2018 ORDER ON CONSENT GROUNDWATER MONITORING REPORT
FORMER TEXACO RESEARCH CENTER
Beacon, New York

6NYCRR PART 373
NYSDEC ID # 3-1330-48/16-0
EPA ID# 091894899
CONSENT ORDER #03-112-08-12
SITE # 314004

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LIST OF ACRONYMS

1,1-DCA	1,1-Dichloroethane
1,2-DCE	1,2-Dichloroethene
6NYCRR	New York Code of Rules and Regulations
µg/L	micrograms per liter (parts per billion)
bgs	below ground surface
Chevron EMC	Chevron Environmental Management Company
Class GA Water Standards	Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, dated June 1998 (NYSDEC document).
Consent Order	Effective date October 31, 2013, Index #03-1112-08-12, Site # 314004
DER	(NYSDEC) Division of Environmental Remediation
ELLE	Eurofins Lancaster Laboratories Environmental
ft.	feet/foot
IHWS	Inactive Hazardous Waste site
NAVD	North America Vertical Datum
NYSDEC	New York State Department of Environmental Conservation
OU	Operable Unit
Permit	6 NYCRR Part 373 Hazardous Waste Management Permit #3-1330-00048/16.0
P.E.	Professional Engineer
PVC	polyvinyl chloride
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
SVOCs	Semivolatile Organic Compounds
TCE	Trichloroethene (a.k.a. Trichloroethylene)
TF	Tank Farm
TRCB	Texaco Research Center Beacon
USEPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds
WATF	Washington Avenue Tank Farm
NAD-1983	New York State Plane Coordinate System, East Zone – 1983

ENGINEER'S CERTIFICATION

CERTIFICATION OF COMPLETION

I, Craig F. Butler, certify that I am currently a New York State registered Professional Engineer (P.E.) and that the 2018 Order On Consent Groundwater Monitoring Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

Craig F Butler

Craig F. Butler, P.E.
New York, No. 080807
PARSONS

04/30/19

Date

SECTION 1

INTRODUCTION

1.1 INTRODUCTION

This annual report is submitted in accordance with the requirements of the New York State Department of Environmental Conservation (NYSDEC) 6 New York Code of Rules and Regulations (6NYCRR) former Part 373 Hazardous Waste Management Permit #3-1330-00048/16-0 (Permit) and the Order on Consent (Effective date October 31, 2013, Index # 03-1112-08-12, Site #314004) for the Former Texaco Research Center, located in Beacon, New York (Texaco Research Center Beacon (TRCB) - See Figure 1). The Permit requires the collection of groundwater samples on a semiannual basis at the former Recreation Area (a.k.a. Back 93-Acre Area or Operable Unit (OU) 01E) and Tank Farm (a.k.a., Washington Avenue Tank Farm (WATF) or OU-1C) Area at the Former TRCB facility. This annual report contains a brief description of the calendar year 2018 groundwater monitoring and sampling events, along with a comparison of analytical results to the Class GA water standards as listed in the NYSDEC document entitled, "*Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations*, dated June 1998" contained in the Permit. A brief description of each parcel and discussion of the Class GA Water Standards is presented below and in the following section, along with a description of the groundwater flow patterns in the former Back 93-Acre Area vicinity.

1.2 PARCEL DESCRIPTIONS AND ENVIRONMENTAL INVESTIGATIONS

Back 93 Acre Parcel (OU-1E)

The Back 93 Acre Parcel or OU-1E is an undeveloped property located south of Washington Avenue and Fishkill Creek. The Back 93 Acre Parcel is listed as an Inactive Hazardous Waste Site (IHWS) due to the former use of isolated portions of the Property as a disposal site. The Back 93 Acre Parcel included a sludge lagoon, a "new" sludge lagoon permitted under Resource Conservation and Recovery Act (RCRA) Part B status, three chemical burial sites, a disposal pit, and a container disposal site. Additionally, four areas were identified which contained a variety of non-hazardous materials, which were referred to as Trash Piles "A" through "D" (Figure 2). These four separate areas were utilized for the disposal of non-hazardous materials during the history of the facility. Materials disposed in these locations primarily consisted of wood and metal debris, grass clippings, old empty drums, and general trash. The property formerly included four structures (pump house, washroom, storage shed, and picnic shelter). Structures were removed during the Sitewide building demolition project that took place in 2011 through 2012. Currently no structures exist on the parcel with the exception of a Potable Water Well Pumping System Shed and a Concrete Reservoir.

Washington Avenue Tank Farm (WATF) (OU-1C)

The WATF or OU-1C consists of 5 acres of land that is located south of Fishkill Creek, and is bounded by Fishkill Creek to the north, Washington Avenue to the east, and the Metro-North Railroad line to the south and west. The entirety of the WATF is surrounded by a chain link fence. This parcel was formerly the site of approximately 30 ASTs and associated facilities. All tanks were decommissioned in 2003. Currently no structures exist on the parcel and the area is an open lot with the remains of piping structures, and a previously operated groundwater recovery system.

Environmental Investigations

Various subsurface investigations were performed at the Back 93 Acre Parcel from 1981 to 1986, in which soil borings and groundwater monitoring wells were installed and corresponding samples were collected. Between 1985 to 1986, site remediation was completed at the Back 93 Acre Parcel where all waste materials and soils exhibiting visual staining or detectable volatile organic compounds (VOCs) were excavated and clean fill was used to backfill excavations. Following remediation activities, a groundwater monitoring program was implemented in 1987 in accordance with conditions specified in the facility's Hazardous Waste Management Permit (permit requirements aforementioned). A reduction in the monitoring well network for the site, including the abandonment of several wells no longer needed for the monitoring program, was completed in early 2000 in accordance with a plan approved by the NYSDEC. Reduction and abandonment of wells were completed to eliminate the potential of future vertical fluid migration along the boreholes. Refer to Figure 2 for locations of wells abandoned. Monitoring program was reduced to the monitoring of ten groundwater monitoring wells (see Section 3 for a list of the wells and Figure 3 for well locations).

SECTION 2

CLASS GA WATER STANDARD AND GUIDANCE VALUES DESCRIPTION

2.1 CLASS GA WATER STANDARDS AND GUIDANCE VALUES

Class GA Water Standards and guidance values are water quality standards published under 6NYCRR 703.5 and proposed guidance values for compounds where regulatory standards do not exist. The standards and guidance values have been developed for ambient water quality values to protect the State's water. Class GA was chosen because the water criteria for this specific class represents protection for Human Health (Water Source), (Source of Drinking Water-Groundwater).

SECTION 3

PROJECT SCOPE

3.1 CONSENT ORDER PROJECT SCOPE AND MONITORING WELL SUMMARY

The following groundwater monitoring wells located in the Recreation and Tank Farm Areas were sampled during the sampling events:

- DC-1 (Located in Back 93-Acre Area or Operable Unit (OU) No. 1E)
- DC-2 (Located in Back 93-Acre Area or Operable Unit (OU) No. 1E)
- TF-5 (Located in Former Washington Avenue Tank Farm or OU 1C)
- TF-23 (Located in Former Washington Avenue Tank Farm or OU 1C)
- DB-8A (Located in Back 93-Acre Area or Operable Unit (OU) No. 1E)
- DB-17 (Located in Back 93-Acre Area or Operable Unit (OU) No. 1E)
- OS-2 (Located along Belvedere Road)
- OR-2 (Located along Belvedere Road)
- OS-3 (Located along Belvedere Road)
- OR-3 (Located along Belvedere Road)

The sampling events took place in June and November 2018. The monitoring well locations are shown on Figure 3.

SECTION 4

GROUNDWATER MONITORING

4.1 GROUNDWATER MONITORING EVENTS SUMMARY

The groundwater monitoring events covered by this annual report occurred on June 12th through 14th and October 29th through November 4th, 2018.

During the sampling events, the well conditions, groundwater levels, well depths, physical appearance, well evacuation information, and sampling parameters were documented on a Groundwater Sampling Record Log (see Appendix A). The sampling information recorded included the time and well purge volume measurements. Samples were collected after these field parameters were recorded. Groundwater elevations obtained during the field events are presented in Tables 1 and 2.

All field information described above was documented in an electronic tablet. Entries were of sufficient detail that a complete daily record of significant events, observations, and measurements was obtained.

In accordance with the project Quality Assurance Project Plan (QAPP), one equipment blank was analyzed during each sampling event and one trip blank accompanied and was analyzed for each sample shipment (i.e., one trip blank for each day of sample collection). The samples were properly containerized and transported to Eurofins Lancaster Laboratories Environmental (ELLE) in Lancaster, Pennsylvania; a New York State-approved environmental laboratory for chemical analyses.

SECTION 5

TRCB SITE HYDROGEOLOGY

5.1 SITE HYDROGEOLOGY DESCRIPTION

Prior to purging and sampling activities of the wells referenced in the previous sections, the depth to water was measured at each well location in order to determine groundwater flow direction and hydraulic gradient within the Back 93-Acre area and surrounding vicinity. Depth to water measurements were obtained using an electrical contact probe and measured from the top edge of the permanent polyvinyl chloride (PVC) casing. These reference points were resurveyed (Fall 2006) for elevation and x-y coordinates. Vertical elevations were surveyed to an accuracy and precision of 0.01 feet (ft.), while horizontal coordinate accuracy was 0.10 ft. or better. Coordinates were fixed to a nearby established benchmark. New York State Plane Coordinate System, East Zone (NAD -1983) system was used for the horizontal datum, while the vertical datum used the site vertical datum established by Texaco in 1957. This datum is 1.07 ft. below North American Vertical Datum (NAVD) 1988 Coordinate System. The work was performed by Badey and Watson Surveying and Engineering, P.C. of Cold Spring, New York, a New York State licensed land surveyor.

Groundwater was encountered at depths varying from 2.65 ft. (DC-2, November 2018) to 24.35 ft. (OR-3, October 2018) below ground surface (bgs) and a groundwater divide was also observed to exist within the Back 93-Acre Area. The divide exists between Wells DC-1 and DC-2 with groundwater flowing to the north to northwest of Well DC-2 under a general hydraulic gradient of approximately 0.023 feet/foot, while groundwater flow south of Well DC-2 is south to southeast under a general hydraulic gradient of approximately 0.012 feet/foot. The groundwater north of the divide flows towards Fishkill Creek, while groundwater south of the divide flows towards an unnamed creek located east of the Back 93-Acre area. The unnamed creek flows to the northeast, based on topography, and eventually into Fishkill Creek. The above information is based on two rounds of water level measurements (June 2018 and November 2018). Water level data from both groundwater monitoring/sampling events are presented in Tables 1 and 2 and graphically depicted on Figures 4 and 5.

SECTION 6

ANALYSES OF GROUNDWATER SAMPLES

6.1 GROUNDWATER SAMPLE ANALYSES

The groundwater samples were analyzed according to United States Environmental Protection Agency (USEPA) Method 8260C for VOCs, USEPA Method 8270D for semivolatile organic compounds (SVOCs), and lead by USEPA Method 6010C. All samples analyzed for lead were filtered by the laboratory prior to analyses in order to remove all fines (silt and clay particles). The duplicate sample labeled TF-23-WD-5.26-180612 was collected from Well TF-23 during the June 2018 sampling event and the duplicate sample labeled OR-3-WD-65.50-181105 was collected from Well OR-3 during the November 2018 sampling event. These samples indicated acceptable precision according to USEPA guidelines and Parsons internal validation of the sample data from both sampling events. Validation of the groundwater sample results was performed by a Parsons chemist and validation reports were generated. Copies of the validation reports are provided in Appendix B and the summary of analytical results is presented in Table 3. A historical analytical summary table is also provided in Appendix C.

Chemical trend analysis graphs were also generated using the most commonly detected chemical compounds observed historically at the TRCB facility: 1,1-dichloroethane (1,1-DCA), 1,2-dichloroethene (1,2-DCE), and trichloroethene (TCE). Trend analysis graphs indicate a significant decrease in concentrations of the aforementioned compounds between the start of monitoring in the mid 1980's to present. Chemical trend analysis graphs are provided in Appendix D and graphically depicted for each well in Figure 6.

Figures 7 and 8 present a summary of detected compounds from the June and November 2018 sampling events, respectively. The figures depict detected concentrations and the NYSDEC Class GA Water Standards. Compounds that exceeded NYSDEC Class GA Water Standards are highlighted on the figures.

One of the ten groundwater monitoring wells (DC-1) sampled in June and two groundwater monitoring wells (DC-1 and DB-8A) sampled in November exhibited concentrations of the VOC constituent TCE that exceeded the applicable NYSDEC groundwater standard. A copy of the analytical laboratory report is provided in Appendix E.

One SVOC parameter was detected in one well (OR-3) from the June 2018 sampling event, while several SVOC parameters were detected in two wells (DC-2 and OR-3) from the November 2018 sampling event that exceeded the Class GA Water Standards. Hexachlorobutadiene was detected above NYSDEC Class GA Standards at DB-8A during the June and November 2018 sampling events. The presence of this SVOC has been detected in DB-8A at approximately the same concentration (2 to 6 micrograms per liter (µg/L)) since 2006, as reported in the Parsons report entitled, "*Post-Closure Permit 2008 Annual Report, Hazardous Waste Management Permit, Former Texaco Research Center, Beacon New York"*, dated May 2009. This compound is used in industrial applications to make rubber, and in solvent, lubricant, heat transfer liquid and hydraulic fluid, and these applications are consistent with facility operations at the Former TRCB. Hexachlorobutadiene was not detected in any other groundwater monitoring wells sampled during either sampling event (June and November 2018).

One and four exceedances of Class GA Groundwater Standards were also recorded in Well OR-3 during the June and November 2018 sampling events, respectively. The exceedance parameter for the June 2018 sampling event was benzo(b)fluoranthene; while the same parameter exceeded the Class GA Groundwater Standards along with benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene exceeding standards for the November 2018 sampling event. Groundwater monitoring well DC-2 also indicated one exceedance (nitrobenzene) of the Class GA Groundwater Standards observed during the November 2018 sampling event. Previous sampling events performed in 2015 through 2016 indicated exceedances of the above-mentioned parameters against the NYSDEC Class GA Groundwater Standards, as well. Re-pavement activities of the road, in which the wells are located adjacent to, took place in 2015 and 2016 which correlate to the time when detected SVOCs were indicated to exceed the NYSDEC Class GA Groundwater Standards. The number of SVOC parameters that exceed the NYSDEC Class GA Groundwater Standards in wells located along Belvedere Road have declined in 2018 suggesting the natural breakdown of the SVOC parameters observed in the wells previously. Also, a potential explanation why more SVOC parameters were detected exceeding standards during the Fall 2018 sampling event and again at the Summer 2018 sampling event was that a higher water table was present; allowing the groundwater table to contact constituents in the smear zone. Monitoring of the wells will continue to determine if SVOC parameter concentrations continue to exist and decline.

SECTION 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 2018 SAMPLING PROGRAM CONCLUSIONS AND RECOMMENDATIONS

A review of historical data and analytical trends indicate that eight of the ten wells sampled as part of the RCRA Permit well sampling program have historically indicated no exceedences of Class GA standards for the past ten years. Exceedances of TCE have stabilized and are consistently near the New York State Class GA water standard threshold for two of the ten wells (DC-1 and DB-8A). As previously indicated, the exceedance of hexachlorobutadiene is localized in one well. With the parameters exceeding the Class GA standards being historically present at the same well locations and no evidence of migration of the other contaminants over the years, it can be concluded that the parameters pose no significant threat to the surrounding community and/or environment. Based on the review of historical data and the above analyses, Chevron Environmental Management Company (EMC) will continue to perform semi-annual sampling events at the site.

In addition, the SVOCs detected in some of the groundwater monitoring wells located along Belvedere Road are likely the result of re-pavement activities of the road in which the wells are located adjacent to which took place in 2015 and 2016. The number of SVOC parameters that exceed the NYSDEC Groundwater Standards in wells located along Belvedere Road have declined in 2018 suggesting the natural break down of the SVOC parameters observed in the wells previously. Monitoring of the wells will continue to determine if SVOC parameter concentrations continue to exist and decline.

TABLES

Table 1
June 2018 Semiannual Groundwater Elevations
Recreation Area and Tank Farm, Former Texaco Research Center, Beacon, NY

Well ID	Top of Casing Elevation (feet)[1]	June 2018 Sampling Event	
		Depth To Water	Groundwater Elevation
DC-1	229.30	3.90	225.40
DC-2	229.10	3.55	225.55
TF-5	207.58	7.16	200.42
TF-23	207.20	8.20	199.00
DB-8A	232.60	7.25	225.35
DB-17	231.77	8.90	222.87
OS-2	221.76	6.20	215.56
OR-2	221.92	7.80	214.12
OS-3	233.02	4.90	228.12
OR-3	233.23	24.35	208.88

Note: (1) Top of casing elevations derived from Badey and Watson, Surveying and Engineering, P.C. map dated January 27, 2007.

Table 2
November 2018 Semiannual Groundwater Elevations
Recreation Area and Tank Farm, Former Texaco Research Center, Beacon, NY

Well ID	Top of Casing Elevation (feet)[1]	November 2018 Sampling Event	
		Depth To Water	Groundwater Elevation
DC-1	229.30	3.40	225.90
DC-2	229.10	2.65	226.45
TF-5	207.58	6.47	201.11
TF-23	207.20	7.10	200.10
DB-8A	232.60	6.44	226.16
DB-17	231.77	8.47	223.30
OS-2	221.76	4.25	217.51
OR-2	221.92	6.07	215.85
OS-3	233.02	5.67	227.35
OR-3	233.23	20.25	212.98

Note: (1) Top of casing elevations derived from Badey and Watson, Surveying and Engineering, P.C. map dated January 27, 2007

Table 3
2018 Consent Order Groundwater Sampling Analytical Results
Former Texaco Research Center
Glenham (Beacon), New York

			Location ID		DB-8A		DB-8A		DB-17		DC-1		DC-1		DC-2		DC-2	
			Field Sample ID		DB-8A-W-5.00-180612		DB-8A-W-5.00-181102		DB-17-W-5.00-181102		DC-1-W-2.00-180612		DC-1-W-2.00-181102		DC-2-W-7.50-180612		DC-2-W-7.50-181102	
			Date Sampled		06/12/2018		11/02/2018		11/02/2018		06/12/2018		11/02/2018		06/12/2018		11/02/2018	
			SDG		1955779		2005546		2005546		1955779		2005546		1955779		2005546	
			Sample Matrix		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG		REG		REG		REG		REG	
			Sample Type		GW		GW		GW		GW		GW		GW		GW	
Analytical Method	Parameter Name	Filtered	Units	NY_TOGS Class GA[6]														
SW-846 6010C	Lead[7]	Y	mg/L	0.025 mg/l	0.006	U	0.0071	U	0.0071	U	0.006	U	0.0071	U	0.006	U	0.0071	U
SW-846 8260C	1,1 Dichloroethene	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1,1-Trichloroethane	N	ug/L	5.0 ug/l	0.5	U	0.3	U	0.3	U	0.5	U	0.3	U	0.5	U	0.3	U
SW-846 8260C	1,1,2,2-Tetrachloroethane	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1,2-Trichloroethane	N	ug/L	1.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1-Dichloroethane	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,2-Dichlorobenzene (o-Dichlorobenzene)	N	ug/L	3.0 ug/l	1	U	0.2	U	0.2	U	1	U	0.2	U	1	U	0.2	U
SW-846 8260C	1,2-Dichloroethane	N	ug/L	0.6 ug/l	0.5	U	0.3	U	0.3	U	0.5	U	0.3	U	0.5	U	0.3	U
SW-846 8260C	1,2-Dichloroethene[3]	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.2	U	3		3		0.5	U	0.2	U
SW-846 8260C	1,2-Dichloropropane	N	ug/L	1.0 ug/l	0.5	U	0.3	J	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,3-Dichlorobenzene	N	ug/L	3.0 ug/l	1	U	0.2	U	0.2	U	1	U	0.2	U	1	U	0.2	U
SW-846 8260C	1,4-Dichlorobenzene	N	ug/L	3.0 ug/l	1	U	0.2	U	0.2	U	1	U	0.2	U	1	U	0.2	U
SW-846 8260C	2-Chloroethyl vinyl ether	N	ug/L	NA	2	U	0.2	U	0.2	U	2	U	0.2	U	2	U	0.2	U
SW-846 8260C	Benzene	N	ug/L	1.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Bromodichloromethane	N	ug/L	50.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Bromoform	N	ug/L	50.0 ug/l	0.5	U	0.2	UJ	0.2	UJ	0.5	U	0.2	UJ	0.5	U	0.2	UJ
SW-846 8260C	Bromomethane (Methyl bromide)	N	ug/L	5.0 ug/l	0.5	U	0.3	U	0.3	U	0.5	U	0.3	U	0.5	U	0.3	U
SW-846 8260C	Carbon Tetrachloride	N	ug/L	5.0 ug/l	0.5	UJ	0.2	U	0.2	U	0.5	UJ	0.2	U	0.5	UJ	0.2	U
SW-846 8260C	Chlorobenzene	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloroethane	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloroform	N	ug/L	7.0 ug/l	0.5	U	0.6	J	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloromethane (Methyl chloride)	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	cis-1,3-Dichloropropene[4]	N	ug/L	0.4 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Dibromochloromethane	N	ug/L	50.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Ethylbenzene	N	ug/L	5.0 ug/l	0.5	U	0.4	U	0.4	U	0.5	U	0.4	U	0.5	U	0.4	U
SW-846 8260C	Methyl-t-butyl ether	N	ug/L	10.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Methylene chloride (Dichloromethane)	N	ug/L	5.0 ug/l	0.5	U	0.3	U	0.3	U	0.5	U	0.3	U	0.5	U	0.3	U
SW-846 8260C	Tetrachloroethene	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.6	J	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Toluene	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	trans-1,3-Dichloropropene[4]	N	ug/L	0.4 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Trichloroethene (Trichloroethylene)	N	ug/L	5.0 ug/l	3		10		0.2	U	7		7		0.5	U	0.2	U
SW-846 8260C	Trichlorofluoromethane (Freon 11)	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Vinyl chloride (Chloroethene)	N	ug/L	2.0 ug/l	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Xylene (total)	N	ug/L	5.0 ug/l	0.5	U	1	U	1	U	0.5	U	1	U	0.5	U	1	U
	Trihalomethanes (total)[2]	N	ug/l	100	0		0.6	J	0		0		0		0		0	
	Total VOCs [1] [5]	N	ug/l	NA	3		10.9		0.6	J	10		10		0		0	
SW-846 8270D	1,2,4-Trichlorobenzene	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,2-Dichlorobenzene (o-Dichlorobenzene)	N	ug/L	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,3-Dichlorobenzene	N	ug/L	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,4-Dichlorobenzene	N	ug/L	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,5-Trichlorophenol	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,6-Trichlorophenol	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dichlorophenol	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dimethylphenol	N	ug/L	50.0 ug/l	3	U	3	U	3	U	3	U	3	U	3	U	3	U
SW-846 8270D	2,4-Dinitrophenol	N	ug/L	10.0 ug/l	14	U	15	U	15	U	15	U	15	U	15	U	14	U
SW-846 8270D	2,4-Dinitrotoluene	N	ug/L	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW-846 8270D	2,6-Dinitrotoluene	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Chloronaphthalene	N	ug/L	10.0 ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
SW-846 8270D	2-Chlorophenol (o-Chlorophenol)	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Methyl-Naphthlalene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	2-Methylphenol (o-Cresol)	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Nitroaniline (o-Nitroaniline)	N	ug/L	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
SW-846 8270D	2-Nitrophenol (o-Nitrophenol)	N	ug/L	1.0 ug/l	3	U	3	U	3	U	3	U	3	U	3	U	3	U
SW-846 8270D	3,3'-Dichlorobenzidine	N	ug/L	5.0 ug/l	3	U	3	U	3	U	3	U	3	U	3	U	3	U
SW-846 8270D	3-Nitroaniline	N	ug/L	5.0 ug/l	3	U	3	U	3	U	3	U	3	U	3	U	3	U
SW-846 8270D	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	N	ug/L	1.0 ug/l	8	U	8	U	8	U	8	U	8	U	8	U	8	U
SW-846 8270D	4-Bromophenylphenylether	N	ug/L	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Chloroaniline	N	ug/L	5.0 ug/l	4	U	4	U	4	U	4	U	4	U	4	U	4	U
SW-846 8270D	4-Chlorophenyl phenyl ether	N	ug/L	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Methylphenol (p-Cresol)	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Nitroaniline	N	ug/L	5.0 ug/l	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U
SW-846 8270D	4-Nitrophenol	N	ug/L	1.0 ug/l	10	U	10	U	11	U	10	U	10	U	10	U	10	U

Table 3
2018 Consent Order Groundwater Sampling Analytical Results
Former Texaco Research Center
Glenham (Beacon), New York

			Location ID		DB-8A		DB-8A		DB-17		DC-1		DC-1		DC-2		DC-2	
			Field Sample ID		DB-8A-W-5.00-180612		DB-8A-W-5.00-181102		DB-17-W-5.00-181102		DC-1-W-2.00-180612		DC-1-W-2.00-181102		DC-2-W-7.50-180612		DC-2-W-7.50-181102	
			Date Sampled		06/12/2018		11/02/2018		11/02/2018		06/12/2018		11/02/2018		06/12/2018		11/02/2018	
			SDG		1955779		2005546		2005546		1955779		2005546		1955779		2005546	
			Sample Matrix		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG		REG		REG		REG		REG	
			Sample Type		GW		GW		GW		GW		GW		GW		GW	
Analytical Method	Parameter Name	Filtered	Units	NY_TOGS Class GA[6]														
SW-846 8270D	Acenaphthene	N	ug/L	20.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Acenaphthylene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Anthracene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)anthracene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)pyrene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(b)fluoranthene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(g,h,i)perylene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(k)fluoranthene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	bis(2-Chloroethoxy)methane	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Chloroethyl) ether	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-chloroisopropyl) ether	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Ethylhexyl)phthalate	N	ug/L	5.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
SW-846 8270D	Butylbenzylphthalate	N	ug/L	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
SW-846 8270D	Carbazole	N	ug/L	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	Chrysene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Di-n-butylphthalate	N	ug/L	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
SW-846 8270D	Di-n-octylphthalate	N	ug/L	50.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
SW-846 8270D	Dibenz(a,h)anthracene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Dibenzofuran	N	ug/L	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	Diethylphthalate	N	ug/L	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
SW-846 8270D	Dimethyl phthalate	N	ug/L	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
SW-846 8270D	Fluoranthene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Fluorene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobenzene	N	ug/L	0.04 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobutadiene	N	ug/L	0.5 ug/l	2	J	2		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	Hexachlorocyclopentadiene	N	ug/L	5.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U
SW-846 8270D	Hexachloroethane	N	ug/L	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW-846 8270D	Indeno(1,2,3-cd)Pyrene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Isophorone	N	ug/L	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	N-Nitrosodi-n-propylamine	N	ug/L	NA	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
SW-846 8270D	N-Nitrosodiphenylamine (Diphenylamine)	N	ug/L	50.0 ug/l	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
SW-846 8270D	Naphthalene	N	ug/L	10.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Nitrobenzene	N	ug/L	0.4 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1	J
SW-846 8270D	p-Chloro-m-cresol	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pentachlorophenol	N	ug/L	1.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW-846 8270D	Phenanthrene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	Phenol	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pyrene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
	Total SVOCs[5]	N	ug/l	NA	2	J	2		0		0		0		0		1	J

Notes:

(1) VOCs analyzed by EPA Method 8260, SVOCs were analyzed by EOA Method 8270, and lead was analyzed by EPA Method 6010.

(2) Total of the trihalomethanes not to exceed 100 micrograms/liter. Total value is sum of bromoform, chloroform, dibromochloromethane, and bromodichloromethane.

(3) 1,2-Dichloroethene is the sum of trans-1,2-dichloroethene and cis-1,2-dichloroethene.

(4) Total of the cis and trans - 1,3-dichloropropene not to exceed 0.40 ug/L.

(5) Refer to Appendix E for details.

(6) Class GA Water Standards obtained from NYSDEC document entitled "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, Dated June 1998."

(7) Lead samples filtered by the analytical laboratory.

NA - No applicable standard or guidance value.

NS - Not sampled for parameter(s)

Concentration exceeds Class GA Groundwater Standard.

J - Estimated value.

U - Non-detect value.

UJ - Estimated non-detect value.

GW - Groundwater sample.

Reg - Regular sample.

FD - Field Duplicate sample.

N - Sample not filtered.

mg/L - Milligrams per liter.

ug/L - Micrograms per liter.

Table 3
2018 Consent Order Groundwater Sampling Analytical Results
Former Texaco Research Center
Glenham (Beacon), New York

				Location ID															
				Field Sample ID	OR-2-W-26.00-180613		OR-2-W-26.00-181105		OR-3-W-65.50-180614		OR-3-W-65.50-181105		OR-3-WD-65.50-181105		OS-2-W-6.00-180613		OS-2-W-6.00-181101	
				Date Sampled	06/13/2018		11/05/2018		06/14/2018		11/05/2018		11/05/2018		06/13/2018		11/01/2018	
				SDG	1955779		2006269		1955779		2006269		2006269		1955779		2005546	
				Sample Matrix	WATER		WATER		WATER		WATER		WATER		WATER		WATER	
				Sample Purpose	REG		REG		REG		REG		FD		REG		REG	
				Sample Type	GW		GW		GW		GW		GW		GW		GW	
Analytical Method	Parameter Name	Filtered	Units	NY_TOGS Class GA[6]														
SW-846 6010C	Lead[7]	Y	mg/L	0.025 mg/l	0.006	U	0.0071	U	0.006	U	0.0071	U	0.0071	U	0.006	U	0.0071	U
SW-846 8260C	1,1 Dichloroethene	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1,1-Trichloroethane	N	ug/L	5.0 ug/l	0.5	U	0.3	U	0.5	U	0.3	U	0.3	U	0.5	U	0.3	U
SW-846 8260C	1,1,2,2-Tetrachloroethane	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1,2-Trichloroethane	N	ug/L	1.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1-Dichloroethane	N	ug/L	5.0 ug/l	0.9	J	0.2	J	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,2-Dichlorobenzene (o-Dichlorobenzene)	N	ug/L	3.0 ug/l	1	U	0.2	U	1	U	0.2	U	0.2	U	1	U	0.2	U
SW-846 8260C	1,2-Dichloroethane	N	ug/L	0.6 ug/l	0.5	U	0.3	U	0.5	U	0.3	U	0.3	U	0.5	U	0.3	U
SW-846 8260C	1,2-Dichloroethene [3]	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,2-Dichloropropane	N	ug/L	1.0 ug/l	0.9	J	0.2	J	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,3-Dichlorobenzene	N	ug/L	3.0 ug/l	1	U	0.2	U	1	U	0.2	U	0.2	U	1	U	0.2	U
SW-846 8260C	1,4-Dichlorobenzene	N	ug/L	3.0 ug/l	1	U	0.2	U	1	U	0.2	U	0.2	U	1	U	0.2	U
SW-846 8260C	2-Chloroethyl vinyl ether	N	ug/L	NA	2	U	0.2	U	2	U	0.2	U	0.2	U	2	U	0.2	U
SW-846 8260C	Benzene	N	ug/L	1.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Bromodichloromethane	N	ug/L	50.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Bromoform	N	ug/L	50.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	UJ
SW-846 8260C	Bromomethane (Methyl bromide)	N	ug/L	5.0 ug/l	0.5	U	0.3	U	0.5	U	0.3	U	0.3	U	0.5	U	0.3	U
SW-846 8260C	Carbon Tetrachloride	N	ug/L	5.0 ug/l	0.5	UJ	0.2	U	0.5	UJ	0.2	U	0.2	U	0.5	UJ	0.2	U
SW-846 8260C	Chlorobenzene	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloroethane	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloroform	N	ug/L	7.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloromethane (Methyl chloride)	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	cis-1,3-Dichloropropene [4]	N	ug/L	0.4 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Dibromochloromethane	N	ug/L	50.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Ethylbenzene	N	ug/L	5.0 ug/l	0.5	U	0.4	U	0.5	U	0.4	U	0.4	U	0.5	U	0.4	U
SW-846 8260C	Methyl-t-butyl ether	N	ug/L	10.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Methylene chloride (Dichloromethane)	N	ug/L	5.0 ug/l	0.5	U	0.3	U	0.5	U	0.3	U	0.3	U	0.5	U	0.3	U
SW-846 8260C	Tetrachloroethene	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Toluene	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	trans-1,3-Dichloropropene [4]	N	ug/L	0.4 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Trichloroethene (Trichloroethylene)	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Trichlorofluoromethane (Freon 11)	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Vinyl chloride (Chloroethene)	N	ug/L	2.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.2	U	0.5	U	0.2	U
SW-846 8260C	Xylene (total)	N	ug/L	5.0 ug/l	0.5	U	1	U	0.5	U	1	U	1	U	0.5	U	1	U
	Trihalomethanes (total)[2]	N	ug/l	100	0		0		0		0		0		0		0	
	Total VOCs [1] [5]	N	ug/l	NA	1.8	J	0.4	J	0		0		0		0		0	
SW-846 8270D	1,2,4-Trichlorobenzene	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,2-Dichlorobenzene (o-Dichlorobenzene)	N	ug/L	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,3-Dichlorobenzene	N	ug/L	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,4-Dichlorobenzene	N	ug/L	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,5-Trichlorophenol	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,6-Trichlorophenol	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dichlorophenol	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dimethylphenol	N	ug/L	50.0 ug/l	3	U	3	U	3	U	3	U	3	U	3	U	3	U
SW-846 8270D	2,4-Dinitrophenol	N	ug/L	10.0 ug/l	14	U	15	U	14	U	15	U	14	U	14	U	15	U
SW-846 8270D	2,4-Dinitrotoluene	N	ug/L	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U
SW-846 8270D	2,6-Dinitrotoluene	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Chloronaphthalene	N	ug/L	10.0 ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
SW-846 8270D	2-Chlorophenol (o-Chlorophenol)	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Methyl-Naphthlalene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
SW-846 8270D	2-Methylphenol (o-Cresol)	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Nitroaniline (o-Nitroaniline)	N	ug/L	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
SW-846 8270D	2-Nitrophenol (o-Nitrophenol)	N	ug/L	1.0 ug/l	3	U	3	U	3	U	3	U	3	U	3	U	3	U
SW-846 8270D	3,3'-Dichlorobenzidine	N	ug/L	5.0 ug/l	3	U	3	U	3	U	3	U	3	U	3	U	3	U
SW-846 8270D	3-Nitroaniline	N	ug/L	5.0 ug/l	3	U	3	U	3	U	3	U	3	U	3	U	3	U
SW-846 8270D	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	N	ug/L	1.0 ug/l	8	U	8	U	8	U	8	U	8	U	8	U	8	U
SW-846 8270D	4-Bromophenylphenylether	N	ug/L	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Chloroaniline	N	ug/L	5.0 ug/l	4	U	4	U	4	U	4	U	4	U	4	U	4	U
SW-846 8270D	4-Chlorophenyl phenyl ether	N	ug/L	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Methylphenol (p-Cresol)	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Nitroaniline	N	ug/L	5.0 ug/l	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U
SW-846 8270D	4-Nitrophenol	N	ug/L	1.0 ug/l	10	U	11	U	10	U	10	U	10	U	10	U	10	U

Table 3
2018 Consent Order Groundwater Sampling Analytical Results
Former Texaco Research Center
Glenham (Beacon), New York

			Location ID		OR-2		OR-2		OR-3		OR-3		OR-3		OS-2		OS-2				
			Field Sample ID		OR-2-W-26.00-180613		OR-2-W-26.00-181105		OR-3-W-65.50-180614		OR-3-W-65.50-181105		OR-3-WD-65.50-181105		OS-2-W-6.00-180613		OS-2-W-6.00-181101				
			Date Sampled		06/13/2018		11/05/2018		06/14/2018		11/05/2018		11/05/2018		06/13/2018		11/01/2018				
			SDG		1955779		2006269		1955779		2006269		2006269		1955779		2005546				
			Sample Matrix		WATER		WATER		WATER		WATER		WATER		WATER		WATER				
			Sample Purpose		REG		REG		REG		REG		FD		REG		REG				
			Sample Type		GW		GW		GW		GW		GW		GW		GW				
Analytical Method	Parameter Name	Filtered	Units	NY_TOGS Class GA[6]																	
SW-846 8270D	Acenaphthene	N	ug/L	20.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Acenaphthylene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Anthracene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Benzo(a)anthracene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Benzo(a)pyrene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.2	J	0.2	J	0.1	U	0.1	U			
SW-846 8270D	Benzo(b)fluoranthene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	J	0.2	J	0.3	J	0.1	U	0.1	U			
SW-846 8270D	Benzo(g,h,i)perylene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	J	0.2	J	0.1	U	0.1	U			
SW-846 8270D	Benzo(k)fluoranthene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	J	0.1	U	0.1	U			
SW-846 8270D	bis(2-Chloroethoxy)methane	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	bis(2-Chloroethyl) ether	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	bis(2-chloroisopropyl) ether	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	bis(2-Ethylhexyl)phthalate	N	ug/L	5.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U			
SW-846 8270D	Butylbenzylphthalate	N	ug/L	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			
SW-846 8270D	Carbazole	N	ug/L	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	Chrysene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	J	0.2	J	0.1	U	0.1	U			
SW-846 8270D	Di-n-butylphthalate	N	ug/L	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			
SW-846 8270D	Di-n-octylphthalate	N	ug/L	50.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U			
SW-846 8270D	Dibenz(a,h)anthracene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Dibenzofuran	N	ug/L	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	Diethylphthalate	N	ug/L	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			
SW-846 8270D	Dimethyl phthalate	N	ug/L	50.0 ug/l	2	U	2	UJ	2	U	2	UJ	2	UJ	2	U	2	U			
SW-846 8270D	Fluoranthene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	J	0.3	J	0.3	J	0.1	U	0.1	U			
SW-846 8270D	Fluorene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Hexachlorobenzene	N	ug/L	0.04 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Hexachlorobutadiene	N	ug/L	0.5 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	Hexachlorocyclopentadiene	N	ug/L	5.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U			
SW-846 8270D	Hexachloroethane	N	ug/L	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
SW-846 8270D	Indeno(1,2,3-cd)Pyrene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	J	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Isophorone	N	ug/L	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	N-Nitrosodi-n-propylamine	N	ug/L	NA	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U			
SW-846 8270D	N-Nitrosodiphenylamine (Diphenylamine)	N	ug/L	50.0 ug/l	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U			
SW-846 8270D	Naphthalene	N	ug/L	10.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Nitrobenzene	N	ug/L	0.4 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	p-Chloro-m-cresol	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	Pentachlorophenol	N	ug/L	1.0 ug/l	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U			
SW-846 8270D	Phenanthrene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	J	0.1	U	0.1	U			
SW-846 8270D	Phenol	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	Pyrene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	J	0.3	J	0.2	J	0.1	U	0.1	U			
	Total SVOCs[5]	N	ug/l	NA	0		0		0		1.3	J	1.6	J	0		0				

Notes:

(1) VOCs analyzed by EPA Method 8260, SVOCs were analyzed by EOA Method 8270, and lead was analyzed by EPA Method 6010.

(2) Total of the trihalomethanes not to exceed 100 micrograms/liter. Total value is sum of bromoform, chloroform, dibromochloromethane, and bromodichloromethane.

(3) 1,2-Dichloroethene is the sum of trans-1,2-dichloroethene and cis-1,2-dichloroethene.

(4) Total of the cis and trans - 1,3-dichloropropene not to exceed 0.40 ug/L.

(5) Refer to Appendix E for details.

(6) Class GA Water Standards obtained from NYSDEC document entitled "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, Dated June 1998."

(7) Lead samples filtered by the analytical laboratory.

NA - No applicable standard or guidance value.

NS - Not sampled for parameter(s)

Concentration exceeds Class GA Groundwater Standard.

J - Estimated value.

U - Non-detect value.

UJ - Estimated non-detect value.

GW - Groundwater sample.

Reg - Regular sample.

FD - Field Duplicate sample.

N - Sample not filtered.

mg/L - Milligrams per liter.

ug/L - Micrograms per liter.

Table 3
2018 Consent Order Groundwater Sampling Analytical Results
Former Texaco Research Center
Glenham (Beacon), New York

			Location ID		OS-3		OS-3		TF-5		TF-5		TF-23		TF-23		TF-23				
			Field Sample ID		OS-3-W-6.00-180614		OS-3-W-6.00-181101		TF-5-W-4.59-180612		TF-5-W-4.59-181101		TF-23-W-5.26-180612		TF-23-WD-5.26-180612		TF-23-W-5.26-181101				
			Date Sampled		06/14/2018		11/01/2018		06/12/2018		11/01/2018		06/12/2018		06/12/2018		11/01/2018				
			SDG		1955779		2005546		1955779		2005546		1955779		1955779		2005546				
			Sample Matrix		WATER		WATER		WATER		WATER		WATER		WATER		WATER				
			Sample Purpose		REG		REG		REG		REG		REG		FD		REG				
			Sample Type		GW		GW		GW		GW		GW		GW		GW				
Analytical Method	Parameter Name	Filtered	Units	NY_TOGS Class GA[6]																	
SW-846 6010C	Lead[7]	Y	mg/L	0.025 mg/l	0.006	U	0.0071	U	0.006	U	0.0071	U	0.006	U	0.006	U	0.0071	U			
SW-846 8260C	1,1 Dichloroethene	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	1,1,1-Trichloroethane	N	ug/L	5.0 ug/l	0.5	U	0.3	U	0.5	U	0.3	U	0.5	U	0.5	U	0.3	U			
SW-846 8260C	1,1,2,2-Tetrachloroethane	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	1,1,2-Trichloroethane	N	ug/L	1.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	1,1-Dichloroethane	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	1,2-Dichlorobenzene (o-Dichlorobenzene)	N	ug/L	3.0 ug/l	1	U	0.2	U	1	U	0.2	U	1	U	1	U	0.2	U			
SW-846 8260C	1,2-Dichloroethane	N	ug/L	0.6 ug/l	0.5	U	0.3	U	0.5	U	0.3	U	0.5	U	0.5	U	0.3	U			
SW-846 8260C	1,2-Dichloroethene [3]	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	1,2-Dichloropropane	N	ug/L	1.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	1,3-Dichlorobenzene	N	ug/L	3.0 ug/l	1	U	0.2	U	1	U	0.2	U	1	U	1	U	0.2	U			
SW-846 8260C	1,4-Dichlorobenzene	N	ug/L	3.0 ug/l	1	U	0.2	U	1	U	0.2	U	1	U	1	U	0.2	U			
SW-846 8260C	2-Chloroethyl vinyl ether	N	ug/L	NA	2	U	0.2	U	2	U	0.2	U	2	U	2	U	0.2	U			
SW-846 8260C	Benzene	N	ug/L	1.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	Bromodichloromethane	N	ug/L	50.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	Bromoform	N	ug/L	50.0 ug/l	0.5	U	0.2	UJ	0.5	U	0.2	UJ	0.5	U	0.5	U	0.2	UJ			
SW-846 8260C	Bromomethane (Methyl bromide)	N	ug/L	5.0 ug/l	0.5	U	0.3	U	0.5	U	0.3	U	0.5	U	0.5	U	0.3	U			
SW-846 8260C	Carbon Tetrachloride	N	ug/L	5.0 ug/l	0.5	UJ	0.2	U	0.5	UJ	0.2	U	0.5	UJ	0.5	UJ	0.2	U			
SW-846 8260C	Chlorobenzene	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	Chloroethane	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	Chloroform	N	ug/L	7.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	Chloromethane (Methyl chloride)	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	cis-1,3-Dichloropropene [4]	N	ug/L	0.4 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	Dibromochloromethane	N	ug/L	50.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	Ethylbenzene	N	ug/L	5.0 ug/l	0.5	U	0.4	U	0.5	U	0.4	U	0.5	U	0.5	U	0.4	U			
SW-846 8260C	Methyl-t-butyl ether	N	ug/L	10.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	Methylene chloride (Dichloromethane)	N	ug/L	5.0 ug/l	0.5	U	0.3	U	0.5	U	0.3	U	0.5	U	0.5	U	0.3	U			
SW-846 8260C	Tetrachloroethene	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	Toluene	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	trans-1,3-Dichloropropene [4]	N	ug/L	0.4 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	Trichloroethene (Trichloroethylene)	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	Trichlorofluoromethane (Freon 11)	N	ug/L	5.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	Vinyl chloride (Chloroethene)	N	ug/L	2.0 ug/l	0.5	U	0.2	U	0.5	U	0.2	U	0.5	U	0.5	U	0.2	U			
SW-846 8260C	Xylene (total)	N	ug/L	5.0 ug/l	0.5	U	1	U	0.5	U	1	U	0.5	U	0.5	U	1	U			
	Trihalomethanes (total)[2]	N	ug/l	100	0		0		0		0		0		0		0				
	Total VOCs [1] [5]	N	ug/l	NA	0		0		0		0		0		0		0				
SW-846 8270D	1,2,4-Trichlorobenzene	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	1,2-Dichlorobenzene (o-Dichlorobenzene)	N	ug/L	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	1,3-Dichlorobenzene	N	ug/L	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	1,4-Dichlorobenzene	N	ug/L	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	2,4,5-Trichlorophenol	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	2,4,6-Trichlorophenol	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	2,4-Dichlorophenol	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	2,4-Dimethylphenol	N	ug/L	50.0 ug/l	3	U	3	U	3	U	3	U	3	U	3	U	3	U			
SW-846 8270D	2,4-Dinitrophenol	N	ug/L	10.0 ug/l	14	U	14	U	14	U	15	U	14	U	14	U	14	U			
SW-846 8270D	2,4-Dinitrotoluene	N	ug/L	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
SW-846 8270D	2,6-Dinitrotoluene	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	2-Chloronaphthalene	N	ug/L	10.0 ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U			
SW-846 8270D	2-Chlorophenol (o-Chlorophenol)	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	2-Methyl-Naphthlalene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	2-Methylphenol (o-Cresol)	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	2-Nitroaniline (o-Nitroaniline)	N	ug/L	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			
SW-846 8270D	2-Nitrophenol (o-Nitrophenol)	N	ug/L	1.0 ug/l	3	U	3	U	3	U	3	U	3	U	3	U	3	U			
SW-846 8270D	3,3'-Dichlorobenzidine	N	ug/L	5.0 ug/l	3	U	3	U	3	U	3	U	3	U	3	U	3	U			
SW-846 8270D	3-Nitroaniline	N	ug/L	5.0 ug/l	3	U	3	U	3	U	3	U	3	U	3	U	3	U			
SW-846 8270D	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	N	ug/L	1.0 ug/l	8	U	8	U	8	U	9	U	8	U	8	U	8	U			
SW-846 8270D	4-Bromophenylphenylether	N	ug/L	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	4-Chloroaniline	N	ug/L	5.0 ug/l	4	U	4	U	4	U	4	U	4	U	4	U	4	U			
SW-846 8270D	4-Chlorophenyl phenyl ether	N	ug/L	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	4-Methylphenol (p-Cresol)	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	4-Nitroaniline	N	ug/L	5.0 ug/l	0.9	U	0.9	U	0.9	U	1	U	0.9	U	0.9	U	0.9	U			
SW-846 8270D	4-Nitrophenol	N	ug/L	1.0 ug/l	10	U	10	U	10	U	11	U	10	U	10	U	10	U			

Table 3
2018 Consent Order Groundwater Sampling Analytical Results
Former Texaco Research Center
Glenham (Beacon), New York

			Location ID		OS-3		OS-3		TF-5		TF-5		TF-23		TF-23		TF-23				
			Field Sample ID		OS-3-W-6.00-180614		OS-3-W-6.00-181101		TF-5-W-4.59-180612		TF-5-W-4.59-181101		TF-23-W-5.26-180612		TF-23-WD-5.26-180612		TF-23-W-5.26-181101				
			Date Sampled		06/14/2018		11/01/2018		06/12/2018		11/01/2018		06/12/2018		06/12/2018		11/01/2018				
			SDG		1955779		2005546		1955779		2005546		1955779		1955779		2005546				
			Sample Matrix		WATER		WATER		WATER		WATER		WATER		WATER		WATER				
			Sample Purpose		REG		REG		REG		REG		REG		FD		REG				
			Sample Type		GW		GW		GW		GW		GW		GW		GW				
Analytical Method	Parameter Name	Filtered	Units	NY_TOGS Class GA[6]																	
SW-846 8270D	Acenaphthene	N	ug/L	20.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Acenaphthylene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Anthracene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Benzo(a)anthracene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Benzo(a)pyrene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Benzo(b)fluoranthene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Benzo(g,h,i)perylene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Benzo(k)fluoranthene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	bis(2-Chloroethoxy)methane	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	bis(2-Chloroethyl) ether	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	bis(2-chloroisopropyl) ether	N	ug/L	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	bis(2-Ethylhexyl)phthalate	N	ug/L	5.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U			
SW-846 8270D	Butylbenzylphthalate	N	ug/L	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			
SW-846 8270D	Carbazole	N	ug/L	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	Chrysene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Di-n-butylphthalate	N	ug/L	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			
SW-846 8270D	Di-n-octylphthalate	N	ug/L	50.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U			
SW-846 8270D	Dibenz(a,h)anthracene	N	ug/L	NA	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Dibenzofuran	N	ug/L	NA	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	Diethylphthalate	N	ug/L	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			
SW-846 8270D	Dimethyl phthalate	N	ug/L	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			
SW-846 8270D	Fluoranthene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Fluorene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Hexachlorobenzene	N	ug/L	0.04 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Hexachlorobutadiene	N	ug/L	0.5 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	Hexachlorocyclopentadiene	N	ug/L	5.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U			
SW-846 8270D	Hexachloroethane	N	ug/L	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
SW-846 8270D	Indeno(1,2,3-cd)Pyrene	N	ug/L	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Isophorone	N	ug/L	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	N-Nitrosodi-n-propylamine	N	ug/L	NA	0.7	U	0.7	U	0.7	U	0.8	U	0.7	U	0.7	U	0.7	U			
SW-846 8270D	N-Nitrosodiphenylamine (Diphenylamine)	N	ug/L	50.0 ug/l	0.7	U	0.7	U	0.7	U	0.8	U	0.7	U	0.7	U	0.7	U			
SW-846 8270D	Naphthalene	N	ug/L	10.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Nitrobenzene	N	ug/L	0.4 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	p-Chloro-m-cresol	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	Pentachlorophenol	N	ug/L	1.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U			
SW-846 8270D	Phenanthrene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
SW-846 8270D	Phenol	N	ug/L	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U			
SW-846 8270D	Pyrene	N	ug/L	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			
	Total SVOCs[5]	N	ug/l	NA	0		0		0		0		0		0		0				

Notes:

(1) VOCs analyzed by EPA Method 8260, SVOCs were analyzed by EOA Method 8270, and lead was analyzed by EPA Method 6010.

(2) Total of the trihalomethanes not to exceed 100 micrograms/liter. Total value is sum of bromoform, chloroform, dibromochloromethane, and bromodichloromethane.

(3) 1,2-Dichloroethene is the sum of trans-1,2-dichloroethene and cis-1,2-dichloroethene.

(4) Total of the cis and trans - 1,3-dichloropropene not to exceed 0.40 ug/L.

(5) Refer to Appendix E for details.

(6) Class GA Water Standards obtained from NYSDEC document entitled "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, Dated June 1998."

(7) Lead samples filtered by the analytical laboratory.

NA - No applicable standard or guidance value.

NS - Not sampled for parameter(s)

Concentration exceeds Class GA Groundwater Standard.

J - Estimated value.

U - Non-detect value.

UJ - Estimated non-detect value.

GW - Groundwater sample.

Reg - Regular sample.

FD - Field Duplicate sample.

N - Sample not filtered.

mg/L - Milligrams per liter.

ug/L - Micrograms per liter.

FIGURES

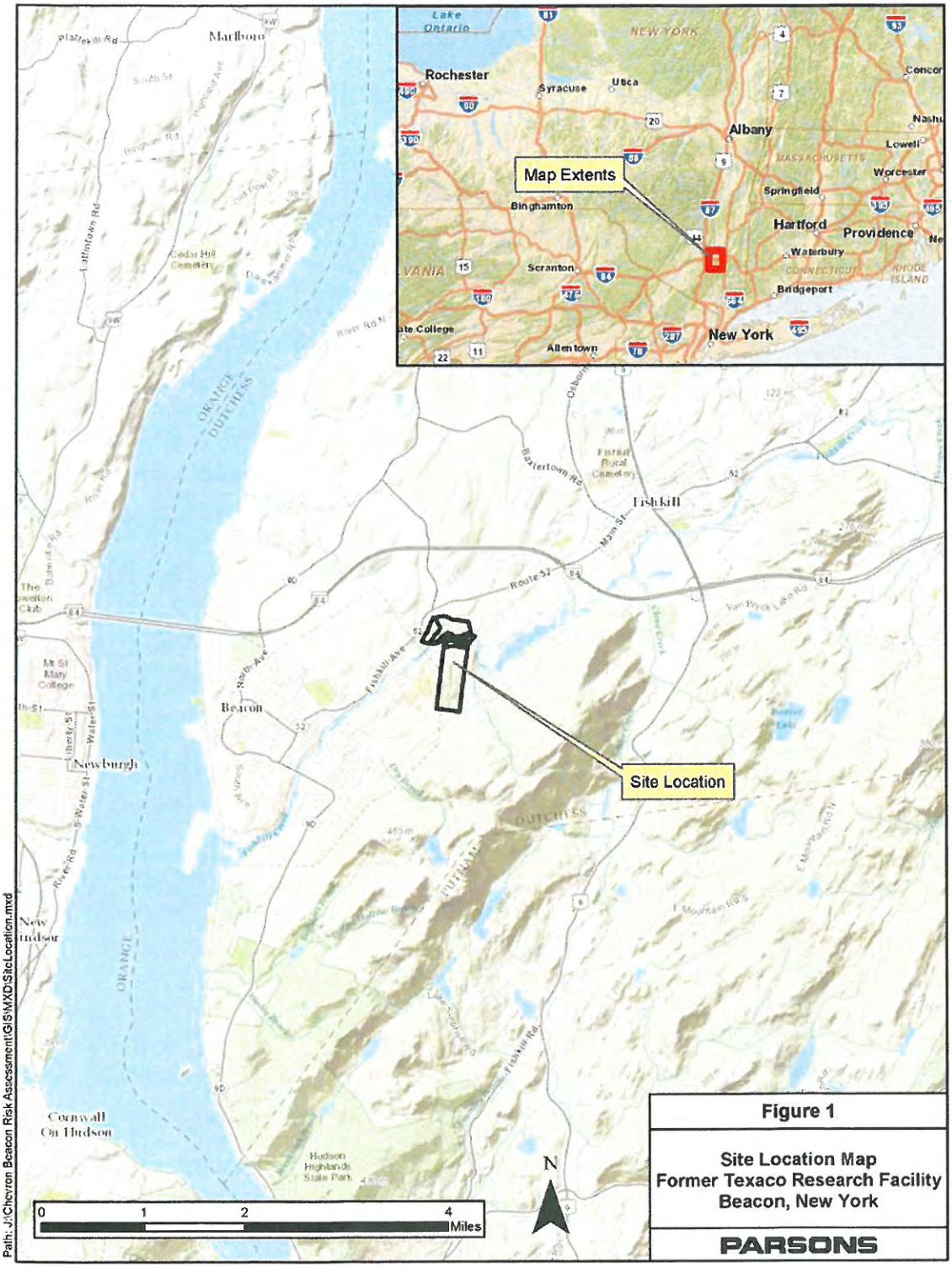


Figure 1

Site Location Map
Former Texaco Research Facility
Beacon, New York

PARSONS

N

OR-1 OS-1
OR-2 OS-2
DB-8A
OR-3 OS-3
Old Sludge Lagoon
OR-4 OS-4
Chemical Burial Site No. 1
(See Note 3)
Trash Pile A
Central Hudson Gas & Electric
DB-14
DB-17
DB-17
DB-12
DB-18
DB-6B
DB-6A
Trash Pile D
(See Note 2)
CS-10
Former Softball Field
UC-1A
DB-32
CS-08
CS-11
DB-13A
DB-7A
DB-31
Central Hudson Gas & Electric
CS-09
Trash Pile B
DB-16
DC-1
Chemical Burial Site No. 3
(See Note 3)
DL-8
UB-5
DC-2
DL-7A
DL-7B
Potable Well
Pumphouse
Former Bathroom Structure
Container Site
Chemical Burial Site No. 2
DL-6
Tennis Courts Area
MW-A
DL-5
Disposal Pit
(See Note 4)
DL-3
DL-4
DL-1
DL-2
Former Pavilion Area
Open Dig
Excavation Area
(See Note 4)
Trash Pile C
New Sludge Lagoon
UL-2
UL-1
MW-B
The Back 93 Acres Parcel
(OU-1E)
Former Borrow Area
Concrete Resevoir

Overburden Well (Wells that currently exist at OU-1E)
Bedrock Well (Wells that currently exist at OU-1E)
Abandoned GW Monitoring Well
Approximate Limit of Excavation.
Excavation performed after 2001.
Approximate Limit of Excavation.
Excavation performed prior to 2001.
The Back 93 Acres Parcel, OU-1E (Approximate Boundary)

0 150 300 600 900 Feet

Wetland Zone
Central Hudson Gas & Electric Property
Stream

Notes to Assigned Zones to Back 93 Acre Parcel:
1) Zoned areas based on figure generated by Lawrence J. Paggi, P.E., P.C. LMV Architects, and McGrath & Co. Inc. entitled; "Beacon Technology Center Redevelopment Project, Site Constraints-Combined: Traffic, Topographic, and Environmental", January 14 2015

PARSONS
301 Plainfield Road, Suite 350; Syracuse, NY 13212 315-451-9560

Back 93 Acres Parcel (OU-1E)
Former Groundwater Monitoring Well Locations
Former Texaco Research Center
Beacon New York

Figure 2

1:2,000	E. Sisson	CHKD:	APRD:
	4/3/2019		

Path: Q:\GIS\Chevron\MXD\2016\OU1E_MW_Locations.mxd

FIGURE 3

FORMER TEXACO RESEARCH CENTER
BEACON, NEW YORK

Groundwater Monitoring Well Locations

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

File Name: Q:\GIS\Chevron\MXDs\Chevron Beacon Site Map Figure 2.mxd

Plot Date: 3/20/2019 Plotted By: Sisson, Evan

N

Spring Street

Old Glenham Road

East Street

Consolidated Rail Corporation

TF-23 (199.00)

TF-5 (200.42)

Petticoat Lane

Chase Drive

Winterberry Road

Washington Avenue

200.00

Henry Street

Park Lane

Linden Place

Birch Drive

DC-1 (225.40)

DC-2 (225.55)

Belvedere Road

Old Town Road

220.00

225.00

OR-2 (NA)

DB-8A (225.35)

OS-2 (215.56)

DB-17 (222.87)

Joy Place

DB-6 (NM)

OS-3 (228.12)

OR-3 (NA)

Brookside Road

Fun Place

Monitoring Well Location

200.00 Groundwater Elevation Contour

Groundwater Flow Direction

(225.35) Groundwater Elevation Result (June 2018)

(NM) Not Measured

(NA) Non-Applicable (Note: Wells OR-2 and OR-3 are bedrock wells and are not contoured. Only overburden well contoured).

Source: Badey & Watson, Surveying & Engineering, P.C.

The meridian and coordinate values hereon refer to The New York State Coordinate System, East Zone (NAD-1983) expressed in feet.

Well and boring elevations are referenced to a site vertical datum established by Texaco in 1958, hereinafter referred to as the Texaco Datum. This datum is 1.07' below NAVD 1988.

0 250 500 1,000 Feet

FIGURE 4

FORMER TEXACO RESEARCH CENTER
BEACON, NEW YORK

GROUNDWATER ELEVATION CONTOUR MAP (JUNE 2018)

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

File Name: Q:\GIS\ChevronMXDs\Chevron Beacon GW Contours June 2018.mxd

Plot Date: 4/17/2019 Plotted By: Sisson, Evan

N

Consolidated Rail Corporation

TF-23 (200.10)

TF-5 (201.11)

DC-1 (225.90)

DC-2 (226.45)

DB-8A (226.16)

OR-2 (NA)

OS-2 (217.51)

DB-17 (223.30)

OS-3 (227.35)

DB-6 (NM)

OR-3 (NA)

201.00

210.00

220.00

225.00

225.00

220.00

220.00

Monitoring Well Location

220.00 Groundwater Elevation Contour

Groundwater Flow Direction

(223.30) Groundwater Elevation Result (November 2018)

(NM) Not Measured

(NA) Non-Applicable
(Note: Wells OR-2 and OR-3 are bedrock wells and are not contoured. Only overburden well contoured).

(*) Well not used for developing contour map.

Source: Badey & Watson, Surveying & Engineering, P.C.

The meridian and coordinate values hereon refer to The New York State Coordinate System, East Zone (NAD-1983) expressed in feet.

Well and boring elevations are referenced to a site vertical datum established by Texaco in 1958, hereinafter referred to as the Texaco Datum. This datum is 1.07' below NAVD 1988.

0 250 500 1,000 Feet

FIGURE 5

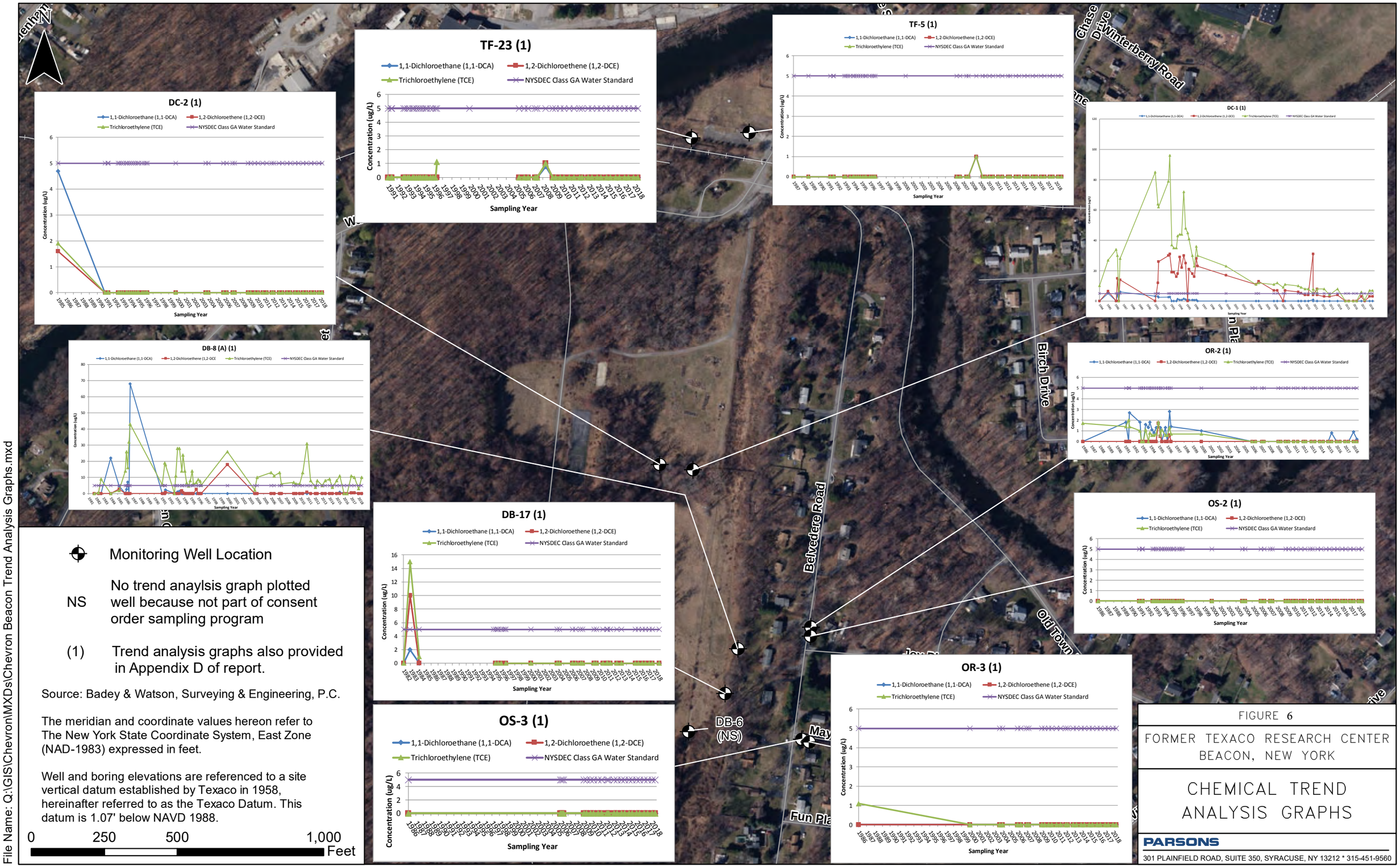
FORMER TEXACO RESEARCH CENTER
BEACON, NEW YORK

GROUNDWATER ELEVATION CONTOUR MAP
(NOVEMBER 2018)

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

File Name: Q:\GIS\Chevron\MXDs\Chevron Beacon GW Contours Nov 2018.mxd

Plot Date: 4/23/2019 Plotted By: Sisson, Evan



File Name: Q:\GIS\Chevron\MXDs\Chevron Beacon Trend Analysis Graphs.mxd

Monitoring Well Location

NS — No trend anaylsis graph plotted well because not part of consent order sampling program

(1) — Trend analysis graphs also provided in Appendix D of report.

Source: Badey & Watson, Surveying & Engineering, P.C.

The meridian and coordinate values hereon refer to The New York State Coordinate System, East Zone (NAD-1983) expressed in feet.

Well and boring elevations are referenced to a site vertical datum established by Texaco in 1958, hereinafter referred to as the Texaco Datum. This datum is 1.07' below NAVD 1988.

0 250 500 1,000 Feet

Plot Date: 3/25/2019 Plotted By: Sisson, Evan

FIGURE 6

FORMER TEXACO RESEARCH CENTER
BEACON, NEW YORK

CHEMICAL TREND ANALYSIS GRAPHS

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

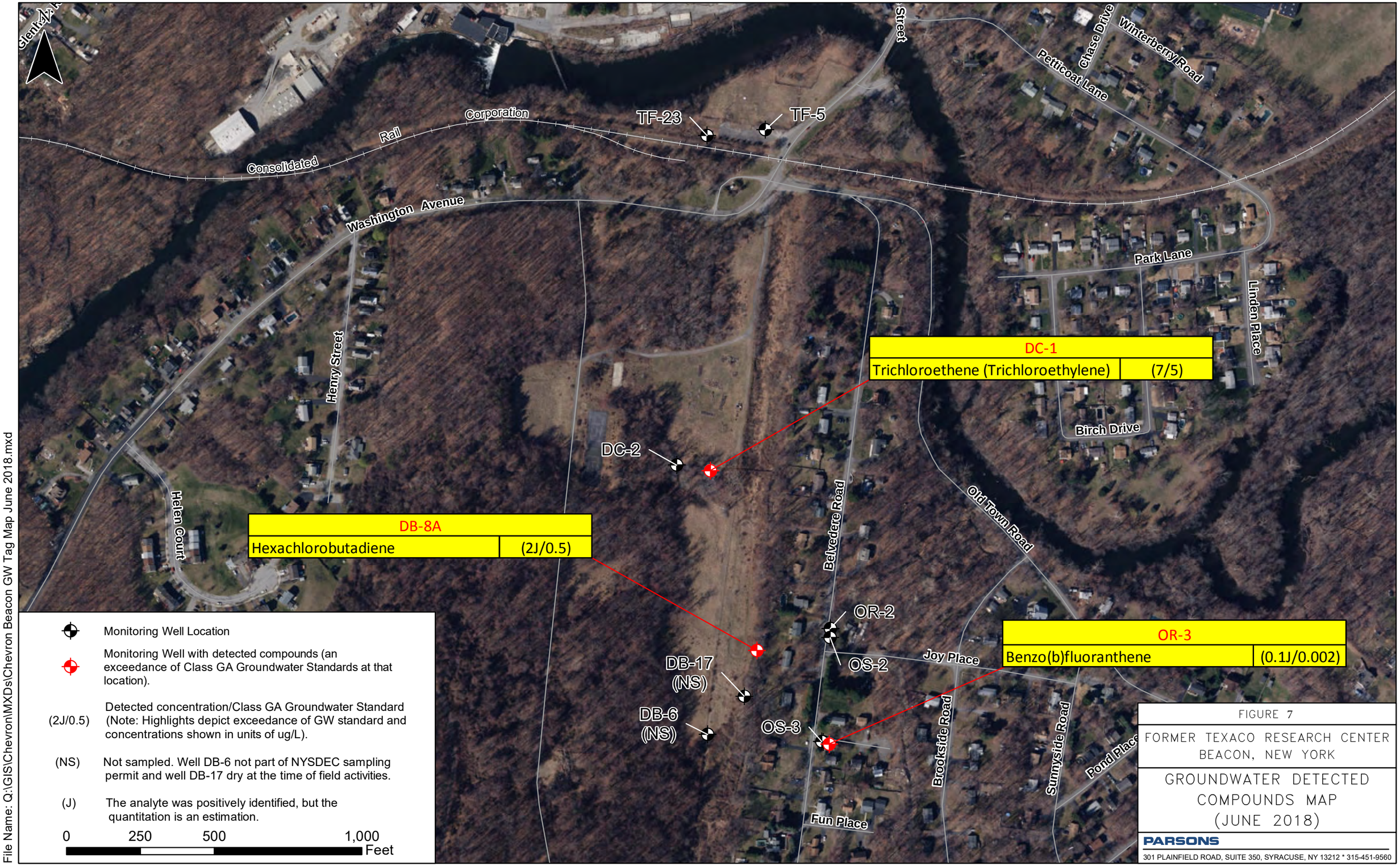


FIGURE 7

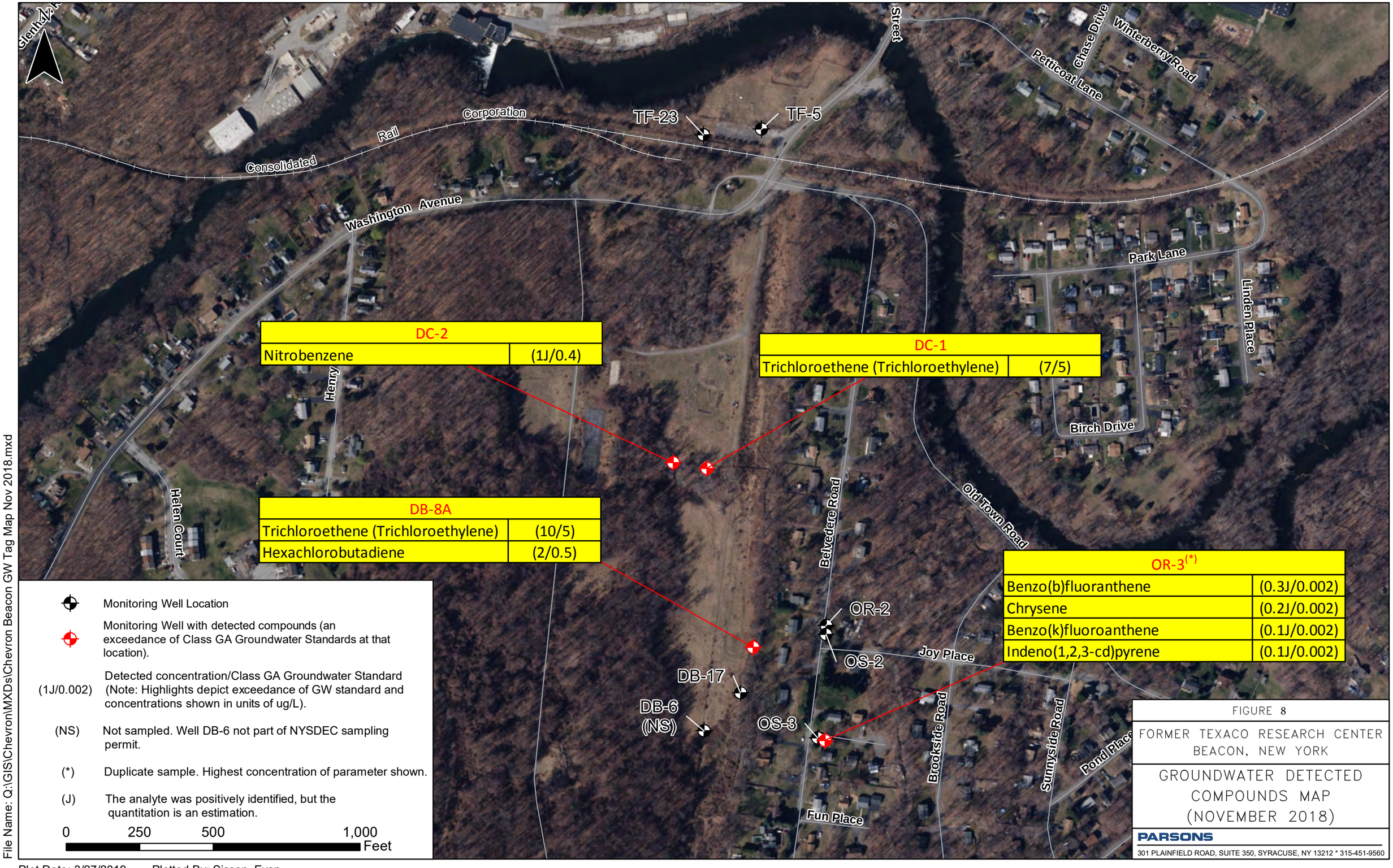
FORMER TEXACO RESEARCH CENTER
BEACON, NEW YORK

GROUNDWATER DETECTED COMPOUNDS MAP
(JUNE 2018)

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

File Name: Q:\GIS\Chevron\MXDs\Chevron Beacon GW Tag Map June 2018.mxd

Plot Date: 3/25/2019 Plotted By: Sisson, Evan



File Name: Q:\GIS\Chevron\MXDs\Chevron Beacon GW Tag Map Nov 2018.mxd

Plot Date: 3/27/2019 Plotted By: Sisson, Evan

FIGURE 8

FORMER TEXACO RESEARCH CENTER
BEACON, NEW YORK

GROUNDWATER DETECTED COMPOUNDS MAP
(NOVEMBER 2018)

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

APPENDIX A

PARSONS GROUNDWATER SAMPLING RECORD LOGS (JUNE 2018 AND NOVEMBER 2018)

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: DB-8A | Well Diameter: 2 Inches

Samplers: Jim Goldthwait, Ed Ashton

Purging Data

Method: Disposable rope and bailer | Date/Time: 06-12-2018 / 16:05

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	1.482		
Initial Depth to Water (ft.):	7.25	Depth to Well Bottom (ft.):	16.51

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
12:51	0.00	0.00	0.00	0.00	0.91	0.00	0.00		140.7	Pre, 0.0 ppm well head
12:58	0.00	0.00	2.00	6.82	1.12	64.70	0.38	17.08	156	
13:03	0.00	0.00	4.00	6.76	2.29	56.10	0.39	14.98	159	
13:06	0.00	0.00	6.00	6.74	1.44	102.00	0.41	14.16	140	
13:08	0.00	0.00	8.00	6.75	3.21	80.10	0.41	13.92	105	
15:52	0.00	0.00	0.00	6.66	0.00	173.00	0.44	17.97	101	Sample
16:05	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	194.5	Post

Sampling Data

Method: Disposable rope and bailer | Date/Time: 06-12-2018 / 16:06 | Total Volume Purged (gallons): 8

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH	6.66	Ferrous Iron (mg/L)	0.40
Spec. Cond.(mS/cm)	0.44	Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)	173.00	Methyl Alkalinity (mg/L)	860.00
DO (mg/L)	0.00		
Temp.(°C)	17.97		
ORP (mv)	101.00		

SAMPLE SET				
Parameter	**Bottle**	**Pres.**	**Method**	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: DB-17A | Well Diameter: 2 Inches

Samplers: Ed AshtonJim Goldthwait

Purging Data

Method: NA | Date/Time: 06-12-2018 / 13:22

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	0.016		
Initial Depth to Water (ft.):	8.9	Depth to Well Bottom (ft.):	9

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
13:22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	Pre, one inch in well. Not enough water in well to purge. Well basically dry. 0.0 ppm well head. No sample collected.

Sampling Data

Method: NA | Date/Time: 06-18-2018 / 16:30 | Total Volume Purged (gallons): 0

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH	NA	Ferrous Iron (mg/L)	NA
Spec. Cond.(mS/cm)	NA	Phenol Alkalinity (mg/L)	NA
Turbidity (NTU)	NA	Methyl Alkalinity (mg/L)	NA
DO (mg/L)	NA		
Temp.(°C)	NA		
ORP (mv)	NA		

SAMPLE SET				
Parameter	**Bottle**	**Pres.**	**Method**	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	
SVOCs	2-250 mL amber glass		SW8270D	
Total Lead	250 mL poly	HNO3	SW6010C	
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: DC-1 | Well Diameter: 2 Inches

Samplers: Ed AshtonJim Goldthwait

Purging Data

Method: Disposable rope and bailer | Date/Time: 06-12-2018 / 12:41

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	0.168		
Initial Depth to Water (ft.):	3.9	Depth to Well Bottom (ft.):	4.95

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
12:41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	not enough water volume in well to collect purge measurements. Purged approx. .25 gals dry. 0.0 ppm well head

Sampling Data

Method: Disposable rope and bailer | Date/Time: 06-12-2018 / 15:44 | Total Volume Purged (gallons): 0.25

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH	NA	Ferrous Iron (mg/L)	NA
Spec. Cond.(mS/cm)	NA	Phenol Alkalinity (mg/L)	NA
Turbidity (NTU)	NA	Methyl Alkalinity (mg/L)	NA
DO (mg/L)	NA		
Temp.(°C)	NA		
ORP (mv)	NA		

SAMPLE SET				
Parameter	**Bottle**	**Pres.**	**Method**	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: DC-2 | Well Diameter: 2 Inches

Samplers: Ed AshtonJim Goldthwait

Purging Data

Method: Disposable rope and bailer | Date/Time: 06-12-2018 / 15:27

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	1.629		
Initial Depth to Water (ft.):	3.55	Depth to Well Bottom (ft.):	13.73

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
12:05	0.00	0.00	0.00	0.00	5.63	0.00	0.00	0.00	101.2	Pre, 0.0 ppm well head
12:09	0.00	0.00	2.00	7.51	4.26	499.00	0.27	16.73	97	
12:16	0.00	0.00	4.00	7.23	4.63	625.00	0.26	14.12	105	
12:18	0.00	0.00	6.00	7.02	6.50	560.00	0.27	13.84	109	
12:22	0.00	0.00	8.00	6.85	3.97	590.00	0.27	13.42	111	
15:19	0.00	0.00	0.00	6.99	3.90	800.00	0.29	17.67	132	Sample
15:27	0.00	0.00	0.00	0.00	4.81	0.00	0.00	0.00	151.5	Post

Sampling Data

Method: Disposable rope and bailer | Date/Time: 06-12-2018 / 15:27 | Total Volume Purged (gallons): 8

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH	6.99	Ferrous Iron (mg/L)	0.20
Spec. Cond.(mS/cm)	0.29	Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)	800.00	Methyl Alkalinity (mg/L)	600.00
DO (mg/L)	3.90		
Temp.(°C)	17.67		
ORP (mv)	132.00		

SAMPLE SET				
Parameter	**Bottle**	**Pres.**	**Method**	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

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LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: TF-5 | Well Diameter: 2 Inches

Samplers: Ed AshtonJim Goldthwait

Purging Data

Method: Disposable rope and bailer | Date/Time: 06-12-2018 / 14:23

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	0.406		
Initial Depth to Water (ft.):	7.16	Depth to Well Bottom (ft.):	9.7

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
10:47	0.00	0.00	0.00	0.00	5.92	0.00	0.00	0.00	118.3	Pre, 0.0 ppm well head
10:56	0.00	0.00	0.50	6.92	12.57	220.00	5.38	20.15	62	
11:02	0.00	0.00	1.00	6.55	9.11	339.00	5.43	18.29	94	
11:05	0.00	0.00	1.50	17.54	16.96	377.00	5.30	17.58	96	
11:08	0.00	0.00	2.00	17.02	12.46	366.00	5.30	17.11	88	
11:10	0.00	0.00	2.50	6.50	12.37	333.00	5.32	17.15	70	
14:12	0.00	0.00	0.00	6.54	7.08	47.40	5.16	24.06	119	Sample
14:23	0.00	0.00	0.00	0.00	6.25	0.00	0.00	0.00	189.1	Pre

Sampling Data

Method: Disposable rope and bailer | Date/Time: 06-12-2018 / 13:59 | Total Volume Purged (gallons): 2.5

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH	6.54	Ferrous Iron (mg/L)	0.40
Spec. Cond.(mS/cm)	5.16	Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)	47.40	Methyl Alkalinity (mg/L)	720.00
DO (mg/L)	7.08		
Temp.(°C)	24.06		
ORP (mv)	189.10		

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: TF-23 | Well Diameter: 2 Inches

Samplers: Ed AshtonJim Goldthwait

Purging Data

Method: Disposable rope and bailer | Date/Time: 06-12-2018 / 14:50

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	0.768		
Initial Depth to Water (ft.):	8.2	Depth to Well Bottom (ft.):	13

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
11:20	0.00	0.00	0.00	0.00	5.22	0.00	0.00	0.00	139.4	Pre, 0.0 ppm well head
11:26	0.00	0.00	1.00	7.45	8.42	800.00	0.72	16.76	81	
11:30	0.00	0.00	2.00	6.90	8.01	800.00	0.70	14.74	100	
11:33	0.00	0.00	3.00	6.70	7.18	800.00	0.69	13.77	111	
11:35	0.00	0.00	4.00	6.56	9.45	800.00	0.71	12.95	111	
14:25	0.00	0.00	0.00	6.83	6.23	387.00	0.79	19.53	82	Sample Duplicate sample collected (TF-123)
14:50	0.00	0.00	0.00	0.00	4.98	0.00	0.00	0.00	163.6	Post

Sampling Data

Method: Disposable rope and bailer | Date/Time: 06-12-2018 / 14:45 | Total Volume Purged (gallons): 4

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH	6.83	Ferrous Iron (mg/L)	0.40
Spec. Cond.(mS/cm)	0.79	Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)	387.00	Methyl Alkalinity (mg/L)	660.00
DO (mg/L)	6.23		
Temp.(°C)	19.53		
ORP (mv)	82.00		

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: OR-2 | Well Diameter: 4 Inches

Samplers: Ed AshtonJim Goldthwait

Purging Data

Method: Disposable rope and bailer | Date/Time: 06-13-2018 / 13:28

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	19.648		
Initial Depth to Water (ft.):	7.8	Depth to Well Bottom (ft.):	38.5

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
09:30	0.00	0.00	0.00	0.00	1.61	0.00	0.00	0.00	196.2	Pre,0.0 ppm well head
09:37	0.00	0.00	10.00	6.58	0.21	46.80	0.58	15.53	70	
11:20	0.00	0.00	20.00	6.82	0.00	116.00	0.57	15.09	54	
11:30	0.00	0.00	40.00	6.95	0.90	41.90	0.62	14.64	24	
11:41	0.00	0.00	60.00	7.03	0.92	27.90	0.62	14.59	3	
11:58	0.00	0.00	80.00	7.04	0.85	25.50	0.63	14.26	-11	
13:24	0.00	0.00	0.00	6.84	0.00	7.60	0.63	16.76	12	Sample, MS/MSD collected
13:28	0.00	0.00	0.00	0.00	1.75	0.00	0.00	0.00	-42.7	Post

Sampling Data

Method: Disposable rope and bailer | Date/Time: 06-13-2018 / 13:32 | Total Volume Purged (gallons): 80

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH	6.84	Ferrous Iron (mg/L)	0.80
Spec. Cond.(mS/cm)	0.63	Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)	7.60	Methyl Alkalinity (mg/L)	660.00
DO (mg/L)	0.00		
Temp.(°C)	16.76		
ORP (mv)	12.00		

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: OS-2 | Well Diameter: 4 Inches

Samplers: Ed AshtonJim Goldthwait

Purging Data

Method: Disposable rope and bailer | Date/Time: 06-13-2018 / 13:44

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	5.568		
Initial Depth to Water (ft.):	6.2	Depth to Well Bottom (ft.):	14.9

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
12:13	0.00	0.00	0.00	0.00	2.08	0.00	0.00	0.00	129.6	Pre, 0.0 ppm well head
12:25	0.00	0.00	10.00	7.02	1.23	119.00	0.24	16.09	78	
12:38	0.00	0.00	20.00	6.71	1.60	105.00	0.24	15.93	108	
12:48	0.00	0.00	30.00	6.52	0.17	33.20	0.24	15.61	142	
13:36	0.00	0.00	0.00	6.99	0.36	38.90	0.25	15.73	65	Sample
13:44	0.00	0.00	0.00	0.00	2.21	0.00	0.00	0.00	143	Post

Sampling Data

Method: Disposable rope and bailer | Date/Time: 06-13-2018 / 12:48 | Total Volume Purged (gallons): 30

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH	6.99	Ferrous Iron (mg/L)	0.20
Spec. Cond.(mS/cm)	0.25	Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)	38.90	Methyl Alkalinity (mg/L)	240.00
DO (mg/L)	0.36		
Temp.(°C)	15.73		
ORP (mv)	143.00		

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: OR-3 | Well Diameter: 4 Inches

Samplers: Ed AshtonJim Goldthwait

Purging Data

Method: Submersible pump with dedicated tubing | Date/Time: 06-14-2018 / 10:25

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	31.776		
Initial Depth to Water (ft.):	24.35	Depth to Well Bottom (ft.):	74

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
08:36	0.00	0.00	0.00	0.00	3.91	0.00	0.00	0.00	214.6	Pre, 0.1 ppm well head
09:05	0.00	0.00	20.00	6.97	0.79	65.10	0.56	21.15	-9	
09:14	0.00	0.00	40.00	7.27	0.00	7.90	0.56	16.33	-26	
09:17	0.00	0.00	60.00	7.15	6.87	7.10	0.58	13.97	-22	
09:26	0.00	0.00	80.00	7.07	0.00	6.40	0.58	13.31	-17	
09:33	0.00	0.00	100.00	7.41	4.54	23.90	0.28	11.98	9	
09:37	0.00	0.00	100.00	7.07	1.34	0.00	0.58	13.53	-25	
10:16	0.00	0.00	0.00	7.01	0.99	1.40	0.45	15.50	111	Sample
10:25	0.00	0.00	0.00	0.00	3.69	0.00	0.00	0.00	229	Post

Sampling Data

Method: Disposable rope and bailer | Date/Time: 06-14-2018 / 09:36 | Total Volume Purged (gallons): 100

Field Parameters

STABILIZED PARAMETERS	
pH	7.01
Spec. Cond.(mS/cm)	0.45
Turbidity (NTU)	1.40
DO (mg/L)	0.99
Temp.(°C)	15.50
ORP (mv)	111.00

HACH TEST KITS	
Ferrous Iron (mg/L)	0.20
Phenol Alkalinity (mg/L)	0.00
Methyl Alkalinity (mg/L)	420.00

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: OS-3 | Well Diameter: 4 Inches

Samplers: Ed AshtonJim Goldthwait

Purging Data

Method: Disposable rope and bailer | Date/Time: 06-14-2018 / 10:48

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	5.184		
Initial Depth to Water (ft.):	4.9	Depth to Well Bottom (ft.):	13

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
08:45	0.00	0.00	0.00	0.00	9.44	0.00	0.00	0.00	213.1	Pre, 0.0 ppm well head
10:29	0.00	0.00	5.00	7.55	5.18	20.10	0.27	13.29	34	
10:30	0.00	0.00	10.00	7.37	5.05	45.10	0.28	12.34	16	
10:32	0.00	0.00	15.00	7.29	9.22	19.10	0.28	12.52	35	
10:33	0.00	0.00	20.00	7.23	4.72	26.90	0.27	12.04	62	
10:35	0.00	0.00	0.00	7.42	5.40	0.00	0.27	13.98	105	Sample
10:48	0.00	0.00	0.00	0.00	9.72	0.00	0.00	0.00	243.5	Post

Sampling Data

Method: Disposable rope and bailer | Date/Time: 06-14-2018 / 10:54 | Total Volume Purged (gallons): 20

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH	7.42	Ferrous Iron (mg/L)	0.20
Spec. Cond.(mS/cm)	0.27	Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)	0.00	Methyl Alkalinity (mg/L)	440.00
DO (mg/L)	5.40		
Temp.(°C)	13.98		
ORP (mv)	105.00		

SAMPLE SET				
Parameter	**Bottle**	**Pres.**	**Method**	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: OS-2 | Well Diameter: 4 Inches

Samplers: Jim GoldthwaitJosh Hawley

Purging Data

Method: Disposable rope and bailer | Date/Time: 11-01-2018 / 14:50

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	5.664		
Initial Depth to Water (ft.):	4.25	Depth to Well Bottom (ft.):	13.1

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
14:20					7.98				195.5	Pre measure
14:35			4.30	7.55		40.10	0.18	13.49		
14:37			8.60	7.70		60.80	0.18	12.54		
14:39			12.90	7.71		33.80	0.17	12.21		
14:41			17.30	7.70		37.50	0.17	11.80		
14:50			20.00	7.69		41.40	0.17	11.67		Final Measure
14:50					8.24				184.9	Post measure

Sampling Data

Method: Disposable rope and bailer | Date/Time: 11-01-2018 / 14:50 | Total Volume Purged (gallons): 20

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH		Ferrous Iron (mg/L)	0.00
Spec. Cond.(mS/cm)		Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)		Methyl Alkalinity (mg/L)	240.00
DO (mg/L)	8.24		
Temp.(°C)			
ORP (mv)	184.90		

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: OS-3 | Well Diameter: 4 Inches

Samplers: Jim GoldthwaitJosh Hawley

Purging Data

Method: Disposable rope and bailer | Date/Time: 11-01-2018 / 13:30

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	6.035		
Initial Depth to Water (ft.):	5.67	Depth to Well Bottom (ft.):	15.1

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
13:30					3.79				183.8	Pre measure
13:35			4.75	7.09		485.00	0.23	16.50		
13:37			9.50	6.85		625.00	0.22	16.03		
13:39			14.25	6.82		564.00	0.23	15.83		
13:41			19.00	6.77		628.00	0.23	15.70		
14:07					3.71				207.1	Post measure

Sampling Data

Method: Disposable rope and bailer | Date/Time: 11-01-2018 / 14:10 | Total Volume Purged (gallons): 20

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH		Ferrous Iron (mg/L)	0.00
Spec. Cond.(mS/cm)		Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)		Methyl Alkalinity (mg/L)	300.00
DO (mg/L)	3.71		
Temp.(°C)			
ORP (mv)	207.10		

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: TF-5 | Well Diameter: 2 Inches

Samplers: Jim GoldthwaitJosh Hawley

Purging Data

Method: Disposable rope and bailer | Date/Time: 11-01-2018 / 16:25

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	0.514		
Initial Depth to Water (ft.):	6.47	Depth to Well Bottom (ft.):	9.68

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
09:14					7.22				188.9	Pre-measure
09:32			0.50	6.40		367.00	1.94	16.25		
09:33			0.75	6.81		357.00	1.94	16.61		
09:35			1.25	6.91		267.00	2.74	16.72		
09:37			1.50	6.94		230.00	2.93	16.81		
16:25			2.00	7.00		39.80	2.85	16.29		Final reading
16:25			2.00		8.02				192.8	Post measure

Sampling Data

Method: Disposable rope and bailer | Date/Time: 11-01-2018 / 16:25 | Total Volume Purged (gallons): 2

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH		Ferrous Iron (mg/L)	0.00
Spec. Cond.(mS/cm)		Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)		Methyl Alkalinity (mg/L)	760.00
DO (mg/L)	8.02		
Temp.(°C)			
ORP (mv)	192.80		

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: TF-23 | Well Diameter: 2 Inches

Samplers: Jim GoldthwaitJosh Hawley

Purging Data

Method: Disposable rope and bailer | Date/Time: 11-01-2018 / 15:55

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	0.931		
Initial Depth to Water (ft.):	7.1	Depth to Well Bottom (ft.):	12.92

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
09:45					3.69				177.7	Pre measure
09:55			0.75	7.01		918.00	0.57	15.26		
09:57			1.50	6.82		971.00	0.54	15.02		
09:59			2.25	6.76		0.00	0.53	14.90		Turbidity didn't read correctly
10:01			3.00	6.76		718.00	0.52	14.83		
15:55			3.50	6.86		183.00	0.53	14.62		Final Reading
15:55					4.11				191.2	Post measure

Sampling Data

Method: Disposable rope and bailer | Date/Time: 11-01-2018 / 15:55 | Total Volume Purged (gallons): 3.5

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH		Ferrous Iron (mg/L)	0.00
Spec. Cond.(mS/cm)		Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)		Methyl Alkalinity (mg/L)	720.00
DO (mg/L)	4.11		
Temp.(°C)			
ORP (mv)	191.20		

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: DB-8A | Well Diameter: 2 Inches

Samplers: Jim GoldthwaitJosh Hawley

Purging Data

Method: Disposable rope and bailer | Date/Time: 11-02-2018 / 09:55

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	1.6		
Initial Depth to Water (ft.):	6.44	Depth to Well Bottom (ft.):	16.44

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
11:30					1.66				189.9	Pre measure
11:35			1.22	7.16		46.10	0.37	14.60		
11:37			2.44	7.08		43.50	0.36	14.50		
11:39			3.66	7.06		24.00	0.36	14.47		
11:41			4.88	7.00		21.40	0.36	14.46		
09:40			5.50	6.99		24.30	0.18	15.73		Final reading
09:55					2.51				160	Post measure

Sampling Data

Method: Disposable rope and bailer | Date/Time: 11-02-2018 / 09:55 | Total Volume Purged (gallons): 5.5

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH		Ferrous Iron (mg/L)	0.40
Spec. Cond.(mS/cm)		Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)		Methyl Alkalinity (mg/L)	1040.00
DO (mg/L)	2.51		
Temp.(°C)			
ORP (mv)	160.00		

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: DB-17A | Well Diameter: 2 Inches

Samplers: Jim GoldthwaitJosh Hawley

Purging Data

Method: Disposable rope and bailer | Date/Time: 11-02-2018 / 09:00

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	0.12		
Initial Depth to Water (ft.):	8.47	Depth to Well Bottom (ft.):	9.22

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
12:00					6.97				190	Pre measure
12:05			0.20	7.11		185.00	0.32	14.08		
12:07			0.40	7.07		325.00	0.32	13.65		
12:09			0.60	7.05		382.00	0.32	13.33		
08:45			1.00	6.87		44.50	0.16	15.70		Final Reading
09:00					4.35				219	Post measure

Sampling Data

Method: Disposable rope and bailer | Date/Time: 11-02-2018 / 09:00 | Total Volume Purged (gallons): 1

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH		Ferrous Iron (mg/L)	0.20
Spec. Cond.(mS/cm)		Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)		Methyl Alkalinity (mg/L)	980.00
DO (mg/L)	4.35		
Temp.(°C)			
ORP (mv)	219.00		

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: DC-1 | Well Diameter: 2 Inches

Samplers: Jim GoldthwaitJosh Hawley

Purging Data

Method: Disposable rope and bailer | Date/Time: 11-02-2018 / 10:55

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	0.238		
Initial Depth to Water (ft.):	3.4	Depth to Well Bottom (ft.):	4.89

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
10:50					4.35				201.4	Pre measure
10:55			0.20	7.22		1000.00	0.50	13.48		
10:56			0.40	7.26		973.00	0.51	13.25		
10:57			0.60	7.26		810.00	0.51	13.16		
10:58			0.80	7.15		433.00	0.51	13.10		
10:10			1.50	7.40		149.00	0.48	15.15		Final reading
10:55			1.50		4.02				185.1	Post measure

Sampling Data

Method: Disposable rope and bailer | Date/Time: 11-02-2018 / 10:30 | Total Volume Purged (gallons): 1.5

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH		Ferrous Iron (mg/L)	0.00
Spec. Cond.(mS/cm)		Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)		Methyl Alkalinity (mg/L)	1140.00
DO (mg/L)	4.02		
Temp.(°C)			
ORP (mv)	185.10		

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: DC-2 | Well Diameter: 2 Inches

Samplers: Jim GoldthwaitJosh Hawley

Purging Data

Method: Disposable rope and bailer | Date/Time: 11-02-2018 / 10:45

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	1.765		
Initial Depth to Water (ft.):	2.65	Depth to Well Bottom (ft.):	13.68

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
10:30					5.97				189.6	Pre measure
10:35			1.35	7.07		272.00	237.00	13.75		
10:37			2.70	7.12		234.00	0.23	7.12		
10:39			4.05	7.09		345.00	0.23	13.59		
11:26			5.45	7.13		346.00	0.23	13.59		
10:35			6.00	7.57		119.00	0.25	15.06		Final reading
10:45			6.00		4.57				193.4	Post measure

Sampling Data

Method: Disposable rope and bailer | Date/Time: 11-02-2018 / 10:45 | Total Volume Purged (gallons):

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH		Ferrous Iron (mg/L)	0.00
Spec. Cond.(mS/cm)		Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)		Methyl Alkalinity (mg/L)	640.00
DO (mg/L)	4.57		
Temp.(°C)			
ORP (mv)	193.40		

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: OR-2 | Well Diameter: 4 Inches

Samplers: Jim GoldthwaitJosh Hawey

Purging Data

Method: Submersible pump with dedicated tubing | Date/Time: 11-05-2018 / 11:15

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	21.075		
Initial Depth to Water (ft.):	6.07	Depth to Well Bottom (ft.):	39

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
09:20	6.07		0.00		3.11				194	Pre measure
09:25	12.50		10.00	7.37		21.00	0.48	12.00		
09:30	14.10		19.00	7.37		11.80	0.47	12.04		
09:35	16.70		29.00	7.41		6.70	0.47	11.90		
09:40	18.60		38.00	7.44		3.30	0.47	11.77		
09:45	20.70		49.00	7.46		2.60	0.47	11.67		
09:50	21.70		58.00	7.48		0.90	0.47	11.79		
09:55	23.00		70.00	7.48		1.00	0.47	11.84		
11:15	10.09		75.00	7.73		8.80	0.40	13.04		Final reading
11:15					2.80				-22.8	Post measure

Sampling Data

Method: Disposable rope and bailer | Date/Time: 11-05-2018 / 11:15 | Total Volume Purged (gallons): 75

Field Parameters

STABILIZED PARAMETERS		HACH TEST KITS	
pH		Ferrous Iron (mg/L)	0.00
Spec. Cond.(mS/cm)		Phenol Alkalinity (mg/L)	0.00
Turbidity (NTU)		Methyl Alkalinity (mg/L)	750.00
DO (mg/L)	2.80		
Temp.(°C)			
ORP (mv)			

SAMPLE SET				
Parameter	**Bottle**	**Pres.**	**Method**	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

LOW FLOW WELL SAMPLING RECORD

Site Name: Chevron TRC Beacon | Well ID: OR-3 | Well Diameter: 4 Inches

Samplers: Jim GoldthwaitJosh Hawley

Purging Data

Method: Submersible pump with dedicated tubing | Date/Time: 11-05-2018 / 13:45

WATER VOLUME CALCULATION			
= (Total Depth of Well - Depth To Water) x Casing Volume per Foot			
Water Volume =	34.08		
Initial Depth to Water (ft.):	20.25	Depth to Well Bottom (ft.):	73.5

Time	DTW	Pump Rate	Vol.	pH	DO	Turbidity	Spec. Cond.	Temp.	ORP	Comments
24 hr.	ft.	ml/min.	gal.		mg/L	NTU	mS/cm	°C	mv	
12:15			0.00		2.77				134	Pre measure
12:30	22.15		7.00	7.91		298.00	0.43	10.35		
12:35	23.15		15.00	7.89		130.00	0.43	10.44		
12:40	23.95		22.00	7.85		33.70	0.43	10.51		
12:45	25.65		30.00	7.84		18.90	0.42	10.58		
12:50	26.32		40.00	7.80		6.20	0.43	10.58		
12:55	26.60		50.00	7.79		4.00	0.43	10.63		
13:00	26.80		60.00	7.79		1.80	0.43	10.59		
13:05	26.95		70.00	7.79		1.30	0.43	10.59		
13:10	27.00		80.00	7.78		0.90	0.43	10.61		
13:15	27.10		90.00	7.78		0.60	0.43	10.62		
13:20	27.12		100.00	7.78		0.40	0.43	10.61		
13:25	27.15		110.00	7.78		0.50	0.43	10.62		Final
13:45					2.70				140.6	Post measure

Sampling Data

Method: Disposable rope and bailer | Date/Time: 11-05-2018 / 13:45 | Total Volume Purged (gallons): 110

Field Parameters

STABILIZED PARAMETERS	
pH	
Spec. Cond.(mS/cm)	
Turbidity (NTU)	
DO (mg/L)	2.70
Temp.(°C)	
ORP (mv)	140.60

HACH TEST KITS	
Ferrous Iron (mg/L)	0.00
Phenol Alkalinity (mg/L)	0.00
Methyl Alkalinity (mg/L)	600.00

SAMPLE SET				
Parameter	Bottle	Pres.	Method	
Select VOCs	3-40 mL glass vial	HCL	SW8260C	✔
SVOCs	2-250 mL amber glass		SW8270D	✔
Total Lead	250 mL poly	HNO3	SW6010C	✔
Alkalinity	250 mL poly	HNO3	SM 2320 B-1997	
Nitrate/Sulfate/ Chloride	2- 40 mL vials		EPA 300.0	
Manganese	250 mL poly	HNO3	SW-846 6010/SW-846 6020/EPA 200.7/EPA 200.8	
Iron (II)	250 mL amber	HCL	SM 3500-Fe	
Sulfide	250 mL poly	NaOH/Zinc Acetate	SM4500-S2 D-20	
Carbon dioxide	250 mL poly or 2-40 mL vials			
Methane/ Ethane/ Ethene	2-40 mL vials		SW-846 8115B/RSK 175	

APPENDIX B

PARSONS DATA REVIEW SUMMARY REPORTS FOR JUNE 2018 AND NOVEMBER 2018 GROUNDWATER SAMPLING EVENTS

DATA USABILITY SUMMARY REPORT
2018 RCRA SAMPLING

Former Chevron Texaco Research Center
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Prepared For:

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March 2019

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SECTION 1

DATA USABILITY SUMMARY

Groundwater samples were collected as part of the 2018 RCRA sampling event from the Chevron Beacon site on June 12, 2018 through June 14, 2018 and November 1, 2018 through November 5, 2018. Analytical results from these samples were validated and reviewed by Parsons for usability with respect to the following requirements:

- Work Plan
- QAPP,
- July 2005 NYSDEC Analytical Services Protocol (ASP), and
- USEPA Region II Standard Operating Procedures (SOPs) for organic and inorganic data review.

The analytical laboratory for this project was Eurofins Laboratories (Eurofins) in Lancaster, Pennsylvania. This laboratory is certified to conduct project analyses through the New York State Department of Health (NYSDOH) and the National Environmental Laboratory Accreditation Program (NELAP).

1.1 LABORATORY DATA PACKAGES

The laboratory data package turnaround time, defined as the time from sample receipt by the laboratory to receipt of the analytical data packages by Parsons, was 66-168 days for the samples.

The laboratory data packages received from Eurofins were paginated, complete, and overall were of good quality. Comments on specific quality control (QC) and other requirements are discussed in detail in the attached data validation report which is summarized in Section 2.

1.2 SAMPLING AND CHAIN-OF-CUSTODY

The samples were collected, properly preserved, shipped under a COC record, and received at Eurofins within one to three days of sampling. All samples were received intact and in good condition at Eurofins.

1.3 LABORATORY ANALYTICAL METHODS

The groundwater samples were collected from the site and analyzed for volatiles, semivolatiles, and dissolved lead. Summaries of issues concerning these laboratory analyses are presented in Subsections 1.3.1 through 1.3.3. The data qualifications resulting from the data validation review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS) are discussed for each analytical method in Section 2 of this Data Usability Summary Report (DUSR). A USEPA

Stage 4 data validation (i.e., full data validation) was conducted by Parsons on 10% of the project samples with the remaining 90% of the project samples undergoing a USEPA Stage 2B data validation which provides data defensibility. The laboratory data were reviewed and may be qualified with the following validation flags:

"U" - not detected at the value given,

"UJ" - estimated and not detected at the value given,

"J" - estimated at the value given,

"J+" - estimated biased high at the value given,

"J-" - estimated biased low at the value given,

"N" - presumptive evidence at the value given, and

"R" - unusable value.

The validated laboratory data were tabulated and are presented in Attachment A.

1.3.1 Volatile Organic Analysis

Groundwater samples collected from the site were analyzed for volatiles using the USEPA SW-846 8260C analytical method. Certain reported results for these samples were qualified as estimated based upon instrument calibrations. The reported volatile analytical results were 100% complete (i.e., usable) for the data presented by Eurofins. PARCCS requirements were met.

1.3.2 Semivolatile Organic Analysis

Groundwater samples collected from the site were analyzed for semivolatiles using the USEPA SW-846 8270D analytical method. Certain reported results for these samples were qualified as estimated based upon laboratory control sample recoveries and matrix spike/matrix spike duplicate (MS/MSD) recoveries. The reported semivolatile analytical results were 100% complete (i.e., usable) for the data presented by Eurofins. PARCCS requirements were met.

1.3.3 Metals Analysis

Groundwater samples collected from the site were analyzed for dissolved lead using the USEPA SW-846 6010C analytical method. The reported results for these samples did not require qualification resulting from data validation. The lead results were considered 100% complete (i.e., usable) for the data presented by Eurofins. PARCCS requirements were met.

SECTION 2

DATA VALIDATION REPORT

2.1 GROUNDWATER SAMPLES

Data review has been completed for data packages generated by Eurofins containing groundwater samples collected from the site. These samples were contained within sample delivery group (SDGs) CBD50, CBD53, and CBD54. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory. The validated laboratory data were tabulated and are presented in Attachment A.

Data validation was performed for all samples in accordance with the project work plan, QAPP, NYSDEC ASP, and the USEPA Region II SOPs for organic and inorganic data review. This data validation and usability report is presented by analysis type.

2.1.1 Volatiles

The following items were reviewed for compliancy in the volatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank and trip blank contamination
- GC/MS instrument performance
- Sample result verification and identification
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS/MSD precision and accuracy and initial and continuing calibrations as discussed below.

MS/MSD Precision and Accuracy

All MS/MSD precision (relative percent difference; RPD) and accuracy (percent recovery; %R) measurements were considered acceptable and within QC limits for designated spiked project samples with the exception of the high MS/MSD accuracy results for 1,1-dichloroethene (135%R/136%R; QC limit 80-131%R), trichlorofluoromethane (140%R/137%R; QC limit 60-136%R), methyl tert-butyl ether (124%R/122%R; QC limit 75-120%R), 1,1,1-trichloroethane (132%R/130%R; QC limit 67-126%R), and carbon tetrachloride (149%R/146%R; QC limit 64-134%R) during the spiked analyses of sample OR-2-W-26.00-180613; and the high MS/MSD accuracy results for tetrachloroethene (124%R/122%R; QC limit 80-120%R) during the spiked analyses of sample OR-2-W-26.00-181105. Validation qualification was not required for the parent samples since these compounds were not detected.

Initial and Continuing Calibrations

All initial calibration compounds were compliant with average relative response factors (RRFs) greater than 0.05 (0.01 for poor performers) and percent relative standard deviations (%RSDs) greater than 20% (40% for poor performers) with the exception of bromoform (23%RSD) in the initial calibration associated with samples in SDG CBD53 (2005546). Therefore, the bromoform results which were nondetects were considered estimated and qualified "UJ" for the affected samples.

All continuing calibration compounds were compliant with RRFs greater than 0.05 (0.01 for poor performers) and percent differences (%Ds) within ±20% (±40% for poor performers) with the exception of carbon tetrachloride (31%D) in the continuing calibrations associated with samples in SDG CBD50 (1955779). Therefore, the carbon tetrachloride results which were nondetects were considered estimated and qualified "UJ" for the affected samples.

Usability

All volatile results for the groundwater samples were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, comparability, and sensitivity. The volatile data presented by Eurofins were 100% complete (i.e., usable). The validated laboratory data are tabulated and presented in Attachment A.

2.1.2 Semivolatiles

The following items were reviewed for compliancy in the semivolatile analysis:

- Custody documentation
- Holding times

- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank contamination
- GC/MS instrument performance
- Sample result verification and identification
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS/MSD precision and accuracy and LCS recoveries as discussed below.

MS/MSD Precision and Accuracy

All MS/MSD precision (relative percent difference; RPD) and accuracy (percent recovery; %R) measurements were considered acceptable and within QC limits for designated spiked project samples with the exception of the low MS/MSD accuracy results for pentachlorophenol (46%R/35%R; QC limit 64-130%R) during the spiked analyses of sample OR-2-W-26.00-181105. Therefore, the nondetected pentachlorophenol result was considered estimated and qualified "UJ" for the affected parent sample.

LCS Recoveries

All LCS recoveries were considered acceptable and within QC limits with the exception of the low LCS recovery for dimethylphthalate (36%R; QC limit 37-116%R) associated with samples collected on 11/5/18. Therefore, results for this compound which were nondetects were considered estimated and qualified "UJ" for the affected samples.

Usability

All semivolatile results for the groundwater samples were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, comparability, and sensitivity. The

semivolatile data presented by Eurofins were 100% complete (i.e., usable). The validated semivolatile laboratory data are tabulated and presented in Attachment A.

2.1.3 Dissolved Lead

The following items were reviewed for compliancy in the dissolved lead analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration blank, and laboratory preparation blank contamination
- Matrix spike/matrix spike duplicate (MS/MSD) recoveries
- Laboratory duplicate precision
- Laboratory control sample (LCS) recoveries
- Serial dilutions
- Interference check sample recoveries
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols.

Usability

All lead results for the groundwater samples were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, comparability, and sensitivity. The dissolved lead data for the groundwater samples presented by Eurofins were 100% complete (i.e., usable). The validated laboratory data are tabulated and presented in Attachment A.

ATTACHMENT A

VALIDATED LABORATORY DATA

			Location ID		DB-17		DB-8A		DB-8A	
			Field Sample ID		DB-17-W-5.00-181102		DB-8A-W-5.00-180612		DB-8A-W-5.00-181102	
			Date Sampled		11/02/2018		06/12/2018		11/02/2018	
			SDG		2005546		1955779		2005546	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 6010C	Lead	7439-92-1	Y	mg/L	0.0071	U	0.006	U	0.0071	U
SW-846 8260C	1,1 Dichloroethene	75-35-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1,1-Trichloroethane	71-55-6	N	ug/L	0.3	U	0.5	U	0.3	U
SW-846 8260C	1,1,2,2-Tetrachloroethane	79-34-5	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1,2-Trichloroethane	79-00-5	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1-Dichloroethane	75-34-3	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	0.2	U	1	U	0.2	U
SW-846 8260C	1,2-Dichloroethane	107-06-2	N	ug/L	0.3	U	0.5	U	0.3	U
SW-846 8260C	1,2-Dichloroethene	540-59-0	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,2-Dichloropropane	78-87-5	N	ug/L	0.2	U	0.5	U	0.3	J
SW-846 8260C	1,3-Dichlorobenzene	541-73-1	N	ug/L	0.2	U	1	U	0.2	U
SW-846 8260C	1,4-Dichlorobenzene	106-46-7	N	ug/L	0.2	U	1	U	0.2	U
SW-846 8260C	2-Chloroethyl vinyl ether	110-75-8	N	ug/L	0.2	U	2	U	0.2	U
SW-846 8260C	Benzene	71-43-2	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Bromodichloromethane	75-27-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Bromoform	75-25-2	N	ug/L	0.2	UJ	0.5	U	0.2	UJ
SW-846 8260C	Bromomethane (Methyl bromide)	74-83-9	N	ug/L	0.3	U	0.5	U	0.3	U
SW-846 8260C	Carbon Tetrachloride	56-23-5	N	ug/L	0.2	U	0.5	UJ	0.2	U
SW-846 8260C	Chlorobenzene	108-90-7	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloroethane	75-00-3	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloroform	67-66-3	N	ug/L	0.2	U	0.5	U	0.6	J
SW-846 8260C	Chloromethane (Methyl chloride)	74-87-3	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	cis-1,3-Dichloropropene	10061-01-5	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Dibromochloromethane	124-48-1	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Ethylbenzene	100-41-4	N	ug/L	0.4	U	0.5	U	0.4	U
SW-846 8260C	Methyl-t-butyl ether	1634-04-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Methylene chloride (Dichloromethane)	75-09-2	N	ug/L	0.3	U	0.5	U	0.3	U
SW-846 8260C	Tetrachloroethene	127-18-4	N	ug/L	0.6	J	0.5	U	0.2	U
SW-846 8260C	Toluene	108-88-3	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	trans-1,3-Dichloropropene	10061-02-6	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Trichloroethene (Trichloroethylene)	79-01-6	N	ug/L	0.2	U	3		10	
SW-846 8260C	Trichlorofluoromethane (Freon 11)	75-69-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Vinyl chloride (Chloroethene)	75-01-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Xylene (total)	1330-20-7	N	ug/L	1	U	0.5	U	1	U
SW-846 8270D	1,2,4-Trichlorobenzene	120-82-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,3-Dichlorobenzene	541-73-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,4-Dichlorobenzene	106-46-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,5-Trichlorophenol	95-95-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,6-Trichlorophenol	88-06-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dichlorophenol	120-83-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dimethylphenol	105-67-9	N	ug/L	3	U	3	U	3	U
SW-846 8270D	2,4-Dinitrophenol	51-28-5	N	ug/L	15	U	14	U	15	U

			Location ID		DB-17		DB-8A		DB-8A	
			Field Sample ID		DB-17-W-5.00-181102		DB-8A-W-5.00-180612		DB-8A-W-5.00-181102	
			Date Sampled		11/02/2018		06/12/2018		11/02/2018	
			SDG		2005546		1955779		2005546	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	2,4-Dinitrotoluene	121-14-2	N	ug/L	1	U	1	U	1	U
SW-846 8270D	2,6-Dinitrotoluene	606-20-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Chloronaphthalene	91-58-7	N	ug/L	0.4	U	0.4	U	0.4	U
SW-846 8270D	2-Chlorophenol (o-Chlorophenol)	95-57-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Methyl-Naphthlalene	91-57-6	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	2-Methylphenol (o-Cresol)	95-48-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Nitroaniline (o-Nitroaniline)	88-74-4	N	ug/L	2	U	2	U	2	U
SW-846 8270D	2-Nitrophenol (o-Nitrophenol)	88-75-5	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3,3'-Dichlorobenzidine	91-94-1	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3-Nitroaniline	99-09-2	N	ug/L	3	U	3	U	3	U
SW-846 8270D	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	534-52-1	N	ug/L	8	U	8	U	8	U
SW-846 8270D	4-Bromophenylphenylether	101-55-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Chloroaniline	106-47-8	N	ug/L	4	U	4	U	4	U
SW-846 8270D	4-Chlorophenyl phenyl ether	7005-72-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Methylphenol (p-Cresol)	106-44-5	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Nitroaniline	100-01-6	N	ug/L	0.9	U	0.9	U	0.9	U
SW-846 8270D	4-Nitrophenol	100-02-7	N	ug/L	11	U	10	U	10	U
SW-846 8270D	Acenaphthene	83-32-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Acenaphthylene	208-96-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Anthracene	120-12-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)anthracene	56-55-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)pyrene	50-32-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(b)fluoranthene	205-99-2	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(g,h,i)perylene	191-24-2	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(k)fluoranthene	207-08-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	bis(2-Chloroethoxy)methane	111-91-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Chloroethyl) ether	111-44-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-chloroisopropyl) ether	108-60-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Ethylhexyl)phthalate	117-81-7	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Butylbenzylphthalate	85-68-7	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Carbazole	86-74-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Chrysene	218-01-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Di-n-butylphthalate	84-74-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Di-n-octylphthalate	117-84-0	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Dibenz(a,h)anthracene	53-70-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Dibenzofuran	132-64-9	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Diethylphthalate	84-66-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Dimethyl phthalate	131-11-3	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Fluoranthene	206-44-0	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Fluorene	86-73-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobenzene	118-74-1	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobutadiene	87-68-3	N	ug/L	0.5	U	2	J	2	
SW-846 8270D	Hexachlorocyclopentadiene	77-47-4	N	ug/L	5	U	5	U	5	U

			Location ID		DB-17		DB-8A		DB-8A	
			Field Sample ID		DB-17-W-5.00-181102		DB-8A-W-5.00-180612		DB-8A-W-5.00-181102	
			Date Sampled		11/02/2018		06/12/2018		11/02/2018	
			SDG		2005546		1955779		2005546	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	Hexachloroethane	67-72-1	N	ug/L	1	U	1	U	1	U
SW-846 8270D	Indeno(1,2,3-cd)Pyrene	193-39-5	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Isophorone	78-59-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	N-Nitrosodi-n-propylamine	621-64-7	N	ug/L	0.7	U	0.7	U	0.7	U
SW-846 8270D	N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	N	ug/L	0.7	U	0.7	U	0.7	U
SW-846 8270D	Naphthalene	91-20-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Nitrobenzene	98-95-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	p-Chloro-m-cresol	59-50-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pentachlorophenol	87-86-5	N	ug/L	1	U	1	U	1	U
SW-846 8270D	Phenanthrene	85-01-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Phenol	108-95-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pyrene	129-00-0	N	ug/L	0.1	U	0.1	U	0.1	U

			Location ID		DC-1		DC-1		DC-2	
			Field Sample ID		DC-1-W-2.00-180612		DC-1-W-2.00-181102		DC-2-W-7.50-180612	
			Date Sampled		06/12/2018		11/02/2018		06/12/2018	
			SDG		1955779		2005546		1955779	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 6010C	Lead	7439-92-1	Y	mg/L	0.006	U	0.0071	U	0.006	U
SW-846 8260C	1,1 Dichloroethene	75-35-4	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	1,1,1-Trichloroethane	71-55-6	N	ug/L	0.5	U	0.3	U	0.5	U
SW-846 8260C	1,1,2,2-Tetrachloroethane	79-34-5	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	1,1,2-Trichloroethane	79-00-5	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	1,1-Dichloroethane	75-34-3	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	1	U	0.2	U	1	U
SW-846 8260C	1,2-Dichloroethane	107-06-2	N	ug/L	0.5	U	0.3	U	0.5	U
SW-846 8260C	1,2-Dichloroethene	540-59-0	N	ug/L	3		3		0.5	U
SW-846 8260C	1,2-Dichloropropane	78-87-5	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	1,3-Dichlorobenzene	541-73-1	N	ug/L	1	U	0.2	U	1	U
SW-846 8260C	1,4-Dichlorobenzene	106-46-7	N	ug/L	1	U	0.2	U	1	U
SW-846 8260C	2-Chloroethyl vinyl ether	110-75-8	N	ug/L	2	U	0.2	U	2	U
SW-846 8260C	Benzene	71-43-2	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Bromodichloromethane	75-27-4	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Bromoform	75-25-2	N	ug/L	0.5	U	0.2	UJ	0.5	U
SW-846 8260C	Bromomethane (Methyl bromide)	74-83-9	N	ug/L	0.5	U	0.3	U	0.5	U
SW-846 8260C	Carbon Tetrachloride	56-23-5	N	ug/L	0.5	UJ	0.2	U	0.5	UJ
SW-846 8260C	Chlorobenzene	108-90-7	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Chloroethane	75-00-3	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Chloroform	67-66-3	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Chloromethane (Methyl chloride)	74-87-3	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	cis-1,3-Dichloropropene	10061-01-5	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Dibromochloromethane	124-48-1	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Ethylbenzene	100-41-4	N	ug/L	0.5	U	0.4	U	0.5	U
SW-846 8260C	Methyl-t-butyl ether	1634-04-4	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Methylene chloride (Dichloromethane)	75-09-2	N	ug/L	0.5	U	0.3	U	0.5	U
SW-846 8260C	Tetrachloroethene	127-18-4	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Toluene	108-88-3	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	trans-1,3-Dichloropropene	10061-02-6	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Trichloroethene (Trichloroethylene)	79-01-6	N	ug/L	7		7		0.5	U
SW-846 8260C	Trichlorofluoromethane (Freon 11)	75-69-4	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Vinyl chloride (Chloroethene)	75-01-4	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Xylene (total)	1330-20-7	N	ug/L	0.5	U	1	U	0.5	U
SW-846 8270D	1,2,4-Trichlorobenzene	120-82-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,3-Dichlorobenzene	541-73-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,4-Dichlorobenzene	106-46-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,5-Trichlorophenol	95-95-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,6-Trichlorophenol	88-06-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dichlorophenol	120-83-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dimethylphenol	105-67-9	N	ug/L	3	U	3	U	3	U
SW-846 8270D	2,4-Dinitrophenol	51-28-5	N	ug/L	15	U	15	U	15	U

			Location ID		DC-1		DC-1		DC-2	
			Field Sample ID		DC-1-W-2.00-180612		DC-1-W-2.00-181102		DC-2-W-7.50-180612	
			Date Sampled		06/12/2018		11/02/2018		06/12/2018	
			SDG		1955779		2005546		1955779	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	2,4-Dinitrotoluene	121-14-2	N	ug/L	1	U	1	U	1	U
SW-846 8270D	2,6-Dinitrotoluene	606-20-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Chloronaphthalene	91-58-7	N	ug/L	0.4	U	0.4	U	0.4	U
SW-846 8270D	2-Chlorophenol (o-Chlorophenol)	95-57-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Methyl-Naphthlalene	91-57-6	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	2-Methylphenol (o-Cresol)	95-48-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Nitroaniline (o-Nitroaniline)	88-74-4	N	ug/L	2	U	2	U	2	U
SW-846 8270D	2-Nitrophenol (o-Nitrophenol)	88-75-5	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3,3'-Dichlorobenzidine	91-94-1	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3-Nitroaniline	99-09-2	N	ug/L	3	U	3	U	3	U
SW-846 8270D	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	534-52-1	N	ug/L	8	U	8	U	8	U
SW-846 8270D	4-Bromophenylphenylether	101-55-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Chloroaniline	106-47-8	N	ug/L	4	U	4	U	4	U
SW-846 8270D	4-Chlorophenyl phenyl ether	7005-72-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Methylphenol (p-Cresol)	106-44-5	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Nitroaniline	100-01-6	N	ug/L	0.9	U	0.9	U	0.9	U
SW-846 8270D	4-Nitrophenol	100-02-7	N	ug/L	10	U	10	U	10	U
SW-846 8270D	Acenaphthene	83-32-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Acenaphthylene	208-96-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Anthracene	120-12-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)anthracene	56-55-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)pyrene	50-32-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(b)fluoranthene	205-99-2	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(g,h,i)perylene	191-24-2	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(k)fluoranthene	207-08-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	bis(2-Chloroethoxy)methane	111-91-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Chloroethyl) ether	111-44-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-chloroisopropyl) ether	108-60-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Ethylhexyl)phthalate	117-81-7	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Butylbenzylphthalate	85-68-7	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Carbazole	86-74-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Chrysene	218-01-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Di-n-butylphthalate	84-74-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Di-n-octylphthalate	117-84-0	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Dibenz(a,h)anthracene	53-70-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Dibenzofuran	132-64-9	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Diethylphthalate	84-66-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Dimethyl phthalate	131-11-3	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Fluoranthene	206-44-0	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Fluorene	86-73-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobenzene	118-74-1	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobutadiene	87-68-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Hexachlorocyclopentadiene	77-47-4	N	ug/L	5	U	5	U	5	U

			Location ID		DC-1		DC-1		DC-2	
			Field Sample ID		DC-1-W-2.00-180612		DC-1-W-2.00-181102		DC-2-W-7.50-180612	
			Date Sampled		06/12/2018		11/02/2018		06/12/2018	
			SDG		1955779		2005546		1955779	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	Hexachloroethane	67-72-1	N	ug/L	1	U	1	U	1	U
SW-846 8270D	Indeno(1,2,3-cd)Pyrene	193-39-5	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Isophorone	78-59-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	N-Nitrosodi-n-propylamine	621-64-7	N	ug/L	0.7	U	0.7	U	0.7	U
SW-846 8270D	N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	N	ug/L	0.7	U	0.7	U	0.7	U
SW-846 8270D	Naphthalene	91-20-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Nitrobenzene	98-95-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	p-Chloro-m-cresol	59-50-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pentachlorophenol	87-86-5	N	ug/L	1	U	1	U	1	U
SW-846 8270D	Phenanthrene	85-01-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Phenol	108-95-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pyrene	129-00-0	N	ug/L	0.1	U	0.1	U	0.1	U

			Location ID		DC-2		OR-2		OR-2	
			Field Sample ID		DC-2-W-7.50-181102		OR-2-W-26.00-180613		OR-2-W-26.00-181105	
			Date Sampled		11/02/2018		06/13/2018		11/05/2018	
			SDG		2005546		1955779		2006269	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 6010C	Lead	7439-92-1	Y	mg/L	0.0071	U	0.006	U	0.0071	U
SW-846 8260C	1,1 Dichloroethene	75-35-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1,1-Trichloroethane	71-55-6	N	ug/L	0.3	U	0.5	U	0.3	U
SW-846 8260C	1,1,2,2-Tetrachloroethane	79-34-5	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1,2-Trichloroethane	79-00-5	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1-Dichloroethane	75-34-3	N	ug/L	0.2	U	0.9	J	0.2	J
SW-846 8260C	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	0.2	U	1	U	0.2	U
SW-846 8260C	1,2-Dichloroethane	107-06-2	N	ug/L	0.3	U	0.5	U	0.3	U
SW-846 8260C	1,2-Dichloroethene	540-59-0	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,2-Dichloropropane	78-87-5	N	ug/L	0.2	U	0.9	J	0.2	J
SW-846 8260C	1,3-Dichlorobenzene	541-73-1	N	ug/L	0.2	U	1	U	0.2	U
SW-846 8260C	1,4-Dichlorobenzene	106-46-7	N	ug/L	0.2	U	1	U	0.2	U
SW-846 8260C	2-Chloroethyl vinyl ether	110-75-8	N	ug/L	0.2	U	2	U	0.2	U
SW-846 8260C	Benzene	71-43-2	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Bromodichloromethane	75-27-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Bromoform	75-25-2	N	ug/L	0.2	UJ	0.5	U	0.2	U
SW-846 8260C	Bromomethane (Methyl bromide)	74-83-9	N	ug/L	0.3	U	0.5	U	0.3	U
SW-846 8260C	Carbon Tetrachloride	56-23-5	N	ug/L	0.2	U	0.5	UJ	0.2	U
SW-846 8260C	Chlorobenzene	108-90-7	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloroethane	75-00-3	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloroform	67-66-3	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloromethane (Methyl chloride)	74-87-3	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	cis-1,3-Dichloropropene	10061-01-5	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Dibromochloromethane	124-48-1	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Ethylbenzene	100-41-4	N	ug/L	0.4	U	0.5	U	0.4	U
SW-846 8260C	Methyl-t-butyl ether	1634-04-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Methylene chloride (Dichloromethane)	75-09-2	N	ug/L	0.3	U	0.5	U	0.3	U
SW-846 8260C	Tetrachloroethene	127-18-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Toluene	108-88-3	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	trans-1,3-Dichloropropene	10061-02-6	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Trichloroethene (Trichloroethylene)	79-01-6	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Trichlorofluoromethane (Freon 11)	75-69-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Vinyl chloride (Chloroethene)	75-01-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Xylene (total)	1330-20-7	N	ug/L	1	U	0.5	U	1	U
SW-846 8270D	1,2,4-Trichlorobenzene	120-82-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,3-Dichlorobenzene	541-73-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,4-Dichlorobenzene	106-46-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,5-Trichlorophenol	95-95-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,6-Trichlorophenol	88-06-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dichlorophenol	120-83-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dimethylphenol	105-67-9	N	ug/L	3	U	3	U	3	U
SW-846 8270D	2,4-Dinitrophenol	51-28-5	N	ug/L	14	U	14	U	15	U

			Location ID		DC-2		OR-2		OR-2	
			Field Sample ID		DC-2-W-7.50-181102		OR-2-W-26.00-180613		OR-2-W-26.00-181105	
			Date Sampled		11/02/2018		06/13/2018		11/05/2018	
			SDG		2005546		1955779		2006269	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	2,4-Dinitrotoluene	121-14-2	N	ug/L	1	U	1	U	1	U
SW-846 8270D	2,6-Dinitrotoluene	606-20-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Chloronaphthalene	91-58-7	N	ug/L	0.4	U	0.4	U	0.4	U
SW-846 8270D	2-Chlorophenol (o-Chlorophenol)	95-57-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Methyl-Naphthlalene	91-57-6	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	2-Methylphenol (o-Cresol)	95-48-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Nitroaniline (o-Nitroaniline)	88-74-4	N	ug/L	2	U	2	U	2	U
SW-846 8270D	2-Nitrophenol (o-Nitrophenol)	88-75-5	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3,3'-Dichlorobenzidine	91-94-1	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3-Nitroaniline	99-09-2	N	ug/L	3	U	3	U	3	U
SW-846 8270D	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	534-52-1	N	ug/L	8	U	8	U	8	U
SW-846 8270D	4-Bromophenylphenylether	101-55-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Chloroaniline	106-47-8	N	ug/L	4	U	4	U	4	U
SW-846 8270D	4-Chlorophenyl phenyl ether	7005-72-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Methylphenol (p-Cresol)	106-44-5	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Nitroaniline	100-01-6	N	ug/L	0.9	U	0.9	U	0.9	U
SW-846 8270D	4-Nitrophenol	100-02-7	N	ug/L	10	U	10	U	11	U
SW-846 8270D	Acenaphthene	83-32-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Acenaphthylene	208-96-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Anthracene	120-12-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)anthracene	56-55-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)pyrene	50-32-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(b)fluoranthene	205-99-2	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(g,h,i)perylene	191-24-2	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(k)fluoranthene	207-08-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	bis(2-Chloroethoxy)methane	111-91-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Chloroethyl) ether	111-44-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-chloroisopropyl) ether	108-60-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Ethylhexyl)phthalate	117-81-7	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Butylbenzylphthalate	85-68-7	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Carbazole	86-74-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Chrysene	218-01-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Di-n-butylphthalate	84-74-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Di-n-octylphthalate	117-84-0	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Dibenz(a,h)anthracene	53-70-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Dibenzofuran	132-64-9	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Diethylphthalate	84-66-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Dimethyl phthalate	131-11-3	N	ug/L	2	U	2	U	2	UJ
SW-846 8270D	Fluoranthene	206-44-0	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Fluorene	86-73-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobenzene	118-74-1	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobutadiene	87-68-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Hexachlorocyclopentadiene	77-47-4	N	ug/L	5	U	5	U	5	U

			Location ID		DC-2		OR-2		OR-2	
			Field Sample ID		DC-2-W-7.50-181102		OR-2-W-26.00-180613		OR-2-W-26.00-181105	
			Date Sampled		11/02/2018		06/13/2018		11/05/2018	
			SDG		2005546		1955779		2006269	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	Hexachloroethane	67-72-1	N	ug/L	1	U	1	U	1	U
SW-846 8270D	Indeno(1,2,3-cd)Pyrene	193-39-5	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Isophorone	78-59-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	N-Nitrosodi-n-propylamine	621-64-7	N	ug/L	0.7	U	0.7	U	0.7	U
SW-846 8270D	N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	N	ug/L	0.7	U	0.7	U	0.7	U
SW-846 8270D	Naphthalene	91-20-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Nitrobenzene	98-95-3	N	ug/L	1	J	0.5	U	0.5	U
SW-846 8270D	p-Chloro-m-cresol	59-50-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pentachlorophenol	87-86-5	N	ug/L	1	U	1	U	1	UJ
SW-846 8270D	Phenanthrene	85-01-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Phenol	108-95-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pyrene	129-00-0	N	ug/L	0.1	U	0.1	U	0.1	U

			Location ID		OR-3		OR-3		OR-3	
			Field Sample ID		OR-3-W-65.50-180614		OR-3-W-65.50-181105		OR-3-WD-65.50-181105	
			Date Sampled		06/14/2018		11/05/2018		11/05/2018	
			SDG		1955779		2006269		2006269	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		FD	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 6010C	Lead	7439-92-1	Y	mg/L	0.006	U	0.0071	U	0.0071	U
SW-846 8260C	1,1 Dichloroethene	75-35-4	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	1,1,1-Trichloroethane	71-55-6	N	ug/L	0.5	U	0.3	U	0.3	U
SW-846 8260C	1,1,2,2-Tetrachloroethane	79-34-5	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	1,1,2-Trichloroethane	79-00-5	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	1,1-Dichloroethane	75-34-3	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	1	U	0.2	U	0.2	U
SW-846 8260C	1,2-Dichloroethane	107-06-2	N	ug/L	0.5	U	0.3	U	0.3	U
SW-846 8260C	1,2-Dichloroethene	540-59-0	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	1,2-Dichloropropane	78-87-5	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	1,3-Dichlorobenzene	541-73-1	N	ug/L	1	U	0.2	U	0.2	U
SW-846 8260C	1,4-Dichlorobenzene	106-46-7	N	ug/L	1	U	0.2	U	0.2	U
SW-846 8260C	2-Chloroethyl vinyl ether	110-75-8	N	ug/L	2	U	0.2	U	0.2	U
SW-846 8260C	Benzene	71-43-2	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Bromodichloromethane	75-27-4	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Bromoform	75-25-2	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Bromomethane (Methyl bromide)	74-83-9	N	ug/L	0.5	U	0.3	U	0.3	U
SW-846 8260C	Carbon Tetrachloride	56-23-5	N	ug/L	0.5	UJ	0.2	U	0.2	U
SW-846 8260C	Chlorobenzene	108-90-7	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Chloroethane	75-00-3	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Chloroform	67-66-3	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Chloromethane (Methyl chloride)	74-87-3	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	cis-1,3-Dichloropropene	10061-01-5	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Dibromochloromethane	124-48-1	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Ethylbenzene	100-41-4	N	ug/L	0.5	U	0.4	U	0.4	U
SW-846 8260C	Methyl-t-butyl ether	1634-04-4	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Methylene chloride (Dichloromethane)	75-09-2	N	ug/L	0.5	U	0.3	U	0.3	U
SW-846 8260C	Tetrachloroethene	127-18-4	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Toluene	108-88-3	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	trans-1,3-Dichloropropene	10061-02-6	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Trichloroethene (Trichloroethylene)	79-01-6	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Trichlorofluoromethane (Freon 11)	75-69-4	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Vinyl chloride (Chloroethene)	75-01-4	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Xylene (total)	1330-20-7	N	ug/L	0.5	U	1	U	1	U
SW-846 8270D	1,2,4-Trichlorobenzene	120-82-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,3-Dichlorobenzene	541-73-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,4-Dichlorobenzene	106-46-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,5-Trichlorophenol	95-95-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,6-Trichlorophenol	88-06-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dichlorophenol	120-83-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dimethylphenol	105-67-9	N	ug/L	3	U	3	U	3	U
SW-846 8270D	2,4-Dinitrophenol	51-28-5	N	ug/L	14	U	15	U	14	U

			Location ID		OR-3		OR-3		OR-3	
			Field Sample ID		OR-3-W-65.50-180614		OR-3-W-65.50-181105		OR-3-WD-65.50-181105	
			Date Sampled		06/14/2018		11/05/2018		11/05/2018	
			SDG		1955779		2006269		2006269	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		FD	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	2,4-Dinitrotoluene	121-14-2	N	ug/L	1	U	1	U	1	U
SW-846 8270D	2,6-Dinitrotoluene	606-20-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Chloronaphthalene	91-58-7	N	ug/L	0.4	U	0.4	U	0.4	U
SW-846 8270D	2-Chlorophenol (o-Chlorophenol)	95-57-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Methyl-Naphthlalene	91-57-6	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	2-Methylphenol (o-Cresol)	95-48-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Nitroaniline (o-Nitroaniline)	88-74-4	N	ug/L	2	U	2	U	2	U
SW-846 8270D	2-Nitrophenol (o-Nitrophenol)	88-75-5	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3,3'-Dichlorobenzidine	91-94-1	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3-Nitroaniline	99-09-2	N	ug/L	3	U	3	U	3	U
SW-846 8270D	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	534-52-1	N	ug/L	8	U	8	U	8	U
SW-846 8270D	4-Bromophenylphenylether	101-55-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Chloroaniline	106-47-8	N	ug/L	4	U	4	U	4	U
SW-846 8270D	4-Chlorophenyl phenyl ether	7005-72-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Methylphenol (p-Cresol)	106-44-5	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Nitroaniline	100-01-6	N	ug/L	0.9	U	0.9	U	0.9	U
SW-846 8270D	4-Nitrophenol	100-02-7	N	ug/L	10	U	10	U	10	U
SW-846 8270D	Acenaphthene	83-32-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Acenaphthylene	208-96-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Anthracene	120-12-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)anthracene	56-55-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)pyrene	50-32-8	N	ug/L	0.1	U	0.2	J	0.2	J
SW-846 8270D	Benzo(b)fluoranthene	205-99-2	N	ug/L	0.1	J	0.2	J	0.3	J
SW-846 8270D	Benzo(g,h,i)perylene	191-24-2	N	ug/L	0.1	U	0.1	J	0.2	J
SW-846 8270D	Benzo(k)fluoranthene	207-08-9	N	ug/L	0.1	U	0.1	U	0.1	J
SW-846 8270D	bis(2-Chloroethoxy)methane	111-91-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Chloroethyl) ether	111-44-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-chloroisopropyl) ether	108-60-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Ethylhexyl)phthalate	117-81-7	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Butylbenzylphthalate	85-68-7	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Carbazole	86-74-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Chrysene	218-01-9	N	ug/L	0.1	U	0.1	J	0.2	J
SW-846 8270D	Di-n-butylphthalate	84-74-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Di-n-octylphthalate	117-84-0	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Dibenz(a,h)anthracene	53-70-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Dibenzofuran	132-64-9	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Diethylphthalate	84-66-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Dimethyl phthalate	131-11-3	N	ug/L	2	U	2	UJ	2	UJ
SW-846 8270D	Fluoranthene	206-44-0	N	ug/L	0.1	J	0.3	J	0.3	J
SW-846 8270D	Fluorene	86-73-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobenzene	118-74-1	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobutadiene	87-68-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Hexachlorocyclopentadiene	77-47-4	N	ug/L	5	U	5	U	5	U

			Location ID		OR-3		OR-3		OR-3	
			Field Sample ID		OR-3-W-65.50-180614		OR-3-W-65.50-181105		OR-3-WD-65.50-181105	
			Date Sampled		06/14/2018		11/05/2018		11/05/2018	
			SDG		1955779		2006269		2006269	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		FD	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	Hexachloroethane	67-72-1	N	ug/L	1	U	1	U	1	U
SW-846 8270D	Indeno(1,2,3-cd)Pyrene	193-39-5	N	ug/L	0.1	U	0.1	J	0.1	U
SW-846 8270D	Isophorone	78-59-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	N-Nitrosodi-n-propylamine	621-64-7	N	ug/L	0.7	U	0.7	U	0.7	U
SW-846 8270D	N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	N	ug/L	0.7	U	0.7	U	0.7	U
SW-846 8270D	Naphthalene	91-20-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Nitrobenzene	98-95-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	p-Chloro-m-cresol	59-50-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pentachlorophenol	87-86-5	N	ug/L	1	U	1	U	1	U
SW-846 8270D	Phenanthrene	85-01-8	N	ug/L	0.1	U	0.1	U	0.1	J
SW-846 8270D	Phenol	108-95-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pyrene	129-00-0	N	ug/L	0.1	J	0.3	J	0.2	J

				Location ID	OS-2		OS-2		OS-3	
				Field Sample ID	OS-2-W-6.00-180613		OS-2-W-6.00-181101		OS-3-W-6.00-180614	
				Date Sampled	06/13/2018		11/01/2018		06/14/2018	
				SDG	1955779		2005546		1955779	
				Sample Matrix	WATER		WATER		WATER	
				Sample Purpose	REG		REG		REG	
				Sample Type	GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 6010C	Lead	7439-92-1	Y	mg/L	0.006	U	0.0071	U	0.006	U
SW-846 8260C	1,1 Dichloroethene	75-35-4	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	1,1,1-Trichloroethane	71-55-6	N	ug/L	0.5	U	0.3	U	0.5	U
SW-846 8260C	1,1,2,2-Tetrachloroethane	79-34-5	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	1,1,2-Trichloroethane	79-00-5	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	1,1-Dichloroethane	75-34-3	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	1	U	0.2	U	1	U
SW-846 8260C	1,2-Dichloroethane	107-06-2	N	ug/L	0.5	U	0.3	U	0.5	U
SW-846 8260C	1,2-Dichloroethene	540-59-0	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	1,2-Dichloropropane	78-87-5	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	1,3-Dichlorobenzene	541-73-1	N	ug/L	1	U	0.2	U	1	U
SW-846 8260C	1,4-Dichlorobenzene	106-46-7	N	ug/L	1	U	0.2	U	1	U
SW-846 8260C	2-Chloroethyl vinyl ether	110-75-8	N	ug/L	2	U	0.2	U	2	U
SW-846 8260C	Benzene	71-43-2	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Bromodichloromethane	75-27-4	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Bromoform	75-25-2	N	ug/L	0.5	U	0.2	UJ	0.5	U
SW-846 8260C	Bromomethane (Methyl bromide)	74-83-9	N	ug/L	0.5	U	0.3	U	0.5	U
SW-846 8260C	Carbon Tetrachloride	56-23-5	N	ug/L	0.5	UJ	0.2	U	0.5	UJ
SW-846 8260C	Chlorobenzene	108-90-7	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Chloroethane	75-00-3	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Chloroform	67-66-3	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Chloromethane (Methyl chloride)	74-87-3	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	cis-1,3-Dichloropropene	10061-01-5	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Dibromochloromethane	124-48-1	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Ethylbenzene	100-41-4	N	ug/L	0.5	U	0.4	U	0.5	U
SW-846 8260C	Methyl-t-butyl ether	1634-04-4	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Methylene chloride (Dichloromethane)	75-09-2	N	ug/L	0.5	U	0.3	U	0.5	U
SW-846 8260C	Tetrachloroethene	127-18-4	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Toluene	108-88-3	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	trans-1,3-Dichloropropene	10061-02-6	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Trichloroethene (Trichloroethylene)	79-01-6	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Trichlorofluoromethane (Freon 11)	75-69-4	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Vinyl chloride (Chloroethene)	75-01-4	N	ug/L	0.5	U	0.2	U	0.5	U
SW-846 8260C	Xylene (total)	1330-20-7	N	ug/L	0.5	U	1	U	0.5	U
SW-846 8270D	1,2,4-Trichlorobenzene	120-82-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,3-Dichlorobenzene	541-73-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,4-Dichlorobenzene	106-46-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,5-Trichlorophenol	95-95-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,6-Trichlorophenol	88-06-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dichlorophenol	120-83-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dimethylphenol	105-67-9	N	ug/L	3	U	3	U	3	U
SW-846 8270D	2,4-Dinitrophenol	51-28-5	N	ug/L	14	U	15	U	14	U

			Location ID		OS-2		OS-2		OS-3	
			Field Sample ID		OS-2-W-6.00-180613		OS-2-W-6.00-181101		OS-3-W-6.00-180614	
			Date Sampled		06/13/2018		11/01/2018		06/14/2018	
			SDG		1955779		2005546		1955779	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	2,4-Dinitrotoluene	121-14-2	N	ug/L	1	U	1	U	1	U
SW-846 8270D	2,6-Dinitrotoluene	606-20-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Chloronaphthalene	91-58-7	N	ug/L	0.4	U	0.4	U	0.4	U
SW-846 8270D	2-Chlorophenol (o-Chlorophenol)	95-57-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Methyl-Naphthlalene	91-57-6	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	2-Methylphenol (o-Cresol)	95-48-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Nitroaniline (o-Nitroaniline)	88-74-4	N	ug/L	2	U	2	U	2	U
SW-846 8270D	2-Nitrophenol (o-Nitrophenol)	88-75-5	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3,3'-Dichlorobenzidine	91-94-1	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3-Nitroaniline	99-09-2	N	ug/L	3	U	3	U	3	U
SW-846 8270D	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	534-52-1	N	ug/L	8	U	8	U	8	U
SW-846 8270D	4-Bromophenylphenylether	101-55-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Chloroaniline	106-47-8	N	ug/L	4	U	4	U	4	U
SW-846 8270D	4-Chlorophenyl phenyl ether	7005-72-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Methylphenol (p-Cresol)	106-44-5	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Nitroaniline	100-01-6	N	ug/L	0.9	U	0.9	U	0.9	U
SW-846 8270D	4-Nitrophenol	100-02-7	N	ug/L	10	U	10	U	10	U
SW-846 8270D	Acenaphthene	83-32-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Acenaphthylene	208-96-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Anthracene	120-12-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)anthracene	56-55-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)pyrene	50-32-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(b)fluoranthene	205-99-2	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(g,h,i)perylene	191-24-2	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(k)fluoranthene	207-08-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	bis(2-Chloroethoxy)methane	111-91-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Chloroethyl) ether	111-44-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-chloroisopropyl) ether	108-60-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Ethylhexyl)phthalate	117-81-7	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Butylbenzylphthalate	85-68-7	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Carbazole	86-74-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Chrysene	218-01-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Di-n-butylphthalate	84-74-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Di-n-octylphthalate	117-84-0	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Dibenz(a,h)anthracene	53-70-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Dibenzofuran	132-64-9	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Diethylphthalate	84-66-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Dimethyl phthalate	131-11-3	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Fluoranthene	206-44-0	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Fluorene	86-73-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobenzene	118-74-1	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobutadiene	87-68-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Hexachlorocyclopentadiene	77-47-4	N	ug/L	5	U	5	U	5	U

			Location ID		OS-2		OS-2		OS-3	
			Field Sample ID		OS-2-W-6.00-180613		OS-2-W-6.00-181101		OS-3-W-6.00-180614	
			Date Sampled		06/13/2018		11/01/2018		06/14/2018	
			SDG		1955779		2005546		1955779	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	Hexachloroethane	67-72-1	N	ug/L	1	U	1	U	1	U
SW-846 8270D	Indeno(1,2,3-cd)Pyrene	193-39-5	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Isophorone	78-59-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	N-Nitrosodi-n-propylamine	621-64-7	N	ug/L	0.7	U	0.7	U	0.7	U
SW-846 8270D	N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	N	ug/L	0.7	U	0.7	U	0.7	U
SW-846 8270D	Naphthalene	91-20-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Nitrobenzene	98-95-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	p-Chloro-m-cresol	59-50-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pentachlorophenol	87-86-5	N	ug/L	1	U	1	U	1	U
SW-846 8270D	Phenanthrene	85-01-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Phenol	108-95-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pyrene	129-00-0	N	ug/L	0.1	U	0.1	U	0.1	U

			Location ID		OS-3		TF-23		TF-23	
			Field Sample ID		OS-3-W-6.00-181101		TF-23-W-5.26-180612		TF-23-WD-5.26-180612	
			Date Sampled		11/01/2018		06/12/2018		06/12/2018	
			SDG		2005546		1955779		1955779	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		FD	
			Sample Type		GW		GW		GW	
Analytical Method	**Parameter Name**	**Parameter Code**	**Filtered**	**Units**						
SW-846 6010C	Lead	7439-92-1	Y	mg/L	0.0071	U	0.006	U	0.006	U
SW-846 8260C	1,1 Dichloroethene	75-35-4	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	1,1,1-Trichloroethane	71-55-6	N	ug/L	0.3	U	0.5	U	0.5	U
SW-846 8260C	1,1,2,2-Tetrachloroethane	79-34-5	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	1,1,2-Trichloroethane	79-00-5	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	1,1-Dichloroethane	75-34-3	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	0.2	U	1	U	1	U
SW-846 8260C	1,2-Dichloroethane	107-06-2	N	ug/L	0.3	U	0.5	U	0.5	U
SW-846 8260C	1,2-Dichloroethene	540-59-0	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	1,2-Dichloropropane	78-87-5	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	1,3-Dichlorobenzene	541-73-1	N	ug/L	0.2	U	1	U	1	U
SW-846 8260C	1,4-Dichlorobenzene	106-46-7	N	ug/L	0.2	U	1	U	1	U
SW-846 8260C	2-Chloroethyl vinyl ether	110-75-8	N	ug/L	0.2	U	2	U	2	U
SW-846 8260C	Benzene	71-43-2	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	Bromodichloromethane	75-27-4	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	Bromoform	75-25-2	N	ug/L	0.2	UJ	0.5	U	0.5	U
SW-846 8260C	Bromomethane (Methyl bromide)	74-83-9	N	ug/L	0.3	U	0.5	U	0.5	U
SW-846 8260C	Carbon Tetrachloride	56-23-5	N	ug/L	0.2	U	0.5	UJ	0.5	UJ
SW-846 8260C	Chlorobenzene	108-90-7	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	Chloroethane	75-00-3	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	Chloroform	67-66-3	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	Chloromethane (Methyl chloride)	74-87-3	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	cis-1,3-Dichloropropene	10061-01-5	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	Dibromochloromethane	124-48-1	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	Ethylbenzene	100-41-4	N	ug/L	0.4	U	0.5	U	0.5	U
SW-846 8260C	Methyl-t-butyl ether	1634-04-4	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	Methylene chloride (Dichloromethane)	75-09-2	N	ug/L	0.3	U	0.5	U	0.5	U
SW-846 8260C	Tetrachloroethene	127-18-4	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	Toluene	108-88-3	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	trans-1,3-Dichloropropene	10061-02-6	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	Trichloroethene (Trichloroethylene)	79-01-6	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	Trichlorofluoromethane (Freon 11)	75-69-4	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	Vinyl chloride (Chloroethene)	75-01-4	N	ug/L	0.2	U	0.5	U	0.5	U
SW-846 8260C	Xylene (total)	1330-20-7	N	ug/L	1	U	0.5	U	0.5	U
SW-846 8270D	1,2,4-Trichlorobenzene	120-82-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,3-Dichlorobenzene	541-73-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,4-Dichlorobenzene	106-46-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,5-Trichlorophenol	95-95-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,6-Trichlorophenol	88-06-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dichlorophenol	120-83-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dimethylphenol	105-67-9	N	ug/L	3	U	3	U	3	U
SW-846 8270D	2,4-Dinitrophenol	51-28-5	N	ug/L	14	U	14	U	14	U

			Location ID		OS-3		TF-23		TF-23	
			Field Sample ID		OS-3-W-6.00-181101		TF-23-W-5.26-180612		TF-23-WD-5.26-180612	
			Date Sampled		11/01/2018		06/12/2018		06/12/2018	
			SDG		2005546		1955779		1955779	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		FD	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	2,4-Dinitrotoluene	121-14-2	N	ug/L	1	U	1	U	1	U
SW-846 8270D	2,6-Dinitrotoluene	606-20-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Chloronaphthalene	91-58-7	N	ug/L	0.4	U	0.4	U	0.4	U
SW-846 8270D	2-Chlorophenol (o-Chlorophenol)	95-57-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Methyl-Naphthlalene	91-57-6	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	2-Methylphenol (o-Cresol)	95-48-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Nitroaniline (o-Nitroaniline)	88-74-4	N	ug/L	2	U	2	U	2	U
SW-846 8270D	2-Nitrophenol (o-Nitrophenol)	88-75-5	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3,3'-Dichlorobenzidine	91-94-1	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3-Nitroaniline	99-09-2	N	ug/L	3	U	3	U	3	U
SW-846 8270D	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	534-52-1	N	ug/L	8	U	8	U	8	U
SW-846 8270D	4-Bromophenylphenylether	101-55-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Chloroaniline	106-47-8	N	ug/L	4	U	4	U	4	U
SW-846 8270D	4-Chlorophenyl phenyl ether	7005-72-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Methylphenol (p-Cresol)	106-44-5	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Nitroaniline	100-01-6	N	ug/L	0.9	U	0.9	U	0.9	U
SW-846 8270D	4-Nitrophenol	100-02-7	N	ug/L	10	U	10	U	10	U
SW-846 8270D	Acenaphthene	83-32-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Acenaphthylene	208-96-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Anthracene	120-12-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)anthracene	56-55-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)pyrene	50-32-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(b)fluoranthene	205-99-2	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(g,h,i)perylene	191-24-2	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(k)fluoranthene	207-08-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	bis(2-Chloroethoxy)methane	111-91-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Chloroethyl) ether	111-44-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-chloroisopropyl) ether	108-60-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Ethylhexyl)phthalate	117-81-7	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Butylbenzylphthalate	85-68-7	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Carbazole	86-74-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Chrysene	218-01-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Di-n-butylphthalate	84-74-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Di-n-octylphthalate	117-84-0	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Dibenz(a,h)anthracene	53-70-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Dibenzofuran	132-64-9	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Diethylphthalate	84-66-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Dimethyl phthalate	131-11-3	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Fluoranthene	206-44-0	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Fluorene	86-73-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobenzene	118-74-1	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobutadiene	87-68-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Hexachlorocyclopentadiene	77-47-4	N	ug/L	5	U	5	U	5	U

			Location ID		OS-3		TF-23		TF-23	
			Field Sample ID		OS-3-W-6.00-181101		TF-23-W-5.26-180612		TF-23-WD-5.26-180612	
			Date Sampled		11/01/2018		06/12/2018		06/12/2018	
			SDG		2005546		1955779		1955779	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		FD	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	Hexachloroethane	67-72-1	N	ug/L	1	U	1	U	1	U
SW-846 8270D	Indeno(1,2,3-cd)Pyrene	193-39-5	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Isophorone	78-59-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	N-Nitrosodi-n-propylamine	621-64-7	N	ug/L	0.7	U	0.7	U	0.7	U
SW-846 8270D	N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	N	ug/L	0.7	U	0.7	U	0.7	U
SW-846 8270D	Naphthalene	91-20-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Nitrobenzene	98-95-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	p-Chloro-m-cresol	59-50-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pentachlorophenol	87-86-5	N	ug/L	1	U	1	U	1	U
SW-846 8270D	Phenanthrene	85-01-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Phenol	108-95-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pyrene	129-00-0	N	ug/L	0.1	U	0.1	U	0.1	U

			Location ID		TF-23		TF-5		TF-5	
			Field Sample ID		TF-23-W-5.26-181101		TF-5-W-4.59-180612		TF-5-W-4.59-181101	
			Date Sampled		11/01/2018		06/12/2018		11/01/2018	
			SDG		2005546		1955779		2005546	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 6010C	Lead	7439-92-1	Y	mg/L	0.0071	U	0.006	U	0.0071	U
SW-846 8260C	1,1 Dichloroethene	75-35-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1,1-Trichloroethane	71-55-6	N	ug/L	0.3	U	0.5	U	0.3	U
SW-846 8260C	1,1,2,2-Tetrachloroethane	79-34-5	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1,2-Trichloroethane	79-00-5	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,1-Dichloroethane	75-34-3	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	0.2	U	1	U	0.2	U
SW-846 8260C	1,2-Dichloroethane	107-06-2	N	ug/L	0.3	U	0.5	U	0.3	U
SW-846 8260C	1,2-Dichloroethene	540-59-0	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,2-Dichloropropane	78-87-5	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	1,3-Dichlorobenzene	541-73-1	N	ug/L	0.2	U	1	U	0.2	U
SW-846 8260C	1,4-Dichlorobenzene	106-46-7	N	ug/L	0.2	U	1	U	0.2	U
SW-846 8260C	2-Chloroethyl vinyl ether	110-75-8	N	ug/L	0.2	U	2	U	0.2	U
SW-846 8260C	Benzene	71-43-2	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Bromodichloromethane	75-27-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Bromoform	75-25-2	N	ug/L	0.2	UJ	0.5	U	0.2	UJ
SW-846 8260C	Bromomethane (Methyl bromide)	74-83-9	N	ug/L	0.3	U	0.5	U	0.3	U
SW-846 8260C	Carbon Tetrachloride	56-23-5	N	ug/L	0.2	U	0.5	UJ	0.2	U
SW-846 8260C	Chlorobenzene	108-90-7	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloroethane	75-00-3	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloroform	67-66-3	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Chloromethane (Methyl chloride)	74-87-3	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	cis-1,3-Dichloropropene	10061-01-5	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Dibromochloromethane	124-48-1	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Ethylbenzene	100-41-4	N	ug/L	0.4	U	0.5	U	0.4	U
SW-846 8260C	Methyl-t-butyl ether	1634-04-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Methylene chloride (Dichloromethane)	75-09-2	N	ug/L	0.3	U	0.5	U	0.3	U
SW-846 8260C	Tetrachloroethene	127-18-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Toluene	108-88-3	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	trans-1,3-Dichloropropene	10061-02-6	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Trichloroethene (Trichloroethylene)	79-01-6	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Trichlorofluoromethane (Freon 11)	75-69-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Vinyl chloride (Chloroethene)	75-01-4	N	ug/L	0.2	U	0.5	U	0.2	U
SW-846 8260C	Xylene (total)	1330-20-7	N	ug/L	1	U	0.5	U	1	U
SW-846 8270D	1,2,4-Trichlorobenzene	120-82-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,3-Dichlorobenzene	541-73-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	1,4-Dichlorobenzene	106-46-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,5-Trichlorophenol	95-95-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4,6-Trichlorophenol	88-06-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dichlorophenol	120-83-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2,4-Dimethylphenol	105-67-9	N	ug/L	3	U	3	U	3	U
SW-846 8270D	2,4-Dinitrophenol	51-28-5	N	ug/L	14	U	14	U	15	U

			Location ID		TF-23		TF-5		TF-5	
			Field Sample ID		TF-23-W-5.26-181101		TF-5-W-4.59-180612		TF-5-W-4.59-181101	
			Date Sampled		11/01/2018		06/12/2018		11/01/2018	
			SDG		2005546		1955779		2005546	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	2,4-Dinitrotoluene	121-14-2	N	ug/L	1	U	1	U	1	U
SW-846 8270D	2,6-Dinitrotoluene	606-20-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Chloronaphthalene	91-58-7	N	ug/L	0.4	U	0.4	U	0.4	U
SW-846 8270D	2-Chlorophenol (o-Chlorophenol)	95-57-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Methyl-Naphthlalene	91-57-6	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	2-Methylphenol (o-Cresol)	95-48-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	2-Nitroaniline (o-Nitroaniline)	88-74-4	N	ug/L	2	U	2	U	2	U
SW-846 8270D	2-Nitrophenol (o-Nitrophenol)	88-75-5	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3,3'-Dichlorobenzidine	91-94-1	N	ug/L	3	U	3	U	3	U
SW-846 8270D	3-Nitroaniline	99-09-2	N	ug/L	3	U	3	U	3	U
SW-846 8270D	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	534-52-1	N	ug/L	8	U	8	U	9	U
SW-846 8270D	4-Bromophenylphenylether	101-55-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Chloroaniline	106-47-8	N	ug/L	4	U	4	U	4	U
SW-846 8270D	4-Chlorophenyl phenyl ether	7005-72-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Methylphenol (p-Cresol)	106-44-5	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	4-Nitroaniline	100-01-6	N	ug/L	0.9	U	0.9	U	1	U
SW-846 8270D	4-Nitrophenol	100-02-7	N	ug/L	10	U	10	U	11	U
SW-846 8270D	Acenaphthene	83-32-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Acenaphthylene	208-96-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Anthracene	120-12-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)anthracene	56-55-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(a)pyrene	50-32-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(b)fluoranthene	205-99-2	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(g,h,i)perylene	191-24-2	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Benzo(k)fluoranthene	207-08-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	bis(2-Chloroethoxy)methane	111-91-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Chloroethyl) ether	111-44-4	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-chloroisopropyl) ether	108-60-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	bis(2-Ethylhexyl)phthalate	117-81-7	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Butylbenzylphthalate	85-68-7	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Carbazole	86-74-8	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Chrysene	218-01-9	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Di-n-butylphthalate	84-74-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Di-n-octylphthalate	117-84-0	N	ug/L	5	U	5	U	5	U
SW-846 8270D	Dibenz(a,h)anthracene	53-70-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Dibenzofuran	132-64-9	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Diethylphthalate	84-66-2	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Dimethyl phthalate	131-11-3	N	ug/L	2	U	2	U	2	U
SW-846 8270D	Fluoranthene	206-44-0	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Fluorene	86-73-7	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobenzene	118-74-1	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Hexachlorobutadiene	87-68-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Hexachlorocyclopentadiene	77-47-4	N	ug/L	5	U	5	U	5	U

			Location ID		TF-23		TF-5		TF-5	
			Field Sample ID		TF-23-W-5.26-181101		TF-5-W-4.59-180612		TF-5-W-4.59-181101	
			Date Sampled		11/01/2018		06/12/2018		11/01/2018	
			SDG		2005546		1955779		2005546	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG	
			Sample Type		GW		GW		GW	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	Hexachloroethane	67-72-1	N	ug/L	1	U	1	U	1	U
SW-846 8270D	Indeno(1,2,3-cd)Pyrene	193-39-5	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Isophorone	78-59-1	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	N-Nitrosodi-n-propylamine	621-64-7	N	ug/L	0.7	U	0.7	U	0.8	U
SW-846 8270D	N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	N	ug/L	0.7	U	0.7	U	0.8	U
SW-846 8270D	Naphthalene	91-20-3	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Nitrobenzene	98-95-3	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	p-Chloro-m-cresol	59-50-7	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pentachlorophenol	87-86-5	N	ug/L	1	U	1	U	1	U
SW-846 8270D	Phenanthrene	85-01-8	N	ug/L	0.1	U	0.1	U	0.1	U
SW-846 8270D	Phenol	108-95-2	N	ug/L	0.5	U	0.5	U	0.5	U
SW-846 8270D	Pyrene	129-00-0	N	ug/L	0.1	U	0.1	U	0.1	U

			Location ID		Trip		Trip		Trip	
			Field Sample ID		QA-WT1-180614		QA-WT1-181026		QA-WT2-181026	
			Date Sampled		06/14/2018		10/26/2018		10/26/2018	
			SDG		1955779		2005546		2006269	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		TB		TB		TB	
			Sample Type		BLKWATER		BLKWATER		BLKWATER	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 6010C	Lead	7439-92-1	Y	mg/L						
SW-846 8260C	1,1 Dichloroethene	75-35-4	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	1,1,1-Trichloroethane	71-55-6	N	ug/L	0.5	U	0.3	U	0.3	U
SW-846 8260C	1,1,2,2-Tetrachloroethane	79-34-5	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	1,1,2-Trichloroethane	79-00-5	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	1,1-Dichloroethane	75-34-3	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L	1	U	0.2	U	0.2	U
SW-846 8260C	1,2-Dichloroethane	107-06-2	N	ug/L	0.5	U	0.3	U	0.3	U
SW-846 8260C	1,2-Dichloroethene	540-59-0	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	1,2-Dichloropropane	78-87-5	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	1,3-Dichlorobenzene	541-73-1	N	ug/L	1	U	0.2	U	0.2	U
SW-846 8260C	1,4-Dichlorobenzene	106-46-7	N	ug/L	1	U	0.2	U	0.2	U
SW-846 8260C	2-Chloroethyl vinyl ether	110-75-8	N	ug/L	2	U	0.2	U	0.2	U
SW-846 8260C	Benzene	71-43-2	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Bromodichloromethane	75-27-4	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Bromoform	75-25-2	N	ug/L	0.5	U	0.2	UJ	0.2	U
SW-846 8260C	Bromomethane (Methyl bromide)	74-83-9	N	ug/L	0.5	U	0.3	U	0.3	U
SW-846 8260C	Carbon Tetrachloride	56-23-5	N	ug/L	0.5	UJ	0.2	U	0.2	U
SW-846 8260C	Chlorobenzene	108-90-7	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Chloroethane	75-00-3	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Chloroform	67-66-3	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Chloromethane (Methyl chloride)	74-87-3	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	cis-1,3-Dichloropropene	10061-01-5	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Dibromochloromethane	124-48-1	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Ethylbenzene	100-41-4	N	ug/L	0.5	U	0.4	U	0.4	U
SW-846 8260C	Methyl-t-butyl ether	1634-04-4	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Methylene chloride (Dichloromethane)	75-09-2	N	ug/L	0.5	U	0.3	U	0.3	U
SW-846 8260C	Tetrachloroethene	127-18-4	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Toluene	108-88-3	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	trans-1,3-Dichloropropene	10061-02-6	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Trichloroethene (Trichloroethylene)	79-01-6	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Trichlorofluoromethane (Freon 11)	75-69-4	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Vinyl chloride (Chloroethene)	75-01-4	N	ug/L	0.5	U	0.2	U	0.2	U
SW-846 8260C	Xylene (total)	1330-20-7	N	ug/L	0.5	U	1	U	1	U
SW-846 8270D	1,2,4-Trichlorobenzene	120-82-1	N	ug/L						
SW-846 8270D	1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	N	ug/L						
SW-846 8270D	1,3-Dichlorobenzene	541-73-1	N	ug/L						
SW-846 8270D	1,4-Dichlorobenzene	106-46-7	N	ug/L						
SW-846 8270D	2,4,5-Trichlorophenol	95-95-4	N	ug/L						
SW-846 8270D	2,4,6-Trichlorophenol	88-06-2	N	ug/L						
SW-846 8270D	2,4-Dichlorophenol	120-83-2	N	ug/L						
SW-846 8270D	2,4-Dimethylphenol	105-67-9	N	ug/L						
SW-846 8270D	2,4-Dinitrophenol	51-28-5	N	ug/L						

				Location ID	Trip		Trip		Trip		
				Field Sample ID	QA-WT1-180614		QA-WT1-181026		QA-WT2-181026		
				Date Sampled	06/14/2018		10/26/2018		10/26/2018		
				SDG	1955779		2005546		2006269		
				Sample Matrix	WATER		WATER		WATER		
				Sample Purpose	TB		TB		TB		
				Sample Type	BLKWATER		BLKWATER		BLKWATER		
Analytical Method	Parameter Name	Parameter Code	Filtered	Units							
SW-846 8270D	2,4-Dinitrotoluene	121-14-2	N	ug/L							
SW-846 8270D	2,6-Dinitrotoluene	606-20-2	N	ug/L							
SW-846 8270D	2-Chloronaphthalene	91-58-7	N	ug/L							
SW-846 8270D	2-Chlorophenol (o-Chlorophenol)	95-57-8	N	ug/L							
SW-846 8270D	2-Methyl-Naphthlalene	91-57-6	N	ug/L							
SW-846 8270D	2-Methylphenol (o-Cresol)	95-48-7	N	ug/L							
SW-846 8270D	2-Nitroaniline (o-Nitroaniline)	88-74-4	N	ug/L							
SW-846 8270D	2-Nitrophenol (o-Nitrophenol)	88-75-5	N	ug/L							
SW-846 8270D	3,3'-Dichlorobenzidine	91-94-1	N	ug/L							
SW-846 8270D	3-Nitroaniline	99-09-2	N	ug/L							
SW-846 8270D	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	534-52-1	N	ug/L							
SW-846 8270D	4-Bromophenylphenylether	101-55-3	N	ug/L							
SW-846 8270D	4-Chloroaniline	106-47-8	N	ug/L							
SW-846 8270D	4-Chlorophenyl phenyl ether	7005-72-3	N	ug/L							
SW-846 8270D	4-Methylphenol (p-Cresol)	106-44-5	N	ug/L							
SW-846 8270D	4-Nitroaniline	100-01-6	N	ug/L							
SW-846 8270D	4-Nitrophenol	100-02-7	N	ug/L							
SW-846 8270D	Acenaphthene	83-32-9	N	ug/L							
SW-846 8270D	Acenaphthylene	208-96-8	N	ug/L							
SW-846 8270D	Anthracene	120-12-7	N	ug/L							
SW-846 8270D	Benzo(a)anthracene	56-55-3	N	ug/L							
SW-846 8270D	Benzo(a)pyrene	50-32-8	N	ug/L							
SW-846 8270D	Benzo(b)fluoranthene	205-99-2	N	ug/L							
SW-846 8270D	Benzo(g,h,i)perylene	191-24-2	N	ug/L							
SW-846 8270D	Benzo(k)fluoranthene	207-08-9	N	ug/L							
SW-846 8270D	bis(2-Chloroethoxy)methane	111-91-1	N	ug/L							
SW-846 8270D	bis(2-Chloroethyl) ether	111-44-4	N	ug/L							
SW-846 8270D	bis(2-chloroisopropyl) ether	108-60-1	N	ug/L							
SW-846 8270D	bis(2-Ethylhexyl)phthalate	117-81-7	N	ug/L							
SW-846 8270D	Butylbenzylphthalate	85-68-7	N	ug/L							
SW-846 8270D	Carbazole	86-74-8	N	ug/L							
SW-846 8270D	Chrysene	218-01-9	N	ug/L							
SW-846 8270D	Di-n-butylphthalate	84-74-2	N	ug/L							
SW-846 8270D	Di-n-octylphthalate	117-84-0	N	ug/L							
SW-846 8270D	Dibenz(a,h)anthracene	53-70-3	N	ug/L							
SW-846 8270D	Dibenzofuran	132-64-9	N	ug/L							
SW-846 8270D	Diethylphthalate	84-66-2	N	ug/L							
SW-846 8270D	Dimethyl phthalate	131-11-3	N	ug/L							
SW-846 8270D	Fluoranthene	206-44-0	N	ug/L							
SW-846 8270D	Fluorene	86-73-7	N	ug/L							
SW-846 8270D	Hexachlorobenzene	118-74-1	N	ug/L							
SW-846 8270D	Hexachlorobutadiene	87-68-3	N	ug/L							
SW-846 8270D	Hexachlorocyclopentadiene	77-47-4	N	ug/L							

			Location ID		Trip		Trip		Trip	
			Field Sample ID		QA-WT1-180614		QA-WT1-181026		QA-WT2-181026	
			Date Sampled		06/14/2018		10/26/2018		10/26/2018	
			SDG		1955779		2005546		2006269	
			Sample Matrix		WATER		WATER		WATER	
			Sample Purpose		TB		TB		TB	
			Sample Type		BLKWATER		BLKWATER		BLKWATER	
Analytical Method	Parameter Name	Parameter Code	Filtered	Units						
SW-846 8270D	Hexachloroethane	67-72-1	N	ug/L						
SW-846 8270D	Indeno(1,2,3-cd)Pyrene	193-39-5	N	ug/L						
SW-846 8270D	Isophorone	78-59-1	N	ug/L						
SW-846 8270D	N-Nitrosodi-n-propylamine	621-64-7	N	ug/L						
SW-846 8270D	N-Nitrosodiphenylamine (Diphenylamine)	86-30-6	N	ug/L						
SW-846 8270D	Naphthalene	91-20-3	N	ug/L						
SW-846 8270D	Nitrobenzene	98-95-3	N	ug/L						
SW-846 8270D	p-Chloro-m-cresol	59-50-7	N	ug/L						
SW-846 8270D	Pentachlorophenol	87-86-5	N	ug/L						
SW-846 8270D	Phenanthrene	85-01-8	N	ug/L						
SW-846 8270D	Phenol	108-95-2	N	ug/L						
SW-846 8270D	Pyrene	129-00-0	N	ug/L						

APPENDIX C

HISTORICAL ANALYTICAL SUMMARY TABLES

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location			DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A	
Field Sample ID			06152000-W		DB-8A-032004		DB-8A-072004		DB-108A		DB-8A		DB-8A-111506		DB-8A-082107		DB-8A-112807		DB-8A-061008		DB-8A(11-18-08)		DB-8A(7-15-09)		09)		DB-8A(11-10-09)		DB-8A(5-26-10)		DB-8A(10-12-10)		DB-8A(5-11-11)	
Date Sampled			06/15/2000		03/01/2004		07/01/2004		06/08/2006		06/08/2006		11/15/2006		08/21/2007		11/28/2007		06/10/2008		11/18/2008		07/15/2009		11/10/2009		11/10/2009		05/26/2010		10/12/2010		05/11/2011	
SDG									993100		993100		1014759		1052940		1067563		1095960		1120871		1153748		1170505		1170505		1196247		1216105		1246861	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		FD		REG		REG		REG		REG		REG		REG		REG		FD		REG		REG		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																															
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	18		0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.9	J
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l							3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	UJ	3	U	3	U	3	U	3	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l							20	U	20	U	19	U	20	U	19	U	19	U	19	U	19	UJ	22	U	20	U	10	U	10	U	10	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
2-Chloroethyl vinyl ether	ug/L	N	NS	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	UJ	2	U	2	U	2	U	2	U	2	R
2-Chloronaphthalene	ug/L	N	10.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
2-Methyl-Naphthlalene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l							5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	6	U	5	U	5	U	5	U	5	U
4-Bromophenylphenylether	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
4-Chloroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
4-Chlorophenyl phenyl ether	ug/L	N	NS							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
4-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
4-Nitrophenol	ug/L	N	1.0 ug/l							10	U	10	U	10	U	10	U	10	U	10	U	9	U	10	UJ	11	U	10	U	10	U	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Acenaphthylene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Anthracene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Benzene	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Benzo(a)pyrene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Benzo(g,h,i)perylene	mg/L	N	NS																															
Benzo(g,h,i)perylene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
Bromodichloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
Carbazole	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloride	mg/L	Y	250.0 mg/l																															
Chlorobenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	N	7.0 ug/l	0.8		0	U	0	U	0.8	U	0.8	U	1	J	1	J	2	J	0.8	U	1	J	0.8	U	1	J	1	J	0.8	U	1	J	0.8	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	UJ	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chrysene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U

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Location			DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A	
Field Sample ID			06152000-W		DB-8A-032004		DB-8A-072004		DB-108A		DB-8A		DB-8A-111506		DB-8A-082107		DB-8A-112807		DB-8A-061008		DB-8A(11-18-08)		DB-8A(7-15-09)		09)		DB-8A(11-10-09)		DB-8A(5-26-10)		DB-8A(10-12-10)		DB-8A(5-11-11)	
Date Sampled			06/15/2000		03/01/2004		07/01/2004		06/08/2006		06/08/2006		11/15/2006		08/21/2007		11/28/2007		06/10/2008		11/18/2008		07/15/2009		11/10/2009		11/10/2009		05/26/2010		10/12/2010		05/11/2011	
SDG									993100		993100		1014759		1052940		1067563		1095960		1120871		1153748		1170505		1170505		1196247		1216105		1246861	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		FD		REG		REG		REG		REG		REG		REG		REG		FD		REG		REG		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																															
Dibenz(a,h)anthracene	ug/L	N	NS						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Dibenzofuran	ug/L	N	NS						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Diethylphthalate	ug/L	N	50.0 ug/l						2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l						2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
Ethylbenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Fluoranthene	ug/L	N	50.0 ug/l						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Fluorene	ug/L	N	50.0 ug/l						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l						6		5		6		5	J	4	J	4	J	5	J	4	J	4	J	4	J	4	J	3	J	2	J
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l						5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	6	U	5	U	5	U	5	UJ	5	U
Hexachloroethane	ug/L	N	5.0 ug/l						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Isophorone	ug/L	N	50.0 ug/l						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Lead	mg/L	N	0.025 mg/l	0.0486		0.00083		0.0057		0.0069	U	0.0069	U	0.0069	U	0.0069	U	0.0095	J	0.0069	U	0.0101	J			0.0069	U	0.0069	U						
Lead	mg/L	Y	0.025 mg/l																				0.0069	U					0.0069	U	0.0069	U	0.0069	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l						0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Nitrosodi-n-propylamine	ug/L	N	NS						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l						2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	UJ	2	UJ	2	U	2	UJ	2	U
Naphthalene	ug/L	N	10.0 ug/l						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Nitrobenzene	ug/L	N	0.4 ug/l						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Pentachlorophenol	ug/L	N	1.0 ug/l						3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	UJ	3	U	3	U	3	U	3	U	3	U
pH	SU	N	NS																															
Phenanthrene	ug/L	N	50.0 ug/l						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Phenol	ug/L	N	1.0 ug/l						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Pyrene	ug/L	N	50.0 ug/l						1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Sulfate (SO4)	mg/L	Y	250.0 mg/l																															
Tetrachloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Toluene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
Total Hardness As Caco3	ug/L	Y	NS																															
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	26		2.2		10		14		13		11		13		6		7		9		7		6		6		6		13		31	
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Trihalomethanes (THM)	ug/L	N	NS	0	U	0	U	0	U																									
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

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Location			DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A	
Field Sample ID			DB-8A(11-10-11)		DB-8A(7-18-12)		DB-8A(102312)		DB-8A(061113)		DB-8A 111313		DB-8A-061114		CVX-0041-01		CVX-0059-01		151117		160613		161116		170627		171031		180612		181102	
Date Sampled			11/10/2011		07/18/2012		10/23/2012		06/11/2013		11/13/2013		06/11/2014		11/12/2014		06/22/2015		11/17/2015		06/13/2016		11/16/2016		06/27/2017		10/31/2017		06/12/2018		11/02/2018	
SDG			1276051		1323156		1344432		1396584		1433988		1481390		1518325		1571843		1610359		1671783		1734549		1819683		1871380		1955779		2005546	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																													
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.9	J	0.5	U	0.6	U	0.6	J	0.6	J	0.5	U	0.2	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7	J	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	J	0.5	U	0.6	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	J
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	3	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	10	U	10	U	10	U	10	UJ	10	UJ	11	U	10	U	10	U	10	U	11	U	10	UJ	10	U	10	U	14	U	15	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2-Methyl-Naphthlalene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U	2	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	3	U	3	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	3	U	3	U
3-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	3	U	3	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	U	5	U	5	UJ	5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U	5	U	8	U	8	U
4-Bromophenylphenylether	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U	2	U	2	U	2	UJ	2	U	2	U	4	U	4	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.9	U	0.9	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	10	U	10	U	10	U	10	U	11	U	10	U	10	U	10	UJ	11	U	10	UJ	10	U	10	U	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(g,h,i)perylene	mg/L	N	NS									0.0001	U																		
Benzo(g,h,i)perylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	5	U	5	U
Bromodichloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Bromoform	ug/L	N	50.0 ug/l	1	U	1	UJ	1	U	1	UJ	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.2	UJ
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Carbazole	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.2	U
Chloride	mg/L	Y	250.0 mg/l									5.3	J																		
Chlorobenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroform	ug/L	N	7.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	1	J	0.5	U	1		0.5	U	0.8	J	0.5	U	0.7	U	0.5	J	0.7	J	0.5	U	0.6	J
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chrysene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	5	U	5	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location			DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A		DB-8A	
Field Sample ID			DB-8A(11-10-11)		DB-8A(7-18-12)		DB-8A(102312)		DB-8A(061113)		DB-8A 111313		DB-8A-061114		CVX-0041-01		CVX-0059-01		151117		160613		161116		170627		171031		180612		181102	
Date Sampled			11/10/2011		07/18/2012		10/23/2012		06/11/2013		11/13/2013		06/11/2014		11/12/2014		06/22/2015		11/17/2015		06/13/2016		11/16/2016		06/27/2017		10/31/2017		06/12/2018		11/02/2018	
SDG			1276051		1323156		1344432		1396584		1433988		1481390		1518325		1571843		1610359		1671783		1734549		1819683		1871380		1955779		2005546	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																													
Dibenz(a,h)anthracene	**ug/L**	**N**	**NS**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	**ug/L**	**N**	**NS**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	**ug/L**	**N**	**50.0 ug/l**	1	U	1	U	1	U	1	UJ	1	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Diethylphthalate	**ug/L**	**N**	**50.0 ug/l**	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dimethyl phthalate	**ug/L**	**N**	**50.0 ug/l**	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U
Ethylbenzene	**ug/L**	**N**	**5.0 ug/l**	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.4	U
Fluoranthene	**ug/L**	**N**	**50.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Fluorene	**ug/L**	**N**	**50.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	**ug/L**	**N**	**0.04 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	**ug/L**	**N**	**0.5 ug/l**	4		3		3		3		4		4		4		3		1		2		0.5	U	0.8	J	0.8	J	2	J	2	
Hexachlorocyclopentadiene	**ug/L**	**N**	**5.0 ug/l**	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U	5	U	5	U	5	U
Hexachloroethane	**ug/L**	**N**	**5.0 ug/l**	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	**ug/L**	**N**	**0.002 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Isophorone	**ug/L**	**N**	**50.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	**mg/L**	**N**	**0.025 mg/l**																													
Lead	**mg/L**	**Y**	**0.025 mg/l**	0.0022	U	0.0051	U	0.0051	U	0.0051	U	0.0047	U	0.0047	U	0.0047	U	0.0047	U	0.0051	U	0.0051	U	0.0062	U	0.006	U	0.006	U	0.006	U	0.0071	U
Methyl-t-butyl ether	**ug/L**	**N**	**10.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Methylene chloride (Dichloromethane)	**ug/L**	**N**	**5.0 ug/l**	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.3	U
N-Nitrosodi-n-propylamine	**ug/L**	**N**	**NS**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7	U	0.7	U
N-Nitrosodiphenylamine (Diphenylamine)	**ug/L**	**N**	**50.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7	U	0.7	U
Naphthalene	**ug/L**	**N**	**10.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nitrobenzene	**ug/L**	**N**	**0.4 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chloro-m-cresol	**ug/L**	**N**	**1.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
Pentachlorophenol	**ug/L**	**N**	**1.0 ug/l**	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	UJ	1	UJ	1	U	1	UJ	1	U	1	U	1	U	1	U
pH	**SU**	**N**	**NS**									7.4																				
Phenanthrene	**ug/L**	**N**	**50.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Phenol	**ug/L**	**N**	**1.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
Pyrene	**ug/L**	**N**	**50.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Sulfate (SO4)	**mg/L**	**Y**	**250.0 mg/l**									17.9	J																			
Tetrachloroethene	**ug/L**	**N**	**5.0 ug/l**	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Toluene	**ug/L**	**N**	**5.0 ug/l**	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Total Hardness As Caco3	**ug/L**	**Y**	**NS**									378000																				
trans-1,3-Dichloropropene	**ug/L**	**N**	**0.4 ug/l**	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trichloroethene (Trichloroethylene)	**ug/L**	**N**	**5.0 ug/l**	8		4	J	8		5	J	8		9		4		8		11		3		8	U	11		10		3		10	
Trichlorofluoromethane (Freon 11)	**ug/L**	**N**	**5.0 ug/l**	2	U	2	UJ	2	U	2	UJ	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trihalomethanes (THM)	**ug/L**	**N**	**NS**																													
Vinyl chloride (Chloroethene)	**ug/L**	**N**	**2.0 ug/l**	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Xylene (total)	**ug/L**	**N**	**5.0 ug/l**	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				DB-17		DB-17		DB-17		DB-17		DB-17		DB-17		DB-17		DB-17		DB-17	
Field Sample ID				W		DB-17-032004		DB-17		DB-17(7-15-09)		DB-17(11-10-09)		DB-17(102312)		DB-17(061113)		DB-17-061114		181102	
Date Sampled				06/15/2000		03/01/2004		11/15/2006		07/15/2009		11/10/2009		10/23/2012		06/11/2013		06/11/2014		11/02/2018	
SDG								1014759		1153748		1170505		1344432		1396584		1481390		2005546	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																		
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.2	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.3	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.2	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.2	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.2	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l					1	U	1	UJ	1	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l					1	U	1	UJ	1	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.3	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.2	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l					1	U	1	UJ	1	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l					1	U	1	UJ	1	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l					3	U	3	U	3	U	0.5	U	0.5	U	0.5	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l					19	U	23	U	19	U	10	U	11	UJ	10	U	15	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l					1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Chloroethyl vinyl ether	ug/L	N	NS	0	U	0	U	2	U	2	UJ	2	U	2	U	2	U	2	U	0.2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l					2	U	2	U	2	U	0.4	U	0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Methyl-Naphthlalene	ug/L	N	NS					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	2	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	3	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l					2	U	2	U	2	U	2	U	2	U	2	U	3	U
3-Nitroaniline	ug/L	N	5.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	3	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l					5	U	6	U	5	U	5	U	5	UJ	5	U	8	U
4-Bromophenylphenylether	ug/L	N	NS					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	4	U
4-Chlorophenyl phenyl ether	ug/L	N	NS					2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l					2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.9	U
4-Nitrophenol	ug/L	N	1.0 ug/l					10	U	11	U	10	U	10	U	11	U	10	U	11	U
Acenaphthene	ug/L	N	20.0 ug/l					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzene	ug/L	N	1.0 ug/l	0	U	0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(g,h,i)perylene	ug/L	N	NS					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l					2	U	2	U	2	U	2	U	2	U	2	U	5	U
Bromodichloromethane	ug/L	N	50.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.2	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				DB-17		DB-17		DB-17		DB-17		DB-17		DB-17		DB-17		DB-17		DB-17	
Field Sample ID				W		DB-17-032004		DB-17		DB-17(7-15-09)		DB-17(11-10-09)		DB-17(102312)		DB-17(061113)		DB-17-061114		181102	
Date Sampled				06/15/2000		03/01/2004		11/15/2006		07/15/2009		11/10/2009		10/23/2012		06/11/2013		06/11/2014		11/02/2018	
SDG								1014759		1153748		1170505		1344432		1396584		1481390		2005546	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																		
Bromoform	ug/L	N	50.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	UJ	0.5	U	0.2	UJ
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	UJ	0.5	U	0.3	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l					2	U	2	U	2	U	2	U	2	U	2	U	2	U
Carbazole	ug/L	N	NS					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	UJ	0.5	U	0.2	U
Chlorobenzene	ug/L	N	5.0 ug/l	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.2	U
Chloroethane	ug/L	N	5.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.2	U
Chloroform	ug/L	N	7.0 ug/l	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.2	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0	U	0	U	1	UJ	1	U	1	U	1	U	1	U	0.5	U	0.2	U
Chrysene	ug/L	N	0.002 ug/l					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.2	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l					2	U	2	U	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l					2	U	2	U	2	U	2	U	2	U	2	U	5	U
Dibenz(a,h)anthracene	ug/L	N	NS					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	ug/L	N	NS					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	ug/L	N	50.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	UJ	0.5	U	0.2	U
Diethylphthalate	ug/L	N	50.0 ug/l					2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l					2	U	2	U	2	U	2	U	2	U	2	U	2	U
Ethylbenzene	ug/L	N	5.0 ug/l	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.4	U
Fluoranthene	ug/L	N	50.0 ug/l					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Fluorene	ug/L	N	50.0 ug/l					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l					1	U	1	UJ	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l					5	U	6	U	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l					1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Isophorone	ug/L	N	50.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	mg/L	N	0.025 mg/l	0.0195		0.0532		0.0069	U			0.0069	U								
Lead	mg/L	Y	0.025 mg/l											0.0051	U	0.0051	U	0.0047	U	0.0071	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l					0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	0.3	U
N-Nitrosodi-n-propylamine	ug/L	N	NS					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.7	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l					2	U	2	U	2	UJ	0.5	U	0.5	U	0.5	U	0.7	U
Naphthalene	ug/L	N	10.0 ug/l					1	U	1	UJ	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nitrobenzene	ug/L	N	0.4 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Pentachlorophenol	ug/L	N	1.0 ug/l					3	U	3	U	3	U	1	U	1	UJ	1	U	1	U
Phenanthrene	ug/L	N	50.0 ug/l					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Phenol	ug/L	N	1.0 ug/l					1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Pyrene	ug/L	N	50.0 ug/l					1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U
Tetrachloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.6	J
Toluene	ug/L	N	5.0 ug/l	0	U	0	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.5	U	0.2	U
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.2	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.2	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	0	U	0	U	2	U	2	U	2	U	2	U	2	UJ	0.5	U	0.2	U
Trihalomethanes (THM)	ug/L	N	NS	0	U	0	U														
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	0	U	0	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.2	U
Xylene (total)	ug/L	N	5.0 ug/l	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	1	U

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Location				DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1	
Field Sample ID				DC-01-0-0-06152000-W		DC-1-032004		DC-1-072004		DC-1		DC-1-111506		DC-1-082207		DC-1-112807		DC-1-061108		DC-1(11-18-08)		DC-1(7-14-09)		DC-1(11-10-09)	
Date Sampled				06/15/2000		03/01/2004		07/01/2004		06/08/2006		11/15/2006		08/22/2007		11/28/2007		06/10/2008		11/18/2008		07/14/2009		11/10/2009	
SDG										993100		1014759		1052940		1067563		1095960		1120871		1153748		1170505	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																						
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.5		0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	17		11		13		7		7		0.8	U	7		5	J	4	J	6		5	J
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l							3	U	3	U	3	U	3	U	3	U	3	U	3	UJ	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l							19	U	19	U	22	U	22	U	19	U	19	U	19	UJ	22	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2-Chloroethyl vinyl ether	ug/L	N		0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	UJ	2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2-Methyl-Naphthlalene	ug/L	N								1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l							5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U
4-Bromophenylphenylether	ug/L	N								1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
4-Chloroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
4-Chlorophenyl phenyl ether	ug/L	N								2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
4-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
4-Nitrophenol	ug/L	N	1.0 ug/l							10	U	10	U	11	U	11	U	10	U	10	U	10	UJ	11	U
Acenaphthene	ug/L	N	20.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Acenaphthylene	ug/L	N								1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Anthracene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Benzene	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Benzo(a)pyrene	ug/L	N								1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Benzo(g,h,i)perylene	ug/L	N								1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
Bromodichloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
Carbazole	ug/L	N								1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	N	7.0 ug/l	0.8		0.6	J	1.1		0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	UJ	1	U	1	UJ	1	U	1	U	1	U	1	U
Chrysene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
Dibenz(a,h)anthracene	ug/L	N								1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Dibenzofuran	ug/L	N								1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U

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Location				DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1	
Field Sample ID				DC-01-0-0-06152000-W		DC-1-032004		DC-1-072004		DC-1		DC-1-111506		DC-1-082207		DC-1-112807		DC-1-061108		DC-1(11-18-08)		DC-1(7-14-09)		DC-1(11-10-09)	
Date Sampled				06/15/2000		03/01/2004		07/01/2004		06/08/2006		11/15/2006		08/22/2007		11/28/2007		06/10/2008		11/18/2008		07/14/2009		11/10/2009	
SDG										993100		1014759		1052940		1067563		1095960		1120871		1153748		1170505	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																						
Dibromochloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Diethylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
Ethylbenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Fluoranthene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Fluorene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l							5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U
Hexachloroethane	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Isophorone	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Lead	mg/L	N	0.025 mg/l	0.0535		0.0092		0.0338		0.0069	U	0.0071	J	0.044		0.0157		0.0137	J	0.0361				0.0069	U
Lead	mg/L	Y	0.025 mg/l																			0.0069	U		
Methyl-t-butyl ether	ug/L	N	10.0 ug/l							0.5	U	0.5	U			0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	0	U	0	U	0.8	J	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Nitrosodi-n-propylamine	ug/L	N								1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	UJ
Naphthalene	ug/L	N	10.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Nitrobenzene	ug/L	N	0.4 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Pentachlorophenol	ug/L	N	1.0 ug/l							3	U	3	U	3	U	3	U	3	U	3	U	3	UJ	3	U
Phenanthrene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Phenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Pyrene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Tetrachloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Toluene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	23		11		16		11		12		9		11		10		4	J	10		9	
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Trihalomethanes (THM)	ug/L	N		0	U	0	U	1.1																	
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

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Location			DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1	
Field Sample ID			DC-1(5-26-10)		DC-1(10-12-10)		DC-1(5-11-11)		DC-1(11-10-11)		DC-1(102312)		DC-1(061113)		DC-1-061114		DC-1-W-2.00-170627		DC-1-W-2.00-171031		DC-1-W-2.00-180612		DC-1-W-2.00-181102	
Date Sampled			05/26/2010		10/12/2010		05/11/2011		11/10/2011		10/23/2012		06/11/2013		06/11/2014		06/27/2017		10/31/2017		06/12/2018		11/02/2018	
SDG			1196247		1216105		1246861		1276051		1344432		1396584		1481390		1819683		1871380		1955779		2005546	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																					
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	4	J	4	J	4	J	4	J	3	J	3	J	4		3		0.5	U	3		3	
1,2-Dichloropropane	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	3	U	3	U	3	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	3	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	10	U	10	U	10	U	10	U	10	U	10	UJ	10	U			11	U	15	U	15	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U			1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
2-Chloroethyl vinyl ether	ug/L	N		2	U	2	U	2	R	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	2	U	2	U	2	U	0.4	U	0.4	U	0.4	U	0.4	U			0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
2-Methyl-Naphthlalene	ug/L	N		1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	2	U	2	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	3	U	3	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			2	U	3	U	3	U
3-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	3	U	3	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U			5	U	8	U	8	U
4-Bromophenylphenylether	ug/L	N		1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			2	U	4	U	4	U
4-Chlorophenyl phenyl ether	ug/L	N		2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.9	U	0.9	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U			11	U	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N		1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N		1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Benzo(g,h,i)perylene	ug/L	N		1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			2	U	5	U	5	U
Bromodichloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Bromoform	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	UJ	0.5	U	0.5	U	0.5	UJ	0.5	U	0.2	UJ
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			2	U	2	U	2	U
Carbazole	ug/L	N		1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	UJ	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.2	U
Chlorobenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroform	ug/L	N	7.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chrysene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			2	U	5	U	5	U
Dibenz(a,h)anthracene	ug/L	N		1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Dibenzofuran	ug/L	N		1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1		DC-1	
Field Sample ID				DC-1(5-26-10)		DC-1(10-12-10)		DC-1(5-11-11)		DC-1(11-10-11)		DC-1(102312)		DC-1(061113)		DC-1-061114		DC-1-W-2.00-170627		DC-1-W-2.00-171031		DC-1-W-2.00-180612		DC-1-W-2.00-181102	
Date Sampled				05/26/2010		10/12/2010		05/11/2011		11/10/2011		10/23/2012		06/11/2013		06/11/2014		06/27/2017		10/31/2017		06/12/2018		11/02/2018	
SDG				1196247		1216105		1246861		1276051		1344432		1396584		1481390		1819683		1871380		1955779		2005546	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																						
Dibromochloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Diethylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			2	U	2	U	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U			2	U	2	U	2	U
Ethylbenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.4	U
Fluoranthene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Fluorene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.6	J	0.6	J			0.5	U	0.5	U	0.5	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	5	UJ	5	U	5	U	5	U	5	U	5	U			5	U	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U			1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Isophorone	ug/L	N	50.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Lead	mg/L	N	0.025 mg/l																						
Lead	mg/L	Y	0.025 mg/l	0.0069	U	0.0069	U	0.0069	U	0.0022	U	0.0051	U	0.0051	U	0.0047	U			0.006	U	0.006	U	0.0071	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.3	U
N-Nitrosodi-n-propylamine	ug/L	N		1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.7	U	0.7	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	2	U	2	UJ	2	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.7	U	0.7	U
Naphthalene	ug/L	N	10.0 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Nitrobenzene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Pentachlorophenol	ug/L	N	1.0 ug/l	3	U	3	U	3	U	1	U	1	U	1	UJ	1	U			1	U	1	U	1	U
Phenanthrene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Phenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U
Pyrene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U	0.1	U
Tetrachloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Toluene	ug/L	N	5.0 ug/l	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	8		8		8		8		8		4	J	8		6		0.7	J	7		7	
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trihalomethanes (THM)	ug/L	N																							
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Xylene (total)	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	1	U

Historical Consent Order Groundwater Analytical Table
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Location				DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2	
Field Sample ID				DC-02-0-0-06152000-W		DC-2-032004		DC-2-072004		DC-2		DC-2-111506		DC-2-082107		DC-2-112807		DC-2-061008		DC-2(11-18-08)		DC-2-D(11-18-08)		DC-2(7-14-09)	
Date Sampled				06/15/2000		03/01/2004		07/01/2004		06/07/2006		11/15/2006		08/21/2007		11/28/2007		06/10/2008		11/18/2008		11/18/2008		07/14/2009	
SDG										993100		1014759		1052940		1067563		1095960		1120871		1120871		1153748	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		FD		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																						
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,4-Dichlorophenol	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,4-Dimethylphenol	ug/L	N	50.0 ug/l							3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	UJ
2,4-Dinitrophenol	ug/L	N	10.0 ug/l							20	U	19	U	20	U	20	U	22	U	19	U	19	U	20	UJ
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Chloroethyl vinyl ether	ug/L	N	NS	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	UJ	2	UJ
2-Chloronaphthalene	ug/L	N	10.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Methyl-Naphthlalene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
3-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l							5	U	5	U	5	U	5	U	6	U	5	U	5	U	5	UJ
4-Bromophenylphenylether	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
4-Chloroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
4-Chlorophenyl phenyl ether	ug/L	N	NS							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
4-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
4-Nitrophenol	ug/L	N	1.0 ug/l							10	U	10	U	10	U	10	U	11	U	10	U	10	U	10	UJ
Acenaphthene	ug/L	N	20.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Acenaphthylene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Anthracene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzene	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzo(a)pyrene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzo(g,h,i)perylene	mg/L	N	NS																						
Benzo(g,h,i)perylene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Bromodichloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Carbazole	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloride	mg/L	Y	250.0 mg/l																						
Chlorobenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	N	7.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	UJ	1	U	1	UJ	1	U	1	U	1	U	1	U
Chrysene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ

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Location				DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2	
Field Sample ID				DC-02-0-0-06152000-W		DC-2-032004		DC-2-072004		DC-2		DC-2-111506		DC-2-082107		DC-2-112807		DC-2-061008		DC-2(11-18-08)		DC-2-D(11-18-08)		DC-2(7-14-09)	
Date Sampled				06/15/2000		03/01/2004		07/01/2004		06/07/2006		11/15/2006		08/21/2007		11/28/2007		06/10/2008		11/18/2008		11/18/2008		07/14/2009	
SDG										993100		1014759		1052940		1067563		1095960		1120871		1120871		1153748	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		FD		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																						
Di-n-octylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Dibenz(a,h)anthracene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Dibenzofuran	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Dibromochloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Diethylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Dimethyl phthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Ethylbenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Fluoranthene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Fluorene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Hexachlorobenzene	ug/L	N	0.04 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Hexachlorobutadiene	ug/L	N	0.5 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l							5	U	5	U	5	U	5	U	6	U	5	U	5	U	5	UJ
Hexachloroethane	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Isophorone	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Lead	mg/L	N	0.025 mg/l	0.0364		0.00075		0.0031		0.0069	U	0.0069	U	0.0069	U	0.0161		0.0069	U	0.0244		0.0271			
Lead	mg/L	Y	0.025 mg/l																					0.0069	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l							0.5	U	0.5	U			0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Nitrosodi-n-propylamine	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Naphthalene	ug/L	N	10.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Nitrobenzene	ug/L	N	0.4 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
p-Chloro-m-cresol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Pentachlorophenol	ug/L	N	1.0 ug/l							3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	UJ
pH	SU	N	NS																						
Phenanthrene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Phenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Pyrene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Sulfate (SO4)	mg/L	Y	250.0 mg/l																						
Tetrachloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Toluene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	J	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
Total Hardness As Caco3	ug/L	Y	NS																						
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Trihalomethanes (THM)	ug/L	N	NS	0	U	0	U	0	U																
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

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Location			DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2	
Field Sample ID			DC-2(11-10-09)		DC-2(5-26-10)		DC-2(10-12-10)		DC-2(5-11-11)		DC-2(11-10-11)		DC-2(7-18-12)		DC-2(102312)		DC-2(061113)		DC-2 111313		DC-2-061114		CVX-0041-02	
Date Sampled			11/10/2009		05/26/2010		10/12/2010		05/11/2011		11/10/2011		07/18/2012		10/23/2012		06/11/2013		11/13/2013		06/11/2014		11/12/2014	
SDG			1170505		1196247		1216105		1246861		1276051		1323156		1344432		1396584		1433988		1481390		1518325	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																					
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	3	U	3	UJ	3	U	3	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	20	U	10	UJ	10	U	10	U	10	U	10	U	10	U	11	UJ	11	UJ	11	U	10	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	2	U	2	U	2	R	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	2	U	2	UJ	2	U	2	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
2-Methyl-Naphthlalene	ug/L	N	NS	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	UJ	5	U	5	U	5	U	5	U	5	U	5	UJ	6	U	5	U	5	U
4-Bromophenylphenylether	ug/L	N	NS	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	2	U	2	UJ	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	2	U	2	UJ	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	10	UJ	10	U	10	U	10	U	10	U	10	U	11	U	11	U	11	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(g,h,i)perylene	mg/L	N	NS																	0.0001	U				
Benzo(g,h,i)perylene	ug/L	N	NS	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U	0.1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Bromodichloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Bromoform	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	UJ	1	U	0.5	U	0.5	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	0.5	U	0.5	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Carbazole	ug/L	N	NS	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	0.5	U	0.5	U
Chloride	mg/L	Y	250.0 mg/l																	4.2	J				
Chlorobenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
Chloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Chloroform	ug/L	N	7.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	0.5	U	0.5	U
Chrysene	ug/L	N	0.002 ug/l	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location			DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2	
Field Sample ID			DC-2(11-10-09)		DC-2(5-26-10)		DC-2(10-12-10)		DC-2(5-11-11)		DC-2(11-10-11)		DC-2(7-18-12)		DC-2(102312)		DC-2(061113)		DC-2 111313		DC-2-061114		CVX-0041-02	
Date Sampled			11/10/2009		05/26/2010		10/12/2010		05/11/2011		11/10/2011		07/18/2012		10/23/2012		06/11/2013		11/13/2013		06/11/2014		11/12/2014	
SDG			1170505		1196247		1216105		1246861		1276051		1323156		1344432		1396584		1433988		1481390		1518325	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																					
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dibenz(a,h)anthracene	ug/L	N	NS	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	ug/L	N	NS	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
Dibromochloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	0.5	U	0.5	U
Diethylphthalate	ug/L	N	50.0 ug/l	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Ethylbenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
Fluoranthene	ug/L	N	50.0 ug/l	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Fluorene	ug/L	N	50.0 ug/l	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	5	UJ	5	UJ	5	U	5	U	5	U	5	U	5	U	6	U	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Isophorone	ug/L	N	50.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
Lead	mg/L	N	0.025 mg/l	0.0069	U																			
Lead	mg/L	Y	0.025 mg/l			0.0069	U	0.0069	U	0.0069	U	0.0022	U	0.0051	U	0.0051	U	0.0051	U	0.0047	U	0.0047	U	0.0047	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Nitrosodi-n-propylamine	ug/L	N	NS	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	2	UJ	2	UJ	2	UJ	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
Naphthalene	ug/L	N	10.0 ug/l	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nitrobenzene	ug/L	N	0.4 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
Pentachlorophenol	ug/L	N	1.0 ug/l	3	U	3	UJ	3	U	3	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U
pH	SU	N	NS																	7.3					
Phenanthrene	ug/L	N	50.0 ug/l	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Phenol	ug/L	N	1.0 ug/l	1	U	1	UJ	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U
Pyrene	ug/L	N	50.0 ug/l	1	U	1	UJ	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Sulfate (SO4)	mg/L	Y	250.0 mg/l																	16.1	J				
Tetrachloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
Toluene	ug/L	N	5.0 ug/l	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.5	U	0.5	U
Total Hardness As Caco3	ug/L	Y	NS																	192000					
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	UJ	2	U	0.5	U	0.5	U
Trihalomethanes (THM)	ug/L	N	NS																						
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Xylene (total)	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location			DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2	
Field Sample ID			CVX-0059-02		DC-2-W-7.50-151117		DC-2-W-7.50-160613		DC-2-W-7.50-161115		DC-2-WD-7.50-161115		DC-2-W-7.50-170627		DC-2-W-7.50-171031		DC-2-W-7.50-180612		DC-2-W-7.50-181102	
Date Sampled			06/22/2015		11/17/2015		06/13/2016		11/15/2016		11/15/2016		06/27/2017		10/31/2017		06/12/2018		11/02/2018	
SDG			1571843		1610359		1671783		1734549		1734549		1819683		1871380		1955779		2005546	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		FD		REG		REG		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																	
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	3	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	10	U	10	U	10	U	10	UJ	10	UJ	10	UJ	11	U	15	U	14	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2-Methyl-Naphthlalene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U	2	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	3	U	3	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	3	U	3	U
3-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	3	U	3	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	U	5	U	5	UJ	5	UJ	5	U	5	U	8	U	8	U
4-Bromophenylphenylether	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	UJ	2	UJ	2	U	2	U	4	U	4	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.9	U	0.9	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	10	UJ	10	U	10	UJ	10	UJ	10	U	11	U	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(g,h,i)perylene	mg/L	N	NS																		
Benzo(g,h,i)perylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	5	U	5	U
Bromodichloromethane	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Bromoform	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.2	UJ
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Carbazole	ug/L	N	NS	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.2	U
Chloride	mg/L	Y	250.0 mg/l																		
Chlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroform	ug/L	N	7.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chrysene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2		DC-2	
Field Sample ID				CVX-0059-02		DC-2-W-7.50-151117		DC-2-W-7.50-160613		DC-2-W-7.50-161115		DC-2-WD-7.50-161115		DC-2-W-7.50-170627		DC-2-W-7.50-171031		DC-2-W-7.50-180612		DC-2-W-7.50-181102	
Date Sampled				06/22/2015		11/17/2015		06/13/2016		11/15/2016		11/15/2016		06/27/2017		10/31/2017		06/12/2018		11/02/2018	
SDG				1571843		1610359		1671783		1734549		1734549		1819683		1871380		1955779		2005546	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		FD		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																		
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	5	U	5	U
Dibenz(a,h)anthracene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	ug/L	N	50.0 ug/l	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Diethylphthalate	ug/L	N	50.0 ug/l	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	UJ	2	U	2	U	2	UJ	2	UJ	2	U	2	U	2	U	2	U
Ethylbenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.4	U
Fluoranthene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Fluorene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	5	U	5	U	5	UJ	5	UJ	5	U	5	U	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Isophorone	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	mg/L	N	0.025 mg/l																		
Lead	mg/L	Y	0.025 mg/l	0.0047	U	0.0051	U	0.0051	U	0.0062	U	0.0062	U	0.006	U	0.006	U	0.006	U	0.0071	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.3	U
N-Nitrosodi-n-propylamine	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7	U	0.7	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7	U	0.7	U
Naphthalene	ug/L	N	10.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nitrobenzene	ug/L	N	0.4 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1	J
p-Chloro-m-cresol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
Pentachlorophenol	ug/L	N	1.0 ug/l	1	UJ	1	UJ	1	U	1	UJ	1	UJ	1	UJ	1	U	1	U	1	U
pH	SU	N	NS																		
Phenanthrene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Phenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
Pyrene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Sulfate (SO4)	mg/L	Y	250.0 mg/l																		
Tetrachloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Toluene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Total Hardness As Caco3	ug/L	Y	NS																		
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trihalomethanes (THM)	ug/L	N	NS																		
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Xylene (total)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1	U

Historical Consent Order Groundwater Analytical Table
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Location				OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2	
Field Sample ID				OR-02-0-0-06152000-W		OR-2-032004		OR-2-072004		OR-2		OR-2-111606		OR-2-082207		OR-2-112907		OR-2-061208		OR-2(11-20-08)		OR-2(7-15-09)	
Date Sampled				06/15/2000		03/01/2004		07/01/2004		06/09/2006		11/16/2006		08/22/2007		11/28/2007		06/12/2008		11/20/2008		07/15/2009	
SDG										993100		1014759		1052940		1067563		1095960		1121380		1153748	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																				
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	1		0	U	0	U	1	U	1	J	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0	U	0.48		0.9	J	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,4-Dichlorophenol	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,4-Dimethylphenol	ug/L	N	50.0 ug/l							3	U	3	U	3	U	3	U	3	U	3	U	3	UJ
2,4-Dinitrophenol	ug/L	N	10.0 ug/l							20	U	19	U	21	U	20	U	19	U	19	U	20	UJ
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Chloroethyl vinyl ether	ug/L	N	NS	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	UJ
2-Chloronaphthalene	ug/L	N	10.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Methyl-Naphthlalene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
3-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l							5	U	5	U	5	U	5	U	5	U	5	U	5	UJ
4-Bromophenylphenylether	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
4-Chloroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
4-Chlorophenyl phenyl ether	ug/L	N	NS							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
4-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
4-Nitrophenol	ug/L	N	1.0 ug/l							10	U	10	U	10	U	10	U	10	U	10	U	10	UJ
Acenaphthene	ug/L	N	20.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Acenaphthylene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Anthracene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzene	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzo(a)pyrene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzo(g,h,i)perylene	mg/L	N	NS																				
Benzo(g,h,i)perylene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	3	J	2	UJ
Bromodichloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Carbazole	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloride	mg/L	Y	250.0 mg/l																				
Chlorobenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	N	7.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	UJ	1	U	1	UJ	1	U	1	U	1	U
Chrysene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ

Historical Consent Order Groundwater Analytical Table
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Location				OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2	
Field Sample ID				OR-02-0-0-06152000-W		OR-2-032004		OR-2-072004		OR-2		OR-2-111606		OR-2-082207		OR-2-112907		OR-2-061208		OR-2(11-20-08)		OR-2(7-15-09)	
Date Sampled				06/15/2000		03/01/2004		07/01/2004		06/09/2006		11/16/2006		08/22/2007		11/28/2007		06/12/2008		11/20/2008		07/15/2009	
SDG										993100		1014759		1052940		1067563		1095960		1121380		1153748	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																				
Di-n-octylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Dibenz(a,h)anthracene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Dibenzofuran	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Dibromochloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Diethylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Dimethyl phthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Ethylbenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Fluoranthene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Fluorene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Hexachlorobenzene	ug/L	N	0.04 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Hexachlorobutadiene	ug/L	N	0.5 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l							5	U	5	UJ	5	U	5	U	5	U	5	U	5	UJ
Hexachloroethane	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Isophorone	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Lead	mg/L	N	0.025 mg/l	0.0113		0		0.0059		0.0069	U	0.0069	U	0.0069	U	0.0069	U	0.0069	U	0.0069	U		
Lead	mg/L	Y	0.025 mg/l																			0.0069	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l							0.5	U	0.5	U			0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Nitrosodi-n-propylamine	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Naphthalene	ug/L	N	10.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Nitrobenzene	ug/L	N	0.4 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
p-Chloro-m-cresol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Pentachlorophenol	ug/L	N	1.0 ug/l							3	U	3	U	3	U	3	U	3	U	3	U	3	UJ
pH	SU	N	NS																				
Phenanthrene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Phenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	3	J	1	UJ
Pyrene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Sulfate (SO4)	mg/L	Y	250.0 mg/l																				
Tetrachloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Toluene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
Total Hardness As Caco3	ug/L	Y	NS																				
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	0.7		0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Trihalomethanes (THM)	ug/L	N	NS	0	U	0	U	0	U														
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

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Location				OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2	
Field Sample ID				OR-2(11-11-09)		OR-2(5-26-10)		OR-2(10-12-10)		OR-2(5-11-11)		OR-2(11-10-11)		OR-2(7-18-12)		OR-2(102312)		OR-102(061113)		OR-2(061113)		OR-2 111413	
Date Sampled				11/11/2009		05/26/2010		10/12/2010		05/11/2011		11/10/2011		07/18/2012		10/23/2012		06/11/2013		06/11/2013		11/14/2013	
SDG				1170754		1196247		1216105		1246861		1276051		1323156		1344432		1396584		1396584		1434248	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		FD		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																				
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	3	U	3	U	3	U	3	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	20	U	10	U	10	U	10	U	10	U	10	U	10	U	10	UJ	10	UJ	10	UJ
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	2	U	2	U	2	R	2	U	2	U	2	U	2	U	2	U	2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	2	U	2	U	2	U	2	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Methyl-Naphthlalene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	UJ	5	U
4-Bromophenylphenylether	ug/L	N	NS	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(g,h,i)perylene	mg/L	N	NS																			0.0001	U
Benzo(g,h,i)perylene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U		
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	J	2	U	2	U	2	U	2	U
Bromodichloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	UJ	1	UJ	1	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	UJ	1	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Carbazole	ug/L	N	NS	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	UJ	1	U
Chloride	mg/L	Y	250.0 mg/l																			40.6	
Chlorobenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	N	7.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U
Chrysene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2	
Field Sample ID				OR-2(11-11-09)		OR-2(5-26-10)		OR-2(10-12-10)		OR-2(5-11-11)		OR-2(11-10-11)		OR-2(7-18-12)		OR-2(102312)		OR-102(061113)		OR-2(061113)		OR-2 111413	
Date Sampled				11/11/2009		05/26/2010		10/12/2010		05/11/2011		11/10/2011		07/18/2012		10/23/2012		06/11/2013		06/11/2013		11/14/2013	
SDG				1170754		1196247		1216105		1246861		1276051		1323156		1344432		1396584		1396584		1434248	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		FD		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																				
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dibenz(a,h)anthracene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	ug/L	N	NS	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	UJ	1	U
Diethylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Ethylbenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Fluoranthene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Fluorene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	5	U	5	UJ	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Isophorone	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	mg/L	N	0.025 mg/l																				
Lead	mg/L	Y	0.025 mg/l	0.0069	U	0.0069	U	0.0069	U	0.0069	U	0.0022	U	0.0051	U	0.0051	U	0.0051	U	0.0051	U	0.0047	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Nitrosodi-n-propylamine	ug/L	N	NS	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	2	UJ	2	U	2	UJ	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	ug/L	N	10.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nitrobenzene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Pentachlorophenol	ug/L	N	1.0 ug/l	3	U	3	U	3	U	3	U	1	U	1	U	1	U	1	UJ	1	UJ	1	U
pH	SU	N	NS																			7.9	
Phenanthrene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Phenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Pyrene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Sulfate (SO4)	mg/L	Y	250.0 mg/l																			12.7	
Tetrachloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Toluene	ug/L	N	5.0 ug/l	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
Total Hardness As Caco3	ug/L	Y	NS																			205000	
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	UJ	2	UJ	2	U
Trihalomethanes (THM)	ug/L	N	NS																				
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2	
Field Sample ID				OR-120-061114		OR-2-061114		CVX-0040-01		CVX-0040-02		CVX-0058-08		OR-2-W-26.00-151113		OR-2-W-26.00-160614		OR-2-W-26.00-161115		OR-2-W-26.00-170627		OR-2-W-26.00-171101	
Date Sampled				06/11/2014		06/11/2014		11/11/2014		11/11/2014		06/19/2015		11/13/2015		06/14/2016		11/15/2016		06/27/2017		11/01/2017	
SDG				1481390		1481390		1517916		1517916		1570824		1609463		1672790		1734549		1819683		1871380	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				FD		REG		FD		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																				
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	J	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1		0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	10	U	11	U	10	U	10	U	11	U	10	U	10	U	10	UJ	10	U	11	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	UJ	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	UJ	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
2-Methyl-Naphthlalene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U	6	U
4-Bromophenylphenylether	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
4-Chloroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	2	U	2	U	2	U	2	UJ	2	U	2	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
4-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	11	U	10	U	10	U	11	U	10	U	10	U	10	UJ	10	U	11	U
Acenaphthene	ug/L	N	20.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.5	J
Benzo(a)pyrene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.5	J
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.9	
Benzo(g,h,i)perylene	mg/L	N	NS																				
Benzo(g,h,i)perylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.6	
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	1	
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U
Bromodichloromethane	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	UJ	2	U	2	U
Carbazole	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ
Chloride	mg/L	Y	250.0 mg/l																				
Chlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	ug/L	N	7.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chrysene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	1	
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	UJ	2	U	2	U

Historical Consent Order Groundwater Analytical Table
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Glenham (Beacon), New York

Location				OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2		OR-2	
Field Sample ID				OR-120-061114		OR-2-061114		CVX-0040-01		CVX-0040-02		CVX-0058-08		OR-2-W-26.00-151113		OR-2-W-26.00-160614		OR-2-W-26.00-161115		OR-2-W-26.00-170627		OR-2-W-26.00-171101	
Date Sampled				06/11/2014		06/11/2014		11/11/2014		11/11/2014		06/19/2015		11/13/2015		06/14/2016		11/15/2016		06/27/2017		11/01/2017	
SDG				1481390		1481390		1517916		1517916		1570824		1609463		1672790		1734549		1819683		1871380	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				FD		REG		FD		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																				
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U
Dibenz(a,h)anthracene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.7	
Dibenzofuran	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
Dibromochloromethane	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Diethylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	UJ	2	U	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	UJ	2	U	2	U
Ethylbenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Fluoranthene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	J
Fluorene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U	6	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.6	
Isophorone	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
Lead	mg/L	N	0.025 mg/l																				
Lead	mg/L	Y	0.025 mg/l	0.0047	U	0.0047	U	0.0047	U	0.0047	U	0.0047	U	0.0051	U	0.0051	U	0.0062	U	0.006	U	0.006	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.5	U
N-Nitrosodi-n-propylamine	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
Naphthalene	ug/L	N	10.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U
Nitrobenzene	ug/L	N	0.4 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
Pentachlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	1	UJ	1	UJ	1	U	1	UJ	1	U	1	U
pH	SU	N	NS																				
Phenanthrene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U
Phenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	1		0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U
Pyrene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U
Sulfate (SO4)	mg/L	Y	250.0 mg/l																				
Tetrachloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Total Hardness As Caco3	ug/L	Y	NS																				
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trihalomethanes (THM)	ug/L	N	NS																				
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

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Glenham (Beacon), New York

Location				OR-2		OR-2	
Field Sample ID				OR-2-W-26.00-180613		OR-2-W-26.00-181105	
Date Sampled				06/13/2018		11/05/2018	
SDG				1955779		2006269	
Sample Matrix				WATER		WATER	
Sample Purpose				REG		REG	
Sample Type			NY_TOGS	GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**				
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.2	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.5	U	0.3	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0.5	U	0.2	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.5	U	0.2	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0.9	J	0.2	J
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	0.2	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0.5	U	0.3	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.2	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0.9	J	0.2	J
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	0.2	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	3	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	14	U	15	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	0.5	U	0.5	U
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	0.2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U
2-Methyl-Naphthlalene	ug/L	N	NS	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	2	U	2	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	3	U	3	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	3	U	3	U
3-Nitroaniline	ug/L	N	5.0 ug/l	3	U	3	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	8	U	8	U
4-Bromophenylphenylether	ug/L	N	NS	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	4	U	4	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	0.5	U	0.5	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	0.9	U	0.9	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	11	U
Acenaphthene	ug/L	N	20.0 ug/l	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l	0.1	U	0.1	U
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.2	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS	0.1	U	0.1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U
Benzo(g,h,i)perylene	mg/L	N	NS				
Benzo(g,h,i)perylene	ug/L	N	NS	0.1	U	0.1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	5	U	5	U
Bromodichloromethane	ug/L	N	50.0 ug/l	0.5	U	0.2	U
Bromoform	ug/L	N	50.0 ug/l	0.5	U	0.2	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0.5	U	0.3	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	U
Carbazole	ug/L	N	NS	0.5	U	0.5	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0.5	UJ	0.2	U
Chloride	mg/L	Y	250.0 mg/l				
Chlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.2	U
Chloroethane	ug/L	N	5.0 ug/l	0.5	U	0.2	U
Chloroform	ug/L	N	7.0 ug/l	0.5	U	0.2	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0.5	U	0.2	U
Chrysene	ug/L	N	0.002 ug/l	0.1	U	0.1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0.5	U	0.2	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				OR-2		OR-2	
Field Sample ID				OR-2-W-26.00-180613		OR-2-W-26.00-181105	
Date Sampled				06/13/2018		11/05/2018	
SDG				1955779		2006269	
Sample Matrix				WATER		WATER	
Sample Purpose				REG		REG	
Sample Type			NY_TOGS	GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**				
Di-n-octylphthalate	ug/L	N	50.0 ug/l	5	U	5	U
Dibenz(a,h)anthracene	ug/L	N	NS	0.1	U	0.1	U
Dibenzofuran	ug/L	N	NS	0.5	U	0.5	U
Dibromochloromethane	ug/L	N	50.0 ug/l	0.5	U	0.2	U
Diethylphthalate	ug/L	N	50.0 ug/l	2	U	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	U	2	UJ
Ethylbenzene	ug/L	N	5.0 ug/l	0.5	U	0.4	U
Fluoranthene	ug/L	N	50.0 ug/l	0.1	U	0.1	U
Fluorene	ug/L	N	50.0 ug/l	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	0.5	U	0.5	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	0.1	U	0.1	U
Isophorone	ug/L	N	50.0 ug/l	0.5	U	0.5	U
Lead	mg/L	N	0.025 mg/l				
Lead	mg/L	Y	0.025 mg/l	0.006	U	0.0071	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.2	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	0.5	U	0.3	U
N-Nitrosodi-n-propylamine	ug/L	N	NS	0.7	U	0.7	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	0.7	U	0.7	U
Naphthalene	ug/L	N	10.0 ug/l	0.1	U	0.1	U
Nitrobenzene	ug/L	N	0.4 ug/l	0.5	U	0.5	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l	0.5	U	0.5	U
Pentachlorophenol	ug/L	N	1.0 ug/l	1	U	1	UJ
pH	SU	N	NS				
Phenanthrene	ug/L	N	50.0 ug/l	0.1	U	0.1	U
Phenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U
Pyrene	ug/L	N	50.0 ug/l	0.1	U	0.1	U
Sulfate (SO4)	mg/L	Y	250.0 mg/l				
Tetrachloroethene	ug/L	N	5.0 ug/l	0.5	U	0.2	U
Toluene	ug/L	N	5.0 ug/l	0.5	U	0.2	U
Total Hardness As Caco3	ug/L	Y	NS				
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0.5	U	0.2	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	0.5	U	0.2	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	0.5	U	0.2	U
Trihalomethanes (THM)	ug/L	N	NS				
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	0.5	U	0.2	U
Xylene (total)	ug/L	N	5.0 ug/l	0.5	U	1	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3	
Field Sample ID				OR-03-0-0-06152000-W		OR-3-032004		OR-3-072004		OR-3		OR-3-111606		OR-3-082207		OR-3-112907		OR-3-061208		OR-3(11-20-08)		OR-3(7-15-09)	
Date Sampled				06/15/2000		03/01/2004		07/01/2004		06/09/2006		11/16/2006		08/22/2007		11/29/2007		06/12/2008		11/20/2008		07/15/2009	
SDG										993100		1014759		1052940		1067563		1095960		1121380		1153748	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																				
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,4-Dichlorophenol	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,4-Dimethylphenol	ug/L	N	50.0 ug/l							3	U	3	U	3	U	3	U	3	U	3	U	3	UJ
2,4-Dinitrophenol	ug/L	N	10.0 ug/l							21	U	19	U	20	U	21	U	19	U	19	U	20	UJ
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Chloroethyl vinyl ether	ug/L	N	NS	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	UJ
2-Chloronaphthalene	ug/L	N	10.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Methyl-Naphthlalene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
3-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l							5	U	5	U	5	U	5	U	5	U	5	U	5	UJ
4-Bromophenylphenylether	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
4-Chloroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
4-Chlorophenyl phenyl ether	ug/L	N	NS							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
4-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
4-Nitrophenol	ug/L	N	1.0 ug/l							10	U	10	U	10	U	10	U	10	U	10	U	10	UJ
Acenaphthene	ug/L	N	20.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Acenaphthylene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Anthracene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzene	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzo(a)pyrene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzo(g,h,i)perylene	mg/L	N	NS																				
Benzo(g,h,i)perylene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	4	J	2	UJ
Bromodichloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Carbazole	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloride	mg/L	Y	250.0 mg/l																				
Chlorobenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	N	7.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	UJ	1	U	1	UJ	1	U	1	U	1	U
Chrysene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Di-n-octylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ

Historical Consent Order Groundwater Analytical Table
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Glenham (Beacon), New York

Location				OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3	
Field Sample ID				OR-03-0-0-06152000-W		OR-3-032004		OR-3-072004		OR-3		OR-3-111606		OR-3-082207		OR-3-112907		OR-3-061208		OR-3(11-20-08)		OR-3(7-15-09)	
Date Sampled				06/15/2000		03/01/2004		07/01/2004		06/09/2006		11/16/2006		08/22/2007		11/29/2007		06/12/2008		11/20/2008		07/15/2009	
SDG										993100		1014759		1052940		1067563		1095960		1121380		1153748	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																				
Dibenz(a,h)anthracene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Dibenzofuran	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Dibromochloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Diethylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Dimethyl phthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Ethylbenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Fluoranthene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Fluorene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Hexachlorobenzene	ug/L	N	0.04 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Hexachlorobutadiene	ug/L	N	0.5 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l							5	U	5	UJ	5	U	5	U	5	U	5	U	5	UJ
Hexachloroethane	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Isophorone	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Lead	mg/L	N	0.025 mg/l	0.0352		0.0023		0.0052		0.0069	U	0.0069	U	0.0069	U	0.0069	U	0.0069	U	0.0069	U		
Lead	mg/L	Y	0.025 mg/l																			0.0069	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l							0.5	U	0.5	U			0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Nitrosodi-n-propylamine	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ
Naphthalene	ug/L	N	10.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Nitrobenzene	ug/L	N	0.4 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
p-Chloro-m-cresol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Pentachlorophenol	ug/L	N	1.0 ug/l							3	U	3	U	3	U	3	U	3	U	3	U	3	UJ
pH	SU	N	NS																				
Phenanthrene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Phenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	5	J	1	UJ
Pyrene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Sulfate (SO4)	mg/L	Y	250.0 mg/l																				
Tetrachloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Toluene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
Total Hardness As Caco3	ug/L	Y	NS																				
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Trihalomethanes (THM)	ug/L	N	NS	0	U	0	U	0	U														
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
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Location				OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3	
Field Sample ID				OR-3(11-11-09)		OR-3(5-26-10)		OR-3(10-12-10)		OR-3(5-11-11)		OR-103(11-10-11)		OR-3(11-10-11)		OR-3(7-18-12)		OR-103(102312)		OR-3(102312)		OR-3(061113)	
Date Sampled				11/11/2009		05/26/2010		10/12/2010		05/11/2011		11/10/2011		11/10/2011		07/18/2012		10/23/2012		10/23/2012		06/11/2013	
SDG				1170754		1196247		1216105		1246861		1276051		1276051		1323156		1344432		1344432		1396584	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		FD		REG		REG		FD		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																				
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	3	U	3	U	3	U	3	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	20	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	11	UJ
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	2	U	2	U			2	U	2	U	2	U	2	U	2	U	2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	2	U	2	U	2	U	2	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Methyl-Naphthlalene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	UJ
4-Bromophenylphenylether	ug/L	N	NS	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	11	U
Acenaphthene	ug/L	N	20.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(g,h,i)perylene	mg/L	N	NS																				
Benzo(g,h,i)perylene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Bromodichloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	UJ
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Carbazole	ug/L	N	NS	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Chloride	mg/L	Y	250.0 mg/l																				
Chlorobenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	N	7.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U
Chrysene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U

Historical Consent Order Groundwater Analytical Table
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Location				OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3	
Field Sample ID				OR-3(11-11-09)		OR-3(5-26-10)		OR-3(10-12-10)		OR-3(5-11-11)		OR-103(11-10-11)		OR-3(11-10-11)		OR-3(7-18-12)		OR-103(102312)		OR-3(102312)		OR-3(061113)	
Date Sampled				11/11/2009		05/26/2010		10/12/2010		05/11/2011		11/10/2011		11/10/2011		07/18/2012		10/23/2012		10/23/2012		06/11/2013	
SDG				1170754		1196247		1216105		1246861		1276051		1276051		1323156		1344432		1344432		1396584	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		FD		REG		REG		FD		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																				
Dibenz(a,h)anthracene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	ug/L	N	NS	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ
Diethylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Ethylbenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Fluoranthene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.2	J	0.1	U	0.1	J	0.1	U	0.1	U
Fluorene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Isophorone	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	mg/L	N	0.025 mg/l																				
Lead	mg/L	Y	0.025 mg/l	0.0069	U	0.0069	U	0.0069	U	0.0069	U	0.0022	U	0.0022	U	0.0051	U	0.0051	U	0.0051	U	0.0051	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Nitrosodi-n-propylamine	ug/L	N	NS	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	2	UJ	2	U	2	UJ	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	ug/L	N	10.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nitrobenzene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Pentachlorophenol	ug/L	N	1.0 ug/l	3	U	3	U	3	U	3	U	1	U	1	U	1	U	1	U	1	U	1	UJ
pH	SU	N	NS																				
Phenanthrene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Phenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Pyrene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	J	0.1	U	0.1	J	0.1	U	0.1	U
Sulfate (SO4)	mg/L	Y	250.0 mg/l																				
Tetrachloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Toluene	ug/L	N	5.0 ug/l	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
Total Hardness As Caco3	ug/L	Y	NS																				
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	UJ
Trihalomethanes (THM)	ug/L	N	NS																				
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3	
Field Sample ID				OR-3 111413		OR-3-061114		CVX-0040-03		CVX-0058-04		OR-3-W-65.50-160614		OR-3-WD-65.50-160614		OR-3-W-65.50-170628		OR-3-W-65.50-171101		OR-3-W-65.50-180614		OR-3-W-65.50-181105		OR-3-WD-65.50-181105	
Date Sampled				11/14/2013		06/11/2014		11/11/2014		06/19/2015		06/14/2016		06/14/2016		06/28/2017		11/01/2017		06/14/2018		11/05/2018		11/05/2018	
SDG				1434248		1481390		1517916		1570824		1672790		1672790		1819683		1871380		1955779		2006269		2006269	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		FD		REG		REG		REG		REG		FD	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																						
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U	0.3	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U	0.2	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U	0.3	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U	0.2	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	3	U	3	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	10	UJ	10	U	11	U	10	U	10	U	11	U	10	U	10	U	14	U	15	U	14	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.2	U	0.2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Methyl-Naphthlalene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	2		0.5	U	0.5	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	2	U	2	U	2	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	3	U	3	U	3	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	3	U	3	U	3	U
3-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	3	U	3	U	3	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	U	5	U	5	U	5	U	6	U	5	U	5	U	8	U	8	U	8	U
4-Bromophenylphenylether	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	2	U	2	U	2	U	2	U	2	U	4	U	4	U	4	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.9	U	0.9	U	0.9	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	10	U	11	U	10	U	10	U	11	U	10	U	10	U	10	U	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	J	0.2	J	0.2	J	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.3	J	0.4	J	0.2	J	0.2	J	0.2	J	0.1	U	0.2	J	0.2	J
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.5	J	0.7		0.4	J	0.3	J	0.3	J	0.1	J	0.2	J	0.3	J
Benzo(g,h,i)perylene	mg/L	N	NS	0.0001	U																				
Benzo(g,h,i)perylene	ug/L	N	NS			0.1	U	0.1	U	0.3	J	0.4	J	0.2	J	0.2	J	0.2	J	0.1	U	0.1	J	0.2	J
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.2	J	0.2	J	0.2	J	0.1	J	0.1	J	0.1	U	0.1	U	0.1	J
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	5	U	5	U	5	U
Bromodichloromethane	ug/L	N	50.0 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Bromoform	ug/L	N	50.0 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.2	U	0.2	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U	0.3	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Carbazole	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.2	U	0.2	U
Chloride	mg/L	Y	250.0 mg/l	47.0																					
Chlorobenzene	ug/L	N	5.0 ug/l	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Chloroethane	ug/L	N	5.0 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Chloroform	ug/L	N	7.0 ug/l	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Chrysene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.3	J	0.5		0.3	J	0.2	J	0.2	J	0.1	U	0.1	J	0.2	J
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	5	U	5	U	5	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3		OR-3	
Field Sample ID				OR-3 111413		OR-3-061114		CVX-0040-03		CVX-0058-04		OR-3-W-65.50-160614		OR-3-WD-65.50-160614		OR-3-W-65.50-170628		OR-3-W-65.50-171101		OR-3-W-65.50-180614		OR-3-W-65.50-181105		OR-3-WD-65.50-181105	
Date Sampled				11/14/2013		06/11/2014		11/11/2014		06/19/2015		06/14/2016		06/14/2016		06/28/2017		11/01/2017		06/14/2018		11/05/2018		11/05/2018	
SDG				1434248		1481390		1517916		1570824		1672790		1672790		1819683		1871380		1955779		2006269		2006269	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		FD		REG		REG		REG		REG		FD	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																						
Dibenz(a,h)anthracene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	ug/L	N	50.0 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Diethylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	UJ	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	UJ	2	UJ
Ethylbenzene	ug/L	N	5.0 ug/l	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.4	U	0.4	U
Fluoranthene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.2	J	0.6		1	J	0.6	J	0.4	J	0.3	J	0.1	J	0.3	J	0.3	J
Fluorene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	5	U	5	U	5	U	5	U	6	U	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.3	J	0.3	J	0.2	J	0.2	J	0.2	J	0.1	U	0.1	J	0.1	U
Isophorone	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	mg/L	N	0.025 mg/l																						
Lead	mg/L	Y	0.025 mg/l	0.0047	U	0.0047	U	0.0047	U	0.0047	U	0.0051	U	0.0051	U	0.006	U	0.006	U	0.006	U	0.0071	U	0.0071	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.3	U	0.3	U
N-Nitrosodi-n-propylamine	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.7	U	0.7	U	0.7	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.7	U	0.7	U	0.7	U
Naphthalene	ug/L	N	10.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	J	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nitrobenzene	ug/L	N	0.4 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Pentachlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U	1	U
pH	SU	N	NS	7.9																					
Phenanthrene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.2	J	0.5	J	0.3	J	0.2	J	0.1	J	0.1	U	0.1	U	0.1	J
Phenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Pyrene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.2	J	0.5	J	0.7		0.5	J	0.3	J	0.3	J	0.1	J	0.3	J	0.2	J
Sulfate (SO4)	mg/L	Y	250.0 mg/l	23.6																					
Tetrachloroethene	ug/L	N	5.0 ug/l	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Toluene	ug/L	N	5.0 ug/l	0.7	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Total Hardness As Caco3	ug/L	Y	NS	205000																					
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Trihalomethanes (THM)	ug/L	N	NS																						
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	0.2	U
Xylene (total)	ug/L	N	5.0 ug/l	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1	U	1	U

Historical Consent Order Groundwater Analytical Table
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Glenham (Beacon), New York

Location				OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2	
Field Sample ID				OS-02-0-0-06152000-W		OS-2-032004		OS-2-072004		OS-2		OS-2-111506		OS-2-082107		OS-2-112907		OS-2-061208		OS-2(11-20-08)		OS-2(7-15-09)		OS-2(11-11-09)	
Date Sampled				06/15/2000		03/01/2004		07/01/2004		06/09/2006		11/15/2006		08/21/2007		11/29/2007		06/12/2008		11/20/2008		07/15/2009		11/11/2009	
SDG										993100		1014759		1052940		1067563		1095960		1121380		1153748		1170754	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class Ga																						
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l							3	U	3	U	3	U	3	U	3	U	3	U	3	UJ	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l							21	U	19	U	20	U	20	U	20	U	19	U	20	UJ	20	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2-Chloroethyl vinyl ether	ug/L	N	NS	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	UJ	2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2-Methyl-Naphthlalene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l							5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U
4-Bromophenylphenylether	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
4-Chloroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
4-Chlorophenyl phenyl ether	ug/L	N	NS							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
4-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
4-Nitrophenol	ug/L	N	1.0 ug/l							11	U	10	U	10	U	10	U	10	U	10	U	10	UJ	10	U
Acenaphthene	ug/L	N	20.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Acenaphthylene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Anthracene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Benzene	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Benzo(a)pyrene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Benzo(g,h,i)perylene	mg/L	N	NS																						
Benzo(g,h,i)perylene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
Bromodichloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
Carbazole	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloride	mg/L	Y	250.0 mg/l																						
Chlorobenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	N	7.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	UJ	1	U	1	UJ	1	U	1	U	1	U	1	U
Chrysene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U

Historical Consent Order Groundwater Analytical Table
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Location				OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2	
Field Sample ID				OS-02-0-0-06152000-W		OS-2-032004		OS-2-072004		OS-2		OS-2-111506		OS-2-082107		OS-2-112907		OS-2-061208		OS-2(11-20-08)		OS-2(7-15-09)		OS-2(11-11-09)	
Date Sampled				06/15/2000		03/01/2004		07/01/2004		06/09/2006		11/15/2006		08/21/2007		11/29/2007		06/12/2008		11/20/2008		07/15/2009		11/11/2009	
SDG										993100		1014759		1052940		1067563		1095960		1121380		1153748		1170754	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class Ga																						
Dibenz(a,h)anthracene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Dibenzofuran	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Dibromochloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Diethylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
Ethylbenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Fluoranthene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Fluorene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l							5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U
Hexachloroethane	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Isophorone	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Lead	mg/L	N	0.025 mg/l	0.0249		0		0.0007		0.0069	U	0.0069	U	0.0069	U	0.0069	U	0.0069	U	0.0069	U				
Lead	mg/L	Y	0.025 mg/l																			0.0069	U	0.0069	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l							0.5	U	0.5	U			0.5	U	59		0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Nitrosodi-n-propylamine	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	UJ
Naphthalene	ug/L	N	10.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Nitrobenzene	ug/L	N	0.4 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Pentachlorophenol	ug/L	N	1.0 ug/l							3	U	3	U	3	U	3	U	3	U	3	U	3	UJ	3	U
pH	SU	N	NS																						
Phenanthrene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Phenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Pyrene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
Sulfate (SO4)	mg/L	Y	250.0 mg/l																						
Tetrachloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Toluene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
Total Hardness As Caco3	ug/L	Y	NS																						
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Trihalomethanes (THM)	ug/L	N	NS	0	U	0	U	0	U																
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

Historical Consent Order Groundwater Analytical Table
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Location				OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2	
Field Sample ID				OS-2(5-26-10)		OS-102(10-12-10)		OS-2(10-12-10)		OS-2(5-11-11)		OS-2(11-10-11)		OS-102(7-18-12)		OS-2(7-18-12)		OS-2(102312)		OS-2(061113)		OS-2 111413		OS-2-061114	
Date Sampled				05/26/2010		10/12/2010		10/12/2010		05/11/2011		11/10/2011		07/18/2012		07/18/2012		10/23/2012		06/11/2013		11/14/2013		06/11/2014	
SDG				1196247		1216105		1216105		1246861		1276051		1323156		1323156		1344432		1396584		1434248		1481390	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		FD		REG		REG		REG		FD		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class Ga**																						
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	3	U	3	U	3	U	3	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	UJ	10	UJ	11	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	2	U	2	U	2	R	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	2	U	2	U	2	U	2	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Methyl-Naphthlalene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U	5	U
4-Bromophenylphenylether	ug/L	N	NS	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	11	U
Acenaphthene	ug/L	N	20.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(g,h,i)perylene	mg/L	N	NS																			0.0001	U		
Benzo(g,h,i)perylene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U			0.1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Bromodichloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U
Bromoform	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	UJ	1	UJ	1	U	1	UJ	1	U	0.5	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	0.5	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Carbazole	ug/L	N	NS	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	0.5	U
Chloride	mg/L	Y	250.0 mg/l																			30.5			
Chlorobenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U
Chloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U
Chloroform	ug/L	N	7.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	UJ	1	UJ	1	U	1	U	1	U	0.5	U
Chrysene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U

Historical Consent Order Groundwater Analytical Table
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Location				OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2	
Field Sample ID				OS-2(5-26-10)		OS-102(10-12-10)		OS-2(10-12-10)		OS-2(5-11-11)		OS-2(11-10-11)		OS-102(7-18-12)		OS-2(7-18-12)		OS-2(102312)		OS-2(061113)		OS-2 111413		OS-2-061114	
Date Sampled				05/26/2010		10/12/2010		10/12/2010		05/11/2011		11/10/2011		07/18/2012		07/18/2012		10/23/2012		06/11/2013		11/14/2013		06/11/2014	
SDG				1196247		1216105		1216105		1246861		1276051		1323156		1323156		1344432		1396584		1434248		1481390	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		FD		REG		REG		REG		FD		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class Ga**																						
Dibenz(a,h)anthracene	ug/L	N	NS	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	ug/L	N	NS	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	0.5	U
Diethylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U
Ethylbenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U
Fluoranthene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Fluorene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	5	UJ	5	UJ	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Isophorone	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	mg/L	N	0.025 mg/l																						
Lead	mg/L	Y	0.025 mg/l	0.0069	U	0.0069	U	0.0069	U	0.0069	U	0.0022	U	0.0051	U	0.0051	U	0.0051	U	0.0051	U	0.0047	U	0.0047	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Nitrosodi-n-propylamine	ug/L	N	NS	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	2	U	2	UJ	2	UJ	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	ug/L	N	10.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nitrobenzene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Pentachlorophenol	ug/L	N	1.0 ug/l	3	U	3	U	3	U	3	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U
pH	SU	N	NS																			7			
Phenanthrene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Phenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Pyrene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Sulfate (SO4)	mg/L	Y	250.0 mg/l																			15.1			
Tetrachloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U
Toluene	ug/L	N	5.0 ug/l	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.5	U
Total Hardness As Caco3	ug/L	Y	NS																			242000			
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	UJ	2	UJ	2	U	2	UJ	2	U	0.5	U
Trihalomethanes (THM)	ug/L	N	NS																						
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U
Xylene (total)	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U

Historical Consent Order Groundwater Analytical Table
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Location			OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2	
Field Sample ID			CVX-0040-04		CVX-0058-05		OS-2-W-6.00-151113		OS-2-WD-6.00-151113		OS-2-W-6.00-160614		OS-2-W-6.00-161115		OS-2-W-6.00-170627		OS-2-W-6.00-171101		OS-2-WD-6.00-171101		OS-2-W-6.00-180613		OS-2-W-6.00-181101	
Date Sampled			11/11/2014		06/19/2015		11/13/2015		11/13/2015		06/14/2016		11/15/2016		06/27/2017		11/01/2017		11/01/2017		06/13/2018		11/01/2018	
SDG			1517916		1570824		1609463		1609463		1672790		1734549		1819683		1871380		1871380		1955779		2005546	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		FD		REG		REG		REG		REG		FD		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class Ga**																					
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	3	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	10	U	11	U	10	U	10	U	11	U	10	UJ	11	U	11	U	10	U	14	U	15	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	UJ	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Methyl-Naphthlalene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	2	U	2	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	3	U	3	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	3	U	3	U
3-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	3	U	3	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	6	U	5	U	5	U	5	U	5	UJ	5	U	5	U	5	U	8	U	8	U
4-Bromophenylphenylether	ug/L	N	NS	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	0.5	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	4	U	4	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.9	U	0.9	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	11	U	10	U	10	U	11	U	10	UJ	11	U	11	U	10	U	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(g,h,i)perylene	mg/L	N	NS																					
Benzo(g,h,i)perylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	5	U	5	U
Bromodichloromethane	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Bromoform	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.2	UJ
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	UJ	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
Carbazole	ug/L	N	NS	0.5	U	0.6	UJ	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	UJ	0.2	U
Chloride	mg/L	Y	250.0 mg/l																					
Chlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroform	ug/L	N	7.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chrysene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	UJ	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	5	U	5	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location			OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2		OS-2	
Field Sample ID			CVX-0040-04		CVX-0058-05		OS-2-W-6.00-151113		OS-2-WD-6.00-151113		OS-2-W-6.00-160614		OS-2-W-6.00-161115		OS-2-W-6.00-170627		OS-2-W-6.00-171101		OS-2-WD-6.00-171101		OS-2-W-6.00-180613		OS-2-W-6.00-181101	
Date Sampled			11/11/2014		06/19/2015		11/13/2015		11/13/2015		06/14/2016		11/15/2016		06/27/2017		11/01/2017		11/01/2017		06/13/2018		11/01/2018	
SDG			1517916		1570824		1609463		1609463		1672790		1734549		1819683		1871380		1871380		1955779		2005546	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		FD		REG		REG		REG		REG		FD		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class Ga																					
Dibenz(a,h)anthracene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	ug/L	N	NS	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Diethylphthalate	ug/L	N	50.0 ug/l	2	U	2	UJ	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	U	2	UJ	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U
Ethylbenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.4	U
Fluoranthene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Fluorene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	6	U	5	U	5	U	5	U	5	UJ	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Isophorone	ug/L	N	50.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	mg/L	N	0.025 mg/l																					
Lead	mg/L	Y	0.025 mg/l	0.0047	U	0.0047	U	0.0051	U	0.0051	U	0.0051	U	0.0062	U	0.006	U	0.006	U	0.006	U	0.006	U	0.0071	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.3	U
N-Nitrosodi-n-propylamine	ug/L	N	NS	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.7	U	0.7	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.7	U	0.7	U
Naphthalene	ug/L	N	10.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nitrobenzene	ug/L	N	0.4 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Pentachlorophenol	ug/L	N	1.0 ug/l	1	U	1	UJ	1	UJ	1	UJ	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
pH	SU	N	NS																					
Phenanthrene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Phenol	ug/L	N	1.0 ug/l	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Pyrene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Sulfate (SO4)	mg/L	Y	250.0 mg/l																					
Tetrachloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1		0.5	U	0.2	U
Toluene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Total Hardness As Caco3	ug/L	Y	NS																					
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trihalomethanes (THM)	ug/L	N	NS																					
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Xylene (total)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
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Location				OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3	
Field Sample ID				OS-03-0-0-06152000-W		OS-3-032004		OS-3-072004		OS-3		OS-3-111506		OS-3-082107		OS-3-112907		OS-3-061208		OS-3(11-20-08)		OS-3(7-15-09)		OS-3(11-11-09)		OS-103(5-26-10)	
Date Sampled				06/15/2000		03/01/2004		07/01/2004		06/09/2006		11/15/2006		08/21/2007		11/29/2007		06/12/2008		11/20/2008		07/15/2009		11/11/2009		05/26/2010	
SDG										993100		1014759		1052940		1067563		1095960		1121380		1153748		1170754		1196247	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		FD	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																								
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l							3	U	3	U	3	U	3	U	3	U	3	U	3	UJ	3	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l							20	U	19	U			19	U	19	U	20	U	19	UJ	20	U	10	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
2-Chloroethyl vinyl ether	ug/L	N	NS	0	U	0	U	0	U	2	U	2	U			2	U	2	U	2	UJ	2	UJ	2	U	2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
2-Methyl-Naphthlalene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l							5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U	5	U
4-Bromophenylphenylether	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
4-Chloroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
4-Chlorophenyl phenyl ether	ug/L	N	NS							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U
4-Nitroaniline	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
4-Nitrophenol	ug/L	N	1.0 ug/l							10	U	10	U	10	U	10	U	10	U	10	U	9	UJ	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Acenaphthylene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Anthracene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Benzene	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Benzo(a)pyrene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Benzo(g,h,i)perylene	mg/L	N	NS																								
Benzo(g,h,i)perylene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U
Bromodichloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U
Carbazole	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloride	mg/L	Y	250.0 mg/l																								
Chlorobenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	N	7.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	UJ	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Chrysene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U

Historical Consent Order Groundwater Analytical Table
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Location				OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3	
Field Sample ID				OS-03-0-0-06152000-W		OS-3-032004		OS-3-072004		OS-3		OS-3-111506		OS-3-082107		OS-3-112907		OS-3-061208		OS-3(11-20-08)		OS-3(7-15-09)		OS-3(11-11-09)		OS-103(5-26-10)	
Date Sampled				06/15/2000		03/01/2004		07/01/2004		06/09/2006		11/15/2006		08/21/2007		11/29/2007		06/12/2008		11/20/2008		07/15/2009		11/11/2009		05/26/2010	
SDG										993100		1014759		1052940		1067563		1095960		1121380		1153748		1170754		1196247	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		FD	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																								
Dibenz(a,h)anthracene	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Dibenzofuran	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Dibromochloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Diethylphthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U
Dimethyl phthalate	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U
Ethylbenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Fluoranthene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Fluorene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l							5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Isophorone	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Lead	mg/L	N	0.025 mg/l	0.0139		0		0.0007		0.0069	U	0.0069	U	0.0069	U	0.0069	U	0.0069	U	0.0069	U						
Lead	mg/L	Y	0.025 mg/l																			0.0069	U	0.0069	U	0.0069	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l							0.5	U	0.5	U			0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Nitrosodi-n-propylamine	ug/L	N	NS							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l							2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	UJ	2	U
Naphthalene	ug/L	N	10.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Nitrobenzene	ug/L	N	0.4 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Pentachlorophenol	ug/L	N	1.0 ug/l							3	U	3	U	3	U	3	U	3	U	3	U	3	UJ	3	U	3	U
pH	SU	N	NS																								
Phenanthrene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Phenol	ug/L	N	1.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Pyrene	ug/L	N	50.0 ug/l							1	U	1	U	1	U	1	U	1	U	1	U	0.9	UJ	1	U	1	U
Sulfate (SO4)	mg/L	Y	250.0 mg/l																								
Tetrachloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Toluene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
Total Hardness As Caco3	ug/L	Y	NS																								
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Trihalomethanes (THM)	ug/L	N	NS	0	U	0	U	0	U																		
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

Historical Consent Order Groundwater Analytical Table
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Location			OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3	
Field Sample ID			OS-3(5-26-10)		OS-3(10-12-10)		OS-3(5-11-11)		OS-3(11-10-11)		OS-3(7-18-12)		OS-3(102312)		OS-3(061113)		OS-3 111413		OS-3-061114		CVX-0040-05		CVX-0058-03		CVX-0058-06	
Date Sampled			05/26/2010		10/12/2010		05/11/2011		11/10/2011		07/18/2012		10/23/2012		06/11/2013		11/14/2013		06/11/2014		11/11/2014		06/19/2015		06/19/2015	
SDG			1196247		1216105		1246861		1276051		1323156		1344432		1396584		1434248		1481390		1517916		1570824		1570824	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		FD		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																							
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	3	U	3	U	3	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	10	U	10	U	10	U	10	U	10	U	10	U	11	UJ	11	UJ	11	U	10	U	10	U	10	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	UJ	1	UJ
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	11		0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	2	U	2	R	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	2	U	2	U	2	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	UJ	0.4	U	0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2-Methyl-Naphthlalene	ug/L	N	NS	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	6	UJ	5	U	5	U	5	U	5	U	5	U
4-Bromophenylphenylether	ug/L	N	NS	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	2	U	2	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	10	U	10	U	10	U	10	U	10	U	11	U	11	U	11	U	10	U	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.3	J	0.1	UJ	0.1	U	0.1	U	0.1	UJ	0.1	UJ
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	0.1	U	0.5	U	0.1	U	4		0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	J
Benzo(a)pyrene	ug/L	N	NS	1	U	1	U	1	U	0.1	U	0.4	J	0.1	U	5		0.1	UJ	0.1	U	0.1	U	0.1	U	0.2	J
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	0.1	U	0.5	U	0.1	U	8		0.1	UJ	0.1	U	0.1	U	0.1	J	0.3	J
Benzo(g,h,i)perylene	mg/L	N	NS															0.0001	UJ								
Benzo(g,h,i)perylene	ug/L	N	NS	1	U	1	U	1	U	0.1	U	0.4	J	0.1	U	4				0.1	U	0.1	U	0.1	U	0.2	J
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	0.1	U	0.5	U	0.1	U	3		0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	3	J	2	UJ	2	U	2	U	2	U	2	U
Bromodichloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	UJ	1	U	1	UJ	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	UJ	2	UJ
Carbazole	ug/L	N	NS	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	UJ	0.5	UJ
Carbon Tetrachloride	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloride	mg/L	Y	250.0 mg/l															46.6									
Chlorobenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	ug/L	N	7.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Chrysene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	0.1	U	0.5	U	0.1	U	6		0.1	UJ	0.1	U	0.1	U	0.1	U	0.2	J
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	UJ	2	UJ
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3	
Field Sample ID				OS-3(5-26-10)		OS-3(10-12-10)		OS-3(5-11-11)		OS-3(11-10-11)		OS-3(7-18-12)		OS-3(102312)		OS-3(061113)		OS-3 111413		OS-3-061114		CVX-0040-05		CVX-0058-03		CVX-0058-06	
Date Sampled				05/26/2010		10/12/2010		05/11/2011		11/10/2011		07/18/2012		10/23/2012		06/11/2013		11/14/2013		06/11/2014		11/11/2014		06/19/2015		06/19/2015	
SDG				1196247		1216105		1246861		1276051		1323156		1344432		1396584		1434248		1481390		1517916		1570824		1570824	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		FD		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																								
Dibenz(a,h)anthracene	ug/L	N	NS	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.8		0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	ug/L	N	NS	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Diethylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	UJ	2	UJ
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	UJ	2	U	2	U	2	UJ	2	UJ
Ethylbenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U
Fluoranthene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	0.1	J	0.6	U	0.1	J	11		0.1	UJ	0.1	U	0.1	J	0.2	J	0.3	J
Fluorene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	5	UJ	5	U	5	U	5	U	5	U	6	U	5	UJ	5	U	5	U	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	0.1	U	0.3	J	0.1	U	4		0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	J
Isophorone	ug/L	N	50.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
Lead	mg/L	N	0.025 mg/l																								
Lead	mg/L	Y	0.025 mg/l	0.0069	U	0.0069	U	0.0069	U	0.0022	U	0.0051	U	0.0051	U	0.0051	U	0.0047	U	0.0047	U	0.0047	U	0.0047	U	0.0047	U
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Nitrosodi-n-propylamine	ug/L	N	NS	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	2	U	2	UJ	2	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
Naphthalene	ug/L	N	10.0 ug/l	1	U	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U
Nitrobenzene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
p-Chloro-m-cresol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Pentachlorophenol	ug/L	N	1.0 ug/l	3	U	3	U	3	U	1	U	1	UJ	1	U	1	UJ	1	U	1	U	1	U	1	UJ	1	UJ
pH	SU	N	NS															7.9									
Phenanthrene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	0.1	U	0.2	J	0.1	U	3		0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	J
Phenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Pyrene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	0.1	J	0.5	U	0.1	U	9		0.1	UJ	0.1	U	0.1	J	0.2	J	0.3	J
Sulfate (SO4)	mg/L	Y	250.0 mg/l															8.3									
Tetrachloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	ug/L	N	5.0 ug/l	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.5	U	0.5	U	0.5	U	0.5	U
Total Hardness As Caco3	ug/L	Y	NS															139000									
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	UJ	2	U	2	UJ	2	U	0.5	U	0.5	U	0.5	U	0.5	U
Trihalomethanes (THM)	ug/L	N	NS																								
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U
Xylene (total)	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	U	0.5	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3	
Field Sample ID				OS-3-W-6.00-151116		OS-3-W-6.00-160614		OS-3-W-6.00-161116		OS-3-W-6.00-170628		OS-3-W-6.00-171101		OS-3-W-6.00-180614		OS-3-W-6.00-181101	
Date Sampled				11/16/2015		06/14/2016		11/16/2016		06/28/2017		11/01/2017		06/14/2018		11/01/2018	
SDG				1610359		1672790		1734549		1819683		1871380		1955779		2005546	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA														
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	3	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	10	U	11	U	10	UJ	10	U	11	U	14	U	14	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	2	U	2	U	2	U	2	U	2	U	0.2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2-Methyl-Naphthlalene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U	2	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	3	U	3	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	3	U	3	U
3-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	3	U	3	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	U	5	UJ	5	U	5	U	8	U	8	U
4-Bromophenylphenylether	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	2	U	2	U	2	UJ	2	U	2	U	4	U	4	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.9	U	0.9	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	UJ	11	U	10	UJ	10	U	11	U	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Anthracene	ug/L	N	50.0 ug/l	0.1	U	0.1	J	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Benzo(a)anthracene	ug/L	N	0.002 ug/l	0.1	U	1		0.1	U	0.1	U	0.1	J	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS	0.1	U	1		0.1	U	0.1	U	0.2	J	0.1	U	0.1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	2		0.1	U	0.1	U	0.2	J	0.1	U	0.1	U
Benzo(g,h,i)perylene	mg/L	N	NS														
Benzo(g,h,i)perylene	ug/L	N	NS	0.1	U	1		0.1	U	0.1	U	0.1	J	0.1	U	0.1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.7		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	5	U	5	U
Bromodichloromethane	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Bromoform	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.2	UJ
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Carbazole	ug/L	N	NS	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.2	U
Chloride	mg/L	Y	250.0 mg/l														
Chlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroform	ug/L	N	7.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chrysene	ug/L	N	0.002 ug/l	0.1	U	2		0.1	U	0.1	U	0.2	J	0.1	U	0.1	U
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	5	U	5	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				OS-3		OS-3		OS-3		OS-3		OS-3		OS-3		OS-3	
Field Sample ID				OS-3-W-6.00-151116		OS-3-W-6.00-160614		OS-3-W-6.00-161116		OS-3-W-6.00-170628		OS-3-W-6.00-171101		OS-3-W-6.00-180614		OS-3-W-6.00-181101	
Date Sampled				11/16/2015		06/14/2016		11/16/2016		06/28/2017		11/01/2017		06/14/2018		11/01/2018	
SDG				1610359		1672790		1734549		1819683		1871380		1955779		2005546	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**														
Dibenz(a,h)anthracene	**ug/L**	**N**	**NS**	0.1	U	0.1	J	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	**ug/L**	**N**	**NS**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	**ug/L**	**N**	**50.0 ug/l**	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Diethylphthalate	**ug/L**	**N**	**50.0 ug/l**	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dimethyl phthalate	**ug/L**	**N**	**50.0 ug/l**	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U
Ethylbenzene	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.4	U
Fluoranthene	**ug/L**	**N**	**50.0 ug/l**	0.1	U	3		0.2	U	0.1	U	0.4	J	0.1	U	0.1	U
Fluorene	**ug/L**	**N**	**50.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	**ug/L**	**N**	**0.04 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	**ug/L**	**N**	**0.5 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorocyclopentadiene	**ug/L**	**N**	**5.0 ug/l**	5	U	5	U	5	UJ	5	U	5	U	5	U	5	U
Hexachloroethane	**ug/L**	**N**	**5.0 ug/l**	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	**ug/L**	**N**	**0.002 ug/l**	0.1	U	1		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Isophorone	**ug/L**	**N**	**50.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	**mg/L**	**N**	**0.025 mg/l**														
Lead	**mg/L**	**Y**	**0.025 mg/l**	0.0051	U	0.0051	U	0.0062	U	0.006	U	0.006	U	0.006	U	0.0071	U
Methyl-t-butyl ether	**ug/L**	**N**	**10.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Methylene chloride (Dichloromethane)	**ug/L**	**N**	**5.0 ug/l**	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.3	U
N-Nitrosodi-n-propylamine	**ug/L**	**N**	**NS**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7	U	0.7	U
N-Nitrosodiphenylamine (Diphenylamine)	**ug/L**	**N**	**50.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7	U	0.7	U
Naphthalene	**ug/L**	**N**	**10.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nitrobenzene	**ug/L**	**N**	**0.4 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chloro-m-cresol	**ug/L**	**N**	**1.0 ug/l**	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
Pentachlorophenol	**ug/L**	**N**	**1.0 ug/l**	1	UJ	1	U	1	UJ	1	U	1	U	1	U	1	U
pH	**SU**	**N**	**NS**														
Phenanthrene	**ug/L**	**N**	**50.0 ug/l**	0.1	U	1		0.1	U	0.1	U	0.1	J	0.1	U	0.1	U
Phenol	**ug/L**	**N**	**1.0 ug/l**	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U
Pyrene	**ug/L**	**N**	**50.0 ug/l**	0.1	J	2		0.1	U	0.1	U	0.3	J	0.1	U	0.1	U
Sulfate (SO4)	**mg/L**	**Y**	**250.0 mg/l**														
Tetrachloroethene	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.6	J	0.5	U	0.2	U
Toluene	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Total Hardness As Caco3	**ug/L**	**Y**	**NS**														
trans-1,3-Dichloropropene	**ug/L**	**N**	**0.4 ug/l**	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trichloroethene (Trichloroethylene)	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trichlorofluoromethane (Freon 11)	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trihalomethanes (THM)	**ug/L**	**N**	**NS**														
Vinyl chloride (Chloroethene)	**ug/L**	**N**	**2.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Xylene (total)	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location			TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5	
Field Sample ID			W		W		W		TF-5-032004		TF-5-072004		TF-5		TF-105		TF-5-111506		TF-5-082107		TF-5-112807		TF-5-061008		TF-5(10-15-08)		TF-5(11-18-08)	
Date Sampled			04/27/2000		06/15/2000		04/30/2001		03/01/2004		07/01/2004		06/06/2006		11/15/2006		11/15/2006		08/21/2007		11/28/2007		06/10/2008		10/15/2008		11/18/2008	
SDG													993100		1014759		1014759		1052940		1067563		1095960		1115578		1120871	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		REG		REG		FD		REG		REG		REG		REG		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																									
1,1 Dichloroethene	ug/L	N	5.0 ug/l			0	U			0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l			0	U			0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l			0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l			0	U			0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l			0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	0	U									1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trimethylbenzene	ug/L	N	NS	0	U			1	U																				
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0	U	0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U			1	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l			0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l			0	U			0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U			0.8	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l			0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	ug/L	N	NS	0	U			1	U																				
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U			1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U			1	U
2,2'-oxybis(2-chloropropane)	ug/L	N	NS	0	U																								
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l											3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l											19	U	19	U	19	U	20	U	21	U	20	U	19	U	20	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	0	U									1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone (Methyl ethyl ketone)	ug/L	N	50.0 ug/l																							3	U		
2-Chloroethyl vinyl ether	ug/L	N	NS			0	U			0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U			2	UJ
2-Chloronaphthalene	ug/L	N	10.0 ug/l	0	U									2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone	ug/L	N	50.0 ug/l																							3	U		
2-Methyl-Naphthlalene	ug/L	N	NS											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	0	U									2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l											5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Bromophenylphenylether	ug/L	N	NS	0	U									1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Chloroaniline	ug/L	N	5.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	0	U									2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
4-Isopropyltoluene	ug/L	N	NS	0	U			1	U																				
4-Methyl-2-pentanone	ug/L	N	NS																							3	U		
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l											2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
4-Nitroaniline	ug/L	N	5.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Nitrophenol	ug/L	N	1.0 ug/l											10	U	10	U	10	U	10	U	11	U	10	U	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Acenaphthylene	ug/L	N	NS	0	U									1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Acetone	ug/L	N	50.0 ug/l																							6	U		
Aluminum	mg/L	N	0.1 mg/l																							2.81	J		
Anthracene	ug/L	N	50.0 ug/l	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Antimony	mg/L	N	0.003 mg/l																							0.0101	J		
Arsenic	mg/L	N	0.025 mg/l																							0.0100	UJ		
Barium	mg/L	N	1.0 mg/l																							0.0592			
Benzene	ug/L	N	1.0 ug/l	0	U	0	U	1	U	0	U	0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzidine	ug/L	N	NS	0	U																								
Benzo(a)anthracene	ug/L	N	0.002 ug/l	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzo(a)pyrene	ug/L	N	NS	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzo(g,h,i)perylene	mg/L	N	NS																							0.001	U		
Benzo(g,h,i)perylene	ug/L	N	NS	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U			1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Beryllium	mg/L	N	0.003 mg/l																							0.00090	U		
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	0	U									1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	0	U									1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	0	U									2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U

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Location			TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5	
Field Sample ID			W		W		W		TF-5-032004		TF-5-072004		TF-5		TF-105		TF-5-111506		TF-5-082107		TF-5-112807		TF-5-061008		TF-5(10-15-08)		TF-5(11-18-08)	
Date Sampled			04/27/2000		06/15/2000		04/30/2001		03/01/2004		07/01/2004		06/06/2006		11/15/2006		11/15/2006		08/21/2007		11/28/2007		06/10/2008		10/15/2008		11/18/2008	
SDG													993100		1014759		1014759		1052940		1067563		1095960		1115578		1120871	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		REG		REG		FD		REG		REG		REG		REG		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																									
Bromodichloromethane	**ug/L**	**N**	**50.0 ug/l**			0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	**ug/L**	**N**	**50.0 ug/l**			0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane (Methyl bromide)	**ug/L**	**N**	**5.0 ug/l**			0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Butylbenzylphthalate	**ug/L**	**N**	**50.0 ug/l**	0	U									2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Cadmium	**mg/L**	**N**	**0.005 mg/l**																							0.0020	U		
Calcium	**mg/L**	**N**	**NS**																							99.9			
Carbazole	**ug/L**	**N**	**NS**											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon disulfide	**ug/L**	**N**	**60.0 ug/l**																							1	U		
Carbon Tetrachloride	**ug/L**	**N**	**5.0 ug/l**			0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloride	**mg/L**	**N**	**250.0 mg/l**																							367			
Chlorobenzene	**ug/L**	**N**	**5.0 ug/l**			0	U			0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloroethane	**ug/L**	**N**	**5.0 ug/l**			0	U			0	U	0	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Chloroform	**ug/L**	**N**	**7.0 ug/l**			0	U			0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloromethane (Methyl chloride)	**ug/L**	**N**	**5.0 ug/l**			0	U			0	U	0	U	1	U	1	UJ	1	UJ	1	U	1	UJ	1	U	1	U	1	U
Chromium	**mg/L**	**N**	**0.05 mg/l**																							0.0031	J		
Chrysene	**ug/L**	**N**	**0.002 ug/l**	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	**ug/L**	**N**	**5.0 ug/l**																							0.8	U		
cis-1,3-Dichloropropene	**ug/L**	**N**	**0.4 ug/l**			0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Cobalt	**mg/L**	**N**	**0.005 mg/l**																							0.0026	J		
Copper	**mg/L**	**N**	**0.2 mg/l**																							0.0142			
Di-n-butylphthalate	**ug/L**	**N**	**50.0 ug/l**	0	U									2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	**ug/L**	**N**	**50.0 ug/l**	0	U									2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dibenz(a,h)anthracene	**ug/L**	**N**	**NS**	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibenzofuran	**ug/L**	**N**	**NS**											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	**ug/L**	**N**	**50.0 ug/l**			0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Diethylphthalate	**ug/L**	**N**	**50.0 ug/l**	0	U									2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Diisopropyl ether	**ug/L**	**N**	**NS**																							0.8	U		
Dimethyl phthalate	**ug/L**	**N**	**50.0 ug/l**	0	U									2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Ethyl-t-butylether	**ug/L**	**N**	**NS**																							0.8	U		
Ethylbenzene	**ug/L**	**N**	**5.0 ug/l**	0	U	0	U	1	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Fluoranthene	**ug/L**	**N**	**50.0 ug/l**	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Fluorene	**ug/L**	**N**	**50.0 ug/l**	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Hexachlorobenzene	**ug/L**	**N**	**0.04 ug/l**	0	U									1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Hexachlorobutadiene	**ug/L**	**N**	**0.5 ug/l**	0	U									1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Hexachlorocyclopentadiene	**ug/L**	**N**	**5.0 ug/l**	0	U									5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	**ug/L**	**N**	**5.0 ug/l**	0	U									1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	**ug/L**	**N**	**0.002 ug/l**	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Iron	**mg/L**	**N**	**0.3 mg/l**																							4.52	J		
Isophorone	**ug/L**	**N**	**50.0 ug/l**	0	U									1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Isopropylbenzene	**ug/L**	**N**	**NS**	0	U			1	U																				
Lead	**mg/L**	**N**	**0.025 mg/l**			0.0631				0.003		0.004		0.0069	U	0.0070	J	0.0083	J	0.0069	U	0.0076	J	0.0069	U	0.0185	J	0.0192	
Lead	**mg/L**	**Y**	**0.025 mg/l**																										
Magnesium	**mg/L**	**N**	**35.0 mg/l**																							29.8			
Manganese	**mg/L**	**N**	**0.3 mg/l**																							0.128	J		
Mercury	**mg/L**	**N**	**0.00070 mg/**																							0.000056	U		
Methyl-t-butyl ether	**ug/L**	**N**	**10.0 ug/l**	0	U			1	U					0.5	U	0.5	U	0.5	U			0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	**ug/L**	**N**	**5.0 ug/l**			0	U			0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
n-Butylbenzene	**ug/L**	**N**	**NS**	0	U			1	U																				
N-Nitrosodi-n-propylamine	**ug/L**	**N**	**NS**	0	U									1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
N-Nitrosodiphenylamine (Diphenylamine)	**ug/L**	**N**	**50.0 ug/l**	0	U									2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
n-Propylbenzene	**ug/L**	**N**	**NS**	0	U			1	U																				
Naphthalene	**ug/L**	**N**	**10.0 ug/l**	0	U			1	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Naphthalene	**ug/L**	**N**	**10.0 ug/l**	0	U			10	U																				
Nickel	**mg/L**	**N**	**0.1 mg/l**																							0.0056	U		
Nitrobenzene	**ug/L**	**N**	**0.4 ug/l**	0	U									1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
o-Xylene	**ug/L**	**N**	**NS**					8	J																				
p-Chloro-m-cresol	**ug/L**	**N**	**1.0 ug/l**											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Pentachlorophenol	**ug/L**	**N**	**1.0 ug/l**											3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
pH	**SU**	**N**	**NS**																										
Phenanthrene	**ug/L**	**N**	**50.0 ug/l**	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Phenol	**ug/L**	**N**	**1.0 ug/l**											1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Potassium	**mg/L**	**N**	**NS**																							1.92			
Pyrene	**ug/L**	**N**	**50.0 ug/l**	0	U			10	U					1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
sec-Butylbenzene	**ug/L**	**N**	**NS**	0	U			1	U																				
Selenium	**mg/L**	**N**	**0.01 mg/l**																							0.0107	U		
Silver	**mg/L**	**N**	**0.05 mg/l**																							0.0022	U		

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Location				TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5	
Field Sample ID				W		W		W		TF-5-032004		TF-5-072004		TF-5		TF-105		TF-5-111506		TF-5-082107		TF-5-112807		TF-5-061008		TF-5(10-15-08)		TF-5(11-18-08)	
Date Sampled				04/27/2000		06/15/2000		04/30/2001		03/01/2004		07/01/2004		06/06/2006		11/15/2006		11/15/2006		08/21/2007		11/28/2007		06/10/2008		10/15/2008		11/18/2008	
SDG														993100		1014759		1014759		1052940		1067563		1095960		1115578		1120871	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		FD		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																										
Sodium	mg/L	N	20.0 mg/l																							435			
Styrene	ug/L	N	5.0 ug/l																							1	U		
Sulfate (SO4)	mg/L	N	250.0 mg/l																							38.2			
t-Butylbenzene	ug/L	N	NS	0	U			1	U																				
tert-Amyl methyl ether	ug/L	N	NS																							0.8	U		
Tertiary Butyl Alcohol	ug/L	N	NS																							10	U		
Tetrachloroethene	ug/L	N	5.0 ug/l			0	U			0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Thallium	mg/L	N	0.00050 mg/																							0.0140	U		
Toluene	ug/L	N	5.0 ug/l	0	U	0	U	1.2		0	U	0	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
Total Hardness As Caco3	ug/L	N	NS																										
trans-1,2-Dichloroethene	ug/L	N	5.0 ug/l																							0.8	U		
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l			0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l			0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l			0	U			0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U			2	U
Trihalomethanes (THM)	ug/L	N	NS			0	U			0	U	0	U																
Vanadium	mg/L	N	NS																							0.0031	J		
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l			0	U			0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	ug/L	N	5.0 ug/l	0	U	0	U	1.1		0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Zinc	mg/L	N	2.0 mg/l																							0.0488			

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Location				TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5	
Field Sample ID				TF-5(7-14-09)		TF-5(7-15-09)		TF-5(11-10-09)		TF-5(5-25-10)		TF-5(5-26-10)		TF-5(10-12-10)		TF-5(5-11-11)		TF-5(11-10-11)		TF-5(7-18-12)		TF-05(102312)		TF-5(061113)		TF-5(061113)SW		TF-5 111313	
Date Sampled				07/14/2009		07/15/2009		11/10/2009		05/25/2010		05/26/2010		10/12/2010		05/11/2011		11/10/2011		07/18/2012		10/23/2012		06/11/2013		06/11/2013		11/13/2013	
SDG				1153748		1153748		1170505		1196041		1196247		1216105		1246861		1276051		1323156		1344432		1396584		1396587		1433988	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																										
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.8	U			0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.8	U			0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.8	U			0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
1,2,4-Trimethylbenzene	ug/L	N	NS																										
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	UJ			1	U			1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.6	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.8	U			0.8	U			0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U			0.8	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	ug/L	N	NS																										
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	UJ			1	U			1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.6	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	UJ			1	U			1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.6	U
2,2'-oxybis(2-chloropropane)	ug/L	N	NS																										
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	3	UJ			3	U	3	U	3	U	3	U	3	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	20	UJ			19	U	10	U	10	U	10	U	10	U	10	U	10	U	9	U	10	UJ	10	UJ	12	UJ
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
2-Butanone (Methyl ethyl ketone)	ug/L	N	50.0 ug/l							3	U															3	U		
2-Chloroethyl vinyl ether	ug/L	N	NS	2	UJ			2	U			2	U	2	U	2	R	2	U	2	U	2	U	2	U			2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	2	UJ			2	U	2	U	2	U	2	U	2	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.5	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
2-Hexanone	ug/L	N	50.0 ug/l							3	U															3	U		
2-Methyl-Naphthlalene	ug/L	N	NS	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	UJ			2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l	1	UJ			1	U	1	UJ	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	UJ			5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	UJ	5	UJ	6	U
4-Bromophenylphenylether	ug/L	N	NS	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
4-Chloroaniline	ug/L	N	5.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	2	UJ			2	U	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
4-Isopropyltoluene	ug/L	N	NS																										
4-Methyl-2-pentanone	ug/L	N	NS							3	U															3	U		
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	2	UJ			2	U	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
4-Nitroaniline	ug/L	N	5.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	UJ			10	U	10	U	10	U	10	U	10	U	10	U	10	U	9	U	10	U	10	U	12	U
Acenaphthene	ug/L	N	20.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Acetone	ug/L	N	50.0 ug/l							6	U															6	U		
Aluminum	mg/L	N	0.1 mg/l							0.0802	UJ															4.32			
Anthracene	ug/L	N	50.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Antimony	mg/L	N	0.003 mg/l							0.0097	U															0.0035	U		
Arsenic	mg/L	N	0.025 mg/l							0.0072	U															0.0068	U		
Barium	mg/L	N	1.0 mg/l							0.0346																0.0436			
Benzene	ug/L	N	1.0 ug/l	0.5	U			0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzidine	ug/L	N	NS																										
Benzo(a)anthracene	ug/L	N	0.002 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Benzo(g,h,i)perylene	mg/L	N	NS							0.001	U															0.0001	U		
Benzo(g,h,i)perylene	ug/L	N	NS	1	UJ			1	U			1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U			0.1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Beryllium	mg/L	N	0.003 mg/l							0.0014	U															0.00067	U		
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	UJ			2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	6	J

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5	
Field Sample ID				TF-5(7-14-09)		TF-5(7-15-09)		TF-5(11-10-09)		TF-5(5-25-10)		TF-5(5-26-10)		TF-5(10-12-10)		TF-5(5-11-11)		TF-5(11-10-11)		TF-5(7-18-12)		TF-05(102312)		TF-5(061113)		TF-5(061113)SW		TF-5 111313	
Date Sampled				07/14/2009		07/15/2009		11/10/2009		05/25/2010		05/26/2010		10/12/2010		05/11/2011		11/10/2011		07/18/2012		10/23/2012		06/11/2013		06/11/2013		11/13/2013	
SDG				1153748		1153748		1170505		1196041		1196247		1216105		1246861		1276051		1323156		1344432		1396584		1396587		1433988	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																										
Bromodichloromethane	ug/L	N	50.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	N	50.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	UJ			2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Cadmium	mg/L	N	0.005 mg/l							0.0020	U															0.00036	U		
Calcium	mg/L	N	NS							95.5																29.4			
Carbazole	ug/L	N	NS	1	UJ			1	U	1	UJ	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
Carbon disulfide	ug/L	N	60.0 ug/l							1	U															1	U		
Carbon Tetrachloride	ug/L	N	5.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloride	mg/L	N	250.0 mg/l							656																246			
Chlorobenzene	ug/L	N	5.0 ug/l	0.8	U			0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloroethane	ug/L	N	5.0 ug/l	1	U			1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	N	7.0 ug/l	0.8	U			0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U
Chromium	mg/L	N	0.05 mg/l							0.0034	U															0.0053	J		
Chrysene	ug/L	N	0.002 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
cis-1,2-Dichloroethene	ug/L	N	5.0 ug/l							0.8	U															0.8	U		
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Cobalt	mg/L	N	0.005 mg/l							0.0021	U															0.0028	J		
Copper	mg/L	N	0.2 mg/l							0.0029	J															0.0391			
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	UJ			2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	UJ			2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dibenz(a,h)anthracene	ug/L	N	NS	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	ug/L	N	NS	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
Dibromochloromethane	ug/L	N	50.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Diethylphthalate	ug/L	N	50.0 ug/l	2	UJ			2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Diisopropyl ether	ug/L	N	NS							0.8	U															0.8	U		
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	UJ			2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Ethyl-t-butylether	ug/L	N	NS							0.8	U															0.8	U		
Ethylbenzene	ug/L	N	5.0 ug/l	0.8	U			0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Fluoranthene	ug/L	N	50.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Fluorene	ug/L	N	50.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	UJ			5	U	5	U	5	U	5	UJ	5	U	5	U	5	U	5	U	5	U	5	U	6	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.9	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Iron	mg/L	N	0.3 mg/l							0.0522	UJ															5.83			
Isophorone	ug/L	N	50.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
Isopropylbenzene	ug/L	N	NS																										
Lead	mg/L	N	0.025 mg/l					0.0069	U	0.0069	U															0.0122	J		
Lead	mg/L	Y	0.025 mg/l			0.0069	U					0.0069	U	0.0069	U	0.0069	U	0.0022	U	0.0051	U	0.0051	U	0.0051	U			0.0047	U
Magnesium	mg/L	N	35.0 mg/l							27.6																9.42			
Manganese	mg/L	N	0.3 mg/l							0.0016	J															0.209			
Mercury	mg/L	N	0.00070 mg/							0.000056	U															0.000074	J		
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U			0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U			2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
n-Butylbenzene	ug/L	N	NS																										
N-Nitrosodi-n-propylamine	ug/L	N	NS	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	2	UJ			2	UJ	2	UJ	2	U	2	UJ	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
n-Propylbenzene	ug/L	N	NS																										
Naphthalene	ug/L	N	10.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Naphthalene	ug/L	N	10.0 ug/l																										
Nickel	mg/L	N	0.1 mg/l							0.0018	U															0.0047	J		
Nitrobenzene	ug/L	N	0.4 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
o-Xylene	ug/L	N	NS																										
p-Chloro-m-cresol	ug/L	N	1.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
Pentachlorophenol	ug/L	N	1.0 ug/l	3	UJ			3	U	3	U	3	U	3	U	3	U	1	U	1	U	0.9	U	1	UJ	1	UJ	1	U
pH	SU	N	NS																							7.3			
Phenanthrene	ug/L	N	50.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
Phenol	ug/L	N	1.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U
Potassium	mg/L	N	NS							1.13																1.84			
Pyrene	ug/L	N	50.0 ug/l	1	UJ			1	U	1	U	1	U	1	U	1	U	0.1	U	0.1	U	0.09	U	0.1	U	0.1	U	0.1	U
sec-Butylbenzene	ug/L	N	NS																										
Selenium	mg/L	N	0.01 mg/l							0.0089	U															0.0075	U		
Silver	mg/L	N	0.05 mg/l							0.0023	U															0.0012	U		

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location			TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5	
Field Sample ID			TF-5(7-14-09)		TF-5(7-15-09)		TF-5(11-10-09)		TF-5(5-25-10)		TF-5(5-26-10)		TF-5(10-12-10)		TF-5(5-11-11)		TF-5(11-10-11)		TF-5(7-18-12)		TF-05(102312)		TF-5(061113)		TF-5(061113)SW		TF-5 111313	
Date Sampled			07/14/2009		07/15/2009		11/10/2009		05/25/2010		05/26/2010		10/12/2010		05/11/2011		11/10/2011		07/18/2012		10/23/2012		06/11/2013		06/11/2013		11/13/2013	
SDG			1153748		1153748		1170505		1196041		1196247		1216105		1246861		1276051		1323156		1344432		1396584		1396587		1433988	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																									
Sodium	mg/L	N	20.0 mg/l						426																127			
Styrene	ug/L	N	5.0 ug/l						1	U															1	U		
Sulfate (SO4)	mg/L	N	250.0 mg/l						30.6																19.9			
t-Butylbenzene	ug/L	N	NS																									
tert-Amyl methyl ether	ug/L	N	NS						0.8	U															0.8	U		
Tertiary Butyl Alcohol	ug/L	N	NS						10	U															10	UJ		
Tetrachloroethene	ug/L	N	5.0 ug/l	0.8	U			0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Thallium	mg/L	N	0.00050 mg/						0.0140	U															0.0057	U		
Toluene	ug/L	N	5.0 ug/l	0.7	U			0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
Total Hardness As Caco3	ug/L	N	NS																						31900			
trans-1,2-Dichloroethene	ug/L	N	5.0 ug/l						0.8	U															0.8	U		
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	2	U			2	U			2	U	2	U	2	U	2	U	2	UJ	2	U	2	U			2	U		
Trihalomethanes (THM)	ug/L	N	NS																										
Vanadium	mg/L	N	NS						0.0025	U															0.0056			
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	1	U			1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	ug/L	N	5.0 ug/l	0.8	U			0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Zinc	mg/L	N	2.0 mg/l						0.0359																0.0916			

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location			TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5	
Field Sample ID			TF-5-061014		CVX-0040-07		CVX-0058-02		TF-5-W-4.59-151116		TF-5-W-4.59-160613		TF-5-W-4.59-161115		TF-5-W-4.59-170627		TF-5-W-4.59-171031		TF-5-W-4.59-180612		TF-5-W-4.59-181101	
Date Sampled			06/10/2014		11/11/2014		06/19/2015		11/16/2015		06/13/2016		11/15/2016		06/27/2017		10/31/2017		06/12/2018		11/01/2018	
SDG			1480955		1517916		1570824		1610359		1671783		1734549		1819683		1871380		1955779		2005546	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER			
Sample Purpose			REG		REG		REG		REG		REG		REG		REG		REG		REG		REG			
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW			
Parameter Name	**Units**	**Filtered**	**Class GA**																					
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U	
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2,4-Trimethylbenzene	ug/L	N	NS																					
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U	
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U	
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	
1,3,5-Trimethylbenzene	ug/L	N	NS																					
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U	
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U	
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
2,2'-oxybis(2-chloropropane)	ug/L	N	NS																					
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	3	U	3	U	
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	11	U	10	U	10	U	11	U	10	U	10	UJ	10	UJ	10	U	14	U	15	U	
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U	1	U	
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
2-Butanone (Methyl ethyl ketone)	ug/L	N	50.0 ug/l																					
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.2	U	
2-Chloronaphthalene	ug/L	N	10.0 ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	
2-Hexanone	ug/L	N	50.0 ug/l																					
2-Methyl-Naphthlalene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U	2	U	
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	3	U	3	U	
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	3	U	3	U	
3-Nitroaniline	ug/L	N	5.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	3	U	3	U	
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	6	U	5	U	5	U	5	U	5	U	5	UJ	5	UJ	5	U	8	U	9	U	
4-Bromophenylphenylether	ug/L	N	NS	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
4-Chloroaniline	ug/L	N	5.0 ug/l	0.6	U	0.5	U	2	U	2	U	2	U	2	UJ	2	U	2	U	4	U	4	U	
4-Chlorophenyl phenyl ether	ug/L	N	NS	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
4-Isopropyltoluene	ug/L	N	NS																					
4-Methyl-2-pentanone	ug/L	N	NS																					
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U	
4-Nitroaniline	ug/L	N	5.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.9	U	1	U	
4-Nitrophenol	ug/L	N	1.0 ug/l	11	U	10	U	10	U	11	UJ	10	U	10	UJ	10	UJ	10	U	10	U	11	U	
Acenaphthene	ug/L	N	20.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	
Acenaphthylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	
Acetone	ug/L	N	50.0 ug/l																					
Aluminum	mg/L	N	0.1 mg/l																					
Anthracene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	
Antimony	mg/L	N	0.003 mg/l																					
Arsenic	mg/L	N	0.025 mg/l																					
Barium	mg/L	N	1.0 mg/l																					
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	
Benzidine	ug/L	N	NS																					
Benzo(a)anthracene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	
Benzo(a)pyrene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	
Benzo(g,h,i)perylene	mg/L	N	NS																					
Benzo(g,h,i)perylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	
Beryllium	mg/L	N	0.003 mg/l																					
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	14	U	2	U	2	U	5	U	5	U	

Historical Consent Order Groundwater Analytical Table
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Location			TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5	
Field Sample ID			TF-5-061014		CVX-0040-07		CVX-0058-02		TF-5-W-4.59-151116		TF-5-W-4.59-160613		TF-5-W-4.59-161115		TF-5-W-4.59-170627		TF-5-W-4.59-171031		TF-5-W-4.59-180612		TF-5-W-4.59-181101	
Date Sampled			06/10/2014		11/11/2014		06/19/2015		11/16/2015		06/13/2016		11/15/2016		06/27/2017		10/31/2017		06/12/2018		11/01/2018	
SDG			1480955		1517916		1570824		1610359		1671783		1734549		1819683		1871380		1955779		2005546	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																					
Bromodichloromethane	**ug/L**	**N**	**50.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Bromoform	**ug/L**	**N**	**50.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.2	UJ
Bromomethane (Methyl bromide)	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
Butylbenzylphthalate	**ug/L**	**N**	**50.0 ug/l**	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Cadmium	**mg/L**	**N**	**0.005 mg/l**																				
Calcium	**mg/L**	**N**	**NS**																				
Carbazole	**ug/L**	**N**	**NS**	0.6	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	**ug/L**	**N**	**60.0 ug/l**																				
Carbon Tetrachloride	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.2	U
Chloride	**mg/L**	**N**	**250.0 mg/l**																				
Chlorobenzene	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroethane	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroform	**ug/L**	**N**	**7.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloromethane (Methyl chloride)	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chromium	**mg/L**	**N**	**0.05 mg/l**																				
Chrysene	**ug/L**	**N**	**0.002 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
cis-1,2-Dichloroethene	**ug/L**	**N**	**5.0 ug/l**																				
cis-1,3-Dichloropropene	**ug/L**	**N**	**0.4 ug/l**	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Cobalt	**mg/L**	**N**	**0.005 mg/l**																				
Copper	**mg/L**	**N**	**0.2 mg/l**																				
Di-n-butylphthalate	**ug/L**	**N**	**50.0 ug/l**	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	**ug/L**	**N**	**50.0 ug/l**	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	5	U	5	U
Dibenz(a,h)anthracene	**ug/L**	**N**	**NS**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	**ug/L**	**N**	**NS**	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	**ug/L**	**N**	**50.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Diethylphthalate	**ug/L**	**N**	**50.0 ug/l**	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Diisopropyl ether	**ug/L**	**N**	**NS**																				
Dimethyl phthalate	**ug/L**	**N**	**50.0 ug/l**	2	U	2	U	2	UJ	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U
Ethyl-t-butylether	**ug/L**	**N**	**NS**																				
Ethylbenzene	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.4	U
Fluoranthene	**ug/L**	**N**	**50.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Fluorene	**ug/L**	**N**	**50.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	**ug/L**	**N**	**0.04 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	**ug/L**	**N**	**0.5 ug/l**	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorocyclopentadiene	**ug/L**	**N**	**5.0 ug/l**	6	U	5	U	5	U	5	U	5	U	5	UJ	5	U	5	U	5	U	5	U
Hexachloroethane	**ug/L**	**N**	**5.0 ug/l**	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	**ug/L**	**N**	**0.002 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Iron	**mg/L**	**N**	**0.3 mg/l**																				
Isophorone	**ug/L**	**N**	**50.0 ug/l**	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	**ug/L**	**N**	**NS**																				
Lead	**mg/L**	**N**	**0.025 mg/l**																				
Lead	**mg/L**	**Y**	**0.025 mg/l**	0.0047	U	0.0047	U	0.0047	U	0.0051	U	0.0051	U	0.0062	U	0.006	U	0.006	U	0.006	U	0.0071	U
Magnesium	**mg/L**	**N**	**35.0 mg/l**																				
Manganese	**mg/L**	**N**	**0.3 mg/l**																				
Mercury	**mg/L**	**N**	**0.00070 mg/**																				
Methyl-t-butyl ether	**ug/L**	**N**	**10.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Methylene chloride (Dichloromethane)	**ug/L**	**N**	**5.0 ug/l**	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.3	U
n-Butylbenzene	**ug/L**	**N**	**NS**																				
N-Nitrosodi-n-propylamine	**ug/L**	**N**	**NS**	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7	U	0.8	U
N-Nitrosodiphenylamine (Diphenylamine)	**ug/L**	**N**	**50.0 ug/l**	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7	U	0.8	U
n-Propylbenzene	**ug/L**	**N**	**NS**																				
Naphthalene	**ug/L**	**N**	**10.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Naphthalene	**ug/L**	**N**	**10.0 ug/l**																				
Nickel	**mg/L**	**N**	**0.1 mg/l**																				
Nitrobenzene	**ug/L**	**N**	**0.4 ug/l**	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	**ug/L**	**N**	**NS**																				
p-Chloro-m-cresol	**ug/L**	**N**	**1.0 ug/l**	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U
Pentachlorophenol	**ug/L**	**N**	**1.0 ug/l**	1	U	1	U	1	UJ	1	UJ	1	U	1	UJ	1	UJ	1	U	1	U	1	U
pH	**SU**	**N**	**NS**																				
Phenanthrene	**ug/L**	**N**	**50.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Phenol	**ug/L**	**N**	**1.0 ug/l**	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	U	0.5	U	0.5	U
Potassium	**mg/L**	**N**	**NS**																				
Pyrene	**ug/L**	**N**	**50.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
sec-Butylbenzene	**ug/L**	**N**	**NS**																				
Selenium	**mg/L**	**N**	**0.01 mg/l**																				
Silver	**mg/L**	**N**	**0.05 mg/l**																				

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

			Location		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5		TF-5	
			Field Sample ID		TF-5-061014		CVX-0040-07		CVX-0058-02		TF-5-W-4.59-151116		TF-5-W-4.59-160613		TF-5-W-4.59-161115		TF-5-W-4.59-170627		TF-5-W-4.59-171031		TF-5-W-4.59-180612		TF-5-W-4.59-181101	
			Date Sampled		06/10/2014		11/11/2014		06/19/2015		11/16/2015		06/13/2016		11/15/2016		06/27/2017		10/31/2017		06/12/2018		11/01/2018	
			SDG		1480955		1517916		1570824		1610359		1671783		1734549		1819683		1871380		1955779		2005546	
			Sample Matrix		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
			Sample Purpose		REG		REG		REG		REG		REG		REG		REG		REG		REG		REG	
			Sample Type	NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																					
Sodium	mg/L	N	20.0 mg/l																					
Styrene	ug/L	N	5.0 ug/l																					
Sulfate (SO4)	mg/L	N	250.0 mg/l																					
t-Butylbenzene	ug/L	N	NS																					
tert-Amyl methyl ether	ug/L	N	NS																					
Tertiary Butyl Alcohol	ug/L	N	NS																					
Tetrachloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	
Thallium	mg/L	N	0.00050 mg/																					
Toluene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	
Total Hardness As Caco3	ug/L	N	NS																					
trans-1,2-Dichloroethene	ug/L	N	5.0 ug/l																					
trans-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	
Trichloroethene (Trichloroethylene)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	
Trichlorofluoromethane (Freon 11)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	
Trihalomethanes (THM)	ug/L	N	NS																					
Vanadium	mg/L	N	NS																					
Vinyl chloride (Chloroethene)	ug/L	N	2.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U	
Xylene (total)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1	U	
Zinc	mg/L	N	2.0 mg/l																					

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23	
Field Sample ID				TF-23-0-0-04272000-W		TF-23-0-0-06152000-W		TF-23-032004		TF-23-072004		TF-23		TF-23-111506		TF-123-082107		TF-23-082107		TF-123-112807		TF-23-112807		TF-123-061008	
Date Sampled				04/27/2000		06/15/2000		03/01/2004		07/01/2004		06/06/2006		11/15/2006		08/21/2007		08/21/2007		11/28/2007		11/28/2007		06/10/2008	
SDG												993100		1014759		1052940		1052940		1067563		1067563		1095960	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		FD		REG		FD		REG		FD	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																						
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,1,2-Tetrachloroethane	ug/L	N	NS	0	U																				
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloropropane	ug/L	N	NS	0	U																				
1,2,3-Trichlorobenzene	ug/L	N	NS	0	U																				
1,2,3-Trichloropropane	ug/L	N	0.04 ug/l	0	U																				
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	0	U																				
1,2,4-Trimethylbenzene	ug/L	N	NS	0	U																				
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	NS	0	U																				
1,2-Dibromoethane	ug/L	N	NS	0	U																				
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l			0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	ug/L	N	NS	0	U																				
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichloropropane	ug/L	N	5.0 ug/l	0	U																				
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,2'-oxybis(2-chloropropane)	ug/L	N	NS	0	U																				
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l									1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l									1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l									1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l									3	U	3	U	3	U	3	U	3	U	3	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l									20	U	20	U	20	U	20	U	19	U	19	U	19	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l									1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Butanone (Methyl ethyl ketone)	ug/L	N	50.0 ug/l	0	U																				
2-Chloroethyl vinyl ether	ug/L	N	NS			0	U	0	U	0	U	2	U			2	U	2	U	2	U	2	U	2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	0	U							2	U	2	U	2	U	2	U	2	U	2	U	2	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l									1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone	ug/L	N	50.0 ug/l	0	U																				
2-Methyl-Naphthlalene	ug/L	N	NS									1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l									1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l									1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l									1	U	1	U	1	U	1	U	1	U	1	U	1	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	0	U							2	U	2	U	2	U	2	U	2	U	2	U	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l									1	U	1	U	1	U	1	U	1	U	1	U	1	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l									5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Bromophenylphenylether	ug/L	N	NS	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Chloroaniline	ug/L	N	5.0 ug/l									1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	0	U							2	U	2	U	2	U	2	U	2	U	2	U	2	U
4-Isopropyltoluene	ug/L	N	NS	0	U																				
4-Methyl-2-pentanone	ug/L	N	NS	0	U																				
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l									2	U	2	U	2	U	2	U	2	U	2	U	2	U
4-Nitroaniline	ug/L	N	5.0 ug/l									1	U	1	U	1	U	1	U	1	U	1	U	1	U
4-Nitrophenol	ug/L	N	1.0 ug/l									10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Acenaphthylene	ug/L	N	NS	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Acetone	ug/L	N	50.0 ug/l	0	U																				
Acrolein	ug/L	N	NS	0	U																				
Acrylonitrile	ug/L	N	NS	0	U																				
Aluminum	mg/L	N	0.1 mg/l																						
Anthracene	ug/L	N	50.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Antimony	mg/L	N	0.003 mg/l																						
Arsenic	mg/L	N	0.025 mg/l																						
Barium	mg/L	N	1.0 mg/l																						
Benzene	ug/L	N	1.0 ug/l	0	U	0	U	0	U	0	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzidine	ug/L	N	NS	0	U																				
Benzo(a)anthracene	ug/L	N	0.002 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzo(a)pyrene	ug/L	N	NS	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U

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Location				TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23	
Field Sample ID				TF-23-0-0-04272000-W		TF-23-0-0-06152000-W		TF-23-032004		TF-23-072004		TF-23		TF-23-111506		TF-123-082107		TF-23-082107		TF-123-112807		TF-23-112807		TF-123-061008	
Date Sampled				04/27/2000		06/15/2000		03/01/2004		07/01/2004		06/06/2006		11/15/2006		08/21/2007		08/21/2007		11/28/2007		11/28/2007		06/10/2008	
SDG												993100		1014759		1052940		1052940		1067563		1067563		1095960	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		FD		REG		FD		REG		FD	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																						
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzo(g,h,i)perylene	mg/L	N	NS																						
Benzo(g,h,i)perylene	ug/L	N	NS	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Beryllium	mg/L	N	0.003 mg/l																						
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l									1	U	1	U	1	U	1	U	1	U	1	U	1	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	0	U							2	U	2	U	2	U	2	U	2	U	2	U	2	U
Bromobenzene	ug/L	N	NS	0	U																				
Bromochloromethane	ug/L	N	NS	0	U																				
Bromodichloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	N	50.0 ug/l	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	0	U							2	U	2	U	2	U	2	U	2	U	2	U	2	U
Cadmium	mg/L	N	0.005 mg/l																						
Calcium	mg/L	N	NS																						
Carbazole	ug/L	N	NS									1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon disulfide	ug/L	N	60.0 ug/l	0	U																				
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloride	mg/L	N	250.0 mg/l																						
Chloride	mg/L	Y	250.0 mg/l																						
Chlorobenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloroethane	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	N	7.0 ug/l	0	U	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0	U	1	U	1	UJ	1	U	1	U	1	UJ	1	UJ	1	U
Chromium	mg/L	N	0.05 mg/l																						
Chrysene	ug/L	N	0.002 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	ug/L	N	5.0 ug/l	0	U											0.8	U								
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0	U	0	U	0	U	0	U	1	U	1	U			1	U	1	U	1	U	1	U
Cobalt	mg/L	N	0.005 mg/l																						
Copper	mg/L	N	0.2 mg/l																						
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2.8								2	U	2	U	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l	0	U							2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dibenz(a,h)anthracene	ug/L	N	NS	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibenzofuran	ug/L	N	NS									1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	ug/L	N	50.0 ug/l	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Dichlorodifluoromethane (Freon 12)	ug/L	N	NS	0	U																				
Diethylphthalate	ug/L	N	50.0 ug/l	0	U							2	U	2	U	2	U	2	U	2	U	2	U	2	U
Diisopropyl ether	ug/L	N	NS																						
Dimethyl phthalate	ug/L	N	50.0 ug/l	0	U							2	U	2	U	2	U	2	U	2	U	2	U	2	U
Ethyl-t-butylether	ug/L	N	NS																						
Ethylbenzene	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Fluoranthene	ug/L	N	50.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Fluorene	ug/L	N	50.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	0	U																				
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	0	U							5	U	5	U	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Iodomethane (Methyl iodide)	ug/L	N	NS	0	U																				
Iron	mg/L	N	0.3 mg/l																						
Isophorone	ug/L	N	50.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Isopropylbenzene	ug/L	N	NS	0	U																				
Lead	mg/L	N	0.025 mg/l			0.131		0.0375		0.005		0.0069	U	0.0069	U	0.0177		0.0147	J	0.025		0.0211		0.0128	J
Lead	mg/L	Y	0.025 mg/l																						
Magnesium	mg/L	N	35.0 mg/l																						
Manganese	mg/L	N	0.3 mg/l																						
Mercury	mg/L	N	0.00070 mg/																						
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0	U							0.5	U	0.5	U					0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	0	U	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
n-Butylbenzene	ug/L	N	NS	0	U																				
N-Nitrosodi-n-propylamine	ug/L	N	NS	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	0	U							2	U	2	U	2	U	2	U	2	U	2	U	2	U
n-Propylbenzene	ug/L	N	NS	0	U																				
Naphthalene	ug/L	N	10.0 ug/l	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U

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Location				TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23	
Field Sample ID				TF-23-0-0-04272000-W		TF-23-0-0-06152000-W		TF-23-032004		TF-23-072004		TF-23		TF-23-111506		TF-123-082107		TF-23-082107		TF-123-112807		TF-23-112807		TF-123-061008	
Date Sampled				04/27/2000		06/15/2000		03/01/2004		07/01/2004		06/06/2006		11/15/2006		08/21/2007		08/21/2007		11/28/2007		11/28/2007		06/10/2008	
SDG												993100		1014759		1052940		1052940		1067563		1067563		1095960	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		REG		REG		REG		FD		REG		FD		REG		FD	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																						
Naphthalene	**ug/L**	**N**	**10.0 ug/l**	0	U																				
Nickel	**mg/L**	**N**	**0.1 mg/l**																						
Nitrobenzene	**ug/L**	**N**	**0.4 ug/l**	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
o-Chlorotoluene	**ug/L**	**N**	**NS**	0	U																				
p-Chloro-m-cresol	**ug/L**	**N**	**1.0 ug/l**									1	U	1	U	1	U	1	U	1	U	1	U	1	U
p-Chlorotoluene	**ug/L**	**N**	**NS**	0	U																				
Pentachlorophenol	**ug/L**	**N**	**1.0 ug/l**									3	U	3	U	3	U	3	U	3	U	3	U	3	U
pH	**SU**	**N**	**NS**																						
Phenanthrene	**ug/L**	**N**	**50.0 ug/l**	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
Phenol	**ug/L**	**N**	**1.0 ug/l**									1	U	1	U	1	U	1	U	1	U	1	U	1	U
Potassium	**mg/L**	**N**	**NS**																						
Pyrene	**ug/L**	**N**	**50.0 ug/l**	0	U							1	U	1	U	1	U	1	U	1	U	1	U	1	U
sec-Butylbenzene	**ug/L**	**N**	**NS**	0	U																				
sec-Dichloropropane	**ug/L**	**N**	**NS**	0	U																				
Selenium	**mg/L**	**N**	**0.01 mg/l**																						
Silver	**mg/L**	**N**	**0.05 mg/l**																						
Sodium	**mg/L**	**N**	**20.0 mg/l**																						
Styrene	**ug/L**	**N**	**5.0 ug/l**	0	U																				
Sulfate (SO4)	**mg/L**	**N**	**250.0 mg/l**																						
Sulfate (SO4)	**mg/L**	**Y**	**250.0 mg/l**																						
t-Butylbenzene	**ug/L**	**N**	**NS**	0	U																				
tert-Amyl methyl ether	**ug/L**	**N**	**NS**																						
Tertiary Butyl Alcohol	**ug/L**	**N**	**NS**																						
Tetrachloroethene	**ug/L**	**N**	**5.0 ug/l**	0	U	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Thallium	**mg/L**	**N**	**0.00050 mg/**																						
Toluene	**ug/L**	**N**	**5.0 ug/l**	0	U	0	U	0	U	0	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
Total Hardness As Caco3	**ug/L**	**N**	**NS**																						
Total Hardness As Caco3	**ug/L**	**Y**	**NS**																						
trans-1,2-Dichloroethene	**ug/L**	**N**	**5.0 ug/l**	0	U											0.8	U								
trans-1,3-Dichloropropene	**ug/L**	**N**	**0.4 ug/l**	0	U	0	U	0	U	0	U	1	U	1	U			1	U	1	U	1	U	1	U
Trichloroethene (Trichloroethylene)	**ug/L**	**N**	**5.0 ug/l**	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane (Freon 11)	**ug/L**	**N**	**5.0 ug/l**	0	U	0	U	0	U	0	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Trihalomethanes (THM)	**ug/L**	**N**	**NS**			0	U	0	U	0	U														
Vanadium	**mg/L**	**N**	**NS**																						
Vinyl chloride (Chloroethene)	**ug/L**	**N**	**2.0 ug/l**	0	U	0	U	0	U	0	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylene (total)	**ug/L**	**N**	**5.0 ug/l**	0	U	0	U	0	U	0	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Zinc	**mg/L**	**N**	**2.0 mg/l**																						

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Location				TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23	
Field Sample ID				TF-23-061008		TF-23(10-15-08)		TF-23(11-18-08)		TF-123(7-14-09)		TF-23(7-14-09)		TF-123(7-15-09)		TF-23(7-15-09)		TF-23(11-10-09)		TF-23(5-25-10)		TF-23(5-26-10)		TF-23(10-12-10)	
Date Sampled				06/10/2008		10/15/2008		11/18/2008		07/14/2009		07/14/2009		07/15/2009		07/15/2009		11/10/2009		05/25/2010		05/26/2010		10/12/2010	
SDG				1095960		1115578		1120871		1153748		1153748		1153748		1153748		1170505		1196041		1196247		1216105	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		FD		REG		FD		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																						
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U					0.8	U	0.8	U	0.8	U	0.8	U
1,1,1,2-Tetrachloroethane	ug/L	N	NS																						
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U					0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	1	U	1	UJ	1	U	1	U	1	U					1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U					0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
1,1-Dichloropropane	ug/L	N	NS																						
1,2,3-Trichlorobenzene	ug/L	N	NS																						
1,2,3-Trichloropropane	ug/L	N	0.04 ug/l																						
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l																						
1,2,4-Trimethylbenzene	ug/L	N	NS																						
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	NS																						
1,2-Dibromoethane	ug/L	N	NS																						
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U			1	U	1	UJ	1	UJ					1	U			1	U	1	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.8	U			0.8	U	0.8	U	0.8	U					0.8	U			0.8	U	0.8	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	ug/L	N	NS																						
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U			1	U	1	UJ	1	UJ					1	U			1	U	1	U
1,3-Dichloropropane	ug/L	N	5.0 ug/l																						
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U			1	U	1	UJ	1	UJ					1	U			1	U	1	U
2,2'-oxybis(2-chloropropane)	ug/L	N	NS																						
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	3	U	3	U	3	U	3	UJ	3	UJ					3	U	3	U	3	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	19	U	19	U	20	U	20	UJ	20	UJ					20	U	10	U	10	U	10	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
2-Butanone (Methyl ethyl ketone)	ug/L	N	50.0 ug/l			3	U													3	U				
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U			2	UJ	2	UJ	2	UJ					2	U			2	U	2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	2	U	2	U	2	U	2	UJ	2	UJ					2	U	2	U	2	U	2	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
2-Hexanone	ug/L	N	50.0 ug/l			3	U													3	U				
2-Methyl-Naphthlalene	ug/L	N	NS	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	UJ	2	UJ					2	U	2	UJ	2	U	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	UJ	1	U	1	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	U	5	U	5	UJ	5	UJ					5	U	5	U	5	U	5	U
4-Bromophenylphenylether	ug/L	N	NS	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
4-Chloroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	2	U	2	U	2	U	2	UJ	2	UJ					2	U	2	U	2	U	2	U
4-Isopropyltoluene	ug/L	N	NS																						
4-Methyl-2-pentanone	ug/L	N	NS			3	U													3	U				
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	2	U	2	U	2	U	2	UJ	2	UJ					2	U	2	U	2	U	2	U
4-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	10	U	10	U	10	UJ	10	UJ					10	U	10	U	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Acenaphthylene	ug/L	N	NS	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Acetone	ug/L	N	50.0 ug/l			6	U													6	U				
Acrolein	ug/L	N	NS																						
Acrylonitrile	ug/L	N	NS																						
Aluminum	mg/L	N	0.1 mg/l			0.0874	J													0.112	J				
Anthracene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Antimony	mg/L	N	0.003 mg/l			0.0097	U													0.0097	U				
Arsenic	mg/L	N	0.025 mg/l			0.0100	UJ													0.0072	U				
Barium	mg/L	N	1.0 mg/l			0.0158														0.0152					
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U					0.5	U	0.5	U	0.5	U	0.5	U
Benzidine	ug/L	N	NS																						
Benzo(a)anthracene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Benzo(a)pyrene	ug/L	N	NS	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23	
Field Sample ID				TF-23-061008		TF-23(10-15-08)		TF-23(11-18-08)		TF-123(7-14-09)		TF-23(7-14-09)		TF-123(7-15-09)		TF-23(7-15-09)		TF-23(11-10-09)		TF-23(5-25-10)		TF-23(5-26-10)		TF-23(10-12-10)	
Date Sampled				06/10/2008		10/15/2008		11/18/2008		07/14/2009		07/14/2009		07/15/2009		07/15/2009		11/10/2009		05/25/2010		05/26/2010		10/12/2010	
SDG				1095960		1115578		1120871		1153748		1153748		1153748		1153748		1170505		1196041		1196247		1216105	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		FD		REG		FD		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																						
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Benzo(g,h,i)perylene	mg/L	N	NS			0.001	U													0.001	U				
Benzo(g,h,i)perylene	ug/L	N	NS	1	U			1	U	1	UJ	1	UJ					1	U			1	U	1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Beryllium	mg/L	N	0.003 mg/l			0.00090	U													0.0014	U				
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	UJ	2	UJ					2	U	2	U	2	U	2	U
Bromobenzene	ug/L	N	NS																						
Bromochloromethane	ug/L	N	NS																						
Bromodichloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
Bromoform	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	UJ	2	UJ					2	U	2	U	2	U	2	U
Cadmium	mg/L	N	0.005 mg/l			0.0020	U													0.0020	U				
Calcium	mg/L	N	NS			48.5														60.9					
Carbazole	ug/L	N	NS	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	UJ	1	U	1	U
Carbon disulfide	ug/L	N	60.0 ug/l			1	U													1	U				
Carbon Tetrachloride	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
Chloride	mg/L	N	250.0 mg/l			102														118					
Chloride	mg/L	Y	250.0 mg/l																						
Chlorobenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U					0.8	U	0.8	U	0.8	U	0.8	U
Chloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	UJ	1	U	1	U
Chloroform	ug/L	N	7.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U					0.8	U	0.8	U	0.8	U	0.8	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
Chromium	mg/L	N	0.05 mg/l			0.0030	U													0.0034	U				
Chrysene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
cis-1,2-Dichloroethene	ug/L	N	5.0 ug/l			0.8	U													0.8	U				
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
Cobalt	mg/L	N	0.005 mg/l			0.0021	U													0.0021	U				
Copper	mg/L	N	0.2 mg/l			0.0027	U													0.0027	U				
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	UJ	2	UJ					2	U	2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	UJ	2	UJ					2	U	2	U	2	U	2	U
Dibenz(a,h)anthracene	ug/L	N	NS	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Dibenzofuran	ug/L	N	NS	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Dibromochloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
Dichlorodifluoromethane (Freon 12)	ug/L	N	NS																						
Diethylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	UJ	2	UJ					2	U	2	U	2	U	2	U
Diisopropyl ether	ug/L	N	NS			0.8	U													0.8	U				
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	UJ	2	UJ					2	U	2	U	2	U	2	U
Ethyl-t-butylether	ug/L	N	NS			0.8	U													0.8	U				
Ethylbenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U					0.8	U	0.8	U	0.8	U	0.8	U
Fluoranthene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Fluorene	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l																						
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	5	U	5	U	5	UJ	5	UJ					5	U	5	U	5	U	5	UJ
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Iodomethane (Methyl iodide)	ug/L	N	NS																						
Iron	mg/L	N	0.3 mg/l			0.112	J													0.142	J				
Isophorone	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Isopropylbenzene	ug/L	N	NS																						
Lead	mg/L	N	0.025 mg/l	0.0131	J	0.0072	J	0.0314										0.0069	U	0.0069	U				
Lead	mg/L	Y	0.025 mg/l											0.0069	U	0.0069	U					0.0069	U	0.0069	U
Magnesium	mg/L	N	35.0 mg/l			14.4														18.1					
Manganese	mg/L	N	0.3 mg/l			0.0065	J													0.0033	J				
Mercury	mg/L	N	0.00070 mg/			0.000056	U													0.000056	U				
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U					0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U					2	U	2	U	2	U	2	U
n-Butylbenzene	ug/L	N	NS																						
N-Nitrosodi-n-propylamine	ug/L	N	NS	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	UJ	2	UJ					2	UJ	2	UJ	2	U	2	UJ
n-Propylbenzene	ug/L	N	NS																						
Naphthalene	ug/L	N	10.0 ug/l	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23	
Field Sample ID				TF-23-061008		TF-23(10-15-08)		TF-23(11-18-08)		TF-123(7-14-09)		TF-23(7-14-09)		TF-123(7-15-09)		TF-23(7-15-09)		TF-23(11-10-09)		TF-23(5-25-10)		TF-23(5-26-10)		TF-23(10-12-10)	
Date Sampled				06/10/2008		10/15/2008		11/18/2008		07/14/2009		07/14/2009		07/15/2009		07/15/2009		11/10/2009		05/25/2010		05/26/2010		10/12/2010	
SDG				1095960		1115578		1120871		1153748		1153748		1153748		1153748		1170505		1196041		1196247		1216105	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				REG		REG		REG		FD		REG		FD		REG		REG		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																						
Naphthalene	**ug/L**	**N**	**10.0 ug/l**																						
Nickel	**mg/L**	**N**	**0.1 mg/l**			0.0056	U													0.0018	U				
Nitrobenzene	**ug/L**	**N**	**0.4 ug/l**	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
o-Chlorotoluene	**ug/L**	**N**	**NS**																						
p-Chloro-m-cresol	**ug/L**	**N**	**1.0 ug/l**	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
p-Chlorotoluene	**ug/L**	**N**	**NS**																						
Pentachlorophenol	**ug/L**	**N**	**1.0 ug/l**	3	U	3	U	3	U	3	UJ	3	UJ					3	U	3	U	3	U	3	U
pH	**SU**	**N**	**NS**																						
Phenanthrene	**ug/L**	**N**	**50.0 ug/l**	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Phenol	**ug/L**	**N**	**1.0 ug/l**	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
Potassium	**mg/L**	**N**	**NS**			0.869														0.913					
Pyrene	**ug/L**	**N**	**50.0 ug/l**	1	U	1	U	1	U	1	UJ	1	UJ					1	U	1	U	1	U	1	U
sec-Butylbenzene	**ug/L**	**N**	**NS**																						
sec-Dichloropropane	**ug/L**	**N**	**NS**																						
Selenium	**mg/L**	**N**	**0.01 mg/l**			0.0107	U													0.0089	U				
Silver	**mg/L**	**N**	**0.05 mg/l**			0.0022	U													0.0023	U				
Sodium	**mg/L**	**N**	**20.0 mg/l**			74.1														67.2					
Styrene	**ug/L**	**N**	**5.0 ug/l**			1	U													1	U				
Sulfate (SO4)	**mg/L**	**N**	**250.0 mg/l**			20.0														19.6					
Sulfate (SO4)	**mg/L**	**Y**	**250.0 mg/l**																						
t-Butylbenzene	**ug/L**	**N**	**NS**																						
tert-Amyl methyl ether	**ug/L**	**N**	**NS**			0.8	U													0.8	U				
Tertiary Butyl Alcohol	**ug/L**	**N**	**NS**			10	U													10	U				
Tetrachloroethene	**ug/L**	**N**	**5.0 ug/l**	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U					0.8	U	0.8	U	0.8	U	0.8	U
Thallium	**mg/L**	**N**	**0.00050 mg/**			0.0140	U													0.0140	U				
Toluene	**ug/L**	**N**	**5.0 ug/l**	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U					0.7	U	0.7	U	0.7	U	0.7	U
Total Hardness As Caco3	**ug/L**	**N**	**NS**																						
Total Hardness As Caco3	**ug/L**	**Y**	**NS**																						
trans-1,2-Dichloroethene	**ug/L**	**N**	**5.0 ug/l**			0.8	U													0.8	U				
trans-1,3-Dichloropropene	**ug/L**	**N**	**0.4 ug/l**	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
Trichloroethene (Trichloroethylene)	**ug/L**	**N**	**5.0 ug/l**	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
Trichlorofluoromethane (Freon 11)	**ug/L**	**N**	**5.0 ug/l**	2	U			2	U	2	U	2	U					2	U			2	U	2	U
Trihalomethanes (THM)	**ug/L**	**N**	**NS**																						
Vanadium	**mg/L**	**N**	**NS**			0.0025	UJ													0.0025	U				
Vinyl chloride (Chloroethene)	**ug/L**	**N**	**2.0 ug/l**	1	U	1	U	1	U	1	U	1	U					1	U	1	U	1	U	1	U
Xylene (total)	**ug/L**	**N**	**5.0 ug/l**	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U					0.8	U	0.8	U	0.8	U	0.8	U
Zinc	**mg/L**	**N**	**2.0 mg/l**			0.0104	J													0.0081	U				

Historical Consent Order Groundwater Analytical Table
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Location			TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23	
Field Sample ID			TF-123(5-11-11)		TF-23(5-11-11)		TF-23(11-10-11)		TF-23(7-18-12)		TF-23(102312)		TF-23(061113)		TF-23(061113)SW		TF-123 111313		TF-23 111313		TF-23-061014		CVX-0040-06	
Date Sampled			05/11/2011		05/11/2011		11/10/2011		07/18/2012		10/23/2012		06/11/2013		06/11/2013		11/13/2013		11/13/2013		06/10/2014		11/11/2014	
SDG			1246861		1246861		1276051		1323156		1344432		1396584		1396587		1433988		1433988		1480955		1517916	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			FD		REG		REG		REG		REG		REG		REG		FD		REG		REG		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																					
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
1,1,1,2-Tetrachloroethane	ug/L	N	NS																					
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
1,1-Dichloropropane	ug/L	N	NS																					
1,2,3-Trichlorobenzene	ug/L	N	NS																					
1,2,3-Trichloropropane	ug/L	N	0.04 ug/l																					
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l																					
1,2,4-Trimethylbenzene	ug/L	N	NS																					
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	NS																					
1,2-Dibromoethane	ug/L	N	NS																					
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.6	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U			0.8	U	0.8	U	0.5	U	0.5	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
1,3,5-Trimethylbenzene	ug/L	N	NS																					
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.6	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	ug/L	N	5.0 ug/l																					
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U			0.6	U	0.5	U	0.5	U	0.5	U
2,2'-oxybis(2-chloropropane)	ug/L	N	NS																					
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	3	U	3	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	10	U	10	U	10	U	10	U	10	U	10	UJ	10	UJ	12	UJ	10	UJ	11	U	10	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
2-Butanone (Methyl ethyl ketone)	ug/L	N	50.0 ug/l													3	U								
2-Chloroethyl vinyl ether	ug/L	N	NS	2	R	2	R	2	U	2	U	2	U	2	U			2	U	2	U	2	U	2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	2	U	2	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.5	U	0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
2-Hexanone	ug/L	N	50.0 ug/l													3	U								
2-Methyl-Naphthlalene	ug/L	N	NS	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
3-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	UJ	5	UJ	6	U	5	U	5	U	5	U
4-Bromophenylphenylether	ug/L	N	NS	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
4-Isopropyltoluene	ug/L	N	NS																					
4-Methyl-2-pentanone	ug/L	N	NS													3	U								
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	10	U	10	U	10	U	10	U	10	U	10	U	12	U	10	U	11	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acetone	ug/L	N	50.0 ug/l													6	U								
Acrolein	ug/L	N	NS																					
Acrylonitrile	ug/L	N	NS																					
Aluminum	mg/L	N	0.1 mg/l													0.0743	U							
Anthracene	ug/L	N	50.0 ug/l	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Antimony	mg/L	N	0.003 mg/l													0.0035	U							
Arsenic	mg/L	N	0.025 mg/l													0.0068	U							
Barium	mg/L	N	1.0 mg/l													0.0158								
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzidine	ug/L	N	NS																					
Benzo(a)anthracene	ug/L	N	0.002 ug/l	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U

Historical Consent Order Groundwater Analytical Table
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Location				TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23	
Field Sample ID				TF-123(5-11-11)		TF-23(5-11-11)		TF-23(11-10-11)		TF-23(7-18-12)		TF-23(102312)		TF-23(061113)		TF-23(061113)SW		TF-123 111313		TF-23 111313		TF-23-061014		CVX-0040-06	
Date Sampled				05/11/2011		05/11/2011		11/10/2011		07/18/2012		10/23/2012		06/11/2013		06/11/2013		11/13/2013		11/13/2013		06/10/2014		11/11/2014	
SDG				1246861		1246861		1276051		1323156		1344432		1396584		1396587		1433988		1433988		1480955		1517916	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				FD		REG		REG		REG		REG		REG		REG		FD		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																						
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(g,h,i)perylene	mg/L	N	NS													0.0001	U	0.0001	U	0.0001	U				
Benzo(g,h,i)perylene	ug/L	N	NS	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U							0.1	U	0.1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Beryllium	mg/L	N	0.003 mg/l													0.00067	U								
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Bromobenzene	ug/L	N	NS																						
Bromochloromethane	ug/L	N	NS																						
Bromodichloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Bromoform	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Cadmium	mg/L	N	0.005 mg/l													0.00036	U								
Calcium	mg/L	N	NS													60.1									
Carbazole	ug/L	N	NS	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	ug/L	N	60.0 ug/l													1	U								
Carbon Tetrachloride	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Chloride	mg/L	N	250.0 mg/l													128									
Chloride	mg/L	Y	250.0 mg/l															149	J	135	J				
Chlorobenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
Chloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Chloroform	ug/L	N	7.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Chromium	mg/L	N	0.05 mg/l													0.0011	U								
Chrysene	ug/L	N	0.002 ug/l	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
cis-1,2-Dichloroethene	ug/L	N	5.0 ug/l													0.8	U								
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Cobalt	mg/L	N	0.005 mg/l													0.00066	U								
Copper	mg/L	N	0.2 mg/l													0.0021	U								
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dibenz(a,h)anthracene	ug/L	N	NS	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	ug/L	N	NS	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	ug/L	N	50.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Dichlorodifluoromethane (Freon 12)	ug/L	N	NS																						
Diethylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Diisopropyl ether	ug/L	N	NS													0.8	U								
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Ethyl-t-butylether	ug/L	N	NS													0.8	U								
Ethylbenzene	ug/L	N	5.0 ug/l	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
Fluoranthene	ug/L	N	50.0 ug/l	1	U	1	U	0.1	U	0.1	U	0.1	J	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Fluorene	ug/L	N	50.0 ug/l	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l																						
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	5	U	5	U	5	U	5	U	5	U	5	U	6	U	5	U	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Iodomethane (Methyl iodide)	ug/L	N	NS																						
Iron	mg/L	N	0.3 mg/l													0.0571	J								
Isophorone	ug/L	N	50.0 ug/l	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	ug/L	N	NS																						
Lead	mg/L	N	0.025 mg/l													0.0051	U								
Lead	mg/L	Y	0.025 mg/l	0.0069	U	0.0069	U	0.0022	U	0.0051	U	0.0051	U	0.0051	U			0.0047	U	0.0047	U	0.0047	U	0.0047	U
Magnesium	mg/L	N	35.0 mg/l													15.9									
Manganese	mg/L	N	0.3 mg/l													0.0021	J								
Mercury	mg/L	N	0.00070 mg/													0.000070	U								
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
n-Butylbenzene	ug/L	N	NS																						
N-Nitrosodi-n-propylamine	ug/L	N	NS	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	2	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
n-Propylbenzene	ug/L	N	NS																						
Naphthalene	ug/L	N	10.0 ug/l	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location				TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23	
Field Sample ID				TF-123(5-11-11)		TF-23(5-11-11)		TF-23(11-10-11)		TF-23(7-18-12)		TF-23(102312)		TF-23(061113)		TF-23(061113)SW		TF-123 111313		TF-23 111313		TF-23-061014		CVX-0040-06	
Date Sampled				05/11/2011		05/11/2011		11/10/2011		07/18/2012		10/23/2012		06/11/2013		06/11/2013		11/13/2013		11/13/2013		06/10/2014		11/11/2014	
SDG				1246861		1246861		1276051		1323156		1344432		1396584		1396587		1433988		1433988		1480955		1517916	
Sample Matrix				WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose				FD		REG		REG		REG		REG		REG		REG		FD		REG		REG		REG	
Sample Type			NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																						
Naphthalene	**ug/L**	**N**	**10.0 ug/l**																						
Nickel	**mg/L**	**N**	**0.1 mg/l**													0.0011	U								
Nitrobenzene	**ug/L**	**N**	**0.4 ug/l**	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	**ug/L**	**N**	**NS**																						
p-Chloro-m-cresol	**ug/L**	**N**	**1.0 ug/l**	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	**ug/L**	**N**	**NS**																						
Pentachlorophenol	**ug/L**	**N**	**1.0 ug/l**	3	U	3	U	1	U	1	U	1	U	1	UJ	1	UJ	1	U	1	U	1	U	1	U
pH	**SU**	**N**	**NS**													7.4		7		7					
Phenanthrene	**ug/L**	**N**	**50.0 ug/l**	1	U	1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Phenol	**ug/L**	**N**	**1.0 ug/l**	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U
Potassium	**mg/L**	**N**	**NS**													1.04									
Pyrene	**ug/L**	**N**	**50.0 ug/l**	1	U	1	U	0.1	U	0.1	U	0.1	J	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
sec-Butylbenzene	**ug/L**	**N**	**NS**																						
sec-Dichloropropane	**ug/L**	**N**	**NS**																						
Selenium	**mg/L**	**N**	**0.01 mg/l**													0.0075	U								
Silver	**mg/L**	**N**	**0.05 mg/l**													0.0012	U								
Sodium	**mg/L**	**N**	**20.0 mg/l**													64.6									
Styrene	**ug/L**	**N**	**5.0 ug/l**													1	U								
Sulfate (SO4)	**mg/L**	**N**	**250.0 mg/l**													13.5									
Sulfate (SO4)	**mg/L**	**Y**	**250.0 mg/l**															16.4	J	16.7	J				
t-Butylbenzene	**ug/L**	**N**	**NS**																						
tert-Amyl methyl ether	**ug/L**	**N**	**NS**													0.8	U								
Tertiary Butyl Alcohol	**ug/L**	**N**	**NS**													10	UJ								
Tetrachloroethene	**ug/L**	**N**	**5.0 ug/l**	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
Thallium	**mg/L**	**N**	**0.00050 mg/**													0.0057	U								
Toluene	**ug/L**	**N**	**5.0 ug/l**	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.5	U	0.5	U
Total Hardness As Caco3	**ug/L**	**N**	**NS**													237000									
Total Hardness As Caco3	**ug/L**	**Y**	**NS**															100000	J	281000	J				
trans-1,2-Dichloroethene	**ug/L**	**N**	**5.0 ug/l**													0.8	U								
trans-1,3-Dichloropropene	**ug/L**	**N**	**0.4 ug/l**	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Trichloroethene (Trichloroethylene)	**ug/L**	**N**	**5.0 ug/l**	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Trichlorofluoromethane (Freon 11)	**ug/L**	**N**	**5.0 ug/l**	2	U	2	U	2	U	2	UJ	2	U	2	U			2	U	2	U	0.5	U	0.5	U
Trihalomethanes (THM)	**ug/L**	**N**	**NS**																						
Vanadium	**mg/L**	**N**	**NS**													0.0013	U								
Vinyl chloride (Chloroethene)	**ug/L**	**N**	**2.0 ug/l**	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.5	U	0.5	U
Xylene (total)	**ug/L**	**N**	**5.0 ug/l**	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U
Zinc	**mg/L**	**N**	**2.0 mg/l**													0.0128	J								

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

Location			TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23	
Field Sample ID			CVX-0058-01		TF-23-W-5.26-151116		TF-23-W-5.26-160613		TF-23-W-5.26-161115		TF-23-W-5.26-170627		TF-23-WD-5.26-170627		TF-23-W-5.26-171031		TF-23-W-5.26-180612		TF-23-WD-5.26-180612		TF-23-W-5.26-181101	
Date Sampled			06/19/2015		11/16/2015		06/13/2016		11/15/2016		06/27/2017		06/27/2017		10/31/2017		06/12/2018		06/12/2018		11/01/2018	
SDG			1570824		1610359		1671783		1734549		1819683		1819683		1871380		1955779		1955779		2005546	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		REG		FD		REG		REG		FD		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																			
1,1 Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1,1,2-Tetrachloroethane	ug/L	N	NS																			
1,1,1-Trichloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
1,1,2,2-Tetrachloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1,2-Trichloroethane	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1-Dichloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,1-Dichloropropane	ug/L	N	NS																			
1,2,3-Trichlorobenzene	ug/L	N	NS																			
1,2,3-Trichloropropane	ug/L	N	0.04 ug/l																			
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	ug/L	N	5.0 ug/l																			
1,2,4-Trimethylbenzene	ug/L	N	NS																			
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	NS																			
1,2-Dibromoethane	ug/L	N	NS																			
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	ug/L	N	0.6 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
1,2-Dichloroethene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,2-Dichloropropane	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
1,3,5-Trimethylbenzene	ug/L	N	NS																			
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,3-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichloropropane	ug/L	N	5.0 ug/l																			
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	0.2	U
1,4-Dichlorobenzene	ug/L	N	3.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,2'-oxybis(2-chloropropane)	ug/L	N	NS																			
2,4,5-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4,6-Trichlorophenol	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dichlorophenol	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2,4-Dimethylphenol	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	3	U	3	U	3	U
2,4-Dinitrophenol	ug/L	N	10.0 ug/l	10	U	10	U	11	U	10	UJ	10	U	10	U	10	U	14	U	14	U	14	U
2,4-Dinitrotoluene	ug/L	N	5.0 ug/l	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone (Methyl ethyl ketone)	ug/L	N	50.0 ug/l																			
2-Chloroethyl vinyl ether	ug/L	N	NS	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	0.2	U
2-Chloronaphthalene	ug/L	N	10.0 ug/l	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Hexanone	ug/L	N	50.0 ug/l																			
2-Methyl-Naphthlalene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
2-Methylphenol (o-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U	2	U	2	U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	3	U	3	U	3	U
3,3'-Dichlorobenzidine	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	3	U	3	U	3	U
3-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	3	U	3	U	3	U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	1.0 ug/l	5	U	5	U	6	U	5	UJ	5	U	5	U	5	U	8	U	8	U	8	U
4-Bromophenylphenylether	ug/L	N	NS	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Chloroaniline	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	UJ	2	U	2	U	2	U	4	U	4	U	4	U
4-Chlorophenyl phenyl ether	ug/L	N	NS	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Isopropyltoluene	ug/L	N	NS																			
4-Methyl-2-pentanone	ug/L	N	NS																			
4-Methylphenol (p-Cresol)	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Nitroaniline	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.9	U	0.9	U	0.9	U
4-Nitrophenol	ug/L	N	1.0 ug/l	10	U	10	UJ	11	U	10	UJ	10	U	10	U	10	U	10	U	10	U	10	U
Acenaphthene	ug/L	N	20.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acenaphthylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Acetone	ug/L	N	50.0 ug/l																			
Acrolein	ug/L	N	NS																			
Acrylonitrile	ug/L	N	NS																			
Aluminum	mg/L	N	0.1 mg/l																			
Anthracene	ug/L	N	50.0 ug/l	0.1	UJ	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Antimony	mg/L	N	0.003 mg/l																			
Arsenic	mg/L	N	0.025 mg/l																			
Barium	mg/L	N	1.0 mg/l																			
Benzene	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Benzidine	ug/L	N	NS																			
Benzo(a)anthracene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(a)pyrene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U

Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

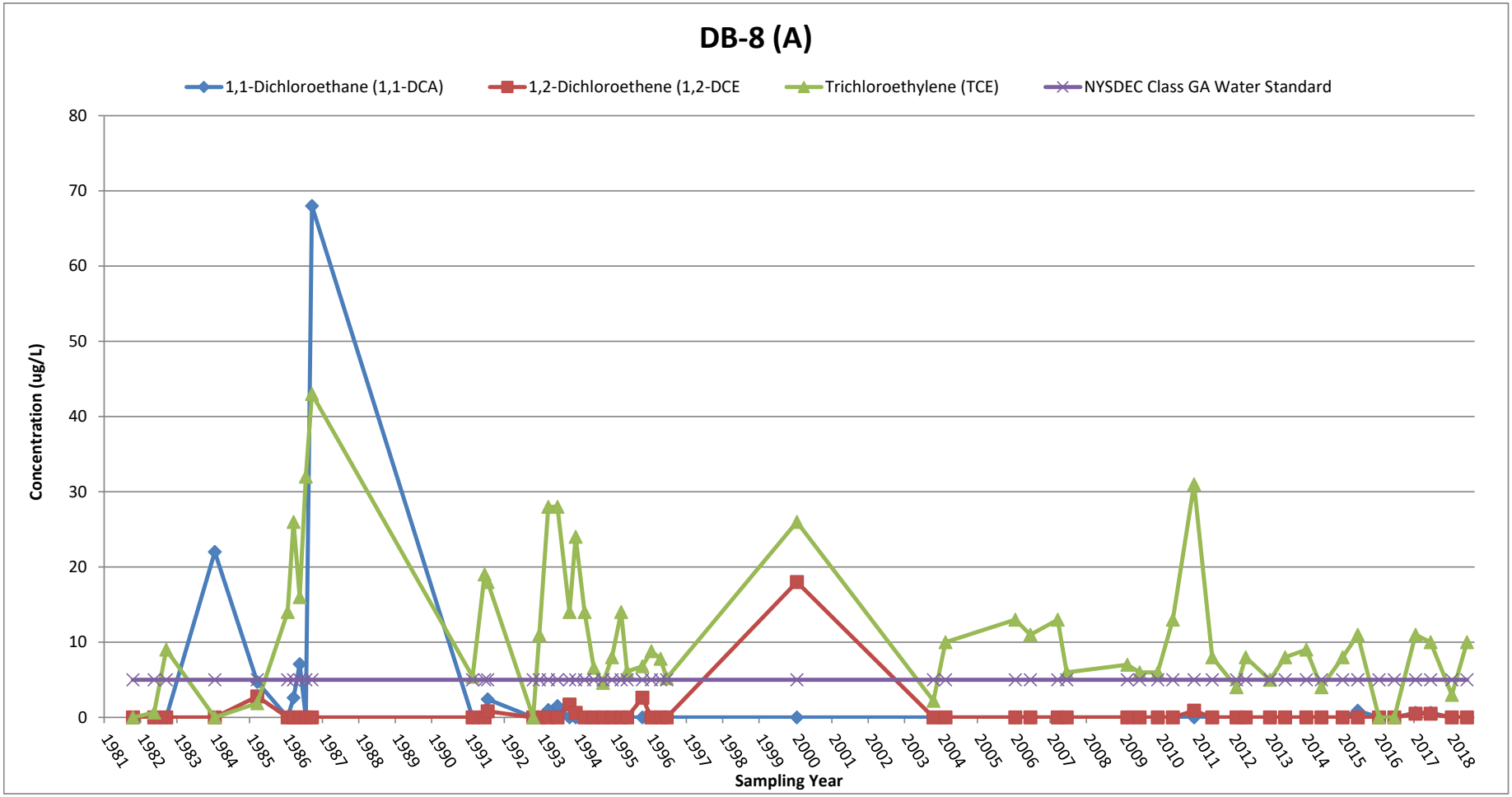
Location			TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23	
Field Sample ID			CVX-0058-01		TF-23-W-5.26-151116		TF-23-W-5.26-160613		TF-23-W-5.26-161115		TF-23-W-5.26-170627		TF-23-WD-5.26-170627		TF-23-W-5.26-171031		TF-23-W-5.26-180612		TF-23-WD-5.26-180612		TF-23-W-5.26-181101	
Date Sampled			06/19/2015		11/16/2015		06/13/2016		11/15/2016		06/27/2017		06/27/2017		10/31/2017		06/12/2018		06/12/2018		11/01/2018	
SDG			1570824		1610359		1671783		1734549		1819683		1819683		1871380		1955779		1955779		2005546	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		REG		FD		REG		REG		FD		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	Units	Filtered	Class GA																			
Benzo(b)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(g,h,i)perylene	mg/L	N	NS																			
Benzo(g,h,i)perylene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Benzo(k)fluoranthene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Beryllium	mg/L	N	0.003 mg/l																			
bis(2-Chloroethoxy)methane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Chloroethyl) ether	ug/L	N	1.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-chloroisopropyl) ether	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
bis(2-Ethylhexyl)phthalate	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	5	U	5	U	5	U
Bromobenzene	ug/L	N	NS																			
Bromochloromethane	ug/L	N	NS																			
Bromodichloromethane	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Bromoform	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	U	0.5	U	0.2	UJ
Bromomethane (Methyl bromide)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.3	U
Butylbenzylphthalate	ug/L	N	50.0 ug/l	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Cadmium	mg/L	N	0.005 mg/l																			
Calcium	mg/L	N	NS																			
Carbazole	ug/L	N	NS	0.5	UJ	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon disulfide	ug/L	N	60.0 ug/l																			
Carbon Tetrachloride	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	UJ	0.5	UJ	0.5	UJ	0.2	U
Chloride	mg/L	N	250.0 mg/l																			
Chloride	mg/L	Y	250.0 mg/l																			
Chlorobenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroethane	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloroform	ug/L	N	7.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chloromethane (Methyl chloride)	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Chromium	mg/L	N	0.05 mg/l																			
Chrysene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
cis-1,2-Dichloroethene	ug/L	N	5.0 ug/l																			
cis-1,3-Dichloropropene	ug/L	N	0.4 ug/l	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Cobalt	mg/L	N	0.005 mg/l																			
Copper	mg/L	N	0.2 mg/l																			
Di-n-butylphthalate	ug/L	N	50.0 ug/l	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Di-n-octylphthalate	ug/L	N	50.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	2	U	5	U	5	U	5	U
Dibenz(a,h)anthracene	ug/L	N	NS	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Dibenzofuran	ug/L	N	NS	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	ug/L	N	50.0 ug/l	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Dichlorodifluoromethane (Freon 12)	ug/L	N	NS																			
Diethylphthalate	ug/L	N	50.0 ug/l	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Diisopropyl ether	ug/L	N	NS																			
Dimethyl phthalate	ug/L	N	50.0 ug/l	2	UJ	2	U	2	U	2	UJ	2	U	2	U	2	U	2	U	2	U	2	U
Ethyl-t-butylether	ug/L	N	NS																			
Ethylbenzene	ug/L	N	5.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.4	U
Fluoranthene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Fluorene	ug/L	N	50.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobenzene	ug/L	N	0.04 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	ug/L	N	0.5 ug/l																			
Hexachlorocyclopentadiene	ug/L	N	5.0 ug/l	5	U	5	U	6	U	5	UJ	5	U	5	U	5	U	5	U	5	U	5	U
Hexachloroethane	ug/L	N	5.0 ug/l	1	U	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.002 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Iodomethane (Methyl iodide)	ug/L	N	NS																			
Iron	mg/L	N	0.3 mg/l																			
Isophorone	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Isopropylbenzene	ug/L	N	NS																			
Lead	mg/L	N	0.025 mg/l																			
Lead	mg/L	Y	0.025 mg/l	0.0047	U	0.0051	U	0.0051	U	0.0062	U	0.006	U	0.006	U	0.006	U	0.006	U	0.006	U	0.0071	U
Magnesium	mg/L	N	35.0 mg/l																			
Manganese	mg/L	N	0.3 mg/l																			
Mercury	mg/L	N	0.00070 mg/																			
Methyl-t-butyl ether	ug/L	N	10.0 ug/l	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Methylene chloride (Dichloromethane)	ug/L	N	5.0 ug/l	2	U	2	U	2	U	2	U	2	U	2	U	0.5	U	0.5	U	0.5	U	0.3	U
n-Butylbenzene	ug/L	N	NS																			
N-Nitrosodi-n-propylamine	ug/L	N	NS	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7	U	0.7	U	0.7	U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	50.0 ug/l	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7	U	0.7	U	0.7	U
n-Propylbenzene	ug/L	N	NS																			
Naphthalene	ug/L	N	10.0 ug/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U

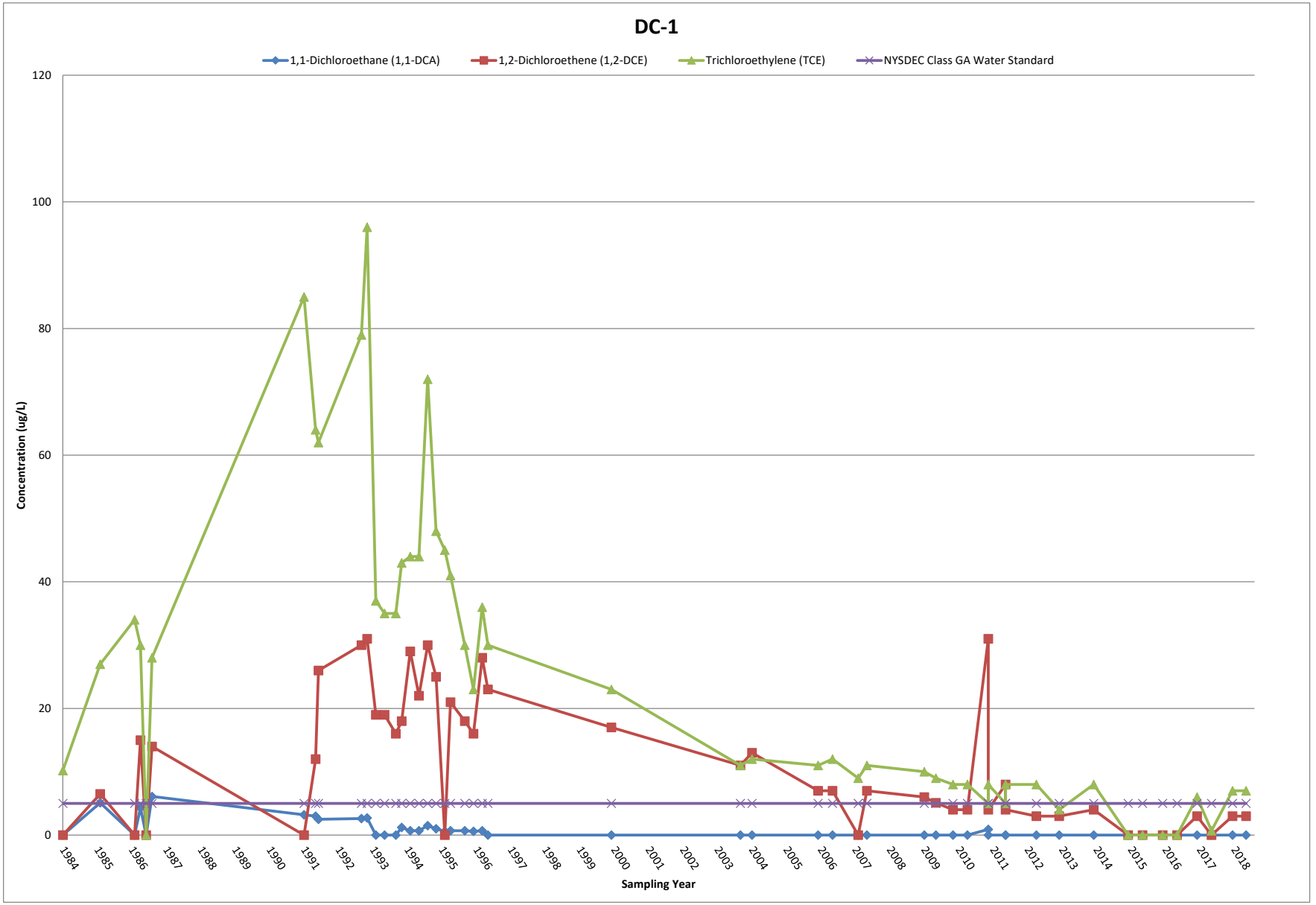
Historical Consent Order Groundwater Analytical Table
Former Texaco Research Center
Glenham (Beacon), New York

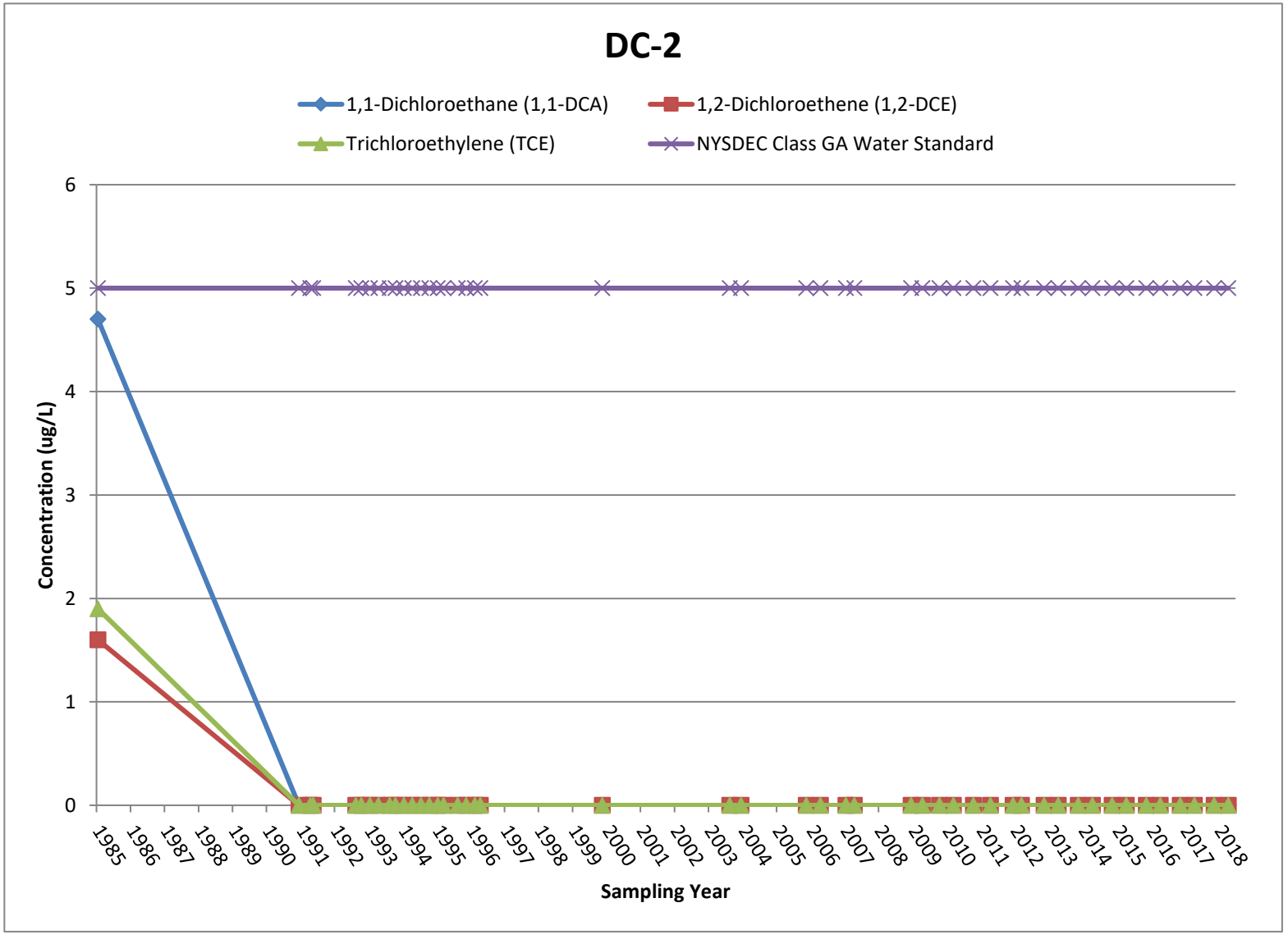
Location			TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23		TF-23	
Field Sample ID			CVX-0058-01		TF-23-W-5.26-151116		TF-23-W-5.26-160613		TF-23-W-5.26-161115		TF-23-W-5.26-170627		TF-23-WD-5.26-170627		TF-23-W-5.26-171031		TF-23-W-5.26-180612		TF-23-WD-5.26-180612		TF-23-W-5.26-181101	
Date Sampled			06/19/2015		11/16/2015		06/13/2016		11/15/2016		06/27/2017		06/27/2017		10/31/2017		06/12/2018		06/12/2018		11/01/2018	
SDG			1570824		1610359		1671783		1734549		1819683		1819683		1871380		1955779		1955779		2005546	
Sample Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER		WATER	
Sample Purpose			REG		REG		REG		REG		REG		FD		REG		REG		FD		REG	
Sample Type		NY_TOGS	GW		GW		GW		GW		GW		GW		GW		GW		GW		GW	
Parameter Name	**Units**	**Filtered**	**Class GA**																			
Naphthalene	**ug/L**	**N**	**10.0 ug/l**																			
Nickel	**mg/L**	**N**	**0.1 mg/l**																			
Nitrobenzene	**ug/L**	**N**	**0.4 ug/l**	0.5	U	0.5	U	0.6	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Chlorotoluene	**ug/L**	**N**	**NS**																			
p-Chloro-m-cresol	**ug/L**	**N**	**1.0 ug/l**	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
p-Chlorotoluene	**ug/L**	**N**	**NS**																			
Pentachlorophenol	**ug/L**	**N**	**1.0 ug/l**	1	UJ	1	UJ	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U	1	U
pH	**SU**	**N**	**NS**																			
Phenanthrene	**ug/L**	**N**	**50.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Phenol	**ug/L**	**N**	**1.0 ug/l**	0.5	U	0.5	U	0.6	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Potassium	**mg/L**	**N**	**NS**																			
Pyrene	**ug/L**	**N**	**50.0 ug/l**	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
sec-Butylbenzene	**ug/L**	**N**	**NS**																			
sec-Dichloropropane	**ug/L**	**N**	**NS**																			
Selenium	**mg/L**	**N**	**0.01 mg/l**																			
Silver	**mg/L**	**N**	**0.05 mg/l**																			
Sodium	**mg/L**	**N**	**20.0 mg/l**																			
Styrene	**ug/L**	**N**	**5.0 ug/l**																			
Sulfate (SO4)	**mg/L**	**N**	**250.0 mg/l**																			
Sulfate (SO4)	**mg/L**	**Y**	**250.0 mg/l**																			
t-Butylbenzene	**ug/L**	**N**	**NS**																			
tert-Amyl methyl ether	**ug/L**	**N**	**NS**																			
Tertiary Butyl Alcohol	**ug/L**	**N**	**NS**																			
Tetrachloroethene	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Thallium	**mg/L**	**N**	**0.00050 mg/**																			
Toluene	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Total Hardness As Caco3	**ug/L**	**N**	**NS**																			
Total Hardness As Caco3	**ug/L**	**Y**	**NS**																			
trans-1,2-Dichloroethene	**ug/L**	**N**	**5.0 ug/l**																			
trans-1,3-Dichloropropene	**ug/L**	**N**	**0.4 ug/l**	0.5	U	0.5	UJ	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trichloroethene (Trichloroethylene)	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trichlorofluoromethane (Freon 11)	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Trihalomethanes (THM)	**ug/L**	**N**	**NS**																			
Vanadium	**mg/L**	**N**	**NS**																			
Vinyl chloride (Chloroethene)	**ug/L**	**N**	**2.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.2	U
Xylene (total)	**ug/L**	**N**	**5.0 ug/l**	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1	U
Zinc	**mg/L**	**N**	**2.0 mg/l**																			

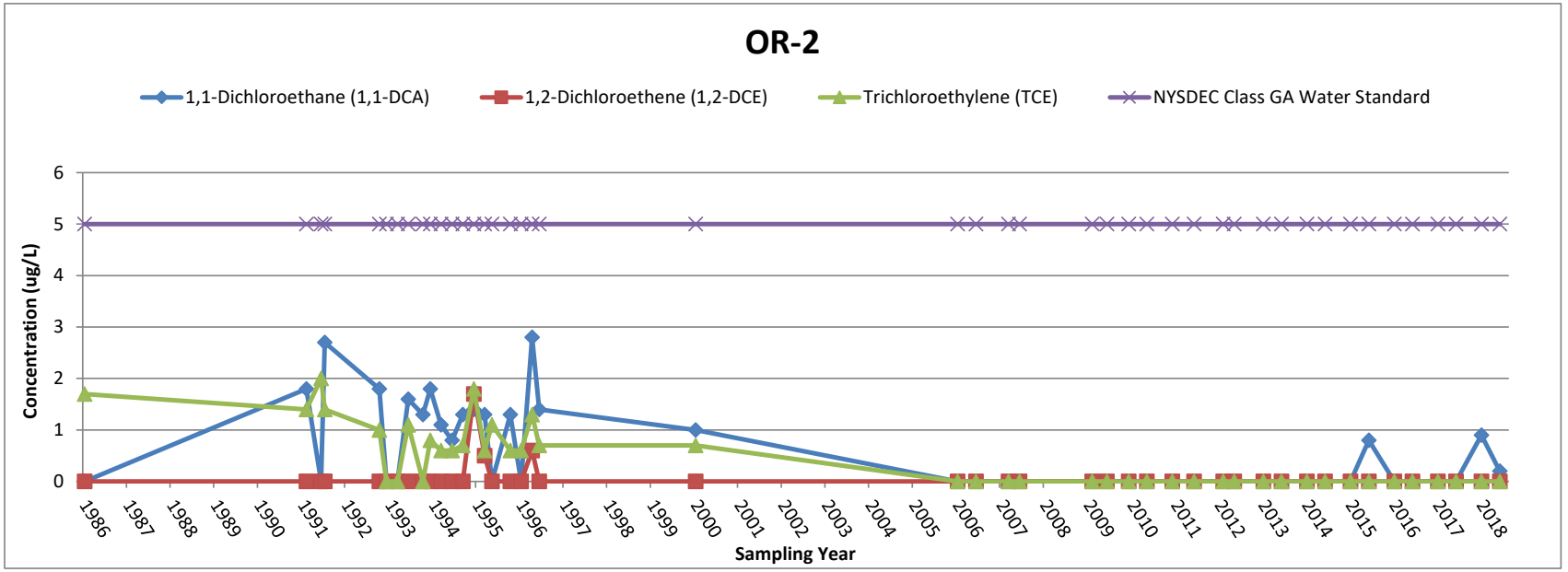
APPENDIX D

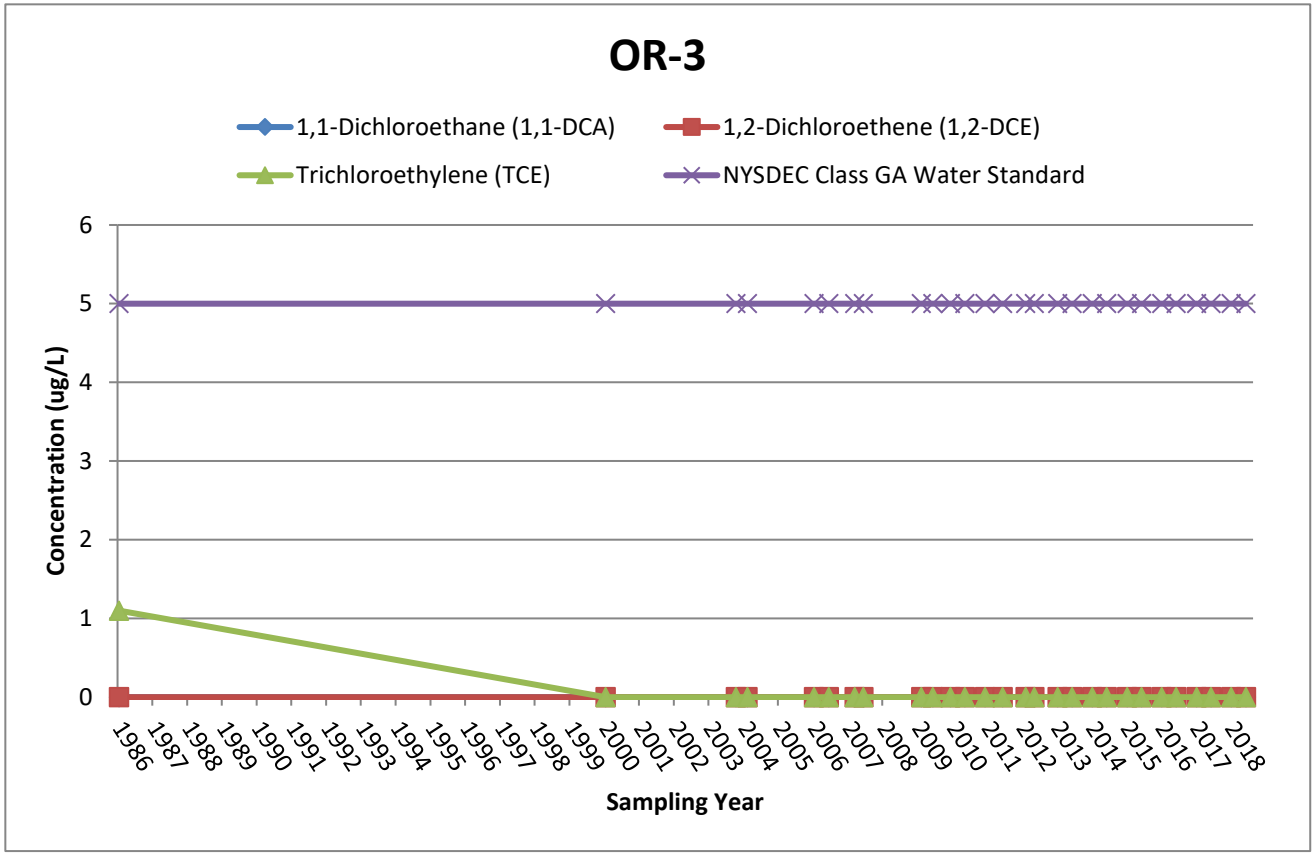
HISTORICAL CHEMICAL TREND ANALYSIS GRAPHS (1,1-DCA, 1,2-DCE, AND TCE)


DB-8 (A)
1,1-Dichloroethane (1,1-DCA)
1,2-Dichloroethene (1,2-DCE
Trichloroethylene (TCE)
NYSDEC Class GA Water Standard
Concentration (ug/L)
0
10
20
30
40
50
60
70
80
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Sampling Year


DC-1
1,1-Dichloroethane (1,1-DCA)
1,2-Dichloroethene (1,2-DCE)
Trichloroethylene (TCE)
NYSDEC Class GA Water Standard
Concentration (ug/L)
120
100
80
60
40
20
0
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Sampling Year


DC-2
1,1-Dichloroethane (1,1-DCA)
1,2-Dichloroethene (1,2-DCE)
Trichloroethylene (TCE)
NYSDEC Class GA Water Standard
Concentration (ug/L)
0
1
2
3
4
5
6
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Sampling Year


OR-2
1,1-Dichloroethane (1,1-DCA)
1,2-Dichloroethene (1,2-DCE)
Trichloroethylene (TCE)
NYSDEC Class GA Water Standard
Concentration (ug/L)
0
1
2
3
4
5
6
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Sampling Year


OR-3
1,1-Dichloroethane (1,1-DCA)
1,2-Dichloroethene (1,2-DCE)
Trichloroethylene (TCE)
NYSDEC Class GA Water Standard
Concentration (ug/L)
0
1
2
3
4
5
6
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
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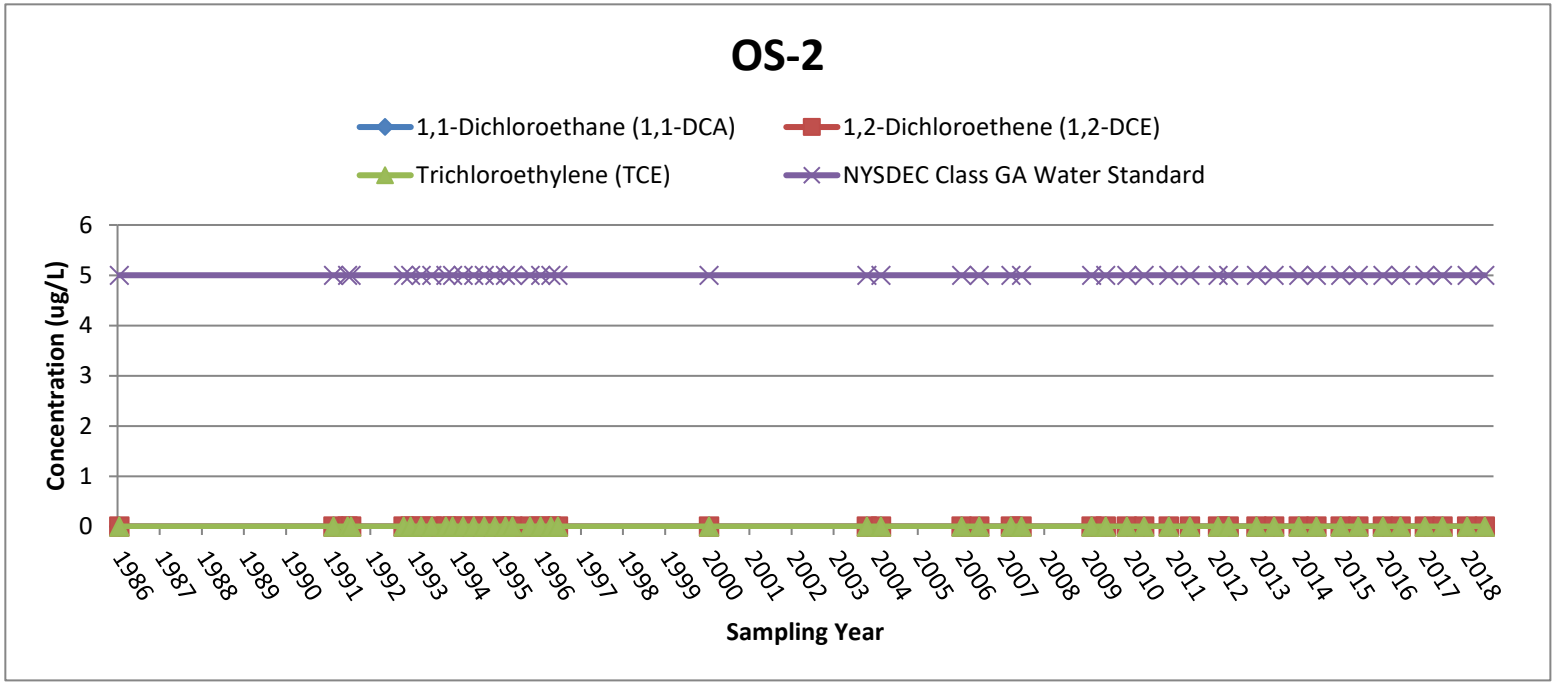
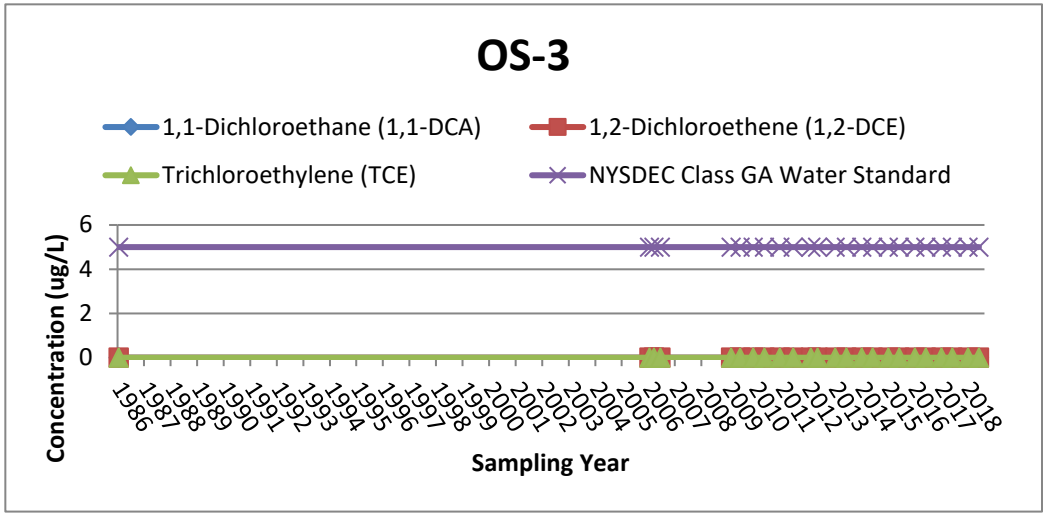
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Sampling Year


OS-2
1,1-Dichloroethane (1,1-DCA)
1,2-Dichloroethene (1,2-DCE)
Trichloroethylene (TCE)
NYSDEC Class GA Water Standard
Concentration (ug/L)
0
1
2
3
4
5
6
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Sampling Year


OS-3
1,1-Dichloroethane (1,1-DCA)
1,2-Dichloroethene (1,2-DCE)
Trichloroethylene (TCE)
NYSDEC Class GA Water Standard
Concentration (ug/L)
6
4
2
0
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
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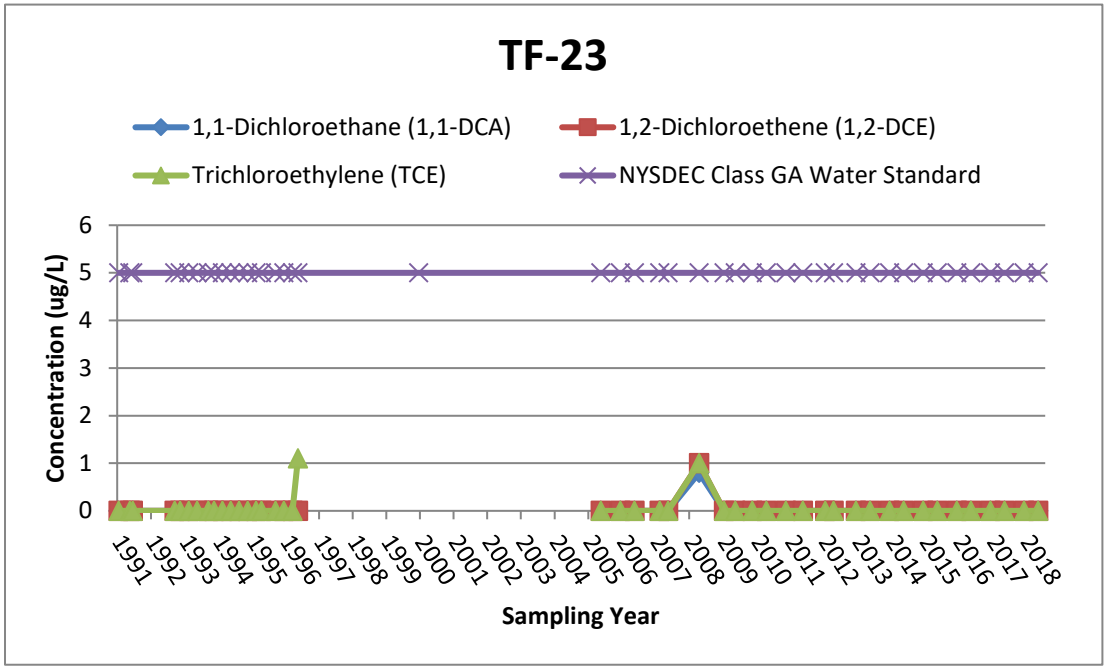
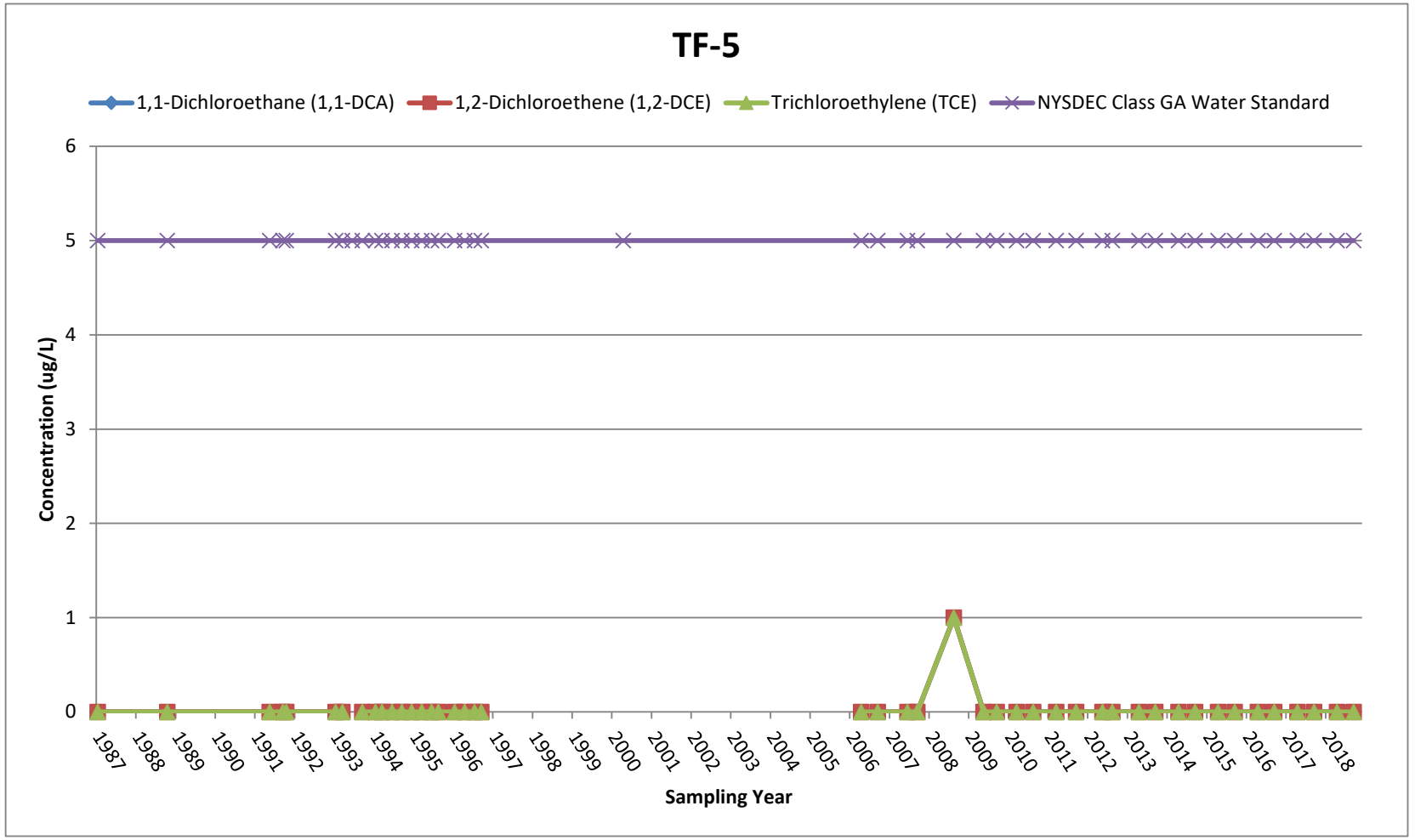
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Sampling Year


TF-23
1,1-Dichloroethane (1,1-DCA)
1,2-Dichloroethene (1,2-DCE)
Trichloroethylene (TCE)
NYSDEC Class GA Water Standard
Concentration (ug/L)
0
1
2
3
4
5
6
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Sampling Year


TF-5
1,1-Dichloroethane (1,1-DCA)
1,2-Dichloroethene (1,2-DCE)
Trichloroethylene (TCE)
NYSDEC Class GA Water Standard
Concentration (ug/L)
0
1
2
3
4
5
6
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
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2005
2006
2007
2008
2009
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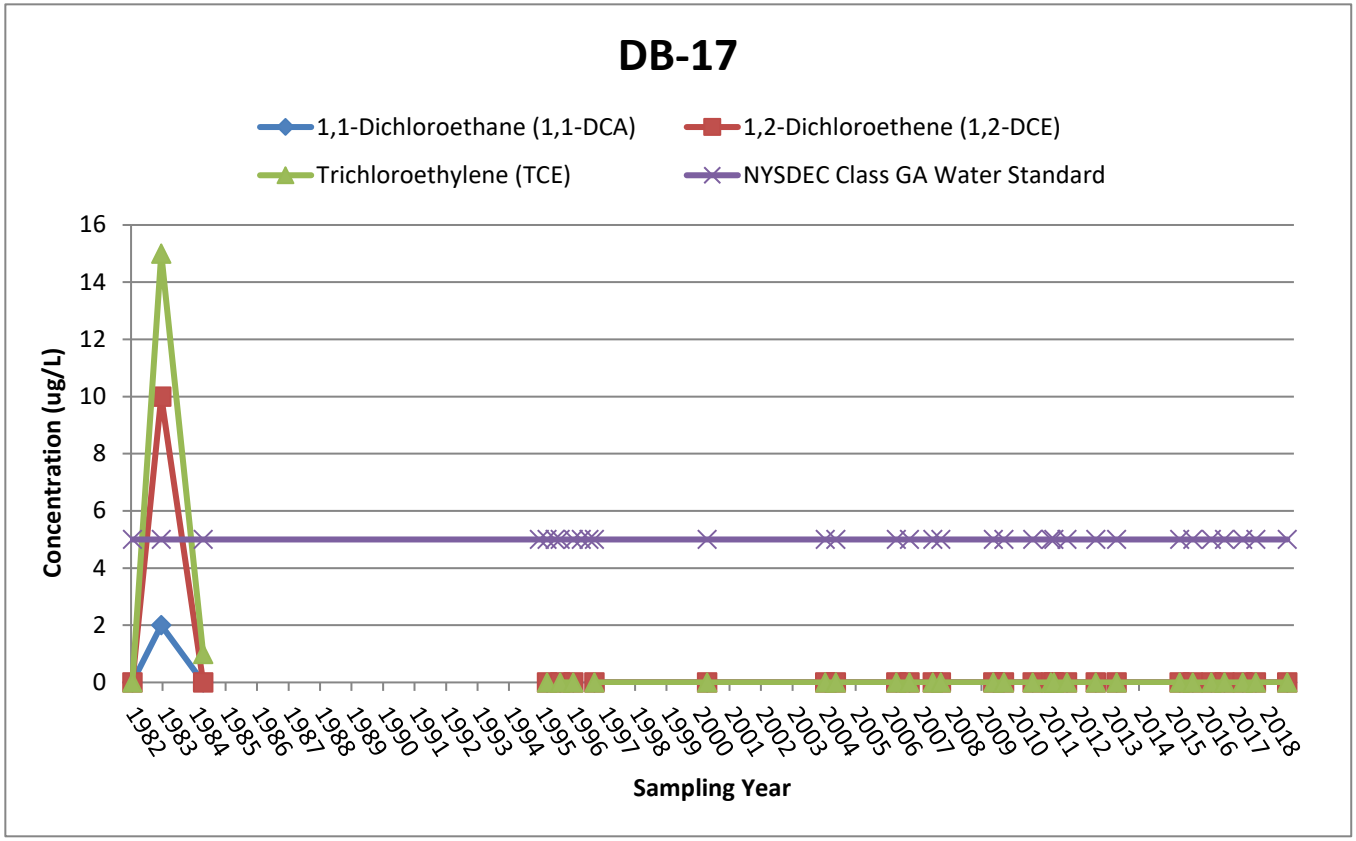
2011
2012
2013
2014
2015
2016
2017
2018
Sampling Year


DB-17
1,1-Dichloroethane (1,1-DCA)
1,2-Dichloroethene (1,2-DCE)
Trichloroethylene (TCE)
NYSDEC Class GA Water Standard
Concentration (ug/L)
0
2
4
6
8
10
12
14
16
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
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2005
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2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
Sampling Year

APPENDIX E

LABORATORY ANALYTICAL RESULTS WITH CHAIN-OF-CUSTODIES (JUNE 2018 AND NOVEMBER 2018)

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

NYSDEC ASP Category B Data Package

Prepared for:

Chevron Environmental Mgmt.
4800 Fournace Place
Bellaire TX 77401

Project: Beacon - NY Annual RCRA Event
Groundwater and Water Samples
Collected on 06/12/18-06/14/18

SDG# CBD50

GROUP	SAMPLE NUMBERS
1955779	9662302-9662315

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

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

Authorized by: Dana M Kauffman **Date:** **11/29/2018**

Dana M. Kauffman
Manager

Any questions or concerns you might have regarding this data package should be directed to your client representative, Megan Moeller at (717) 556-7261.

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

Table of Contents for SDG# CBD50

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

Sample Reference List for SDG Number CBD50 with a Data Package Type of NYSDEC B

11387 - Chevron Environmental Mgmt.

Project: Beacon - NY Annual RCRA Event

Lab Sample Number	Client Sample ID	Collection Date	Date Received
9662302	QA-WT1-180614	06/14/2018 00:00	06/15/2018 09:50
9662303	TF-23-WD-5.26-180612	06/12/2018 12:00	06/15/2018 09:50
9662304	TF-5-W-4.59-180612	06/12/2018 13:59	06/15/2018 09:50
9662305	TF-23-W-5.26-180612	06/12/2018 14:45	06/15/2018 09:50
9662306	DC-2-W-7.50-180612	06/12/2018 15:27	06/15/2018 09:50
9662307	DC-1-W-2.00-180612	06/12/2018 15:44	06/15/2018 09:50
9662308	DB-8A-W-5.00-180612	06/12/2018 16:06	06/15/2018 09:50
9662309	OS-2-W-6.00-180613	06/13/2018 12:48	06/15/2018 09:50
9662310	OR-2-W-26.00-180613	06/13/2018 13:32	06/15/2018 09:50
9662311	OR-2-W-26.00-180613 MS	06/13/2018 13:32	06/15/2018 09:50
9662312	OR-2-W-26.00-180613 MSD	06/13/2018 13:32	06/15/2018 09:50
9662313	OR-2-W-26.00-180613 DUP	06/13/2018 13:32	06/15/2018 09:50
9662314	OR-3-W-65.50-180614	06/14/2018 09:36	06/15/2018 09:50
9662315	OS-3-W-6.00-180614	06/14/2018 10:54	06/15/2018 09:50

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Sample pH Log

SDG: CBD50

LLI Sample Number	Bottle Code	Actual pH	Exp. pH	*pH Check Code	Adj. pH	Adjusted Date	Adjusted Time	Preservative Added	Preservative Lot #	LLI Supplied Bottle?	Sulfide Present?	Corrective Substance	CS Lot #	**Chlorine Present?	Corrective Substance	CS Lot #	Record Date	Employee
9662302	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	6/20/2018 4:14:29PM	12641
9662303	015A	7	5-7	PC	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:24:33PM	1532
9662303	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	6/20/2018 2:52:30PM	12641
9662303	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/18/2018 12:48:15PM	12644
9662303	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:03:50PM	1532
9662303	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:04:48PM	1532
9662304	015A	7	5-7	PC	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:25:12PM	1532
9662304	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	6/20/2018 2:52:30PM	12641
9662304	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/18/2018 2:39:17PM	12644
9662304	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:04:03PM	1532
9662304	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:04:21PM	1532
9662305	015A	7	5-7	PC	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:25:37PM	1532
9662305	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	6/20/2018 2:52:30PM	12641
9662305	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/18/2018 1:38:30PM	12644
9662305	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:03:46PM	1532
9662305	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:04:45PM	1532
9662306	015A	7	5-7	PC	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:24:46PM	1532
9662306	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	6/20/2018 2:52:30PM	12641
9662306	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/18/2018 1:47:41PM	12644
9662306	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:04:00PM	1532
9662306	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:04:18PM	1532
9662307	015A	7	5-7	PC	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:23:53PM	1532
9662307	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	6/20/2018 2:52:30PM	12641
9662307	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/18/2018 1:37:28PM	12644
9662307	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:03:42PM	1532
9662307	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:04:42PM	1532
9662308	015A	7	5-7	PC	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:26:05PM	1532
9662308	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	6/20/2018 2:52:30PM	12641
9662308	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/18/2018 2:44:18PM	12644
9662308	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:03:57PM	1532
9662308	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:04:15PM	1532
9662309	015A	7	5-7	PC	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:24:07PM	1532
9662309	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	6/20/2018 2:52:30PM	12641
9662309	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/18/2018 2:17:45PM	12644
9662309	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:05:01PM	1532
9662309	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:05:15PM	1532
9662310	015A	7	5-7	PC	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:24:58PM	1532
9662310	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	6/20/2018 2:52:30PM	12641

LLI Sample Number	Bottle Code	Actual pH	Exp. pH	*pH Check Code	Adj. pH	Adjusted Date	Adjusted Time	Preservative Added	Preservative Lot #	LLI Supplied Bottle?	Sulfide Present?	Corrective Substance	CS Lot #	**Chlorine Present?	Corrective Substance	CS Lot #	Record Date	Employee
9662310	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/18/2018 1:39:29PM	12644
9662310	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:04:35PM	1532
9662310	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:05:29PM	1532
9662311	015A	7	5-7	PC	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:25:24PM	1532
9662311	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	6/20/2018 2:52:30PM	12641
9662311	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/18/2018 2:46:14PM	12644
9662311	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:04:58PM	1532
9662311	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:05:12PM	1532
9662312	015A	7	5-7	PC	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:24:20PM	1532
9662312	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	6/20/2018 2:52:31PM	12641
9662312	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/18/2018 2:36:39PM	12644
9662312	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:04:32PM	1532
9662312	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:05:26PM	1532
9662314	015A	7	5-7	PC	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:25:52PM	1532
9662314	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	6/20/2018 2:52:31PM	12641
9662314	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/18/2018 1:57:33PM	12644
9662314	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:04:55PM	1532
9662314	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:05:09PM	1532
9662315	015A	7	5-7	PC	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:26:19PM	1532
9662315	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	6/20/2018 2:52:31PM	12641
9662315	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/18/2018 2:15:33PM	12644
9662315	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:04:29PM	1532
9662315	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	6/15/2018 4:05:24PM	1532

***pH Check Code Key**
PK = Original container checked - pH is within the correct range. (No preservative was added)
PA = Original container checked - pH adjusted to correct range. (Preservative was added)
PV = Volatile container checked
PC = pH checked (unpreserved container)
SPK = Subsampled from an original container. Original container checked - pH is within correct range
SPA = Subsampled from an original container. Subsample container checked - pH adjusted to correct range.
SPC = Subsampled from an original container. pH checked (unpreserved container).
SUP = Subsampled from original container. Unable to be preserved due to the matrix of the sample.
UP = Unable to preserve due to matrix of the sample.
NA = Not applicable

****Chlorine Present Code Key**
NA = Chlorine Not Checked
Y = Chlorine Present
N = Chlorine Not Present

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01163 GC/MS VOA Water Prep

An undiluted aliquot of the water sample or a dilution of the sample is purged with an inert gas and the volatiles are collected on an adsorbent trap that is subsequently desorbed onto a gas chromatographic column.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 5030C, May 2003.

11997 VOCs- 5ml Water by 8260C

The water sample is purged and the volatile compounds are collected on a sorbent trap that is subsequently desorbed onto the GC/MS system for chromatographic and mass spectral analysis.

Reference: Volatile Organic Compounds by Gas Chromatography/ Mass Spectrometry (GC/MS), SW-846 Method 8260C, August 2006.

10635 ICP-WW, 3005A (tot rec) - U4

The sample is digested with nitric acid and hydrochloric acid.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3005A, July 1992

07055 Lead

The solution resulting from the metals digestion is analyzed by Trace ICP.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 6010C, February 2007.

11010 8270D BNA Extraction

The sample aliquot is extracted with methylene chloride by either separatory funnel or liquid/liquid apparatus. Extraction is performed at both a pH of 11 and 2. The extract is concentrated prior to analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3510C, Rev 3, December 1996

14241 SVOAs 8270D MINI

The sample extract is analyzed by capillary column Gas Chromatography/Mass Spectrometry.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8270D, February 2007.

Analysis Reports / Field Chain of Custody

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ANALYSIS REPORT

Prepared by:

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

Prepared for:

Chevron Environmental Mgmt.
4800 Fournace Place
Bellaire TX 77401

Report Date: November 19, 2018 10:36

Project: Beacon - NY Annual RCRA Event

Account #: 11387
Group Number: 1955779
SDG: CBD50
PO Number: 0015295390
Release Number: HENDRICKSON
State of Sample Origin: NY

Electronic Copy To	Parsons Engineering Science	Attn: Ed Ashton
Electronic Copy To	Parsons	Attn: Craig Butler
Electronic Copy To	Parsons	Attn: Heather Fettig

Respectfully Submitted,

Megan A. Moeller
Senior Specialist

(717) 556-7261

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

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
QA-WT1-180614 Water	06/14/2018	9662302
TF-23-WD-5.26-180612 Grab Groundwater	06/12/2018 12:00	9662303
TF-5-W-4.59-180612 Grab Groundwater	06/12/2018 13:59	9662304
TF-23-W-5.26-180612 Grab Groundwater	06/12/2018 14:45	9662305
DC-2-W-7.50-180612 Grab Groundwater	06/12/2018 15:27	9662306
DC-1-W-2.00-180612 Grab Groundwater	06/12/2018 15:44	9662307
DB-8A-W-5.00-180612 Grab Groundwater	06/12/2018 16:06	9662308
OS-2-W-6.00-180613 Grab Groundwater	06/13/2018 12:48	9662309
OR-2-W-26.00-180613 Grab Groundwater	06/13/2018 13:32	9662310
OR-2-W-26.00-180613 MS Grab Groundwater	06/13/2018 13:32	9662311
OR-2-W-26.00-180613 MSD Grab Groundwater	06/13/2018 13:32	9662312
OR-2-W-26.00-180613 DUP Grab Groundwater	06/13/2018 13:32	9662313
OR-3-W-65.50-180614 Grab Groundwater	06/14/2018 09:36	9662314
OS-3-W-6.00-180614 Grab Groundwater	06/14/2018 10:54	9662315

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

Sample Description: **QA-WT1-180614 Water**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/14/2018
SDG#: CBD50-01TB

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662302
ELLE Group #: 1955779
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.5	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1
11997	Bromoform	75-25-2	N.D.	0.5	1
11997	Bromomethane	74-83-9	N.D.	0.5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1
11997	Chloroethane	75-00-3	N.D.	0.5	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.5	1
11997	Chloromethane	74-87-3	N.D.	0.5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.5	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
11997	Methylene Chloride	75-09-2	N.D.	0.5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1
11997	Toluene	108-88-3	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5181701AA	06/20/2018 00:05	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5181701AA	06/20/2018 00:05	Patrick T Herres	1

Sample Description: **TF-23-WD-5.26-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 12:00
SDG#: CBD50-02FD

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662303
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.5	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1
11997	Bromoform	75-25-2	N.D.	0.5	1
11997	Bromomethane	74-83-9	N.D.	0.5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1
11997	Chloroethane	75-00-3	N.D.	0.5	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.5	1
11997	Chloromethane	74-87-3	N.D.	0.5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.5	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
11997	Methylene Chloride	75-09-2	N.D.	0.5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1
11997	Toluene	108-88-3	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **TF-23-WD-5.26-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 12:00
SDG#: CBD50-02FD

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662303
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **TF-23-WD-5.26-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 12:00
SDG#: CBD50-02FD

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662303
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0060	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5181701AA	06/19/2018 21:33	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5181701AA	06/19/2018 21:33	Patrick T Herres	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18169WAM026	06/20/2018 15:40	Brandon H Smith	1
11010	8270D BNA Extraction	SW-846 3510C	1	18169WAM026	06/19/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	181701063501	06/20/2018 15:31	Cindy M Gehman	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	181701063501	06/20/2018 06:50	Nicholas W Shroyer	1

Sample Description: **TF-5-W-4.59-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 13:59
SDG#: CBD50-03

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662304
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.5	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1
11997	Bromoform	75-25-2	N.D.	0.5	1
11997	Bromomethane	74-83-9	N.D.	0.5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1
11997	Chloroethane	75-00-3	N.D.	0.5	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.5	1
11997	Chloromethane	74-87-3	N.D.	0.5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.5	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
11997	Methylene Chloride	75-09-2	N.D.	0.5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1
11997	Toluene	108-88-3	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **TF-5-W-4.59-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 13:59
SDG#: CBD50-03

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662304
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **TF-5-W-4.59-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 13:59
SDG#: CBD50-03

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662304
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0060	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5181701AA	06/19/2018 21:55	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5181701AA	06/19/2018 21:55	Patrick T Herres	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18169WAM026	06/20/2018 16:08	Brandon H Smith	1
11010	8270D BNA Extraction	SW-846 3510C	1	18169WAM026	06/19/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	181701063501	06/20/2018 15:40	Cindy M Gehman	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	181701063501	06/20/2018 06:50	Nicholas W Shroyer	1

Sample Description: **TF-23-W-5.26-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 14:45
SDG#: CBD50-04

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662305
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.5	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1
11997	Bromoform	75-25-2	N.D.	0.5	1
11997	Bromomethane	74-83-9	N.D.	0.5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1
11997	Chloroethane	75-00-3	N.D.	0.5	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.5	1
11997	Chloromethane	74-87-3	N.D.	0.5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.5	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
11997	Methylene Chloride	75-09-2	N.D.	0.5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1
11997	Toluene	108-88-3	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **TF-23-W-5.26-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 14:45
SDG#: CBD50-04

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662305
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **TF-23-W-5.26-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 14:45
SDG#: CBD50-04

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662305
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0060	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5181701AA	06/19/2018 22:17	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5181701AA	06/19/2018 22:17	Patrick T Herres	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18169WAM026	06/20/2018 16:36	Brandon H Smith	1
11010	8270D BNA Extraction	SW-846 3510C	1	18169WAM026	06/19/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	181701063501	06/20/2018 15:44	Cindy M Gehman	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	181701063501	06/20/2018 06:50	Nicholas W Shroyer	1

Sample Description: **DC-2-W-7.50-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 15:27
SDG#: CBD50-05

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662306
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.5	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1
11997	Bromoform	75-25-2	N.D.	0.5	1
11997	Bromomethane	74-83-9	N.D.	0.5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1
11997	Chloroethane	75-00-3	N.D.	0.5	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.5	1
11997	Chloromethane	74-87-3	N.D.	0.5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.5	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
11997	Methylene Chloride	75-09-2	N.D.	0.5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1
11997	Toluene	108-88-3	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **DC-2-W-7.50-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 15:27
SDG#: CBD50-05

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662306
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	15	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **DC-2-W-7.50-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 15:27
SDG#: CBD50-05

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662306
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0060	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5181701AA	06/19/2018 22:38	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5181701AA	06/19/2018 22:38	Patrick T Herres	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18169WAM026	06/20/2018 17:05	Brandon H Smith	1
11010	8270D BNA Extraction	SW-846 3510C	1	18169WAM026	06/19/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	181701063501	06/20/2018 15:47	Cindy M Gehman	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	181701063501	06/20/2018 06:50	Nicholas W Shroyer	1

Sample Description: **DC-1-W-2.00-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 15:44
SDG#: CBD50-06

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662307
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.5	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1
11997	Bromoform	75-25-2	N.D.	0.5	1
11997	Bromomethane	74-83-9	N.D.	0.5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1
11997	Chloroethane	75-00-3	N.D.	0.5	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.5	1
11997	Chloromethane	74-87-3	N.D.	0.5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
11997	1,2-Dichloroethene (Total)	540-59-0	3	0.5	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
11997	Methylene Chloride	75-09-2	N.D.	0.5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1
11997	Toluene	108-88-3	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
11997	Trichloroethene	79-01-6	7	0.5	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **DC-1-W-2.00-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 15:44
SDG#: CBD50-06

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662307
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	15	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **DC-1-W-2.00-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 15:44
SDG#: CBD50-06

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662307
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0060	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5181701AA	06/19/2018 23:00	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5181701AA	06/19/2018 23:00	Patrick T Herres	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18169WAM026	06/20/2018 17:34	Brandon H Smith	1
11010	8270D BNA Extraction	SW-846 3510C	1	18169WAM026	06/19/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	181701063501	06/20/2018 15:50	Cindy M Gehman	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	181701063501	06/20/2018 06:50	Nicholas W Shroyer	1

Sample Description: **DB-8A-W-5.00-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 16:06
SDG#: CBD50-07

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662308
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.5	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1
11997	Bromoform	75-25-2	N.D.	0.5	1
11997	Bromomethane	74-83-9	N.D.	0.5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1
11997	Chloroethane	75-00-3	N.D.	0.5	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.5	1
11997	Chloromethane	74-87-3	N.D.	0.5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.5	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
11997	Methylene Chloride	75-09-2	N.D.	0.5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1
11997	Toluene	108-88-3	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
11997	Trichloroethene	79-01-6	3	0.5	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **DB-8A-W-5.00-180612 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 16:06
SDG#: CBD50-07

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662308
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	2 J	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **DB-8A-W-5.00-180612 Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/12/2018 16:06
SDG#: CBD50-07

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662308
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0060	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5181701AA	06/19/2018 23:22	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5181701AA	06/19/2018 23:22	Patrick T Herres	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18169WAM026	06/20/2018 18:03	Brandon H Smith	1
11010	8270D BNA Extraction	SW-846 3510C	1	18169WAM026	06/19/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	181701063501	06/20/2018 15:53	Cindy M Gehman	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	181701063501	06/20/2018 06:50	Nicholas W Shroyer	1

Sample Description: **OS-2-W-6.00-180613 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/13/2018 12:48
SDG#: CBD50-08

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662309
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.5	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1
11997	Bromoform	75-25-2	N.D.	0.5	1
11997	Bromomethane	74-83-9	N.D.	0.5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1
11997	Chloroethane	75-00-3	N.D.	0.5	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.5	1
11997	Chloromethane	74-87-3	N.D.	0.5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.5	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
11997	Methylene Chloride	75-09-2	N.D.	0.5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1
11997	Toluene	108-88-3	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **OS-2-W-6.00-180613 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/13/2018 12:48
SDG#: CBD50-08

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662309
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **OS-2-W-6.00-180613 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/13/2018 12:48
SDG#: CBD50-08

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662309
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0060	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5181701AA	06/20/2018 00:48	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5181701AA	06/20/2018 00:48	Patrick T Herres	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18169WAM026	06/20/2018 18:31	Brandon H Smith	1
11010	8270D BNA Extraction	SW-846 3510C	1	18169WAM026	06/19/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	181701063501	06/20/2018 15:56	Cindy M Gehman	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	181701063501	06/20/2018 06:50	Nicholas W Shroyer	1

Sample Description: **OR-2-W-26.00-180613 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/13/2018 13:32
SDG#: CBD50-09BKG

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662310
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.5	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1
11997	Bromoform	75-25-2	N.D.	0.5	1
11997	Bromomethane	74-83-9	N.D.	0.5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1
11997	Chloroethane	75-00-3	N.D.	0.5	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.5	1
11997	Chloromethane	74-87-3	N.D.	0.5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
11997	1,1-Dichloroethane	75-34-3	0.9 J	0.5	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.5	1
11997	1,2-Dichloropropane	78-87-5	0.9 J	0.5	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
11997	Methylene Chloride	75-09-2	N.D.	0.5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1
11997	Toluene	108-88-3	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **OR-2-W-26.00-180613 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/13/2018 13:32
SDG#: CBD50-09BKG

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662310
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **OR-2-W-26.00-180613 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/13/2018 13:32
SDG#: CBD50-09BKG

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662310
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0060	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5181701AA	06/20/2018 01:10	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5181701AA	06/20/2018 01:10	Patrick T Herres	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18169WAM026	06/20/2018 10:59	Brandon H Smith	1
11010	8270D BNA Extraction	SW-846 3510C	1	18169WAM026	06/19/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	181701063501	06/20/2018 15:09	Cindy M Gehman	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	181701063501	06/20/2018 06:50	Nicholas W Shroyer	1

Sample Description: **OR-2-W-26.00-180613 MS Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/13/2018 13:32
SDG#: CBD50-09MS

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662311
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	24	0.5	1
11997	Bromodichloromethane	75-27-4	22	0.5	1
11997	Bromoform	75-25-2	18	0.5	1
11997	Bromomethane	74-83-9	23	0.5	1
11997	Carbon Tetrachloride	56-23-5	30	0.5	1
11997	Chlorobenzene	108-90-7	21	0.5	1
11997	Chloroethane	75-00-3	22	0.5	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	19	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	24	0.5	1
11997	Chloromethane	74-87-3	21	0.5	1
11997	Dibromochloromethane	124-48-1	20	0.5	1
11997	1,2-Dichlorobenzene	95-50-1	20	1	1
11997	1,3-Dichlorobenzene	541-73-1	20	1	1
11997	1,4-Dichlorobenzene	106-46-7	20	1	1
11997	1,1-Dichloroethane	75-34-3	25	0.5	1
11997	1,2-Dichloroethane	107-06-2	25	0.5	1
11997	1,1-Dichloroethene	75-35-4	27	0.5	1
11997	1,2-Dichloroethene (Total)	540-59-0	48	0.5	1
11997	1,2-Dichloropropane	78-87-5	25	0.5	1
11997	cis-1,3-Dichloropropene	10061-01-5	20	0.5	1
11997	trans-1,3-Dichloropropene	10061-02-6	19	0.5	1
11997	Ethylbenzene	100-41-4	23	0.5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	25	0.5	1
11997	Methylene Chloride	75-09-2	24	0.5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	19	0.5	1
11997	Tetrachloroethene	127-18-4	23	0.5	1
11997	Toluene	108-88-3	22	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	26	0.5	1
11997	1,1,2-Trichloroethane	79-00-5	21	0.5	1
11997	Trichloroethene	79-01-6	24	0.5	1
11997	Trichlorofluoromethane	75-69-4	28	0.5	1
11997	Vinyl Chloride	75-01-4	22	0.5	1
11997	Xylene (Total)	1330-20-7	66	0.5	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	49	0.1	1
14241	Acenaphthylene	208-96-8	47	0.1	1
14241	Anthracene	120-12-7	49	0.1	1
14241	Benzo(a)anthracene	56-55-3	49	0.1	1
14241	Benzo(a)pyrene	50-32-8	49	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	47	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	39	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	52	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	48	0.5	1
14241	Butylbenzylphthalate	85-68-7	47	2	1
14241	Di-n-butylphthalate	84-74-2	48	2	1
14241	Carbazole	86-74-8	50	0.5	1

Sample Description: **OR-2-W-26.00-180613 MS Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/13/2018 13:32
SDG#: CBD50-09MS

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662311
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	44	0.5	1
14241	4-Chloroaniline	106-47-8	34	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	42	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	42	0.5	1
14241	2-Chloronaphthalene	91-58-7	45	0.4	1
14241	2-Chlorophenol	95-57-8	43	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	45	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	46	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	49	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	39	0.1	1
14241	Dibenzofuran	132-64-9	46	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	43	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	41	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	41	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	43	3	1
14241	2,4-Dichlorophenol	120-83-2	44	0.5	1
14241	Diethylphthalate	84-66-2	45	2	1
14241	2,4-Dimethylphenol	105-67-9	33	3	1
14241	Dimethylphthalate	131-11-3	43	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	38	8	1
14241	2,4-Dinitrophenol	51-28-5	44	15	1
14241	2,4-Dinitrotoluene	121-14-2	50	1	1
14241	2,6-Dinitrotoluene	606-20-2	51	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	46	5	1
14241	Fluoranthene	206-44-0	49	0.1	1
14241	Fluorene	86-73-7	47	0.1	1
14241	Hexachlorobenzene	118-74-1	46	0.1	1
14241	Hexachlorobutadiene	87-68-3	38	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	73	5	1
14241	Hexachloroethane	67-72-1	38	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	38	0.1	1
14241	Isophorone	78-59-1	45	0.5	1
14241	2-Methylnaphthalene	91-57-6	45	0.1	1
14241	2-Methylphenol	95-48-7	40	0.5	1
14241	4-Methylphenol	106-44-5	40	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	44	0.1	1
14241	2-Nitroaniline	88-74-4	49	2	1
14241	3-Nitroaniline	99-09-2	39	3	1
14241	4-Nitroaniline	100-01-6	44	0.9	1
14241	Nitrobenzene	98-95-3	43	0.5	1
14241	2-Nitrophenol	88-75-5	45	3	1
14241	4-Nitrophenol	100-02-7	33	10	1

Sample Description: **OR-2-W-26.00-180613 MS Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/13/2018 13:32
SDG#: CBD50-09MS

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662311
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	46	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	46	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	47	5	1
14241	Pentachlorophenol	87-86-5	30	1	1
14241	Phenanthrene	85-01-8	50	0.1	1
14241	Phenol	108-95-2	26	0.5	1
14241	Pyrene	129-00-0	47	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	43	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	46	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	43	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	0.147	0.0060	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5181701AA	06/20/2018 01:32	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5181701AA	06/20/2018 01:32	Patrick T Herres	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18169WAM026	06/20/2018 11:27	Brandon H Smith	1
11010	8270D BNA Extraction	SW-846 3510C	1	18169WAM026	06/19/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	181701063501	06/20/2018 15:19	Cindy M Gehman	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	181701063501	06/20/2018 06:50	Nicholas W Shroyer	1

Sample Description: **OR-2-W-26.00-180613 MSD Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/13/2018 13:32
SDG#: CBD50-09MSD

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662312
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	24	0.5	1
11997	Bromodichloromethane	75-27-4	22	0.5	1
11997	Bromoform	75-25-2	18	0.5	1
11997	Bromomethane	74-83-9	23	0.5	1
11997	Carbon Tetrachloride	56-23-5	29	0.5	1
11997	Chlorobenzene	108-90-7	22	0.5	1
11997	Chloroethane	75-00-3	23	0.5	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	18	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	24	0.5	1
11997	Chloromethane	74-87-3	22	0.5	1
11997	Dibromochloromethane	124-48-1	20	0.5	1
11997	1,2-Dichlorobenzene	95-50-1	20	1	1
11997	1,3-Dichlorobenzene	541-73-1	20	1	1
11997	1,4-Dichlorobenzene	106-46-7	20	1	1
11997	1,1-Dichloroethane	75-34-3	25	0.5	1
11997	1,2-Dichloroethane	107-06-2	23	0.5	1
11997	1,1-Dichloroethene	75-35-4	27	0.5	1
11997	1,2-Dichloroethene (Total)	540-59-0	48	0.5	1
11997	1,2-Dichloropropane	78-87-5	25	0.5	1
11997	cis-1,3-Dichloropropene	10061-01-5	21	0.5	1
11997	trans-1,3-Dichloropropene	10061-02-6	19	0.5	1
11997	Ethylbenzene	100-41-4	23	0.5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	24	0.5	1
11997	Methylene Chloride	75-09-2	24	0.5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	19	0.5	1
11997	Tetrachloroethene	127-18-4	23	0.5	1
11997	Toluene	108-88-3	23	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	26	0.5	1
11997	1,1,2-Trichloroethane	79-00-5	21	0.5	1
11997	Trichloroethene	79-01-6	24	0.5	1
11997	Trichlorofluoromethane	75-69-4	27	0.5	1
11997	Vinyl Chloride	75-01-4	23	0.5	1
11997	Xylene (Total)	1330-20-7	68	0.5	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	50	0.1	1
14241	Acenaphthylene	208-96-8	48	0.1	1
14241	Anthracene	120-12-7	52	0.1	1
14241	Benzo(a)anthracene	56-55-3	51	0.1	1
14241	Benzo(a)pyrene	50-32-8	49	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	48	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	38	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	51	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	50	0.5	1
14241	Butylbenzylphthalate	85-68-7	48	2	1
14241	Di-n-butylphthalate	84-74-2	49	2	1
14241	Carbazole	86-74-8	53	0.5	1

Sample Description: **OR-2-W-26.00-180613 MSD Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/13/2018 13:32
SDG#: CBD50-09MSD

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662312
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	45	0.5	1
14241	4-Chloroaniline	106-47-8	34	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	43	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	44	0.5	1
14241	2-Chloronaphthalene	91-58-7	45	0.4	1
14241	2-Chlorophenol	95-57-8	44	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	46	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	48	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	50	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	39	0.1	1
14241	Dibenzofuran	132-64-9	47	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	43	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	41	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	42	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	43	3	1
14241	2,4-Dichlorophenol	120-83-2	46	0.5	1
14241	Diethylphthalate	84-66-2	47	2	1
14241	2,4-Dimethylphenol	105-67-9	33	3	1
14241	Dimethylphthalate	131-11-3	45	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	44	8	1
14241	2,4-Dinitrophenol	51-28-5	64	15	1
14241	2,4-Dinitrotoluene	121-14-2	50	1	1
14241	2,6-Dinitrotoluene	606-20-2	53	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	47	5	1
14241	Fluoranthene	206-44-0	51	0.1	1
14241	Fluorene	86-73-7	48	0.1	1
14241	Hexachlorobenzene	118-74-1	47	0.1	1
14241	Hexachlorobutadiene	87-68-3	38	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	75	5	1
14241	Hexachloroethane	67-72-1	39	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	38	0.1	1
14241	Isophorone	78-59-1	46	0.5	1
14241	2-Methylnaphthalene	91-57-6	45	0.1	1
14241	2-Methylphenol	95-48-7	42	0.5	1
14241	4-Methylphenol	106-44-5	40	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	44	0.1	1
14241	2-Nitroaniline	88-74-4	51	2	1
14241	3-Nitroaniline	99-09-2	43	3	1
14241	4-Nitroaniline	100-01-6	46	0.9	1
14241	Nitrobenzene	98-95-3	44	0.5	1
14241	2-Nitrophenol	88-75-5	47	3	1
14241	4-Nitrophenol	100-02-7	36	11	1

Sample Description: **OR-2-W-26.00-180613 MSD Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/13/2018 13:32
SDG#: CBD50-09MSD

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662312
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	47	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	49	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	48	5	1
14241	Pentachlorophenol	87-86-5	32	1	1
14241	Phenanthrene	85-01-8	52	0.1	1
14241	Phenol	108-95-2	27	0.5	1
14241	Pyrene	129-00-0	49	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	44	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	48	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	45	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	0.146	0.0060	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5181701AA	06/20/2018 01:54	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5181701AA	06/20/2018 01:54	Patrick T Herres	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18169WAM026	06/20/2018 11:55	Brandon H Smith	1
11010	8270D BNA Extraction	SW-846 3510C	1	18169WAM026	06/19/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	181701063501	06/20/2018 15:22	Cindy M Gehman	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	181701063501	06/20/2018 06:50	Nicholas W Shroyer	1

Sample Description: **OR-2-W-26.00-180613 DUP Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/13/2018 13:32
SDG#: CBD50-09DUP

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662313
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0060	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07055	Lead	SW-846 6010C	1	181701063501	06/20/2018 15:15	Cindy M Gehman	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	181701063501	06/20/2018 06:50	Nicholas W Shroyer	1

Sample Description: **OR-3-W-65.50-180614 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/14/2018 09:36
SDG#: CBD50-10

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662314
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.5	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1
11997	Bromoform	75-25-2	N.D.	0.5	1
11997	Bromomethane	74-83-9	N.D.	0.5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1
11997	Chloroethane	75-00-3	N.D.	0.5	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.5	1
11997	Chloromethane	74-87-3	N.D.	0.5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.5	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
11997	Methylene Chloride	75-09-2	N.D.	0.5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1
11997	Toluene	108-88-3	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	0.1 J	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **OR-3-W-65.50-180614 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/14/2018 09:36
SDG#: CBD50-10

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662314
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	0.1 J	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **OR-3-W-65.50-180614 Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/14/2018 09:36
SDG#: CBD50-10

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662314
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	0.1 J	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0060	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5181701AA	06/20/2018 02:16	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5181701AA	06/20/2018 02:16	Patrick T Herres	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18170WAB026	06/21/2018 00:38	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	18170WAB026	06/19/2018 16:50	Mathias Okpo	1
07055	Lead	SW-846 6010C	1	181701063501	06/20/2018 15:59	Cindy M Gehman	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	181701063501	06/20/2018 06:50	Nicholas W Shroyer	1

Sample Description: **OS-3-W-6.00-180614 Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/14/2018 10:54
SDG#: CBD50-11

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662315
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.5	1
11997	Bromodichloromethane	75-27-4	N.D.	0.5	1
11997	Bromoform	75-25-2	N.D.	0.5	1
11997	Bromomethane	74-83-9	N.D.	0.5	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
11997	Chlorobenzene	108-90-7	N.D.	0.5	1
11997	Chloroethane	75-00-3	N.D.	0.5	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.5	1
11997	Chloromethane	74-87-3	N.D.	0.5	1
11997	Dibromochloromethane	124-48-1	N.D.	0.5	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	1	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	1	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	1	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.5	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
11997	Ethylbenzene	100-41-4	N.D.	0.5	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
11997	Methylene Chloride	75-09-2	N.D.	0.5	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
11997	Tetrachloroethene	127-18-4	N.D.	0.5	1
11997	Toluene	108-88-3	N.D.	0.5	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
11997	Trichloroethene	79-01-6	N.D.	0.5	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.5	1
11997	Vinyl Chloride	75-01-4	N.D.	0.5	1
11997	Xylene (Total)	1330-20-7	N.D.	0.5	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **OS-3-W-6.00-180614 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/14/2018 10:54
SDG#: CBD50-11

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662315
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **OS-3-W-6.00-180614 Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 06/15/2018 09:50
Collection Date/Time: 06/14/2018 10:54
SDG#: CBD50-11

Chevron Environmental Mgmt.
ELLE Sample #: WW 9662315
ELLE Group #: 1955779
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0060	1

03277 Lab Filtration - Metals
The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5181701AA	06/20/2018 02:38	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5181701AA	06/20/2018 02:38	Patrick T Herres	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18170WAB026	06/21/2018 01:06	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	18170WAB026	06/19/2018 16:50	Mathias Okpo	1
07055	Lead	SW-846 6010C	1	181701063501	06/20/2018 16:02	Cindy M Gehman	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	181701063501	06/20/2018 06:50	Nicholas W Shroyer	1

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 1955779
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Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

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

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: 5181701AA	Sample number(s): 9662302-9662312,9662314-9662315	
Benzene	N.D.	0.5
Bromodichloromethane	N.D.	0.5
Bromoform	N.D.	0.5
Bromomethane	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
Chlorobenzene	N.D.	0.5
Chloroethane	N.D.	0.5
2-Chloroethyl Vinyl Ether	N.D.	2
Chloroform	N.D.	0.5
Chloromethane	N.D.	0.5
Dibromochloromethane	N.D.	0.5
1,2-Dichlorobenzene	N.D.	1
1,3-Dichlorobenzene	N.D.	1
1,4-Dichlorobenzene	N.D.	1
1,1-Dichloroethane	N.D.	0.5
1,2-Dichloroethane	N.D.	0.5
1,1-Dichloroethene	N.D.	0.5
1,2-Dichloroethene (Total)	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
Ethylbenzene	N.D.	0.5
Methyl Tertiary Butyl Ether	N.D.	0.5
Methylene Chloride	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Toluene	N.D.	0.5
1,1,1-Trichloroethane	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Trichloroethene	N.D.	0.5
Trichlorofluoromethane	N.D.	0.5
Vinyl Chloride	N.D.	0.5
Xylene (Total)	N.D.	0.5
Batch number: 18169WAM026	Sample number(s): 9662303-9662312	
Acenaphthene	N.D.	0.1
Acenaphthylene	N.D.	0.1
Anthracene	N.D.	0.1
Benzo(a)anthracene	N.D.	0.1

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 1955779
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Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
Benzo(a)pyrene	N.D.	0.1
Benzo(b)fluoranthene	N.D.	0.1
Benzo(g,h,i)perylene	N.D.	0.1
Benzo(k)fluoranthene	N.D.	0.1
4-Bromophenyl-phenylether	N.D.	0.5
Butylbenzylphthalate	N.D.	2
Di-n-butylphthalate	N.D.	2
Carbazole	N.D.	0.5
4-Chloro-3-methylphenol	N.D.	0.5
4-Chloroaniline	N.D.	4
bis(2-Chloroethoxy)methane	N.D.	0.5
bis(2-Chloroethyl)ether	N.D.	0.5
2-Chloronaphthalene	N.D.	0.4
2-Chlorophenol	N.D.	0.5
4-Chlorophenyl-phenylether	N.D.	0.5
2,2'-oxybis(1-Chloropropane)	N.D.	0.5
Chrysene	N.D.	0.1
Dibenz(a,h)anthracene	N.D.	0.1
Dibenzofuran	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
3,3'-Dichlorobenzidine	N.D.	3
2,4-Dichlorophenol	N.D.	0.5
Diethylphthalate	N.D.	2
2,4-Dimethylphenol	N.D.	3
Dimethylphthalate	N.D.	2
4,6-Dinitro-2-methylphenol	N.D.	8
2,4-Dinitrophenol	N.D.	14
2,4-Dinitrotoluene	N.D.	1
2,6-Dinitrotoluene	N.D.	0.5
bis(2-Ethylhexyl)phthalate	N.D.	5
Fluoranthene	N.D.	0.1
Fluorene	N.D.	0.1
Hexachlorobenzene	N.D.	0.1
Hexachlorobutadiene	N.D.	0.5
Hexachlorocyclopentadiene	N.D.	5
Hexachloroethane	N.D.	1
Indeno(1,2,3-cd)pyrene	N.D.	0.1
Isophorone	N.D.	0.5
2-Methylnaphthalene	N.D.	0.1
2-Methylphenol	N.D.	0.5
4-Methylphenol	N.D.	0.5
Naphthalene	N.D.	0.1
2-Nitroaniline	N.D.	2

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Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 1955779
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Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
3-Nitroaniline	N.D.	3
4-Nitroaniline	N.D.	0.9
Nitrobenzene	N.D.	0.5
2-Nitrophenol	N.D.	3
4-Nitrophenol	N.D.	10
N-Nitroso-di-n-propylamine	N.D.	0.7
N-Nitrosodiphenylamine	N.D.	0.7
Di-n-octylphthalate	N.D.	5
Pentachlorophenol	N.D.	1
Phenanthrene	N.D.	0.1
Phenol	N.D.	0.5
Pyrene	N.D.	0.1
1,2,4-Trichlorobenzene	N.D.	0.5
2,4,5-Trichlorophenol	N.D.	0.5
2,4,6-Trichlorophenol	N.D.	0.5
Batch number: 18170WAB026	Sample number(s): 9662314-9662315	
Acenaphthene	N.D.	0.1
Acenaphthylene	N.D.	0.1
Anthracene	N.D.	0.1
Benzo(a)anthracene	N.D.	0.1
Benzo(a)pyrene	N.D.	0.1
Benzo(b)fluoranthene	N.D.	0.1
Benzo(g,h,i)perylene	N.D.	0.1
Benzo(k)fluoranthene	N.D.	0.1
4-Bromophenyl-phenylether	N.D.	0.5
Butylbenzylphthalate	N.D.	2
Di-n-butylphthalate	N.D.	2
Carbazole	N.D.	0.5
4-Chloro-3-methylphenol	N.D.	0.5
4-Chloroaniline	N.D.	4
bis(2-Chloroethoxy)methane	N.D.	0.5
bis(2-Chloroethyl)ether	N.D.	0.5
2-Chloronaphthalene	N.D.	0.4
2-Chlorophenol	N.D.	0.5
4-Chlorophenyl-phenylether	N.D.	0.5
2,2'-oxybis(1-Chloropropane)	N.D.	0.5
Chrysene	N.D.	0.1
Dibenz(a,h)anthracene	N.D.	0.1
Dibenzofuran	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
3,3'-Dichlorobenzidine	N.D.	3
2,4-Dichlorophenol	N.D.	0.5

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Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 1955779
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Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
Diethylphthalate	N.D.	2
2,4-Dimethylphenol	N.D.	3
Dimethylphthalate	N.D.	2
4,6-Dinitro-2-methylphenol	N.D.	8
2,4-Dinitrophenol	N.D.	14
2,4-Dinitrotoluene	N.D.	1
2,6-Dinitrotoluene	N.D.	0.5
bis(2-Ethylhexyl)phthalate	N.D.	5
Fluoranthene	N.D.	0.1
Fluorene	N.D.	0.1
Hexachlorobenzene	N.D.	0.1
Hexachlorobutadiene	N.D.	0.5
Hexachlorocyclopentadiene	N.D.	5
Hexachloroethane	N.D.	1
Indeno(1,2,3-cd)pyrene	N.D.	0.1
Isophorone	N.D.	0.5
2-Methylnaphthalene	N.D.	0.1
2-Methylphenol	N.D.	0.5
4-Methylphenol	N.D.	0.5
Naphthalene	N.D.	0.1
2-Nitroaniline	N.D.	2
3-Nitroaniline	N.D.	3
4-Nitroaniline	N.D.	0.9
Nitrobenzene	N.D.	0.5
2-Nitrophenol	N.D.	3
4-Nitrophenol	N.D.	10
N-Nitroso-di-n-propylamine	N.D.	0.7
N-Nitrosodiphenylamine	N.D.	0.7
Di-n-octylphthalate	N.D.	5
Pentachlorophenol	N.D.	1
Phenanthrene	N.D.	0.1
Phenol	N.D.	0.5
Pyrene	N.D.	0.1
1,2,4-Trichlorobenzene	N.D.	0.5
2,4,5-Trichlorophenol	N.D.	0.5
2,4,6-Trichlorophenol	N.D.	0.5
	mg/l	mg/l
Batch number: 181701063501	Sample number(s): 9662303-9662315	
Lead	N.D.	0.0060

LCS/LCSD

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Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 1955779
Reported: 11/19/2018 10:36

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 5181701AA	Sample number(s): 9662302-9662312,9662314-9662315								
Benzene	20	21.47			107		80-120		
Bromodichloromethane	20	19.98			100		71-120		
Bromoform	20	17.55			88		59-120		
Bromomethane	20	19.99			100		58-130		
Carbon Tetrachloride	20	24.87			124		64-134		
Chlorobenzene	20	20.08			100		80-120		
Chloroethane	20	19.11			96		61-123		
2-Chloroethyl Vinyl Ether	20	20.67			103		57-121		
Chloroform	20	20.72			104		80-120		
Chloromethane	20	18.94			95		63-120		
Dibromochloromethane	20	18.33			92		71-120		
1,2-Dichlorobenzene	20	19.26			96		80-120		
1,3-Dichlorobenzene	20	19.26			96		80-120		
1,4-Dichlorobenzene	20	19.67			98		80-120		
1,1-Dichloroethane	20	21.3			107		80-120		
1,2-Dichloroethane	20	20.88			104		73-124		
1,1-Dichloroethene	20	23.92			120		80-131		
1,2-Dichloroethene (Total)	40	43.27			108		80-120		
1,2-Dichloropropane	20	21.44			107		80-120		
cis-1,3-Dichloropropene	20	19.52			98		75-120		
trans-1,3-Dichloropropene	20	18.28			91		76-120		
Ethylbenzene	20	21.11			106		80-120		
Methyl Tertiary Butyl Ether	20	23.14			116		75-120		
Methylene Chloride	20	22.03			110		80-120		
1,1,2,2-Tetrachloroethane	20	19.12			96		72-120		
Tetrachloroethene	20	20.69			103		80-120		
Toluene	20	20.58			103		80-120		
1,1,1-Trichloroethane	20	22.32			112		67-126		
1,1,2-Trichloroethane	20	19.65			98		80-120		
Trichloroethene	20	21.17			106		80-120		
Trichlorofluoromethane	20	22.44			112		60-136		
Vinyl Chloride	20	19.4			97		68-120		
Xylene (Total)	60	61.94			103		80-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 18169WAM026	Sample number(s): 9662303-9662312								
Acenaphthene	50	45.65			91		49-123		
Acenaphthylene	50	43.55			87		67-111		
Anthracene	50	46.06			92		55-126		
Benzo(a)anthracene	50	47.74			95		63-124		
Benzo(a)pyrene	50	49.27			99		50-128		
Benzo(b)fluoranthene	50	46.45			93		58-127		
Benzo(g,h,i)perylene	50	38.74			77		51-124		

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Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 1955779
Reported: 11/19/2018 10:36

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzo(k)fluoranthene	50	50.81			102		63-123		
4-Bromophenyl-phenylether	50	44.56			89		53-127		
Butylbenzylphthalate	50	41.82			84		40-131		
Di-n-butylphthalate	50	43.33			87		58-119		
Carbazole	50	45.86			92		65-123		
4-Chloro-3-methylphenol	50	42.52			85		50-130		
4-Chloroaniline	50	30.44			61		33-106		
bis(2-Chloroethoxy)methane	50	38.73			77		54-127		
bis(2-Chloroethyl)ether	50	39.75			79		48-119		
2-Chloronaphthalene	50	45.37			91		41-123		
2-Chlorophenol	50	42.03			84		47-116		
4-Chlorophenyl-phenylether	50	42.05			84		45-124		
2,2'-oxybis(1-Chloropropane)	50	43.46			87		40-117		
Chrysene	50	47.86			96		65-124		
Dibenz(a,h)anthracene	50	39.08			78		53-132		
Dibenzofuran	50	42.25			85		50-124		
1,2-Dichlorobenzene	50	39.02			78		31-116		
1,3-Dichlorobenzene	50	38.11			76		24-115		
1,4-Dichlorobenzene	50	38.48			77		30-109		
3,3'-Dichlorobenzidine	50	40.82			82		32-106		
2,4-Dichlorophenol	50	43.32			87		53-126		
Diethylphthalate	50	37.42			75		42-124		
2,4-Dimethylphenol	50	32.51			65		41-103		
Dimethylphthalate	50	31.84			64		19-119		
4,6-Dinitro-2-methylphenol	50	40.87			82		50-132		
2,4-Dinitrophenol	100	70.59			71		19-140		
2,4-Dinitrotoluene	50	41.62			83		56-128		
2,6-Dinitrotoluene	50	47.56			95		57-131		
bis(2-Ethylhexyl)phthalate	50	45.56			91		52-132		
Fluoranthene	50	45.99			92		61-123		
Fluorene	50	43.69			87		48-124		
Hexachlorobenzene	50	43.51			87		57-123		
Hexachlorobutadiene	50	35.47			71		16-119		
Hexachlorocyclopentadiene	100	38.22			38		10-104		
Hexachloroethane	50	36.41			73		19-105		
Indeno(1,2,3-cd)pyrene	50	37.94			76		52-127		
Isophorone	50	41.69			83		49-129		
2-Methylnaphthalene	50	41.25			83		42-120		
2-Methylphenol	50	39.82			80		46-113		
4-Methylphenol	50	38.98			78		42-115		
Naphthalene	50	39.54			79		44-114		
2-Nitroaniline	50	45.11			90		54-133		
3-Nitroaniline	50	35.27			71		41-123		
4-Nitroaniline	50	39.6			79		46-114		

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 1955779
Reported: 11/19/2018 10:36

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Nitrobenzene	50	39.76			80		43-128		
2-Nitrophenol	50	41.74			83		58-125		
4-Nitrophenol	50	32.77			66		10-96		
N-Nitroso-di-n-propylamine	50	43.02			86		48-128		
N-Nitrosodiphenylamine	50	42.85			86		55-128		
Di-n-octylphthalate	50	46.78			94		51-134		
Pentachlorophenol	50	42.2			84		50-127		
Phenanthrene	50	47.63			95		54-122		
Phenol	50	26.24			52		10-92		
Pyrene	50	45.15			90		54-123		
1,2,4-Trichlorobenzene	50	39.14			78		29-120		
2,4,5-Trichlorophenol	50	44.5			89		59-129		
2,4,6-Trichlorophenol	50	43.57			87		61-130		
Batch number: 18170WAB026	Sample number(s): 9662314-9662315								
Acenaphthene	50	42.36	50	47.53	85	95	49-123	12	30
Acenaphthylene	50	40.57	50	46.22	81	92	67-111	13	30
Anthracene	50	43.48	50	51.62	87	103	55-126	17	30
Benzo(a)anthracene	50	39.19	50	49.09	78	98	63-124	22	30
Benzo(a)pyrene	50	38.43	50	49.89	77	100	50-128	26	30
Benzo(b)fluoranthene	50	38.46	50	48.62	77	97	58-127	23	30
Benzo(g,h,i)perylene	50	32.12	50	40.93	64	82	51-124	24	30
Benzo(k)fluoranthene	50	41.24	50	53.48	82	107	63-123	26	30
4-Bromophenyl-phenylether	50	40.68	50	48.09	81	96	53-127	17	30
Butylbenzylphthalate	50	38.03	50	45.12	76	90	40-131	17	30
Di-n-butylphthalate	50	41.34	50	48.66	83	97	58-119	16	30
Carbazole	50	45.41	50	51.77	91	104	65-123	13	30
4-Chloro-3-methylphenol	50	41.04	50	45.46	82	91	50-130	10	30
4-Chloroaniline	50	35.11	50	38.18	70	76	33-106	8	30
bis(2-Chloroethoxy)methane	50	37.66	50	41.96	75	84	54-127	11	30
bis(2-Chloroethyl)ether	50	36.47	50	41.59	73	83	48-119	13	30
2-Chloronaphthalene	50	39.22	50	44.35	78	89	41-123	12	30
2-Chlorophenol	50	38.53	50	42.7	77	85	47-116	10	30
4-Chlorophenyl-phenylether	50	38.45	50	44.91	77	90	45-124	16	30
2,2'-oxybis(1-Chloropropane)	50	39.31	50	44.89	79	90	40-117	13	30
Chrysene	50	39.97	50	49.76	80	100	65-124	22	30
Dibenz(a,h)anthracene	50	32.47	50	41.86	65	84	53-132	25	30
Dibenzofuran	50	39.4	50	45.29	79	91	50-124	14	30
1,2-Dichlorobenzene	50	34.07	50	39.66	68	79	31-116	15	30
1,3-Dichlorobenzene	50	32.63	50	37.82	65	76	24-115	15	30
1,4-Dichlorobenzene	50	33.45	50	37.9	67	76	30-109	12	30
3,3'-Dichlorobenzidine	50	42.39	50	46.82	85	94	32-106	10	30
2,4-Dichlorophenol	50	40.59	50	45.13	81	90	53-126	11	30
Diethylphthalate	50	38.13	50	44.58	76	89	42-124	16	30

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Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 1955779
Reported: 11/19/2018 10:36

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,4-Dimethylphenol	50	31.19	50	34.54	62	69	41-103	10	30
Dimethylphthalate	50	34.26	50	40.51	69	81	19-119	17	30
4,6-Dinitro-2-methylphenol	50	36.62	50	46.5	73	93	50-132	24	30
2,4-Dinitrophenol	100	31.47	100	44.44	31	44	19-140	34*	30
2,4-Dinitrotoluene	50	41.84	50	49.15	84	98	56-128	16	30
2,6-Dinitrotoluene	50	45.19	50	51.27	90	103	57-131	13	30
bis(2-Ethylhexyl)phthalate	50	37.89	50	47.02	76	94	52-132	21	30
Fluoranthene	50	41.21	50	50.11	82	100	61-123	19	30
Fluorene	50	40.58	50	47	81	94	48-124	15	30
Hexachlorobenzene	50	36.12	50	46.63	72	93	57-123	25	30
Hexachlorobutadiene	50	29.42	50	34.29	59	69	16-119	15	30
Hexachlorocyclopentadiene	100	26.2	100	30.88	26	31	10-104	16	30
Hexachloroethane	50	30.56	50	35.14	61	70	19-105	14	30
Indeno(1,2,3-cd)pyrene	50	30.05	50	39.86	60	80	52-127	28	30
Isophorone	50	38.94	50	43.53	78	87	49-129	11	30
2-Methylnaphthalene	50	37.23	50	42.48	74	85	42-120	13	30
2-Methylphenol	50	36.42	50	40.22	73	80	46-113	10	30
4-Methylphenol	50	36.75	50	40.02	74	80	42-115	9	30
Naphthalene	50	34.97	50	40.09	70	80	44-114	14	30
2-Nitroaniline	50	43.18	50	49.08	86	98	54-133	13	30
3-Nitroaniline	50	41.34	50	46.64	83	93	41-123	12	30
4-Nitroaniline	50	41.07	50	46.29	82	93	46-114	12	30
Nitrobenzene	50	36.07	50	40.79	72	82	43-128	12	30
2-Nitrophenol	50	37.1	50	43.07	74	86	58-125	15	30
4-Nitrophenol	50	28.24	50	33.26	56	67	10-96	16	30
N-Nitroso-di-n-propylamine	50	39.87	50	45.31	80	91	48-128	13	30
N-Nitrosodiphenylamine	50	44.47	50	50.55	89	101	55-128	13	30
Di-n-octylphthalate	50	35.77	50	48.5	72	97	51-134	30	30
Pentachlorophenol	50	38.04	50	46.54	76	93	50-127	20	30
Phenanthrene	50	42.97	50	50.59	86	101	54-122	16	30
Phenol	50	22.3	50	24.4	45	49	10-92	9	30
Pyrene	50	39.55	50	47.71	79	95	54-123	19	30
1,2,4-Trichlorobenzene	50	34.56	50	39.6	69	79	29-120	14	30
2,4,5-Trichlorophenol	50	42.78	50	48.88	86	98	59-129	13	30
2,4,6-Trichlorophenol	50	39.63	50	46.49	79	93	61-130	16	30
	mg/l	**mg/l**	**mg/l**	**mg/l**					
Batch number: 181701063501	Sample number(s): 9662303-9662315								
Lead	0.150	0.146			97		87-113		

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 1955779
Reported: 11/19/2018 10:36

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 5181701AA	Sample number(s): 9662302-9662312,9662314-9662315 UNSPK: 9662310									
Benzene	N.D.	20	23.94	20	23.86	120	119	80-120	0	30
Bromodichloromethane	N.D.	20	22.42	20	21.96	112	110	71-120	2	30
Bromoform	N.D.	20	18.14	20	17.89	91	89	59-120	1	30
Bromomethane	N.D.	20	22.69	20	23.17	113	116	58-130	2	30
Carbon Tetrachloride	N.D.	20	29.85	20	29.24	149*	146*	64-134	2	30
Chlorobenzene	N.D.	20	21.39	20	21.65	107	108	80-120	1	30
Chloroethane	N.D.	20	22.34	20	22.66	112	113	61-123	1	30
2-Chloroethyl Vinyl Ether	N.D.	20	19.15	20	18.28	96	91	57-121	5	30
Chloroform	N.D.	20	23.69	20	23.58	118	118	80-120	0	30
Chloromethane	N.D.	20	20.77	20	22.03	104	110	63-120	6	30
Dibromochloromethane	N.D.	20	19.75	20	19.97	99	100	71-120	1	30
1,2-Dichlorobenzene	N.D.	20	20.08	20	20.28	100	101	80-120	1	30
1,3-Dichlorobenzene	N.D.	20	19.85	20	19.99	99	100	80-120	1	30
1,4-Dichlorobenzene	N.D.	20	19.86	20	20.36	99	102	80-120	2	30
1,1-Dichloroethane	0.851	20	24.95	20	24.78	120	120	80-120	1	30
1,2-Dichloroethane	N.D.	20	24.81	20	22.99	124	115	73-124	8	30
1,1-Dichloroethene	N.D.	20	27.06	20	27.18	135*	136*	80-131	0	30
1,2-Dichloroethene (Total)	N.D.	40	48.45	40	48.06	121*	120	80-120	1	30
1,2-Dichloropropane	0.865	20	24.84	20	24.58	120	119	80-120	1	30
cis-1,3-Dichloropropene	N.D.	20	20.46	20	20.62	102	103	75-120	1	30
trans-1,3-Dichloropropene	N.D.	20	19.42	20	19.48	97	97	76-120	0	30
Ethylbenzene	N.D.	20	23.28	20	23.43	116	117	80-120	1	30
Methyl Tertiary Butyl Ether	N.D.	20	24.74	20	24.37	124*	122*	75-120	2	30
Methylene Chloride	N.D.	20	24.28	20	23.5	121*	118	80-120	3	30
1,1,2,2-Tetrachloroethane	N.D.	20	19.13	20	19.33	96	97	72-120	1	30
Tetrachloroethene	N.D.	20	22.91	20	23.3	115	117	80-120	2	30
Toluene	N.D.	20	22.13	20	22.55	111	113	80-120	2	30
1,1,1-Trichloroethane	N.D.	20	26.48	20	26.08	132*	130*	67-126	2	30
1,1,2-Trichloroethane	N.D.	20	21.16	20	20.7	106	104	80-120	2	30
Trichloroethene	N.D.	20	23.94	20	23.66	120	118	80-120	1	30
Trichlorofluoromethane	N.D.	20	27.9	20	27.47	140*	137*	60-136	2	30
Vinyl Chloride	N.D.	20	21.58	20	22.64	108	113	68-120	5	30
Xylene (Total)	N.D.	60	66.49	60	67.7	111	113	80-120	2	30
	ug/l	ug/l	ug/l	ug/l	ug/l					
Batch number: 18169WAM026	Sample number(s): 9662303-9662312 UNSPK: 9662310									
Acenaphthene	N.D.	51.87	48.73	52.74	49.63	94	94	49-123	2	30
Acenaphthylene	N.D.	51.87	46.95	52.74	48.39	91	92	67-111	3	30
Anthracene	N.D.	51.87	49.34	52.74	52.45	95	99	55-126	6	30
Benzo(a)anthracene	N.D.	51.87	48.91	52.74	50.67	94	96	63-124	4	30
Benzo(a)pyrene	N.D.	51.87	49.12	52.74	49.24	95	93	50-128	0	30
Benzo(b)fluoranthene	N.D.	51.87	47.27	52.74	47.65	91	90	58-127	1	30

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 1955779
Reported: 11/19/2018 10:36

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Benzo(g,h,i)perylene	N.D.	51.87	38.76	52.74	38.45	75	73	51-124	1	30
Benzo(k)fluoranthene	N.D.	51.87	51.8	52.74	51.09	100	97	63-123	1	30
4-Bromophenyl-phenylether	N.D.	51.87	47.69	52.74	49.51	92	94	53-127	4	30
Butylbenzylphthalate	N.D.	51.87	47.09	52.74	48.47	91	92	40-131	3	30
Di-n-butylphthalate	N.D.	51.87	47.79	52.74	49.31	92	93	58-119	3	30
Carbazole	N.D.	51.87	50.2	52.74	52.58	97	100	65-123	5	30
4-Chloro-3-methylphenol	N.D.	51.87	44.37	52.74	44.52	86	84	50-130	0	30
4-Chloroaniline	N.D.	51.87	33.7	52.74	33.62	65	64	33-106	0	30
bis(2-Chloroethoxy)methane	N.D.	51.87	41.76	52.74	43.36	81	82	54-127	4	30
bis(2-Chloroethyl)ether	N.D.	51.87	42.43	52.74	43.51	82	82	48-119	3	30
2-Chloronaphthalene	N.D.	51.87	44.63	52.74	44.97	86	85	41-123	1	30
2-Chlorophenol	N.D.	51.87	42.84	52.74	44.39	83	84	47-116	4	30
4-Chlorophenyl-phenylether	N.D.	51.87	45.28	52.74	45.89	87	87	45-124	1	30
2,2'-oxybis(1-Chloropropane)	N.D.	51.87	46.42	52.74	47.93	90	91	40-117	3	30
Chrysene	N.D.	51.87	49.08	52.74	50.48	95	96	65-124	3	30
Dibenz(a,h)anthracene	N.D.	51.87	39.47	52.74	39.48	76	75	53-132	0	30
Dibenzofuran	N.D.	51.87	45.91	52.74	46.95	89	89	50-124	2	30
1,2-Dichlorobenzene	N.D.	51.87	42.77	52.74	43.37	82	82	31-116	1	30
1,3-Dichlorobenzene	N.D.	51.87	41.28	52.74	41.35	80	78	24-115	0	30
1,4-Dichlorobenzene	N.D.	51.87	41.42	52.74	42.46	80	81	30-109	2	30
3,3'-Dichlorobenzidine	N.D.	51.87	43.29	52.74	43.42	83	82	32-106	0	30
2,4-Dichlorophenol	N.D.	51.87	44.27	52.74	45.85	85	87	53-126	4	30
Diethylphthalate	N.D.	51.87	44.91	52.74	47.17	87	89	42-124	5	30
2,4-Dimethylphenol	N.D.	51.87	32.63	52.74	32.84	63	62	41-103	1	30
Dimethylphthalate	N.D.	51.87	43.09	52.74	45.25	83	86	19-119	5	30
4,6-Dinitro-2-methylphenol	N.D.	51.87	37.93	52.74	43.85	73	83	50-132	14	30
2,4-Dinitrophenol	N.D.	103.73	43.75	105.49	64.35	42	61	19-140	38*	30
2,4-Dinitrotoluene	N.D.	51.87	50.41	52.74	50.47	97	96	56-128	0	30
2,6-Dinitrotoluene	N.D.	51.87	51.18	52.74	52.73	99	100	57-131	3	30
bis(2-Ethylhexyl)phthalate	N.D.	51.87	45.75	52.74	47.48	88	90	52-132	4	30
Fluoranthene	N.D.	51.87	48.89	52.74	50.77	94	96	61-123	4	30
Fluorene	N.D.	51.87	47.17	52.74	48.29	91	92	48-124	2	30
Hexachlorobenzene	N.D.	51.87	45.92	52.74	47.35	89	90	57-123	3	30
Hexachlorobutadiene	N.D.	51.87	38.36	52.74	37.72	74	72	16-119	2	30
Hexachlorocyclopentadiene	N.D.	103.73	72.99	105.49	75.19	70	71	10-104	3	30
Hexachloroethane	N.D.	51.87	38.44	52.74	38.53	74	73	19-105	0	30
Indeno(1,2,3-cd)pyrene	N.D.	51.87	38.29	52.74	37.89	74	72	52-127	1	30
Isophorone	N.D.	51.87	44.97	52.74	46	87	87	49-129	2	30
2-Methylnaphthalene	N.D.	51.87	44.95	52.74	45.15	87	86	42-120	0	30
2-Methylphenol	N.D.	51.87	40.23	52.74	41.54	78	79	46-113	3	30
4-Methylphenol	N.D.	51.87	39.67	52.74	40.29	76	76	42-115	2	30
Naphthalene	N.D.	51.87	43.72	52.74	43.94	84	83	44-114	0	30
2-Nitroaniline	N.D.	51.87	48.97	52.74	50.58	94	96	54-133	3	30

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 1955779
Reported: 11/19/2018 10:36

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
3-Nitroaniline	N.D.	51.87	39.1	52.74	42.8	75	81	41-123	9	30
4-Nitroaniline	N.D.	51.87	43.66	52.74	45.58	84	86	46-114	4	30
Nitrobenzene	N.D.	51.87	43.02	52.74	44.15	83	84	43-128	3	30
2-Nitrophenol	N.D.	51.87	45.23	52.74	47.08	87	89	58-125	4	30
4-Nitrophenol	N.D.	51.87	33.38	52.74	36.35	64	69	10-96	9	30
N-Nitroso-di-n-propylamine	N.D.	51.87	46.23	52.74	47.32	89	90	48-128	2	30
N-Nitrosodiphenylamine	N.D.	51.87	46.34	52.74	49.32	89	94	55-128	6	30
Di-n-octylphthalate	N.D.	51.87	47.35	52.74	48.29	91	92	51-134	2	30
Pentachlorophenol	N.D.	51.87	29.88	52.74	32.22	58	61	50-127	8	30
Phenanthrene	N.D.	51.87	50.37	52.74	51.77	97	98	54-122	3	30
Phenol	N.D.	51.87	26.14	52.74	26.86	50	51	10-92	3	30
Pyrene	N.D.	51.87	47.18	52.74	48.69	91	92	54-123	3	30
1,2,4-Trichlorobenzene	N.D.	51.87	43.11	52.74	43.6	83	83	29-120	1	30
2,4,5-Trichlorophenol	N.D.	51.87	45.89	52.74	47.88	88	91	59-129	4	30
2,4,6-Trichlorophenol	N.D.	51.87	43.32	52.74	45.37	84	86	61-130	5	30
	mg/l	**mg/l**	**mg/l**	**mg/l**	**mg/l**					
Batch number: 181701063501	Sample number(s): 9662303-9662315 UNSPK: 9662310									
Lead	N.D.	0.150	0.147	0.150	0.146	98	97	75-125	1	20

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max
	mg/l	**mg/l**		
Batch number: 181701063501	Sample number(s): 9662303-9662315 BKG: 9662310			
Lead	N.D.	N.D.	0 (1)	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 5ml Water by 8260C
Batch number: 5181701AA

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 1955779
Reported: 11/19/2018 10:36

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 5ml Water by 8260C
Batch number: 5181701AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9662302	105	105	98	99
9662303	99	102	98	101
9662304	99	102	98	98
9662305	99	102	98	99
9662306	102	105	98	100
9662307	103	105	98	100
9662308	104	104	99	99
9662309	105	106	99	99
9662310	106	103	101	98
9662311	104	103	101	110
9662312	101	99	100	110
9662314	103	106	99	100
9662315	105	105	99	100
Blank	99	100	99	99
LCS	99	99	100	107
MS	104	103	101	110
MSD	101	99	100	110
Limits:	80-120	80-120	80-120	80-120

Analysis Name: SVOAs 8270D MINI
Batch number: 18169WAM026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9662303	34	46	83	77	80	81
9662304	33	45	80	70	74	92
9662305	30	42	67	65	69	74
9662306	28	40	69	65	69	61
9662307	32	45	82	69	75	75
9662308	36	49	81	78	83	88
9662309	32	45	82	74	79	72
9662310	21	30	70	73	79	83
9662311	47	57	80	78	81	81
9662312	48	59	83	79	82	85
Blank	37	51	81	77	78	99
LCS	49	62	87	77	80	89
MS	47	57	80	78	81	81
MSD	48	59	83	79	82	85
Limits:	10-71	10-82	21-134	30-111	39-105	27-116

Analysis Name: SVOAs 8270D MINI
Batch number: 18170WAB026

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 1955779
Reported: 11/19/2018 10:36

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: SVOAs 8270D MINI
Batch number: 18170WAB026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9662314	29	38	77	65	66	87
9662315	31	43	79	75	78	66
Blank	32	43	84	72	73	93
LCS	40	51	78	68	71	82
LCSD	44	56	92	77	81	92
Limits:	10-71	10-82	21-134	30-111	39-105	27-116

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

Revised by HF. MLM 6/18/18

Chain of Custody

COC #: CVX-0225

Client Contact:	**Privileged and Confidential**	**Site Name:**	BEACON
	EDD To: Laura.Drachenberg@parsons.com	**Site Location:**	BEACON, NY
PARSONS 301 PLAINFIELD ROAD-SUITE 350 SYRACUSE, NY 13212	**Sampler:**	**Lab Use Only**	
	Program: BEACON-2018 RCRA Sampling R1	**Lab Proj #**	
	Analysis Turnaround Time: **Standard -** Rush Charges Authorized for - 2 weeks - 1 week - Next Day -	**Lab ID**	LANCASTER
		Job No	450996
Hardcopy Report To: Edward.J.Ashton@parsons.com			
Invoice To: Chevron			

Ship to:
Attn: Megan Moeller
Eurofins Lancaster Laboratories
Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601
Phone: (717) 556-7261 Ext. 1246

Sample Identification											Preservative:											
											0	0	0									
Location ID	**Start Depth (ft)**	**End Depth (ft)**	**Field Sample ID**	**Sample Date**	**Sample Time**	**Sample Type**	**Sample Matrix**	**Sample Purpose**	**# of Cont.**	**MS/MSD**	**Composite (y/n)**	**SW8260C-VOCs**	**SW8270D-SVOCs**	**(1) SW6010C-Dissolved Lead**								**Lab Sample Numbers**
QA			QA-WT1-180614	06/14/18		BLKWATER	Water	TB	2	☐	N	☑	☐	☐								
TF-23	5.26	10.26	TF-23-WD-5.26-180612	06/12/18	12:00	GW	Water	FD	6	☐	N	☑	☑	☑								
TF-5	4.59	9.59	TF-5-W-4.59-180612	06/12/18	13:59	GW	Water	REG	6	☐	N	☑	☑	☑								
TF-23	5.26	10.26	TF-23-W-5.26-180612	06/12/18	14:45	GW	Water	REG	6	☐	N	☑	☑	☑								
DC-2	7.50	17.50	DC-2-W-7.50-180612	06/12/18	15:27	GW	Water	REG	6	☐	N	☑	☑	☑								
DC-1	2.00	12.00	DC-1-W-2.00-180612	06/12/18	15:44	GW	Water	REG	6	☐	N	☑	☑	☑								
DB-8A	5.00	10.00	DB-8A-W-5.00-180612	06/12/18	16:06	GW	Water	REG	6	☐	N	☑	☑	☑								
OS-2	6.00	16.00	OS-2-W-6.00-180613	06/13/18	12:48	GW	Water	REG	6	☐	N	☑	☑	☑								
OR-2	26.00	46.00	OR-2-W-26.00-180613	06/13/18	13:32	GW	Water	REG	18	☑	N	☑	☑	☑								
OR-3	65.50	75.50	OR-3-W-65.50-180614	06/14/18	9:36	GW	Water	REG	6	☐	N	☑	☑	☑								
OS-3	6.00	16.00	OS-3-W-6.00-180614	06/14/18	10:54	GW	Water	REG	6	☐	N	☑	☑	☑								

Special Instructions: (1) Lab to filter sample prior to analysis.

Relinquished by: E/Ashton	Company Parsons	Received by:	Company	Condition	Custody Seals Int
	Date/Time 6-19-18 @ 1600		Date/Time	Cooler Temp.	
Relinquished by:	Company	Received by:	Company	Condition	Custody Seals Int
	Date/Time		Date/Time	Cooler Temp.	

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):

Page 1 of 1

Date Printed: 6/14/2018

11387/1955779/9662302-15

Chain of Custody

COC #: CVX-0225
Lab Use Only
Lab Proj #
Lab ID: LANCASTER
Job No: 450996

Client Contact:

PARSONS
301 PLAINFIELD [illegible]
SYRACUSE, NY 13212

Hardcopy R[illegible]@parsons.com
Invoice To

Privileged and Confidential
EDD To: Laura.Drachenberg@parsons.com
Sampler:
Program: BEACON-2018 RCRA Sampling R1

Analysis Turnaround Time:
Standard -
Rush Charges Authorized for -
2 weeks -
1 week -
Next Day -

Site Name: BEACON
Site Location: BEACON, NY

Ship to:
Attn: Megan Moeller
Eurofins Lancaster Laboratories
Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601
Phone: (717) 556-7261 Ext. 1246

Location ID	Start Depth (ft)	End Depth (ft)	Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	MS/MSD	Composite (y/n)	Preservative: 0 SW8260C-VOCs	0 SW8270D-SVOCs	0 (1) SW6010C-Dissolved Lead	Lab Sample Numbers
QA			QA-WT1-			BLKWATER	Water	TB	2	☐	N	☑	☐	☐	
TF-123	5.26	10.26	TF-23-WD-5.26-180612	06/12/18	12:00	GW	Water	FD	6	☐	N	☑	☑	☑	
TF-5	4.59	9.59	TF-5-W-4.59-180612	06/12/18	13:59	GW	Water	REG	6	☐	N	☑	☑	☑	
TF-23	5.26	10.26	TF-23-W-5.26-180612	06/12/18	14:45	GW	Water	REG	6	☐	N	☑	☑	☑	
DC-2	7.50	17.50	DC-2-W-7.50-180612	06/12/18	15:27	GW	Water	REG	6	☐	N	☑	☑	☑	
DC-1	2.00	12.00	DC-1-W-2.00-180612	06/12/18	15:44	GW	Water	REG	6	☐	N	☑	☑	☑	
DB-8A	5.00	10.00	DB-8A-W-5.00-180612	06/12/18	16:06	GW	Water	REG	6	☐	N	☑	☑	☑	
OS-2	6.00	16.00	OS-2-W-6.00-180613	06/13/18	12:48	GW	Water	REG	6	☐	N	☑	☑	☑	
OR-2	26.00	46.00	OR-2-W-26.00-180613	06/13/18	13:32	GW	Water	REG	18	☑	N	☑	☑	☑	
OR-3	65.50	75.50	OR-3-W-65.50-180614	06/14/18	9:36	GW	Water	REG	6	☐	N	☑	☑	☑	
OS-3	6.00	16.00	OS-3-W-6.00-180614	06/14/18	10:54	GW	Water	REG	6	☐	N	☑	☑	☑	

Special Instructions: (1) Lab to filter sample prior to analysis.

Relinquished by: E/Ashton	Company Parsons	Received by:	Company	Condition	Custody Seals Int
	Date/Time 6-14-18 @ 1600		Date/Time	Cooler Temp.	
Relinquished by:	Company	Received by: MMK	Company ELLE	Condition MMK	Custody Seals Int
	Date/Time		Date/Time 6/15/18 0950	Cooler Temp. 0.6-1.6	

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):

Date Printed: 6/14[illegible]

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Sample Administration Receipt Documentation Log

Doc Log ID: 219297

Group Number(s): 1955779

Client: Parsons

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	06/15/2018 9:50
Number of Packages:	4	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	2
Paperwork Enclosed:	Yes	Trip Blank Type:	See Below
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Trip Blank Type(s): Unpreserved

Unpacked by Nicole Reiff (25684) at 14:16 on 06/15/2018

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	0.8	DT	Wet	Y	Loose	N
2	DT146	1.3	DT	Wet	Y	Loose	N
3	DT146	1.6	DT	Wet	Y	Loose	N
4	DT146	0.6	DT	Wet	Y	Loose	N

2425 New Holland Pike
Lancaster, PA 17601-5994
T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

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

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

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

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

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

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

Volatiles by GC/MS Data

Case Narrative/Conformance Summary

Volatiles by GC/MS

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD50

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9662302	QA-WT1-180614	X		1	Trip Blank
9662303	TF-23-WD-5.26-180612	X		1	Field Duplicate Sample
9662304	TF-5-W-4.59-180612	X		1	
9662305	TF-23-W-5.26-180612	X		1	
9662306	DC-2-W-7.50-180612	X		1	
9662307	DC-1-W-2.00-180612	X		1	
9662308	DB-8A-W-5.00-180612	X		1	
9662309	OS-2-W-6.00-180613	X		1	
9662310	OR-2-W-26.00-180613	X		1	Unspiked
9662311	OR-2-W-26.00-180613 MS	X		1	Matrix Spike
9662312	OR-2-W-26.00-180613 MSD	X		1	Matrix Spike Duplicate
9662314	OR-3-W-65.50-180614	X		1	
9662315	OS-3-W-6.00-180614	X		1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

(Sample number(s): 9662302-9662312, 9662314-9662315: Analysis: 11997)
2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD50

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Batch#: 5181701AA (Sample number(s): 9662302-9662312, 9662314-9662315, UNSPK: 9662310)
The recovery(ies) for the following analyte(s) in the MS exceeded the acceptance window indicating a positive bias: 1,2-Dichloroethene (Total), Methylene Chloride
The recovery(ies) for the following analyte(s) in the MS and MSD exceeded the acceptance window indicating a positive bias: 1,1,1-Trichloroethane, 1,1-Dichloroethene, Carbon Tetrachloride, Methyl Tertiary Butyl Ether, Trichlorofluoromethane

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

1. Relative Response Factor (RRF)

$$RRF = \frac{AX}{Ais} \times \frac{Cis}{Cx}$$

Where:

Ax = Area of the characteristic ion for the compound to be measured
Ais = Area of the characteristic ion for the specific internal standard to be measured
Cis = Concentration of the internal standard
Cx = Concentration of the compound to be measured

2. % Relative Standard Deviation (%RSD)

$$\%RSD = \frac{standard\ deviation}{Mean} \times 100$$

3. % Difference

$$\%D = \frac{RRFc - RRFi}{RRFi} \times 100$$

Where:

RRFc = Relative response factor from the continuing calibration standard
RRFi = Mean relative response factor from the initial calibration

4. Concentration

$$Concentration\ (\mu g / L) = \frac{(Ax)(Is)(Df)}{(Ais)(RRF)}$$

Where:

Ax, Ais, and RRF are as given in 1. above
Is = Amount of internal standard added in parts per billion (µg/L)
Df = Dilution factor

5. % Recovery (% Rec)

$$\%Rec = \frac{SSR - SR}{SA} \times 100$$

Where:

SSR = Spiked sample result
SR = Sample result
SA = Spike added

6. Relative Percent Difference (RPD)

$$RPD = \frac{(MSR - MSRD)}{(1/2)(MSR + MSRD)} \times 100$$

Where:

MSR = Matrix spike recovery
MSRD = Matrix spike recovery duplicate

Quality Control and Calibration Summary Forms

Volatiles by GC/MS

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Quality Control Reference List
GC/MS Volatiles

CLIENT: Chevron Environmental Mgmt.
SDG: CBD50

Fraction: Volatiles by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
VOCs- 5ml Water by 8260C	5181701AA	VBLK548	06/19/2018 20:25
		LCS548	06/19/2018 20:48
		9662302	06/20/2018 00:05
		9662303	06/19/2018 21:33
		9662304	06/19/2018 21:55
		9662305	06/19/2018 22:17
		9662306	06/19/2018 22:38
		9662307	06/19/2018 23:00
		9662308	06/19/2018 23:22
		9662309	06/20/2018 00:48
		9662310 UNSPK	06/20/2018 01:10
		9662311 MS	06/20/2018 01:32
		9662312 MSD	06/20/2018 01:54
		9662314	06/20/2018 02:16
		9662315	06/20/2018 02:38

Quality Control Summary
Method Blank
GC/MS Volatiles
SDG: CBD50
Matrix: LIQUID

Fraction: Volatiles by GC/MS

5181701AA / VBLK548 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Chloromethane	06/19/18	N.D.	ug/l	0.5	1
Vinyl Chloride	06/19/18	N.D.	ug/l	0.5	1
Bromomethane	06/19/18	N.D.	ug/l	0.5	1
Chloroethane	06/19/18	N.D.	ug/l	0.5	1
Trichlorofluoromethane	06/19/18	N.D.	ug/l	0.5	1
1,1-Dichloroethene	06/19/18	N.D.	ug/l	0.5	1
Methylene Chloride	06/19/18	N.D.	ug/l	0.5	1
Methyl Tertiary Butyl Ether	06/19/18	N.D.	ug/l	0.5	1
1,1-Dichloroethane	06/19/18	N.D.	ug/l	0.5	1
1,2-Dichloroethene (Total)	06/19/18	N.D.	ug/l	0.5	1
Chloroform	06/19/18	N.D.	ug/l	0.5	1
1,1,1-Trichloroethane	06/19/18	N.D.	ug/l	0.5	1
Carbon Tetrachloride	06/19/18	N.D.	ug/l	0.5	1
Benzene	06/19/18	N.D.	ug/l	0.5	1
1,2-Dichloroethane	06/19/18	N.D.	ug/l	0.5	1
Trichloroethene	06/19/18	N.D.	ug/l	0.5	1
1,2-Dichloropropane	06/19/18	N.D.	ug/l	0.5	1
Bromodichloromethane	06/19/18	N.D.	ug/l	0.5	1
2-Chloroethyl Vinyl Ether	06/19/18	N.D.	ug/l	2	10
cis-1,3-Dichloropropene	06/19/18	N.D.	ug/l	0.5	1
trans-1,3-Dichloropropene	06/19/18	N.D.	ug/l	0.5	1
Toluene	06/19/18	N.D.	ug/l	0.5	1
Tetrachloroethene	06/19/18	N.D.	ug/l	0.5	1
1,1,2-Trichloroethane	06/19/18	N.D.	ug/l	0.5	1
Dibromochloromethane	06/19/18	N.D.	ug/l	0.5	1
Chlorobenzene	06/19/18	N.D.	ug/l	0.5	1
Ethylbenzene	06/19/18	N.D.	ug/l	0.5	1
Xylene (Total)	06/19/18	N.D.	ug/l	0.5	1
Bromoform	06/19/18	N.D.	ug/l	0.5	4
1,1,2,2-Tetrachloroethane	06/19/18	N.D.	ug/l	0.5	1
1,3-Dichlorobenzene	06/19/18	N.D.	ug/l	1	5
1,4-Dichlorobenzene	06/19/18	N.D.	ug/l	1	5
1,2-Dichlorobenzene	06/19/18	N.D.	ug/l	1	5

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Quality Control Summary
Surrogates
GC/MS Volatiles
SDG: CBD50
Matrix: LIQUID

Fraction: Volatiles by GC/MS

5181701AA	1,2-Dichloroethane-d4		4-Bromofluorobenzene		Dibromofluoromethane		Toluene-d8	
	Spike Added	50 ug/l	Spike Added	50 ug/l	Spike Added	50 ug/l	Spike Added	50 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
VBLK548	100	80 - 120	99	80 - 120	99	80 - 120	99	80 - 120
LCS548	99	80 - 120	107	80 - 120	99	80 - 120	100	80 - 120
9662302	105	80 - 120	99	80 - 120	105	80 - 120	98	80 - 120
9662303	102	80 - 120	101	80 - 120	99	80 - 120	98	80 - 120
9662304	102	80 - 120	98	80 - 120	99	80 - 120	98	80 - 120
9662305	102	80 - 120	99	80 - 120	99	80 - 120	98	80 - 120
9662306	105	80 - 120	100	80 - 120	102	80 - 120	98	80 - 120
9662307	105	80 - 120	100	80 - 120	103	80 - 120	98	80 - 120
9662308	104	80 - 120	99	80 - 120	104	80 - 120	99	80 - 120
9662309	106	80 - 120	99	80 - 120	105	80 - 120	99	80 - 120
9662310 UNSPK	103	80 - 120	98	80 - 120	106	80 - 120	101	80 - 120
9662311 MS	103	80 - 120	110	80 - 120	104	80 - 120	101	80 - 120
9662312 MSD	99	80 - 120	110	80 - 120	101	80 - 120	100	80 - 120
9662314	106	80 - 120	100	80 - 120	103	80 - 120	99	80 - 120
9662315	105	80 - 120	100	80 - 120	105	80 - 120	99	80 - 120

GC/MS Volatiles

Fraction: Volatiles by GC/MS

UNSPK: 9662310 MS: 9662311 MSD: 9662312 **Analyte**	Batch: **5181701AA** (Sample number(s): 9662302-9662312, 9662314-9662315)								
	Spike Added ug/l	**Unspiked Conc ug/l**	**MS Conc ug/l**	**MSD Conc ug/l**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Chloromethane	20	N.D.	20.77	22.03	104	110	63-120	6	30
Vinyl Chloride	20	N.D.	21.58	22.64	108	113	68-120	5	30
Bromomethane	20	N.D.	22.69	23.17	113	116	58-130	2	30
Chloroethane	20	N.D.	22.34	22.66	112	113	61-123	1	30
Trichlorofluoromethane	20	N.D.	27.9	27.47	140 *	137 *	60-136	2	30
1,1-Dichloroethene	20	N.D.	27.06	27.18	135 *	136 *	80-131	0	30
Methylene Chloride	20	N.D.	24.28	23.5	121 *	118	80-120	3	30
Methyl Tertiary Butyl Ether	20	N.D.	24.74	24.37	124 *	122 *	75-120	2	30
1,1-Dichloroethane	20	0.851 J	24.95	24.78	120	120	80-120	1	30
1,2-Dichloroethene (Total)	40	N.D.	48.45	48.06	121 *	120	80-120	1	30
1,1,1-Trichloroethane	20	N.D.	26.48	26.08	132 *	130 *	67-126	2	30
Chloroform	20	N.D.	23.69	23.58	118	118	80-120	0	30
Carbon Tetrachloride	20	N.D.	29.85	29.24	149 *	146 *	64-134	2	30
1,2-Dichloroethane	20	N.D.	24.81	22.99	124	115	73-124	8	30
Benzene	20	N.D.	23.94	23.86	120	119	80-120	0	30
Trichloroethene	20	N.D.	23.94	23.66	120	118	80-120	1	30
1,2-Dichloropropane	20	0.865 J	24.84	24.58	120	119	80-120	1	30
Bromodichloromethane	20	N.D.	22.42	21.96	112	110	71-120	2	30
2-Chloroethyl Vinyl Ether	20	N.D.	19.15	18.28	96	91	57-121	5	30
cis-1,3-Dichloropropene	20	N.D.	20.46	20.62	102	103	75-120	1	30
Toluene	20	N.D.	22.13	22.55	111	113	80-120	2	30
trans-1,3-Dichloropropene	20	N.D.	19.42	19.48	97	97	76-120	0	30
1,1,2-Trichloroethane	20	N.D.	21.16	20.7	106	104	80-120	2	30
Tetrachloroethene	20	N.D.	22.91	23.3	115	117	80-120	2	30
Dibromochloromethane	20	N.D.	19.75	19.97	99	100	71-120	1	30
Chlorobenzene	20	N.D.	21.39	21.65	107	108	80-120	1	30
Ethylbenzene	20	N.D.	23.28	23.43	116	117	80-120	1	30
Xylene (Total)	60	N.D.	66.49	67.7	111	113	80-120	2	30
Bromoform	20	N.D.	18.14	17.89	91	89	59-120	1	30
1,1,2,2-Tetrachloroethane	20	N.D.	19.13	19.33	96	97	72-120	1	30
1,3-Dichlorobenzene	20	N.D.	19.85	19.99	99	100	80-120	1	30
1,4-Dichlorobenzene	20	N.D.	19.86	20.36	99	102	80-120	2	30
1,2-Dichlorobenzene	20	N.D.	20.08	20.28	100	101	80-120	1	30

Comments:
(2) The unspiked sample result is greater than four times the spike added.
* = Out of Specification

Results are being reported on an as received basis.

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: CBD50
Matrix: LIQUID

GC/MS Volatiles
Fraction: Volatiles by GC/MS

LCS: LCS548	Batch: **5181701AA** (Sample number(s): 9662302-9662312, 9662314-9662315)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Chloromethane	20	18.94	NA	95	NA	63-120	NA	NA
Vinyl Chloride	20	19.4	NA	97	NA	68-120	NA	NA
Bromomethane	20	19.99	NA	100	NA	58-130	NA	NA
Chloroethane	20	19.11	NA	96	NA	61-123	NA	NA
Trichlorofluoromethane	20	22.44	NA	112	NA	60-136	NA	NA
1,1-Dichloroethene	20	23.92	NA	120	NA	80-131	NA	NA
Methylene Chloride	20	22.03	NA	110	NA	80-120	NA	NA
Methyl Tertiary Butyl Ether	20	23.14	NA	116	NA	75-120	NA	NA
1,1-Dichloroethane	20	21.3	NA	107	NA	80-120	NA	NA
1,2-Dichloroethene (Total)	40	43.27	NA	108	NA	80-120	NA	NA
1,1,1-Trichloroethane	20	22.32	NA	112	NA	67-126	NA	NA
Chloroform	20	20.72	NA	104	NA	80-120	NA	NA
Carbon Tetrachloride	20	24.87	NA	124	NA	64-134	NA	NA
1,2-Dichloroethane	20	20.88	NA	104	NA	73-124	NA	NA
Benzene	20	21.47	NA	107	NA	80-120	NA	NA
Trichloroethene	20	21.17	NA	106	NA	80-120	NA	NA
1,2-Dichloropropane	20	21.44	NA	107	NA	80-120	NA	NA
Bromodichloromethane	20	19.98	NA	100	NA	71-120	NA	NA
2-Chloroethyl Vinyl Ether	20	20.67	NA	103	NA	57-121	NA	NA
cis-1,3-Dichloropropene	20	19.52	NA	98	NA	75-120	NA	NA
Toluene	20	20.58	NA	103	NA	80-120	NA	NA
trans-1,3-Dichloropropene	20	18.28	NA	91	NA	76-120	NA	NA
1,1,2-Trichloroethane	20	19.65	NA	98	NA	80-120	NA	NA
Tetrachloroethene	20	20.69	NA	103	NA	80-120	NA	NA
Dibromochloromethane	20	18.33	NA	92	NA	71-120	NA	NA
Chlorobenzene	20	20.08	NA	100	NA	80-120	NA	NA
Ethylbenzene	20	21.11	NA	106	NA	80-120	NA	NA
Xylene (Total)	60	61.94	NA	103	NA	80-120	NA	NA
Bromoform	20	17.55	NA	88	NA	59-120	NA	NA
1,1,2,2-Tetrachloroethane	20	19.12	NA	96	NA	72-120	NA	NA
1,3-Dichlorobenzene	20	19.26	NA	96	NA	80-120	NA	NA
1,4-Dichlorobenzene	20	19.67	NA	98	NA	80-120	NA	NA
1,2-Dichlorobenzene	20	19.26	NA	96	NA	80-120	NA	NA

Fraction: Volatiles by GC/MS

11997: VOCs- 5ml Water by 8260C Analyte Name	Default MDL	Default LOQ	Units
Chloromethane	0.5	1	ug/l
Vinyl Chloride	0.5	1	ug/l
Bromomethane	0.5	1	ug/l
Chloroethane	0.5	1	ug/l
Trichlorofluoromethane	0.5	1	ug/l
1,1-Dichloroethene	0.5	1	ug/l
Methylene Chloride	0.5	1	ug/l
Methyl Tertiary Butyl Ether	0.5	1	ug/l
1,1-Dichloroethane	0.5	1	ug/l
1,2-Dichloroethene (Total)	0.5	1	ug/l
Chloroform	0.5	1	ug/l
1,1,1-Trichloroethane	0.5	1	ug/l
Carbon Tetrachloride	0.5	1	ug/l
Benzene	0.5	1	ug/l
1,2-Dichloroethane	0.5	1	ug/l
Trichloroethene	0.5	1	ug/l
1,2-Dichloropropane	0.5	1	ug/l
Bromodichloromethane	0.5	1	ug/l
2-Chloroethyl Vinyl Ether	2	10	ug/l
cis-1,3-Dichloropropene	0.5	1	ug/l
Toluene	0.5	1	ug/l
trans-1,3-Dichloropropene	0.5	1	ug/l
1,1,2-Trichloroethane	0.5	1	ug/l
Tetrachloroethene	0.5	1	ug/l
Dibromochloromethane	0.5	1	ug/l
Chlorobenzene	0.5	1	ug/l
Ethylbenzene	0.5	1	ug/l
Xylene (Total)	0.5	1	ug/l
Bromoform	0.5	4	ug/l
1,1,2,2-Tetrachloroethane	0.5	1	ug/l
1,3-Dichlorobenzene	1	5	ug/l
1,4-Dichlorobenzene	1	5	ug/l
1,2-Dichlorobenzene	1	5	ug/l

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Lab File ID: 5y15t01.d BFB Injection Date: 05/15/18

Instrument ID: HP26285 BFB Injection Time: 13:28

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.14
75	30.0 - 60.0% of mass 95	46.63
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.86
173	Less than 2.0% of mass 174	0.50 (0.57)1
174	Greater than 50.0% of mass 95	87.67
175	5.0 - 9.0% of mass 174	6.22 (7.09)1
176	Greater than 95.0%, but less than 101.0% of mass 174	85.04 (97.00)1
177	5.0 - 9.0% of mass 176	5.73 (6.74)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD300	5y15i01.d	05/15/18	14:12
02	VSTD100	5y15i02.d	05/15/18	14:34
03	VSTD50	5y15i03.d	05/15/18	14:55
04	VSTD20	5y15i04.d	05/15/18	15:17
05	VSTD10	5y15i05.d	05/15/18	15:39
06	VSTD4	5y15i06.d	05/15/18	16:01
07	VSTD1	5y15i07.d	05/15/18	16:22
08	0.5PPB - 0.5PPB	5y15m01.d	05/15/18	16:44
09	LG5ICV	5y15v01.d	05/15/18	17:06

FORM V VOA

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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: 5u19t01.d BFB Injection Date: 06/19/18

Instrument ID: HP26285 BFB Injection Time: 19:06

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.40
75	30.0 - 60.0% of mass 95	48.59
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.68
173	Less than 2.0% of mass 174	0.55 (0.68)1
174	Greater than 50.0% of mass 95	80.93
175	5.0 - 9.0% of mass 174	5.93 (7.33)1
176	Greater than 95.0%, but less than 101.0% of mass 174	77.61 (95.90)1
177	5.0 - 9.0% of mass 176	5.21 (6.72)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	5u19c01.d	06/19/18	19:42
02	VBLK548	5u19b01.d	06/19/18	20:25
03	LCS548	5u19s02.d	06/19/18	20:48
04	9662303	5u19s03.d	06/19/18	21:33
05	9662304	5u19s04.d	06/19/18	21:55
06	9662305	5u19s05.d	06/19/18	22:17
07	9662306	5u19s06.d	06/19/18	22:38
08	9662307	5u19s07.d	06/19/18	23:00
09	9662308	5u19s08.d	06/19/18	23:22
10	9662302	5u19s09.d	06/20/18	00:05
11	9651271	5u19s10.d	06/20/18	00:27
12	9662309	5u19s11.d	06/20/18	00:48
13	9662310	5u19s12.d	06/20/18	01:10
14	9662311MS	5u19s13.d	06/20/18	01:32
15	9662312MSD	5u19s14.d	06/20/18	01:54
16	9662314	5u19s15.d	06/20/18	02:16
17	9662315	5u19s16.d	06/20/18	02:38
18	9651266	5u19s17.d	06/20/18	02:59
19	9651267	5u19s18.d	06/20/18	03:21
20	9651268	5u19s19.d	06/20/18	03:42
21	9651269DL	5u19s20.d	06/20/18	04:04
22	9651270	5u19s22.d	06/20/18	04:47

FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: 5u19t01.d BFB Injection Date: 06/19/18

Instrument ID: HP26285 BFB Injection Time: 19:06

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.40
75	30.0 - 60.0% of mass 95	48.59
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.68
173	Less than 2.0% of mass 174	0.55 (0.68)1
174	Greater than 50.0% of mass 95	80.93
175	5.0 - 9.0% of mass 174	5.93 (7.33)1
176	Greater than 95.0%, but less than 101.0% of mass 174	77.61 (95.90)1
177	5.0 - 9.0% of mass 176	5.21 (6.72)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
23	9651270DL	5u19s23.d	06/20/18	05:09
24	9646717DL	5u19s25.d	06/20/18	05:53
25	9646903	5u19s26.d	06/20/18	06:14

FORM V VOA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date(s): 05/15/18 05/15/18

Heated Purge: (Y/N) Y Calibration Times: 14:12 16:22

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

LAB FILE ID: RRF 1 = 5y15i07.d RRF 4 = 5y15i06.d RRF 10= 5y15i05.d
RRF 20= 5y15i04.d RRF 50= 5y15i03.d RRF100= 5y15i02.d RRF300= 5y15i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	RRF	% RSD	CAL. METHOD
Dichlorodifluoromethane	#0.2347	0.2971	0.3503	0.3665	0.3939	0.3847	0.3838	0.3444	17	AVG #
Chloromethane	#0.2495	0.2597	0.2415	0.2458	0.2421	0.2488	0.2296	0.2453	4	AVG #
1,3-Butadiene	0.1663	0.1829	0.1477	0.1451	0.1570	0.1616	0.1557	0.1595	8	AVG
Vinyl Chloride	#0.2204	0.2527	0.2370	0.2480	0.2478	0.2438	0.2283	0.2397	5	AVG #
Bromomethane	#0.2125	0.2050	0.1993	0.2082	0.2027	0.1958	0.1922	0.2023	3	AVG #
Chloroethane	#0.1303	0.1288	0.1309	0.1312	0.1301	0.1253	0.1140	0.1272	5	AVG #
Dichlorofluoromethane	0.3874	0.4168	0.3970	0.4007	0.3974	0.3951	0.3786	0.3961	3	AVG
n-Pentane	0.2143	0.2053	0.1861	0.1525	0.2370	0.2495	0.2279	0.2104	16	AVG
Trichlorofluoromethane	#0.2971	0.3377	0.3841	0.3983	0.4166	0.4104	0.4094	0.3791	12	AVG #
Ethyl ether	0.1647	0.1924	0.2056	0.1999	0.2113	0.2088	0.1950	0.1968	8	AVG
Freon 123a	0.2610	0.2811	0.2698	0.2664	0.2786	0.2857	0.2748	0.2739	3	AVG
Acrolein	1.7536	1.5327	1.8332	1.6697	1.9452	1.8459	1.4775	1.7226	10	AVG
1,1-Dichloroethene	#0.1875	0.2113	0.1950	0.1982	0.2086	0.2119	0.2090	0.2031	5	AVG #
1,1-Dichloroethene(2)	#0.0980	0.1060	0.1009	0.0988	0.1030	0.1040	0.1035	0.1020	3	AVG #
Acetone	#1.2681	0.9429	0.9417	0.8352	0.9010	0.8209	0.7534	0.9233	18	AVG #
Freon 113	#0.1992	0.1910	0.2005	0.1688	0.2408	0.2532	0.2484	0.2146	15	AVG #
2-Propanol	0.5770	0.4567	0.6371	0.5391	0.6749	0.6786	0.5666	0.5900	14	AVG
Methyl Iodide	0.4804	0.5100	0.4547	0.4635	0.4790	0.4847	0.4812	0.4791	4	AVG
Carbon Disulfide	#0.6112	0.6597	0.6293	0.6424	0.6867	0.7052	0.7026	0.6624	6	AVG #
Allyl Chloride	0.3042	0.3340	0.3557	0.3819	0.3832	0.3777	0.3662	0.3576	8	AVG
Methyl Acetate	#0.3093	0.3048	0.2817	0.2998	0.3079	0.2990	0.2899	0.2989	3	AVG #
Methylene Chloride	#0.2562	0.2846	0.2531	0.2528	0.2619	0.2636	0.2581	0.2615	4	AVG #
t-Butyl alcohol	1.0326	1.0601	1.1596	1.0728	1.3066	1.2703	1.1441	1.1495	9	AVG
Acrylonitrile	0.1361	0.1638	0.1459	0.1581	0.1635	0.1626	0.1584	0.1555	7	AVG
trans-1,2-Dichloroethene	#0.2478	0.2693	0.2457	0.2463	0.2551	0.2529	0.2464	0.2519	3	AVG #
Methyl Tertiary Butyl Ether	#0.6345	0.7039	0.5992	0.5886	0.6425	0.6210	0.6225	0.6303	6	AVG #
n-Hexane	0.1846	0.2281	0.2172	0.1655	0.3469	0.3835	0.3634	0.2699	34	2NDDEG
1,1-Dichloroethane	#0.4322	0.4738	0.4372	0.4441	0.4598	0.4640	0.4592	0.4529	3	AVG #
di-Isopropyl ether	0.7819	0.8343	0.7561	0.7568	0.8143	0.8006	0.7695	0.7876	4	AVG
2-Chloro-1,3-butadiene	0.2659	0.3331	0.3223	0.3320	0.3695	0.3804	0.3823	0.3408	12	AVG
Ethyl t-butyl ether	0.5712	0.6792	0.5883	0.5898	0.6488	0.6397	0.6291	0.6209	6	AVG
cis-1,2-Dichloroethene	#0.2870	0.3141	0.2909	0.2960	0.3022	0.3066	0.2953	0.2989	3	AVG #
2-Butanone	#0.2115	0.2371	0.2085	0.2311	0.2343	0.2354	0.2237	0.2260	5	AVG #
2,2-Dichloropropane	0.2308	0.2588	0.2419	0.2434	0.2555	0.2559	0.2368	0.2461	4	AVG
Propionitrile	1.4173	1.3113	1.4339	1.3332	1.4549	1.3701	1.2909	1.3731	5	AVG
Methacrylonitrile	0.1586	0.1817	0.1680	0.1710	0.1784	0.1741	0.1673	0.1713	4	AVG
Bromochloromethane	0.1341	0.1460	0.1560	0.1655	0.1706	0.1692	0.1703	0.1588	9	AVG
Tetrahydrofuran	1.3491	1.1396	1.2884	1.3029	1.4747	1.3879	1.2452	1.3126	8	AVG
Chloroform	#0.5020	0.5523	0.4896	0.4883	0.5150	0.5183	0.5227	0.5126	4	AVG #
1,1,1-Trichloroethane	#0.4423	0.4807	0.4083	0.4111	0.4306	0.4462	0.4591	0.4397	6	AVG #
Cyclohexane	#0.2737	0.2993	0.2895	0.2563	0.4053	0.4373	0.4237	0.3407	23	2NDDEG #
Cyclohexane(2)	#0.2444	0.2574	0.2483	0.2219	0.3499	0.3773	0.3701	0.2956	23	2NDDEG #
Cyclohexane(3)	#0.0793	0.0943	0.0905	0.0809	0.1283	0.1364	0.1359	0.1065	24	2NDDEG #
1,1-Dichloropropene	0.3326	0.3445	0.3220	0.3224	0.3684	0.3755	0.3733	0.3484	7	AVG
Carbon Tetrachloride	#0.2759	0.2985	0.2841	0.2835	0.3441	0.3721	0.3912	0.3213	15	AVG #
Isobutyl Alcohol	0.3801	0.3845	0.3879	0.3810	0.4359	0.4364	0.3858	0.3988	6	AVG
Benzene	#1.1274	1.2047	1.1063	1.0818	1.1314	1.1274	1.0942	1.1247	4	AVG #
1,2-Dichloroethane	#0.4445	0.4215	0.3651	0.3508	0.3785	0.3797	0.3951	0.3907	8	AVG #
1,2-Dichloroethane(2)	#0.0333	0.0353	0.0321	0.0321	0.0341	0.0346	0.0340	0.0336	4	AVG #<-
t-Amyl ethyl ether	0.2738	0.3455	0.2948	0.2950	0.3709	0.3783	0.3709	0.3327	13	AVG
t-Amyl methyl ether	0.6236	0.7197	0.6033	0.6022	0.6672	0.6512	0.6222	0.6413	7	AVG
n-Heptane	0.2069	0.2350	0.2145	0.1617	0.3628	0.4196		0.2668	38	2NDDEG

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date(s): 05/15/18 05/15/18

Heated Purge: (Y/N) Y Calibration Times: 14:12 16:22

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

LAB FILE ID: RRF 1 = 5y15i07.d RRF 4 = 5y15i06.d RRF 10= 5y15i05.d
RRF 20= 5y15i04.d RRF 50= 5y15i03.d RRF100= 5y15i02.d RRF300= 5y15i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	RRF	% RSD	CAL. METHOD	
n-Butanol	0.2627	0.3103	0.3045	0.3170	0.3719	0.3819	0.3323	0.3258	13	AVG	
Trichloroethene	#0.2967	0.3225	0.2983	0.2936	0.3099	0.3146	0.3093	0.3064	3	AVG	#
Methylcyclohexane	#0.2833	0.3456	0.3664	0.4726	0.5077	0.5265	0.5200	0.4317	23	2NDDEG	#
Methylcyclohexane(2)	#0.1246	0.1536	0.1553	0.2066	0.2274	0.2367	0.2326	0.1910	24	2NDDEG	#
1,2-Dichloropropane	#0.2961	0.3171	0.2840	0.2816	0.2955	0.2929	0.2815	0.2927	4	AVG	#
Dibromomethane	0.2092	0.2189	0.1883	0.1864	0.1999	0.1981	0.2016	0.2003	6	AVG	
1,4-Dioxane	0.0817	0.1123	0.0877	0.1069	0.0974	0.1006	0.1162	0.1004	13	AVG	
Methyl Methacrylate	0.2489	0.2971	0.2496	0.2590	0.2811	0.2818	0.2834	0.2715	7	AVG	
Bromodichloromethane	#0.3386	0.3808	0.3550	0.3654	0.4042	0.4184	0.4378	0.3857	9	AVG	#
2-Nitropropane	0.0823	0.0895	0.0845	0.1002	0.1134	0.1201	0.1285	0.1026	18	AVG	
2-Chloroethyl Vinyl Ether	0.1181	0.1449	0.1474	0.1497	0.1815	0.1968	0.1946	0.1619	18	AVG	
cis-1,3-Dichloropropene	#0.4157	0.4814	0.4487	0.4645	0.5101	0.5172	0.5245	0.4803	8	AVG	#
4-Methyl-2-pentanone	#0.3586	0.4433	0.4130	0.4703	0.4883	0.5045	0.4826	0.4515	11	AVG	#
Toluene	#1.0005	0.9726	0.8775	0.8719	0.9409	0.9360	0.9030	0.9289	5	AVG	#
trans-1,3-Dichloropropene	#0.4715	0.5470	0.4931	0.5191	0.5739	0.5889	0.5998	0.5419	9	AVG	#
Ethyl Methacrylate	0.4364	0.5308	0.5069	0.5363	0.5998	0.6064	0.5966	0.5447	11	AVG	
1,1,2-Trichloroethane	#0.3873	0.4083	0.3610	0.3550	0.3783	0.3755	0.3682	0.3762	5	AVG	#
Tetrachloroethene	#0.4488	0.4362	0.3760	0.3788	0.4422	0.4658	0.4739	0.4317	9	AVG	#
1,3-Dichloropropane	0.6064	0.6523	0.5730	0.5668	0.5975	0.5960	0.5836	0.5965	5	AVG	
2-Hexanone	#0.3415	0.4446	0.4294	0.4892	0.5061	0.5214	0.4698	0.4574	13	AVG	#
Dibromochloromethane	#0.3479	0.3941	0.3775	0.3968	0.4451	0.4592	0.4856	0.4152	12	AVG	#
1,2-Dibromoethane	#0.4049	0.4345	0.3826	0.3875	0.4183	0.4191	0.4300	0.4110	5	AVG	#
1-Chlorohexane	0.5064	0.4585	0.3774	0.3588	0.5166	0.5504	0.5180	0.4694	16	AVG	
Chlorobenzene	#1.2666	1.1921	1.0761	1.0558	1.1560	1.1634	1.1452	1.1507	6	AVG	#
1,1,1,2-Tetrachloroethane	0.3860	0.3912	0.3577	0.3653	0.4082	0.4271	0.4482	0.3977	8	AVG	
Ethylbenzene	#1.8890	1.8598	1.6404	1.6673	1.8954	1.9525	1.8439	1.8212	7	AVG	#
m+p-Xylene	#0.7251	0.7340	0.6452	0.6463	0.7553	0.7715	0.7498	0.7182	7	AVG	#
o-Xylene	#0.6566	0.7081	0.6304	0.6550	0.7513	0.7713	0.7652	0.7054	8	AVG	#
Styrene	#0.9956	1.1419	1.0542	1.0999	1.2713	1.2740	1.2679	1.1578	10	AVG	#
Bromoform	#0.2449	0.2888	0.2713	0.2919	0.3458	0.3669	0.4083	0.3168	18	AVG	#
Isopropylbenzene	#1.4357	1.6715	1.4371	1.5046	1.8865	1.9894	1.8938	1.6884	14	AVG	#
Cyclohexanone	0.3133	0.4117	0.4074	0.4946	0.4730	0.4707	0.5378	0.4441	17	AVG	
Bromobenzene	0.9902	0.9578	0.8159	0.8161	0.9448	0.9401	1.0000	0.9236	8	AVG	
1,1,2,2-Tetrachloroethane	#1.2556	1.2773	1.0224	1.0410	1.1660	1.1039	1.0160	1.1260	10	AVG	#
1,2,3-Trichloropropane	0.3761	0.4004	0.3092	0.3148	0.3434	0.3304	0.3239	0.3426	10	AVG	
trans-1,4-Dichloro-2-butene	0.2781	0.3119	0.2961	0.3027	0.3243	0.3148	0.2837	0.3017	6	AVG	
n-Propylbenzene	3.6765	3.8270	3.0638	3.1571	3.9820	4.1237	3.3612	3.5987	11	AVG	
2-Chlorotoluene	0.8168	0.8443	0.7069	0.7257	0.8474	0.8561	0.8424	0.8057	8	AVG	
4-Chlorotoluene	0.8926	0.8940	0.7426	0.7664	0.8907	0.8922	0.8892	0.8525	8	AVG	
1,3,5-Trimethylbenzene	2.3320	2.6688	2.1773	2.2817	2.9173	2.9912	2.7920	2.5943	13	AVG	
tert-Butylbenzene	0.4019	0.5005	0.4116	0.4287	0.5926	0.6299	0.6279	0.5133	20	AVG	
Pentachloroethane	0.3886	0.4209	0.4567	0.5071	0.5563	0.5764	0.6242	0.5043	17	AVG	
1,2,4-Trimethylbenzene	2.3745	2.7825	2.2876	2.4166	3.0121	3.0875	2.8400	2.6858	12	AVG	
sec-Butylbenzene	2.6040	3.0095	2.4378	2.4464	3.6536	3.9013	3.2606	3.0447	19	AVG	
1,3-Dichlorobenzene	#1.7202	1.7943	1.4320	1.5238	1.8165	1.8635	1.8971	1.7211	10	AVG	#
p-Isopropyltoluene	2.1484	2.6581	2.1702	2.2083	3.2111	3.4832	2.9880	2.6953	20	AVG	
1,4-Dichlorobenzene	#1.8302	1.8042	1.5055	1.5528	1.8236	1.8899	1.9132	1.7599	9	AVG	#
1,2,3-Trimethylbenzene	2.4605	2.6750	2.6841	3.0555	3.1073	3.0852	2.8887	2.8509	9	AVG	
Benzyl Chloride	1.5777	1.8963	1.7266	1.8830	2.2968	2.3498	2.3652	2.0136	16	AVG	
1,3-Diethylbenzene	1.2745	1.6207	1.5457	1.8957	1.9832	2.0354	1.9118	1.7524	16	AVG	
1,4-Diethylbenzene	1.3819	1.6943	1.6455	2.0153	2.1075	2.2032	2.0751	1.8747	16	AVG	
1,2-Dichlorobenzene	#1.7620	1.7471	1.3792	1.4410	1.6957	1.7368	1.7461	1.6440	10	AVG	#

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date(s): 05/15/18 05/15/18

Heated Purge: (Y/N) Y Calibration Times: 14:12 16:22

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

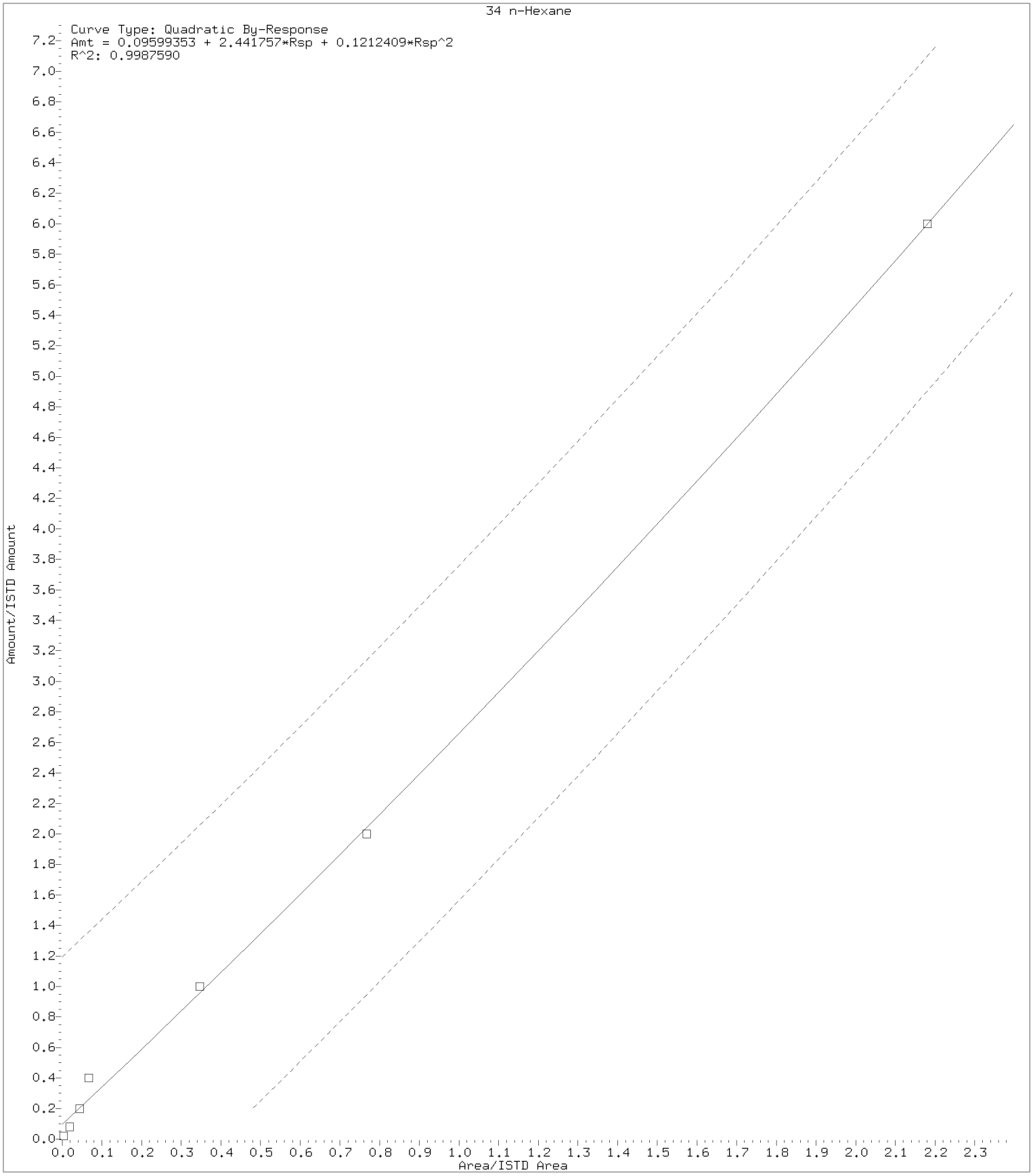
LAB FILE ID: RRF 1 = 5y15i07.d RRF 4 = 5y15i06.d RRF 10= 5y15i05.d
RRF 20= 5y15i04.d RRF 50= 5y15i03.d RRF100= 5y15i02.d RRF300= 5y15i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	RRF	% RSD	CAL. METHOD
n-Butylbenzene	1.1723	1.3385	1.0910	1.1000	1.6196	1.7544	1.5616	1.3768	20	AVG
1,2-Diethylbenzene	1.2118	1.3921	1.3181	1.5819	1.6186	1.6445	1.5522	1.4742	11	AVG
1,2-Dibromo-3-chloropropane	#0.2811	0.2683	0.2224	0.2424	0.2899	0.2970	0.2819	0.2690	10	AVG #
1,3,5-Trichlorobenzene	1.0747	1.1445	0.8763	0.9346	1.3071	1.4311	1.4477	1.1737	20	AVG
1,2,4-Trichlorobenzene	#0.9186	1.0222	0.7912	0.8589	1.1884	1.2811	1.3179	1.0540	20	AVG #
Hexachlorobutadiene	0.4693	0.4403	0.3141	0.3169	0.5445	0.6334	0.6477	0.4809	28	2NDDEG
Naphthalene	2.9722	3.4395	2.7488	3.0575	3.8420	3.9944	3.2444	3.3284	14	AVG
1,2,3-Trichlorobenzene	0.8618	0.9995	0.7552	0.8122	1.0941	1.1495	1.1597	0.9760	17	AVG
2-Methylnaphthalene	1.1574	1.3530	1.2988	1.7130	1.9900	2.1053	1.9670	1.6549	23	2NDDEG
Dibromofluoromethane	0.2683	0.2681	0.2693	0.2681	0.2689	0.2726	0.2774	0.2704	1	AVG
Dibromofluoromethane(2)	0.2712	0.2709	0.2730	0.2712	0.2733	0.2766	0.2833	0.2742	2	AVG
1,2-Dichloroethane-d4	0.0595	0.0601	0.0597	0.0565	0.0568	0.0576	0.0570	0.0582	3	AVG
1,2-Dichloroethane-d4(2)	0.2839	0.2840	0.2863	0.2705	0.2761	0.2758	0.2928	0.2813	3	AVG
1,2-Dichloroethane-d4(3)	0.0381	0.0373	0.0371	0.0356	0.0370	0.0372	0.0372	0.0371	2	AVG
Toluene-d8	1.2240	1.2315	1.2318	1.2295	1.2129	1.2141	1.2008	1.2206	1	AVG
Toluene-d8(2)	0.7912	0.7927	0.8018	0.7974	0.7917	0.7949	0.7915	0.7945	0	AVG
4-Bromofluorobenzene	0.4954	0.4996	0.5057	0.4996	0.4949	0.4942	0.5073	0.4995	1	AVG
4-Bromofluorobenzene(2)	0.4506	0.4540	0.4568	0.4541	0.4490	0.4517	0.4560	0.4532	1	AVG

Average %RSD 10

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

FORM VI VOA



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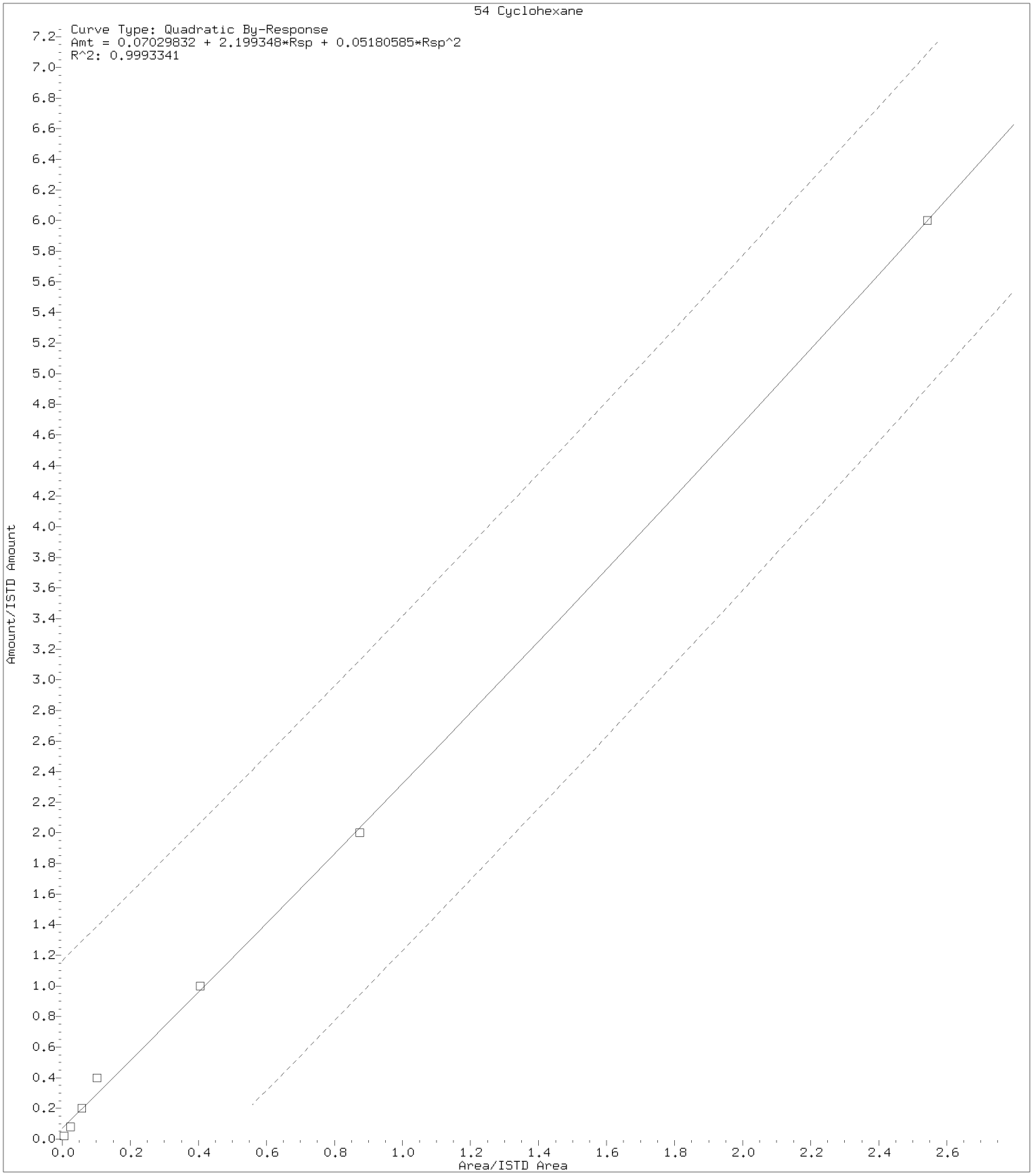
Target 3.5 esignature user ID: kas02648



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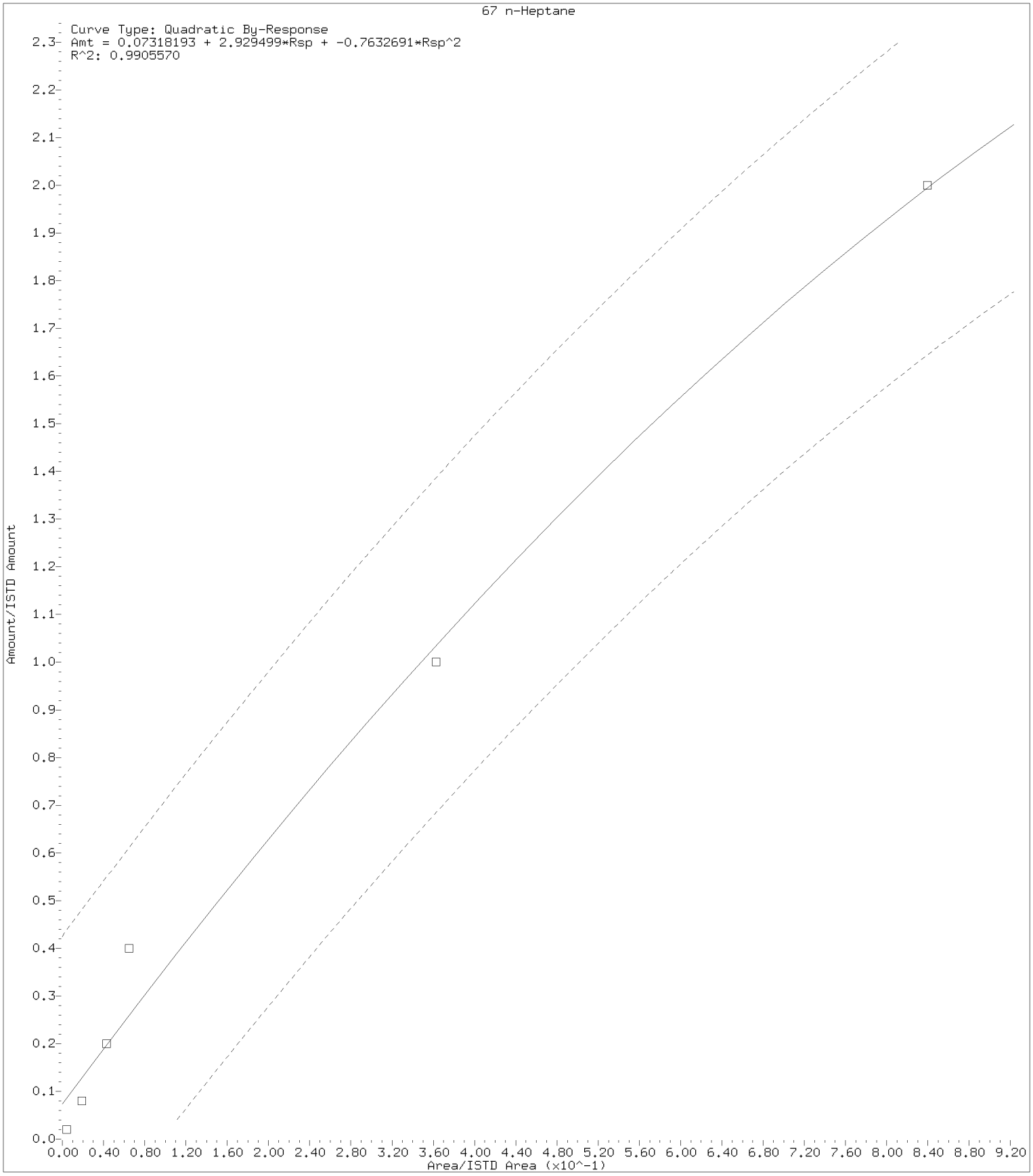
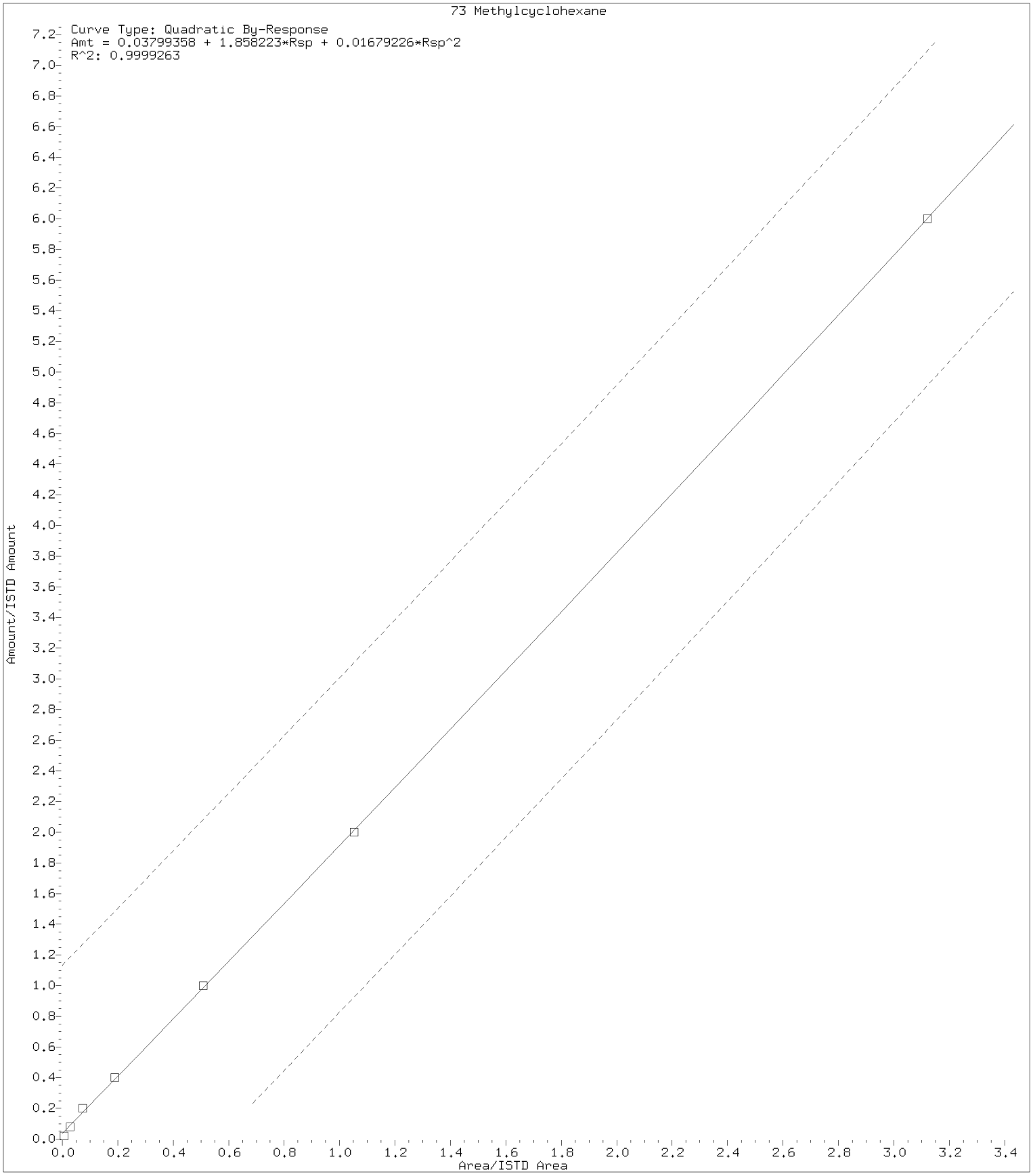
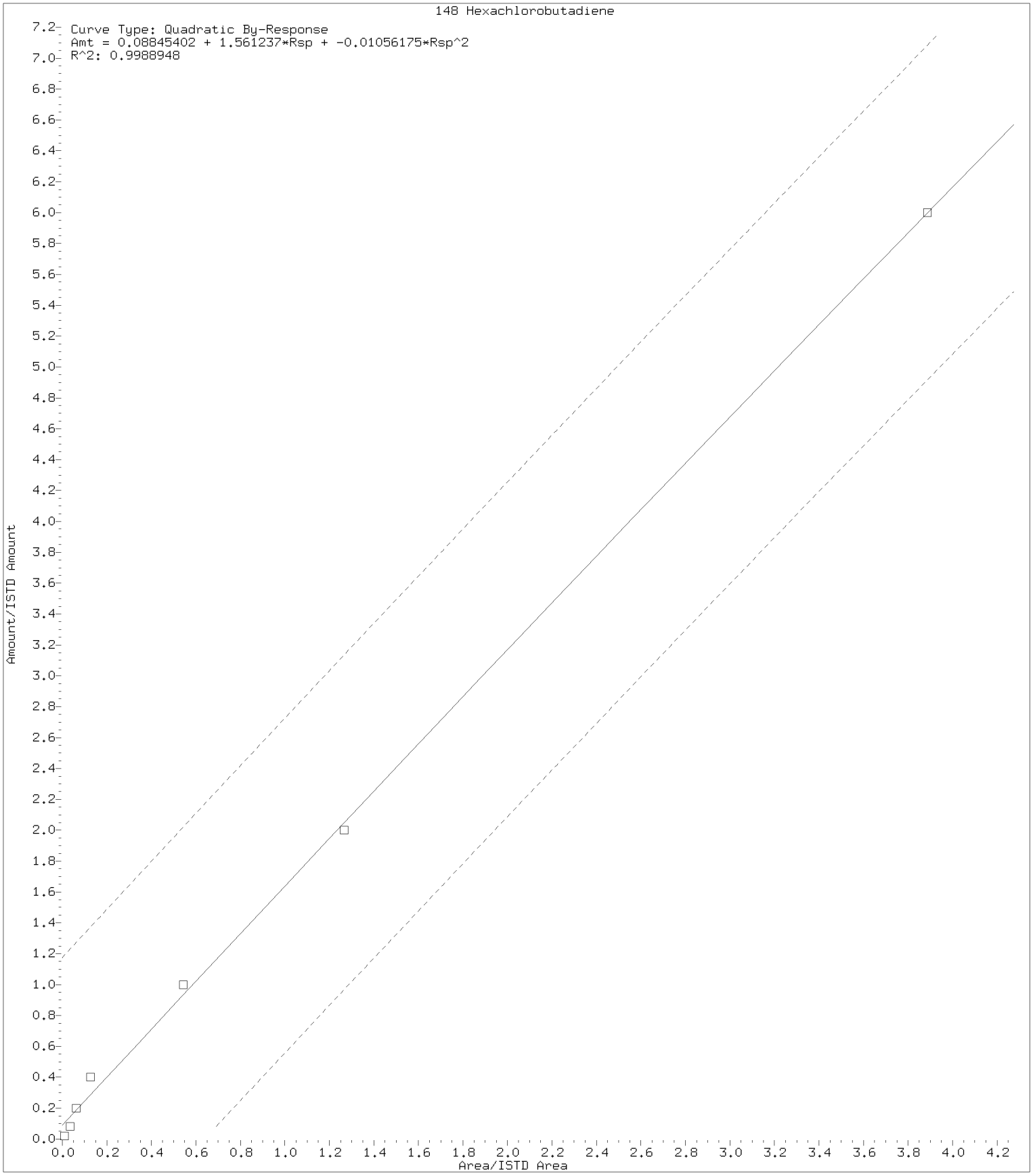
Target 3.5 esignature user ID: kas02648



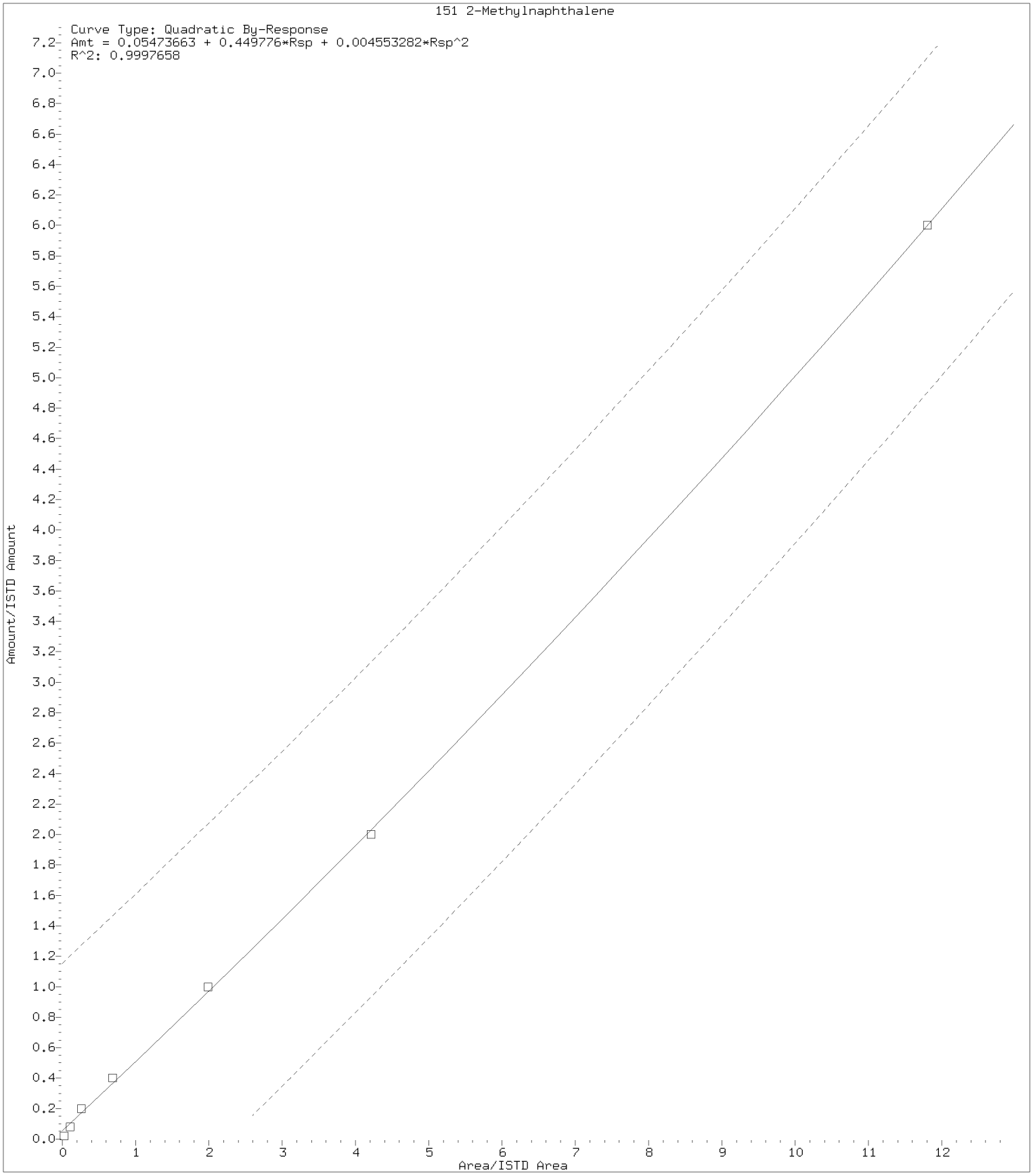
Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:04.
Target 3.5 esignature user ID: kas02648



Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:04.
Target 3.5 esignature user ID: kas02648



Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:04.
Target 3.5 esignature user ID: kas02648



Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:04.
Target 3.5 esignature user ID: kas02648

Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem2/HP26285.i/18may15a.b/5y15i01.d	VSTD300
/chem2/HP26285.i/18may15a.b/5y15i02.d	VSTD100
/chem2/HP26285.i/18may15a.b/5y15i03.d	VSTD050
/chem2/HP26285.i/18may15a.b/5y15i04.d	VSTD020
/chem2/HP26285.i/18may15a.b/5y15i05.d	VSTD010
/chem2/HP26285.i/18may15a.b/5y15i06.d	VSTD004
/chem2/HP26285.i/18may15a.b/5y15i07.d	VSTD001

Area Summary

File ID:

Internal Standard Name	5y15i01.d	5y15i02.d	5y15i03.d	5y15i04.d	5y15i05.d	5y15i06.d	5y15i07.d	Avg. Area	%RSD	In Spec
t-Butyl alcohol-d10	338384	350966	337211	378332	343894	417893	359308	360855	8	Yes
Fluorobenzene	1326213	1444158	1479096	1501328	1510941	1473407	1500028	1462167	4	Yes
Chlorobenzene-d5	1114468	1181171	1210397	1212671	1217290	1194068	1207944	1191144	3	Yes
1,4-Dichlorobenzene-d4	677337	693434	688394	695201	694939	673752	678846	685986	1	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

File ID:

Internal Standard Name	5y15i01.d	5y15i02.d	5y15i03.d	5y15i04.d	5y15i05.d	5y15i06.d	5y15i07.d	Avg. RT
t-Butyl alcohol-d10	3.539	3.551	3.551	3.545	3.545	3.545	3.545	3.546
Fluorobenzene	7.020	7.026	7.026	7.026	7.026	7.026	7.032	7.026
Chlorobenzene-d5	10.763	10.763	10.763	10.763	10.763	10.763	10.763	10.763
1,4-Dichlorobenzene-d4	12.763	12.762	12.763	12.763	12.763	12.763	12.763	12.763

* indicates the retention time is greater than 30 seconds from the average RT.

Report generated on 05/16/2018 at 11:58.

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 ICV Date: 05/15/18 Time: 17:06

Lab File ID: 5y15v01.d Init. Calib. Date(s): 05/15/18 05/15/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	$\overline{RRF}$	RRF	CONC.	CONC.	DRIFT	
# Dichlorodifluoromethane	0.3444	0.3789	22.00	20	10	#
# Chloromethane	0.2453	0.2480	20.23	20	1	#
1,3-Butadiene	0.1595	0.1787	22.41	20	12	
# Vinyl Chloride	0.2397	0.2457	20.50	20	2	#
# Bromomethane	0.2023	0.1791	17.70	20	-11	#
# Chloroethane	0.1272	0.1083	17.03	20	-15	#
Dichlorofluoromethane	0.3961	0.3638	18.37	20	-8	
n-Pentane	0.2104	0.2373	22.55	20	13	
# Trichlorofluoromethane	0.3791	0.3893	20.54	20	3	#
Ethyl ether	0.1968	0.1961	19.93	20	0	
Freon 123a	0.2739	0.2916	21.29	20	6	
Acrolein	1.7226	1.4714	128.13	150	-15	
# 1,1-Dichloroethene	0.2031	0.2438	24.02	20	20	#
# Acetone	0.9233	0.9447	153.47	150	2	#
# Freon 113	0.2146	0.2530	23.59	20	18	#
2-Propanol	0.5900	0.5519	140.31	150	-6	
Methyl Iodide	0.4791	0.4921	20.55	20	3	
# Carbon Disulfide	0.6624	0.6718	20.28	20	1	#
Allyl Chloride	0.3576	0.3516	19.66	20	-2	
# Methyl Acetate	0.2989	0.3130	20.94	20	5	#
# Methylene Chloride	0.2615	0.2840	21.72	20	9	#
t-Butyl alcohol	1.1495	1.0648	185.27	200	-7	
Acrylonitrile	0.1555	0.1561	100.42	100	0	
# trans-1,2-Dichloroethene	0.2519	0.2778	22.05	20	10	#
# Methyl Tertiary Butyl Ether	0.6303	0.6304	20.00	20	0	#
n-Hexane	0.2699	0.3675	22.88	20	14	
# 1,1-Dichloroethane	0.4529	0.4697	20.74	20	4	#
di-Isopropyl ether	0.7876	0.8163	20.73	20	4	
2-Chloro-1,3-butadiene	0.3408	0.3691	21.66	20	8	
Ethyl t-butyl ether	0.6209	0.6281	20.23	20	1	
# cis-1,2-Dichloroethene	0.2989	0.3181	21.29	20	6	#
# 2-Butanone	0.2260	0.2465	163.67	150	9	#
2,2-Dichloropropane	0.2461	0.2566	20.85	20	4	
Propionitrile	1.3731	1.3136	143.50	150	-4	
Methacrylonitrile	0.1713	0.1759	153.97	150	3	
Bromochloromethane	0.1588	0.1616	20.35	20	2	

Compounds with required minimum RRF.
Maximum % Drift = 30 %

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 ICV Date: 05/15/18 Time: 17:06

Lab File ID: 5y15v01.d Init. Calib. Date(s): 05/15/18 05/15/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	$\overline{RRF}$	RRF	CONC.	CONC.	DRIFT	
Tetrahydrofuran	1.3126	1.2119	92.33	100	-8	
# Chloroform	0.5126	0.5158	20.12	20	1	#
# 1,1,1-Trichloroethane	0.4397	0.4565	20.76	20	4	#
# Cyclohexane	0.3407	0.4282	22.43	20	12	#
1,1-Dichloropropene	0.3484	0.3692	21.19	20	6	
# Carbon Tetrachloride	0.3213	0.3391	21.10	20	6	#
Isobutyl Alcohol	0.3988	0.3738	468.69	500	-6	
# Benzene	1.1247	1.1642	20.70	20	4	#
# 1,2-Dichloroethane	0.3907	0.3830	19.60	20	-2	#
t-Amyl ethyl ether	0.3327	0.3332	20.03	20	0	
t-Amyl methyl ether	0.6413	0.6526	20.35	20	2	
n-Heptane	0.2668	0.3876	25.45	20	27	
n-Butanol	0.3258	0.3062	940.02	1000	-6	
# Trichloroethene	0.3064	0.3145	20.53	20	3	#
# Methylcyclohexane	0.4317	0.4694	19.37	20	-3	#
# 1,2-Dichloropropane	0.2927	0.3014	20.59	20	3	#
Dibromomethane	0.2003	0.1996	19.92	20	0	
1,4-Dioxane	0.1004	0.1091	543.68	500	9	
Methyl Methacrylate	0.2715	0.2633	19.39	20	-3	
# Bromodichloromethane	0.3857	0.3730	19.34	20	-3	#
2-Nitropropane	0.1026	0.0912	17.76	20	-11	
2-Chloroethyl Vinyl Ether	0.1619	0.1684	20.81	20	4	
# cis-1,3-Dichloropropene	0.4803	0.4783	19.92	20	0	#
# 4-Methyl-2-pentanone	0.4515	0.4677	103.59	100	4	#
# Toluene	0.9289	0.9531	20.52	20	3	#
# trans-1,3-Dichloropropene	0.5419	0.5236	19.32	20	-3	#
Ethyl Methacrylate	0.5447	0.5516	20.25	20	1	
# 1,1,2-Trichloroethane	0.3762	0.3831	20.37	20	2	#
# Tetrachloroethene	0.4317	0.4560	21.13	20	6	#
1,3-Dichloropropane	0.5965	0.5840	19.58	20	-2	
# 2-Hexanone	0.4574	0.4849	106.02	100	6	#
# Dibromochloromethane	0.4152	0.4008	19.31	20	-3	#
# 1,2-Dibromoethane	0.4110	0.4109	19.99	20	0	#
1-Chlorohexane	0.4694	0.5197	22.14	20	11	
# Chlorobenzene	1.1507	1.1543	20.06	20	0	#
1,1,1,2-Tetrachloroethane	0.3977	0.3885	19.54	20	-2	

Compounds with required minimum RRF.
Maximum % Drift = 30 %

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 ICV Date: 05/15/18 Time: 17:06

Lab File ID: 5y15v01.d Init. Calib. Date(s): 05/15/18 05/15/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	$\overline{RRF}$	RRF	CONC.	CONC.	DRIFT	
# Ethylbenzene	1.8212	1.8862	20.71	20	4	#
# m+p-Xylene	0.7182	0.7465	41.58	40	4	#
# o-Xylene	0.7054	0.7312	20.73	20	4	#
# Styrene	1.1578	1.2176	21.03	20	5	#
# Bromoform	0.3168	0.2870	18.12	20	-9	#
# Isopropylbenzene	1.6884	1.8872	22.36	20	12	#
Cyclohexanone	0.4441	0.5405	608.55	500	22	
Bromobenzene	0.9236	0.8999	19.49	20	-3	
# 1,1,2,2-Tetrachloroethane	1.1260	1.0650	18.92	20	-5	#
1,2,3-Trichloropropane	0.3426	0.3366	19.65	20	-2	
trans-1,4-Dichloro-2-butene	0.3017	0.3221	106.77	100	7	
n-Propylbenzene	3.5987	4.0268	22.38	20	12	
2-Chlorotoluene	0.8057	0.8338	20.70	20	3	
4-Chlorotoluene	0.8525	0.8454	19.83	20	-1	
1,3,5-Trimethylbenzene	2.5943	2.7850	21.47	20	7	
tert-Butylbenzene	0.5133	0.6224	24.25	20	21	
Pentachloroethane	0.5043	0.5072	20.12	20	1	
1,2,4-Trimethylbenzene	2.6858	2.9338	21.85	20	9	
sec-Butylbenzene	3.0447	3.6336	23.87	20	19	
# 1,3-Dichlorobenzene	1.7211	1.7119	19.89	20	-1	#
p-Isopropyltoluene	2.6953	3.1460	23.34	20	17	
# 1,4-Dichlorobenzene	1.7599	1.7898	20.34	20	2	#
1,2,3-Trimethylbenzene	2.8509	3.0009	21.05	20	5	
Benzyl Chloride	2.0136	1.9465	19.33	20	-3	
1,3-Diethylbenzene	1.7524	1.8514	21.13	20	6	
1,4-Diethylbenzene	1.8747	1.9524	20.83	20	4	
# 1,2-Dichlorobenzene	1.6440	1.6353	19.89	20	-1	#
n-Butylbenzene	1.3768	1.5818	22.98	20	15	
1,2-Diethylbenzene	1.4742	1.5586	21.15	20	6	
# 1,2-Dibromo-3-chloropropane	0.2690	0.2447	18.20	20	-9	#
1,3,5-Trichlorobenzene	1.1737	1.2416	21.16	20	6	
# 1,2,4-Trichlorobenzene	1.0540	1.0898	20.68	20	3	#
Hexachlorobutadiene	0.4809	0.5293	20.93	20	5	
Naphthalene	3.3284	3.4003	20.43	20	2	
1,2,3-Trichlorobenzene	0.9760	1.0229	20.96	20	5	
2-Methylnaphthalene	1.6549	1.6616	17.78	20	-11	

Compounds with required minimum RRF.
Maximum % Drift = 30 %

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 ICV Date: 05/15/18 Time: 17:06

Lab File ID: 5y15v01.d Init. Calib. Date(s): 05/15/18 05/15/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	$\overline{RRF}$	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT
				Average %Drift	6

Compounds with required minimum RRF.
Maximum % Drift = 30 %

^

Lancaster Laboratories
Continuing Calibration Internal Standard Check

Initial Calibration Standards:

/chem2/HP26285.i/18may15a.b/5y15i07.d
/chem2/HP26285.i/18may15a.b/5y15i06.d
/chem2/HP26285.i/18may15a.b/5y15i05.d
/chem2/HP26285.i/18may15a.b/5y15i04.d
/chem2/HP26285.i/18may15a.b/5y15i03.d
/chem2/HP26285.i/18may15a.b/5y15i02.d
/chem2/HP26285.i/18may15a.b/5y15i01.d

File /chem2/HP26285.i/18may15a.b/5y15i03.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem2/HP26285.i/18jun19a.b/5u19c01.d

RT Summary

Internal Standard Name	File ID: 5u19c01.d	ICAL RT	In Spec
t-Butyl alcohol-d10	3.502	3.551	Yes
Fluorobenzene	6.996	7.026	Yes
Chlorobenzene-d5	10.788	10.763	Yes
1,4-Dichlorobenzene-d4	12.805	12.763	Yes

A "No" indicates the retention time is greater than 10 seconds from the referenced ICAL standard.

Area Summary

Internal Standard Name	File ID: 5u19c01.d	ICAL Area	Low Limit	High Limit	In Spec
t-Butyl alcohol-d10	313853	337211	168606	674422	Yes
Fluorobenzene	1114700	1479096	739548	2958192	Yes
Chlorobenzene-d5	952931	1210397	605198	2420794	Yes
1,4-Dichlorobenzene-d4	586643	688394	344197	1376788	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

Comments: _____

report generated on 06/19/2018 at 20:16

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date: 06/19/18 Time: 19:42

Lab File ID: 5u19c01.d Init. Calib. Date(s): 05/15/18 05/15/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF50	CONC.	CONC.	DRIFT	
# Dichlorodifluoromethane	0.3444	0.3993	57.96	50	16	#
# Chloromethane	0.2453	0.2338	47.67	50	-5	#
1,3-Butadiene	0.1595	0.2289	71.76	50	44	<-
# Vinyl Chloride	0.2397	0.2319	48.37	50	-3	#
# Bromomethane	0.2023	0.2435	60.19	50	20	#
# Chloroethane	0.1272	0.1350	53.05	50	6	#
n-Pentane	0.2104	0.2691	63.94	50	28	<-
# Trichlorofluoromethane	0.3791	0.4703	62.04	50	24	#<-
Freon 123a	0.2739	0.3163	57.73	50	15	
Acrolein	1.7226	1.7090	496.07	500	-1	
# 1,1-Dichloroethene	0.2031	0.2269	55.86	50	12	#
# 1,1-Dichloroethene(2)	0.1020	0.1203	58.94	50	18	#
# Acetone	0.9233	0.8733	94.59	100	-5	#
# Freon 113	0.2146	0.2656	61.89	50	24	#<-
2-Propanol	0.5900	0.5756	243.89	250	-2	
Methyl Iodide	0.4791	0.4976	51.94	50	4	
# Carbon Disulfide	0.6624	0.7791	58.81	50	18	#
Allyl Chloride	0.3576	0.3904	54.59	50	9	
# Methyl Acetate	0.2989	0.3550	59.39	50	19	#
# Methylene Chloride	0.2615	0.2831	54.13	50	8	#
t-Butyl alcohol	1.1495	1.1650	253.37	250	1	
Acrylonitrile	0.1555	0.1795	57.71	50	15	
# trans-1,2-Dichloroethene	0.2519	0.2667	52.93	50	6	#
# Methyl Tertiary Butyl Ether	0.6303	0.7884	62.54	50	25	#<-
n-Hexane	0.2699	0.3558	49.01	50	-2	
# 1,1-Dichloroethane	0.4529	0.4876	53.84	50	8	#
di-Isopropyl ether	0.7876	0.8688	55.15	50	10	
2-Chloro-1,3-butadiene	0.3408	0.4114	60.36	50	21	<-
Ethyl t-butyl ether	0.6209	0.7365	59.31	50	19	
# cis-1,2-Dichloroethene	0.2989	0.3106	51.96	50	4	#
# 2-Butanone	0.2260	0.2659	117.68	100	18	#
2,2-Dichloropropane	0.2461	0.2918	59.27	50	19	
Propionitrile	1.3731	1.3802	251.30	250	1	
Methacrylonitrile	0.1713	0.1864	136.00	125	9	
Bromochloromethane	0.1588	0.1683	52.99	50	6	
Tetrahydrofuran	1.3126	1.2645	96.34	100	-4	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date: 06/19/18 Time: 19:42

Lab File ID: 5u19c01.d Init. Calib. Date(s): 05/15/18 05/15/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF50	CONC.	CONC.	DRIFT	
# Chloroform	0.5126	0.5444	53.10	50	6	#
# 1,1,1-Trichloroethane	0.4397	0.4860	55.26	50	11	#
# Cyclohexane	0.3407	0.4274	50.99	50	2	#
# Cyclohexane(2)	0.2956	0.3542	49.20	50	-2	#
# Cyclohexane(3)	0.1065	0.1345	51.45	50	3	#
1,1-Dichloropropene	0.3484	0.3901	55.99	50	12	
# Carbon Tetrachloride	0.3213	0.4208	65.47	50	31	#<-
Isobutyl Alcohol	0.3988	0.4163	652.45	625	4	
# Benzene	1.1247	1.2151	54.02	50	8	#
# 1,2-Dichloroethane	0.3907	0.4372	55.94	50	12	#
# 1,2-Dichloroethane(2)	0.0336	0.0355	52.83	50	6	#<-
t-Amyl ethyl ether	0.3327	0.3684	55.36	50	11	
t-Amyl methyl ether	0.6413	0.7476	58.28	50	17	
n-Heptane	0.2668	0.4138	57.73	50	15	
n-Butanol	0.3258	0.3111	1193.62	1250	-5	
# Trichloroethene	0.3064	0.3241	52.89	50	6	#
# Methylcyclohexane	0.4317	0.4639	45.18	50	-10	#
# Methylcyclohexane(2)	0.1910	0.2007	43.66	50	-13	#
# 1,2-Dichloropropane	0.2927	0.3236	55.28	50	11	#
Dibromomethane	0.2003	0.2167	54.09	50	8	
1,4-Dioxane	0.1004	0.0917	570.68	625	-9	
Methyl Methacrylate	0.2715	0.3012	55.46	50	11	
# Bromodichloromethane	0.3857	0.4350	56.39	50	13	#
2-Nitropropane	0.1026	0.1397	136.13	100	36	<-
2-Chloroethyl Vinyl Ether	0.1619	0.2035	62.86	50	26	<-
# cis-1,3-Dichloropropene	0.4803	0.5207	54.21	50	8	#
# 4-Methyl-2-pentanone	0.4515	0.5619	124.45	100	24	#<-
# Toluene	0.9289	0.9448	50.86	50	2	#
# trans-1,3-Dichloropropene	0.5419	0.5647	52.10	50	4	#
Ethyl Methacrylate	0.5447	0.6014	55.20	50	10	
# 1,1,2-Trichloroethane	0.3762	0.3714	49.36	50	-1	#
# Tetrachloroethene	0.4317	0.4400	50.96	50	2	#
1,3-Dichloropropane	0.5965	0.6076	50.93	50	2	
# 2-Hexanone	0.4574	0.5572	121.81	100	22	#<-
# Dibromochloromethane	0.4152	0.4325	52.09	50	4	#
# 1,2-Dibromoethane	0.4110	0.4088	49.74	50	-1	#

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date: 06/19/18 Time: 19:42

Lab File ID: 5u19c01.d Init. Calib. Date(s): 05/15/18 05/15/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF50	CONC.	CONC.	DRIFT	
1-Chlorohexane	0.4694	0.5259	56.01	50	12	
# Chlorobenzene	1.1507	1.1689	50.79	50	2	#
1,1,1,2-Tetrachloroethane	0.3977	0.4086	51.37	50	3	
# Ethylbenzene	1.8212	1.9733	54.18	50	8	#
# m+p-Xylene	0.7182	0.7676	106.87	100	7	#
# o-Xylene	0.7054	0.7633	54.10	50	8	#
# Styrene	1.1578	1.2807	55.31	50	11	#
# Bromoform	0.3168	0.3256	51.38	50	3	#
# Isopropylbenzene	1.6884	1.9524	57.82	50	16	#
Cyclohexanone	0.4441	0.5815	818.45	625	31	<-
Bromobenzene	0.9236	0.8586	46.49	50	-7	
# 1,1,2,2-Tetrachloroethane	1.1260	1.1200	49.73	50	-1	#
1,2,3-Trichloropropane	0.3426	0.3260	47.58	50	-5	
trans-1,4-Dichloro-2-butene	0.3017	0.2801	116.06	125	-7	
n-Propylbenzene	3.5987	4.0310	56.01	50	12	
2-Chlorotoluene	0.8057	0.7859	48.77	50	-2	
4-Chlorotoluene	0.8525	0.8335	48.88	50	-2	
1,3,5-Trimethylbenzene	2.5943	2.8422	54.78	50	10	
tert-Butylbenzene	0.5133	0.5483	53.41	50	7	
Pentachloroethane	0.5043	0.5294	52.48	50	5	
1,2,4-Trimethylbenzene	2.6858	2.9709	55.31	50	11	
sec-Butylbenzene	3.0447	3.5621	58.50	50	17	
# 1,3-Dichlorobenzene	1.7211	1.6943	49.22	50	-2	#
p-Isopropyltoluene	2.6953	3.1246	57.96	50	16	
# 1,4-Dichlorobenzene	1.7599	1.7524	49.79	50	0	#
1,2,3-Trimethylbenzene	2.8509	2.9560	51.84	50	4	
Benzyl Chloride	2.0136	2.1602	53.64	50	7	
1,3-Diethylbenzene	1.7524	1.8614	53.11	50	6	
1,4-Diethylbenzene	1.8747	1.9882	53.03	50	6	
# 1,2-Dichlorobenzene	1.6440	1.6115	49.01	50	-2	#
n-Butylbenzene	1.3768	1.6801	61.02	50	22	<-
1,2-Diethylbenzene	1.4742	1.5632	53.02	50	6	
# 1,2-Dibromo-3-chloropropane	0.2690	0.2643	49.13	50	-2	#
1,3,5-Trichlorobenzene	1.1737	1.2006	51.14	50	2	
# 1,2,4-Trichlorobenzene	1.0540	1.0654	50.54	50	1	#
Hexachlorobutadiene	0.4809	0.5119	44.25	50	-12	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date: 06/19/18 Time: 19:42

Lab File ID: 5u19c01.d Init. Calib. Date(s): 05/15/18 05/15/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	RRF	RRF50	ACTUAL CONC.	TRUE CONC.	% DRIFT
Naphthalene	3.3284	3.5672	53.59	50	7
1,2,3-Trichlorobenzene	0.9760	1.0074	51.61	50	3
2-Methylnaphthalene	1.6549	1.8221	44.47	50	-11
Dibromofluoromethane	0.2704	0.2774	51.30	50	3
Dibromofluoromethane(2)	0.2742	0.2839	51.77	50	4
1,2-Dichloroethane-d4	0.0582	0.0586	50.37	50	1
1,2-Dichloroethane-d4(2)	0.2813	0.3210	57.04	50	14
1,2-Dichloroethane-d4(3)	0.0371	0.0380	51.28	50	3
Toluene-d8	1.2206	1.2081	49.48	50	-1
Toluene-d8(2)	0.7945	0.7746	48.75	50	-3
4-Bromofluorobenzene	0.4995	0.5425	54.30	50	9
4-Bromofluorobenzene(2)	0.4532	0.4740	52.30	50	5

Average %Drift 10

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): 5u19c01.d Date Analyzed: 06/19/18

Instrument ID: HP26285 Time Analyzed: 19:42

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

	IS1(TBA)		IS2(FBZ)		IS3(CBZ)		IS4(DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	313853	3.502	1114700	6.996	952931	10.788	586643	12.805
UPPER LIMIT	627706	4.002	2229400	7.496	1905862	11.288	1173286	13.305
LOWER LIMIT	156926	3.002	557350	6.496	476466	10.288	293322	12.305
LAB SAMPLE ID								
01 VBLK548	296110	3.502	1186565	6.996	971324	10.788	547499	12.805
02 LCS548	300021	3.502	1188175	6.995	1003928	10.787	597749	12.811
03 9662303	308377	3.496	1200781	6.995	989904	10.787	559575	12.805
04 9662304	287139	3.502	1137626	6.995	928063	10.787	513653	12.805
05 9662305	240533	3.502	1062382	6.995	874491	10.787	492013	12.805
06 9662306	266443	3.496	1037756	6.995	859038	10.787	474085	12.805
07 9662307	264005	3.502	1020894	6.995	843743	10.787	474347	12.805
08 9662308	257195	3.496	976256	6.995	801425	10.787	447217	12.805
09 9662302	232866	3.496	953747	6.995	788646	10.787	433337	12.805
10 9651271	231010	3.496	954267	6.989	775661	10.787	431212	12.805
11 9662309	215864	3.502	946210	6.995	782794	10.787	427885	12.805
12 9662310	234714	3.496	910567	6.995	742039	10.787	406278	12.811
13 9662311MS	236269	3.502	1007343	6.989	849298	10.787	531548	12.805
14 9662312MSD	260714	3.496	1043072	6.990	864572	10.788	529937	12.805
15 9662314	272978	3.502	1014733	6.989	839840	10.788	460325	12.805
16 9662315	245004	3.502	1001840	6.995	828800	10.787	456884	12.811
17 9651266	239625	3.496	948184	6.996	791161	10.788	432770	12.805
18 9651267	250994	3.496	915678	6.996	772693	10.788	422422	12.805
19 9651268	259171	3.496	933356	6.996	784831	10.787	459154	12.805
20 9651269DL	254796	3.496	982839	6.990	807739	10.788	454082	12.805
21 9651270	258067	3.496	964799	6.996	768990	10.788	442840	12.812
22 9651270DL	251153	3.496	969946	6.996	784587	10.787	431232	12.805

IS1 (TBA)=t-Butyl alcohol-d10
IS2 (FBZ)=Fluorobenzene
IS3 (CBZ)=Chlorobenzene-d5
IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM VIII VOA

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): 5u19c01.d Date Analyzed: 06/19/18

Instrument ID: HP26285 Time Analyzed: 19:42

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

		IS1(TBA)		IS2(FBZ)		IS3(CBZ)		IS4(DCB)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	313853	3.502	1114700	6.996	952931	10.788	586643	12.805
	UPPER LIMIT	627706	4.002	2229400	7.496	1905862	11.288	1173286	13.305
	LOWER LIMIT	156926	3.002	557350	6.496	476466	10.288	293322	12.305
	LAB SAMPLE ID								
23	9646717DL	261093	3.496	966800	6.989	790773	10.788	471157	12.805
24	9646903	257061	3.496	953334	6.990	782518	10.788	431138	12.805

IS1 (TBA)=t-Butyl alcohol-d10
IS2 (FBZ)=Fluorobenzene
IS3 (CBZ)=Chlorobenzene-d5
IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM VIII VOA

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Sample Data

Volatiles by GC/MS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5001

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662302

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s09.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	1	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5001

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662302

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s09.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s09.d Injection date and time: **20-JUN-2018 00:05**
Data file Sample Info. Line: C5001;9662302;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 00:24 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph=7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.496	(0.006)	346	65	232866	(-26)	250.00	
66) Fluorobenzene	6.995	(0.000)	920	96	953747	(-14)	50.00	
101) Chlorobenzene-d5	10.787	(0.000)	1542	117	788646	(-17)	50.00	
132) 1,4-Dichlorobenzene-d4	12.805	(0.000)	1873	152	433337	(-26)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.057	(0.001)	113	270679	52.481	105%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.532	(0.001)	102	57990	52.258	105%		80 - 120
84) Toluene-d8	(3)	9.166	(0.000)	98	944383	49.051	98%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.872	(0.000)	95	389282	49.408	99%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.5	1
6) Vinyl Chloride	(2)				Not Detected					0.5	1
8) Bromomethane	(2)				Not Detected					0.5	1
9) Chloroethane	(2)				Not Detected					0.5	1
12) Trichlorofluoromethane	(2)				Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.5	1
28) Methylene Chloride	(2)				Not Detected					0.5	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.5	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.5	1
51) Chloroform	(2)				Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.5	1
56) Carbon Tetrachloride	(2)				Not Detected					0.5	1
60) Benzene	(2)				Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.5	1
71) Trichloroethene	(2)				Not Detected					0.5	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.5	1
79) Bromodichloromethane	(2)				Not Detected					0.5	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.5	1
89) Toluene	(3)				Not Detected					0.5	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
94) Tetrachloroethene	(3)				Not Detected					0.5	1
98) Dibromochloromethane	(3)				Not Detected					0.5	1
103) Chlorobenzene	(3)				Not Detected					0.5	1
105) Ethylbenzene	(3)				Not Detected					0.5	1
107) m+p-Xylene	(3)				Not Detected					0.5	1

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:04. Target 3.5 esignature user ID: jkh09052

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s09.d Injection date and time: **20-JUN-2018 00:05**
Data file Sample Info. Line: C5001;9662302;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 00:24 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

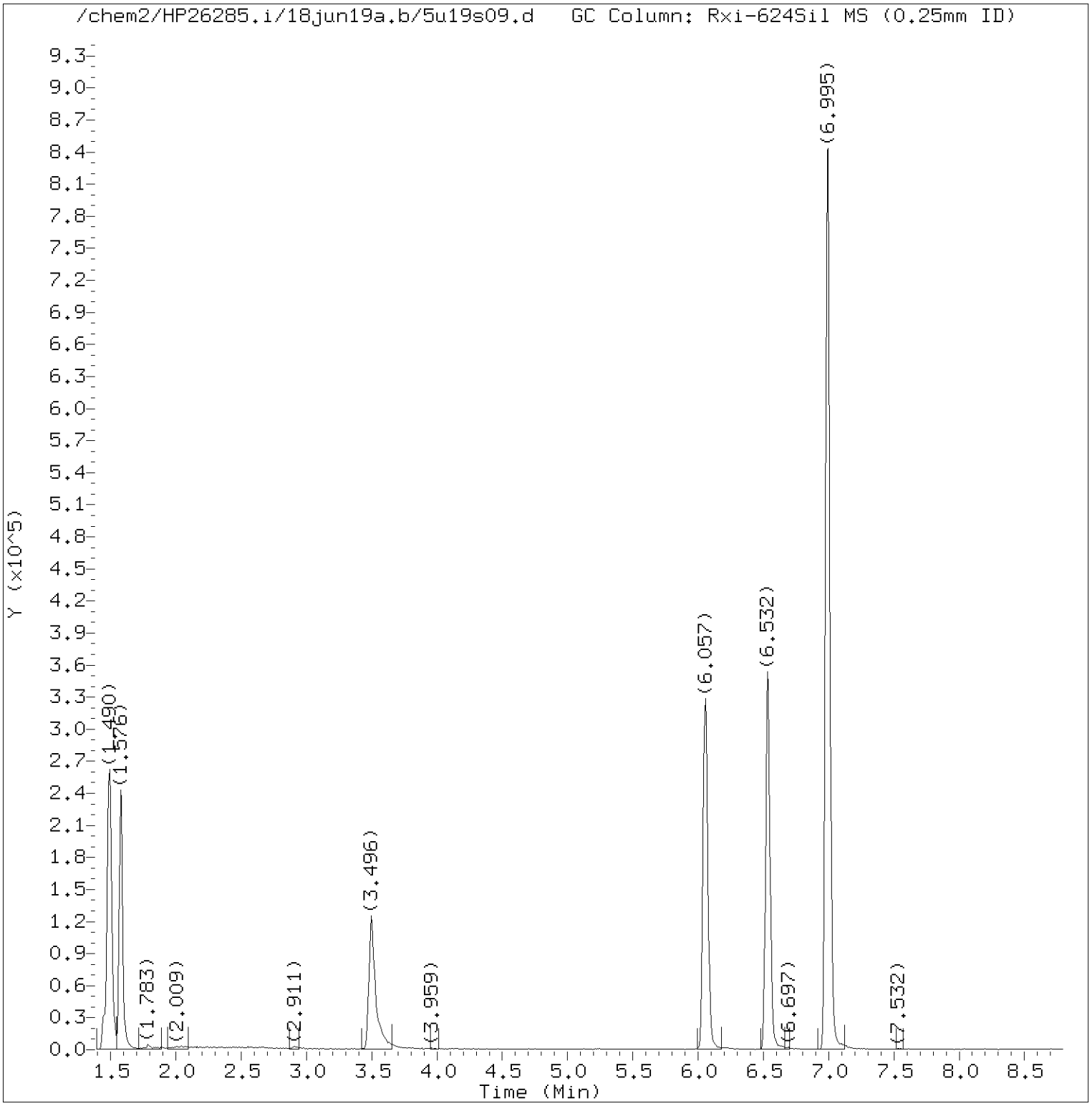
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.5	1
109) Xylene (Total)	(3)				Not Detected					0.5	1
111) Bromoform	(3)				Not Detected					0.5	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					1	5

Total number of targets = 37

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:04. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

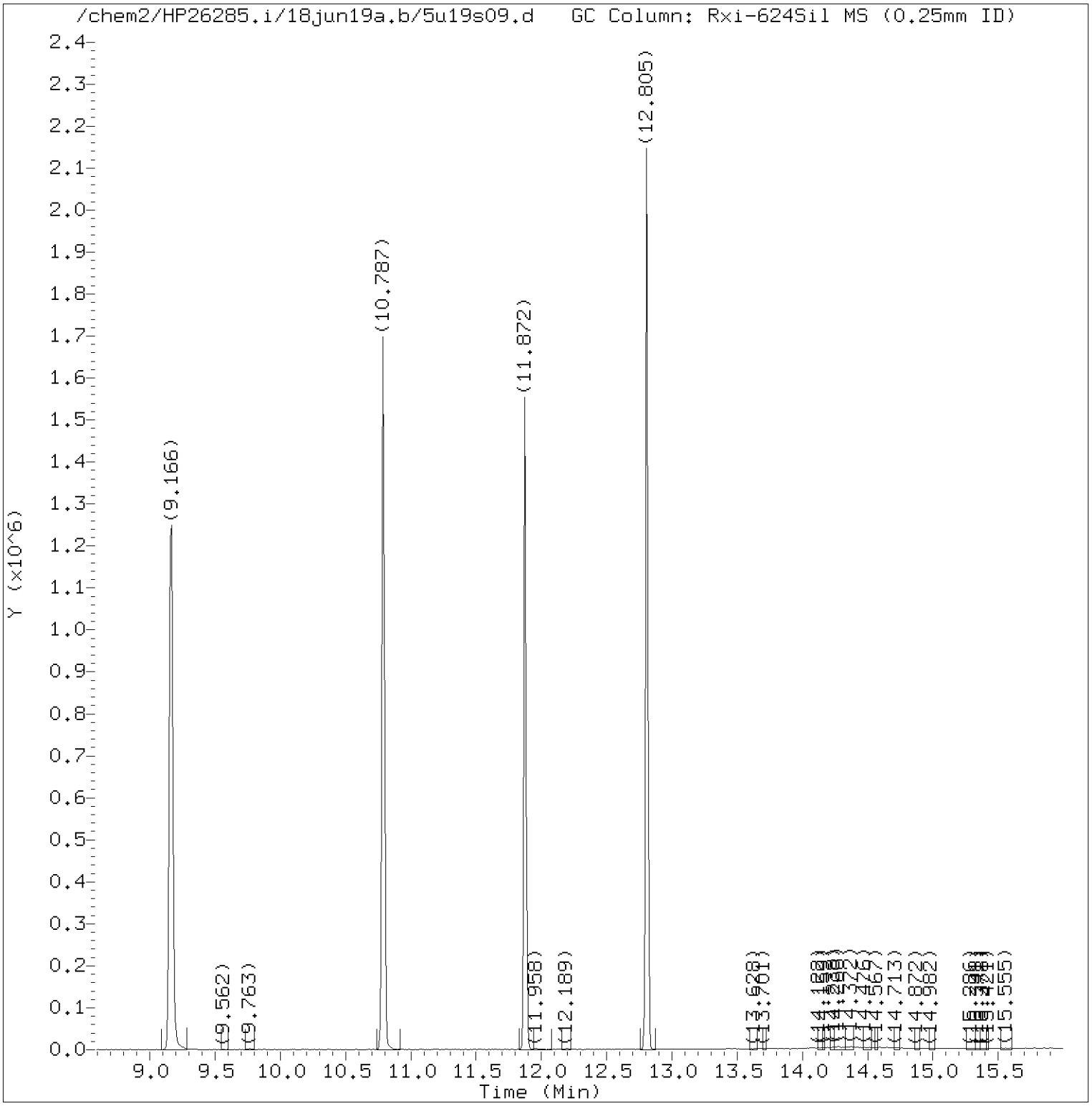
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s09.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 00:05 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 00:24 Unknown

Sample Name: C5001 Lab Sample ID: 9662302

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s09.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 00:05 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 00:24 Unknown

Sample Name: C5001 Lab Sample ID: 9662302

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s09.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 00:05 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 00:24 Unknown

Sample Name: C5001 Lab Sample ID: 9662302

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.496	65	232866	250.000
52)$Dibromofluoromethane	(2)	6.057	113	270679	52.481
57)$1,2-Dichloroethane-d4	(2)	6.532	102	57990	52.258
66)*Fluorobenzene	(2)	6.995	96	953747	50.000
84)$Toluene-d8	(3)	9.166	98	944383	49.051
101)*Chlorobenzene-d5	(3)	10.787	117	788646	50.000
115)$4-Bromofluorobenzene	(3)	11.872	95	389282	49.408
132)*1,4-Dichlorobenzene-d4	(4)	12.805	152	433337	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: jkh09052

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
C5002

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662303

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s03.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
74-87-3	Chloromethane		1	U
75-01-4	Vinyl Chloride		1	U
74-83-9	Bromomethane		1	U
75-00-3	Chloroethane		1	U
75-69-4	Trichlorofluoromethane		1	U
75-35-4	1,1-Dichloroethene		1	U
75-09-2	Methylene Chloride		1	U
1634-04-4	Methyl Tertiary Butyl Ether		1	U
75-34-3	1,1-Dichloroethane		1	U
540-59-0	1,2-Dichloroethene (Total)		1	U
67-66-3	Chloroform		1	U
71-55-6	1,1,1-Trichloroethane		1	U
56-23-5	Carbon Tetrachloride		1	U
71-43-2	Benzene		1	U
107-06-2	1,2-Dichloroethane		1	U
79-01-6	Trichloroethene		1	U
78-87-5	1,2-Dichloropropane		1	U
75-27-4	Bromodichloromethane		1	U
110-75-8	2-Chloroethyl Vinyl Ether		10	U
10061-01-5	cis-1,3-Dichloropropene		1	U
108-88-3	Toluene		1	U
10061-02-6	trans-1,3-Dichloropropene		1	U
79-00-5	1,1,2-Trichloroethane		1	U
127-18-4	Tetrachloroethene		1	U
124-48-1	Dibromochloromethane		1	U
108-90-7	Chlorobenzene		1	U
100-41-4	Ethylbenzene		1	U
1330-20-7	Xylene (Total)		1	U
75-25-2	Bromoform		4	U
79-34-5	1,1,2,2-Tetrachloroethane		1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5002

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662303

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s03.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s03.d Injection date and time: **19-JUN-2018 21:33**
Data file Sample Info. Line: C5002;9662303;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 21:52 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph=7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.496	(0.006)	346	65	308377	(-2)	250.00	
66) Fluorobenzene	6.995	(0.000)	920	96	1200781	(8)	50.00	
101) Chlorobenzene-d5	10.787	(0.000)	1542	117	989904	(4)	50.00	
132) 1,4-Dichlorobenzene-d4	12.805	(0.000)	1873	152	559575	(-5)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.063	(0.000)	113	321429	49.500	99%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.538	(0.000)	102	71597	51.246	102%		80 - 120
84) Toluene-d8	(3)	9.166	(0.000)	98	1180709	48.858	98%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.872	(0.000)	95	497199	50.275	101%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.5	1
6) Vinyl Chloride	(2)				Not Detected					0.5	1
8) Bromomethane	(2)				Not Detected					0.5	1
9) Chloroethane	(2)				Not Detected					0.5	1
12) Trichlorofluoromethane	(2)				Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.5	1
28) Methylene Chloride	(2)				Not Detected					0.5	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.5	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.5	1
51) Chloroform	(2)				Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.5	1
56) Carbon Tetrachloride	(2)				Not Detected					0.5	1
60) Benzene	(2)				Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.5	1
71) Trichloroethene	(2)				Not Detected					0.5	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.5	1
79) Bromodichloromethane	(2)				Not Detected					0.5	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.5	1
89) Toluene	(3)				Not Detected					0.5	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
94) Tetrachloroethene	(3)				Not Detected					0.5	1
98) Dibromochloromethane	(3)				Not Detected					0.5	1
103) Chlorobenzene	(3)				Not Detected					0.5	1
105) Ethylbenzene	(3)				Not Detected					0.5	1
107) m+p-Xylene	(3)				Not Detected					0.5	1

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:03. Target 3.5 esignature user ID: jkh09052

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s03.d Injection date and time: **19-JUN-2018 21:33**
Data file Sample Info. Line: C5002;9662303;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 21:52 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

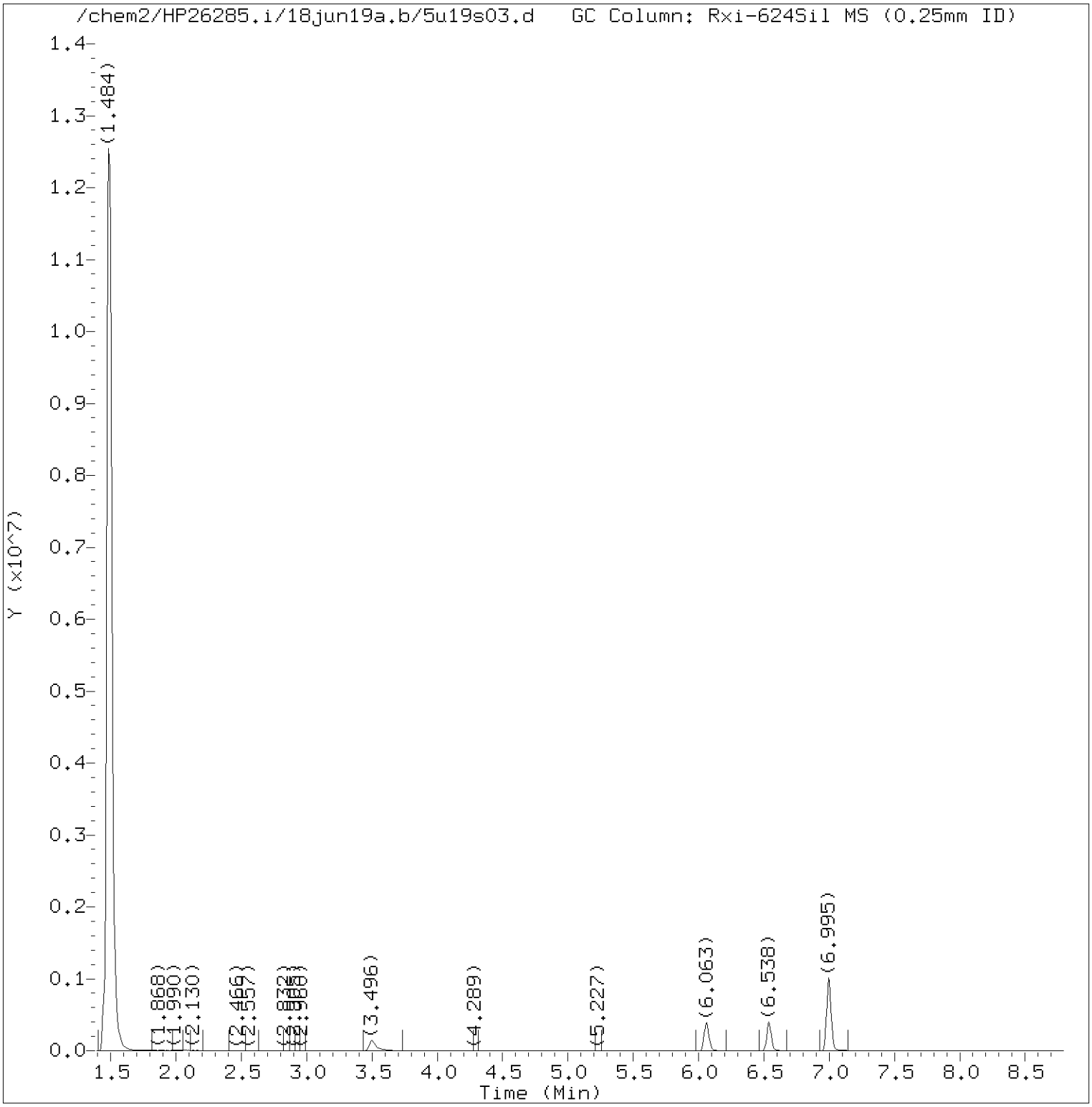
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.5	1
109) Xylene (Total)	(3)				Not Detected					0.5	1
111) Bromoform	(3)				Not Detected					0.5	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					1	5

Total number of targets = 37

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:03. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s03.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 21:33 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:52 Unknown

Sample Name: C5002 Lab Sample ID: 9662303

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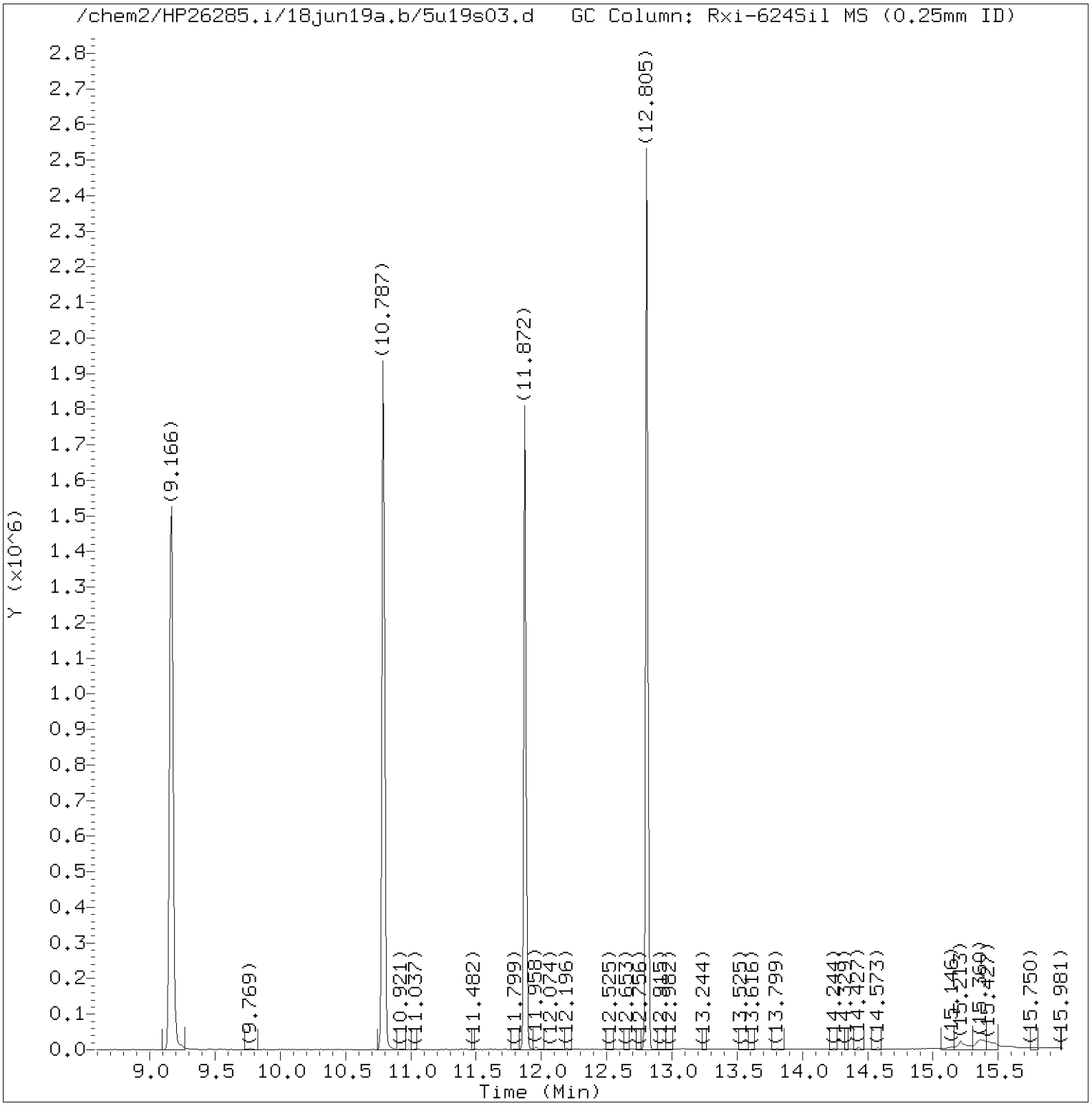
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s03.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 21:33 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:52 Unknown

Sample Name: C5002 Lab Sample ID: 9662303

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s03.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 21:33 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:52 Unknown

Sample Name: C5002 Lab Sample ID: 9662303

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.496	65	308377	250.000
52)$Dibromofluoromethane	(2)	6.063	113	321429	49.500
57)$1,2-Dichloroethane-d4	(2)	6.538	102	71597	51.246
66)*Fluorobenzene	(2)	6.995	96	1200781	50.000
84)$Toluene-d8	(3)	9.166	98	1180709	48.858
101)*Chlorobenzene-d5	(3)	10.787	117	989904	50.000
115)$4-Bromofluorobenzene	(3)	11.872	95	497199	50.275
132)*1,4-Dichlorobenzene-d4	(4)	12.805	152	559575	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
C5003

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662304

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s04.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	1	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5003

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662304

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s04.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s04.d Injection date and time: **19-JUN-2018 21:55**
Data file Sample Info. Line: C5003;9662304;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 22:14 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph=7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(0.000)	347	65	287139	(-9)	250.00	
66) Fluorobenzene	6.995	(0.000)	920	96	1137626	(2)	50.00	
101) Chlorobenzene-d5	10.787	(0.000)	1542	117	928063	(-3)	50.00	
132) 1,4-Dichlorobenzene-d4	12.805	(0.000)	1873	152	513653	(-12)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.057	(0.001)	113	305396	49.642	99%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.538	(0.000)	102	67816	51.234	102%		80 - 120
84) Toluene-d8	(3)	9.166	(0.000)	98	1114281	49.181	98%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.873	(0.000)	95	452952	48.852	98%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.5	1
6) Vinyl Chloride	(2)				Not Detected					0.5	1
8) Bromomethane	(2)				Not Detected					0.5	1
9) Chloroethane	(2)				Not Detected					0.5	1
12) Trichlorofluoromethane	(2)				Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.5	1
28) Methylene Chloride	(2)				Not Detected					0.5	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.5	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.5	1
51) Chloroform	(2)				Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.5	1
56) Carbon Tetrachloride	(2)				Not Detected					0.5	1
60) Benzene	(2)				Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.5	1
71) Trichloroethene	(2)				Not Detected					0.5	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.5	1
79) Bromodichloromethane	(2)				Not Detected					0.5	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.5	1
89) Toluene	(3)				Not Detected					0.5	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
94) Tetrachloroethene	(3)				Not Detected					0.5	1
98) Dibromochloromethane	(3)				Not Detected					0.5	1
103) Chlorobenzene	(3)				Not Detected					0.5	1
105) Ethylbenzene	(3)				Not Detected					0.5	1
107) m+p-Xylene	(3)				Not Detected					0.5	1

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Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s04.d Injection date and time: **19-JUN-2018 21:55**
Data file Sample Info. Line: C5003;9662304;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 22:14 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

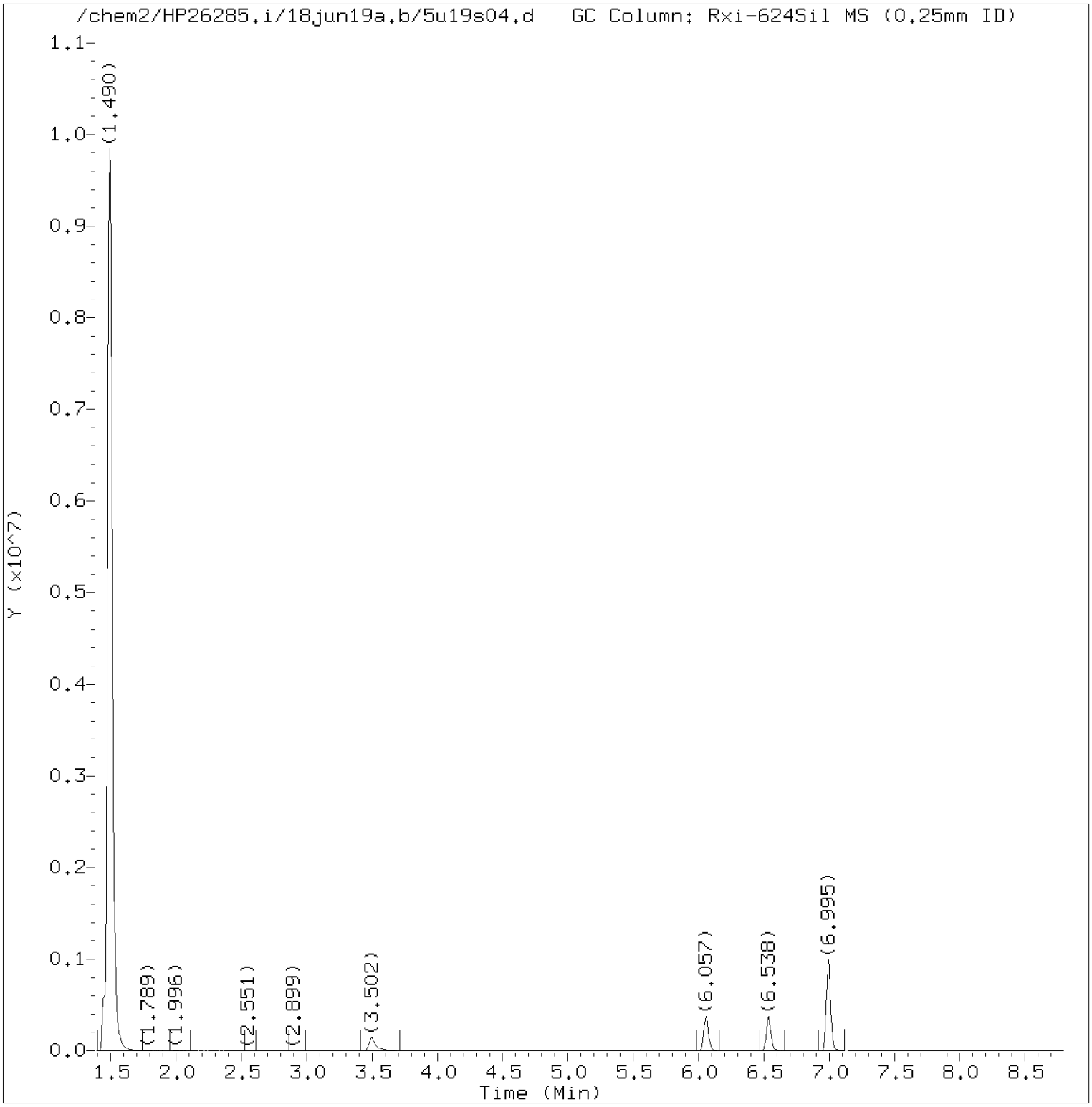
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.5	1
109) Xylene (Total)	(3)				Not Detected					0.5	1
111) Bromoform	(3)				Not Detected					0.5	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					1	5

Total number of targets = 37

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:03. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s04.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 21:55 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 22:14 Unknown

Sample Name: C5003 Lab Sample ID: 9662304

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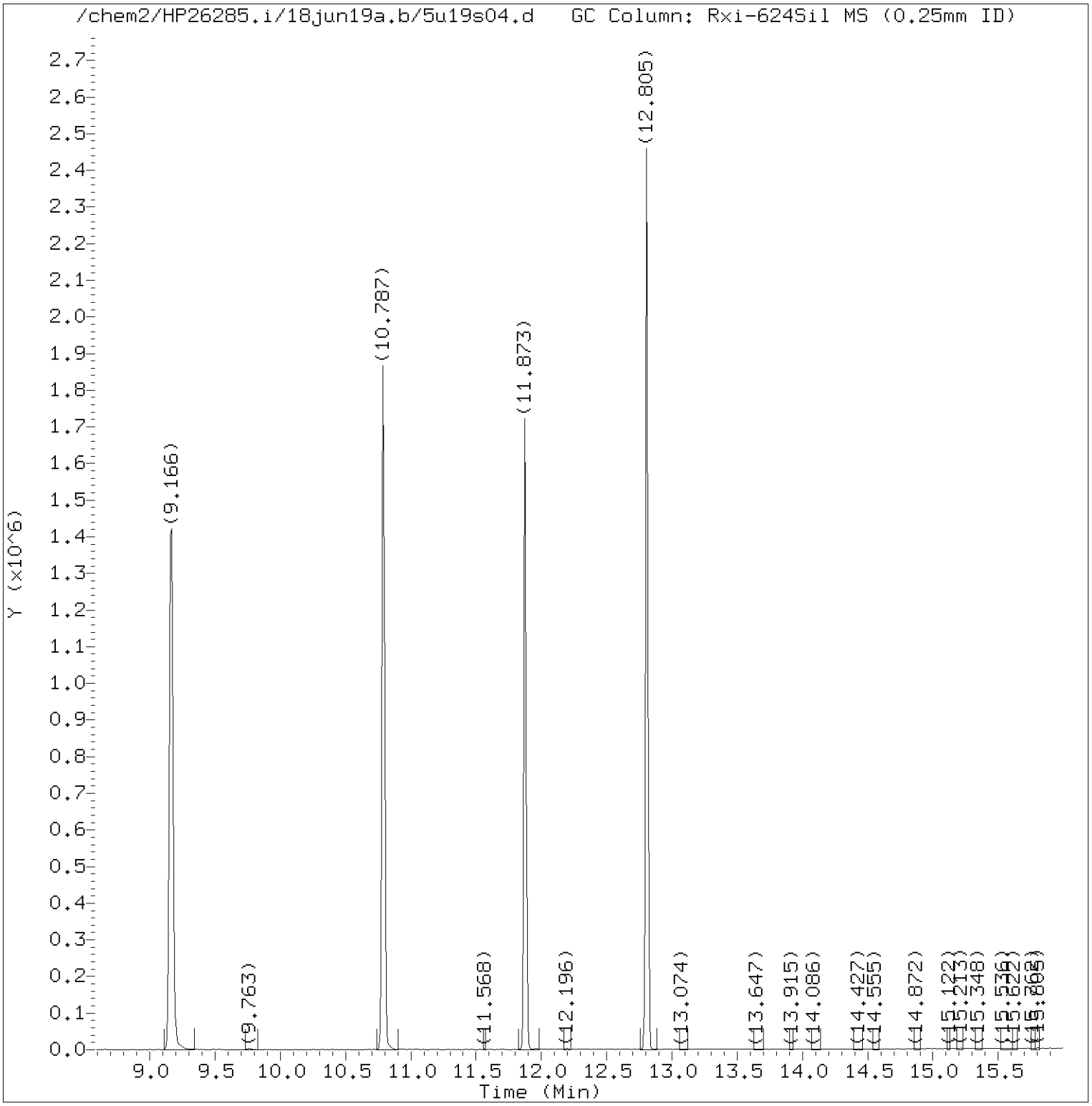
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s04.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 21:55 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 22:14 Unknown

Sample Name: C5003 Lab Sample ID: 9662304

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s04.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 21:55 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 22:14 Unknown

Sample Name: C5003 Lab Sample ID: 9662304

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.502	65	287139	250.000
52)$Dibromofluoromethane	(2)	6.057	113	305396	49.642
57)$1,2-Dichloroethane-d4	(2)	6.538	102	67816	51.234
66)*Fluorobenzene	(2)	6.995	96	1137626	50.000
84)$Toluene-d8	(3)	9.166	98	1114281	49.181
101)*Chlorobenzene-d5	(3)	10.787	117	928063	50.000
115)$4-Bromofluorobenzene	(3)	11.873	95	452952	48.852
132)*1,4-Dichlorobenzene-d4	(4)	12.805	152	513653	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5004

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662305

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s05.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	1	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5004

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662305

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s05.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s05.d Injection date and time: **19-JUN-2018 22:17**
Data file Sample Info. Line: C5004;9662305;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 22:35 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph=7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(0.000)	347	65	240533	(-23)	250.00	
66) Fluorobenzene	6.995	(0.000)	920	96	1062382	(-5)	50.00	
101) Chlorobenzene-d5	10.787	(0.000)	1542	117	874491	(-8)	50.00	
132) 1,4-Dichlorobenzene-d4	12.805	(0.000)	1873	152	492013	(-16)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.057	(0.001)	113	284826	49.577	99%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.532	(0.001)	102	63154	51.091	102%		80 - 120
84) Toluene-d8	(3)	9.160	(0.001)	98	1041226	48.772	98%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.873	(0.000)	95	432265	49.477	99%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.5	1
6) Vinyl Chloride	(2)				Not Detected					0.5	1
8) Bromomethane	(2)				Not Detected					0.5	1
9) Chloroethane	(2)				Not Detected					0.5	1
12) Trichlorofluoromethane	(2)				Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.5	1
28) Methylene Chloride	(2)				Not Detected					0.5	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.5	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.5	1
51) Chloroform	(2)				Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.5	1
56) Carbon Tetrachloride	(2)				Not Detected					0.5	1
60) Benzene	(2)				Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.5	1
71) Trichloroethene	(2)				Not Detected					0.5	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.5	1
79) Bromodichloromethane	(2)				Not Detected					0.5	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.5	1
89) Toluene	(3)				Not Detected					0.5	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
94) Tetrachloroethene	(3)				Not Detected					0.5	1
98) Dibromochloromethane	(3)				Not Detected					0.5	1
103) Chlorobenzene	(3)				Not Detected					0.5	1
105) Ethylbenzene	(3)				Not Detected					0.5	1
107) m+p-Xylene	(3)				Not Detected					0.5	1

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:03. Target 3.5 esignature user ID: jkh09052

Data file: /chem2/HP26285.i/18jun19a.b/5u19s05.d Injection date and time: **19-JUN-2018 22:17**
Data file Sample Info. Line: C5004;9662305;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 22:35 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

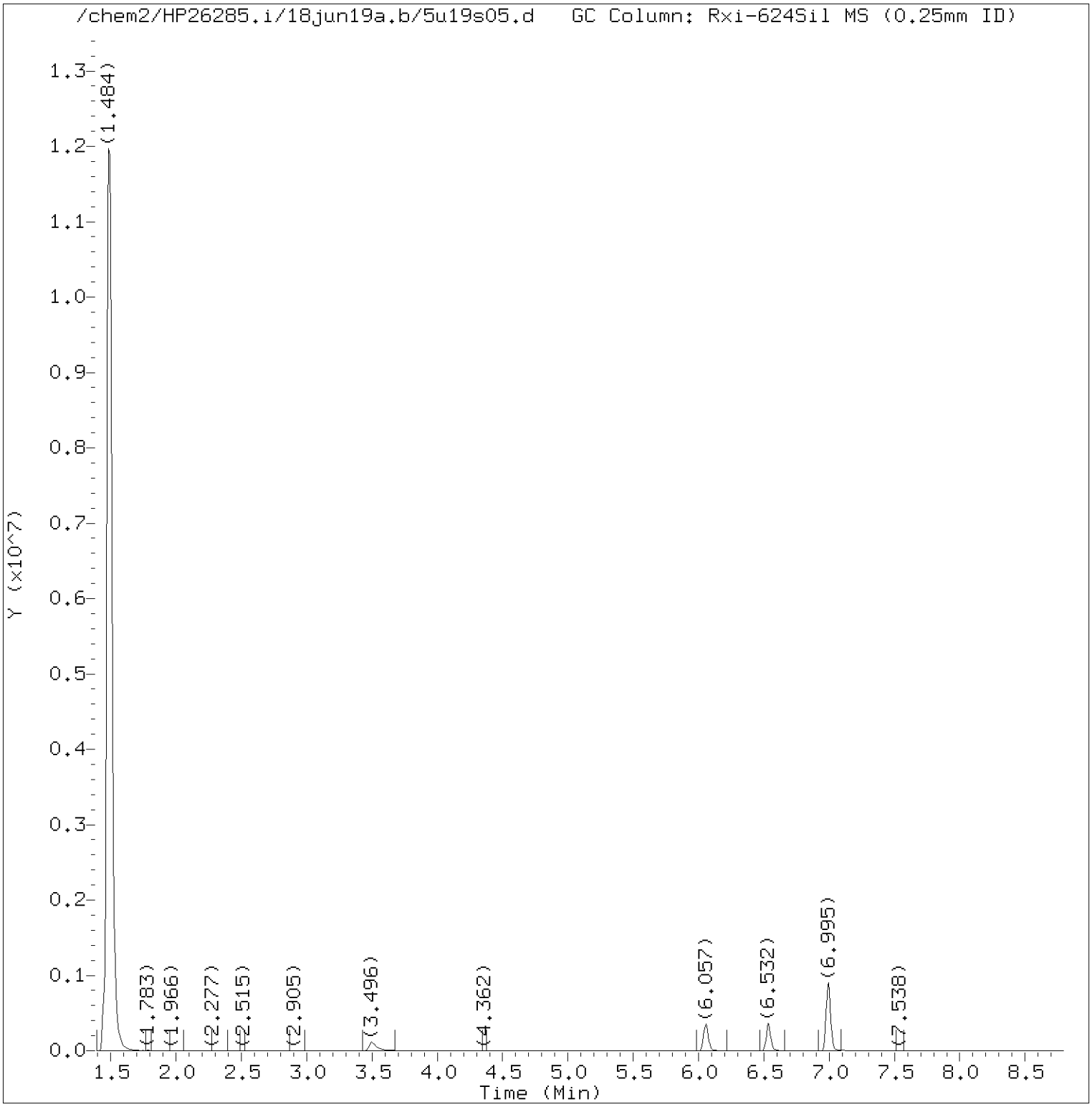
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.5	1
109) Xylene (Total)	(3)				Not Detected					0.5	1
111) Bromoform	(3)				Not Detected					0.5	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					1	5

Total number of targets = 37

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:03. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

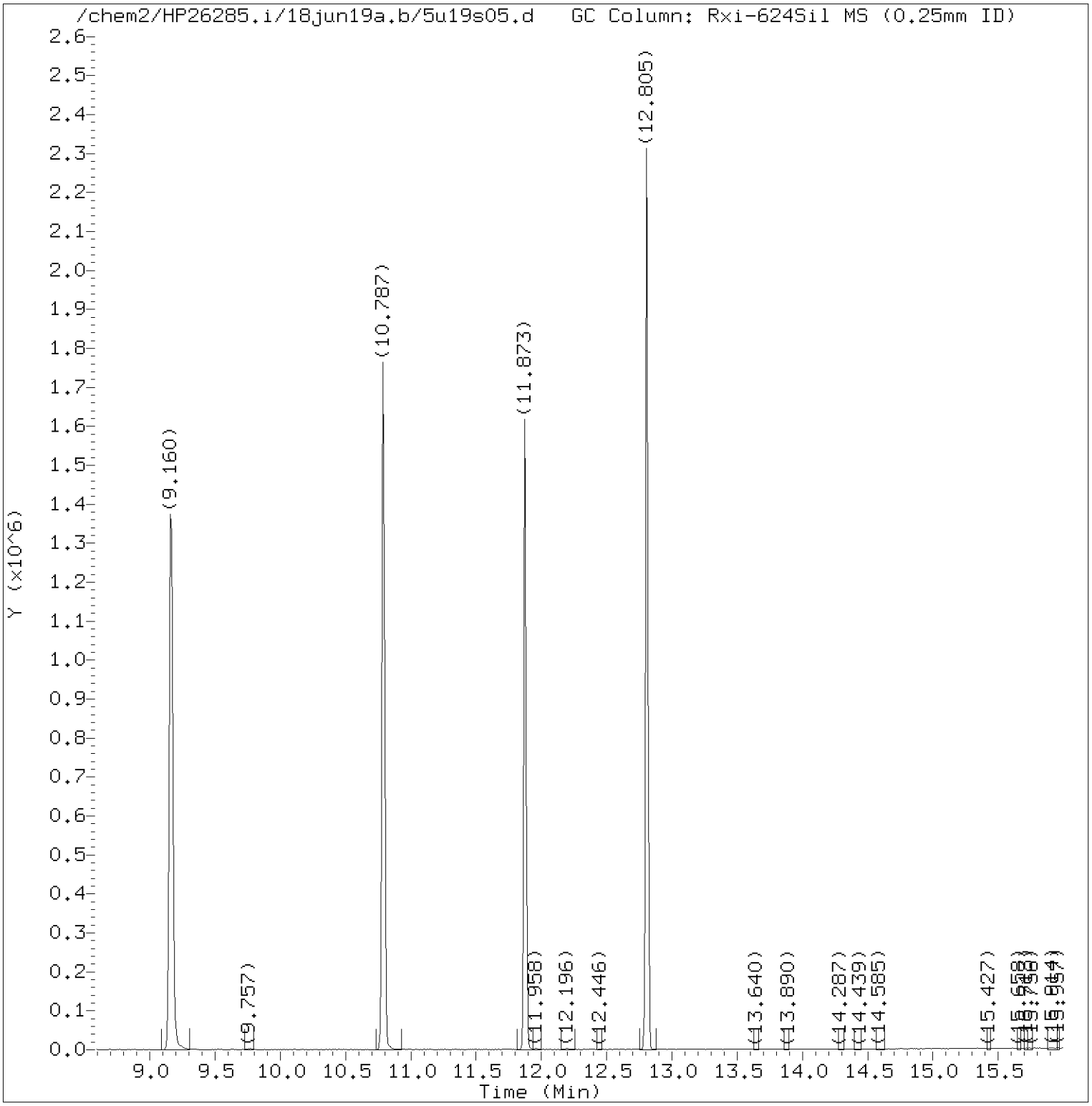
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s05.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 22:17 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 22:35 Unknown

Sample Name: C5004 Lab Sample ID: 9662305

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s05.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 22:17 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 22:35 Unknown

Sample Name: C5004 Lab Sample ID: 9662305

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s05.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 22:17 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 22:35 Unknown

Sample Name: C5004 Lab Sample ID: 9662305

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.502	65	240533	250.000
52)$Dibromofluoromethane	(2)	6.057	113	284826	49.577
57)$1,2-Dichloroethane-d4	(2)	6.532	102	63154	51.091
66)*Fluorobenzene	(2)	6.995	96	1062382	50.000
84)$Toluene-d8	(3)	9.160	98	1041226	48.772
101)*Chlorobenzene-d5	(3)	10.787	117	874491	50.000
115)$4-Bromofluorobenzene	(3)	11.873	95	432265	49.477
132)*1,4-Dichlorobenzene-d4	(4)	12.805	152	492013	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5005

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662306

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s06.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
74-87-3	Chloromethane		1	U
75-01-4	Vinyl Chloride		1	U
74-83-9	Bromomethane		1	U
75-00-3	Chloroethane		1	U
75-69-4	Trichlorofluoromethane		1	U
75-35-4	1,1-Dichloroethene		1	U
75-09-2	Methylene Chloride		1	U
1634-04-4	Methyl Tertiary Butyl Ether		1	U
75-34-3	1,1-Dichloroethane		1	U
540-59-0	1,2-Dichloroethene (Total)		1	U
67-66-3	Chloroform		1	U
71-55-6	1,1,1-Trichloroethane		1	U
56-23-5	Carbon Tetrachloride		1	U
71-43-2	Benzene		1	U
107-06-2	1,2-Dichloroethane		1	U
79-01-6	Trichloroethene		1	U
78-87-5	1,2-Dichloropropane		1	U
75-27-4	Bromodichloromethane		1	U
110-75-8	2-Chloroethyl Vinyl Ether		10	U
10061-01-5	cis-1,3-Dichloropropene		1	U
108-88-3	Toluene		1	U
10061-02-6	trans-1,3-Dichloropropene		1	U
79-00-5	1,1,2-Trichloroethane		1	U
127-18-4	Tetrachloroethene		1	U
124-48-1	Dibromochloromethane		1	U
108-90-7	Chlorobenzene		1	U
100-41-4	Ethylbenzene		1	U
1330-20-7	Xylene (Total)		1	U
75-25-2	Bromoform		4	U
79-34-5	1,1,2,2-Tetrachloroethane		1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5005

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662306

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s06.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s06.d Injection date and time: **19-JUN-2018 22:38**
Data file Sample Info. Line: C5005;9662306;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 22:58 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph=7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.496	(0.006)	346	65	266443	(-15)	250.00	
66) Fluorobenzene	6.995	(0.000)	920	96	1037756	(-7)	50.00	
101) Chlorobenzene-d5	10.787	(0.000)	1542	117	859038	(-10)	50.00	
132) 1,4-Dichlorobenzene-d4	12.805	(0.000)	1873	152	474085	(-19)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.057	(0.001)	113	287388	51.210	102%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.532	(0.001)	102	63464	52.560	105%		80 - 120
84) Toluene-d8	(3)	9.160	(0.001)	98	1025366	48.893	98%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.873	(0.000)	95	428110	49.883	100%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.5	1
6) Vinyl Chloride	(2)				Not Detected					0.5	1
8) Bromomethane	(2)				Not Detected					0.5	1
9) Chloroethane	(2)				Not Detected					0.5	1
12) Trichlorofluoromethane	(2)				Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.5	1
28) Methylene Chloride	(2)				Not Detected					0.5	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.5	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.5	1
51) Chloroform	(2)				Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.5	1
56) Carbon Tetrachloride	(2)				Not Detected					0.5	1
60) Benzene	(2)				Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.5	1
71) Trichloroethene	(2)				Not Detected					0.5	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.5	1
79) Bromodichloromethane	(2)				Not Detected					0.5	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.5	1
89) Toluene	(3)				Not Detected					0.5	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
94) Tetrachloroethene	(3)				Not Detected					0.5	1
98) Dibromochloromethane	(3)				Not Detected					0.5	1
103) Chlorobenzene	(3)				Not Detected					0.5	1
105) Ethylbenzene	(3)				Not Detected					0.5	1
107) m+p-Xylene	(3)				Not Detected					0.5	1

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:03. Target 3.5 esignature user ID: jkh09052

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s06.d Injection date and time: **19-JUN-2018 22:38**
Data file Sample Info. Line: C5005;9662306;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 22:58 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

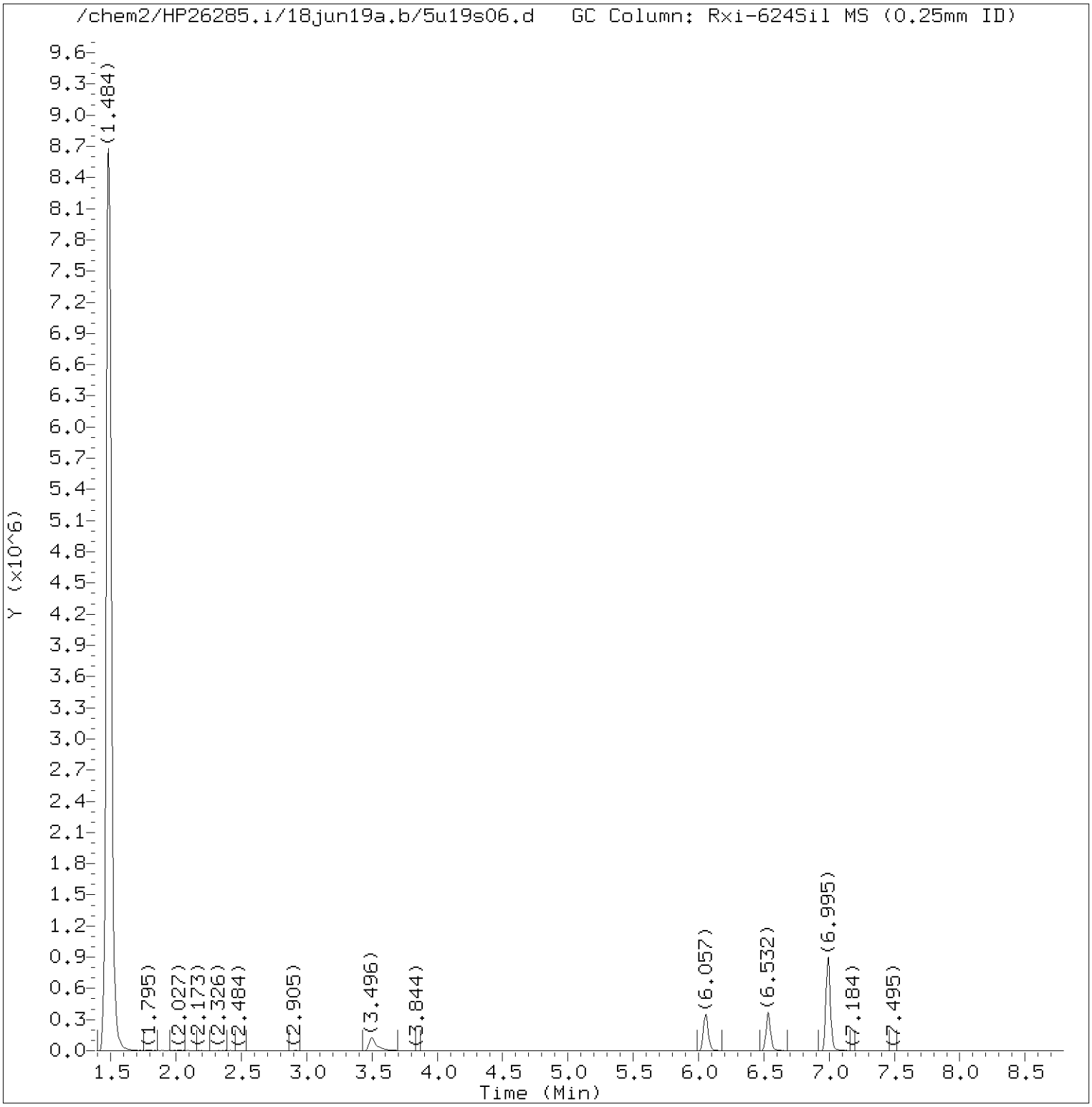
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.5	1
109) Xylene (Total)	(3)				Not Detected					0.5	1
111) Bromoform	(3)				Not Detected					0.5	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					1	5

Total number of targets = 37

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:03. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

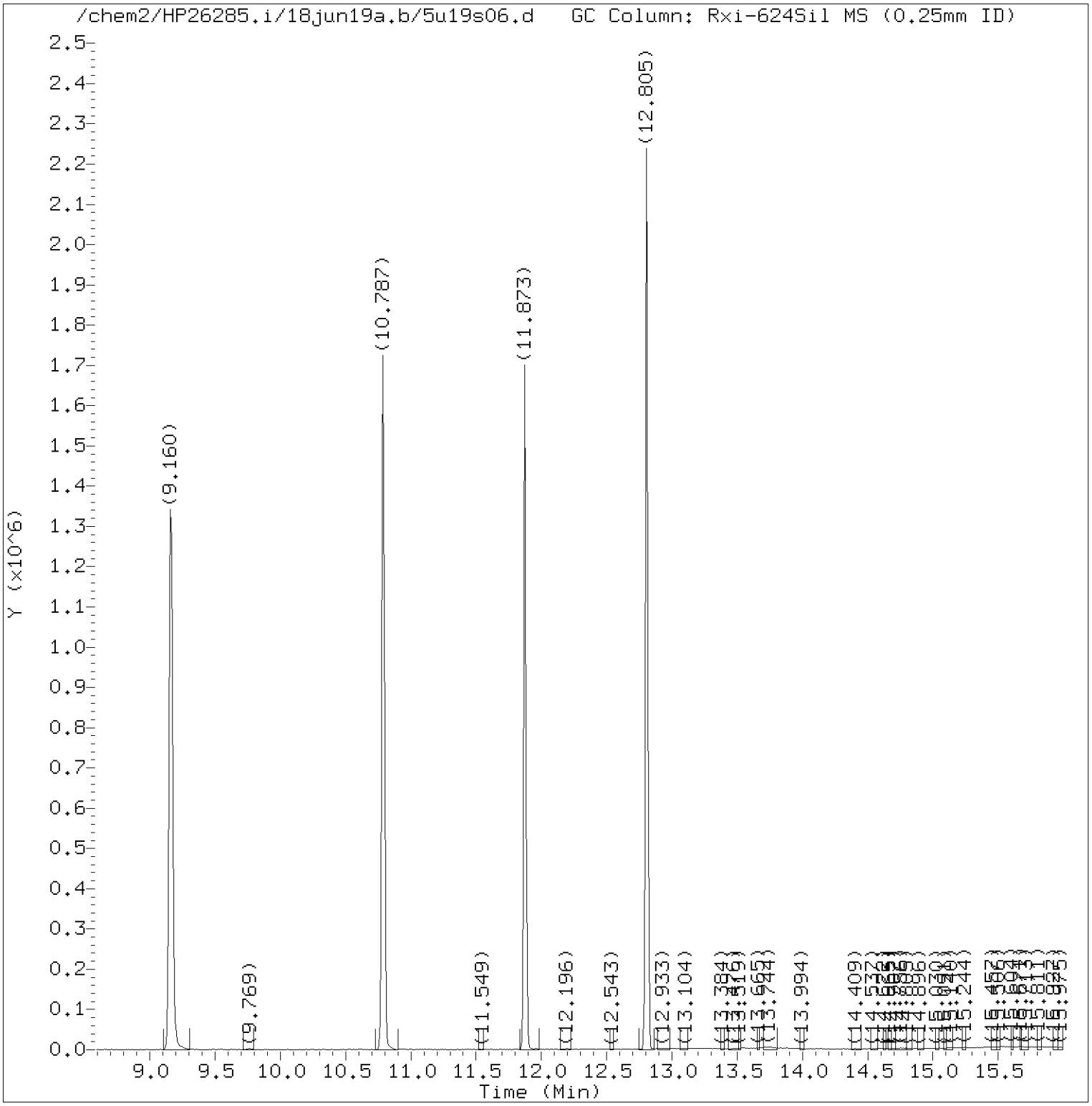
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s06.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 22:38 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 22:58 Unknown

Sample Name: C5005 Lab Sample ID: 9662306

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s06.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 22:38 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 22:58 Unknown

Sample Name: C5005 Lab Sample ID: 9662306

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s06.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 22:38 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 22:58 Unknown

Sample Name: C5005 Lab Sample ID: 9662306

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.496	65	266443	250.000
52)$Dibromofluoromethane	(2)	6.057	113	287388	51.210
57)$1,2-Dichloroethane-d4	(2)	6.532	102	63464	52.560
66)*Fluorobenzene	(2)	6.995	96	1037756	50.000
84)$Toluene-d8	(3)	9.160	98	1025366	48.893
101)*Chlorobenzene-d5	(3)	10.787	117	859038	50.000
115)$4-Bromofluorobenzene	(3)	11.873	95	428110	49.883
132)*1,4-Dichlorobenzene-d4	(4)	12.805	152	474085	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5006

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662307

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s07.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
74-87-3	Chloromethane		1	U
75-01-4	Vinyl Chloride		1	U
74-83-9	Bromomethane		1	U
75-00-3	Chloroethane		1	U
75-69-4	Trichlorofluoromethane		1	U
75-35-4	1,1-Dichloroethene		1	U
75-09-2	Methylene Chloride		1	U
1634-04-4	Methyl Tertiary Butyl Ether		1	U
75-34-3	1,1-Dichloroethane		1	U
540-59-0	1,2-Dichloroethene (Total)		3	
67-66-3	Chloroform		1	U
71-55-6	1,1,1-Trichloroethane		1	U
56-23-5	Carbon Tetrachloride		1	U
71-43-2	Benzene		1	U
107-06-2	1,2-Dichloroethane		1	U
79-01-6	Trichloroethene		7	
78-87-5	1,2-Dichloropropane		1	U
75-27-4	Bromodichloromethane		1	U
110-75-8	2-Chloroethyl Vinyl Ether		10	U
10061-01-5	cis-1,3-Dichloropropene		1	U
108-88-3	Toluene		1	U
10061-02-6	trans-1,3-Dichloropropene		1	U
79-00-5	1,1,2-Trichloroethane		1	U
127-18-4	Tetrachloroethene		1	U
124-48-1	Dibromochloromethane		1	U
108-90-7	Chlorobenzene		1	U
100-41-4	Ethylbenzene		1	U
1330-20-7	Xylene (Total)		1	U
75-25-2	Bromoform		4	U
79-34-5	1,1,2,2-Tetrachloroethane		1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5006

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662307

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s07.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s07.d Injection date and time: **19-JUN-2018 23:00**
Data file Sample Info. Line: C5006;9662307;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 23:19 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph=7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(0.000)	347	65	264005	(-16)	250.00	
66) Fluorobenzene	6.995	(0.000)	920	96	1020894	(-8)	50.00	
101) Chlorobenzene-d5	10.787	(0.000)	1542	117	843743	(-11)	50.00	
132) 1,4-Dichlorobenzene-d4	12.805	(0.000)	1873	152	474347	(-19)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.057	(0.001)	113	283940	51.432	103%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.538	(0.000)	102	62174	52.343	105%		80 - 120
84) Toluene-d8	(3)	9.160	(0.001)	98	1014175	49.236	98%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.873	(0.000)	95	420038	49.830	100%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.5	1
6) Vinyl Chloride	(2)				Not Detected					0.5	1
8) Bromomethane	(2)				Not Detected					0.5	1
9) Chloroethane	(2)				Not Detected					0.5	1
12) Trichlorofluoromethane	(2)				Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.5	1
28) Methylene Chloride	(2)				Not Detected					0.5	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)	5.319	(0.000)	96	17129	2.807	2.81			0.5	1
43) 1,2-Dichloroethene (Total)	(2)			96	17129	2.807	2.81			0.5	1
51) Chloroform	(2)				Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.5	1
56) Carbon Tetrachloride	(2)				Not Detected					0.5	1
60) Benzene	(2)				Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.5	1
71) Trichloroethene	(2)	7.501	(-0.000)	95	43783	6.998	7.00			0.5	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.5	1
79) Bromodichloromethane	(2)				Not Detected					0.5	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.5	1
89) Toluene	(3)				Not Detected					0.5	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
94) Tetrachloroethene	(3)				Not Detected					0.5	1
98) Dibromochloromethane	(3)				Not Detected					0.5	1
103) Chlorobenzene	(3)				Not Detected					0.5	1
105) Ethylbenzene	(3)				Not Detected					0.5	1
107) m+p-Xylene	(3)				Not Detected					0.5	1

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Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s07.d Injection date and time: **19-JUN-2018 23:00**
Data file Sample Info. Line: C5006;9662307;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 23:19 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.5	1
109) Xylene (Total)	(3)				Not Detected					0.5	1
111) Bromoform	(3)				Not Detected					0.5	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					1	5

Total number of targets = 37

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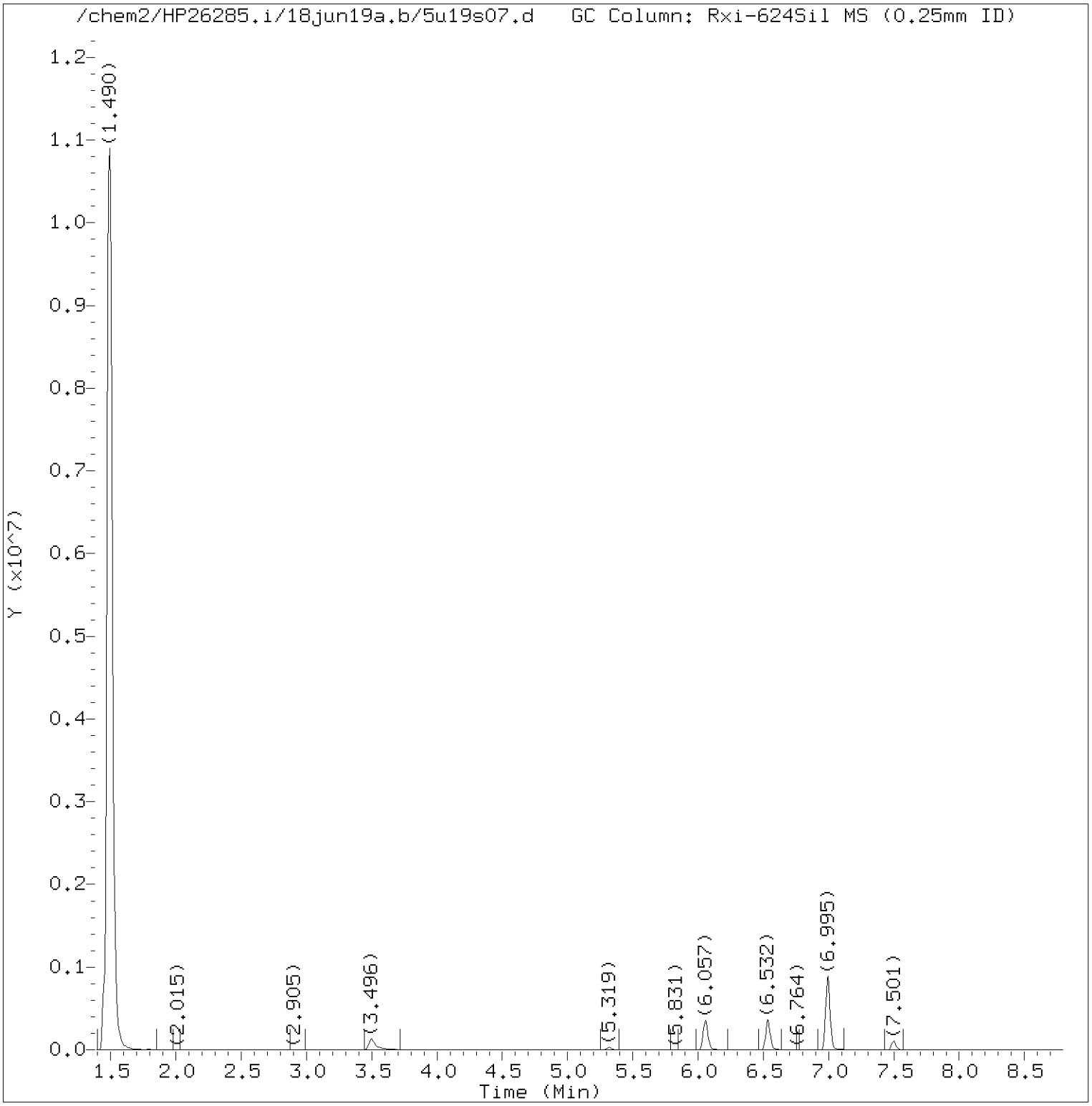
Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

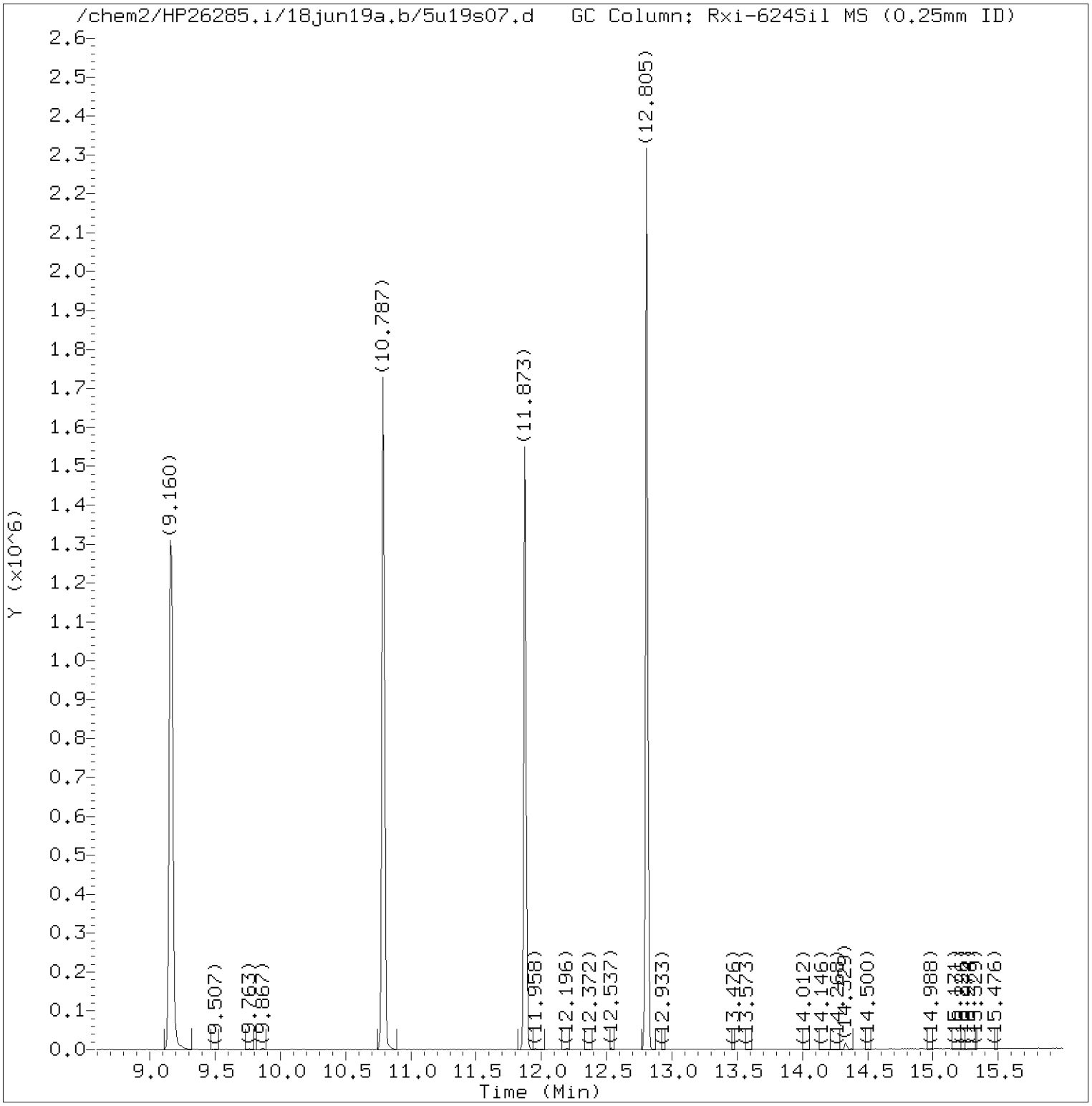
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s07.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 23:00 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 23:19 Unknown

Sample Name: C5006 Lab Sample ID: 9662307

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s07.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 23:00 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 23:19 Unknown

Sample Name: C5006 Lab Sample ID: 9662307

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s07.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 23:00 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 23:19 Unknown

Sample Name: C5006 Lab Sample ID: 9662307

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.502	65	264005	250.000
42) cis-1,2-Dichloroethene	(2)	5.319	96	17129	2.807
52)$Dibromofluoromethane	(2)	6.057	113	283940	51.432
43) 1,2-Dichloroethene (Total)	(2)		96	17129	2.807
57)$1,2-Dichloroethane-d4	(2)	6.538	102	62174	52.343
66)*Fluorobenzene	(2)	6.995	96	1020894	50.000
71) Trichloroethene	(2)	7.501	95	43783	6.998
84)$Toluene-d8	(3)	9.160	98	1014175	49.236
101)*Chlorobenzene-d5	(3)	10.787	117	843743	50.000
115)$4-Bromofluorobenzene	(3)	11.873	95	420038	49.830
132)*1,4-Dichlorobenzene-d4	(4)	12.805	152	474347	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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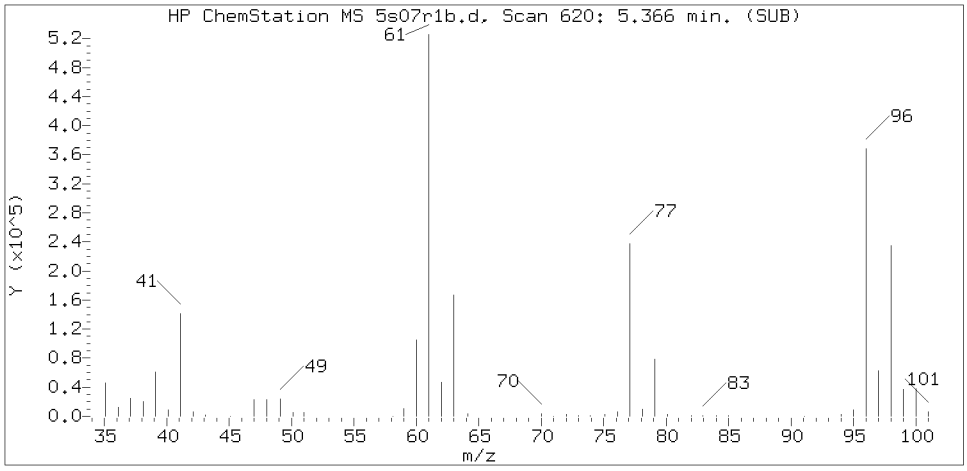
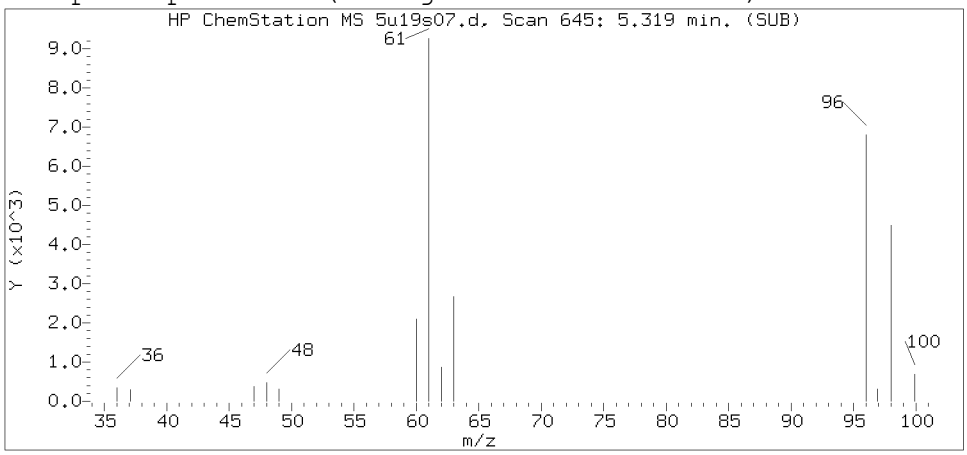
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

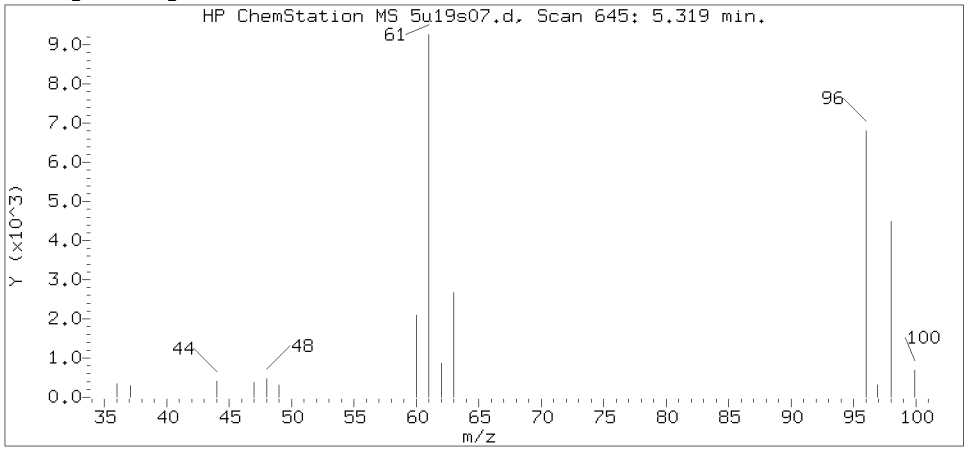
Reference Standard Spectrum for cis-1,2-Dichloroethene

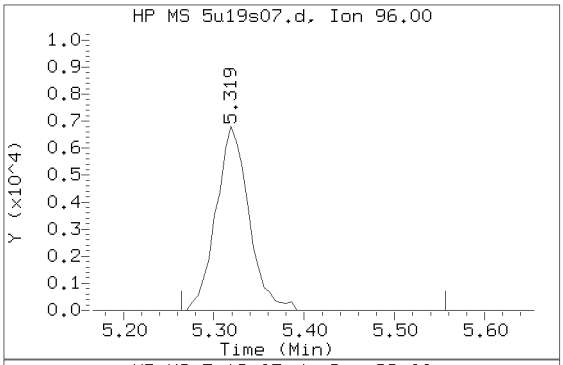


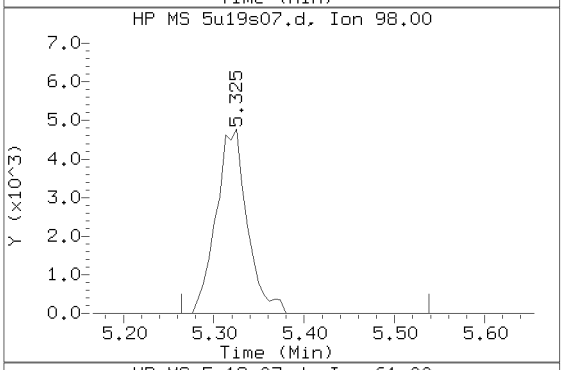
Sample Spectrum (Background Subtracted)

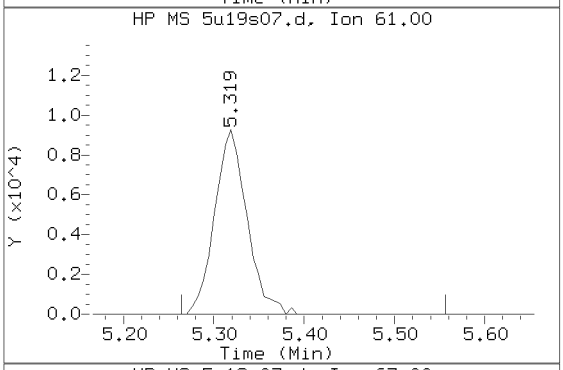


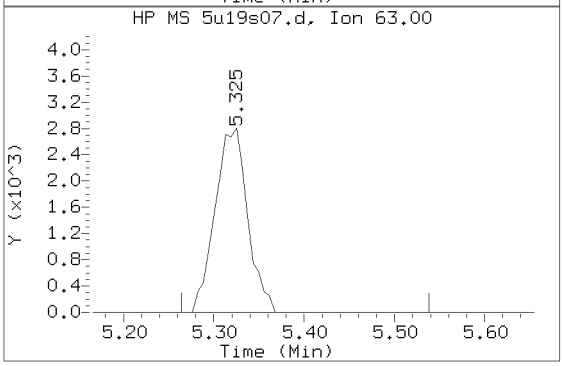
Sample Spectrum (Unaltered)











Data File: /chem2/HP26285.i/18jun19a.b/5u19s07.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 23:00 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 23:19 Unknown

Sample Name: C5006 Lab Sample ID: 9662307

Compound Number	: 42
Compound Name	: cis-1,2-Dichloroethene
Scan Number	: 645
Retention Time (minutes)	: 5.319
Relative Retention Time	: 0.00000
Quant Ion	: 96.00
Area (flag)	: 17129
On-Column Amount (ng)	: 2.8070

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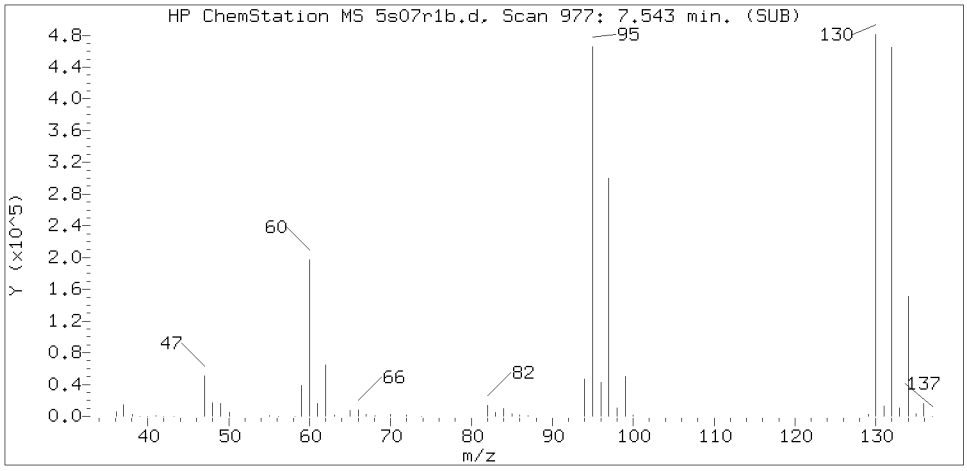
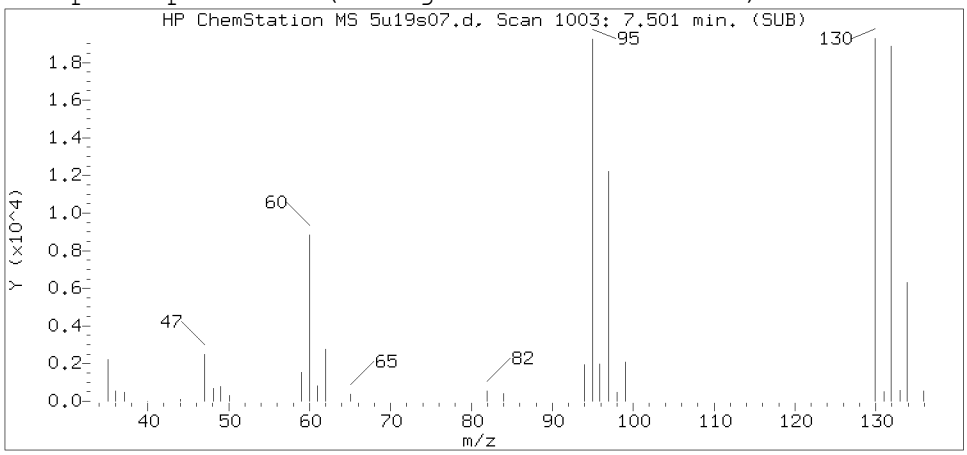
Target 3.5 esignature user ID: jkh09052

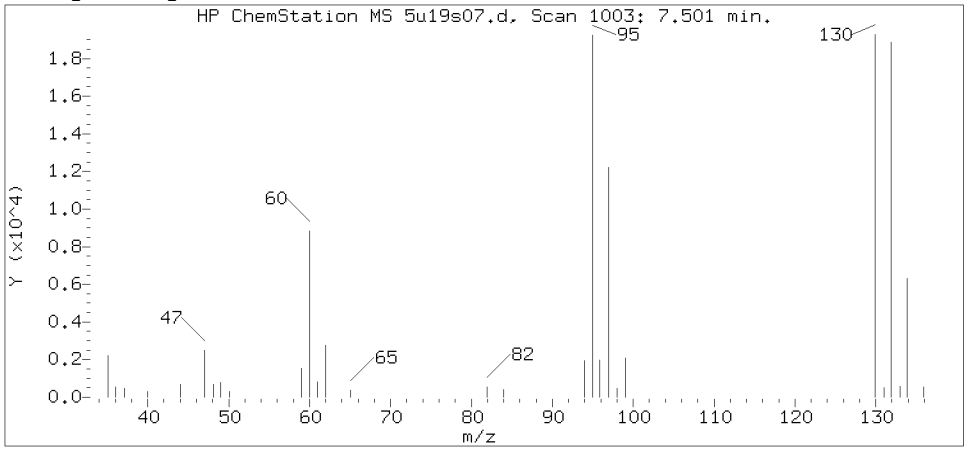
Reference Standard Spectrum for Trichloroethene

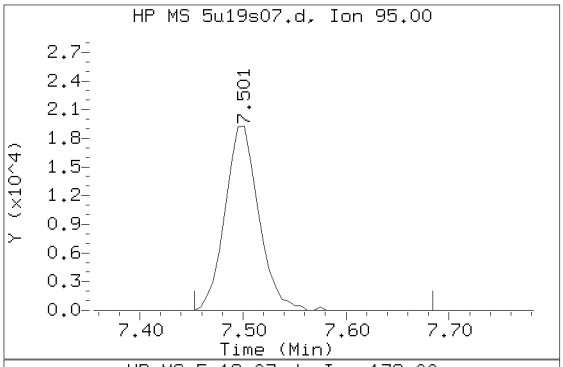


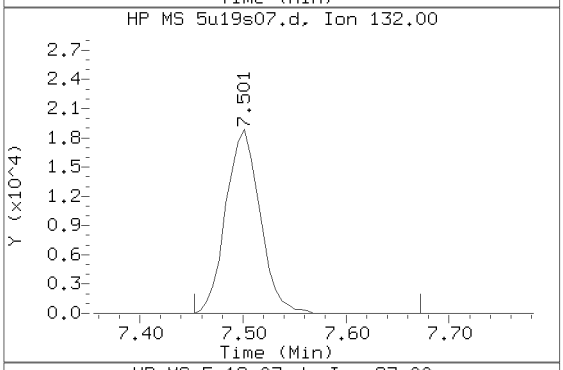
Sample Spectrum (Background Subtracted)

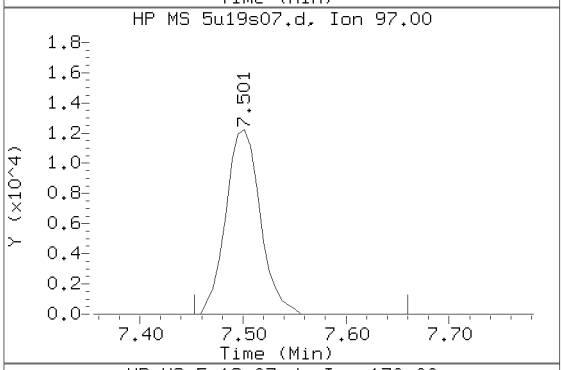


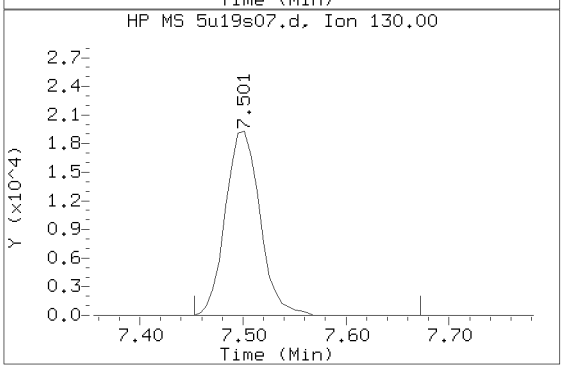
Sample Spectrum (Unaltered)











Data File: /chem2/HP26285.i/18jun19a.b/5u19s07.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 23:00 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 23:19 Unknown

Sample Name: C5006 Lab Sample ID: 9662307

Compound Number : 71
Compound Name : Trichloroethene
Scan Number : 1003
Retention Time (minutes): 7.501
Relative Retention Time :-0.00000
Quant Ion : 95.00
Area (flag) : 43783
On-Column Amount (ng) : 6.9984

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5007

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662308

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s08.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
74-87-3	Chloromethane		1	U
75-01-4	Vinyl Chloride		1	U
74-83-9	Bromomethane		1	U
75-00-3	Chloroethane		1	U
75-69-4	Trichlorofluoromethane		1	U
75-35-4	1,1-Dichloroethene		1	U
75-09-2	Methylene Chloride		1	U
1634-04-4	Methyl Tertiary Butyl Ether		1	U
75-34-3	1,1-Dichloroethane		1	U
540-59-0	1,2-Dichloroethene (Total)		1	U
67-66-3	Chloroform		1	U
71-55-6	1,1,1-Trichloroethane		1	U
56-23-5	Carbon Tetrachloride		1	U
71-43-2	Benzene		1	U
107-06-2	1,2-Dichloroethane		1	U
79-01-6	Trichloroethene		3	
78-87-5	1,2-Dichloropropane		1	U
75-27-4	Bromodichloromethane		1	U
110-75-8	2-Chloroethyl Vinyl Ether		10	U
10061-01-5	cis-1,3-Dichloropropene		1	U
108-88-3	Toluene		1	U
10061-02-6	trans-1,3-Dichloropropene		1	U
79-00-5	1,1,2-Trichloroethane		1	U
127-18-4	Tetrachloroethene		1	U
124-48-1	Dibromochloromethane		1	U
108-90-7	Chlorobenzene		1	U
100-41-4	Ethylbenzene		1	U
1330-20-7	Xylene (Total)		1	U
75-25-2	Bromoform		4	U
79-34-5	1,1,2,2-Tetrachloroethane		1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5007

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662308

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s08.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

^

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s08.d Injection date and time: **19-JUN-2018 23:22**
Data file Sample Info. Line: C5007;9662308;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 23:41 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph=7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.496	(0.006)	346	65	257195	(-18)	250.00	
66) Fluorobenzene	6.995	(0.000)	920	96	976256	(-12)	50.00	
101) Chlorobenzene-d5	10.787	(0.000)	1542	117	801425	(-16)	50.00	
132) 1,4-Dichlorobenzene-d4	12.805	(0.000)	1873	152	447217	(-24)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.057	(0.001)	113	274902	52.071	104%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.532	(0.001)	102	59176	52.096	104%		80 - 120
84) Toluene-d8	(3)	9.160	(0.001)	98	967601	49.456	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.873	(0.000)	95	397048	49.590	99%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.5	1
6) Vinyl Chloride	(2)				Not Detected					0.5	1
8) Bromomethane	(2)				Not Detected					0.5	1
9) Chloroethane	(2)				Not Detected					0.5	1
12) Trichlorofluoromethane	(2)				Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.5	1
28) Methylene Chloride	(2)				Not Detected					0.5	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.5	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.5	1
51) Chloroform	(2)				Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.5	1
56) Carbon Tetrachloride	(2)				Not Detected					0.5	1
60) Benzene	(2)				Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.5	1
71) Trichloroethene	(2)	7.495	(0.000)	95	18318	3.062	3.06			0.5	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.5	1
79) Bromodichloromethane	(2)				Not Detected					0.5	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.5	1
89) Toluene	(3)				Not Detected					0.5	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
94) Tetrachloroethene	(3)				Not Detected					0.5	1
98) Dibromochloromethane	(3)				Not Detected					0.5	1
103) Chlorobenzene	(3)				Not Detected					0.5	1
105) Ethylbenzene	(3)				Not Detected					0.5	1
107) m+p-Xylene	(3)				Not Detected					0.5	1

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:03. Target 3.5 esignature user ID: jkh09052

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s08.d Injection date and time: **19-JUN-2018 23:22**
Data file Sample Info. Line: C5007;9662308;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 23:41 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

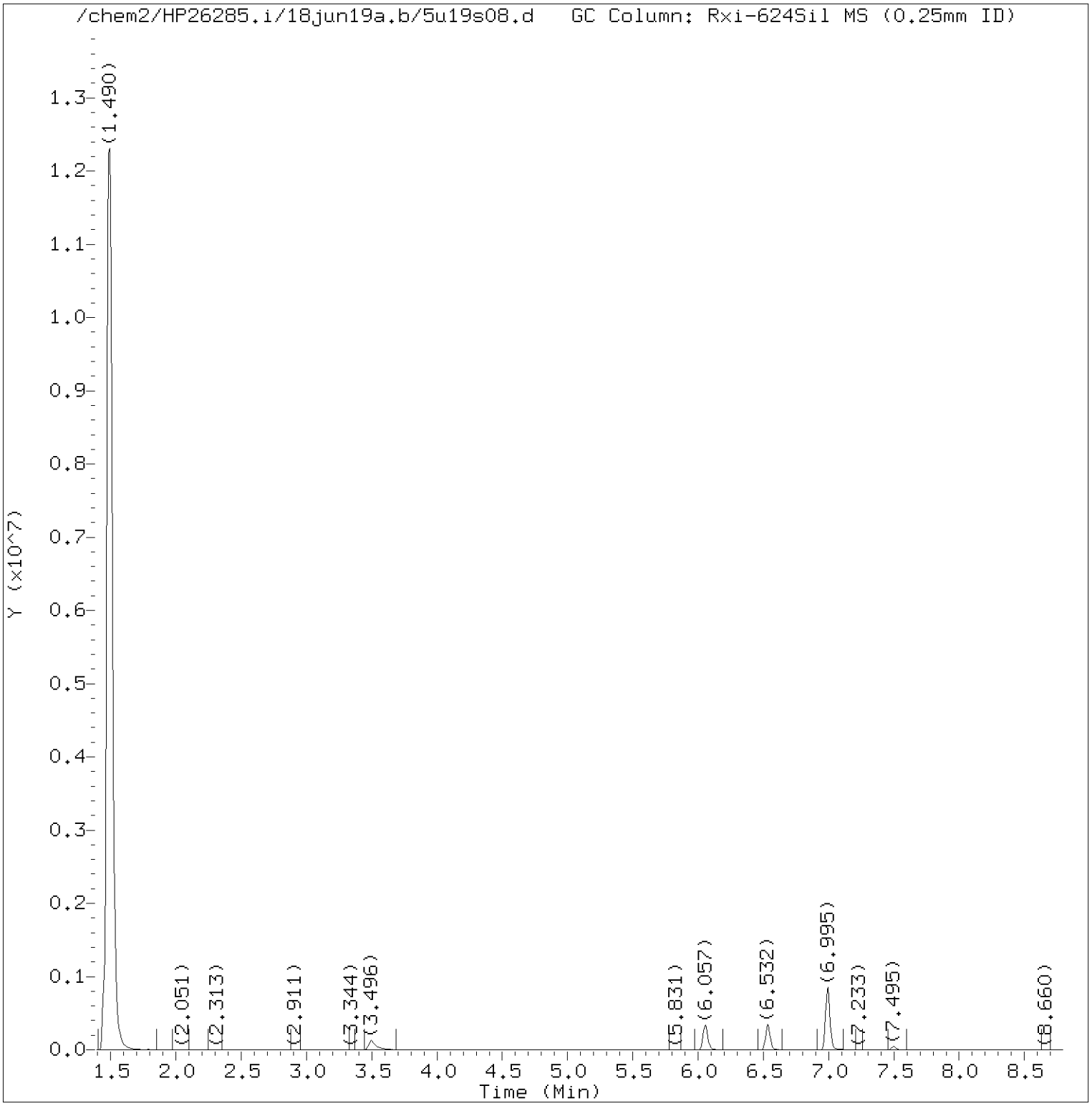
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.5	1
109) Xylene (Total)	(3)				Not Detected					0.5	1
111) Bromoform	(3)				Not Detected					0.5	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					1	5

Total number of targets = 37

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:03. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

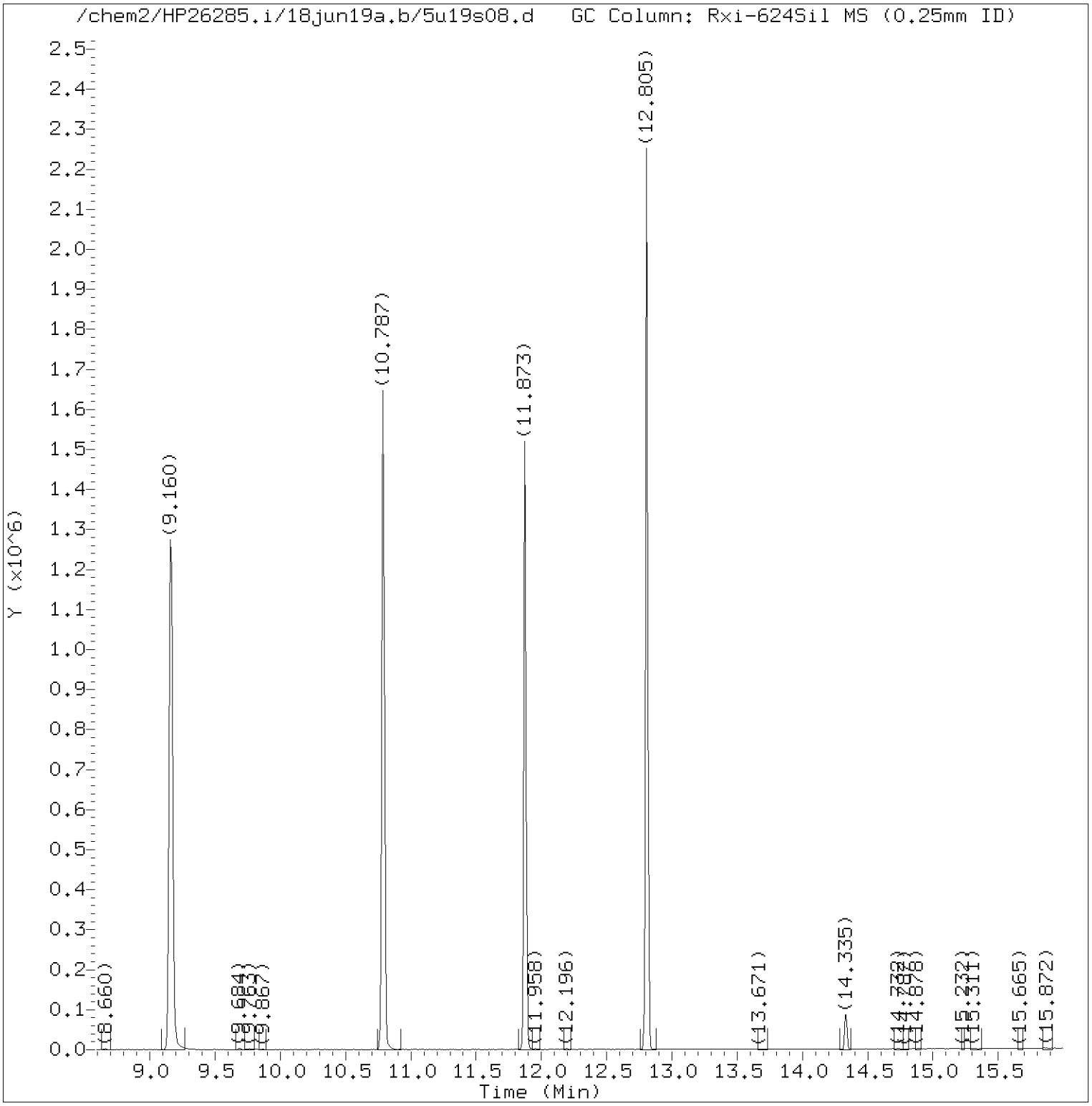
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s08.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 23:22 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 23:41 Unknown

Sample Name: C5007 Lab Sample ID: 9662308

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s08.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 23:22 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 23:41 Unknown

Sample Name: C5007 Lab Sample ID: 9662308

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s08.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 23:22 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 23:41 Unknown

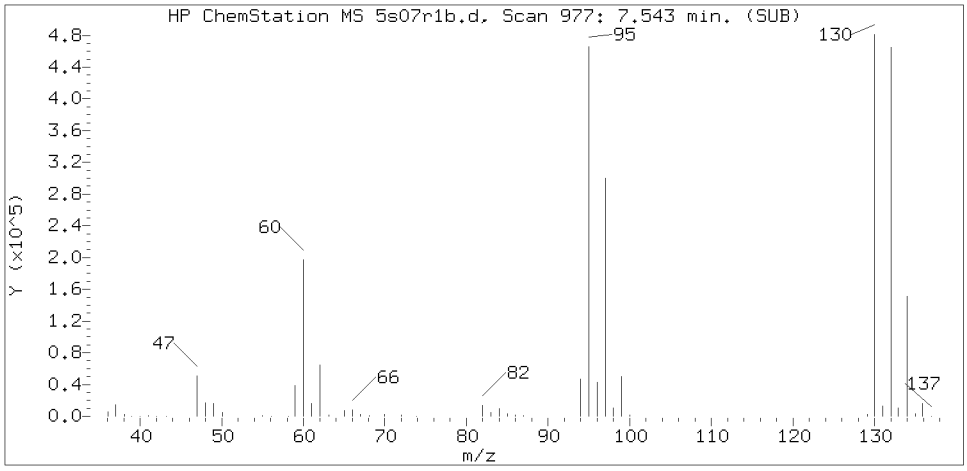
Sample Name: C5007 Lab Sample ID: 9662308

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.496	65	257195	250.000
52)$Dibromofluoromethane	(2)	6.057	113	274902	52.071
57)$1,2-Dichloroethane-d4	(2)	6.532	102	59176	52.096
66)*Fluorobenzene	(2)	6.995	96	976256	50.000
71) Trichloroethene	(2)	7.495	95	18318	3.062
84)$Toluene-d8	(3)	9.160	98	967601	49.456
101)*Chlorobenzene-d5	(3)	10.787	117	801425	50.000
115)$4-Bromofluorobenzene	(3)	11.873	95	397048	49.590
132)*1,4-Dichlorobenzene-d4	(4)	12.805	152	447217	50.000

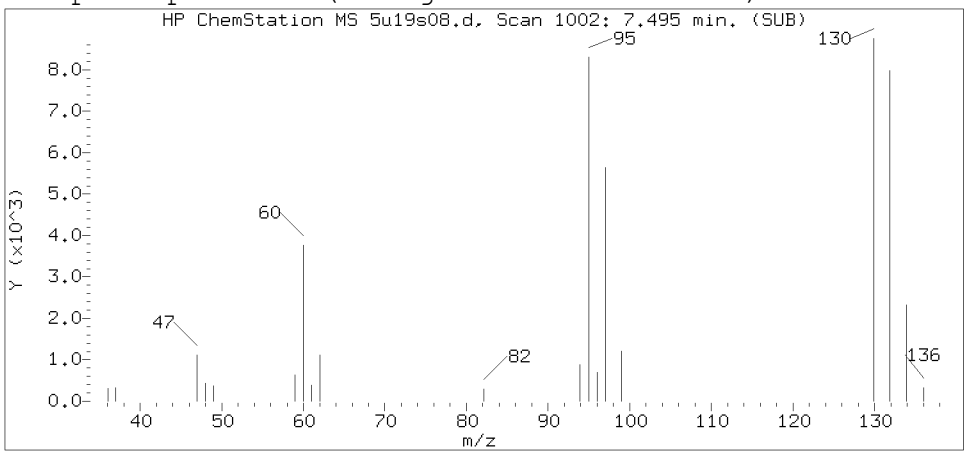
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

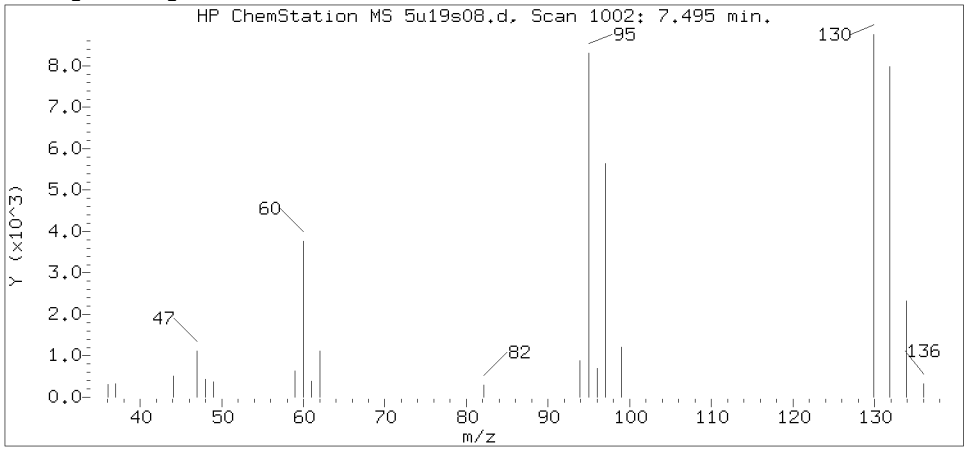
Reference Standard Spectrum for Trichloroethene

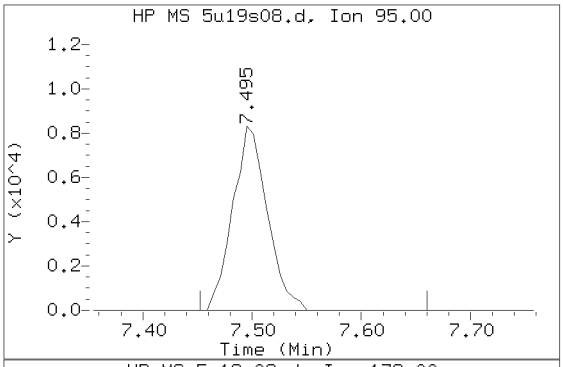


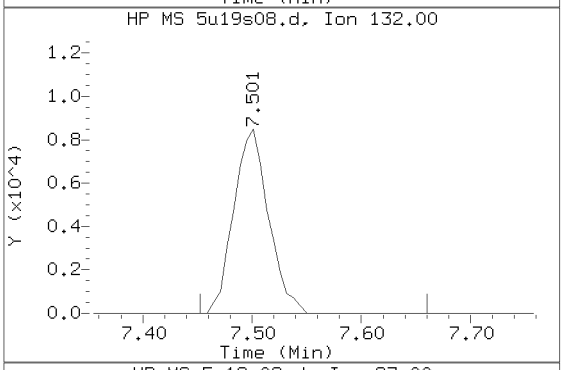
Sample Spectrum (Background Subtracted)

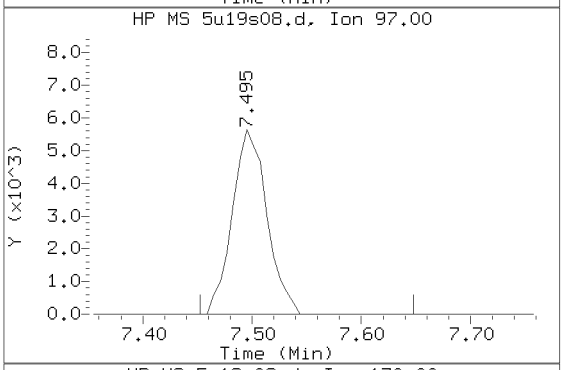


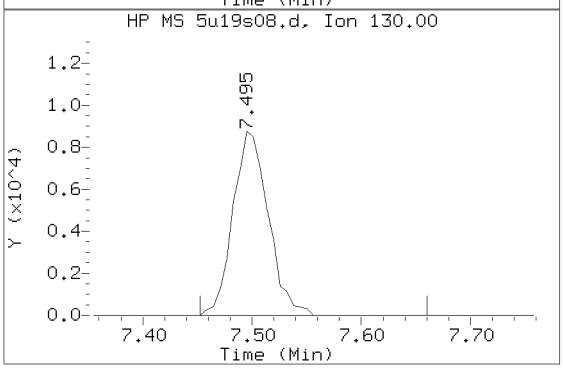
Sample Spectrum (Unaltered)











Data File: /chem2/HP26285.i/18jun19a.b/5u19s08.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 23:22 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 23:41 Unknown

Sample Name: C5007 Lab Sample ID: 9662308

Compound Number	: 71
Compound Name	: Trichloroethene
Scan Number	: 1002
Retention Time (minutes)	: 7.495
Relative Retention Time	: 0.00087
Quant Ion	: 95.00
Area (flag)	: 18318
On-Column Amount (ng)	: 3.0619

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: jkh09052

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5008

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662309

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s11.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	1	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5008

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662309

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s11.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s11.d Injection date and time: **20-JUN-2018 00:48**
Data file Sample Info. Line: C5008;9662309;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 01:08 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph=7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(0.000)	347	65	215864	(-31)	250.00	
66) Fluorobenzene	6.995	(0.000)	920	96	946210	(-15)	50.00	
101) Chlorobenzene-d5	10.787	(0.000)	1542	117	782794	(-18)	50.00	
132) 1,4-Dichlorobenzene-d4	12.805	(0.000)	1873	152	427885	(-27)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.057	(0.001)	113	269831	52.734	105%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.532	(0.001)	102	58137	52.807	106%		80 - 120
84) Toluene-d8	(3)	9.160	(0.001)	98	944777	49.439	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.873	(0.000)	95	385598	49.306	99%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.5	1
6) Vinyl Chloride	(2)				Not Detected					0.5	1
8) Bromomethane	(2)				Not Detected					0.5	1
9) Chloroethane	(2)				Not Detected					0.5	1
12) Trichlorofluoromethane	(2)				Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.5	1
28) Methylene Chloride	(2)				Not Detected					0.5	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.5	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.5	1
51) Chloroform	(2)				Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.5	1
56) Carbon Tetrachloride	(2)				Not Detected					0.5	1
60) Benzene	(2)				Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.5	1
71) Trichloroethene	(2)				Not Detected					0.5	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.5	1
79) Bromodichloromethane	(2)				Not Detected					0.5	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.5	1
89) Toluene	(3)				Not Detected					0.5	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
94) Tetrachloroethene	(3)				Not Detected					0.5	1
98) Dibromochloromethane	(3)				Not Detected					0.5	1
103) Chlorobenzene	(3)				Not Detected					0.5	1
105) Ethylbenzene	(3)				Not Detected					0.5	1
107) m+p-Xylene	(3)				Not Detected					0.5	1

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:04. Target 3.5 esignature user ID: jkh09052

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s11.d Injection date and time: **20-JUN-2018 00:48**
Data file Sample Info. Line: C5008;9662309;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 01:08 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

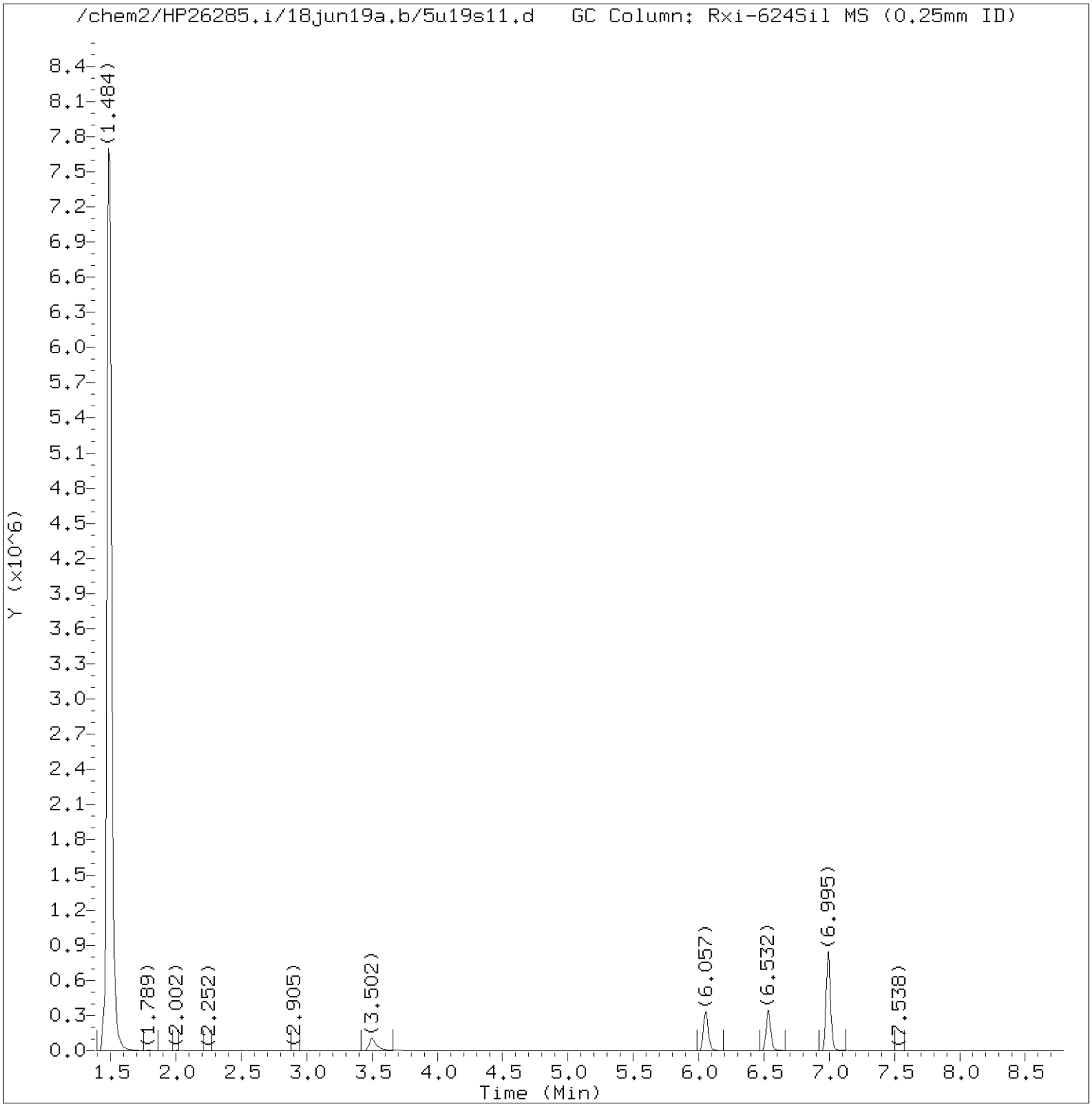
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.5	1
109) Xylene (Total)	(3)				Not Detected					0.5	1
111) Bromoform	(3)				Not Detected					0.5	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					1	5

Total number of targets = 37

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:04. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

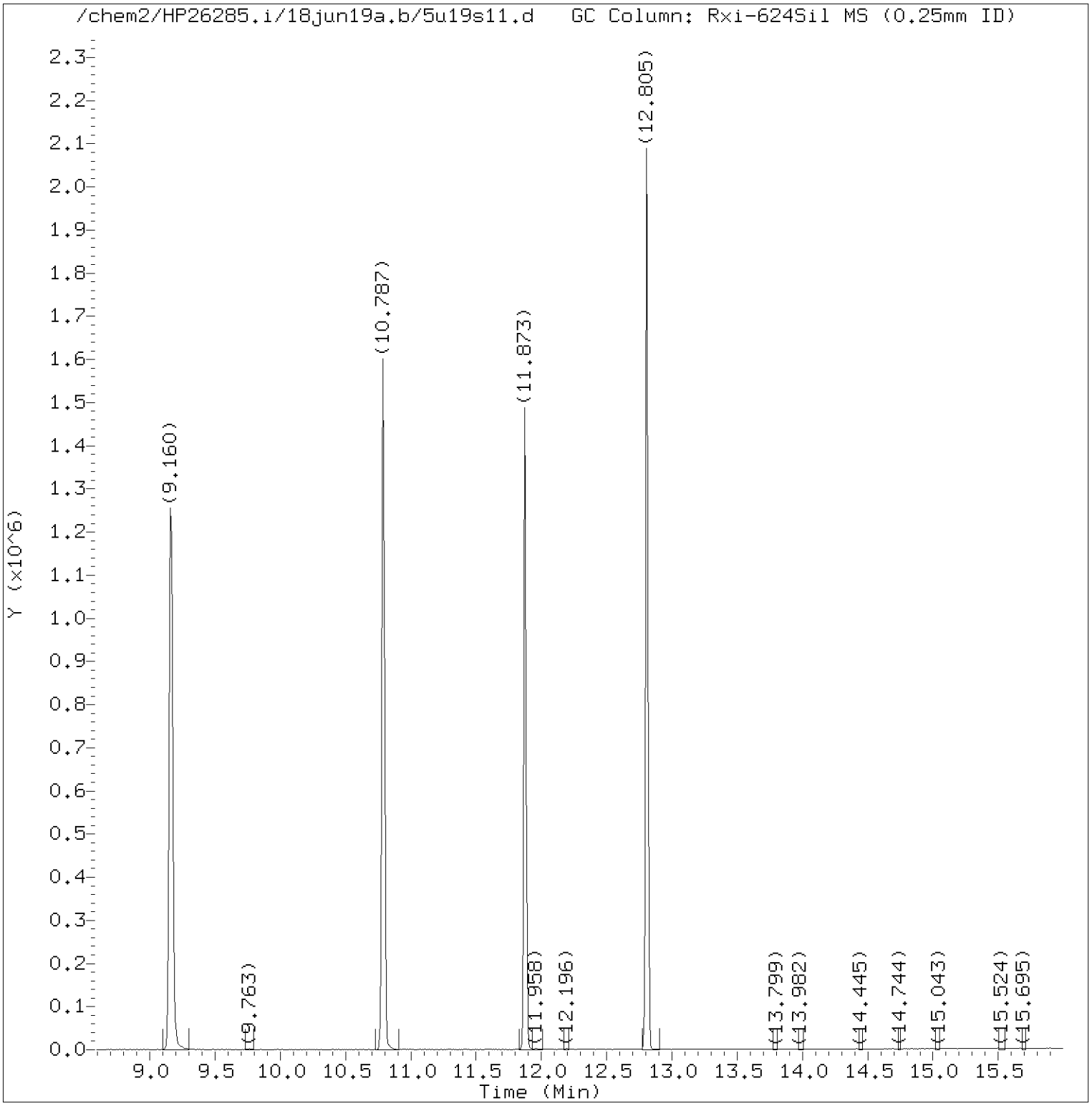
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s11.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 00:48 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 01:08 Unknown

Sample Name: C5008 Lab Sample ID: 9662309

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s11.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 00:48 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 01:08 Unknown

Sample Name: C5008 Lab Sample ID: 9662309

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s11.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 00:48 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 01:08 Unknown

Sample Name: C5008 Lab Sample ID: 9662309

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.502	65	215864	250.000
52)$Dibromofluoromethane	(2)	6.057	113	269831	52.734
57)$1,2-Dichloroethane-d4	(2)	6.532	102	58137	52.807
66)*Fluorobenzene	(2)	6.995	96	946210	50.000
84)$Toluene-d8	(3)	9.160	98	944777	49.439
101)*Chlorobenzene-d5	(3)	10.787	117	782794	50.000
115)$4-Bromofluorobenzene	(3)	11.873	95	385598	49.306
132)*1,4-Dichlorobenzene-d4	(4)	12.805	152	427885	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: jkh09052

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662310

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s12.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	0.9	J
540-59-0	1,2-Dichloroethene (Total)	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	0.9	J
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	1	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662310

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s12.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s12.d Injection date and time: **20-JUN-2018 01:10**
Data file Sample Info. Line: C5009;9662310;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph=7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.496	(0.006)	346	65	234714	(-25)	250.00	
66) Fluorobenzene	6.995	(0.000)	920	96	910567	(-18)	50.00	
101) Chlorobenzene-d5	10.787	(0.000)	1542	117	742039	(-22)	50.00	
132) 1,4-Dichlorobenzene-d4	12.811	(-0.006)	1874	152	406278	(-31)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.057	(0.001)	113	260891	52.982	106%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.532	(0.001)	102	54629	51.563	103%		80 - 120
84) Toluene-d8	(3)	9.160	(0.001)	98	910685	50.272	101%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.872	(0.000)	95	364539	49.173	98%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.5	1
6) Vinyl Chloride	(2)				Not Detected					0.5	1
8) Bromomethane	(2)				Not Detected					0.5	1
9) Chloroethane	(2)				Not Detected					0.5	1
12) Trichlorofluoromethane	(2)				Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.5	1
28) Methylene Chloride	(2)				Not Detected					0.5	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)	4.453	(0.000)	63	7018	0.851	0.85		J	0.5	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.5	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.5	1
51) Chloroform	(2)				Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.5	1
56) Carbon Tetrachloride	(2)				Not Detected					0.5	1
60) Benzene	(2)				Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.5	1
71) Trichloroethene	(2)				Not Detected					0.5	1
74) 1,2-Dichloropropane	(2)	7.855	(-0.000)	63	4608	0.865	0.86		J	0.5	1
79) Bromodichloromethane	(2)				Not Detected					0.5	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.5	1
89) Toluene	(3)				Not Detected					0.5	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
94) Tetrachloroethene	(3)				Not Detected					0.5	1
98) Dibromochloromethane	(3)				Not Detected					0.5	1
103) Chlorobenzene	(3)				Not Detected					0.5	1
105) Ethylbenzene	(3)				Not Detected					0.5	1
107) m+p-Xylene	(3)				Not Detected					0.5	1

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Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s12.d Injection date and time: **20-JUN-2018 01:10**
Data file Sample Info. Line: C5009;9662310;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.5	1
109) Xylene (Total)	(3)				Not Detected					0.5	1
111) Bromoform	(3)				Not Detected					0.5	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					1	5

Total number of targets = 37

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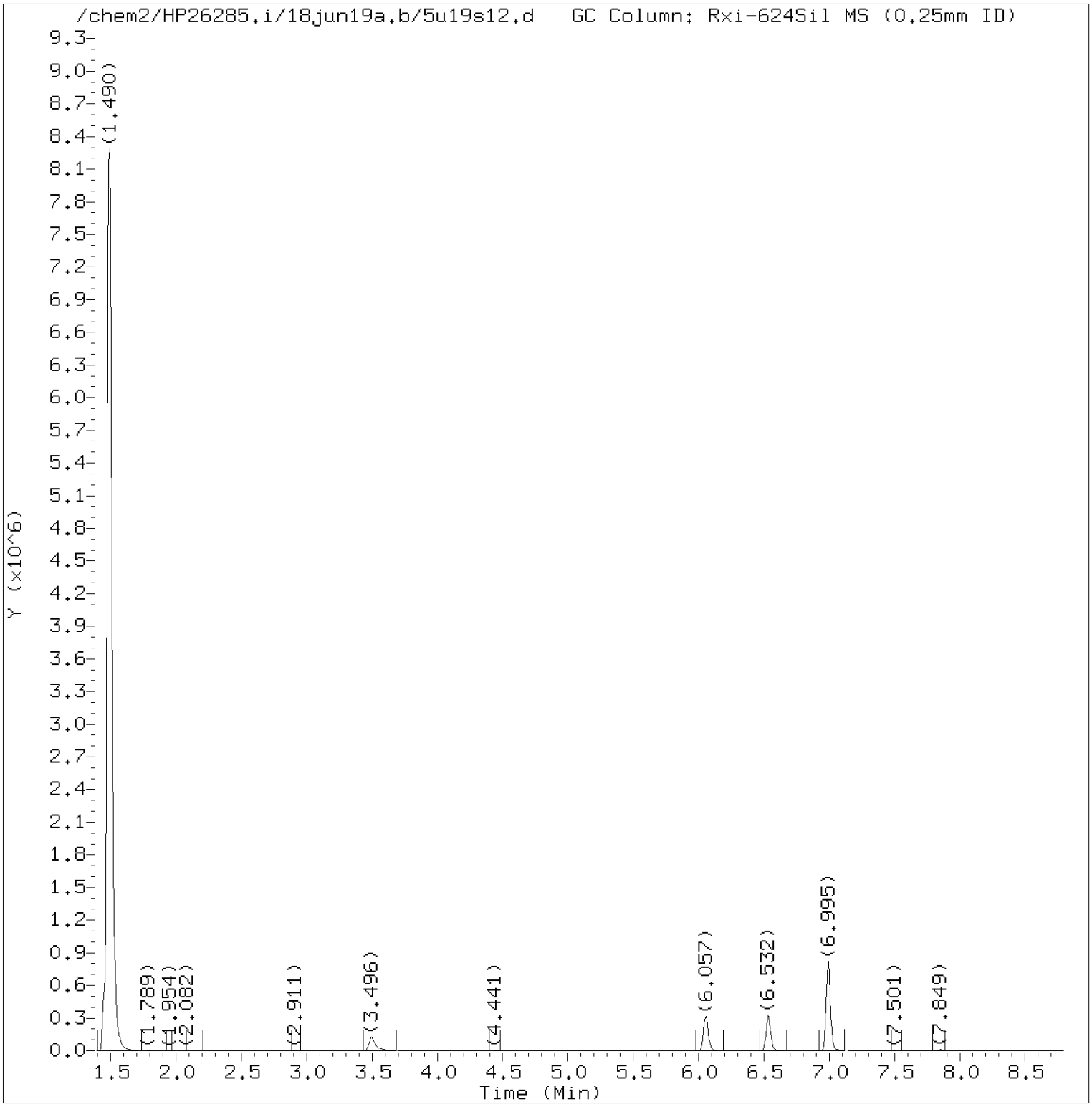
Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 18:40. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

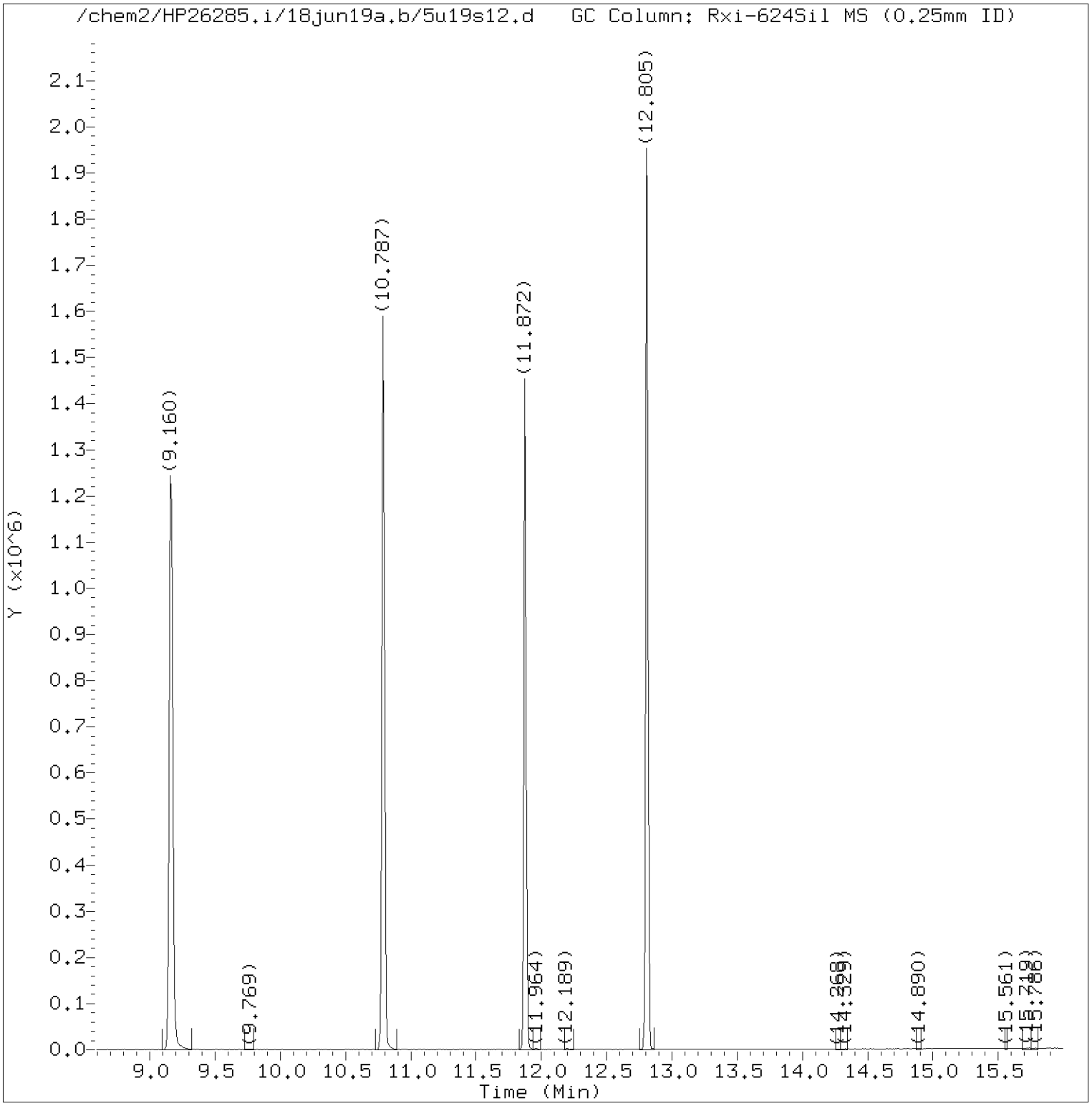
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s12.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:10 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009 Lab Sample ID: 9662310

Digitally signed by Don V. Viray
on 06/20/2018 at 17:27.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s12.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:10 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009 Lab Sample ID: 9662310

Digitally signed by Don V. Viray
on 06/20/2018 at 17:27.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s12.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:10 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009 Lab Sample ID: 9662310

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.496	65	234714	250.000
36) 1,1-Dichloroethane	(2)	4.453	63	7018	0.851
52)$Dibromofluoromethane	(2)	6.057	113	260891	52.982
57)$1,2-Dichloroethane-d4	(2)	6.532	102	54629	51.563
66)*Fluorobenzene	(2)	6.995	96	910567	50.000
74) 1,2-Dichloropropane	(2)	7.855	63	4608	0.865
84)$Toluene-d8	(3)	9.160	98	910685	50.272
101)*Chlorobenzene-d5	(3)	10.787	117	742039	50.000
115)$4-Bromofluorobenzene	(3)	11.872	95	364539	49.173
132)*1,4-Dichlorobenzene-d4	(4)	12.811	152	406278	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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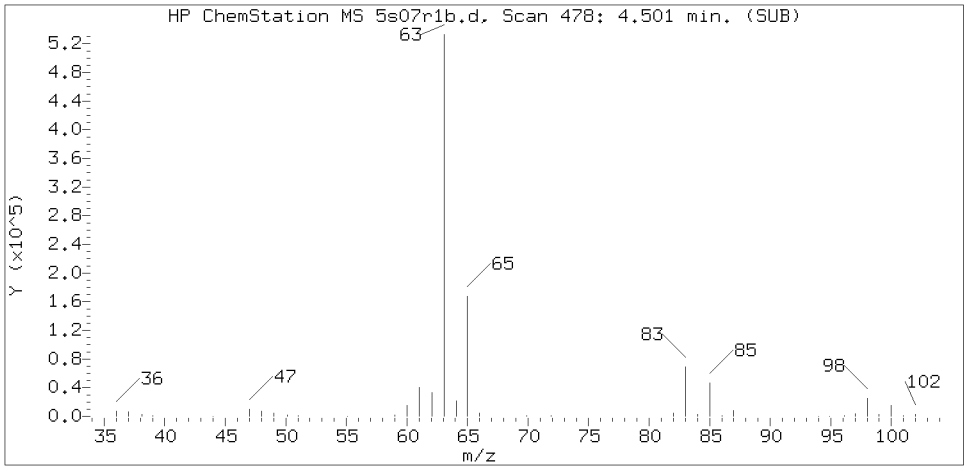
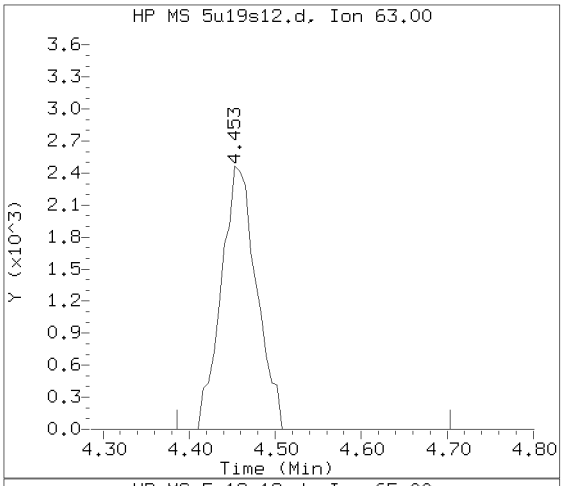
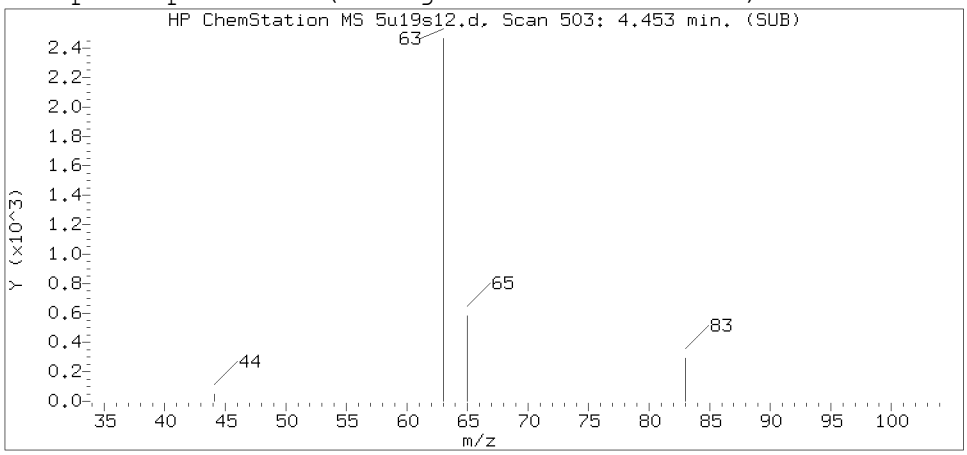
on 06/20/2018 at 17:27.
Target 3.5 esignature user ID: dvv10203

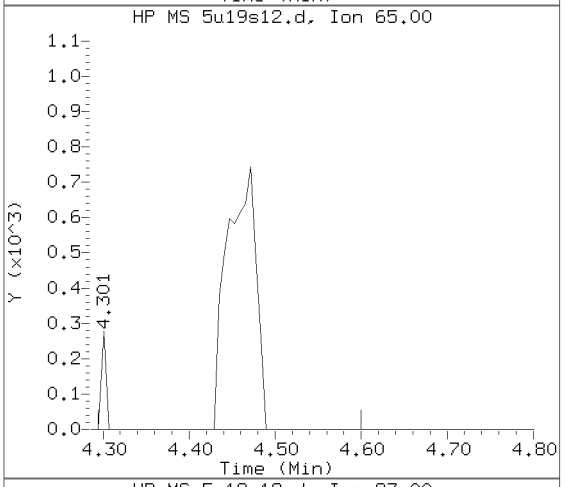
Reference Standard Spectrum for 1,1-Dichloroethane



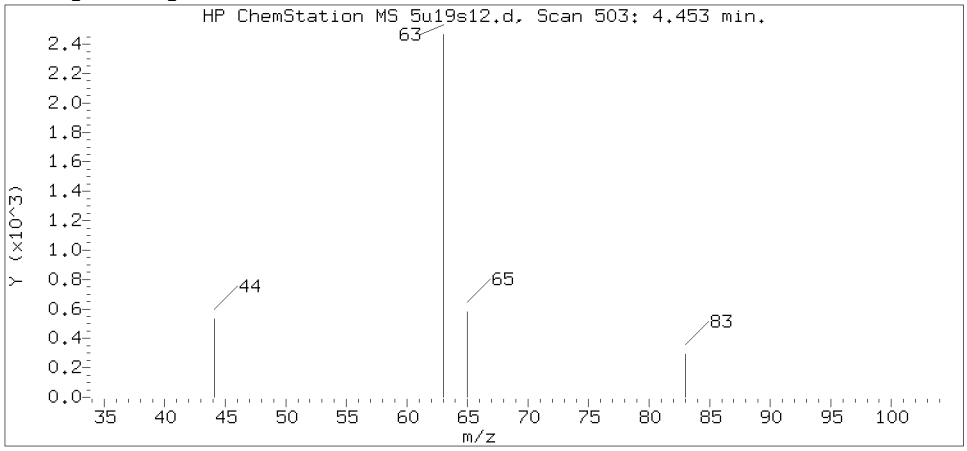


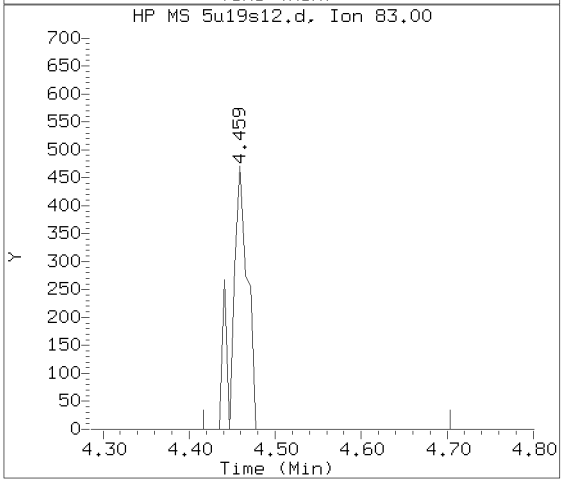
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP26285.i/18jun19a.b/5u19s12.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:10 Analyst ID: PTH10165

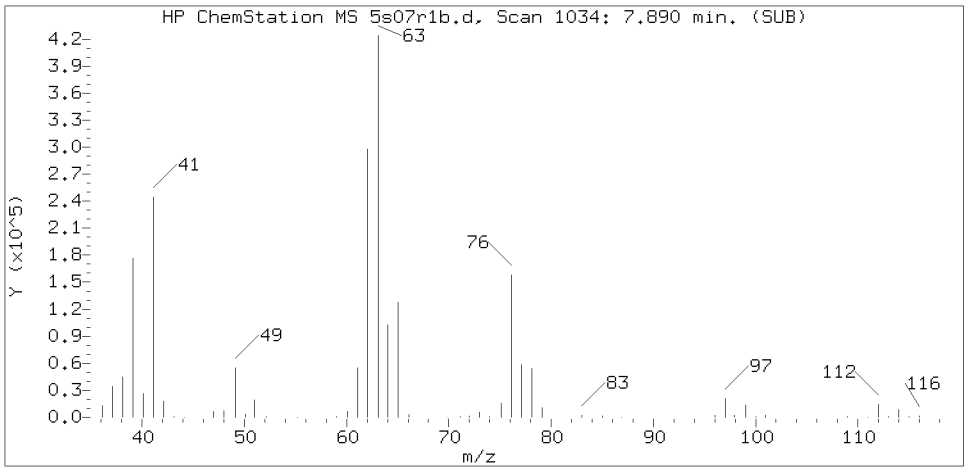
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009 Lab Sample ID: 9662310

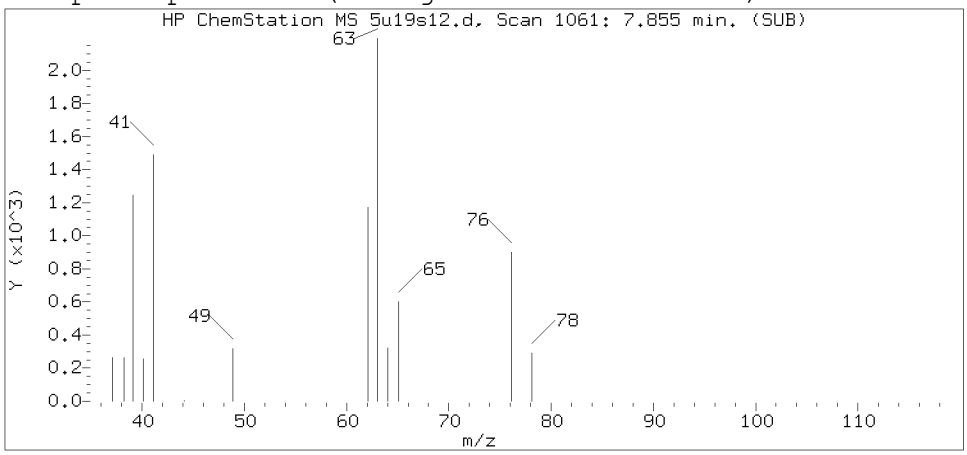
Compound Number	: 36
Compound Name	: 1,1-Dichloroethane
Scan Number	: 503
Retention Time (minutes)	: 4.453
Relative Retention Time	: 0.00088
Quant Ion	: 63.00
Area (flag)	: 7018
On-Column Amount (ng)	: 0.8509

Digitally signed by Don V. Viray on 06/20/2018 at 17:27.
Target 3.5 esignature user ID: dvv10203

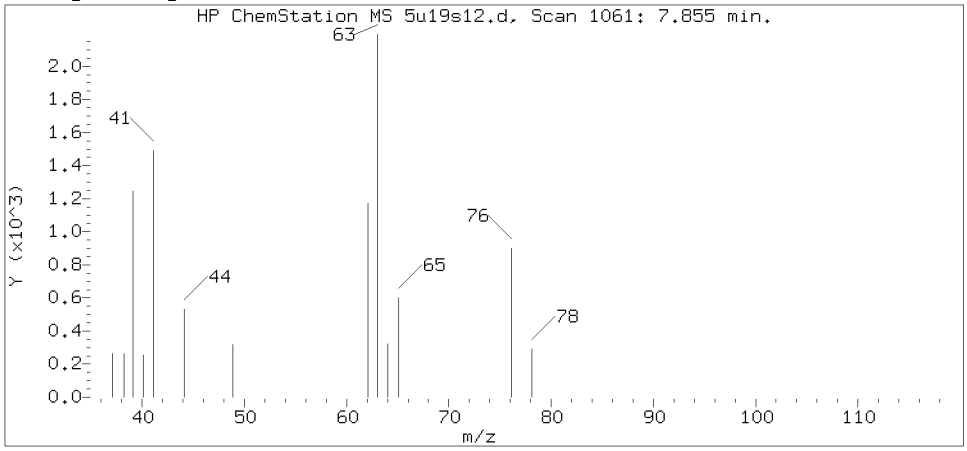
Reference Standard Spectrum for 1,2-Dichloropropane

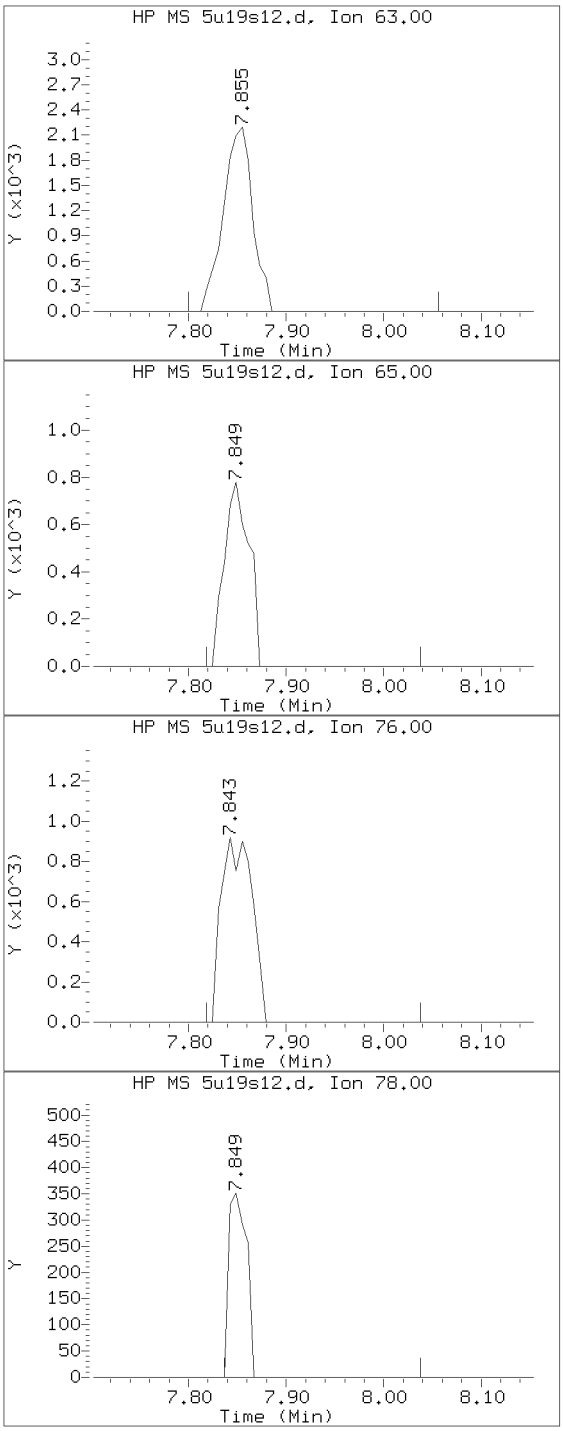


Sample Spectrum (Background Subtracted)



Sample Spectrum (Unaltered)





Data File: /chem2/HP26285.i/18jun19a.b/5u19s12.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:10 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009 Lab Sample ID: 9662310

Compound Number : 74
Compound Name : 1,2-Dichloropropane
Scan Number : 1061
Retention Time (minutes): 7.855
Relative Retention Time :-0.00000
Quant Ion : 63.00
Area (flag) : 4608
On-Column Amount (ng) : 0.8645

Digitally signed by Don V. Viray on 06/20/2018 at 17:27.
Target 3.5 esignature user ID: dvv10203

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5010

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662314

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s15.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	1	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5010

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662314

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s15.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

Data file: /chem2/HP26285.i/18jun19a.b/5u19s15.d Injection date and time: **20-JUN-2018 02:16**
Data file Sample Info. Line: C5010;9662314;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 02:34 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph=7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(0.000)	347	65	272978	(-13)	250.00	
66) Fluorobenzene	6.989	(0.006)	919	96	1014733	(-9)	50.00	
101) Chlorobenzene-d5	10.788	(0.000)	1542	117	839840	(-12)	50.00	
132) 1,4-Dichlorobenzene-d4	12.805	(0.000)	1873	152	460325	(-22)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.057	(0.000)	113	282067	51.403	103%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.532	(0.000)	102	62492	52.930	106%		80 - 120
84) Toluene-d8	(3)	9.160	(0.001)	98	1011412	49.330	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.873	(0.000)	95	418314	49.856	100%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.5	1
6) Vinyl Chloride	(2)				Not Detected					0.5	1
8) Bromomethane	(2)				Not Detected					0.5	1
9) Chloroethane	(2)				Not Detected					0.5	1
12) Trichlorofluoromethane	(2)				Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.5	1
28) Methylene Chloride	(2)				Not Detected					0.5	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.5	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.5	1
51) Chloroform	(2)				Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.5	1
56) Carbon Tetrachloride	(2)				Not Detected					0.5	1
60) Benzene	(2)				Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.5	1
71) Trichloroethene	(2)				Not Detected					0.5	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.5	1
79) Bromodichloromethane	(2)				Not Detected					0.5	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.5	1
89) Toluene	(3)				Not Detected					0.5	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
94) Tetrachloroethene	(3)				Not Detected					0.5	1
98) Dibromochloromethane	(3)				Not Detected					0.5	1
103) Chlorobenzene	(3)				Not Detected					0.5	1
105) Ethylbenzene	(3)				Not Detected					0.5	1
107) m+p-Xylene	(3)				Not Detected					0.5	1

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13. Target 3.5 esignature user ID: jkh09052

Data file: /chem2/HP26285.i/18jun19a.b/5u19s15.d Injection date and time: **20-JUN-2018 02:16**
Data file Sample Info. Line: C5010;9662314;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 02:34 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

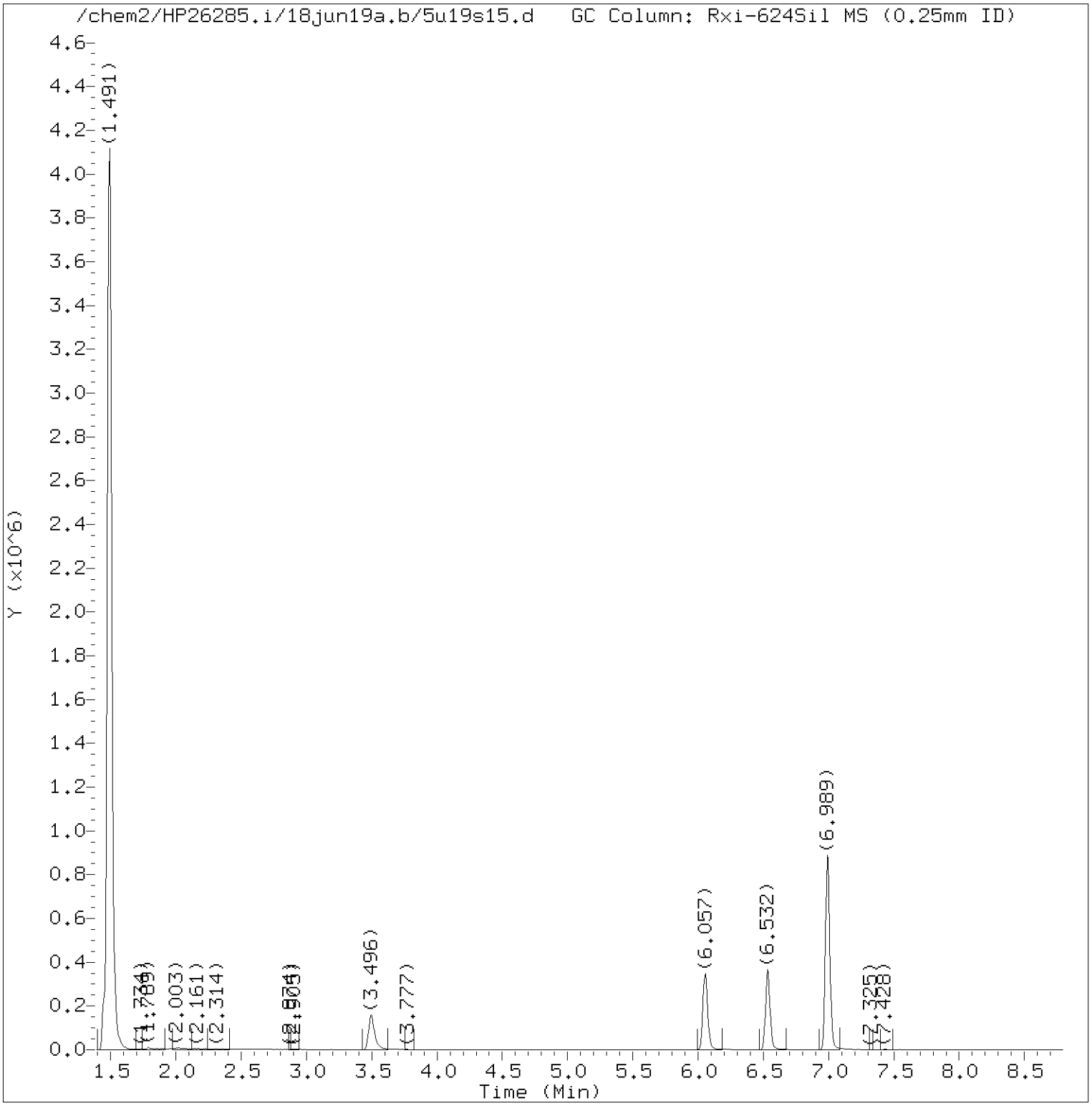
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.5	1
109) Xylene (Total)	(3)				Not Detected					0.5	1
111) Bromoform	(3)				Not Detected					0.5	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					1	5

Total number of targets = 37

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

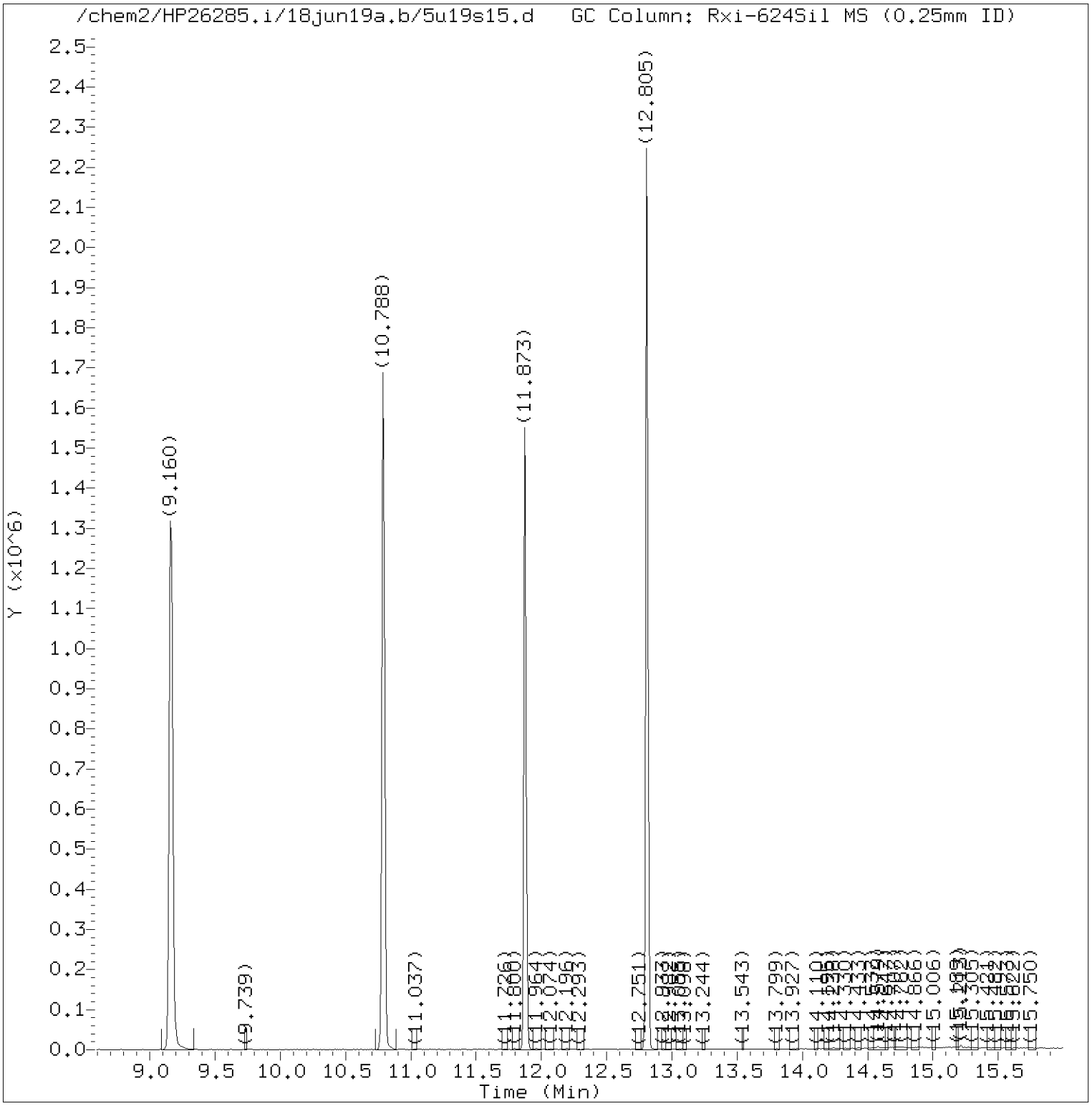
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s15.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 02:16 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 02:34 Unknown

Sample Name: C5010 Lab Sample ID: 9662314

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s15.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 02:16 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 02:34 Unknown

Sample Name: C5010 Lab Sample ID: 9662314

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s15.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 02:16 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 02:34 Unknown

Sample Name: C5010 Lab Sample ID: 9662314

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.502	65	272978	250.000
52)$Dibromofluoromethane	(2)	6.057	113	282067	51.403
57)$1,2-Dichloroethane-d4	(2)	6.532	102	62492	52.930
66)*Fluorobenzene	(2)	6.989	96	1014733	50.000
84)$Toluene-d8	(3)	9.160	98	1011412	49.330
101)*Chlorobenzene-d5	(3)	10.788	117	839840	50.000
115)$4-Bromofluorobenzene	(3)	11.873	95	418314	49.856
132)*1,4-Dichlorobenzene-d4	(4)	12.805	152	460325	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5011

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662315

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s16.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	1	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5011

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662315

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s16.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s16.d Injection date and time: **20-JUN-2018 02:38**
Data file Sample Info. Line: C5011;9662315;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 02:57 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph=7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(0.000)	347	65	245004	(-22)	250.00	
66) Fluorobenzene	6.995	(0.000)	920	96	1001840	(-10)	50.00	
101) Chlorobenzene-d5	10.787	(0.000)	1542	117	828800	(-13)	50.00	
132) 1,4-Dichlorobenzene-d4	12.811	(-0.006)	1874	152	456884	(-22)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.057	(0.001)	113	284060	52.432	105%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.532	(0.001)	102	61322	52.607	105%		80 - 120
84) Toluene-d8	(3)	9.160	(0.001)	98	999157	49.382	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.873	(0.000)	95	415398	50.168	100%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.5	1
6) Vinyl Chloride	(2)				Not Detected					0.5	1
8) Bromomethane	(2)				Not Detected					0.5	1
9) Chloroethane	(2)				Not Detected					0.5	1
12) Trichlorofluoromethane	(2)				Not Detected					0.5	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.5	1
28) Methylene Chloride	(2)				Not Detected					0.5	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.5	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.5	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.5	1
51) Chloroform	(2)				Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.5	1
56) Carbon Tetrachloride	(2)				Not Detected					0.5	1
60) Benzene	(2)				Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.5	1
71) Trichloroethene	(2)				Not Detected					0.5	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.5	1
79) Bromodichloromethane	(2)				Not Detected					0.5	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.5	1
89) Toluene	(3)				Not Detected					0.5	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
94) Tetrachloroethene	(3)				Not Detected					0.5	1
98) Dibromochloromethane	(3)				Not Detected					0.5	1
103) Chlorobenzene	(3)				Not Detected					0.5	1
105) Ethylbenzene	(3)				Not Detected					0.5	1
107) m+p-Xylene	(3)				Not Detected					0.5	1

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13. Target 3.5 esignature user ID: jkh09052

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s16.d Injection date and time: **20-JUN-2018 02:38**
Data file Sample Info. Line: C5011;9662315;1;0;;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 02:57 Unknown

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

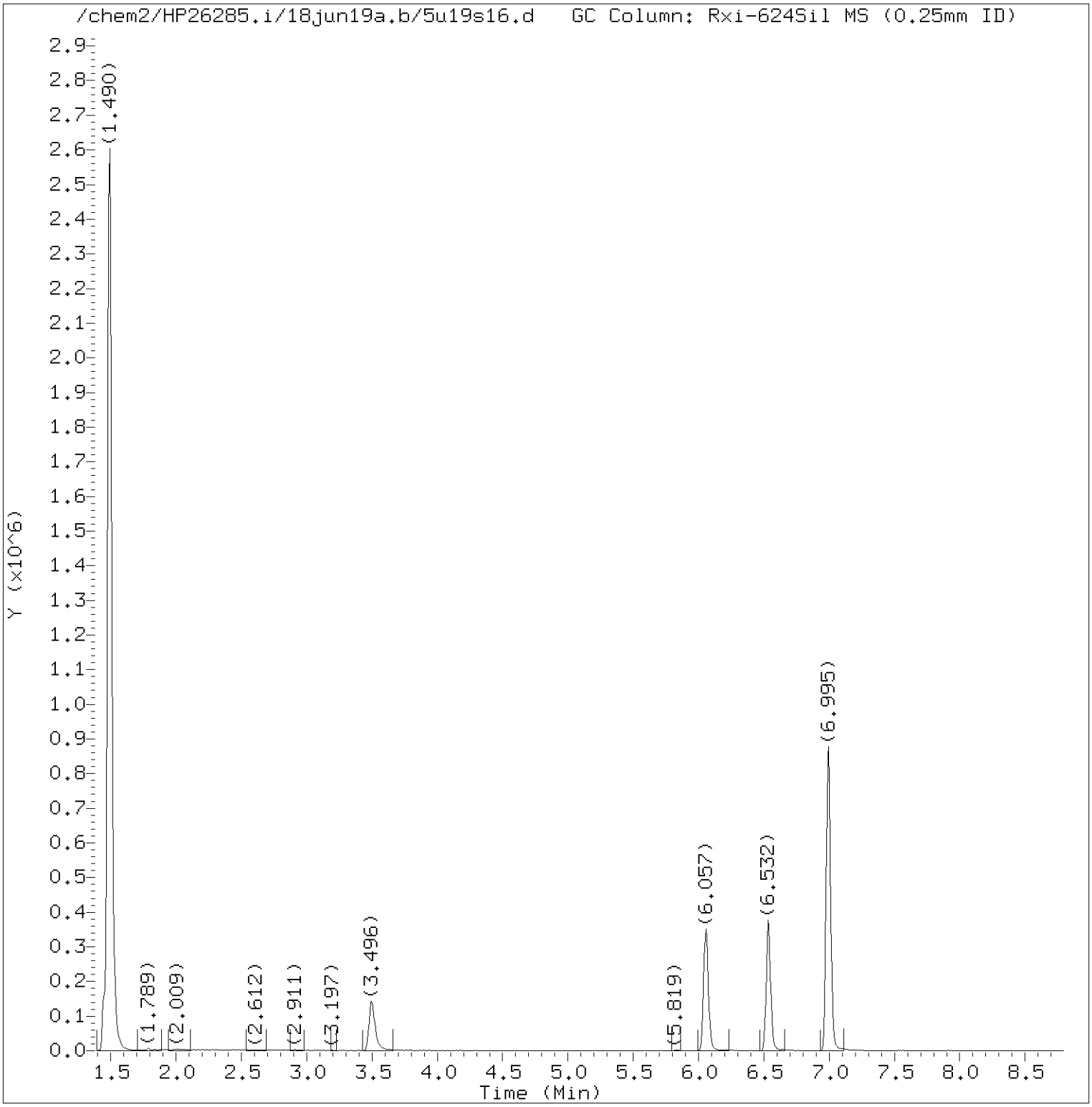
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.5	1
109) Xylene (Total)	(3)				Not Detected					0.5	1
111) Bromoform	(3)				Not Detected					0.5	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					1	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					1	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					1	5

Total number of targets = 37

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

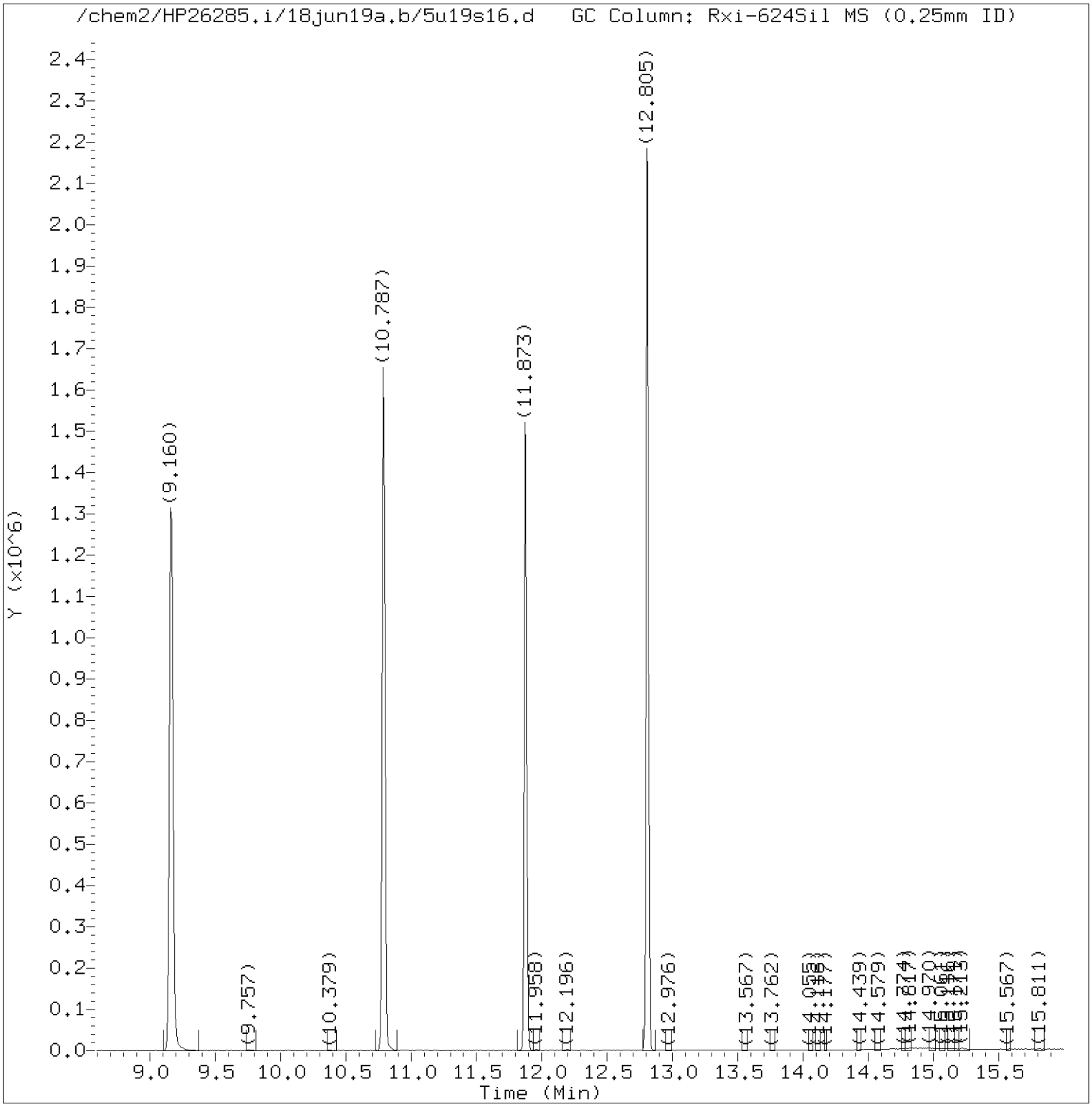
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s16.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 02:38 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 02:57 Unknown

Sample Name: C5011 Lab Sample ID: 9662315

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s16.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 02:38 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 02:57 Unknown

Sample Name: C5011 Lab Sample ID: 9662315

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s16.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 02:38 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 02:57 Unknown

Sample Name: C5011 Lab Sample ID: 9662315

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.502	65	245004	250.000
52)$Dibromofluoromethane	(2)	6.057	113	284060	52.432
57)$1,2-Dichloroethane-d4	(2)	6.532	102	61322	52.607
66)*Fluorobenzene	(2)	6.995	96	1001840	50.000
84)$Toluene-d8	(3)	9.160	98	999157	49.382
101)*Chlorobenzene-d5	(3)	10.787	117	828800	50.000
115)$4-Bromofluorobenzene	(3)	11.873	95	415398	50.168
132)*1,4-Dichlorobenzene-d4	(4)	12.811	152	456884	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Standards Data

Volatiles by GC/MS

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP26285 **HP #05**

Data Directory Path is - C:\DATA\18MAY15A\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
LCP00895	5Y15T01.D	50NGBFB	05/15/2018	13:28		
LCP00895	5Y15X01.D	BLK	05/15/2018	13:51		
LCP00895	5Y15I01.D	VSTD300	05/15/2018	14:12		
LCP00895	5Y15I02.D	VSTD100	05/15/2018	14:34		
LCP00895	5Y15I03.D	VSTD050	05/15/2018	14:55		
LCP00895	5Y15I04.D	VSTD020	05/15/2018	15:17		
LCP00895	5Y15I05.D	VSTD010	05/15/2018	15:39		
LCP00895	5Y15I06.D	VSTD004	05/15/2018	16:01		
LCP00895	5Y15I07.D	VSTD001	05/15/2018	16:22		
LCP00895	5Y15M01.D	0.5PPB	05/15/2018	16:44		
LCP00895	5Y15V01.D	LG5ICV	05/15/2018	17:06		

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP26285 **HP #05**

Data Directory Path is - C:\DATA\18JUN19A\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
PTH10165	5U19T01.D	50NGBFB	06/19/2018	19:06		
PTH10165	5U19X05.D	VBLK548	06/19/2018	19:20	5181701AA	
PTH10165	5U19C01.D	VSTD050	06/19/2018	19:42	5181701AA	
PTH10165	5U19S01.D	LCS548	06/19/2018	20:04	5181701AA	
PTH10165	5U19B01.D	VBLK548	06/19/2018	20:25	5181701AA	
PTH10165	5U19S02.D	LCS548	06/19/2018	20:48	5181701AA	
PTH10165	5U19S03.D	9662303	06/19/2018	21:33	5181701AA	
PTH10165	5U19S04.D	9662304	06/19/2018	21:55	5181701AA	
PTH10165	5U19S05.D	9662305	06/19/2018	22:17	5181701AA	
PTH10165	5U19S06.D	9662306	06/19/2018	22:38	5181701AA	
PTH10165	5U19S07.D	9662307	06/19/2018	23:00	5181701AA	
PTH10165	5U19S08.D	9662308	06/19/2018	23:22	5181701AA	
PTH10165	5U19X16.D	VBLK548	06/19/2018	23:43	5181701AA	
PTH10165	5U19S09.D	9662302	06/20/2018	00:05	5181701AA	
PTH10165	5U19S10.D	9651271	06/20/2018	00:27	5181701AA	
PTH10165	5U19S11.D	9662309	06/20/2018	00:48	5181701AA	
PTH10165	5U19S12.D	9662310	06/20/2018	01:10	5181701AA	
PTH10165	5U19S13.D	9662311MS	06/20/2018	01:32	5181701AA	
PTH10165	5U19S14.D	9662312MSD	06/20/2018	01:54	5181701AA	
PTH10165	5U19S15.D	9662314	06/20/2018	02:16	5181701AA	
PTH10165	5U19S16.D	9662315	06/20/2018	02:38	5181701AA	
PTH10165	5U19S17.D	9651266	06/20/2018	02:59	5181701AA	
PTH10165	5U19S18.D	9651267	06/20/2018	03:21	5181701AA	
PTH10165	5U19S19.D	9651268	06/20/2018	03:42	5181701AA	
PTH10165	5U19S20.D	9651269	06/20/2018	04:04	5181701AA	10
PTH10165	5U19S21.D	9651269DL	06/20/2018	04:25	5181701AA	100
PTH10165	5U19S22.D	9651270	06/20/2018	04:47	5181701AA	50
PTH10165	5U19S23.D	9651270DL	06/20/2018	05:09	5181701AA	500
PTH10165	5U19S24.D	9646715DL	06/20/2018	05:31	5181701AA	10
PTH10165	5U19S25.D	9646717DL	06/20/2018	05:53	5181701AA	10
PTH10165	5U19S26.D	9646903RE	06/20/2018	06:14	5181701AA	

Data File: /chem2/HP26285.i/18may15a.b/5y15t01.d

Date : 15-MAY-2018 13:28

Client ID: BFBFEB13-18

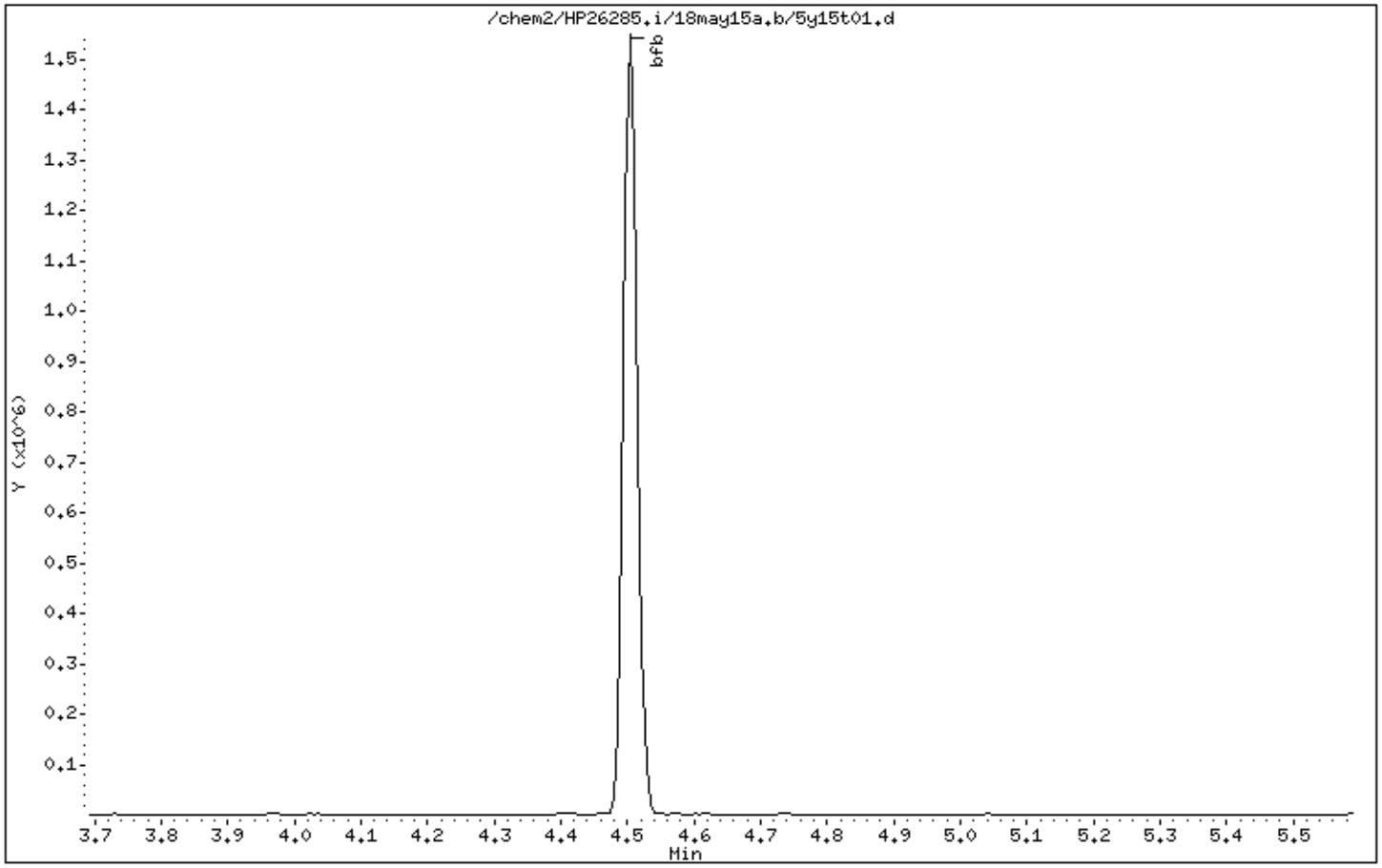
Instrument: HP26285.i

Sample Info: BFBFEB13-18;50NGBFB;1;3;;;;;;

Operator: LCP00895

Column phase: Rxi-624Sil MS

Column diameter: 0.25



Digitally signed by Kevin A. Sposito on 05/16/2018 at 11:59.
Target 3.5 esignature user ID: kas02648

Data File: /chem2/HP26285.i/18may15a.b/5y15t01.d

Date : 15-MAY-2018 13:28

Client ID: BFBFEB13-18

Instrument: HP26285.i

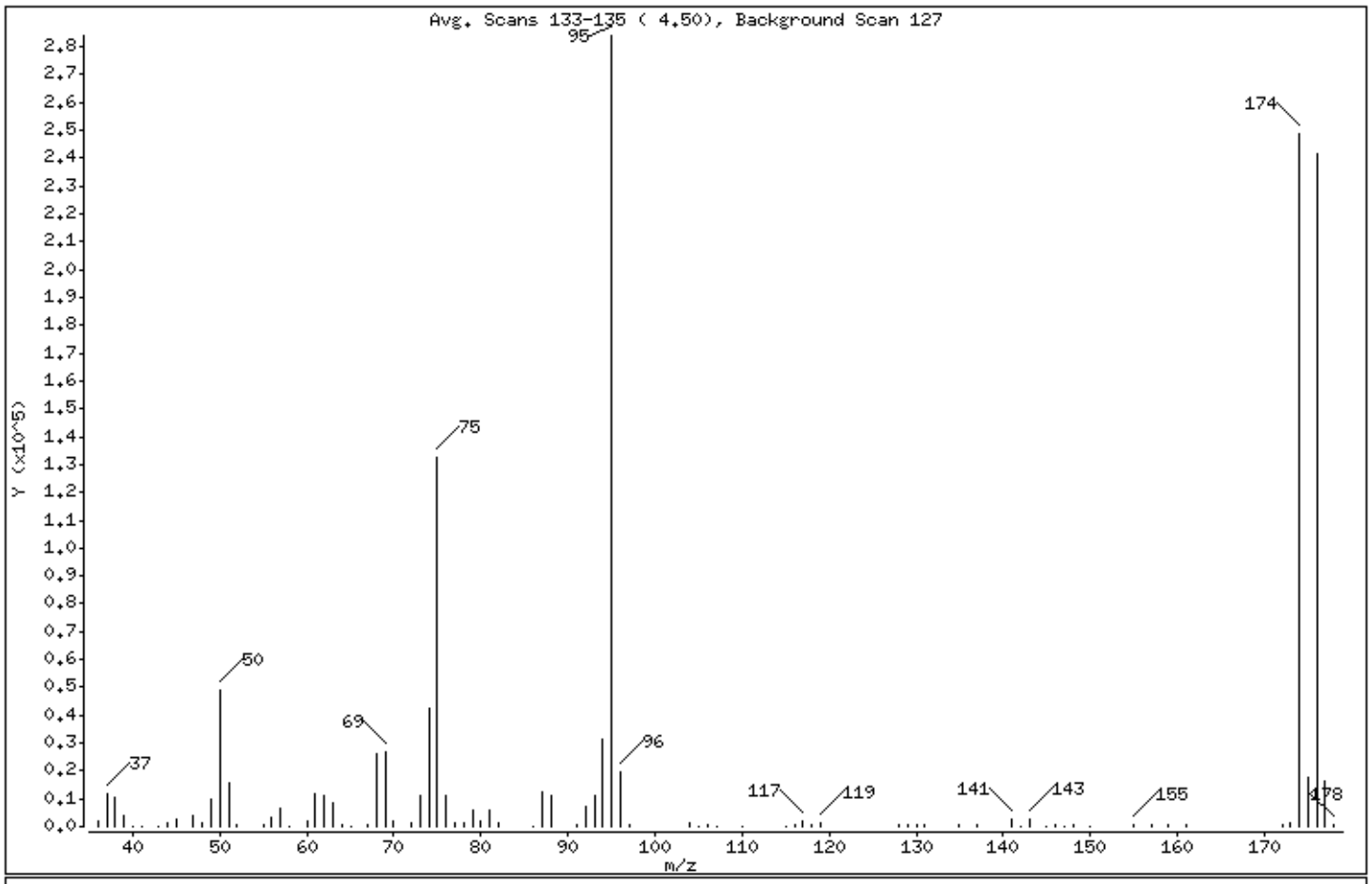
Sample Info: BFBFEB13-18;50NGBFB;1;3;;;;;;

Operator: LCP00895

Column phase: Rxi-624Sil MS

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.14
75	30.00 - 60.00% of mass 95	46.63
96	5.00 - 9.00% of mass 95	6.86
173	Less than 2.00% of mass 174	0.50 (0.57)
174	50.00 - 100.00% of mass 95	87.67
175	5.00 - 9.00% of mass 174	6.22 (7.09)
176	95.00 - 101.00% of mass 174	85.04 (97.00)
177	5.00 - 9.00% of mass 176	5.73 (6.74)

Digitally signed by Kevin A. Sposito on 05/16/2018 at 11:59.
Target 3.5 esignature user ID: kas02648

Data File: /chem2/HP26285.i/18may15a.b/5y15t01.d

Date : 15-MAY-2018 13:28

Client ID: BFBFEB13-18 Instrument: HP26285.i

Sample Info: BFBFEB13-18;50NGBFB;1;3;;;;;;

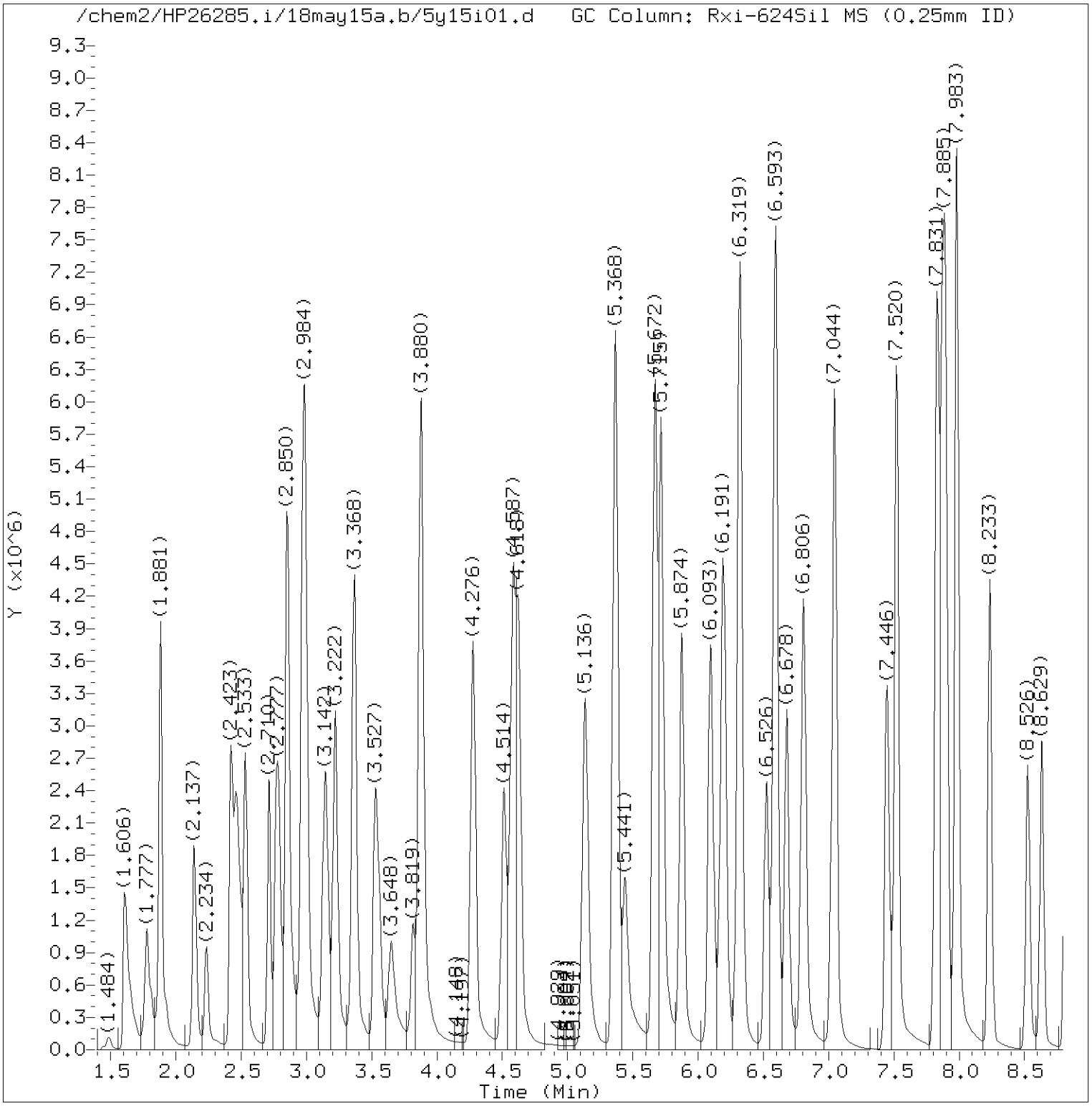
Operator: LCP00895

Column phase: Rxi-624Sil MS Column diameter: 0.25

Data File: 5y15t01.d
Spectrum: Avg. Scans 133-135 (4.50), Background Scan 127
Location of Maximum: 95.00
Number of points: 85

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2101	63.00	8432	92.00	7203	141.00	2724
37.00	11823	64.00	912	93.00	11114	142.00	240
38.00	10663	65.00	272	94.00	31416	143.00	2677
39.00	4120	67.00	629	95.00	284032	145.00	111
40.00	233	68.00	26144	96.00	19488	146.00	412
41.00	84	69.00	26856	97.00	646	147.00	240
43.00	92	70.00	2103	104.00	984	148.00	764
44.00	1477	72.00	1110	105.00	266	150.00	295
45.00	2335	73.00	11195	106.00	972	155.00	636
47.00	3757	74.00	42592	107.00	118	157.00	472
48.00	1390	75.00	132416	110.00	84	159.00	406
49.00	9961	76.00	10892	115.00	196	161.00	389
50.00	48680	77.00	1545	116.00	811	172.00	678
51.00	15525	78.00	987	117.00	1674	173.00	1427
52.00	672	79.00	5865	118.00	870	174.00	248960
55.00	648	80.00	1921	119.00	1401	175.00	17656
56.00	3317	81.00	5661	128.00	952	176.00	241536
57.00	6443	82.00	1240	129.00	530	177.00	16280
58.00	90	86.00	251	130.00	955	178.00	403
60.00	2281	87.00	12504	131.00	333		
61.00	11793	88.00	11314	135.00	488		
62.00	11346	91.00	903	137.00	385		

Digitally signed by Kevin A. Sposito on 05/16/2018 at 11:59.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

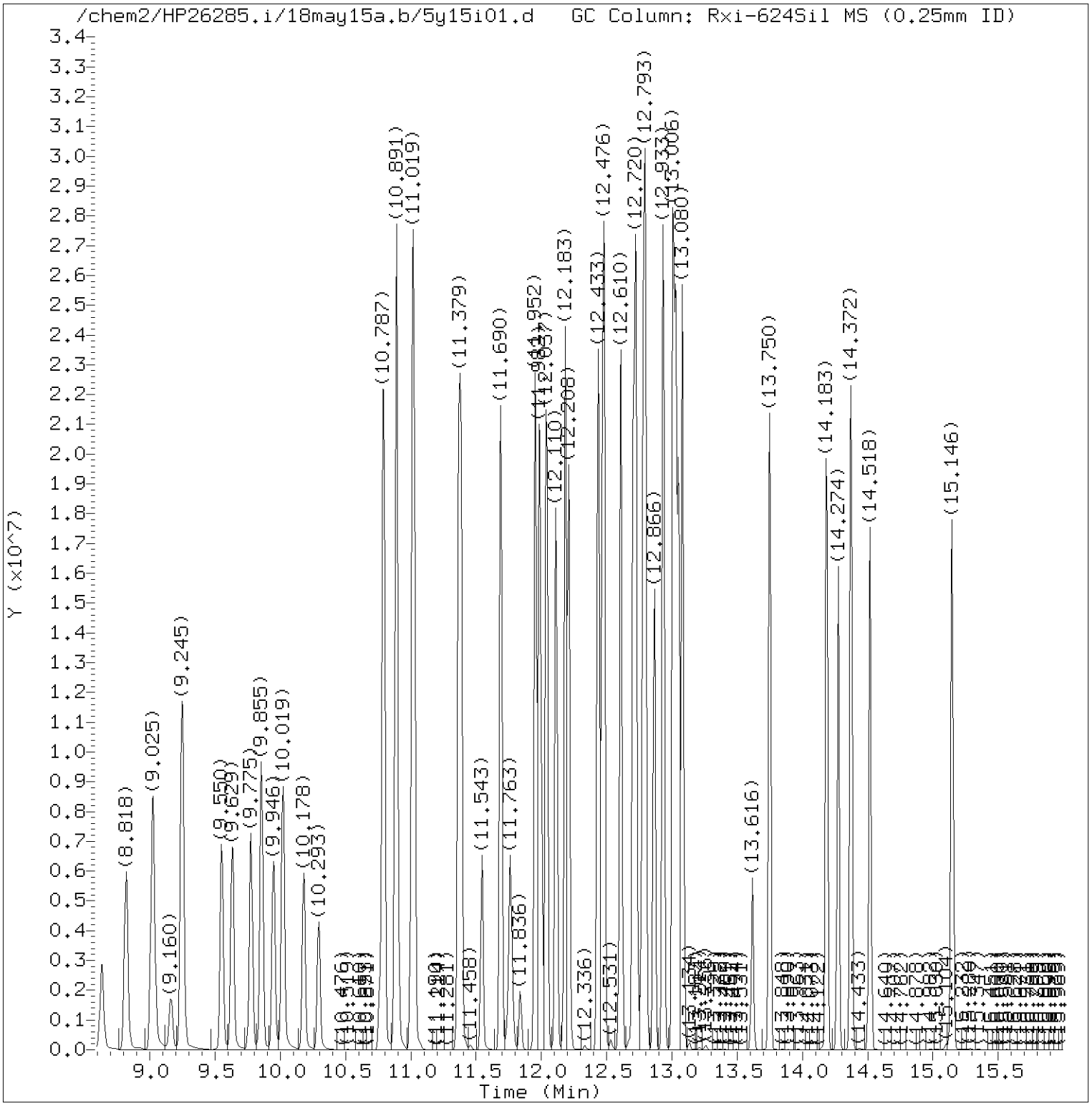
Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.606	85	3053866	334.278
4) Chloromethane	(2)	1.777	50	1826876	280.807
6) Vinyl Chloride	(2)	1.874	62	1816665	285.705
5) 1,3-Butadiene	(2)	1.881	39	1238856	292.869
8) Bromomethane	(2)	2.137	94	1529568	285.112
9) Chloroethane	(2)	2.234	64	906813	268.718
10) Dichlorofluoromethane	(2)	2.423	67	3012964	286.737
12) Trichlorofluoromethane	(2)	2.460	101	3257790	324.001
11) n-Pentane	(2)	2.533	43	1813416	324.960
14) Ethyl ether	(2)	2.710	59	1551684	297.231
15) Freon 123a	(2)	2.777	67	2186922M	300.990
16) Acrolein	(1)	2.850	56	5999651	2573.254
17) 1,1-Dichloroethene	(2)	2.972	96	1662759	308.698
17) 1,1-Dichloroethene	(2)	2.972	63	823789	304.421
19) Freon 113	(2)	2.984	101	1976736	347.327
18) Acetone	(1)	2.996	58	611819	489.561
21) 2-Propanol	(1)	3.142	45	1150420M	1440.535
22) Methyl Iodide	(2)	3.149	142	3828784	301.319
23) Carbon Disulfide	(2)	3.222	76	5590836	318.187
27) Methyl Acetate	(2)	3.350	43	2306468	290.925
25) Allyl Chloride	(2)	3.368	41	2913819	307.224
28) Methylene Chloride	(2)	3.527	84	2054025	296.161
29)*t-Butyl alcohol-d10	(1)	3.539	65	338384	250.000
30) t-Butyl alcohol	(1)	3.648	59	2322940	1493.051
31) Acrylonitrile	(2)	3.813	53	1260450	305.623
33) Methyl Tertiary Butyl Ether	(2)	3.874	73	4953680	296.298
32) trans-1,2-Dichloroethene	(2)	3.880	96	1960929	293.450
34) n-Hexane	(2)	4.276	57	2891599	403.953
36) 1,1-Dichloroethane	(2)	4.514	63	3653779	304.160
38) di-Isopropyl ether	(2)	4.581	45	6122818	293.077
39) 2-Chloro-1,3-butadiene	(2)	4.624	53	3042413	336.585
40) Ethyl t-butyl ether	(2)	5.136	59	5005918	303.975
44) 2-Butanone	(2)	5.355	43	3559382	593.908
42) cis-1,2-Dichloroethene	(2)	5.368	96	2349962	296.441
45) 2,2-Dichloropropane	(2)	5.374	77	1883989	288.561
47) Propionitrile	(1)	5.441	54	2620958	1410.218
48) Methacrylonitrile	(2)	5.672	67	3328382	732.452
49) Bromochloromethane	(2)	5.715	128	1355438	321.805

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.727	71	1011271	569.218
51) Chloroform	(2)	5.874	83	4159328	305.914
53) 1,1,1-Trichloroethane	(2)	6.093	97	3652929	313.182
52)$Dibromofluoromethane	(2)	6.099	113	367865	51.293
52)$Dibromofluoromethane	(2)	6.099	111	375693	51.650
43) 1,2-Dichloroethene (Total)	(2)		96	4310891	589.891
54) Cyclohexane	(2)	6.191	56	3371873	373.094
54) Cyclohexane	(2)	6.191	84	2944952	375.609
54) Cyclohexane	(2)	6.191	69	1081146	382.708
56) Carbon Tetrachloride	(2)	6.313	117	3113189	365.256
55) 1,1-Dichloropropene	(2)	6.325	75	2970450	321.451
58) Isobutyl Alcohol	(1)	6.526	41	1958283	3627.770
57)$1,2-Dichloroethane-d4	(2)	6.569	102	75657	49.030
57)$1,2-Dichloroethane-d4	(2)	6.569	65	388376	52.045
57)$1,2-Dichloroethane-d4	(2)	6.569	104	49379	50.219
60) Benzene	(2)	6.593	78	8706742	291.853
61) 1,2-Dichloroethane	(2)	6.678	62	3144025	303.357
61) 1,2-Dichloroethane	(2)	6.678	98	270638	303.272
65) t-Amyl methyl ether	(2)	6.806	73	4950760	291.033
66)*Fluorobenzene	(2)	7.020	96	1326213	50.000
67) n-Heptane	(2)	7.044	43	3212678	423.019
69) n-Butanol	(1)	7.446	56	3373068	7649.226
71) Trichloroethene	(2)	7.520	95	2460973	302.803
73) Methylcyclohexane	(2)	7.831	83	4137651	361.336
73) Methylcyclohexane	(2)	7.831	98	1851088	365.410
74) 1,2-Dichloropropane	(2)	7.867	63	2239692	288.499
72) t-Amyl ethyl ether	(2)	7.898	87	2951064	334.395
76) 1,4-Dioxane	(1)	7.971	88	589592M	4339.575
77) Methyl Methacrylate	(2)	7.983	69	2255035	313.081
75) Dibromomethane	(2)	7.983	93	1604029	301.849
79) Bromodichloromethane	(2)	8.233	83	3483570	340.468
80) 2-Nitropropane	(2)	8.526	41	2044241	750.852
81) 2-Chloroethyl Vinyl Ether	(2)	8.635	63	1548361	360.672
82) cis-1,3-Dichloropropene	(2)	8.818	75	4173905	327.640
83) 4-Methyl-2-pentanone	(2)	9.025	43	7680379	641.298
84)$Toluene-d8	(3)	9.160	98	1338237	49.187
84)$Toluene-d8	(3)	9.160	100	882093	49.812
89) Toluene	(3)	9.245	92	6037882	291.621

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) trans-1,3-Dichloropropene	(3)	9.550	75	4010859	332.063
92) Ethyl Methacrylate	(3)	9.635	69	3989596	328.575
93) 1,1,2-Trichloroethane	(3)	9.775	97	2462403M	293.629
94) Tetrachloroethene	(3)	9.855	166	3168937	329.356
95) 1,3-Dichloropropane	(3)	9.946	76	3902666	293.525
97) 2-Hexanone	(3)	10.019	43	6282374M	616.197
91) 1,3-Dichloropropene (total)	(3)		100	8184764	659.704
98) Dibromochloromethane	(3)	10.178	129	3246888	350.856
100) 1,2-Dibromoethane	(3)	10.293	107	2875387	313.882
101)*Chlorobenzene-d5	(3)	10.763	117	1114468	50.000
102) 1-Chlorohexane	(3)	10.787	91	3463956	331.050
103) Chlorobenzene	(3)	10.793	112	7657406	298.542
104) 1,1,1,2-Tetrachloroethane	(3)	10.885	131	2997338	338.132
105) Ethylbenzene	(3)	10.891	91	12329704	303.742
107) m+p-Xylene	(3)	11.019	106	10027740	626.428
108) o-Xylene	(3)	11.366	106	5116653	325.425
110) Styrene	(3)	11.385	104	8478350	328.529
111) Bromoform	(3)	11.543	173	2730511	386.633
112) Isopropylbenzene	(3)	11.690	105	12663338	336.498
113) Cyclohexanone	(1)	11.763	55	2729648M	4541.230
109) Xylene (Total)	(3)		106	15144393	951.852
115)$4-Bromofluorobenzene	(3)	11.836	95	565341	50.775
115)$4-Bromofluorobenzene	(3)	11.836	174	508221	50.313
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	4128963M	270.684
116) Bromobenzene	(4)	11.952	156	4063936	324.827
119) trans-1,4-Dichloro-2-butene	(4)	11.982	53	2882115	705.246
118) 1,2,3-Trichloropropane	(4)	12.000	110	1316450	283.642
120) n-Propylbenzene	(4)	12.043	91	13659808	280.194
121) 2-Chlorotoluene	(4)	12.110	126	3423354	313.659
123) 1,3,5-Trimethylbenzene	(4)	12.183	105	11346888	322.863
122) 4-Chlorotoluene	(4)	12.208	126	3613723	312.902
125) tert-Butylbenzene	(4)	12.433	134	2551929M	367.008
126) Pentachloroethane	(4)	12.464	167	2536712	371.312
127) 1,2,4-Trimethylbenzene	(4)	12.482	105	11541627	317.215
128) sec-Butylbenzene	(4)	12.610	105	13250948	321.264
130) 1,3-Dichlorobenzene	(4)	12.702	146	7709959	330.691
131) p-Isopropyltoluene	(4)	12.726	119	12143265	332.575
132)*1,4-Dichlorobenzene-d4	(4)	12.763	152	677337	50.000

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

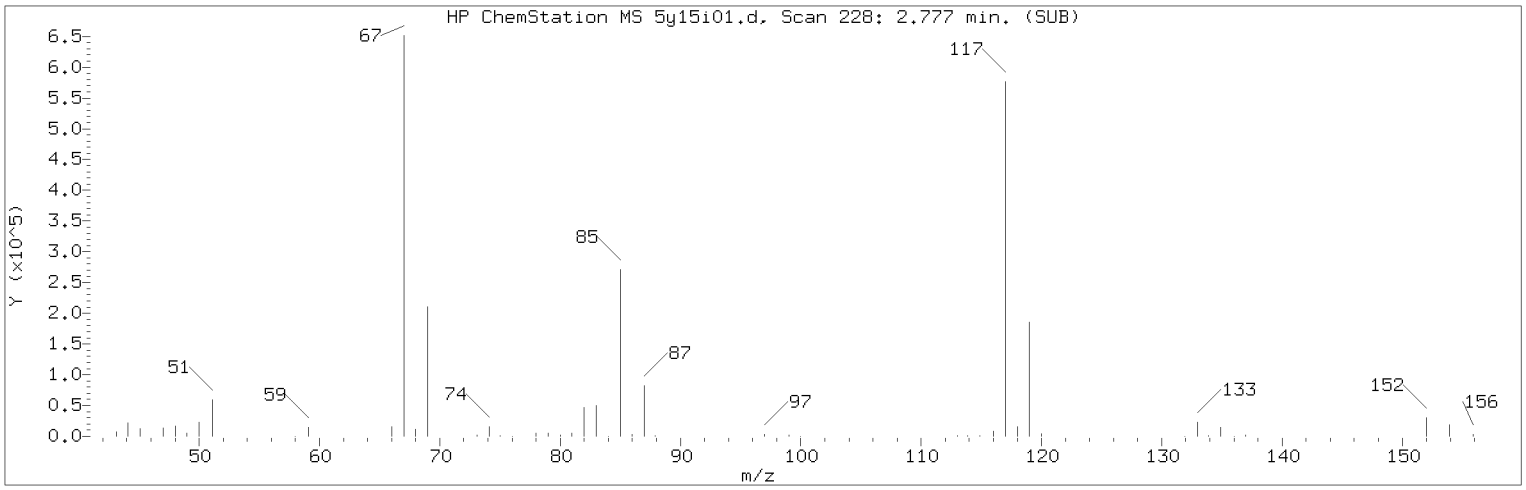
Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,4-Dichlorobenzene	(4)	12.781	146	7775385	326.132
135) 1,2,3-Trimethylbenzene	(4)	12.799	105	11739705	303.977
136) Benzyl Chloride	(4)	12.866	91	9612051	352.374
137) 1,3-Diethylbenzene	(4)	12.933	119	7769594	327.282
138) 1,4-Diethylbenzene	(4)	13.006	119	8433091	332.067
140) n-Butylbenzene	(4)	13.031	92	6346218	340.264
139) 1,2-Dichlorobenzene	(4)	13.049	146	7096190	318.633
141) 1,2-Diethylbenzene	(4)	13.080	119	6308122M	315.874
142) Diethylbenzene (total)	(4)		100	22510807	975.223
143) 1,2-Dibromo-3-chloropropane	(4)	13.616	75	1145550	314.389
145) 1,3,5-Trichlorobenzene	(4)	13.750	180	5883446	370.030
147) 1,2,4-Trichlorobenzene	(4)	14.183	180	5356038	375.099
148) Hexachlorobutadiene	(4)	14.274	225	2632235	404.064
149) Naphthalene	(4)	14.372	128	13185168	292.426
150) 1,2,3-Trichlorobenzene	(4)	14.518	180	4713068	356.472
151) 2-Methylnaphthalene	(4)	15.146	142	7994060	356.576

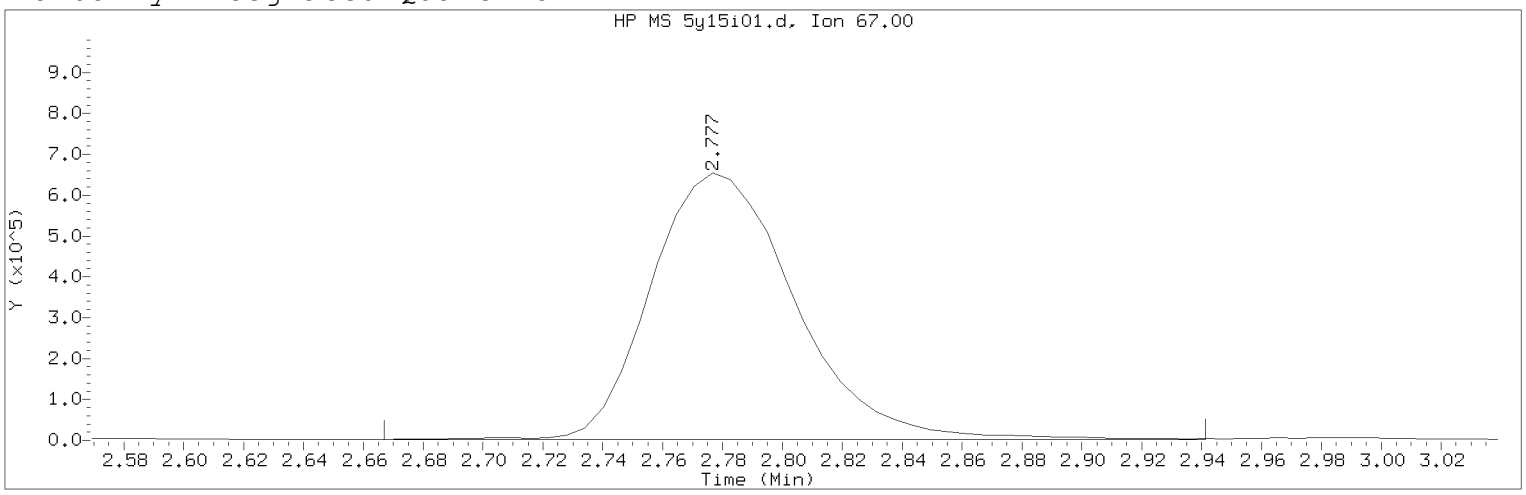
M = Compound was manually integrated.

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

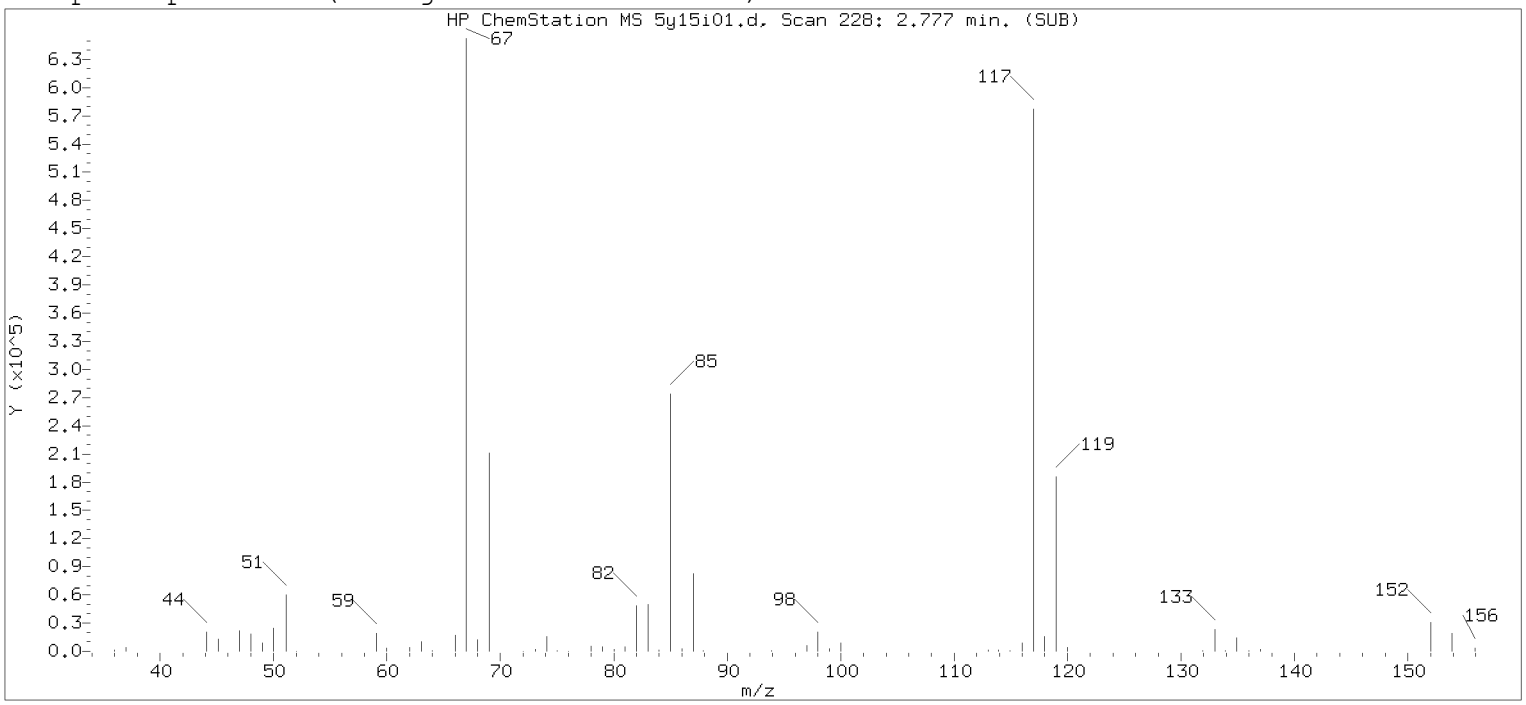
Compound Number : 15
Compound Name : Freon 123a
Scan Number : 228
Retention Time (minutes): 2.777
Quant Ion : 67.00
Area (flag) : 2186922M
On-Column Amount (ng) : 300.9904
Integration start scan : 209 Integration stop scan: 254
Y at integration start : 1519 Y at integration end: 1927

Reason for manual integration: improper integration

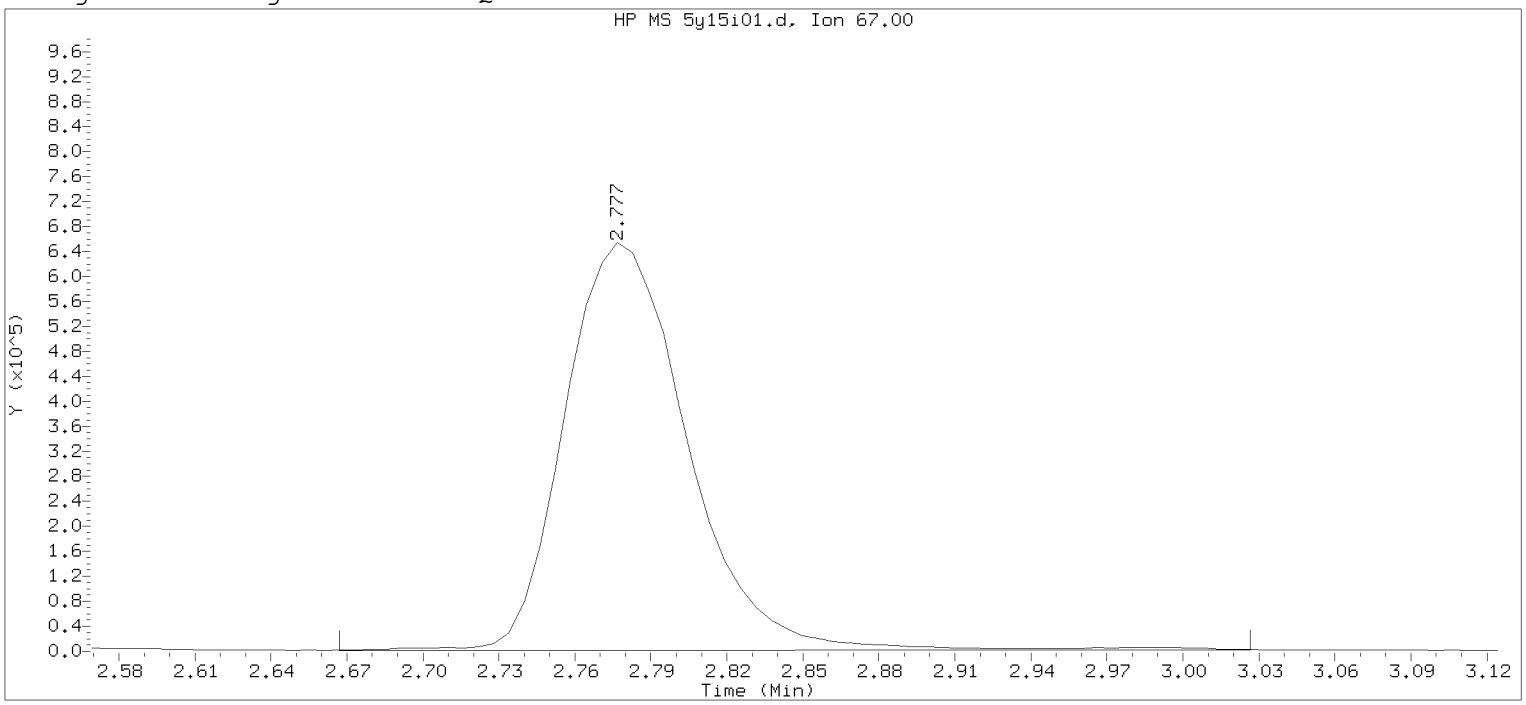
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

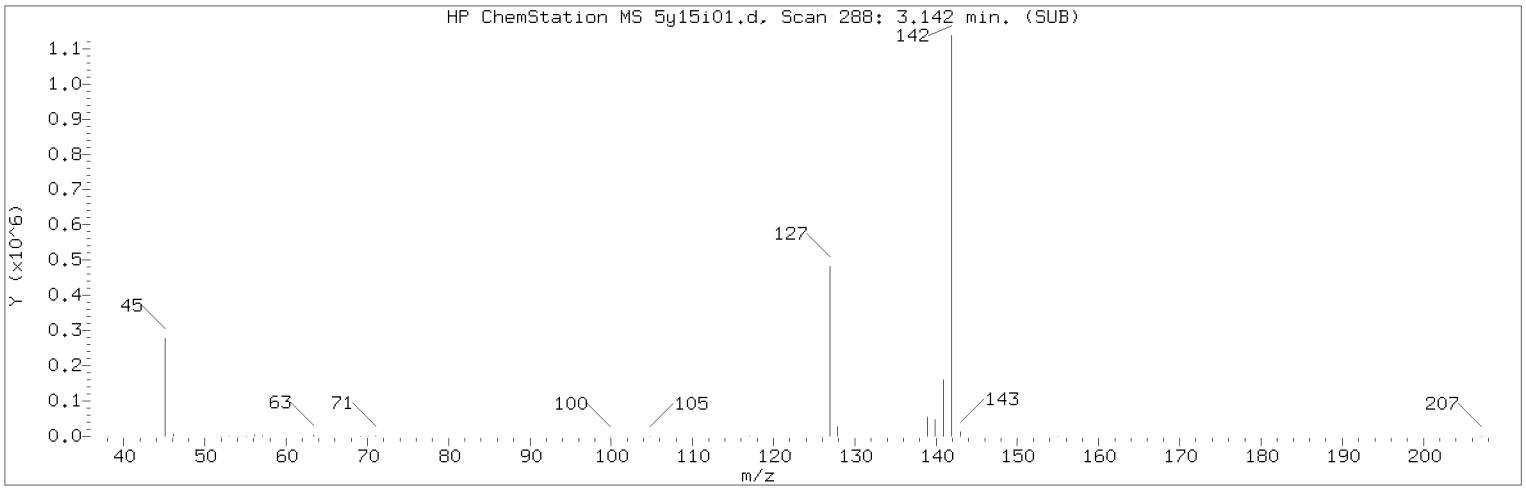
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD300 Lab Sample ID: VSTD300

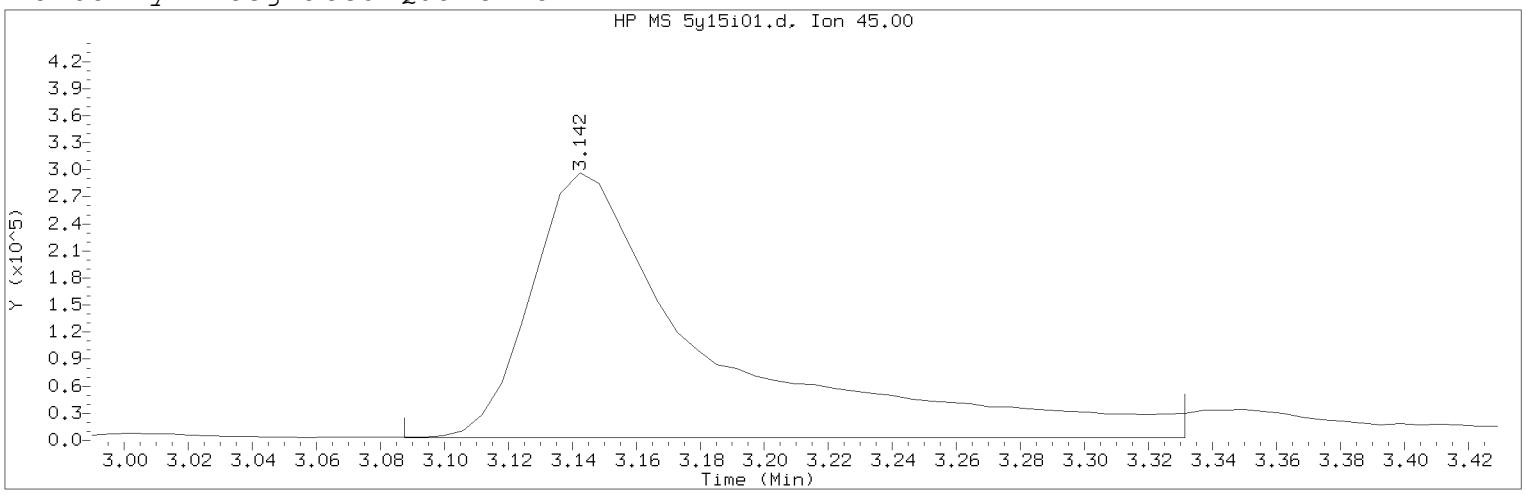
Compound Number : 15
Compound Name : Freon 123a
Scan Number : 228
Retention Time (minutes): 2.777
Quant Ion : 67.00
Area : 2201032
On-column Amount (ng) : 300.0000
Integration start scan : 209 Integration stop scan: 268
Y at integration start : 1519 Y at integration end: 2055

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper 208

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

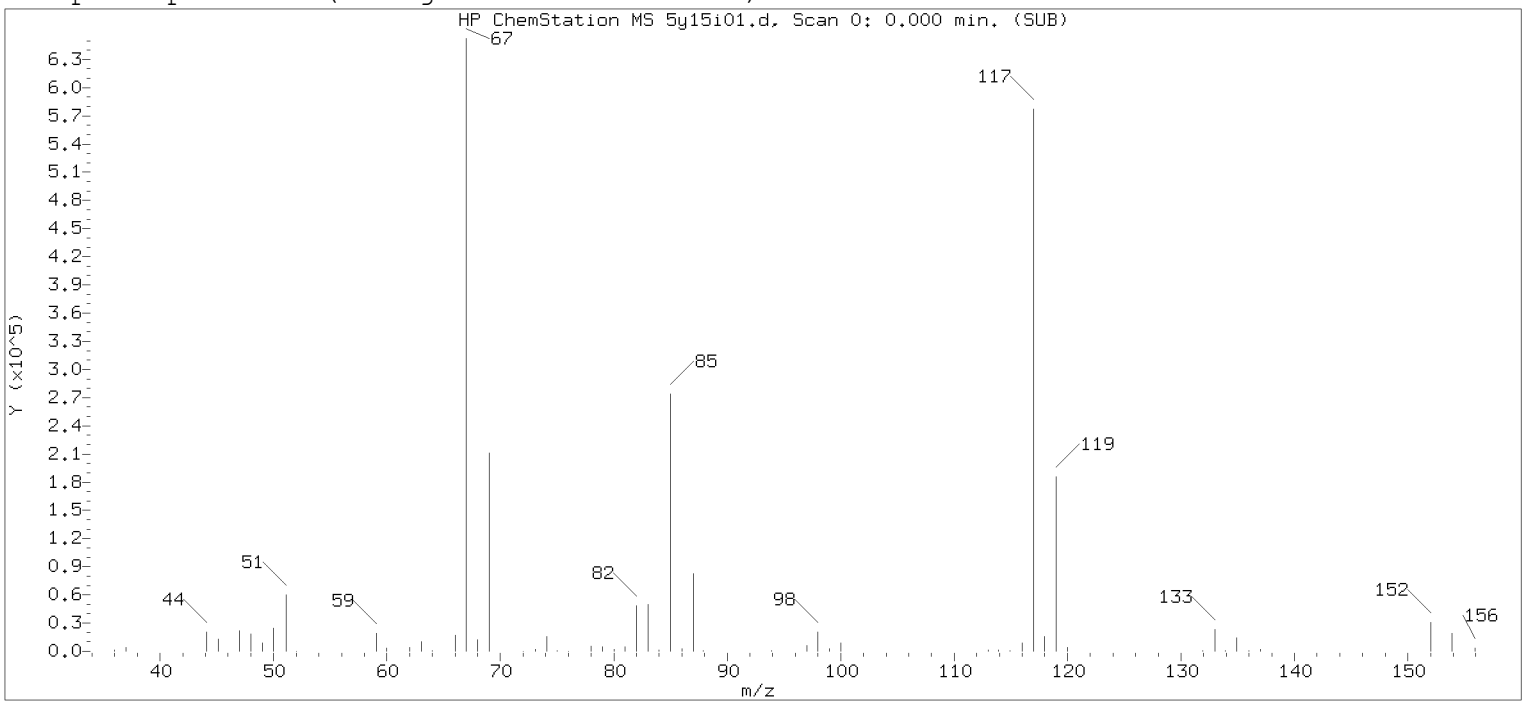
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 288
Retention Time (minutes): 3.142
Quant Ion : 45.00
Area (flag) : 1150420M
On-Column Amount (ng) : 1440.5351
Integration start scan : 278 Integration stop scan: 318
Y at integration start : 3133 Y at integration end: 3133

Reason for manual integration: improper integration

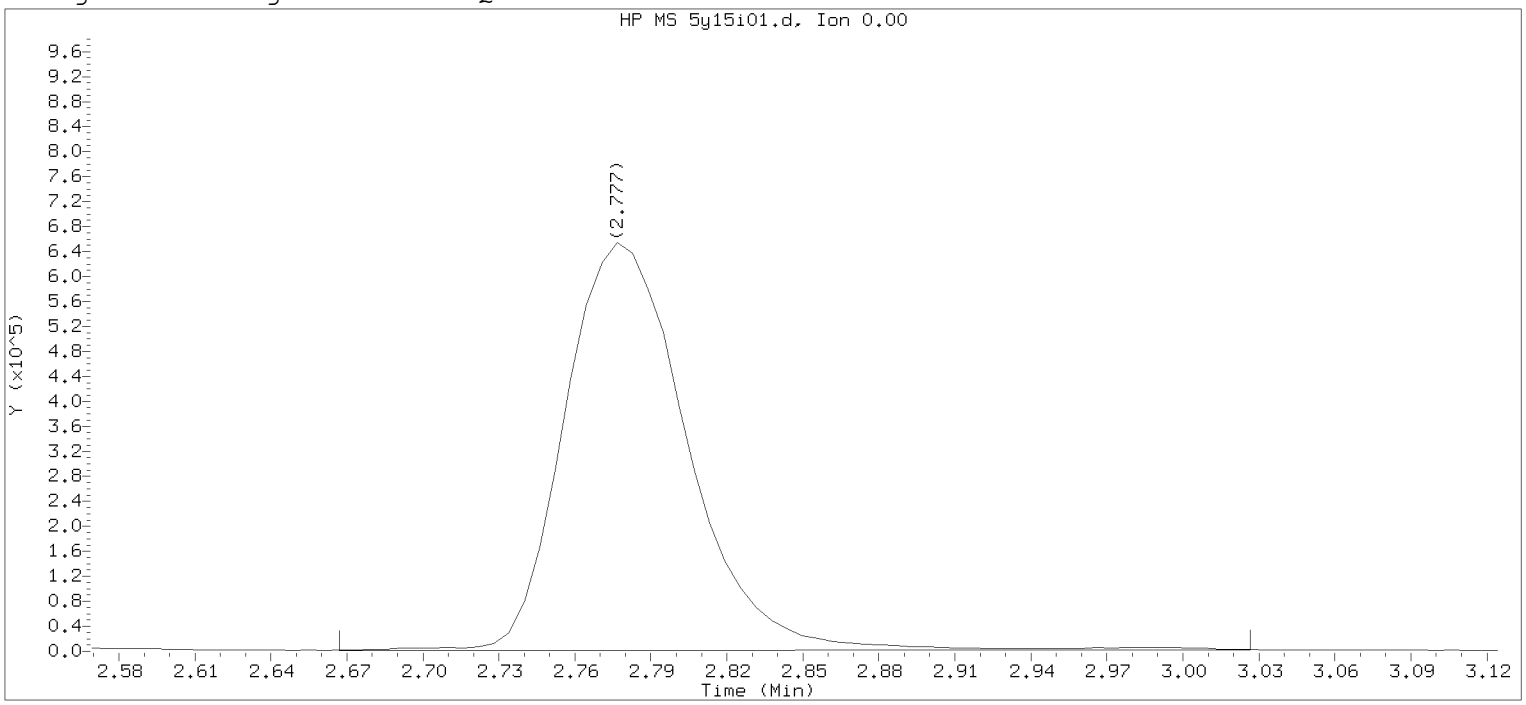
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

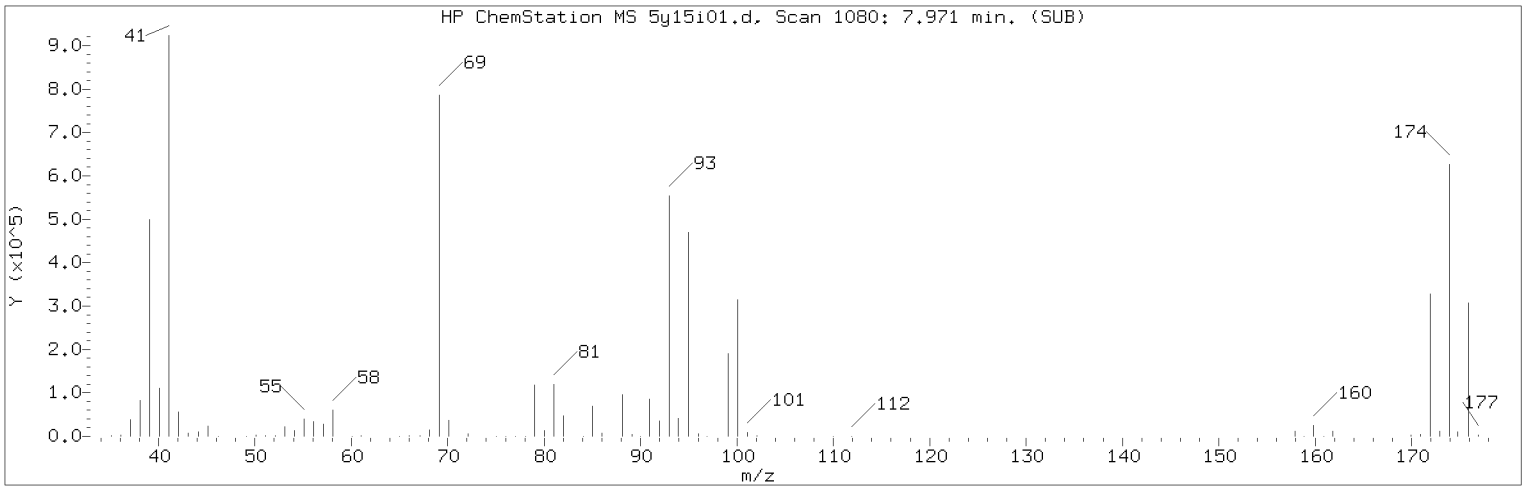
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD300 Lab Sample ID: VSTD300

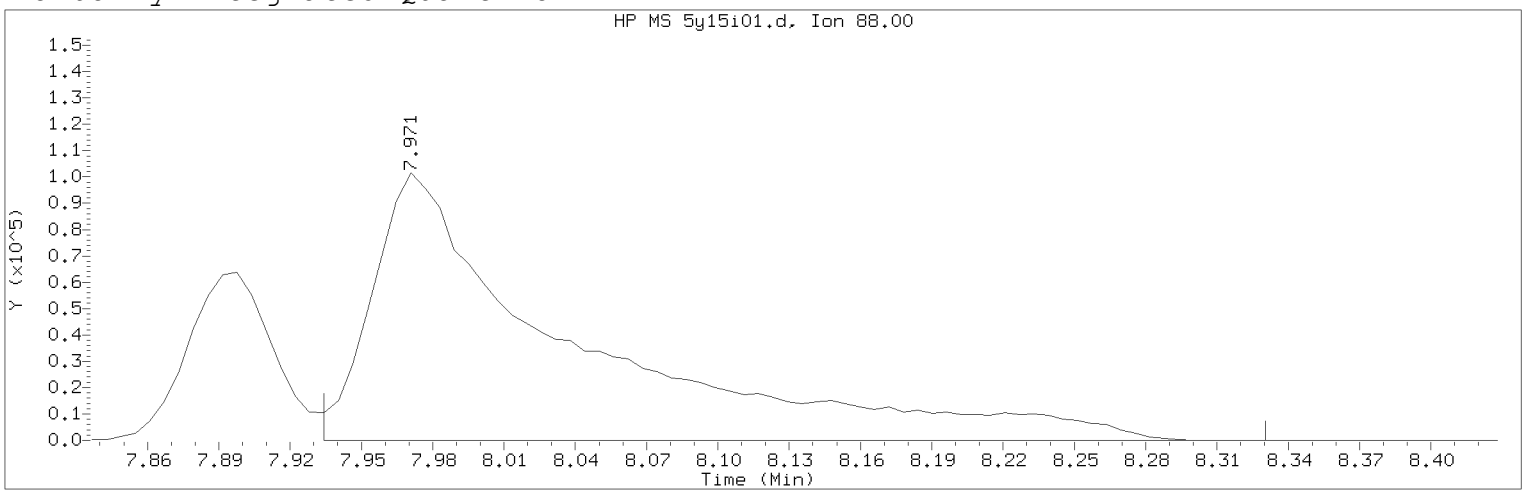
Compound Number : 0
Compound Name : 2-Propanol
Scan Number : 0
Retention Time (minutes): 0.000
Quant Ion : 0.00
Area : 0
On-column Amount (ng) : 0.0000
Integration start scan : 0 Integration stop scan: 0
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

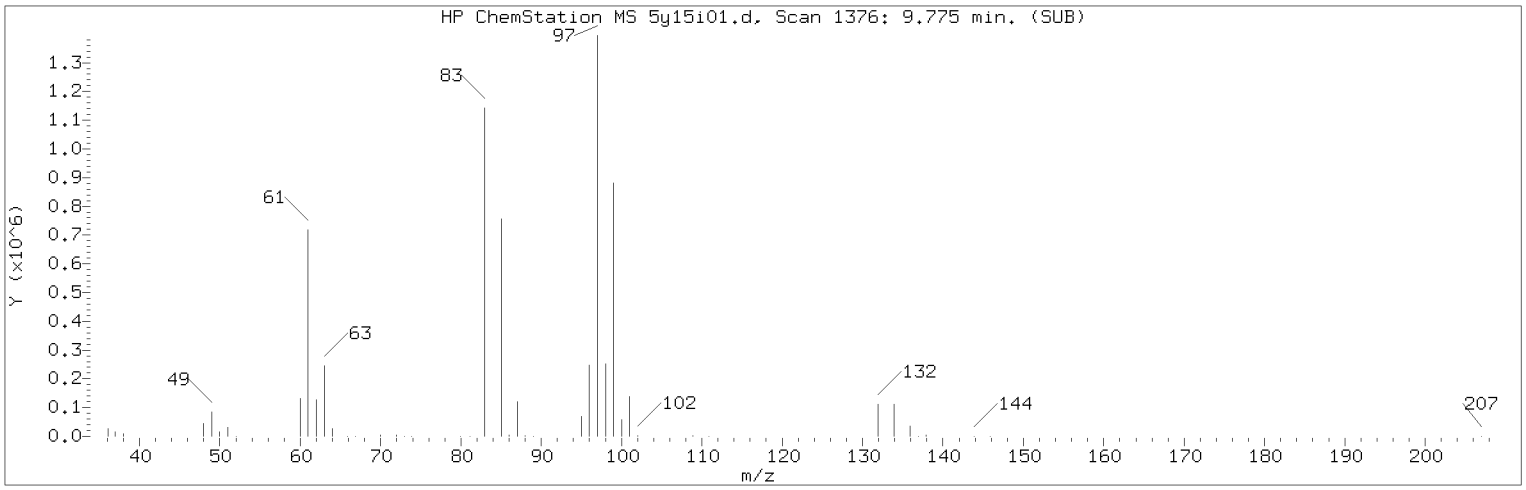
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 1080
Retention Time (minutes): 7.971
Quant Ion : 88.00
Area (flag) : 589592M
On-Column Amount (ng) : 4339.5752
Integration start scan : 1073 Integration stop scan: 1138
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: compound not in processing sublist

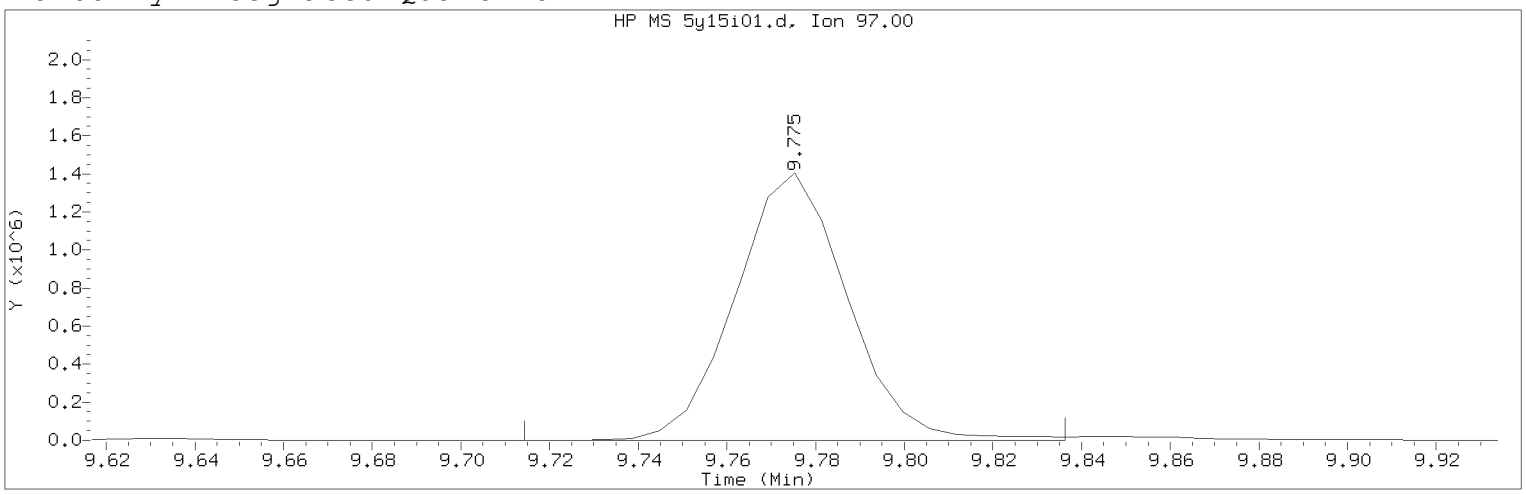
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

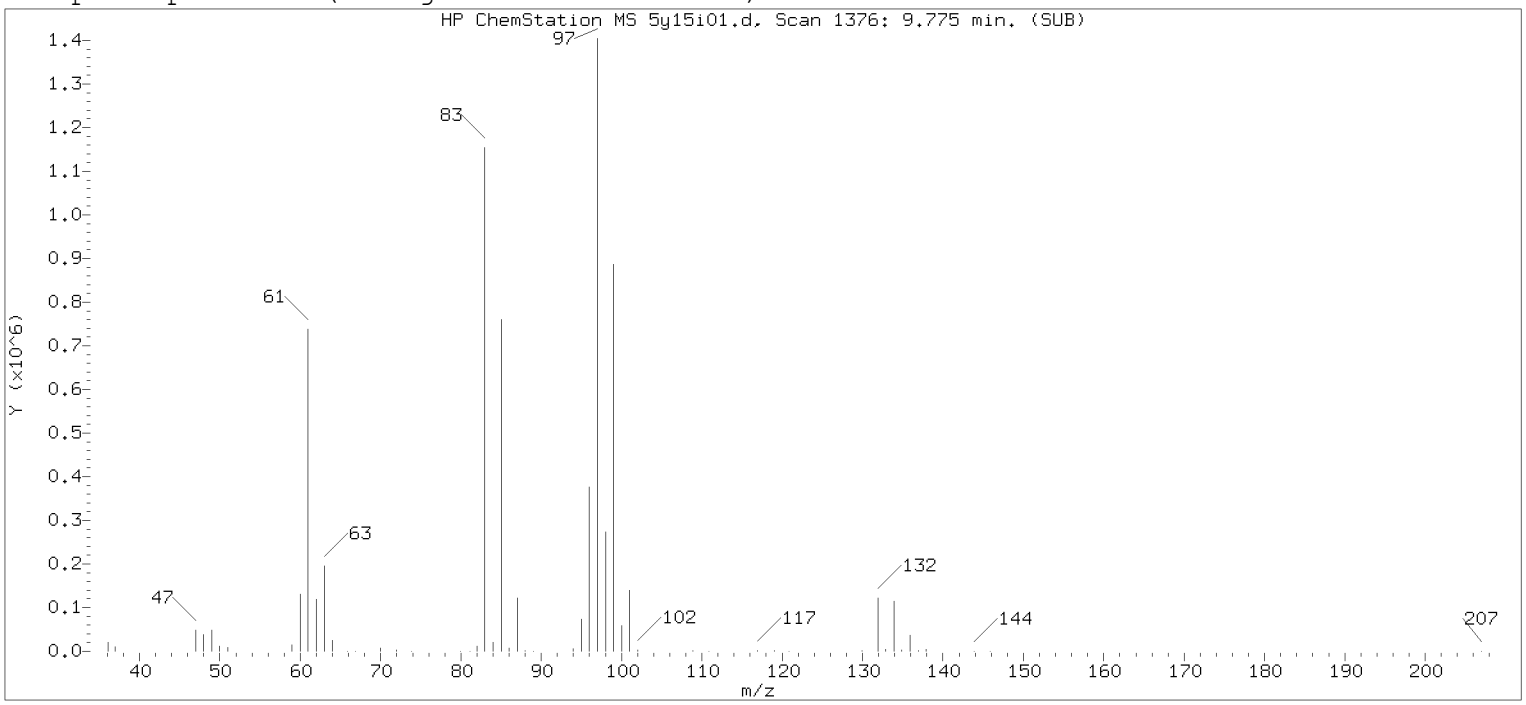
Compound Number : 93
Compound Name : 1,1,2-Trichloroethane
Scan Number : 1376
Retention Time (minutes): 9.775
Quant Ion : 97.00
Area (flag) : 2462403M
On-Column Amount (ng) : 293.6290
Integration start scan : 1365 Integration stop scan: 1385
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

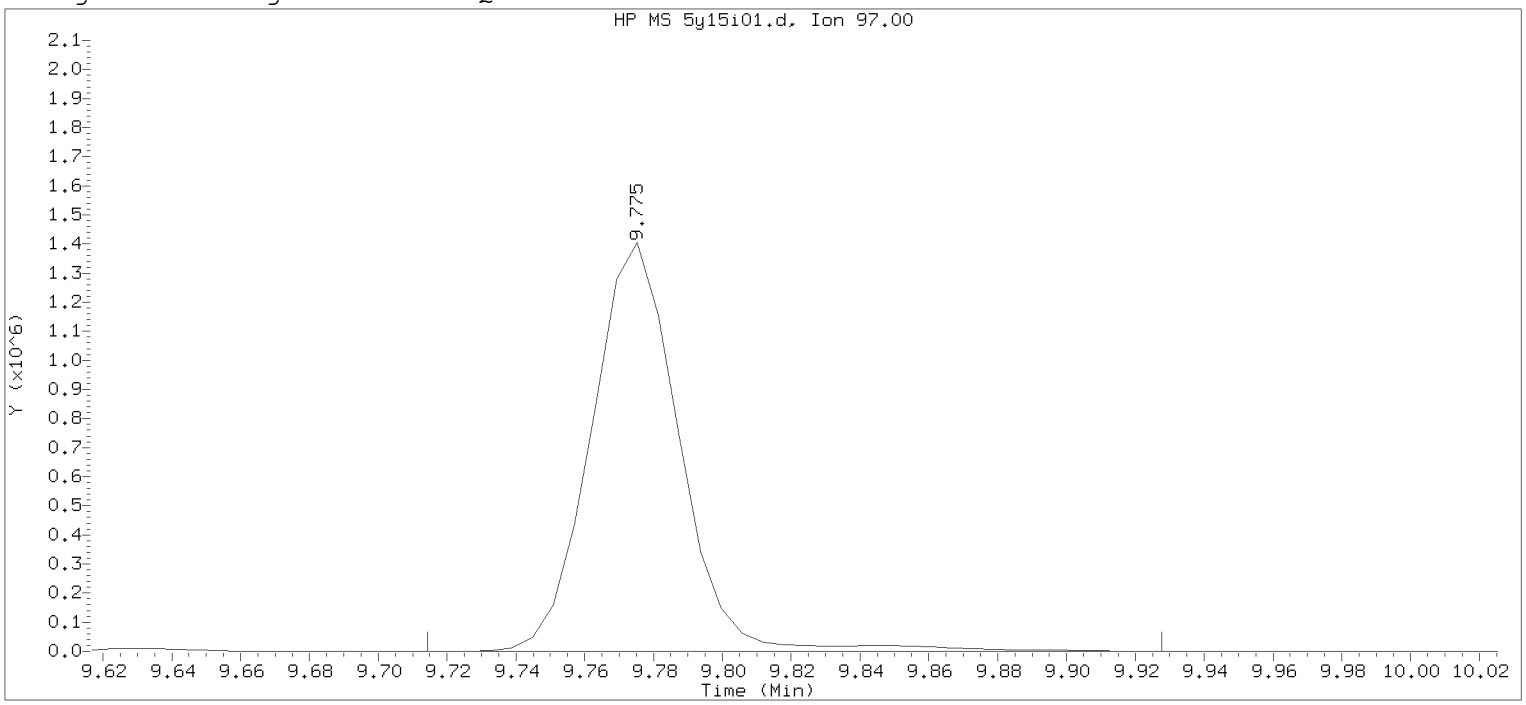
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

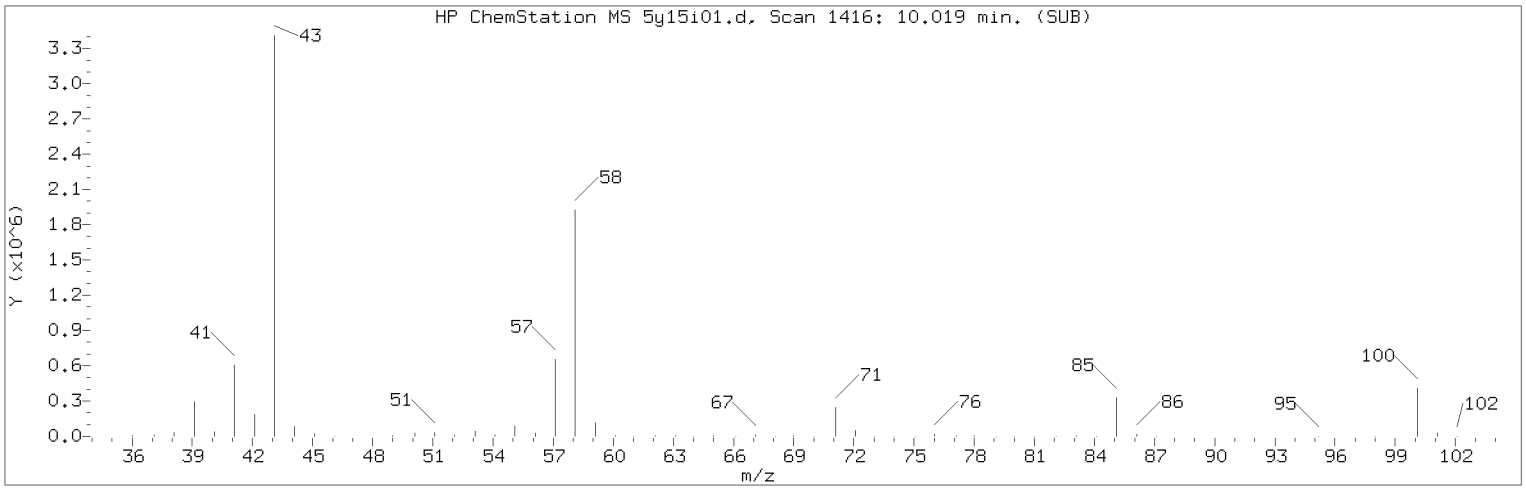
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD300 Lab Sample ID: VSTD300

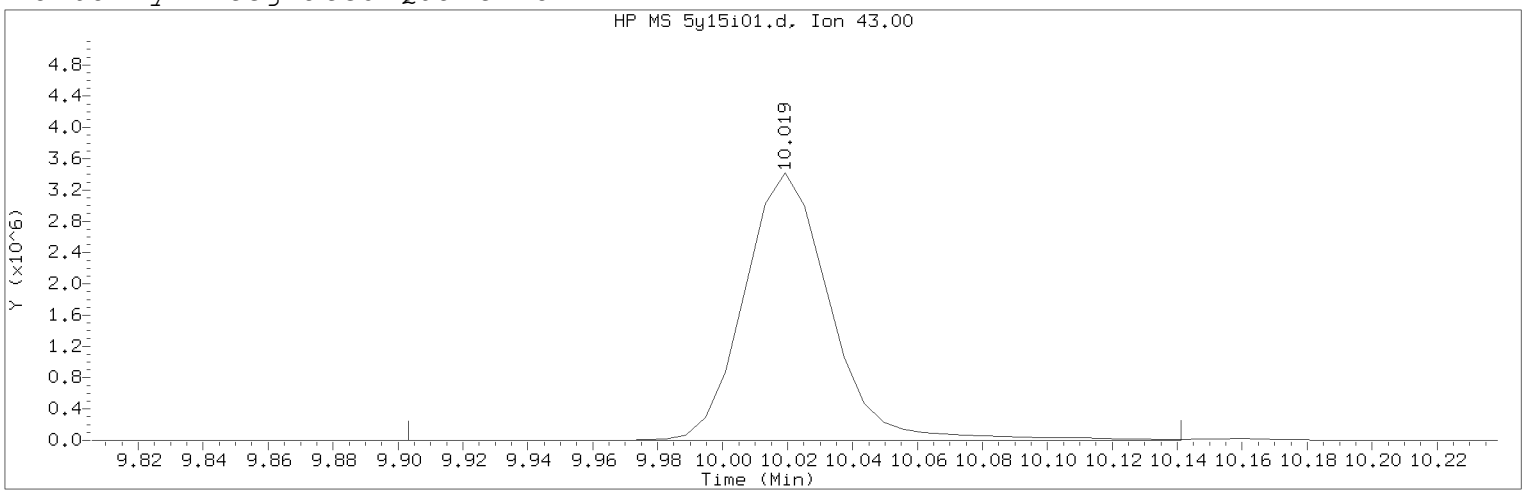
Compound Number : 93
Compound Name : 1,1,2-Trichloroethane
Scan Number : 1376
Retention Time (minutes): 9.775
Quant Ion : 97.00
Area : 2504993
On-column Amount (ng) : 300.0000
Integration start scan : 1365 Integration stop scan: 1400
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

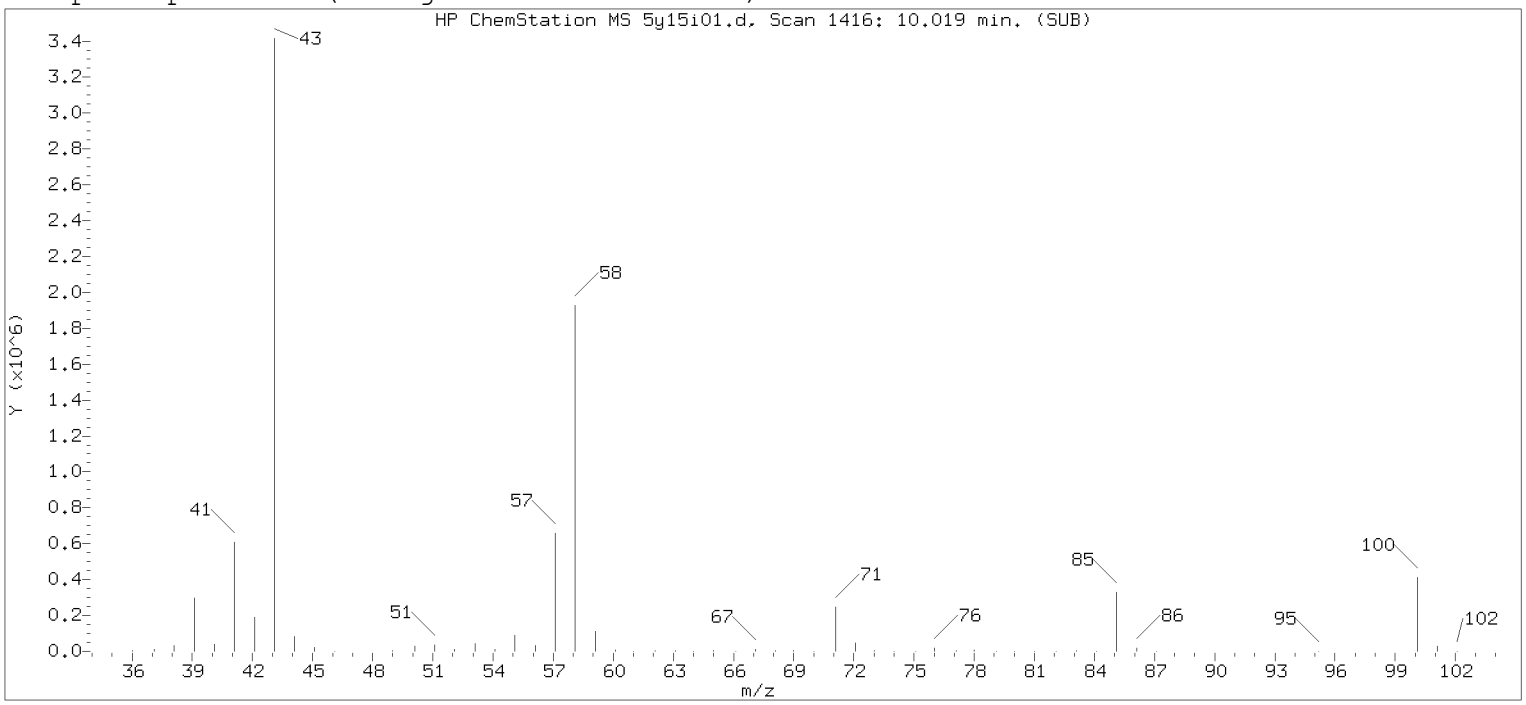
Compound Number : 97
Compound Name : 2-Hexanone
Scan Number : 1416
Retention Time (minutes): 10.019
Quant Ion : 43.00
Area (flag) : 6282374M
On-Column Amount (ng) : 616.1967
Integration start scan : 1396 Integration stop scan: 1435
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

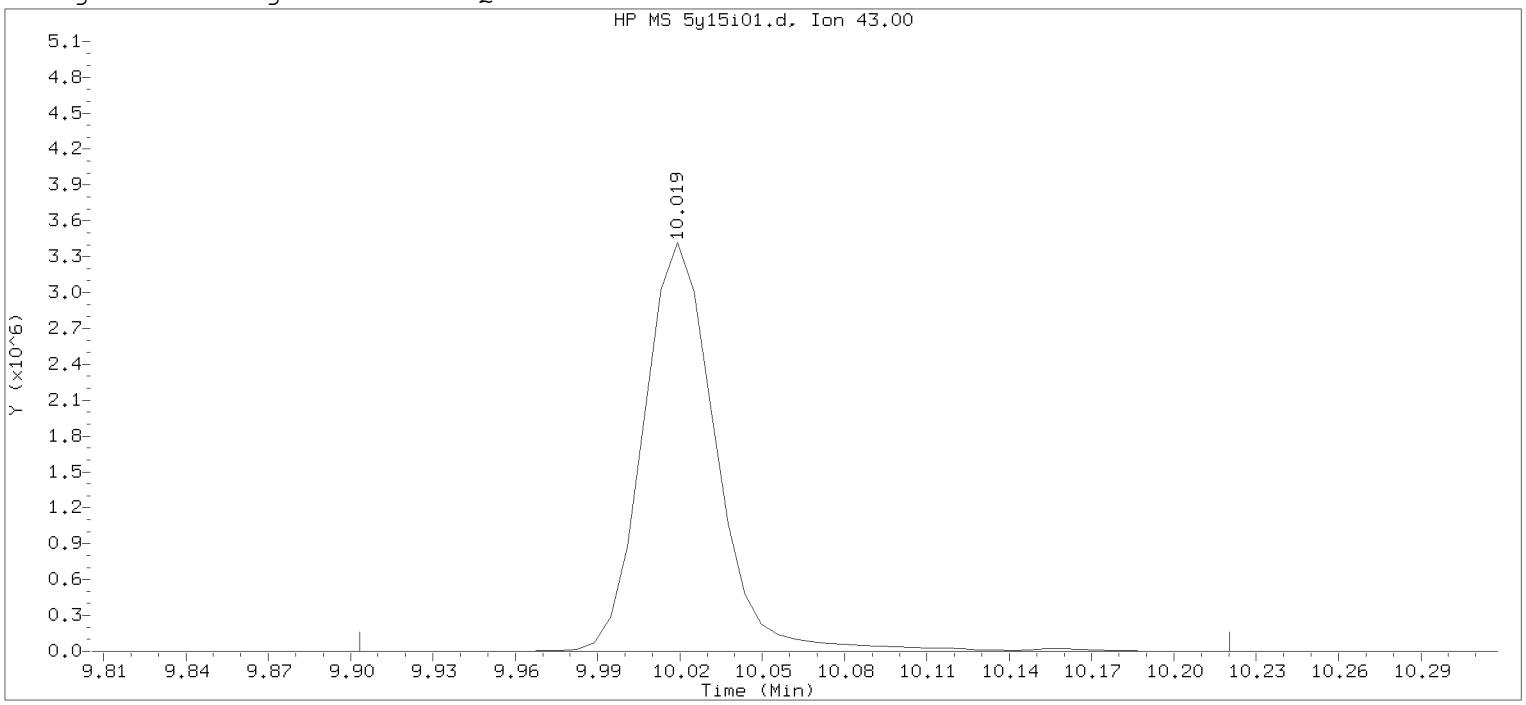
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

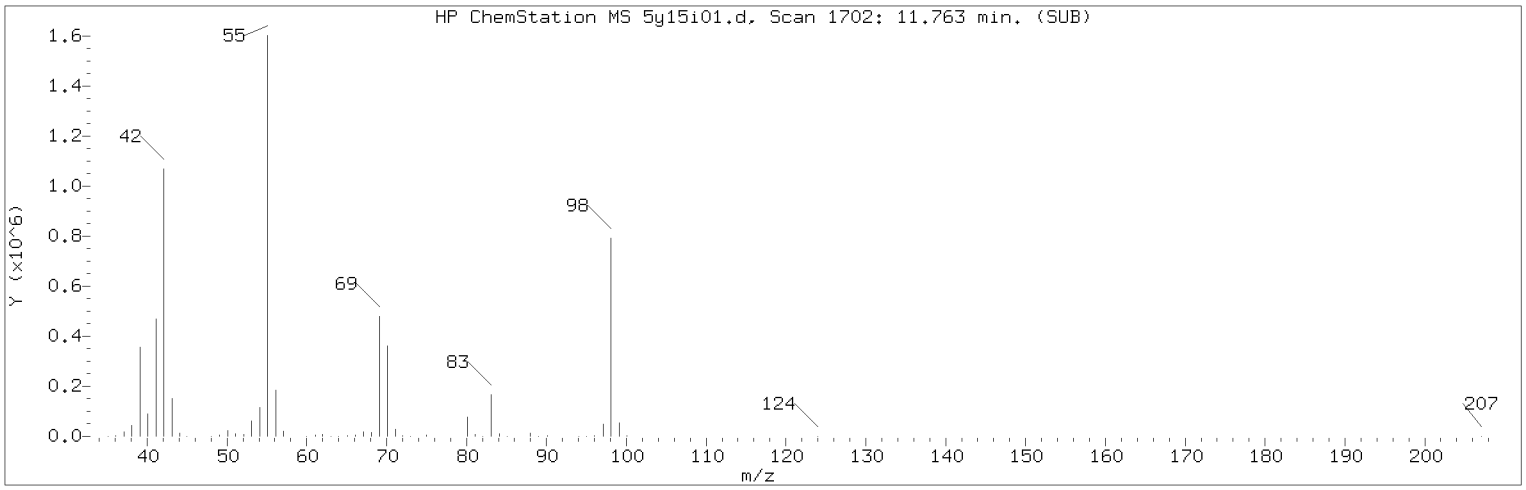
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD300 Lab Sample ID: VSTD300

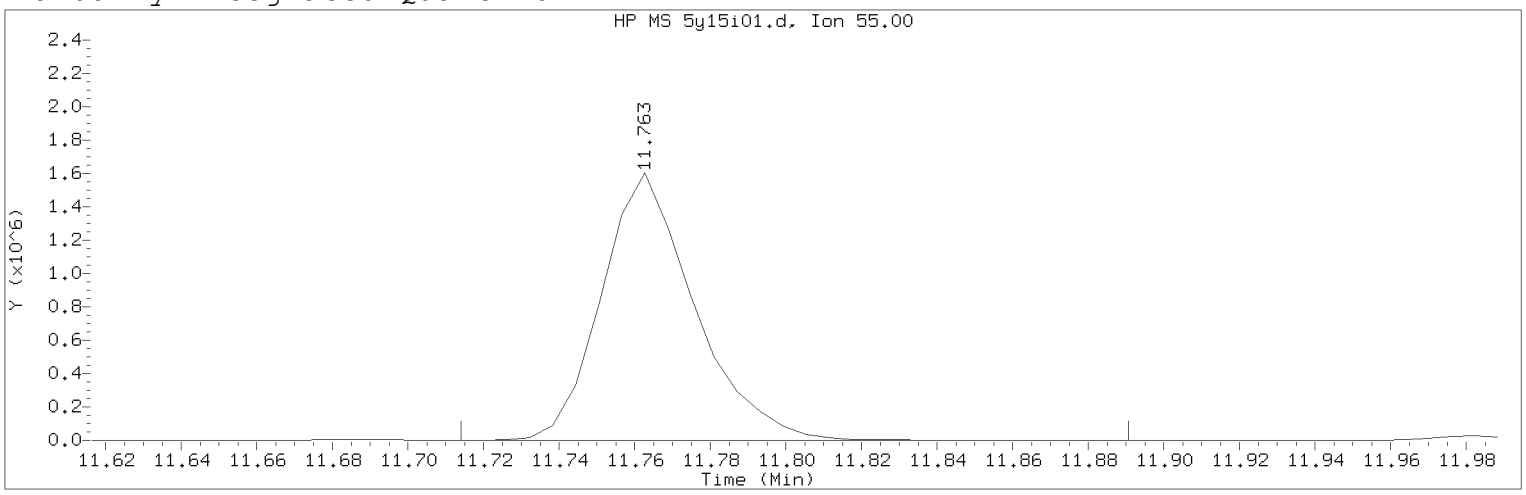
Compound Number : 97
Compound Name : 2-Hexanone
Scan Number : 1416
Retention Time (minutes): 10.019
Quant Ion : 43.00
Area : 6317890
On-column Amount (ng) : 300.0000
Integration start scan : 1396 Integration stop scan: 1448
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper 207

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

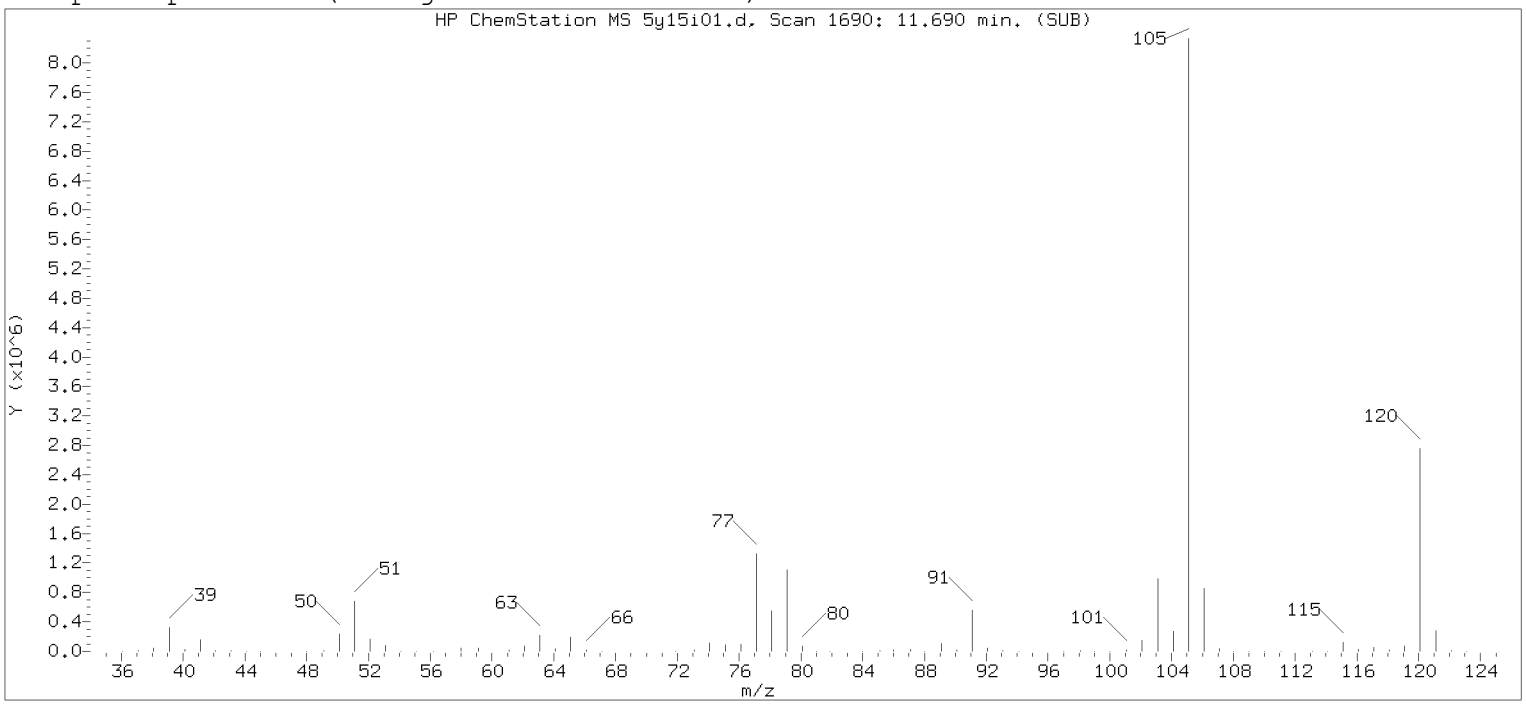
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1702
Retention Time (minutes): 11.763
Quant Ion : 55.00
Area (flag) : 2729648M
On-Column Amount (ng) : 4541.2304
Integration start scan : 1693 Integration stop scan: 1722
Y at integration start : 277 Y at integration end: 277

Reason for manual integration: improper integration

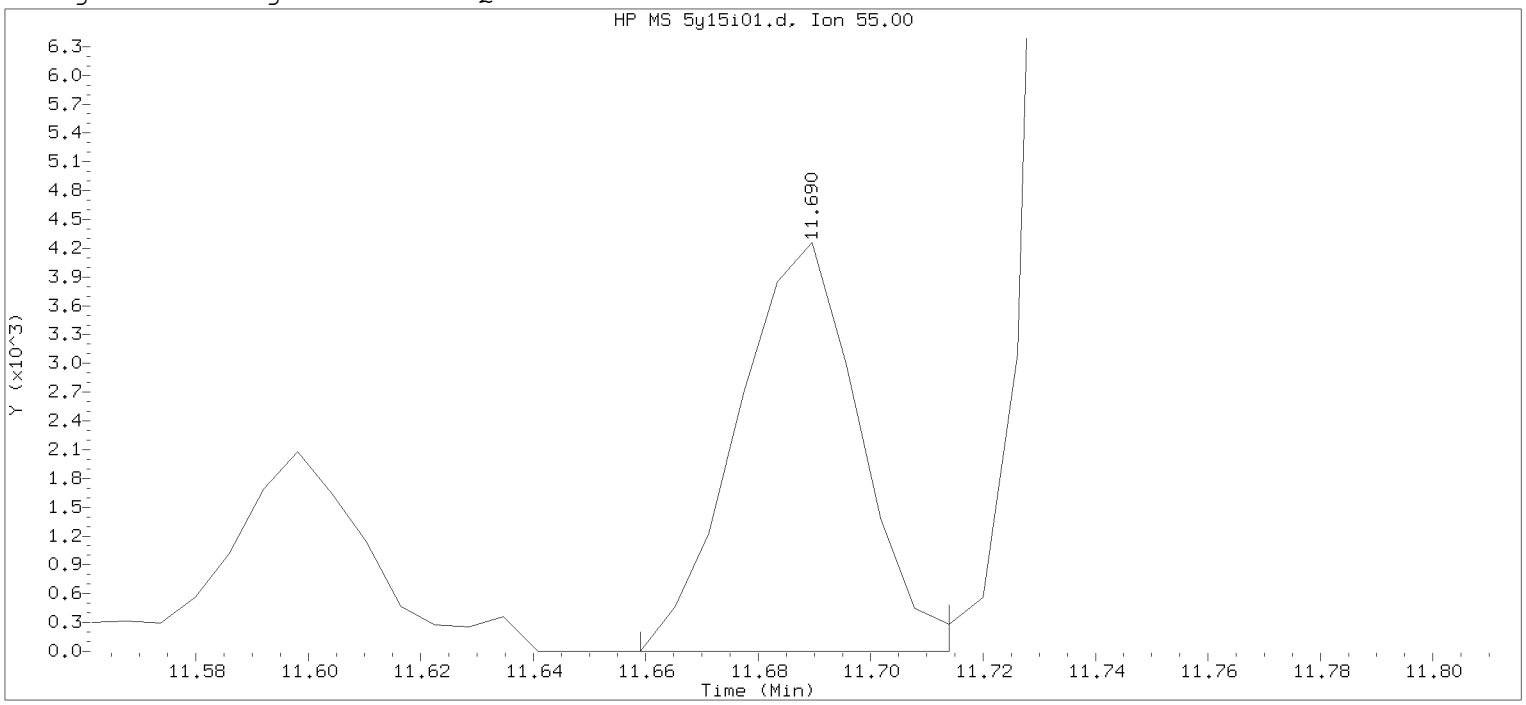
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

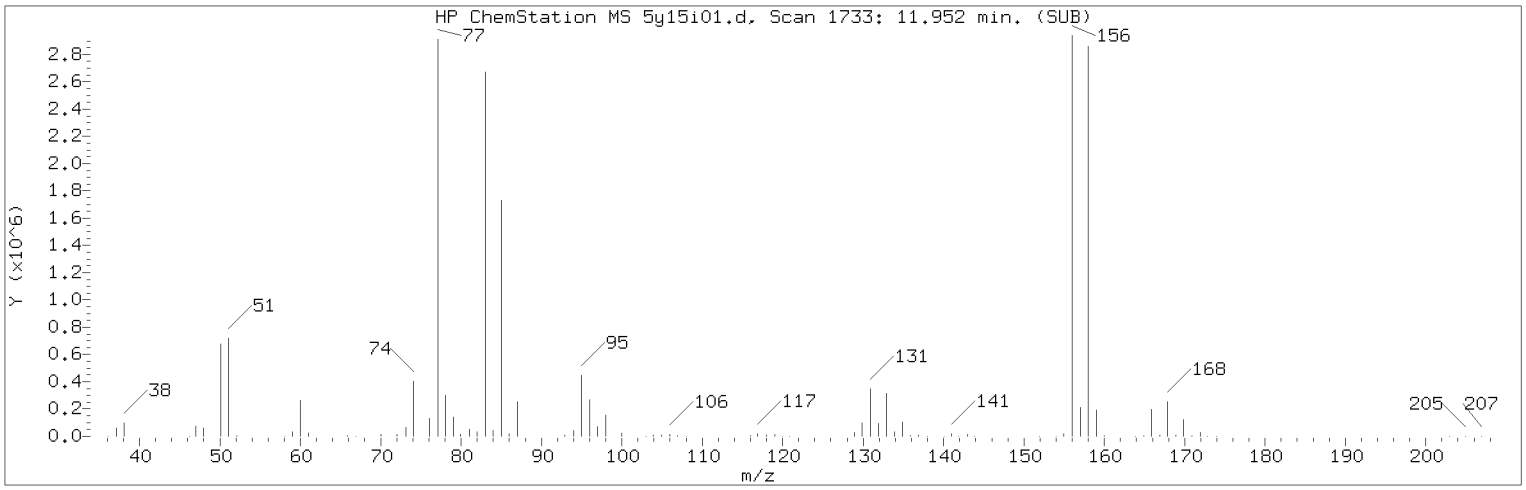
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD300 Lab Sample ID: VSTD300

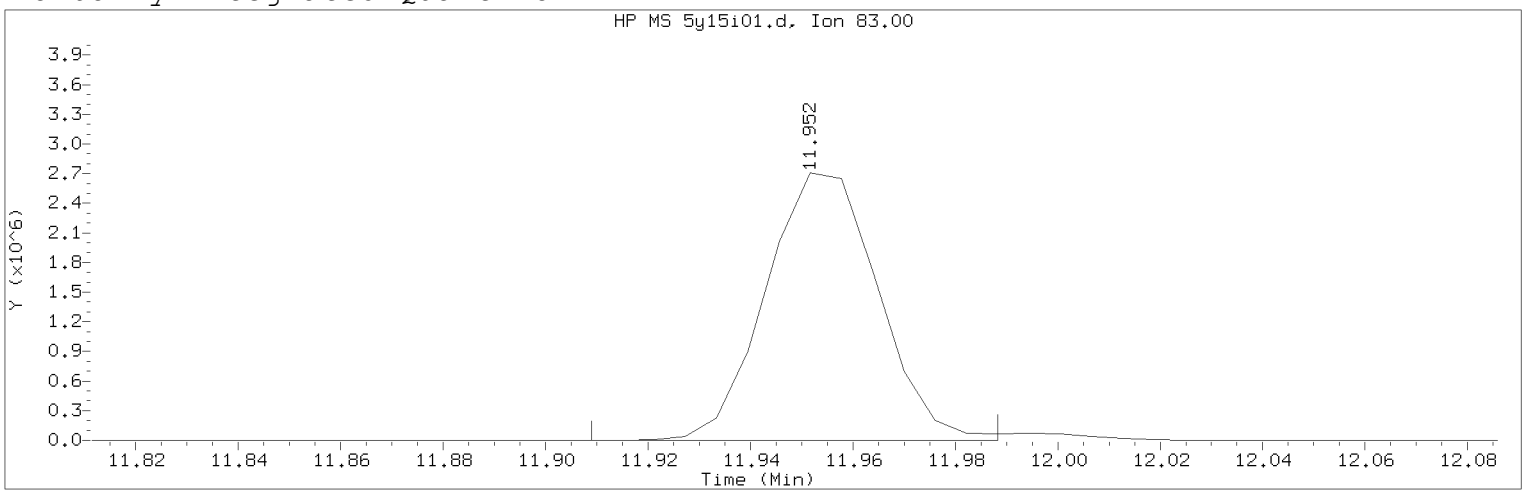
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1690
Retention Time (minutes): 11.690
Quant Ion : 55.00
Area : 6388
On-column Amount (ng) : 300.0000
Integration start scan : 1684 Integration stop scan: 1693
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper 2018

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

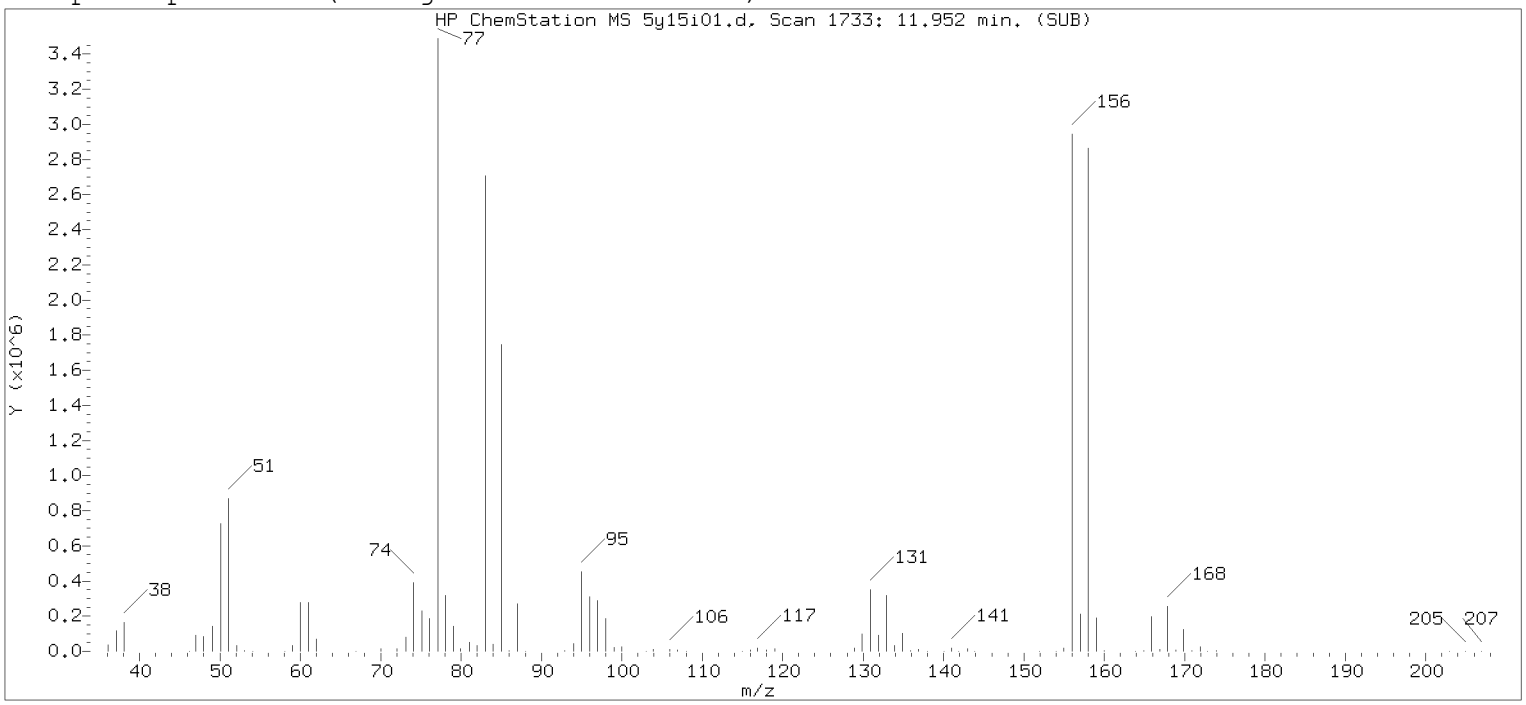
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area (flag) : 4128963M
On-Column Amount (ng) : 270.6840
Integration start scan : 1725 Integration stop scan: 1738
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

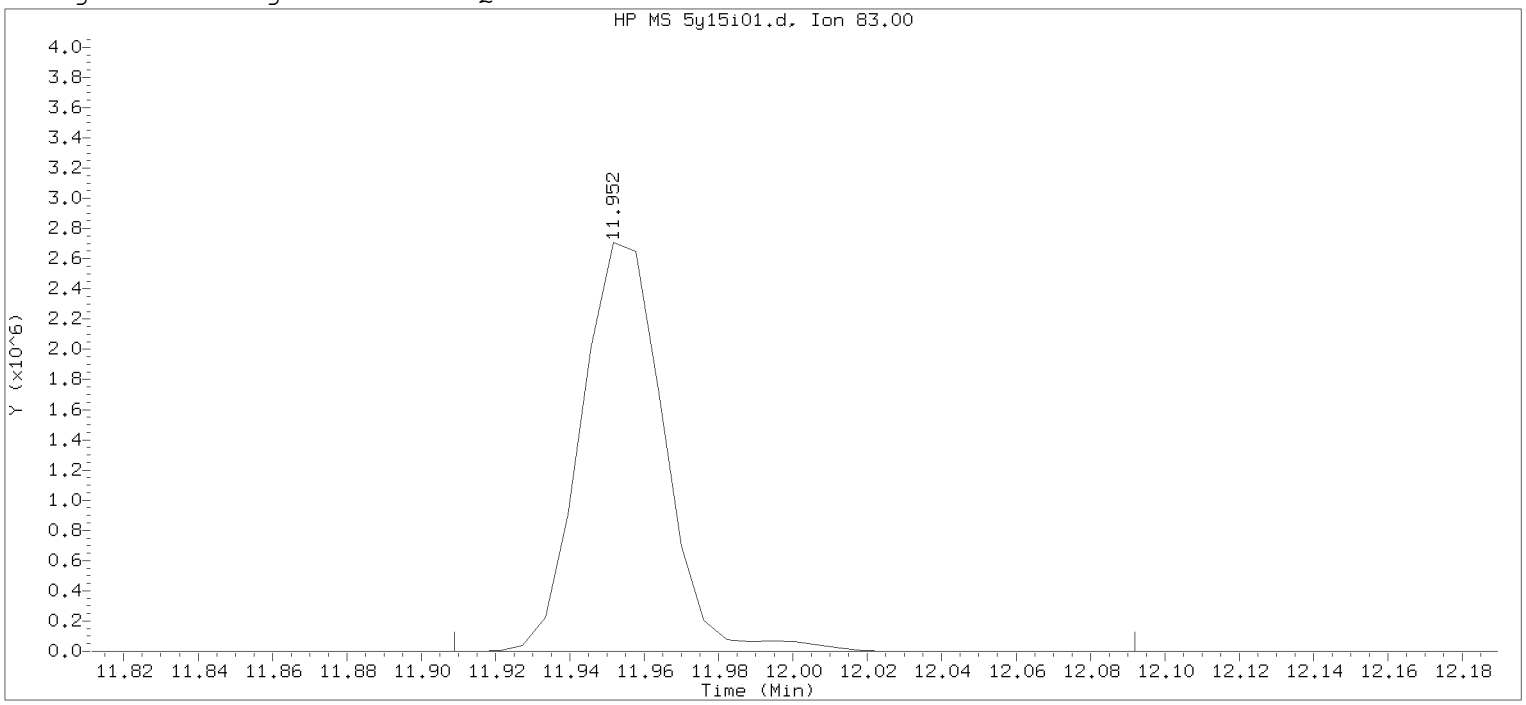
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

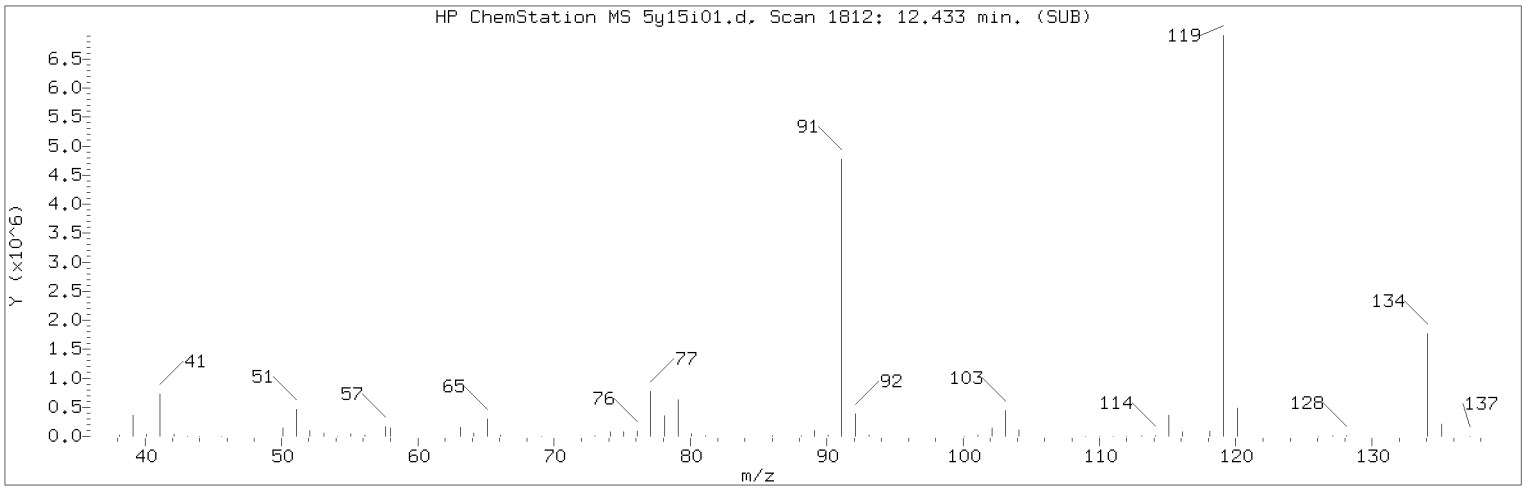
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD300 Lab Sample ID: VSTD300

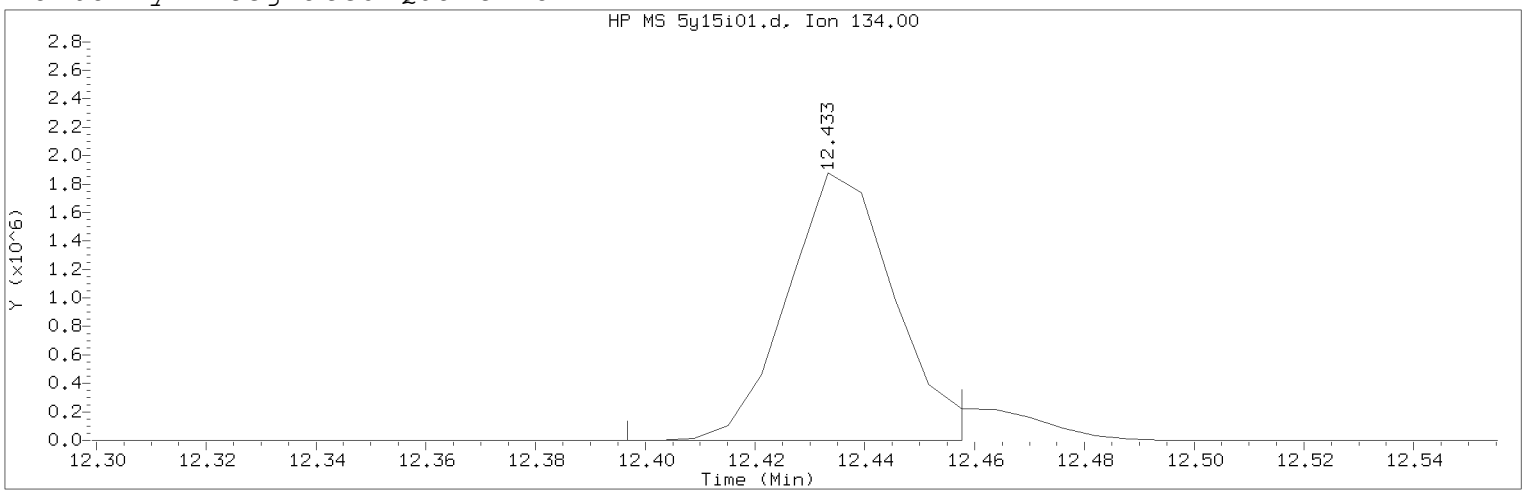
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area : 4204086
On-column Amount (ng) : 300.0000
Integration start scan : 1725 Integration stop scan: 1755
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper 241

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

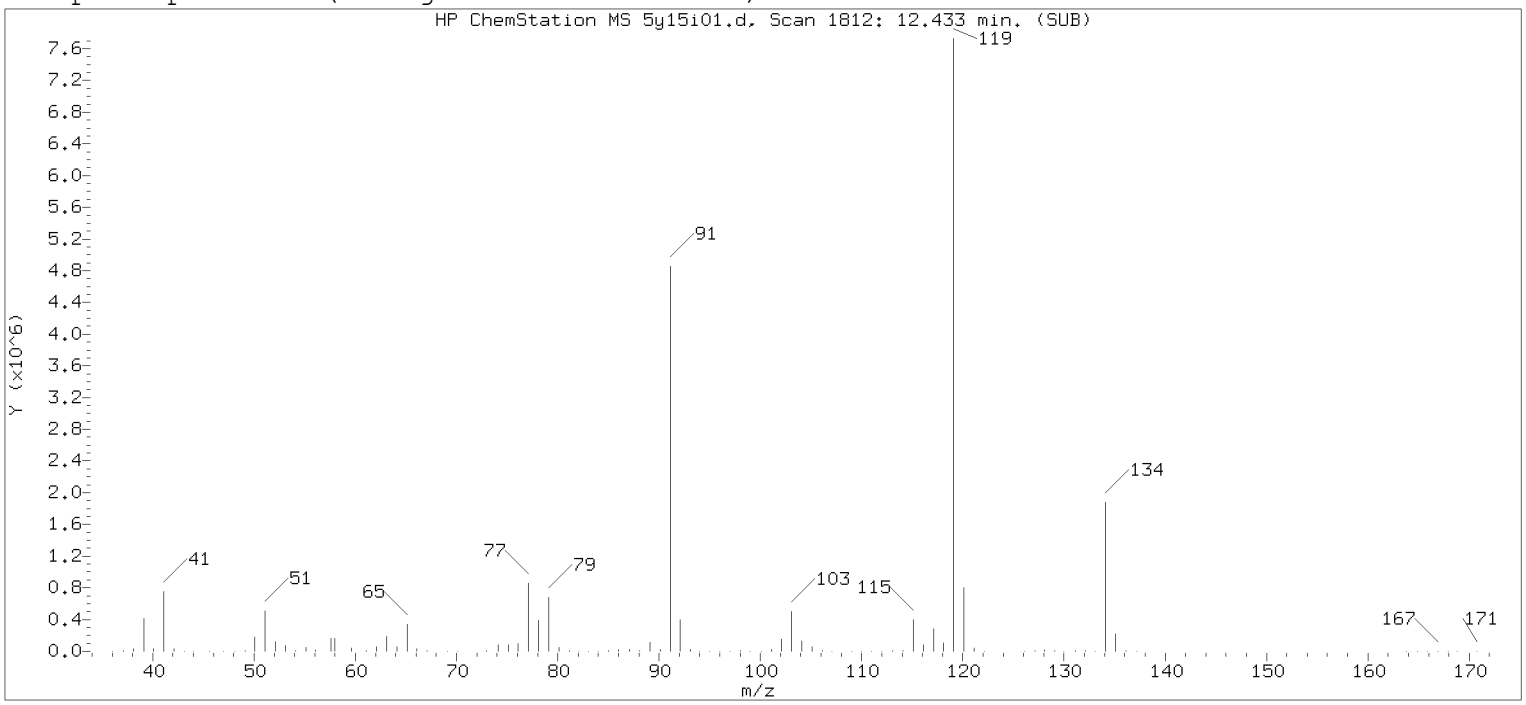
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.433
Quant Ion : 134.00
Area (flag) : 2551929M
On-Column Amount (ng) : 367.0081
Integration start scan : 1805 Integration stop scan: 1815
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

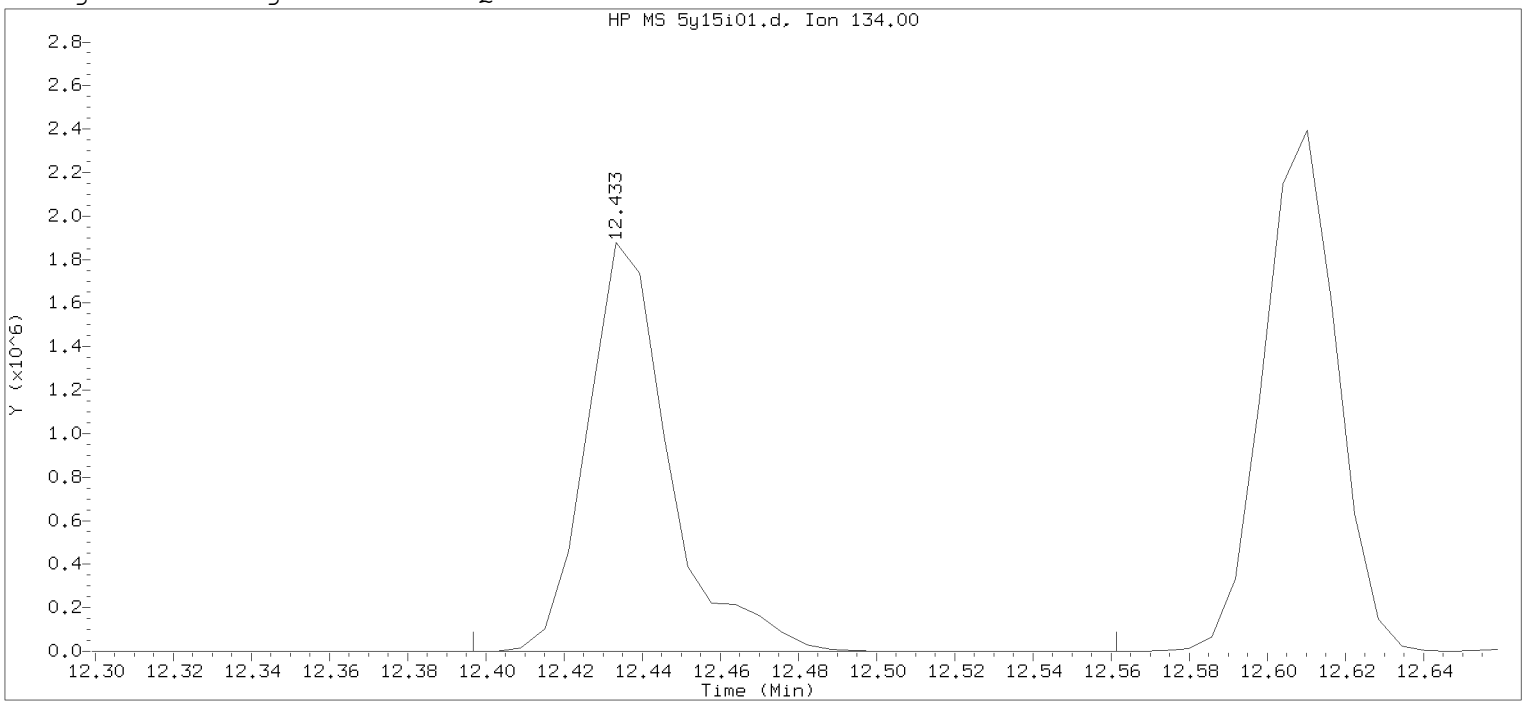
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

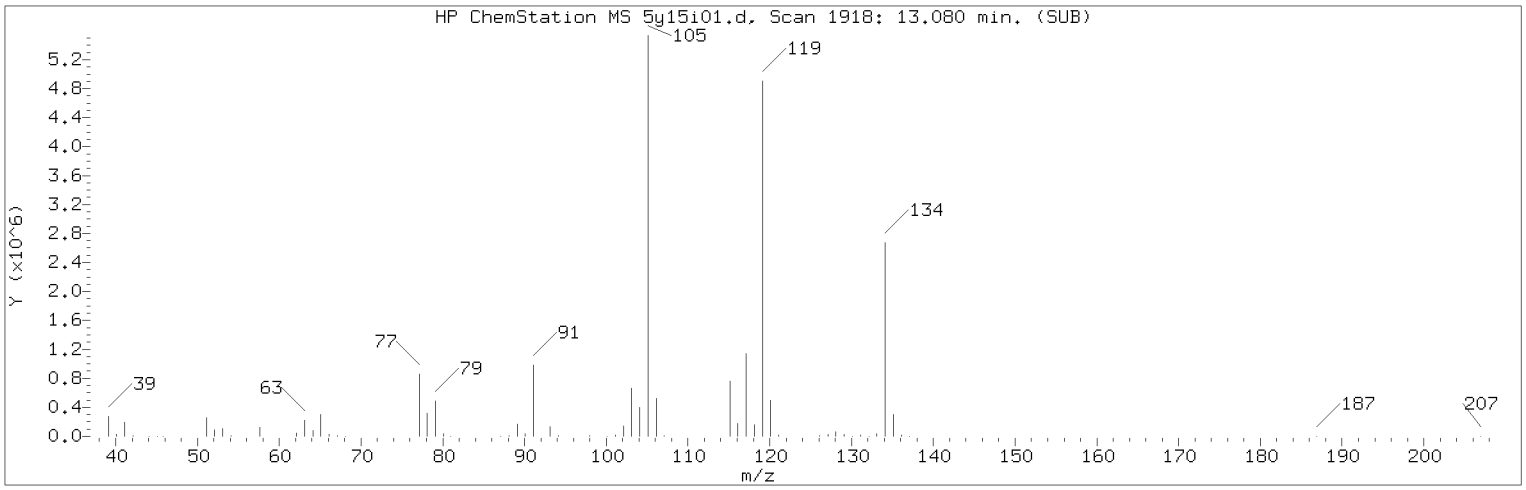
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD300 Lab Sample ID: VSTD300

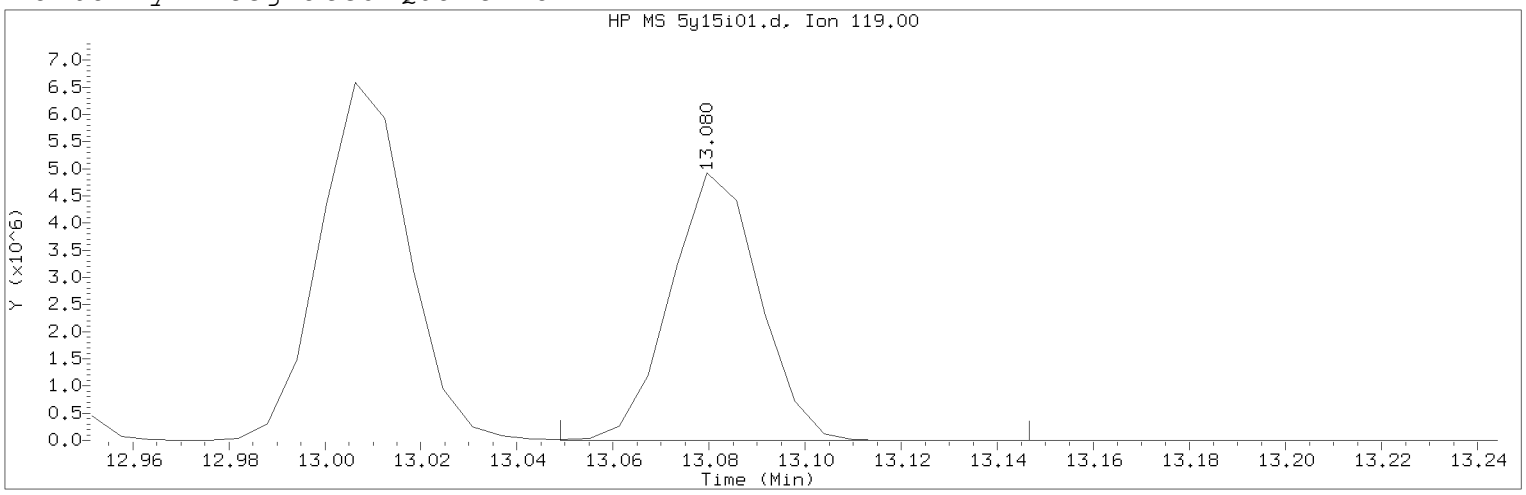
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.433
Quant Ion : 134.00
Area : 2737186
On-column Amount (ng) : 300.0000
Integration start scan : 1805 Integration stop scan: 1832
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD300 Lab Sample ID: VSTD300

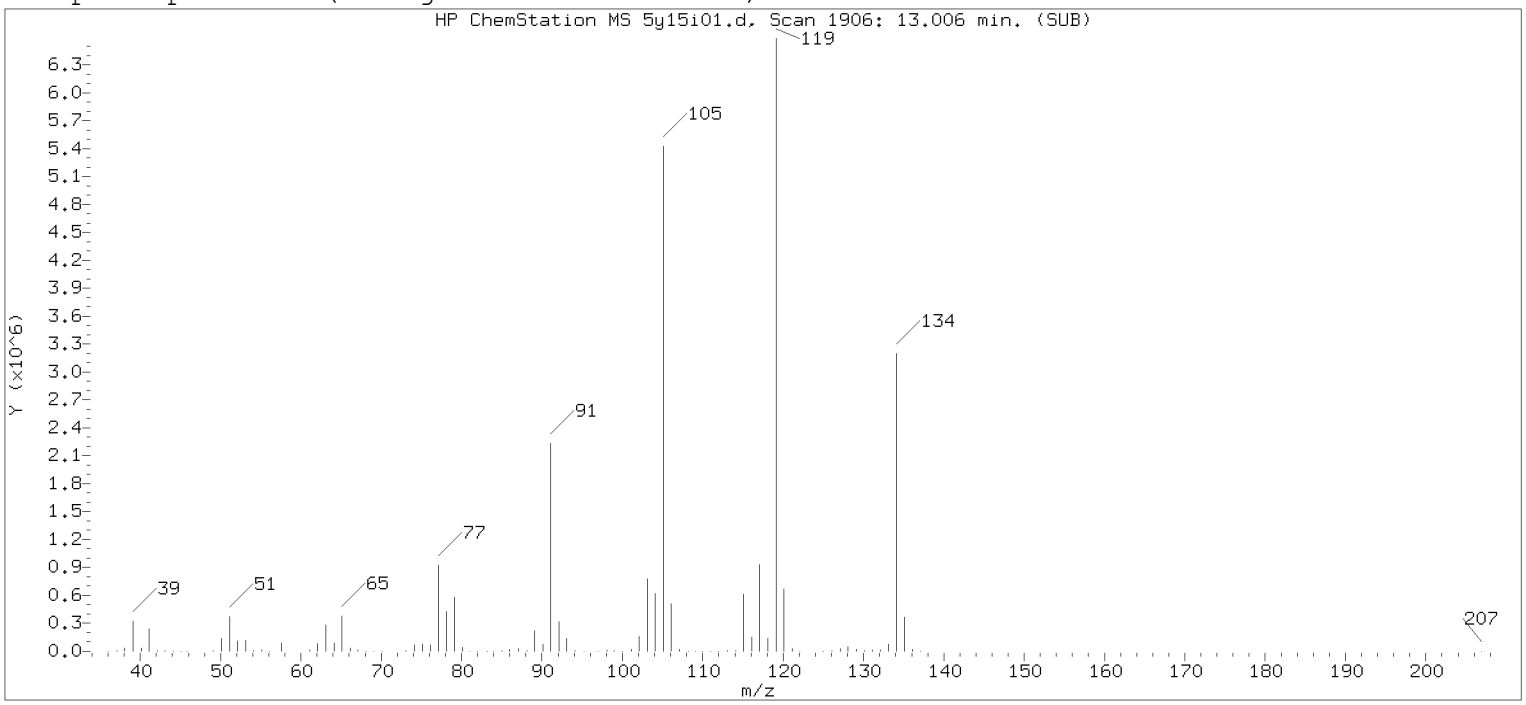
Compound Number : 141
Compound Name : 1,2-Diethylbenzene
Scan Number : 1918
Retention Time (minutes): 13.080
Quant Ion : 119.00
Area (flag) : 6308122M
On-Column Amount (ng) : 315.8737
Integration start scan : 1912 Integration stop scan: 1928
Y at integration start : 573 Y at integration end: 573

Reason for manual integration: improper integration

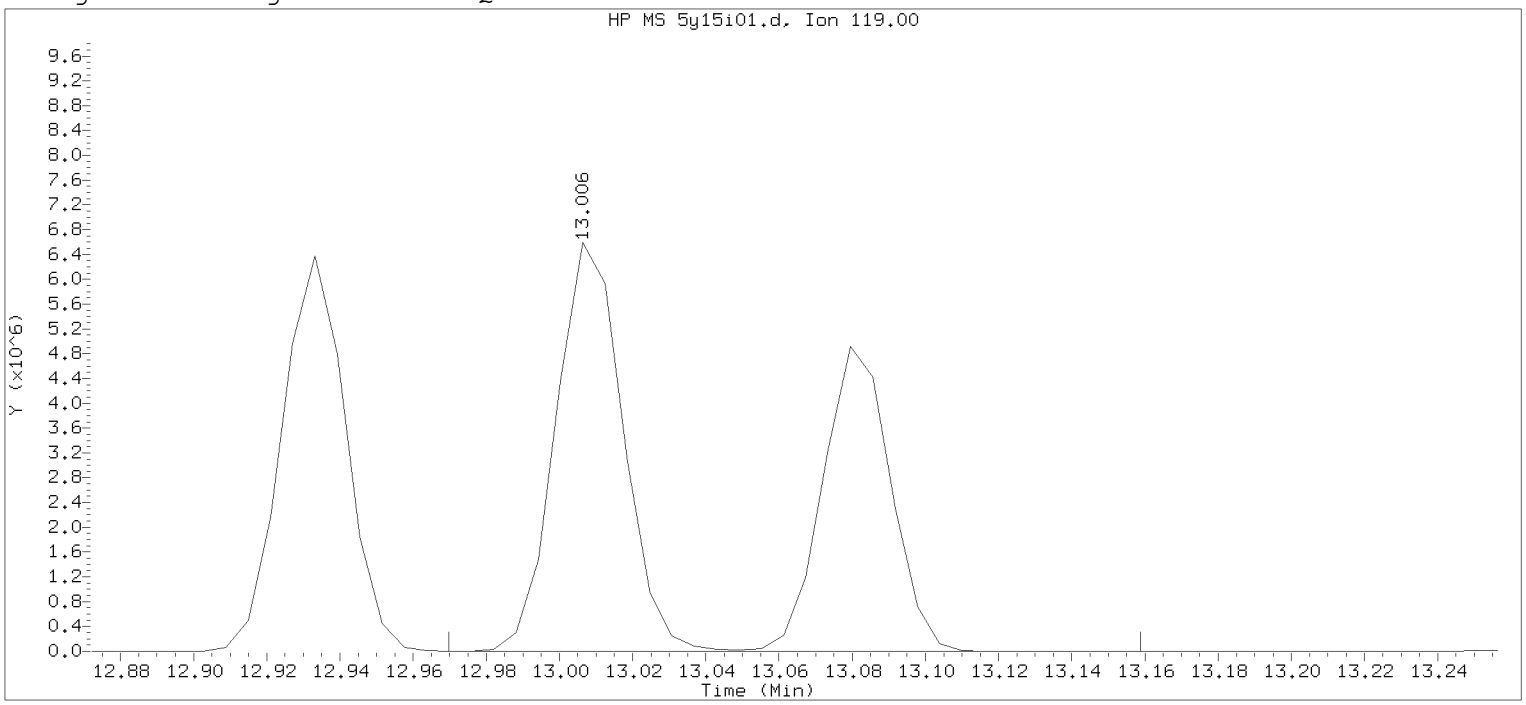
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:12 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compound Number : 141
Compound Name : 1,2-Diethylbenzene
Scan Number : 1906
Retention Time (minutes): 13.006
Quant Ion : 119.00
Area : 14742250
On-column Amount (ng) : 300.0000
Integration start scan : 1899 Integration stop scan: 1930
Y at integration start : 0 Y at integration end: 0

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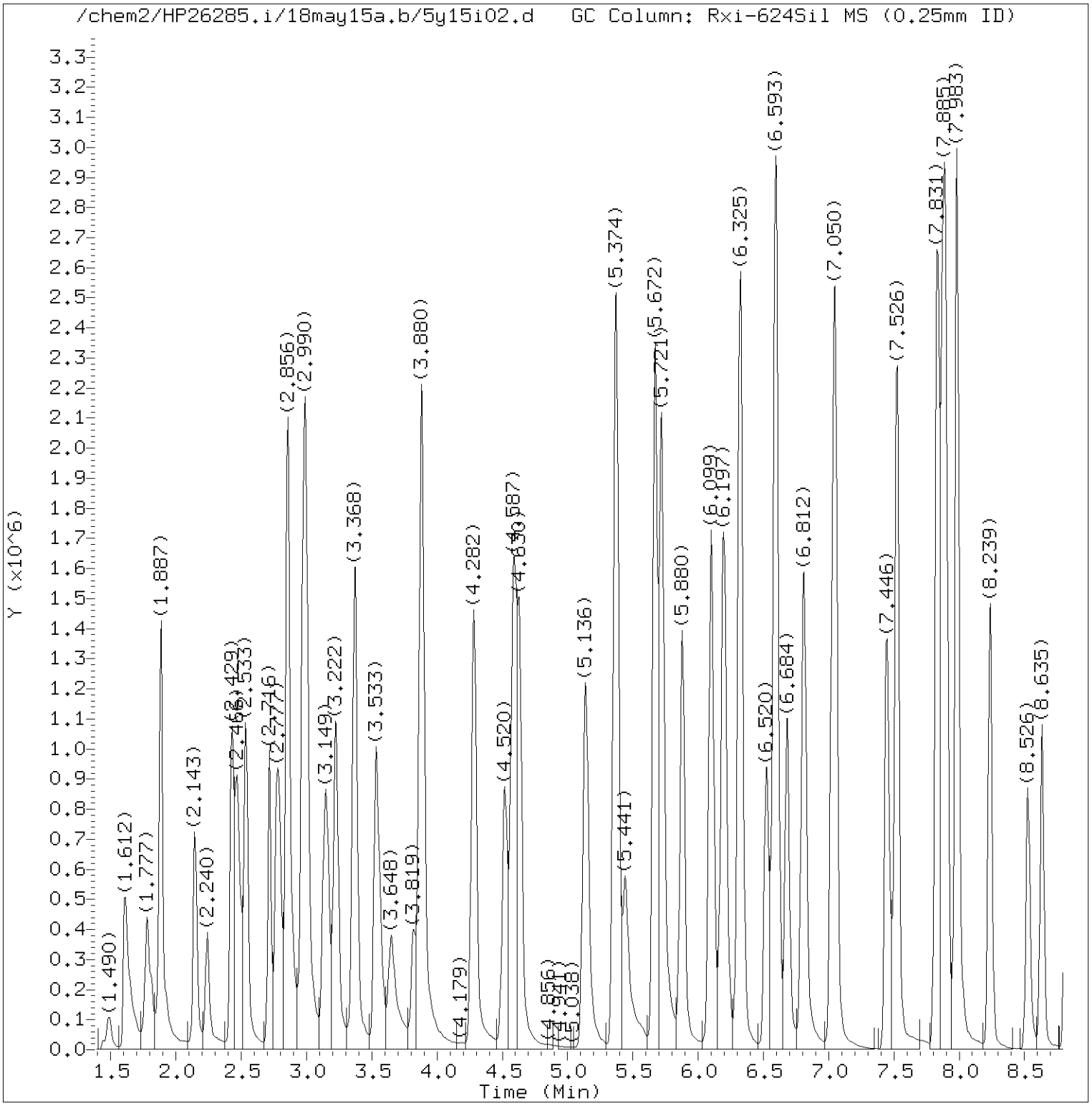
Target 3.5 esignature user keeper 245



Total Ion Chromatogram (TIC)

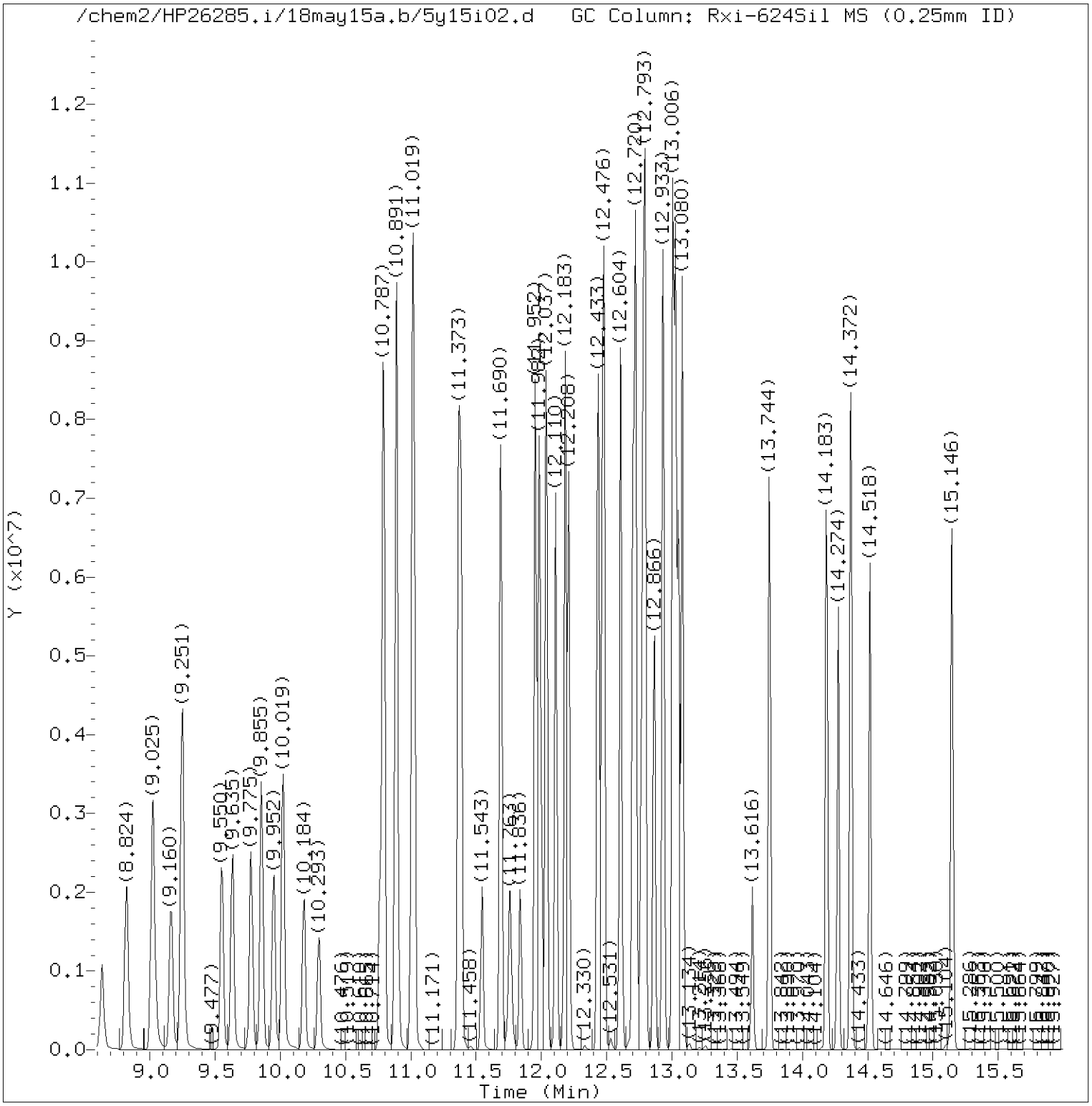
Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i02.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:34 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i02.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:34 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i02.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:34 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.612	85	1111078	111.686
4) Chloromethane	(2)	1.777	50	718735	101.453
6) Vinyl Chloride	(2)	1.874	62	704167	101.699
5) 1,3-Butadiene	(2)	1.887	39	466735	101.326
8) Bromomethane	(2)	2.143	94	565457	96.793
9) Chloroethane	(2)	2.240	64	361988	98.508
10) Dichlorofluoromethane	(2)	2.429	67	1141262	99.741
12) Trichlorofluoromethane	(2)	2.466	101	1185288	108.254
11) n-Pentane	(2)	2.533	43	720654	118.593
14) Ethyl ether	(2)	2.716	59	603164	106.102
15) Freon 123a	(2)	2.777	67	825202	104.299
16) Acrolein	(1)	2.856	56	2591454	1071.630
17) 1,1-Dichloroethene	(2)	2.972	96	612095	104.357
17) 1,1-Dichloroethene	(2)	2.972	63	300300	101.909
19) Freon 113	(2)	2.990	101	731304	118.001
18) Acetone	(1)	2.996	58	230482	177.814
21) 2-Propanol	(1)	3.142	45	476352	575.096
22) Methyl Iodide	(2)	3.149	142	1399988	101.179
23) Carbon Disulfide	(2)	3.222	76	2036901	106.457
27) Methyl Acetate	(2)	3.356	43	863549	100.027
25) Allyl Chloride	(2)	3.374	41	1091056	105.642
28) Methylene Chloride	(2)	3.533	84	761481	100.828
29)*t-Butyl alcohol-d10	(1)	3.551	65	350966	250.000
30) t-Butyl alcohol	(1)	3.648	59	891657	552.560
31) Acrylonitrile	(2)	3.819	53	469499	104.543
33) Methyl Tertiary Butyl Ether	(2)	3.874	73	1793507	98.515
32) trans-1,2-Dichloroethene	(2)	3.886	96	730433	100.381
34) n-Hexane	(2)	4.282	57	1107689	142.105
36) 1,1-Dichloroethane	(2)	4.520	63	1340309	102.462
38) di-Isopropyl ether	(2)	4.587	45	2312450	101.649
39) 2-Chloro-1,3-butadiene	(2)	4.630	53	1098666	111.620
40) Ethyl t-butyl ether	(2)	5.136	59	1847629	103.031
44) 2-Butanone	(2)	5.355	43	1359577	208.328
45) 2,2-Dichloropropane	(2)	5.374	77	739087	103.957
42) cis-1,2-Dichloroethene	(2)	5.374	96	885505	102.581
47) Propionitrile	(1)	5.441	54	961709	498.901
48) Methacrylonitrile	(2)	5.672	67	1256802	253.987
49) Bromochloromethane	(2)	5.715	128	488629	106.535

* = Compound is an internal standard.

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i02.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:34 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.727	71	389694	211.485
51) Chloroform	(2)	5.880	83	1496968	101.108
52)$Dibromofluoromethane	(2)	6.099	113	393654	50.406
52)$Dibromofluoromethane	(2)	6.105	111	399476	50.435
53) 1,1,1-Trichloroethane	(2)	6.099	97	1288669	101.460
43) 1,2-Dichloroethene (Total)	(2)		96	1615938	202.962
54) Cyclohexane	(2)	6.197	56	1262932	128.329
54) Cyclohexane	(2)	6.197	84	1089628	127.625
54) Cyclohexane	(2)	6.197	69	393990	128.076
56) Carbon Tetrachloride	(2)	6.313	117	1074644	115.786
55) 1,1-Dichloropropene	(2)	6.331	75	1084668	107.792
58) Isobutyl Alcohol	(1)	6.520	41	765852	1367.898
57)$1,2-Dichloroethane-d4	(2)	6.575	102	83190	49.509
57)$1,2-Dichloroethane-d4	(2)	6.575	65	398253	49.010
57)$1,2-Dichloroethane-d4	(2)	6.575	104	53706	50.159
60) Benzene	(2)	6.599	78	3256184	100.234
61) 1,2-Dichloroethane	(2)	6.684	62	1096718	97.176
61) 1,2-Dichloroethane	(2)	6.678	98	100061	102.969
65) t-Amyl methyl ether	(2)	6.812	73	1880914	101.540
66)*Fluorobenzene	(2)	7.026	96	1444158	50.000
67) n-Heptane	(2)	7.050	43	1212001	146.553
69) n-Butanol	(1)	7.446	56	1340372	2930.640
71) Trichloroethene	(2)	7.526	95	908747	102.682
73) Methylcyclohexane	(2)	7.831	83	1520662	121.952
73) Methylcyclohexane	(2)	7.831	98	683744	123.950
74) 1,2-Dichloropropane	(2)	7.873	63	846069	100.083
72) t-Amyl ethyl ether	(2)	7.898	87	1092709	113.706
76) 1,4-Dioxane	(1)	7.971	88	176561M	1252.954
77) Methyl Methacrylate	(2)	7.983	69	813877	103.767
75) Dibromomethane	(2)	7.983	93	572158	98.876
79) Bromodichloromethane	(2)	8.239	83	1208544	108.471
80) 2-Nitropropane	(2)	8.526	41	693881	234.048
81) 2-Chloroethyl Vinyl Ether	(2)	8.635	63	568293	121.566
82) cis-1,3-Dichloropropene	(2)	8.824	75	1493867	107.688
83) 4-Methyl-2-pentanone	(2)	9.019	43	2914224	223.460
84)$Toluene-d8	(3)	9.166	98	1434018	49.731
84)$Toluene-d8	(3)	9.160	100	938942	50.028
89) Toluene	(3)	9.251	92	2211103	100.762

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i02.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:34 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) trans-1,3-Dichloropropene	(3)	9.550	75	1391114	108.668
92) Ethyl Methacrylate	(3)	9.635	69	1432605	111.323
93) 1,1,2-Trichloroethane	(3)	9.775	97	887089	99.807
94) Tetrachloroethene	(3)	9.855	166	1100288	107.898
95) 1,3-Dichloropropane	(3)	9.952	76	1407862	99.908
97) 2-Hexanone	(3)	10.019	43	2463606	227.993
91) 1,3-Dichloropropene (total)	(3)		100	2884981	216.355
98) Dibromochloromethane	(3)	10.184	129	1084802	110.603
100) 1,2-Dibromoethane	(3)	10.293	107	989971	101.964
101)*Chlorobenzene-d5	(3)	10.763	117	1181171	50.000
102) 1-Chlorohexane	(3)	10.787	91	1300175	117.241
103) Chlorobenzene	(3)	10.793	112	2748338	101.099
104) 1,1,1,2-Tetrachloroethane	(3)	10.885	131	1009072	107.406
105) Ethylbenzene	(3)	10.891	91	4612589	107.214
107) m+p-Xylene	(3)	11.019	106	3645114	214.849
108) o-Xylene	(3)	11.366	106	1821978	109.336
110) Styrene	(3)	11.385	104	3009538	110.032
111) Bromoform	(3)	11.543	173	866737	115.797
112) Isopropylbenzene	(3)	11.690	105	4699709	117.831
113) Cyclohexanone	(1)	11.763	55	825938	1324.827
109) Xylene (Total)	(3)		106	5467092	324.185
115)$4-Bromofluorobenzene	(3)	11.836	95	583722	49.466
115)$4-Bromofluorobenzene	(3)	11.836	174	533483	49.832
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	1530929M	98.034
116) Bromobenzene	(4)	11.952	156	1303805	101.793
119) trans-1,4-Dichloro-2-butene	(4)	11.982	53	1091634	260.919
118) 1,2,3-Trichloropropane	(4)	11.994	110	458246	96.442
120) n-Propylbenzene	(4)	12.037	91	5719031	114.587
121) 2-Chlorotoluene	(4)	12.110	126	1187352	106.264
123) 1,3,5-Trimethylbenzene	(4)	12.183	105	4148360	115.297
122) 4-Chlorotoluene	(4)	12.208	126	1237412	104.657
125) tert-Butylbenzene	(4)	12.433	134	873532M	122.712
126) Pentachloroethane	(4)	12.464	167	799413	114.298
127) 1,2,4-Trimethylbenzene	(4)	12.476	105	4281908	114.954
128) sec-Butylbenzene	(4)	12.604	105	5410543	128.132
130) 1,3-Dichlorobenzene	(4)	12.702	146	2584431	108.277
131) p-Isopropyltoluene	(4)	12.720	119	4830687	129.230
132)*1,4-Dichlorobenzene-d4	(4)	12.762	152	693434	50.000

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i02.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:34 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,4-Dichlorobenzene	(4)	12.781	146	2621098	107.388
135) 1,2,3-Trimethylbenzene	(4)	12.793	105	4278699	108.217
136) Benzyl Chloride	(4)	12.866	91	3258798	116.693
137) 1,3-Diethylbenzene	(4)	12.933	119	2822854	116.148
138) 1,4-Diethylbenzene	(4)	13.006	119	3055533	117.524
140) n-Butylbenzene	(4)	13.025	92	2433179	127.431
139) 1,2-Dichlorobenzene	(4)	13.049	146	2408689	105.644
141) 1,2-Diethylbenzene	(4)	13.080	119	2280683	111.552
142) Diethylbenzene (total)	(4)		100	8159070	345.224
143) 1,2-Dibromo-3-chloropropane	(4)	13.616	75	411854	110.407
145) 1,3,5-Trichlorobenzene	(4)	13.744	180	1984714	121.928
147) 1,2,4-Trichlorobenzene	(4)	14.183	180	1776743	121.542
148) Hexachlorobutadiene	(4)	14.274	225	878433	131.715
149) Naphthalene	(4)	14.372	128	5539737	120.011
150) 1,2,3-Trichlorobenzene	(4)	14.518	180	1594165	117.775
151) 2-Methylnaphthalene	(4)	15.146	142	2919809	127.215

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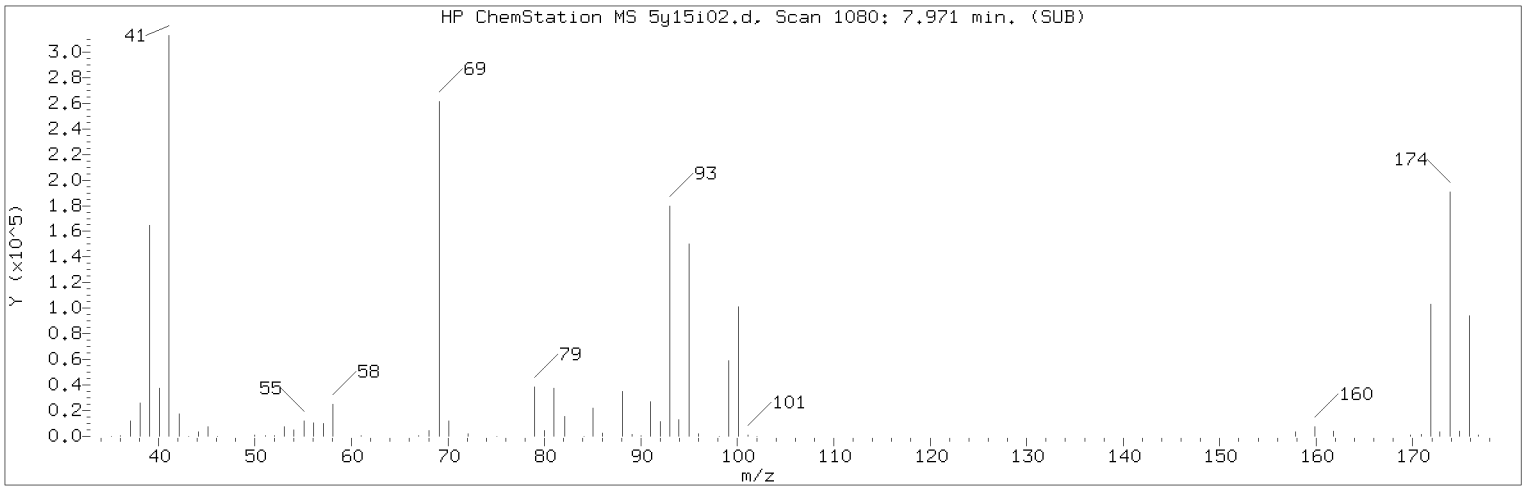
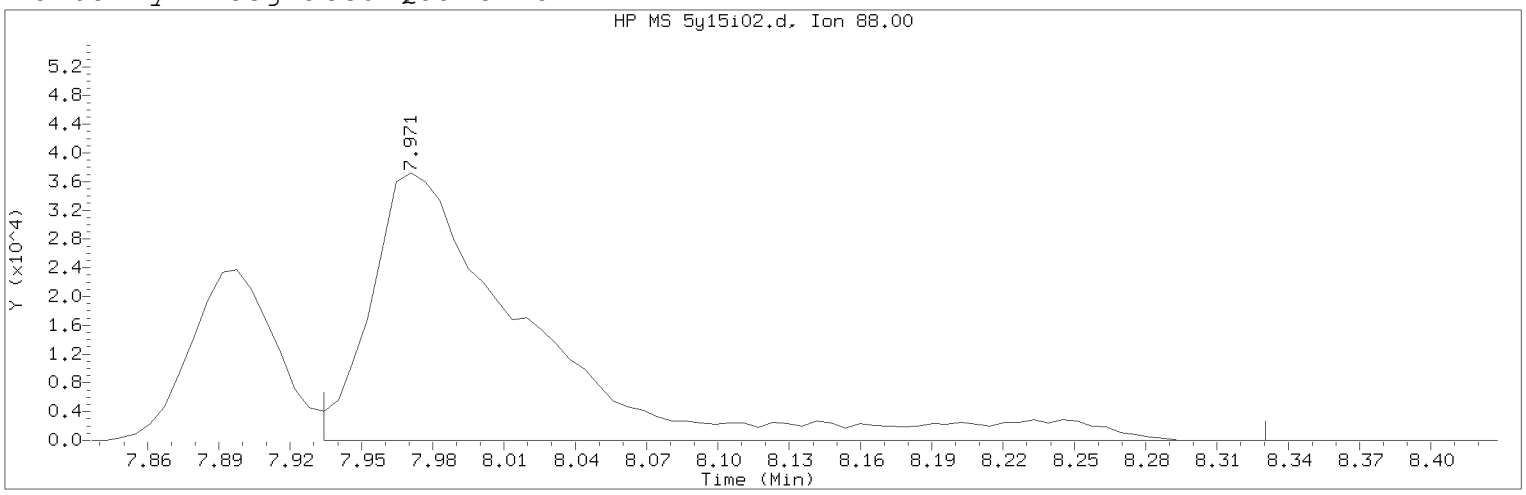
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i02.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:34 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

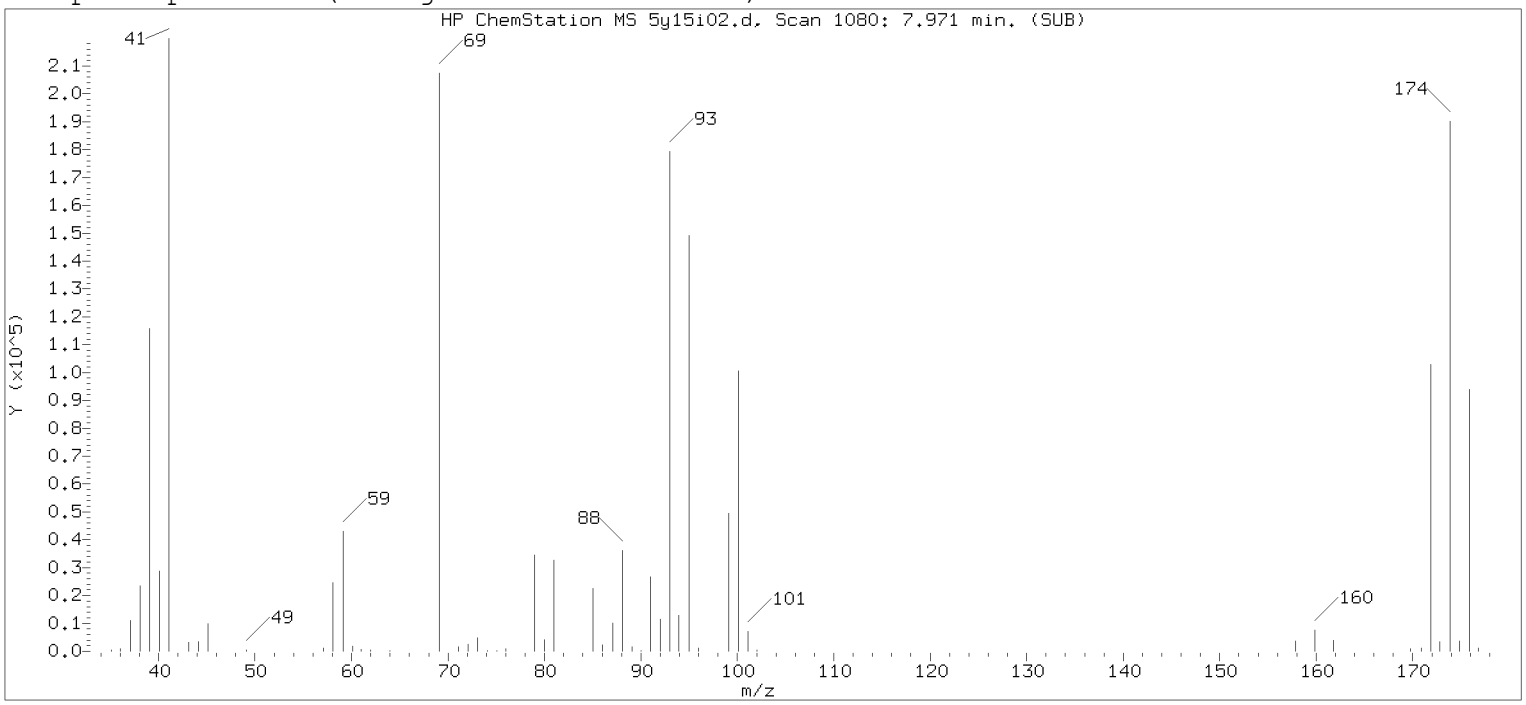
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 1080
Retention Time (minutes): 7.971
Quant Ion : 88.00
Area (flag) : 176561M
On-Column Amount (ng) : 1252.9542
Integration start scan : 1073 Integration stop scan: 1138
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

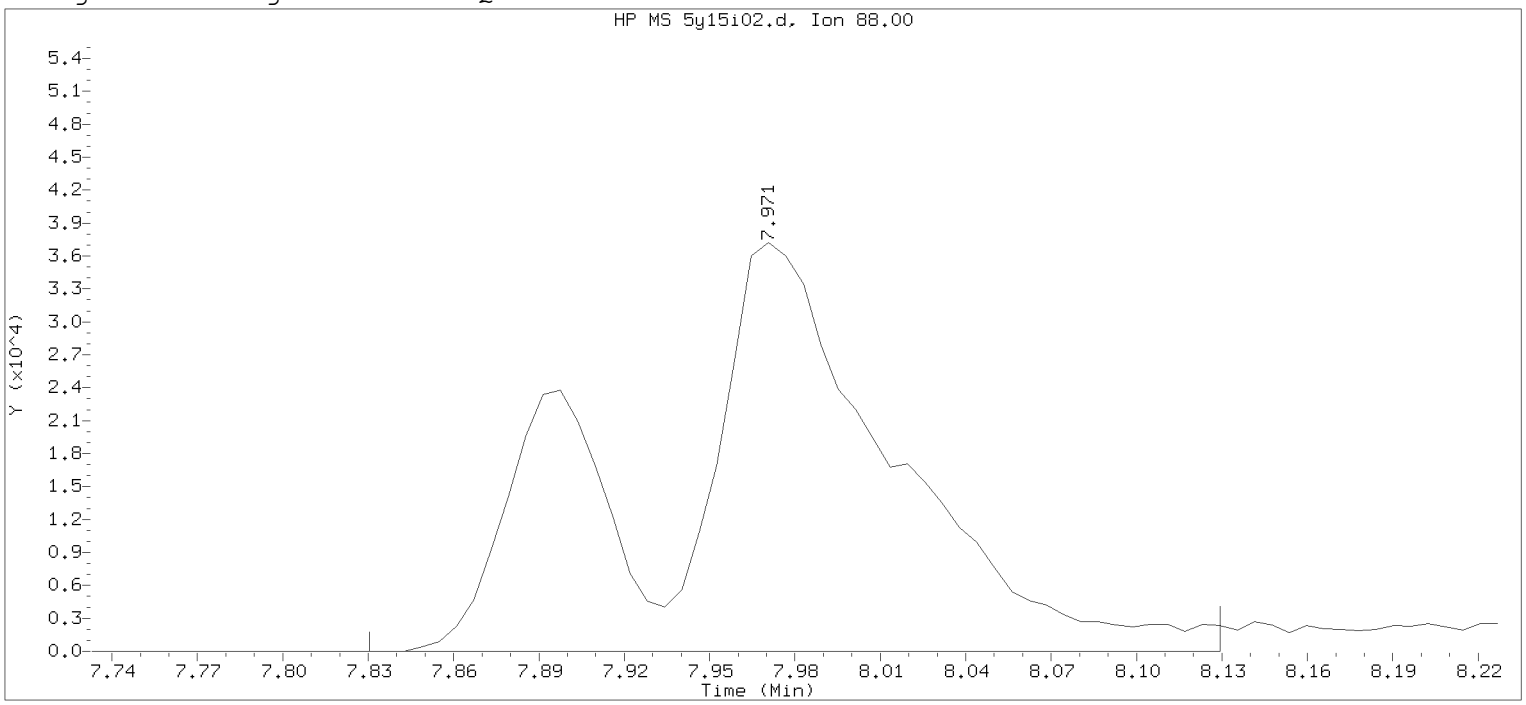
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i02.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:34 Analyst ID: LCP00895

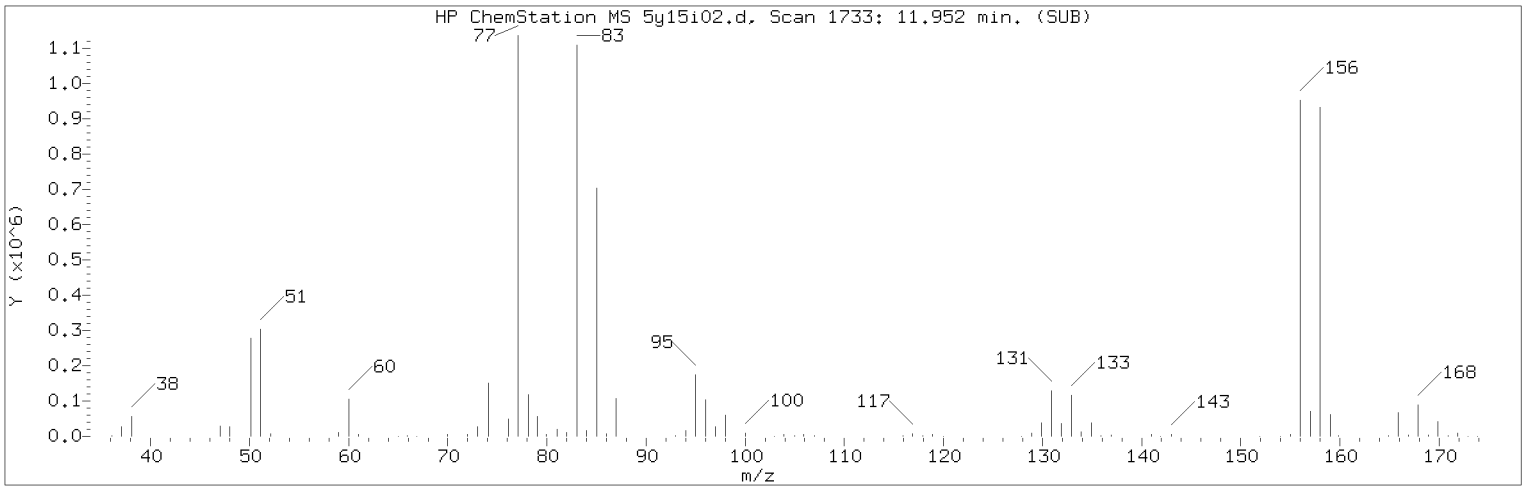
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD100 Lab Sample ID: VSTD100

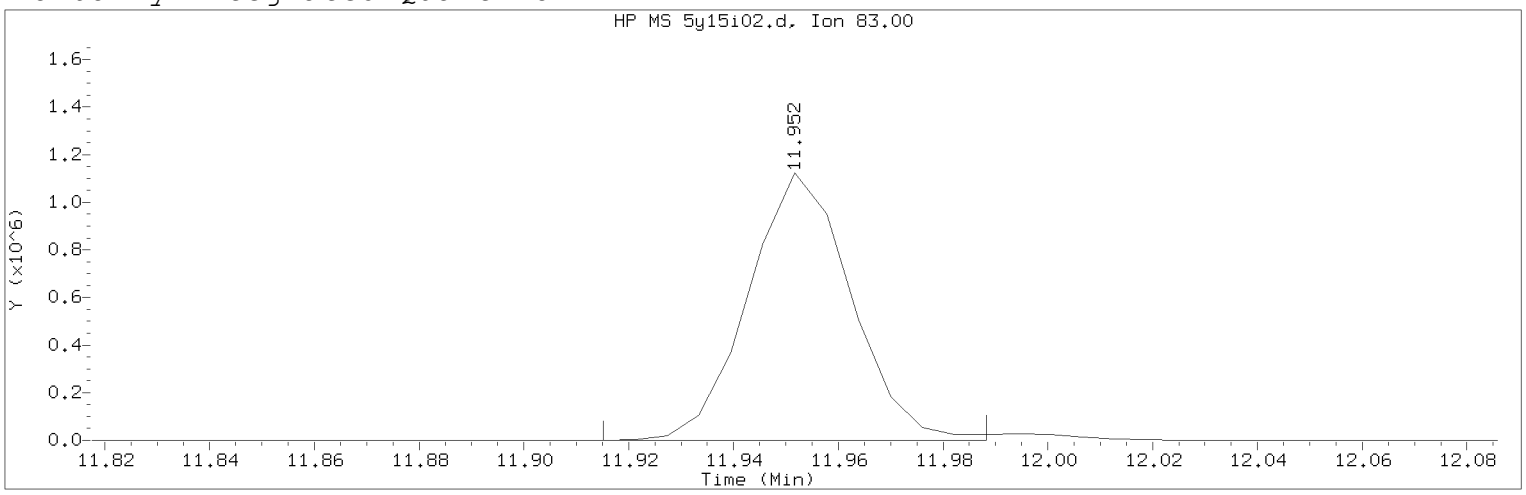
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 1080
Retention Time (minutes): 7.971
Quant Ion : 88.00
Area : 215413
On-column Amount (ng) : 596.0076
Integration start scan : 1056 Integration stop scan: 1105
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i02.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:34 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

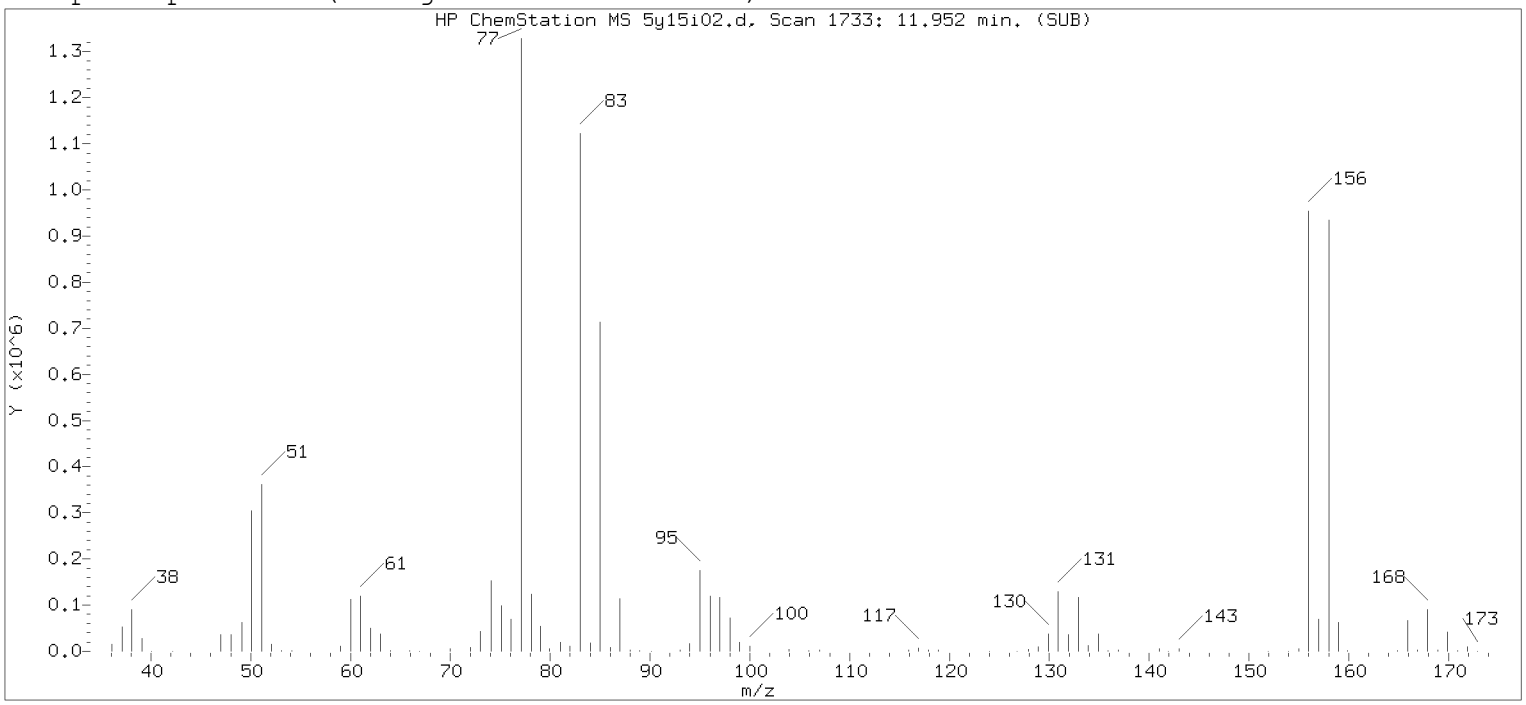
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area (flag) : 1530929M
On-Column Amount (ng) : 98.0339
Integration start scan : 1726 Integration stop scan: 1738
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

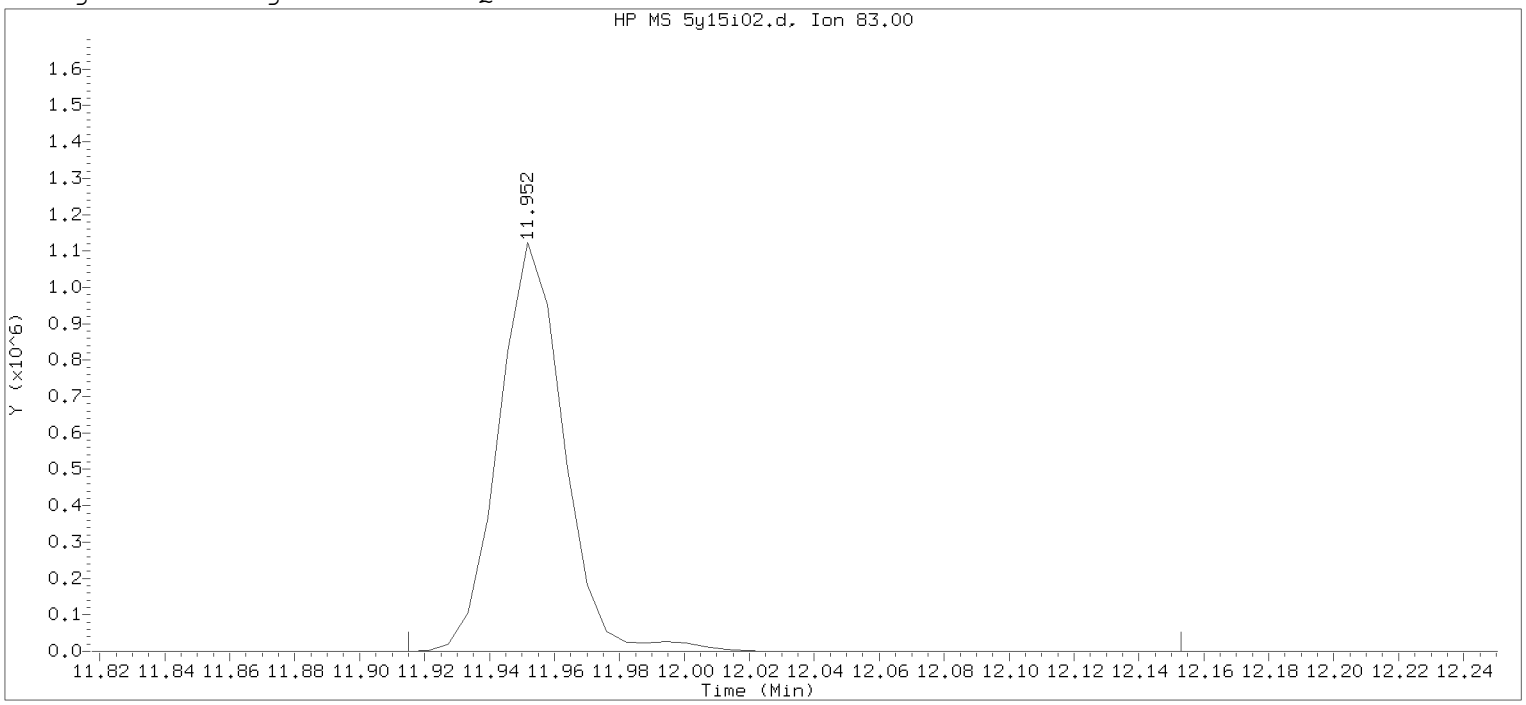
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i02.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:34 Analyst ID: LCP00895

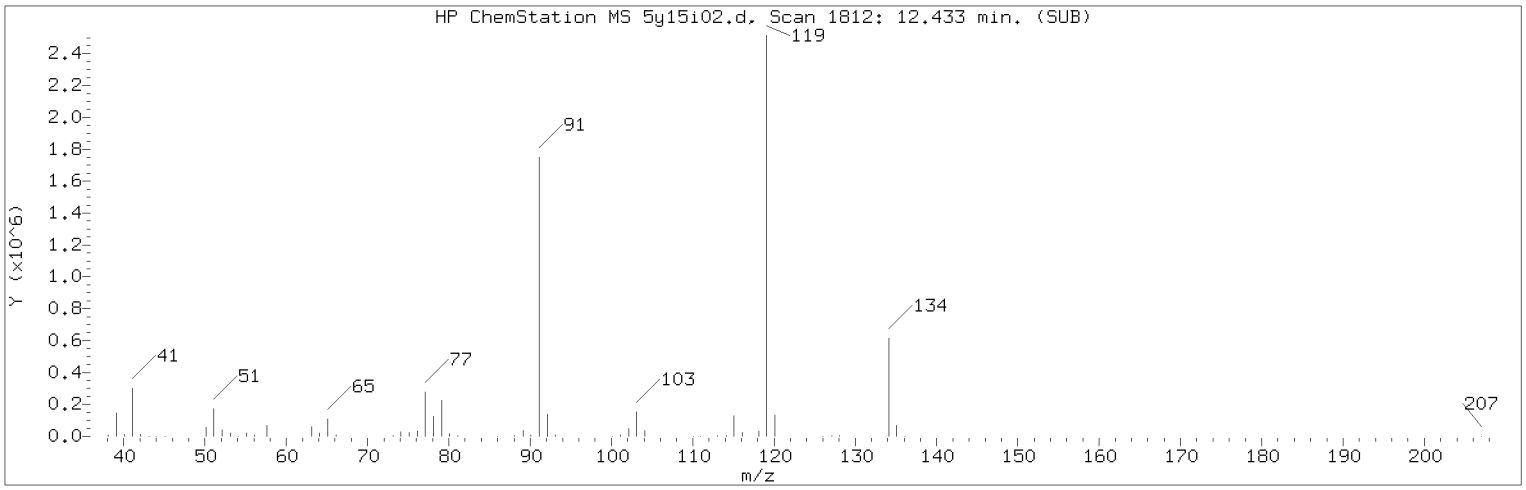
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD100 Lab Sample ID: VSTD100

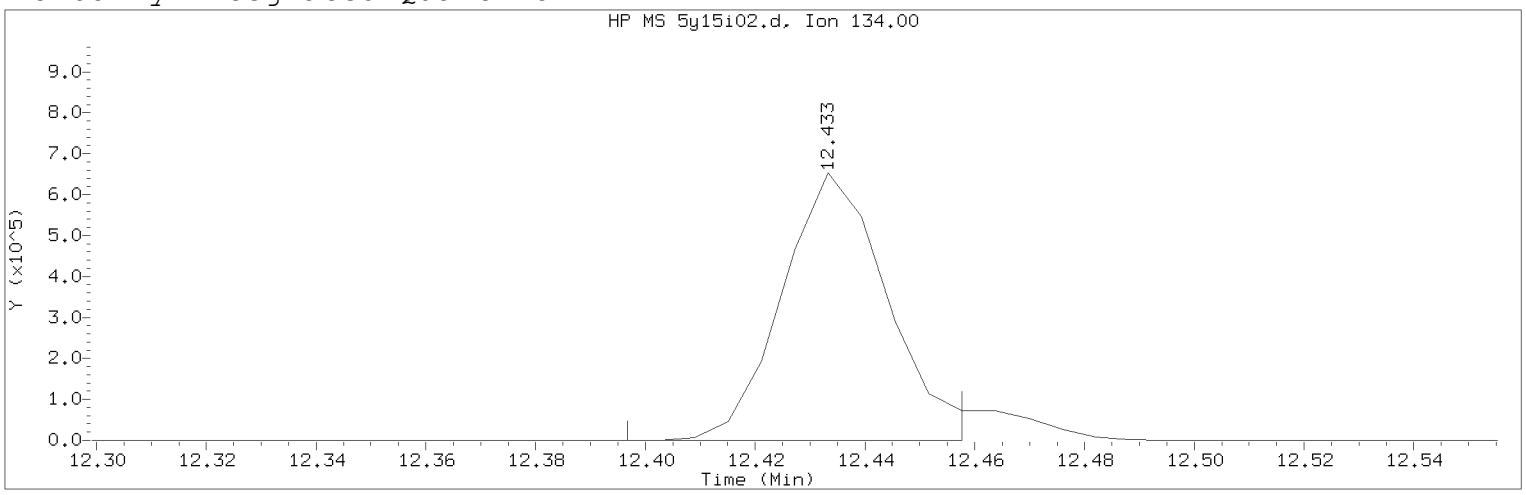
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area : 1557005
On-column Amount (ng) : 104.0893
Integration start scan : 1726 Integration stop scan: 1765
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i02.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:34 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD100 Lab Sample ID: VSTD100

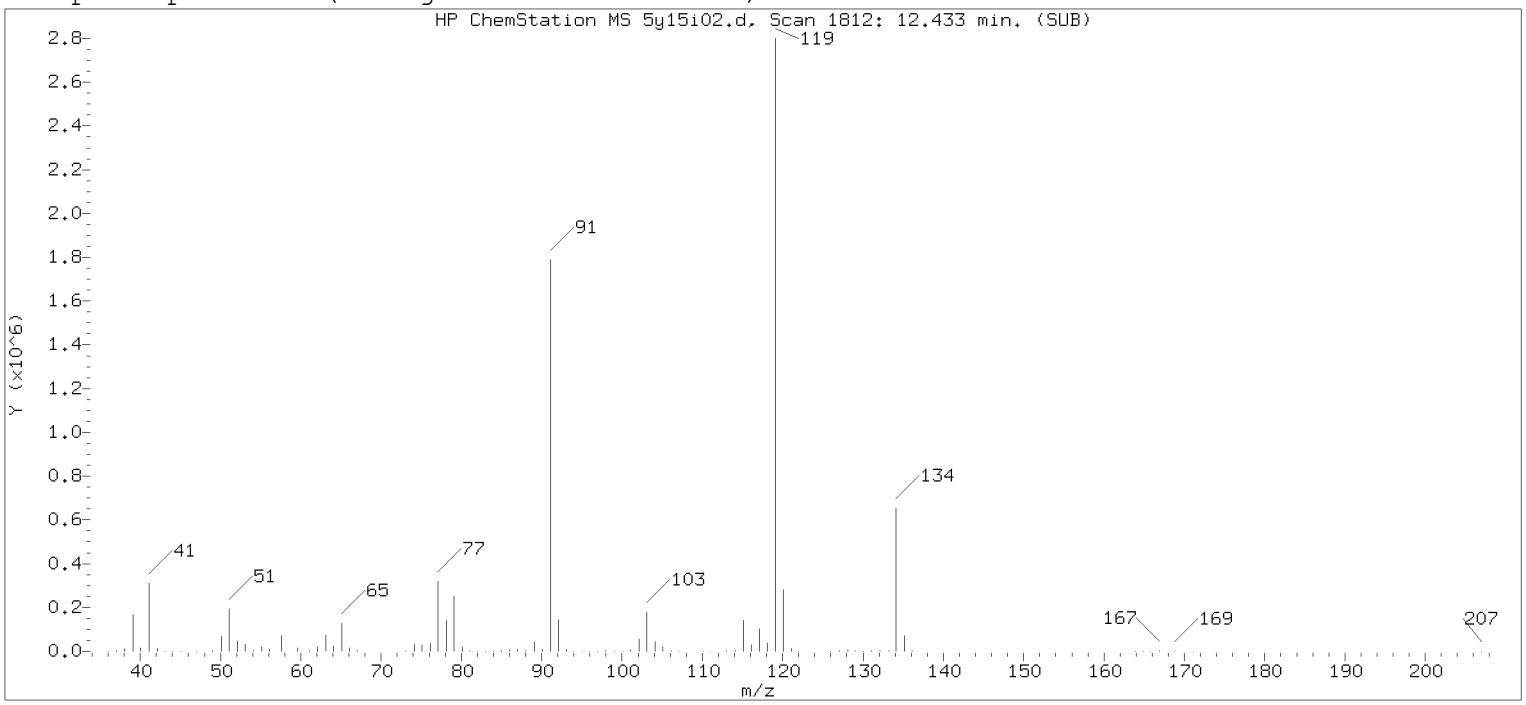
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.433
Quant Ion : 134.00
Area (flag) : 873532M
On-Column Amount (ng) : 122.7116
Integration start scan : 1805 Integration stop scan: 1815
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

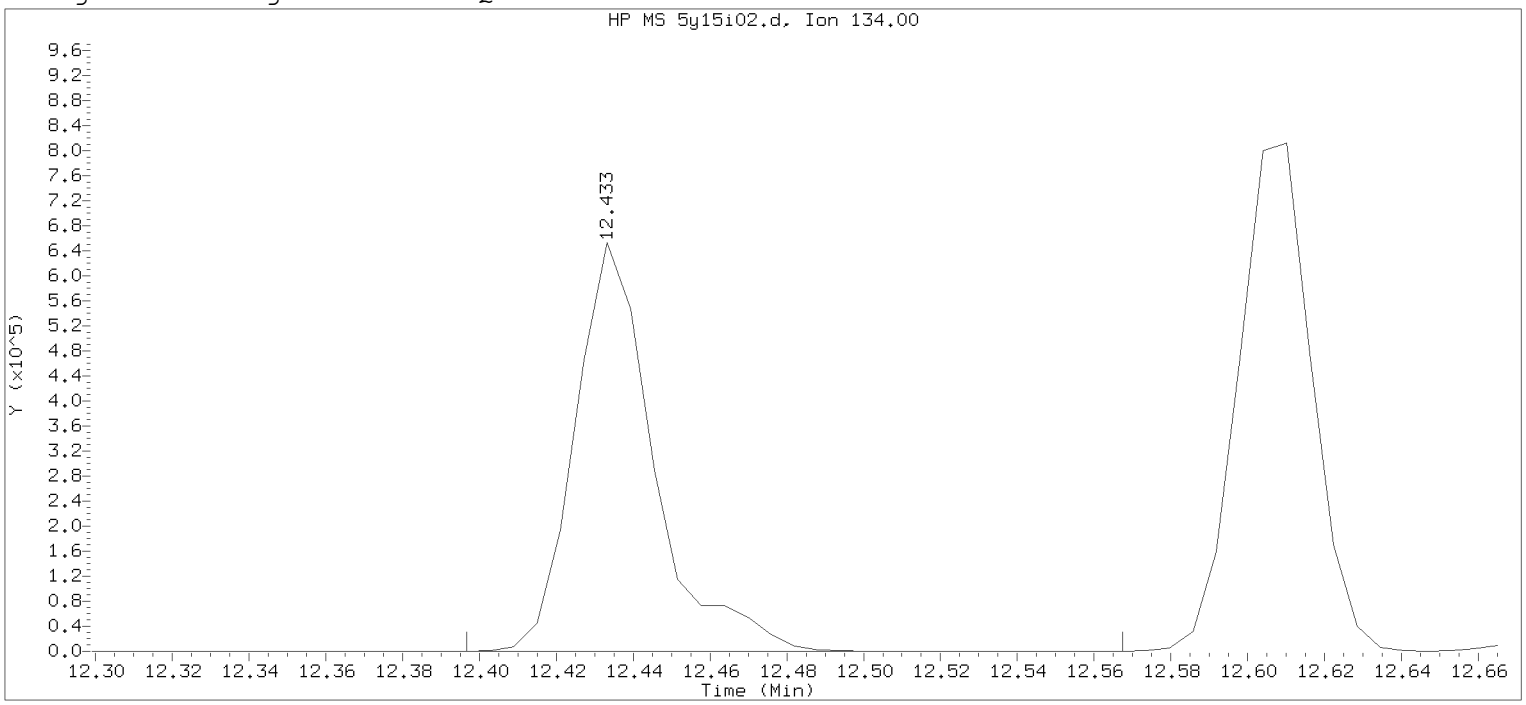
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



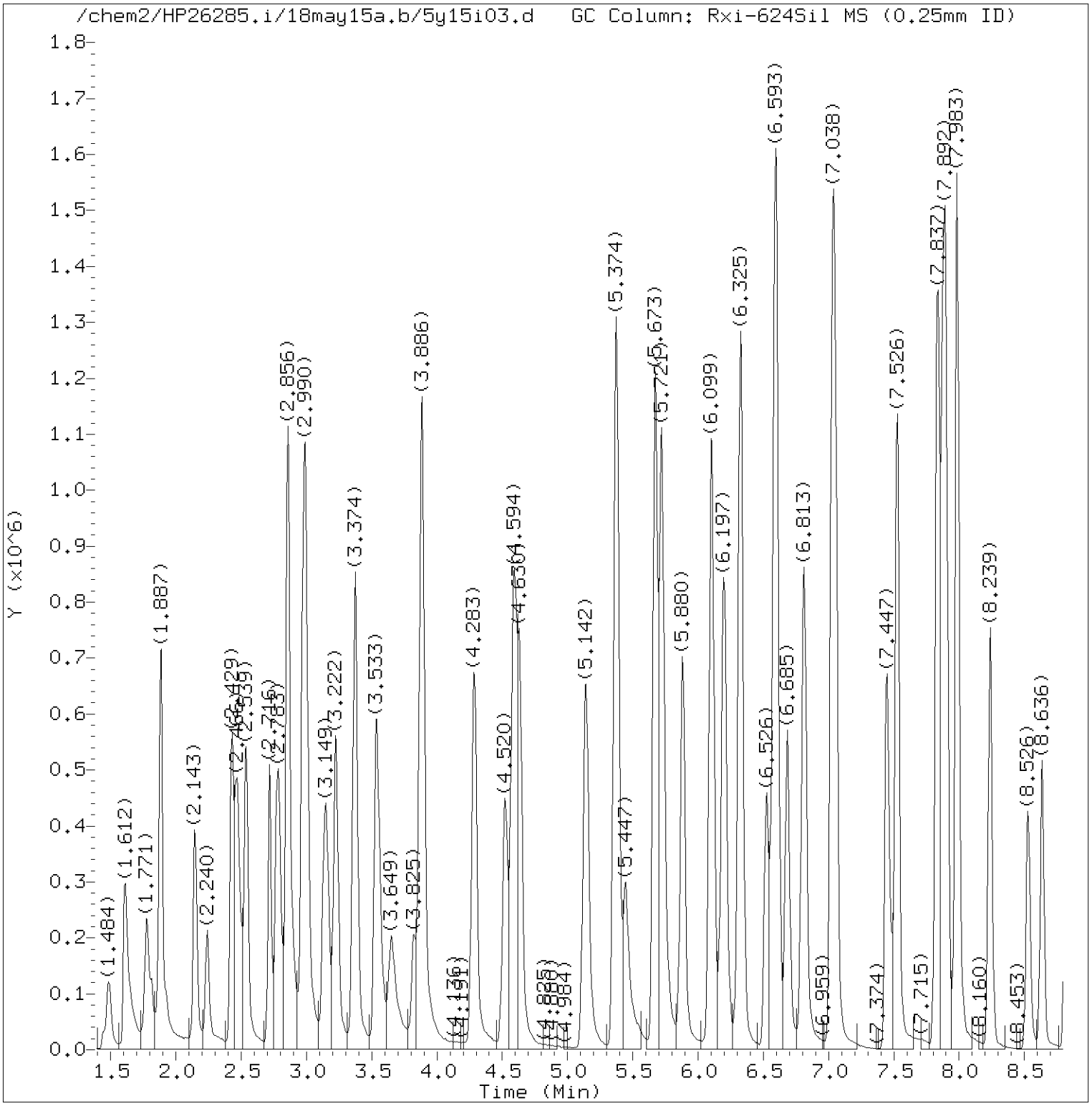
Data File: /chem2/HP26285.i/18may15a.b/5y15i02.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:34 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.433
Quant Ion : 134.00
Area : 933448
On-column Amount (ng) : 99.9662
Integration start scan : 1805 Integration stop scan: 1833
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user kevin.sposito



Total Ion Chromatogram (TIC)

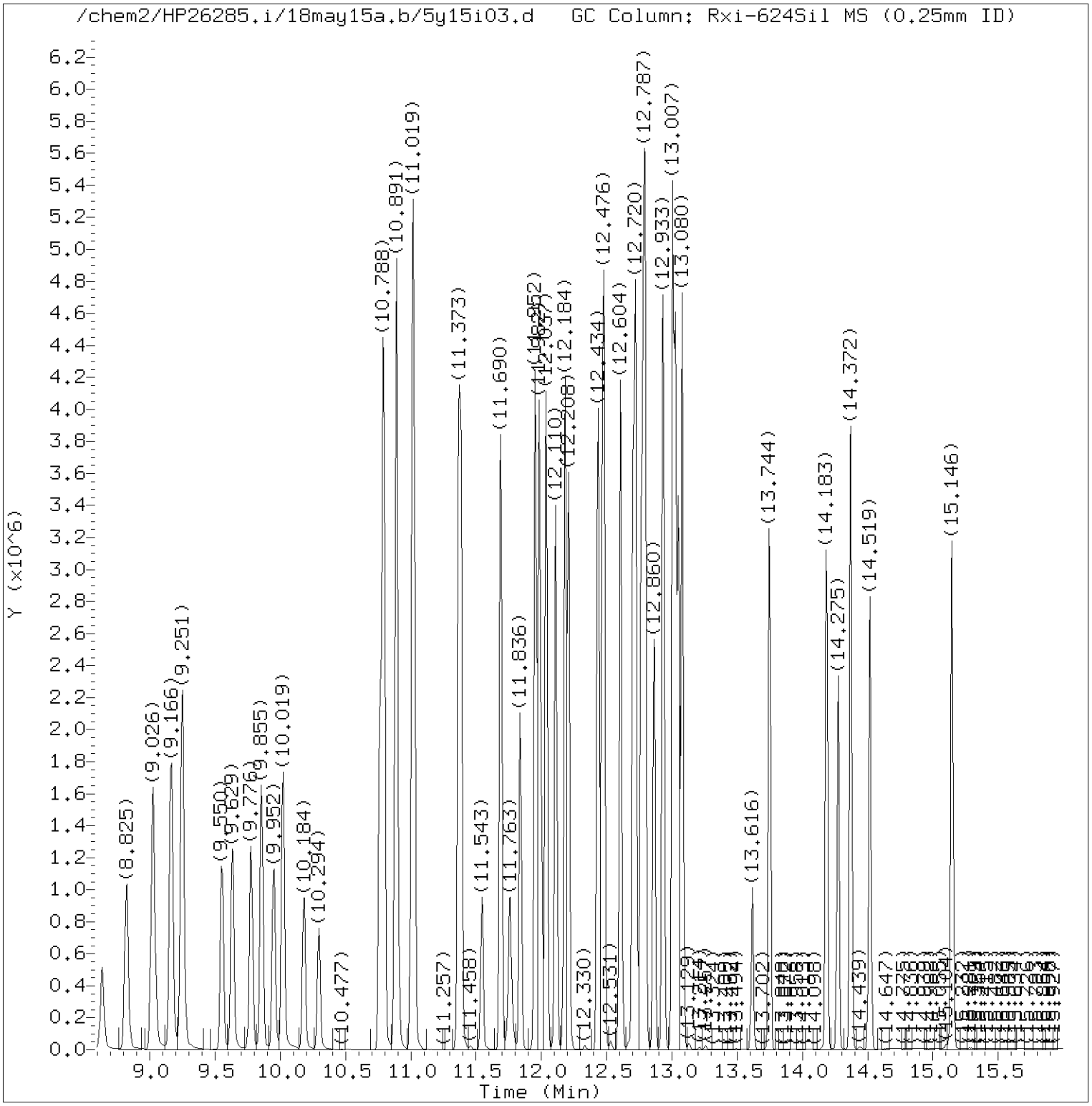
Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i03.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:55 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i03.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:55 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i03.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:55 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.606	85	582555	57.176
4) Chloromethane	(2)	1.777	50	358078	49.351
6) Vinyl Chloride	(2)	1.875	62	366493	51.680
5) 1,3-Butadiene	(2)	1.887	39	232292	49.238
8) Bromomethane	(2)	2.143	94	299857	50.116
9) Chloroethane	(2)	2.240	64	192423	51.127
10) Dichlorofluoromethane	(2)	2.429	67	587760	50.154
12) Trichlorofluoromethane	(2)	2.466	101	616166	54.946
11) n-Pentane	(2)	2.539	43	350577	56.329
14) Ethyl ether	(2)	2.716	59	312563	53.684
15) Freon 123a	(2)	2.783	67	412029	50.847
16) Acrolein	(1)	2.856	56	1311867	564.618
17) 1,1-Dichloroethene	(2)	2.972	96	308518	51.357
17) 1,1-Dichloroethene	(2)	2.972	63	152293	50.461
19) Freon 113	(2)	2.990	101	356161	56.112
18) Acetone	(1)	2.996	58	121537	97.589
21) 2-Propanol	(1)	3.143	45	227575	285.957
22) Methyl Iodide	(2)	3.149	142	708549	49.998
23) Carbon Disulfide	(2)	3.222	76	1015755	51.834
27) Methyl Acetate	(2)	3.356	43	455365	51.500
25) Allyl Chloride	(2)	3.374	41	566810	53.585
28) Methylene Chloride	(2)	3.533	84	387399	50.084
29)*t-Butyl alcohol-d10	(1)	3.551	65	337211	250.000
30) t-Butyl alcohol	(1)	3.649	59	440594	284.173
31) Acrylonitrile	(2)	3.825	53	241898	52.591
33) Methyl Tertiary Butyl Ether	(2)	3.874	73	950359	50.969
32) trans-1,2-Dichloroethene	(2)	3.886	96	377349	50.633
34) n-Hexane	(2)	4.283	57	513055	64.265
36) 1,1-Dichloroethane	(2)	4.520	63	680152	50.767
38) di-Isopropyl ether	(2)	4.588	45	1204382	51.691
39) 2-Chloro-1,3-butadiene	(2)	4.636	53	546498	54.210
40) Ethyl t-butyl ether	(2)	5.136	59	959624	52.248
44) 2-Butanone	(2)	5.362	43	693057	103.688
42) cis-1,2-Dichloroethene	(2)	5.374	96	446989	50.558
45) 2,2-Dichloropropane	(2)	5.380	77	377887	51.896
47) Propionitrile	(1)	5.447	54	490625	264.901
48) Methacrylonitrile	(2)	5.673	67	659781	130.185
49) Bromochloromethane	(2)	5.715	128	252260	53.701

* = Compound is an internal standard.

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i03.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:55 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.728	71	198917	112.355
51) Chloroform	(2)	5.880	83	761759	50.235
53) 1,1,1-Trichloroethane	(2)	6.099	97	636941	48.963
52)$Dibromofluoromethane	(2)	6.106	113	397696	49.721
52)$Dibromofluoromethane	(2)	6.106	111	404306	49.839
43) 1,2-Dichloroethene (Total)	(2)		96	824338	101.191
54) Cyclohexane	(2)	6.197	56	599532	59.481
54) Cyclohexane	(2)	6.197	84	517497	59.181
54) Cyclohexane	(2)	6.197	69	189699	60.209
56) Carbon Tetrachloride	(2)	6.313	117	508931	53.539
55) 1,1-Dichloropropene	(2)	6.331	75	544935	52.875
58) Isobutyl Alcohol	(1)	6.526	41	367505	683.181
57)$1,2-Dichloroethane-d4	(2)	6.575	102	84080	48.856
57)$1,2-Dichloroethane-d4	(2)	6.575	65	408398	49.071
57)$1,2-Dichloroethane-d4	(2)	6.575	104	54708	49.888
60) Benzene	(2)	6.599	78	1673427	50.296
61) 1,2-Dichloroethane	(2)	6.685	62	559910	48.440
61) 1,2-Dichloroethane	(2)	6.685	98	50412	50.652
65) t-Amyl methyl ether	(2)	6.813	73	986911	52.019
66)*Fluorobenzene	(2)	7.026	96	1479096	50.000
67) n-Heptane	(2)	7.050	43	536683	63.362
69) n-Butanol	(1)	7.447	56	627028	1426.880
71) Trichloroethene	(2)	7.526	95	458303	50.562
73) Methylcyclohexane	(2)	7.831	83	750989M	58.804
73) Methylcyclohexane	(2)	7.837	98	336373	59.538
74) 1,2-Dichloropropane	(2)	7.873	63	437129	50.487
72) t-Amyl ethyl ether	(2)	7.898	87	548530	55.731
76) 1,4-Dioxane	(1)	7.977	88	82070M	606.161
77) Methyl Methacrylate	(2)	7.983	69	415779	51.759
75) Dibromomethane	(2)	7.983	93	295643	49.884
79) Bromodichloromethane	(2)	8.239	83	597889	52.395
80) 2-Nitropropane	(2)	8.526	41	335456	110.478
81) 2-Chloroethyl Vinyl Ether	(2)	8.636	63	268467	56.072
82) cis-1,3-Dichloropropene	(2)	8.825	75	754416	53.099
83) 4-Methyl-2-pentanone	(2)	9.026	43	1444506	108.147
84)$Toluene-d8	(3)	9.166	98	1468064	49.682
84)$Toluene-d8	(3)	9.166	100	958315	49.828
89) Toluene	(3)	9.251	92	1138830	50.645

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i03.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:55 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) trans-1,3-Dichloropropene	(3)	9.550	75	694707	52.957
92) Ethyl Methacrylate	(3)	9.629	69	726033	55.056
93) 1,1,2-Trichloroethane	(3)	9.776	97	457906	50.275
94) Tetrachloroethene	(3)	9.855	166	535254	51.221
95) 1,3-Dichloropropane	(3)	9.952	76	723202	50.082
97) 2-Hexanone	(3)	10.019	43	1225075	110.636
91) 1,3-Dichloropropene (total)	(3)		100	1449123	106.056
98) Dibromochloromethane	(3)	10.184	129	538769	53.605
100) 1,2-Dibromoethane	(3)	10.294	107	506348	50.893
101)*Chlorobenzene-d5	(3)	10.763	117	1210397	50.000
102) 1-Chlorohexane	(3)	10.788	91	625265	55.021
103) Chlorobenzene	(3)	10.794	112	1399260	50.230
104) 1,1,1,2-Tetrachloroethane	(3)	10.885	131	494043	51.316
105) Ethylbenzene	(3)	10.891	91	2294131	52.037
107) m+p-Xylene	(3)	11.019	106	1828317	105.162
108) o-Xylene	(3)	11.367	106	909315	53.250
110) Styrene	(3)	11.385	104	1538778	54.901
111) Bromoform	(3)	11.543	173	418599	54.575
112) Isopropylbenzene	(3)	11.690	105	2283453	55.868
113) Cyclohexanone	(1)	11.763	55	398766	665.722
109) Xylene (Total)	(3)		106	2737632	158.412
115)$4-Bromofluorobenzene	(3)	11.836	95	599067	49.540
115)$4-Bromofluorobenzene	(3)	11.836	174	543450	49.537
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	802659	51.775
116) Bromobenzene	(4)	11.952	156	650408	51.151
119) trans-1,4-Dichloro-2-butene	(4)	11.982	53	558060	134.362
118) 1,2,3-Trichloropropane	(4)	11.995	110	236402	50.117
120) n-Propylbenzene	(4)	12.037	91	2741213	55.325
121) 2-Chlorotoluene	(4)	12.110	126	583367	52.592
123) 1,3,5-Trimethylbenzene	(4)	12.184	105	2008278	56.226
122) 4-Chlorotoluene	(4)	12.208	126	613178	52.241
125) tert-Butylbenzene	(4)	12.434	134	407955M	57.728
126) Pentachloroethane	(4)	12.464	167	382955	55.155
127) 1,2,4-Trimethylbenzene	(4)	12.476	105	2073525	56.074
128) sec-Butylbenzene	(4)	12.604	105	2515127	59.999
130) 1,3-Dichlorobenzene	(4)	12.702	146	1250461	52.773
131) p-Isopropyltoluene	(4)	12.720	119	2210521	59.569
132)*1,4-Dichlorobenzene-d4	(4)	12.763	152	688394	50.000

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i03.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:55 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,4-Dichlorobenzene	(4)	12.781	146	1255382	51.810
135) 1,2,3-Trimethylbenzene	(4)	12.793	105	2139048	54.497
136) Benzyl Chloride	(4)	12.860	91	1581122	57.032
137) 1,3-Diethylbenzene	(4)	12.933	119	1365233	56.585
138) 1,4-Diethylbenzene	(4)	13.007	119	1450796	56.210
140) n-Butylbenzene	(4)	13.025	92	1114932	58.819
139) 1,2-Dichlorobenzene	(4)	13.049	146	1167318	51.573
141) 1,2-Diethylbenzene	(4)	13.080	119	1114266	54.900
142) Diethylbenzene (total)	(4)		100	3930295	167.694
143) 1,2-Dibromo-3-chloropropane	(4)	13.616	75	199561	53.888
145) 1,3,5-Trichlorobenzene	(4)	13.744	180	899791	55.682
147) 1,2,4-Trichlorobenzene	(4)	14.183	180	818057	56.371
148) Hexachlorobutadiene	(4)	14.275	225	374808	56.611
149) Naphthalene	(4)	14.372	128	2644818	57.716
150) 1,2,3-Trichlorobenzene	(4)	14.519	180	753138	56.048
151) 2-Methylnaphthalene	(4)	15.146	142	1369879	60.122

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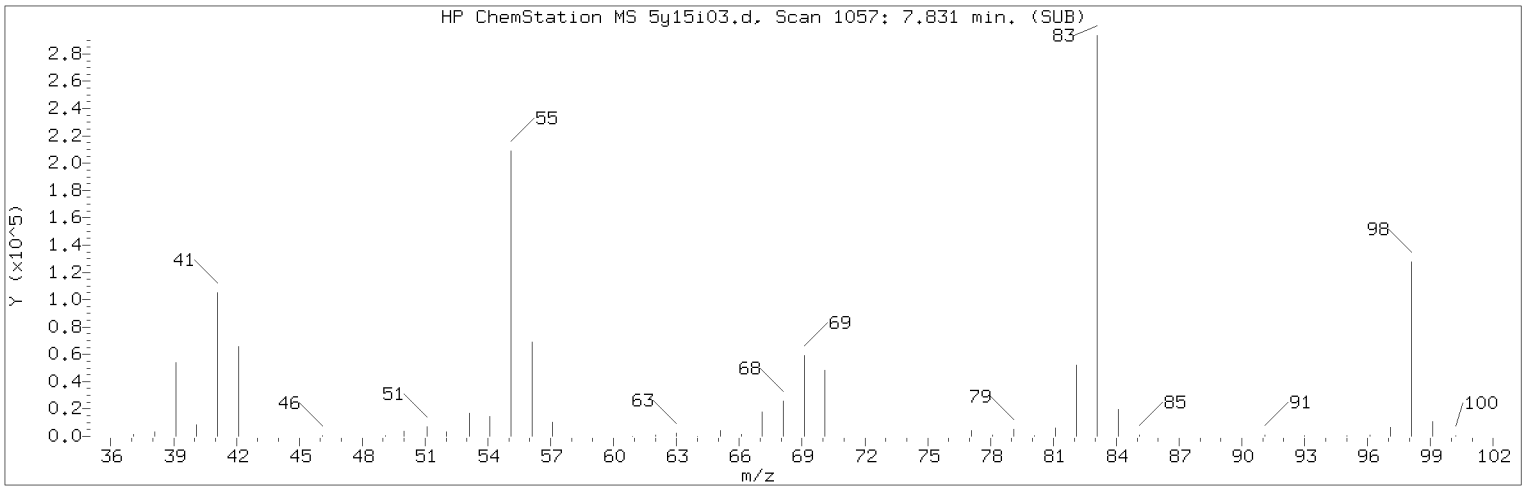
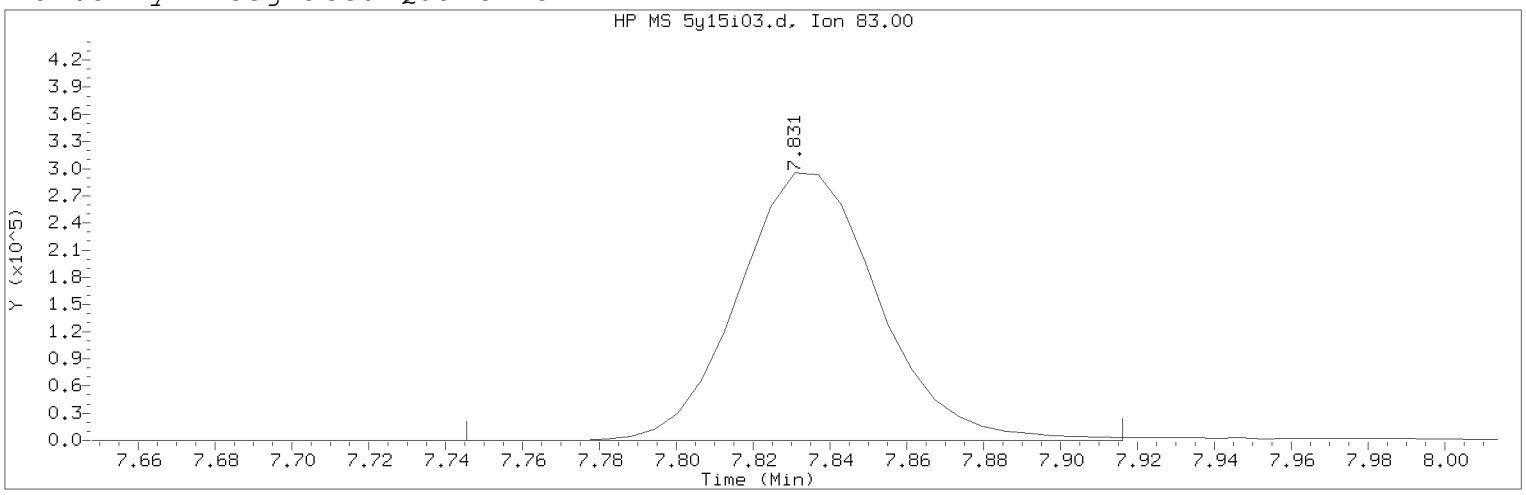
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i03.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:55 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

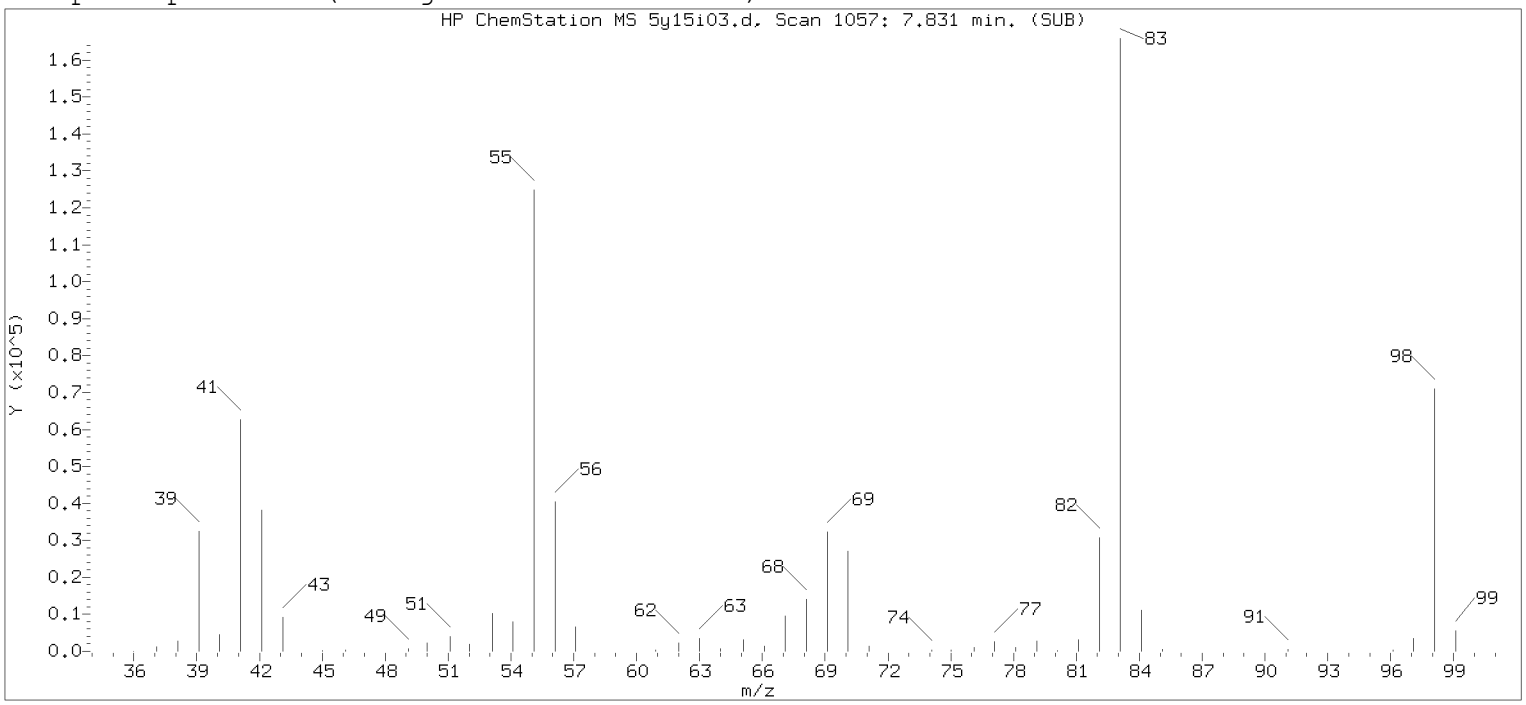
Compound Number : 73
Compound Name : Methylcyclohexane
Scan Number : 1057
Retention Time (minutes): 7.831
Quant Ion : 83.00
Area (flag) : 750989M
On-Column Amount (ng) : 58.8041
Integration start scan : 1042 Integration stop scan: 1070
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

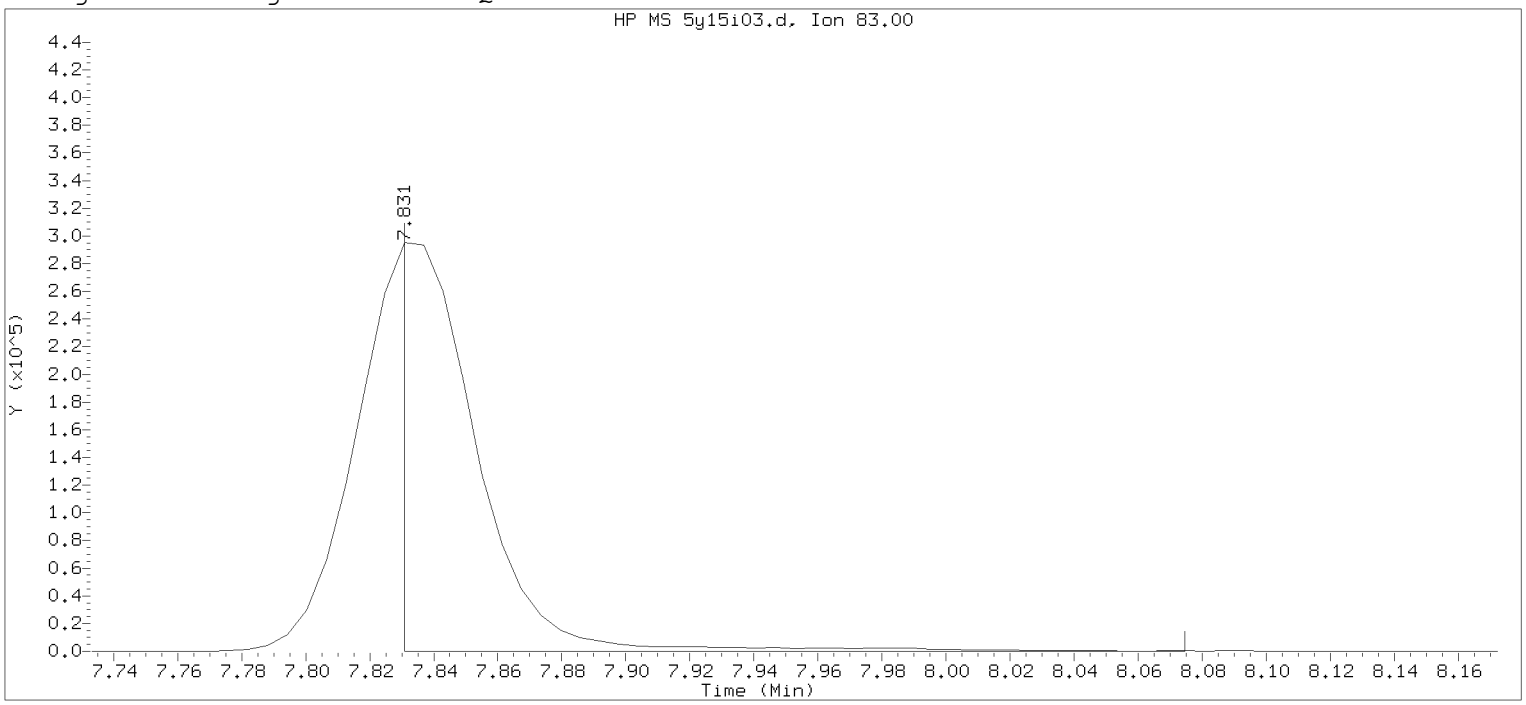
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i03.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:55 Analyst ID: LCP00895

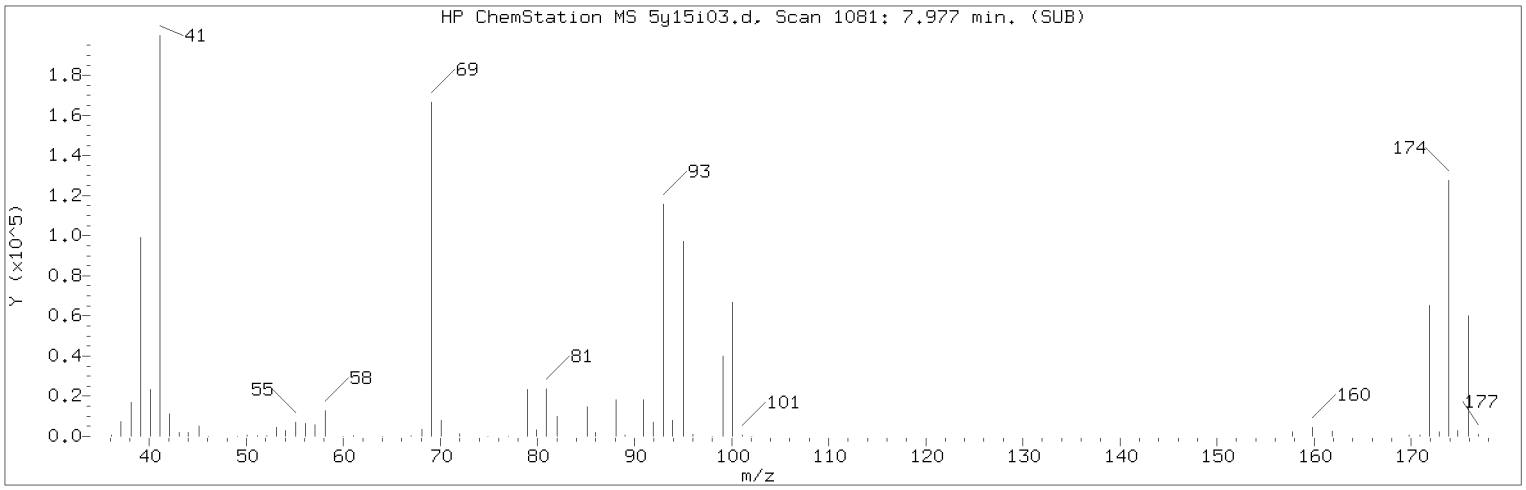
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD050 Lab Sample ID: VSTD050

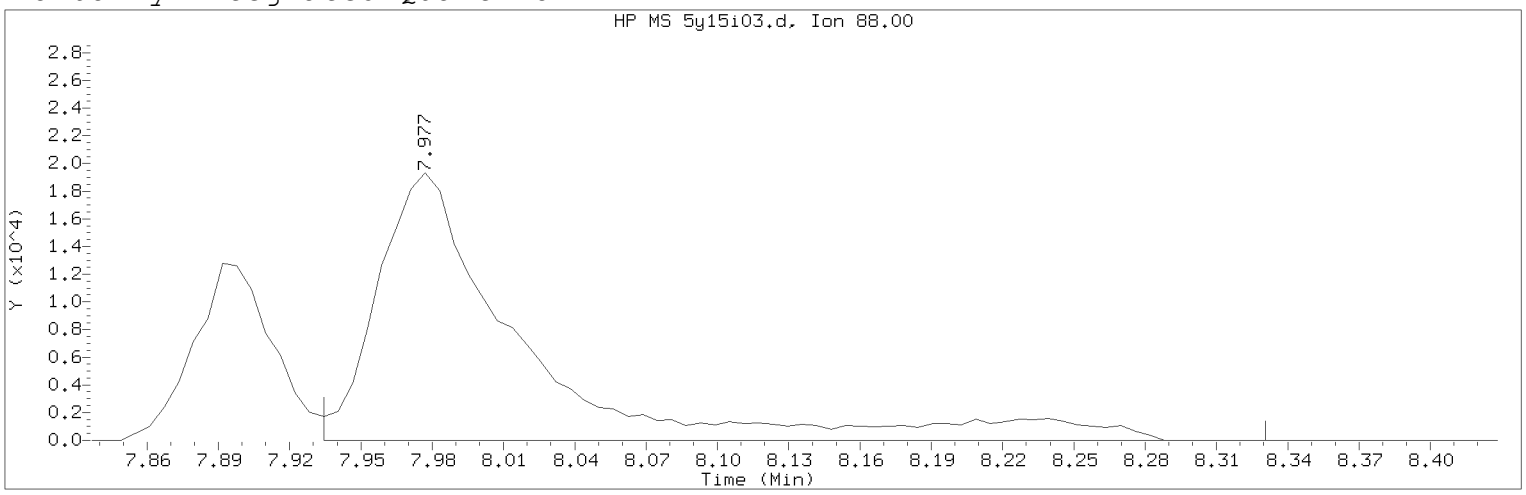
Compound Number : 73
Compound Name : Methylcyclohexane
Scan Number : 1057
Retention Time (minutes): 7.831
Quant Ion : 83.00
Area : 459664
On-column Amount (ng) : 34.3461
Integration start scan : 1056 Integration stop scan: 1096
Y at integration start : 0 Y at integration end: 141

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i03.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:55 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

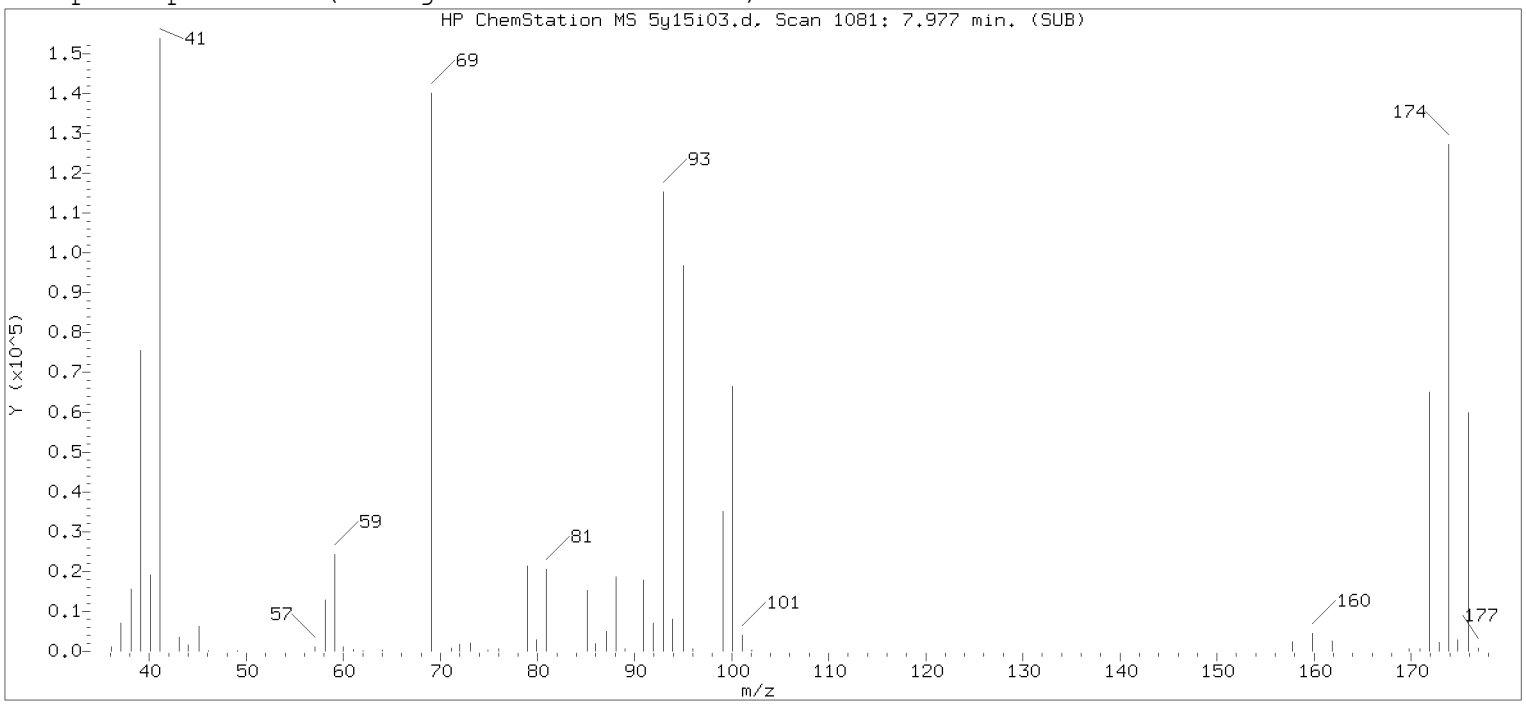
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 1081
Retention Time (minutes): 7.977
Quant Ion : 88.00
Area (flag) : 82070M
On-Column Amount (ng) : 606.1612
Integration start scan : 1073 Integration stop scan: 1138
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

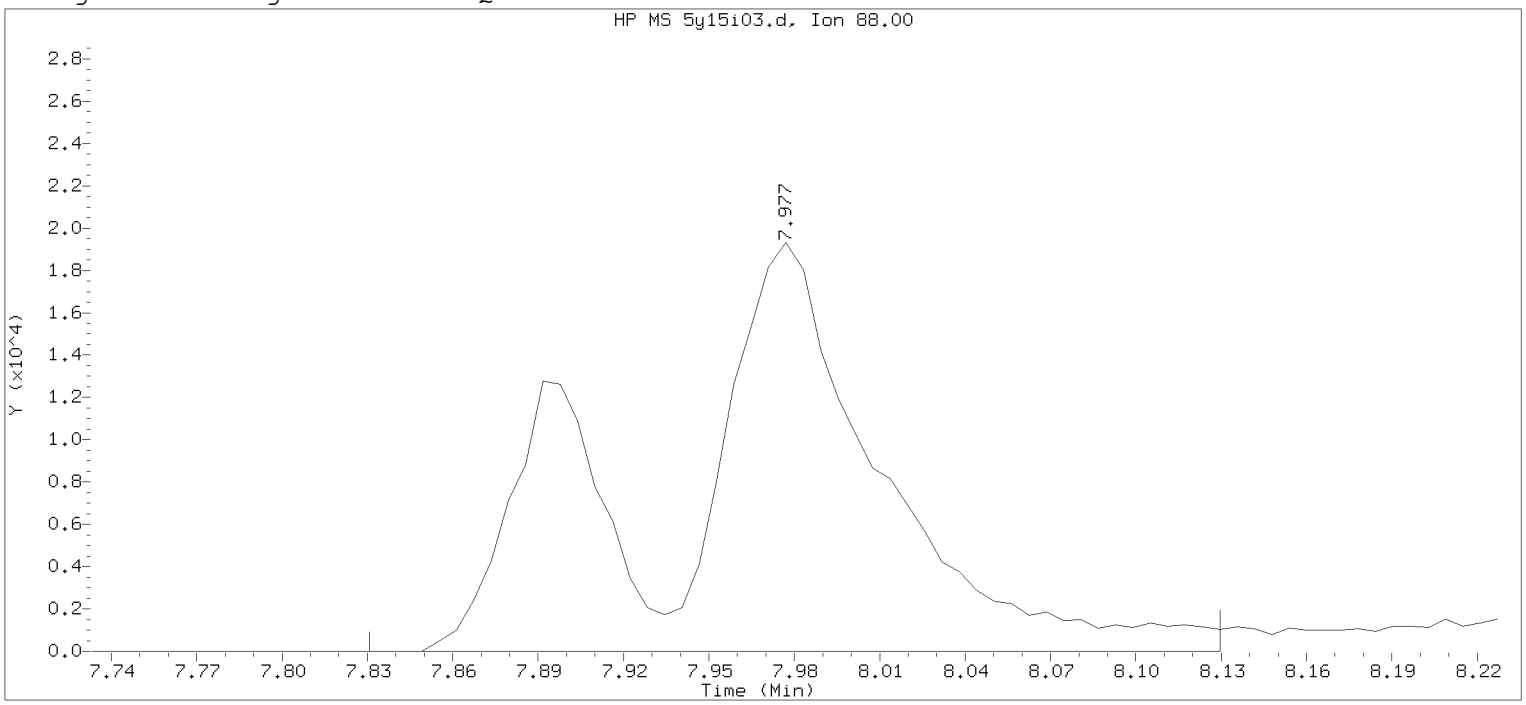
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i03.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:55 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 1081
Retention Time (minutes): 7.977
Quant Ion : 88.00
Area : 100944
On-column Amount (ng) : 353.7619
Integration start scan : 1056 Integration stop scan: 1105
Y at integration start : 0 Y at integration end: 0

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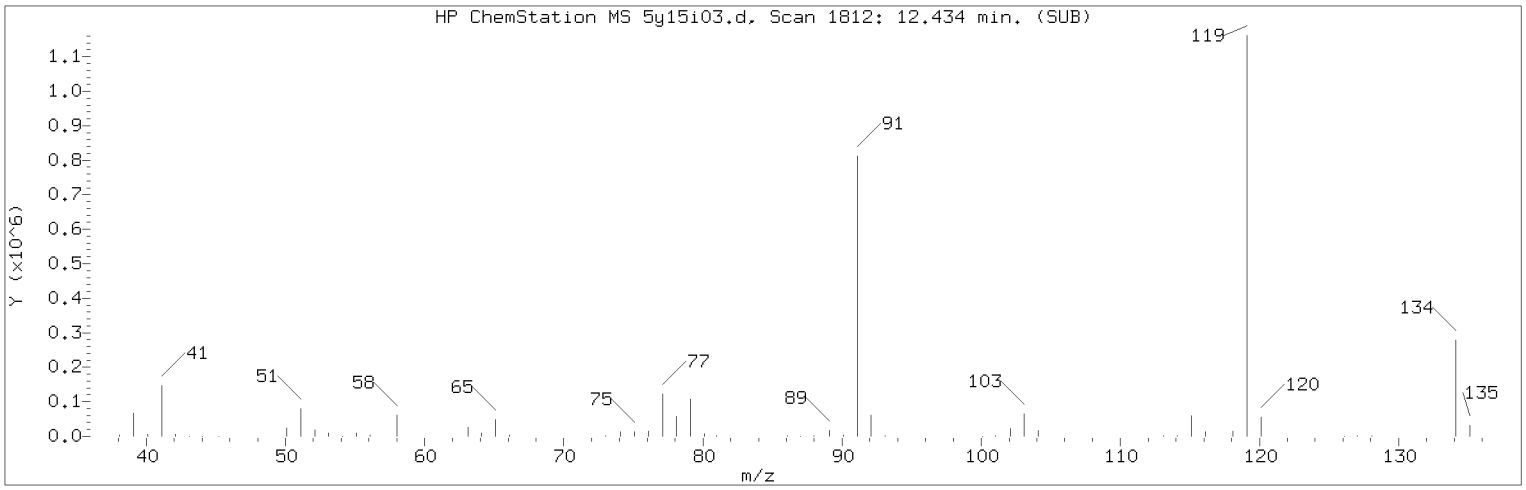
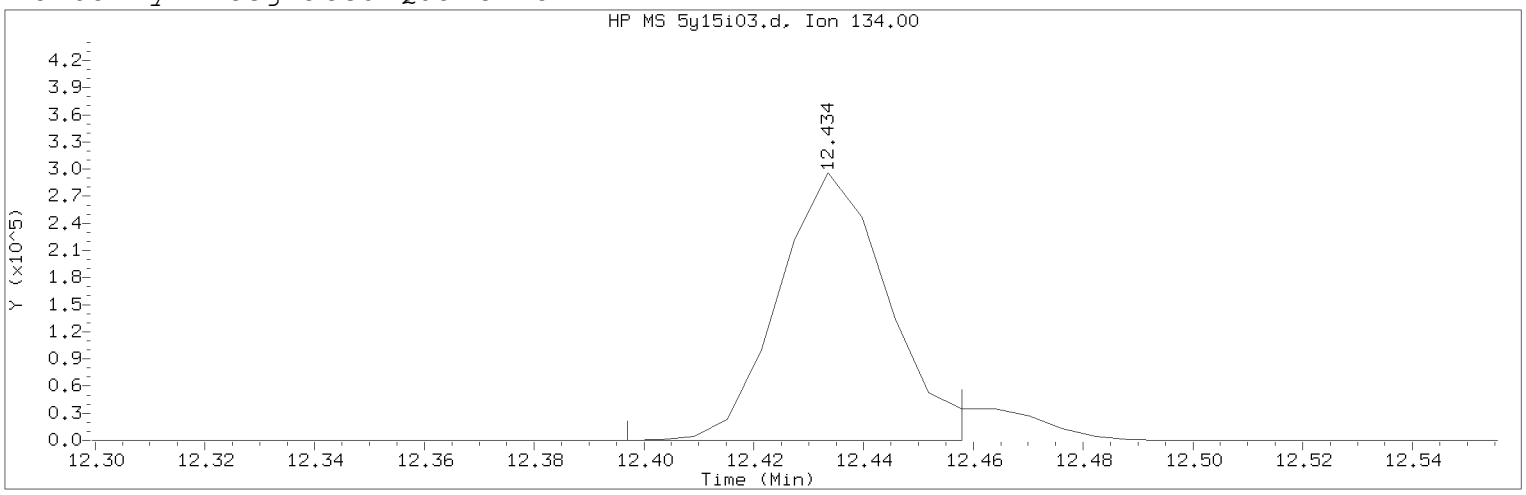
Target 3.5 esignature user keeper 237

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i03.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:55 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:51
Date, time and analyst ID of latest file update: 16-May-2018 10:51 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

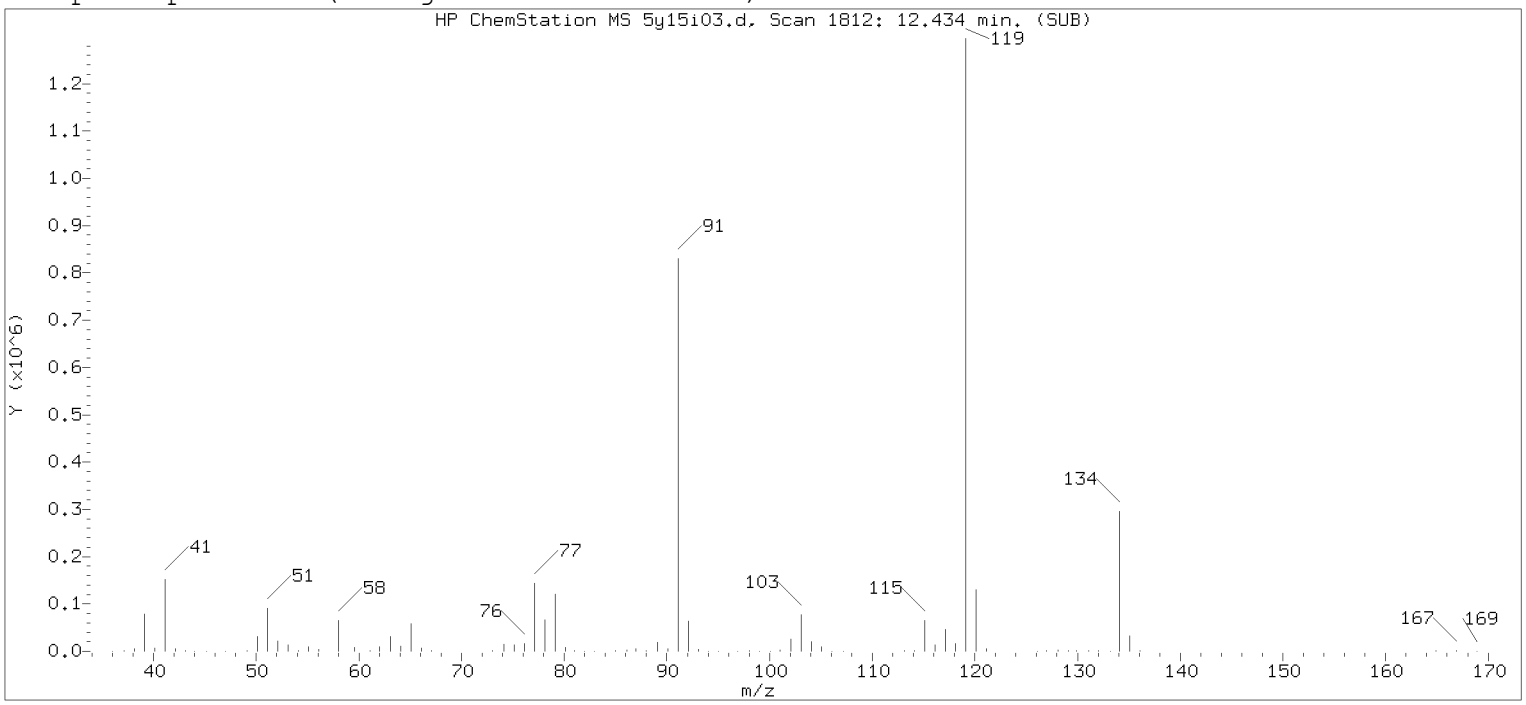
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.434
Quant Ion : 134.00
Area (flag) : 407955M
On-Column Amount (ng) : 57.7281
Integration start scan : 1805 Integration stop scan: 1815
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

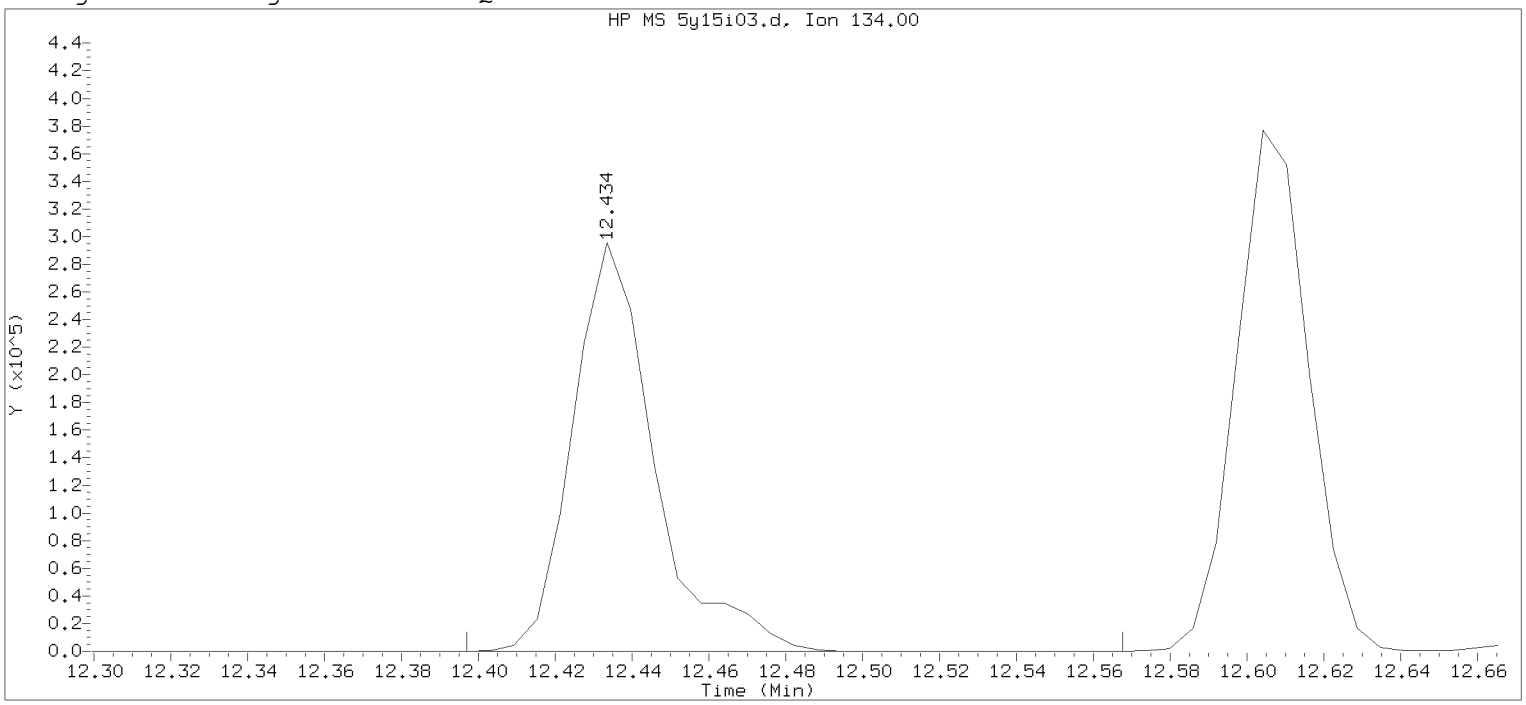
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i03.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 14:55 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.434
Quant Ion : 134.00
Area : 437049
On-column Amount (ng) : 48.0617
Integration start scan : 1805 Integration stop scan: 1833
Y at integration start : 0 Y at integration end: 0

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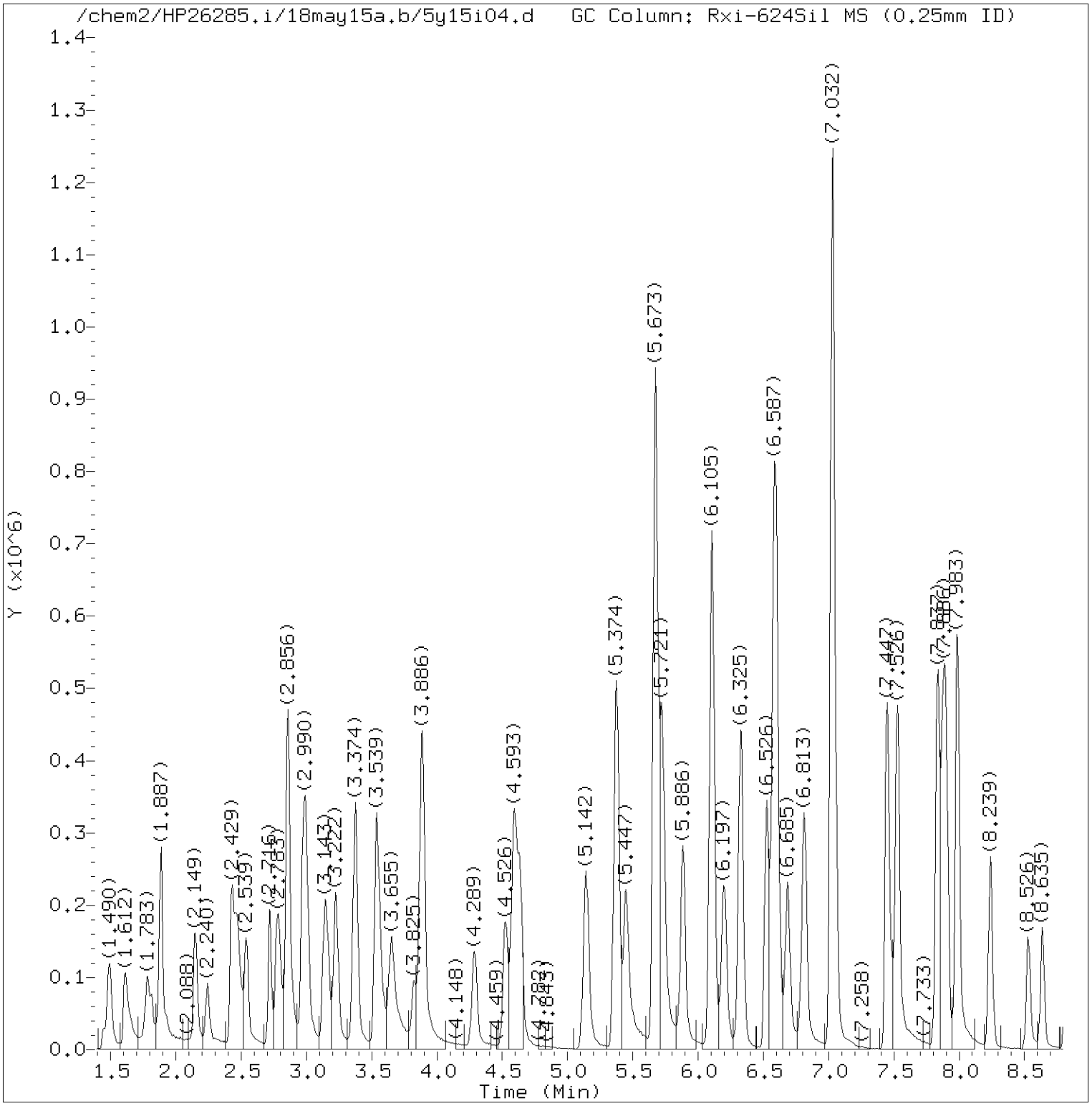
Target 3.5 esignature user keeper 239



Total Ion Chromatogram (TIC)

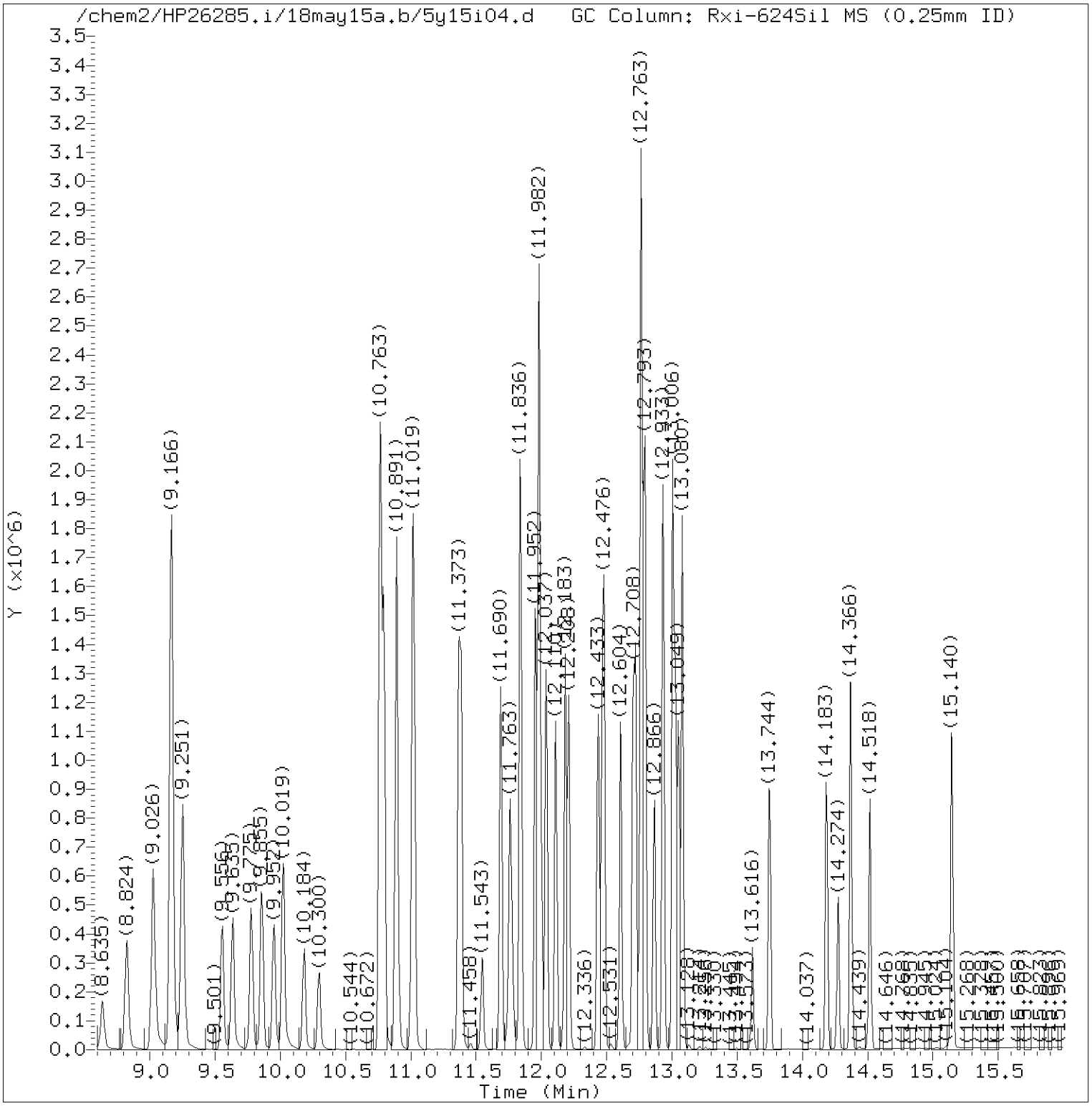
Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.612	85	220120	21.284
4) Chloromethane	(2)	1.777	50	147587	20.039
6) Vinyl Chloride	(2)	1.874	62	148946	20.692
5) 1,3-Butadiene	(2)	1.887	39	87136	18.196
8) Bromomethane	(2)	2.149	94	125048	20.590
9) Chloroethane	(2)	2.240	64	78770	20.620
10) Dichlorofluoromethane	(2)	2.429	67	240626	20.229
12) Trichlorofluoromethane	(2)	2.472	101	239208	21.015
11) n-Pentane	(2)	2.539	43	91584	14.497
14) Ethyl ether	(2)	2.716	59	120054	20.314
15) Freon 123a	(2)	2.783	67	160007	19.453
16) Acrolein	(1)	2.856	56	505361	193.863
17) 1,1-Dichloroethene	(2)	2.972	96	119030	19.521
17) 1,1-Dichloroethene	(2)	2.972	63	59344	19.372
19) Freon 113	(2)	2.990	101	101390	15.737
18) Acetone	(1)	3.002	58	50559	36.184
22) Methyl Iodide	(2)	3.143	142	278330	19.349
21) 2-Propanol	(1)	3.149	45	163165M	182.739
23) Carbon Disulfide	(2)	3.222	76	385758	19.394
27) Methyl Acetate	(2)	3.356	43	180050	20.062
25) Allyl Chloride	(2)	3.374	41	229339	21.360
28) Methylene Chloride	(2)	3.539	84	151827	19.338
29)*t-Butyl alcohol-d10	(1)	3.545	65	378332	250.000
30) t-Butyl alcohol	(1)	3.655	59	324696	186.660
31) Acrylonitrile	(2)	3.819	53	94940	20.335
33) Methyl Tertiary Butyl Ether	(2)	3.880	73	353445	18.675
32) trans-1,2-Dichloroethene	(2)	3.892	96	147932	19.556
34) n-Hexane	(2)	4.289	57	99375	12.263
36) 1,1-Dichloroethane	(2)	4.520	63	266688	19.611
38) di-Isopropyl ether	(2)	4.587	45	454511	19.218
39) 2-Chloro-1,3-butadiene	(2)	4.636	53	199393	19.486
40) Ethyl t-butyl ether	(2)	5.142	59	354221	19.001
44) 2-Butanone	(2)	5.362	43	277603	40.917
45) 2,2-Dichloropropane	(2)	5.380	77	146167	19.776
42) cis-1,2-Dichloroethene	(2)	5.380	96	177747	19.807
47) Propionitrile	(1)	5.447	54	403522	194.191
48) Methacrylonitrile	(2)	5.673	67	513560	99.833
49) Bromochloromethane	(2)	5.721	128	99366	20.840

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.733	71	78869	39.706
51) Chloroform	(2)	5.880	83	293221	19.051
53) 1,1,1-Trichloroethane	(2)	6.099	97	246907	18.699
52)$Dibromofluoromethane	(2)	6.105	113	402447	49.570
52)$Dibromofluoromethane	(2)	6.111	111	407148	49.446
43) 1,2-Dichloroethene (Total)	(2)		96	325679	39.363
54) Cyclohexane	(2)	6.197	56	153911	15.044
54) Cyclohexane	(2)	6.203	84	133259	15.014
54) Cyclohexane	(2)	6.203	69	48591	15.194
56) Carbon Tetrachloride	(2)	6.319	117	170265	17.646
55) 1,1-Dichloropropene	(2)	6.331	75	193604	18.507
58) Isobutyl Alcohol	(1)	6.526	41	288262	477.626
57)$1,2-Dichloroethane-d4	(2)	6.575	102	84829	48.562
57)$1,2-Dichloroethane-d4	(2)	6.575	65	406169	48.080
57)$1,2-Dichloroethane-d4	(2)	6.581	104	53409	47.982
60) Benzene	(2)	6.599	78	649661	19.237
61) 1,2-Dichloroethane	(2)	6.691	62	210645	17.954
61) 1,2-Dichloroethane	(2)	6.685	98	19263	19.068
65) t-Amyl methyl ether	(2)	6.813	73	361620	18.779
66)*Fluorobenzene	(2)	7.026	96	1501328	50.000
67) n-Heptane	(2)	7.056	43	97114	11.296
69) n-Butanol	(1)	7.447	56	479689	972.946
71) Trichloroethene	(2)	7.526	95	176317	19.164
73) Methylcyclohexane	(2)	7.837	83	283792	21.892
73) Methylcyclohexane	(2)	7.831	98	124097	21.640
74) 1,2-Dichloropropane	(2)	7.873	63	169118	19.243
72) t-Amyl ethyl ether	(2)	7.898	87	177131	17.730
76) 1,4-Dioxane	(1)	7.977	88	80861M	532.318
77) Methyl Methacrylate	(2)	7.989	69	155558	19.078
75) Dibromomethane	(2)	7.989	93	111909	18.603
79) Bromodichloromethane	(2)	8.239	83	219444	18.946
80) 2-Nitropropane	(2)	8.526	41	120367M	39.054
81) 2-Chloroethyl Vinyl Ether	(2)	8.635	63	89911	18.501
82) cis-1,3-Dichloropropene	(2)	8.824	75	278917	19.340
83) 4-Methyl-2-pentanone	(2)	9.026	43	564879	41.665
84)$Toluene-d8	(3)	9.166	98	1490954	50.362
84)$Toluene-d8	(3)	9.166	100	966992	50.185
89) Toluene	(3)	9.251	92	422917	18.772

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) trans-1,3-Dichloropropene	(3)	9.556	75	251809	19.159
92) Ethyl Methacrylate	(3)	9.635	69	260138	19.689
93) 1,1,2-Trichloroethane	(3)	9.775	97	172189	18.870
94) Tetrachloroethene	(3)	9.855	166	183731	17.549
95) 1,3-Dichloropropane	(3)	9.952	76	274922	19.003
97) 2-Hexanone	(3)	10.019	43	474547	42.776
91) 1,3-Dichloropropene (total)	(3)		100	530726	38.500
98) Dibromochloromethane	(3)	10.184	129	192477	19.115
100) 1,2-Dibromoethane	(3)	10.294	107	187982	18.859
101)*Chlorobenzene-d5	(3)	10.763	117	1212671	50.000
102) 1-Chlorohexane	(3)	10.787	91	174046	15.287
103) Chlorobenzene	(3)	10.793	112	512153	18.351
104) 1,1,1,2-Tetrachloroethane	(3)	10.885	131	177201	18.371
105) Ethylbenzene	(3)	10.891	91	808741	18.310
107) m+p-Xylene	(3)	11.019	106	627043	35.999
108) o-Xylene	(3)	11.367	106	317738	18.572
110) Styrene	(3)	11.385	104	533520	18.999
111) Bromoform	(3)	11.543	173	141586	18.425
112) Isopropylbenzene	(3)	11.690	105	729821	17.823
113) Cyclohexanone	(1)	11.763	55	374283	556.934
109) Xylene (Total)	(3)		106	944781	54.571
115)$4-Bromofluorobenzene	(3)	11.836	95	605894	50.011
115)$4-Bromofluorobenzene	(3)	11.842	174	550701	50.104
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	289482M	18.490
116) Bromobenzene	(4)	11.958	156	226936	17.673
119) trans-1,4-Dichloro-2-butene	(4)	11.982	53	420932	100.354
118) 1,2,3-Trichloropropane	(4)	11.994	110	87546	18.378
120) n-Propylbenzene	(4)	12.037	91	877933	17.546
121) 2-Chlorotoluene	(4)	12.110	126	201816	18.016
123) 1,3,5-Trimethylbenzene	(4)	12.183	105	634487	17.590
122) 4-Chlorotoluene	(4)	12.208	126	213108	17.978
125) tert-Butylbenzene	(4)	12.433	134	119205M	16.703
126) Pentachloroethane	(4)	12.464	167	141001	20.109
127) 1,2,4-Trimethylbenzene	(4)	12.482	105	672014	17.995
128) sec-Butylbenzene	(4)	12.604	105	680308	16.070
130) 1,3-Dichlorobenzene	(4)	12.702	146	423732	17.707
131) p-Isopropyltoluene	(4)	12.720	119	614077	16.386
132)*1,4-Dichlorobenzene-d4	(4)	12.763	152	695201	50.000

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Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,4-Dichlorobenzene	(4)	12.781	146	431801	17.646
135) 1,2,3-Trimethylbenzene	(4)	12.793	105	849679	21.435
136) Benzyl Chloride	(4)	12.866	91	523615	18.702
137) 1,3-Diethylbenzene	(4)	12.933	119	527159	21.635
138) 1,4-Diethylbenzene	(4)	13.006	119	560420	21.500
140) n-Butylbenzene	(4)	13.025	92	305889	15.979
139) 1,2-Dichlorobenzene	(4)	13.049	146	400715	17.531
141) 1,2-Diethylbenzene	(4)	13.080	119	439905	21.462
142) Diethylbenzene (total)	(4)		100	1527484	64.597
143) 1,2-Dibromo-3-chloropropane	(4)	13.616	75	67398	18.022
145) 1,3,5-Trichlorobenzene	(4)	13.750	180	259901	15.926
147) 1,2,4-Trichlorobenzene	(4)	14.183	180	238851	16.298
148) Hexachlorobutadiene	(4)	14.274	225	88123	13.180
149) Naphthalene	(4)	14.372	128	850224	18.372
150) 1,2,3-Trichlorobenzene	(4)	14.518	180	225863	16.644
151) 2-Methylnaphthalene	(4)	15.146	142	476355	20.702

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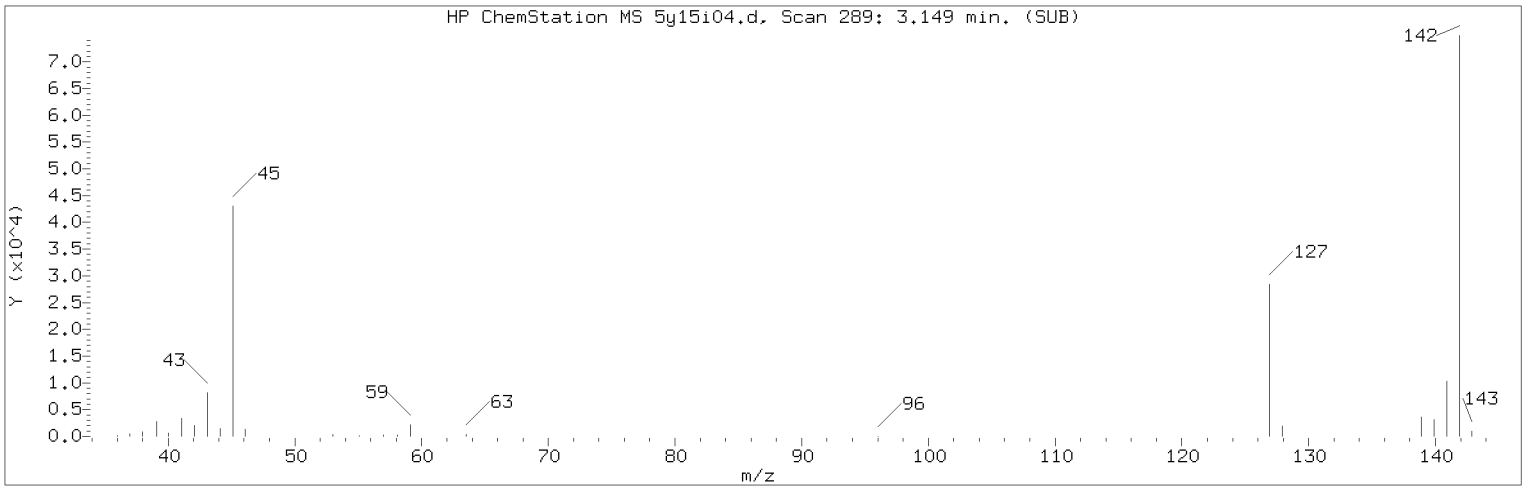
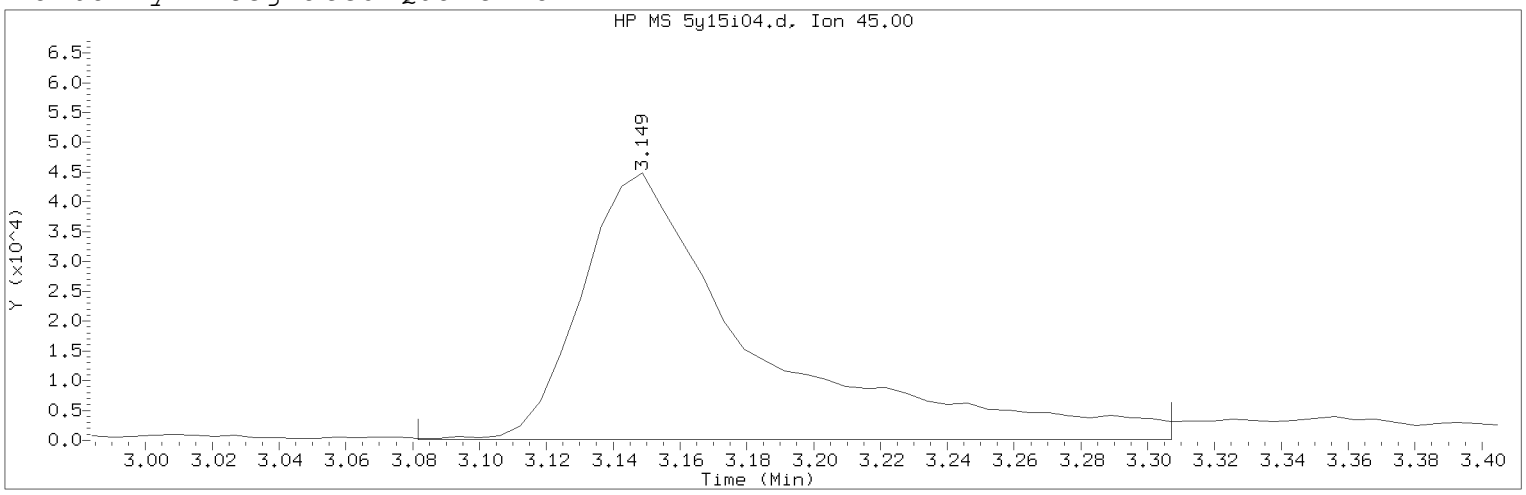
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

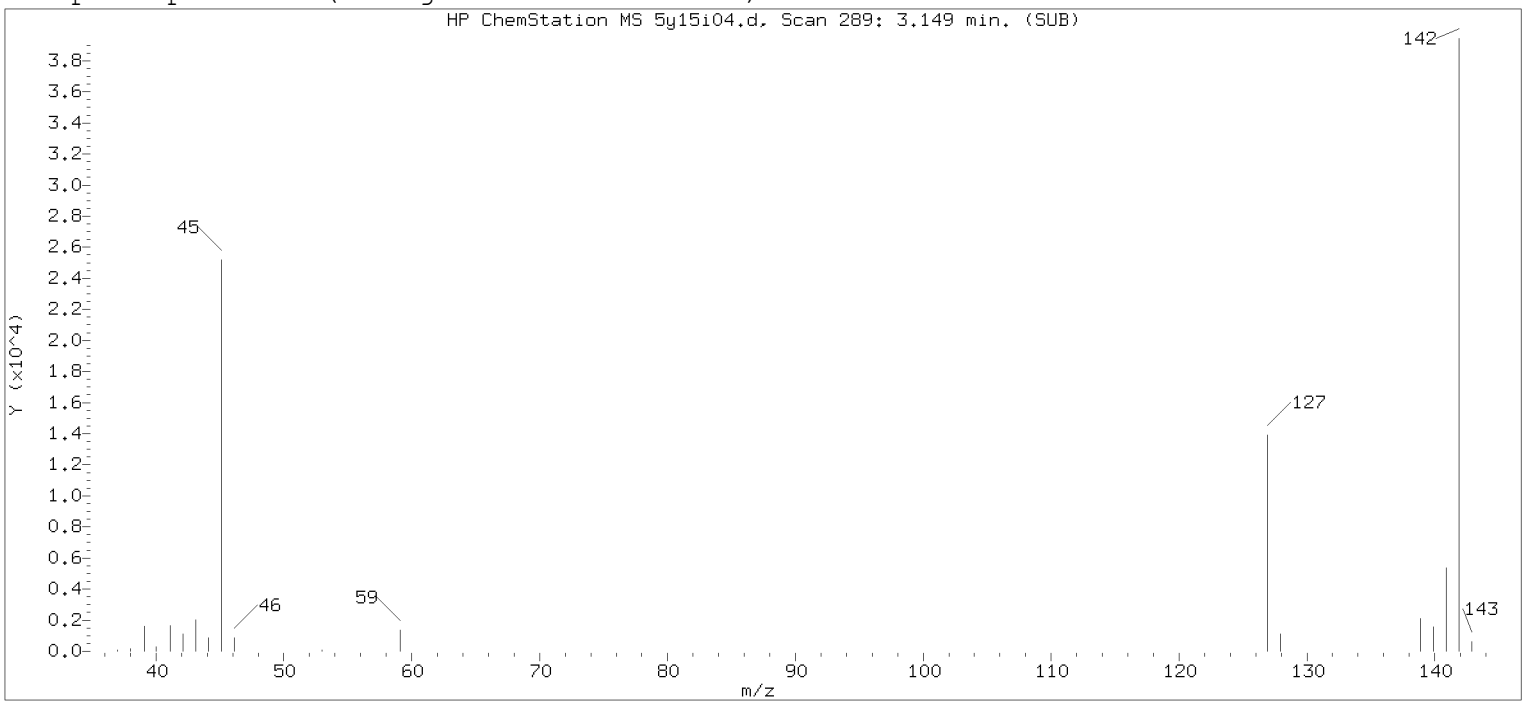
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 289
Retention Time (minutes): 3.149
Quant Ion : 45.00
Area (flag) : 163165M
On-Column Amount (ng) : 182.7390
Integration start scan : 277 Integration stop scan: 314
Y at integration start : 93 Y at integration end: 93

Reason for manual integration: improper integration

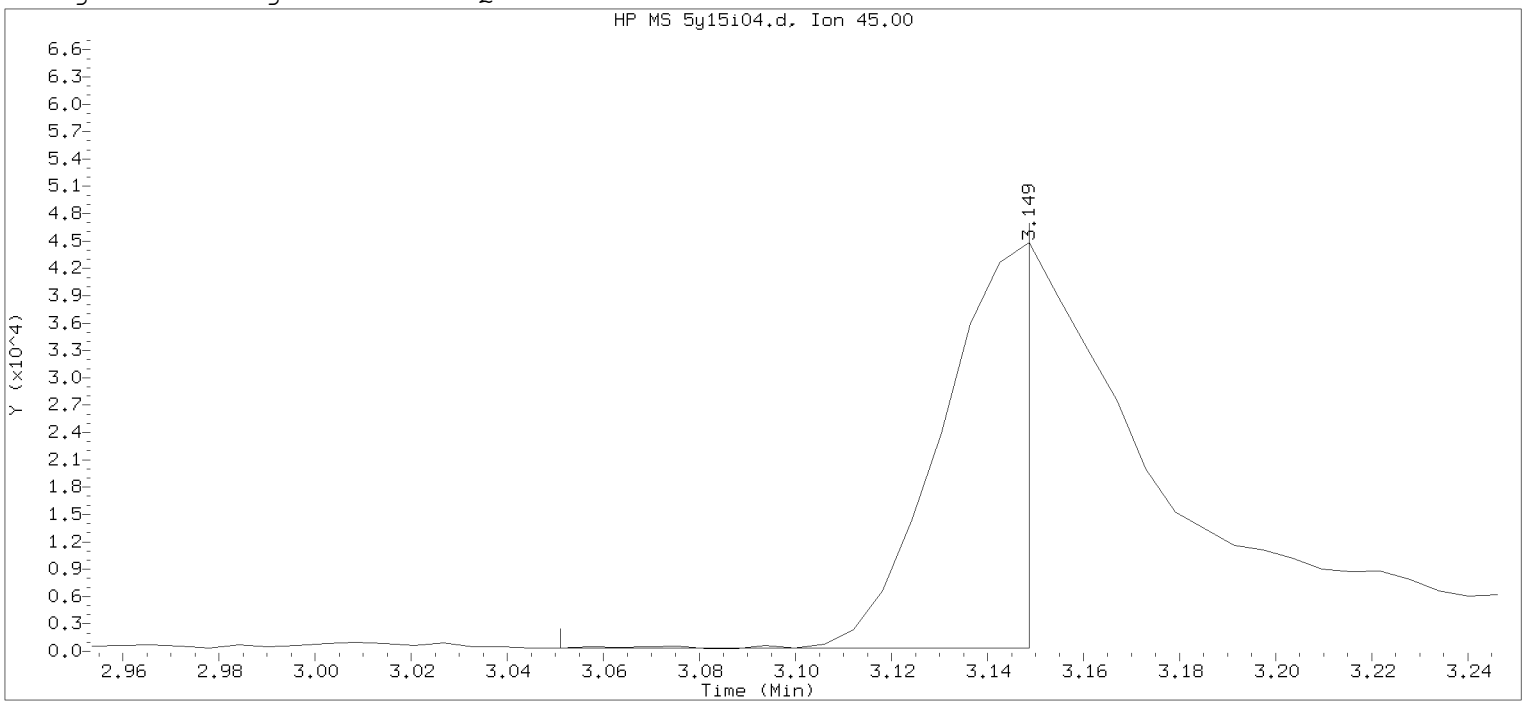
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

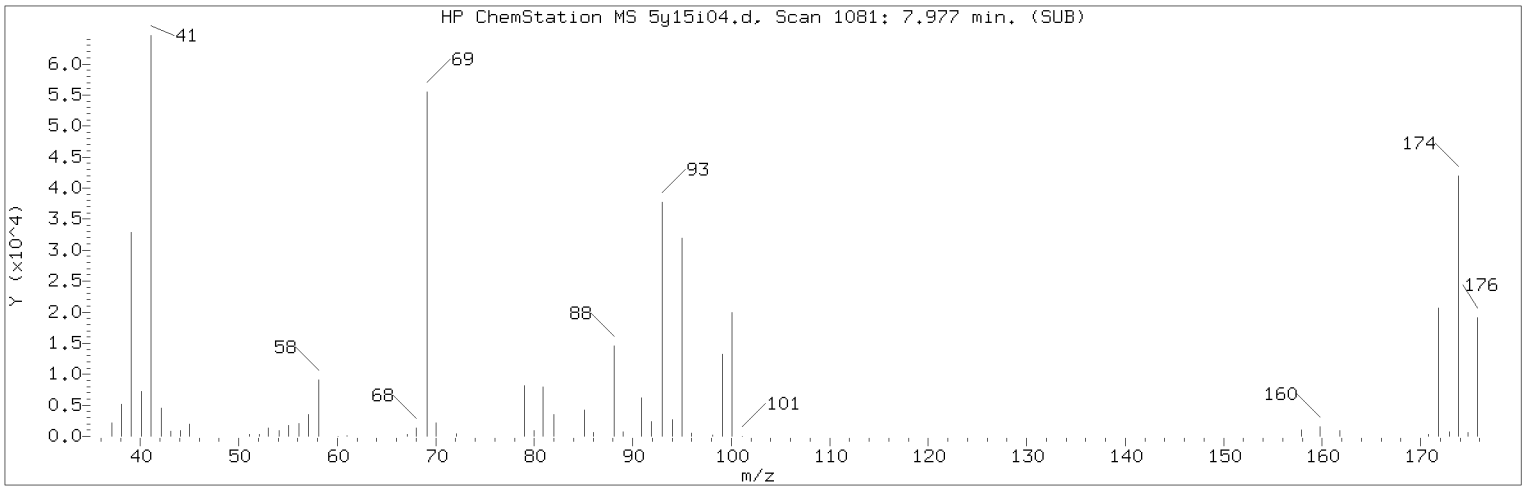
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD020 Lab Sample ID: VSTD020

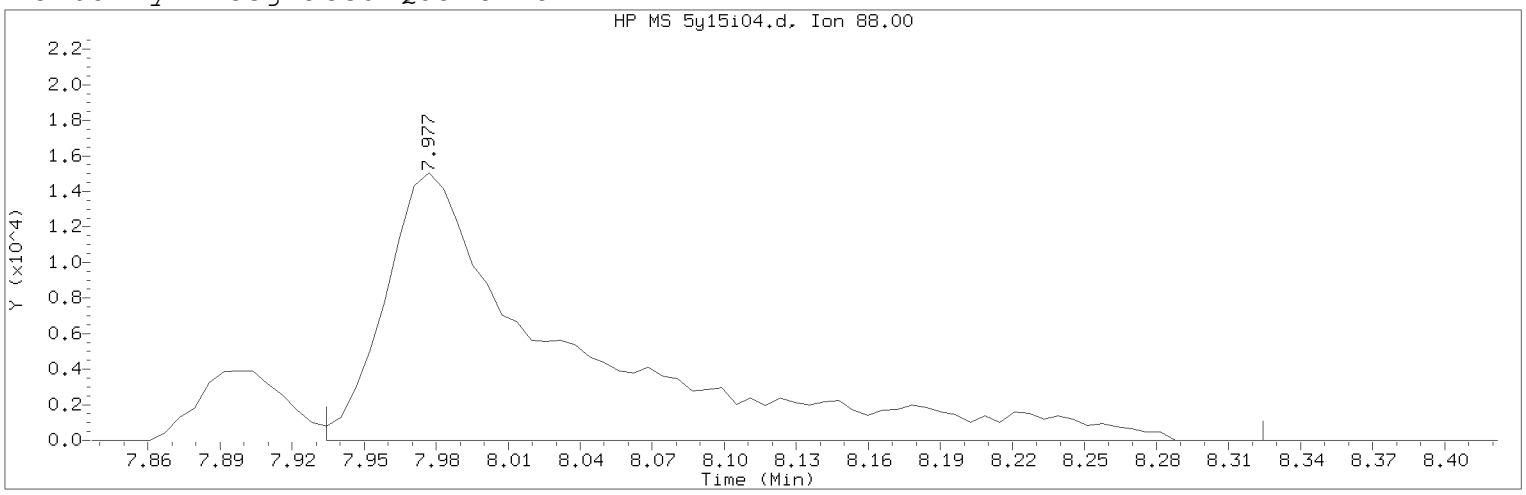
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 289
Retention Time (minutes): 3.149
Quant Ion : 45.00
Area : 53923
On-column Amount (ng) : 31.4956
Integration start scan : 272 Integration stop scan: 288
Y at integration start : 338 Y at integration end: 338

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper 247

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

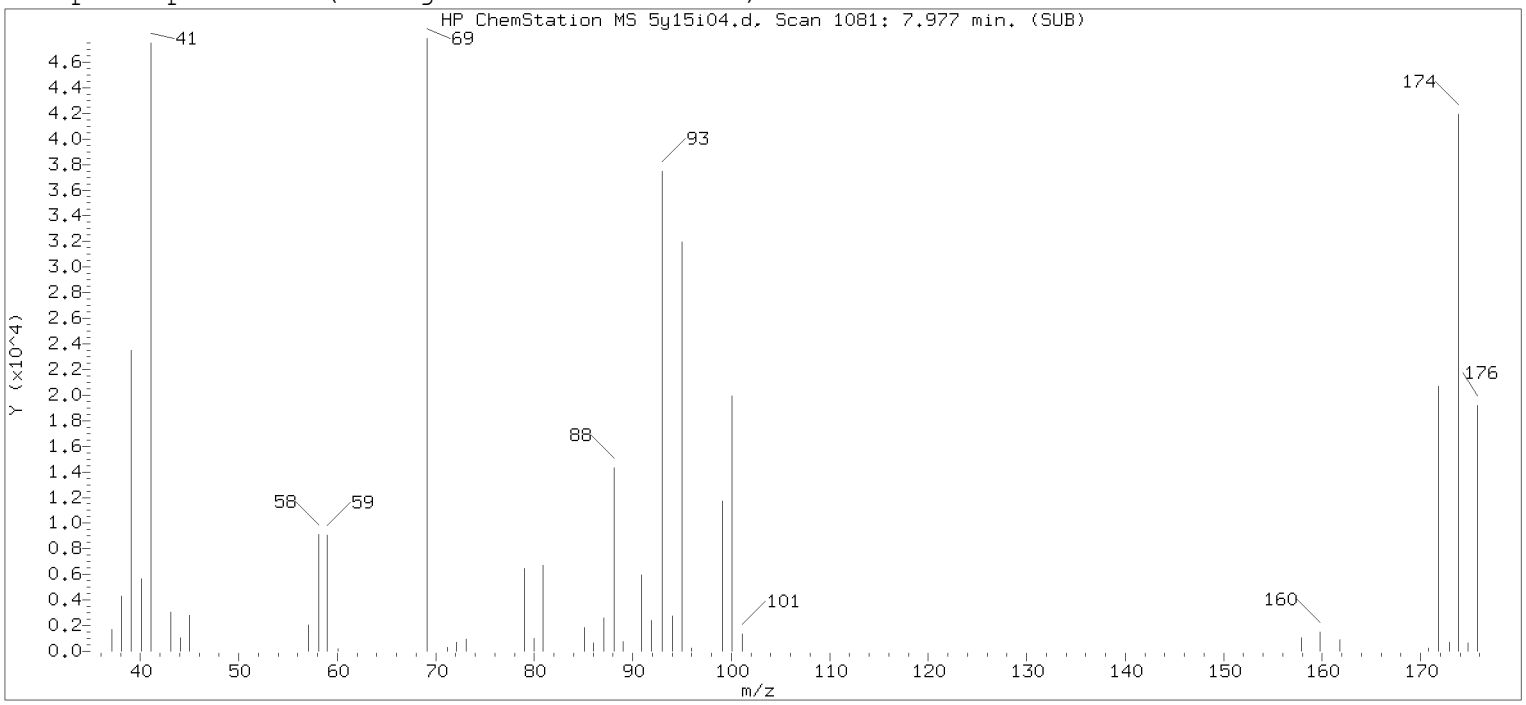
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 1081
Retention Time (minutes): 7.977
Quant Ion : 88.00
Area (flag) : 80861M
On-Column Amount (ng) : 532.3184
Integration start scan : 1073 Integration stop scan: 1137
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

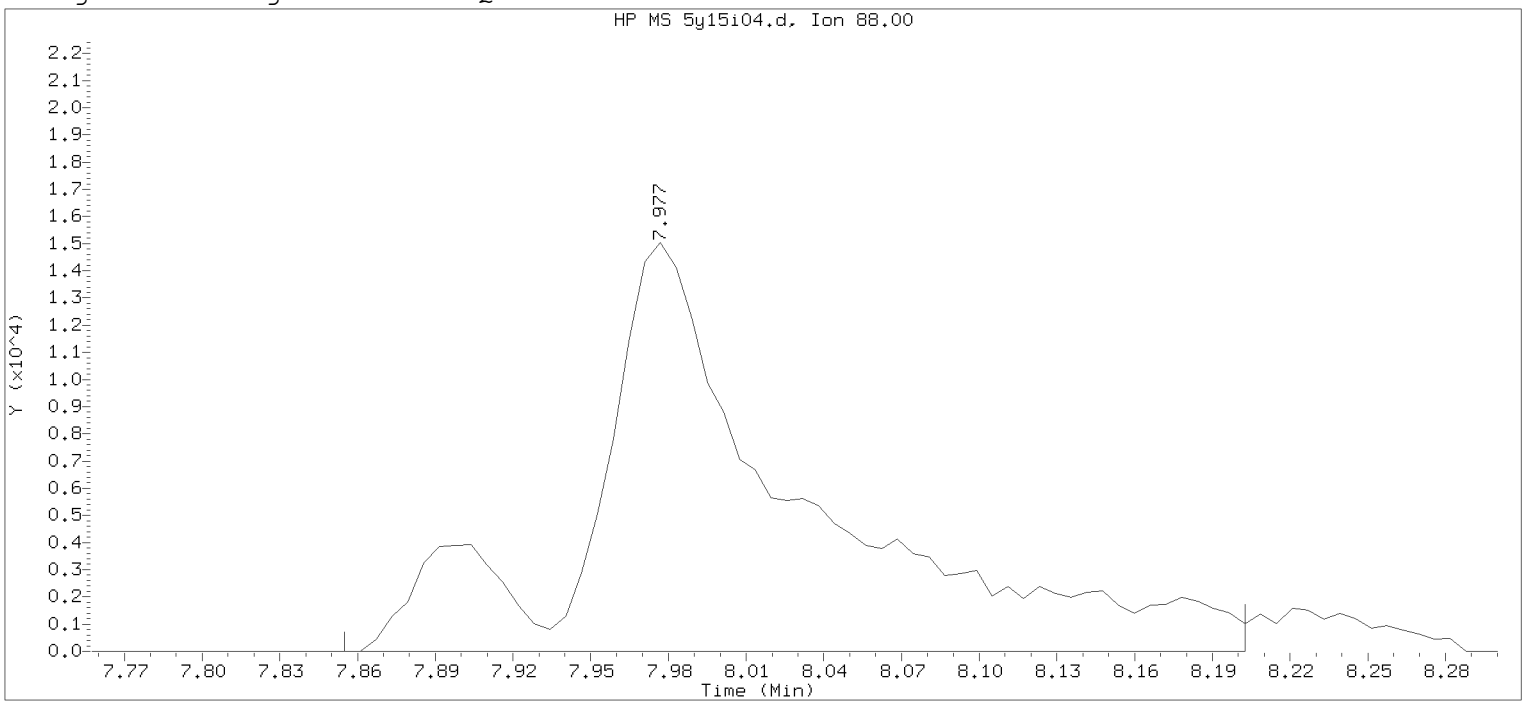
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

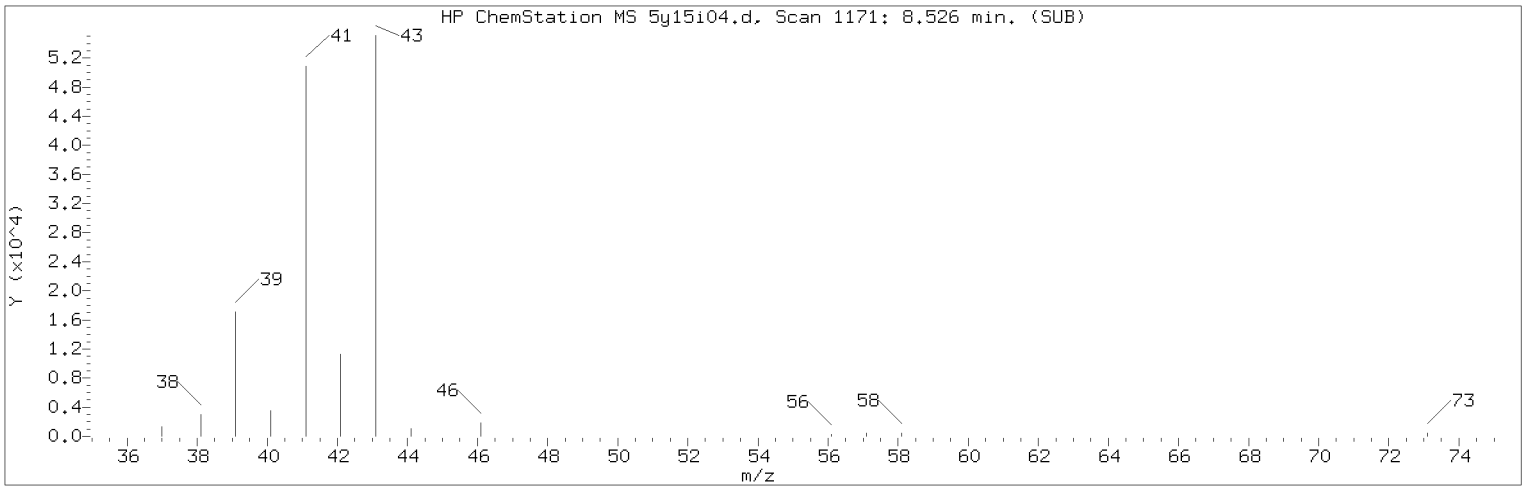
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD020 Lab Sample ID: VSTD020

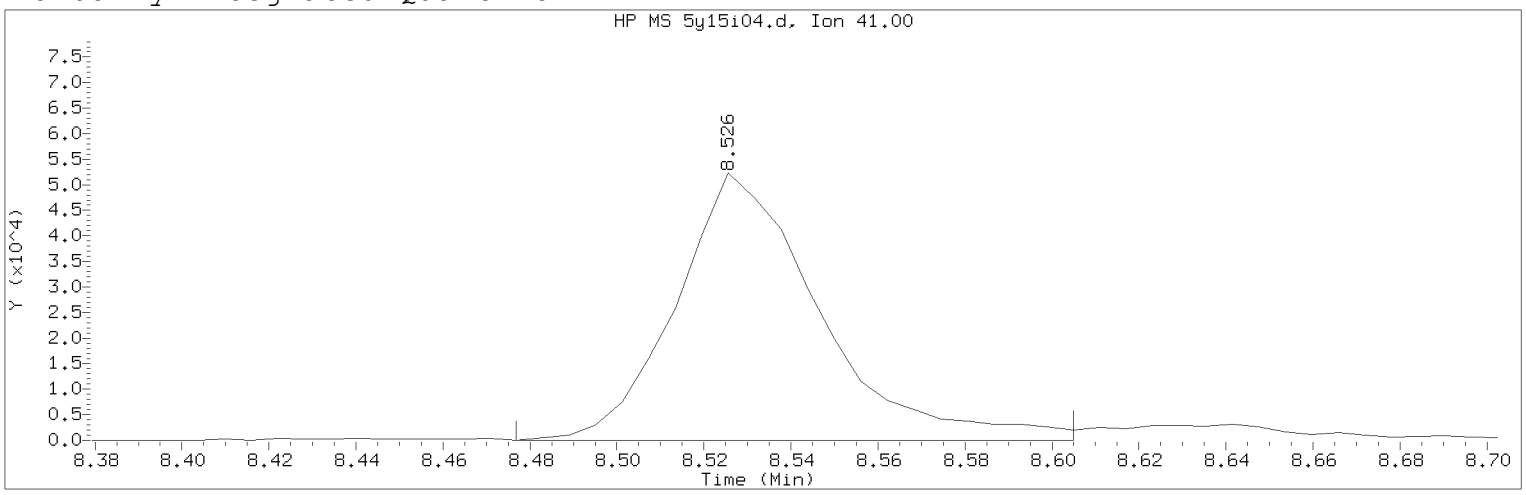
Compound Number	: 76		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1081		
Retention Time (minutes)	: 7.977		
Quant Ion	: 88.00		
Area	: 85620		
On-column Amount (ng)	: 302.6353		
Integration start scan	: 1060	Integration stop scan:	1117
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keyword.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

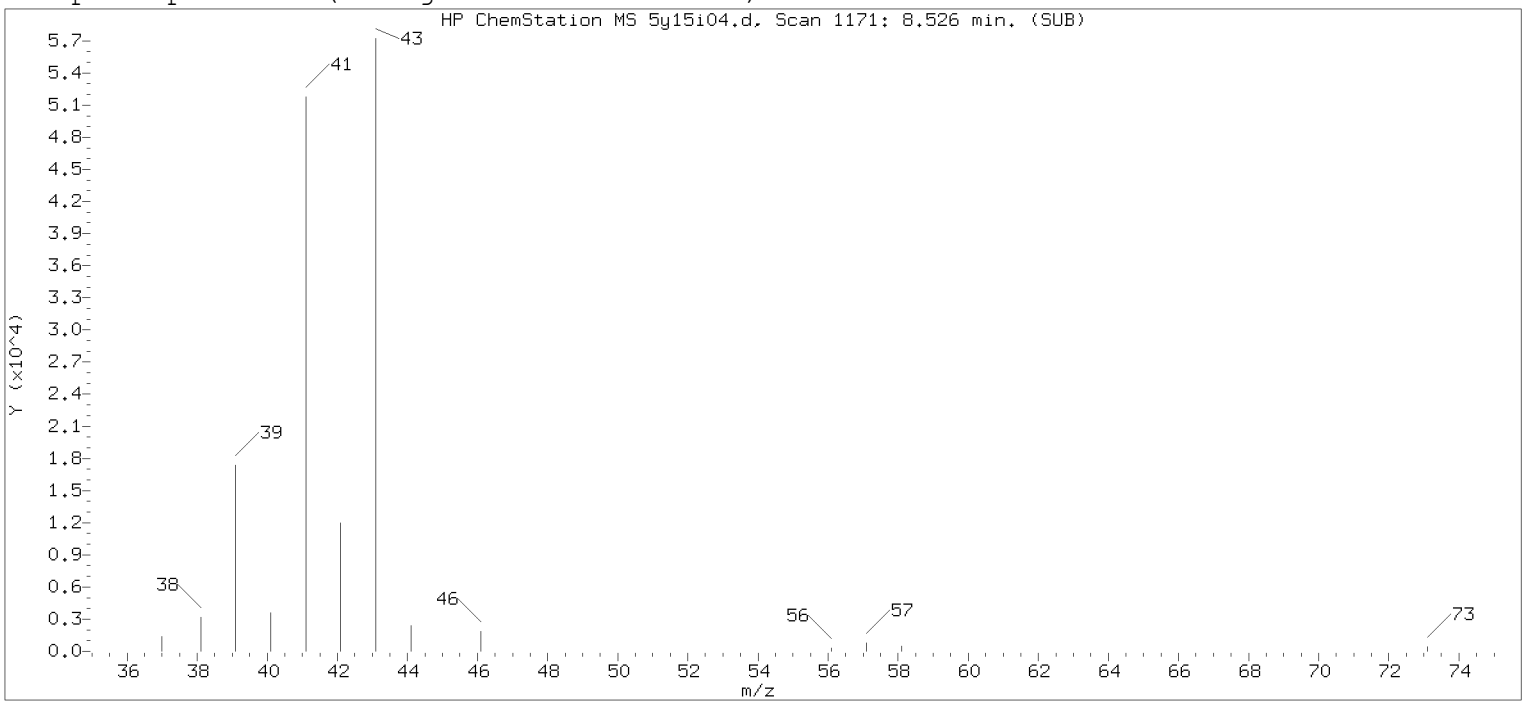
Compound Number : 80
Compound Name : 2-Nitropropane
Scan Number : 1171
Retention Time (minutes): 8.526
Quant Ion : 41.00
Area (flag) : 120367M
On-Column Amount (ng) : 39.0542
Integration start scan : 1162 Integration stop scan: 1183
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

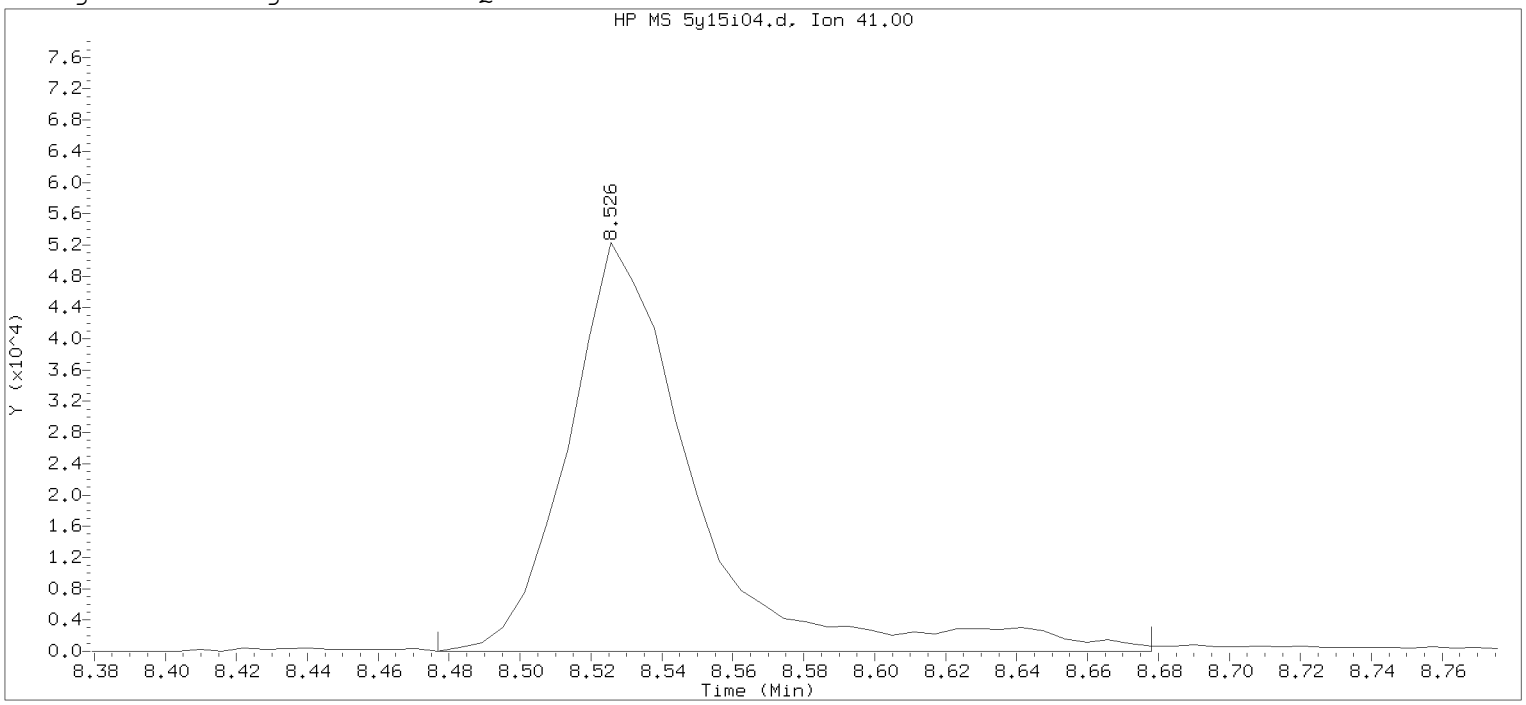
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

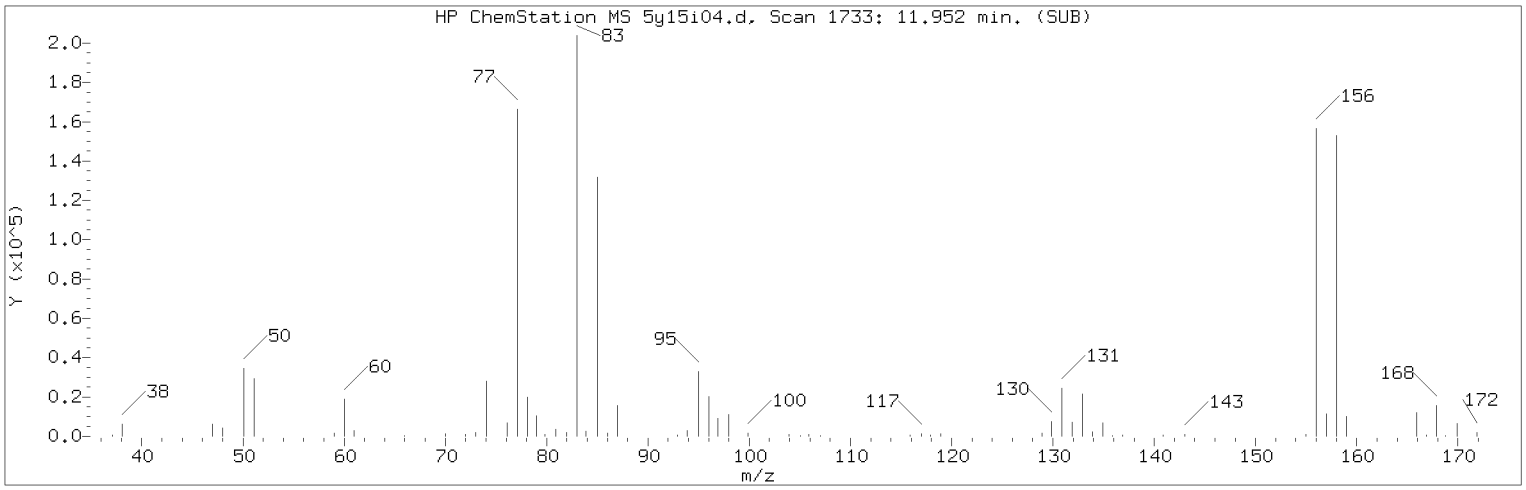
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD020 Lab Sample ID: VSTD020

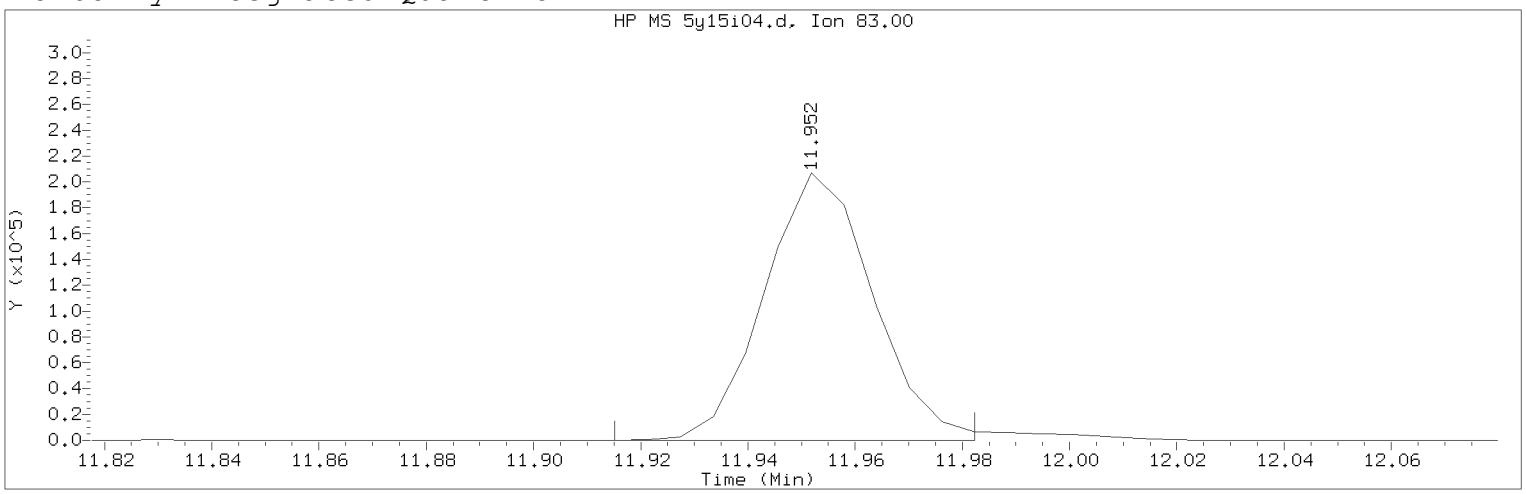
Compound Number	: 80		
Compound Name	: 2-Nitropropane		
Scan Number	: 1171		
Retention Time (minutes)	: 8.526		
Quant Ion	: 41.00		
Area	: 129308		
On-column Amount (ng)	: 28.8019		
Integration start scan	: 1162	Integration stop scan:	1195
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keyword.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

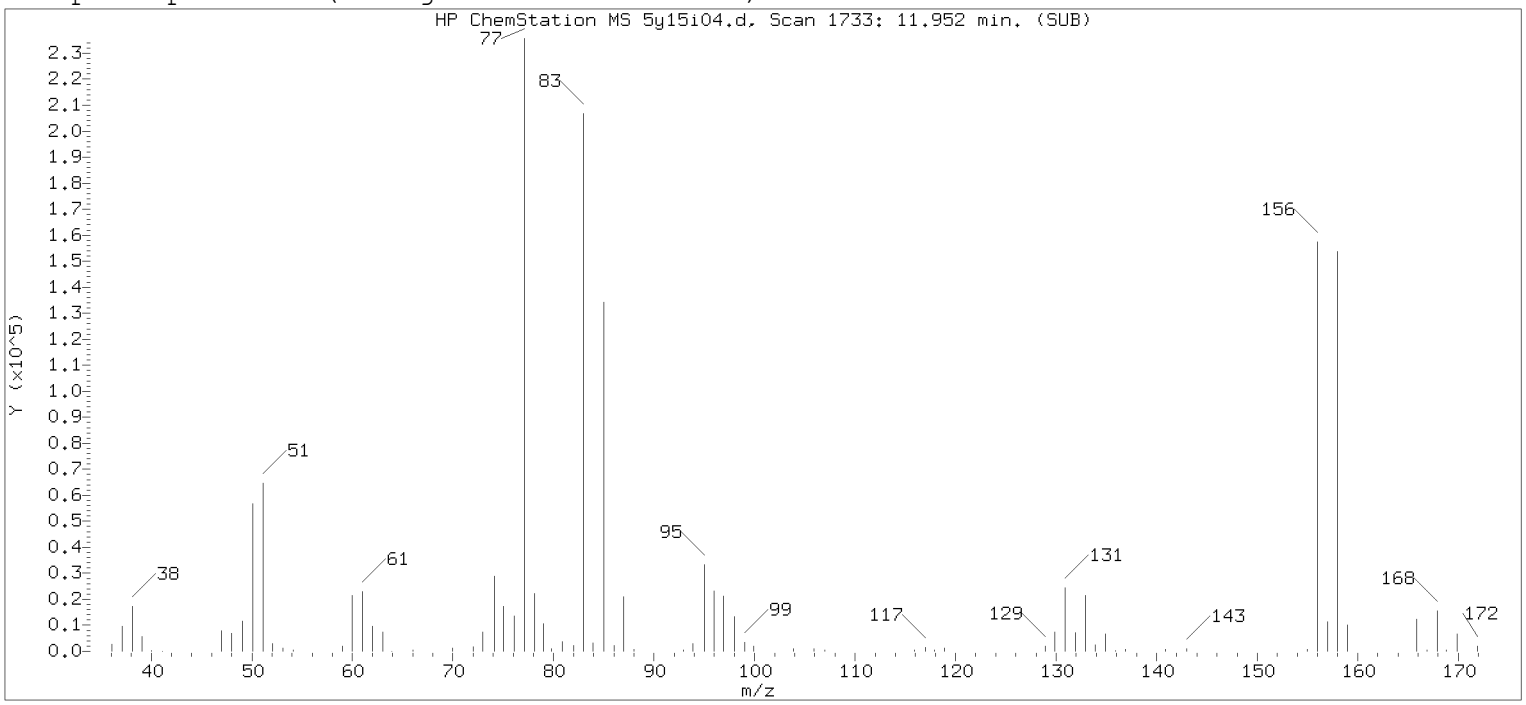
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area (flag) : 289482M
On-Column Amount (ng) : 18.4900
Integration start scan : 1726 Integration stop scan: 1737
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

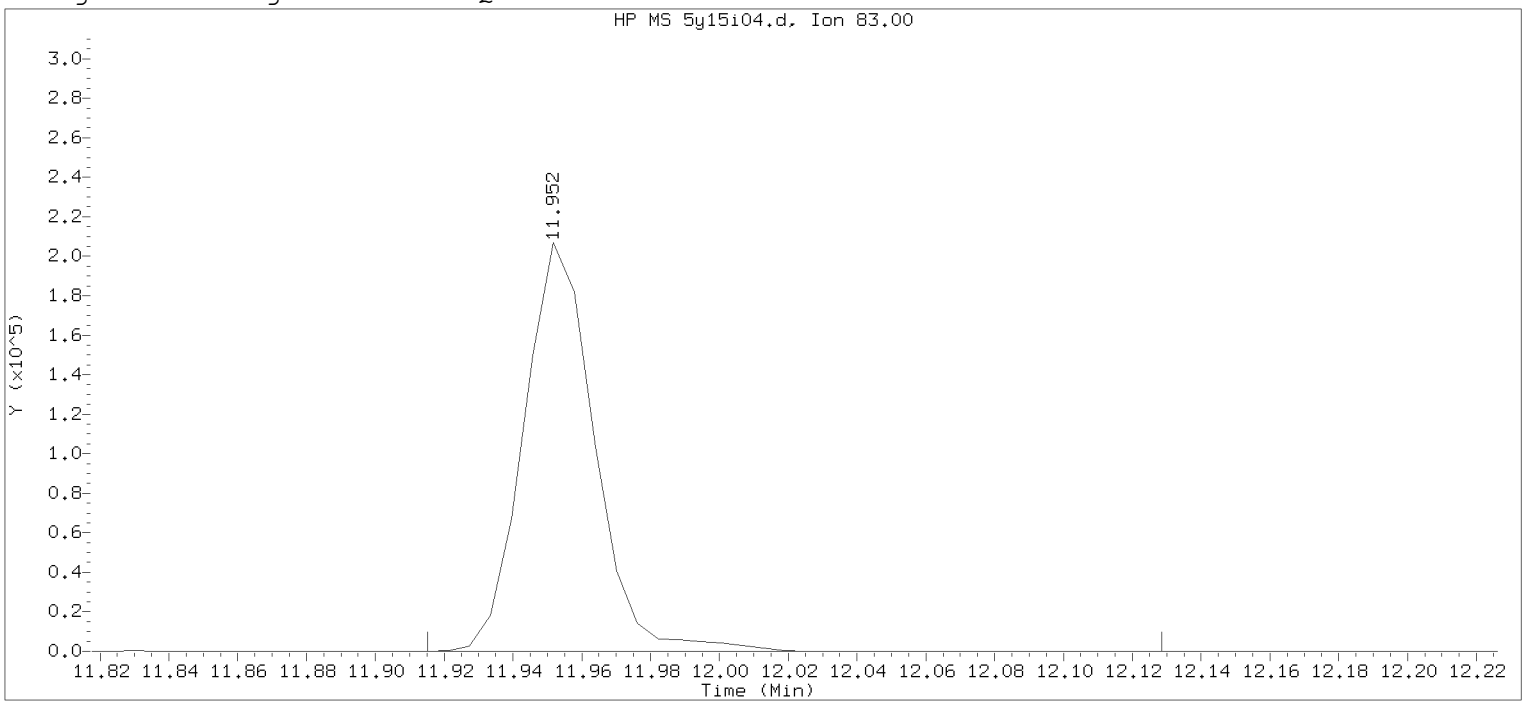
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

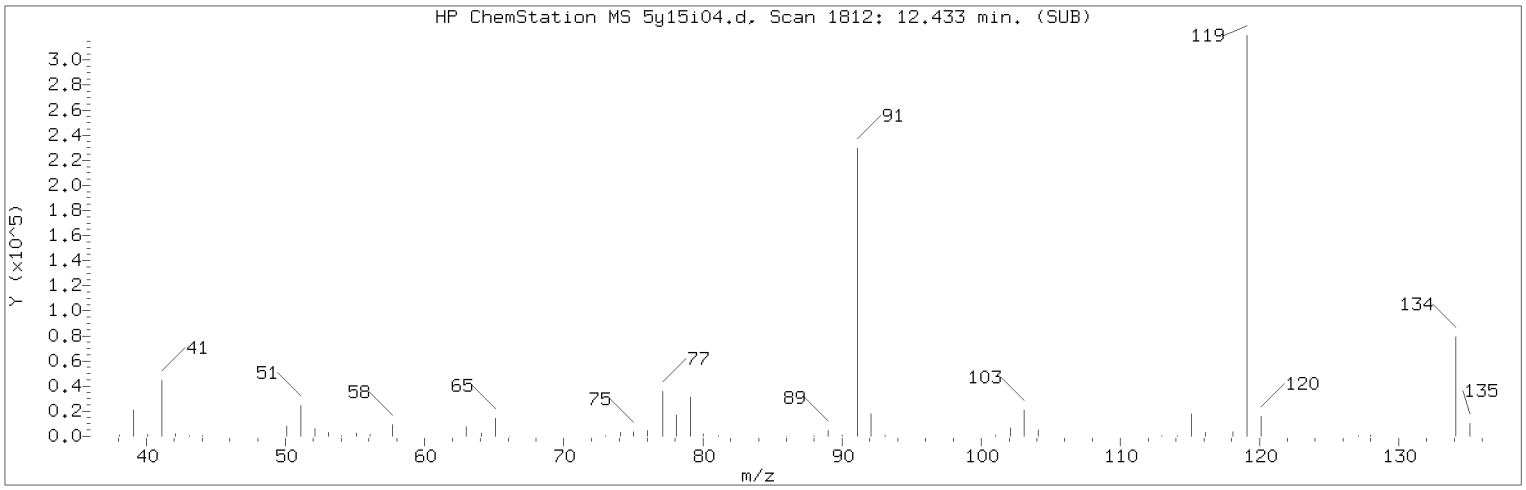
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD020 Lab Sample ID: VSTD020

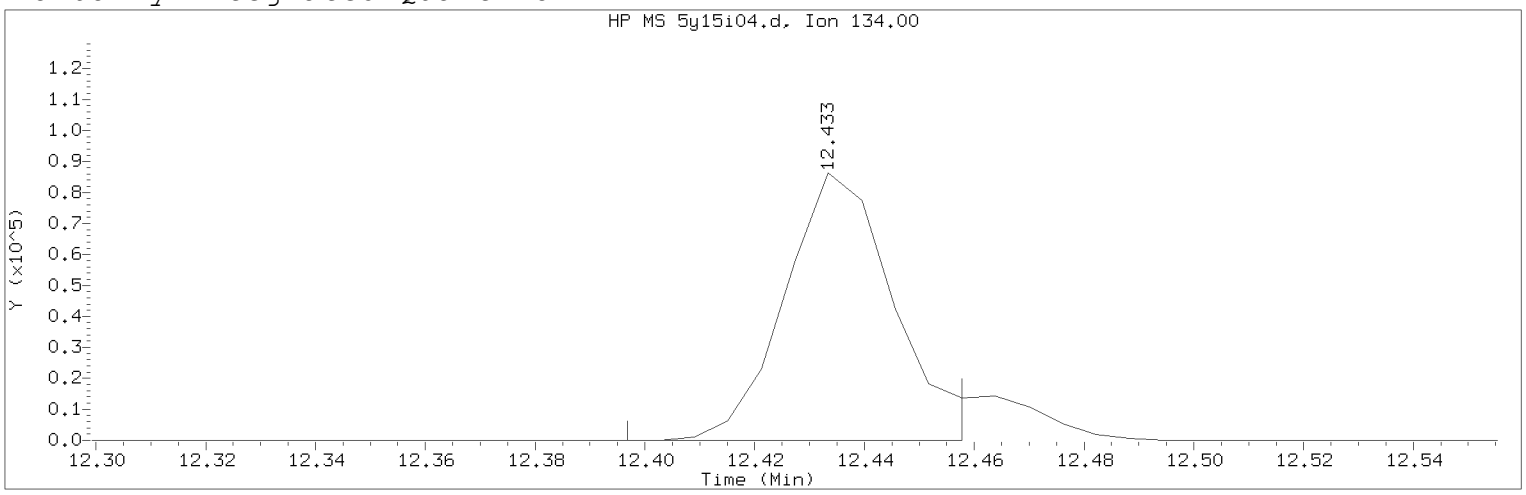
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area : 296789
On-column Amount (ng) : 19.4475
Integration start scan : 1726 Integration stop scan: 1761
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD020 Lab Sample ID: VSTD020

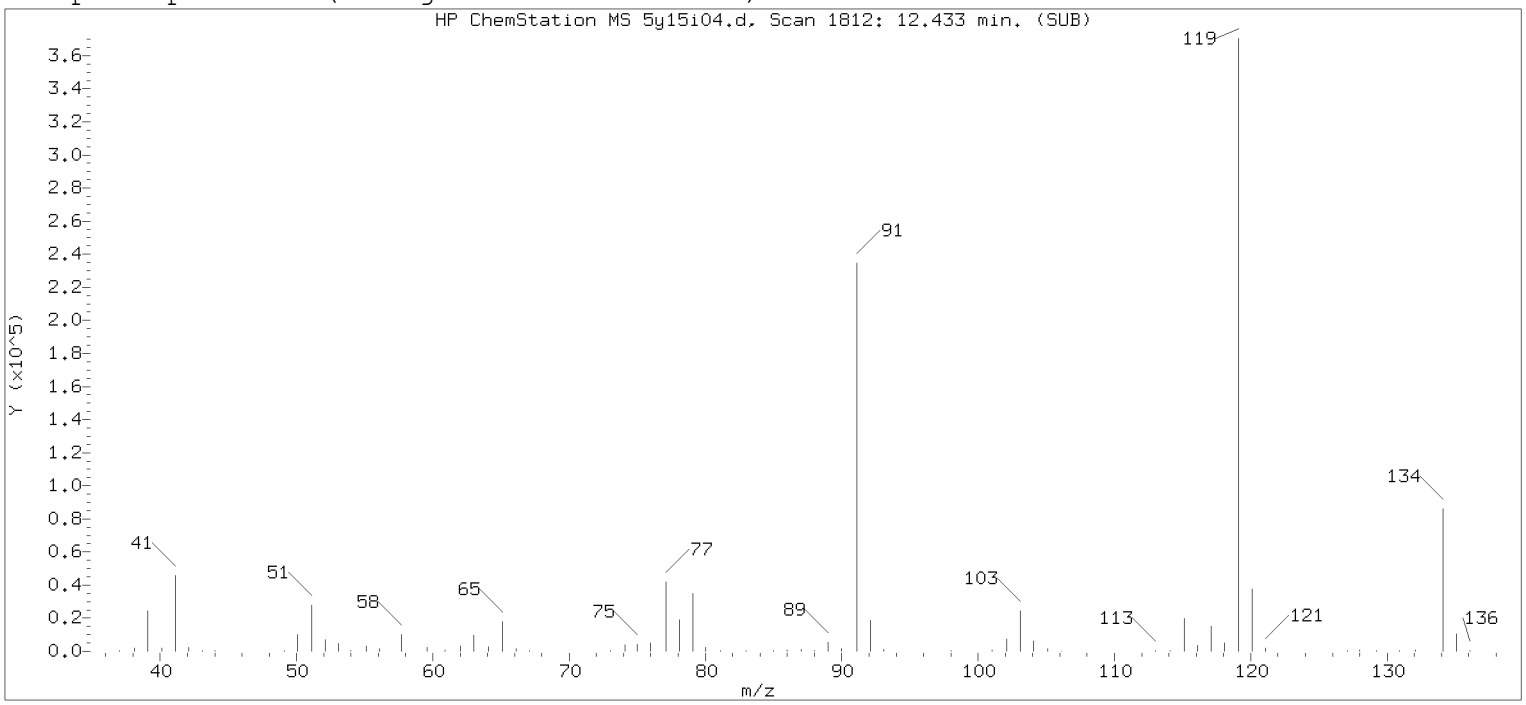
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.433
Quant Ion : 134.00
Area (flag) : 119205M
On-Column Amount (ng) : 16.7031
Integration start scan : 1805 Integration stop scan: 1815
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

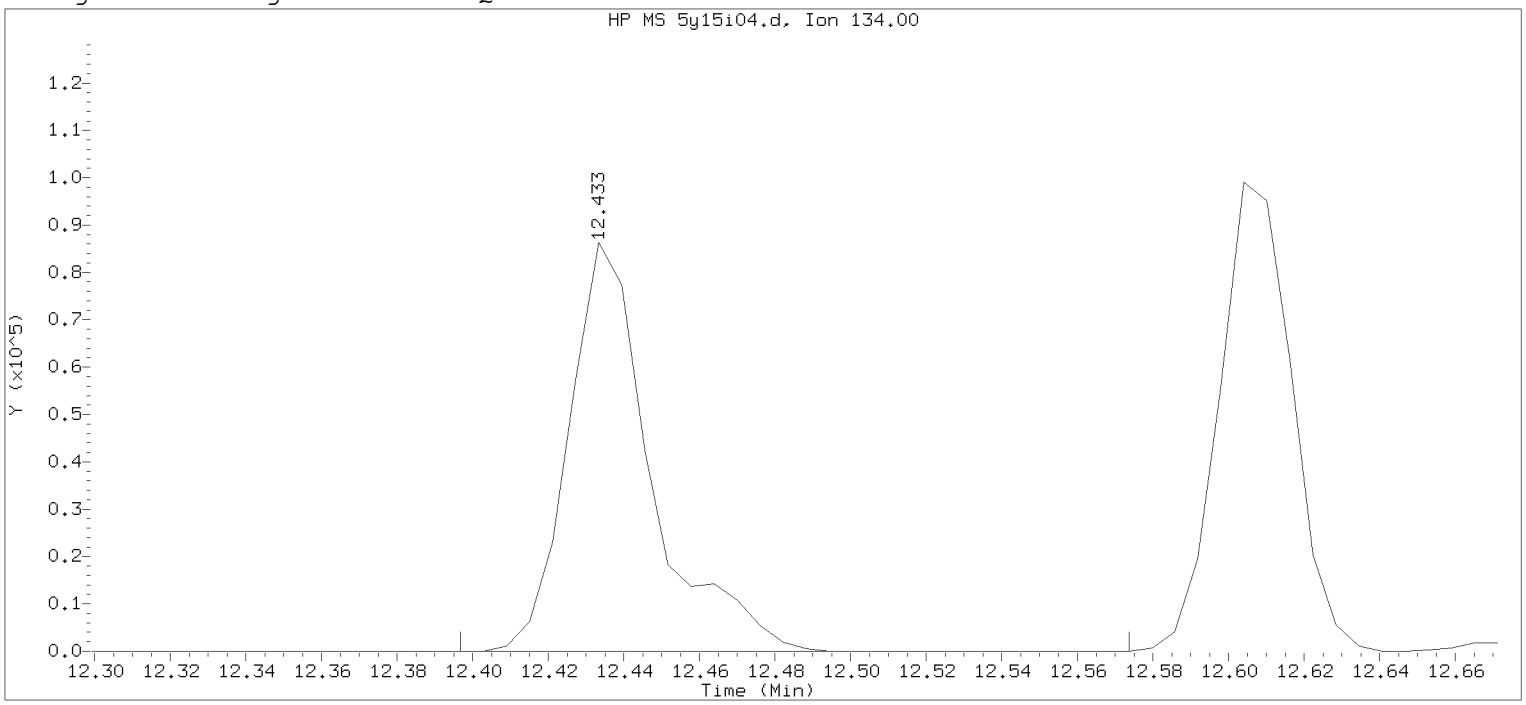
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



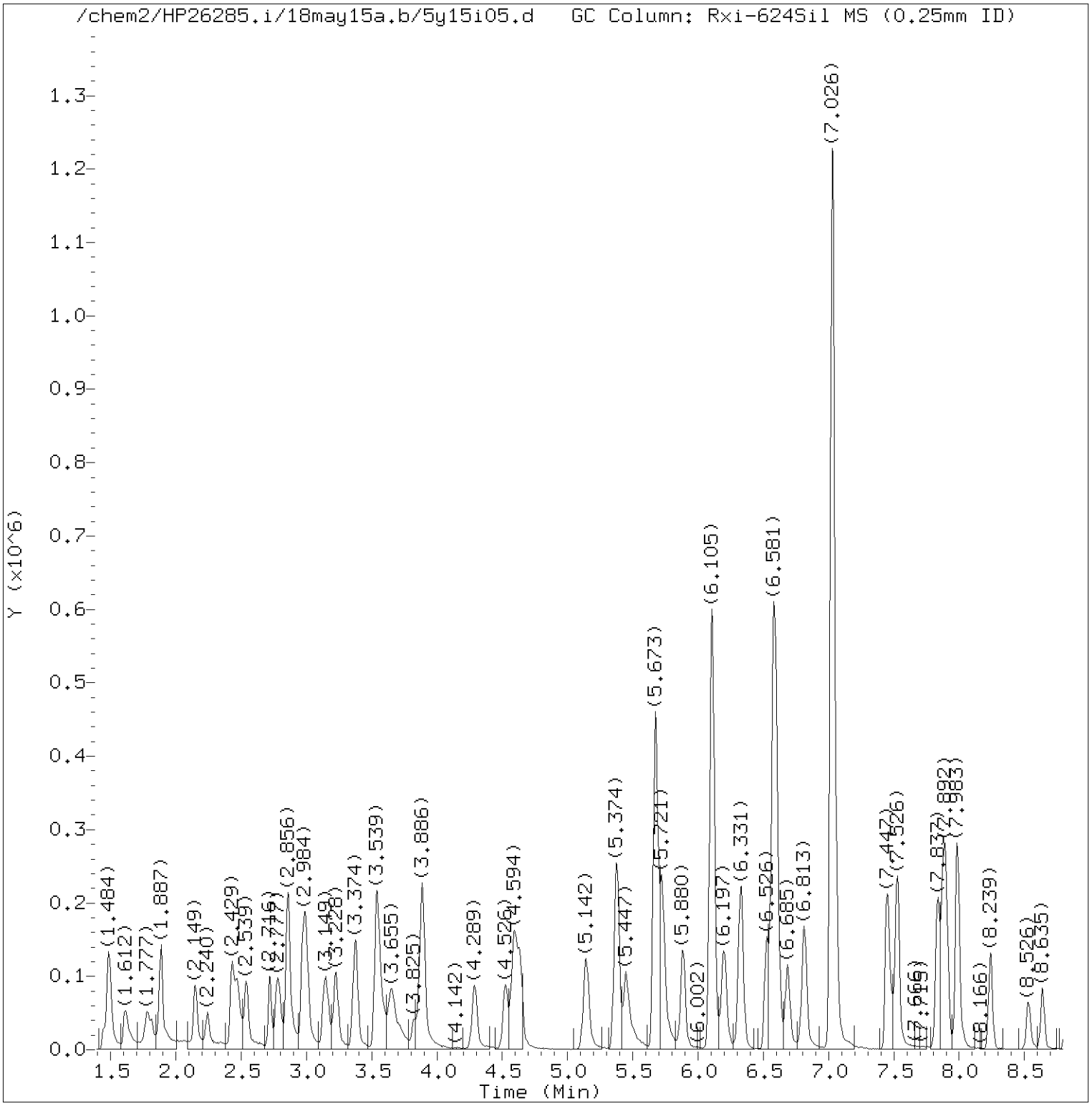
Data File: /chem2/HP26285.i/18may15a.b/5y15i04.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:17 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.433
Quant Ion : 134.00
Area : 131234
On-column Amount (ng) : 15.3886
Integration start scan : 1805 Integration stop scan: 1834
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user kevin.sposito



Total Ion Chromatogram (TIC)

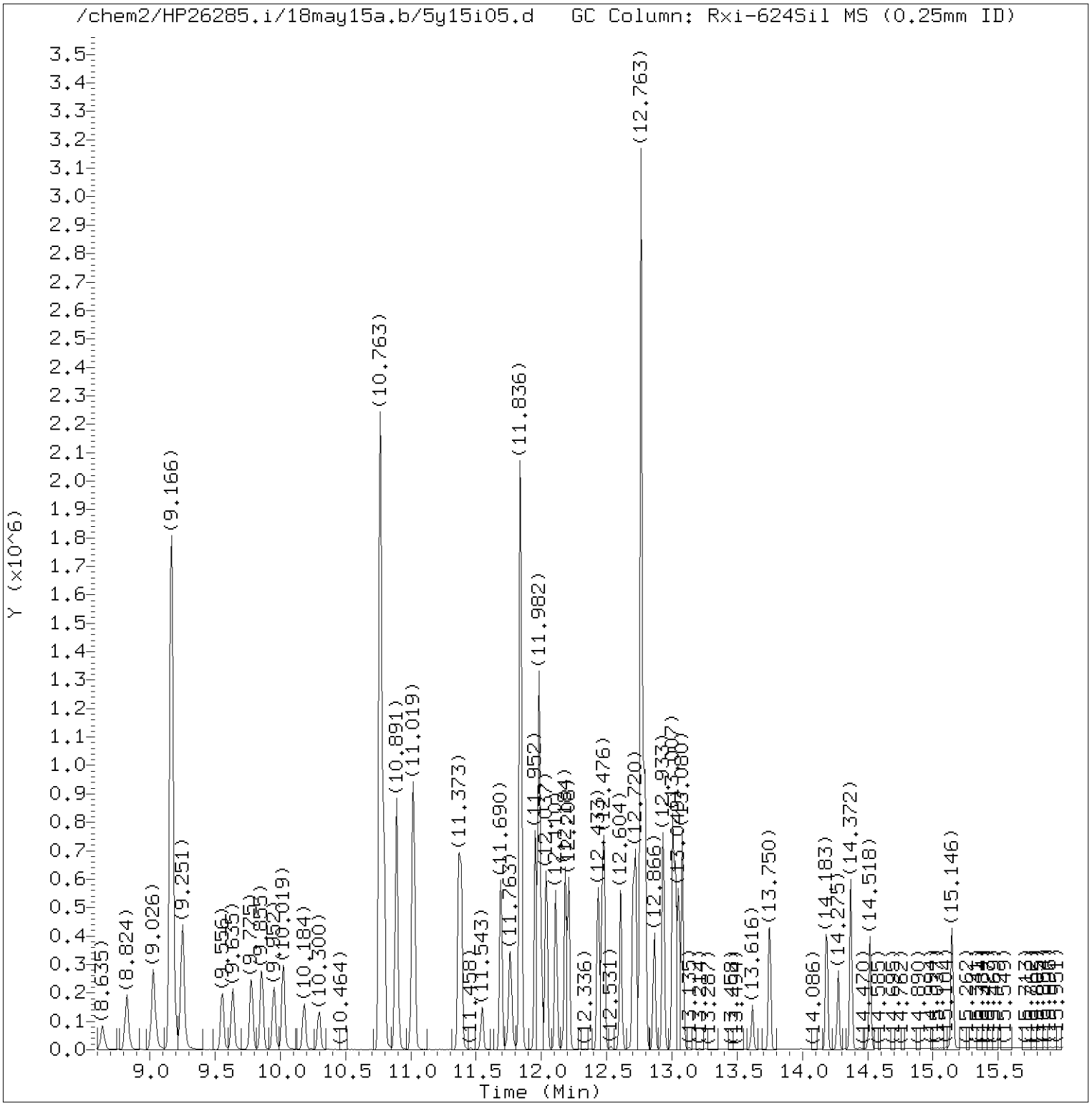
Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.612	85	105864	10.171
4) Chloromethane	(2)	1.777	50	72972	9.845
6) Vinyl Chloride	(2)	1.875	62	71631	9.888
5) 1,3-Butadiene	(2)	1.887	39	44644	9.264
8) Bromomethane	(2)	2.149	94	60232	9.855
9) Chloroethane	(2)	2.240	64	39552	10.288
10) Dichlorofluoromethane	(2)	2.429	67	119975	10.022
12) Trichlorofluoromethane	(2)	2.466	101	116066	10.132
11) n-Pentane	(2)	2.539	43	56244	8.847
14) Ethyl ether	(2)	2.722	59	62140	10.448
15) Freon 123a	(2)	2.777	67	81535	9.850
16) Acrolein	(1)	2.862	56	252169	106.423
17) 1,1-Dichloroethene	(2)	2.972	96	58924	9.602
17) 1,1-Dichloroethene	(2)	2.978	63	30497	9.892
19) Freon 113	(2)	2.996	101	60603	9.347
18) Acetone	(1)	3.002	58	25907	20.398
21) 2-Propanol	(1)	3.149	45	87638	107.980
22) Methyl Iodide	(2)	3.149	142	137399	9.491
23) Carbon Disulfide	(2)	3.228	76	190159	9.499
27) Methyl Acetate	(2)	3.362	43	85129	9.425
25) Allyl Chloride	(2)	3.380	41	107503	9.949
28) Methylene Chloride	(2)	3.533	84	76474	9.678
29)*t-Butyl alcohol-d10	(1)	3.545	65	343894	250.000
30) t-Butyl alcohol	(1)	3.655	59	159517	100.885
31) Acrylonitrile	(2)	3.819	53	44093	9.384
33) Methyl Tertiary Butyl Ether	(2)	3.880	73	181069	9.506
32) trans-1,2-Dichloroethene	(2)	3.886	96	74247	9.753
34) n-Hexane	(2)	4.289	57	65633	8.048
36) 1,1-Dichloroethane	(2)	4.526	63	132104	9.653
38) di-Isopropyl ether	(2)	4.587	45	228488	9.600
39) 2-Chloro-1,3-butadiene	(2)	4.630	53	97382	9.456
40) Ethyl t-butyl ether	(2)	5.142	59	177778	9.475
44) 2-Butanone	(2)	5.362	43	126027	18.458
45) 2,2-Dichloropropane	(2)	5.380	77	73094	9.827
42) cis-1,2-Dichloroethene	(2)	5.380	96	87908	9.734
47) Propionitrile	(1)	5.447	54	197241	104.426
48) Methacrylonitrile	(2)	5.673	67	253900	49.043
49) Bromochloromethane	(2)	5.721	128	47142	9.824

* = Compound is an internal standard.

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.734	71	35447	19.633
51) Chloroform	(2)	5.886	83	147964	9.552
53) 1,1,1-Trichloroethane	(2)	6.105	97	123379	9.285
52)$Dibromofluoromethane	(2)	6.112	113	406964	49.807
52)$Dibromofluoromethane	(2)	6.105	111	412554	49.784
43) 1,2-Dichloroethene (Total)	(2)		96	162155	19.486
54) Cyclohexane	(2)	6.197	56	87491	8.497
54) Cyclohexane	(2)	6.197	84	75025	8.399
54) Cyclohexane	(2)	6.197	69	27359	8.501
56) Carbon Tetrachloride	(2)	6.319	117	85862	8.842
55) 1,1-Dichloropropene	(2)	6.331	75	97293	9.241
58) Isobutyl Alcohol	(1)	6.526	41	133385	243.140
57)$1,2-Dichloroethane-d4	(2)	6.581	102	90142	51.275
57)$1,2-Dichloroethane-d4	(2)	6.575	65	432536	50.876
57)$1,2-Dichloroethane-d4	(2)	6.581	104	56032	50.018
60) Benzene	(2)	6.599	78	334298	9.836
61) 1,2-Dichloroethane	(2)	6.685	62	110318	9.343
61) 1,2-Dichloroethane	(2)	6.691	98	9689	9.530
65) t-Amyl methyl ether	(2)	6.813	73	182308	9.407
66)*Fluorobenzene	(2)	7.026	96	1510941	50.000
67) n-Heptane	(2)	7.050	43	64811	7.490
69) n-Butanol	(1)	7.453	56	209428	467.318
71) Trichloroethene	(2)	7.526	95	90147	9.736
73) Methylcyclohexane	(2)	7.837	83	110720	8.487
73) Methylcyclohexane	(2)	7.837	98	46925	8.131
74) 1,2-Dichloropropane	(2)	7.873	63	85835	9.705
72) t-Amyl ethyl ether	(2)	7.898	87	89085M	8.860
76) 1,4-Dioxane	(1)	7.977	88	30168M	218.488
77) Methyl Methacrylate	(2)	7.983	69	75436	9.193
75) Dibromomethane	(2)	7.983	93	56915	9.401
79) Bromodichloromethane	(2)	8.239	83	107273	9.203
80) 2-Nitropropane	(2)	8.532	41	51050	16.458
81) 2-Chloroethyl Vinyl Ether	(2)	8.642	63	44528M	9.104
82) cis-1,3-Dichloropropene	(2)	8.824	75	135583	9.342
83) 4-Methyl-2-pentanone	(2)	9.026	43	249627	18.295
84)$Toluene-d8	(3)	9.166	98	1499405	50.456
84)$Toluene-d8	(3)	9.166	100	976056	50.463
89) Toluene	(3)	9.251	92	213637	9.447

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) trans-1,3-Dichloropropene	(3)	9.556	75	120042	9.099
92) Ethyl Methacrylate	(3)	9.635	69	123413	9.305
93) 1,1,2-Trichloroethane	(3)	9.775	97	87882	9.594
94) Tetrachloroethene	(3)	9.855	166	91544	8.711
95) 1,3-Dichloropropane	(3)	9.952	76	139506	9.606
97) 2-Hexanone	(3)	10.019	43	209070	18.774
91) 1,3-Dichloropropene (total)	(3)		100	255625	18.441
98) Dibromochloromethane	(3)	10.184	129	91912	9.093
100) 1,2-Dibromoethane	(3)	10.300	107	93152	9.310
101)*Chlorobenzene-d5	(3)	10.763	117	1217290	50.000
102) 1-Chlorohexane	(3)	10.787	91	91882	8.039
103) Chlorobenzene	(3)	10.794	112	261993	9.352
104) 1,1,1,2-Tetrachloroethane	(3)	10.885	131	87097	8.996
105) Ethylbenzene	(3)	10.891	91	399357	9.007
107) m+p-Xylene	(3)	11.019	106	314182	17.969
108) o-Xylene	(3)	11.367	106	153478	8.937
110) Styrene	(3)	11.385	104	256646	9.105
111) Bromoform	(3)	11.549	173	66048	8.562
112) Isopropylbenzene	(3)	11.690	105	349878	8.512
113) Cyclohexanone	(1)	11.763	55	140110	229.362
109) Xylene (Total)	(3)		106	467660	26.906
115)$4-Bromofluorobenzene	(3)	11.836	95	615637	50.622
115)$4-Bromofluorobenzene	(3)	11.842	174	556088	50.402
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	142098M	9.080
116) Bromobenzene	(4)	11.952	156	113398	8.834
119) trans-1,4-Dichloro-2-butene	(4)	11.982	53	205792	49.081
118) 1,2,3-Trichloropropane	(4)	11.995	110	42977	9.025
120) n-Propylbenzene	(4)	12.037	91	425824	8.513
121) 2-Chlorotoluene	(4)	12.110	126	98257	8.775
123) 1,3,5-Trimethylbenzene	(4)	12.184	105	302612	8.392
122) 4-Chlorotoluene	(4)	12.208	126	103206	8.710
125) tert-Butylbenzene	(4)	12.433	134	57206M	8.019
126) Pentachloroethane	(4)	12.464	167	63474	9.056
127) 1,2,4-Trimethylbenzene	(4)	12.482	105	317949	8.517
128) sec-Butylbenzene	(4)	12.604	105	338829	8.007
130) 1,3-Dichlorobenzene	(4)	12.702	146	199032	8.321
131) p-Isopropyltoluene	(4)	12.720	119	301631	8.052
132)*1,4-Dichlorobenzene-d4	(4)	12.763	152	694939	50.000

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

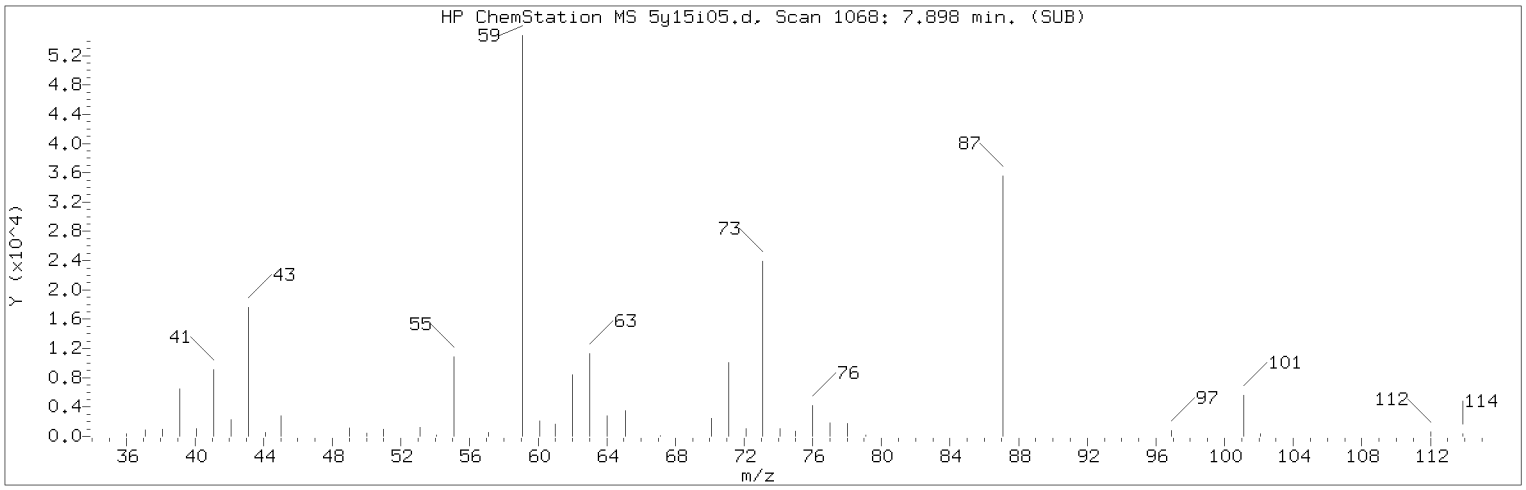
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

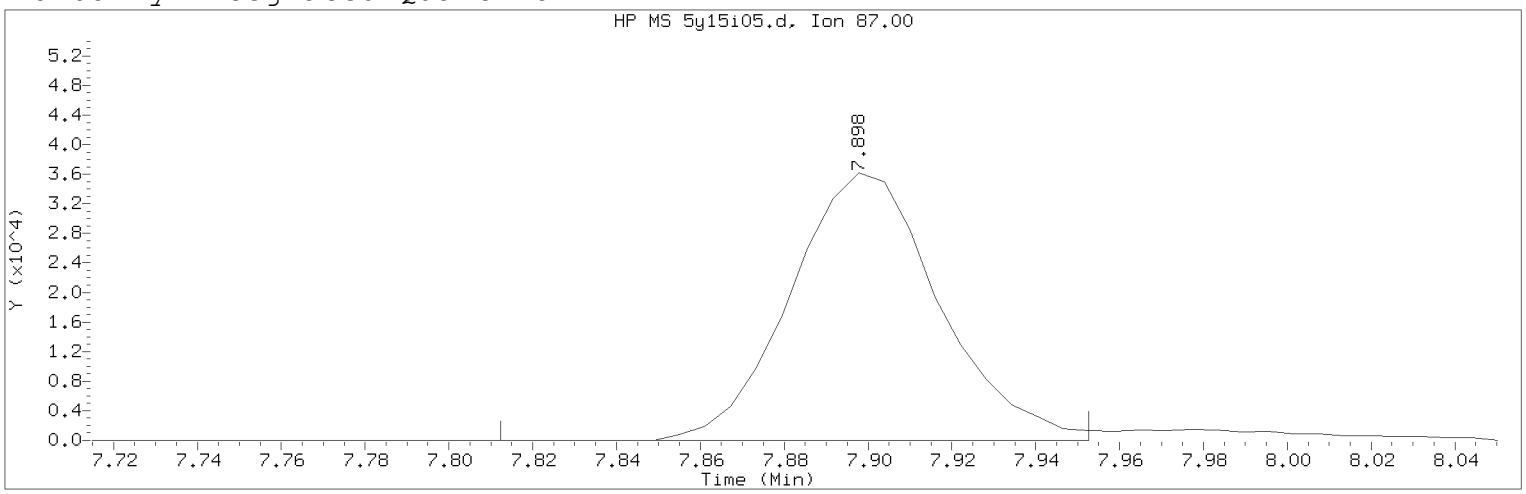
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,4-Dichlorobenzene	(4)	12.781	146	209251	8.555
135) 1,2,3-Trimethylbenzene	(4)	12.793	105	373054	9.415
136) Benzyl Chloride	(4)	12.866	91	239979	8.575
137) 1,3-Diethylbenzene	(4)	12.933	119	214834	8.820
138) 1,4-Diethylbenzene	(4)	13.007	119	228703	8.777
140) n-Butylbenzene	(4)	13.025	92	151638	7.924
139) 1,2-Dichlorobenzene	(4)	13.049	146	191693	8.389
141) 1,2-Diethylbenzene	(4)	13.080	119	183204	8.941
142) Diethylbenzene (total)	(4)		100	626741	26.539
143) 1,2-Dibromo-3-chloropropane	(4)	13.616	75	30906	8.267
145) 1,3,5-Trichlorobenzene	(4)	13.750	180	121791	7.466
147) 1,2,4-Trichlorobenzene	(4)	14.189	180	109971	7.507
148) Hexachlorobutadiene	(4)	14.275	225	43660	6.532
149) Naphthalene	(4)	14.372	128	382043	8.258
150) 1,2,3-Trichlorobenzene	(4)	14.518	180	104964	7.738
151) 2-Methylnaphthalene	(4)	15.146	142	180521	7.848

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

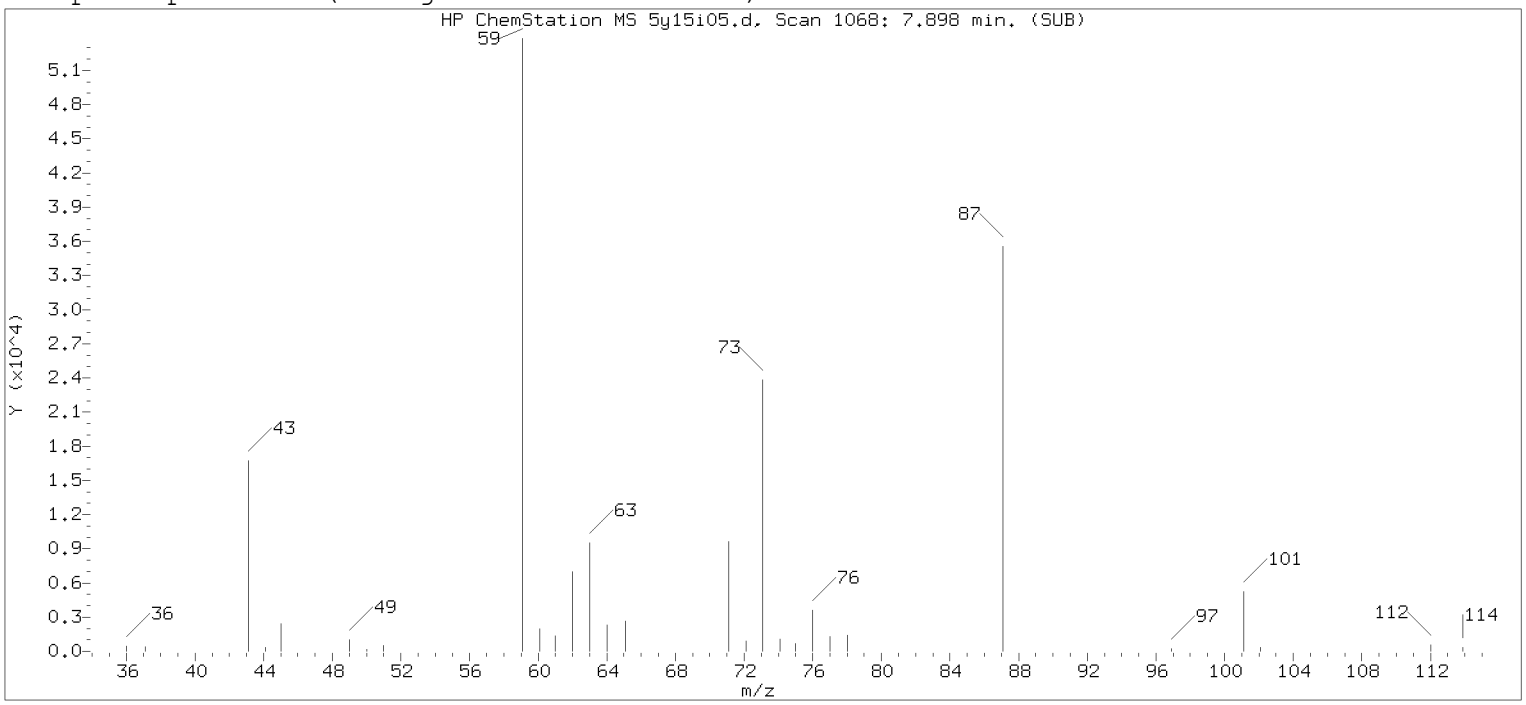
Compound Number : 72
Compound Name : t-Amyl ethyl ether
Scan Number : 1068
Retention Time (minutes): 7.898
Quant Ion : 87.00
Area (flag) : 89085M
On-Column Amount (ng) : 8.8604
Integration start scan : 1053 Integration stop scan: 1076
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

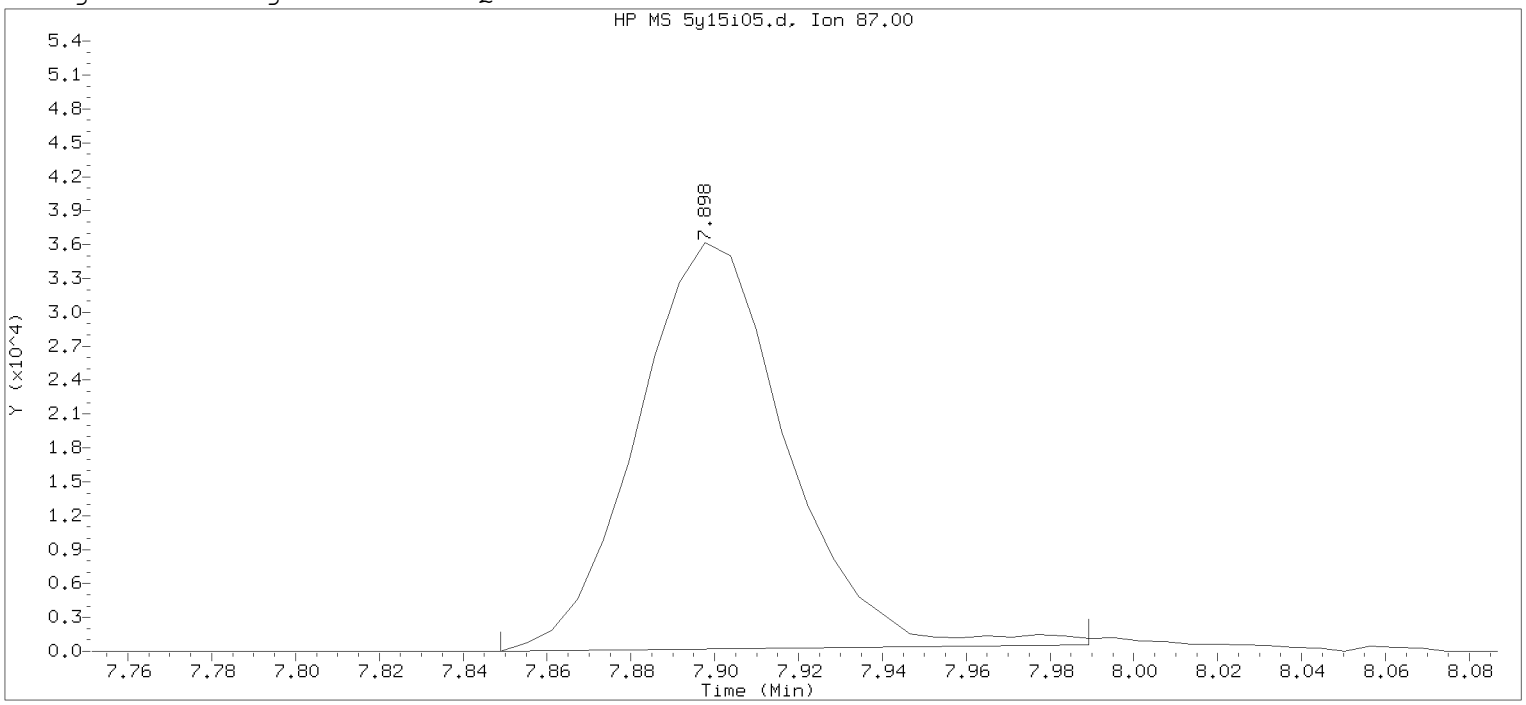
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

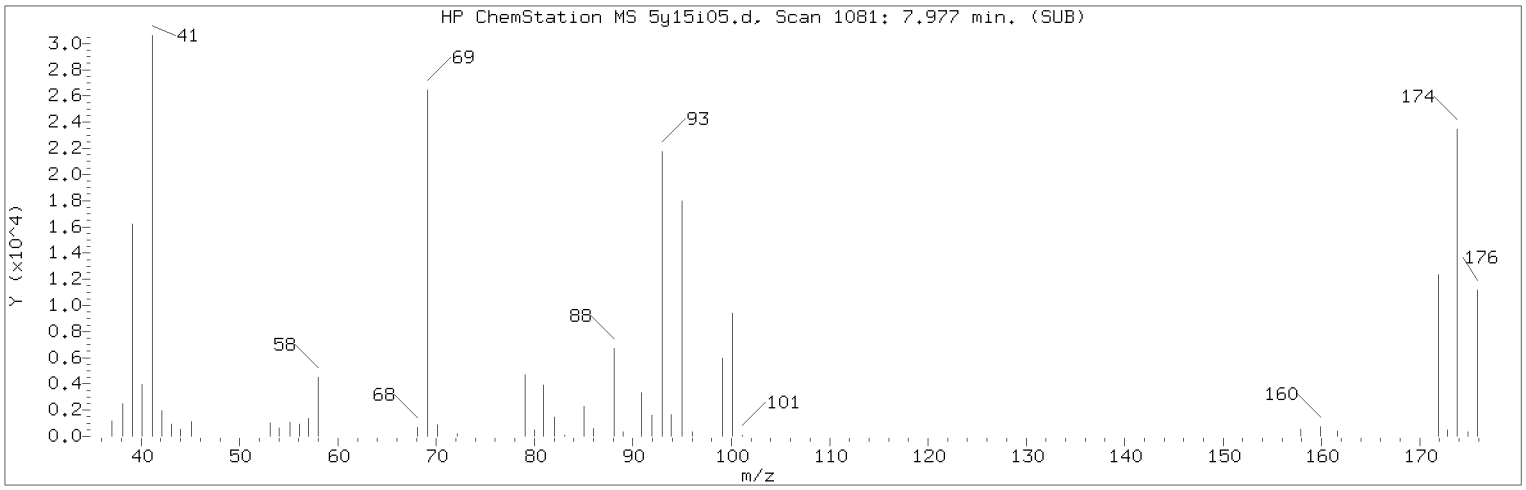
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD010 Lab Sample ID: VSTD010

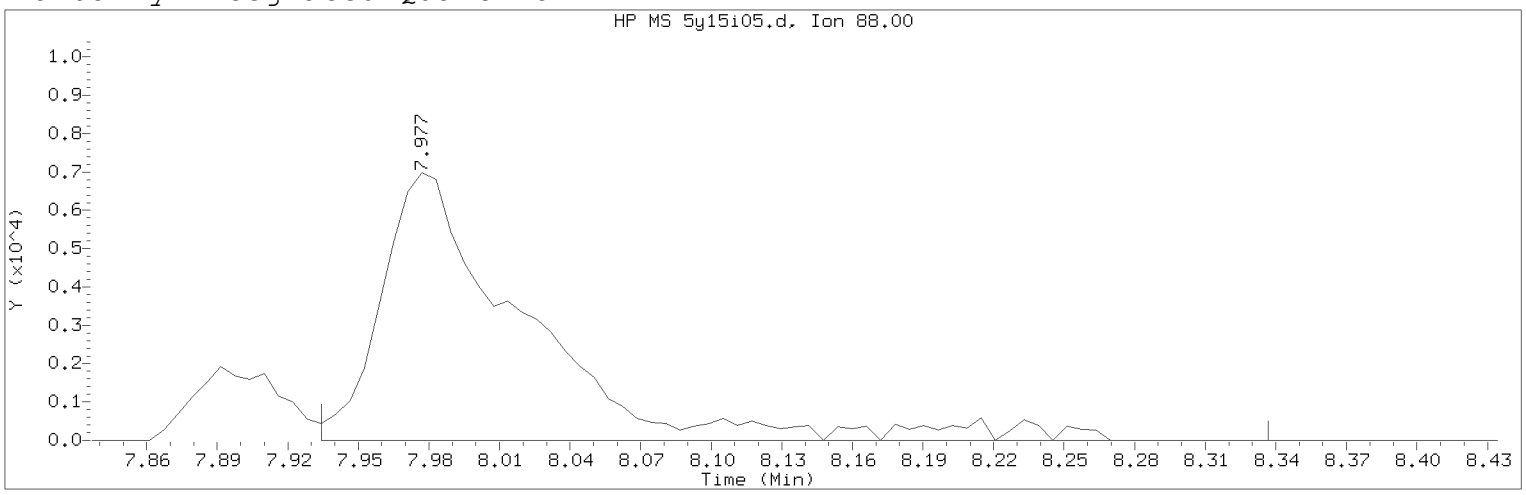
Compound Number : 72
Compound Name : t-Amyl ethyl ether
Scan Number : 1068
Retention Time (minutes): 7.898
Quant Ion : 87.00
Area : 89388
On-column Amount (ng) : 8.6452
Integration start scan : 1059 Integration stop scan: 1082
Y at integration start : 0 Y at integration end: 557

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper 263

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

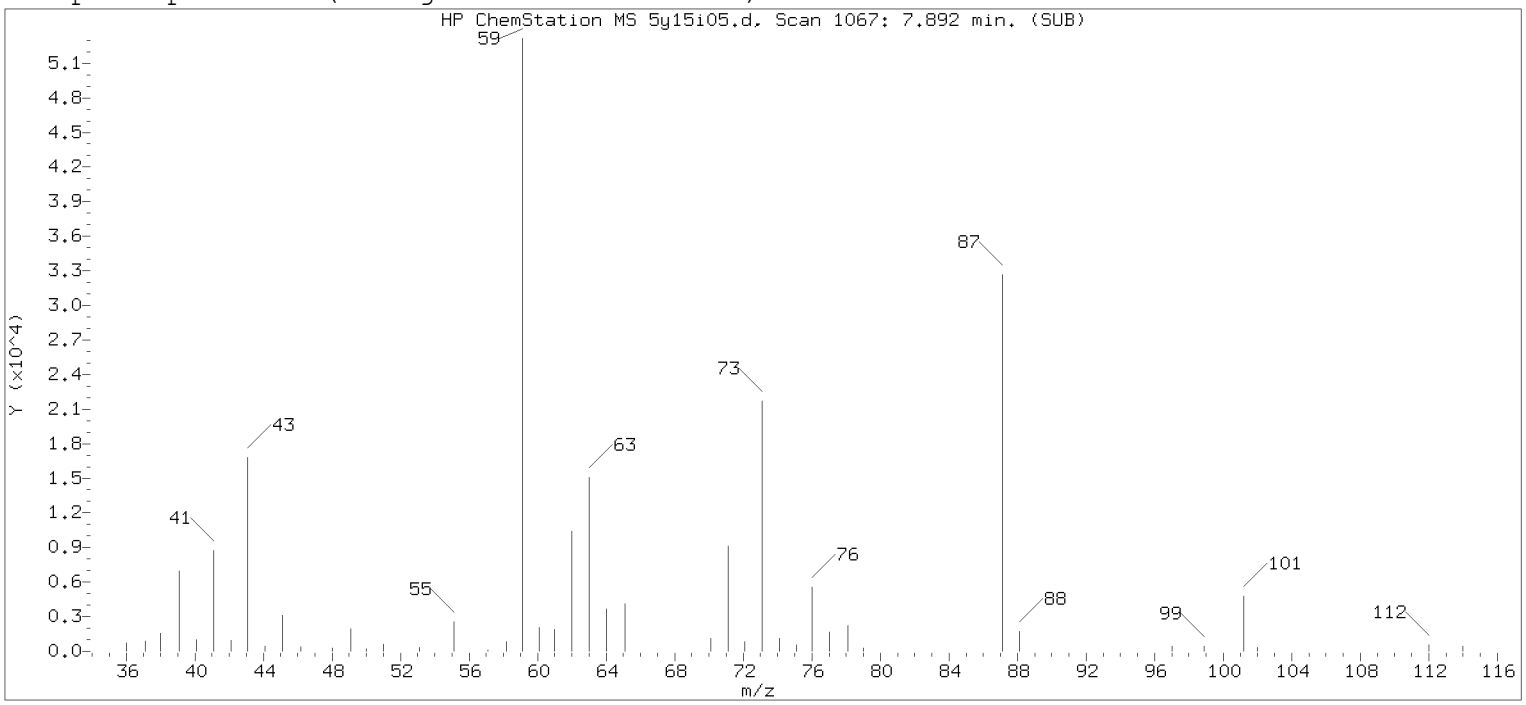
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 1081
Retention Time (minutes): 7.977
Quant Ion : 88.00
Area (flag) : 30168M
On-Column Amount (ng) : 218.4879
Integration start scan : 1073 Integration stop scan: 1139
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

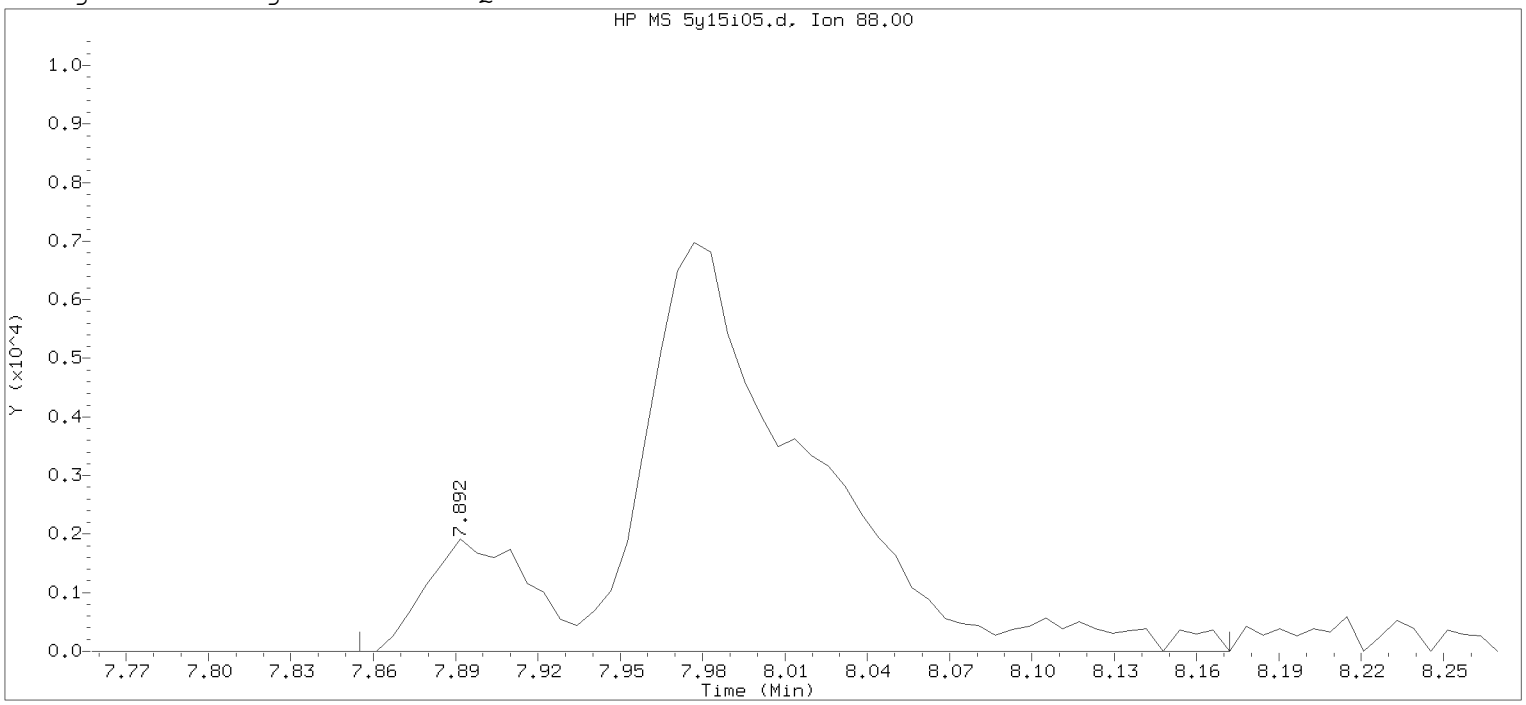
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

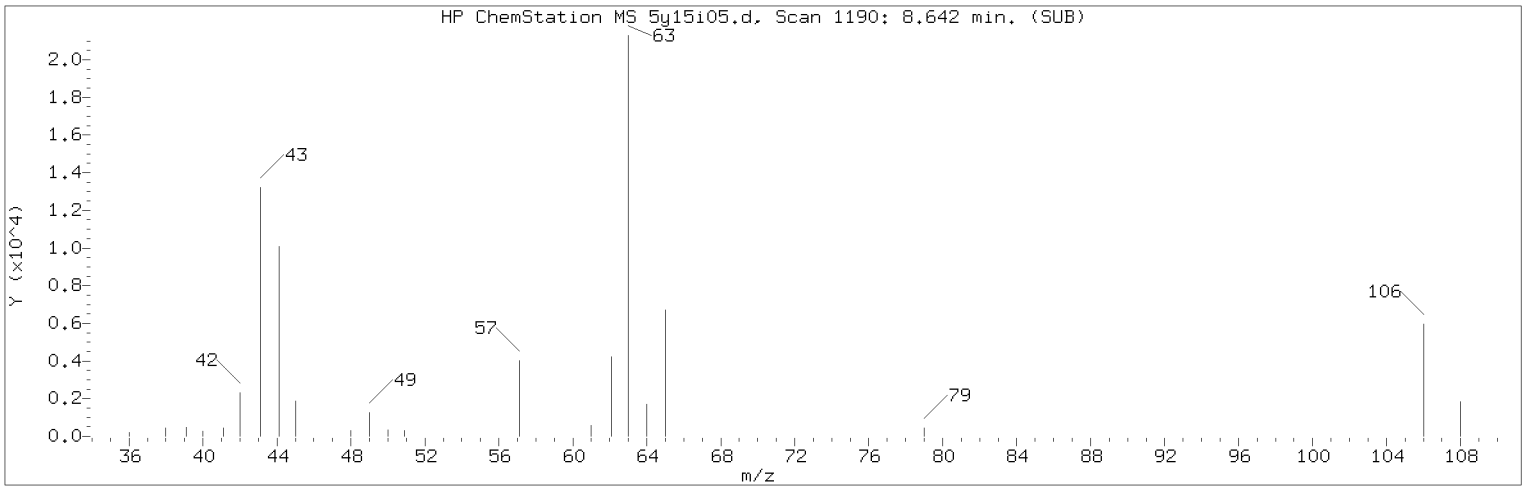
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD010 Lab Sample ID: VSTD010

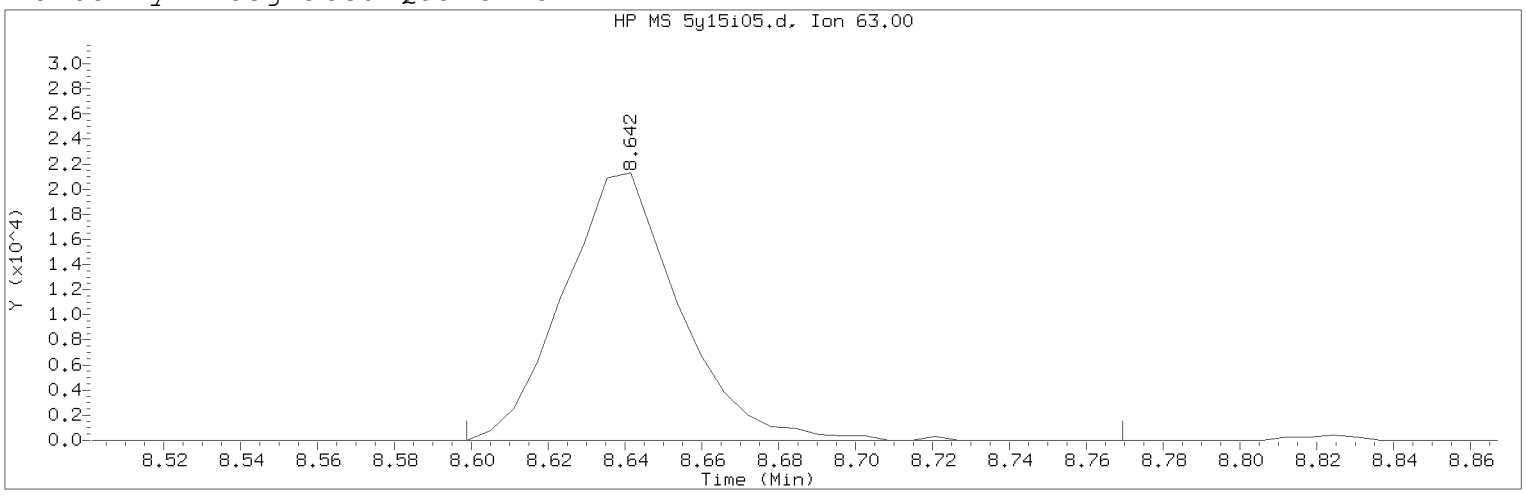
Compound Number	: 76		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1067		
Retention Time (minutes)	: 7.892		
Quant Ion	: 88.00		
Area	: 33284		
On-column Amount (ng)	: 143.2468		
Integration start scan	: 1060	Integration stop scan:	1112
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user key: 2265

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

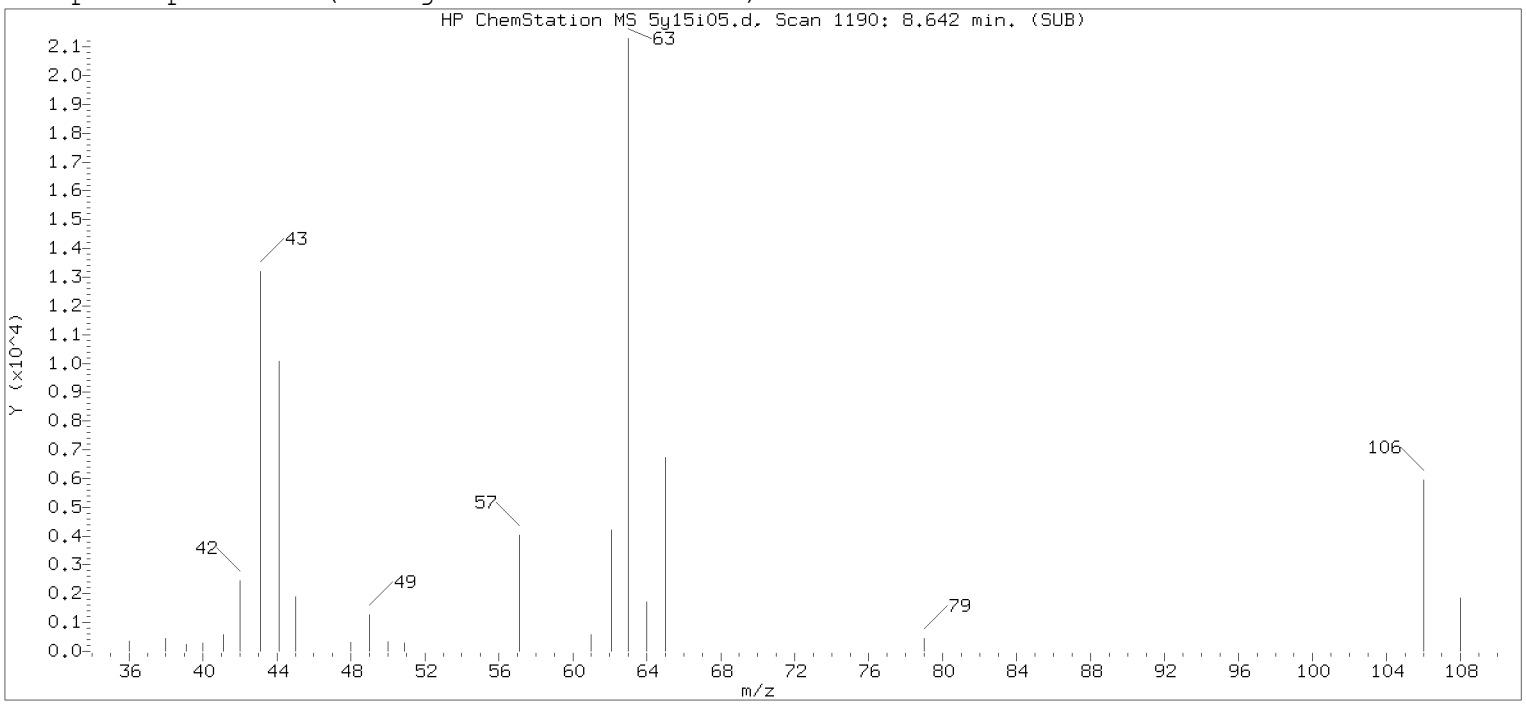
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1190
Retention Time (minutes): 8.642
Quant Ion : 63.00
Area (flag) : 44528M
On-Column Amount (ng) : 9.1041
Integration start scan : 1182 Integration stop scan: 1210
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

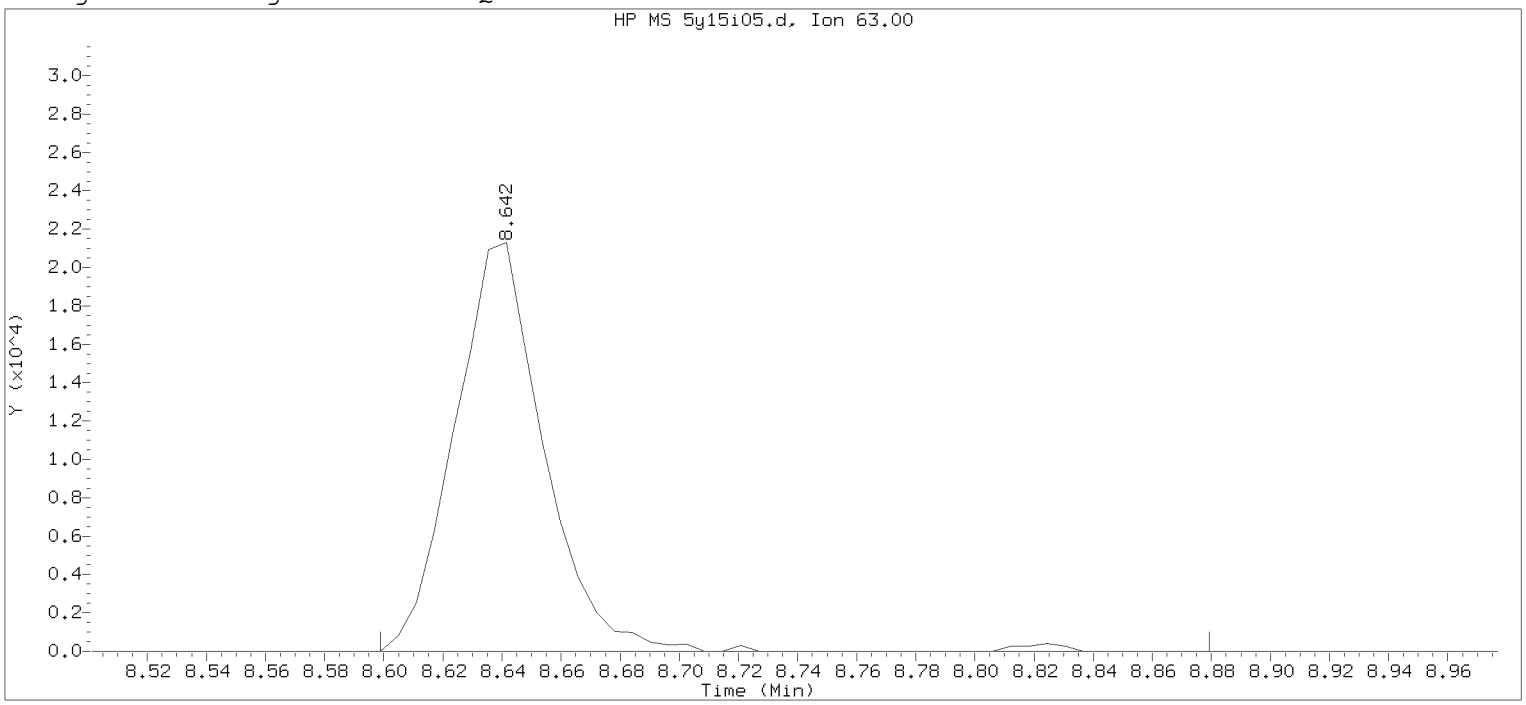
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

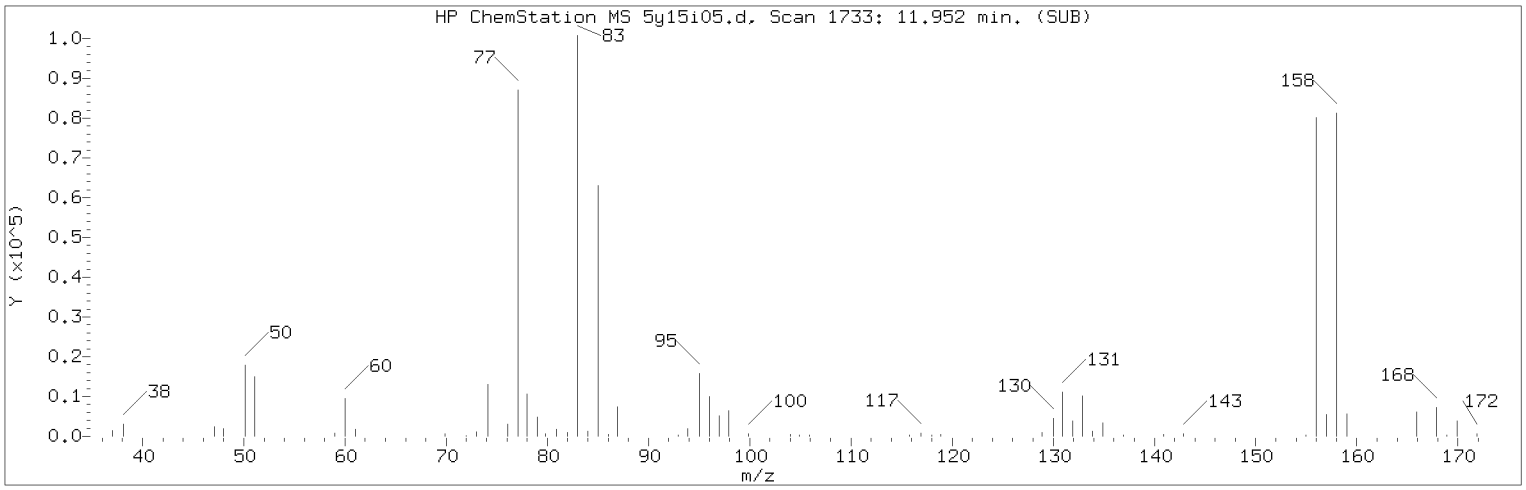
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD010 Lab Sample ID: VSTD010

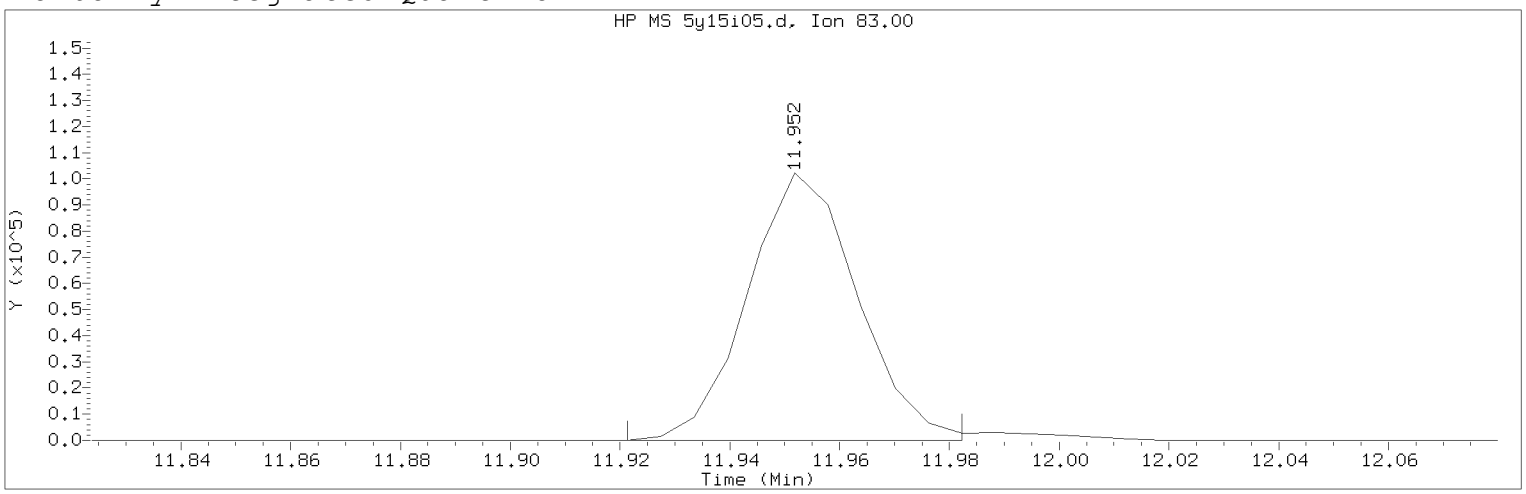
Compound Number	: 81		
Compound Name	: 2-Chloroethyl Vinyl Ether		
Scan Number	: 1190		
Retention Time (minutes)	: 8.642		
Quant Ion	: 63.00		
Area	: 44964		
On-column Amount (ng)	: 8.5382		
Integration start scan	: 1182	Integration stop scan:	1228
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

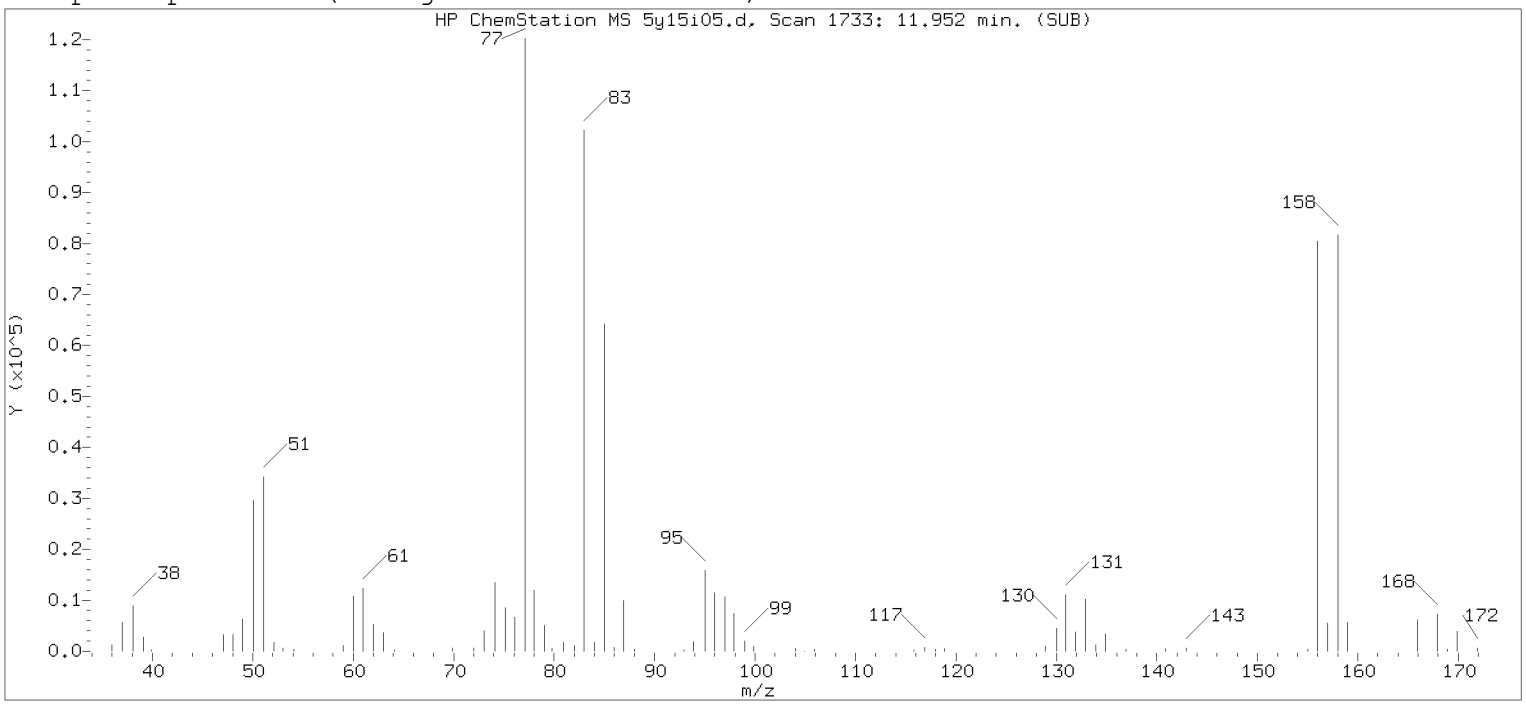
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area (flag) : 142098M
On-Column Amount (ng) : 9.0796
Integration start scan : 1727 Integration stop scan: 1737
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

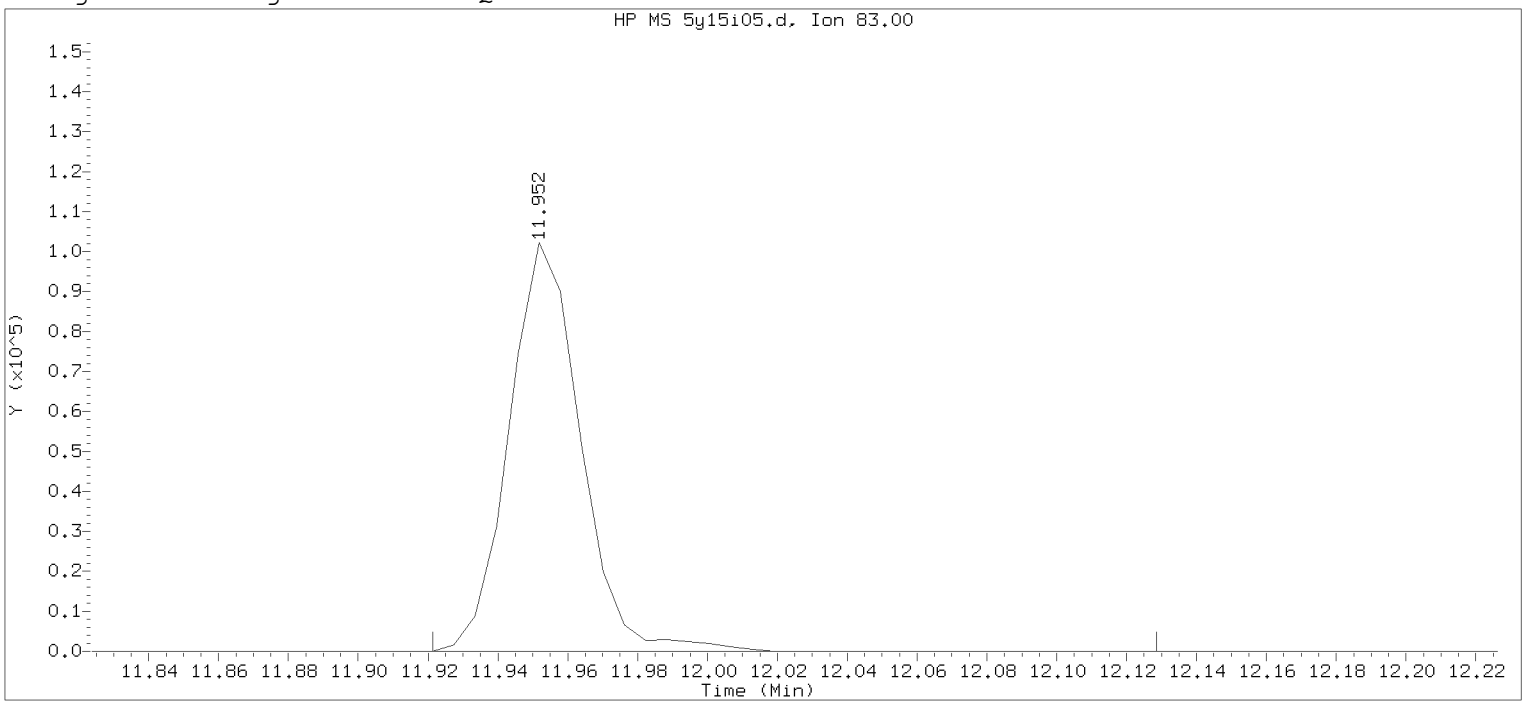
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

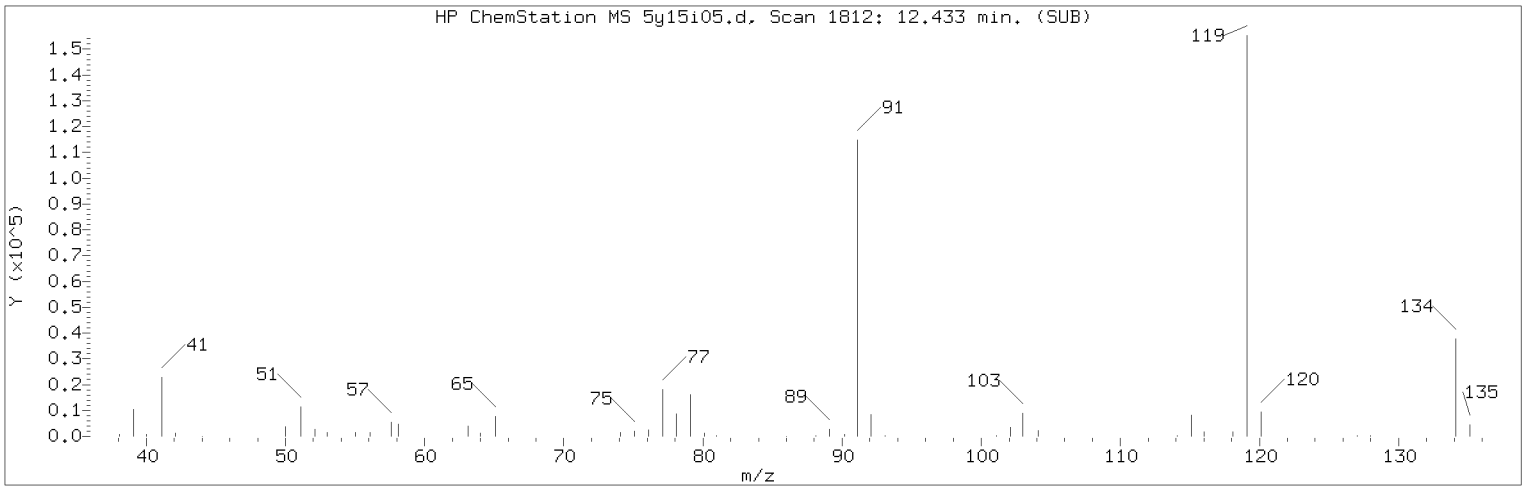
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD010 Lab Sample ID: VSTD010

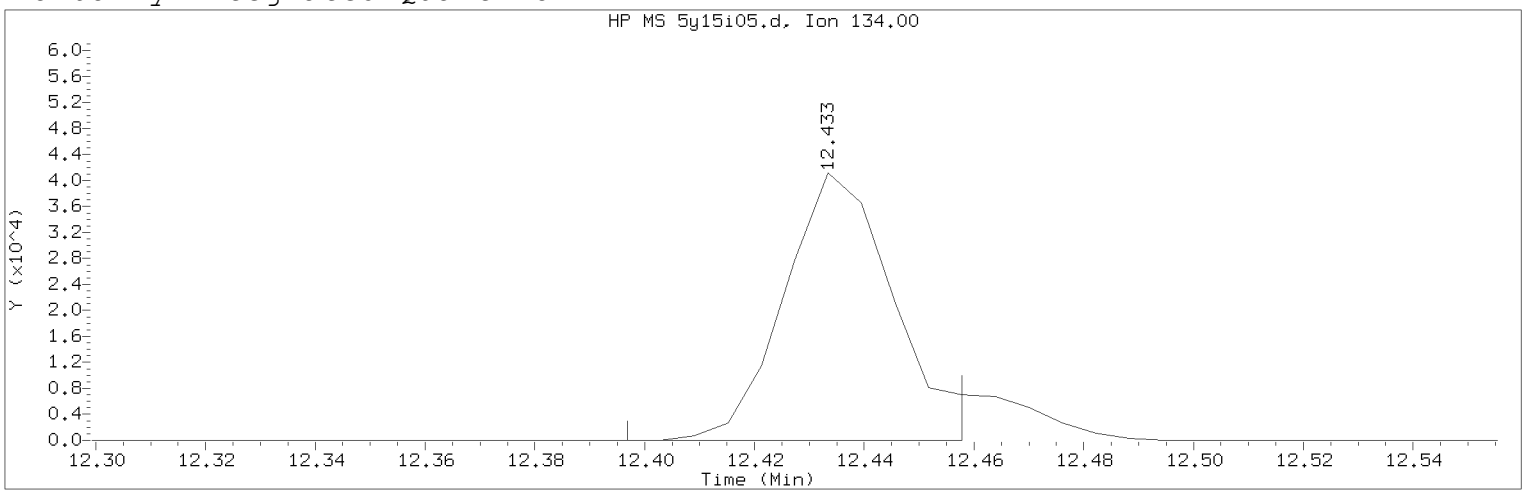
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area : 145372
On-column Amount (ng) : 9.6198
Integration start scan : 1727 Integration stop scan: 1761
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper: 269

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD010 Lab Sample ID: VSTD010

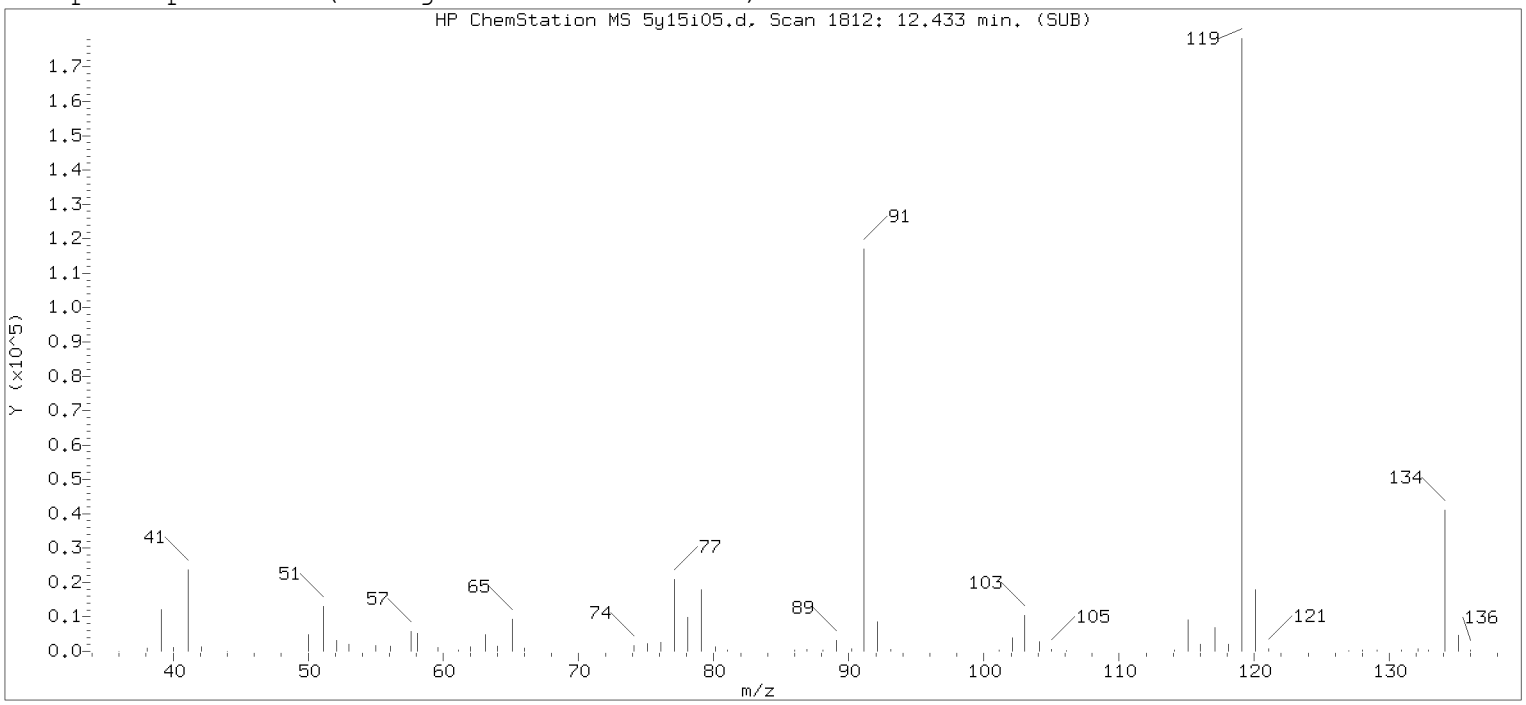
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.433
Quant Ion : 134.00
Area (flag) : 57206M
On-Column Amount (ng) : 8.0188
Integration start scan : 1805 Integration stop scan: 1815
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

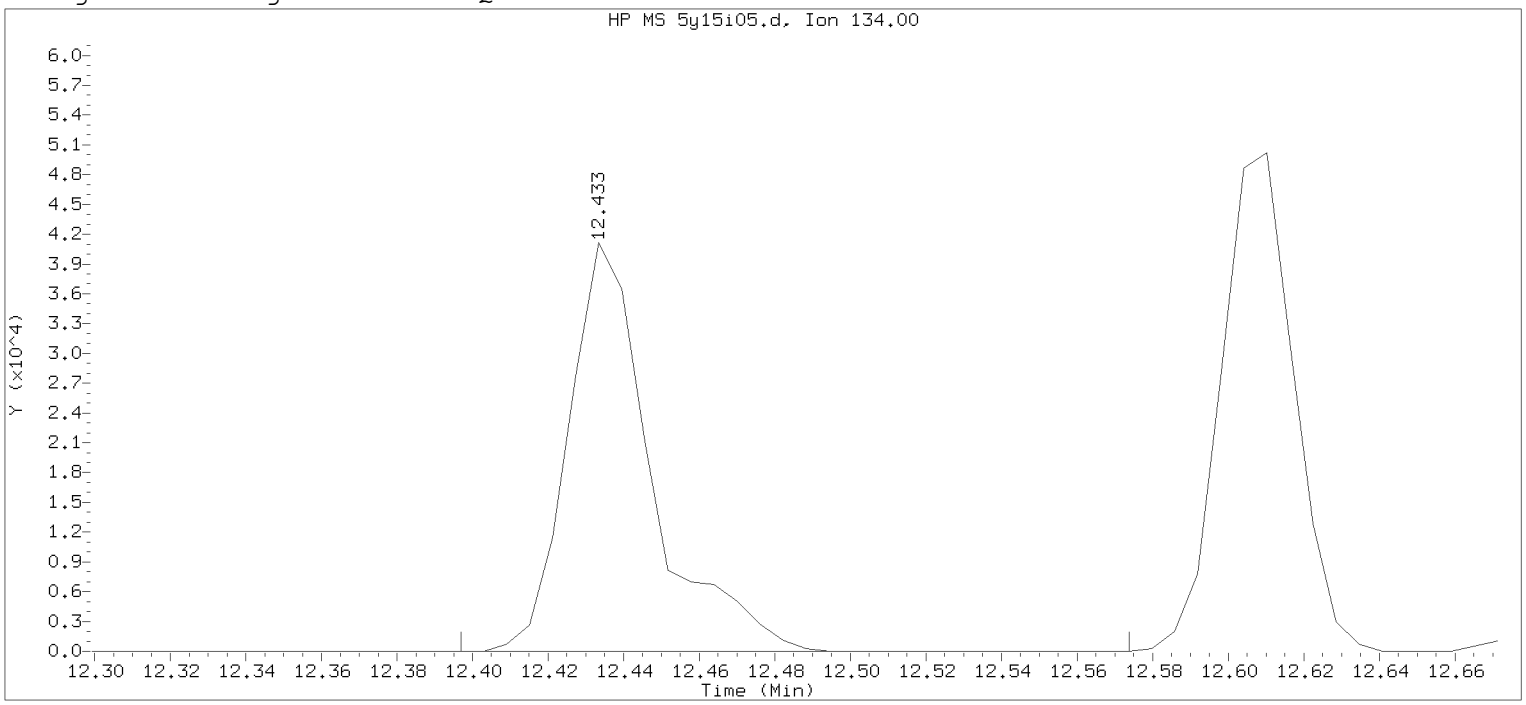
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



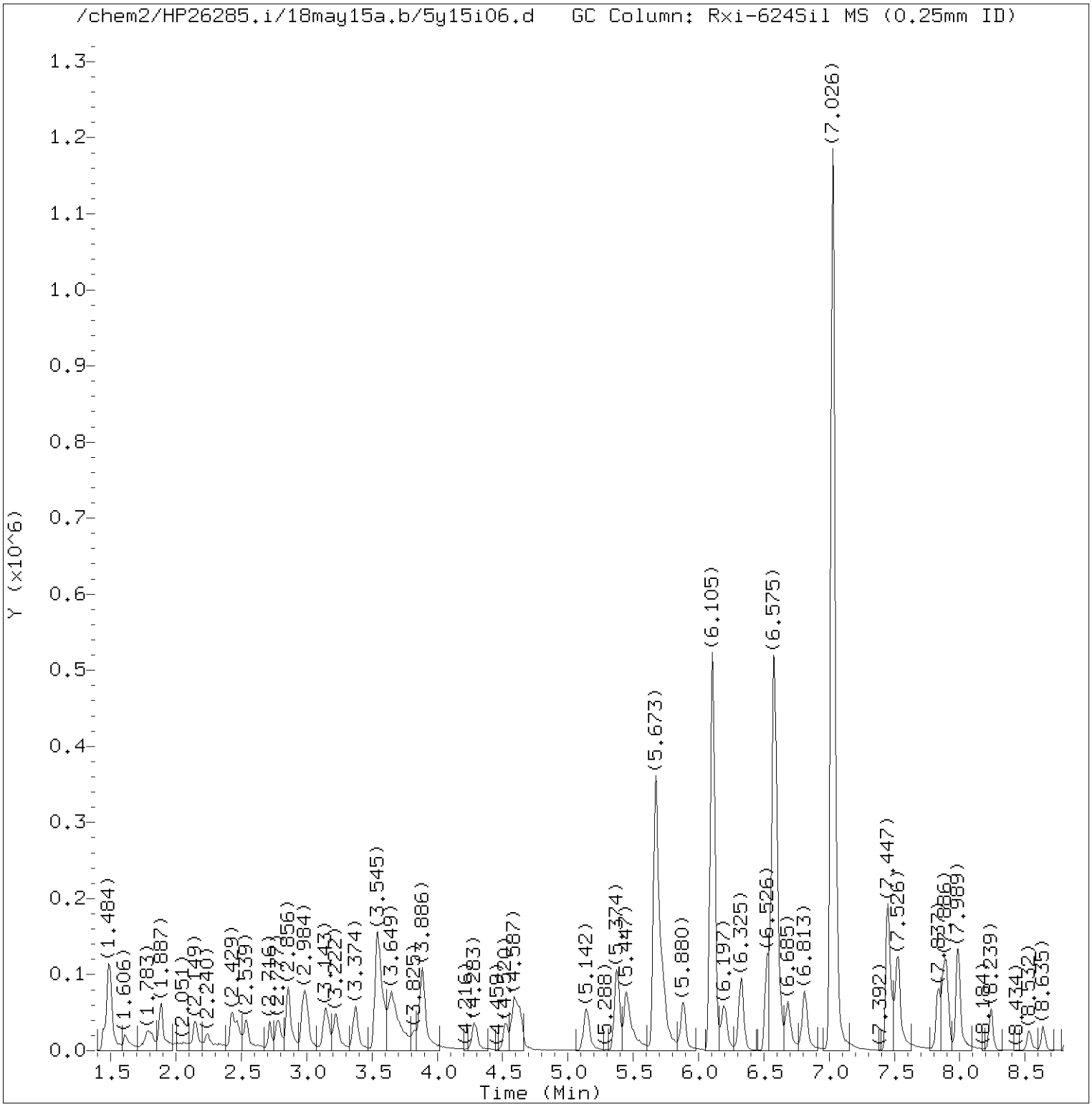
Data File: /chem2/HP26285.i/18may15a.b/5y15i05.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 15:39 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.433
Quant Ion : 134.00
Area : 62986
On-column Amount (ng) : 7.7958
Integration start scan : 1805 Integration stop scan: 1834
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper 271



Total Ion Chromatogram (TIC)

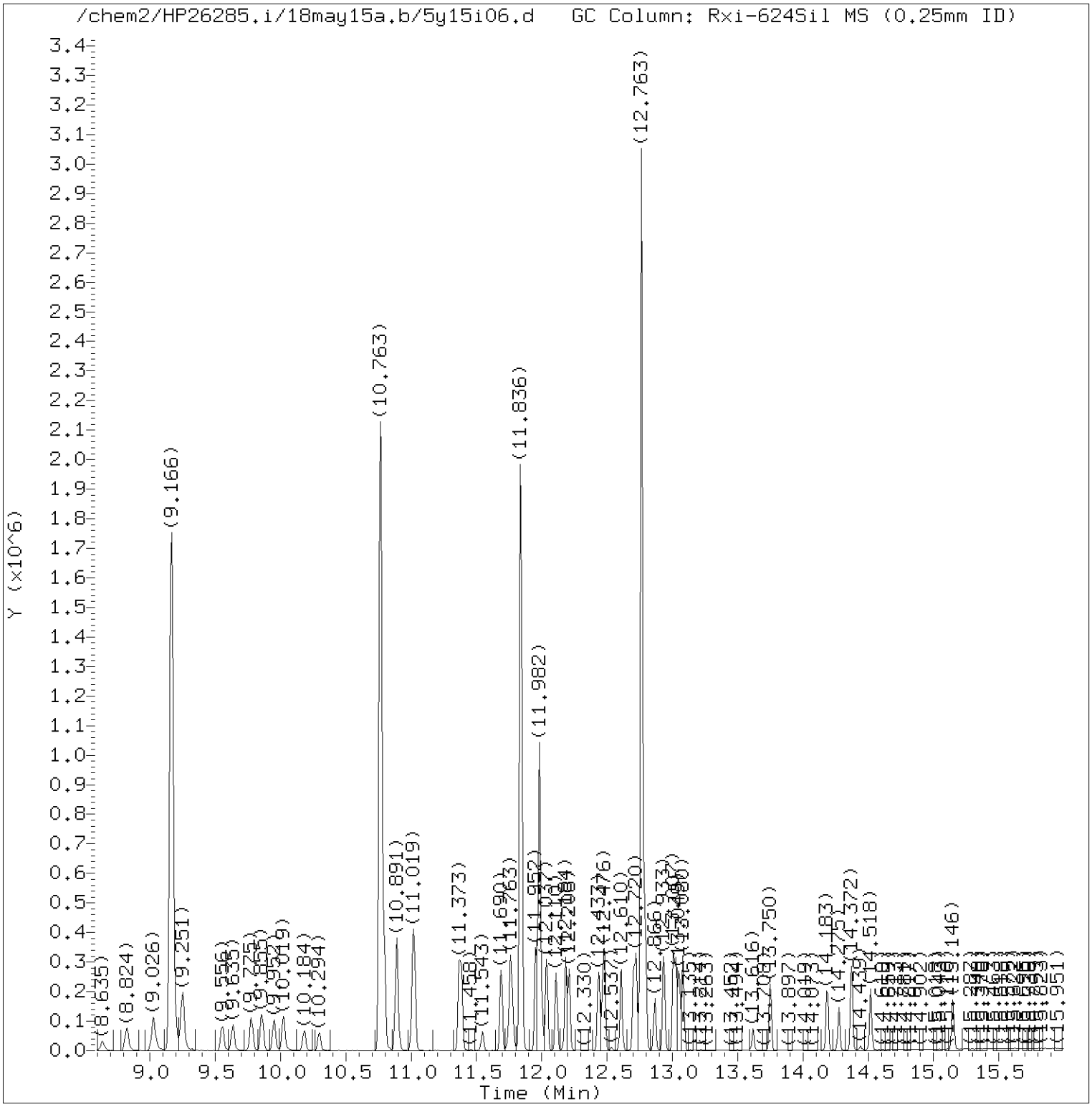
Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.606	85	35018	3.450
4) Chloromethane	(2)	1.777	50	30614	4.236
6) Vinyl Chloride	(2)	1.881	62	29790	4.217
5) 1,3-Butadiene	(2)	1.887	39	21554	4.586
8) Bromomethane	(2)	2.143	94	24166	4.055
9) Chloroethane	(2)	2.240	64	15184	4.050
10) Dichlorofluoromethane	(2)	2.429	67	49131	4.209
12) Trichlorofluoromethane	(2)	2.466	101	39802	3.563
11) n-Pentane	(2)	2.539	43	24205	3.904
14) Ethyl ether	(2)	2.716	59	22675	3.910
15) Freon 123a	(2)	2.777	67	33139	4.105
16) Acrolein	(1)	2.862	56	102482	35.592
17) 1,1-Dichloroethene	(2)	2.972	96	24912	4.163
17) 1,1-Dichloroethene	(2)	2.972	63	12494	4.156
19) Freon 113	(2)	2.984	101	22513	3.561
18) Acetone	(1)	2.996	58	12609	8.170
22) Methyl Iodide	(2)	3.136	142	60115	4.258
21) 2-Propanol	(1)	3.143	45	61077	61.928
23) Carbon Disulfide	(2)	3.222	76	77765	3.984
27) Methyl Acetate	(2)	3.356	43	35923	4.078
25) Allyl Chloride	(2)	3.374	41	39373	3.737
28) Methylene Chloride	(2)	3.533	84	33543	4.353
29)*t-Butyl alcohol-d10	(1)	3.545	65	417893	250.000
30) t-Butyl alcohol	(1)	3.655	59	141768	73.784
31) Acrylonitrile	(2)	3.825	53	19313	4.215
32) trans-1,2-Dichloroethene	(2)	3.886	96	31738	4.275
33) Methyl Tertiary Butyl Ether	(2)	3.886	73	82975	4.467
34) n-Hexane	(2)	4.283	57	26886	3.381
36) 1,1-Dichloroethane	(2)	4.520	63	55843	4.184
38) di-Isopropyl ether	(2)	4.587	45	98340	4.237
39) 2-Chloro-1,3-butadiene	(2)	4.636	53	39268	3.910
40) Ethyl t-butyl ether	(2)	5.142	59	80054	4.376
44) 2-Butanone	(2)	5.362	43	55907	8.397
42) cis-1,2-Dichloroethene	(2)	5.374	96	37018	4.203
45) 2,2-Dichloropropane	(2)	5.380	77	30509	4.206
47) Propionitrile	(1)	5.447	54	175359	76.401
48) Methacrylonitrile	(2)	5.673	67	214230	42.434
49) Bromochloromethane	(2)	5.715	128	17208	3.677

* = Compound is an internal standard.

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.734	71	15239	6.946
51) Chloroform	(2)	5.886	83	65102	4.310
53) 1,1,1-Trichloroethane	(2)	6.099	97	56657	4.372
52)$Dibromofluoromethane	(2)	6.105	113	395048	49.581
52)$Dibromofluoromethane	(2)	6.105	111	399161	49.395
43) 1,2-Dichloroethene (Total)	(2)		96	68756	8.478
54) Cyclohexane	(2)	6.191	56	35274	3.513
54) Cyclohexane	(2)	6.197	84	30338	3.483
54) Cyclohexane	(2)	6.197	69	11111	3.540
56) Carbon Tetrachloride	(2)	6.319	117	35182	3.715
55) 1,1-Dichloropropene	(2)	6.331	75	40609	3.956
58) Isobutyl Alcohol	(1)	6.526	41	128560	192.848
57)$1,2-Dichloroethane-d4	(2)	6.575	102	88567	51.662
57)$1,2-Dichloroethane-d4	(2)	6.575	65	418374	50.464
57)$1,2-Dichloroethane-d4	(2)	6.581	104	55013	50.360
60) Benzene	(2)	6.599	78	141999	4.284
61) 1,2-Dichloroethane	(2)	6.685	62	49687	4.315
61) 1,2-Dichloroethane	(2)	6.685	98	4161	4.197
65) t-Amyl methyl ether	(2)	6.813	73	84835	4.489
66)*Fluorobenzene	(2)	7.026	96	1473407	50.000
67) n-Heptane	(2)	7.050	43	27701	3.283
69) n-Butanol	(1)	7.447	56	207481	380.992
71) Trichloroethene	(2)	7.526	95	38015	4.210
73) Methylcyclohexane	(2)	7.837	83	40736	3.202
73) Methylcyclohexane	(2)	7.837	98	18110	3.218
74) 1,2-Dichloropropane	(2)	7.873	63	37379	4.334
72) t-Amyl ethyl ether	(2)	7.898	87	40721M	4.153
76) 1,4-Dioxane	(1)	7.977	88	37533M	223.694
77) Methyl Methacrylate	(2)	7.983	69	35015	4.376
75) Dibromomethane	(2)	7.989	93	25807	4.371
79) Bromodichloromethane	(2)	8.239	83	44887	3.949
80) 2-Nitropropane	(2)	8.532	41	21109M	6.979
81) 2-Chloroethyl Vinyl Ether	(2)	8.635	63	17081	3.581
82) cis-1,3-Dichloropropene	(2)	8.824	75	56744	4.009
83) 4-Methyl-2-pentanone	(2)	9.026	43	104515	7.855
84)$Toluene-d8	(3)	9.166	98	1470536	50.446
84)$Toluene-d8	(3)	9.166	100	946579	49.891
89) Toluene	(3)	9.251	92	92908	4.188

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) trans-1,3-Dichloropropene	(3)	9.556	75	52253	4.038
92) Ethyl Methacrylate	(3)	9.635	69	50703	3.897
93) 1,1,2-Trichloroethane	(3)	9.775	97	39006	4.341
94) Tetrachloroethene	(3)	9.855	166	41671	4.042
95) 1,3-Dichloropropane	(3)	9.952	76	62311	4.374
97) 2-Hexanone	(3)	10.025	43	84934	7.775
91) 1,3-Dichloropropene (total)	(3)		100	108997	8.047
98) Dibromochloromethane	(3)	10.184	129	37649	3.797
100) 1,2-Dibromoethane	(3)	10.294	107	41503	4.229
101)*Chlorobenzene-d5	(3)	10.763	117	1194068	50.000
103) Chlorobenzene	(3)	10.794	112	113874	4.144
102) 1-Chlorohexane	(3)	10.794	91	43798	3.907
104) 1,1,1,2-Tetrachloroethane	(3)	10.885	131	37372	3.935
105) Ethylbenzene	(3)	10.891	91	177655	4.085
107) m+p-Xylene	(3)	11.019	106	140225	8.176
108) o-Xylene	(3)	11.367	106	67643	4.015
110) Styrene	(3)	11.385	104	109076	3.945
111) Bromoform	(3)	11.543	173	27586	3.646
112) Isopropylbenzene	(3)	11.690	105	159670	3.960
113) Cyclohexanone	(1)	11.763	55	137638M	185.417
109) Xylene (Total)	(3)		106	207868	12.191
115)$4-Bromofluorobenzene	(3)	11.836	95	596506	50.003
115)$4-Bromofluorobenzene	(3)	11.842	174	542134	50.093
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	68846	4.537
116) Bromobenzene	(4)	11.958	156	51624	4.148
119) trans-1,4-Dichloro-2-butene	(4)	11.982	53	168131	41.360
118) 1,2,3-Trichloropropane	(4)	12.001	110	21581	4.675
120) n-Propylbenzene	(4)	12.037	91	206274	4.254
121) 2-Chlorotoluene	(4)	12.110	126	45510	4.192
123) 1,3,5-Trimethylbenzene	(4)	12.184	105	143848	4.115
122) 4-Chlorotoluene	(4)	12.208	126	48189	4.195
125) tert-Butylbenzene	(4)	12.433	134	26975M	3.900
126) Pentachloroethane	(4)	12.464	167	22688	3.339
127) 1,2,4-Trimethylbenzene	(4)	12.482	105	149978	4.144
128) sec-Butylbenzene	(4)	12.610	105	162211	3.954
130) 1,3-Dichlorobenzene	(4)	12.702	146	96712	4.170
131) p-Isopropyltoluene	(4)	12.726	119	143271	3.945
132)*1,4-Dichlorobenzene-d4	(4)	12.763	152	673752	50.000

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

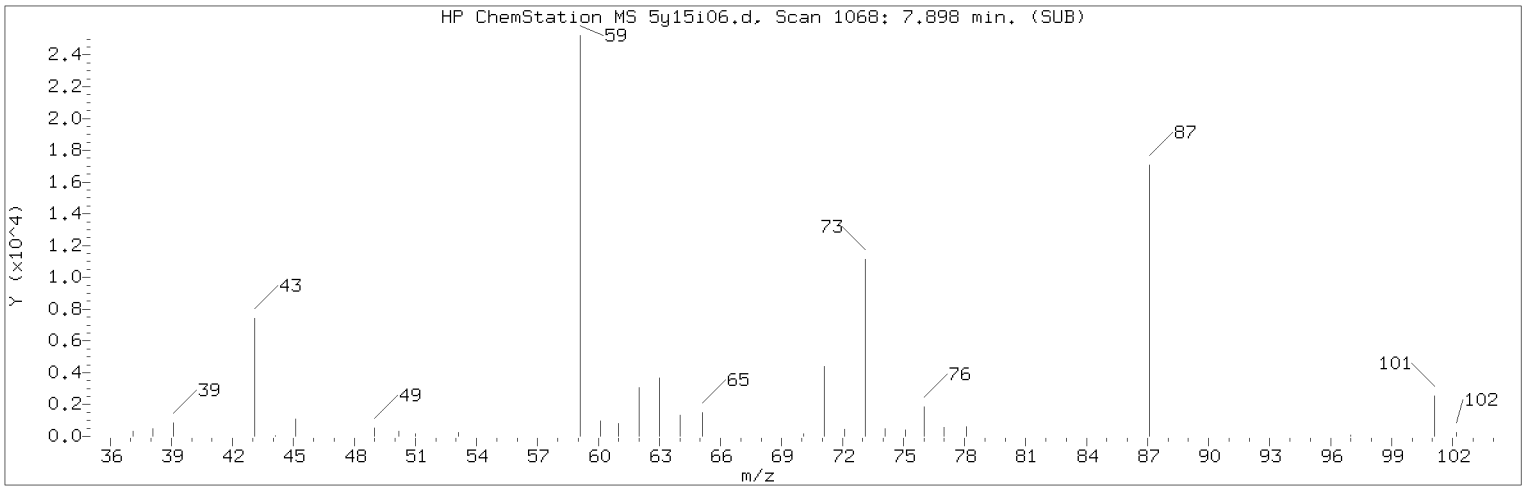
Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,4-Dichlorobenzene	(4)	12.781	146	97245	4.101
135) 1,2,3-Trimethylbenzene	(4)	12.799	105	144185	3.753
136) Benzyl Chloride	(4)	12.866	91	102212	3.767
137) 1,3-Diethylbenzene	(4)	12.933	119	87354	3.699
138) 1,4-Diethylbenzene	(4)	13.007	119	91322	3.615
140) n-Butylbenzene	(4)	13.025	92	72147	3.889
139) 1,2-Dichlorobenzene	(4)	13.049	146	94169	4.251
141) 1,2-Diethylbenzene	(4)	13.080	119	75037M	3.777
142) Diethylbenzene (total)	(4)		100	253713	11.092
143) 1,2-Dibromo-3-chloropropane	(4)	13.616	75	14461	3.990
145) 1,3,5-Trichlorobenzene	(4)	13.750	180	61689	3.900
147) 1,2,4-Trichlorobenzene	(4)	14.189	180	55098	3.879
148) Hexachlorobutadiene	(4)	14.275	225	23731	3.662
149) Naphthalene	(4)	14.372	128	185388	4.133
150) 1,2,3-Trichlorobenzene	(4)	14.518	180	53873	4.096
151) 2-Methylnaphthalene	(4)	15.146	142	72926	3.270

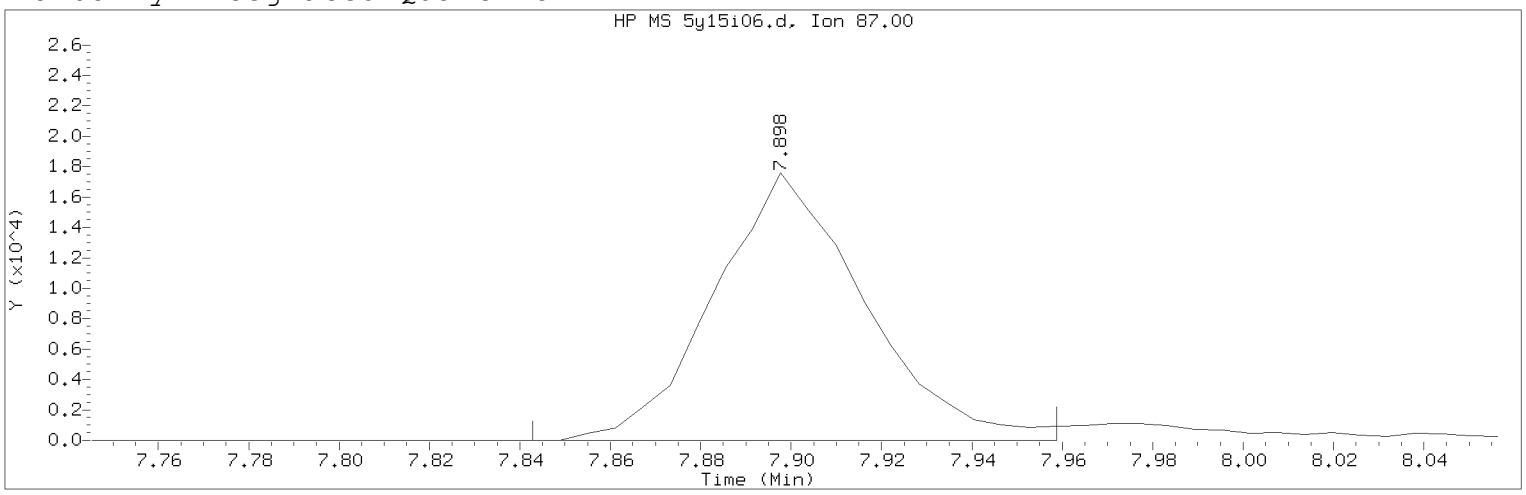
M = Compound was manually integrated.

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

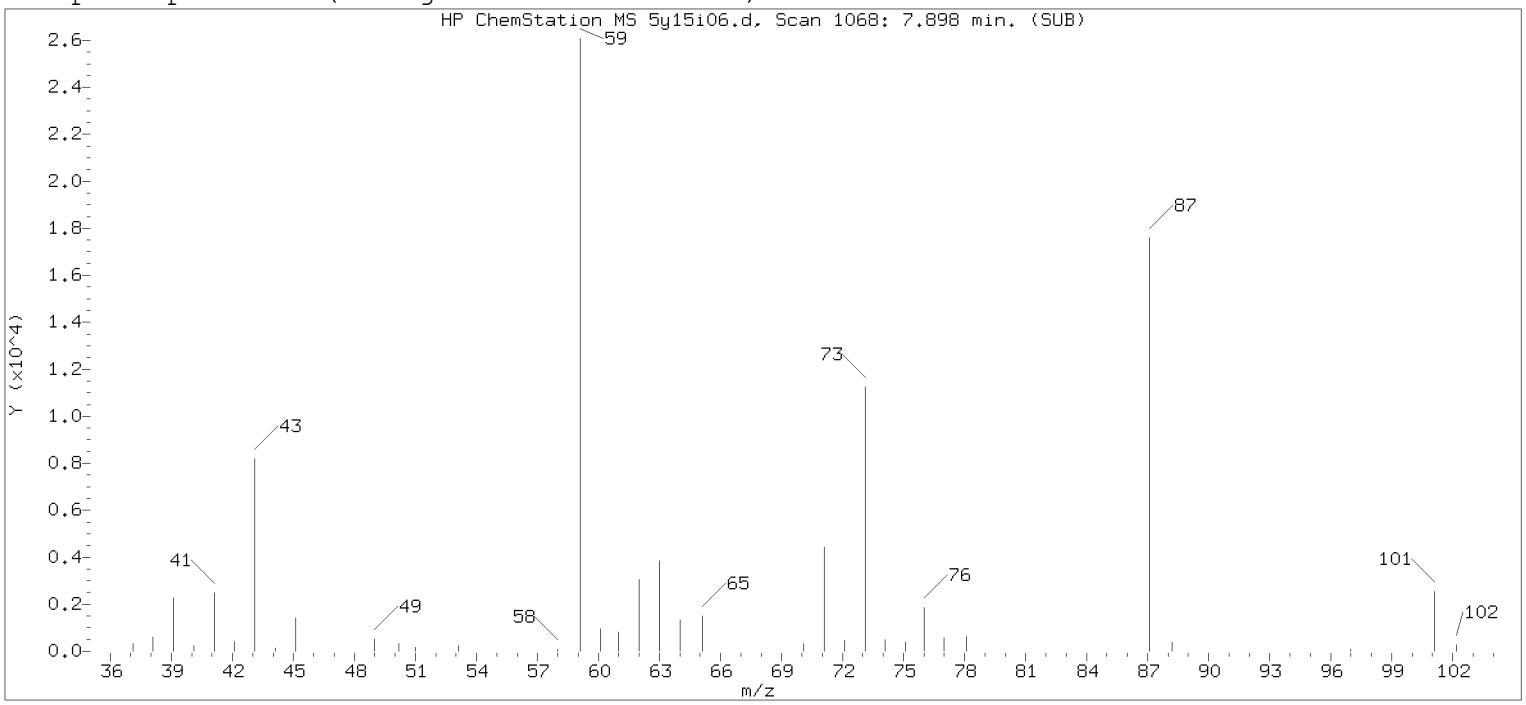
Compound Number : 72
Compound Name : t-Amyl ethyl ether
Scan Number : 1068
Retention Time (minutes): 7.898
Quant Ion : 87.00
Area (flag) : 40721M
On-Column Amount (ng) : 4.1533
Integration start scan : 1058 Integration stop scan: 1077
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

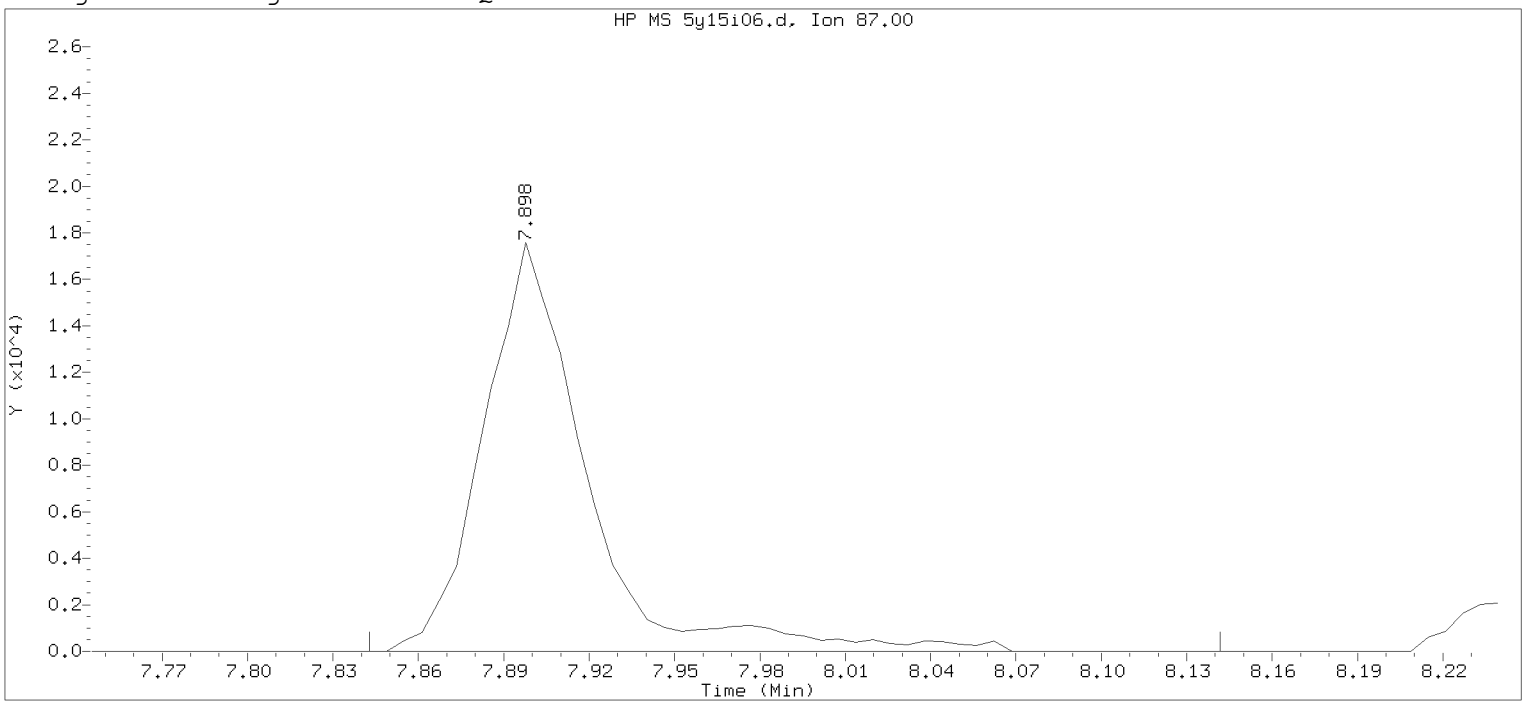
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

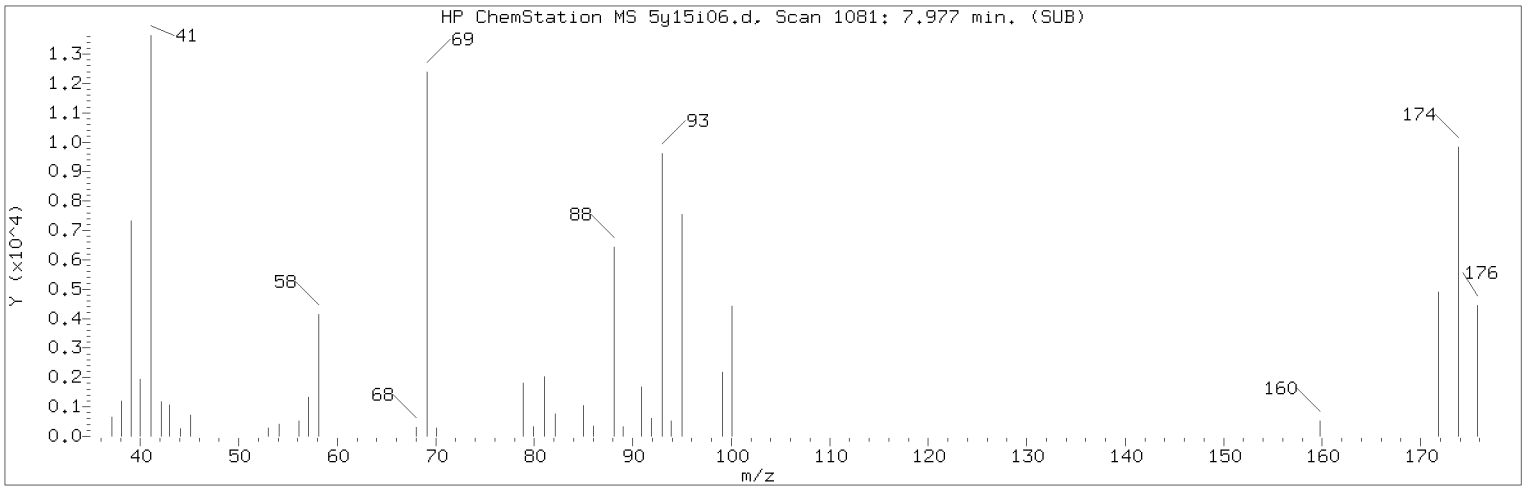
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD004 Lab Sample ID: VSTD004

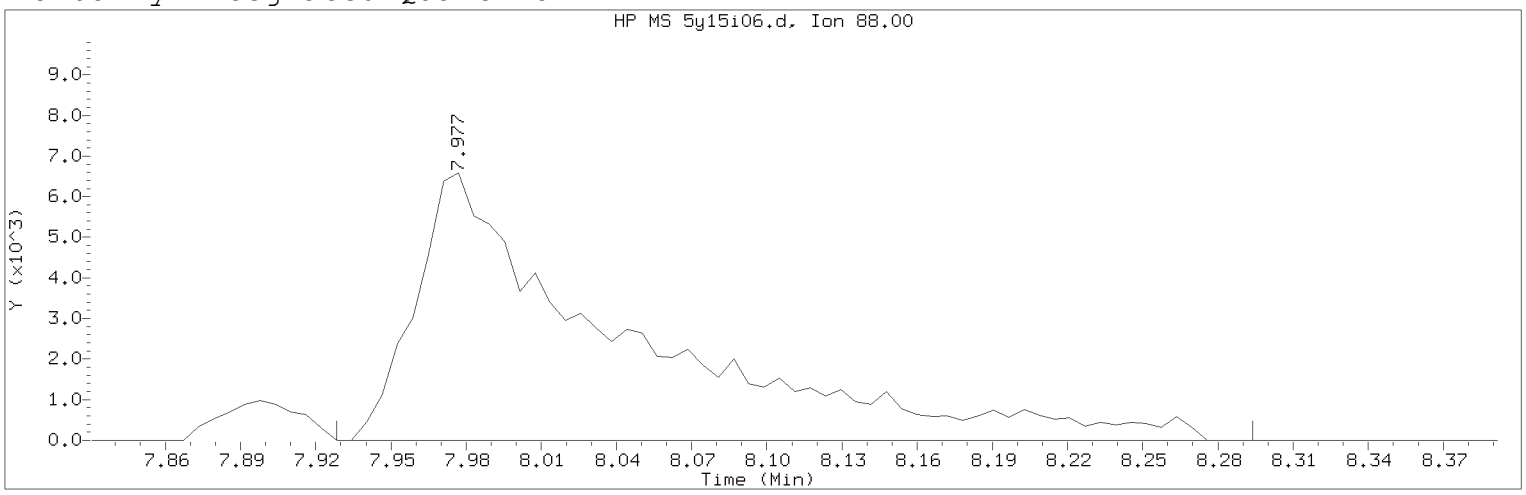
Compound Number : 72
Compound Name : t-Amyl ethyl ether
Scan Number : 1068
Retention Time (minutes): 7.898
Quant Ion : 87.00
Area : 44347
On-column Amount (ng) : 4.3265
Integration start scan : 1058 Integration stop scan: 1107
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

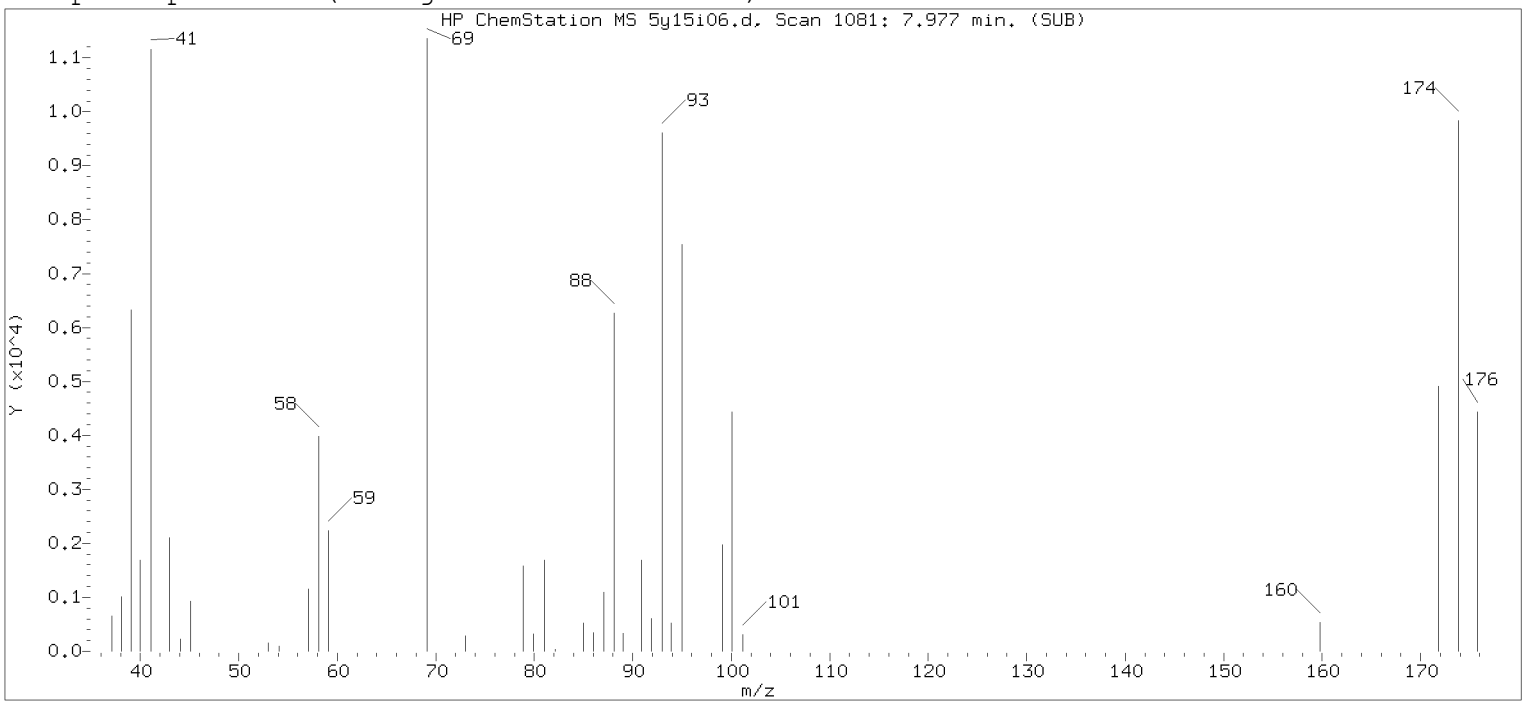
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 1081
Retention Time (minutes): 7.977
Quant Ion : 88.00
Area (flag) : 37533M
On-Column Amount (ng) : 223.6936
Integration start scan : 1072 Integration stop scan: 1132
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

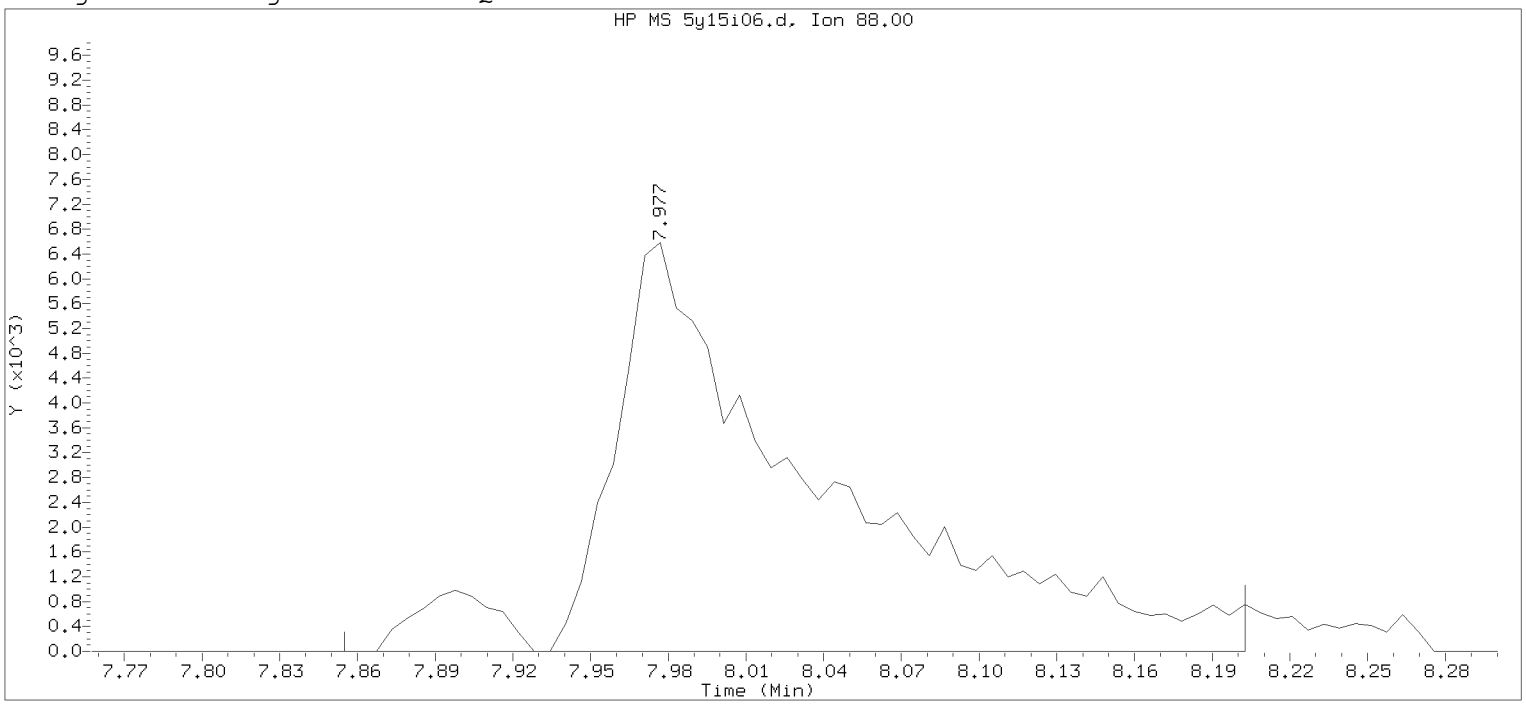
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

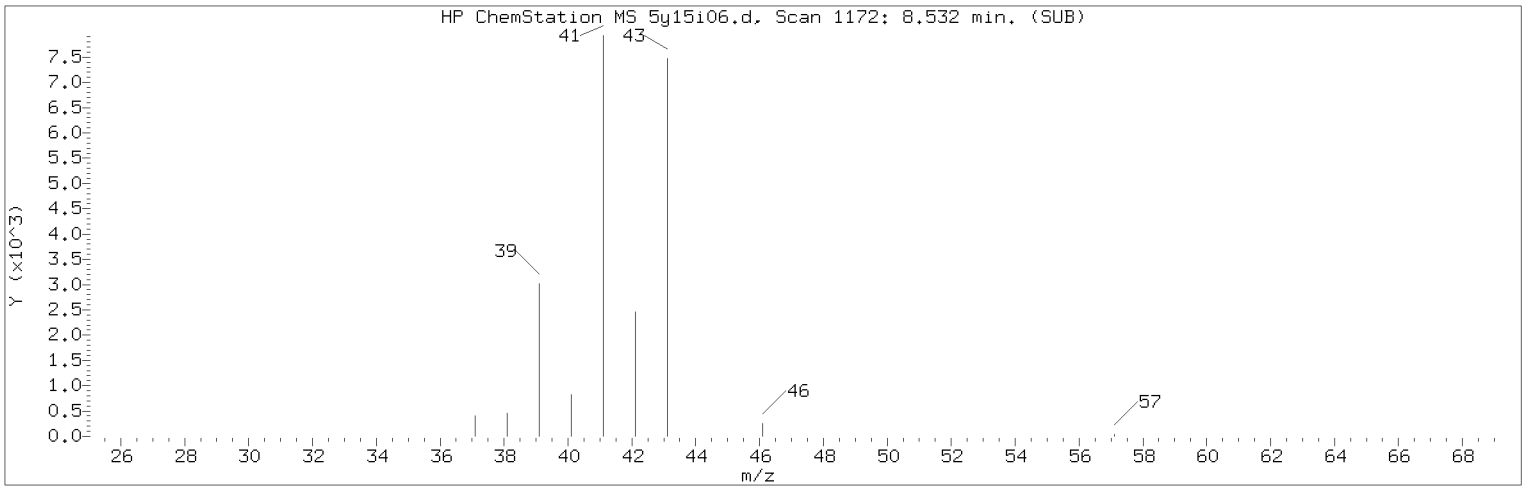
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD004 Lab Sample ID: VSTD004

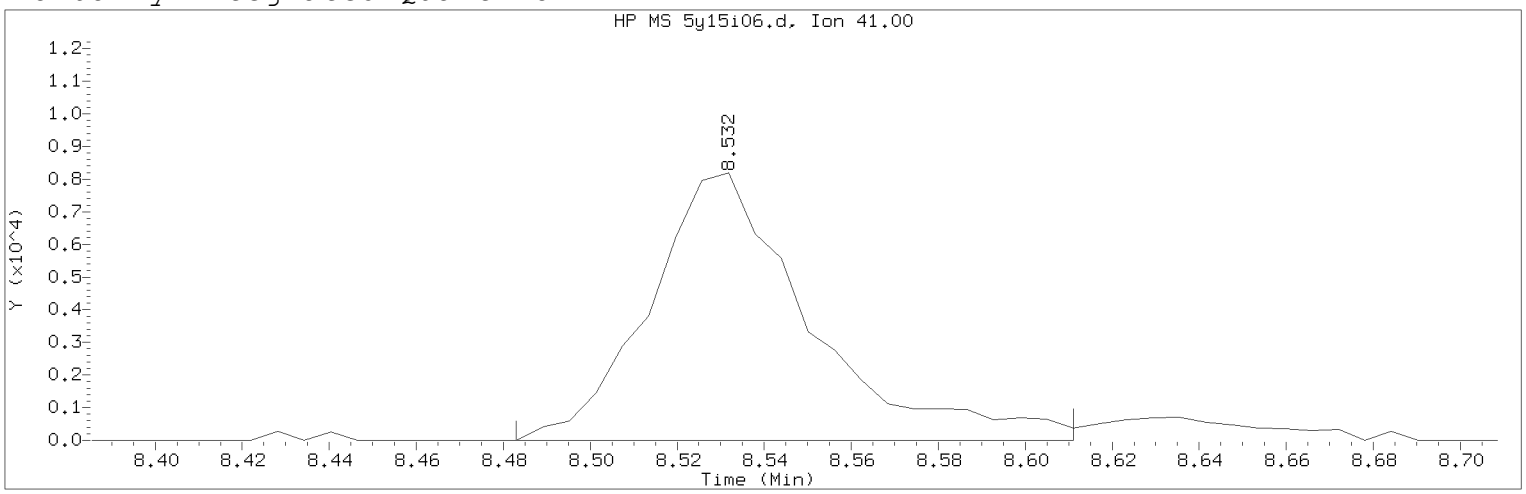
Compound Number	: 76		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1081		
Retention Time (minutes)	: 7.977		
Quant Ion	: 88.00		
Area	: 37780		
On-column Amount (ng)	: 141.6163		
Integration start scan	: 1060	Integration stop scan:	1117
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

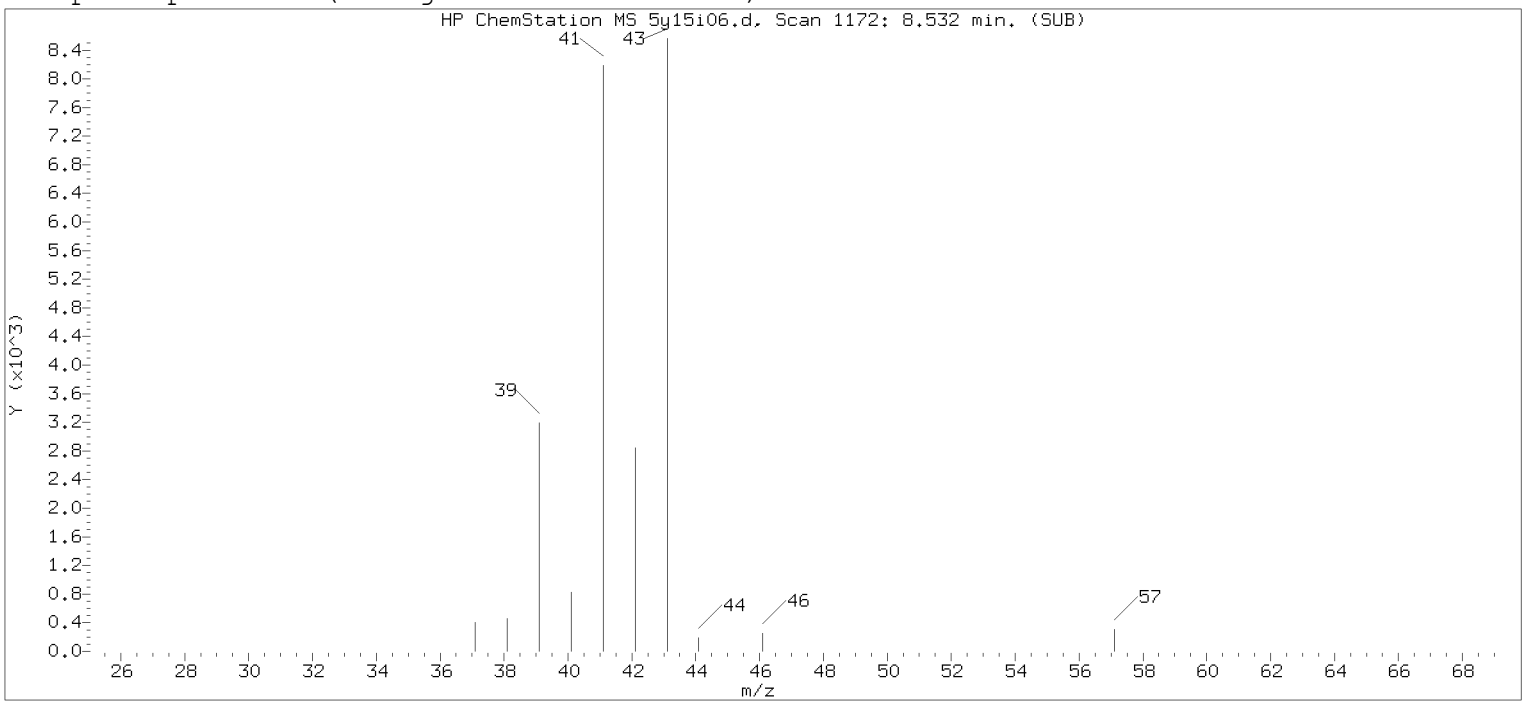
Compound Number : 80
Compound Name : 2-Nitropropane
Scan Number : 1172
Retention Time (minutes): 8.532
Quant Ion : 41.00
Area (flag) : 21109M
On-Column Amount (ng) : 6.9788
Integration start scan : 1163 Integration stop scan: 1184
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

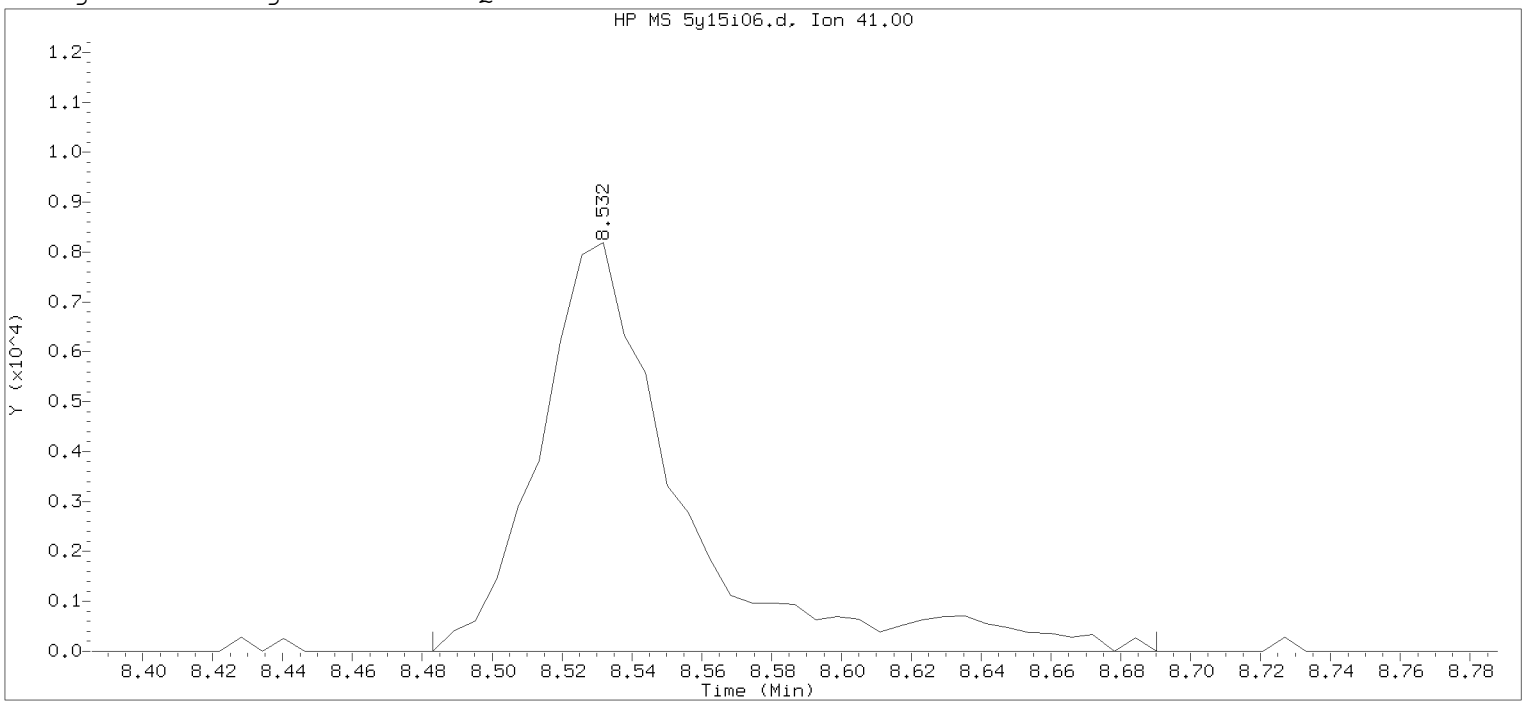
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

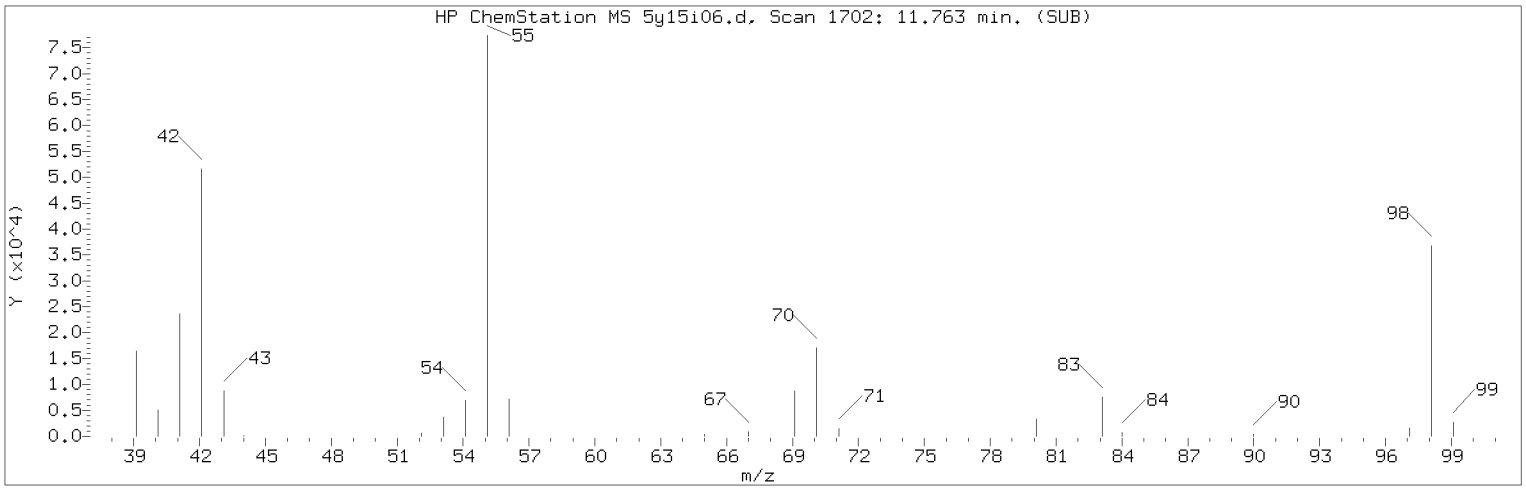
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD004 Lab Sample ID: VSTD004

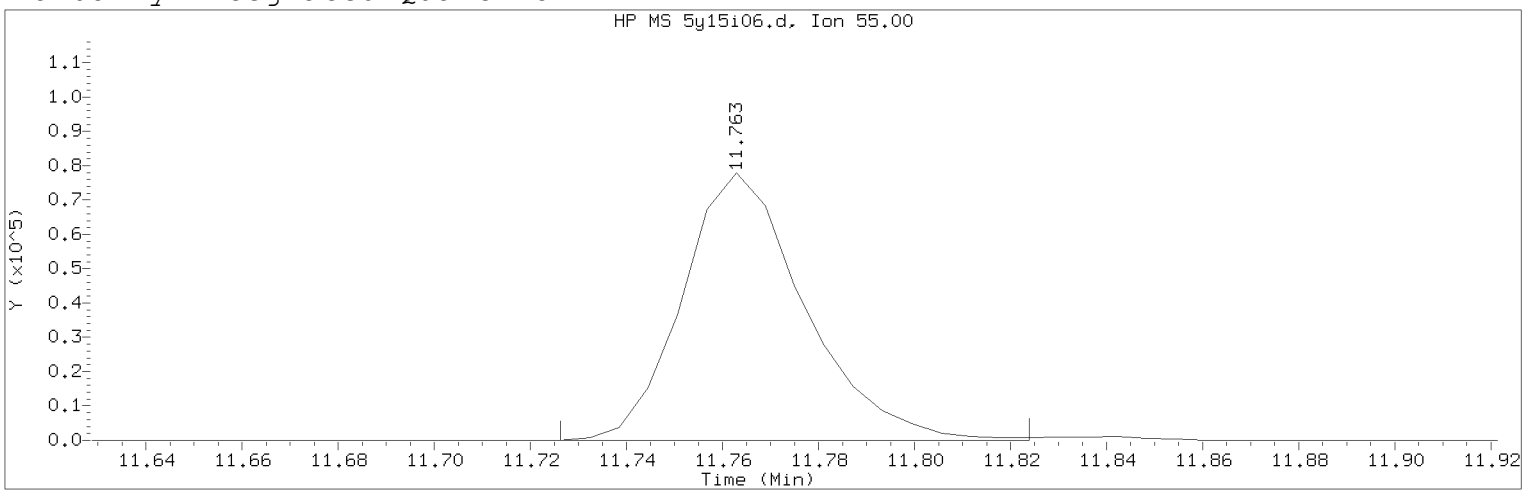
Compound Number : 80
Compound Name : 2-Nitropropane
Scan Number : 1172
Retention Time (minutes): 8.532
Quant Ion : 41.00
Area : 23010
On-column Amount (ng) : 6.0053
Integration start scan : 1163 Integration stop scan: 1197
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

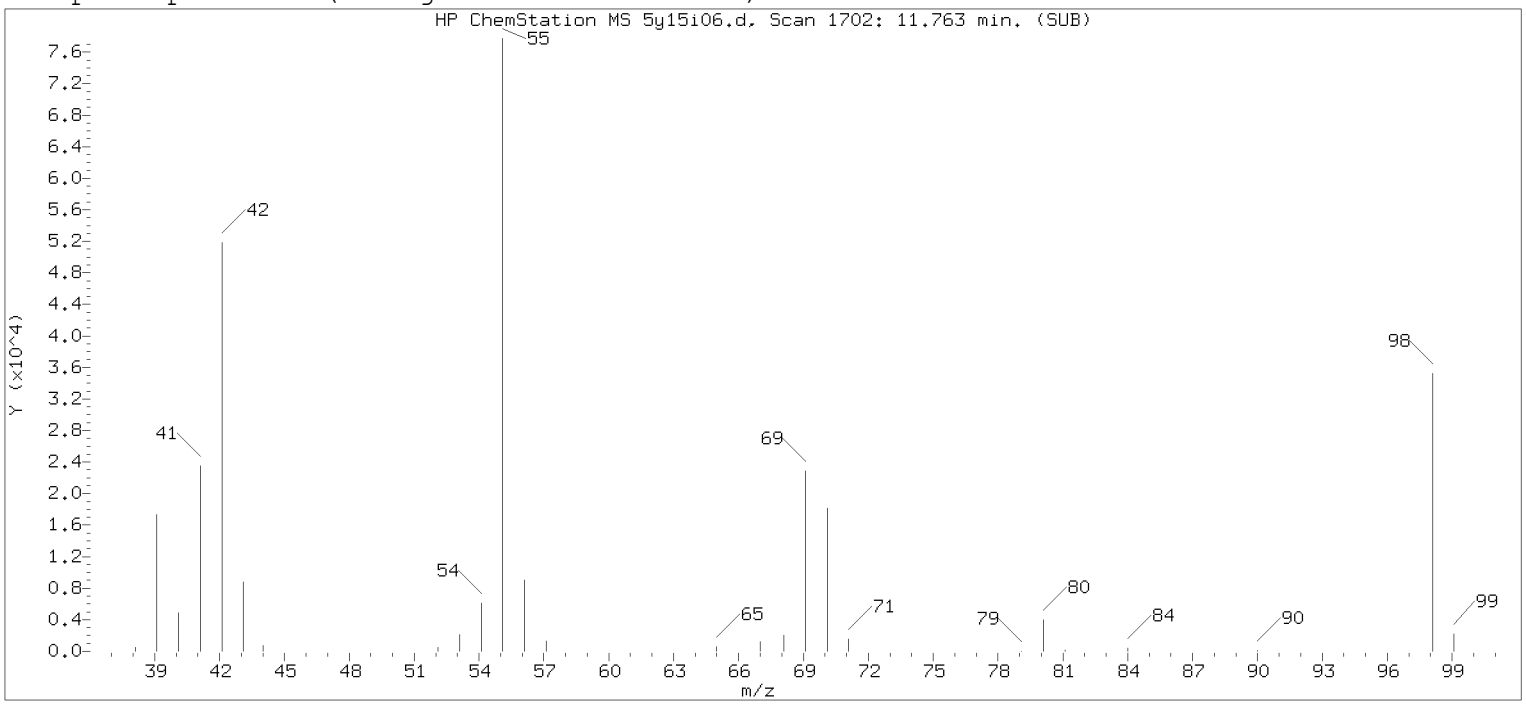
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1702
Retention Time (minutes): 11.763
Quant Ion : 55.00
Area (flag) : 137638M
On-Column Amount (ng) : 185.4172
Integration start scan : 1695 Integration stop scan: 1711
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

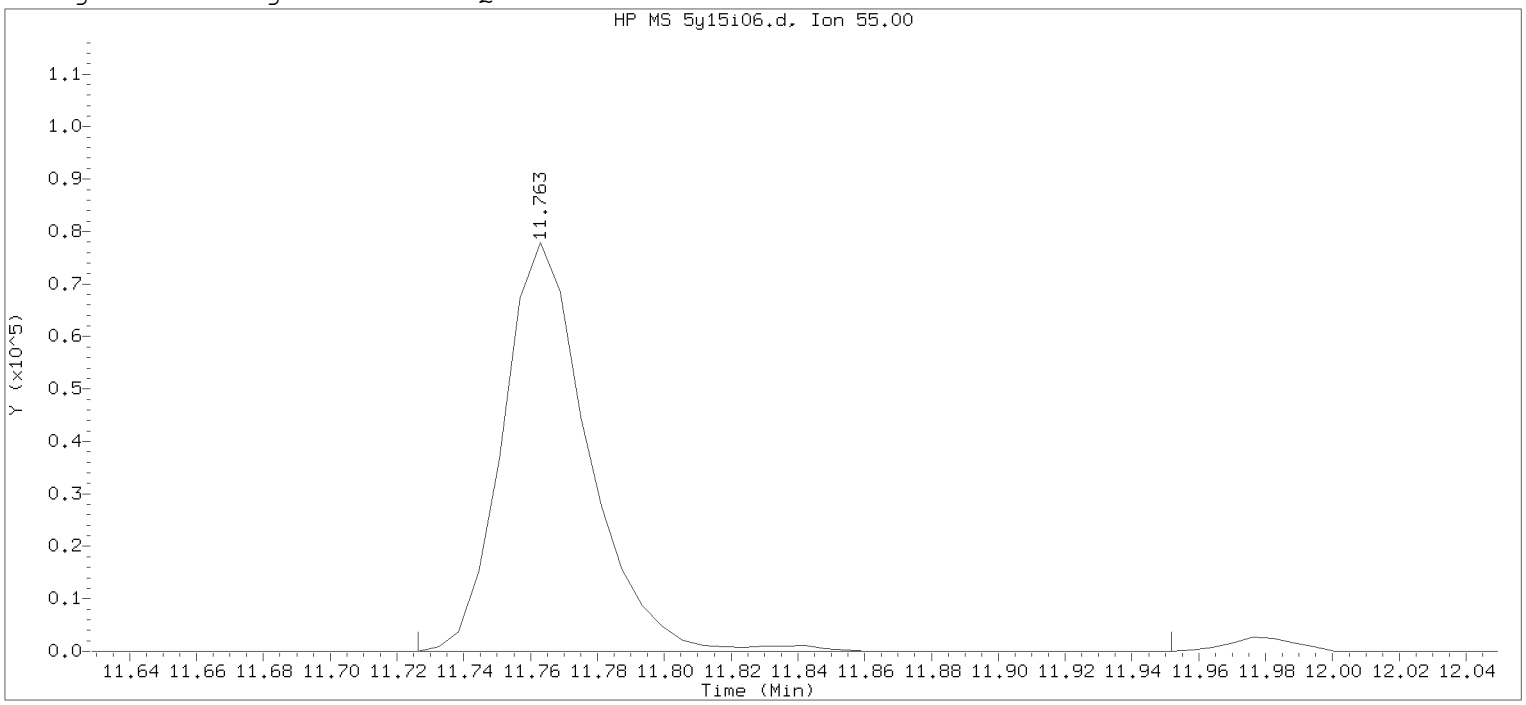
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

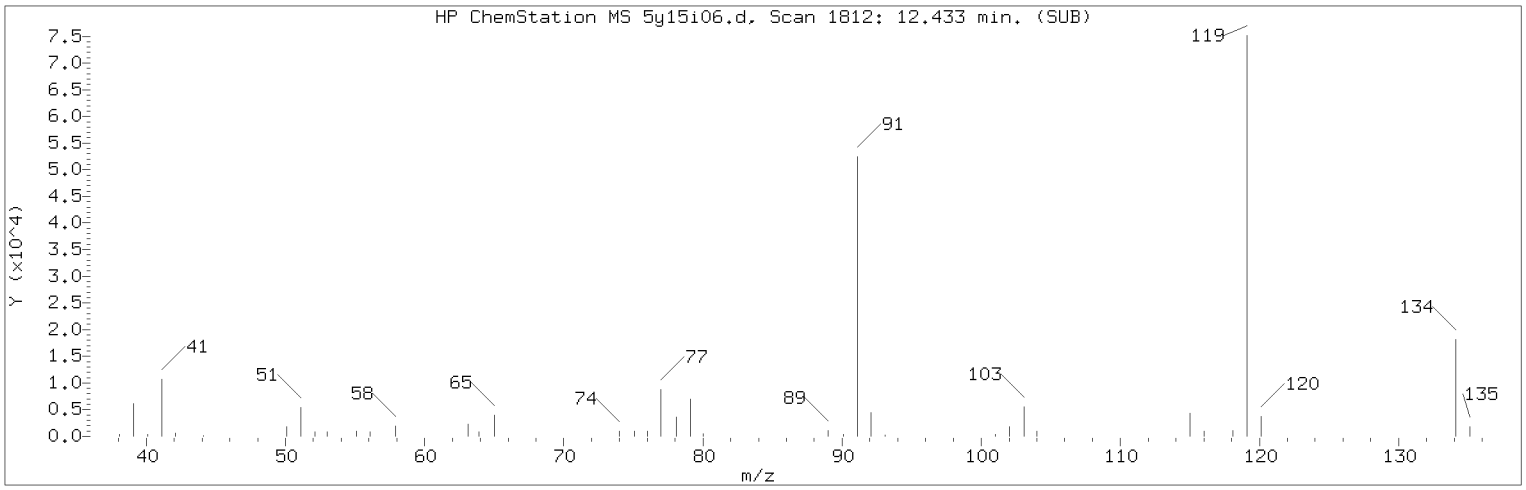
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD004 Lab Sample ID: VSTD004

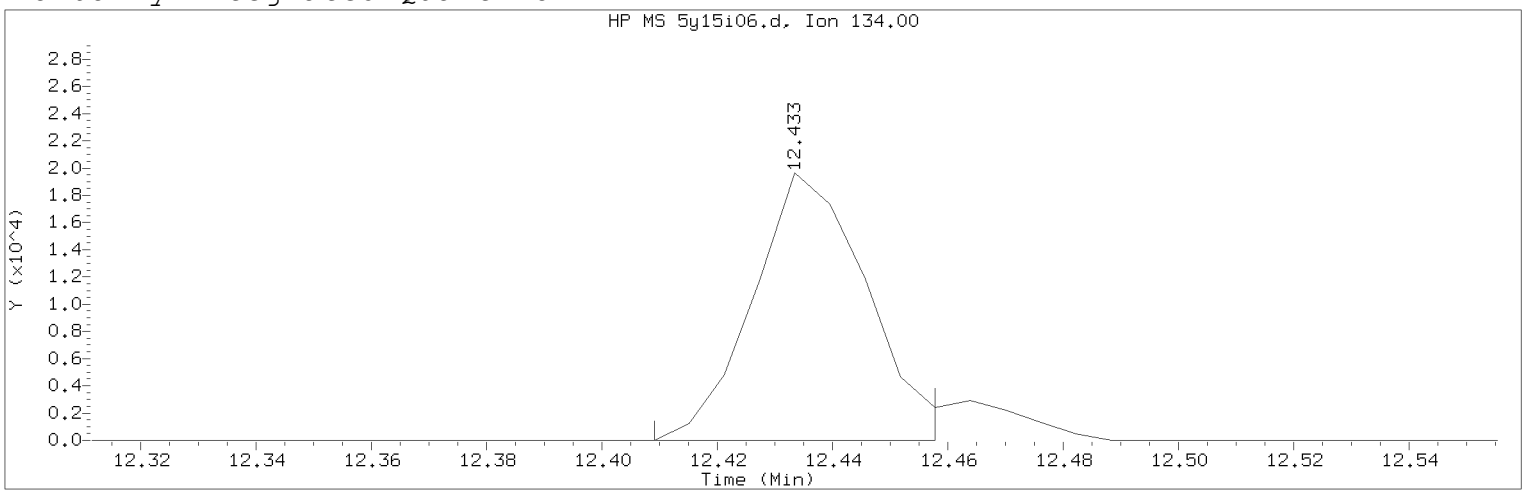
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1702
Retention Time (minutes): 11.763
Quant Ion : 55.00
Area : 139024
On-column Amount (ng) : 219.1234
Integration start scan : 1695 Integration stop scan: 1732
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user k[illegible]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

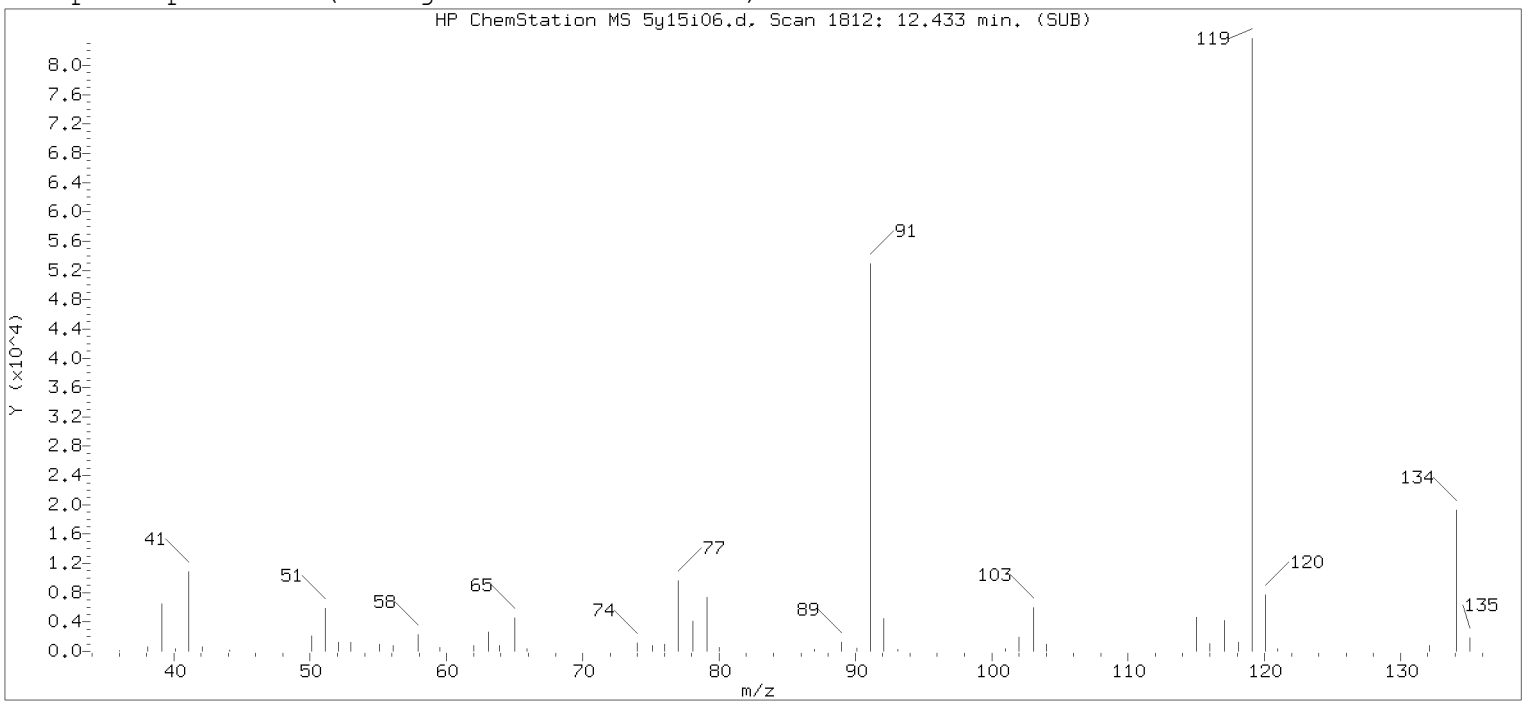
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.433
Quant Ion : 134.00
Area (flag) : 26975M
On-Column Amount (ng) : 3.9001
Integration start scan : 1807 Integration stop scan: 1815
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

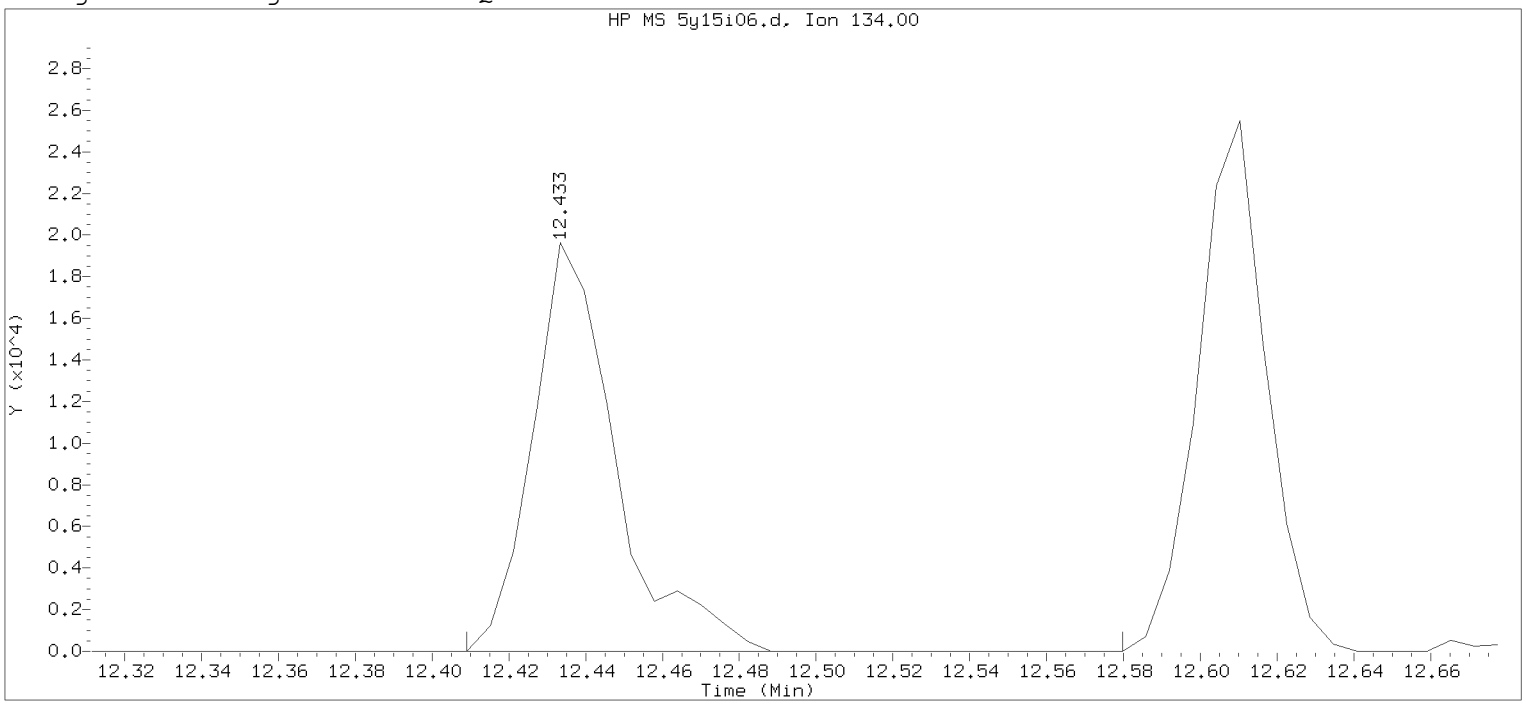
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.433
Quant Ion : 134.00
Area : 29505
On-column Amount (ng) : 3.8037
Integration start scan : 1807 Integration stop scan: 1835
Y at integration start : 0 Y at integration end: 0

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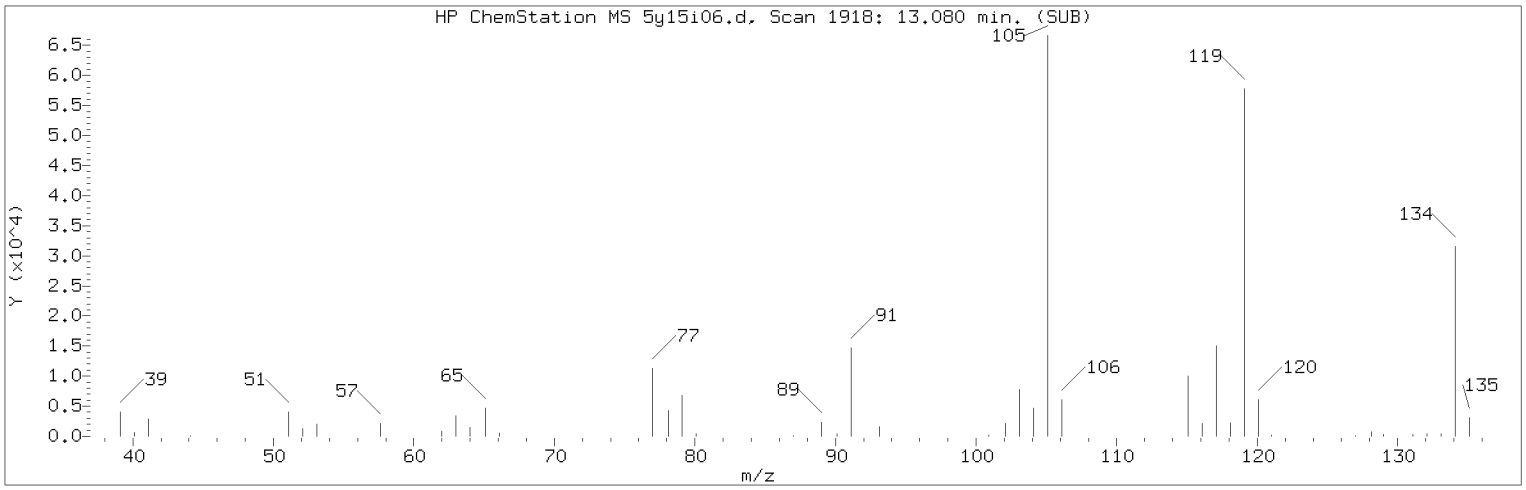
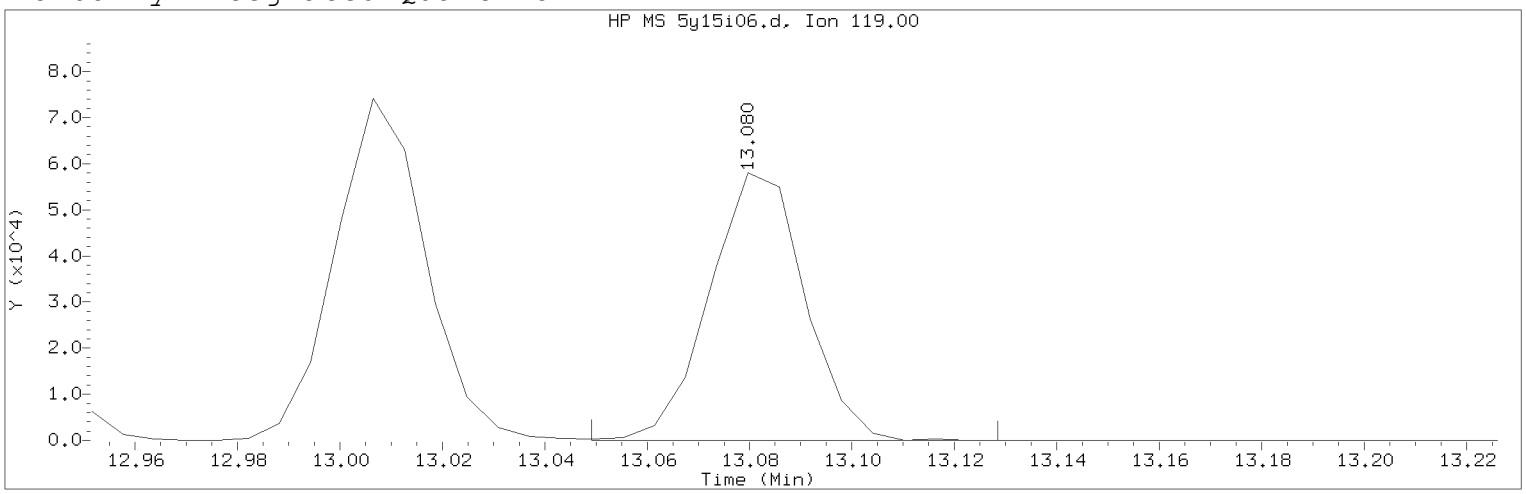
Target 3.5 esignature user keeper 287

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD004 Lab Sample ID: VSTD004

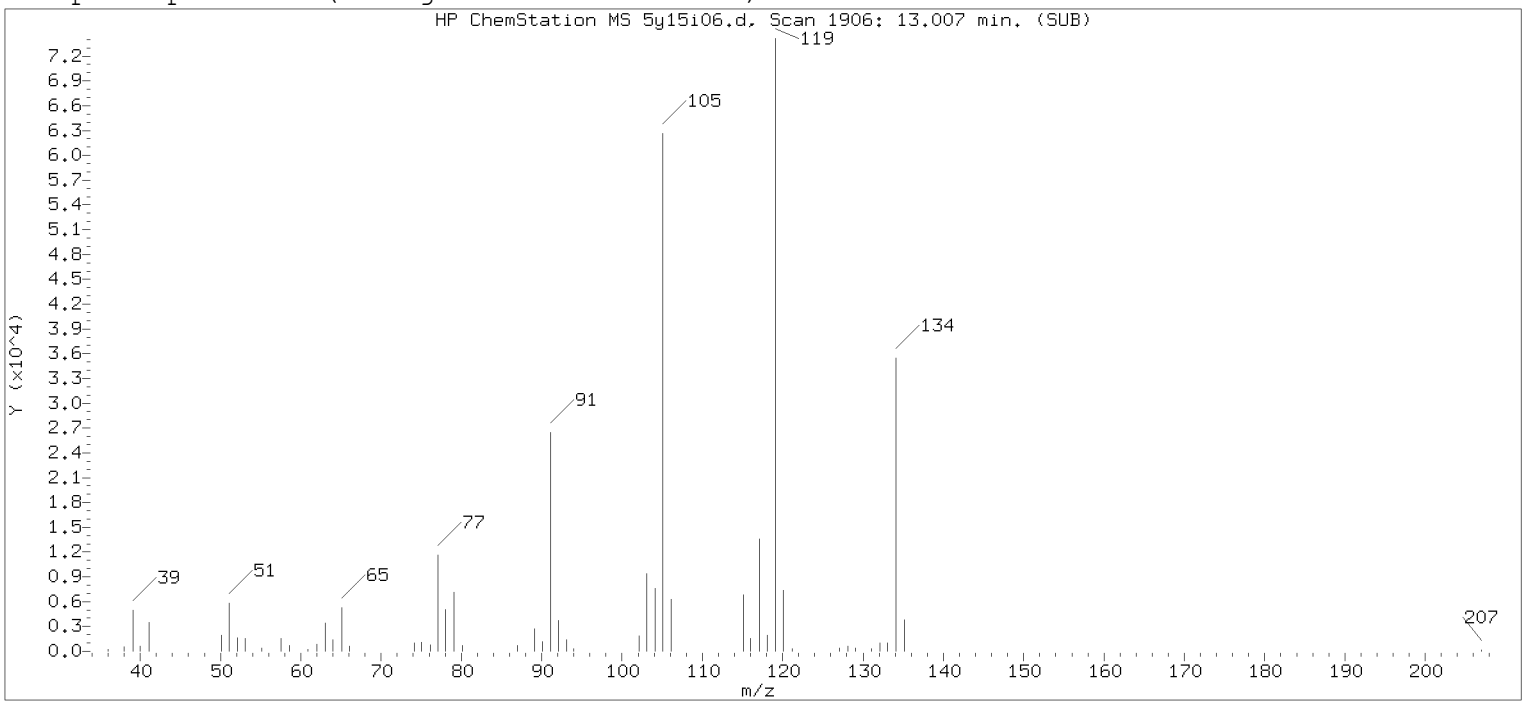
Compound Number : 141
Compound Name : 1,2-Diethylbenzene
Scan Number : 1918
Retention Time (minutes): 13.080
Quant Ion : 119.00
Area (flag) : 75037M
On-Column Amount (ng) : 3.7774
Integration start scan : 1912 Integration stop scan: 1925
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

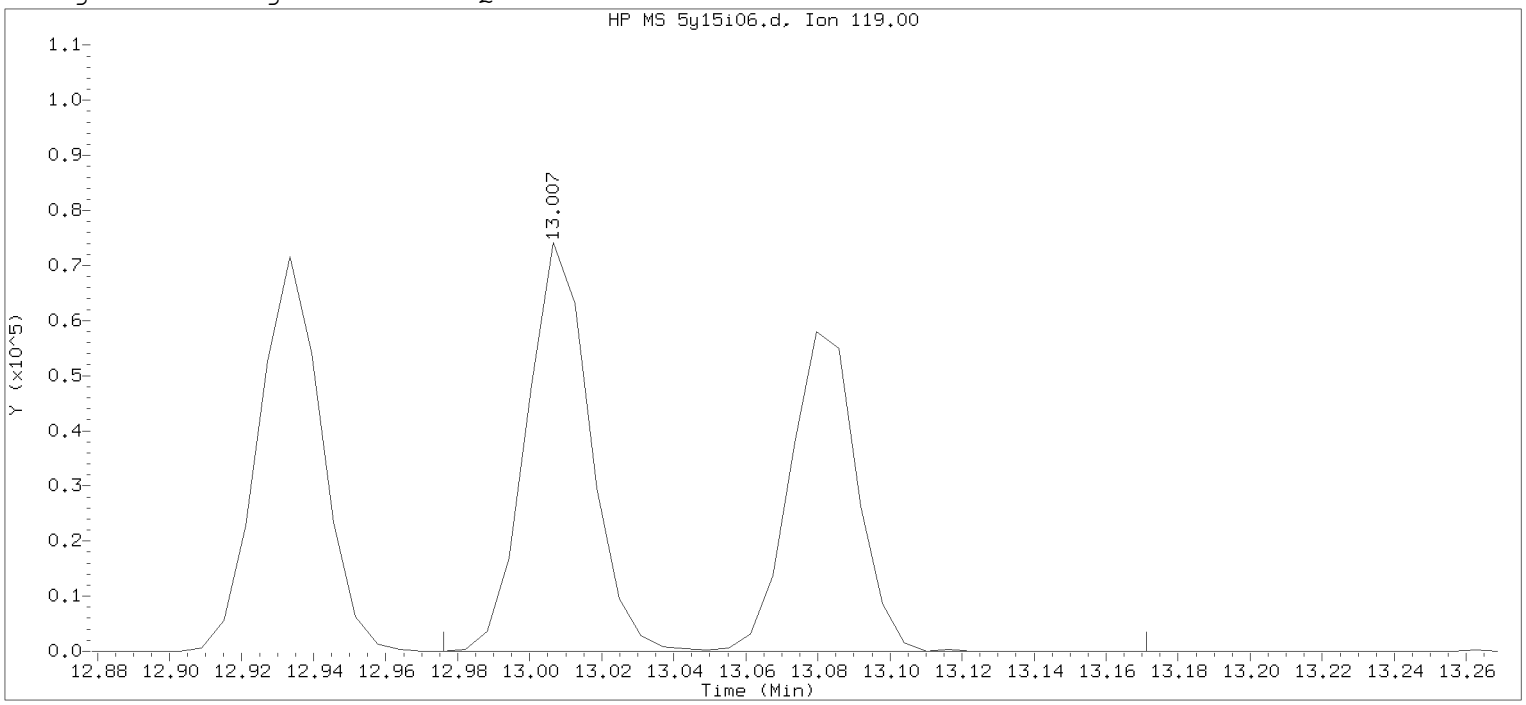
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i06.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:01 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compound Number : 141
Compound Name : 1,2-Diethylbenzene
Scan Number : 1906
Retention Time (minutes): 13.007
Quant Ion : 119.00
Area : 166307
On-column Amount (ng) : 5.7510
Integration start scan : 1900 Integration stop scan: 1932
Y at integration start : 0 Y at integration end: 0

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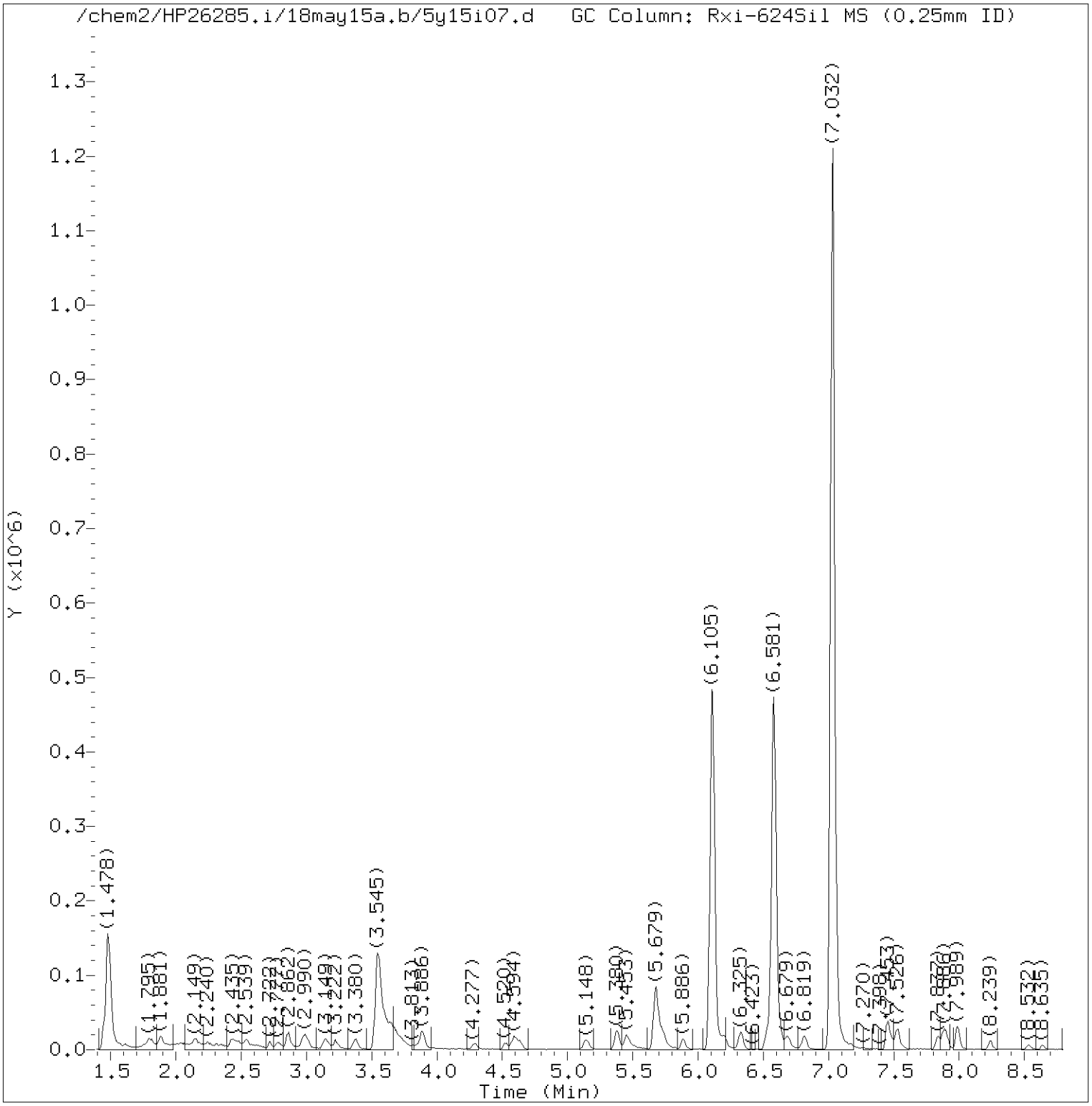
Target 3.5 esignature user keeper 289



Total Ion Chromatogram (TIC)

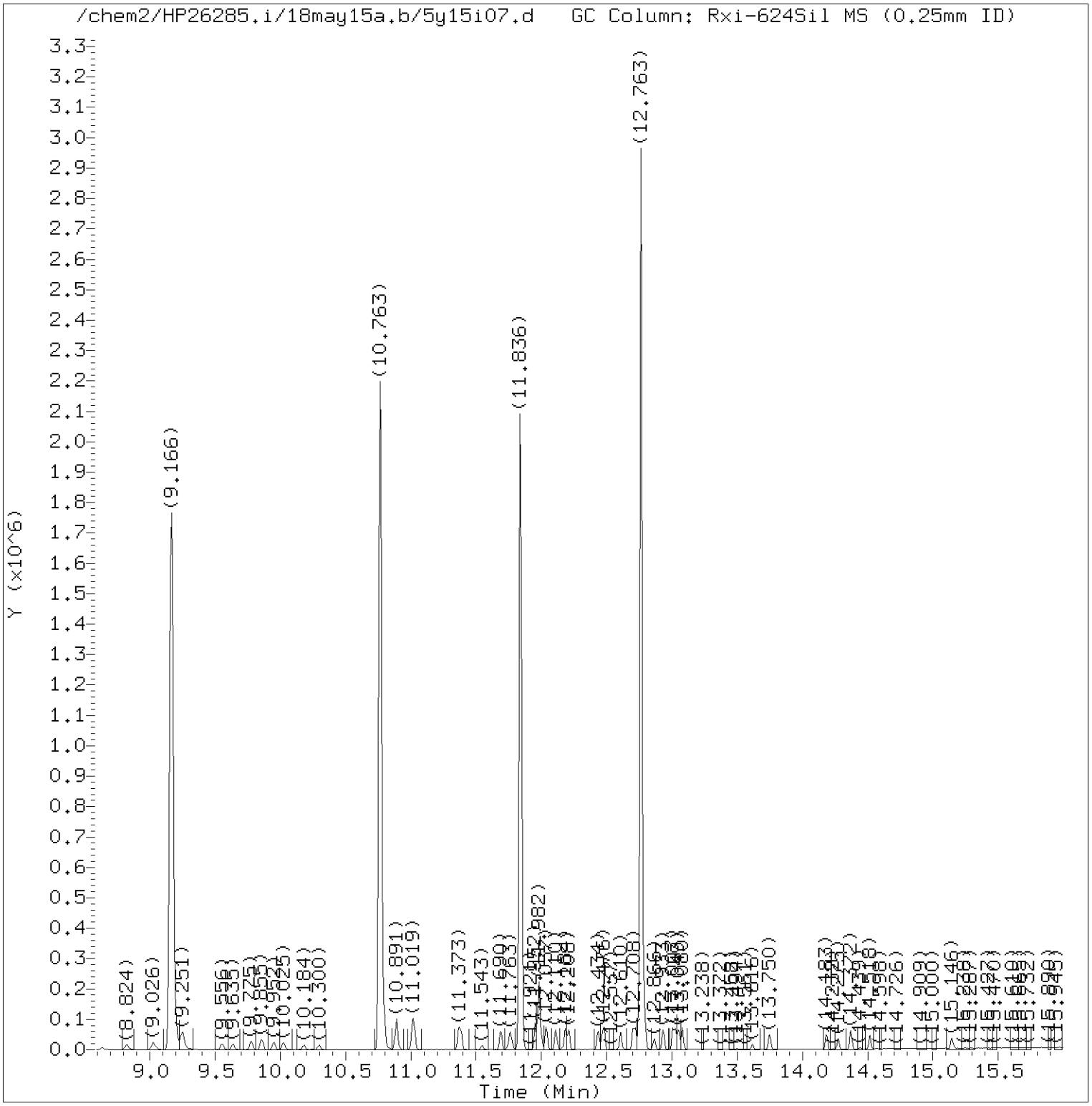
Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.612	85	7042	0.682
4) Chloromethane	(2)	1.789	50	7484	1.017
6) Vinyl Chloride	(2)	1.875	62	6612	0.919
5) 1,3-Butadiene	(2)	1.887	39	4990	1.043
8) Bromomethane	(2)	2.143	94	6376	1.051
9) Chloroethane	(2)	2.240	64	3910	1.024
10) Dichlorofluoromethane	(2)	2.429	67	11623	0.978
12) Trichlorofluoromethane	(2)	2.472	101	8914	0.784
11) n-Pentane	(2)	2.545	43	6430M	1.019
14) Ethyl ether	(2)	2.716	59	4940	0.837
15) Freon 123a	(2)	2.777	67	7830	0.953
16) Acrolein	(1)	2.862	56	25204	10.180
17) 1,1-Dichloroethene	(2)	2.972	96	5625	0.923
17) 1,1-Dichloroethene	(2)	2.972	63	2939	0.960
19) Freon 113	(2)	2.996	101	5976	0.928
18) Acetone	(1)	3.009	58	3645	2.747
22) Methyl Iodide	(2)	3.143	142	14411	1.003
21) 2-Propanol	(1)	3.149	45	16587	19.560
23) Carbon Disulfide	(2)	3.222	76	18336	0.923
27) Methyl Acetate	(2)	3.362	43	9279	1.035
25) Allyl Chloride	(2)	3.386	41	9126	0.851
28) Methylene Chloride	(2)	3.539	84	7686	0.980
29)*t-Butyl alcohol-d10	(1)	3.545	65	359308	250.000
30) t-Butyl alcohol	(1)	3.643	59	29683	17.967
31) Acrylonitrile	(2)	3.832	53	4082	0.875
33) Methyl Tertiary Butyl Ether	(2)	3.880	73	19035	1.007
32) trans-1,2-Dichloroethene	(2)	3.886	96	7434	0.984
34) n-Hexane	(2)	4.289	57	5538	0.684
36) 1,1-Dichloroethane	(2)	4.520	63	12966	0.954
38) di-Isopropyl ether	(2)	4.587	45	23456	0.993
39) 2-Chloro-1,3-butadiene	(2)	4.636	53	7976	0.780
40) Ethyl t-butyl ether	(2)	5.148	59	17137	0.920
44) 2-Butanone	(2)	5.368	43	12693	1.873
45) 2,2-Dichloropropane	(2)	5.374	77	6924	0.938
42) cis-1,2-Dichloroethene	(2)	5.380	96	8611	0.960
47) Propionitrile	(1)	5.453	54	40741	20.644
48) Methacrylonitrile	(2)	5.679	67	47590	9.259
49) Bromochloromethane	(2)	5.721	128	4022	0.844

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.746	71	3878	2.056
51) Chloroform	(2)	5.886	83	15060	0.979
52)$Dibromofluoromethane	(2)	6.105	113	402525	49.622
52)$Dibromofluoromethane	(2)	6.105	111	406846	49.452
53) 1,1,1-Trichloroethane	(2)	6.105	97	13268	1.006
43) 1,2-Dichloroethene (Total)	(2)		96	16045	1.944
54) Cyclohexane	(2)	6.209	56	8211	0.803
54) Cyclohexane	(2)	6.209	84	7332	0.827
54) Cyclohexane	(2)	6.197	69	2379	0.745
56) Carbon Tetrachloride	(2)	6.319	117	8276	0.858
55) 1,1-Dichloropropene	(2)	6.331	75	9978	0.955
58) Isobutyl Alcohol	(1)	6.526	41	27316	47.657
57)$1,2-Dichloroethane-d4	(2)	6.581	102	89197	51.106
57)$1,2-Dichloroethane-d4	(2)	6.581	65	425857	50.455
57)$1,2-Dichloroethane-d4	(2)	6.581	104	57135	51.374
60) Benzene	(2)	6.599	78	33823	1.002
61) 1,2-Dichloroethane	(2)	6.691	62	13334	1.137
61) 1,2-Dichloroethane	(2)	6.685	98	1000	0.991
65) t-Amyl methyl ether	(2)	6.813	73	18707	0.972
66)*Fluorobenzene	(2)	7.032	96	1500028	50.000
67) n-Heptane	(2)	7.057	43	6207	0.723
69) n-Butanol	(1)	7.459	56	37753	80.628
71) Trichloroethene	(2)	7.526	95	8901	0.968
73) Methylcyclohexane	(2)	7.837	83	8498	0.656
73) Methylcyclohexane	(2)	7.837	98	3737	0.652
74) 1,2-Dichloropropane	(2)	7.873	63	8883	1.012
72) t-Amyl ethyl ether	(2)	7.904	87	8213	0.823
75) Dibromomethane	(2)	7.983	93	6277	1.044
76) 1,4-Dioxane	(1)	7.983	88	5868	40.675
77) Methyl Methacrylate	(2)	7.995	69	7466M	0.916
79) Bromodichloromethane	(2)	8.239	83	10158	0.878
80) 2-Nitropropane	(2)	8.532	41	4939	1.604
81) 2-Chloroethyl Vinyl Ether	(2)	8.635	63	3544	0.730
82) cis-1,3-Dichloropropene	(2)	8.824	75	12471	0.866
83) 4-Methyl-2-pentanone	(2)	9.026	43	21515	1.588
84)$Toluene-d8	(3)	9.166	98	1478470	50.136
84)$Toluene-d8	(3)	9.166	100	955724	49.794
89) Toluene	(3)	9.251	92	24171	1.077

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) trans-1,3-Dichloropropene	(3)	9.556	75	11390	0.870
92) Ethyl Methacrylate	(3)	9.635	69	10542	0.801
93) 1,1,2-Trichloroethane	(3)	9.782	97	9357	1.029
94) Tetrachloroethene	(3)	9.855	166	10842	1.040
95) 1,3-Dichloropropane	(3)	9.952	76	14650	1.017
97) 2-Hexanone	(3)	10.025	43	16502	1.493
91) 1,3-Dichloropropene (total)	(3)		100	23861	1.736
98) Dibromochloromethane	(3)	10.184	129	8406	0.838
100) 1,2-Dibromoethane	(3)	10.300	107	9782	0.985
101)*Chlorobenzene-d5	(3)	10.763	117	1207944	50.000
102) 1-Chlorohexane	(3)	10.787	91	12234	1.079
103) Chlorobenzene	(3)	10.794	112	30599	1.101
104) 1,1,1,2-Tetrachloroethane	(3)	10.885	131	9326	0.971
105) Ethylbenzene	(3)	10.891	91	45636	1.037
107) m+p-Xylene	(3)	11.019	106	35037	2.019
108) o-Xylene	(3)	11.367	106	15862	0.931
110) Styrene	(3)	11.385	104	24053	0.860
111) Bromoform	(3)	11.550	173	5916	0.773
112) Isopropylbenzene	(3)	11.690	105	34684	0.850
113) Cyclohexanone	(1)	11.763	55	22517M	35.279
109) Xylene (Total)	(3)		106	50899	2.950
115)$4-Bromofluorobenzene	(3)	11.836	95	598360	49.582
115)$4-Bromofluorobenzene	(3)	11.836	174	544343	49.719
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	17047	1.115
116) Bromobenzene	(4)	11.958	156	13444	1.072
119) trans-1,4-Dichloro-2-butene	(4)	11.982	53	37760	9.219
118) 1,2,3-Trichloropropane	(4)	12.001	110	5106	1.098
120) n-Propylbenzene	(4)	12.037	91	49915	1.022
121) 2-Chlorotoluene	(4)	12.110	126	11089	1.014
123) 1,3,5-Trimethylbenzene	(4)	12.184	105	31661	0.899
122) 4-Chlorotoluene	(4)	12.214	126	12119	1.047
125) tert-Butylbenzene	(4)	12.434	134	5456M	0.783
126) Pentachloroethane	(4)	12.470	167	5276	0.771
127) 1,2,4-Trimethylbenzene	(4)	12.482	105	32239	0.884
128) sec-Butylbenzene	(4)	12.604	105	35354	0.855
130) 1,3-Dichlorobenzene	(4)	12.702	146	23355	1.000
131) p-Isopropyltoluene	(4)	12.720	119	29169	0.797
132)*1,4-Dichlorobenzene-d4	(4)	12.763	152	678846	50.000

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
134) 1,4-Dichlorobenzene	(4)	12.781	146	24848	1.040
135) 1,2,3-Trimethylbenzene	(4)	12.793	105	33406	0.863
136) Benzyl Chloride	(4)	12.866	91	21420	0.784
137) 1,3-Diethylbenzene	(4)	12.933	119	17304	0.727
138) 1,4-Diethylbenzene	(4)	13.007	119	18762	0.737
140) n-Butylbenzene	(4)	13.025	92	15916	0.851
139) 1,2-Dichlorobenzene	(4)	13.049	146	23923	1.072
141) 1,2-Diethylbenzene	(4)	13.080	119	16452	0.822
142) Diethylbenzene (total)	(4)		100	52518	2.286
143) 1,2-Dibromo-3-chloropropane	(4)	13.616	75	3816	1.045
145) 1,3,5-Trichlorobenzene	(4)	13.750	180	14591	0.916
147) 1,2,4-Trichlorobenzene	(4)	14.183	180	12472	0.872
148) Hexachlorobutadiene	(4)	14.275	225	6372	0.976
149) Naphthalene	(4)	14.372	128	40354	0.893
150) 1,2,3-Trichlorobenzene	(4)	14.518	180	11700	0.883
151) 2-Methylnaphthalene	(4)	15.146	142	15714	0.699

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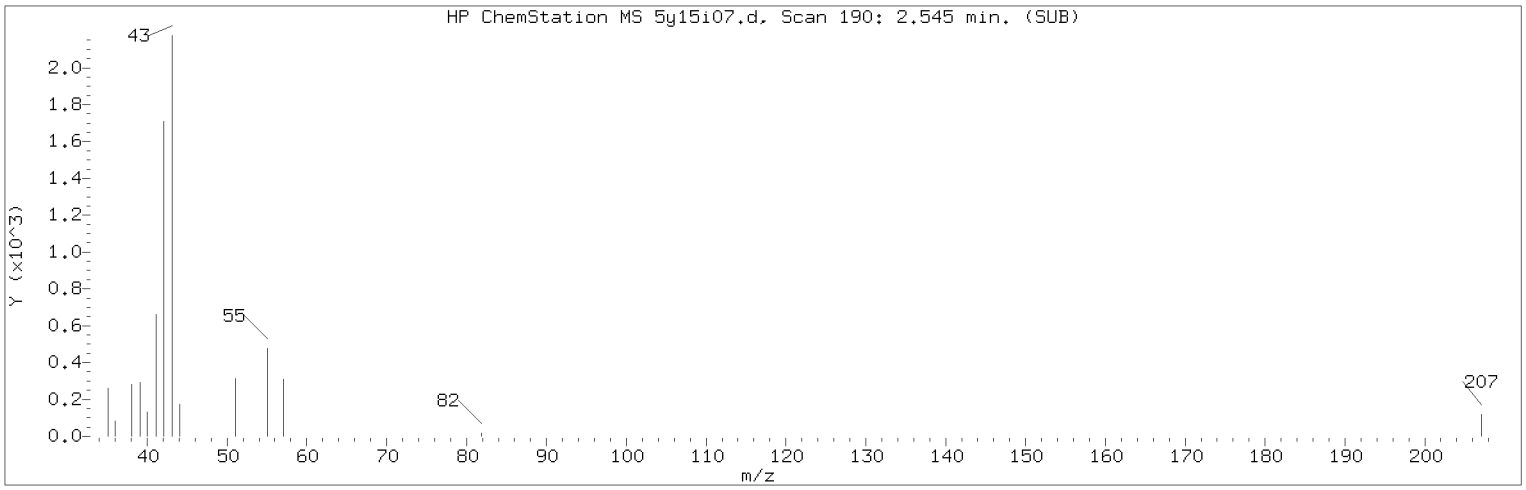
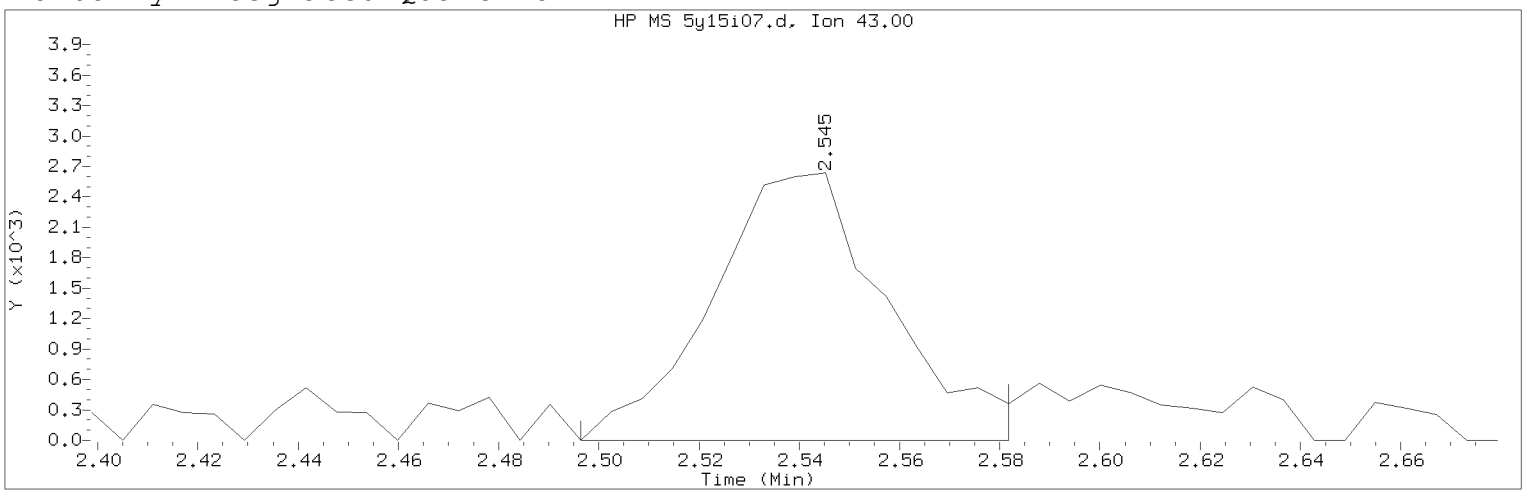
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

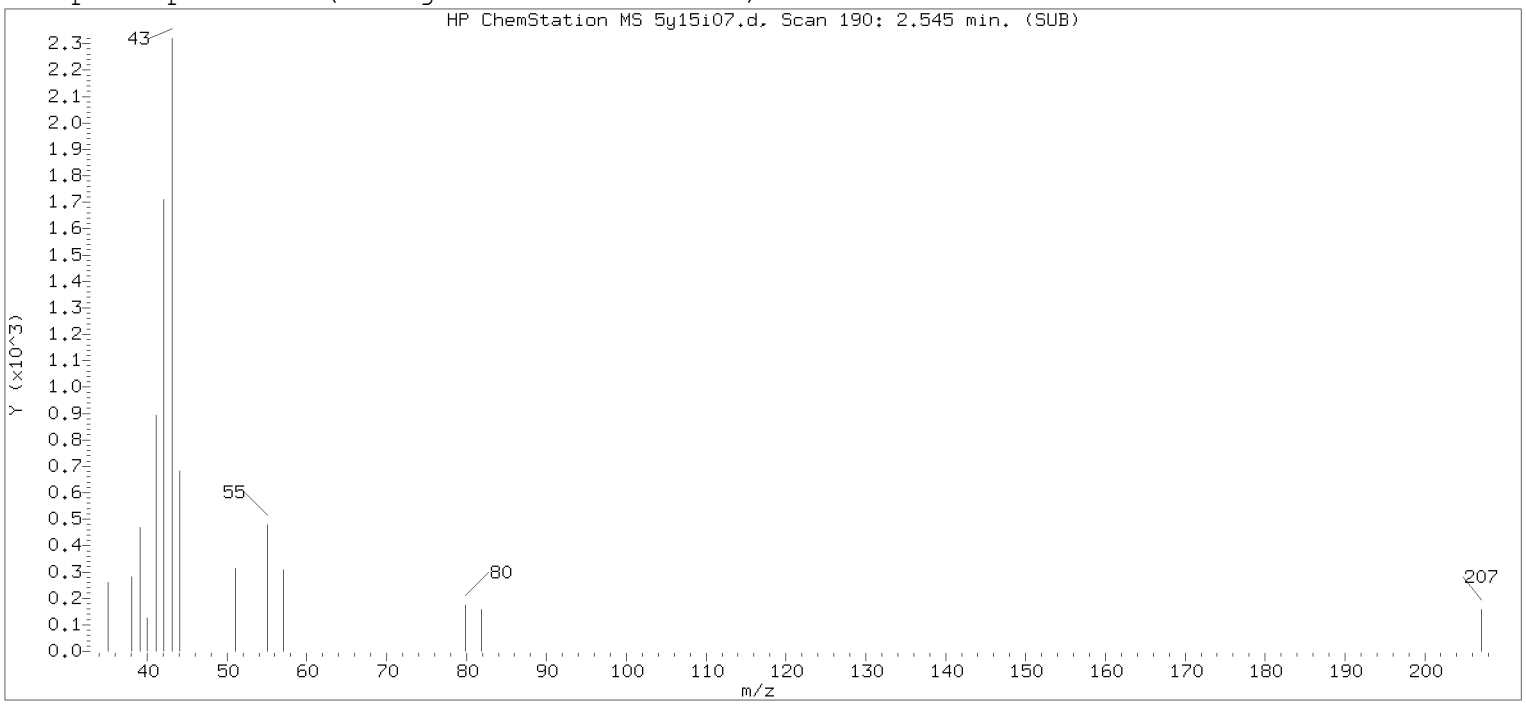
Compound Number : 11
Compound Name : n-Pentane
Scan Number : 190
Retention Time (minutes): 2.545
Quant Ion : 43.00
Area (flag) : 6430M
On-Column Amount (ng) : 1.0187
Integration start scan : 181 Integration stop scan: 195
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

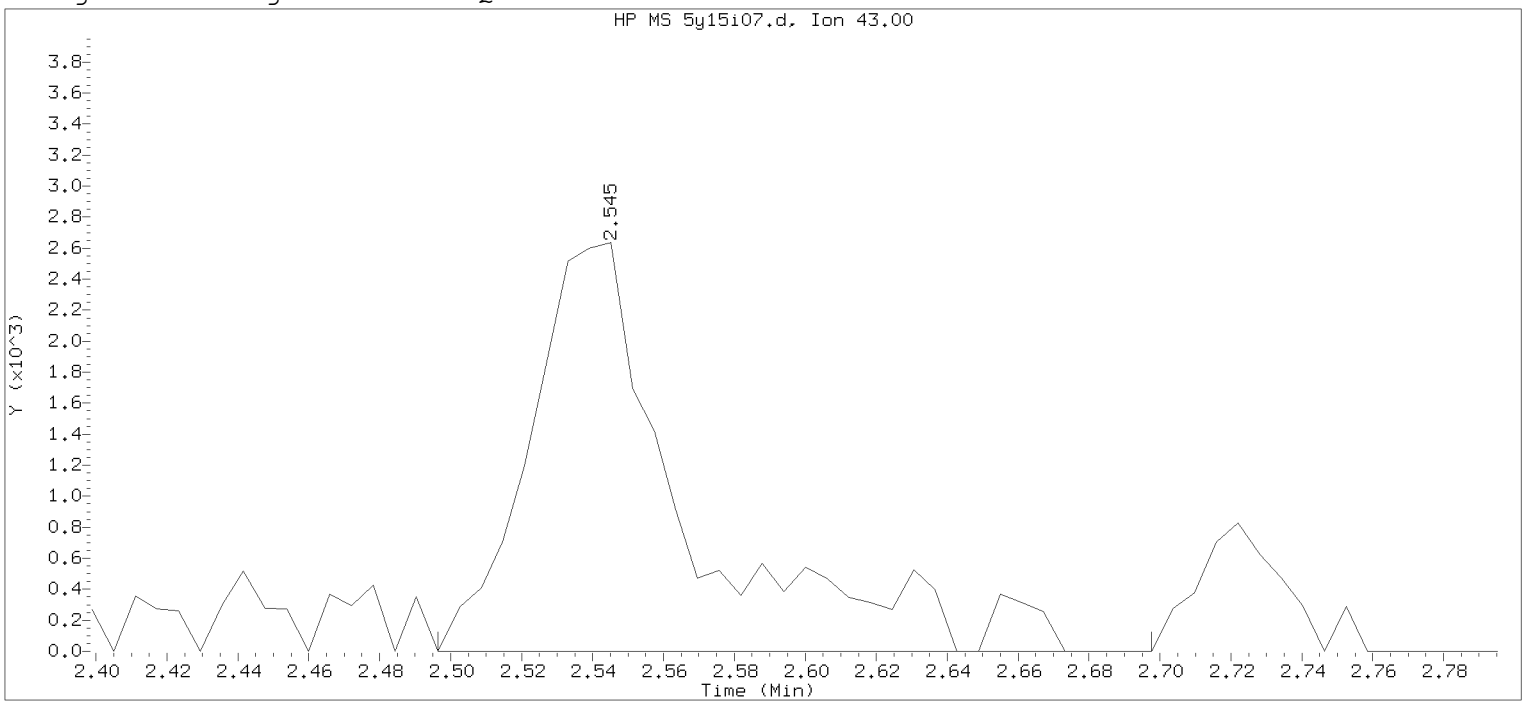
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

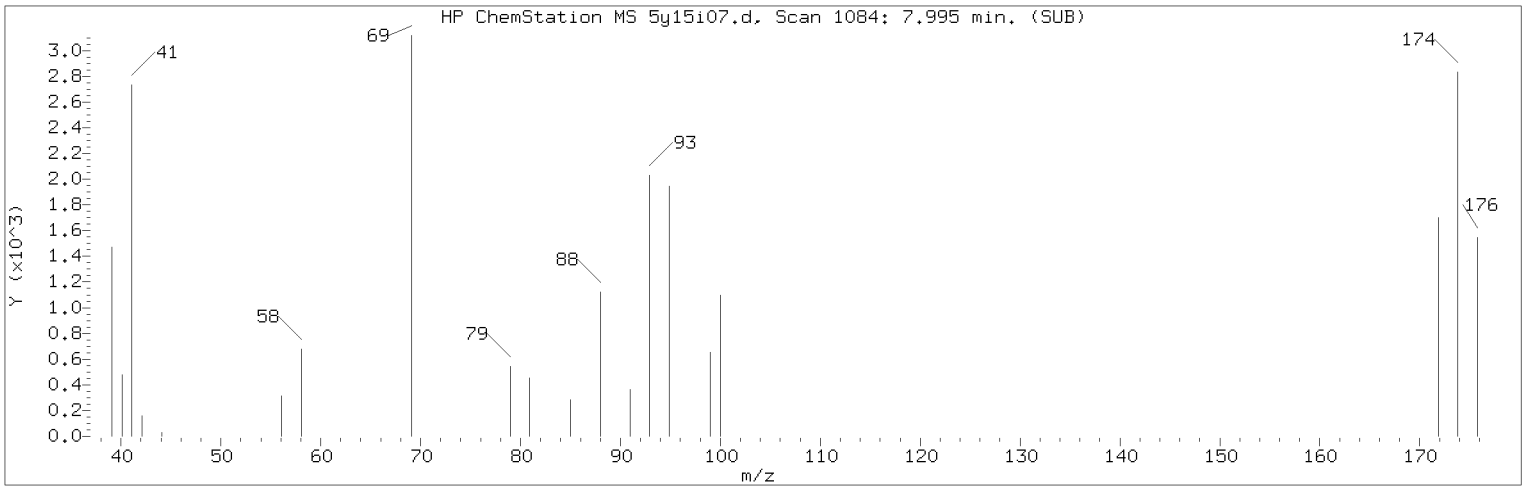
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD001 Lab Sample ID: VSTD001

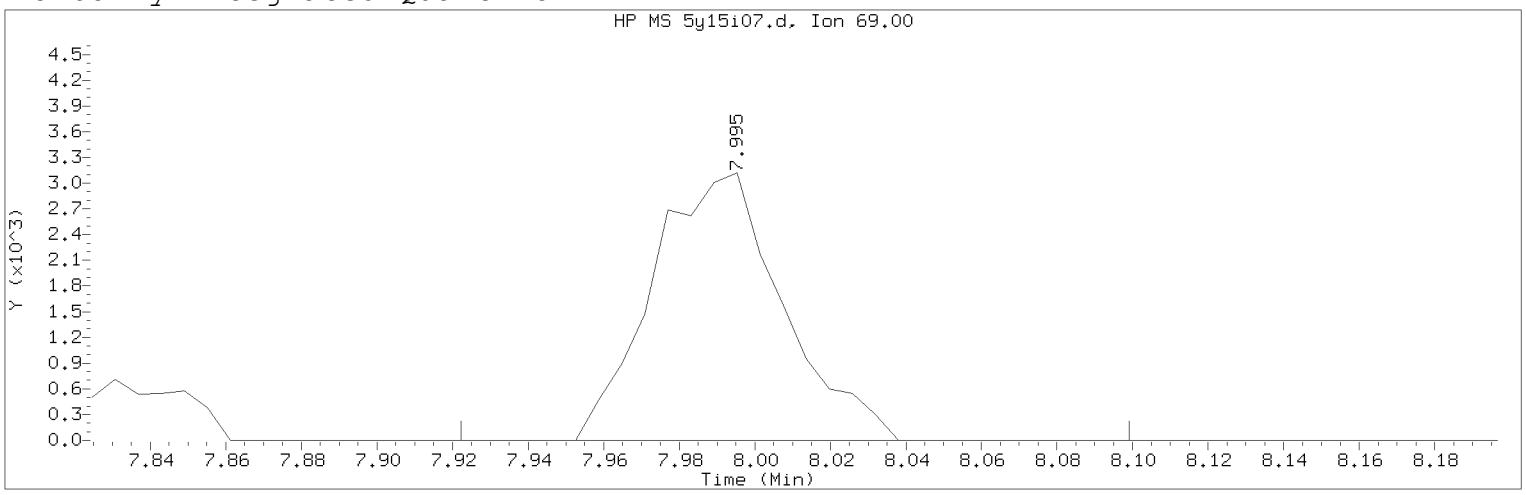
Compound Number : 11
Compound Name : n-Pentane
Scan Number : 190
Retention Time (minutes): 2.545
Quant Ion : 43.00
Area : 8169
On-column Amount (ng) : 1.2453
Integration start scan : 181 Integration stop scan: 214
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

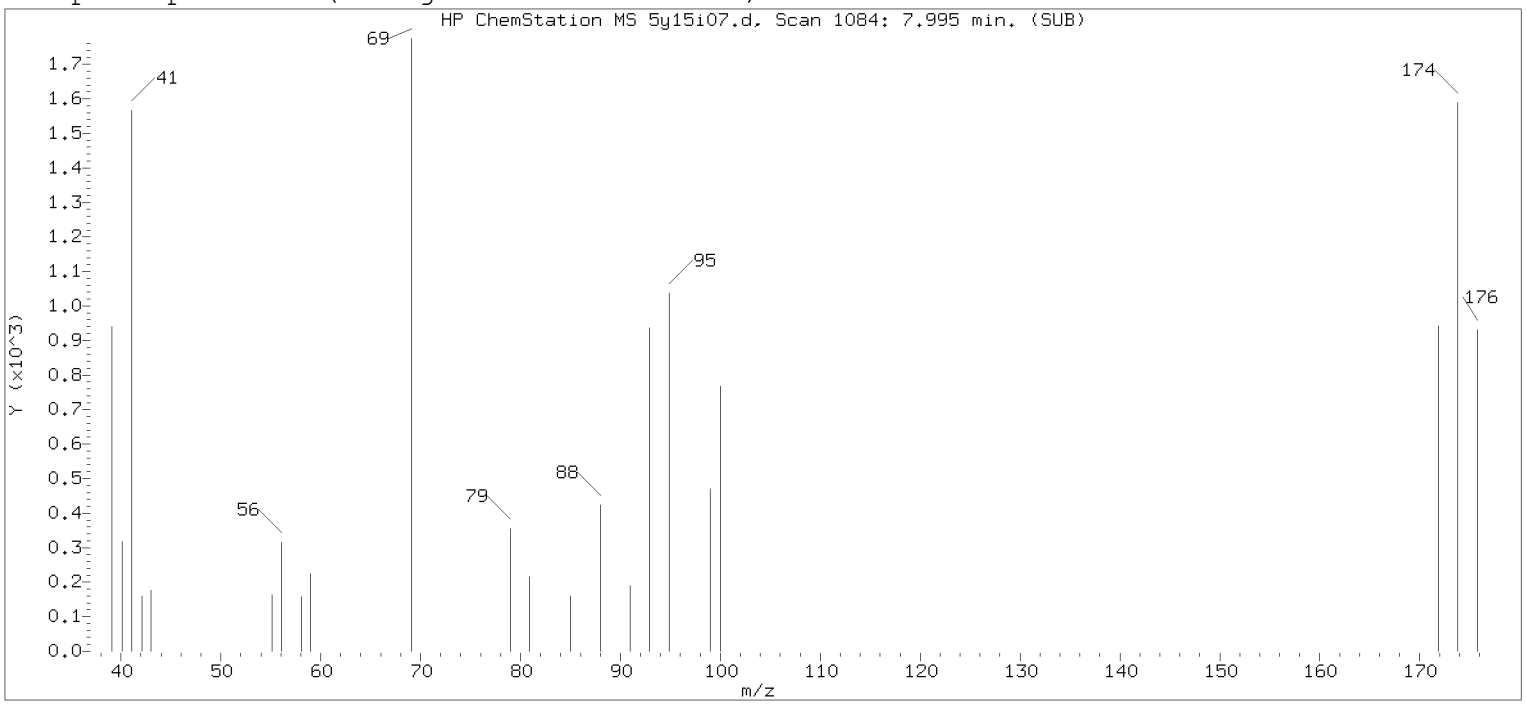
Compound Number : 77
Compound Name : Methyl Methacrylate
Scan Number : 1084
Retention Time (minutes): 7.995
Quant Ion : 69.00
Area (flag) : 7466M
On-Column Amount (ng) : 0.9164
Integration start scan : 1071 Integration stop scan: 1100
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

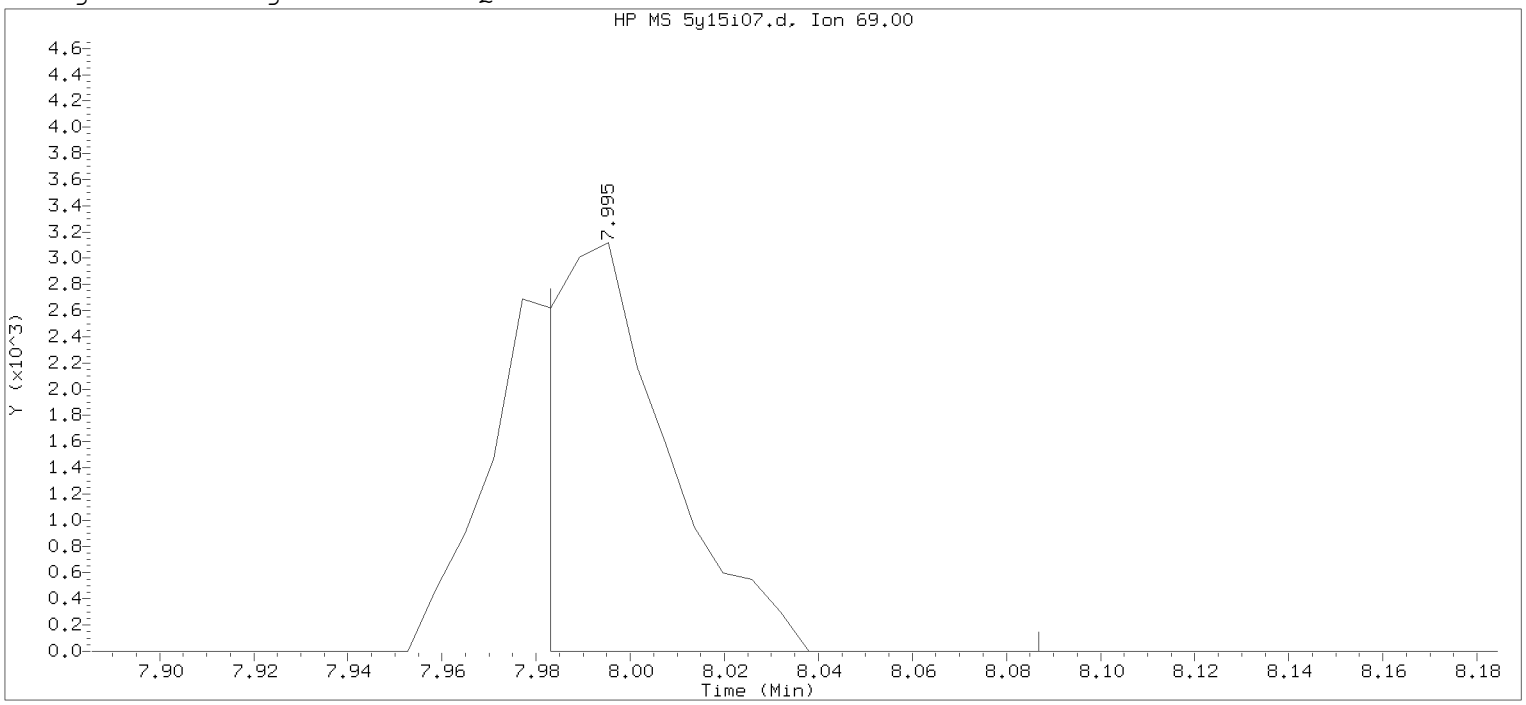
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

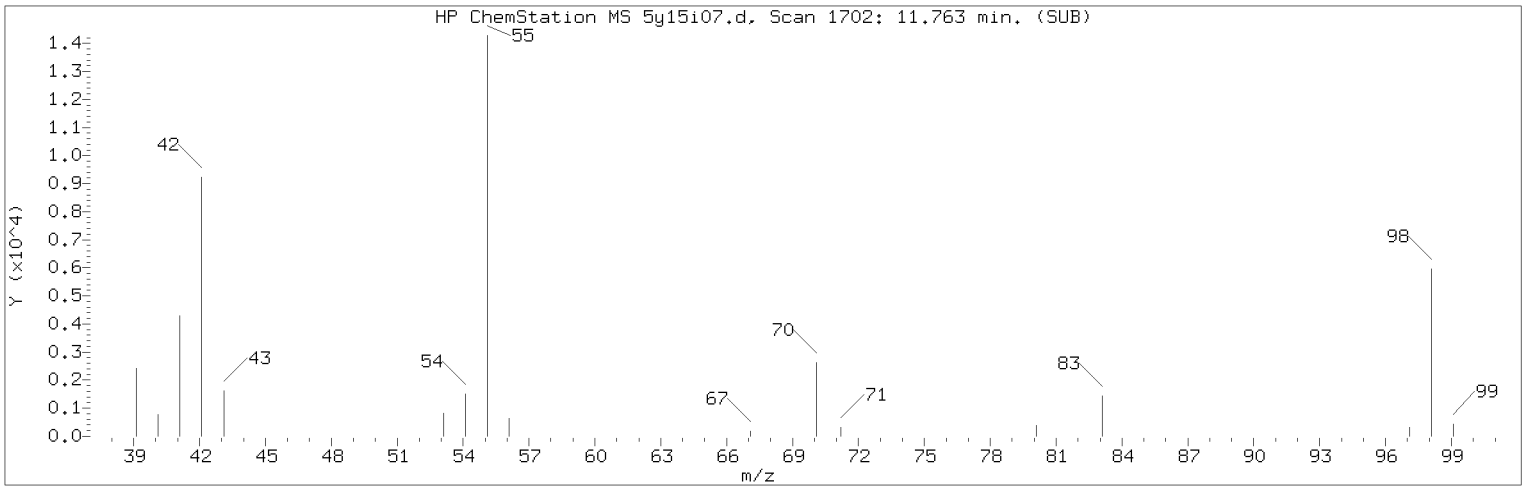
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD001 Lab Sample ID: VSTD001

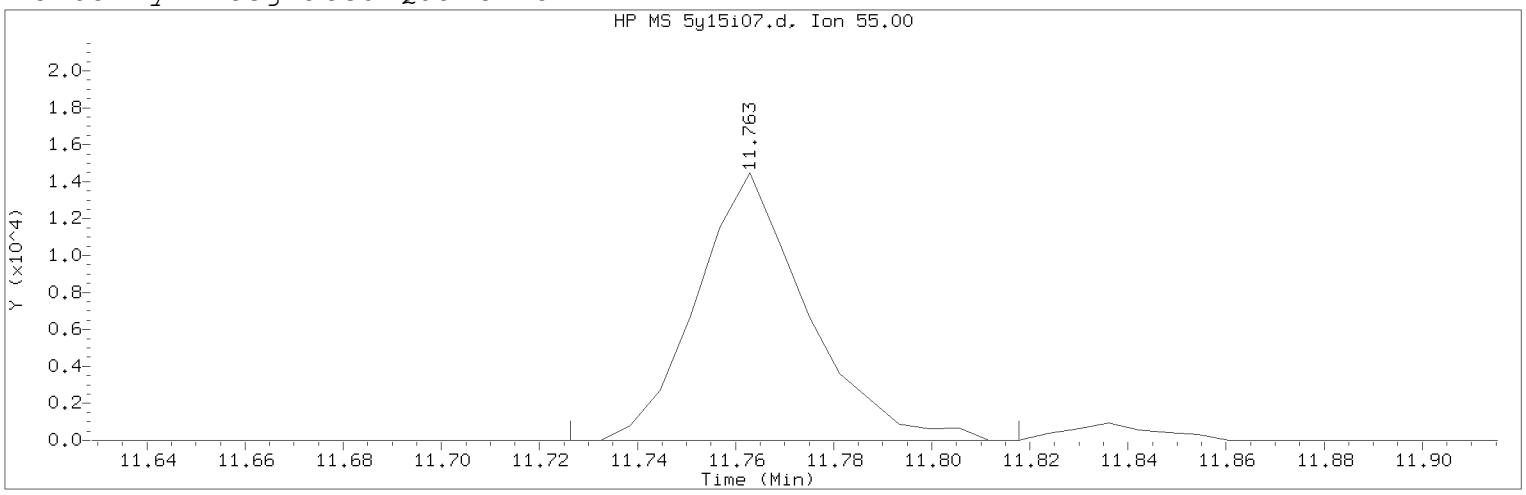
Compound Number : 77
Compound Name : Methyl Methacrylate
Scan Number : 1084
Retention Time (minutes): 7.995
Quant Ion : 69.00
Area : 4965
On-column Amount (ng) : 0.6375
Integration start scan : 1081 Integration stop scan: 1098
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

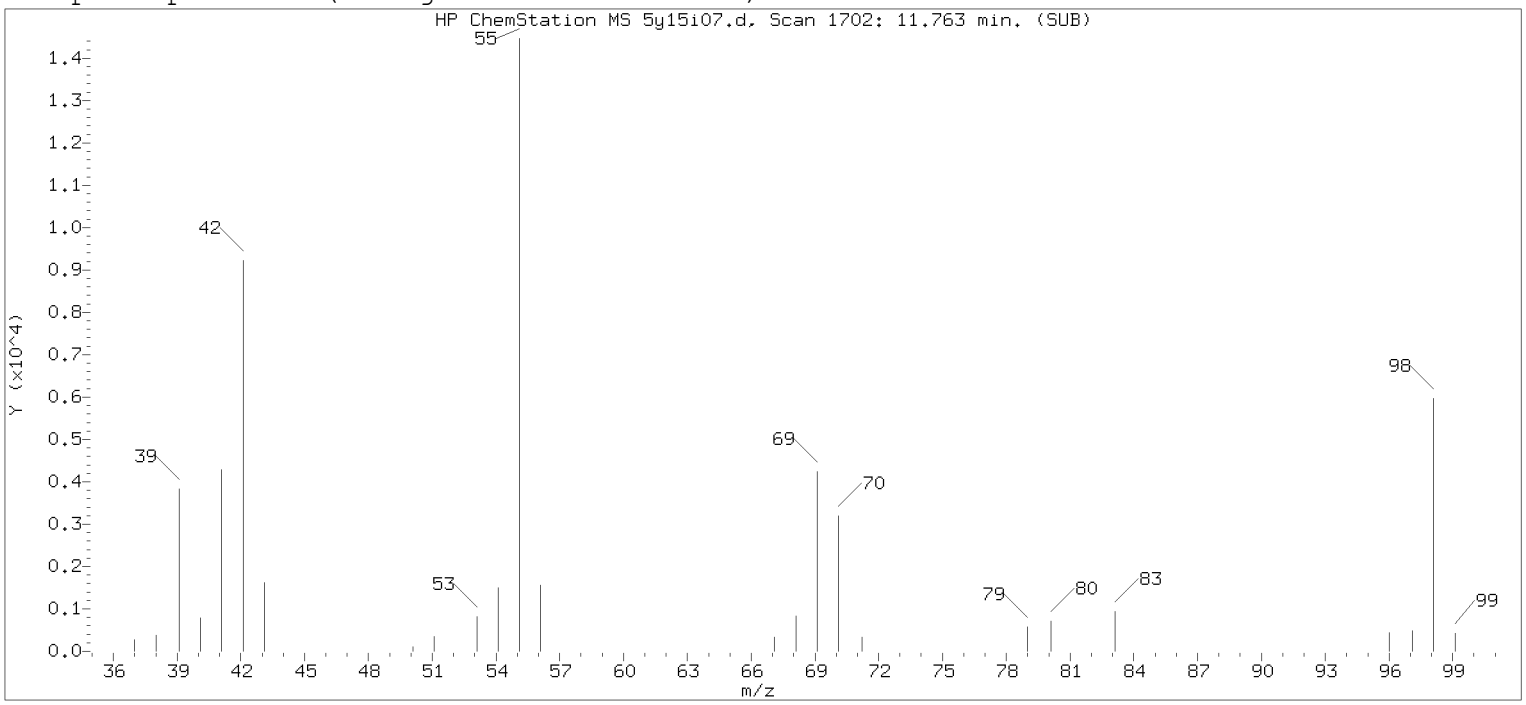
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1702
Retention Time (minutes): 11.763
Quant Ion : 55.00
Area (flag) : 22517M
On-Column Amount (ng) : 35.2793
Integration start scan : 1695 Integration stop scan: 1710
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

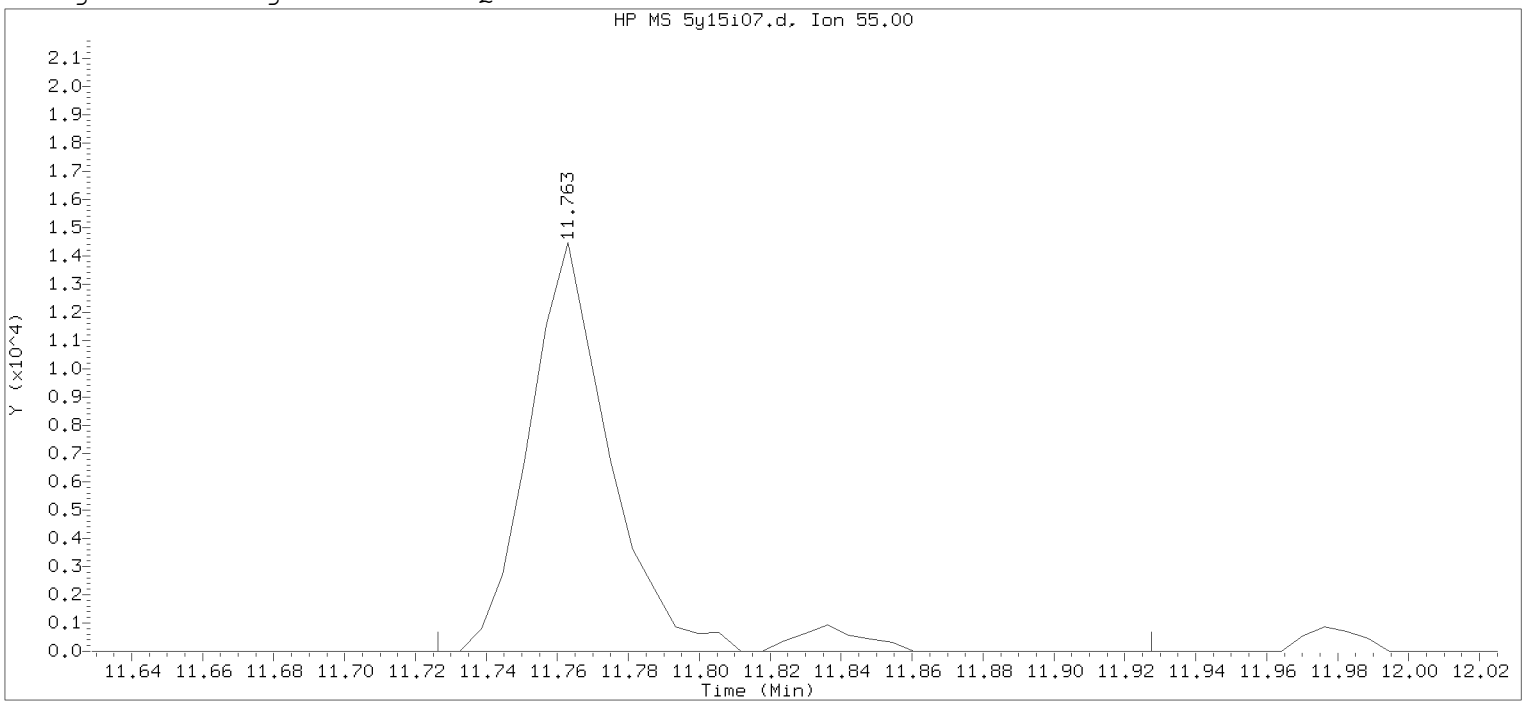
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

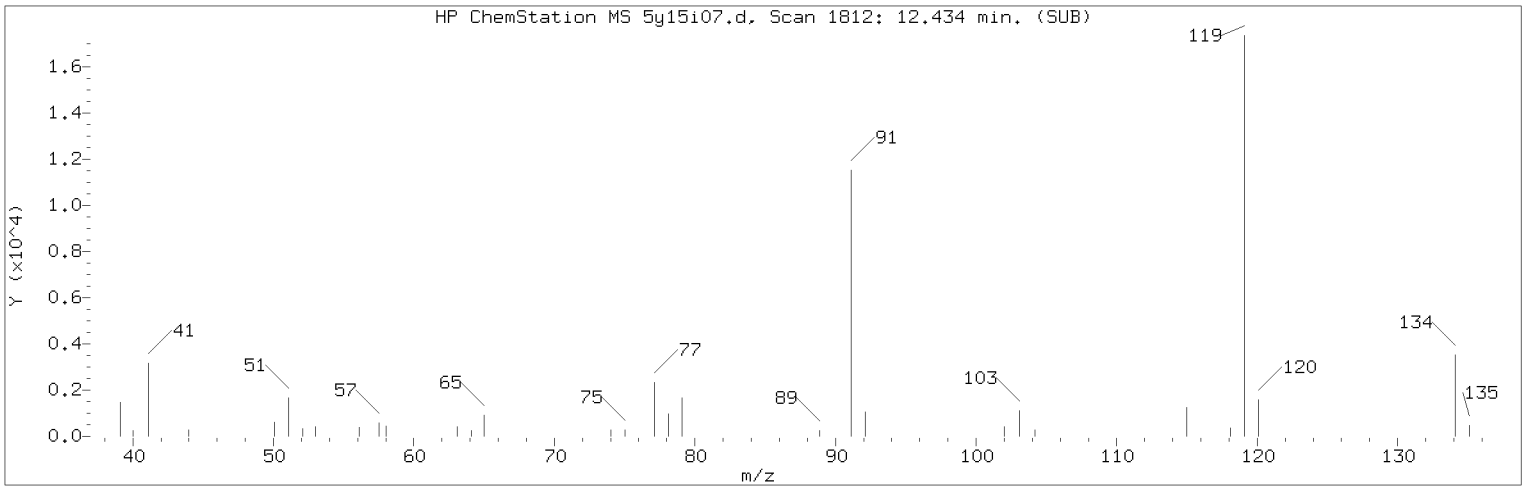
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD001 Lab Sample ID: VSTD001

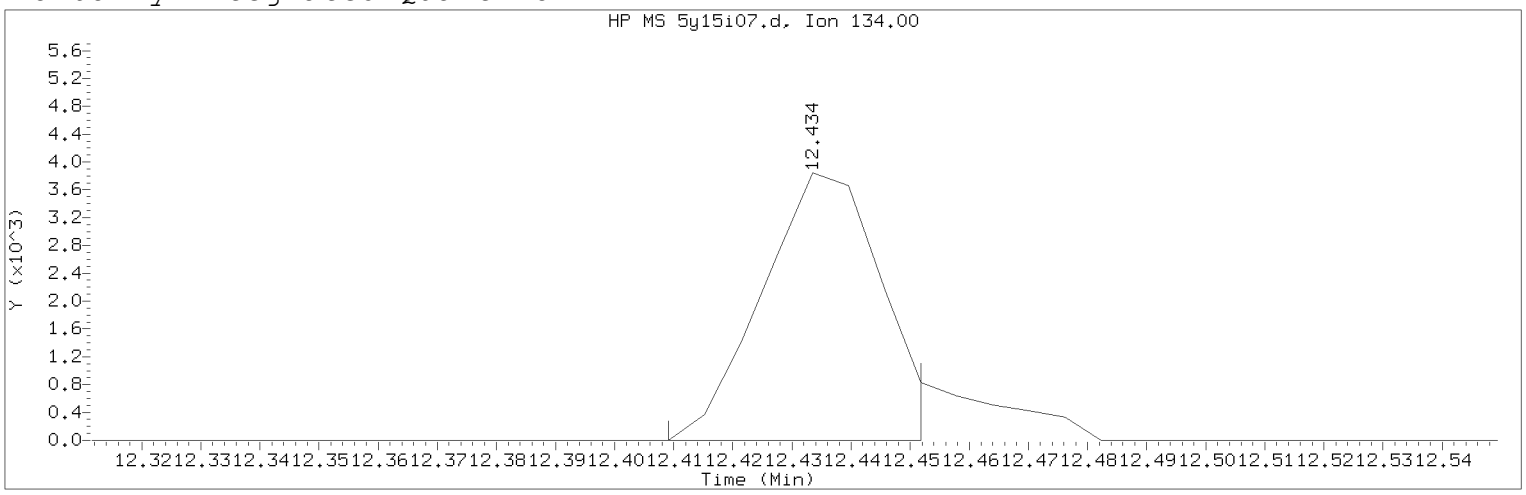
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1702
Retention Time (minutes): 11.763
Quant Ion : 55.00
Area : 23693
On-column Amount (ng) : 6.1504
Integration start scan : 1695 Integration stop scan: 1728
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keyword.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 10:52
Date, time and analyst ID of latest file update: 16-May-2018 10:52 ads01731

Sample Name: VSTD001 Lab Sample ID: VSTD001

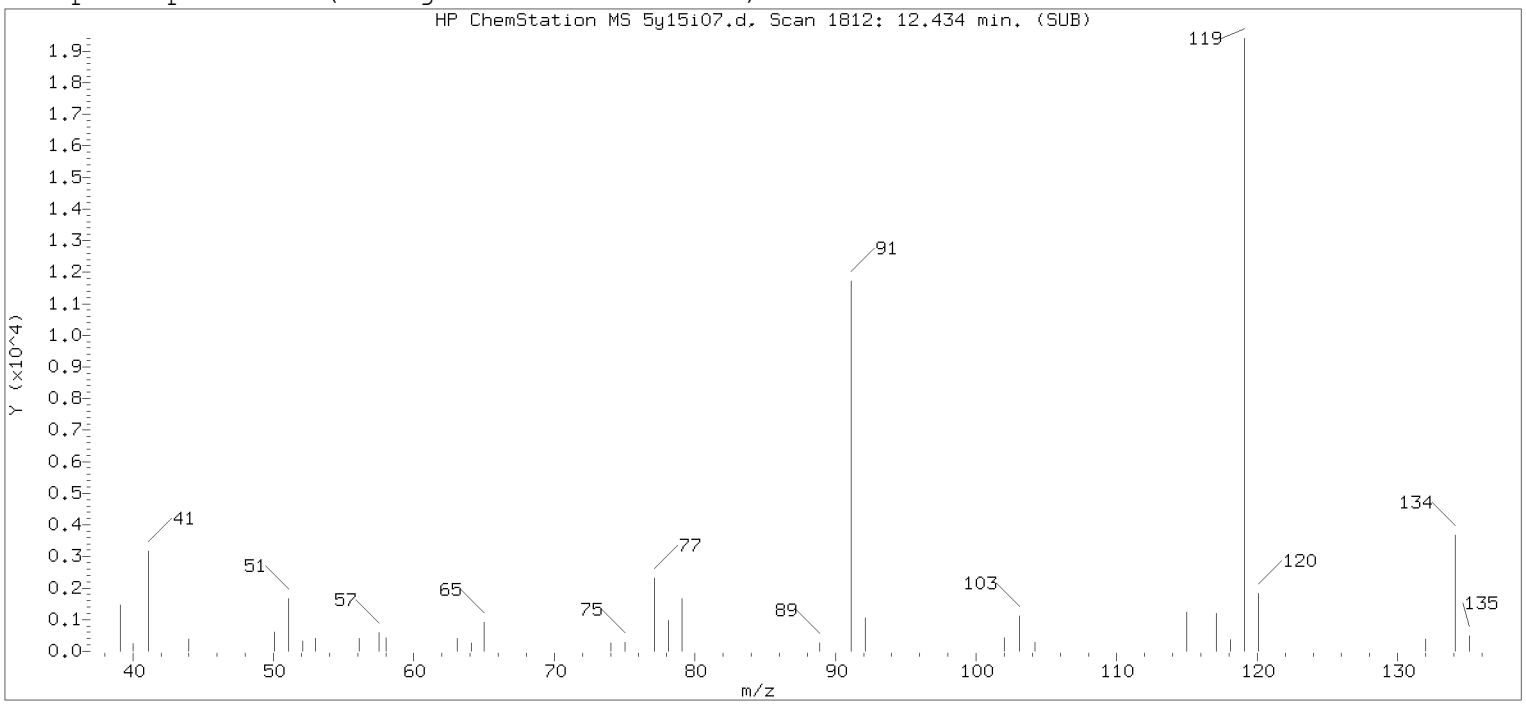
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.434
Quant Ion : 134.00
Area (flag) : 5456M
On-Column Amount (ng) : 0.7829
Integration start scan : 1807 Integration stop scan: 1814
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

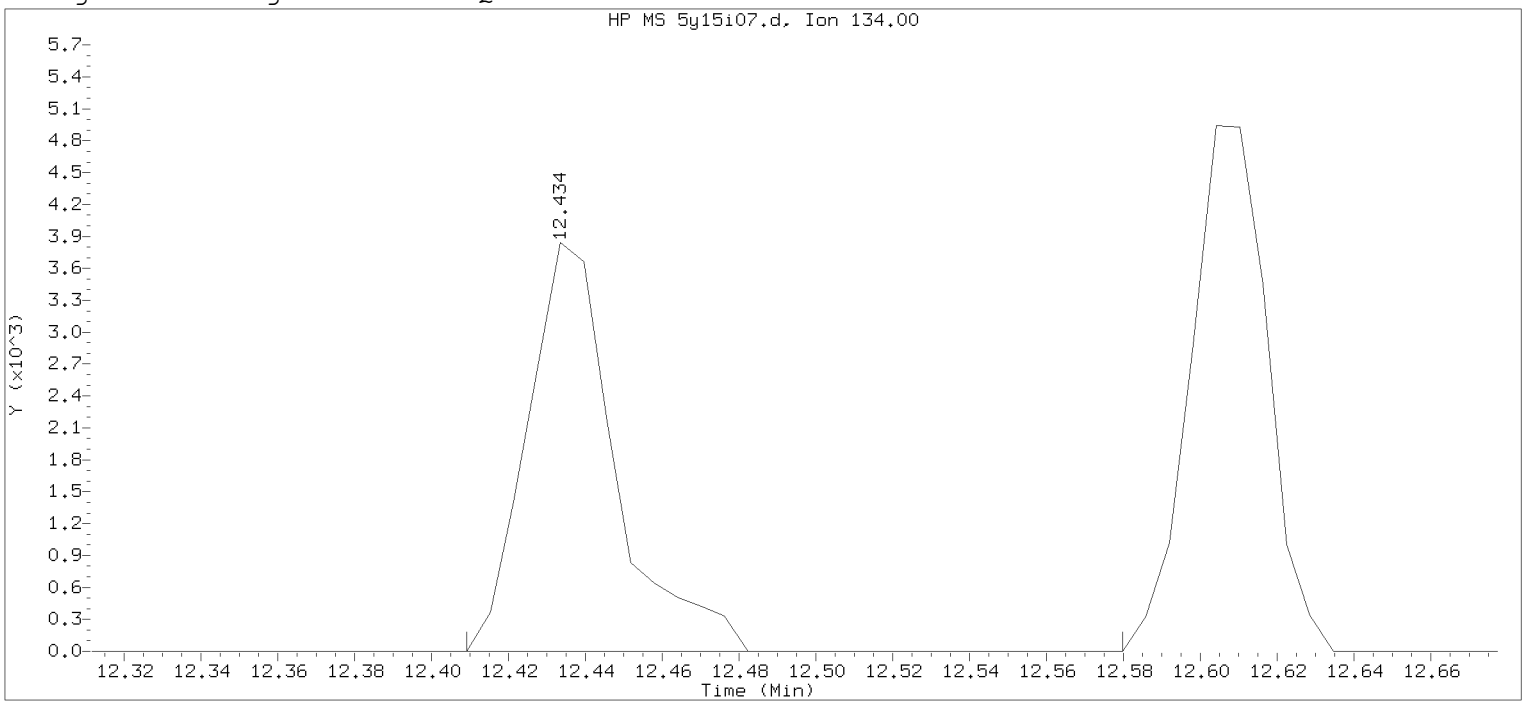
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:05.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



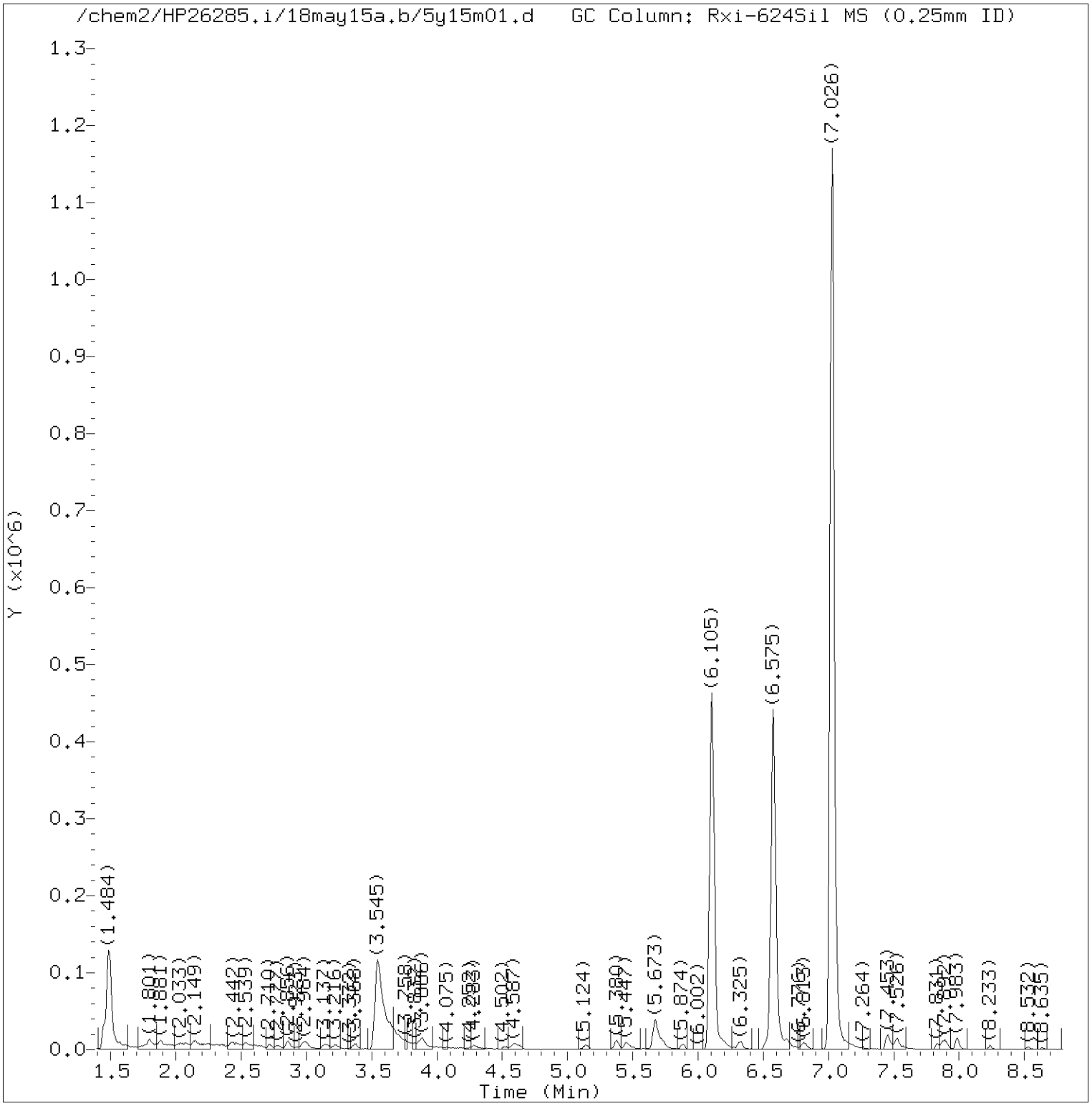
Data File: /chem2/HP26285.i/18may15a.b/5y15i07.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:22 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1812
Retention Time (minutes): 12.434
Quant Ion : 134.00
Area : 6152
On-column Amount (ng) : 0.8118
Integration start scan : 1807 Integration stop scan: 1835
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:05.
Target 3.5 esignature user keeper.



Total Ion Chromatogram (TIC)

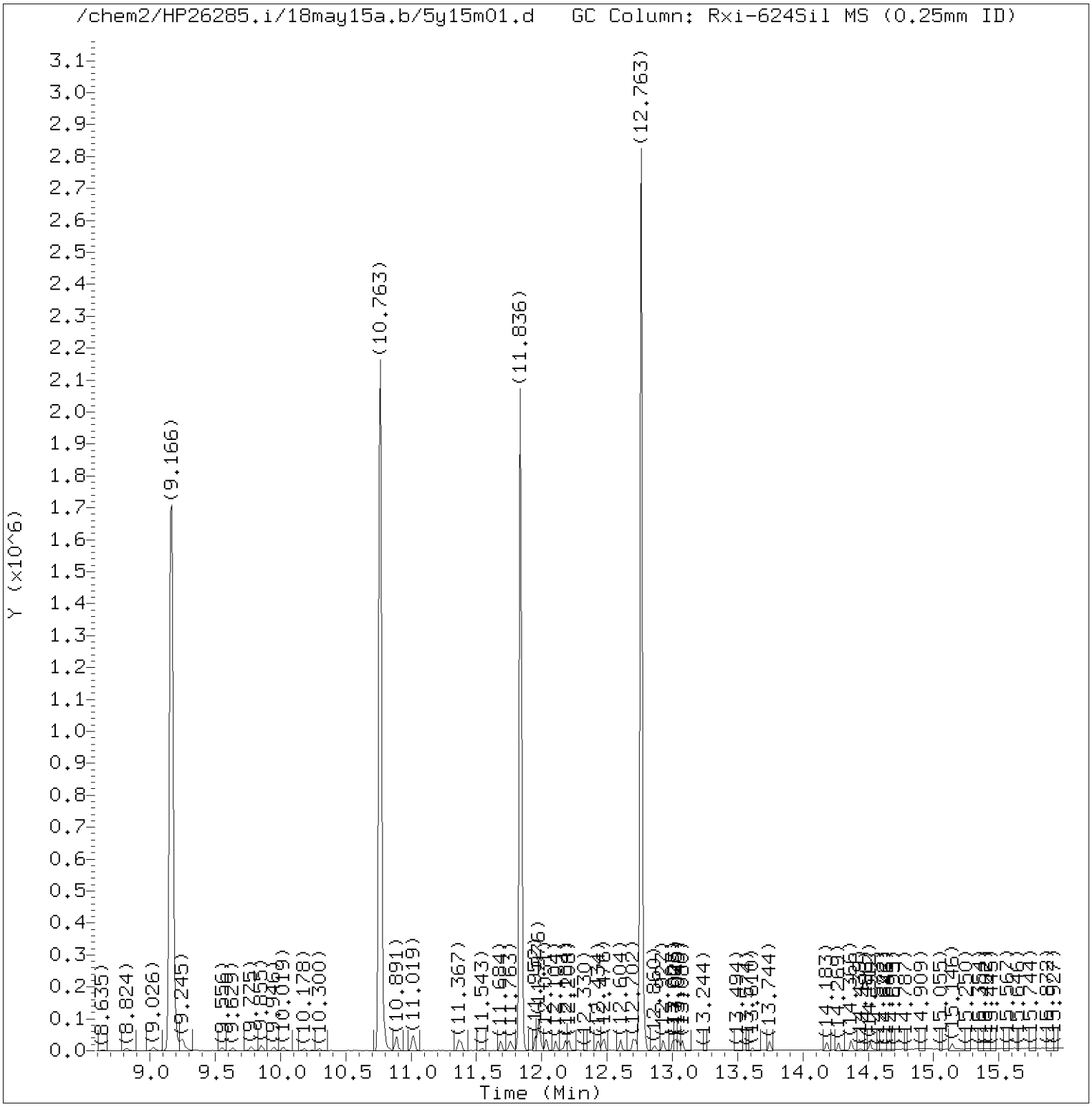
Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15m01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:44 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 11:58.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15m01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:44 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 11:58.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15m01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:44 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.606	85	2769	0.275
4) Chloromethane	(2)	1.783	50	3691	0.515
6) Vinyl Chloride	(2)	1.868	62	3147	0.449
5) 1,3-Butadiene	(2)	1.881	39	3018	0.647
8) Bromomethane	(2)	2.143	94	3115	0.527
9) Chloroethane	(2)	2.240	64	1918	0.516
10) Dichlorofluoromethane	(2)	2.429	67	5698	0.492
12) Trichlorofluoromethane	(2)	2.472	101	3843	0.347
11) n-Pentane	(2)	2.539	43	3123M	0.508
14) Ethyl ether	(2)	2.710	59	2459	0.427
15) Freon 123a	(2)	2.783	67	3492	0.436
16) Acrolein	(1)	2.862	56	12305	4.507
17) 1,1-Dichloroethene	(2)	2.966	96	3033	0.511
19) Freon 113	(2)	2.984	101	2665	0.425
18) Acetone	(1)	3.002	58	2052	1.402
22) Methyl Iodide	(2)	3.137	142	6359	0.454
21) 2-Propanol	(1)	3.149	45	8351	8.930
23) Carbon Disulfide	(2)	3.216	76	8900	0.460
27) Methyl Acetate	(2)	3.362	43	5578	0.638
25) Allyl Chloride	(2)	3.380	41	4137	0.396
28) Methylene Chloride	(2)	3.539	84	3805	0.498
29)*t-Butyl alcohol-d10	(1)	3.545	65	396257	250.000
30) t-Butyl alcohol	(1)	3.643	59	13657	7.496
31) Acrylonitrile	(2)	3.832	53	1473	0.324
33) Methyl Tertiary Butyl Ether	(2)	3.880	73	8287	0.450
32) trans-1,2-Dichloroethene	(2)	3.886	96	3499	0.475
34) n-Hexane	(2)	4.289	57	2634	5.020
36) 1,1-Dichloroethane	(2)	4.514	63	6452	0.487
38) di-Isopropyl ether	(2)	4.587	45	10501	0.456
39) 2-Chloro-1,3-butadiene	(2)	4.642	53	4294	0.431
40) Ethyl t-butyl ether	(2)	5.136	59	7795	0.430
44) 2-Butanone	(2)	5.362	43	6251	0.946
42) cis-1,2-Dichloroethene	(2)	5.374	96	4089	0.468
45) 2,2-Dichloropropane	(2)	5.380	77	3011	0.418
47) Propionitrile	(1)	5.453	54	20204	9.283
48) Methacrylonitrile	(2)	5.667	67	22184	4.430
49) Bromochloromethane	(2)	5.721	128	1947	0.419
50) Tetrahydrofuran	(1)	5.740	71	1166	0.560

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 11:58.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15m01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:44 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
51) Chloroform	(2)	5.880	83	7574	0.505
52)$Dibromofluoromethane	(2)	6.105	113	391158	49.492
53) 1,1,1-Trichloroethane	(2)	6.105	97	5978	0.465
43) 1,2-Dichloroethene (Total)	(2)		96	7588	0.943
54) Cyclohexane	(2)	6.191	56	3576	3.784
56) Carbon Tetrachloride	(2)	6.307	117	3790M	0.403
55) 1,1-Dichloropropene	(2)	6.331	75	4836	0.475
58) Isobutyl Alcohol	(1)	6.532	41	14608	23.109
57)$1,2-Dichloroethane-d4	(2)	6.575	102	86891	51.097
60) Benzene	(2)	6.599	78	17204	0.523
61) 1,2-Dichloroethane	(2)	6.679	62	7245	0.634
65) t-Amyl methyl ether	(2)	6.813	73	8306	0.443
66)*Fluorobenzene	(2)	7.026	96	1461522	50.000
67) n-Heptane	(2)	7.050	43	4042	4.064
69) n-Butanol	(1)	7.453	56	20049	38.826
71) Trichloroethene	(2)	7.526	95	4465	0.499
73) Methylcyclohexane	(2)	7.831	83	4068	2.158
74) 1,2-Dichloropropane	(2)	7.873	63	4059	0.474
72) t-Amyl ethyl ether	(2)	7.892	87	4079	0.419
76) 1,4-Dioxane	(1)	7.971	88	3420	21.496
77) Methyl Methacrylate	(2)	7.977	69	3350	0.422
75) Dibromomethane	(2)	7.983	93	2932	0.501
79) Bromodichloromethane	(2)	8.239	83	4675	0.415
80) 2-Nitropropane	(2)	8.520	41	1814	0.605
81) 2-Chloroethyl Vinyl Ether	(2)	8.642	63	1619	0.342
82) cis-1,3-Dichloropropene	(2)	8.824	75	5664	0.403
83) 4-Methyl-2-pentanone	(2)	9.026	43	9643	0.731
84)$Toluene-d8	(3)	9.166	98	1444672	50.229
89) Toluene	(3)	9.257	92	11757	0.537
90) trans-1,3-Dichloropropene	(3)	9.556	75	5495	0.430
92) Ethyl Methacrylate	(3)	9.635	69	4306	0.335
93) 1,1,2-Trichloroethane	(3)	9.775	97	4100	0.462
94) Tetrachloroethene	(3)	9.855	166	5457	0.537
95) 1,3-Dichloropropane	(3)	9.946	76	7096	0.505
97) 2-Hexanone	(3)	10.019	43	7926	0.735
91) 1,3-Dichloropropene (total)	(3)		100	11159	0.834
98) Dibromochloromethane	(3)	10.184	129	3665	0.375
100) 1,2-Dibromoethane	(3)	10.300	107	4604	0.475

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

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on 05/16/2018 at 11:58.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15m01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:44 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
101)*Chlorobenzene-d5	(3)	10.763	117	1178148	50.000
102) 1-Chlorohexane	(3)	10.787	91	7563	0.684
103) Chlorobenzene	(3)	10.794	112	14703	0.542
104) 1,1,1,2-Tetrachloroethane	(3)	10.885	131	4149	0.443
105) Ethylbenzene	(3)	10.891	91	20726	0.483
107) m+p-Xylene	(3)	11.019	106	15685	0.927
108) o-Xylene	(3)	11.367	106	7529	0.453
110) Styrene	(3)	11.385	104	10723	0.393
111) Bromoform	(3)	11.543	173	2817	0.377
112) Isopropylbenzene	(3)	11.684	105	18139	0.456
113) Cyclohexanone	(1)	11.763	55	12447	17.683
109) Xylene (Total)	(3)		106	23214	1.380
115)$4-Bromofluorobenzene	(3)	11.836	95	584469	49.656
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	8117	0.539
116) Bromobenzene	(4)	11.952	156	5929	0.480
119) trans-1,4-Dichloro-2-butene	(4)	11.976	53	18270	4.524
118) 1,2,3-Trichloropropane	(4)	11.995	110	2696	0.588
120) n-Propylbenzene	(4)	12.037	91	25124	0.522
121) 2-Chlorotoluene	(4)	12.104	126	5589	0.518
123) 1,3,5-Trimethylbenzene	(4)	12.184	105	16357	0.471
122) 4-Chlorotoluene	(4)	12.208	126	5462	0.479
125) tert-Butylbenzene	(4)	12.434	134	3563	0.519
126) Pentachloroethane	(4)	12.458	167	2253	0.334
127) 1,2,4-Trimethylbenzene	(4)	12.476	105	15650	0.435
128) sec-Butylbenzene	(4)	12.604	105	19037	0.467
130) 1,3-Dichlorobenzene	(4)	12.702	146	12274	0.533
131) p-Isopropyltoluene	(4)	12.720	119	16102M	0.446
132)*1,4-Dichlorobenzene-d4	(4)	12.763	152	669307	50.000
134) 1,4-Dichlorobenzene	(4)	12.781	146	12752	0.541
135) 1,2,3-Trimethylbenzene	(4)	12.793	105	17019	0.446
136) Benzyl Chloride	(4)	12.860	91	9548	0.354
137) 1,3-Diethylbenzene	(4)	12.927	119	8617	0.367
138) 1,4-Diethylbenzene	(4)	13.007	119	8878	0.354
140) n-Butylbenzene	(4)	13.025	92	8085	0.439
139) 1,2-Dichlorobenzene	(4)	13.049	146	11312	0.514
141) 1,2-Diethylbenzene	(4)	13.074	119	7388	0.374
142) Diethylbenzene (total)	(4)		100	24883	1.095
143) 1,2-Dibromo-3-chloropropane	(4)	13.616	75	1815	0.504

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

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on 05/16/2018 at 11:58.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15m01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:44 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
145) 1,3,5-Trichlorobenzene	(4)	13.744	180	8011	0.510
147) 1,2,4-Trichlorobenzene	(4)	14.183	180	6873	0.487
148) Hexachlorobutadiene	(4)	14.275	225	4129	4.904
149) Naphthalene	(4)	14.366	128	19566	0.439
150) 1,2,3-Trichlorobenzene	(4)	14.512	180	6627	0.507
151) 2-Methylnaphthalene	(4)	15.146	142	8162	3.011

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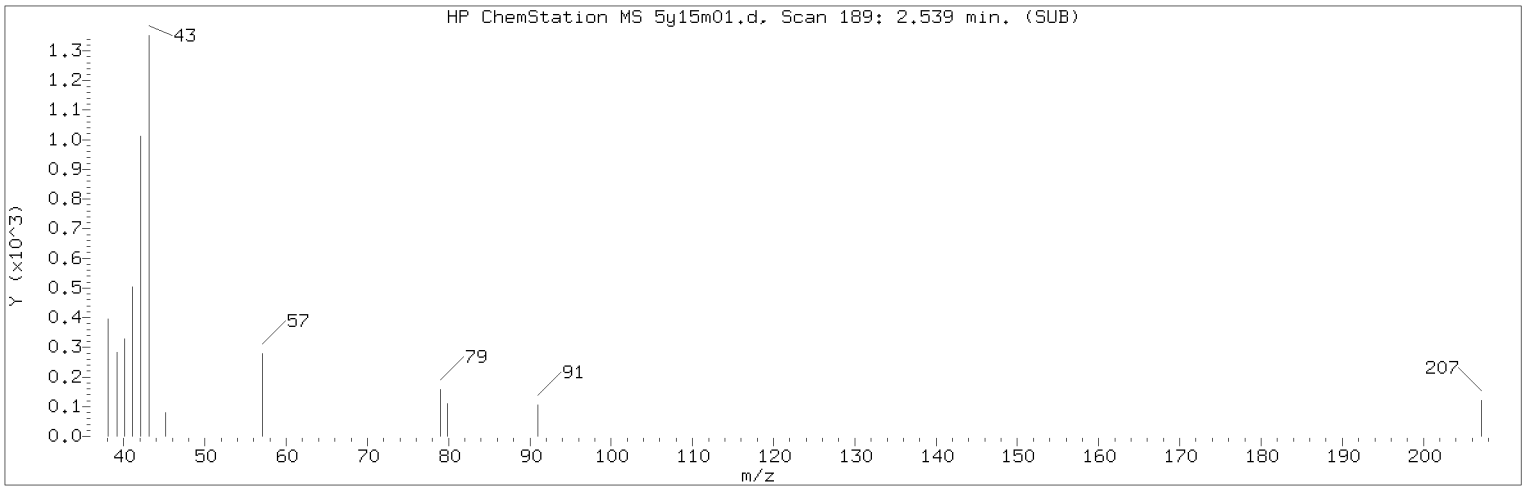
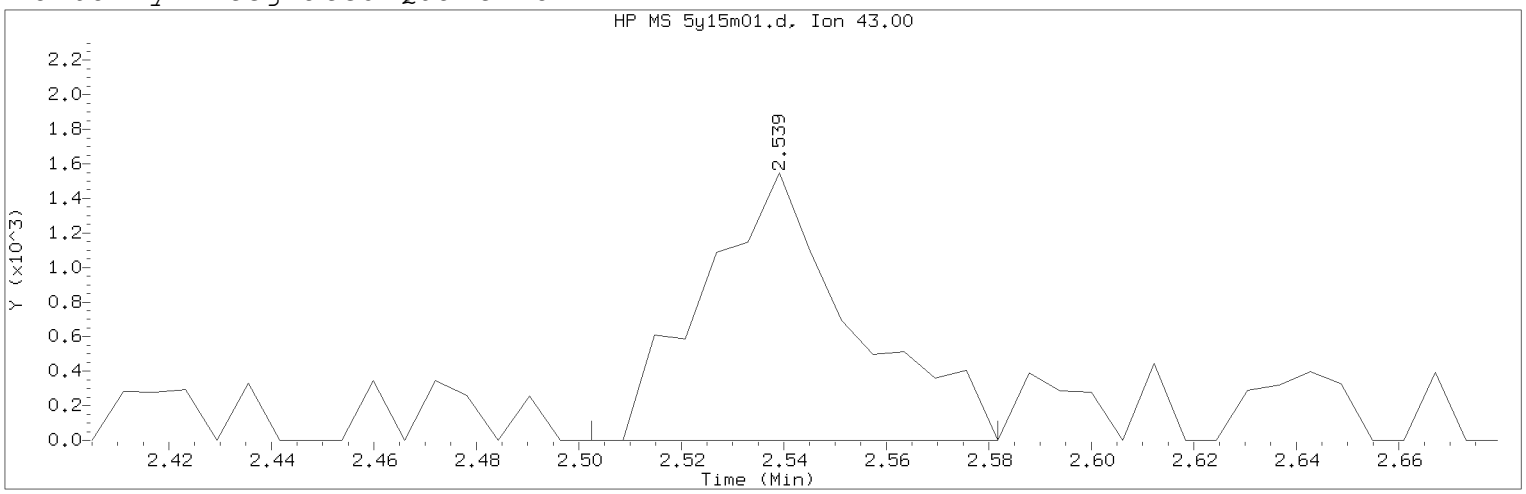
on 05/16/2018 at 11:58.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15m01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:44 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

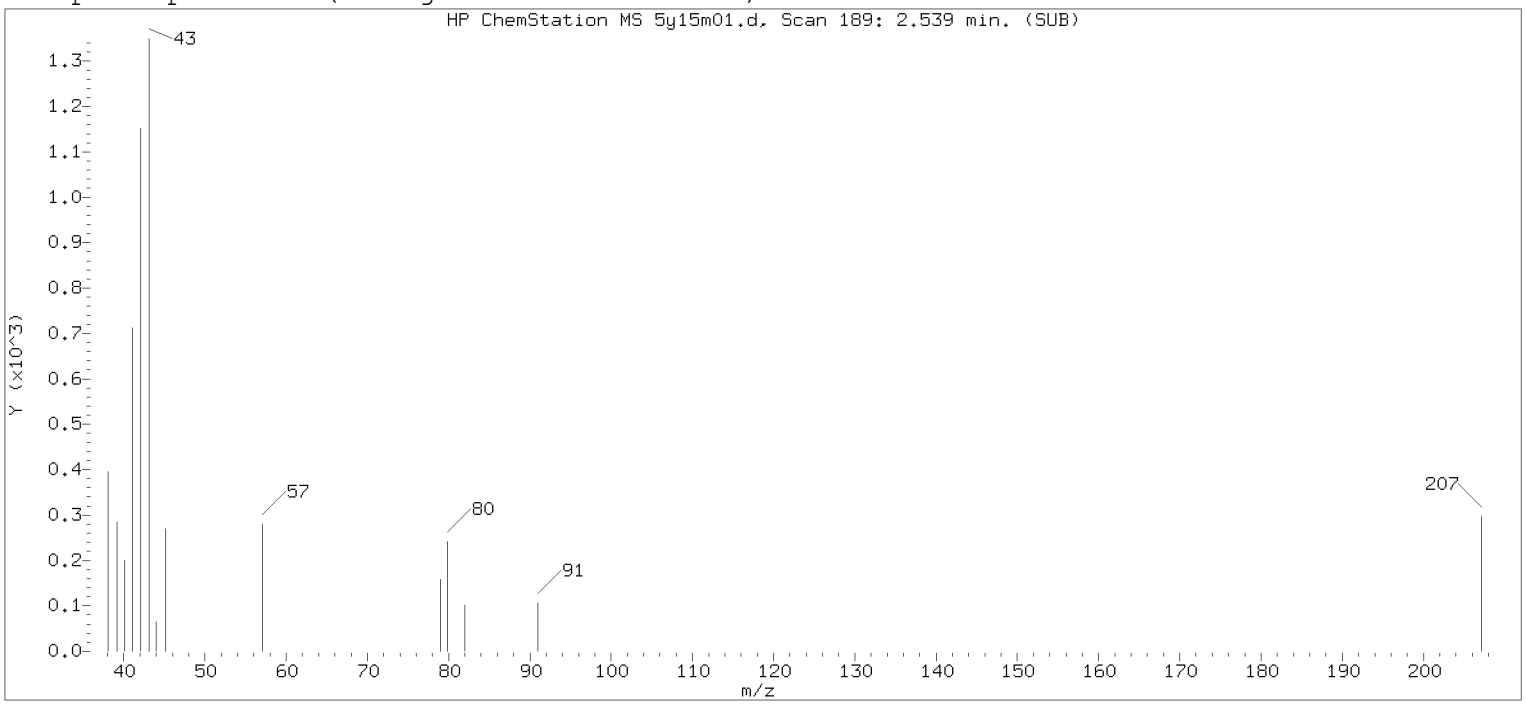
Compound Number : 11
Compound Name : n-Pentane
Scan Number : 189
Retention Time (minutes): 2.539
Quant Ion : 43.00
Area (flag) : 3123M
On-Column Amount (ng) : 0.5078
Integration start scan : 182 Integration stop scan: 195
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

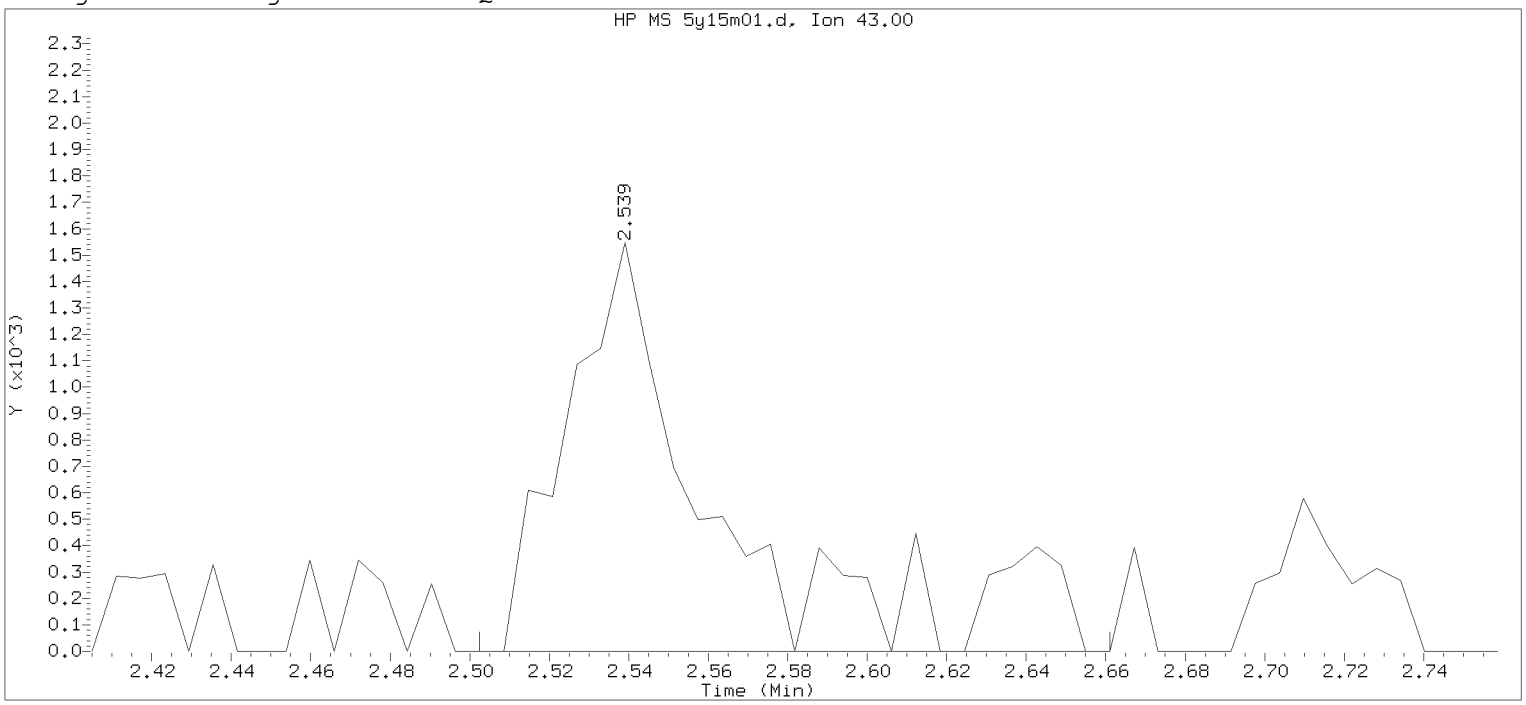
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 11:58.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15m01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:44 Analyst ID: LCP00895

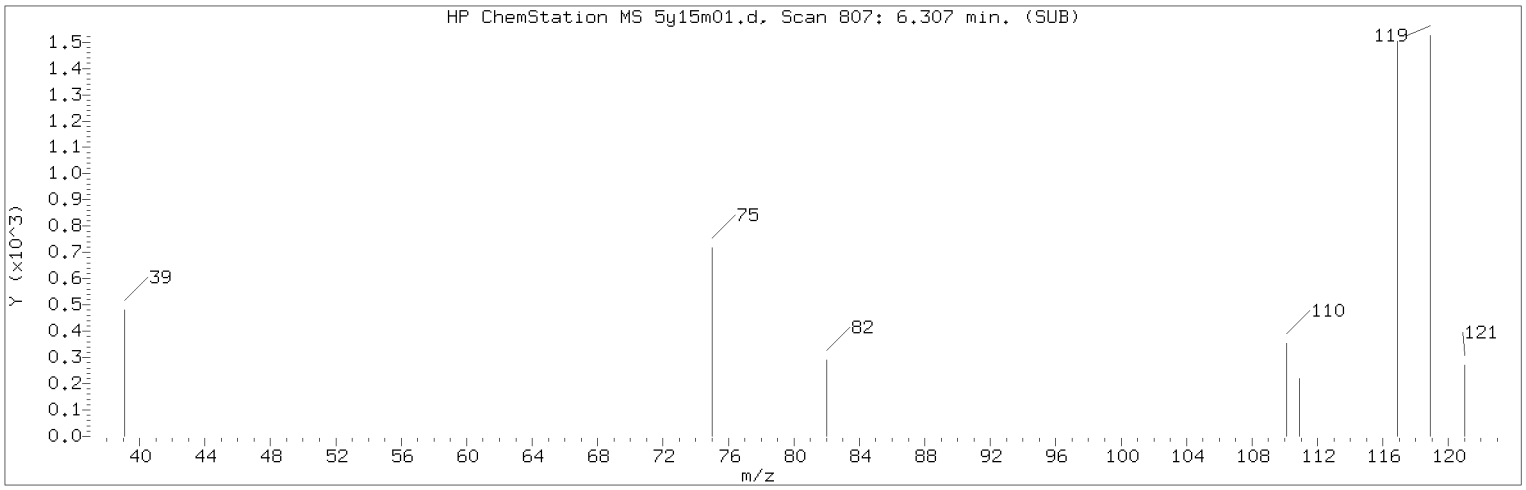
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

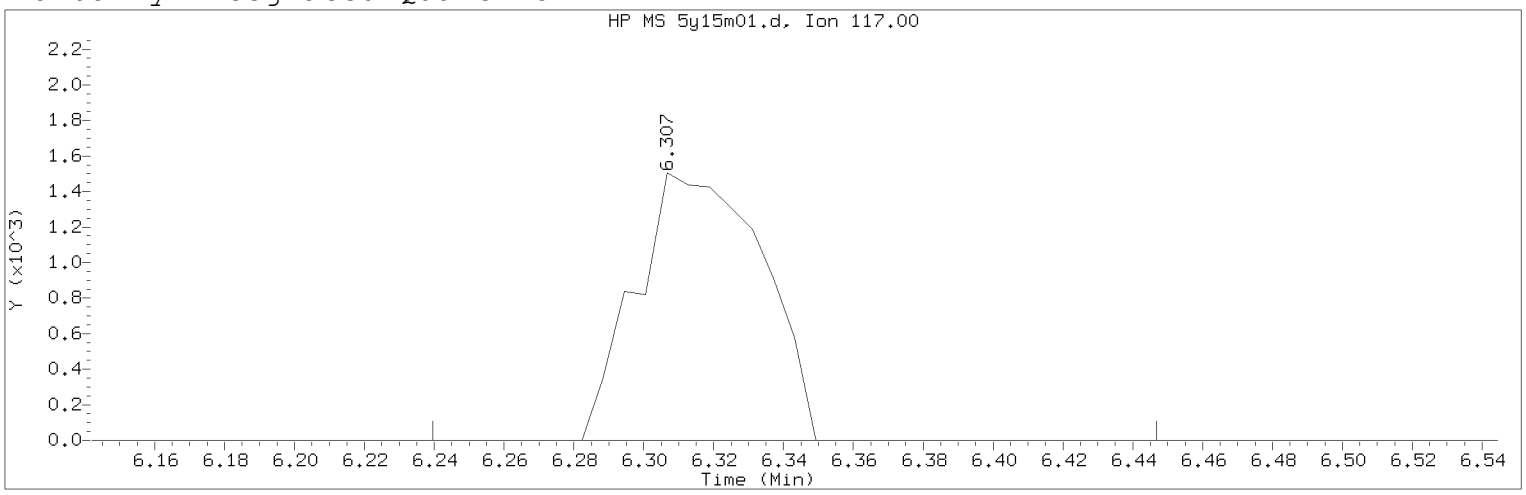
Compound Number : 11
Compound Name : n-Pentane
Scan Number : 189
Retention Time (minutes): 2.539
Quant Ion : 43.00
Area : 4123
On-column Amount (ng) : 0.6451
Integration start scan : 182 Integration stop scan: 208
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 11:58.
Target 3.5 esignature user keeper

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15m01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:44 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

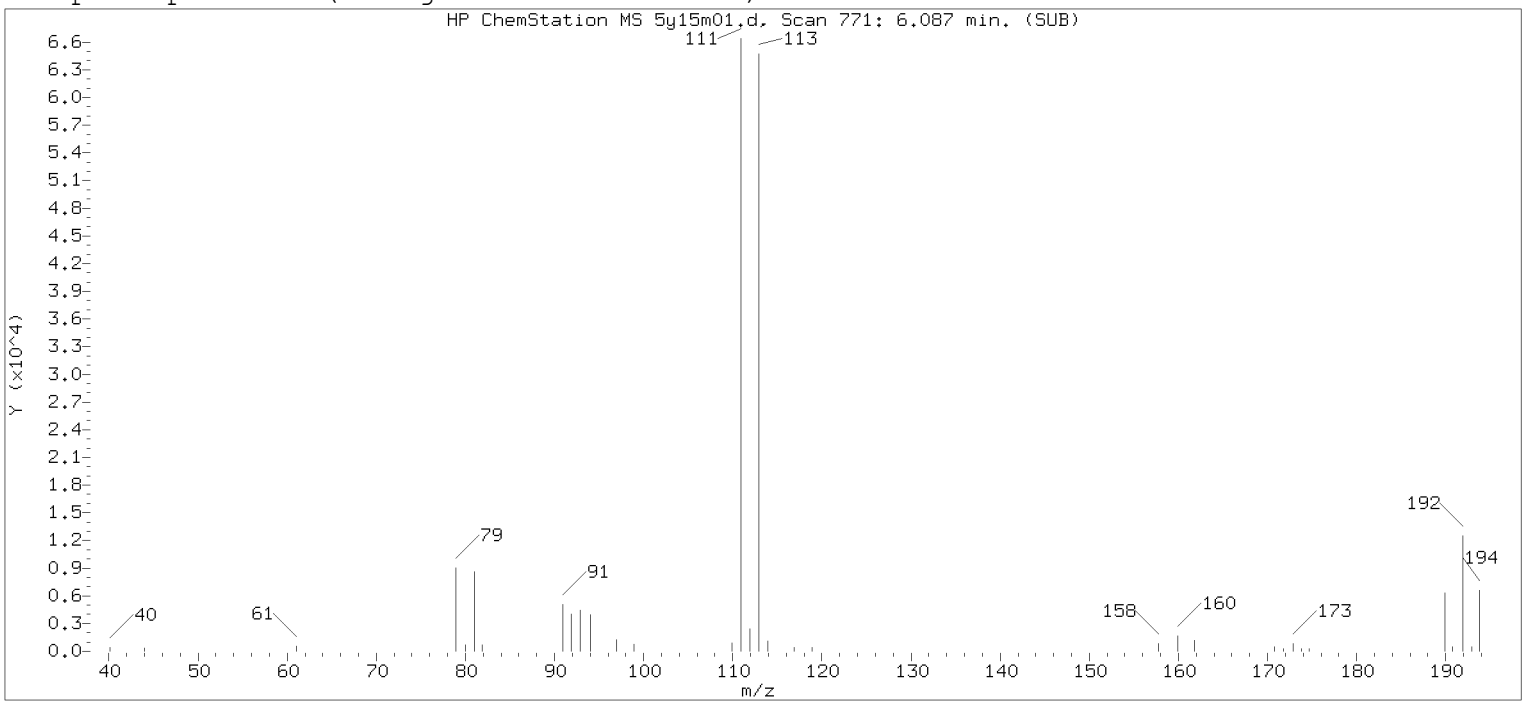
Compound Number : 56
Compound Name : Carbon Tetrachloride
Scan Number : 807
Retention Time (minutes): 6.307
Quant Ion : 117.00
Area (flag) : 3790M
On-Column Amount (ng) : 0.4035
Integration start scan : 795 Integration stop scan: 829
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

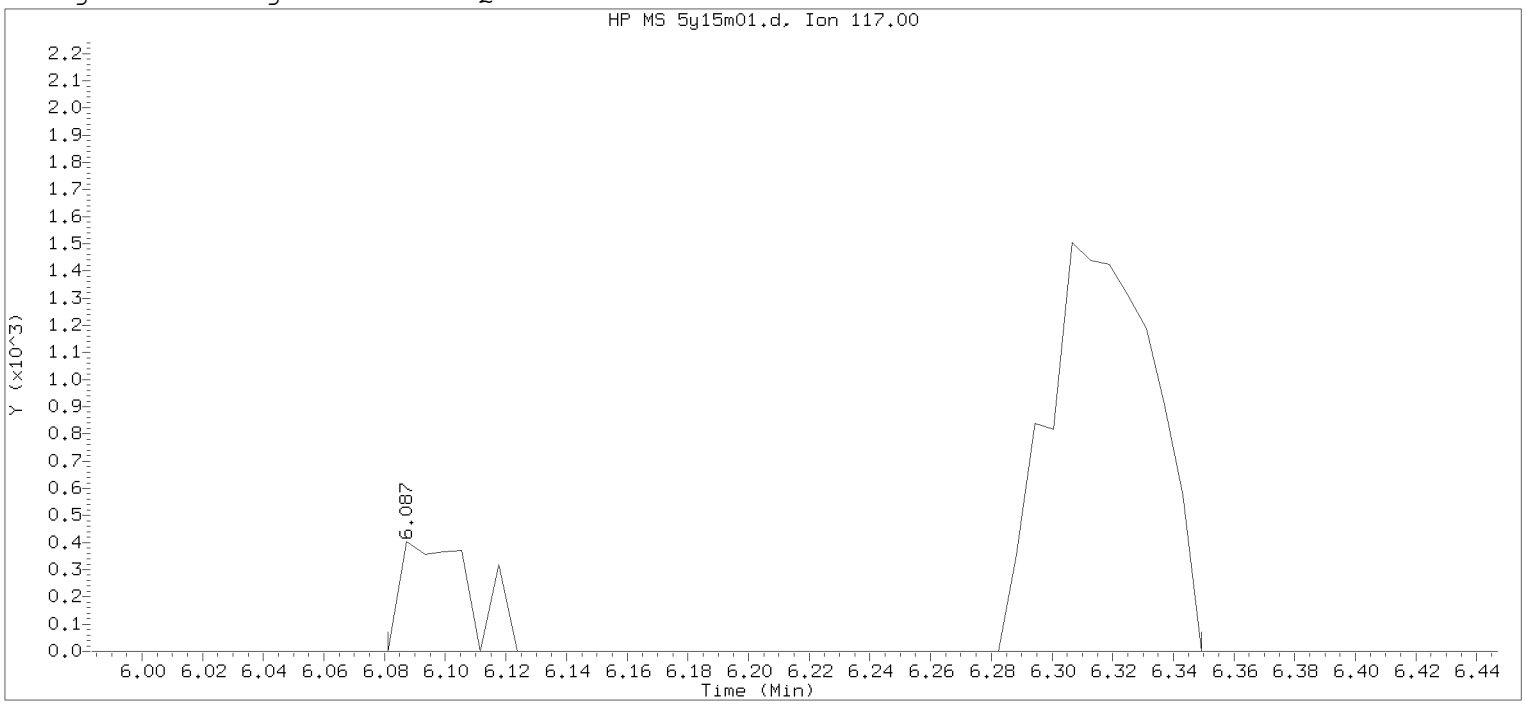
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 11:58.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15m01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:44 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Compound Number : 56
Compound Name : Carbon Tetrachloride
Scan Number : 771
Retention Time (minutes): 6.087
Quant Ion : 117.00
Area : 4455
On-column Amount (ng) : 0.4743
Integration start scan : 769 Integration stop scan: 813
Y at integration start : 0 Y at integration end: 0

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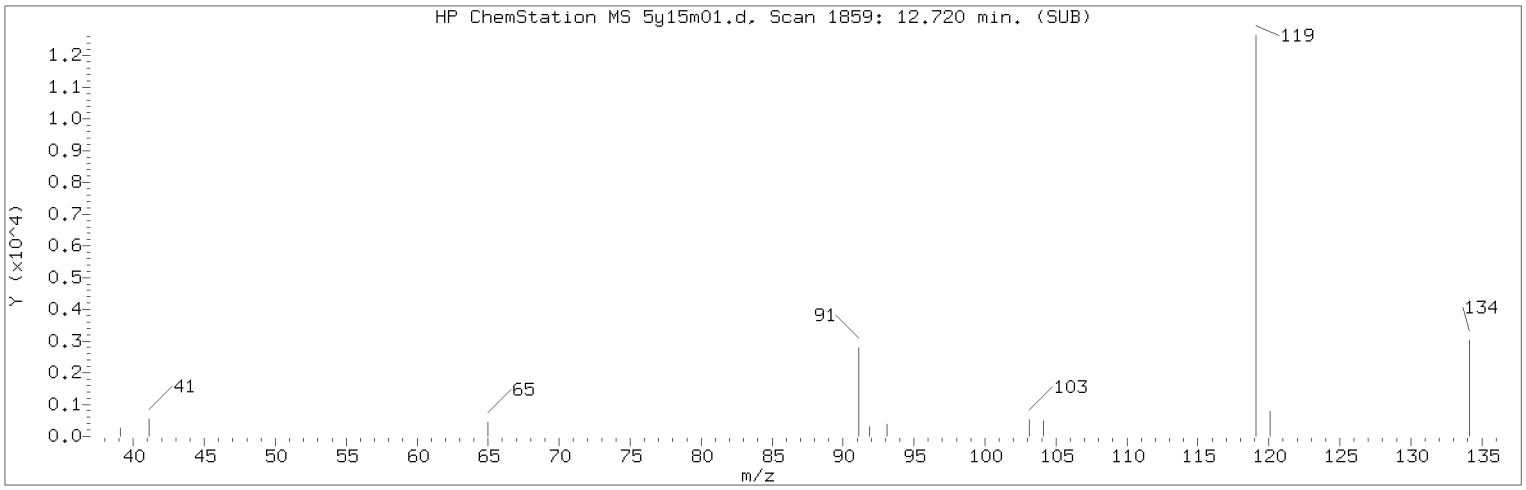
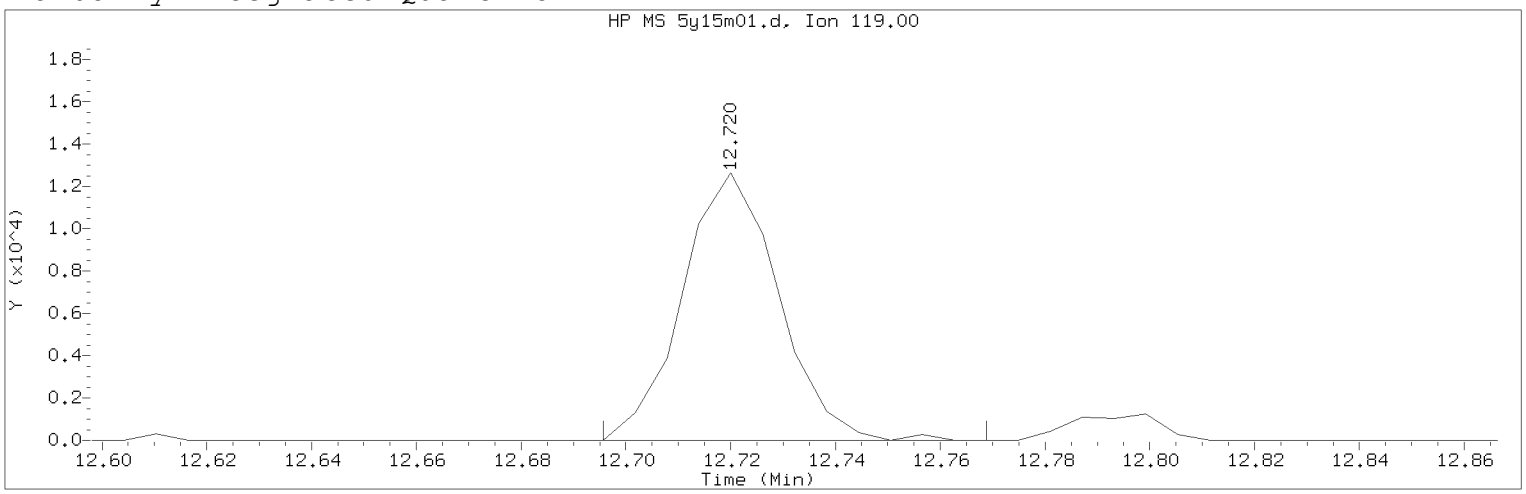
Target 3.5 esignature user keeper 343

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15m01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:44 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

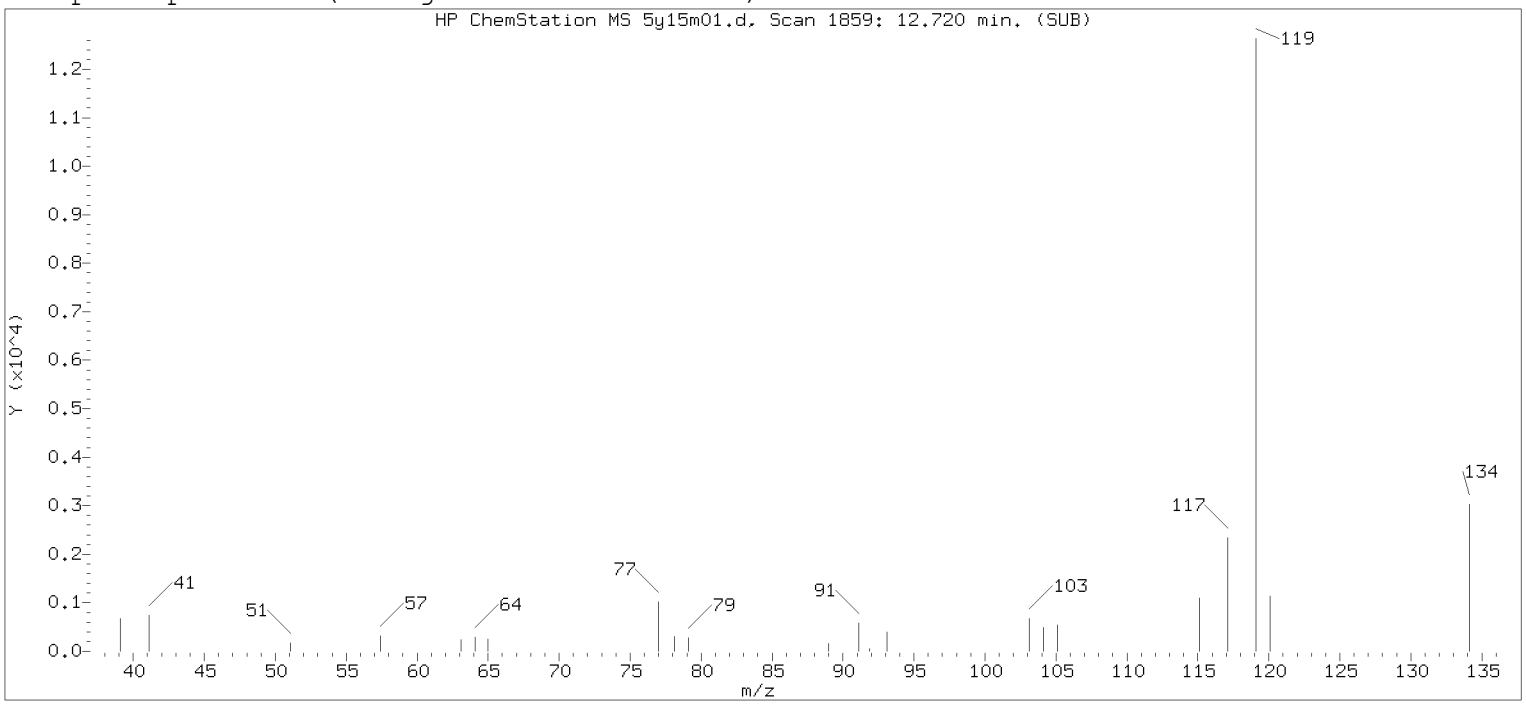
Compound Number : 131
Compound Name : p-Isopropyltoluene
Scan Number : 1859
Retention Time (minutes): 12.720
Quant Ion : 119.00
Area (flag) : 16102M
On-Column Amount (ng) : 0.4463
Integration start scan : 1854 Integration stop scan: 1866
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

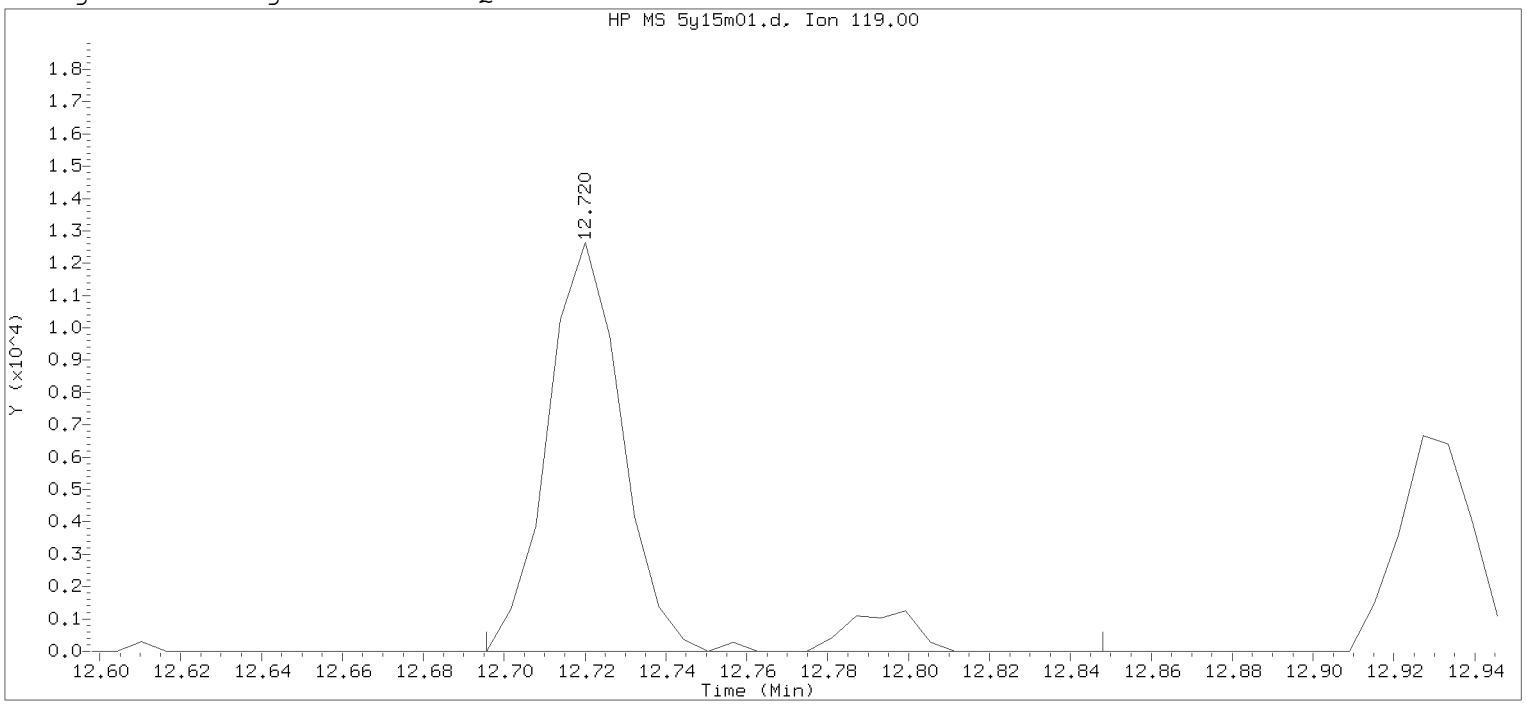
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 11:58.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



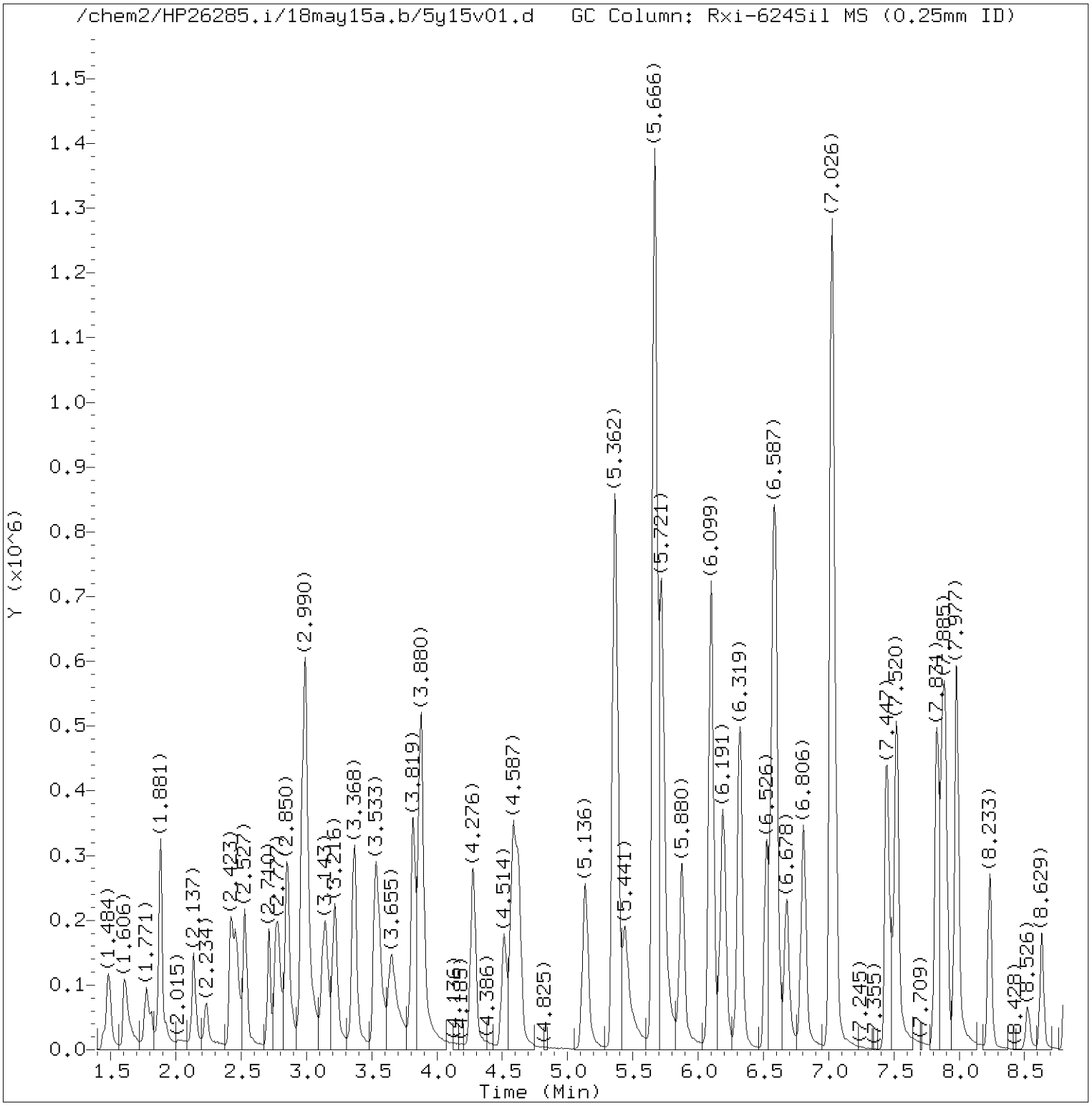
Data File: /chem2/HP26285.i/18may15a.b/5y15m01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 16:44 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Compound Number : 131
Compound Name : p-Isopropyltoluene
Scan Number : 1859
Retention Time (minutes): 12.720
Quant Ion : 119.00
Area : 17591
On-column Amount (ng) : 0.4876
Integration start scan : 1854 Integration stop scan: 1879
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 11:58.
Target 3.5 esignature user kevin.sposito



Total Ion Chromatogram (TIC)

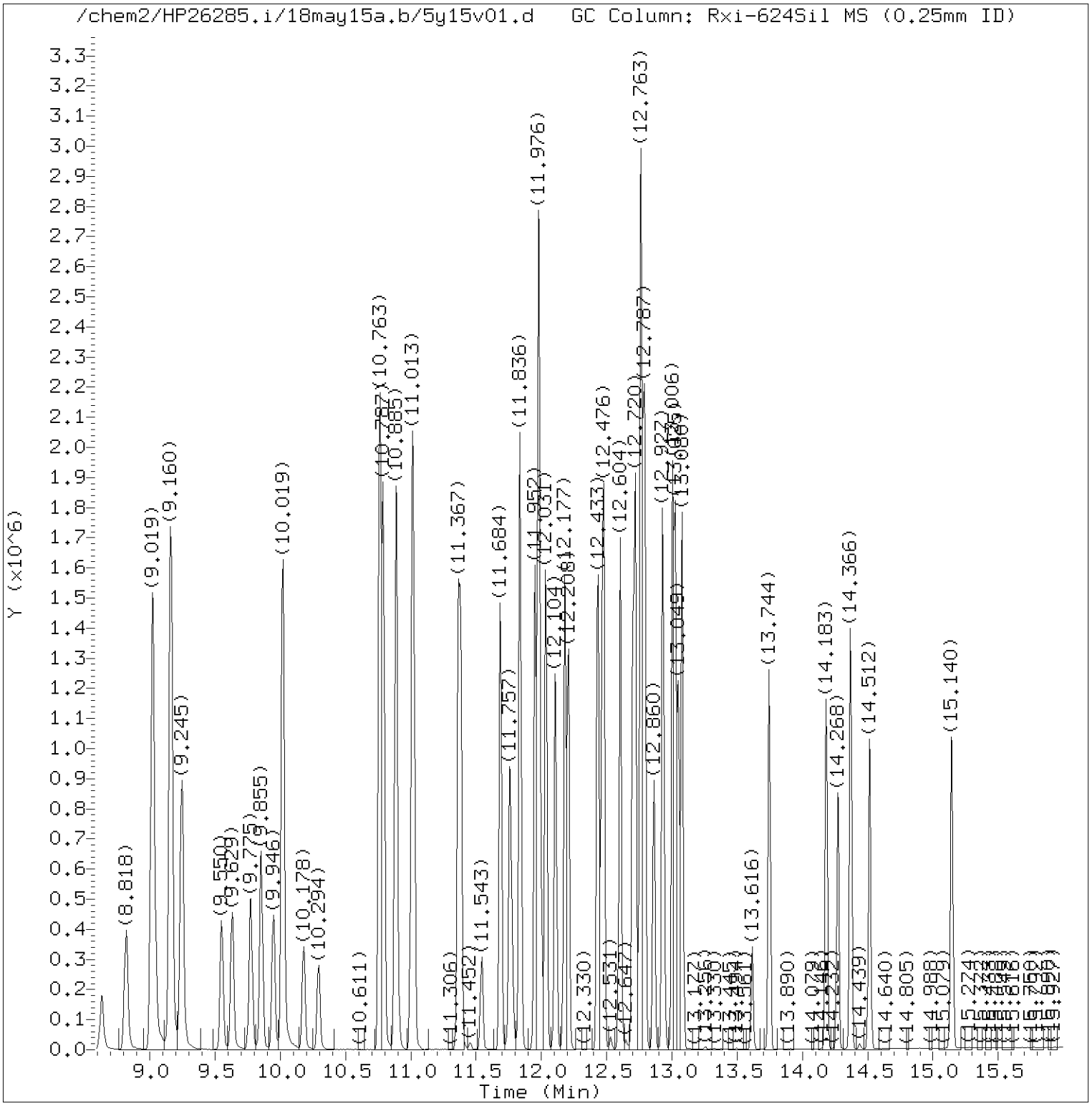
Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15v01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 17:06 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:00.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15v01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 17:06 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:00.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15v01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 17:06 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.606	85	219621	22.001
4) Chloromethane	(2)	1.771	50	143774	20.225
6) Vinyl Chloride	(2)	1.868	62	142400	20.496
5) 1,3-Butadiene	(2)	1.881	39	103557	22.405
8) Bromomethane	(2)	2.137	94	103784	17.705
9) Chloroethane	(2)	2.234	64	62784	17.027
10) Dichlorofluoromethane	(2)	2.423	67	210882	18.367
12) Trichlorofluoromethane	(2)	2.460	101	225641	20.538
11) n-Pentane	(2)	2.527	43	137524	22.554
14) Ethyl ether	(2)	2.716	59	113672	19.928
15) Freon 123a	(2)	2.777	67	168994	21.287
16) Acrolein	(1)	2.856	56	345236	128.129
17) 1,1-Dichloroethene	(2)	2.966	96	141341	24.015
19) Freon 113	(2)	2.984	101	146669	23.586
18) Acetone	(1)	2.996	58	221649	153.470
21) 2-Propanol	(1)	3.143	45	129494	140.311
22) Methyl Iodide	(2)	3.143	142	285254	20.545
23) Carbon Disulfide	(2)	3.216	76	389400	20.282
27) Methyl Acetate	(2)	3.350	43	181431	20.944
25) Allyl Chloride	(2)	3.368	41	203777	19.664
28) Methylene Chloride	(2)	3.520	84	164608	21.722
29)*t-Butyl alcohol-d10	(1)	3.545	65	391052	250.000
30) t-Butyl alcohol	(1)	3.655	59	333119	185.273
31) Acrylonitrile	(2)	3.813	53	452511	100.417
33) Methyl Tertiary Butyl Ether	(2)	3.874	73	365415	20.003
32) trans-1,2-Dichloroethene	(2)	3.880	96	161022	22.053
34) n-Hexane	(2)	4.276	57	213028	22.879
36) 1,1-Dichloroethane	(2)	4.514	63	272273	20.744
38) di-Isopropyl ether	(2)	4.581	45	473171	20.728
39) 2-Chloro-1,3-butadiene	(2)	4.624	53	213954	21.663
40) Ethyl t-butyl ether	(2)	5.136	59	364047	20.232
44) 2-Butanone	(2)	5.355	43	1071774	163.669
42) cis-1,2-Dichloroethene	(2)	5.368	96	184387	21.288
45) 2,2-Dichloropropane	(2)	5.374	77	148714	20.846
47) Propionitrile	(1)	5.441	54	308213	143.500
48) Methacrylonitrile	(2)	5.666	67	764478	153.967
49) Bromochloromethane	(2)	5.715	128	93670	20.353
50) Tetrahydrofuran	(1)	5.727	71	189560	92.328

* = Compound is an internal standard.

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:00.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15v01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 17:06 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
51) Chloroform	(2)	5.880	83	298955	20.123
53) 1,1,1-Trichloroethane	(2)	6.093	97	264609	20.762
52)$Dibromofluoromethane	(2)	6.099	113	393354	50.196
43) 1,2-Dichloroethene (Total)	(2)		96	345409	43.341
54) Cyclohexane	(2)	6.191	56	248224	22.428
56) Carbon Tetrachloride	(2)	6.313	117	196532	21.103
55) 1,1-Dichloropropene	(2)	6.325	75	213978	21.192
58) Isobutyl Alcohol	(1)	6.520	41	292380	468.692
57)$1,2-Dichloroethane-d4	(2)	6.569	102	84148	49.908
60) Benzene	(2)	6.593	78	674835	20.703
61) 1,2-Dichloroethane	(2)	6.678	62	221984	19.602
65) t-Amyl methyl ether	(2)	6.806	73	378290	20.352
66)*Fluorobenzene	(2)	7.020	96	1449090	50.000
67) n-Heptane	(2)	7.050	43	224693	25.454
69) n-Butanol	(1)	7.440	56	479035	940.015
71) Trichloroethene	(2)	7.520	95	182279	20.526
73) Methylcyclohexane	(2)	7.831	83	272055	19.373
74) 1,2-Dichloropropane	(2)	7.867	63	174693	20.594
72) t-Amyl ethyl ether	(2)	7.898	87	193159M	20.032
77) Methyl Methacrylate	(2)	7.977	69	152638	19.395
76) 1,4-Dioxane	(1)	7.977	88	85363M	543.677
75) Dibromomethane	(2)	7.983	93	115667	19.921
79) Bromodichloromethane	(2)	8.233	83	216205	19.339
80) 2-Nitropropane	(2)	8.520	41	52840	17.762
81) 2-Chloroethyl Vinyl Ether	(2)	8.635	63	97631	20.814
82) cis-1,3-Dichloropropene	(2)	8.818	75	277218	19.916
83) 4-Methyl-2-pentanone	(2)	9.019	43	1355528	103.587
84)$Toluene-d8	(3)	9.160	98	1443679	50.137
89) Toluene	(3)	9.245	92	449649	20.520
90) trans-1,3-Dichloropropene	(3)	9.550	75	247011	19.323
92) Ethyl Methacrylate	(3)	9.629	69	260266	20.253
93) 1,1,2-Trichloroethane	(3)	9.775	97	180750	20.365
94) Tetrachloroethene	(3)	9.855	166	215147	21.128
95) 1,3-Dichloropropane	(3)	9.946	76	275536	19.581
97) 2-Hexanone	(3)	10.019	43	1143970	106.019
91) 1,3-Dichloropropene (total)	(3)		100	524229	39.239
98) Dibromochloromethane	(3)	10.178	129	189117	19.309
100) 1,2-Dibromoethane	(3)	10.294	107	193842	19.994

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:00.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15v01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 17:06 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
101)*Chlorobenzene-d5	(3)	10.763	117	1179491	50.000
103) Chlorobenzene	(3)	10.787	112	544590	20.062
102) 1-Chlorohexane	(3)	10.787	91	245175	22.140
104) 1,1,1,2-Tetrachloroethane	(3)	10.885	131	183278	19.536
105) Ethylbenzene	(3)	10.891	91	889897	20.714
107) m+p-Xylene	(3)	11.013	106	704380	41.577
108) o-Xylene	(3)	11.360	106	344982	20.732
110) Styrene	(3)	11.379	104	574481	21.033
111) Bromoform	(3)	11.543	173	135414	18.117
112) Isopropylbenzene	(3)	11.684	105	890390	22.356
113) Cyclohexanone	(1)	11.757	55	422718	608.545
109) Xylene (Total)	(3)		106	1049362	62.308
115)$4-Bromofluorobenzene	(3)	11.836	95	590836	50.140
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	289264M	18.916
116) Bromobenzene	(4)	11.952	156	244427	19.488
119) trans-1,4-Dichloro-2-butene	(4)	11.976	53	437416	106.766
118) 1,2,3-Trichloropropane	(4)	11.994	110	91422	19.648
120) n-Propylbenzene	(4)	12.031	91	1093743	22.379
121) 2-Chlorotoluene	(4)	12.110	126	226464	20.697
123) 1,3,5-Trimethylbenzene	(4)	12.177	105	756459	21.470
122) 4-Chlorotoluene	(4)	12.208	126	229626	19.833
125) tert-Butylbenzene	(4)	12.433	134	169045	24.250
126) Pentachloroethane	(4)	12.464	167	137773	20.116
127) 1,2,4-Trimethylbenzene	(4)	12.476	105	796875	21.847
128) sec-Butylbenzene	(4)	12.604	105	986939	23.868
130) 1,3-Dichlorobenzene	(4)	12.702	146	464979	19.894
131) p-Isopropyltoluene	(4)	12.720	119	854510	23.344
132)*1,4-Dichlorobenzene-d4	(4)	12.763	152	679043	50.000
134) 1,4-Dichlorobenzene	(4)	12.781	146	486143	20.340
135) 1,2,3-Trimethylbenzene	(4)	12.793	105	815101	21.052
136) Benzyl Chloride	(4)	12.860	91	528691	19.333
137) 1,3-Diethylbenzene	(4)	12.927	119	502873	21.130
138) 1,4-Diethylbenzene	(4)	13.006	119	530304	20.829
140) n-Butylbenzene	(4)	13.025	92	429637	22.978
139) 1,2-Dichlorobenzene	(4)	13.049	146	444178	19.894
141) 1,2-Diethylbenzene	(4)	13.080	119	423356	21.146
142) Diethylbenzene (total)	(4)		100	1456533	63.105
143) 1,2-Dibromo-3-chloropropane	(4)	13.616	75	66468	18.196

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

Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:00.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18may15a.b/5y15v01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 17:06 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
145) 1,3,5-Trichlorobenzene	(4)	13.744	180	337233	21.156
147) 1,2,4-Trichlorobenzene	(4)	14.183	180	296002	20.678
148) Hexachlorobutadiene	(4)	14.274	225	143777	20.927
149) Naphthalene	(4)	14.366	128	923591	20.432
150) 1,2,3-Trichlorobenzene	(4)	14.512	180	277832	20.961
151) 2-Methylnaphthalene	(4)	15.146	142	451308	17.784

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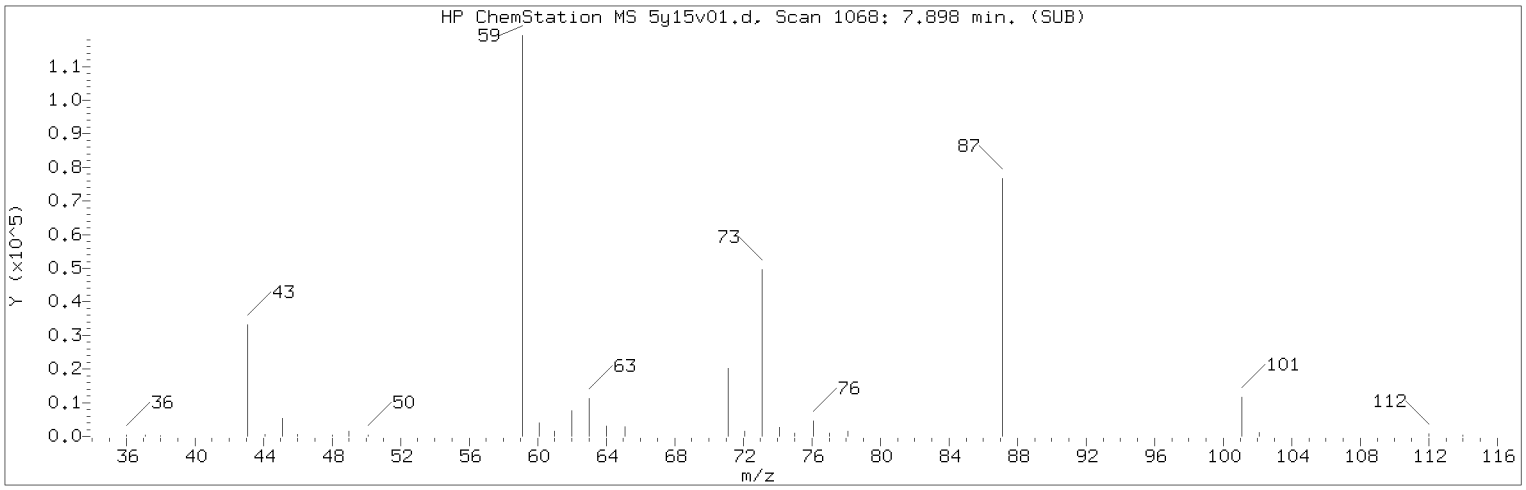
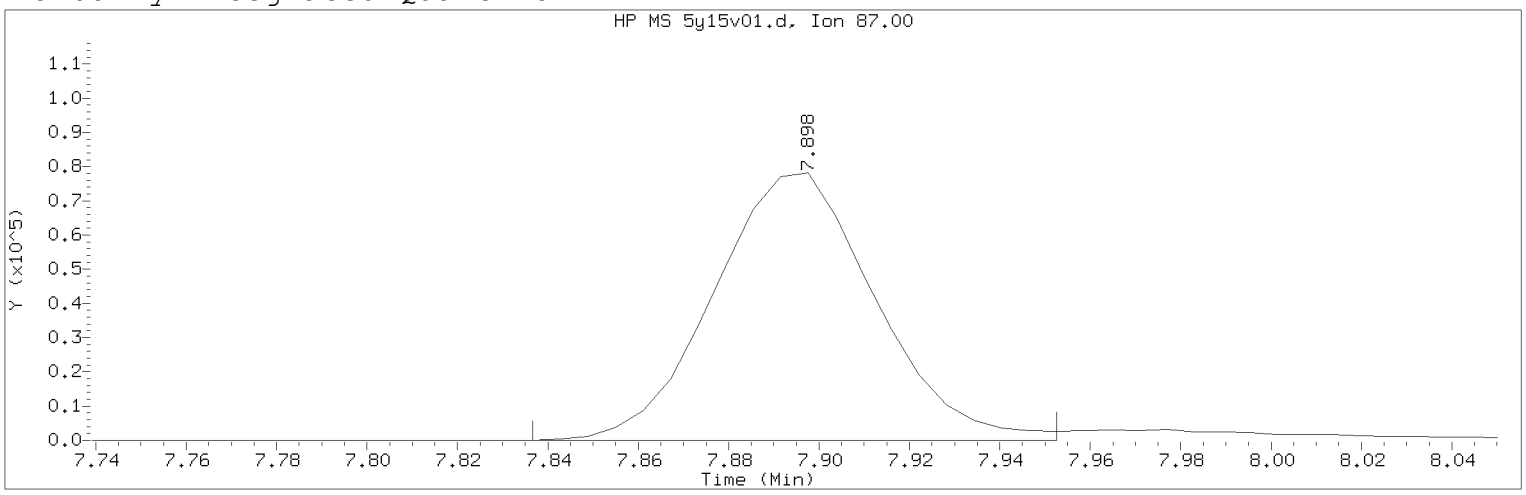
on 05/16/2018 at 12:00.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15v01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 17:06 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

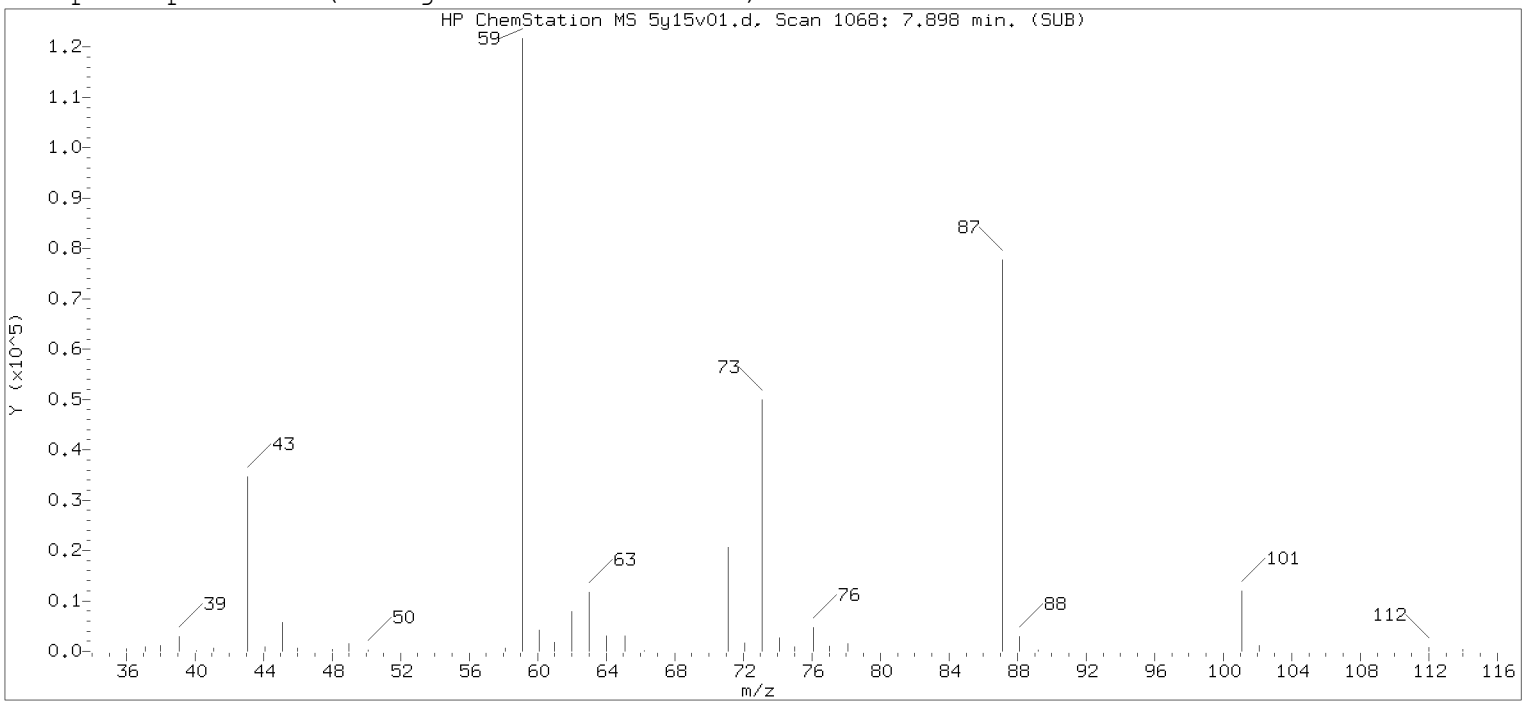
Compound Number : 72
Compound Name : t-Amyl ethyl ether
Scan Number : 1068
Retention Time (minutes): 7.898
Quant Ion : 87.00
Area (flag) : 193159M
On-Column Amount (ng) : 20.0315
Integration start scan : 1057 Integration stop scan: 1076
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

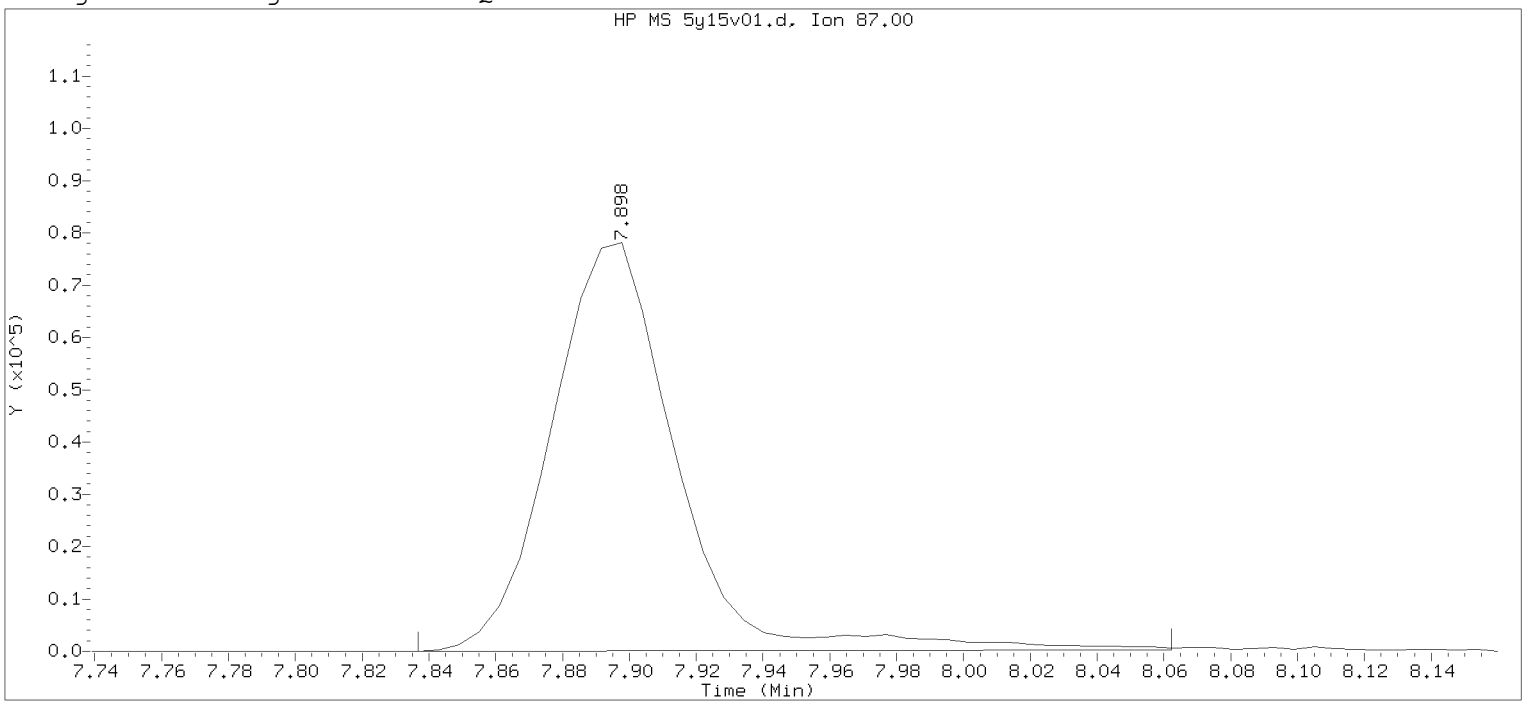
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:00.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15v01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 17:06 Analyst ID: LCP00895

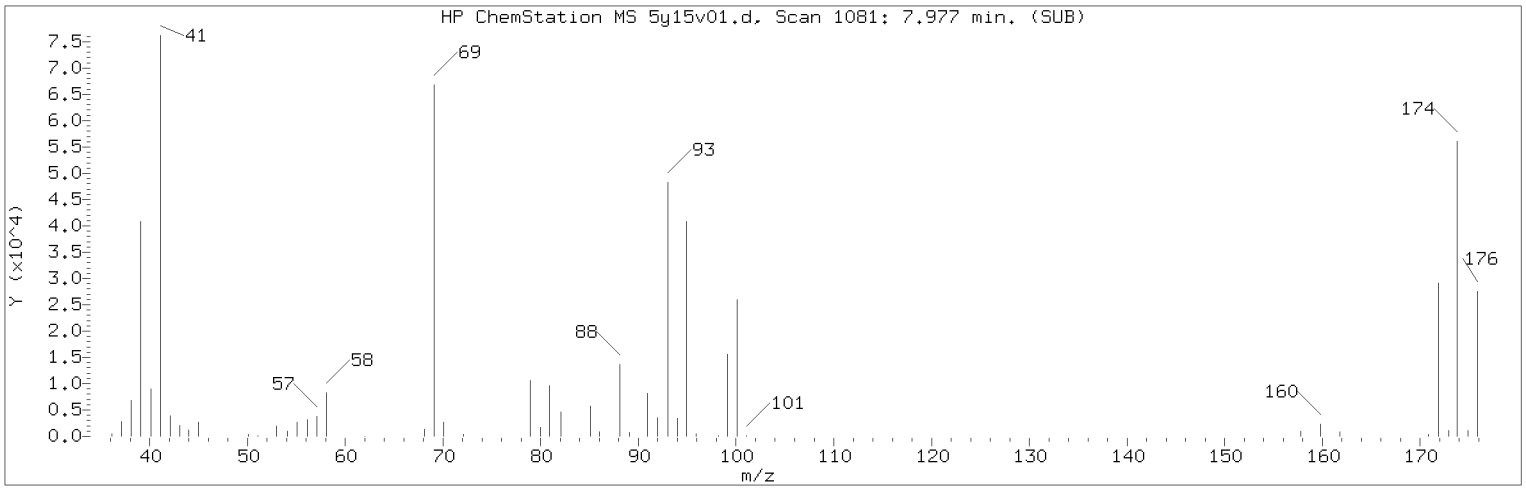
Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: LG5ICV Lab Sample ID: LG5ICV

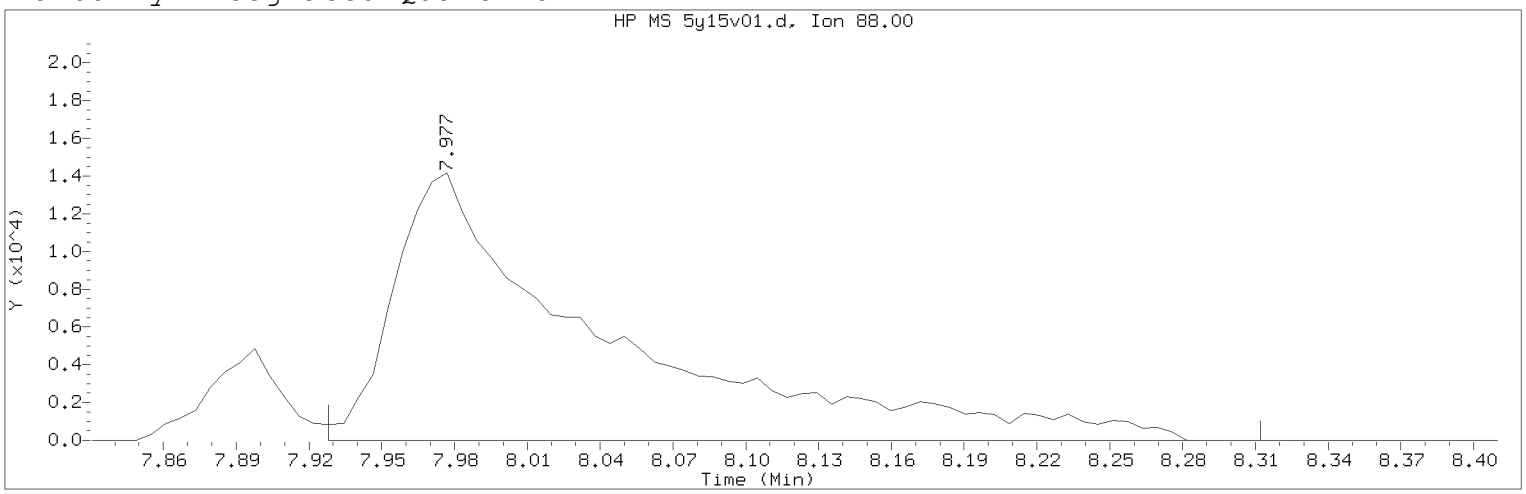
Compound Number : 72
Compound Name : t-Amyl ethyl ether
Scan Number : 1068
Retention Time (minutes): 7.898
Quant Ion : 87.00
Area : 202516
On-column Amount (ng) : 20.7190
Integration start scan : 1057 Integration stop scan: 1094
Y at integration start : 0 Y at integration end: 305

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:00.
Target 3.5 esignature user keeper

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15v01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 17:06 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

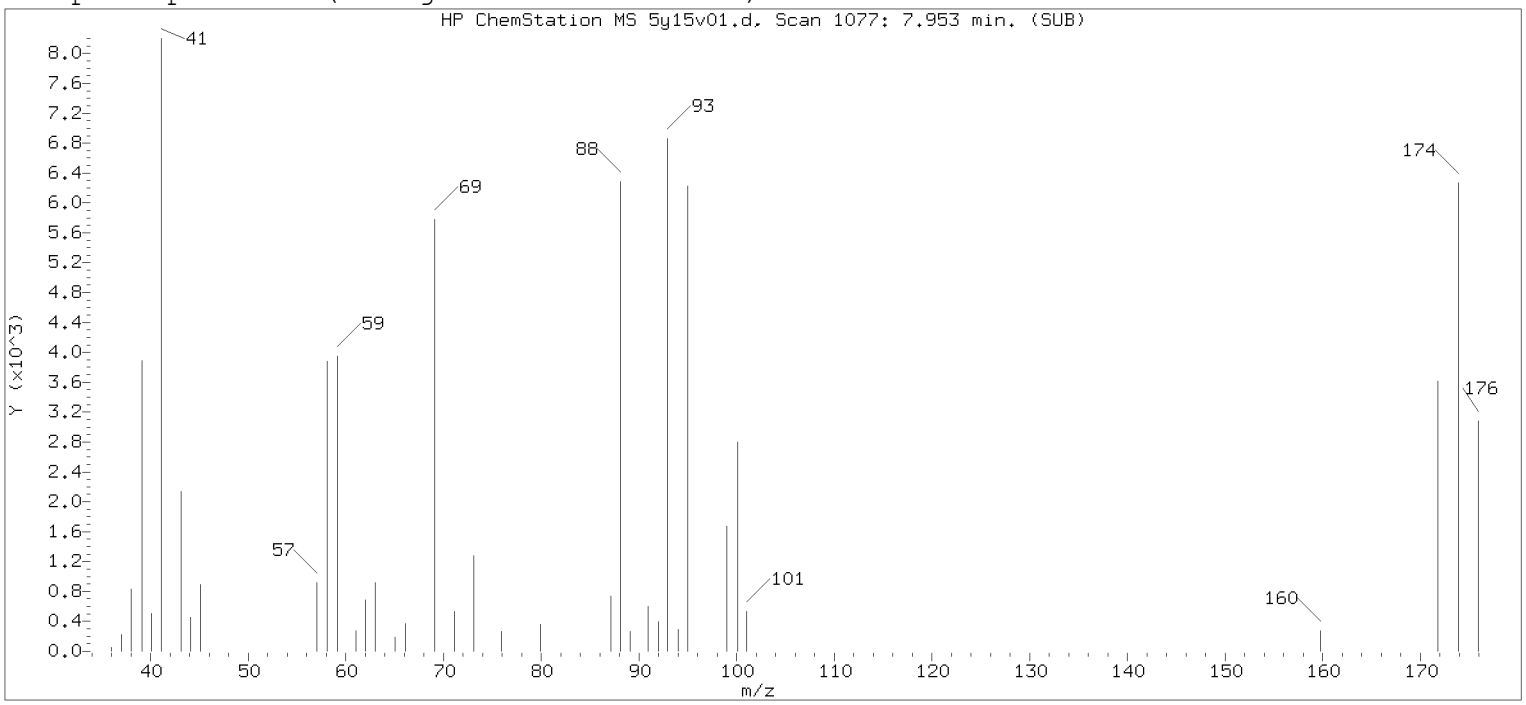
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 1081
Retention Time (minutes): 7.977
Quant Ion : 88.00
Area (flag) : 85363M
On-Column Amount (ng) : 543.6766
Integration start scan : 1072 Integration stop scan: 1135
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

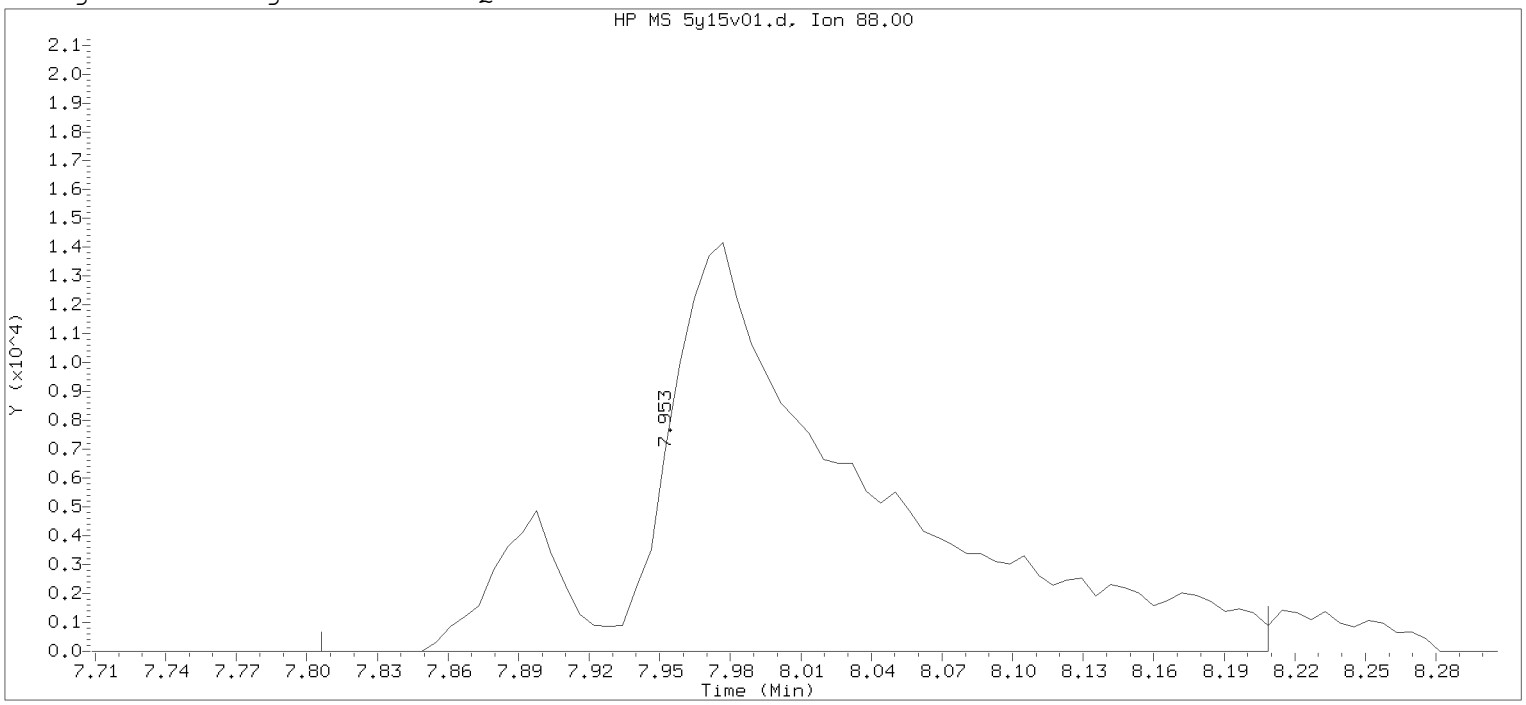
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:00.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15v01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 17:06 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Compound Number	: 76		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1077		
Retention Time (minutes)	: 7.953		
Quant Ion	: 88.00		
Area	: 91220		
On-column Amount (ng)	: 80.9891		
Integration start scan	: 1052	Integration stop scan:	1118
Y at integration start	: 0	Y at integration end:	0

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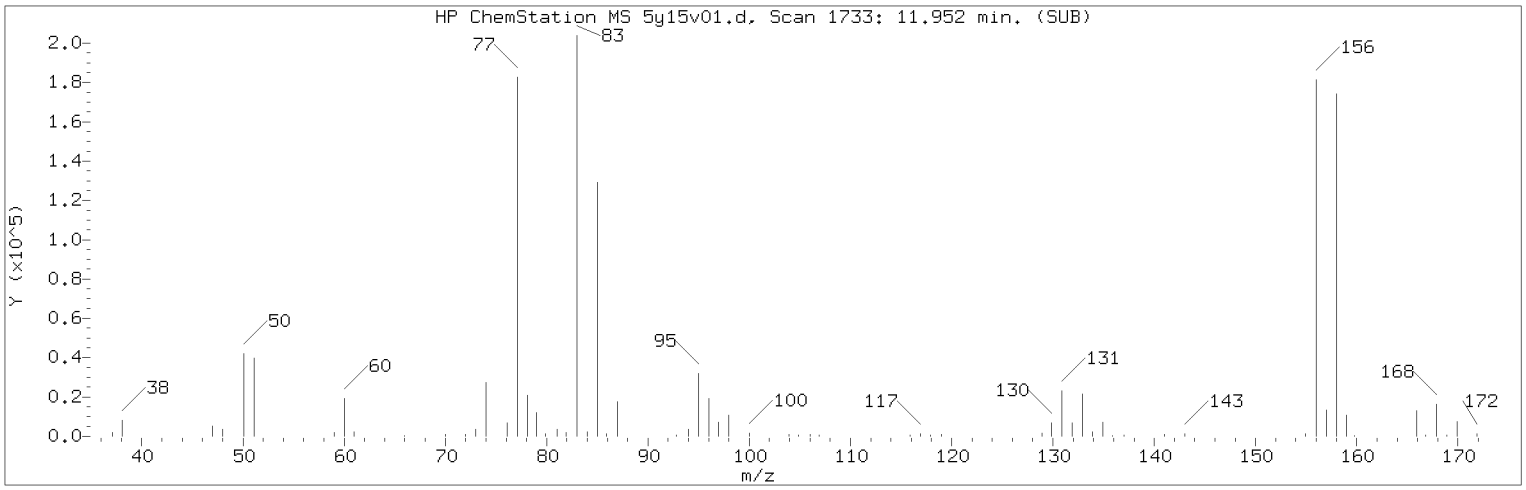
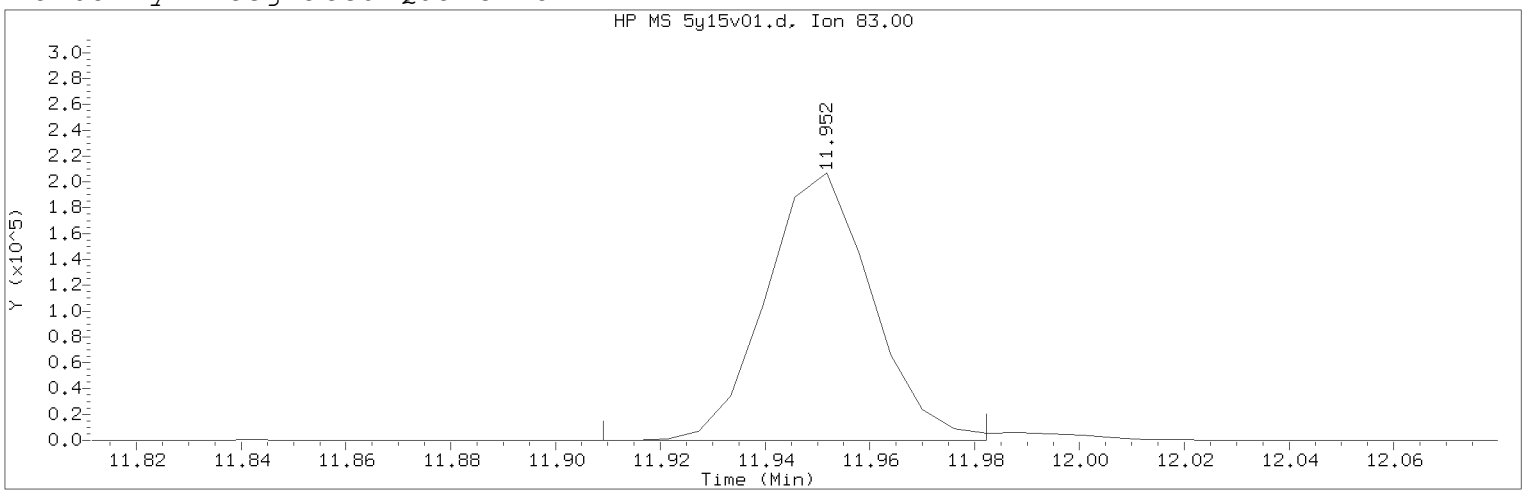
Target 3.5 esignature user kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15v01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 17:06 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 11:58
Date, time and analyst ID of latest file update: 16-May-2018 11:58 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

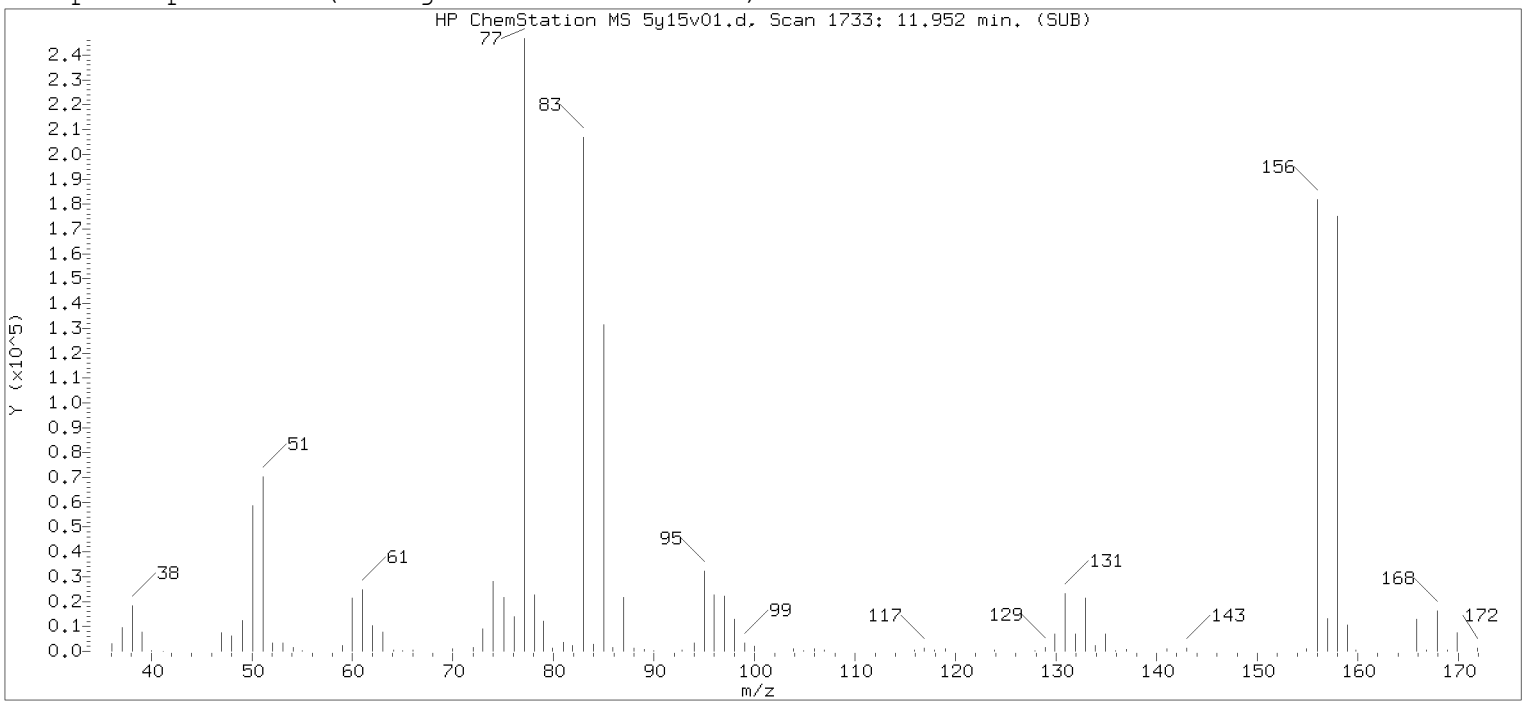
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area (flag) : 289264M
On-Column Amount (ng) : 18.9157
Integration start scan : 1725 Integration stop scan: 1737
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

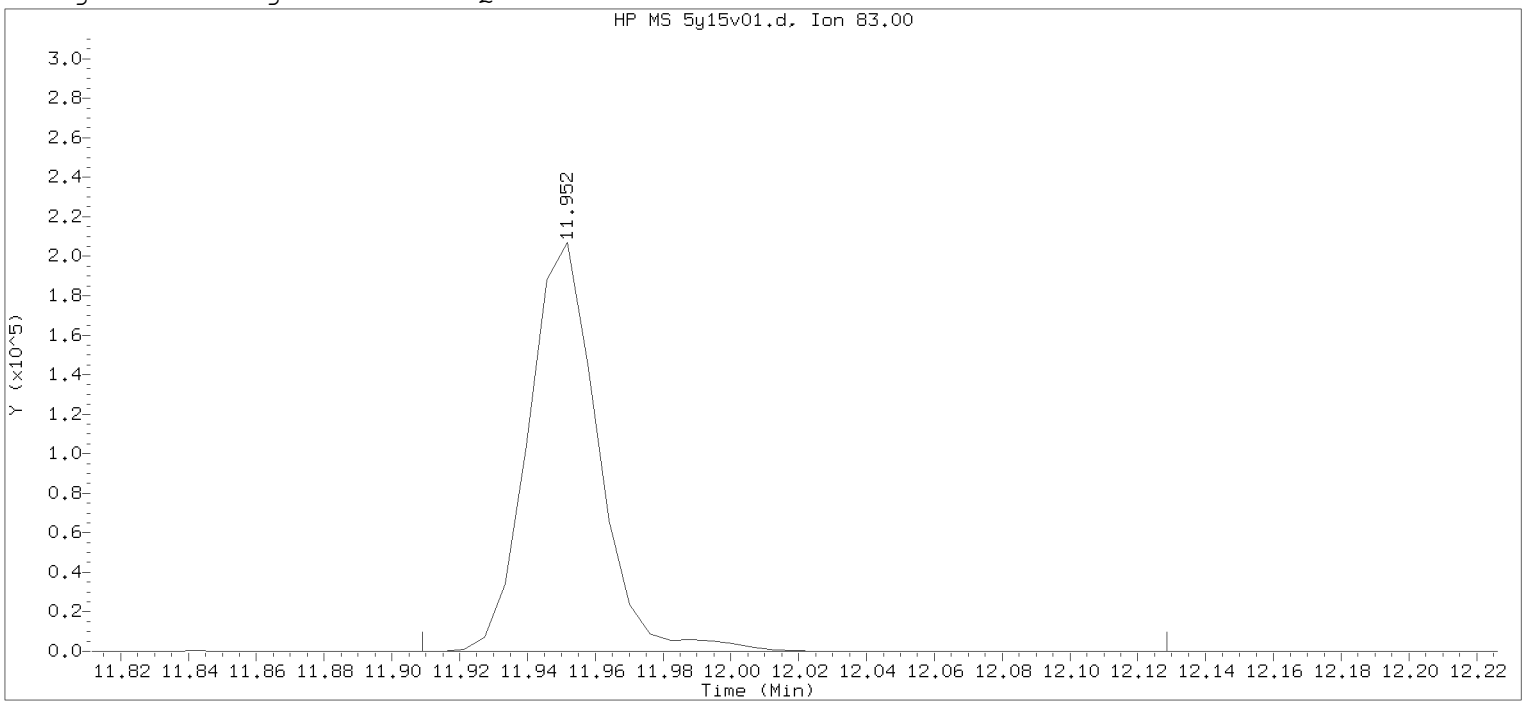
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 05/16/2018 at 12:00.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 05/18/2018 at 20:26.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18may15a.b/5y15v01.d Instrument ID: HP26285.i
Injection date and time: 15-MAY-2018 17:06 Analyst ID: LCP00895

Method used: /chem2/HP26285.i/18may15a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 16-MAY-2018 06:12
Date, time and analyst ID of latest file update: 16-May-2018 06:12 lcp00895

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area : 295794
On-column Amount (ng) : 19.1312
Integration start scan : 1725 Integration stop scan: 1761
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 05/16/2018 at 12:00.
Target 3.5 esignature user keeper

Data File: /chem2/HP26285.i/18jun19a.b/5u19t01.d

Date : 19-JUN-2018 19:06

Client ID: BFB Feb13-18

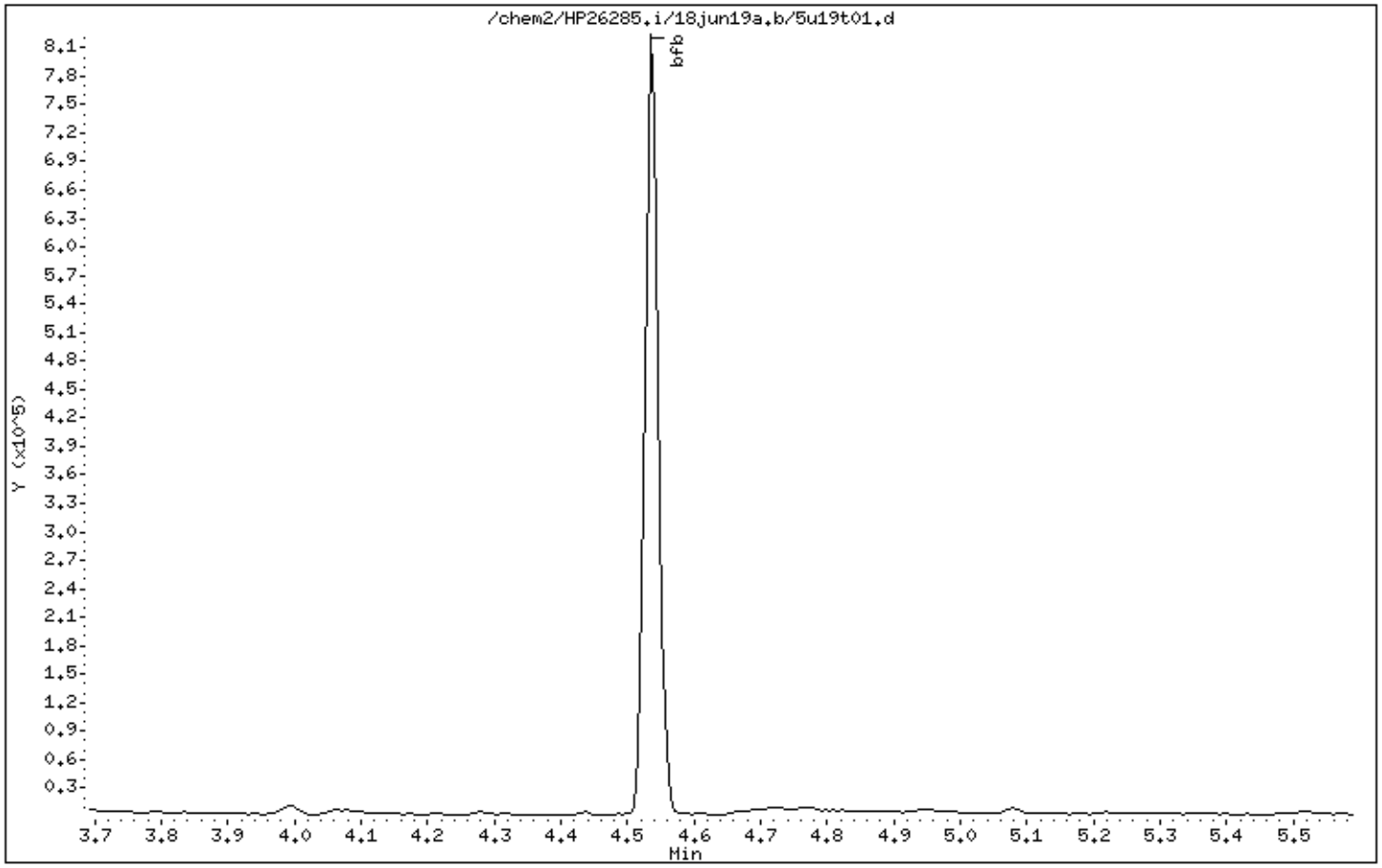
Instrument: HP26285.i

Sample Info: BFB Feb13-18;50NGBFB;1;3;;;;;;

Operator: PTH10165

Column phase: Rxi-624Sil MS

Column diameter: 0.25



Digitally signed by Patrick T. Herres on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Data File: /chem2/HP26285.i/18jun19a.b/5u19t01.d

Date : 19-JUN-2018 19:06

Client ID: BFB Feb13-18

Instrument: HP26285.i

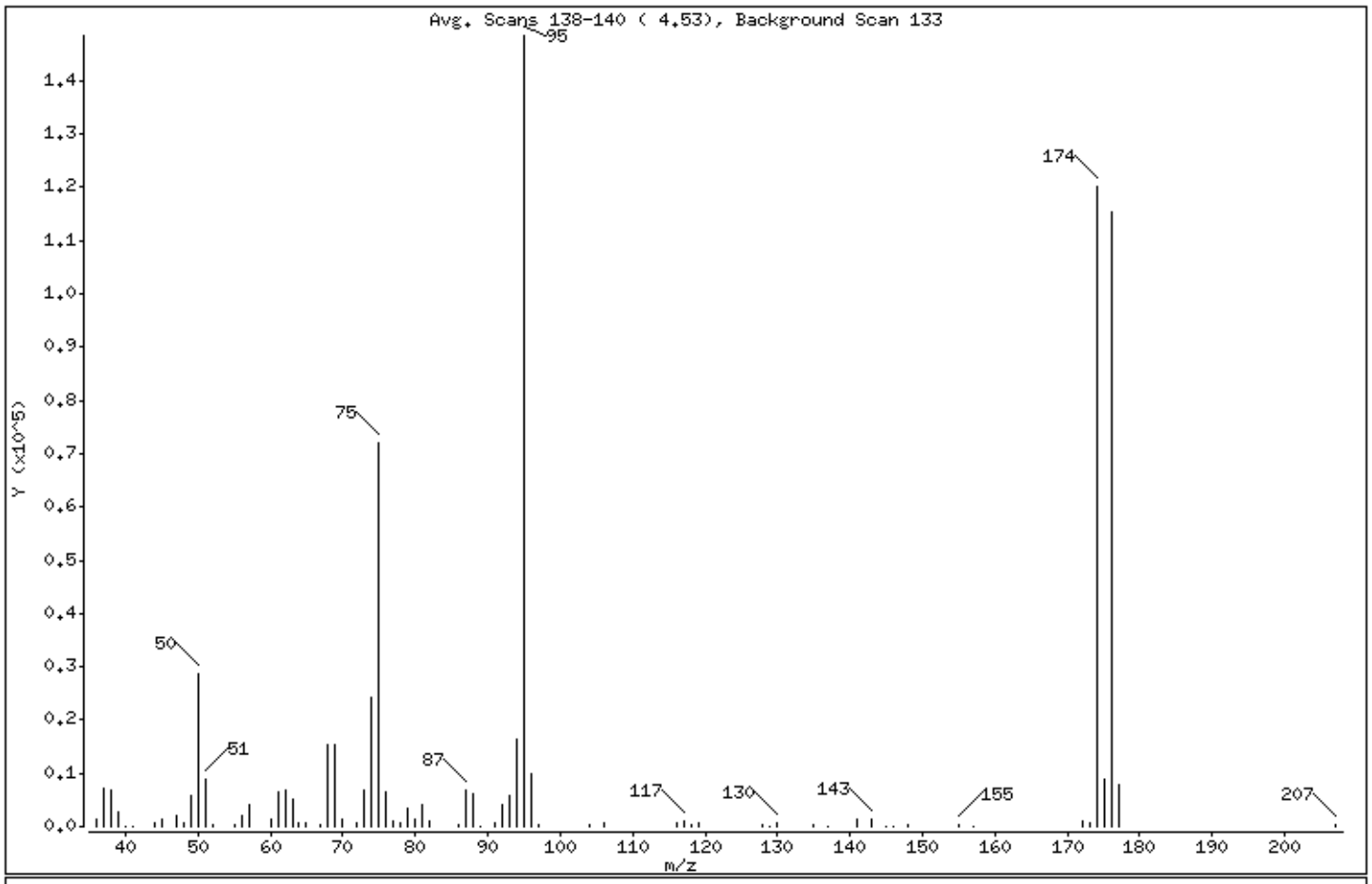
Sample Info: BFB Feb13-18;50NGBFB;1;3;;;;;;

Operator: PTH10165

Column phase: Rxi-624Sil MS

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.40
75	30.00 - 60.00% of mass 95	48.59
96	5.00 - 9.00% of mass 95	6.68
173	Less than 2.00% of mass 174	0.55 (0.68)
174	50.00 - 100.00% of mass 95	80.93
175	5.00 - 9.00% of mass 174	5.93 (7.33)
176	95.00 - 101.00% of mass 174	77.61 (95.90)
177	5.00 - 9.00% of mass 176	5.21 (6.72)

Digitally signed by Patrick T. Herres on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Data File: /chem2/HP26285.i/18jun19a.b/5u19t01.d

Date : 19-JUN-2018 19:06

Client ID: BFB Feb13-18 Instrument: HP26285.i

Sample Info: BFB Feb13-18;50NGBFB;1;3;;;;;;

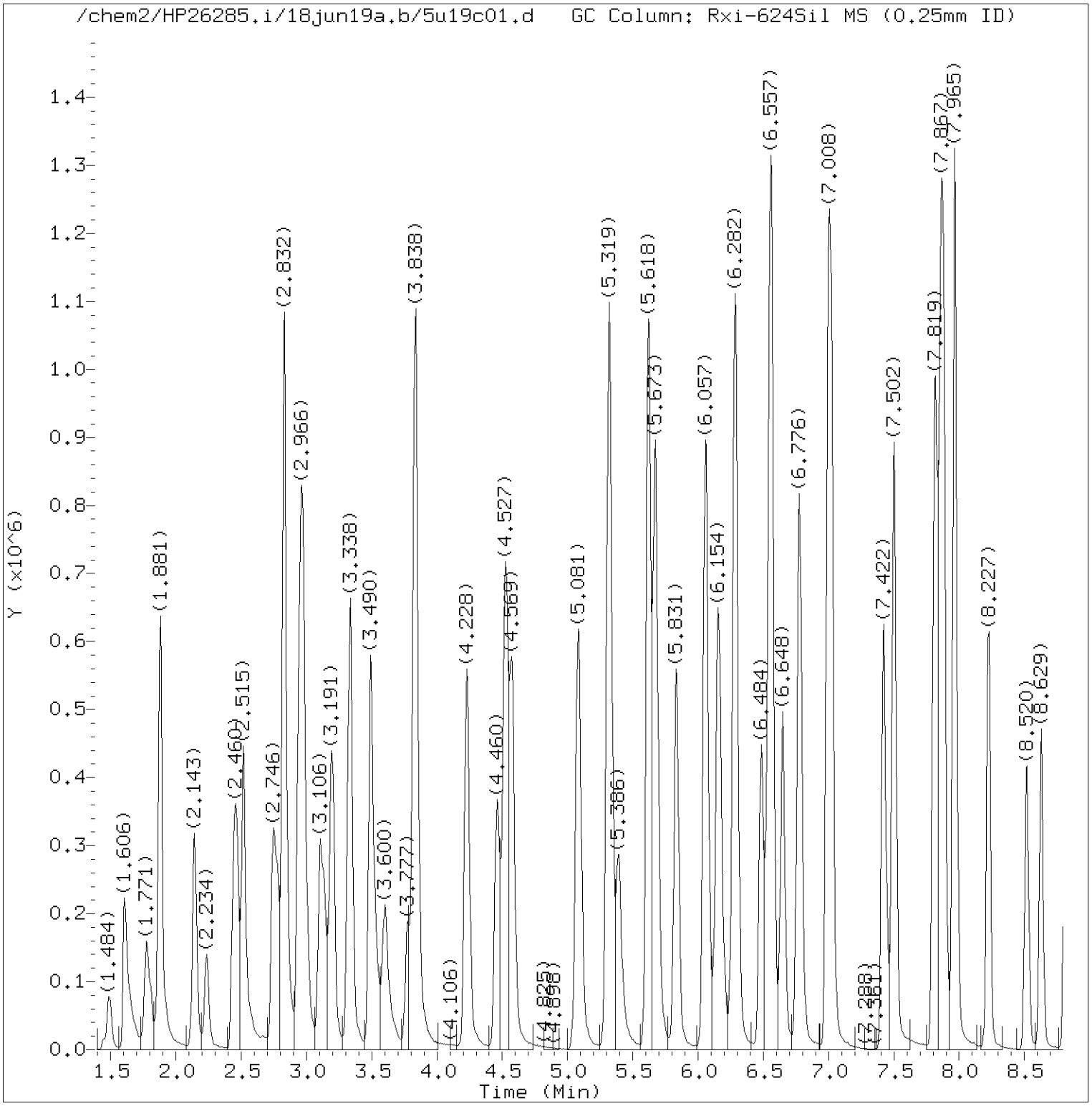
Operator: PTH10165

Column phase: Rxi-624Sil MS Column diameter: 0.25

Data File: 5u19t01.d
Spectrum: Avg. Scans 138-140 (4.53), Background Scan 133
Location of Maximum: 95.00
Number of points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1277	62.00	6817	86.00	201	130.00	594
37.00	7158	63.00	5101	87.00	6684	135.00	240
38.00	6861	64.00	692	88.00	6063	137.00	134
39.00	2828	65.00	662	89.00	103	141.00	1374
40.00	77	67.00	473	91.00	526	143.00	1470
41.00	116	68.00	15384	92.00	4064	145.00	92
44.00	807	69.00	15523	93.00	5936	146.00	84
45.00	1342	70.00	1200	94.00	16448	148.00	388
47.00	2049	72.00	796	95.00	148480	155.00	258
48.00	797	73.00	6681	96.00	9925	157.00	93
49.00	5871	74.00	24080	97.00	303	172.00	858
50.00	28800	75.00	72144	104.00	511	173.00	815
51.00	8950	76.00	6458	106.00	545	174.00	120160
52.00	437	77.00	968	116.00	559	175.00	8809
55.00	420	78.00	574	117.00	877	176.00	115232
56.00	2122	79.00	3482	118.00	492	177.00	7738
57.00	4017	80.00	1378	119.00	847	207.00	174
60.00	1439	81.00	4177	128.00	489		
61.00	6526	82.00	1020	129.00	114		

Digitally signed by Patrick T. Herres on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165



Total Ion Chromatogram (TIC)

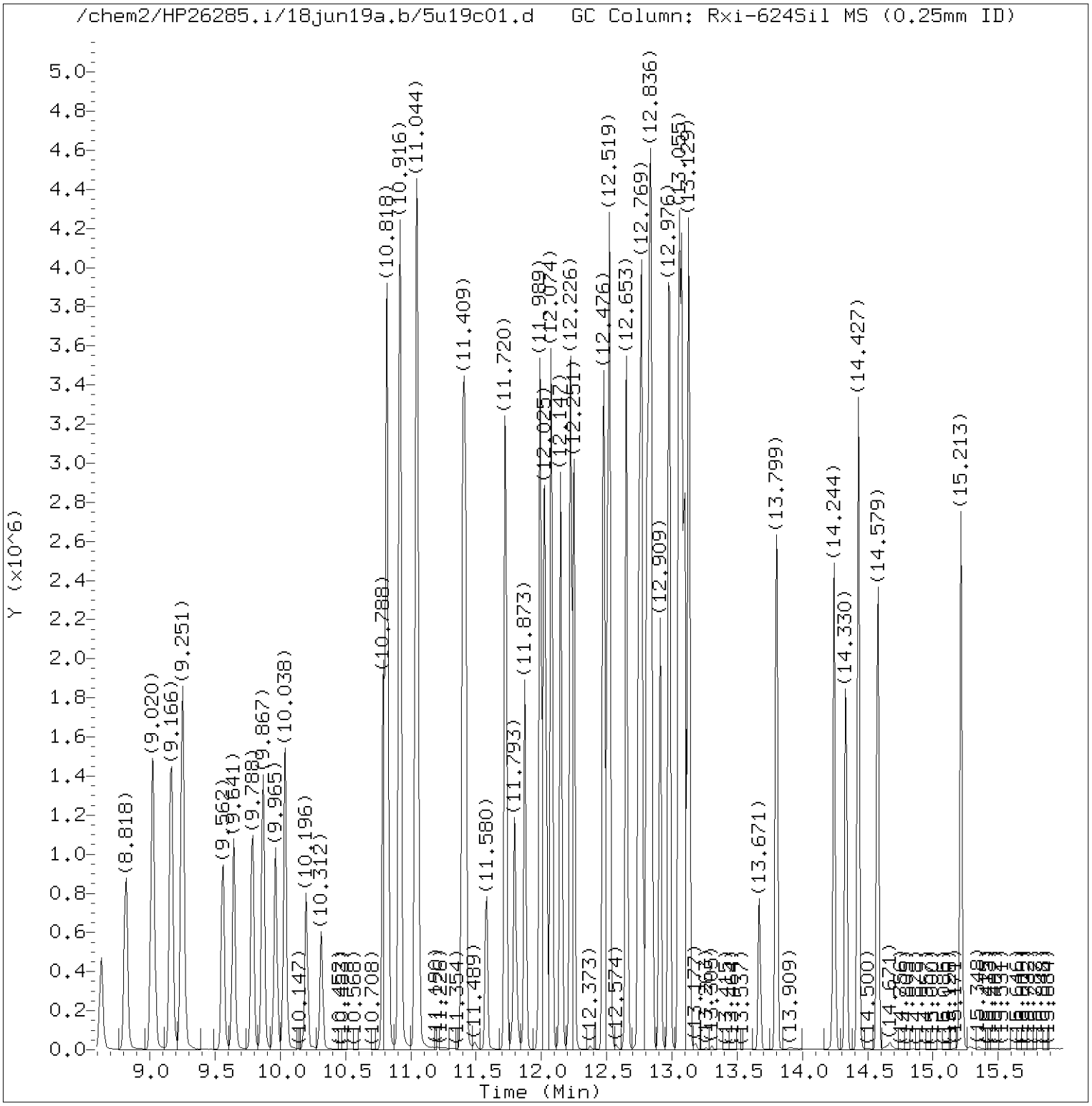
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:16 pth10165

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:16 pth10165

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:16 pth10165

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.606	85	445056	57.960
4) Chloromethane	(2)	1.777	50	260646	47.666
6) Vinyl Chloride	(2)	1.869	62	258522	48.372
5) 1,3-Butadiene	(2)	1.881	39	255124	71.756
8) Bromomethane	(2)	2.143	94	271392	60.186
9) Chloroethane	(2)	2.234	64	150473	53.051
12) Trichlorofluoromethane	(2)	2.454	101	524295	62.037
11) n-Pentane	(2)	2.515	43	299921	63.943
15) Freon 123a	(2)	2.746	67	352539	57.727
16) Acrolein	(1)	2.832	56	1072750	496.065
17) 1,1-Dichloroethene	(2)	2.942	96	252873	55.855
17) 1,1-Dichloroethene	(2)	2.942	63	134058	58.940
18) Acetone	(1)	2.972	58	109637	94.585
19) Freon 113	(2)	2.972	101	296041	61.887
21) 2-Propanol	(1)	3.106	45	180654	243.893
22) Methyl Iodide	(2)	3.106	142	554722	51.939
23) Carbon Disulfide	(2)	3.198	76	868514	58.808
27) Methyl Acetate	(2)	3.319	43	395770	59.393
25) Allyl Chloride	(2)	3.338	41	435197	54.593
28) Methylene Chloride	(2)	3.490	84	315526	54.127
29)*t-Butyl alcohol-d10	(1)	3.502	65	313853	250.000
30) t-Butyl alcohol	(1)	3.606	59	365629	253.373
31) Acrylonitrile	(2)	3.771	53	200046	57.709
33) Methyl Tertiary Butyl Ether	(2)	3.825	73	878806	62.539
32) trans-1,2-Dichloroethene	(2)	3.838	96	297293	52.931
34) n-Hexane	(2)	4.228	57	396644	49.010
36) 1,1-Dichloroethane	(2)	4.460	63	543572	53.836
38) di-Isopropyl ether	(2)	4.527	45	968450	55.152
39) 2-Chloro-1,3-butadiene	(2)	4.575	53	458554	60.356
40) Ethyl t-butyl ether	(2)	5.081	59	821002	59.314
44) 2-Butanone	(2)	5.307	43	592816M	117.685
42) cis-1,2-Dichloroethene	(2)	5.319	96	346211	51.961
45) 2,2-Dichloropropane	(2)	5.325	77	325234	59.267
47) Propionitrile	(1)	5.392	54	433189	251.297
48) Methacrylonitrile	(2)	5.618	67	519430	135.997
49) Bromochloromethane	(2)	5.667	128	187612	52.994
50) Tetrahydrofuran	(1)	5.679	71	158745	96.337
51) Chloroform	(2)	5.831	83	606869	53.104

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

Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:16 pth10165

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
53) 1,1,1-Trichloroethane	(2)	6.057	97	541769	55.262
52)$Dibromofluoromethane	(2)	6.063	113	309227	51.298
52)$Dibromofluoromethane	(2)	6.057	111	316500	51.769
54) Cyclohexane	(2)	6.154	56	476454	50.991
54) Cyclohexane	(2)	6.160	84	394861	49.200
54) Cyclohexane	(2)	6.160	69	149931	51.451
43) 1,2-Dichloroethene (Total)	(2)		96	643504	104.892
56) Carbon Tetrachloride	(2)	6.276	117	469015	65.469
55) 1,1-Dichloropropene	(2)	6.288	75	434859	55.988
58) Isobutyl Alcohol	(1)	6.484	41	326661	652.447
57)$1,2-Dichloroethane-d4	(2)	6.538	102	65328	50.369
57)$1,2-Dichloroethane-d4	(2)	6.538	65	357785	57.043
57)$1,2-Dichloroethane-d4	(2)	6.538	104	42378	51.277
60) Benzene	(2)	6.563	78	1354424	54.016
61) 1,2-Dichloroethane	(2)	6.648	62	487344	55.945
61) 1,2-Dichloroethane	(2)	6.648	98	39624	52.827
65) t-Amyl methyl ether	(2)	6.776	73	833347	58.284
66)*Fluorobenzene	(2)	6.996	96	1114700	50.000
67) n-Heptane	(2)	7.020	43	461229	57.732
69) n-Butanol	(1)	7.422	56	488190	1193.617
71) Trichloroethene	(2)	7.502	95	361285	52.888
73) Methylcyclohexane	(2)	7.812	83	517057	45.177
73) Methylcyclohexane	(2)	7.819	98	223721	43.659
74) 1,2-Dichloropropane	(2)	7.855	63	360715	55.281
72) t-Amyl ethyl ether	(2)	7.880	87	410655M	55.362
76) 1,4-Dioxane	(1)	7.959	88	71914M	570.681
77) Methyl Methacrylate	(2)	7.965	69	335780	55.464
75) Dibromomethane	(2)	7.965	93	241574	54.086
79) Bromodichloromethane	(2)	8.221	83	484941	56.389
80) 2-Nitropropane	(2)	8.520	41	311521	136.133
81) 2-Chloroethyl Vinyl Ether	(2)	8.629	63	226815	62.859
82) cis-1,3-Dichloropropene	(2)	8.818	75	580456	54.210
83) 4-Methyl-2-pentanone	(2)	9.020	43	1252722	124.448
84)$Toluene-d8	(3)	9.166	98	1151194	49.485
84)$Toluene-d8	(3)	9.166	100	738136	48.749
89) Toluene	(3)	9.251	92	900331	50.856
90) trans-1,3-Dichloropropene	(3)	9.562	75	538128	52.105
92) Ethyl Methacrylate	(3)	9.641	69	573126	55.203

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

Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:16 pth10165

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) 1,1,2-Trichloroethane	(3)	9.788	97	353923	49.358
94) Tetrachloroethene	(3)	9.867	166	419286	50.965
95) 1,3-Dichloropropane	(3)	9.965	76	578977	50.927
97) 2-Hexanone	(3)	10.038	43	1061915	121.812
91) 1,3-Dichloropropene (total)	(3)		100	1118584	106.315
98) Dibromochloromethane	(3)	10.196	129	412157	52.087
100) 1,2-Dibromoethane	(3)	10.312	107	389600	49.739
101)*Chlorobenzene-d5	(3)	10.788	117	952931	50.000
103) Chlorobenzene	(3)	10.818	112	1113868	50.788
102) 1-Chlorohexane	(3)	10.818	91	501147	56.014
104) 1,1,1,2-Tetrachloroethane	(3)	10.909	131	389385	51.373
105) Ethylbenzene	(3)	10.916	91	1880453	54.178
107) m+p-Xylene	(3)	11.044	106	1462856	106.875
108) o-Xylene	(3)	11.397	106	727350	54.102
110) Styrene	(3)	11.415	104	1220463	55.309
111) Bromoform	(3)	11.580	173	310268	51.380
112) Isopropylbenzene	(3)	11.720	105	1860528	57.820
109) Xylene (Total)	(3)		106	2190206	160.977
113) Cyclohexanone	(1)	11.793	55	456293A	818.454
115)$4-Bromofluorobenzene	(3)	11.873	95	516984	54.303
115)$4-Bromofluorobenzene	(3)	11.873	174	451729	52.302
117) 1,1,2,2-Tetrachloroethane	(4)	11.989	83	657020	49.731
116) Bromobenzene	(4)	11.995	156	503717	46.486
119) trans-1,4-Dichloro-2-butene	(4)	12.019	53	410794	116.060
118) 1,2,3-Trichloropropane	(4)	12.037	110	191271	47.582
120) n-Propylbenzene	(4)	12.074	91	2364762	56.006
121) 2-Chlorotoluene	(4)	12.147	126	461022	48.771
123) 1,3,5-Trimethylbenzene	(4)	12.226	105	1667358	54.777
122) 4-Chlorotoluene	(4)	12.251	126	488964	48.883
125) tert-Butylbenzene	(4)	12.476	134	321667M	53.413
126) Pentachloroethane	(4)	12.507	167	310549	52.484
127) 1,2,4-Trimethylbenzene	(4)	12.525	105	1742830	55.306
128) sec-Butylbenzene	(4)	12.653	105	2089674	58.496
130) 1,3-Dichlorobenzene	(4)	12.751	146	993968	49.224
131) p-Isopropyltoluene	(4)	12.769	119	1833023	57.963
132)*1,4-Dichlorobenzene-d4	(4)	12.805	152	586643	50.000
134) 1,4-Dichlorobenzene	(4)	12.830	146	1028025	49.786
135) 1,2,3-Trimethylbenzene	(4)	12.842	105	1734129	51.844

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:16 pth10165

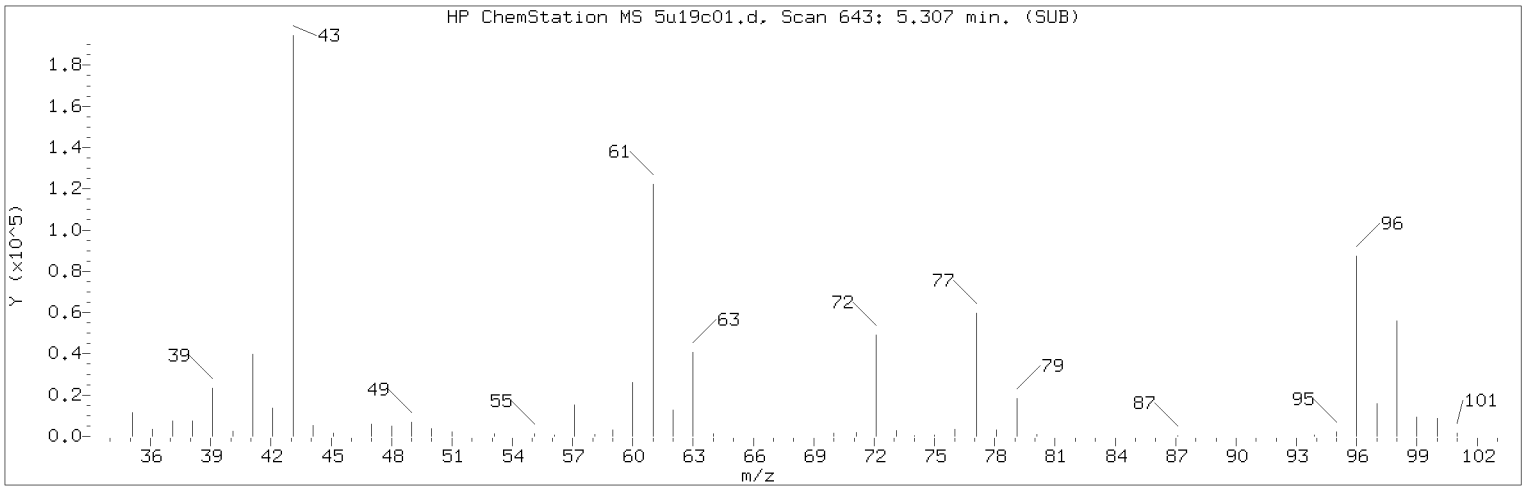
Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
136) Benzyl Chloride	(4)	12.909	91	1267292	53.641
137) 1,3-Diethylbenzene	(4)	12.982	119	1091974	53.109
138) 1,4-Diethylbenzene	(4)	13.055	119	1166376	53.028
140) n-Butylbenzene	(4)	13.074	92	985617M	61.016
139) 1,2-Dichlorobenzene	(4)	13.098	146	945399	49.013
141) 1,2-Diethylbenzene	(4)	13.129	119	917025A	53.018
142) Diethylbenzene (total)	(4)		100	3175375	159.155
143) 1,2-Dibromo-3-chloropropane	(4)	13.671	75	155047	49.130
145) 1,3,5-Trichlorobenzene	(4)	13.805	180	704305	51.144
147) 1,2,4-Trichlorobenzene	(4)	14.244	180	624985	50.536
148) Hexachlorobutadiene	(4)	14.336	225	300324	44.247
149) Naphthalene	(4)	14.427	128	2092690	53.588
150) 1,2,3-Trichlorobenzene	(4)	14.579	180	590973	51.608
151) 2-Methylnaphthalene	(4)	15.213	142	1068951	44.471

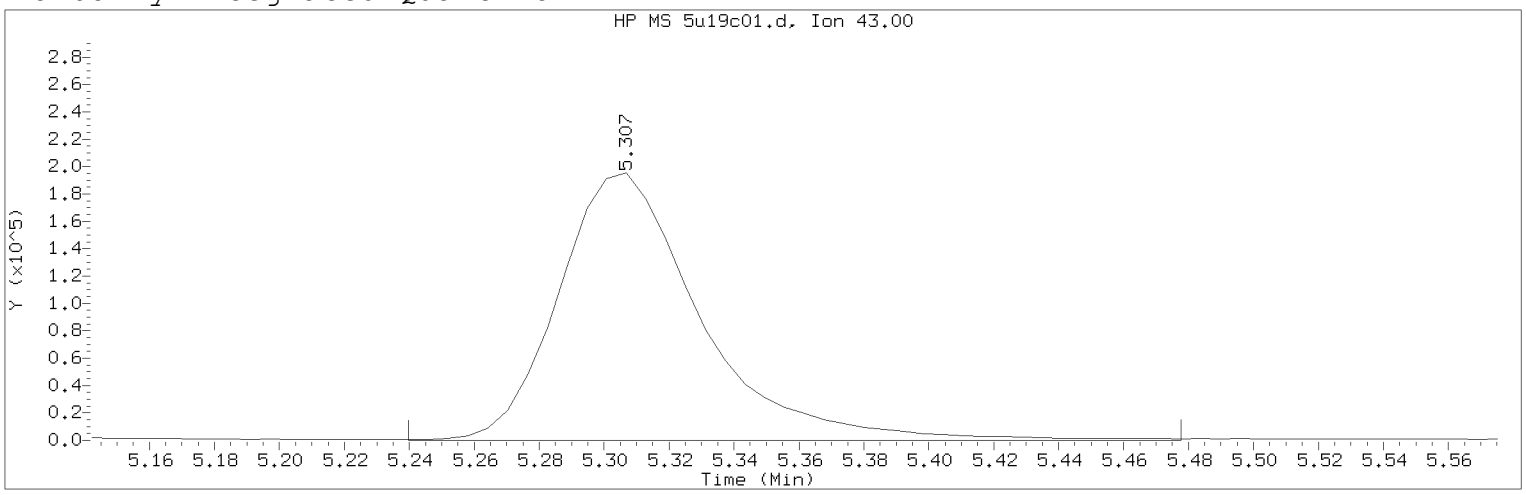
M = Compound was manually integrated.
A = User selected an alternate hit.

Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:16 pth10165

Sample Name: VSTD050 Lab Sample ID: VSTD050

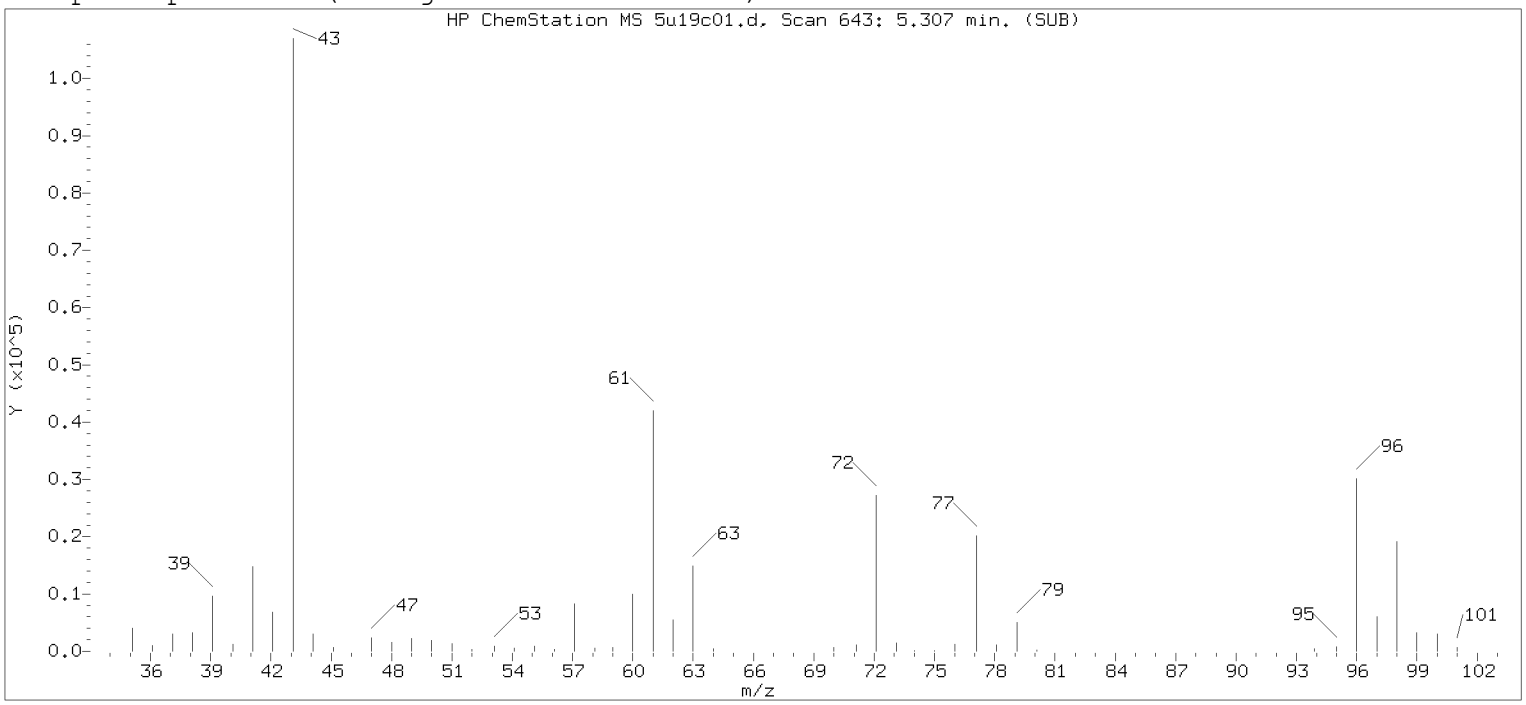
Compound Number : 44
Compound Name : 2-Butanone
Scan Number : 643
Retention Time (minutes): 5.307
Quant Ion : 43.00
Area (flag) : 592816M
On-Column Amount (ng) : 117.6846
Integration start scan : 631 Integration stop scan: 670
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

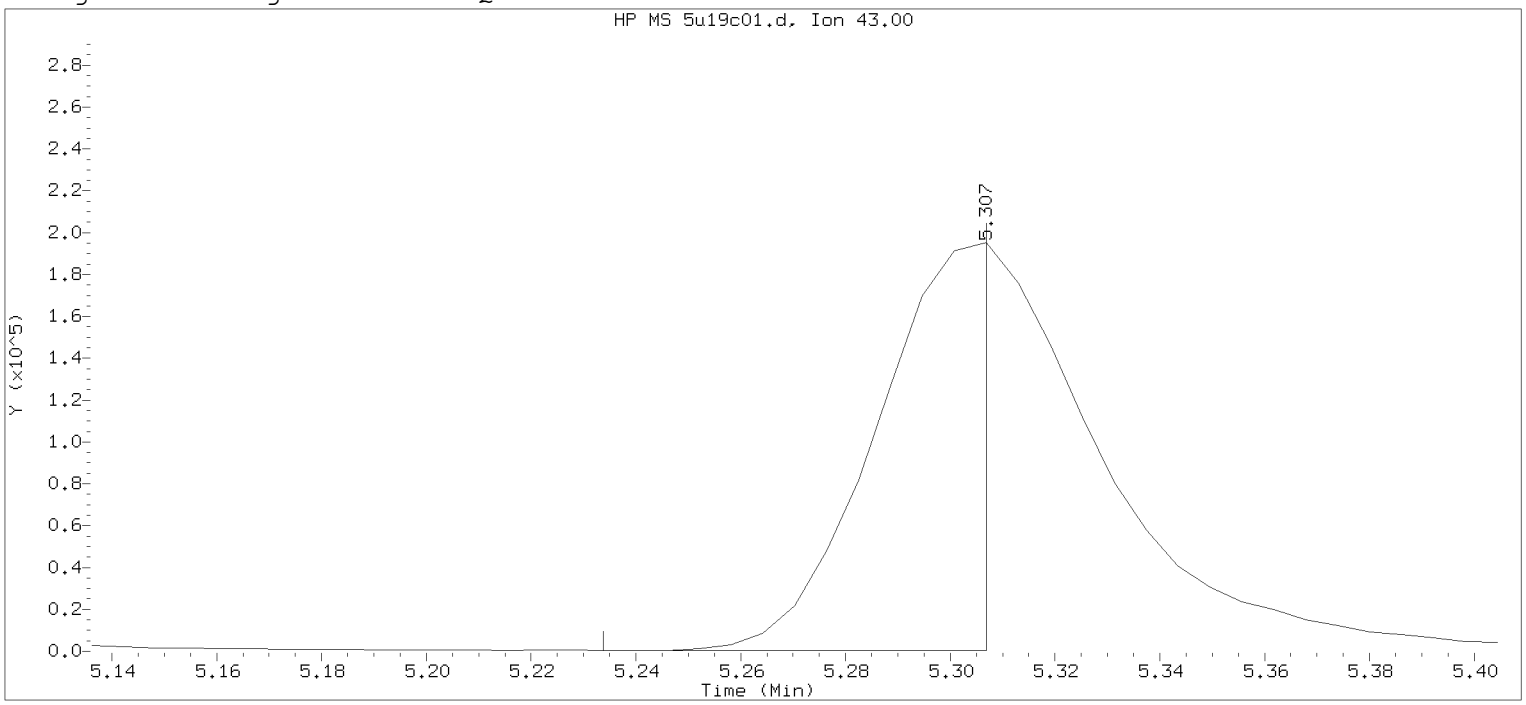
Analyst responsible for change: Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

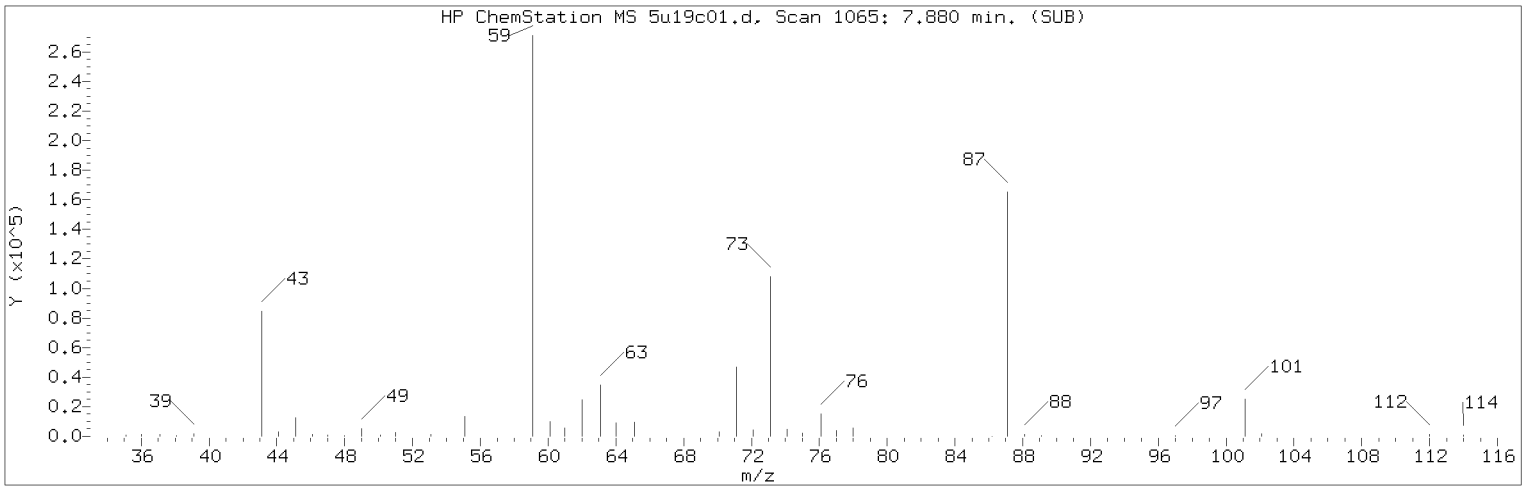
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:01 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

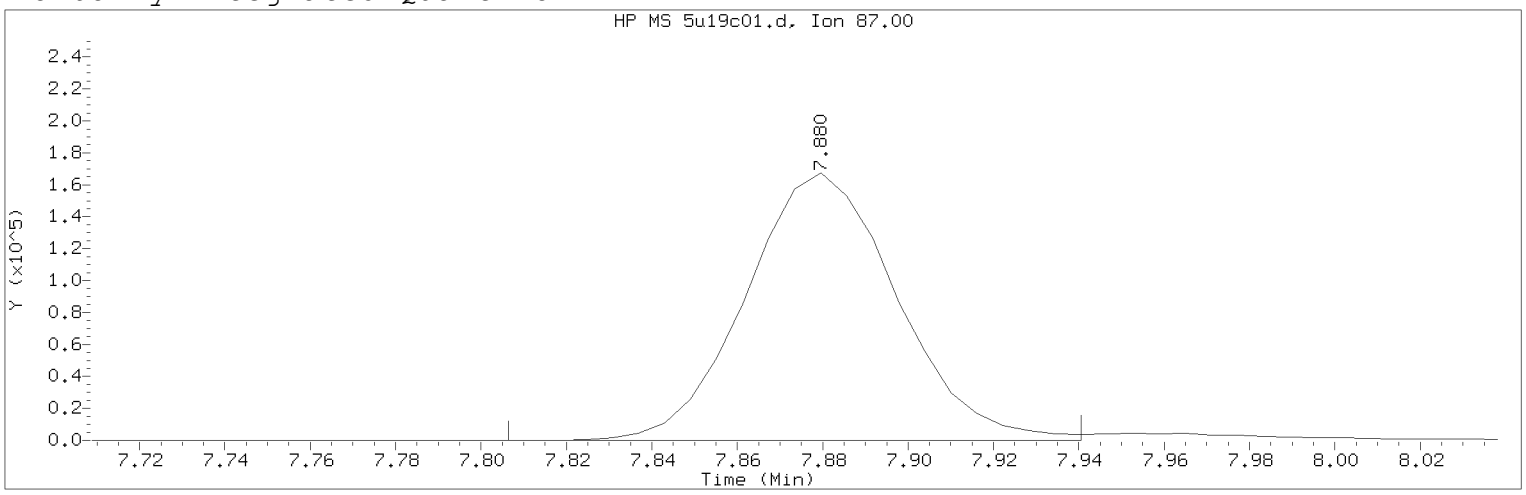
Compound Number : 44
Compound Name : 2-Butanone
Scan Number : 643
Retention Time (minutes): 5.307
Quant Ion : 43.00
Area : 273162
On-column Amount (ng) : 54.2276
Integration start scan : 630 Integration stop scan: 642
Y at integration start : 421 Y at integration end: 421

Digitally signed by Patrick T. Herres on 06/19/2018 at 20:16.
Target 3.5 esignature user approved.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:16 pth10165

Sample Name: VSTD050 Lab Sample ID: VSTD050

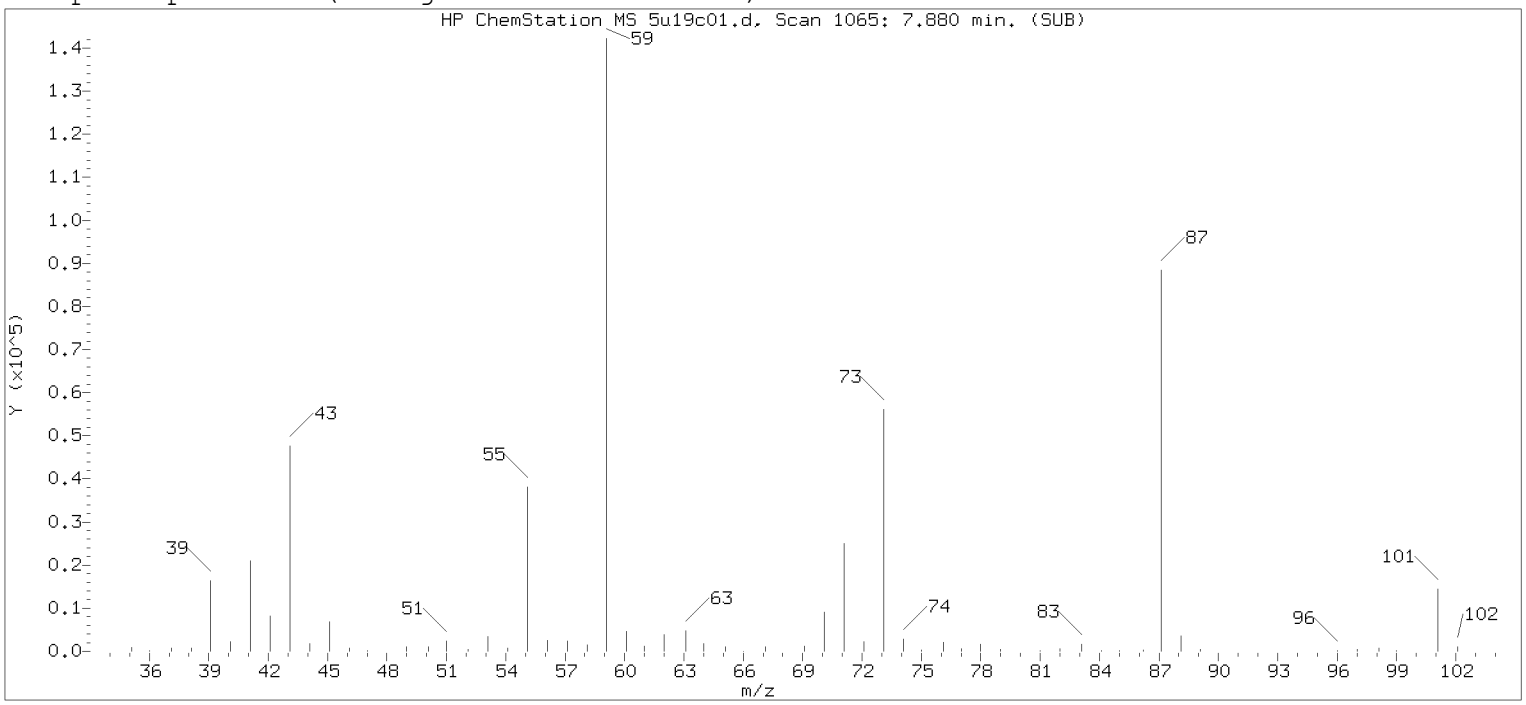
Compound Number : 72
Compound Name : t-Amyl ethyl ether
Scan Number : 1065
Retention Time (minutes): 7.880
Quant Ion : 87.00
Area (flag) : 410655M
On-Column Amount (ng) : 55.3623
Integration start scan : 1052 Integration stop scan: 1074
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

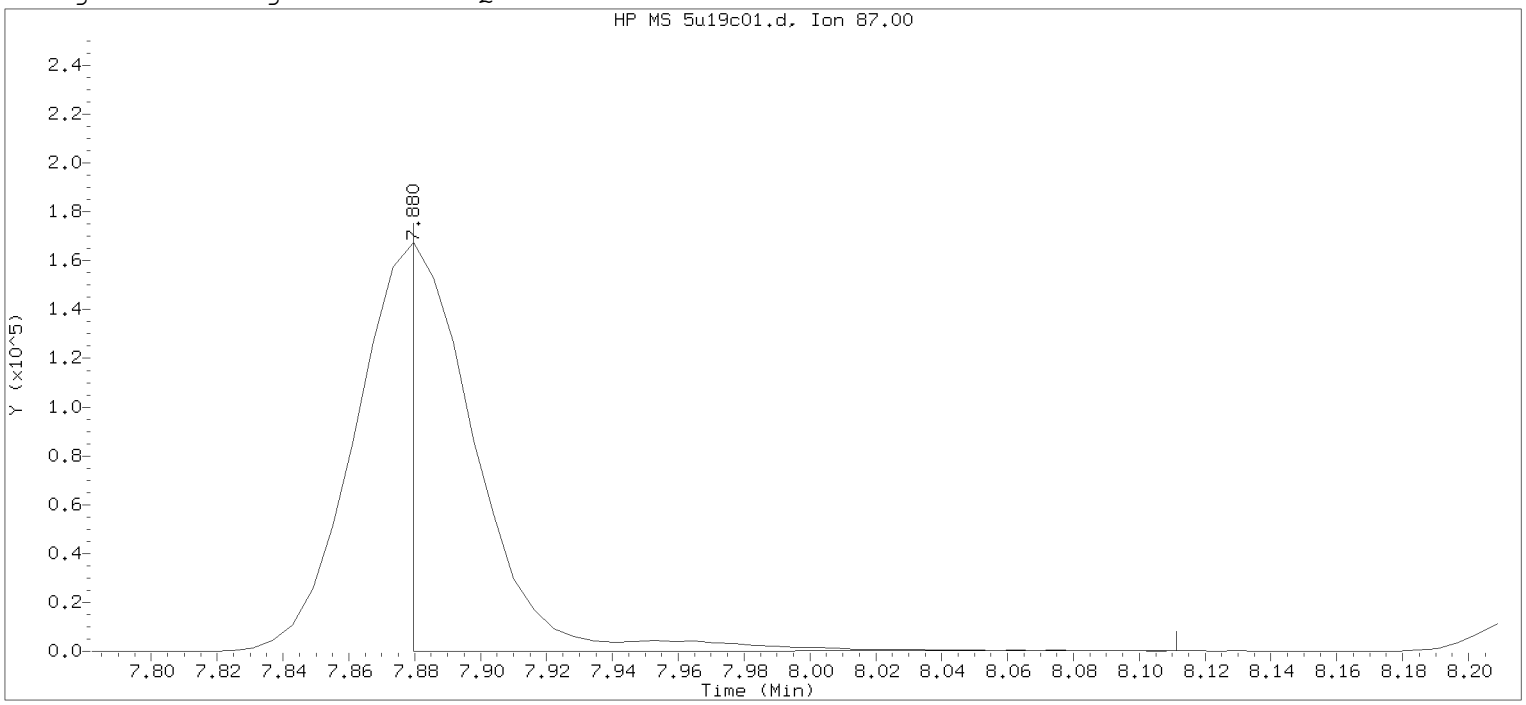
Analyst responsible for change: Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

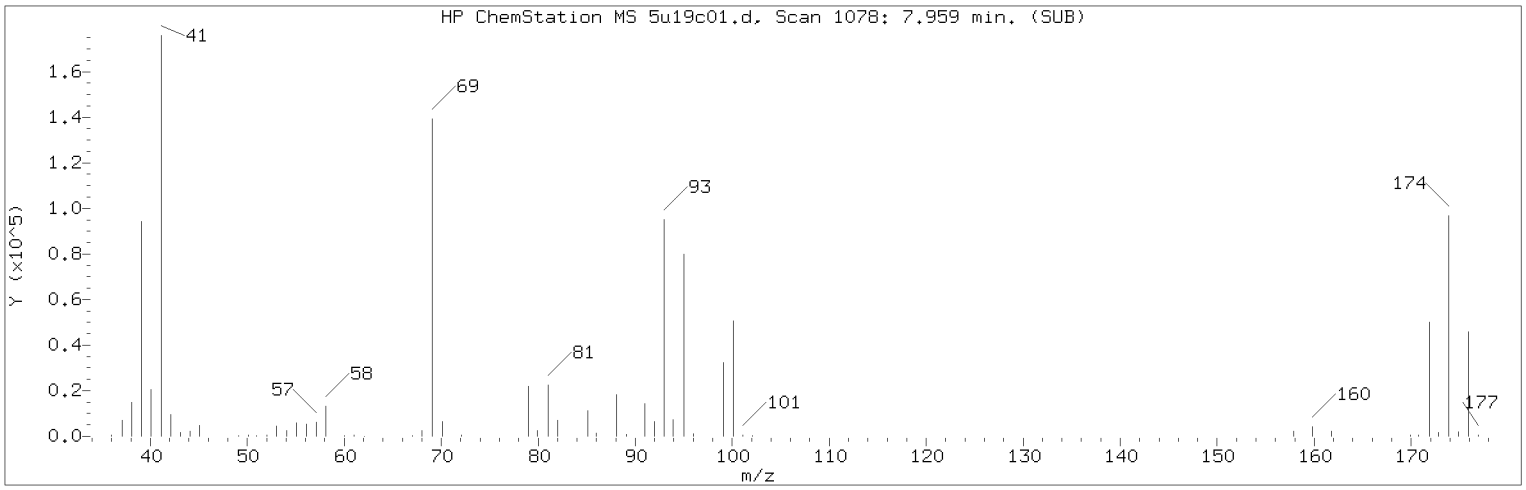
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:01 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

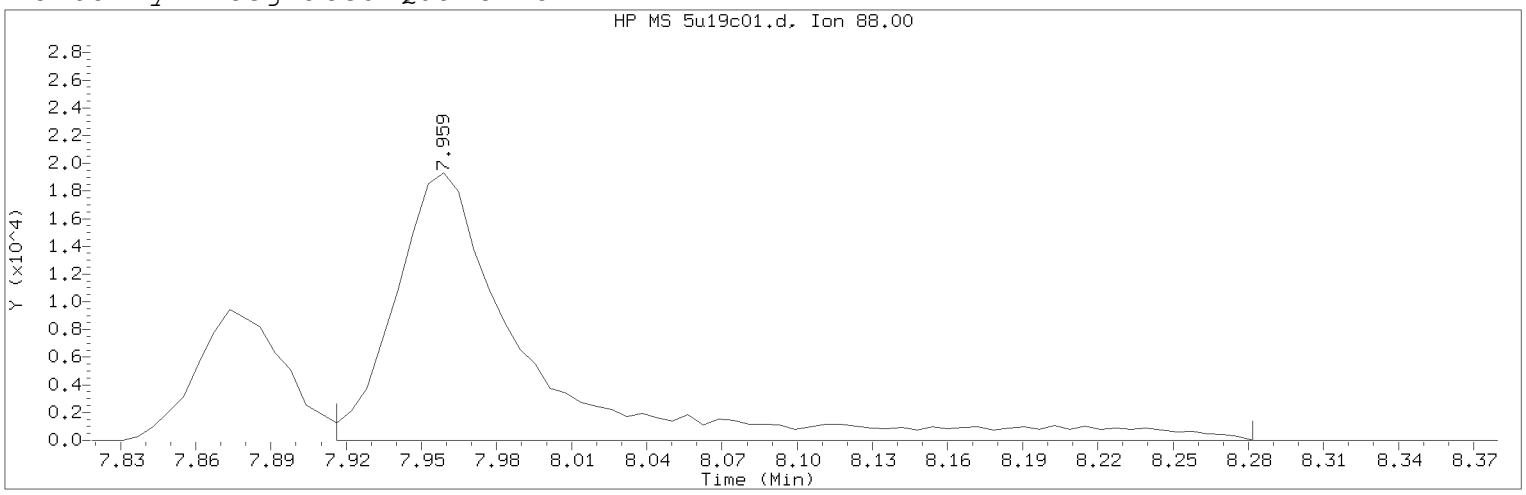
Compound Number : 72
Compound Name : t-Amyl ethyl ether
Scan Number : 1065
Retention Time (minutes): 7.880
Quant Ion : 87.00
Area : 223906
On-column Amount (ng) : 30.1858
Integration start scan : 1064 Integration stop scan: 1102
Y at integration start : 0 Y at integration end: 159

Digitally signed by Patrick T. Herres on 06/19/2018 at 20:16.
Target 3.5 esignature user approval

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:16 pth10165

Sample Name: VSTD050 Lab Sample ID: VSTD050

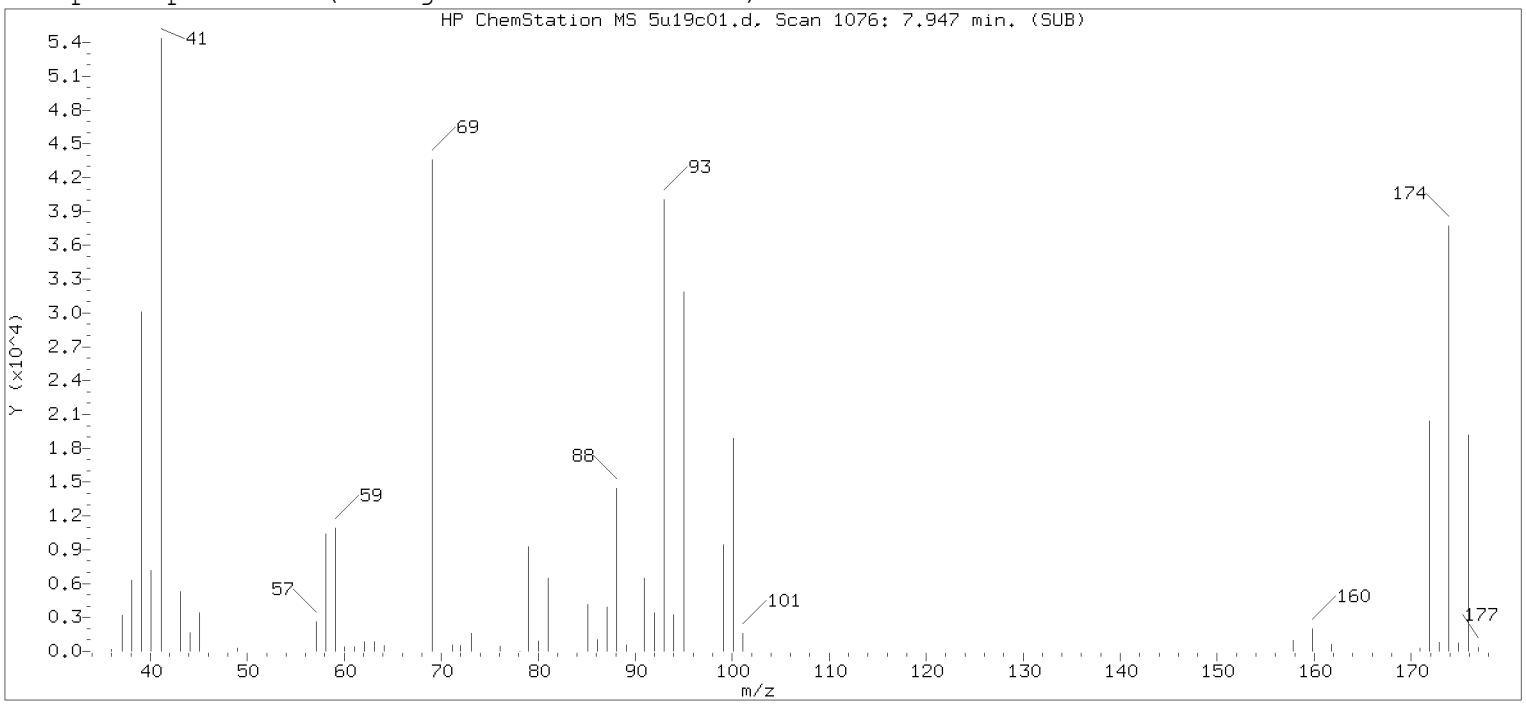
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 1078
Retention Time (minutes): 7.959
Quant Ion : 88.00
Area (flag) : 71914M
On-Column Amount (ng) : 570.6809
Integration start scan : 1070 Integration stop scan: 1130
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

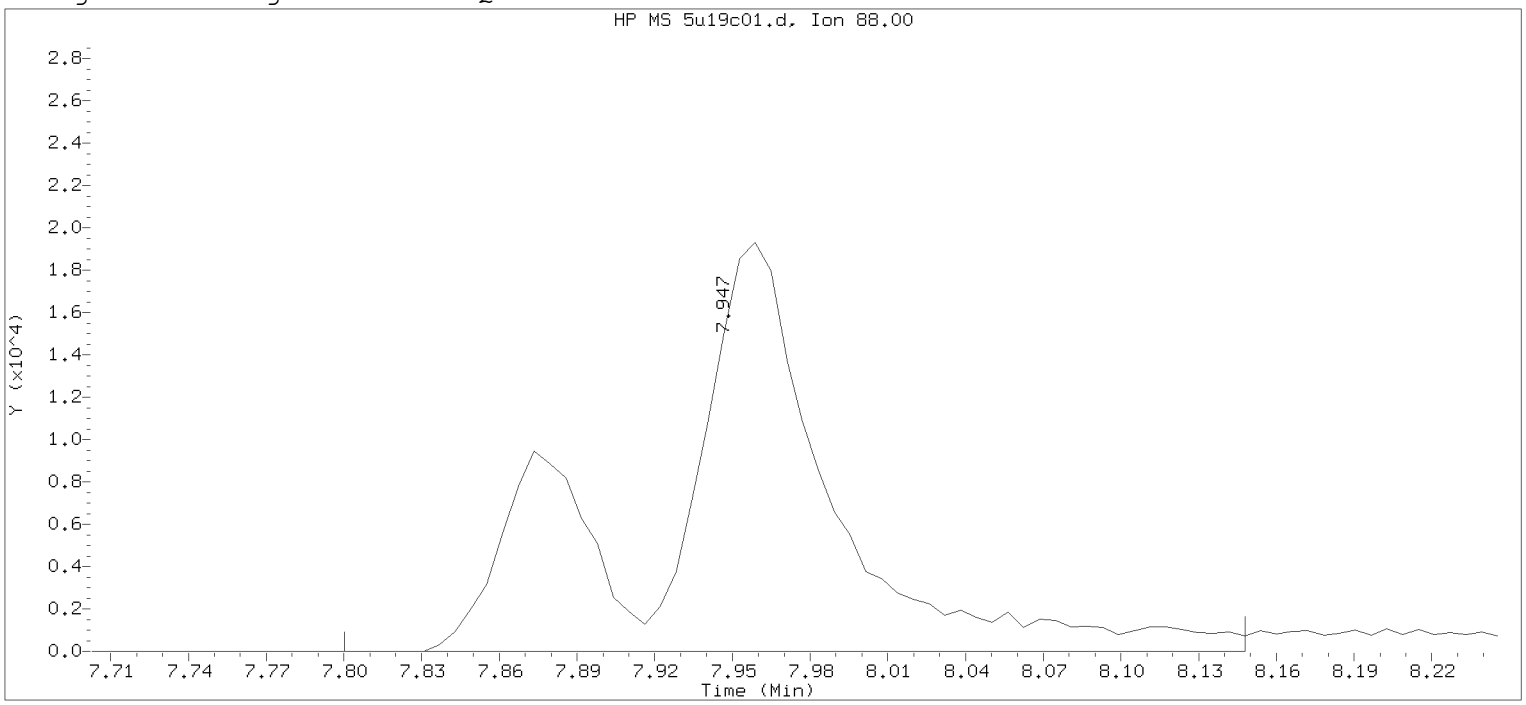
Analyst responsible for change: Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

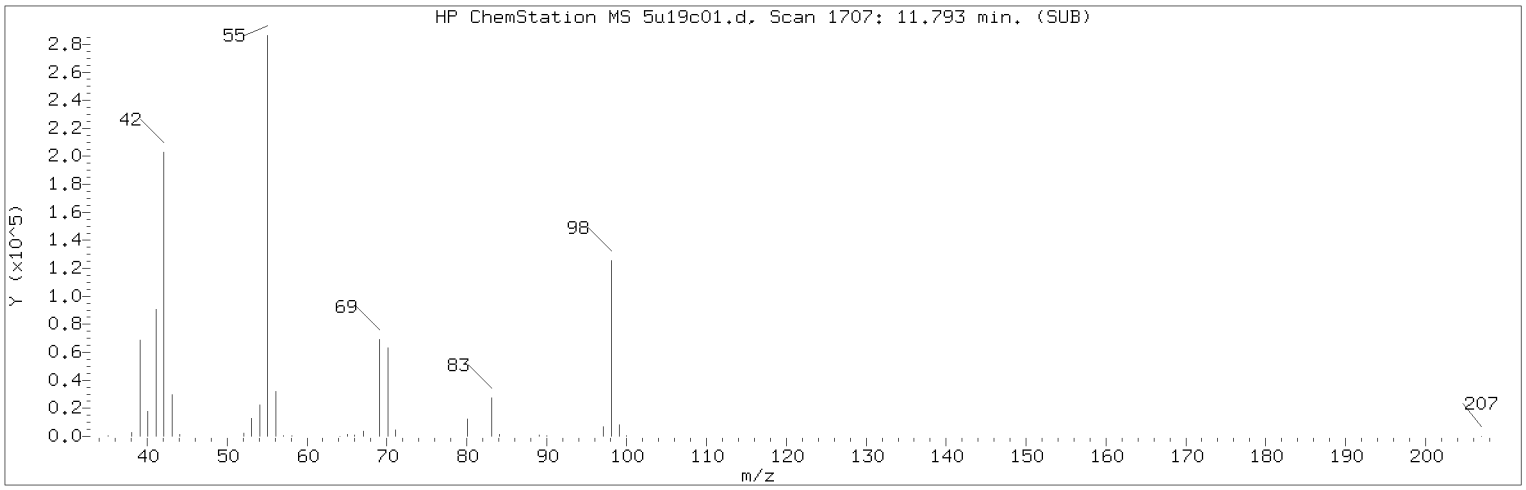
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:01 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

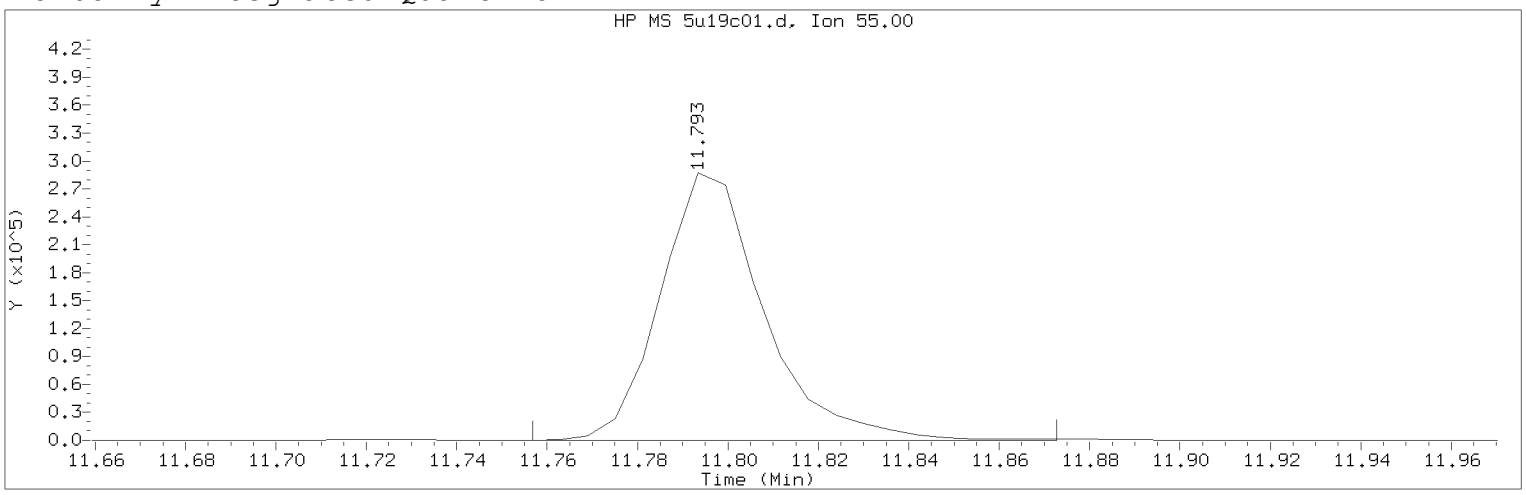
Compound Number	: 76		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1076		
Retention Time (minutes)	: 7.947		
Quant Ion	: 88.00		
Area	: 88478		
On-column Amount (ng)	: 702.1316		
Integration start scan	: 1051	Integration stop scan:	1108
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Patrick T. Herres on 06/19/2018 at 20:16.
Target 3.5 esignature user approval

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:16 pth10165

Sample Name: VSTD050 Lab Sample ID: VSTD050

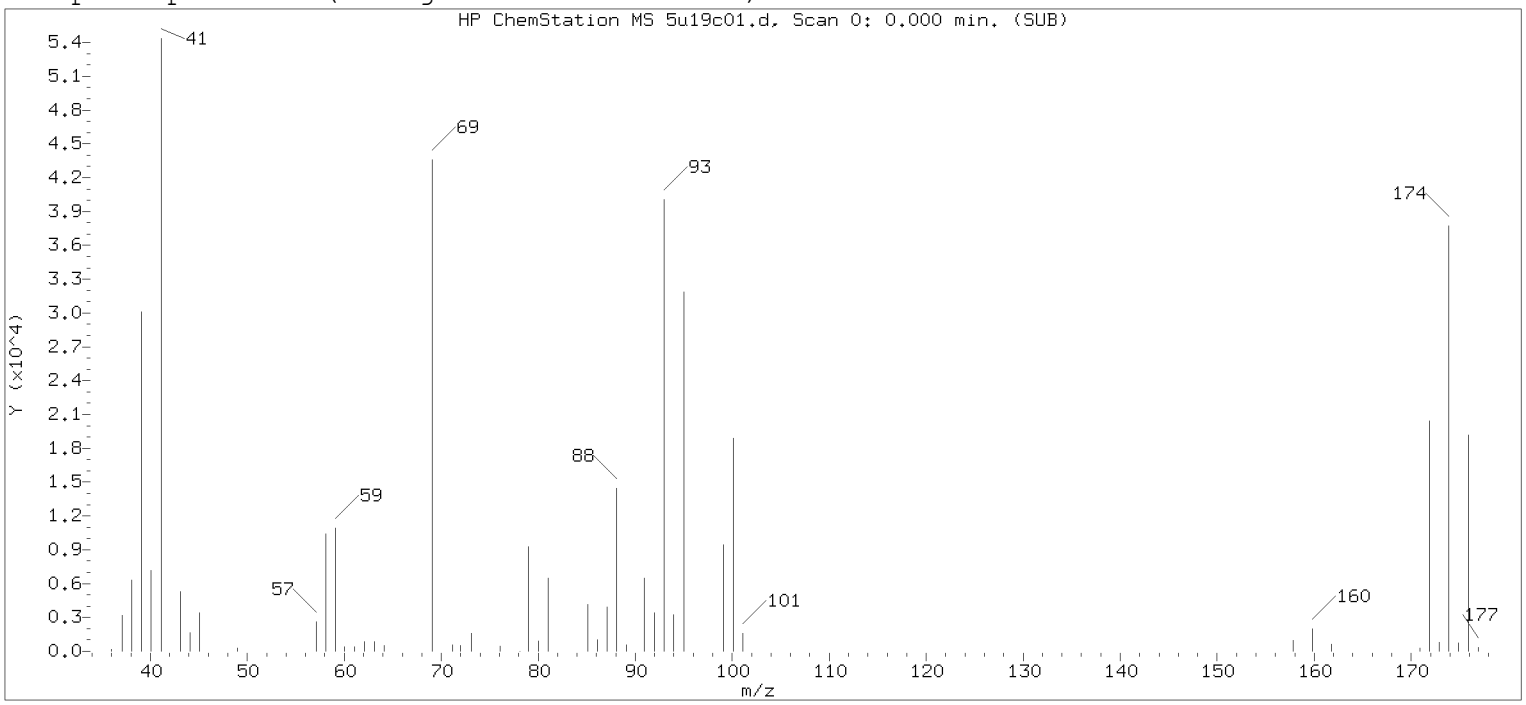
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1707
Retention Time (minutes): 11.793
Quant Ion : 55.00
Area (flag) : 456293A
On-Column Amount (ng) : 818.4539
Integration start scan : 1700 Integration stop scan: 1719
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

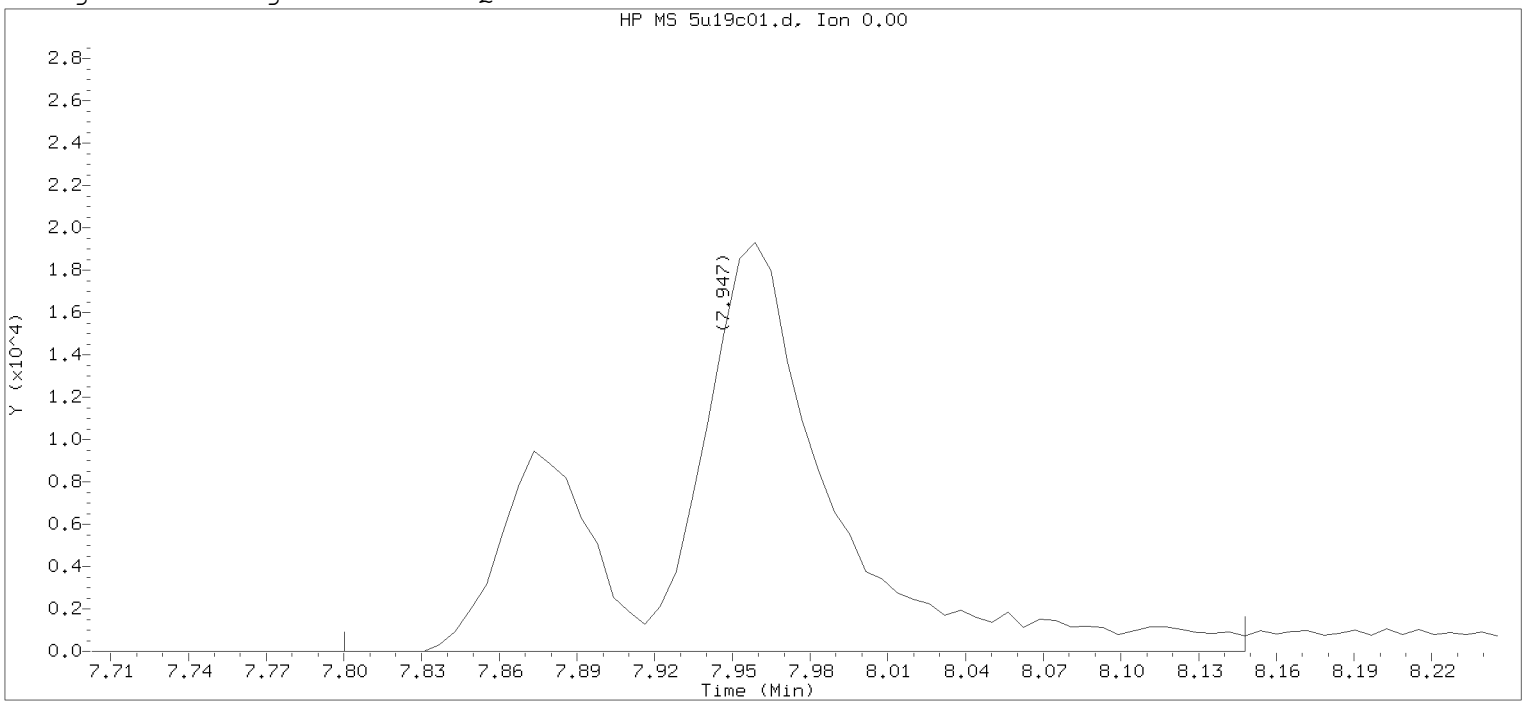
Analyst responsible for change: Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

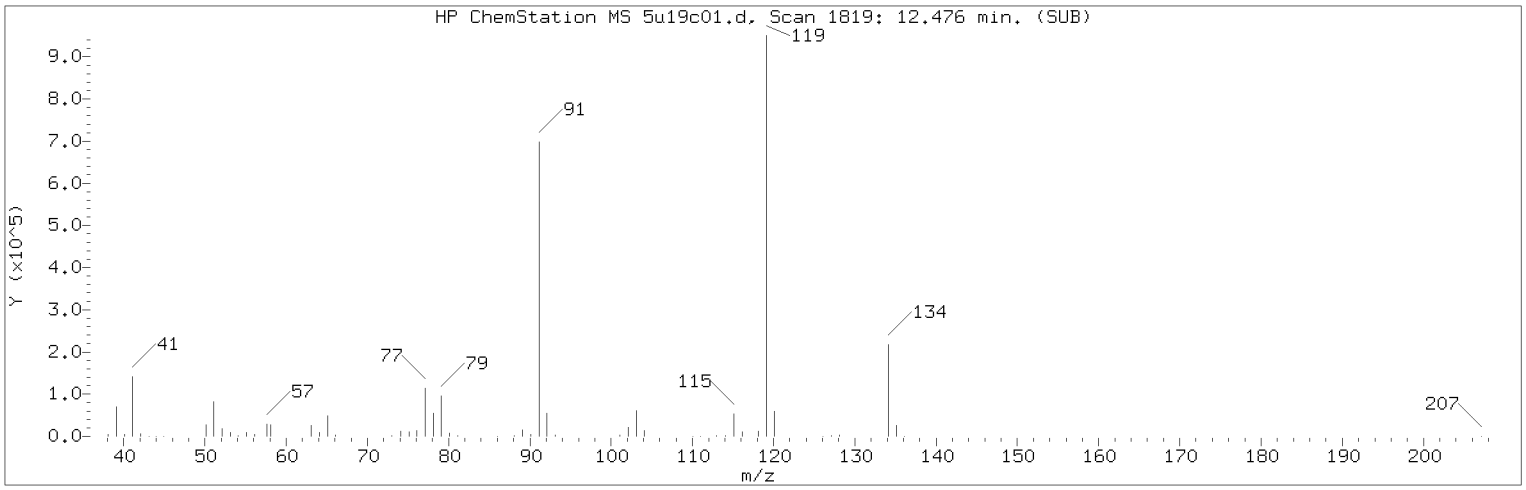
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:01 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

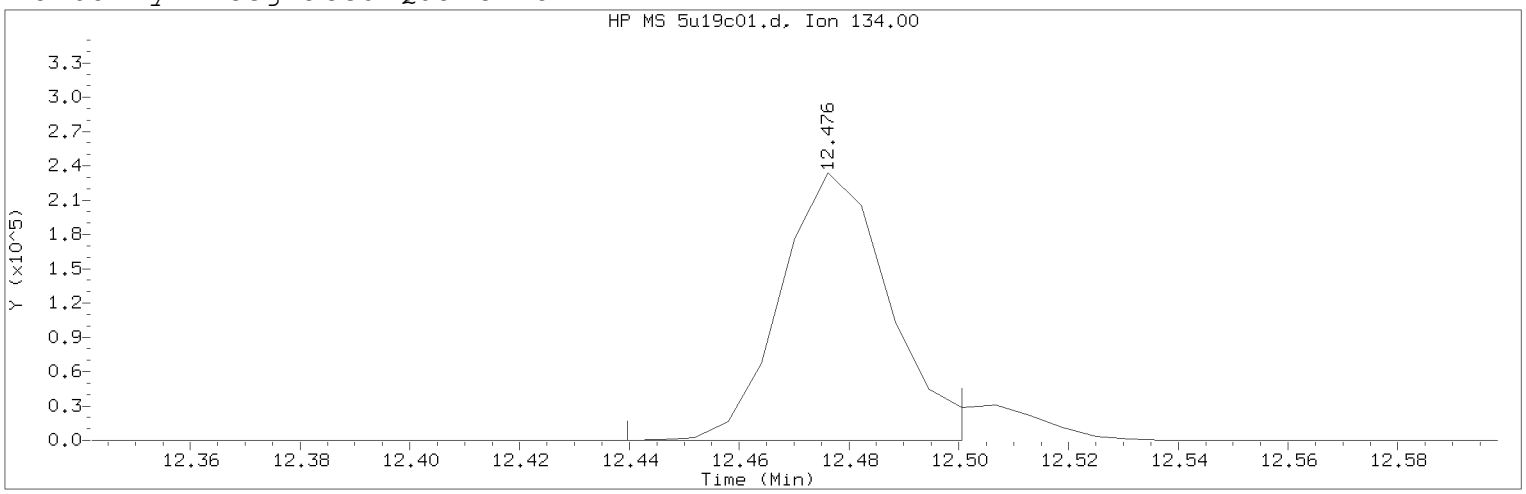
Compound Number : 0
Compound Name : Cyclohexanone
Scan Number : 0
Retention Time (minutes): 0.000
Quant Ion : 0.00
Area : 0
On-column Amount (ng) : 0.0000
Integration start scan : 0 Integration stop scan: 0
Y at integration start : 0 Y at integration end: 0

Digitally signed by Patrick T. Herres on 06/19/2018 at 20:16.
Target 3.5 esignature user approved.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:16 pth10165

Sample Name: VSTD050 Lab Sample ID: VSTD050

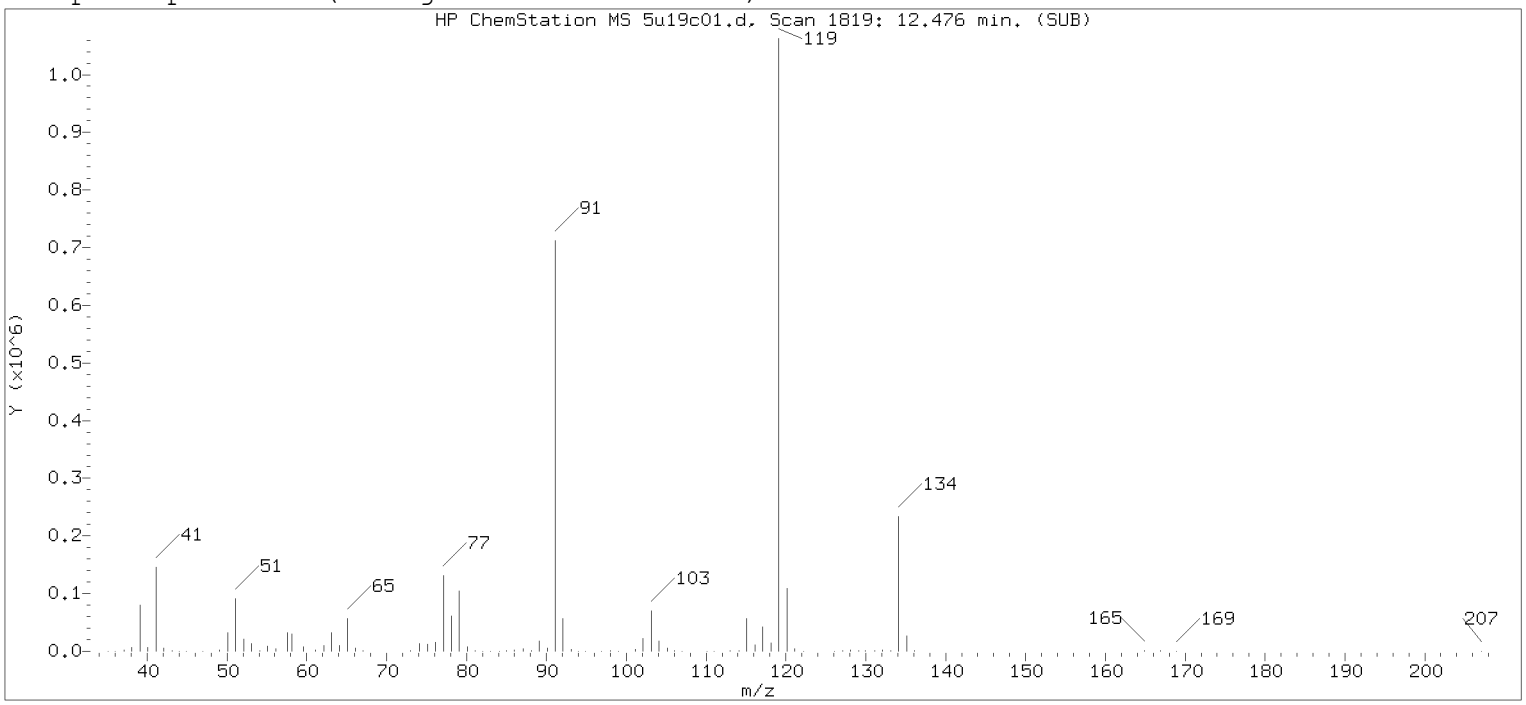
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1819
Retention Time (minutes): 12.476
Quant Ion : 134.00
Area (flag) : 321667M
On-Column Amount (ng) : 53.4128
Integration start scan : 1812 Integration stop scan: 1822
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

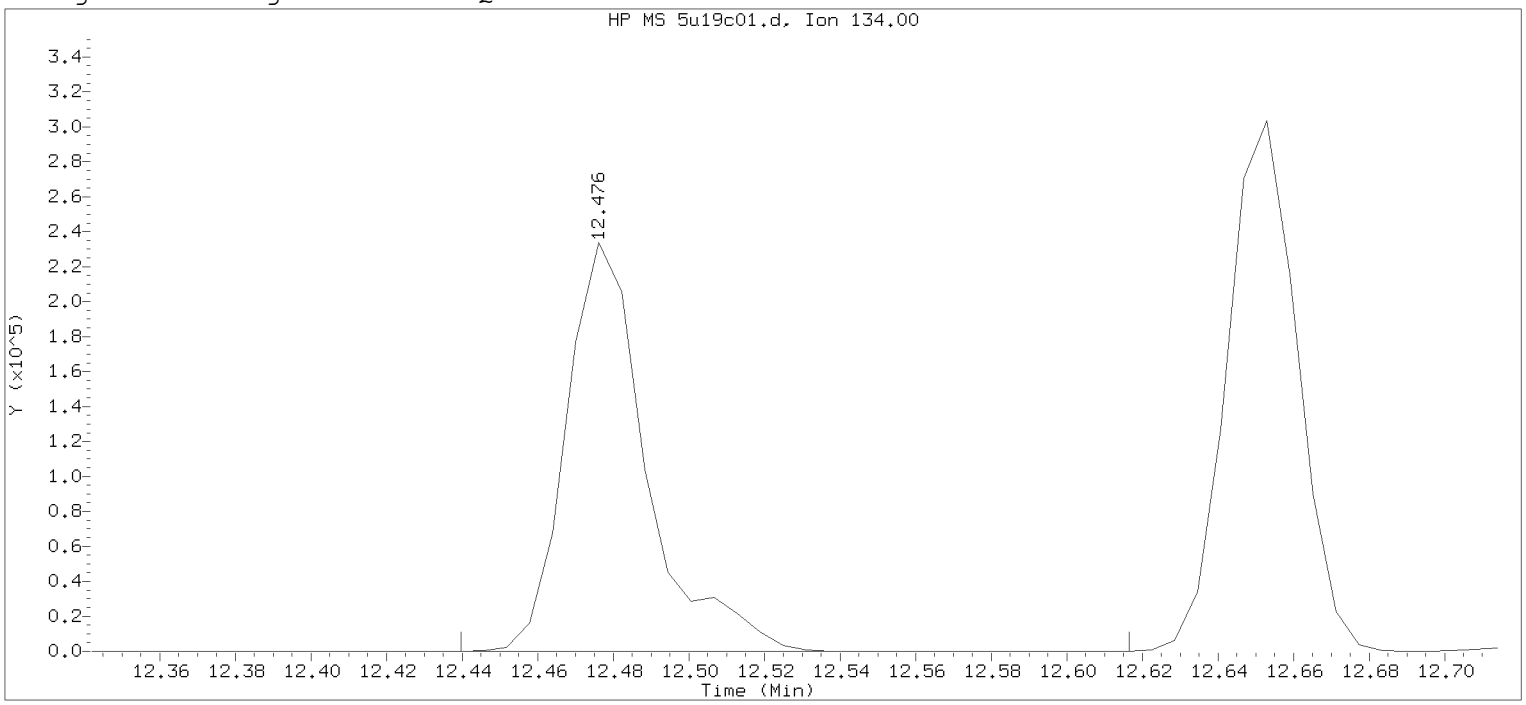
Analyst responsible for change: Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

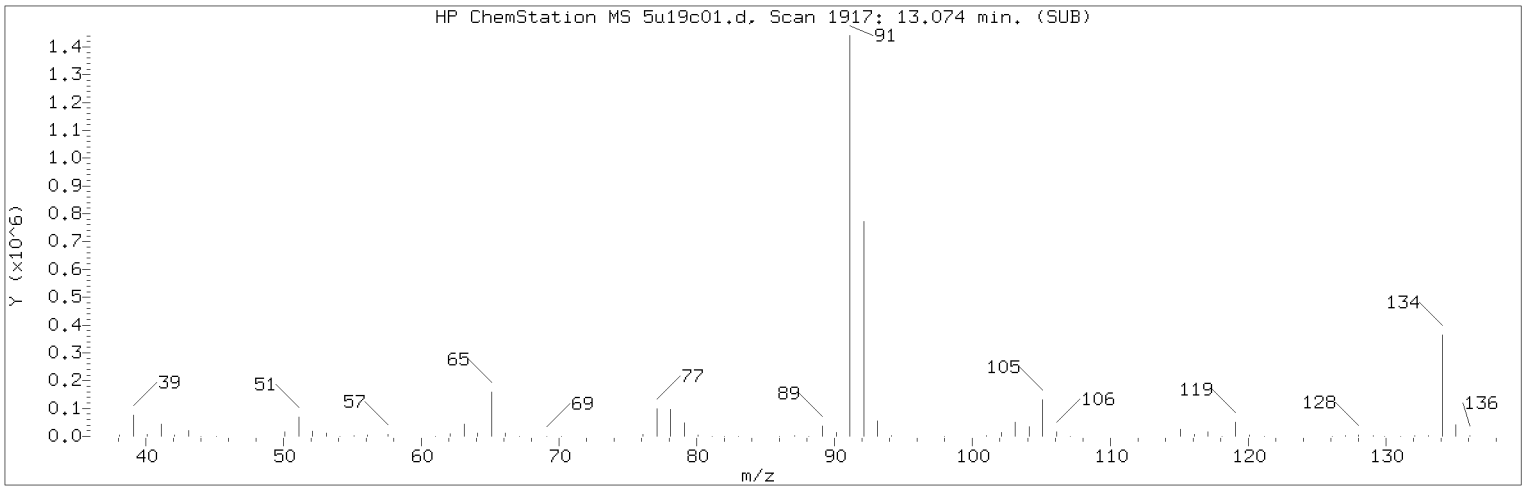
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:01 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

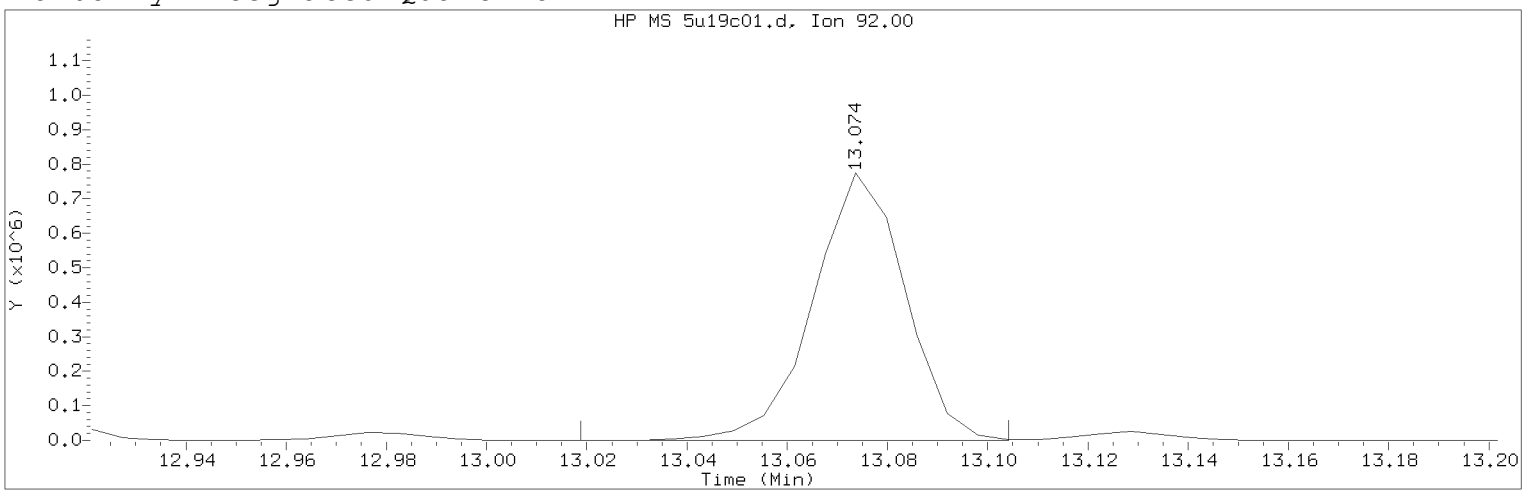
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1819
Retention Time (minutes): 12.476
Quant Ion : 134.00
Area : 346560
On-column Amount (ng) : 57.5462
Integration start scan : 1812 Integration stop scan: 1841
Y at integration start : 0 Y at integration end: 0

Digitally signed by Patrick T. Herres on 06/19/2018 at 20:16.
Target 3.5 esignature user approval.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:16 pth10165

Sample Name: VSTD050 Lab Sample ID: VSTD050

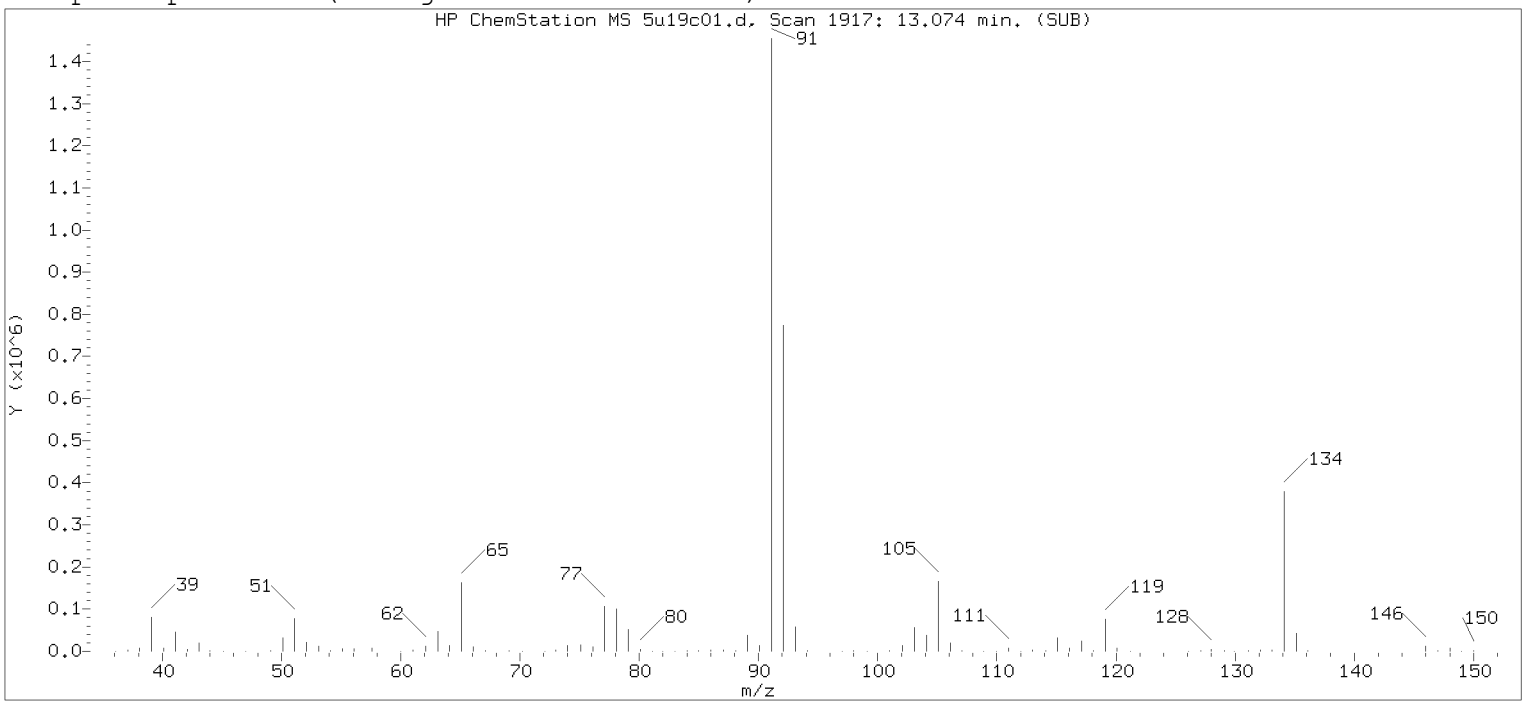
Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1917
Retention Time (minutes): 13.074
Quant Ion : 92.00
Area (flag) : 985617M
On-Column Amount (ng) : 61.0155
Integration start scan : 1907 Integration stop scan: 1921
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

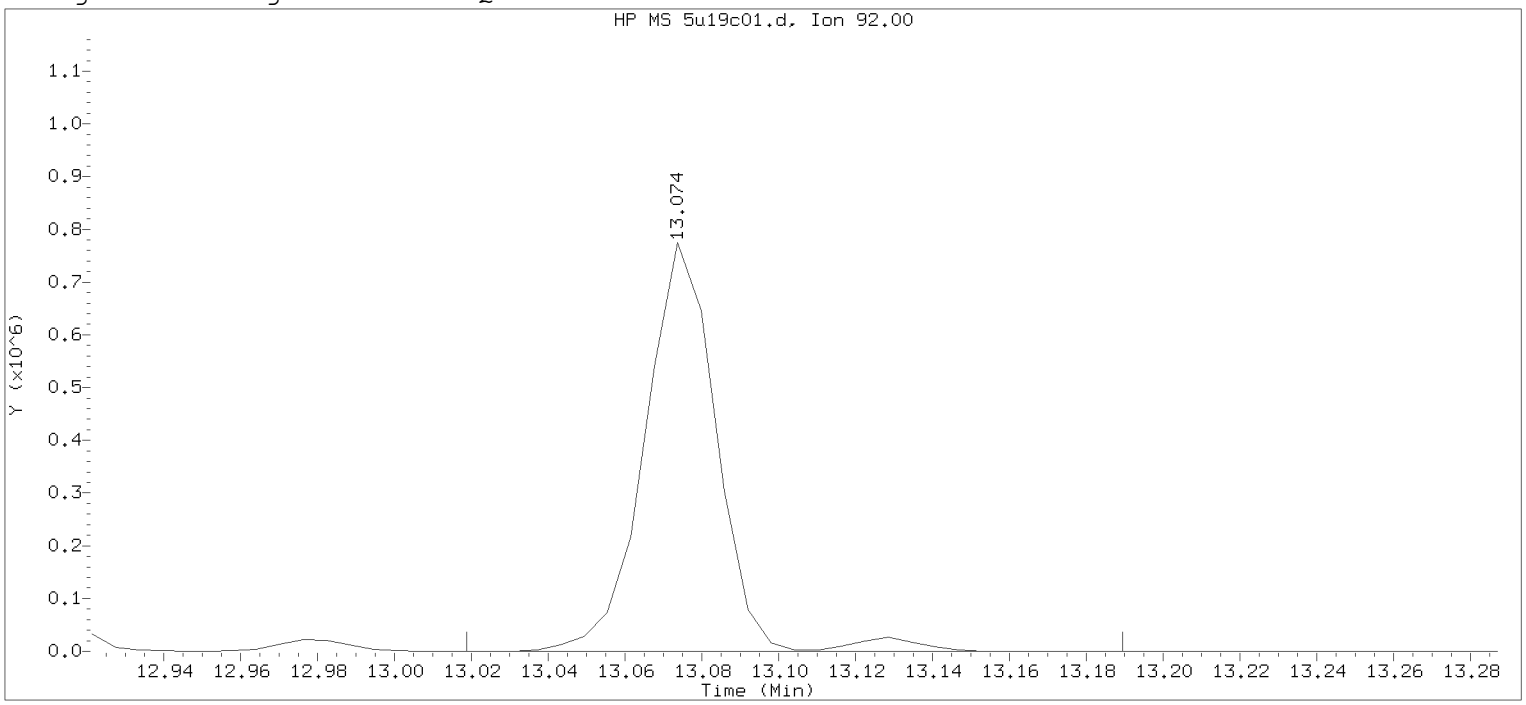
Analyst responsible for change: Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

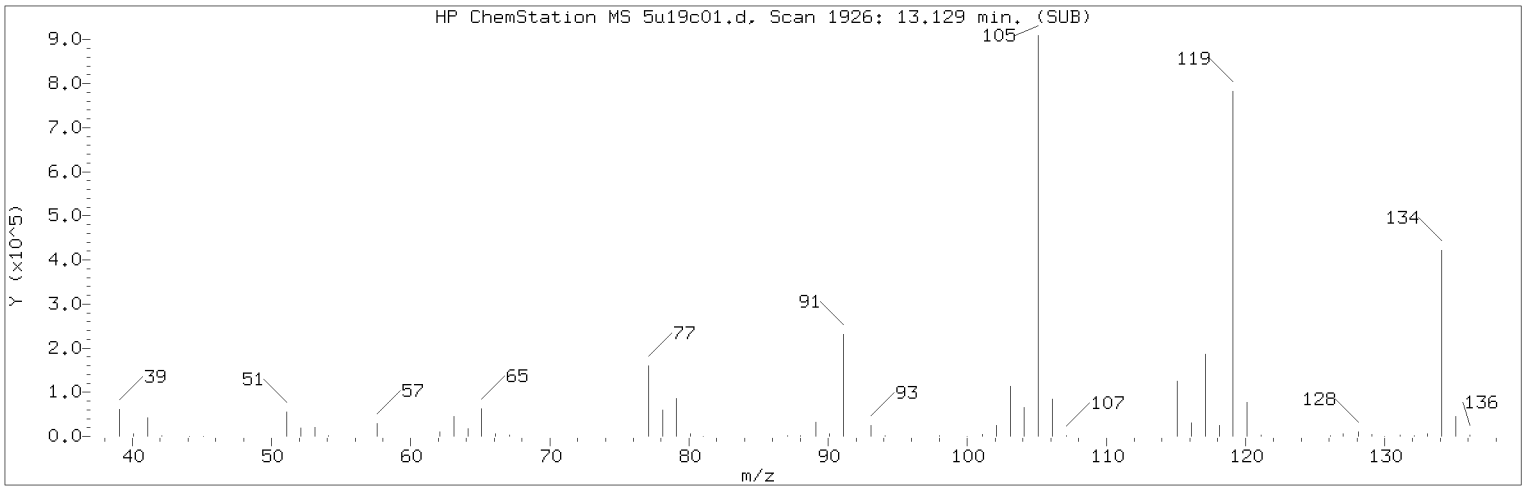
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:01 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

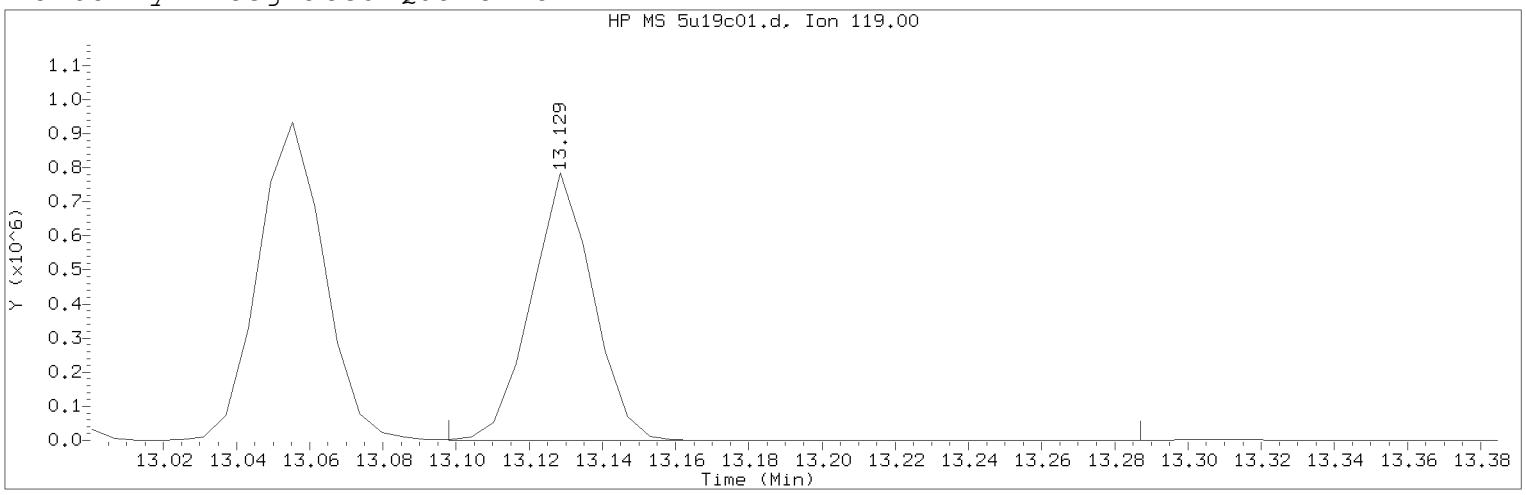
Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1917
Retention Time (minutes): 13.074
Quant Ion : 92.00
Area : 1017089
On-column Amount (ng) : 62.9638
Integration start scan : 1907 Integration stop scan: 1935
Y at integration start : 0 Y at integration end: 0

Digitally signed by Patrick T. Herres on 06/19/2018 at 20:16.
Target 3.5 esignature user approved.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:16 pth10165

Sample Name: VSTD050 Lab Sample ID: VSTD050

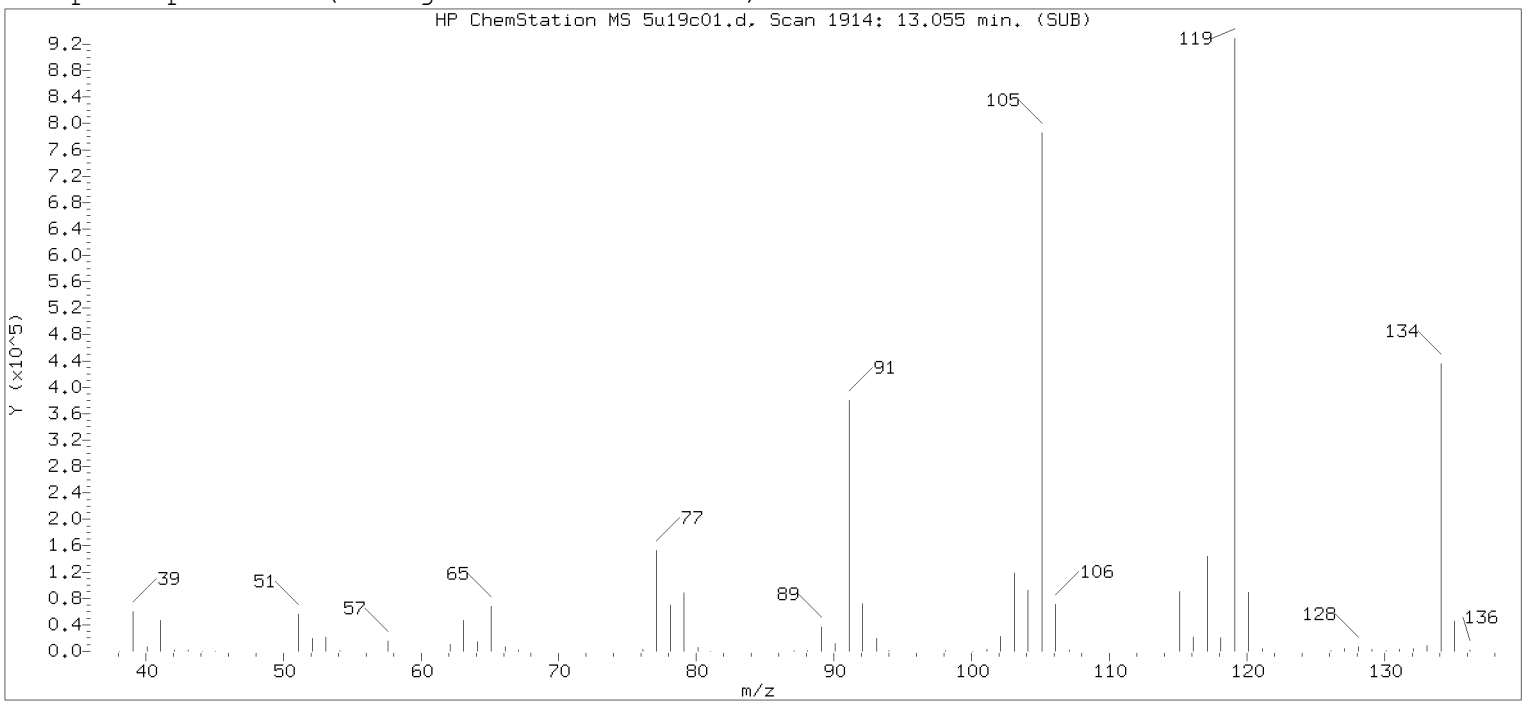
Compound Number : 141
Compound Name : 1,2-Diethylbenzene
Scan Number : 1926
Retention Time (minutes): 13.129
Quant Ion : 119.00
Area (flag) : 917025A
On-Column Amount (ng) : 53.0183
Integration start scan : 1920 Integration stop scan: 1951
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

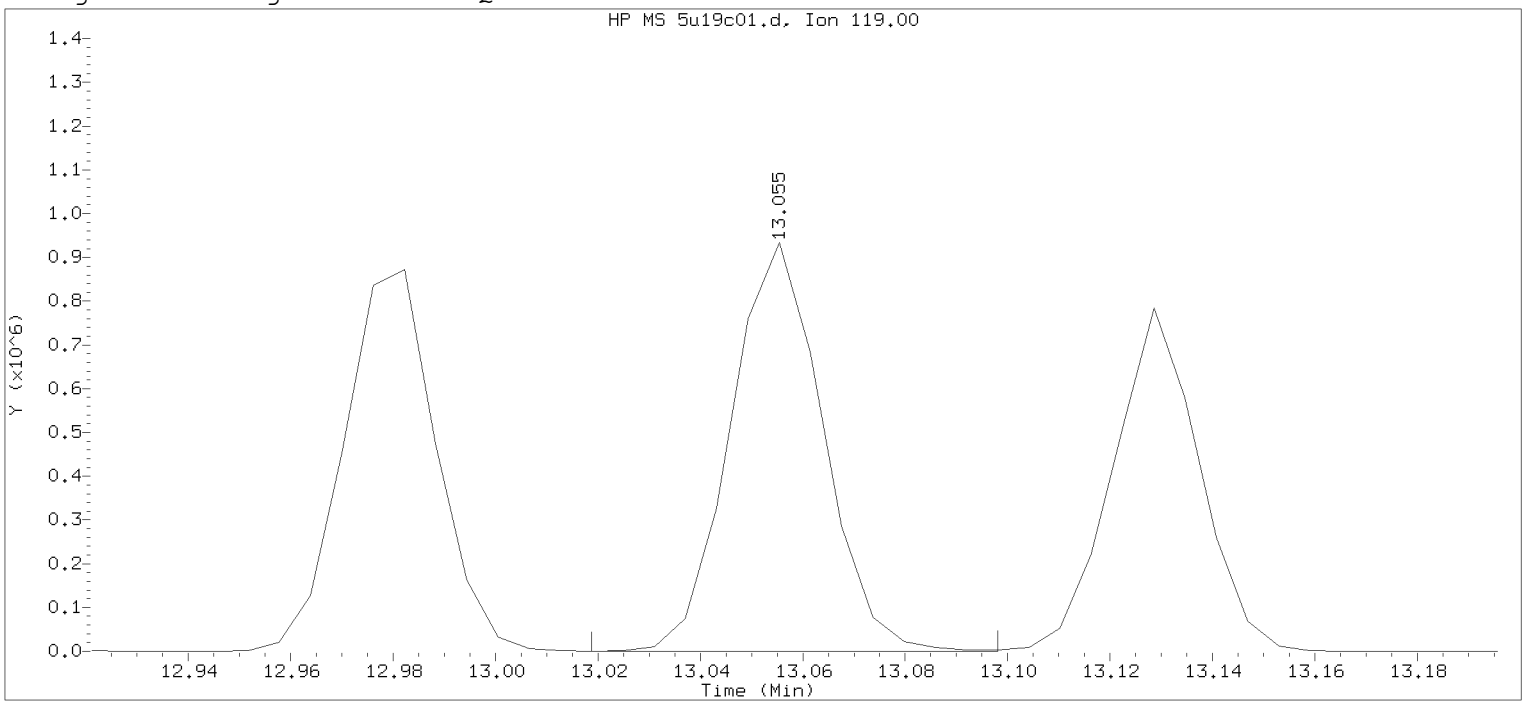
Analyst responsible for change: Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:16.
Target 3.5 esignature user ID: pth10165

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19c01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 19:42 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 19-JUN-2018 20:01
Date, time and analyst ID of latest file update: 19-Jun-2018 20:01 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compound Number : 141
Compound Name : 1,2-Diethylbenzene
Scan Number : 1914
Retention Time (minutes): 13.055
Quant Ion : 119.00
Area : 1166376
On-column Amount (ng) : 67.4346
Integration start scan : 1907 Integration stop scan: 1920
Y at integration start : 0 Y at integration end: 0

Digitally signed by Patrick T. Herres on 06/19/2018 at 20:16.
Target 3.5 esignature user approval

Raw QC Data

Volatiles by GC/MS

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19b01.d
Data file Sample Info. Line: VBLK548;VBLK548;1;3;;;;;;
Date, time and analyst ID of latest file update: 19-Jun-2018 20:46 pth10165

Injection date and time: **19-JUN-2018 20:25**
Instrument ID: **HP26285.i** Batch: **5181701AA**

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **5181701**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(0.000)	347	65	296110	(-6)	250.00	
66) Fluorobenzene	6.996	(0.000)	920	96	1186565	(6)	50.00	
101) Chlorobenzene-d5	10.788	(0.000)	1542	117	971324	(2)	50.00	
132) 1,4-Dichlorobenzene-d4	12.805	(0.000)	1873	152	547499	(-7)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.057	(0.001)	113	316018	49.250	98%		80 - 116
57) 1,2-Dichloroethane-d4	(2)	6.532	(0.001)	102	69012	49.987	100%		77 - 113
84) Toluene-d8	(3)	9.160	(0.001)	98	1167944	49.254	99%		80 - 113
115) 4-Bromofluorobenzene	(3)	11.873	(0.000)	95	479879	49.451	99%		78 - 113

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)				Not Detected					0.5	1
4) Chloromethane	(2)				Not Detected					0.5	1
5) 1,3-Butadiene	(2)				Not Detected					0.5	1
6) Vinyl Chloride	(2)				Not Detected					0.5	1
8) Bromomethane	(2)				Not Detected					0.5	1
9) Chloroethane	(2)				Not Detected					0.5	1
11) n-Pentane	(2)				Not Detected					2	10
12) Trichlorofluoromethane	(2)				Not Detected					0.5	1
15) Freon 123a	(2)				Not Detected					2	5
16) Acrolein	(1)				Not Detected					40	100
17) 1,1-Dichloroethene	(2)				Not Detected					0.5	1
18) Acetone	(1)				Not Detected					6	20
19) Freon 113	(2)				Not Detected					2	10
21) 2-Propanol	(1)				Not Detected					50	100
22) Methyl Iodide	(2)				Not Detected					0.5	1
23) Carbon Disulfide	(2)				Not Detected					1	5
25) Allyl Chloride	(2)				Not Detected					1	5
27) Methyl Acetate	(2)				Not Detected					1	5
28) Methylene Chloride	(2)				Not Detected					0.5	1
30) t-Butyl alcohol	(1)				Not Detected					5	20
31) Acrylonitrile	(2)				Not Detected					4	20
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.5	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.5	1
34) n-Hexane	(2)				Not Detected					2	5
36) 1,1-Dichloroethane	(2)				Not Detected					0.5	1
38) di-Isopropyl ether	(2)				Not Detected					0.5	1
39) 2-Chloro-1,3-butadiene	(2)				Not Detected					1	5
40) Ethyl t-butyl ether	(2)				Not Detected					0.5	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.5	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.5	1
44) 2-Butanone	(2)				Not Detected					3	10

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Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19b01.d Injection date and time: **19-JUN-2018 20:25**
Data file Sample Info. Line: VBLK548;VBLK548;1;3;;;;;; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 20:46 pth10165

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **5181701**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) 2,2-Dichloropropane	(2)				Not Detected					0.5	1
47) Propionitrile	(1)				Not Detected					30	100
48) Methacrylonitrile	(2)				Not Detected					10	50
49) Bromochloromethane	(2)				Not Detected					1	5
50) Tetrahydrofuran	(1)				Not Detected					4	10
51) Chloroform	(2)				Not Detected					0.5	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.5	1
54) Cyclohexane	(2)				Not Detected					2	5
55) 1,1-Dichloropropene	(2)				Not Detected					1	5
56) Carbon Tetrachloride	(2)				Not Detected					0.5	1
58) Isobutyl Alcohol	(1)				Not Detected					100	250
60) Benzene	(2)				Not Detected					0.5	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.5	1
72) t-Amyl ethyl ether	(2)				Not Detected					0.5	1
65) t-Amyl methyl ether	(2)				Not Detected					0.5	1
67) n-Heptane	(2)				Not Detected					2	5
69) n-Butanol	(1)				Not Detected					100	250
71) Trichloroethene	(2)				Not Detected					0.5	1
73) Methylcyclohexane	(2)				Not Detected					1	5
74) 1,2-Dichloropropane	(2)				Not Detected					0.5	1
75) Dibromomethane	(2)				Not Detected					0.5	1
76) 1,4-Dioxane	(1)				Not Detected					70	250
77) Methyl Methacrylate	(2)				Not Detected					1	5
79) Bromodichloromethane	(2)				Not Detected					0.5	1
80) 2-Nitropropane	(2)				Not Detected					2	10
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.5	1
83) 4-Methyl-2-pentanone	(2)				Not Detected					3	10
89) Toluene	(3)				Not Detected					0.5	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.5	1
91) 1,3-Dichloropropene (total)	(3)				Not Detected					1	5
92) Ethyl Methacrylate	(3)				Not Detected					1	5
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.5	1
94) Tetrachloroethene	(3)				Not Detected					0.5	1
95) 1,3-Dichloropropane	(3)				Not Detected					0.5	1
97) 2-Hexanone	(3)				Not Detected					3	10
98) Dibromochloromethane	(3)				Not Detected					0.5	1
100) 1,2-Dibromoethane	(3)				Not Detected					0.5	1
102) 1-Chlorohexane	(3)				Not Detected					1	5
103) Chlorobenzene	(3)				Not Detected					0.5	1
104) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.5	1
105) Ethylbenzene	(3)				Not Detected					0.5	1
107) m+p-Xylene	(3)				Not Detected					0.5	1
108) o-Xylene	(3)				Not Detected					0.5	1
109) Xylene (Total)	(3)				Not Detected					0.5	1
110) Styrene	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.5	4
112) Isopropylbenzene	(3)				Not Detected					1	5
113) Cyclohexanone	(1)				Not Detected					25	100
116) Bromobenzene	(4)				Not Detected					1	5
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.5	1
118) 1,2,3-Trichloropropane	(4)				Not Detected					1	5
119) trans-1,4-Dichloro-2-butene	(4)				Not Detected					15	50
120) n-Propylbenzene	(4)				Not Detected					1	5

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Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19b01.d Injection date and time: **19-JUN-2018 20:25**
Data file Sample Info. Line: VBLK548;VBLK548;1;3;;;;;; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 20:46 pth10165

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **5181701**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
121) 2-Chlorotoluene	(4)			Not Detected					1	5
122) 4-Chlorotoluene	(4)			Not Detected					1	5
123) 1,3,5-Trimethylbenzene	(4)			Not Detected					1	5
125) tert-Butylbenzene	(4)			Not Detected					1	5
126) Pentachloroethane	(4)			Not Detected					1	5
127) 1,2,4-Trimethylbenzene	(4)			Not Detected					1	5
128) sec-Butylbenzene	(4)			Not Detected					1	5
130) 1,3-Dichlorobenzene	(4)			Not Detected					1	5
131) p-Isopropyltoluene	(4)			Not Detected					1	5
134) 1,4-Dichlorobenzene	(4)			Not Detected					1	5
135) 1,2,3-Trimethylbenzene	(4)			Not Detected					1	5
136) Benzyl Chloride	(4)			Not Detected					1	5
137) 1,3-Diethylbenzene	(4)			Not Detected					1	5
138) 1,4-Diethylbenzene	(4)			Not Detected					1	5
139) 1,2-Dichlorobenzene	(4)			Not Detected					1	5
140) n-Butylbenzene	(4)			Not Detected					1	5
141) 1,2-Diethylbenzene	(4)			Not Detected					1	5
142) Diethylbenzene (total)	(4)			Not Detected					1	5
143) 1,2-Dibromo-3-chloropropane	(4)			Not Detected					2	5
145) 1,3,5-Trichlorobenzene	(4)			Not Detected					1	5
147) 1,2,4-Trichlorobenzene	(4)			Not Detected					1	5
148) Hexachlorobutadiene	(4)			Not Detected					2	5
149) Naphthalene	(4)			Not Detected					1	5
150) 1,2,3-Trichlorobenzene	(4)			Not Detected					1	5
151) 2-Methylnaphthalene	(4)	15.213(-0.000)	142	4368	2.916	2.92		J	2	5

Total number of targets = 110

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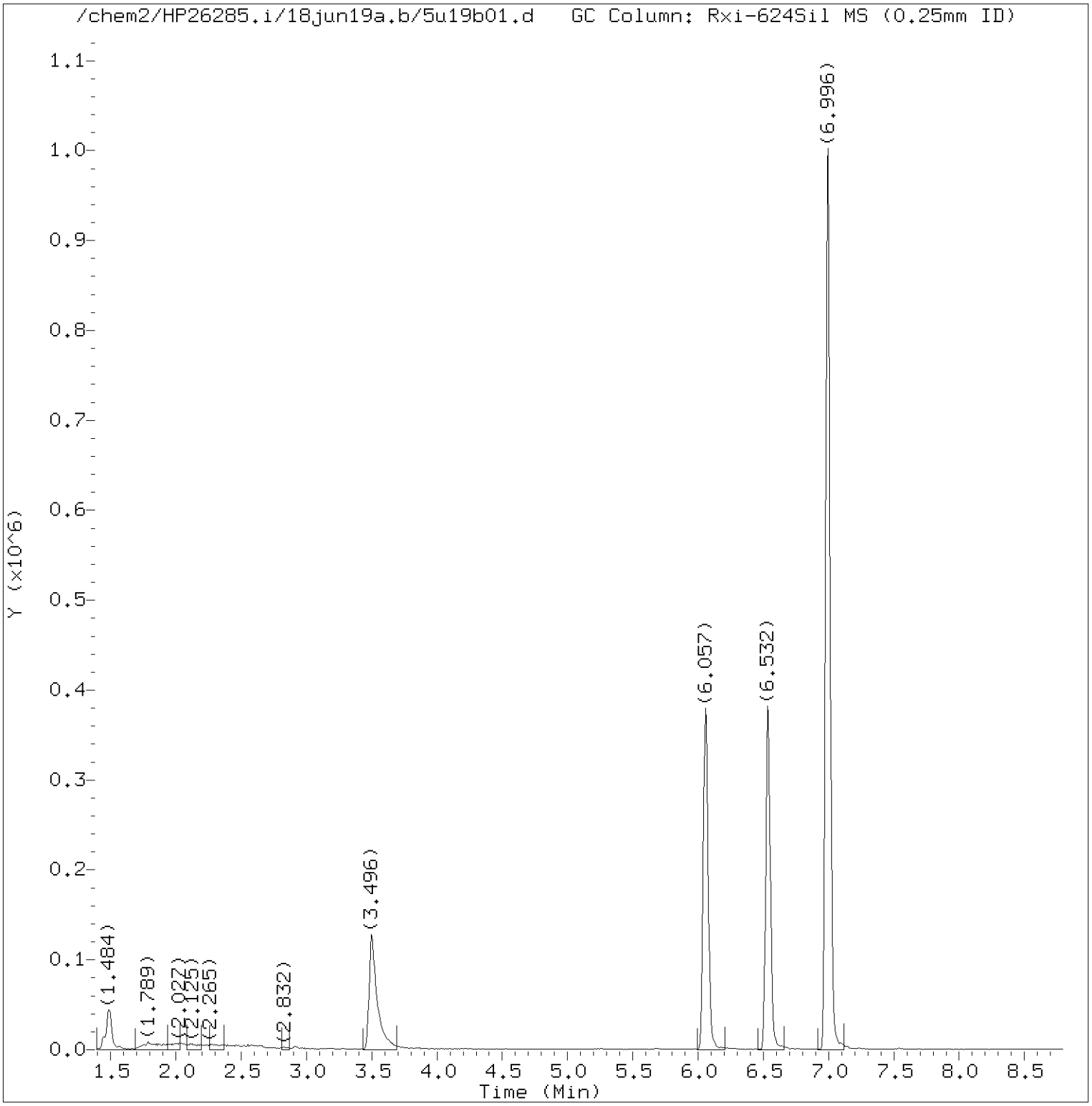
Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

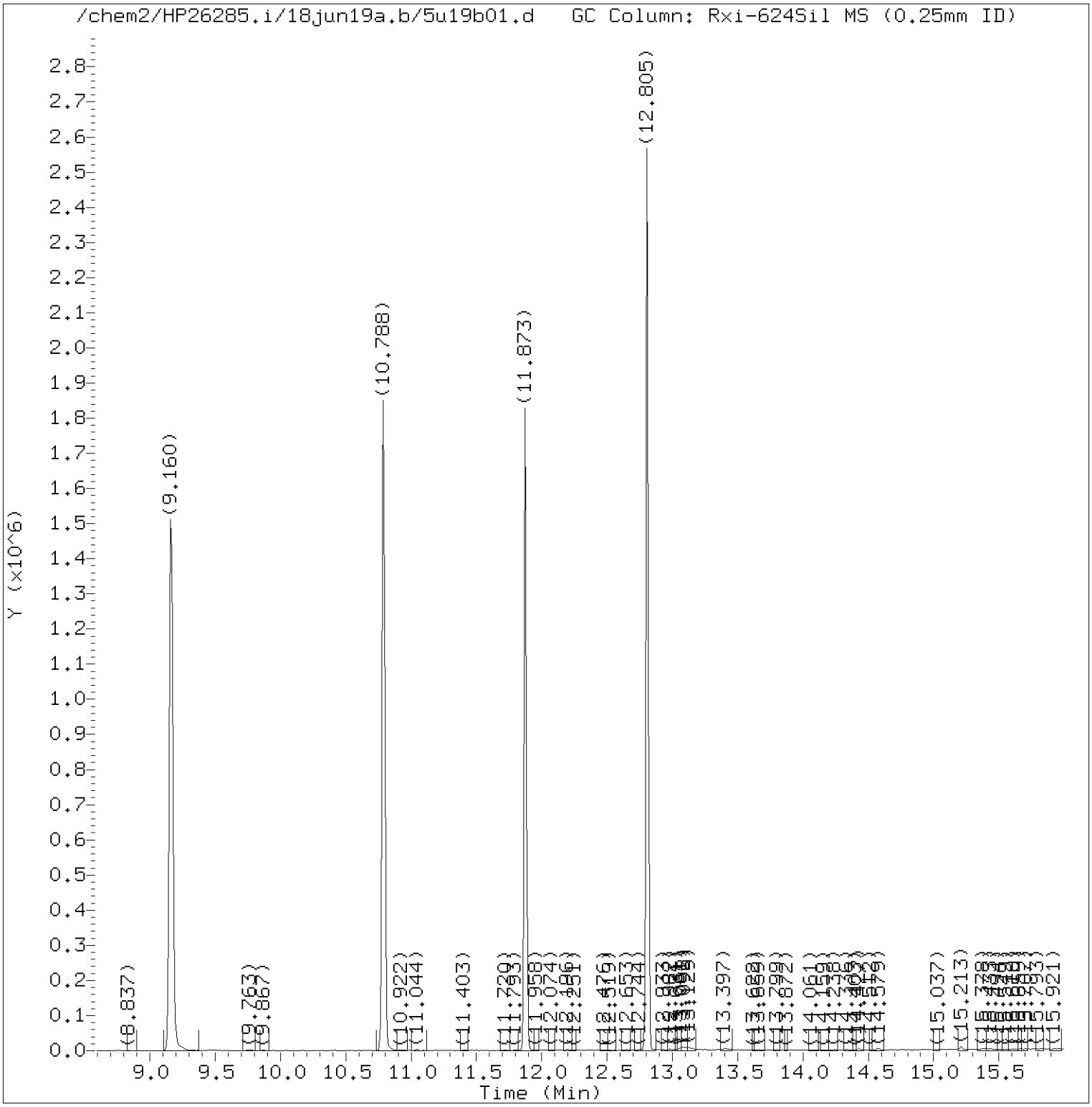
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19b01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:25 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 20:46 pth10165

Sample Name: VBLK548 Lab Sample ID: VBLK548

Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:47.
Target 3.5 esignature user ID: pth10165



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19b01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:25 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 20:46 pth10165

Sample Name: VBLK548 Lab Sample ID: VBLK548

Digitally signed by Patrick T. Herres
on 06/19/2018 at 20:47.
Target 3.5 esignature user ID: pth10165

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19b01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:25 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 20:46 pth10165

Sample Name: VBLK548 Lab Sample ID: VBLK548

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.502	65	296110	250.000
52)$Dibromofluoromethane	(2)	6.057	113	316018	49.250
57)$1,2-Dichloroethane-d4	(2)	6.532	102	69012	49.987
66)*Fluorobenzene	(2)	6.996	96	1186565	50.000
84)$Toluene-d8	(3)	9.160	98	1167944	49.254
101)*Chlorobenzene-d5	(3)	10.788	117	971324	50.000
115)$4-Bromofluorobenzene	(3)	11.873	95	479879	49.451
132)*1,4-Dichlorobenzene-d4	(4)	12.805	152	547499	50.000
151) 2-Methylnaphthalene	(4)	15.213	142	4368	2.916

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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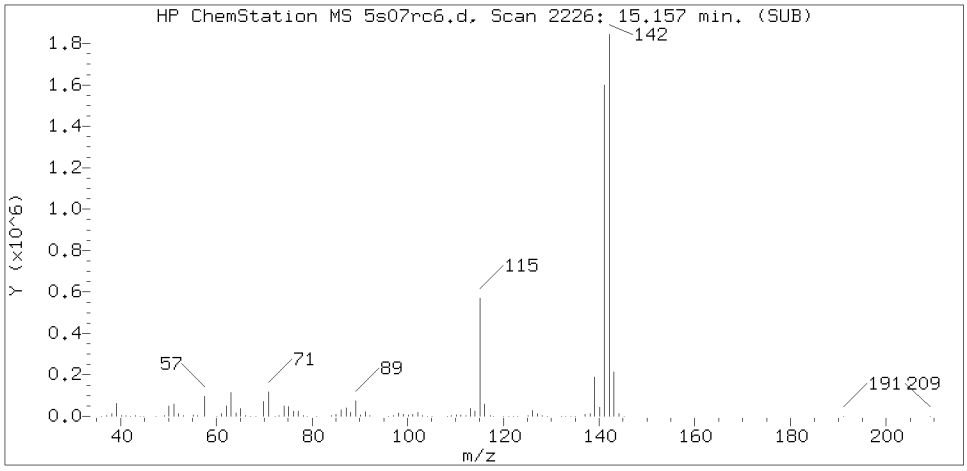
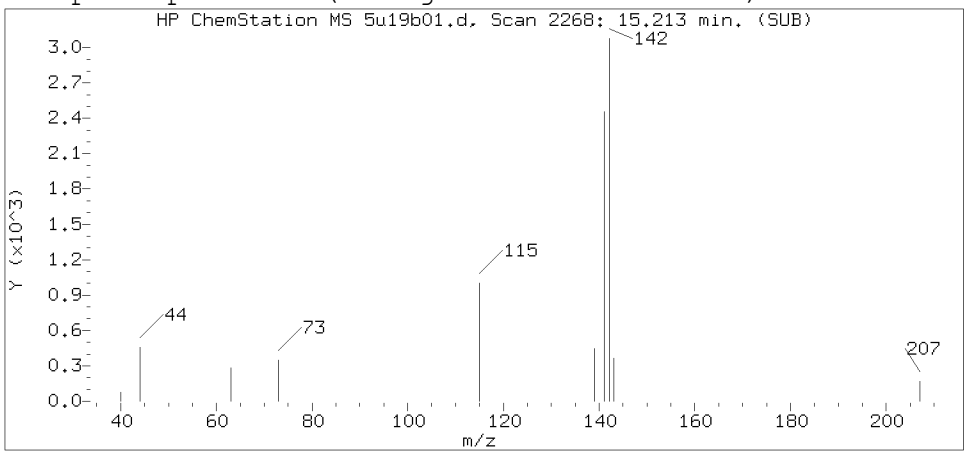
on 06/19/2018 at 20:47.
Target 3.5 esignature user ID: pth10165

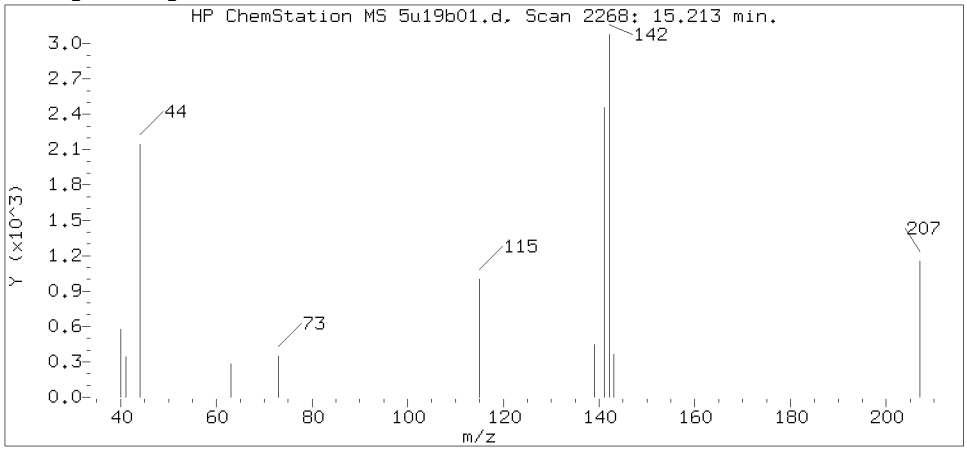
Reference Standard Spectrum for 2-Methylnaphthalene

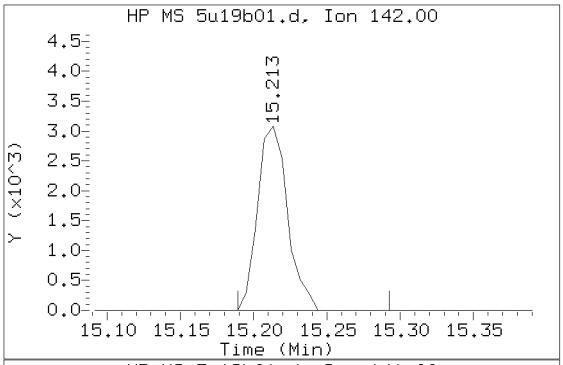


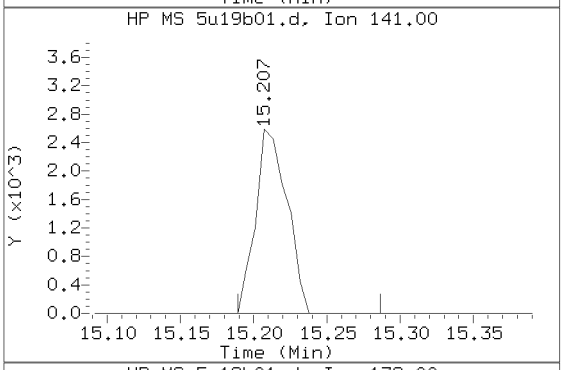
Sample Spectrum (Background Subtracted)

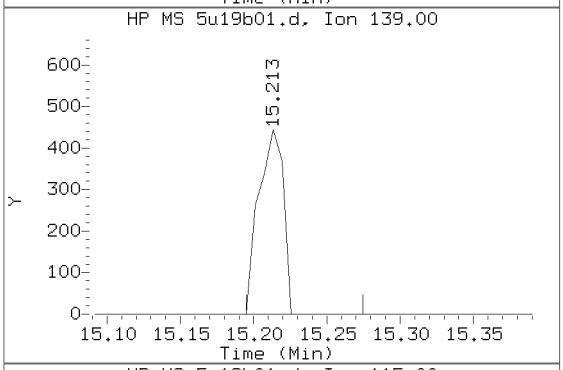


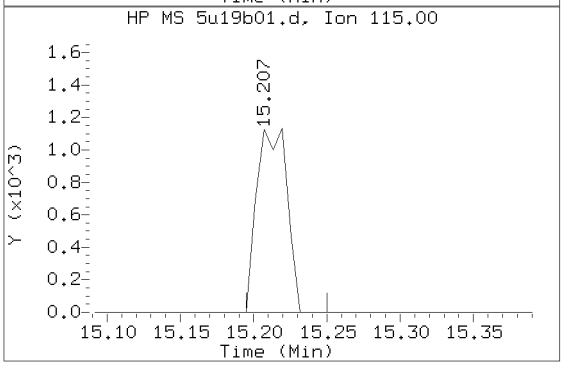
Sample Spectrum (Unaltered)











Data File: /chem2/HP26285.i/18jun19a.b/5u19b01.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:25 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 20:46 pth10165

Sample Name: VBLK548 Lab Sample ID: VBLK548

Compound Number : 151
Compound Name : 2-Methylnaphthalene
Scan Number : 2268
Retention Time (minutes): 15.213
Relative Retention Time :-0.00000
Quant Ion : 142.00
Area (flag) : 4368
On-Column Amount (ng) : 2.9163

Digitally signed by Patrick T. Herres on 06/19/2018 at 20:47.
Target 3.5 esignature user ID: pth10165

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009MS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662311

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s13.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	21	
75-01-4	Vinyl Chloride	22	
74-83-9	Bromomethane	23	
75-00-3	Chloroethane	22	
75-69-4	Trichlorofluoromethane	28	
75-35-4	1,1-Dichloroethene	27	
75-09-2	Methylene Chloride	24	
1634-04-4	Methyl Tertiary Butyl Ether	25	
75-34-3	1,1-Dichloroethane	25	
540-59-0	1,2-Dichloroethene (Total)	48	
67-66-3	Chloroform	24	
71-55-6	1,1,1-Trichloroethane	26	
56-23-5	Carbon Tetrachloride	30	
71-43-2	Benzene	24	
107-06-2	1,2-Dichloroethane	25	
79-01-6	Trichloroethene	24	
78-87-5	1,2-Dichloropropane	25	
75-27-4	Bromodichloromethane	22	
110-75-8	2-Chloroethyl Vinyl Ether	19	
10061-01-5	cis-1,3-Dichloropropene	20	
108-88-3	Toluene	22	
10061-02-6	trans-1,3-Dichloropropene	19	
79-00-5	1,1,2-Trichloroethane	21	
127-18-4	Tetrachloroethene	23	
124-48-1	Dibromochloromethane	20	
108-90-7	Chlorobenzene	21	
100-41-4	Ethylbenzene	23	
1330-20-7	Xylene (Total)	66	
75-25-2	Bromoform	18	
79-34-5	1,1,2,2-Tetrachloroethane	19	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009MS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662311

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s13.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	20	
106-46-7	1,4-Dichlorobenzene	20	
95-50-1	1,2-Dichlorobenzene	20	

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s13.d Injection date and time: **20-JUN-2018 01:32**
Data file Sample Info. Line: C5009MS;9662311MS;1;3;MS;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph=7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(0.000)	347	65	236269	(-25)	250.00	
66) Fluorobenzene	6.989	(0.006)	919	96	1007343	(-10)	50.00	
101) Chlorobenzene-d5	10.787	(0.000)	1542	117	849298	(-11)	50.00	
132) 1,4-Dichlorobenzene-d4	12.805	(0.000)	1873	152	531548	(-9)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.056	(0.000)	113	282733	51.902	104%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.532	(0.000)	102	60550	51.661	103%		80 - 120
84) Toluene-d8	(3)	9.160	(0.001)	98	1044275	50.366	101%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.872	(0.000)	95	466840	55.020	110%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)	1.771	(0.000)	50	102650	20.773	20.77			0.5	1
6) Vinyl Chloride	(2)	1.862	(0.000)	62	104207	21.576	21.58			0.5	1
8) Bromomethane	(2)	2.136	(0.000)	94	92467	22.692	22.69			0.5	1
9) Chloroethane	(2)	2.228	(0.000)	64	57265	22.341	22.34			0.5	1
12) Trichlorofluoromethane	(2)	2.447	(0.000)	101	213090	27.901	27.90			0.5	1
17) 1,1-Dichloroethene	(2)	2.941	(-0.000)	96	110691	27.055	27.06			0.5	1
28) Methylene Chloride	(2)	3.484	(0.000)	84	127891	24.277	24.28			0.5	1
32) trans-1,2-Dichloroethene	(2)	3.831	(0.000)	96	124471	24.523	24.52			0.5	1
33) Methyl Tertiary Butyl Ether	(2)	3.825	(-0.000)	73	314183	24.741	24.74			0.5	1
36) 1,1-Dichloroethane	(2)	4.453	(0.000)	63	227640	24.949	24.95			0.5	1
42) cis-1,2-Dichloroethene	(2)	5.313	(0.000)	96	144075	23.928	23.93			0.5	1
43) 1,2-Dichloroethene (Total)	(2)			96	268546	48.451	48.45			0.5	1
51) Chloroform	(2)	5.825	(0.000)	83	244624	23.687	23.69			0.5	1
53) 1,1,1-Trichloroethane	(2)	6.056	(-0.000)	97	234579	26.478	26.48			0.5	1
56) Carbon Tetrachloride	(2)	6.270	(0.000)	117	193237	29.848	29.85			0.5	1
60) Benzene	(2)	6.556	(0.000)	78	542575	23.944	23.94			0.5	1
61) 1,2-Dichloroethane	(2)	6.642	(0.000)	62	195285	24.807	24.81			0.5	1
71) Trichloroethene	(2)	7.495	(-0.000)	95	147772	23.938	23.94			0.5	1
74) 1,2-Dichloropropane	(2)	7.849	(-0.000)	63	146468	24.839	24.84			0.5	1
79) Bromodichloromethane	(2)	8.221	(-0.001)	83	174218	22.417	22.42			0.5	1
81) 2-Chloroethyl Vinyl Ether	(2)	8.629	(-0.001)	63	62440M	19.149	19.15			2	10
82) cis-1,3-Dichloropropene	(2)	8.818	(-0.001)	75	197990	20.461	20.46			0.5	1
89) Toluene	(3)	9.251	(0.000)	92	349101	22.125	22.13			0.5	1
90) trans-1,3-Dichloropropene	(3)	9.556	(0.000)	75	178711	19.415	19.42			0.5	1
93) 1,1,2-Trichloroethane	(3)	9.781	(0.000)	97	135215M	21.158	21.16			0.5	1
94) Tetrachloroethene	(3)	9.867	(0.000)	166	167967	22.908	22.91			0.5	1
98) Dibromochloromethane	(3)	10.196	(0.000)	129	139313	19.754	19.75			0.5	1
103) Chlorobenzene	(3)	10.818	(-0.000)	112	418099	21.390	21.39			0.5	1
105) Ethylbenzene	(3)	10.915	(-0.000)	91	720163	23.280	23.28			0.5	1
107) m+p-Xylene	(3)	11.043	(-0.000)	106	554313	45.439	45.44			0.5	1

M = Compound was manually integrated.

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13. Target 3.5 esignature user ID: jkh09052

Data file: /chem2/HP26285.i/18jun19a.b/5u19s13.d Injection date and time: **20-JUN-2018 01:32**
Data file Sample Info. Line: C5009MS;9662311MS;1;3;MS;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

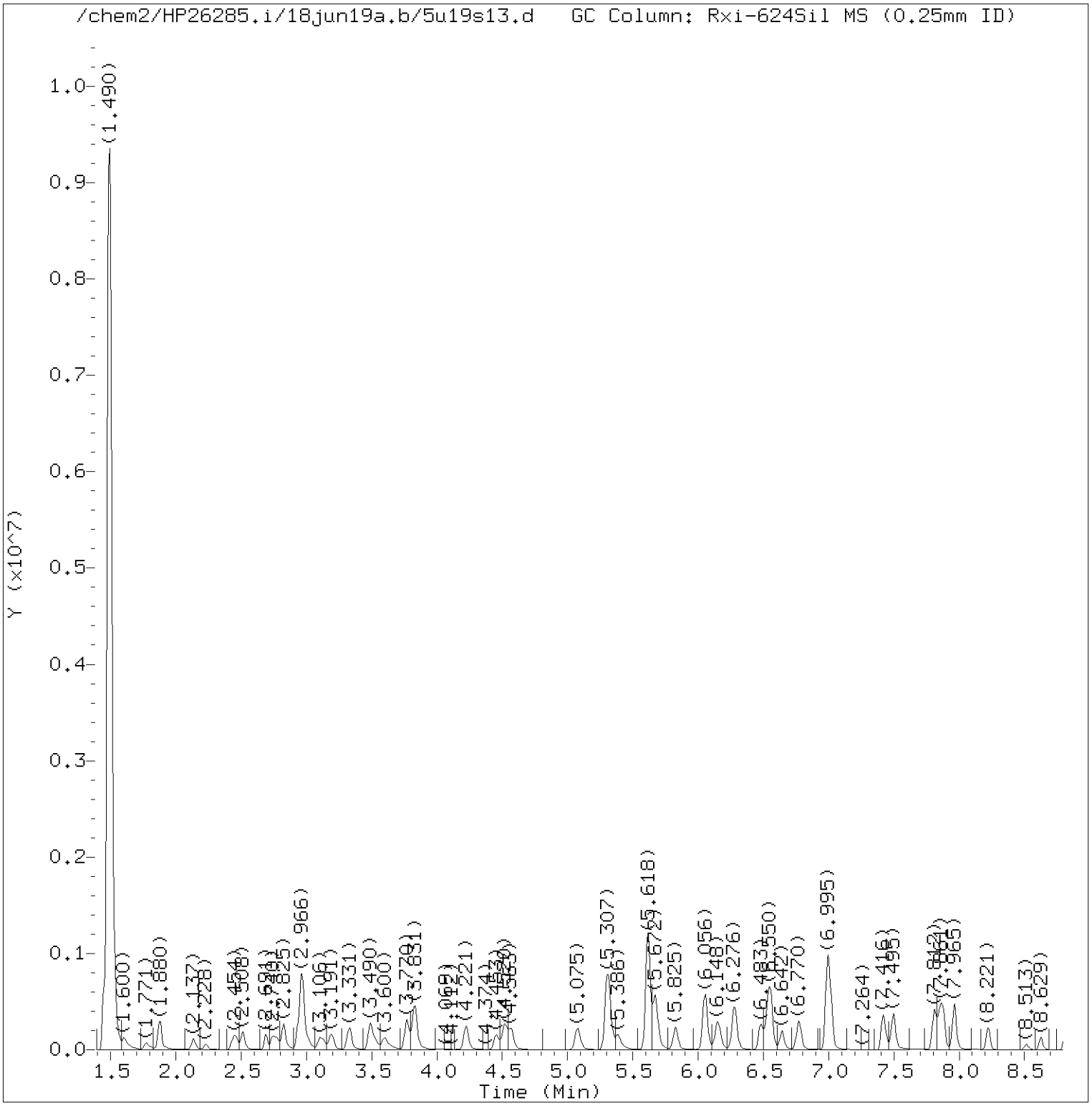
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)	11.397(-0.000)	106	252210	21.049	21.05			0.5	1
109) Xylene (Total)	(3)		106	806523	66.488	66.49			0.5	1
111) Bromoform	(3)	11.580(-0.000)	173	97625	18.139	18.14			0.5	4
117) 1,1,2,2-Tetrachloroethane	(4)	11.988(0.000)	83	228961M	19.127	19.13			0.5	1
130) 1,3-Dichlorobenzene	(4)	12.750(0.000)	146	363257	19.854	19.85			1	5
134) 1,4-Dichlorobenzene	(4)	12.823(0.000)	146	371658	19.864	19.86			1	5
139) 1,2-Dichlorobenzene	(4)	13.098(-0.000)	146	350857	20.075	20.08			1	5

M = Compound was manually integrated.

Total number of targets = 37

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

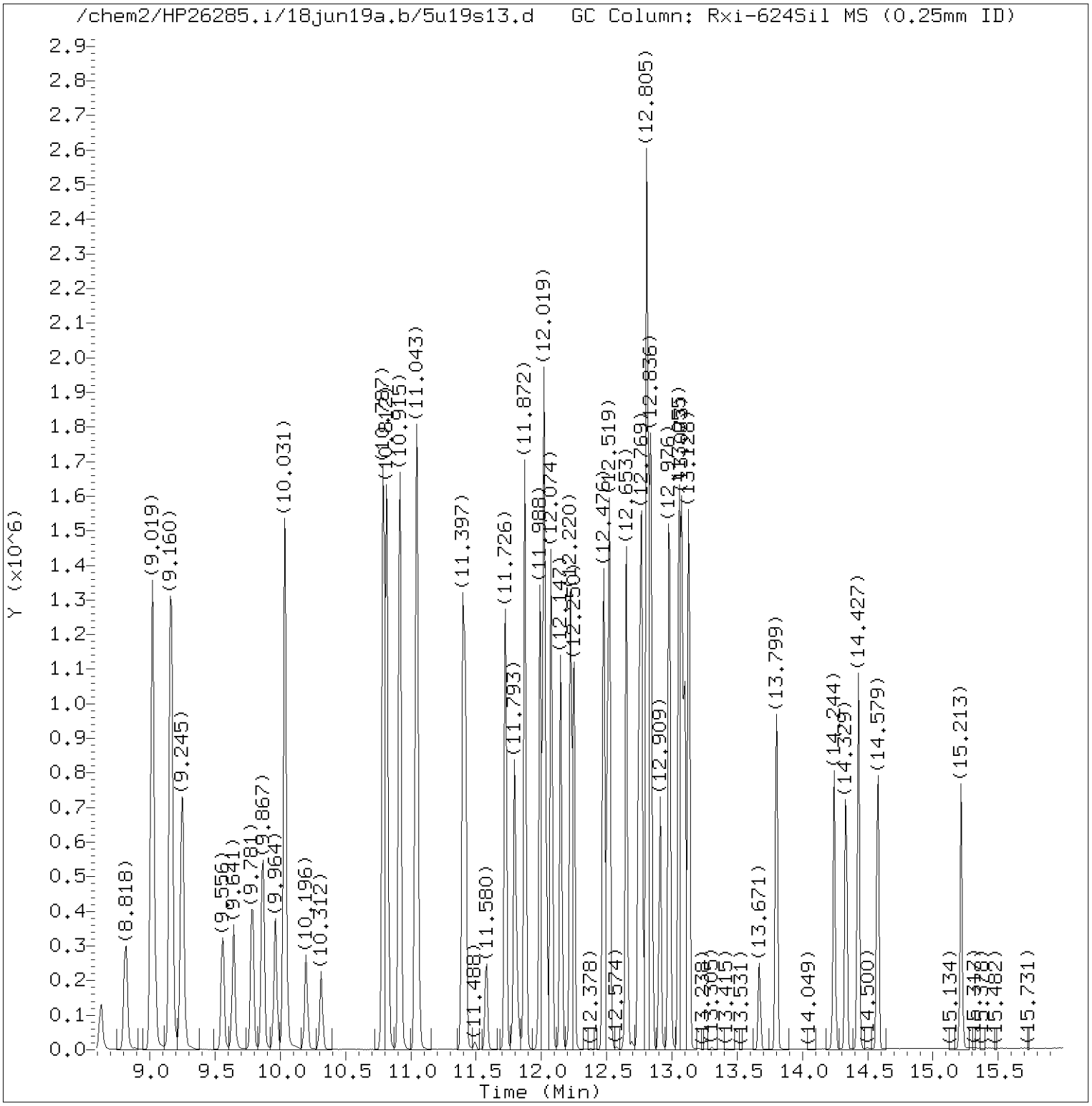
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s13.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:32 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009MS Lab Sample ID: 9662311MS

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s13.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:32 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009MS Lab Sample ID: 9662311MS

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s13.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:32 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009MS Lab Sample ID: 9662311MS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Chloromethane	(2)	1.771	50	102650	20.773
6) Vinyl Chloride	(2)	1.862	62	104207	21.576
8) Bromomethane	(2)	2.137	94	92467	22.692
9) Chloroethane	(2)	2.228	64	57265	22.341
12) Trichlorofluoromethane	(2)	2.447	101	213090	27.901
17) 1,1-Dichloroethene	(2)	2.941	96	110691	27.055
28) Methylene Chloride	(2)	3.484	84	127891	24.277
29)*t-Butyl alcohol-d10	(1)	3.502	65	236269	250.000
33) Methyl Tertiary Butyl Ether	(2)	3.825	73	314183	24.741
32) trans-1,2-Dichloroethene	(2)	3.831	96	124471	24.523
36) 1,1-Dichloroethane	(2)	4.453	63	227640	24.949
42) cis-1,2-Dichloroethene	(2)	5.313	96	144075	23.928
51) Chloroform	(2)	5.825	83	244624	23.687
52)$Dibromofluoromethane	(2)	6.056	113	282733	51.902
53) 1,1,1-Trichloroethane	(2)	6.056	97	234579	26.478
43) 1,2-Dichloroethene (Total)	(2)		96	268546	48.451
56) Carbon Tetrachloride	(2)	6.270	117	193237	29.848
57)$1,2-Dichloroethane-d4	(2)	6.532	102	60550	51.661
60) Benzene	(2)	6.556	78	542575	23.944
61) 1,2-Dichloroethane	(2)	6.642	62	195285	24.807
66)*Fluorobenzene	(2)	6.989	96	1007343	50.000
71) Trichloroethene	(2)	7.495	95	147772	23.938
74) 1,2-Dichloropropane	(2)	7.849	63	146468	24.839
79) Bromodichloromethane	(2)	8.221	83	174218	22.417
81) 2-Chloroethyl Vinyl Ether	(2)	8.629	63	62440M	19.149
82) cis-1,3-Dichloropropene	(2)	8.818	75	197990	20.461
84)$Toluene-d8	(3)	9.160	98	1044275	50.366
89) Toluene	(3)	9.251	92	349101	22.125
90) trans-1,3-Dichloropropene	(3)	9.556	75	178711	19.415
93) 1,1,2-Trichloroethane	(3)	9.781	97	135215M	21.158
94) Tetrachloroethene	(3)	9.867	166	167967	22.908
98) Dibromochloromethane	(3)	10.196	129	139313	19.754
101)*Chlorobenzene-d5	(3)	10.787	117	849298	50.000
103) Chlorobenzene	(3)	10.818	112	418099	21.390
105) Ethylbenzene	(3)	10.915	91	720163	23.280
107) m+p-Xylene	(3)	11.043	106	554313	45.439
108) o-Xylene	(3)	11.397	106	252210	21.049
111) Bromoform	(3)	11.580	173	97625	18.139

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

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s13.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:32 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

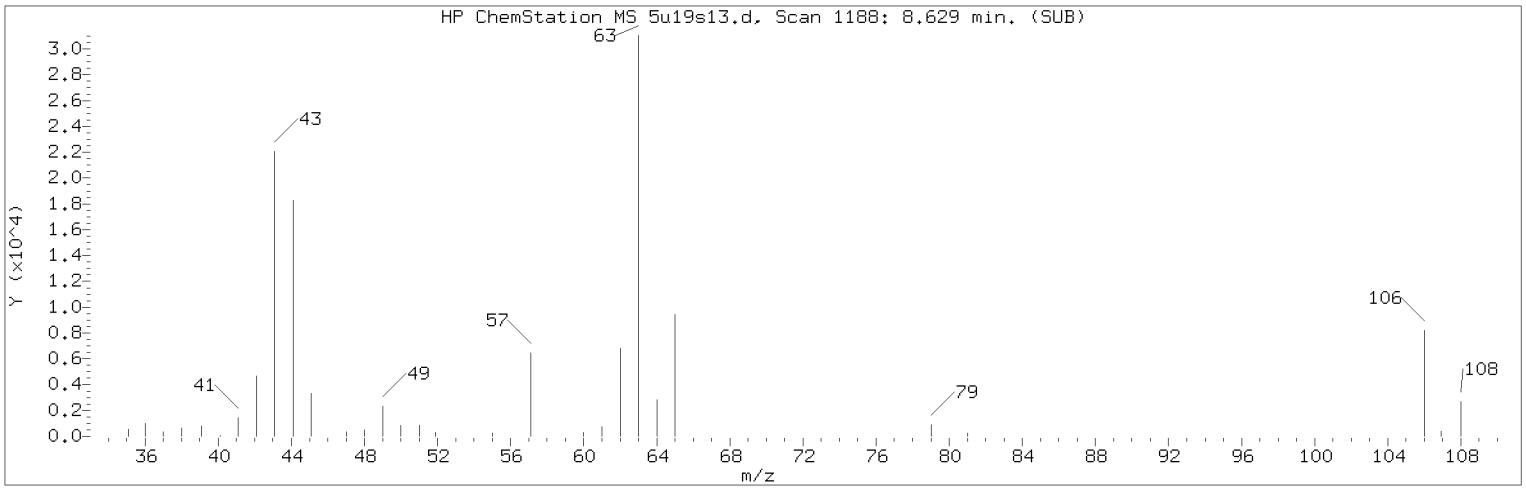
Sample Name: C5009MS Lab Sample ID: 9662311MS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
109) Xylene (Total)	(3)		106	806523	66.488
115)$4-Bromofluorobenzene	(3)	11.872	95	466840	55.020
117) 1,1,2,2-Tetrachloroethane	(4)	11.988	83	228961M	19.127
130) 1,3-Dichlorobenzene	(4)	12.750	146	363257	19.854
132)*1,4-Dichlorobenzene-d4	(4)	12.805	152	531548	50.000
134) 1,4-Dichlorobenzene	(4)	12.823	146	371658	19.864
139) 1,2-Dichlorobenzene	(4)	13.098	146	350857	20.075

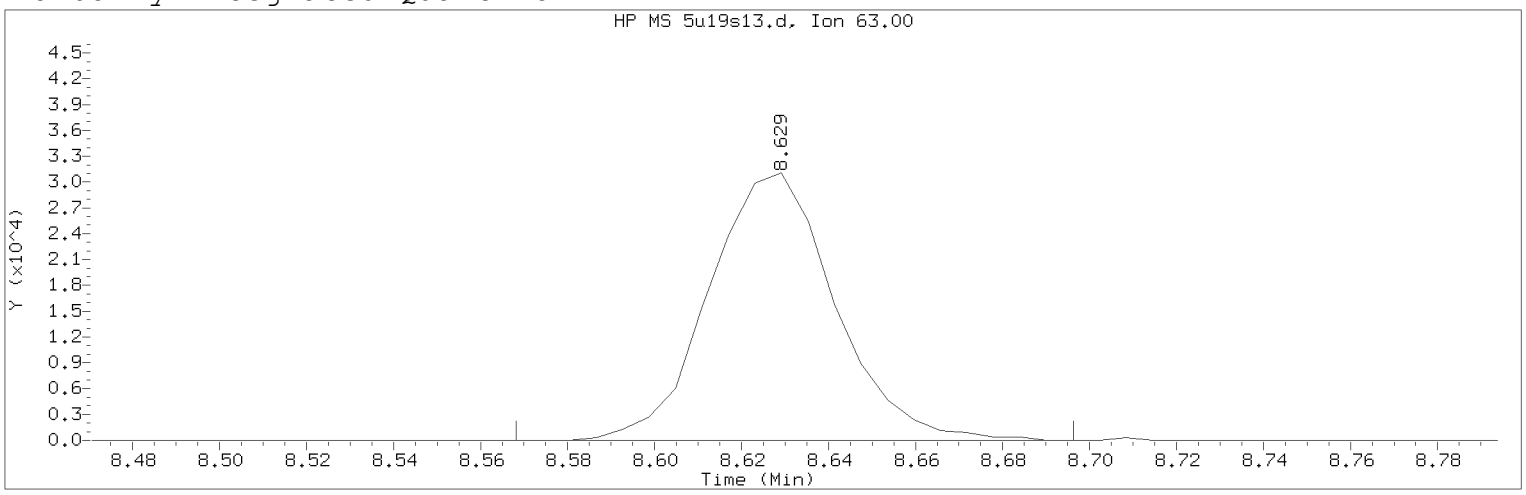
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s13.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:32 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009MS Lab Sample ID: 9662311MS

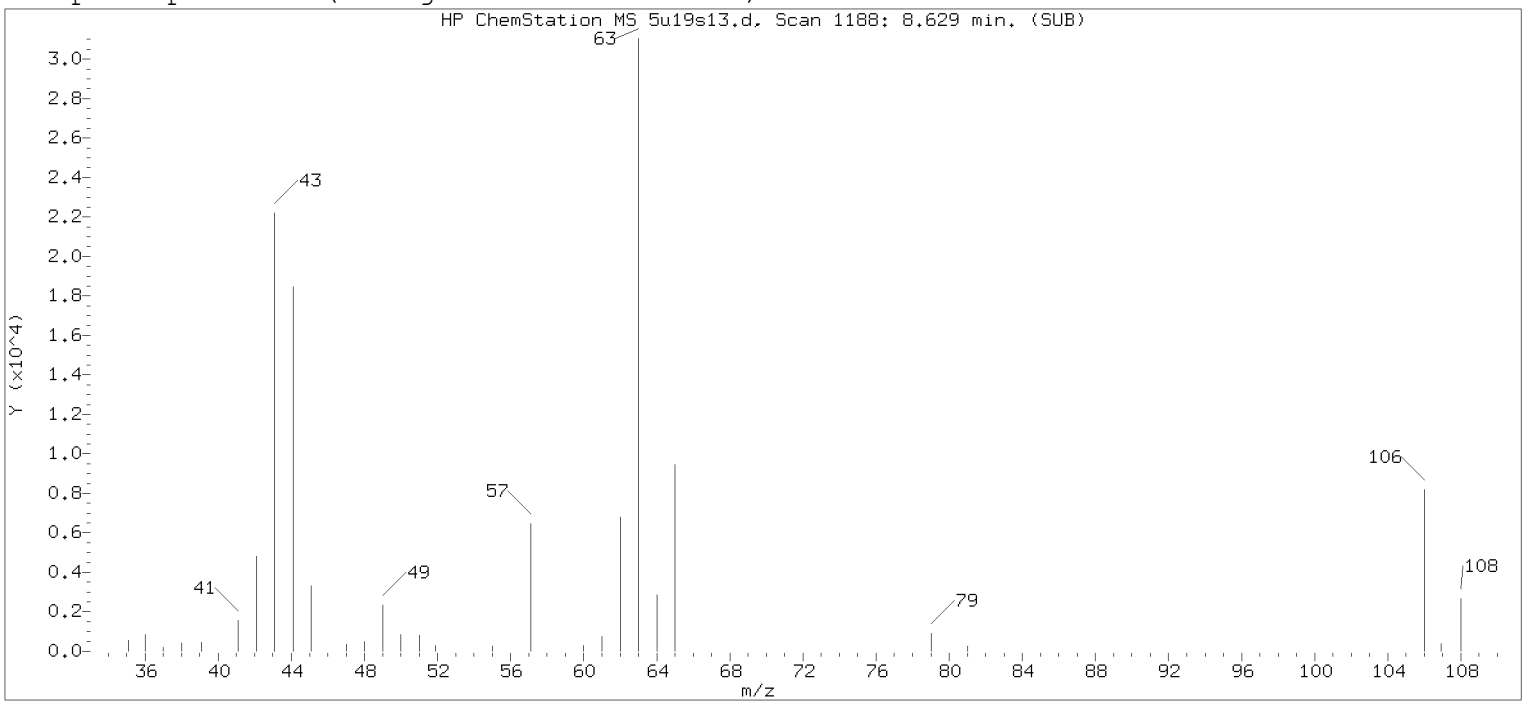
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1188
Retention Time (minutes): 8.629
Quant Ion : 63.00
Area (flag) : 62440M
On-Column Amount (ng) : 19.1487
Integration start scan : 1177 Integration stop scan: 1198
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

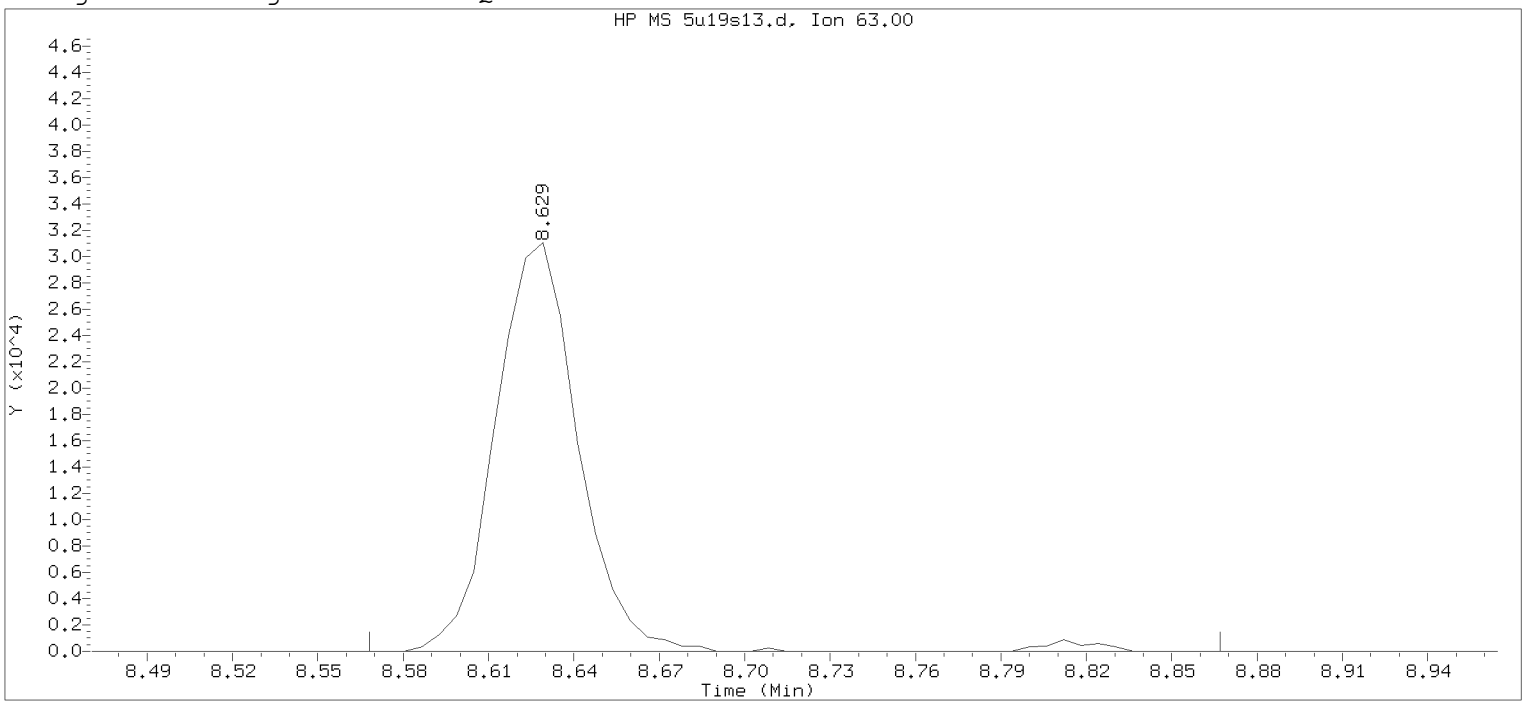
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s13.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:32 Analyst ID: PTH10165

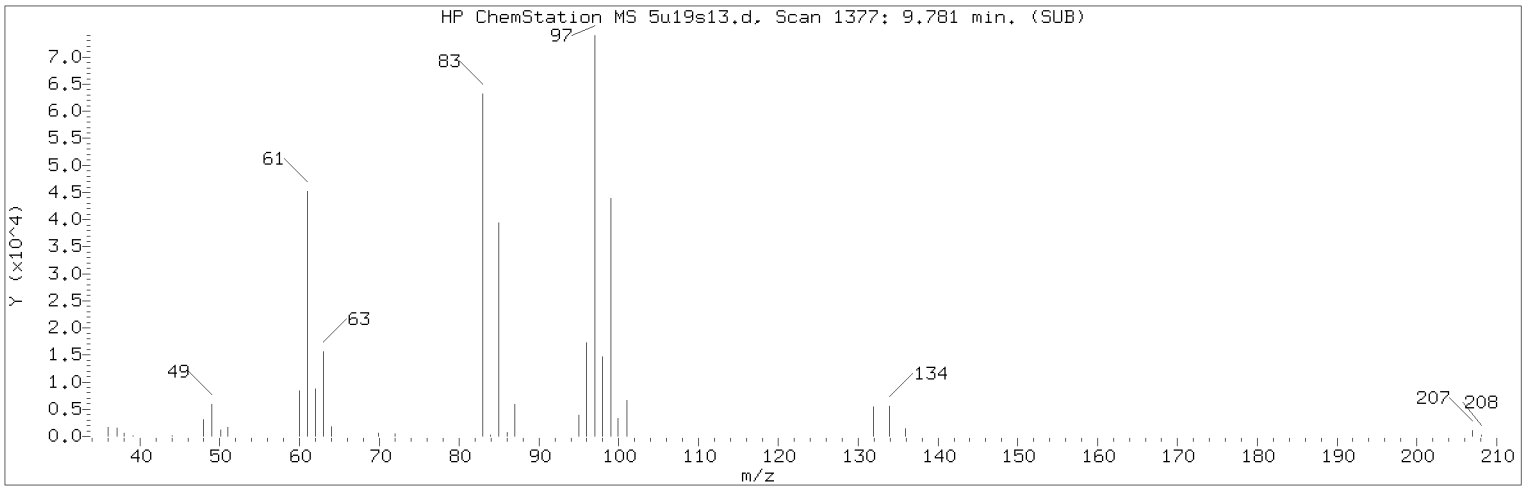
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:04 jkh09052

Sample Name: C5009MS Lab Sample ID: 9662311MS

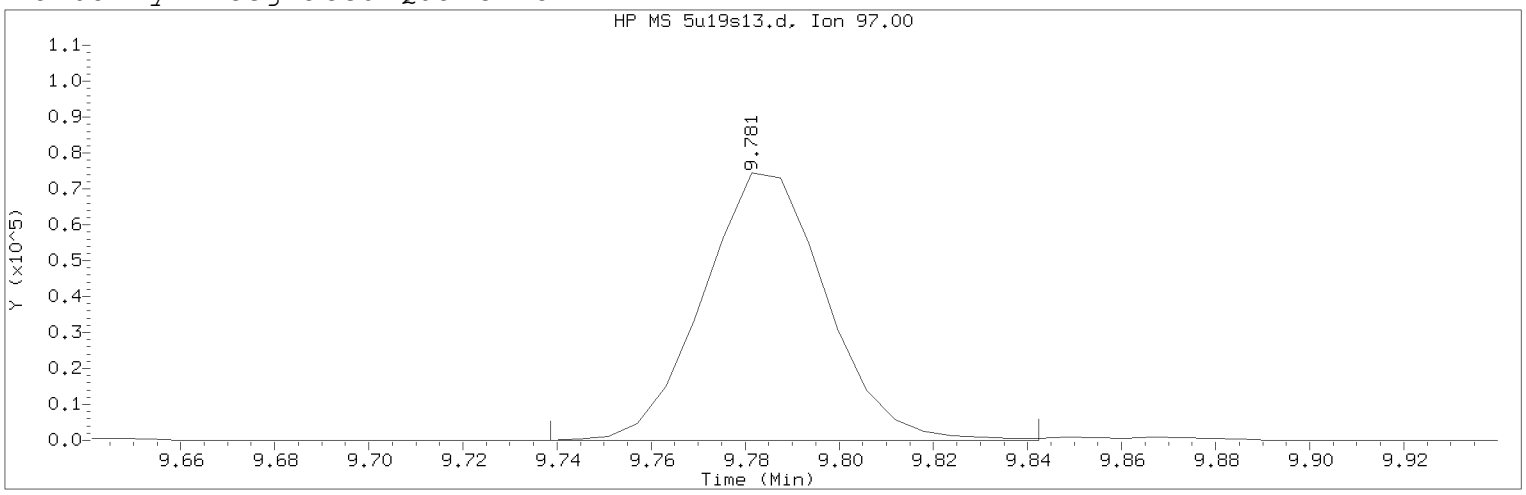
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1188
Retention Time (minutes): 8.629
Quant Ion : 63.00
Area : 63610
On-column Amount (ng) : 19.5076
Integration start scan : 1177 Integration stop scan: 1226
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13.
Target 3.5 esignature user id: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s13.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:32 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009MS Lab Sample ID: 9662311MS

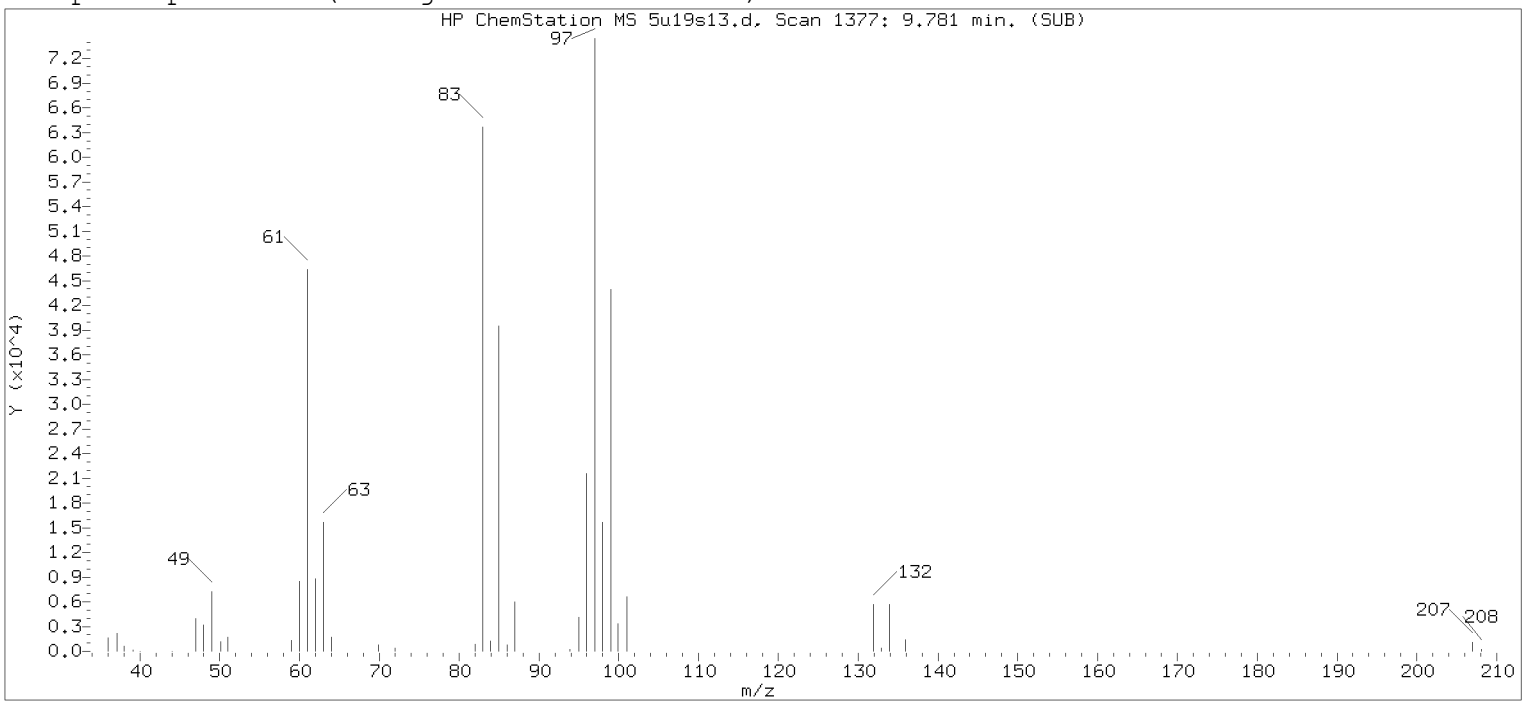
Compound Number : 93
Compound Name : 1,1,2-Trichloroethane
Scan Number : 1377
Retention Time (minutes): 9.781
Quant Ion : 97.00
Area (flag) : 135215M
On-Column Amount (ng) : 21.1579
Integration start scan : 1369 Integration stop scan: 1386
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

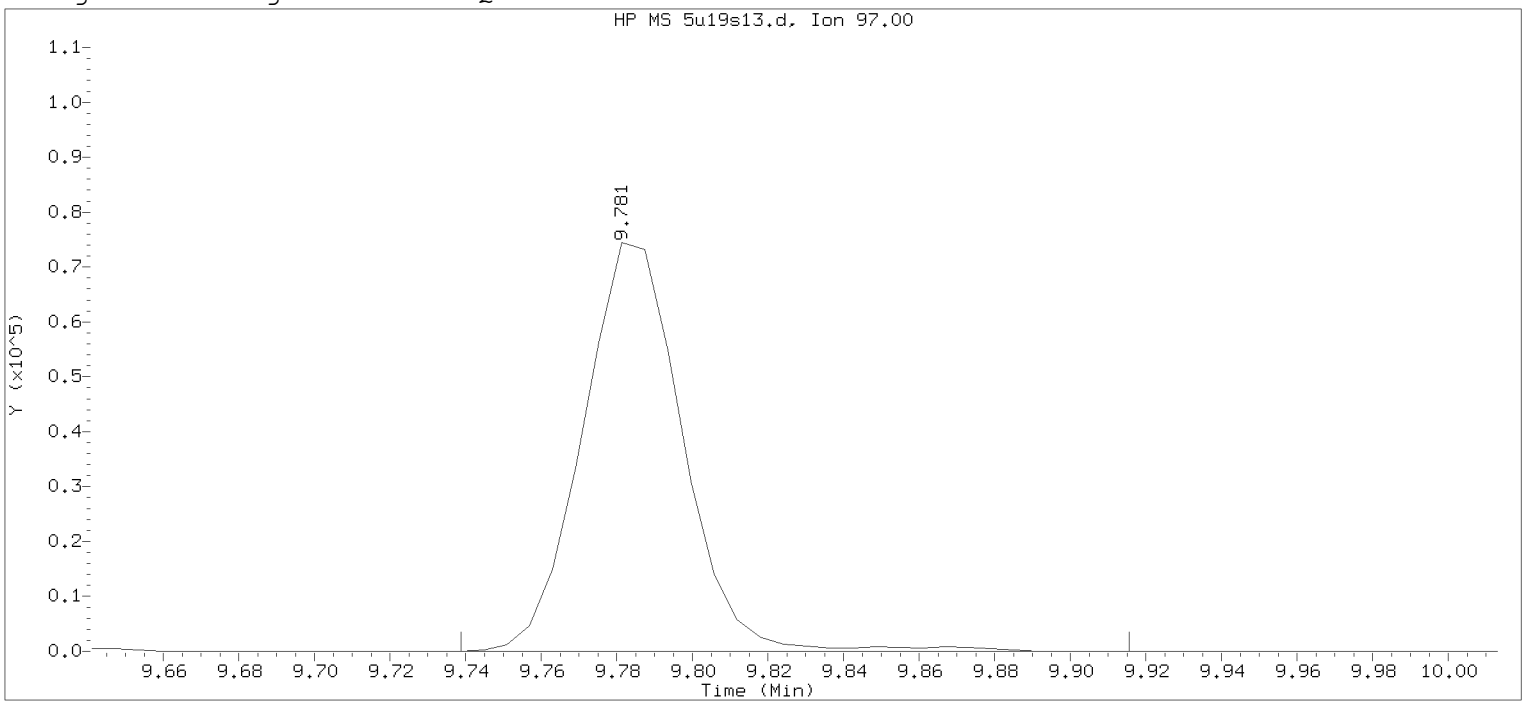
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s13.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:32 Analyst ID: PTH10165

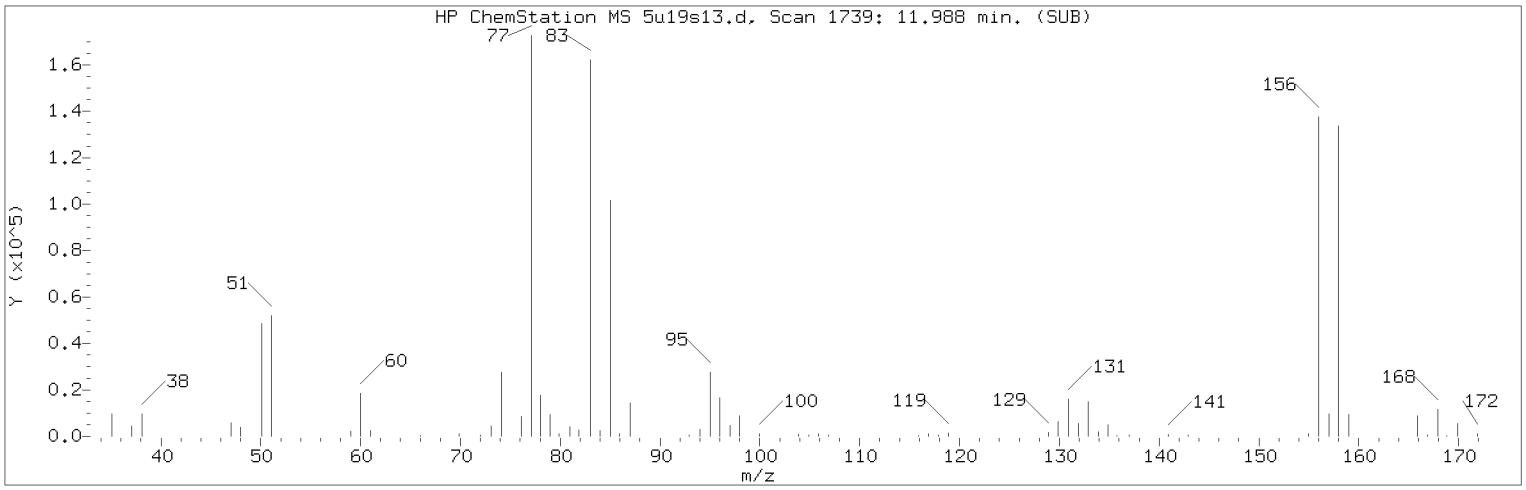
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:04 jkh09052

Sample Name: C5009MS Lab Sample ID: 9662311MS

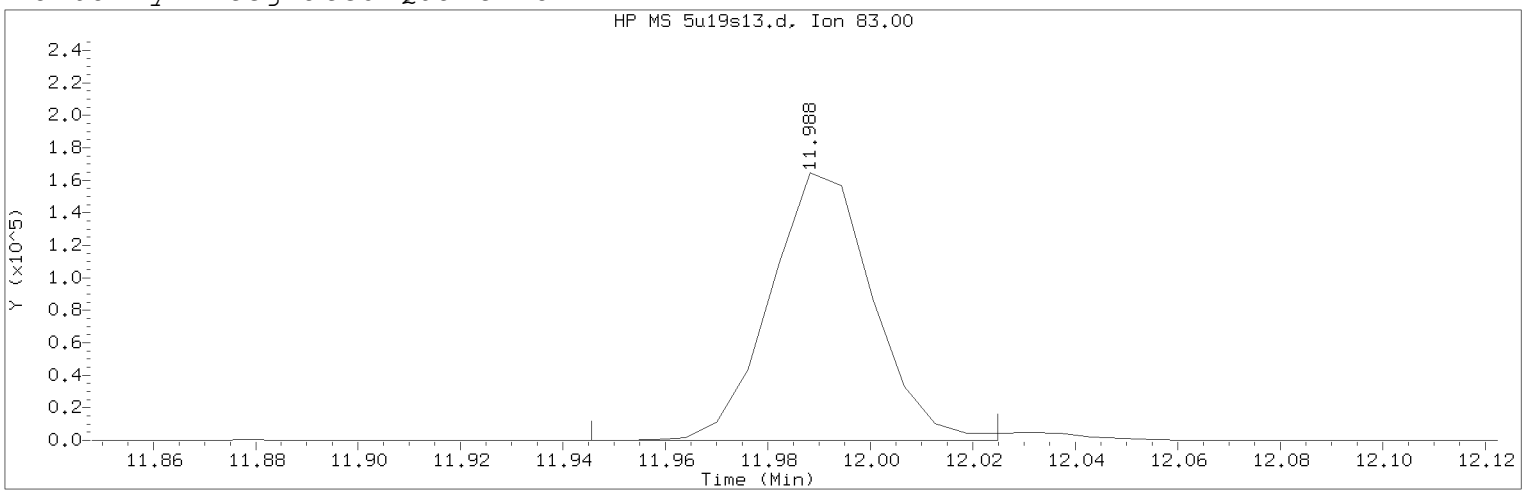
Compound Number : 93
Compound Name : 1,1,2-Trichloroethane
Scan Number : 1377
Retention Time (minutes): 9.781
Quant Ion : 97.00
Area : 136863
On-column Amount (ng) : 21.4158
Integration start scan : 1369 Integration stop scan: 1398
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13.
Target 3.5 esignature user id: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s13.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:32 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009MS Lab Sample ID: 9662311MS

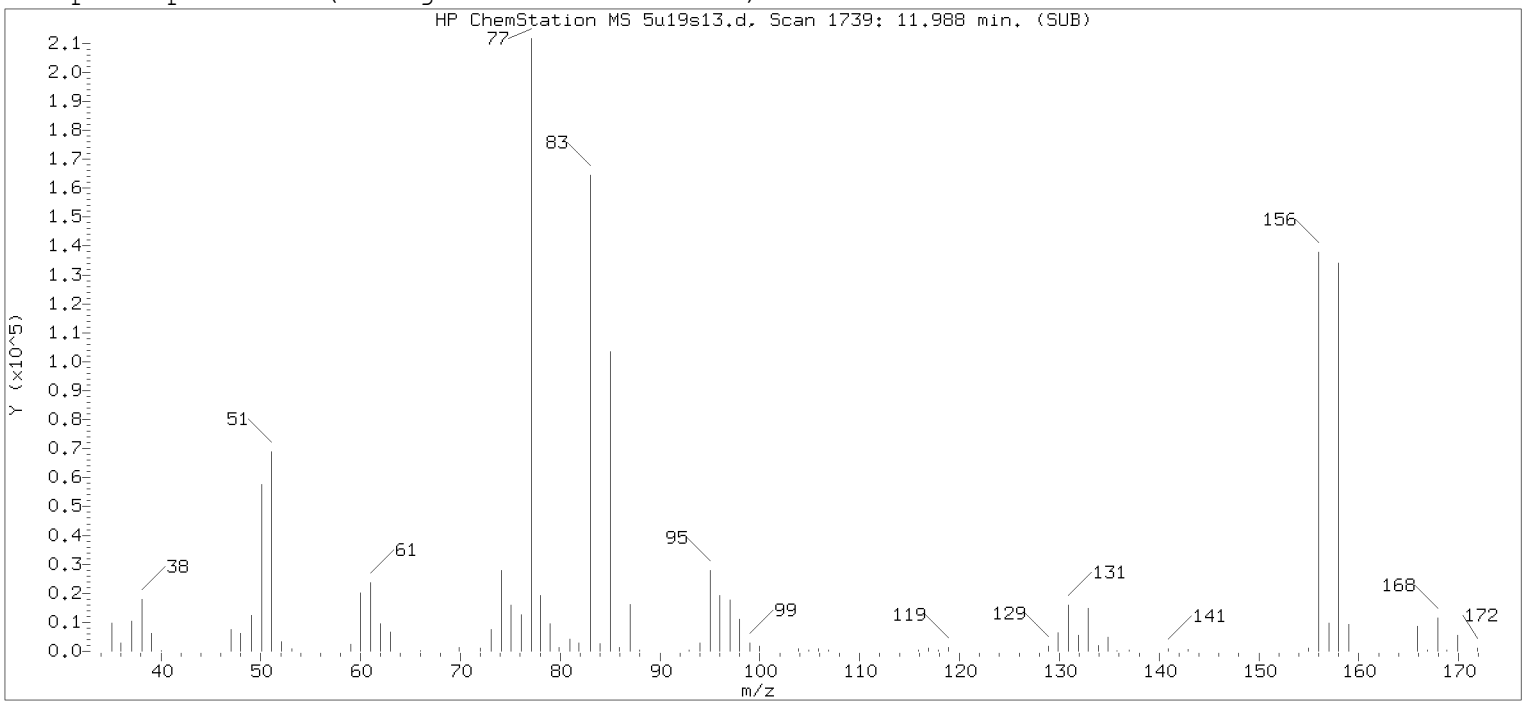
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1739
Retention Time (minutes): 11.988
Quant Ion : 83.00
Area (flag) : 228961M
On-Column Amount (ng) : 19.1269
Integration start scan : 1731 Integration stop scan: 1744
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

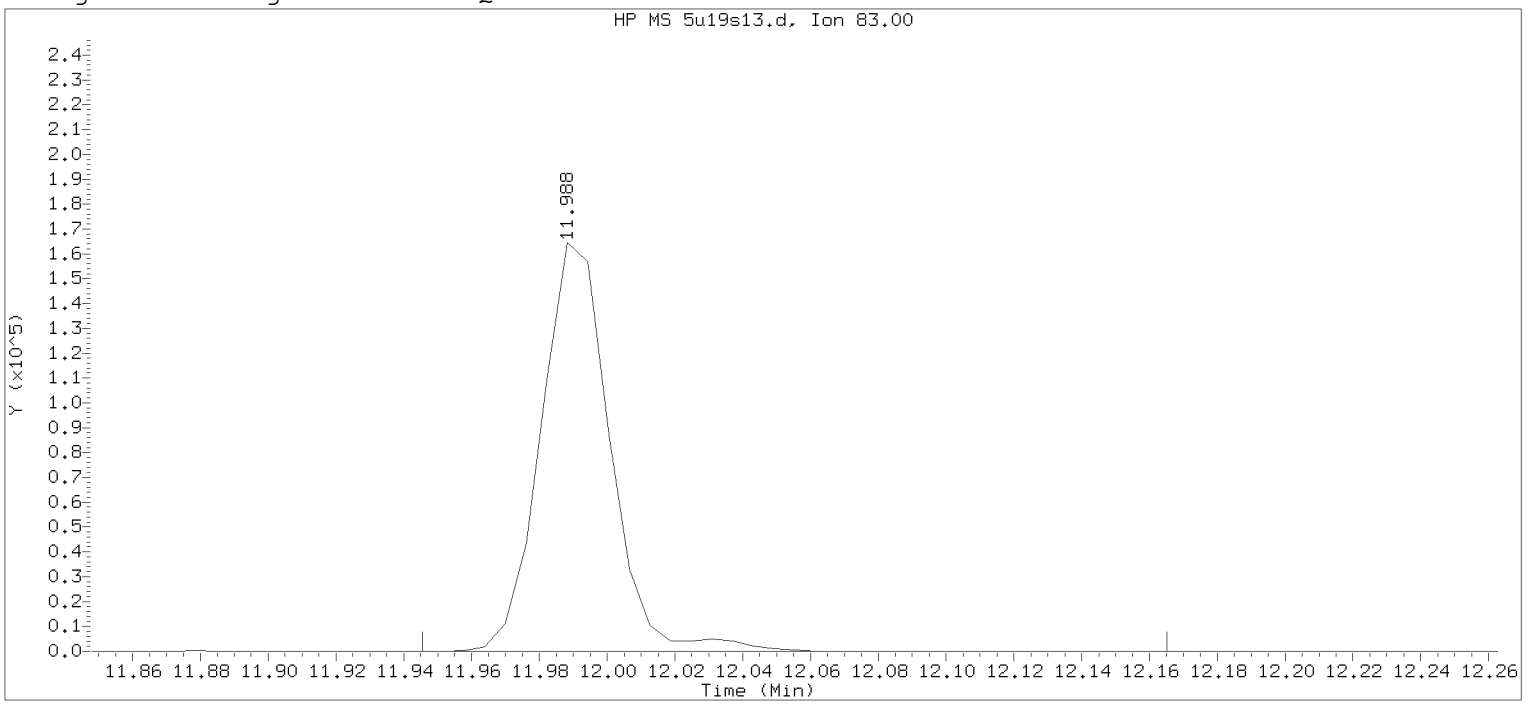
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s13.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:32 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:04 jkh09052

Sample Name: C5009MS Lab Sample ID: 9662311MS

Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1739
Retention Time (minutes): 11.988
Quant Ion : 83.00
Area : 233522
On-column Amount (ng) : 19.5080
Integration start scan : 1731 Integration stop scan: 1767
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13.
Target 3.5 esignature user id: jkh09052

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009MSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662312

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s14.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	22	
75-01-4	Vinyl Chloride	23	
74-83-9	Bromomethane	23	
75-00-3	Chloroethane	23	
75-69-4	Trichlorofluoromethane	27	
75-35-4	1,1-Dichloroethene	27	
75-09-2	Methylene Chloride	24	
1634-04-4	Methyl Tertiary Butyl Ether	24	
75-34-3	1,1-Dichloroethane	25	
540-59-0	1,2-Dichloroethene (Total)	48	
67-66-3	Chloroform	24	
71-55-6	1,1,1-Trichloroethane	26	
56-23-5	Carbon Tetrachloride	29	
71-43-2	Benzene	24	
107-06-2	1,2-Dichloroethane	23	
79-01-6	Trichloroethene	24	
78-87-5	1,2-Dichloropropane	25	
75-27-4	Bromodichloromethane	22	
110-75-8	2-Chloroethyl Vinyl Ether	18	
10061-01-5	cis-1,3-Dichloropropene	21	
108-88-3	Toluene	23	
10061-02-6	trans-1,3-Dichloropropene	19	
79-00-5	1,1,2-Trichloroethane	21	
127-18-4	Tetrachloroethene	23	
124-48-1	Dibromochloromethane	20	
108-90-7	Chlorobenzene	22	
100-41-4	Ethylbenzene	23	
1330-20-7	Xylene (Total)	68	
75-25-2	Bromoform	18	
79-34-5	1,1,2,2-Tetrachloroethane	19	

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009MSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662312

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s14.d

Level: (low/med) LOW Date Received: 06/15/18

Moisture: not dec. _____ Date Analyzed: 06/20/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	20	
106-46-7	1,4-Dichlorobenzene	20	
95-50-1	1,2-Dichlorobenzene	20	

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s14.d Injection date and time: **20-JUN-2018 01:54**
Data file Sample Info. Line: C5009MSD;9662312MSD;1;3;MSD;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph=7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.496	(0.006)	346	65	260714	(-17)	250.00	
66) Fluorobenzene	6.990	(0.006)	919	96	1043072	(-6)	50.00	
101) Chlorobenzene-d5	10.788	(0.000)	1542	117	864572	(-9)	50.00	
132) 1,4-Dichlorobenzene-d4	12.805	(0.000)	1873	152	529937	(-10)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.051	(0.001)	113	284264	50.395	101%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.532	(0.000)	102	59807	49.279	99%		80 - 120
84) Toluene-d8	(3)	9.160	(0.001)	98	1058491	50.150	100%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.873	(0.000)	95	475378	55.036	110%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)	1.771	(0.000)	50	112722	22.030	22.03			0.5	1
6) Vinyl Chloride	(2)	1.862	(0.000)	62	113219	22.639	22.64			0.5	1
8) Bromomethane	(2)	2.137	(0.000)	94	97774	23.172	23.17			0.5	1
9) Chloroethane	(2)	2.228	(0.000)	64	60149	22.662	22.66			0.5	1
12) Trichlorofluoromethane	(2)	2.448	(0.000)	101	217204	27.466	27.47			0.5	1
17) 1,1-Dichloroethene	(2)	2.935	(0.000)	96	115136	27.178	27.18			0.5	1
28) Methylene Chloride	(2)	3.484	(0.000)	84	128210	23.504	23.50			0.5	1
32) trans-1,2-Dichloroethene	(2)	3.832	(0.000)	96	127727	24.303	24.30			0.5	1
33) Methyl Tertiary Butyl Ether	(2)	3.819	(0.000)	73	320466	24.371	24.37			0.5	1
36) 1,1-Dichloroethane	(2)	4.453	(0.000)	63	234083	24.776	24.78			0.5	1
42) cis-1,2-Dichloroethene	(2)	5.319	(-0.000)	96	148152	23.762	23.76			0.5	1
43) 1,2-Dichloroethene (Total)	(2)			96	275879	48.065	48.06			0.5	1
51) Chloroform	(2)	5.831	(-0.000)	83	252118	23.576	23.58			0.5	1
53) 1,1,1-Trichloroethane	(2)	6.051	(0.000)	97	239218	26.076	26.08			0.5	1
56) Carbon Tetrachloride	(2)	6.270	(0.000)	117	196034	29.243	29.24			0.5	1
60) Benzene	(2)	6.557	(0.000)	78	559727	23.855	23.86			0.5	1
61) 1,2-Dichloroethane	(2)	6.642	(0.000)	62	187364	22.985	22.99			0.5	1
71) Trichloroethene	(2)	7.496	(-0.000)	95	151243	23.661	23.66			0.5	1
74) 1,2-Dichloropropane	(2)	7.849	(-0.000)	63	150068	24.578	24.58			0.5	1
79) Bromodichloromethane	(2)	8.221	(-0.001)	83	176684	21.956	21.96			0.5	1
81) 2-Chloroethyl Vinyl Ether	(2)	8.629	(-0.001)	63	61719M	18.279	18.28			2	10
82) cis-1,3-Dichloropropene	(2)	8.812	(-0.000)	75	206567	20.616	20.62			0.5	1
89) Toluene	(3)	9.245	(0.000)	92	362276	22.555	22.55			0.5	1
90) trans-1,3-Dichloropropene	(3)	9.556	(0.000)	75	182535	19.480	19.48			0.5	1
93) 1,1,2-Trichloroethane	(3)	9.782	(0.000)	97	134698M	20.705	20.70			0.5	1
94) Tetrachloroethene	(3)	9.867	(-0.000)	166	173948	23.304	23.30			0.5	1
98) Dibromochloromethane	(3)	10.196	(-0.000)	129	143392	19.973	19.97			0.5	1
103) Chlorobenzene	(3)	10.818	(0.000)	112	430725	21.647	21.65			0.5	1
105) Ethylbenzene	(3)	10.916	(-0.000)	91	737972	23.435	23.43			0.5	1
107) m+p-Xylene	(3)	11.044	(0.000)	106	572821	46.127	46.13			0.5	1

M = Compound was manually integrated.

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13. Target 3.5 esignature user ID: jkh09052

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s14.d Injection date and time: **20-JUN-2018 01:54**
Data file Sample Info. Line: C5009MSD;9662312MSD;1;3;MSD;CBD50;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

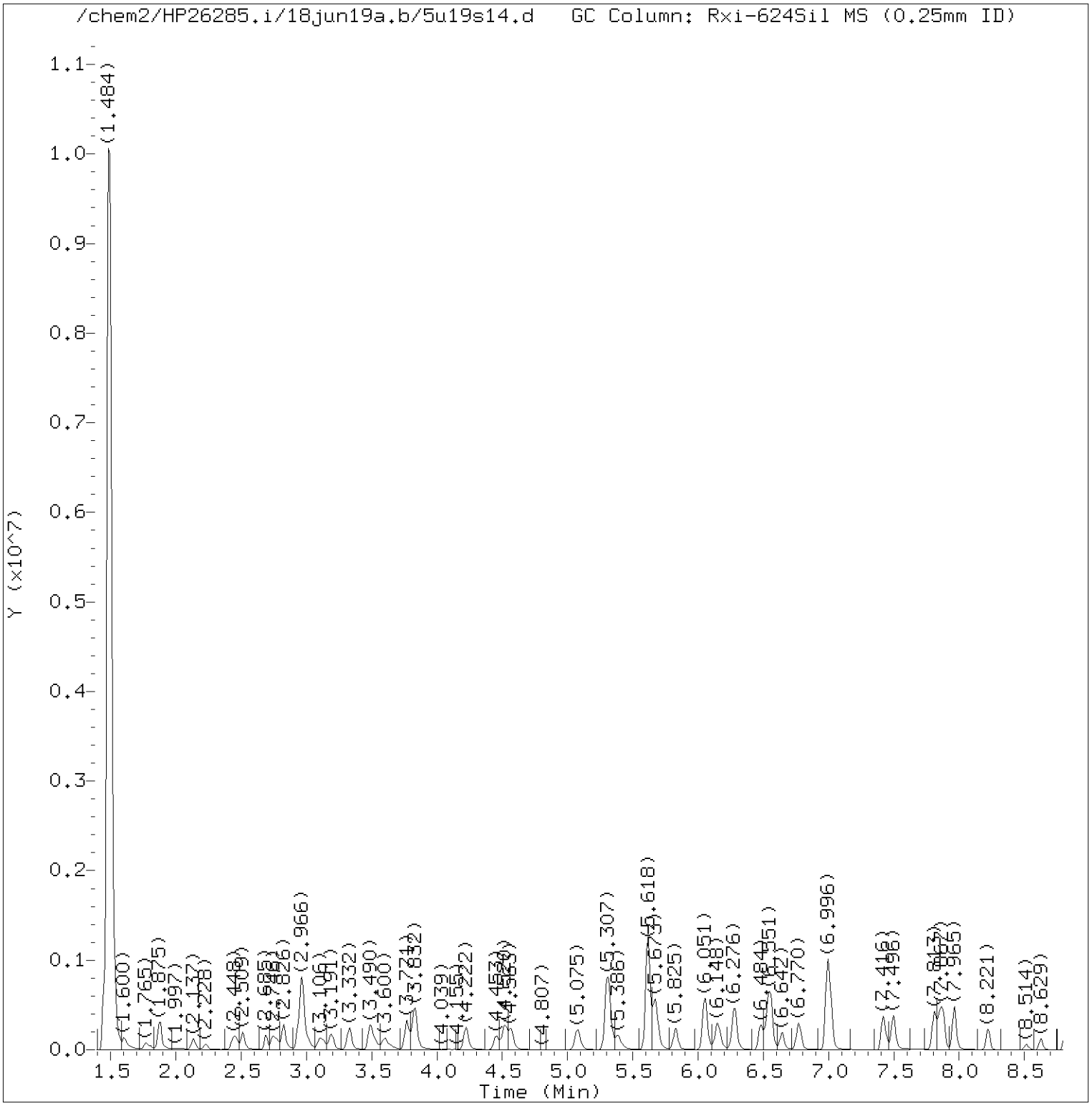
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)	11.397(-0.000)	106	263163	21.575	21.58			0.5	1
109) Xylene (Total)	(3)		106	835984	67.702	67.70			0.5	1
111) Bromoform	(3)	11.580(0.000)	173	98019	17.891	17.89			0.5	4
117) 1,1,2,2-Tetrachloroethane	(4)	11.988(-0.000)	83	230670M	19.328	19.33			0.5	1
130) 1,3-Dichlorobenzene	(4)	12.750(-0.000)	146	364722	19.995	19.99			1	5
134) 1,4-Dichlorobenzene	(4)	12.824(0.000)	146	379752	20.359	20.36			1	5
139) 1,2-Dichlorobenzene	(4)	13.098(-0.000)	146	353382	20.281	20.28			1	5

M = Compound was manually integrated.

Total number of targets = 37

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13. Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

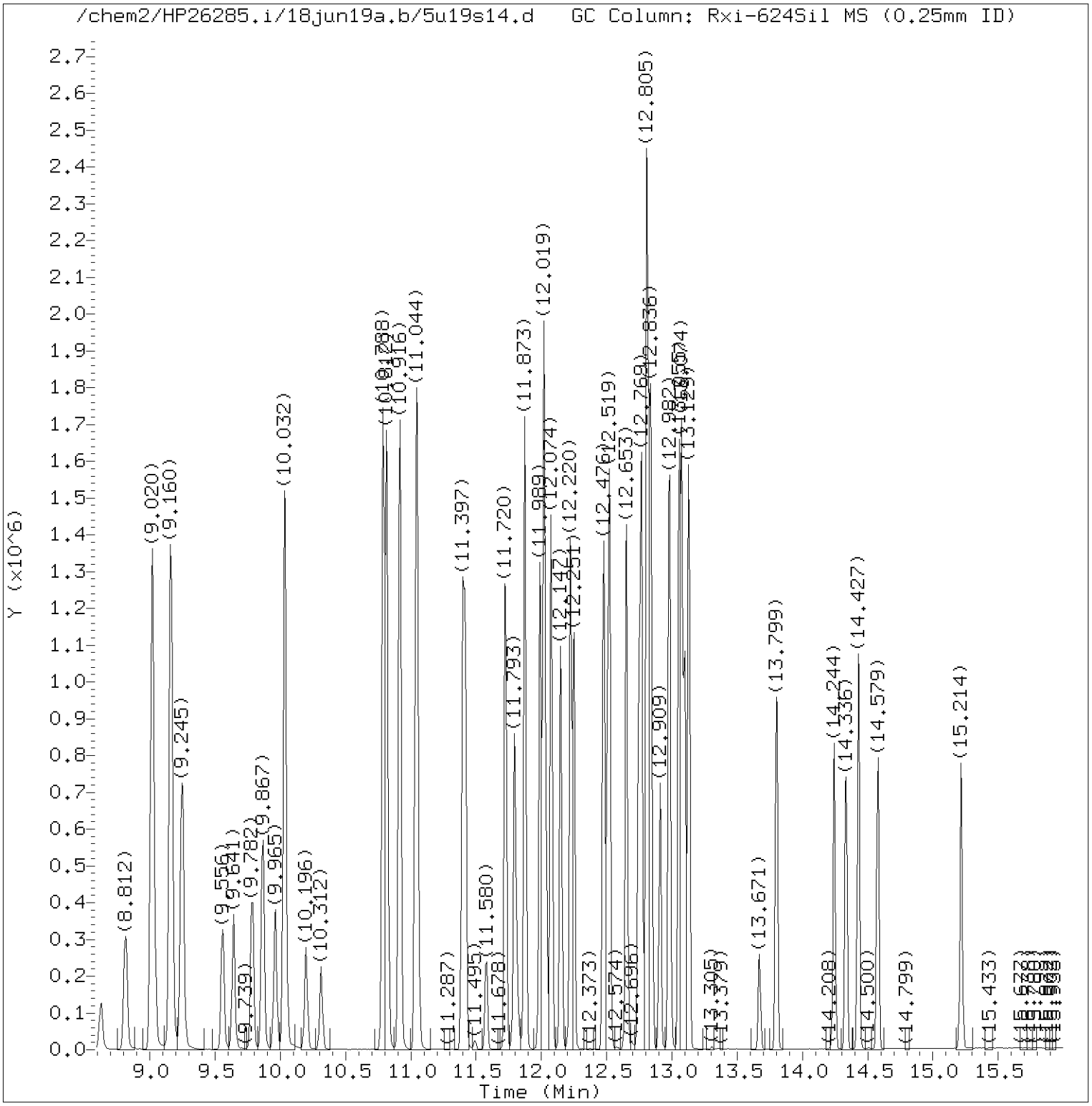
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s14.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:54 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009MSD Lab Sample ID: 9662312MSD

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s14.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:54 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009MSD Lab Sample ID: 9662312MSD

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s14.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:54 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009MSD Lab Sample ID: 9662312MSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Chloromethane	(2)	1.771	50	112722	22.030
6) Vinyl Chloride	(2)	1.862	62	113219	22.639
8) Bromomethane	(2)	2.137	94	97774	23.172
9) Chloroethane	(2)	2.228	64	60149	22.662
12) Trichlorofluoromethane	(2)	2.448	101	217204	27.466
17) 1,1-Dichloroethene	(2)	2.935	96	115136	27.178
28) Methylene Chloride	(2)	3.484	84	128210	23.504
29)*t-Butyl alcohol-d10	(1)	3.496	65	260714	250.000
33) Methyl Tertiary Butyl Ether	(2)	3.819	73	320466	24.371
32) trans-1,2-Dichloroethene	(2)	3.832	96	127727	24.303
36) 1,1-Dichloroethane	(2)	4.453	63	234083	24.776
42) cis-1,2-Dichloroethene	(2)	5.319	96	148152	23.762
51) Chloroform	(2)	5.831	83	252118	23.576
52)$Dibromofluoromethane	(2)	6.051	113	284264	50.395
53) 1,1,1-Trichloroethane	(2)	6.051	97	239218	26.076
43) 1,2-Dichloroethene (Total)	(2)		96	275879	48.065
56) Carbon Tetrachloride	(2)	6.270	117	196034	29.243
57)$1,2-Dichloroethane-d4	(2)	6.532	102	59807	49.279
60) Benzene	(2)	6.557	78	559727	23.855
61) 1,2-Dichloroethane	(2)	6.642	62	187364	22.985
66)*Fluorobenzene	(2)	6.990	96	1043072	50.000
71) Trichloroethene	(2)	7.496	95	151243	23.661
74) 1,2-Dichloropropane	(2)	7.849	63	150068	24.578
79) Bromodichloromethane	(2)	8.221	83	176684	21.956
81) 2-Chloroethyl Vinyl Ether	(2)	8.629	63	61719M	18.279
82) cis-1,3-Dichloropropene	(2)	8.812	75	206567	20.616
84)$Toluene-d8	(3)	9.160	98	1058491	50.150
89) Toluene	(3)	9.245	92	362276	22.555
90) trans-1,3-Dichloropropene	(3)	9.556	75	182535	19.480
93) 1,1,2-Trichloroethane	(3)	9.782	97	134698M	20.705
94) Tetrachloroethene	(3)	9.867	166	173948	23.304
98) Dibromochloromethane	(3)	10.196	129	143392	19.973
101)*Chlorobenzene-d5	(3)	10.788	117	864572	50.000
103) Chlorobenzene	(3)	10.818	112	430725	21.647
105) Ethylbenzene	(3)	10.916	91	737972	23.435
107) m+p-Xylene	(3)	11.044	106	572821	46.127
108) o-Xylene	(3)	11.397	106	263163	21.575
111) Bromoform	(3)	11.580	173	98019	17.891

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

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s14.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:54 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

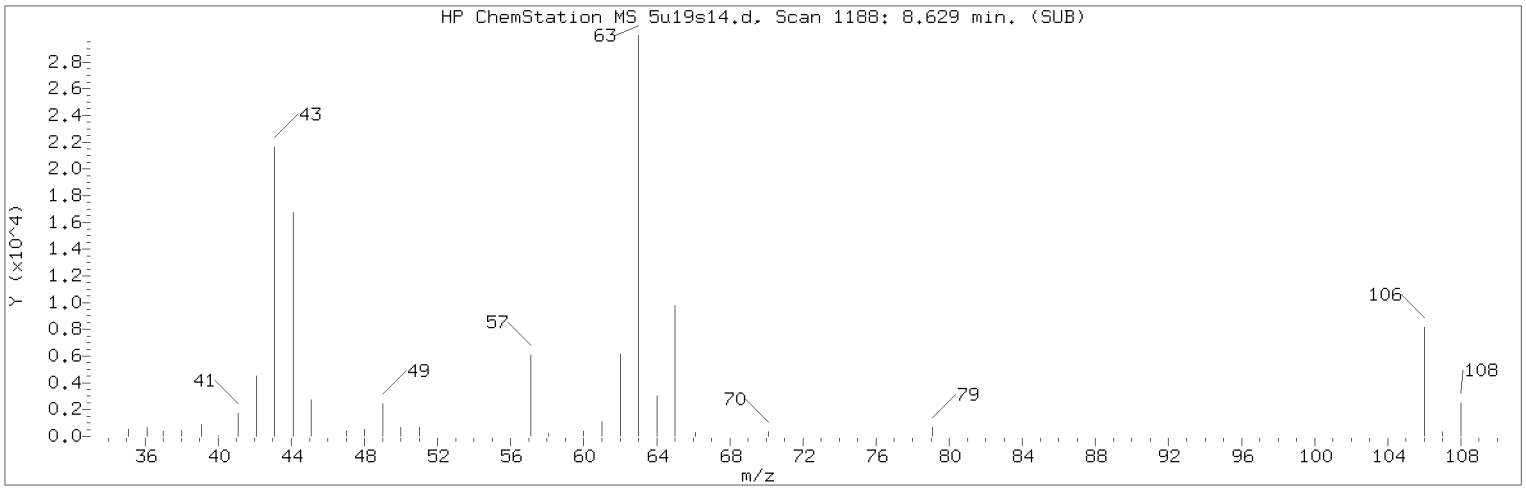
Sample Name: C5009MSD Lab Sample ID: 9662312MSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
109) Xylene (Total)	(3)		106	835984	67.702
115)$4-Bromofluorobenzene	(3)	11.873	95	475378	55.036
117) 1,1,2,2-Tetrachloroethane	(4)	11.989	83	230670M	19.328
130) 1,3-Dichlorobenzene	(4)	12.751	146	364722	19.995
132)*1,4-Dichlorobenzene-d4	(4)	12.805	152	529937	50.000
134) 1,4-Dichlorobenzene	(4)	12.824	146	379752	20.359
139) 1,2-Dichlorobenzene	(4)	13.098	146	353382	20.281

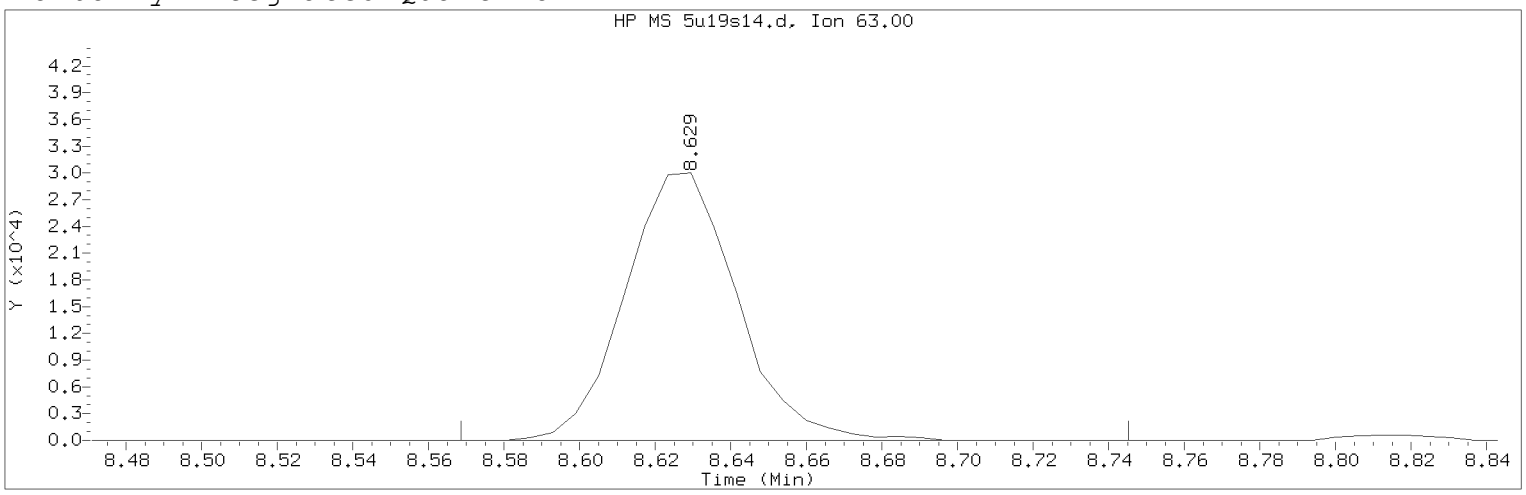
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s14.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:54 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009MSD Lab Sample ID: 9662312MSD

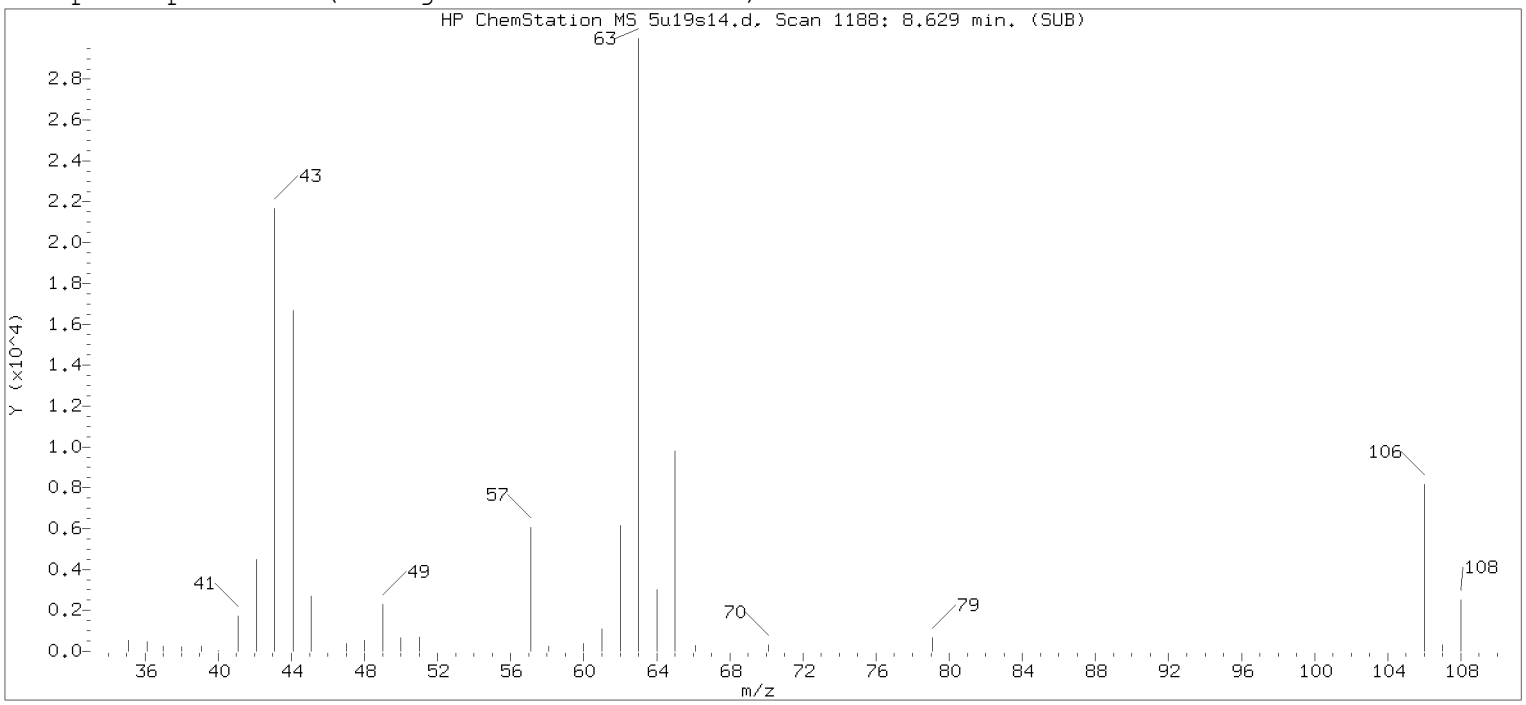
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1188
Retention Time (minutes): 8.629
Quant Ion : 63.00
Area (flag) : 61719M
On-Column Amount (ng) : 18.2792
Integration start scan : 1177 Integration stop scan: 1206
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

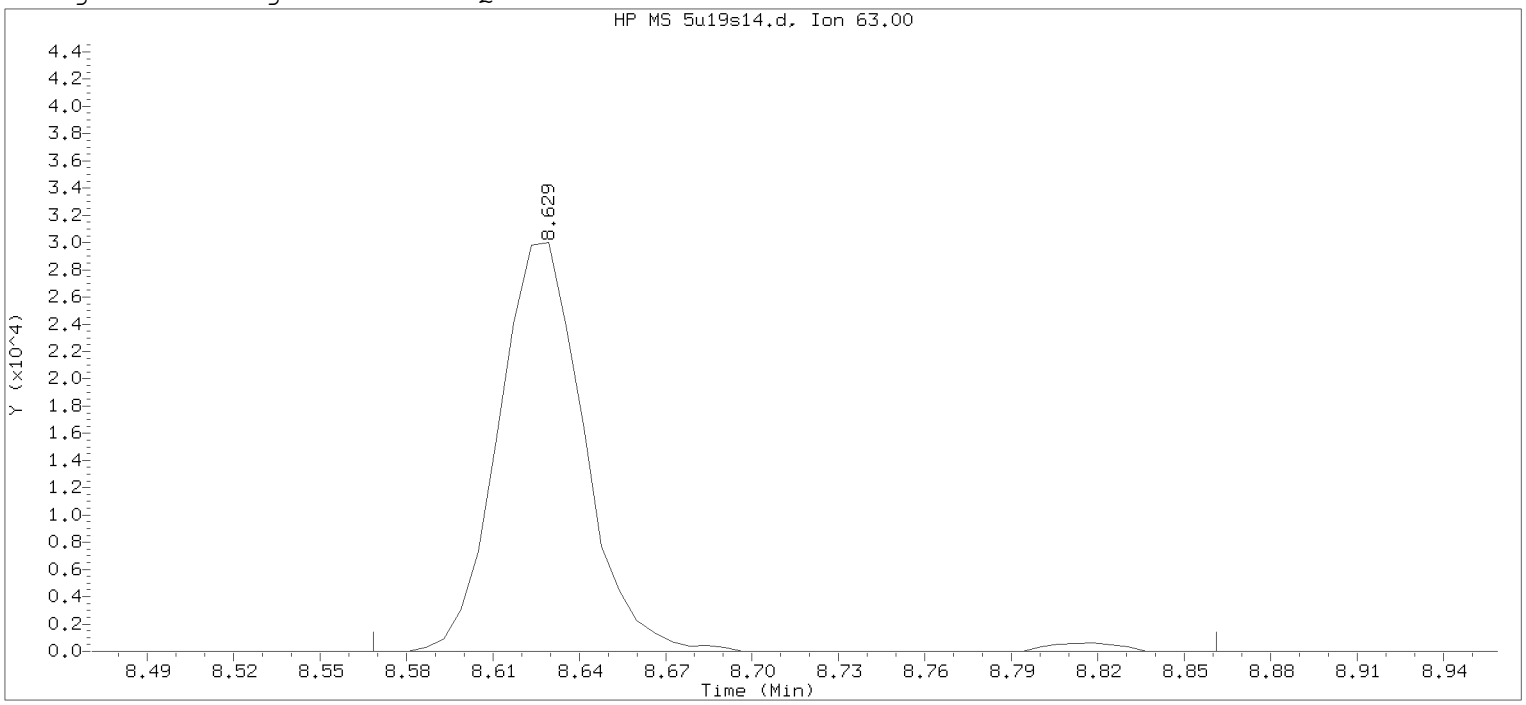
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s14.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:54 Analyst ID: PTH10165

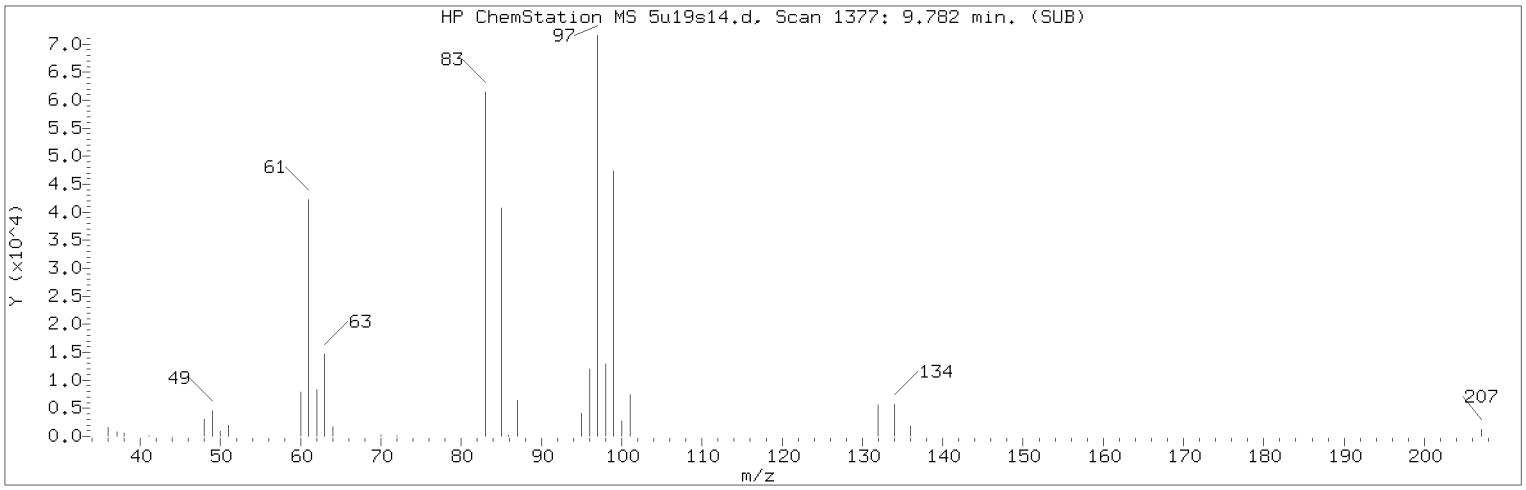
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:05 jkh09052

Sample Name: C5009MSD Lab Sample ID: 9662312MSD

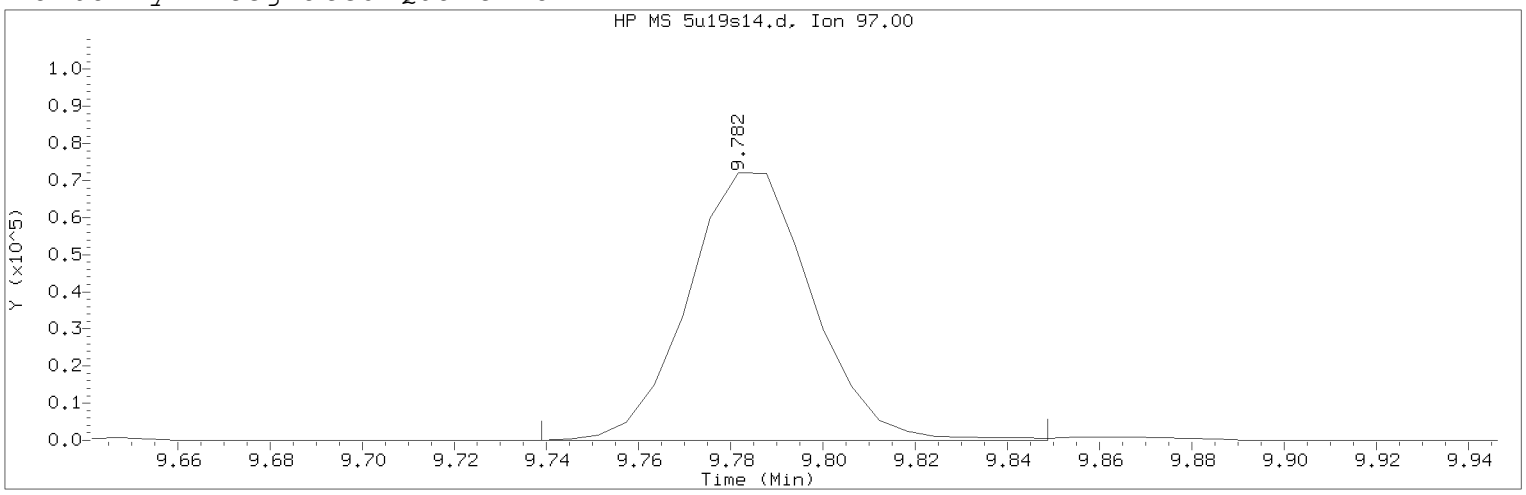
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1188
Retention Time (minutes): 8.629
Quant Ion : 63.00
Area : 62729
On-column Amount (ng) : 18.5785
Integration start scan : 1177 Integration stop scan: 1225
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13.
Target 3.5 esignature user id: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s14.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:54 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009MSD Lab Sample ID: 9662312MSD

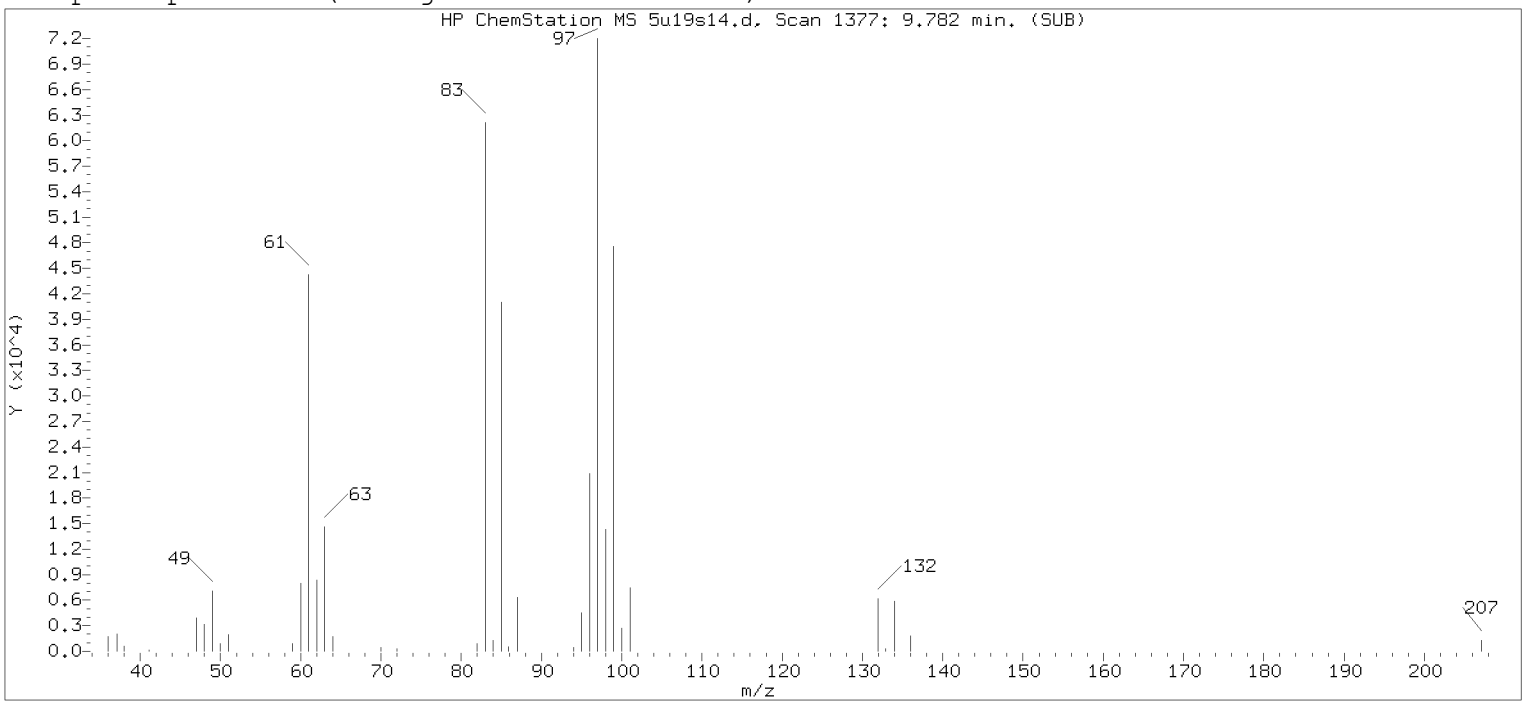
Compound Number : 93
Compound Name : 1,1,2-Trichloroethane
Scan Number : 1377
Retention Time (minutes): 9.782
Quant Ion : 97.00
Area (flag) : 134698M
On-Column Amount (ng) : 20.7046
Integration start scan : 1369 Integration stop scan: 1387
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

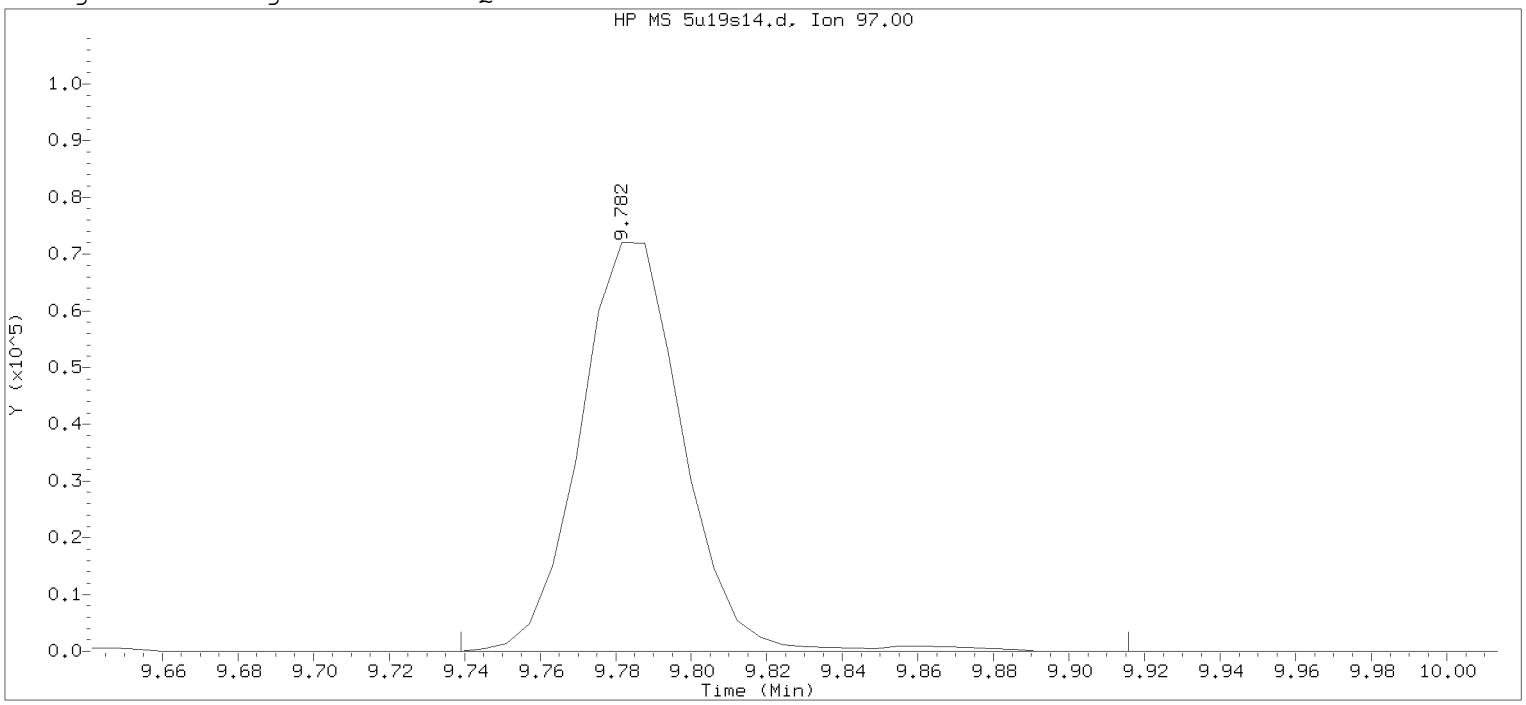
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s14.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:54 Analyst ID: PTH10165

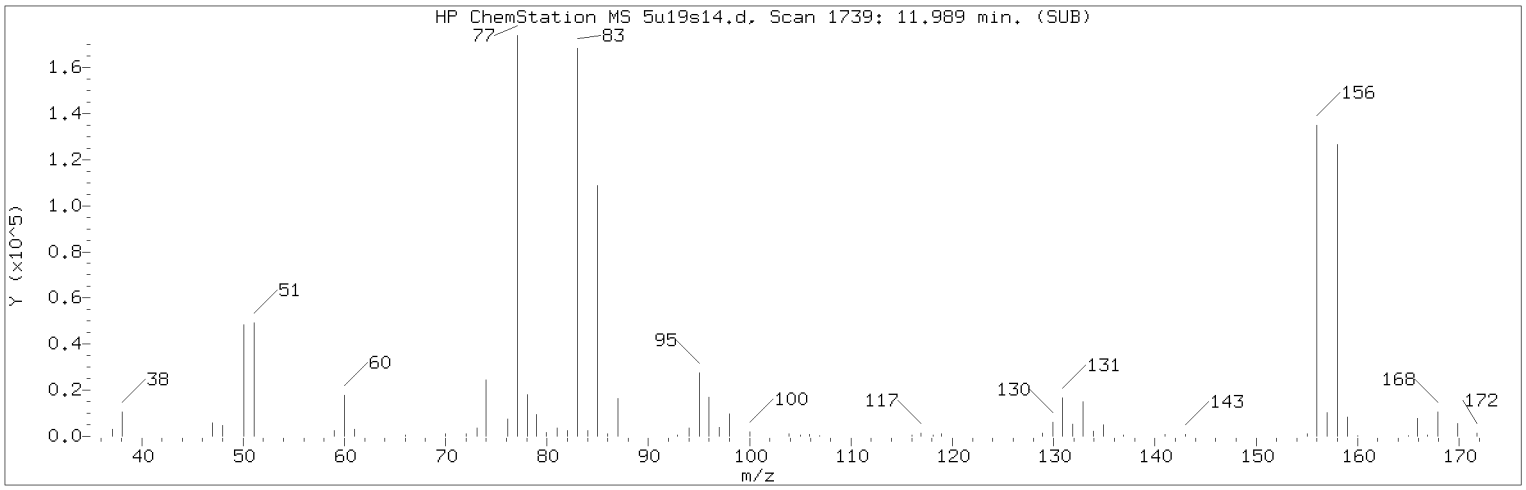
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:05 jkh09052

Sample Name: C5009MSD Lab Sample ID: 9662312MSD

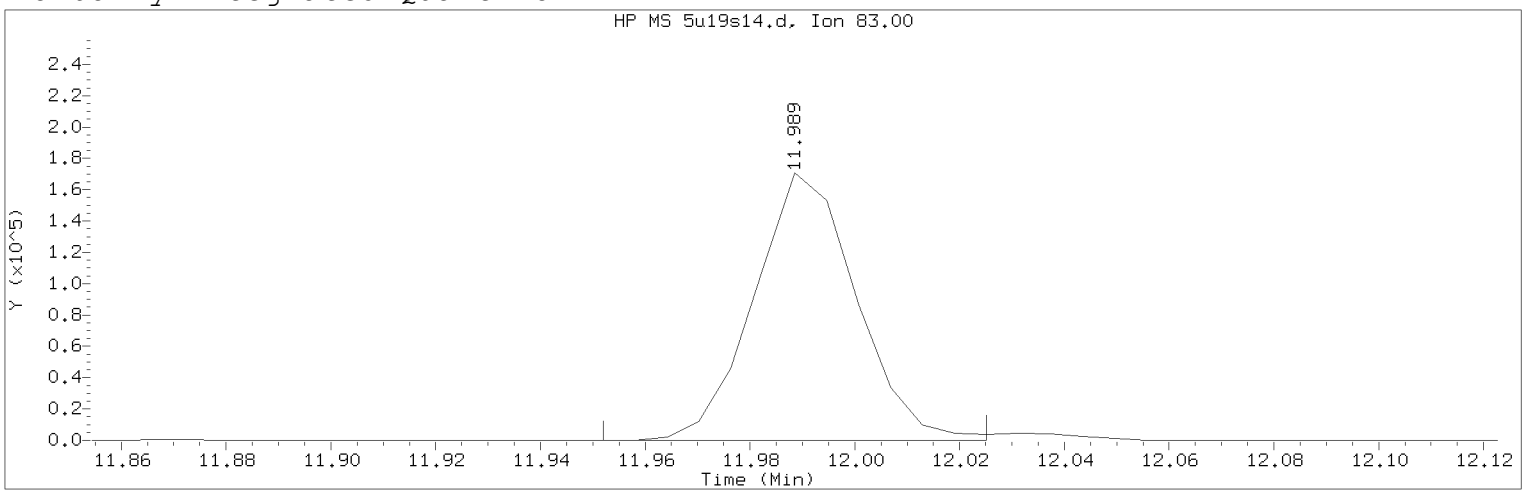
Compound Number : 93
Compound Name : 1,1,2-Trichloroethane
Scan Number : 1377
Retention Time (minutes): 9.782
Quant Ion : 97.00
Area : 136192
On-column Amount (ng) : 20.9344
Integration start scan : 1369 Integration stop scan: 1398
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13.
Target 3.5 esignature user id: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s14.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:54 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 jkh09052

Sample Name: C5009MSD Lab Sample ID: 9662312MSD

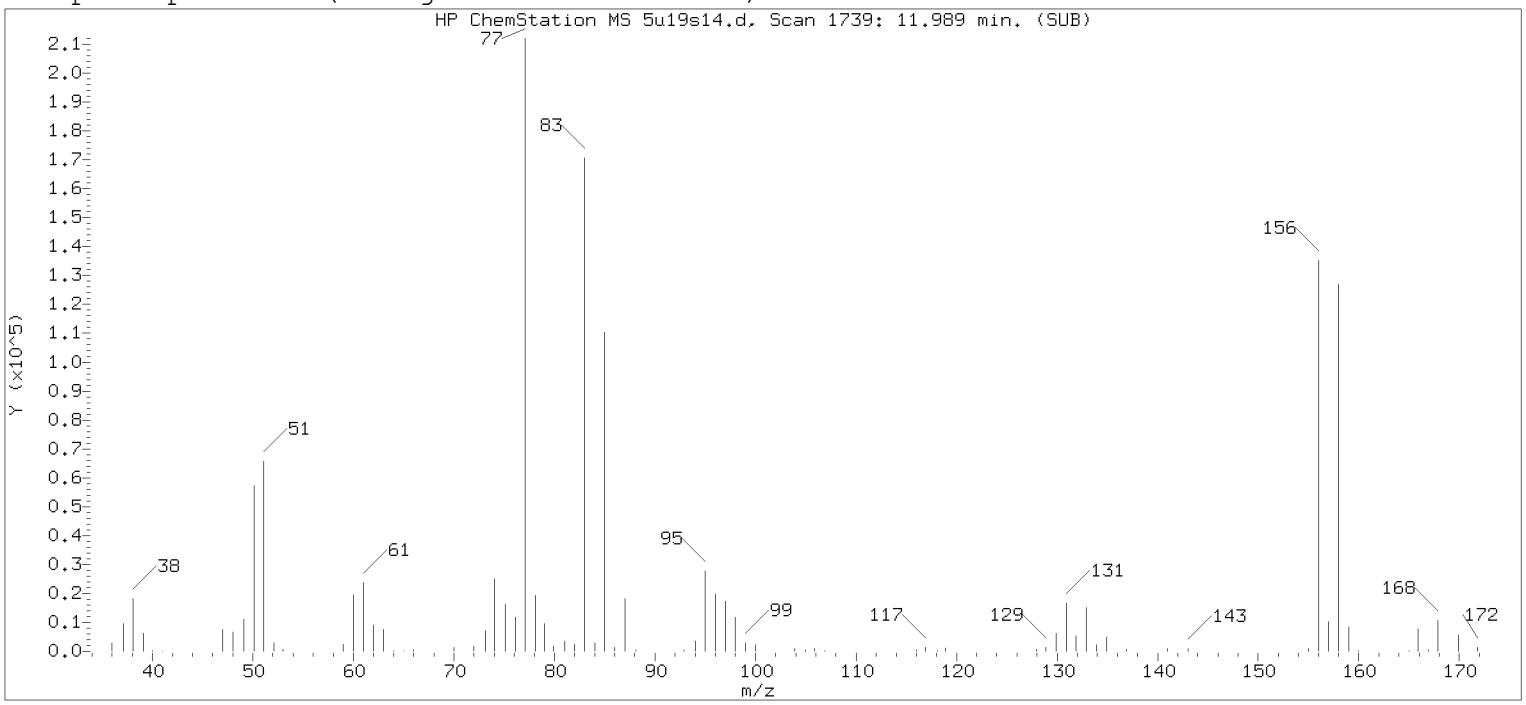
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1739
Retention Time (minutes): 11.989
Quant Ion : 83.00
Area (flag) : 230670M
On-Column Amount (ng) : 19.3283
Integration start scan : 1732 Integration stop scan: 1744
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

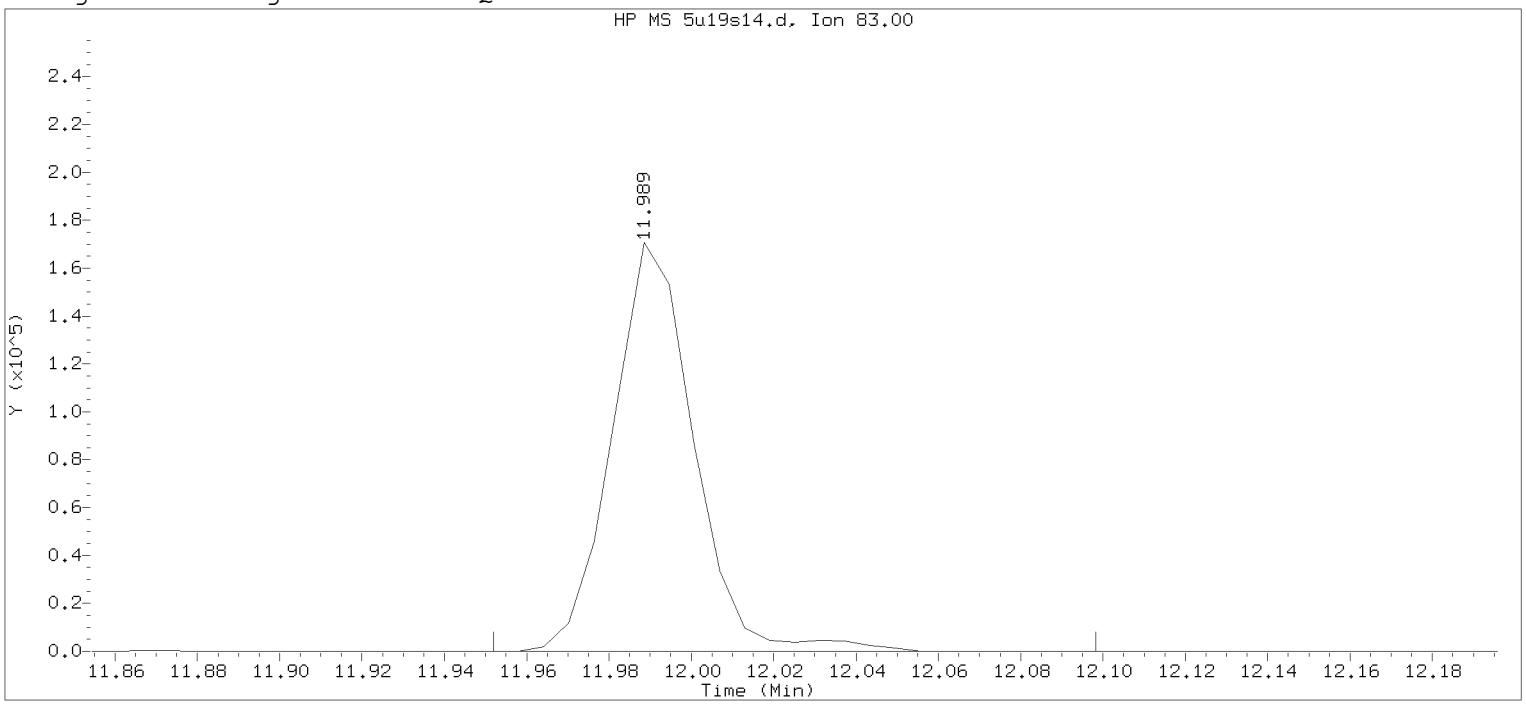
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 06/20/2018 at 14:13.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s14.d Instrument ID: HP26285.i
Injection date and time: 20-JUN-2018 01:54 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 20-Jun-2018 14:05 jkh09052

Sample Name: C5009MSD Lab Sample ID: 9662312MSD

Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1739
Retention Time (minutes): 11.989
Quant Ion : 83.00
Area : 235196
On-column Amount (ng) : 19.7075
Integration start scan : 1732 Integration stop scan: 1756
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 06/20/2018 at 14:13.
Target 3.5 esignature user id: jkh09052

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS548

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCS548

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	22	
74-87-3	Chloromethane	19	
106-99-0	1,3-Butadiene	39	
75-01-4	Vinyl Chloride	19	
74-83-9	Bromomethane	20	
75-00-3	Chloroethane	19	
109-66-0	n-Pentane	23	
75-69-4	Trichlorofluoromethane	22	
354-23-4	Freon 123a	22	
107-02-8	Acrolein	140	
75-35-4	1,1-Dichloroethene	24	
67-64-1	Acetone	240	
76-13-1	Freon 113	25	
67-63-0	2-Propanol	150	
74-88-4	Methyl Iodide	19	
75-15-0	Carbon Disulfide	21	
107-05-1	Allyl Chloride	19	
79-20-9	Methyl Acetate	22	
75-09-2	Methylene Chloride	22	
75-65-0	t-Butyl alcohol	200	
107-13-1	Acrylonitrile	110	
156-60-5	trans-1,2-Dichloroethene	22	
1634-04-4	Methyl Tertiary Butyl Ether	23	
110-54-3	n-Hexane	22	
75-34-3	1,1-Dichloroethane	21	
108-20-3	di-Isopropyl ether	20	
126-99-8	2-Chloro-1,3-butadiene	22	
637-92-3	Ethyl t-butyl ether	21	
156-59-2	cis-1,2-Dichloroethene	22	
540-59-0	1,2-Dichloroethene (Total)	43	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS548

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCS548

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
78-93-3	2-Butanone	200	
594-20-7	2,2-Dichloropropane	24	
107-12-0	Propionitrile	160	
126-98-7	Methacrylonitrile	160	
74-97-5	Bromochloromethane	20	
109-99-9	Tetrahydrofuran	100	
67-66-3	Chloroform	21	
71-55-6	1,1,1-Trichloroethane	22	
110-82-7	Cyclohexane	23	
563-58-6	1,1-Dichloropropene	21	
56-23-5	Carbon Tetrachloride	25	
78-83-1	Isobutyl Alcohol	520	
71-43-2	Benzene	21	
107-06-2	1,2-Dichloroethane	21	
994-05-8	t-Amyl methyl ether	21	
142-82-5	n-Heptane	27	
71-36-3	n-Butanol	950	
79-01-6	Trichloroethene	21	
919-94-8	t-Amyl ethyl ether	22	
108-87-2	Methylcyclohexane	19	
78-87-5	1,2-Dichloropropane	21	
74-95-3	Dibromomethane	20	
123-91-1	1,4-Dioxane	450	
80-62-6	Methyl Methacrylate	20	
75-27-4	Bromodichloromethane	20	
79-46-9	2-Nitropropane	21	
110-75-8	2-Chloroethyl Vinyl Ether	21	
10061-01-5	cis-1,3-Dichloropropene	20	
108-10-1	4-Methyl-2-pentanone	110	
108-88-3	Toluene	21	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS548

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCS548

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
10061-02-6	trans-1,3-Dichloropropene	18	
542-75-6	1,3-Dichloropropene (total)	38	
97-63-2	Ethyl Methacrylate	19	
79-00-5	1,1,2-Trichloroethane	20	
127-18-4	Tetrachloroethene	21	
142-28-9	1,3-Dichloropropane	19	
591-78-6	2-Hexanone	120	
124-48-1	Dibromochloromethane	18	
106-93-4	1,2-Dibromoethane	19	
544-10-5	1-Chlorohexane	23	
108-90-7	Chlorobenzene	20	
630-20-6	1,1,1,2-Tetrachloroethane	19	
100-41-4	Ethylbenzene	21	
179601-23-1	m+p-Xylene	42	
95-47-6	o-Xylene	20	
1330-20-7	Xylene (Total)	62	
100-42-5	Styrene	21	
75-25-2	Bromoform	18	
98-82-8	Isopropylbenzene	22	
108-94-1	Cyclohexanone	730	
108-86-1	Bromobenzene	18	
79-34-5	1,1,2,2-Tetrachloroethane	19	
96-18-4	1,2,3-Trichloropropane	19	
110-57-6	trans-1,4-Dichloro-2-butene	80	
103-65-1	n-Propylbenzene	23	
95-49-8	2-Chlorotoluene	20	
106-43-4	4-Chlorotoluene	19	
108-67-8	1,3,5-Trimethylbenzene	22	
98-06-6	tert-Butylbenzene	22	
76-01-7	Pentachloroethane	20	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS548

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCS548

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18jun19a.b/5u19s02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 06/19/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
95-63-6	1,2,4-Trimethylbenzene	22	
135-98-8	sec-Butylbenzene	24	
541-73-1	1,3-Dichlorobenzene	19	
99-87-6	p-Isopropyltoluene	23	
106-46-7	1,4-Dichlorobenzene	20	
526-73-8	1,2,3-Trimethylbenzene	21	
100-44-7	Benzyl Chloride	19	
141-93-5	1,3-Diethylbenzene	21	
105-05-5	1,4-Diethylbenzene	20	
95-50-1	1,2-Dichlorobenzene	19	
104-51-8	n-Butylbenzene	24	
135-01-3	1,2-Diethylbenzene	21	
25340-17-4	Diethylbenzene (total)	62	
96-12-8	1,2-Dibromo-3-chloropropane	18	
108-70-3	1,3,5-Trichlorobenzene	20	
120-82-1	1,2,4-Trichlorobenzene	18	
87-68-3	Hexachlorobutadiene	21	
91-20-3	Naphthalene	20	
87-61-6	1,2,3-Trichlorobenzene	19	
91-57-6	2-Methylnaphthalene	16	B

^

Data file: /chem2/HP26285.i/18jun19a.b/5u19s02.d Injection date and time: **19-JUN-2018 20:48**
Data file Sample Info. Line: LCS548;LCS548;1;3;LCS;;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 21:09 pth10165

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **5181701**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(0.000)	347	65	300021	(-4)	250.00	
66) Fluorobenzene	6.995	(0.000)	920	96	1188175	(7)	50.00	
101) Chlorobenzene-d5	10.787	(0.000)	1542	117	1003928	(5)	50.00	
132) 1,4-Dichlorobenzene-d4	12.811	(-0.006)	1874	152	597749	(2)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.063	(0.000)	113	316833	49.310	99%		80 - 116
57) 1,2-Dichloroethane-d4	(2)	6.538	(0.000)	102	68553	49.587	99%		77 - 113
84) Toluene-d8	(3)	9.166	(0.000)	98	1220886	49.815	100%		80 - 113
115) 4-Bromofluorobenzene	(3)	11.873	(0.000)	95	535309	53.372	107%		78 - 113

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ (in sample)
3) Dichlorodifluoromethane	(2)	1.606	(0.000)	85	180729	22.081	22.08			0.5	1
4) Chloromethane	(2)	1.771	(0.000)	50	110413	18.943	18.94			0.5	1
5) 1,3-Butadiene	(2)	1.880	(0.000)	39	146737	38.719	38.72			0.5	1
6) Vinyl Chloride	(2)	1.868	(0.000)	62	110534	19.403	19.40			0.5	1
8) Bromomethane	(2)	2.137	(0.000)	94	96074	19.989	19.99			0.5	1
9) Chloroethane	(2)	2.234	(0.000)	64	57769	19.108	19.11			0.5	1
11) n-Pentane	(2)	2.515	(0.000)	43	116018	23.205	23.21			2	10
12) Trichlorofluoromethane	(2)	2.454	(0.000)	101	202172	22.443	22.44			0.5	1
15) Freon 123a	(2)	2.752	(-0.000)	67	142248	21.852	21.85			2	5
16) Acrolein	(1)	2.832	(0.000)	56	295110	142.757	142.76			40	100
17) 1,1-Dichloroethene	(2)	2.935	(0.000)	96	115449	23.924	23.92			0.5	1
18) Acetone	(1)	2.966	(0.001)	58	260462	235.064	235.06			6	20
19) Freon 113	(2)	2.966	(0.000)	101	126725	24.853	24.85			2	10
21) 2-Propanol	(1)	3.112	(-0.001)	45	103341	145.948	145.95			50	100
22) Methyl Iodide	(2)	3.130	(-0.003)	142	216758	19.040	19.04			0.5	1
23) Carbon Disulfide	(2)	3.191	(0.000)	76	325546	20.680	20.68			1	5
25) Allyl Chloride	(2)	3.338	(0.000)	41	158526	18.656	18.66			1	5
27) Methyl Acetate	(2)	3.313	(0.000)	43	158687	22.341	22.34			1	5
28) Methylene Chloride	(2)	3.490	(0.000)	84	136905	22.033	22.03			0.5	1
30) t-Butyl alcohol	(1)	3.606	(-0.000)	59	279363	202.518	202.52			5	20
31) Acrylonitrile	(2)	3.770	(0.000)	53	396788	107.387	107.39			4	20
32) trans-1,2-Dichloroethene	(2)	3.838	(0.000)	96	129693	21.663	21.66			0.5	1
33) Methyl Tertiary Butyl Ether	(2)	3.825	(0.000)	73	346597	23.140	23.14			0.5	1
34) n-Hexane	(2)	4.228	(0.000)	57	166711	22.049	22.05			2	5
36) 1,1-Dichloroethane	(2)	4.459	(0.000)	63	229261	21.302	21.30			0.5	1
38) di-Isopropyl ether	(2)	4.526	(0.000)	45	382591	20.441	20.44			0.5	1
39) 2-Chloro-1,3-butadiene	(2)	4.575	(0.000)	53	177634	21.935	21.93			1	5
40) Ethyl t-butyl ether	(2)	5.081	(0.000)	59	316880	21.477	21.48			0.5	1
42) cis-1,2-Dichloroethene	(2)	5.325	(-0.000)	96	153462	21.608	21.61			0.5	1
43) 1,2-Dichloroethene (Total)	(2)			96	283155	43.271	43.27			0.5	1
44) 2-Butanone	(2)	5.307	(0.000)	43	1095763	204.077	204.08			3	10

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s02.d Injection date and time: **19-JUN-2018 20:48**
Data file Sample Info. Line: LCS548;LCS548;1;3;LCS;;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 21:09 pth10165

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **5181701**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) 2,2-Dichloropropane	(2)	5.325(0.000)	77	137915	23.578	23.58			0.5	1
47) Propionitrile	(1)	5.392(-0.000)	54	260716	158.217	158.22			30	100
48) Methacrylonitrile	(2)	5.624(-0.000)	67	642469	157.809	157.81			10	50
49) Bromochloromethane	(2)	5.666(0.000)	128	74153	19.651	19.65			1	5
50) Tetrahydrofuran	(1)	5.685(-0.001)	71	162087	102.901	102.90			4	10
51) Chloroform	(2)	5.837(-0.000)	83	252405	20.721	20.72			0.5	1
53) 1,1,1-Trichloroethane	(2)	6.057(0.000)	97	233228	22.319	22.32			0.5	1
54) Cyclohexane	(2)	6.160(-0.000)	56	206228	22.680	22.68			2	5
55) 1,1-Dichloropropene	(2)	6.288(0.000)	75	177648	21.458	21.46			1	5
56) Carbon Tetrachloride	(2)	6.276(0.000)	117	189922	24.871	24.87			0.5	1
58) Isobutyl Alcohol	(1)	6.489(-0.001)	41	249500	521.306	521.31			100	250
60) Benzene	(2)	6.563(0.000)	78	573849	21.470	21.47			0.5	1
61) 1,2-Dichloroethane	(2)	6.648(0.000)	62	193902	20.883	20.88			0.5	1
72) t-Amyl ethyl ether	(2)	7.879(-0.000)	87	171122	21.643	21.64			0.5	1
65) t-Amyl methyl ether	(2)	6.776(0.000)	73	322182	21.140	21.14			0.5	1
67) n-Heptane	(2)	7.020(0.000)	43	198131	27.023	27.02			2	5
69) n-Butanol	(1)	7.428(-0.001)	56	369806	945.855	945.85			100	250
71) Trichloroethene	(2)	7.501(-0.000)	95	154180	21.175	21.17			0.5	1
73) Methylcyclohexane	(2)	7.818(-0.000)	83	216517	18.858	18.86			1	5
74) 1,2-Dichloropropane	(2)	7.855(-0.000)	63	149150	21.444	21.44			0.5	1
75) Dibromomethane	(2)	7.965(-0.000)	93	95576	20.075	20.08			0.5	1
76) 1,4-Dioxane	(1)	7.965(-0.001)	88	53790M	446.541	446.54			70	250
77) Methyl Methacrylate	(2)	7.971(-0.000)	69	125994	19.525	19.52			1	5
79) Bromodichloromethane	(2)	8.227(-0.000)	83	183161	19.981	19.98			0.5	1
80) 2-Nitropropane	(2)	8.520(-0.000)	41	51451	21.094	21.09			2	10
81) 2-Chloroethyl Vinyl Ether	(2)	8.629(-0.000)	63	79515M	20.674	20.67			2	10
82) cis-1,3-Dichloropropene	(2)	8.818(-0.000)	75	222821	19.523	19.52			0.5	1
83) 4-Methyl-2-pentanone	(2)	9.026(-0.000)	43	1226063	114.268	114.27			3	10
89) Toluene	(3)	9.251(0.000)	92	383826	20.579	20.58			0.5	1
90) trans-1,3-Dichloropropene	(3)	9.562(0.000)	75	198865	18.277	18.28			0.5	1
91) 1,3-Dichloropropene (total)	(3)		100	421686	37.800	37.80			1	5
92) Ethyl Methacrylate	(3)	9.647(-0.000)	69	207545	18.975	18.98			1	5
93) 1,1,2-Trichloroethane	(3)	9.788(0.000)	97	148463	19.653	19.65			0.5	1
94) Tetrachloroethene	(3)	9.873(-0.000)	166	179285	20.685	20.69			0.5	1
95) 1,3-Dichloropropane	(3)	9.964(0.000)	76	228575	19.084	19.08			0.5	1
97) 2-Hexanone	(3)	10.038(0.000)	43	1108932	120.744	120.74			3	10
98) Dibromochloromethane	(3)	10.202(-0.000)	129	152821	18.332	18.33			0.5	1
100) 1,2-Dibromoethane	(3)	10.312(0.000)	107	155261	18.815	18.81			0.5	1
102) 1-Chlorohexane	(3)	10.818(-0.000)	91	212673	22.563	22.56			1	5
103) Chlorobenzene	(3)	10.818(-0.000)	112	463870	20.076	20.08			0.5	1
104) 1,1,1,2-Tetrachloroethane	(3)	10.915(-0.000)	131	155227	19.439	19.44			0.5	1
105) Ethylbenzene	(3)	10.922(-0.000)	91	771817	21.107	21.11			0.5	1
107) m+p-Xylene	(3)	11.050(-0.000)	106	604357	41.911	41.91			0.5	1
108) o-Xylene	(3)	11.397(-0.000)	106	283657	20.027	20.03			0.5	1
109) Xylene (Total)	(3)		106	888014	61.938	61.94			0.5	1
110) Styrene	(3)	11.415(0.000)	104	478865	20.599	20.60			1	5
111) Bromoform	(3)	11.580(-0.000)	173	111662	17.552	17.55			0.5	4
112) Isopropylbenzene	(3)	11.726(-0.000)	105	756927	22.328	22.33			1	5
113) Cyclohexanone	(1)	11.799(-0.001)	55	388554	729.082	729.08			25	100
116) Bromobenzene	(4)	11.994(0.000)	156	202381	18.330	18.33			1	5
117) 1,1,2,2-Tetrachloroethane	(4)	11.988(0.000)	83	257415	19.122	19.12			0.5	1
118) 1,2,3-Trichloropropane	(4)	12.037(0.000)	110	77610	18.948	18.95			1	5
119) trans-1,4-Dichloro-2-butene	(4)	12.019(0.000)	53	287858	79.817	79.82			15	50
120) n-Propylbenzene	(4)	12.074(0.000)	91	971876	22.590	22.59			1	5

M = Compound was manually integrated.

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Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18jun19a.b/5u19s02.d Injection date and time: **19-JUN-2018 20:48**
Data file Sample Info. Line: LCS548;LCS548;1;3;LCS;;;;5u19b01; Instrument ID: **HP26285.i** Batch: **5181701AA**
Date, time and analyst ID of latest file update: 19-Jun-2018 21:09 pth10165

Blank Data file reference: **/chem2/HP26285.i/18jun19a.b/5u19b01.d**

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: **5181701**
Calibration date and time (Last Method Edit): 19-JUN-2018 20:26
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18jun19a.b/5u19c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

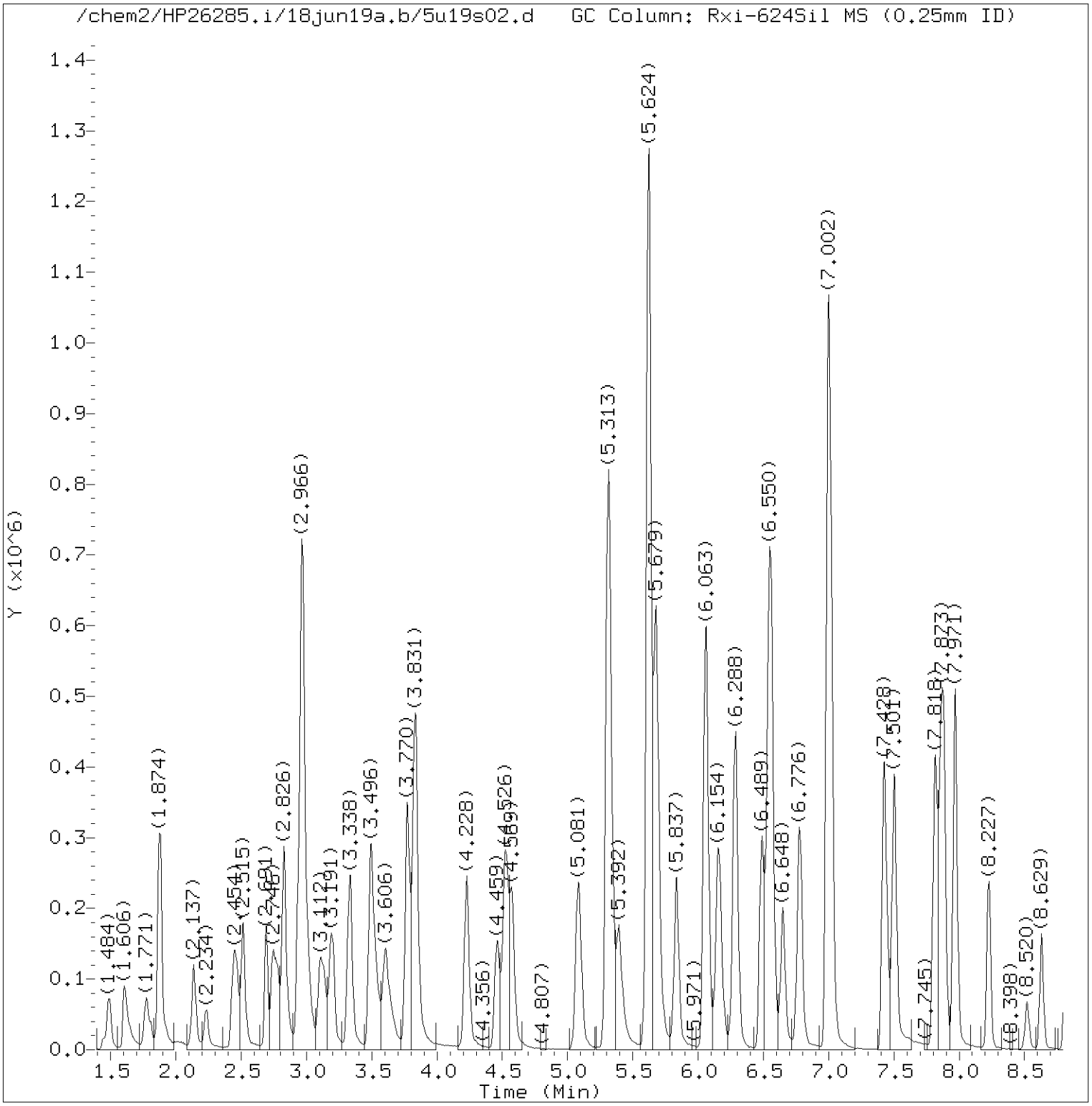
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
121) 2-Chlorotoluene	(4)	12.153(-0.000)	126	193250	20.064	20.06			1	5
122) 4-Chlorotoluene	(4)	12.250(0.000)	126	196920	19.321	19.32			1	5
123) 1,3,5-Trimethylbenzene	(4)	12.226(0.000)	105	670275	21.611	21.61			1	5
125) tert-Butylbenzene	(4)	12.476(0.000)	134	133032M	21.680	21.68			1	5
126) Pentachloroethane	(4)	12.506(0.000)	167	119973	19.899	19.90			1	5
127) 1,2,4-Trimethylbenzene	(4)	12.525(0.000)	105	691203	21.527	21.53			1	5
128) sec-Butylbenzene	(4)	12.653(0.000)	105	862112	23.685	23.68			1	5
130) 1,3-Dichlorobenzene	(4)	12.750(0.000)	146	396214	19.257	19.26			1	5
131) p-Isopropyltoluene	(4)	12.769(0.000)	119	745071	23.123	23.12			1	5
134) 1,4-Dichlorobenzene	(4)	12.824(0.000)	146	413904	19.672	19.67			1	5
135) 1,2,3-Trimethylbenzene	(4)	12.842(0.000)	105	713932	20.947	20.95			1	5
136) Benzyl Chloride	(4)	12.909(0.000)	91	448233	18.620	18.62			1	5
137) 1,3-Diethylbenzene	(4)	12.982(0.000)	119	438840	20.947	20.95			1	5
138) 1,4-Diethylbenzene	(4)	13.055(0.000)	119	456251	20.358	20.36			1	5
139) 1,2-Dichlorobenzene	(4)	13.098(0.000)	146	378594	19.263	19.26			1	5
140) n-Butylbenzene	(4)	13.074(0.000)	92	386876M	23.505	23.50			1	5
141) 1,2-Diethylbenzene	(4)	13.128(0.000)	119	366216	20.780	20.78			1	5
142) Diethylbenzene (total)	(4)		100	1261307	62.084	62.08			1	5
143) 1,2-Dibromo-3-chloropropane	(4)	13.671(0.000)	75	57009	17.729	17.73			2	5
145) 1,3,5-Trichlorobenzene	(4)	13.799(0.000)	180	277828	19.800	19.80			1	5
147) 1,2,4-Trichlorobenzene	(4)	14.244(0.000)	180	230484	18.291	18.29			1	5
148) Hexachlorobutadiene	(4)	14.335(0.000)	225	124825	20.701	20.70			2	5
149) Naphthalene	(4)	14.427(0.000)	128	779682	19.594	19.59			1	5
150) 1,2,3-Trichlorobenzene	(4)	14.579(0.000)	180	227076	19.462	19.46			1	5
151) 2-Methylnaphthalene	(4)	15.213(0.000)	142	359423	16.342	16.34	2.916	B	2	5

M = Compound was manually integrated. B = Compound detected in referenced method blank.

Total number of targets = 110

Digitally signed by Patrick T. Herres on 06/19/2018 at 21:10. Target 3.5 esignature user ID: pth10165

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

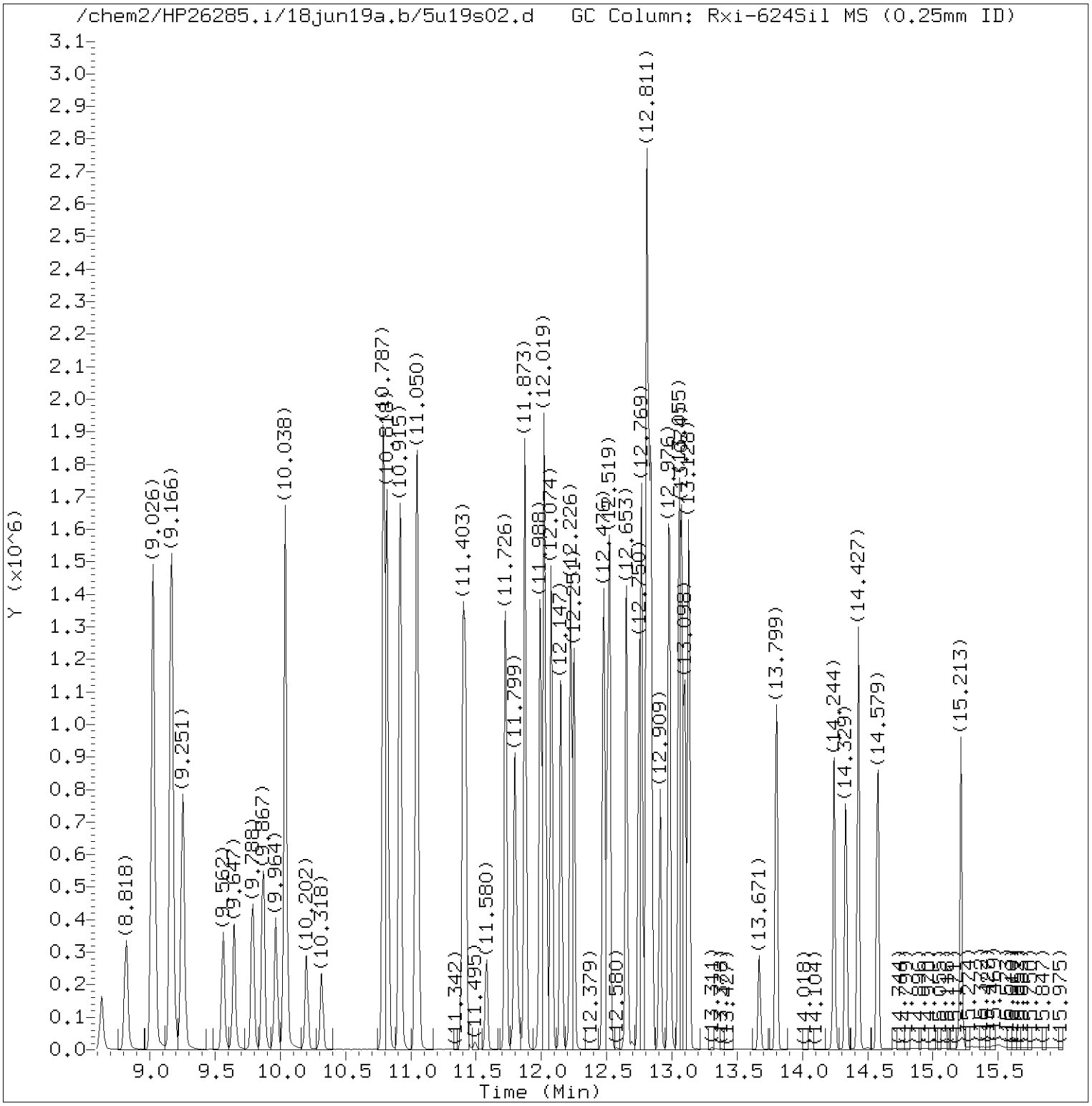
Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:09 pth10165

Sample Name: LCS548 Lab Sample ID: LCS548

Digitally signed by Patrick T. Herres
on 06/19/2018 at 21:10.
Target 3.5 esignature user ID: pth10165



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:09 pth10165

Sample Name: LCS548 Lab Sample ID: LCS548

Digitally signed by Patrick T. Herres
on 06/19/2018 at 21:10.
Target 3.5 esignature user ID: pth10165

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:09 pth10165

Sample Name: LCS548 Lab Sample ID: LCS548

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.606	85	180729	22.081
4) Chloromethane	(2)	1.771	50	110413	18.943
6) Vinyl Chloride	(2)	1.868	62	110534	19.403
5) 1,3-Butadiene	(2)	1.881	39	146737	38.719
8) Bromomethane	(2)	2.137	94	96074	19.989
9) Chloroethane	(2)	2.234	64	57769	19.108
12) Trichlorofluoromethane	(2)	2.454	101	202172	22.443
11) n-Pentane	(2)	2.515	43	116018	23.205
15) Freon 123a	(2)	2.752	67	142248	21.852
16) Acrolein	(1)	2.832	56	295110	142.757
17) 1,1-Dichloroethene	(2)	2.935	96	115449	23.924
18) Acetone	(1)	2.966	58	260462	235.064
19) Freon 113	(2)	2.966	101	126725	24.853
21) 2-Propanol	(1)	3.112	45	103341	145.948
22) Methyl Iodide	(2)	3.130	142	216758	19.040
23) Carbon Disulfide	(2)	3.191	76	325546	20.680
27) Methyl Acetate	(2)	3.313	43	158687	22.341
25) Allyl Chloride	(2)	3.338	41	158526	18.656
28) Methylene Chloride	(2)	3.490	84	136905	22.033
29)*t-Butyl alcohol-d10	(1)	3.502	65	300021	250.000
30) t-Butyl alcohol	(1)	3.606	59	279363	202.518
31) Acrylonitrile	(2)	3.770	53	396788	107.387
33) Methyl Tertiary Butyl Ether	(2)	3.825	73	346597	23.140
32) trans-1,2-Dichloroethene	(2)	3.838	96	129693	21.663
34) n-Hexane	(2)	4.228	57	166711	22.049
36) 1,1-Dichloroethane	(2)	4.459	63	229261	21.302
38) di-Isopropyl ether	(2)	4.526	45	382591	20.441
39) 2-Chloro-1,3-butadiene	(2)	4.575	53	177634	21.935
40) Ethyl t-butyl ether	(2)	5.081	59	316880	21.477
44) 2-Butanone	(2)	5.307	43	1095763	204.077
45) 2,2-Dichloropropane	(2)	5.325	77	137915	23.578
42) cis-1,2-Dichloroethene	(2)	5.325	96	153462	21.608
47) Propionitrile	(1)	5.392	54	260716	158.217
48) Methacrylonitrile	(2)	5.624	67	642469	157.809
49) Bromochloromethane	(2)	5.666	128	74153	19.651
50) Tetrahydrofuran	(1)	5.685	71	162087	102.901
51) Chloroform	(2)	5.837	83	252405	20.721
53) 1,1,1-Trichloroethane	(2)	6.057	97	233228	22.319

* = Compound is an internal standard.

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on 06/19/2018 at 21:10.
Target 3.5 esignature user ID: pth10165

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:09 pth10165

Sample Name: LCS548 Lab Sample ID: LCS548

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
52)$Dibromofluoromethane	(2)	6.063	113	316833	49.310
43) 1,2-Dichloroethene (Total)	(2)		96	283155	43.271
54) Cyclohexane	(2)	6.160	56	206228	22.680
56) Carbon Tetrachloride	(2)	6.276	117	189922	24.871
55) 1,1-Dichloropropene	(2)	6.288	75	177648	21.458
58) Isobutyl Alcohol	(1)	6.489	41	249500	521.306
57)$1,2-Dichloroethane-d4	(2)	6.538	102	68553	49.587
60) Benzene	(2)	6.563	78	573849	21.470
61) 1,2-Dichloroethane	(2)	6.648	62	193902	20.883
65) t-Amyl methyl ether	(2)	6.776	73	322182	21.140
66)*Fluorobenzene	(2)	6.995	96	1188175	50.000
67) n-Heptane	(2)	7.020	43	198131	27.023
69) n-Butanol	(1)	7.428	56	369806	945.855
71) Trichloroethene	(2)	7.501	95	154180	21.175
73) Methylcyclohexane	(2)	7.818	83	216517	18.858
74) 1,2-Dichloropropane	(2)	7.855	63	149150	21.444
72) t-Amyl ethyl ether	(2)	7.879	87	171122	21.643
75) Dibromomethane	(2)	7.965	93	95576	20.075
76) 1,4-Dioxane	(1)	7.965	88	53790M	446.541
77) Methyl Methacrylate	(2)	7.971	69	125994	19.525
79) Bromodichloromethane	(2)	8.227	83	183161	19.981
80) 2-Nitropropane	(2)	8.520	41	51451	21.094
81) 2-Chloroethyl Vinyl Ether	(2)	8.629	63	79515M	20.674
82) cis-1,3-Dichloropropene	(2)	8.818	75	222821	19.523
83) 4-Methyl-2-pentanone	(2)	9.026	43	1226063	114.268
84)$Toluene-d8	(3)	9.166	98	1220886	49.815
89) Toluene	(3)	9.251	92	383826	20.579
90) trans-1,3-Dichloropropene	(3)	9.562	75	198865	18.277
92) Ethyl Methacrylate	(3)	9.647	69	207545	18.975
93) 1,1,2-Trichloroethane	(3)	9.788	97	148463	19.653
94) Tetrachloroethene	(3)	9.873	166	179285	20.685
95) 1,3-Dichloropropane	(3)	9.964	76	228575	19.084
97) 2-Hexanone	(3)	10.038	43	1108932	120.744
91) 1,3-Dichloropropene (total)	(3)		100	421686	37.800
98) Dibromochloromethane	(3)	10.202	129	152821	18.332
100) 1,2-Dibromoethane	(3)	10.312	107	155261	18.815
101)*Chlorobenzene-d5	(3)	10.787	117	1003928	50.000
102) 1-Chlorohexane	(3)	10.818	91	212673	22.563

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

Digitally signed by Patrick T. Herres
on 06/19/2018 at 21:10.
Target 3.5 esignature user ID: pth10165

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:09 pth10165

Sample Name: LCS548 Lab Sample ID: LCS548

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
103) Chlorobenzene	(3)	10.818	112	463870	20.076
104) 1,1,1,2-Tetrachloroethane	(3)	10.915	131	155227	19.439
105) Ethylbenzene	(3)	10.922	91	771817	21.107
107) m+p-Xylene	(3)	11.050	106	604357	41.911
108) o-Xylene	(3)	11.397	106	283657	20.027
110) Styrene	(3)	11.415	104	478865	20.599
111) Bromoform	(3)	11.580	173	111662	17.552
112) Isopropylbenzene	(3)	11.726	105	756927	22.328
109) Xylene (Total)	(3)		106	888014	61.938
113) Cyclohexanone	(1)	11.799	55	388554	729.082
115)$4-Bromofluorobenzene	(3)	11.873	95	535309	53.372
117) 1,1,2,2-Tetrachloroethane	(4)	11.988	83	257415	19.122
116) Bromobenzene	(4)	11.994	156	202381	18.330
119) trans-1,4-Dichloro-2-butene	(4)	12.019	53	287858	79.817
118) 1,2,3-Trichloropropane	(4)	12.037	110	77610	18.948
120) n-Propylbenzene	(4)	12.074	91	971876	22.590
121) 2-Chlorotoluene	(4)	12.153	126	193250	20.064
123) 1,3,5-Trimethylbenzene	(4)	12.226	105	670275	21.611
122) 4-Chlorotoluene	(4)	12.251	126	196920	19.321
125) tert-Butylbenzene	(4)	12.476	134	133032M	21.680
126) Pentachloroethane	(4)	12.507	167	119973	19.899
127) 1,2,4-Trimethylbenzene	(4)	12.525	105	691203	21.527
128) sec-Butylbenzene	(4)	12.653	105	862112	23.685
130) 1,3-Dichlorobenzene	(4)	12.750	146	396214	19.257
131) p-Isopropyltoluene	(4)	12.769	119	745071	23.123
132)*1,4-Dichlorobenzene-d4	(4)	12.811	152	597749	50.000
134) 1,4-Dichlorobenzene	(4)	12.824	146	413904	19.672
135) 1,2,3-Trimethylbenzene	(4)	12.842	105	713932	20.947
136) Benzyl Chloride	(4)	12.909	91	448233	18.620
137) 1,3-Diethylbenzene	(4)	12.982	119	438840	20.947
138) 1,4-Diethylbenzene	(4)	13.055	119	456251	20.358
140) n-Butylbenzene	(4)	13.074	92	386876M	23.505
139) 1,2-Dichlorobenzene	(4)	13.098	146	378594	19.263
141) 1,2-Diethylbenzene	(4)	13.128	119	366216	20.780
142) Diethylbenzene (total)	(4)		100	1261307	62.084
143) 1,2-Dibromo-3-chloropropane	(4)	13.671	75	57009	17.729
145) 1,3,5-Trichlorobenzene	(4)	13.799	180	277828	19.800
147) 1,2,4-Trichlorobenzene	(4)	14.244	180	230484	18.291

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

Digitally signed by Patrick T. Herres
on 06/19/2018 at 21:10.
Target 3.5 esignature user ID: pth10165

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

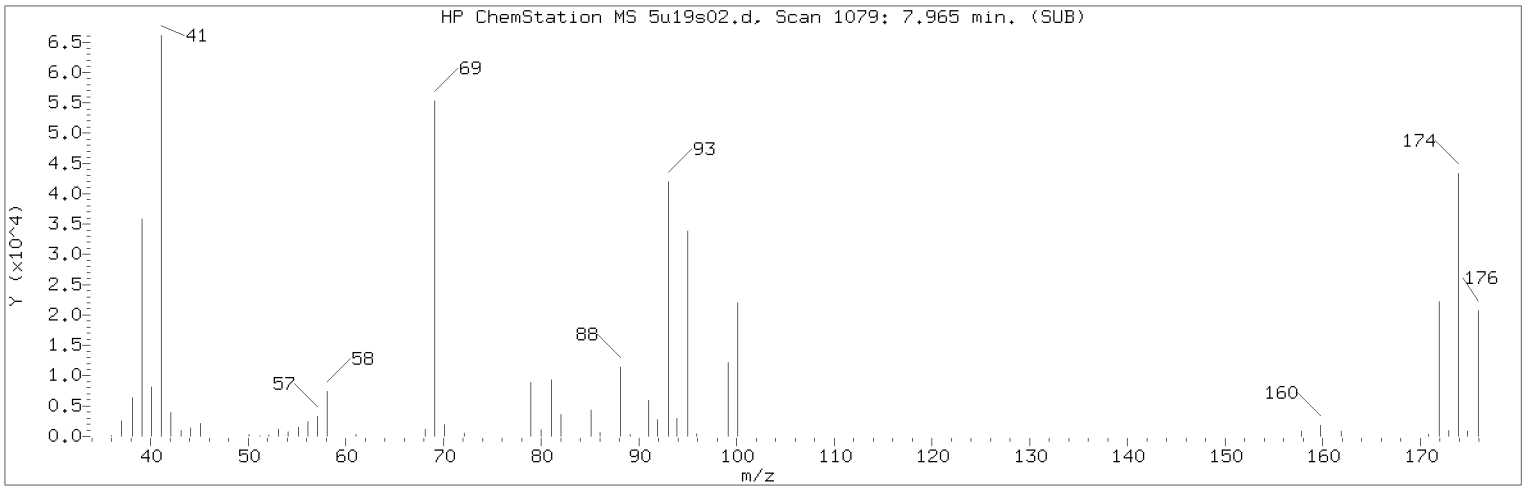
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:09 pth10165

Sample Name: LCS548 Lab Sample ID: LCS548

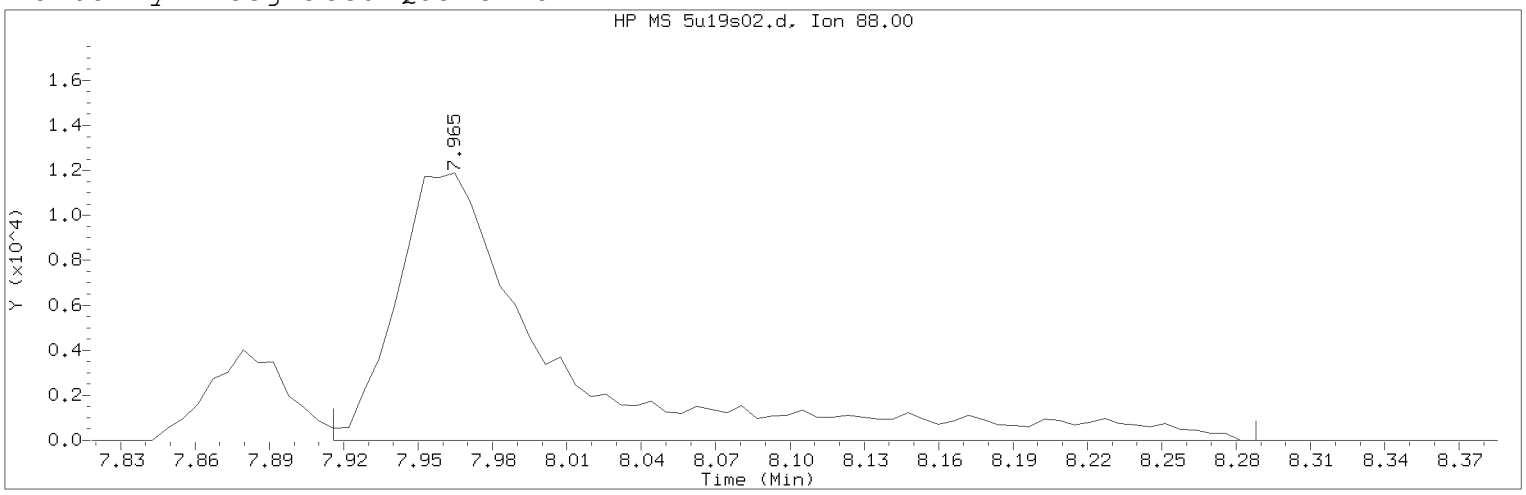
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
148) Hexachlorobutadiene	(4)	14.335	225	124825	20.701
149) Naphthalene	(4)	14.427	128	779682	19.594
150) 1,2,3-Trichlorobenzene	(4)	14.579	180	227076	19.462
151) 2-Methylnaphthalene	(4)	15.213	142	359423	16.342

Digitally signed by Patrick T. Herres
on 06/19/2018 at 21:10.
Target 3.5 esignature user ID: pth10165

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:09 pth10165

Sample Name: LCS548 Lab Sample ID: LCS548

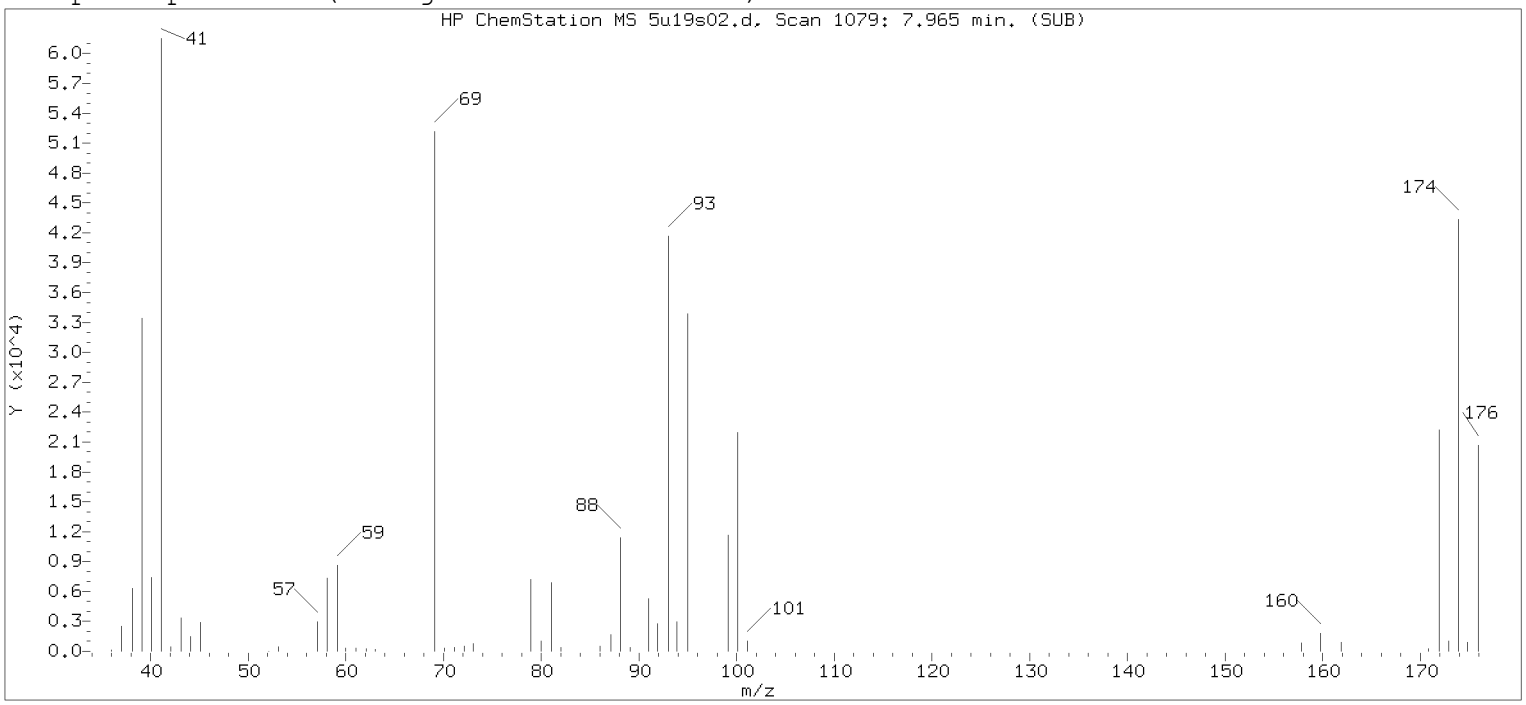
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 1079
Retention Time (minutes): 7.965
Quant Ion : 88.00
Area (flag) : 53790M
On-Column Amount (ng) : 446.5411
Integration start scan : 1070 Integration stop scan: 1131
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

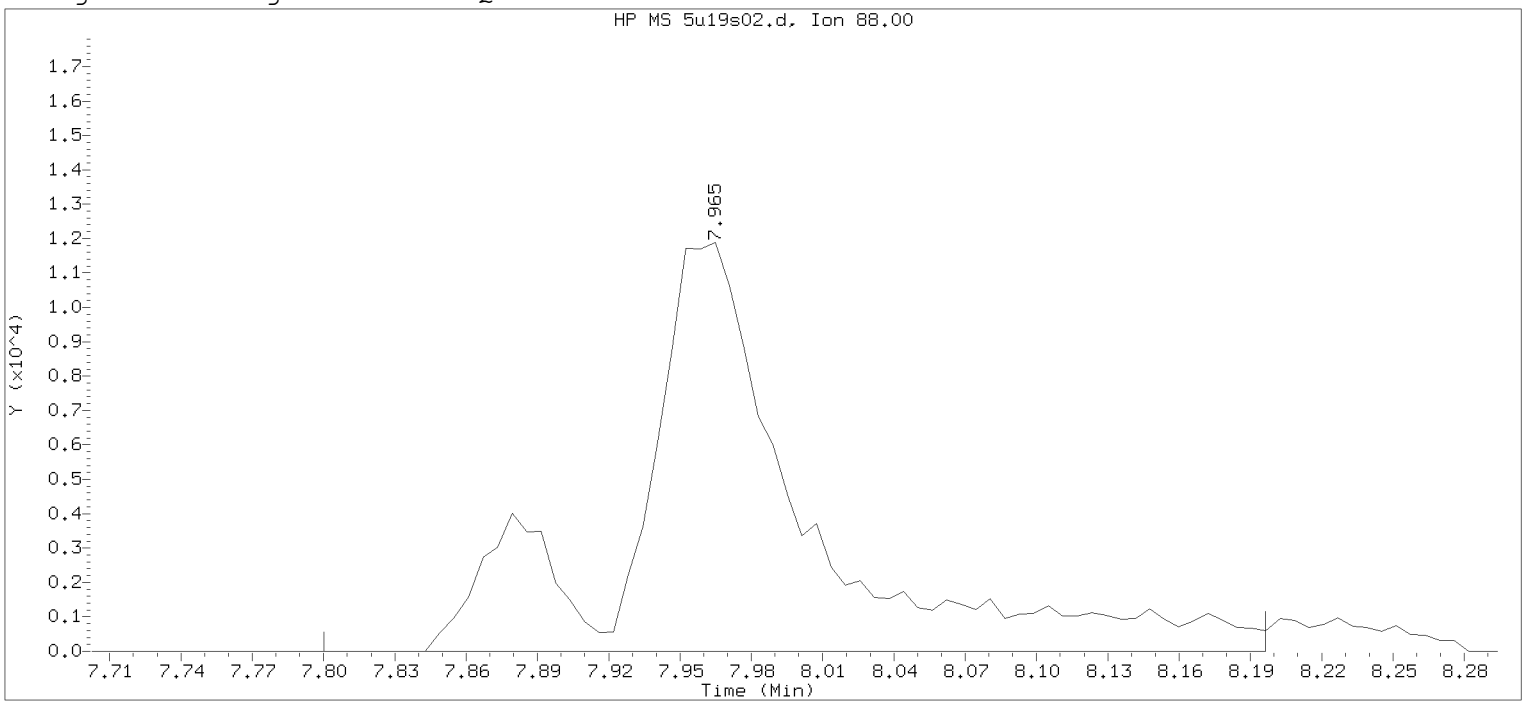
Analyst responsible for change: Digitally signed by Patrick T. Herres
on 06/19/2018 at 21:10.
Target 3.5 esignature user ID: pth10165

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

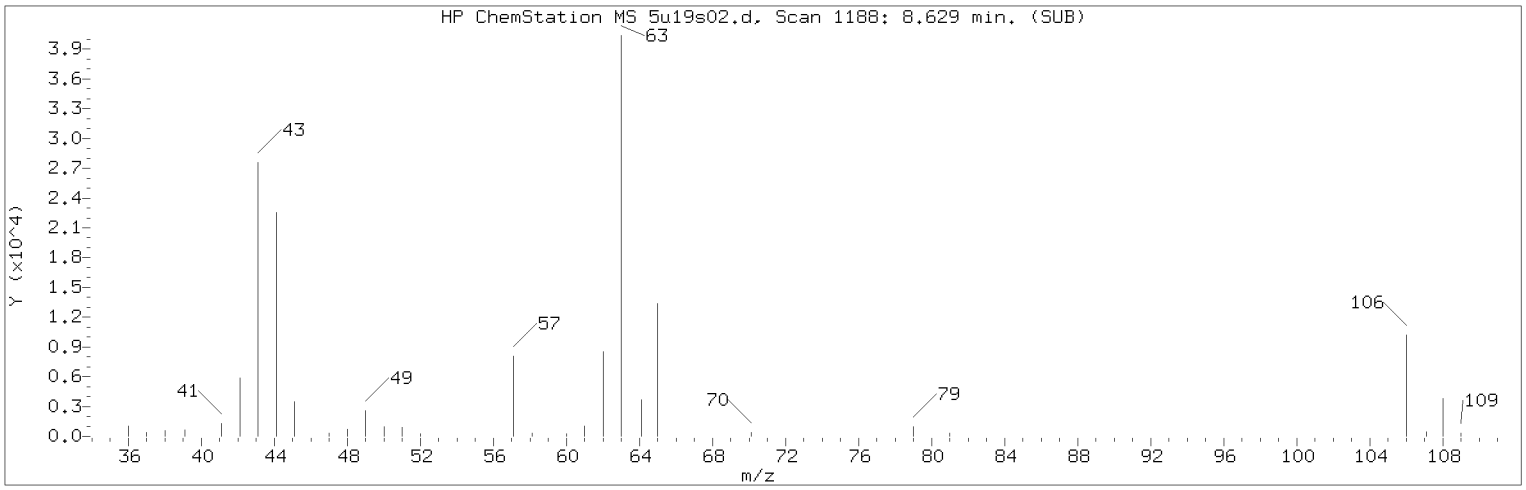
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:08 Unknown

Sample Name: LCS548 Lab Sample ID: LCS548

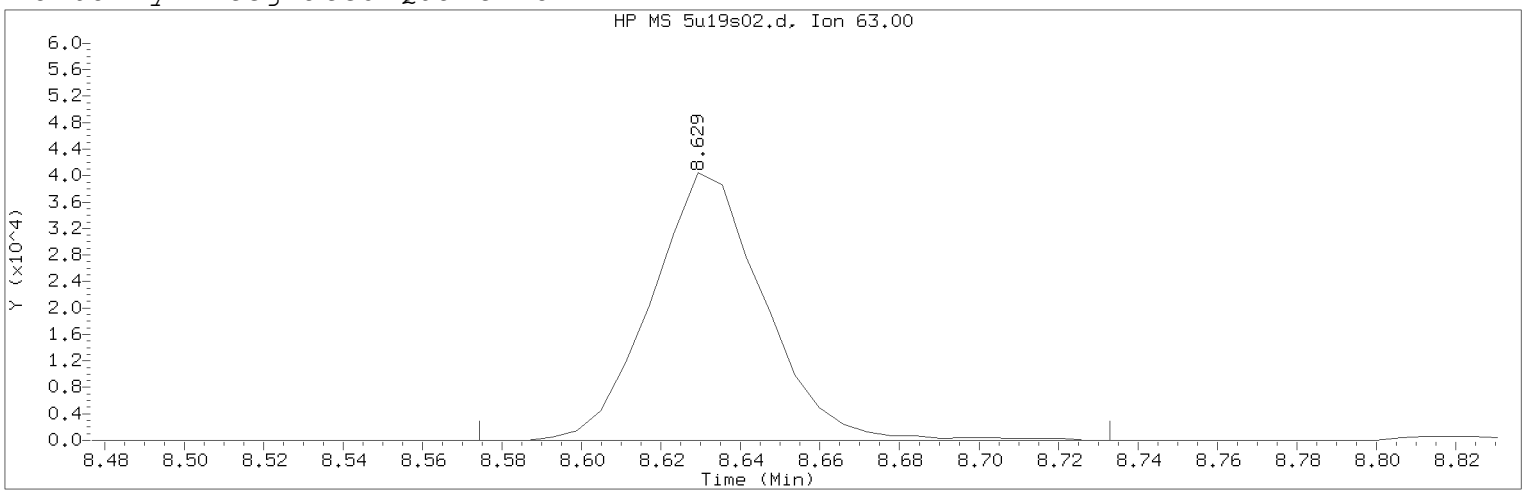
Compound Number	: 76		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1079		
Retention Time (minutes)	: 7.965		
Quant Ion	: 88.00		
Area	: 59352		
On-column Amount (ng)	: 492.7119		
Integration start scan	: 1051	Integration stop scan:	1116
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Patrick T. Herres on 06/19/2018 at 21:10.
Target 3.5 esignature user approval

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:09 pth10165

Sample Name: LCS548 Lab Sample ID: LCS548

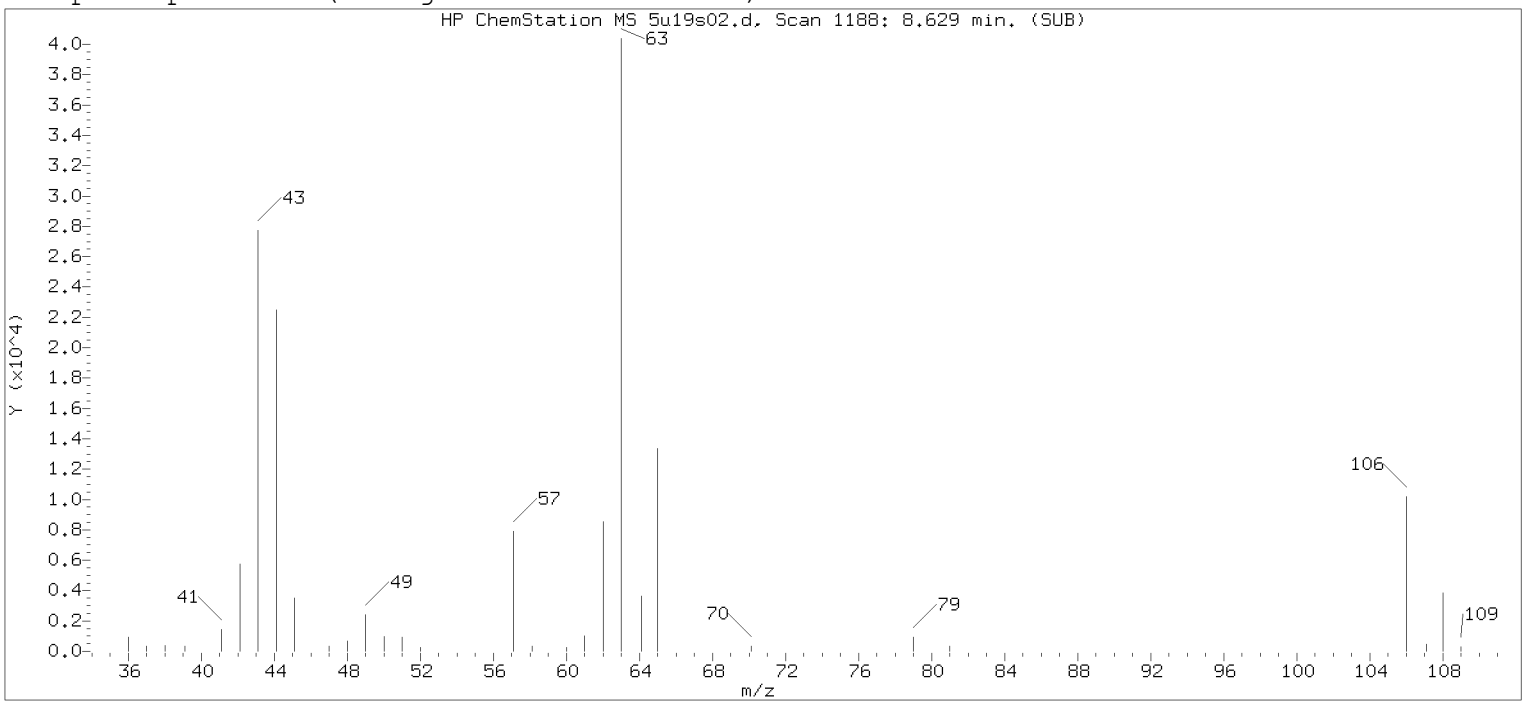
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1188
Retention Time (minutes): 8.629
Quant Ion : 63.00
Area (flag) : 79515M
On-Column Amount (ng) : 20.6741
Integration start scan : 1178 Integration stop scan: 1204
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

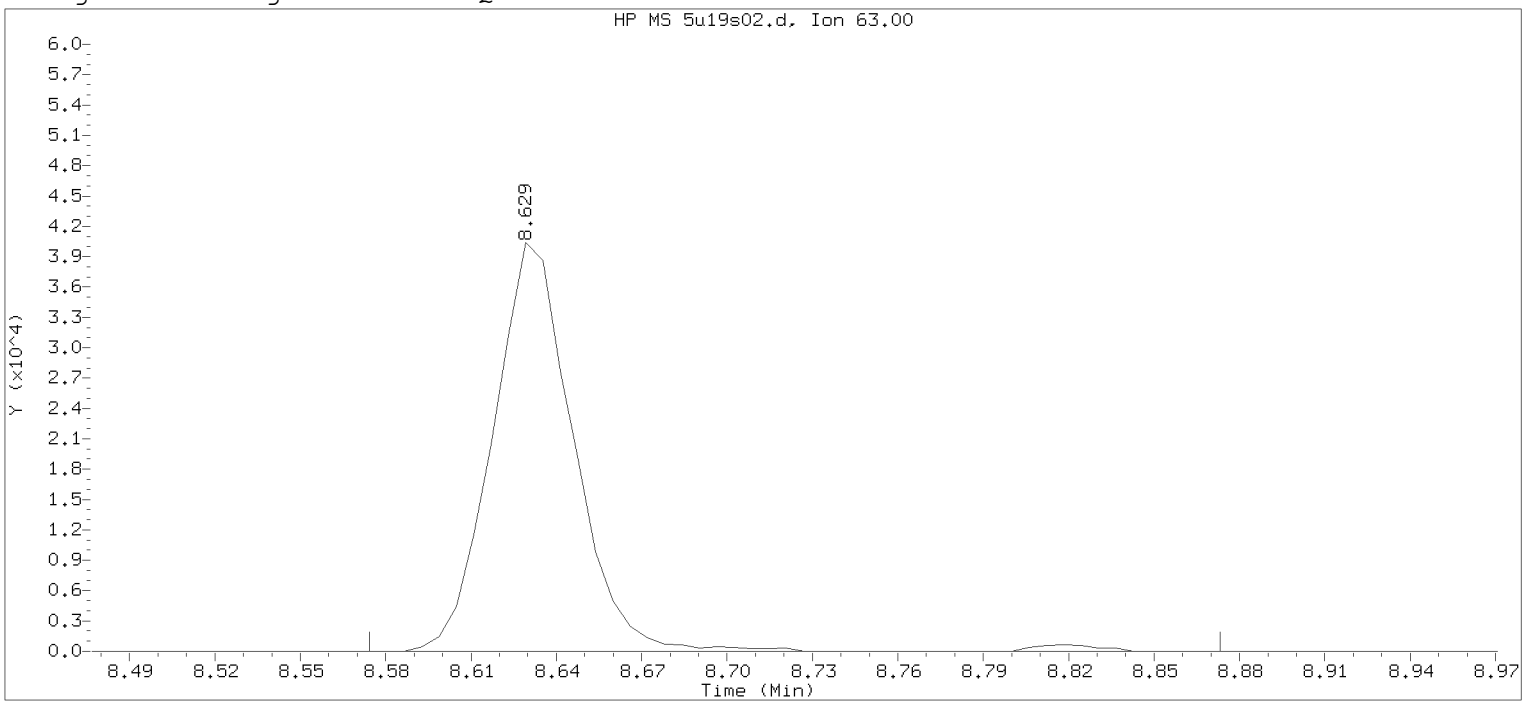
Analyst responsible for change: Digitally signed by Patrick T. Herres
on 06/19/2018 at 21:10.
Target 3.5 esignature user ID: pth10165

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

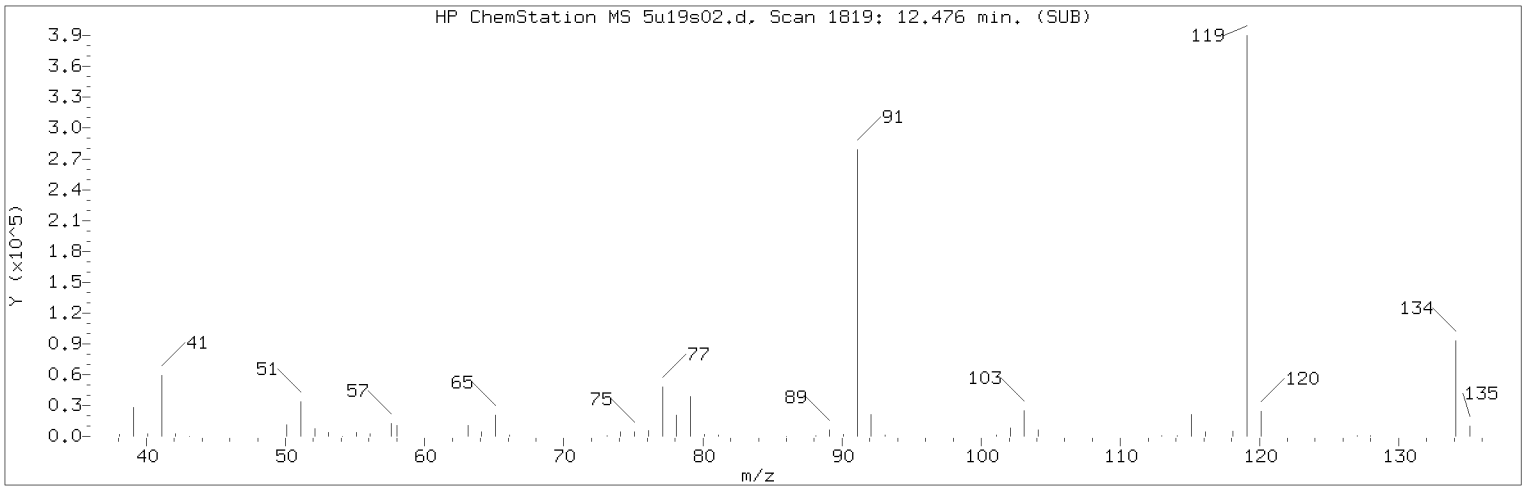
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:08 Unknown

Sample Name: LCS548 Lab Sample ID: LCS548

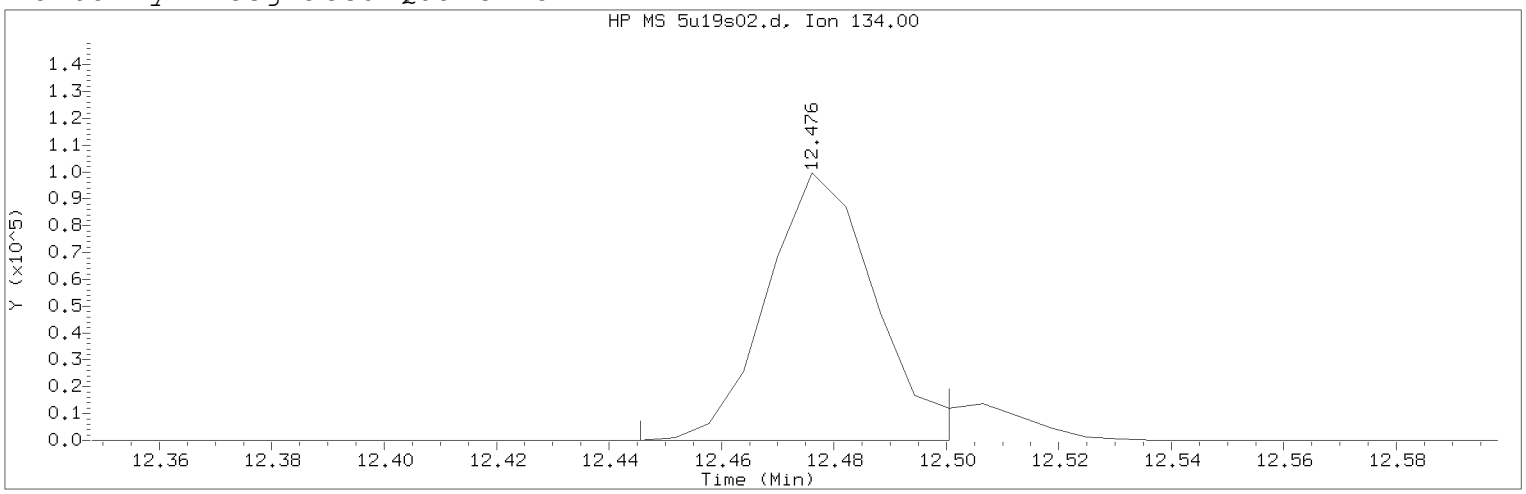
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1188
Retention Time (minutes): 8.629
Quant Ion : 63.00
Area : 80524
On-column Amount (ng) : 20.9363
Integration start scan : 1178 Integration stop scan: 1227
Y at integration start : 0 Y at integration end: 0

Digitally signed by Patrick T. Herres on 06/19/2018 at 21:10.
Target 3.5 esignature user approved.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:09 pth10165

Sample Name: LCS548 Lab Sample ID: LCS548

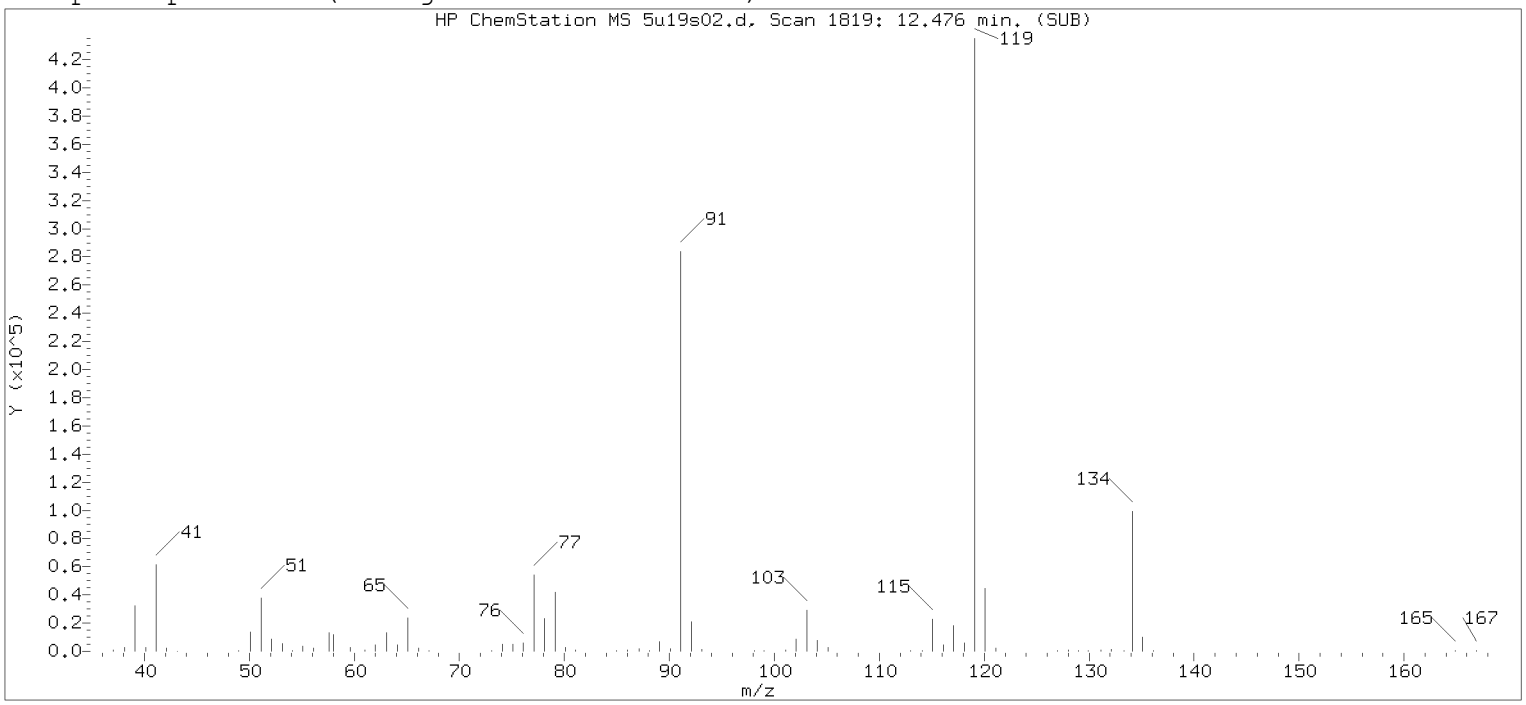
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1819
Retention Time (minutes): 12.476
Quant Ion : 134.00
Area (flag) : 133032M
On-Column Amount (ng) : 21.6796
Integration start scan : 1813 Integration stop scan: 1822
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

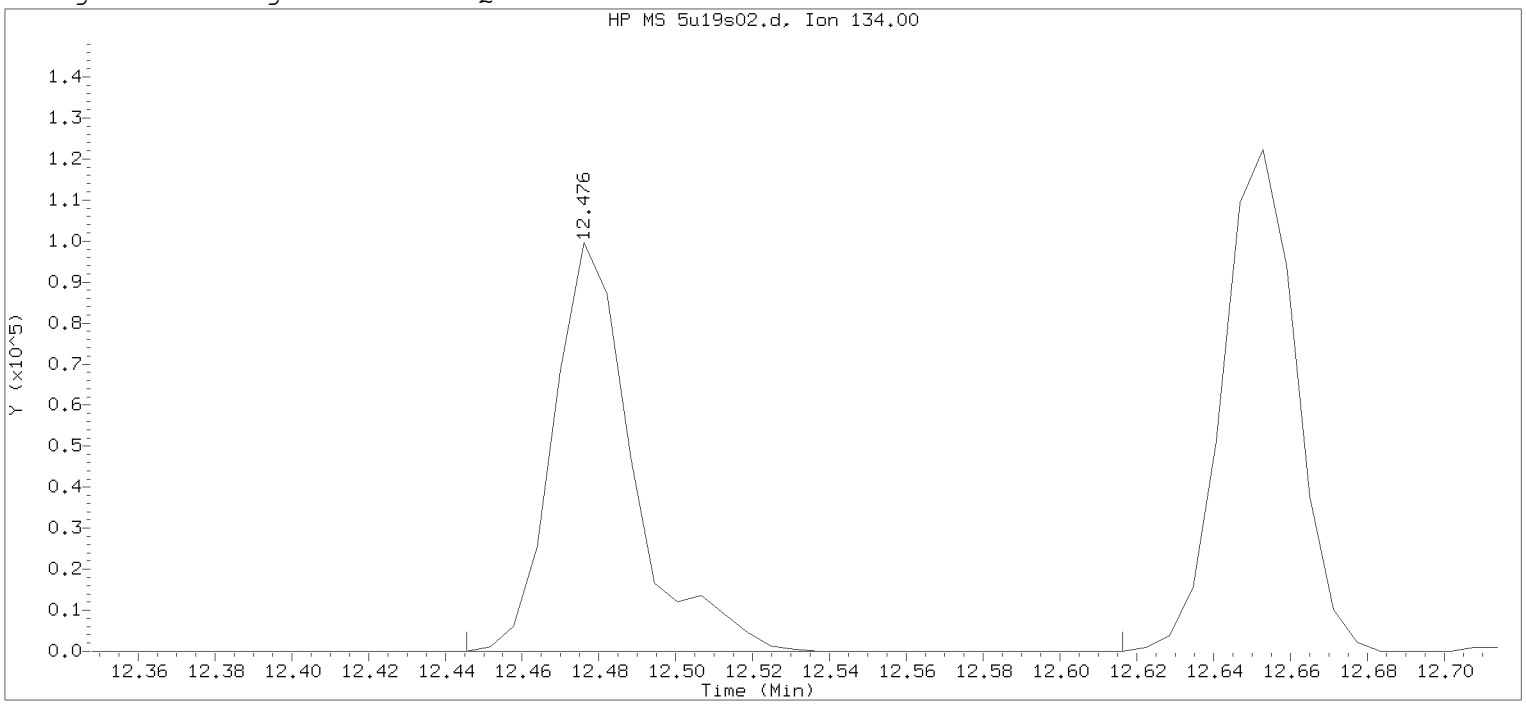
Analyst responsible for change: Digitally signed by Patrick T. Herres
on 06/19/2018 at 21:10.
Target 3.5 esignature user ID: pth10165

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

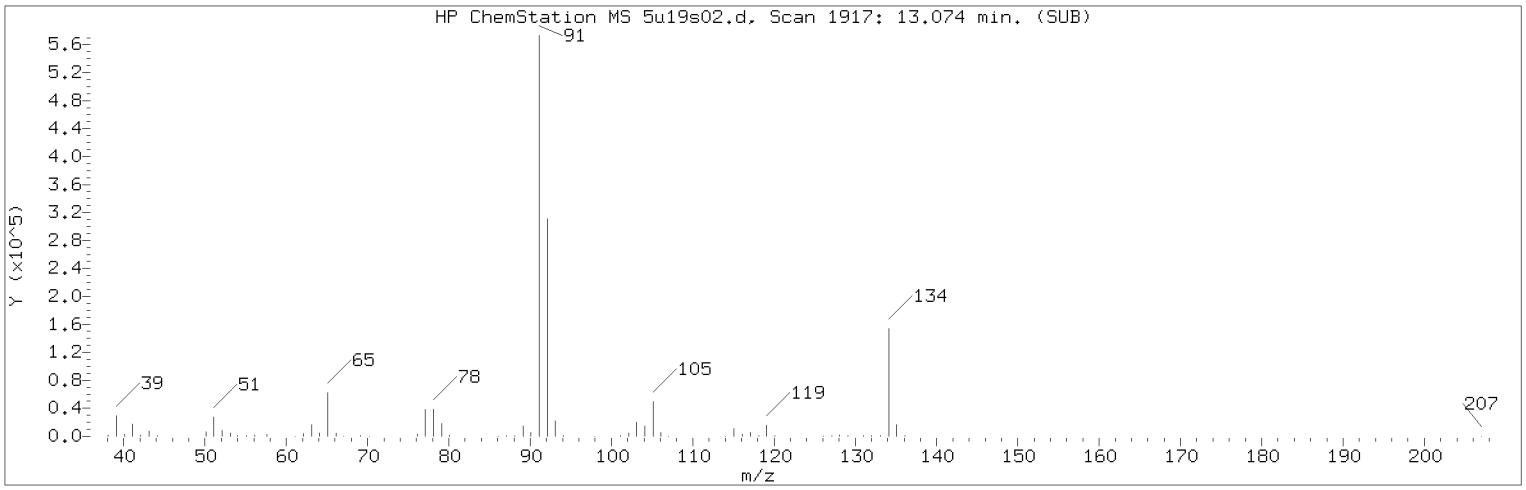
Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:08 Unknown

Sample Name: LCS548 Lab Sample ID: LCS548

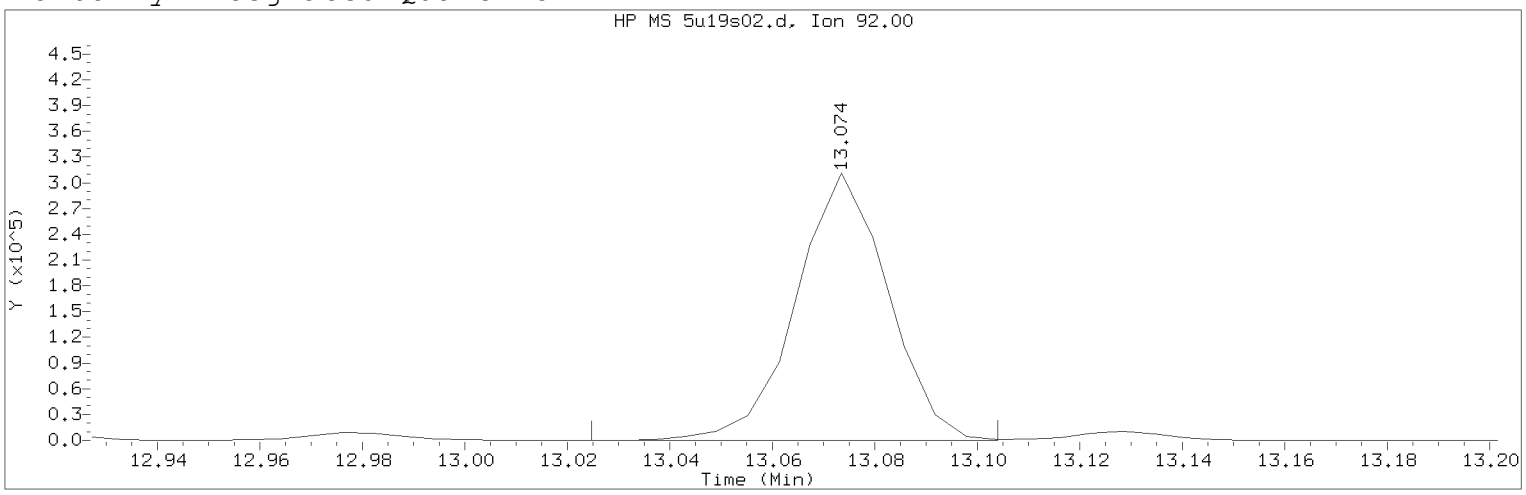
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1819
Retention Time (minutes): 12.476
Quant Ion : 134.00
Area : 143614
On-column Amount (ng) : 23.4040
Integration start scan : 1813 Integration stop scan: 1841
Y at integration start : 0 Y at integration end: 0

Digitally signed by Patrick T. Herres on 06/19/2018 at 21:10.
Target 3.5 esignature user approved.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:09 pth10165

Sample Name: LCS548 Lab Sample ID: LCS548

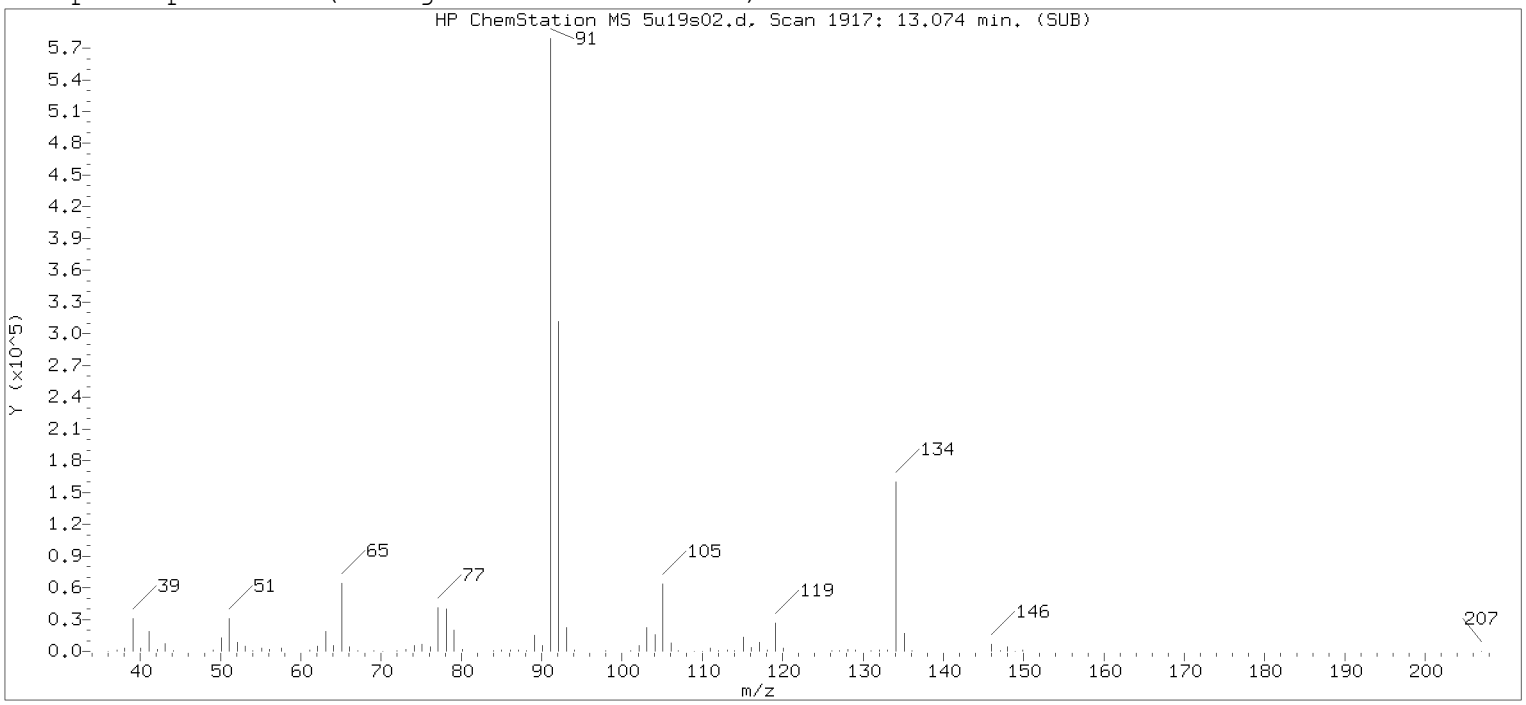
Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1917
Retention Time (minutes): 13.074
Quant Ion : 92.00
Area (flag) : 386876M
On-Column Amount (ng) : 23.5050
Integration start scan : 1908 Integration stop scan: 1921
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

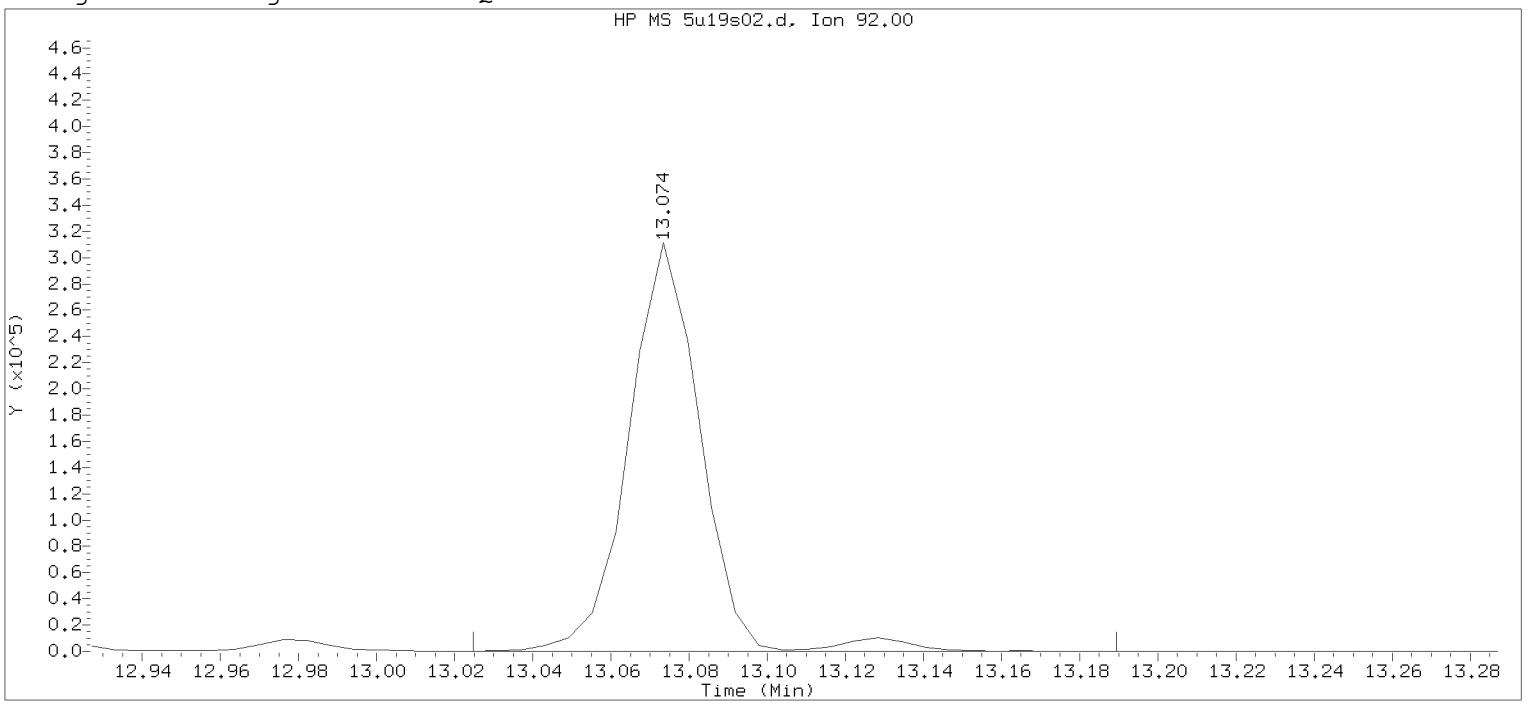
Analyst responsible for change: Digitally signed by Patrick T. Herres
on 06/19/2018 at 21:10.
Target 3.5 esignature user ID: pth10165

Secondary review performed and digitally signed by Joshua E. Berrios on 06/20/2018 at 16:11.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18jun19a.b/5u19s02.d Instrument ID: HP26285.i
Injection date and time: 19-JUN-2018 20:48 Analyst ID: PTH10165

Method used: /chem2/HP26285.i/18jun19a.b/m8260c5.m Sublist used: 5181701
Calibration date and time: 19-JUN-2018 20:26
Date, time and analyst ID of latest file update: 19-Jun-2018 21:08 Unknown

Sample Name: LCS548 Lab Sample ID: LCS548

Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1917
Retention Time (minutes): 13.074
Quant Ion : 92.00
Area : 399486
On-column Amount (ng) : 24.2710
Integration start scan : 1908 Integration stop scan: 1935
Y at integration start : 0 Y at integration end: 0

Digitally signed by Patrick T. Herres on 06/19/2018 at 21:10.
Target 3.5 esignature user approved.

Semivolatiles by GC/MS Data

Case Narrative/Conformance Summary

Semivolatiles by GC/MS

eurofins | Lancaster Laboratories Environmental

Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD50

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9662303	TF-23-WD-5.26-180612	X		1	Field Duplicate Sample
9662304	TF-5-W-4.59-180612	X		1	
9662305	TF-23-W-5.26-180612	X		1	
9662306	DC-2-W-7.50-180612	X		1	
9662307	DC-1-W-2.00-180612	X		1	
9662308	DB-8A-W-5.00-180612	X		1	
9662309	OS-2-W-6.00-180613	X		1	
9662310	OR-2-W-26.00-180613	X		1	Unspiked
9662311	OR-2-W-26.00-180613 MS	X		1	Matrix Spike
9662312	OR-2-W-26.00-180613 MSD	X		1	Matrix Spike Duplicate
9662314	OR-3-W-65.50-180614	X		1	
9662315	OS-3-W-6.00-180614	X		1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

LCS/LCSD

The % RPD for target analyte(s) in the Laboratory Control Spike/Spike Duplicate is outside the QC acceptance limits as noted on the QC Summary. Since the individual % recovery is within the acceptance limits, the data is reported.

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD50

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

Batch#: 18170WAB026 (Sample number(s): 9662314-9662315)
The relative percent difference(s) for the following analyte(s) in the LCS/LCSD is outside the acceptance window: 2,4-Dinitrophenol

MS/MSD

Batch#: 18169WAM026 (Sample number(s): 9662303-9662312, UNSPK: 9662310)
The relative percent difference(s) for the following analyte(s) in the MS/MSD is outside the acceptance window: 2,4-Dinitrophenol

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

1. Relative Response Factor (RRF)

$$RRF = \frac{AX}{Ais} \times \frac{Cis}{Cx}$$

Where:

Ax = Area of the characteristic ion for the compound to be measured
Ais = Area of the characteristic ion for the specific internal standard to be measured
Cis = Concentration of the internal standard
Cx = Concentration of the compound to be measured

2. % Relative Standard Deviation (%RSD)

$$\%RSD = \frac{standard\ deviation}{Mean} \times 100$$

3. % Difference

$$\%D = \frac{RRFc - RRFi}{RRFi} \times 100$$

Where:

RRFc = Relative response factor from the continuing calibration standard

RRFi = Mean relative response factor from the initial calibration

4. Concentration

Concentration waters

$$(\mu g / L) = \frac{(Ax)(Is)(Df)(Vt)}{(Ais)(RRF)(Vo)(Vi)}$$

Where:

Ax, Ais, and RRF are as given in 1 above
Is = Amount of internal standard added in parts per billion (ng)
Df = Dilution factor
Vt = Volume of the concentrated extract (ul)
Vo = Volume of the water extracted (ml)
Vi = Volume of extract injection (ul)

Concentration soils

$$(\mu g / Kg) = \frac{(Ax)(Is)(Df)(Vt)}{(Ais)(RRF)(Ws)(Vi)}$$

Where:

Ax, Ais, and RRF are as given in 1 above
Is = Amount of internal standard added in parts per billion (ng)
Df = Dilution factor
Vt = Volume of the concentrated extract (µL)
Ws = Sample weight of the soil extracted (g)
Vi = Volume of extract injection (µL)

5. % Recovery

$$\%Rec = \frac{SSR - SR}{SA} \times 100$$

Where:

SSR = Spiked sample result
SR = Sample result
SA = Spike added

Quality Control and Calibration Summary Forms

Semivolatiles by GC/MS

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Quality Control Reference List
GC/MS Semivolatiles

CLIENT: Chevron Environmental Mgmt.
SDG: CBD50

Fraction: Semivolatiles by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
SVOAs 8270D MINI	18169WAM026	SBLKWM169	06/20/2018 10:03
		169WMLCS	06/20/2018 10:30
		9662303	06/20/2018 15:40
		9662304	06/20/2018 16:08
		9662305	06/20/2018 16:36
		9662306	06/20/2018 17:05
		9662307	06/20/2018 17:34
		9662308	06/20/2018 18:03
		9662309	06/20/2018 18:31
		9662310 UNSPK	06/20/2018 10:59
		9662311 MS	06/20/2018 11:27
		9662312 MSD	06/20/2018 11:55
SVOAs 8270D MINI	18170WAB026	SBLKWB170	06/20/2018 21:17
		170WBLCS	06/20/2018 21:45
		170WBLCSD	06/20/2018 22:14
		9662314	06/21/2018 00:38
		9662315	06/21/2018 01:06

Quality Control Summary
Method Blank
GC/MS Semivolatiles
SDG: CBD50
Matrix: LIQUID

Fraction: Semivolatiles by GC/MS

18169WAM026 / SBLKWM169 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Phenol	06/20/18	N.D.	ug/l	0.5	2
bis(2-Chloroethyl)ether	06/20/18	N.D.	ug/l	0.5	2
2-Chlorophenol	06/20/18	N.D.	ug/l	0.5	2
1,3-Dichlorobenzene	06/20/18	N.D.	ug/l	0.5	2
1,4-Dichlorobenzene	06/20/18	N.D.	ug/l	0.5	2
1,2-Dichlorobenzene	06/20/18	N.D.	ug/l	0.5	2
2-Methylphenol	06/20/18	N.D.	ug/l	0.5	2
2,2'-oxybis(1-Chloropropane)	06/20/18	N.D.	ug/l	0.5	2
2,4-Dichlorophenol	06/20/18	N.D.	ug/l	0.5	2
4-Methylphenol	06/20/18	N.D.	ug/l	0.5	2
N-Nitroso-di-n-propylamine	06/20/18	N.D.	ug/l	0.7	3
Hexachloroethane	06/20/18	N.D.	ug/l	1	5
Nitrobenzene	06/20/18	N.D.	ug/l	0.5	2
Isophorone	06/20/18	N.D.	ug/l	0.5	2
2-Nitrophenol	06/20/18	N.D.	ug/l	3	10
2,4-Dimethylphenol	06/20/18	N.D.	ug/l	3	10
bis(2-Chloroethoxy)methane	06/20/18	N.D.	ug/l	0.5	2
1,2,4-Trichlorobenzene	06/20/18	N.D.	ug/l	0.5	2
Naphthalene	06/20/18	N.D.	ug/l	0.1	0.5
4-Chloroaniline	06/20/18	N.D.	ug/l	4	10
Hexachlorobutadiene	06/20/18	N.D.	ug/l	0.5	2
4-Chloro-3-methylphenol	06/20/18	N.D.	ug/l	0.5	2
2-Methylnaphthalene	06/20/18	N.D.	ug/l	0.1	0.5
Hexachlorocyclopentadiene	06/20/18	N.D.	ug/l	5	11
2,4,6-Trichlorophenol	06/20/18	N.D.	ug/l	0.5	2
2,4,5-Trichlorophenol	06/20/18	N.D.	ug/l	0.5	2
2-Chloronaphthalene	06/20/18	N.D.	ug/l	0.4	1
2-Nitroaniline	06/20/18	N.D.	ug/l	2	7
Dimethylphthalate	06/20/18	N.D.	ug/l	2	5
2,6-Dinitrotoluene	06/20/18	N.D.	ug/l	0.5	2
Acenaphthylene	06/20/18	N.D.	ug/l	0.1	0.5
3-Nitroaniline	06/20/18	N.D.	ug/l	3	7
Acenaphthene	06/20/18	N.D.	ug/l	0.1	0.5
2,4-Dinitrophenol	06/20/18	N.D.	ug/l	14	30
4-Nitrophenol	06/20/18	N.D.	ug/l	10	30
2,4-Dinitrotoluene	06/20/18	N.D.	ug/l	1	5
Dibenzofuran	06/20/18	N.D.	ug/l	0.5	2
Diethylphthalate	06/20/18	N.D.	ug/l	2	5
Fluorene	06/20/18	N.D.	ug/l	0.1	0.5
4-Chlorophenyl-phenylether	06/20/18	N.D.	ug/l	0.5	2
4-Nitroaniline	06/20/18	N.D.	ug/l	0.9	3
4,6-Dinitro-2-methylphenol	06/20/18	N.D.	ug/l	8	21
N-Nitrosodiphenylamine	06/20/18	N.D.	ug/l	0.7	3
4-Bromophenyl-phenylether	06/20/18	N.D.	ug/l	0.5	2
Hexachlorobenzene	06/20/18	N.D.	ug/l	0.1	0.5

Fraction: Semivolatiles by GC/MS

18169WAM026 / SBLKWM169 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Pentachlorophenol	06/20/18	N.D.	ug/l	1	5
Phenanthrene	06/20/18	N.D.	ug/l	0.1	0.5
Anthracene	06/20/18	N.D.	ug/l	0.1	0.5
Carbazole	06/20/18	N.D.	ug/l	0.5	2
Di-n-butylphthalate	06/20/18	N.D.	ug/l	2	5
Fluoranthene	06/20/18	N.D.	ug/l	0.1	0.5
Pyrene	06/20/18	N.D.	ug/l	0.1	0.5
Butylbenzylphthalate	06/20/18	N.D.	ug/l	2	5
3,3'-Dichlorobenzidine	06/20/18	N.D.	ug/l	3	10
Benzo(a)anthracene	06/20/18	N.D.	ug/l	0.1	0.5
Chrysene	06/20/18	N.D.	ug/l	0.1	0.5
bis(2-Ethylhexyl)phthalate	06/20/18	N.D.	ug/l	5	11
Di-n-octylphthalate	06/20/18	N.D.	ug/l	5	11
Benzo(b)fluoranthene	06/20/18	N.D.	ug/l	0.1	0.5
Benzo(k)fluoranthene	06/20/18	N.D.	ug/l	0.1	0.5
Benzo(a)pyrene	06/20/18	N.D.	ug/l	0.1	0.5
Indeno(1,2,3-cd)pyrene	06/20/18	N.D.	ug/l	0.1	0.5
Dibenz(a,h)anthracene	06/20/18	N.D.	ug/l	0.1	0.5
Benzo(g,h,i)perylene	06/20/18	N.D.	ug/l	0.1	0.5

18170WAB026 / SBLKWB170 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Phenol	06/20/18	N.D.	ug/l	0.5	2
bis(2-Chloroethyl)ether	06/20/18	N.D.	ug/l	0.5	2
2-Chlorophenol	06/20/18	N.D.	ug/l	0.5	2
1,3-Dichlorobenzene	06/20/18	N.D.	ug/l	0.5	2
1,4-Dichlorobenzene	06/20/18	N.D.	ug/l	0.5	2
1,2-Dichlorobenzene	06/20/18	N.D.	ug/l	0.5	2
2-Methylphenol	06/20/18	N.D.	ug/l	0.5	2
2,2'-oxybis(1-Chloropropane)	06/20/18	N.D.	ug/l	0.5	2
2,4-Dichlorophenol	06/20/18	N.D.	ug/l	0.5	2
4-Methylphenol	06/20/18	N.D.	ug/l	0.5	2
N-Nitroso-di-n-propylamine	06/20/18	N.D.	ug/l	0.7	3
Hexachloroethane	06/20/18	N.D.	ug/l	1	5
Nitrobenzene	06/20/18	N.D.	ug/l	0.5	2
Isophorone	06/20/18	N.D.	ug/l	0.5	2
2-Nitrophenol	06/20/18	N.D.	ug/l	3	10
2,4-Dimethylphenol	06/20/18	N.D.	ug/l	3	10
bis(2-Chloroethoxy)methane	06/20/18	N.D.	ug/l	0.5	2
1,2,4-Trichlorobenzene	06/20/18	N.D.	ug/l	0.5	2
Naphthalene	06/20/18	N.D.	ug/l	0.1	0.5
4-Chloroaniline	06/20/18	N.D.	ug/l	4	10
Hexachlorobutadiene	06/20/18	N.D.	ug/l	0.5	2
4-Chloro-3-methylphenol	06/20/18	N.D.	ug/l	0.5	2
2-Methylnaphthalene	06/20/18	N.D.	ug/l	0.1	0.5

Fraction: Semivolatiles by GC/MS

18170WAB026 / SBLKWB170 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Hexachlorocyclopentadiene	06/20/18	N.D.	ug/l	5	11
2,4,6-Trichlorophenol	06/20/18	N.D.	ug/l	0.5	2
2,4,5-Trichlorophenol	06/20/18	N.D.	ug/l	0.5	2
2-Chloronaphthalene	06/20/18	N.D.	ug/l	0.4	1
2-Nitroaniline	06/20/18	N.D.	ug/l	2	7
Dimethylphthalate	06/20/18	N.D.	ug/l	2	5
2,6-Dinitrotoluene	06/20/18	N.D.	ug/l	0.5	2
Acenaphthylene	06/20/18	N.D.	ug/l	0.1	0.5
3-Nitroaniline	06/20/18	N.D.	ug/l	3	7
Acenaphthene	06/20/18	N.D.	ug/l	0.1	0.5
2,4-Dinitrophenol	06/20/18	N.D.	ug/l	14	30
4-Nitrophenol	06/20/18	N.D.	ug/l	10	30
2,4-Dinitrotoluene	06/20/18	N.D.	ug/l	1	5
Dibenzofuran	06/20/18	N.D.	ug/l	0.5	2
Diethylphthalate	06/20/18	N.D.	ug/l	2	5
Fluorene	06/20/18	N.D.	ug/l	0.1	0.5
4-Chlorophenyl-phenylether	06/20/18	N.D.	ug/l	0.5	2
4-Nitroaniline	06/20/18	N.D.	ug/l	0.9	3
4,6-Dinitro-2-methylphenol	06/20/18	N.D.	ug/l	8	21
N-Nitrosodiphenylamine	06/20/18	N.D.	ug/l	0.7	3
4-Bromophenyl-phenylether	06/20/18	N.D.	ug/l	0.5	2
Hexachlorobenzene	06/20/18	N.D.	ug/l	0.1	0.5
Pentachlorophenol	06/20/18	N.D.	ug/l	1	5
Phenanthrene	06/20/18	N.D.	ug/l	0.1	0.5
Anthracene	06/20/18	N.D.	ug/l	0.1	0.5
Carbazole	06/20/18	N.D.	ug/l	0.5	2
Di-n-butylphthalate	06/20/18	N.D.	ug/l	2	5
Fluoranthene	06/20/18	N.D.	ug/l	0.1	0.5
Pyrene	06/20/18	N.D.	ug/l	0.1	0.5
Butylbenzylphthalate	06/20/18	N.D.	ug/l	2	5
3,3'-Dichlorobenzidine	06/20/18	N.D.	ug/l	3	10
Benzo(a)anthracene	06/20/18	N.D.	ug/l	0.1	0.5
Chrysene	06/20/18	N.D.	ug/l	0.1	0.5
bis(2-Ethylhexyl)phthalate	06/20/18	N.D.	ug/l	5	11
Di-n-octylphthalate	06/20/18	N.D.	ug/l	5	11
Benzo(b)fluoranthene	06/20/18	N.D.	ug/l	0.1	0.5
Benzo(k)fluoranthene	06/20/18	N.D.	ug/l	0.1	0.5
Benzo(a)pyrene	06/20/18	N.D.	ug/l	0.1	0.5
Indeno(1,2,3-cd)pyrene	06/20/18	N.D.	ug/l	0.1	0.5
Dibenz(a,h)anthracene	06/20/18	N.D.	ug/l	0.1	0.5
Benzo(g,h,i)perylene	06/20/18	N.D.	ug/l	0.1	0.5

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Quality Control Summary
Surrogates
GC/MS Semivolatiles
SDG: CBD50
Matrix: LIQUID

Fraction: Semivolatiles by GC/MS

18169WAM026	2,4,6-Tribromophenol		2-Fluorobiphenyl		2-Fluorophenol		Nitrobenzene-d5		Phenol-d6		Terphenyl-d14	
	Spike Added	200 ug/l	Spike Added	100 ug/l	Spike Added	200 ug/l	Spike Added	100 ug/l	Spike Added	200 ug/l	Spike Added	100 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
SBLKWM169	81	21 - 134	78	39 - 105	51	10 - 82	77	30 - 111	37	10 - 71	99	27 - 116
169WMLCS	87	21 - 134	80	39 - 105	62	10 - 82	77	30 - 111	49	10 - 71	89	27 - 116
9662303	83	21 - 134	80	39 - 105	46	10 - 82	77	30 - 111	34	10 - 71	81	27 - 116
9662304	80	21 - 134	74	39 - 105	45	10 - 82	70	30 - 111	33	10 - 71	92	27 - 116
9662305	67	21 - 134	69	39 - 105	42	10 - 82	65	30 - 111	30	10 - 71	74	27 - 116
9662306	69	21 - 134	69	39 - 105	40	10 - 82	65	30 - 111	28	10 - 71	61	27 - 116
9662307	82	21 - 134	75	39 - 105	45	10 - 82	69	30 - 111	32	10 - 71	75	27 - 116
9662308	81	21 - 134	83	39 - 105	49	10 - 82	78	30 - 111	36	10 - 71	88	27 - 116
9662309	82	21 - 134	79	39 - 105	45	10 - 82	74	30 - 111	32	10 - 71	72	27 - 116
9662310 UNSPK	70	21 - 134	79	39 - 105	30	10 - 82	73	30 - 111	21	10 - 71	83	27 - 116
9662311 MS	80	21 - 134	81	39 - 105	57	10 - 82	78	30 - 111	47	10 - 71	81	27 - 116
9662312 MSD	83	21 - 134	82	39 - 105	59	10 - 82	79	30 - 111	48	10 - 71	85	27 - 116

18170WAB026	2,4,6-Tribromophenol		2-Fluorobiphenyl		2-Fluorophenol		Nitrobenzene-d5		Phenol-d6		Terphenyl-d14	
	Spike Added	200 ug/l	Spike Added	100 ug/l	Spike Added	200 ug/l	Spike Added	100 ug/l	Spike Added	200 ug/l	Spike Added	100 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
SBLKWB170	84	21 - 134	73	39 - 105	43	10 - 82	72	30 - 111	32	10 - 71	93	27 - 116
170WBLCS	78	21 - 134	71	39 - 105	51	10 - 82	68	30 - 111	40	10 - 71	82	27 - 116
170WBLCSD	92	21 - 134	81	39 - 105	56	10 - 82	77	30 - 111	44	10 - 71	92	27 - 116
9662314	77	21 - 134	66	39 - 105	38	10 - 82	65	30 - 111	29	10 - 71	87	27 - 116
9662315	79	21 - 134	78	39 - 105	43	10 - 82	75	30 - 111	31	10 - 71	66	27 - 116

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

UNSPK: 9662310 MS: 9662311 MSD: 9662312 **Analyte**	Batch: **18169WAM026** (Sample number(s): 9662303-9662312)								
	Spike Added ug/l MS/MSD	**Unspiked Conc ug/l**	**MS Conc ug/l**	**MSD Conc ug/l**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Phenol	51.87 / 52.74	N.D.	26.14	26.86	50	51	10-92	3	30
bis(2-Chloroethyl)ether	51.87 / 52.74	N.D.	42.43	43.51	82	82	48-119	3	30
2-Chlorophenol	51.87 / 52.74	N.D.	42.84	44.39	83	84	47-116	4	30
1,3-Dichlorobenzene	51.87 / 52.74	N.D.	41.28	41.35	80	78	24-115	0	30
1,4-Dichlorobenzene	51.87 / 52.74	N.D.	41.42	42.46	80	81	30-109	2	30
1,2-Dichlorobenzene	51.87 / 52.74	N.D.	42.77	43.37	82	82	31-116	1	30
2-Methylphenol	51.87 / 52.74	N.D.	40.23	41.54	78	79	46-113	3	30
2,2'-oxybis(1-Chloropropane)	51.87 / 52.74	N.D.	46.42	47.93	90	91	40-117	3	30
2,4-Dichlorophenol	51.87 / 52.74	N.D.	44.27	45.85	85	87	53-126	4	30
4-Methylphenol	51.87 / 52.74	N.D.	39.67	40.29	76	76	42-115	2	30
N-Nitroso-di-n-propylamine	51.87 / 52.74	N.D.	46.23	47.32	89	90	48-128	2	30
Hexachloroethane	51.87 / 52.74	N.D.	38.44	38.53	74	73	19-105	0	30
Nitrobenzene	51.87 / 52.74	N.D.	43.02	44.15	83	84	43-128	3	30
Isophorone	51.87 / 52.74	N.D.	44.97	46.	87	87	49-129	2	30
2-Nitrophenol	51.87 / 52.74	N.D.	45.23	47.08	87	89	58-125	4	30
2,4-Dimethylphenol	51.87 / 52.74	N.D.	32.63	32.84	63	62	41-103	1	30
bis(2-Chloroethoxy)methane	51.87 / 52.74	N.D.	41.76	43.36	81	82	54-127	4	30
1,2,4-Trichlorobenzene	51.87 / 52.74	N.D.	43.11	43.6	83	83	29-120	1	30
Naphthalene	51.87 / 52.74	N.D.	43.72	43.94	84	83	44-114	0	30
4-Chloroaniline	51.87 / 52.74	N.D.	33.7	33.62	65	64	33-106	0	30
Hexachlorobutadiene	51.87 / 52.74	N.D.	38.36	37.72	74	72	16-119	2	30
4-Chloro-3-methylphenol	51.87 / 52.74	N.D.	44.37	44.52	86	84	50-130	0	30
2-Methylnaphthalene	51.87 / 52.74	N.D.	44.95	45.15	87	86	42-120	0	30
Hexachlorocyclopentadiene	103.73 / 105.49	N.D.	72.99	75.19	70	71	10-104	3	30
2,4,6-Trichlorophenol	51.87 / 52.74	N.D.	43.32	45.37	84	86	61-130	5	30
2,4,5-Trichlorophenol	51.87 / 52.74	N.D.	45.89	47.88	88	91	59-129	4	30
2-Chloronaphthalene	51.87 / 52.74	N.D.	44.63	44.97	86	85	41-123	1	30
2-Nitroaniline	51.87 / 52.74	N.D.	48.97	50.58	94	96	54-133	3	30
Dimethylphthalate	51.87 / 52.74	N.D.	43.09	45.25	83	86	19-119	5	30
2,6-Dinitrotoluene	51.87 / 52.74	N.D.	51.18	52.73	99	100	57-131	3	30
Acenaphthylene	51.87 / 52.74	N.D.	46.95	48.39	91	92	67-111	3	30
3-Nitroaniline	51.87 / 52.74	N.D.	39.1	42.8	75	81	41-123	9	30
Acenaphthene	51.87 / 52.74	N.D.	48.73	49.63	94	94	49-123	2	30
2,4-Dinitrophenol	103.73 / 105.49	N.D.	43.75	64.35	42	61	19-140	38 *	30
4-Nitrophenol	51.87 / 52.74	N.D.	33.38	36.35	64	69	10-96	9	30

Comments:
(2) The unspiked sample result is greater than four times the spike added.
* = Out of Specification

Results are being reported on an as received basis.

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

UNSPK: 9662310 MS: 9662311 MSD: 9662312 **Analyte**	Batch: **18169WAM026** (Sample number(s): 9662303-9662312)								
	Spike Added ug/l MS/MSD	**Unspiked Conc ug/l**	**MS Conc ug/l**	**MSD Conc ug/l**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
2,4-Dinitrotoluene	51.87 / 52.74	N.D.	50.41	50.47	97	96	56-128	0	30
Dibenzofuran	51.87 / 52.74	N.D.	45.91	46.95	89	89	50-124	2	30
Diethylphthalate	51.87 / 52.74	N.D.	44.91	47.17	87	89	42-124	5	30
Fluorene	51.87 / 52.74	N.D.	47.17	48.29	91	92	48-124	2	30
4-Chlorophenyl-phenylether	51.87 / 52.74	N.D.	45.28	45.89	87	87	45-124	1	30
4-Nitroaniline	51.87 / 52.74	N.D.	43.66	45.58	84	86	46-114	4	30
4,6-Dinitro-2-methylphenol	51.87 / 52.74	N.D.	37.93	43.85	73	83	50-132	14	30
N-Nitrosodiphenylamine	51.87 / 52.74	N.D.	46.34	49.32	89	94	55-128	6	30
4-Bromophenyl-phenylether	51.87 / 52.74	N.D.	47.69	49.51	92	94	53-127	4	30
Hexachlorobenzene	51.87 / 52.74	N.D.	45.92	47.35	89	90	57-123	3	30
Pentachlorophenol	51.87 / 52.74	N.D.	29.88	32.22	58	61	50-127	8	30
Phenanthrene	51.87 / 52.74	N.D.	50.37	51.77	97	98	54-122	3	30
Anthracene	51.87 / 52.74	N.D.	49.34	52.45	95	99	55-126	6	30
Carbazole	51.87 / 52.74	N.D.	50.2	52.58	97	100	65-123	5	30
Di-n-butylphthalate	51.87 / 52.74	N.D.	47.79	49.31	92	93	58-119	3	30
Fluoranthene	51.87 / 52.74	N.D.	48.89	50.77	94	96	61-123	4	30
Pyrene	51.87 / 52.74	N.D.	47.18	48.69	91	92	54-123	3	30
Butylbenzylphthalate	51.87 / 52.74	N.D.	47.09	48.47	91	92	40-131	3	30
3,3'-Dichlorobenzidine	51.87 / 52.74	N.D.	43.29	43.42	83	82	32-106	0	30
Benzo(a)anthracene	51.87 / 52.74	N.D.	48.91	50.67	94	96	63-124	4	30
Chrysene	51.87 / 52.74	N.D.	49.08	50.48	95	96	65-124	3	30
bis(2-Ethylhexyl)phthalate	51.87 / 52.74	N.D.	45.75	47.48	88	90	52-132	4	30
Di-n-octylphthalate	51.87 / 52.74	N.D.	47.35	48.29	91	92	51-134	2	30
Benzo(b)fluoranthene	51.87 / 52.74	N.D.	47.27	47.65	91	90	58-127	1	30
Benzo(k)fluoranthene	51.87 / 52.74	N.D.	51.8	51.09	100	97	63-123	1	30
Benzo(a)pyrene	51.87 / 52.74	N.D.	49.12	49.24	95	93	50-128	0	30
Indeno(1,2,3-cd)pyrene	51.87 / 52.74	N.D.	38.29	37.89	74	72	52-127	1	30
Dibenz(a,h)anthracene	51.87 / 52.74	N.D.	39.47	39.48	76	75	53-132	0	30
Benzo(g,h,i)perylene	51.87 / 52.74	N.D.	38.76	38.45	75	73	51-124	1	30

Comments:
(2) The unspiked sample result is greater than four times the spike added.
* = Out of Specification

Results are being reported on an as received basis.

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: CBD50
Matrix: LIQUID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

LCS: 169WMLCS	Batch: **18169WAM026** (Sample number(s): 9662303-9662312)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Phenol	50	26.24	NA	52	NA	10-92	NA	NA
bis(2-Chloroethyl)ether	50	39.75	NA	79	NA	48-119	NA	NA
2-Chlorophenol	50	42.03	NA	84	NA	47-116	NA	NA
1,3-Dichlorobenzene	50	38.11	NA	76	NA	24-115	NA	NA
1,4-Dichlorobenzene	50	38.48	NA	77	NA	30-109	NA	NA
1,2-Dichlorobenzene	50	39.02	NA	78	NA	31-116	NA	NA
2-Methylphenol	50	39.82	NA	80	NA	46-113	NA	NA
2,2'-oxybis(1-Chloropropane)	50	43.46	NA	87	NA	40-117	NA	NA
2,4-Dichlorophenol	50	43.32	NA	87	NA	53-126	NA	NA
4-Methylphenol	50	38.98	NA	78	NA	42-115	NA	NA
N-Nitroso-di-n-propylamine	50	43.02	NA	86	NA	48-128	NA	NA
Hexachloroethane	50	36.41	NA	73	NA	19-105	NA	NA
Nitrobenzene	50	39.76	NA	80	NA	43-128	NA	NA
Isophorone	50	41.69	NA	83	NA	49-129	NA	NA
2-Nitrophenol	50	41.74	NA	83	NA	58-125	NA	NA
2,4-Dimethylphenol	50	32.51	NA	65	NA	41-103	NA	NA
bis(2-Chloroethoxy)methane	50	38.73	NA	77	NA	54-127	NA	NA
1,2,4-Trichlorobenzene	50	39.14	NA	78	NA	29-120	NA	NA
Naphthalene	50	39.54	NA	79	NA	44-114	NA	NA
4-Chloroaniline	50	30.44	NA	61	NA	33-106	NA	NA
Hexachlorobutadiene	50	35.47	NA	71	NA	16-119	NA	NA
4-Chloro-3-methylphenol	50	42.52	NA	85	NA	50-130	NA	NA
2-Methylnaphthalene	50	41.25	NA	83	NA	42-120	NA	NA
Hexachlorocyclopentadiene	100	38.22	NA	38	NA	10-104	NA	NA
2,4,6-Trichlorophenol	50	43.57	NA	87	NA	61-130	NA	NA
2,4,5-Trichlorophenol	50	44.5	NA	89	NA	59-129	NA	NA
2-Chloronaphthalene	50	45.37	NA	91	NA	41-123	NA	NA
2-Nitroaniline	50	45.11	NA	90	NA	54-133	NA	NA
Dimethylphthalate	50	31.84	NA	64	NA	19-119	NA	NA
2,6-Dinitrotoluene	50	47.56	NA	95	NA	57-131	NA	NA
Acenaphthylene	50	43.55	NA	87	NA	67-111	NA	NA
3-Nitroaniline	50	35.27	NA	71	NA	41-123	NA	NA
Acenaphthene	50	45.65	NA	91	NA	49-123	NA	NA
2,4-Dinitrophenol	100	70.59	NA	71	NA	19-140	NA	NA
4-Nitrophenol	50	32.77	NA	66	NA	10-96	NA	NA
2,4-Dinitrotoluene	50	41.62	NA	83	NA	56-128	NA	NA
Dibenzofuran	50	42.25	NA	85	NA	50-124	NA	NA
Diethylphthalate	50	37.42	NA	75	NA	42-124	NA	NA
Fluorene	50	43.69	NA	87	NA	48-124	NA	NA
4-Chlorophenyl-phenylether	50	42.05	NA	84	NA	45-124	NA	NA
4-Nitroaniline	50	39.6	NA	79	NA	46-114	NA	NA
4,6-Dinitro-2-methylphenol	50	40.87	NA	82	NA	50-132	NA	NA

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

LCS: 169WMLCS	Batch: **18169WAM026** (Sample number(s): 9662303-9662312)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
N-Nitrosodiphenylamine	50	42.85	NA	86	NA	55-128	NA	NA
4-Bromophenyl-phenylether	50	44.56	NA	89	NA	53-127	NA	NA
Hexachlorobenzene	50	43.51	NA	87	NA	57-123	NA	NA
Pentachlorophenol	50	42.2	NA	84	NA	50-127	NA	NA
Phenanthrene	50	47.63	NA	95	NA	54-122	NA	NA
Anthracene	50	46.06	NA	92	NA	55-126	NA	NA
Carbazole	50	45.86	NA	92	NA	65-123	NA	NA
Di-n-butylphthalate	50	43.33	NA	87	NA	58-119	NA	NA
Fluoranthene	50	45.99	NA	92	NA	61-123	NA	NA
Pyrene	50	45.15	NA	90	NA	54-123	NA	NA
Butylbenzylphthalate	50	41.82	NA	84	NA	40-131	NA	NA
3,3'-Dichlorobenzidine	50	40.82	NA	82	NA	32-106	NA	NA
Benzo(a)anthracene	50	47.74	NA	95	NA	63-124	NA	NA
Chrysene	50	47.86	NA	96	NA	65-124	NA	NA
bis(2-Ethylhexyl)phthalate	50	45.56	NA	91	NA	52-132	NA	NA
Di-n-octylphthalate	50	46.78	NA	94	NA	51-134	NA	NA
Benzo(b)fluoranthene	50	46.45	NA	93	NA	58-127	NA	NA
Benzo(k)fluoranthene	50	50.81	NA	102	NA	63-123	NA	NA
Benzo(a)pyrene	50	49.27	NA	99	NA	50-128	NA	NA
Indeno(1,2,3-cd)pyrene	50	37.94	NA	76	NA	52-127	NA	NA
Dibenz(a,h)anthracene	50	39.08	NA	78	NA	53-132	NA	NA
Benzo(g,h,i)perylene	50	38.74	NA	77	NA	51-124	NA	NA

LCS: 170WBLCS LCSD: 170WBLCSD	Batch: **18170WAB026** (Sample number(s): 9662314-9662315)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Phenol	50	22.3	24.4	45	49	10-92	9	30
bis(2-Chloroethyl)ether	50	36.47	41.59	73	83	48-119	13	30
2-Chlorophenol	50	38.53	42.7	77	85	47-116	10	30
1,3-Dichlorobenzene	50	32.63	37.82	65	76	24-115	15	30
1,4-Dichlorobenzene	50	33.45	37.9	67	76	30-109	12	30
1,2-Dichlorobenzene	50	34.07	39.66	68	79	31-116	15	30
2-Methylphenol	50	36.42	40.22	73	80	46-113	10	30
2,2'-oxybis(1-Chloropropane)	50	39.31	44.89	79	90	40-117	13	30
2,4-Dichlorophenol	50	40.59	45.13	81	90	53-126	11	30
4-Methylphenol	50	36.75	40.02	74	80	42-115	9	30
N-Nitroso-di-n-propylamine	50	39.87	45.31	80	91	48-128	13	30
Hexachloroethane	50	30.56	35.14	61	70	19-105	14	30
Nitrobenzene	50	36.07	40.79	72	82	43-128	12	30
Isophorone	50	38.94	43.53	78	87	49-129	11	30
2-Nitrophenol	50	37.1	43.07	74	86	58-125	15	30

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

LCS: 170WBLCS LCSD: 170WBLCSD	Batch: **18170WAB026** (Sample number(s): 9662314-9662315)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
2,4-Dimethylphenol	50	31.19	34.54	62	69	41-103	10	30
bis(2-Chloroethoxy)methane	50	37.66	41.96	75	84	54-127	11	30
1,2,4-Trichlorobenzene	50	34.56	39.6	69	79	29-120	14	30
Naphthalene	50	34.97	40.09	70	80	44-114	14	30
4-Chloroaniline	50	35.11	38.18	70	76	33-106	8	30
Hexachlorobutadiene	50	29.42	34.29	59	69	16-119	15	30
4-Chloro-3-methylphenol	50	41.04	45.46	82	91	50-130	10	30
2-Methylnaphthalene	50	37.23	42.48	74	85	42-120	13	30
Hexachlorocyclopentadiene	100	26.2	30.88	26	31	10-104	16	30
2,4,6-Trichlorophenol	50	39.63	46.49	79	93	61-130	16	30
2,4,5-Trichlorophenol	50	42.78	48.88	86	98	59-129	13	30
2-Chloronaphthalene	50	39.22	44.35	78	89	41-123	12	30
2-Nitroaniline	50	43.18	49.08	86	98	54-133	13	30
Dimethylphthalate	50	34.26	40.51	69	81	19-119	17	30
2,6-Dinitrotoluene	50	45.19	51.26	90	103	57-131	13	30
Acenaphthylene	50	40.57	46.22	81	92	67-111	13	30
3-Nitroaniline	50	41.34	46.64	83	93	41-123	12	30
Acenaphthene	50	42.36	47.53	85	95	49-123	12	30
2,4-Dinitrophenol	100	31.47	44.44	31	44	19-140	34 *	30
4-Nitrophenol	50	28.24 J	33.26	56	67	10-96	16	30
2,4-Dinitrotoluene	50	41.84	49.15	84	98	56-128	16	30
Dibenzofuran	50	39.4	45.29	79	91	50-124	14	30
Diethylphthalate	50	38.13	44.58	76	89	42-124	16	30
Fluorene	50	40.58	47	81	94	48-124	15	30
4-Chlorophenyl-phenylether	50	38.45	44.91	77	90	45-124	16	30
4-Nitroaniline	50	41.07	46.29	82	93	46-114	12	30
4,6-Dinitro-2-methylphenol	50	36.62	46.5	73	93	50-132	24	30
N-Nitrosodiphenylamine	50	44.47	50.55	89	101	55-128	13	30
4-Bromophenyl-phenylether	50	40.68	48.09	81	96	53-127	17	30
Hexachlorobenzene	50	36.12	46.63	72	93	57-123	25	30
Pentachlorophenol	50	38.04	46.54	76	93	50-127	20	30
Phenanthrene	50	42.97	50.59	86	101	54-122	16	30
Anthracene	50	43.48	51.62	87	103	55-126	17	30
Carbazole	50	45.41	51.77	91	104	65-123	13	30
Di-n-butylphthalate	50	41.34	48.66	83	97	58-119	16	30
Fluoranthene	50	41.21	50.11	82	100	61-123	19	30
Pyrene	50	39.55	47.71	79	95	54-123	19	30
Butylbenzylphthalate	50	38.03	45.12	76	90	40-131	17	30
3,3'-Dichlorobenzidine	50	42.39	46.82	85	94	32-106	10	30
Benzo(a)anthracene	50	39.19	49.09	78	98	63-124	22	30
Chrysene	50	39.97	49.76	80	100	65-124	22	30
bis(2-Ethylhexyl)phthalate	50	37.89	47.02	76	94	52-132	21	30

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

LCS: 170WBLCS LCSD: 170WBLCSD **Analyte**	Batch: **18170WAB026** (Sample number(s): 9662314-9662315)							
	Spike Added ug/l	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Di-n-octylphthalate	50	35.77	48.5	72	97	51-134	30	30
Benzo(b)fluoranthene	50	38.46	48.62	77	97	58-127	23	30
Benzo(k)fluoranthene	50	41.24	53.48	82	107	63-123	26	30
Benzo(a)pyrene	50	38.43	49.89	77	100	50-128	26	30
Indeno(1,2,3-cd)pyrene	50	30.05	39.86	60	80	52-127	28	30
Dibenz(a,h)anthracene	50	32.47	41.86	65	84	53-132	25	30
Benzo(g,h,i)perylene	50	32.12	40.93	64	82	51-124	24	30

Fraction: Semivolatiles by GC/MS

14241: SVOAs 8270D MINI Analyte Name	Default MDL	Default LOQ	Units
Phenol	0.5	2	ug/l
bis(2-Chloroethyl)ether	0.5	2	ug/l
2-Chlorophenol	0.5	2	ug/l
1,3-Dichlorobenzene	0.5	2	ug/l
1,4-Dichlorobenzene	0.5	2	ug/l
1,2-Dichlorobenzene	0.5	2	ug/l
2-Methylphenol	0.5	2	ug/l
2,2'-oxybis(1-Chloropropane)	0.5	2	ug/l
2,4-Dichlorophenol	0.5	2	ug/l
4-Methylphenol	0.5	2	ug/l
N-Nitroso-di-n-propylamine	0.7	3	ug/l
Hexachloroethane	1	5	ug/l
Nitrobenzene	0.5	2	ug/l
Isophorone	0.5	2	ug/l
2-Nitrophenol	3	10	ug/l
2,4-Dimethylphenol	3	10	ug/l
bis(2-Chloroethoxy)methane	0.5	2	ug/l
1,2,4-Trichlorobenzene	0.5	2	ug/l
Naphthalene	0.1	0.5	ug/l
4-Chloroaniline	4	10	ug/l
Hexachlorobutadiene	0.5	2	ug/l
4-Chloro-3-methylphenol	0.5	2	ug/l
2-Methylnaphthalene	0.1	0.5	ug/l
Hexachlorocyclopentadiene	5	11	ug/l
2,4,6-Trichlorophenol	0.5	2	ug/l
2,4,5-Trichlorophenol	0.5	2	ug/l
2-Chloronaphthalene	0.4	1	ug/l
2-Nitroaniline	2	7	ug/l
Dimethylphthalate	2	5	ug/l
2,6-Dinitrotoluene	0.5	2	ug/l
Acenaphthylene	0.1	0.5	ug/l
3-Nitroaniline	3	7	ug/l
Acenaphthene	0.1	0.5	ug/l
2,4-Dinitrophenol	14	30	ug/l
4-Nitrophenol	10	30	ug/l
2,4-Dinitrotoluene	1	5	ug/l
Dibenzofuran	0.5	2	ug/l
Diethylphthalate	2	5	ug/l
Fluorene	0.1	0.5	ug/l
4-Chlorophenyl-phenylether	0.5	2	ug/l
4-Nitroaniline	0.9	3	ug/l
4,6-Dinitro-2-methylphenol	8	21	ug/l
N-Nitrosodiphenylamine	0.7	3	ug/l
4-Bromophenyl-phenylether	0.5	2	ug/l
Hexachlorobenzene	0.1	0.5	ug/l
Pentachlorophenol	1	5	ug/l
Phenanthrene	0.1	0.5	ug/l

Fraction: Semivolatiles by GC/MS

14241: SVOAs 8270D MINI Analyte Name	Default MDL	Default LOQ	Units
Anthracene	0.1	0.5	ug/l
Carbazole	0.5	2	ug/l
Di-n-butylphthalate	2	5	ug/l
Fluoranthene	0.1	0.5	ug/l
Pyrene	0.1	0.5	ug/l
Butylbenzylphthalate	2	5	ug/l
3,3'-Dichlorobenzidine	3	10	ug/l
Benzo(a)anthracene	0.1	0.5	ug/l
Chrysene	0.1	0.5	ug/l
bis(2-Ethylhexyl)phthalate	5	11	ug/l
Di-n-octylphthalate	5	11	ug/l
Benzo(b)fluoranthene	0.1	0.5	ug/l
Benzo(k)fluoranthene	0.1	0.5	ug/l
Benzo(a)pyrene	0.1	0.5	ug/l
Indeno(1,2,3-cd)pyrene	0.1	0.5	ug/l
Dibenz(a,h)anthracene	0.1	0.5	ug/l
Benzo(g,h,i)perylene	0.1	0.5	ug/l

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date(s): 06/05/18 06/05/18

Calibration Times: 00:37 04:01

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = df0102.d RRF0.25 = df0108.d RRF1.25 = df0107.d RRF3.75 = df0106.d
RRF7.5 = df0101a.d RRF12.5 = df0105.d RRF20 = df0104.d RRF30 = df0103.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. METHOD
1,4-Dioxane			0.722	0.738	0.796	0.812	0.807	0.800	0.779	5	AVG
N-Nitrosodimethylamine			1.069	1.093	1.179	1.247	1.237	1.214	1.173	6	AVG
Pyridine			1.811	1.927	2.006	2.112	2.109	2.066	2.005	6	AVG
2-Picoline			2.109	2.103	2.145	2.201	2.183	2.135	2.146	2	AVG
N-Nitrosomethylethylamine			0.894	0.912	0.945	0.969	0.965	0.942	0.938	3	AVG
Methyl methanesulfonate			1.001	1.023	1.066	1.081	1.066	1.053	1.048	3	AVG
N-Nitrosodiethylamine		0.781	0.823	0.867	0.899	0.914	0.918	0.898	0.871	6	AVG
Ethyl methanesulfonate		0.767	0.836	0.832	0.871	0.877	0.879	0.860	0.846	5	AVG
Benzaldehyde			1.377	1.453	1.551	1.413	1.273	1.046	1.352	13	AVG
Phenol		2.388	2.564	2.528	2.606	2.643	2.601	2.528	2.551	3	AVG
Aniline		2.781	2.873	2.940	3.042	3.069	3.049	2.959	2.959	4	AVG
a-methylstyrene			0.594	0.584	0.620	0.624	0.629	0.617	0.611	3	AVG
bis(2-Chloroethyl)ether		1.745	1.849	1.886	1.945	1.957	1.937	1.881	1.886	4	AVG
2-Chlorophenol		1.366	1.427	1.459	1.476	1.526	1.503	1.466	1.461	4	AVG
1,3-Dichlorobenzene		1.463	1.527	1.498	1.559	1.581	1.568	1.526	1.532	3	AVG
1,4-Dichlorobenzene		1.514	1.580	1.530	1.555	1.595	1.581	1.548	1.558	2	AVG
Benzyl alcohol			1.035	1.038	1.103	1.111	1.134	1.118	1.090	4	AVG
1,2-Dichlorobenzene		1.448	1.455	1.449	1.471	1.504	1.492	1.451	1.467	2	AVG
Indene			2.296	2.301	2.378	2.391	2.423	2.368	2.359	2	AVG
2-Methylphenol		1.396	1.515	1.540	1.598	1.608	1.611	1.574	1.549	5	AVG
2,2'-oxybis(1-Chloropropane)		1.855	1.907	1.900	1.984	1.963	1.945	1.898	1.922	2	AVG
bis(2-Chloroisopropyl)ether		1.855	1.907	1.900	1.984	1.963	1.945	1.898	1.922	2	AVG
N-Nitrosopyrrolidine		0.799	0.874	0.896	0.942	0.963	0.962	0.946	0.912	7	AVG
Acetophenone		1.860	2.059	2.221	2.409	2.400	2.399	2.328	2.239	9	AVG
4-Methylphenol		1.365	1.746	1.791	1.679	1.852	1.849	1.804	1.727	10	AVG
Total Cresols		1.381	1.630	1.665	1.638	1.730	1.730	1.689	1.638	7	AVG
N-Nitroso-di-n-propylamine		1.232	1.326	1.323	1.358	1.354	1.353	1.329	1.325	3	AVG
N-Nitrosomorpholine			0.988	0.985	1.022	1.008	1.003	0.974	0.997	2	AVG
o-Toluidine		2.501	2.691	2.696	2.751	2.793	2.772	2.689	2.699	4	AVG
Hexachloroethane			0.684	0.689	0.714	0.728	0.721	0.700	0.706	3	AVG
Nitrobenzene		0.470	0.514	0.513	0.519	0.529	0.515	0.520	0.512	4	AVG
N-Nitrosopiperidine		0.193	0.208	0.216	0.219	0.226	0.222	0.226	0.216	5	AVG
Isophorone		0.783	0.850	0.895	0.920	0.933	0.928	0.943	0.893	6	AVG
2-Nitrophenol		0.163	0.175	0.188	0.201	0.205	0.206	0.210	0.193	9	AVG
2,4-Dimethylphenol		0.385	0.420	0.436	0.447	0.457	0.454	0.461	0.437	6	AVG
O,O,O-Triethylphosphorothioat			0.167	0.170	0.171	0.172	0.174	0.178	0.172	2	AVG
bis(2-Chloroethoxy)methane		0.558	0.577	0.599	0.586	0.592	0.543	0.578	0.576	3	AVG
Benzoic acid			0.238	0.310	0.320	0.335	0.343	0.352	0.316	13	AVG
1,2,3,4-Tetrahydronaphthalene			0.019	0.020	0.021	0.022	0.021	0.021	0.020	4	AVG
2,4-Dichlorophenol		0.246	0.276	0.288	0.298	0.304	0.301	0.308	0.289	8	AVG
1,2,4-Trichlorobenzene		0.295	0.308	0.306	0.311	0.315	0.313	0.317	0.309	2	AVG
Naphthalene	1.134	1.079	1.083	1.106	1.105	1.126	1.110	1.132	1.109	2	AVG
4-Chloroaniline		0.415	0.461	0.463	0.472	0.484	0.477	0.485	0.465	5	AVG
2,6-Dichlorophenol		0.250	0.281	0.294	0.296	0.298	0.295	0.302	0.288	6	AVG
Hexachloropropene			0.192	0.196	0.201	0.207	0.206	0.211	0.202	4	AVG
Hexachlorobutadiene		0.173	0.174	0.173	0.174	0.179	0.172	0.175	0.174	1	AVG
Quinoline			0.636	0.666	0.673	0.680	0.672	0.684	0.668	3	AVG
Caprolactam			0.103	0.128	0.136	0.137	0.132	0.135	0.128	10	AVG
N-Nitrosodi-n-butylamine			0.301	0.317	0.332	0.333	0.419	0.429	0.355	15	AVG
4-Chloro-3-methylphenol		0.295	0.348	0.370	0.382	0.386	0.383	0.394	0.365	9	AVG
Safrole			0.255	0.269	0.278	0.283	0.278	0.287	0.275	4	AVG
2-Methylnaphthalene	0.666	0.657	0.689	0.715	0.728	0.726	0.725	0.736	0.705	4	AVG

4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date(s): 06/05/18 06/05/18

Calibration Times: 00:37 04:01

Min $\overline{\text{RRF}}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = df0102.d RRF0.25 = df0108.d RRF1.25 = df0107.d RRF3.75 = df0106.d
RRF7.5 = df0101a.d RRF12.5 = df0105.d RRF20 = df0104.d RRF30 = df0103.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{\text{RRF}}$	% RSD	CAL. METHOD
1-Methylnaphthalene	0.622	0.567	0.633	0.639	0.650	0.660	0.652	0.666	0.636	5	AVG
Hexachlorocyclopentadiene			0.333	0.342	0.362	0.390	0.370	0.373	0.362	6	AVG
1,2,4,5-Tetrachlorobenzene		0.681	0.657	0.636	0.654	0.663	0.652	0.660	0.658	2	AVG
cis-Isosafrole			0.565	0.584	0.617	0.627	0.620	0.639	0.609	5	AVG
2,4,6-Trichlorophenol		0.342	0.391	0.421	0.443	0.457	0.456	0.468	0.426	11	AVG
2,4,5-Trichlorophenol		0.352	0.414	0.441	0.459	0.454	0.443	0.444	0.430	9	AVG
trans-Isosafrole			0.624	0.644	0.678	0.694	0.683	0.703	0.671	5	AVG
Isosafrole			0.614	0.634	0.668	0.682	0.672	0.692	0.660	5	AVG
1,1'-Biphenyl		1.597	1.633	1.682	1.845	1.836	1.769	1.791	1.736	6	AVG
2-Chloronaphthalene		1.375	1.377	1.326	1.433	1.429	1.372	1.445	1.394	3	AVG
1-Chloronaphthalene		1.176	1.286	1.292	1.272	1.279	1.251	1.215	1.253	3	AVG
Diphenyl ether		0.931	0.955	0.944	0.983	0.985	0.961	0.981	0.963	2	AVG
2-Nitroaniline		0.362	0.415	0.459	0.487	0.493	0.486	0.500	0.457	11	AVG
1,4-Naphthoquinone			0.480	0.525	0.567	0.578	0.551	0.562	0.544	7	AVG
1,4-Dinitrobenzene			0.205	0.244	0.259	0.265	0.255	0.265	0.249	9	AVG
Dimethylphthalate			1.447	1.443	1.485	1.426	1.353	1.409	1.427	3	AVG
1,3-Dinitrobenzene			0.254	0.281	0.290	0.288	0.278	0.288	0.280	5	AVG
2,6-Dinitrotoluene		0.265	0.328	0.350	0.356	0.359	0.341	0.349	0.336	10	AVG
Acenaphthylene	1.877	1.762	1.978	2.003	2.085	2.148	2.072	2.111	2.004	7	AVG
3-Nitroaniline		0.287	0.375	0.388	0.408	0.418	0.412	0.418	0.387	12	AVG
Acenaphthene	1.357	1.302	1.365	1.339	1.374	1.400	1.360	1.384	1.360	2	AVG
2,4-Dinitrophenol			0.182	0.213	0.235	0.251	0.251	0.268	0.233	13	AVG
4-Nitrophenol				0.259	0.274	0.310	0.301	0.313	0.291	8	AVG
Pentachlorobenzene		0.534	0.548	0.522	0.546	0.550	0.535	0.549	0.540	2	AVG
2,4-Dinitrotoluene			0.426	0.447	0.469	0.479	0.452	0.468	0.457	4	AVG
2,4_2,6-Dinitrotoluenes		0.319	0.377	0.399	0.413	0.419	0.397	0.408	0.390	9	AVG
Dibenzofuran		1.855	1.959	1.901	1.965	1.980	1.904	1.922	1.927	2	AVG
1-Naphthylamine				1.416	1.455	1.500	1.431	1.485	1.457	2	AVG
2,3,4,6-Tetrachlorophenol			0.341	0.348	0.358	0.370	0.371	0.376	0.361	4	AVG
2-Naphthylamine				1.370	1.423	1.449	1.393	1.424	1.412	2	AVG
Diethylphthalate			1.411	1.429	1.497	1.476	1.418	1.480	1.452	3	AVG
Thionazin			0.325	0.325	0.343	0.348	0.332	0.342	0.336	3	AVG
Fluorene	1.485	1.472	1.544	1.561	1.586	1.615	1.503	1.518	1.535	3	AVG
4-Chlorophenyl-phenylether		0.706	0.738	0.732	0.745	0.744	0.720	0.701	0.727	2	AVG
5-Nitro-o-toluidine		0.382	0.420	0.460	0.480	0.488	0.471	0.487	0.455	9	AVG
4-Nitroaniline		0.337	0.425	0.436	0.463	0.447	0.427	0.445	0.426	10	AVG
4,6-Dinitro-2-methylphenol				0.136	0.153	0.157	0.158	0.163	0.153	7	AVG
N-Nitrosodiphenylamine (1)		0.630	0.688	0.693	0.700	0.703	0.684	0.686	0.684	4	AVG
NDPA as diphenylamine		0.630	0.688	0.693	0.700	0.703	0.684	0.686	0.684	4	AVG
1,2-Diphenylhydrazine		0.993	1.060	1.086	1.091	1.078	1.054	1.039	1.057	3	AVG
Tetraethyldithiopyrophosphate			0.164	0.169	0.175	0.170	0.168	0.173	0.170	2	AVG
1,3,5-Trinitrobenzene				0.090	0.102	0.105	0.113	0.117	0.105	10	AVG
Diallate (peak 1)			0.503	0.513	0.524	0.517	0.499	0.506	0.510	2	AVG
Phorate		0.534	0.618	0.652	0.672	0.659	0.643	0.650	0.633	7	AVG
Phenacetin			0.446	0.507	0.525	0.528	0.525	0.537	0.511	7	AVG
4-Bromophenyl-phenylether		0.184	0.214	0.219	0.215	0.214	0.208	0.210	0.209	6	AVG
Diallate (peak 2)			0.376	0.404	0.413	0.401	0.401	0.412	0.401	3	AVG
Diallate trans/cis			0.481	0.495	0.505	0.497	0.482	0.490	0.492	2	AVG
Hexachlorobenzene	0.204	0.213	0.207	0.207	0.204	0.211	0.210	0.205	0.208	2	AVG
Dimethoate			0.389	0.434	0.449	0.449	0.433	0.439	0.432	5	AVG
Atrazine			0.179	0.197	0.211	0.202	0.195	0.190	0.196	6	AVG
Pentachlorophenol			0.124	0.135	0.147	0.148	0.152	0.154	0.143	8	AVG

(1) Cannot be separated from Diphenylamine
4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date(s): 06/05/18 06/05/18

Calibration Times: 00:37 04:01

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = df0102.d RRF0.25 = df0108.d RRF1.25 = df0107.d RRF3.75 = df0106.d
RRF7.5 = df0101a.d RRF12.5 = df0105.d RRF20 = df0104.d RRF30 = df0103.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. METHOD
4-Aminobiphenyl		0.656	0.754	0.807	0.810	0.820	0.812	0.796	0.779	8	AVG
Pentachloronitrobenzene			0.084	0.090	0.093	0.095	0.095	0.095	0.092	5	AVG
Pronamide		0.276	0.306	0.349	0.362	0.367	0.367	0.372	0.343	11	AVG
Dinoseb			0.149	0.188	0.215	0.234	0.236	0.247	0.212	18	AVG
Phenanthrene	1.181	1.137	1.164	1.150	1.162	1.193	1.200	1.190	1.172	2	AVG
Anthracene	1.024	1.036	1.148	1.181	1.199	1.214	1.193	1.208	1.151	7	AVG
Carbazole		0.930	1.058	1.113	1.147	1.155	1.149	1.166	1.103	8	AVG
Methyl parathion			0.255	0.302	0.331	0.340	0.339	0.344	0.319	11	AVG
Di-n-butylphthalate			1.253	1.363	1.444	1.463	1.453	1.470	1.408	6	AVG
Parathion			0.164	0.199	0.216	0.225	0.228	0.236	0.211	13	AVG
4-Nitroquinoline-1-oxide				0.112	0.140	0.161	0.171	0.181	0.153	18	AVG
Octachlorostyrene			0.076	0.074	0.080	0.081	0.081	0.081	0.079	4	AVG
Isodrin		0.126	0.122	0.129	0.135	0.135	0.137	0.139	0.132	5	AVG
Fluoranthene	1.152	1.104	1.204	1.294	1.333	1.368	1.373	1.398	1.278	9	AVG
Benzidine				0.886	0.925	0.916	0.888	0.882	0.900	2	AVG
Pyrene	1.366	1.368	1.356	1.365	1.380	1.391	1.358	1.381	1.371	1	AVG
p-Dimethylaminoazobenzene			0.194	0.229	0.242	0.259	0.259	0.269	0.242	11	AVG
Chlorobenzilate			0.377	0.421	0.427	0.446	0.437	0.447	0.426	6	AVG
3,3'-Dimethylbenzidine			0.715	0.831	0.934	0.960	0.921	0.905	0.878	10	AVG
Butylbenzylphthalate			0.595	0.668	0.694	0.724	0.710	0.710	0.683	7	AVG
2-Acetylaminofluorene			0.392	0.508	0.562	0.605	0.600	0.619	0.548	16	AVG
3,3'-Dichlorobenzidine			0.384	0.432	0.471	0.490	0.480	0.482	0.456	9	AVG
4,4'-Methylenebis(2-chloroani				0.265	0.276	0.291	0.279	0.280	0.278	3	AVG
Benzo(a)anthracene	1.011	0.981	1.123	1.229	1.284	1.342	1.333	1.337	1.205	12	AVG
Chrysene	1.098	1.116	1.173	1.223	1.241	1.275	1.259	1.268	1.207	6	AVG
bis(2-Ethylhexyl)phthalate			0.783	0.906	0.961	1.008	0.983	0.994	0.939	9	AVG
6-Methylchrysene			0.764	0.836	0.886	0.929	0.917	0.934	0.878	8	AVG
Di-n-octylphthalate			1.306	1.541	1.672	1.729	1.730	1.754	1.622	11	AVG
Benzo(b)fluoranthene	1.100	1.006	1.149	1.193	1.277	1.314	1.310	1.299	1.206	9	AVG
7,12-Dimethylbenz[a]anthracen			0.503	0.541	0.567	0.585	0.593	0.604	0.566	7	AVG
Benzo(k)fluoranthene	1.099	1.098	1.200	1.245	1.223	1.244	1.221	1.264	1.199	5	AVG
Benzo(a)pyrene	0.904	0.882	1.041	1.115	1.152	1.201	1.197	1.220	1.089	12	AVG
3-Methylcholanthrene		0.417	0.500	0.550	0.591	0.616	0.616	0.637	0.561	14	AVG
Dibenz(a,h)acridine			0.819	0.889	0.946	0.957	0.965	0.968	0.924	6	AVG
Dibenz(a,j)acridine			0.927	0.963	1.013	1.026	1.011	0.985	0.987	4	AVG
Indeno(1,2,3-cd)pyrene	0.876	0.844	0.948	1.020	1.089	1.102	1.102	1.093	1.009	11	AVG
Dibenz(a,h)anthracene	0.955	1.002	1.091	1.120	1.170	1.144	1.144	1.119	1.093	7	AVG
Benzo(g,h,i)perylene	1.046	0.983	1.077	1.105	1.143	1.113	1.105	1.043	1.077	5	AVG
Total PAHs	1.058	1.033	1.098	1.097	1.113	1.105	1.088	1.088	1.085	2	AVG
2-Fluorophenol		1.495	1.596	1.635	1.679	1.732	1.723	1.684	1.649	5	AVG
Phenol-d6		2.000	2.142	2.160	2.237	2.279	2.274	2.210	2.186	4	AVG
Nitrobenzene-d5		0.480	0.513	0.523	0.530	0.537	0.527	0.535	0.521	4	AVG
2-Fluorobiphenyl		1.558	1.627	1.592	1.640	1.639	1.600	1.614	1.610	2	AVG
2,4,6-Tribromophenol		0.139	0.168	0.174	0.182	0.189	0.183	0.188	0.175	10	AVG
Terphenyl-d14		0.808	0.846	0.876	0.896	0.887	0.887	0.891	0.870	4	AVG
								Average %RSD		6	

4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.
Benzidine Levels in the 5,15,30,50,80,120 standards are 15,45,90,150,240,360 ng/ul, respectively.
Benzoic acid and 2,4-Dinitrophenol are at 15 ng/ul, 30 ng/ul,40 ng/ul in the 5,15,30 standards.

Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP19760.i/18jun04a.b/df0101a.d SSTD7.5
/chem/HP19760.i/18jun04a.b/df0102.d SSTD0.125
/chem/HP19760.i/18jun04a.b/df0103.d SSTD30
/chem/HP19760.i/18jun04a.b/df0104.d SSTD20
/chem/HP19760.i/18jun04a.b/df0105.d SSTD12.5
/chem/HP19760.i/18jun04a.b/df0106.d SSTD3.75
/chem/HP19760.i/18jun04a.b/df0107.d SSTD1.25
/chem/HP19760.i/18jun04a.b/df0108.d SSTD0.25

Area Summary

File ID:

Internal Standard Name	df0101a.d	df0102.d	df0103.d	df0104.d	df0105.d	df0106.d	df0107.d	df0108.d	Avg. Area	%RSD	In Spec
1,4-Dichlorobenzene-d4	199536	233206	202589	196684	221630	209057	209281	188257	207530	7	Yes
Naphthalene-d8	752578	869564	742126	747557	833114	776630	791196	713723	778311	7	Yes
Acenaphthene-d10	349529	405133	349473	351231	386382	367908	363762	324533	362244	7	Yes
Phenanthrene-d10	661403	752059	664650	649152	730128	676746	671650	598503	675536	7	Yes
Pyrene-d10	666393	727004	698458	681472	746275	681935	675555	584926	682752	7	Yes
Perylene-d12	668430	694569	712280	697807	770589	677153	641640	555910	677297	9	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

File ID:

Internal Standard Name	df0101a.d	df0102.d	df0103.d	df0104.d	df0105.d	df0106.d	df0107.d	df0108.d	Avg. RT
1,4-Dichlorobenzene-d4	6.961	6.960	6.960	6.960	6.960	6.960	6.961	6.961	6.960
Naphthalene-d8	8.896	8.890	8.896	8.896	8.896	8.895	8.890	8.890	8.893
Acenaphthene-d10	11.676	11.670	11.676	11.676	11.676	11.670	11.670	11.670	11.673
Phenanthrene-d10	13.553	13.553	13.559	13.559	13.558	13.553	13.553	13.553	13.555
Pyrene-d10	15.552	15.546	15.552	15.552	15.552	15.546	15.546	15.546	15.549
Perylene-d12	20.057	20.052	20.063	20.057	20.057	20.051	20.052	20.052	20.055

Comments:_____

_____

Report generated on 06/05/2018 at 08:35

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: df0111.d

ICV SAMPLE ID: rvICV1218 BATCH: 18JUN04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,4-Dioxane	12.50	12.32	-1	30	YES
N-Nitrosodimethylamine	12.50	12.72	2	30	YES
Pyridine	12.50	12.70	2	30	YES
2-Picoline	12.50	12.28	-2	30	YES
N-Nitrosomethylethylamine	12.50	12.00	-4	30	YES
Methyl methanesulfonate	12.50	12.90	3	30	YES
N-Nitrosodiethylamine	12.50	12.16	-3	30	YES
Ethyl methanesulfonate	12.50	12.33	-1	30	YES
Phenol	12.50	12.60	1	30	YES
Aniline	12.50	12.17	-3	30	YES
bis(2-Chloroethyl)ether	12.50	12.51	0	30	YES
2-Chlorophenol	12.50	12.56	0	30	YES
1,3-Dichlorobenzene	12.50	12.46	0	30	YES
1,4-Dichlorobenzene	12.50	12.71	2	30	YES
Benzyl alcohol	12.50	12.97	4	30	YES
1,2-Dichlorobenzene	12.50	12.59	1	30	YES
Indene	12.50	14.79	18	30	YES
2-Methylphenol	12.50	12.67	1	30	YES
2,2'-oxybis(1-Chloropropane	12.50	12.68	1	30	YES
bis(2-Chloroisopropyl)ether	12.50	12.68	1	30	YES
N-Nitrosopyrrolidine	12.50	12.45	0	30	YES
Acetophenone	12.50	13.13	5	30	YES
4-Methylphenol	12.50	13.18	5	30	YES
N-Nitroso-di-n-propylamine	12.50	12.62	1	30	YES
N-Nitrosomorpholine	12.50	12.59	1	30	YES
o-Toluidine	12.50	12.37	-1	30	YES
Total Cresols	25.00	25.88	4	30	YES
Hexachloroethane	12.50	12.49	0	30	YES
Nitrobenzene	12.50	12.54	0	30	YES
N-Nitrosopiperidine	12.50	12.01	-4	30	YES
Isophorone	12.50	13.13	5	30	YES
2-Nitrophenol	12.50	13.03	4	30	YES
2,4-Dimethylphenol	12.50	10.90	-13	30	YES
bis(2-Chloroethoxy)methane	12.50	12.58	1	30	YES
Benzoic acid	25.00	25.99	4	30	YES
O,O,O-Triethylphosphorothio	12.50	12.33	-1	30	YES
2,4-Dichlorophenol	12.50	13.00	4	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: df0111.d

ICV SAMPLE ID: rvICV1218 BATCH: 18JUN04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,2,4-Trichlorobenzene	12.50	12.69	1	30	YES
Naphthalene	12.50	12.34	-1	30	YES
4-Chloroaniline	12.50	13.00	4	30	YES
2,6-Dichlorophenol	12.50	12.67	1	30	YES
Hexachloropropene	12.50	13.34	7	30	YES
Hexachlorobutadiene	12.50	12.40	-1	30	YES
Quinoline	12.50	12.78	2	30	YES
N-Nitrosodi-n-butylamine	12.50	11.41	-9	30	YES
4-Chloro-3-methylphenol	12.50	13.06	4	30	YES
Safrole	12.50	12.40	-1	30	YES
2-Methylnaphthalene	12.50	12.74	2	30	YES
1-Methylnaphthalene	12.50	12.96	4	30	YES
Hexachlorocyclopentadiene	25.00	28.43	14	30	YES
1,2,4,5-Tetrachlorobenzene	12.50	12.47	0	30	YES
cis-Isosafrole	1.50	1.57	5	30	YES
2,4,6-Trichlorophenol	12.50	12.91	3	30	YES
2,4,5-Trichlorophenol	12.50	13.68	9	30	YES
trans-Isosafrole	11.00	11.54	5	30	YES
1,1'-Biphenyl	12.50	13.13	5	30	YES
2-Chloronaphthalene	12.50	12.05	-4	30	YES
Isosafrole	12.50	13.18	5	30	YES
1-Chloronaphthalene	12.50	13.10	5	30	YES
Diphenyl ether	12.50	12.65	1	30	YES
2-Nitroaniline	12.50	13.25	6	30	YES
1,4-Naphthoquinone	15.63	16.30	4	30	YES
1,4-Dinitrobenzene	12.50	12.84	3	30	YES
Dimethylphthalate	12.50	12.73	2	30	YES
1,3-Dinitrobenzene	12.50	12.94	4	30	YES
2,6-Dinitrotoluene	12.50	13.30	6	30	YES
Acenaphthylene	12.50	14.23	14	30	YES
3-Nitroaniline	12.50	13.57	9	30	YES
Acenaphthene	12.50	13.45	8	30	YES
2,4-Dinitrophenol	25.00	26.93	8	30	YES
4-Nitrophenol	12.50	13.06	4	30	YES
Pentachlorobenzene	12.50	12.45	0	30	YES
2,4-Dinitrotoluene	12.50	12.71	2	30	YES
Dibenzofuran	12.50	12.83	3	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: df0111.d

ICV SAMPLE ID: rvICV1218 BATCH: 18JUN04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
2,4_2,6-Dinitrotoluenes	25.00	26.32	5	30	YES
1-Naphthylamine	25.00	24.81	-1	30	YES
2,3,4,6-Tetrachlorophenol	12.50	13.27	6	30	YES
2-Naphthylamine	25.00	25.76	3	30	YES
Diethylphthalate	12.50	12.38	-1	30	YES
Thionazin	12.50	12.89	3	30	YES
Fluorene	12.50	12.82	3	30	YES
4-Chlorophenyl-phenylether	12.50	12.38	-1	30	YES
5-Nitro-o-toluidine	12.50	13.16	5	30	YES
4-Nitroaniline	12.50	12.56	1	30	YES
4,6-Dinitro-2-methylphenol	12.50	12.56	0	30	YES
N-Nitrosodiphenylamine	12.50	13.09	5	30	YES
NDPA as diphenylamine	12.50	13.09	5	30	YES
1,2-Diphenylhydrazine	12.50	13.35	7	30	YES
Tetraethyldithiopyrophospha	12.50	12.26	-2	30	YES
1,3,5-Trinitrobenzene	12.50	12.09	-3	30	YES
Diallate (peak 1)	9.38	8.91	-5	30	YES
Phorate	12.50	13.03	4	30	YES
Phenacetin	12.50	12.75	2	30	YES
4-Bromophenyl-phenylether	12.50	12.81	2	30	YES
Diallate (peak 2)	3.13	3.64	16	30	YES
Hexachlorobenzene	12.50	12.54	0	30	YES
Diallate trans/cis	12.50	12.22	-2	30	YES
Dimethoate	12.50	13.27	6	30	YES
Pentachlorophenol	12.50	13.75	10	30	YES
4-Aminobiphenyl	12.50	14.66	17	30	YES
Pentachloronitrobenzene	12.50	12.93	3	30	YES
Pronamide	12.50	13.60	9	30	YES
Dinoseb	12.50	12.27	-2	30	YES
Phenanthrene	12.50	12.82	3	30	YES
Anthracene	12.50	12.96	4	30	YES
Carbazole	12.50	13.52	8	30	YES
Methyl parathion	12.50	13.96	12	30	YES
Di-n-butylphthalate	12.50	13.00	4	30	YES
Parathion	12.50	14.13	13	30	YES
4-Nitroquinoline-1-oxide	150.00	186.92	25	30	YES
Isodrin	12.50	13.36	7	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: df0111.d

ICV SAMPLE ID: rvICV1218 BATCH: 18JUN04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
Fluoranthene	12.50	13.23	6	30	YES
Benzidine	62.50	63.85	2	30	YES
Pyrene	12.50	12.44	0	30	YES
p-Dimethylaminoazobenzene	12.50	14.89	19	30	YES
Chlorobenzilate	12.50	13.62	9	30	YES
3,3'-Dimethylbenzidine	25.00	25.89	4	30	YES
Butylbenzylphthalate	12.50	13.06	4	30	YES
2-Acetylaminofluorene	12.50	12.74	2	30	YES
3,3'-Dichlorobenzidine	12.50	12.78	2	30	YES
Benzo(a)anthracene	12.50	13.46	8	30	YES
Chrysene	12.50	13.01	4	30	YES
4,4'-Methylenebis(2-chloroa	12.50	11.43	-9	30	YES
bis(2-Ethylhexyl)phthalate	12.50	13.08	5	30	YES
6-Methylchrysene	12.50	12.44	0	30	YES
Di-n-octylphthalate	12.50	12.78	2	30	YES
Benzo(b)fluoranthene	12.50	12.65	1	30	YES
7,12-Dimethylbenz[a]anthrac	12.50	12.90	3	30	YES
Benzo(k)fluoranthene	12.50	12.99	4	30	YES
Benzo(a)pyrene	12.50	13.20	6	30	YES
3-Methylcholanthrene	12.50	14.34	15	30	YES
Dibenz(a,h)acridine	12.50	12.14	-3	30	YES
Dibenz(a,j)acridine	12.50	12.17	-3	30	YES
Indeno(1,2,3-cd)pyrene	12.50	13.08	5	30	YES
Dibenz(a,h)anthracene	12.50	13.19	6	30	YES
Benzo(g,h,i)perylene	12.50	12.66	1	30	YES
Total PAHs	225.00	228.76	2	30	YES

NC = Could not calculate

Comments: _____

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Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: df0112.d

ICV SAMPLE ID: rvBASICV1218 BATCH: 18JUN04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
Benzaldehyde	12.50	14.82	19	30	YES
Caprolactam	12.50	13.04	4	30	YES
Atrazine	12.50	14.00	12	30	YES

NC = Could not calculate

Comments: _____

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Lab File ID: df1350y.d DFTPP Injection Date: 06/20/18

Instrument ID: HP19760 DFTPP Injection Time: 08:54

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	51.0
68	Less than 2.0% of mass 69	0.93 (1.59)1
69	Mass 69 relative abundance	58.2
70	Less than 2.0% of mass 69	0.29 (0.49)1
127	10.0 - 80.00% of mass 198	53.3
197	Less than 2.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.37
275	10.0 - 60.0% of mass 198	20.3
365	Greater than 1.00% of mass 198	2.05
441	Present, and less than mass 443	8.91
442	Greater than 50.00% of mass 198	59.1
443	15.00 - 24.00% of mass 442	11.6 (19.7)2

1-Value is % mass 69 2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	rvSTD1628 - SSTD7.5	df1351y.d	06/20/18	09:09
02	SBLKWM169	df1352.d	06/20/18	10:03
03	169WMLCS	df1353.d	06/20/18	10:30
04	9662310	df1354.d	06/20/18	10:59
05	9662311MS	df1355.d	06/20/18	11:27
06	9662312MSD	df1356.d	06/20/18	11:55
07	9659871	df1358.d	06/20/18	12:51
08	9659872RE	df1359.d	06/20/18	13:19
09	9659874RE	df1360.d	06/20/18	13:47
10	9659875	df1361.d	06/20/18	14:15
11	9660089	df1362.d	06/20/18	14:43
12	9660091RE	df1363.d	06/20/18	15:11
13	9662303	df1364.d	06/20/18	15:40
14	9662304	df1365.d	06/20/18	16:08
15	9662305	df1366.d	06/20/18	16:36
16	9662306	df1367.d	06/20/18	17:05
17	9662307	df1368.d	06/20/18	17:34
18	9662308	df1369.d	06/20/18	18:03

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Lab File ID: df1350y.d DFTPP Injection Date: 06/20/18

Instrument ID: HP19760 DFTPP Injection Time: 08:54

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	51.0
68	Less than 2.0% of mass 69	0.93 (1.59)1
69	Mass 69 relative abundance	58.2
70	Less than 2.0% of mass 69	0.29 (0.49)1
127	10.0 - 80.00% of mass 198	53.3
197	Less than 2.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.37
275	10.0 - 60.0% of mass 198	20.3
365	Greater than 1.00% of mass 198	2.05
441	Present, and less than mass 443	8.91
442	Greater than 50.00% of mass 198	59.1
443	15.00 - 24.00% of mass 442	11.6 (19.7)2

1-Value is % mass 69 2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
19	9662309	df1370.d	06/20/18	18:31

FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: df1400.d DFTPP Injection Date: 06/20/18

Instrument ID: HP19760 DFTPP Injection Time: 19:20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	43.4
68	Less than 2.0% of mass 69	0.81 (1.58)1
69	Mass 69 relative abundance	51.3
70	Less than 2.0% of mass 69	0.25 (0.48)1
127	10.0 - 80.00% of mass 198	49.2
197	Less than 2.0% of mass 198	0.9
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.82
275	10.0 - 60.0% of mass 198	20.6
365	Greater than 1.00% of mass 198	2.17
441	Present, and less than mass 443	8.14
442	Greater than 50.00% of mass 198	55.8
443	15.00 - 24.00% of mass 442	10.4 (18.7)2

1-Value is % mass 69 2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RVSTD1628 - SSTD7.5	df1401.d	06/20/18	19:43
02	rvABC1548 - SSTD125	df1402.d	06/20/18	20:15
03	rvPDA0448 - SSTD125	df1403.d	06/20/18	20:44
04	SBLKWB170	df1404.d	06/20/18	21:17
05	170WBLCS	df1405.d	06/20/18	21:45
06	170WBLCSD	df1406.d	06/20/18	22:14
07	SBLKWJ170	df1407.d	06/20/18	22:43
08	170WJLCS	df1408.d	06/20/18	23:12
09	170WJLCSD	df1409.d	06/20/18	23:40
10	9662185	df1410.d	06/21/18	00:09
11	9662314	df1411.d	06/21/18	00:38
12	9662315	df1412.d	06/21/18	01:06
13	9664270	df1413.d	06/21/18	01:35
14	9664796	df1414.d	06/21/18	02:04
15	9661022	df1415.d	06/21/18	02:33
16	9661026	df1416.d	06/21/18	03:01
17	9659869	df1417.d	06/21/18	03:30

FORM V SV

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date(s): 06/05/18 06/05/18

Calibration Times: 00:37 04:01

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = df0102.d RRF0.25 = df0108.d RRF1.25 = df0107.d RRF3.75 = df0106.d
RRF7.5 = df0101a.d RRF12.5 = df0105.d RRF20 = df0104.d RRF30 = df0103.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. METHOD
1,4-Dioxane			0.722	0.738	0.796	0.812	0.807	0.800	0.779	5	AVG
N-Nitrosodimethylamine			1.069	1.093	1.179	1.247	1.237	1.214	1.173	6	AVG
Pyridine			1.811	1.927	2.006	2.112	2.109	2.066	2.005	6	AVG
2-Picoline			2.109	2.103	2.145	2.201	2.183	2.135	2.146	2	AVG
N-Nitrosomethylethylamine			0.894	0.912	0.945	0.969	0.965	0.942	0.938	3	AVG
Methyl methanesulfonate			1.001	1.023	1.066	1.081	1.066	1.053	1.048	3	AVG
N-Nitrosodiethylamine		0.781	0.823	0.867	0.899	0.914	0.918	0.898	0.871	6	AVG
Ethyl methanesulfonate		0.767	0.836	0.832	0.871	0.877	0.879	0.860	0.846	5	AVG
Benzaldehyde			1.377	1.453	1.551	1.413	1.273	1.046	1.352	13	AVG
Phenol		2.388	2.564	2.528	2.606	2.643	2.601	2.528	2.551	3	AVG
Aniline		2.781	2.873	2.940	3.042	3.069	3.049	2.959	2.959	4	AVG
a-methylstyrene			0.594	0.584	0.620	0.624	0.629	0.617	0.611	3	AVG
bis(2-Chloroethyl)ether		1.745	1.849	1.886	1.945	1.957	1.937	1.881	1.886	4	AVG
2-Chlorophenol		1.366	1.427	1.459	1.476	1.526	1.503	1.466	1.461	4	AVG
1,3-Dichlorobenzene		1.463	1.527	1.498	1.559	1.581	1.568	1.526	1.532	3	AVG
1,4-Dichlorobenzene		1.514	1.580	1.530	1.555	1.595	1.581	1.548	1.558	2	AVG
Benzyl alcohol			1.035	1.038	1.103	1.111	1.134	1.118	1.090	4	AVG
1,2-Dichlorobenzene		1.448	1.455	1.449	1.471	1.504	1.492	1.451	1.467	2	AVG
Indene			2.296	2.301	2.378	2.391	2.423	2.368	2.359	2	AVG
2-Methylphenol		1.396	1.515	1.540	1.598	1.608	1.611	1.574	1.549	5	AVG
2,2'-oxybis(1-Chloropropane)		1.855	1.907	1.900	1.984	1.963	1.945	1.898	1.922	2	AVG
bis(2-Chloroisopropyl)ether		1.855	1.907	1.900	1.984	1.963	1.945	1.898	1.922	2	AVG
N-Nitrosopyrrolidine		0.799	0.874	0.896	0.942	0.963	0.962	0.946	0.912	7	AVG
Acetophenone		1.860	2.059	2.221	2.409	2.400	2.399	2.328	2.239	9	AVG
4-Methylphenol		1.365	1.746	1.791	1.679	1.852	1.849	1.804	1.727	10	AVG
Total Cresols		1.381	1.630	1.665	1.638	1.730	1.730	1.689	1.638	7	AVG
N-Nitroso-di-n-propylamine		1.232	1.326	1.323	1.358	1.354	1.353	1.329	1.325	3	AVG
N-Nitrosomorpholine			0.988	0.985	1.022	1.008	1.003	0.974	0.997	2	AVG
o-Toluidine		2.501	2.691	2.696	2.751	2.793	2.772	2.689	2.699	4	AVG
Hexachloroethane			0.684	0.689	0.714	0.728	0.721	0.700	0.706	3	AVG
Nitrobenzene		0.470	0.514	0.513	0.519	0.529	0.515	0.520	0.512	4	AVG
N-Nitrosopiperidine		0.193	0.208	0.216	0.219	0.226	0.222	0.226	0.216	5	AVG
Isophorone		0.783	0.850	0.895	0.920	0.933	0.928	0.943	0.893	6	AVG
2-Nitrophenol		0.163	0.175	0.188	0.201	0.205	0.206	0.210	0.193	9	AVG
2,4-Dimethylphenol		0.385	0.420	0.436	0.447	0.457	0.454	0.461	0.437	6	AVG
O,O,O-Triethylphosphorothioat			0.167	0.170	0.171	0.172	0.174	0.178	0.172	2	AVG
bis(2-Chloroethoxy)methane		0.558	0.577	0.599	0.586	0.592	0.543	0.578	0.576	3	AVG
Benzoic acid			0.238	0.310	0.320	0.335	0.343	0.352	0.316	13	AVG
1,2,3,4-Tetrahydronaphthalene			0.019	0.020	0.021	0.022	0.021	0.021	0.020	4	AVG
2,4-Dichlorophenol		0.246	0.276	0.288	0.298	0.304	0.301	0.308	0.289	8	AVG
1,2,4-Trichlorobenzene		0.295	0.308	0.306	0.311	0.315	0.313	0.317	0.309	2	AVG
Naphthalene	1.134	1.079	1.083	1.106	1.105	1.126	1.110	1.132	1.109	2	AVG
4-Chloroaniline		0.415	0.461	0.463	0.472	0.484	0.477	0.485	0.465	5	AVG
2,6-Dichlorophenol		0.250	0.281	0.294	0.296	0.298	0.295	0.302	0.288	6	AVG
Hexachloropropene			0.192	0.196	0.201	0.207	0.206	0.211	0.202	4	AVG
Hexachlorobutadiene		0.173	0.174	0.173	0.174	0.179	0.172	0.175	0.174	1	AVG
Quinoline			0.636	0.666	0.673	0.680	0.672	0.684	0.668	3	AVG
Caprolactam			0.103	0.128	0.136	0.137	0.132	0.135	0.128	10	AVG
N-Nitrosodi-n-butylamine			0.301	0.317	0.332	0.333	0.419	0.429	0.355	15	AVG
4-Chloro-3-methylphenol		0.295	0.348	0.370	0.382	0.386	0.383	0.394	0.365	9	AVG
Safrole			0.255	0.269	0.278	0.283	0.278	0.287	0.275	4	AVG
2-Methylnaphthalene	0.666	0.657	0.689	0.715	0.728	0.726	0.725	0.736	0.705	4	AVG

4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date(s): 06/05/18 06/05/18

Calibration Times: 00:37 04:01

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = df0102.d RRF0.25 = df0108.d RRF1.25 = df0107.d RRF3.75 = df0106.d
RRF7.5 = df0101a.d RRF12.5 = df0105.d RRF20 = df0104.d RRF30 = df0103.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. METHOD
1-Methylnaphthalene	0.622	0.567	0.633	0.639	0.650	0.660	0.652	0.666	0.636	5	AVG
Hexachlorocyclopentadiene			0.333	0.342	0.362	0.390	0.370	0.373	0.362	6	AVG
1,2,4,5-Tetrachlorobenzene		0.681	0.657	0.636	0.654	0.663	0.652	0.660	0.658	2	AVG
cis-Isosafrole			0.565	0.584	0.617	0.627	0.620	0.639	0.609	5	AVG
2,4,6-Trichlorophenol		0.342	0.391	0.421	0.443	0.457	0.456	0.468	0.426	11	AVG
2,4,5-Trichlorophenol		0.352	0.414	0.441	0.459	0.454	0.443	0.444	0.430	9	AVG
trans-Isosafrole			0.624	0.644	0.678	0.694	0.683	0.703	0.671	5	AVG
Isosafrole			0.614	0.634	0.668	0.682	0.672	0.692	0.660	5	AVG
1,1'-Biphenyl		1.597	1.633	1.682	1.845	1.836	1.769	1.791	1.736	6	AVG
2-Chloronaphthalene		1.375	1.377	1.326	1.433	1.429	1.372	1.445	1.394	3	AVG
1-Chloronaphthalene		1.176	1.286	1.292	1.272	1.279	1.251	1.215	1.253	3	AVG
Diphenyl ether		0.931	0.955	0.944	0.983	0.985	0.961	0.981	0.963	2	AVG
2-Nitroaniline		0.362	0.415	0.459	0.487	0.493	0.486	0.500	0.457	11	AVG
1,4-Naphthoquinone			0.480	0.525	0.567	0.578	0.551	0.562	0.544	7	AVG
1,4-Dinitrobenzene			0.205	0.244	0.259	0.265	0.255	0.265	0.249	9	AVG
Dimethylphthalate			1.447	1.443	1.485	1.426	1.353	1.409	1.427	3	AVG
1,3-Dinitrobenzene			0.254	0.281	0.290	0.288	0.278	0.288	0.280	5	AVG
2,6-Dinitrotoluene		0.265	0.328	0.350	0.356	0.359	0.341	0.349	0.336	10	AVG
Acenaphthylene	1.877	1.762	1.978	2.003	2.085	2.148	2.072	2.111	2.004	7	AVG
3-Nitroaniline		0.287	0.375	0.388	0.408	0.418	0.412	0.418	0.387	12	AVG
Acenaphthene	1.357	1.302	1.365	1.339	1.374	1.400	1.360	1.384	1.360	2	AVG
2,4-Dinitrophenol			0.182	0.213	0.235	0.251	0.251	0.268	0.233	13	AVG
4-Nitrophenol				0.259	0.274	0.310	0.301	0.313	0.291	8	AVG
Pentachlorobenzene		0.534	0.548	0.522	0.546	0.550	0.535	0.549	0.540	2	AVG
2,4-Dinitrotoluene			0.426	0.447	0.469	0.479	0.452	0.468	0.457	4	AVG
2,4_2,6-Dinitrotoluenes		0.319	0.377	0.399	0.413	0.419	0.397	0.408	0.390	9	AVG
Dibenzofuran		1.855	1.959	1.901	1.965	1.980	1.904	1.922	1.927	2	AVG
1-Naphthylamine				1.416	1.455	1.500	1.431	1.485	1.457	2	AVG
2,3,4,6-Tetrachlorophenol			0.341	0.348	0.358	0.370	0.371	0.376	0.361	4	AVG
2-Naphthylamine				1.370	1.423	1.449	1.393	1.424	1.412	2	AVG
Diethylphthalate			1.411	1.429	1.497	1.476	1.418	1.480	1.452	3	AVG
Thionazin			0.325	0.325	0.343	0.348	0.332	0.342	0.336	3	AVG
Fluorene	1.485	1.472	1.544	1.561	1.586	1.615	1.503	1.518	1.535	3	AVG
4-Chlorophenyl-phenylether		0.706	0.738	0.732	0.745	0.744	0.720	0.701	0.727	2	AVG
5-Nitro-o-toluidine		0.382	0.420	0.460	0.480	0.488	0.471	0.487	0.455	9	AVG
4-Nitroaniline		0.337	0.425	0.436	0.463	0.447	0.427	0.445	0.426	10	AVG
4,6-Dinitro-2-methylphenol				0.136	0.153	0.157	0.158	0.163	0.153	7	AVG
N-Nitrosodiphenylamine (1)		0.630	0.688	0.693	0.700	0.703	0.684	0.686	0.684	4	AVG
NDPA as diphenylamine		0.630	0.688	0.693	0.700	0.703	0.684	0.686	0.684	4	AVG
1,2-Diphenylhydrazine		0.993	1.060	1.086	1.091	1.078	1.054	1.039	1.057	3	AVG
Tetraethyldithiopyrophosphate			0.164	0.169	0.175	0.170	0.168	0.173	0.170	2	AVG
1,3,5-Trinitrobenzene				0.090	0.102	0.105	0.113	0.117	0.105	10	AVG
Diallate (peak 1)			0.503	0.513	0.524	0.517	0.499	0.506	0.510	2	AVG
Phorate		0.534	0.618	0.652	0.672	0.659	0.643	0.650	0.633	7	AVG
Phenacetin			0.446	0.507	0.525	0.528	0.525	0.537	0.511	7	AVG
4-Bromophenyl-phenylether		0.184	0.214	0.219	0.215	0.214	0.208	0.210	0.209	6	AVG
Diallate (peak 2)			0.376	0.404	0.413	0.401	0.401	0.412	0.401	3	AVG
Diallate trans/cis			0.481	0.495	0.505	0.497	0.482	0.490	0.492	2	AVG
Hexachlorobenzene	0.204	0.213	0.207	0.207	0.204	0.211	0.210	0.205	0.208	2	AVG
Dimethoate			0.389	0.434	0.449	0.449	0.433	0.439	0.432	5	AVG
Atrazine			0.179	0.197	0.211	0.202	0.195	0.190	0.196	6	AVG
Pentachlorophenol			0.124	0.135	0.147	0.148	0.152	0.154	0.143	8	AVG

(1) Cannot be separated from Diphenylamine
4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.

FORM VI SV-1

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date(s): 06/05/18 06/05/18

Calibration Times: 00:37 04:01

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = df0102.d RRF0.25 = df0108.d RRF1.25 = df0107.d RRF3.75 = df0106.d
RRF7.5 = df0101a.d RRF12.5 = df0105.d RRF20 = df0104.d RRF30 = df0103.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. METHOD
4-Aminobiphenyl		0.656	0.754	0.807	0.810	0.820	0.812	0.796	0.779	8	AVG
Pentachloronitrobenzene			0.084	0.090	0.093	0.095	0.095	0.095	0.092	5	AVG
Pronamide		0.276	0.306	0.349	0.362	0.367	0.367	0.372	0.343	11	AVG
Dinoseb			0.149	0.188	0.215	0.234	0.236	0.247	0.212	18	AVG
Phenanthrene	1.181	1.137	1.164	1.150	1.162	1.193	1.200	1.190	1.172	2	AVG
Anthracene	1.024	1.036	1.148	1.181	1.199	1.214	1.193	1.208	1.151	7	AVG
Carbazole		0.930	1.058	1.113	1.147	1.155	1.149	1.166	1.103	8	AVG
Methyl parathion			0.255	0.302	0.331	0.340	0.339	0.344	0.319	11	AVG
Di-n-butylphthalate			1.253	1.363	1.444	1.463	1.453	1.470	1.408	6	AVG
Parathion			0.164	0.199	0.216	0.225	0.228	0.236	0.211	13	AVG
4-Nitroquinoline-1-oxide				0.112	0.140	0.161	0.171	0.181	0.153	18	AVG
Octachlorostyrene			0.076	0.074	0.080	0.081	0.081	0.081	0.079	4	AVG
Isodrin		0.126	0.122	0.129	0.135	0.135	0.137	0.139	0.132	5	AVG
Fluoranthene	1.152	1.104	1.204	1.294	1.333	1.368	1.373	1.398	1.278	9	AVG
Benzidine				0.886	0.925	0.916	0.888	0.882	0.900	2	AVG
Pyrene	1.366	1.368	1.356	1.365	1.380	1.391	1.358	1.381	1.371	1	AVG
p-Dimethylaminoazobenzene			0.194	0.229	0.242	0.259	0.259	0.269	0.242	11	AVG
Chlorobenzilate			0.377	0.421	0.427	0.446	0.437	0.447	0.426	6	AVG
3,3'-Dimethylbenzidine			0.715	0.831	0.934	0.960	0.921	0.905	0.878	10	AVG
Butylbenzylphthalate			0.595	0.668	0.694	0.724	0.710	0.710	0.683	7	AVG
2-Acetylaminofluorene			0.392	0.508	0.562	0.605	0.600	0.619	0.548	16	AVG
3,3'-Dichlorobenzidine			0.384	0.432	0.471	0.490	0.480	0.482	0.456	9	AVG
4,4'-Methylenebis(2-chloroani				0.265	0.276	0.291	0.279	0.280	0.278	3	AVG
Benzo(a)anthracene	1.011	0.981	1.123	1.229	1.284	1.342	1.333	1.337	1.205	12	AVG
Chrysene	1.098	1.116	1.173	1.223	1.241	1.275	1.259	1.268	1.207	6	AVG
bis(2-Ethylhexyl)phthalate			0.783	0.906	0.961	1.008	0.983	0.994	0.939	9	AVG
6-Methylchrysene			0.764	0.836	0.886	0.929	0.917	0.934	0.878	8	AVG
Di-n-octylphthalate			1.306	1.541	1.672	1.729	1.730	1.754	1.622	11	AVG
Benzo(b)fluoranthene	1.100	1.006	1.149	1.193	1.277	1.314	1.310	1.299	1.206	9	AVG
7,12-Dimethylbenz[a]anthracen			0.503	0.541	0.567	0.585	0.593	0.604	0.566	7	AVG
Benzo(k)fluoranthene	1.099	1.098	1.200	1.245	1.223	1.244	1.221	1.264	1.199	5	AVG
Benzo(a)pyrene	0.904	0.882	1.041	1.115	1.152	1.201	1.197	1.220	1.089	12	AVG
3-Methylcholanthrene		0.417	0.500	0.550	0.591	0.616	0.616	0.637	0.561	14	AVG
Dibenz(a,h)acridine			0.819	0.889	0.946	0.957	0.965	0.968	0.924	6	AVG
Dibenz(a,j)acridine			0.927	0.963	1.013	1.026	1.011	0.985	0.987	4	AVG
Indeno(1,2,3-cd)pyrene	0.876	0.844	0.948	1.020	1.089	1.102	1.102	1.093	1.009	11	AVG
Dibenz(a,h)anthracene	0.955	1.002	1.091	1.120	1.170	1.144	1.144	1.119	1.093	7	AVG
Benzo(g,h,i)perylene	1.046	0.983	1.077	1.105	1.143	1.113	1.105	1.043	1.077	5	AVG
Total PAHs	1.058	1.033	1.098	1.097	1.113	1.105	1.088	1.088	1.085	2	AVG
2-Fluorophenol		1.495	1.596	1.635	1.679	1.732	1.723	1.684	1.649	5	AVG
Phenol-d6		2.000	2.142	2.160	2.237	2.279	2.274	2.210	2.186	4	AVG
Nitrobenzene-d5		0.480	0.513	0.523	0.530	0.537	0.527	0.535	0.521	4	AVG
2-Fluorobiphenyl		1.558	1.627	1.592	1.640	1.639	1.600	1.614	1.610	2	AVG
2,4,6-Tribromophenol		0.139	0.168	0.174	0.182	0.189	0.183	0.188	0.175	10	AVG
Terphenyl-d14		0.808	0.846	0.876	0.896	0.887	0.887	0.891	0.870	4	AVG
								Average %RSD		6	

4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.
Benzidine Levels in the 5,15,30,50,80,120 standards are 15,45,90,150,240,360 ng/ul, respectively.
Benzoic acid and 2,4-Dinitrophenol are at 15 ng/ul, 30 ng/ul,40 ng/ul in the 5,15,30 standards.

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP19760.i/18jun04a.b/df0101a.d SSTD7.5
/chem/HP19760.i/18jun04a.b/df0102.d SSTD0.125
/chem/HP19760.i/18jun04a.b/df0103.d SSTD30
/chem/HP19760.i/18jun04a.b/df0104.d SSTD20
/chem/HP19760.i/18jun04a.b/df0105.d SSTD12.5
/chem/HP19760.i/18jun04a.b/df0106.d SSTD3.75
/chem/HP19760.i/18jun04a.b/df0107.d SSTD1.25
/chem/HP19760.i/18jun04a.b/df0108.d SSTD0.25

Area Summary

	File ID:									
Internal Standard Name	df0101a.d	df0102.d	df0103.d	df0104.d	df0105.d	df0106.d	df0107.d	df0108.d	Avg. Area	%RSD	In Spec
1,4-Dichlorobenzene-d4	199536	233206	202589	196684	221630	209057	209281	188257	207530	7	Yes
Naphthalene-d8	752578	869564	742126	747557	833114	776630	791196	713723	778311	7	Yes
Acenaphthene-d10	349529	405133	349473	351231	386382	367908	363762	324533	362244	7	Yes
Phenanthrene-d10	661403	752059	664650	649152	730128	676746	671650	598503	675536	7	Yes
Pyrene-d10	666393	727004	698458	681472	746275	681935	675555	584926	682752	7	Yes
Perylene-d12	668430	694569	712280	697807	770589	677153	641640	555910	677297	9	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

	File ID:								
Internal Standard Name	df0101a.d	df0102.d	df0103.d	df0104.d	df0105.d	df0106.d	df0107.d	df0108.d	Avg. RT
1,4-Dichlorobenzene-d4	6.961	6.960	6.960	6.960	6.960	6.960	6.961	6.961	6.960
Naphthalene-d8	8.896	8.890	8.896	8.896	8.896	8.895	8.890	8.890	8.893
Acenaphthene-d10	11.676	11.670	11.676	11.676	11.676	11.670	11.670	11.670	11.673
Phenanthrene-d10	13.553	13.553	13.559	13.559	13.558	13.553	13.553	13.553	13.555
Pyrene-d10	15.552	15.546	15.552	15.552	15.552	15.546	15.546	15.546	15.549
Perylene-d12	20.057	20.052	20.063	20.057	20.057	20.051	20.052	20.052	20.055

Comments:_____

_____

Report generated on 06/05/2018 at 08:35

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS | LAB CODE: LANCAS | INSTRUMENT: HP19760

Method: SW-846 8270D MINI | File ID: df0111.d

ICV SAMPLE ID: rvICV1218 | BATCH: 18JUN04A026 | Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,4-Dioxane	12.50	12.32	-1	30	YES
N-Nitrosodimethylamine	12.50	12.72	2	30	YES
Pyridine	12.50	12.70	2	30	YES
2-Picoline	12.50	12.28	-2	30	YES
N-Nitrosomethylethylamine	12.50	12.00	-4	30	YES
Methyl methanesulfonate	12.50	12.90	3	30	YES
N-Nitrosodiethylamine	12.50	12.16	-3	30	YES
Ethyl methanesulfonate	12.50	12.33	-1	30	YES
Phenol	12.50	12.60	1	30	YES
Aniline	12.50	12.17	-3	30	YES
bis(2-Chloroethyl)ether	12.50	12.51	0	30	YES
2-Chlorophenol	12.50	12.56	0	30	YES
1,3-Dichlorobenzene	12.50	12.46	0	30	YES
1,4-Dichlorobenzene	12.50	12.71	2	30	YES
Benzyl alcohol	12.50	12.97	4	30	YES
1,2-Dichlorobenzene	12.50	12.59	1	30	YES
Indene	12.50	14.79	18	30	YES
2-Methylphenol	12.50	12.67	1	30	YES
2,2'-oxybis(1-Chloropropane	12.50	12.68	1	30	YES
bis(2-Chloroisopropyl)ether	12.50	12.68	1	30	YES
N-Nitrosopyrrolidine	12.50	12.45	0	30	YES
Acetophenone	12.50	13.13	5	30	YES
4-Methylphenol	12.50	13.18	5	30	YES
N-Nitroso-di-n-propylamine	12.50	12.62	1	30	YES
N-Nitrosomorpholine	12.50	12.59	1	30	YES
o-Toluidine	12.50	12.37	-1	30	YES
Total Cresols	25.00	25.88	4	30	YES
Hexachloroethane	12.50	12.49	0	30	YES
Nitrobenzene	12.50	12.54	0	30	YES
N-Nitrosopiperidine	12.50	12.01	-4	30	YES
Isophorone	12.50	13.13	5	30	YES
2-Nitrophenol	12.50	13.03	4	30	YES
2,4-Dimethylphenol	12.50	10.90	-13	30	YES
bis(2-Chloroethoxy)methane	12.50	12.58	1	30	YES
Benzoic acid	25.00	25.99	4	30	YES
O,O,O-Triethylphosphorothio	12.50	12.33	-1	30	YES
2,4-Dichlorophenol	12.50	13.00	4	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: df0111.d

ICV SAMPLE ID: rvICV1218 BATCH: 18JUN04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,2,4-Trichlorobenzene	12.50	12.69	1	30	YES
Naphthalene	12.50	12.34	-1	30	YES
4-Chloroaniline	12.50	13.00	4	30	YES
2,6-Dichlorophenol	12.50	12.67	1	30	YES
Hexachloropropene	12.50	13.34	7	30	YES
Hexachlorobutadiene	12.50	12.40	-1	30	YES
Quinoline	12.50	12.78	2	30	YES
N-Nitrosodi-n-butylamine	12.50	11.41	-9	30	YES
4-Chloro-3-methylphenol	12.50	13.06	4	30	YES
Safrole	12.50	12.40	-1	30	YES
2-Methylnaphthalene	12.50	12.74	2	30	YES
1-Methylnaphthalene	12.50	12.96	4	30	YES
Hexachlorocyclopentadiene	25.00	28.43	14	30	YES
1,2,4,5-Tetrachlorobenzene	12.50	12.47	0	30	YES
cis-Isosafrole	1.50	1.57	5	30	YES
2,4,6-Trichlorophenol	12.50	12.91	3	30	YES
2,4,5-Trichlorophenol	12.50	13.68	9	30	YES
trans-Isosafrole	11.00	11.54	5	30	YES
1,1'-Biphenyl	12.50	13.13	5	30	YES
2-Chloronaphthalene	12.50	12.05	-4	30	YES
Isosafrole	12.50	13.18	5	30	YES
1-Chloronaphthalene	12.50	13.10	5	30	YES
Diphenyl ether	12.50	12.65	1	30	YES
2-Nitroaniline	12.50	13.25	6	30	YES
1,4-Naphthoquinone	15.63	16.30	4	30	YES
1,4-Dinitrobenzene	12.50	12.84	3	30	YES
Dimethylphthalate	12.50	12.73	2	30	YES
1,3-Dinitrobenzene	12.50	12.94	4	30	YES
2,6-Dinitrotoluene	12.50	13.30	6	30	YES
Acenaphthylene	12.50	14.23	14	30	YES
3-Nitroaniline	12.50	13.57	9	30	YES
Acenaphthene	12.50	13.45	8	30	YES
2,4-Dinitrophenol	25.00	26.93	8	30	YES
4-Nitrophenol	12.50	13.06	4	30	YES
Pentachlorobenzene	12.50	12.45	0	30	YES
2,4-Dinitrotoluene	12.50	12.71	2	30	YES
Dibenzofuran	12.50	12.83	3	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: df0111.d

ICV SAMPLE ID: rvICV1218 BATCH: 18JUN04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
2,4_2,6-Dinitrotoluenes	25.00	26.32	5	30	YES
1-Naphthylamine	25.00	24.81	-1	30	YES
2,3,4,6-Tetrachlorophenol	12.50	13.27	6	30	YES
2-Naphthylamine	25.00	25.76	3	30	YES
Diethylphthalate	12.50	12.38	-1	30	YES
Thionazin	12.50	12.89	3	30	YES
Fluorene	12.50	12.82	3	30	YES
4-Chlorophenyl-phenylether	12.50	12.38	-1	30	YES
5-Nitro-o-toluidine	12.50	13.16	5	30	YES
4-Nitroaniline	12.50	12.56	1	30	YES
4,6-Dinitro-2-methylphenol	12.50	12.56	0	30	YES
N-Nitrosodiphenylamine	12.50	13.09	5	30	YES
NDPA as diphenylamine	12.50	13.09	5	30	YES
1,2-Diphenylhydrazine	12.50	13.35	7	30	YES
Tetraethyldithiopyrophospha	12.50	12.26	-2	30	YES
1,3,5-Trinitrobenzene	12.50	12.09	-3	30	YES
Diallate (peak 1)	9.38	8.91	-5	30	YES
Phorate	12.50	13.03	4	30	YES
Phenacetin	12.50	12.75	2	30	YES
4-Bromophenyl-phenylether	12.50	12.81	2	30	YES
Diallate (peak 2)	3.13	3.64	16	30	YES
Hexachlorobenzene	12.50	12.54	0	30	YES
Diallate trans/cis	12.50	12.22	-2	30	YES
Dimethoate	12.50	13.27	6	30	YES
Pentachlorophenol	12.50	13.75	10	30	YES
4-Aminobiphenyl	12.50	14.66	17	30	YES
Pentachloronitrobenzene	12.50	12.93	3	30	YES
Pronamide	12.50	13.60	9	30	YES
Dinoseb	12.50	12.27	-2	30	YES
Phenanthrene	12.50	12.82	3	30	YES
Anthracene	12.50	12.96	4	30	YES
Carbazole	12.50	13.52	8	30	YES
Methyl parathion	12.50	13.96	12	30	YES
Di-n-butylphthalate	12.50	13.00	4	30	YES
Parathion	12.50	14.13	13	30	YES
4-Nitroquinoline-1-oxide	150.00	186.92	25	30	YES
Isodrin	12.50	13.36	7	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: df0111.d

ICV SAMPLE ID: rvICV1218 BATCH: 18JUN04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
Fluoranthene	12.50	13.23	6	30	YES
Benzidine	62.50	63.85	2	30	YES
Pyrene	12.50	12.44	0	30	YES
p-Dimethylaminoazobenzene	12.50	14.89	19	30	YES
Chlorobenzilate	12.50	13.62	9	30	YES
3,3'-Dimethylbenzidine	25.00	25.89	4	30	YES
Butylbenzylphthalate	12.50	13.06	4	30	YES
2-Acetylaminofluorene	12.50	12.74	2	30	YES
3,3'-Dichlorobenzidine	12.50	12.78	2	30	YES
Benzo(a)anthracene	12.50	13.46	8	30	YES
Chrysene	12.50	13.01	4	30	YES
4,4'-Methylenebis(2-chloroa	12.50	11.43	-9	30	YES
bis(2-Ethylhexyl)phthalate	12.50	13.08	5	30	YES
6-Methylchrysene	12.50	12.44	0	30	YES
Di-n-octylphthalate	12.50	12.78	2	30	YES
Benzo(b)fluoranthene	12.50	12.65	1	30	YES
7,12-Dimethylbenz[a]anthrac	12.50	12.90	3	30	YES
Benzo(k)fluoranthene	12.50	12.99	4	30	YES
Benzo(a)pyrene	12.50	13.20	6	30	YES
3-Methylcholanthrene	12.50	14.34	15	30	YES
Dibenz(a,h)acridine	12.50	12.14	-3	30	YES
Dibenz(a,j)acridine	12.50	12.17	-3	30	YES
Indeno(1,2,3-cd)pyrene	12.50	13.08	5	30	YES
Dibenz(a,h)anthracene	12.50	13.19	6	30	YES
Benzo(g,h,i)perylene	12.50	12.66	1	30	YES
Total PAHs	225.00	228.76	2	30	YES

NC = Could not calculate

Comments: _____

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Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: df0112.d

ICV SAMPLE ID: rvBASICV1218 BATCH: 18JUN04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
Benzaldehyde	12.50	14.82	19	30	YES
Caprolactam	12.50	13.04	4	30	YES
Atrazine	12.50	14.00	12	30	YES

NC = Could not calculate

Comments: _____

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7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 06/20/18 Time: 09:09

Lab File ID: df1351y.d Init. Calib. Date(s): 06/05/18 06/05/18

Init. Calib. Times(s): 00:37 04:01

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
1,4-Dioxane	0.779	0.807	7.760	7.5	4
N-Nitrosodimethylamine	1.173	1.207	7.720	7.5	3
Pyridine	2.005	1.981	7.410	7.5	-1
2-Picoline	2.146	2.159	7.550	7.5	1
N-Nitrosomethylethylamine	0.938	0.944	7.550	7.5	1
Methyl methanesulfonate	1.048	1.089	7.790	7.5	4
N-Nitrosodiethylamine	0.871	0.907	7.810	7.5	4
Ethyl methanesulfonate	0.846	0.872	7.730	7.5	3
Benzaldehyde	1.352	1.499	8.320	7.5	11
Phenol	2.551	2.614	7.680	7.5	2
Aniline	2.959	3.054	7.740	7.5	3
a-methylstyrene	0.611	0.647	7.940	7.5	6
bis(2-Chloroethyl)ether	1.886	1.959	7.790	7.5	4
2-Chlorophenol	1.461	1.604	8.240	7.5	10
1,3-Dichlorobenzene	1.532	1.679	8.220	7.5	10
1,4-Dichlorobenzene	1.558	1.700	8.190	7.5	9
Benzyl alcohol	1.090	1.090	7.500	7.5	0
1,2-Dichlorobenzene	1.467	1.603	8.200	7.5	9
Indene	2.359	2.415	7.680	7.5	2
2-Methylphenol	1.549	1.631	7.890	7.5	5
2,2'-oxybis(1-Chloropropane)	1.922	2.165	8.450	7.5	13
bis(2-Chloroisopropyl)ether	1.922	2.165	8.450	7.5	13
N-Nitrosopyrrolidine	0.912	0.931	7.660	7.5	2
Acetophenone	2.239	2.228	7.460	7.5	-1
4-Methylphenol	1.727	1.889	8.210	7.5	9
Total Cresols	1.638	1.760	16.120	15.0	7
N-Nitroso-di-n-propylamine	1.325	1.413	8.000	7.5	7
N-Nitrosomorpholine	0.997	1.078	8.110	7.5	8
o-Toluidine	2.699	2.874	7.990	7.5	6
Hexachloroethane	0.706	0.766	8.140	7.5	9
Nitrobenzene	0.512	0.534	7.830	7.5	4
N-Nitrosopiperidine	0.216	0.213	7.390	7.5	-1
Isophorone	0.893	0.892	7.490	7.5	0
2-Nitrophenol	0.193	0.200	7.790	7.5	4
2,4-Dimethylphenol	0.437	0.437	7.510	7.5	0
O,O,O-Triethylphosphorothioate	0.172	0.180	7.860	7.5	5

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 06/20/18 Time: 09:09

Lab File ID: df1351y.d Init. Calib. Date(s): 06/05/18 06/05/18

Init. Calib. Times(s): 00:37 04:01

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
bis(2-Chloroethoxy)methane	0.576	0.584	7.600	7.5	1
Benzoic acid	0.316	0.280	8.840	10.0	-12
2,4-Dichlorophenol	0.289	0.311	8.090	7.5	8
1,2,4-Trichlorobenzene	0.309	0.329	7.970	7.5	6
Naphthalene	1.110	1.175	7.940	7.5	6
4-Chloroaniline	0.465	0.479	7.720	7.5	3
2,6-Dichlorophenol	0.288	0.306	7.980	7.5	6
Hexachloropropene	0.202	0.187	6.930	7.5	-8
Hexachlorobutadiene	0.174	0.175	7.530	7.5	0
Quinoline	0.668	0.714	8.020	7.5	7
Caprolactam	0.128	0.122	7.150	7.5	-5
N-Nitrosodi-n-butylamine	0.355	0.329	6.950	7.5	-7
4-Chloro-3-methylphenol	0.365	0.371	7.610	7.5	2
Safrole	0.275	0.290	7.910	7.5	5
2-Methylnaphthalene	0.705	0.767	8.160	7.5	9
1-Methylnaphthalene	0.636	0.699	8.240	7.5	10
Hexachlorocyclopentadiene	0.362	0.338	7.000	7.5	-7
1,2,4,5-Tetrachlorobenzene	0.658	0.663	7.560	7.5	1
cis-Isosafrole	0.609	0.604	1.270	1.3	-1
2,4,6-Trichlorophenol	0.426	0.431	7.590	7.5	1
2,4,5-Trichlorophenol	0.430	0.447	7.800	7.5	4
trans-Isosafrole	0.671	0.648	6.020	6.2	-3
Isosafrole	0.660	0.641	7.280	7.5	-3
1,1'-Biphenyl	1.736	1.768	7.640	7.5	2
2-Chloronaphthalene	1.394	1.532	8.240	7.5	10
1-Chloronaphthalene	1.253	1.306	7.820	7.5	4
Diphenyl ether	0.963	0.999	7.780	7.5	4
2-Nitroaniline	0.457	0.479	7.850	7.5	5
1,4-Naphthoquinone	0.544	0.566	7.810	7.5	4
1,4-Dinitrobenzene	0.249	0.246	7.410	7.5	-1
Dimethylphthalate	1.427	1.547	8.130	7.5	8
1,3-Dinitrobenzene	0.280	0.285	7.650	7.5	2
2,6-Dinitrotoluene	0.336	0.372	8.310	7.5	11
Acenaphthylene	2.004	2.053	7.680	7.5	2
3-Nitroaniline	0.387	0.411	7.970	7.5	6
Acenaphthene	1.360	1.449	7.990	7.5	7

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 06/20/18 Time: 09:09

Lab File ID: df1351y.d Init. Calib. Date(s): 06/05/18 06/05/18

Init. Calib. Times(s): 00:37 04:01

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
2,4-Dinitrophenol	0.233	0.175	7.490	10.0	-25
4-Nitrophenol	0.291	0.274	7.040	7.5	-6
Pentachlorobenzene	0.540	0.541	7.510	7.5	0
2,4-Dinitrotoluene	0.457	0.495	8.130	7.5	8
2,4_2,6-Dinitrotoluenes	0.390	0.433	16.660	15.0	11
Dibenzofuran	1.927	1.969	7.670	7.5	2
1-Naphthylamine	1.457	1.530	7.870	7.5	5
2,3,4,6-Tetrachlorophenol	0.361	0.345	7.180	7.5	-4
2-Naphthylamine	1.412	1.494	7.930	7.5	6
Diethylphthalate	1.452	1.526	7.880	7.5	5
Thionazin	0.336	0.343	7.650	7.5	2
Fluorene	1.535	1.621	7.920	7.5	6
4-Chlorophenyl-phenylether	0.727	0.764	7.890	7.5	5
5-Nitro-o-toluidine	0.455	0.476	7.840	7.5	5
4-Nitroaniline	0.426	0.455	8.020	7.5	7
4,6-Dinitro-2-methylphenol	0.153	0.141	6.900	7.5	-8
N-Nitrosodiphenylamine (1)	0.684	0.731	8.020	7.5	7
NDPA as diphenylamine	0.684	0.731	8.020	7.5	7
1,2-Diphenylhydrazine	1.057	1.168	8.280	7.5	10
Tetraethyldithiopyrophosphate	0.170	0.177	7.820	7.5	4
1,3,5-Trinitrobenzene	0.105	0.099	7.020	7.5	-6
Diallate (peak 1)	0.510	0.540	6.590	6.2	6
Phorate	0.633	0.700	8.300	7.5	11
Phenacetin	0.511	0.511	7.490	7.5	0
4-Bromophenyl-phenylether	0.209	0.228	8.170	7.5	9
Diallate (peak 2)	0.401	0.419	1.330	1.3	5
Diallate trans/cis	0.492	0.520	7.930	7.5	6
Hexachlorobenzene	0.208	0.214	7.740	7.5	3
Dimethoate	0.432	0.458	7.960	7.5	6
Atrazine	0.196	0.210	8.070	7.5	8
Pentachlorophenol	0.143	0.135	7.080	7.5	-6
4-Aminobiphenyl	0.779	0.636	6.120	7.5	-18
Pentachloronitrobenzene	0.092	0.099	8.100	7.5	8
Pronamide	0.343	0.380	8.320	7.5	11
Dinoseb	0.212	0.195	6.930	7.5	-8
Phenanthrene	1.172	1.290	8.250	7.5	10

(1) Cannot be Separated from Diphenylamine

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 06/20/18 Time: 09:09

Lab File ID: dfl351y.d Init. Calib. Date(s): 06/05/18 06/05/18

Init. Calib. Times(s): 00:37 04:01

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Anthracene	1.151	1.319	8.600	7.5	15
Carbazole	1.103	1.185	8.060	7.5	8
Methyl parathion	0.319	0.354	8.330	7.5	11
Di-n-butylphthalate	1.408	1.484	7.910	7.5	5
Parathion	0.211	0.228	8.080	7.5	8
4-Nitroquinoline-1-oxide	0.153	0.099	4.880	7.5	-35
Octachlorostyrene	0.079	0.084	8.000	7.5	7
Isodrin	0.132	0.146	8.300	7.5	11
Fluoranthene	1.278	1.396	8.190	7.5	9
Benzidine	0.900	0.924	23.110	22.5	3
Pyrene	1.370	1.458	7.980	7.5	6
p-Dimethylaminoazobenzene	0.242	0.234	7.260	7.5	-3
Chlorobenzilate	0.426	0.462	8.140	7.5	8
3,3'-Dimethylbenzidine	0.878	0.844	7.210	7.5	-4
Butylbenzylphthalate	0.683	0.708	7.770	7.5	4
2-Acetylaminofluorene	0.548	0.485	6.640	7.5	-12
3,3'-Dichlorobenzidine	0.456	0.461	7.580	7.5	1
4,4'-Methylenebis(2-chloroanil	0.278	0.271	7.300	7.5	-3
Benzo(a)anthracene	1.205	1.308	8.140	7.5	9
Chrysene	1.207	1.349	8.380	7.5	12
bis(2-Ethylhexyl)phthalate	0.939	0.949	7.580	7.5	1
6-Methylchrysene	0.878	0.920	7.860	7.5	5
Di-n-octylphthalate	1.622	1.615	7.470	7.5	0
Benzo(b)fluoranthene	1.206	1.324	8.230	7.5	10
7,12-Dimethylbenz[a]anthracene	0.566	0.623	8.260	7.5	10
Benzo(k)fluoranthene	1.199	1.387	8.670	7.5	16
Benzo(a)pyrene	1.089	1.223	8.420	7.5	12
3-Methylcholanthrene	0.561	0.535	7.150	7.5	-5
Dibenz(a,h)acridine	0.924	0.749	6.080	7.5	-19
Dibenz(a,j)acridine	0.987	0.845	6.420	7.5	-14
Indeno(1,2,3-cd)pyrene	1.009	0.916	6.810	7.5	-9
Dibenz(a,h)anthracene	1.093	0.972	6.670	7.5	-11
Benzo(g,h,i)perylene	1.077	1.040	7.240	7.5	-3
Total PAHs	1.085	1.201	149.440	135.0	11
2-Fluorophenol	1.649	1.730	15.740	15.0	5

FORM VII SV-1

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 06/20/18 Time: 09:09

Lab File ID: df1351y.d Init. Calib. Date(s): 06/05/18 06/05/18

Init. Calib. Times(s): 00:37 04:01

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	$\overline{RRF}$	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Phenol-d6	2.186	2.350	16.120	15.0	7
Nitrobenzene-d5	0.521	0.530	15.260	15.0	2
2-Fluorobiphenyl	1.610	1.642	15.300	15.0	2
2,4,6-Tribromophenol	0.175	0.177	15.210	15.0	1
Terphenyl-d14	0.870	0.921	15.870	15.0	6
			Average %Drift:		6

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP19760.i/18jun04a.b/df0101a.d **
/chem/HP19760.i/18jun04a.b/df0102.d
/chem/HP19760.i/18jun04a.b/df0103.d
/chem/HP19760.i/18jun04a.b/df0104.d
/chem/HP19760.i/18jun04a.b/df0105.d
/chem/HP19760.i/18jun04a.b/df0106.d
/chem/HP19760.i/18jun04a.b/df0107.d
/chem/HP19760.i/18jun04a.b/df0108.d

** indicates the Mid Level Calibration Standard.

Mid Level Calibration Standard is used for comparison.

Current Continuing Calibration Standard:

/chem/HP19760.i/18jun20.b/df1351y.d

Area Summary

File ID:

Internal Standard Name	df1351y.d	ICAL Area	Low Limit	High Limit	In Spec
1,4-Dichlorobenzene-d4	269123	199536	99768	399072	Yes
Naphthalene-d8	1050678	752578	376289	1505156	Yes
Acenaphthene-d10	498379	349529	174764	699058	Yes
Phenanthrene-d10	908605	661403	330702	1322806	Yes
Pyrene-d10	924062	666393	333196	1332786	Yes
Perylene-d12	865335	668430	334215	1336860	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

File ID:

Internal Standard Name	df1351y.d	ICAL RT	In Spec
1,4-Dichlorobenzene-d4	6.619	6.961	No
Naphthalene-d8	8.554	8.896	No
Acenaphthene-d10	11.340	11.676	No
Phenanthrene-d10	13.240	13.553	No
Pyrene-d10	15.169	15.552	No
Perylene-d12	19.611	20.057	No

A "No" indicates the retention time is greater than 10 seconds from the RT of the referenced standard.

Comments: # Column maintenance

10208
6/20/18

Report generated on 06/20/2018 at 09:46

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 06/20/18 Time: 19:43

Lab File ID: df1401.d Init. Calib. Date(s): 06/05/18 06/05/18

Init. Calib. Times(s): 00:37 04:01

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
1,4-Dioxane	0.779	0.837	8.050	7.5	7
N-Nitrosodimethylamine	1.173	1.189	7.600	7.5	1
Pyridine	2.005	2.073	7.750	7.5	3
2-Picoline	2.146	2.143	7.490	7.5	0
N-Nitrosomethylethylamine	0.938	0.938	7.500	7.5	0
Methyl methanesulfonate	1.048	1.089	7.790	7.5	4
N-Nitrosodiethylamine	0.871	0.920	7.910	7.5	6
Ethyl methanesulfonate	0.846	0.876	7.770	7.5	4
Benzaldehyde	1.352	1.545	8.570	7.5	14
Phenol	2.551	2.639	7.760	7.5	3
Aniline	2.959	3.056	7.750	7.5	3
a-methylstyrene	0.611	0.643	7.890	7.5	5
bis(2-Chloroethyl)ether	1.886	1.964	7.810	7.5	4
2-Chlorophenol	1.461	1.620	8.320	7.5	11
1,3-Dichlorobenzene	1.532	1.672	8.190	7.5	9
1,4-Dichlorobenzene	1.558	1.703	8.200	7.5	9
Benzyl alcohol	1.090	1.099	7.560	7.5	1
1,2-Dichlorobenzene	1.467	1.611	8.230	7.5	10
Indene	2.359	2.419	7.690	7.5	3
2-Methylphenol	1.549	1.621	7.850	7.5	5
2,2'-oxybis(1-Chloropropane)	1.922	2.159	8.430	7.5	12
bis(2-Chloroisopropyl)ether	1.922	2.159	8.430	7.5	12
N-Nitrosopyrrolidine	0.912	0.923	7.600	7.5	1
Acetophenone	2.239	2.251	7.540	7.5	0
4-Methylphenol	1.727	1.875	8.140	7.5	9
Total Cresols	1.638	1.748	16.010	15.0	7
N-Nitroso-di-n-propylamine	1.325	1.433	8.110	7.5	8
N-Nitrosomorpholine	0.997	1.081	8.130	7.5	8
o-Toluidine	2.699	2.881	8.010	7.5	7
Hexachloroethane	0.706	0.779	8.280	7.5	10
Nitrobenzene	0.512	0.525	7.700	7.5	3
N-Nitrosopiperidine	0.216	0.209	7.270	7.5	-3
Isophorone	0.893	0.898	7.550	7.5	1
2-Nitrophenol	0.193	0.199	7.760	7.5	4
2,4-Dimethylphenol	0.437	0.441	7.560	7.5	1
O,O,O-Triethylphosphorothioate	0.172	0.176	7.690	7.5	3

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 06/20/18 Time: 19:43

Lab File ID: df1401.d Init. Calib. Date(s): 06/05/18 06/05/18

Init. Calib. Times(s): 00:37 04:01

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
bis(2-Chloroethoxy)methane	0.576	0.587	7.640	7.5	2
Benzoic acid	0.316	0.314	9.940	10.0	-1
2,4-Dichlorophenol	0.289	0.310	8.040	7.5	7
1,2,4-Trichlorobenzene	0.309	0.327	7.940	7.5	6
Naphthalene	1.110	1.154	7.800	7.5	4
4-Chloroaniline	0.465	0.465	7.500	7.5	0
2,6-Dichlorophenol	0.288	0.304	7.920	7.5	6
Hexachloropropene	0.202	0.189	7.010	7.5	-7
Hexachlorobutadiene	0.174	0.172	7.420	7.5	-1
Quinoline	0.668	0.712	7.990	7.5	7
Caprolactam	0.128	0.121	7.080	7.5	-6
N-Nitrosodi-n-butylamine	0.355	0.328	6.920	7.5	-8
4-Chloro-3-methylphenol	0.365	0.372	7.630	7.5	2
Safrole	0.275	0.288	7.860	7.5	5
2-Methylnaphthalene	0.705	0.758	8.060	7.5	8
1-Methylnaphthalene	0.636	0.702	8.270	7.5	10
Hexachlorocyclopentadiene	0.362	0.335	6.940	7.5	-8
1,2,4,5-Tetrachlorobenzene	0.658	0.667	7.600	7.5	1
cis-Isosafrole	0.609	0.611	1.280	1.3	0
2,4,6-Trichlorophenol	0.426	0.439	7.740	7.5	3
2,4,5-Trichlorophenol	0.430	0.449	7.850	7.5	5
trans-Isosafrole	0.671	0.650	6.030	6.2	-3
Isosafrole	0.660	0.644	7.310	7.5	-3
1,1'-Biphenyl	1.736	1.767	7.630	7.5	2
2-Chloronaphthalene	1.394	1.514	8.150	7.5	9
1-Chloronaphthalene	1.253	1.353	8.100	7.5	8
Diphenyl ether	0.963	0.990	7.710	7.5	3
2-Nitroaniline	0.457	0.479	7.850	7.5	5
1,4-Naphthoquinone	0.544	0.563	7.770	7.5	4
1,4-Dinitrobenzene	0.249	0.243	7.310	7.5	-3
Dimethylphthalate	1.427	1.561	8.200	7.5	9
1,3-Dinitrobenzene	0.280	0.283	7.580	7.5	1
2,6-Dinitrotoluene	0.336	0.373	8.330	7.5	11
Acenaphthylene	2.004	2.069	7.740	7.5	3
3-Nitroaniline	0.387	0.413	8.000	7.5	7
Acenaphthene	1.360	1.458	8.040	7.5	7

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 06/20/18 Time: 19:43

Lab File ID: df1401.d Init. Calib. Date(s): 06/05/18 06/05/18

Init. Calib. Times(s): 00:37 04:01

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
2,4-Dinitrophenol	0.233	0.170	7.270	10.0	-27
4-Nitrophenol	0.291	0.269	6.920	7.5	-8
Pentachlorobenzene	0.540	0.553	7.680	7.5	2
2,4-Dinitrotoluene	0.457	0.493	8.090	7.5	8
2,4_2,6-Dinitrotoluenes	0.390	0.433	16.640	15.0	11
Dibenzofuran	1.927	1.977	7.700	7.5	3
1-Naphthylamine	1.457	1.532	7.880	7.5	5
2,3,4,6-Tetrachlorophenol	0.361	0.351	7.310	7.5	-3
2-Naphthylamine	1.412	1.500	7.970	7.5	6
Diethylphthalate	1.452	1.524	7.870	7.5	5
Thionazin	0.336	0.342	7.640	7.5	2
Fluorene	1.535	1.622	7.920	7.5	6
4-Chlorophenyl-phenylether	0.727	0.752	7.760	7.5	3
5-Nitro-o-toluidine	0.455	0.476	7.840	7.5	5
4-Nitroaniline	0.426	0.449	7.900	7.5	5
4,6-Dinitro-2-methylphenol	0.153	0.141	6.890	7.5	-8
N-Nitrosodiphenylamine (1)	0.684	0.723	7.930	7.5	6
NDPA as diphenylamine	0.684	0.723	7.930	7.5	6
1,2-Diphenylhydrazine	1.057	1.148	8.150	7.5	9
Tetraethyldithiopyrophosphate	0.170	0.181	7.980	7.5	6
1,3,5-Trinitrobenzene	0.105	0.096	6.820	7.5	-9
Diallate (peak 1)	0.510	0.535	6.530	6.2	5
Phorate	0.633	0.692	8.200	7.5	9
Phenacetin	0.511	0.507	7.440	7.5	-1
4-Bromophenyl-phenylether	0.209	0.228	8.170	7.5	9
Diallate (peak 2)	0.401	0.410	1.300	1.3	2
Diallate trans/cis	0.492	0.514	7.840	7.5	5
Hexachlorobenzene	0.208	0.223	8.040	7.5	7
Dimethoate	0.432	0.461	8.000	7.5	7
Atrazine	0.196	0.218	8.360	7.5	12
Pentachlorophenol	0.143	0.132	6.930	7.5	-8
4-Aminobiphenyl	0.779	0.635	6.110	7.5	-19
Pentachloronitrobenzene	0.092	0.098	8.010	7.5	7
Pronamide	0.343	0.371	8.120	7.5	8
Dinoseb	0.212	0.188	6.650	7.5	-11
Phenanthrene	1.172	1.278	8.180	7.5	9

(1) Cannot be Separated from Diphenylamine

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 06/20/18 Time: 19:43

Lab File ID: df1401.d Init. Calib. Date(s): 06/05/18 06/05/18

Init. Calib. Times(s): 00:37 04:01

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Anthracene	1.151	1.314	8.570	7.5	14
Carbazole	1.103	1.181	8.030	7.5	7
Methyl parathion	0.319	0.355	8.350	7.5	11
Di-n-butylphthalate	1.408	1.483	7.900	7.5	5
Parathion	0.211	0.224	7.940	7.5	6
4-Nitroquinoline-1-oxide	0.153	0.090	4.420	7.5	-41
Octachlorostyrene	0.079	0.084	8.000	7.5	7
Isodrin	0.132	0.147	8.380	7.5	12
Fluoranthene	1.278	1.404	8.240	7.5	10
Benzidine	0.900	0.917	22.950	22.5	2
Pyrene	1.370	1.441	7.880	7.5	5
p-Dimethylaminoazobenzene	0.242	0.231	7.150	7.5	-5
Chlorobenzilate	0.426	0.460	8.100	7.5	8
3,3'-Dimethylbenzidine	0.878	0.833	7.120	7.5	-5
Butylbenzylphthalate	0.683	0.688	7.550	7.5	1
2-Acetylaminofluorene	0.548	0.499	6.840	7.5	-9
3,3'-Dichlorobenzidine	0.456	0.463	7.610	7.5	1
4,4'-Methylenebis(2-chloroanil	0.278	0.265	7.140	7.5	-5
Benzo(a)anthracene	1.205	1.280	7.970	7.5	6
Chrysene	1.207	1.335	8.300	7.5	11
bis(2-Ethylhexyl)phthalate	0.939	0.934	7.460	7.5	-1
6-Methylchrysene	0.878	0.916	7.830	7.5	4
Di-n-octylphthalate	1.622	1.625	7.520	7.5	0
Benzo(b)fluoranthene	1.206	1.302	8.100	7.5	8
7,12-Dimethylbenz[a]anthracene	0.566	0.645	8.550	7.5	14
Benzo(k)fluoranthene	1.199	1.424	8.910	7.5	19
Benzo(a)pyrene	1.089	1.226	8.450	7.5	13
3-Methylcholanthrene	0.561	0.537	7.180	7.5	-4
Dibenz(a,h)acridine	0.924	0.754	6.120	7.5	-18
Dibenz(a,j)acridine	0.987	0.805	6.110	7.5	-19
Indeno(1,2,3-cd)pyrene	1.009	0.882	6.560	7.5	-13
Dibenz(a,h)anthracene	1.093	0.976	6.700	7.5	-11
Benzo(g,h,i)perylene	1.077	0.992	6.910	7.5	-8
Total PAHs	1.085	1.205	149.880	135.0	11
2-Fluorophenol	1.649	1.749	15.910	15.0	6

FORM VII SV-1

7C cont

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 06/20/18 Time: 19:43

Lab File ID: df1401.d Init. Calib. Date(s): 06/05/18 06/05/18

Init. Calib. Times(s): 00:37 04:01

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Phenol-d6	2.186	2.360	16.190	15.0	8
Nitrobenzene-d5	0.521	0.527	15.180	15.0	1
2-Fluorobiphenyl	1.610	1.658	15.450	15.0	3
2,4,6-Tribromophenol	0.175	0.179	15.390	15.0	3
Terphenyl-d14	0.870	0.923	15.920	15.0	6
				Average %Drift:	7

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP19760.i/18jun04a.b/df0101a.d **
/chem/HP19760.i/18jun04a.b/df0102.d
/chem/HP19760.i/18jun04a.b/df0103.d
/chem/HP19760.i/18jun04a.b/df0104.d
/chem/HP19760.i/18jun04a.b/df0105.d
/chem/HP19760.i/18jun04a.b/df0106.d
/chem/HP19760.i/18jun04a.b/df0107.d
/chem/HP19760.i/18jun04a.b/df0108.d

** indicates the Mid Level Calibration Standard.

Mid Level Calibration Standard is used for comparison.

Current Continuing Calibration Standard:

/chem/HP19760.i/18jun20a.b/df1401.d

Area Summary

File ID:

Internal Standard Name	df1401.d	ICAL Area	Low Limit	High Limit	In Spec
1,4-Dichlorobenzene-d4	261533	199536	99768	399072	Yes
Naphthalene-d8	1031003	752578	376289	1505156	Yes
Acenaphthene-d10	481603	349529	174764	699058	Yes
Phenanthrene-d10	885034	661403	330702	1322806	Yes
Pyrene-d10	901681	666393	333196	1332786	Yes
Perylene-d12	831181	668430	334215	1336860	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

File ID:

Internal Standard Name	df1401.d	ICAL RT	In Spec
1,4-Dichlorobenzene-d4	6.619	6.961	No
Naphthalene-d8	8.554	8.896	No
Acenaphthene-d10	11.340	11.676	No
Phenanthrene-d10	13.246	13.553	No
Pyrene-d10	15.175	15.552	No
Perylene-d12	19.611	20.057	No

(8)

A "No" indicates the retention time is greater than 10 seconds from the RT of the referenced standard.

Comments: (8) Column Maintenance AT12405 6/20/18

Report generated on 06/20/2018 at 21:19

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Lab File ID (Standard): df1351y.d Date Analyzed: 06/20/18

Instrument ID: HP19760 Time Analyzed: 09:09

	IS1(DCB)		IS2(NPT)		IS3(ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	269123	6.619	1050678	8.554	498379	11.340
UPPER LIMIT	538246	7.119	2101356	9.054	996758	11.840
LOWER LIMIT	134562	6.119	525339	8.054	249190	10.840
LLI SAMPLE NO.						
01 SBLKWM169	246066	6.619	958989	8.548	432158	11.334
02 169WMLCS	247516	6.624	969387	8.554	448341	11.340
03 9662310	253909	6.619	999236	8.548	449260	11.334
04 9662311MS	241605	6.625	941448	8.548	440781	11.340
05 9662312MSD	232930	6.625	915047	8.554	421884	11.340
06 9659871	246694	6.619	971768	8.548	443149	11.334
07 9659872RE	257290	6.619	996182	8.548	450047	11.334
08 9659874RE	251672	6.619	996052	8.548	450994	11.334
09 9659875	243707	6.619	953335	8.548	427489	11.334
10 9660089	242248	6.619	940313	8.548	425473	11.334
11 9660091RE	251501	6.619	981764	8.548	485389	11.334
12 9662303	253806	6.619	998355	8.548	453938	11.334
13 9662304	253879	6.619	985400	8.548	442835	11.334
14 9662305	245858	6.619	964610	8.548	439920	11.334
15 9662306	252625	6.619	979454	8.548	443160	11.340
16 9662307	244518	6.619	935626	8.554	425019	11.334
17 9662308	234624	6.619	919053	8.548	414928	11.334

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Lab File ID (Standard): df1351y.d Date Analyzed: 06/20/18

Instrument ID: HP19760 Time Analyzed: 09:09

	IS4(PHN)		IS5(PYR)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	908605	13.240	924062	15.169	865335	19.611
UPPER LIMIT	1817210	13.740	1848124	15.669	1730670	20.111
LOWER LIMIT	454303	12.740	462031	14.669	432668	19.111
LLI SAMPLE NO.						
01 SBLKWM169	762089	13.240	741951	15.169	557859	19.611
02 169WMLCS	812729	13.240	810636	15.175	778552	19.611
03 9662310	805258	13.240	778054	15.169	596766	19.605
04 9662311MS	815815	13.240	826456	15.175	778806	19.611
05 9662312MSD	773265	13.240	776320	15.175	752375	19.611
06 9659871	801333	13.240	778892	15.170	643216	19.605
07 9659872RE	809211	13.240	779981	15.169	567392	19.605
08 9659874RE	803204	13.240	770383	15.169	522475	19.605
09 9659875	762432	13.240	732802	15.169	484030	19.605
10 9660089	765398	13.240	764248	15.169	532788	19.605
11 9660091RE	856759	13.240	863471	15.169	791249	19.605
12 9662303	803268	13.240	793123	15.169	630040	19.605
13 9662304	802475	13.240	773109	15.169	611712	19.605
14 9662305	785203	13.240	761566	15.169	577739	19.605
15 9662306	784462	13.240	772820	15.169	577286	19.605
16 9662307	760148	13.240	746256	15.169	568673	19.605
17 9662308	741322	13.240	725122	15.169	558628	19.605

IS4 (PHN) = Phenanthrene-d10
IS5 (PYR) = Pyrene-d10
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Lab File ID (Standard): df1351y.d Date Analyzed: 06/20/18

Instrument ID: HP19760 Time Analyzed: 09:09

	IS1(DCB)		IS2(NPT)		IS3(ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	269123	6.619	1050678	8.554	498379	11.340
UPPER LIMIT	538246	7.119	2101356	9.054	996758	11.840
LOWER LIMIT	134562	6.119	525339	8.054	249190	10.840
LLI SAMPLE NO.						
18 9662309	244312	6.619	943273	8.548	424205	11.340

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Lab File ID (Standard): df1351y.d Date Analyzed: 06/20/18

Instrument ID: HP19760 Time Analyzed: 09:09

	IS4(PHN)		IS5(PYR)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	908605	13.240	924062	15.169	865335	19.611
UPPER LIMIT	1817210	13.740	1848124	15.669	1730670	20.111
LOWER LIMIT	454303	12.740	462031	14.669	432668	19.111
LLI SAMPLE NO.						
18 9662309	747826	13.240	733704	15.169	523960	19.605

IS4 (PHN) = Phenanthrene-d10
IS5 (PYR) = Pyrene-d10
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): df1401.d Date Analyzed: 06/20/18

Instrument ID: HP19760 Time Analyzed: 19:43

	IS1(DCB)		IS2(NPT)		IS3(ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	261533	6.619	1031003	8.554	481603	11.340
UPPER LIMIT	523066	7.119	2062006	9.054	963206	11.840
LOWER LIMIT	130767	6.119	515502	8.054	240802	10.840
LLI SAMPLE NO.						
01 SBLKWB170	254331	6.619	992405	8.554	452413	11.340
02 170WBLCS	234306	6.625	930730	8.554	436291	11.340
03 170WBLCSD	225928	6.624	906042	8.554	422580	11.340
04 SBLKWJ170	245521	6.619	962796	8.554	447785	11.340
05 170WJLCS	244348	6.625	959086	8.554	446993	11.340
06 170WJLCSD	244638	6.625	955035	8.554	452441	11.340
07 9662185	239319	6.619	953976	8.548	431116	11.334
08 9662314	257002	6.619	982238	8.548	458503	11.334
09 9662315	247487	6.619	984787	8.548	444547	11.340
10 9664270	236820	6.619	949354	8.554	428249	11.334
11 9664796	239494	6.619	941168	8.554	425469	11.340
12 9661022	252101	6.619	998517	8.548	469402	11.340
13 9661026	239413	6.619	958263	8.548	432432	11.334
14 9659869	243817	6.619	948379	8.554	444230	11.340

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): df1401.d Date Analyzed: 06/20/18

Instrument ID: HP19760 Time Analyzed: 19:43

	IS4(PHN)		IS5(PYR)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	885034	13.246	901681	15.175	831181	19.611
UPPER LIMIT	1770068	13.746	1803362	15.675	1662362	20.111
LOWER LIMIT	442517	12.746	450841	14.675	415591	19.111
LLI SAMPLE NO.						
01 SBLKWB170	801898	13.240	797937	15.169	571153	19.611
02 170WBLCS	794695	13.240	790660	15.175	762626	19.611
03 170WBLCSD	769659	13.246	786175	15.175	738808	19.611
04 SBLKWJ170	798074	13.240	774470	15.169	547633	19.605
05 170WJLCS	794998	13.240	813996	15.169	764717	19.611
06 170WJLCSD	810430	13.240	828048	15.169	781153	19.611
07 9662185	786722	13.240	772487	15.170	509383	19.605
08 9662314	823963	13.240	815883	15.169	679643	19.605
09 9662315	803831	13.240	789393	15.170	551443	19.605
10 9664270	770726	13.240	753748	15.170	513988	19.605
11 9664796	770135	13.240	763411	15.169	635844	19.605
12 9661022	824597	13.240	825825	15.169	602489	19.605
13 9661026	769651	13.240	744358	15.170	509131	19.605
14 9659869	805275	13.240	797142	15.170	490051	19.605

IS4 (PHN) = Phenanthrene-d10
IS5 (PYR) = Pyrene-d10
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

Sample Data

Semivolatiles by GC/MS

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C5002

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662303

Sample wt/vol: 246 (g/mL)ML Lab File ID: df1364.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5002

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662303

Sample wt/vol: 246 (g/mL)ML Lab File ID: df1364.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		14	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5002

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662303

Sample wt/vol: 246 (g/mL)ML Lab File ID: df1364.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

C5002 Lancaster Laboratories, Inc. 9662303
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1364.d Injection date and time: **20-JUN-2018 15:40**
Data file Sample Info. Line: C5002;9662303;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 19:36 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 246 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.619	(0.000)	829	152	253806	(-6)	5.00	
65) Naphthalene-d8	8.548	(0.006)	1160	136	998355	(-5)	5.00	
113) Acenaphthene-d10	11.334	(0.006)	1638	164	453938	(-9)	5.00	
153) Phenanthrene-d10	13.240	(0.000)	1965	188	803268	(-12)	5.00	
175) Pyrene-d10	15.169	(0.000)	2296	212	793123	(-14)	5.00	
213) Perylene-d12	19.605	(0.006)	3057	264	630040	(-27)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.730	(0.001)	112	1943403	23.216	46%		10 - 82
17) Phenol-d6	(1)	6.117	(0.001)	99	1904936	17.166	34%		10 - 71
44) Nitrobenzene-d5	(2)	7.446	(0.000)	82	2009592	19.326	77%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297	(0.000)	172	2920071	19.977	80%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.407	(0.000)	330	660921	41.654	83%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	2808336	20.348	81%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

Digitally signed by Ashley R. Transue on 06/20/2018 at 19:47. Target 3.5 esignature user ID: art12405

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1364.d Injection date and time: **20-JUN-2018 15:40**
Data file Sample Info. Line: C5002;9662303;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 19:36 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

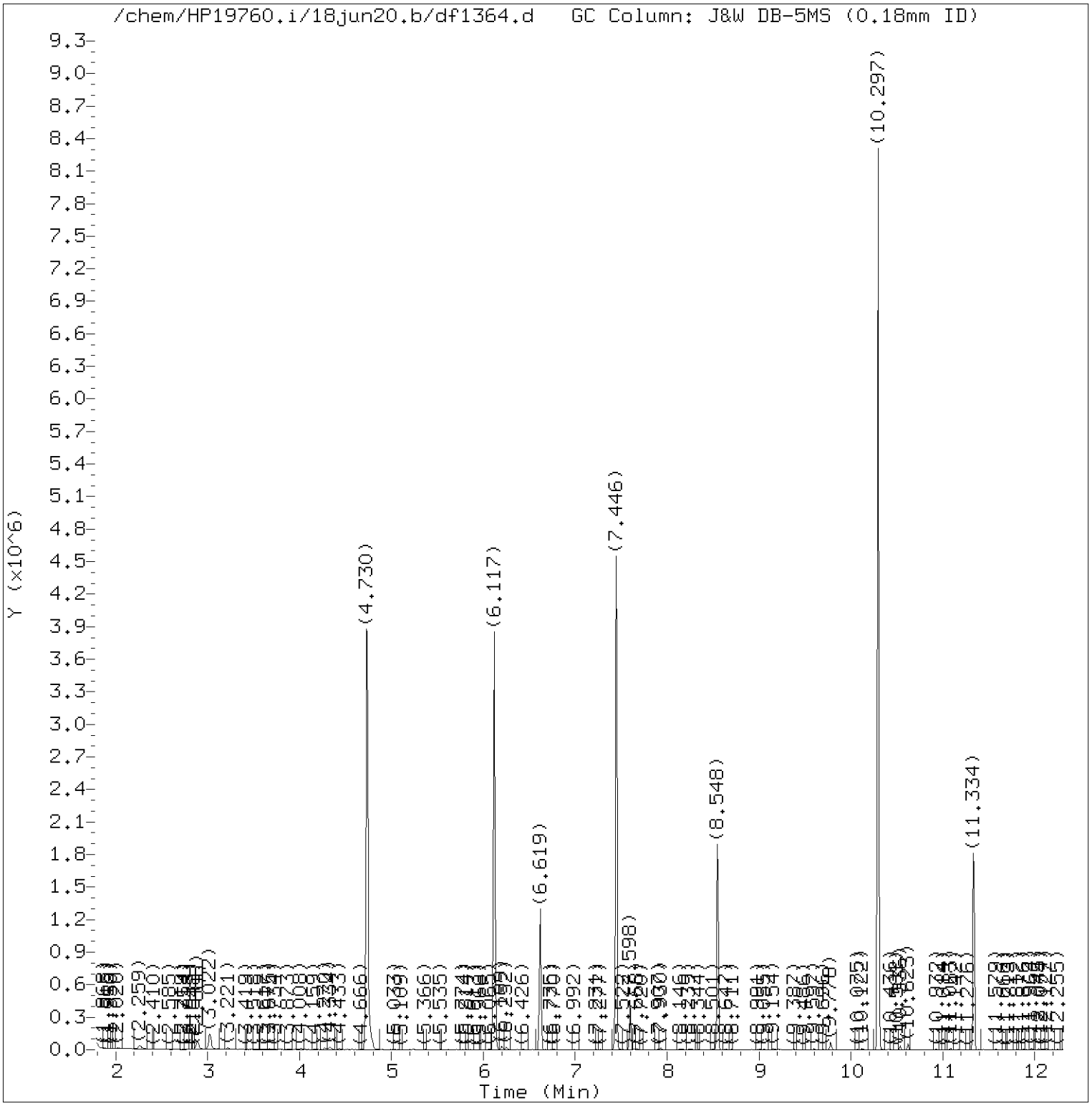
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 246 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

Digitally signed by Ashley R. Transue on 06/20/2018 at 19:47. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:52. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

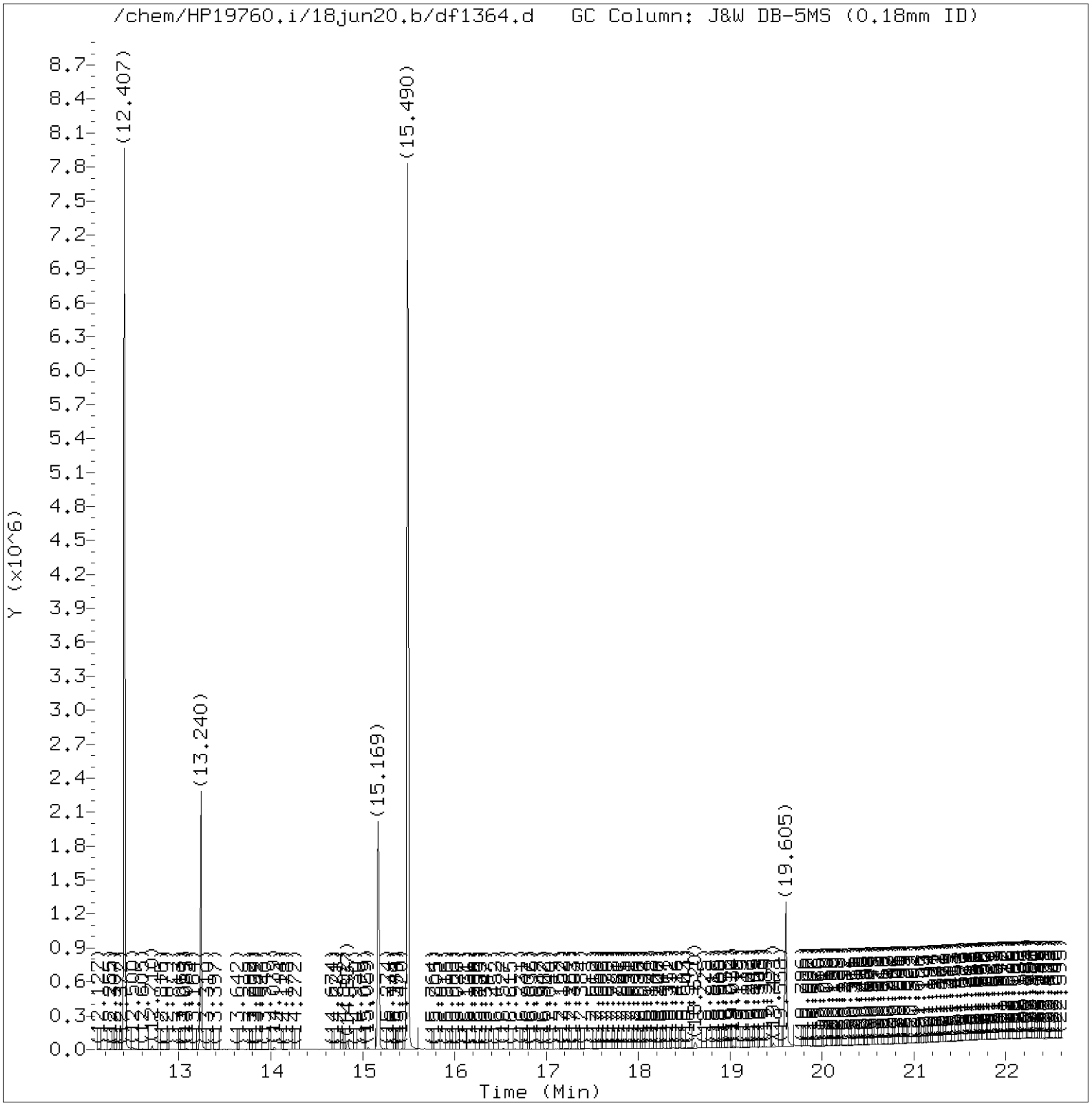
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1364.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 15:40 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:36 art12405

Sample Name: C5002 Lab Sample ID: 9662303

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:47.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1364.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 15:40 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:36 art12405

Sample Name: C5002 Lab Sample ID: 9662303

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:47.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1364.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 15:40 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:36 art12405

Sample Name: C5002 Lab Sample ID: 9662303

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.730	112	1943403	23.216
17)$Phenol-d6	(1)	6.117	99	1904936	17.166
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	253806	5.000
44)$Nitrobenzene-d5	(2)	7.446	82	2009592	19.326
65)*Naphthalene-d8	(2)	8.548	136	998355	5.000
93)$2-Fluorobiphenyl	(3)	10.297	172	2920071	19.977
113)*Acenaphthene-d10	(3)	11.334	164	453938	5.000
135)$2,4,6-Tribromophenol	(3)	12.407	330	660921	41.654
153)*Phenanthrene-d10	(4)	13.240	188	803268	5.000
175)*Pyrene-d10	(5)	15.169	212	793123	5.000
179)$Terphenyl-d14	(5)	15.490	244	2808336	20.348
213)*Perylene-d12	(6)	19.605	264	630040	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:47.
Target 3.5 esignature user ID: art12405

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5003

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662304

Sample wt/vol: 247 (g/mL)ML Lab File ID: df1365.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5003

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662304

Sample wt/vol: 247 (g/mL)ML Lab File ID: df1365.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		14	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5003

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662304

Sample wt/vol: 247 (g/mL)ML Lab File ID: df1365.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1365.d
Data file Sample Info. Line: C5003;9662304;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 20-Jun-2018 19:37 art12405

Injection date and time: **20-JUN-2018 16:08**
Instrument ID: **HP19760.i** Batch: **18169WAM**

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 247 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.619	(0.000)	829	152	253879	(-6)	5.00	
65) Naphthalene-d8	8.548	(0.006)	1160	136	985400	(-6)	5.00	
113) Acenaphthene-d10	11.334	(0.006)	1638	164	442835	(-11)	5.00	
153) Phenanthrene-d10	13.240	(0.000)	1965	188	802475	(-12)	5.00	
175) Pyrene-d10	15.169	(0.000)	2296	212	773109	(-16)	5.00	
213) Perylene-d12	19.605	(0.006)	3057	264	611712	(-29)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.730	(0.001)	112	1863830	22.259	45%		10 - 82
17) Phenol-d6	(1)	6.118	(0.001)	99	1836928	16.549	33%		10 - 71
44) Nitrobenzene-d5	(2)	7.447	(0.000)	82	1787675	17.418	70%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297	(0.000)	172	2652193	18.599	74%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.407	(0.000)	330	623002	40.248	80%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	3080074	22.894	92%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

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Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1365.d
Injection date and time: **20-JUN-2018 16:08**
Data file Sample Info. Line: C5003;9662304;1;0;SAMPLE;;;
Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 19:37 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 247 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

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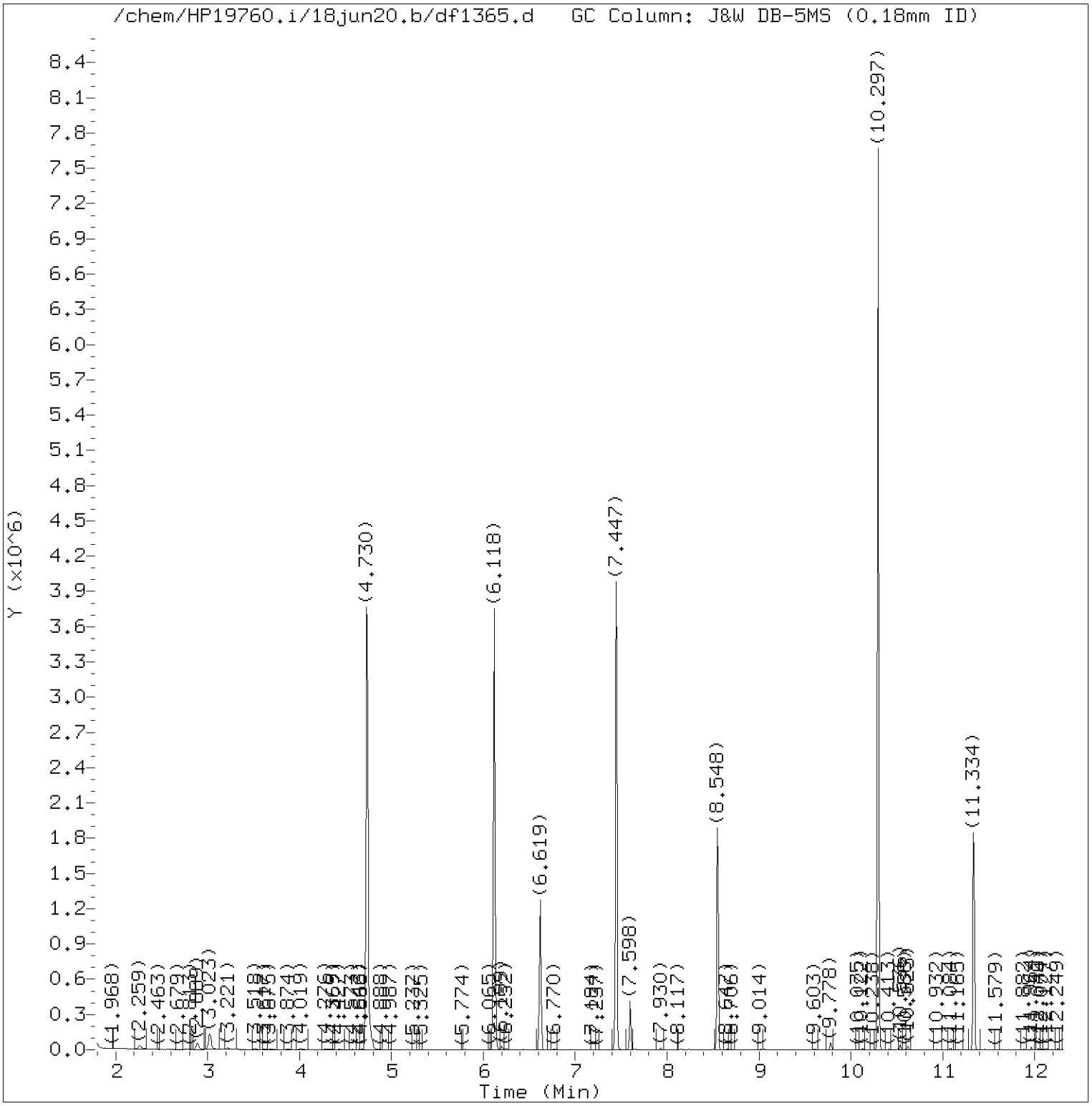
Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:52. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

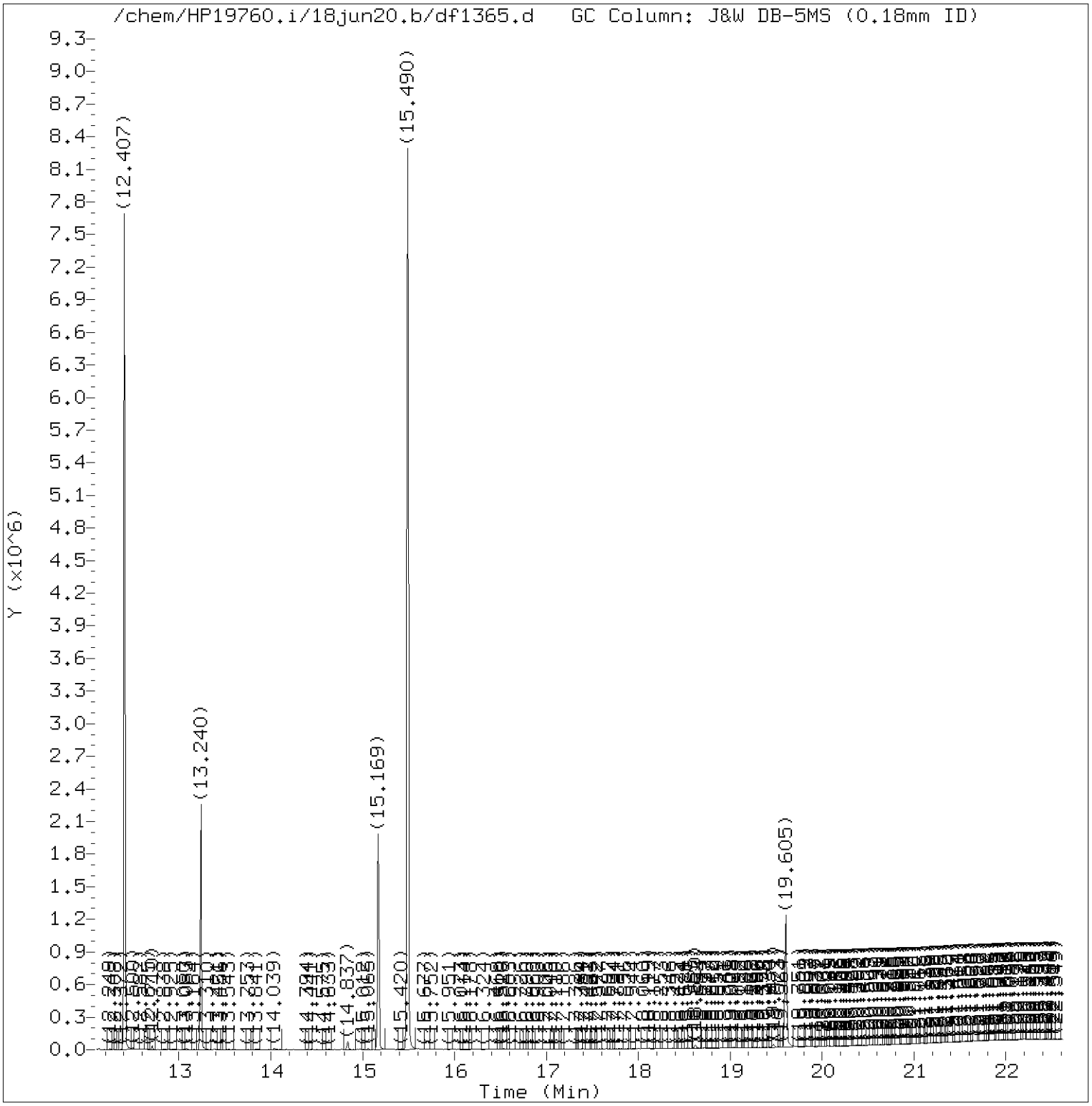
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1365.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 16:08 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:37 art12405

Sample Name: C5003 Lab Sample ID: 9662304

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:47.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1365.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 16:08 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:37 art12405

Sample Name: C5003 Lab Sample ID: 9662304

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:47.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1365.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 16:08 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:37 art12405

Sample Name: C5003 Lab Sample ID: 9662304

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.730	112	1863830	22.259
17)$Phenol-d6	(1)	6.118	99	1836928	16.549
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	253879	5.000
44)$Nitrobenzene-d5	(2)	7.447	82	1787675	17.418
65)*Naphthalene-d8	(2)	8.548	136	985400	5.000
93)$2-Fluorobiphenyl	(3)	10.297	172	2652193	18.599
113)*Acenaphthene-d10	(3)	11.334	164	442835	5.000
135)$2,4,6-Tribromophenol	(3)	12.407	330	623002	40.248
153)*Phenanthrene-d10	(4)	13.240	188	802475	5.000
175)*Pyrene-d10	(5)	15.169	212	773109	5.000
179)$Terphenyl-d14	(5)	15.490	244	3080074	22.894
213)*Perylene-d12	(6)	19.605	264	611712	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:47.
Target 3.5 esignature user ID: art12405

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C5004

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662305

Sample wt/vol: 243 (g/mL)ML Lab File ID: df1366.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5004

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662305

Sample wt/vol: 243 (g/mL)ML Lab File ID: df1366.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		14	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5004

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662305

Sample wt/vol: 243 (g/mL)ML Lab File ID: df1366.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

C5004 Lancaster Laboratories, Inc. 9662305
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1366.d Injection date and time: **20-JUN-2018 16:36**
Data file Sample Info. Line: C5004;9662305;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 19:38 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 243 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.619	(0.000)	829	152	245858	(-9)	5.00	
65) Naphthalene-d8	8.548	(0.006)	1160	136	964610	(-8)	5.00	
113) Acenaphthene-d10	11.334	(0.006)	1638	164	439920	(-12)	5.00	
153) Phenanthrene-d10	13.240	(0.000)	1965	188	785203	(-14)	5.00	
175) Pyrene-d10	15.169	(0.000)	2296	212	761566	(-18)	5.00	
213) Perylene-d12	19.605	(0.006)	3057	264	577739	(-33)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.730	(0.001)	112	1697387	20.932	42%		10 - 82
17) Phenol-d6	(1)	6.118	(0.001)	99	1628299	15.148	30%		10 - 71
44) Nitrobenzene-d5	(2)	7.446	(0.000)	82	1636706	16.291	65%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297	(0.000)	172	2454848	17.329	69%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.407	(0.000)	330	516032	33.559	67%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	2448711	18.477	74%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

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Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1366.d Injection date and time: **20-JUN-2018 16:36**
Data file Sample Info. Line: C5004;9662305;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 19:38 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 243 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

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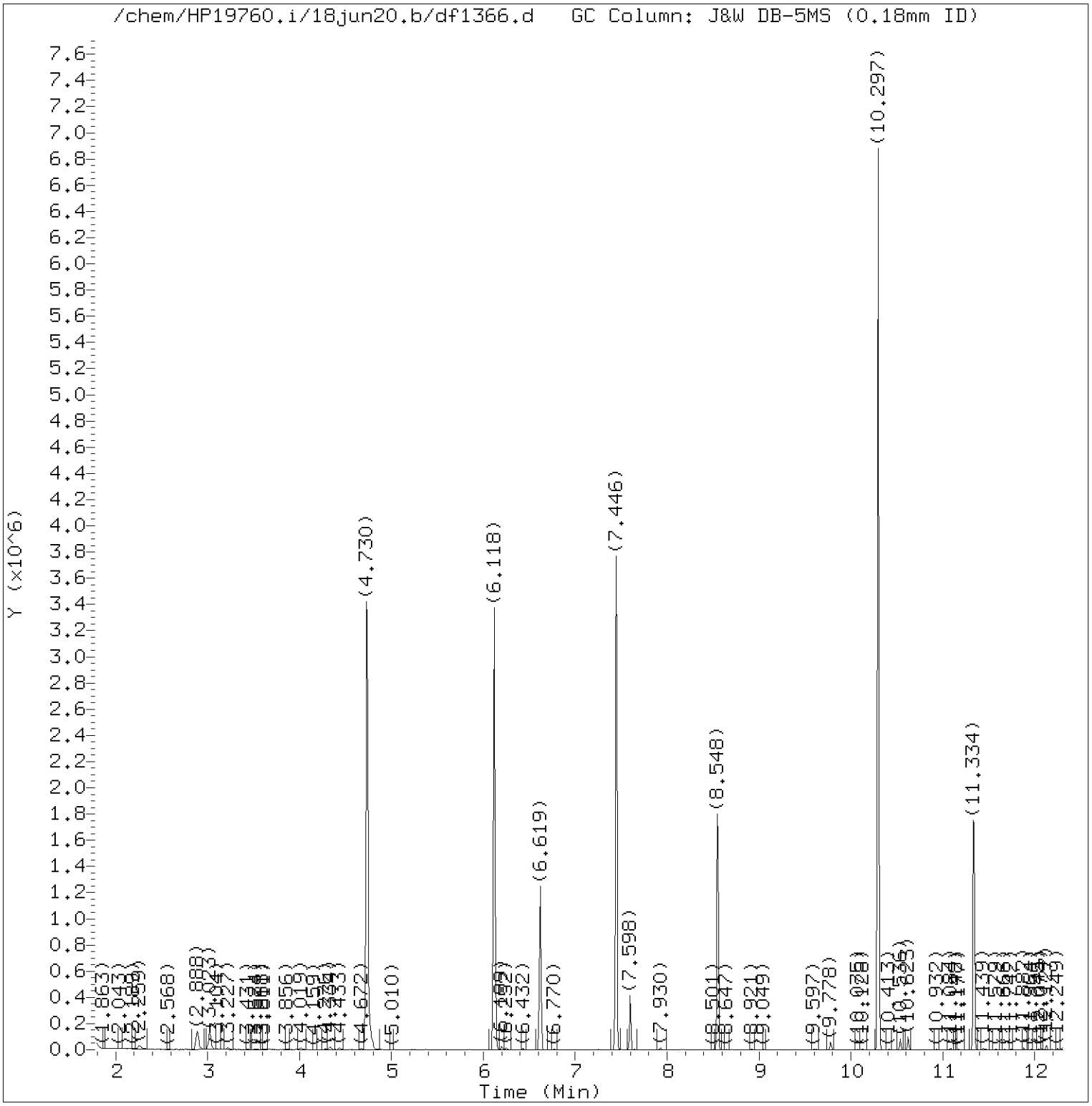
Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:52. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1366.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 16:36 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:38 art12405

Sample Name: C5004 Lab Sample ID: 9662305

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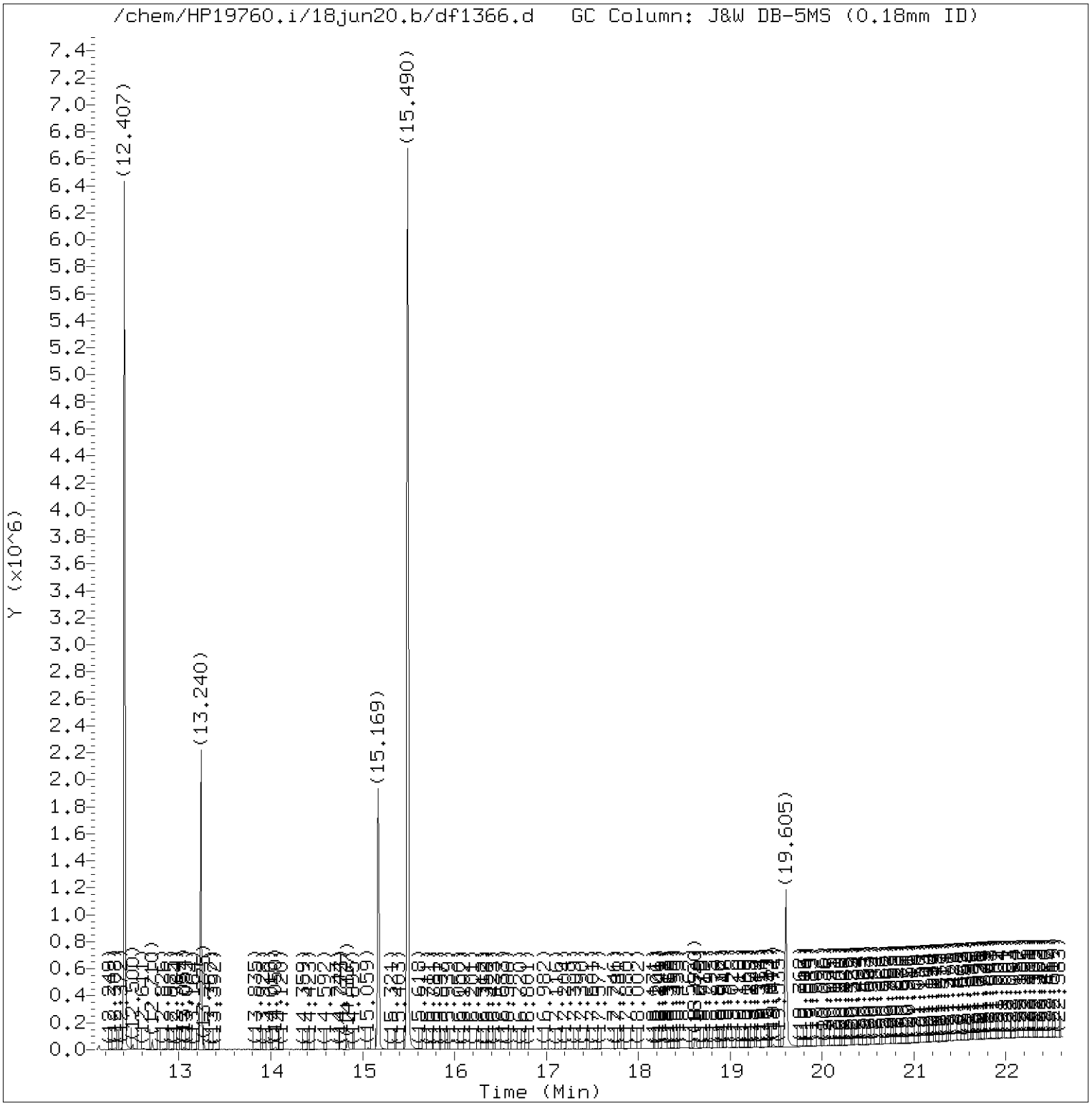
on 06/20/2018 at 19:47.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1366.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 16:36 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:38 art12405

Sample Name: C5004 Lab Sample ID: 9662305

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:47.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1366.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 16:36 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:38 art12405

Sample Name: C5004 Lab Sample ID: 9662305

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.730	112	1697387	20.932
17)$Phenol-d6	(1)	6.118	99	1628299	15.148
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	245858	5.000
44)$Nitrobenzene-d5	(2)	7.446	82	1636706	16.291
65)*Naphthalene-d8	(2)	8.548	136	964610	5.000
93)$2-Fluorobiphenyl	(3)	10.297	172	2454848	17.329
113)*Acenaphthene-d10	(3)	11.334	164	439920	5.000
135)$2,4,6-Tribromophenol	(3)	12.407	330	516032	33.559
153)*Phenanthrene-d10	(4)	13.240	188	785203	5.000
175)*Pyrene-d10	(5)	15.169	212	761566	5.000
179)$Terphenyl-d14	(5)	15.490	244	2448711	18.477
213)*Perylene-d12	(6)	19.605	264	577739	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:47.
Target 3.5 esignature user ID: art12405

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5005

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662306

Sample wt/vol: 241 (g/mL)ML Lab File ID: df1367.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5005

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662306

Sample wt/vol: 241 (g/mL)ML Lab File ID: df1367.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		15	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5005

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662306

Sample wt/vol: 241 (g/mL)ML Lab File ID: df1367.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

C5005 Lancaster Laboratories, Inc. 9662306
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1367.d Injection date and time: **20-JUN-2018 17:05**
Data file Sample Info. Line: C5005;9662306;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 19:38 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 241 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.619	(0.000)	829	152	252625	(-6)	5.00	
65) Naphthalene-d8	8.548	(0.006)	1160	136	979454	(-7)	5.00	
113) Acenaphthene-d10	11.340	(0.000)	1639	164	443160	(-11)	5.00	
153) Phenanthrene-d10	13.240	(0.000)	1965	188	784462	(-14)	5.00	
175) Pyrene-d10	15.169	(0.000)	2296	212	772820	(-16)	5.00	
213) Perylene-d12	19.605	(0.006)	3057	264	577286	(-33)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.736	(0.000)	112	1654830	19.861	40%		10 - 82
17) Phenol-d6	(1)	6.118	(0.001)	99	1553571	14.065	28%		10 - 71
44) Nitrobenzene-d5	(2)	7.446	(0.000)	82	1664609	16.317	65%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297	(0.001)	172	2454781	17.202	69%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.407	(0.001)	330	533267	34.426	69%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	2046429	15.217	61%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

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Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1367.d
Data file Sample Info. Line: C5005;9662306;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 20-Jun-2018 19:38 art12405

Injection date and time: **20-JUN-2018 17:05**
Instrument ID: **HP19760.i** Batch: **18169WAM**

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 241 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

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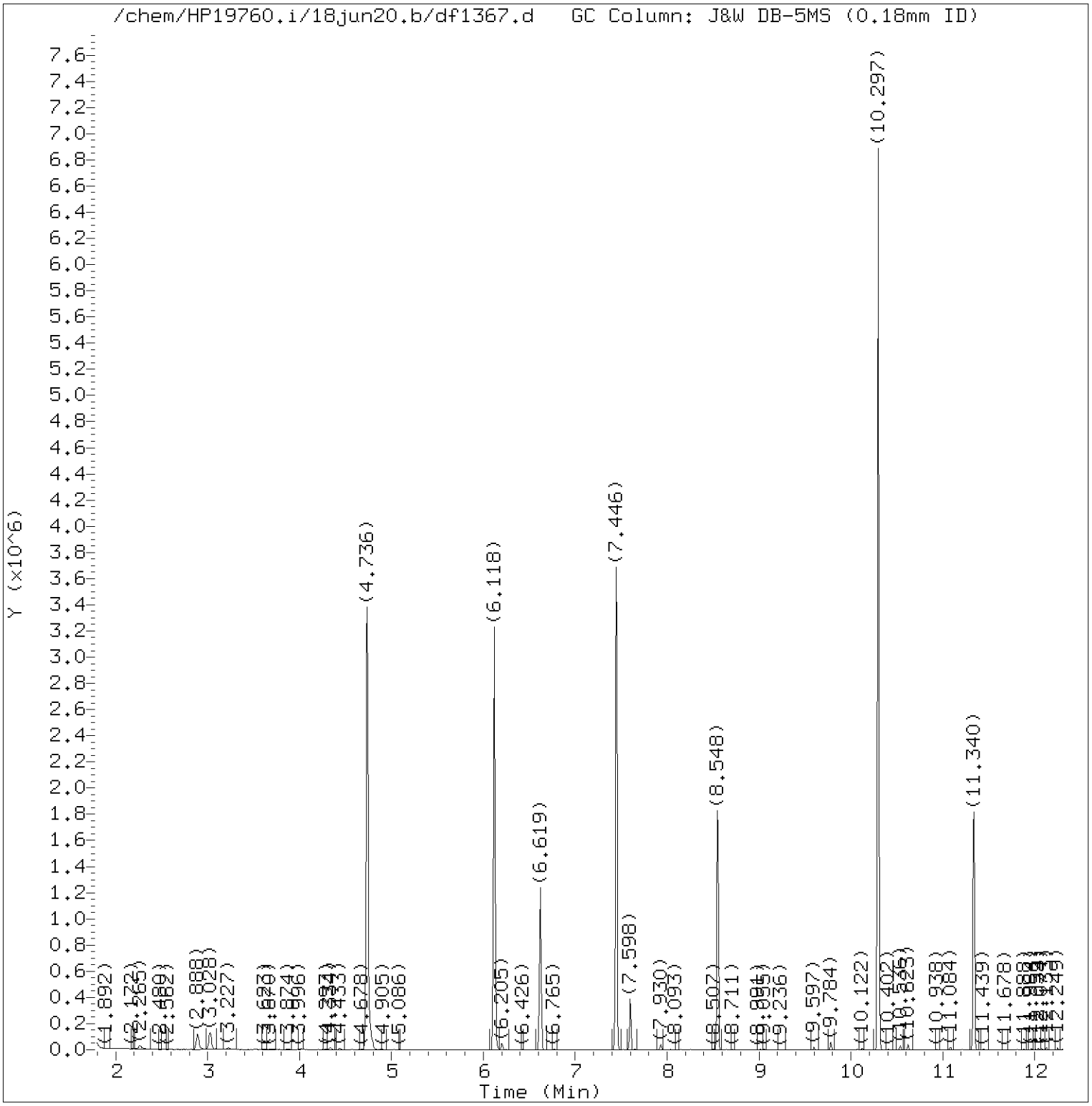
Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:52. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1367.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 17:05 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:38 art12405

Sample Name: C5005 Lab Sample ID: 9662306

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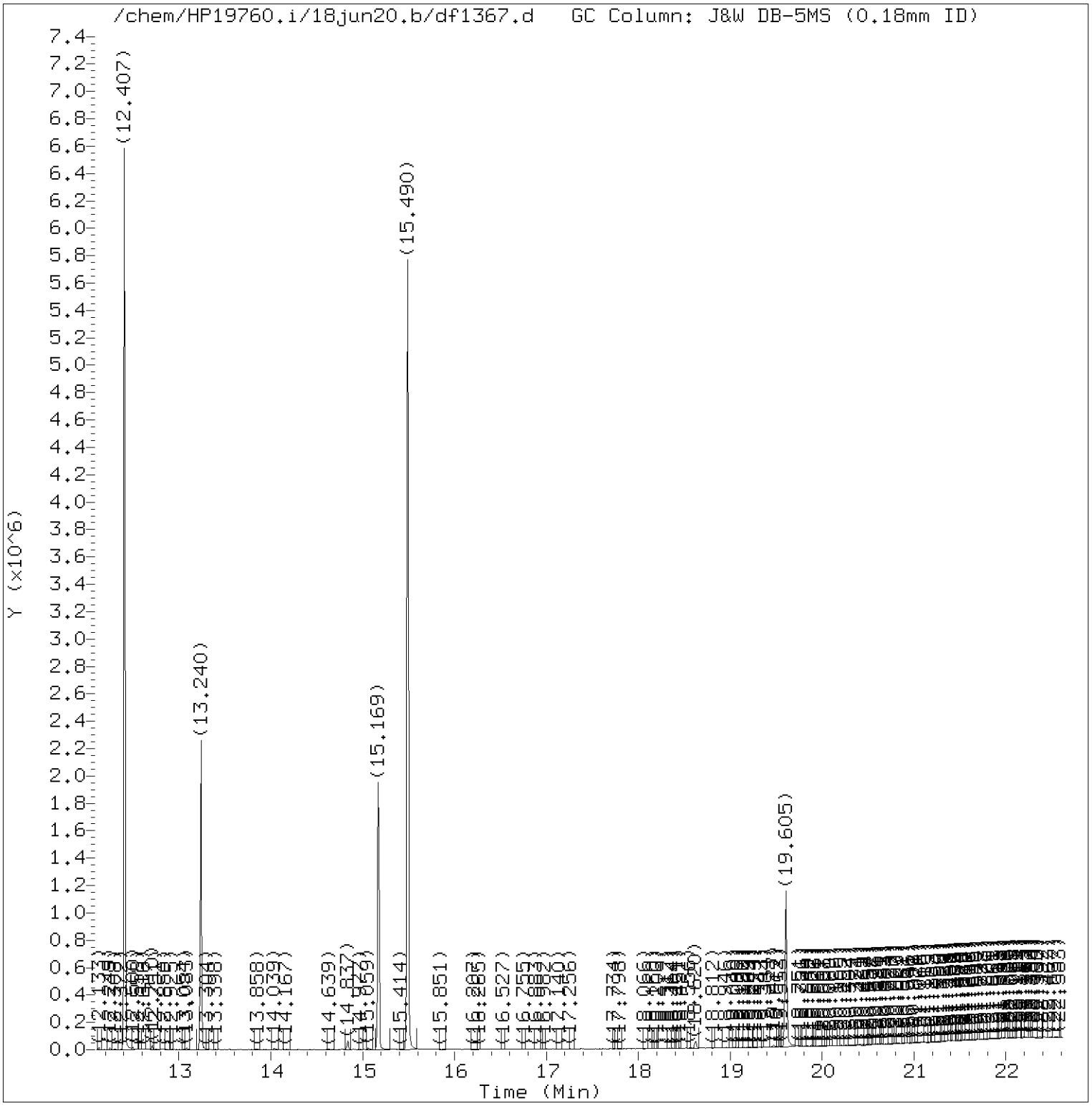
on 06/20/2018 at 19:48.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1367.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 17:05 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:38 art12405

Sample Name: C5005 Lab Sample ID: 9662306

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:48.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1367.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 17:05 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:38 art12405

Sample Name: C5005 Lab Sample ID: 9662306

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.736	112	1654830	19.861
17)$Phenol-d6	(1)	6.118	99	1553571	14.065
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	252625	5.000
44)$Nitrobenzene-d5	(2)	7.446	82	1664609	16.317
65)*Naphthalene-d8	(2)	8.548	136	979454	5.000
93)$2-Fluorobiphenyl	(3)	10.297	172	2454781	17.202
113)*Acenaphthene-d10	(3)	11.340	164	443160	5.000
135)$2,4,6-Tribromophenol	(3)	12.407	330	533267	34.426
153)*Phenanthrene-d10	(4)	13.240	188	784462	5.000
175)*Pyrene-d10	(5)	15.169	212	772820	5.000
179)$Terphenyl-d14	(5)	15.490	244	2046429	15.217
213)*Perylene-d12	(6)	19.605	264	577286	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:48.
Target 3.5 esignature user ID: art12405

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5006

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662307

Sample wt/vol: 240 (g/mL)ML Lab File ID: df1368.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5006

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662307

Sample wt/vol: 240 (g/mL)ML Lab File ID: df1368.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		15	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5006

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662307

Sample wt/vol: 240 (g/mL)ML Lab File ID: df1368.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

C5006 Lancaster Laboratories, Inc. 9662307
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1368.d Injection date and time: **20-JUN-2018 17:34**
Data file Sample Info. Line: C5006;9662307;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 19:39 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 240 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.619	(0.000)	829	152	244518	(-9)	5.00	
65) Naphthalene-d8	8.554	(0.000)	1161	136	935626	(-11)	5.00	
113) Acenaphthene-d10	11.334	(0.006)	1638	164	425019	(-15)	5.00	
153) Phenanthrene-d10	13.240	(0.000)	1965	188	760148	(-16)	5.00	
175) Pyrene-d10	15.169	(0.000)	2296	212	746256	(-19)	5.00	
213) Perylene-d12	19.605	(0.006)	3057	264	568673	(-34)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.736	(0.000)	112	1798856	22.305	45%		10 - 82
17) Phenol-d6	(1)	6.118	(0.001)	99	1734846	16.227	32%		10 - 71
44) Nitrobenzene-d5	(2)	7.447	(0.001)	82	1689277	17.335	69%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297	(0.000)	172	2579415	18.847	75%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.413	(-0.001)	330	612601	41.235	82%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	2437559	18.770	75%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

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Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1368.d
Data file Sample Info. Line: C5006;9662307;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 20-Jun-2018 19:39 art12405

Injection date and time: **20-JUN-2018 17:34**
Instrument ID: **HP19760.i** Batch: **18169WAM**

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 240 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

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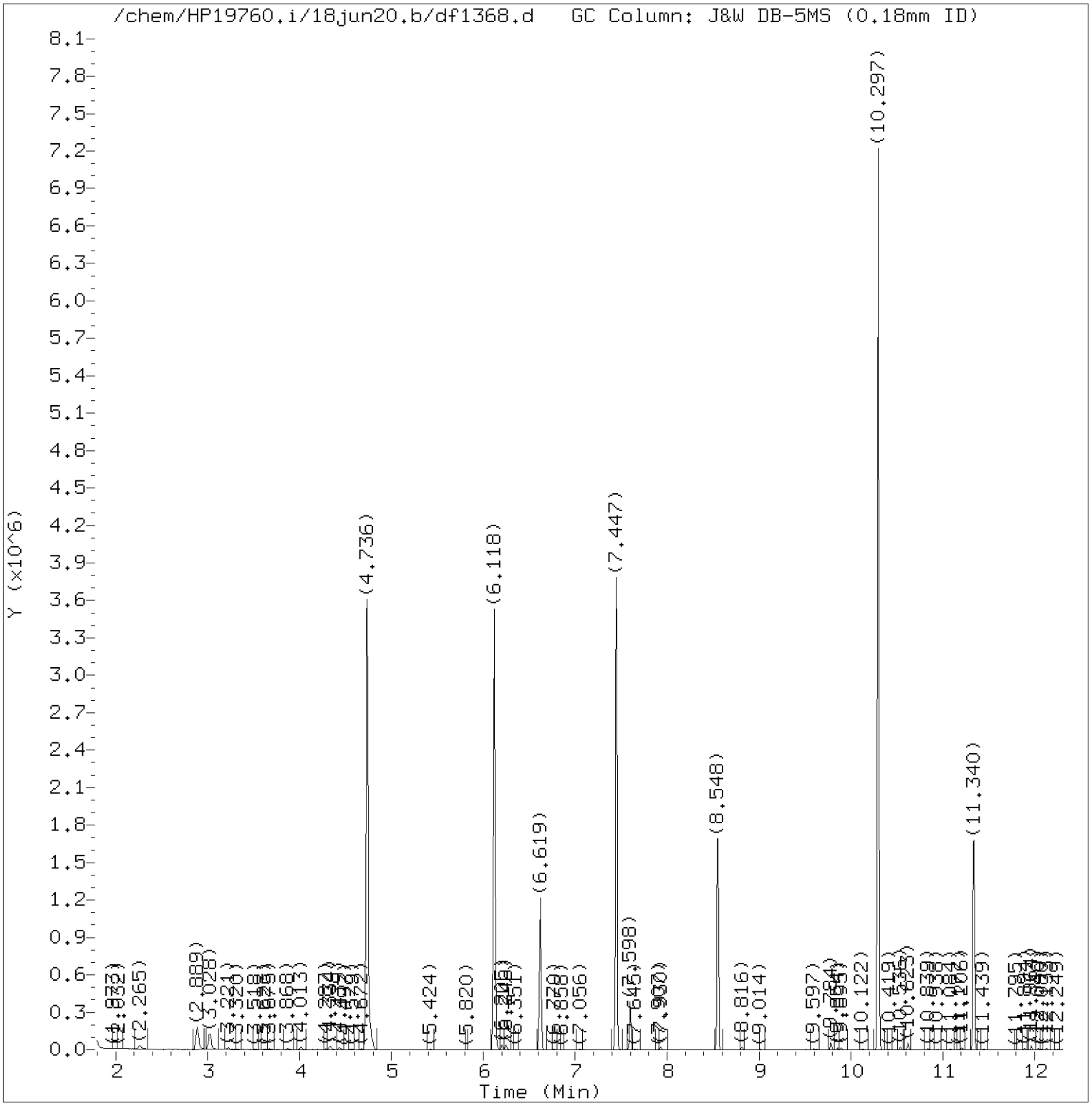
Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:52. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

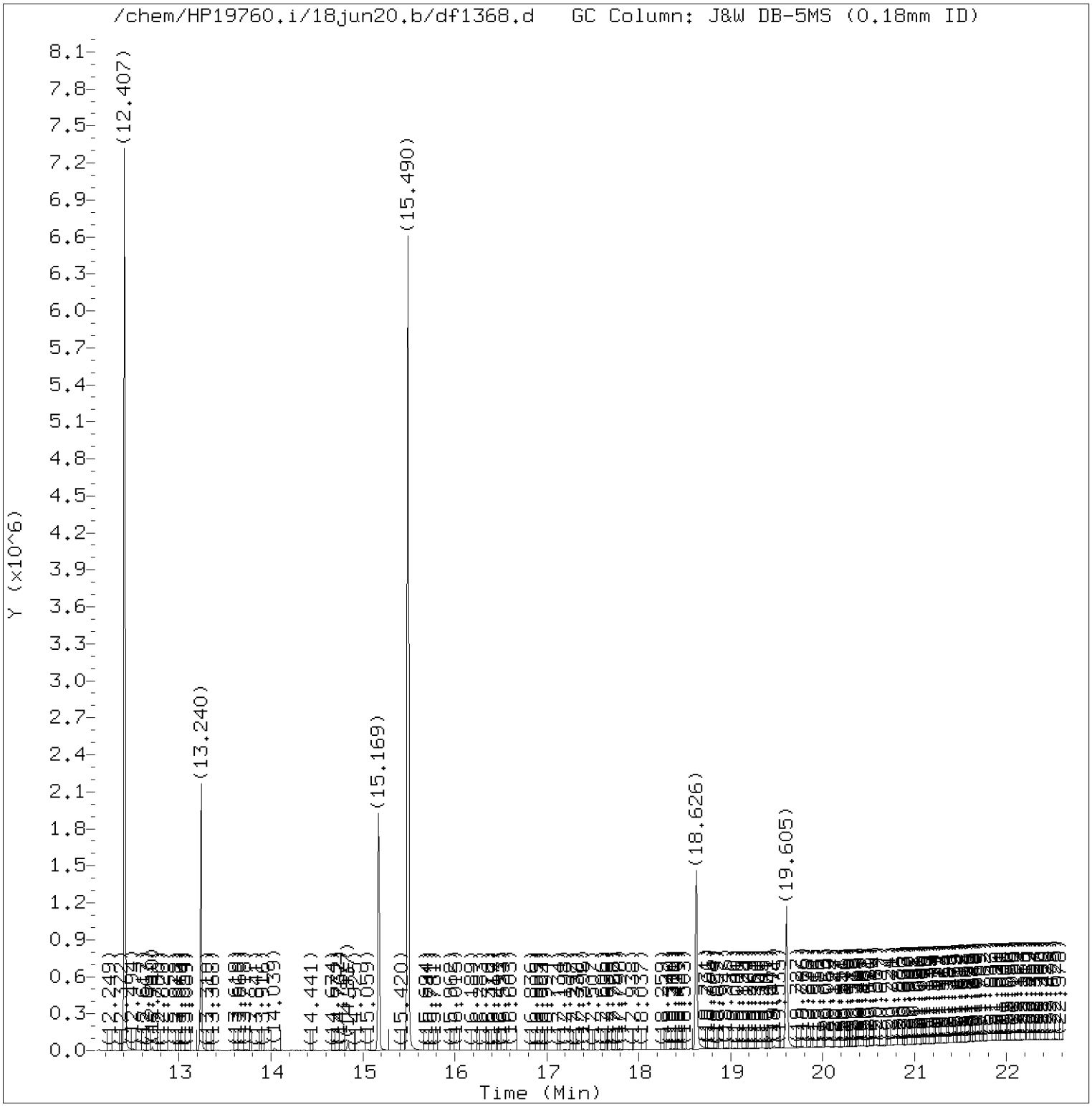
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1368.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 17:34 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:39 art12405

Sample Name: C5006 Lab Sample ID: 9662307

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:48.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1368.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 17:34 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:39 art12405

Sample Name: C5006 Lab Sample ID: 9662307

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:48.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1368.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 17:34 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:39 art12405

Sample Name: C5006 Lab Sample ID: 9662307

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.736	112	1798856	22.305
17)$Phenol-d6	(1)	6.118	99	1734846	16.227
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	244518	5.000
44)$Nitrobenzene-d5	(2)	7.447	82	1689277	17.335
65)*Naphthalene-d8	(2)	8.554	136	935626	5.000
93)$2-Fluorobiphenyl	(3)	10.297	172	2579415	18.847
113)*Acenaphthene-d10	(3)	11.334	164	425019	5.000
135)$2,4,6-Tribromophenol	(3)	12.413	330	612601	41.235
153)*Phenanthrene-d10	(4)	13.240	188	760148	5.000
175)*Pyrene-d10	(5)	15.169	212	746256	5.000
179)$Terphenyl-d14	(5)	15.490	244	2437559	18.770
213)*Perylene-d12	(6)	19.605	264	568673	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:48.
Target 3.5 esignature user ID: art12405

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5007

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662308

Sample wt/vol: 247 (g/mL)ML Lab File ID: df1369.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			2	J
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5007

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662308

Sample wt/vol: 247 (g/mL)ML Lab File ID: df1369.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		14	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5007

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662308

Sample wt/vol: 247 (g/mL)ML Lab File ID: df1369.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

C5007 Lancaster Laboratories, Inc. 9662308
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1369.d Injection date and time: **20-JUN-2018 18:03**
Data file Sample Info. Line: C5007;9662308;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 19:43 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 247 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.619	(0.000)	829	152	234624	(-13)	5.00	
65) Naphthalene-d8	8.548	(0.006)	1160	136	919053	(-13)	5.00	
113) Acenaphthene-d10	11.334	(0.006)	1638	164	414928	(-17)	5.00	
153) Phenanthrene-d10	13.240	(0.000)	1965	188	741322	(-18)	5.00	
175) Pyrene-d10	15.169	(0.000)	2296	212	725122	(-22)	5.00	
213) Perylene-d12	19.605	(0.006)	3057	264	558628	(-35)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.736	(0.000)	112	1877273	24.259	49%		10 - 82
17) Phenol-d6	(1)	6.118	(0.001)	99	1829145	17.831	36%		10 - 71
44) Nitrobenzene-d5	(2)	7.447	(0.000)	82	1860036	19.431	78%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.303	(0.000)	172	2777441	20.787	83%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.413	(-0.001)	330	585981	40.403	81%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	2768769	21.942	88%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)	8.816	(-0.000)	225	15560	0.486	1.97		J	0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

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Data file: /chem/HP19760.i/18jun20.b/df1369.d Injection date and time: **20-JUN-2018 18:03**
Data file Sample Info. Line: C5007;9662308;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 19:43 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

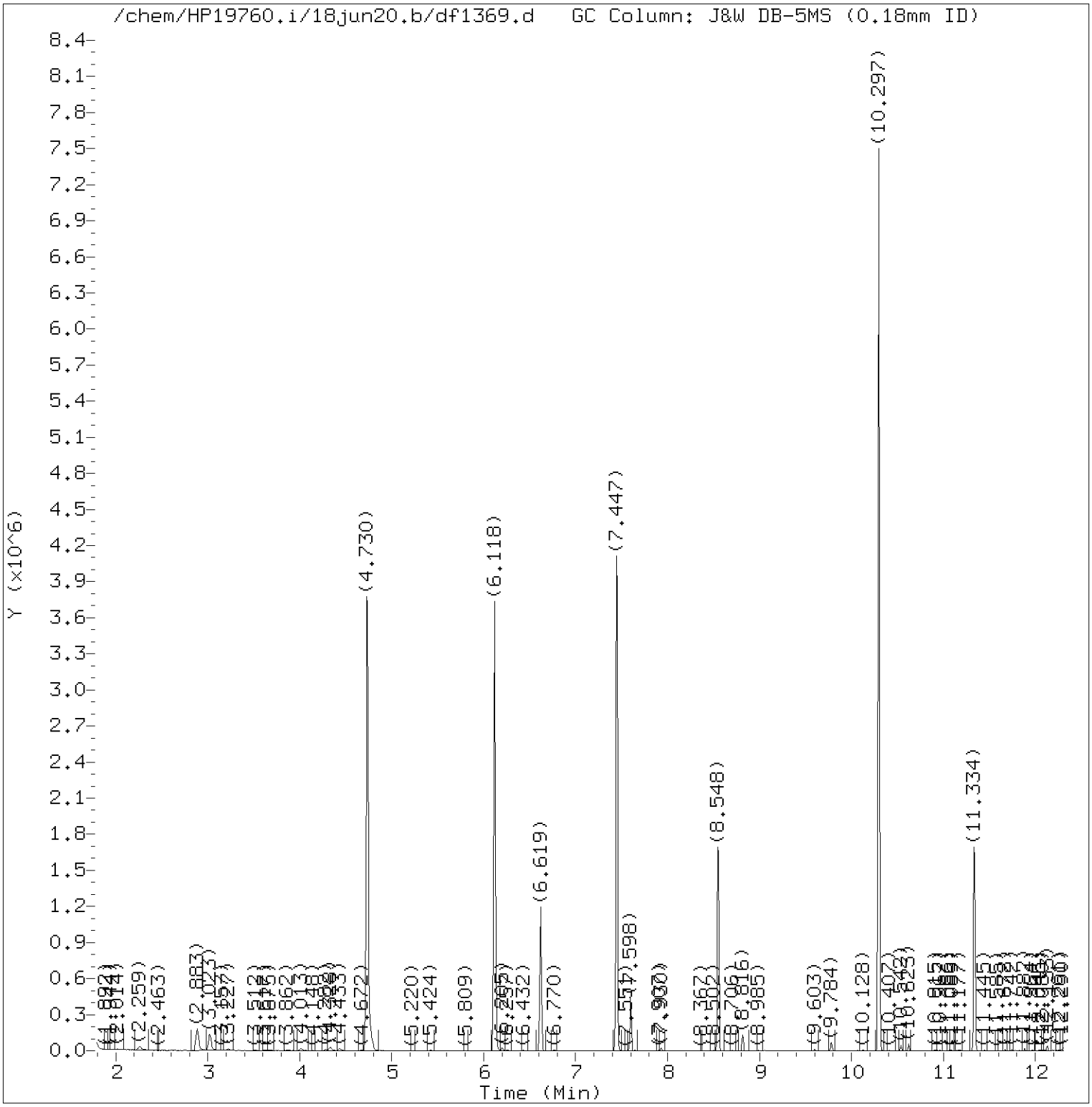
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 247 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

Digitally signed by Ashley R. Transue on 06/20/2018 at 19:48. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:52. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

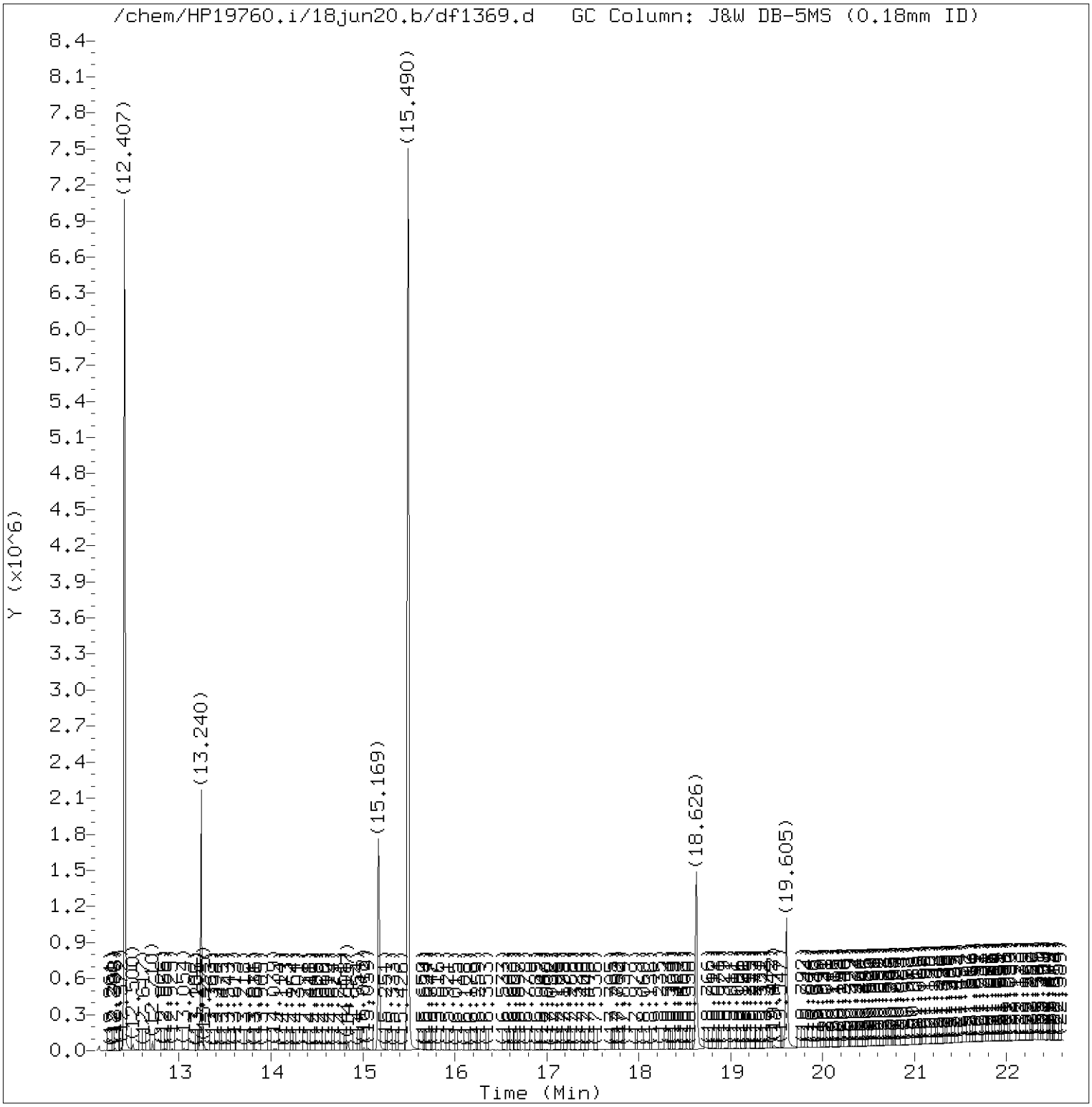
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1369.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 18:03 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:43 art12405

Sample Name: C5007 Lab Sample ID: 9662308

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:48.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1369.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 18:03 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:43 art12405

Sample Name: C5007 Lab Sample ID: 9662308

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:48.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1369.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 18:03 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:43 art12405

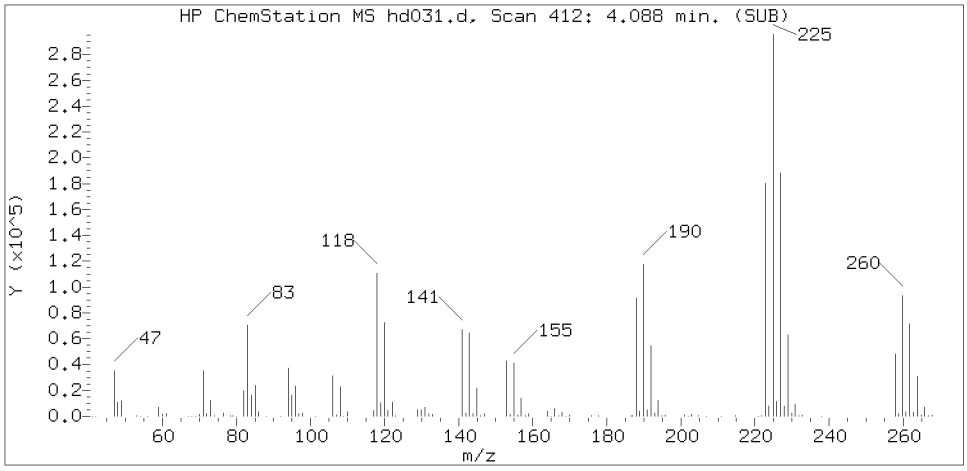
Sample Name: C5007 Lab Sample ID: 9662308

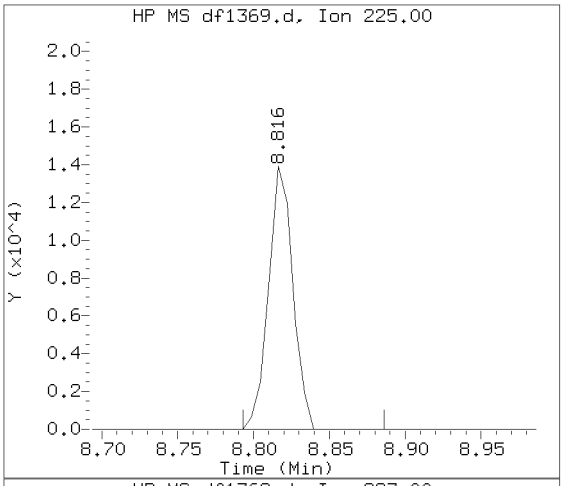
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.736	112	1877273	24.259
17)$Phenol-d6	(1)	6.118	99	1829145	17.831
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	234624	5.000
44)$Nitrobenzene-d5	(2)	7.447	82	1860036	19.431
65)*Naphthalene-d8	(2)	8.548	136	919053	5.000
71) Hexachlorobutadiene	(2)	8.816	225	15560	0.486
93)$2-Fluorobiphenyl	(3)	10.303	172	2777441	20.787
113)*Acenaphthene-d10	(3)	11.334	164	414928	5.000
135)$2,4,6-Tribromophenol	(3)	12.413	330	585981	40.403
153)*Phenanthrene-d10	(4)	13.240	188	741322	5.000
175)*Pyrene-d10	(5)	15.169	212	725122	5.000
179)$Terphenyl-d14	(5)	15.490	244	2768769	21.942
213)*Perylene-d12	(6)	19.605	264	558628	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

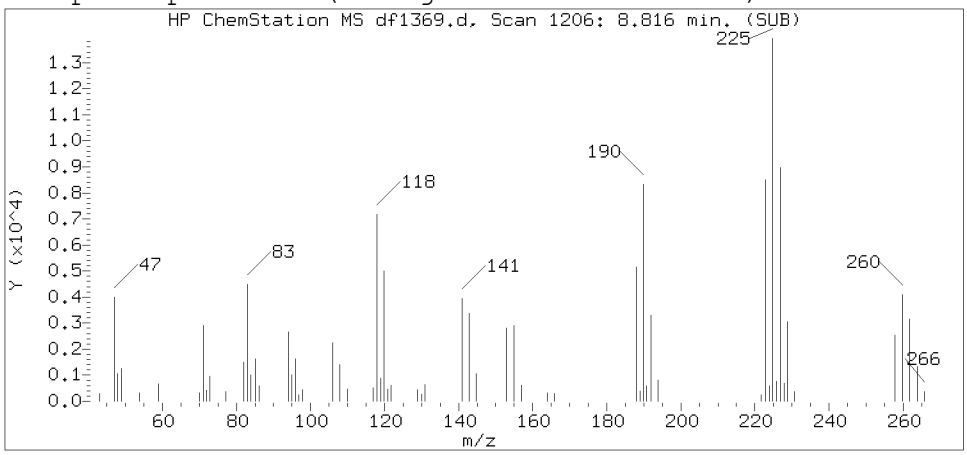
Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:48.
Target 3.5 esignature user ID: art12405

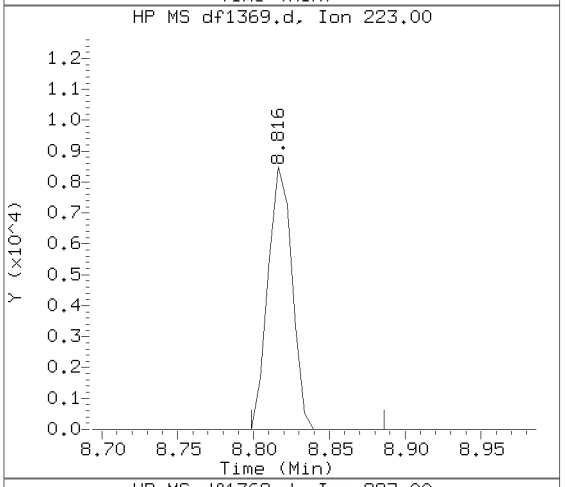
Reference Standard Spectrum for Hexachlorobutadiene



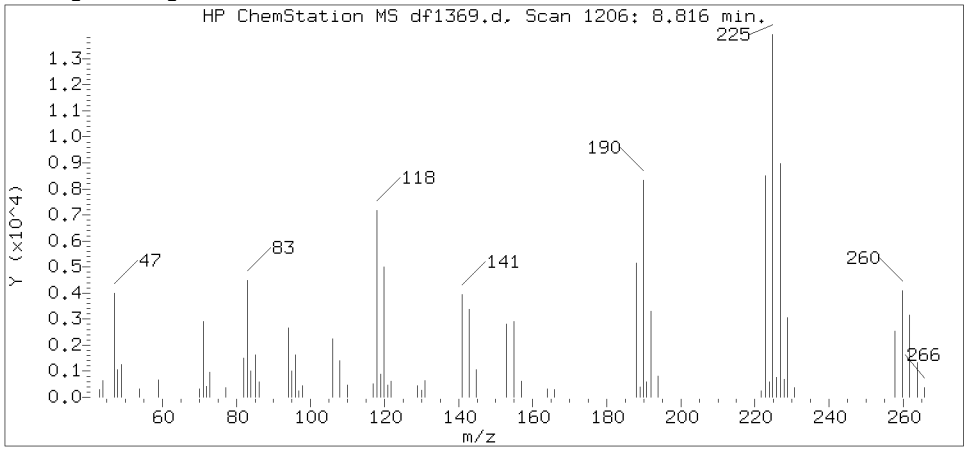


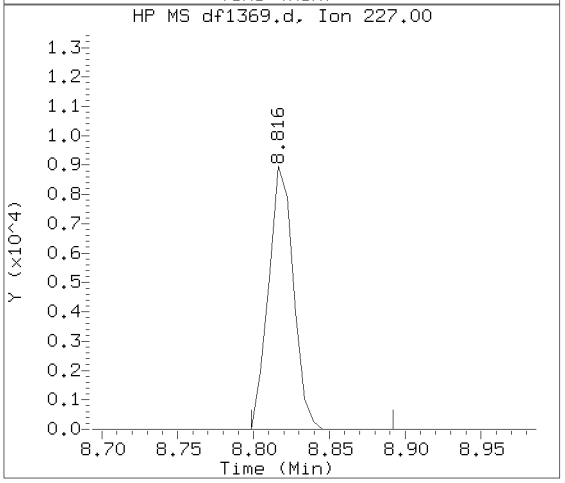
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP19760.i/18jun20.b/df1369.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 18:03 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:43 art12405

Sample Name: C5007 Lab Sample ID: 9662308

Compound Number : 71
Compound Name : Hexachlorobutadiene
Scan Number : 1206
Retention Time (minutes) : 8.816
Relative Retention Time :-0.00070
Quant Ion : 225.00
Area (flag) : 15560
On-column Amount (ng/ul) : 0.4856

Digitally signed by Ashley R. Transue on 06/20/2018 at 19:48.
Target 3.5 esignature user ID: art12405

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C5008

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662309

Sample wt/vol: 247 (g/mL)ML Lab File ID: df1370.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5008

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662309

Sample wt/vol: 247 (g/mL)ML Lab File ID: df1370.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		14	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5008

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662309

Sample wt/vol: 247 (g/mL)ML Lab File ID: df1370.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

C5008 Lancaster Laboratories, Inc. 9662309
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1370.d Injection date and time: **20-JUN-2018 18:31**
Data file Sample Info. Line: C5008;9662309;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 19:44 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 247 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.619	(0.000)	829	152	244312	(-9)	5.00	
65) Naphthalene-d8	8.548	(0.006)	1160	136	943273	(-10)	5.00	
113) Acenaphthene-d10	11.340	(0.000)	1639	164	424205	(-15)	5.00	
153) Phenanthrene-d10	13.240	(0.000)	1965	188	747826	(-18)	5.00	
175) Pyrene-d10	15.169	(0.000)	2296	212	733704	(-21)	5.00	
213) Perylene-d12	19.605	(0.006)	3057	264	523960	(-39)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.736	(0.000)	112	1826196	22.663	45%		10 - 82
17) Phenol-d6	(1)	6.117	(0.001)	99	1709296	16.002	32%		10 - 71
44) Nitrobenzene-d5	(2)	7.446	(0.000)	82	1807878	18.401	74%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.296	(0.001)	172	2690447	19.696	79%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.412	(0.000)	330	608637	41.047	82%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	2290429	17.939	72%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

Digitally signed by Ashley R. Transue on 06/20/2018 at 19:48. Target 3.5 esignature user ID: art12405

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1370.d Injection date and time: **20-JUN-2018 18:31**
Data file Sample Info. Line: C5008;9662309;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 19:44 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

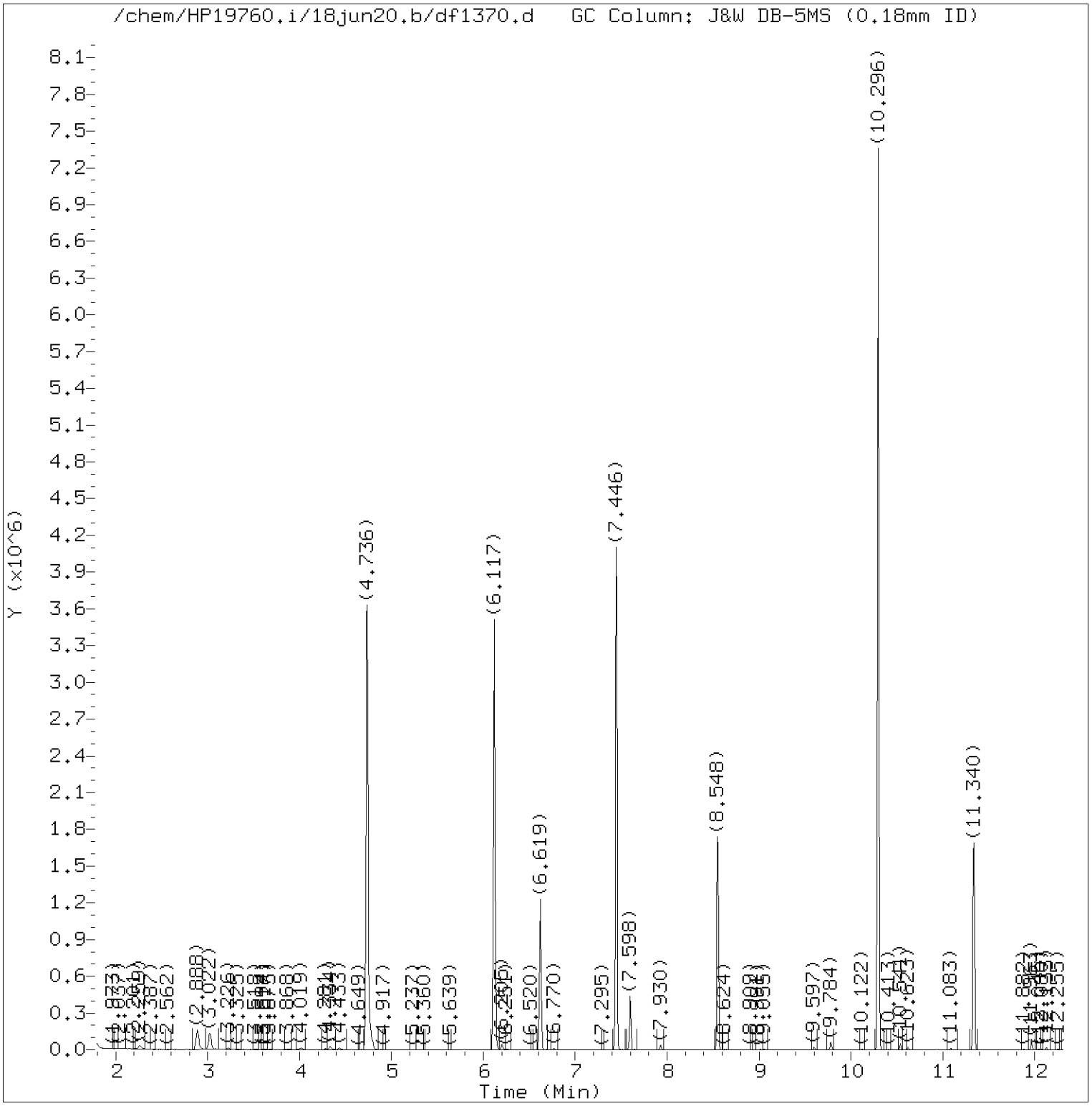
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 247 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

Digitally signed by Ashley R. Transue on 06/20/2018 at 19:48. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:52. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

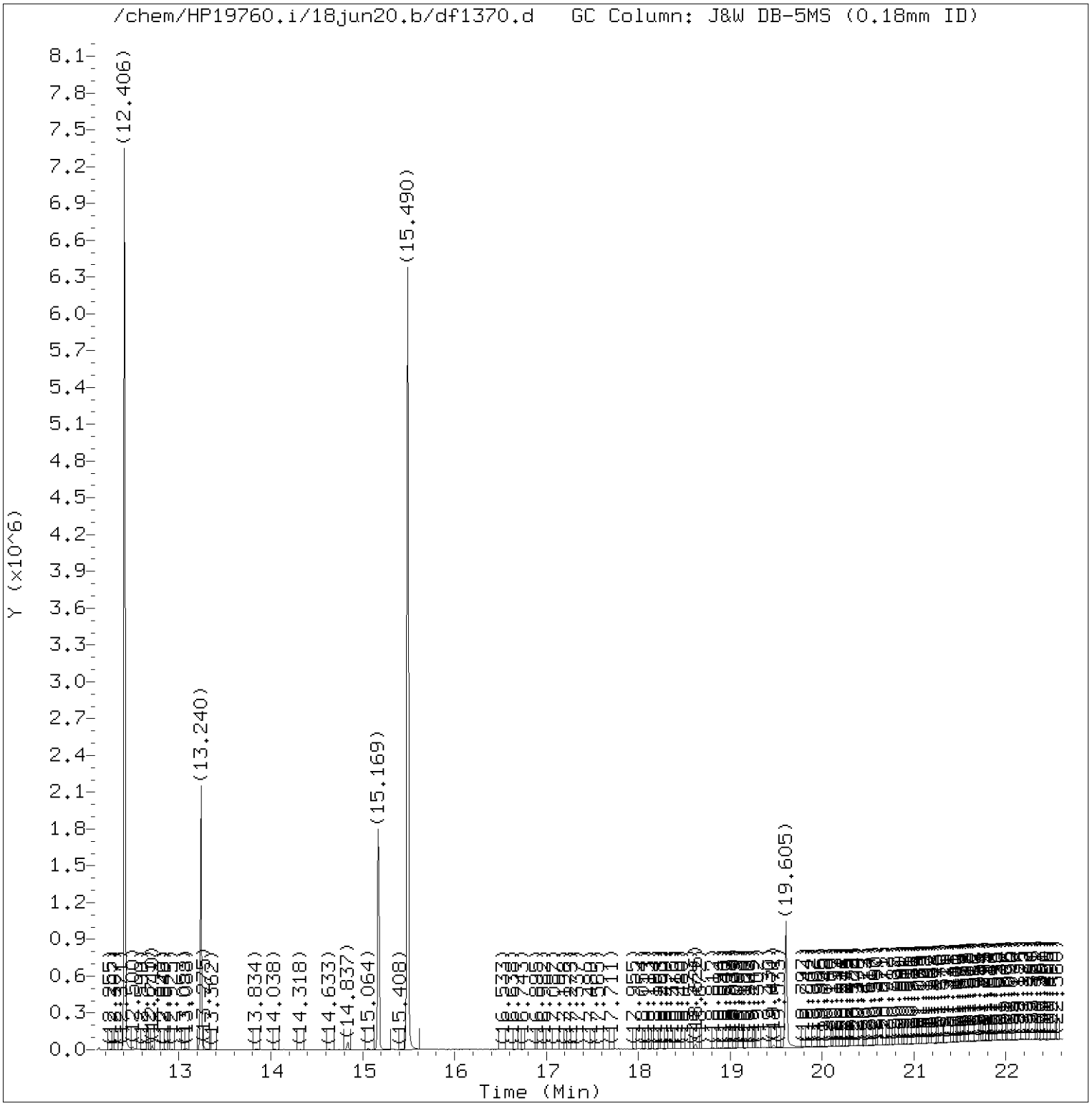
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1370.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 18:31 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:44 art12405

Sample Name: C5008 Lab Sample ID: 9662309

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:48.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1370.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 18:31 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:44 art12405

Sample Name: C5008 Lab Sample ID: 9662309

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:48.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1370.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 18:31 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 19:44 art12405

Sample Name: C5008 Lab Sample ID: 9662309

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.736	112	1826196	22.663
17)$Phenol-d6	(1)	6.117	99	1709296	16.002
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	244312	5.000
44)$Nitrobenzene-d5	(2)	7.446	82	1807878	18.401
65)*Naphthalene-d8	(2)	8.548	136	943273	5.000
93)$2-Fluorobiphenyl	(3)	10.296	172	2690447	19.696
113)*Acenaphthene-d10	(3)	11.340	164	424205	5.000
135)$2,4,6-Tribromophenol	(3)	12.412	330	608637	41.047
153)*Phenanthrene-d10	(4)	13.240	188	747826	5.000
175)*Pyrene-d10	(5)	15.169	212	733704	5.000
179)$Terphenyl-d14	(5)	15.490	244	2290429	17.939
213)*Perylene-d12	(6)	19.605	264	523960	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 06/20/2018 at 19:48.
Target 3.5 esignature user ID: art12405

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

C5009

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662310

Sample wt/vol: 243 (g/mL)ML Lab File ID: df1354.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662310

Sample wt/vol: 243 (g/mL)ML Lab File ID: df1354.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		14	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662310

Sample wt/vol: 243 (g/mL)ML Lab File ID: df1354.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1354.d
Data file Sample Info. Line: C5009;9662310;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

Injection date and time: **20-JUN-2018 10:59**
Instrument ID: **HP19760.i** Batch: **18169WAM**

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 243 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.619	(0.000)	829	152	253909	(-6)	5.00	
65) Naphthalene-d8	8.548	(0.006)	1160	136	999236	(-5)	5.00	
113) Acenaphthene-d10	11.334	(0.006)	1638	164	449260	(-10)	5.00	
153) Phenanthrene-d10	13.240	(0.000)	1965	188	805258	(-11)	5.00	
175) Pyrene-d10	15.169	(0.000)	2296	212	778054	(-16)	5.00	
213) Perylene-d12	19.605	(0.006)	3057	264	596766	(-31)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.730	(0.001)	112	1255722	14.995	30%		10 - 82
17) Phenol-d6	(1)	6.117	(0.001)	99	1183348	10.659	21%		10 - 71
44) Nitrobenzene-d5	(2)	7.446	(0.000)	82	1908523	18.338	73%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297	(0.000)	172	2845521	19.669	79%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.407	(0.000)	330	551378	35.112	70%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	2798908	20.672	83%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

Digitally signed by Edward Monborne on 06/20/2018 at 14:14. Target 3.5 esignature user ID: em10340

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1354.d
Injection date and time: **20-JUN-2018 10:59**
Data file Sample Info. Line: C5009;9662310;1;0;SAMPLE;;;
Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

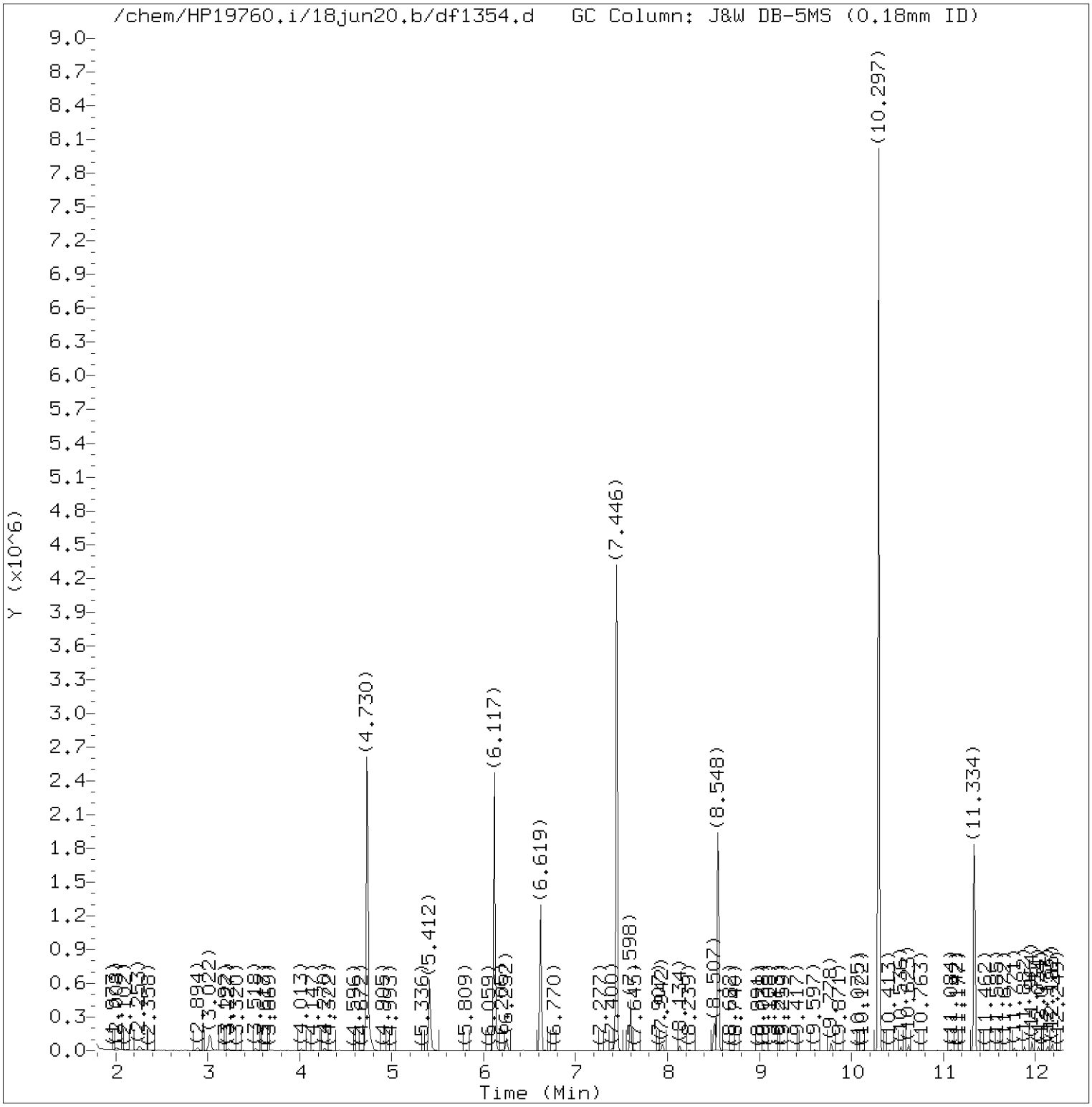
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 243 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

Digitally signed by Edward Monborne on 06/20/2018 at 14:14. Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

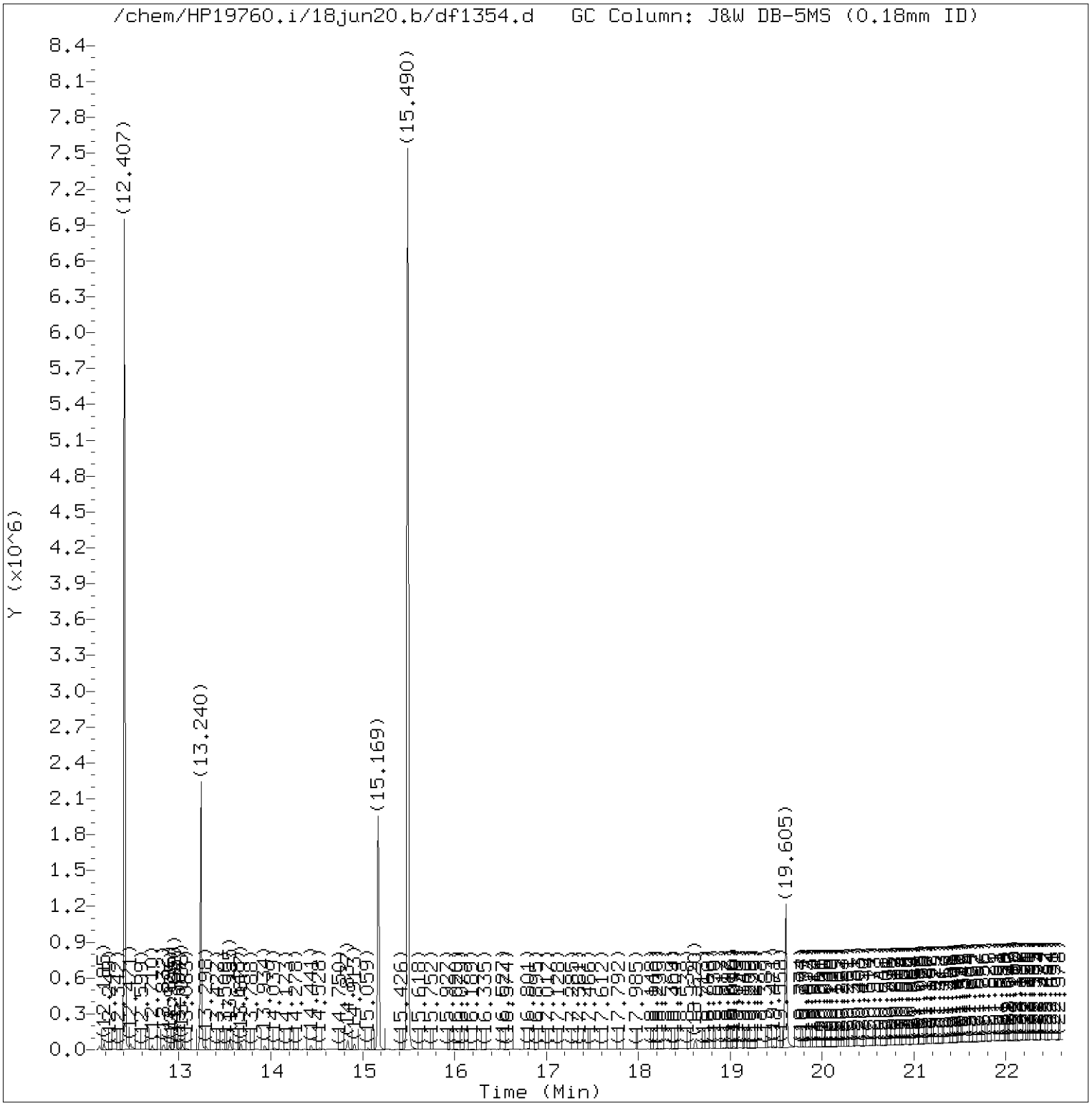
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1354.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:59 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

Sample Name: C5009 Lab Sample ID: 9662310

Digitally signed by Edward Monborne
on 06/20/2018 at 14:14.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1354.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:59 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

Sample Name: C5009 Lab Sample ID: 9662310

Digitally signed by Edward Monborne
on 06/20/2018 at 14:14.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1354.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:59 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

Sample Name: C5009 Lab Sample ID: 9662310

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.730	112	1255722	14.995
17)$Phenol-d6	(1)	6.117	99	1183348	10.659
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	253909	5.000
44)$Nitrobenzene-d5	(2)	7.446	82	1908523	18.338
65)*Naphthalene-d8	(2)	8.548	136	999236	5.000
93)$2-Fluorobiphenyl	(3)	10.297	172	2845521	19.669
113)*Acenaphthene-d10	(3)	11.334	164	449260	5.000
135)$2,4,6-Tribromophenol	(3)	12.407	330	551378	35.112
153)*Phenanthrene-d10	(4)	13.240	188	805258	5.000
175)*Pyrene-d10	(5)	15.169	212	778054	5.000
179)$Terphenyl-d14	(5)	15.490	244	2798908	20.672
213)*Perylene-d12	(6)	19.605	264	596766	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 06/20/2018 at 14:14.
Target 3.5 esignature user ID: em10340

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1354.d
Data file Sample Info. Line: C5009;9662310;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 20-Jun-2018 13:54 em10340

Injection date and time: **20-JUN-2018 10:59**
Instrument ID: **HP19760.i** Batch: **18169WAM**

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 243 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.619(0.000)	829	152	253909 (-6)	5.00	
65) Naphthalene-d8	8.548(0.006)	1160	136	999236 (-5)	5.00	
113) Acenaphthene-d10	11.334(0.006)	1638	164	449260 (-10)	5.00	
153) Phenanthrene-d10	13.240(0.000)	1965	188	805258 (-11)	5.00	
175) Pyrene-d10	15.169(0.000)	2296	212	778054 (-16)	5.00	
213) Perylene-d12	19.605(0.006)	3057	264	596766 (-31)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.730(0.001)	112	1255722	14.995	30%		10 - 82
17) Phenol-d6	(1)	6.117(0.001)	99	1183348	10.659	21%		10 - 71
44) Nitrobenzene-d5	(2)	7.446(0.000)	82	1908523	18.338	73%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297(0.000)	172	2845521	19.669	79%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.407(0.000)	330	551378	35.112	70%		21 - 134
179) Terphenyl-d14	(5)	15.490(0.000)	244	2798908	20.672	83%		27 - 116

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
16) Benzaldehyde	(1)			Not Detected					0.8
18) Phenol	(1)			Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)			Not Detected					0.1
23) 2-Chlorophenol	(1)			Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)			Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)			Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)			Not Detected					0.1
31) 2-Methylphenol	(1)			Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)			Not Detected					0.1
36) Acetophenone	(1)			Not Detected					1
37) 4-Methylphenol	(1)			Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)			Not Detected					0.2
43) Hexachloroethane	(1)			Not Detected					0.3
45) Nitrobenzene	(2)			Not Detected					0.1
50) Isophorone	(2)			Not Detected					0.1
51) 2-Nitrophenol	(2)			Not Detected					0.8
53) 2,4-Dimethylphenol	(2)			Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)			Not Detected					0.1
60) 2,4-Dichlorophenol	(2)			Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)			Not Detected					0.1
66) Naphthalene	(2)			Not Detected					0.03
67) 4-Chloroaniline	(2)			Not Detected					1
71) Hexachlorobutadiene	(2)			Not Detected					0.1
76) Caprolactam	(2)			Not Detected					1
80) 4-Chloro-3-methylphenol	(2)			Not Detected					0.1
83) 2-Methylnaphthalene	(2)			Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)			Not Detected					1

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Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1354.d
Injection date and time: **20-JUN-2018 10:59**
Data file Sample Info. Line: C5009;9662310;1;0;SAMPLE;;;
Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 13:54 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 243 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
86) 1,2,4,5-Tetrachlorobenzene	(3)				Not Detected					0.1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
95) 1,1'-Biphenyl	(3)				Not Detected					0.8
96) 2-Chloronaphthalene	(3)				Not Detected					0.1
99) Diphenyl ether	(3)				Not Detected					0.1
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
122) 2,3,4,6-Tetrachlorophenol	(3)				Not Detected					1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
148) Atrazine	(4)				Not Detected					0.5
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

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Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1354.d Injection date and time: **20-JUN-2018 10:59**
Data file Sample Info. Line: C5009;9662310;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 13:54 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 243 ml Volume Injected (Vi): 0.5 ul

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Total number of targets = 72

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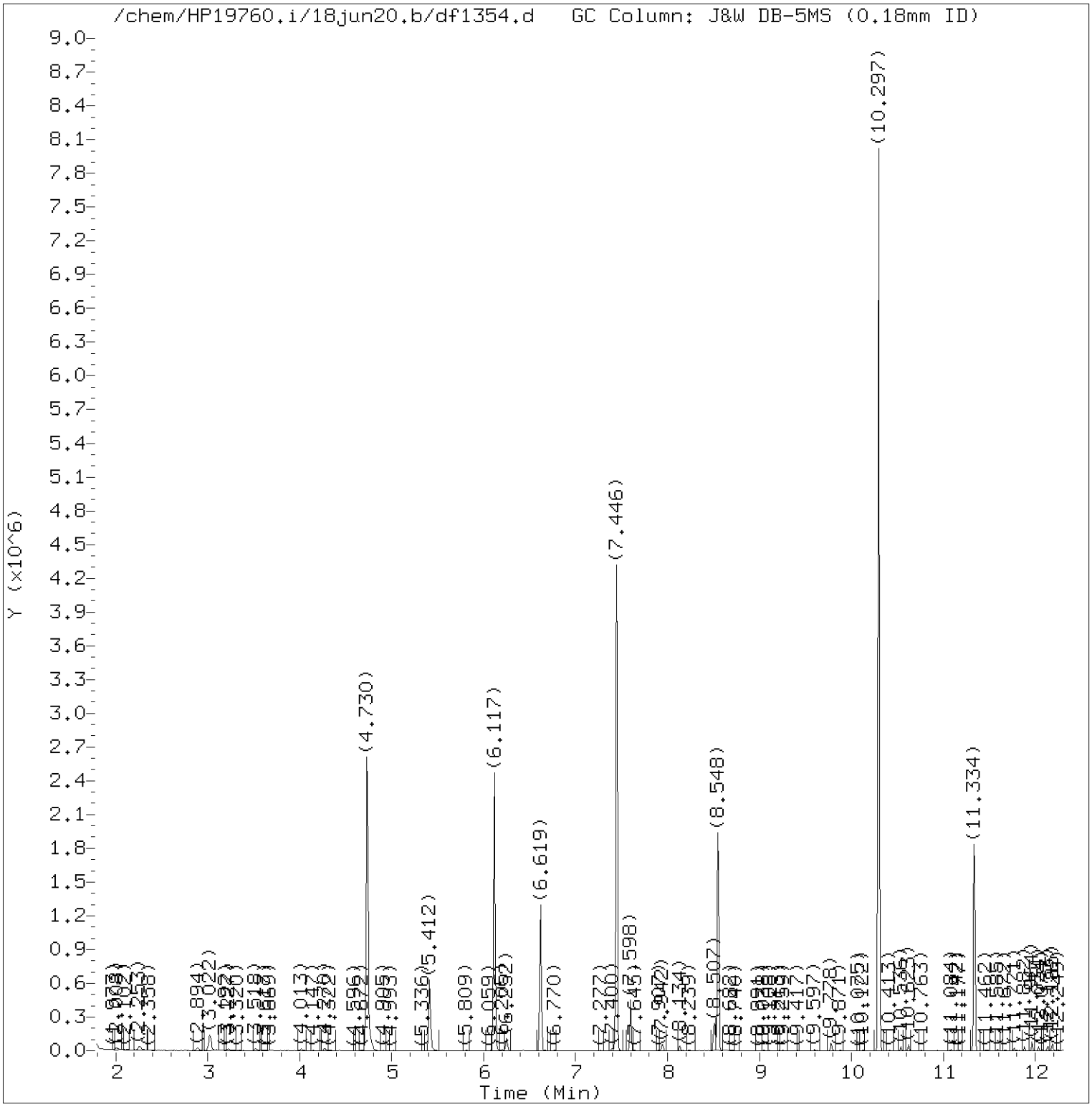
Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

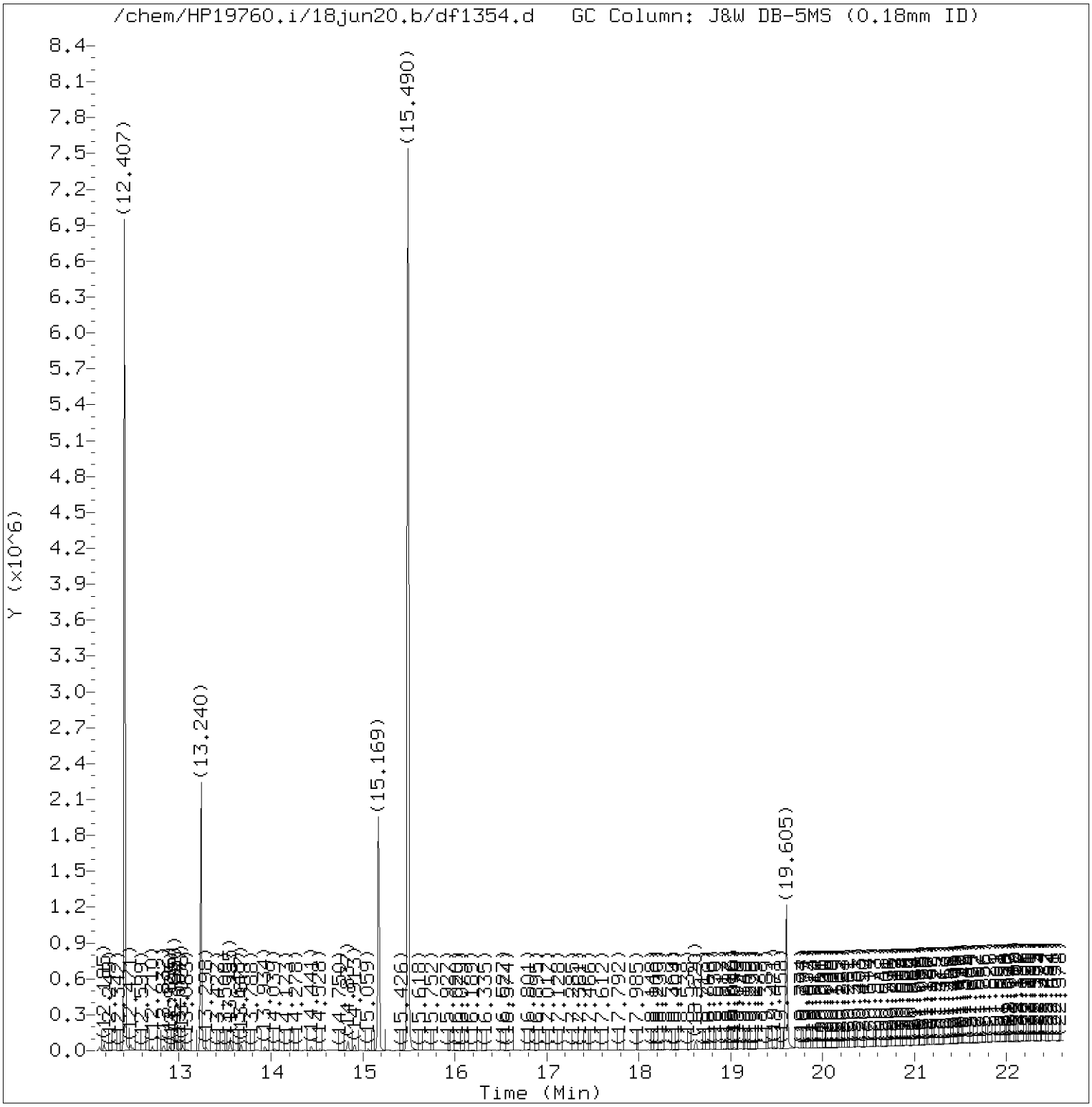
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1354.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:59 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 13:54 em10340

Sample Name: C5009 Lab Sample ID: 9662310

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1354.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:59 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 13:54 em10340

Sample Name: C5009 Lab Sample ID: 9662310

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1354.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:59 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 13:54 em10340

Sample Name: C5009 Lab Sample ID: 9662310

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.730	112	1255722	14.995
17)$Phenol-d6	(1)	6.117	99	1183348	10.659
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	253909	5.000
44)$Nitrobenzene-d5	(2)	7.446	82	1908523	18.338
65)*Naphthalene-d8	(2)	8.548	136	999236	5.000
93)$2-Fluorobiphenyl	(3)	10.297	172	2845521	19.669
113)*Acenaphthene-d10	(3)	11.334	164	449260	5.000
135)$2,4,6-Tribromophenol	(3)	12.407	330	551378	35.112
153)*Phenanthrene-d10	(4)	13.240	188	805258	5.000
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213)*Perylene-d12	(6)	19.605	264	596766	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5010

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662314

Sample wt/vol: 249 (g/mL)ML Lab File ID: df1411.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/21/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5010

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662314

Sample wt/vol: 249 (g/mL)ML Lab File ID: df1411.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/21/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		14	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	J	
129-00-0	Pyrene		0.1	J	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	J	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5010

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662314

Sample wt/vol: 249 (g/mL)ML Lab File ID: df1411.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/21/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

C5010 Lancaster Laboratories, Inc. 9662314
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20a.b/df1411.d Injection date and time: **21-JUN-2018 00:38**
Data file Sample Info. Line: C5010;9662314;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18170WAB**
Date, time and analyst ID of latest file update: 21-Jun-2018 09:45 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20a.b/df1404.d**

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 21-JUN-2018 00:04
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20a.b/df1401.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 249 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.619	(0.000)	829	152	257002	(-2)	5.00	
65) Naphthalene-d8	8.548	(0.006)	1160	136	982238	(-5)	5.00	
113) Acenaphthene-d10	11.334	(0.006)	1638	164	458503	(-5)	5.00	
153) Phenanthrene-d10	13.240	(0.006)	1965	188	823963	(-7)	5.00	
175) Pyrene-d10	15.169	(0.006)	2296	212	815883	(-10)	5.00	
213) Perylene-d12	19.605	(0.006)	3057	264	679643	(-18)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.736	(0.000)	112	1625824	19.181	38%		10 - 82
17) Phenol-d6	(1)	6.117	(0.001)	99	1616004	14.381	29%		10 - 71
44) Nitrobenzene-d5	(2)	7.446	(0.000)	82	1674641	16.369	65%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297	(0.000)	172	2442698	16.544	66%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.412	(-0.001)	330	619923	38.681	77%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	3078529	21.683	87%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

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Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20a.b/df1411.d Injection date and time: **21-JUN-2018 00:38**
Data file Sample Info. Line: C5010;9662314;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18170WAB**
Date, time and analyst ID of latest file update: 21-Jun-2018 09:45 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20a.b/df1404.d**

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 21-JUN-2018 00:04
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20a.b/df1401.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 249 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)			Not Detected					0.5
106) Dimethylphthalate	(3)			Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)			Not Detected					0.1
109) Acenaphthylene	(3)			Not Detected					0.03
112) 3-Nitroaniline	(3)			Not Detected					0.8
114) Acenaphthene	(3)			Not Detected					0.03
115) 2,4-Dinitrophenol	(3)			Not Detected					4
116) 4-Nitrophenol	(3)			Not Detected					3
118) 2,4-Dinitrotoluene	(3)			Not Detected					0.3
119) Dibenzofuran	(3)			Not Detected					0.1
124) Diethylphthalate	(3)			Not Detected					0.5
126) Fluorene	(3)			Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)			Not Detected					0.1
129) 4-Nitroaniline	(3)			Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)			Not Detected					2
131) N-Nitrosodiphenylamine	(4)			Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)			Not Detected					0.1
145) Hexachlorobenzene	(4)			Not Detected					0.03
149) Pentachlorophenol	(4)			Not Detected					0.3
155) Phenanthrene	(4)			Not Detected					0.03
157) Anthracene	(4)			Not Detected					0.03
163) Carbazole	(4)			Not Detected					0.1
165) Di-n-butylphthalate	(4)			Not Detected					0.5
173) Fluoranthene	(4)	14.866(-0.000)	202	7143	0.034	0.14		J	0.03
177) Pyrene	(5)	15.198(-0.000)	202	6759	0.030	0.12		J	0.03
188) Butylbenzylphthalate	(5)			Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)			Not Detected					0.8
195) Benzo(a)anthracene	(5)			Not Detected					0.03
196) Chrysene	(5)			Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)			Not Detected					1
205) Di-n-octylphthalate	(6)			Not Detected					1
206) Benzo(b)fluoranthene	(6)	18.993(0.000)	252	4314	0.026	0.11		J	0.03
208) Benzo(k)fluoranthene	(6)			Not Detected					0.03
211) Benzo(a)pyrene	(6)			Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)			Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)			Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)			Not Detected					0.03

Total number of targets = 64

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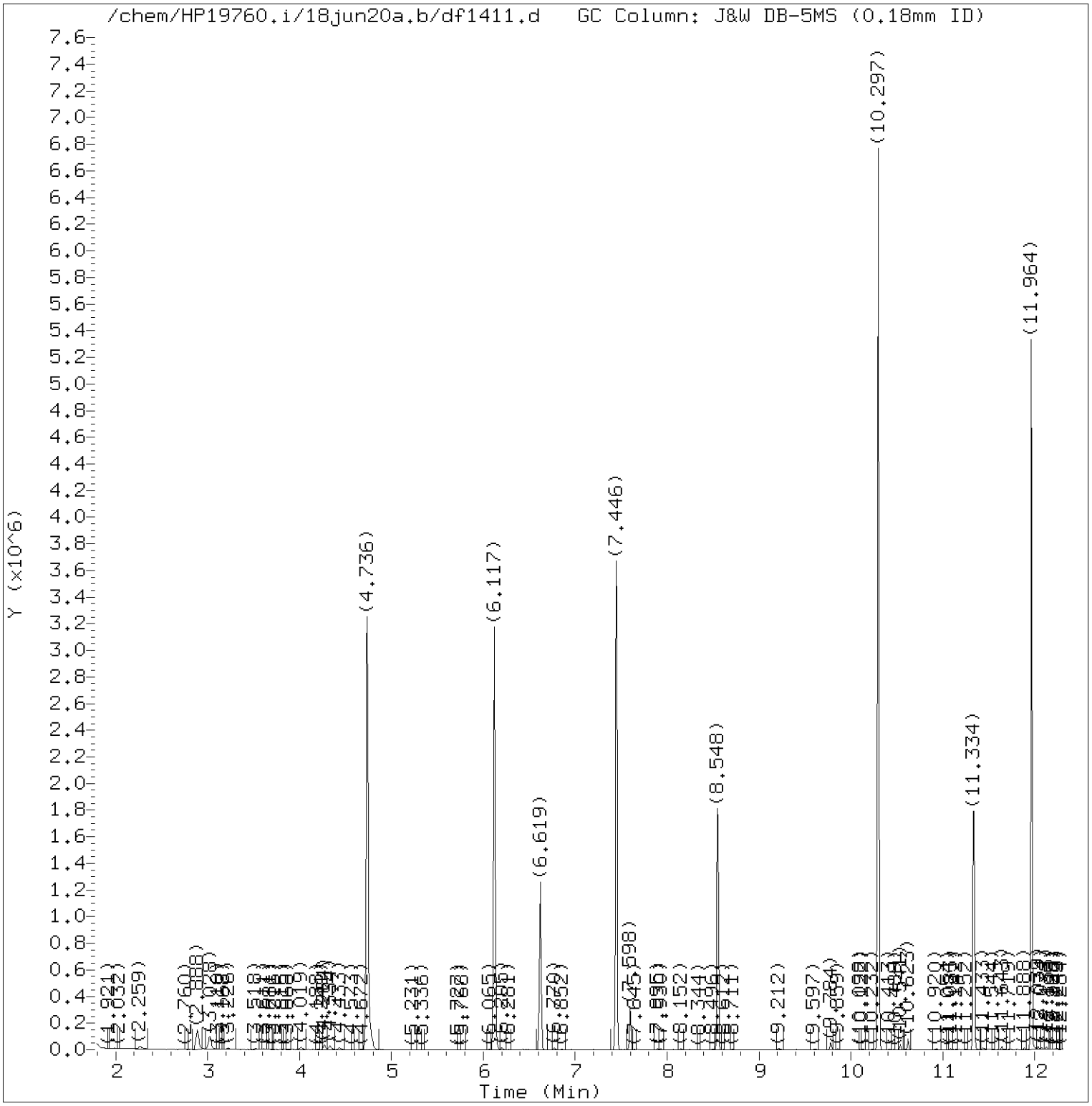
Secondary review performed and digitally signed by Matthew E. Barton on 06/24/2018 at 20:41. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

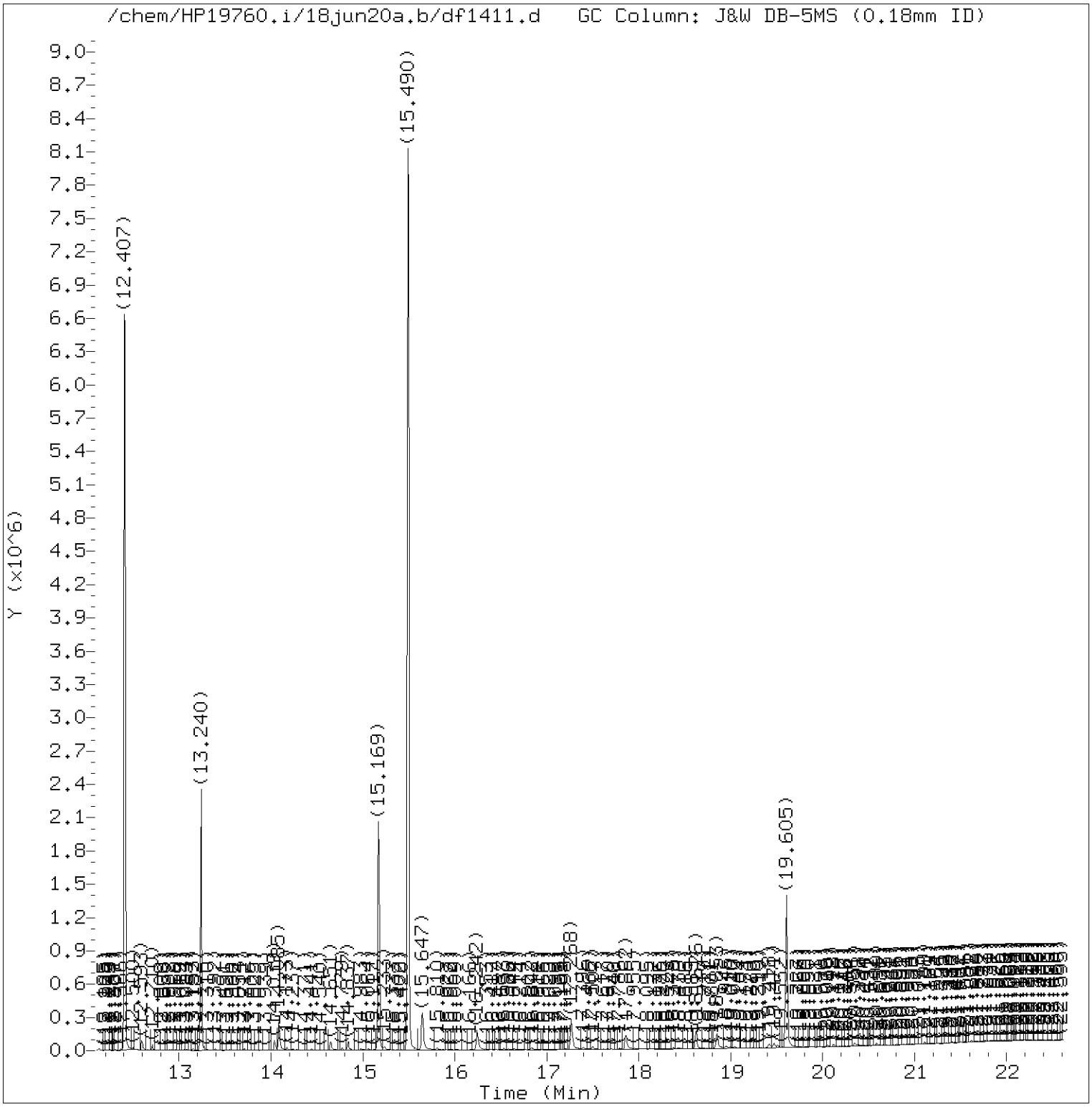
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1411.d Instrument ID: HP19760.i
Injection date and time: 21-JUN-2018 00:38 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 21-JUN-2018 00:04
Date, time and analyst ID of latest file update: 21-Jun-2018 09:45 em10340

Sample Name: C5010 Lab Sample ID: 9662314

Digitally signed by Edward Monborne
on 06/21/2018 at 09:50.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1411.d Instrument ID: HP19760.i
Injection date and time: 21-JUN-2018 00:38 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 21-JUN-2018 00:04
Date, time and analyst ID of latest file update: 21-Jun-2018 09:45 em10340

Sample Name: C5010 Lab Sample ID: 9662314

Digitally signed by Edward Monborne
on 06/21/2018 at 09:50.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1411.d Instrument ID: HP19760.i
Injection date and time: 21-JUN-2018 00:38 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 21-JUN-2018 00:04
Date, time and analyst ID of latest file update: 21-Jun-2018 09:45 em10340

Sample Name: C5010 Lab Sample ID: 9662314

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.736	112	1625824	19.181
17)$Phenol-d6	(1)	6.117	99	1616004	14.381
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	257002	5.000
44)$Nitrobenzene-d5	(2)	7.446	82	1674641	16.369
65)*Naphthalene-d8	(2)	8.548	136	982238	5.000
93)$2-Fluorobiphenyl	(3)	10.297	172	2442698	16.544
113)*Acenaphthene-d10	(3)	11.334	164	458503	5.000
135)$2,4,6-Tribromophenol	(3)	12.412	330	619923	38.681
153)*Phenanthrene-d10	(4)	13.240	188	823963	5.000
173) Fluoranthene	(4)	14.866	202	7143	0.034
175)*Pyrene-d10	(5)	15.169	212	815883	5.000
177) Pyrene	(5)	15.198	202	6759	0.030
179)$Terphenyl-d14	(5)	15.490	244	3078529	21.683
206) Benzo(b)fluoranthene	(6)	18.993	252	4314	0.026
213)*Perylene-d12	(6)	19.605	264	679643	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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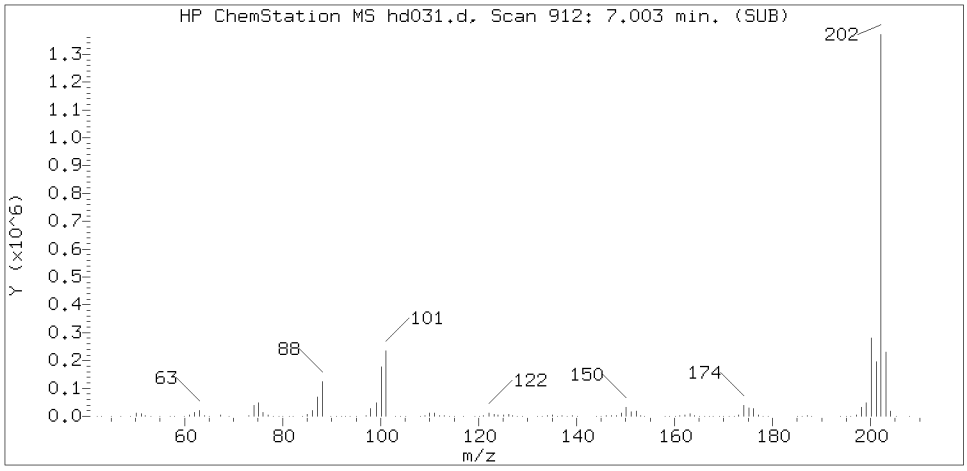
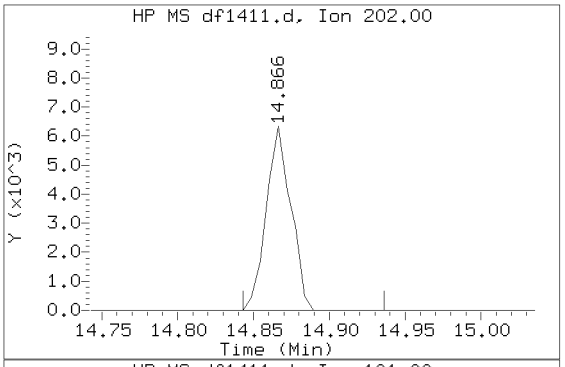
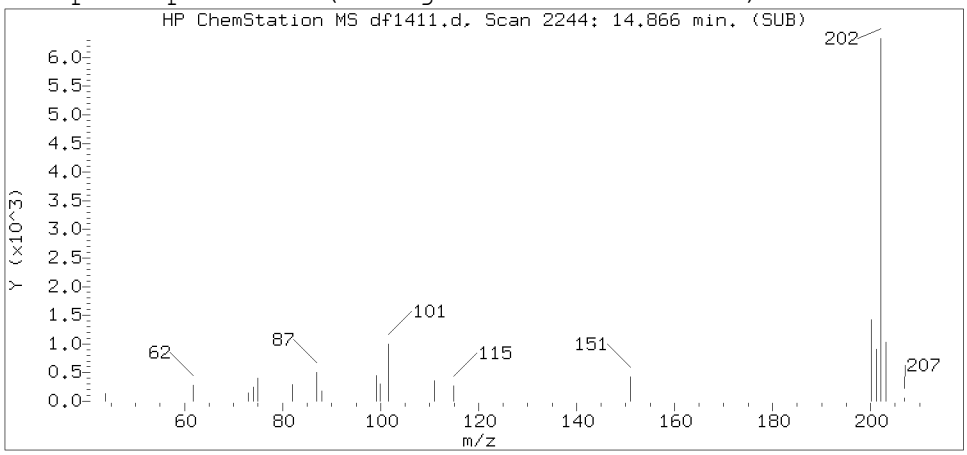
on 06/21/2018 at 09:50.
Target 3.5 esignature user ID: em10340

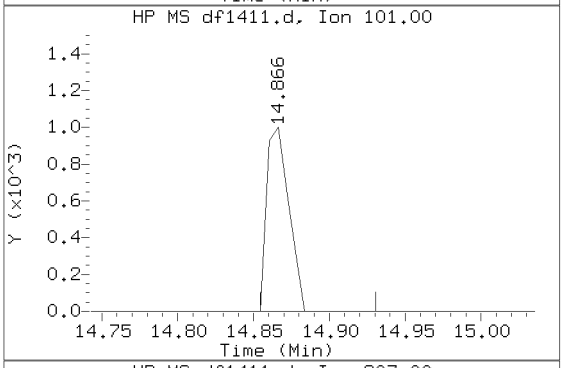
Reference Standard Spectrum for Fluoranthene

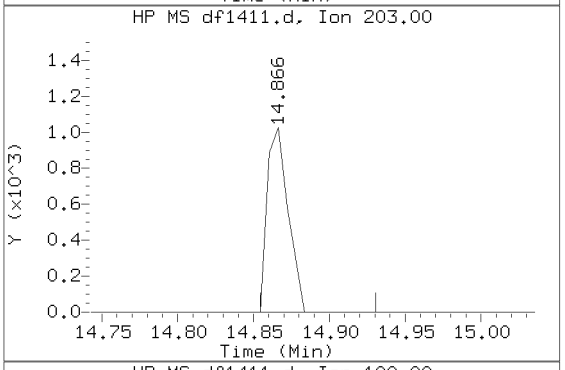




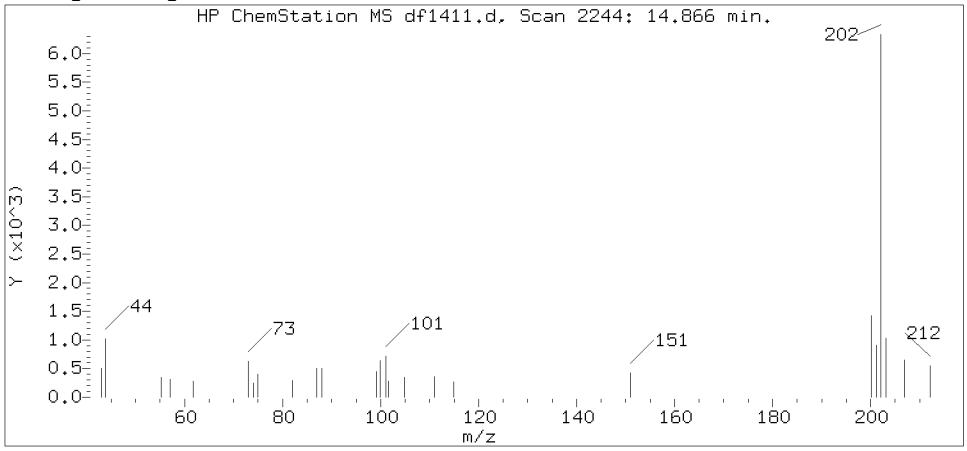
Sample Spectrum (Background Subtracted)

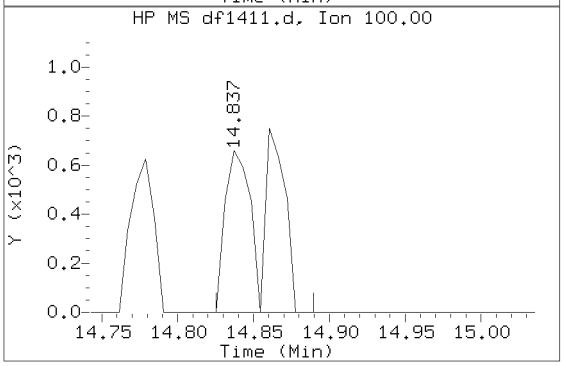






Sample Spectrum (Unaltered)





Data File: /chem/HP19760.i/18jun20a.b/df1411.d Instrument ID: HP19760.i
Injection date and time: 21-JUN-2018 00:38 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 21-JUN-2018 00:04
Date, time and analyst ID of latest file update: 21-Jun-2018 09:45 em10340

Sample Name: C5010 Lab Sample ID: 9662314

Compound Number : 173
Compound Name : Fluoranthene
Scan Number : 2244
Retention Time (minutes) : 14.866
Relative Retention Time :-0.00005
Quant Ion : 202.00
Area (flag) : 7143
On-column Amount (ng/ul) : 0.0339

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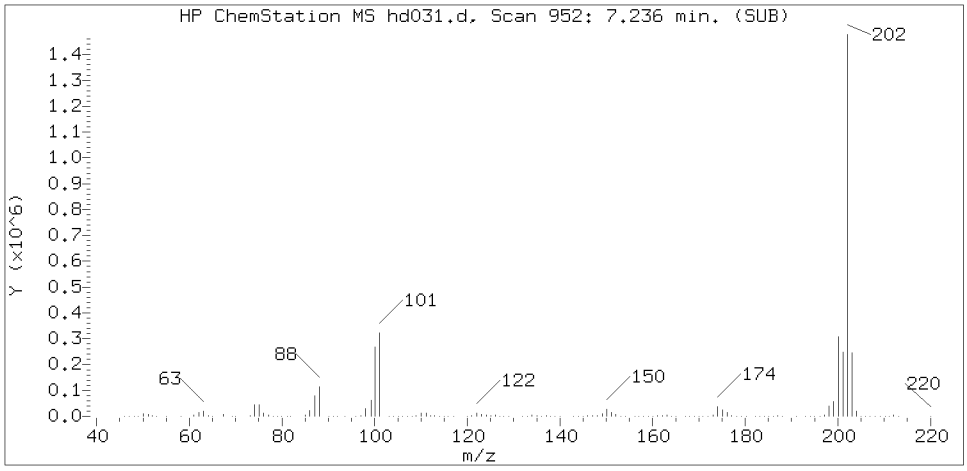
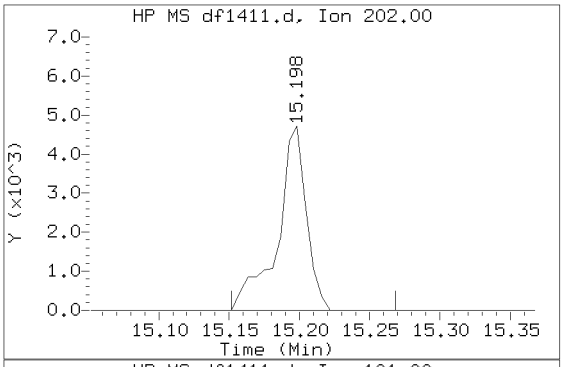
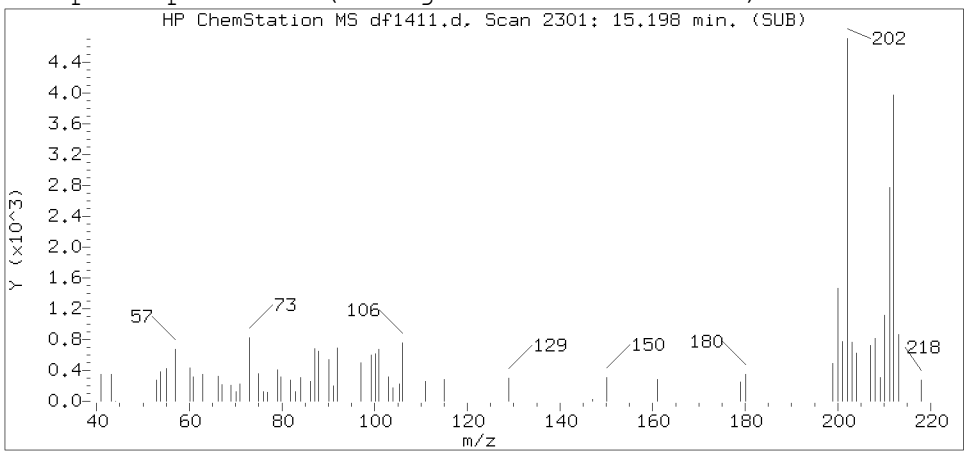
Target 3.5 esignature user ID: em10340

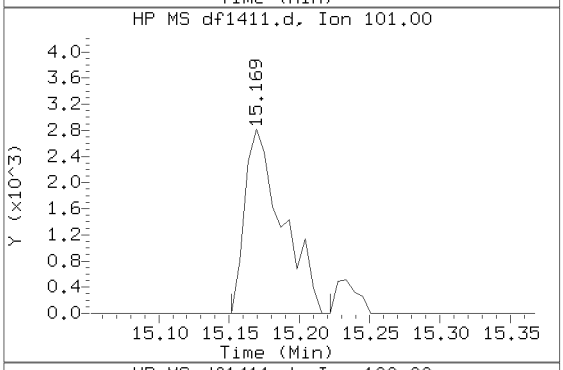
Reference Standard Spectrum for Pyrene

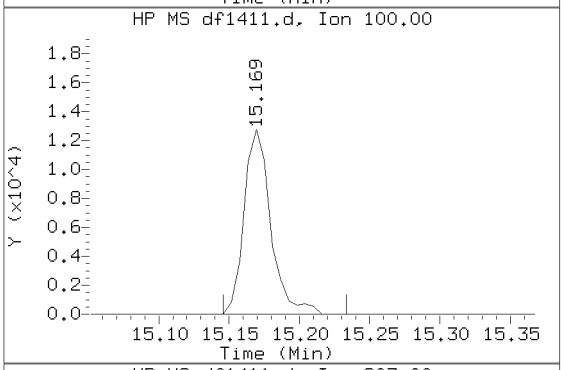




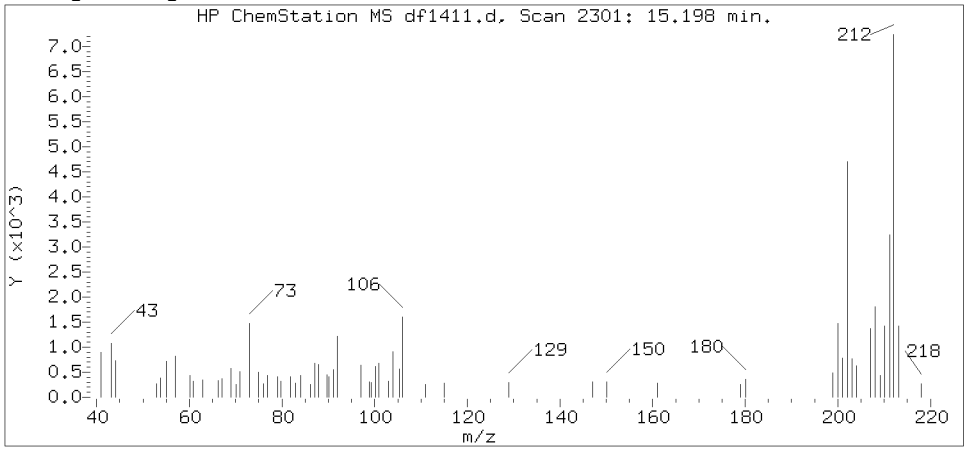
Sample Spectrum (Background Subtracted)

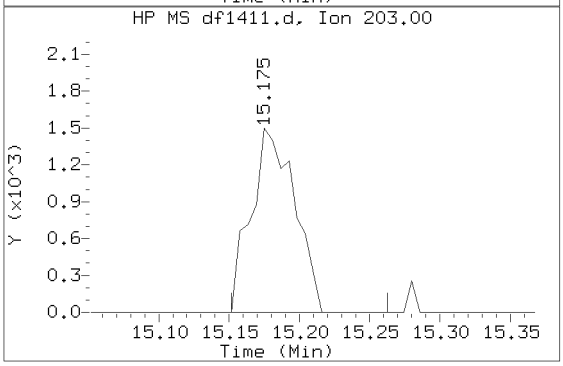






Sample Spectrum (Unaltered)





Data File: /chem/HP19760.i/18jun20a.b/df1411.d Instrument ID: HP19760.i
Injection date and time: 21-JUN-2018 00:38 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 21-JUN-2018 00:04
Date, time and analyst ID of latest file update: 21-Jun-2018 09:45 em10340

Sample Name: C5010 Lab Sample ID: 9662314

Compound Number	: 177
Compound Name	: Pyrene
Scan Number	: 2301
Retention Time (minutes)	: 15.198
Relative Retention Time	:-0.00000
Quant Ion	: 202.00
Area (flag)	: 6759
On-column Amount (ng/ul)	: 0.0302

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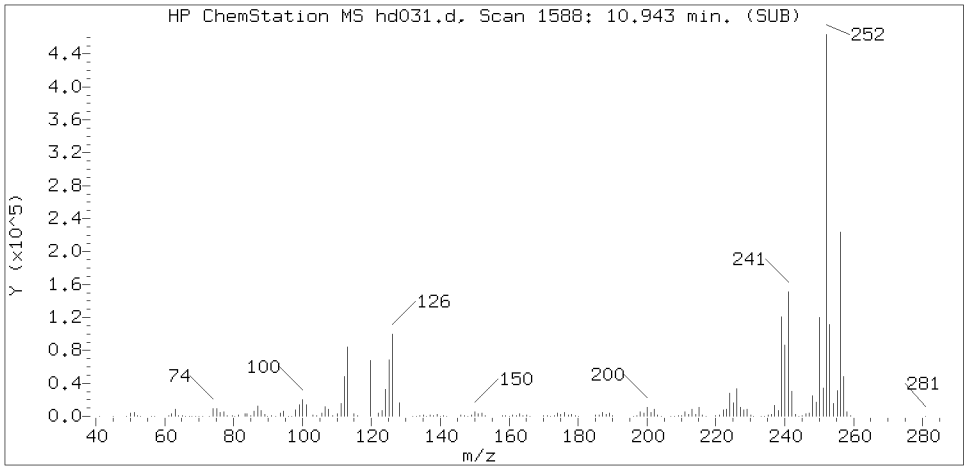
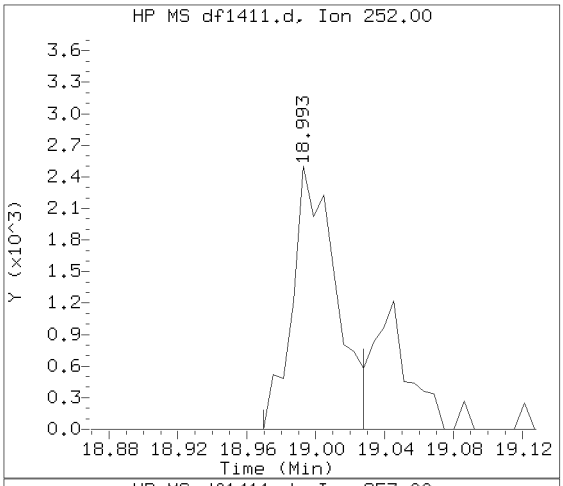
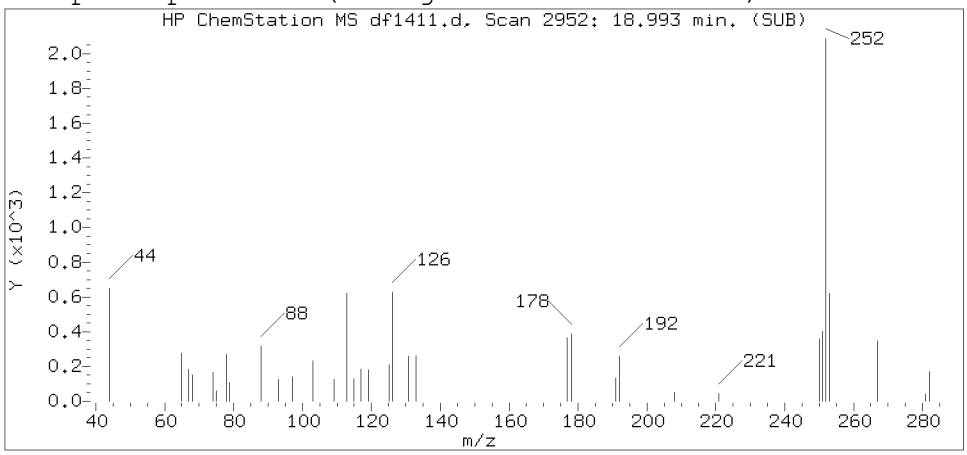
Target 3.5 esignature user ID: em10340

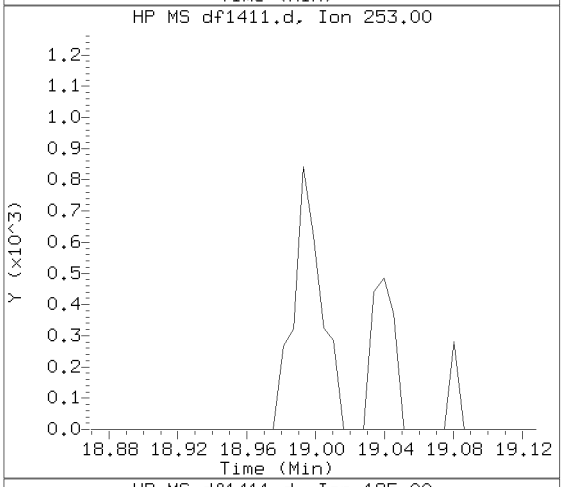
Reference Standard Spectrum for Benzo(b)fluoranthene



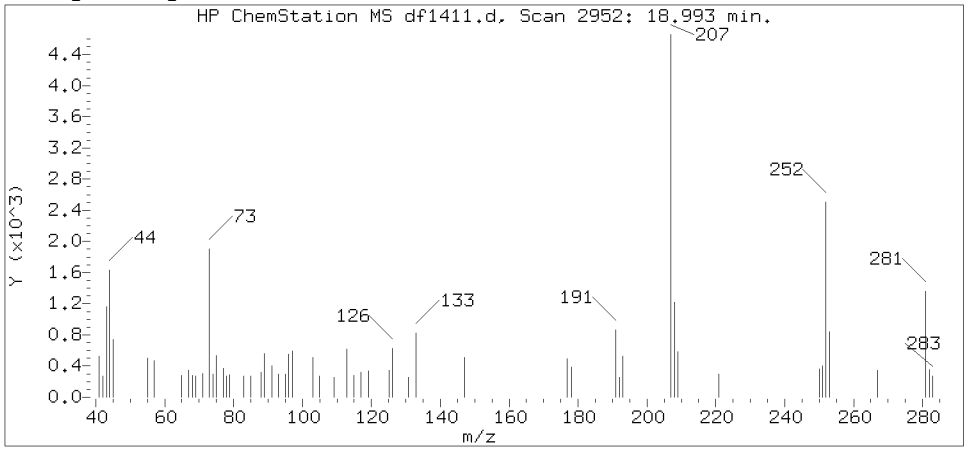


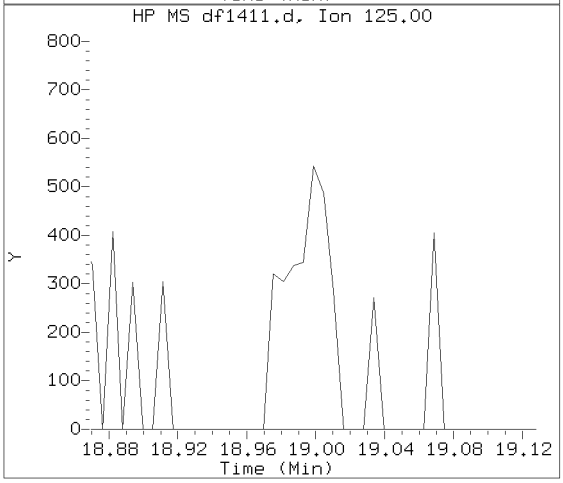
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP19760.i/18jun20a.b/df1411.d Instrument ID: HP19760.i
Injection date and time: 21-JUN-2018 00:38 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 21-JUN-2018 00:04
Date, time and analyst ID of latest file update: 21-Jun-2018 09:45 em10340

Sample Name: C5010 Lab Sample ID: 9662314

Compound Number	: 206
Compound Name	: Benzo(b)fluoranthene
Scan Number	: 2952
Retention Time (minutes)	: 18.993
Relative Retention Time	: 0.00031
Quant Ion	: 252.00
Area (flag)	: 4314
On-column Amount (ng/ul)	: 0.0263

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Target 3.5 esignature user ID: em10340

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5011

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662315

Sample wt/vol: 244 (g/mL)ML Lab File ID: df1412.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/21/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5011

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662315

Sample wt/vol: 244 (g/mL)ML Lab File ID: df1412.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/21/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene			0.1	U
99-09-2	3-Nitroaniline			3	U
83-32-9	Acenaphthene			0.1	U
51-28-5	2,4-Dinitrophenol			14	U
100-02-7	4-Nitrophenol			10	U
121-14-2	2,4-Dinitrotoluene			1	U
132-64-9	Dibenzofuran			0.5	U
84-66-2	Diethylphthalate			2	U
86-73-7	Fluorene			0.1	U
7005-72-3	4-Chlorophenyl-phenylether			0.5	U
100-01-6	4-Nitroaniline			0.9	U
534-52-1	4,6-Dinitro-2-methylphenol			8	U
86-30-6	N-Nitrosodiphenylamine			0.7	U
101-55-3	4-Bromophenyl-phenylether			0.5	U
118-74-1	Hexachlorobenzene			0.1	U
87-86-5	Pentachlorophenol			1	U
85-01-8	Phenanthrene			0.1	U
120-12-7	Anthracene			0.1	U
86-74-8	Carbazole			0.5	U
84-74-2	Di-n-butylphthalate			2	U
206-44-0	Fluoranthene			0.1	U
129-00-0	Pyrene			0.1	U
85-68-7	Butylbenzylphthalate			2	U
91-94-1	3,3'-Dichlorobenzidine			3	U
56-55-3	Benzo(a)anthracene			0.1	U
218-01-9	Chrysene			0.1	U
117-81-7	bis(2-Ethylhexyl)phthalate			5	U
117-84-0	Di-n-octylphthalate			5	U
205-99-2	Benzo(b)fluoranthene			0.1	U
207-08-9	Benzo(k)fluoranthene			0.1	U

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5011

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662315

Sample wt/vol: 244 (g/mL)ML Lab File ID: df1412.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/21/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20a.b/df1412.d
Data file Sample Info. Line: C5011;9662315;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 21-Jun-2018 09:45 em10340

Injection date and time: **21-JUN-2018 01:06**
Instrument ID: **HP19760.i** Batch: **18170WAB**

Blank Data file reference: **/chem/HP19760.i/18jun20a.b/df1404.d**

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 21-JUN-2018 00:04
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20a.b/df1401.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 244 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.619	(0.000)	829	152	247487	(-5)	5.00	
65) Naphthalene-d8	8.548	(0.006)	1160	136	984787	(-4)	5.00	
113) Acenaphthene-d10	11.340	(0.000)	1639	164	444547	(-8)	5.00	
153) Phenanthrene-d10	13.240	(0.006)	1965	188	803831	(-9)	5.00	
175) Pyrene-d10	15.170	(0.006)	2296	212	789393	(-12)	5.00	
213) Perylene-d12	19.605	(0.006)	3057	264	551443	(-34)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.736	(0.000)	112	1749672	21.435	43%		10 - 82
17) Phenol-d6	(1)	6.118	(0.001)	99	1659470	15.336	31%		10 - 71
44) Nitrobenzene-d5	(2)	7.447	(0.000)	82	1926928	18.786	75%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297	(0.001)	172	2778816	19.412	78%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.407	(0.001)	330	617439	39.735	79%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	2251642	16.391	66%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

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Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20a.b/df1412.d Injection date and time: **21-JUN-2018 01:06**
Data file Sample Info. Line: C5011;9662315;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18170WAB**
Date, time and analyst ID of latest file update: 21-Jun-2018 09:45 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20a.b/df1404.d**

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 21-JUN-2018 00:04
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20a.b/df1401.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 244 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

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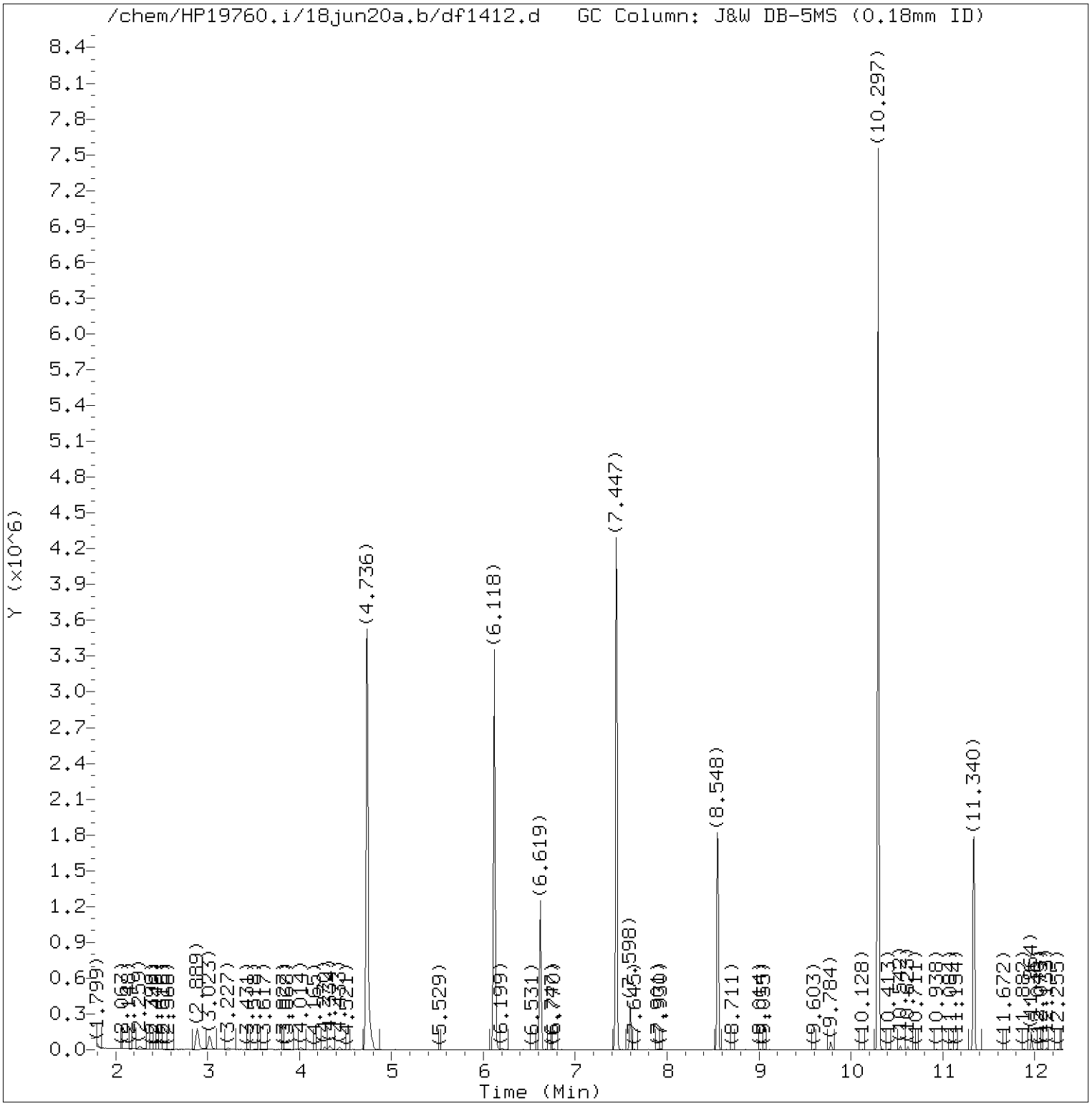
Secondary review performed and digitally signed by Matthew E. Barton on 06/24/2018 at 20:41. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1412.d Instrument ID: HP19760.i
Injection date and time: 21-JUN-2018 01:06 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 21-JUN-2018 00:04
Date, time and analyst ID of latest file update: 21-Jun-2018 09:45 em10340

Sample Name: C5011 Lab Sample ID: 9662315

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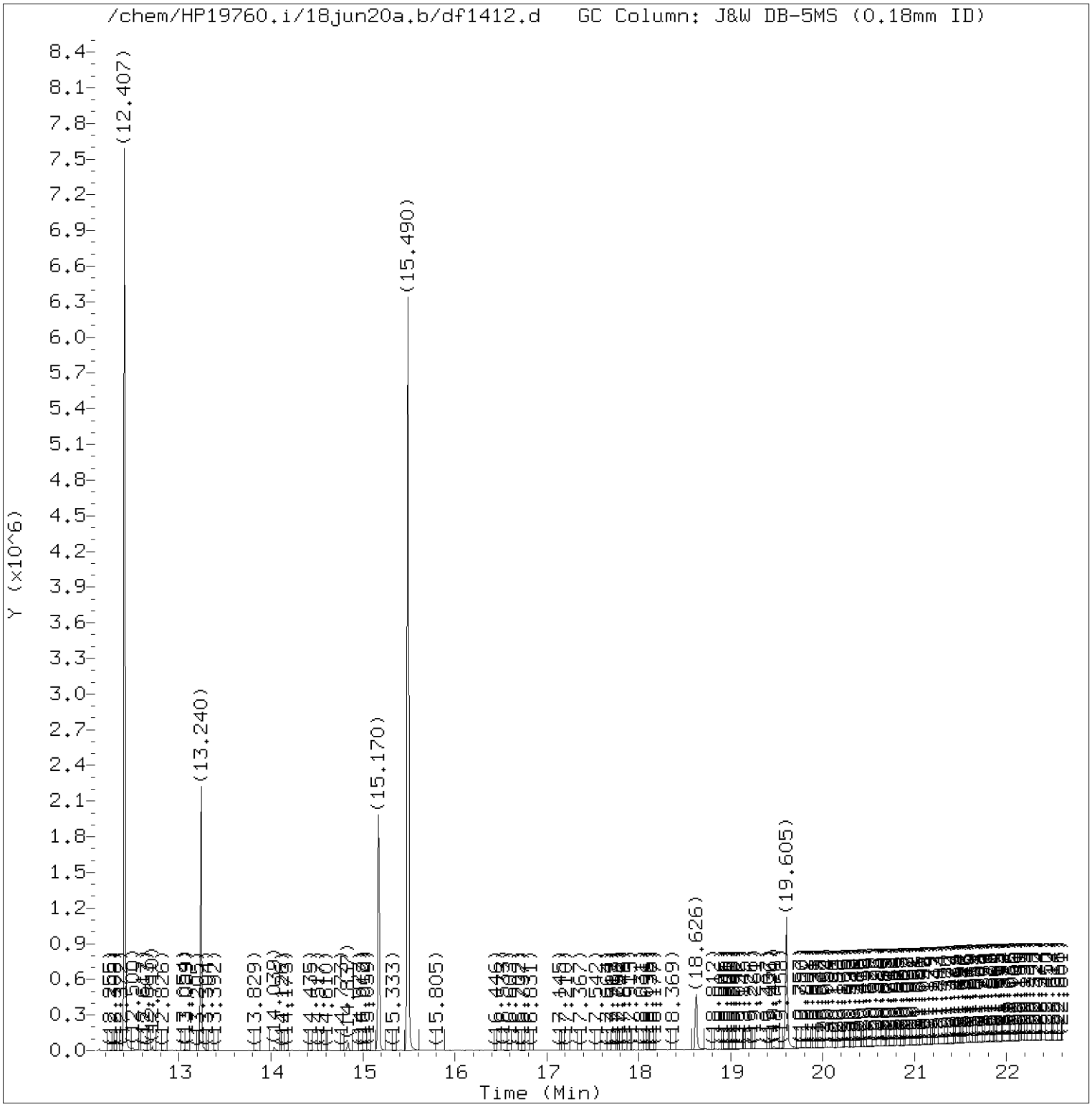
on 06/21/2018 at 09:50.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1412.d Instrument ID: HP19760.i
Injection date and time: 21-JUN-2018 01:06 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 21-JUN-2018 00:04
Date, time and analyst ID of latest file update: 21-Jun-2018 09:45 em10340

Sample Name: C5011 Lab Sample ID: 9662315

Digitally signed by Edward Monborne
on 06/21/2018 at 09:50.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1412.d Instrument ID: HP19760.i
Injection date and time: 21-JUN-2018 01:06 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 21-JUN-2018 00:04
Date, time and analyst ID of latest file update: 21-Jun-2018 09:45 em10340

Sample Name: C5011 Lab Sample ID: 9662315

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.736	112	1749672	21.435
17)$Phenol-d6	(1)	6.118	99	1659470	15.336
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	247487	5.000
44)$Nitrobenzene-d5	(2)	7.447	82	1926928	18.786
65)*Naphthalene-d8	(2)	8.548	136	984787	5.000
93)$2-Fluorobiphenyl	(3)	10.297	172	2778816	19.412
113)*Acenaphthene-d10	(3)	11.340	164	444547	5.000
135)$2,4,6-Tribromophenol	(3)	12.407	330	617439	39.735
153)*Phenanthrene-d10	(4)	13.240	188	803831	5.000
175)*Pyrene-d10	(5)	15.170	212	789393	5.000
179)$Terphenyl-d14	(5)	15.490	244	2251642	16.391
213)*Perylene-d12	(6)	19.605	264	551443	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 06/21/2018 at 09:50.
Target 3.5 esignature user ID: em10340

Standards Data

Semivolatiles by GC/MS

SAMPLE INFORMATION SUMMARY

BATCH: /chem/HP19760.i/18jun04a.b

Data File	Injection Date	Sample Type	Dil Factor	Inst ID	Method	Method Batch
df01xx.d	20-APR-2018 13:33	ICV	1.00	HP19760	rv8270d.m	18jun04a.b
df0100.d	04-JUN-2018 22:59	DFTPP	1.00	HP19760	rvdftpp8270d.m	18jun04a.b
df0101.d	04-JUN-2018 23:16	Continuing Cal	1.00	HP19760	rv8270d.m	18jun04a.b
df0100a.d	05-JUN-2018 00:17	DFTPP	1.00	HP19760	rvdftpp8270d.m	18jun04a.b
df0101a.d	05-JUN-2018 00:37	Cal Level 5	1.00	HP19760	rv8270d.m	18jun04a.b
df0102.d	05-JUN-2018 01:13	Cal Level 1	1.00	HP19760	rv8270d.m	18jun04a.b
df0103.d	05-JUN-2018 01:41	Cal Level 8	1.00	HP19760	rv8270d.m	18jun04a.b
df0104.d	05-JUN-2018 02:09	Cal Level 7	1.00	HP19760	rv8270d.m	18jun04a.b
df0105.d	05-JUN-2018 02:37	Cal Level 6	1.00	HP19760	rv8270d.m	18jun04a.b
df0106.d	05-JUN-2018 03:05	Cal Level 4	1.00	HP19760	rv8270d.m	18jun04a.b
df0107.d	05-JUN-2018 03:33	Cal Level 3	1.00	HP19760	rv8270d.m	18jun04a.b
df0108.d	05-JUN-2018 04:01	Cal Level 2	1.00	HP19760	rv8270d.m	18jun04a.b
df0109.d	05-JUN-2018 04:29	MDL/LOQ	1.00	HP19760	rv8270d.m	18jun04a.b
df0110.d	05-JUN-2018 04:57	MDL/LOQ	1.00	HP19760	rv8270d.m	18jun04a.b

Data File	Matrix	Fraction	Lab Sample ID	Lab Prep Batch	Client Sample ID	Client Sample Group
df01xx.d	LIQUID	SV	RVICV1498	18apr20	SSTD12.5	18apr20
df0100.d	LIQUID	SV	RVDFTPP1318	18jun04a	DFTPP	18jun04a
df0101.d	LIQUID	SV	RV1318	18jun04a	SSTD7.5	18jun04a
df0100a.d	LIQUID	SV	RVDFTPP1318	18jun04a	DFTPP	18jun04a
df0101a.d	LIQUID	SV	RV1318	18jun04a	SSTD7.5	18jun04a
df0102.d	LIQUID	SV	rvSTD1318	18jun04a	SSTD0.125	18jun04a
df0103.d	LIQUID	SV	rvSTD1318	18jun04a	SSTD30	18jun04a
df0104.d	LIQUID	SV	rvSTD1318	18jun04a	SSTD20	18jun04a
df0105.d	LIQUID	SV	rvSTD1318	18jun04a	SSTD12.5	18jun04a
df0106.d	LIQUID	SV	rvSTD1318	18jun04a	SSTD3.75	18jun04a
df0107.d	LIQUID	SV	rvSTD1318	18jun04a	SSTD1.25	18jun04a
df0108.d	LIQUID	SV	rvSTD1318	18jun04a	SSTD0.25	18jun04a
df0109.d	LIQUID	SV	rvMDL1318	18jun04a	SSTD0.125	18jun04a
df0110.d	LIQUID	SV	PAHMDL1318	18jun04a	SSTD0.025	18jun04a

Data File	Compound Sublist	Spike List File	Sample Ref #	QC Group Ref #	Init Cal Ref #	Batch Ref #
df01xx.d	icvall1.sub	ICV4X.spk	202376055	202376069	202376407	202376038
df0100.d	all.sub		202376000	202376001	200002637	202375999
df0101.d	all1.sub		202376039	202376001	202340017	202376038
df0100a.d	all.sub		202376068	202376069	200002637	202375999
df0101a.d	all1.sub		202376098	202376069	202376407	202376038
df0102.d	all1.sub		202376118	202376069	202376407	202376038
df0103.d	all1.sub		202376138	202376069	202376407	202376038
df0104.d	all1.sub		202376154	202376069	202376407	202376038
df0105.d	all1.sub		202376170	202376069	202376407	202376038
df0106.d	all1.sub		202376186	202376069	202376407	202376038
df0107.d	all1.sub		202376204	202376069	202376407	202376038
df0108.d	all1.sub		202376220	202376069	202376407	202376038
df0109.d	mdlall1.sub		202376236	202376069	202376407	202376038
df0110.d	pahmdlall1.sub		202376252	202376069	202376407	202376038

SAMPLE INFORMATION SUMMARY

BATCH: /chem/HP19760.i/18jun04a.b

Data File	Injection Date	Sample Type	Dil Factor	Inst ID	Method	Method Batch
df0111.d	05-JUN-2018 05:25	ICV	1.00	HP19760	rv8270d.m	18jun04a.b
df0112.d	05-JUN-2018 05:53	ICV	1.00	HP19760	rv8270d.m	18jun04a.b
df0113.d	05-JUN-2018 06:20	ICV	1.00	HP19760	rv8270d.m	18jun04a.b

Data File	Matrix	Fraction	Lab Sample ID	Lab Prep Batch	Client Sample ID	Client Sample Group
df0111.d	LIQUID	SV	rvICV1218	18jun04a	SSTD12.5	18jun04a
df0112.d	LIQUID	SV	rvBASICV1218	18jun04a	SSTD12.5	18jun04a
df0113.d	LIQUID	SV	MS1814426A	18jun04a	SSTD12.5	18jun04a

Data File	Compound Sublist	Spike List File	Sample Ref #	QC Group Ref #	Init Cal Ref #	Batch Ref #
df0111.d	icvall1.sub	ICV4X.spk	202376657	202376069	202376407	202376038
df0112.d	basicvall1.sub	ICV4X.spk	202376276	202376069	202376407	202376038
df0113.d	icvall1+.sub	ICV4X.spk	202376307	202376069	202376407	202376038

Lancaster Laboratories
Semi-Volatiles
Runlog for Agilent GC/MS System HP19760 **HP #04**

Data Directory Path is - D:\data\18jun20\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
em10340	DF1350.D	rvDFTPP1598	06/20/2018	08:27		
em10340	DF1350z.D	rvDFTPP1598	06/20/2018	08:42		
em10340	DF1350y.D	rvDFTPP1598	06/20/2018	08:54		
em10340	DF1351y.D	rvSTD1628	06/20/2018	09:09		
bhs10208	DF1352.D	SBLKWM169	06/20/2018	10:03	18169WAM	
bhs10208	DF1353.D	169WMLCS	06/20/2018	10:30	18169WAM	
bhs10208	DF1354.D	9662310	06/20/2018	10:59	18169WAM	
bhs10208	DF1355.D	9662311	06/20/2018	11:27	18169WAM	
bhs10208	DF1356.D	9662312	06/20/2018	11:55	18169WAM	
bhs10208	DF1357.D	9659869RE	06/20/2018	12:22	18169WAM	
bhs10208	DF1358.D	9659871RE	06/20/2018	12:51	18169WAM	
bhs10208	DF1359.D	9659872RE	06/20/2018	13:19	18169WAM	
bhs10208	DF1360.D	9659874RE	06/20/2018	13:47	18169WAM	
bhs10208	DF1361.D	9659875RE	06/20/2018	14:15	18169WAM	
bhs10208	DF1362.D	9660089RE	06/20/2018	14:43	18169WAM	
bhs10208	DF1363.D	9660091RE	06/20/2018	15:11	18169WAM	
bhs10208	DF1364.D	9662303	06/20/2018	15:40	18169WAM	
bhs10208	DF1365.D	9662304	06/20/2018	16:08	18169WAM	
bhs10208	DF1366.D	9662305	06/20/2018	16:36	18169WAM	
bhs10208	DF1367.D	9662306	06/20/2018	17:05	18169WAM	
bhs10208	DF1368.D	9662307	06/20/2018	17:34	18169WAM	
bhs10208	DF1369.D	9662308	06/20/2018	18:03	18169WAM	
bhs10208	DF1370.D	9662309	06/20/2018	18:31	18169WAM	

Lancaster Laboratories
Semi-Volatiles
Runlog for Agilent GC/MS System HP19760 **HP #04**

Data Directory Path is - D:\data\18jun20a\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
art12405	DF1400.D	RVDFTPP1598	06/20/2018	19:20		
art12405	DF1401.D	RVSTD1628	06/20/2018	19:43		
art12405	DF1402.D	rvABC1548	06/20/2018	20:15		
art12405	DF1403.D	rvPDA0448	06/20/2018	20:44		
art12405	DF1404.D	SBLKWB170	06/20/2018	21:17	18170WAB	
art12405	DF1405.D	170WBLCS	06/20/2018	21:45	18170WAB	
art12405	DF1406.D	170WBLCSD	06/20/2018	22:14	18170WAB	
art12405	DF1407.D	SBLKWJ170	06/20/2018	22:43	18170WAJ	
art12405	DF1408.D	170WJLCS	06/20/2018	23:12	18170WAJ	
art12405	DF1409.D	170WJLCSD	06/20/2018	23:40	18170WAJ	
art12405	DF1410.D	9662185	06/21/2018	00:09	18170WAB	
art12405	DF1411.D	9662314	06/21/2018	00:38	18170WAB	
art12405	DF1412.D	9662315	06/21/2018	01:06	18170WAB	
art12405	DF1413.D	9664270	06/21/2018	01:35	18170WAB	
art12405	DF1414.D	9664796	06/21/2018	02:04	18170WAB	
art12405	DF1415.D	9661022RE	06/21/2018	02:33	18170WAJ	
art12405	DF1416.D	9661026RE	06/21/2018	03:01	18170WAJ	
art12405	DF1417.D	9659869	06/21/2018	03:30	18169WAM	5
art12405	DF1418.D	9659869DL	06/21/2018	03:59	18169WAM	20

Data File: /chem/HP19760.i/18jun04a.b/df0100a.d

Date : 05-JUN-2018 00:17

Client ID: DFTPP

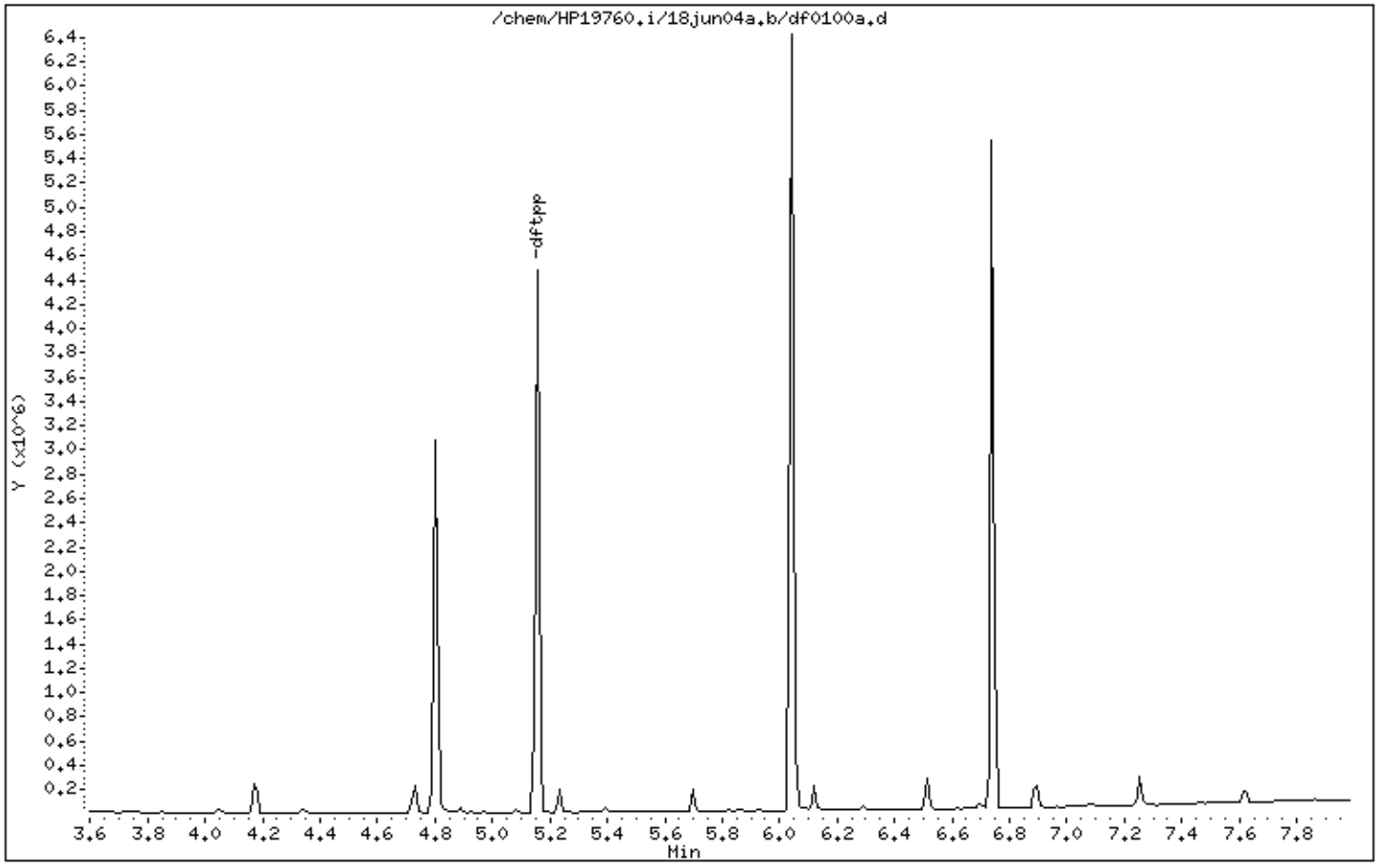
Instrument: HP19760.i

Sample Info: DFTPP;RVDFTPP1318;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Edward Monborne on 06/06/2018 at 13:28.
Target 3.5 esignature user ID: em10340

Data File: /chem/HP19760.i/18jun04a.b/df0100a.d

Date : 05-JUN-2018 00:17

Client ID: DFTPP

Instrument: HP19760.i

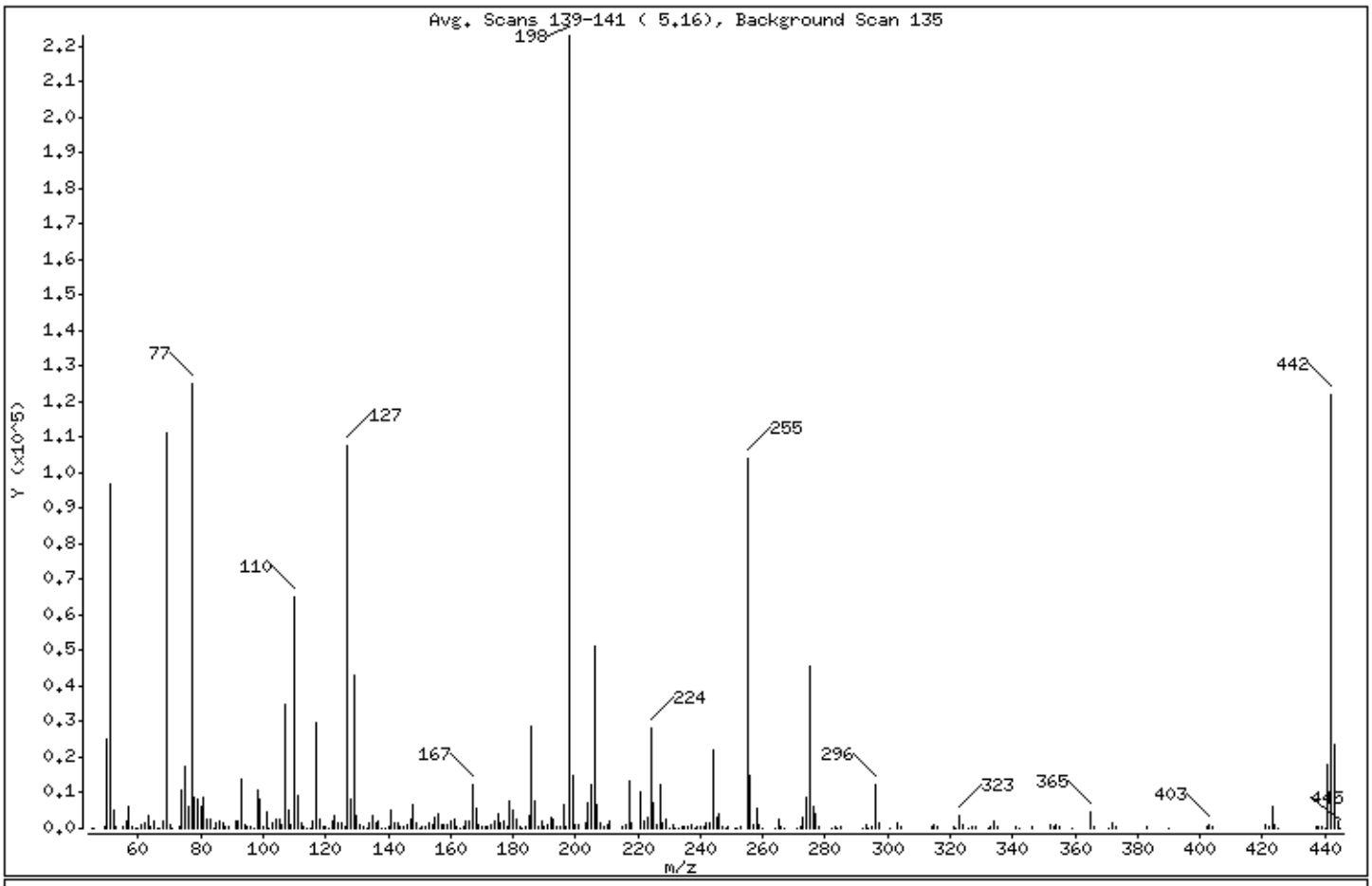
Sample Info: DFTPP;RVDFTPP1318;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	43.47
68	Less than 2.00% of mass 69	0.87 (1.75)
69	Mass 69 relative abundance	49.87
70	Less than 2.00% of mass 69	0.38 (0.76)
127	10.00 - 80.00% of mass 198	48.33
197	Less than 2.00% of mass 198	0.18
199	5.00 - 9.00% of mass 198	6.70
275	10.00 - 60.00% of mass 198	20.48
365	Greater than 1.00% of mass 198	2.07
441	0.01 - 24.00% of mass 442	8.10 (14.81)
442	50.00 - 99.99% of mass 198	54.71
443	15.00 - 24.00% of mass 442	10.51 (19.21)

Digitally signed by Edward Monborne on 06/06/2018 at 13:28.
Target 3.5 esignature user ID: em10340

Date : 05-JUN-2018 00:17

Client ID: DFTPP Instrument: HP19760.i

Sample Info: DFTPP;RVDFTPP1318;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

Data File: df0100a.d
Spectrum: Avg. Scans 139-141 (5,16), Background Scan 135
Location of Maximum: 198.00
Number of points: 274

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	253	119.00	257	188.00	571	271.00	209
46.00	86	120.00	443	189.00	1815	272.00	344
49.00	546	121.00	151	190.00	260	273.00	3205
50.00	24920	122.00	2101	191.00	1095	274.00	8471
51.00	96872	123.00	3499	192.00	2869	275.00	45632
52.00	5374	124.00	1583	193.00	2546	276.00	6051
53.00	286	125.00	1445	194.00	587	277.00	3998
55.00	479	126.00	683	195.00	390	278.00	599
56.00	2281	127.00	107704	196.00	6469	282.00	142
57.00	6395	128.00	8106	197.00	397	283.00	516
58.00	262	129.00	42904	198.00	222848	284.00	191
59.00	138	130.00	3693	199.00	14929	285.00	626
60.00	89	131.00	855	200.00	949	292.00	181
61.00	1185	132.00	368	201.00	1217	293.00	853
62.00	1383	133.00	63	203.00	1656	294.00	140
63.00	3765	134.00	1372	204.00	6977	295.00	314
64.00	476	135.00	3405	205.00	12433	296.00	12463
65.00	2083	136.00	1312	206.00	51328	297.00	1544
66.00	109	137.00	2111	207.00	6797	301.00	115
67.00	37	138.00	256	208.00	1614	303.00	1355
68.00	1949	139.00	230	209.00	513	304.00	267
69.00	111136	140.00	580	210.00	769	314.00	417
70.00	840	141.00	5260	211.00	1967	315.00	1137
71.00	73	142.00	1781	215.00	504	316.00	641
73.00	765	143.00	1359	216.00	932	321.00	335
74.00	11009	144.00	294	217.00	13462	322.00	121
75.00	17552	145.00	383	218.00	1677	323.00	3554
76.00	6181	146.00	909	221.00	10225	324.00	794
77.00	125144	147.00	2780	222.00	2177	326.00	136
78.00	8489	148.00	6875	223.00	2939	327.00	736
79.00	8236	149.00	1474	224.00	28280	328.00	324
80.00	5924	150.00	254	225.00	6926	332.00	231
81.00	8491	151.00	712	226.00	775	333.00	318
82.00	2478	152.00	272	227.00	12096	334.00	2294
83.00	2407	153.00	1651	228.00	1658	335.00	730

Date : 05-JUN-2018 00:17

Client ID: DFTPP Instrument: HP19760.i

Sample Info: DFTPP;RVDFTPP1318;1;3;DFTPP;

Operator: art12405

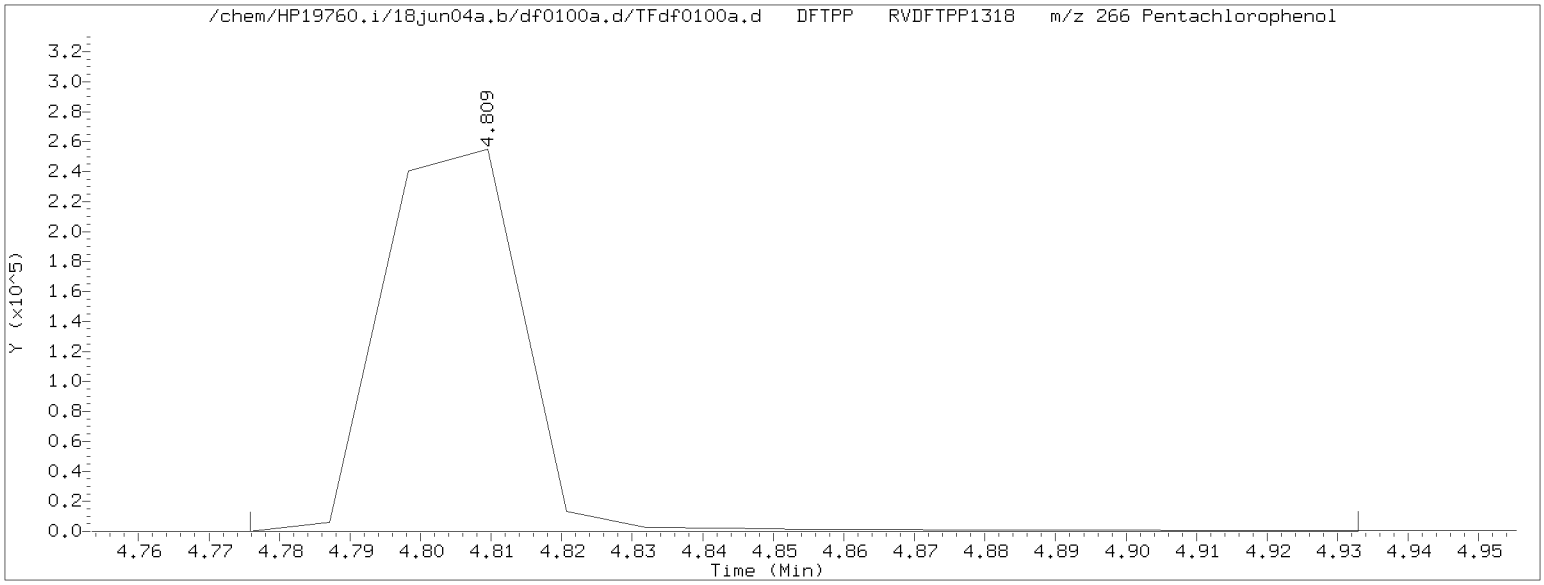
Column phase: DB-5MS Column diameter: 0.18

Data File: df0100a.d
Spectrum: Avg. Scans 139-141 (5,16), Background Scan 135
Location of Maximum: 198.00
Number of points: 274

m/z	Y	m/z	Y	m/z	Y	m/z	Y
84.00	209	154.00	1084	229.00	2416	341.00	455
85.00	1517	155.00	3178	230.00	236	342.00	94
86.00	2293	156.00	4329	231.00	954	346.00	756
87.00	1394	157.00	779	232.00	100	352.00	1189
88.00	399	158.00	785	233.00	101	353.00	664
89.00	349	159.00	788	234.00	738	354.00	1061
91.00	1830	160.00	1806	235.00	748	355.00	288
92.00	2009	161.00	2551	236.00	534	359.00	94
93.00	13806	162.00	713	237.00	955	365.00	4605
94.00	994	163.00	232	238.00	107	366.00	614
95.00	309	164.00	305	239.00	369	371.00	176
96.00	324	165.00	2268	240.00	311	372.00	1635
97.00	227	166.00	1821	241.00	679	373.00	423
98.00	10854	167.00	12226	242.00	1483	383.00	401
99.00	8430	168.00	5844	243.00	1604	390.00	176
100.00	723	169.00	1043	244.00	22088	402.00	707
101.00	4722	170.00	338	245.00	2841	403.00	811
102.00	193	171.00	299	246.00	3980	404.00	395
103.00	1510	172.00	694	247.00	575	421.00	821
104.00	2768	173.00	1238	248.00	143	422.00	730
105.00	2809	174.00	2110	249.00	650	423.00	6332
106.00	1069	175.00	4151	251.00	250	424.00	1276
107.00	35016	176.00	1287	252.00	220	425.00	122
108.00	5233	177.00	1898	253.00	512	437.00	266
109.00	1129	178.00	435	255.00	104248	438.00	266
110.00	65088	179.00	7467	256.00	14689	439.00	493
111.00	9464	180.00	5226	257.00	973	440.00	236
112.00	1284	181.00	2445	258.00	5747	441.00	18056
113.00	485	182.00	275	259.00	963	442.00	121936
114.00	102	183.00	172	260.00	109	443.00	23424
115.00	160	184.00	502	264.00	212	444.00	1970
116.00	2033	185.00	3795	265.00	2450	445.00	90
117.00	29608	186.00	28640	266.00	292		
118.00	2335	187.00	7797	267.00	114		

Assessment of GC Column Performance and Injection Port Inertness for

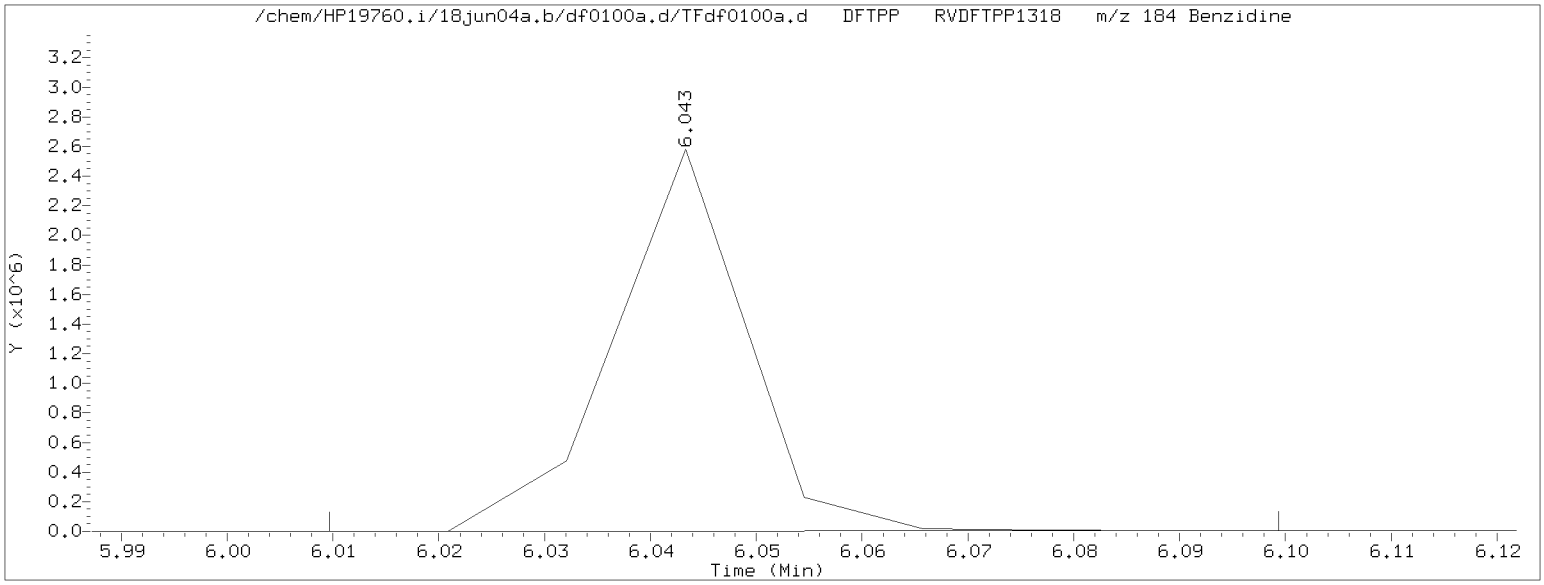
Instrument ID: HP19760.i Injection Date: 05-JUN-2018 00:17 Operator: art12405



Pentachlorophenol EICP peak height = 255040 EICP peak height at 10% = 25504 Pentachlorophenol EICP area = 353691

Pentachlorophenol EICP peak apex (min.) = 4.809
RT at 5% of front half of EICP (min.) = 4.787 'Front' peak width (min.) = 0.0220833333
RT at 5% of back half of EICP (min.) = 4.821 'Tailing' peak width (min.) = 0.0118333333

PCP tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0118333333}{0.0220833333} = 0.536$



Benzidine EICP peak height = 2582641 EICP peak height at 5% = 129132 Benzidine EICP area = 2229640

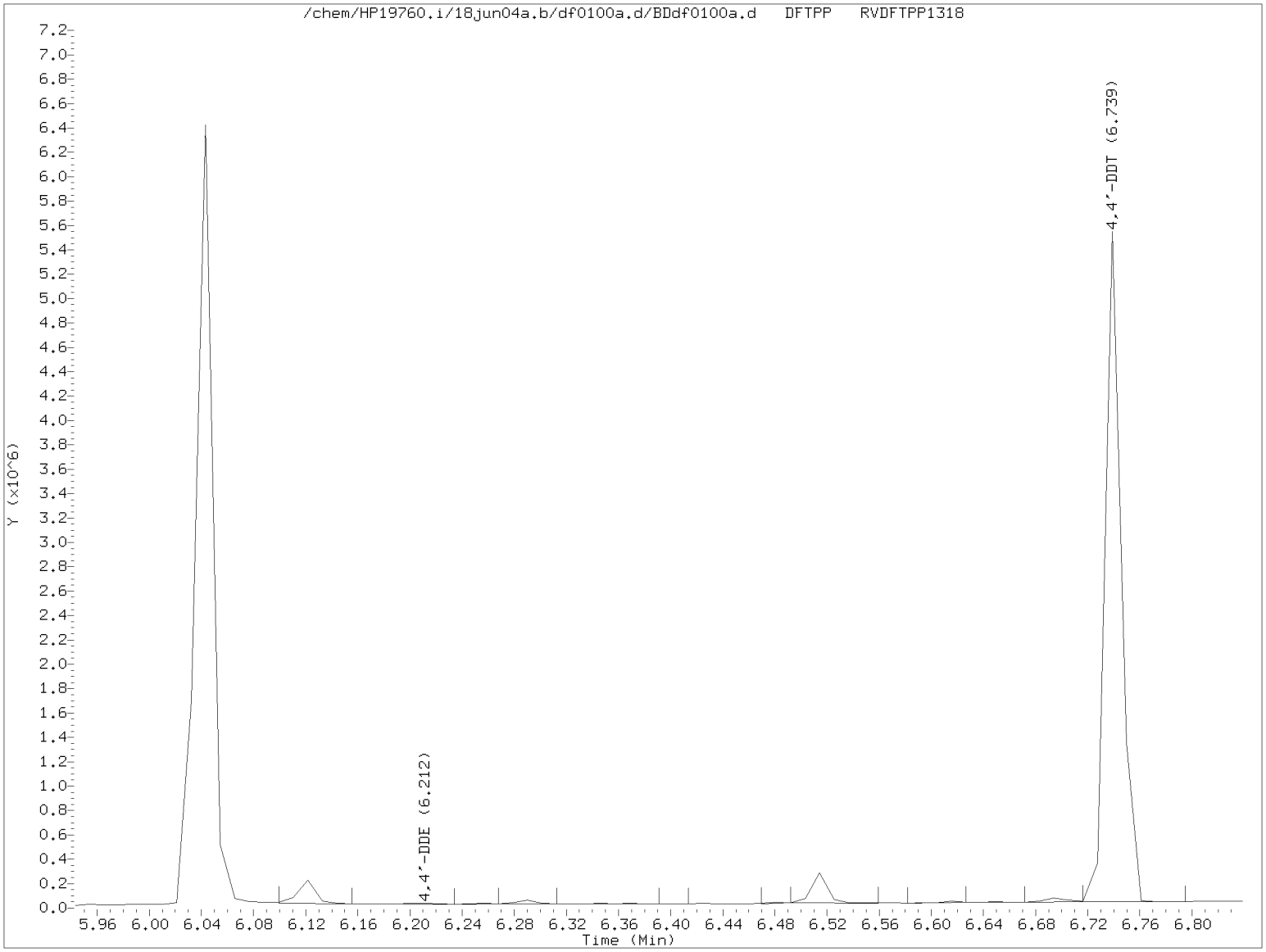
Benzidine EICP peak apex (min.) = 6.043
RT at 5% of front half of EICP (min.) = 6.024 'Front' peak width (min.) = 0.0193833333
RT at 5% of back half of EICP (min.) = 6.060 'Tailing' peak width (min.) = 0.0165000000

Benzidine tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0165000000}{0.0193833333} = 0.851$

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43. PARALLAX ID: cam01237

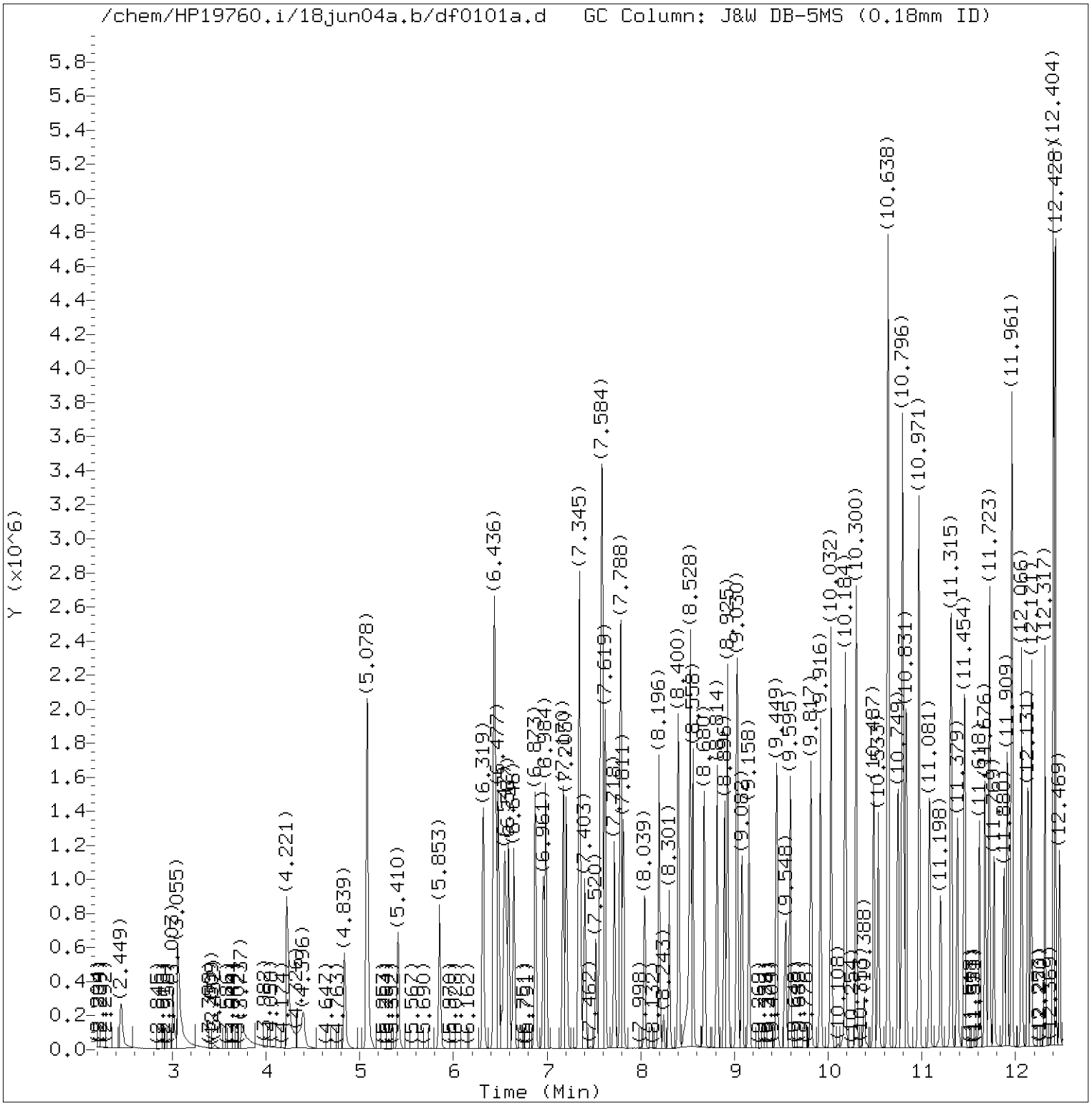
Assessment of GC Column Performance and Injection Port Inertness for

Instrument ID: HP19760.i Injection Date: 05-JUN-2018 00:17 Operator: art12405



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{12001 + 0}{12001 + 0 + 4800939} \times 100 = 0.2$$



Total Ion Chromatogram (TIC)

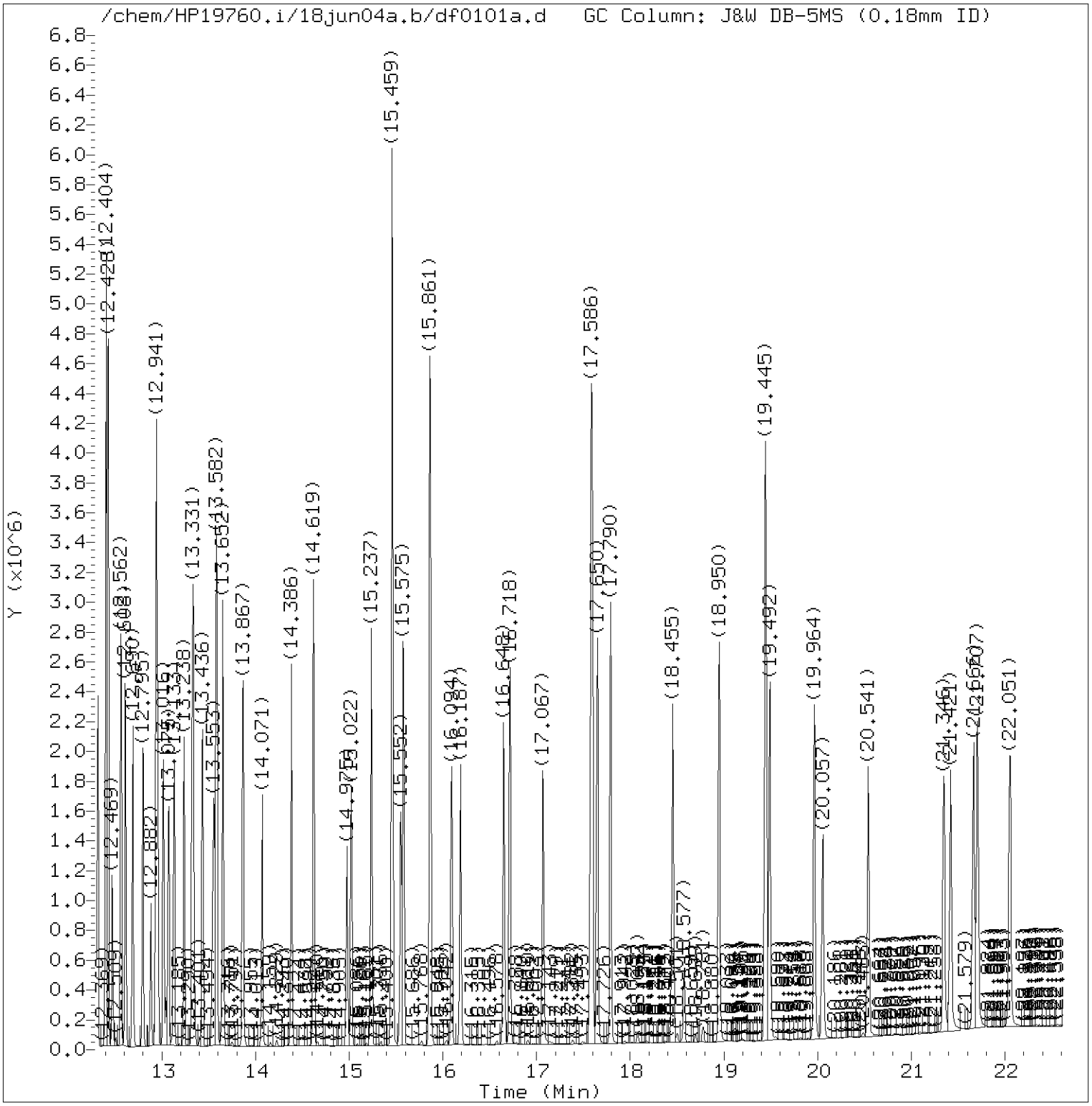
Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0101a.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 00:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD7.5 Lab Sample ID: RV1318

Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0101a.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 00:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD7.5 Lab Sample ID: RV1318

Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0101a.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 00:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD7.5 Lab Sample ID: RV1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.455	88	238271	7.500
4) N-Nitrosodimethylamine	(1)	3.003	74	352853	7.500
5) Pyridine	(1)	3.055	79	600445	7.500
7) 2-Picoline	(1)	4.221	93	641976	7.500
8) N-Nitrosomethylethylamine	(1)	4.396	88	282919	7.500
9) Methyl methanesulfonate	(1)	4.839	80	319044	7.500
11)$2-Fluorophenol	(1)	5.084	112	1005072	15.000
13) N-Nitrosodiethylamine	(1)	5.410	102	269029	7.500
42) Total Cresols	(1)			980741	15.000
15) Ethyl methanesulfonate	(1)	5.853	109	260595	7.500
16) Benzaldehyde	(1)	6.319	77	464190	7.500
17)$Phenol-d6	(1)	6.436	99	1338828	15.000
18) Phenol	(1)	6.453	94	779967	7.500
19) Aniline	(1)	6.477	93	910426	7.500
20) a-methylstyrene	(1)	6.564	118	185564	7.500
22) bis(2-Chloroethyl)ether	(1)	6.587	93	582086	7.500
23) 2-Chlorophenol	(1)	6.646	128	441789	7.500
24) 1,3-Dichlorobenzene	(1)	6.873	146	466682	7.500
25)*1,4-Dichlorobenzene-d4	(1)	6.961	152	199536	5.000
26) 1,4-Dichlorobenzene	(1)	6.984	146	465356	7.500
27) Benzyl alcohol	(1)	7.170	108	329983	7.500
28) 1,2-Dichlorobenzene	(1)	7.205	146	440173	7.500
30) Indene	(1)	7.339	115	711625	7.500
31) 2-Methylphenol	(1)	7.351	108	478334	7.500
97) Isosafrole	(3)			350045	7.500
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.403	45	593782	7.500
34) bis(2-Chloroisopropyl)ether	(1)	7.403	45	593782	7.500
35) N-Nitrosopyrrolidine	(1)	7.520	100	281804	7.500
36) Acetophenone	(1)	7.567	105	721068	7.500
37) 4-Methylphenol	(1)	7.584	108	502407	7.500
39) N-Nitrosomorpholine	(1)	7.590	56	305785	7.500
38) N-Nitroso-di-n-propylamine	(1)	7.590	70	406425	7.500
40) o-Toluidine	(1)	7.619	106	823470	7.500
59) 1,2,3,4-Tetrahydronaphthalene	(2)	7.619	104	23652A	7.500
43) Hexachloroethane	(1)	7.718	117	213633	7.500
44)$Nitrobenzene-d5	(2)	7.788	82	1197585	15.000
45) Nitrobenzene	(2)	7.811	77	586333	7.500
48) N-Nitrosopiperidine	(2)	8.045	114	247186	7.500
120) 2,4_2,6-Dinitrotoluenes	(3)			432896	15.000
50) Isophorone	(2)	8.196	82	1038044	7.500

A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0101a.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 00:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD7.5 Lab Sample ID: RV1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
51) 2-Nitrophenol	(2)	8.307	139	226411	7.500
53) 2,4-Dimethylphenol	(2)	8.400	107	504084	7.500
57) O,O,O-Triethylphosphorothioate	(2)	8.528	198	192665	7.500
56) Benzoic acid	(2)	8.534	105	482117	10.000
55) bis(2-Chloroethoxy)methane	(2)	8.558	93	662017	7.500
60) 2,4-Dichlorophenol	(2)	8.680	162	336700	7.500
146) Diallate trans/cis	(4)			501368	7.500
62) 1,2,4-Trichlorobenzene	(2)	8.814	180	351037	7.500
65)*Naphthalene-d8	(2)	8.896	136	752578	5.000
66) Naphthalene	(2)	8.925	128	1247880	7.500
67) 4-Chloroaniline	(2)	9.024	127	533189	7.500
68) 2,6-Dichlorophenol	(2)	9.036	162	333955	7.500
69) Hexachloropropene	(2)	9.082	213	226708	7.500
71) Hexachlorobutadiene	(2)	9.158	225	195989	7.500
75) Quinoline	(2)	9.449	129	759360	7.500
76) Caprolactam	(2)	9.548	113	153690	7.500
77) N-Nitrosodi-n-butylamine	(2)	9.595	84	374834	7.500
80) 4-Chloro-3-methylphenol	(2)	9.817	107	431081	7.500
82) Safrole	(2)	9.921	162	313541	7.500
83) 2-Methylnaphthalene	(2)	10.032	142	821479	7.500
84) 1-Methylnaphthalene	(2)	10.184	142	733998	7.500
85) Hexachlorocyclopentadiene	(3)	10.300	237	189905	7.500
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.300	216	343095	7.500
88) cis-Isosafrole	(3)	10.388	162	54952	1.275
90) 2,4,6-Trichlorophenol	(3)	10.487	196	232291	7.500
92) 2,4,5-Trichlorophenol	(3)	10.539	196	240642	7.500
93)$2-Fluorobiphenyl	(3)	10.638	172	1719757	15.000
94) trans-Isosafrole	(3)	10.749	162	295093	6.225
95) 1,1'-Biphenyl	(3)	10.790	154	967407	7.500
96) 2-Chloronaphthalene	(3)	10.802	162	751137	7.500
98) 1-Chloronaphthalene	(3)	10.837	162	667017	7.500
100) 2-Nitroaniline	(3)	10.971	138	255287	7.500
99) Diphenyl ether	(3)	10.971	170	515188	7.500
104) 1,4-Naphthoquinone	(3)	11.087	158	297443	7.500
105) 1,4-Dinitrobenzene	(3)	11.204	168	135678	7.500
106) Dimethylphthalate	(3)	11.309	163	778729	7.500
107) 1,3-Dinitrobenzene	(3)	11.315	168	151792	7.500
108) 2,6-Dinitrotoluene	(3)	11.379	165	186800	7.500
109) Acenaphthylene	(3)	11.460	152	1093020	7.500
112) 3-Nitroaniline	(3)	11.618	138	214105	7.500

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0101a.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 00:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD7.5 Lab Sample ID: RV1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
113)*Acenaphthene-d10	(3)	11.676	164	349529	5.000
114) Acenaphthene	(3)	11.723	153	720613	7.500
115) 2,4-Dinitrophenol	(3)	11.775	184	164342	10.000
116) 4-Nitrophenol	(3)	11.880	109	143715	7.500
117) Pentachlorobenzene	(3)	11.915	250	286117	7.500
119) Dibenzofuran	(3)	11.961	168	1030442	7.500
118) 2,4-Dinitrotoluene	(3)	11.961	165	246096	7.500
121) 1-Naphthylamine	(3)	12.066	143	762893	7.500
122) 2,3,4,6-Tetrachlorophenol	(3)	12.136	232	187481	7.500
123) 2-Naphthylamine	(3)	12.171	143	746164	7.500
124) Diethylphthalate	(3)	12.317	149	784991	7.500
126) Fluorene	(3)	12.404	166	831617	7.500
125) Thionazin	(3)	12.404	107	180064	7.500
128) 5-Nitro-o-toluidine	(3)	12.422	152	251414	7.500
129) 4-Nitroaniline	(3)	12.428	138	242826	7.500
127) 4-Chlorophenyl-phenylether	(3)	12.428	204	390418	7.500
130) 4,6-Dinitro-2-methylphenol	(4)	12.474	198	151338	7.500
132) NDPA as diphenylamine	(4)	12.562	169	694896	7.500
131) N-Nitrosodiphenylamine	(4)	12.562	169	694896	7.500
134) 1,2-Diphenylhydrazine	(4)	12.608	77	1082749	7.500
135)$2,4,6-Tribromophenol	(3)	12.690	330	191315	15.000
137) Tetraethyldithiopyrophosphate	(4)	12.795	97	173122	7.500
139) 1,3,5-Trinitrobenzene	(4)	12.882	213	101036	7.500
140) Diallate (peak 1)	(4)	12.935	86	431677	6.225
141) Phorate	(4)	12.941	75	667160	7.500
142) Phenacetin	(4)	12.952	108	521339	7.500
143) 4-Bromophenyl-phenylether	(4)	13.016	248	213369	7.500
144) Diallate (peak 2)	(4)	13.040	86	69691	1.275
145) Hexachlorobenzene	(4)	13.075	284	202758	7.500
147) Dimethoate	(4)	13.133	87	444961	7.500
148) Atrazine	(4)	13.238	200	209790	7.500
149) Pentachlorophenol	(4)	13.320	266	146173	7.500
150) 4-Aminobiphenyl	(4)	13.331	169	803391	7.500
151) Pentachloronitrobenzene	(4)	13.343	237	92349	7.500
152) Pronamide	(4)	13.436	173	359355	7.500
153)*Phenanthrene-d10	(4)	13.553	188	661403	5.000
154) Dinoseb	(4)	13.576	211	213010	7.500
155) Phenanthrene	(4)	13.588	178	1153251	7.500
157) Anthracene	(4)	13.652	178	1189559	7.500
163) Carbazole	(4)	13.867	167	1138143	7.500

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0101a.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 00:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

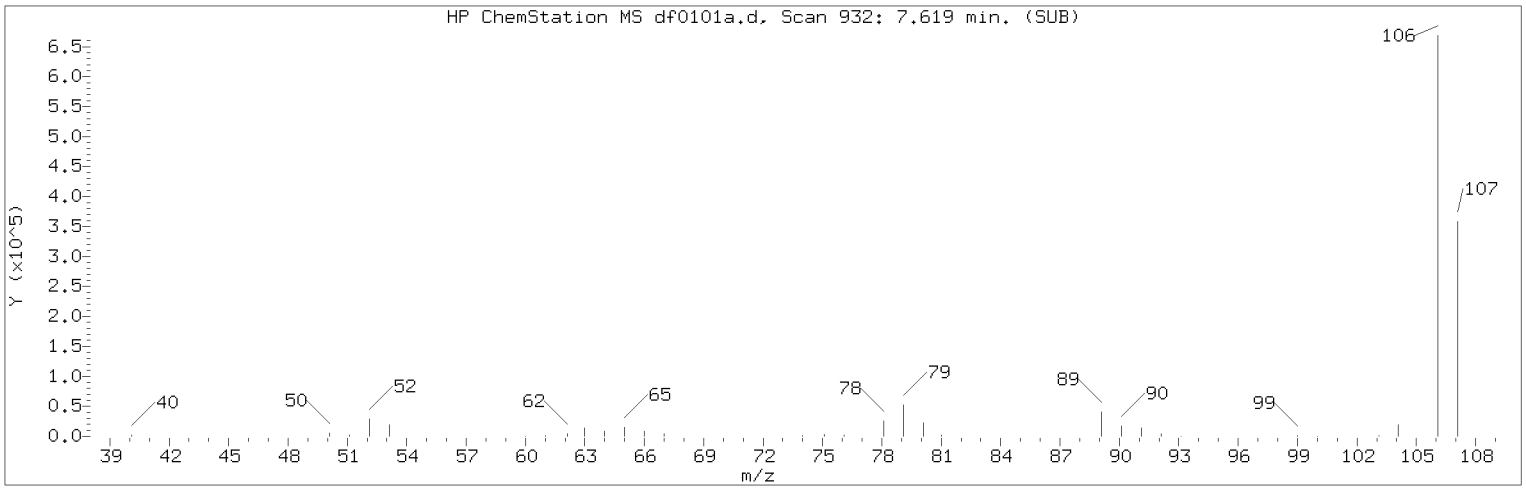
Sample Name: SSTD7.5 Lab Sample ID: RV1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
164) Methyl parathion	(4)	14.071	109	328330	7.500
165) Di-n-butylphthalate	(4)	14.386	149	1432192	7.500
167) Parathion	(4)	14.619	109	214428	7.500
168) 4-Nitroquinoline-1-oxide	(4)	14.619	190	138913	7.500
169) Octachlorostyrene	(4)	14.975	308	79425	7.500
222) Total PAHs	(6)			20089126	135.000
171) Isodrin	(4)	15.022	193	133789	7.500
173) Fluoranthene	(4)	15.237	202	1322890	7.500
174) Benzidine	(5)	15.459	184	2772366	22.500
175)*Pyrene-d10	(5)	15.552	212	666393	5.000
177) Pyrene	(5)	15.581	202	1379225	7.500
179)$Terphenyl-d14	(5)	15.861	244	1791194	15.000
182) p-Dimethylaminoazobenzene	(5)	16.094	225	241727	7.500
185) Chlorobenzilate	(5)	16.187	139	426498	7.500
187) 3,3'-Dimethylbenzidine	(5)	16.648	212	933929	7.500
188) Butylbenzylphthalate	(5)	16.718	149	693339	7.500
191) 2-Acetylaminofluorene	(5)	17.067	181	561338	7.500
193) 3,3'-Dichlorobenzidine	(5)	17.574	252	471112	7.500
195) Benzo(a)anthracene	(5)	17.586	228	1283338	7.500
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.598	231	275943	7.500
196) Chrysene	(5)	17.650	228	1240836	7.500
199) bis(2-Ethylhexyl)phthalate	(5)	17.790	149	960684	7.500
203) 6-Methylchrysene	(5)	18.455	242	885416	7.500
205) Di-n-octylphthalate	(6)	18.950	149	1676782	7.500
206) Benzo(b)fluoranthene	(6)	19.440	252	1280162	7.500
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.445	256	568644	7.500
208) Benzo(k)fluoranthene	(6)	19.492	252	1226439	7.500
211) Benzo(a)pyrene	(6)	19.964	252	1154624	7.500
213)*Perylene-d12	(6)	20.057	264	668430	5.000
215) 3-Methylcholanthrene	(6)	20.541	268	592621	7.500
217) Dibenz(a,h)acridine	(6)	21.346	279	948052	7.500
218) Dibenz(a,j)acridine	(6)	21.421	279	1015840	7.500
219) Indeno(1,2,3-cd)pyrene	(6)	21.666	276	1091492M	7.500
220) Dibenz(a,h)anthracene	(6)	21.707	278	1172649	7.500
221) Benzo(g,h,i)perylene	(6)	22.057	276	1146054	7.500

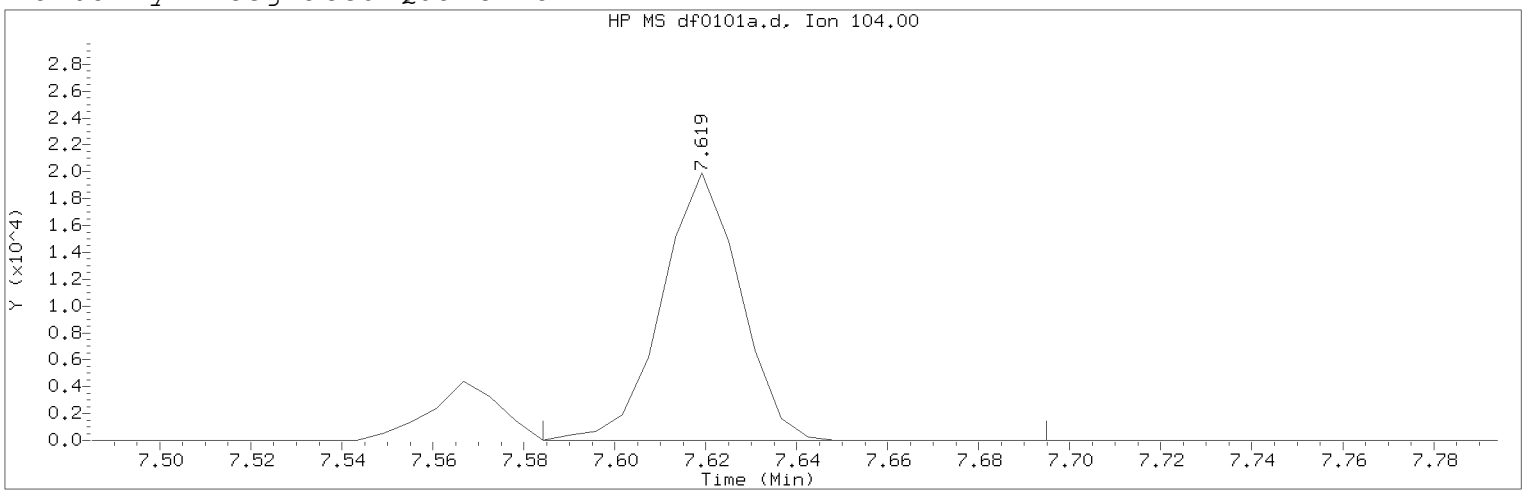
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0101a.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 00:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD7.5 Lab Sample ID: RV1318

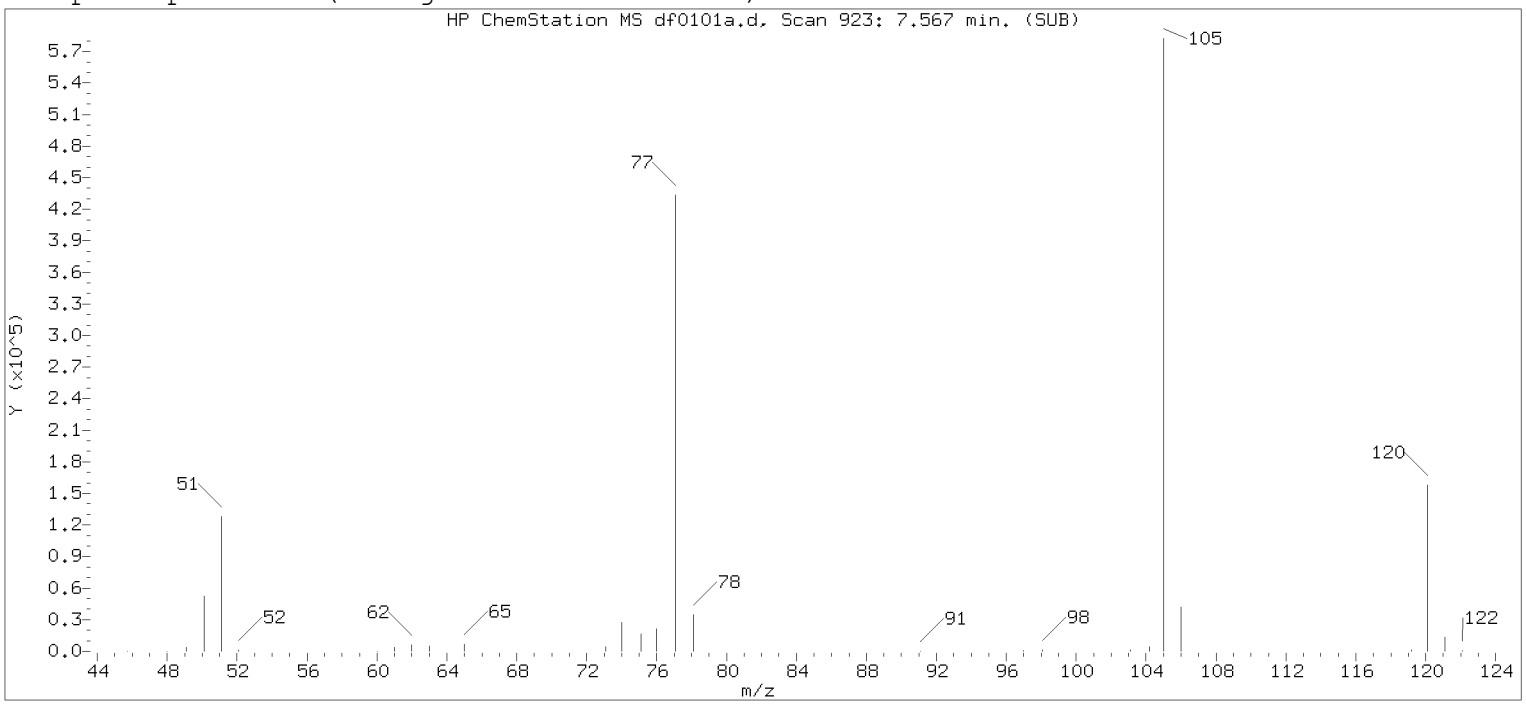
Compound Number : 59
Compound Name : 1,2,3,4-Tetrahydronaphthalene
Scan Number : 932
Retention Time (minutes) : 7.619
Quant Ion : 104.00
Area (flag) : 23652A
On-Column Amount (ng/ul) : 7.5000
Integration start scan : 925 Integration stop scan: 944
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

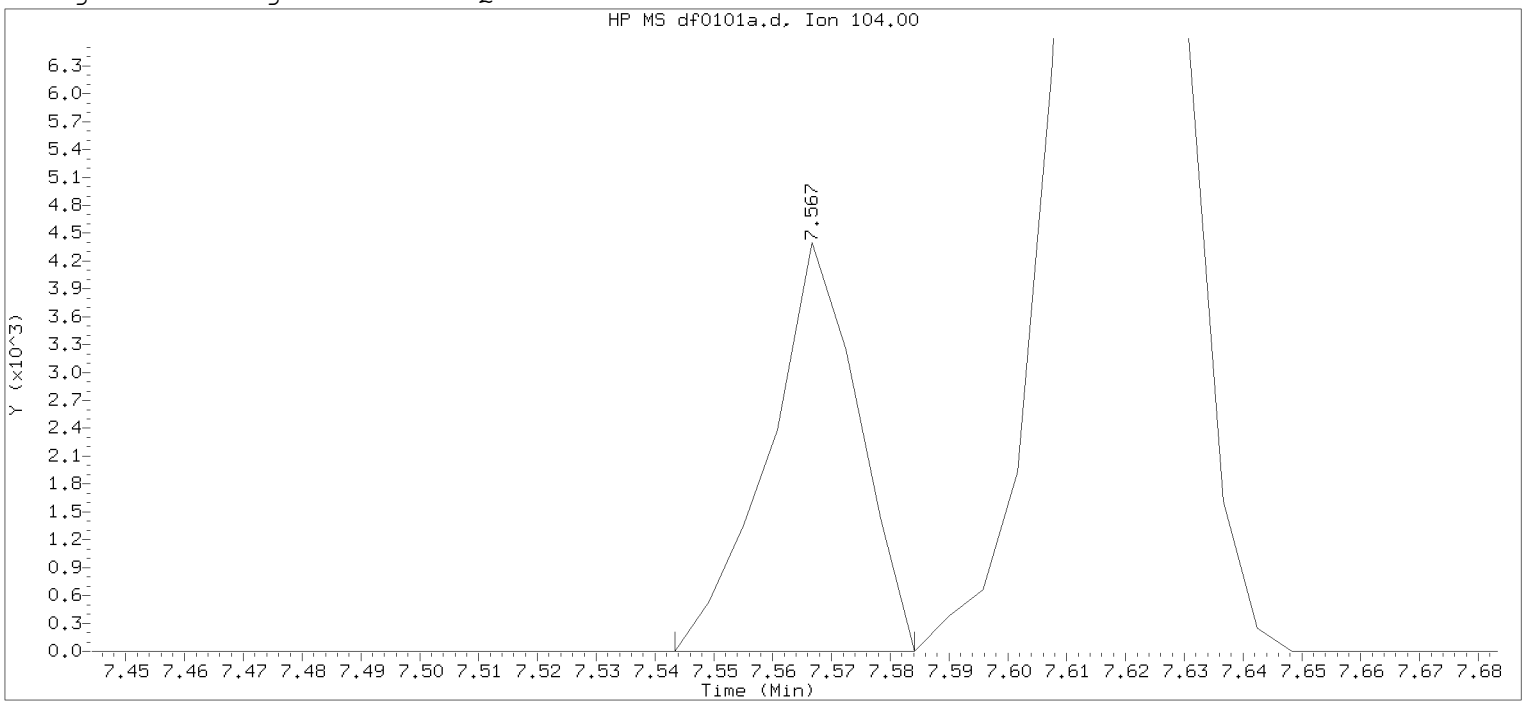
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0101a.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 00:37 Analyst ID: art12405

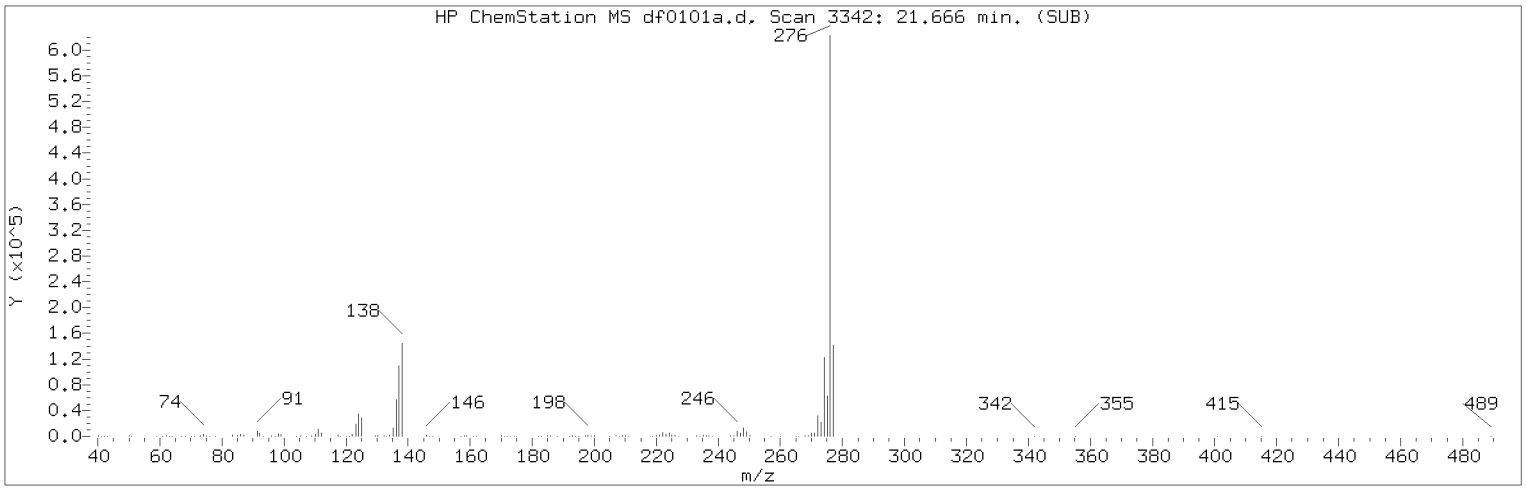
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 01:06
Date, time and analyst ID of latest file update: 05-Jun-2018 01:06 Automation

Sample Name: SSTD7.5 Lab Sample ID: RV1318

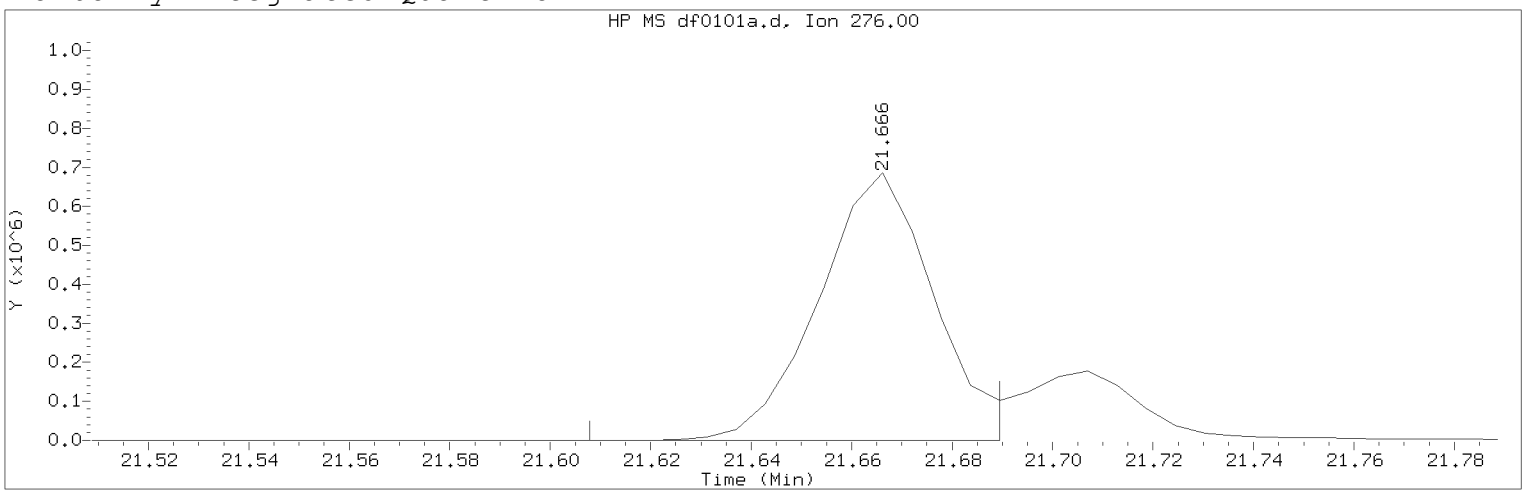
Compound Number : 59
Compound Name : 1,2,3,4-Tetrahydronaphthalene
Scan Number : 923
Retention Time (minutes) : 7.567
Quant Ion : 104.00
Area : 4663
On-column Amount (ng/ul) : 0.0000
Integration start scan : 918 Integration stop scan: 925
Y at integration start : 0 Y at integration end: 0

Digitally signed by Edward Monborne on 06/05/2018 at 09:30.
Target 3.5 esignature user email: [illegible]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0101a.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 00:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD7.5 Lab Sample ID: RV1318

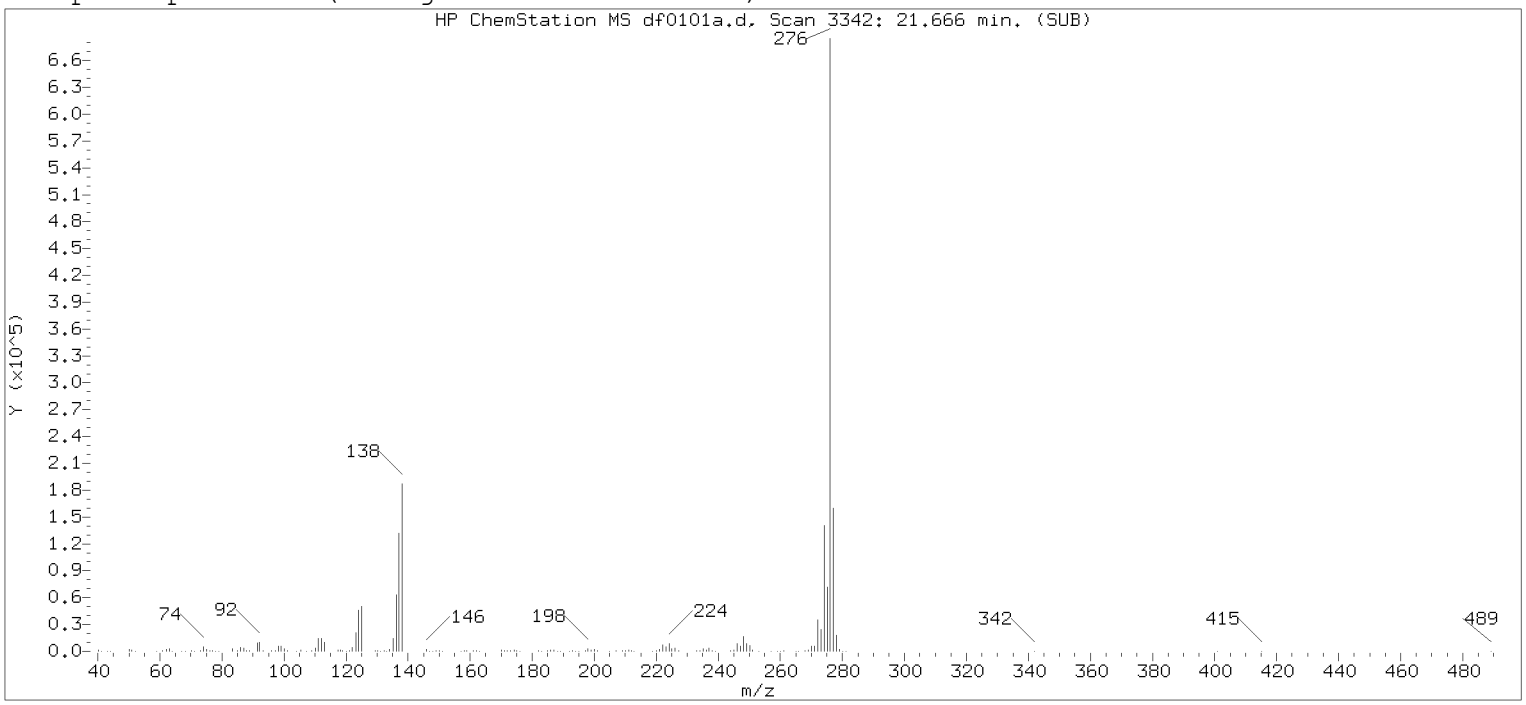
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3342
Retention Time (minutes) : 21.666
Quant Ion : 276.00
Area (flag) : 1091492M
On-Column Amount (ng/ul) : 7.5000
Integration start scan : 3331 Integration stop scan: 3345
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

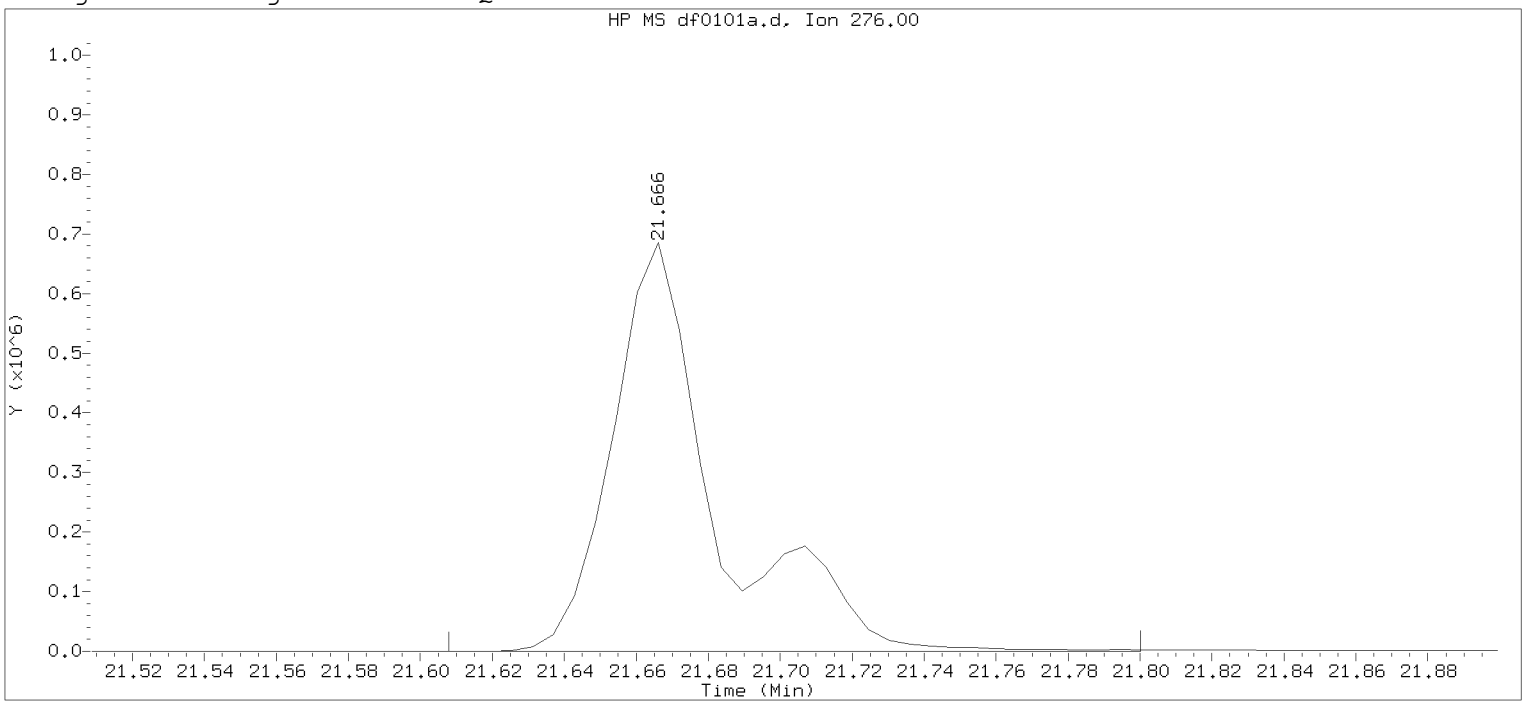
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



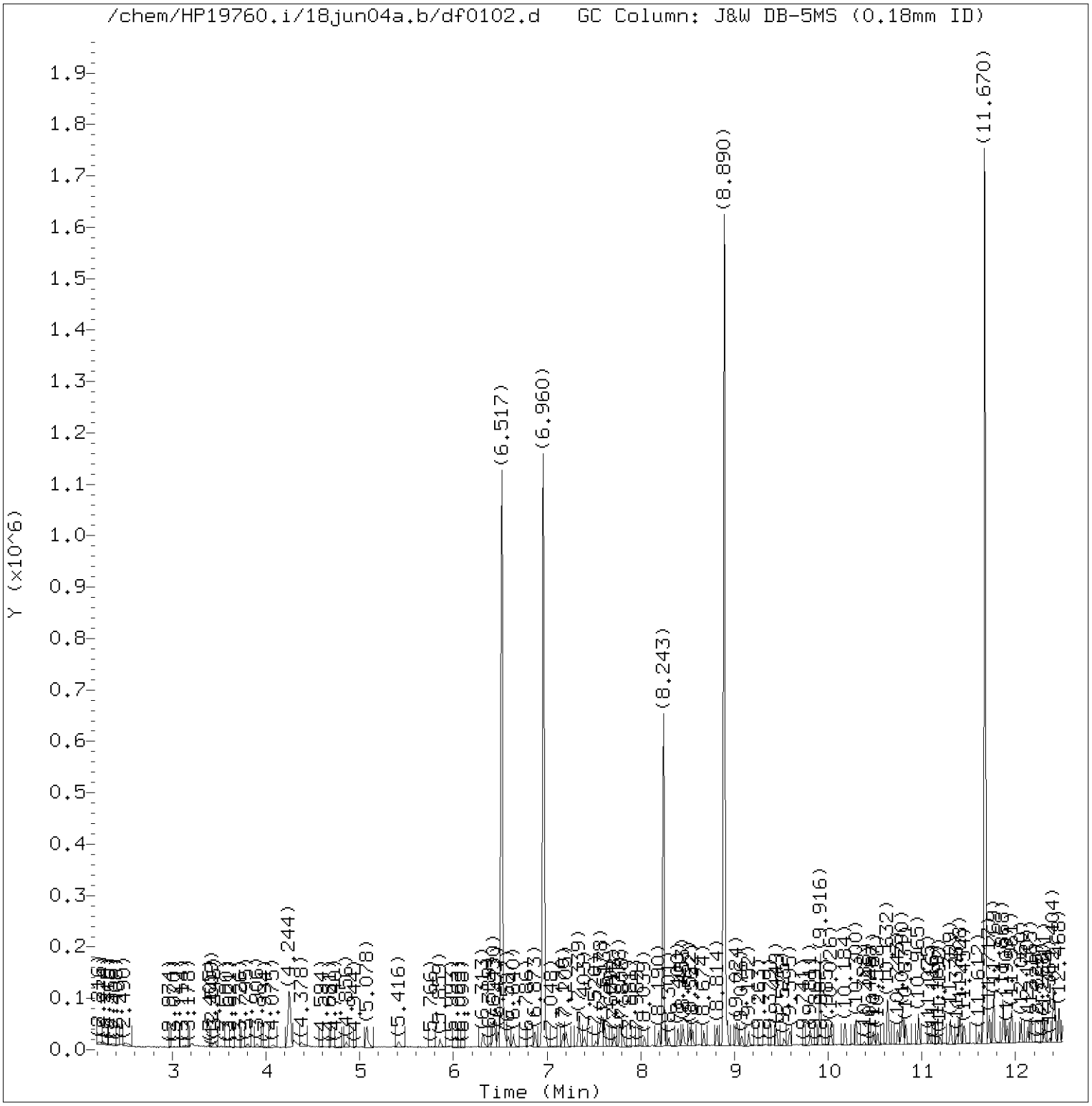
Data File: /chem/HP19760.i/18jun04a.b/df0101a.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 00:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 01:06
Date, time and analyst ID of latest file update: 05-Jun-2018 01:06 Automation

Sample Name: SSTD7.5 Lab Sample ID: RV1318

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3342		
Retention Time (minutes)	: 21.666		
Quant Ion	: 276.00		
Area	: 1371534		
On-column Amount (ng/ul)	: 9.8277		
Integration start scan	: 3331	Integration stop scan:	3364
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:30.
Target 3.5 esignature user email: [redacted]



Total Ion Chromatogram (TIC)

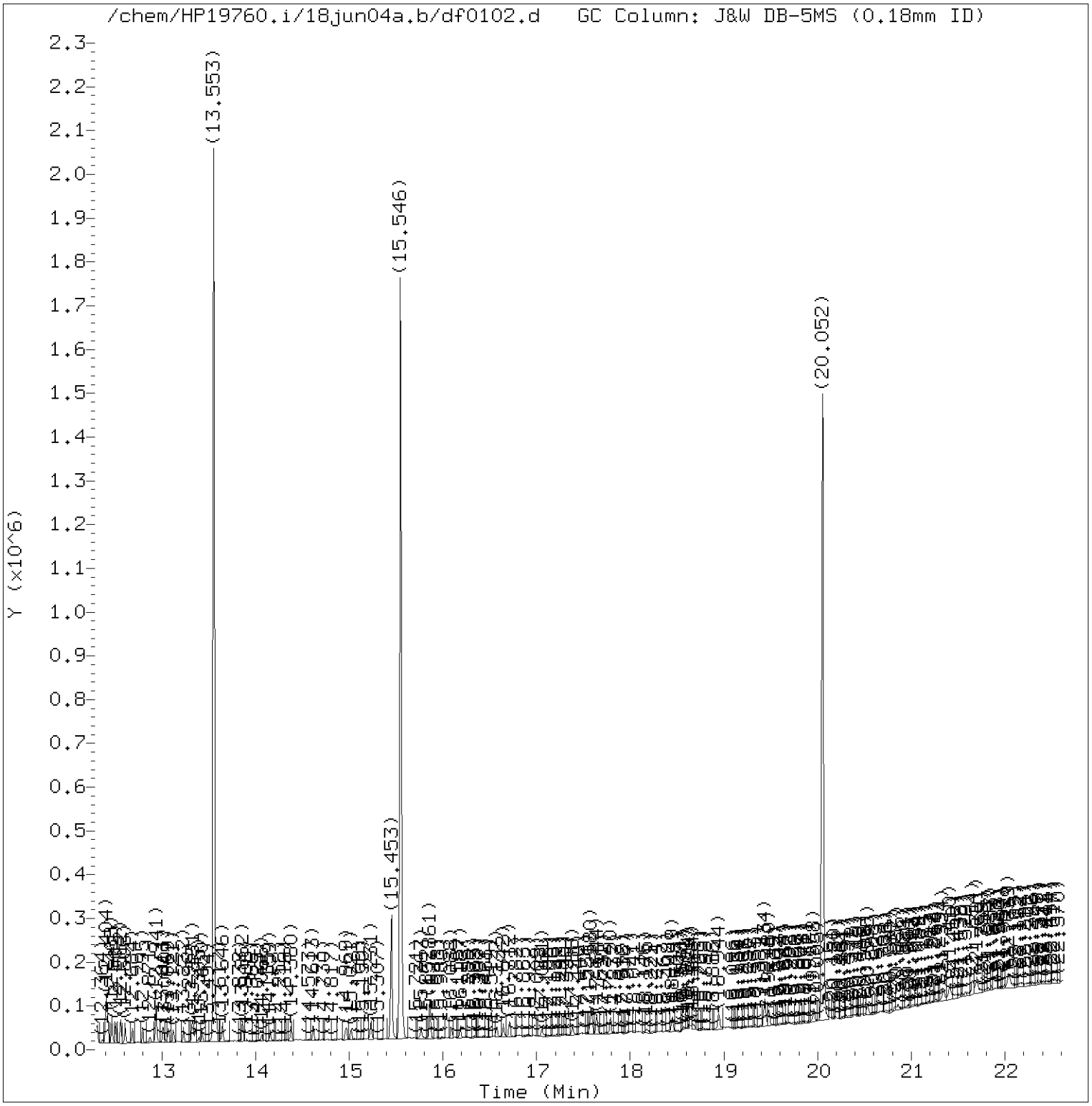
Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.496	88	3227	0.087
4) N-Nitrosodimethylamine	(1)	3.148	74	4960	0.090
5) Pyridine	(1)	3.218	79	12210M	0.130
7) 2-Picoline	(1)	4.291	93	13304M	0.133
8) N-Nitrosomethylethylamine	(1)	4.425	88	5810M	0.132
9) Methyl methanesulfonate	(1)	4.862	80	5626	0.113
11)$2-Fluorophenol	(1)	5.078	112	17490	0.223
13) N-Nitrosodiethylamine	(1)	5.416	102	4069	0.097
42) Total Cresols	(1)			18397	0.241
15) Ethyl methanesulfonate	(1)	5.859	109	4965	0.122
16) Benzaldehyde	(1)	6.313	77	7825	0.108
17)$Phenol-d6	(1)	6.430	99	24839	0.238
18) Phenol	(1)	6.447	94	14545	0.120
19) Aniline	(1)	6.477	93	17606	0.124
20) a-methylstyrene	(1)	6.512	118	7974	0.276
22) bis(2-Chloroethyl)ether	(1)	6.587	93	10619	0.117
23) 2-Chlorophenol	(1)	6.640	128	8458	0.123
24) 1,3-Dichlorobenzene	(1)	6.873	146	8314	0.114
25)*1,4-Dichlorobenzene-d4	(1)	6.960	152	233206	5.000
26) 1,4-Dichlorobenzene	(1)	6.984	146	8771	0.121
27) Benzyl alcohol	(1)	7.170	108	5674	0.110
28) 1,2-Dichlorobenzene	(1)	7.205	146	8324	0.121
30) Indene	(1)	7.339	115	12150	0.110
31) 2-Methylphenol	(1)	7.345	108	8455	0.113
97) Isosafrole	(3)			5717	0.106
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.403	45	11555	0.125
34) bis(2-Chloroisopropyl)ether	(1)	7.403	45	11555	0.125
35) N-Nitrosopyrrolidine	(1)	7.520	100	4742	0.108
36) Acetophenone	(1)	7.561	105	12173	0.108
38) N-Nitroso-di-n-propylamine	(1)	7.584	70	7729	0.122
39) N-Nitrosomorpholine	(1)	7.584	56	6061	0.127
37) 4-Methylphenol	(1)	7.584	108	9942	0.127
40) o-Toluidine	(1)	7.613	106	14867	0.116
59) 1,2,3,4-Tetrahydronaphthalene	(2)	7.613	104	351M	0.096
43) Hexachloroethane	(1)	7.718	117	3712	0.112
44)$Nitrobenzene-d5	(2)	7.776	82	21482	0.233
45) Nitrobenzene	(2)	7.811	77	10649	0.118
48) N-Nitrosopiperidine	(2)	8.039	114	4148	0.109
120) 2,4_2,6-Dinitrotoluenes	(3)			6086	0.182
50) Isophorone	(2)	8.190	82	17586	0.110

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on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
51) 2-Nitrophenol	(2)	8.301	139	3695	0.106
53) 2,4-Dimethylphenol	(2)	8.400	107	8549	0.110
56) Benzoic acid	(2)	8.453	105	19310	0.347
57) O,O,O-Triethylphosphorothioate	(2)	8.528	198	3004	0.101
55) bis(2-Chloroethoxy)methane	(2)	8.552	93	12065	0.118
60) 2,4-Dichlorophenol	(2)	8.674	162	5823	0.112
146) Diallate trans/cis	(4)			7771	0.102
62) 1,2,4-Trichlorobenzene	(2)	8.814	180	6787	0.125
65)*Naphthalene-d8	(2)	8.890	136	869564	5.000
66) Naphthalene	(2)	8.925	128	24649	0.127
67) 4-Chloroaniline	(2)	9.018	127	10356	0.126
68) 2,6-Dichlorophenol	(2)	9.030	162	5877	0.114
69) Hexachloropropene	(2)	9.082	213	4084	0.117
71) Hexachlorobutadiene	(2)	9.152	225	3473	0.115
75) Quinoline	(2)	9.449	129	13677	0.117
76) Caprolactam	(2)	9.531	113	2263	0.096
77) N-Nitrosodi-n-butylamine	(2)	9.595	84	6709	0.116
80) 4-Chloro-3-methylphenol	(2)	9.811	107	7211	0.109
82) Safrole	(2)	9.916	162	5460	0.113
83) 2-Methylnaphthalene	(2)	10.026	142	14486	0.119
84) 1-Methylnaphthalene	(2)	10.184	142	13523	0.122
85) Hexachlorocyclopentadiene	(3)	10.294	237	3192	0.109
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.300	216	6067	0.114
88) cis-Isosafrole	(3)	10.388	162	788	0.016
90) 2,4,6-Trichlorophenol	(3)	10.487	196	3959	0.110
92) 2,4,5-Trichlorophenol	(3)	10.533	196	3530	0.095
93)$2-Fluorobiphenyl	(3)	10.638	172	30521	0.230
94) trans-Isosafrole	(3)	10.743	162	4929	0.090
95) 1,1'-Biphenyl	(3)	10.790	154	16647	0.111
96) 2-Chloronaphthalene	(3)	10.796	162	13297	0.115
98) 1-Chloronaphthalene	(3)	10.831	162	12184	0.118
100) 2-Nitroaniline	(3)	10.965	138	3402	0.086
99) Diphenyl ether	(3)	10.965	170	8750	0.110
104) 1,4-Naphthoquinone	(3)	11.081	158	3873	0.084
105) 1,4-Dinitrobenzene	(3)	11.198	168	1656	0.079
106) Dimethylphthalate	(3)	11.309	163	14999	0.125
107) 1,3-Dinitrobenzene	(3)	11.309	168	1891	0.081
108) 2,6-Dinitrotoluene	(3)	11.373	165	2681	0.093
109) Acenaphthylene	(3)	11.454	152	19013	0.118
112) 3-Nitroaniline	(3)	11.612	138	3403	0.103

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on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
113)*Acenaphthene-d10	(3)	11.670	164	405133	5.000
114) Acenaphthene	(3)	11.717	153	13740	0.124
115) 2,4-Dinitrophenol	(3)	11.769	184	12094	0.635
116) 4-Nitrophenol	(3)	11.868	109	10462	0.471
117) Pentachlorobenzene	(3)	11.909	250	5262	0.119
118) 2,4-Dinitrotoluene	(3)	11.956	165	3405	0.090
119) Dibenzofuran	(3)	11.961	168	19607	0.123
121) 1-Naphthylamine	(3)	12.060	143	13495	0.114
122) 2,3,4,6-Tetrachlorophenol	(3)	12.130	232	3016	0.104
123) 2-Naphthylamine	(3)	12.165	143	13387	0.116
124) Diethylphthalate	(3)	12.311	149	13863	0.114
126) Fluorene	(3)	12.399	166	15039	0.121
125) Thionazin	(3)	12.404	107	2707	0.097
128) 5-Nitro-o-toluidine	(3)	12.410	152	3788	0.097
129) 4-Nitroaniline	(3)	12.416	138	3768	0.100
127) 4-Chlorophenyl-phenylether	(3)	12.422	204	7251	0.120
130) 4,6-Dinitro-2-methylphenol	(4)	12.468	198	8702	0.379
132) NDPA as diphenylamine	(4)	12.562	169	11923	0.113
131) N-Nitrosodiphenylamine	(4)	12.562	169	11923	0.113
134) 1,2-Diphenylhydrazine	(4)	12.608	77	18267	0.111
135)$2,4,6-Tribromophenol	(3)	12.684	330	2856	0.193
137) Tetraethyldithiopyrophosphate	(4)	12.795	97	2883	0.110
139) 1,3,5-Trinitrobenzene	(4)	12.871	213	1028M	0.067
140) Diallate (peak 1)	(4)	12.935	86	6512	0.083
142) Phenacetin	(4)	12.941	108	7211	0.091
141) Phorate	(4)	12.941	75	10356	0.102
143) 4-Bromophenyl-phenylether	(4)	13.016	248	3750	0.116
144) Diallate (peak 2)	(4)	13.040	86	1259	0.020
145) Hexachlorobenzene	(4)	13.069	284	3835	0.125
147) Dimethoate	(4)	13.121	87	5774	0.086
148) Atrazine	(4)	13.232	200	3483	0.110
149) Pentachlorophenol	(4)	13.319	266	2220	0.100
150) 4-Aminobiphenyl	(4)	13.325	169	13930	0.114
151) Pentachloronitrobenzene	(4)	13.337	237	1462	0.104
152) Pronamide	(4)	13.430	173	4955	0.091
153)*Phenanthrene-d10	(4)	13.553	188	752059	5.000
154) Dinoseb	(4)	13.570	211	2152	0.067
155) Phenanthrene	(4)	13.582	178	22199	0.126
157) Anthracene	(4)	13.646	178	19257	0.115
163) Carbazole	(4)	13.862	167	17803	0.103

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Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
164) Methyl parathion	(4)	14.066	109	3942	0.079
165) Di-n-butylphthalate	(4)	14.380	149	21934	0.101
167) Parathion	(4)	14.613	109	2469	0.076
168) 4-Nitroquinoline-1-oxide	(4)	14.619	190	1267	0.060
222) Total PAHs	(6)			330564	2.192
171) Isodrin	(4)	15.021	193	2871	0.142
173) Fluoranthene	(4)	15.231	202	21657	0.116
174) Benzidine	(5)	15.453	184	130143	0.968
175)*Pyrene-d10	(5)	15.546	212	727004	5.000
177) Pyrene	(5)	15.575	202	24823	0.124
179)$Terphenyl-d14	(5)	15.861	244	31358	0.241
182) p-Dimethylaminoazobenzene	(5)	16.088	225	2507	0.071
185) Chlorobenzilate	(5)	16.187	139	5521	0.089
187) 3,3'-Dimethylbenzidine	(5)	16.642	212	13334	0.098
188) Butylbenzylphthalate	(5)	16.712	149	8958	0.089
191) 2-Acetylaminofluorene	(5)	17.056	181	5538	0.068
193) 3,3'-Dichlorobenzidine	(5)	17.574	252	6231	0.091
195) Benzo(a)anthracene	(5)	17.580	228	18381	0.110
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.592	231	3315	0.083
196) Chrysene	(5)	17.644	228	19955	0.117
199) bis(2-Ethylhexyl)phthalate	(5)	17.790	149	11286	0.081
203) 6-Methylchrysene	(5)	18.449	242	13275	0.103
205) Di-n-octylphthalate	(6)	18.944	149	18896	0.081
206) Benzo(b)fluoranthene	(6)	19.434	252	19105	0.116
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.440	256	7592	0.096
208) Benzo(k)fluoranthene	(6)	19.480	252	19081	0.118
211) Benzo(a)pyrene	(6)	19.958	252	15699	0.110
213)*Perylene-d12	(6)	20.052	264	694569	5.000
215) 3-Methylcholanthrene	(6)	20.535	268	8071	0.098
217) Dibenz(a,h)acridine	(6)	21.340	279	13009	0.099
218) Dibenz(a,j)acridine	(6)	21.410	279	16083	0.114
219) Indeno(1,2,3-cd)pyrene	(6)	21.654	276	15215M	0.111
220) Dibenz(a,h)anthracene	(6)	21.701	278	16585	0.112
221) Benzo(g,h,i)perylene	(6)	22.039	276	18157	0.119

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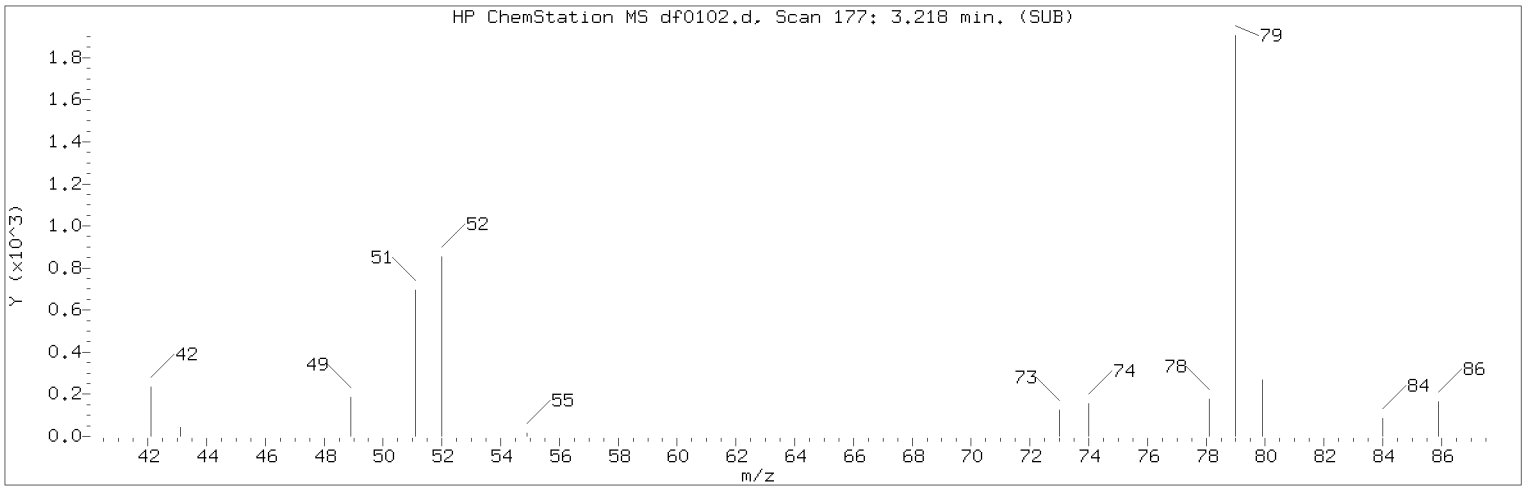
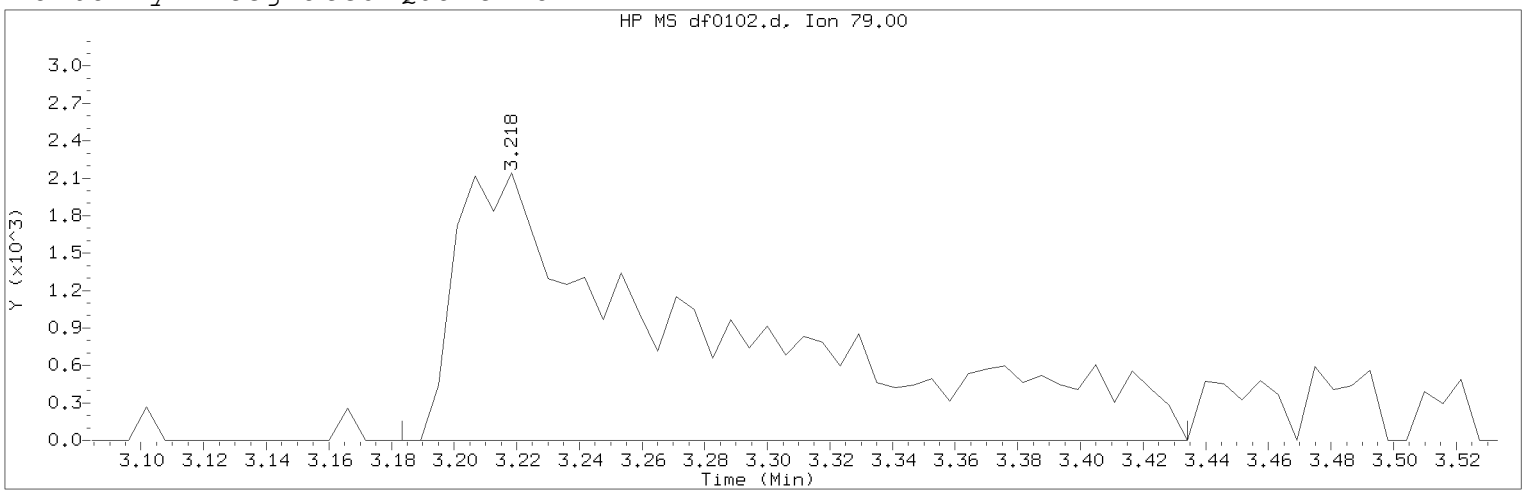
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

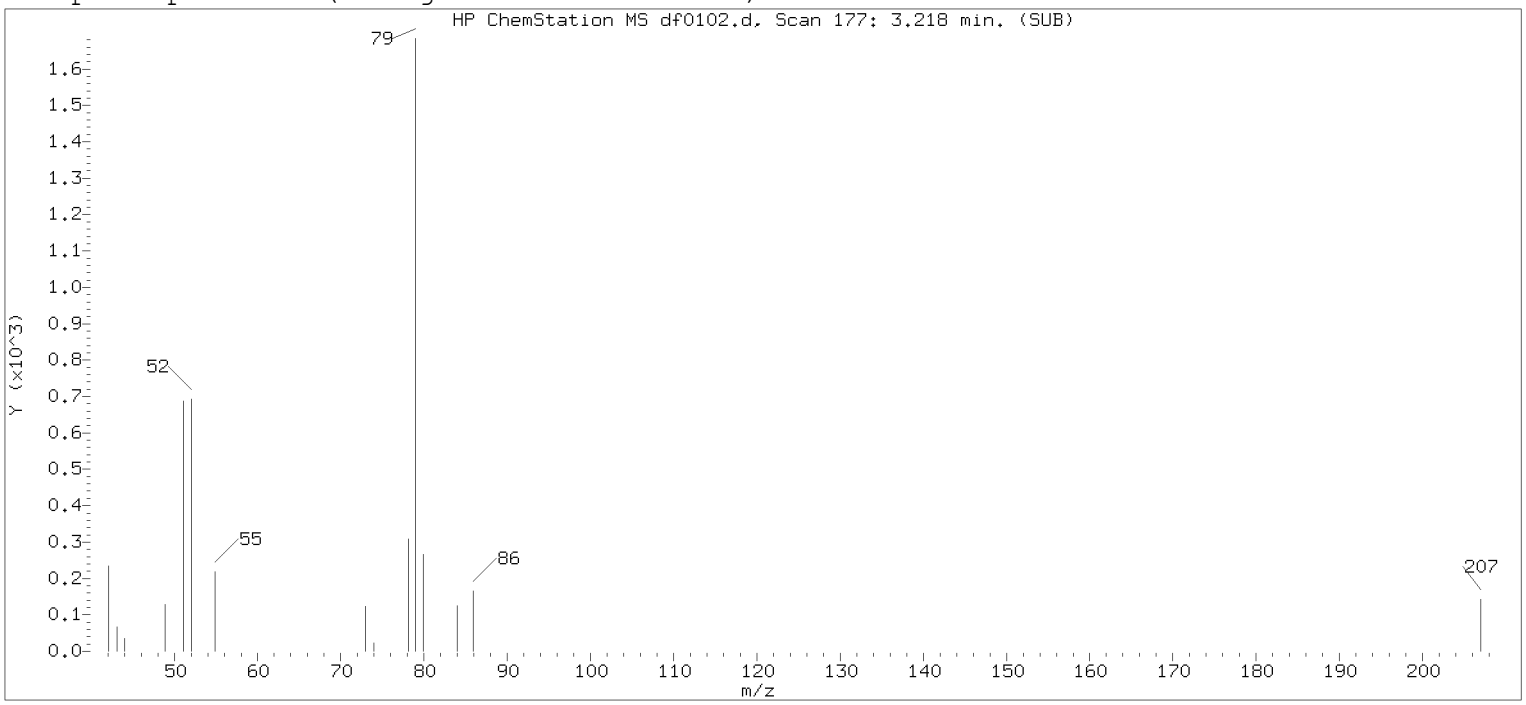
Compound Number	: 5		
Compound Name	: Pyridine		
Scan Number	: 177		
Retention Time (minutes)	: 3.218		
Quant Ion	: 79.00		
Area (flag)	: 12210M		
On-Column Amount (ng/ul)	: 0.1305		
Integration start scan	: 170	Integration stop scan:	213
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

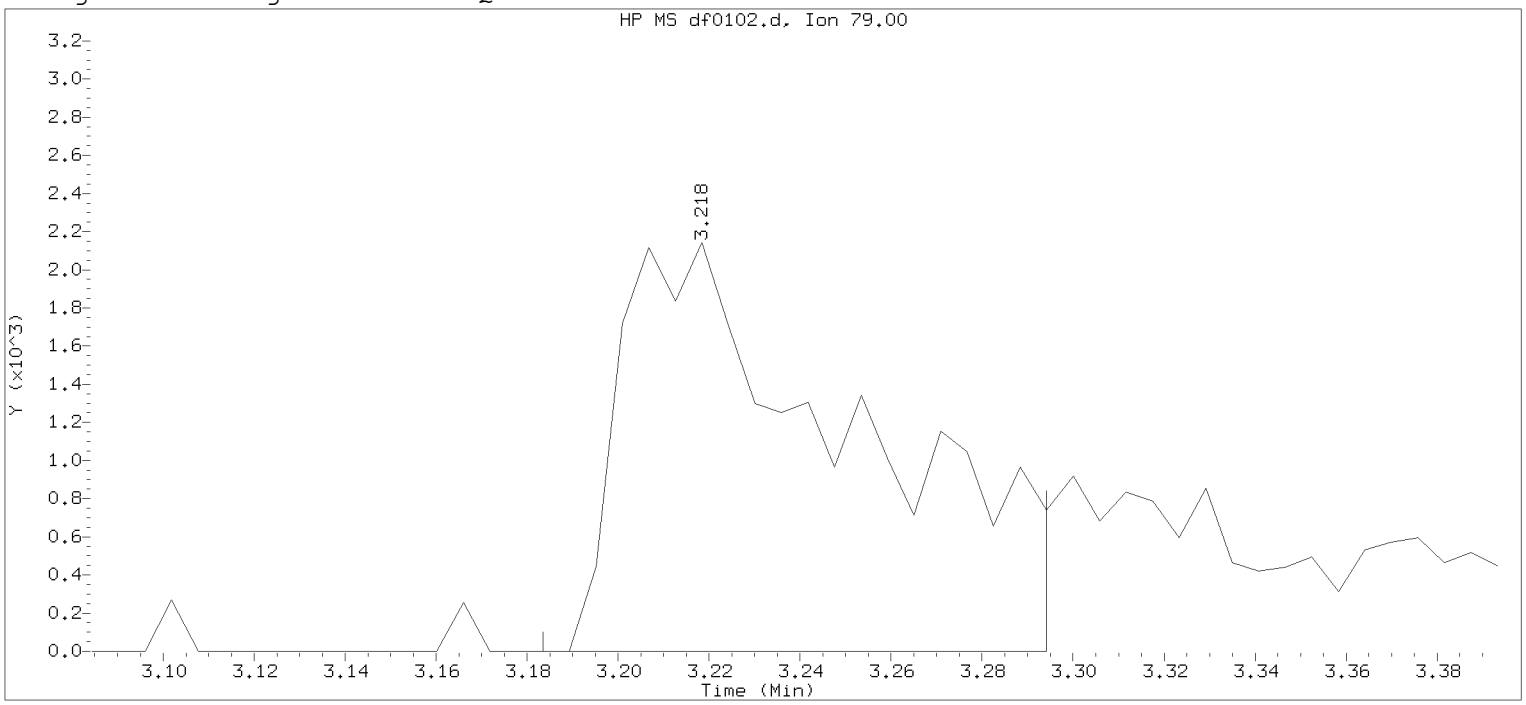
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

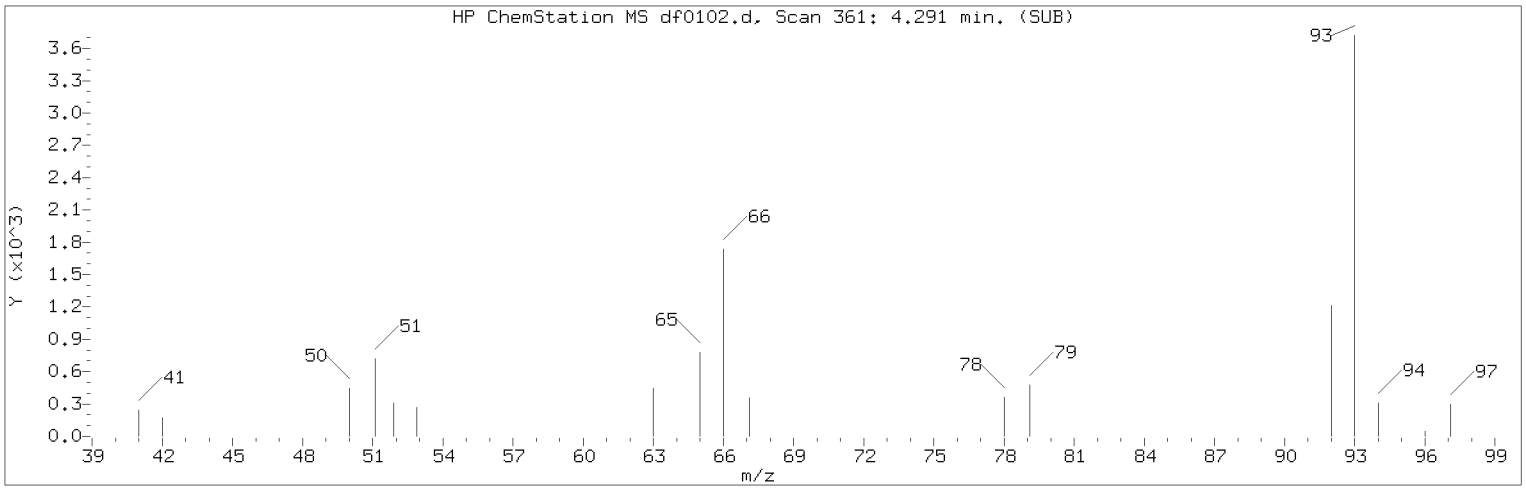
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 01:39
Date, time and analyst ID of latest file update: 05-Jun-2018 01:39 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

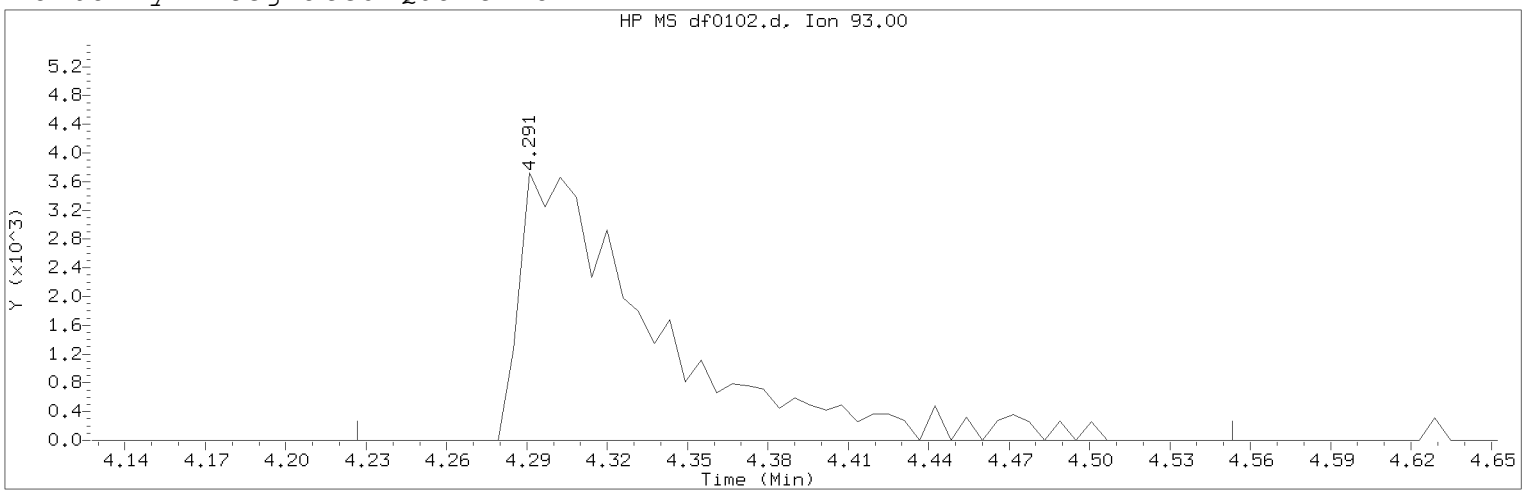
Compound Number	: 5		
Compound Name	: Pyridine		
Scan Number	: 177		
Retention Time (minutes)	: 3.218		
Quant Ion	: 79.00		
Area	: 7710		
On-column Amount (ng/ul)	: 0.0923		
Integration start scan	: 170	Integration stop scan:	189
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:30.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

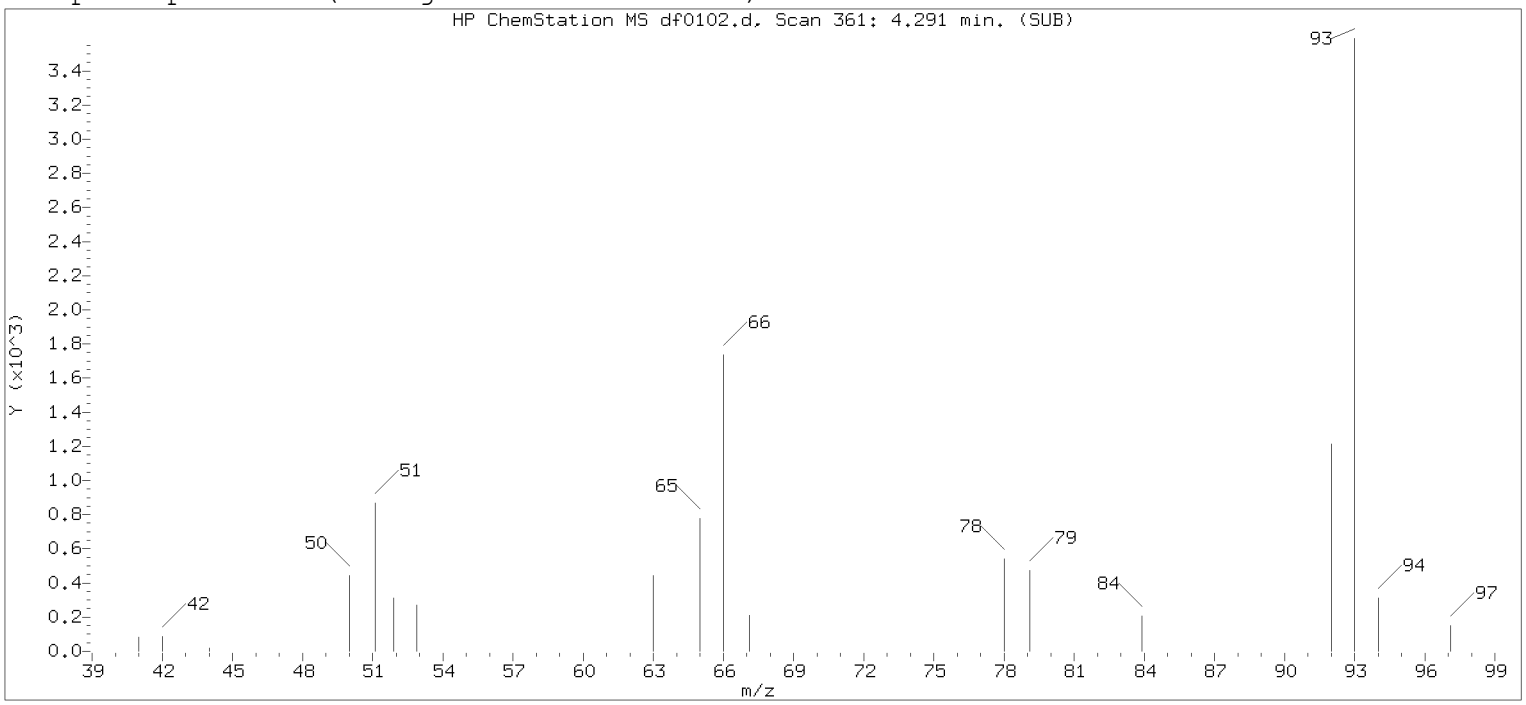
Compound Number : 7
Compound Name : 2-Picoline
Scan Number : 361
Retention Time (minutes) : 4.291
Quant Ion : 93.00
Area (flag) : 13304M
On-Column Amount (ng/ul) : 0.1330
Integration start scan : 349 Integration stop scan: 405
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

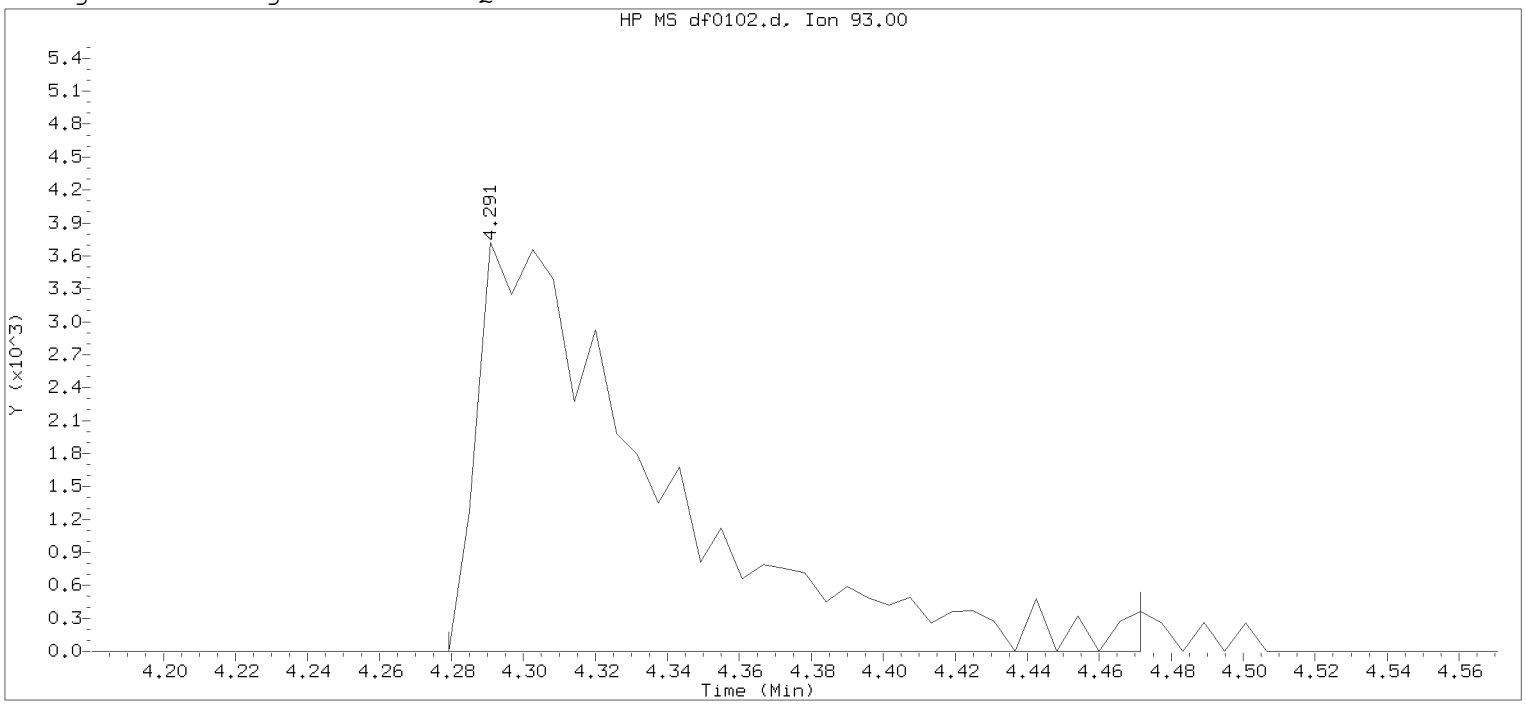
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

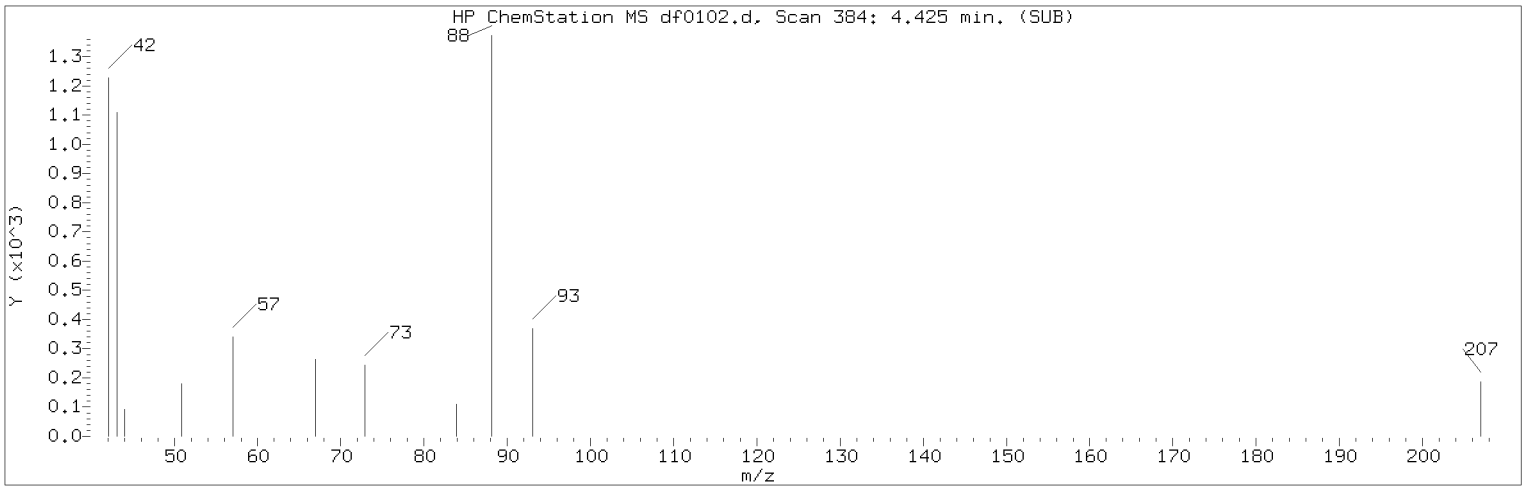
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 01:39
Date, time and analyst ID of latest file update: 05-Jun-2018 01:39 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

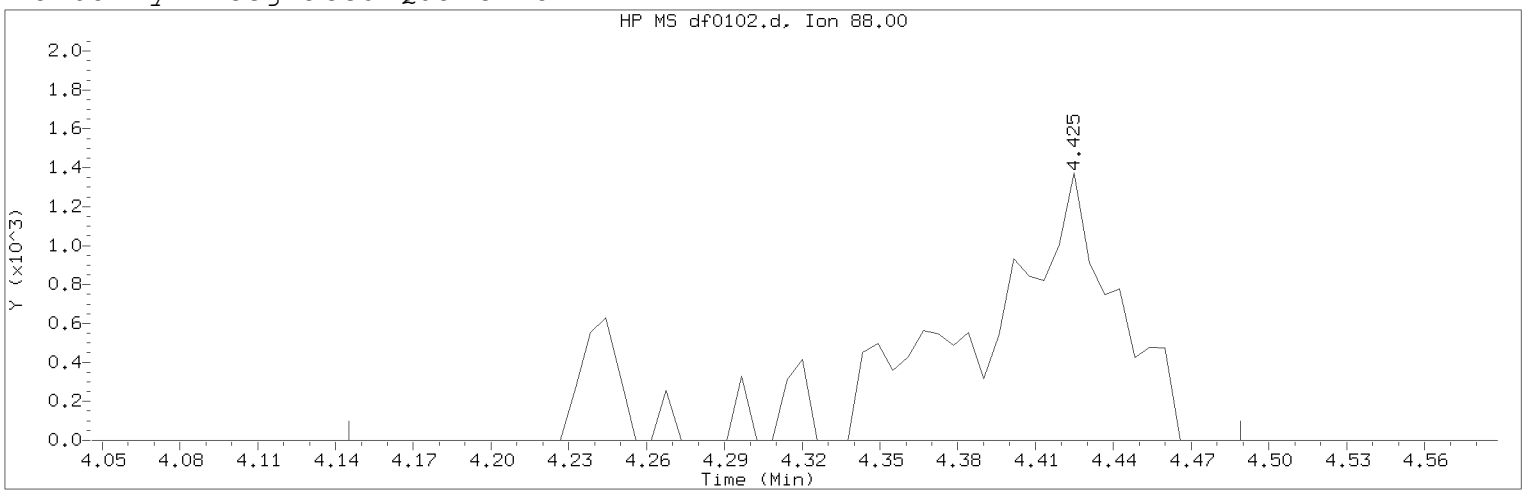
Compound Number	: 7		
Compound Name	: 2-Picoline		
Scan Number	: 361		
Retention Time (minutes)	: 4.291		
Quant Ion	: 93.00		
Area	: 12967		
On-column Amount (ng/ul)	: 0.1409		
Integration start scan	: 358	Integration stop scan:	391
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:30.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

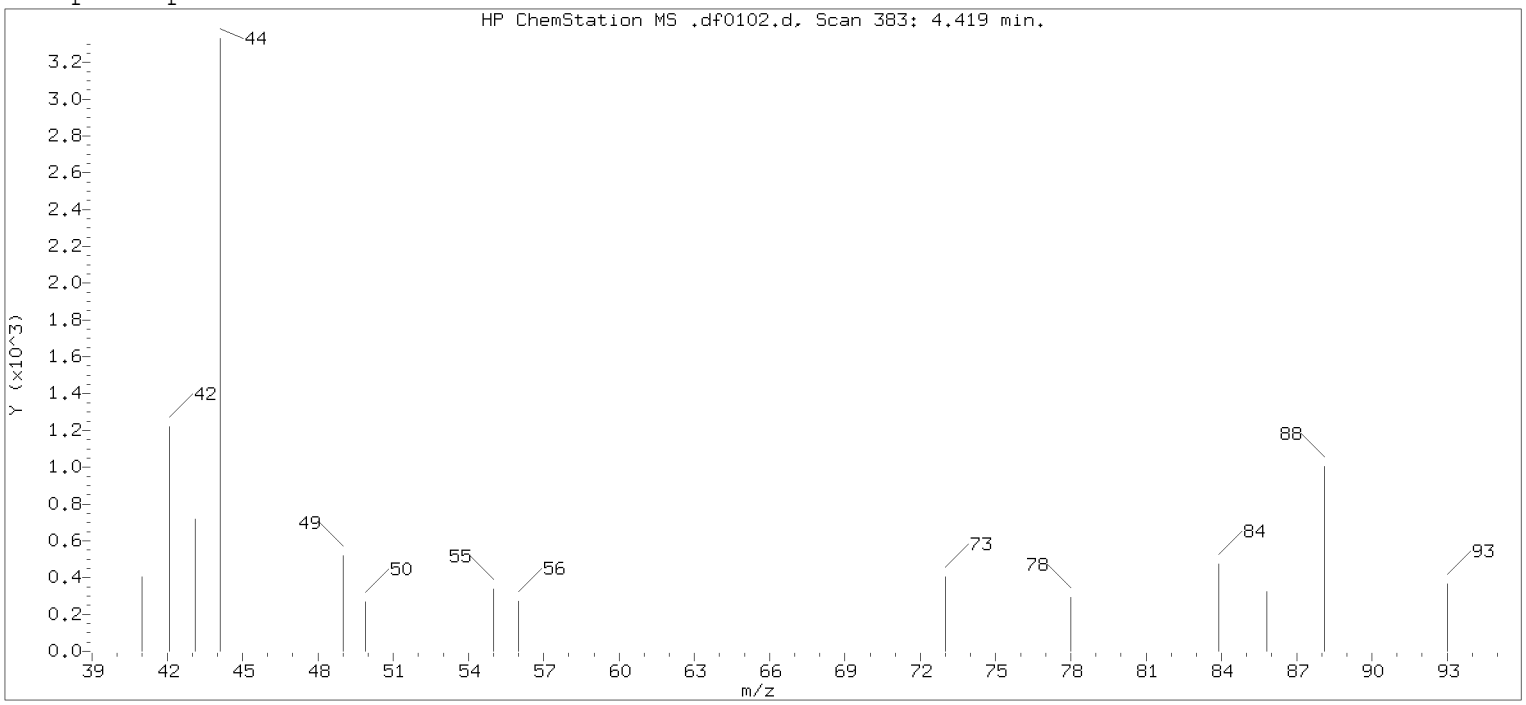
Compound Number : 8
Compound Name : N-Nitrosomethylethylamine
Scan Number : 384
Retention Time (minutes) : 4.425
Quant Ion : 88.00
Area (flag) : 5810M
On-Column Amount (ng/ul) : 0.1318
Integration start scan : 335 Integration stop scan: 394
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

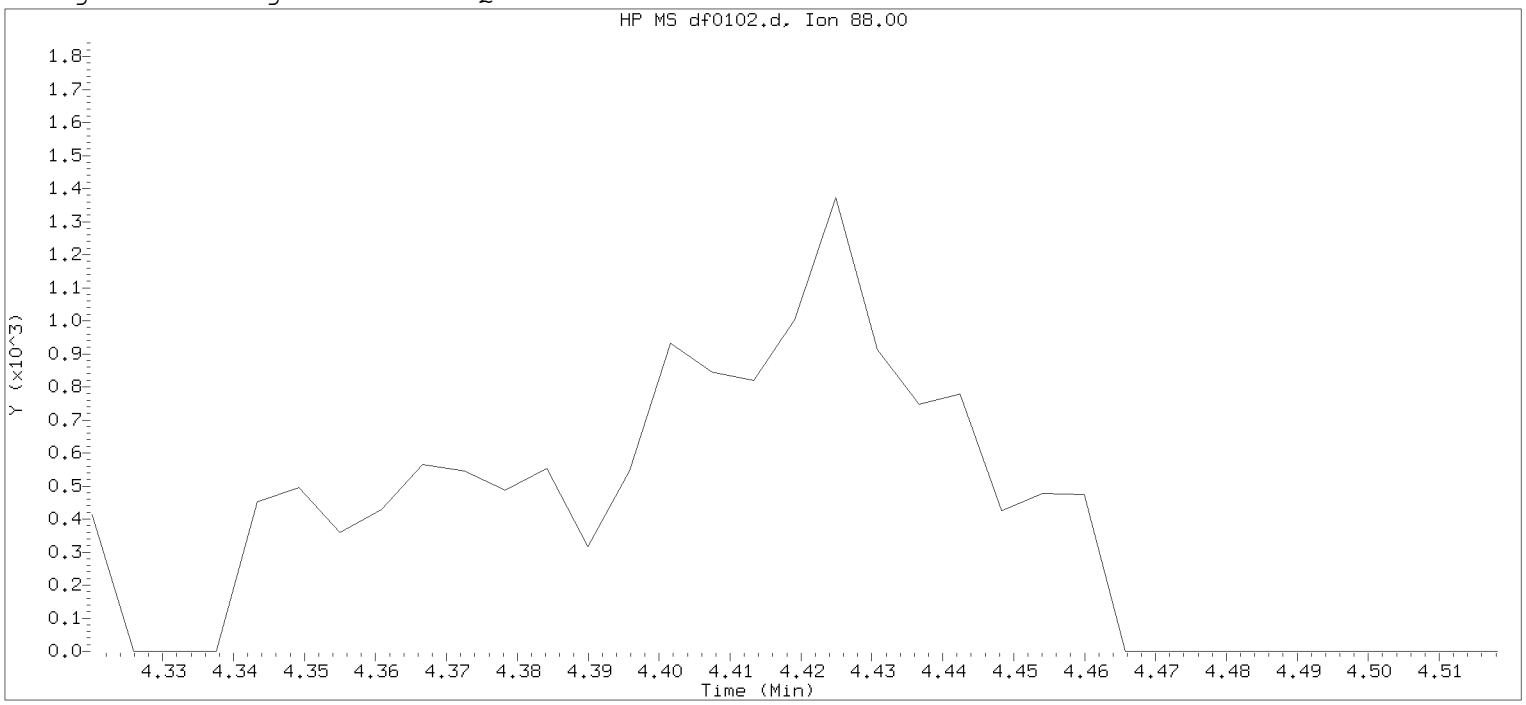
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

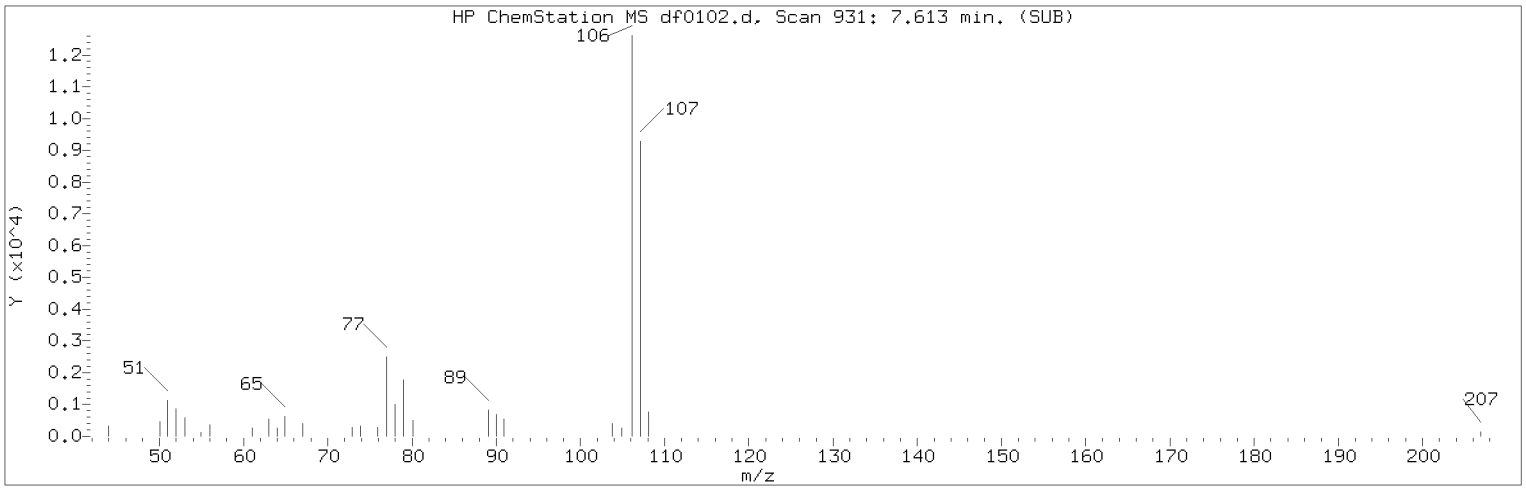
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 01:39
Date, time and analyst ID of latest file update: 05-Jun-2018 01:39 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

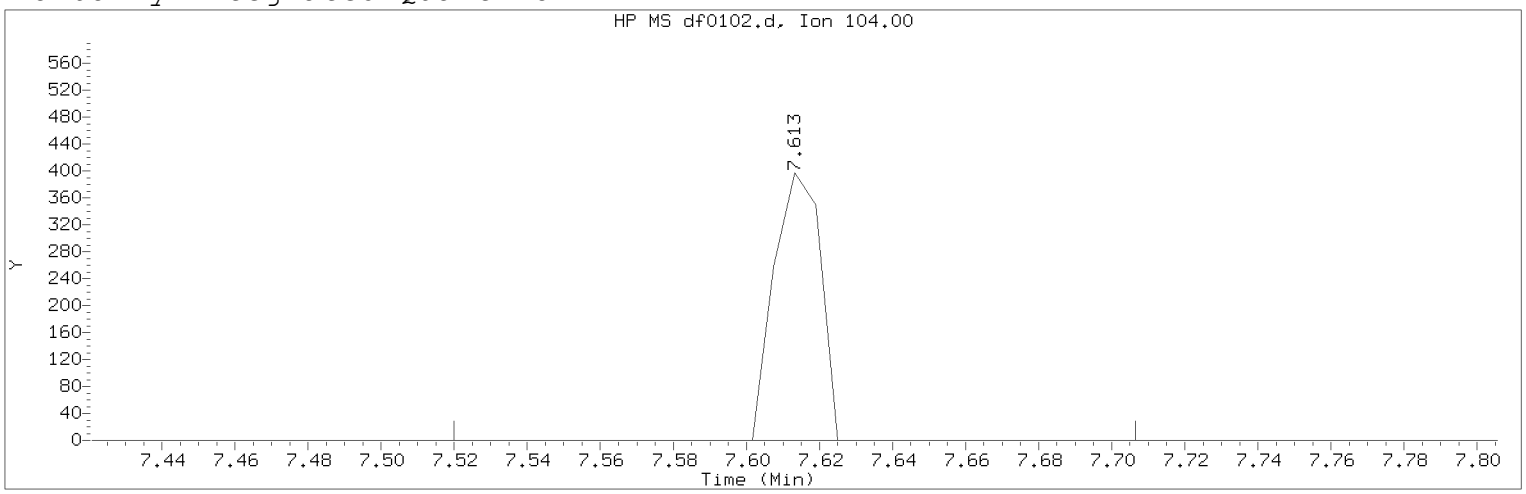
Compound Number : 8
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.419
Quant Ion : 88.00

Digitally signed by Edward Monborne on 06/05/2018 at 09:30.
Target 3.5 esignature user name: CBD50

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

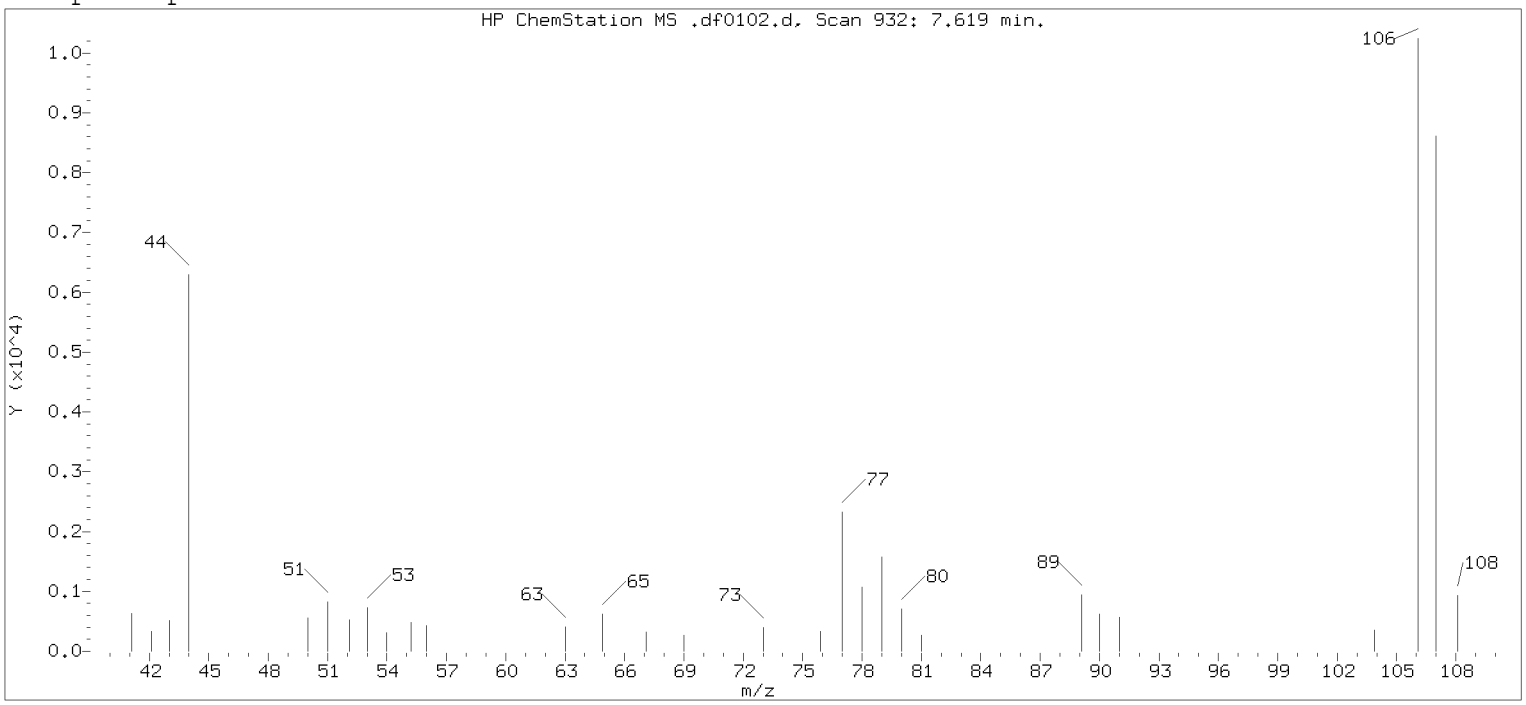
Compound Number : 59
Compound Name : 1,2,3,4-Tetrahydronaphthalene
Scan Number : 931
Retention Time (minutes) : 7.613
Quant Ion : 104.00
Area (flag) : 351M
On-Column Amount (ng/ul) : 0.0963
Integration start scan : 914 Integration stop scan: 946
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

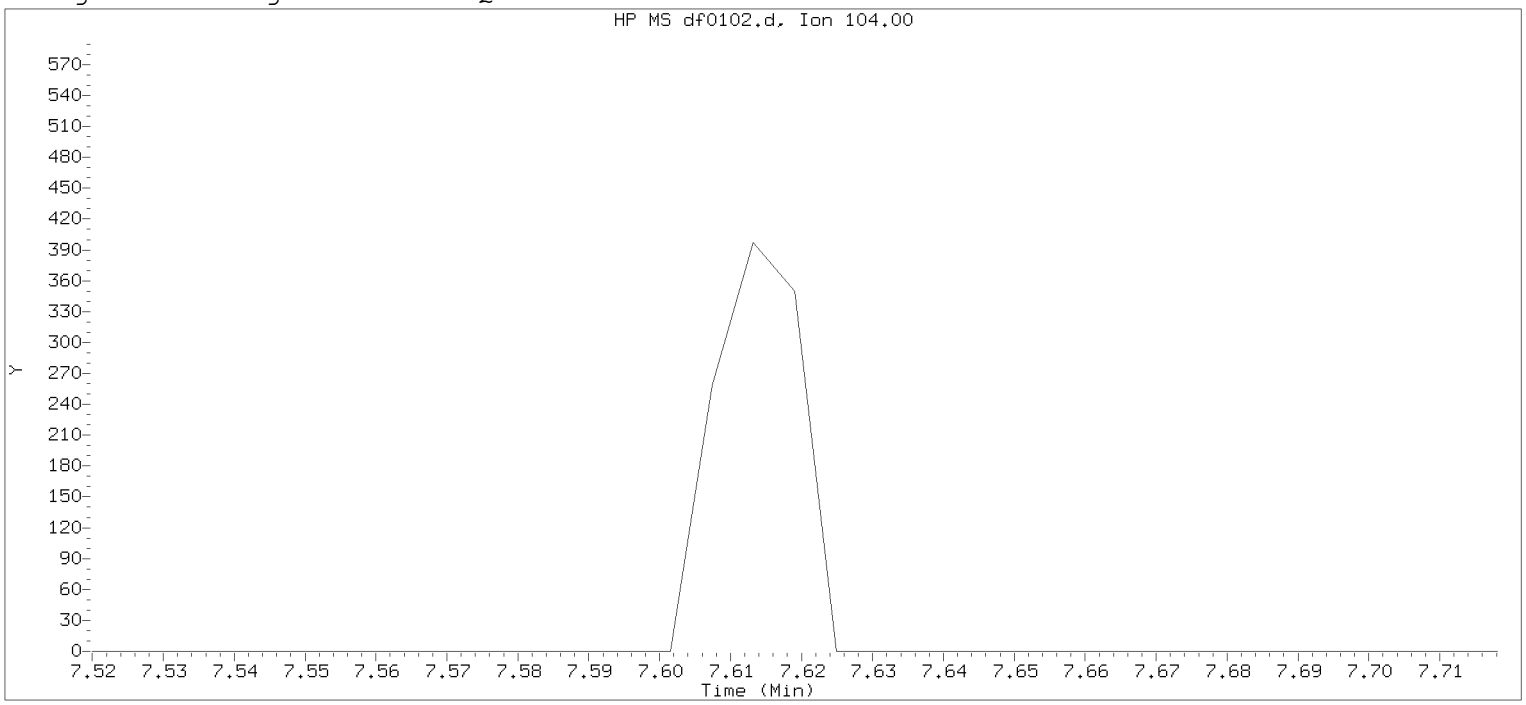
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

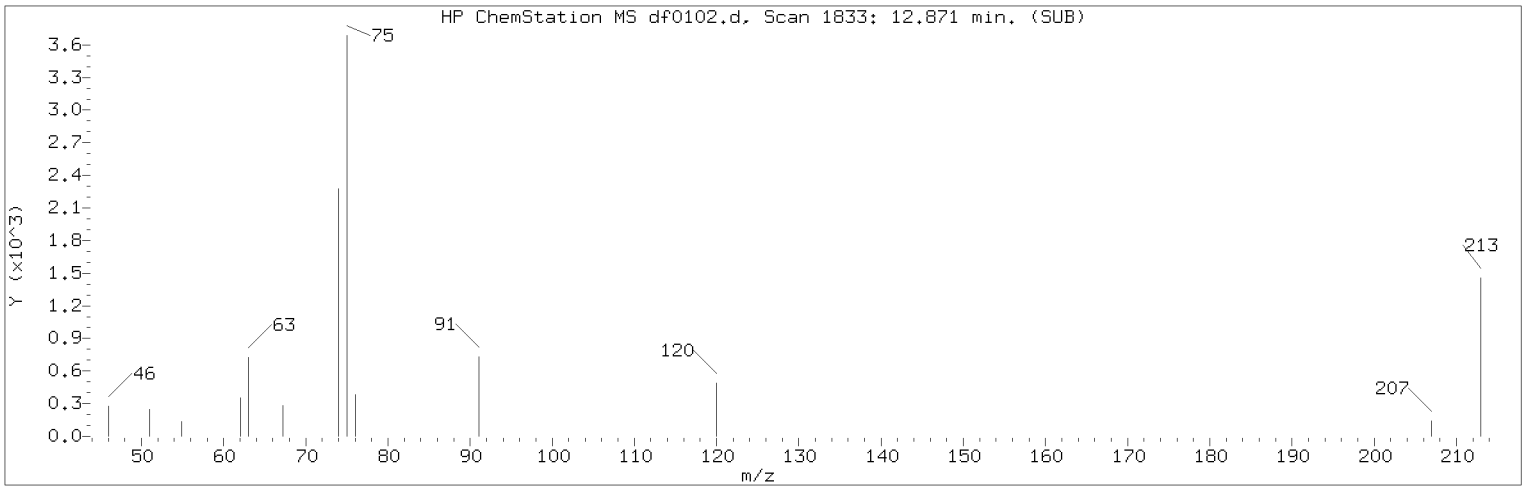
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 01:39
Date, time and analyst ID of latest file update: 05-Jun-2018 01:39 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

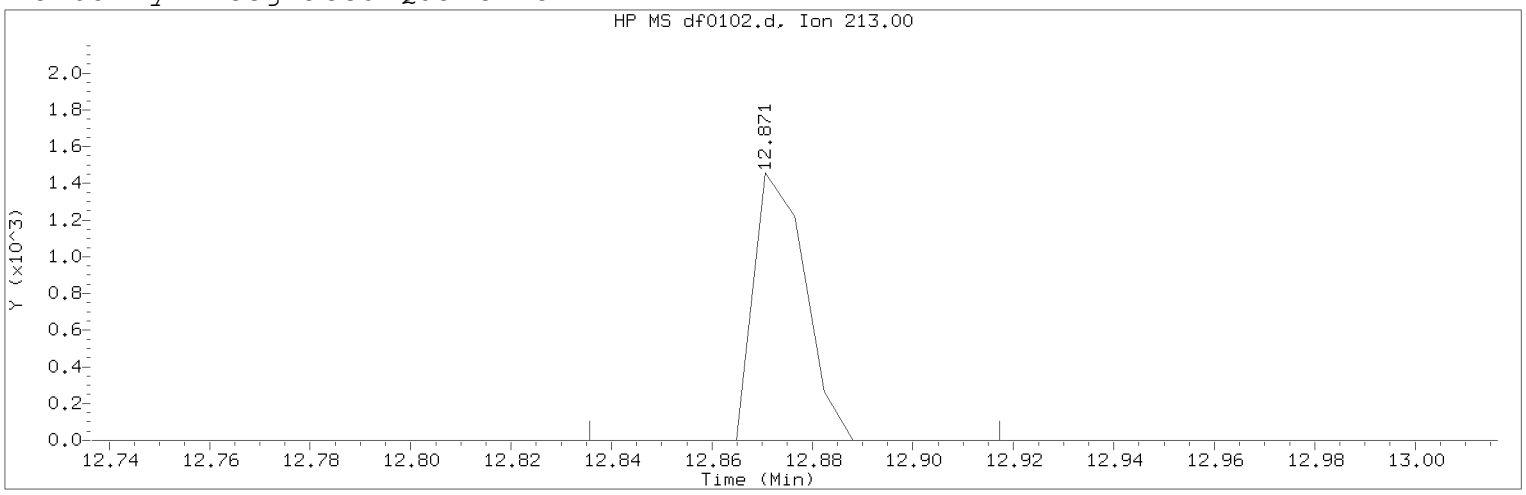
Compound Number : 59
Compound Name : 1,2,3,4-Tetrahydronaphthalene
Expected RT (minutes) : 7.619
Quant Ion : 104.00

Digitally signed by Edward Monborne on 06/05/2018 at 09:30.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

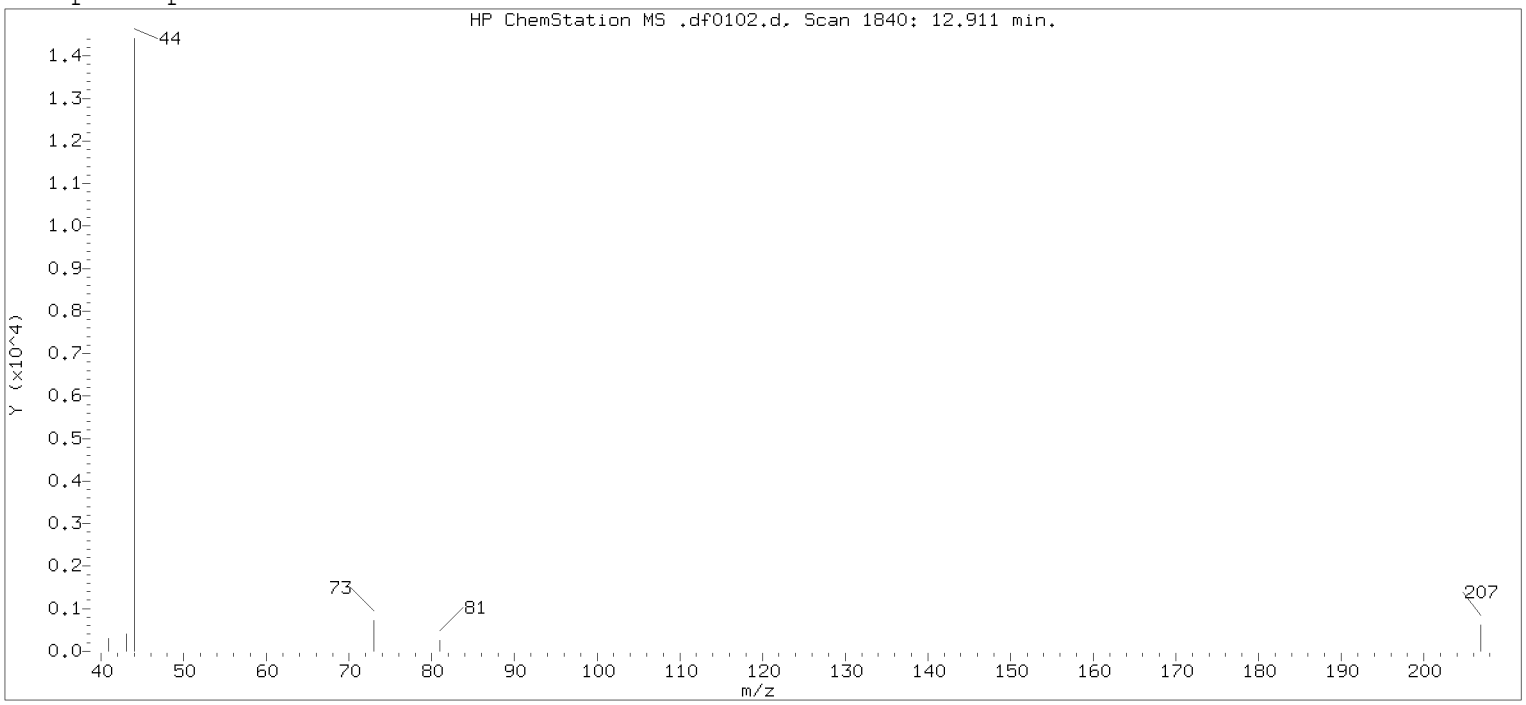
Compound Number : 139
Compound Name : 1,3,5-Trinitrobenzene
Scan Number : 1833
Retention Time (minutes) : 12.871
Quant Ion : 213.00
Area (flag) : 1028M
On-Column Amount (ng/ul) : 0.0671
Integration start scan : 1826 Integration stop scan: 1840
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

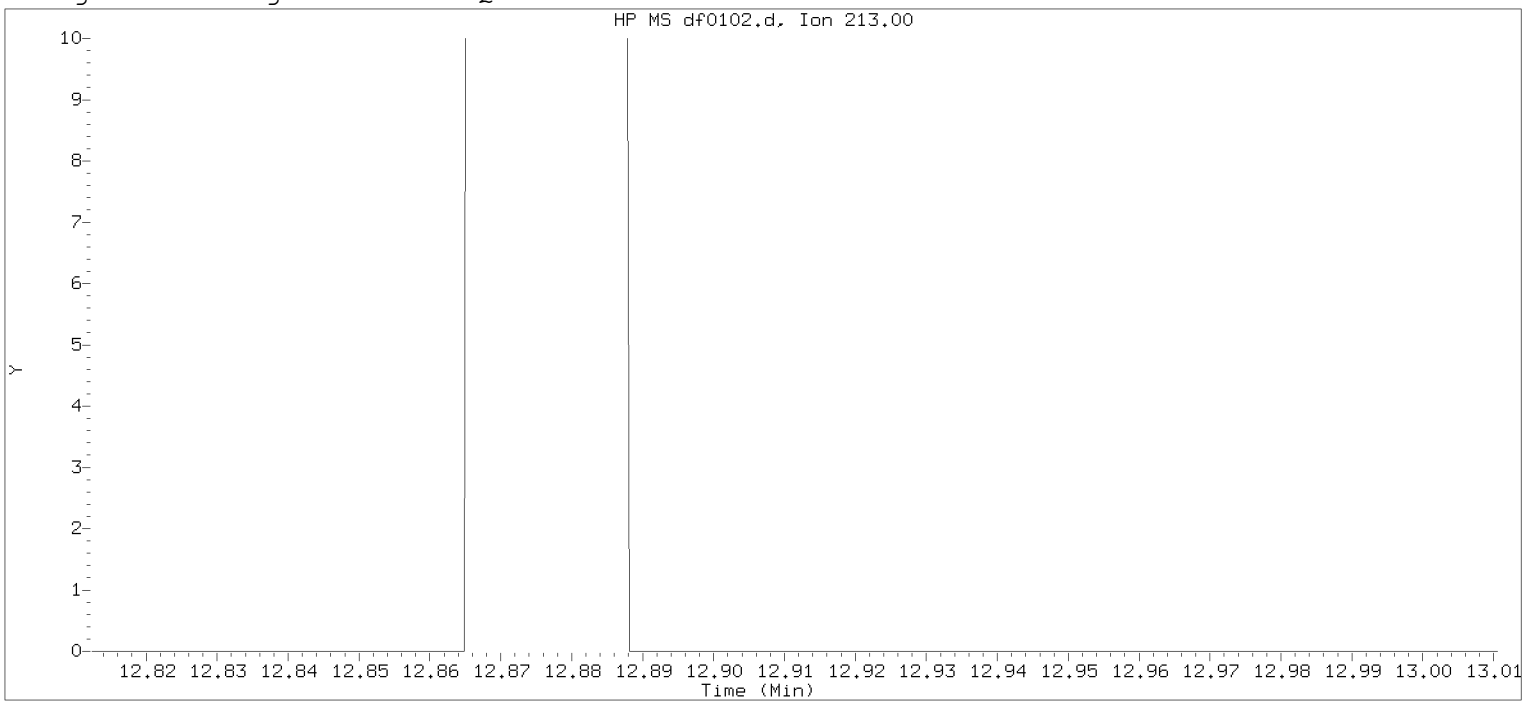
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

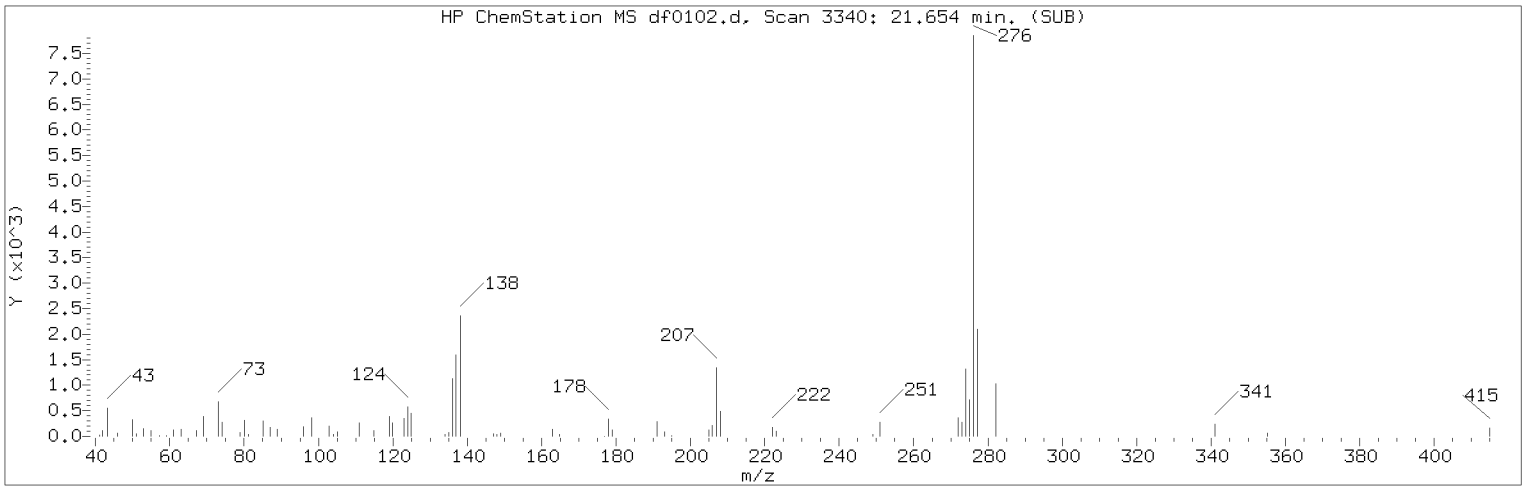
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 01:39
Date, time and analyst ID of latest file update: 05-Jun-2018 01:39 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

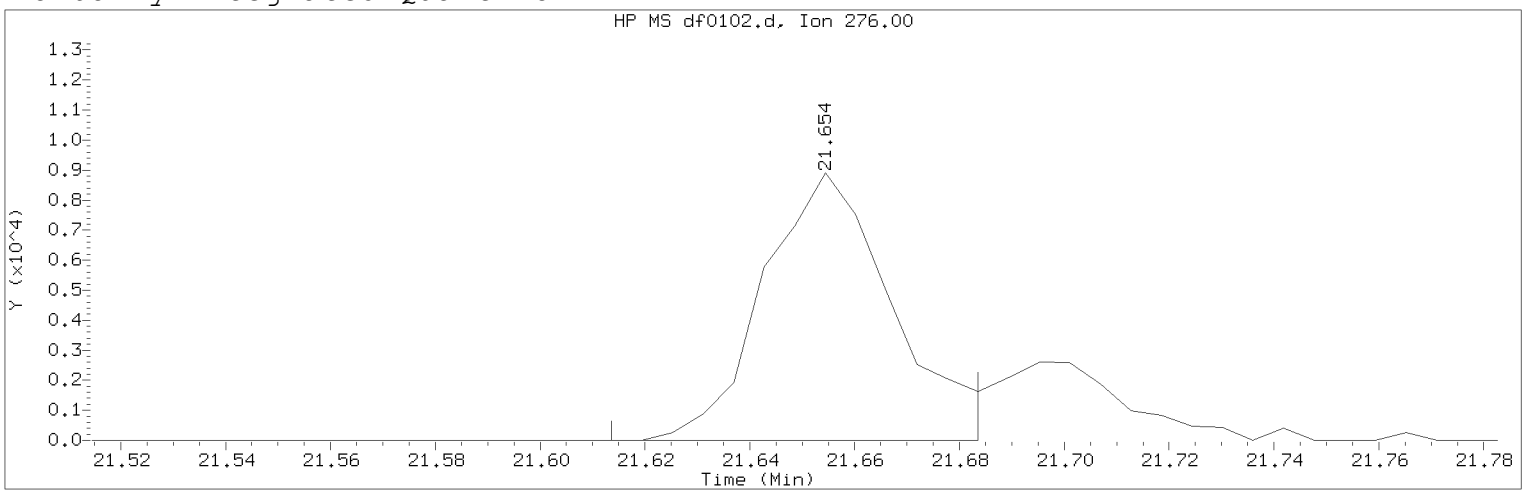
Compound Number : 139
Compound Name : 1,3,5-Trinitrobenzene
Expected RT (minutes) : 12.911
Quant Ion : 213.00

Digitally signed by Edward Monborne on 06/05/2018 at 09:30.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

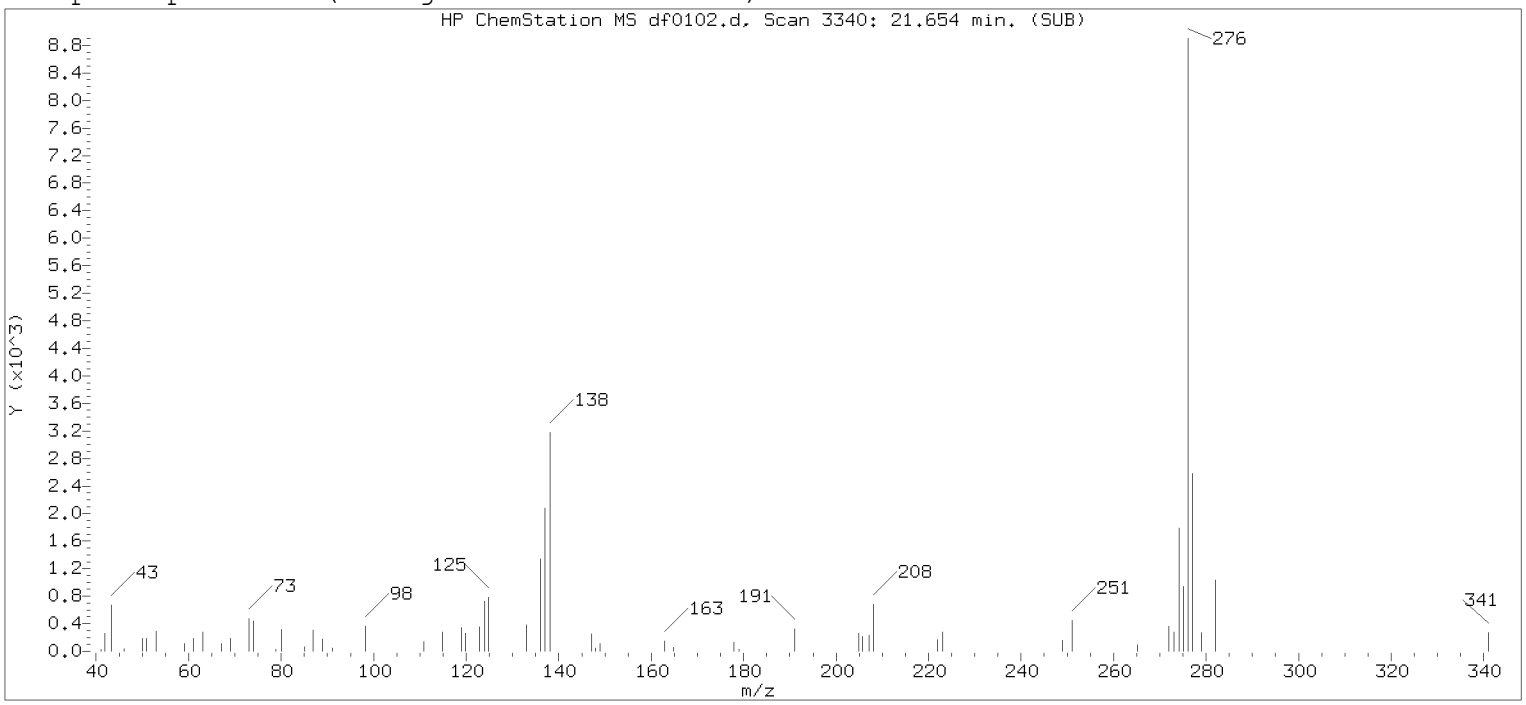
Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3340		
Retention Time (minutes)	: 21.654		
Quant Ion	: 276.00		
Area (flag)	: 15215M		
On-Column Amount (ng/ul)	: 0.1115		
Integration start scan	: 3332	Integration stop scan:	3344
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

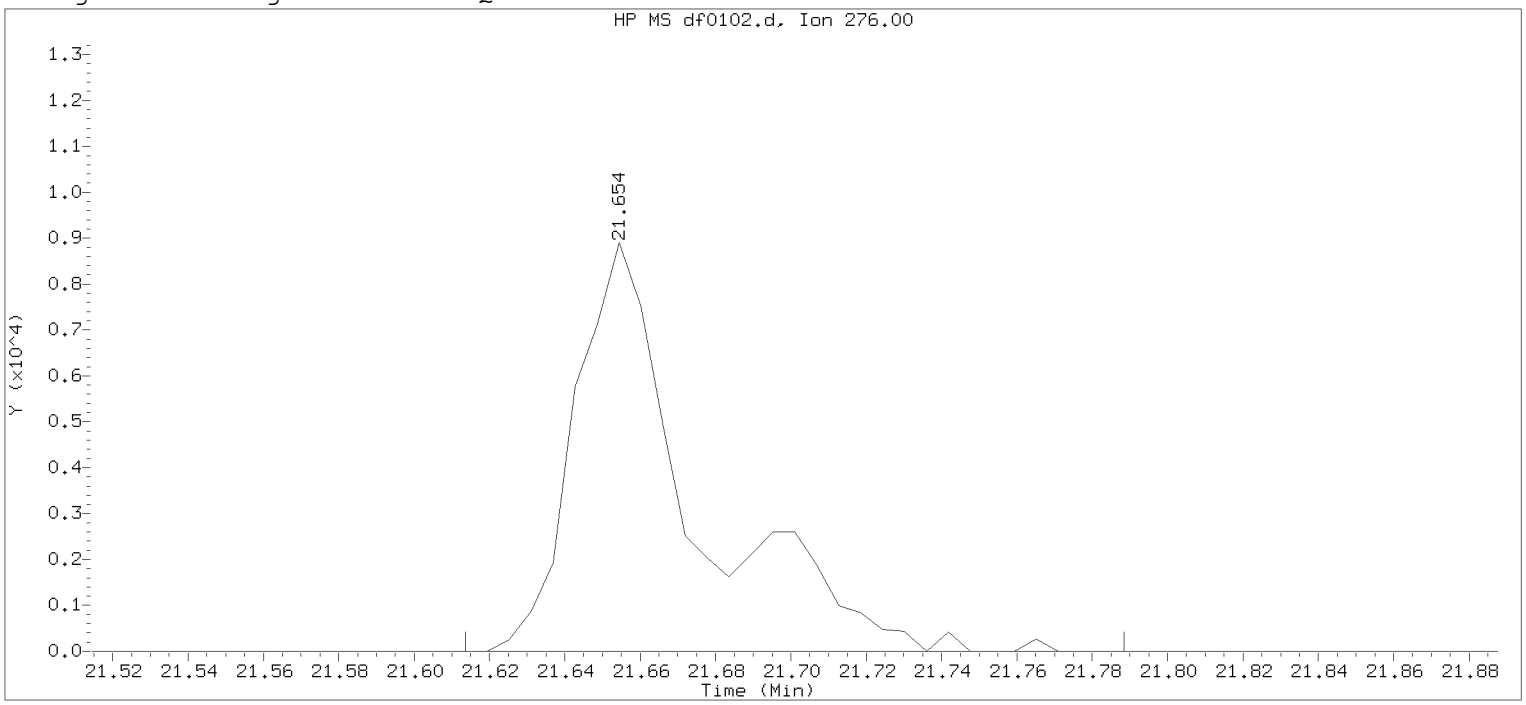
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



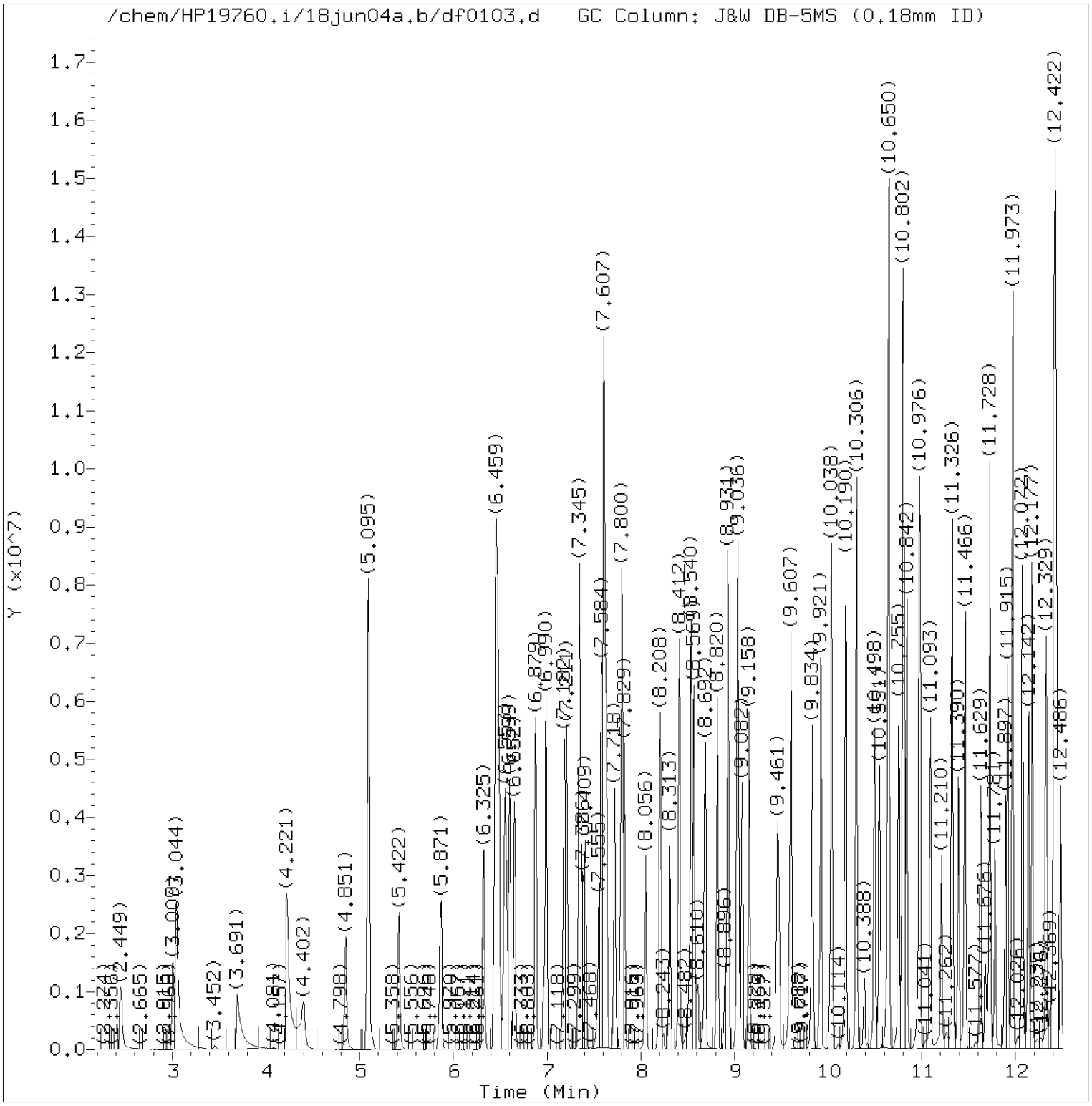
Data File: /chem/HP19760.i/18jun04a.b/df0102.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 01:39
Date, time and analyst ID of latest file update: 05-Jun-2018 01:39 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD1318

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3340		
Retention Time (minutes)	: 21.654		
Quant Ion	: 276.00		
Area	: 19619		
On-column Amount (ng/ul)	: 0.1324		
Integration start scan	: 3332	Integration stop scan:	3362
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:30.
Target 3.5 esignature user email



Total Ion Chromatogram (TIC)

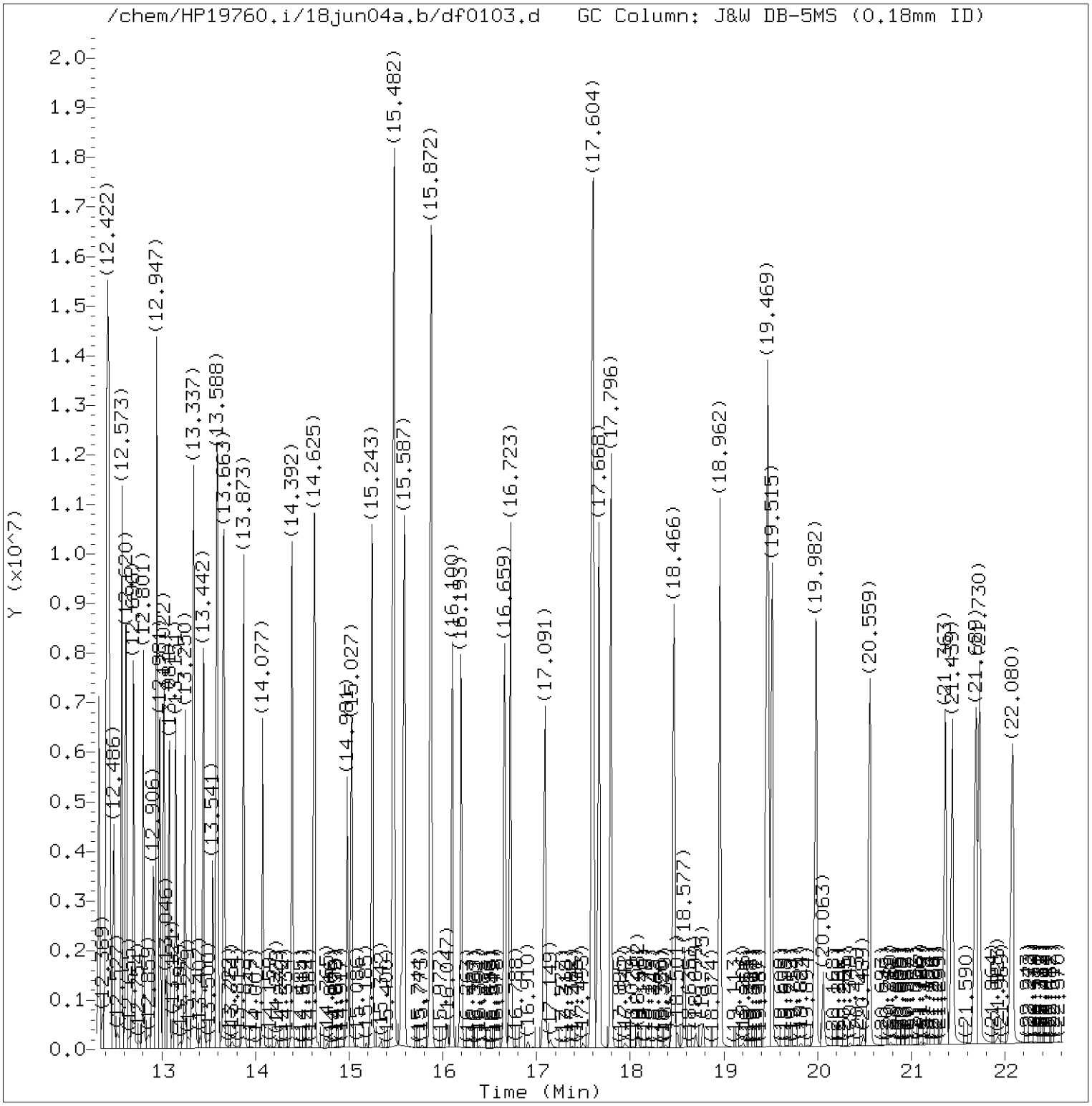
Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD1318

Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD1318

Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.449	88	972268	30.071
4) N-Nitrosodimethylamine	(1)	3.009	74	1476241	30.446
5) Pyridine	(1)	3.044	79	2510877	30.439
7) 2-Picoline	(1)	4.221	93	2595697	29.934
8) N-Nitrosomethylethylamine	(1)	4.402	88	1145156	29.950
9) Methyl methanesulfonate	(1)	4.851	80	1279902	29.816
11)$2-Fluorophenol	(1)	5.095	112	4093253	60.084
13) N-Nitrosodiethylamine	(1)	5.422	102	1091709	29.988
42) Total Cresols	(1)			4106521	60.916
15) Ethyl methanesulfonate	(1)	5.871	109	1045909	29.823
16) Benzaldehyde	(1)	6.325	77	1271679	24.170
17)$Phenol-d6	(1)	6.453	99	5373788	59.648
18) Phenol	(1)	6.471	94	3072288	29.542
19) Aniline	(1)	6.488	93	3597313	29.588
20) a-methylstyrene	(1)	6.564	118	750137	29.931
22) bis(2-Chloroethyl)ether	(1)	6.599	93	2286119	29.498
23) 2-Chlorophenol	(1)	6.652	128	1782118	29.899
24) 1,3-Dichlorobenzene	(1)	6.879	146	1854325	29.672
25)*1,4-Dichlorobenzene-d4	(1)	6.960	152	202589	5.000
26) 1,4-Dichlorobenzene	(1)	6.990	146	1881831	29.936
27) Benzyl alcohol	(1)	7.182	108	1359072	30.211
28) 1,2-Dichlorobenzene	(1)	7.211	146	1763148	29.793
30) Indene	(1)	7.345	115	2878147	29.938
31) 2-Methylphenol	(1)	7.357	108	1913263	29.772
97) Isosafrole	(3)			1451007	30.537
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.409	45	2307203	29.337
34) bis(2-Chloroisopropyl)ether	(1)	7.409	45	2307203	29.337
35) N-Nitrosopyrrolidine	(1)	7.549	100	1150002	30.072
36) Acetophenone	(1)	7.578	105	2830012	29.487
37) 4-Methylphenol	(1)	7.602	108	2193258	31.083
39) N-Nitrosomorpholine	(1)	7.613	56	1184322	29.289
38) N-Nitroso-di-n-propylamine	(1)	7.613	70	1615580	29.679
59) 1,2,3,4-Tetrahydronaphthalene	(2)	7.631	104	92214	29.825
40) o-Toluidine	(1)	7.631	106	3268606	29.657
43) Hexachloroethane	(1)	7.724	117	851126	29.712
44)$Nitrobenzene-d5	(2)	7.800	82	4764513	60.257
45) Nitrobenzene	(2)	7.829	77	2314303	30.010
120) 2,4_2,6-Dinitrotoluenes	(3)			1713041	59.682
48) N-Nitrosopiperidine	(2)	8.056	114	1006905	30.483
50) Isophorone	(2)	8.208	82	4196793	30.370

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
51) 2-Nitrophenol	(2)	8.313	139	935728	30.700
53) 2,4-Dimethylphenol	(2)	8.412	107	2052497	30.476
57) O,O,O-Triethylphosphorothioate	(2)	8.540	198	792588	30.631
55) bis(2-Chloroethoxy)methane	(2)	8.569	93	2571814	29.772
56) Benzoic acid	(2)	8.610	105	1565366M	31.395
60) 2,4-Dichlorophenol	(2)	8.692	162	1370582	30.472
146) Diallate trans/cis	(4)			1954350	29.539
62) 1,2,4-Trichlorobenzene	(2)	8.820	180	1410504	30.278
65)*Naphthalene-d8	(2)	8.896	136	742126	5.000
66) Naphthalene	(2)	8.931	128	5041423	30.224
67) 4-Chloroaniline	(2)	9.036	127	2159624	30.398
68) 2,6-Dichlorophenol	(2)	9.041	162	1345512	30.318
69) Hexachloropropene	(2)	9.082	213	938530	30.725
71) Hexachlorobutadiene	(2)	9.158	225	781435	30.161
75) Quinoline	(2)	9.461	129	3043683	30.241
77) N-Nitrosodi-n-butylamine	(2)	9.607	84	1909256	33.814
76) Caprolactam	(2)	9.613	113	600232A	29.851
80) 4-Chloro-3-methylphenol	(2)	9.834	107	1754659	30.471
82) Safrole	(2)	9.927	162	1277915	30.491
83) 2-Methylnaphthalene	(2)	10.038	142	3276213	31.091
84) 1-Methylnaphthalene	(2)	10.190	142	2964831	30.920
85) Hexachlorocyclopentadiene	(3)	10.306	237	783154	30.460
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.306	216	1383901	30.128
88) cis-Isosafrole	(3)	10.388	162	227819	5.192
90) 2,4,6-Trichlorophenol	(3)	10.498	196	982011	30.832
92) 2,4,5-Trichlorophenol	(3)	10.551	196	930387	29.492
93)$2-Fluorobiphenyl	(3)	10.650	172	6770473	59.528
94) trans-Isosafrole	(3)	10.755	162	1223188	25.346
95) 1,1'-Biphenyl	(3)	10.796	154	3754403	29.549
96) 2-Chloronaphthalene	(3)	10.807	162	3029710	30.127
98) 1-Chloronaphthalene	(3)	10.842	162	2546821	29.305
99) Diphenyl ether	(3)	10.976	170	2056649	29.973
100) 2-Nitroaniline	(3)	10.982	138	1049063	30.407
104) 1,4-Naphthoquinone	(3)	11.093	158	1177668	29.849
105) 1,4-Dinitrobenzene	(3)	11.210	168	555528	30.352
106) Dimethylphthalate	(3)	11.326	163	2954912	29.212
107) 1,3-Dinitrobenzene	(3)	11.332	168	604178	29.928
108) 2,6-Dinitrotoluene	(3)	11.396	165	732644	29.707
109) Acenaphthylene	(3)	11.466	152	4426245	31.284
112) 3-Nitroaniline	(3)	11.629	138	876658	30.353

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
113)*Acenaphthene-d10	(3)	11.676	164	349473	5.000
114) Acenaphthene	(3)	11.728	153	2901994	30.269
115) 2,4-Dinitrophenol	(3)	11.781	184	561573	31.952
116) 4-Nitrophenol	(3)	11.897	109	655854	31.977
117) Pentachlorobenzene	(3)	11.915	250	1151689	30.097
119) Dibenzofuran	(3)	11.973	168	4031022	29.668
118) 2,4-Dinitrotoluene	(3)	11.973	165	980397	29.942
121) 1-Naphthylamine	(3)	12.072	143	3113450	30.304
122) 2,3,4,6-Tetrachlorophenol	(3)	12.142	232	789124	30.767
123) 2-Naphthylamine	(3)	12.177	143	2985627	30.007
124) Diethylphthalate	(3)	12.329	149	3102524	29.822
126) Fluorene	(3)	12.410	166	3182329	29.767
125) Thionazin	(3)	12.422	107	717957	29.954
127) 4-Chlorophenyl-phenylether	(3)	12.428	204	1470449	29.100
128) 5-Nitro-o-toluidine	(3)	12.434	152	1020872	30.228
129) 4-Nitroaniline	(3)	12.445	138	933406A	29.405
130) 4,6-Dinitro-2-methylphenol	(4)	12.486	198	648627	30.962
132) NDPA as diphenylamine	(4)	12.573	169	2737267	29.696
131) N-Nitrosodiphenylamine	(4)	12.573	169	2737267	29.696
134) 1,2-Diphenylhydrazine	(4)	12.614	77	4141457	29.255
135)$2,4,6-Tribromophenol	(3)	12.702	330	789174	60.928
137) Tetraethyldithiopyrophosphate	(4)	12.801	97	689071	29.852
139) 1,3,5-Trinitrobenzene	(4)	12.912	213	468488	32.139
140) Diallate (peak 1)	(4)	12.941	86	1674722	24.458
141) Phorate	(4)	12.952	75	2592331	29.491
142) Phenacetin	(4)	12.981	108	2140091	30.315
143) 4-Bromophenyl-phenylether	(4)	13.022	248	836987	29.634
144) Diallate (peak 2)	(4)	13.046	86	279628	5.095
145) Hexachlorobenzene	(4)	13.081	284	816392	30.053
147) Dimethoate	(4)	13.151	87	1751115	29.682
148) Atrazine	(4)	13.250	200	757150	28.386
149) Pentachlorophenol	(4)	13.331	266	616080	30.711
150) 4-Aminobiphenyl	(4)	13.337	169	3175660	29.749
151) Pentachloronitrobenzene	(4)	13.349	237	378344	30.286
152) Pronamide	(4)	13.442	173	1485419	30.419
153)*Phenanthrene-d10	(4)	13.559	188	664650	5.000
154) Dinoseb	(4)	13.582	211	985315	32.103
155) Phenanthrene	(4)	13.593	178	4744479	30.308
157) Anthracene	(4)	13.663	178	4816841	31.683
163) Carbazole	(4)	13.873	167	4649044	30.241

A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

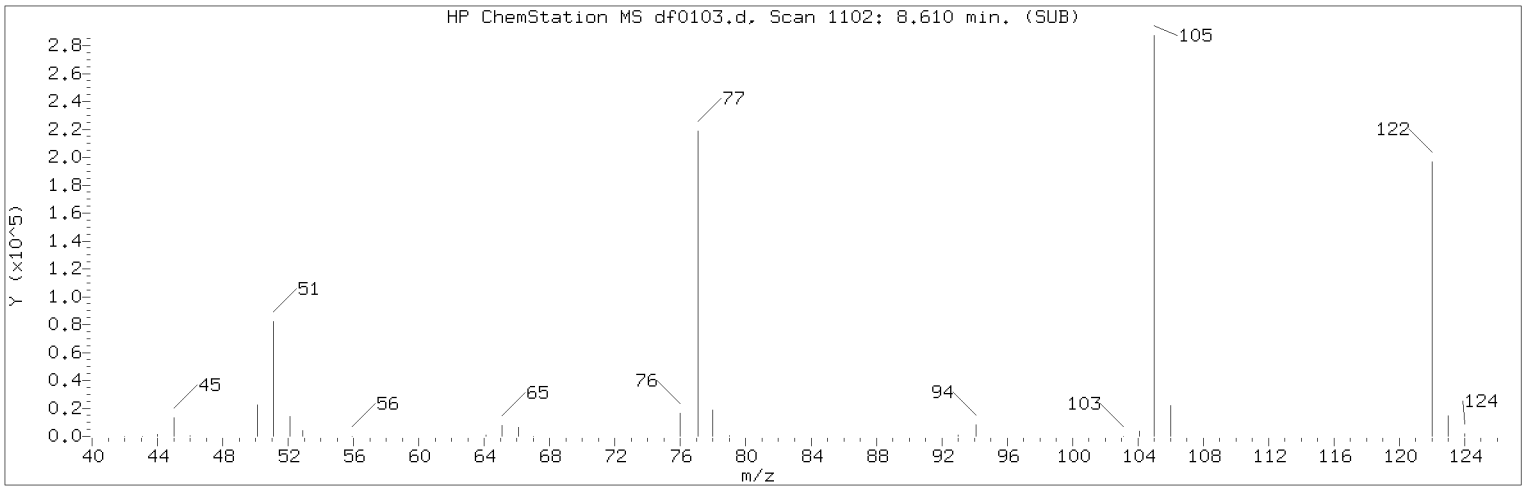
Sample Name: SSTD30 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
164) Methyl parathion	(4)	14.077	109	1373332	30.597
165) Di-n-butylphthalate	(4)	14.392	149	5860622	30.268
167) Parathion	(4)	14.625	109	940299	31.305
168) 4-Nitroquinoline-1-oxide	(4)	14.637	190	723301	33.860
169) Octachlorostyrene	(4)	14.981	308	323576	30.201
222) Total PAHs	(6)			83708829	540.929
171) Isodrin	(4)	15.027	193	553234	30.425
173) Fluoranthene	(4)	15.243	202	5573734	32.395
174) Benzidine	(5)	15.482	184	11093552	87.902
175)*Pyrene-d10	(5)	15.552	212	698458	5.000
177) Pyrene	(5)	15.587	202	5788129	30.122
179)$Terphenyl-d14	(5)	15.872	244	7464404	59.819
182) p-Dimethylaminoazobenzene	(5)	16.100	225	1129176	31.621
185) Chlorobenzilate	(5)	16.193	139	1873577	30.700
187) 3,3'-Dimethylbenzidine	(5)	16.659	212	3793330	29.525
188) Butylbenzylphthalate	(5)	16.723	149	2974707	30.346
191) 2-Acetylaminofluorene	(5)	17.091	181	2595702	31.469
193) 3,3'-Dichlorobenzidine	(5)	17.592	252	2018852	30.328
195) Benzo(a)anthracene	(5)	17.604	228	5602120	33.125
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.609	231	1174658	30.229
196) Chrysene	(5)	17.668	228	5314338	31.638
199) bis(2-Ethylhexyl)phthalate	(5)	17.796	149	4163622	30.498
203) 6-Methylchrysene	(5)	18.466	242	3914607	30.797
205) Di-n-octylphthalate	(6)	18.962	149	7494864	30.712
206) Benzo(b)fluoranthene	(6)	19.463	252	5553179	31.809
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.469	256	2583337	30.956
208) Benzo(k)fluoranthene	(6)	19.515	252	5403481	31.729
211) Benzo(a)pyrene	(6)	19.988	252	5211927	33.512
213)*Perylene-d12	(6)	20.063	264	712280	5.000
215) 3-Methylcholanthrene	(6)	20.559	268	2722177	31.121
217) Dibenz(a,h)acridine	(6)	21.363	279	4135431	30.347
218) Dibenz(a,j)acridine	(6)	21.439	279	4208009	29.572
219) Indeno(1,2,3-cd)pyrene	(6)	21.689	276	4670269M	32.166
220) Dibenz(a,h)anthracene	(6)	21.730	278	4781229	31.044
221) Benzo(g,h,i)perylene	(6)	22.080	276	4456068	29.041

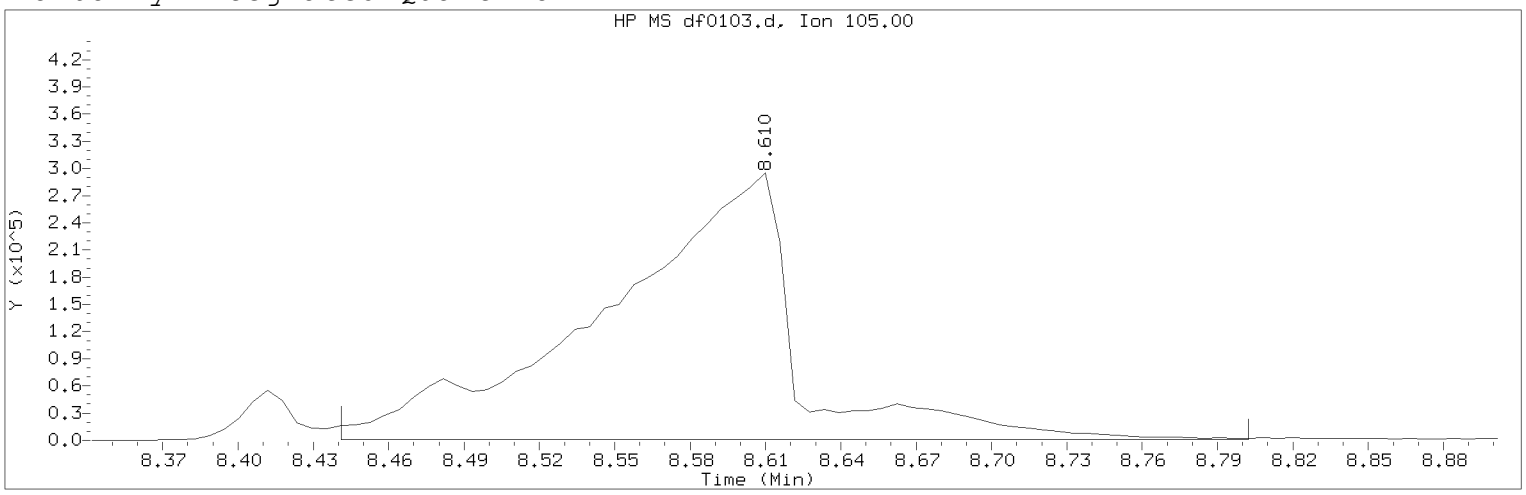
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD1318

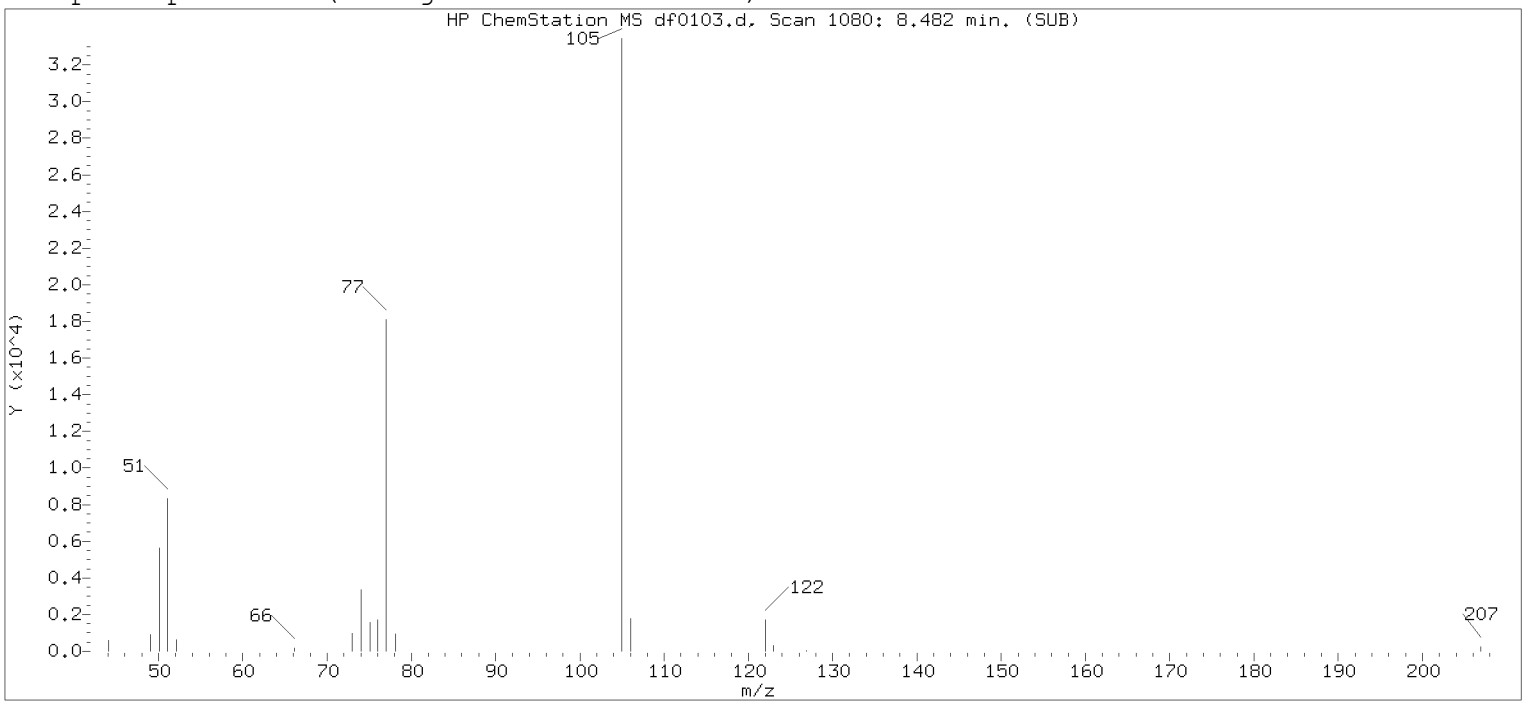
Compound Number : 56
Compound Name : Benzoic acid
Scan Number : 1102
Retention Time (minutes) : 8.610
Quant Ion : 105.00
Area (flag) : 1565366M
On-Column Amount (ng/ul) : 31.3949
Integration start scan : 1072 Integration stop scan: 1134
Y at integration start : 876 Y at integration end: 876

Reason for manual integration: improper integration

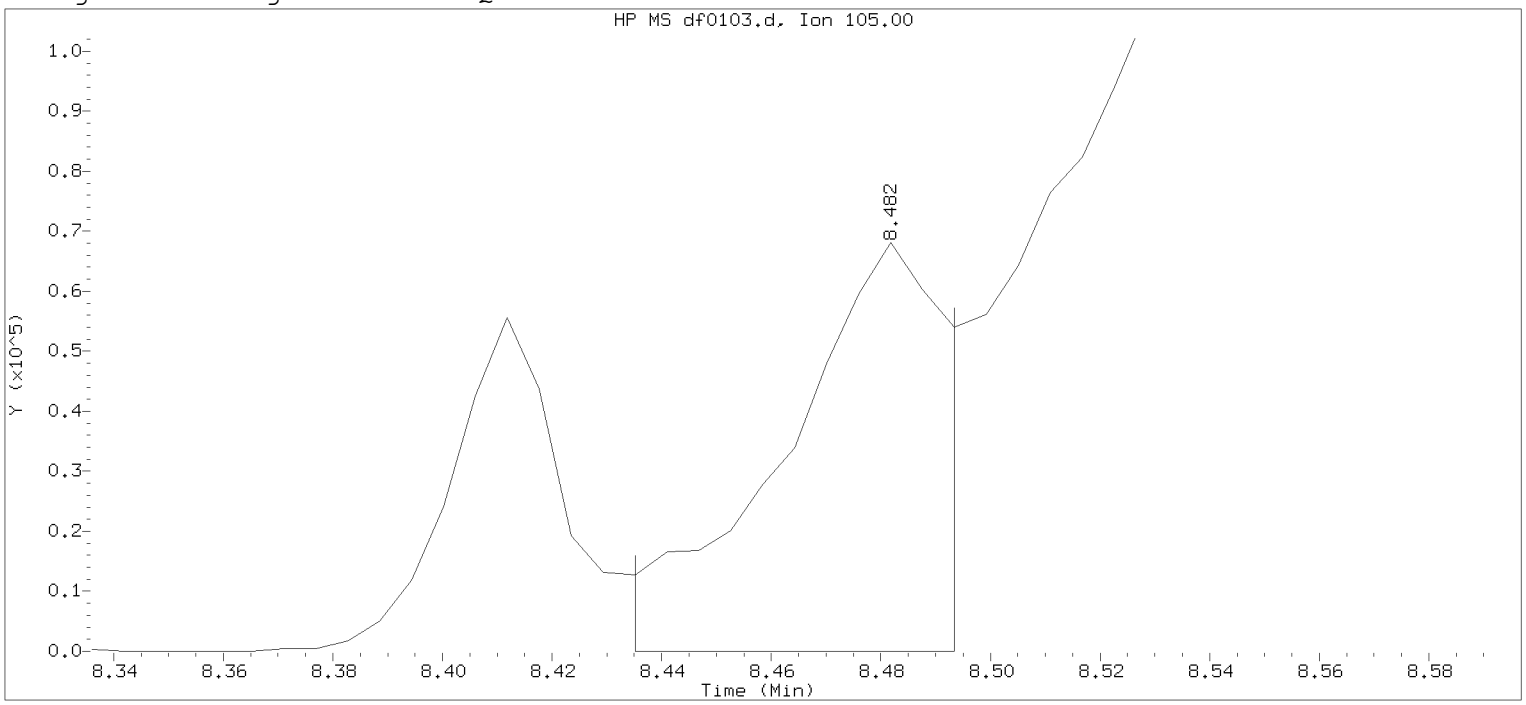
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

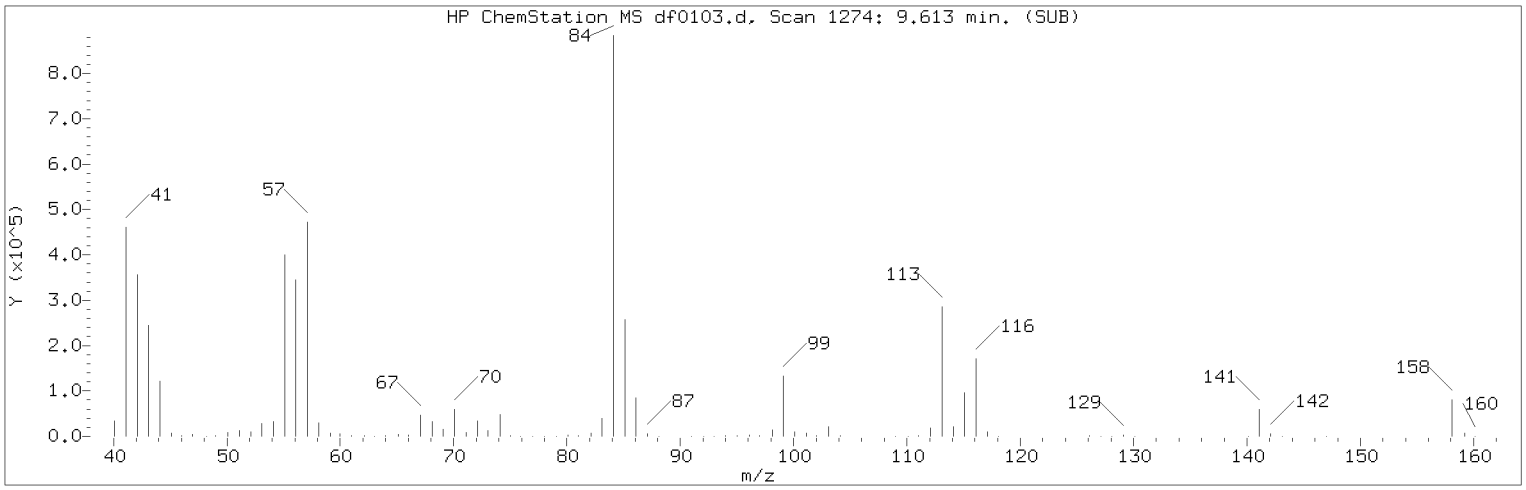
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 02:07
Date, time and analyst ID of latest file update: 05-Jun-2018 02:07 Automation

Sample Name: SSTD30 Lab Sample ID: rvSTD1318

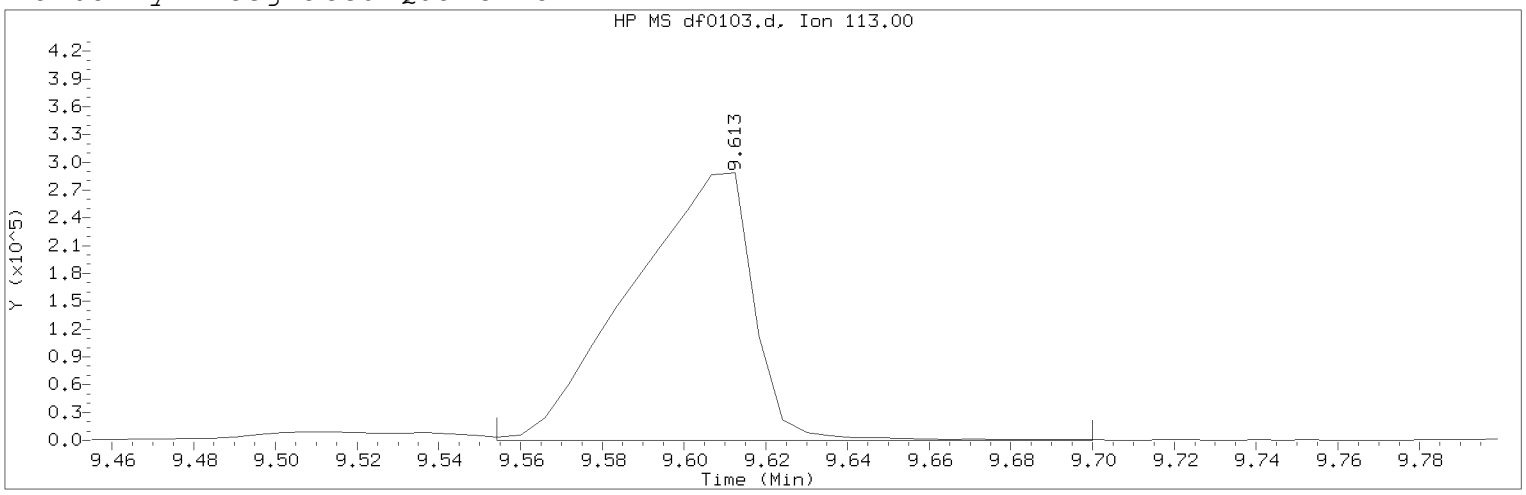
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1080		
Retention Time (minutes)	: 8.482		
Quant Ion	: 105.00		
Area	: 134448		
On-column Amount (ng/ul)	: 4.6436		
Integration start scan	: 1071	Integration stop scan	: 1081
Y at integration start	: 0	Y at integration end	: 0

Digitally signed by Edward Monborne on 06/05/2018 at 09:30.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD1318

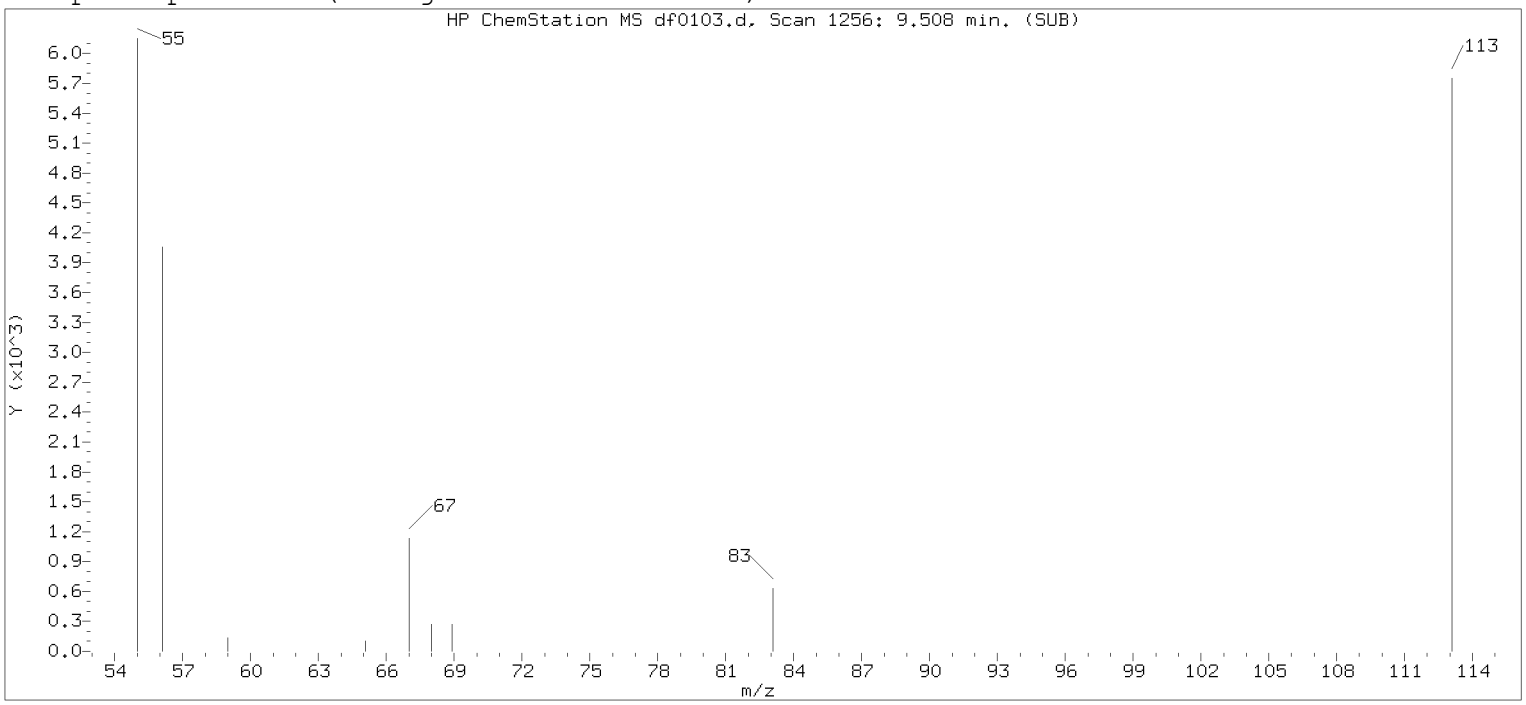
Compound Number : 76
Compound Name : Caprolactam
Scan Number : 1274
Retention Time (minutes) : 9.613
Quant Ion : 113.00
Area (flag) : 600232A
On-Column Amount (ng/ul) : 29.8510
Integration start scan : 1263 Integration stop scan: 1288
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

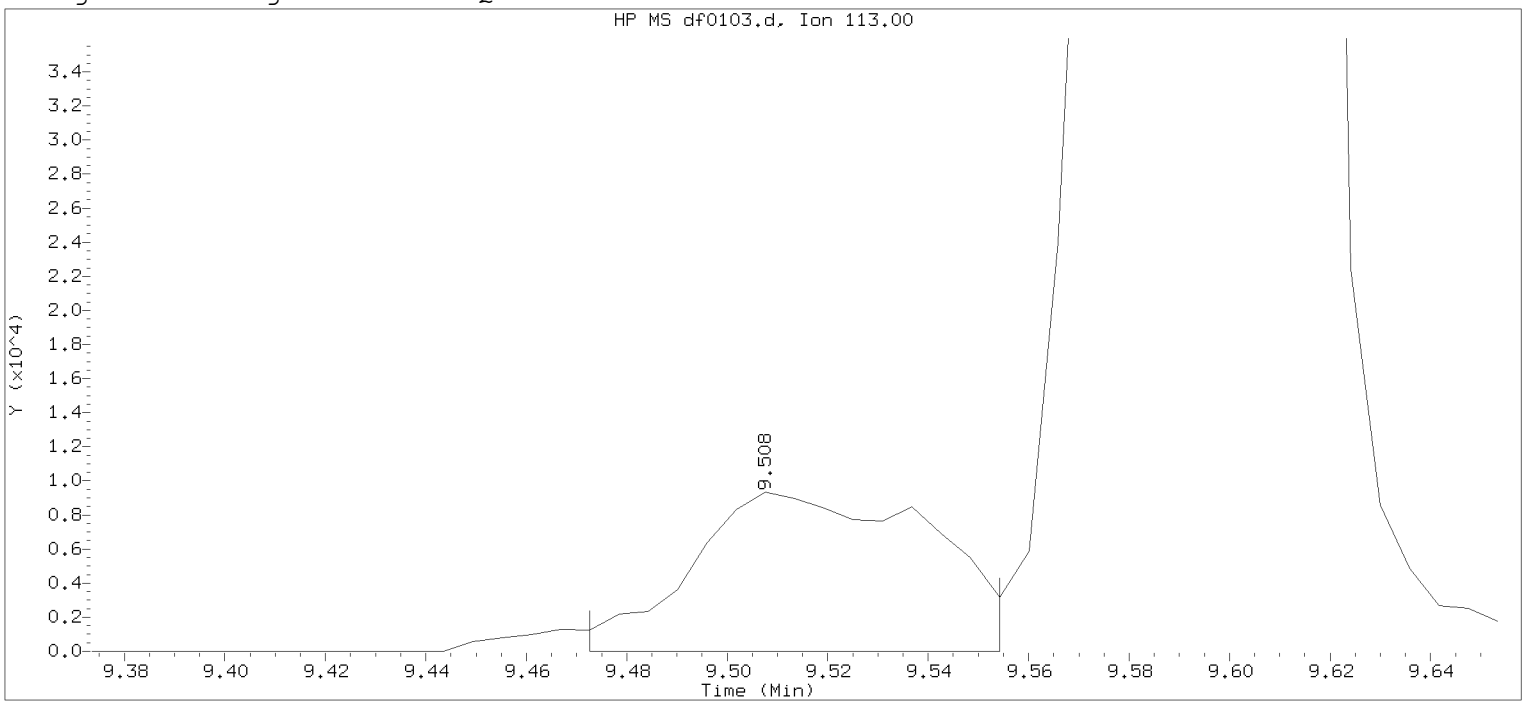
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 02:07
Date, time and analyst ID of latest file update: 05-Jun-2018 02:07 Automation

Sample Name: SSTD30 Lab Sample ID: rvSTD1318

Compound Number	: 76		
Compound Name	: Caprolactam		
Scan Number	: 1256		
Retention Time (minutes)	: 9.508		
Quant Ion	: 113.00		
Area	: 30760		
On-column Amount (ng/ul)	: 1.8724		
Integration start scan	: 1249	Integration stop scan:	1263
Y at integration start	: 0	Y at integration end:	0

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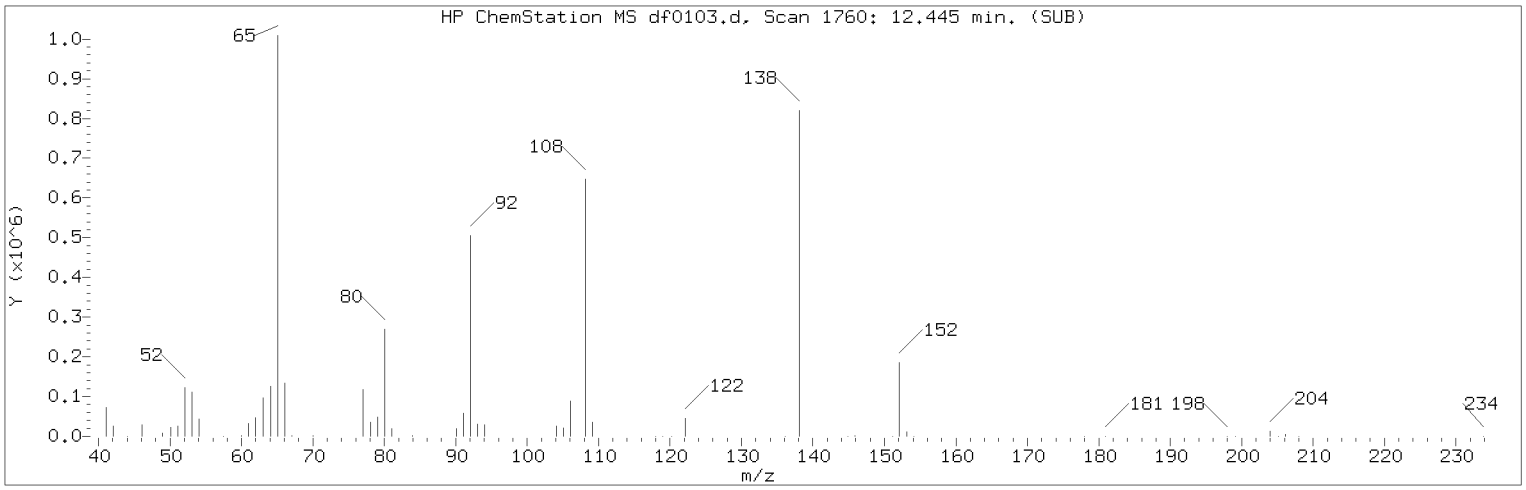
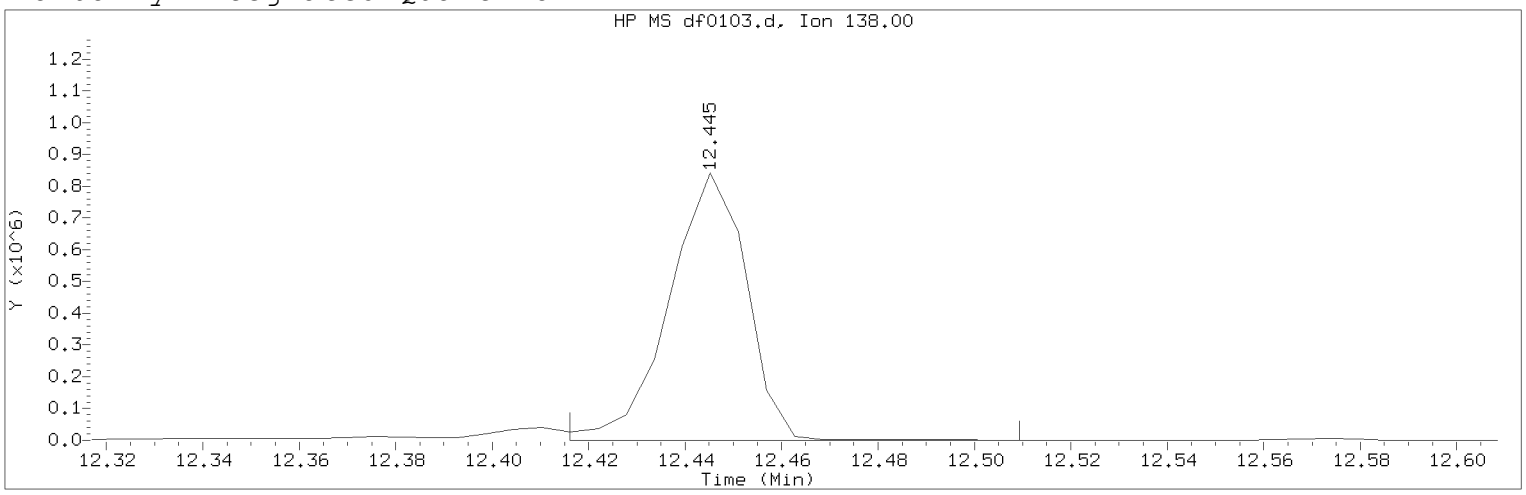
Target 3.5 esignature user email 40

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD1318

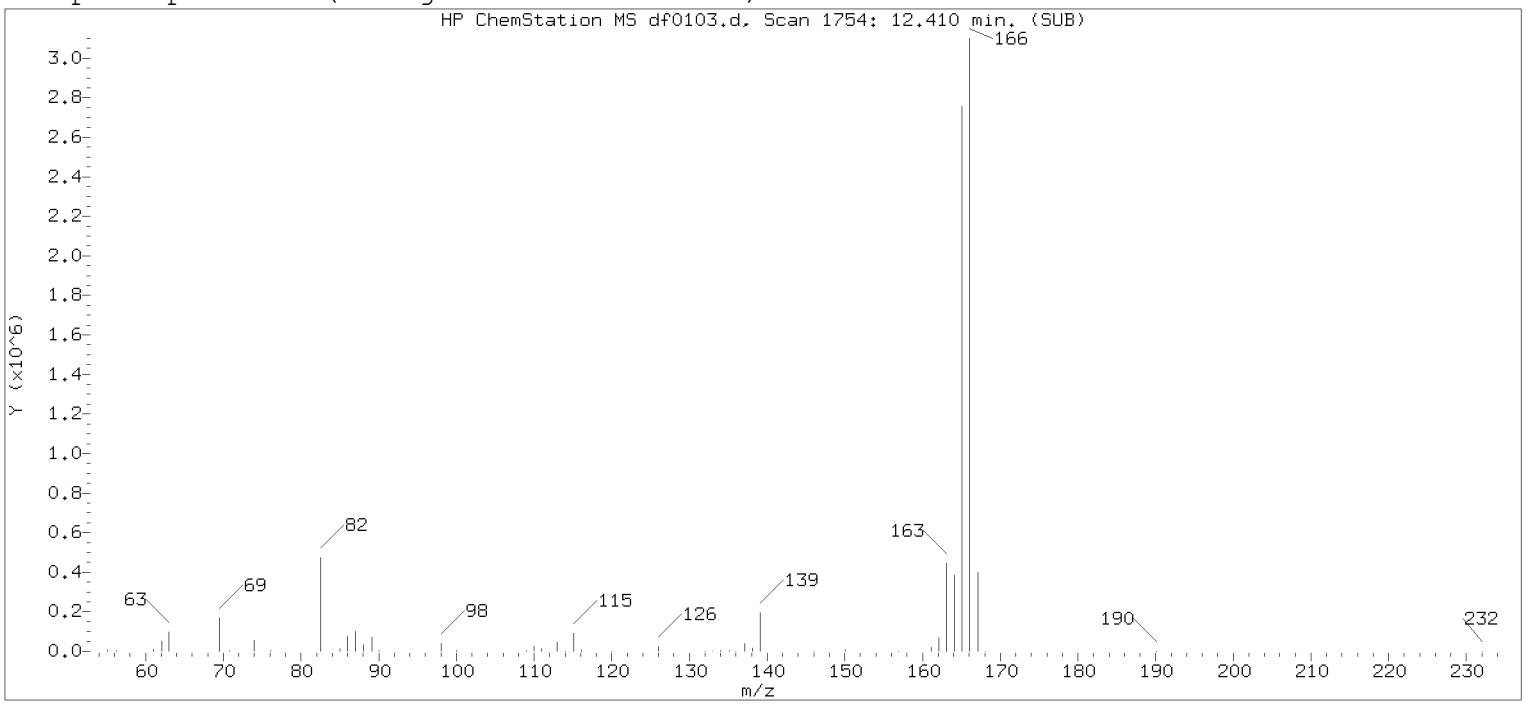
Compound Number : 129
Compound Name : 4-Nitroaniline
Scan Number : 1760
Retention Time (minutes) : 12.445
Quant Ion : 138.00
Area (flag) : 933406A
On-Column Amount (ng/ul) : 29.4055
Integration start scan : 1754 Integration stop scan: 1770
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

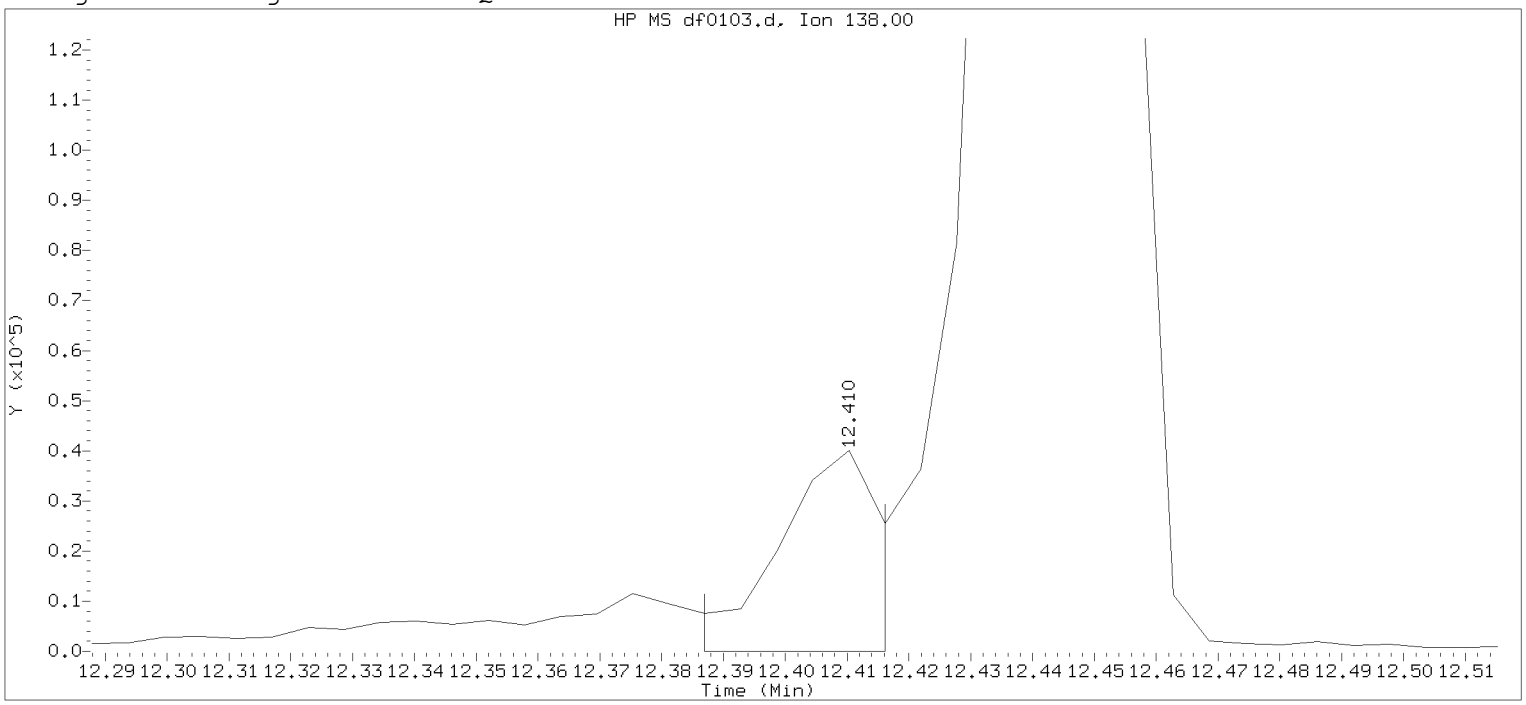
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

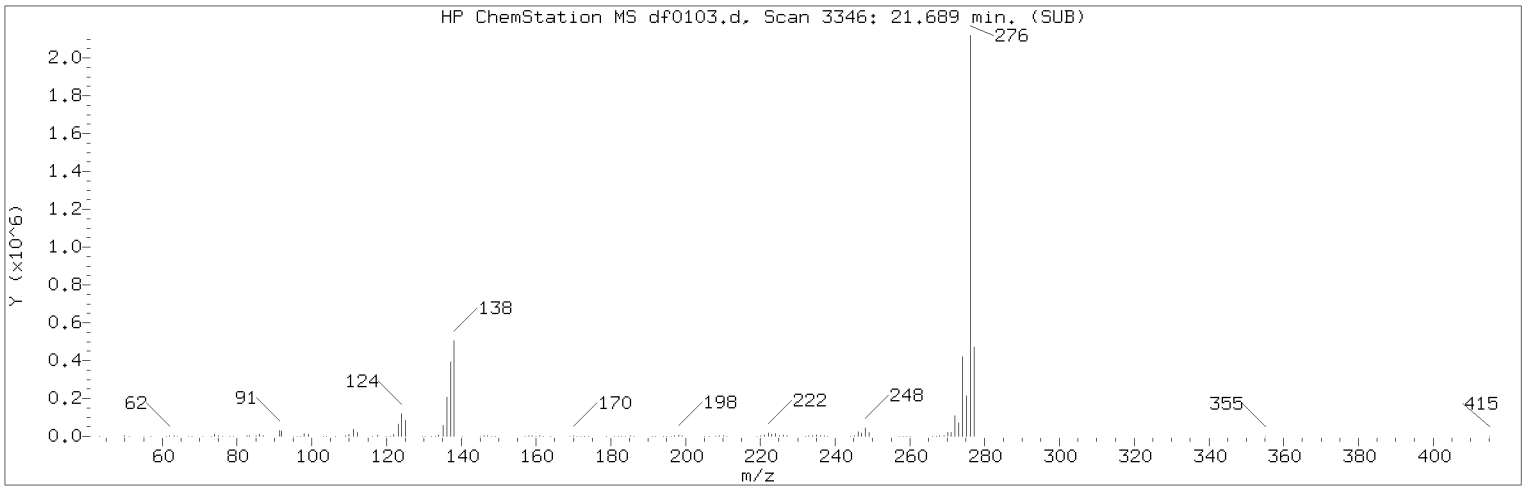
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 02:07
Date, time and analyst ID of latest file update: 05-Jun-2018 02:07 Automation

Sample Name: SSTD30 Lab Sample ID: rvSTD1318

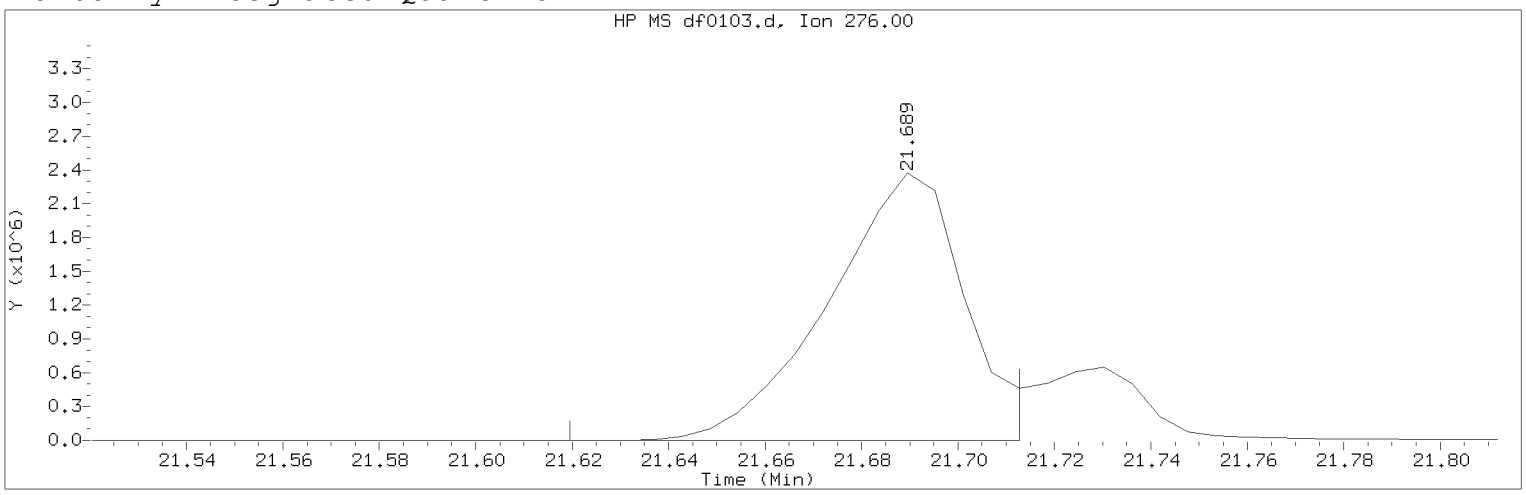
Compound Number	: 129		
Compound Name	: 4-Nitroaniline		
Scan Number	: 1754		
Retention Time (minutes)	: 12.410		
Quant Ion	: 138.00		
Area	: 41784		
On-column Amount (ng/ul)	: 1.7729		
Integration start scan	: 1749	Integration stop scan:	1754
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:30.
Target 3.5 esignature user name: EMONB

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD30 Lab Sample ID: rvSTD1318

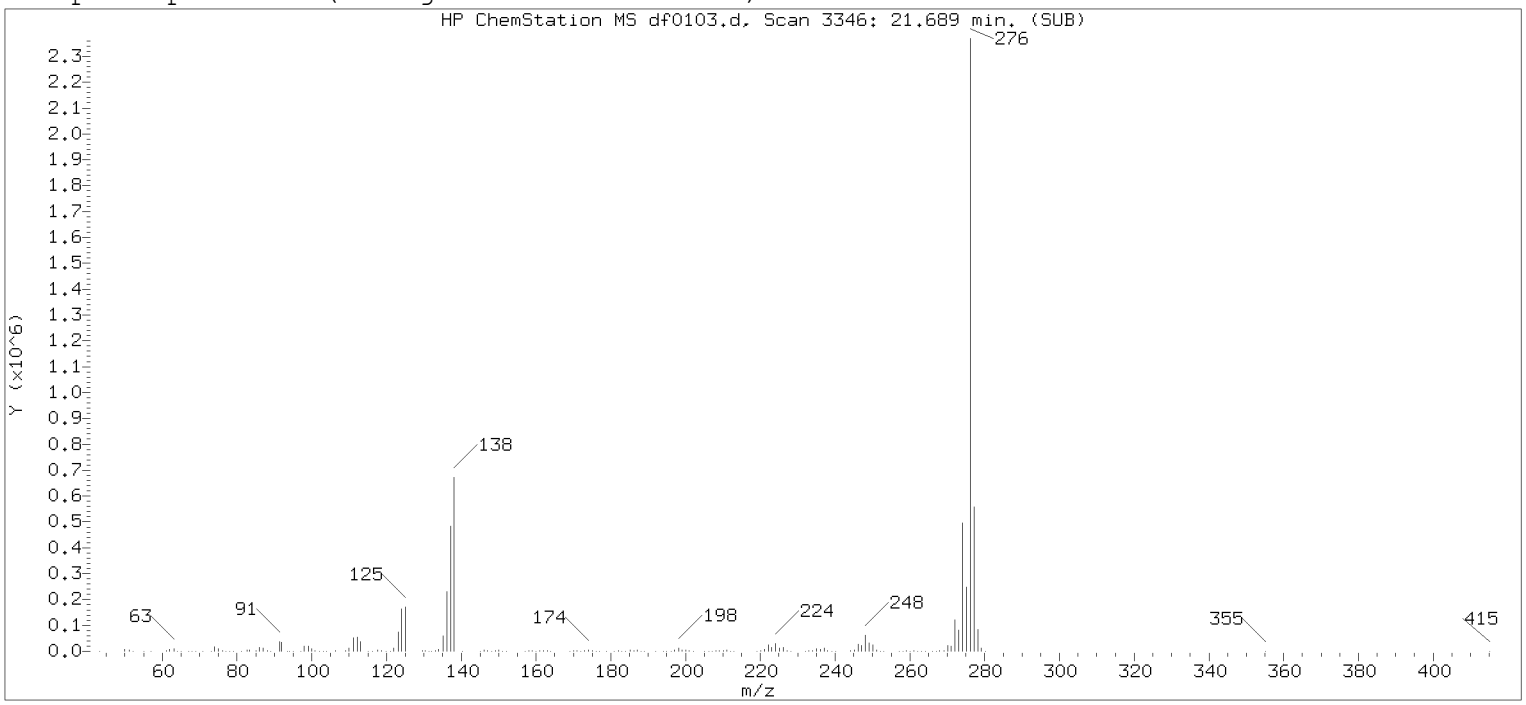
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3346
Retention Time (minutes) : 21.689
Quant Ion : 276.00
Area (flag) : 4670269M
On-Column Amount (ng/ul) : 32.1660
Integration start scan : 3333 Integration stop scan: 3349
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

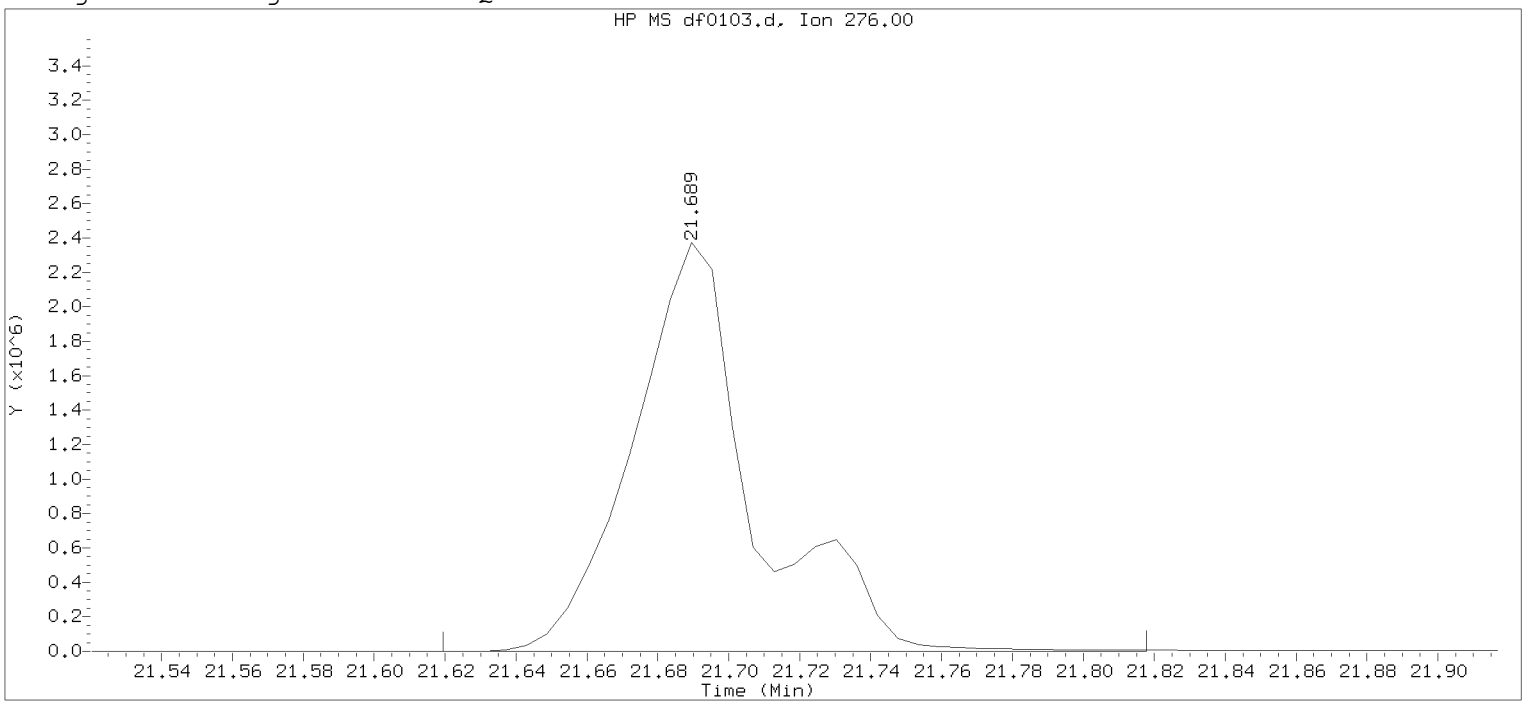
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:30.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



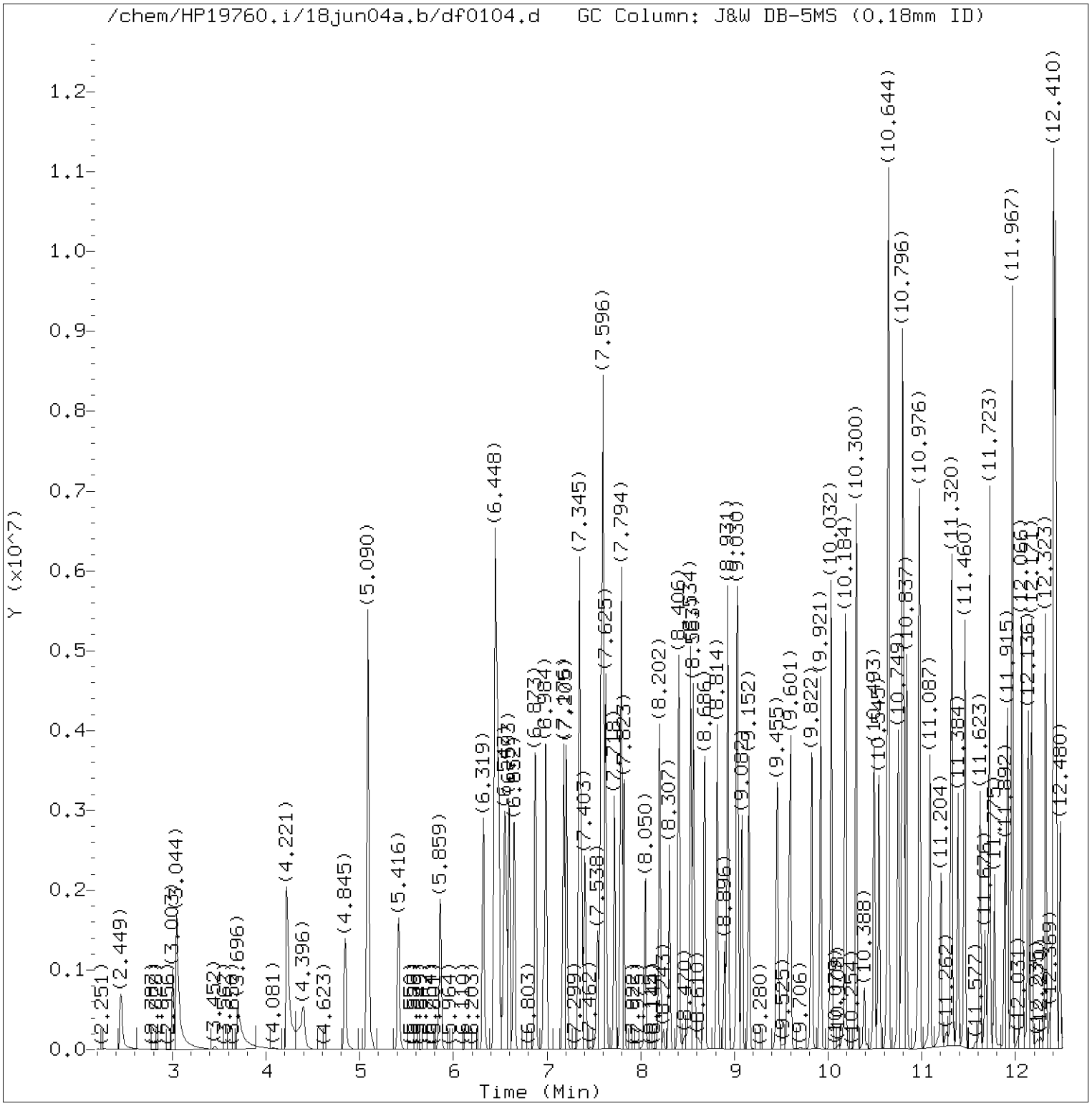
Data File: /chem/HP19760.i/18jun04a.b/df0103.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 01:41 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 02:07
Date, time and analyst ID of latest file update: 05-Jun-2018 02:07 Automation

Sample Name: SSTD30 Lab Sample ID: rvSTD1318

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3346		
Retention Time (minutes)	: 21.689		
Quant Ion	: 276.00		
Area	: 5619650		
On-column Amount (ng/ul)	: 36.1723		
Integration start scan	: 3333	Integration stop scan:	3367
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:30.
Target 3.5 esignature user email: [redacted]



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0104.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:09 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD1318

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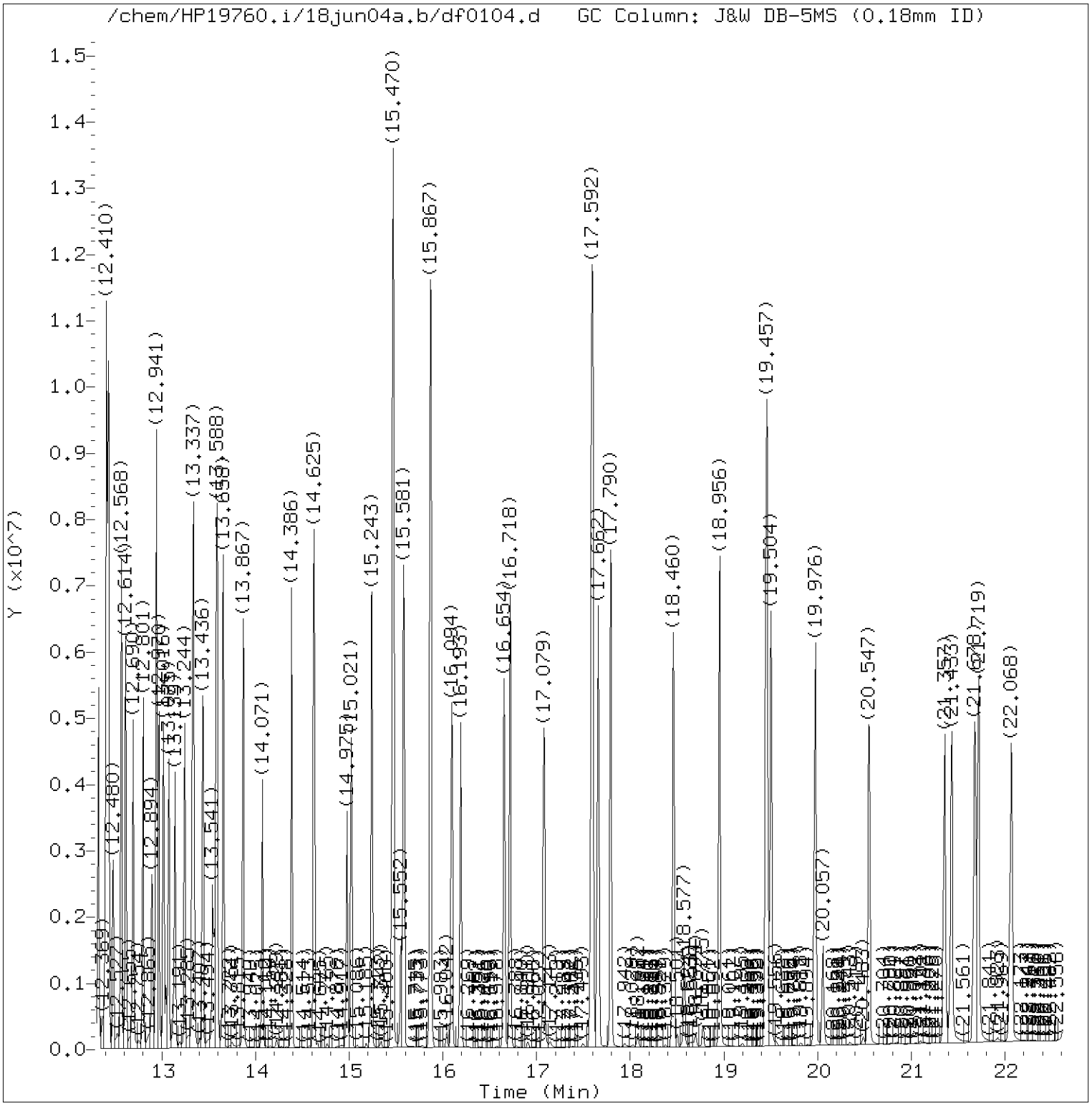
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0104.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:09 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD1318

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on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0104.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:09 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.449	88	635092	20.154
4) N-Nitrosodimethylamine	(1)	3.003	74	973521	20.449
5) Pyridine	(1)	3.044	79	1659249	20.473
7) 2-Picoline	(1)	4.221	93	1717313	20.264
8) N-Nitrosomethylethylamine	(1)	4.396	88	758901	20.294
9) Methyl methanesulfonate	(1)	4.845	80	838930	20.087
11)$2-Fluorophenol	(1)	5.090	112	2711775	40.662
13) N-Nitrosodiethylamine	(1)	5.416	102	722390	20.291
42) Total Cresols	(1)			2722622	41.053
15) Ethyl methanesulfonate	(1)	5.859	109	691528	20.206
16) Benzaldehyde	(1)	6.319	77	1001772	19.739
17)$Phenol-d6	(1)	6.448	99	3578083	40.601
18) Phenol	(1)	6.465	94	2046315	20.177
19) Aniline	(1)	6.483	93	2398952	20.215
20) a-methylstyrene	(1)	6.564	118	494726	20.220
22) bis(2-Chloroethyl)ether	(1)	6.593	93	1523563	20.165
23) 2-Chlorophenol	(1)	6.652	128	1182428	20.287
24) 1,3-Dichlorobenzene	(1)	6.873	146	1233729	20.222
25)*1,4-Dichlorobenzene-d4	(1)	6.960	152	196684	5.000
26) 1,4-Dichlorobenzene	(1)	6.990	146	1244025	20.254
27) Benzyl alcohol	(1)	7.176	108	892535	20.288
28) 1,2-Dichlorobenzene	(1)	7.205	146	1174054	20.288
30) Indene	(1)	7.345	115	1906093	20.279
31) 2-Methylphenol	(1)	7.357	108	1267583	20.210
97) Isosafrole	(3)			943890	19.843
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.403	45	1530465	20.030
34) bis(2-Chloroisopropyl)ether	(1)	7.403	45	1530465	20.030
35) N-Nitrosopyrrolidine	(1)	7.538	100	756994	20.258
36) Acetophenone	(1)	7.572	105	1887598	20.172
37) 4-Methylphenol	(1)	7.596	108	1455039	20.810
39) N-Nitrosomorpholine	(1)	7.602	56	788706	20.060
38) N-Nitroso-di-n-propylamine	(1)	7.602	70	1064264	20.092
59) 1,2,3,4-Tetrahydronaphthalene	(2)	7.625	104	61602	19.852
40) o-Toluidine	(1)	7.625	106	2180902	20.253
43) Hexachloroethane	(1)	7.718	117	567048	20.258
44)$Nitrobenzene-d5	(2)	7.794	82	3149070	39.690
45) Nitrobenzene	(2)	7.823	77	1540880	19.890
120) 2,4_2,6-Dinitrotoluenes	(3)			1114222	39.073
48) N-Nitrosopiperidine	(2)	8.050	114	663111	19.953
50) Isophorone	(2)	8.202	82	2775727	19.960

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0104.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:09 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
51) 2-Nitrophenol	(2)	8.307	139	615565	20.033
53) 2,4-Dimethylphenol	(2)	8.406	107	1357455	20.006
57) O,O,O-Triethylphosphorothioate	(2)	8.534	198	519313	19.949
55) bis(2-Chloroethoxy)methane	(2)	8.563	93	1624123	19.089
56) Benzoic acid	(2)	8.575	105	1025119	20.272
60) 2,4-Dichlorophenol	(2)	8.686	162	900742	19.920
146) Diallate trans/cis	(4)			1251162	19.570
62) 1,2,4-Trichlorobenzene	(2)	8.814	180	936787	19.975
65)*Naphthalene-d8	(2)	8.896	136	747557	5.000
66) Naphthalene	(2)	8.931	128	3319710	19.817
67) 4-Chloroaniline	(2)	9.030	127	1427274	19.962
68) 2,6-Dichlorophenol	(2)	9.041	162	881615	19.813
69) Hexachloropropene	(2)	9.082	213	615698	20.007
71) Hexachlorobutadiene	(2)	9.158	225	515521	19.835
75) Quinoline	(2)	9.455	129	2008815	19.875
76) Caprolactam	(2)	9.583	113	395634	19.686
77) N-Nitrosodi-n-butylamine	(2)	9.601	84	1251633	21.294
80) 4-Chloro-3-methylphenol	(2)	9.822	107	1143843	19.812
82) Safrole	(2)	9.921	162	832215	19.807
83) 2-Methylnaphthalene	(2)	10.032	142	2167053	20.310
84) 1-Methylnaphthalene	(2)	10.184	142	1950891	20.148
85) Hexachlorocyclopentadiene	(3)	10.300	237	519606	20.072
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.300	216	915334	19.885
88) cis-Isosafrole	(3)	10.388	162	147996	3.370
90) 2,4,6-Trichlorophenol	(3)	10.493	196	641116	20.019
92) 2,4,5-Trichlorophenol	(3)	10.545	196	622616	19.757
93)$2-Fluorobiphenyl	(3)	10.644	172	4497026	39.558
94) trans-Isosafrole	(3)	10.749	162	795894	16.472
95) 1,1'-Biphenyl	(3)	10.796	154	2485949	19.642
96) 2-Chloronaphthalene	(3)	10.807	162	1927869	19.374
98) 1-Chloronaphthalene	(3)	10.837	162	1757471	20.081
99) Diphenyl ether	(3)	10.971	170	1350530	19.720
100) 2-Nitroaniline	(3)	10.976	138	682550	19.789
104) 1,4-Naphthoquinone	(3)	11.087	158	773847	19.674
105) 1,4-Dinitrobenzene	(3)	11.204	168	358489	19.656
106) Dimethylphthalate	(3)	11.320	163	1900594	19.111
107) 1,3-Dinitrobenzene	(3)	11.326	168	390481	19.491
108) 2,6-Dinitrotoluene	(3)	11.384	165	478996	19.545
109) Acenaphthylene	(3)	11.460	152	2911640	20.355
112) 3-Nitroaniline	(3)	11.623	138	579409	19.974

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$ = Compound is a surrogate standard.

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on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0104.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:09 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
113)*Acenaphthene-d10	(3)	11.676	164	351231	5.000
114) Acenaphthene	(3)	11.723	153	1911367	19.877
115) 2,4-Dinitrophenol	(3)	11.781	184	352243	19.961
116) 4-Nitrophenol	(3)	11.892	109	422783	20.337
117) Pentachlorobenzene	(3)	11.915	250	752241	19.704
118) 2,4-Dinitrotoluene	(3)	11.967	165	635226	19.530
119) Dibenzofuran	(3)	11.967	168	2674941	19.724
121) 1-Naphthylamine	(3)	12.072	143	2009995	19.641
122) 2,3,4,6-Tetrachlorophenol	(3)	12.136	232	520826	20.136
123) 2-Naphthylamine	(3)	12.177	143	1956847	19.711
124) Diethylphthalate	(3)	12.323	149	1991882	19.357
126) Fluorene	(3)	12.404	166	2111303	19.736
125) Thionazin	(3)	12.410	107	466932	19.585
128) 5-Nitro-o-toluidine	(3)	12.428	152	662199	19.670
127) 4-Chlorophenyl-phenylether	(3)	12.428	204	1011789	19.948
129) 4-Nitroaniline	(3)	12.439	138	600224	19.194
130) 4,6-Dinitro-2-methylphenol	(4)	12.480	198	409175	19.999
132) NDPA as diphenylamine	(4)	12.568	169	1775454	19.814
131) N-Nitrosodiphenylamine	(4)	12.568	169	1775454	19.814
134) 1,2-Diphenylhydrazine	(4)	12.614	77	2736786	19.862
135)$2,4,6-Tribromophenol	(3)	12.696	330	515452	39.730
137) Tetraethyldithiopyrophosphate	(4)	12.801	97	435649	19.544
139) 1,3,5-Trinitrobenzene	(4)	12.900	213	292568	20.363
140) Diallate (peak 1)	(4)	12.941	86	1074369	16.240
141) Phorate	(4)	12.947	75	1669453	19.627
142) Phenacetin	(4)	12.970	108	1362550	19.841
143) 4-Bromophenyl-phenylether	(4)	13.016	248	539704	19.708
144) Diallate (peak 2)	(4)	13.040	86	176793	3.332
145) Hexachlorobenzene	(4)	13.075	284	545288	20.412
147) Dimethoate	(4)	13.139	87	1125582	19.687
148) Atrazine	(4)	13.244	200	505727	19.604
149) Pentachlorophenol	(4)	13.325	266	394922	20.104
150) 4-Aminobiphenyl	(4)	13.337	169	2108341	20.147
151) Pentachloronitrobenzene	(4)	13.343	237	245461	20.078
152) Pronamide	(4)	13.436	173	953556	19.996
153)*Phenanthrene-d10	(4)	13.559	188	649152	5.000
154) Dinoseb	(4)	13.582	211	612550	20.287
155) Phenanthrene	(4)	13.588	178	3116729	20.288
157) Anthracene	(4)	13.658	178	3098246	20.642
163) Carbazole	(4)	13.867	167	2983130	19.912

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on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0104.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:09 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
164) Methyl parathion	(4)	14.071	109	881393	20.070
165) Di-n-butylphthalate	(4)	14.386	149	3772506	19.966
167) Parathion	(4)	14.619	109	591456	20.107
168) 4-Nitroquinoline-1-oxide	(4)	14.625	190	443118	20.809
169) Octachlorostyrene	(4)	14.975	308	209142	19.991
222) Total PAHs	(6)			54677210	360.490
171) Isodrin	(4)	15.021	193	356629	20.054
173) Fluoranthene	(4)	15.243	202	3565006	20.898
174) Benzidine	(5)	15.470	184	7260404	59.305
175)*Pyrene-d10	(5)	15.552	212	681472	5.000
177) Pyrene	(5)	15.581	202	3700528	19.803
179)$Terphenyl-d14	(5)	15.867	244	4835974	39.814
182) p-Dimethylaminoazobenzene	(5)	16.094	225	705415	20.164
185) Chlorobenzilate	(5)	16.193	139	1191756	20.010
187) 3,3'-Dimethylbenzidine	(5)	16.654	212	2511795	20.025
188) Butylbenzylphthalate	(5)	16.718	149	1935337	20.156
191) 2-Acetylaminofluorene	(5)	17.079	181	1636677	20.223
193) 3,3'-Dichlorobenzidine	(5)	17.580	252	1307985	20.093
195) Benzo(a)anthracene	(5)	17.592	228	3634612	21.483
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.604	231	761369	20.054
196) Chrysene	(5)	17.662	228	3432644	20.700
199) bis(2-Ethylhexyl)phthalate	(5)	17.790	149	2680412	20.082
203) 6-Methylchrysene	(5)	18.460	242	2498970	20.100
205) Di-n-octylphthalate	(6)	18.956	149	4829096	20.132
206) Benzo(b)fluoranthene	(6)	19.451	252	3655361	21.012
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.463	256	1655025	20.162
208) Benzo(k)fluoranthene	(6)	19.504	252	3408130	20.319
211) Benzo(a)pyrene	(6)	19.976	252	3341443	21.414
213)*Perylene-d12	(6)	20.057	264	697807	5.000
215) 3-Methylcholanthrene	(6)	20.553	268	1720534	20.052
217) Dibenz(a,h)acridine	(6)	21.357	279	2694175	20.120
218) Dibenz(a,j)acridine	(6)	21.433	279	2820762	20.155
219) Indeno(1,2,3-cd)pyrene	(6)	21.678	276	3075029M	21.190
220) Dibenz(a,h)anthracene	(6)	21.719	278	3191900	20.853
221) Benzo(g,h,i)perylene	(6)	22.068	276	3085618	20.392

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

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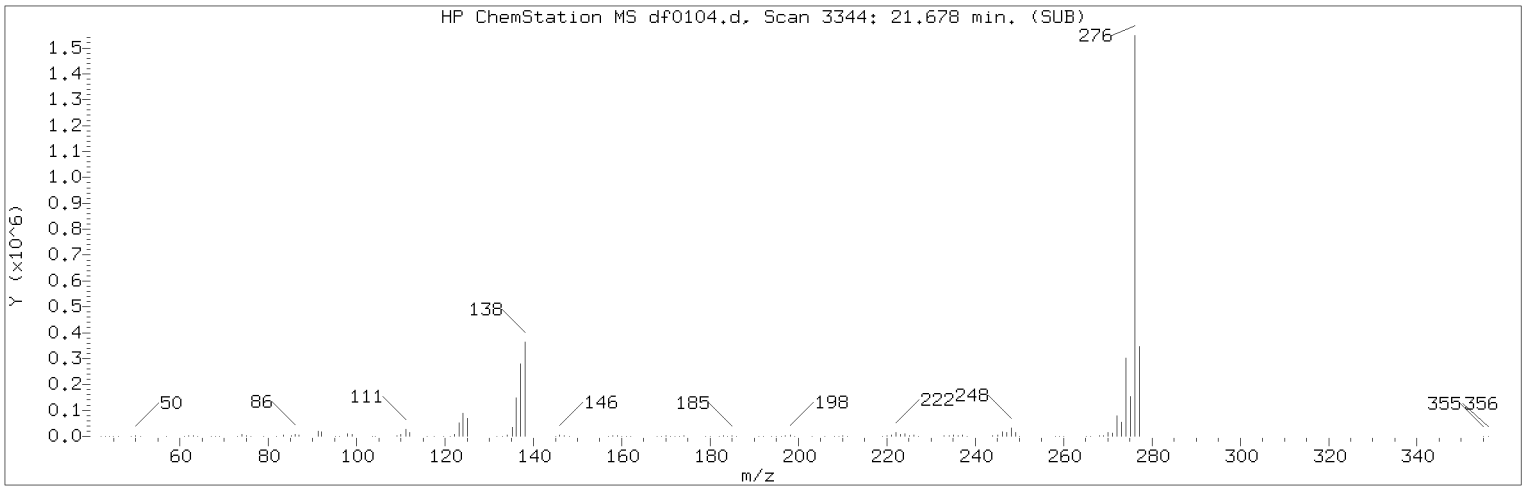
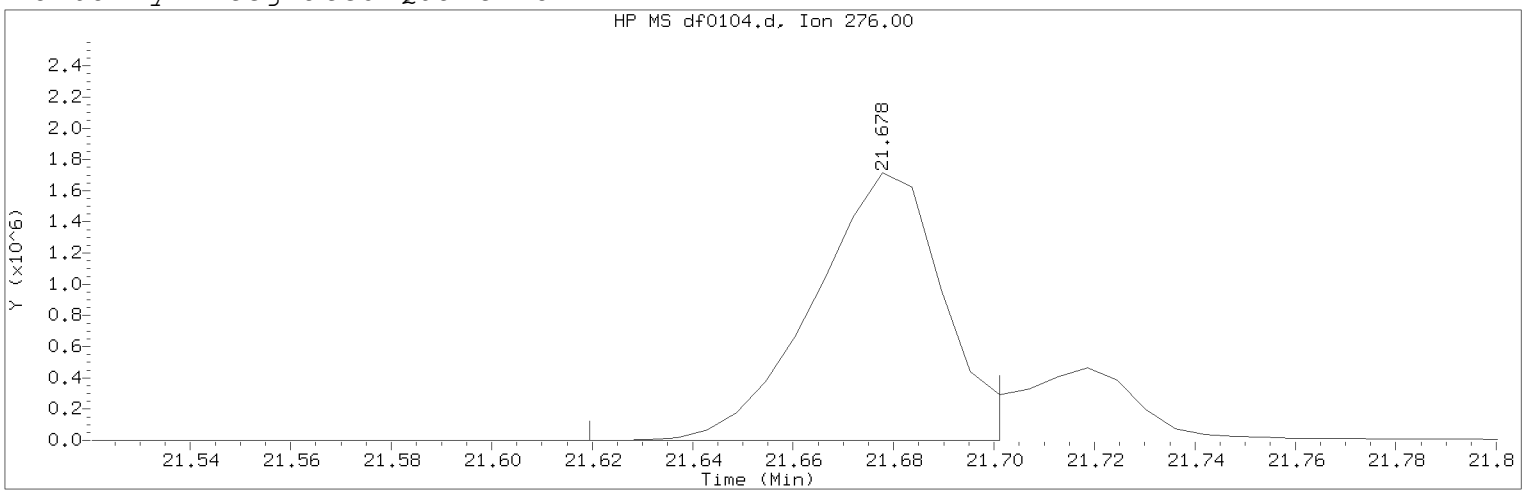
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0104.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:09 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD20 Lab Sample ID: rvSTD1318

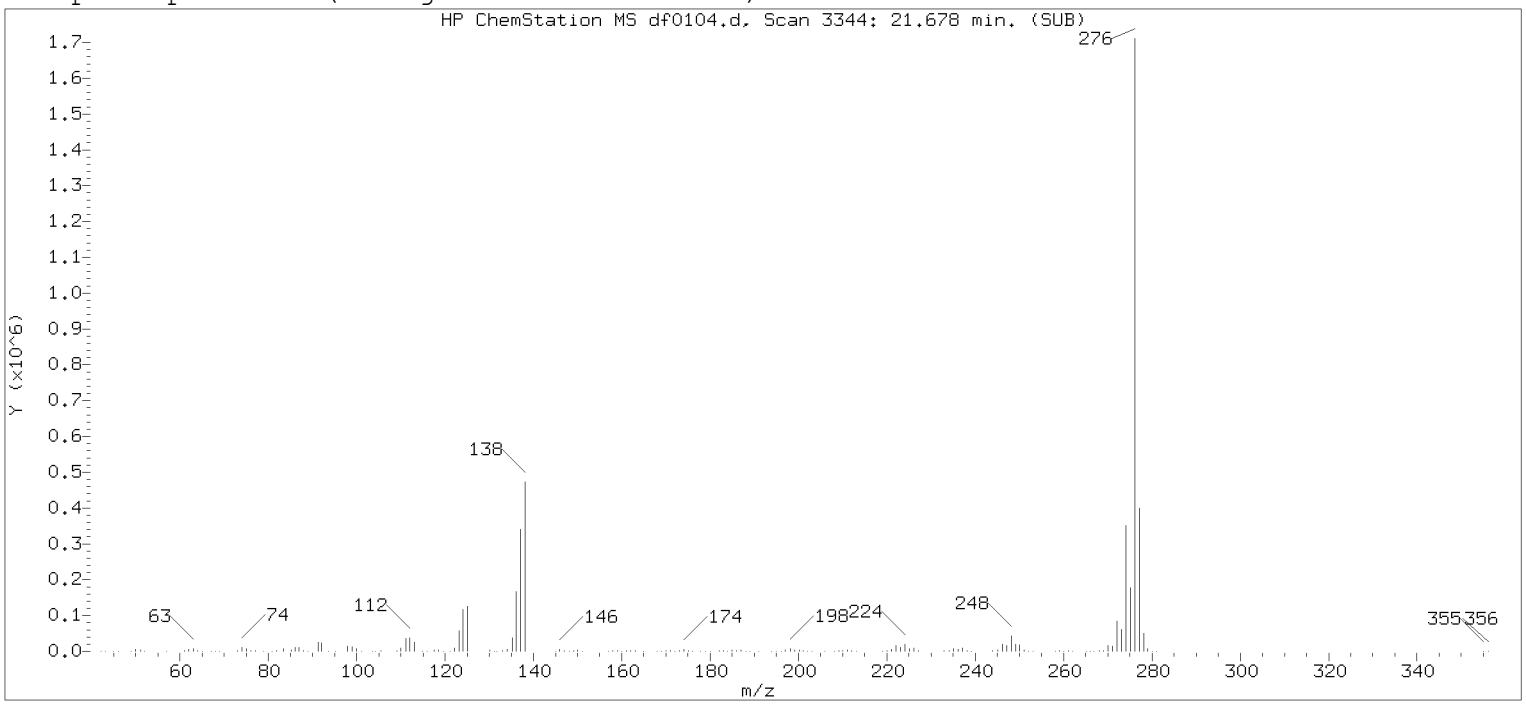
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3344
Retention Time (minutes) : 21.678
Quant Ion : 276.00
Area (flag) : 3075029M
On-Column Amount (ng/ul) : 21.1896
Integration start scan : 3333 Integration stop scan: 3347
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

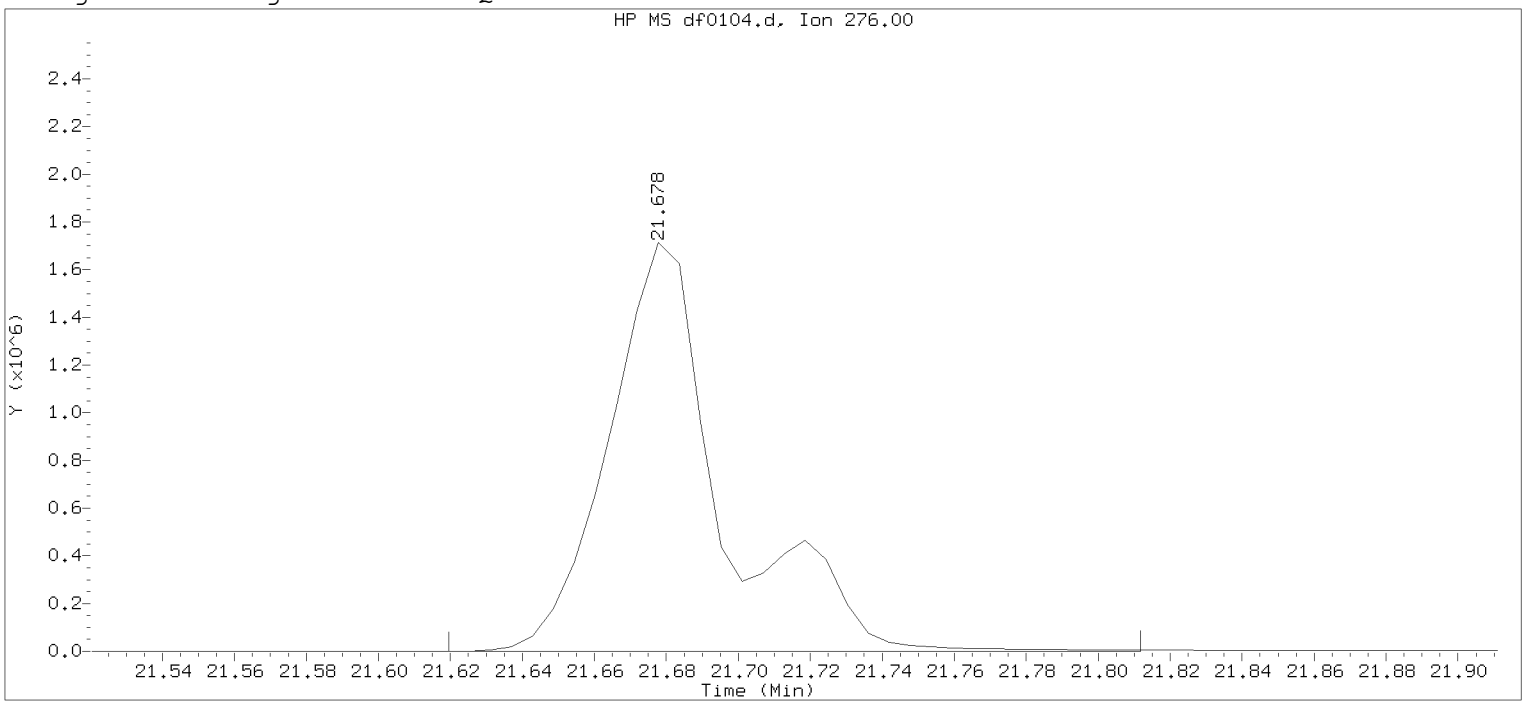
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0104.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:09 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 02:35
Date, time and analyst ID of latest file update: 05-Jun-2018 02:35 Automation

Sample Name: SSTD20 Lab Sample ID: rvSTD1318

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3344		
Retention Time (minutes)	: 21.678		
Quant Ion	: 276.00		
Area	: 3780459		
On-column Amount (ng/ul)	: 24.1442		
Integration start scan	: 3333	Integration stop scan:	3366
Y at integration start	: 0	Y at integration end:	0

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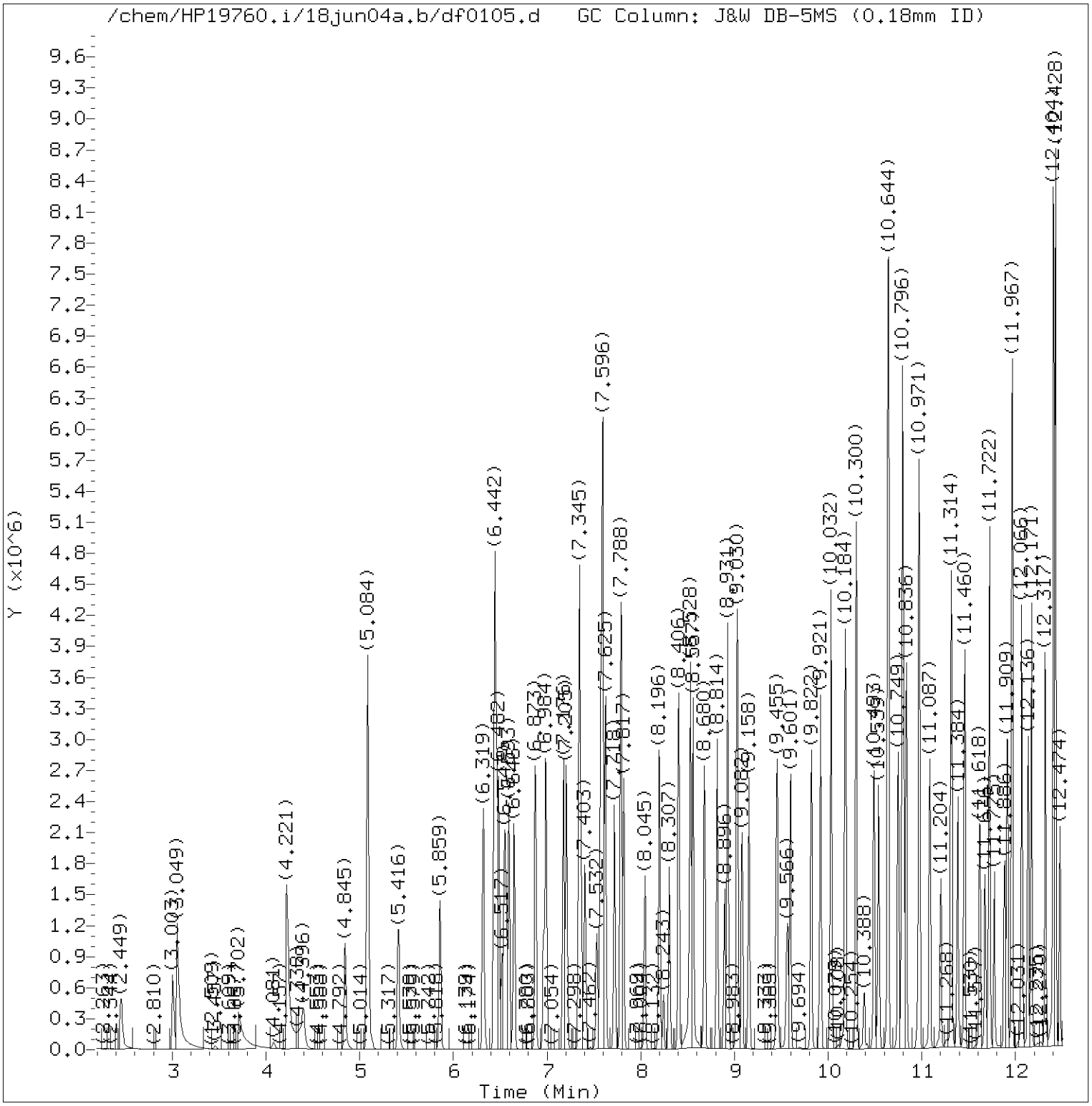
Target 3.5 esignature user name: [illegible]



Total Ion Chromatogram (TIC)

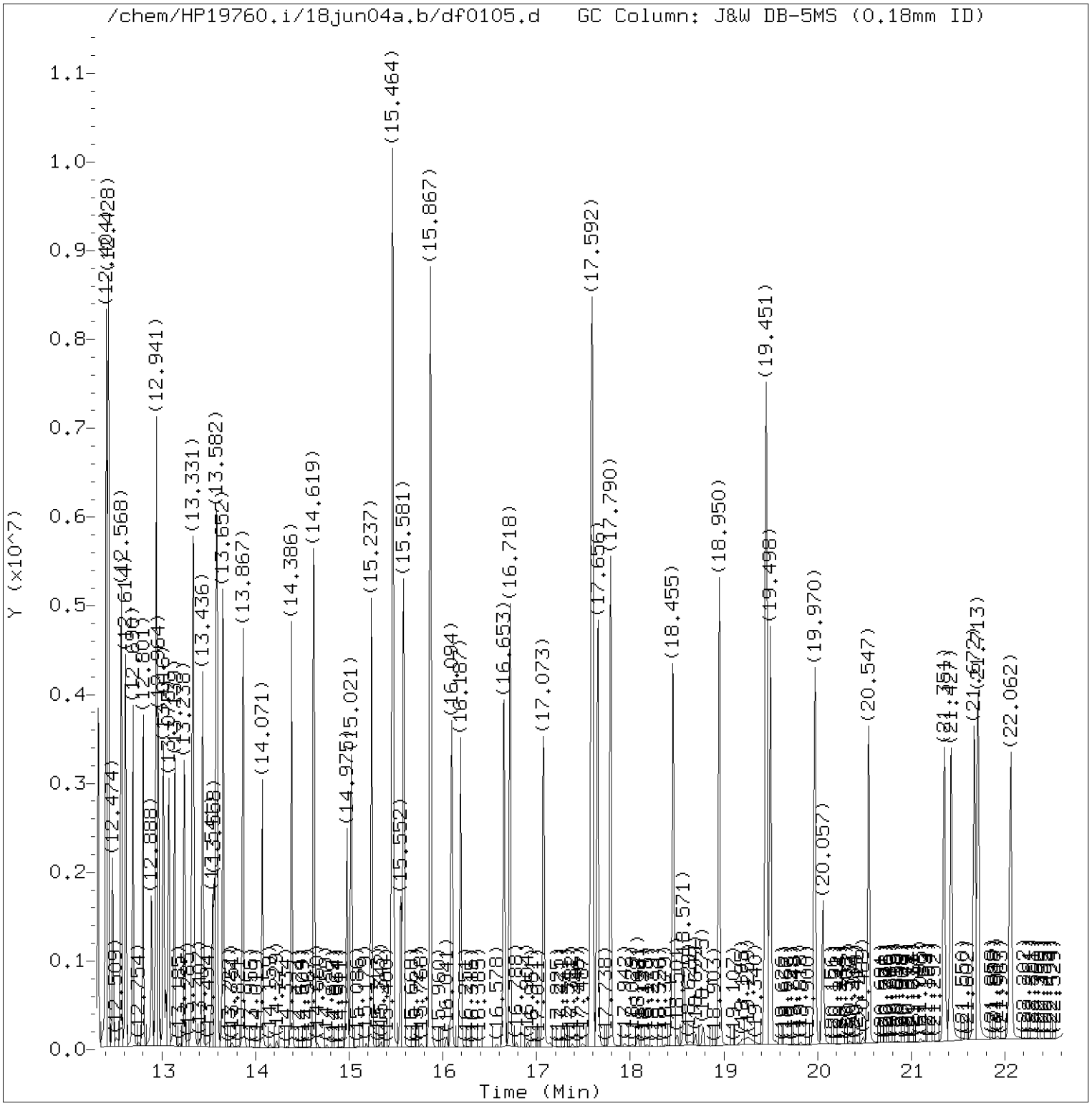
Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0105.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD1318

Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0105.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD1318

Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0105.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.455	88	449739	12.624
4) N-Nitrosodimethylamine	(1)	3.003	74	690900	12.782
5) Pyridine	(1)	3.049	79	1170336	12.735
7) 2-Picoline	(1)	4.221	93	1219272	12.700
8) N-Nitrosomethylethylamine	(1)	4.396	88	537145	12.684
9) Methyl methanesulfonate	(1)	4.845	80	598863	12.668
11)$2-Fluorophenol	(1)	5.089	112	1919367	25.403
13) N-Nitrosodiethylamine	(1)	5.416	102	506459	12.593
42) Total Cresols	(1)			1917458	25.490
15) Ethyl methanesulfonate	(1)	5.859	109	485747	12.571
16) Benzaldehyde	(1)	6.319	77	782848	13.371
17)$Phenol-d6	(1)	6.442	99	2525699	25.324
18) Phenol	(1)	6.459	94	1464371	12.734
19) Aniline	(1)	6.482	93	1700223	12.660
20) a-methylstyrene	(1)	6.564	118	345496	12.524
22) bis(2-Chloroethyl)ether	(1)	6.593	93	1084493	12.678
23) 2-Chlorophenol	(1)	6.646	128	845490	12.778
24) 1,3-Dichlorobenzene	(1)	6.873	146	876253	12.683
25)*1,4-Dichlorobenzene-d4	(1)	6.960	152	221630	5.000
26) 1,4-Dichlorobenzene	(1)	6.990	146	883674	12.700
27) Benzyl alcohol	(1)	7.176	108	615658	12.439
28) 1,2-Dichlorobenzene	(1)	7.205	146	833564	12.711
30) Indene	(1)	7.345	115	1324780	12.506
31) 2-Methylphenol	(1)	7.357	108	891123	12.581
97) Isosafrole	(3)			659083	12.571
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.403	45	1087853	12.601
34) bis(2-Chloroisopropyl)ether	(1)	7.403	45	1087853	12.601
35) N-Nitrosopyrrolidine	(1)	7.532	100	533410	12.626
36) Acetophenone	(1)	7.572	105	1329546	12.581
37) 4-Methylphenol	(1)	7.590	108	1026335	12.891
39) N-Nitrosomorpholine	(1)	7.596	56	558769	12.584
38) N-Nitroso-di-n-propylamine	(1)	7.596	70	750016	12.549
40) o-Toluidine	(1)	7.625	106	1547659	12.690
59) 1,2,3,4-Tetrahydronaphthalene	(2)	7.625	104	45000	12.881
43) Hexachloroethane	(1)	7.718	117	403467	12.717
44)$Nitrobenzene-d5	(2)	7.788	82	2238772	25.239
45) Nitrobenzene	(2)	7.817	77	1101210	12.690
48) N-Nitrosopiperidine	(2)	8.045	114	470687	12.656
120) 2,4_2,6-Dinitrotoluenes	(3)			809539	25.599
50) Isophorone	(2)	8.196	82	1942931	12.528

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0105.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
51) 2-Nitrophenol	(2)	8.307	139	427368	12.485
53) 2,4-Dimethylphenol	(2)	8.406	107	952138	12.569
57) O,O,O-Triethylphosphorothioate	(2)	8.534	198	358079	12.382
56) Benzoic acid	(2)	8.557	105	698435	12.420
55) bis(2-Chloroethoxy)methane	(2)	8.557	93	1232970	12.874
60) 2,4-Dichlorophenol	(2)	8.680	162	632454	12.538
146) Diallate trans/cis	(4)			907496	12.590
62) 1,2,4-Trichlorobenzene	(2)	8.814	180	657007	12.553
65)*Naphthalene-d8	(2)	8.896	136	833114	5.000
66) Naphthalene	(2)	8.931	128	2345225	12.550
67) 4-Chloroaniline	(2)	9.024	127	1007111	12.604
68) 2,6-Dichlorophenol	(2)	9.035	162	620101	12.504
69) Hexachloropropene	(2)	9.082	213	431163	12.554
71) Hexachlorobutadiene	(2)	9.158	225	372569	12.770
75) Quinoline	(2)	9.455	129	1416382	12.556
76) Caprolactam	(2)	9.566	113	284852	12.663
77) N-Nitrosodi-n-butylamine	(2)	9.601	84	694347	11.019
80) 4-Chloro-3-methylphenol	(2)	9.822	107	803620	12.492
82) Safrole	(2)	9.921	162	589195	12.562
83) 2-Methylnaphthalene	(2)	10.032	142	1512672	12.676
84) 1-Methylnaphthalene	(2)	10.184	142	1374823	12.692
85) Hexachlorocyclopentadiene	(3)	10.300	237	376571	13.035
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.300	216	640596	12.612
88) cis-Isosafrole	(3)	10.388	162	102967	2.130
90) 2,4,6-Trichlorophenol	(3)	10.493	196	441284	12.519
92) 2,4,5-Trichlorophenol	(3)	10.539	196	438889	12.620
93)$2-Fluorobiphenyl	(3)	10.644	172	3166631	25.240
94) trans-Isosafrole	(3)	10.749	162	556116	10.441
95) 1,1'-Biphenyl	(3)	10.790	154	1773797	12.679
96) 2-Chloronaphthalene	(3)	10.802	162	1380168	12.581
98) 1-Chloronaphthalene	(3)	10.836	162	1235701	12.749
99) Diphenyl ether	(3)	10.971	170	951226	12.594
100) 2-Nitroaniline	(3)	10.976	138	475922	12.532
104) 1,4-Naphthoquinone	(3)	11.087	158	558665	12.806
105) 1,4-Dinitrobenzene	(3)	11.204	168	256103	12.698
106) Dimethylphthalate	(3)	11.314	163	1377759	12.570
107) 1,3-Dinitrobenzene	(3)	11.320	168	277961	12.584
108) 2,6-Dinitrotoluene	(3)	11.384	165	346521	12.763
109) Acenaphthylene	(3)	11.460	152	2074873	13.042
112) 3-Nitroaniline	(3)	11.623	138	403370	12.605

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$ = Compound is a surrogate standard.

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Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0105.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
113)*Acenaphthene-d10	(3)	11.676	164	386382	5.000
114) Acenaphthene	(3)	11.722	153	1352087	12.724
115) 2,4-Dinitrophenol	(3)	11.775	184	242742	12.503
116) 4-Nitrophenol	(3)	11.886	109	299012	12.926
117) Pentachlorobenzene	(3)	11.915	250	531198	12.611
118) 2,4-Dinitrotoluene	(3)	11.967	165	463018	12.827
119) Dibenzofuran	(3)	11.967	168	1912369	12.737
121) 1-Naphthylamine	(3)	12.066	143	1448585	12.773
122) 2,3,4,6-Tetrachlorophenol	(3)	12.136	232	357648	12.552
123) 2-Naphthylamine	(3)	12.171	143	1399278	12.733
124) Diethylphthalate	(3)	12.317	149	1426121	12.573
126) Fluorene	(3)	12.404	166	1560214	13.099
125) Thionazin	(3)	12.410	107	336214	12.738
128) 5-Nitro-o-toluidine	(3)	12.422	152	471330	12.669
127) 4-Chlorophenyl-phenylether	(3)	12.428	204	719097	12.789
129) 4-Nitroaniline	(3)	12.434	138	431522	12.533
130) 4,6-Dinitro-2-methylphenol	(4)	12.474	198	286668	12.468
132) NDPA as diphenylamine	(4)	12.568	169	1283696	12.677
131) N-Nitrosodiphenylamine	(4)	12.568	169	1283696	12.677
134) 1,2-Diphenylhydrazine	(4)	12.614	77	1967218	12.645
135)$2,4,6-Tribromophenol	(3)	12.690	330	364629	25.409
137) Tetraethyldithiopyrophosphate	(4)	12.795	97	311154	12.433
139) 1,3,5-Trinitrobenzene	(4)	12.894	213	191701	12.016
140) Diallate (peak 1)	(4)	12.941	86	783080	10.486
141) Phorate	(4)	12.946	75	1202920	12.555
142) Phenacetin	(4)	12.964	108	963592	12.481
143) 4-Bromophenyl-phenylether	(4)	13.016	248	391157	12.649
144) Diallate (peak 2)	(4)	13.040	86	124416	2.095
145) Hexachlorobenzene	(4)	13.075	284	385329	12.758
147) Dimethoate	(4)	13.139	87	819418	12.681
148) Atrazine	(4)	13.244	200	368687	12.655
149) Pentachlorophenol	(4)	13.325	266	269341	12.266
150) 4-Aminobiphenyl	(4)	13.331	169	1495881	12.656
151) Pentachloronitrobenzene	(4)	13.343	237	173974	12.614
152) Pronamide	(4)	13.436	173	670597	12.502
153)*Phenanthrene-d10	(4)	13.558	188	730128	5.000
154) Dinoseb	(4)	13.576	211	427947	12.576
155) Phenanthrene	(4)	13.588	178	2177694	12.582
157) Anthracene	(4)	13.652	178	2216843	13.000
163) Carbazole	(4)	13.867	167	2108018	12.508

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$ = Compound is a surrogate standard.

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Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0105.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
164) Methyl parathion	(4)	14.071	109	620727	12.550
165) Di-n-butylphthalate	(4)	14.386	149	2670395	12.549
167) Parathion	(4)	14.619	109	411527	12.454
168) 4-Nitroquinoline-1-oxide	(4)	14.625	190	293765	12.323
169) Octachlorostyrene	(4)	14.975	308	147161	12.505
222) Total PAHs	(6)			38304639	227.944
171) Isodrin	(4)	15.021	193	247153	12.392
173) Fluoranthene	(4)	15.237	202	2497183	12.908
174) Benzidine	(5)	15.464	184	5128789	38.064
175)*Pyrene-d10	(5)	15.552	212	746275	5.000
177) Pyrene	(5)	15.581	202	2595273	12.645
179)$Terphenyl-d14	(5)	15.867	244	3308867	24.907
182) p-Dimethylaminoazobenzene	(5)	16.094	225	483662	12.593
185) Chlorobenzilate	(5)	16.187	139	831587	12.687
187) 3,3'-Dimethylbenzidine	(5)	16.653	212	1791910	12.905
188) Butylbenzylphthalate	(5)	16.718	149	1350051	12.753
191) 2-Acetylaminofluorene	(5)	17.073	181	1128730	12.676
193) 3,3'-Dichlorobenzidine	(5)	17.580	252	913909	12.738
195) Benzo(a)anthracene	(5)	17.592	228	2503772	13.298
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.598	231	543566	12.926
196) Chrysene	(5)	17.656	228	2378641	12.974
199) bis(2-Ethylhexyl)phthalate	(5)	17.790	149	1880144	12.770
203) 6-Methylchrysene	(5)	18.455	242	1732995	12.670
205) Di-n-octylphthalate	(6)	18.950	149	3330817	12.556
206) Benzo(b)fluoranthene	(6)	19.445	252	2530988	13.034
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.457	256	1127643	12.455
208) Benzo(k)fluoranthene	(6)	19.498	252	2397307	12.851
211) Benzo(a)pyrene	(6)	19.970	252	2314142	13.233
213)*Perylene-d12	(6)	20.057	264	770589	5.000
215) 3-Methylcholanthrene	(6)	20.547	268	1186011	12.513
217) Dibenz(a,h)acridine	(6)	21.351	279	1842699	12.471
218) Dibenz(a,j)acridine	(6)	21.427	279	1977231	12.719
219) Indeno(1,2,3-cd)pyrene	(6)	21.672	276	2123461M	13.093
220) Dibenz(a,h)anthracene	(6)	21.713	278	2204725	12.931
221) Benzo(g,h,i)perylene	(6)	22.062	276	2144716	12.767

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

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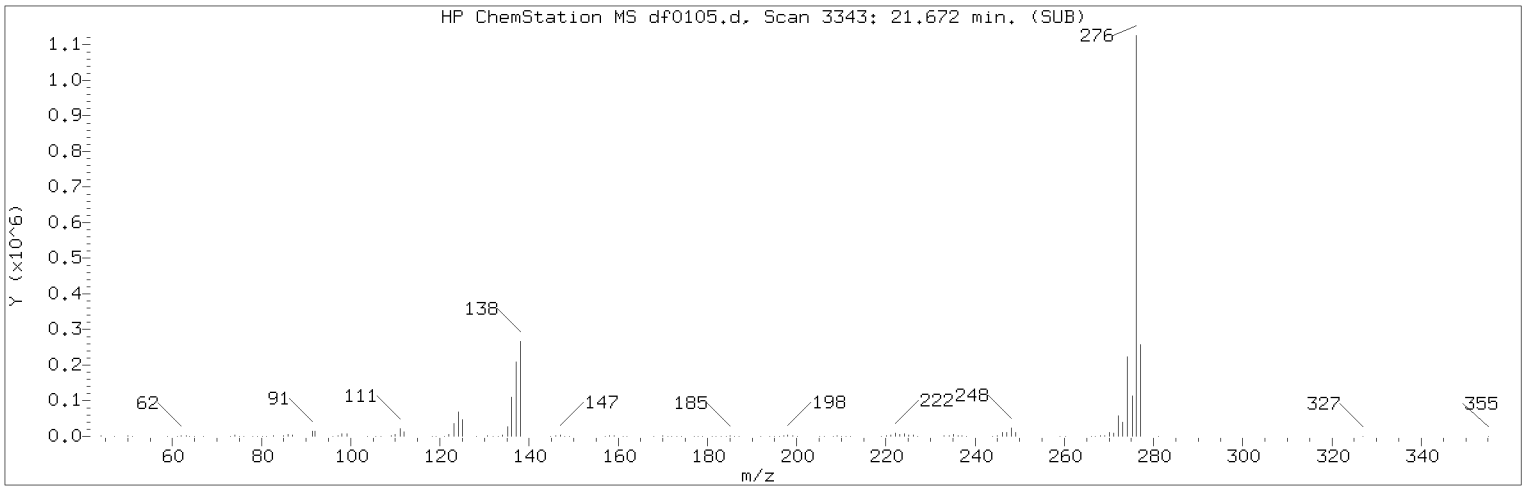
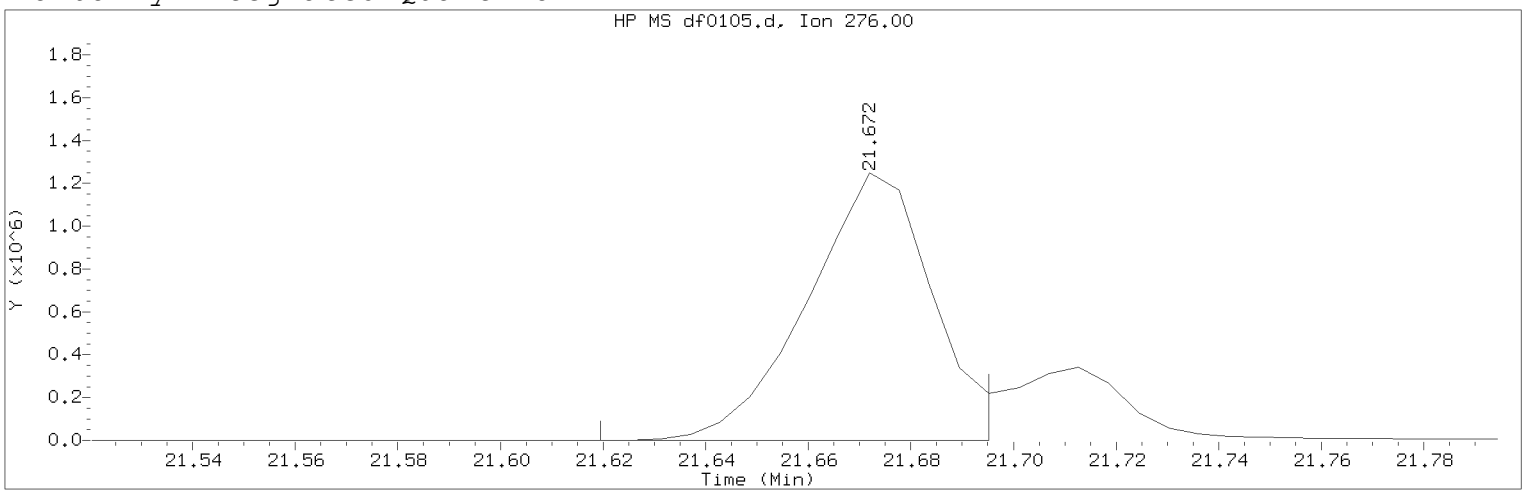
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0105.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:46
Date, time and analyst ID of latest file update: 05-Jun-2018 07:46 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvSTD1318

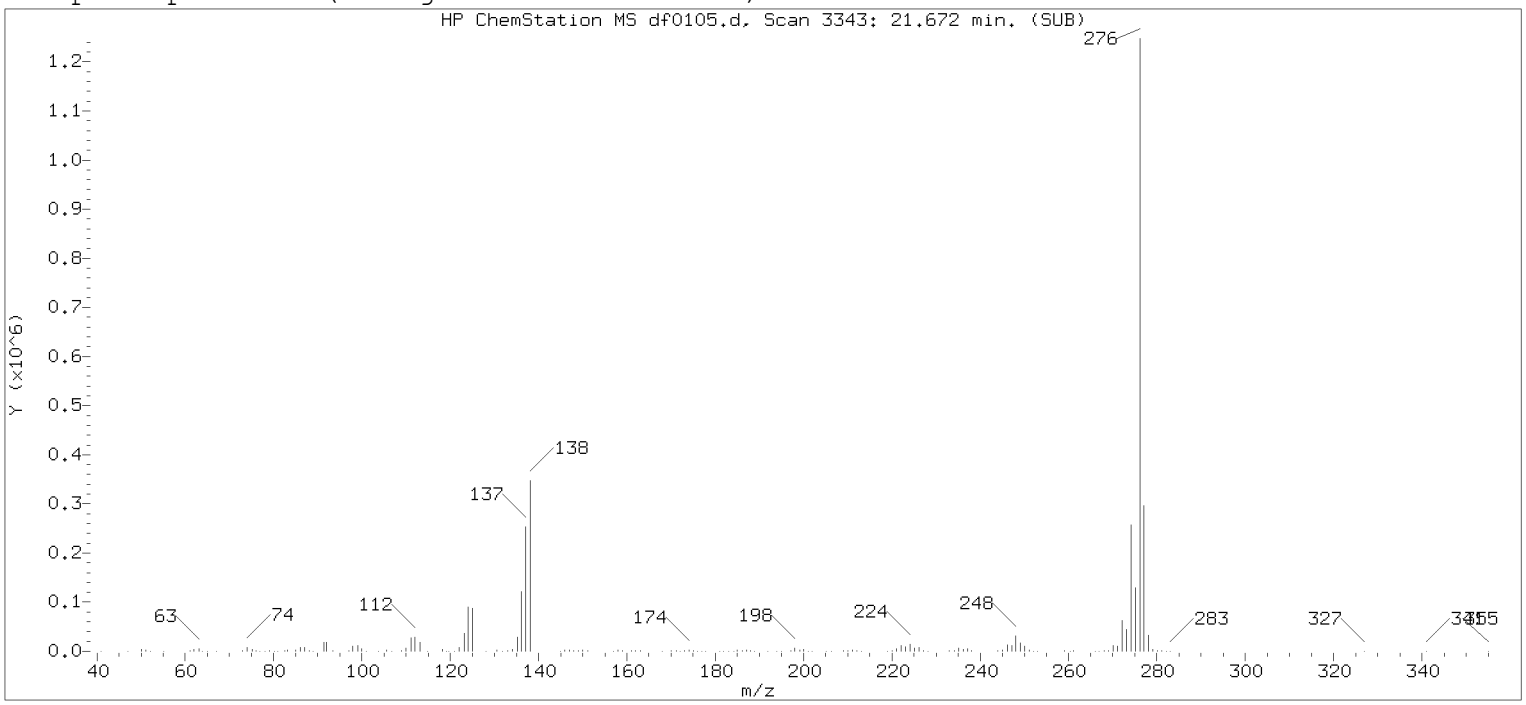
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3343
Retention Time (minutes) : 21.672
Quant Ion : 276.00
Area (flag) : 2123461M
On-Column Amount (ng/ul) : 13.0932
Integration start scan : 3333 Integration stop scan: 3346
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

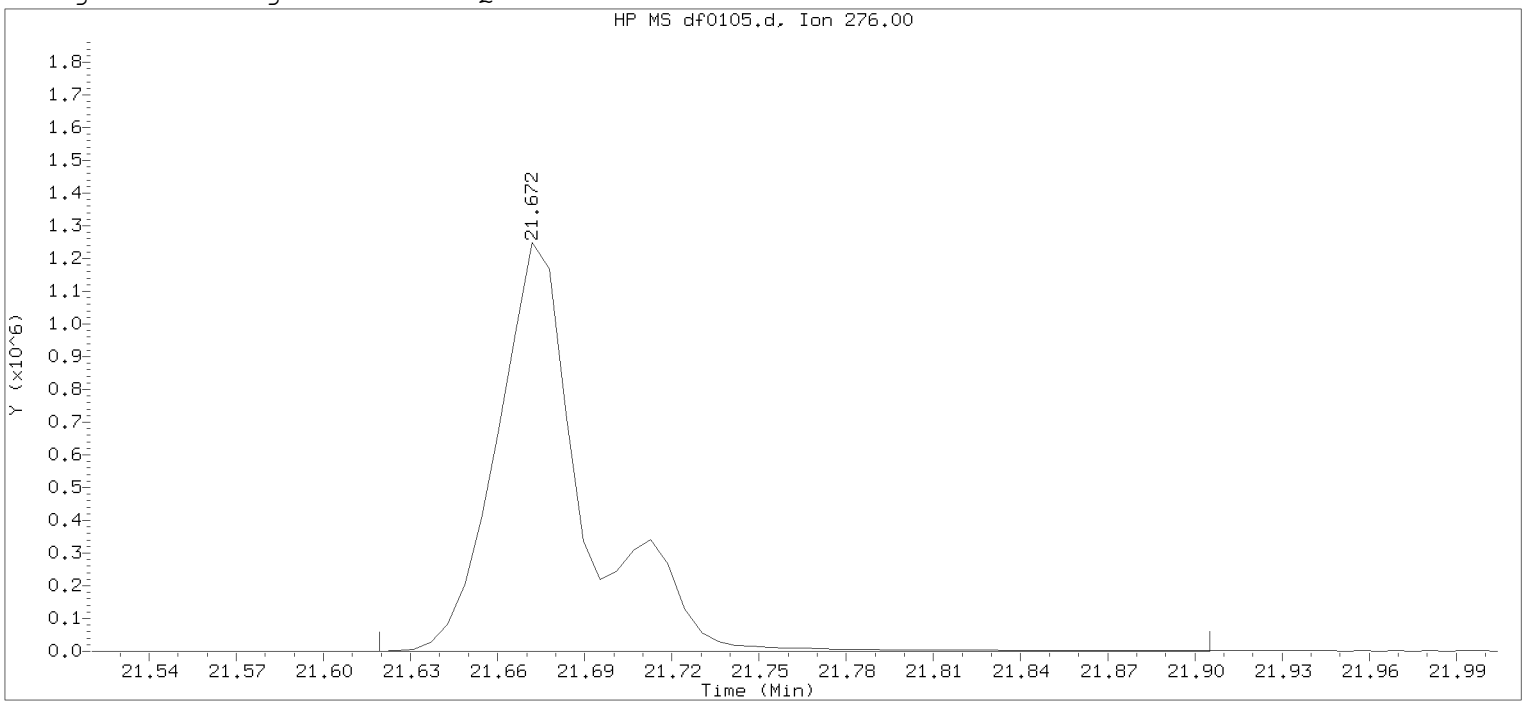
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0105.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 02:37 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 03:03
Date, time and analyst ID of latest file update: 05-Jun-2018 03:03 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvSTD1318

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3343		
Retention Time (minutes)	: 21.672		
Quant Ion	: 276.00		
Area	: 2655632		
On-column Amount (ng/ul)	: 14.9633		
Integration start scan	: 3333	Integration stop scan:	3382
Y at integration start	: 0	Y at integration end:	0

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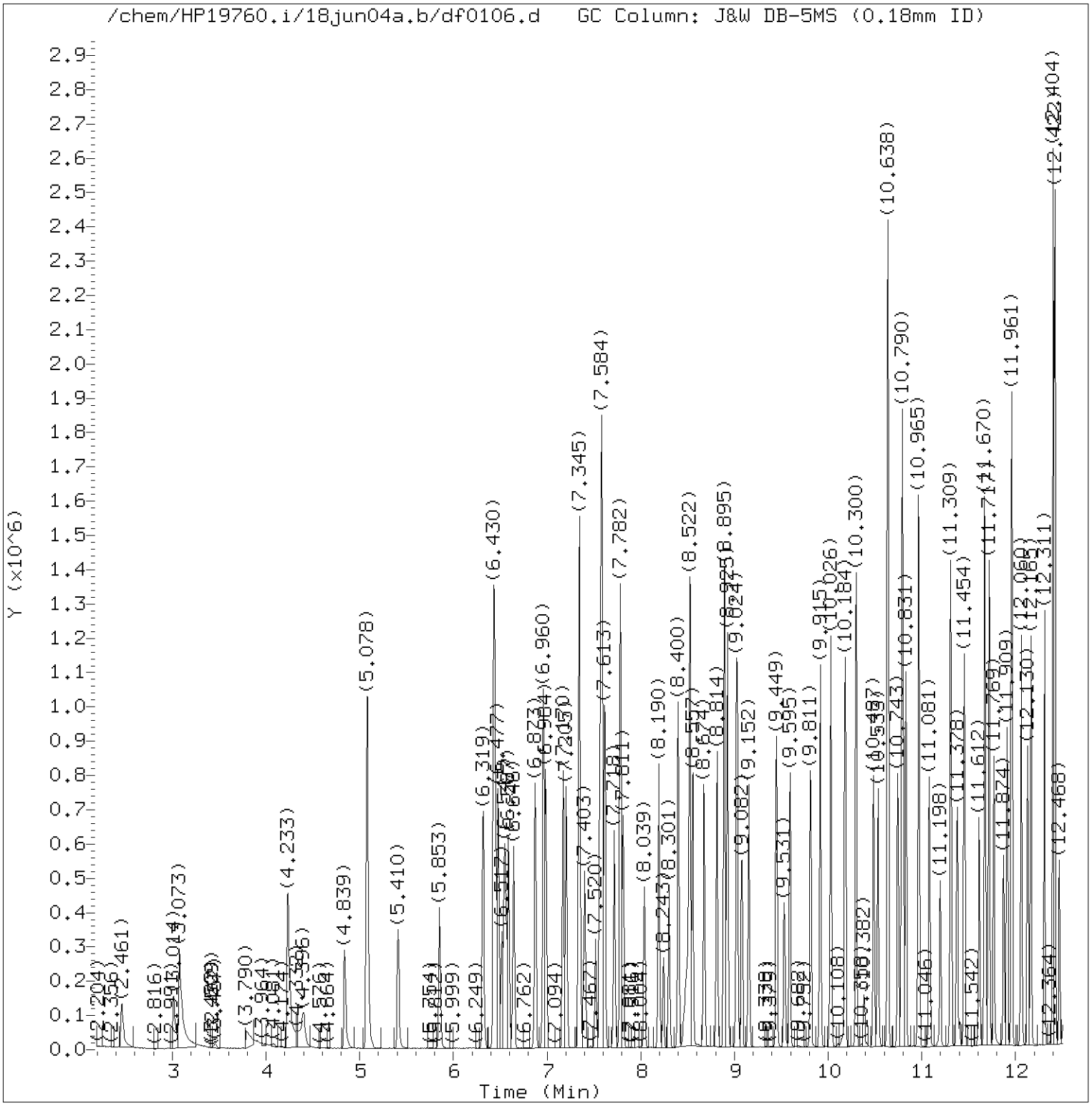
Target 3.5 esignature user name: [illegible]



Total Ion Chromatogram (TIC)

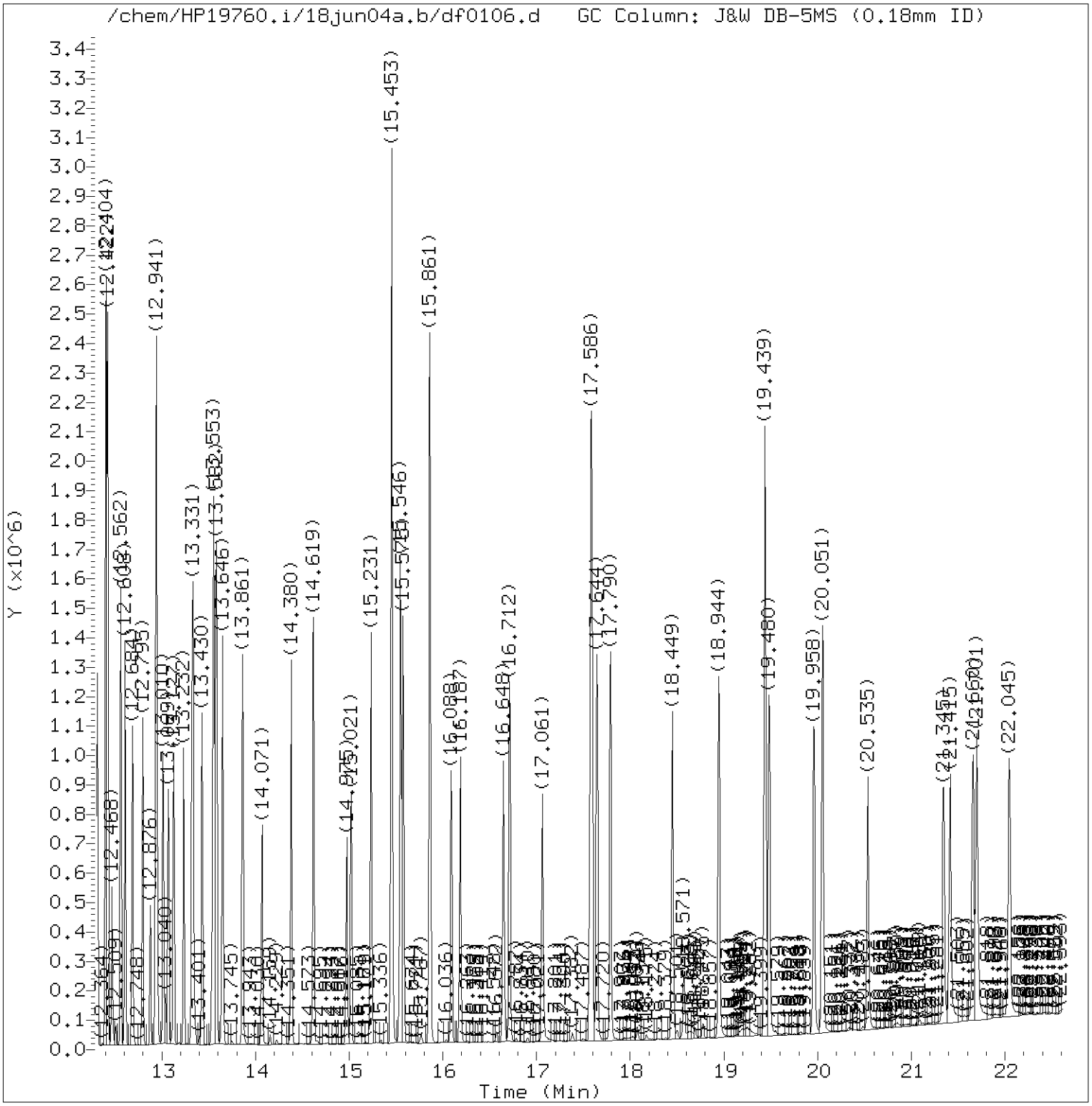
Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0106.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:05 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD1318

Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0106.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:05 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD1318

Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0106.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:05 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.455	88	115765	3.502
4) N-Nitrosodimethylamine	(1)	3.014	74	171301	3.431
5) Pyridine	(1)	3.073	79	302174	3.536
7) 2-Picoline	(1)	4.227	93	329749	3.662
8) N-Nitrosomethylethylamine	(1)	4.402	88	142931	3.611
9) Methyl methanesulfonate	(1)	4.839	80	160384	3.626
11)$2-Fluorophenol	(1)	5.084	112	512569	7.252
13) N-Nitrosodiethylamine	(1)	5.410	102	135867	3.614
42) Total Cresols	(1)			522231	7.388
15) Ethyl methanesulfonate	(1)	5.853	109	130495	3.613
16) Benzaldehyde	(1)	6.319	77	227869	4.045
17)$Phenol-d6	(1)	6.430	99	677409	7.258
18) Phenol	(1)	6.453	94	396312	3.672
19) Aniline	(1)	6.477	93	460993	3.661
20) a-methylstyrene	(1)	6.564	118	91643	3.565
22) bis(2-Chloroethyl)ether	(1)	6.587	93	295676	3.681
23) 2-Chlorophenol	(1)	6.646	128	228754	3.682
24) 1,3-Dichlorobenzene	(1)	6.873	146	234871	3.632
25)*1,4-Dichlorobenzene-d4	(1)	6.960	152	209057	5.000
26) 1,4-Dichlorobenzene	(1)	6.984	146	239820	3.673
27) Benzyl alcohol	(1)	7.170	108	162698	3.535
28) 1,2-Dichlorobenzene	(1)	7.205	146	227184	3.688
30) Indene	(1)	7.339	115	360800	3.638
31) 2-Methylphenol	(1)	7.345	108	241472	3.641
97) Isosafrole	(3)			174944	3.551
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.403	45	297852	3.676
34) bis(2-Chloroisopropyl)ether	(1)	7.403	45	297852	3.676
35) N-Nitrosopyrrolidine	(1)	7.520	100	140454	3.567
36) Acetophenone	(1)	7.567	105	348243	3.542
39) N-Nitrosomorpholine	(1)	7.584	56	154512	3.701
38) N-Nitroso-di-n-propylamine	(1)	7.584	70	207417	3.693
37) 4-Methylphenol	(1)	7.584	108	280759	3.741
40) o-Toluidine	(1)	7.613	106	422738	3.690
59) 1,2,3,4-Tetrahydronaphthalene	(2)	7.619	104	11430	3.555
43) Hexachloroethane	(1)	7.718	117	107973	3.636
44)$Nitrobenzene-d5	(2)	7.782	82	609351	7.395
45) Nitrobenzene	(2)	7.811	77	298836	3.705
48) N-Nitrosopiperidine	(2)	8.039	114	126105	3.659
120) 2,4_2,6-Dinitrotoluenes	(3)			219972	7.343
50) Isophorone	(2)	8.190	82	521367	3.634

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0106.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:05 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
51) 2-Nitrophenol	(2)	8.301	139	109563	3.492
53) 2,4-Dimethylphenol	(2)	8.400	107	254248	3.629
56) Benzoic acid	(2)	8.522	105	360779	6.997
57) O,O,O-Triethylphosphorothioate	(2)	8.528	198	98770	3.681
55) bis(2-Chloroethoxy)methane	(2)	8.557	93	348692	3.873
60) 2,4-Dichlorophenol	(2)	8.680	162	167626	3.600
146) Diallate trans/cis	(4)			251164	3.758
62) 1,2,4-Trichlorobenzene	(2)	8.814	180	178408	3.675
65)*Naphthalene-d8	(2)	8.895	136	776630	5.000
66) Naphthalene	(2)	8.925	128	644268	3.707
67) 4-Chloroaniline	(2)	9.024	127	269821	3.647
68) 2,6-Dichlorophenol	(2)	9.035	162	171227	3.713
69) Hexachloropropene	(2)	9.082	213	114411	3.607
71) Hexachlorobutadiene	(2)	9.152	225	100797	3.715
75) Quinoline	(2)	9.449	129	387793	3.700
76) Caprolactam	(2)	9.531	113	74566	3.593
77) N-Nitrosodi-n-butylamine	(2)	9.595	84	184771	3.250
80) 4-Chloro-3-methylphenol	(2)	9.811	107	215364	3.622
82) Safrole	(2)	9.915	162	156814	3.618
83) 2-Methylnaphthalene	(2)	10.026	142	416305	3.744
84) 1-Methylnaphthalene	(2)	10.184	142	371964	3.694
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.300	216	175606	3.654
85) Hexachlorocyclopentadiene	(3)	10.300	237	94505	3.494
88) cis-Isosafrole	(3)	10.382	162	27413	0.603
90) 2,4,6-Trichlorophenol	(3)	10.487	196	116212	3.516
92) 2,4,5-Trichlorophenol	(3)	10.533	196	121660	3.689
93)$2-Fluorobiphenyl	(3)	10.638	172	878292	7.381
94) trans-Isosafrole	(3)	10.743	162	147531	2.947
95) 1,1'-Biphenyl	(3)	10.790	154	464077	3.534
96) 2-Chloronaphthalene	(3)	10.801	162	366016	3.550
98) 1-Chloronaphthalene	(3)	10.831	162	356459	3.839
100) 2-Nitroaniline	(3)	10.965	138	126772	3.552
99) Diphenyl ether	(3)	10.970	170	260614	3.648
104) 1,4-Naphthoquinone	(3)	11.081	158	144918	3.538
105) 1,4-Dinitrobenzene	(3)	11.198	168	67431	3.556
106) Dimethylphthalate	(3)	11.309	163	398153	3.802
107) 1,3-Dinitrobenzene	(3)	11.314	168	77425	3.695
108) 2,6-Dinitrotoluene	(3)	11.378	165	96666	3.741
109) Acenaphthylene	(3)	11.454	152	552717	3.665
112) 3-Nitroaniline	(3)	11.612	138	107049	3.558

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$ = Compound is a surrogate standard.

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Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0106.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:05 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
113)*Acenaphthene-d10	(3)	11.670	164	367908	5.000
114) Acenaphthene	(3)	11.717	153	369595	3.669
115) 2,4-Dinitrophenol	(3)	11.769	184	117723	6.566
116) 4-Nitrophenol	(3)	11.874	109	71586	3.339
117) Pentachlorobenzene	(3)	11.909	250	143919	3.620
118) 2,4-Dinitrotoluene	(3)	11.956	165	123306	3.619
119) Dibenzofuran	(3)	11.961	168	524651	3.686
121) 1-Naphthylamine	(3)	12.060	143	390712	3.644
122) 2,3,4,6-Tetrachlorophenol	(3)	12.130	232	95941	3.577
123) 2-Naphthylamine	(3)	12.165	143	378160	3.640
124) Diethylphthalate	(3)	12.311	149	394404	3.671
126) Fluorene	(3)	12.398	166	430655	3.789
125) Thionazin	(3)	12.404	107	89727	3.605
128) 5-Nitro-o-toluidine	(3)	12.416	152	126948	3.616
129) 4-Nitroaniline	(3)	12.422	138	120320	3.686
127) 4-Chlorophenyl-phenylether	(3)	12.422	204	202041	3.769
130) 4,6-Dinitro-2-methylphenol	(4)	12.468	198	68968	3.327
132) NDPA as diphenylamine	(4)	12.562	169	351573	3.747
131) N-Nitrosodiphenylamine	(4)	12.562	169	351573	3.747
134) 1,2-Diphenylhydrazine	(4)	12.608	77	551430	3.809
135)$2,4,6-Tribromophenol	(3)	12.684	330	96007	7.116
137) Tetraethyldithiopyrophosphate	(4)	12.795	97	86015	3.716
139) 1,3,5-Trinitrobenzene	(4)	12.876	213	45587	3.197
140) Diallate (peak 1)	(4)	12.935	86	216312	3.123
141) Phorate	(4)	12.941	75	331054	3.732
142) Phenacetin	(4)	12.946	108	257488	3.628
143) 4-Bromophenyl-phenylether	(4)	13.016	248	111000	3.847
144) Diallate (peak 2)	(4)	13.040	86	34852	0.634
145) Hexachlorobenzene	(4)	13.069	284	105027	3.751
147) Dimethoate	(4)	13.127	87	220471	3.695
148) Atrazine	(4)	13.232	200	99892	3.709
149) Pentachlorophenol	(4)	13.319	266	68334	3.429
150) 4-Aminobiphenyl	(4)	13.331	169	409613	3.741
151) Pentachloronitrobenzene	(4)	13.337	237	45672	3.607
152) Pronamide	(4)	13.430	173	177164	3.599
153)*Phenanthrene-d10	(4)	13.553	188	676746	5.000
154) Dinoseb	(4)	13.576	211	95507	3.149
155) Phenanthrene	(4)	13.582	178	583452	3.655
157) Anthracene	(4)	13.646	178	599346	3.785
163) Carbazole	(4)	13.861	167	565090	3.643

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$ = Compound is a surrogate standard.

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Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0106.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:05 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
164) Methyl parathion	(4)	14.071	109	153237	3.417
165) Di-n-butylphthalate	(4)	14.380	149	692056	3.554
167) Parathion	(4)	14.619	109	101245	3.386
168) 4-Nitroquinoline-1-oxide	(4)	14.619	190	56688	2.739
169) Octachlorostyrene	(4)	14.975	308	37722	3.513
222) Total PAHs	(6)			10030093	67.852
171) Isodrin	(4)	15.021	193	65370	3.577
173) Fluoranthene	(4)	15.231	202	656973	3.678
174) Benzidine	(5)	15.453	184	1360082	11.086
175)*Pyrene-d10	(5)	15.546	212	681935	5.000
177) Pyrene	(5)	15.575	202	698037	3.727
179)$Terphenyl-d14	(5)	15.861	244	896002	7.404
182) p-Dimethylaminoazobenzene	(5)	16.094	225	116955	3.408
185) Chlorobenzilate	(5)	16.187	139	215559	3.628
187) 3,3'-Dimethylbenzidine	(5)	16.648	212	425226	3.424
188) Butylbenzylphthalate	(5)	16.712	149	341785	3.575
191) 2-Acetylaminofluorene	(5)	17.061	181	259589	3.288
193) 3,3'-Dichlorobenzidine	(5)	17.574	252	220870	3.439
195) Benzo(a)anthracene	(5)	17.586	228	628692	3.670
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.592	231	135394	3.566
196) Chrysene	(5)	17.644	228	625326	3.736
199) bis(2-Ethylhexyl)phthalate	(5)	17.790	149	463514	3.502
203) 6-Methylchrysene	(5)	18.449	242	427822	3.484
205) Di-n-octylphthalate	(6)	18.944	149	782803	3.430
206) Benzo(b)fluoranthene	(6)	19.439	252	606081	3.583
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.439	256	274918	3.511
208) Benzo(k)fluoranthene	(6)	19.480	252	632365	3.839
211) Benzo(a)pyrene	(6)	19.964	252	566044	3.694
213)*Perylene-d12	(6)	20.051	264	677153	5.000
215) 3-Methylcholanthrene	(6)	20.535	268	279150	3.424
217) Dibenz(a,h)acridine	(6)	21.345	279	451288	3.527
218) Dibenz(a,j)acridine	(6)	21.415	279	489107	3.613
219) Indeno(1,2,3-cd)pyrene	(6)	21.660	276	518076M	3.654
220) Dibenz(a,h)anthracene	(6)	21.701	278	569017	3.790
221) Benzo(g,h,i)perylene	(6)	22.045	276	561180	3.793

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

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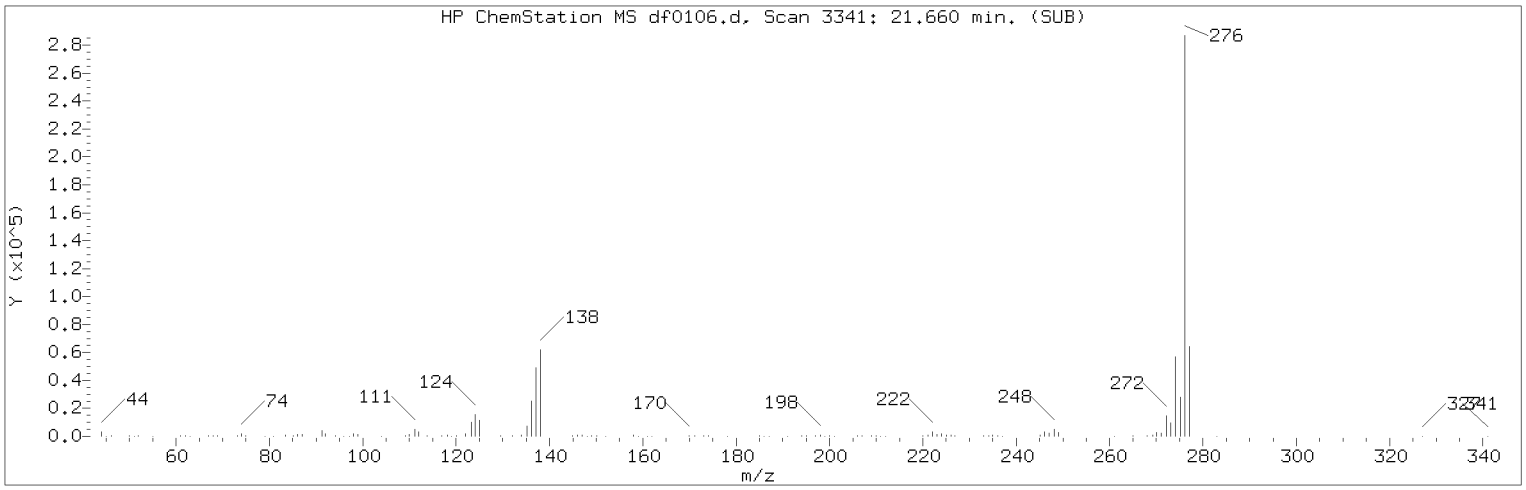
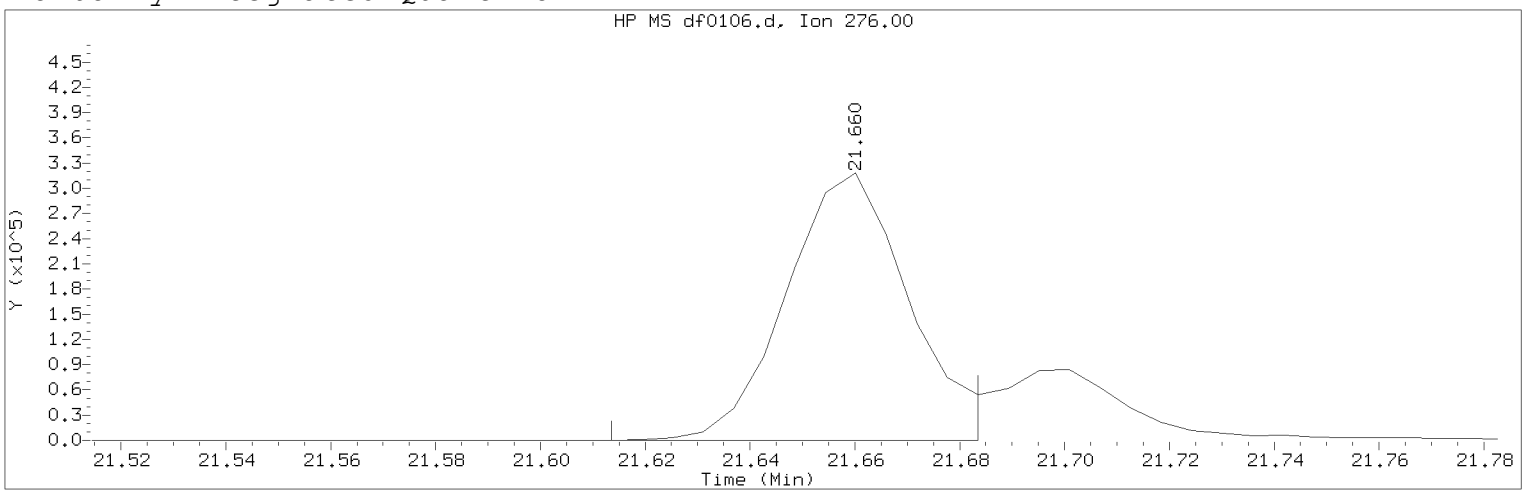
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0106.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:05 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD3.75 Lab Sample ID: rvSTD1318

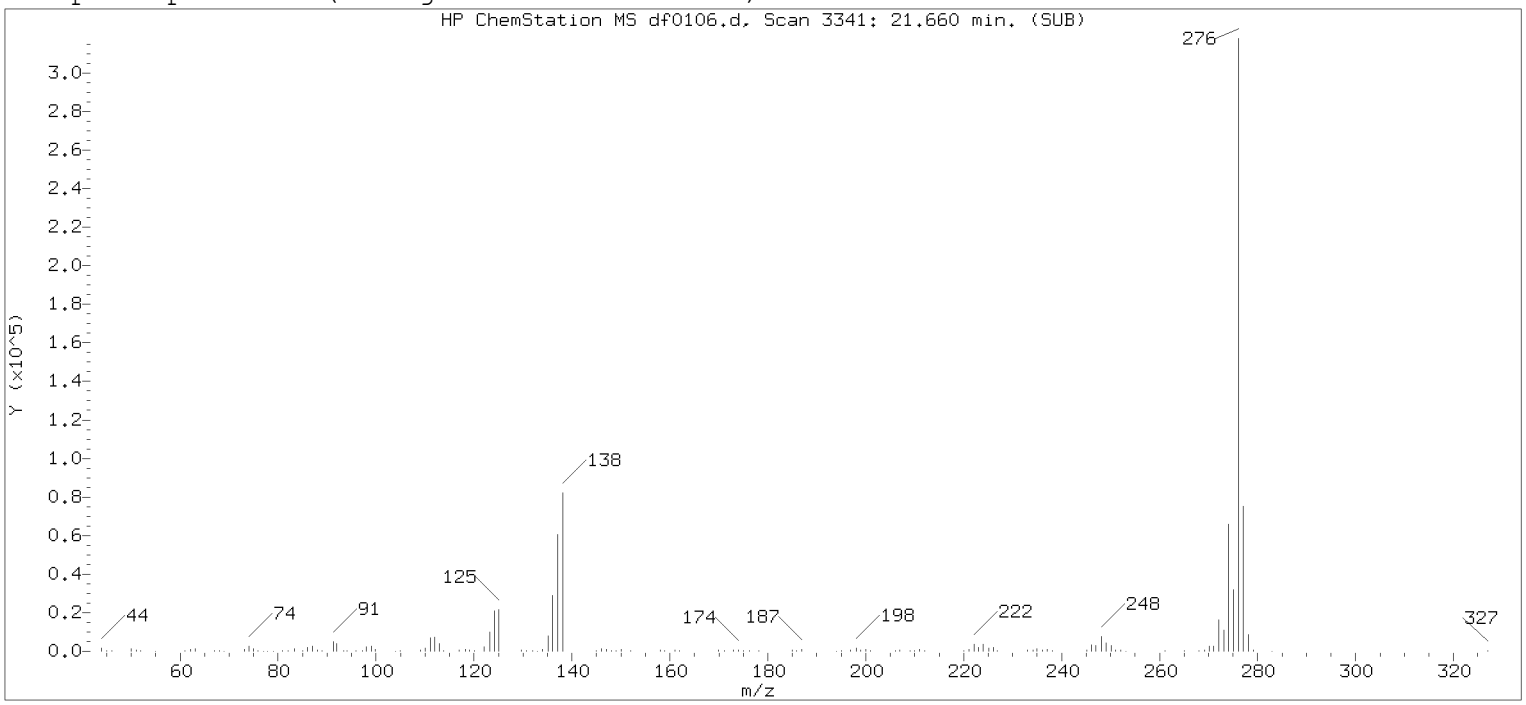
Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3341		
Retention Time (minutes)	: 21.660		
Quant Ion	: 276.00		
Area (flag)	: 518076M		
On-Column Amount (ng/ul)	: 3.6539		
Integration start scan	: 3332	Integration stop scan:	3344
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

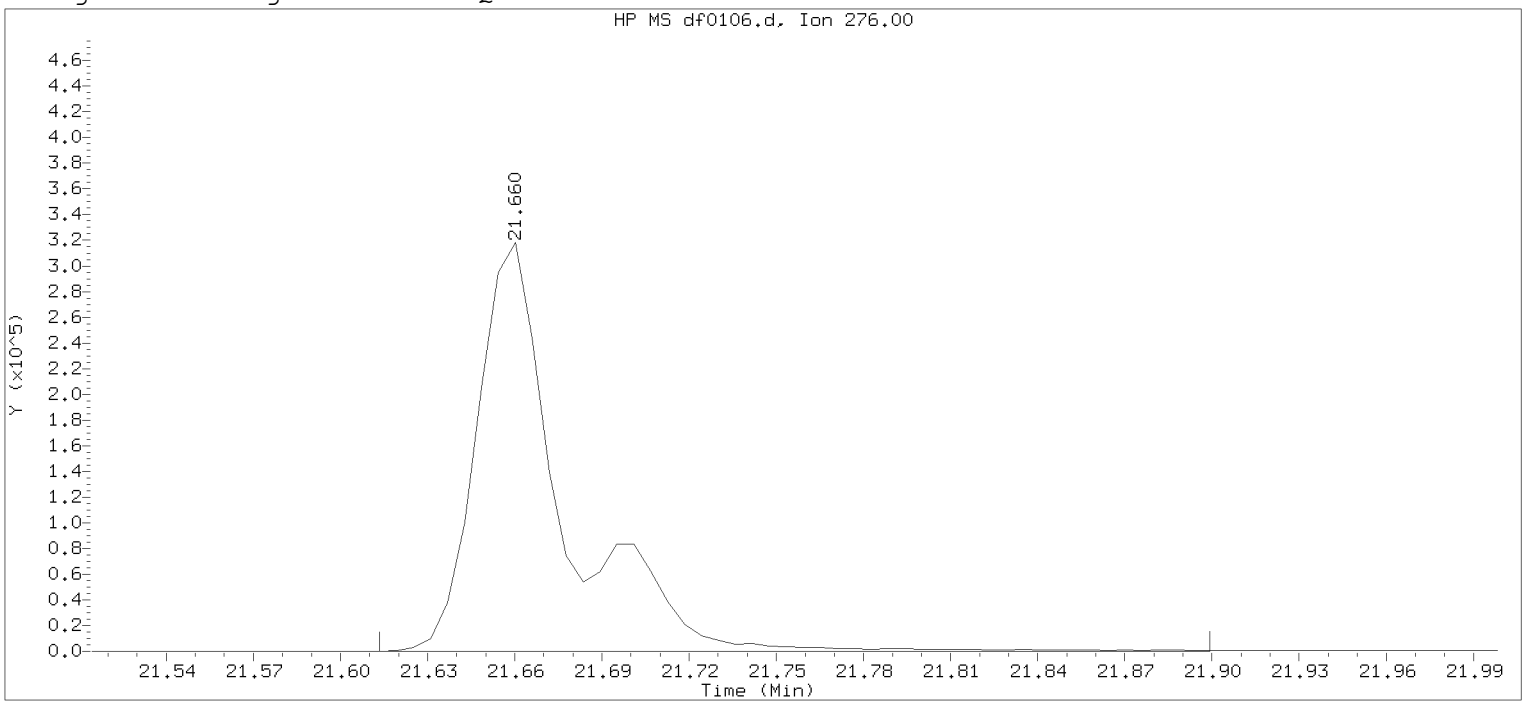
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0106.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:05 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 03:31
Date, time and analyst ID of latest file update: 05-Jun-2018 03:31 Automation

Sample Name: SSTD3.75 Lab Sample ID: rvSTD1318

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3341		
Retention Time (minutes)	: 21.660		
Quant Ion	: 276.00		
Area	: 666020		
On-column Amount (ng/ul)	: 4.1435		
Integration start scan	: 3332	Integration stop scan:	3381
Y at integration start	: 0	Y at integration end:	0

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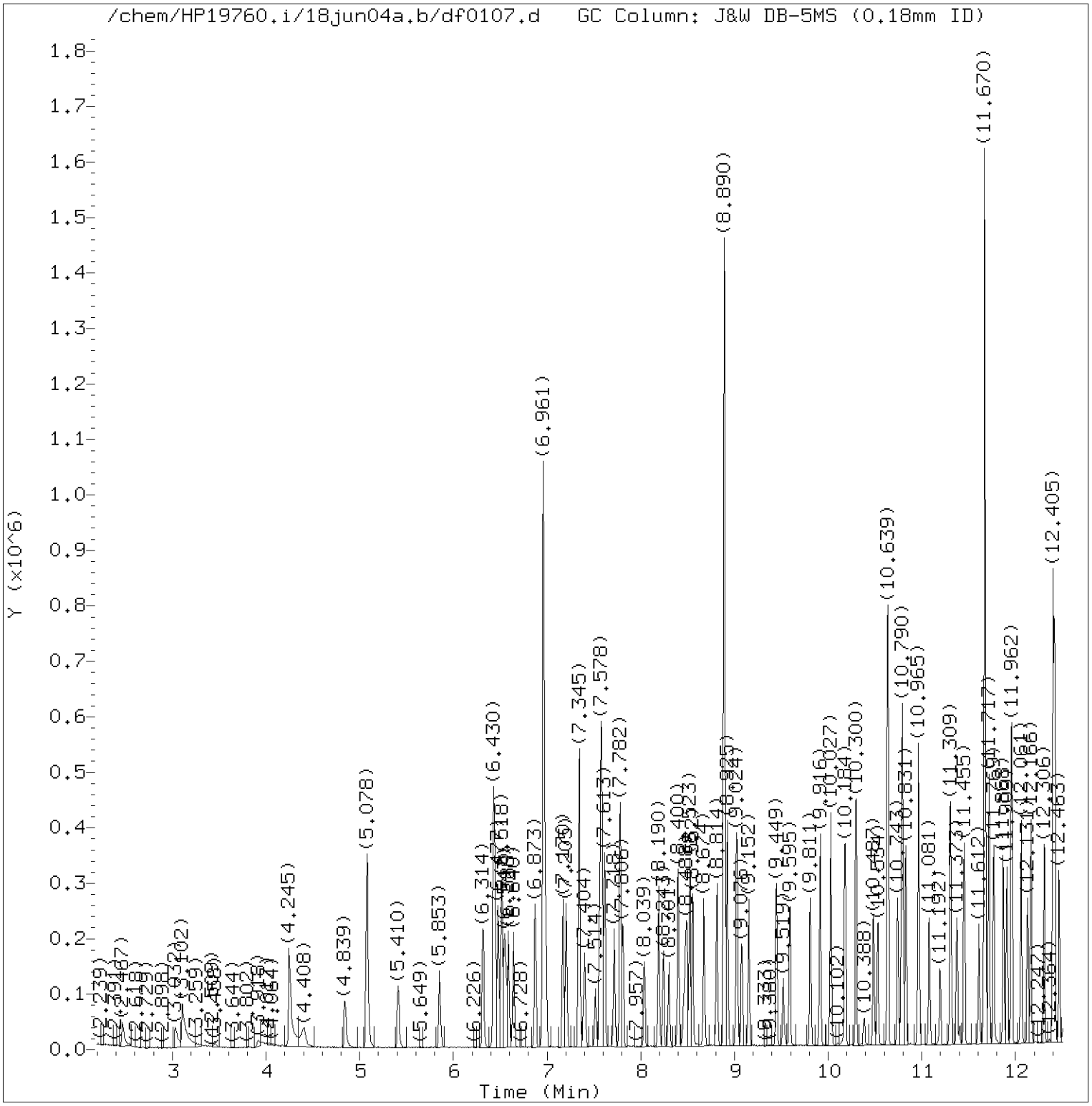
Target 3.5 esignature user name: [illegible]



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0107.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD1318

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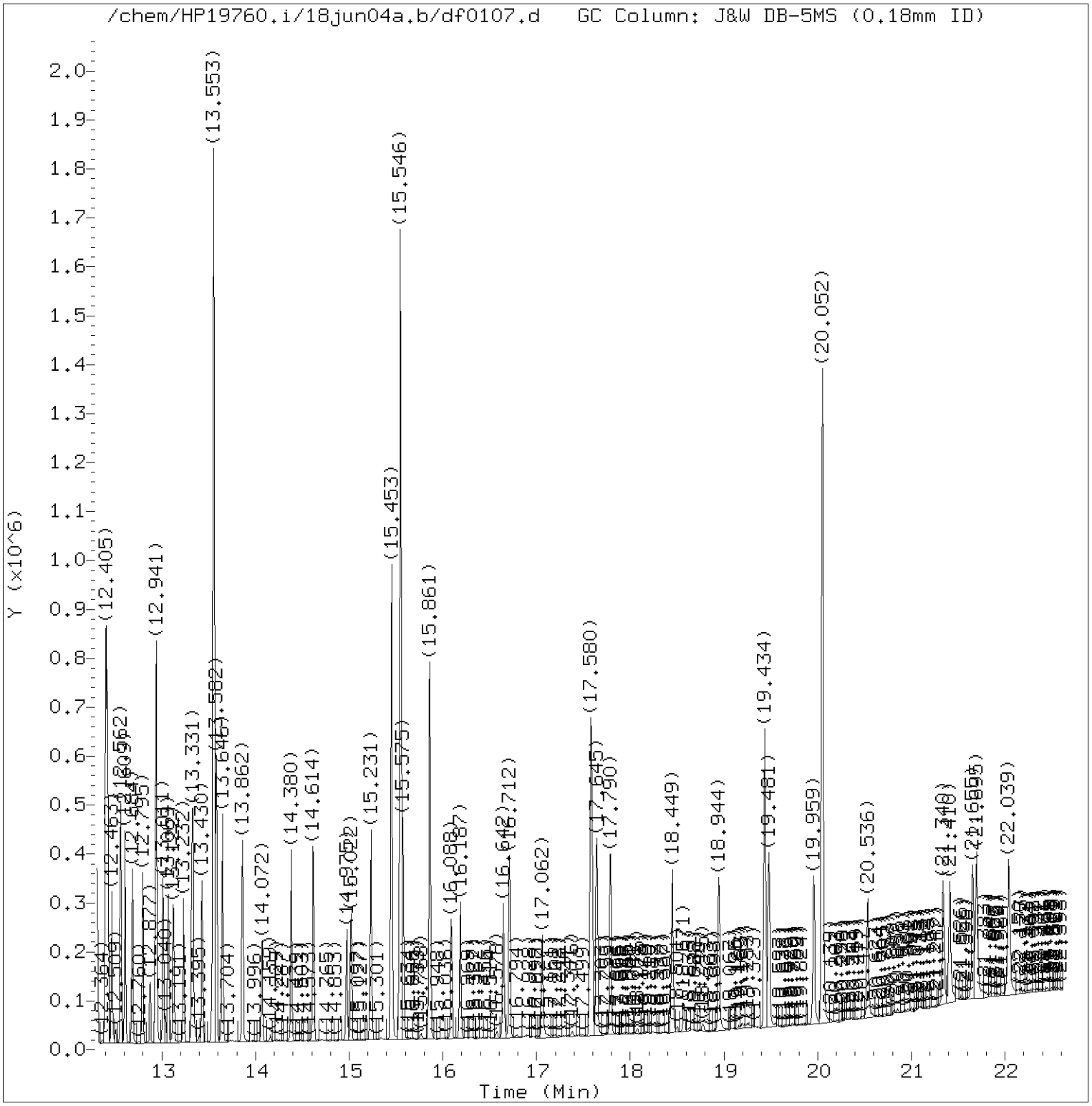
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0107.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD1318

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on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0107.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.467	88	37770	1.158
4) N-Nitrosodimethylamine	(1)	3.032	74	55912	1.139
5) Pyridine	(1)	3.102	79	94753	1.129
7) 2-Picoline	(1)	4.245	93	110337	1.228
8) N-Nitrosomethylethylamine	(1)	4.408	88	46749	1.191
9) Methyl methanesulfonate	(1)	4.845	80	52374	1.194
11)$2-Fluorophenol	(1)	5.078	112	167035	2.383
13) N-Nitrosodiethylamine	(1)	5.410	102	43069	1.161
42) Total Cresols	(1)			170604	2.425
15) Ethyl methanesulfonate	(1)	5.853	109	43719	1.216
16) Benzaldehyde	(1)	6.314	77	72039	1.273
17)$Phenol-d6	(1)	6.430	99	224155	2.415
18) Phenol	(1)	6.448	94	134143	1.243
19) Aniline	(1)	6.477	93	150304	1.202
20) a-methylstyrene	(1)	6.558	118	31099	1.215
22) bis(2-Chloroethyl)ether	(1)	6.588	93	96762	1.211
23) 2-Chlorophenol	(1)	6.640	128	74682	1.209
24) 1,3-Dichlorobenzene	(1)	6.873	146	79901	1.237
25)*1,4-Dichlorobenzene-d4	(1)	6.961	152	209281	5.000
26) 1,4-Dichlorobenzene	(1)	6.984	146	82675	1.262
27) Benzyl alcohol	(1)	7.170	108	54168	1.187
28) 1,2-Dichlorobenzene	(1)	7.205	146	76136	1.237
30) Indene	(1)	7.340	115	120125	1.216
31) 2-Methylphenol	(1)	7.345	108	79250	1.203
97) Isosafrole	(3)			55854	1.163
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.404	45	99754	1.233
34) bis(2-Chloroisopropyl)ether	(1)	7.404	45	99754	1.233
35) N-Nitrosopyrrolidine	(1)	7.514	100	45716	1.174
36) Acetophenone	(1)	7.561	105	107715	1.118
38) N-Nitroso-di-n-propylamine	(1)	7.578	70	69376	1.237
39) N-Nitrosomorpholine	(1)	7.584	56	51686	1.239
37) 4-Methylphenol	(1)	7.584	108	91354	1.221
40) o-Toluidine	(1)	7.613	106	140782	1.231
59) 1,2,3,4-Tetrahydronaphthalene	(2)	7.613	104	3849	1.187
43) Hexachloroethane	(1)	7.713	117	35786	1.211
44)$Nitrobenzene-d5	(2)	7.782	82	202863	2.430
45) Nitrobenzene	(2)	7.806	77	101713	1.240
48) N-Nitrosopiperidine	(2)	8.039	114	41055	1.182
120) 2,4_2,6-Dinitrotoluenes	(3)			68553	2.344
50) Isophorone	(2)	8.190	82	168045	1.165

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$ = Compound is a surrogate standard.

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on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0107.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
51) 2-Nitrophenol	(2)	8.301	139	34702	1.110
53) 2,4-Dimethylphenol	(2)	8.400	107	83005	1.177
56) Benzoic acid	(2)	8.488	105	141055	2.819
57) O,O,O-Triethylphosphorothioate	(2)	8.523	198	33054	1.216
55) bis(2-Chloroethoxy)methane	(2)	8.552	93	114167	1.246
60) 2,4-Dichlorophenol	(2)	8.674	162	54604	1.167
146) Diallate trans/cis	(4)			80776	1.223
62) 1,2,4-Trichlorobenzene	(2)	8.814	180	60830	1.233
65)*Naphthalene-d8	(2)	8.890	136	791196	5.000
66) Naphthalene	(2)	8.925	128	214274	1.216
67) 4-Chloroaniline	(2)	9.018	127	91155	1.216
68) 2,6-Dichlorophenol	(2)	9.030	162	55591	1.194
69) Hexachloropropene	(2)	9.082	213	37939	1.186
71) Hexachlorobutadiene	(2)	9.152	225	34416	1.246
75) Quinoline	(2)	9.449	129	125839	1.190
76) Caprolactam	(2)	9.519	113	20299	0.999
77) N-Nitrosodi-n-butylamine	(2)	9.595	84	59574	1.060
80) 4-Chloro-3-methylphenol	(2)	9.811	107	68835	1.154
82) Safrole	(2)	9.916	162	50376	1.158
83) 2-Methylnaphthalene	(2)	10.027	142	136226	1.209
84) 1-Methylnaphthalene	(2)	10.184	142	125293	1.226
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.295	216	59705	1.255
85) Hexachlorocyclopentadiene	(3)	10.300	237	30311	1.151
88) cis-Isosafrole	(3)	10.388	162	8740	0.197
90) 2,4,6-Trichlorophenol	(3)	10.487	196	35558	1.112
92) 2,4,5-Trichlorophenol	(3)	10.534	196	37637	1.169
93)$2-Fluorobiphenyl	(3)	10.639	172	295843	2.512
94) trans-Isosafrole	(3)	10.743	162	47114	0.965
95) 1,1'-Biphenyl	(3)	10.784	154	148501	1.160
96) 2-Chloronaphthalene	(3)	10.796	162	125266	1.232
98) 1-Chloronaphthalene	(3)	10.831	162	116936	1.270
100) 2-Nitroaniline	(3)	10.965	138	37770	1.097
99) Diphenyl ether	(3)	10.965	170	86871	1.233
104) 1,4-Naphthoquinone	(3)	11.081	158	43665	1.103
105) 1,4-Dinitrobenzene	(3)	11.198	168	18673	1.031
106) Dimethylphthalate	(3)	11.303	163	131622	1.268
107) 1,3-Dinitrobenzene	(3)	11.309	168	23062	1.134
108) 2,6-Dinitrotoluene	(3)	11.373	165	29815	1.180
109) Acenaphthylene	(3)	11.455	152	179842	1.212
112) 3-Nitroaniline	(3)	11.612	138	34128	1.163

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0107.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
113)*Acenaphthene-d10	(3)	11.670	164	363762	5.000
114) Acenaphthene	(3)	11.717	153	124178	1.247
115) 2,4-Dinitrophenol	(3)	11.769	184	49544	2.919
116) 4-Nitrophenol	(3)	11.868	109	42957	2.027
117) Pentachlorobenzene	(3)	11.909	250	49825	1.264
118) 2,4-Dinitrotoluene	(3)	11.956	165	38738	1.165
119) Dibenzofuran	(3)	11.962	168	178107	1.263
121) 1-Naphthylamine	(3)	12.061	143	125488	1.184
122) 2,3,4,6-Tetrachlorophenol	(3)	12.131	232	31018	1.182
123) 2-Naphthylamine	(3)	12.166	143	123739	1.205
124) Diethylphthalate	(3)	12.311	149	128342	1.215
126) Fluorene	(3)	12.399	166	140388	1.249
125) Thionazin	(3)	12.405	107	29601	1.210
128) 5-Nitro-o-toluidine	(3)	12.416	152	38163	1.122
129) 4-Nitroaniline	(3)	12.416	138	38658	1.206
127) 4-Chlorophenyl-phenylether	(3)	12.422	204	67147	1.264
130) 4,6-Dinitro-2-methylphenol	(4)	12.469	198	40793	1.983
132) NDPA as diphenylamine	(4)	12.562	169	115592	1.243
131) N-Nitrosodiphenylamine	(4)	12.562	169	115592	1.243
134) 1,2-Diphenylhydrazine	(4)	12.609	77	178060	1.241
135)$2,4,6-Tribromophenol	(3)	12.684	330	30468	2.317
137) Tetraethyldithiopyrophosphate	(4)	12.795	97	27500	1.206
139) 1,3,5-Trinitrobenzene	(4)	12.877	213	11892	0.840
140) Diallate (peak 1)	(4)	12.935	86	70052	1.022
141) Phorate	(4)	12.941	75	103803	1.190
142) Phenacetin	(4)	12.947	108	74862	1.090
143) 4-Bromophenyl-phenylether	(4)	13.011	248	35869	1.252
144) Diallate (peak 2)	(4)	13.040	86	10724	0.199
145) Hexachlorobenzene	(4)	13.069	284	34805	1.252
147) Dimethoate	(4)	13.127	87	65248	1.124
148) Atrazine	(4)	13.232	200	30031	1.143
149) Pentachlorophenol	(4)	13.320	266	20816	1.081
150) 4-Aminobiphenyl	(4)	13.326	169	126604	1.178
151) Pentachloronitrobenzene	(4)	13.337	237	14143	1.144
152) Pronamide	(4)	13.430	173	51398	1.081
153)*Phenanthrene-d10	(4)	13.553	188	671650	5.000
154) Dinoseb	(4)	13.576	211	25016	0.880
155) Phenanthrene	(4)	13.582	178	195451	1.236
157) Anthracene	(4)	13.646	178	192822	1.230
163) Carbazole	(4)	13.862	167	177713	1.169

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$ = Compound is a surrogate standard.

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Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0107.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
164) Methyl parathion	(4)	14.072	109	42804	1.000
165) Di-n-butylphthalate	(4)	14.380	149	210355	1.113
167) Parathion	(4)	14.614	109	27480	0.968
168) 4-Nitroquinoline-1-oxide	(4)	14.619	190	12464	0.607
169) Octachlorostyrene	(4)	14.975	308	12728	1.203
222) Total PAHs	(6)			3170947	22.618
171) Isodrin	(4)	15.022	193	20492	1.148
173) Fluoranthene	(4)	15.231	202	202207	1.155
174) Benzidine	(5)	15.453	184	430431	3.542
175)*Pyrene-d10	(5)	15.546	212	675555	5.000
177) Pyrene	(5)	15.575	202	229017	1.236
179)$Terphenyl-d14	(5)	15.861	244	285790	2.403
182) p-Dimethylaminoazobenzene	(5)	16.088	225	32765	1.002
185) Chlorobenzilate	(5)	16.187	139	63698	1.107
187) 3,3'-Dimethylbenzidine	(5)	16.648	212	120687	1.017
188) Butylbenzylphthalate	(5)	16.712	149	100564	1.089
191) 2-Acetylaminofluorene	(5)	17.062	181	66172	0.894
193) 3,3'-Dichlorobenzidine	(5)	17.569	252	64895	1.052
195) Benzo(a)anthracene	(5)	17.580	228	189623	1.135
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.592	231	39096	1.040
196) Chrysene	(5)	17.645	228	198099	1.202
199) bis(2-Ethylhexyl)phthalate	(5)	17.790	149	132196	1.042
203) 6-Methylchrysene	(5)	18.449	242	129030	1.088
205) Di-n-octylphthalate	(6)	18.944	149	209478	1.006
206) Benzo(b)fluoranthene	(6)	19.434	252	184240	1.163
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.440	256	80742	1.112
208) Benzo(k)fluoranthene	(6)	19.481	252	192449	1.235
211) Benzo(a)pyrene	(6)	19.959	252	167003	1.164
213)*Perylene-d12	(6)	20.052	264	641640	5.000
215) 3-Methylcholanthrene	(6)	20.536	268	80137	1.068
217) Dibenz(a,h)acridine	(6)	21.340	279	131307	1.108
218) Dibenz(a,j)acridine	(6)	21.410	279	148667	1.173
219) Indeno(1,2,3-cd)pyrene	(6)	21.655	276	152085M	1.147
220) Dibenz(a,h)anthracene	(6)	21.695	278	174986	1.233
221) Benzo(g,h,i)perylene	(6)	22.039	276	172764	1.235

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

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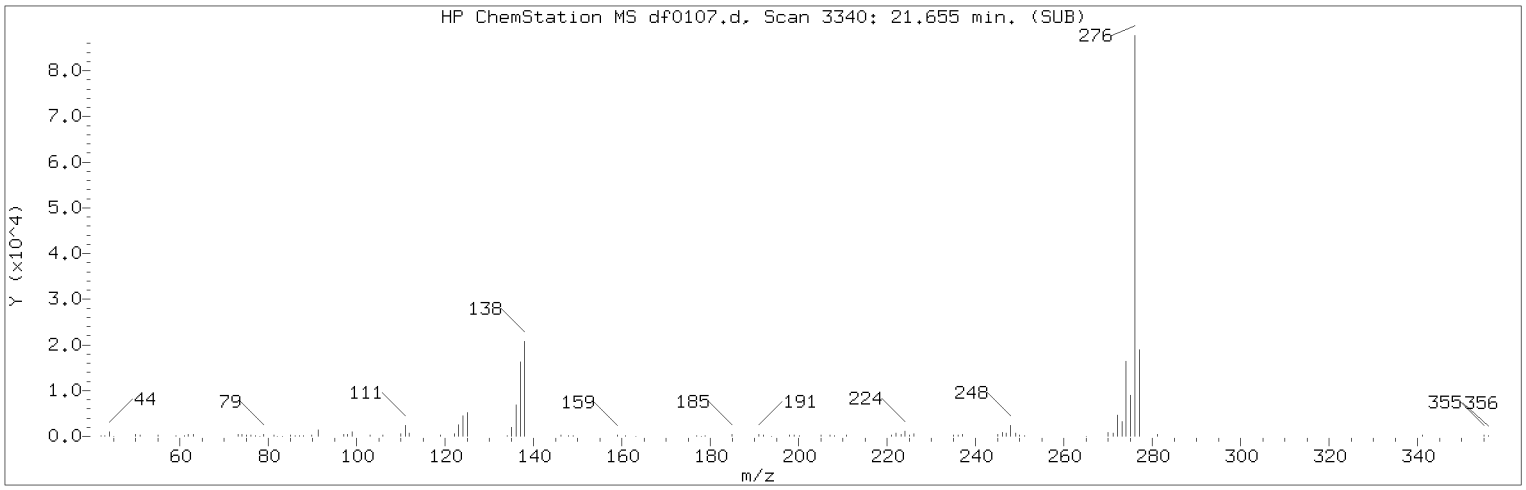
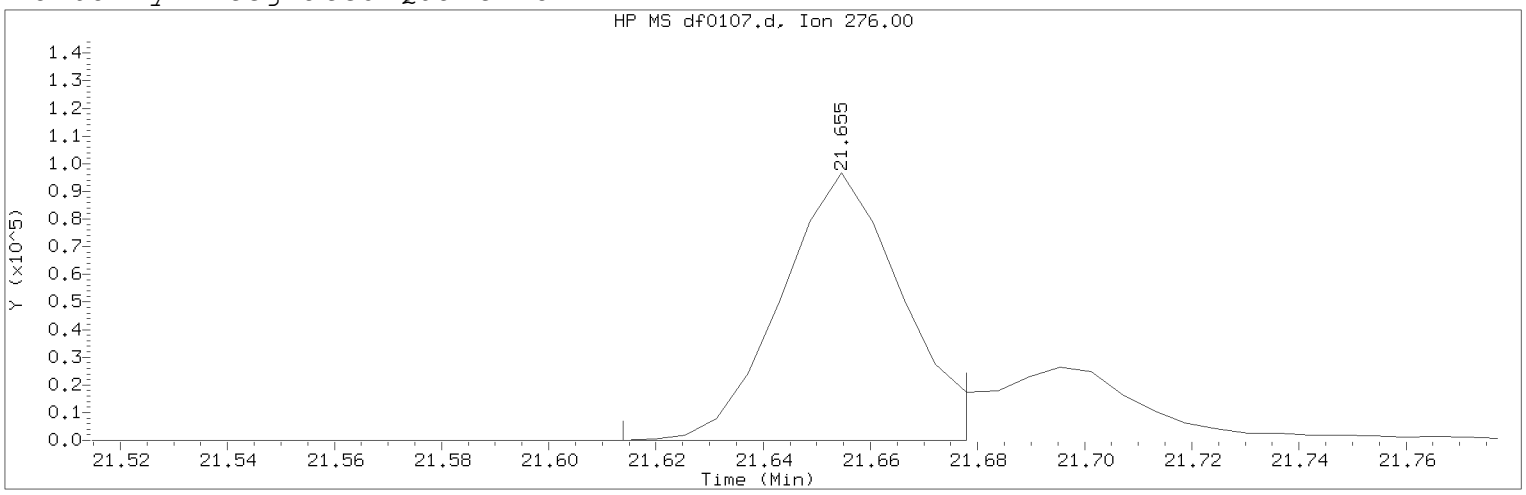
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0107.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD1.25 Lab Sample ID: rvSTD1318

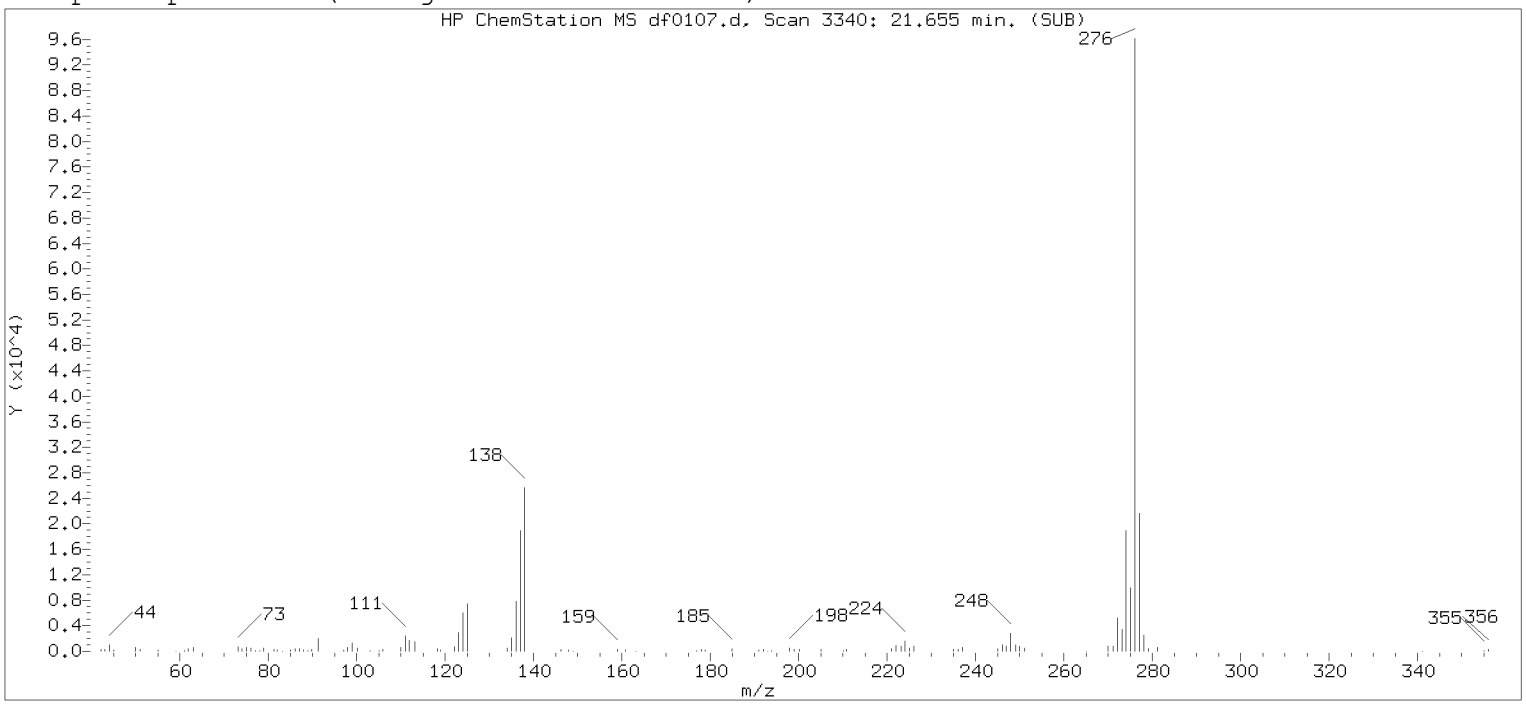
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3340
Retention Time (minutes) : 21.655
Quant Ion : 276.00
Area (flag) : 152085M
On-Column Amount (ng/ul) : 1.1475
Integration start scan : 3332 Integration stop scan: 3343
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

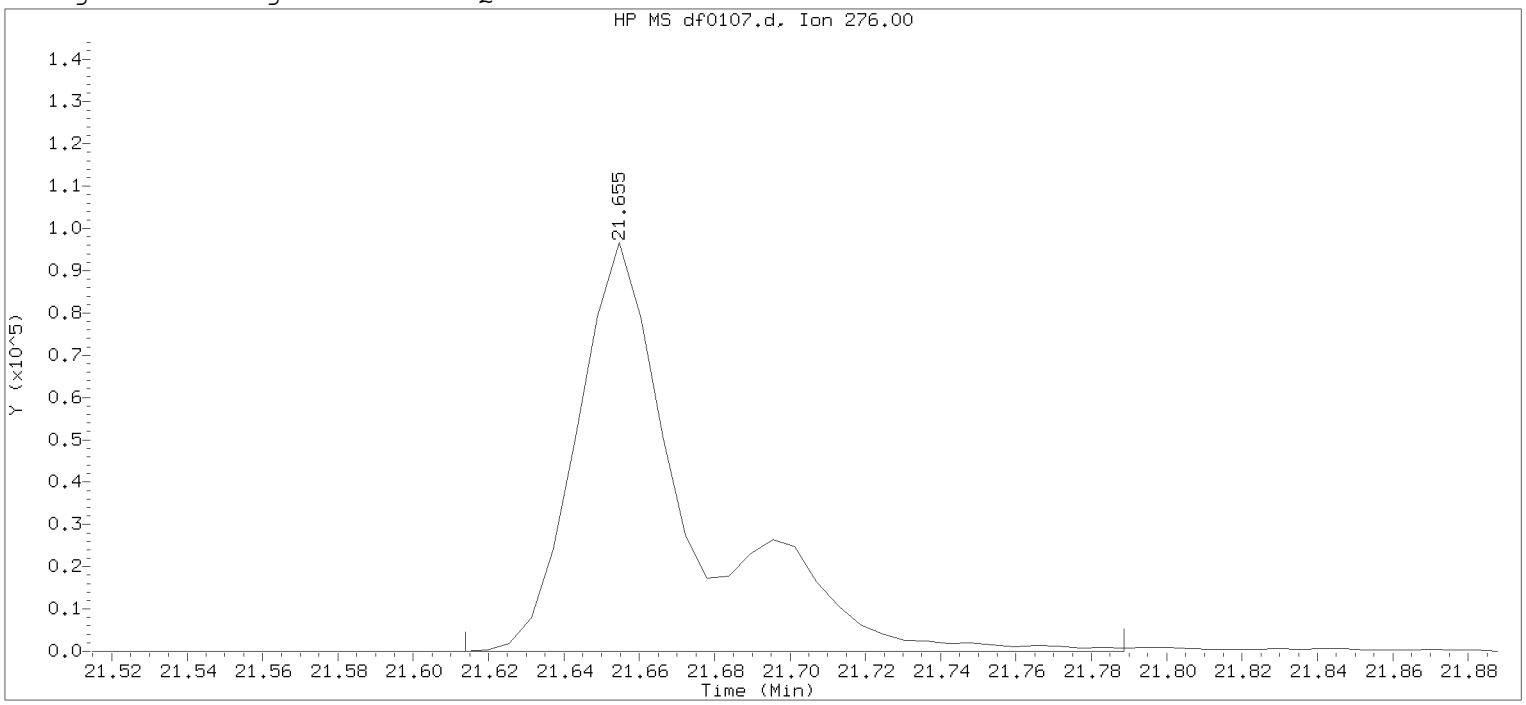
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0107.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 03:33 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 03:59
Date, time and analyst ID of latest file update: 05-Jun-2018 03:59 Automation

Sample Name: SSTD1.25 Lab Sample ID: rvSTD1318

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3340		
Retention Time (minutes)	: 21.655		
Quant Ion	: 276.00		
Area	: 202893		
On-column Amount (ng/ul)	: 1.3036		
Integration start scan	: 3332	Integration stop scan:	3362
Y at integration start	: 0	Y at integration end:	0

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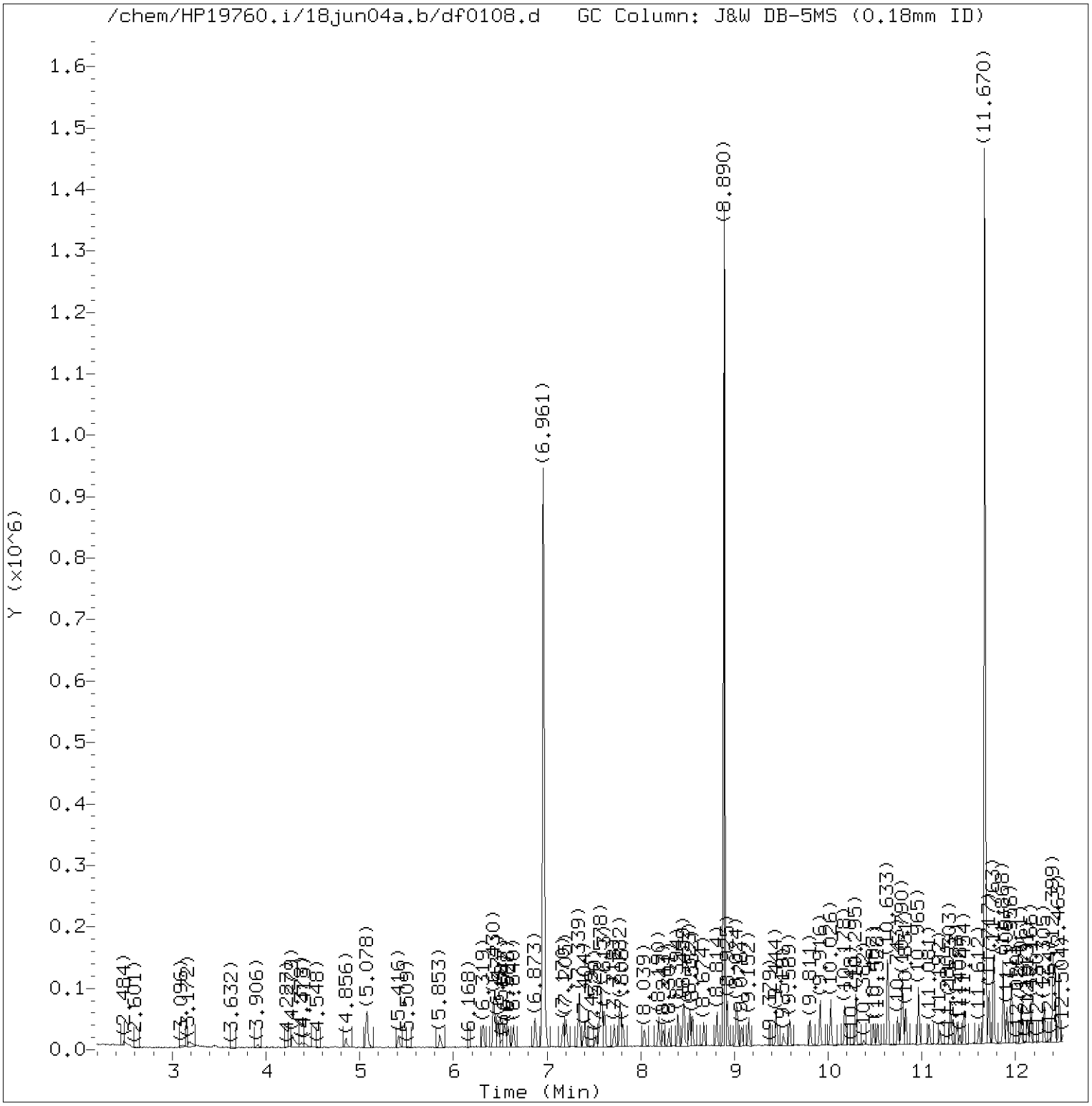
Target 3.5 esignature user name: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

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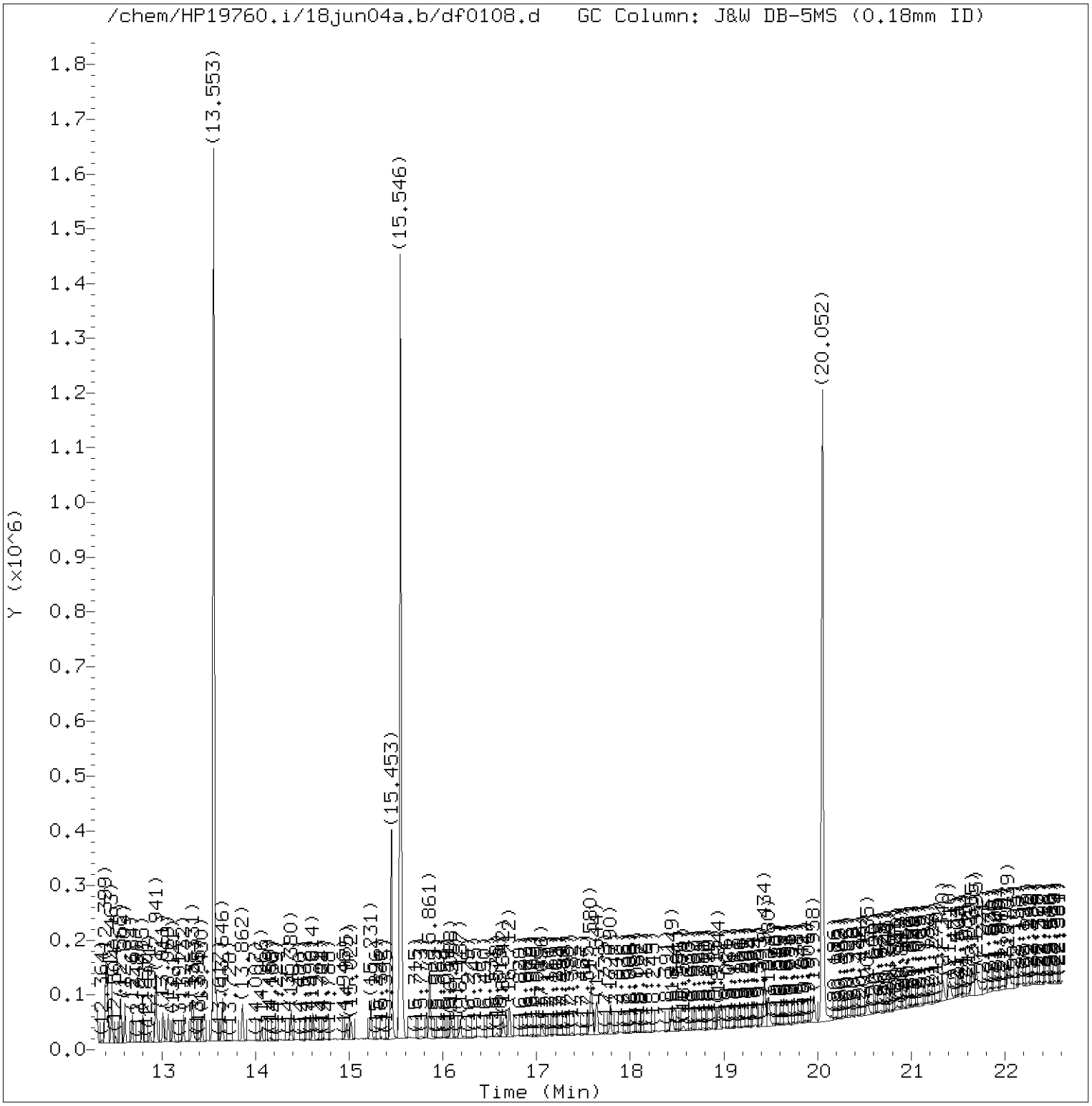
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.490	88	7480M	0.255
4) N-Nitrosodimethylamine	(1)	3.108	74	8391M	0.190
5) Pyridine	(1)	3.166	79	21593M	0.286
7) 2-Picoline	(1)	4.279	93	20168	0.250
8) N-Nitrosomethylethylamine	(1)	4.413	88	7678M	0.217
9) Methyl methanesulfonate	(1)	4.856	80	8755	0.222
11)$2-Fluorophenol	(1)	5.078	112	28138	0.453
13) N-Nitrosodiethylamine	(1)	5.416	102	7353	0.224
42) Total Cresols	(1)			25997	0.422
15) Ethyl methanesulfonate	(1)	5.859	109	7218	0.227
16) Benzaldehyde	(1)	6.319	77	12705	0.250
17)$Phenol-d6	(1)	6.430	99	37656	0.457
18) Phenol	(1)	6.448	94	22482	0.234
19) Aniline	(1)	6.477	93	26176	0.235
20) a-methylstyrene	(1)	6.558	118	4939	0.215
22) bis(2-Chloroethyl)ether	(1)	6.588	93	16421	0.231
23) 2-Chlorophenol	(1)	6.640	128	12859	0.234
24) 1,3-Dichlorobenzene	(1)	6.873	146	13768	0.239
25)*1,4-Dichlorobenzene-d4	(1)	6.961	152	188257	5.000
26) 1,4-Dichlorobenzene	(1)	6.984	146	14255	0.243
27) Benzyl alcohol	(1)	7.170	108	8192	0.200
28) 1,2-Dichlorobenzene	(1)	7.205	146	13629	0.247
30) Indene	(1)	7.339	115	18366	0.207
31) 2-Methylphenol	(1)	7.345	108	13144	0.225
97) Isosafrole	(3)			9115	0.213
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.404	45	17457	0.241
34) bis(2-Chloroisopropyl)ether	(1)	7.404	45	17457	0.241
35) N-Nitrosopyrrolidine	(1)	7.520	100	7523	0.219
36) Acetophenone	(1)	7.561	105	17505	0.208
38) N-Nitroso-di-n-propylamine	(1)	7.578	70	11594	0.232
37) 4-Methylphenol	(1)	7.578	108	12853	0.198
39) N-Nitrosomorpholine	(1)	7.584	56	9007	0.240
59) 1,2,3,4-Tetrahydronaphthalene	(2)	7.608	104	571M	0.195
40) o-Toluidine	(1)	7.613	106	23541	0.232
43) Hexachloroethane	(1)	7.718	117	6275	0.236
44)$Nitrobenzene-d5	(2)	7.782	82	34268	0.461
45) Nitrobenzene	(2)	7.806	77	16786	0.230
48) N-Nitrosopiperidine	(2)	8.039	114	6904	0.224
120) 2,4_2,6-Dinitrotoluenes	(3)			10338	0.408
50) Isophorone	(2)	8.190	82	27951	0.219

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$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
51) 2-Nitrophenol	(2)	8.301	139	5832	0.212
53) 2,4-Dimethylphenol	(2)	8.394	107	13726	0.220
56) Benzoic acid	(2)	8.464	105	33634	0.745
57) O,O,O-Triethylphosphorothioate	(2)	8.523	198	5757	0.235
55) bis(2-Chloroethoxy)methane	(2)	8.552	93	19904	0.242
60) 2,4-Dichlorophenol	(2)	8.674	162	8762	0.213
146) Diallate trans/cis	(4)			12851	0.218
62) 1,2,4-Trichlorobenzene	(2)	8.814	180	10535	0.239
65)*Naphthalene-d8	(2)	8.890	136	713723	5.000
66) Naphthalene	(2)	8.925	128	38503	0.243
67) 4-Chloroaniline	(2)	9.018	127	14793	0.223
68) 2,6-Dichlorophenol	(2)	9.030	162	8909	0.217
69) Hexachloropropene	(2)	9.076	213	6308	0.219
71) Hexachlorobutadiene	(2)	9.152	225	6171	0.248
75) Quinoline	(2)	9.444	129	21508	0.225
76) Caprolactam	(2)	9.525	113	3457	0.189
77) N-Nitrosodi-n-butylamine	(2)	9.589	84	9430	0.186
80) 4-Chloro-3-methylphenol	(2)	9.811	107	10528	0.202
82) Safrole	(2)	9.916	162	8062	0.205
83) 2-Methylnaphthalene	(2)	10.026	142	23448	0.233
84) 1-Methylnaphthalene	(2)	10.184	142	20232	0.223
85) Hexachlorocyclopentadiene	(3)	10.295	237	5461	0.233
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.295	216	11043	0.259
88) cis-Isosafrole	(3)	10.382	162	1313	0.033
90) 2,4,6-Trichlorophenol	(3)	10.487	196	5553	0.201
92) 2,4,5-Trichlorophenol	(3)	10.534	196	5719	0.205
93)$2-Fluorobiphenyl	(3)	10.633	172	50574	0.484
94) trans-Isosafrole	(3)	10.743	162	7802	0.179
95) 1,1'-Biphenyl	(3)	10.784	154	25915	0.230
96) 2-Chloronaphthalene	(3)	10.796	162	22318	0.247
98) 1-Chloronaphthalene	(3)	10.831	162	19078	0.235
100) 2-Nitroaniline	(3)	10.965	138	5867	0.198
99) Diphenyl ether	(3)	10.965	170	15112	0.242
104) 1,4-Naphthoquinone	(3)	11.076	158	6532	0.185
105) 1,4-Dinitrobenzene	(3)	11.192	168	2825	0.175
106) Dimethylphthalate	(3)	11.303	163	22304	0.241
107) 1,3-Dinitrobenzene	(3)	11.309	168	3193	0.176
108) 2,6-Dinitrotoluene	(3)	11.373	165	4298	0.197
109) Acenaphthylene	(3)	11.454	152	28584	0.220
112) 3-Nitroaniline	(3)	11.612	138	4658	0.186

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
113)*Acenaphthene-d10	(3)	11.670	164	324533	5.000
114) Acenaphthene	(3)	11.717	153	21122	0.239
115) 2,4-Dinitrophenol	(3)	11.763	184	20625	1.362
116) 4-Nitrophenol	(3)	11.868	109	16479	0.871
117) Pentachlorobenzene	(3)	11.909	250	8658	0.247
118) 2,4-Dinitrotoluene	(3)	11.956	165	6040	0.204
119) Dibenzofuran	(3)	11.962	168	30097	0.241
121) 1-Naphthylamine	(3)	12.061	143	19650	0.208
122) 2,3,4,6-Tetrachlorophenol	(3)	12.131	232	4746	0.203
123) 2-Naphthylamine	(3)	12.166	143	20847	0.228
124) Diethylphthalate	(3)	12.305	149	21310	0.226
126) Fluorene	(3)	12.399	166	23888	0.240
125) Thionazin	(3)	12.405	107	4483	0.205
128) 5-Nitro-o-toluidine	(3)	12.416	152	6200	0.210
129) 4-Nitroaniline	(3)	12.416	138	5474	0.198
127) 4-Chlorophenyl-phenylether	(3)	12.422	204	11449	0.243
130) 4,6-Dinitro-2-methylphenol	(4)	12.463	198	14009	0.764
132) NDPA as diphenylamine	(4)	12.562	169	18856	0.230
131) N-Nitrosodiphenylamine	(4)	12.562	169	18856	0.230
134) 1,2-Diphenylhydrazine	(4)	12.609	77	29705	0.235
135)$2,4,6-Tribromophenol	(3)	12.684	330	4514	0.398
137) Tetraethyldithiopyrophosphate	(4)	12.795	97	4323	0.213
139) 1,3,5-Trinitrobenzene	(4)	12.877	213	1613	0.128
140) Diallate (peak 1)	(4)	12.935	86	10804	0.177
142) Phenacetin	(4)	12.941	108	11026	0.180
141) Phorate	(4)	12.941	75	15975	0.211
143) 4-Bromophenyl-phenylether	(4)	13.011	248	5507	0.220
144) Diallate (peak 2)	(4)	13.040	86	2047	0.043
145) Hexachlorobenzene	(4)	13.069	284	6381	0.257
147) Dimethoate	(4)	13.121	87	9145	0.177
148) Atrazine	(4)	13.232	200	5444	0.232
149) Pentachlorophenol	(4)	13.320	266	2808	0.164
150) 4-Aminobiphenyl	(4)	13.325	169	19621	0.210
151) Pentachloronitrobenzene	(4)	13.337	237	2074	0.188
152) Pronamide	(4)	13.430	173	8250	0.201
153)*Phenanthrene-d10	(4)	13.553	188	598503	5.000
154) Dinoseb	(4)	13.576	211	2899	0.114
155) Phenanthrene	(4)	13.582	178	34035	0.243
157) Anthracene	(4)	13.646	178	31009	0.225
163) Carbazole	(4)	13.862	167	27825	0.211

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

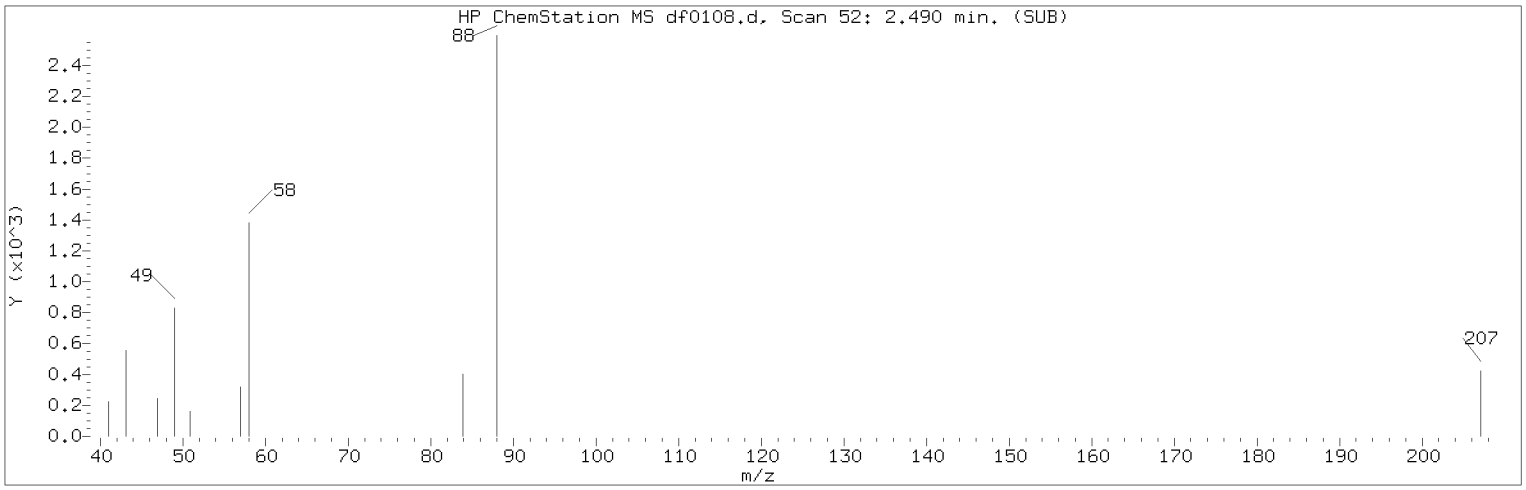
Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
164) Methyl parathion	(4)	14.066	109	5741	0.151
165) Di-n-butylphthalate	(4)	14.380	149	31478	0.187
167) Parathion	(4)	14.614	109	3148	0.124
168) 4-Nitroquinoline-1-oxide	(4)	14.619	190	1461	0.080
169) Octachlorostyrene	(4)	14.975	308	1769	0.188
222) Total PAHs	(6)			516819	4.284
171) Isodrin	(4)	15.022	193	3771	0.239
173) Fluoranthene	(4)	15.231	202	33038	0.216
174) Benzidine	(5)	15.453	184	187577	1.783
175)*Pyrene-d10	(5)	15.546	212	584926	5.000
177) Pyrene	(5)	15.575	202	40014	0.250
179)$Terphenyl-d14	(5)	15.855	244	47275	0.464
182) p-Dimethylaminoazobenzene	(5)	16.094	225	4366	0.154
185) Chlorobenzilate	(5)	16.181	139	8330	0.167
187) 3,3'-Dimethylbenzidine	(5)	16.642	212	16655	0.162
188) Butylbenzylphthalate	(5)	16.712	149	14280	0.179
191) 2-Acetylaminofluorene	(5)	17.056	181	7956	0.124
193) 3,3'-Dichlorobenzidine	(5)	17.575	252	8758	0.164
195) Benzo(a)anthracene	(5)	17.580	228	28680	0.203
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.592	231	5339	0.164
196) Chrysene	(5)	17.644	228	32634	0.231
199) bis(2-Ethylhexyl)phthalate	(5)	17.790	149	17132	0.156
203) 6-Methylchrysene	(5)	18.449	242	20079	0.196
205) Di-n-octylphthalate	(6)	18.944	149	25897	0.144
206) Benzo(b)fluoranthene	(6)	19.434	252	27967	0.209
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.440	256	12086	0.192
208) Benzo(k)fluoranthene	(6)	19.480	252	30506	0.229
211) Benzo(a)pyrene	(6)	19.958	252	24513	0.202
213)*Perylene-d12	(6)	20.052	264	555910	5.000
215) 3-Methylcholanthrene	(6)	20.535	268	11593	0.186
217) Dibenz(a,h)acridine	(6)	21.340	279	20004	0.195
218) Dibenz(a,j)acridine	(6)	21.410	279	21708M	0.198
219) Indeno(1,2,3-cd)pyrene	(6)	21.655	276	23472M	0.209
220) Dibenz(a,h)anthracene	(6)	21.695	278	27864M	0.229
221) Benzo(g,h,i)perylene	(6)	22.039	276	27310M	0.228

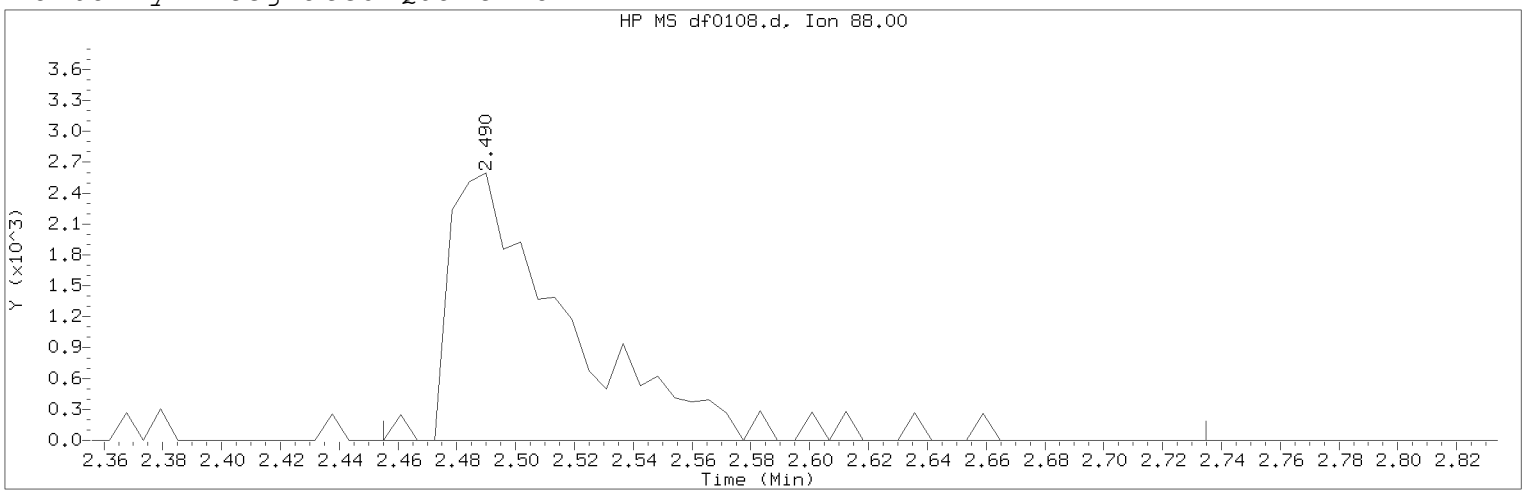
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

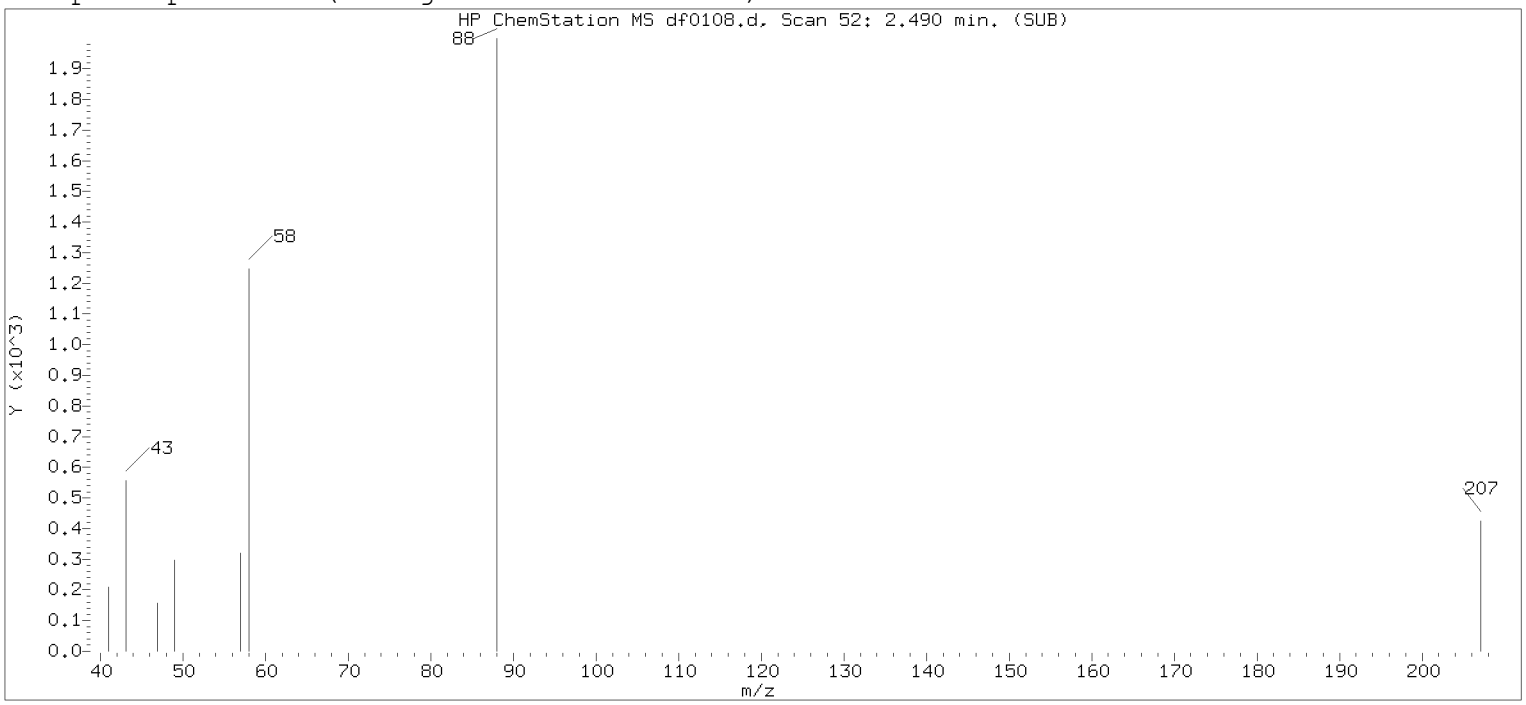
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 52
Retention Time (minutes) : 2.490
Quant Ion : 88.00
Area (flag) : 7480M
On-Column Amount (ng/ul) : 0.2550
Integration start scan : 45 Integration stop scan: 93
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

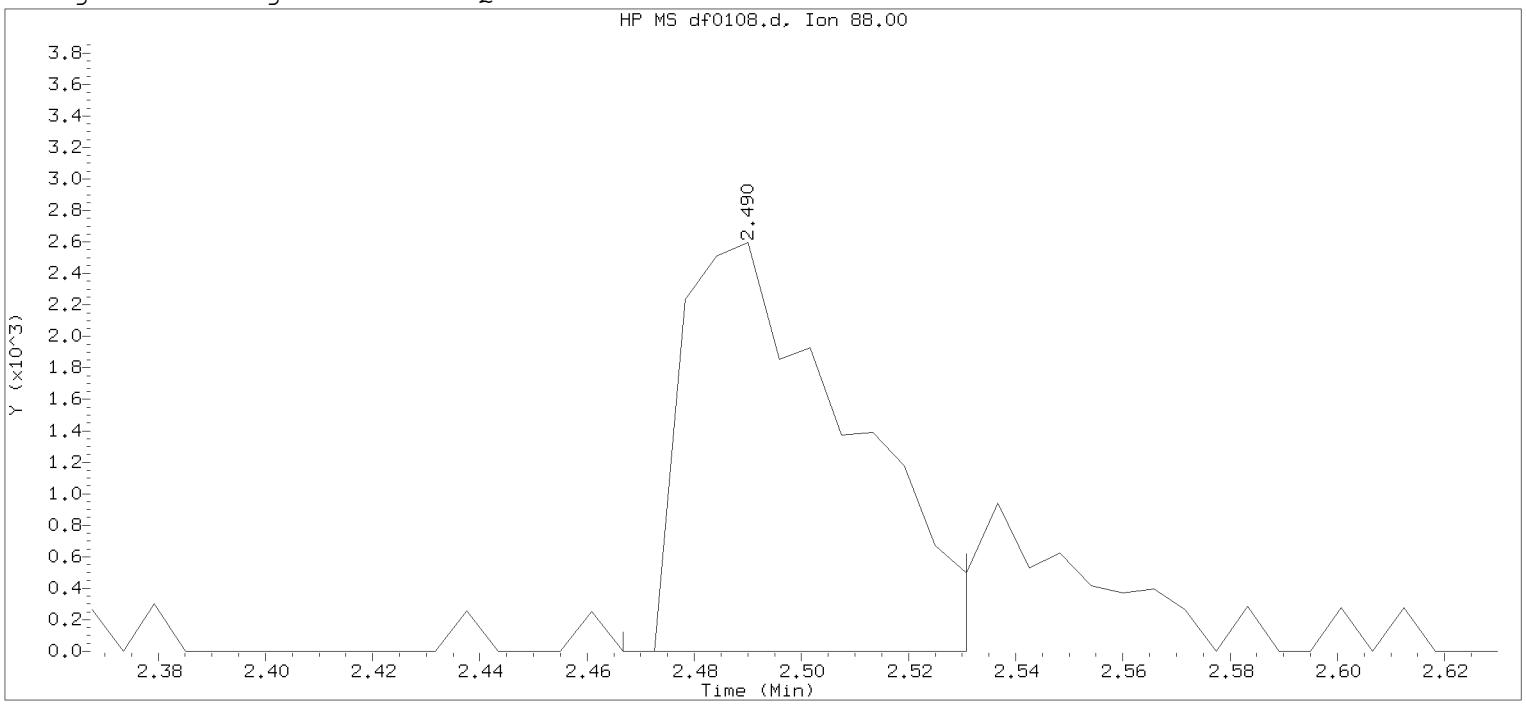
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

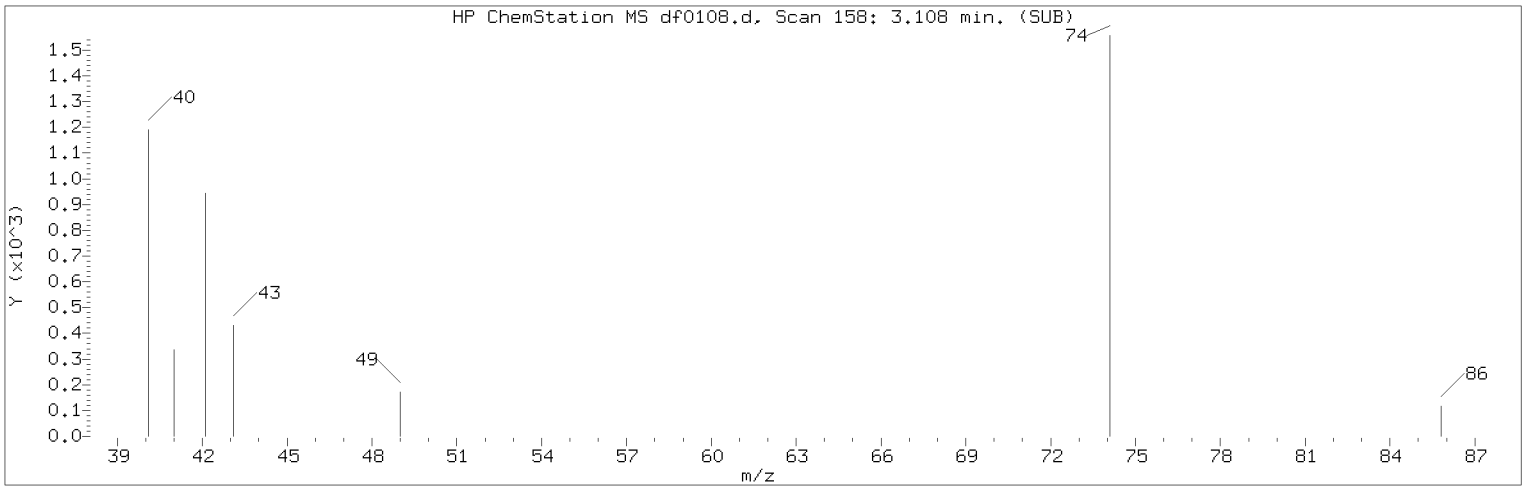
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:27 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

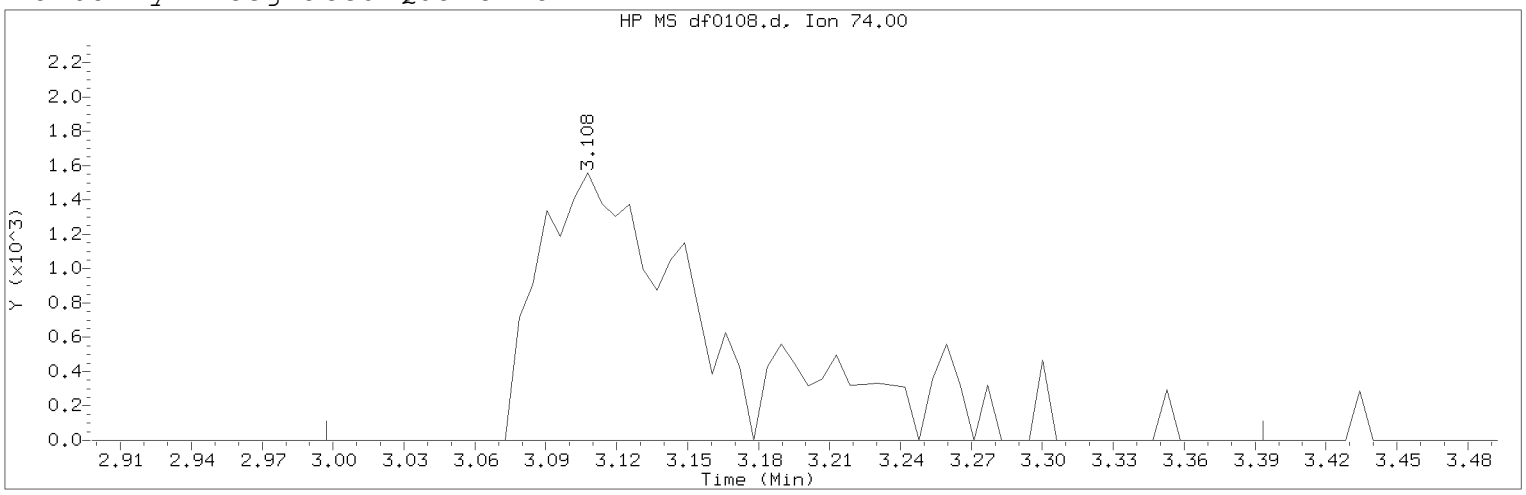
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 52		
Retention Time (minutes)	: 2.490		
Quant Ion	: 88.00		
Area	: 5587		
On-column Amount (ng/ul)	: 0.1942		
Integration start scan	: 47	Integration stop scan:	58
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

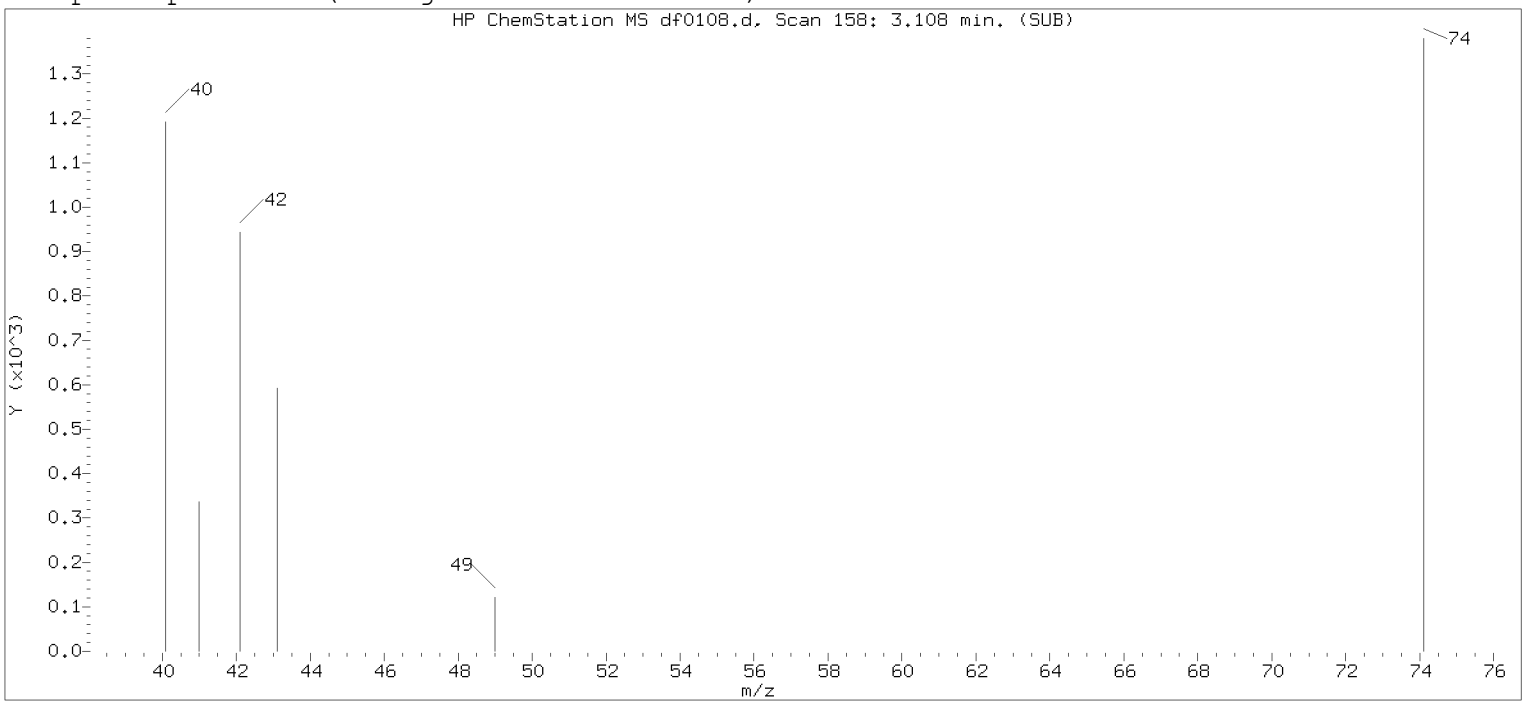
Compound Number : 4
Compound Name : N-Nitrosodimethylamine
Scan Number : 158
Retention Time (minutes) : 3.108
Quant Ion : 74.00
Area (flag) : 8391M
On-Column Amount (ng/ul) : 0.1900
Integration start scan : 138 Integration stop scan: 206
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

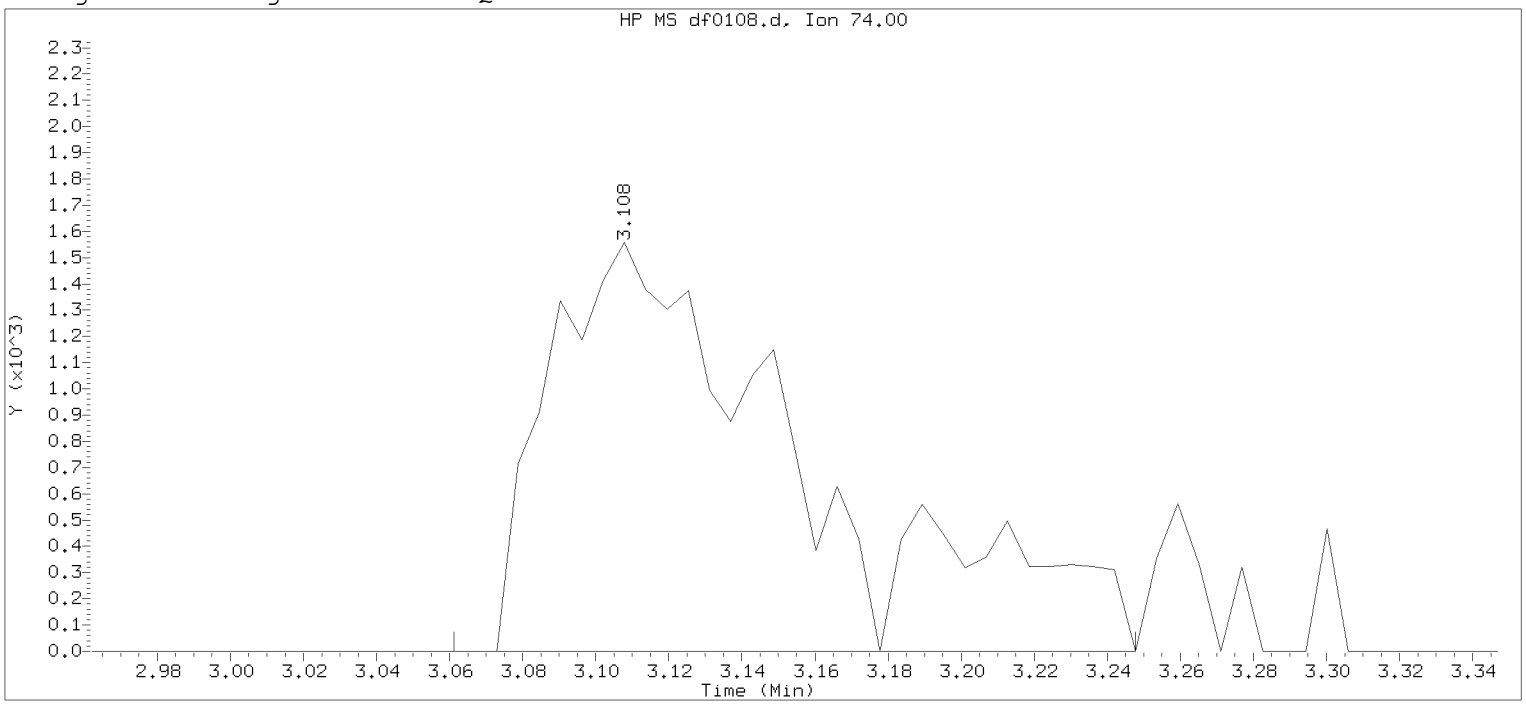
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

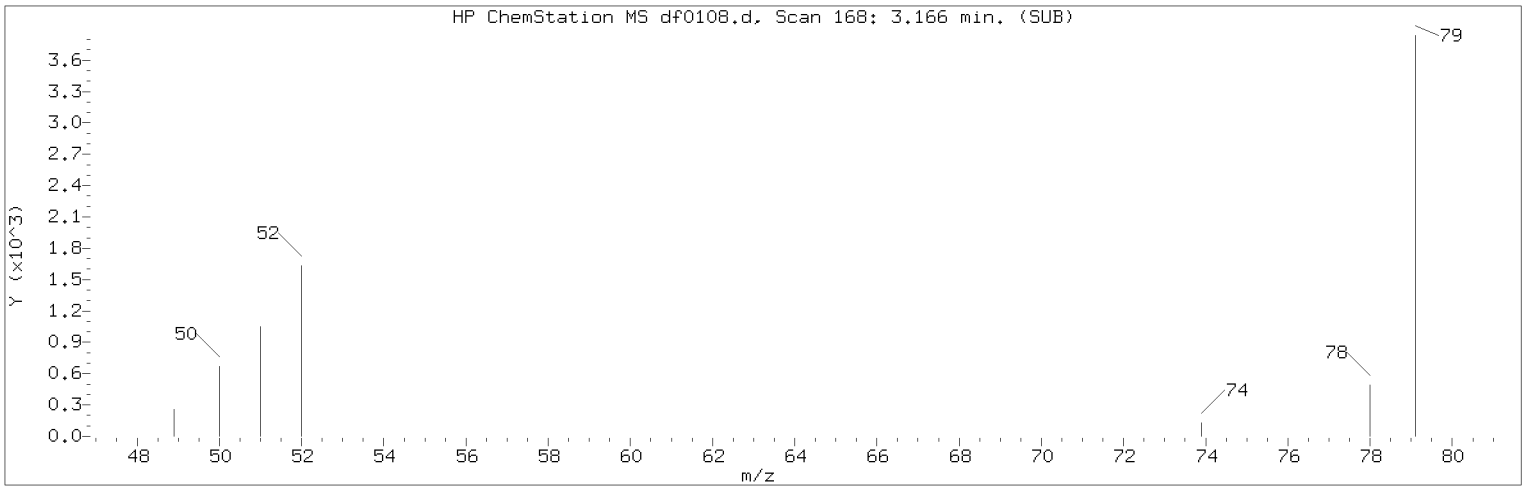
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:27 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

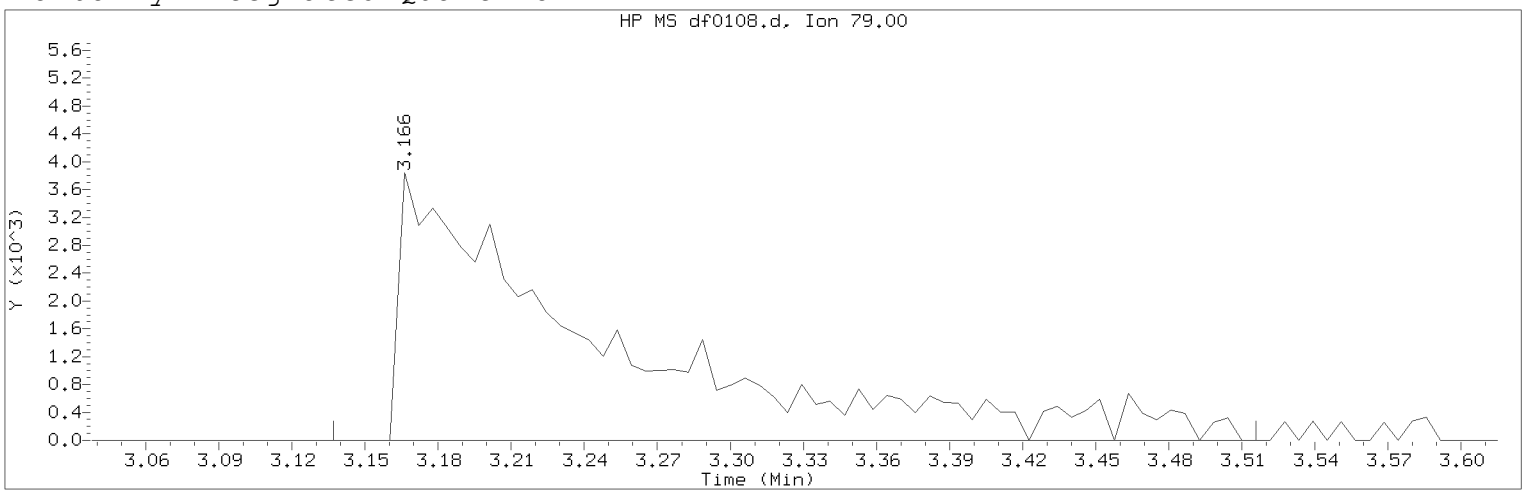
Compound Number	: 4		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 158		
Retention Time (minutes)	: 3.108		
Quant Ion	: 74.00		
Area	: 7578		
On-column Amount (ng/ul)	: 0.1728		
Integration start scan	: 149	Integration stop scan:	181
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

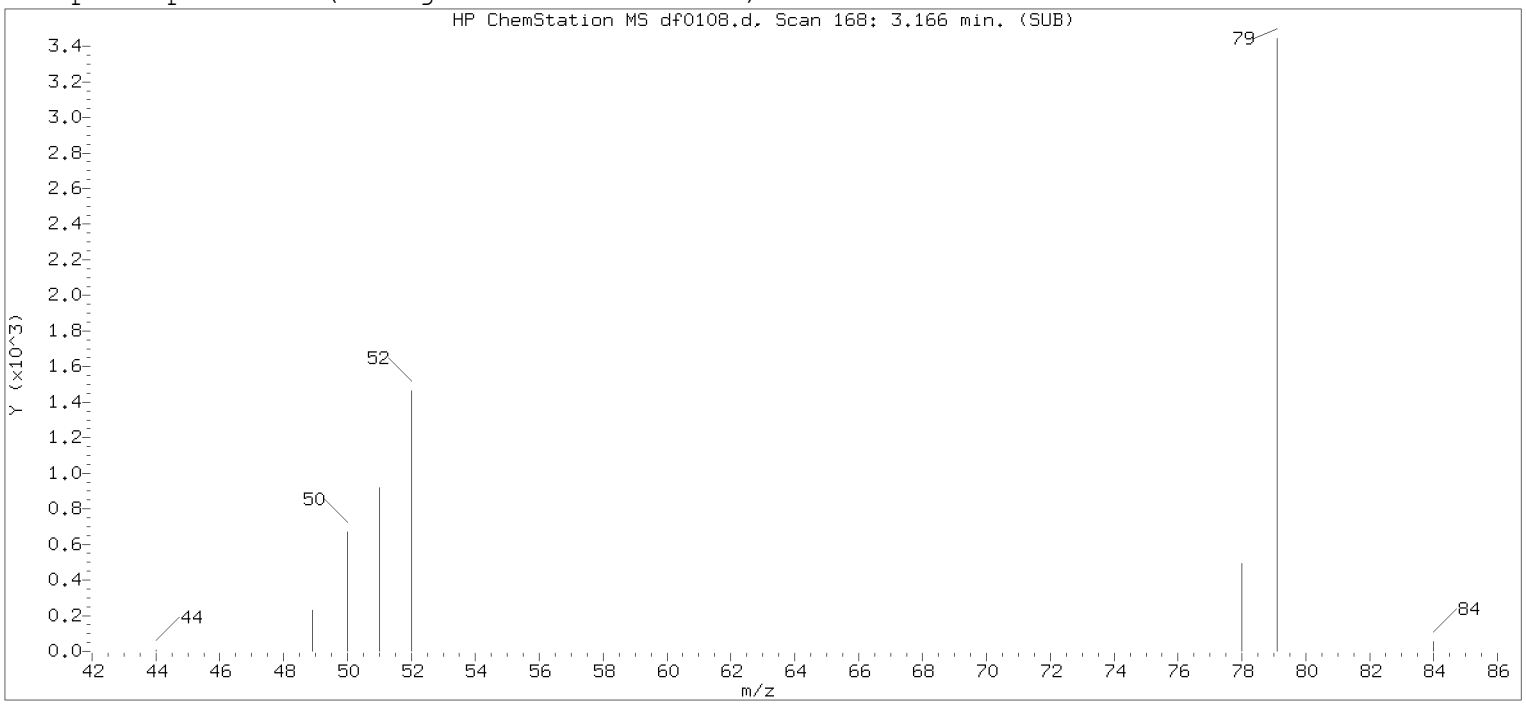
Compound Number : 5
Compound Name : Pyridine
Scan Number : 168
Retention Time (minutes) : 3.166
Quant Ion : 79.00
Area (flag) : 21593M
On-Column Amount (ng/ul) : 0.2860
Integration start scan : 162 Integration stop scan: 227
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

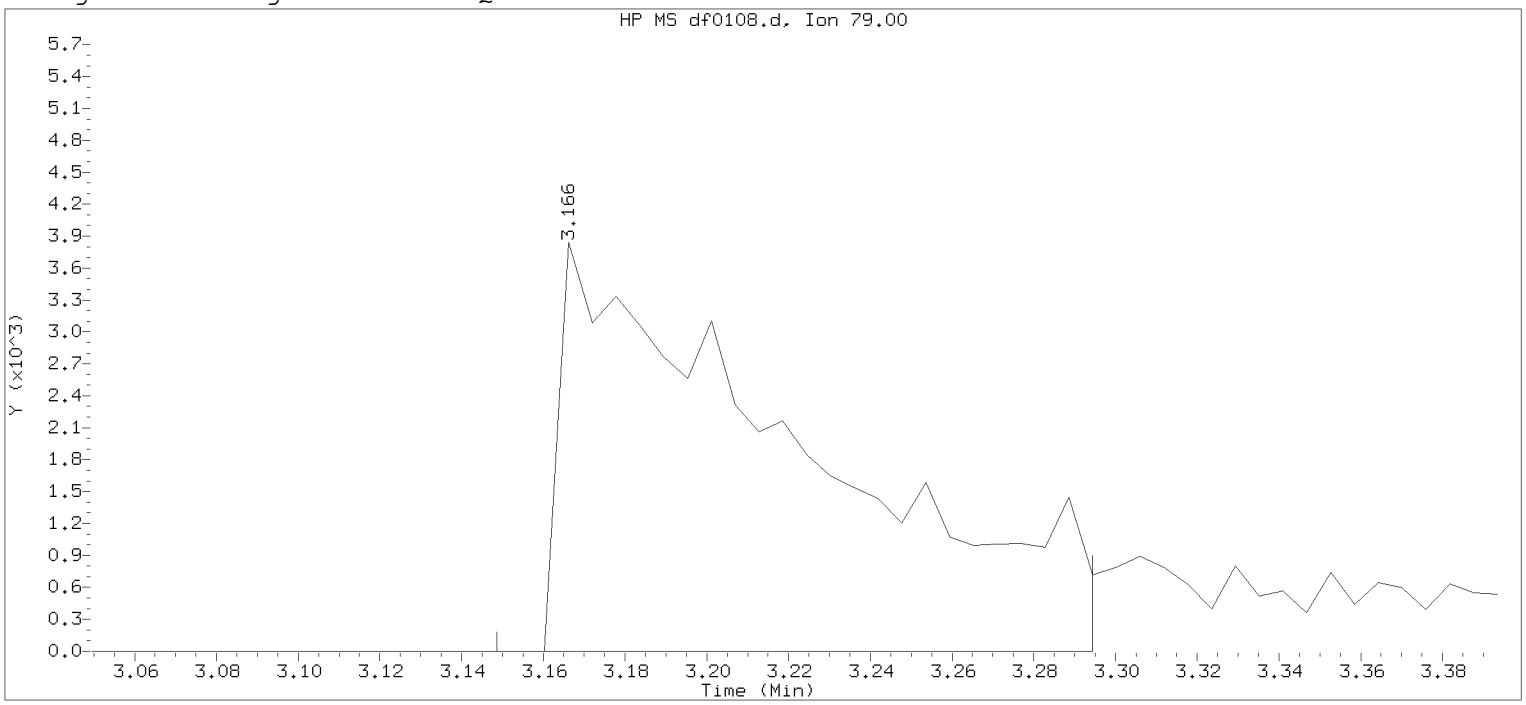
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

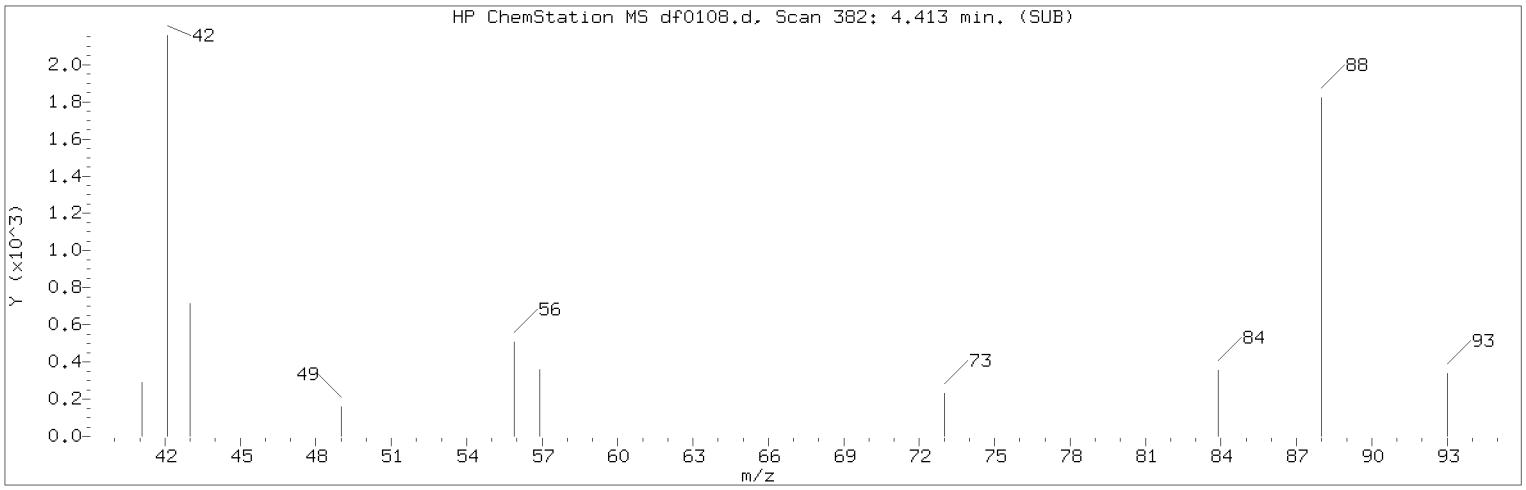
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:27 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

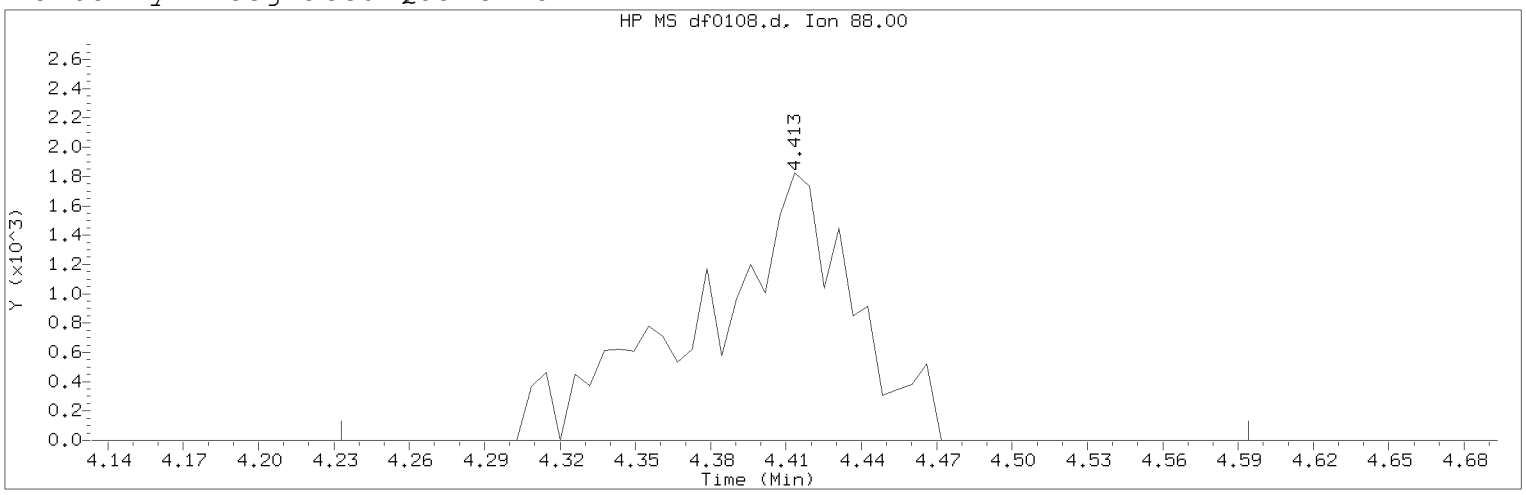
Compound Number	: 5		
Compound Name	: Pyridine		
Scan Number	: 168		
Retention Time (minutes)	: 3.166		
Quant Ion	: 79.00		
Area	: 15534		
On-column Amount (ng/ul)	: 0.2102		
Integration start scan	: 164	Integration stop scan:	189
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

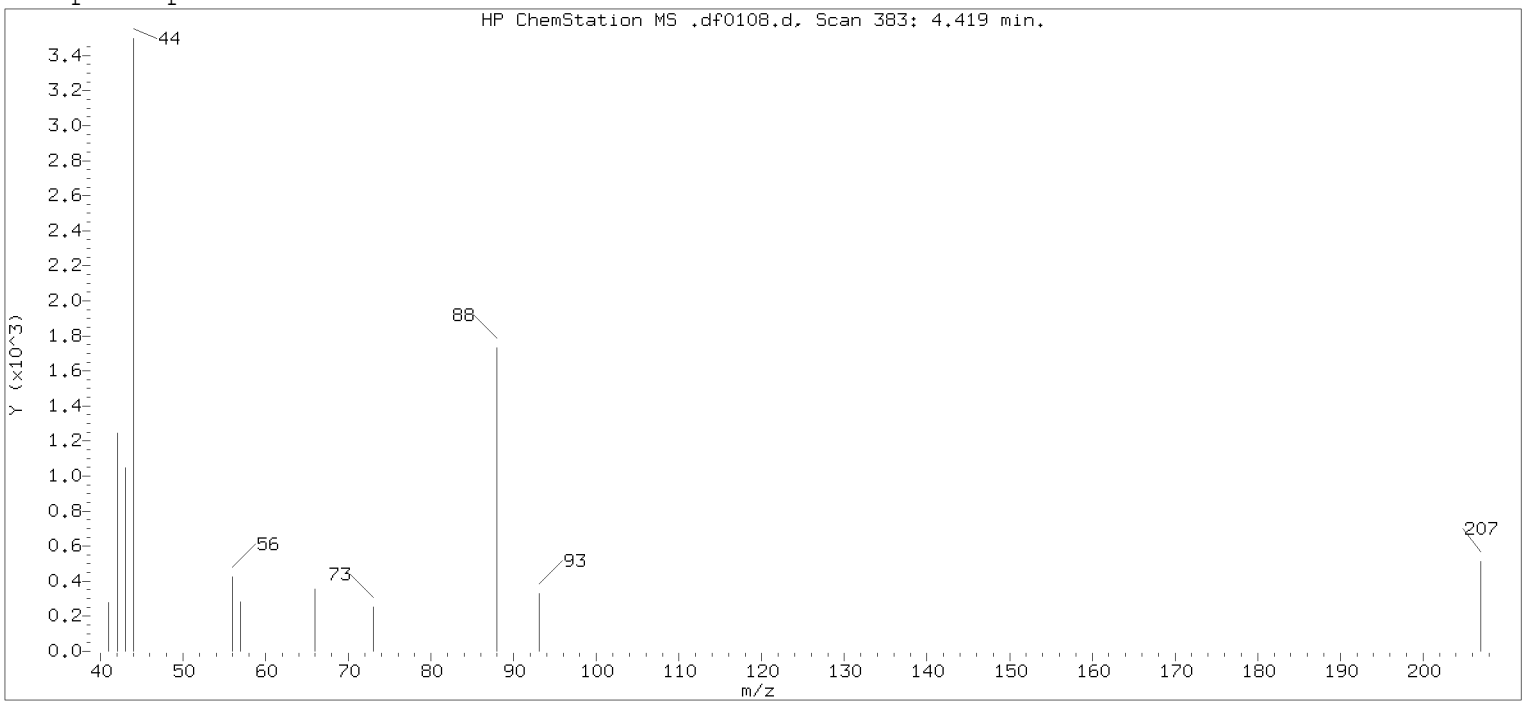
Compound Number : 8
Compound Name : N-Nitrosomethylethylamine
Scan Number : 382
Retention Time (minutes) : 4.413
Quant Ion : 88.00
Area (flag) : 7678M
On-Column Amount (ng/ul) : 0.2175
Integration start scan : 350 Integration stop scan: 412
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

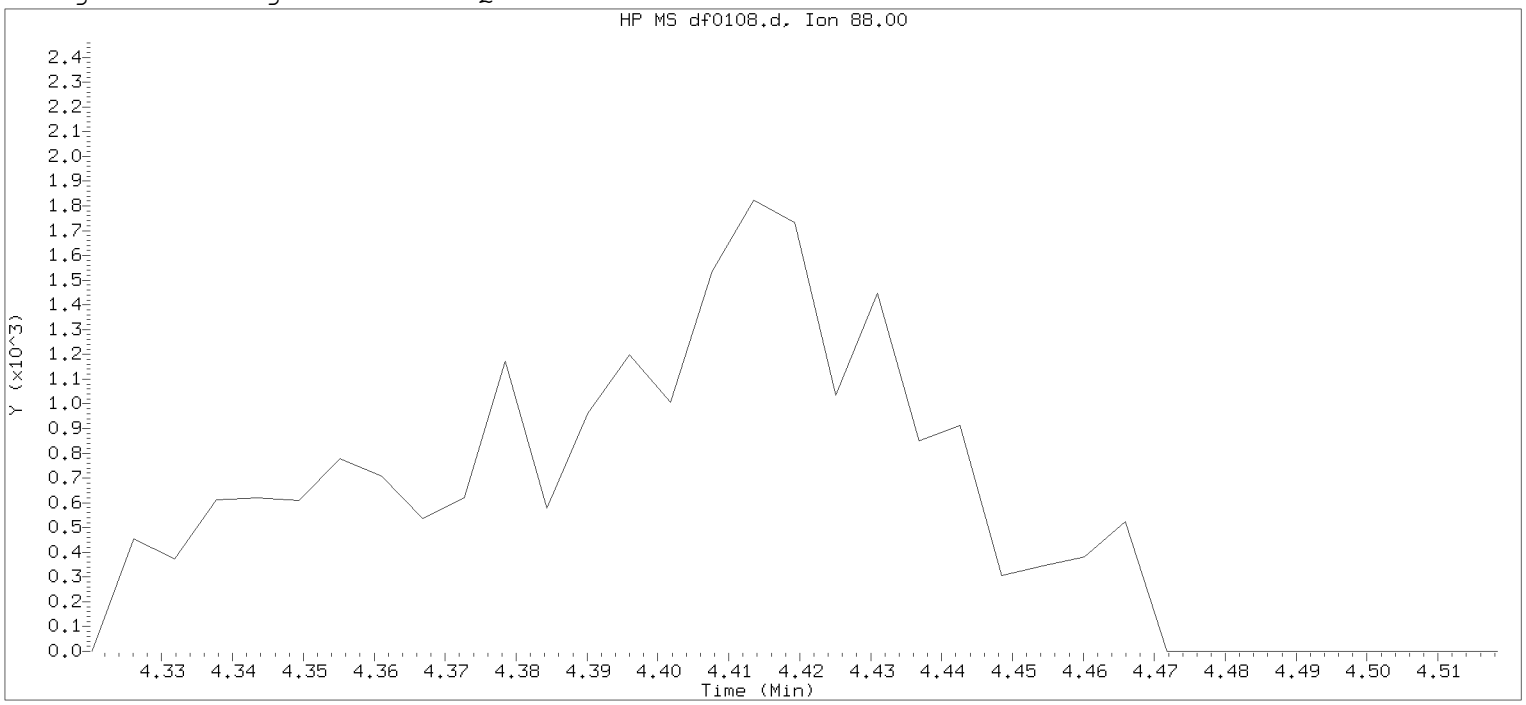
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

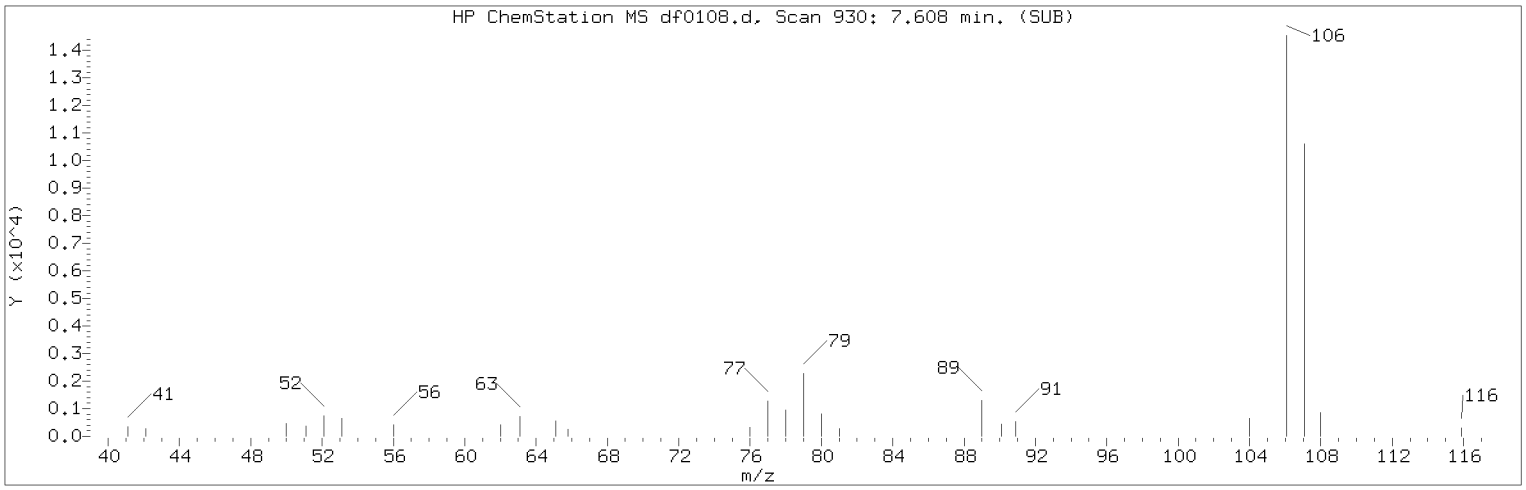
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:27 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

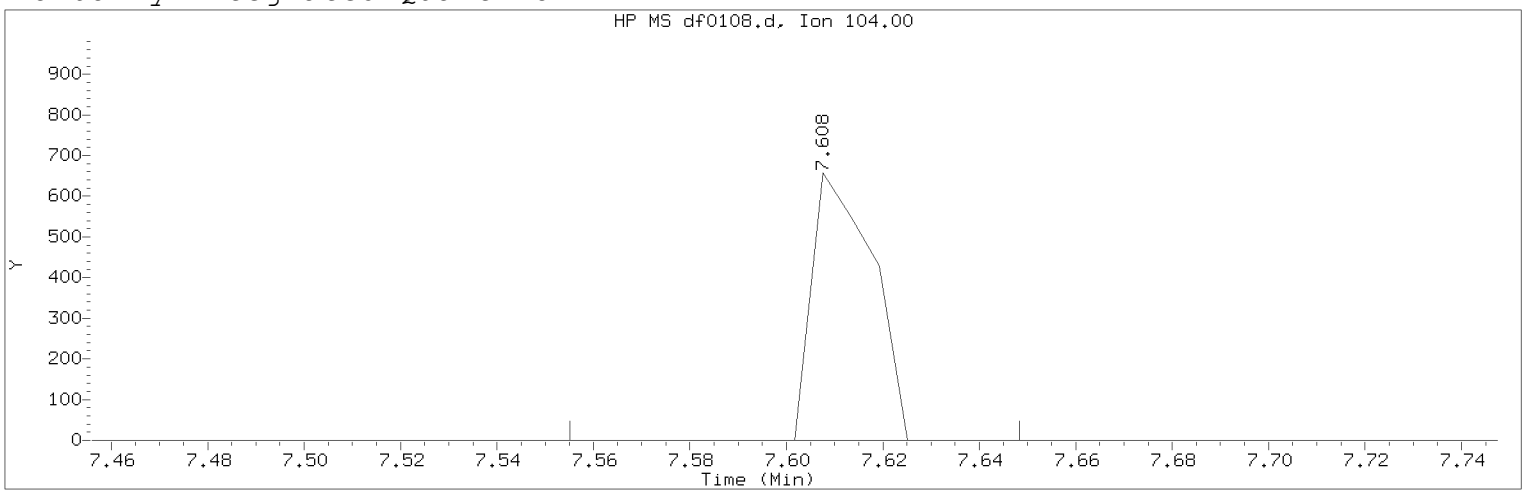
Compound Number : 8
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.419
Quant Ion : 88.00

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user name: EMONB

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

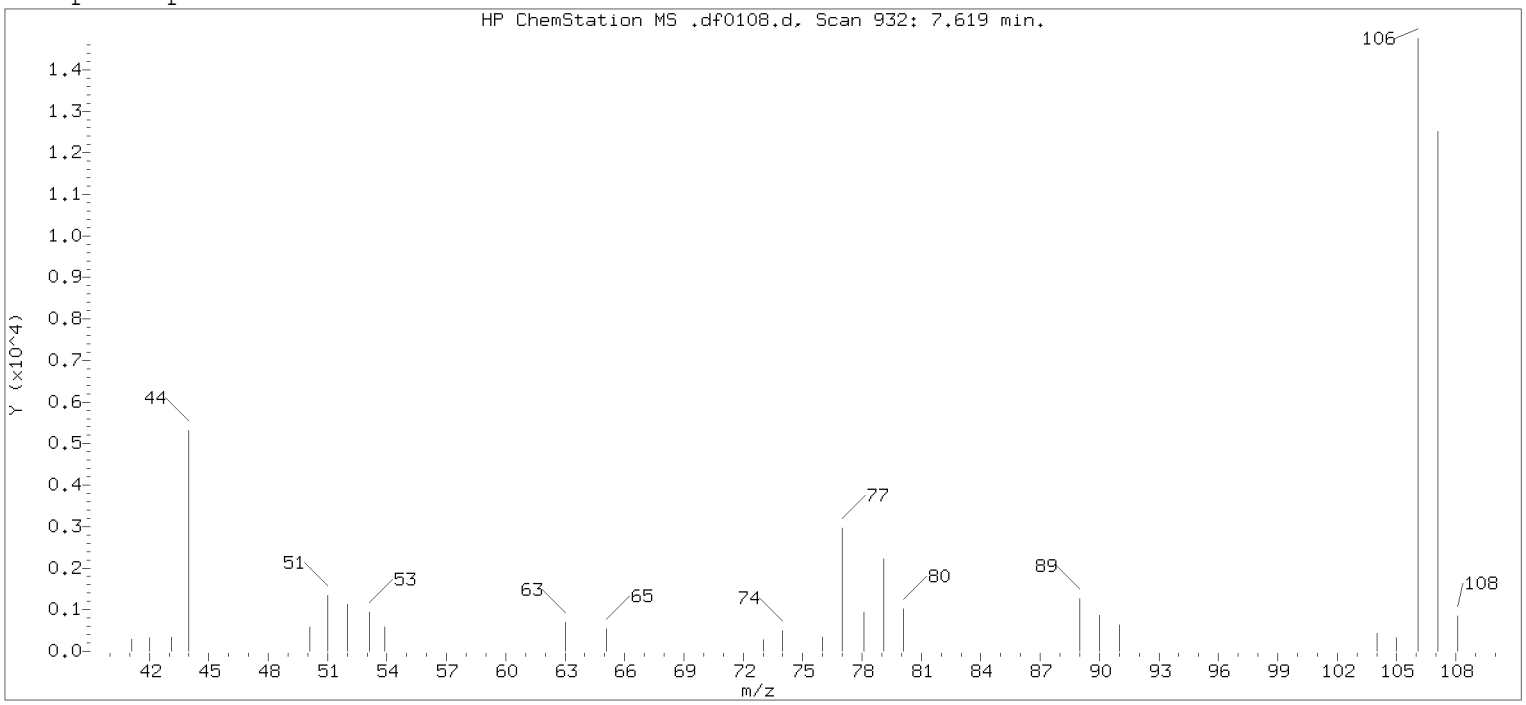
Compound Number : 59
Compound Name : 1,2,3,4-Tetrahydronaphthalene
Scan Number : 930
Retention Time (minutes) : 7.608
Quant Ion : 104.00
Area (flag) : 571M
On-Column Amount (ng/ul) : 0.1952
Integration start scan : 920 Integration stop scan: 936
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

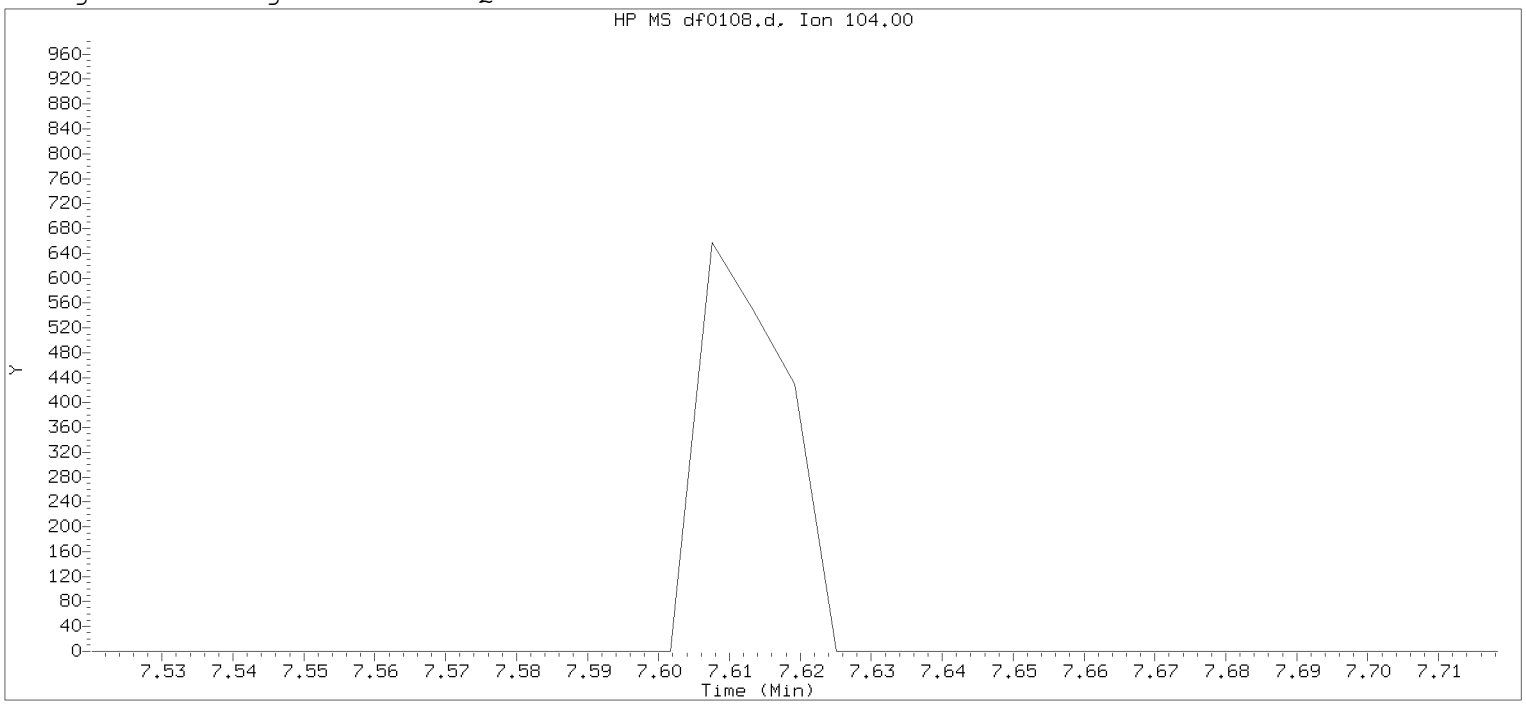
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

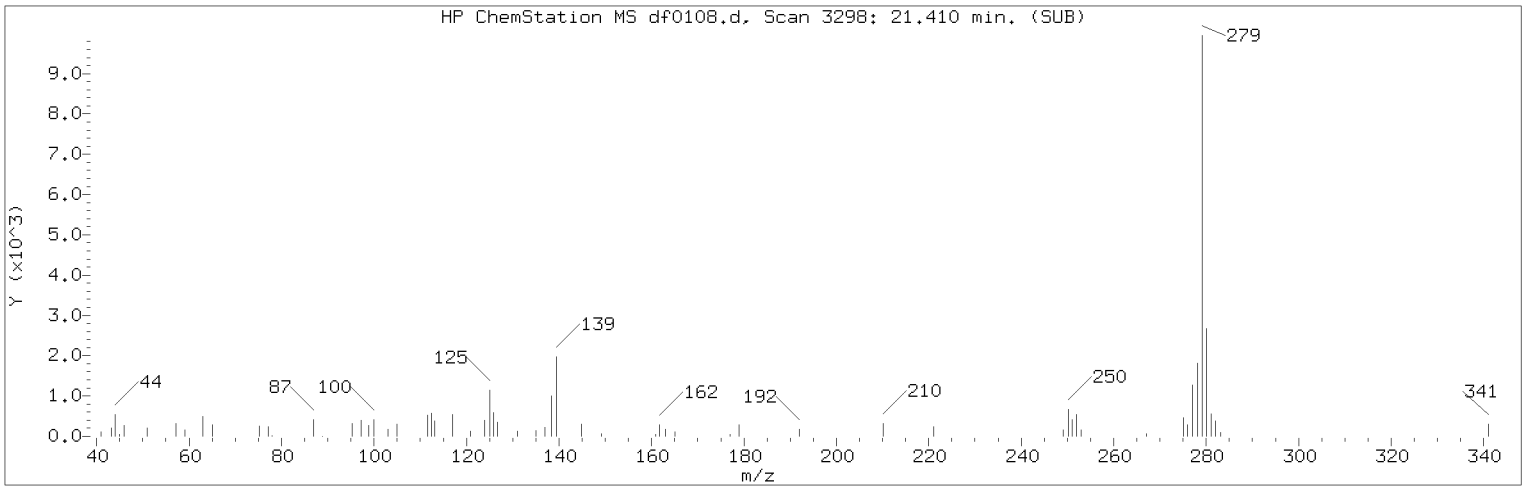
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:27 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

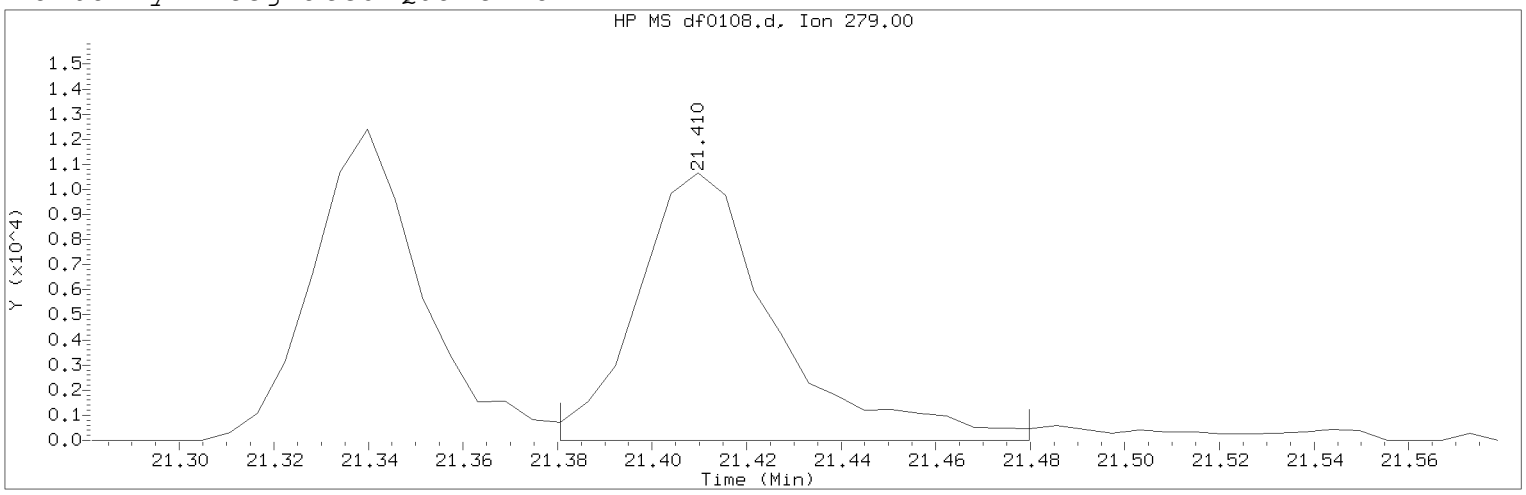
Compound Number : 59
Compound Name : 1,2,3,4-Tetrahydronaphthalene
Expected RT (minutes) : 7.619
Quant Ion : 104.00

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

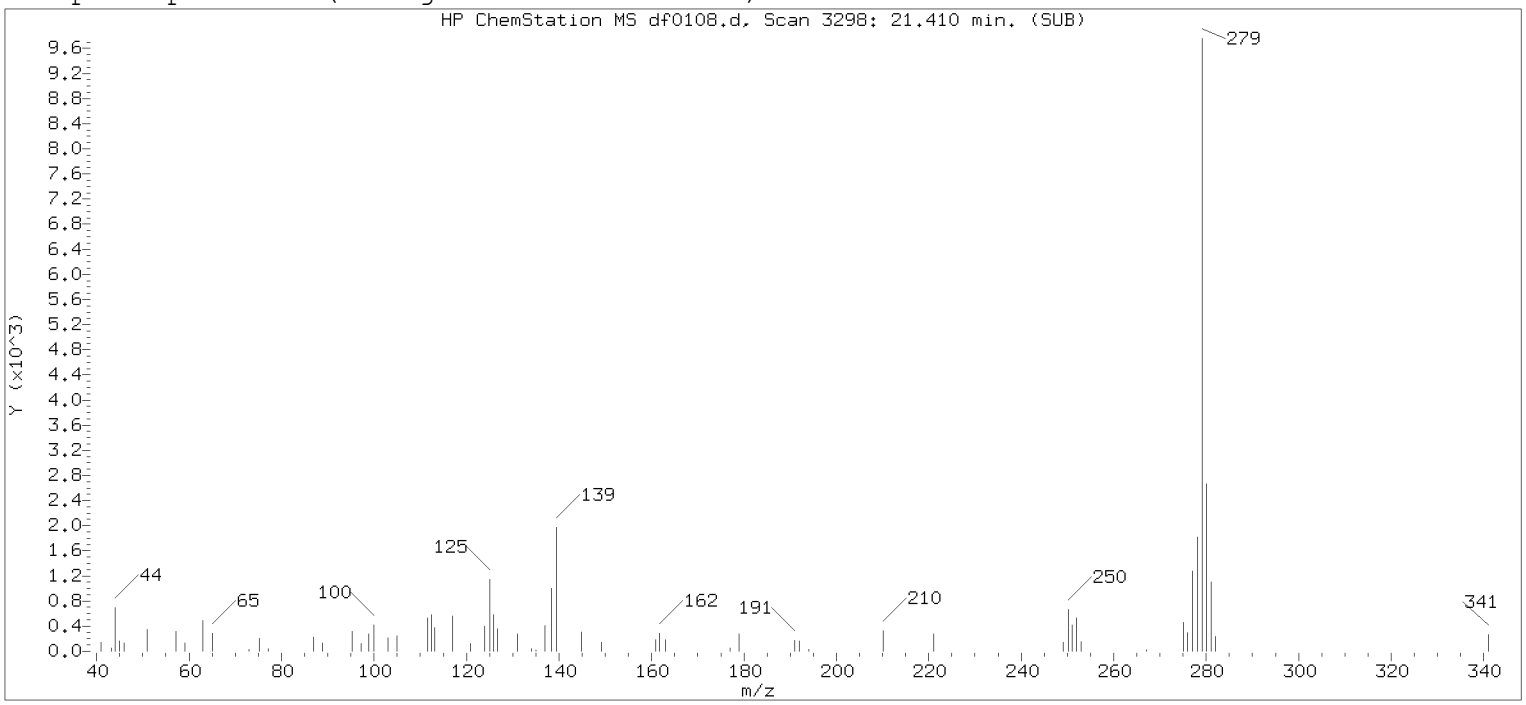
Compound Number	: 218		
Compound Name	: Dibenz(a,j)acridine		
Scan Number	: 3298		
Retention Time (minutes)	: 21.410		
Quant Ion	: 279.00		
Area (flag)	: 21708M		
On-Column Amount (ng/ul)	: 0.1977		
Integration start scan	: 3292	Integration stop scan:	3309
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

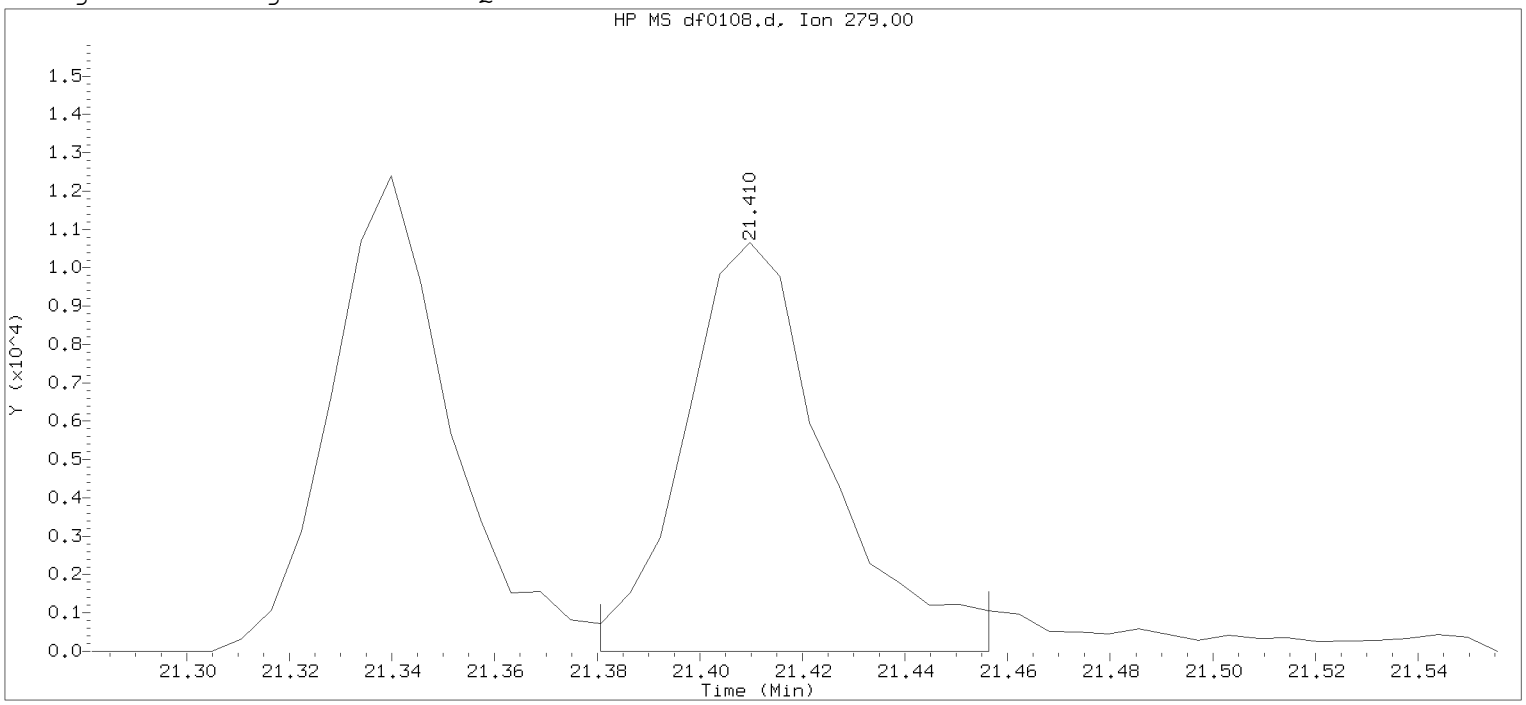
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

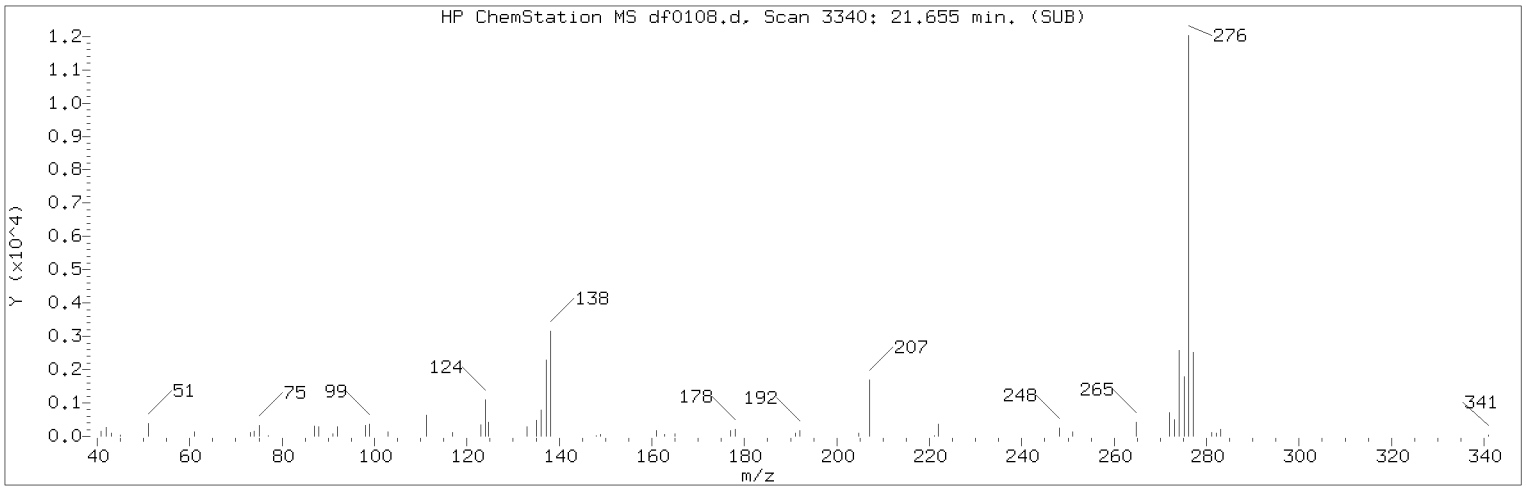
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:27 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

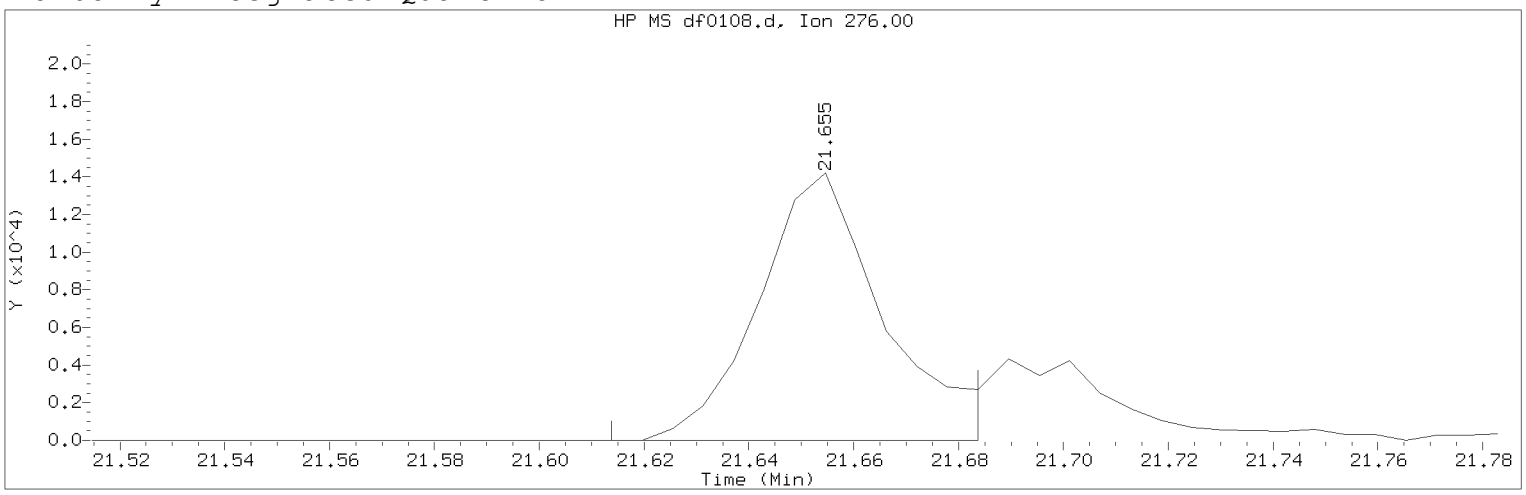
Compound Number	: 218		
Compound Name	: Dibenz(a,j)acridine		
Scan Number	: 3298		
Retention Time (minutes)	: 21.410		
Quant Ion	: 279.00		
Area	: 20548		
On-column Amount (ng/ul)	: 0.1869		
Integration start scan	: 3292	Integration stop scan:	3305
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

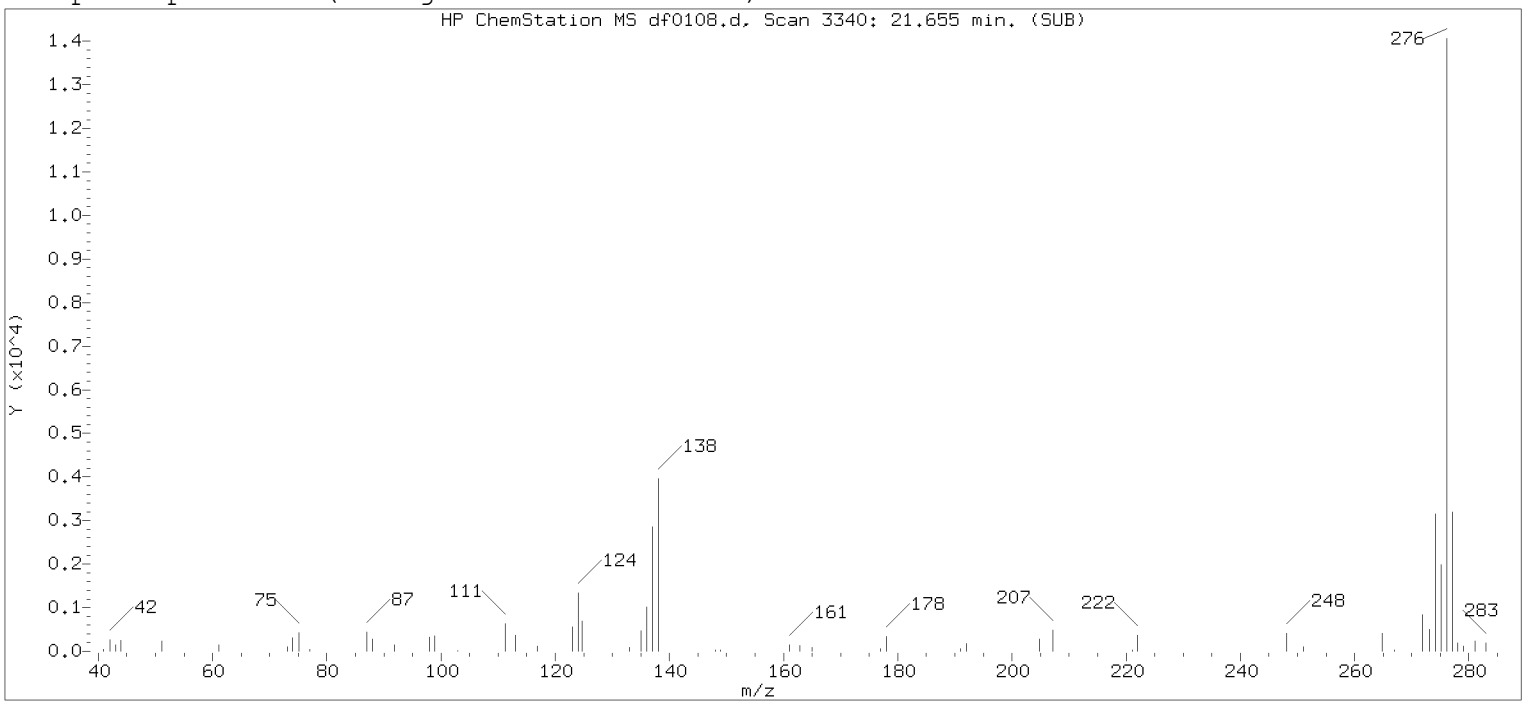
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3340
Retention Time (minutes) : 21.655
Quant Ion : 276.00
Area (flag) : 23472M
On-Column Amount (ng/ul) : 0.2092
Integration start scan : 3332 Integration stop scan: 3344
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

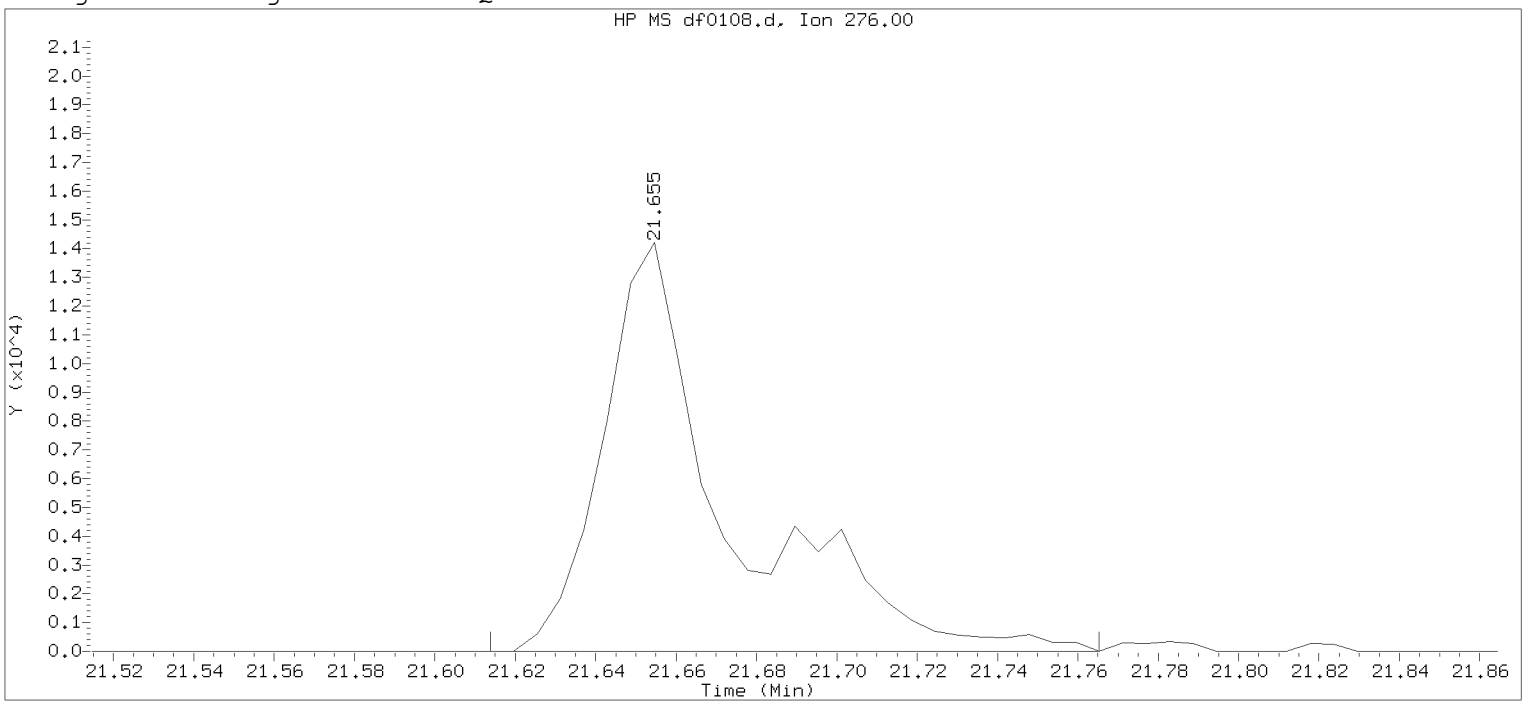
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

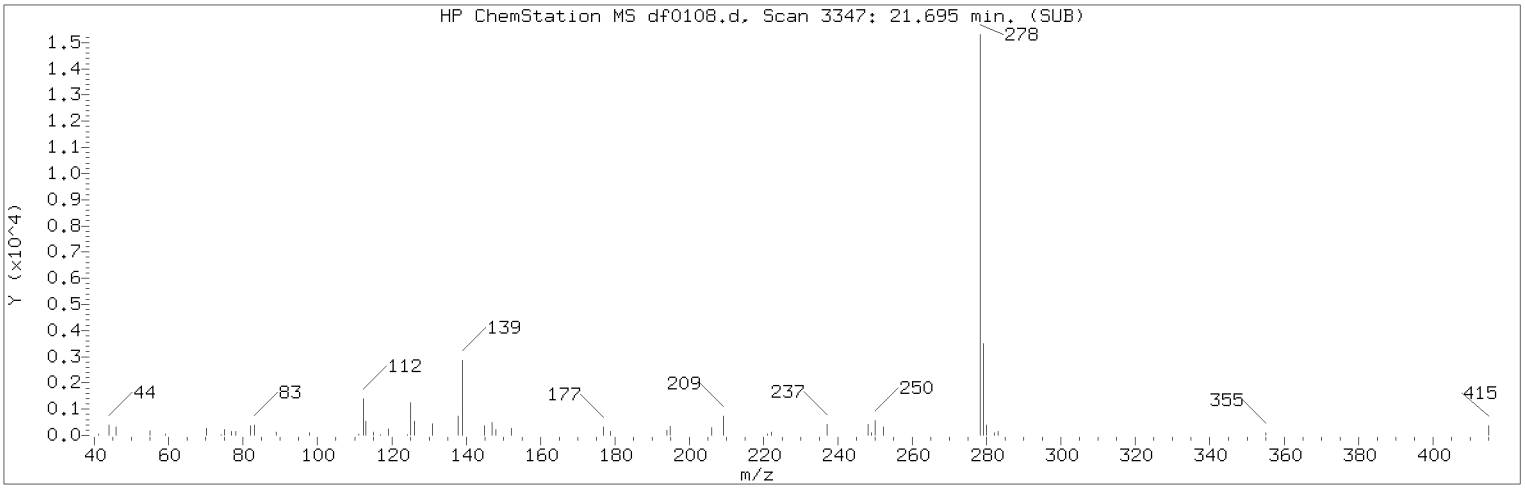
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:27 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

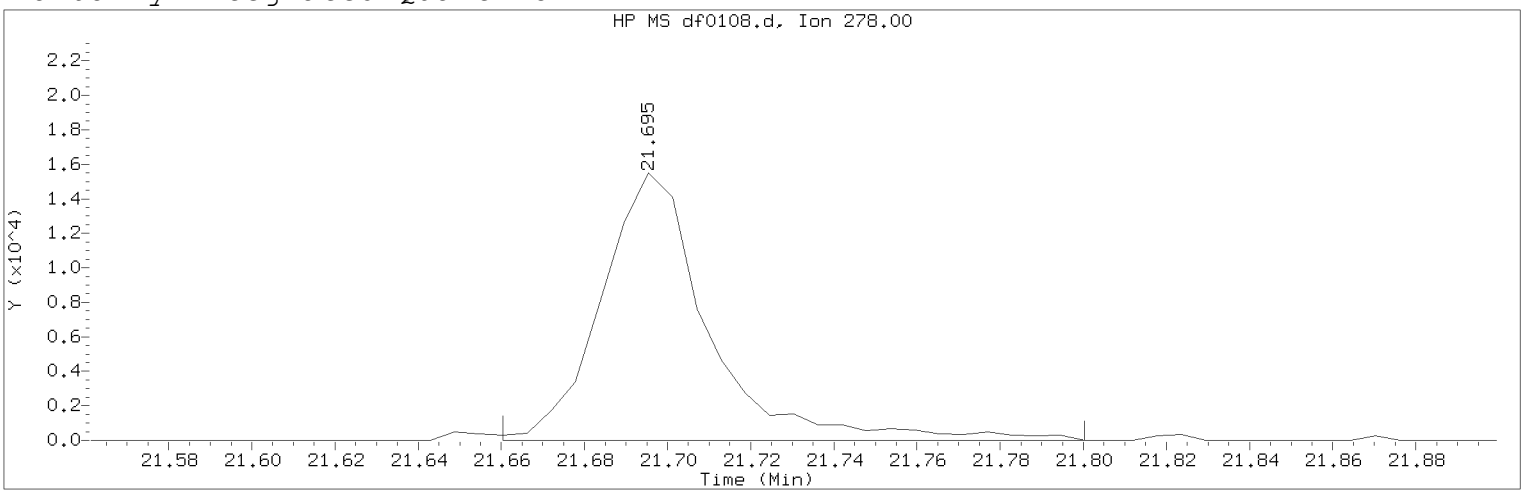
Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3340		
Retention Time (minutes)	: 21.655		
Quant Ion	: 276.00		
Area	: 30704		
On-column Amount (ng/ul)	: 0.2217		
Integration start scan	: 3332	Integration stop scan:	3358
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

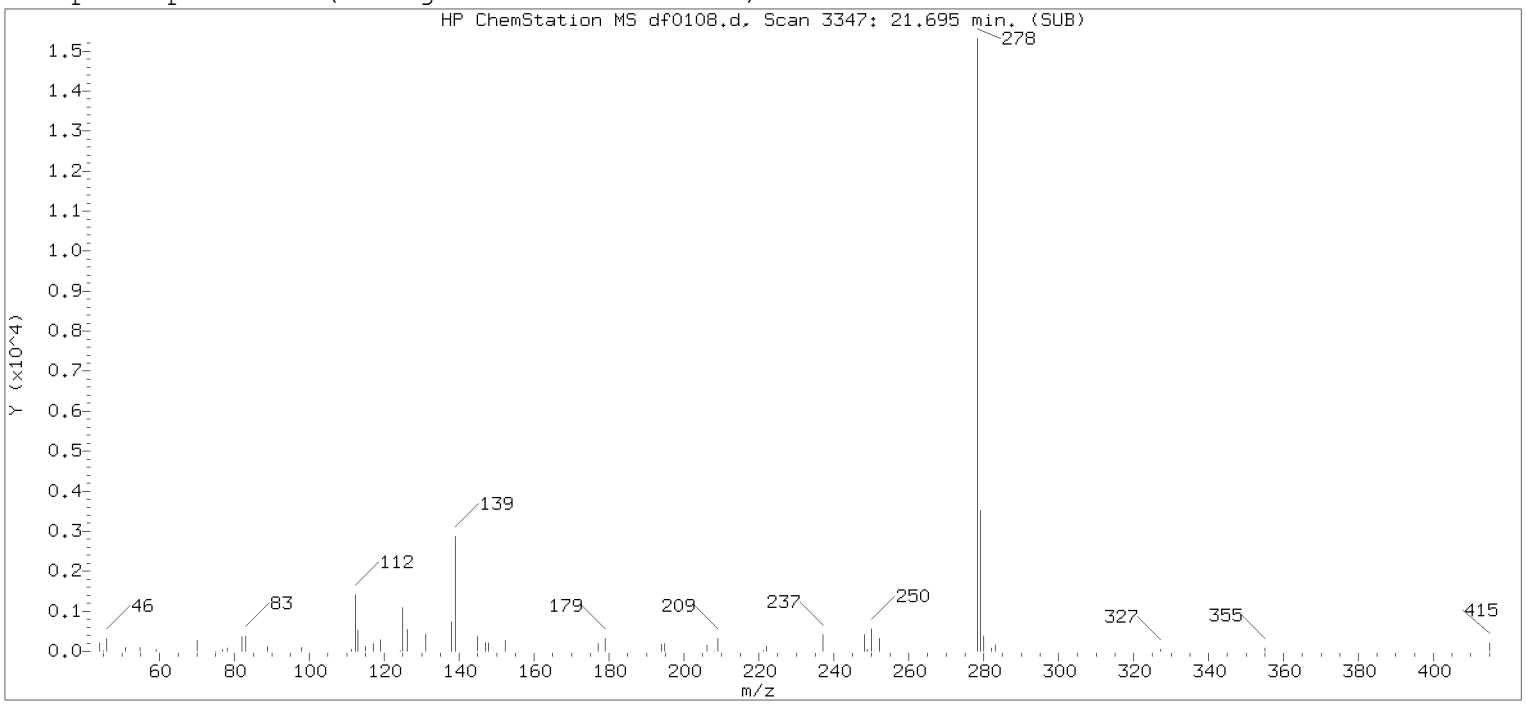
Compound Number : 220
Compound Name : Dibenz(a,h)anthracene
Scan Number : 3347
Retention Time (minutes) : 21.695
Quant Ion : 278.00
Area (flag) : 27864M
On-Column Amount (ng/ul) : 0.2293
Integration start scan : 3340 Integration stop scan: 3364
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

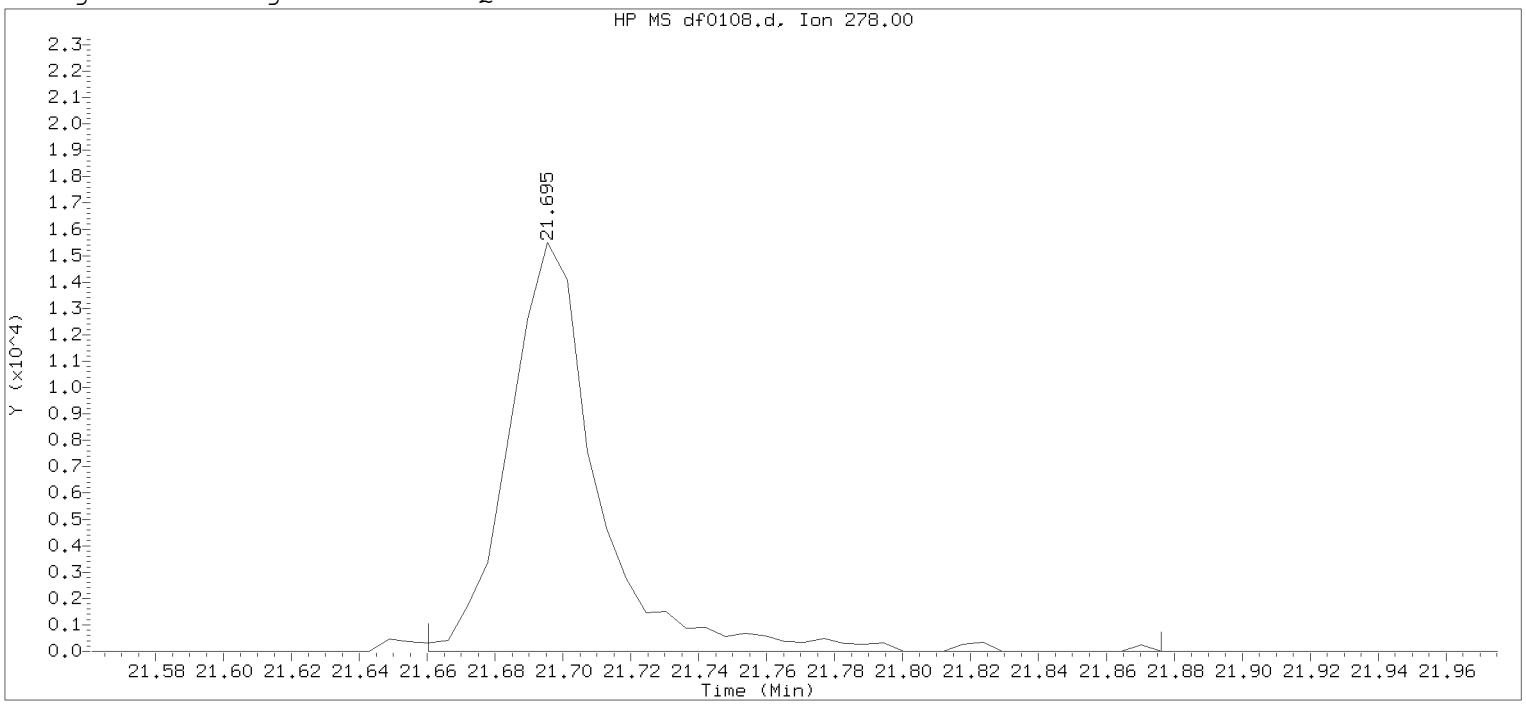
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

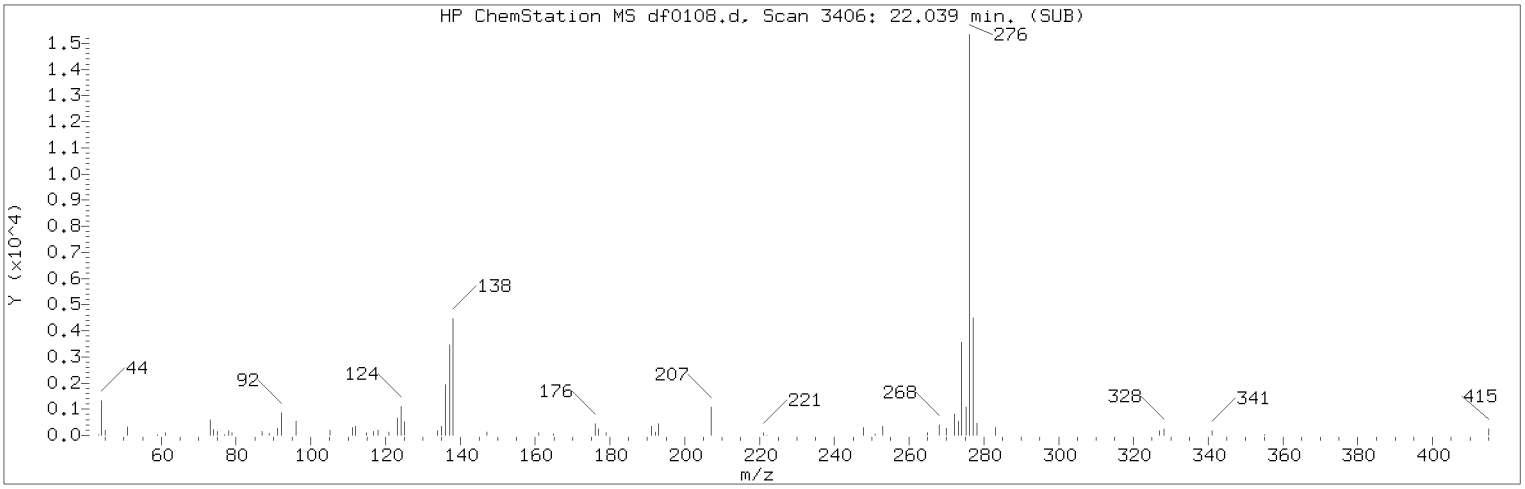
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:27 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

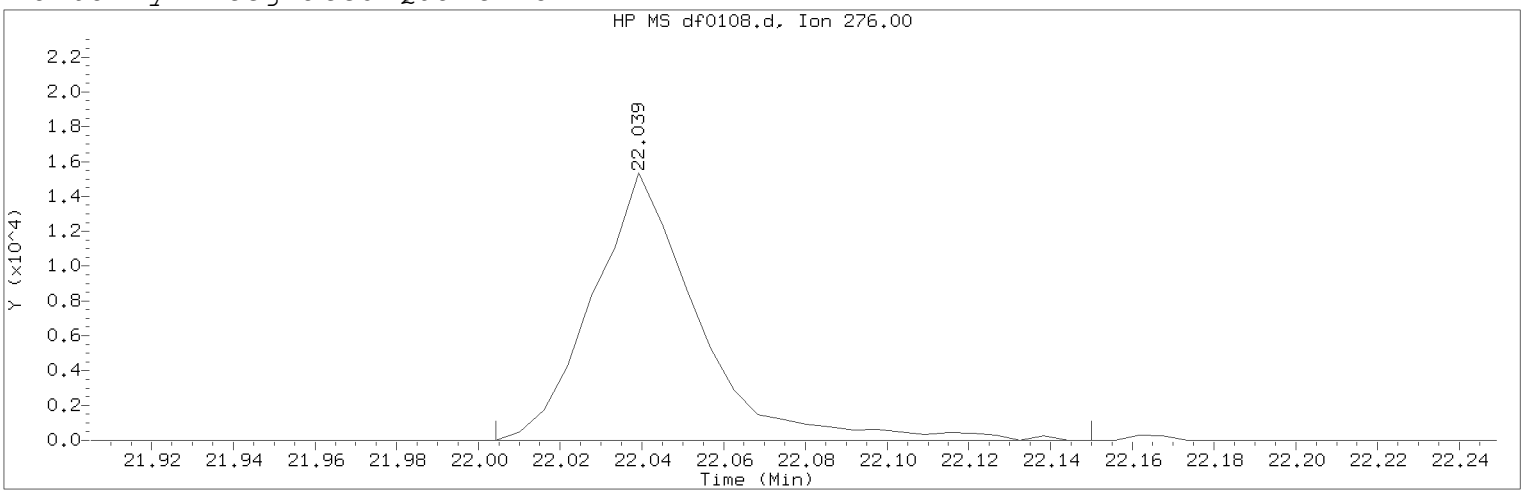
Compound Number	: 220		
Compound Name	: Dibenz(a,h)anthracene		
Scan Number	: 3347		
Retention Time (minutes)	: 21.695		
Quant Ion	: 278.00		
Area	: 28106		
On-column Amount (ng/ul)	: 0.2308		
Integration start scan	: 3340	Integration stop scan:	3377
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 07:47
Date, time and analyst ID of latest file update: 05-Jun-2018 07:47 em10340

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

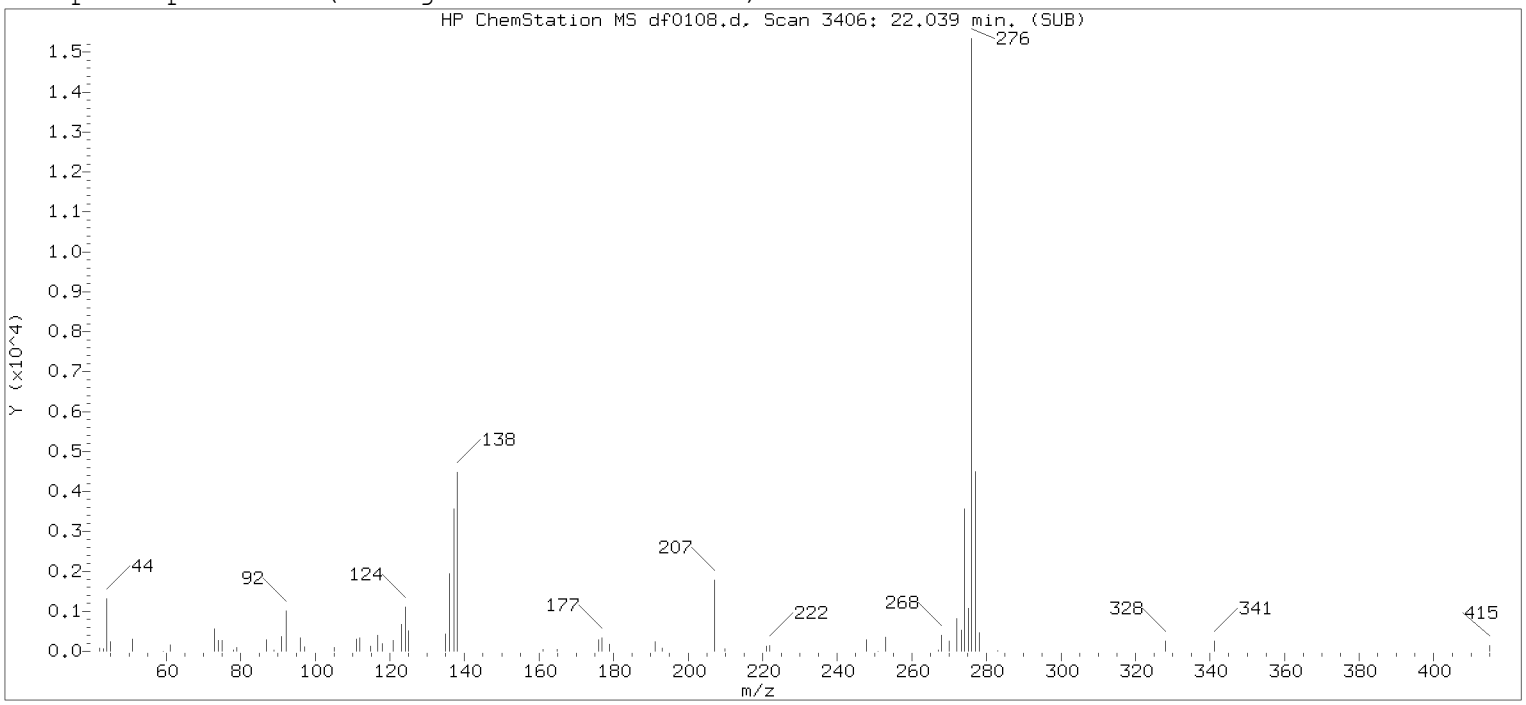
Compound Number : 221
Compound Name : Benzo(g,h,i)perylene
Scan Number : 3406
Retention Time (minutes) : 22.039
Quant Ion : 276.00
Area (flag) : 27310M
On-Column Amount (ng/ul) : 0.2281
Integration start scan : 3399 Integration stop scan: 3424
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

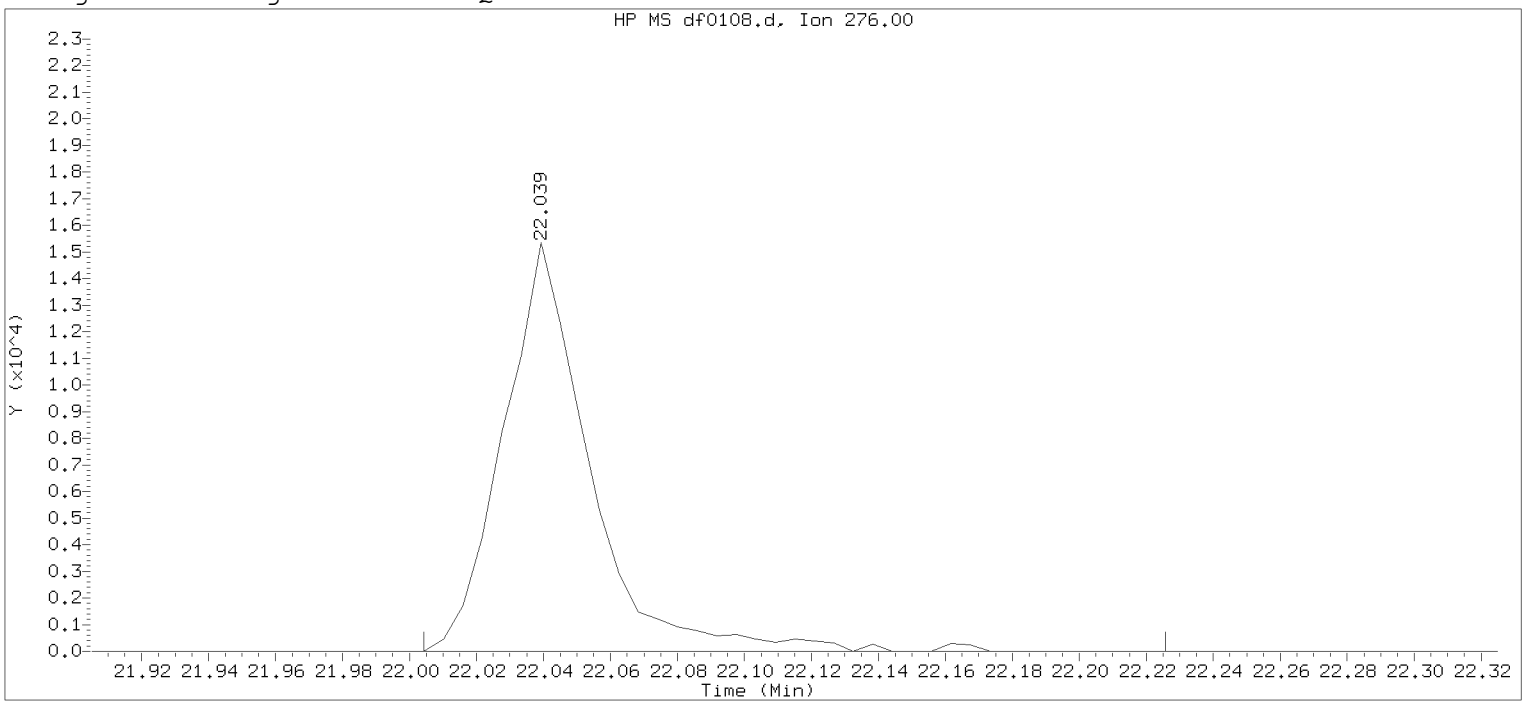
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



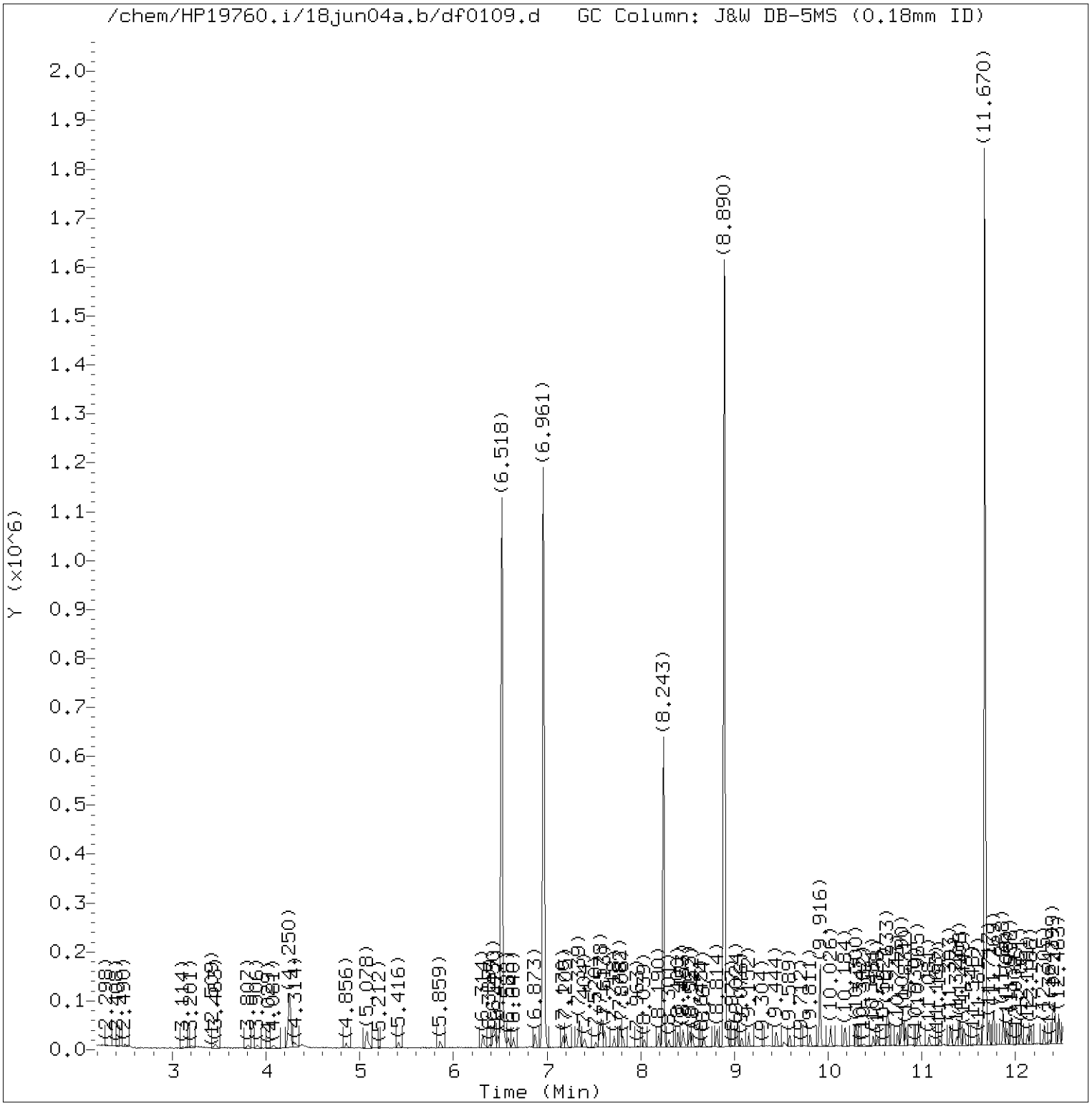
Data File: /chem/HP19760.i/18jun04a.b/df0108.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:01 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:27 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD1318

Compound Number	: 221		
Compound Name	: Benzo(g,h,i)perylene		
Scan Number	: 3406		
Retention Time (minutes)	: 22.039		
Quant Ion	: 276.00		
Area	: 27496		
On-column Amount (ng/ul)	: 0.2290		
Integration start scan	: 3399	Integration stop scan:	3437
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user name: [illegible]



Total Ion Chromatogram (TIC)

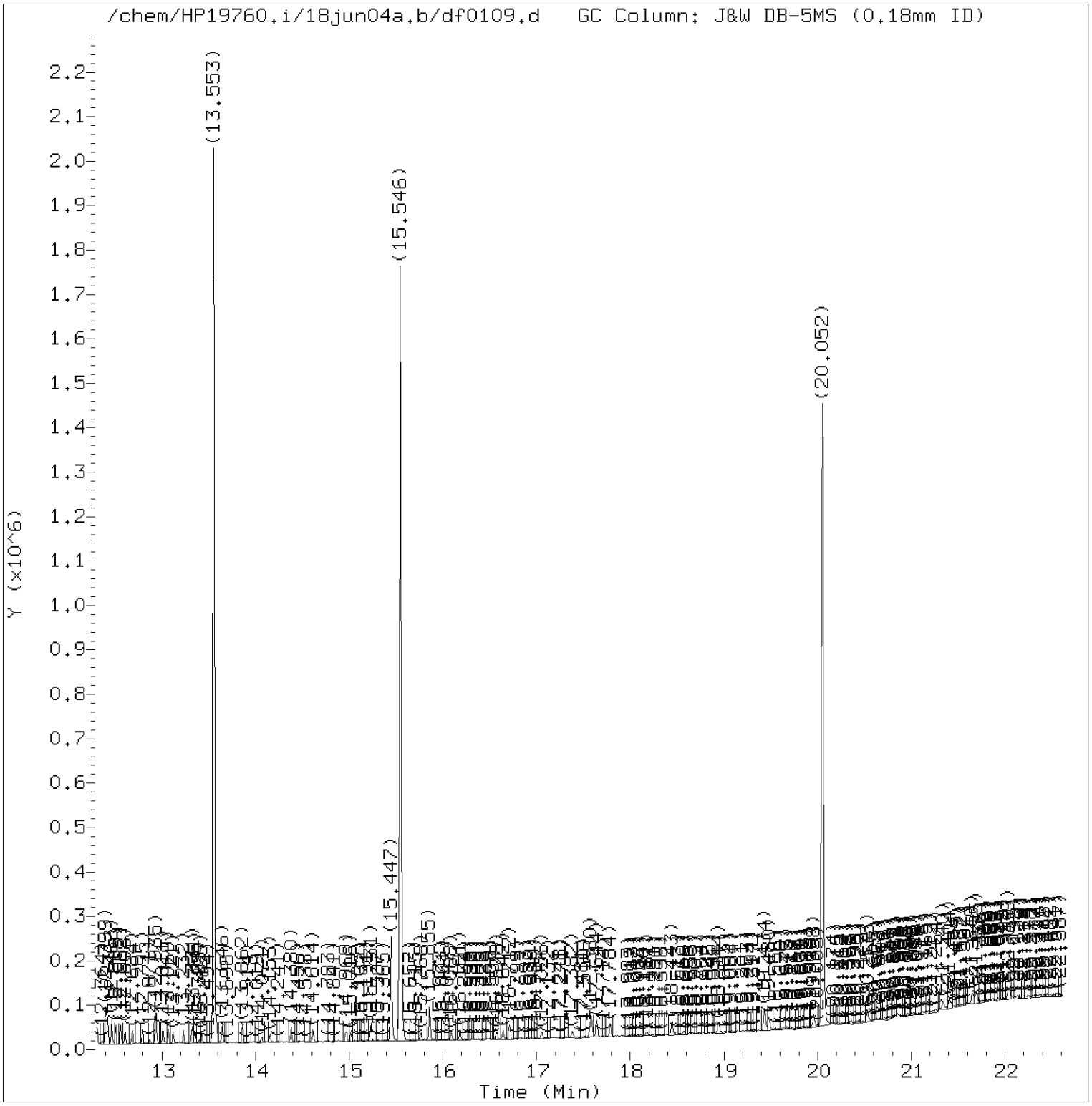
Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.490	88	4775M	0.133
4) N-Nitrosodimethylamine	(1)	3.119	74	4681M	0.087
5) Pyridine	(1)	3.230	79	12221M	0.133
7) 2-Picoline	(1)	4.291	93	10988	0.111
8) N-Nitrosomethylethylamine	(1)	4.425	88	5444M	0.126
9) Methyl methanesulfonate	(1)	4.856	80	5008	0.104
11)$2-Fluorophenol	(1)	5.078	112	16949	0.224
13) N-Nitrosodiethylamine	(1)	5.416	102	3804	0.095
42) Total Cresols	(1)			16965	0.225
15) Ethyl methanesulfonate	(1)	5.859	109	4318	0.111
16) Benzaldehyde	(1)	6.314	77	7221	0.116
17)$Phenol-d6	(1)	6.430	99	21158	0.211
18) Phenol	(1)	6.448	94	13129	0.112
19) Aniline	(1)	6.477	93	14921	0.110
20) a-methylstyrene	(1)	6.564	118	2291M	0.082
22) bis(2-Chloroethyl)ether	(1)	6.588	93	11010	0.127
23) 2-Chlorophenol	(1)	6.640	128	7526	0.112
24) 1,3-Dichlorobenzene	(1)	6.873	146	8457	0.120
25)*1,4-Dichlorobenzene-d4	(1)	6.961	152	229725	5.000
26) 1,4-Dichlorobenzene	(1)	6.984	146	8491	0.119
27) Benzyl alcohol	(1)	7.170	108	5389	0.108
28) 1,2-Dichlorobenzene	(1)	7.205	146	7257	0.108
30) Indene	(1)	7.339	115	10954	0.101
31) 2-Methylphenol	(1)	7.345	108	7559	0.106
97) Isosafrole	(3)			5492	0.106
34) bis(2-Chloroisopropyl)ether	(1)	7.404	45	11096	0.126
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.404	45	11096	0.126
35) N-Nitrosopyrrolidine	(1)	7.520	100	4455	0.106
36) Acetophenone	(1)	7.561	105	11211	0.109
37) 4-Methylphenol	(1)	7.584	108	9406	0.119
39) N-Nitrosomorpholine	(1)	7.584	56	5256	0.115
38) N-Nitroso-di-n-propylamine	(1)	7.584	70	6492	0.107
40) o-Toluidine	(1)	7.613	106	14133	0.114
59) 1,2,3,4-Tetrahydronaphthalene	(2)	7.613	104	177M	0.049
43) Hexachloroethane	(1)	7.712	117	3872	0.119
44)$Nitrobenzene-d5	(2)	7.782	82	20582	0.225
45) Nitrobenzene	(2)	7.806	77	10758	0.120
48) N-Nitrosopiperidine	(2)	8.039	114	3991	0.105
120) 2,4_2,6-Dinitrotoluenes	(3)			5092	0.164
50) Isophorone	(2)	8.190	82	16341	0.104

M = Compound was manually integrated.
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Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
51) 2-Nitrophenol	(2)	8.301	139	3236	0.096
53) 2,4-Dimethylphenol	(2)	8.400	107	8365	0.109
56) Benzoic acid	(2)	8.453	105	15345	0.276
57) O,O,O-Triethylphosphorothioate	(2)	8.528	198	3073	0.102
55) bis(2-Chloroethoxy)methane	(2)	8.552	93	11599	0.115
60) 2,4-Dichlorophenol	(2)	8.674	162	4857	0.096
146) Diallate trans/cis	(4)			7293	0.101
62) 1,2,4-Trichlorobenzene	(2)	8.814	180	6275	0.116
65)*Naphthalene-d8	(2)	8.890	136	877507	5.000
67) 4-Chloroaniline	(2)	9.018	127	8496	0.104
68) 2,6-Dichlorophenol	(2)	9.030	162	5106	0.101
69) Hexachloropropene	(2)	9.082	213	3727	0.105
71) Hexachlorobutadiene	(2)	9.152	225	3425	0.112
75) Quinoline	(2)	9.444	129	12542	0.107
76) Caprolactam	(2)	9.525	113	1962M	0.087
77) N-Nitrosodi-n-butylamine	(2)	9.589	84	5444	0.087
80) 4-Chloro-3-methylphenol	(2)	9.811	107	6543	0.102
82) Safrole	(2)	9.916	162	4880	0.101
85) Hexachlorocyclopentadiene	(3)	10.300	237	2978	0.104
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.300	216	5971	0.115
88) cis-Isosafrole	(3)	10.376	162	1017	0.021
90) 2,4,6-Trichlorophenol	(3)	10.487	196	2979	0.089
92) 2,4,5-Trichlorophenol	(3)	10.534	196	3543	0.105
93)$2-Fluorobiphenyl	(3)	10.633	172	30075	0.237
94) trans-Isosafrole	(3)	10.743	162	4475	0.085
95) 1,1'-Biphenyl	(3)	10.784	154	14862	0.108
98) 1-Chloronaphthalene	(3)	10.831	162	11882	0.120
100) 2-Nitroaniline	(3)	10.965	138	3284	0.091
99) Diphenyl ether	(3)	10.965	170	8931	0.118
104) 1,4-Naphthoquinone	(3)	11.081	158	3252	0.076
105) 1,4-Dinitrobenzene	(3)	11.192	168	1329	0.068
106) Dimethylphthalate	(3)	11.303	163	12891	0.114
107) 1,3-Dinitrobenzene	(3)	11.309	168	1931	0.088
108) 2,6-Dinitrotoluene	(3)	11.379	165	2287	0.086
112) 3-Nitroaniline	(3)	11.612	138	3109	0.102
113)*Acenaphthene-d10	(3)	11.670	164	394479	5.000
115) 2,4-Dinitrophenol	(3)	11.769	184	9555	0.519
116) 4-Nitrophenol	(3)	11.868	109	9579	0.417
117) Pentachlorobenzene	(3)	11.909	250	5648	0.132
118) 2,4-Dinitrotoluene	(3)	11.956	165	2805	0.078

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on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Dibenzofuran	(3)	11.962	168	17872	0.118
121) 1-Naphthylamine	(3)	12.061	143	12236	0.106
122) 2,3,4,6-Tetrachlorophenol	(3)	12.131	232	2807	0.099
123) 2-Naphthylamine	(3)	12.166	143	11874	0.107
124) Diethylphthalate	(3)	12.305	149	13481	0.118
125) Thionazin	(3)	12.405	107	2895	0.109
128) 5-Nitro-o-toluidine	(3)	12.410	152	3013M	0.084
129) 4-Nitroaniline	(3)	12.416	138	3317	0.099
127) 4-Chlorophenyl-phenylether	(3)	12.422	204	6977	0.122
130) 4,6-Dinitro-2-methylphenol	(4)	12.463	198	6895	0.305
131) N-Nitrosodiphenylamine	(4)	12.562	169	11316	0.112
132) NDPA as diphenylamine	(4)	12.562	169	11316	0.112
134) 1,2-Diphenylhydrazine	(4)	12.608	77	17895	0.114
135)$2,4,6-Tribromophenol	(3)	12.684	330	2685	0.195
137) Tetraethyldithiopyrophosphate	(4)	12.795	97	2711	0.108
139) 1,3,5-Trinitrobenzene	(4)	12.871	213	791M	0.051
140) Diallate (peak 1)	(4)	12.935	86	6221	0.082
142) Phenacetin	(4)	12.941	108	6289	0.083
141) Phorate	(4)	12.941	75	9669	0.103
143) 4-Bromophenyl-phenylether	(4)	13.011	248	3345	0.108
144) Diallate (peak 2)	(4)	13.040	86	1072	0.018
147) Dimethoate	(4)	13.121	87	5304	0.083
148) Atrazine	(4)	13.232	200	3289	0.114
149) Pentachlorophenol	(4)	13.314	266	1572	0.074
150) 4-Aminobiphenyl	(4)	13.325	169	11341	0.098
151) Pentachloronitrobenzene	(4)	13.337	237	1160	0.085
152) Pronamide	(4)	13.425	173	4425	0.087
153)*Phenanthrene-d10	(4)	13.553	188	739276	5.000
154) Dinoseb	(4)	13.570	211	1507M	0.048
163) Carbazole	(4)	13.862	167	17091	0.105
164) Methyl parathion	(4)	14.071	109	2947	0.063
165) Di-n-butylphthalate	(4)	14.380	149	18169	0.087
168) 4-Nitroquinoline-1-oxide	(4)	14.614	190	857	0.038
167) Parathion	(4)	14.619	109	1652	0.053
169) Octachlorostyrene	(4)	14.975	308	1038	0.089
171) Isodrin	(4)	15.022	193	2544	0.130
174) Benzidine	(5)	15.453	184	114098	0.874
175)*Pyrene-d10	(5)	15.546	212	725555	5.000
179)$Terphenyl-d14	(5)	15.855	244	29053	0.230
182) p-Dimethylaminoazobenzene	(5)	16.088	225	2549	0.073

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on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
185) Chlorobenzilate	(5)	16.181	139	5042	0.082
187) 3,3'-Dimethylbenzidine	(5)	16.642	212	9572	0.075
188) Butylbenzylphthalate	(5)	16.712	149	8489	0.086
191) 2-Acetylaminofluorene	(5)	17.056	181	4343	0.055
193) 3,3'-Dichlorobenzidine	(5)	17.569	252	5132	0.077
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.586	231	2634	0.065
199) bis(2-Ethylhexyl)phthalate	(5)	17.784	149	9547	0.070
203) 6-Methylchrysene	(5)	18.449	242	12082	0.095
205) Di-n-octylphthalate	(6)	18.944	149	13330	0.060
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.440	256	6632	0.086
213)*Perylene-d12	(6)	20.052	264	681523	5.000
215) 3-Methylcholanthrene	(6)	20.535	268	6195	0.081
217) Dibenz(a,h)acridine	(6)	21.334	279	10522	0.084
218) Dibenz(a,j)acridine	(6)	21.410	279	12923M	0.096

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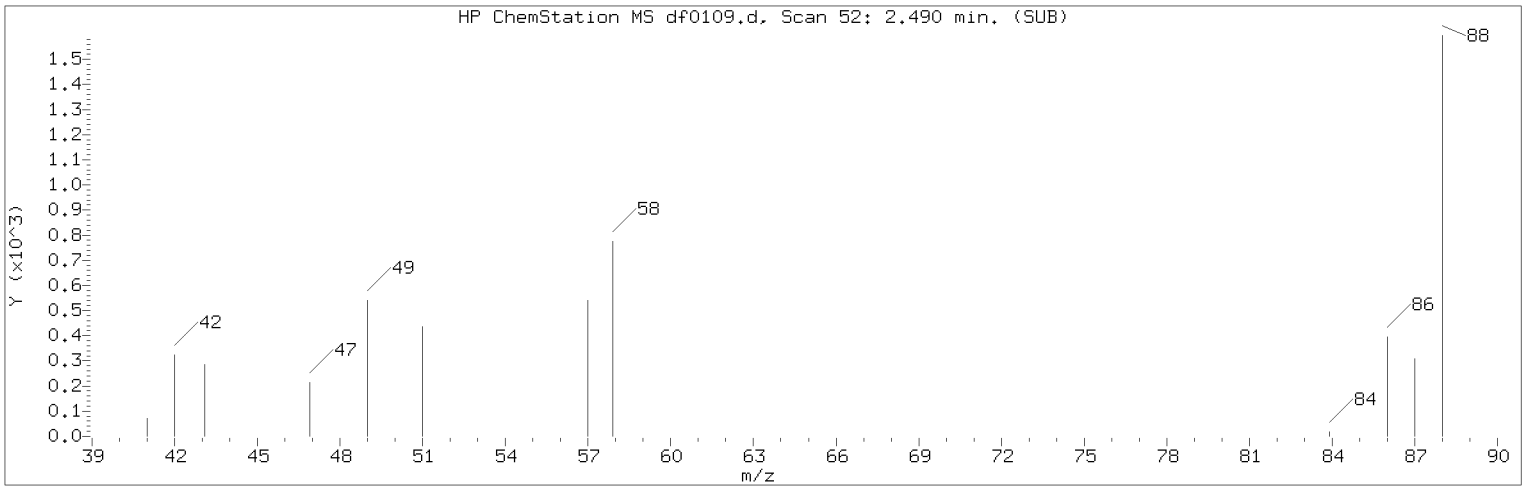
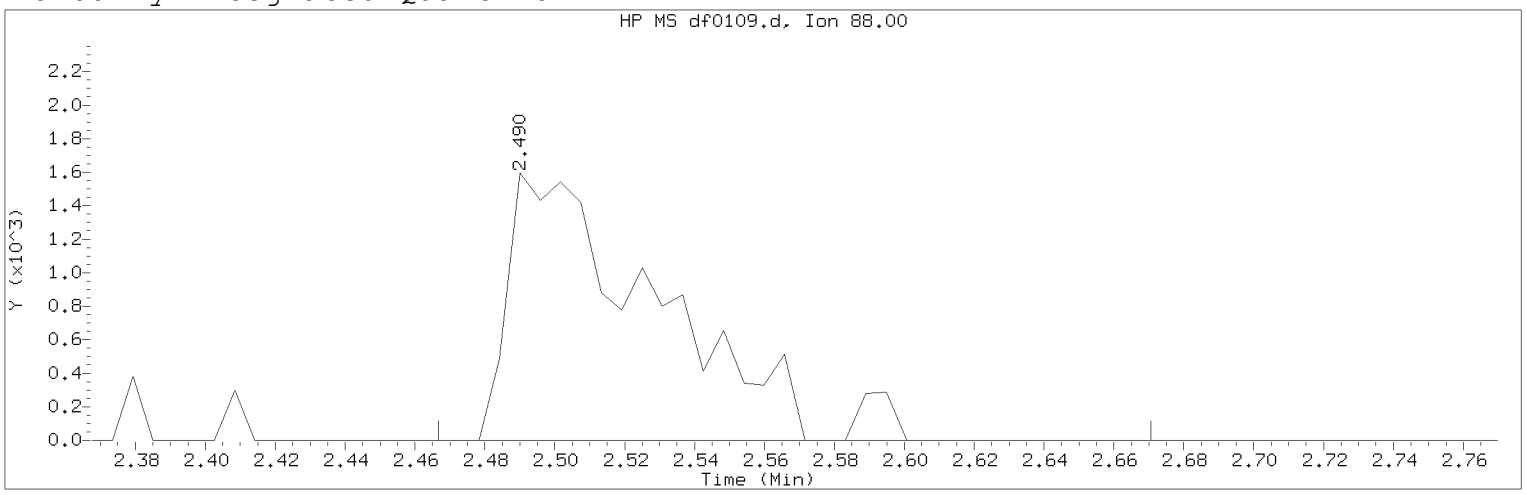
Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

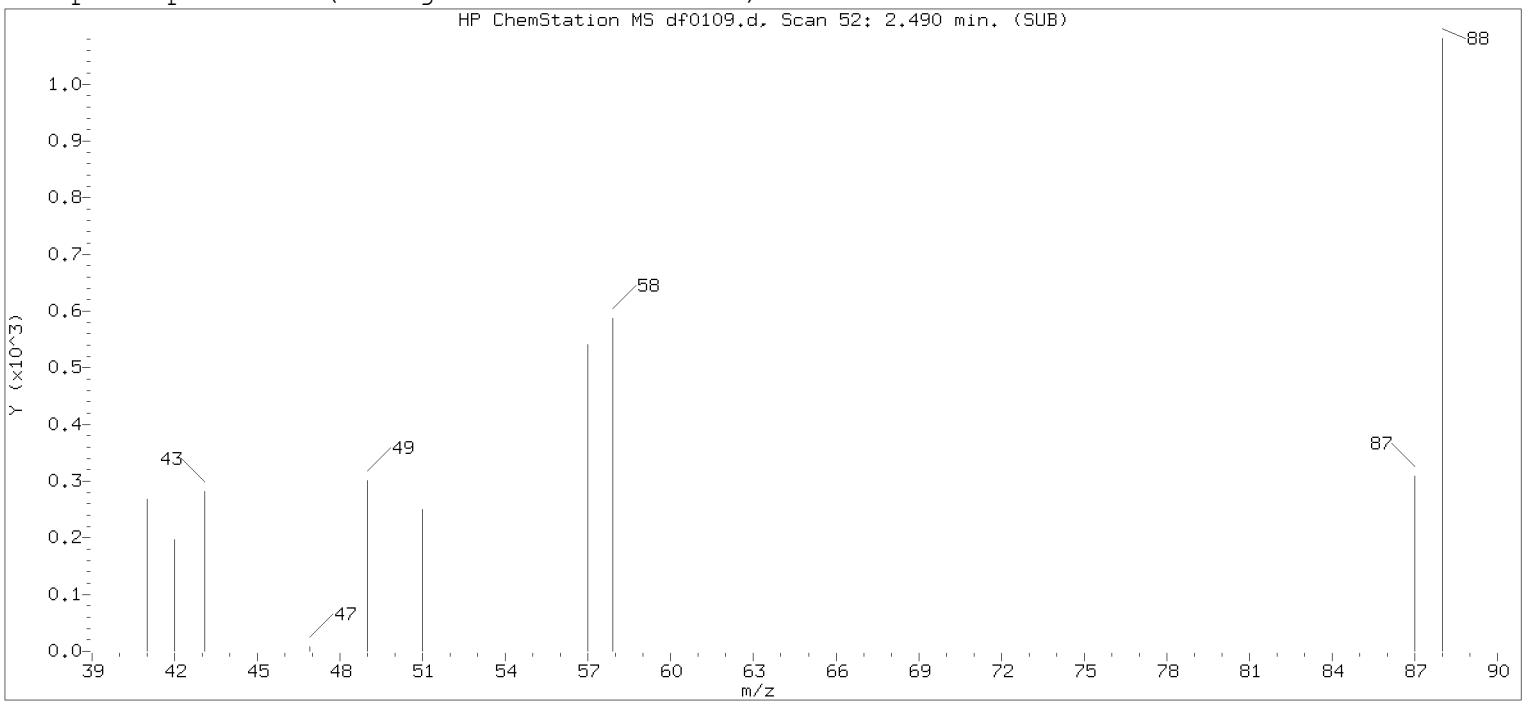
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 52
Retention Time (minutes) : 2.490
Quant Ion : 88.00
Area (flag) : 4775M
On-Column Amount (ng/ul) : 0.1334
Integration start scan : 47 Integration stop scan: 82
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

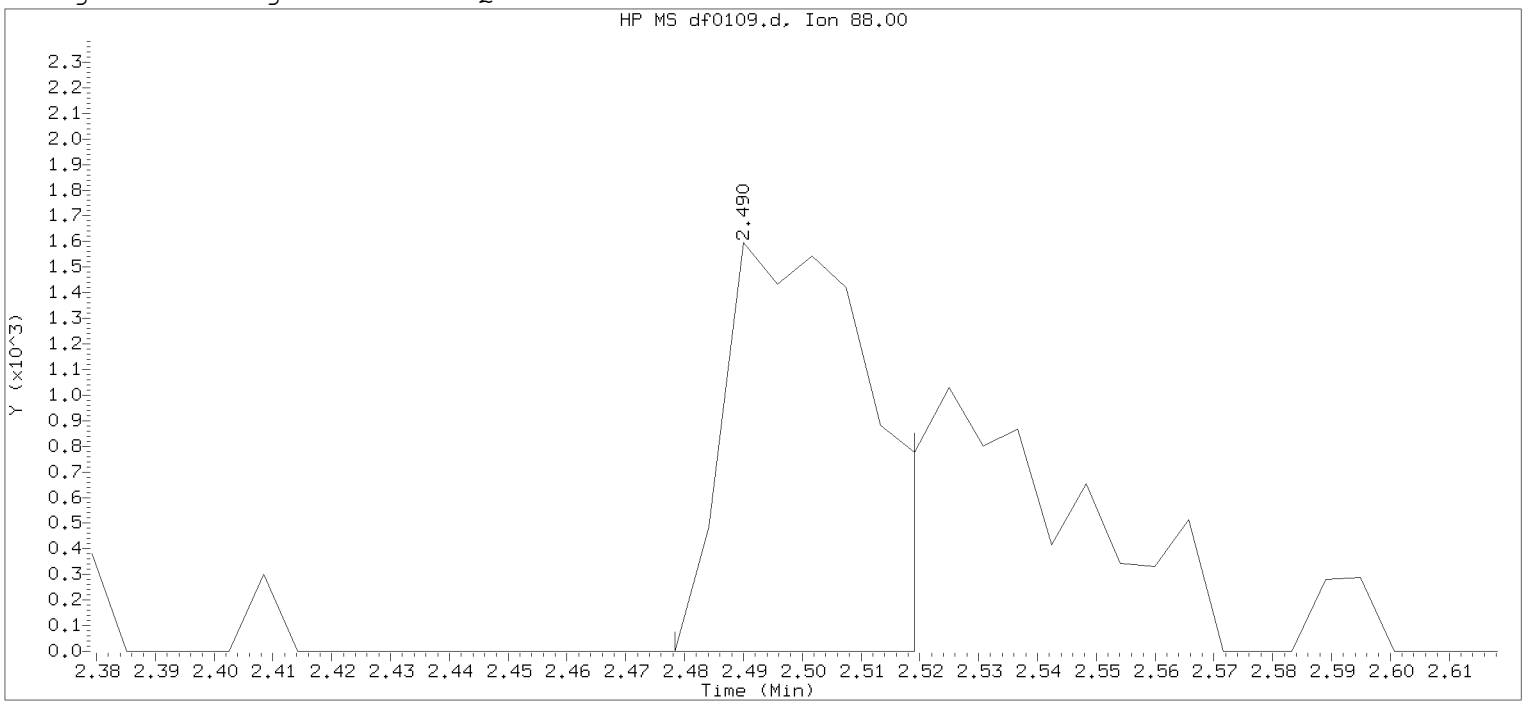
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

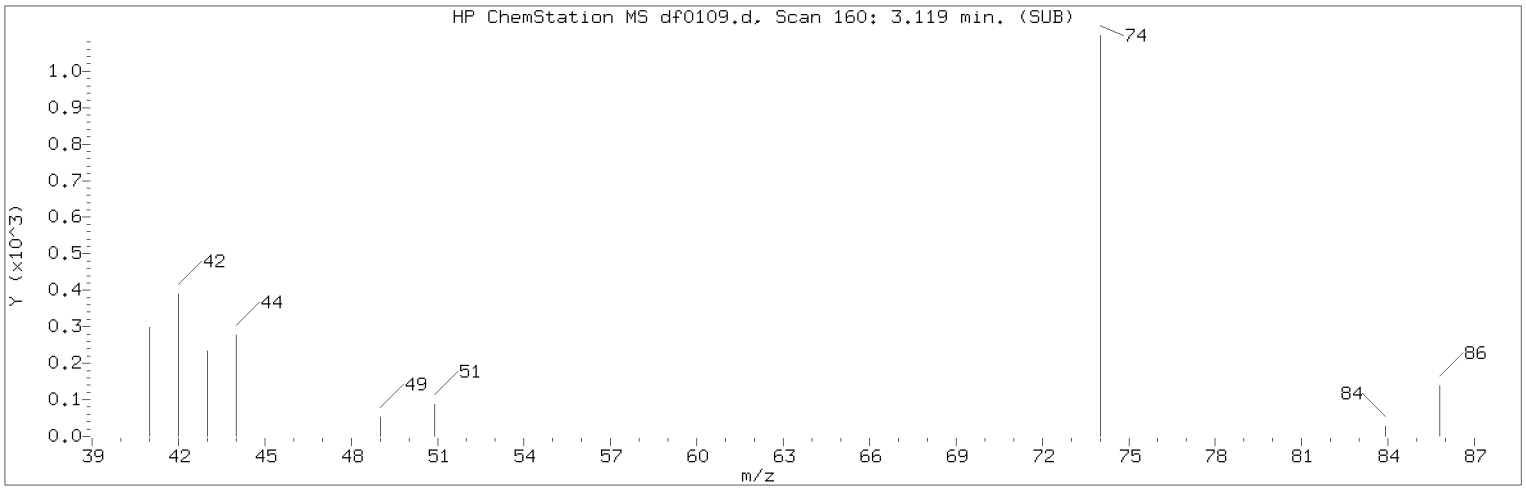
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:55 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

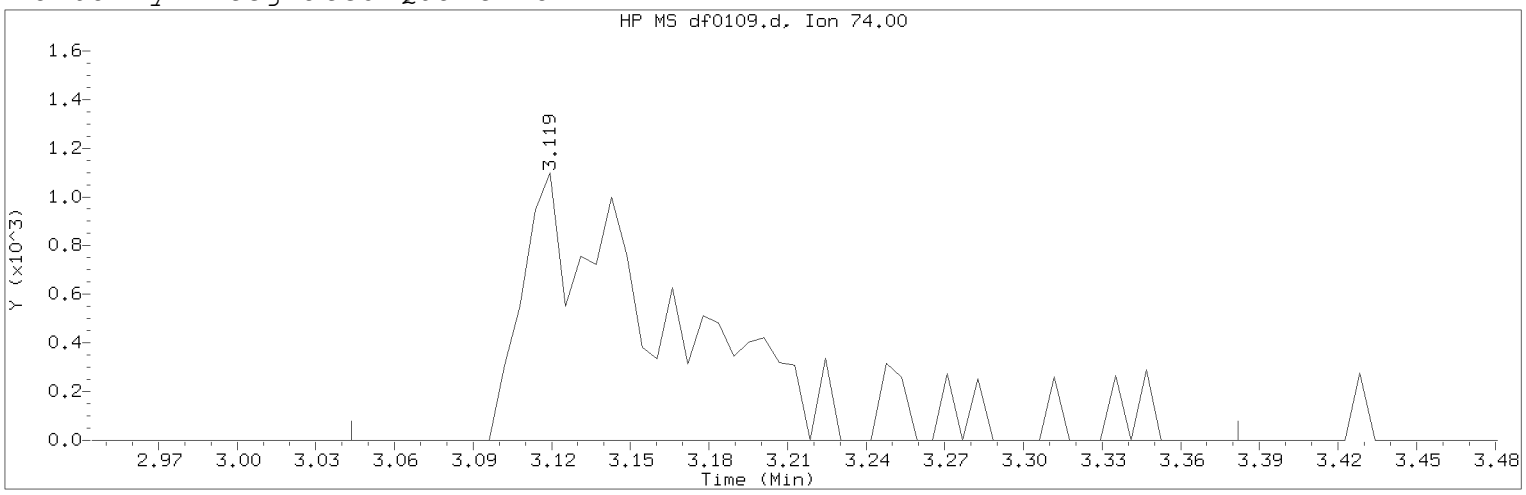
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 52		
Retention Time (minutes)	: 2.490		
Quant Ion	: 88.00		
Area	: 2708		
On-column Amount (ng/ul)	: 0.0771		
Integration start scan	: 49	Integration stop scan:	56
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

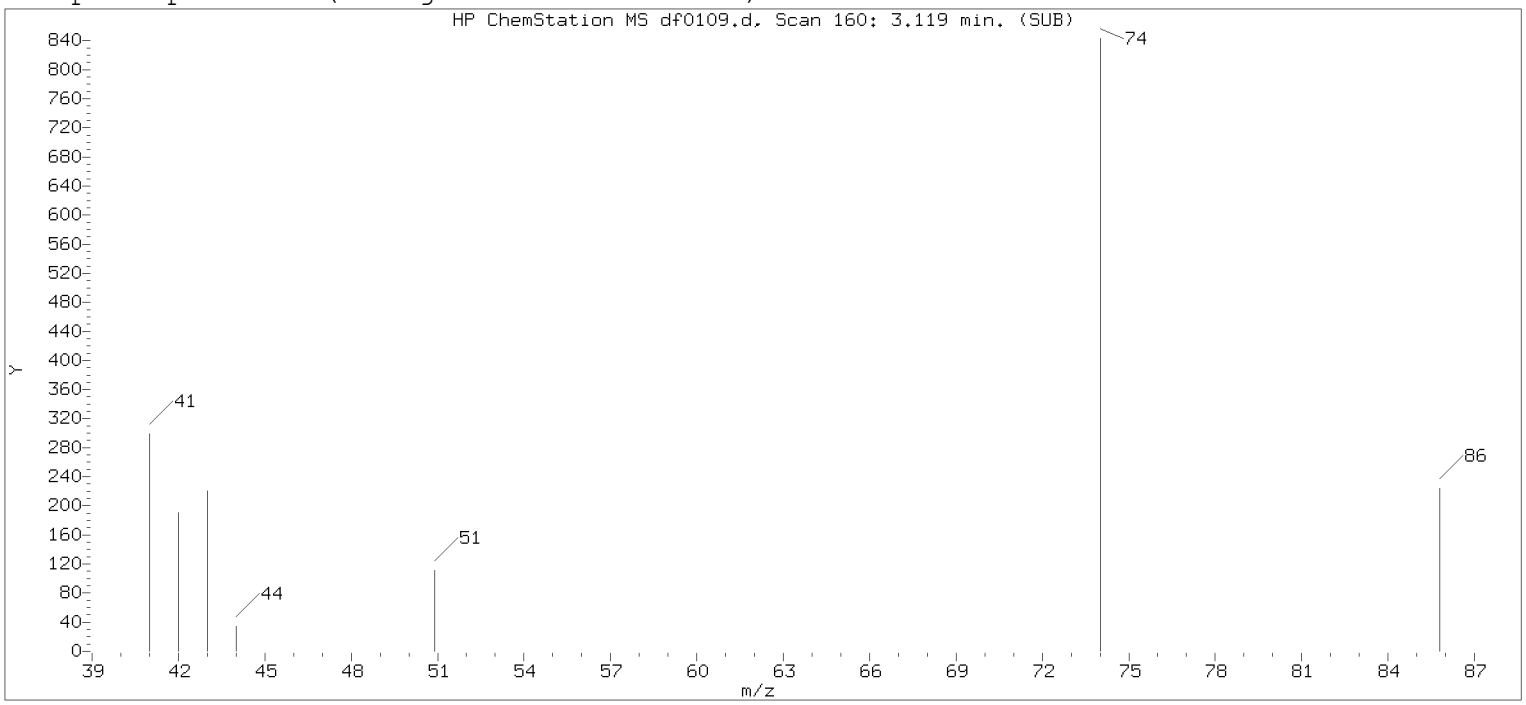
Compound Number : 4
Compound Name : N-Nitrosodimethylamine
Scan Number : 160
Retention Time (minutes) : 3.119
Quant Ion : 74.00
Area (flag) : 4681M
On-Column Amount (ng/ul) : 0.0868
Integration start scan : 146 Integration stop scan: 204
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

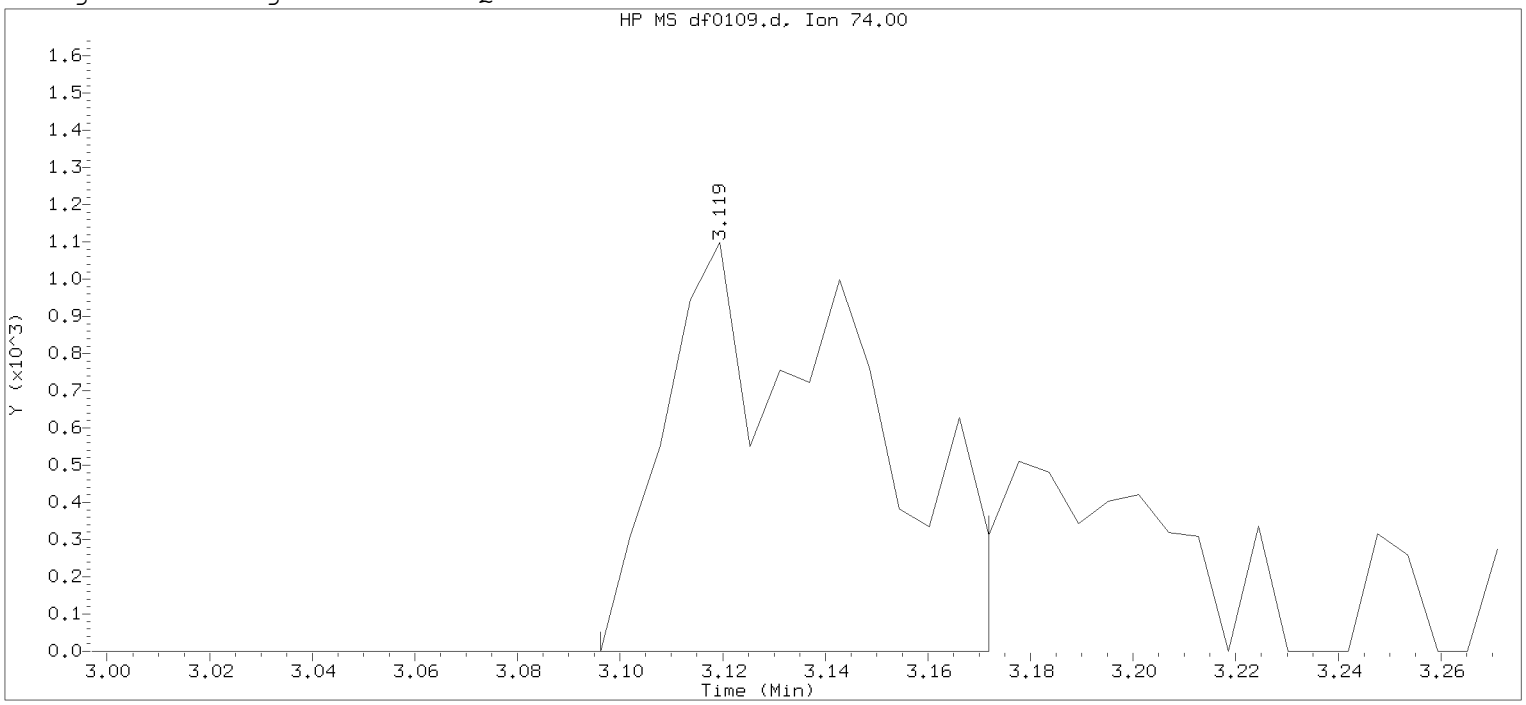
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

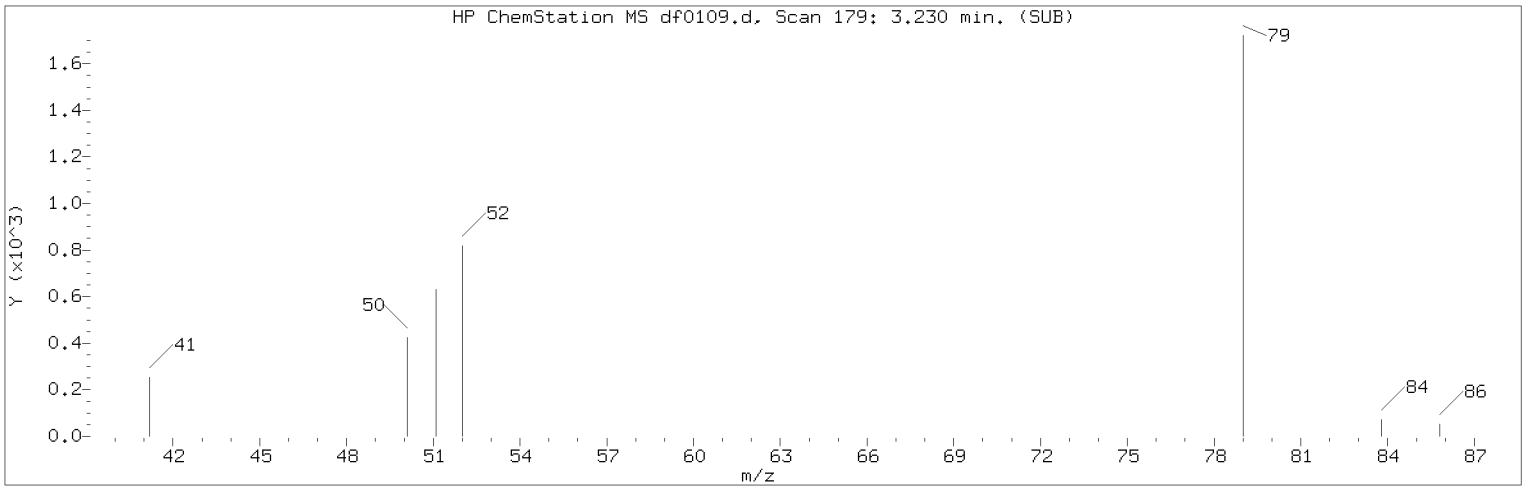
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:55 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

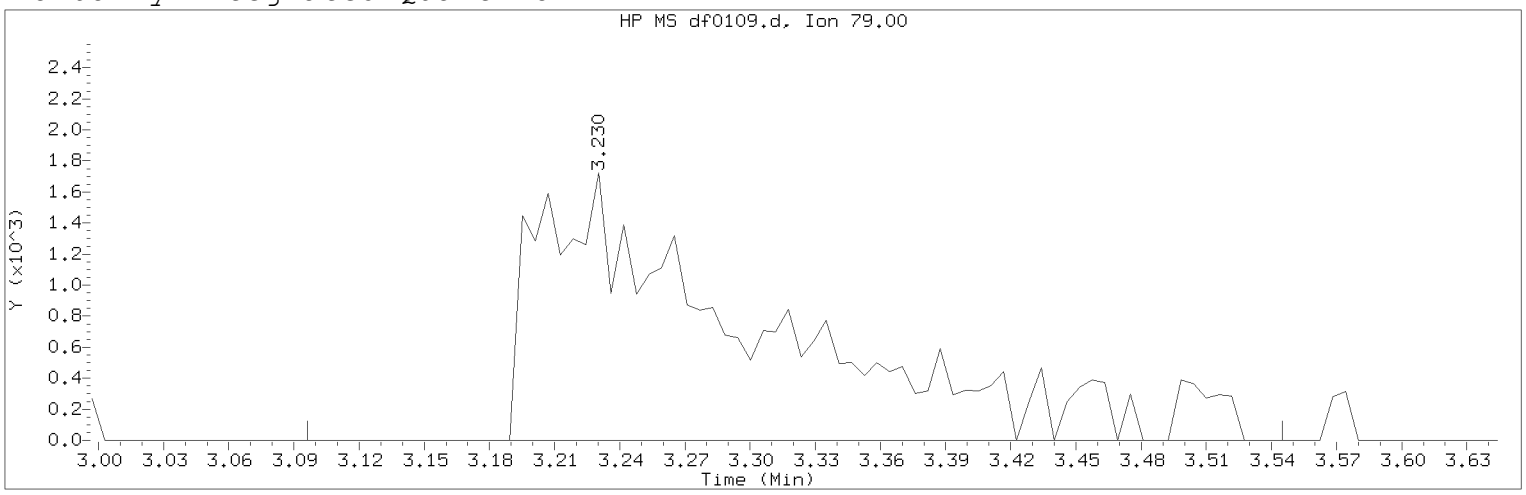
Compound Number	: 4		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 160		
Retention Time (minutes)	: 3.119		
Quant Ion	: 74.00		
Area	: 2864		
On-column Amount (ng/ul)	: 0.0535		
Integration start scan	: 155	Integration stop scan:	168
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: CBD50

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

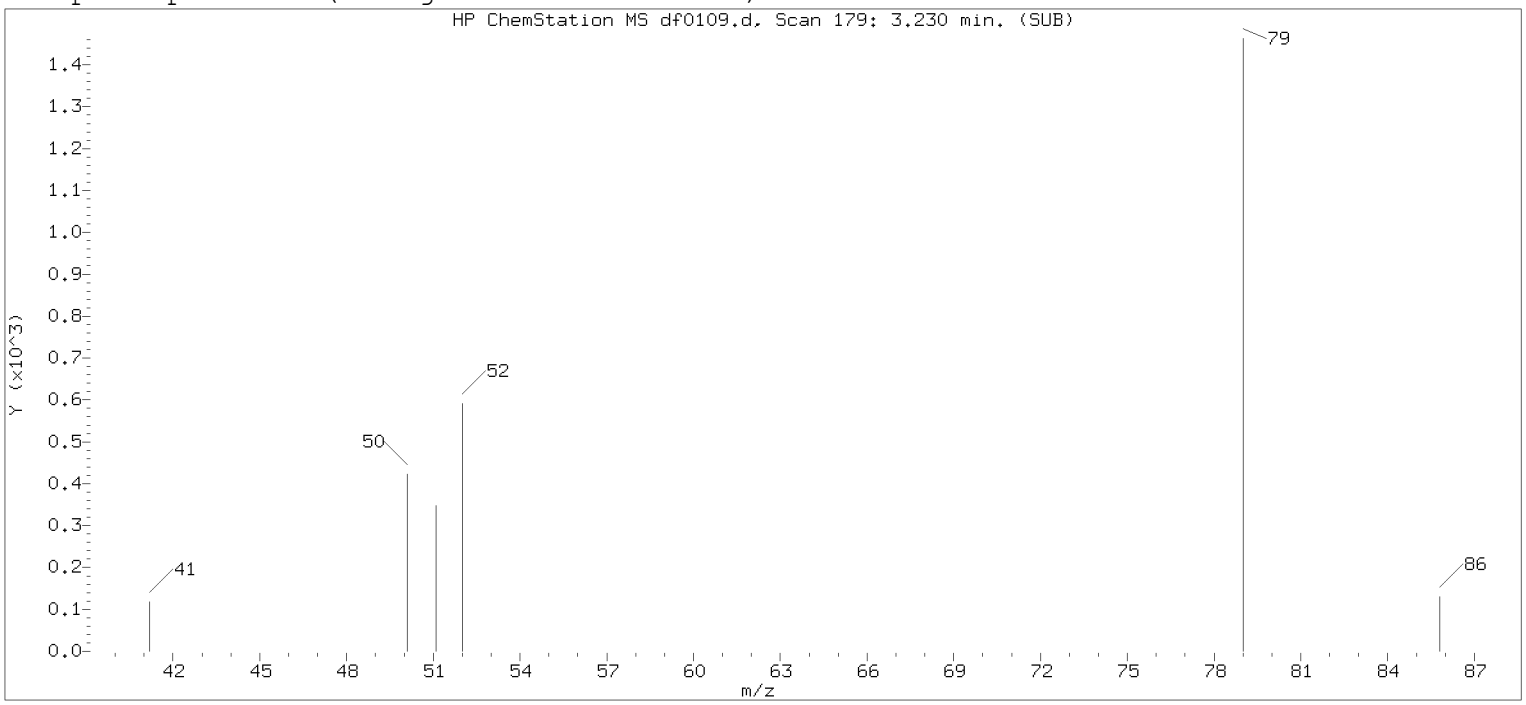
Compound Number : 5
Compound Name : Pyridine
Scan Number : 179
Retention Time (minutes) : 3.230
Quant Ion : 79.00
Area (flag) : 12221M
On-Column Amount (ng/ul) : 0.1327
Integration start scan : 155 Integration stop scan: 232
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

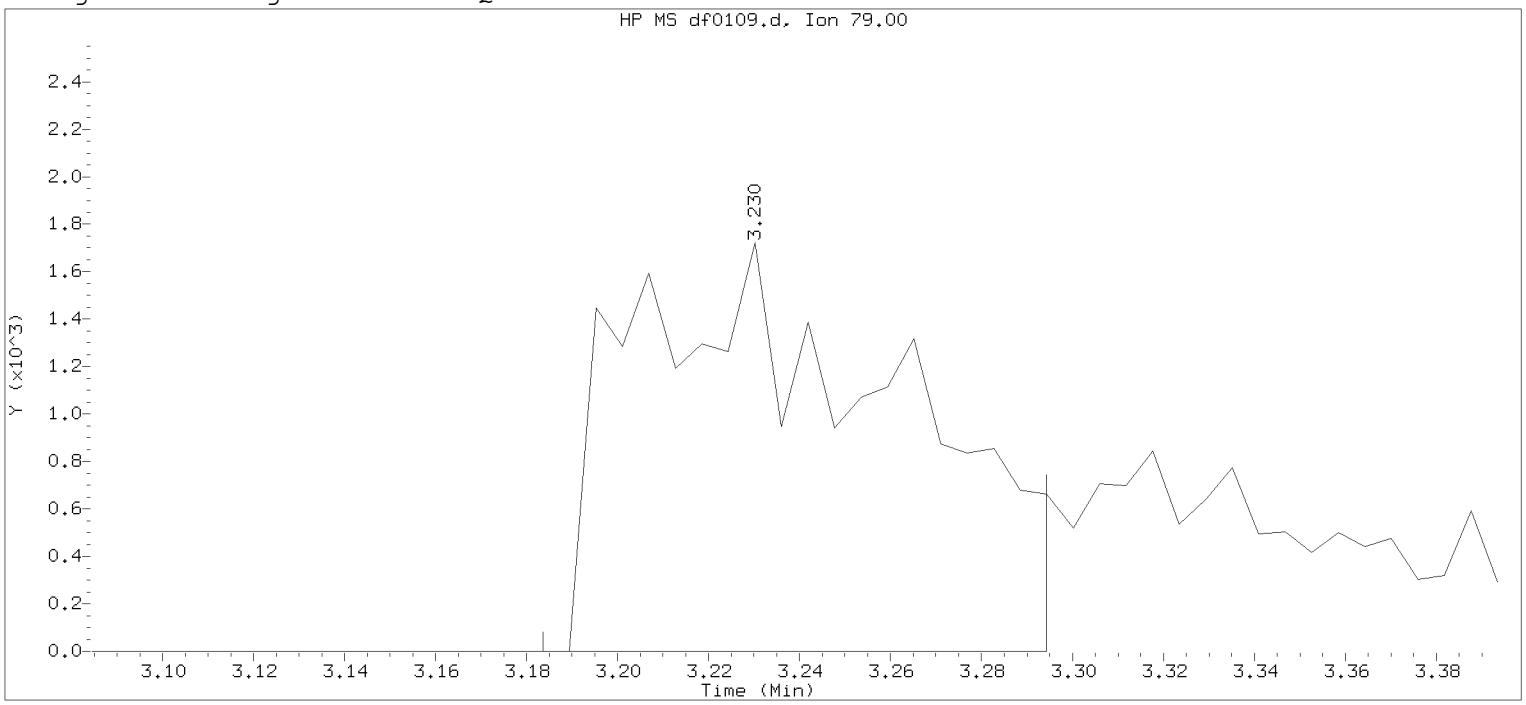
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

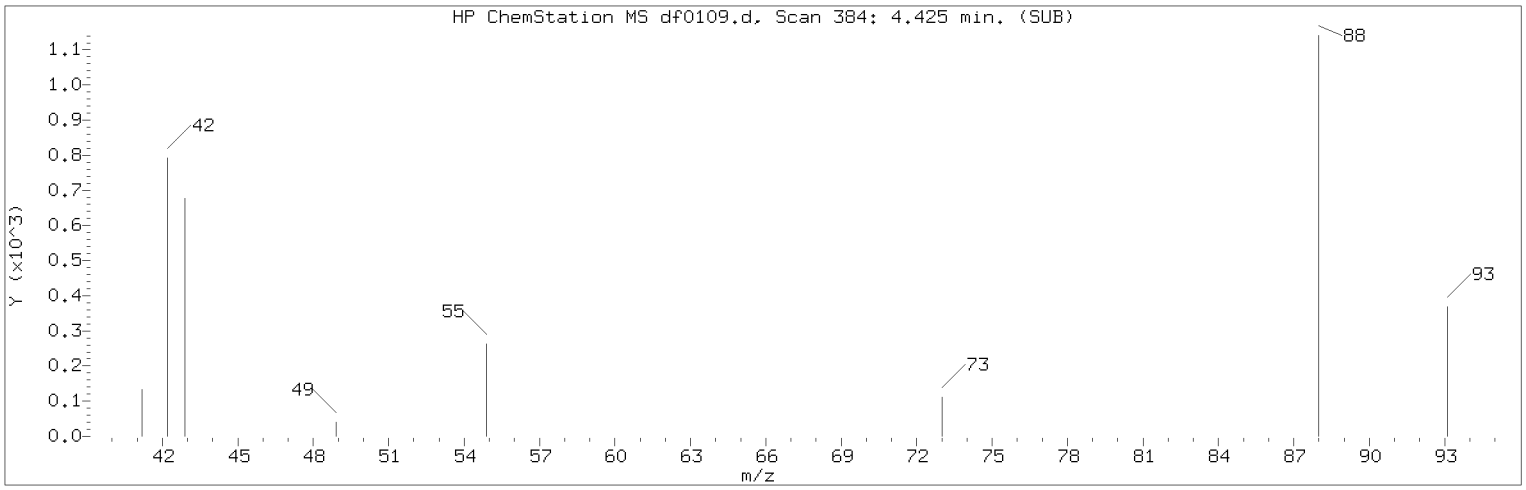
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:55 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

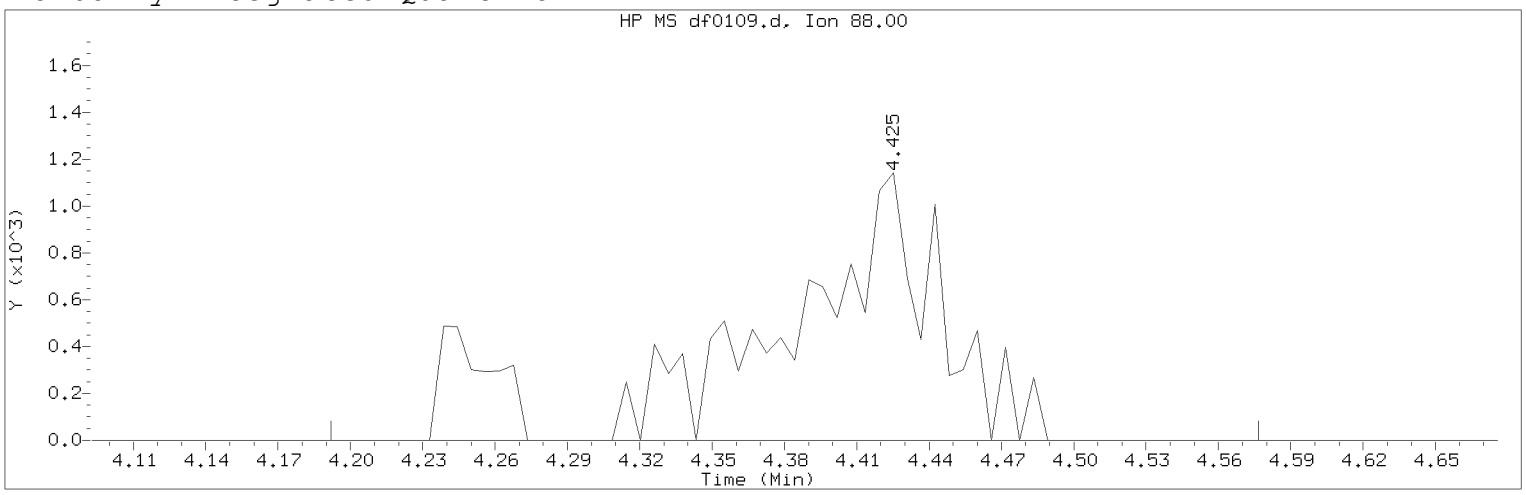
Compound Number	: 5		
Compound Name	: Pyridine		
Scan Number	: 179		
Retention Time (minutes)	: 3.230		
Quant Ion	: 79.00		
Area	: 7046		
On-column Amount (ng/ul)	: 0.0782		
Integration start scan	: 170	Integration stop scan:	189
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

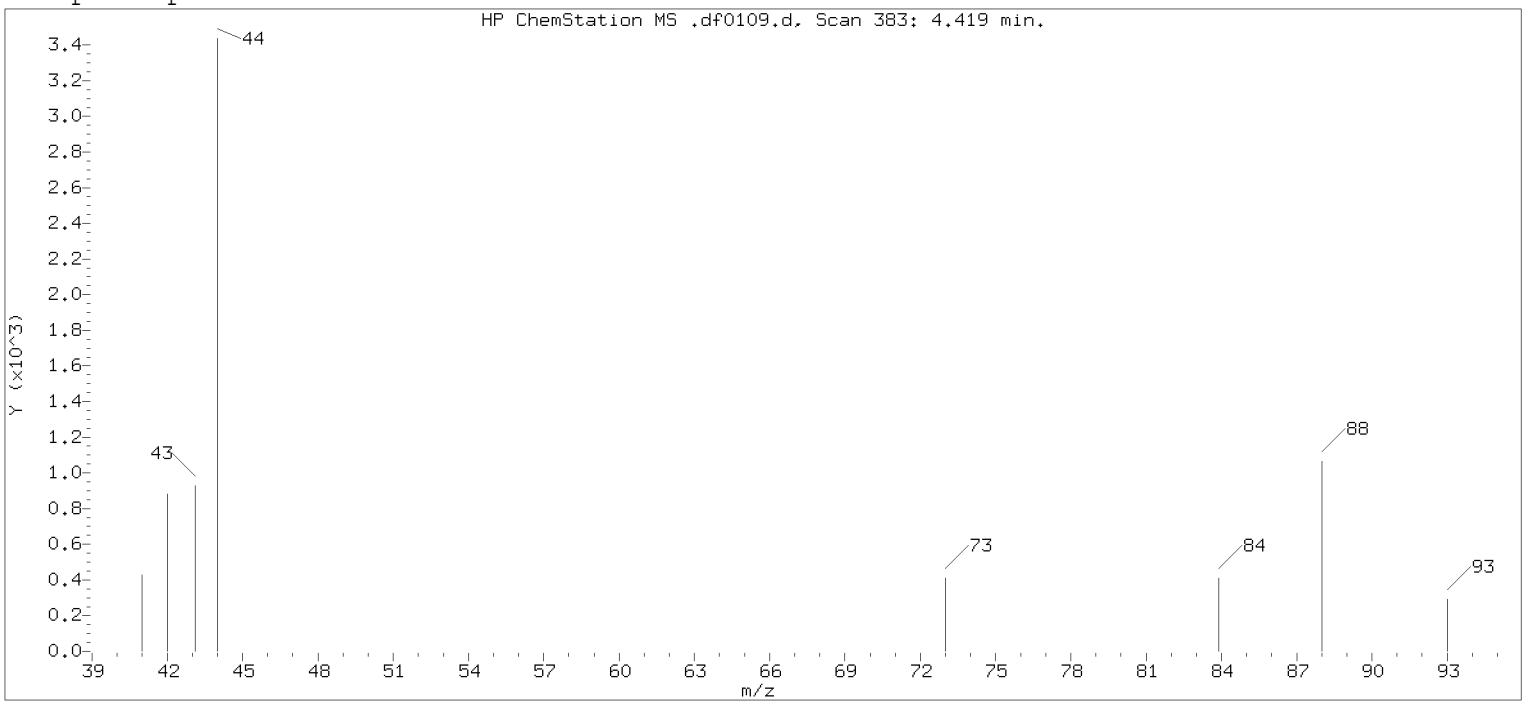
Compound Number : 8
Compound Name : N-Nitrosomethylethylamine
Scan Number : 384
Retention Time (minutes) : 4.425
Quant Ion : 88.00
Area (flag) : 5444M
On-Column Amount (ng/ul) : 0.1264
Integration start scan : 343 Integration stop scan: 409
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

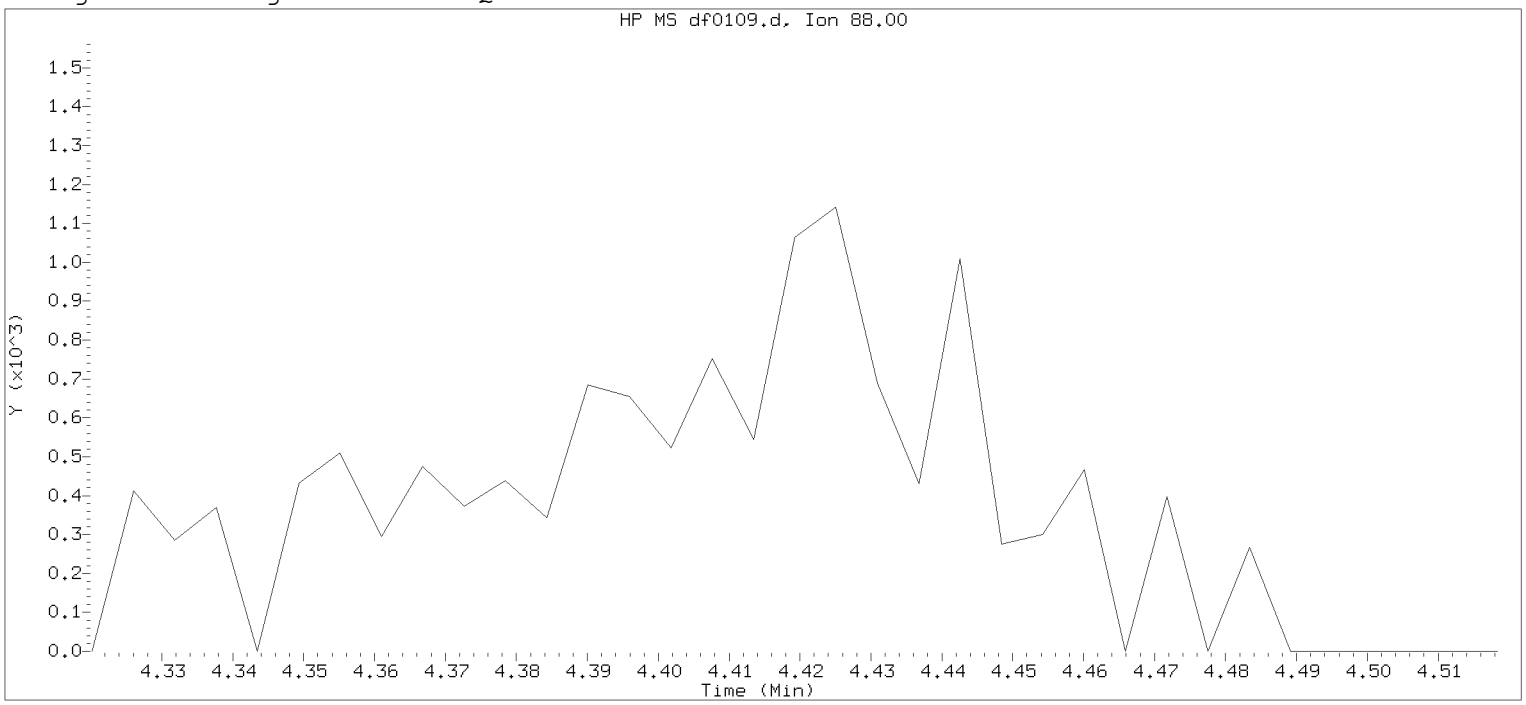
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

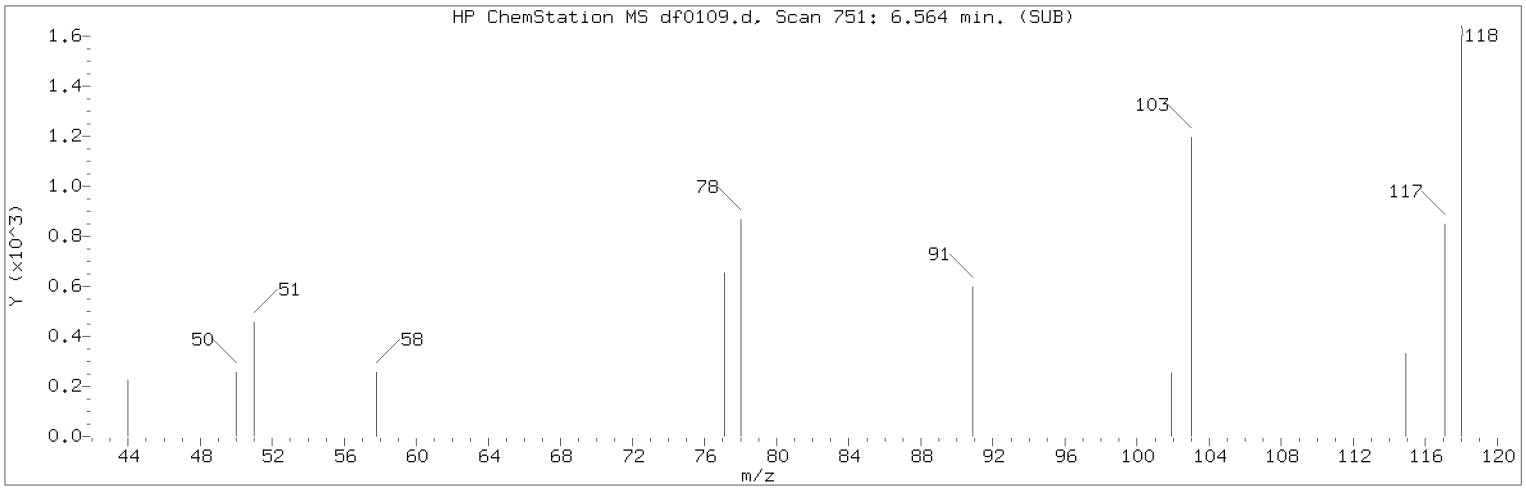
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:55 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

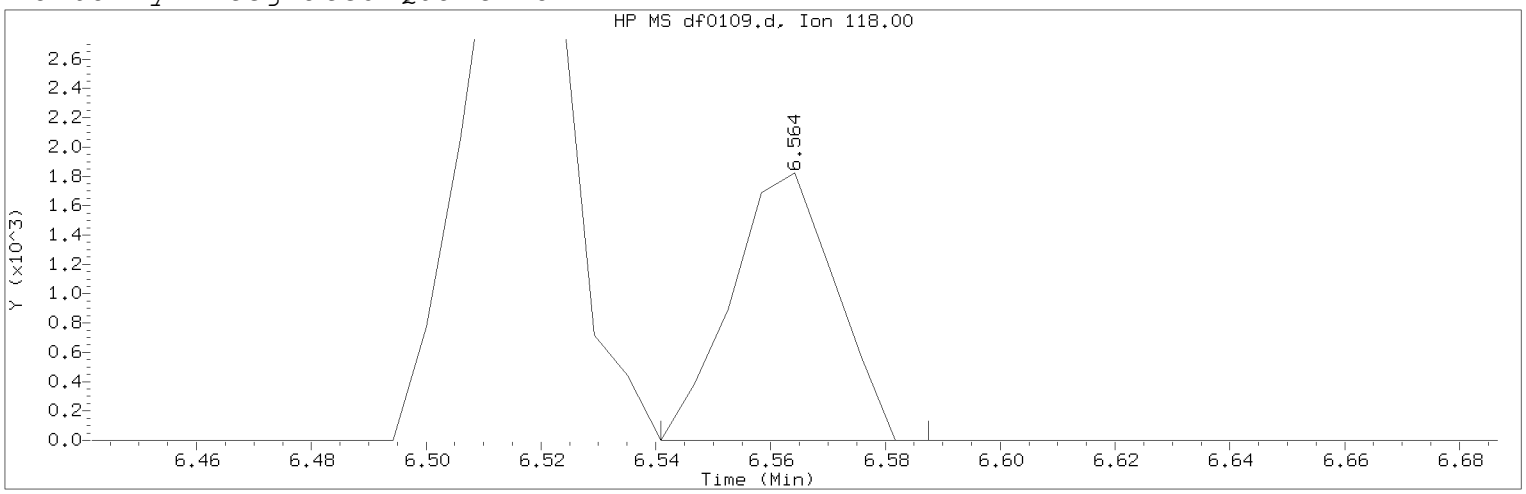
Compound Number : 8
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.419
Quant Ion : 88.00

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

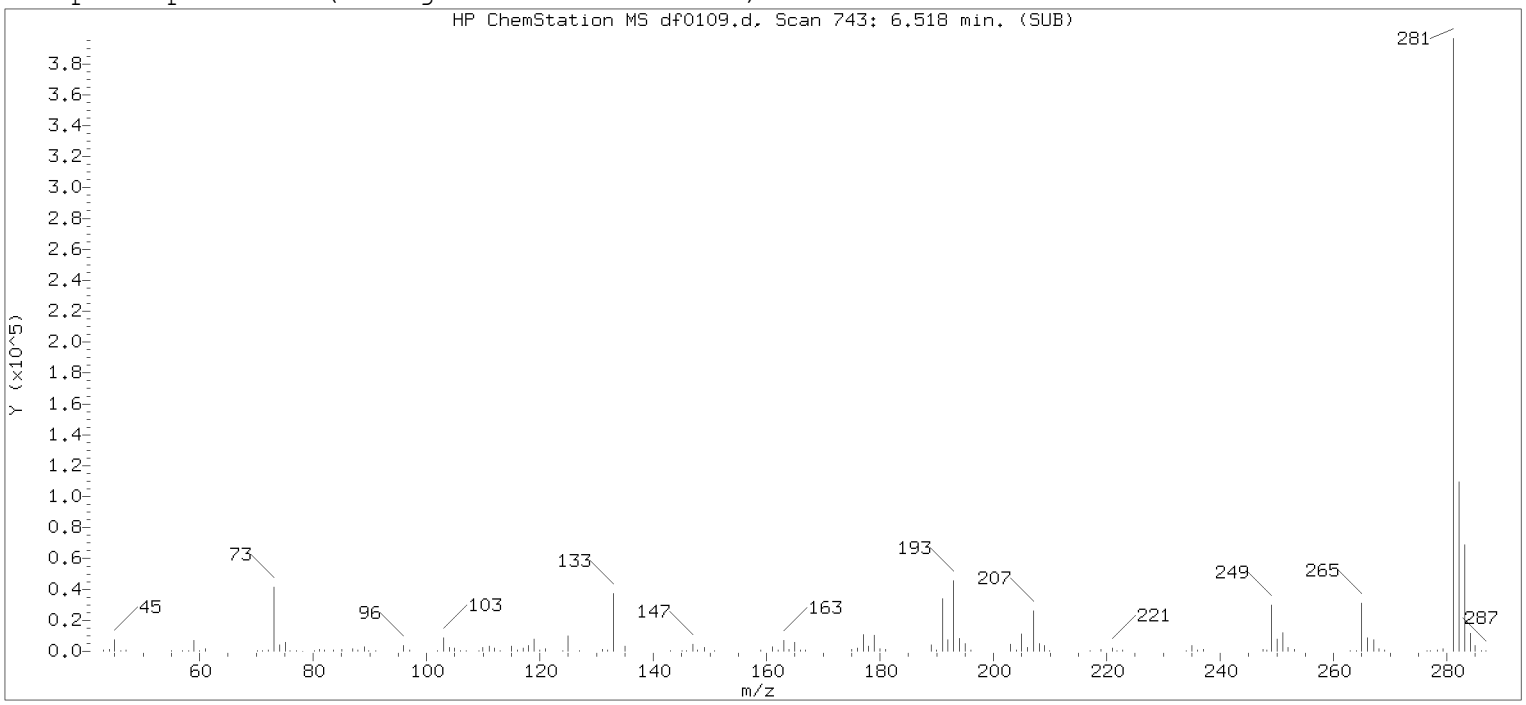
Compound Number : 20
Compound Name : a-methylstyrene
Scan Number : 751
Retention Time (minutes) : 6.564
Quant Ion : 118.00
Area (flag) : 2291M
On-Column Amount (ng/ul) : 0.0816
Integration start scan : 746 Integration stop scan: 754
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

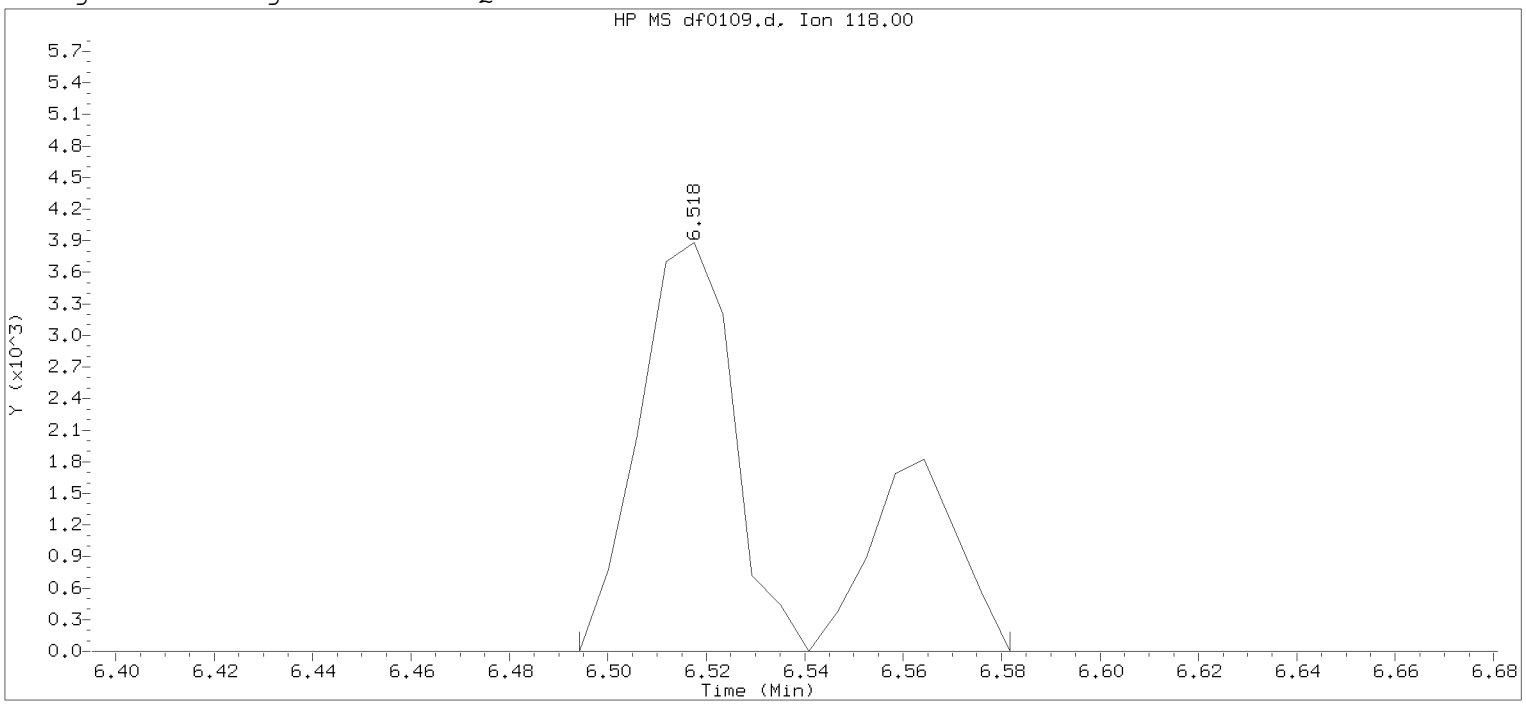
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

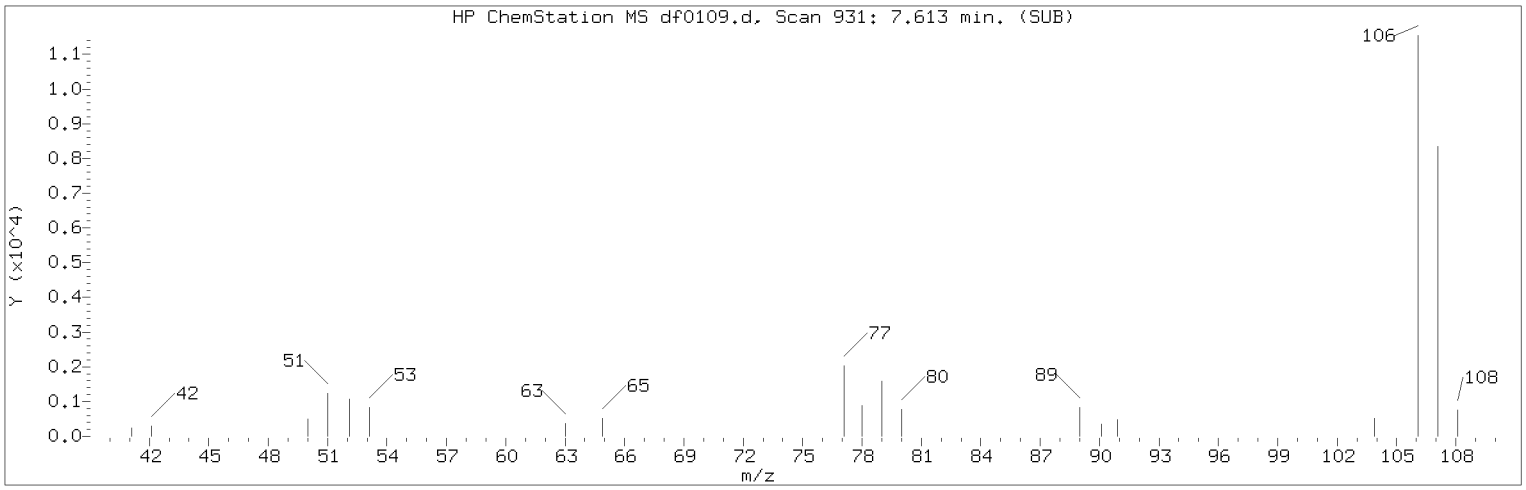
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:55 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

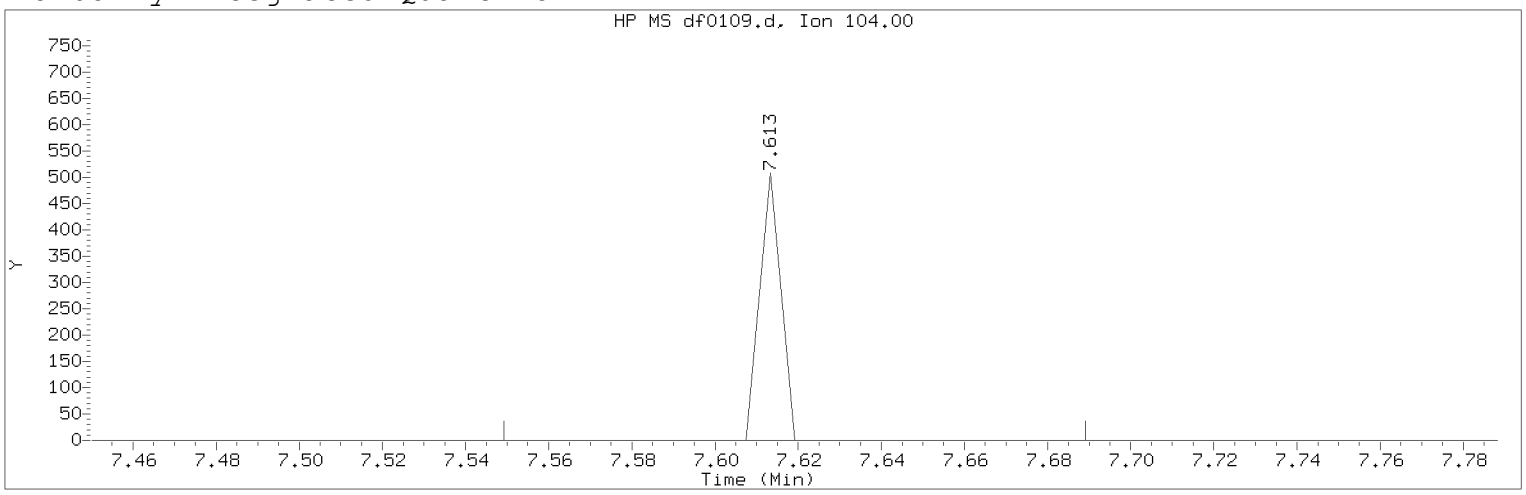
Compound Number	: 20		
Compound Name	: a-methylstyrene		
Scan Number	: 743		
Retention Time (minutes)	: 6.518		
Quant Ion	: 118.00		
Area	: 7455		
On-column Amount (ng/ul)	: 0.2707		
Integration start scan	: 738	Integration stop scan:	753
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

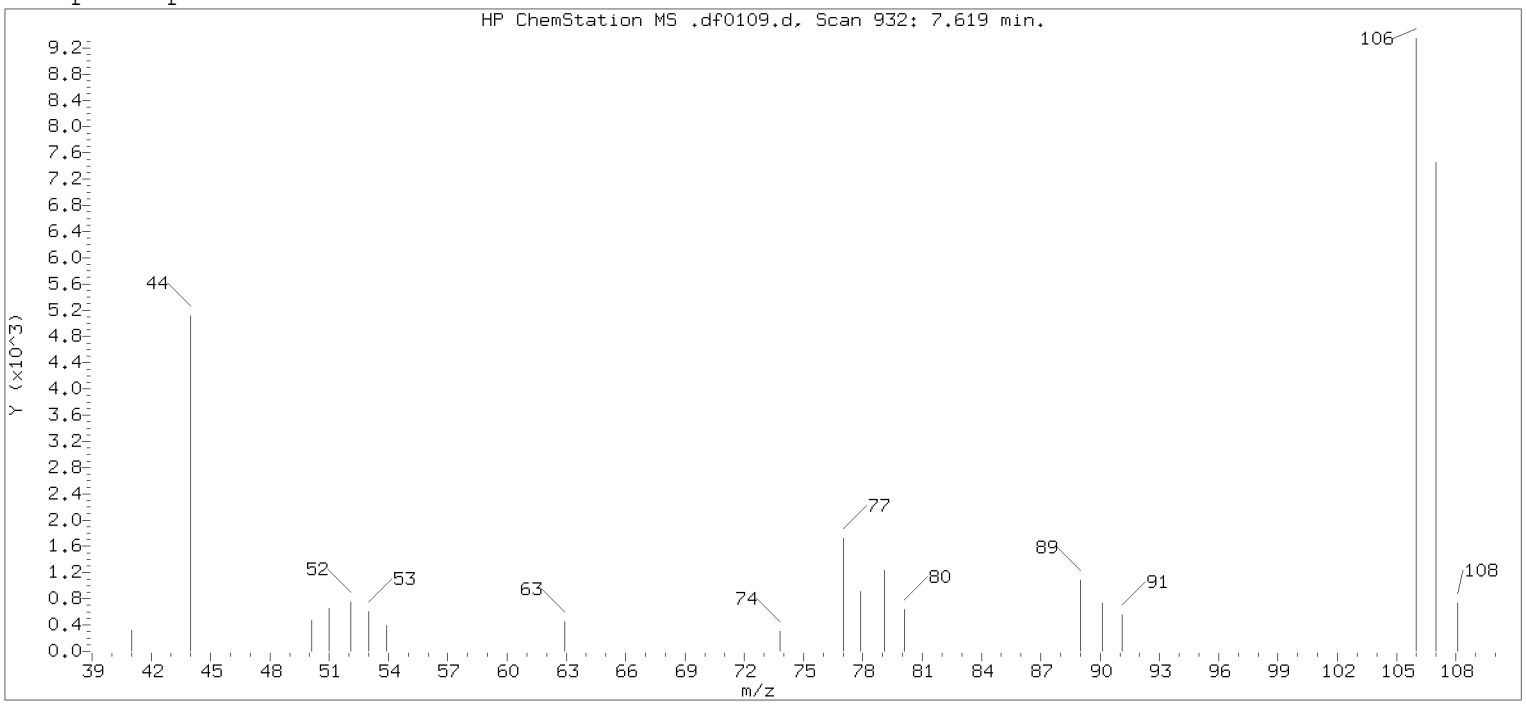
Compound Number : 59
Compound Name : 1,2,3,4-Tetrahydronaphthalene
Scan Number : 931
Retention Time (minutes) : 7.613
Quant Ion : 104.00
Area (flag) : 177M
On-Column Amount (ng/ul) : 0.0492
Integration start scan : 919 Integration stop scan: 943
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

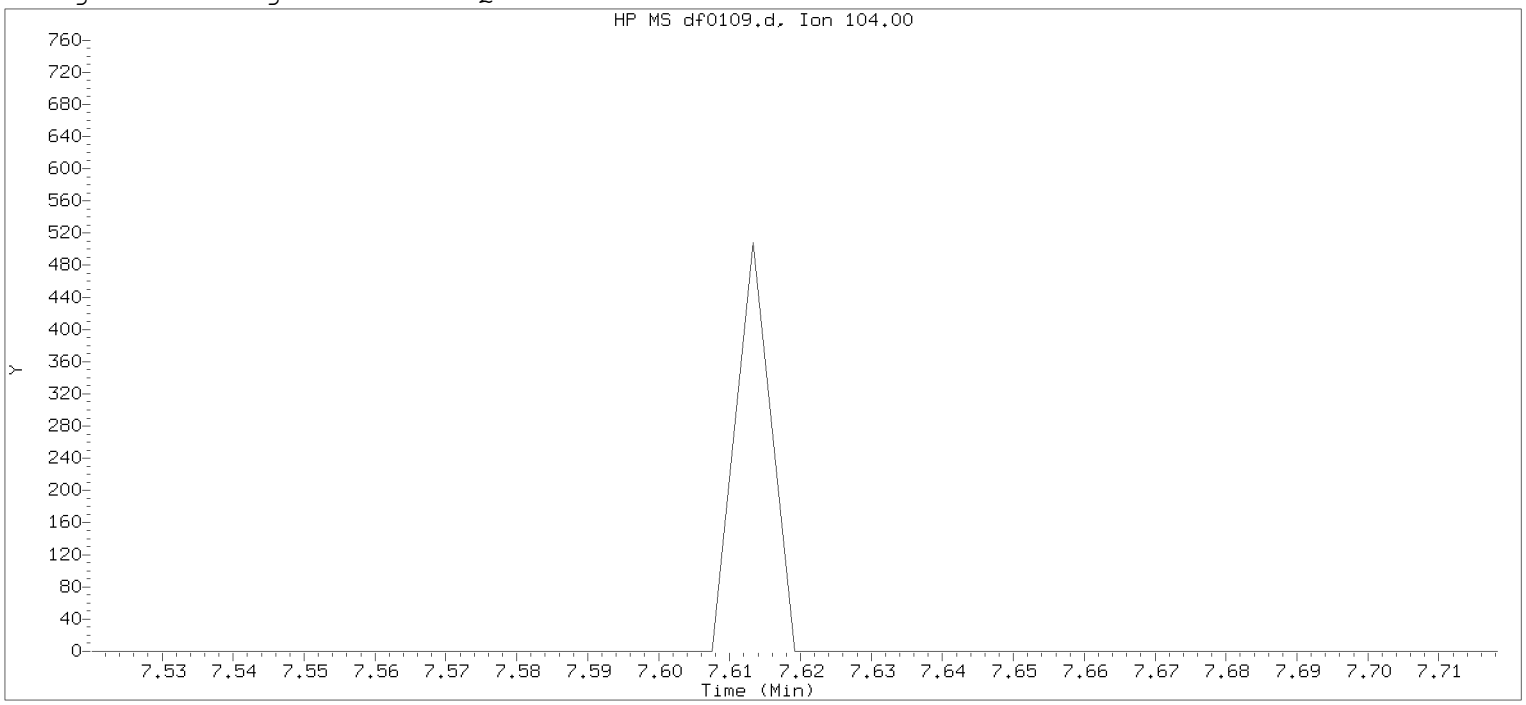
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

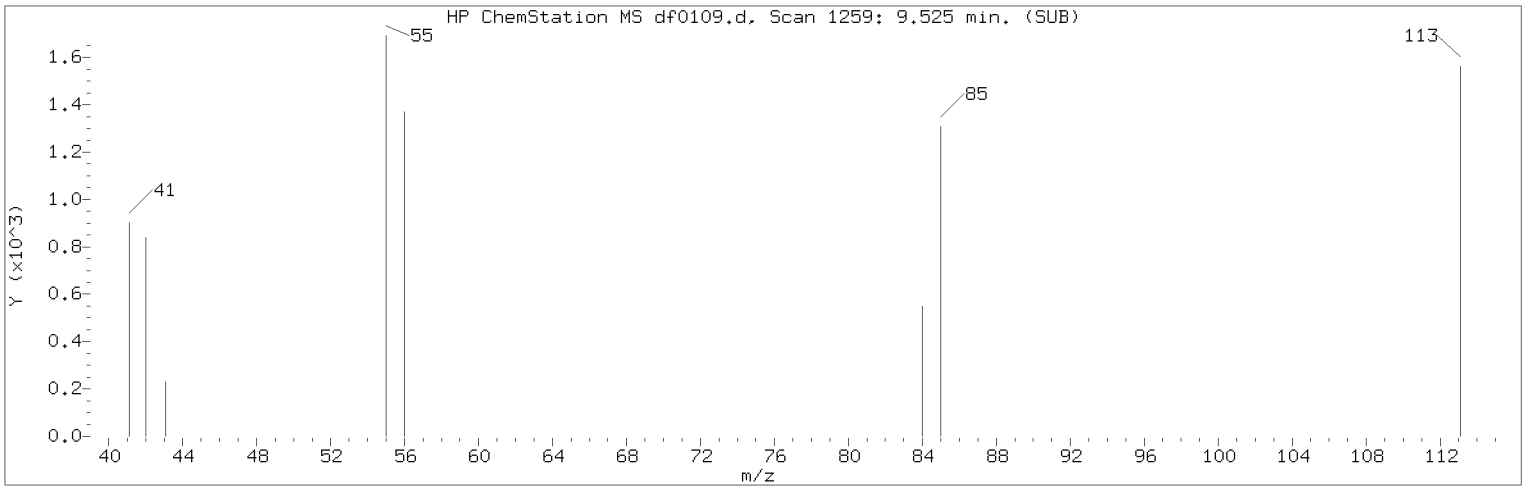
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:55 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

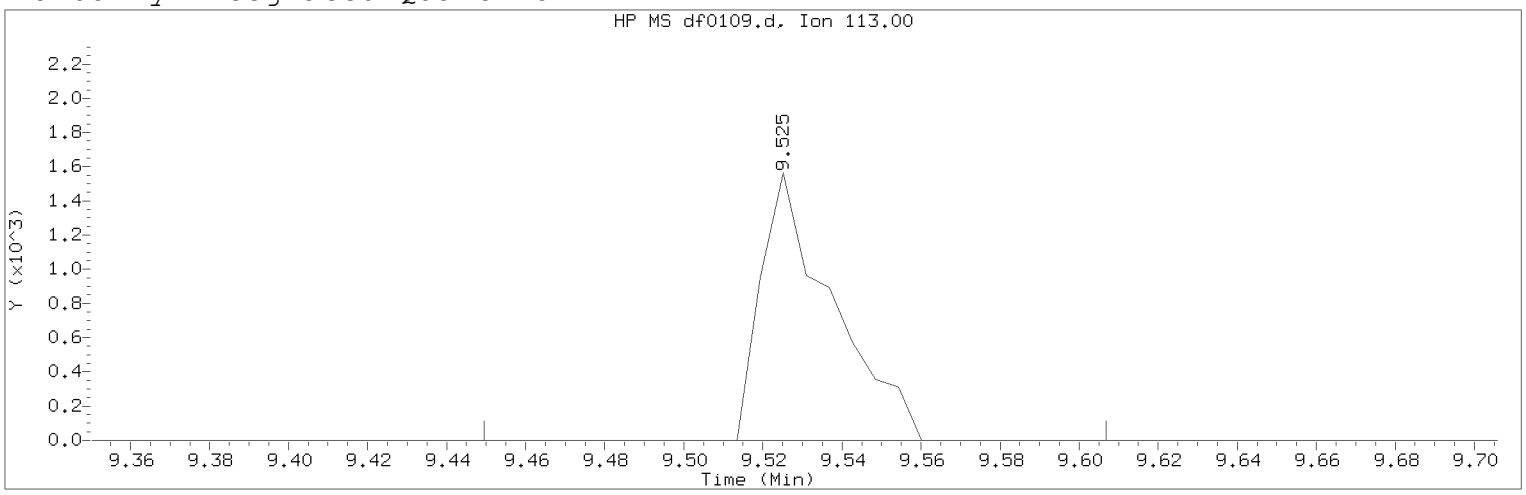
Compound Number : 59
Compound Name : 1,2,3,4-Tetrahydronaphthalene
Expected RT (minutes) : 7.619
Quant Ion : 104.00

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

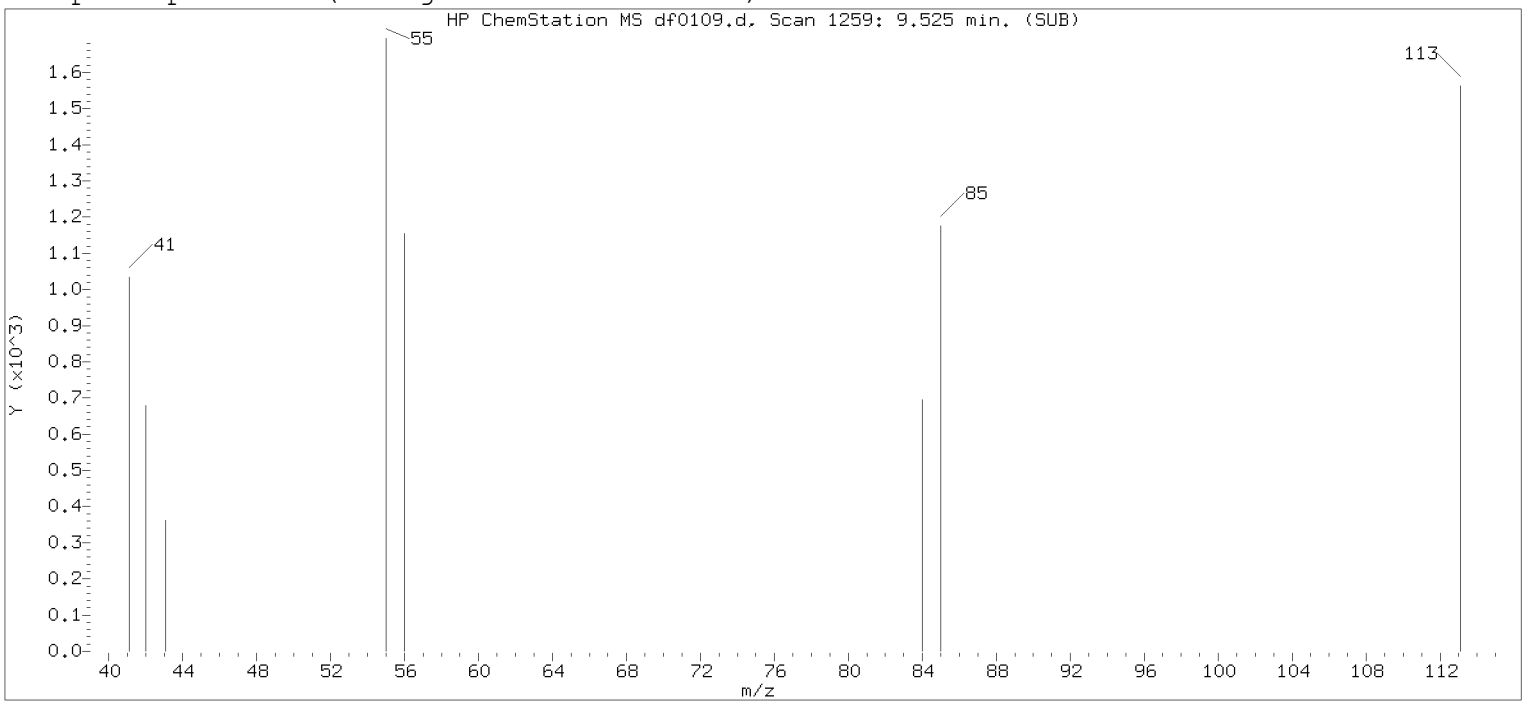
Compound Number : 76
Compound Name : Caprolactam
Scan Number : 1259
Retention Time (minutes) : 9.525
Quant Ion : 113.00
Area (flag) : 1962M
On-Column Amount (ng/ul) : 0.0870
Integration start scan : 1245 Integration stop scan: 1272
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

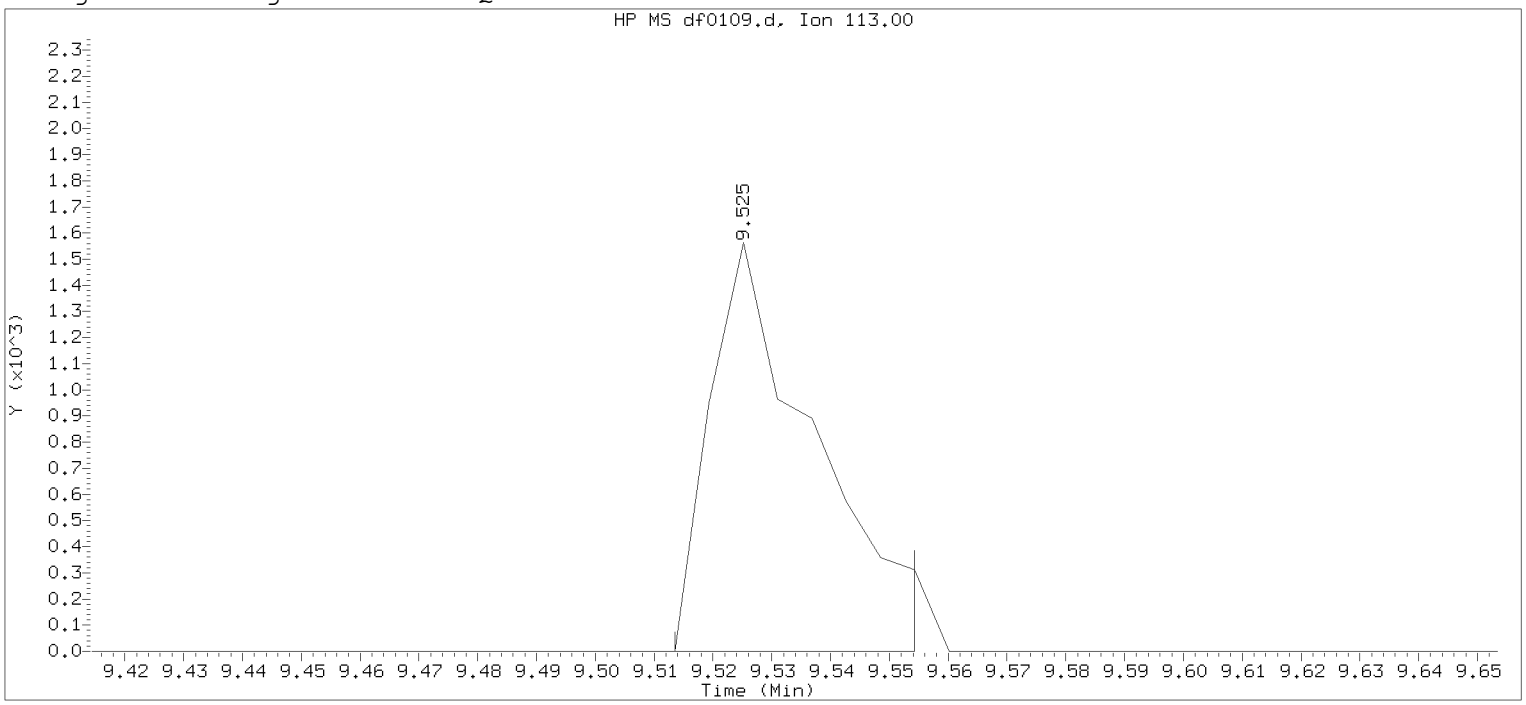
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

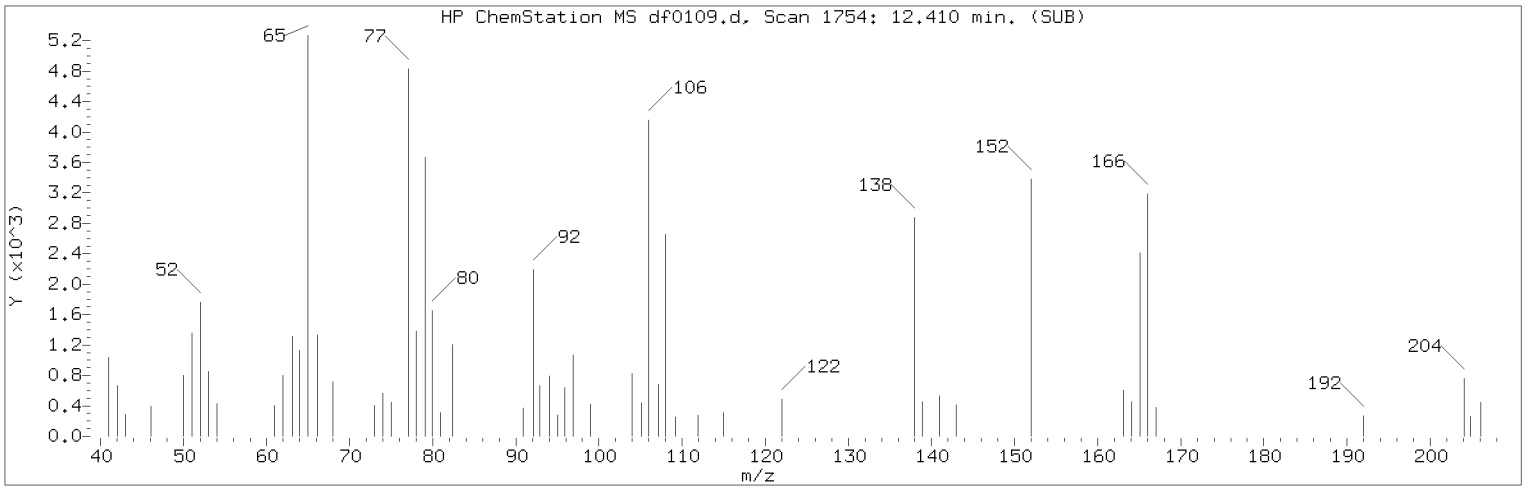
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:55 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

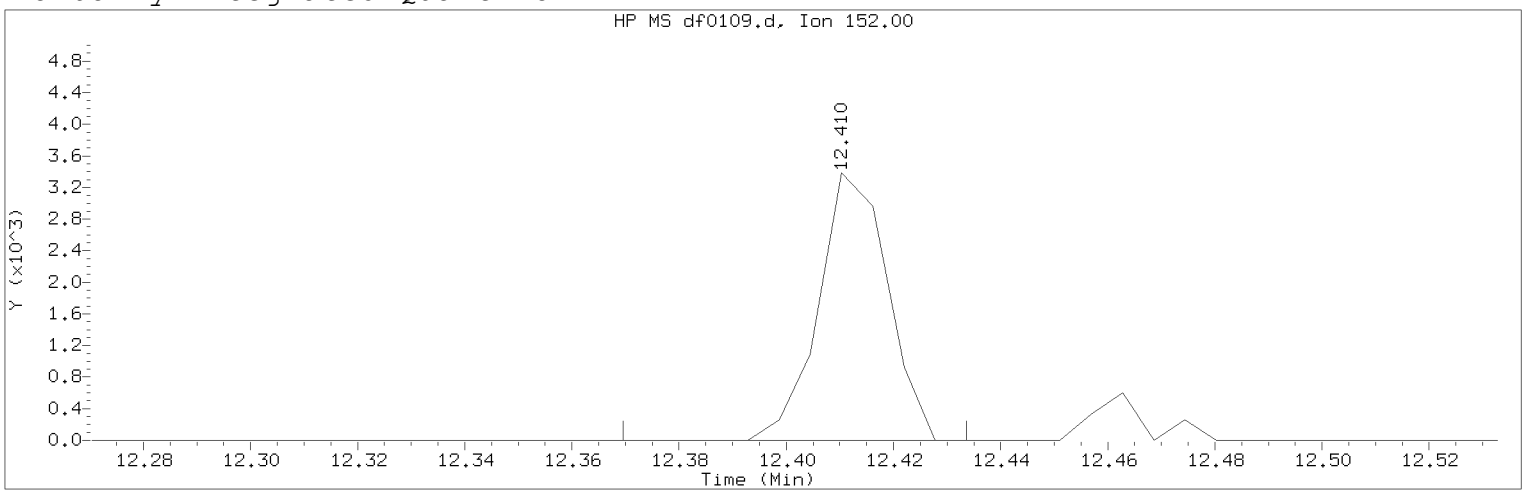
Compound Number	: 76		
Compound Name	: Caprolactam		
Scan Number	: 1259		
Retention Time (minutes)	: 9.525		
Quant Ion	: 113.00		
Area	: 1908		
On-column Amount (ng/ul)	: 0.1013		
Integration start scan	: 1256	Integration stop scan	: 1263
Y at integration start	: 0	Y at integration end	: 0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

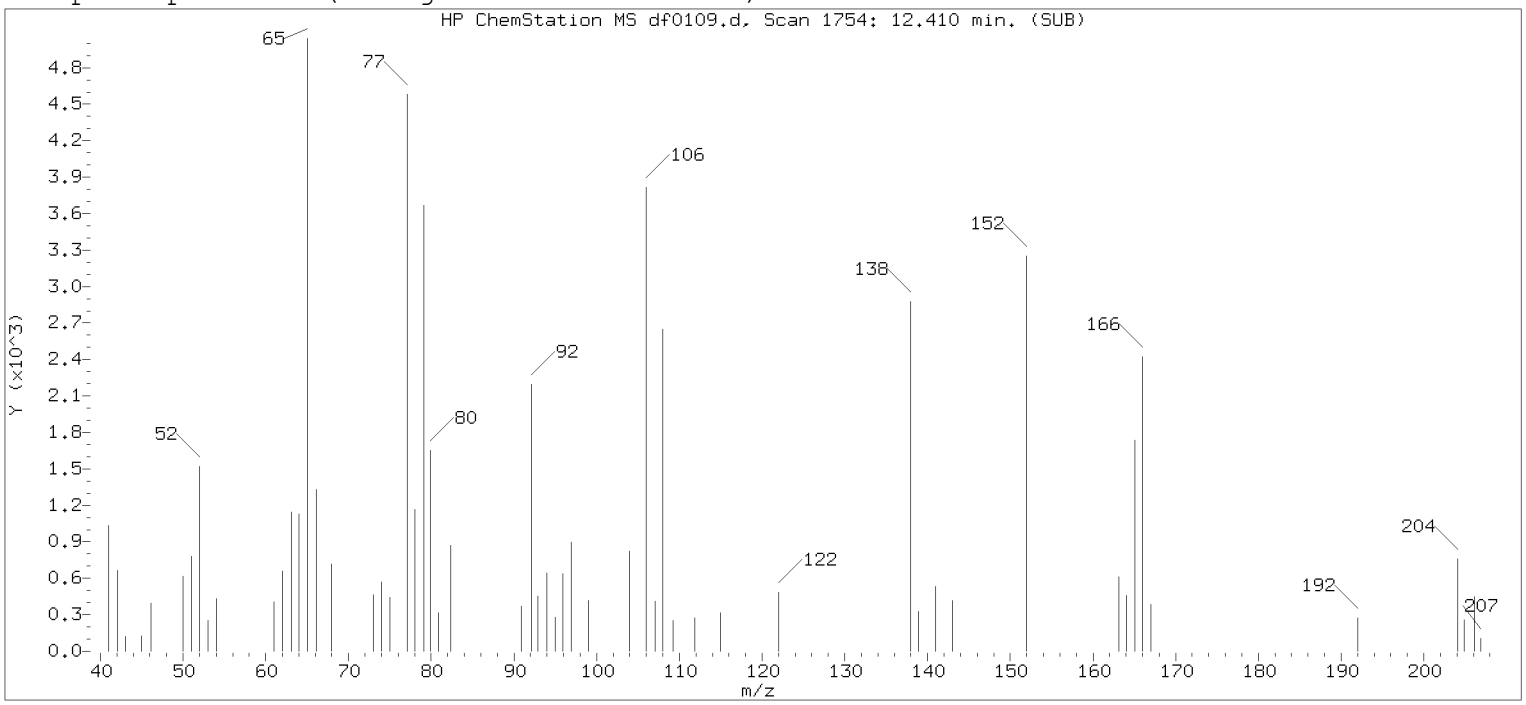
Compound Number : 128
Compound Name : 5-Nitro-o-toluidine
Scan Number : 1754
Retention Time (minutes) : 12.410
Quant Ion : 152.00
Area (flag) : 3013M
On-Column Amount (ng/ul) : 0.0839
Integration start scan : 1746 Integration stop scan: 1757
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

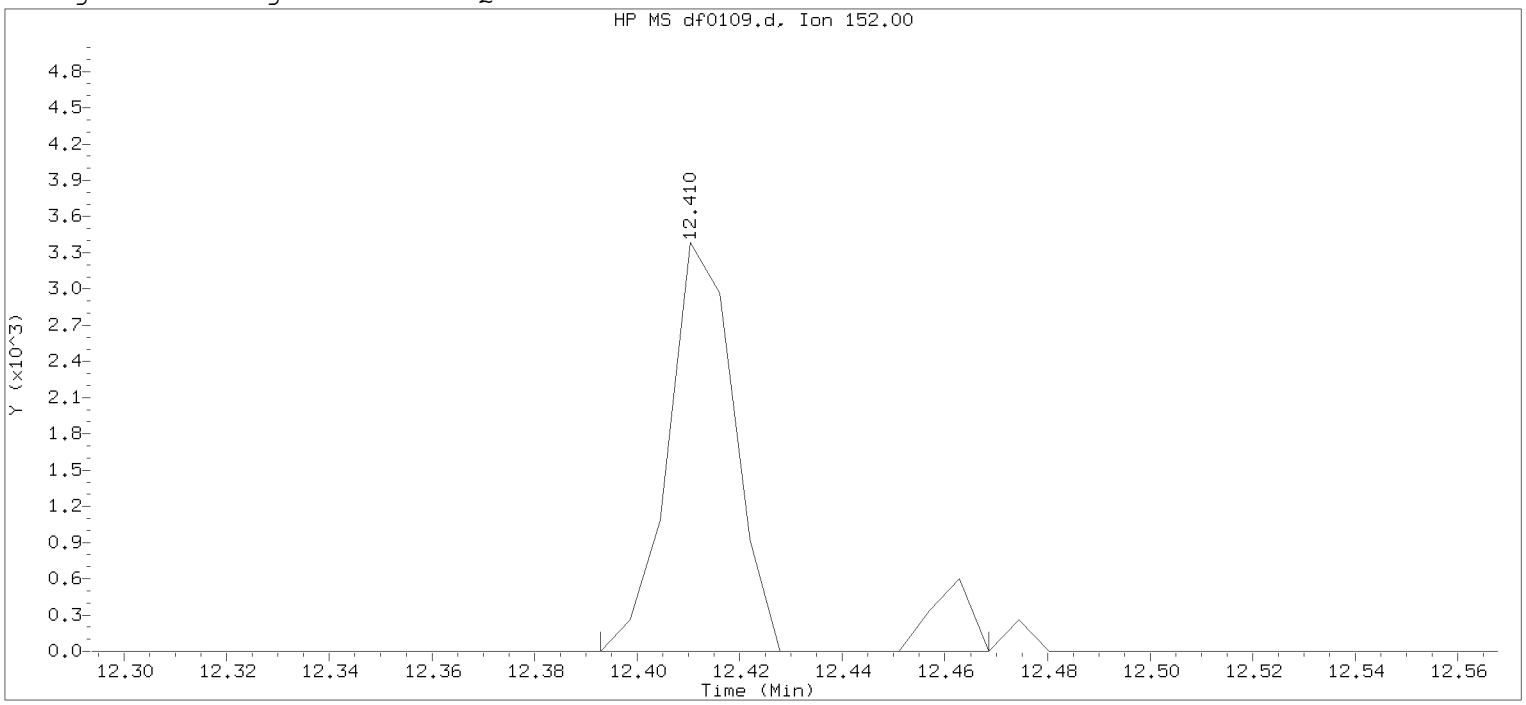
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

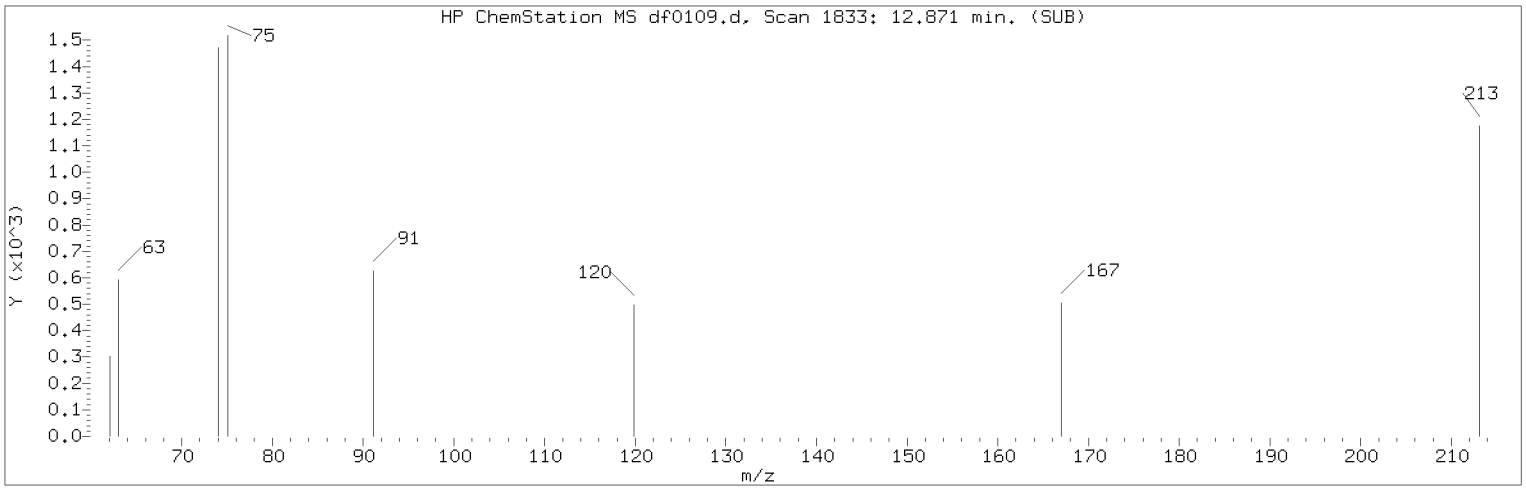
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:55 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

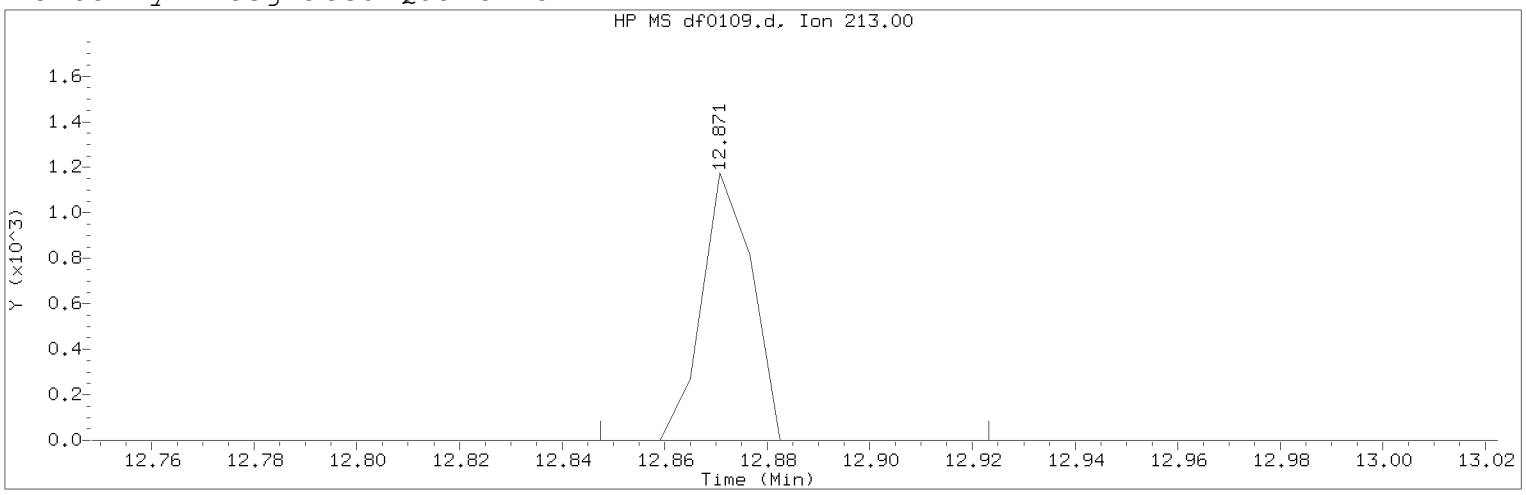
Compound Number	: 128		
Compound Name	: 5-Nitro-o-toluidine		
Scan Number	: 1754		
Retention Time (minutes)	: 12.410		
Quant Ion	: 152.00		
Area	: 3339		
On-column Amount (ng/ul)	: 0.0941		
Integration start scan	: 1750	Integration stop scan:	1763
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

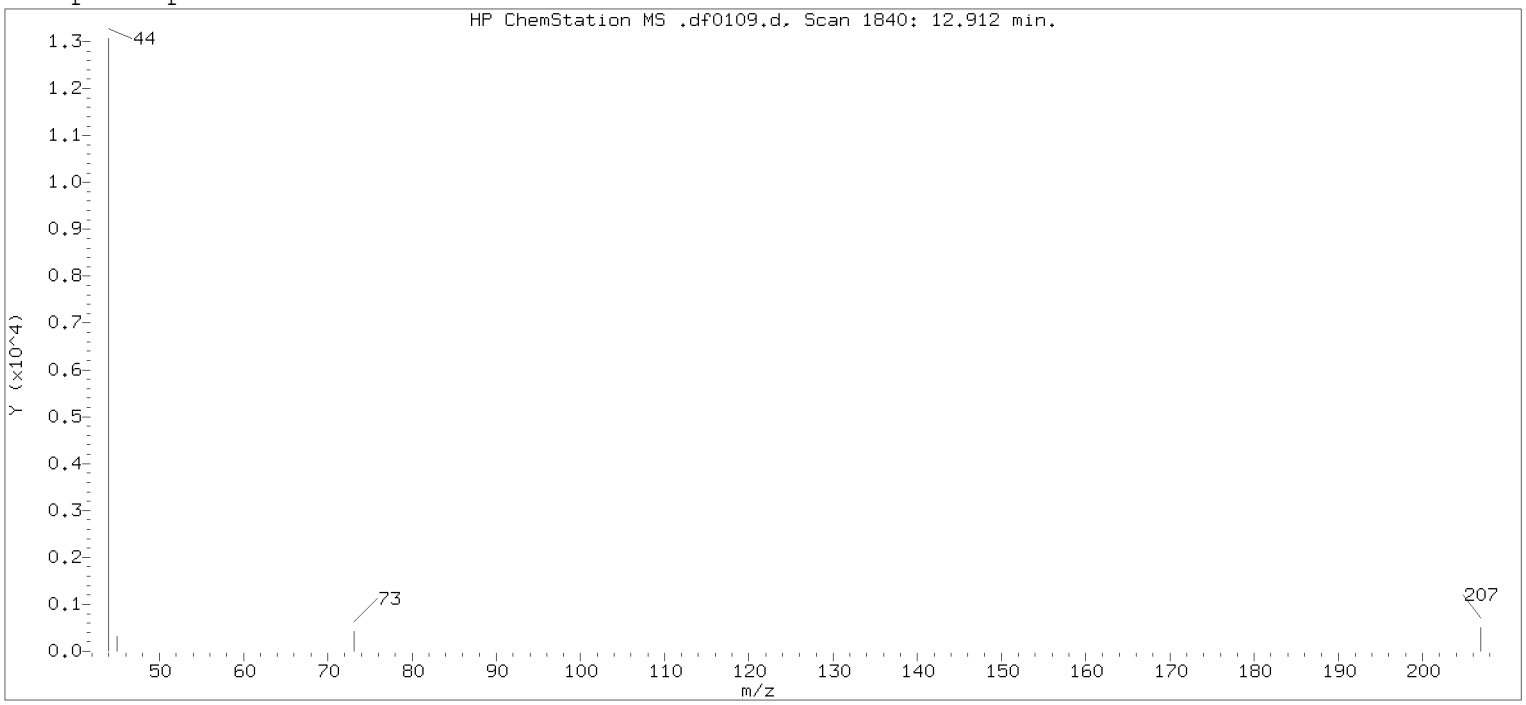
Compound Number : 139
Compound Name : 1,3,5-Trinitrobenzene
Scan Number : 1833
Retention Time (minutes) : 12.871
Quant Ion : 213.00
Area (flag) : 791M
On-Column Amount (ng/ul) : 0.0508
Integration start scan : 1828 Integration stop scan: 1841
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

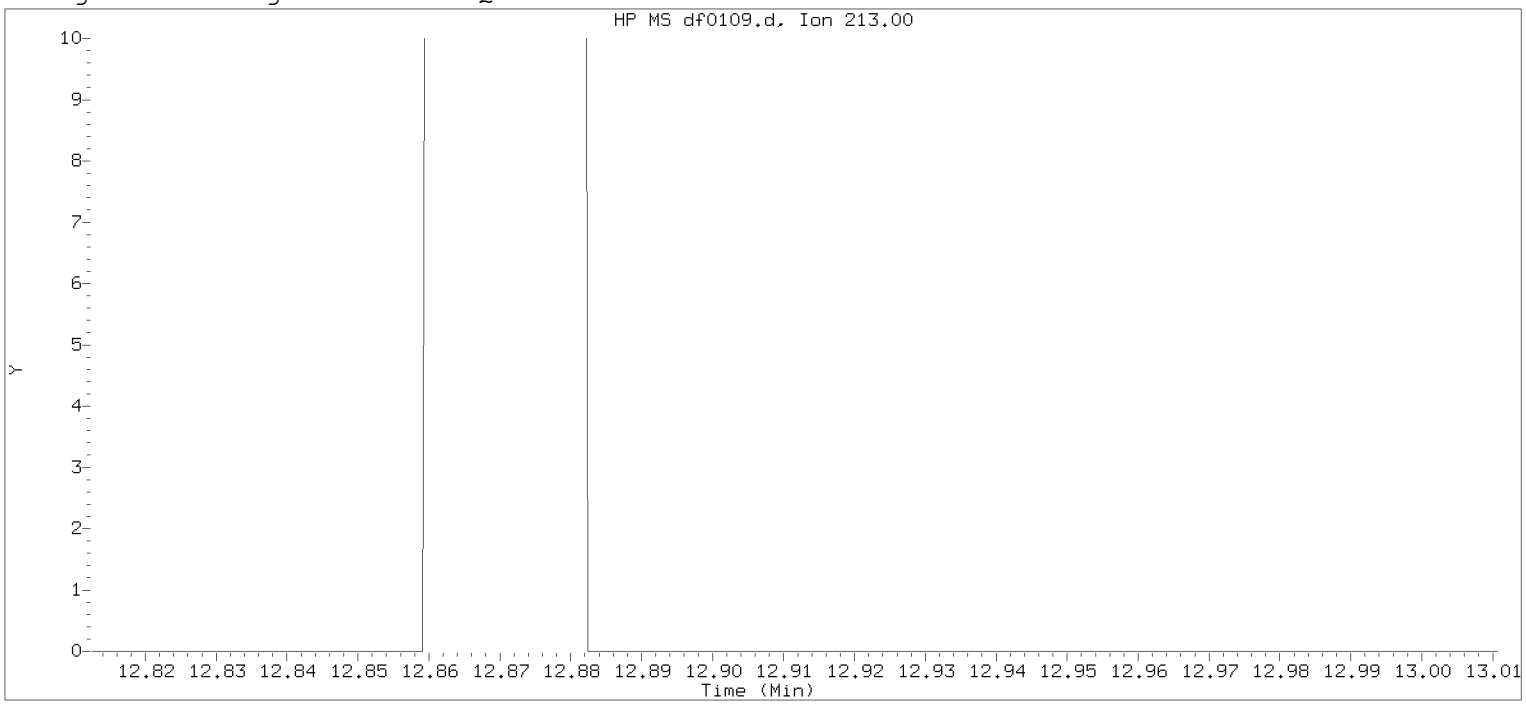
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

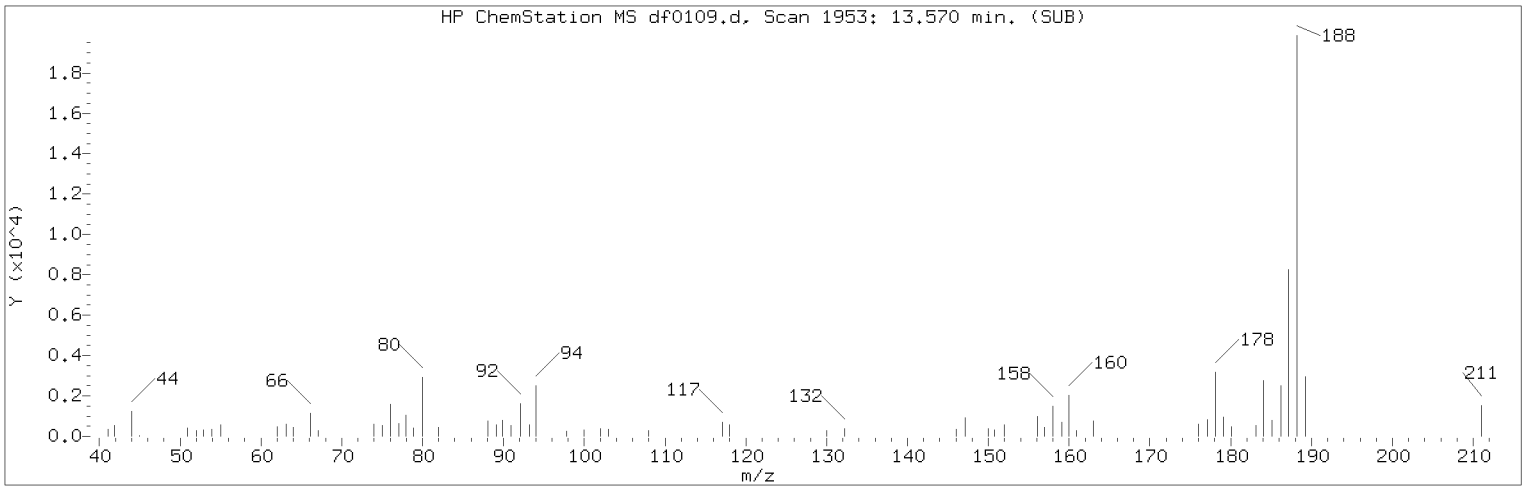
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:55 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

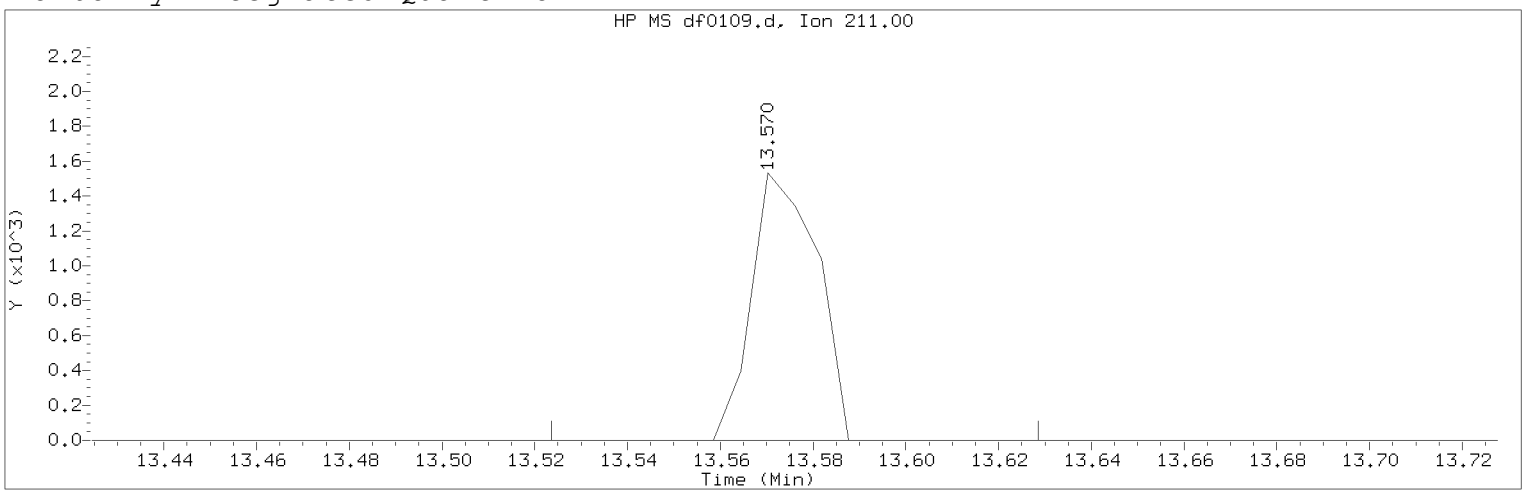
Compound Number : 139
Compound Name : 1,3,5-Trinitrobenzene
Expected RT (minutes) : 12.911
Quant Ion : 213.00

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user name: Edward

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

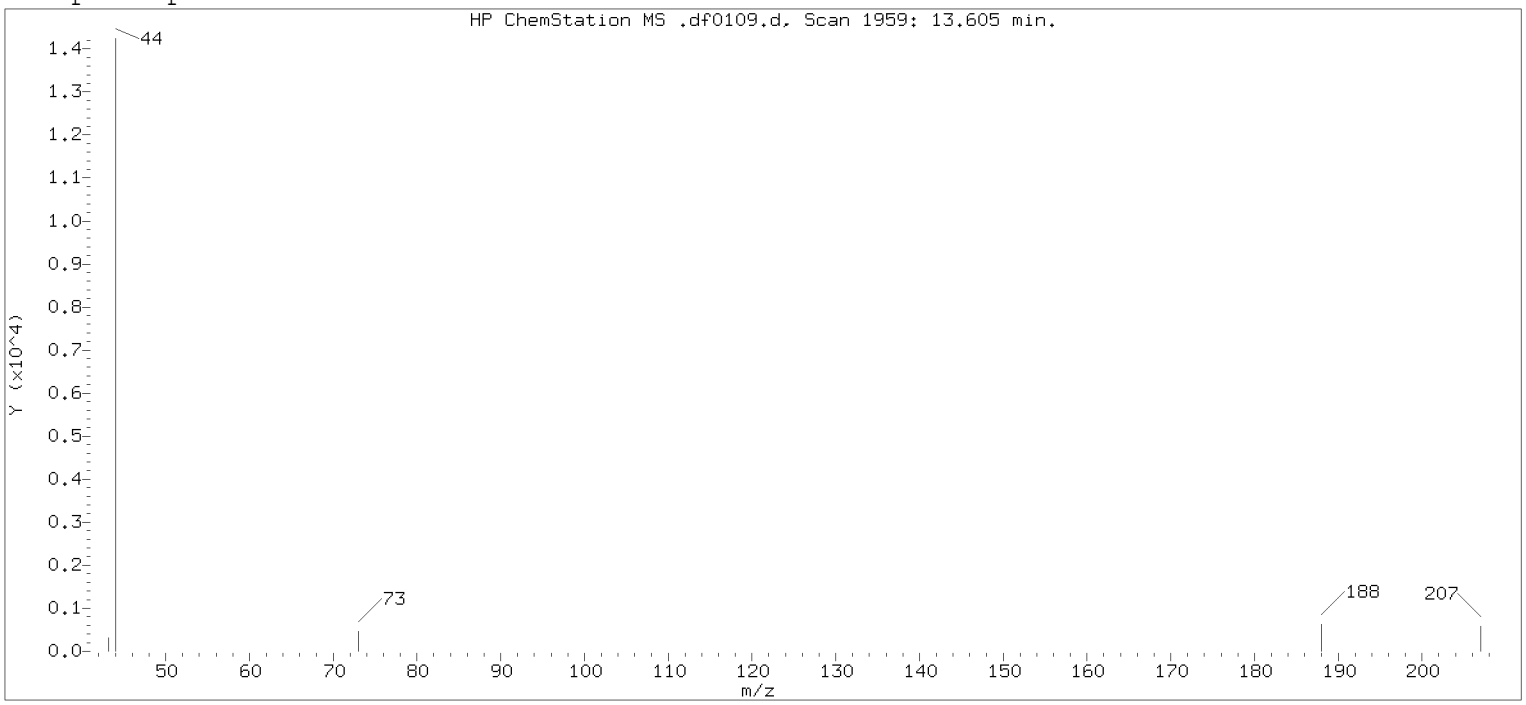
Compound Number : 154
Compound Name : Dinoseb
Scan Number : 1953
Retention Time (minutes) : 13.570
Quant Ion : 211.00
Area (flag) : 1507M
On-Column Amount (ng/ul) : 0.0482
Integration start scan : 1944 Integration stop scan: 1962
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

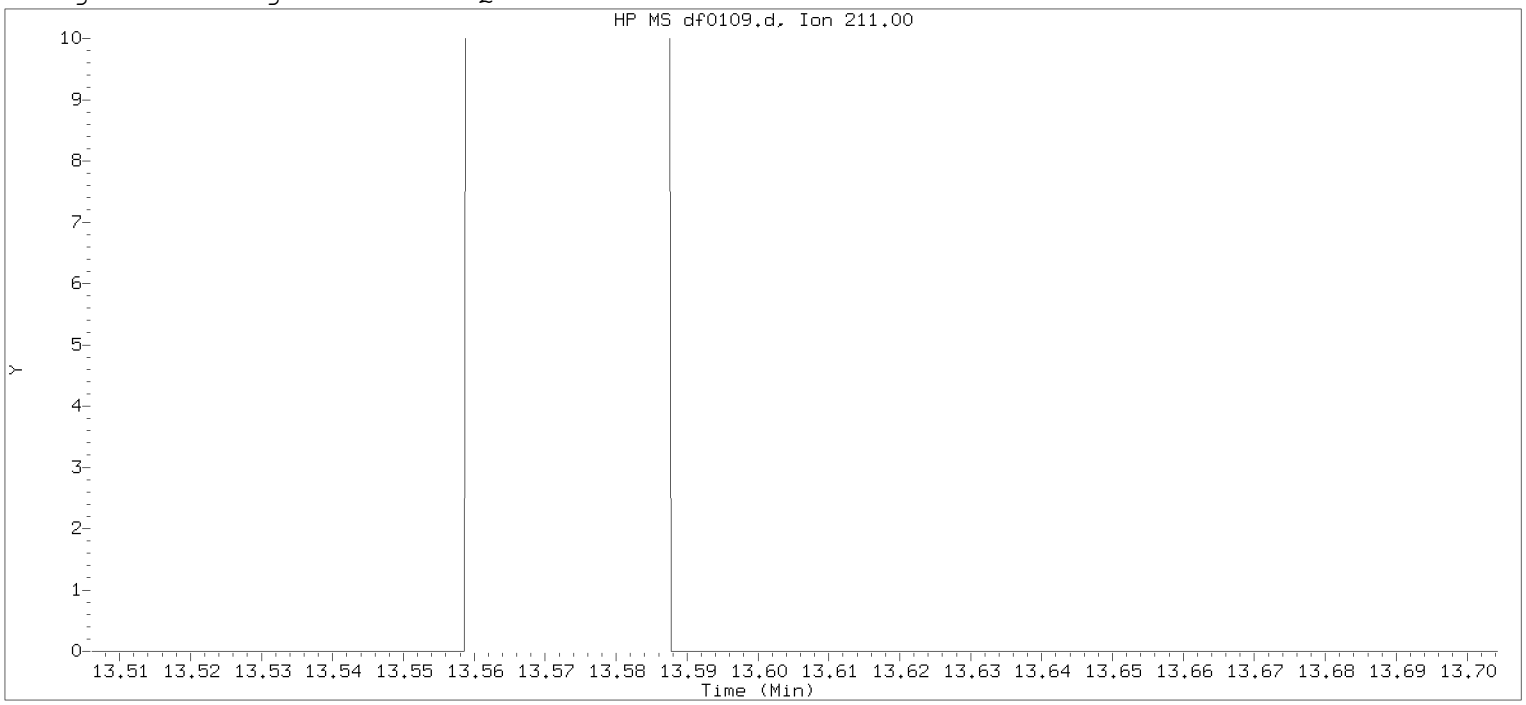
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

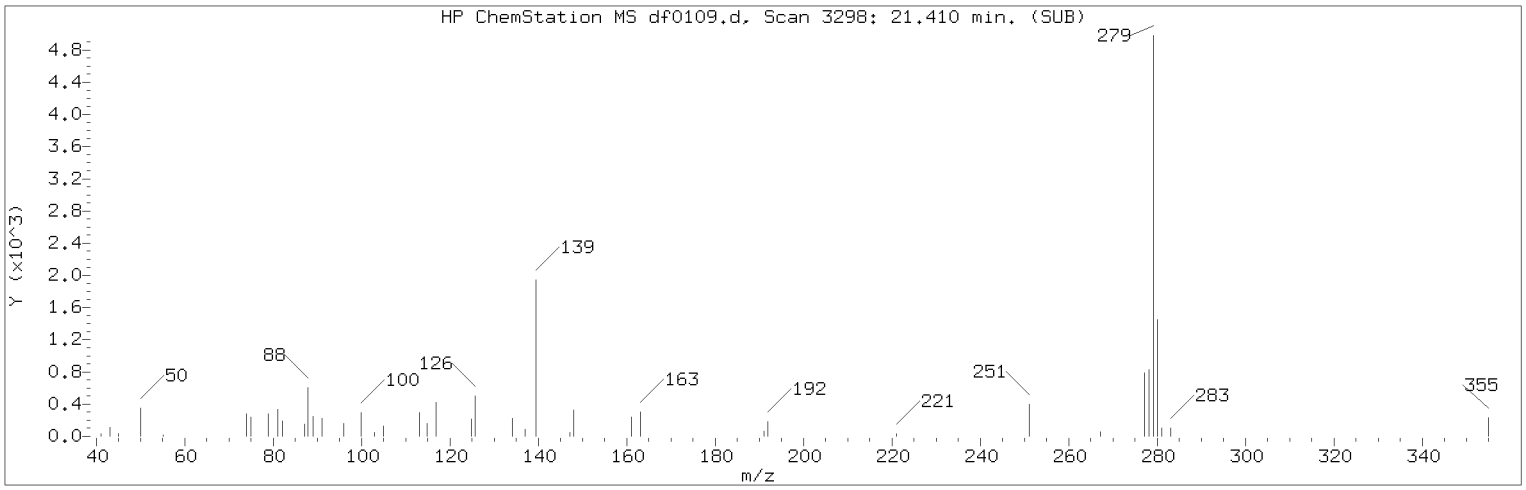
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:55 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

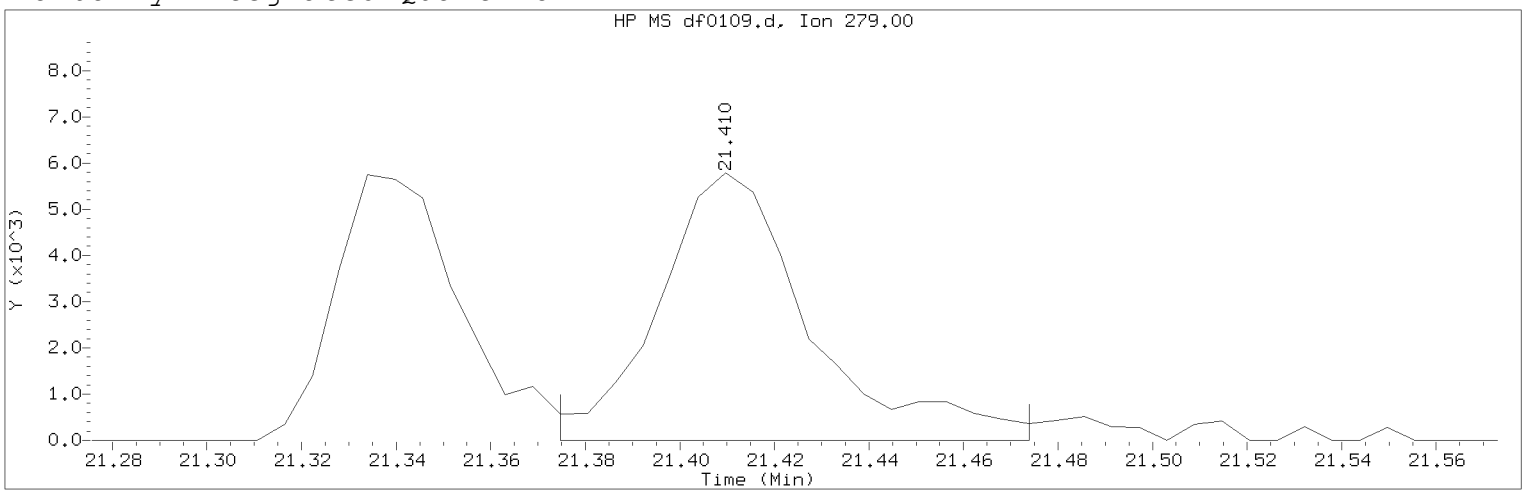
Compound Number : 154
Compound Name : Dinoseb
Expected RT (minutes) : 13.605
Quant Ion : 211.00

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user name: Edward

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 07:59
Date, time and analyst ID of latest file update: 05-Jun-2018 08:00 em10340

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

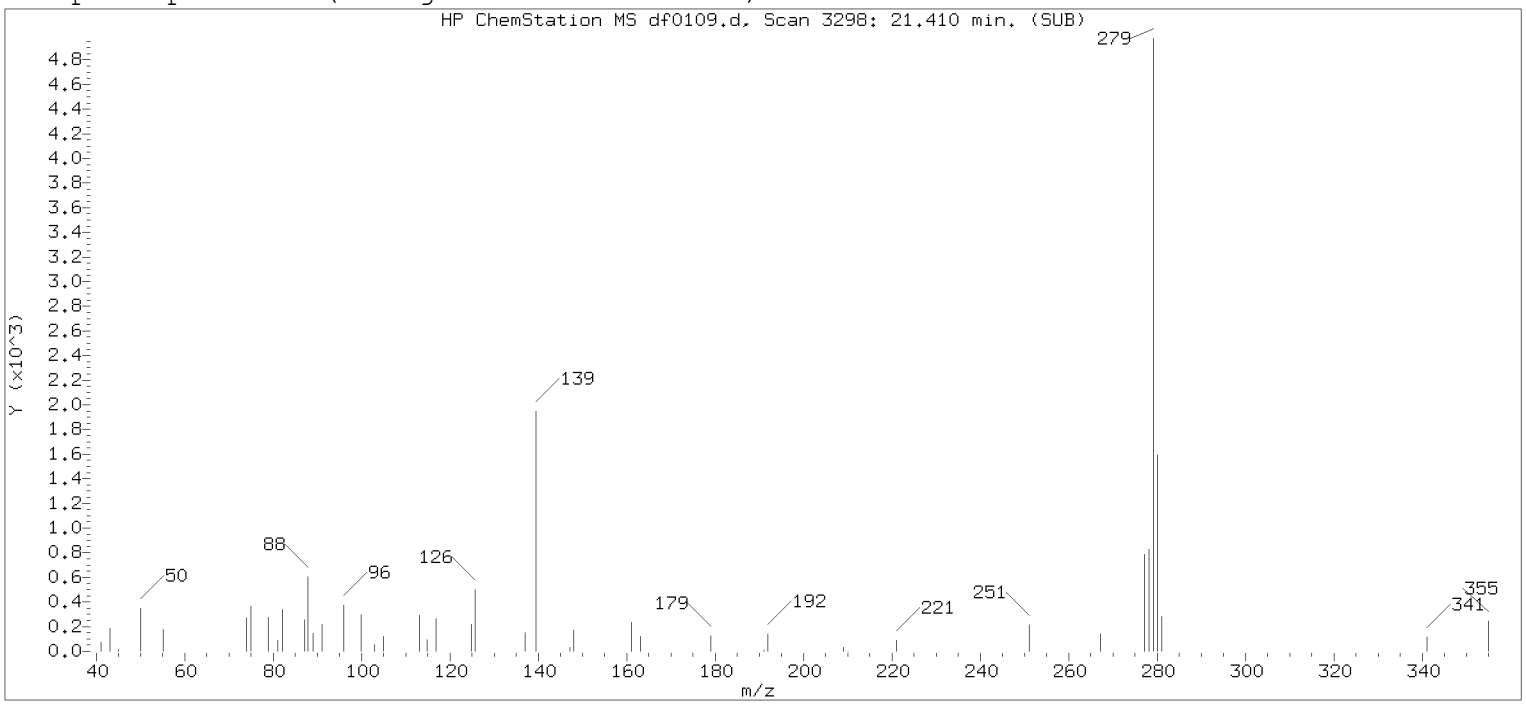
Compound Number : 218
Compound Name : Dibenz(a,j)acridine
Scan Number : 3298
Retention Time (minutes) : 21.410
Quant Ion : 279.00
Area (flag) : 12923M
On-Column Amount (ng/ul) : 0.0960
Integration start scan : 3291 Integration stop scan: 3308
Y at integration start : 3 Y at integration end: 3

Reason for manual integration: improper integration

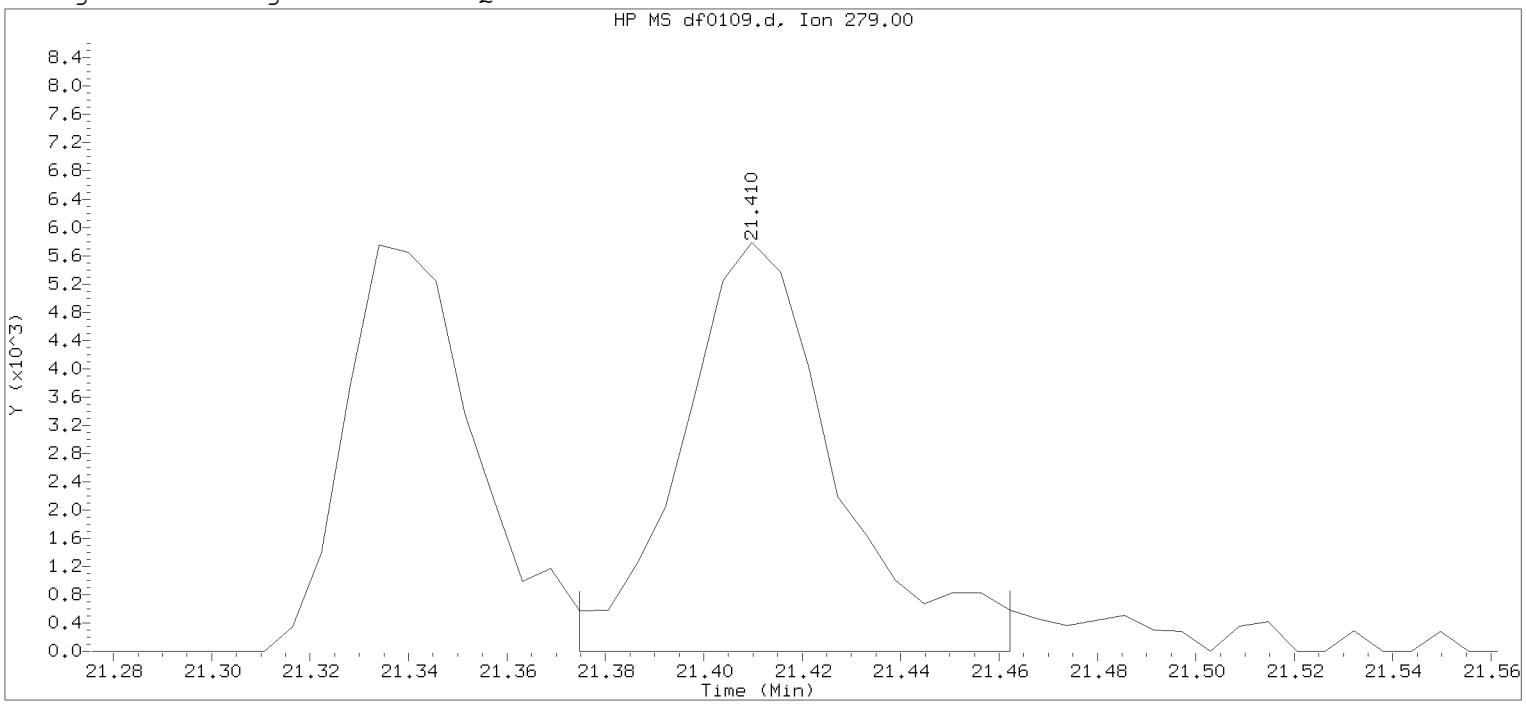
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 09:31.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



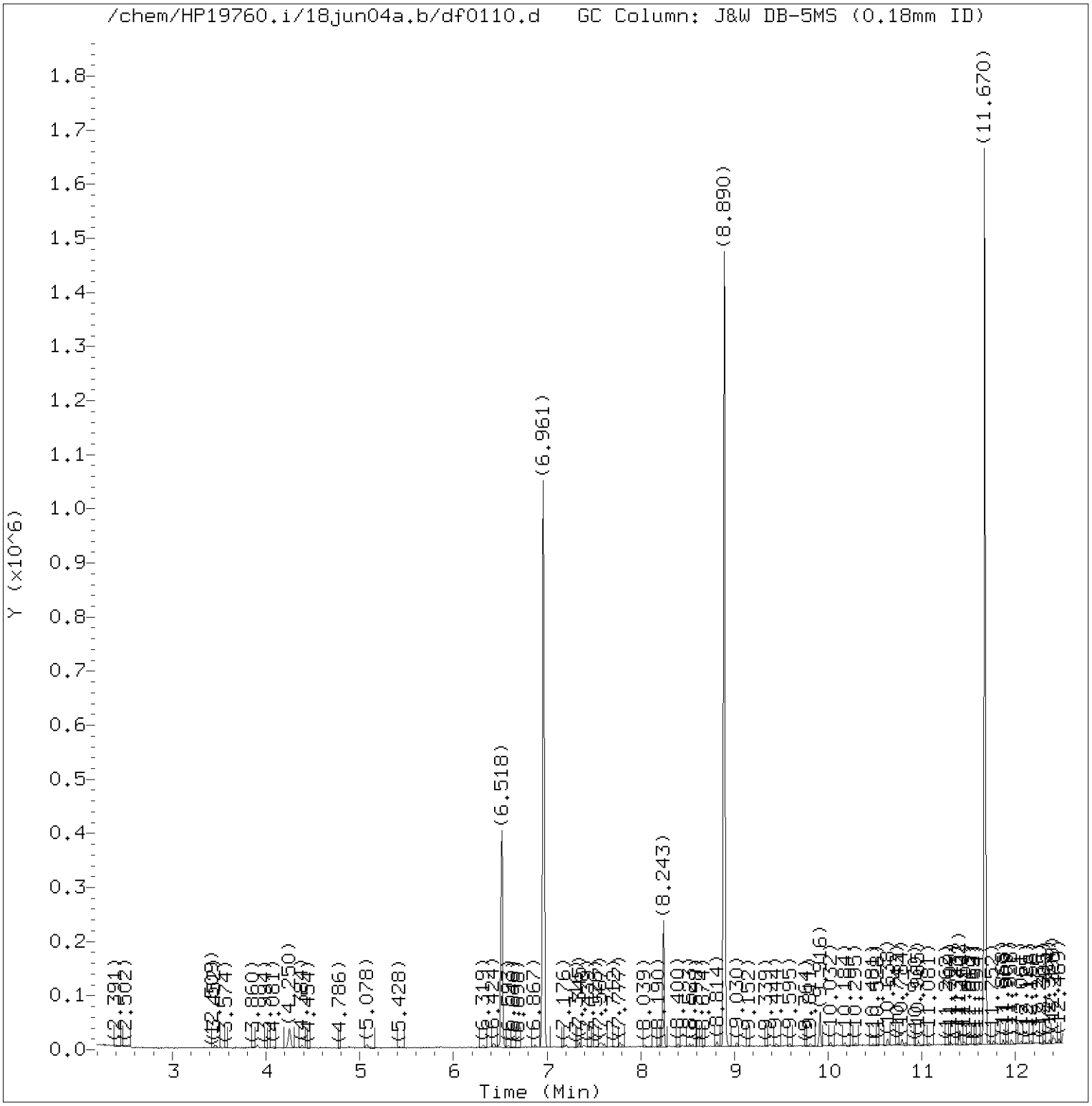
Data File: /chem/HP19760.i/18jun04a.b/df0109.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:29 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 04:55 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL1318

Compound Number	: 218		
Compound Name	: Dibenz(a,j)acridine		
Scan Number	: 3298		
Retention Time (minutes)	: 21.410		
Quant Ion	: 279.00		
Area	: 12456		
On-column Amount (ng/ul)	: 0.0924		
Integration start scan	: 3291	Integration stop scan:	3306
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 09:31.
Target 3.5 esignature user email: [redacted]



Total Ion Chromatogram (TIC)

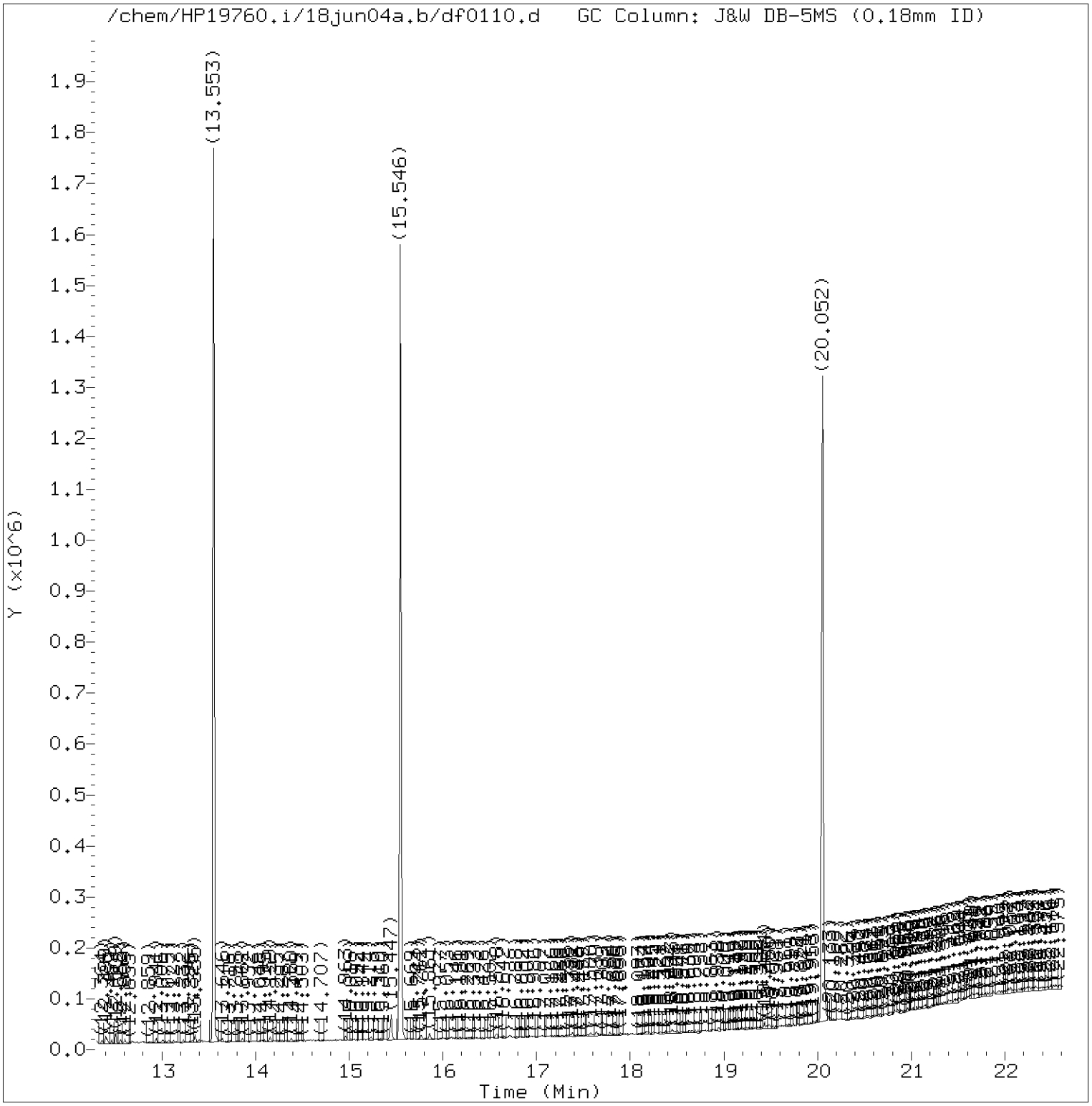
Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0110.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:57 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 06-JUN-2018 13:50
Date, time and analyst ID of latest file update: 06-Jun-2018 13:50 em10340

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL1318

Digitally signed by Edward Monborne
on 06/06/2018 at 13:51.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0110.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:57 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 06-JUN-2018 13:50
Date, time and analyst ID of latest file update: 06-Jun-2018 13:50 em10340

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL1318

Digitally signed by Edward Monborne
on 06/06/2018 at 13:51.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0110.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:57 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 06-JUN-2018 13:50
Date, time and analyst ID of latest file update: 06-Jun-2018 13:50 em10340

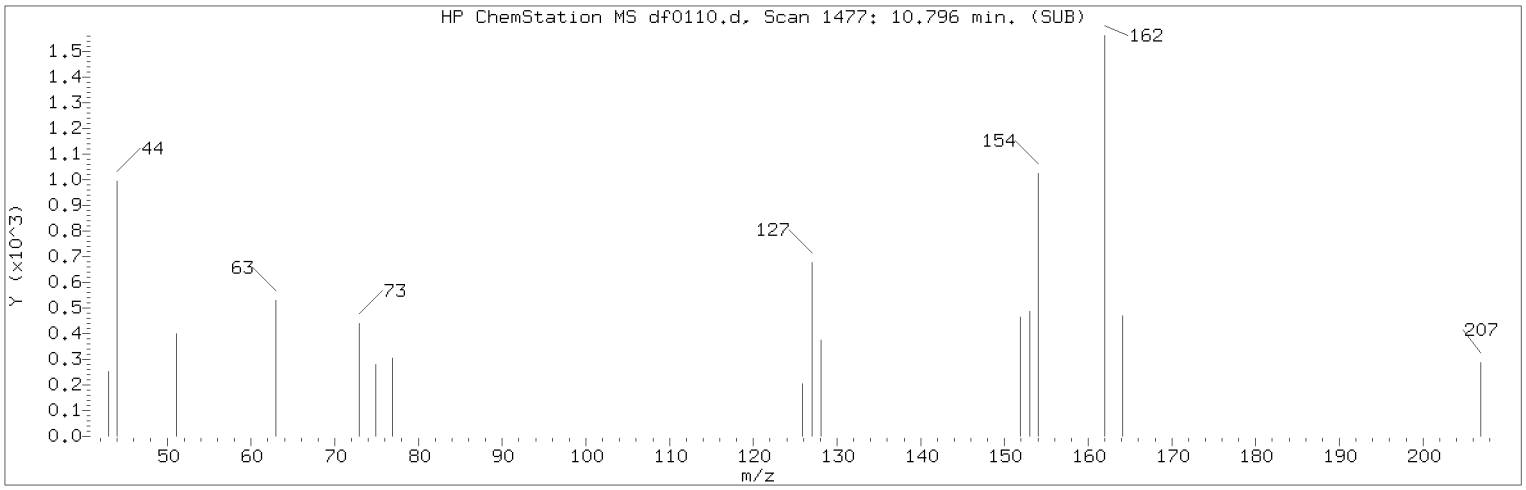
Sample Name: SSTD0.025 Lab Sample ID: PAHMDL1318

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
25)*1,4-Dichlorobenzene-d4	(1)	6.961	152	206909	5.000
44)$Nitrobenzene-d5	(2)	7.777	82	3504	0.043
65)*Naphthalene-d8	(2)	8.890	136	786015	5.000
66) Naphthalene	(2)	8.925	128	4412	0.025
83) 2-Methylnaphthalene	(2)	10.026	142	2508	0.023
84) 1-Methylnaphthalene	(2)	10.184	142	2178	0.022
93)$2-Fluorobiphenyl	(3)	10.633	172	5716	0.050
96) 2-Chloronaphthalene	(3)	10.796	162	2025M	0.020
109) Acenaphthylene	(3)	11.454	152	3135	0.022
113)*Acenaphthene-d10	(3)	11.670	164	354710	5.000
114) Acenaphthene	(3)	11.717	153	2389	0.025
126) Fluorene	(3)	12.399	166	2289	0.021
145) Hexachlorobenzene	(4)	13.069	284	696	0.026
153)*Phenanthrene-d10	(4)	13.553	188	651523	5.000
155) Phenanthrene	(4)	13.582	178	3831	0.025
157) Anthracene	(4)	13.646	178	2905	0.019
222) Total PAHs	(6)			54348	0.392
173) Fluoranthene	(4)	15.231	202	3647	0.022
175)*Pyrene-d10	(5)	15.546	212	635261	5.000
177) Pyrene	(5)	15.575	202	5344M	0.031
179)$Terphenyl-d14	(5)	15.855	244	5362	0.049
195) Benzo(a)anthracene	(5)	17.580	228	2902	0.019
196) Chrysene	(5)	17.644	228	2782	0.018
206) Benzo(b)fluoranthene	(6)	19.434	252	3108	0.022
208) Benzo(k)fluoranthene	(6)	19.480	252	2998	0.021
211) Benzo(a)pyrene	(6)	19.958	252	2318M	0.018
213)*Perylene-d12	(6)	20.052	264	599284	5.000
219) Indeno(1,2,3-cd)pyrene	(6)	21.655	276	2573M	0.021
220) Dibenz(a,h)anthracene	(6)	21.701	278	2090	0.016
221) Benzo(g,h,i)perylene	(6)	22.039	276	2939	0.023

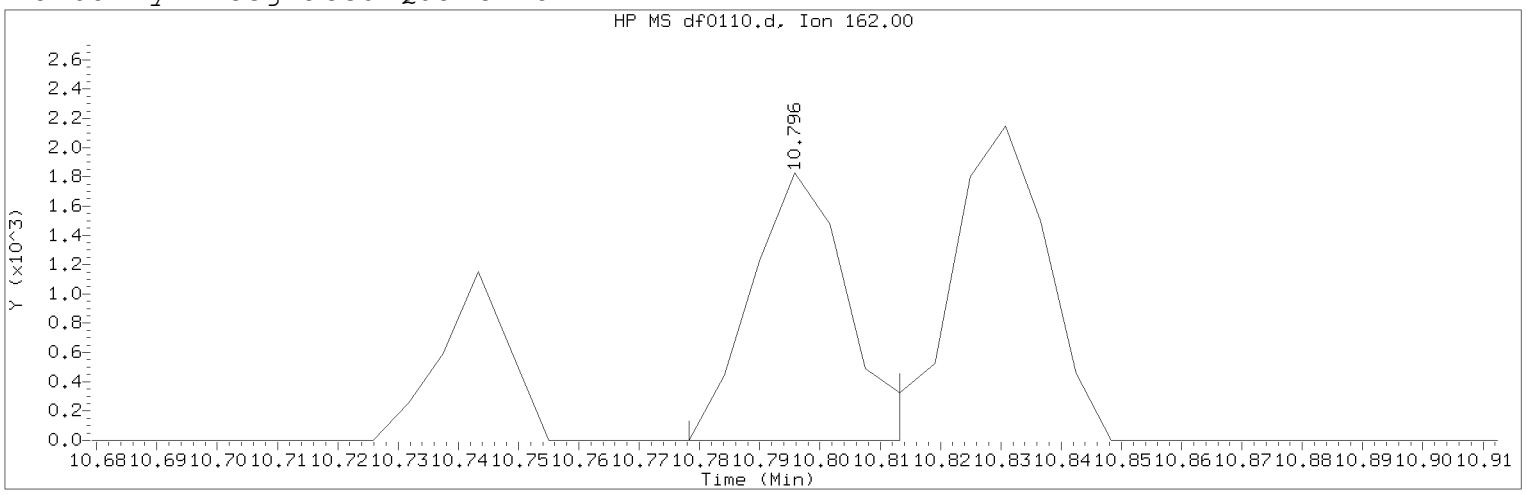
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/06/2018 at 13:51.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0110.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:57 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 06-JUN-2018 13:50
Date, time and analyst ID of latest file update: 06-Jun-2018 13:50 em10340

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL1318

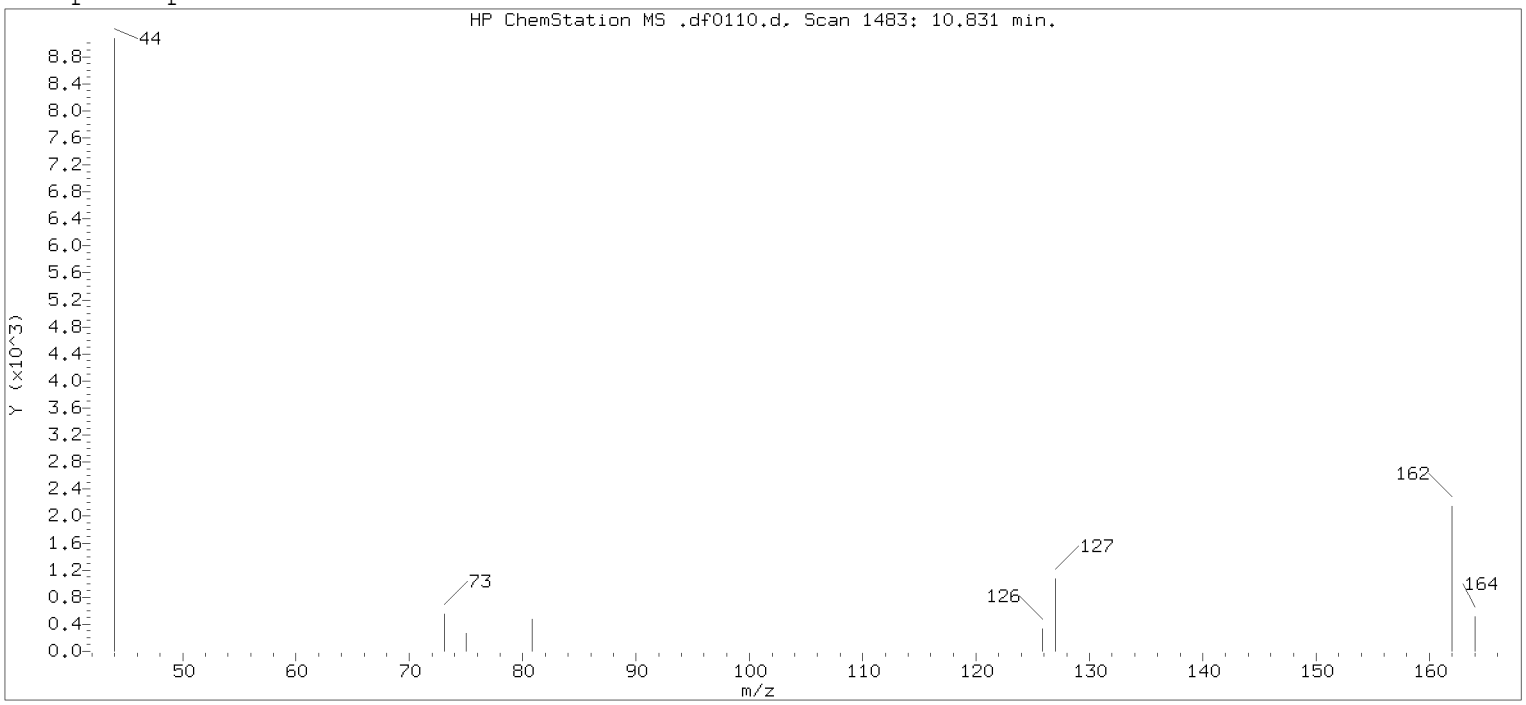
Compound Number : 96
Compound Name : 2-Chloronaphthalene
Scan Number : 1477
Retention Time (minutes) : 10.796
Quant Ion : 162.00
Area (flag) : 2025M
On-Column Amount (ng/ul) : 0.0205
Integration start scan : 1473 Integration stop scan: 1479
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

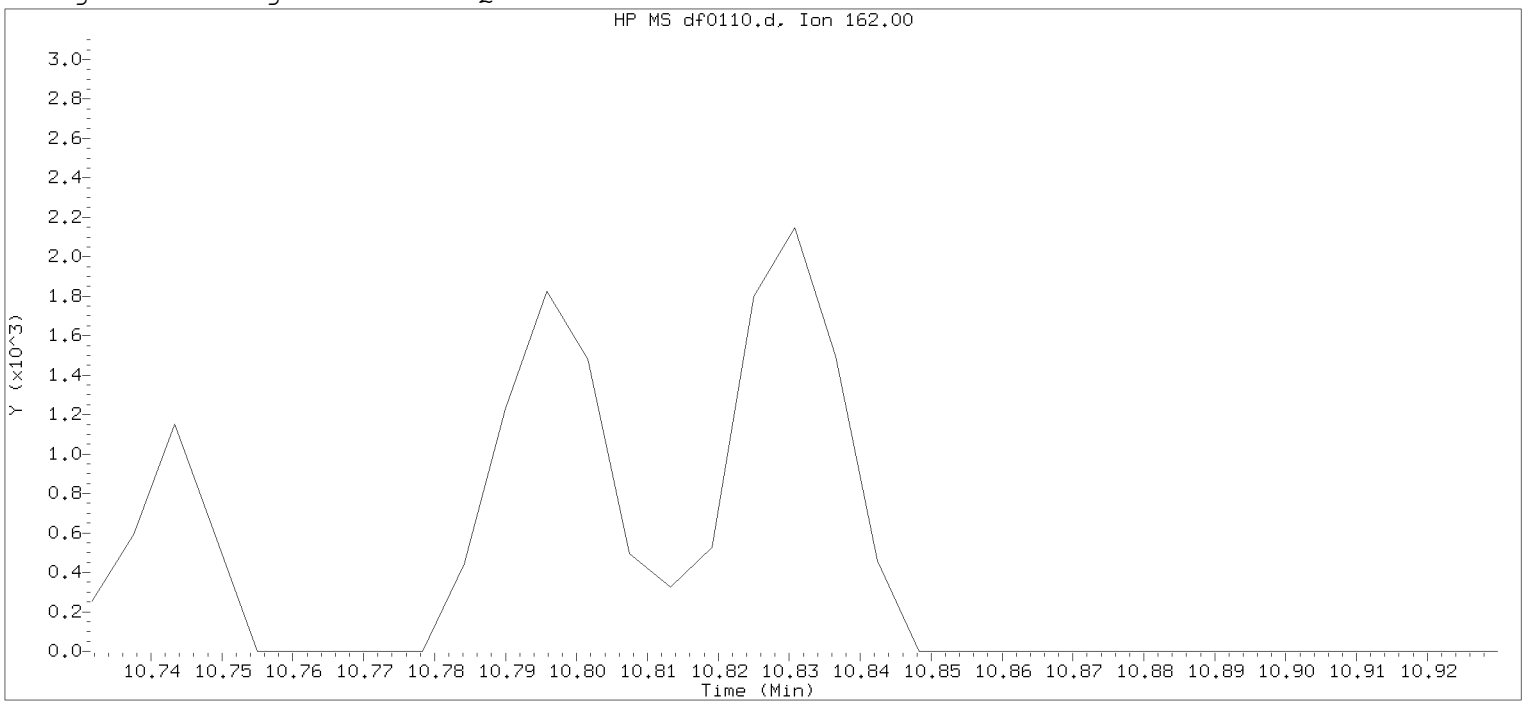
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/06/2018 at 13:51.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 15:12.
PARALLAX ID: cam01237

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0110.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:57 Analyst ID: art12405

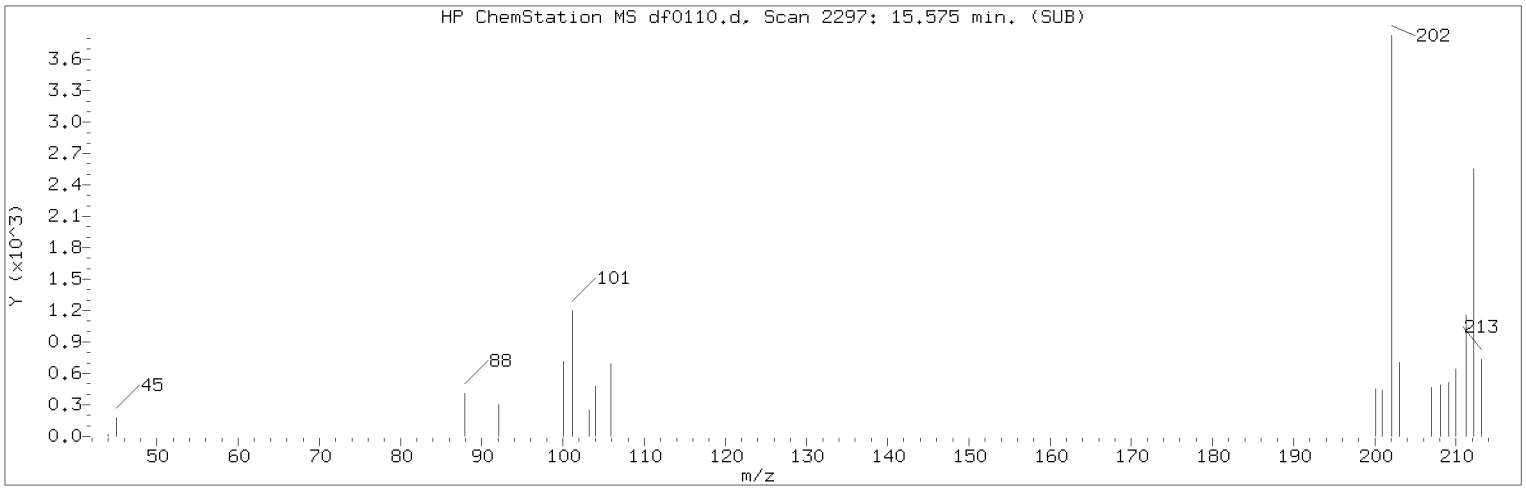
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 05:23 Automation

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL1318

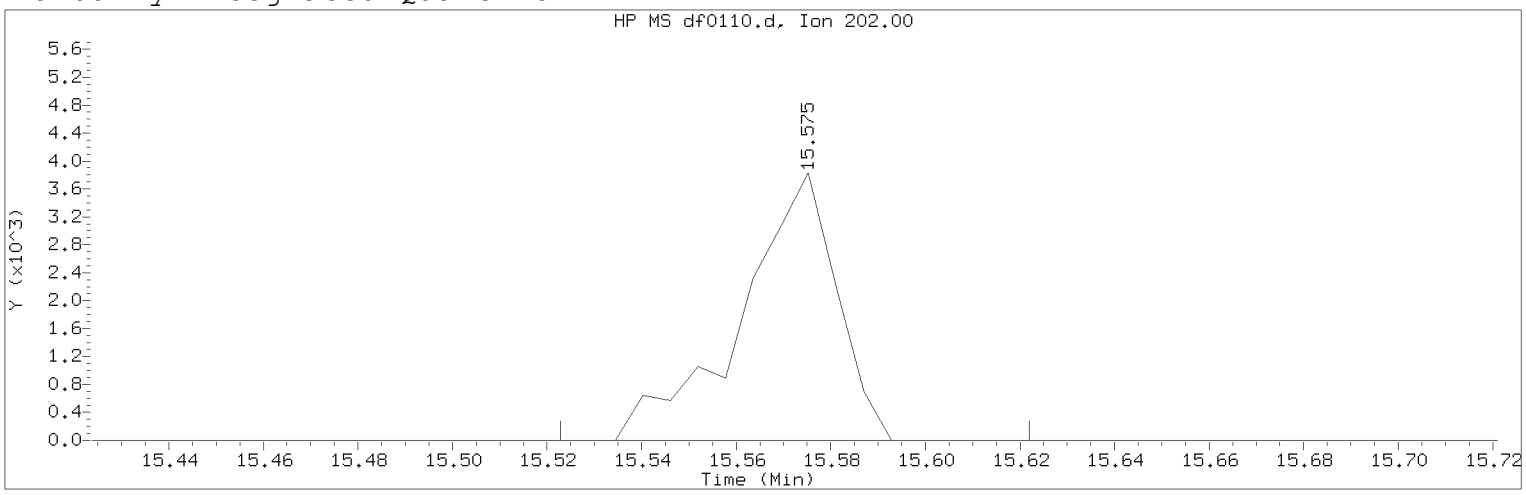
Compound Number : 96
Compound Name : 2-Chloronaphthalene
Expected RT (minutes) : 10.831
Quant Ion : 162.00

Digitally signed by Edward Monborne on 06/06/2018 at 13:51.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0110.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:57 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 06-JUN-2018 13:50
Date, time and analyst ID of latest file update: 06-Jun-2018 13:50 em10340

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL1318

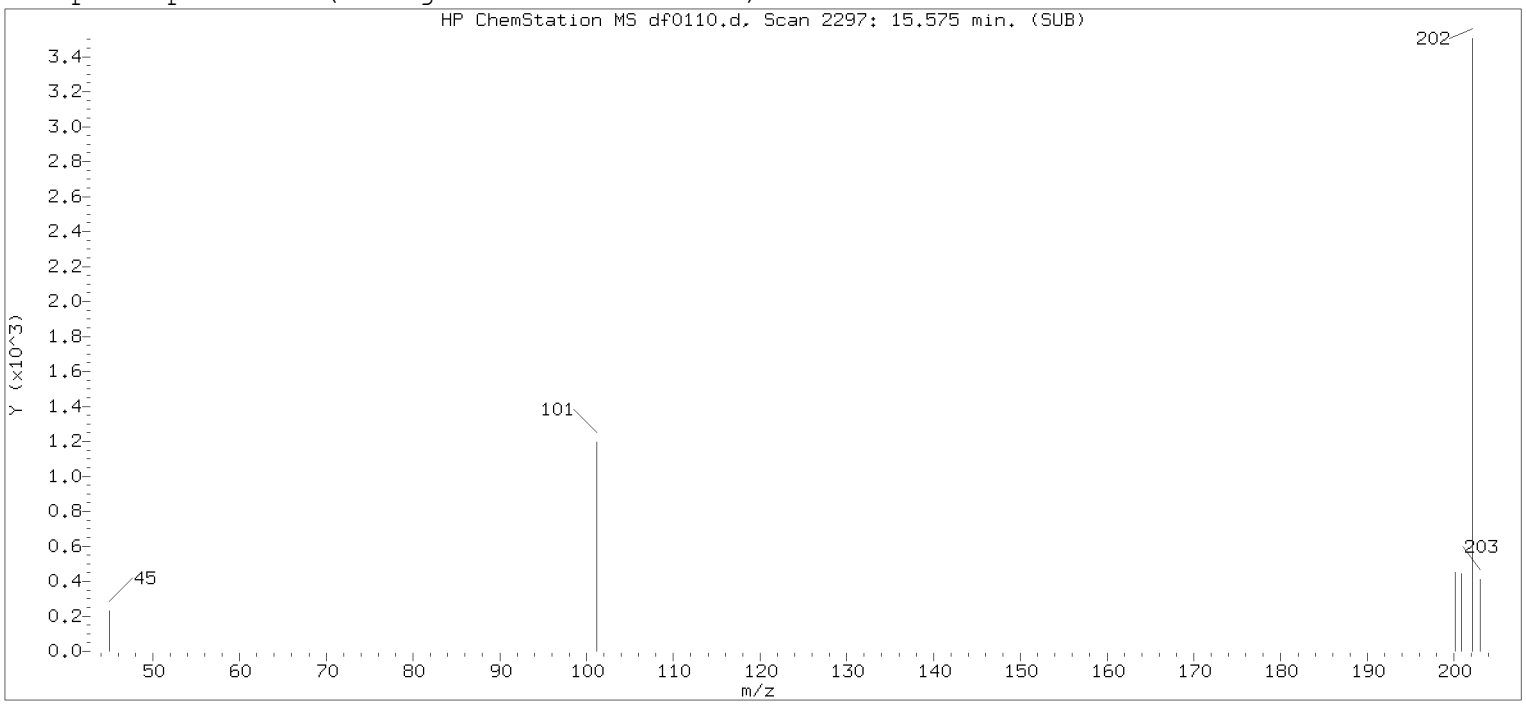
Compound Number	: 177		
Compound Name	: Pyrene		
Scan Number	: 2297		
Retention Time (minutes)	: 15.575		
Quant Ion	: 202.00		
Area (flag)	: 5344M		
On-Column Amount (ng/ul)	: 0.0307		
Integration start scan	: 2287	Integration stop scan:	2304
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

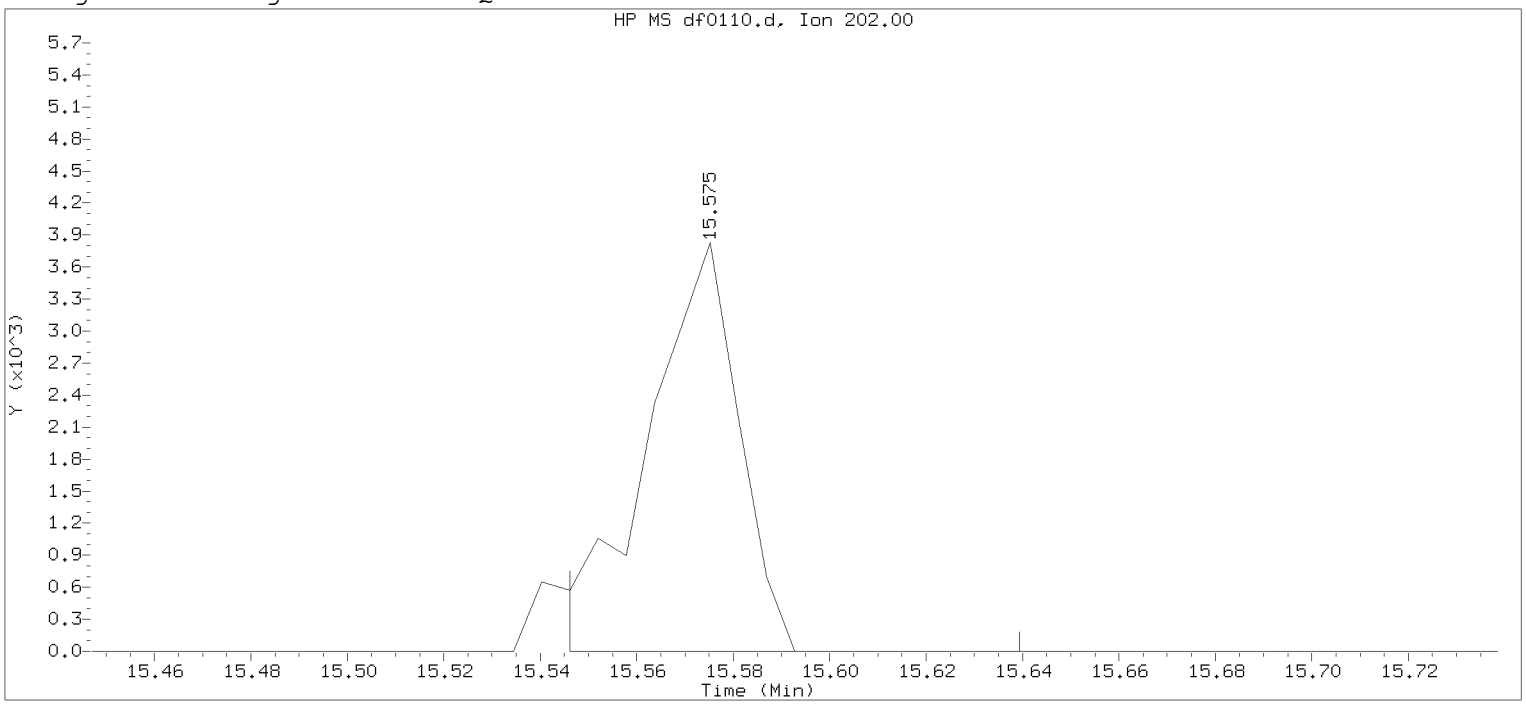
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/06/2018 at 13:51.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 15:12.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0110.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:57 Analyst ID: art12405

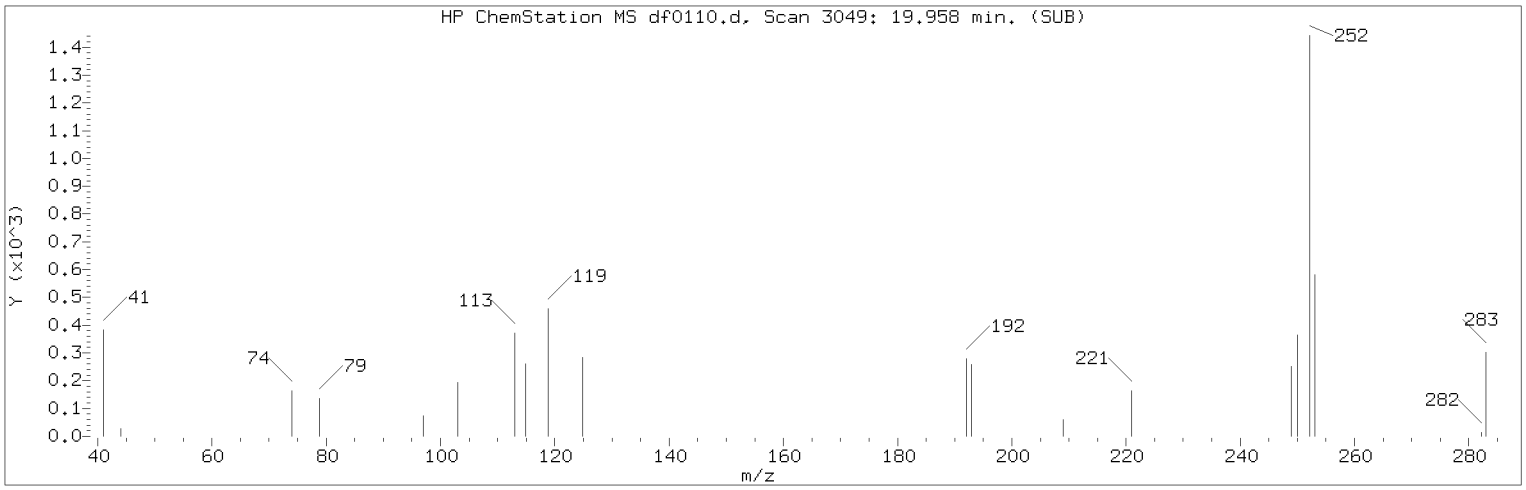
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 05:23 Automation

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL1318

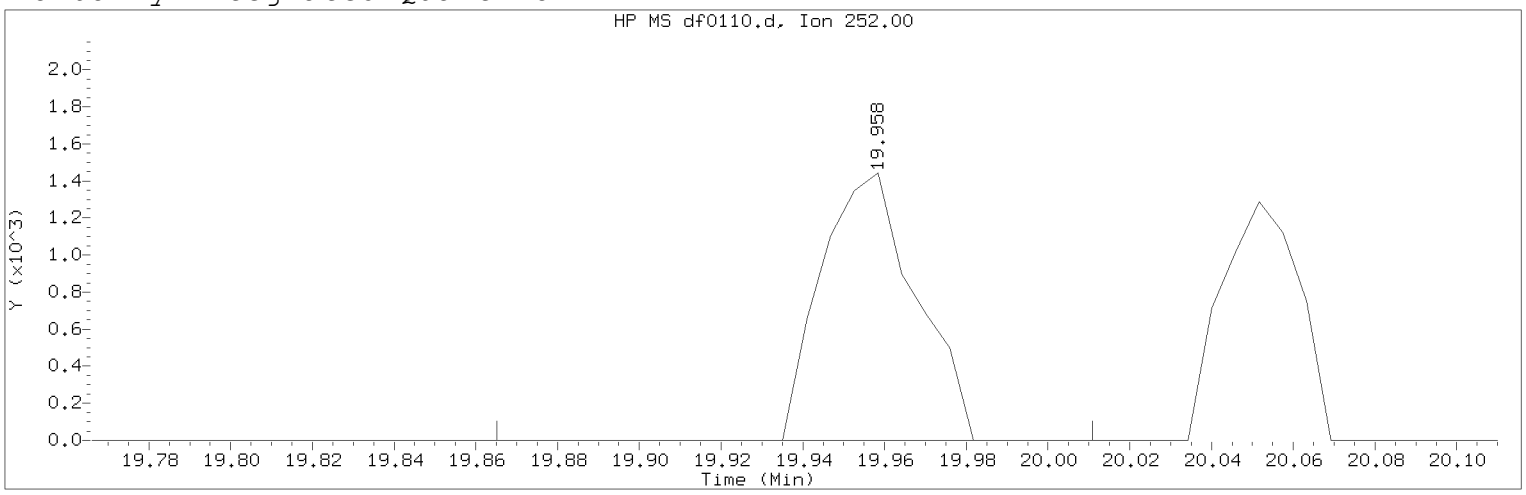
Compound Number	: 177		
Compound Name	: Pyrene		
Scan Number	: 2297		
Retention Time (minutes)	: 15.575		
Quant Ion	: 202.00		
Area	: 5018		
On-column Amount (ng/ul)	: 0.0291		
Integration start scan	: 2291	Integration stop scan:	2307
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/06/2018 at 13:51.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0110.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:57 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 06-JUN-2018 13:50
Date, time and analyst ID of latest file update: 06-Jun-2018 13:50 em10340

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL1318

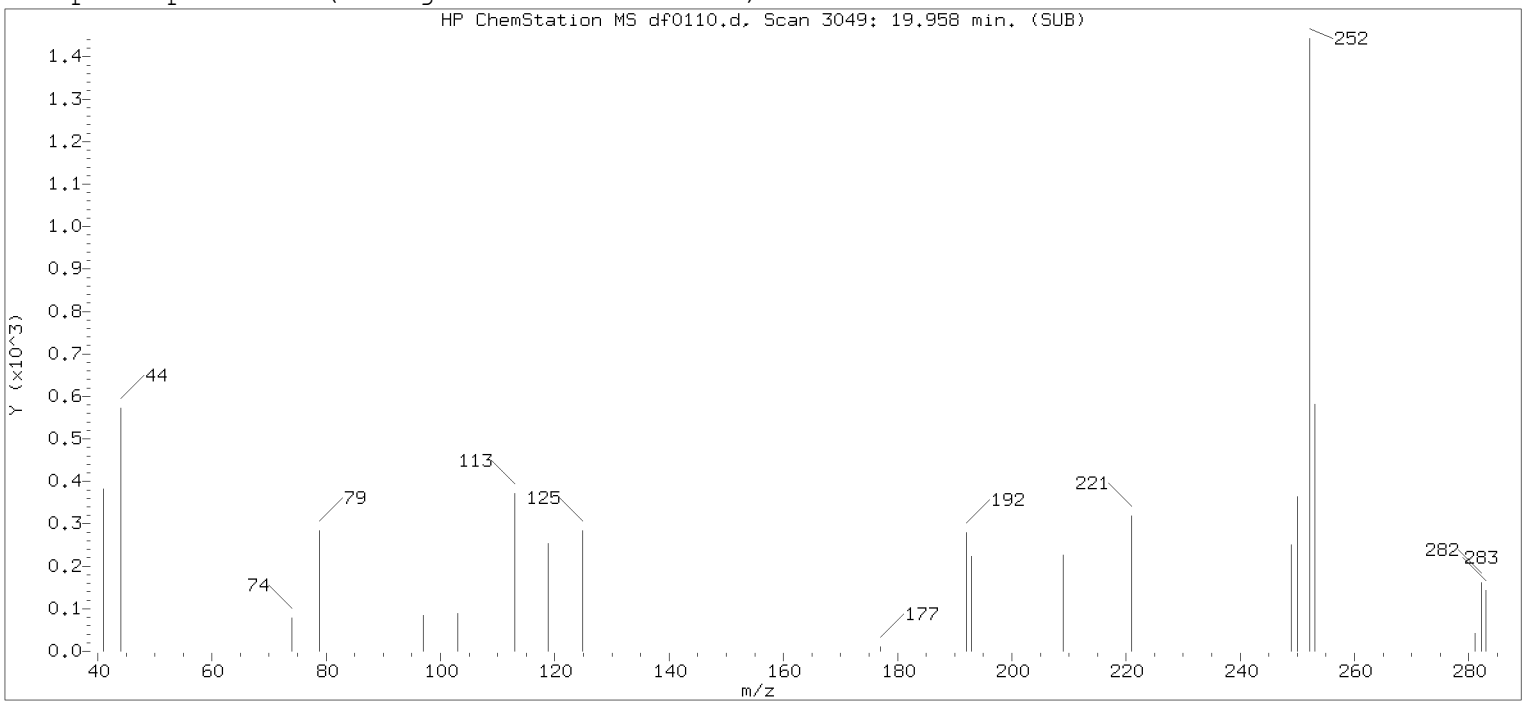
Compound Number : 211
Compound Name : Benzo(a)pyrene
Scan Number : 3049
Retention Time (minutes) : 19.958
Quant Ion : 252.00
Area (flag) : 2318M
On-Column Amount (ng/ul) : 0.0178
Integration start scan : 3032 Integration stop scan: 3057
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

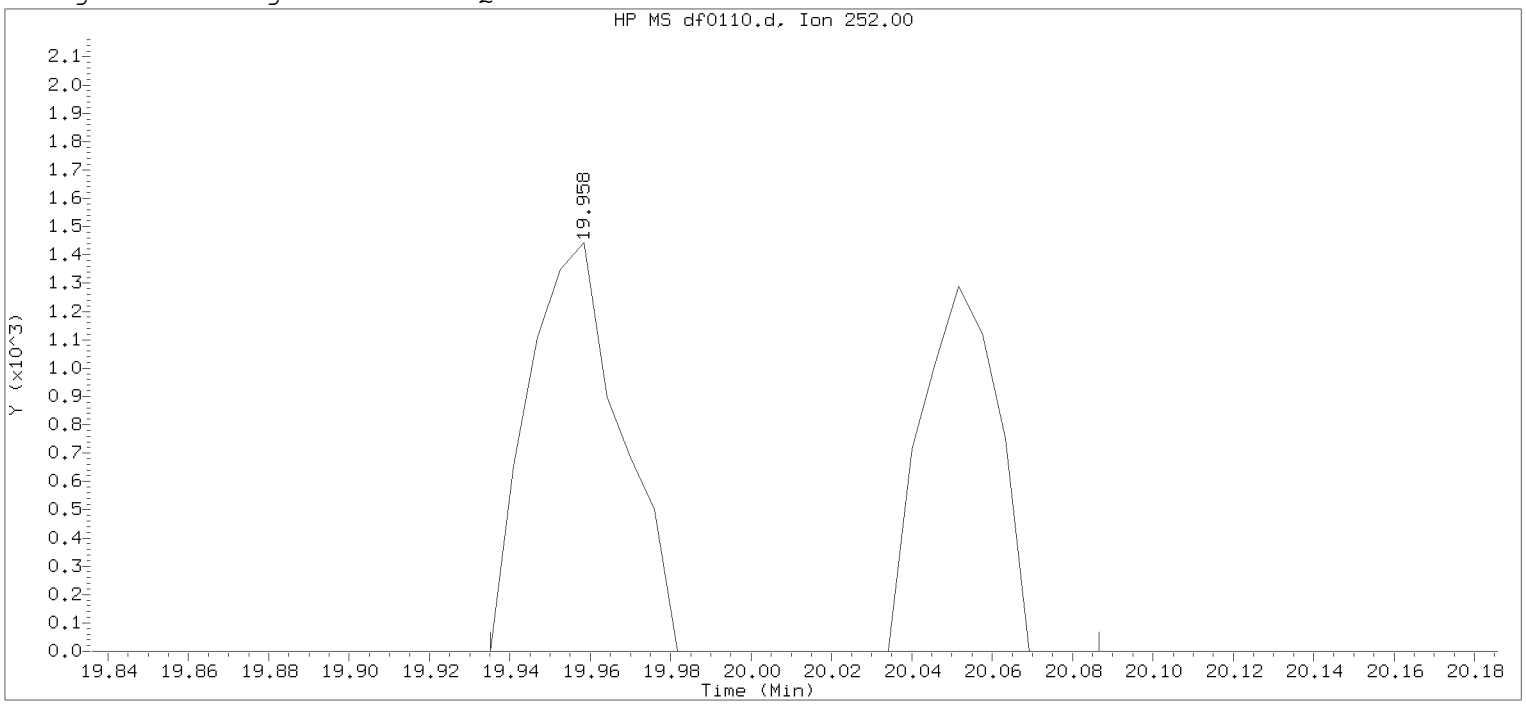
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/06/2018 at 13:51.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 15:12.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0110.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:57 Analyst ID: art12405

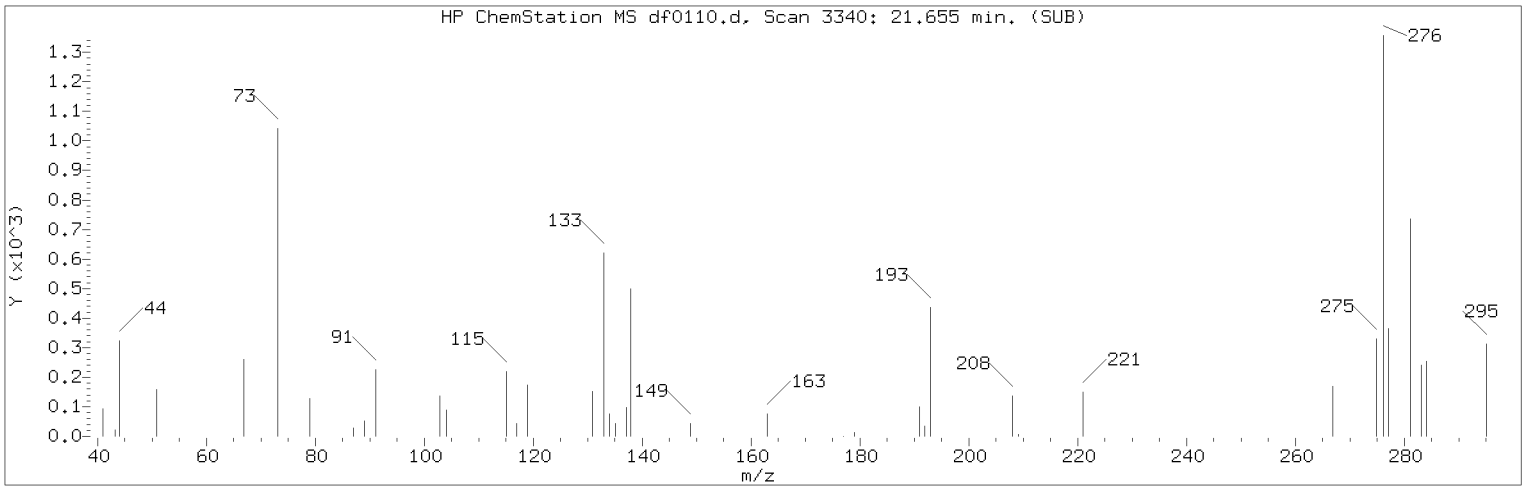
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 05:23 Automation

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL1318

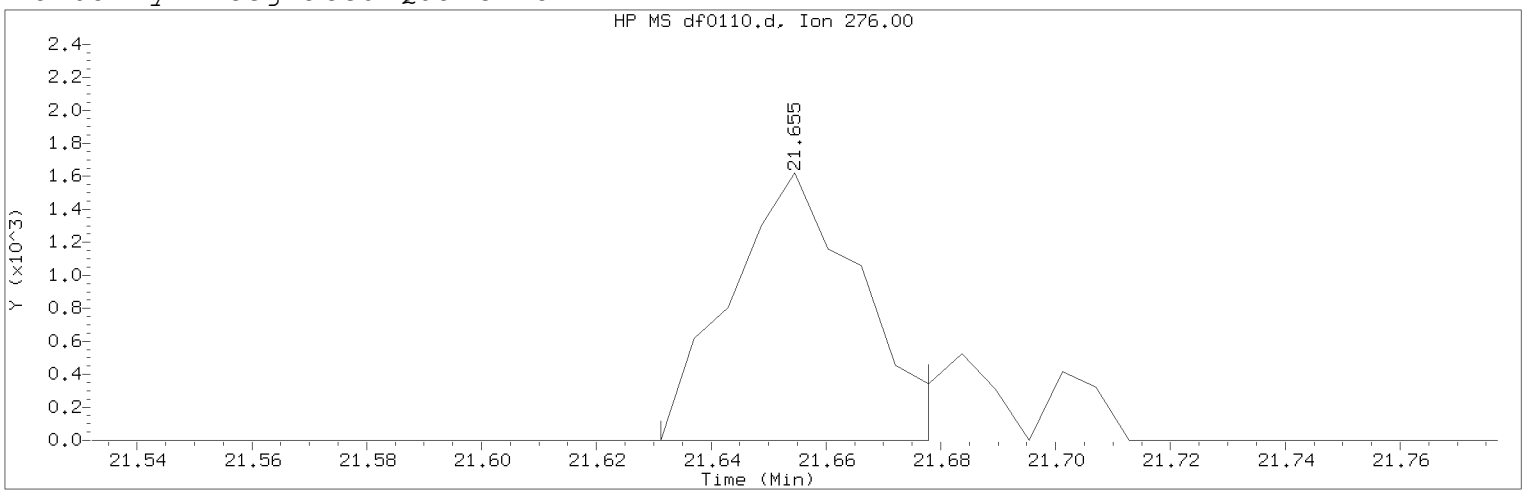
Compound Number	: 211		
Compound Name	: Benzo(a)pyrene		
Scan Number	: 3049		
Retention Time (minutes)	: 19.958		
Quant Ion	: 252.00		
Area	: 4029		
On-column Amount (ng/ul)	: 0.0308		
Integration start scan	: 3044	Integration stop scan:	3070
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/06/2018 at 13:51.
Target 3.5 esignature user ID: EMONB170

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0110.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:57 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 06-JUN-2018 13:50
Date, time and analyst ID of latest file update: 06-Jun-2018 13:50 em10340

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL1318

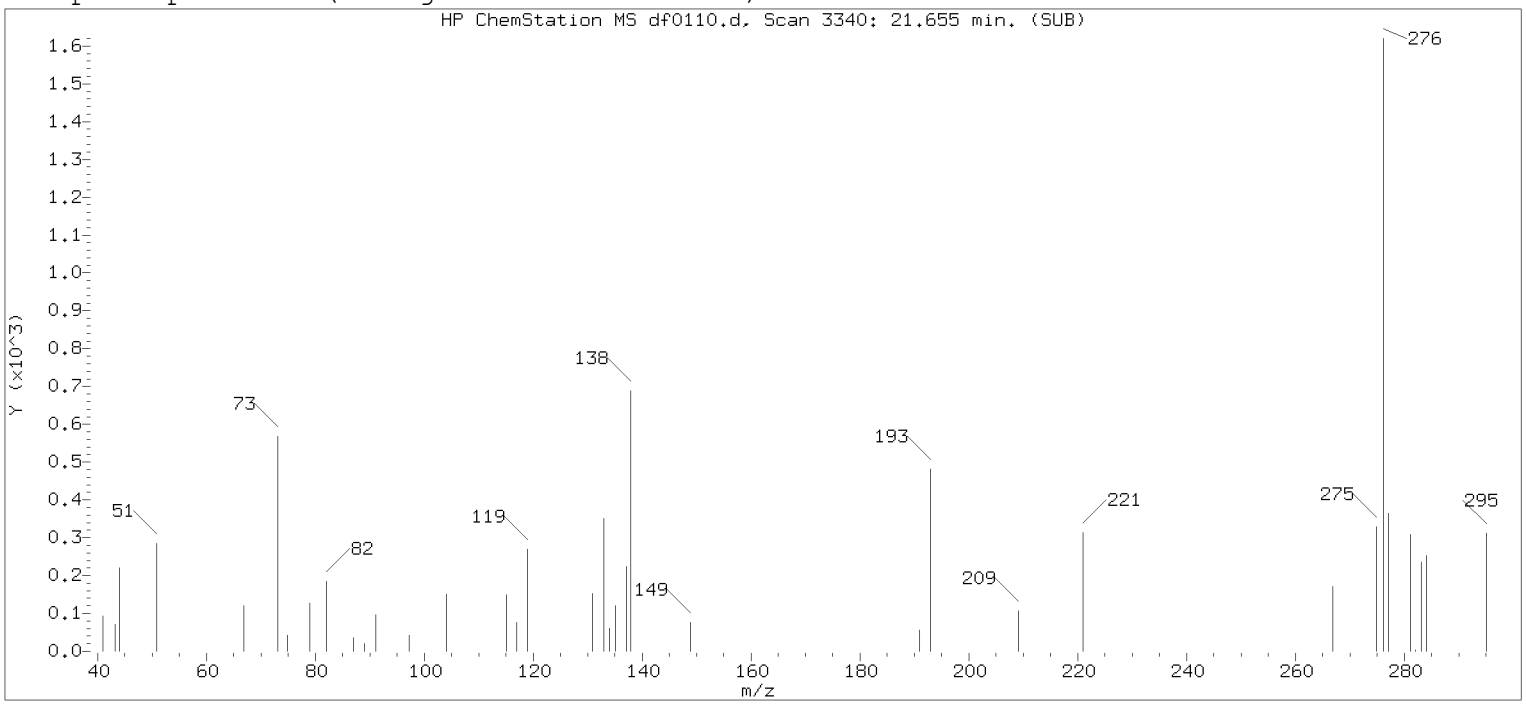
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3340
Retention Time (minutes) : 21.655
Quant Ion : 276.00
Area (flag) : 2573M
On-Column Amount (ng/ul) : 0.0213
Integration start scan : 3335 Integration stop scan: 3343
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

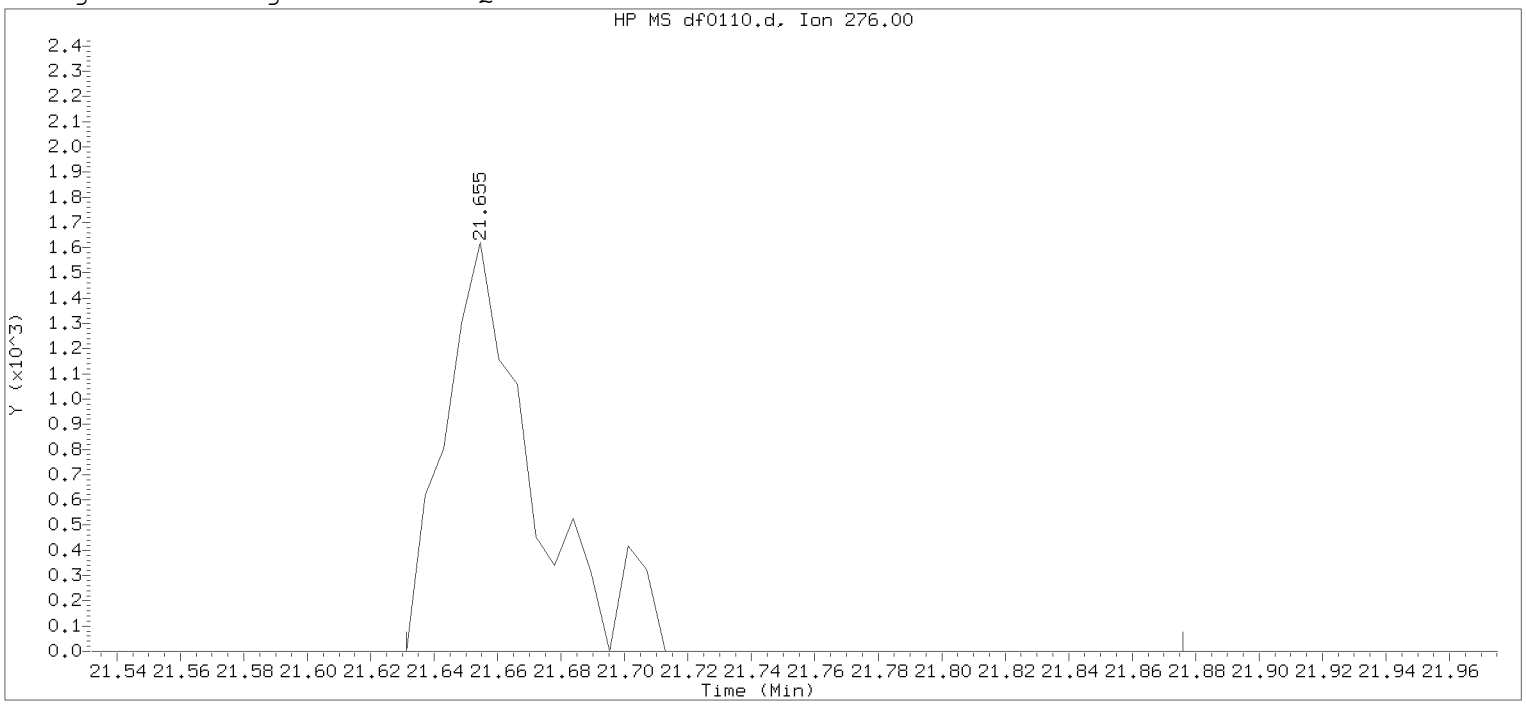
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/06/2018 at 13:51.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 15:12.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



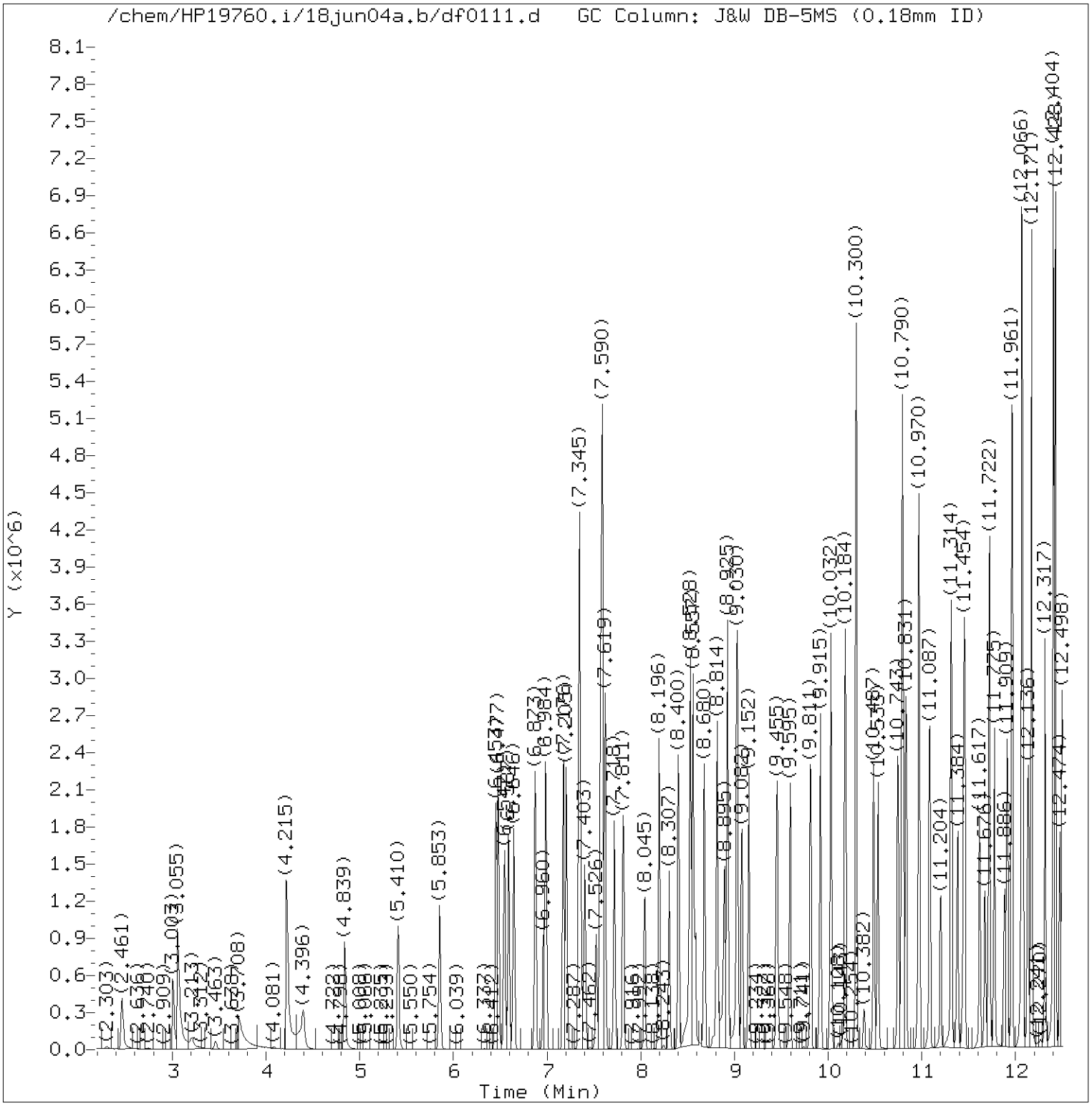
Data File: /chem/HP19760.i/18jun04a.b/df0110.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 04:57 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 05-JUN-2018 04:27
Date, time and analyst ID of latest file update: 05-Jun-2018 05:23 Automation

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL1318

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3340		
Retention Time (minutes)	: 21.655		
Quant Ion	: 276.00		
Area	: 3125		
On-column Amount (ng/ul)	: 0.0209		
Integration start scan	: 3335	Integration stop scan:	3377
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/06/2018 at 13:51.
Target 3.5 esignature user ID: EMONBO



Total Ion Chromatogram (TIC)

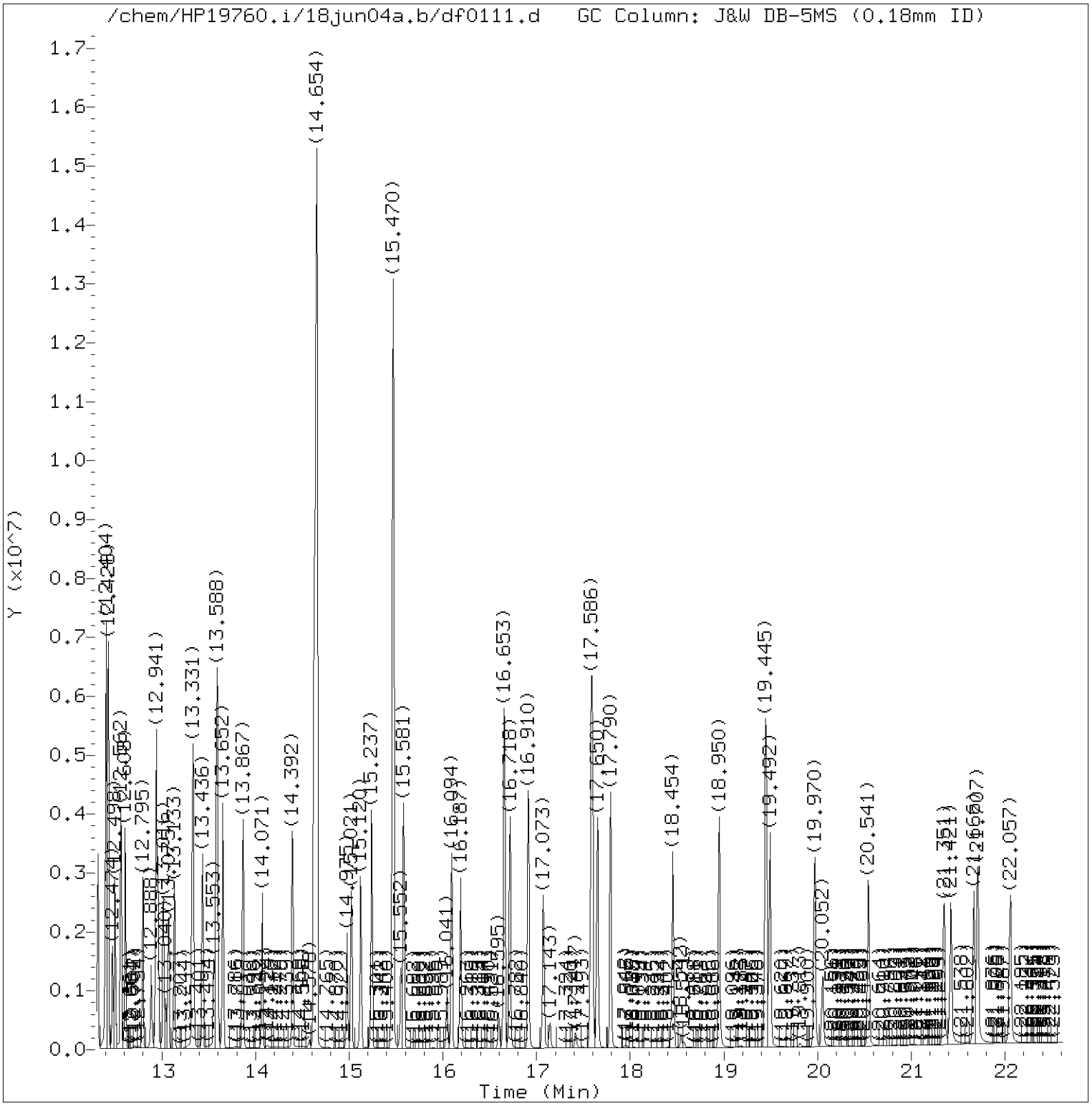
Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.461	88	346726	12.318
4) N-Nitrosodimethylamine	(1)	3.003	74	538986	12.718
5) Pyridine	(1)	3.055	79	919596	12.695
7) 2-Picoline	(1)	4.221	93	951665	12.276
8) N-Nitrosomethylethylamine	(1)	4.396	88	406572	12.002
9) Methyl methanesulfonate	(1)	4.839	80	488464	12.899
13) N-Nitrosodiethylamine	(1)	5.410	102	382813	12.161
42) Total Cresols	(1)	5.660	100	1531389	25.884
15) Ethyl methanesulfonate	(1)	5.853	109	376727	12.328
18) Phenol	(1)	6.453	94	1161324	12.602
19) Aniline	(1)	6.477	93	1300738	12.169
22) bis(2-Chloroethyl)ether	(1)	6.587	93	851811	12.506
23) 2-Chlorophenol	(1)	6.646	128	662466	12.557
24) 1,3-Dichlorobenzene	(1)	6.873	146	689298	12.457
25)*1,4-Dichlorobenzene-d4	(1)	6.960	152	180618	5.000
26) 1,4-Dichlorobenzene	(1)	6.984	146	715278	12.712
27) Benzyl alcohol	(1)	7.176	108	510783	12.974
28) 1,2-Dichlorobenzene	(1)	7.205	146	667252	12.590
30) Indene	(1)	7.339	115	1260494	14.789
31) 2-Methylphenol	(1)	7.351	108	709119	12.673
97) Isosafrole	(3)	7.383	162	539463	13.175
34) bis(2-Chloroisopropyl)ether	(1)	7.403	45	880259	12.681
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.403	45	880259	12.681
35) N-Nitrosopyrrolidine	(1)	7.526	100	410131	12.454
36) Acetophenone	(1)	7.567	105	1062129	13.130
38) N-Nitroso-di-n-propylamine	(1)	7.590	70	604153	12.624
37) 4-Methylphenol	(1)	7.590	108	822270	13.183
39) N-Nitrosomorpholine	(1)	7.590	56	453219	12.588
40) o-Toluidine	(1)	7.619	106	1205980	12.369
43) Hexachloroethane	(1)	7.718	117	318588	12.493
45) Nitrobenzene	(2)	7.811	77	863666	12.545
48) N-Nitrosopiperidine	(2)	8.045	114	348711	12.008
120) 2,4_2,6-Dinitrotoluenes	(3)	8.050	165	636779	26.323
50) Isophorone	(2)	8.196	82	1578581	13.135
51) 2-Nitrophenol	(2)	8.307	139	337764	13.026
53) 2,4-Dimethylphenol	(2)	8.400	107	641135	10.900
57) O,O,O-Triethylphosphorothioate	(2)	8.528	198	285071	12.328
55) bis(2-Chloroethoxy)methane	(2)	8.557	93	975617	12.583
56) Benzoic acid	(2)	8.587	105	1105990	25.986
60) 2,4-Dichlorophenol	(2)	8.680	162	505075	13.003

* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
146) Diallate trans/cis	(4)	8.775	86	695236	12.220
62) 1,2,4-Trichlorobenzene	(2)	8.814	180	528148	12.685
65)*Naphthalene-d8	(2)	8.895	136	672917	5.000
66) Naphthalene	(2)	8.925	128	1843003	12.343
67) 4-Chloroaniline	(2)	9.024	127	814037	13.001
68) 2,6-Dichlorophenol	(2)	9.035	162	490757	12.666
69) Hexachloropropene	(2)	9.082	213	362810	13.337
71) Hexachlorobutadiene	(2)	9.152	225	291034	12.404
75) Quinoline	(2)	9.455	129	1149105	12.775
77) N-Nitrosodi-n-butylamine	(2)	9.595	84	545254	11.406
80) 4-Chloro-3-methylphenol	(2)	9.811	107	641935	13.057
82) Safrole	(2)	9.915	162	458829	12.398
83) 2-Methylnaphthalene	(2)	10.032	142	1209350	12.743
84) 1-Methylnaphthalene	(2)	10.184	142	1109997	12.964
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.300	216	508563	12.474
85) Hexachlorocyclopentadiene	(3)	10.300	237	637929	28.431
88) cis-Isosafrole	(3)	10.382	162	59441	1.575
90) 2,4,6-Trichlorophenol	(3)	10.487	196	340565	12.906
92) 2,4,5-Trichlorophenol	(3)	10.533	196	364546	13.684
94) trans-Isosafrole	(3)	10.743	162	480022	11.539
95) 1,1'-Biphenyl	(3)	10.790	154	1413155	13.127
96) 2-Chloronaphthalene	(3)	10.801	162	1041878	12.054
98) 1-Chloronaphthalene	(3)	10.831	162	1017409	13.096
99) Diphenyl ether	(3)	10.970	170	755067	12.646
100) 2-Nitroaniline	(3)	10.970	138	375951	13.254
104) 1,4-Naphthoquinone	(3)	11.087	158	549710	16.299
105) 1,4-Dinitrobenzene	(3)	11.204	168	198148	12.836
106) Dimethylphthalate	(3)	11.314	163	1126600	12.730
107) 1,3-Dinitrobenzene	(3)	11.320	168	224360	12.942
108) 2,6-Dinitrotoluene	(3)	11.384	165	276621	13.298
109) Acenaphthylene	(3)	11.454	152	1768607	14.230
112) 3-Nitroaniline	(3)	11.617	138	325294	13.567
113)*Acenaphthene-d10	(3)	11.676	164	310032	5.000
114) Acenaphthene	(3)	11.722	153	1134215	13.448
115) 2,4-Dinitrophenol	(3)	11.775	184	389633	26.933
116) 4-Nitrophenol	(3)	11.886	109	235926	13.059
117) Pentachlorobenzene	(3)	11.909	250	417355	12.453
119) Dibenzofuran	(3)	11.967	168	1532636	12.829
118) 2,4-Dinitrotoluene	(3)	11.967	165	360158	12.713
121) 1-Naphthylamine	(3)	12.066	143	2241385	24.805

* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
122) 2,3,4,6-Tetrachlorophenol	(3)	12.136	232	296759	13.272
123) 2-Naphthylamine	(3)	12.171	143	2255034	25.760
124) Diethylphthalate	(3)	12.317	149	1114268	12.377
126) Fluorene	(3)	12.404	166	1220659	12.821
125) Thionazin	(3)	12.404	107	268658	12.889
128) 5-Nitro-o-toluidine	(3)	12.422	152	371438	13.155
129) 4-Nitroaniline	(3)	12.428	138	331693	12.562
127) 4-Chlorophenyl-phenylether	(3)	12.428	204	557922	12.382
130) 4,6-Dinitro-2-methylphenol	(4)	12.474	198	222483	12.556
131) N-Nitrosodiphenylamine	(4)	12.562	169	1035021	13.086
132) NDPA as diphenylamine	(4)	12.562	169	1035021	13.086
134) 1,2-Diphenylhydrazine	(4)	12.608	77	1633186	13.350
137) Tetraethyldithiopyrophosphate	(4)	12.795	97	240834	12.259
139) 1,3,5-Trinitrobenzene	(4)	12.888	213	147421	12.092
140) Diallate (peak 1)	(4)	12.935	86	526306A	8.914
141) Phorate	(4)	12.941	75	953749A	13.029
142) Phenacetin	(4)	12.958	108	754010	12.745
143) 4-Bromophenyl-phenylether	(4)	13.016	248	309874A	12.811
144) Diallate (peak 2)	(4)	13.040	86	168930A	3.640
145) Hexachlorobenzene	(4)	13.075	284	301260	12.536
147) Dimethoate	(4)	13.133	87	663474	13.269
149) Pentachlorophenol	(4)	13.319	266	228005	13.747
150) 4-Aminobiphenyl	(4)	13.331	169	1321792	14.662
151) Pentachloronitrobenzene	(4)	13.343	237	137670	12.933
152) Pronamide	(4)	13.436	173	539349	13.595
153)*Phenanthrene-d10	(4)	13.553	188	578513A	5.000
154) Dinoseb	(4)	13.576	211	300343	12.271
155) Phenanthrene	(4)	13.588	178	1739204A	12.824
157) Anthracene	(4)	13.652	178	1725305	12.961
163) Carbazole	(4)	13.867	167	1725057	13.522
164) Methyl parathion	(4)	14.071	109	514800A	13.965
165) Di-n-butylphthalate	(4)	14.392	149	2117210	13.000
167) Parathion	(4)	14.625	109	345646	14.133
168) 4-Nitroquinoline-1-oxide	(4)	14.654	190	3307458	186.916
222) Total PAHs	(6)	15.000	100	29879017	228.761
171) Isodrin	(4)	15.021	193	203813	13.357
173) Fluoranthene	(4)	15.237	202	1956185	13.226
174) Benzidine	(5)	15.470	184	6761734	63.848
175)*Pyrene-d10	(5)	15.552	212	588686	5.000
177) Pyrene	(5)	15.581	202	2007154	12.439

A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

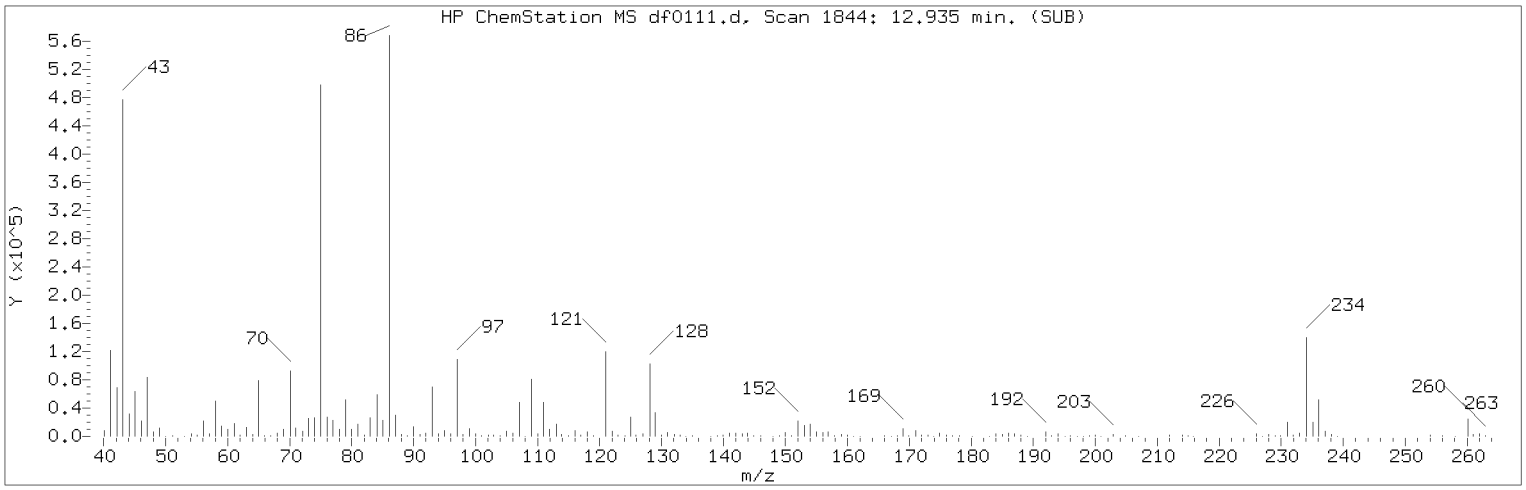
Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
182) p-Dimethylaminoazobenzene	(5)	16.094	225	424172	14.887
185) Chlorobenzilate	(5)	16.187	139	683022	13.622
187) 3,3'-Dimethylbenzidine	(5)	16.653	212	2675690	25.887
188) Butylbenzylphthalate	(5)	16.718	149	1050692	13.057
191) 2-Acetylaminofluorene	(5)	17.073	181	821198	12.737
193) 3,3'-Dichlorobenzidine	(5)	17.580	252	686928	12.782
195) Benzo(a)anthracene	(5)	17.592	228	1909566	13.460
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.598	231	374559	11.429
196) Chrysene	(5)	17.650	228	1848787	13.014
199) bis(2-Ethylhexyl)phthalate	(5)	17.790	149	1446436	13.082
203) 6-Methylchrysene	(5)	18.454	242	1285627	12.441
205) Di-n-octylphthalate	(6)	18.950	149	2496144	12.784
206) Benzo(b)fluoranthene	(6)	19.445	252	1836431	12.650
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.451	256	878431	12.898
208) Benzo(k)fluoranthene	(6)	19.492	252	1874718	12.986
211) Benzo(a)pyrene	(6)	19.970	252	1730370	13.201
213)*Perylene-d12	(6)	20.057	264	601888	5.000
215) 3-Methylcholanthrene	(6)	20.541	268	968081	14.337
217) Dibenz(a,h)acridine	(6)	21.351	279	1350368	12.145
218) Dibenz(a,j)acridine	(6)	21.421	279	1446392	12.168
219) Indeno(1,2,3-cd)pyrene	(6)	21.672	276	1589036M	13.079
220) Dibenz(a,h)anthracene	(6)	21.707	278	1735319	13.187
221) Benzo(g,h,i)perylene	(6)	22.057	276	1641111	12.660

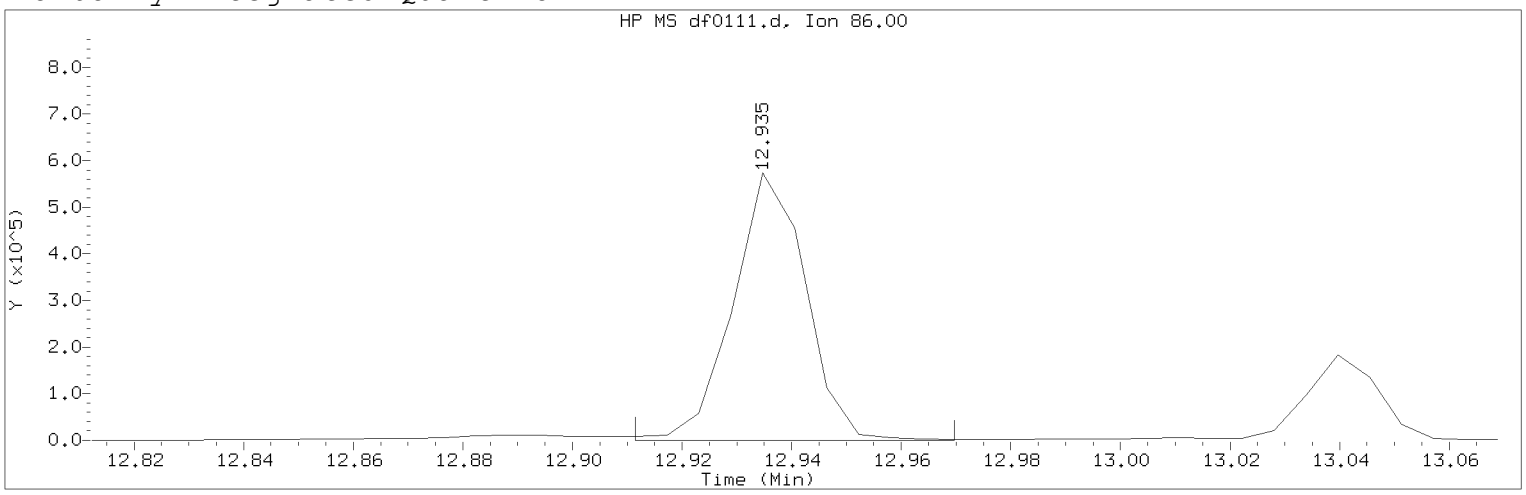
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

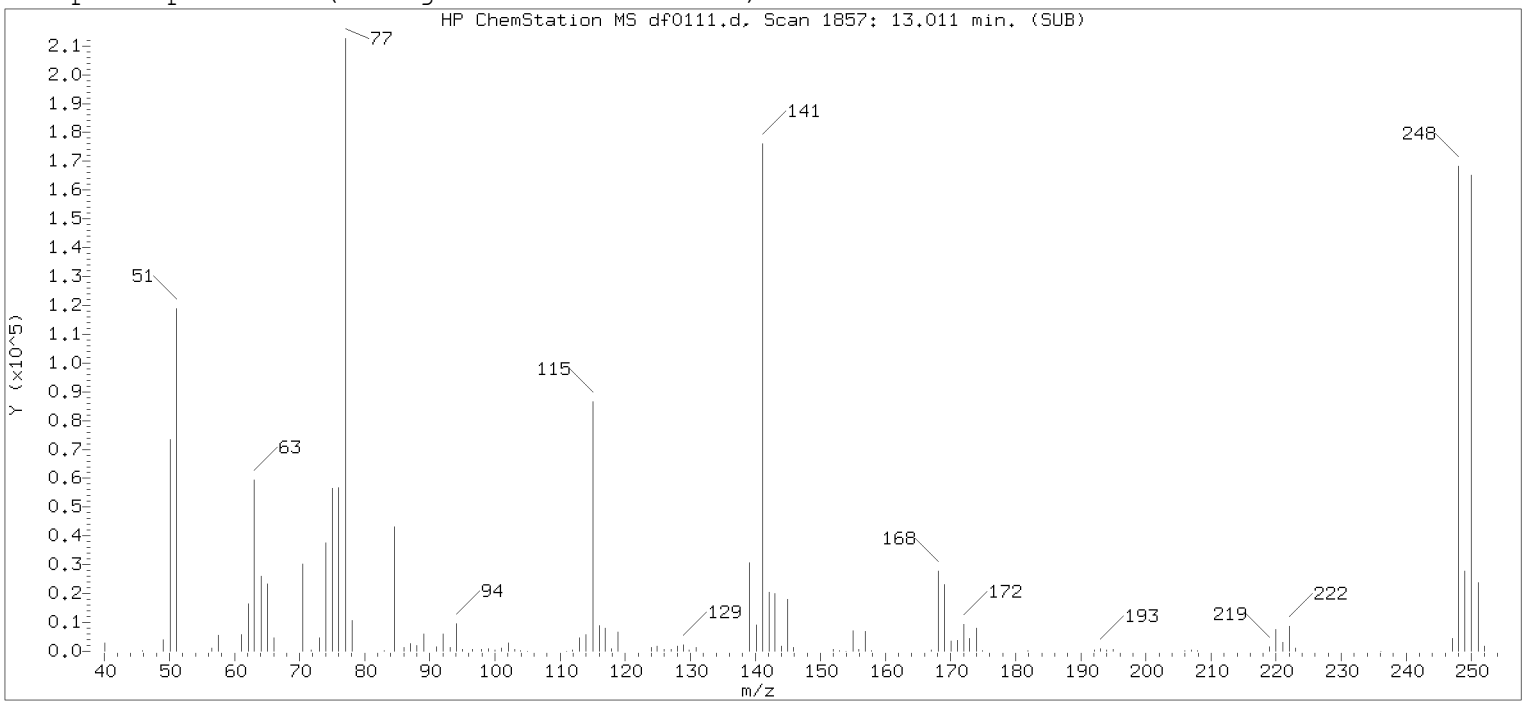
Compound Number : 140
Compound Name : Diallate (peak 1)
Scan Number : 1844
Retention Time (minutes) : 12.935
Quant Ion : 86.00
Area (flag) : 526306A
On-Column Amount (ng/ul) : 8.9142
Integration start scan : 1839 Integration stop scan: 1849
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

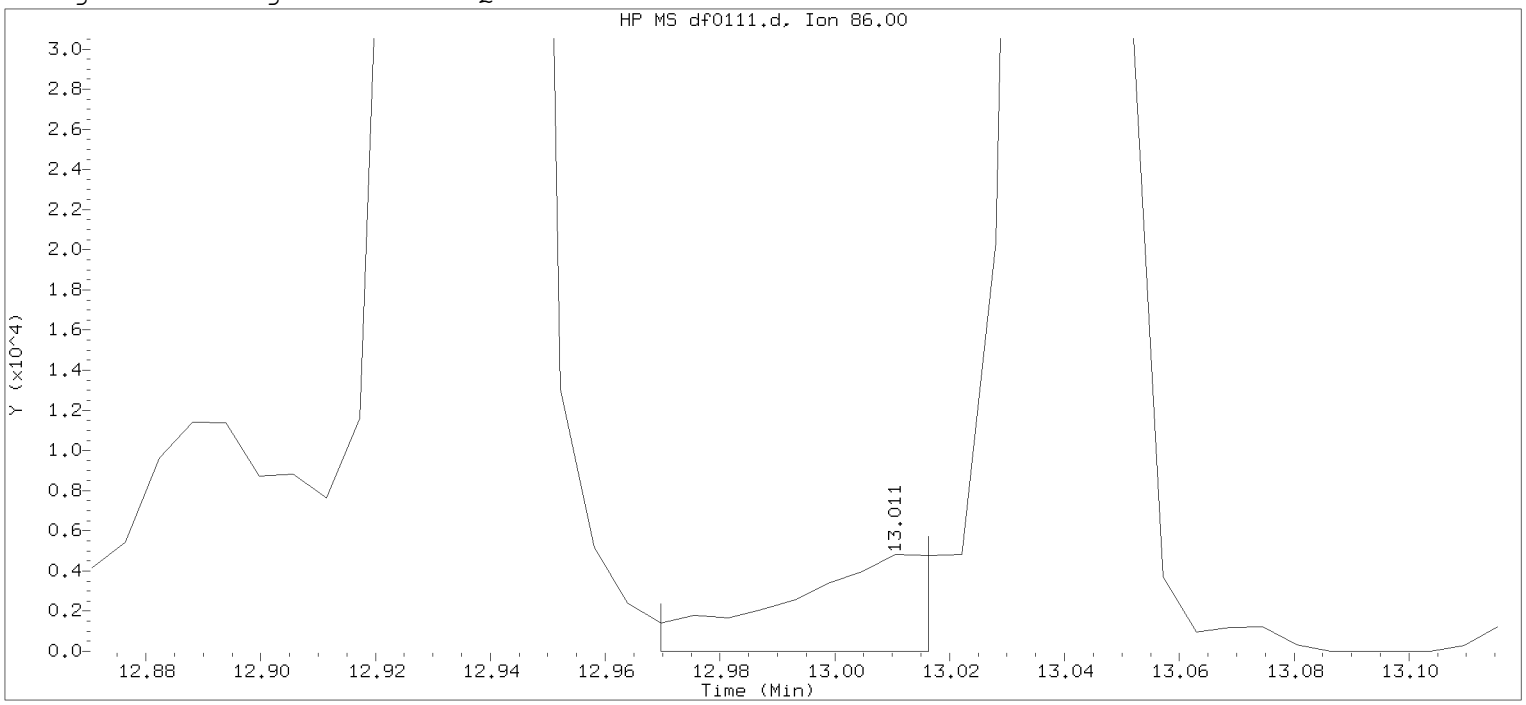
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

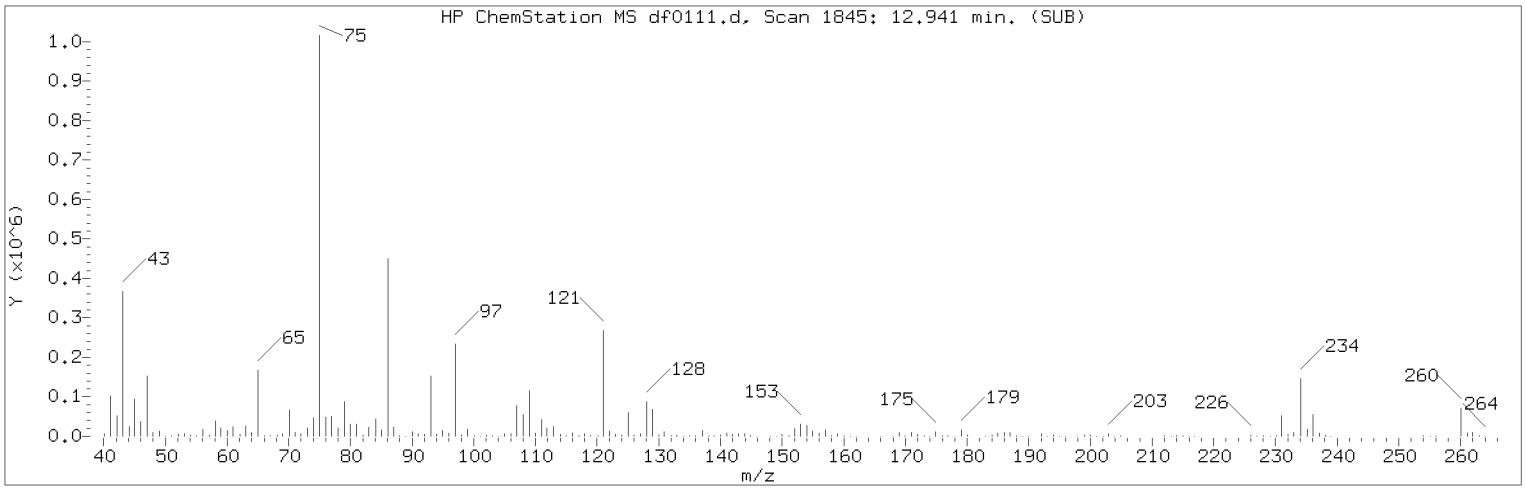
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:36 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

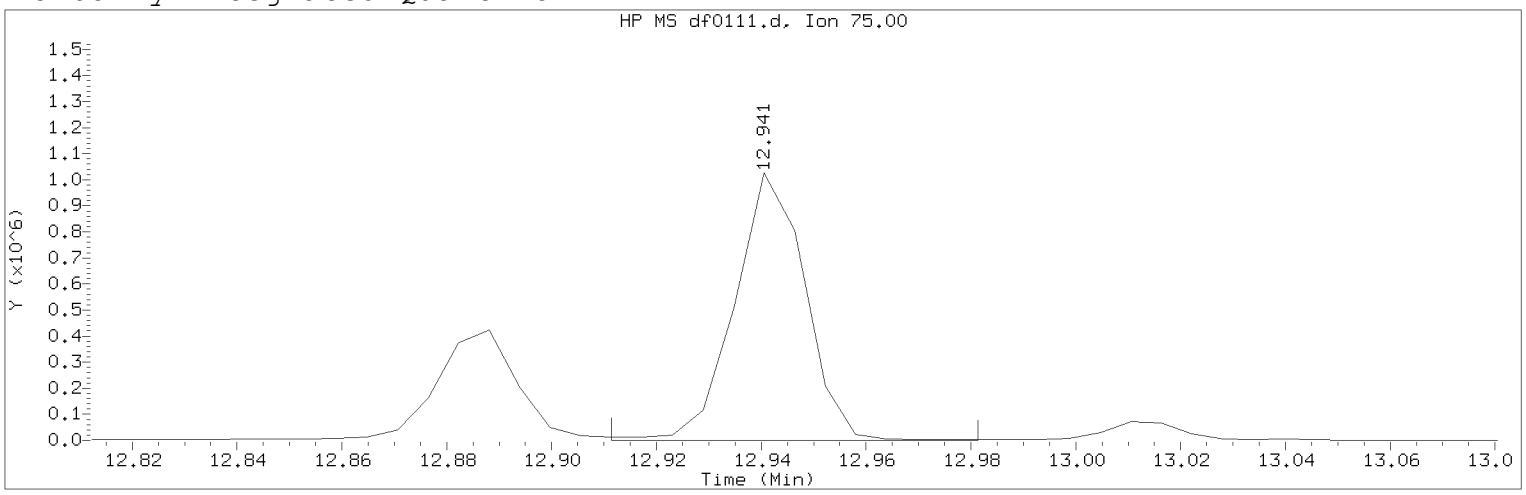
Compound Number	: 140		
Compound Name	: Diallate (peak 1)		
Scan Number	: 1857		
Retention Time (minutes)	: 13.011		
Quant Ion	: 86.00		
Area	: 8170		
On-column Amount (ng/ul)	: 9.2933		
Integration start scan	: 1849	Integration stop scan:	1857
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 11:42.
Target 3.5 esignature user name: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

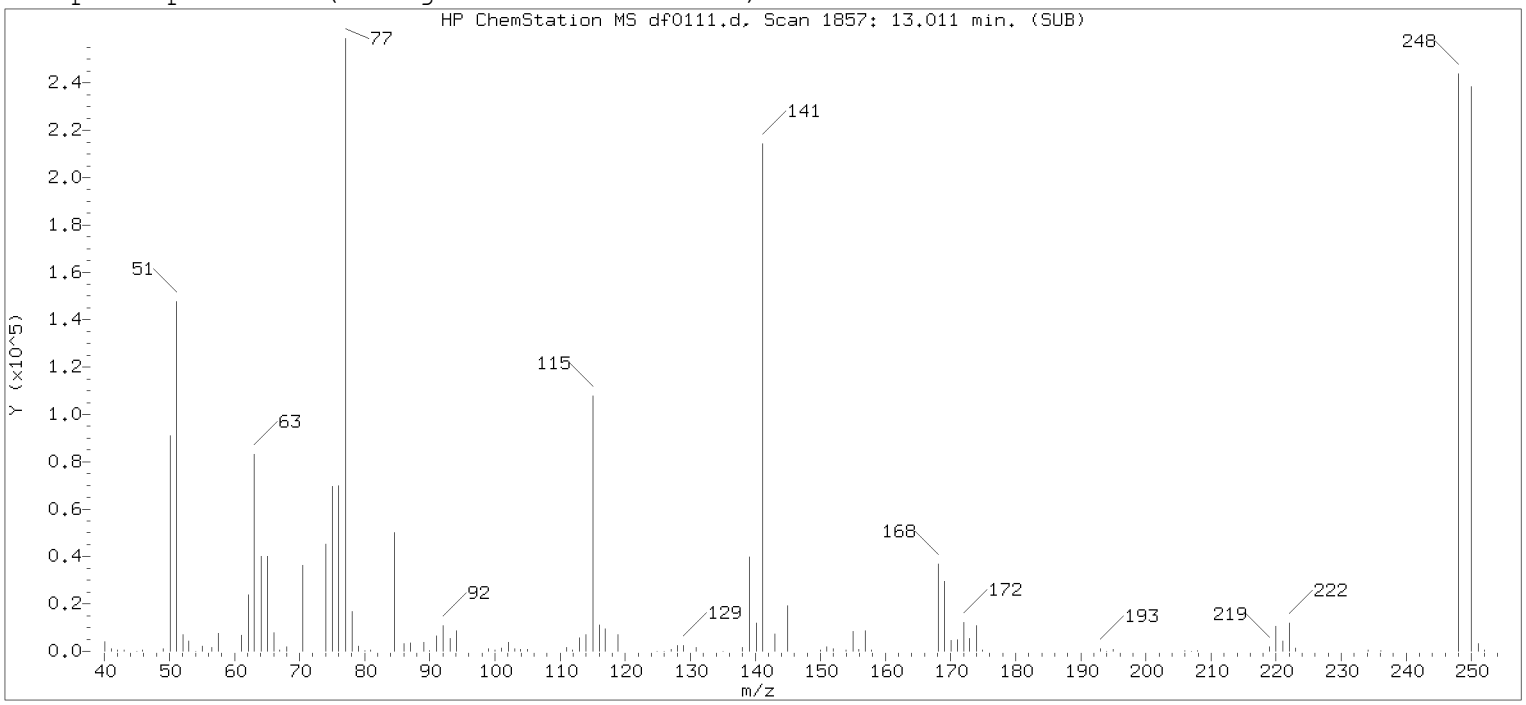
Compound Number : 141
Compound Name : Phorate
Scan Number : 1845
Retention Time (minutes) : 12.941
Quant Ion : 75.00
Area (flag) : 953749A
On-Column Amount (ng/ul) : 13.0289
Integration start scan : 1839 Integration stop scan: 1851
Y at integration start : 298 Y at integration end: 298

Reason for manual integration: improper integration

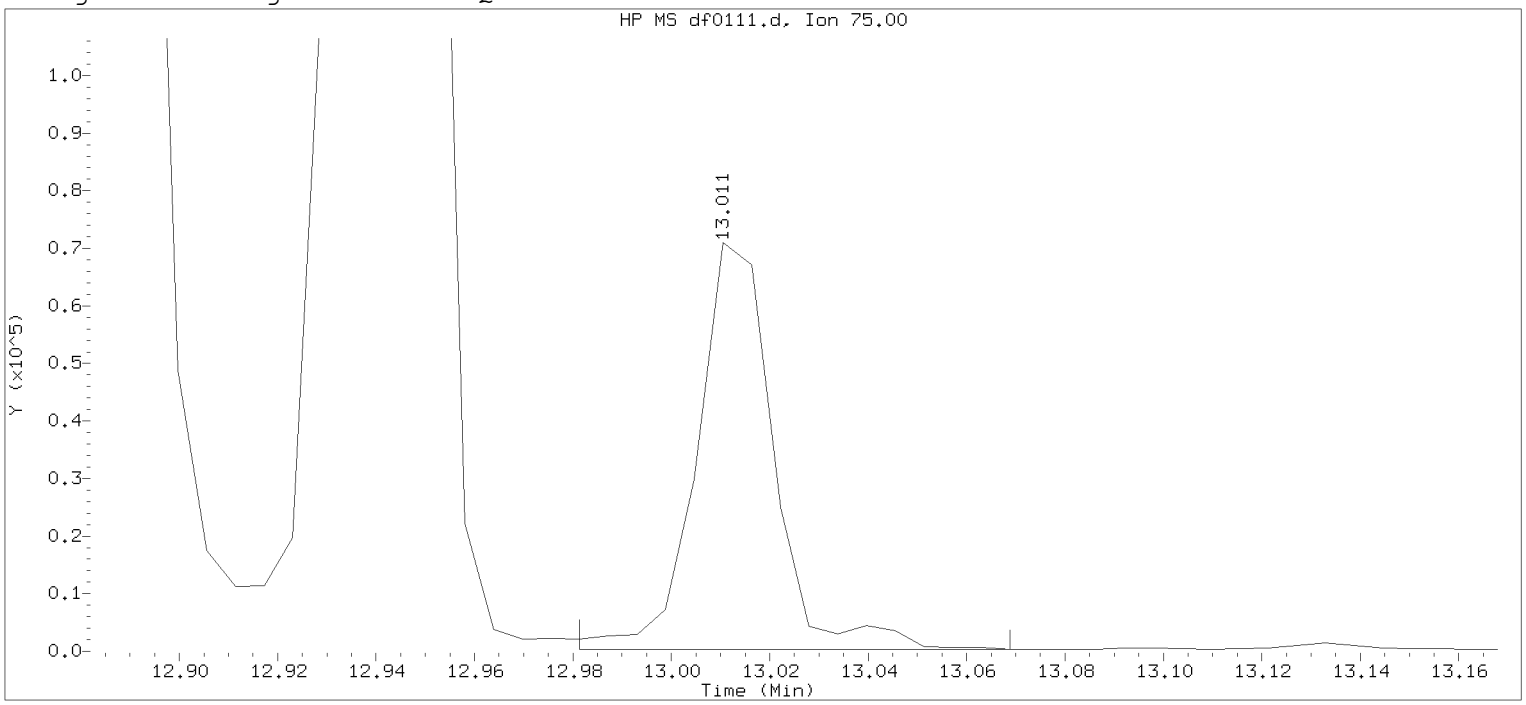
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

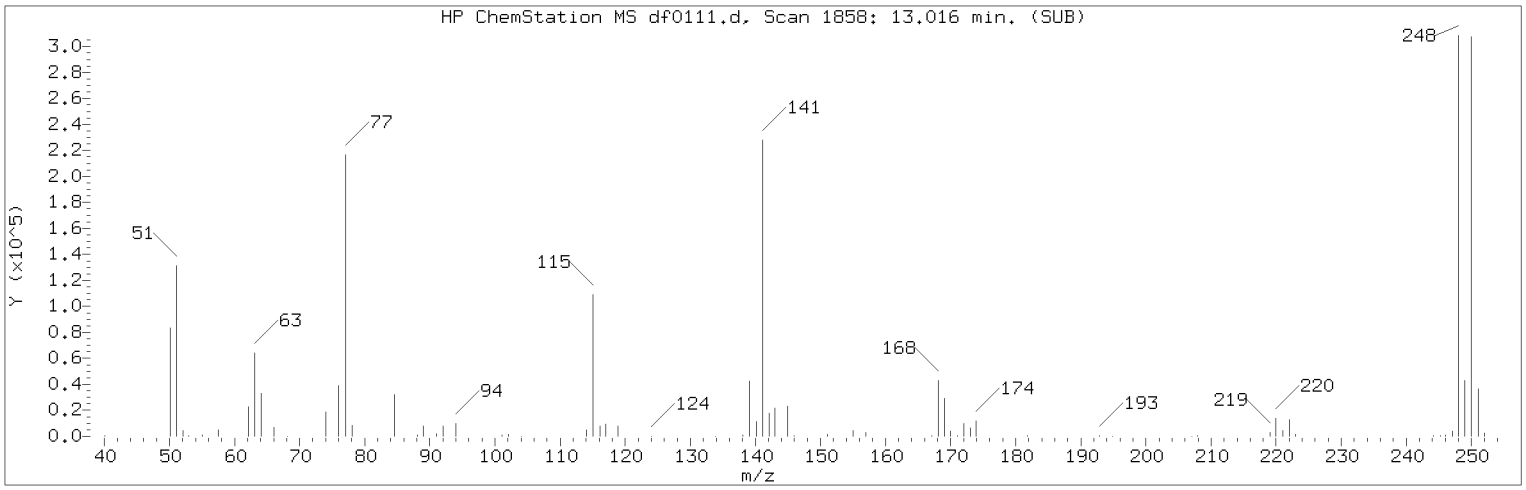
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:36 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

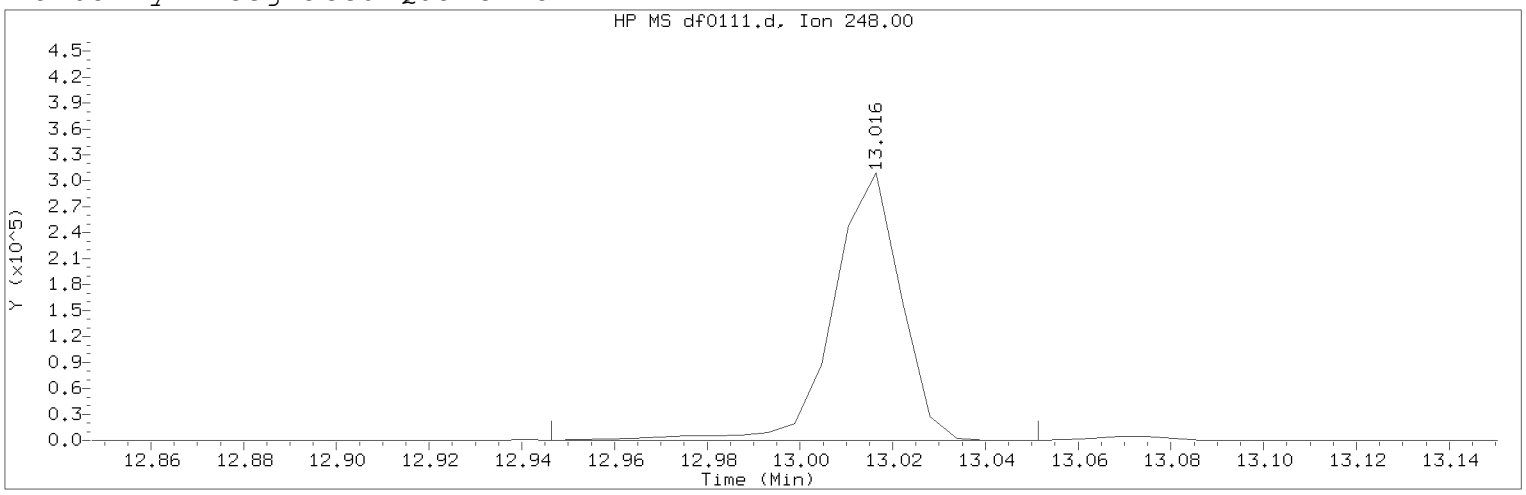
Compound Number	: 141		
Compound Name	: Phorate		
Scan Number	: 1857		
Retention Time (minutes)	: 13.011		
Quant Ion	: 75.00		
Area	: 76997		
On-column Amount (ng/ul)	: 70.6324		
Integration start scan	: 1851	Integration stop scan:	1866
Y at integration start	: 298	Y at integration end:	298

Digitally signed by Edward Monborne on 06/05/2018 at 11:42.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

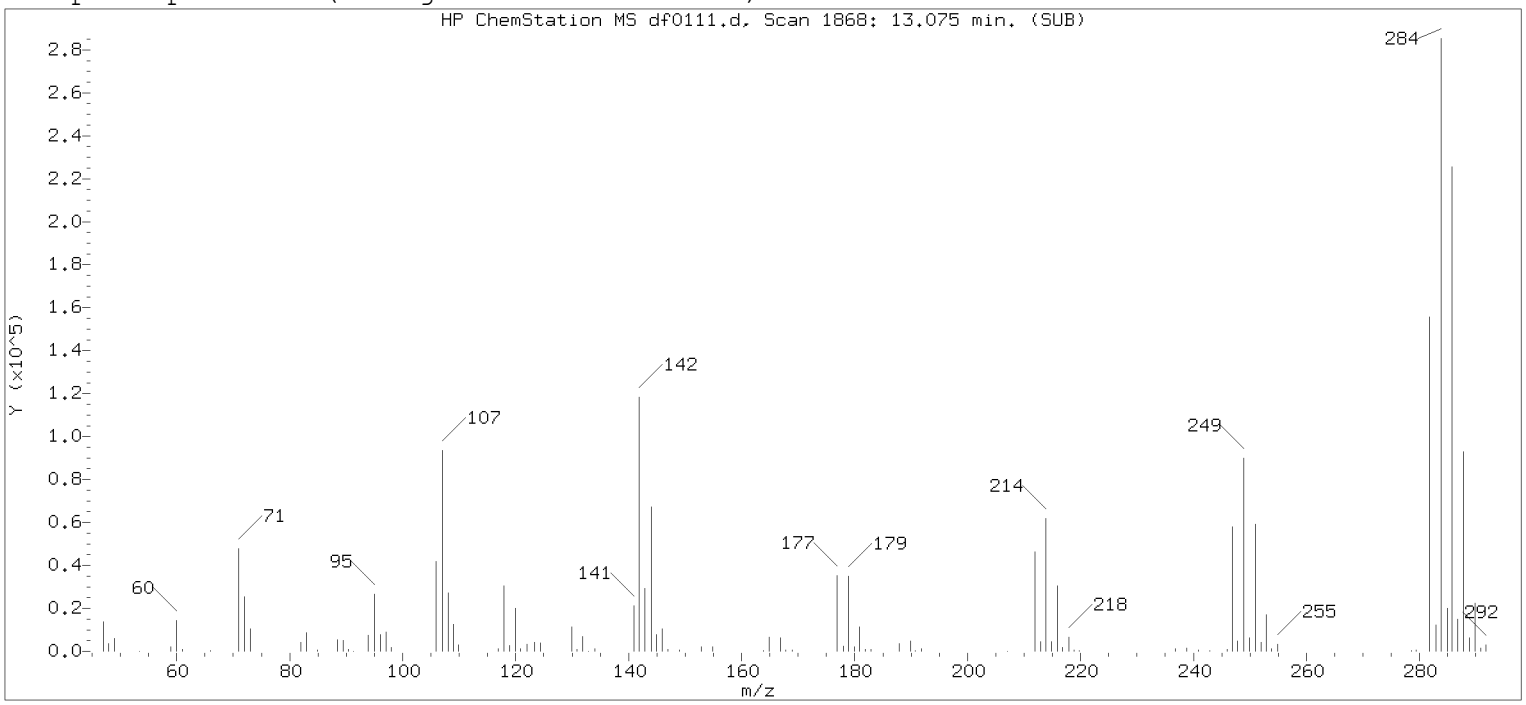
Compound Number	: 143		
Compound Name	: 4-Bromophenyl-phenylether		
Scan Number	: 1858		
Retention Time (minutes)	: 13.016		
Quant Ion	: 248.00		
Area (flag)	: 309874A		
On-Column Amount (ng/ul)	: 12.8106		
Integration start scan	: 1845	Integration stop scan:	1863
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

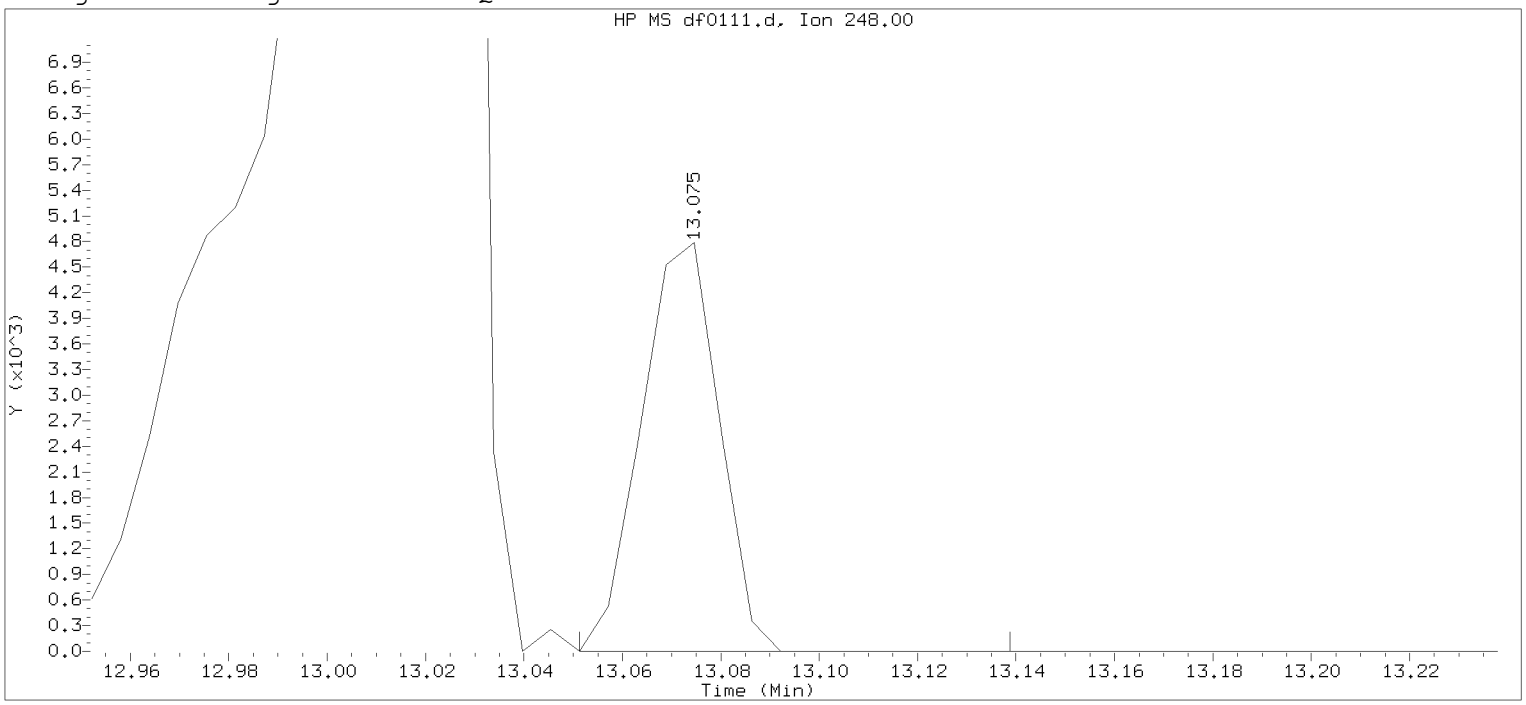
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

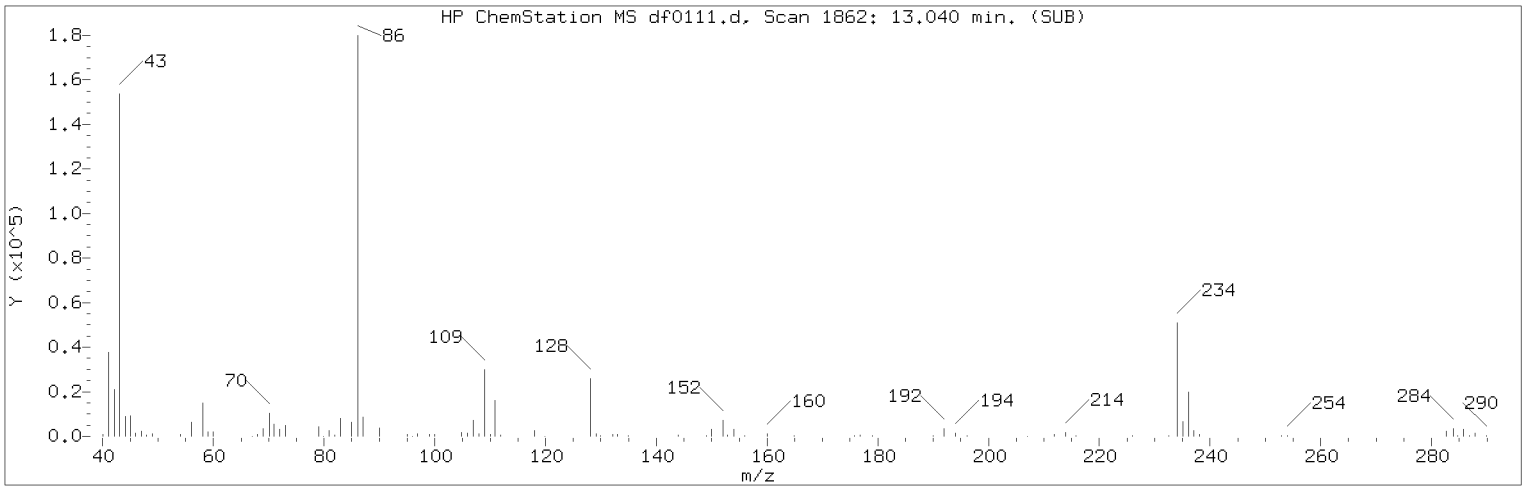
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:36 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

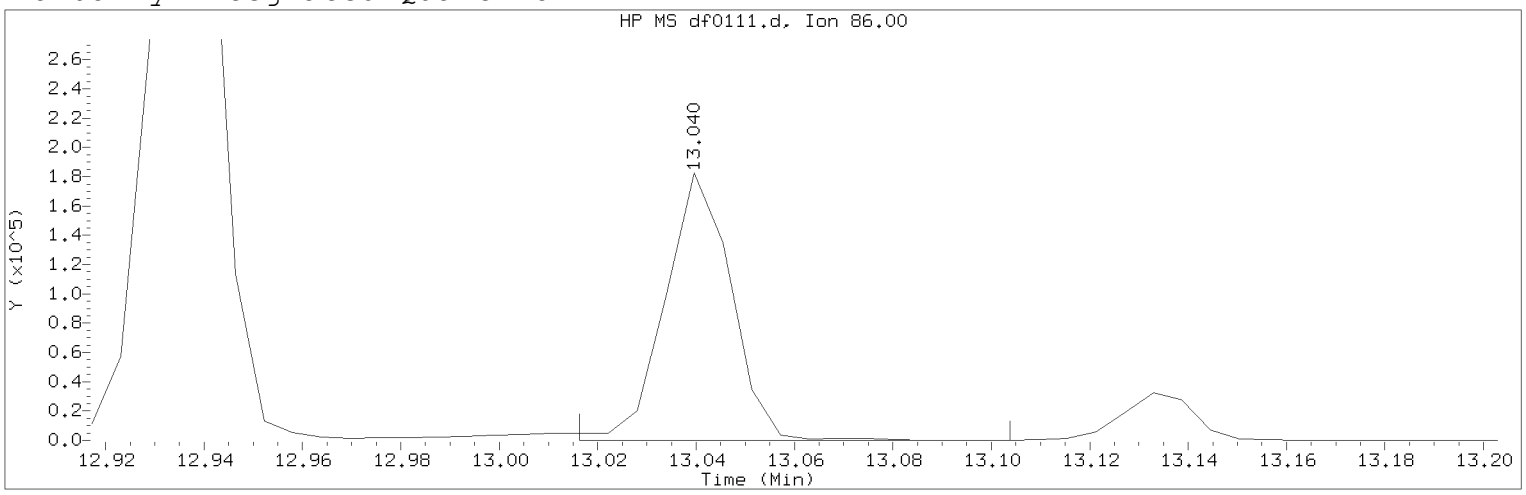
Compound Number	: 143		
Compound Name	: 4-Bromophenyl-phenylether		
Scan Number	: 1868		
Retention Time (minutes)	: 13.075		
Quant Ion	: 248.00		
Area	: 5258		
On-column Amount (ng/ul)	: 14.5985		
Integration start scan	: 1863	Integration stop scan:	1878
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: EMONB

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

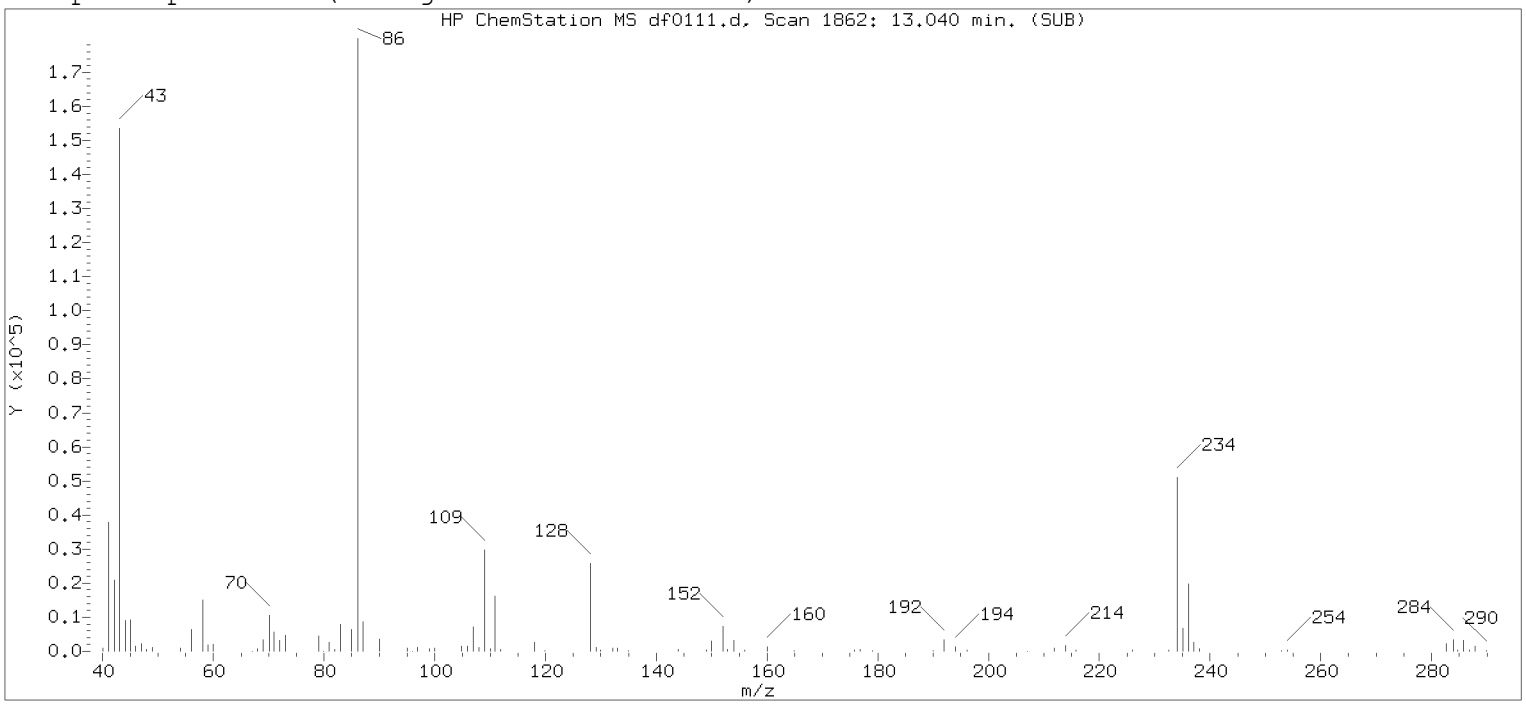
Compound Number	: 144
Compound Name	: Diallate (peak 2)
Scan Number	: 1862
Retention Time (minutes)	: 13.040
Quant Ion	: 86.00
Area (flag)	: 168930A
On-Column Amount (ng/ul)	: 3.6399
Integration start scan	: 1857 Integration stop scan: 1872
Y at integration start	: 0 Y at integration end: 0

Reason for manual integration: improper integration

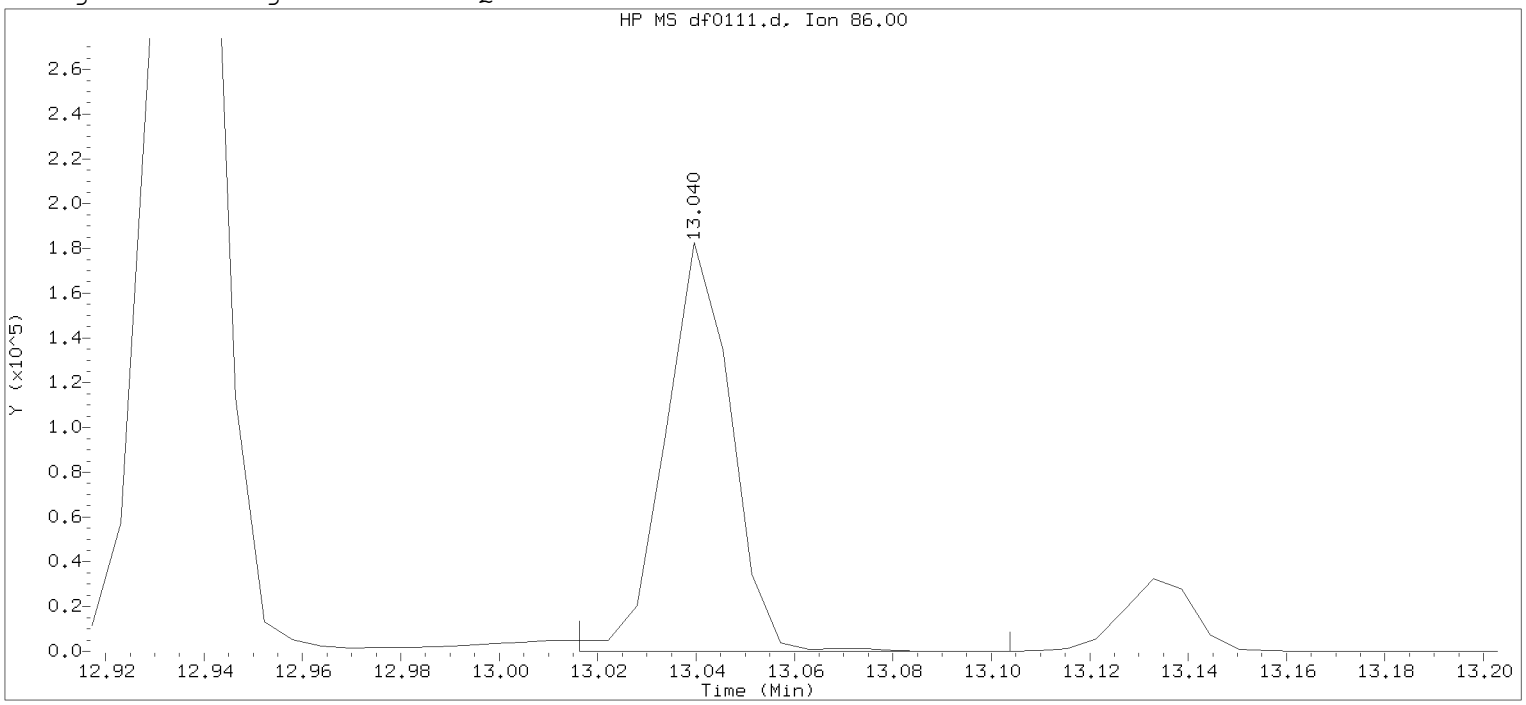
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

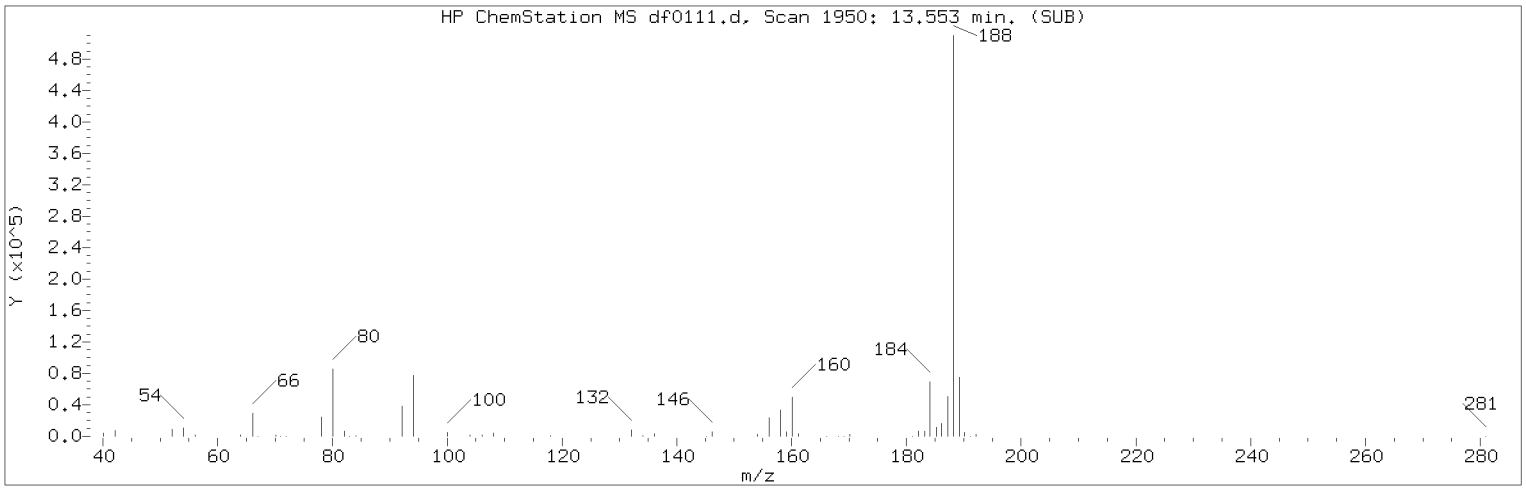
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:36 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

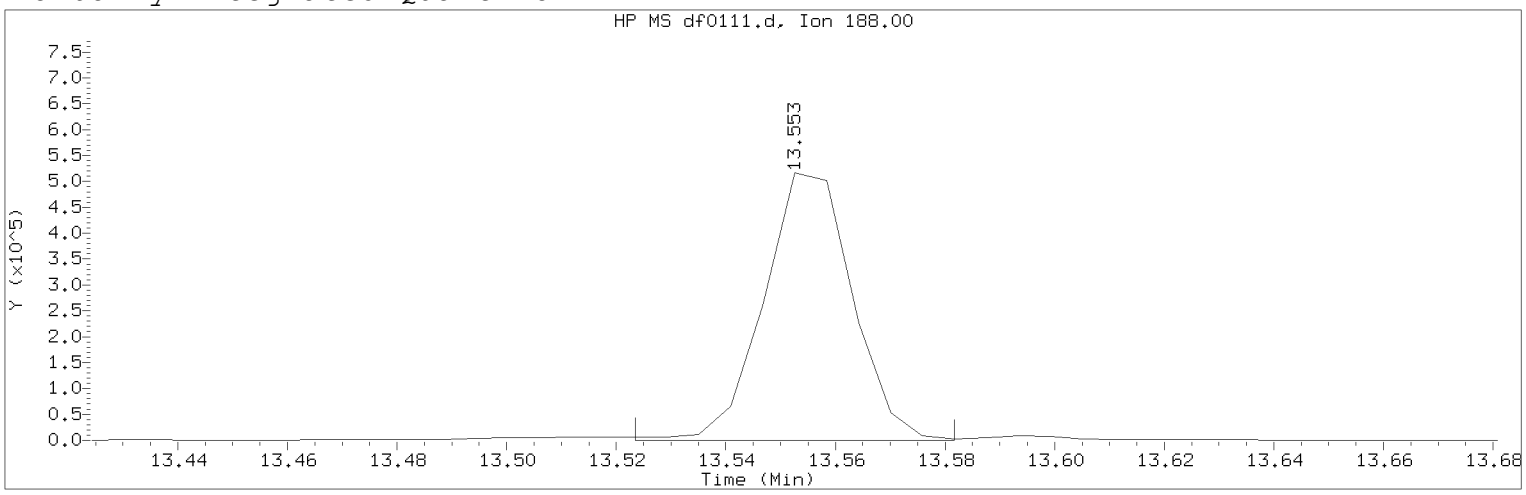
Compound Number	: 144		
Compound Name	: Diallate (peak 2)		
Scan Number	: 1862		
Retention Time (minutes)	: 13.040		
Quant Ion	: 86.00		
Area	: 168930		
On-column Amount (ng/ul)	: 244.4250		
Integration start scan	: 1857	Integration stop scan:	1872
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 11:42.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

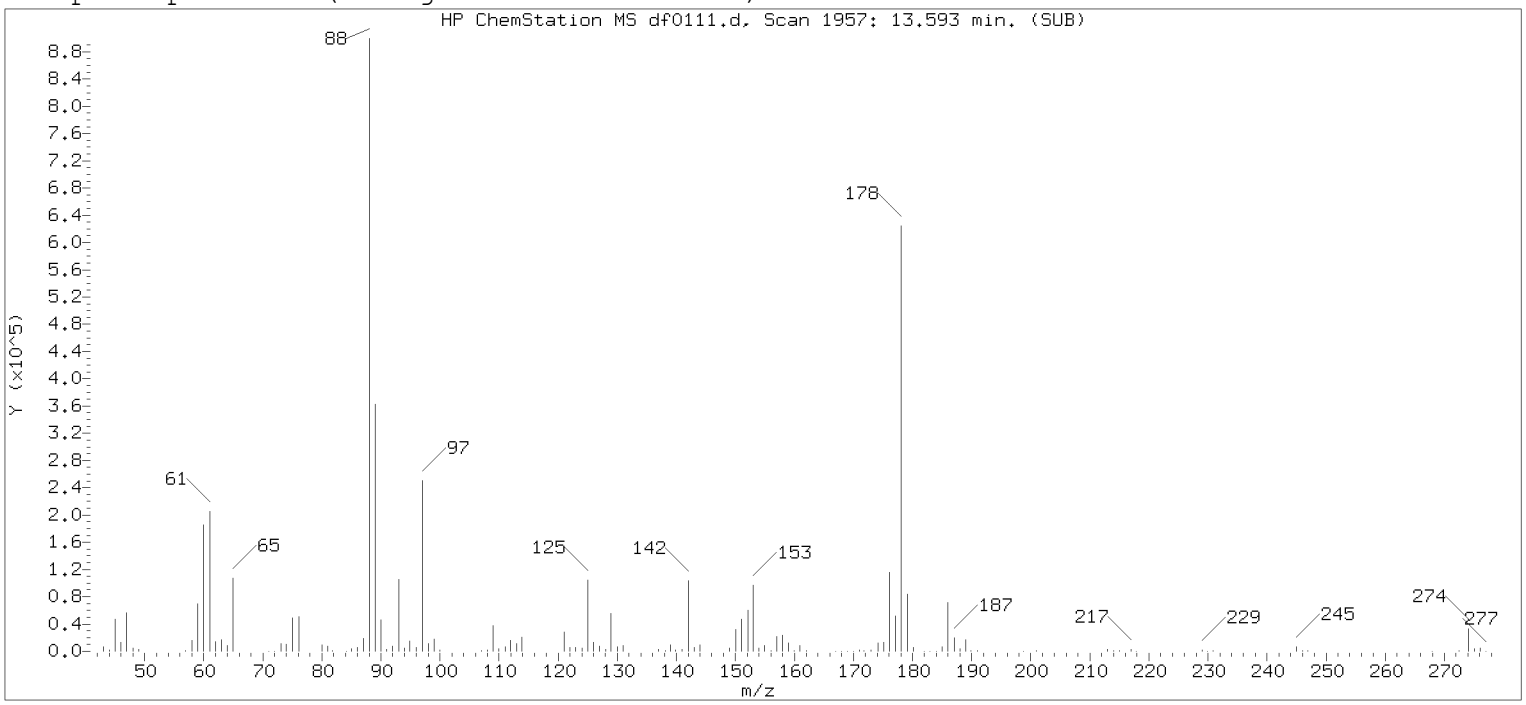
Compound Number : 153
Compound Name : Phenanthrene-d10
Scan Number : 1950
Retention Time (minutes) : 13.553
Quant Ion : 188.00
Area (flag) : 578513A
On-Column Amount (ng/ul) : 5.0000
Integration start scan : 1944 Integration stop scan: 1954
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

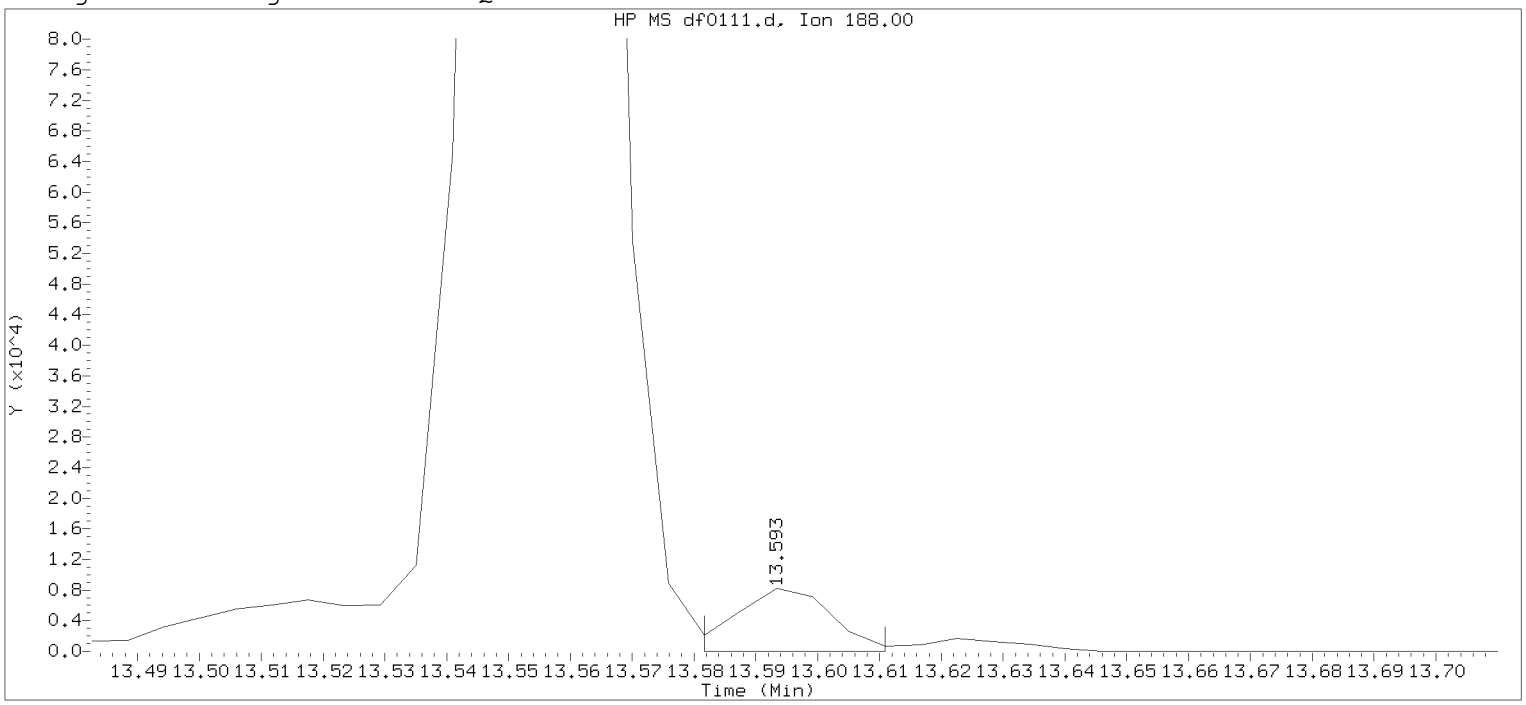
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

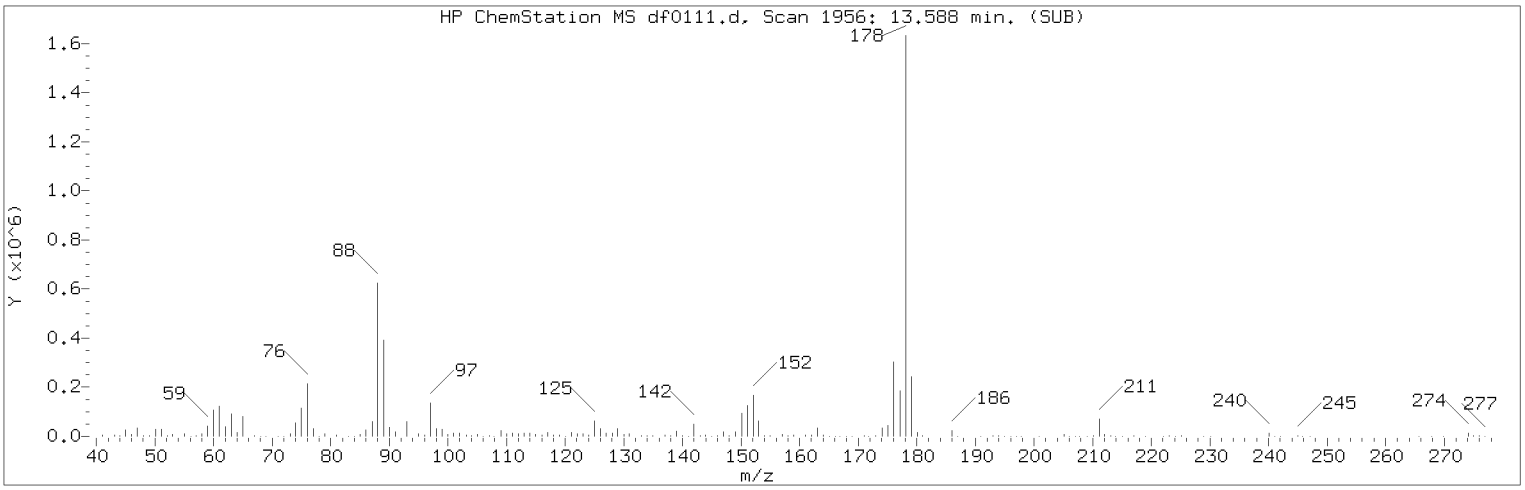
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:36 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

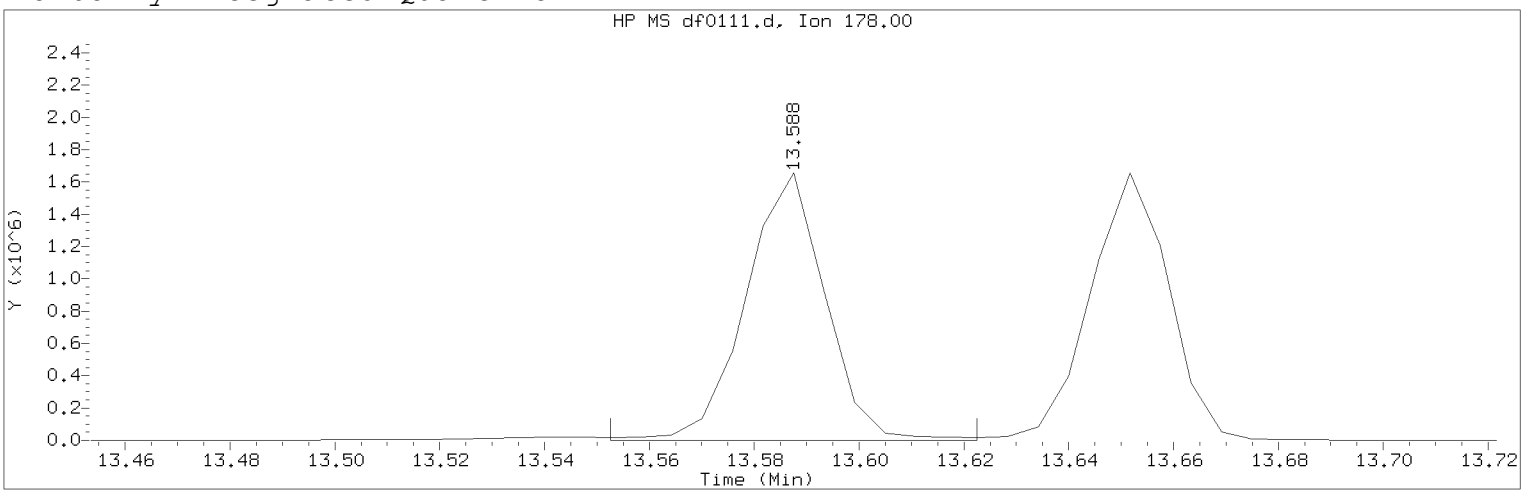
Compound Number	: 153		
Compound Name	: Phenanthrene-d10		
Scan Number	: 1957		
Retention Time (minutes)	: 13.593		
Quant Ion	: 188.00		
Area	: 8615		
On-column Amount (ng/ul)	: 5.0000		
Integration start scan	: 1954	Integration stop scan:	1959
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: EMONBORNE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

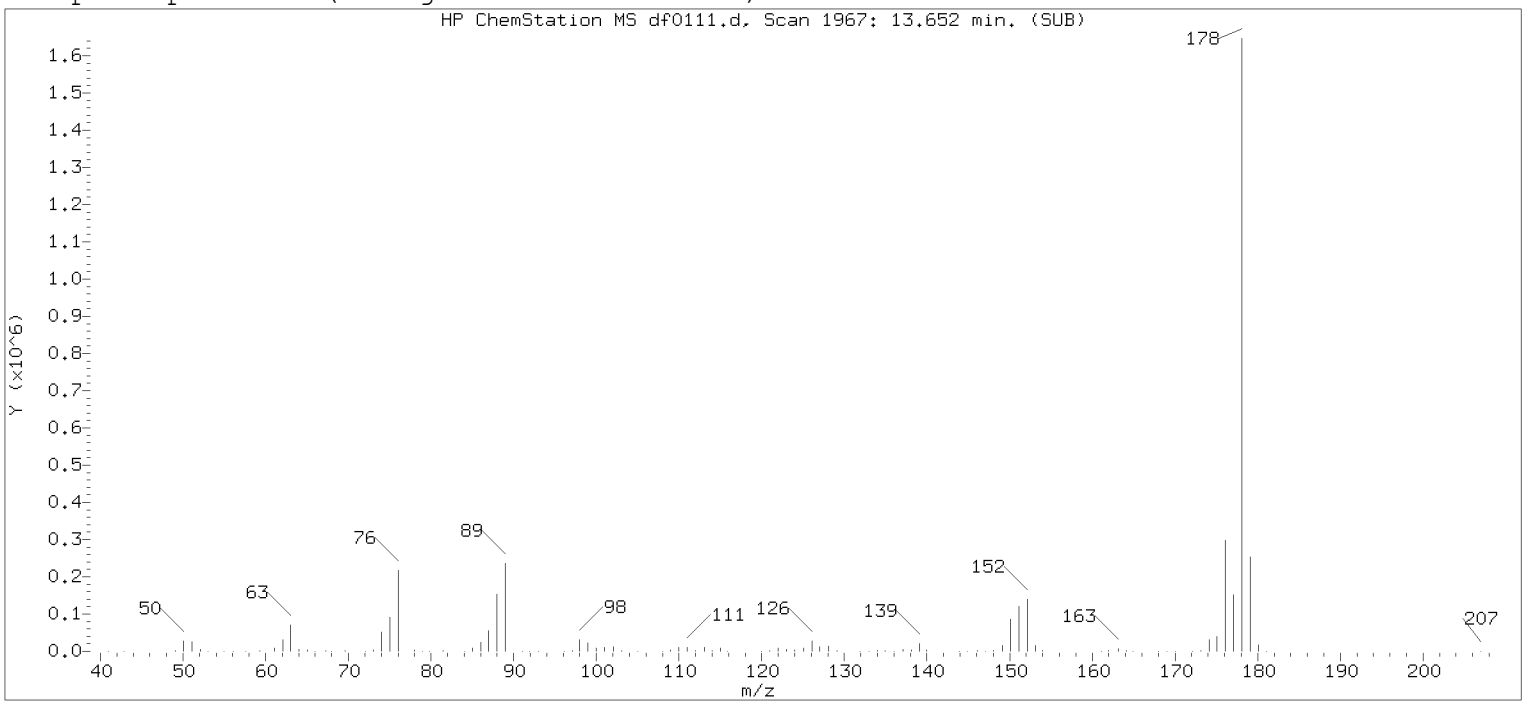
Compound Number : 155
Compound Name : Phenanthrene
Scan Number : 1956
Retention Time (minutes) : 13.588
Quant Ion : 178.00
Area (flag) : 1739204A
On-Column Amount (ng/ul) : 12.8242
Integration start scan : 1949 Integration stop scan: 1961
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

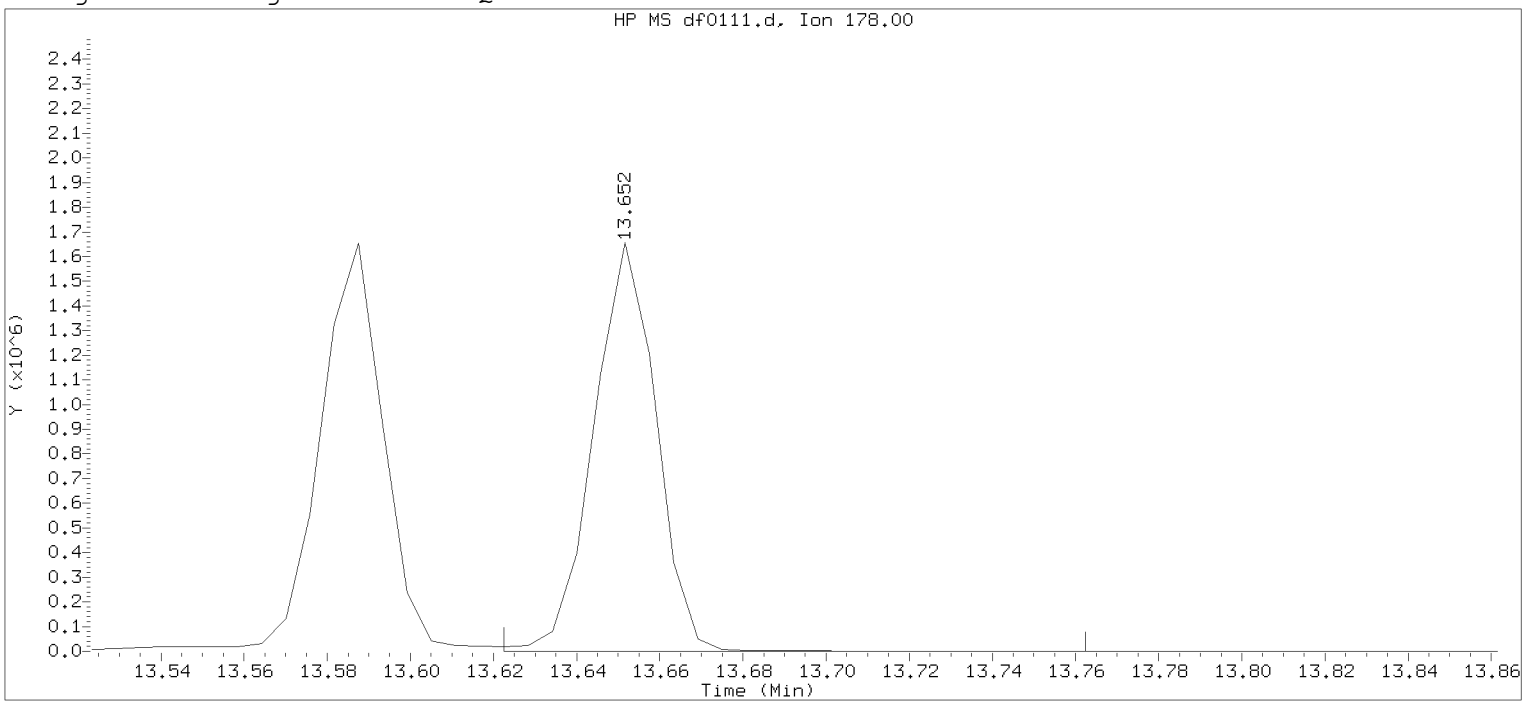
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

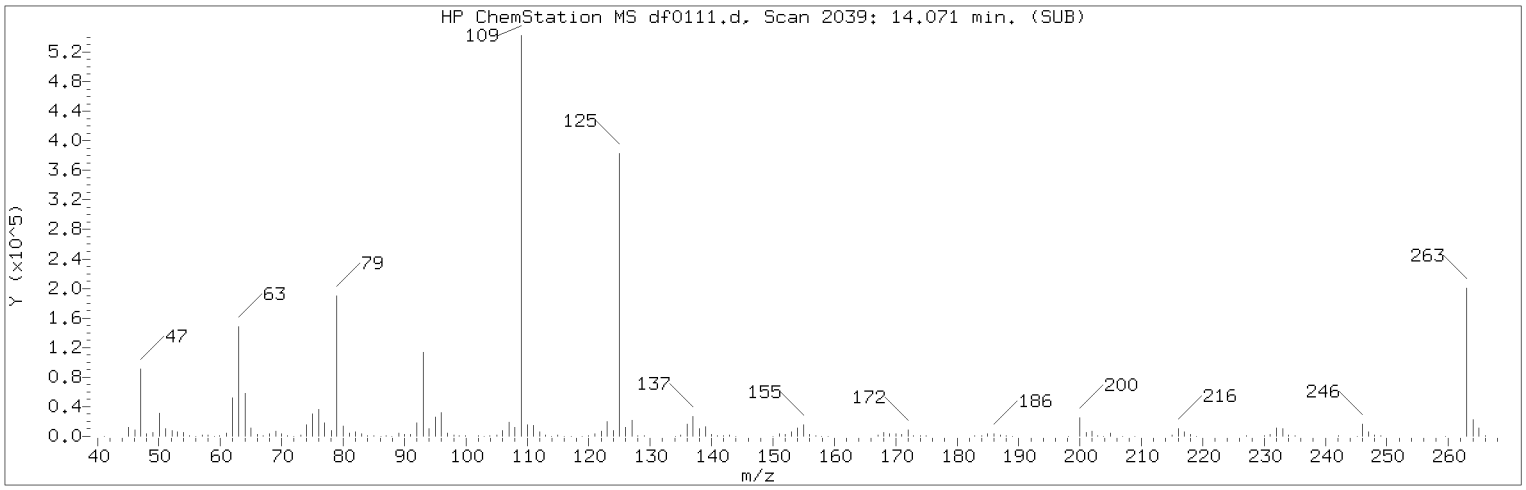
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:36 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

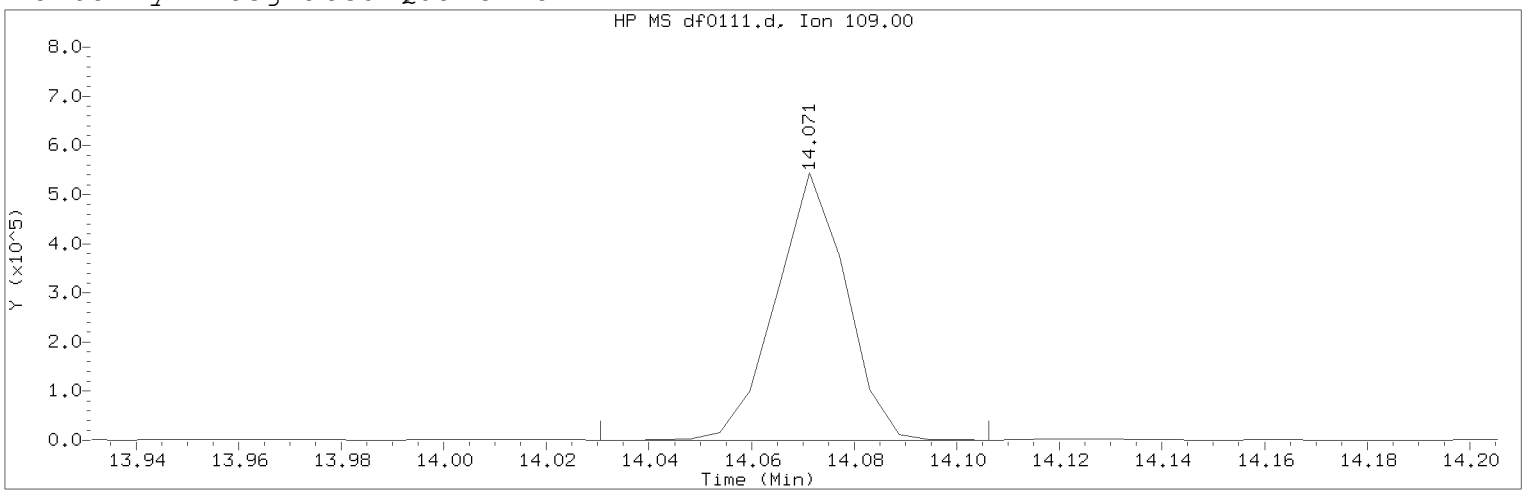
Compound Number	: 155		
Compound Name	: Phenanthrene		
Scan Number	: 1967		
Retention Time (minutes)	: 13.652		
Quant Ion	: 178.00		
Area	: 1725362		
On-column Amount (ng/ul)	: 854.3118		
Integration start scan	: 1961	Integration stop scan:	1985
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: EMON0472

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

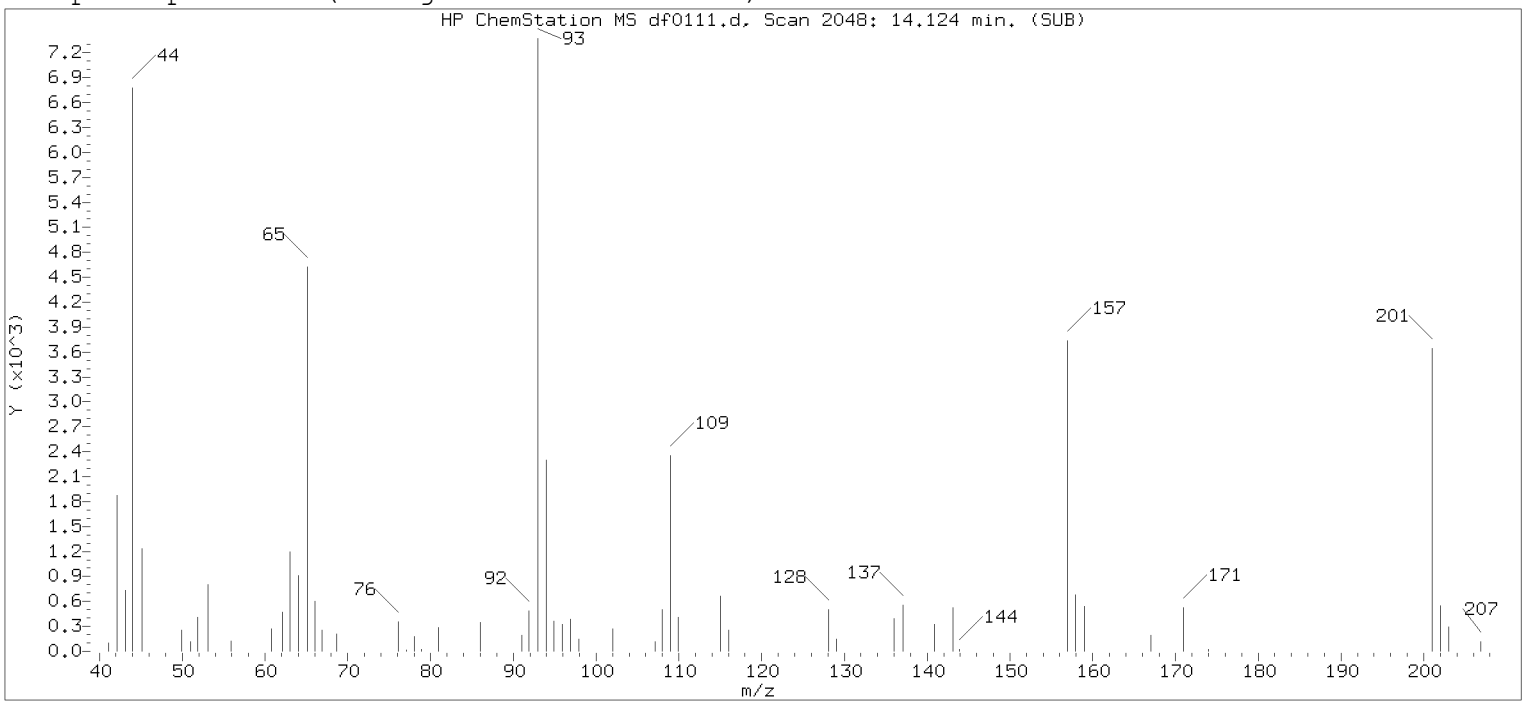
Compound Number : 164
Compound Name : Methyl parathion
Scan Number : 2039
Retention Time (minutes) : 14.071
Quant Ion : 109.00
Area (flag) : 514800A
On-Column Amount (ng/ul) : 13.9649
Integration start scan : 2031 Integration stop scan: 2044
Y at integration start : 279 Y at integration end: 279

Reason for manual integration: improper integration

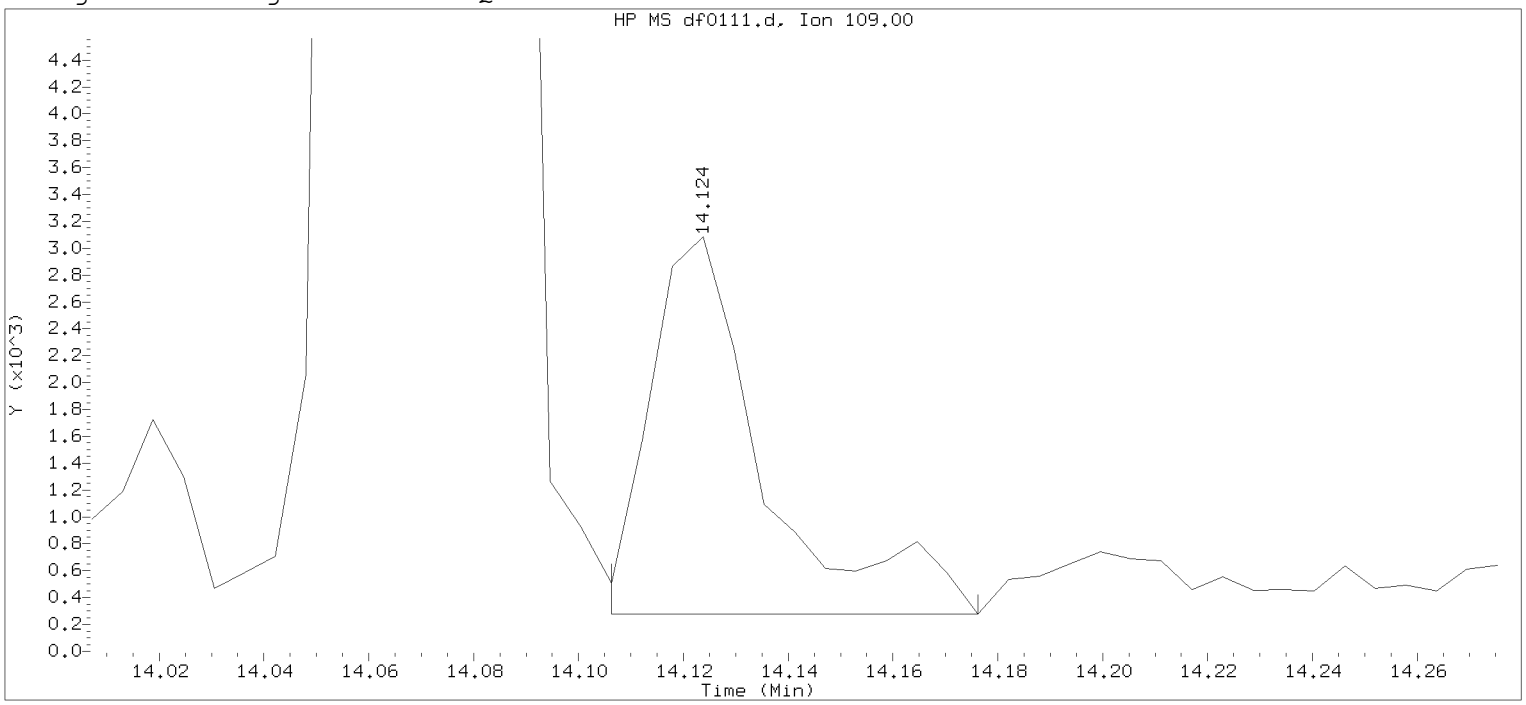
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

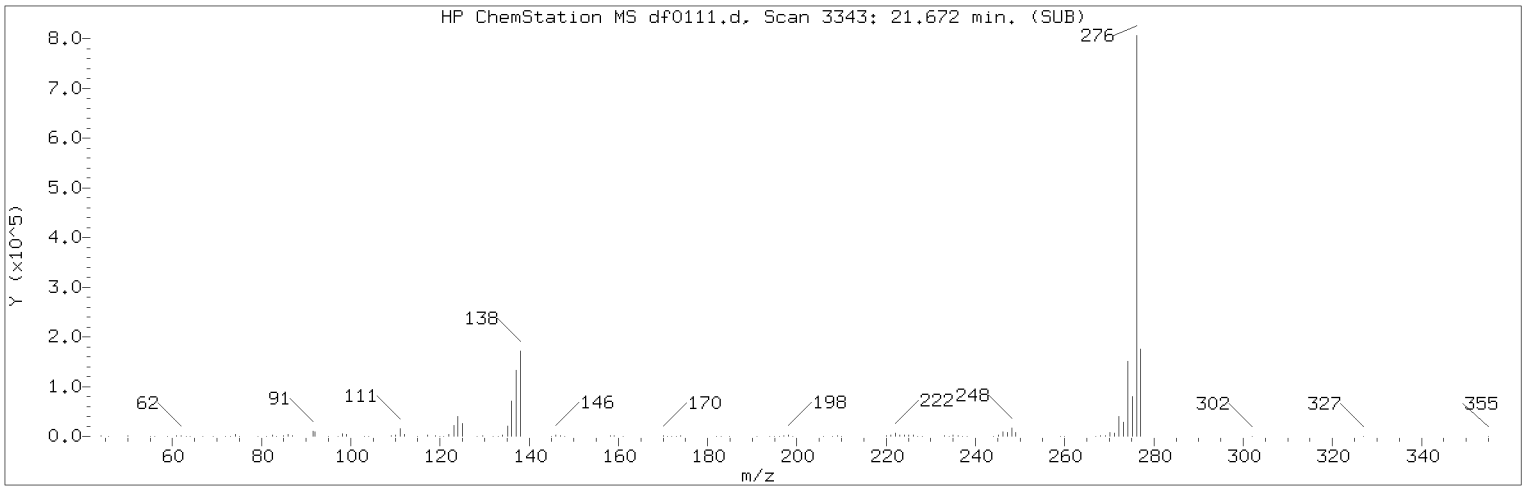
Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:36 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

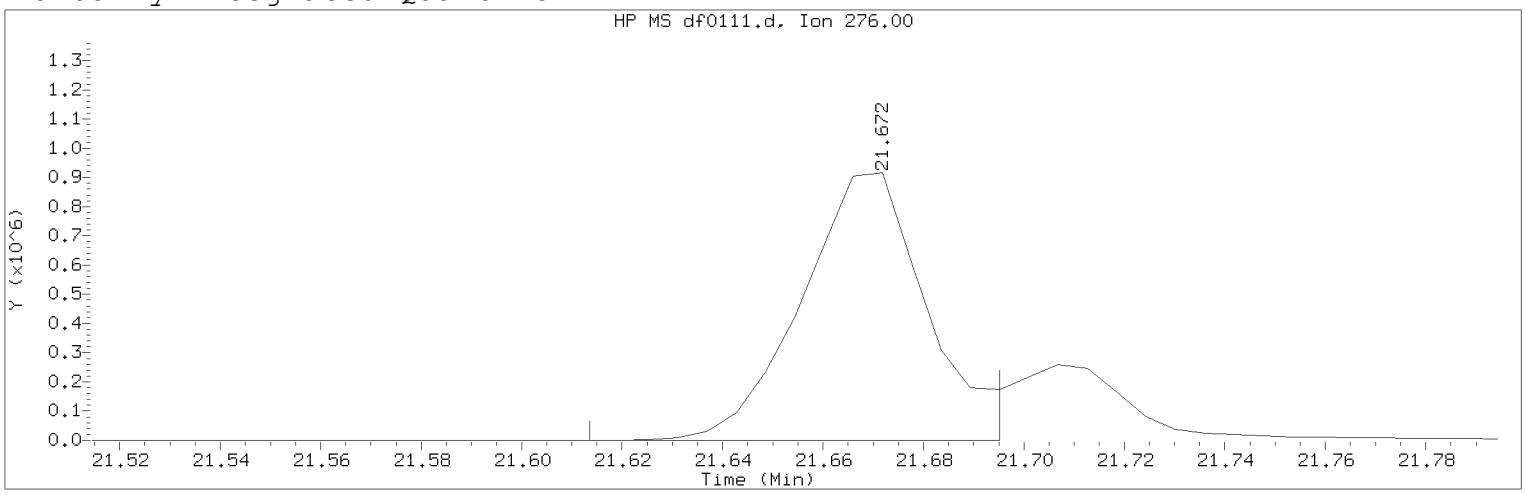
Compound Number	: 164		
Compound Name	: Methyl parathion		
Scan Number	: 2048		
Retention Time (minutes)	: 14.124		
Quant Ion	: 109.00		
Area	: 4228		
On-column Amount (ng/ul)	: 7.7033		
Integration start scan	: 2044	Integration stop scan	: 2056
Y at integration start	: 279	Y at integration end	: 279

Digitally signed by Edward Monborne on 06/05/2018 at 11:42.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:42 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

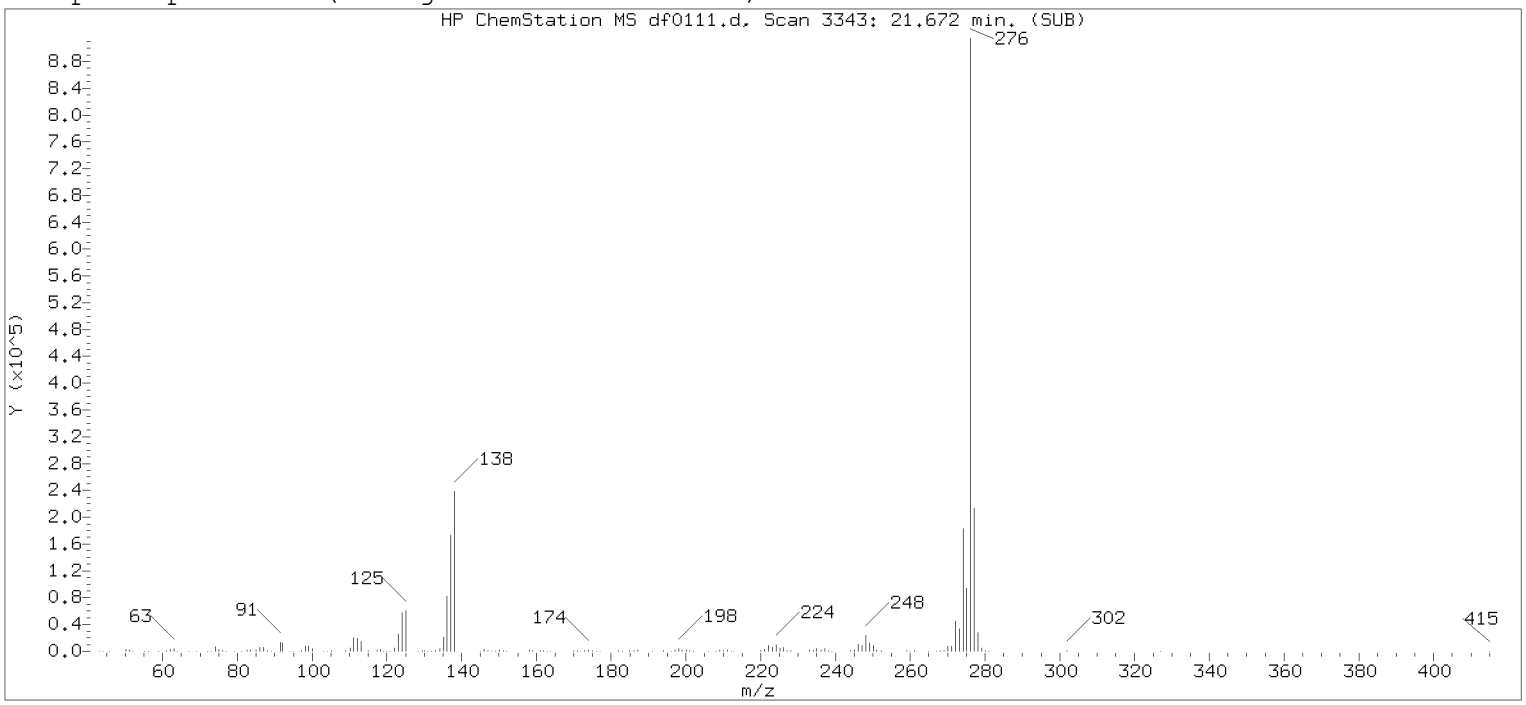
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3343
Retention Time (minutes) : 21.672
Quant Ion : 276.00
Area (flag) : 1589036M
On-Column Amount (ng/ul) : 13.0791
Integration start scan : 3332 Integration stop scan: 3346
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

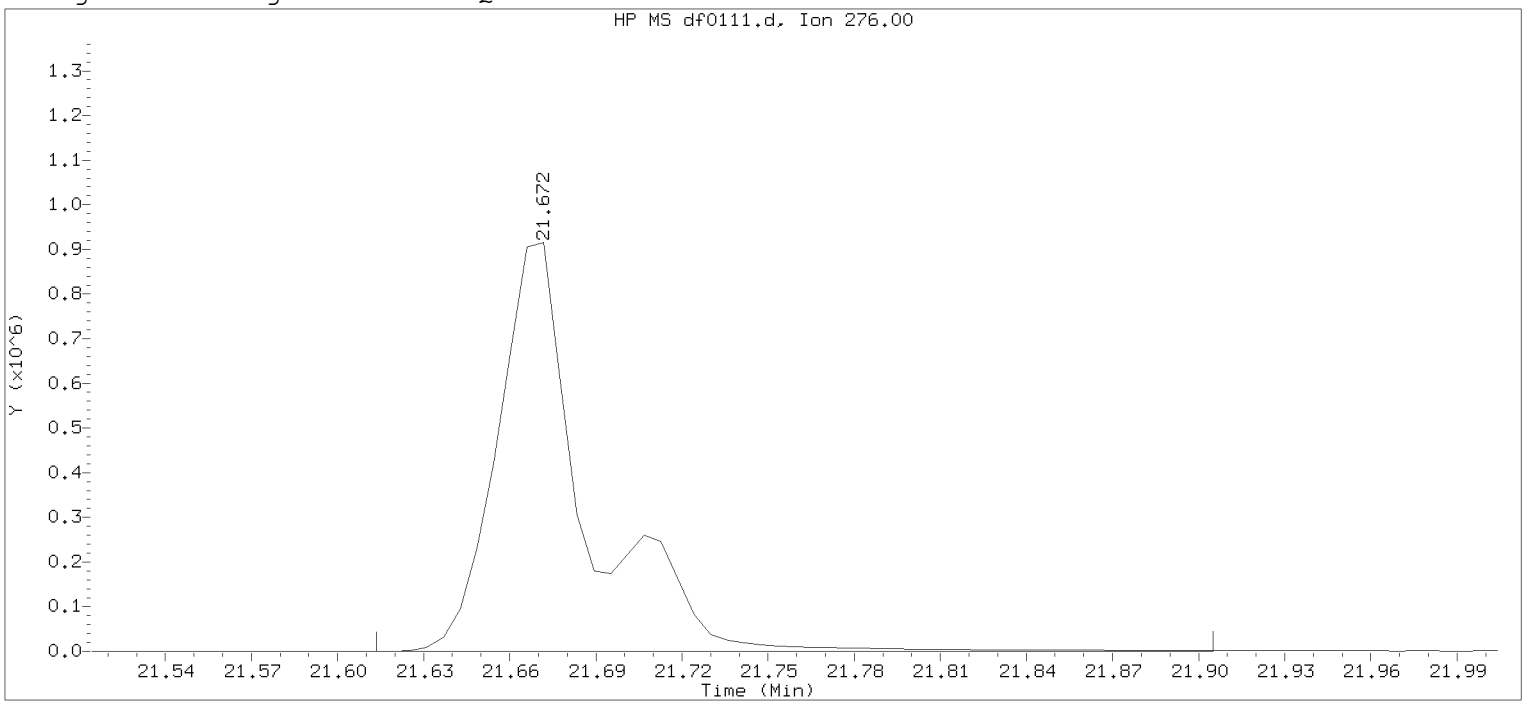
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/05/2018 at 11:42.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 06/06/2018 at 13:43.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



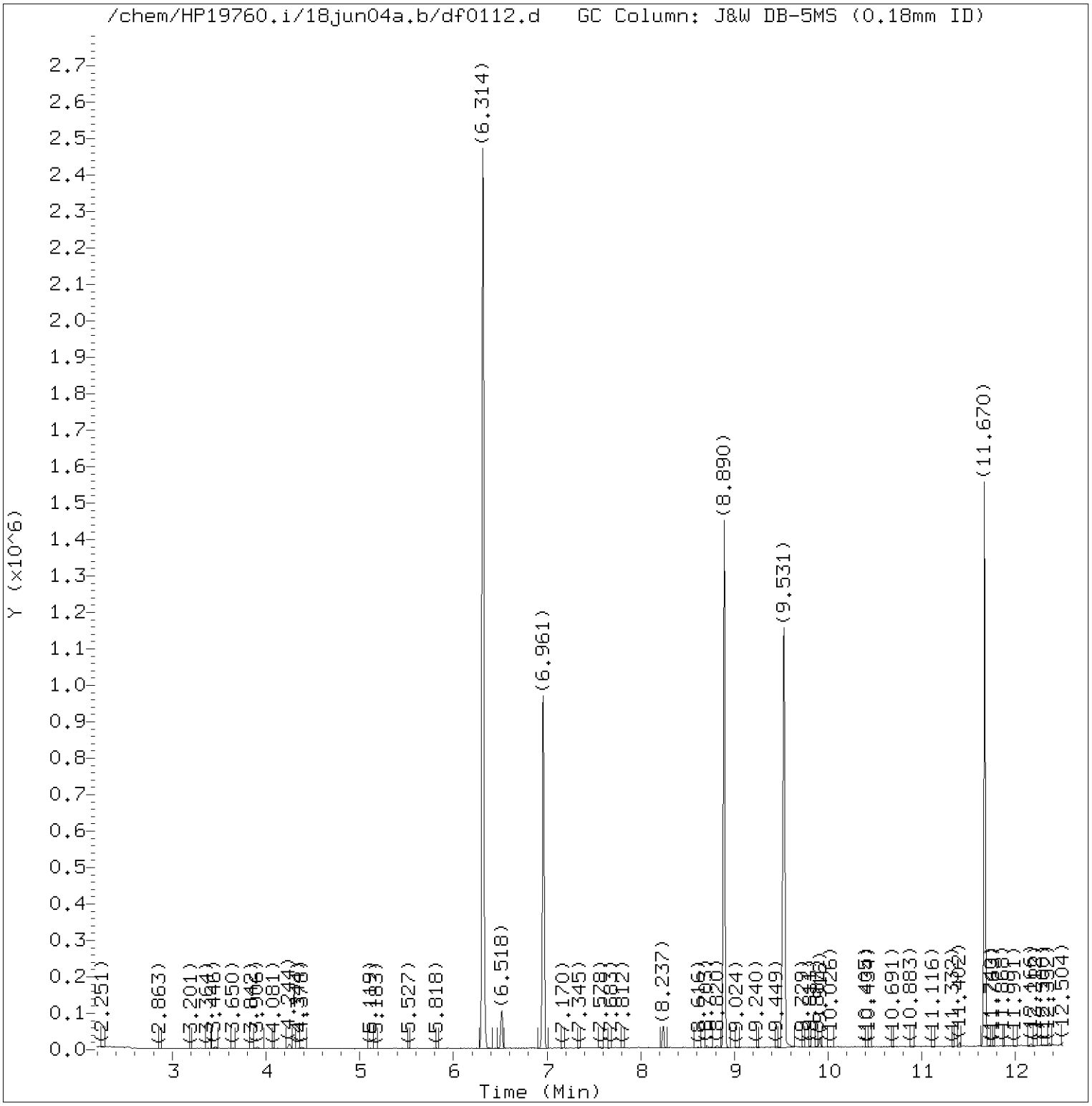
Data File: /chem/HP19760.i/18jun04a.b/df0111.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:25 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 11:36 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvICV1218

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3343		
Retention Time (minutes)	: 21.672		
Quant Ion	: 276.00		
Area	: 2000845		
On-column Amount (ng/ul)	: 16.4686		
Integration start scan	: 3332	Integration stop scan:	3382
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/05/2018 at 11:42.
Target 3.5 esignature user name: [illegible]



Total Ion Chromatogram (TIC)

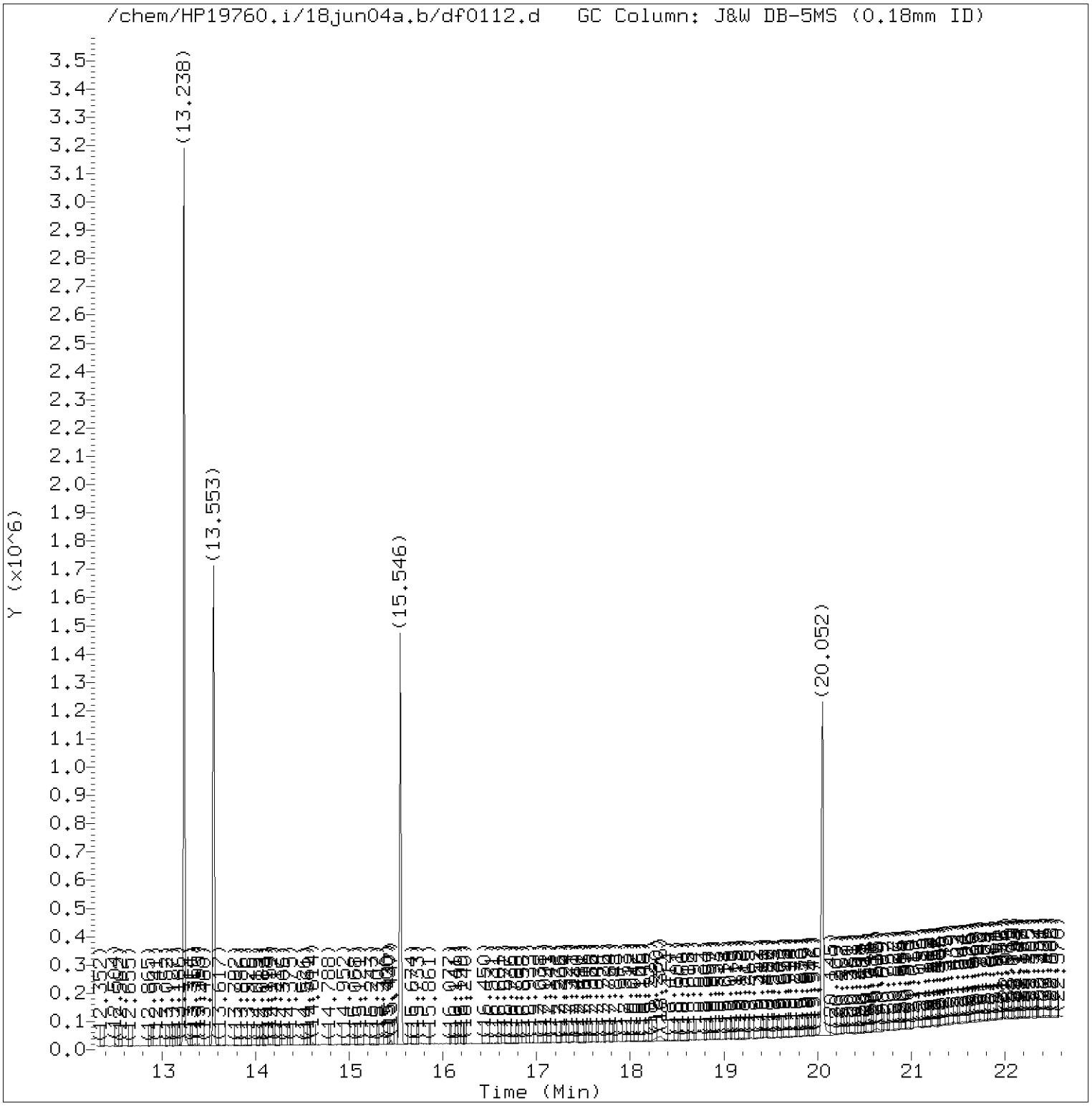
Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0112.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:53 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: basicvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 09:05 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvBASICV1218

Digitally signed by Edward Monborne
on 06/05/2018 at 09:32.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0112.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:53 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: basicvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 09:05 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvBASICV1218

Digitally signed by Edward Monborne
on 06/05/2018 at 09:32.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun04a.b/df0112.d Instrument ID: HP19760.i
Injection date and time: 05-JUN-2018 05:53 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun04a.b/rv8270d.m Sublist used: basicvall1
Calibration date and time: 05-JUN-2018 08:44
Date, time and analyst ID of latest file update: 05-Jun-2018 09:05 em10340

Sample Name: SSTD12.5 Lab Sample ID: rvBASICV1218

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
16) Benzaldehyde	(1)	6.314	77	799205	14.825
25)*1,4-Dichlorobenzene-d4	(1)	6.961	152	199334	5.000
65)*Naphthalene-d8	(2)	8.890	136	741048	5.000
76) Caprolactam	(2)	9.531	113	248180	13.037
113)*Acenaphthene-d10	(3)	11.670	164	334380	5.000
148) Atrazine	(4)	13.238	200	346478	14.002
153)*Phenanthrene-d10	(4)	13.553	188	632491	5.000
175)*Pyrene-d10	(5)	15.546	212	602861	5.000
213)*Perylene-d12	(6)	20.052	264	570033	5.000

* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 06/05/2018 at 09:32.
Target 3.5 esignature user ID: em10340

Data File: /chem/HP19760.i/18jun20.b/df1350y.d

Date : 20-JUN-2018 08:54

Client ID: DFTPP

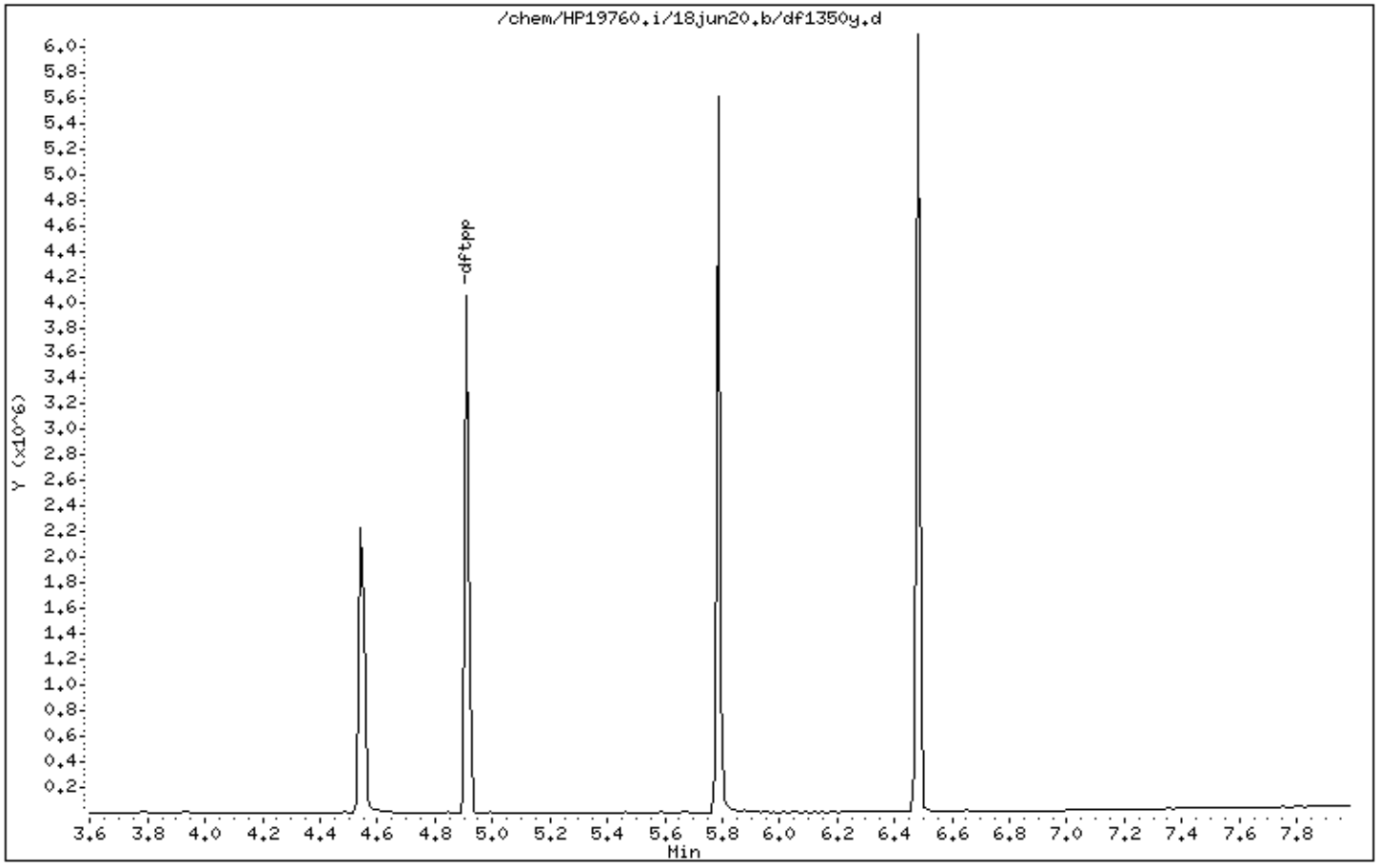
Instrument: HP19760.i

Sample Info: DFTPP;rvDFTPP1598;1;3;DFTPP;

Operator: em10340

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Brandon H. Smith on 06/20/2018 at 10:06.
Target 3.5 esignature user ID: bhs10208

Data File: /chem/HP19760.i/18jun20.b/df1350y.d

Date : 20-JUN-2018 08:54

Client ID: DFTPP

Instrument: HP19760.i

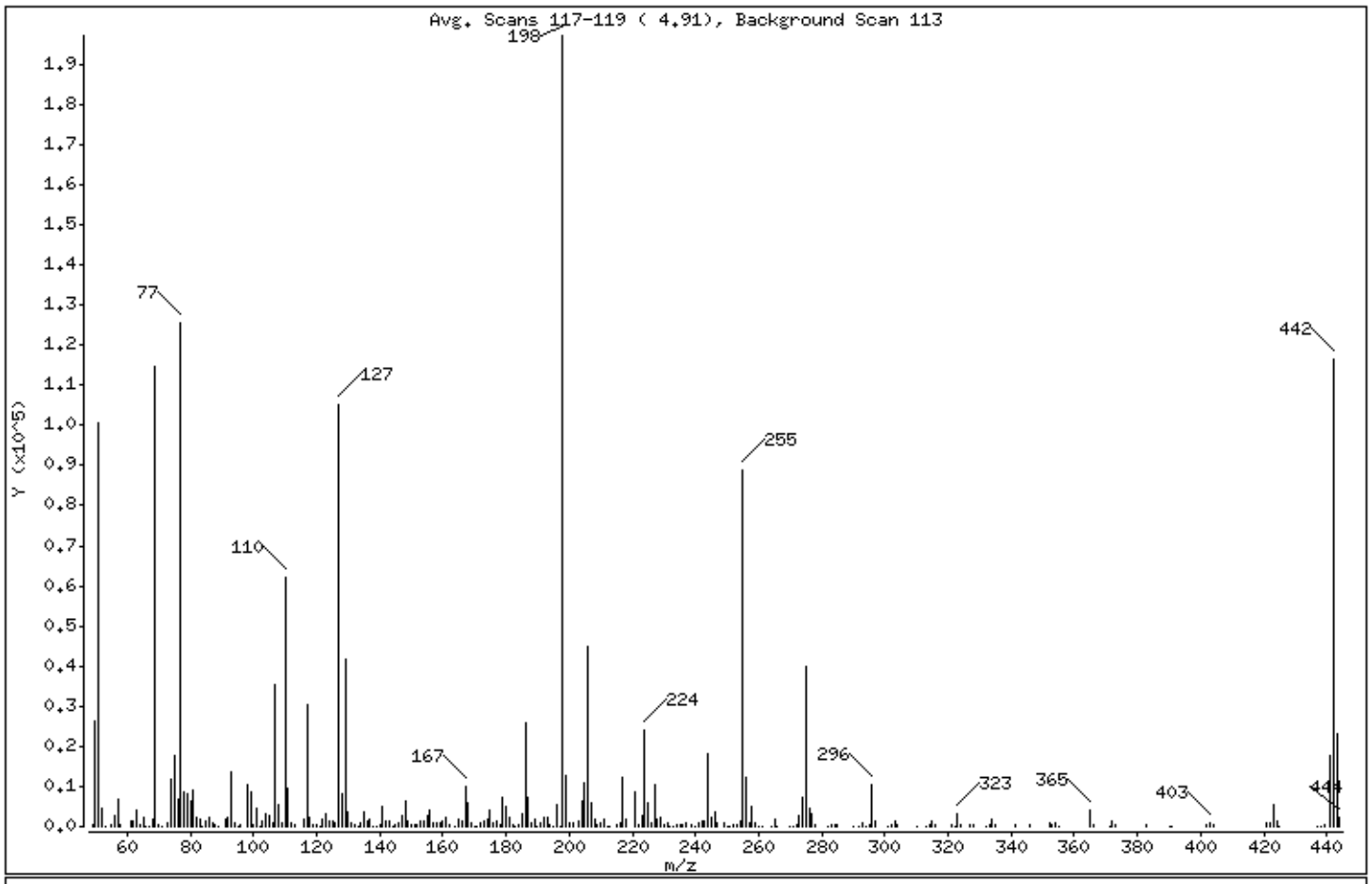
Sample Info: DFTPP;rvDFTPP1598;1;3;DFTPP;

Operator: em10340

Column phase: DB-5MS

Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	51.03
68	Less than 2.00% of mass 69	0.93 (1.59)
69	Mass 69 relative abundance	58.21
70	Less than 2.00% of mass 69	0.29 (0.49)
127	10.00 - 80.00% of mass 198	53.33
197	Less than 2.00% of mass 198	0.04
199	5.00 - 9.00% of mass 198	6.37
275	10.00 - 60.00% of mass 198	20.27
365	Greater than 1.00% of mass 198	2.05
441	0.01 - 24.00% of mass 442	8.91 (15.09)
442	50.00 - 99.99% of mass 198	59.07
443	15.00 - 24.00% of mass 442	11.65 (19.72)

Digitally signed by Brandon H. Smith on 06/20/2018 at 10:06.
Target 3.5 esignature user ID: bhs10208

Date : 20-JUN-2018 08:54

Client ID: DFTPP Instrument: HP19760.i

Sample Info: DFTPP;rvDFTPP1598;1;3;DFTPP;

Operator: em10340

Column phase: DB-5MS Column diameter: 0.18

Data File: df1350y.d
Spectrum: Avg. Scans 117-119 (4.91), Background Scan 113
Location of Maximum: 198.00
Number of points: 269

m/z	Y	m/z	Y	m/z	Y	m/z	Y
49.00	644	125.00	1332	194.00	552	273.00	2754
50.00	26504	126.00	745	195.00	204	274.00	7290
51.00	100608	127.00	105144	196.00	5467	275.00	39968
52.00	4735	128.00	8363	197.00	83	276.00	4730
53.00	83	129.00	41584	198.00	197120	277.00	3205
55.00	497	130.00	3571	199.00	12561	278.00	558
56.00	2882	131.00	739	200.00	1092	282.00	107
57.00	6799	132.00	324	201.00	796	283.00	268
58.00	270	133.00	145	203.00	1463	284.00	233
61.00	1157	134.00	1126	204.00	6509	285.00	515
62.00	1525	135.00	3495	205.00	11011	290.00	95
63.00	4042	136.00	1182	206.00	44784	292.00	107
64.00	635	137.00	1799	207.00	5988	293.00	737
65.00	2115	138.00	157	208.00	1595	294.00	166
66.00	107	139.00	193	209.00	639	295.00	308
67.00	191	140.00	390	210.00	707	296.00	10250
68.00	1828	141.00	4826	211.00	1760	297.00	1391
69.00	114776	142.00	1447	212.00	201	301.00	89
70.00	564	143.00	1244	213.00	169	302.00	274
71.00	94	144.00	182	215.00	528	303.00	1355
73.00	856	145.00	248	216.00	1036	304.00	389
74.00	11811	146.00	815	217.00	12172	310.00	93
75.00	17712	147.00	2685	218.00	1742	313.00	92
76.00	6608	148.00	6553	221.00	8701	314.00	529
77.00	125640	149.00	1299	222.00	376	315.00	1182
78.00	8761	150.00	330	223.00	2839	316.00	585
79.00	8006	151.00	559	224.00	23928	321.00	354
80.00	6451	152.00	326	225.00	6088	322.00	118
81.00	8897	153.00	1516	226.00	740	323.00	3355
82.00	2183	154.00	1223	227.00	10244	324.00	550
83.00	1928	155.00	2885	228.00	1611	327.00	566
84.00	212	156.00	3900	229.00	2153	328.00	286
85.00	1342	157.00	754	230.00	394	332.00	224
86.00	2392	158.00	795	231.00	843	333.00	332
87.00	1079	159.00	703	232.00	96	334.00	1888

Date : 20-JUN-2018 08:54

Client ID: DFTPP Instrument: HP19760.i

Sample Info: DFTPP;rvDFTPP1598;1;3;DFTPP;

Operator: em10340

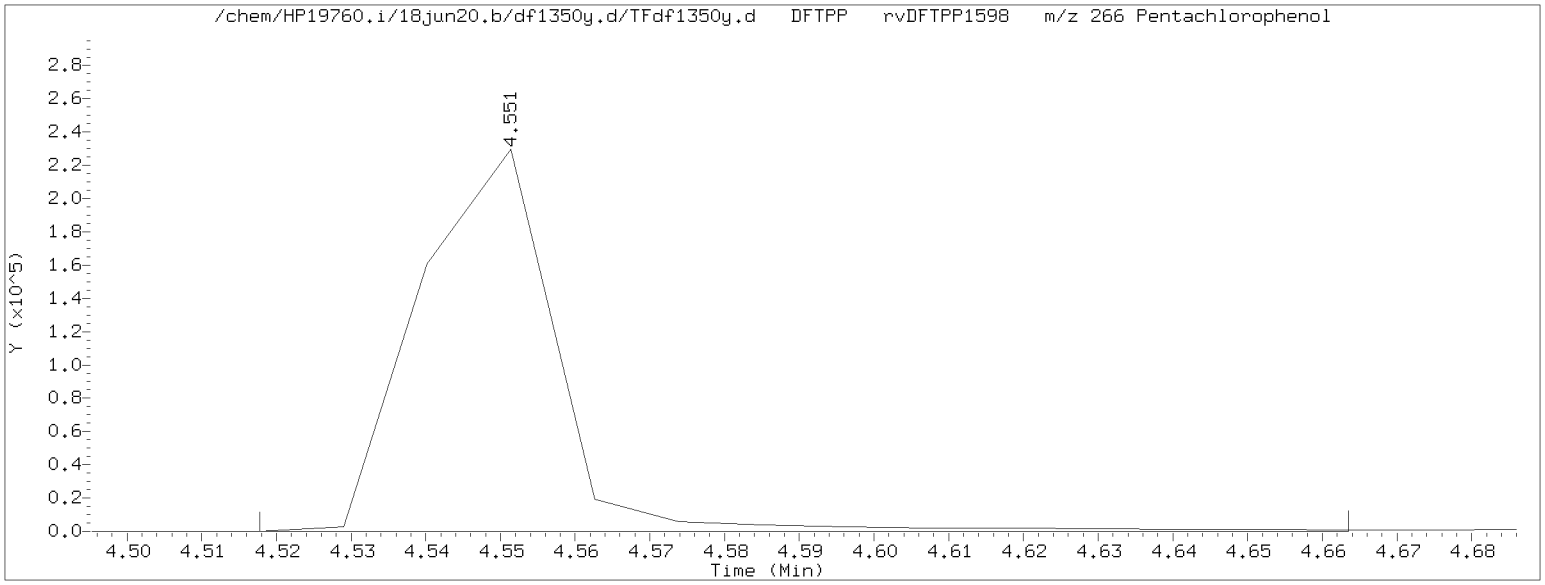
Column phase: DB-5MS Column diameter: 0.18

Data File: df1350y.d
Spectrum: Avg. Scans 117-119 (4.91), Background Scan 113
Location of Maximum: 198.00
Number of points: 269

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	365	160.00	1494	233.00	96	335.00	632
89.00	139	161.00	2322	234.00	652	341.00	379
91.00	1900	162.00	618	235.00	674	346.00	665
92.00	2054	164.00	201	236.00	604	352.00	1019
93.00	13554	165.00	1780	237.00	700	353.00	664
94.00	919	166.00	1488	239.00	387	354.00	948
95.00	167	167.00	10079	240.00	189	355.00	111
96.00	531	168.00	6054	241.00	708	365.00	4043
98.00	10388	169.00	1002	242.00	1381	366.00	517
99.00	8764	170.00	158	243.00	1327	371.00	219
100.00	666	171.00	209	244.00	18192	372.00	1379
101.00	4621	172.00	817	245.00	2333	373.00	365
102.00	200	173.00	1219	246.00	3762	383.00	424
103.00	1406	174.00	1767	247.00	778	390.00	105
104.00	2953	175.00	3955	249.00	796	391.00	98
105.00	2710	176.00	1105	250.00	96	402.00	524
106.00	1118	177.00	1569	251.00	204	403.00	778
107.00	35496	178.00	506	252.00	236	404.00	404
108.00	5283	179.00	7298	253.00	552	421.00	820
109.00	1102	180.00	4895	254.00	1251	422.00	897
110.00	61976	181.00	2114	255.00	88832	423.00	5587
111.00	9610	182.00	362	256.00	12318	424.00	1376
112.00	860	183.00	216	257.00	1011	425.00	107
113.00	379	184.00	514	258.00	5028	437.00	107
116.00	1731	185.00	3077	259.00	852	438.00	162
117.00	30504	186.00	25920	260.00	96	439.00	657
118.00	2410	187.00	7049	261.00	94	441.00	17568
119.00	241	188.00	842	264.00	113	442.00	116456
120.00	325	189.00	1618	265.00	1998	443.00	22968
121.00	123	190.00	209	266.00	169	444.00	2107
122.00	1946	191.00	744	270.00	87		
123.00	3261	192.00	2122	271.00	117		
124.00	1328	193.00	2372	272.00	370		

Assessment of GC Column Performance and Injection Port Inertness for

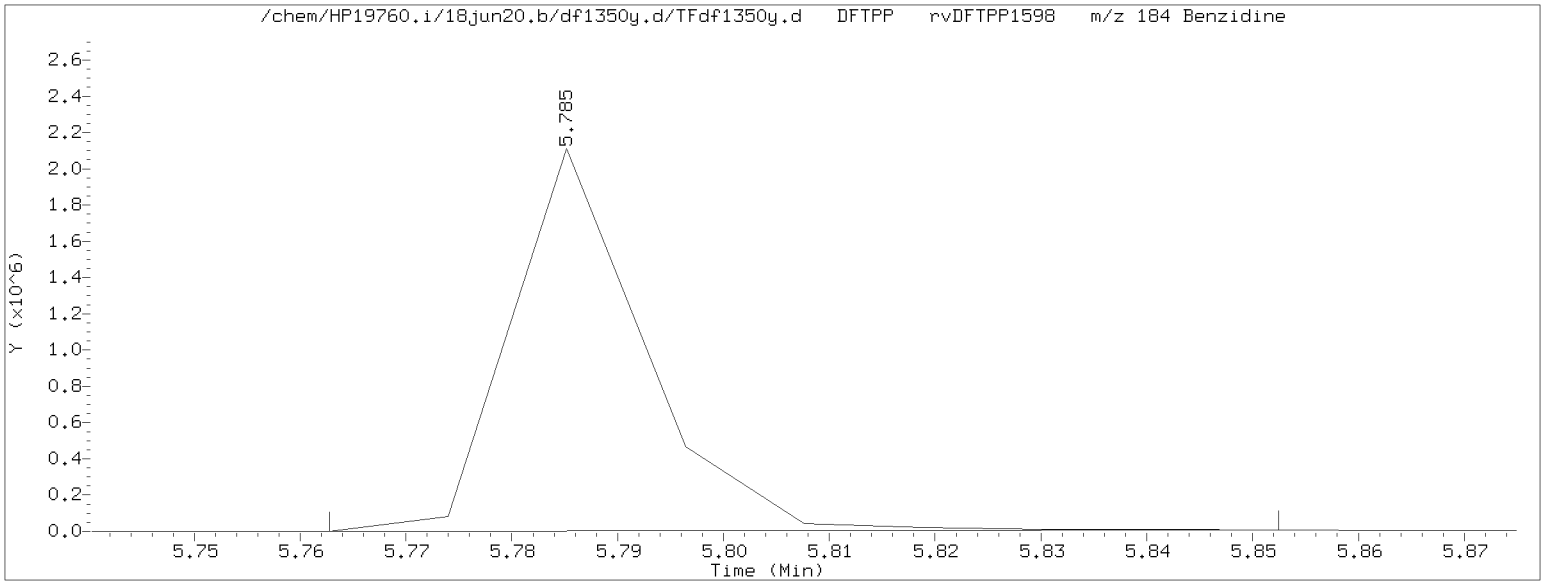
Instrument ID: HP19760.i Injection Date: 20-JUN-2018 08:54 Operator: em10340



Pentachlorophenol EICP peak height = 229760 EICP peak height at 10% = 22976 Pentachlorophenol EICP area = 291394

Pentachlorophenol EICP peak apex (min.) = 4.551
RT at 5% of front half of EICP (min.) = 4.530 'Front' peak width (min.) = 0.0218000000
RT at 5% of back half of EICP (min.) = 4.569 'Tailing' peak width (min.) = 0.0175833333

$$\text{PCP tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0175833333}{0.0218000000} = 0.807$$



Benzidine EICP peak height = 2108815 EICP peak height at 10% = 210882 Benzidine EICP area = 1828785

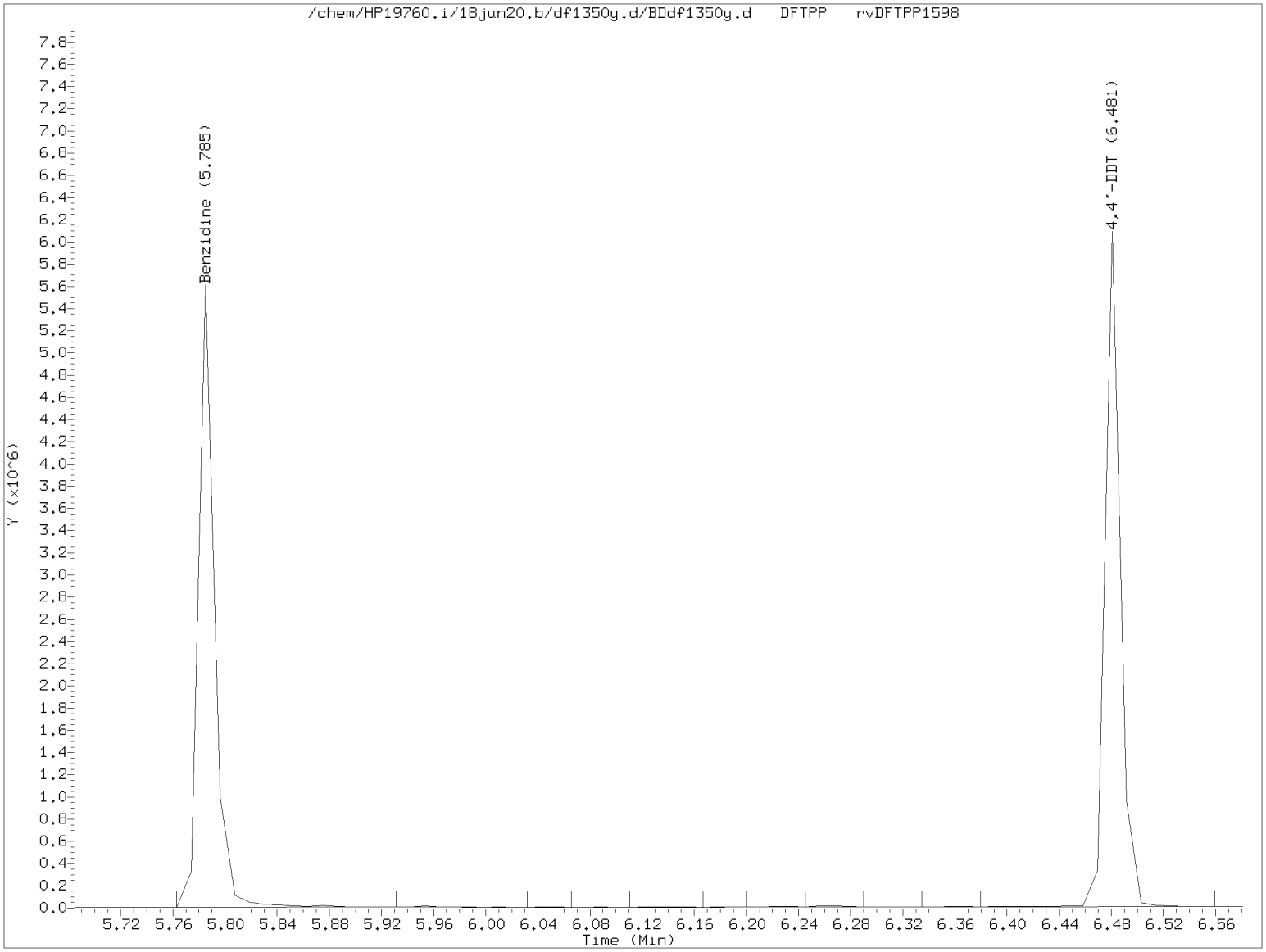
Benzidine EICP peak apex (min.) = 5.785
RT at 10% of front half of EICP (min.) = 5.775 'Front' peak width (min.) = 0.0104833333
RT at 10% of back half of EICP (min.) = 5.803 'Tailing' peak width (min.) = 0.0179333333

$$\text{Benzidine tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0179333333}{0.0104833333} = 1.711$$

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51. PARALLAX ID: reb00745

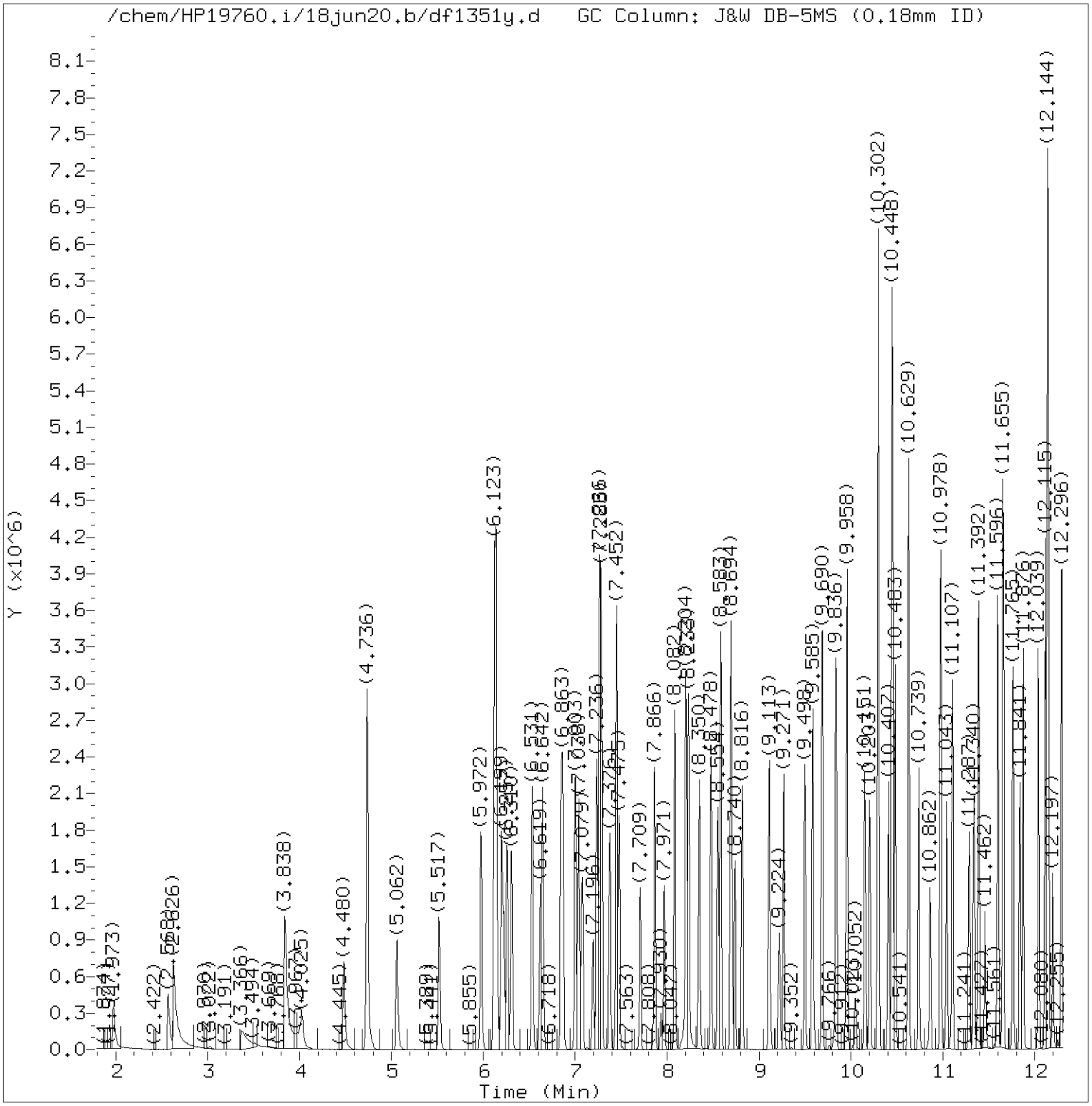
Assessment of GC Column Performance and Injection Port Inertness for

Instrument ID: HP19760.i Injection Date: 20-JUN-2018 08:54 Operator: em10340



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{0 + 0}{0 + 0 + 5013052} \times 100 = 0.0$$



Total Ion Chromatogram (TIC)

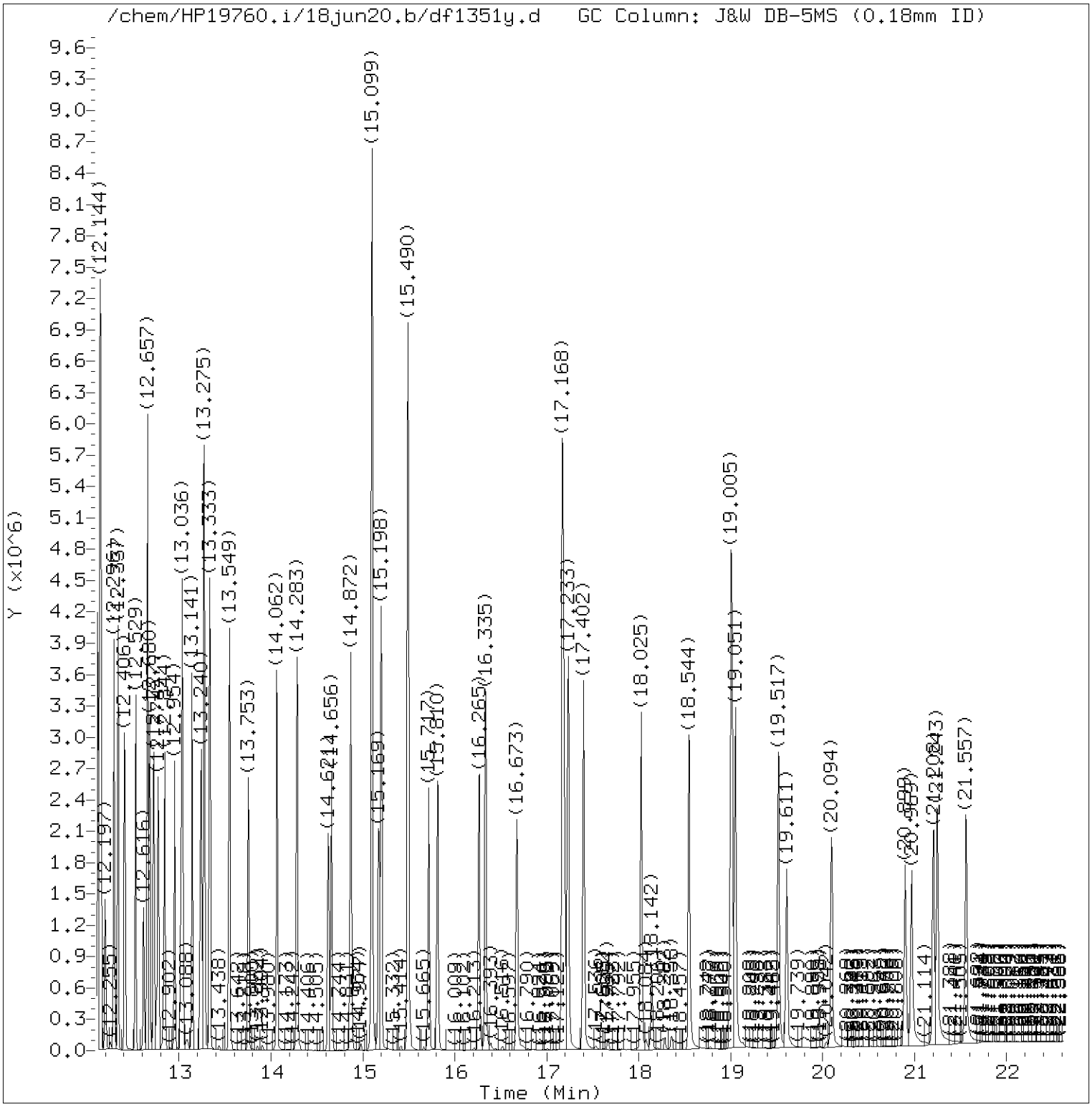
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1351y.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 09:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 09:44
Date, time and analyst ID of latest file update: 20-Jun-2018 09:44 bhs10208

Sample Name: SSTD7.5 Lab Sample ID: rvSTD1628

Digitally signed by Brandon H. Smith
on 06/20/2018 at 09:47.
Target 3.5 esignature user ID: bhs10208



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1351y.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 09:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 09:44
Date, time and analyst ID of latest file update: 20-Jun-2018 09:44 bhs10208

Sample Name: SSTD7.5 Lab Sample ID: rvSTD1628

Digitally signed by Brandon H. Smith
on 06/20/2018 at 09:47.
Target 3.5 esignature user ID: bhs10208

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1351y.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 09:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 09:44
Date, time and analyst ID of latest file update: 20-Jun-2018 09:44 bhs10208

Sample Name: SSTD7.5 Lab Sample ID: rvSTD1628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	1.973	88	325651	7.765
4) N-Nitrosodimethylamine	(1)	2.568	74	487363	7.718
5) Pyridine	(1)	2.626	79	799790	7.410
7) 2-Picoline	(1)	3.838	93	871655	7.546
8) N-Nitrosomethylethylamine	(1)	4.025	88	381206	7.552
9) Methyl methanesulfonate	(1)	4.480	80	439469	7.788
11)$2-Fluorophenol	(1)	4.736	112	1396718	15.736
13) N-Nitrosodiethylamine	(1)	5.062	102	366216	7.808
15) Ethyl methanesulfonate	(1)	5.517	109	352176	7.735
42) Total Cresols	(1)			1420893	16.118
16) Benzaldehyde	(1)	5.972	77	605229	8.315
17)$Phenol-d6	(1)	6.123	99	1897336	16.125
18) Phenol	(1)	6.141	94	1055107	7.684
19) Aniline	(1)	6.141	93	1232870	7.741
20) a-methylstyrene	(1)	6.222	118	261289	7.940
22) bis(2-Chloroethyl)ether	(1)	6.257	93	790980	7.794
23) 2-Chlorophenol	(1)	6.310	128	647608	8.238
24) 1,3-Dichlorobenzene	(1)	6.531	146	677654	8.219
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	269123	5.000
26) 1,4-Dichlorobenzene	(1)	6.648	146	686368	8.187
27) Benzyl alcohol	(1)	6.846	108	440122	7.503
28) 1,2-Dichlorobenzene	(1)	6.863	146	647251	8.196
30) Indene	(1)	7.003	115	974826	7.676
31) 2-Methylphenol	(1)	7.038	108	658215	7.895
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	45	873880	8.449
34) bis(2-Chloroisopropyl)ether	(1)	7.079	45	873880	8.449
35) N-Nitrosopyrrolidine	(1)	7.196	100	375696	7.657
36) Acetophenone	(1)	7.236	105	899243	7.460
39) N-Nitrosomorpholine	(1)	7.260	56	434993	8.108
38) N-Nitroso-di-n-propylamine	(1)	7.260	70	570248	7.997
37) 4-Methylphenol	(1)	7.277	108	762678	8.206
40) o-Toluidine	(1)	7.289	106	1160166	7.986
43) Hexachloroethane	(1)	7.376	117	309253	8.139
97) Isosafrole	(3)			479053	7.278
44)$Nitrobenzene-d5	(2)	7.452	82	1670386	15.264
45) Nitrobenzene	(2)	7.475	77	841994	7.833
48) N-Nitrosopiperidine	(2)	7.709	114	335135	7.392
50) Isophorone	(2)	7.866	82	1405288	7.489
51) 2-Nitrophenol	(2)	7.971	139	315393	7.790
120) 2,4_2,6-Dinitrotoluenes	(3)			647974	16.663

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Brandon H. Smith
on 06/20/2018 at 09:47.
Target 3.5 esignature user ID: bhs10208

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1351y.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 09:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 09:44
Date, time and analyst ID of latest file update: 20-Jun-2018 09:44 bhs10208

Sample Name: SSTD7.5 Lab Sample ID: rvSTD1628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.082	107	689378	7.506
57) O,O,O-Triethylphosphorothioate	(2)	8.204	198	283732	7.858
55) bis(2-Chloroethoxy)methane	(2)	8.233	93	920447	7.603
56) Benzoic acid	(2)	8.245	105	587454	8.840
60) 2,4-Dichlorophenol	(2)	8.350	162	490789	8.092
62) 1,2,4-Trichlorobenzene	(2)	8.478	180	518383	7.974
65)*Naphthalene-d8	(2)	8.554	136	1050678	5.000
66) Naphthalene	(2)	8.583	128	1851694	7.942
67) 4-Chloroaniline	(2)	8.694	127	754357	7.716
68) 2,6-Dichlorophenol	(2)	8.699	162	482519	7.976
69) Hexachloropropene	(2)	8.740	213	294465	6.933
146) Diallate trans/cis	(4)			708342	7.927
71) Hexachlorobutadiene	(2)	8.816	225	275984	7.533
75) Quinoline	(2)	9.113	129	1125658	8.015
76) Caprolactam	(2)	9.224	113	192916	7.148
77) N-Nitrosodi-n-butylamine	(2)	9.271	84	518927	6.952
80) 4-Chloro-3-methylphenol	(2)	9.498	107	584418	7.613
82) Safrole	(2)	9.585	162	456895	7.907
83) 2-Methylnaphthalene	(2)	9.690	142	1209460	8.162
84) 1-Methylnaphthalene	(2)	9.836	142	1101884	8.242
85) Hexachlorocyclopentadiene	(3)	9.958	237	252329	6.996
86) 1,2,4,5-Tetrachlorobenzene	(3)	9.958	216	495739	7.564
88) cis-Isosafrole	(3)	10.052	162	76779	1.266
90) 2,4,6-Trichlorophenol	(3)	10.151	196	322102	7.593
92) 2,4,5-Trichlorophenol	(3)	10.203	196	333909	7.797
93)$2-Fluorobiphenyl	(3)	10.302	172	2454657	15.295
94) trans-Isosafrole	(3)	10.407	162	402274	6.015
95) 1,1'-Biphenyl	(3)	10.448	154	1321356	7.635
96) 2-Chloronaphthalene	(3)	10.454	162	1145597	8.245
98) 1-Chloronaphthalene	(3)	10.483	162	976365	7.818
100) 2-Nitroaniline	(3)	10.629	138	357734	7.846
99) Diphenyl ether	(3)	10.629	170	746660	7.779
104) 1,4-Naphthoquinone	(3)	10.739	158	423478	7.811
105) 1,4-Dinitrobenzene	(3)	10.862	168	183987	7.414
106) Dimethylphthalate	(3)	10.978	163	1156739	8.131
107) 1,3-Dinitrobenzene	(3)	10.978	168	213285	7.653
108) 2,6-Dinitrotoluene	(3)	11.043	165	277906	8.311
109) Acenaphthylene	(3)	11.107	152	1534674	7.681
112) 3-Nitroaniline	(3)	11.287	138	307014	7.966
113)*Acenaphthene-d10	(3)	11.340	164	498379	5.000

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$ = Compound is a surrogate standard.

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on 06/20/2018 at 09:47.
Target 3.5 esignature user ID: bhs10208

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1351y.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 09:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 09:44
Date, time and analyst ID of latest file update: 20-Jun-2018 09:44 bhs10208

Sample Name: SSTD7.5 Lab Sample ID: rvSTD1628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.392	153	1083033	7.988
115) 2,4-Dinitrophenol	(3)	11.462	184	174076M	7.485
116) 4-Nitrophenol	(3)	11.596	109	204472	7.041
117) Pentachlorobenzene	(3)	11.596	250	404595	7.510
119) Dibenzofuran	(3)	11.655	168	1472280	7.667
118) 2,4-Dinitrotoluene	(3)	11.660	165	370068	8.126
121) 1-Naphthylamine	(3)	11.765	143	1143659	7.874
122) 2,3,4,6-Tetrachlorophenol	(3)	11.841	232	258078	7.180
123) 2-Naphthylamine	(3)	11.876	143	1116510	7.934
124) Diethylphthalate	(3)	12.039	149	1140600	7.881
126) Fluorene	(3)	12.115	166	1211673	7.917
125) Thionazin	(3)	12.133	107	256161	7.645
128) 5-Nitro-o-toluidine	(3)	12.144	152	355788	7.839
129) 4-Nitroaniline	(3)	12.150	138	340460	8.021
127) 4-Chlorophenyl-phenylether	(3)	12.150	204	571182	7.886
130) 4,6-Dinitro-2-methylphenol	(4)	12.197	198	192133	6.904
131) N-Nitrosodiphenylamine	(4)	12.296	169	996306	8.020
132) NDPA as diphenylamine	(4)	12.296	169	996306	8.020
134) 1,2-Diphenylhydrazine	(4)	12.337	77	1591473	8.283
135)$2,4,6-Tribromophenol	(3)	12.412	330	264947	15.209
137) Tetraethyldithiopyrophosphate	(4)	12.529	97	241443	7.825
139) 1,3,5-Trinitrobenzene	(4)	12.616	213	134343	7.016
140) Diallate (peak 1)	(4)	12.657	86	611154	6.591
141) Phorate	(4)	12.663	75	954165	8.299
142) Phenacetin	(4)	12.680	108	696252	7.493
143) 4-Bromophenyl-phenylether	(4)	12.727	248	310493	8.173
144) Diallate (peak 2)	(4)	12.756	86	97188	1.333
145) Hexachlorobenzene	(4)	12.774	284	292256	7.743
147) Dimethoate	(4)	12.844	87	624755	7.955
148) Atrazine	(4)	12.954	200	286874	8.070
149) Pentachlorophenol	(4)	13.024	266	184541	7.084
150) 4-Aminobiphenyl	(4)	13.036	169	866282	6.118
151) Pentachloronitrobenzene	(4)	13.036	237	135366	8.097
152) Pronamide	(4)	13.141	173	518208	8.317
153)*Phenanthrene-d10	(4)	13.240	188	908605	5.000
155) Phenanthrene	(4)	13.269	178	1757975	8.253
154) Dinoseb	(4)	13.275	211	266384	6.929
157) Anthracene	(4)	13.333	178	1798112	8.600
163) Carbazole	(4)	13.549	167	1615688	8.064
164) Methyl parathion	(4)	13.753	109	482035	8.326

M = Compound was manually integrated.
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on 06/20/2018 at 09:47.
Target 3.5 esignature user ID: bhs10208

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1351y.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 09:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 09:44
Date, time and analyst ID of latest file update: 20-Jun-2018 09:44 bhs10208

Sample Name: SSTD7.5 Lab Sample ID: rvSTD1628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.062	149	2023078	7.909
168) 4-Nitroquinoline-1-oxide	(4)	14.283	190	135584M	4.879
167) Parathion	(4)	14.289	109	310325	8.079
169) Octachlorostyrene	(4)	14.621	308	114550	8.005
171) Isodrin	(4)	14.662	193	198979	8.303
173) Fluoranthene	(4)	14.872	202	1903171	8.193
222) Total PAHs	(6)			28062104	149.440
174) Benzidine	(5)	15.099	184	3842464	23.114
175)*Pyrene-d10	(5)	15.169	212	924062	5.000
177) Pyrene	(5)	15.198	202	2020571	7.977
179)$Terphenyl-d14	(5)	15.490	244	2552245	15.872
182) p-Dimethylaminoazobenzene	(5)	15.717	225	324798	7.262
185) Chlorobenzilate	(5)	15.810	139	640441	8.137
187) 3,3'-Dimethylbenzidine	(5)	16.265	212	1170365	7.213
188) Butylbenzylphthalate	(5)	16.335	149	981023	7.767
191) 2-Acetylaminofluorene	(5)	16.673	181	671575	6.636
193) 3,3'-Dichlorobenzidine	(5)	17.168	252	639638	7.582
195) Benzo(a)anthracene	(5)	17.174	228	1812774	8.140
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.192	231	375619	7.302
196) Chrysene	(5)	17.233	228	1869631	8.384
199) bis(2-Ethylhexyl)phthalate	(5)	17.402	149	1315526	7.580
203) 6-Methylchrysene	(5)	18.025	242	1275559	7.864
205) Di-n-octylphthalate	(6)	18.544	149	2096391	7.468
206) Benzo(b)fluoranthene	(6)	19.005	252	1718654	8.234
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.016	256	809155	8.264
208) Benzo(k)fluoranthene	(6)	19.051	252	1800467	8.675
211) Benzo(a)pyrene	(6)	19.523	252	1587693	8.425
213)*Perylene-d12	(6)	19.611	264	865335	5.000
215) 3-Methylcholanthrene	(6)	20.094	268	693932	7.148
217) Dibenz(a,h)acridine	(6)	20.899	279	972596	6.084
218) Dibenz(a,j)acridine	(6)	20.969	279	1096993	6.419
219) Indeno(1,2,3-cd)pyrene	(6)	21.208	276	1189361M	6.809
220) Dibenz(a,h)anthracene	(6)	21.249	278	1261534	6.668
221) Benzo(g,h,i)perylene	(6)	21.563	276	1349743	7.243

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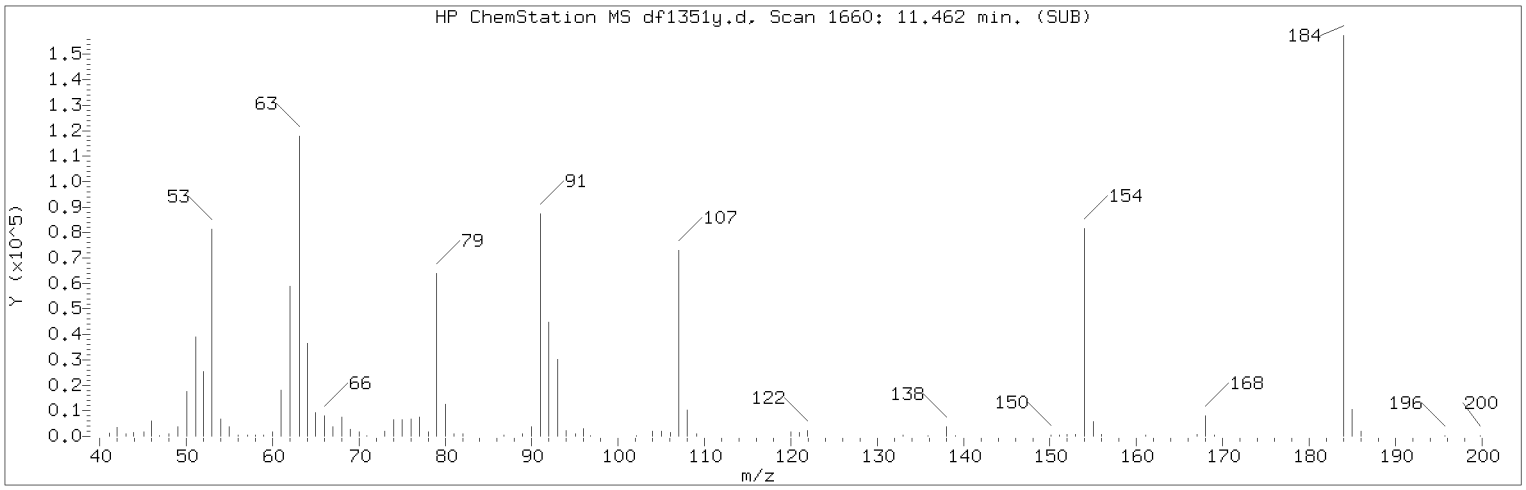
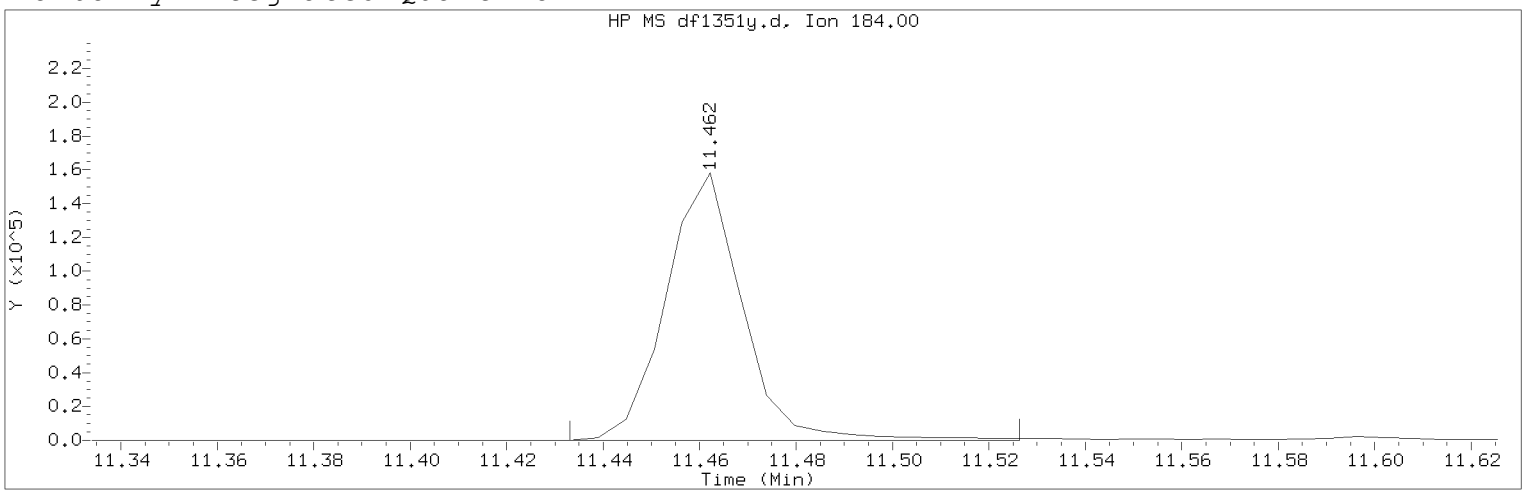
on 06/20/2018 at 09:47.
Target 3.5 esignature user ID: bhs10208

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1351y.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 09:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 09:44
Date, time and analyst ID of latest file update: 20-Jun-2018 09:44 bhs10208

Sample Name: SSTD7.5 Lab Sample ID: rvSTD1628

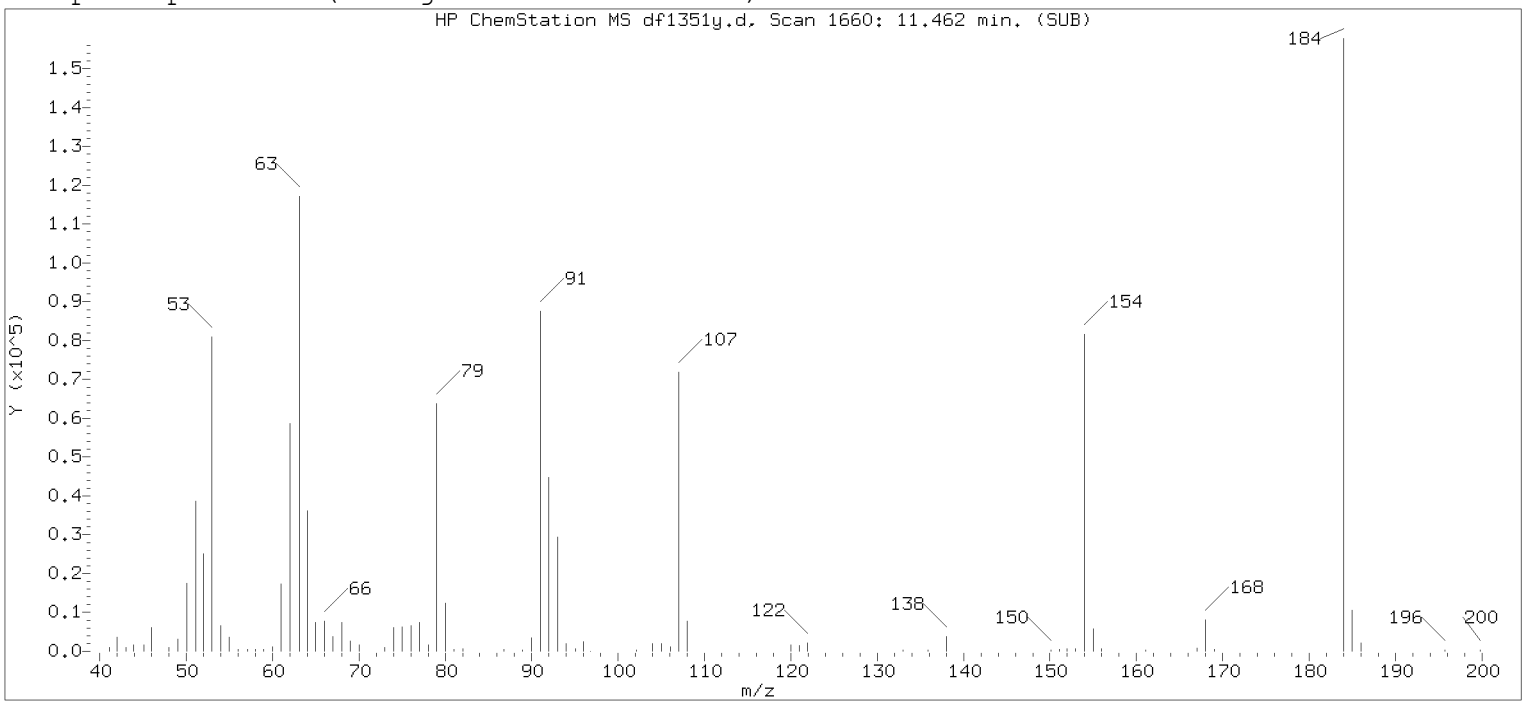
Compound Number : 115
Compound Name : 2,4-Dinitrophenol
Scan Number : 1660
Retention Time (minutes) : 11.462
Quant Ion : 184.00
Area (flag) : 174076M
On-Column Amount (ng/ul) : 7.4855
Integration start scan : 1654 Integration stop scan: 1670
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

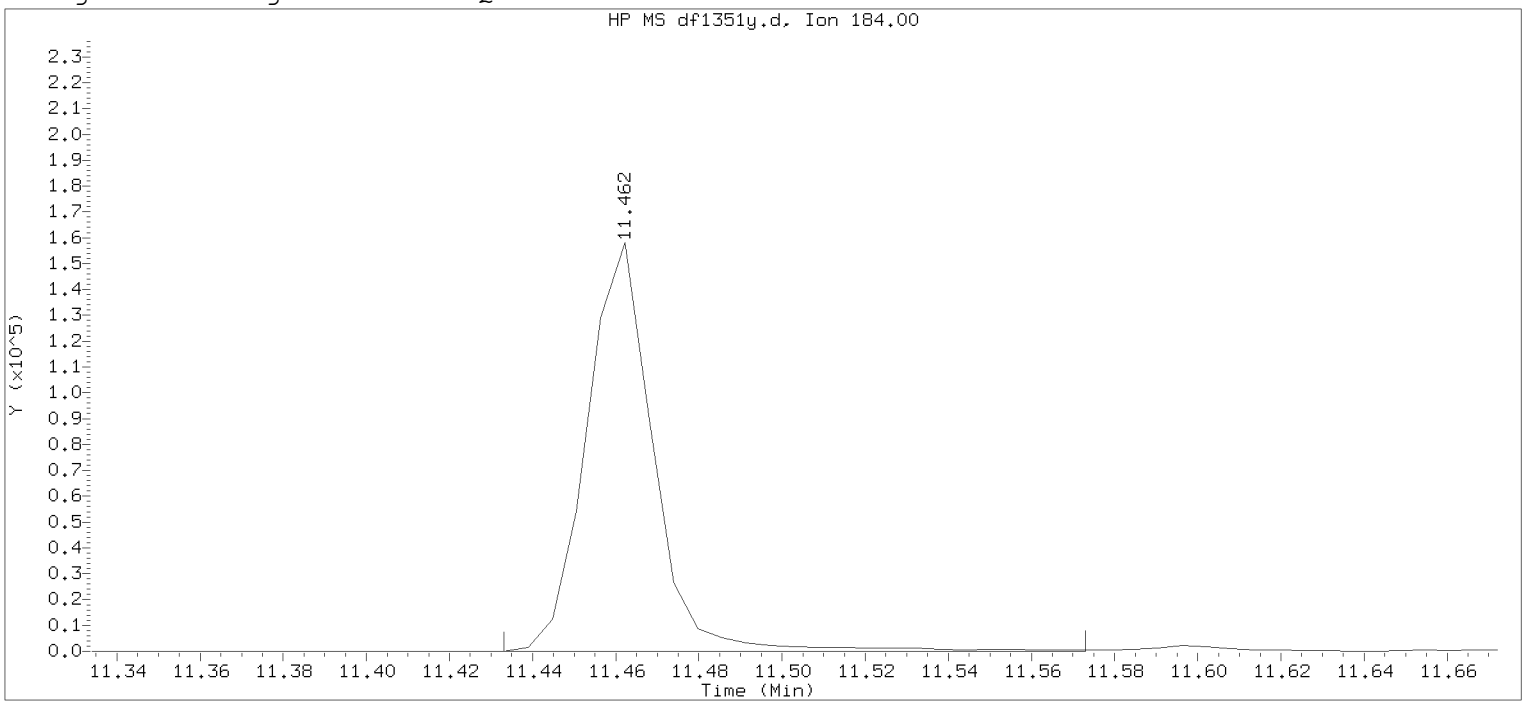
Analyst responsible for change: Digitally signed by Brandon H. Smith
on 06/20/2018 at 09:47.
Target 3.5 esignature user ID: bhs10208

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1351y.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 09:09 Analyst ID: em10340

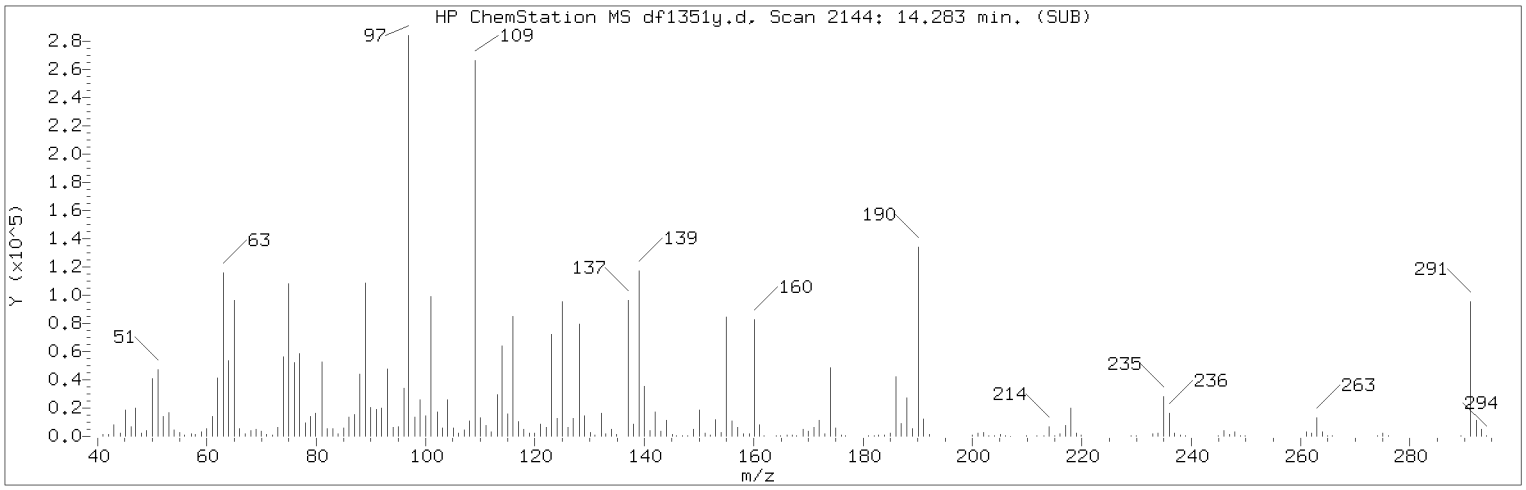
Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 09:35
Date, time and analyst ID of latest file update: 20-Jun-2018 09:35 Automation

Sample Name: SSTD7.5 Lab Sample ID: rvSTD1628

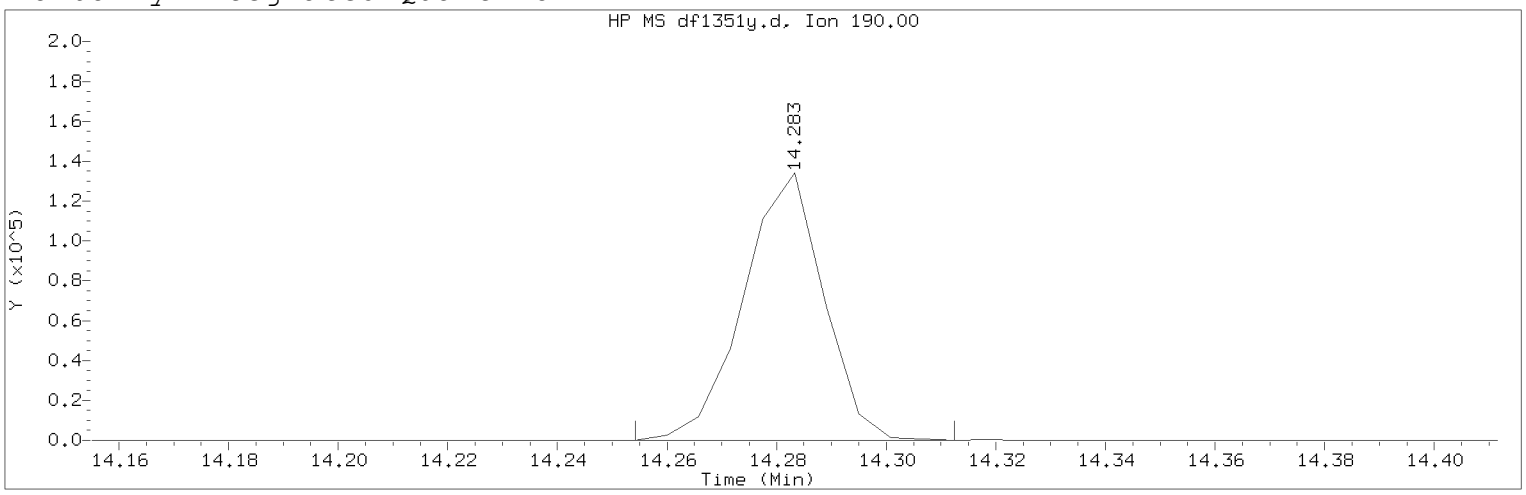
Compound Number	: 115		
Compound Name	: 2,4-Dinitrophenol		
Scan Number	: 1660		
Retention Time (minutes)	: 11.462		
Quant Ion	: 184.00		
Area	: 176006		
On-column Amount (ng/ul)	: 7.5685		
Integration start scan	: 1654	Integration stop scan:	1678
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Brandon H. Smith on 06/20/2018 at 09:47.
Target 3.5 esignature user ID: bsmith2744

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1351y.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 09:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 09:44
Date, time and analyst ID of latest file update: 20-Jun-2018 09:44 bhs10208

Sample Name: SSTD7.5 Lab Sample ID: rvSTD1628

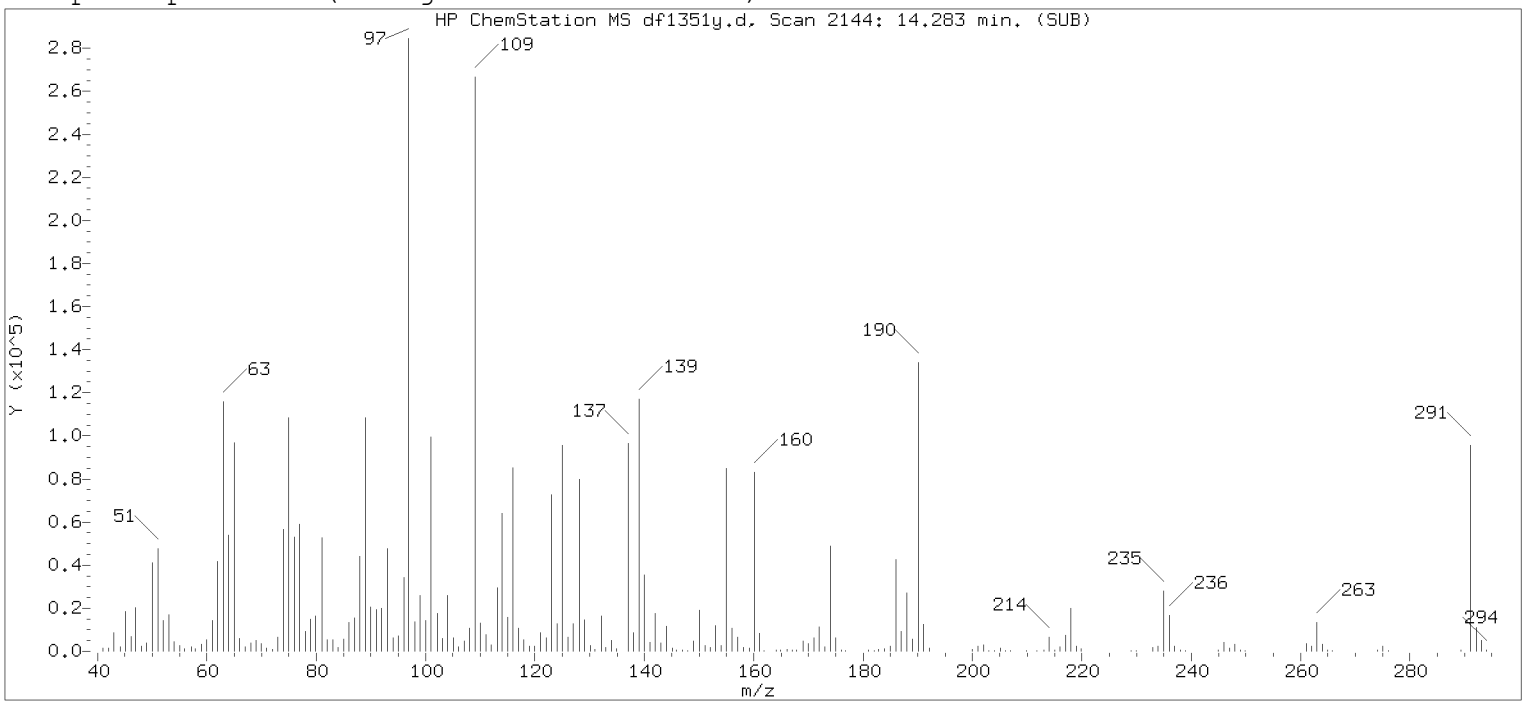
Compound Number : 168
Compound Name : 4-Nitroquinoline-1-oxide
Scan Number : 2144
Retention Time (minutes) : 14.283
Quant Ion : 190.00
Area (flag) : 135584M
On-Column Amount (ng/ul) : 4.8786
Integration start scan : 2138 Integration stop scan: 2148
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

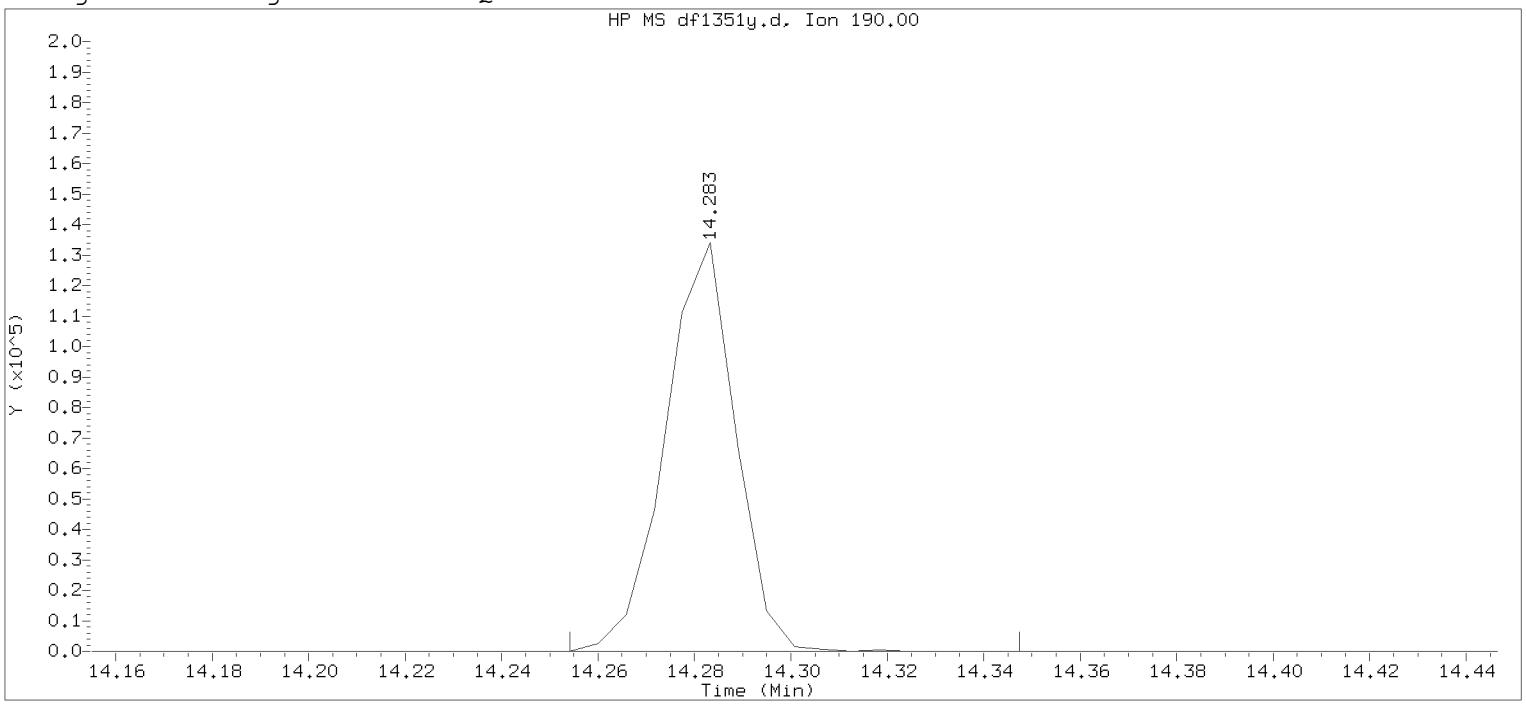
Analyst responsible for change: Digitally signed by Brandon H. Smith
on 06/20/2018 at 09:47.
Target 3.5 esignature user ID: bhs10208

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1351y.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 09:09 Analyst ID: em10340

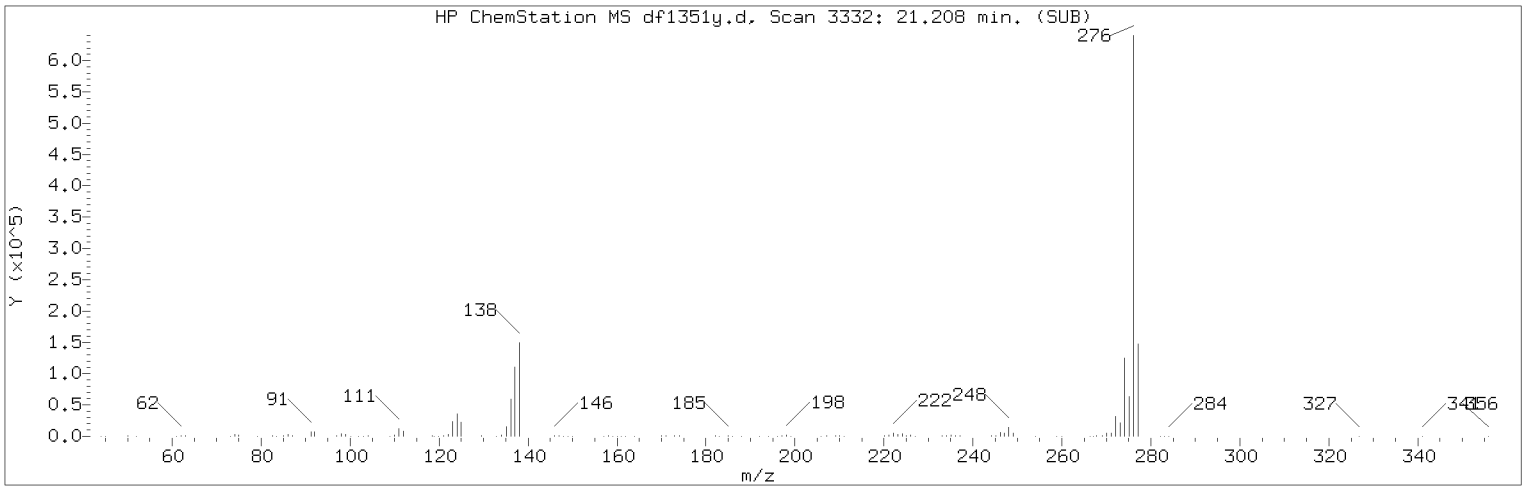
Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 09:35
Date, time and analyst ID of latest file update: 20-Jun-2018 09:35 Automation

Sample Name: SSTD7.5 Lab Sample ID: rvSTD1628

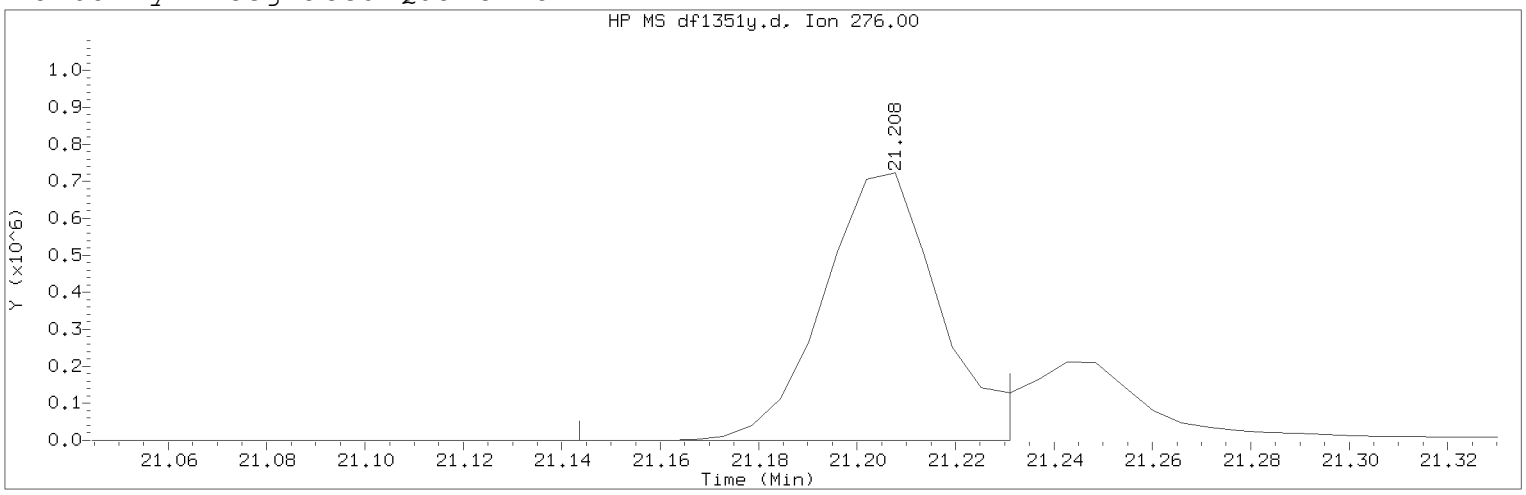
Compound Number	: 168		
Compound Name	: 4-Nitroquinoline-1-oxide		
Scan Number	: 2144		
Retention Time (minutes)	: 14.283		
Quant Ion	: 190.00		
Area	: 135718		
On-column Amount (ng/ul)	: 4.8835		
Integration start scan	: 2138	Integration stop scan:	2154
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Brandon H. Smith on 06/20/2018 at 09:47.
Target 3.5 esignature user brandon.smith

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1351y.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 09:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 09:44
Date, time and analyst ID of latest file update: 20-Jun-2018 09:44 bhs10208

Sample Name: SSTD7.5 Lab Sample ID: rvSTD1628

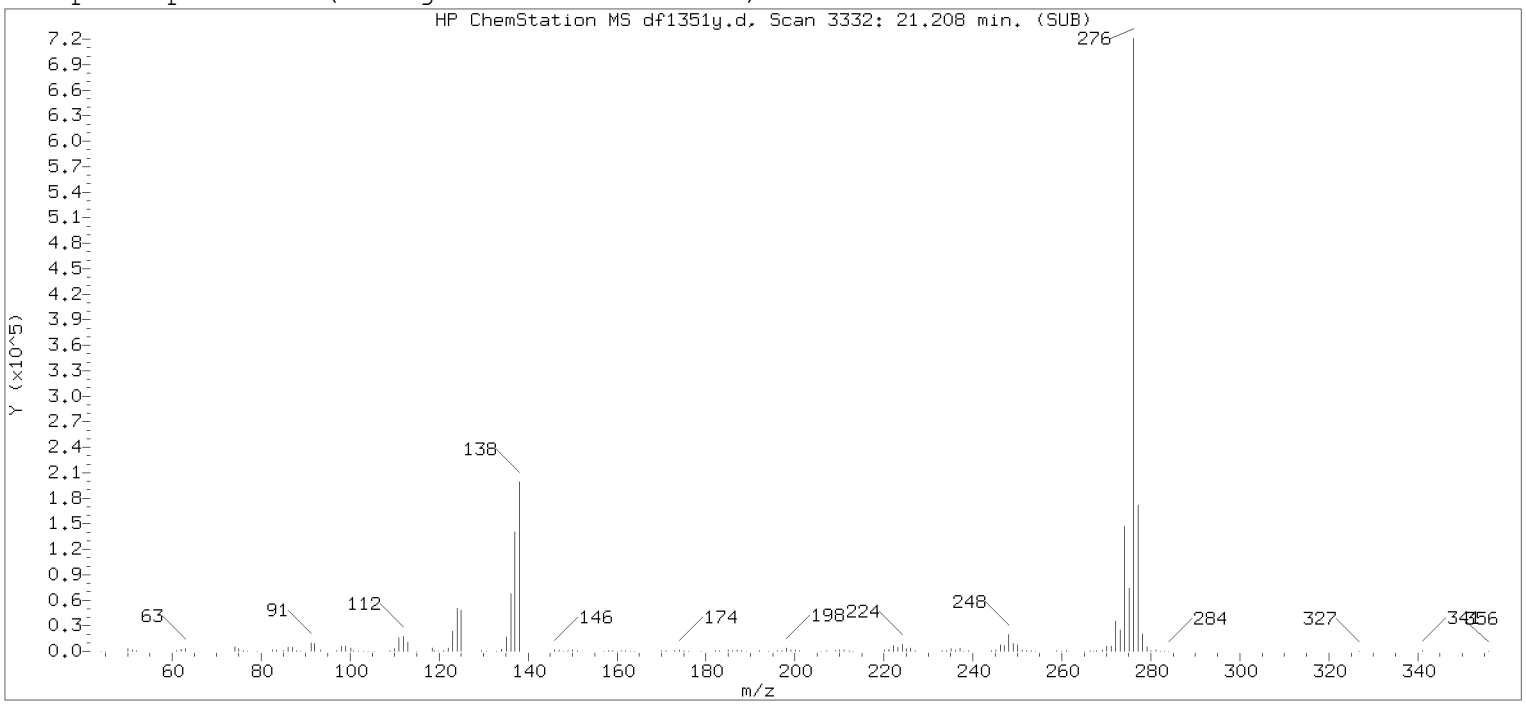
Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3332		
Retention Time (minutes)	: 21.208		
Quant Ion	: 276.00		
Area (flag)	: 1189361M		
On-Column Amount (ng/ul)	: 6.8091		
Integration start scan	: 3320	Integration stop scan:	3335
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

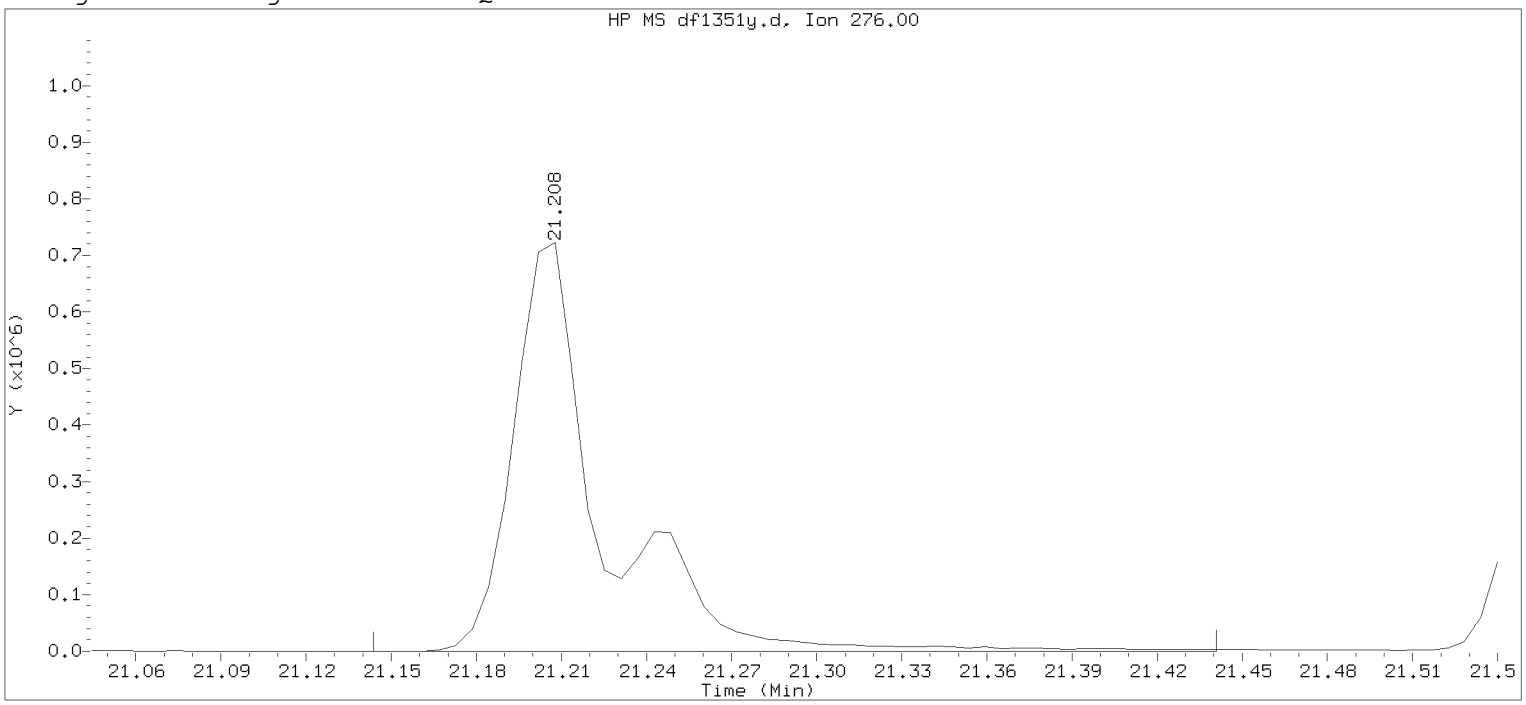
Analyst responsible for change: Digitally signed by Brandon H. Smith
on 06/20/2018 at 09:47.
Target 3.5 esignature user ID: bhs10208

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1351y.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 09:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 09:35
Date, time and analyst ID of latest file update: 20-Jun-2018 09:35 Automation

Sample Name: SSTD7.5 Lab Sample ID: rvSTD1628

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3332		
Retention Time (minutes)	: 21.208		
Quant Ion	: 276.00		
Area	: 1584070		
On-column Amount (ng/ul)	: 9.0688		
Integration start scan	: 3320	Integration stop scan:	3371
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Brandon H. Smith on 06/20/2018 at 09:47.
Target 3.5 esignature user brandon.smith

Data File: /chem/HP19760.i/18jun20a.b/df1400.d

Date : 20-JUN-2018 19:20

Client ID: DFTPP

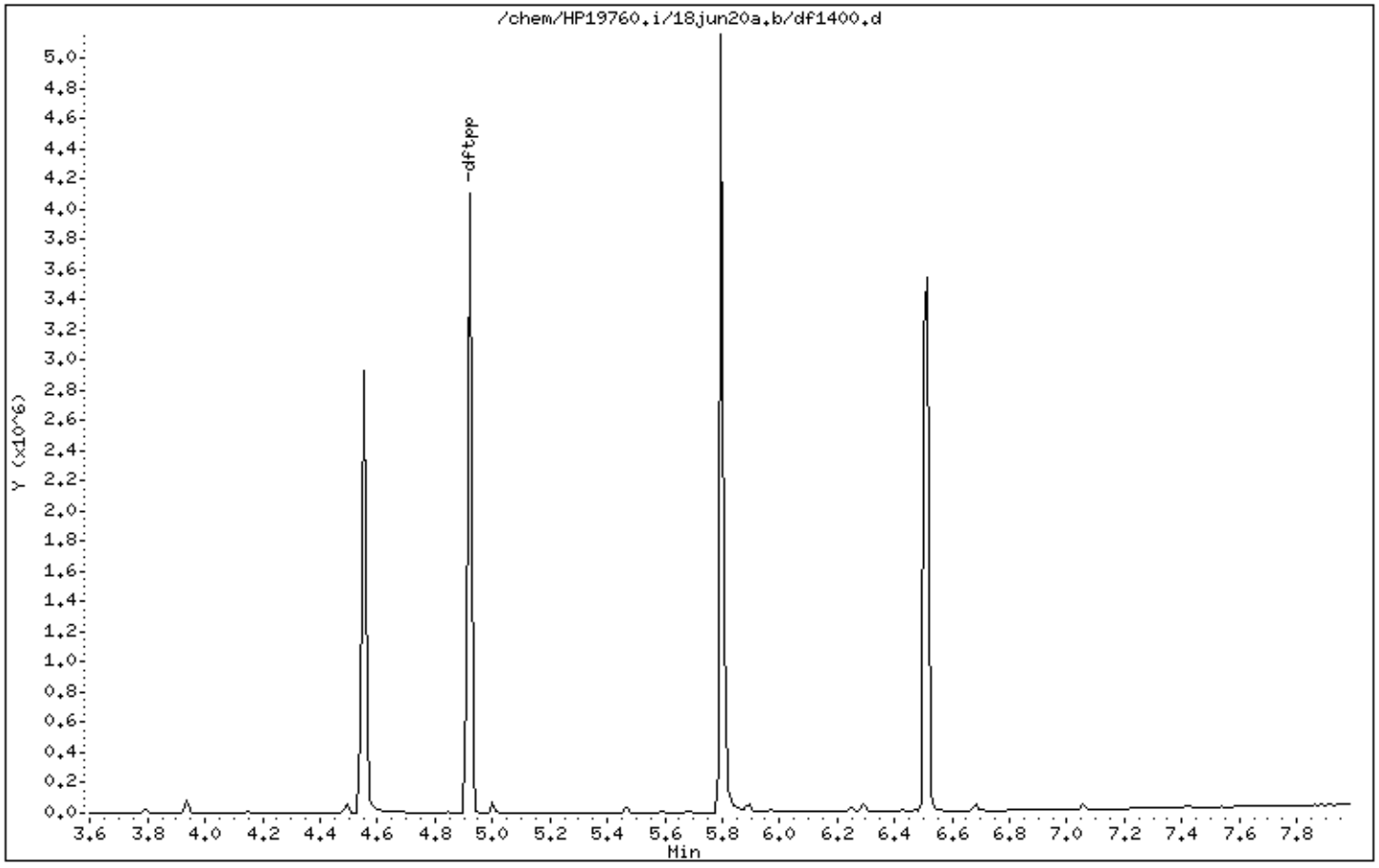
Instrument: HP19760.i

Sample Info: DFTPP;RVDFTPP1598;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Ashley R. Transue on 06/20/2018 at 21:10.
Target 3.5 esignature user ID: art12405

Data File: /chem/HP19760.i/18jun20a.b/df1400.d

Date : 20-JUN-2018 19:20

Client ID: DFTPP

Instrument: HP19760.i

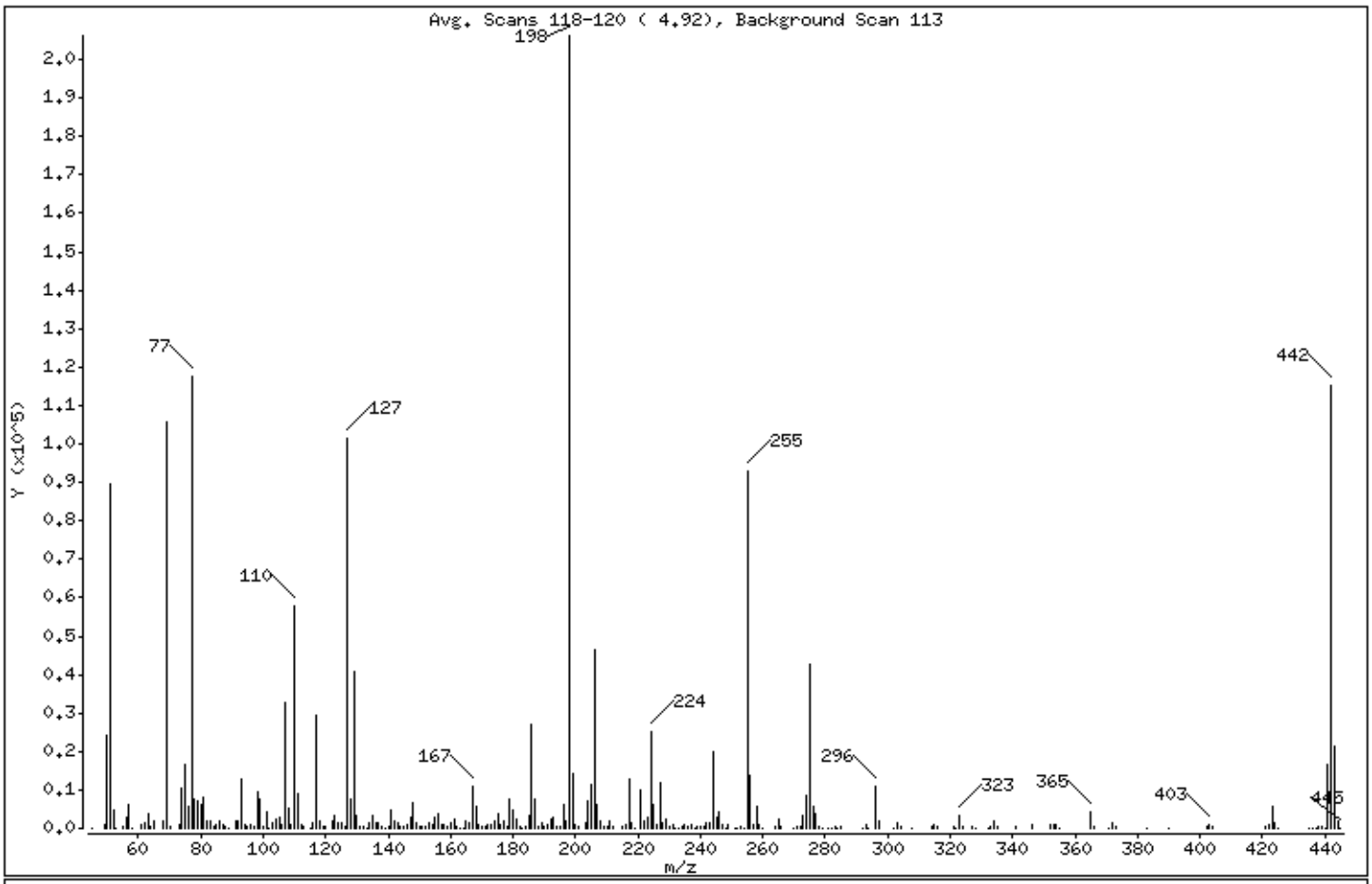
Sample Info: DFTPP;RVDFTPP1598;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	43.38
68	Less than 2.00% of mass 69	0.81 (1.58)
69	Mass 69 relative abundance	51.33
70	Less than 2.00% of mass 69	0.25 (0.48)
127	10.00 - 80.00% of mass 198	49.21
197	Less than 2.00% of mass 198	0.90
199	5.00 - 9.00% of mass 198	6.82
275	10.00 - 60.00% of mass 198	20.61
365	Greater than 1.00% of mass 198	2.17
441	0.01 - 24.00% of mass 442	8.14 (14.59)
442	50.00 - 99.99% of mass 198	55.76
443	15.00 - 24.00% of mass 442	10.44 (18.72)

Digitally signed by Ashley R. Transue on 06/20/2018 at 21:10.
Target 3.5 esignature user ID: art12405

Date : 20-JUN-2018 19:20

Client ID: DFTPP Instrument: HP19760.i

Sample Info: DFTPP;RVDFTPP1598;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

Data File: df1400.d
Spectrum: Avg. Scans 118-120 (4.92), Background Scan 113
Location of Maximum: 198.00
Number of points: 270

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	100	126.00	674	194.00	464	273.00	3118
49.00	728	127.00	101480	195.00	308	274.00	8562
50.00	24088	128.00	7696	196.00	5970	275.00	42512
51.00	89456	129.00	40848	197.00	1852	276.00	5653
52.00	4551	130.00	3402	198.00	206208	277.00	3678
53.00	182	131.00	633	199.00	14073	278.00	556
55.00	488	132.00	325	200.00	1044	279.00	194
56.00	2718	133.00	106	201.00	612	281.00	91
57.00	6116	134.00	1202	203.00	1461	282.00	107
58.00	221	135.00	3388	204.00	7189	283.00	258
61.00	1167	136.00	1442	205.00	11589	284.00	229
62.00	1348	137.00	1616	206.00	46288	285.00	530
63.00	3666	138.00	260	207.00	6118	292.00	166
64.00	591	139.00	202	208.00	2064	293.00	808
65.00	1807	140.00	458	209.00	497	294.00	172
68.00	1668	141.00	4891	210.00	632	296.00	11045
69.00	105856	142.00	1663	211.00	1736	297.00	1662
70.00	513	143.00	1186	212.00	260	302.00	141
73.00	797	144.00	262	215.00	481	303.00	1187
74.00	10428	145.00	300	216.00	1014	304.00	281
75.00	16520	146.00	940	217.00	12863	308.00	193
76.00	5617	147.00	2701	218.00	1550	314.00	488
77.00	117504	148.00	6580	219.00	90	315.00	1144
78.00	7664	149.00	1243	221.00	9766	316.00	658
79.00	7046	150.00	334	222.00	1669	321.00	271
80.00	5934	151.00	490	223.00	2948	322.00	184
81.00	8029	152.00	402	224.00	24920	323.00	3387
82.00	1840	153.00	1460	225.00	6176	324.00	547
83.00	1783	154.00	980	226.00	722	327.00	539
84.00	264	155.00	2640	227.00	11712	328.00	180
85.00	1113	156.00	3918	228.00	1639	332.00	228
86.00	2102	157.00	820	229.00	2455	333.00	343
87.00	913	158.00	944	230.00	355	334.00	2045
88.00	362	159.00	628	231.00	722	335.00	465
89.00	187	160.00	1606	232.00	114	341.00	469

Digitally signed by Ashley R. Transue on 06/20/2018 at 21:10.
Target 3.5 esignature user ID: art12405

Date : 20-JUN-2018 19:20

Client ID: DFTPP Instrument: HP19760.i

Sample Info: DFTPP;RVDFTPP1598;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

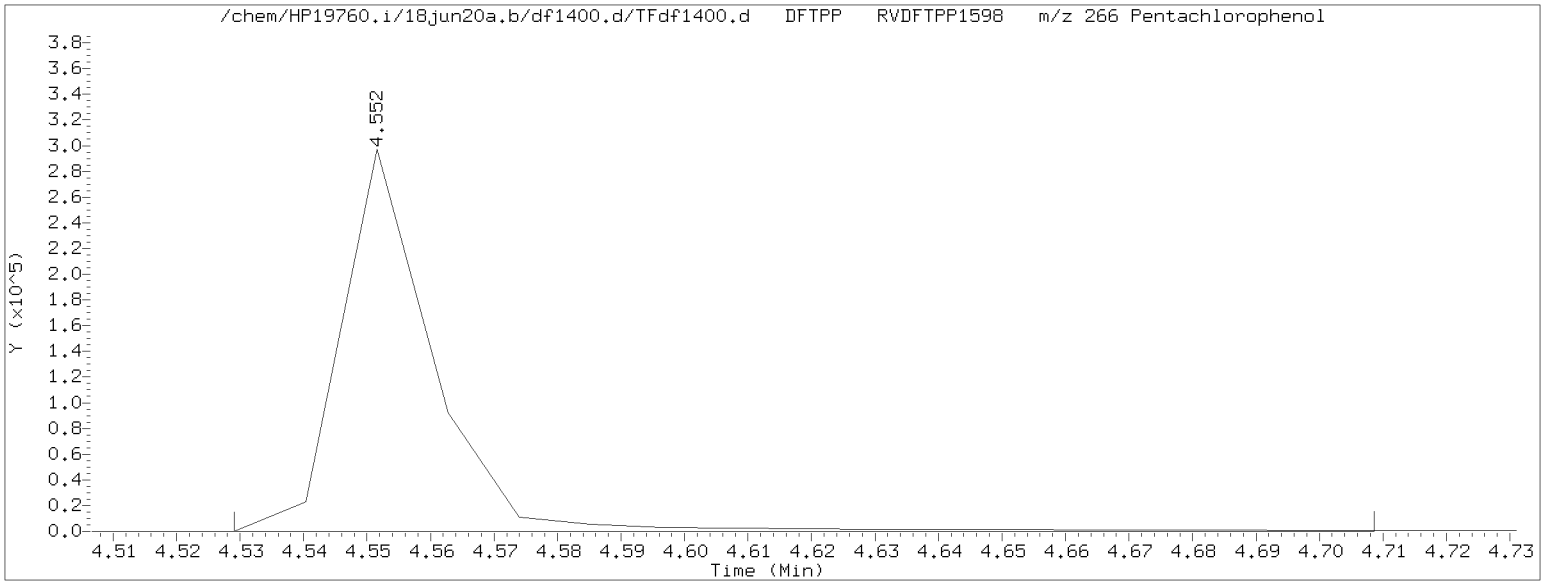
Data File: df1400.d
Spectrum: Avg. Scans 118-120 (4.92), Background Scan 113
Location of Maximum: 198.00
Number of points: 270

m/z	Y	m/z	Y	m/z	Y	m/z	Y
91.00	1859	161.00	2417	233.00	135	346.00	731
92.00	1903	162.00	604	234.00	676	352.00	973
93.00	12607	163.00	135	235.00	733	353.00	844
94.00	879	164.00	134	236.00	596	354.00	903
95.00	274	165.00	1911	237.00	852	355.00	141
96.00	832	166.00	1580	238.00	87	365.00	4480
97.00	279	167.00	10771	239.00	333	366.00	656
98.00	9554	168.00	5664	240.00	340	371.00	230
99.00	7538	169.00	1090	241.00	542	372.00	1644
100.00	661	170.00	299	242.00	1350	373.00	437
101.00	4304	171.00	401	243.00	1520	383.00	202
102.00	161	172.00	986	244.00	20008	390.00	182
103.00	1357	173.00	1008	245.00	2703	402.00	682
104.00	2401	174.00	1834	246.00	4212	403.00	920
105.00	2831	175.00	3737	247.00	957	404.00	287
106.00	939	176.00	990	248.00	163	421.00	706
107.00	32792	177.00	1879	249.00	723	422.00	751
108.00	5163	178.00	525	251.00	121	423.00	5704
109.00	796	179.00	7423	252.00	179	424.00	1391
110.00	57976	180.00	4929	253.00	534	425.00	90
111.00	8811	181.00	2248	254.00	87	435.00	112
112.00	1103	182.00	314	255.00	93024	436.00	98
113.00	393	183.00	133	256.00	13912	437.00	184
115.00	123	184.00	500	257.00	979	438.00	377
116.00	1628	185.00	3480	258.00	5680	439.00	411
117.00	29176	186.00	27208	259.00	951	440.00	187
118.00	2127	187.00	7428	260.00	95	441.00	16776
119.00	303	188.00	676	264.00	281	442.00	114984
120.00	368	189.00	1577	265.00	2340	443.00	21520
122.00	1807	190.00	250	266.00	254	444.00	2116
123.00	3210	191.00	715	270.00	99	445.00	104
124.00	1408	192.00	2217	271.00	260		
125.00	1308	193.00	2753	272.00	334		

Digitally signed by Ashley R. Transue on 06/20/2018 at 21:10.
Target 3.5 esignature user ID: art12405

Assessment of GC Column Performance and Injection Port Inertness for

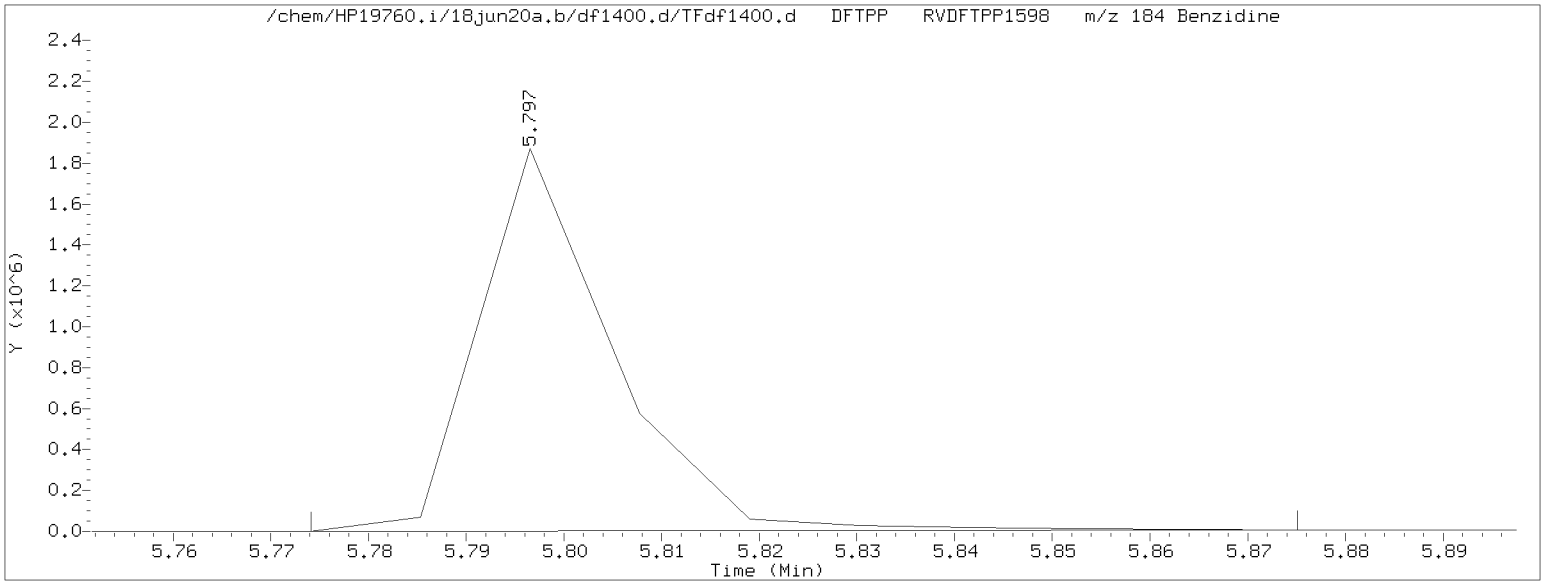
Instrument ID: HP19760.i Injection Date: 20-JUN-2018 19:20 Operator: art12405



Pentachlorophenol EICP peak height = 297344 EICP peak height at 10% = 29734 Pentachlorophenol EICP area = 299023

Pentachlorophenol EICP peak apex (min.) = 4.552
RT at 10% of front half of EICP (min.) = 4.541 'Front' peak width (min.) = 0.0109333333
RT at 10% of back half of EICP (min.) = 4.571 'Tailing' peak width (min.) = 0.0198000000

$$\text{PCP tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0198000000}{0.0109333333} = 1.811$$



Benzidine EICP peak height = 1868678 EICP peak height at 10% = 186868 Benzidine EICP area = 1759265

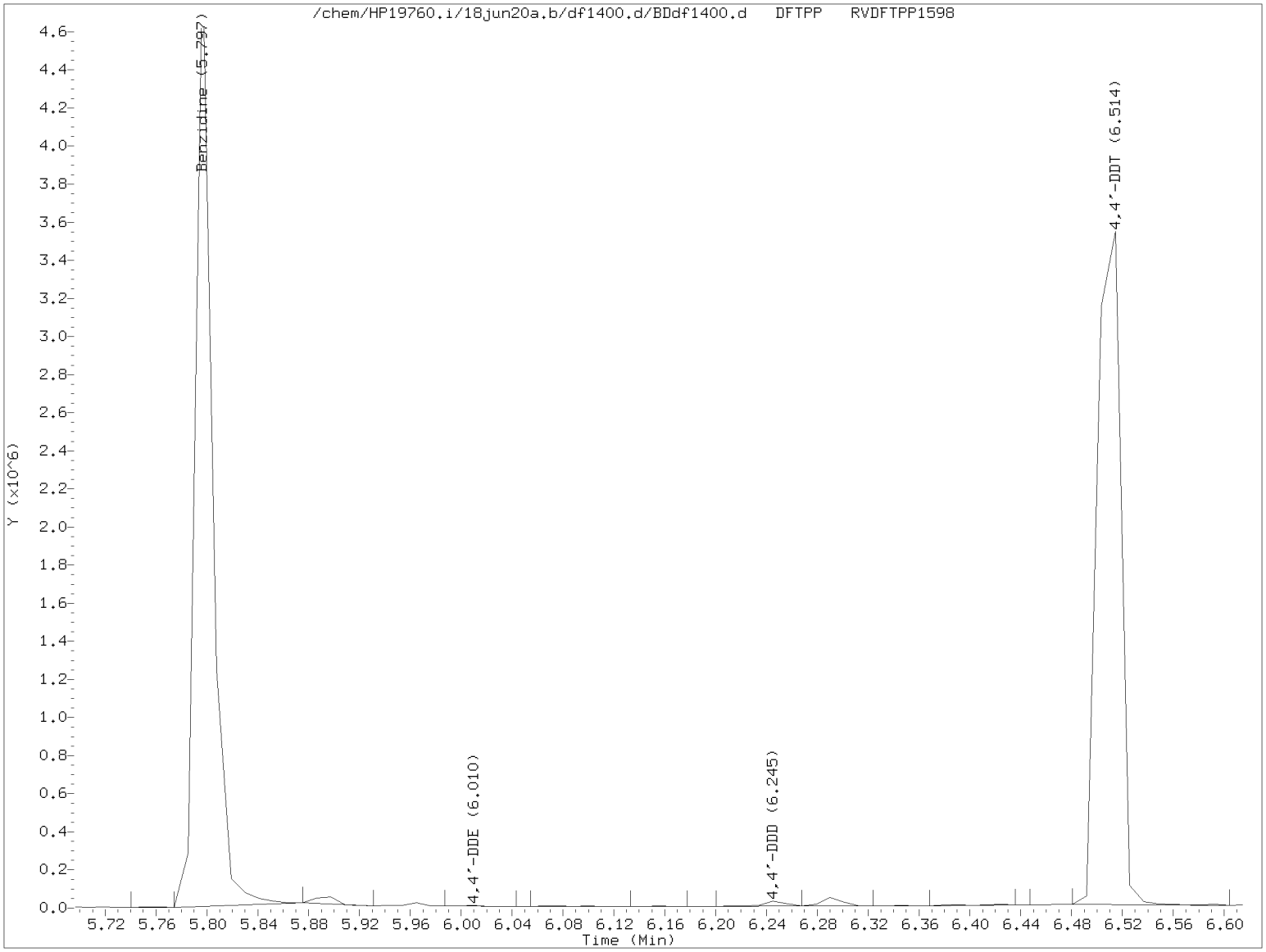
Benzidine EICP peak apex (min.) = 5.797
RT at 10% of front half of EICP (min.) = 5.786 'Front' peak width (min.) = 0.0104666667
RT at 10% of back half of EICP (min.) = 5.816 'Tailing' peak width (min.) = 0.0196166667

$$\text{Benzidine tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0196166667}{0.0104666667} = 1.874$$

Secondary review performed and digitally signed by Matthew E. Barton on 06/24/2018 at 20:41. PARALLAX ID: reb00745

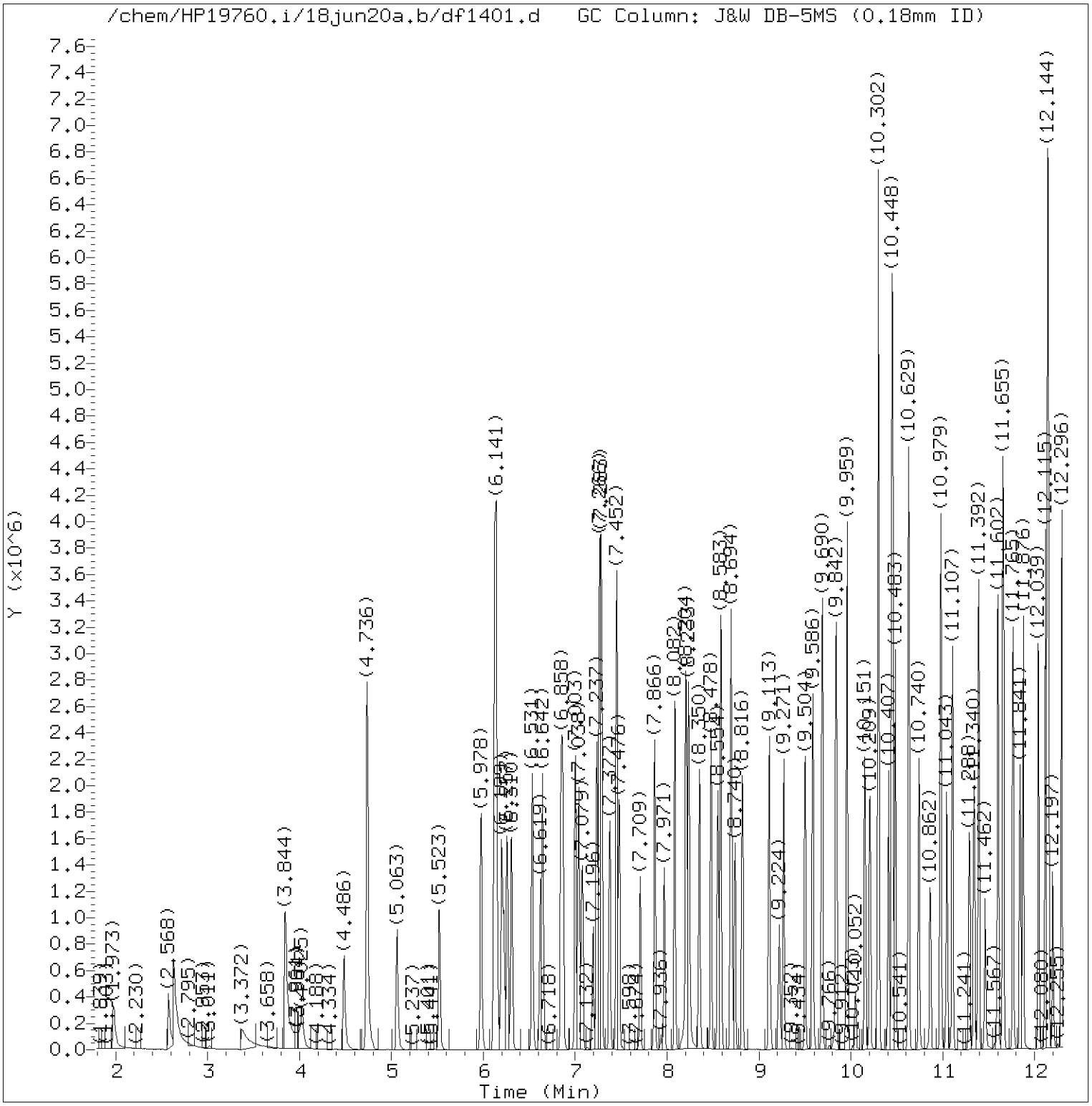
Assessment of GC Column Performance and Injection Port Inertness for

Instrument ID: HP19760.i Injection Date: 20-JUN-2018 19:20 Operator: art12405



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{3866 + 28603}{3866 + 28603 + 4614894} \times 100 = 0.7$$



Total Ion Chromatogram (TIC)

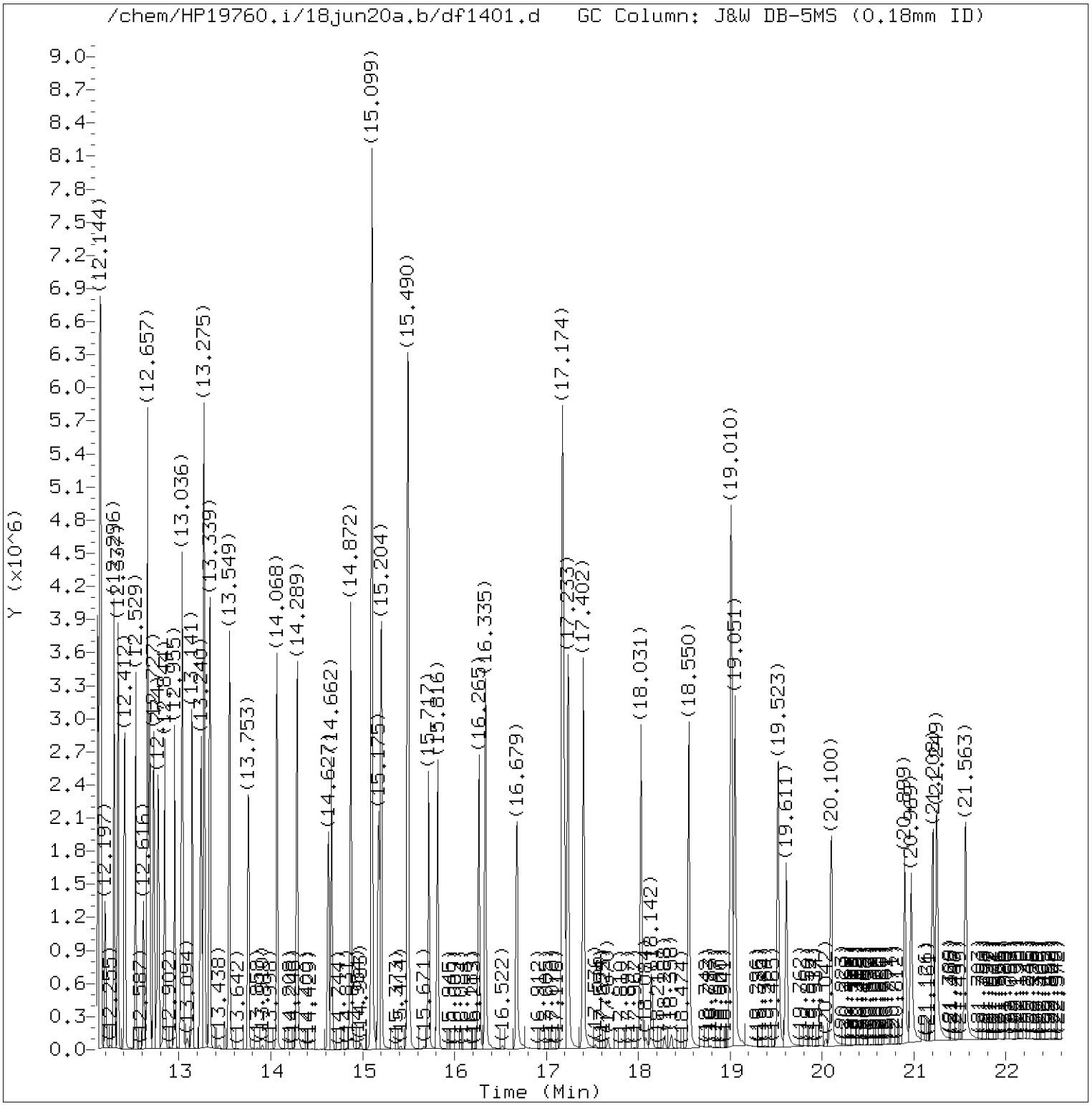
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1401.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 19:43 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 20:12
Date, time and analyst ID of latest file update: 20-Jun-2018 20:13 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD1628

Digitally signed by Ashley R. Transue
on 06/20/2018 at 21:10.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1401.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 19:43 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 20:12
Date, time and analyst ID of latest file update: 20-Jun-2018 20:13 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD1628

Digitally signed by Ashley R. Transue
on 06/20/2018 at 21:10.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1401.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 19:43 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 20:12
Date, time and analyst ID of latest file update: 20-Jun-2018 20:13 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD1628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	1.973	88	328234	8.054
4) N-Nitrosodimethylamine	(1)	2.568	74	466409	7.601
5) Pyridine	(1)	2.626	79	813306	7.754
7) 2-Picoline	(1)	3.844	93	840635	7.489
8) N-Nitrosomethylethylamine	(1)	4.025	88	367867	7.500
9) Methyl methanesulfonate	(1)	4.486	80	427237	7.791
11)$2-Fluorophenol	(1)	4.736	112	1372061	15.906
13) N-Nitrosodiethylamine	(1)	5.063	102	360766	7.915
15) Ethyl methanesulfonate	(1)	5.517	109	343701	7.768
42) Total Cresols	(1)			1371396	16.008
16) Benzaldehyde	(1)	5.978	77	606227	8.571
17)$Phenol-d6	(1)	6.123	99	1851493	16.192
18) Phenol	(1)	6.141	94	1035472	7.760
19) Aniline	(1)	6.141	93	1199033	7.747
20) a-methylstyrene	(1)	6.222	118	252386	7.892
22) bis(2-Chloroethyl)ether	(1)	6.257	93	770440	7.812
23) 2-Chlorophenol	(1)	6.310	128	635508	8.319
24) 1,3-Dichlorobenzene	(1)	6.531	146	655899	8.186
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	261533	5.000
26) 1,4-Dichlorobenzene	(1)	6.648	146	667903	8.198
27) Benzyl alcohol	(1)	6.846	108	431023	7.561
28) 1,2-Dichlorobenzene	(1)	6.864	146	631960	8.235
30) Indene	(1)	7.003	115	949051	7.690
31) 2-Methylphenol	(1)	7.038	108	635983	7.850
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	45	847123	8.428
34) bis(2-Chloroisopropyl)ether	(1)	7.079	45	847123	8.428
35) N-Nitrosopyrrolidine	(1)	7.196	100	362173	7.595
36) Acetophenone	(1)	7.237	105	882892	7.537
38) N-Nitroso-di-n-propylamine	(1)	7.260	70	562294	8.114
39) N-Nitrosomorpholine	(1)	7.266	56	423962	8.132
37) 4-Methylphenol	(1)	7.277	108	735413	8.142
40) o-Toluidine	(1)	7.289	106	1130351	8.006
43) Hexachloroethane	(1)	7.377	117	305690	8.279
97) Isosafrole	(3)			464911	7.309
44)$Nitrobenzene-d5	(2)	7.452	82	1629650	15.176
45) Nitrobenzene	(2)	7.476	77	812027	7.698
48) N-Nitrosopiperidine	(2)	7.709	114	323370	7.268
50) Isophorone	(2)	7.866	82	1389493	7.546
51) 2-Nitrophenol	(2)	7.971	139	308490	7.765
120) 2,4_2,6-Dinitrotoluenes	(3)			625187	16.637

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 06/20/2018 at 21:10.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1401.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 19:43 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 20:12
Date, time and analyst ID of latest file update: 20-Jun-2018 20:13 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD1628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.082	107	681679	7.564
57) O,O,O-Triethylphosphorothioate	(2)	8.210	198	272534	7.692
55) bis(2-Chloroethoxy)methane	(2)	8.233	93	907237	7.637
56) Benzoic acid	(2)	8.251	105	648354	9.943
60) 2,4-Dichlorophenol	(2)	8.350	162	478755	8.045
62) 1,2,4-Trichlorobenzene	(2)	8.478	180	506443	7.939
65)*Naphthalene-d8	(2)	8.554	136	1031003	5.000
66) Naphthalene	(2)	8.583	128	1784369	7.800
67) 4-Chloroaniline	(2)	8.694	127	719096	7.496
68) 2,6-Dichlorophenol	(2)	8.705	162	470029	7.918
69) Hexachloropropene	(2)	8.740	213	292266	7.012
146) Diallate trans/cis	(4)			682441	7.841
71) Hexachlorobutadiene	(2)	8.816	225	266768	7.421
75) Quinoline	(2)	9.113	129	1100837	7.988
76) Caprolactam	(2)	9.224	113	187543	7.081
77) N-Nitrosodi-n-butylamine	(2)	9.271	84	506766	6.919
80) 4-Chloro-3-methylphenol	(2)	9.504	107	574826	7.631
82) Safrole	(2)	9.586	162	445697	7.861
83) 2-Methylnaphthalene	(2)	9.690	142	1172346	8.063
84) 1-Methylnaphthalene	(2)	9.842	142	1084987	8.271
85) Hexachlorocyclopentadiene	(3)	9.959	237	241728	6.935
86) 1,2,4,5-Tetrachlorobenzene	(3)	9.959	216	481567	7.604
88) cis-Isosafrole	(3)	10.052	162	75089	1.281
90) 2,4,6-Trichlorophenol	(3)	10.151	196	317145	7.737
92) 2,4,5-Trichlorophenol	(3)	10.209	196	324671	7.846
93)$2-Fluorobiphenyl	(3)	10.302	172	2395680	15.448
94) trans-Isosafrole	(3)	10.407	162	389822	6.032
95) 1,1'-Biphenyl	(3)	10.448	154	1276708	7.634
96) 2-Chloronaphthalene	(3)	10.454	162	1094080	8.148
98) 1-Chloronaphthalene	(3)	10.483	162	977128	8.097
100) 2-Nitroaniline	(3)	10.629	138	345860	7.850
99) Diphenyl ether	(3)	10.629	170	714879	7.708
104) 1,4-Naphthoquinone	(3)	10.740	158	406861	7.766
105) 1,4-Dinitrobenzene	(3)	10.868	168	175259	7.309
106) Dimethylphthalate	(3)	10.979	163	1128028	8.205
107) 1,3-Dinitrobenzene	(3)	10.979	168	204126	7.580
108) 2,6-Dinitrotoluene	(3)	11.043	165	269100	8.328
109) Acenaphthylene	(3)	11.107	152	1494370	7.740
112) 3-Nitroaniline	(3)	11.288	138	298072	8.003
113)*Acenaphthene-d10	(3)	11.340	164	481603	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 06/20/2018 at 21:10.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1401.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 19:43 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 20:12
Date, time and analyst ID of latest file update: 20-Jun-2018 20:13 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD1628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.392	153	1052985	8.037
115) 2,4-Dinitrophenol	(3)	11.462	184	163332	7.268
116) 4-Nitrophenol	(3)	11.602	109	194216	6.920
117) Pentachlorobenzene	(3)	11.602	250	399833	7.680
119) Dibenzofuran	(3)	11.655	168	1428340	7.697
118) 2,4-Dinitrotoluene	(3)	11.666	165	356087	8.092
121) 1-Naphthylamine	(3)	11.765	143	1106707	7.885
122) 2,3,4,6-Tetrachlorophenol	(3)	11.841	232	253858	7.309
123) 2-Naphthylamine	(3)	11.876	143	1083614	7.969
124) Diethylphthalate	(3)	12.045	149	1100803	7.871
126) Fluorene	(3)	12.115	166	1171590	7.922
125) Thionazin	(3)	12.139	107	247403	7.641
128) 5-Nitro-o-toluidine	(3)	12.144	152	343793	7.838
129) 4-Nitroaniline	(3)	12.150	138	324133	7.903
127) 4-Chlorophenyl-phenylether	(3)	12.150	204	543051	7.759
130) 4,6-Dinitro-2-methylphenol	(4)	12.203	198	186730	6.889
131) N-Nitrosodiphenylamine	(4)	12.296	169	959594	7.931
132) NDPA as diphenylamine	(4)	12.296	169	959594	7.931
134) 1,2-Diphenylhydrazine	(4)	12.337	77	1524335	8.145
135)$2,4,6-Tribromophenol	(3)	12.412	330	259072	15.390
137) Tetraethyldithiopyrophosphate	(4)	12.529	97	239692	7.975
139) 1,3,5-Trinitrobenzene	(4)	12.616	213	127105	6.815
140) Diallate (peak 1)	(4)	12.657	86	590007	6.532
141) Phorate	(4)	12.663	75	918829	8.205
142) Phenacetin	(4)	12.681	108	672952	7.435
143) 4-Bromophenyl-phenylether	(4)	12.727	248	302476	8.174
144) Diallate (peak 2)	(4)	12.756	86	92434	1.302
145) Hexachlorobenzene	(4)	12.780	284	295547	8.039
147) Dimethoate	(4)	12.844	87	611605	7.995
148) Atrazine	(4)	12.955	200	289577	8.363
149) Pentachlorophenol	(4)	13.024	266	175718	6.925
150) 4-Aminobiphenyl	(4)	13.036	169	842890	6.111
151) Pentachloronitrobenzene	(4)	13.042	237	130458	8.011
152) Pronamide	(4)	13.141	173	492574	8.116
153)*Phenanthrene-d10	(4)	13.246	188	885034	5.000
155) Phenanthrene	(4)	13.275	178	1696996	8.179
154) Dinoseb	(4)	13.275	211	249126	6.653
157) Anthracene	(4)	13.339	178	1744293	8.565
163) Carbazole	(4)	13.549	167	1568120	8.035
164) Methyl parathion	(4)	13.753	109	471052	8.353

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 06/20/2018 at 21:10.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1401.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 19:43 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 20:12
Date, time and analyst ID of latest file update: 20-Jun-2018 20:13 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD1628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.068	149	1968647	7.902
168) 4-Nitroquinoline-1-oxide	(4)	14.283	190	119715	4.422
167) Parathion	(4)	14.289	109	296904	7.935
169) Octachlorostyrene	(4)	14.627	308	111541	8.002
171) Isodrin	(4)	14.662	193	195571	8.378
173) Fluoranthene	(4)	14.872	202	1863725	8.237
222) Total PAHs	(6)			27033832	149.880
174) Benzidine	(5)	15.099	184	3722018	22.945
175)*Pyrene-d10	(5)	15.175	212	901681	5.000
177) Pyrene	(5)	15.204	202	1948404	7.883
179)$Terphenyl-d14	(5)	15.490	244	2497456	15.917
182) p-Dimethylaminoazobenzene	(5)	15.717	225	312193	7.154
185) Chlorobenzilate	(5)	15.816	139	622079	8.100
187) 3,3'-Dimethylbenzidine	(5)	16.265	212	1127049	7.119
188) Butylbenzylphthalate	(5)	16.335	149	931141	7.555
191) 2-Acetylaminofluorene	(5)	16.679	181	675000	6.835
193) 3,3'-Dichlorobenzidine	(5)	17.174	252	626381	7.609
195) Benzo(a)anthracene	(5)	17.174	228	1731094	7.966
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.192	231	358377	7.140
196) Chrysene	(5)	17.233	228	1806270	8.301
199) bis(2-Ethylhexyl)phthalate	(5)	17.402	149	1262753	7.456
203) 6-Methylchrysene	(5)	18.031	242	1239417	7.831
205) Di-n-octylphthalate	(6)	18.550	149	2026570	7.516
206) Benzo(b)fluoranthene	(6)	19.005	252	1623844	8.100
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.016	256	803734	8.546
208) Benzo(k)fluoranthene	(6)	19.051	252	1775406	8.905
211) Benzo(a)pyrene	(6)	19.523	252	1529164	8.448
213)*Perylene-d12	(6)	19.611	264	831181	5.000
215) 3-Methylcholanthrene	(6)	20.100	268	669407	7.179
217) Dibenz(a,h)acridine	(6)	20.899	279	940018	6.122
218) Dibenz(a,j)acridine	(6)	20.969	279	1003262	6.112
219) Indeno(1,2,3-cd)pyrene	(6)	21.208	276	1100189M	6.557
220) Dibenz(a,h)anthracene	(6)	21.249	278	1217448	6.700
221) Benzo(g,h,i)perylene	(6)	21.563	276	1236352	6.907

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

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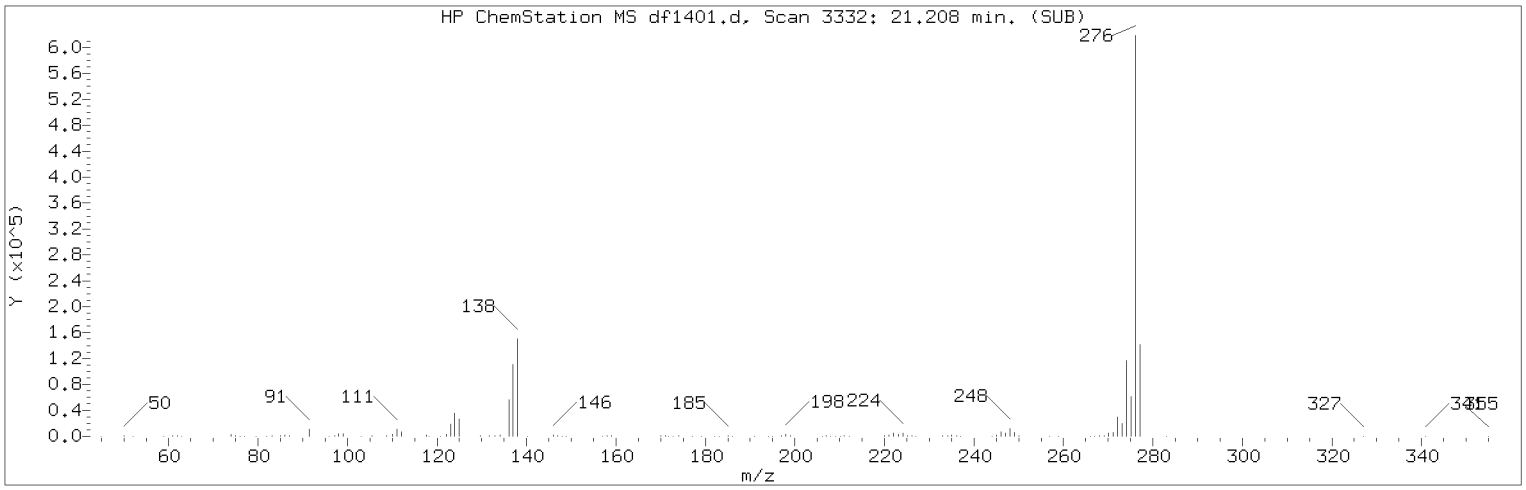
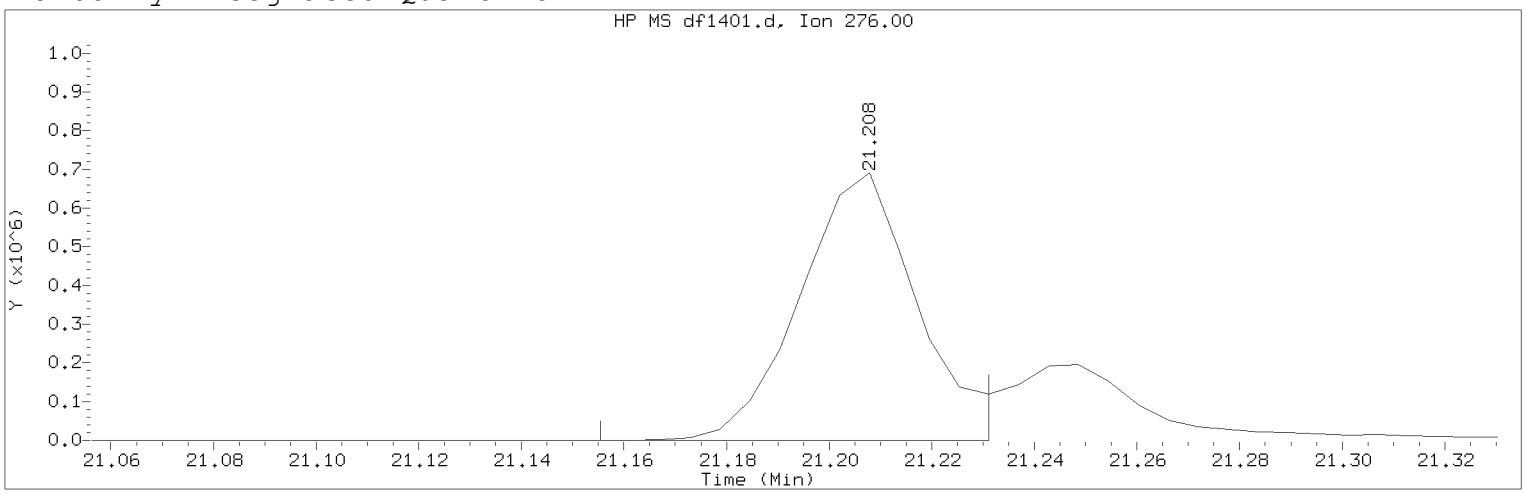
on 06/20/2018 at 21:10.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20a.b/df1401.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 19:43 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 20:12
Date, time and analyst ID of latest file update: 20-Jun-2018 20:13 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD1628

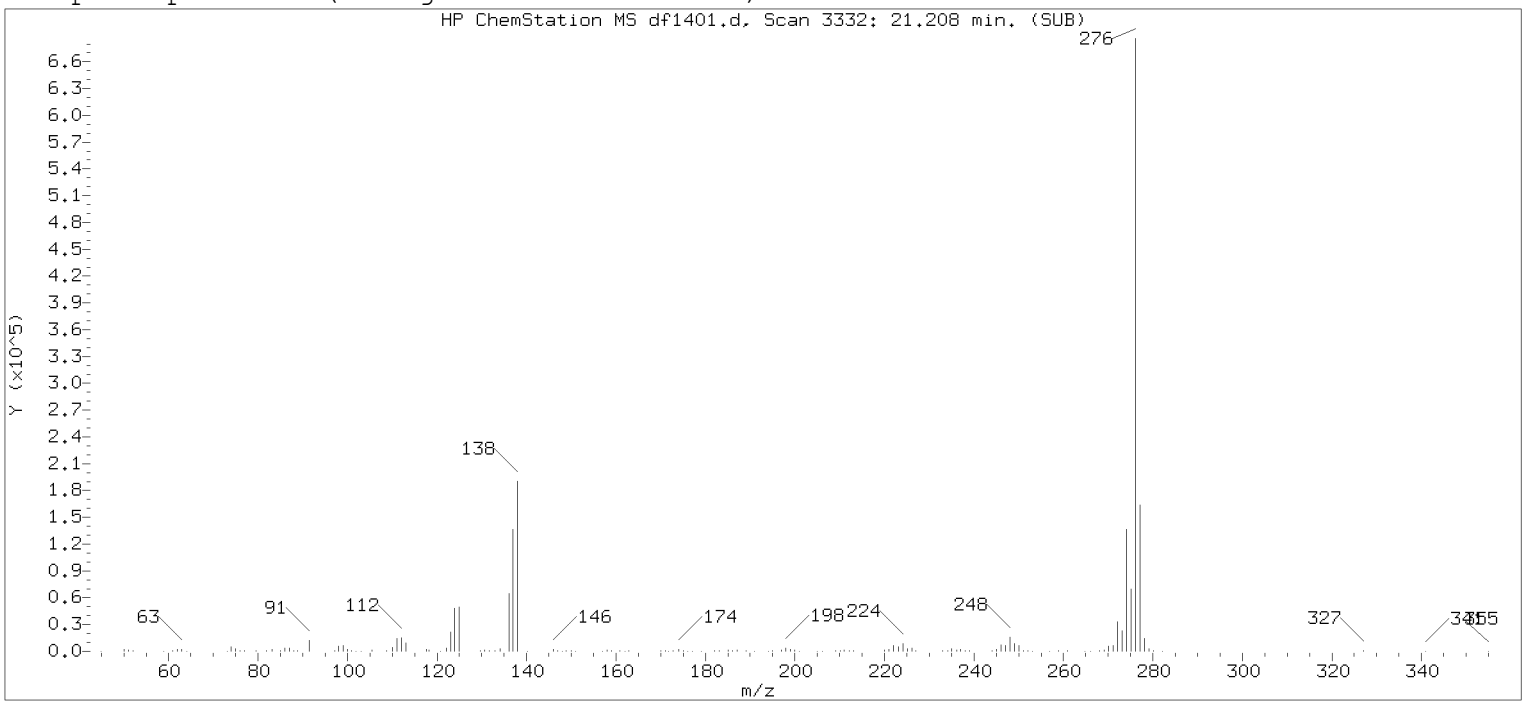
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3332
Retention Time (minutes) : 21.208
Quant Ion : 276.00
Area (flag) : 1100189M
On-Column Amount (ng/ul) : 6.5574
Integration start scan : 3322 Integration stop scan: 3335
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

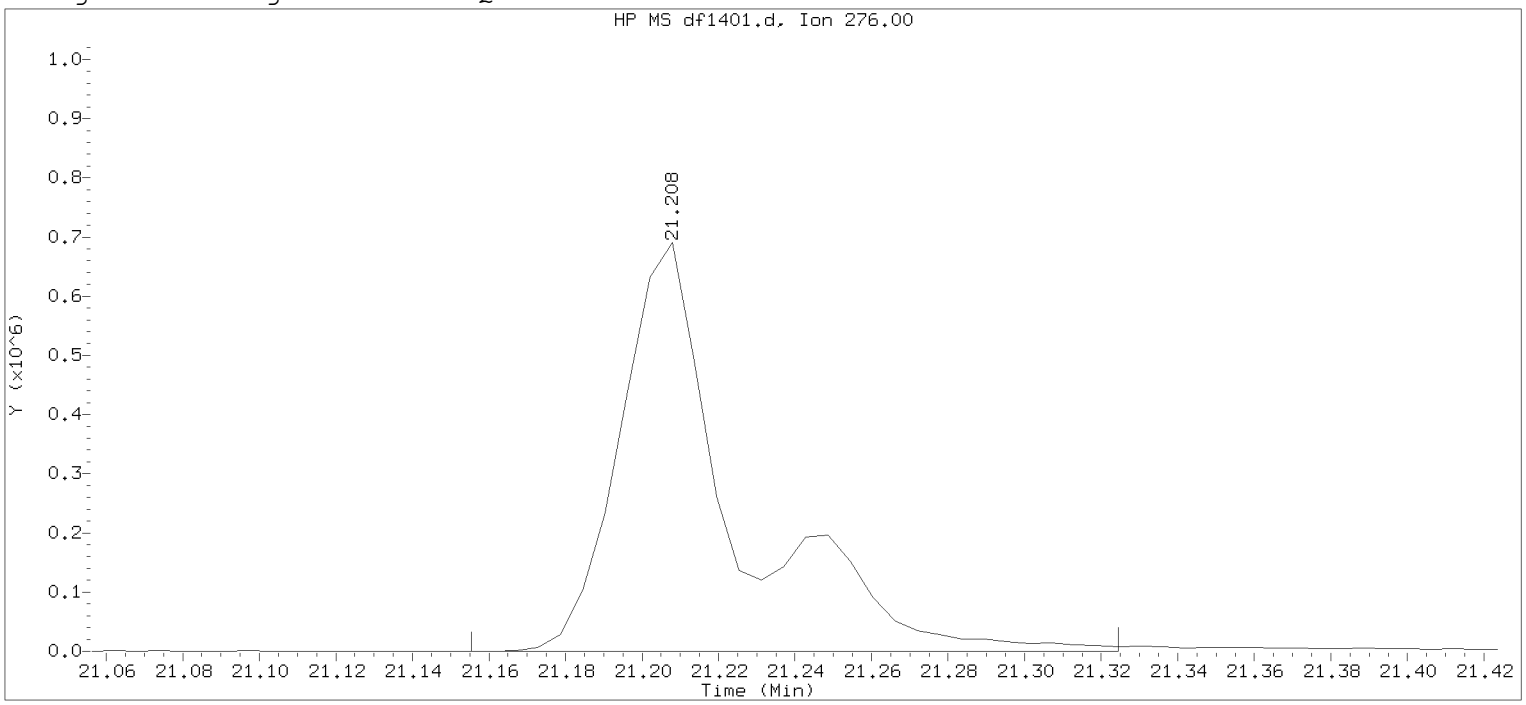
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 06/20/2018 at 21:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 06/24/2018 at 20:41.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20a.b/df1401.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 19:43 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: all1
Calibration date and time: 20-JUN-2018 20:10
Date, time and analyst ID of latest file update: 20-Jun-2018 20:10 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD1628

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3332		
Retention Time (minutes)	: 21.208		
Quant Ion	: 276.00		
Area	: 1449572		
On-column Amount (ng/ul)	: 8.6398		
Integration start scan	: 3322	Integration stop scan:	3351
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user ID: art12405

Raw QC Data

Semivolatiles by GC/MS

Data file: /chem/HP19760.i/18jun20.b/df1352.d
Data file Sample Info. Line: SBLKWM169;SBLKWM169;1;3;BLANK;;;
Date, time and analyst ID of latest file update: 20-Jun-2018 13:51 em10340

Injection date and time: **20-JUN-2018 10:03**
Instrument ID: **HP19760.i** Batch: **18169WAM**

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.619	(0.000)	829	152	246066	(-9)	5.00	
65) Naphthalene-d8	8.548	(0.006)	1160	136	958989	(-9)	5.00	
113) Acenaphthene-d10	11.334	(0.006)	1638	164	432158	(-13)	5.00	
153) Phenanthrene-d10	13.240	(0.000)	1965	188	762089	(-16)	5.00	
175) Pyrene-d10	15.169	(0.000)	2296	212	741951	(-20)	5.00	
213) Perylene-d12	19.611	(0.000)	3058	264	557859	(-36)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.730	(0.001)	112	2062037	25.408	51%		10 - 82
17) Phenol-d6	(1)	6.117	(0.001)	99	1996703	18.559	37%		10 - 71
44) Nitrobenzene-d5	(2)	7.446	(0.000)	82	1911040	19.133	77%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297	(0.000)	172	2725211	19.583	78%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.412	(-0.001)	330	614776	40.698	81%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	3201279	24.795	99%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
16) Benzaldehyde	(1)				Not Detected					0.8
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
36) Acetophenone	(1)				Not Detected					1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
76) Caprolactam	(2)				Not Detected					1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1

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Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1352.d Injection date and time: **20-JUN-2018 10:03**
Data file Sample Info. Line: SBLKWM169;SBLKWM169;1;3;BLANK;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 13:51 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
86) 1,2,4,5-Tetrachlorobenzene	(3)				Not Detected					0.1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
95) 1,1'-Biphenyl	(3)				Not Detected					0.8
96) 2-Chloronaphthalene	(3)				Not Detected					0.1
99) Diphenyl ether	(3)				Not Detected					0.1
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
122) 2,3,4,6-Tetrachlorophenol	(3)				Not Detected					1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
148) Atrazine	(4)				Not Detected					0.5
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

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Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1352.d Injection date and time: **20-JUN-2018 10:03**
Data file Sample Info. Line: SBLKWM169;SBLKWM169;1;3;BLANK;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 13:51 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

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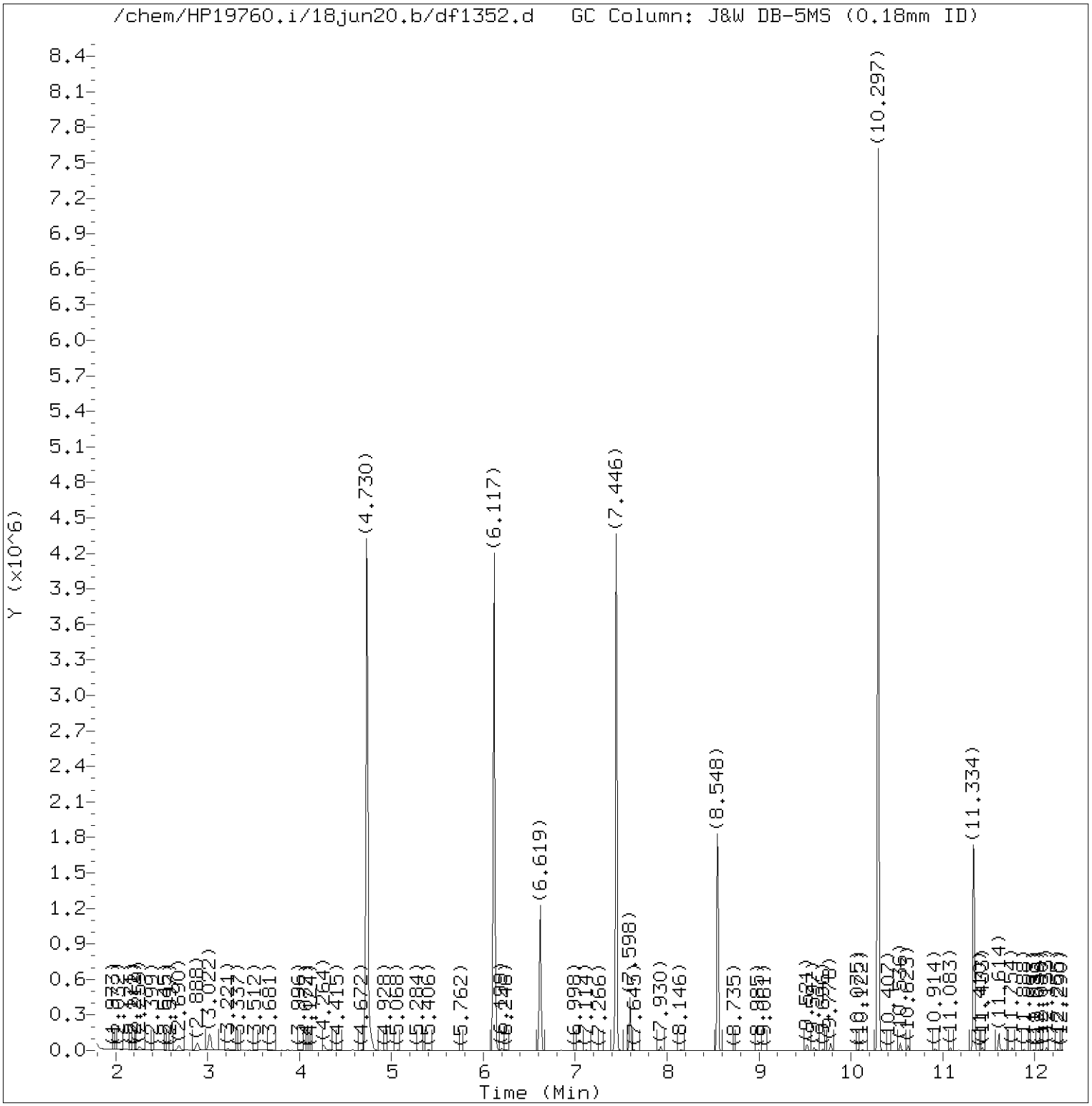
Total number of targets = 72

Digitally signed by Edward Monborne on 06/20/2018 at 14:04. Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

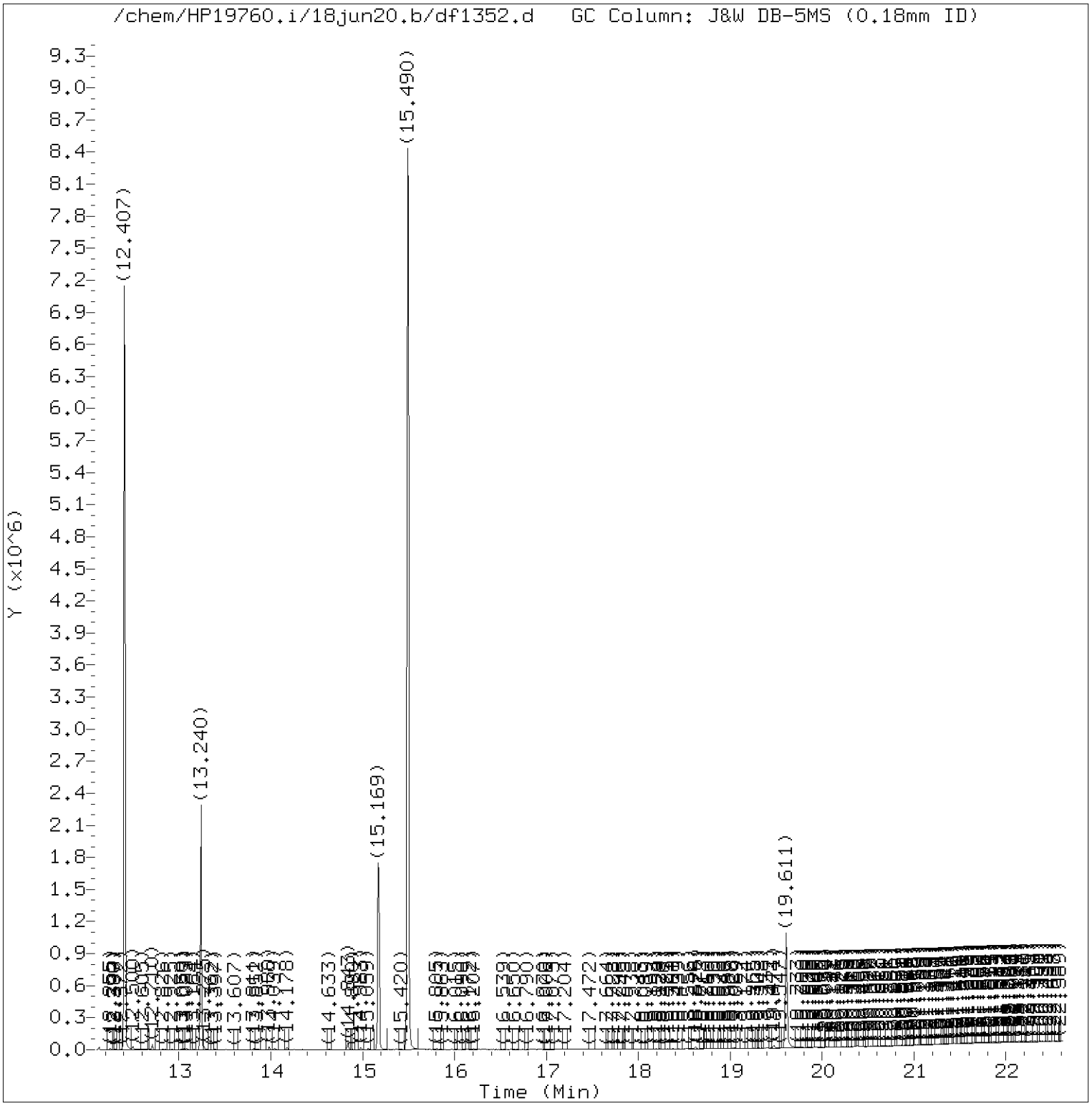
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1352.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:03 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 13:51 em10340

Sample Name: SBLKWM169 Lab Sample ID: SBLKWM169

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1352.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:03 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 13:51 em10340

Sample Name: SBLKWM169 Lab Sample ID: SBLKWM169

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1352.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:03 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 13:51 em10340

Sample Name: SBLKWM169 Lab Sample ID: SBLKWM169

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.730	112	2062037	25.408
17)$Phenol-d6	(1)	6.117	99	1996703	18.559
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	246066	5.000
44)$Nitrobenzene-d5	(2)	7.446	82	1911040	19.133
65)*Naphthalene-d8	(2)	8.548	136	958989	5.000
93)$2-Fluorobiphenyl	(3)	10.297	172	2725211	19.583
113)*Acenaphthene-d10	(3)	11.334	164	432158	5.000
135)$2,4,6-Tribromophenol	(3)	12.412	330	614776	40.698
153)*Phenanthrene-d10	(4)	13.240	188	762089	5.000
175)*Pyrene-d10	(5)	15.169	212	741951	5.000
179)$Terphenyl-d14	(5)	15.490	244	3201279	24.795
213)*Perylene-d12	(6)	19.611	264	557859	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20a.b/df1404.d
Injection date and time: **20-JUN-2018 21:17**
Data file Sample Info. Line: SBLKWB170;SBLKWB170;1;3;BLANK;;;
Instrument ID: **HP19760.i** Batch: **18170WAB**
Date, time and analyst ID of latest file update: 20-Jun-2018 23:32 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20a.b/df1404.d**

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: **QC170WBM**
Calibration date and time (Last Method Edit): 20-JUN-2018 21:16
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20a.b/df1401.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.619(0.000)	829	152	254331 (-3)	5.00	
65) Naphthalene-d8	8.554(0.000)	1161	136	992405 (-4)	5.00	
113) Acenaphthene-d10	11.340(0.000)	1639	164	452413 (-6)	5.00	
153) Phenanthrene-d10	13.240(0.006)	1965	188	801898 (-9)	5.00	
175) Pyrene-d10	15.169(0.006)	2296	212	797937 (-12)	5.00	
213) Perylene-d12	19.611(0.000)	3058	264	571153 (-31)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.730(0.001)	112	1815724	21.646	43%		10 - 82
17) Phenol-d6	(1)	6.117(0.001)	99	1780399	16.011	32%		10 - 71
44) Nitrobenzene-d5	(2)	7.446(0.001)	82	1857744	17.973	72%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297(0.001)	172	2675673	18.366	73%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.412(0.000)	330	663139	41.934	84%		21 - 134
179) Terphenyl-d14	(5)	15.496(-0.001)	244	3245087	23.370	93%		27 - 116

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
4) N-Nitrosodimethylamine	(1)			Not Detected					0.5
5) Pyridine	(1)			Not Detected					0.5
7) 2-Picoline	(1)			Not Detected					0.5
8) N-Nitrosomethylethylamine	(1)			Not Detected					0.5
9) Methyl methanesulfonate	(1)			Not Detected					0.3
13) N-Nitrosodiethylamine	(1)			Not Detected					0.1
15) Ethyl methanesulfonate	(1)			Not Detected					0.1
18) Phenol	(1)			Not Detected					0.1
19) Aniline	(1)			Not Detected					0.8
22) bis(2-Chloroethyl)ether	(1)			Not Detected					0.1
23) 2-Chlorophenol	(1)			Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)			Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)			Not Detected					0.1
27) Benzyl alcohol	(1)			Not Detected					3
28) 1,2-Dichlorobenzene	(1)			Not Detected					0.1
31) 2-Methylphenol	(1)			Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)			Not Detected					0.1
34) bis(2-Chloroisopropyl)ether	(1)			Not Detected					0.1
35) N-Nitrosopyrrolidine	(1)			Not Detected					0.1
36) Acetophenone	(1)			Not Detected					1
37) 4-Methylphenol	(1)			Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)			Not Detected					0.2
39) N-Nitrosomorpholine	(1)			Not Detected					0.5
40) o-Toluidine	(1)			Not Detected					1
43) Hexachloroethane	(1)			Not Detected					0.3
45) Nitrobenzene	(2)			Not Detected					0.1
48) N-Nitrosopiperidine	(2)			Not Detected					0.1

Digitally signed by Ashley R. Transue on 06/20/2018 at 23:37. Target 3.5 esignature user ID: art12405

Data file: /chem/HP19760.i/18jun20a.b/df1404.d Injection date and time: **20-JUN-2018 21:17**
Data file Sample Info. Line: SBLKWB170;SBLKWB170;1;3;BLANK;;; Instrument ID: **HP19760.i** Batch: **18170WAB**
Date, time and analyst ID of latest file update: 20-Jun-2018 23:32 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20a.b/df1404.d**

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: **QC170WBM**
Calibration date and time (Last Method Edit): 20-JUN-2018 21:16
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20a.b/df1401.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
57) O,O,O-Triethylphosphorothioate	(2)				Not Detected					0.5
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
68) 2,6-Dichlorophenol	(2)				Not Detected					0.1
69) Hexachloropropene	(2)				Not Detected					0.5
71) Hexachlorobutadiene	(2)				Not Detected					0.1
77) N-Nitrosodi-n-butylamine	(2)				Not Detected					3
81) 1,4-Phenylenediamine	(2)				Not Detected					19
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
82) Safrole	(2)				Not Detected					0.5
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
86) 1,2,4,5-Tetrachlorobenzene	(3)				Not Detected					0.1
88) cis-Isosafrole	(3)				Not Detected					0.3
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
94) trans-Isosafrole	(3)				Not Detected					0.3
97) Isosafrole	(3)				Not Detected					1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1
100) 2-Nitroaniline	(3)				Not Detected					0.5
104) 1,4-Naphthoquinone	(3)				Not Detected					6
106) Dimethylphthalate	(3)				Not Detected					0.5
107) 1,3-Dinitrobenzene	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
117) Pentachlorobenzene	(3)				Not Detected					0.1
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
121) 1-Naphthylamine	(3)				Not Detected					2
122) 2,3,4,6-Tetrachlorophenol	(3)				Not Detected					1
123) 2-Naphthylamine	(3)				Not Detected					2
124) Diethylphthalate	(3)				Not Detected					0.5
125) Thionazin	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
128) 5-Nitro-o-toluidine	(3)				Not Detected					1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
137) Tetraethyldithiopyrophosphate	(4)				Not Detected					0.3
139) 1,3,5-Trinitrobenzene	(4)				Not Detected					24
140) Diallate (peak 1)	(4)				Not Detected					0.06
142) Phenacetin	(4)				Not Detected					0.1
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1

Data file: /chem/HP19760.i/18jun20a.b/df1404.d Injection date and time: **20-JUN-2018 21:17**
Data file Sample Info. Line: SBLKWB170;SBLKWB170;1;3;BLANK;;; Instrument ID: **HP19760.i** Batch: **18170WAB**
Date, time and analyst ID of latest file update: 20-Jun-2018 23:32 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20a.b/df1404.d**

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: **QC170WBM**
Calibration date and time (Last Method Edit): 20-JUN-2018 21:16
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20a.b/df1401.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

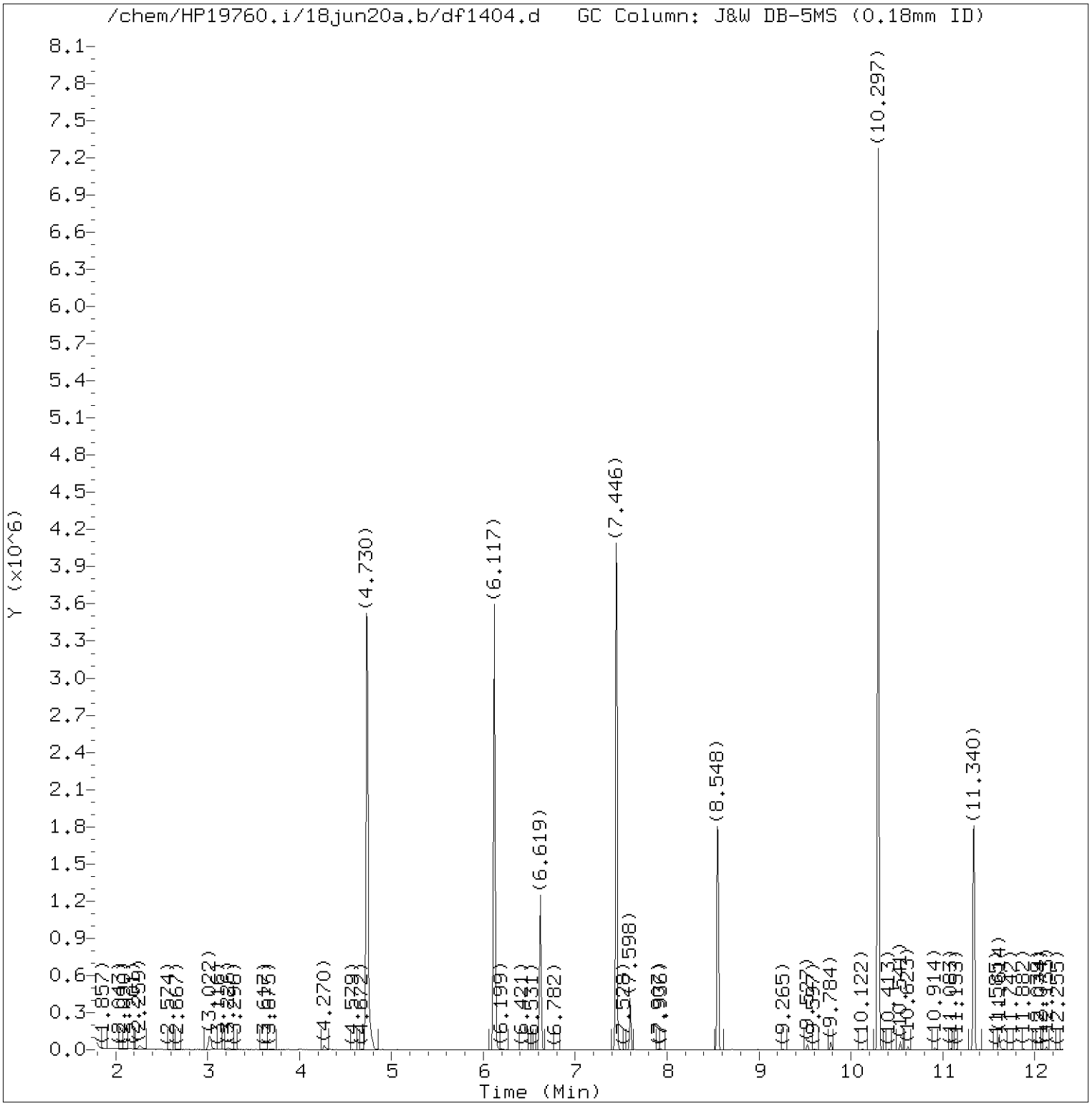
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
144) Diallate (peak 2)	(4)				Not Detected					0.06
146) Diallate trans/cis	(4)				Not Detected					0.3
145) Hexachlorobenzene	(4)				Not Detected					0.03
147) Dimethoate	(4)				Not Detected					0.8
149) Pentachlorophenol	(4)				Not Detected					0.3
150) 4-Aminobiphenyl	(4)				Not Detected					1
151) Pentachloronitrobenzene	(4)				Not Detected					0.5
152) Pronamide	(4)				Not Detected					0.1
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
168) 4-Nitroquinoline-1-oxide	(4)				Not Detected					5
170) Methapyrilene	(4)				Not Detected					4
171) Isodrin	(4)				Not Detected					0.1
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
182) p-Dimethylaminoazobenzene	(5)				Not Detected					1
185) Chlorobenzilate	(5)				Not Detected					0.8
187) 3,3'-Dimethylbenzidine	(5)				Not Detected					6
188) Butylbenzylphthalate	(5)				Not Detected					0.5
191) 2-Acetylaminofluorene	(5)				Not Detected					3
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
207) 7,12-Dimethylbenz[a]anthracene	(6)				Not Detected					1
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
215) 3-Methylcholanthrene	(6)				Not Detected					1
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 116

Digitally signed by Ashley R. Transue on 06/20/2018 at 23:37. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 06/24/2018 at 20:41. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

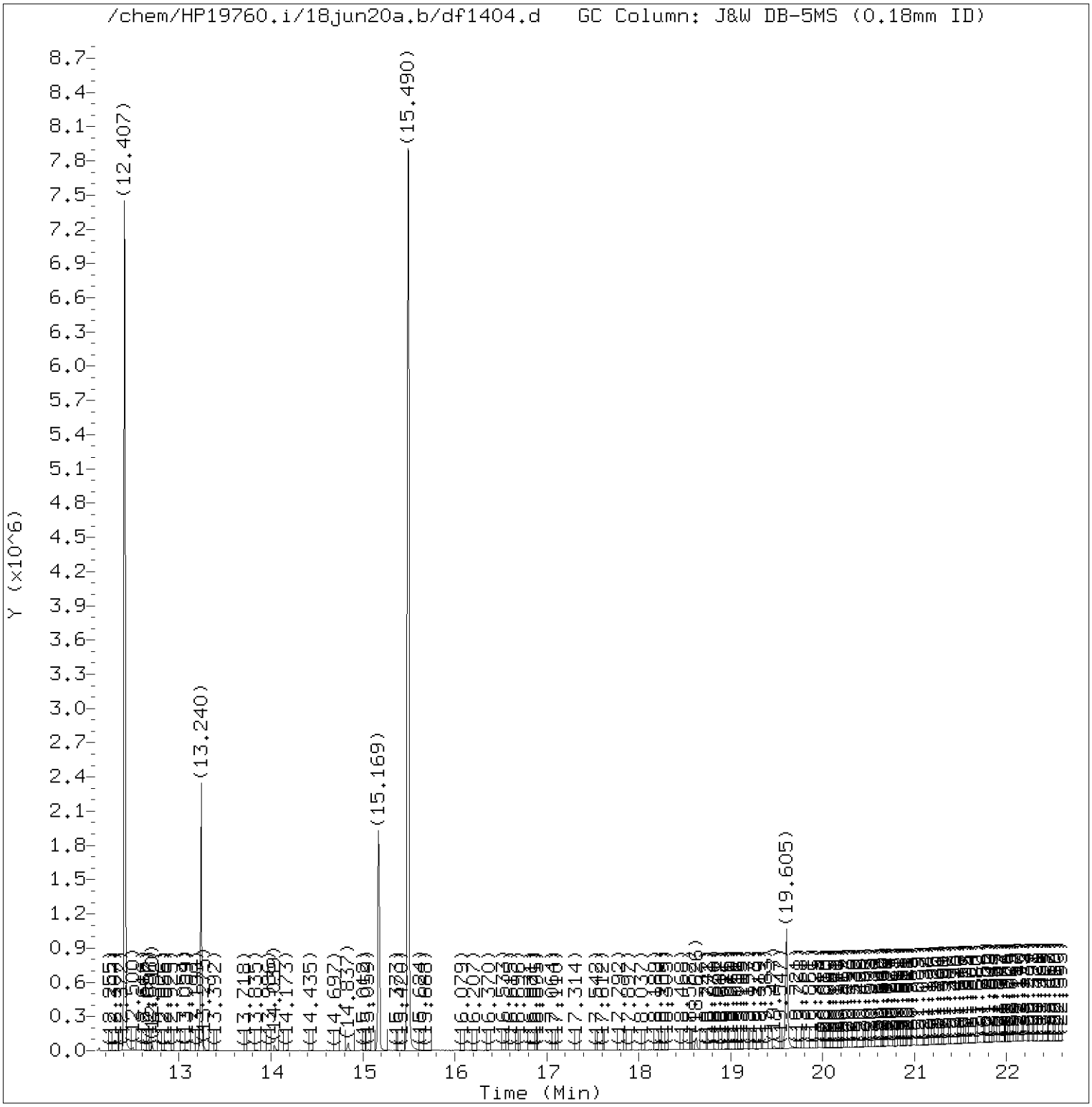
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1404.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 21:17 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:32 art12405

Sample Name: SBLKWB170 Lab Sample ID: SBLKWB170

Digitally signed by Ashley R. Transue
on 06/20/2018 at 23:37.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1404.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 21:17 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:32 art12405

Sample Name: SBLKWB170 Lab Sample ID: SBLKWB170

Digitally signed by Ashley R. Transue
on 06/20/2018 at 23:37.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1404.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 21:17 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:32 art12405

Sample Name: SBLKWB170 Lab Sample ID: SBLKWB170

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.730	112	1815724	21.646
17)$Phenol-d6	(1)	6.117	99	1780399	16.011
25)*1,4-Dichlorobenzene-d4	(1)	6.619	152	254331	5.000
44)$Nitrobenzene-d5	(2)	7.446	82	1857744	17.973
65)*Naphthalene-d8	(2)	8.554	136	992405	5.000
93)$2-Fluorobiphenyl	(3)	10.297	172	2675673	18.366
113)*Acenaphthene-d10	(3)	11.340	164	452413	5.000
135)$2,4,6-Tribromophenol	(3)	12.412	330	663139	41.934
153)*Phenanthrene-d10	(4)	13.240	188	801898	5.000
175)*Pyrene-d10	(5)	15.169	212	797937	5.000
179)$Terphenyl-d14	(5)	15.496	244	3245087	23.370
213)*Perylene-d12	(6)	19.611	264	571153	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 06/20/2018 at 23:37.
Target 3.5 esignature user ID: art12405

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009MS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662311

Sample wt/vol: 241 (g/mL)ML Lab File ID: df1355.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			26	
111-44-4	bis(2-Chloroethyl)ether			42	
95-57-8	2-Chlorophenol			43	
541-73-1	1,3-Dichlorobenzene			41	
106-46-7	1,4-Dichlorobenzene			41	
95-50-1	1,2-Dichlorobenzene			43	
95-48-7	2-Methylphenol			40	
108-60-1	2,2'-oxybis(1-Chloropropane)			46	
106-44-5	4-Methylphenol			40	
621-64-7	N-Nitroso-di-n-propylamine			46	
67-72-1	Hexachloroethane			38	
98-95-3	Nitrobenzene			43	
78-59-1	Isophorone			45	
88-75-5	2-Nitrophenol			45	
105-67-9	2,4-Dimethylphenol			33	
111-91-1	bis(2-Chloroethoxy)methane			42	
120-83-2	2,4-Dichlorophenol			44	
120-82-1	1,2,4-Trichlorobenzene			43	
91-20-3	Naphthalene			44	
106-47-8	4-Chloroaniline			34	
87-68-3	Hexachlorobutadiene			38	
59-50-7	4-Chloro-3-methylphenol			44	
91-57-6	2-Methylnaphthalene			45	
77-47-4	Hexachlorocyclopentadiene			73	
88-06-2	2,4,6-Trichlorophenol			43	
95-95-4	2,4,5-Trichlorophenol			46	
91-58-7	2-Chloronaphthalene			45	
88-74-4	2-Nitroaniline			49	
131-11-3	Dimethylphthalate			43	
606-20-2	2,6-Dinitrotoluene			51	

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009MS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662311

Sample wt/vol: 241 (g/mL)ML Lab File ID: df1355.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene			47	
99-09-2	3-Nitroaniline			39	
83-32-9	Acenaphthene			49	
51-28-5	2,4-Dinitrophenol			44	
100-02-7	4-Nitrophenol			33	
121-14-2	2,4-Dinitrotoluene			50	
132-64-9	Dibenzofuran			46	
84-66-2	Diethylphthalate			45	
86-73-7	Fluorene			47	
7005-72-3	4-Chlorophenyl-phenylether			45	
100-01-6	4-Nitroaniline			44	
534-52-1	4,6-Dinitro-2-methylphenol			38	
86-30-6	N-Nitrosodiphenylamine			46	
101-55-3	4-Bromophenyl-phenylether			48	
118-74-1	Hexachlorobenzene			46	
87-86-5	Pentachlorophenol			30	
85-01-8	Phenanthrene			50	
120-12-7	Anthracene			49	
86-74-8	Carbazole			50	
84-74-2	Di-n-butylphthalate			48	
206-44-0	Fluoranthene			49	
129-00-0	Pyrene			47	
85-68-7	Butylbenzylphthalate			47	
91-94-1	3,3'-Dichlorobenzidine			43	
56-55-3	Benzo(a)anthracene			49	
218-01-9	Chrysene			49	
117-81-7	bis(2-Ethylhexyl)phthalate			46	
117-84-0	Di-n-octylphthalate			47	
205-99-2	Benzo(b)fluoranthene			47	
207-08-9	Benzo(k)fluoranthene			52	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009MS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662311

Sample wt/vol: 241 (g/mL)ML Lab File ID: df1355.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		49		
193-39-5	Indeno(1,2,3-cd)pyrene		38		
53-70-3	Dibenz(a,h)anthracene		39		
191-24-2	Benzo(g,h,i)perylene		39		

FORM I SV-3

C5009MS Lancaster Laboratories, Inc. Analysis Summary for GC/MS Semivolatiles 9662311

Data file: /chem/HP19760.i/18jun20.b/df1355.d Injection date and time: **20-JUN-2018 11:27**
Data file Sample Info. Line: C5009MS;9662311;1;3;MS;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 241 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.625	(-0.006)	830	152	241605	(-10)	5.00	
65) Naphthalene-d8	8.548	(0.006)	1160	136	941448	(-10)	5.00	
113) Acenaphthene-d10	11.340	(0.000)	1639	164	440781	(-12)	5.00	
153) Phenanthrene-d10	13.240	(0.000)	1965	188	815815	(-10)	5.00	
175) Pyrene-d10	15.175	(-0.006)	2297	212	826456	(-11)	5.00	
213) Perylene-d12	19.611	(0.000)	3058	264	778806	(-10)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.765	(-0.004)	112	2290277	28.741	57%		10 - 82
17) Phenol-d6	(1)	6.129	(0.000)	99	2459032	23.278	47%		10 - 71
44) Nitrobenzene-d5	(2)	7.452	(-0.001)	82	1922178	19.603	78%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297	(0.001)	172	2875547	20.259	81%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.413	(0.000)	330	616332	40.003	80%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	2912552	20.252	81%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)	6.147	(-0.000)	94	776516	6.299	26.14			0.1
22) bis(2-Chloroethyl)ether	(1)	6.263	(-0.000)	93	931658	10.225	42.43			0.1
23) 2-Chlorophenol	(1)	6.316	(-0.000)	128	728704	10.326	42.84			0.1
24) 1,3-Dichlorobenzene	(1)	6.537	(-0.000)	146	736376	9.949	41.28			0.1
26) 1,4-Dichlorobenzene	(1)	6.648	(0.000)	146	751237	9.981	41.42			0.1
28) 1,2-Dichlorobenzene	(1)	6.864	(0.000)	146	730669	10.307	42.77			0.1
31) 2-Methylphenol	(1)	7.044	(0.000)	108	725615	9.695	40.23			0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	(0.000)	45	1038834	11.188	46.42			0.1
37) 4-Methylphenol	(1)	7.278	(0.000)	108	797772	9.561	39.67			0.1
38) N-Nitroso-di-n-propylamine	(1)	7.260	(0.000)	70	713201	11.141	46.23			0.2
43) Hexachloroethane	(1)	7.377	(0.000)	117	315971	9.263	38.44			0.3
45) Nitrobenzene	(2)	7.476	(-0.000)	77	998667	10.368	43.02			0.1
50) Isophorone	(2)	7.860	(0.000)	82	1822425	10.838	44.97			0.1
51) 2-Nitrophenol	(2)	7.971	(-0.000)	139	395411	10.899	45.23			0.8
53) 2,4-Dimethylphenol	(2)	8.082	(-0.000)	107	647188	7.864	32.63			0.8
55) bis(2-Chloroethoxy)methane	(2)	8.234	(-0.000)	93	1091801	10.065	41.76			0.1
60) 2,4-Dichlorophenol	(2)	8.356	(-0.001)	162	579761	10.668	44.27			0.1
62) 1,2,4-Trichlorobenzene	(2)	8.478	(-0.000)	180	605167	10.389	43.11			0.1
66) Naphthalene	(2)	8.583	(-0.000)	128	2201381	10.538	43.72			0.03
67) 4-Chloroaniline	(2)	8.688	(-0.000)	127	711395	8.121	33.70			1
71) Hexachlorobutadiene	(2)	8.816	(-0.000)	225	303442	9.244	38.36			0.1
80) 4-Chloro-3-methylphenol	(2)	9.498	(-0.000)	107	735511	10.694	44.37			0.1
83) 2-Methylnaphthalene	(2)	9.685	(-0.000)	142	1438308	10.833	44.95			0.03
85) Hexachlorocyclopentadiene	(3)	9.959	(-0.000)	237	561141	17.590	72.99			1
90) 2,4,6-Trichlorophenol	(3)	10.151	(-0.000)	196	391685	10.440	43.32			0.1
92) 2,4,5-Trichlorophenol	(3)	10.204	(-0.000)	196	418852	11.059	45.89			0.1
96) 2-Chloronaphthalene	(3)	10.454	(-0.000)	162	1321771	10.756	44.63			0.1

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Data file: /chem/HP19760.i/18jun20.b/df1355.d Injection date and time: **20-JUN-2018 11:27**
Data file Sample Info. Line: C5009MS;9662311;1;3;MS;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 241 ml Volume Injected (Vi): 0.5 ul

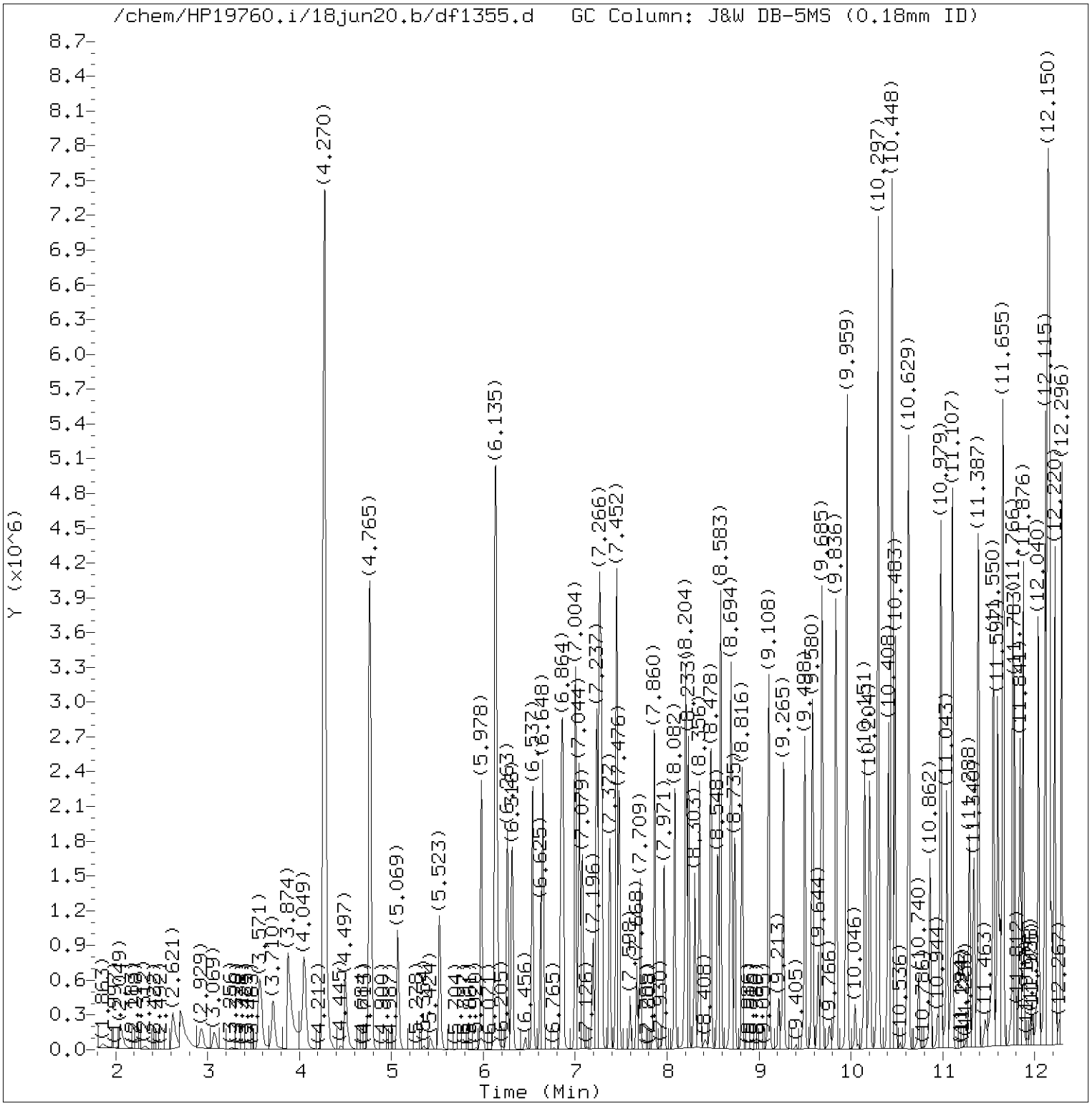
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)	10.629(-0.000)	138	475896	11.801	48.97			0.5
106) Dimethylphthalate	(3)	10.979(-0.000)	163	1306785	10.386	43.09			0.5
108) 2,6-Dinitrotoluene	(3)	11.043(-0.000)	165	364801	12.335	51.18			0.1
109) Acenaphthylene	(3)	11.107(-0.000)	152	1999559	11.316	46.95			0.03
112) 3-Nitroaniline	(3)	11.288(-0.000)	138	321221	9.423	39.10			0.8
114) Acenaphthene	(3)	11.387(0.000)	153	1408232	11.744	48.73			0.03
115) 2,4-Dinitrophenol	(3)	11.544(-0.007)	184	216852M	10.543	43.75			4
116) 4-Nitrophenol	(3)	11.620(-0.002)	109	206611	8.044	33.38			3
118) 2,4-Dinitrotoluene	(3)	11.661(-0.000)	165	489332	12.149	50.41			0.3
119) Dibenzofuran	(3)	11.655(-0.000)	168	1879124	11.064	45.91			0.1
124) Diethylphthalate	(3)	12.040(0.000)	149	1385489	10.824	44.91			0.5
126) Fluorene	(3)	12.115(0.000)	166	1538664	11.368	47.17			0.03
127) 4-Chlorophenyl-phenylether	(3)	12.150(0.000)	204	699075	10.913	45.28			0.1
129) 4-Nitroaniline	(3)	12.156(-0.000)	138	394957	10.521	43.66			0.2
130) 4,6-Dinitro-2-methylphenol	(4)	12.203(-0.000)	198	228408M	9.141	37.93			2
131) N-Nitrosodiphenylamine	(4)	12.296(-0.000)	169	1245653	11.168	46.34			0.2
143) 4-Bromophenyl-phenylether	(4)	12.727(-0.000)	248	392016	11.492	47.69			0.1
145) Hexachlorobenzene	(4)	12.774(-0.000)	284	375021	11.066	45.92			0.03
149) Pentachlorophenol	(4)	13.036(-0.000)	266	168402	7.200	29.88			0.3
155) Phenanthrene	(4)	13.269(-0.000)	178	2321619	12.139	50.37			0.03
157) Anthracene	(4)	13.334(-0.000)	178	2232267	11.891	49.34			0.03
163) Carbazole	(4)	13.549(0.000)	167	2176560	12.098	50.20			0.1
165) Di-n-butylphthalate	(4)	14.074(-0.000)	149	2644873	11.516	47.79			0.5
173) Fluoranthene	(4)	14.872(0.000)	202	2457523	11.782	48.89			0.03
177) Pyrene	(5)	15.204(0.000)	202	2575664	11.370	47.18			0.03
188) Butylbenzylphthalate	(5)	16.335(0.000)	149	1282066	11.349	47.09			0.5
193) 3,3'-Dichlorobenzidine	(5)	17.175(0.000)	252	787236	10.434	43.29			0.8
195) Benzo(a)anthracene	(5)	17.175(0.000)	228	2347792	11.788	48.91			0.03
196) Chrysene	(5)	17.233(0.000)	228	2359230	11.829	49.08			0.03
199) bis(2-Ethylhexyl)phthalate	(5)	17.402(0.000)	149	1711563	11.026	45.75			1
205) Di-n-octylphthalate	(6)	18.550(-0.000)	149	2883066	11.411	47.35			1
206) Benzo(b)fluoranthene	(6)	19.005(-0.000)	252	2139782	11.391	47.27			0.03
208) Benzo(k)fluoranthene	(6)	19.051(-0.000)	252	2331874	12.483	51.80			0.03
211) Benzo(a)pyrene	(6)	19.524(-0.000)	252	2007937	11.839	49.12			0.03
219) Indeno(1,2,3-cd)pyrene	(6)	21.208(0.000)	276	1450510M	9.227	38.29			0.03
220) Dibenz(a,h)anthracene	(6)	21.249(0.000)	278	1619494	9.511	39.47			0.03
221) Benzo(g,h,i)perylene	(6)	21.564(0.000)	276	1566584	9.340	38.76			0.03

M = Compound was manually integrated.

Total number of targets = 64

Digitally signed by Edward Monborne on 06/20/2018 at 14:14. Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

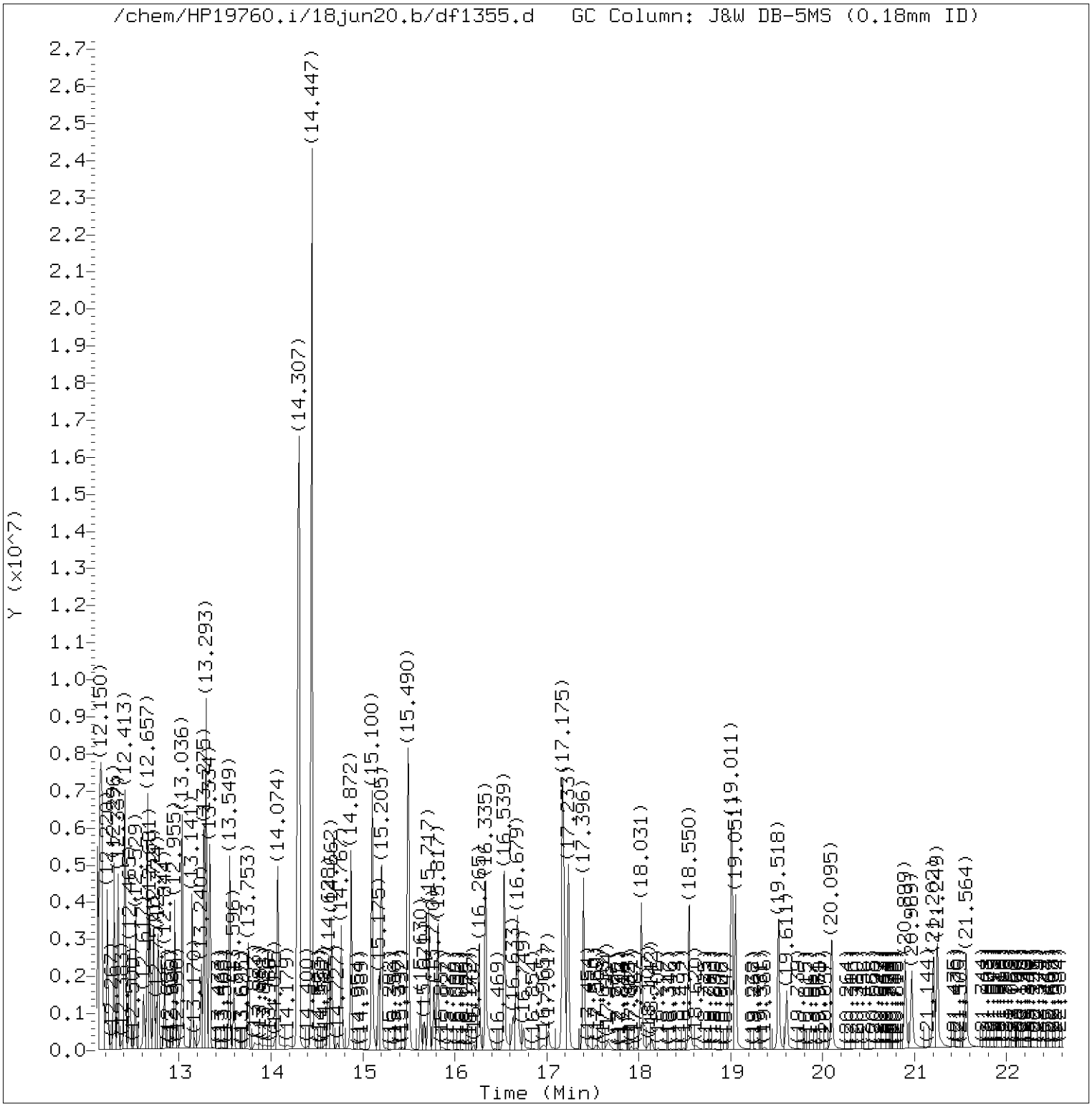
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

Sample Name: C5009MS Lab Sample ID: 9662311

Digitally signed by Edward Monborne
on 06/20/2018 at 14:14.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

Sample Name: C5009MS Lab Sample ID: 9662311

Digitally signed by Edward Monborne
on 06/20/2018 at 14:14.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

Sample Name: C5009MS Lab Sample ID: 9662311

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.765	112	2290277	28.741
17)$Phenol-d6	(1)	6.129	99	2459032	23.278
18) Phenol	(1)	6.147	94	776516	6.299
22) bis(2-Chloroethyl)ether	(1)	6.263	93	931658	10.225
23) 2-Chlorophenol	(1)	6.316	128	728704	10.326
24) 1,3-Dichlorobenzene	(1)	6.537	146	736376	9.949
25)*1,4-Dichlorobenzene-d4	(1)	6.625	152	241605	5.000
26) 1,4-Dichlorobenzene	(1)	6.648	146	751237	9.981
28) 1,2-Dichlorobenzene	(1)	6.864	146	730669	10.307
31) 2-Methylphenol	(1)	7.044	108	725615	9.695
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	45	1038834	11.188
38) N-Nitroso-di-n-propylamine	(1)	7.260	70	713201	11.141
37) 4-Methylphenol	(1)	7.278	108	797772	9.561
43) Hexachloroethane	(1)	7.377	117	315971	9.263
44)$Nitrobenzene-d5	(2)	7.452	82	1922178	19.603
45) Nitrobenzene	(2)	7.476	77	998667	10.368
50) Isophorone	(2)	7.860	82	1822425	10.838
51) 2-Nitrophenol	(2)	7.971	139	395411	10.899
53) 2,4-Dimethylphenol	(2)	8.082	107	647188	7.864
55) bis(2-Chloroethoxy)methane	(2)	8.233	93	1091801	10.065
60) 2,4-Dichlorophenol	(2)	8.356	162	579761	10.668
62) 1,2,4-Trichlorobenzene	(2)	8.478	180	605167	10.389
65)*Naphthalene-d8	(2)	8.548	136	941448	5.000
66) Naphthalene	(2)	8.583	128	2201381	10.538
67) 4-Chloroaniline	(2)	8.688	127	711395	8.121
71) Hexachlorobutadiene	(2)	8.816	225	303442	9.244
80) 4-Chloro-3-methylphenol	(2)	9.498	107	735511	10.694
83) 2-Methylnaphthalene	(2)	9.685	142	1438308	10.833
85) Hexachlorocyclopentadiene	(3)	9.959	237	561141	17.590
90) 2,4,6-Trichlorophenol	(3)	10.151	196	391685	10.440
92) 2,4,5-Trichlorophenol	(3)	10.204	196	418852	11.059
93)$2-Fluorobiphenyl	(3)	10.297	172	2875547	20.259
96) 2-Chloronaphthalene	(3)	10.454	162	1321771	10.756
100) 2-Nitroaniline	(3)	10.629	138	475896	11.801
106) Dimethylphthalate	(3)	10.979	163	1306785	10.386
108) 2,6-Dinitrotoluene	(3)	11.043	165	364801	12.335
109) Acenaphthylene	(3)	11.107	152	1999559	11.316
112) 3-Nitroaniline	(3)	11.288	138	321221	9.423
113)*Acenaphthene-d10	(3)	11.340	164	440781	5.000
114) Acenaphthene	(3)	11.387	153	1408232	11.744

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/20/2018 at 14:14.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

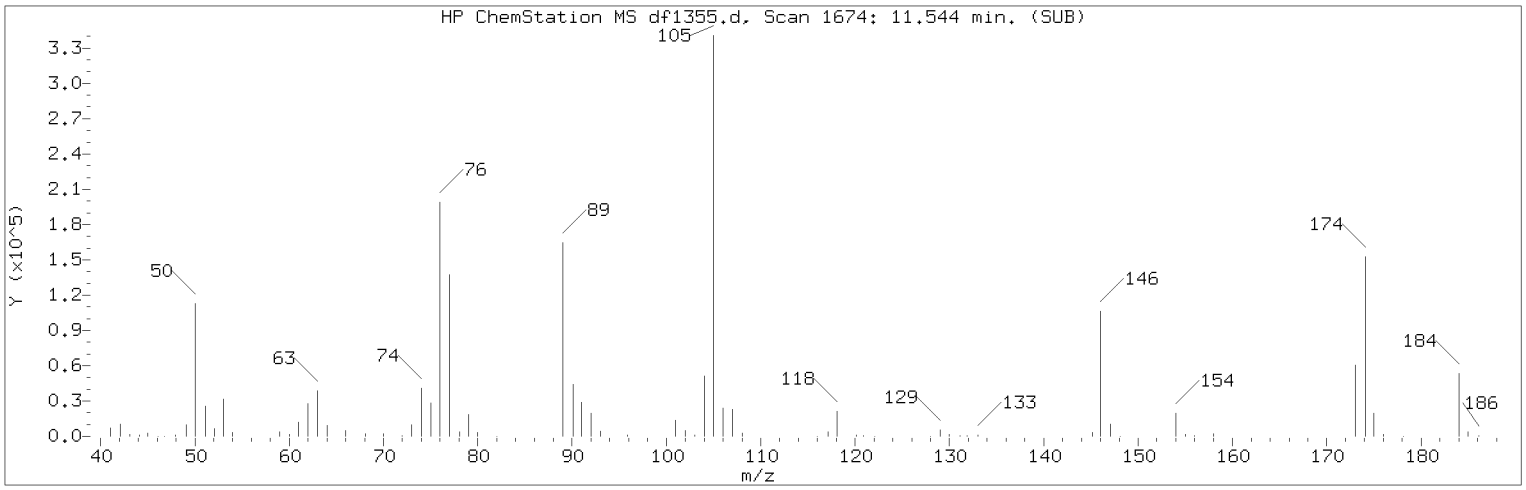
Sample Name: C5009MS Lab Sample ID: 9662311

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
115) 2,4-Dinitrophenol	(3)	11.544	184	216852M	10.543
116) 4-Nitrophenol	(3)	11.620	109	206611	8.044
119) Dibenzofuran	(3)	11.655	168	1879124	11.064
118) 2,4-Dinitrotoluene	(3)	11.661	165	489332	12.149
124) Diethylphthalate	(3)	12.040	149	1385489	10.824
126) Fluorene	(3)	12.115	166	1538664	11.368
127) 4-Chlorophenyl-phenylether	(3)	12.150	204	699075	10.913
129) 4-Nitroaniline	(3)	12.156	138	394957	10.521
130) 4,6-Dinitro-2-methylphenol	(4)	12.203	198	228408M	9.141
131) N-Nitrosodiphenylamine	(4)	12.296	169	1245653	11.168
135)$2,4,6-Tribromophenol	(3)	12.413	330	616332	40.003
143) 4-Bromophenyl-phenylether	(4)	12.727	248	392016	11.492
145) Hexachlorobenzene	(4)	12.774	284	375021	11.066
149) Pentachlorophenol	(4)	13.036	266	168402	7.200
153)*Phenanthrene-d10	(4)	13.240	188	815815	5.000
155) Phenanthrene	(4)	13.269	178	2321619	12.139
157) Anthracene	(4)	13.334	178	2232267	11.891
163) Carbazole	(4)	13.549	167	2176560	12.098
165) Di-n-butylphthalate	(4)	14.074	149	2644873	11.516
173) Fluoranthene	(4)	14.872	202	2457523	11.782
175)*Pyrene-d10	(5)	15.175	212	826456	5.000
177) Pyrene	(5)	15.205	202	2575664	11.370
179)$Terphenyl-d14	(5)	15.490	244	2912552	20.252
188) Butylbenzylphthalate	(5)	16.335	149	1282066	11.349
195) Benzo(a)anthracene	(5)	17.175	228	2347792	11.788
193) 3,3'-Dichlorobenzidine	(5)	17.175	252	787236	10.434
196) Chrysene	(5)	17.233	228	2359230	11.829
199) bis(2-Ethylhexyl)phthalate	(5)	17.402	149	1711563	11.026
205) Di-n-octylphthalate	(6)	18.550	149	2883066	11.411
206) Benzo(b)fluoranthene	(6)	19.005	252	2139782	11.391
208) Benzo(k)fluoranthene	(6)	19.051	252	2331874	12.483
211) Benzo(a)pyrene	(6)	19.524	252	2007937	11.839
213)*Perylene-d12	(6)	19.611	264	778806	5.000
219) Indeno(1,2,3-cd)pyrene	(6)	21.208	276	1450510M	9.227
220) Dibenz(a,h)anthracene	(6)	21.249	278	1619494	9.511
221) Benzo(g,h,i)perylene	(6)	21.564	276	1566584	9.340

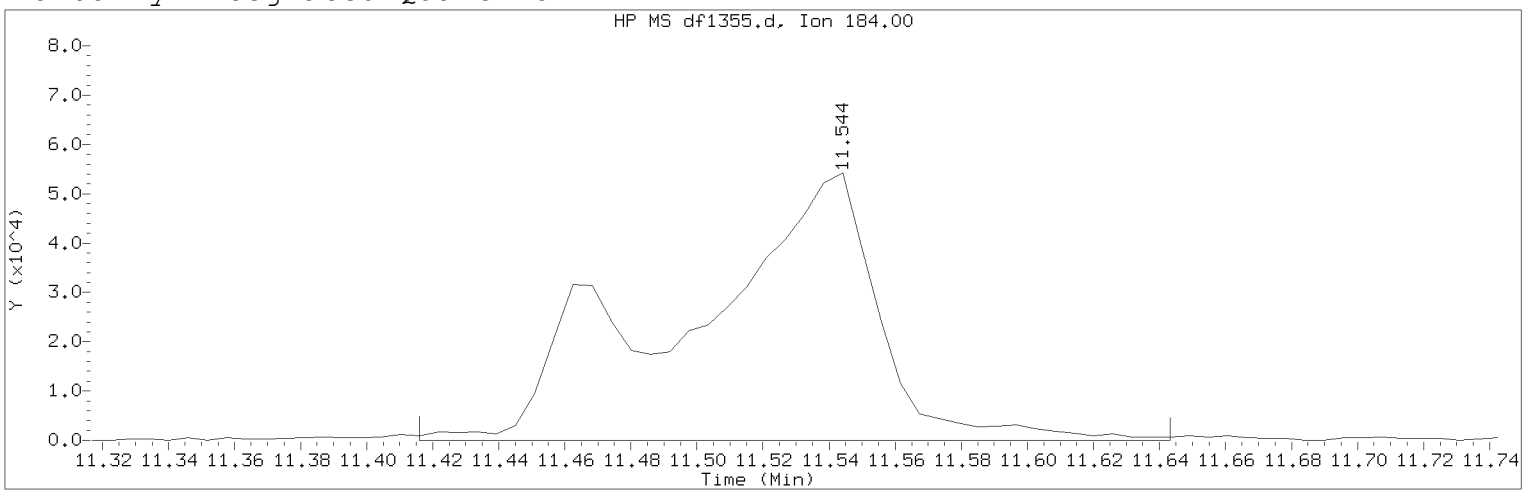
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/20/2018 at 14:14.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

Sample Name: C5009MS Lab Sample ID: 9662311

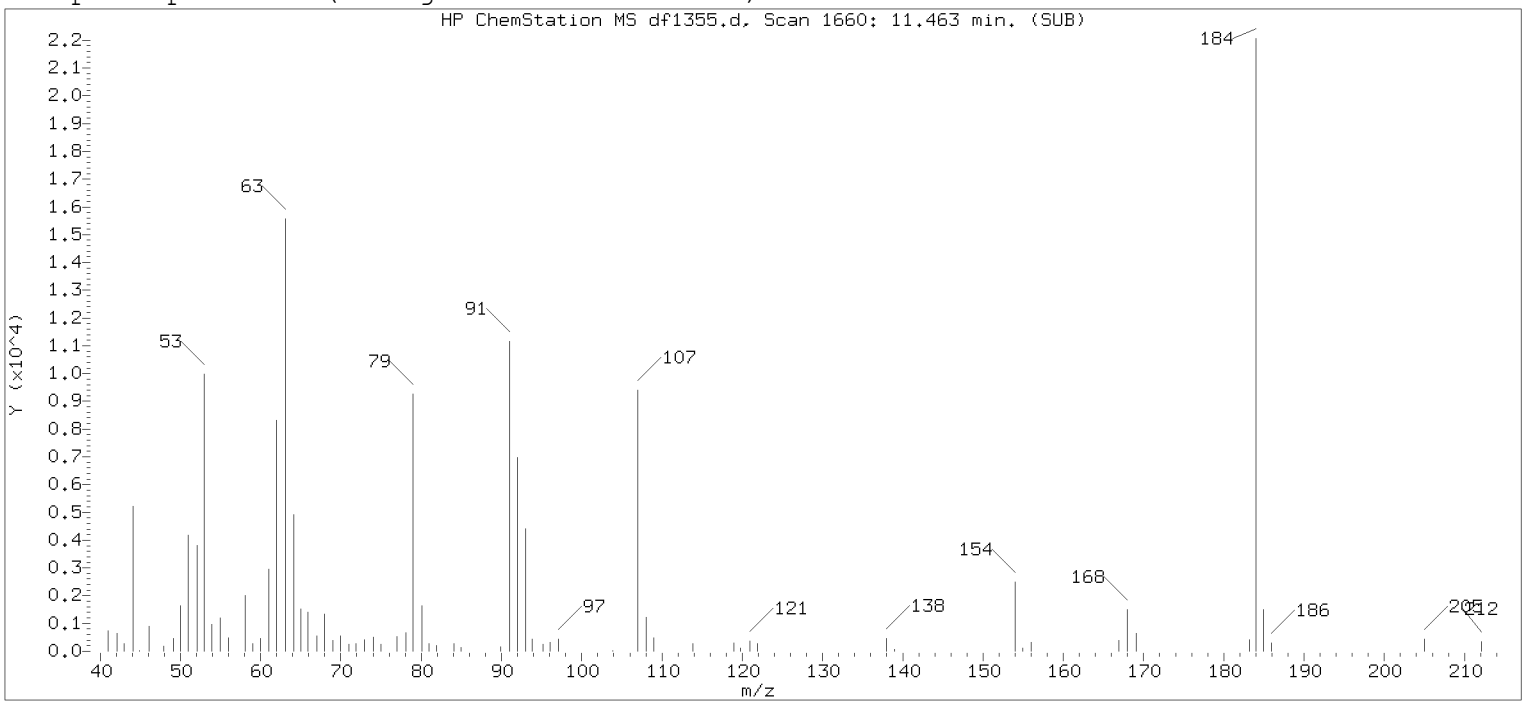
Compound Number : 115
Compound Name : 2,4-Dinitrophenol
Scan Number : 1674
Retention Time (minutes) : 11.544
Quant Ion : 184.00
Area (flag) : 216852M
On-Column Amount (ng/ul) : 10.5434
Integration start scan : 1651 Integration stop scan: 1690
Y at integration start : 9 Y at integration end: 9

Reason for manual integration: improper integration

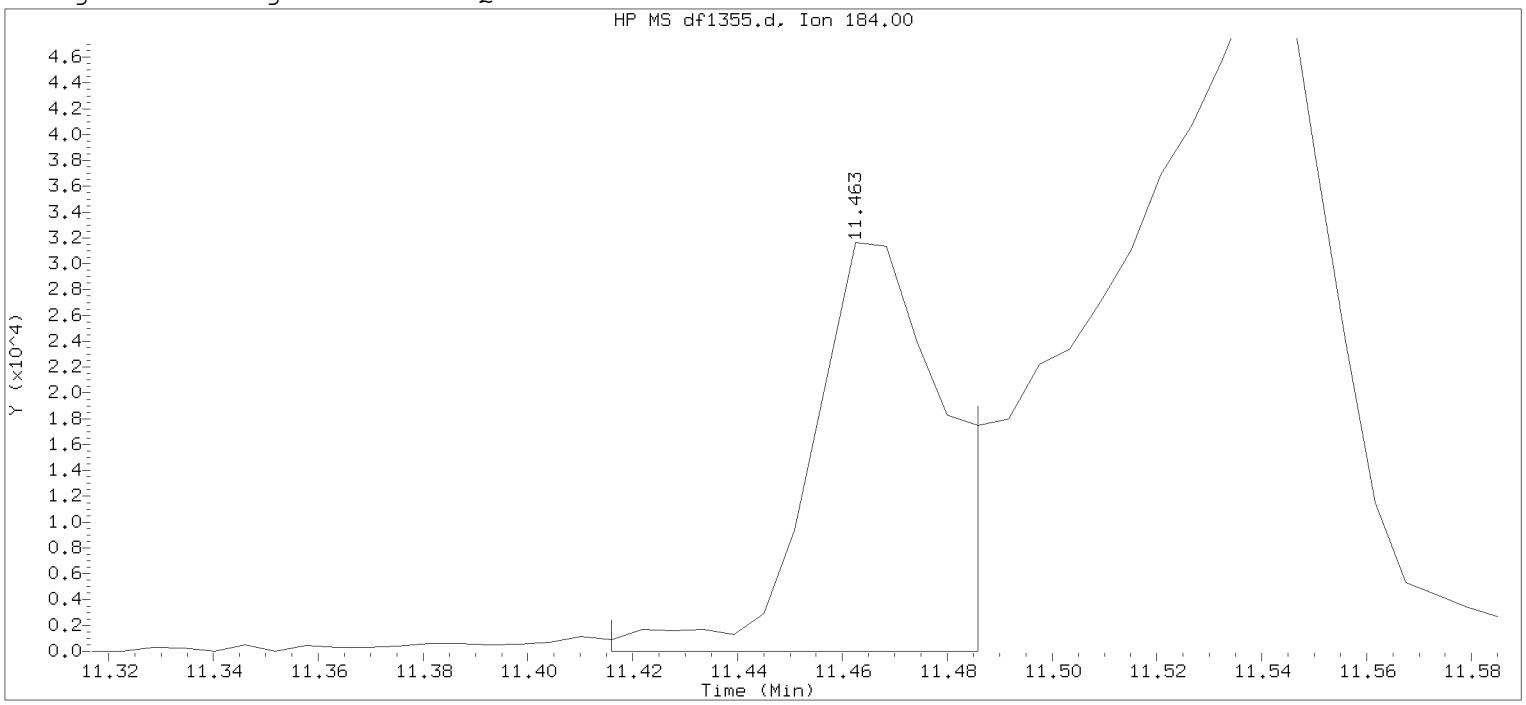
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:14.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

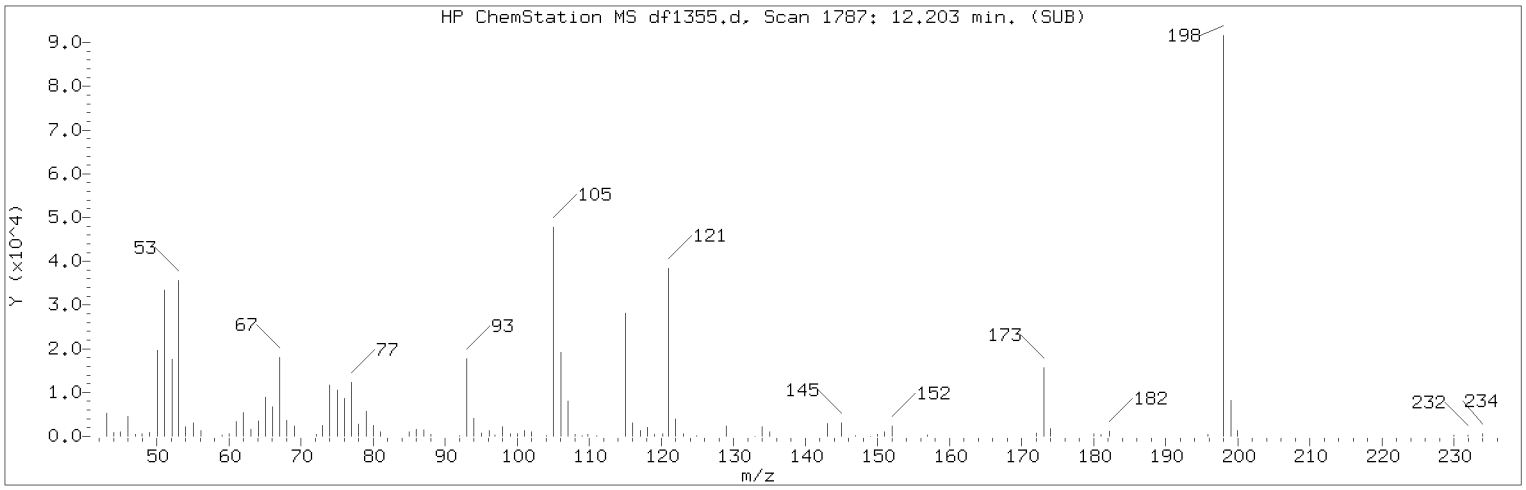
Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 11:53 Automation

Sample Name: C5009MS Lab Sample ID: 9662311

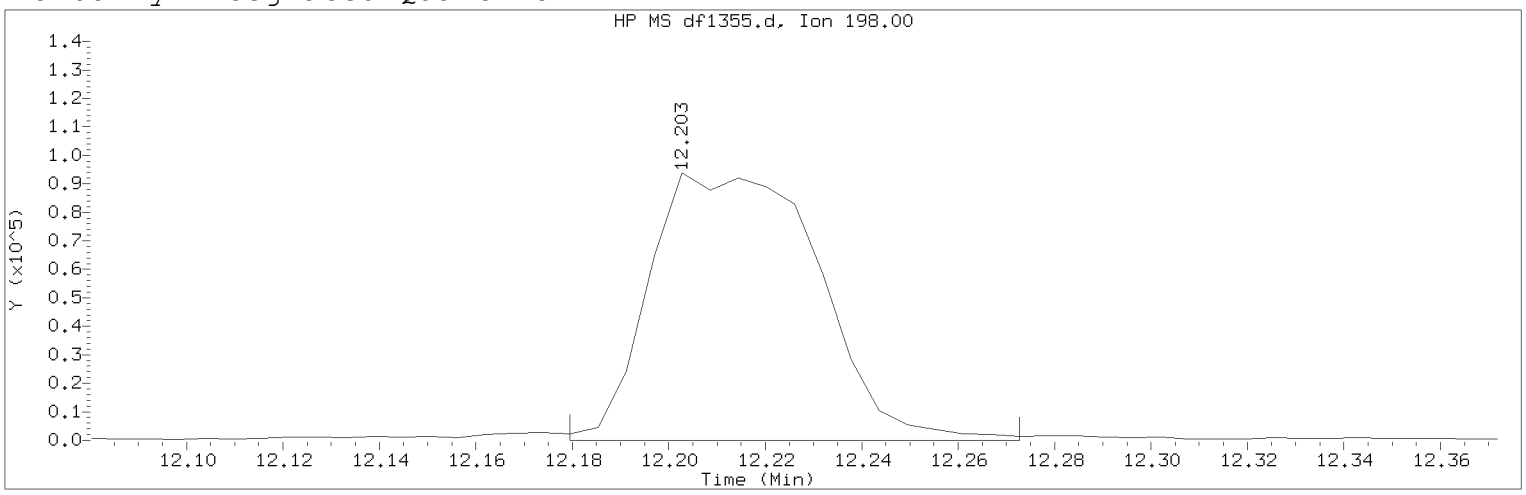
Compound Number	: 115		
Compound Name	: 2,4-Dinitrophenol		
Scan Number	: 1660		
Retention Time (minutes)	: 11.463		
Quant Ion	: 184.00		
Area	: 53739		
On-column Amount (ng/ul)	: 2.6128		
Integration start scan	: 1651	Integration stop scan:	1663
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/20/2018 at 14:14.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

Sample Name: C5009MS Lab Sample ID: 9662311

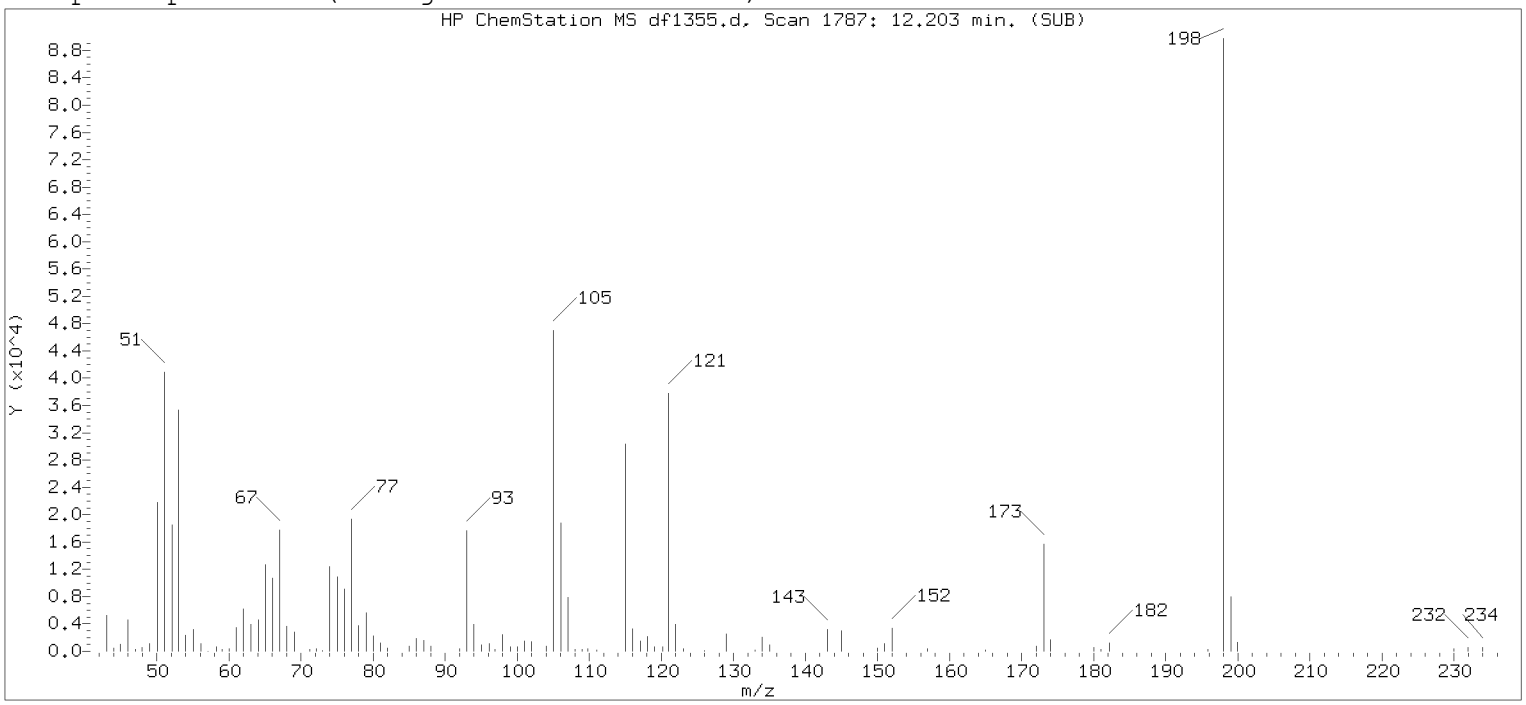
Compound Number : 130
Compound Name : 4,6-Dinitro-2-methylphenol
Scan Number : 1787
Retention Time (minutes) : 12.203
Quant Ion : 198.00
Area (flag) : 228408M
On-Column Amount (ng/ul) : 9.1411
Integration start scan : 1782 Integration stop scan: 1798
Y at integration start : -13 Y at integration end: -13

Reason for manual integration: improper integration

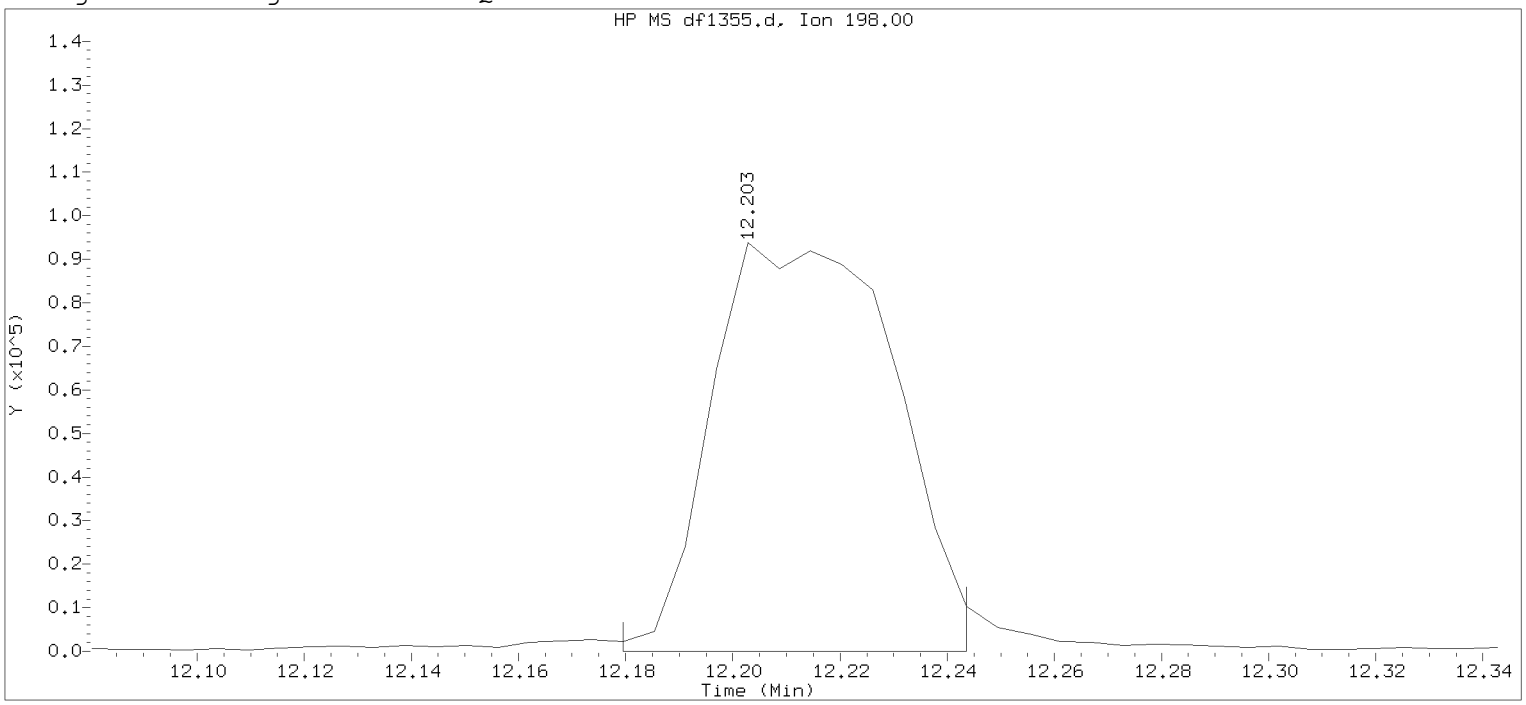
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:14.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

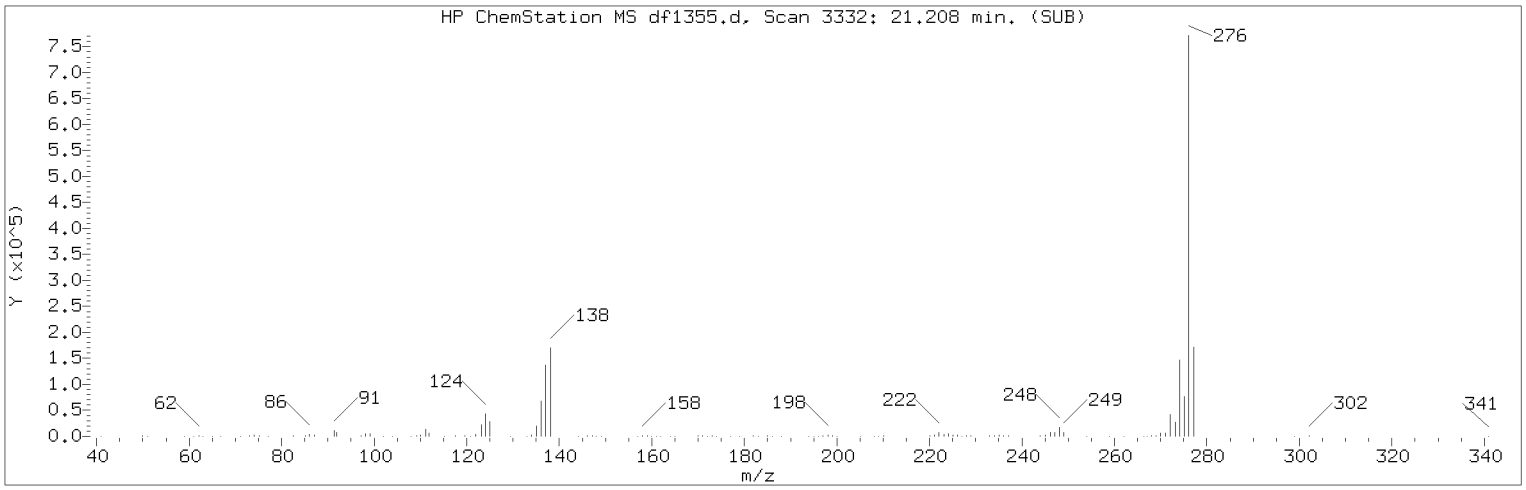
Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 11:53 Automation

Sample Name: C5009MS Lab Sample ID: 9662311

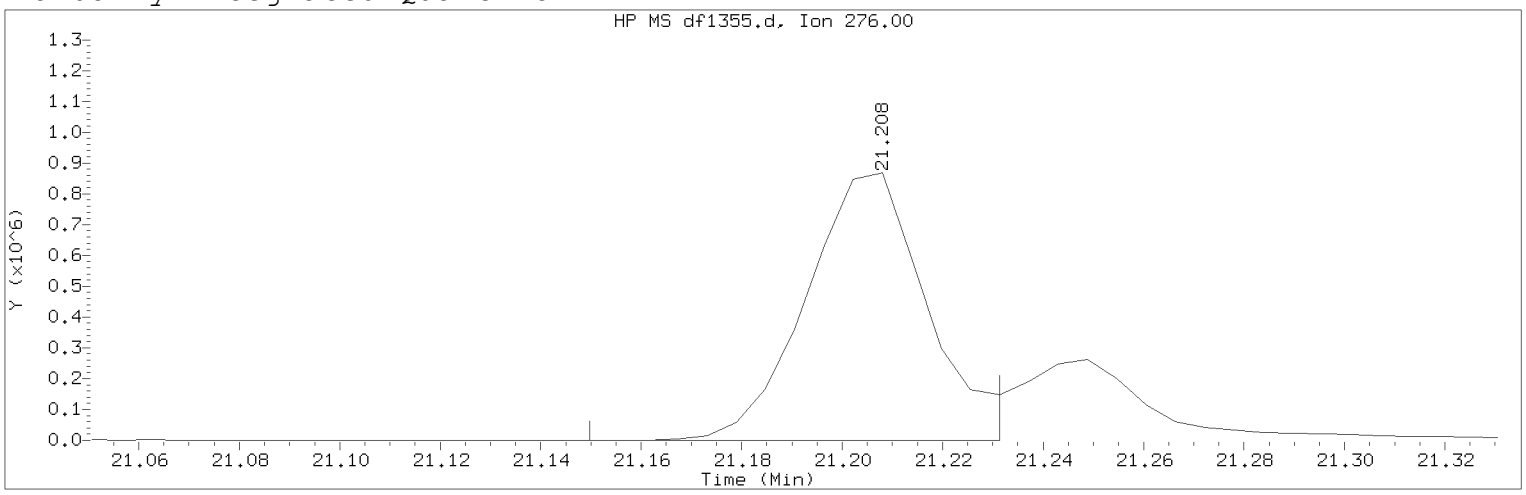
Compound Number	: 130		
Compound Name	: 4,6-Dinitro-2-methylphenol		
Scan Number	: 1787		
Retention Time (minutes)	: 12.203		
Quant Ion	: 198.00		
Area	: 220943		
On-column Amount (ng/ul)	: 8.8424		
Integration start scan	: 1782	Integration stop scan:	1793
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/20/2018 at 14:14.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:11 em10340

Sample Name: C5009MS Lab Sample ID: 9662311

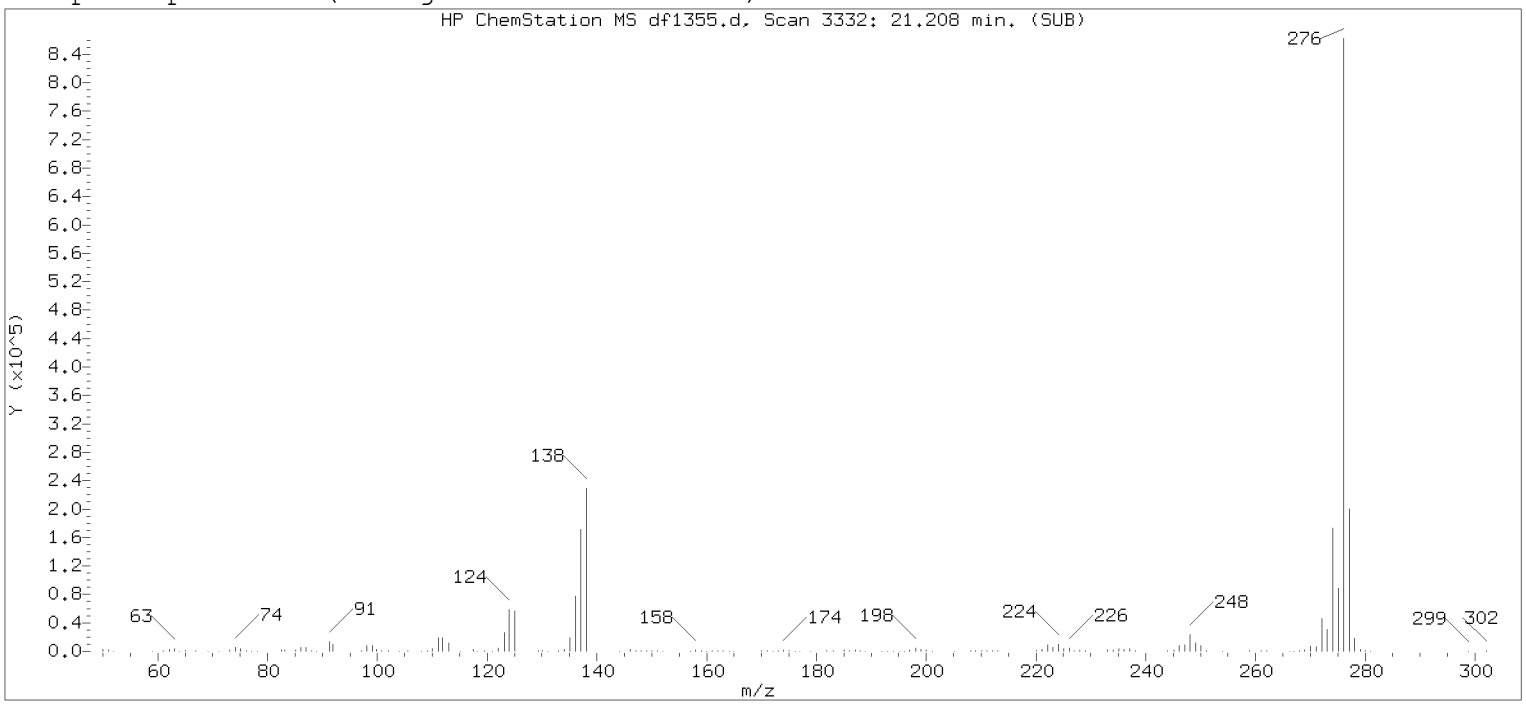
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3332
Retention Time (minutes) : 21.208
Quant Ion : 276.00
Area (flag) : 1450510M
On-Column Amount (ng/ul) : 9.2268
Integration start scan : 3321 Integration stop scan: 3335
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

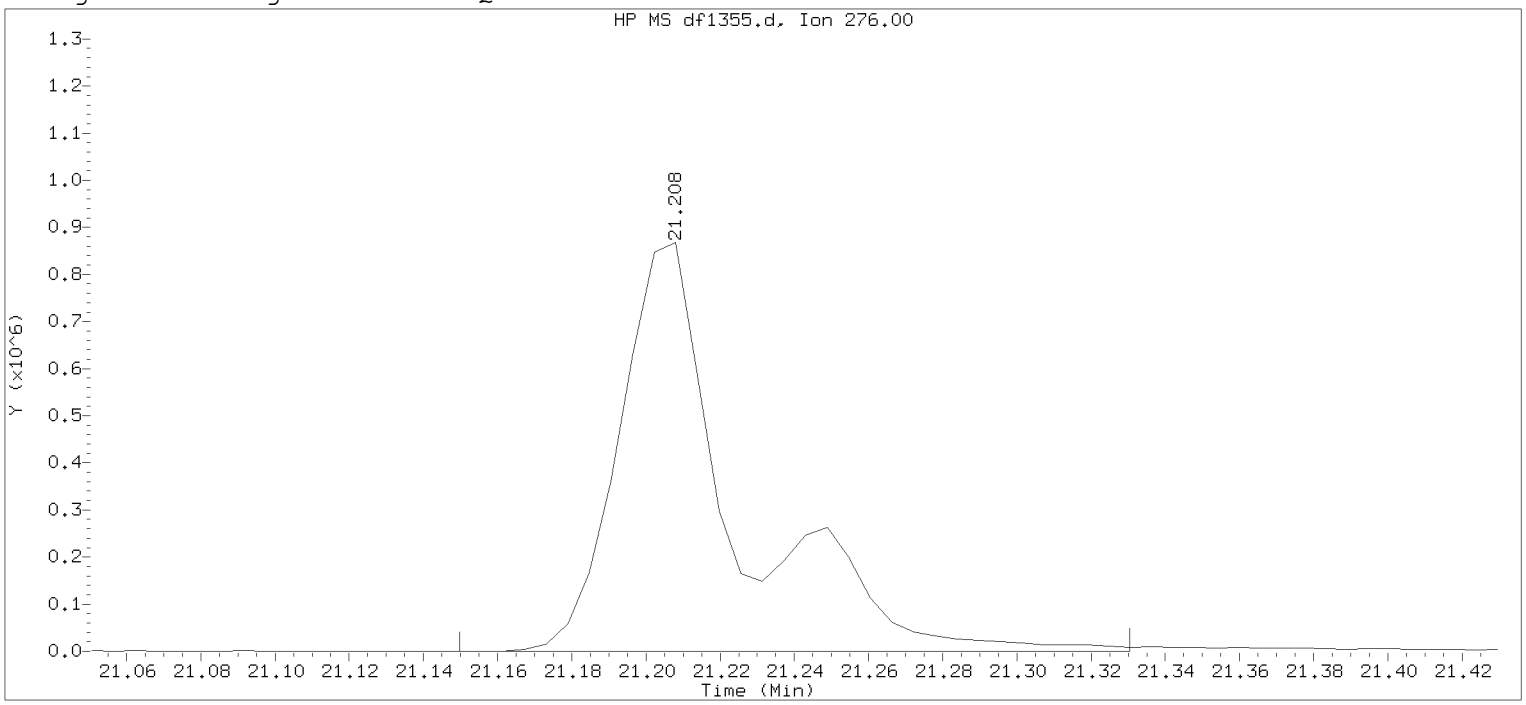
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:14.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 11:53 Automation

Sample Name: C5009MS Lab Sample ID: 9662311

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3332		
Retention Time (minutes)	: 21.208		
Quant Ion	: 276.00		
Area	: 1902154		
On-column Amount (ng/ul)	: 12.0997		
Integration start scan	: 3321	Integration stop scan:	3352
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/20/2018 at 14:14.
Target 3.5 esignature user email: [redacted]

C5009MS Lancaster Laboratories, Inc. Analysis Summary for GC/MS Semivolatiles 9662311

Data file: /chem/HP19760.i/18jun20.b/df1355.d Injection date and time: **20-JUN-2018 11:27**
Data file Sample Info. Line: C5009MS;9662311;1;3;MS;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:01 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 241 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.625	(-0.006)	830	152	241605	(-10)	5.00	
65) Naphthalene-d8	8.548	(0.006)	1160	136	941448	(-10)	5.00	
113) Acenaphthene-d10	11.340	(0.000)	1639	164	440781	(-12)	5.00	
153) Phenanthrene-d10	13.240	(0.000)	1965	188	815815	(-10)	5.00	
175) Pyrene-d10	15.175	(-0.006)	2297	212	826456	(-11)	5.00	
213) Perylene-d12	19.611	(0.000)	3058	264	778806	(-10)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.765	(-0.004)	112	2290277	28.741	57%		10 - 82
17) Phenol-d6	(1)	6.129	(0.000)	99	2459032	23.278	47%		10 - 71
44) Nitrobenzene-d5	(2)	7.452	(-0.001)	82	1922178	19.603	78%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297	(0.001)	172	2875547	20.259	81%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.413	(0.000)	330	616332	40.003	80%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	2912552	20.252	81%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
16) Benzaldehyde	(1)	5.978	(-0.000)	77	795576	12.176	50.52			0.8
18) Phenol	(1)	6.147	(-0.000)	94	776516	6.299	26.14			0.1
22) bis(2-Chloroethyl)ether	(1)	6.263	(-0.000)	93	931658	10.225	42.43			0.1
23) 2-Chlorophenol	(1)	6.316	(-0.000)	128	728704	10.326	42.84			0.1
24) 1,3-Dichlorobenzene	(1)	6.537	(-0.000)	146	736376	9.949	41.28			0.1
26) 1,4-Dichlorobenzene	(1)	6.648	(0.000)	146	751237	9.981	41.42			0.1
28) 1,2-Dichlorobenzene	(1)	6.864	(0.000)	146	730669	10.307	42.77			0.1
31) 2-Methylphenol	(1)	7.044	(0.000)	108	725615	9.695	40.23			0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	(0.000)	45	1038834	11.188	46.42			0.1
36) Acetophenone	(1)	7.237	(0.000)	105	1177916	10.886	45.17			1
37) 4-Methylphenol	(1)	7.278	(0.000)	108	797772	9.561	39.67			0.1
38) N-Nitroso-di-n-propylamine	(1)	7.260	(0.000)	70	713201	11.141	46.23			0.2
43) Hexachloroethane	(1)	7.377	(0.000)	117	315971	9.263	38.44			0.3
45) Nitrobenzene	(2)	7.476	(-0.000)	77	998667	10.368	43.02			0.1
50) Isophorone	(2)	7.860	(0.000)	82	1822425	10.838	44.97			0.1
51) 2-Nitrophenol	(2)	7.971	(-0.000)	139	395411	10.899	45.23			0.8
53) 2,4-Dimethylphenol	(2)	8.082	(-0.000)	107	647188	7.864	32.63			0.8
55) bis(2-Chloroethoxy)methane	(2)	8.234	(-0.000)	93	1091801	10.065	41.76			0.1
60) 2,4-Dichlorophenol	(2)	8.356	(-0.001)	162	579761	10.668	44.27			0.1
62) 1,2,4-Trichlorobenzene	(2)	8.478	(-0.000)	180	605167	10.389	43.11			0.1
66) Naphthalene	(2)	8.583	(-0.000)	128	2201381	10.538	43.72			0.03
67) 4-Chloroaniline	(2)	8.688	(-0.000)	127	711395	8.121	33.70			1
71) Hexachlorobutadiene	(2)	8.816	(-0.000)	225	303442	9.244	38.36			0.1
76) Caprolactam	(2)	9.213	(0.000)	113	90424	3.739	15.51			1
80) 4-Chloro-3-methylphenol	(2)	9.498	(-0.000)	107	735511	10.694	44.37			0.1
83) 2-Methylnaphthalene	(2)	9.685	(-0.000)	142	1438308	10.833	44.95			0.03
85) Hexachlorocyclopentadiene	(3)	9.959	(-0.000)	237	561141	17.590	72.99			1

Digitally signed by Edward Monborne on 06/20/2018 at 14:04. Target 3.5 esignature user ID: em10340

Data file: /chem/HP19760.i/18jun20.b/df1355.d Injection date and time: **20-JUN-2018 11:27**
Data file Sample Info. Line: C5009MS;9662311;1;3;MS;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:01 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 241 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
86) 1,2,4,5-Tetrachlorobenzene	(3)	9.959(-0.000)	216	581624	10.034	41.64			0.1
90) 2,4,6-Trichlorophenol	(3)	10.151(-0.000)	196	391685	10.440	43.32			0.1
92) 2,4,5-Trichlorophenol	(3)	10.204(-0.000)	196	418852	11.059	45.89			0.1
95) 1,1'-Biphenyl	(3)	10.448(-0.000)	154	1737951	11.355	47.12			0.8
96) 2-Chloronaphthalene	(3)	10.454(-0.000)	162	1321771	10.756	44.63			0.1
99) Diphenyl ether	(3)	10.629(-0.000)	170	899439	10.596	43.96			0.1
100) 2-Nitroaniline	(3)	10.629(-0.000)	138	475896	11.801	48.97			0.5
106) Dimethylphthalate	(3)	10.979(-0.000)	163	1306785	10.386	43.09			0.5
108) 2,6-Dinitrotoluene	(3)	11.043(-0.000)	165	364801	12.335	51.18			0.1
109) Acenaphthylene	(3)	11.107(-0.000)	152	1999559	11.316	46.95			0.03
112) 3-Nitroaniline	(3)	11.288(-0.000)	138	321221	9.423	39.10			0.8
114) Acenaphthene	(3)	11.387(0.000)	153	1408232	11.744	48.73			0.03
115) 2,4-Dinitrophenol	(3)	11.544(-0.007)	184	216852M	10.543	43.75			4
116) 4-Nitrophenol	(3)	11.620(-0.002)	109	206611	8.044	33.38			3
118) 2,4-Dinitrotoluene	(3)	11.661(-0.000)	165	489332	12.149	50.41			0.3
119) Dibenzofuran	(3)	11.655(-0.000)	168	1879124	11.064	45.91			0.1
122) 2,3,4,6-Tetrachlorophenol	(3)	11.841(-0.000)	232	296448	9.325	38.69			1
124) Diethylphthalate	(3)	12.040(0.000)	149	1385489	10.824	44.91			0.5
126) Fluorene	(3)	12.115(0.000)	166	1538664	11.368	47.17			0.03
127) 4-Chlorophenyl-phenylether	(3)	12.150(0.000)	204	699075	10.913	45.28			0.1
129) 4-Nitroaniline	(3)	12.156(-0.000)	138	394957	10.521	43.66			0.2
130) 4,6-Dinitro-2-methylphenol	(4)	12.203(-0.000)	198	228408M	9.141	37.93			2
131) N-Nitrosodiphenylamine	(4)	12.296(-0.000)	169	1245653	11.168	46.34			0.2
143) 4-Bromophenyl-phenylether	(4)	12.727(-0.000)	248	392016	11.492	47.69			0.1
145) Hexachlorobenzene	(4)	12.774(-0.000)	284	375021	11.066	45.92			0.03
148) Atrazine	(4)	12.955(-0.000)	200	400667	12.553	52.09			0.5
149) Pentachlorophenol	(4)	13.036(-0.000)	266	168402	7.200	29.88			0.3
155) Phenanthrene	(4)	13.269(-0.000)	178	2321619	12.139	50.37			0.03
157) Anthracene	(4)	13.334(-0.000)	178	2232267	11.891	49.34			0.03
163) Carbazole	(4)	13.549(0.000)	167	2176560	12.098	50.20			0.1
165) Di-n-butylphthalate	(4)	14.074(-0.000)	149	2644873	11.516	47.79			0.5
173) Fluoranthene	(4)	14.872(0.000)	202	2457523	11.782	48.89			0.03
177) Pyrene	(5)	15.204(0.000)	202	2575664	11.370	47.18			0.03
188) Butylbenzylphthalate	(5)	16.335(0.000)	149	1282066	11.349	47.09			0.5
193) 3,3'-Dichlorobenzidine	(5)	17.175(0.000)	252	787236	10.434	43.29			0.8
195) Benzo(a)anthracene	(5)	17.175(0.000)	228	2347792	11.788	48.91			0.03
196) Chrysene	(5)	17.233(0.000)	228	2359230	11.829	49.08			0.03
199) bis(2-Ethylhexyl)phthalate	(5)	17.402(0.000)	149	1711563	11.026	45.75			1
205) Di-n-octylphthalate	(6)	18.550(-0.000)	149	2883066	11.411	47.35			1
206) Benzo(b)fluoranthene	(6)	19.005(-0.000)	252	2139782	11.391	47.27			0.03
208) Benzo(k)fluoranthene	(6)	19.051(-0.000)	252	2331874	12.483	51.80			0.03
211) Benzo(a)pyrene	(6)	19.524(-0.000)	252	2007937	11.839	49.12			0.03
219) Indeno(1,2,3-cd)pyrene	(6)	21.208(0.000)	276	1450510M	9.227	38.29			0.03
220) Dibenz(a,h)anthracene	(6)	21.249(0.000)	278	1619494	9.511	39.47			0.03
221) Benzo(g,h,i)perylene	(6)	21.564(0.000)	276	1566584	9.340	38.76			0.03

M = Compound was manually integrated.

Digitally signed by Edward Monborne on 06/20/2018 at 14:04. Target 3.5 esignature user ID: em10340

Data file: /chem/HP19760.i/18jun20.b/df1355.d Injection date and time: **20-JUN-2018 11:27**
Data file Sample Info. Line: C5009MS;9662311;1;3;MS;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:01 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 241 ml Volume Injected (Vi): 0.5 ul

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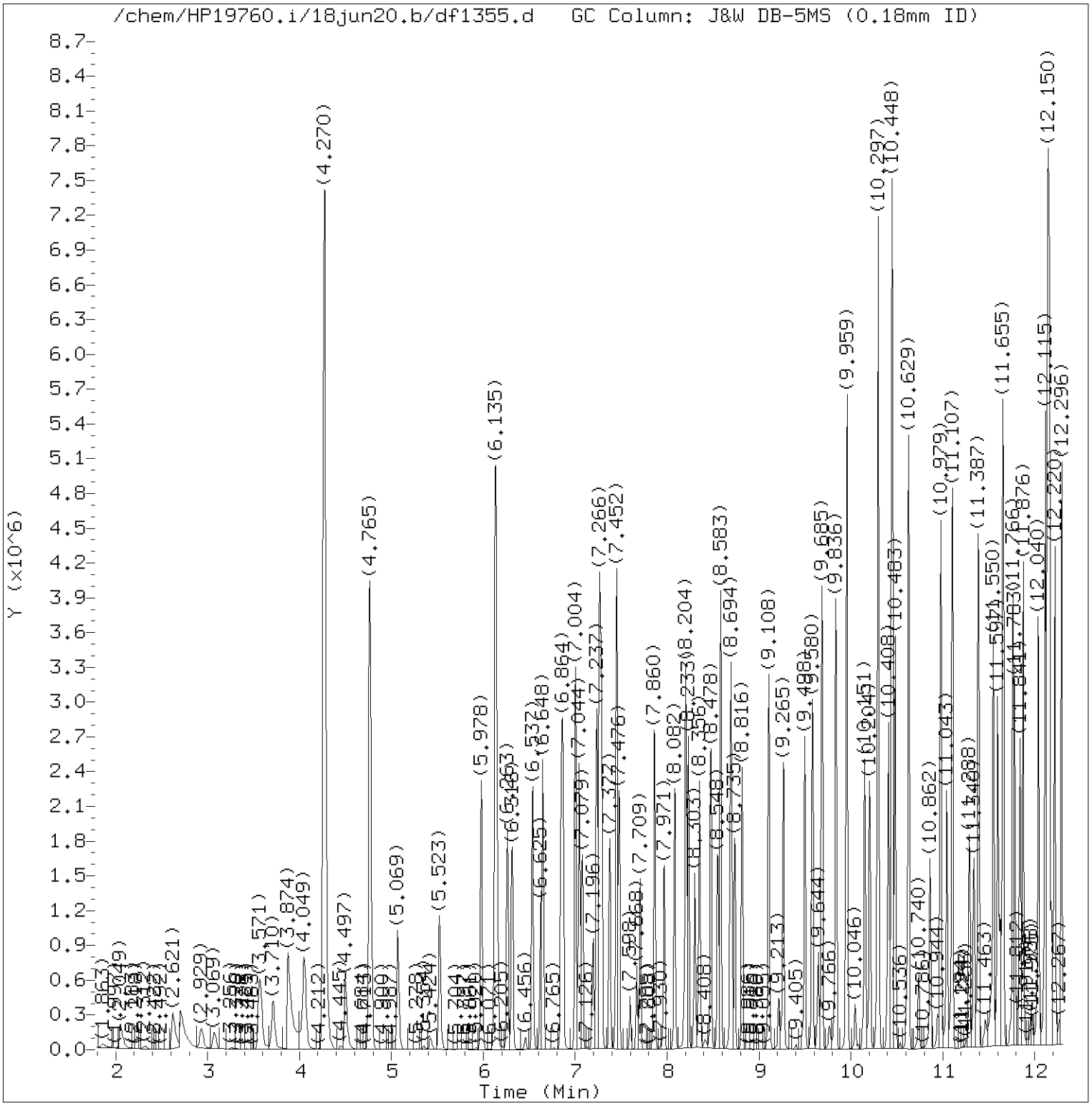
Total number of targets = 72

Digitally signed by Edward Monborne on 06/20/2018 at 14:04. Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

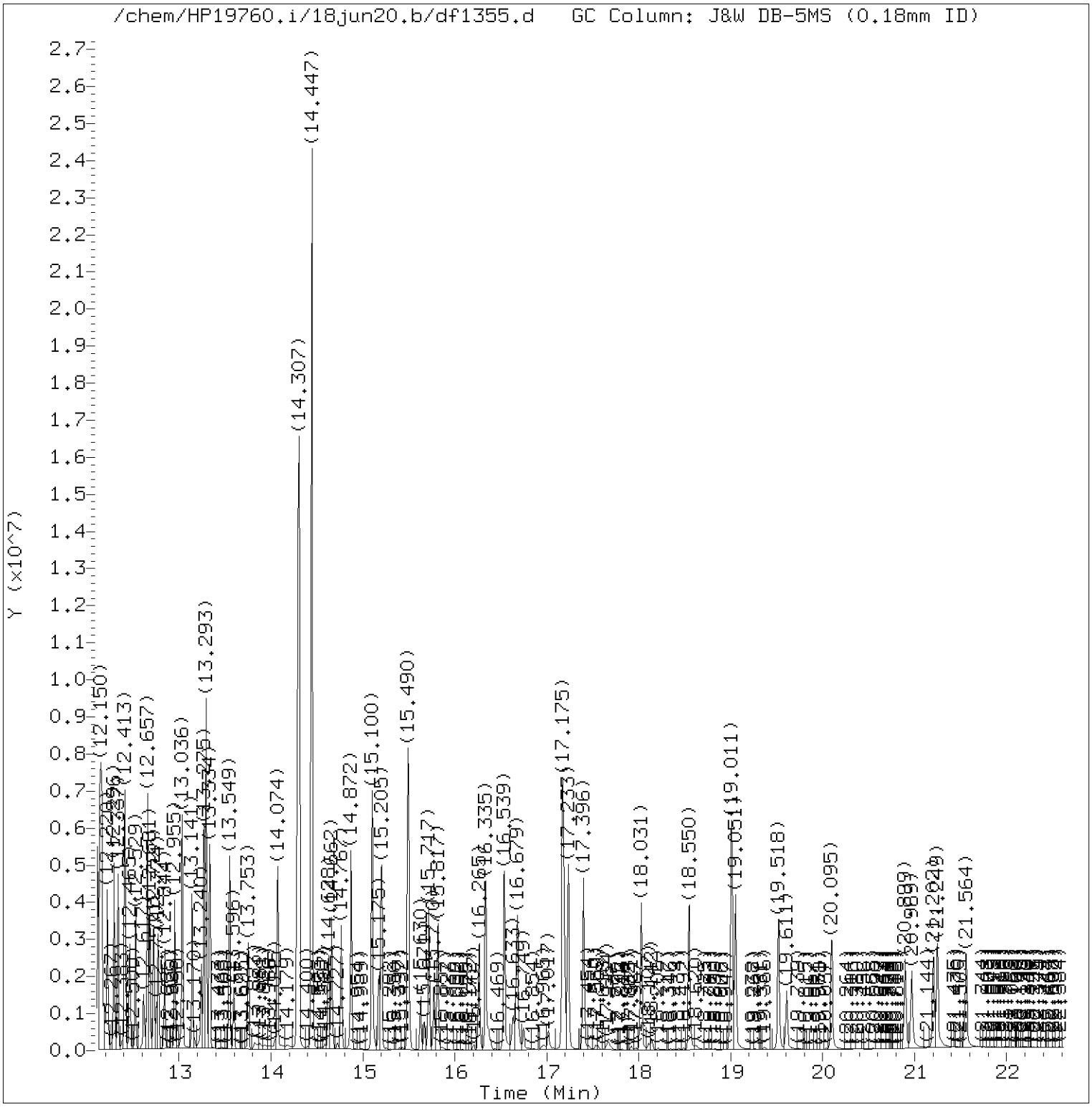
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:01 em10340

Sample Name: C5009MS Lab Sample ID: 9662311

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:01 em10340

Sample Name: C5009MS Lab Sample ID: 9662311

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:01 em10340

Sample Name: C5009MS Lab Sample ID: 9662311

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.765	112	2290277	28.741
16) Benzaldehyde	(1)	5.978	77	795576	12.176
17)$Phenol-d6	(1)	6.129	99	2459032	23.278
18) Phenol	(1)	6.147	94	776516	6.299
22) bis(2-Chloroethyl)ether	(1)	6.263	93	931658	10.225
23) 2-Chlorophenol	(1)	6.316	128	728704	10.326
24) 1,3-Dichlorobenzene	(1)	6.537	146	736376	9.949
25)*1,4-Dichlorobenzene-d4	(1)	6.625	152	241605	5.000
26) 1,4-Dichlorobenzene	(1)	6.648	146	751237	9.981
28) 1,2-Dichlorobenzene	(1)	6.864	146	730669	10.307
31) 2-Methylphenol	(1)	7.044	108	725615	9.695
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	45	1038834	11.188
36) Acetophenone	(1)	7.237	105	1177916	10.886
38) N-Nitroso-di-n-propylamine	(1)	7.260	70	713201	11.141
37) 4-Methylphenol	(1)	7.278	108	797772	9.561
43) Hexachloroethane	(1)	7.377	117	315971	9.263
44)$Nitrobenzene-d5	(2)	7.452	82	1922178	19.603
45) Nitrobenzene	(2)	7.476	77	998667	10.368
50) Isophorone	(2)	7.860	82	1822425	10.838
51) 2-Nitrophenol	(2)	7.971	139	395411	10.899
53) 2,4-Dimethylphenol	(2)	8.082	107	647188	7.864
55) bis(2-Chloroethoxy)methane	(2)	8.233	93	1091801	10.065
60) 2,4-Dichlorophenol	(2)	8.356	162	579761	10.668
62) 1,2,4-Trichlorobenzene	(2)	8.478	180	605167	10.389
65)*Naphthalene-d8	(2)	8.548	136	941448	5.000
66) Naphthalene	(2)	8.583	128	2201381	10.538
67) 4-Chloroaniline	(2)	8.688	127	711395	8.121
71) Hexachlorobutadiene	(2)	8.816	225	303442	9.244
76) Caprolactam	(2)	9.213	113	90424	3.739
80) 4-Chloro-3-methylphenol	(2)	9.498	107	735511	10.694
83) 2-Methylnaphthalene	(2)	9.685	142	1438308	10.833
85) Hexachlorocyclopentadiene	(3)	9.959	237	561141	17.590
86) 1,2,4,5-Tetrachlorobenzene	(3)	9.959	216	581624	10.034
90) 2,4,6-Trichlorophenol	(3)	10.151	196	391685	10.440
92) 2,4,5-Trichlorophenol	(3)	10.204	196	418852	11.059
93)$2-Fluorobiphenyl	(3)	10.297	172	2875547	20.259
95) 1,1'-Biphenyl	(3)	10.448	154	1737951	11.355
96) 2-Chloronaphthalene	(3)	10.454	162	1321771	10.756
100) 2-Nitroaniline	(3)	10.629	138	475896	11.801
99) Diphenyl ether	(3)	10.629	170	899439	10.596

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:01 em10340

Sample Name: C5009MS Lab Sample ID: 9662311

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
106) Dimethylphthalate	(3)	10.979	163	1306785	10.386
108) 2,6-Dinitrotoluene	(3)	11.043	165	364801	12.335
109) Acenaphthylene	(3)	11.107	152	1999559	11.316
112) 3-Nitroaniline	(3)	11.288	138	321221	9.423
113)*Acenaphthene-d10	(3)	11.340	164	440781	5.000
114) Acenaphthene	(3)	11.387	153	1408232	11.744
115) 2,4-Dinitrophenol	(3)	11.544	184	216852M	10.543
116) 4-Nitrophenol	(3)	11.620	109	206611	8.044
119) Dibenzofuran	(3)	11.655	168	1879124	11.064
118) 2,4-Dinitrotoluene	(3)	11.661	165	489332	12.149
122) 2,3,4,6-Tetrachlorophenol	(3)	11.841	232	296448	9.325
124) Diethylphthalate	(3)	12.040	149	1385489	10.824
126) Fluorene	(3)	12.115	166	1538664	11.368
127) 4-Chlorophenyl-phenylether	(3)	12.150	204	699075	10.913
129) 4-Nitroaniline	(3)	12.156	138	394957	10.521
130) 4,6-Dinitro-2-methylphenol	(4)	12.203	198	228408M	9.141
131) N-Nitrosodiphenylamine	(4)	12.296	169	1245653	11.168
135)$2,4,6-Tribromophenol	(3)	12.413	330	616332	40.003
143) 4-Bromophenyl-phenylether	(4)	12.727	248	392016	11.492
145) Hexachlorobenzene	(4)	12.774	284	375021	11.066
148) Atrazine	(4)	12.955	200	400667	12.553
149) Pentachlorophenol	(4)	13.036	266	168402	7.200
153)*Phenanthrene-d10	(4)	13.240	188	815815	5.000
155) Phenanthrene	(4)	13.269	178	2321619	12.139
157) Anthracene	(4)	13.334	178	2232267	11.891
163) Carbazole	(4)	13.549	167	2176560	12.098
165) Di-n-butylphthalate	(4)	14.074	149	2644873	11.516
173) Fluoranthene	(4)	14.872	202	2457523	11.782
175)*Pyrene-d10	(5)	15.175	212	826456	5.000
177) Pyrene	(5)	15.205	202	2575664	11.370
179)$Terphenyl-d14	(5)	15.490	244	2912552	20.252
188) Butylbenzylphthalate	(5)	16.335	149	1282066	11.349
193) 3,3'-Dichlorobenzidine	(5)	17.175	252	787236	10.434
195) Benzo(a)anthracene	(5)	17.175	228	2347792	11.788
196) Chrysene	(5)	17.233	228	2359230	11.829
199) bis(2-Ethylhexyl)phthalate	(5)	17.402	149	1711563	11.026
205) Di-n-octylphthalate	(6)	18.550	149	2883066	11.411
206) Benzo(b)fluoranthene	(6)	19.005	252	2139782	11.391
208) Benzo(k)fluoranthene	(6)	19.051	252	2331874	12.483
211) Benzo(a)pyrene	(6)	19.524	252	2007937	11.839

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

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:01 em10340

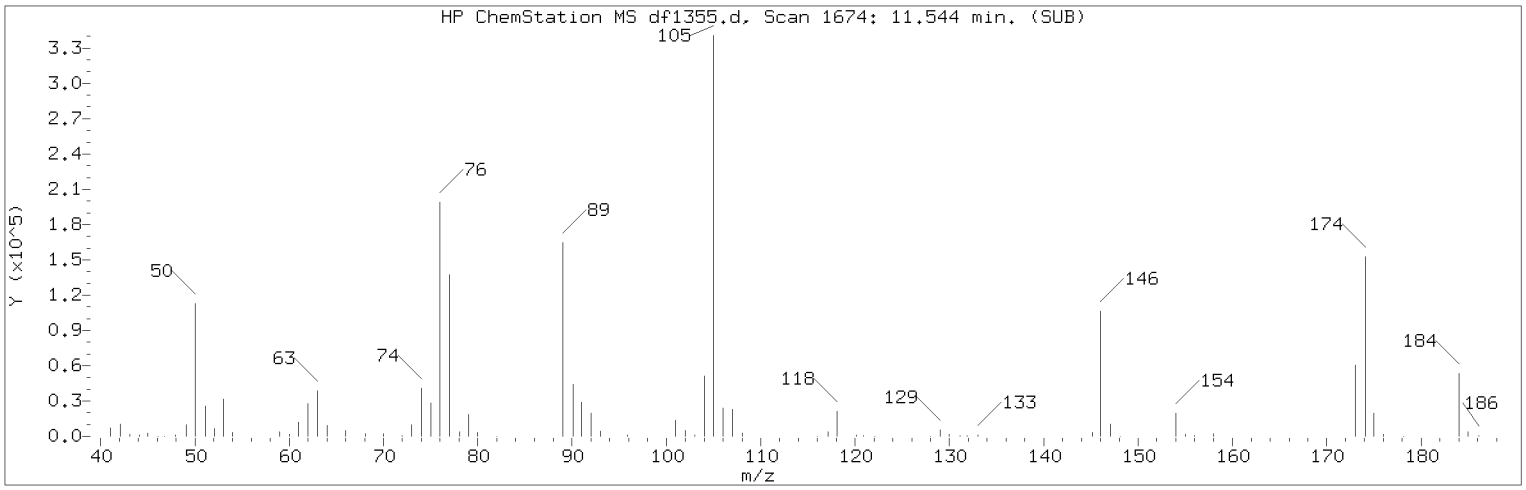
Sample Name: C5009MS Lab Sample ID: 9662311

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
213)*Perylene-d12	(6)	19.611	264	778806	5.000
219) Indeno(1,2,3-cd)pyrene	(6)	21.208	276	1450510M	9.227
220) Dibenz(a,h)anthracene	(6)	21.249	278	1619494	9.511
221) Benzo(g,h,i)perylene	(6)	21.564	276	1566584	9.340

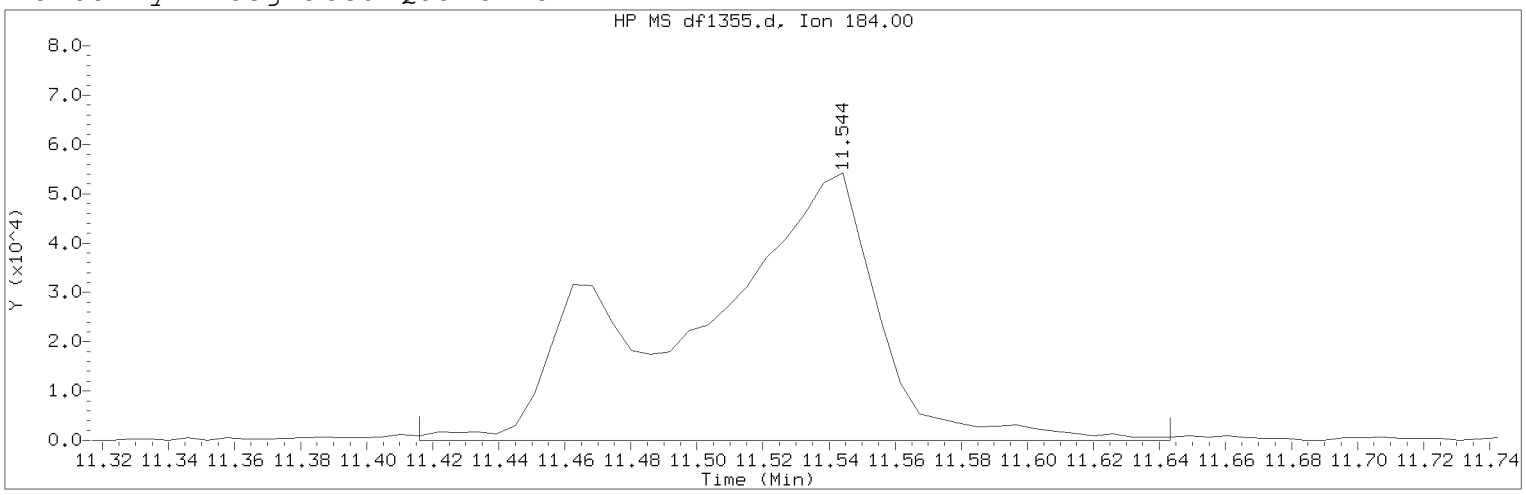
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:01 em10340

Sample Name: C5009MS Lab Sample ID: 9662311

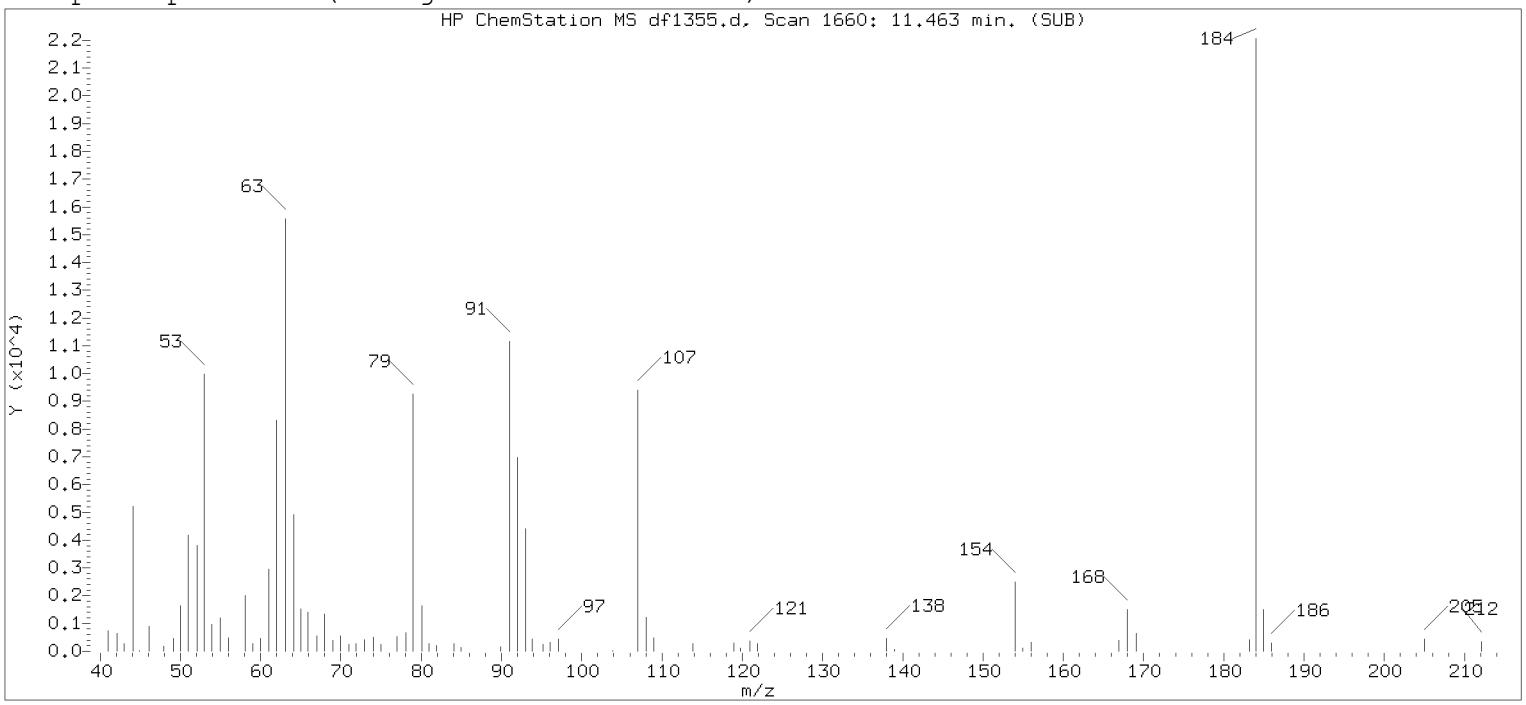
Compound Number : 115
Compound Name : 2,4-Dinitrophenol
Scan Number : 1674
Retention Time (minutes) : 11.544
Quant Ion : 184.00
Area (flag) : 216852M
On-Column Amount (ng/ul) : 10.5435
Integration start scan : 1651 Integration stop scan: 1690
Y at integration start : 9 Y at integration end: 9

Reason for manual integration: improper integration

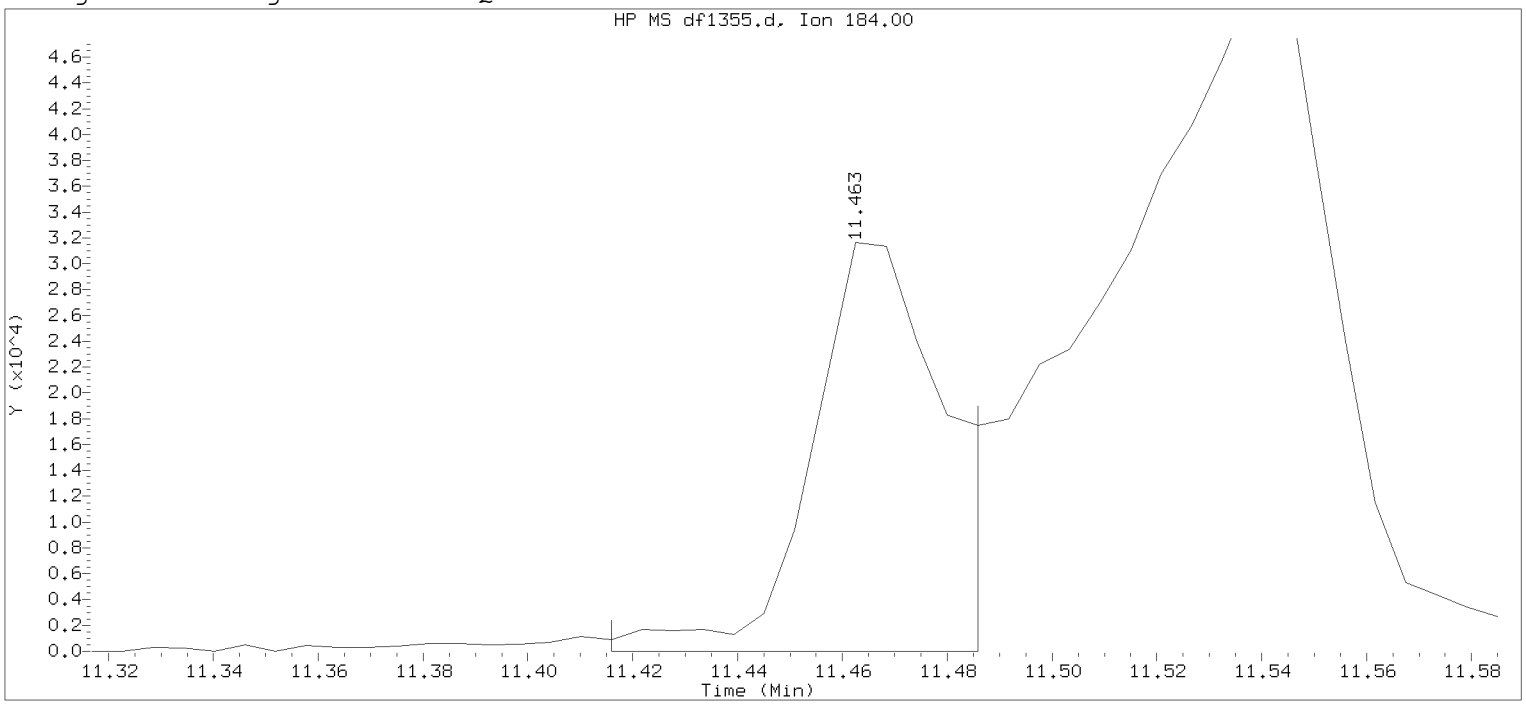
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

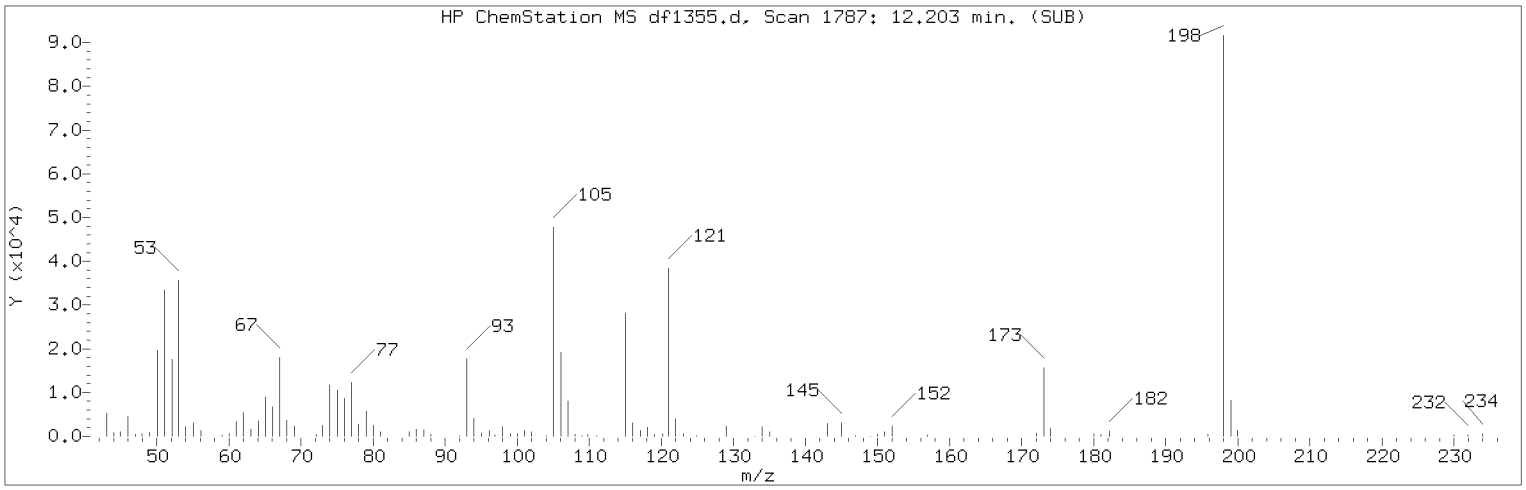
Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 11:53 Automation

Sample Name: C5009MS Lab Sample ID: 9662311

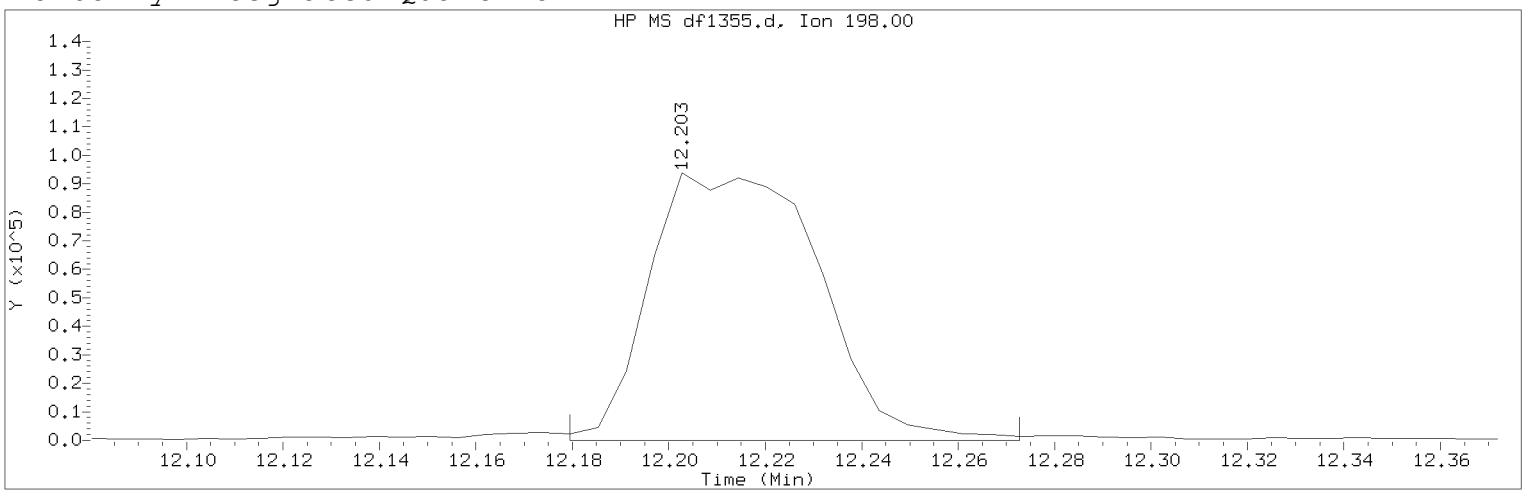
Compound Number	: 115		
Compound Name	: 2,4-Dinitrophenol		
Scan Number	: 1660		
Retention Time (minutes)	: 11.463		
Quant Ion	: 184.00		
Area	: 53739		
On-column Amount (ng/ul)	: 2.6128		
Integration start scan	: 1651	Integration stop scan:	1663
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/20/2018 at 14:04.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:01 em10340

Sample Name: C5009MS Lab Sample ID: 9662311

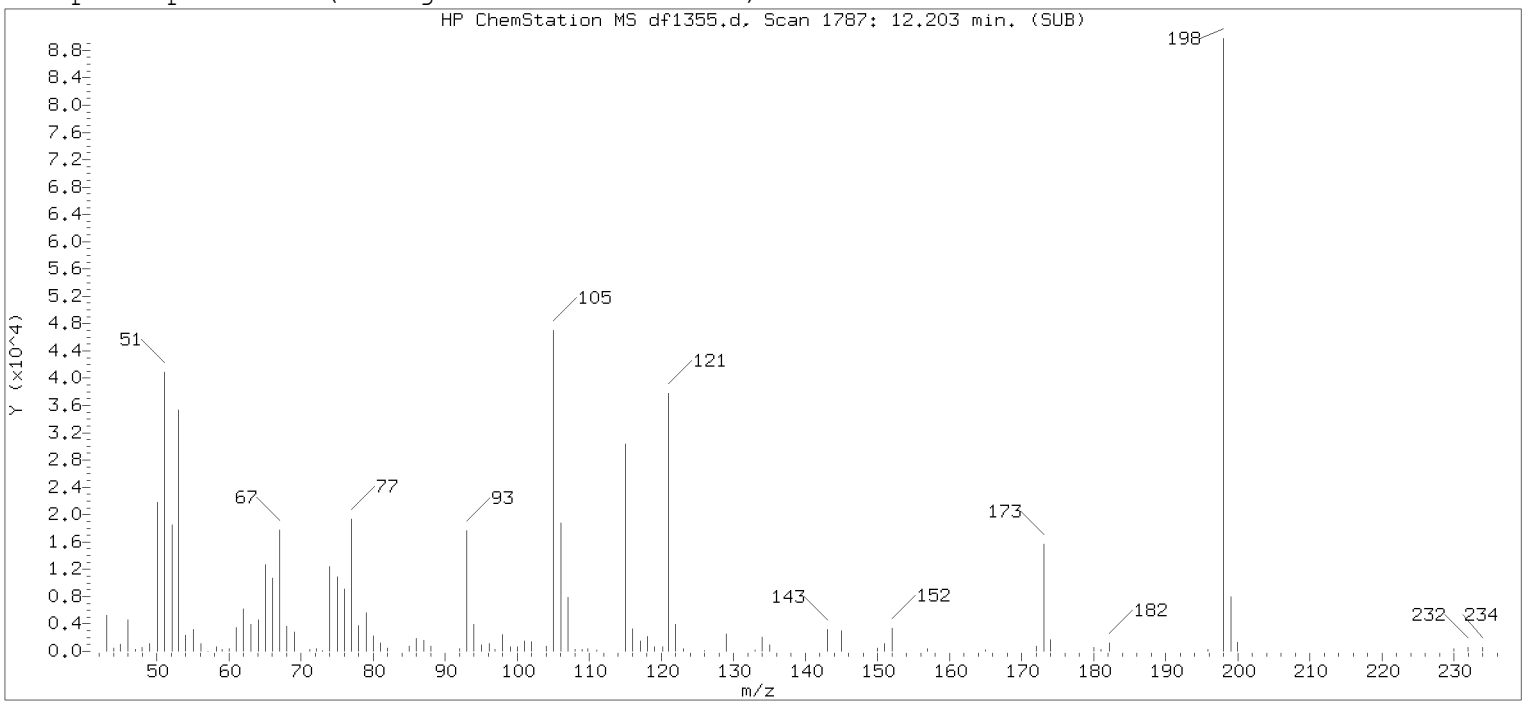
Compound Number : 130
Compound Name : 4,6-Dinitro-2-methylphenol
Scan Number : 1787
Retention Time (minutes) : 12.203
Quant Ion : 198.00
Area (flag) : 228408M
On-Column Amount (ng/ul) : 9.1411
Integration start scan : 1782 Integration stop scan: 1798
Y at integration start : -13 Y at integration end: -13

Reason for manual integration: improper integration

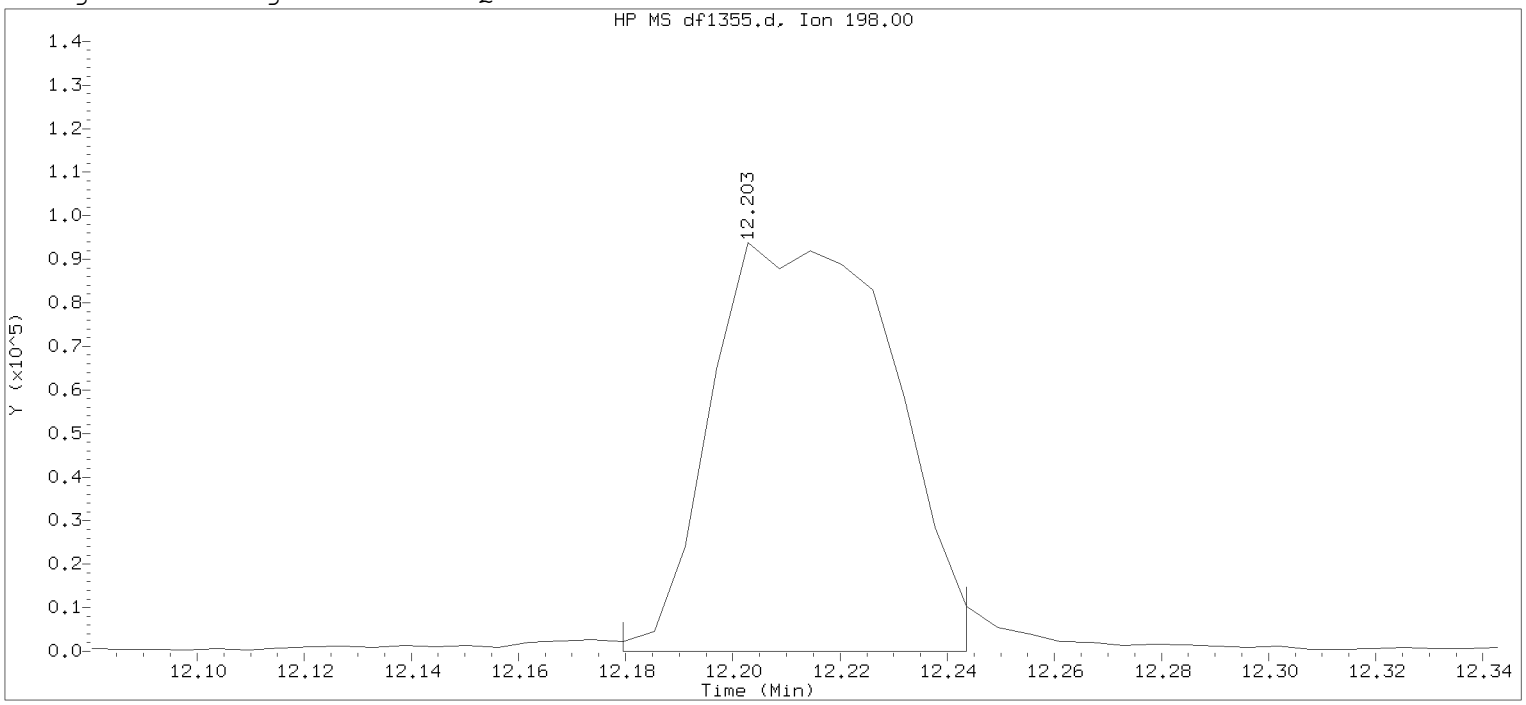
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

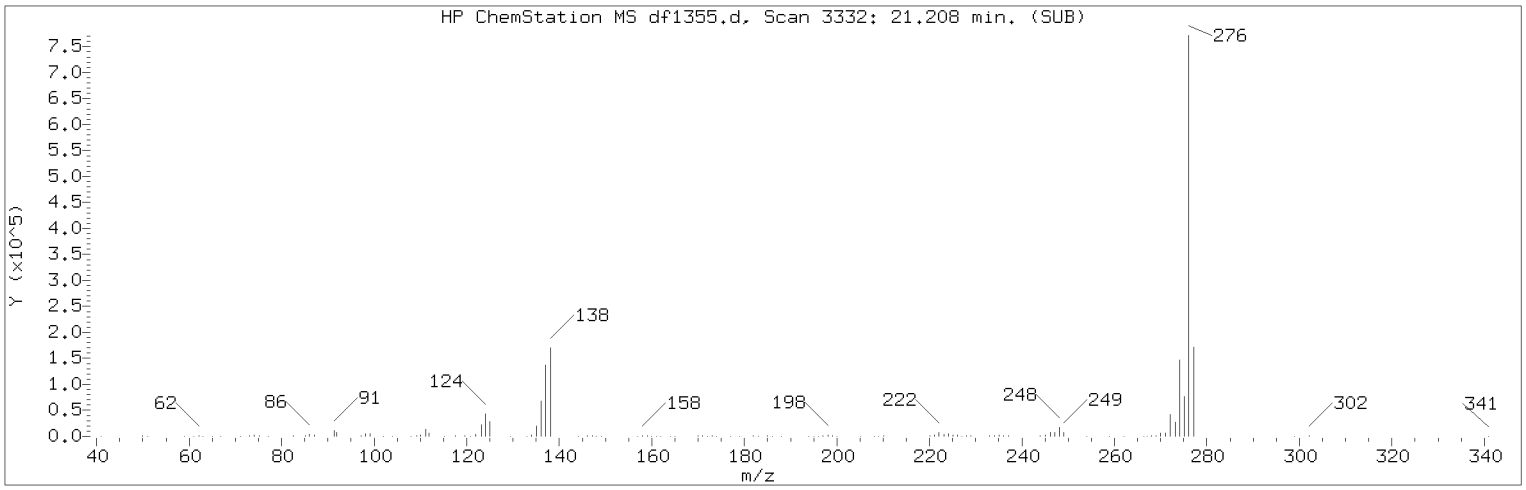
Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 11:53 Automation

Sample Name: C5009MS Lab Sample ID: 9662311

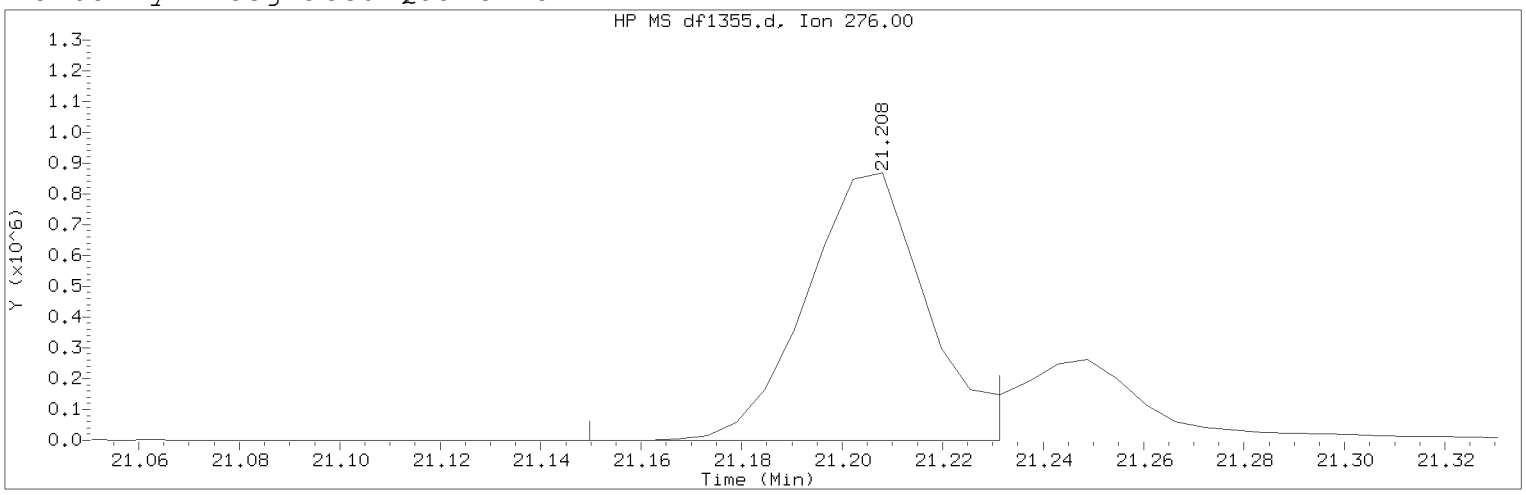
Compound Number	: 130		
Compound Name	: 4,6-Dinitro-2-methylphenol		
Scan Number	: 1787		
Retention Time (minutes)	: 12.203		
Quant Ion	: 198.00		
Area	: 220943		
On-column Amount (ng/ul)	: 8.8424		
Integration start scan	: 1782	Integration stop scan:	1793
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: EMONBORNE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:01 em10340

Sample Name: C5009MS Lab Sample ID: 9662311

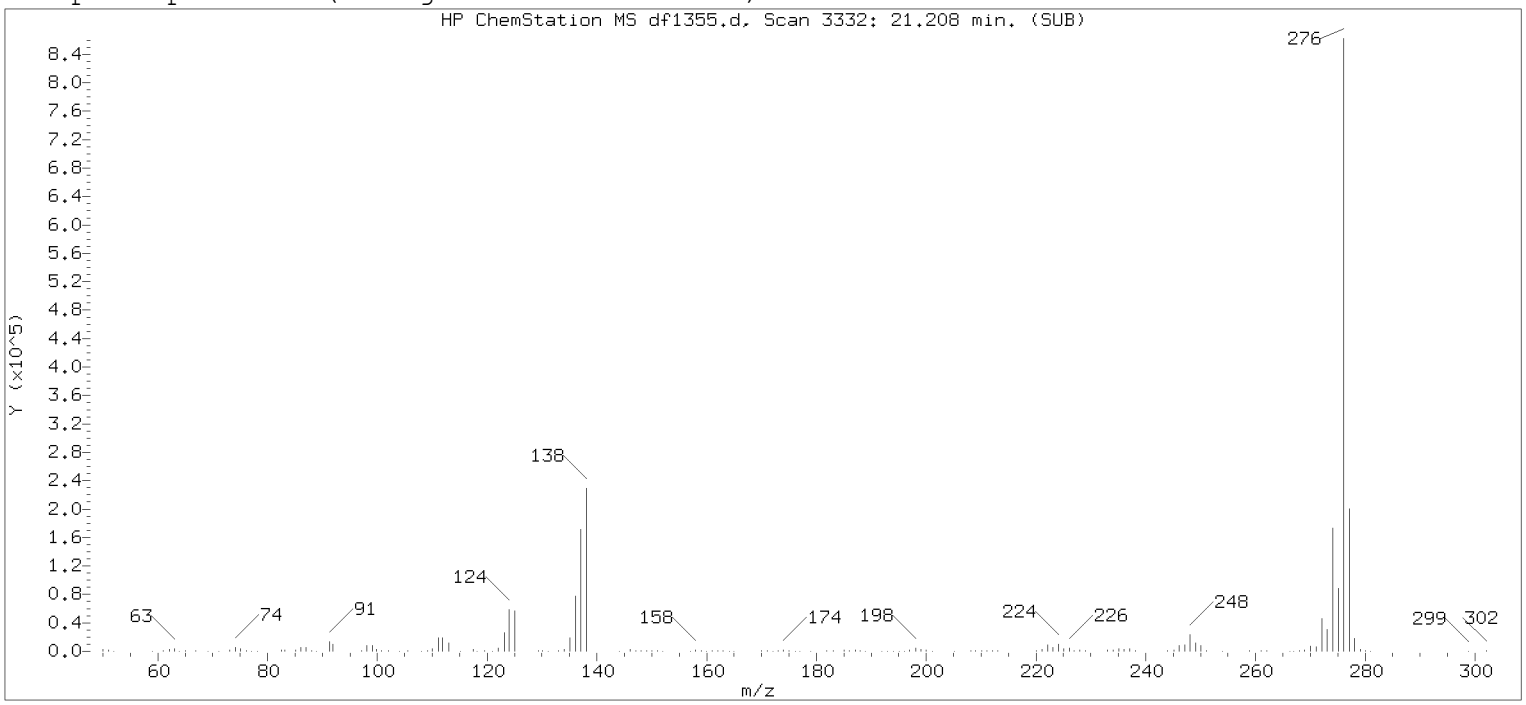
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3332
Retention Time (minutes) : 21.208
Quant Ion : 276.00
Area (flag) : 1450510M
On-Column Amount (ng/ul) : 9.2268
Integration start scan : 3321 Integration stop scan: 3335
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

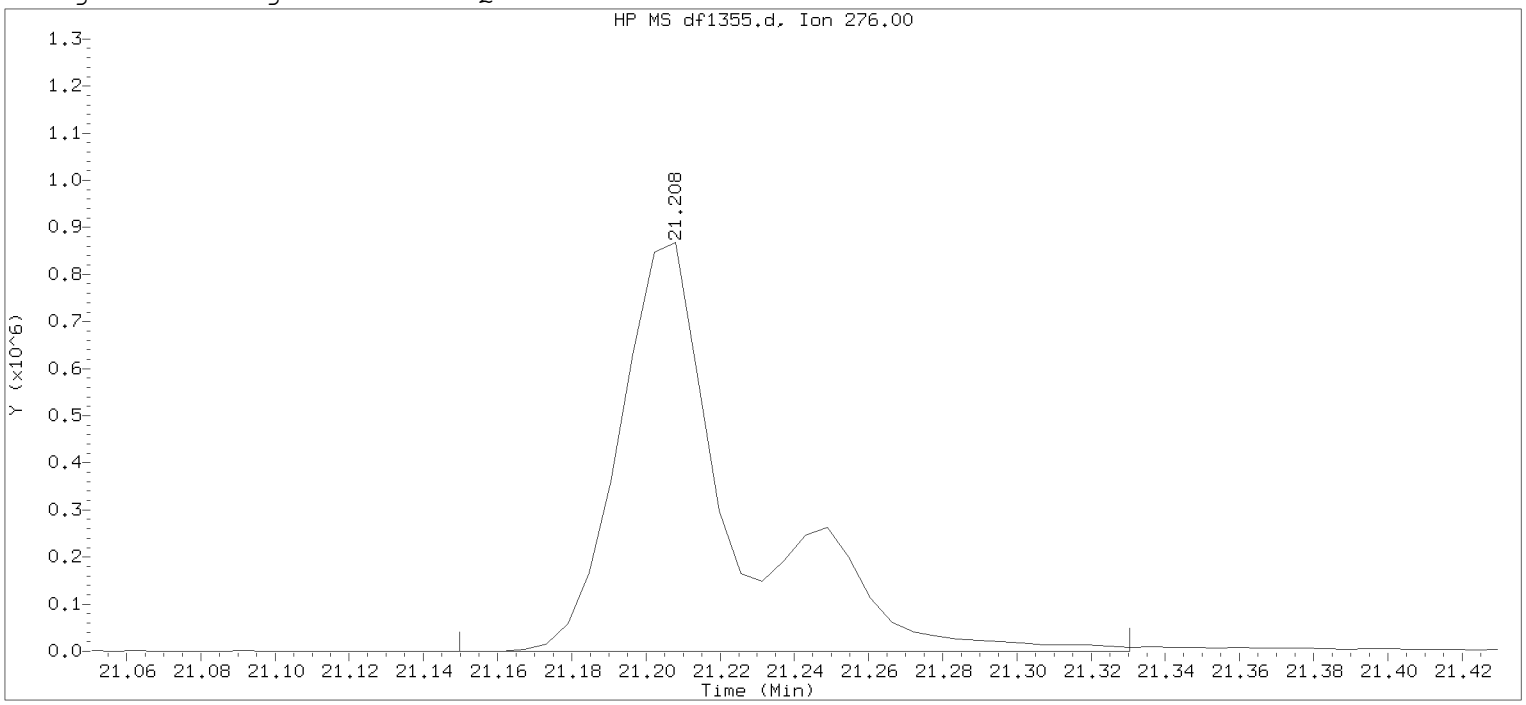
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1355.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:27 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 11:53 Automation

Sample Name: C5009MS Lab Sample ID: 9662311

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3332		
Retention Time (minutes)	: 21.208		
Quant Ion	: 276.00		
Area	: 1902154		
On-column Amount (ng/ul)	: 12.0997		
Integration start scan	: 3321	Integration stop scan:	3352
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: EMONBORNE

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009MSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662312

Sample wt/vol: 237 (g/mL)ML Lab File ID: df1356.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			27	
111-44-4	bis(2-Chloroethyl)ether			44	
95-57-8	2-Chlorophenol			44	
541-73-1	1,3-Dichlorobenzene			41	
106-46-7	1,4-Dichlorobenzene			42	
95-50-1	1,2-Dichlorobenzene			43	
95-48-7	2-Methylphenol			42	
108-60-1	2,2'-oxybis(1-Chloropropane)			48	
106-44-5	4-Methylphenol			40	
621-64-7	N-Nitroso-di-n-propylamine			47	
67-72-1	Hexachloroethane			39	
98-95-3	Nitrobenzene			44	
78-59-1	Isophorone			46	
88-75-5	2-Nitrophenol			47	
105-67-9	2,4-Dimethylphenol			33	
111-91-1	bis(2-Chloroethoxy)methane			43	
120-83-2	2,4-Dichlorophenol			46	
120-82-1	1,2,4-Trichlorobenzene			44	
91-20-3	Naphthalene			44	
106-47-8	4-Chloroaniline			34	
87-68-3	Hexachlorobutadiene			38	
59-50-7	4-Chloro-3-methylphenol			45	
91-57-6	2-Methylnaphthalene			45	
77-47-4	Hexachlorocyclopentadiene			75	
88-06-2	2,4,6-Trichlorophenol			45	
95-95-4	2,4,5-Trichlorophenol			48	
91-58-7	2-Chloronaphthalene			45	
88-74-4	2-Nitroaniline			51	
131-11-3	Dimethylphthalate			45	
606-20-2	2,6-Dinitrotoluene			53	

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009MSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662312

Sample wt/vol: 237 (g/mL)ML Lab File ID: df1356.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene			48	
99-09-2	3-Nitroaniline			43	
83-32-9	Acenaphthene			50	
51-28-5	2,4-Dinitrophenol			64	
100-02-7	4-Nitrophenol			36	
121-14-2	2,4-Dinitrotoluene			50	
132-64-9	Dibenzofuran			47	
84-66-2	Diethylphthalate			47	
86-73-7	Fluorene			48	
7005-72-3	4-Chlorophenyl-phenylether			46	
100-01-6	4-Nitroaniline			46	
534-52-1	4,6-Dinitro-2-methylphenol			44	
86-30-6	N-Nitrosodiphenylamine			49	
101-55-3	4-Bromophenyl-phenylether			50	
118-74-1	Hexachlorobenzene			47	
87-86-5	Pentachlorophenol			32	
85-01-8	Phenanthrene			52	
120-12-7	Anthracene			52	
86-74-8	Carbazole			53	
84-74-2	Di-n-butylphthalate			49	
206-44-0	Fluoranthene			51	
129-00-0	Pyrene			49	
85-68-7	Butylbenzylphthalate			48	
91-94-1	3,3'-Dichlorobenzidine			43	
56-55-3	Benzo(a)anthracene			51	
218-01-9	Chrysene			50	
117-81-7	bis(2-Ethylhexyl)phthalate			47	
117-84-0	Di-n-octylphthalate			48	
205-99-2	Benzo(b)fluoranthene			48	
207-08-9	Benzo(k)fluoranthene			51	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C5009MSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9662312

Sample wt/vol: 237 (g/mL)ML Lab File ID: df1356.d

Level: (low/med) LOW Date Received: 06/15/18

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		49		
193-39-5	Indeno(1,2,3-cd)pyrene		38		
53-70-3	Dibenz(a,h)anthracene		39		
191-24-2	Benzo(g,h,i)perylene		38		

FORM I SV-3

C5009MSD Lancaster Laboratories, Inc. Analysis Summary for GC/MS Semivolatiles 9662312

Data file: /chem/HP19760.i/18jun20.b/df1356.d Injection date and time: **20-JUN-2018 11:55**
Data file Sample Info. Line: C5009MSD;9662312;1;3;MSD;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 237 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.625	(-0.006)	830	152	232930	(-13)	5.00	
65) Naphthalene-d8	8.554	(0.000)	1161	136	915047	(-13)	5.00	
113) Acenaphthene-d10	11.340	(0.000)	1639	164	421884	(-15)	5.00	
153) Phenanthrene-d10	13.240	(0.000)	1965	188	773265	(-15)	5.00	
175) Pyrene-d10	15.175	(-0.006)	2297	212	776320	(-16)	5.00	
213) Perylene-d12	19.611	(0.000)	3058	264	752375	(-13)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.765	(-0.004)	112	2277960	29.651	59%		10 - 82
17) Phenol-d6	(1)	6.129	(0.000)	99	2429389	23.854	48%		10 - 71
44) Nitrobenzene-d5	(2)	7.452	(0.000)	82	1893990	19.872	79%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297	(0.001)	172	2784693	20.498	82%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.412	(0.000)	330	609492	41.331	83%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	2859818	21.169	85%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)	6.147	(-0.000)	94	756479	6.365	26.86			0.1
22) bis(2-Chloroethyl)ether	(1)	6.263	(-0.000)	93	905811	10.312	43.51			0.1
23) 2-Chlorophenol	(1)	6.316	(-0.000)	128	715812	10.521	44.39			0.1
24) 1,3-Dichlorobenzene	(1)	6.537	(-0.000)	146	699240	9.799	41.35			0.1
26) 1,4-Dichlorobenzene	(1)	6.648	(0.000)	146	730179	10.063	42.46			0.1
28) 1,2-Dichlorobenzene	(1)	6.869	(0.000)	146	702510	10.278	43.37			0.1
31) 2-Methylphenol	(1)	7.044	(0.000)	108	710375	9.844	41.54			0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	(0.000)	45	1016997	11.360	47.93			0.1
37) 4-Methylphenol	(1)	7.277	(0.000)	108	768181	9.550	40.29			0.1
38) N-Nitroso-di-n-propylamine	(1)	7.260	(0.000)	70	692128	11.214	47.32			0.2
43) Hexachloroethane	(1)	7.376	(0.000)	117	300330	9.132	38.53			0.3
45) Nitrobenzene	(2)	7.476	(-0.000)	77	979651	10.464	44.15			0.1
50) Isophorone	(2)	7.866	(0.000)	82	1781823	10.903	46.00			0.1
51) 2-Nitrophenol	(2)	7.971	(0.000)	139	393480	11.159	47.08			0.8
53) 2,4-Dimethylphenol	(2)	8.088	(-0.000)	107	622556	7.783	32.84			0.8
55) bis(2-Chloroethoxy)methane	(2)	8.233	(-0.000)	93	1083550	10.277	43.36			0.1
60) 2,4-Dichlorophenol	(2)	8.356	(-0.000)	162	573940	10.866	45.85			0.1
62) 1,2,4-Trichlorobenzene	(2)	8.478	(-0.000)	180	585056	10.334	43.60			0.1
66) Naphthalene	(2)	8.583	(0.000)	128	2114441	10.413	43.94			0.03
67) 4-Chloroaniline	(2)	8.694	(0.000)	127	678382	7.967	33.62			1
71) Hexachlorobutadiene	(2)	8.816	(0.000)	225	285207	8.939	37.72			0.1
80) 4-Chloro-3-methylphenol	(2)	9.498	(0.000)	107	705454	10.552	44.53			0.1
83) 2-Methylnaphthalene	(2)	9.684	(0.000)	142	1381042	10.701	45.15			0.03
85) Hexachlorocyclopentadiene	(3)	9.958	(-0.000)	237	544079	17.819	75.19			1
90) 2,4,6-Trichlorophenol	(3)	10.151	(-0.000)	196	386116	10.753	45.37			0.1
92) 2,4,5-Trichlorophenol	(3)	10.203	(-0.000)	196	411332	11.347	47.88			0.1
96) 2-Chloronaphthalene	(3)	10.454	(-0.000)	162	1253511	10.657	44.97			0.1

Digitally signed by Edward Monborne on 06/20/2018 at 14:15. Target 3.5 esignature user ID: em10340

Data file: /chem/HP19760.i/18jun20.b/df1356.d Injection date and time: **20-JUN-2018 11:55**
Data file Sample Info. Line: C5009MSD;9662312;1;3;MSD;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 237 ml Volume Injected (Vi): 0.5 ul

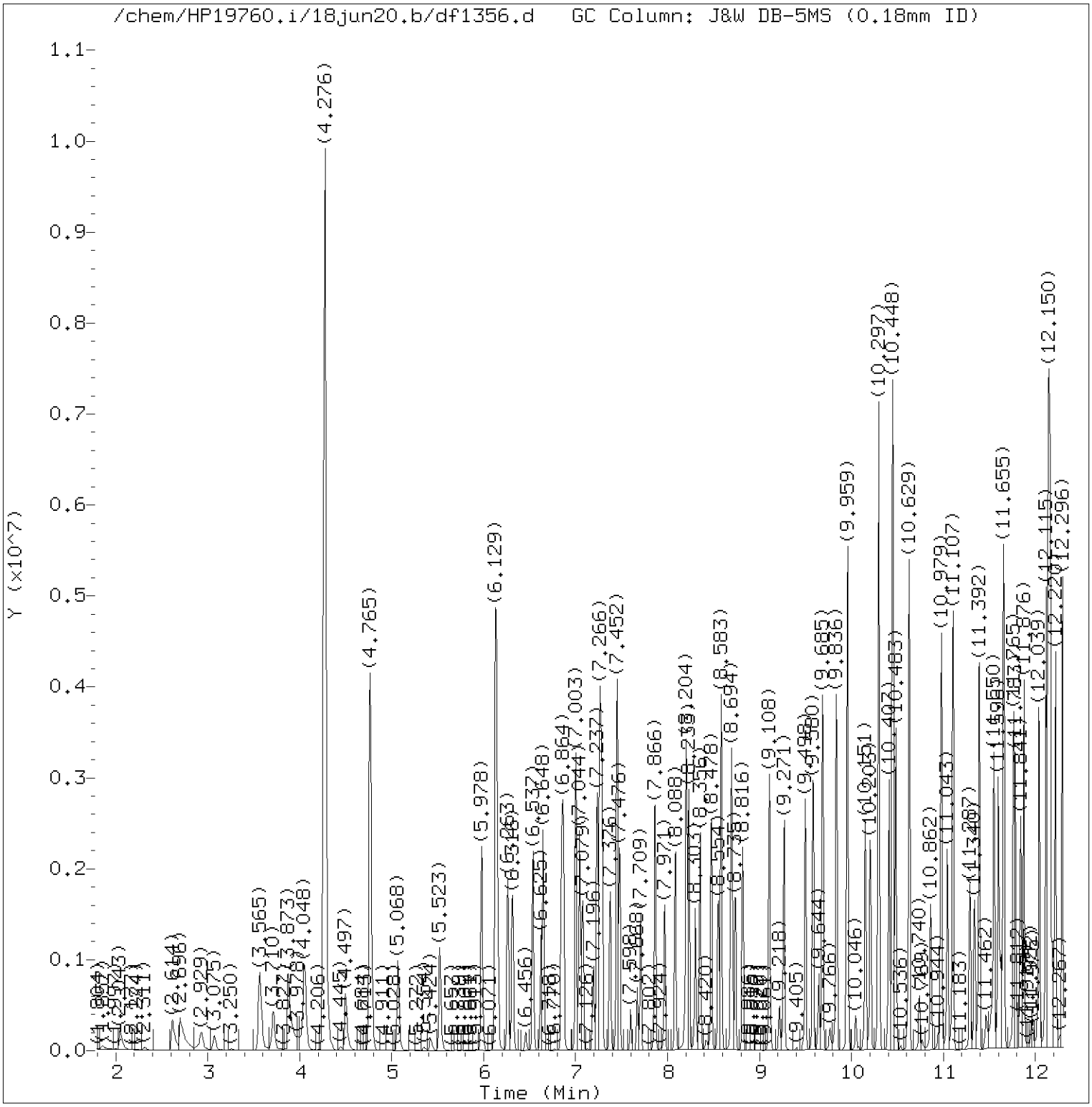
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)	10.629(-0.000)	138	462699	11.988	50.58			0.5
106) Dimethylphthalate	(3)	10.978(-0.000)	163	1291522	10.724	45.25			0.5
108) 2,6-Dinitrotoluene	(3)	11.043(-0.000)	165	353752	12.497	52.73			0.1
109) Acenaphthylene	(3)	11.107(-0.000)	152	1939444	11.467	48.39			0.03
112) 3-Nitroaniline	(3)	11.287(-0.000)	138	330979	10.144	42.80			0.8
114) Acenaphthene	(3)	11.392(-0.000)	153	1350000	11.762	49.63			0.03
115) 2,4-Dinitrophenol	(3)	11.544(-0.007)	184	300240M	15.252	64.35			4
116) 4-Nitrophenol	(3)	11.626(-0.002)	109	211815	8.616	36.35			3
118) 2,4-Dinitrotoluene	(3)	11.660(-0.000)	165	461123	11.962	50.47			0.3
119) Dibenzofuran	(3)	11.655(-0.000)	168	1808794	11.127	46.95			0.1
124) Diethylphthalate	(3)	12.039(-0.000)	149	1369650	11.180	47.17			0.5
126) Fluorene	(3)	12.115(-0.000)	166	1482737	11.445	48.29			0.03
127) 4-Chlorophenyl-phenylether	(3)	12.150(0.000)	204	666872	10.876	45.89			0.1
129) 4-Nitroaniline	(3)	12.156(-0.000)	138	388136	10.803	45.58			0.2
130) 4,6-Dinitro-2-methylphenol	(4)	12.202(-0.000)	198	246120M	10.392	43.85			2
131) N-Nitrosodiphenylamine	(4)	12.296(-0.000)	169	1235798	11.690	49.32			0.2
143) 4-Bromophenyl-phenylether	(4)	12.727(0.000)	248	379384	11.734	49.51			0.1
145) Hexachlorobenzene	(4)	12.774(-0.000)	284	360464	11.222	47.35			0.03
149) Pentachlorophenol	(4)	13.036(-0.000)	266	169288	7.636	32.22			0.3
155) Phenanthrene	(4)	13.269(0.000)	178	2224297	12.270	51.77			0.03
157) Anthracene	(4)	13.333(0.000)	178	2211790	12.431	52.45			0.03
163) Carbazole	(4)	13.549(0.000)	167	2124784	12.460	52.58			0.1
165) Di-n-butylphthalate	(4)	14.074(-0.000)	149	2543996	11.687	49.31			0.5
173) Fluoranthene	(4)	14.872(0.000)	202	2378791	12.032	50.77			0.03
177) Pyrene	(5)	15.204(-0.000)	202	2455786	11.541	48.69			0.03
188) Butylbenzylphthalate	(5)	16.335(0.000)	149	1219095	11.488	48.47			0.5
193) 3,3'-Dichlorobenzidine	(5)	17.174(0.000)	252	729291	10.290	43.42			0.8
195) Benzo(a)anthracene	(5)	17.174(0.000)	228	2246922	12.010	50.67			0.03
196) Chrysene	(5)	17.233(0.000)	228	2241378	11.964	50.48			0.03
199) bis(2-Ethylhexyl)phthalate	(5)	17.396(0.000)	149	1640648	11.252	47.48			1
205) Di-n-octylphthalate	(6)	18.550(-0.000)	149	2793237	11.444	48.29			1
206) Benzo(b)fluoranthene	(6)	19.004(-0.000)	252	2049165	11.292	47.65			0.03
208) Benzo(k)fluoranthene	(6)	19.051(-0.000)	252	2185101	12.108	51.09			0.03
211) Benzo(a)pyrene	(6)	19.523(-0.000)	252	1911956	11.669	49.24			0.03
219) Indeno(1,2,3-cd)pyrene	(6)	21.208(0.000)	276	1363931M	8.981	37.89			0.03
220) Dibenz(a,h)anthracene	(6)	21.249(0.000)	278	1539199	9.357	39.48			0.03
221) Benzo(g,h,i)perylene	(6)	21.563(0.000)	276	1476704	9.113	38.45			0.03

M = Compound was manually integrated.

Total number of targets = 64

Digitally signed by Edward Monborne on 06/20/2018 at 14:15. Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

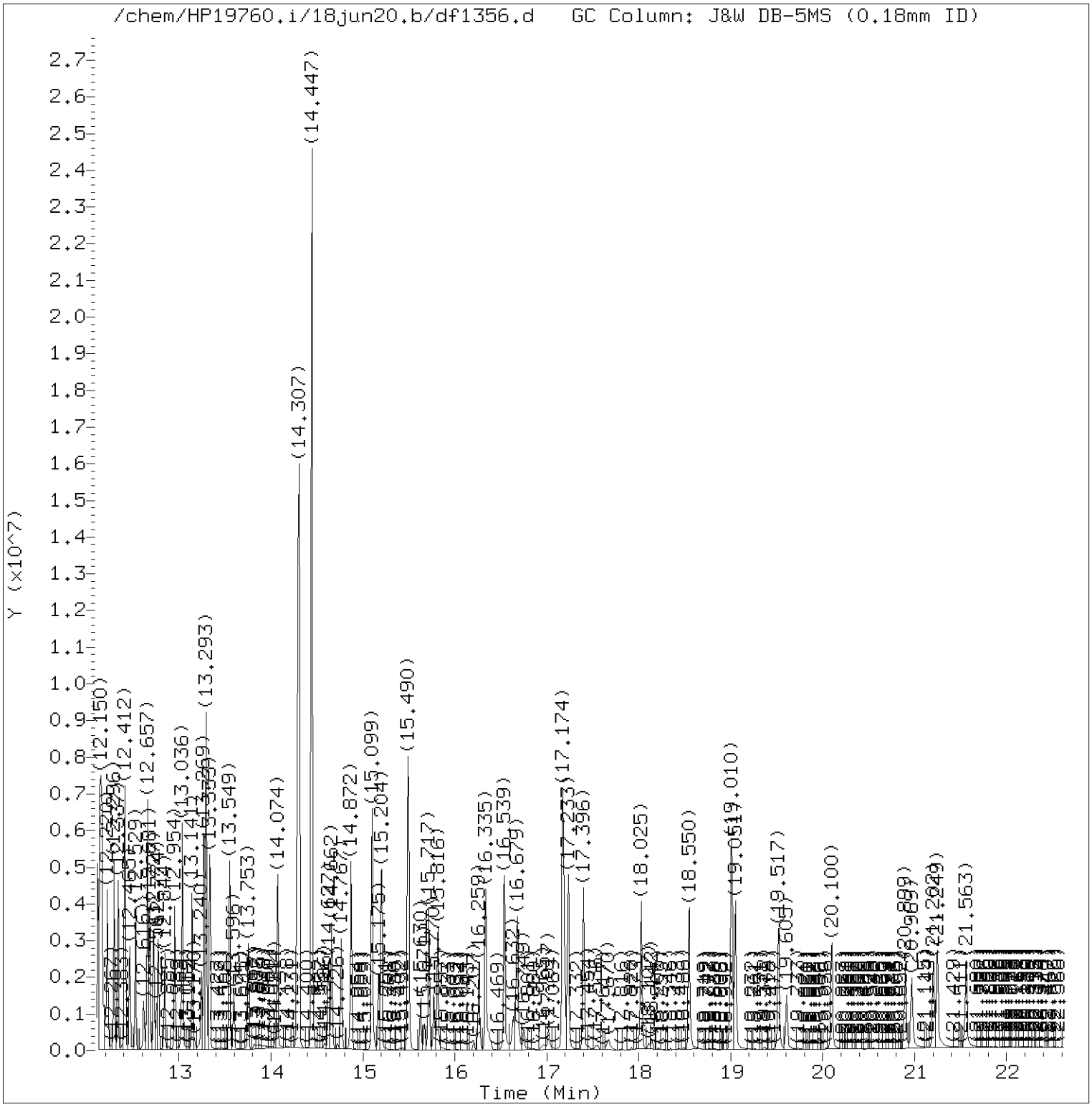
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 em10340

Sample Name: C5009MSD Lab Sample ID: 9662312

Digitally signed by Edward Monborne
on 06/20/2018 at 14:15.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 em10340

Sample Name: C5009MSD Lab Sample ID: 9662312

Digitally signed by Edward Monborne
on 06/20/2018 at 14:15.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 em10340

Sample Name: C5009MSD Lab Sample ID: 9662312

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.765	112	2277960	29.651
17)$Phenol-d6	(1)	6.129	99	2429389	23.854
18) Phenol	(1)	6.147	94	756479	6.365
22) bis(2-Chloroethyl)ether	(1)	6.263	93	905811	10.312
23) 2-Chlorophenol	(1)	6.316	128	715812	10.521
24) 1,3-Dichlorobenzene	(1)	6.537	146	699240	9.799
25)*1,4-Dichlorobenzene-d4	(1)	6.625	152	232930	5.000
26) 1,4-Dichlorobenzene	(1)	6.648	146	730179	10.063
28) 1,2-Dichlorobenzene	(1)	6.869	146	702510	10.278
31) 2-Methylphenol	(1)	7.044	108	710375	9.844
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	45	1016997	11.360
38) N-Nitroso-di-n-propylamine	(1)	7.260	70	692128	11.214
37) 4-Methylphenol	(1)	7.277	108	768181	9.550
43) Hexachloroethane	(1)	7.376	117	300330	9.132
44)$Nitrobenzene-d5	(2)	7.452	82	1893990	19.872
45) Nitrobenzene	(2)	7.476	77	979651	10.464
50) Isophorone	(2)	7.866	82	1781823	10.903
51) 2-Nitrophenol	(2)	7.971	139	393480	11.159
53) 2,4-Dimethylphenol	(2)	8.088	107	622556	7.783
55) bis(2-Chloroethoxy)methane	(2)	8.233	93	1083550	10.277
60) 2,4-Dichlorophenol	(2)	8.356	162	573940	10.866
62) 1,2,4-Trichlorobenzene	(2)	8.478	180	585056	10.334
65)*Naphthalene-d8	(2)	8.554	136	915047	5.000
66) Naphthalene	(2)	8.583	128	2114441	10.413
67) 4-Chloroaniline	(2)	8.694	127	678382	7.967
71) Hexachlorobutadiene	(2)	8.816	225	285207	8.939
80) 4-Chloro-3-methylphenol	(2)	9.498	107	705454	10.552
83) 2-Methylnaphthalene	(2)	9.685	142	1381042	10.701
85) Hexachlorocyclopentadiene	(3)	9.959	237	544079	17.819
90) 2,4,6-Trichlorophenol	(3)	10.151	196	386116	10.753
92) 2,4,5-Trichlorophenol	(3)	10.203	196	411332	11.347
93)$2-Fluorobiphenyl	(3)	10.297	172	2784693	20.498
96) 2-Chloronaphthalene	(3)	10.454	162	1253511	10.657
100) 2-Nitroaniline	(3)	10.629	138	462699	11.988
106) Dimethylphthalate	(3)	10.979	163	1291522	10.724
108) 2,6-Dinitrotoluene	(3)	11.043	165	353752	12.497
109) Acenaphthylene	(3)	11.107	152	1939444	11.467
112) 3-Nitroaniline	(3)	11.287	138	330979	10.144
113)*Acenaphthene-d10	(3)	11.340	164	421884	5.000
114) Acenaphthene	(3)	11.392	153	1350000	11.762

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/20/2018 at 14:15.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 em10340

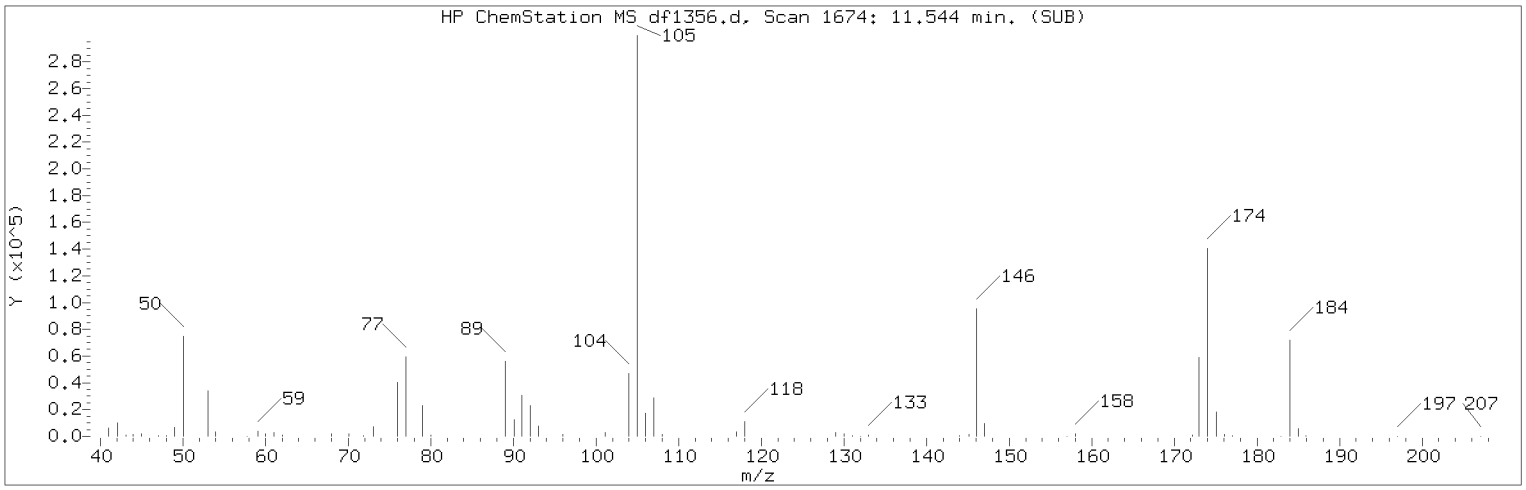
Sample Name: C5009MSD Lab Sample ID: 9662312

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
115) 2,4-Dinitrophenol	(3)	11.544	184	300240M	15.252
116) 4-Nitrophenol	(3)	11.626	109	211815	8.616
119) Dibenzofuran	(3)	11.655	168	1808794	11.127
118) 2,4-Dinitrotoluene	(3)	11.661	165	461123	11.962
124) Diethylphthalate	(3)	12.039	149	1369650	11.180
126) Fluorene	(3)	12.115	166	1482737	11.445
127) 4-Chlorophenyl-phenylether	(3)	12.150	204	666872	10.876
129) 4-Nitroaniline	(3)	12.156	138	388136	10.803
130) 4,6-Dinitro-2-methylphenol	(4)	12.203	198	246120M	10.392
131) N-Nitrosodiphenylamine	(4)	12.296	169	1235798	11.690
135)$2,4,6-Tribromophenol	(3)	12.412	330	609492	41.331
143) 4-Bromophenyl-phenylether	(4)	12.727	248	379384	11.734
145) Hexachlorobenzene	(4)	12.774	284	360464	11.222
149) Pentachlorophenol	(4)	13.036	266	169288	7.636
153)*Phenanthrene-d10	(4)	13.240	188	773265	5.000
155) Phenanthrene	(4)	13.269	178	2224297	12.270
157) Anthracene	(4)	13.333	178	2211790	12.431
163) Carbazole	(4)	13.549	167	2124784	12.460
165) Di-n-butylphthalate	(4)	14.074	149	2543996	11.687
173) Fluoranthene	(4)	14.872	202	2378791	12.032
175)*Pyrene-d10	(5)	15.175	212	776320	5.000
177) Pyrene	(5)	15.204	202	2455786	11.541
179)$Terphenyl-d14	(5)	15.490	244	2859818	21.169
188) Butylbenzylphthalate	(5)	16.335	149	1219095	11.488
195) Benzo(a)anthracene	(5)	17.174	228	2246922	12.010
193) 3,3'-Dichlorobenzidine	(5)	17.174	252	729291	10.290
196) Chrysene	(5)	17.233	228	2241378	11.964
199) bis(2-Ethylhexyl)phthalate	(5)	17.396	149	1640648	11.252
205) Di-n-octylphthalate	(6)	18.550	149	2793237	11.444
206) Benzo(b)fluoranthene	(6)	19.005	252	2049165	11.292
208) Benzo(k)fluoranthene	(6)	19.051	252	2185101	12.108
211) Benzo(a)pyrene	(6)	19.523	252	1911956	11.669
213)*Perylene-d12	(6)	19.611	264	752375	5.000
219) Indeno(1,2,3-cd)pyrene	(6)	21.208	276	1363931M	8.981
220) Dibenz(a,h)anthracene	(6)	21.249	278	1539199	9.357
221) Benzo(g,h,i)perylene	(6)	21.563	276	1476704	9.113

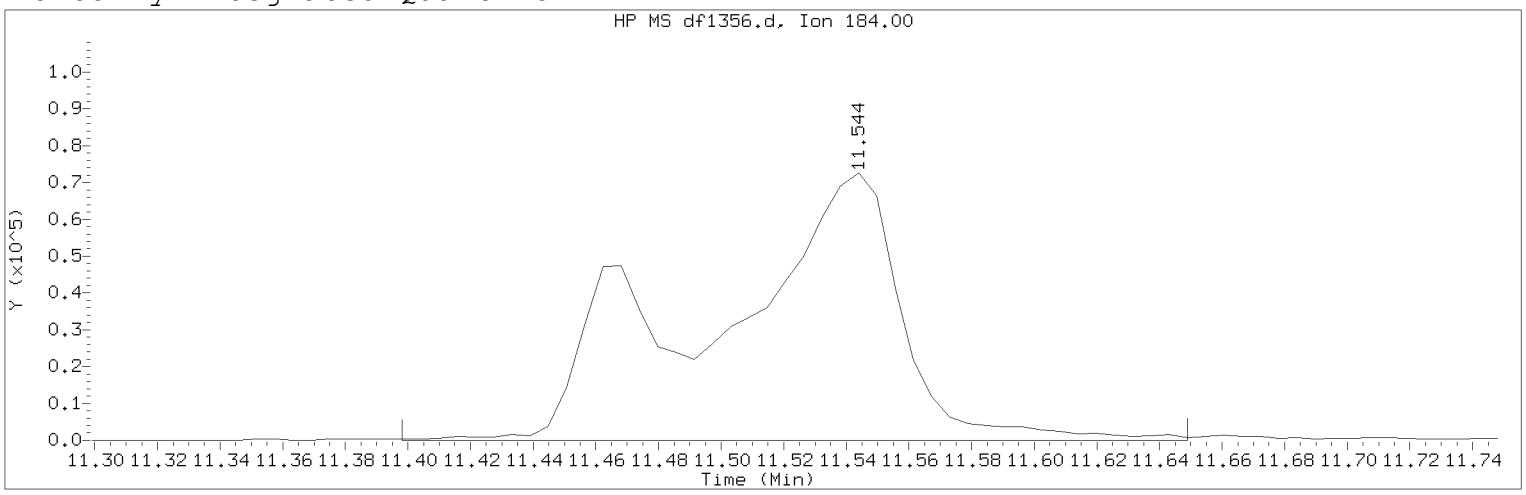
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/20/2018 at 14:15.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 em10340

Sample Name: C5009MSD Lab Sample ID: 9662312

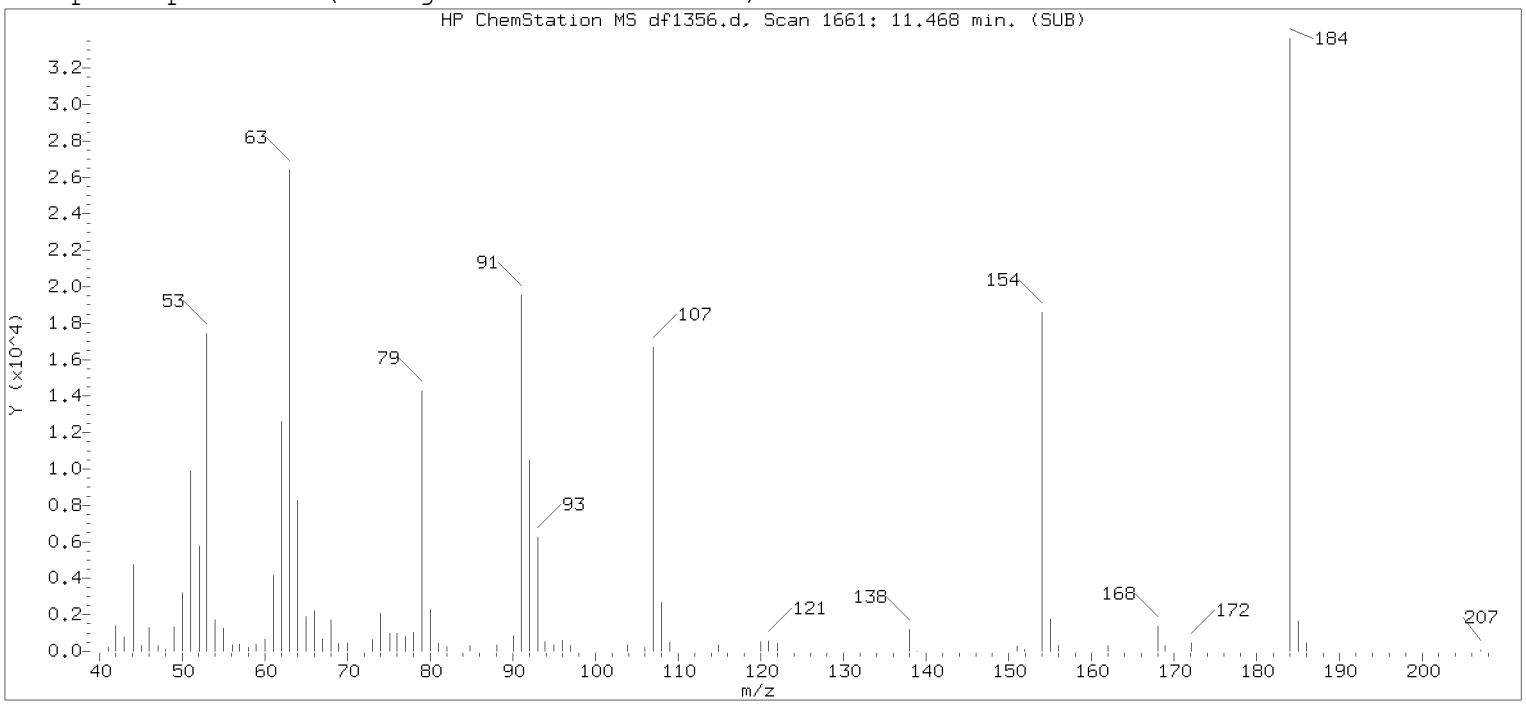
Compound Number : 115
Compound Name : 2,4-Dinitrophenol
Scan Number : 1674
Retention Time (minutes) : 11.544
Quant Ion : 184.00
Area (flag) : 300240M
On-Column Amount (ng/ul) : 15.2516
Integration start scan : 1648 Integration stop scan: 1691
Y at integration start : -10 Y at integration end: -10

Reason for manual integration: improper integration

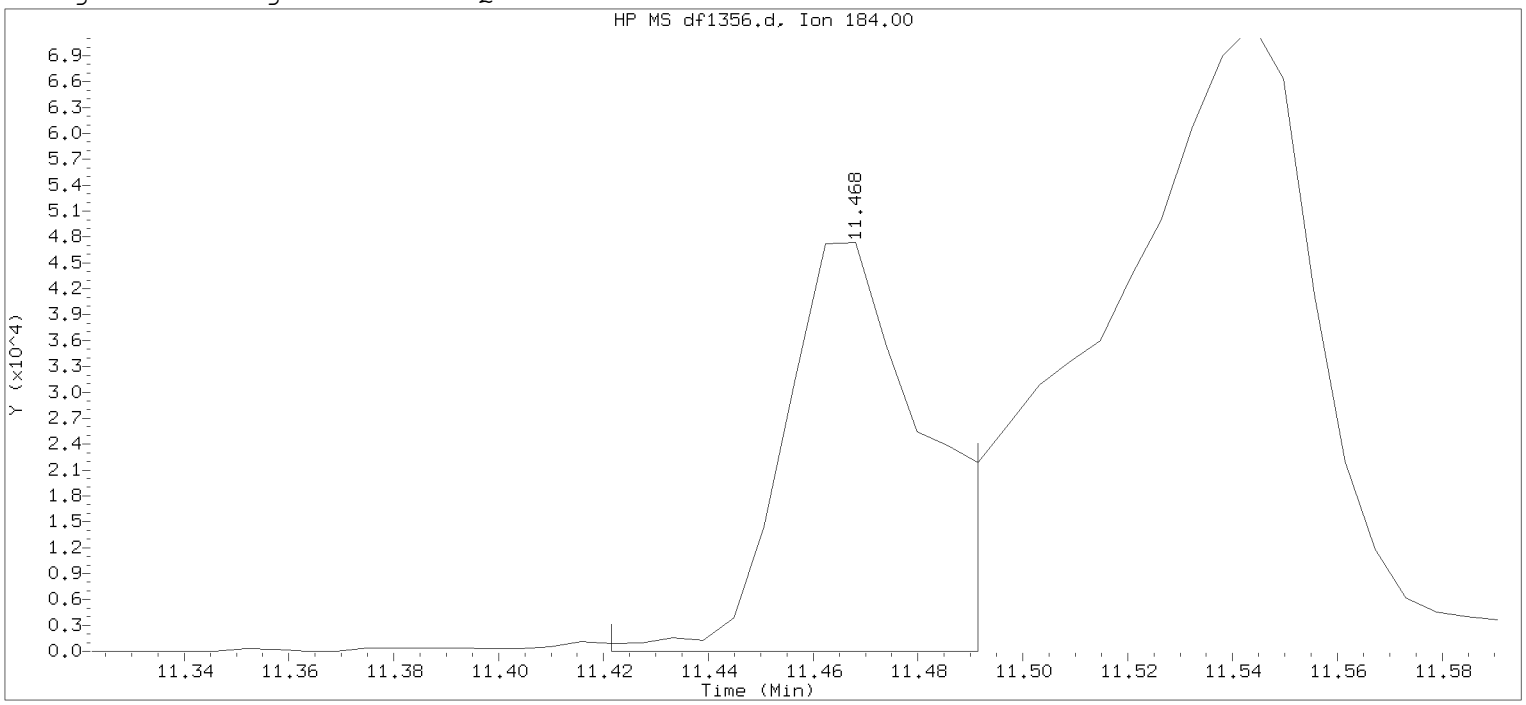
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:15.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

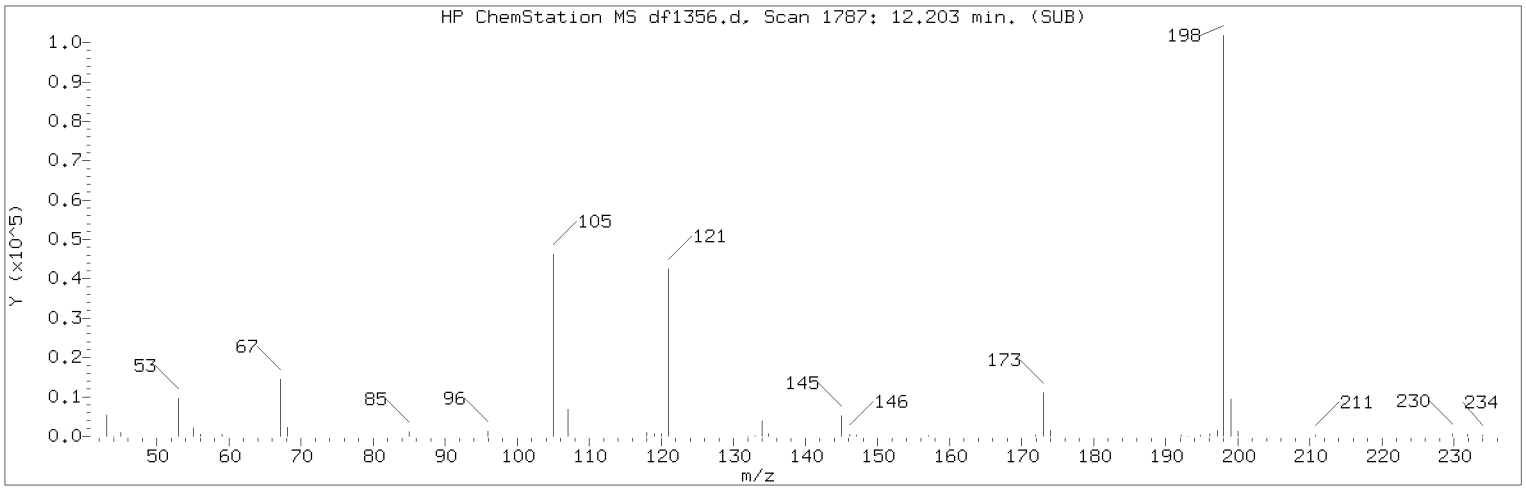
Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 12:21 Automation

Sample Name: C5009MSD Lab Sample ID: 9662312

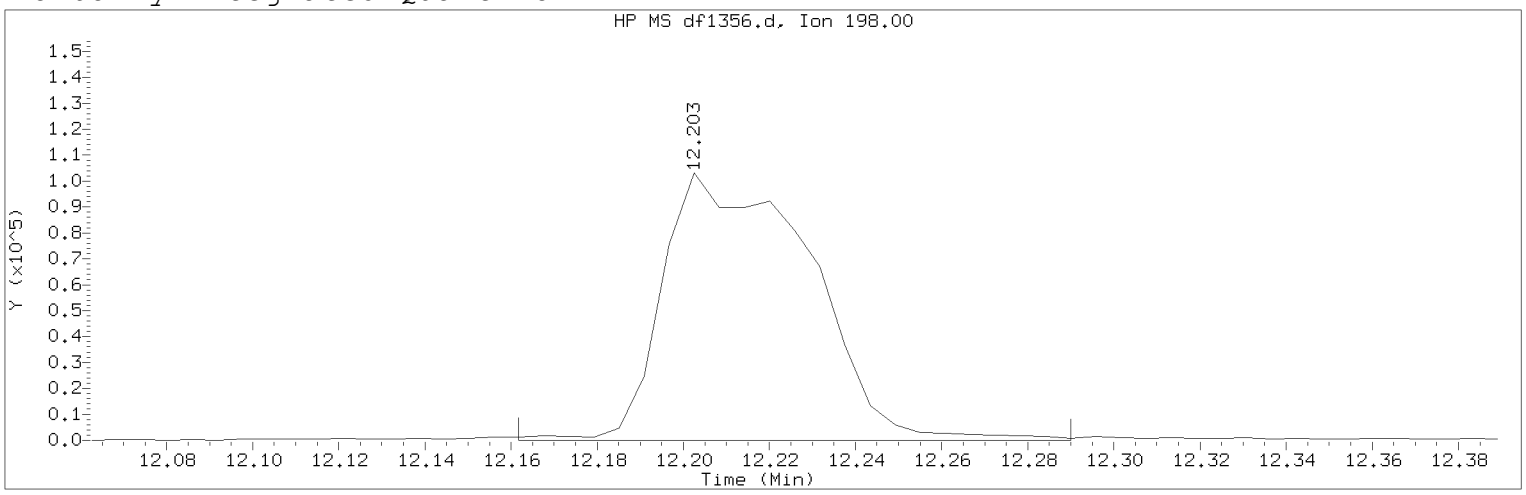
Compound Number	: 115		
Compound Name	: 2,4-Dinitrophenol		
Scan Number	: 1661		
Retention Time (minutes)	: 11.468		
Quant Ion	: 184.00		
Area	: 85285		
On-column Amount (ng/ul)	: 4.3323		
Integration start scan	: 1652	Integration stop scan:	1664
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/20/2018 at 14:15.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 em10340

Sample Name: C5009MSD Lab Sample ID: 9662312

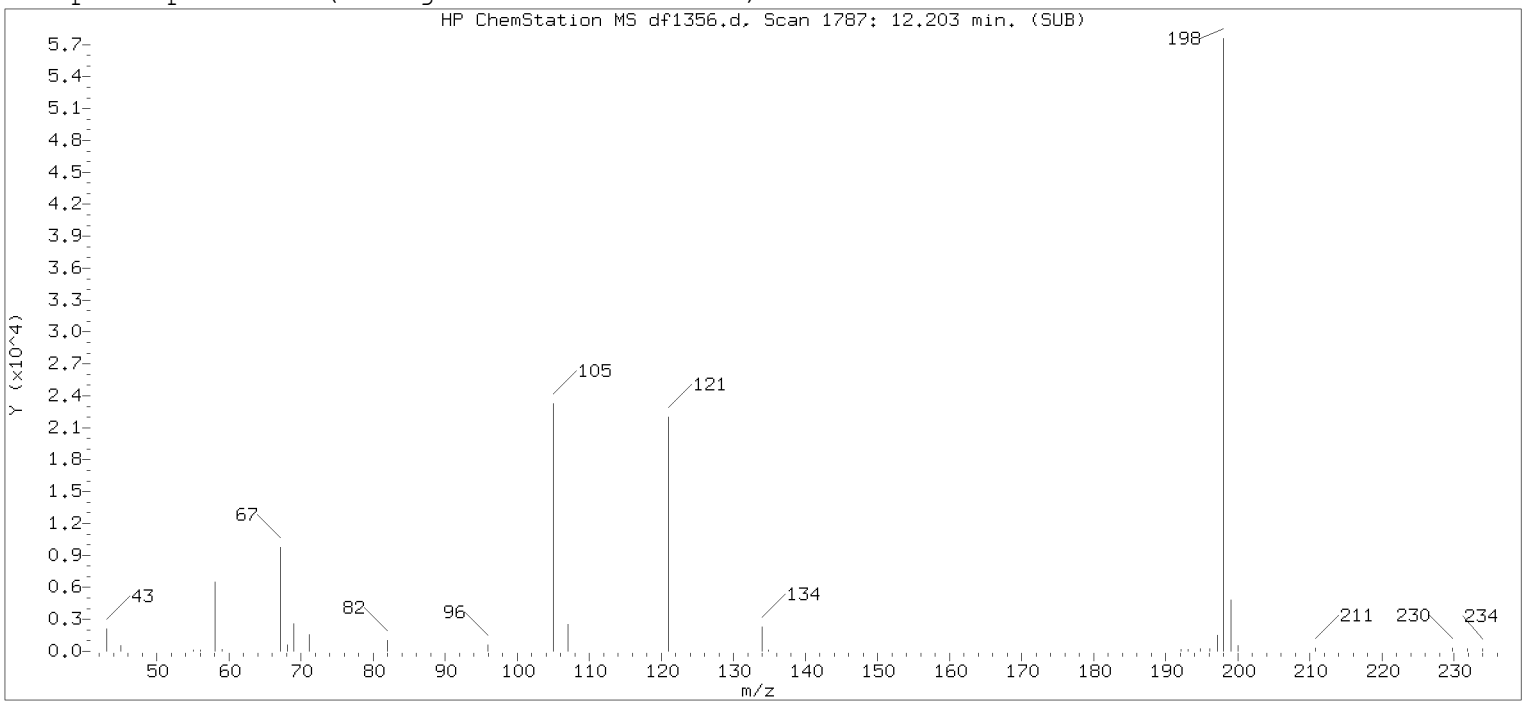
Compound Number : 130
Compound Name : 4,6-Dinitro-2-methylphenol
Scan Number : 1787
Retention Time (minutes) : 12.203
Quant Ion : 198.00
Area (flag) : 246120M
On-Column Amount (ng/ul) : 10.3920
Integration start scan : 1779 Integration stop scan: 1801
Y at integration start : -12 Y at integration end: -12

Reason for manual integration: improper integration

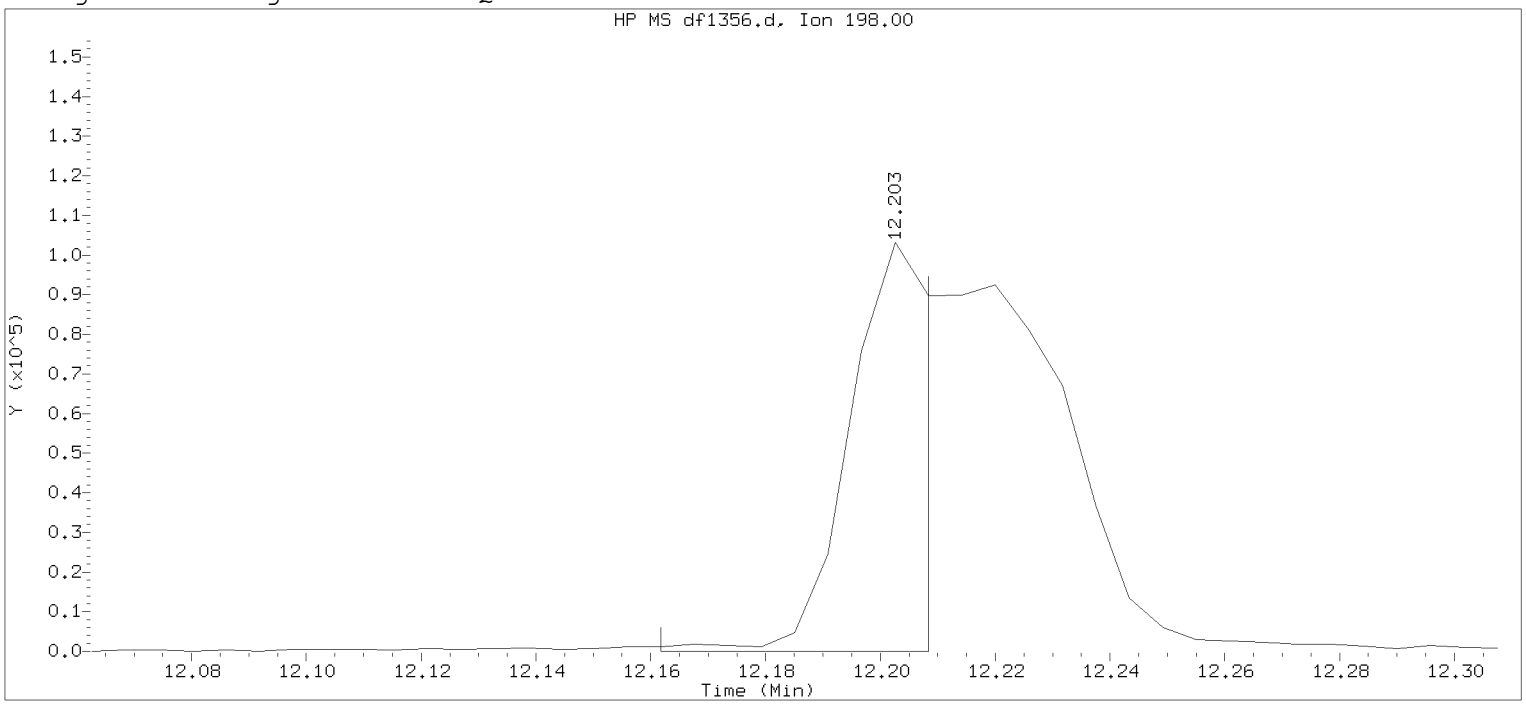
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:15.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

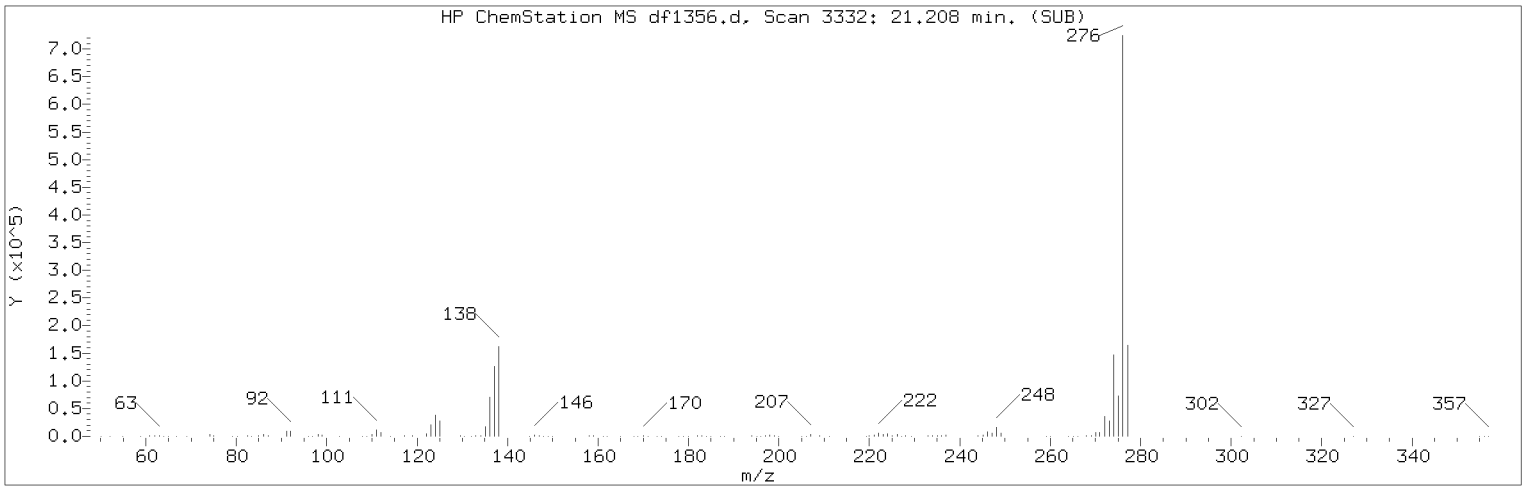
Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 12:21 Automation

Sample Name: C5009MSD Lab Sample ID: 9662312

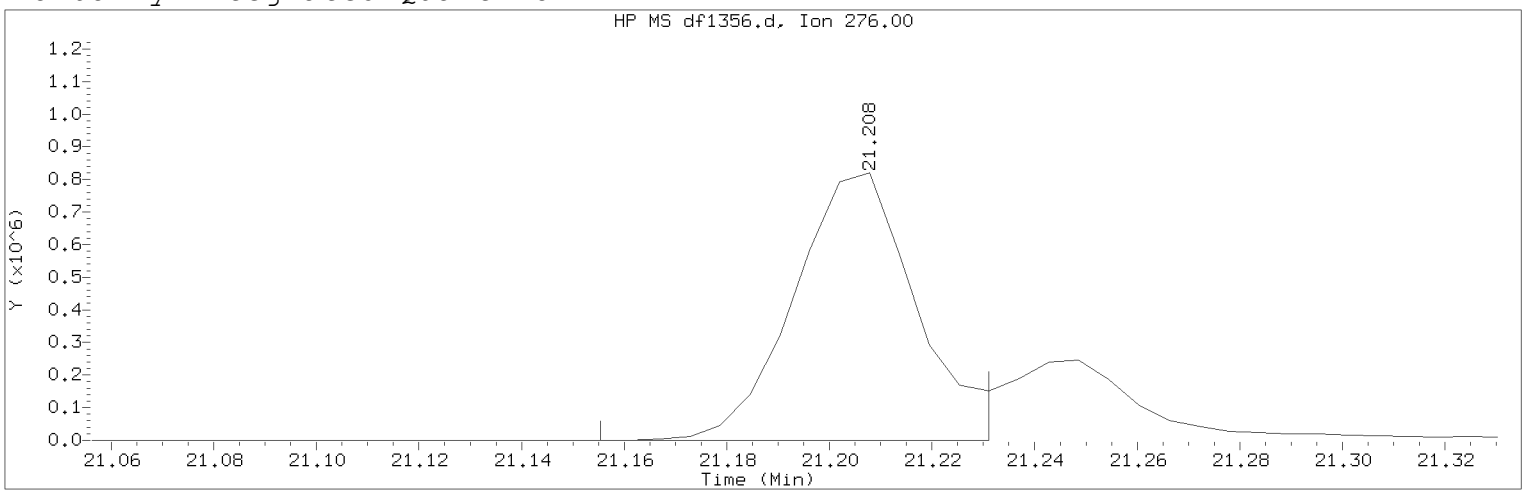
Compound Number : 130
Compound Name : 4,6-Dinitro-2-methylphenol
Scan Number : 1787
Retention Time (minutes) : 12.203
Quant Ion : 198.00
Area : 90227
On-column Amount (ng/ul) : 3.8097
Integration start scan : 1779 Integration stop scan: 1787
Y at integration start : 0 Y at integration end: 0

Digitally signed by Edward Monborne on 06/20/2018 at 14:15.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:12 em10340

Sample Name: C5009MSD Lab Sample ID: 9662312

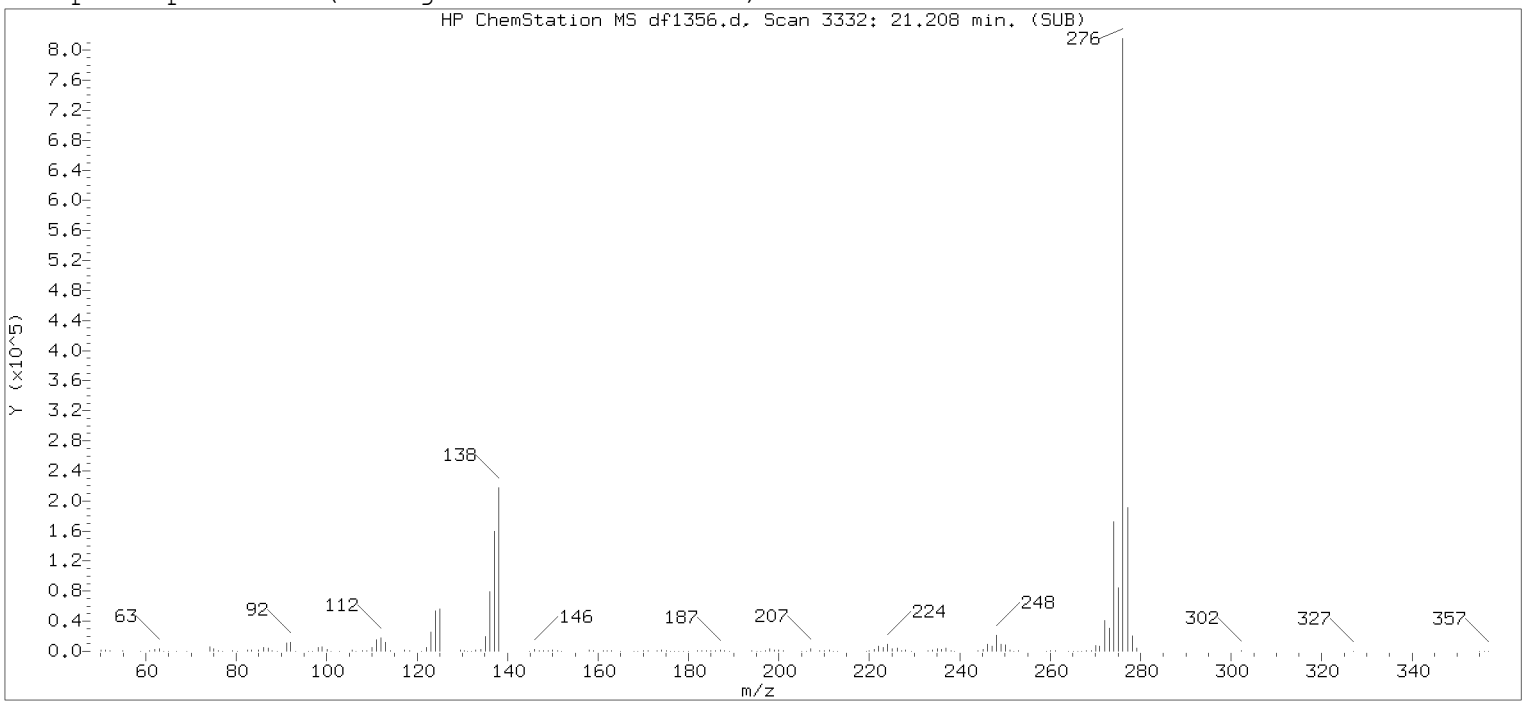
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3332
Retention Time (minutes) : 21.208
Quant Ion : 276.00
Area (flag) : 1363931M
On-Column Amount (ng/ul) : 8.9808
Integration start scan : 3322 Integration stop scan: 3335
Y at integration start : 250 Y at integration end: 250

Reason for manual integration: improper integration

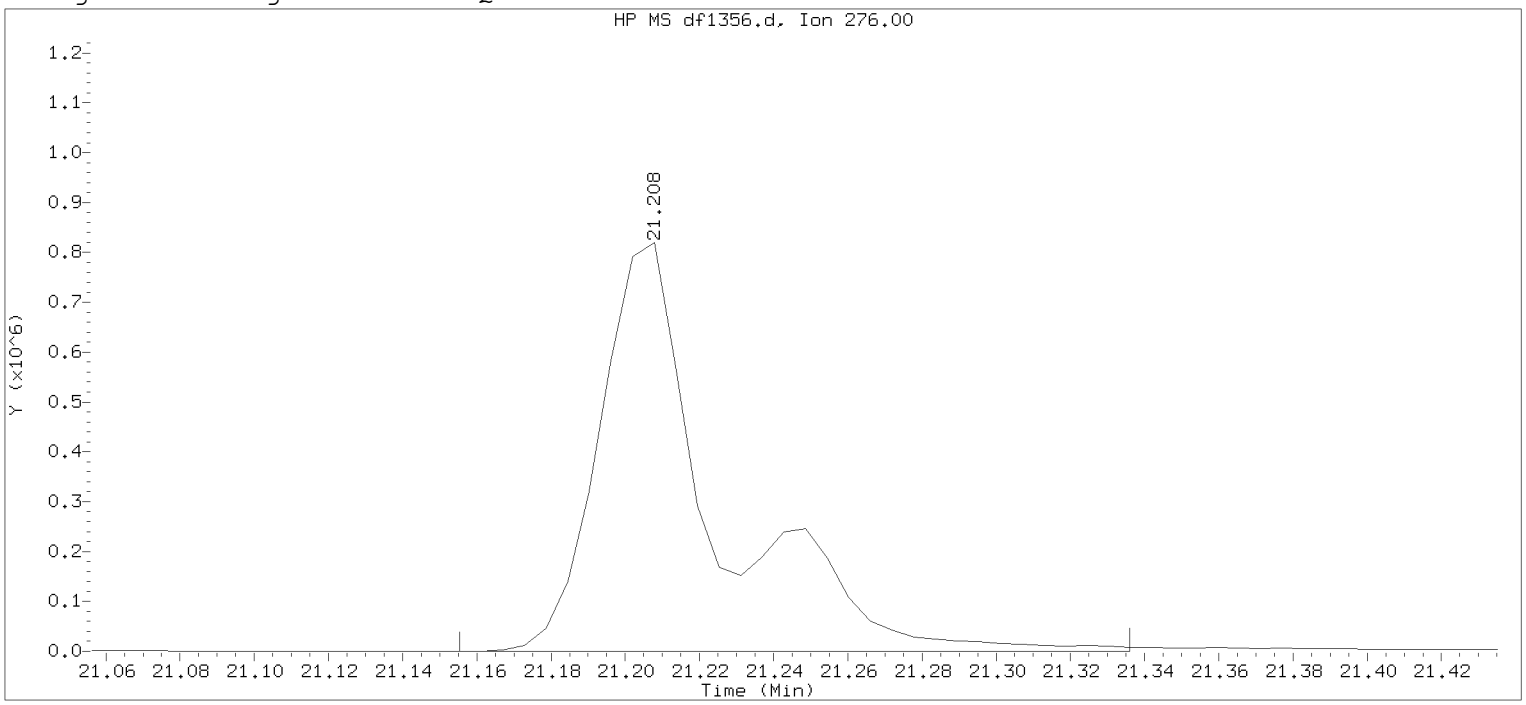
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:15.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 12:21 Automation

Sample Name: C5009MSD Lab Sample ID: 9662312

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3332		
Retention Time (minutes)	: 21.208		
Quant Ion	: 276.00		
Area	: 1796768		
On-column Amount (ng/ul)	: 11.8309		
Integration start scan	: 3322	Integration stop scan:	3353
Y at integration start	: 250	Y at integration end:	250

Digitally signed by Edward Monborne on 06/20/2018 at 14:15.
Target 3.5 esignature user ... Page 1 of 1

C5009MSD Lancaster Laboratories, Inc. Analysis Summary for GC/MS Semivolatiles 9662312

Data file: /chem/HP19760.i/18jun20.b/df1356.d Injection date and time: **20-JUN-2018 11:55**
Data file Sample Info. Line: C5009MSD;9662312;1;3;MSD;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:02 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 237 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.625	(-0.006)	830	152	232930	(-13)	5.00	
65) Naphthalene-d8	8.554	(0.000)	1161	136	915047	(-13)	5.00	
113) Acenaphthene-d10	11.340	(0.000)	1639	164	421884	(-15)	5.00	
153) Phenanthrene-d10	13.240	(0.000)	1965	188	773265	(-15)	5.00	
175) Pyrene-d10	15.175	(-0.006)	2297	212	776320	(-16)	5.00	
213) Perylene-d12	19.611	(0.000)	3058	264	752375	(-13)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.765	(-0.004)	112	2277960	29.651	59%		10 - 82
17) Phenol-d6	(1)	6.129	(0.000)	99	2429389	23.854	48%		10 - 71
44) Nitrobenzene-d5	(2)	7.452	(0.000)	82	1893990	19.872	79%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297	(0.001)	172	2784693	20.498	82%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.412	(0.000)	330	609492	41.331	83%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	2859818	21.169	85%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
16) Benzaldehyde	(1)	5.978	(-0.000)	77	772755	12.267	51.76			0.8
18) Phenol	(1)	6.147	(-0.000)	94	756479	6.365	26.86			0.1
22) bis(2-Chloroethyl)ether	(1)	6.263	(-0.000)	93	905811	10.312	43.51			0.1
23) 2-Chlorophenol	(1)	6.316	(-0.000)	128	715812	10.521	44.39			0.1
24) 1,3-Dichlorobenzene	(1)	6.537	(-0.000)	146	699240	9.799	41.35			0.1
26) 1,4-Dichlorobenzene	(1)	6.648	(0.000)	146	730179	10.063	42.46			0.1
28) 1,2-Dichlorobenzene	(1)	6.869	(0.000)	146	702510	10.278	43.37			0.1
31) 2-Methylphenol	(1)	7.044	(0.000)	108	710375	9.844	41.54			0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	(0.000)	45	1016997	11.360	47.93			0.1
36) Acetophenone	(1)	7.236	(0.000)	105	1144150	10.967	46.28			1
37) 4-Methylphenol	(1)	7.277	(0.000)	108	768181	9.550	40.29			0.1
38) N-Nitroso-di-n-propylamine	(1)	7.260	(0.000)	70	692128	11.214	47.32			0.2
43) Hexachloroethane	(1)	7.376	(0.000)	117	300330	9.132	38.53			0.3
45) Nitrobenzene	(2)	7.476	(-0.000)	77	979651	10.464	44.15			0.1
50) Isophorone	(2)	7.866	(0.000)	82	1781823	10.903	46.00			0.1
51) 2-Nitrophenol	(2)	7.971	(0.000)	139	393480	11.159	47.08			0.8
53) 2,4-Dimethylphenol	(2)	8.088	(-0.000)	107	622556	7.783	32.84			0.8
55) bis(2-Chloroethoxy)methane	(2)	8.233	(-0.000)	93	1083550	10.277	43.36			0.1
60) 2,4-Dichlorophenol	(2)	8.356	(-0.000)	162	573940	10.866	45.85			0.1
62) 1,2,4-Trichlorobenzene	(2)	8.478	(-0.000)	180	585056	10.334	43.60			0.1
66) Naphthalene	(2)	8.583	(0.000)	128	2114441	10.413	43.94			0.03
67) 4-Chloroaniline	(2)	8.694	(0.000)	127	678382	7.967	33.62			1
71) Hexachlorobutadiene	(2)	8.816	(0.000)	225	285207	8.939	37.72			0.1
76) Caprolactam	(2)	9.218	(0.000)	113	90716	3.859	16.28			1
80) 4-Chloro-3-methylphenol	(2)	9.498	(0.000)	107	705454	10.552	44.53			0.1
83) 2-Methylnaphthalene	(2)	9.684	(0.000)	142	1381042	10.701	45.15			0.03
85) Hexachlorocyclopentadiene	(3)	9.958	(-0.000)	237	544079	17.819	75.19			1

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Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18jun20.b/df1356.d
Injection date and time: **20-JUN-2018 11:55**
Data file Sample Info. Line: C5009MSD;9662312;1;3;MSD;;;
Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:02 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 237 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
86) 1,2,4,5-Tetrachlorobenzene	(3)	9.958(-0.000)	216	560395	10.101	42.62			0.1
90) 2,4,6-Trichlorophenol	(3)	10.151(-0.000)	196	386116	10.753	45.37			0.1
92) 2,4,5-Trichlorophenol	(3)	10.203(-0.000)	196	411332	11.347	47.88			0.1
95) 1,1'-Biphenyl	(3)	10.448(-0.000)	154	1671912	11.413	48.16			0.8
96) 2-Chloronaphthalene	(3)	10.454(-0.000)	162	1253511	10.657	44.97			0.1
99) Diphenyl ether	(3)	10.629(-0.000)	170	860889	10.596	44.71			0.1
100) 2-Nitroaniline	(3)	10.629(-0.000)	138	462699	11.988	50.58			0.5
106) Dimethylphthalate	(3)	10.978(-0.000)	163	1291522	10.724	45.25			0.5
108) 2,6-Dinitrotoluene	(3)	11.043(-0.000)	165	353752	12.497	52.73			0.1
109) Acenaphthylene	(3)	11.107(-0.000)	152	1939444	11.467	48.39			0.03
112) 3-Nitroaniline	(3)	11.287(-0.000)	138	330979	10.144	42.80			0.8
114) Acenaphthene	(3)	11.392(-0.000)	153	1350000	11.762	49.63			0.03
115) 2,4-Dinitrophenol	(3)	11.544(-0.007)	184	300240M	15.252	64.35			4
116) 4-Nitrophenol	(3)	11.626(-0.002)	109	211815	8.616	36.35			3
118) 2,4-Dinitrotoluene	(3)	11.660(-0.000)	165	461123	11.962	50.47			0.3
119) Dibenzofuran	(3)	11.655(-0.000)	168	1808794	11.127	46.95			0.1
122) 2,3,4,6-Tetrachlorophenol	(3)	11.841(-0.000)	232	297076	9.763	41.20			1
124) Diethylphthalate	(3)	12.039(-0.000)	149	1369650	11.180	47.17			0.5
126) Fluorene	(3)	12.115(-0.000)	166	1482737	11.445	48.29			0.03
127) 4-Chlorophenyl-phenylether	(3)	12.150(0.000)	204	666872	10.876	45.89			0.1
129) 4-Nitroaniline	(3)	12.156(-0.000)	138	388136	10.803	45.58			0.2
130) 4,6-Dinitro-2-methylphenol	(4)	12.202(-0.000)	198	246120M	10.392	43.85			2
131) N-Nitrosodiphenylamine	(4)	12.296(-0.000)	169	1235798	11.690	49.32			0.2
143) 4-Bromophenyl-phenylether	(4)	12.727(0.000)	248	379384	11.734	49.51			0.1
145) Hexachlorobenzene	(4)	12.774(-0.000)	284	360464	11.222	47.35			0.03
148) Atrazine	(4)	12.954(0.000)	200	404403	13.367	56.40			0.5
149) Pentachlorophenol	(4)	13.036(-0.000)	266	169288	7.636	32.22			0.3
155) Phenanthrene	(4)	13.269(0.000)	178	2224297	12.270	51.77			0.03
157) Anthracene	(4)	13.333(0.000)	178	2211790	12.431	52.45			0.03
163) Carbazole	(4)	13.549(0.000)	167	2124784	12.460	52.58			0.1
165) Di-n-butylphthalate	(4)	14.074(-0.000)	149	2543996	11.687	49.31			0.5
173) Fluoranthene	(4)	14.872(0.000)	202	2378791	12.032	50.77			0.03
177) Pyrene	(5)	15.204(-0.000)	202	2455786	11.541	48.69			0.03
188) Butylbenzylphthalate	(5)	16.335(0.000)	149	1219095	11.488	48.47			0.5
193) 3,3'-Dichlorobenzidine	(5)	17.174(0.000)	252	729291	10.290	43.42			0.8
195) Benzo(a)anthracene	(5)	17.174(0.000)	228	2246922	12.010	50.67			0.03
196) Chrysene	(5)	17.233(0.000)	228	2241378	11.964	50.48			0.03
199) bis(2-Ethylhexyl)phthalate	(5)	17.396(0.000)	149	1640648	11.252	47.48			1
205) Di-n-octylphthalate	(6)	18.550(-0.000)	149	2793237	11.444	48.29			1
206) Benzo(b)fluoranthene	(6)	19.004(-0.000)	252	2049165	11.292	47.65			0.03
208) Benzo(k)fluoranthene	(6)	19.051(-0.000)	252	2185101	12.108	51.09			0.03
211) Benzo(a)pyrene	(6)	19.523(-0.000)	252	1911956	11.669	49.24			0.03
219) Indeno(1,2,3-cd)pyrene	(6)	21.208(0.000)	276	1363931M	8.981	37.89			0.03
220) Dibenz(a,h)anthracene	(6)	21.249(0.000)	278	1539199	9.357	39.48			0.03
221) Benzo(g,h,i)perylene	(6)	21.563(0.000)	276	1476704	9.113	38.45			0.03

M = Compound was manually integrated.

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Data file: /chem/HP19760.i/18jun20.b/df1356.d Injection date and time: **20-JUN-2018 11:55**
Data file Sample Info. Line: C5009MSD;9662312;1;3;MSD;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 14:02 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 237 ml Volume Injected (Vi): 0.5 ul

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Total number of targets = 72

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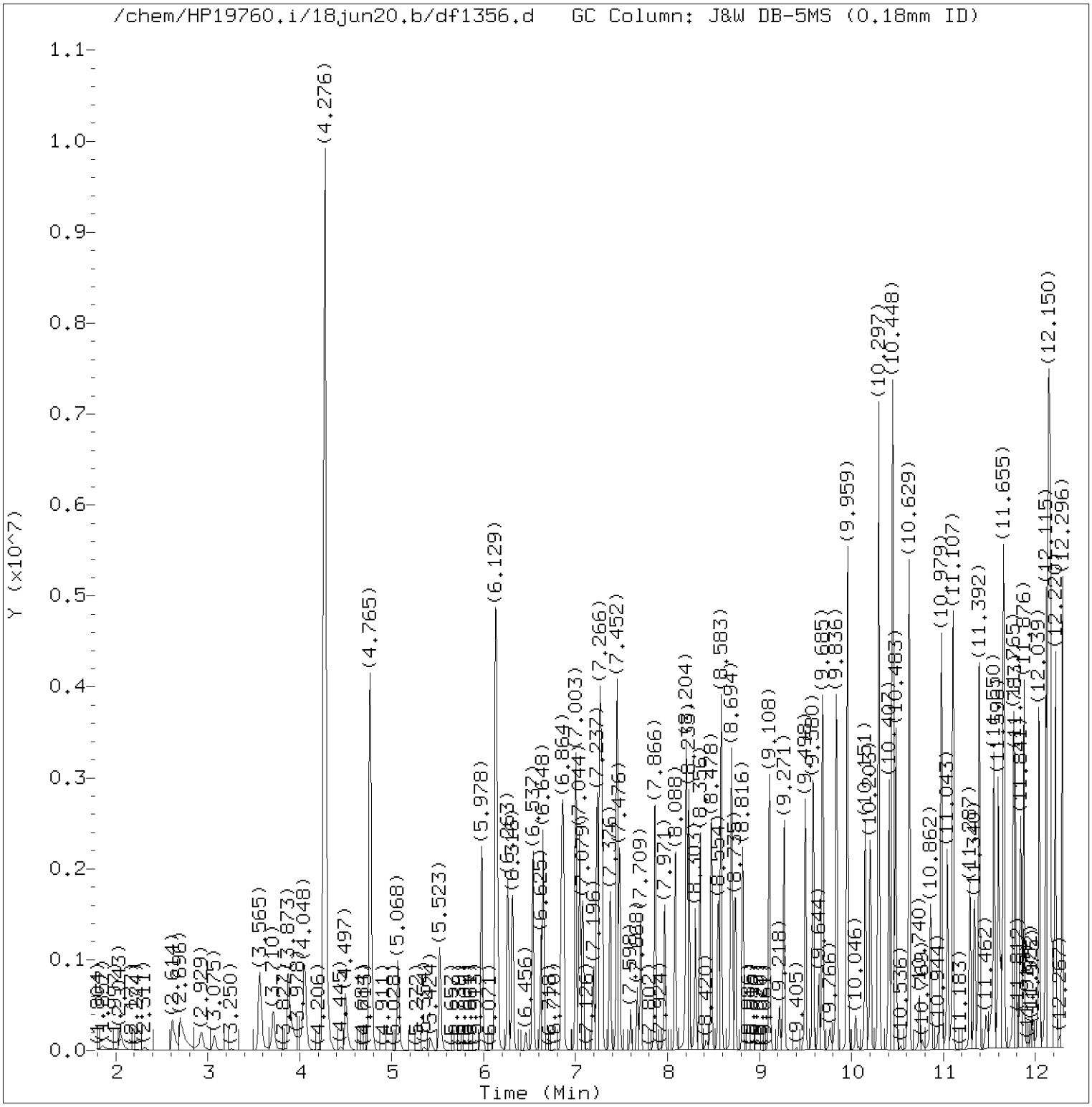
Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:52. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:02 em10340

Sample Name: C5009MSD Lab Sample ID: 9662312

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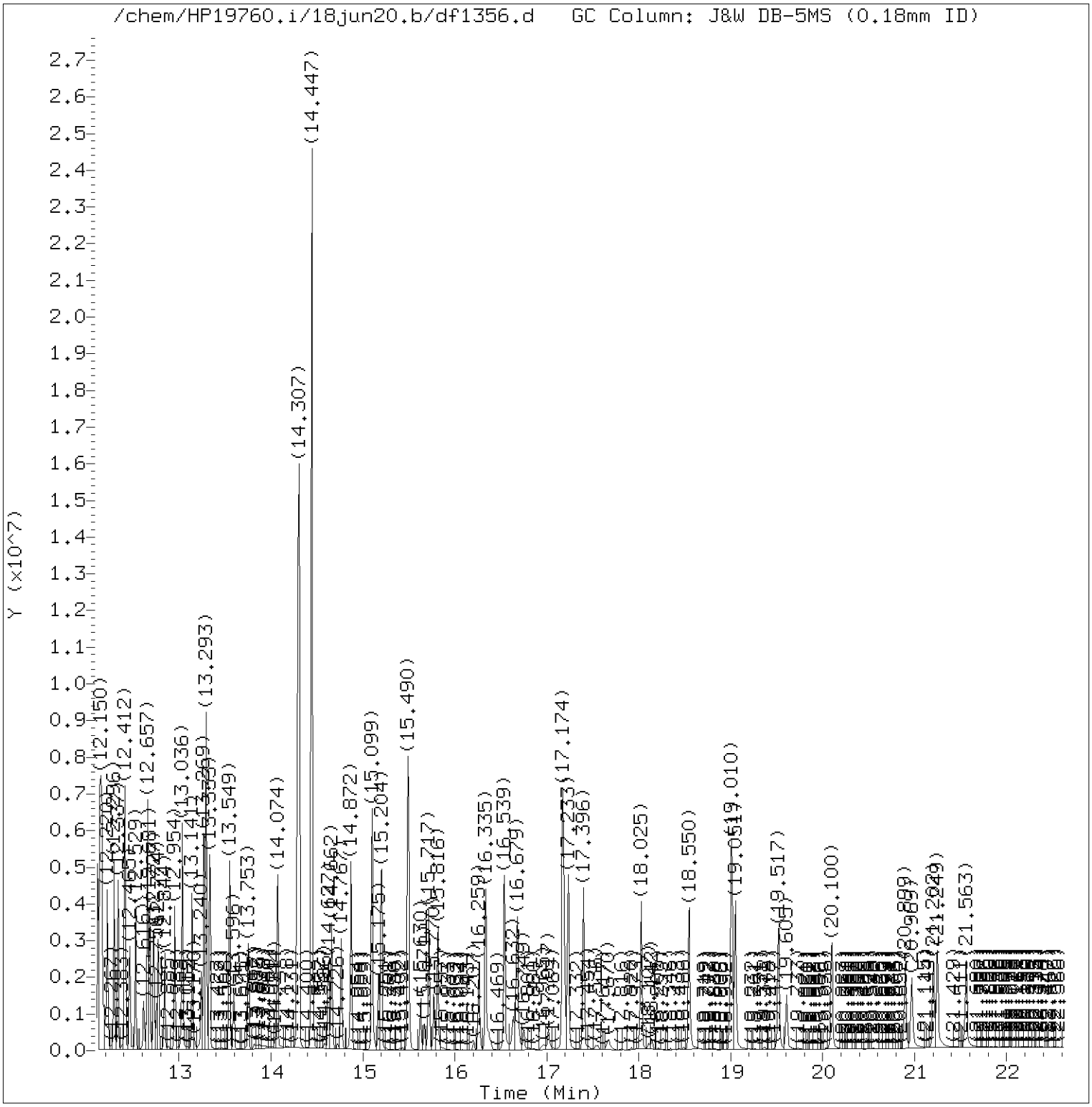
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:02 em10340

Sample Name: C5009MSD Lab Sample ID: 9662312

Digitally signed by Edward Monborne
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:02 em10340

Sample Name: C5009MSD Lab Sample ID: 9662312

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.765	112	2277960	29.651
16) Benzaldehyde	(1)	5.978	77	772755	12.267
17)$Phenol-d6	(1)	6.129	99	2429389	23.854
18) Phenol	(1)	6.147	94	756479	6.365
22) bis(2-Chloroethyl)ether	(1)	6.263	93	905811	10.312
23) 2-Chlorophenol	(1)	6.316	128	715812	10.521
24) 1,3-Dichlorobenzene	(1)	6.537	146	699240	9.799
25)*1,4-Dichlorobenzene-d4	(1)	6.625	152	232930	5.000
26) 1,4-Dichlorobenzene	(1)	6.648	146	730179	10.063
28) 1,2-Dichlorobenzene	(1)	6.869	146	702510	10.278
31) 2-Methylphenol	(1)	7.044	108	710375	9.844
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	45	1016997	11.360
36) Acetophenone	(1)	7.237	105	1144150	10.967
38) N-Nitroso-di-n-propylamine	(1)	7.260	70	692128	11.214
37) 4-Methylphenol	(1)	7.277	108	768181	9.550
43) Hexachloroethane	(1)	7.376	117	300330	9.132
44)$Nitrobenzene-d5	(2)	7.452	82	1893990	19.872
45) Nitrobenzene	(2)	7.476	77	979651	10.464
50) Isophorone	(2)	7.866	82	1781823	10.903
51) 2-Nitrophenol	(2)	7.971	139	393480	11.159
53) 2,4-Dimethylphenol	(2)	8.088	107	622556	7.783
55) bis(2-Chloroethoxy)methane	(2)	8.233	93	1083550	10.277
60) 2,4-Dichlorophenol	(2)	8.356	162	573940	10.866
62) 1,2,4-Trichlorobenzene	(2)	8.478	180	585056	10.334
65)*Naphthalene-d8	(2)	8.554	136	915047	5.000
66) Naphthalene	(2)	8.583	128	2114441	10.413
67) 4-Chloroaniline	(2)	8.694	127	678382	7.967
71) Hexachlorobutadiene	(2)	8.816	225	285207	8.939
76) Caprolactam	(2)	9.218	113	90716	3.859
80) 4-Chloro-3-methylphenol	(2)	9.498	107	705454	10.552
83) 2-Methylnaphthalene	(2)	9.685	142	1381042	10.701
85) Hexachlorocyclopentadiene	(3)	9.959	237	544079	17.819
86) 1,2,4,5-Tetrachlorobenzene	(3)	9.959	216	560395	10.101
90) 2,4,6-Trichlorophenol	(3)	10.151	196	386116	10.753
92) 2,4,5-Trichlorophenol	(3)	10.203	196	411332	11.347
93)$2-Fluorobiphenyl	(3)	10.297	172	2784693	20.498
95) 1,1'-Biphenyl	(3)	10.448	154	1671912	11.413
96) 2-Chloronaphthalene	(3)	10.454	162	1253511	10.657
100) 2-Nitroaniline	(3)	10.629	138	462699	11.988
99) Diphenyl ether	(3)	10.629	170	860889	10.596

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:02 em10340

Sample Name: C5009MSD Lab Sample ID: 9662312

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
106) Dimethylphthalate	(3)	10.979	163	1291522	10.724
108) 2,6-Dinitrotoluene	(3)	11.043	165	353752	12.497
109) Acenaphthylene	(3)	11.107	152	1939444	11.467
112) 3-Nitroaniline	(3)	11.287	138	330979	10.144
113)*Acenaphthene-d10	(3)	11.340	164	421884	5.000
114) Acenaphthene	(3)	11.392	153	1350000	11.762
115) 2,4-Dinitrophenol	(3)	11.544	184	300240M	15.252
116) 4-Nitrophenol	(3)	11.626	109	211815	8.616
119) Dibenzofuran	(3)	11.655	168	1808794	11.127
118) 2,4-Dinitrotoluene	(3)	11.661	165	461123	11.962
122) 2,3,4,6-Tetrachlorophenol	(3)	11.841	232	297076	9.763
124) Diethylphthalate	(3)	12.039	149	1369650	11.180
126) Fluorene	(3)	12.115	166	1482737	11.445
127) 4-Chlorophenyl-phenylether	(3)	12.150	204	666872	10.876
129) 4-Nitroaniline	(3)	12.156	138	388136	10.803
130) 4,6-Dinitro-2-methylphenol	(4)	12.203	198	246120M	10.392
131) N-Nitrosodiphenylamine	(4)	12.296	169	1235798	11.690
135)$2,4,6-Tribromophenol	(3)	12.412	330	609492	41.331
143) 4-Bromophenyl-phenylether	(4)	12.727	248	379384	11.734
145) Hexachlorobenzene	(4)	12.774	284	360464	11.222
148) Atrazine	(4)	12.954	200	404403	13.367
149) Pentachlorophenol	(4)	13.036	266	169288	7.636
153)*Phenanthrene-d10	(4)	13.240	188	773265	5.000
155) Phenanthrene	(4)	13.269	178	2224297	12.270
157) Anthracene	(4)	13.333	178	2211790	12.431
163) Carbazole	(4)	13.549	167	2124784	12.460
165) Di-n-butylphthalate	(4)	14.074	149	2543996	11.687
173) Fluoranthene	(4)	14.872	202	2378791	12.032
175)*Pyrene-d10	(5)	15.175	212	776320	5.000
177) Pyrene	(5)	15.204	202	2455786	11.541
179)$Terphenyl-d14	(5)	15.490	244	2859818	21.169
188) Butylbenzylphthalate	(5)	16.335	149	1219095	11.488
193) 3,3'-Dichlorobenzidine	(5)	17.174	252	729291	10.290
195) Benzo(a)anthracene	(5)	17.174	228	2246922	12.010
196) Chrysene	(5)	17.233	228	2241378	11.964
199) bis(2-Ethylhexyl)phthalate	(5)	17.396	149	1640648	11.252
205) Di-n-octylphthalate	(6)	18.550	149	2793237	11.444
206) Benzo(b)fluoranthene	(6)	19.005	252	2049165	11.292
208) Benzo(k)fluoranthene	(6)	19.051	252	2185101	12.108
211) Benzo(a)pyrene	(6)	19.523	252	1911956	11.669

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

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on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:02 em10340

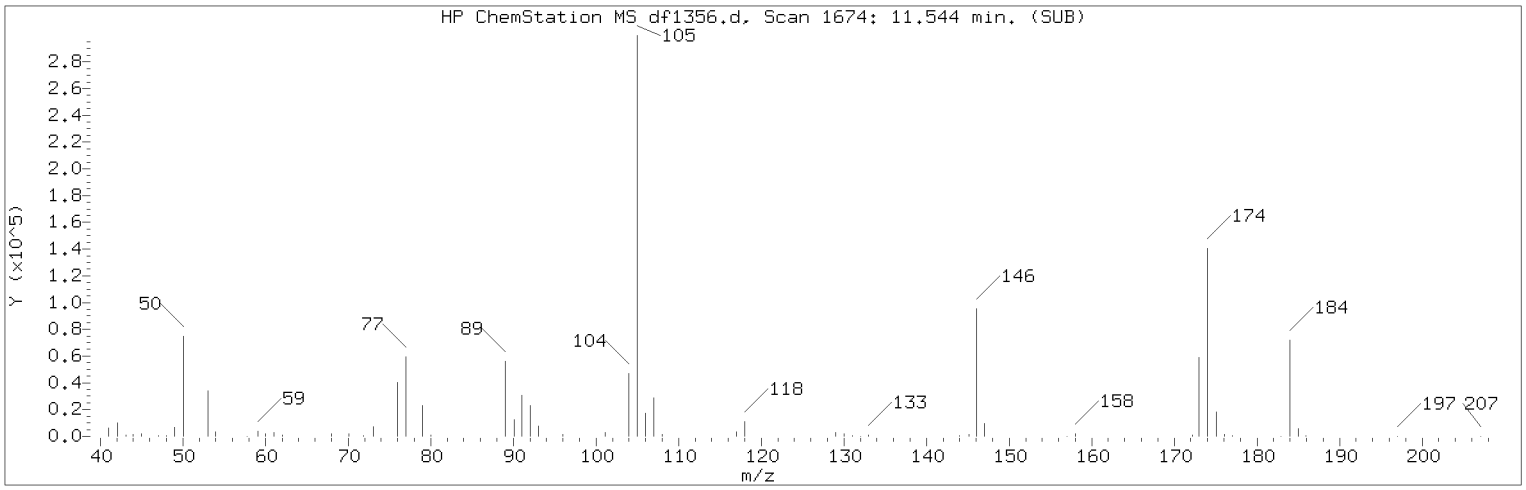
Sample Name: C5009MSD Lab Sample ID: 9662312

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
213)*Perylene-d12	(6)	19.611	264	752375	5.000
219) Indeno(1,2,3-cd)pyrene	(6)	21.208	276	1363931M	8.981
220) Dibenz(a,h)anthracene	(6)	21.249	278	1539199	9.357
221) Benzo(g,h,i)perylene	(6)	21.563	276	1476704	9.113

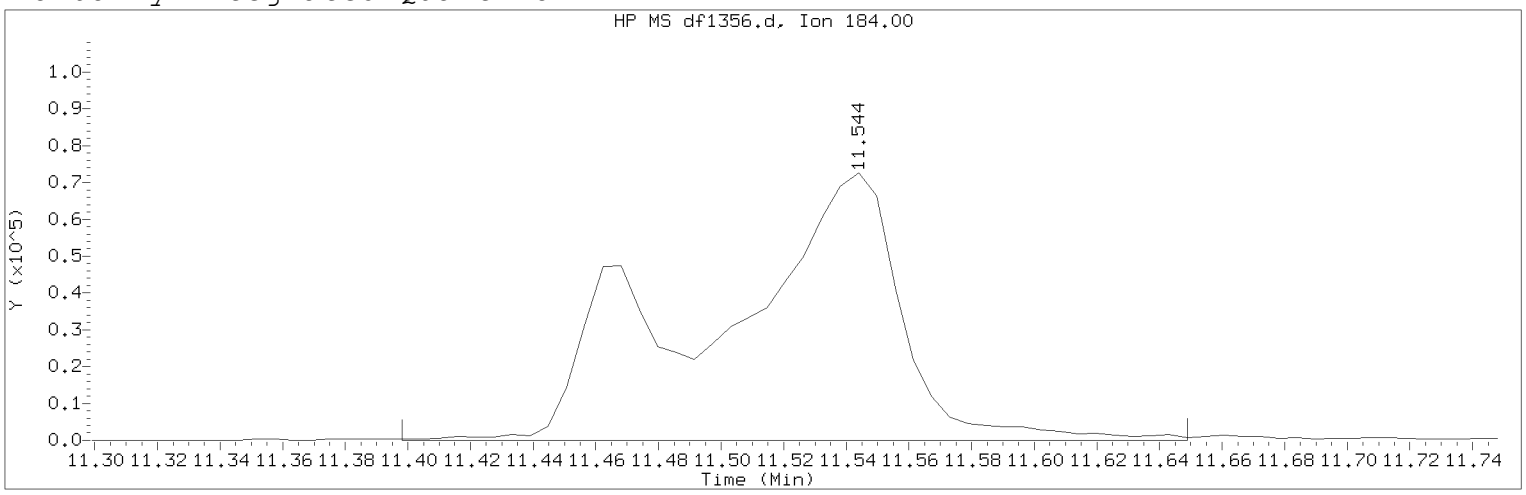
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:02 em10340

Sample Name: C5009MSD Lab Sample ID: 9662312

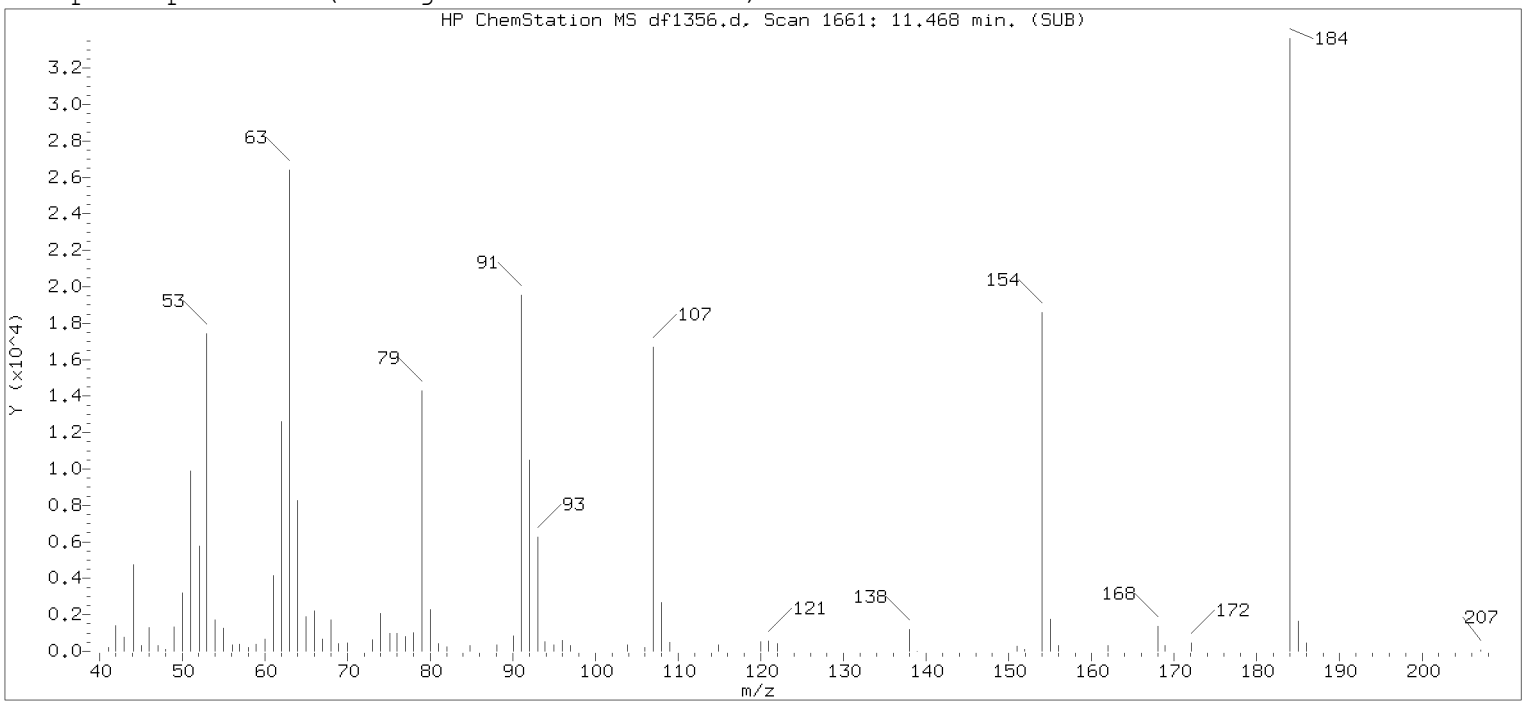
Compound Number : 115
Compound Name : 2,4-Dinitrophenol
Scan Number : 1674
Retention Time (minutes) : 11.544
Quant Ion : 184.00
Area (flag) : 300240M
On-Column Amount (ng/ul) : 15.2517
Integration start scan : 1648 Integration stop scan: 1691
Y at integration start : -10 Y at integration end: -10

Reason for manual integration: improper integration

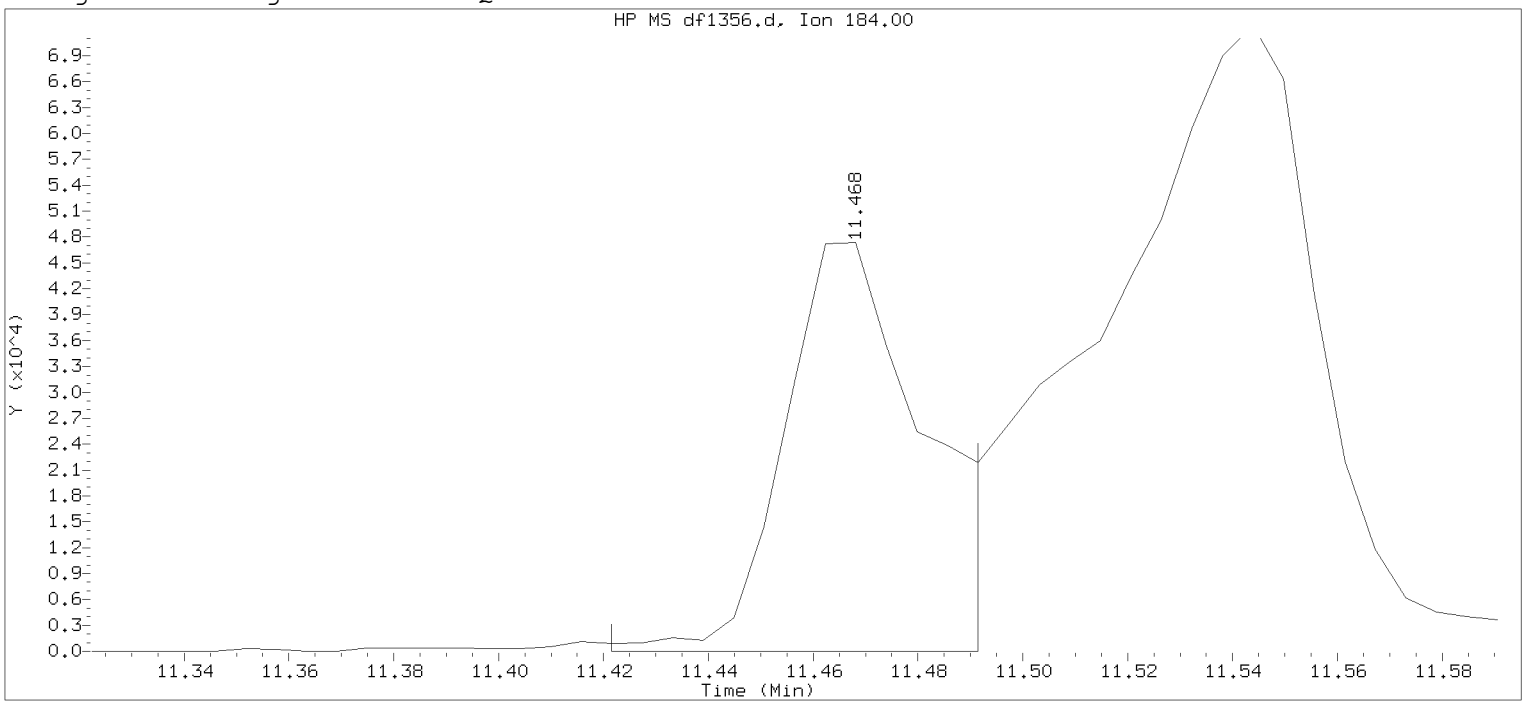
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:52.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

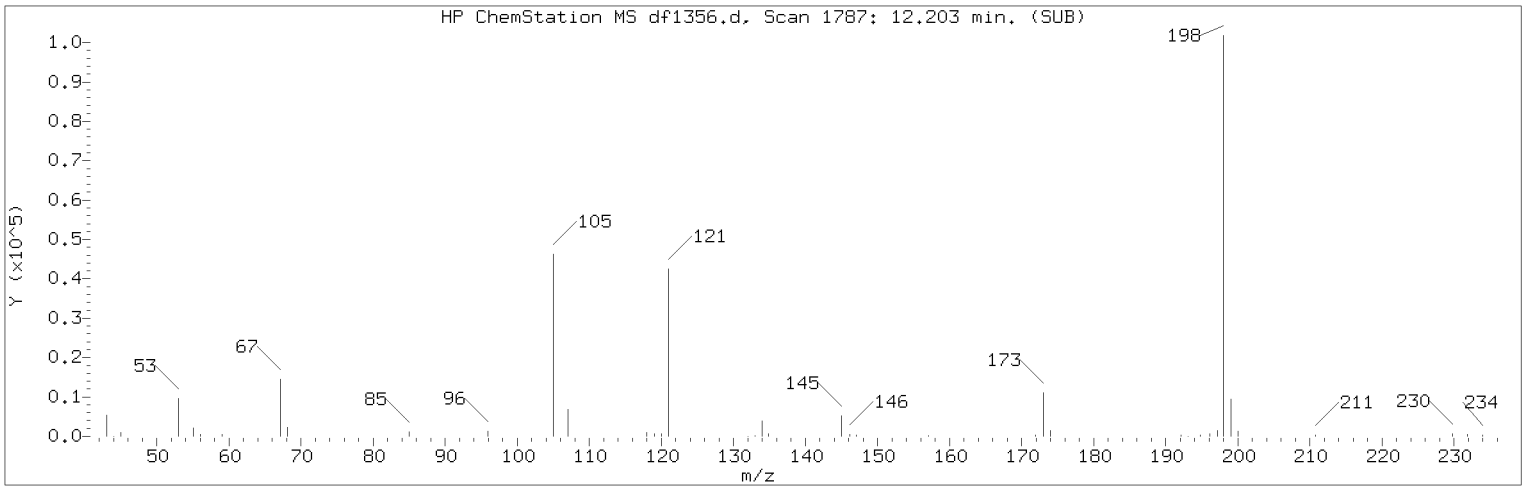
Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 12:21 Automation

Sample Name: C5009MSD Lab Sample ID: 9662312

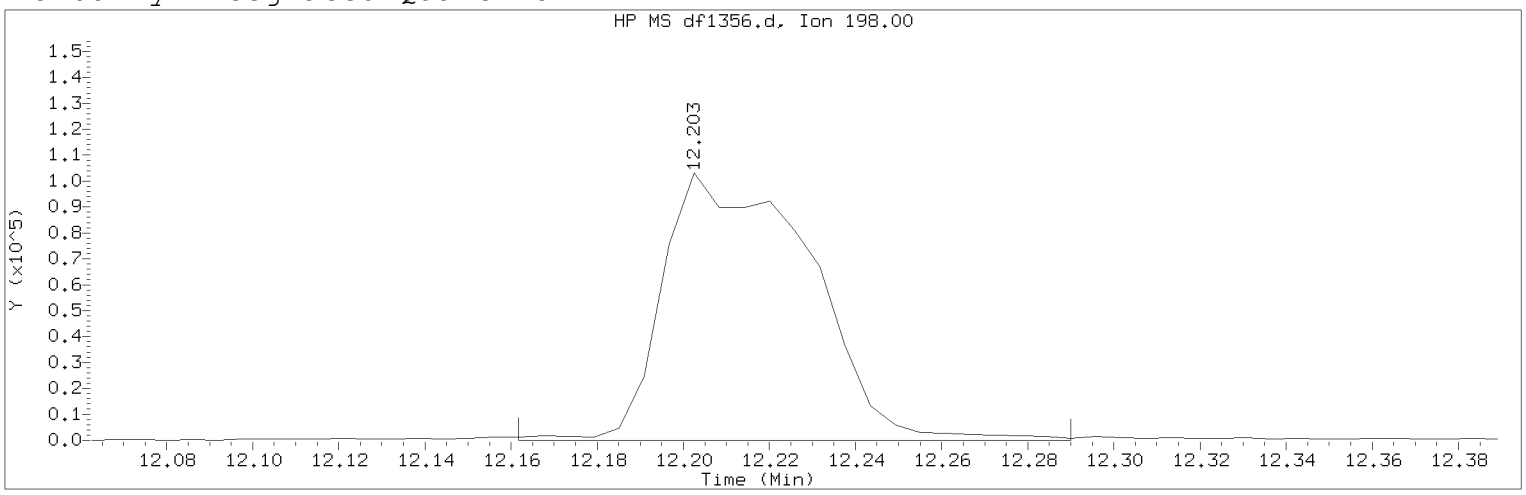
Compound Number : 115
Compound Name : 2,4-Dinitrophenol
Scan Number : 1661
Retention Time (minutes) : 11.468
Quant Ion : 184.00
Area : 85285
On-column Amount (ng/ul) : 4.3323
Integration start scan : 1652 Integration stop scan: 1664
Y at integration start : 0 Y at integration end: 0

Digitally signed by Edward Monborne on 06/20/2018 at 14:03.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:02 em10340

Sample Name: C5009MSD Lab Sample ID: 9662312

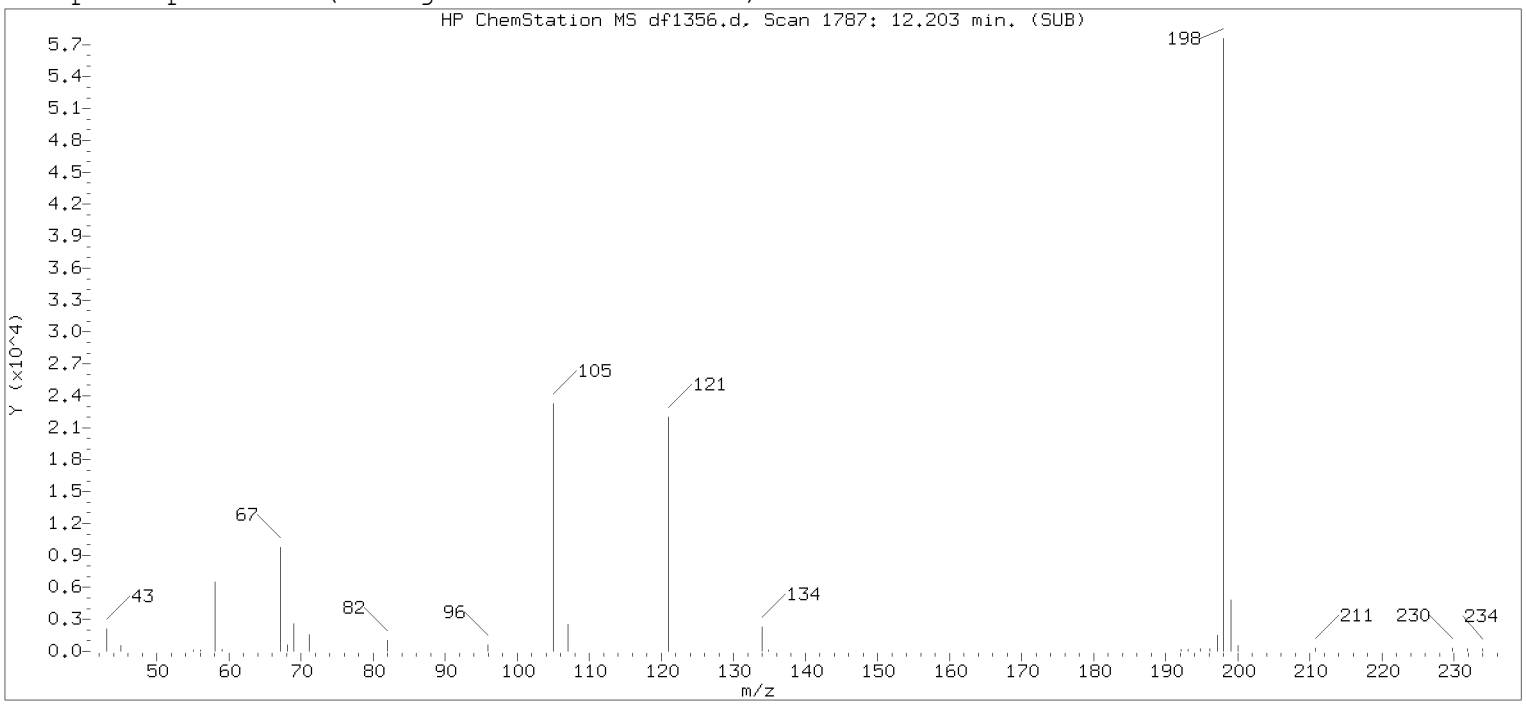
Compound Number : 130
Compound Name : 4,6-Dinitro-2-methylphenol
Scan Number : 1787
Retention Time (minutes) : 12.203
Quant Ion : 198.00
Area (flag) : 246120M
On-Column Amount (ng/ul) : 10.3920
Integration start scan : 1779 Integration stop scan: 1801
Y at integration start : -12 Y at integration end: -12

Reason for manual integration: improper integration

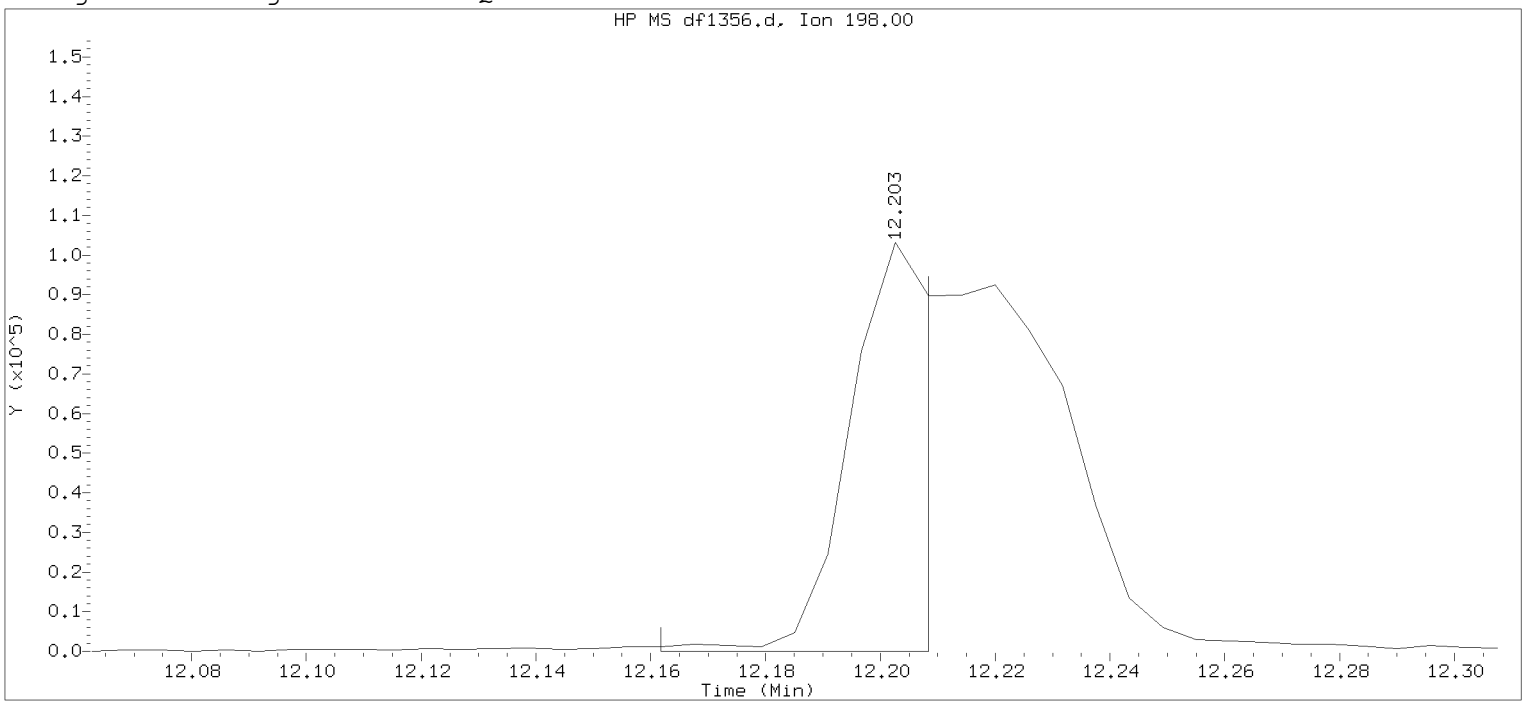
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:52.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

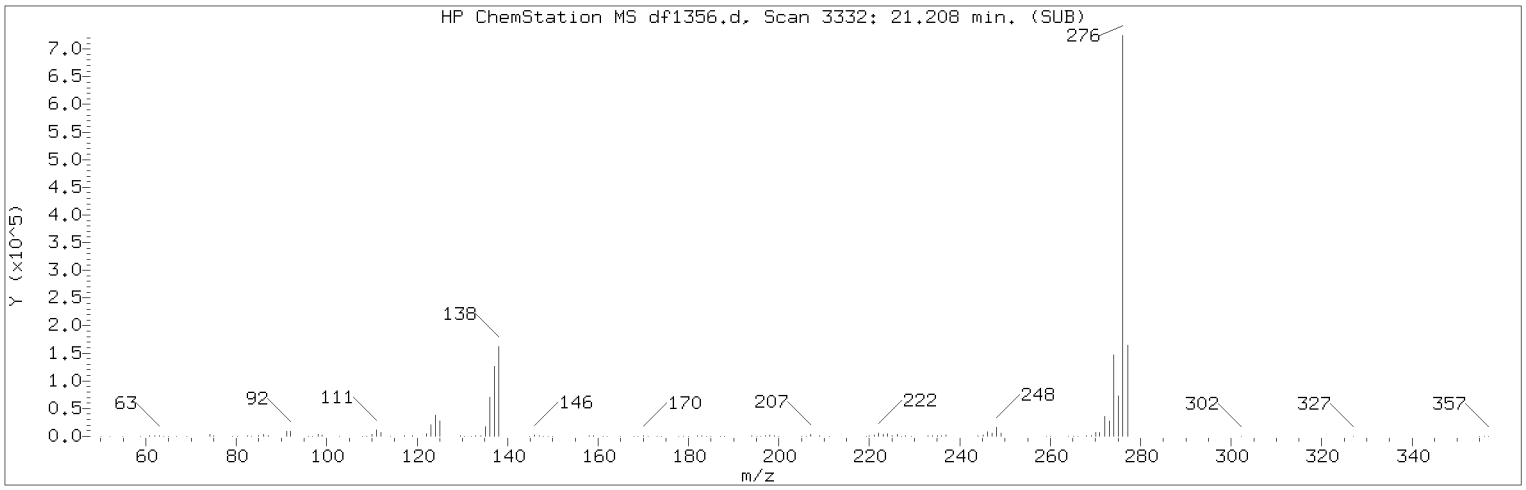
Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 12:21 Automation

Sample Name: C5009MSD Lab Sample ID: 9662312

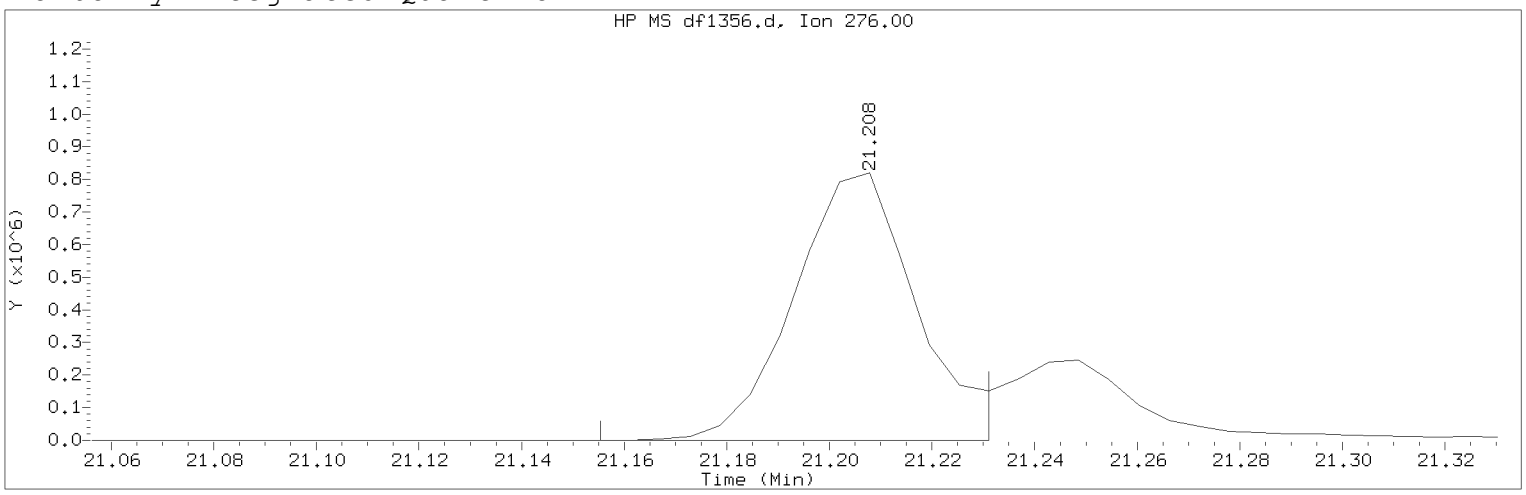
Compound Number : 130
Compound Name : 4,6-Dinitro-2-methylphenol
Scan Number : 1787
Retention Time (minutes) : 12.203
Quant Ion : 198.00
Area : 90227
On-column Amount (ng/ul) : 3.8097
Integration start scan : 1779 Integration stop scan: 1787
Y at integration start : 0 Y at integration end: 0

Digitally signed by Edward Monborne on 06/20/2018 at 14:03.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 14:02 em10340

Sample Name: C5009MSD Lab Sample ID: 9662312

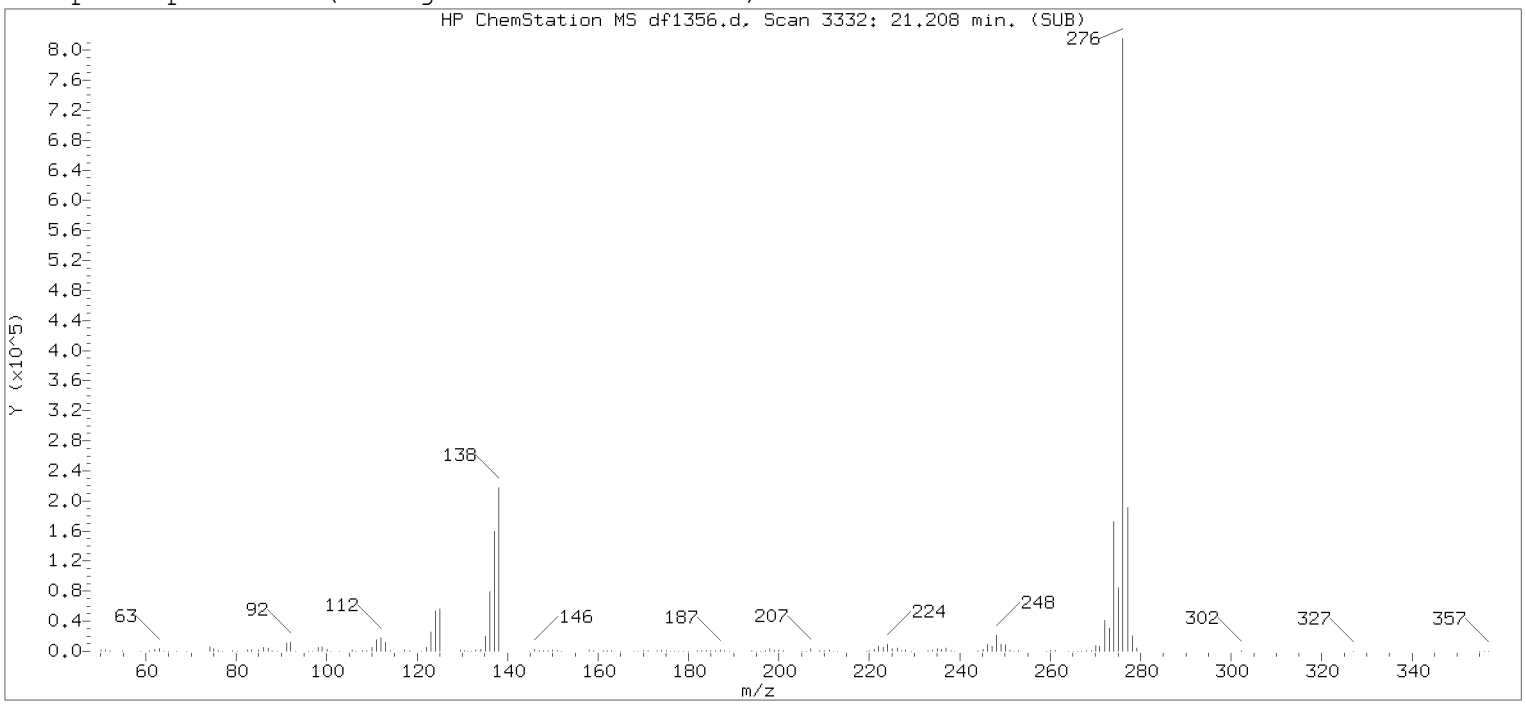
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3332
Retention Time (minutes) : 21.208
Quant Ion : 276.00
Area (flag) : 1363931M
On-Column Amount (ng/ul) : 8.9808
Integration start scan : 3322 Integration stop scan: 3335
Y at integration start : 250 Y at integration end: 250

Reason for manual integration: improper integration

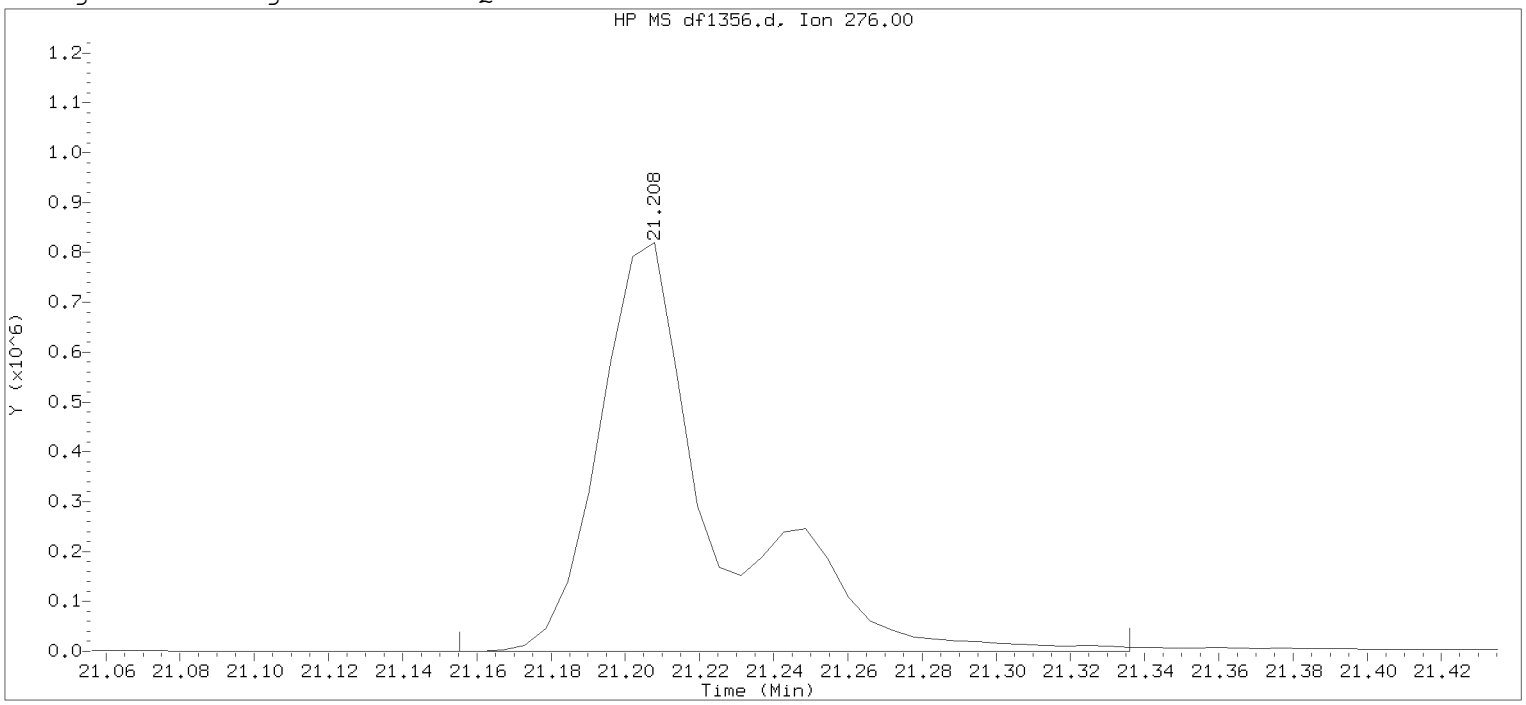
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:03.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:52.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1356.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 11:55 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 12:21 Automation

Sample Name: C5009MSD Lab Sample ID: 9662312

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3332		
Retention Time (minutes)	: 21.208		
Quant Ion	: 276.00		
Area	: 1796768		
On-column Amount (ng/ul)	: 11.8309		
Integration start scan	: 3322	Integration stop scan:	3353
Y at integration start	: 250	Y at integration end:	250

Digitally signed by Edward Monborne on 06/20/2018 at 14:03.
Target 3.5 esignature user name: Edward Monborne

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

169WMLCS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 169WMLCS

Sample wt/vol: 250 (g/mL)ML Lab File ID: df1353.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
100-52-7	Benzaldehyde			44	
108-95-2	Phenol			26	
111-44-4	bis(2-Chloroethyl)ether			40	
95-57-8	2-Chlorophenol			42	
541-73-1	1,3-Dichlorobenzene			38	
106-46-7	1,4-Dichlorobenzene			38	
95-50-1	1,2-Dichlorobenzene			39	
95-48-7	2-Methylphenol			40	
108-60-1	2,2'-oxybis(1-Chloropropane)			43	
98-86-2	Acetophenone			42	
106-44-5	4-Methylphenol			39	
621-64-7	N-Nitroso-di-n-propylamine			43	
67-72-1	Hexachloroethane			36	
98-95-3	Nitrobenzene			40	
78-59-1	Isophorone			42	
88-75-5	2-Nitrophenol			42	
105-67-9	2,4-Dimethylphenol			33	
111-91-1	bis(2-Chloroethoxy)methane			39	
120-83-2	2,4-Dichlorophenol			43	
120-82-1	1,2,4-Trichlorobenzene			39	
91-20-3	Naphthalene			40	
106-47-8	4-Chloroaniline			30	
87-68-3	Hexachlorobutadiene			35	
105-60-2	Caprolactam			16	
59-50-7	4-Chloro-3-methylphenol			43	
91-57-6	2-Methylnaphthalene			41	
77-47-4	Hexachlorocyclopentadiene			38	
95-94-3	1,2,4,5-Tetrachlorobenzene			38	
88-06-2	2,4,6-Trichlorophenol			44	
95-95-4	2,4,5-Trichlorophenol			44	

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

169WMLCS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 169WMLCS

Sample wt/vol: 250 (g/mL)ML Lab File ID: df1353.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
92-52-4	1,1'-Biphenyl			44	
91-58-7	2-Chloronaphthalene			45	
101-84-8	Diphenyl ether			40	
88-74-4	2-Nitroaniline			45	
131-11-3	Dimethylphthalate			32	
606-20-2	2,6-Dinitrotoluene			48	
208-96-8	Acenaphthylene			44	
99-09-2	3-Nitroaniline			35	
83-32-9	Acenaphthene			46	
51-28-5	2,4-Dinitrophenol			71	
100-02-7	4-Nitrophenol			33	
121-14-2	2,4-Dinitrotoluene			42	
132-64-9	Dibenzofuran			42	
58-90-2	2,3,4,6-Tetrachlorophenol			41	
84-66-2	Diethylphthalate			37	
86-73-7	Fluorene			44	
7005-72-3	4-Chlorophenyl-phenylether			42	
100-01-6	4-Nitroaniline			40	
534-52-1	4,6-Dinitro-2-methylphenol			41	
86-30-6	N-Nitrosodiphenylamine			43	
101-55-3	4-Bromophenyl-phenylether			45	
118-74-1	Hexachlorobenzene			44	
1912-24-9	Atrazine			49	
87-86-5	Pentachlorophenol			42	
85-01-8	Phenanthrene			48	
120-12-7	Anthracene			46	
86-74-8	Carbazole			46	
84-74-2	Di-n-butylphthalate			43	
206-44-0	Fluoranthene			46	
129-00-0	Pyrene			45	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

169WMLCS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 169WMLCS

Sample wt/vol: 250 (g/mL)ML Lab File ID: df1353.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
85-68-7	Butylbenzylphthalate			42	
91-94-1	3,3'-Dichlorobenzidine			41	
56-55-3	Benzo(a)anthracene			48	
218-01-9	Chrysene			48	
117-81-7	bis(2-Ethylhexyl)phthalate			46	
117-84-0	Di-n-octylphthalate			47	
205-99-2	Benzo(b)fluoranthene			46	
207-08-9	Benzo(k)fluoranthene			51	
50-32-8	Benzo(a)pyrene			49	
193-39-5	Indeno(1,2,3-cd)pyrene			38	
53-70-3	Dibenz(a,h)anthracene			39	
191-24-2	Benzo(g,h,i)perylene			39	

FORM I SV-3

Data file: /chem/HP19760.i/18jun20.b/df1353.d Injection date and time: **20-JUN-2018 10:30**
Data file Sample Info. Line: 169WMLCS;169WMLCS;1;3;LCS;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 13:53 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.624(-0.006)	830	152	247516 (-8)	5.00	
65) Naphthalene-d8	8.554(0.000)	1161	136	969387 (-8)	5.00	
113) Acenaphthene-d10	11.340(0.000)	1639	164	448341 (-10)	5.00	
153) Phenanthrene-d10	13.240(0.000)	1965	188	812729 (-11)	5.00	
175) Pyrene-d10	15.175(-0.006)	2297	212	810636 (-12)	5.00	
213) Perylene-d12	19.611(0.000)	3058	264	778552 (-10)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.771(-0.005)	112	2538954	31.101	62%		10 - 82
17) Phenol-d6	(1)	6.129(0.000)	99	2674675	24.715	49%		10 - 71
44) Nitrobenzene-d5	(2)	7.452(0.000)	82	1934986	19.164	77%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.297(0.001)	172	2895608	20.056	80%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.412(0.000)	330	685041	43.713	87%		21 - 134
179) Terphenyl-d14	(5)	15.490(0.000)	244	3136577	22.235	89%		27 - 116

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
16) Benzaldehyde	(1)	5.978(-0.000)	77	738077	11.026	44.10			0.8
18) Phenol	(1)	6.146(-0.000)	94	828333	6.559	26.24			0.1
22) bis(2-Chloroethyl)ether	(1)	6.263(-0.000)	93	927487	9.936	39.75			0.1
23) 2-Chlorophenol	(1)	6.316(-0.000)	128	759773	10.509	42.03			0.1
24) 1,3-Dichlorobenzene	(1)	6.537(-0.000)	146	722391	9.527	38.11			0.1
26) 1,4-Dichlorobenzene	(1)	6.648(0.000)	146	741718	9.619	38.48			0.1
28) 1,2-Dichlorobenzene	(1)	6.863(0.000)	146	708503	9.755	39.02			0.1
31) 2-Methylphenol	(1)	7.044(0.000)	108	763398	9.956	39.82			0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079(0.000)	45	1033510	10.864	43.46			0.1
36) Acetophenone	(1)	7.236(0.000)	105	1166095	10.519	42.08			1
37) 4-Methylphenol	(1)	7.277(0.000)	108	832985	9.745	38.98			0.1
38) N-Nitroso-di-n-propylamine	(1)	7.266(0.000)	70	705322	10.754	43.02			0.2
43) Hexachloroethane	(1)	7.376(0.000)	117	318060	9.102	36.41			0.3
45) Nitrobenzene	(2)	7.481(-0.000)	77	985926	9.941	39.76			0.1
50) Isophorone	(2)	7.860(0.000)	82	1804341	10.422	41.69			0.1
51) 2-Nitrophenol	(2)	7.971(0.000)	139	389766	10.434	41.74			0.8
53) 2,4-Dimethylphenol	(2)	8.082(-0.000)	107	688783	8.129	32.51			0.8
55) bis(2-Chloroethoxy)methane	(2)	8.233(-0.000)	93	1081575	9.683	38.73			0.1
60) 2,4-Dichlorophenol	(2)	8.356(-0.000)	162	606054	10.831	43.32			0.1
62) 1,2,4-Trichlorobenzene	(2)	8.478(-0.000)	180	586853	9.785	39.14			0.1
66) Naphthalene	(2)	8.583(0.000)	128	2126593	9.886	39.54			0.03
67) 4-Chloroaniline	(2)	8.688(0.000)	127	686472	7.610	30.44			1
71) Hexachlorobutadiene	(2)	8.816(0.000)	225	299763	8.869	35.47			0.1
76) Caprolactam	(2)	9.224(0.000)	113	98582	3.959	15.84			1
80) 4-Chloro-3-methylphenol	(2)	9.498(0.000)	107	752871	10.630	42.52			0.1
83) 2-Methylnaphthalene	(2)	9.684(0.000)	142	1409989	10.313	41.25			0.03
85) Hexachlorocyclopentadiene	(3)	9.958(-0.000)	237	310062	9.556	38.22			1

Digitally signed by Edward Monborne on 06/20/2018 at 14:04. Target 3.5 esignature user ID: em10340

Data file: /chem/HP19760.i/18jun20.b/df1353.d Injection date and time: **20-JUN-2018 10:30**
Data file Sample Info. Line: 169WMLCS;169WMLCS;1;3;LCS;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 13:53 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
86) 1,2,4,5-Tetrachlorobenzene	(3)	9.958(-0.000)	216	564570	9.576	38.30			0.1
90) 2,4,6-Trichlorophenol	(3)	10.151(-0.000)	196	415665	10.893	43.57			0.1
92) 2,4,5-Trichlorophenol	(3)	10.203(0.000)	196	428582	11.125	44.50			0.1
95) 1,1'-Biphenyl	(3)	10.448(-0.000)	154	1710573	10.988	43.95			0.8
96) 2-Chloronaphthalene	(3)	10.454(0.000)	162	1417901	11.344	45.37			0.1
99) Diphenyl ether	(3)	10.629(-0.000)	170	871907	10.098	40.39			0.1
100) 2-Nitroaniline	(3)	10.629(-0.000)	138	462570	11.277	45.11			0.5
106) Dimethylphthalate	(3)	10.978(-0.000)	163	1018759	7.960	31.84			0.5
108) 2,6-Dinitrotoluene	(3)	11.043(-0.000)	165	357661	11.889	47.56			0.1
109) Acenaphthylene	(3)	11.107(-0.000)	152	1956945	10.888	43.55			0.03
112) 3-Nitroaniline	(3)	11.287(-0.000)	138	305719	8.817	35.27			0.8
114) Acenaphthene	(3)	11.392(0.000)	153	1391991	11.413	45.65			0.03
115) 2,4-Dinitrophenol	(3)	11.468(-0.000)	184	369191M	17.648	70.59			4
116) 4-Nitrophenol	(3)	11.620(-0.002)	109	214040	8.193	32.77			3
118) 2,4-Dinitrotoluene	(3)	11.666(-0.000)	165	426225	10.404	41.62			0.3
119) Dibenzofuran	(3)	11.655(0.000)	168	1824890	10.563	42.25			0.1
122) 2,3,4,6-Tetrachlorophenol	(3)	11.841(0.000)	232	334554	10.346	41.39			1
124) Diethylphthalate	(3)	12.045(-0.000)	149	1217955	9.355	37.42			0.5
126) Fluorene	(3)	12.115(0.000)	166	1503837	10.923	43.69			0.03
127) 4-Chlorophenyl-phenylether	(3)	12.150(0.000)	204	684978	10.512	42.05			0.1
129) 4-Nitroaniline	(3)	12.156(-0.000)	138	377970	9.899	39.60			0.2
130) 4,6-Dinitro-2-methylphenol	(4)	12.202(-0.000)	198	254354	10.218	40.87			2
131) N-Nitrosodiphenylamine	(4)	12.296(-0.000)	169	1190175	10.711	42.85			0.2
143) 4-Bromophenyl-phenylether	(4)	12.727(0.000)	248	378571	11.140	44.56			0.1
145) Hexachlorobenzene	(4)	12.774(-0.000)	284	367244	10.878	43.51			0.03
148) Atrazine	(4)	12.954(0.000)	200	388225	12.209	48.84			0.5
149) Pentachlorophenol	(4)	13.030(-0.000)	266	245827	10.550	42.20			0.3
155) Phenanthrene	(4)	13.269(0.000)	178	2268764	11.908	47.63			0.03
157) Anthracene	(4)	13.333(0.000)	178	2153318	11.514	46.06			0.03
163) Carbazole	(4)	13.549(0.000)	167	2054583	11.464	45.86			0.1
165) Di-n-butylphthalate	(4)	14.073(-0.000)	149	2478170	10.832	43.33			0.5
173) Fluoranthene	(4)	14.872(0.000)	202	2389210	11.498	45.99			0.03
177) Pyrene	(5)	15.204(-0.000)	202	2508215	11.288	45.15			0.03
188) Butylbenzylphthalate	(5)	16.335(0.000)	149	1158439	10.455	41.82			0.5
193) 3,3'-Dichlorobenzidine	(5)	17.174(0.000)	252	755150	10.204	40.82			0.8
195) Benzo(a)anthracene	(5)	17.174(0.000)	228	2331617	11.935	47.74			0.03
196) Chrysene	(5)	17.233(0.000)	228	2340745	11.965	47.86			0.03
199) bis(2-Ethylhexyl)phthalate	(5)	17.402(0.000)	149	1734270	11.390	45.56			1
205) Di-n-octylphthalate	(6)	18.550(-0.000)	149	2954043	11.696	46.78			1
206) Benzo(b)fluoranthene	(6)	19.004(-0.000)	252	2180439	11.611	46.45			0.03
208) Benzo(k)fluoranthene	(6)	19.051(-0.000)	252	2372001	12.702	50.81			0.03
211) Benzo(a)pyrene	(6)	19.523(-0.000)	252	2088422	12.317	49.27			0.03
219) Indeno(1,2,3-cd)pyrene	(6)	21.208(0.000)	276	1490631M	9.485	37.94			0.03
220) Dibenz(a,h)anthracene	(6)	21.248(0.000)	278	1662825	9.769	39.08			0.03
221) Benzo(g,h,i)perylene	(6)	21.563(0.000)	276	1624022	9.686	38.74			0.03

M = Compound was manually integrated.

Digitally signed by Edward Monborne on 06/20/2018 at 14:04. Target 3.5 esignature user ID: em10340

Data file: /chem/HP19760.i/18jun20.b/df1353.d Injection date and time: **20-JUN-2018 10:30**
Data file Sample Info. Line: 169WMLCS;169WMLCS;1;3;LCS;;; Instrument ID: **HP19760.i** Batch: **18169WAM**
Date, time and analyst ID of latest file update: 20-Jun-2018 13:53 em10340

Blank Data file reference: **/chem/HP19760.i/18jun20.b/df1352.d**

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: **QC169WMM**
Calibration date and time (Last Method Edit): 20-JUN-2018 09:48
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20.b/df1351y.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

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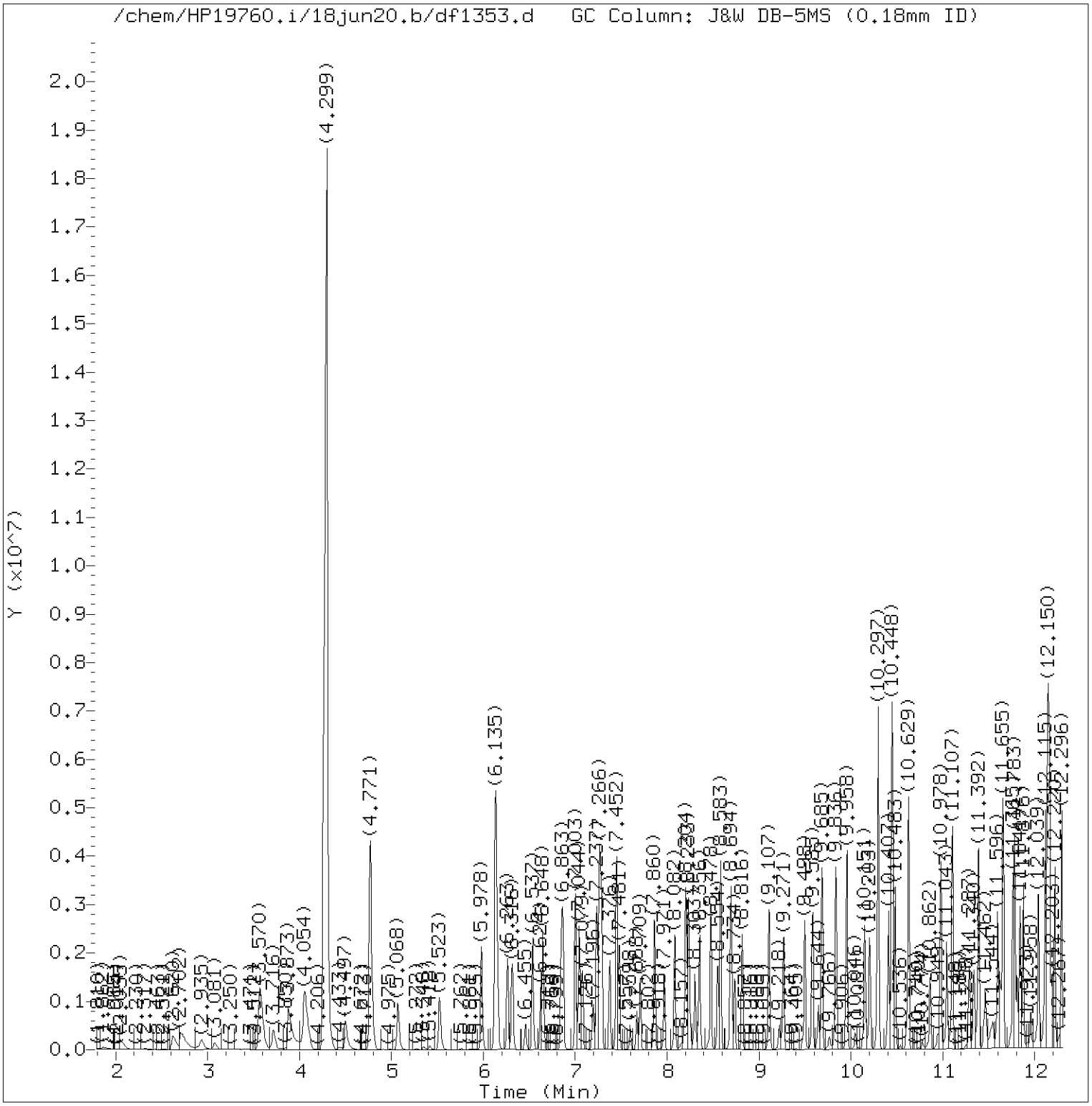
Total number of targets = 72

Digitally signed by Edward Monborne on 06/20/2018 at 14:04. Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

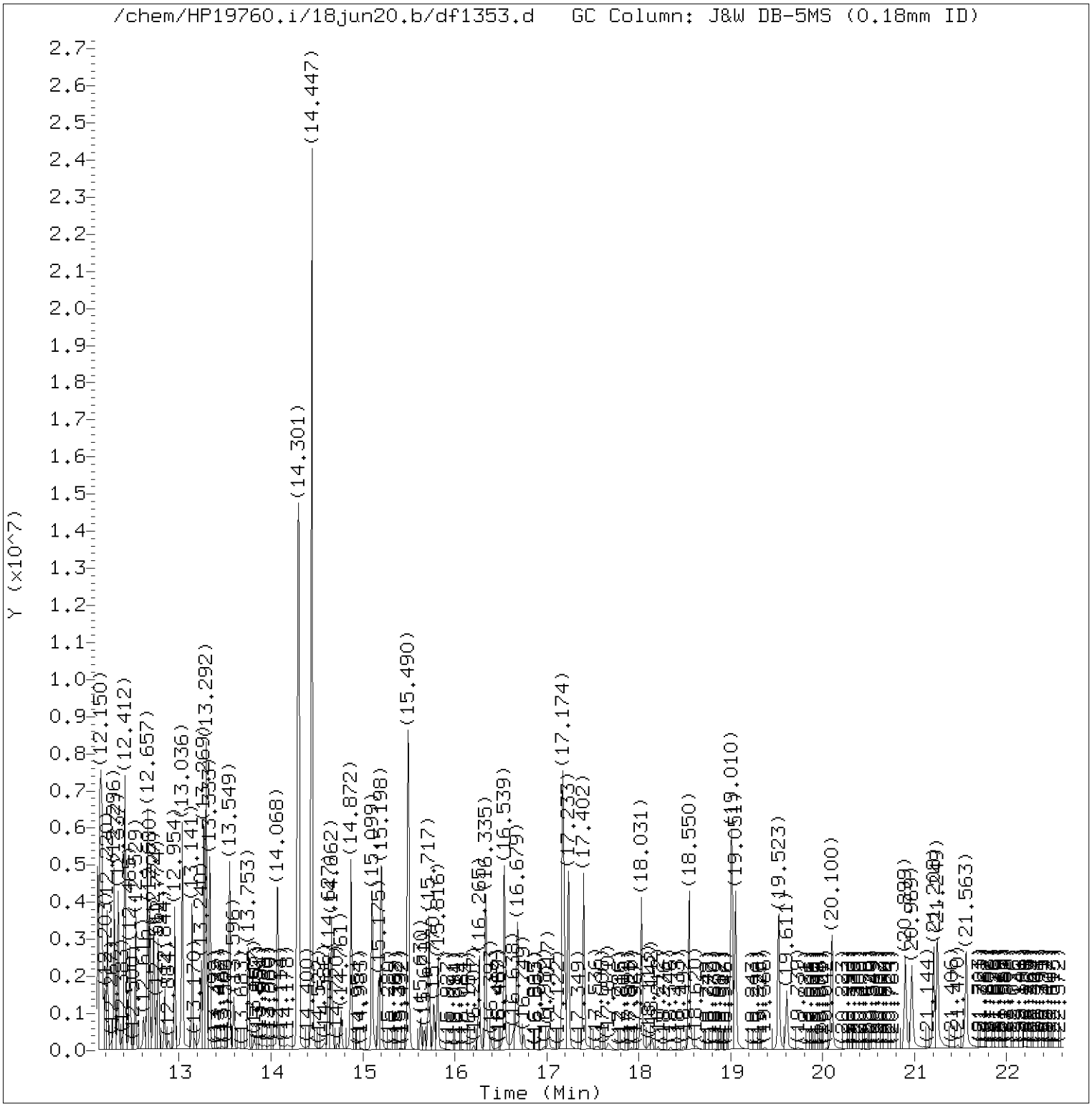
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1353.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:30 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 13:53 em10340

Sample Name: 169WMLCS Lab Sample ID: 169WMLCS

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1353.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:30 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 13:53 em10340

Sample Name: 169WMLCS Lab Sample ID: 169WMLCS

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1353.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:30 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 13:53 em10340

Sample Name: 169WMLCS Lab Sample ID: 169WMLCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.771	112	2538954	31.101
16) Benzaldehyde	(1)	5.978	77	738077	11.026
17)$Phenol-d6	(1)	6.129	99	2674675	24.715
18) Phenol	(1)	6.147	94	828333	6.559
22) bis(2-Chloroethyl)ether	(1)	6.263	93	927487	9.936
23) 2-Chlorophenol	(1)	6.316	128	759773	10.509
24) 1,3-Dichlorobenzene	(1)	6.537	146	722391	9.527
25)*1,4-Dichlorobenzene-d4	(1)	6.624	152	247516	5.000
26) 1,4-Dichlorobenzene	(1)	6.648	146	741718	9.619
28) 1,2-Dichlorobenzene	(1)	6.863	146	708503	9.755
31) 2-Methylphenol	(1)	7.044	108	763398	9.956
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	45	1033510	10.864
36) Acetophenone	(1)	7.237	105	1166095	10.519
38) N-Nitroso-di-n-propylamine	(1)	7.266	70	705322	10.754
37) 4-Methylphenol	(1)	7.277	108	832985	9.745
43) Hexachloroethane	(1)	7.376	117	318060	9.102
44)$Nitrobenzene-d5	(2)	7.452	82	1934986	19.164
45) Nitrobenzene	(2)	7.481	77	985926	9.941
50) Isophorone	(2)	7.860	82	1804341	10.422
51) 2-Nitrophenol	(2)	7.971	139	389766	10.434
53) 2,4-Dimethylphenol	(2)	8.082	107	688783	8.129
55) bis(2-Chloroethoxy)methane	(2)	8.233	93	1081575	9.683
60) 2,4-Dichlorophenol	(2)	8.356	162	606054	10.831
62) 1,2,4-Trichlorobenzene	(2)	8.478	180	586853	9.785
65)*Naphthalene-d8	(2)	8.554	136	969387	5.000
66) Naphthalene	(2)	8.583	128	2126593	9.886
67) 4-Chloroaniline	(2)	8.688	127	686472	7.610
71) Hexachlorobutadiene	(2)	8.816	225	299763	8.869
76) Caprolactam	(2)	9.224	113	98582	3.959
80) 4-Chloro-3-methylphenol	(2)	9.498	107	752871	10.630
83) 2-Methylnaphthalene	(2)	9.685	142	1409989	10.313
85) Hexachlorocyclopentadiene	(3)	9.958	237	310062	9.556
86) 1,2,4,5-Tetrachlorobenzene	(3)	9.958	216	564570	9.576
90) 2,4,6-Trichlorophenol	(3)	10.151	196	415665	10.893
92) 2,4,5-Trichlorophenol	(3)	10.203	196	428582	11.125
93)$2-Fluorobiphenyl	(3)	10.297	172	2895608	20.056
95) 1,1'-Biphenyl	(3)	10.448	154	1710573	10.988
96) 2-Chloronaphthalene	(3)	10.454	162	1417901	11.344
100) 2-Nitroaniline	(3)	10.629	138	462570	11.277
99) Diphenyl ether	(3)	10.629	170	871907	10.098

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1353.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:30 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 13:53 em10340

Sample Name: 169WMLCS Lab Sample ID: 169WMLCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
106) Dimethylphthalate	(3)	10.978	163	1018759	7.960
108) 2,6-Dinitrotoluene	(3)	11.043	165	357661	11.889
109) Acenaphthylene	(3)	11.107	152	1956945	10.888
112) 3-Nitroaniline	(3)	11.287	138	305719	8.817
113)*Acenaphthene-d10	(3)	11.340	164	448341	5.000
114) Acenaphthene	(3)	11.392	153	1391991	11.413
115) 2,4-Dinitrophenol	(3)	11.468	184	369191M	17.648
116) 4-Nitrophenol	(3)	11.620	109	214040	8.193
119) Dibenzofuran	(3)	11.655	168	1824890	10.563
118) 2,4-Dinitrotoluene	(3)	11.666	165	426225	10.404
122) 2,3,4,6-Tetrachlorophenol	(3)	11.841	232	334554	10.346
124) Diethylphthalate	(3)	12.045	149	1217955	9.355
126) Fluorene	(3)	12.115	166	1503837	10.923
127) 4-Chlorophenyl-phenylether	(3)	12.150	204	684978	10.512
129) 4-Nitroaniline	(3)	12.156	138	377970	9.899
130) 4,6-Dinitro-2-methylphenol	(4)	12.203	198	254354	10.218
131) N-Nitrosodiphenylamine	(4)	12.296	169	1190175	10.711
135)$2,4,6-Tribromophenol	(3)	12.412	330	685041	43.713
143) 4-Bromophenyl-phenylether	(4)	12.727	248	378571	11.140
145) Hexachlorobenzene	(4)	12.774	284	367244	10.878
148) Atrazine	(4)	12.954	200	388225	12.209
149) Pentachlorophenol	(4)	13.030	266	245827	10.550
153)*Phenanthrene-d10	(4)	13.240	188	812729	5.000
155) Phenanthrene	(4)	13.269	178	2268764	11.908
157) Anthracene	(4)	13.333	178	2153318	11.514
163) Carbazole	(4)	13.549	167	2054583	11.464
165) Di-n-butylphthalate	(4)	14.073	149	2478170	10.832
173) Fluoranthene	(4)	14.872	202	2389210	11.498
175)*Pyrene-d10	(5)	15.175	212	810636	5.000
177) Pyrene	(5)	15.204	202	2508215	11.288
179)$Terphenyl-d14	(5)	15.490	244	3136577	22.235
188) Butylbenzylphthalate	(5)	16.335	149	1158439	10.455
193) 3,3'-Dichlorobenzidine	(5)	17.174	252	755150	10.204
195) Benzo(a)anthracene	(5)	17.174	228	2331617	11.935
196) Chrysene	(5)	17.233	228	2340745	11.965
199) bis(2-Ethylhexyl)phthalate	(5)	17.402	149	1734270	11.390
205) Di-n-octylphthalate	(6)	18.550	149	2954043	11.696
206) Benzo(b)fluoranthene	(6)	19.005	252	2180439	11.611
208) Benzo(k)fluoranthene	(6)	19.051	252	2372001	12.702
211) Benzo(a)pyrene	(6)	19.523	252	2088422	12.317

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

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20.b/df1353.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:30 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 13:53 em10340

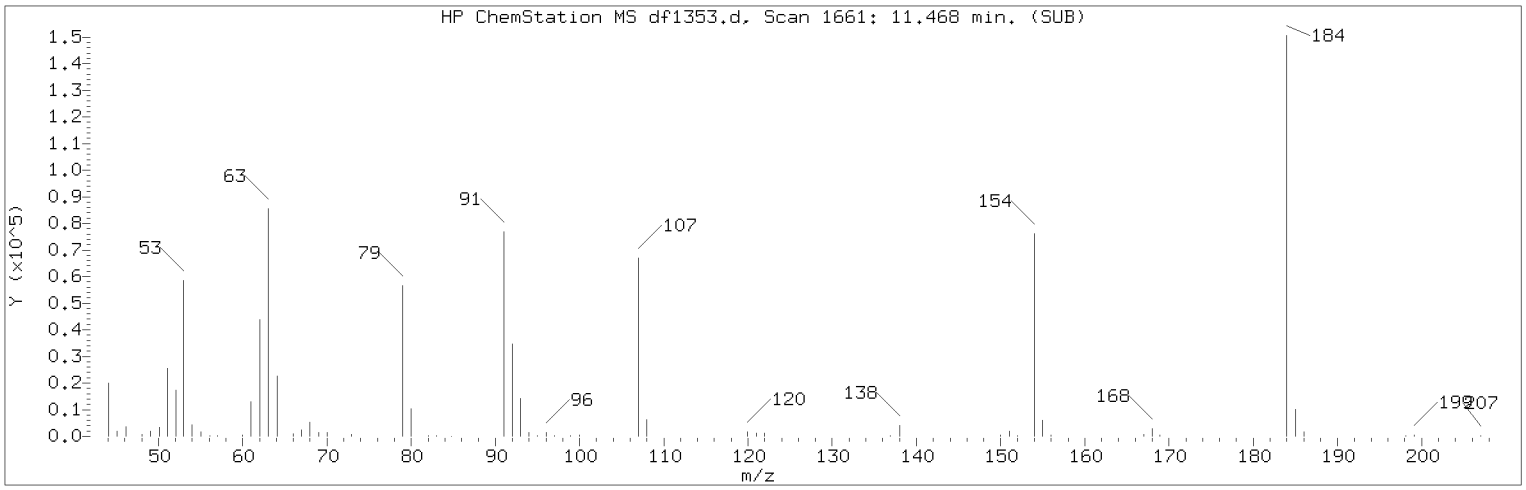
Sample Name: 169WMLCS Lab Sample ID: 169WMLCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
213)*Perylene-d12	(6)	19.611	264	778552	5.000
219) Indeno(1,2,3-cd)pyrene	(6)	21.208	276	1490631M	9.485
220) Dibenz(a,h)anthracene	(6)	21.249	278	1662825	9.769
221) Benzo(g,h,i)perylene	(6)	21.563	276	1624022	9.686

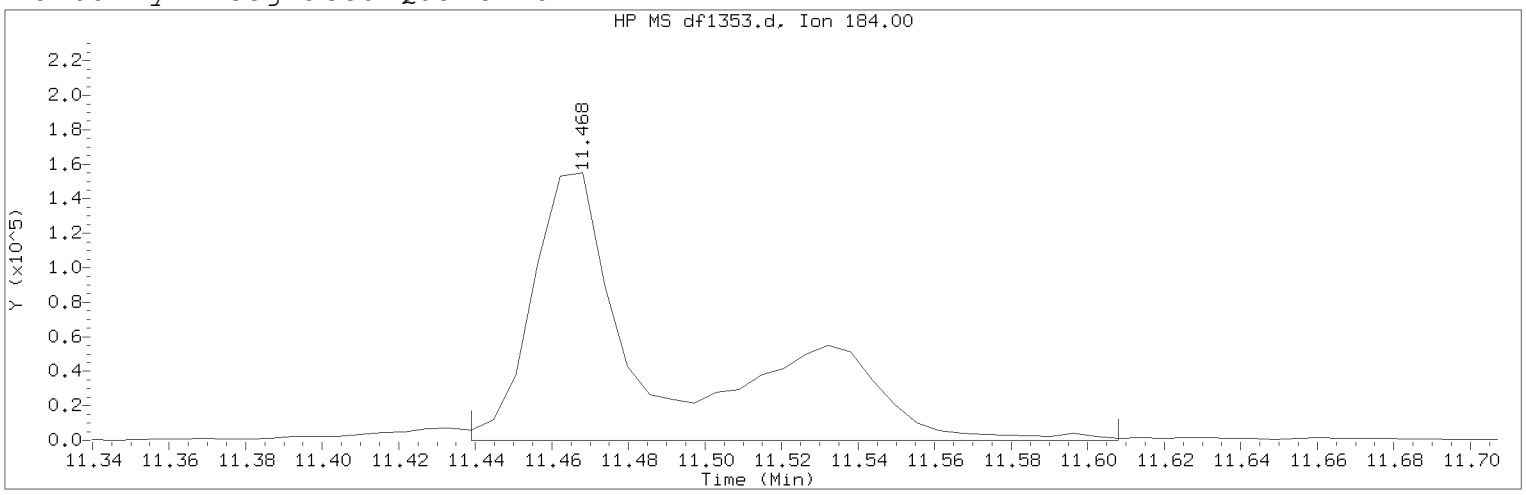
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1353.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:30 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 13:53 em10340

Sample Name: 169WMLCS Lab Sample ID: 169WMLCS

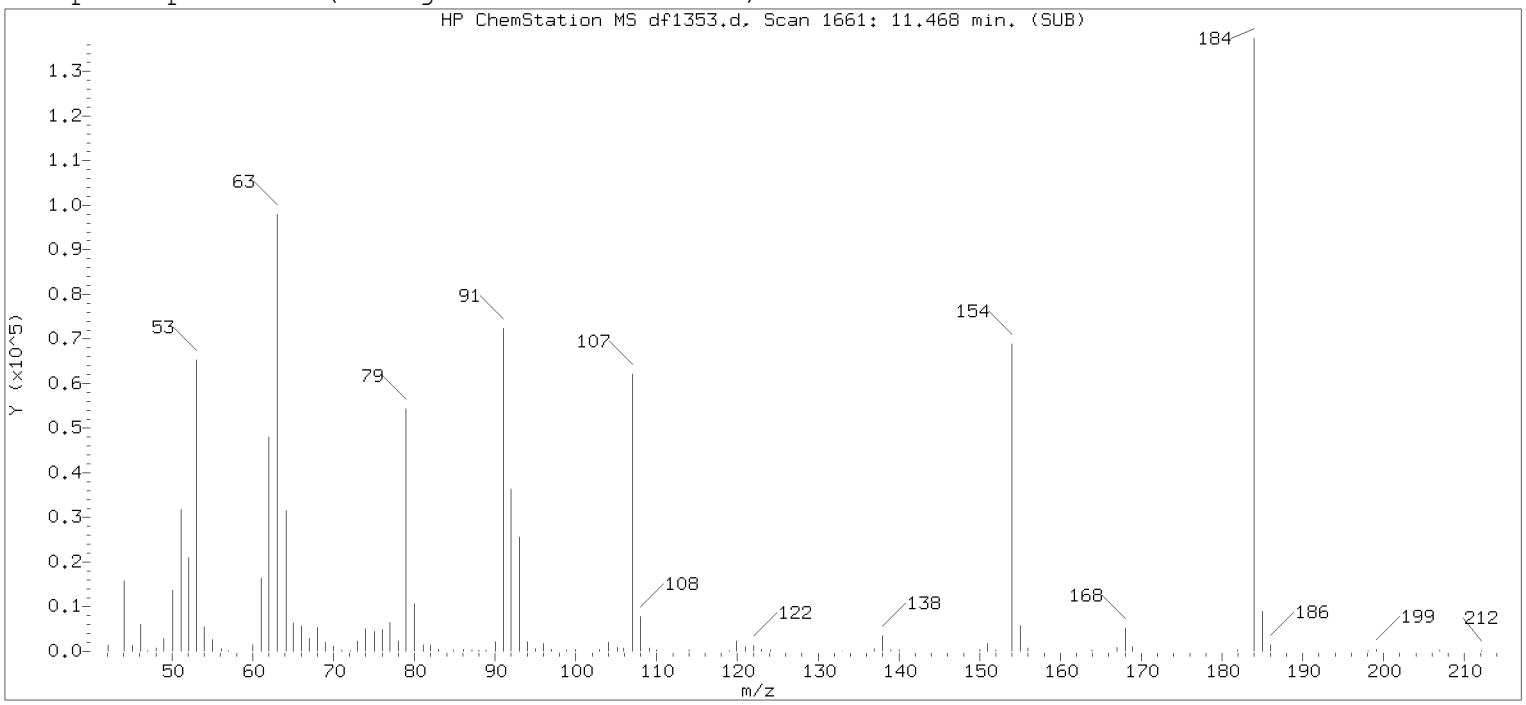
Compound Number : 115
Compound Name : 2,4-Dinitrophenol
Scan Number : 1661
Retention Time (minutes) : 11.468
Quant Ion : 184.00
Area (flag) : 369191M
On-Column Amount (ng/ul) : 17.6475
Integration start scan : 1655 Integration stop scan: 1684
Y at integration start : 62 Y at integration end: 62

Reason for manual integration: improper integration

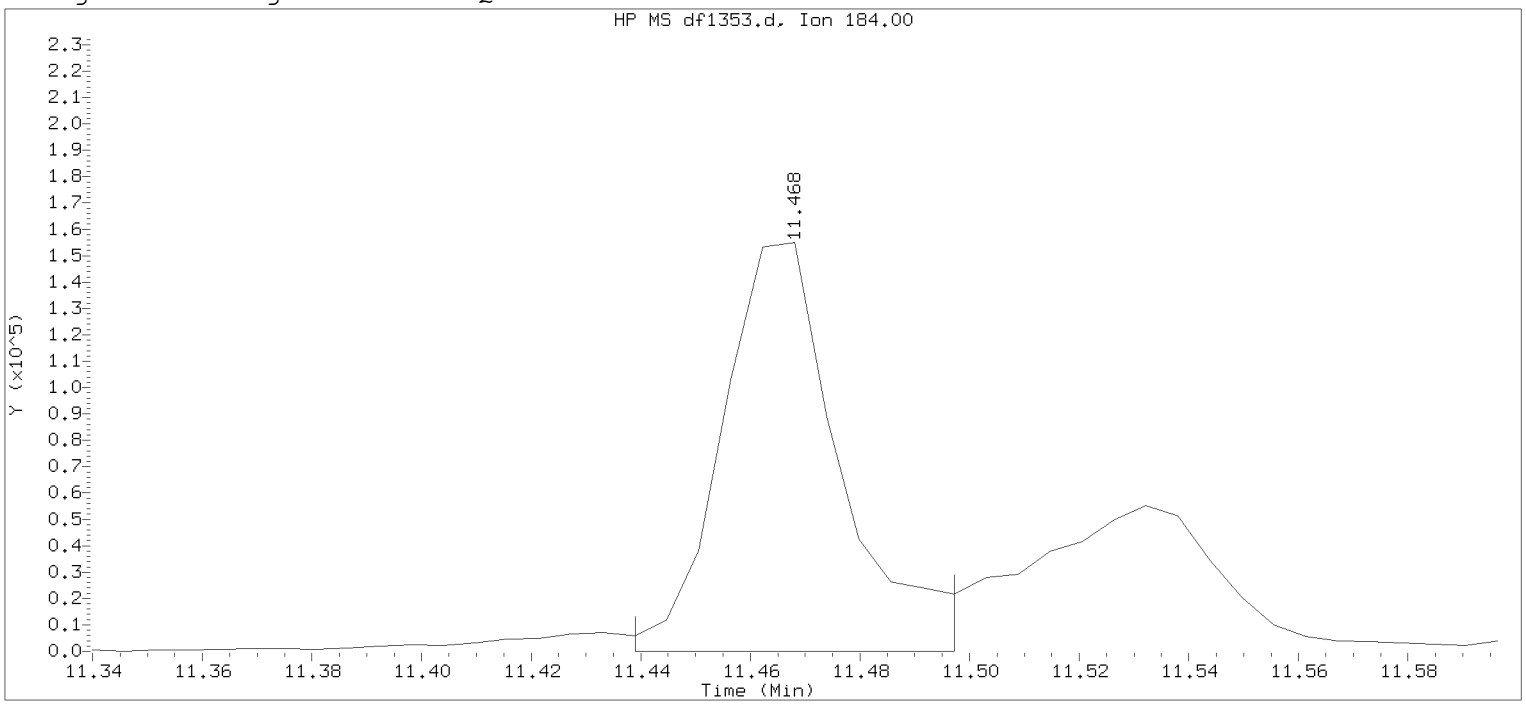
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1353.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:30 Analyst ID: bhs10208

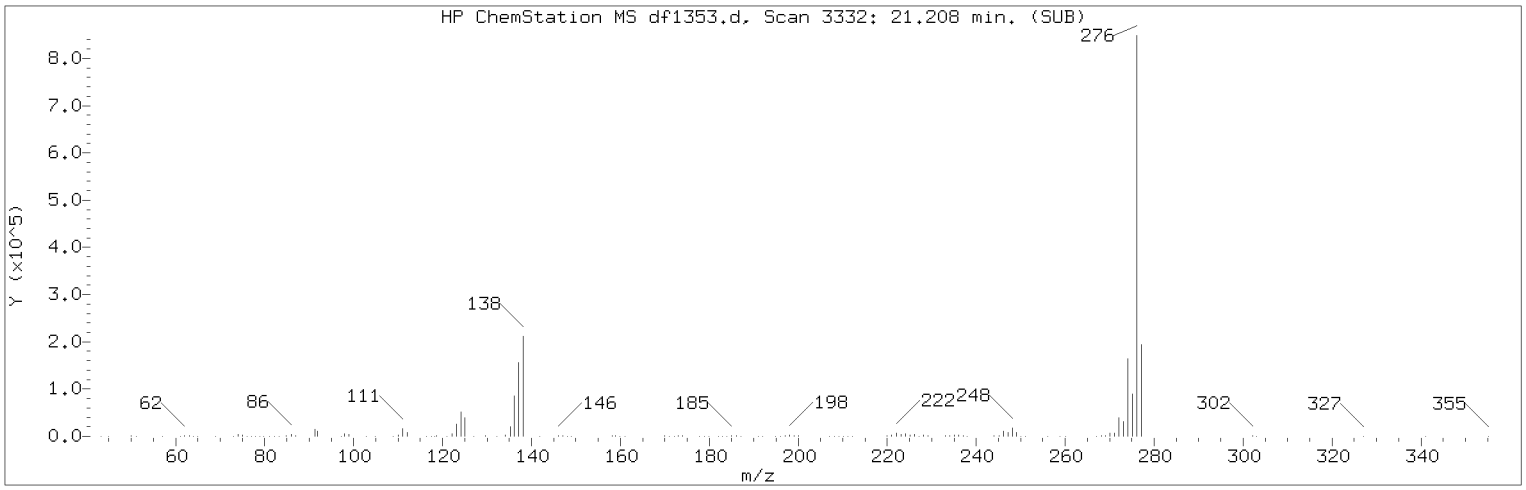
Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 10:57 Automation

Sample Name: 169WMLCS Lab Sample ID: 169WMLCS

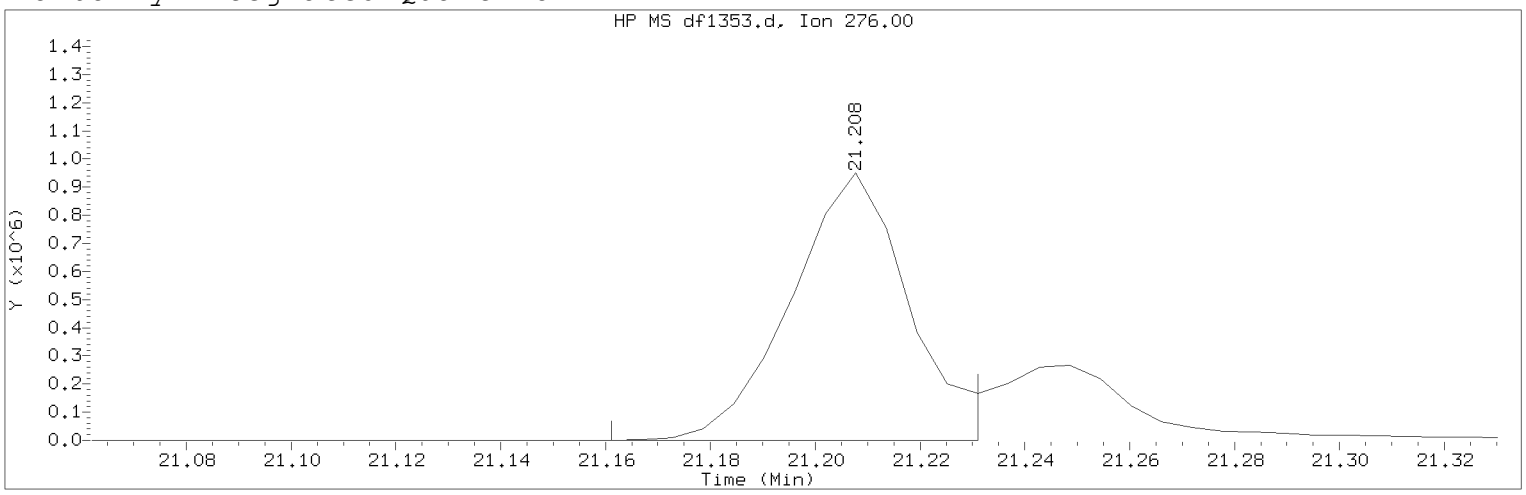
Compound Number	: 115		
Compound Name	: 2,4-Dinitrophenol		
Scan Number	: 1661		
Retention Time (minutes)	: 11.468		
Quant Ion	: 184.00		
Area	: 229694		
On-column Amount (ng/ul)	: 10.9795		
Integration start scan	: 1655	Integration stop scan:	1665
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/20/2018 at 14:04.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1353.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:30 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 13:53 em10340

Sample Name: 169WMLCS Lab Sample ID: 169WMLCS

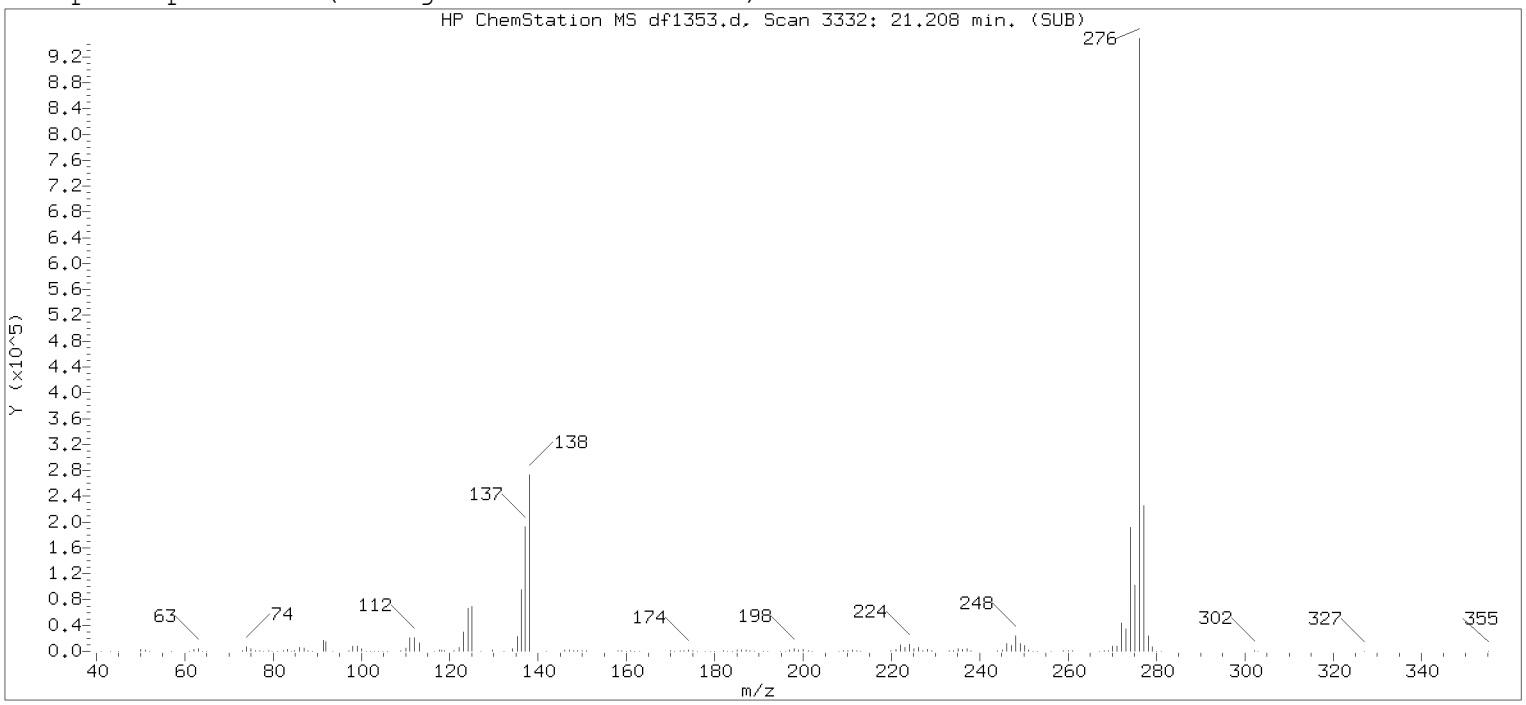
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3332
Retention Time (minutes) : 21.208
Quant Ion : 276.00
Area (flag) : 1490631M
On-Column Amount (ng/ul) : 9.4851
Integration start scan : 3323 Integration stop scan: 3335
Y at integration start : 274 Y at integration end: 274

Reason for manual integration: improper integration

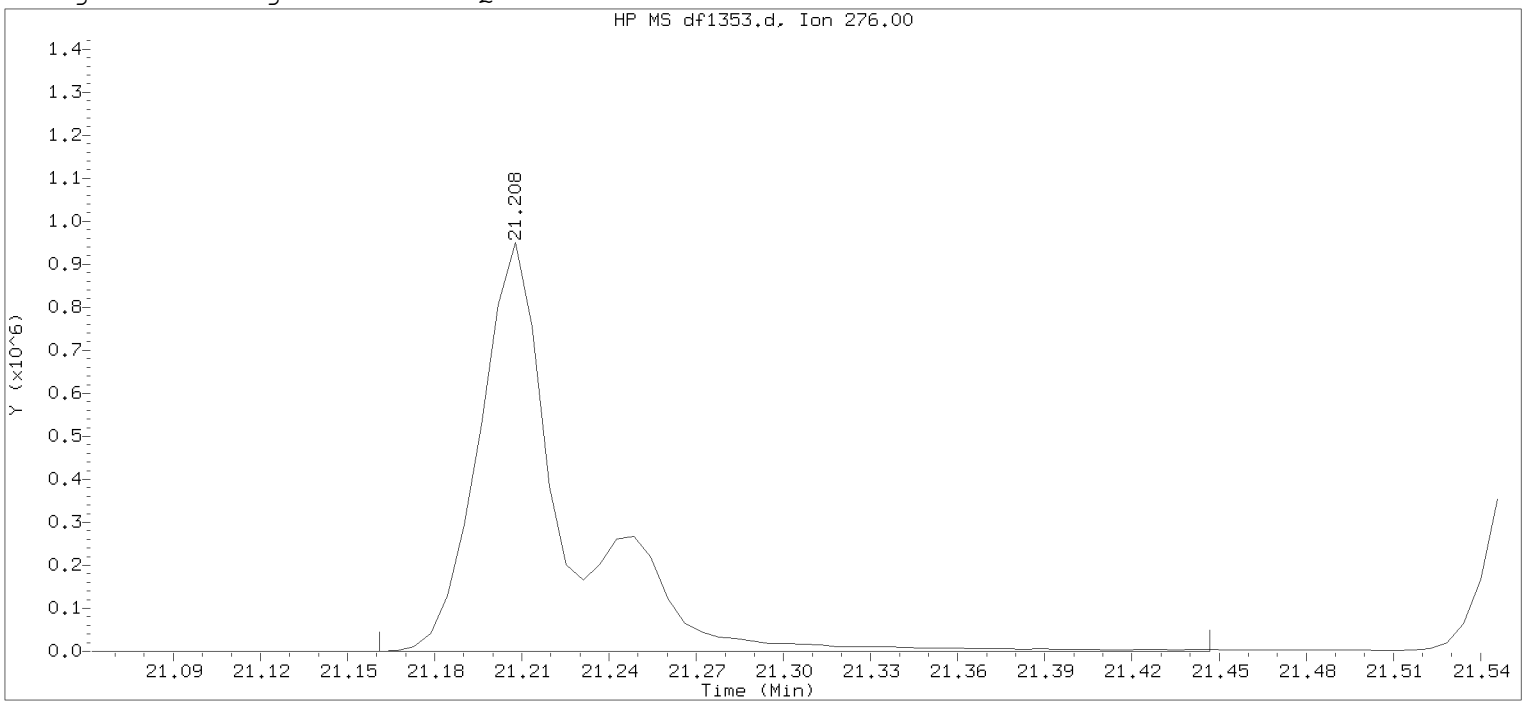
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/20/2018 at 14:04.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/27/2018 at 20:51.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20.b/df1353.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 10:30 Analyst ID: bhs10208

Method used: /chem/HP19760.i/18jun20.b/rv8270d.m Sublist used: QC169WMM
Calibration date and time: 20-JUN-2018 09:48
Date, time and analyst ID of latest file update: 20-Jun-2018 10:57 Automation

Sample Name: 169WMLCS Lab Sample ID: 169WMLCS

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3332		
Retention Time (minutes)	: 21.208		
Quant Ion	: 276.00		
Area	: 2003555		
On-column Amount (ng/ul)	: 12.7489		
Integration start scan	: 3323	Integration stop scan:	3372
Y at integration start	: 274	Y at integration end:	274

Digitally signed by Edward Monborne on 06/20/2018 at 14:04.
Target 3.5 esignature user email: [redacted]

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

170WBLCS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 170WBLCS

Sample wt/vol: 250 (g/mL)ML Lab File ID: df1405.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
62-75-9	N-Nitrosodimethylamine			23	
110-86-1	Pyridine			17	
109-06-8	2-Picoline			28	
10595-95-6	N-Nitrosomethylethylamine			34	
66-27-3	Methyl methanesulfonate			33	
55-18-5	N-Nitrosodiethylamine			38	
62-50-0	Ethyl methanesulfonate			38	
108-95-2	Phenol			22	
62-53-3	Aniline			28	
111-44-4	bis(2-Chloroethyl)ether			36	
95-57-8	2-Chlorophenol			39	
541-73-1	1,3-Dichlorobenzene			33	
106-46-7	1,4-Dichlorobenzene			33	
100-51-6	Benzyl alcohol			37	
95-50-1	1,2-Dichlorobenzene			34	
95-48-7	2-Methylphenol			36	
108-60-1	2,2'-oxybis(1-Chloropropane)			39	
39638-32-9	bis(2-Chloroisopropyl)ether			39	
930-55-2	N-Nitrosopyrrolidine			38	
98-86-2	Acetophenone			39	
106-44-5	4-Methylphenol			37	
621-64-7	N-Nitroso-di-n-propylamine			40	
59-89-2	N-Nitrosomorpholine			39	
95-53-4	o-Toluidine			33	
67-72-1	Hexachloroethane			31	
98-95-3	Nitrobenzene			36	
100-75-4	N-Nitrosopiperidine			37	
78-59-1	Isophorone			39	
88-75-5	2-Nitrophenol			37	
105-67-9	2,4-Dimethylphenol			31	

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

170WBLCS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 170WBLCS

Sample wt/vol: 250 (g/mL)ML Lab File ID: df1405.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
111-91-1	bis(2-Chloroethoxy)methane			38	
126-68-1	O,O,O-Triethylphosphorothioate			39	
120-83-2	2,4-Dichlorophenol			41	
120-82-1	1,2,4-Trichlorobenzene			35	
91-20-3	Naphthalene			35	
106-47-8	4-Chloroaniline			35	
87-65-0	2,6-Dichlorophenol			40	
1888-71-7	Hexachloropropene			27	
87-68-3	Hexachlorobutadiene			29	
924-16-3	N-Nitrosodi-n-butylamine			36	
59-50-7	4-Chloro-3-methylphenol			41	
106-50-3	1,4-Phenylenediamine			75	U
94-59-7	Safrole			38	
91-57-6	2-Methylnaphthalene			37	
77-47-4	Hexachlorocyclopentadiene			26	
95-94-3	1,2,4,5-Tetrachlorobenzene			34	
88-06-2	2,4,6-Trichlorophenol			40	
95-95-4	2,4,5-Trichlorophenol			43	
91-58-7	2-Chloronaphthalene			39	
120-58-1	Isosafrole			41	
88-74-4	2-Nitroaniline			43	
130-15-4	1,4-Naphthoquinone			25	U
131-11-3	Dimethylphthalate			34	
99-65-0	1,3-Dinitrobenzene			40	
606-20-2	2,6-Dinitrotoluene			45	
208-96-8	Acenaphthylene			41	
99-09-2	3-Nitroaniline			41	
83-32-9	Acenaphthene			42	
51-28-5	2,4-Dinitrophenol			31	
100-02-7	4-Nitrophenol			28	J

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

170WBLCS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 170WBLCS

Sample wt/vol: 250 (g/mL)ML Lab File ID: df1405.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
608-93-5	Pentachlorobenzene			36	
121-14-2	2,4-Dinitrotoluene			42	
132-64-9	Dibenzofuran			39	
134-32-7	1-Naphthylamine			59	
58-90-2	2,3,4,6-Tetrachlorophenol			40	
91-59-8	2-Naphthylamine			53	
84-66-2	Diethylphthalate			38	
297-97-2	Thionazin			40	
86-73-7	Fluorene			41	
7005-72-3	4-Chlorophenyl-phenylether			38	
99-55-8	5-Nitro-o-toluidine			38	
100-01-6	4-Nitroaniline			41	
534-52-1	4,6-Dinitro-2-methylphenol			37	
86-30-6	N-Nitrosodiphenylamine			44	
3689-24-5	Tetraethyldithiopyrophosphate			41	
99-35-4	1,3,5-Trinitrobenzene			97	U
62-44-2	Phenacetin			42	
101-55-3	4-Bromophenyl-phenylether			41	
118-74-1	Hexachlorobenzene			36	
2303-16-4	Diallate trans/cis			42	
60-51-5	Dimethoate			29	
87-86-5	Pentachlorophenol			38	
92-67-1	4-Aminobiphenyl			39	
82-68-8	Pentachloronitrobenzene			41	
23950-58-5	Pronamide			45	
85-01-8	Phenanthrene			43	
120-12-7	Anthracene			43	
86-74-8	Carbazole			45	
84-74-2	Di-n-butylphthalate			41	
56-57-5	4-Nitroquinoline-1-oxide			410	E

FORM I SV-3

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

170WBLCS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 170WBLCS

Sample wt/vol: 250 (g/mL)ML Lab File ID: df1405.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
91-80-5	Methapyrilene			330	E
465-73-6	Isodrin			43	
206-44-0	Fluoranthene			41	
129-00-0	Pyrene			40	
60-11-7	p-Dimethylaminoazobenzene			46	
510-15-6	Chlorobenzilate			37	
119-93-7	3,3'-Dimethylbenzidine			41	J
85-68-7	Butylbenzylphthalate			38	
53-96-3	2-Acetylaminofluorene			48	
91-94-1	3,3'-Dichlorobenzidine			42	
56-55-3	Benzo(a)anthracene			39	
218-01-9	Chrysene			40	
117-81-7	bis(2-Ethylhexyl)phthalate			38	
117-84-0	Di-n-octylphthalate			36	
205-99-2	Benzo(b)fluoranthene			38	
57-97-6	7,12-Dimethylbenz[a]anthracene			38	
207-08-9	Benzo(k)fluoranthene			41	
50-32-8	Benzo(a)pyrene			38	
56-49-5	3-Methylcholanthrene			43	
193-39-5	Indeno(1,2,3-cd)pyrene			30	
53-70-3	Dibenz(a,h)anthracene			32	
191-24-2	Benzo(g,h,i)perylene			32	

FORM I SV-4

Data file: /chem/HP19760.i/18jun20a.b/df1405.d Injection date and time: **20-JUN-2018 21:45**
Data file Sample Info. Line: 170WBLCS;170WBLCS;1;3;LCS;;; Instrument ID: **HP19760.i** Batch: **18170WAB**
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20a.b/df1404.d**

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: **QC170WBM**
Calibration date and time (Last Method Edit): 20-JUN-2018 21:16
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20a.b/df1401.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.625	(-0.006)	830	152	234306	(-10)	5.00	
65) Naphthalene-d8	8.554	(0.000)	1161	136	930730	(-10)	5.00	
113) Acenaphthene-d10	11.340	(0.000)	1639	164	436291	(-9)	5.00	
153) Phenanthrene-d10	13.240	(0.006)	1965	188	794695	(-10)	5.00	
175) Pyrene-d10	15.175	(0.000)	2297	212	790660	(-12)	5.00	
213) Perylene-d12	19.611	(0.000)	3058	264	762626	(-8)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.754	(-0.002)	112	1968211	25.469	51%		10 - 82
17) Phenol-d6	(1)	6.129	(0.000)	99	2052288	20.033	40%		10 - 71
44) Nitrobenzene-d5	(2)	7.452	(0.000)	82	1643936	16.958	68%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.303	(0.000)	172	2495796	17.765	71%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.413	(0.000)	330	593826	38.939	78%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	2805152	20.388	82%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
4) N-Nitrosodimethylamine	(1)	2.597	(-0.004)	74	321523	5.848	23.39			0.5
5) Pyridine	(1)	2.673	(-0.006)	79	394811	4.202	16.81			0.5
7) 2-Picoline	(1)	3.862	(-0.002)	93	706019	7.021	28.08			0.5
8) N-Nitrosomethylethylamine	(1)	4.037	(-0.001)	88	376671	8.572	34.29			0.5
9) Methyl methanesulfonate	(1)	4.491	(-0.000)	80	407243	8.290	33.16			0.3
13) N-Nitrosodiethylamine	(1)	5.068	(-0.000)	102	387272	9.483	37.93			0.1
15) Ethyl methanesulfonate	(1)	5.523	(-0.000)	109	374247	9.441	37.76			0.1
18) Phenol	(1)	6.147	(-0.000)	94	666360	5.574	22.30			0.1
19) Aniline	(1)	6.147	(-0.000)	93	981172	7.076	28.30			0.8
22) bis(2-Chloroethyl)ether	(1)	6.263	(-0.000)	93	805574	9.117	36.47			0.1
23) 2-Chlorophenol	(1)	6.310	(0.000)	128	659202	9.632	38.53			0.1
24) 1,3-Dichlorobenzene	(1)	6.537	(-0.000)	146	585564	8.158	32.63			0.1
26) 1,4-Dichlorobenzene	(1)	6.648	(0.000)	146	610322	8.362	33.45			0.1
27) Benzyl alcohol	(1)	6.852	(0.000)	108	471222	9.227	36.91			3
28) 1,2-Dichlorobenzene	(1)	6.870	(0.000)	146	585508	8.516	34.07			0.1
31) 2-Methylphenol	(1)	7.044	(0.000)	108	660813	9.104	36.42			0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	(0.000)	45	885070	9.829	39.31			0.1
34) bis(2-Chloroisopropyl)ether	(1)	7.079	(0.000)	45	885070	9.829	39.31			0.1
35) N-Nitrosopyrrolidine	(1)	7.196	(0.000)	100	404859	9.477	37.91			0.1
36) Acetophenone	(1)	7.237	(0.000)	105	1029189	9.807	39.23			1
37) 4-Methylphenol	(1)	7.278	(0.000)	108	743418	9.188	36.75			0.1
38) N-Nitroso-di-n-propylamine	(1)	7.266	(0.000)	70	618824	9.967	39.87			0.2
39) N-Nitrosomorpholine	(1)	7.266	(0.000)	56	452796	9.694	38.78			0.5
40) o-Toluidine	(1)	7.289	(0.000)	106	1045565	8.267	33.07			1
43) Hexachloroethane	(1)	7.377	(0.000)	117	252749	7.640	30.56			0.3
45) Nitrobenzene	(2)	7.482	(-0.000)	77	858657	9.017	36.07			0.1
48) N-Nitrosopiperidine	(2)	7.709	(-0.000)	114	366531	9.126	36.50			0.1

Digitally signed by Ashley R. Transue on 06/20/2018 at 23:37. Target 3.5 esignature user ID: art12405

Data file: /chem/HP19760.i/18jun20a.b/df1405.d Injection date and time: **20-JUN-2018 21:45**
Data file Sample Info. Line: 170WBLCS;170WBLCS;1;3;LCS;;; Instrument ID: **HP19760.i** Batch: **18170WAB**
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20a.b/df1404.d**

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: **QC170WBM**
Calibration date and time (Last Method Edit): 20-JUN-2018 21:16
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20a.b/df1401.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
50) Isophorone	(2)	7.866(-0.000)	82	1618100	9.734	38.94			0.1
51) 2-Nitrophenol	(2)	7.971(-0.000)	139	332624	9.274	37.10			0.8
53) 2,4-Dimethylphenol	(2)	8.088(-0.000)	107	634393	7.798	31.19			0.8
57) O,O,O-Triethylphosphorothioate	(2)	8.210(-0.000)	198	310828	9.718	38.87			0.5
55) bis(2-Chloroethoxy)methane	(2)	8.233(-0.000)	93	1009638	9.415	37.66			0.1
60) 2,4-Dichlorophenol	(2)	8.356(-0.000)	162	545132	10.147	40.59			0.1
62) 1,2,4-Trichlorobenzene	(2)	8.478(-0.000)	180	497497	8.639	34.56			0.1
66) Naphthalene	(2)	8.583(0.000)	128	1805425	8.742	34.97			0.03
67) 4-Chloroaniline	(2)	8.694(0.000)	127	760137	8.777	35.11			1
68) 2,6-Dichlorophenol	(2)	8.706(0.000)	162	540936	10.094	40.38			0.1
69) Hexachloropropene	(2)	8.740(0.000)	213	257385	6.841	27.36			0.5
71) Hexachlorobutadiene	(2)	8.816(0.000)	225	238716	7.356	29.42			0.1
77) N-Nitrosodi-n-butylamine	(2)	9.271(0.000)	84	596185	9.017	36.07			3
81) 1,4-Phenylenediamine	(2)			Not Detected					19
80) 4-Chloro-3-methylphenol	(2)	9.498(0.000)	107	697739	10.261	41.04			0.1
82) Safrole	(2)	9.586(-0.000)	162	486511	9.505	38.02			0.5
83) 2-Methylnaphthalene	(2)	9.690(-0.000)	142	1221879	9.309	37.23			0.03
85) Hexachlorocyclopentadiene	(3)	9.959(-0.000)	237	206821	6.550	26.20			1
86) 1,2,4,5-Tetrachlorobenzene	(3)	9.959(-0.000)	216	480875	8.382	33.53			0.1
88) cis-Isosafrole	(3)	10.052(-0.000)	162	63328	1.192	4.77			0.3
90) 2,4,6-Trichlorophenol	(3)	10.151(-0.000)	196	367921	9.908	39.63			0.1
92) 2,4,5-Trichlorophenol	(3)	10.209(-0.000)	196	400903	10.694	42.78			0.1
94) trans-Isosafrole	(3)	10.413(-0.000)	162	534282	9.126	36.51			0.3
97) Isosafrole	(3)			597610	10.319	41.27			1
96) 2-Chloronaphthalene	(3)	10.454(-0.000)	162	1192704	9.805	39.22			0.1
100) 2-Nitroaniline	(3)	10.629(-0.000)	138	430895	10.795	43.18			0.5
104) 1,4-Naphthoquinone	(3)			Not Detected					6
106) Dimethylphthalate	(3)	10.979(-0.000)	163	1066870	8.566	34.26			0.5
107) 1,3-Dinitrobenzene	(3)	10.979(-0.000)	168	244416	10.018	40.07			0.5
108) 2,6-Dinitrotoluene	(3)	11.049(-0.000)	165	330754	11.299	45.19			0.1
109) Acenaphthylene	(3)	11.107(-0.000)	152	1774126	10.143	40.57			0.03
112) 3-Nitroaniline	(3)	11.293(-0.000)	138	348694	10.334	41.34			0.8
114) Acenaphthene	(3)	11.392(0.000)	153	1256884	10.590	42.36			0.03
115) 2,4-Dinitrophenol	(3)	11.462(0.000)	184	160189	7.869	31.47			4
116) 4-Nitrophenol	(3)	11.632(-0.002)	109	179478M	7.059	28.24		J	3
117) Pentachlorobenzene	(3)	11.596(0.000)	250	428855	9.093	36.37			0.1
118) 2,4-Dinitrotoluene	(3)	11.666(0.000)	165	417005	10.460	41.84			0.3
119) Dibenzofuran	(3)	11.655(-0.000)	168	1656030	9.851	39.40			0.1
121) 1-Naphthylamine	(3)	11.766(0.000)	143	1862593	14.648	58.59			2
122) 2,3,4,6-Tetrachlorophenol	(3)	11.847(-0.000)	232	314775	10.004	40.01			1
123) 2-Naphthylamine	(3)	11.876(0.000)	143	1616977	13.126	52.50			2
124) Diethylphthalate	(3)	12.045(0.000)	149	1207709	9.532	38.13			0.5
125) Thionazin	(3)	12.139(0.000)	107	296729	10.116	40.46			0.5
126) Fluorene	(3)	12.115(0.000)	166	1359308	10.146	40.58			0.03
127) 4-Chlorophenyl-phenylether	(3)	12.150(-0.000)	204	609469	9.612	38.45			0.1
128) 5-Nitro-o-toluidine	(3)	12.144(0.000)	152	375243	9.444	37.78			1
129) 4-Nitroaniline	(3)	12.156(-0.000)	138	381459	10.266	41.07			0.2
130) 4,6-Dinitro-2-methylphenol	(4)	12.203(-0.000)	198	222855	9.156	36.62			2
131) N-Nitrosodiphenylamine	(4)	12.296(-0.000)	169	1207965	11.118	44.47			0.2
137) Tetraethyldithiopyrophosphate	(4)	12.529(-0.000)	97	274972	10.189	40.76			0.3
139) 1,3,5-Trinitrobenzene	(4)			Not Detected					24
140) Diallate (peak 1)	(4)	12.657(-0.000)	86	611875	7.544	30.18			0.06
142) Phenacetin	(4)	12.681(-0.000)	108	847618	10.430	41.72			0.1
143) 4-Bromophenyl-phenylether	(4)	12.727(-0.000)	248	337924	10.170	40.68			0.1

M = Compound was manually integrated.

Digitally signed by Ashley R. Transue on 06/20/2018 at 23:37. Target 3.5 esignature user ID: art12405

Data file: /chem/HP19760.i/18jun20a.b/df1405.d Injection date and time: **20-JUN-2018 21:45**
Data file Sample Info. Line: 170WBLCS;170WBLCS;1;3;LCS;;; Instrument ID: **HP19760.i** Batch: **18170WAB**
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20a.b/df1404.d**

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: **QC170WBM**
Calibration date and time (Last Method Edit): 20-JUN-2018 21:16
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20a.b/df1401.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
144) Diallate (peak 2)	(4)	12.756(-0.000)	86	185938	2.916	11.67			0.06
146) Diallate trans/cis	(4)			797813	10.461	41.84			0.3
145) Hexachlorobenzene	(4)	12.774(0.000)	284	298063	9.029	36.12			0.03
147) Dimethoate	(4)	12.844(-0.000)	87	495087	7.208	28.83			0.8
149) Pentachlorophenol	(4)	13.036(-0.001)	266	216662	9.510	38.04			0.3
150) 4-Aminobiphenyl	(4)	13.036(-0.000)	169	1195003	9.649	38.60			1
151) Pentachloronitrobenzene	(4)	13.036(0.000)	237	149397	10.217	40.87			0.5
152) Pronamide	(4)	13.141(-0.000)	173	612577	11.241	44.96			0.1
155) Phenanthrene	(4)	13.269(-0.000)	178	2001474	10.743	42.97			0.03
157) Anthracene	(4)	13.333(-0.000)	178	1987651	10.870	43.48			0.03
163) Carbazole	(4)	13.549(-0.000)	167	1989422	11.352	45.41			0.1
165) Di-n-butylphthalate	(4)	14.074(-0.000)	149	2312025	10.335	41.34			0.5
168) 4-Nitroquinoline-1-oxide	(4)	14.307(-0.002)	190	2505032	103.057	412.23		E	5
170) Methapyrilene	(4)	14.447(-0.001)	97	6178367	82.945	331.78		E	4
171) Isodrin	(4)	14.662(-0.000)	193	225247	10.746	42.98			0.1
173) Fluoranthene	(4)	14.872(-0.000)	202	2092971	10.301	41.21			0.03
177) Pyrene	(5)	15.199(0.000)	202	2142826	9.887	39.55			0.03
182) p-Dimethylaminoazobenzene	(5)	15.717(0.000)	225	439880	11.495	45.98			1
185) Chlorobenzilate	(5)	15.816(0.000)	139	630467	9.362	37.45			0.8
187) 3,3'-Dimethylbenzidine	(5)	16.265(0.000)	212	1419055	10.222	40.89		J	6
188) Butylbenzylphthalate	(5)	16.335(0.000)	149	1027440	9.507	38.03			0.5
191) 2-Acetylaminofluorene	(5)	16.679(0.000)	181	1039007	11.998	47.99			3
193) 3,3'-Dichlorobenzidine	(5)	17.174(0.000)	252	764924	10.597	42.39			0.8
195) Benzo(a)anthracene	(5)	17.174(0.000)	228	1867008	9.798	39.19			0.03
196) Chrysene	(5)	17.233(0.000)	228	1906717	9.993	39.97			0.03
199) bis(2-Ethylhexyl)phthalate	(5)	17.402(0.000)	149	1406838	9.473	37.89			1
205) Di-n-octylphthalate	(6)	18.550(-0.000)	149	2212306	8.942	35.77			1
206) Benzo(b)fluoranthene	(6)	19.005(-0.000)	252	1768657	9.615	38.46			0.03
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.016(-0.000)	256	822344	9.530	38.12			1
208) Benzo(k)fluoranthene	(6)	19.051(-0.000)	252	1885809	10.309	41.24			0.03
211) Benzo(a)pyrene	(6)	19.518(0.000)	252	1595842	9.609	38.43			0.03
215) 3-Methylcholanthrene	(6)	20.100(0.000)	268	919539	10.748	42.99			1
219) Indeno(1,2,3-cd)pyrene	(6)	21.202(0.000)	276	1156358M	7.512	30.05			0.03
220) Dibenz(a,h)anthracene	(6)	21.249(0.000)	278	1353457	8.118	32.47			0.03
221) Benzo(g,h,i)perylene	(6)	21.558(0.000)	276	1318942	8.030	32.12			0.03

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

Total number of targets = 116

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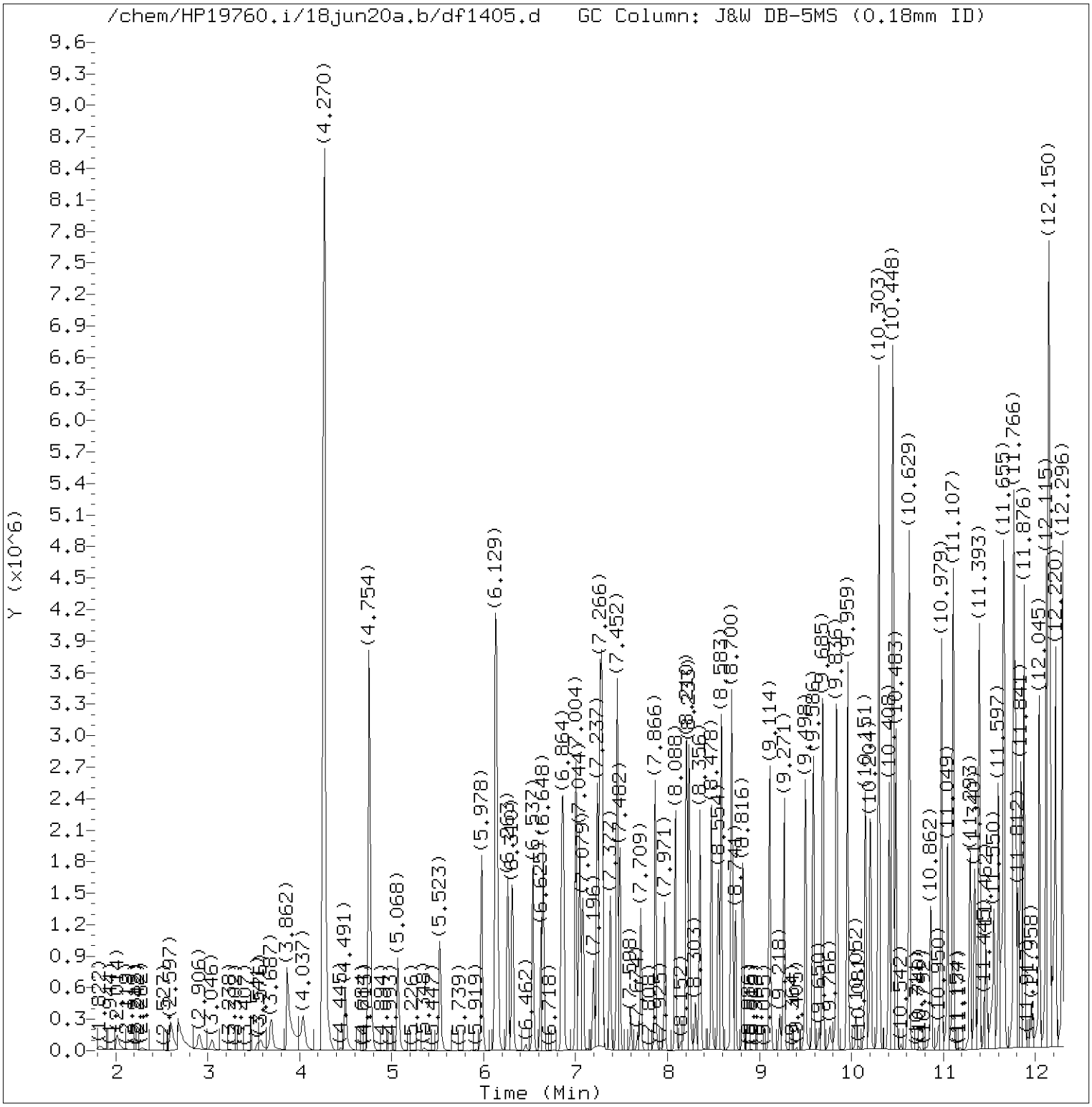
Secondary review performed and digitally signed by Matthew E. Barton on 06/24/2018 at 20:41. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

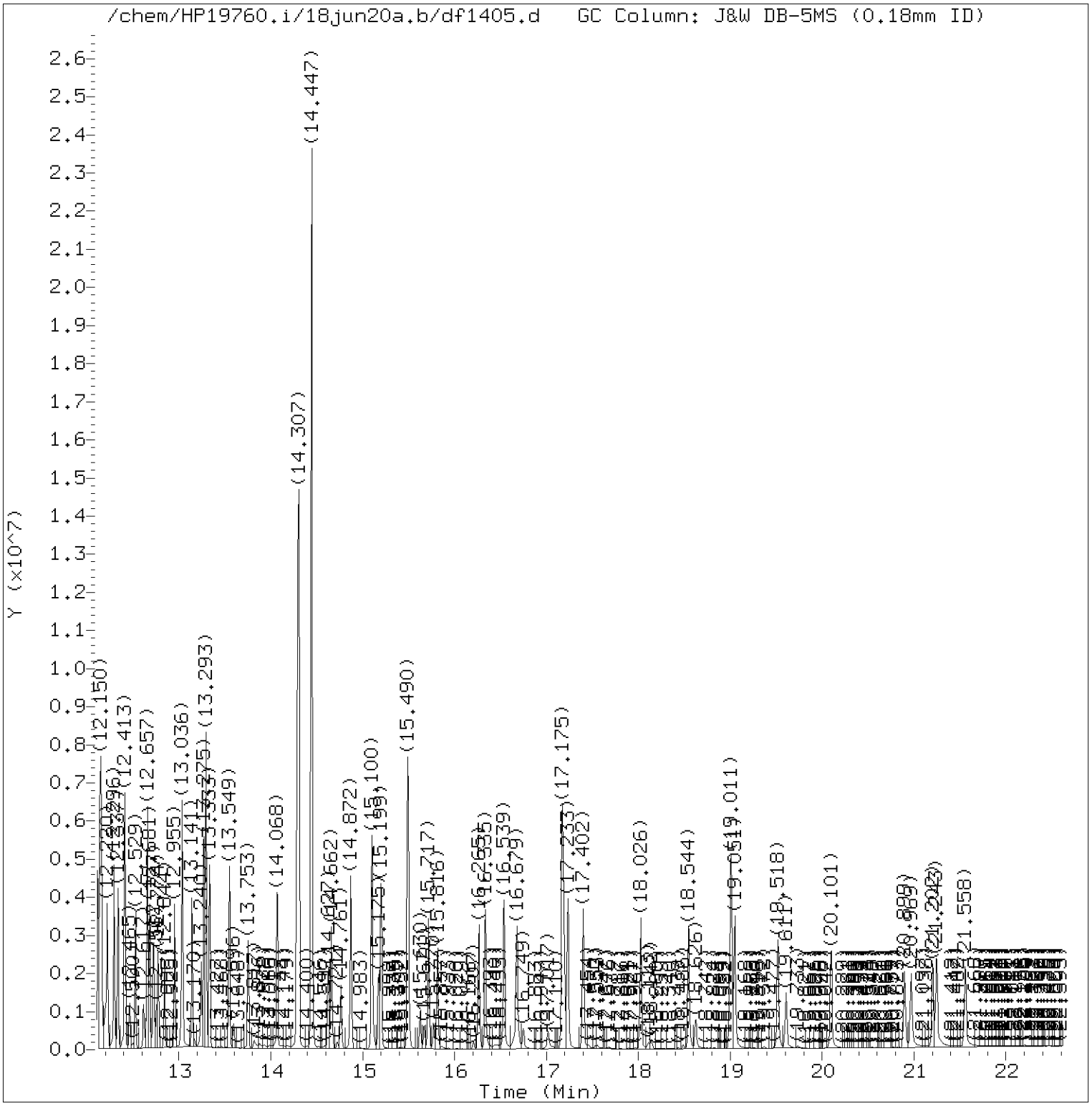
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1405.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 21:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Sample Name: 170WBLCS Lab Sample ID: 170WBLCS

Digitally signed by Ashley R. Transue
on 06/20/2018 at 23:37.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1405.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 21:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Sample Name: 170WBLCS Lab Sample ID: 170WBLCS

Digitally signed by Ashley R. Transue
on 06/20/2018 at 23:37.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1405.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 21:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Sample Name: 170WBLCS Lab Sample ID: 170WBLCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
4) N-Nitrosodimethylamine	(1)	2.597	74	321523	5.848
5) Pyridine	(1)	2.673	79	394811	4.202
7) 2-Picoline	(1)	3.862	93	706019	7.021
8) N-Nitrosomethylethylamine	(1)	4.037	88	376671	8.572
9) Methyl methanesulfonate	(1)	4.491	80	407243	8.290
11)$2-Fluorophenol	(1)	4.754	112	1968211	25.469
13) N-Nitrosodiethylamine	(1)	5.068	102	387272	9.483
15) Ethyl methanesulfonate	(1)	5.523	109	374247	9.441
17)$Phenol-d6	(1)	6.129	99	2052288	20.033
19) Aniline	(1)	6.147	93	981172	7.076
18) Phenol	(1)	6.147	94	666360	5.574
22) bis(2-Chloroethyl)ether	(1)	6.263	93	805574	9.117
23) 2-Chlorophenol	(1)	6.310	128	659202	9.632
24) 1,3-Dichlorobenzene	(1)	6.537	146	585564	8.158
25)*1,4-Dichlorobenzene-d4	(1)	6.625	152	234306	5.000
26) 1,4-Dichlorobenzene	(1)	6.648	146	610322	8.362
27) Benzyl alcohol	(1)	6.852	108	471222	9.227
28) 1,2-Dichlorobenzene	(1)	6.870	146	585508	8.516
31) 2-Methylphenol	(1)	7.044	108	660813	9.104
34) bis(2-Chloroisopropyl)ether	(1)	7.079	45	885070	9.829
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	45	885070	9.829
35) N-Nitrosopyrrolidine	(1)	7.196	100	404859	9.477
36) Acetophenone	(1)	7.237	105	1029189	9.807
39) N-Nitrosomorpholine	(1)	7.266	56	452796	9.694
38) N-Nitroso-di-n-propylamine	(1)	7.266	70	618824	9.967
37) 4-Methylphenol	(1)	7.278	108	743418	9.188
40) o-Toluidine	(1)	7.289	106	1045565	8.267
43) Hexachloroethane	(1)	7.377	117	252749	7.640
97) Isosafrole	(3)			597610	10.319
44)$Nitrobenzene-d5	(2)	7.452	82	1643936	16.958
45) Nitrobenzene	(2)	7.482	77	858657	9.017
48) N-Nitrosopiperidine	(2)	7.709	114	366531	9.126
50) Isophorone	(2)	7.866	82	1618100	9.734
51) 2-Nitrophenol	(2)	7.971	139	332624	9.274
53) 2,4-Dimethylphenol	(2)	8.088	107	634393	7.798
57) O,O,O-Triethylphosphorothioate	(2)	8.210	198	310828	9.718
55) bis(2-Chloroethoxy)methane	(2)	8.233	93	1009638	9.415
60) 2,4-Dichlorophenol	(2)	8.356	162	545132	10.147
62) 1,2,4-Trichlorobenzene	(2)	8.478	180	497497	8.639
65)*Naphthalene-d8	(2)	8.554	136	930730	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 06/20/2018 at 23:37.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1405.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 21:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Sample Name: 170WBLCS Lab Sample ID: 170WBLCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
66) Naphthalene	(2)	8.583	128	1805425	8.742
67) 4-Chloroaniline	(2)	8.694	127	760137	8.777
68) 2,6-Dichlorophenol	(2)	8.706	162	540936	10.094
69) Hexachloropropene	(2)	8.741	213	257385	6.841
146) Diallate trans/cis	(4)			797813	10.461
71) Hexachlorobutadiene	(2)	8.816	225	238716	7.356
77) N-Nitrosodi-n-butylamine	(2)	9.271	84	596185	9.017
80) 4-Chloro-3-methylphenol	(2)	9.498	107	697739	10.261
82) Safrole	(2)	9.586	162	486511	9.505
83) 2-Methylnaphthalene	(2)	9.691	142	1221879	9.309
86) 1,2,4,5-Tetrachlorobenzene	(3)	9.959	216	480875	8.382
85) Hexachlorocyclopentadiene	(3)	9.959	237	206821	6.550
88) cis-Isosafrole	(3)	10.052	162	63328	1.192
90) 2,4,6-Trichlorophenol	(3)	10.151	196	367921	9.908
92) 2,4,5-Trichlorophenol	(3)	10.209	196	400903	10.694
93)$2-Fluorobiphenyl	(3)	10.303	172	2495796	17.765
94) trans-Isosafrole	(3)	10.413	162	534282	9.126
96) 2-Chloronaphthalene	(3)	10.454	162	1192704	9.805
100) 2-Nitroaniline	(3)	10.629	138	430895	10.795
106) Dimethylphthalate	(3)	10.979	163	1066870	8.566
107) 1,3-Dinitrobenzene	(3)	10.979	168	244416	10.018
108) 2,6-Dinitrotoluene	(3)	11.049	165	330754	11.299
109) Acenaphthylene	(3)	11.107	152	1774126	10.143
112) 3-Nitroaniline	(3)	11.293	138	348694	10.334
113)*Acenaphthene-d10	(3)	11.340	164	436291	5.000
114) Acenaphthene	(3)	11.393	153	1256884	10.590
115) 2,4-Dinitrophenol	(3)	11.462	184	160189	7.869
117) Pentachlorobenzene	(3)	11.597	250	428855	9.093
116) 4-Nitrophenol	(3)	11.632	109	179478M	7.059
119) Dibenzofuran	(3)	11.655	168	1656030	9.851
118) 2,4-Dinitrotoluene	(3)	11.666	165	417005	10.460
121) 1-Naphthylamine	(3)	11.766	143	1862593	14.648
122) 2,3,4,6-Tetrachlorophenol	(3)	11.847	232	314775	10.004
123) 2-Naphthylamine	(3)	11.876	143	1616977	13.126
124) Diethylphthalate	(3)	12.045	149	1207709	9.532
126) Fluorene	(3)	12.115	166	1359308	10.146
125) Thionazin	(3)	12.139	107	296729	10.116
128) 5-Nitro-o-toluidine	(3)	12.144	152	375243	9.444
127) 4-Chlorophenyl-phenylether	(3)	12.150	204	609469	9.612
129) 4-Nitroaniline	(3)	12.156	138	381459	10.266

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

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on 06/20/2018 at 23:37.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1405.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 21:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Sample Name: 170WBLCS Lab Sample ID: 170WBLCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
130) 4,6-Dinitro-2-methylphenol	(4)	12.203	198	222855	9.156
131) N-Nitrosodiphenylamine	(4)	12.296	169	1207965	11.118
135)$2,4,6-Tribromophenol	(3)	12.413	330	593826	38.939
137) Tetraethyldithiopyrophosphate	(4)	12.529	97	274972	10.189
140) Diallate (peak 1)	(4)	12.657	86	611875	7.544
142) Phenacetin	(4)	12.681	108	847618	10.430
143) 4-Bromophenyl-phenylether	(4)	12.727	248	337924	10.170
144) Diallate (peak 2)	(4)	12.756	86	185938	2.916
145) Hexachlorobenzene	(4)	12.774	284	298063	9.029
147) Dimethoate	(4)	12.844	87	495087	7.208
150) 4-Aminobiphenyl	(4)	13.036	169	1195003	9.649
151) Pentachloronitrobenzene	(4)	13.036	237	149397	10.217
149) Pentachlorophenol	(4)	13.036	266	216662	9.510
152) Pronamide	(4)	13.141	173	612577	11.241
153)*Phenanthrene-d10	(4)	13.240	188	794695	5.000
155) Phenanthrene	(4)	13.269	178	2001474	10.743
157) Anthracene	(4)	13.333	178	1987651	10.870
163) Carbazole	(4)	13.549	167	1989422	11.352
165) Di-n-butylphthalate	(4)	14.074	149	2312025	10.335
168) 4-Nitroquinoline-1-oxide	(4)	14.307	190	2505032	103.057
170) Methapyrilene	(4)	14.447	97	6178367	82.945
171) Isodrin	(4)	14.662	193	225247	10.746
173) Fluoranthene	(4)	14.872	202	2092971	10.301
175)*Pyrene-d10	(5)	15.175	212	790660	5.000
177) Pyrene	(5)	15.199	202	2142826	9.887
179)$Terphenyl-d14	(5)	15.490	244	2805152	20.388
182) p-Dimethylaminoazobenzene	(5)	15.717	225	439880	11.495
185) Chlorobenzilate	(5)	15.816	139	630467	9.362
187) 3,3'-Dimethylbenzidine	(5)	16.265	212	1419055	10.222
188) Butylbenzylphthalate	(5)	16.335	149	1027440	9.507
191) 2-Acetylaminofluorene	(5)	16.679	181	1039007	11.998
193) 3,3'-Dichlorobenzidine	(5)	17.175	252	764924	10.597
195) Benzo(a)anthracene	(5)	17.175	228	1867008	9.798
196) Chrysene	(5)	17.233	228	1906717	9.993
199) bis(2-Ethylhexyl)phthalate	(5)	17.402	149	1406838	9.473
205) Di-n-octylphthalate	(6)	18.550	149	2212306	8.942
206) Benzo(b)fluoranthene	(6)	19.005	252	1768657	9.615
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.016	256	822344	9.530
208) Benzo(k)fluoranthene	(6)	19.051	252	1885809	10.309
211) Benzo(a)pyrene	(6)	19.518	252	1595842	9.609

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 06/20/2018 at 23:37.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1405.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 21:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

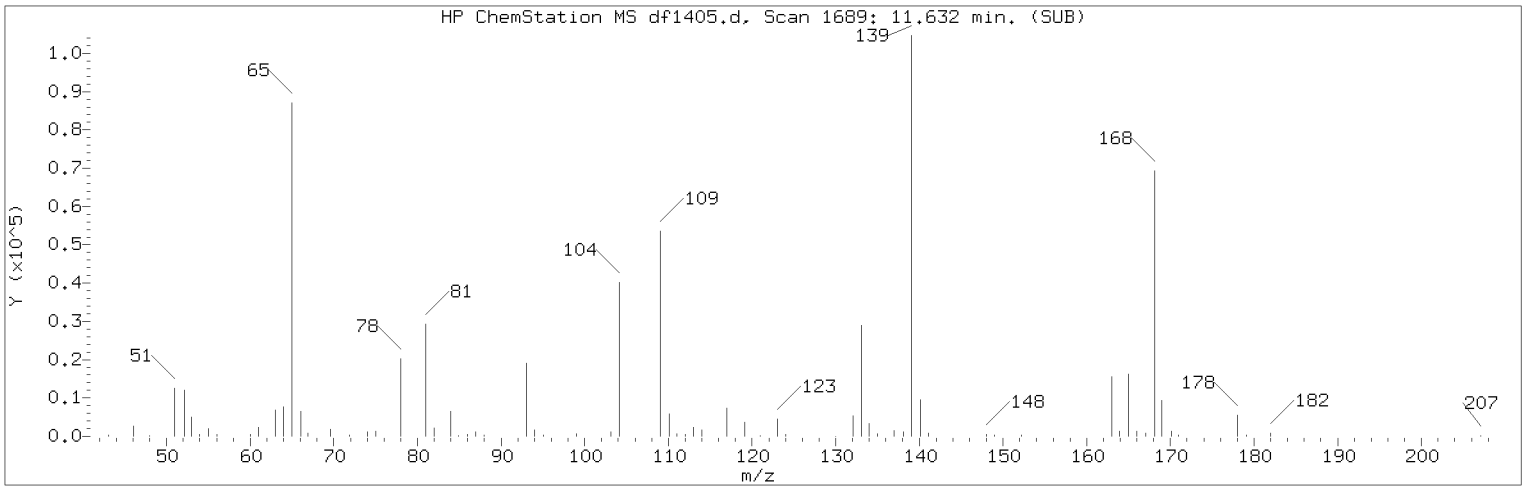
Sample Name: 170WBLCS Lab Sample ID: 170WBLCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
213)*Perylene-d12	(6)	19.611	264	762626	5.000
215) 3-Methylcholanthrene	(6)	20.101	268	919539	10.748
219) Indeno(1,2,3-cd)pyrene	(6)	21.202	276	1156358M	7.512
220) Dibenz(a,h)anthracene	(6)	21.249	278	1353457	8.118
221) Benzo(g,h,i)perylene	(6)	21.558	276	1318942	8.030

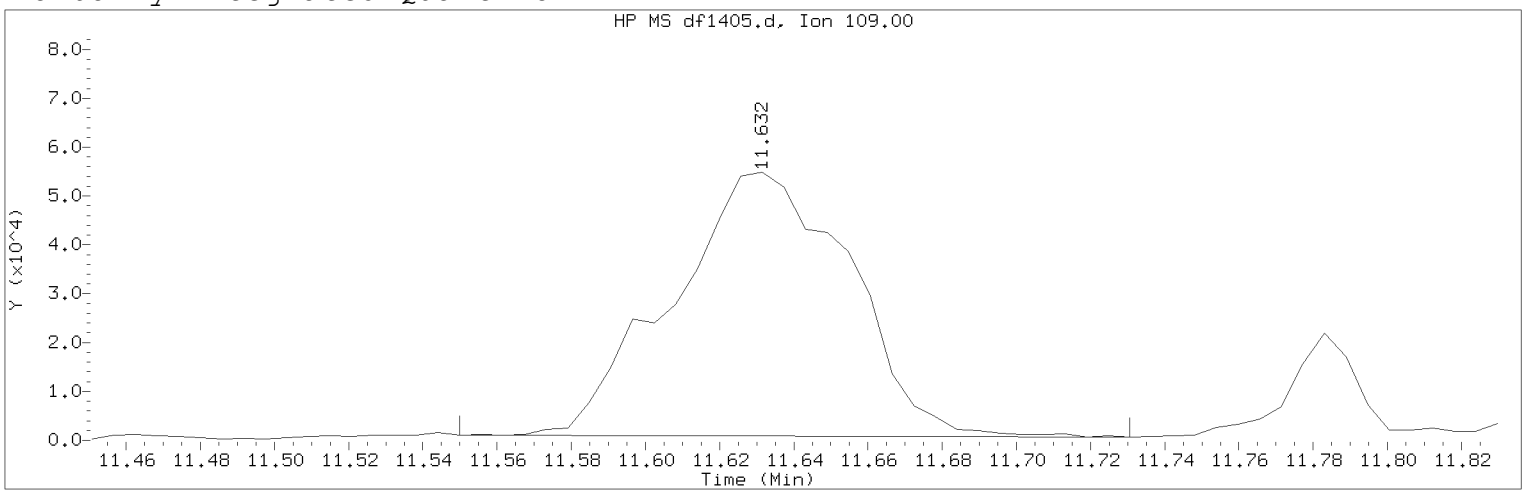
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 06/20/2018 at 23:37.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20a.b/df1405.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 21:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Sample Name: 170WBLCS Lab Sample ID: 170WBLCS

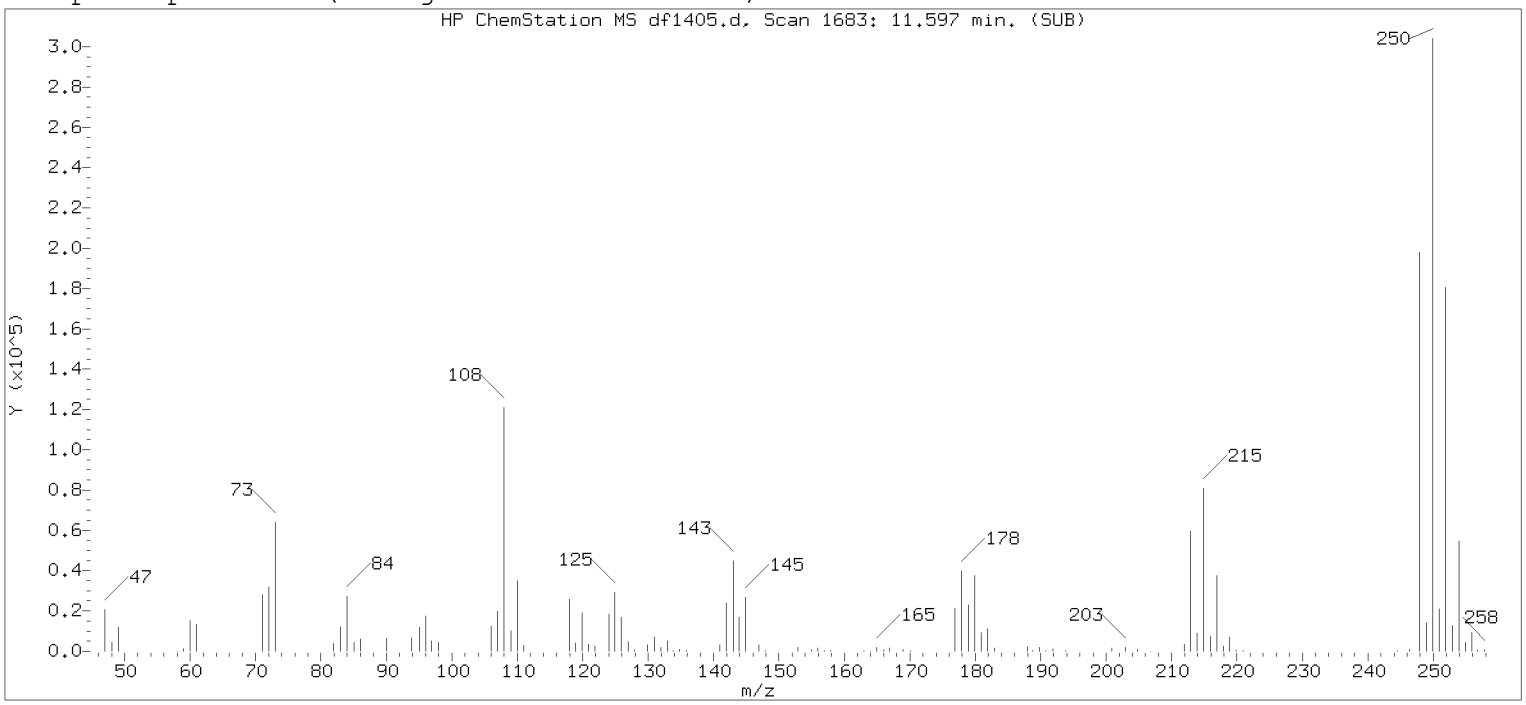
Compound Number : 116
Compound Name : 4-Nitrophenol
Scan Number : 1689
Retention Time (minutes) : 11.632
Quant Ion : 109.00
Area (flag) : 179478M
On-Column Amount (ng/ul) : 7.0595
Integration start scan : 1674 Integration stop scan: 1705
Y at integration start : 1032 Y at integration end: 688

Reason for manual integration: improper integration

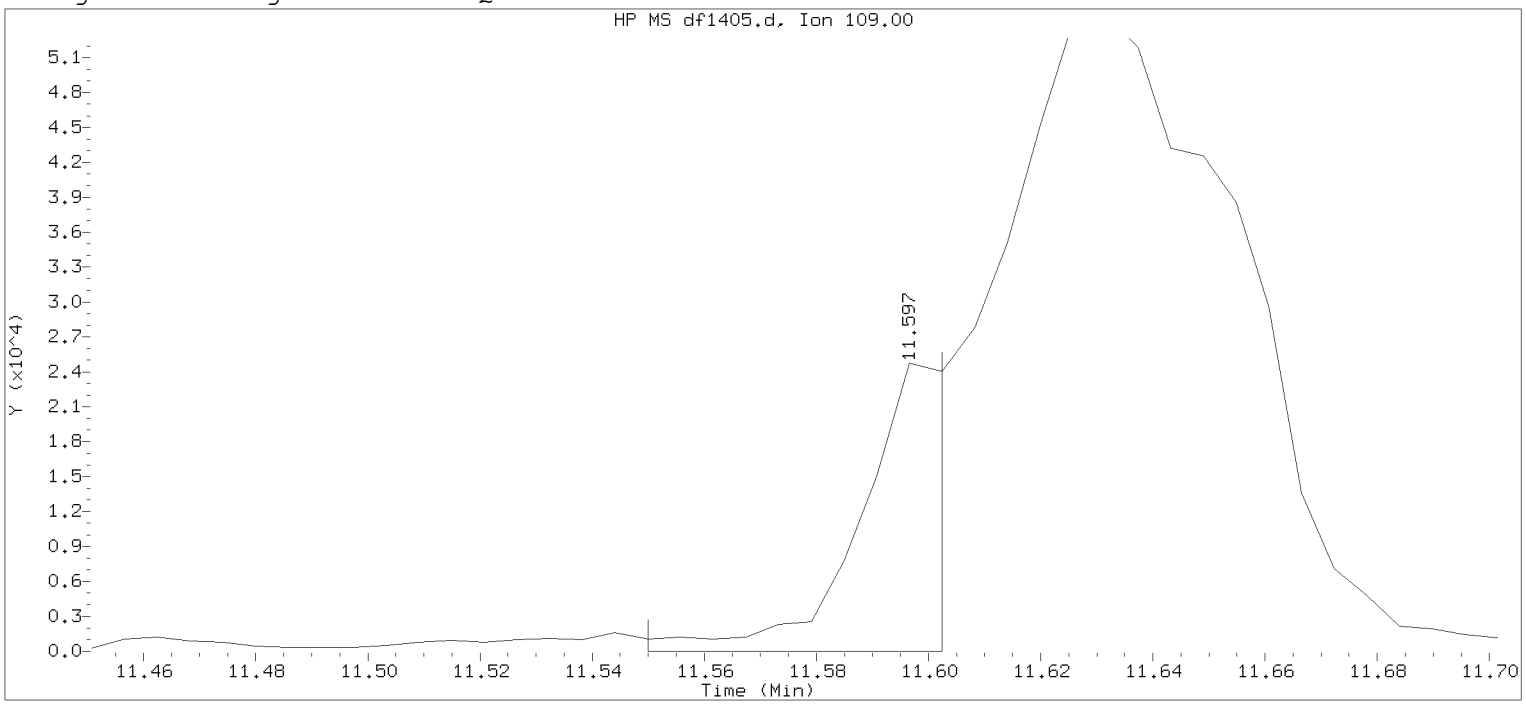
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 06/20/2018 at 23:37.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 06/24/2018 at 20:41.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20a.b/df1405.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 21:45 Analyst ID: art12405

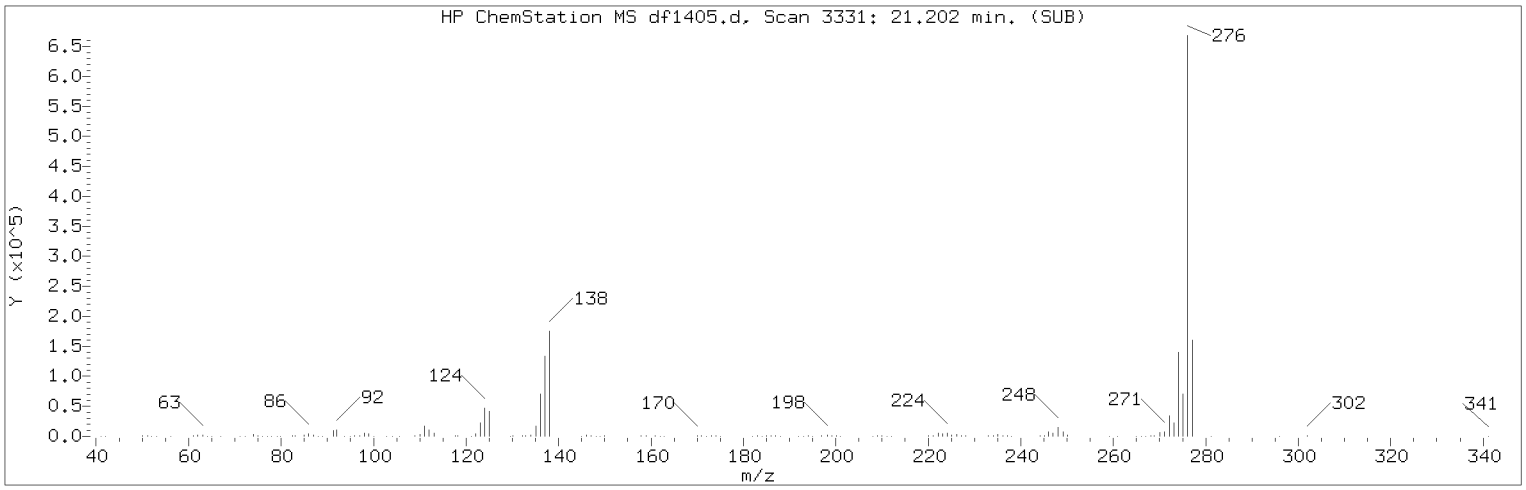
Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 22:11 Automation

Sample Name: 170WBLCS Lab Sample ID: 170WBLCS

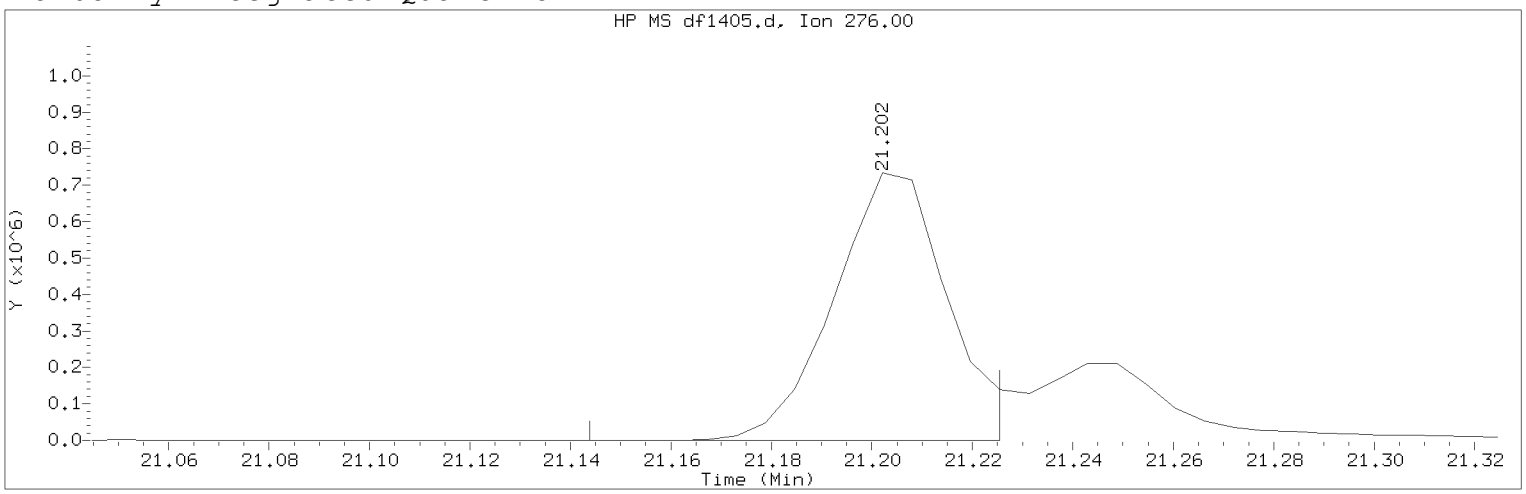
Compound Number : 116
Compound Name : 4-Nitrophenol
Scan Number : 1683
Retention Time (minutes) : 11.597
Quant Ion : 109.00
Area : 23916
On-column Amount (ng/ul) : 0.9407
Integration start scan : 1674 Integration stop scan: 1683
Y at integration start : 0 Y at integration end: 0

Digitally signed by Ashley R. Transue on 06/20/2018 at 23:37.
Target 3.5 esignature user name: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20a.b/df1405.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 21:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Sample Name: 170WBLCS Lab Sample ID: 170WBLCS

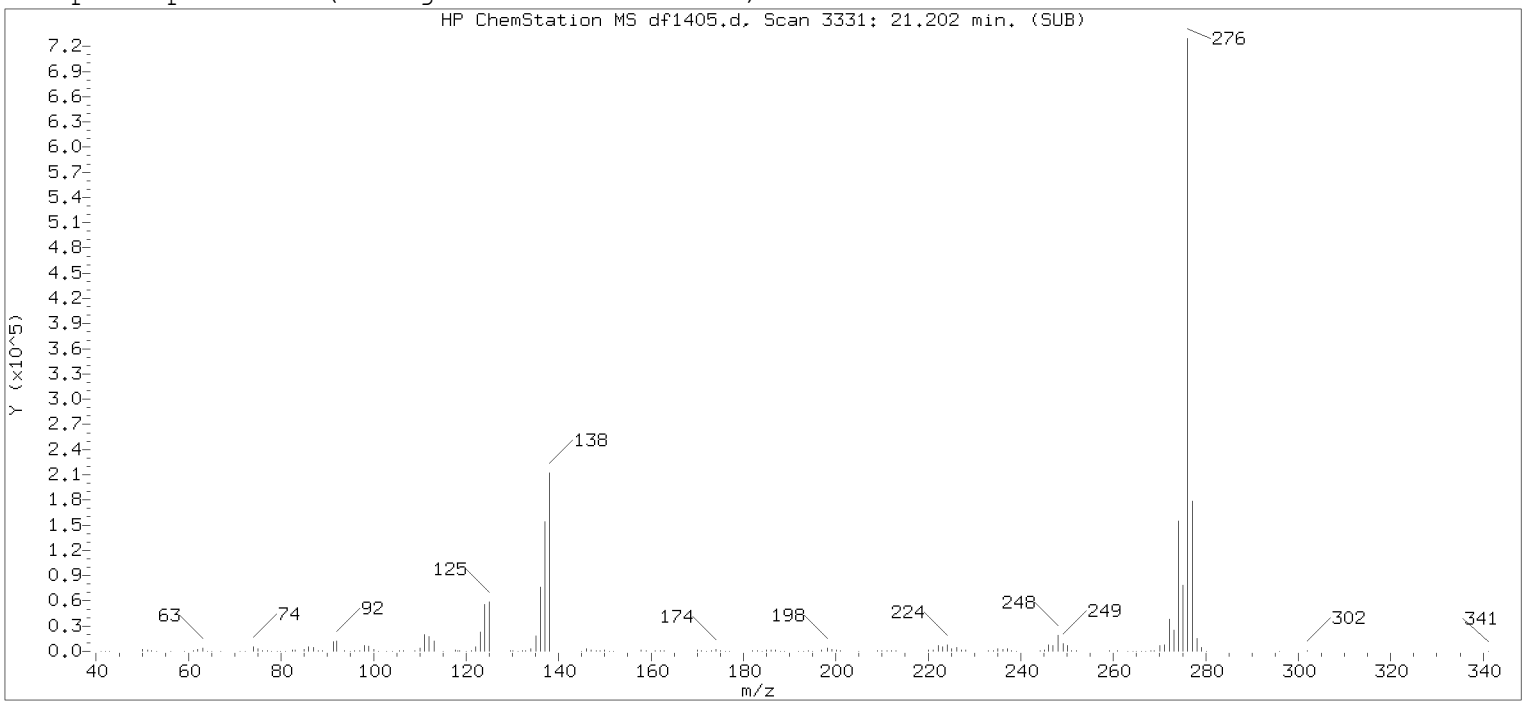
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3331
Retention Time (minutes) : 21.202
Quant Ion : 276.00
Area (flag) : 1156358M
On-Column Amount (ng/ul) : 7.5117
Integration start scan : 3320 Integration stop scan: 3334
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

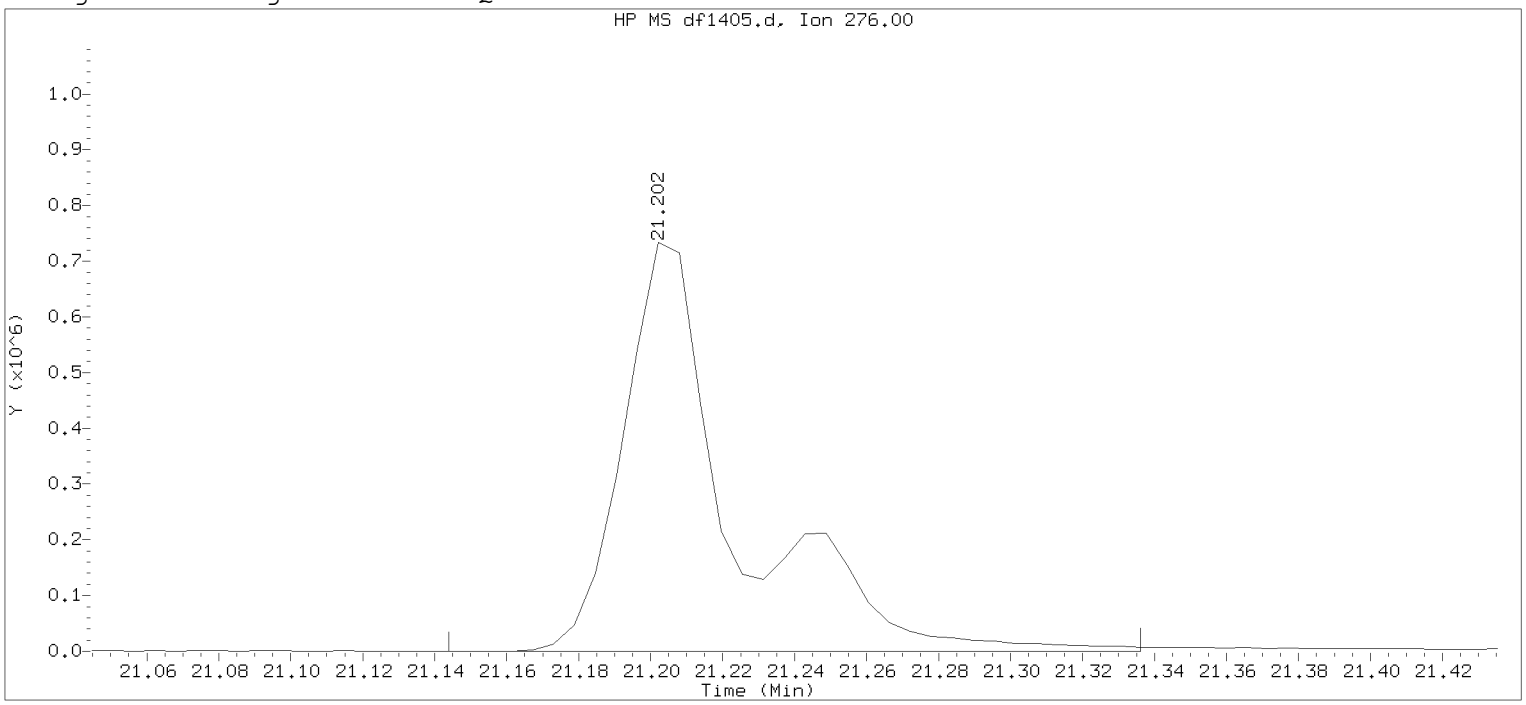
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 06/20/2018 at 23:37.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 06/24/2018 at 20:41.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20a.b/df1405.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 21:45 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 22:11 Automation

Sample Name: 170WBLCS Lab Sample ID: 170WBLCS

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3331		
Retention Time (minutes)	: 21.202		
Quant Ion	: 276.00		
Area	: 1578786		
On-column Amount (ng/ul)	: 10.2558		
Integration start scan	: 3320	Integration stop scan:	3353
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 06/20/2018 at 23:37.
Target 3.5 esignature user name: art12405

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

170WBLCSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 170WBLCSD

Sample wt/vol: 250 (g/mL)ML Lab File ID: df1406.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
62-75-9	N-Nitrosodimethylamine			27	
110-86-1	Pyridine			19	
109-06-8	2-Picoline			32	
10595-95-6	N-Nitrosomethylethylamine			39	
66-27-3	Methyl methanesulfonate			36	
55-18-5	N-Nitrosodiethylamine			44	
62-50-0	Ethyl methanesulfonate			42	
108-95-2	Phenol			24	
62-53-3	Aniline			31	
111-44-4	bis(2-Chloroethyl)ether			42	
95-57-8	2-Chlorophenol			43	
541-73-1	1,3-Dichlorobenzene			38	
106-46-7	1,4-Dichlorobenzene			38	
100-51-6	Benzyl alcohol			42	
95-50-1	1,2-Dichlorobenzene			40	
95-48-7	2-Methylphenol			40	
108-60-1	2,2'-oxybis(1-Chloropropane)			45	
39638-32-9	bis(2-Chloroisopropyl)ether			45	
930-55-2	N-Nitrosopyrrolidine			42	
98-86-2	Acetophenone			44	
106-44-5	4-Methylphenol			40	
621-64-7	N-Nitroso-di-n-propylamine			45	
59-89-2	N-Nitrosomorpholine			43	
95-53-4	o-Toluidine			36	
67-72-1	Hexachloroethane			35	
98-95-3	Nitrobenzene			41	
100-75-4	N-Nitrosopiperidine			41	
78-59-1	Isophorone			44	
88-75-5	2-Nitrophenol			43	
105-67-9	2,4-Dimethylphenol			35	

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

170WBLCSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 170WBLCSD

Sample wt/vol: 250 (g/mL)ML Lab File ID: df1406.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
111-91-1	bis(2-Chloroethoxy)methane			42	
126-68-1	O,O,O-Triethylphosphorothioate			44	
120-83-2	2,4-Dichlorophenol			45	
120-82-1	1,2,4-Trichlorobenzene			40	
91-20-3	Naphthalene			40	
106-47-8	4-Chloroaniline			38	
87-65-0	2,6-Dichlorophenol			45	
1888-71-7	Hexachloropropene			33	
87-68-3	Hexachlorobutadiene			34	
924-16-3	N-Nitrosodi-n-butylamine			41	
59-50-7	4-Chloro-3-methylphenol			45	
106-50-3	1,4-Phenylenediamine			75	U
94-59-7	Safrole			43	
91-57-6	2-Methylnaphthalene			42	
77-47-4	Hexachlorocyclopentadiene			31	
95-94-3	1,2,4,5-Tetrachlorobenzene			39	
88-06-2	2,4,6-Trichlorophenol			46	
95-95-4	2,4,5-Trichlorophenol			49	
91-58-7	2-Chloronaphthalene			44	
120-58-1	Isosafrole			47	
88-74-4	2-Nitroaniline			49	
130-15-4	1,4-Naphthoquinone			25	U
131-11-3	Dimethylphthalate			41	
99-65-0	1,3-Dinitrobenzene			47	
606-20-2	2,6-Dinitrotoluene			51	
208-96-8	Acenaphthylene			46	
99-09-2	3-Nitroaniline			47	
83-32-9	Acenaphthene			48	
51-28-5	2,4-Dinitrophenol			44	
100-02-7	4-Nitrophenol			33	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

170WBLCSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 170WBLCSD

Sample wt/vol: 250 (g/mL)ML Lab File ID: df1406.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
608-93-5	Pentachlorobenzene			44	
121-14-2	2,4-Dinitrotoluene			49	
132-64-9	Dibenzofuran			45	
134-32-7	1-Naphthylamine			63	
58-90-2	2,3,4,6-Tetrachlorophenol			48	
91-59-8	2-Naphthylamine			53	
84-66-2	Diethylphthalate			45	
297-97-2	Thionazin			46	
86-73-7	Fluorene			47	
7005-72-3	4-Chlorophenyl-phenylether			45	
99-55-8	5-Nitro-o-toluidine			40	
100-01-6	4-Nitroaniline			46	
534-52-1	4,6-Dinitro-2-methylphenol			46	
86-30-6	N-Nitrosodiphenylamine			51	
3689-24-5	Tetraethyldithiopyrophosphate			46	
99-35-4	1,3,5-Trinitrobenzene			97	U
62-44-2	Phenacetin			47	
101-55-3	4-Bromophenyl-phenylether			48	
118-74-1	Hexachlorobenzene			47	
2303-16-4	Diallate trans/cis			46	
60-51-5	Dimethoate			35	
87-86-5	Pentachlorophenol			47	
92-67-1	4-Aminobiphenyl			42	
82-68-8	Pentachloronitrobenzene			48	
23950-58-5	Pronamide			51	
85-01-8	Phenanthrene			51	
120-12-7	Anthracene			52	
86-74-8	Carbazole			52	
84-74-2	Di-n-butylphthalate			49	
56-57-5	4-Nitroquinoline-1-oxide			470	E

FORM I SV-3

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

170WBLCSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 170WBLCSD

Sample wt/vol: 250 (g/mL)ML Lab File ID: df1406.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 06/19/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/20/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
91-80-5	Methapyrilene			370	E
465-73-6	Isodrin			52	
206-44-0	Fluoranthene			50	
129-00-0	Pyrene			48	
60-11-7	p-Dimethylaminoazobenzene			51	
510-15-6	Chlorobenzilate			42	
119-93-7	3,3'-Dimethylbenzidine			45	J
85-68-7	Butylbenzylphthalate			45	
53-96-3	2-Acetylaminofluorene			54	
91-94-1	3,3'-Dichlorobenzidine			47	
56-55-3	Benzo(a)anthracene			49	
218-01-9	Chrysene			50	
117-81-7	bis(2-Ethylhexyl)phthalate			47	
117-84-0	Di-n-octylphthalate			48	
205-99-2	Benzo(b)fluoranthene			49	
57-97-6	7,12-Dimethylbenz[a]anthracene			50	
207-08-9	Benzo(k)fluoranthene			53	
50-32-8	Benzo(a)pyrene			50	
56-49-5	3-Methylcholanthrene			52	
193-39-5	Indeno(1,2,3-cd)pyrene			40	
53-70-3	Dibenz(a,h)anthracene			42	
191-24-2	Benzo(g,h,i)perylene			41	

FORM I SV-4

Data file: /chem/HP19760.i/18jun20a.b/df1406.d Injection date and time: **20-JUN-2018 22:14**
Data file Sample Info. Line: 170WBLCSD;170WBLCSD;1;3;LCSD;;; Instrument ID: **HP19760.i** Batch: **18170WAB**
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20a.b/df1404.d**

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: **QC170WBM**
Calibration date and time (Last Method Edit): 20-JUN-2018 21:16
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20a.b/df1401.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.624	(-0.006)	830	152	225928	(-14)	5.00	
65) Naphthalene-d8	8.554	(0.000)	1161	136	906042	(-12)	5.00	
113) Acenaphthene-d10	11.340	(0.000)	1639	164	422580	(-12)	5.00	
153) Phenanthrene-d10	13.246	(0.000)	1966	188	769659	(-13)	5.00	
175) Pyrene-d10	15.175	(0.000)	2297	212	786175	(-13)	5.00	
213) Perylene-d12	19.611	(0.000)	3058	264	738808	(-11)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.753	(-0.002)	112	2101616	28.204	56%		10 - 82
17) Phenol-d6	(1)	6.129	(0.000)	99	2194735	22.218	44%		10 - 71
44) Nitrobenzene-d5	(2)	7.452	(0.000)	82	1813227	19.214	77%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.302	(0.000)	172	2743335	20.160	81%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.412	(0.000)	330	677811	45.888	92%		21 - 134
179) Terphenyl-d14	(5)	15.490	(0.000)	244	3143705	22.979	92%		27 - 116

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
4) N-Nitrosodimethylamine	(1)	2.591	(-0.003)	74	356994	6.734	26.94			0.5
5) Pyridine	(1)	2.667	(-0.005)	79	434273	4.793	19.17			0.5
7) 2-Picoline	(1)	3.856	(-0.001)	93	766323	7.903	31.61			0.5
8) N-Nitrosomethylethylamine	(1)	4.031	(-0.000)	88	412734	9.740	38.96			0.5
9) Methyl methanesulfonate	(1)	4.491	(-0.000)	80	431608	9.111	36.45			0.3
13) N-Nitrosodiethylamine	(1)	5.068	(-0.000)	102	431144	10.949	43.80			0.1
15) Ethyl methanesulfonate	(1)	5.523	(-0.000)	109	404655	10.586	42.35			0.1
18) Phenol	(1)	6.146	(-0.000)	94	703164	6.100	24.40			0.1
19) Aniline	(1)	6.146	(-0.000)	93	1046660	7.828	31.31			0.8
22) bis(2-Chloroethyl)ether	(1)	6.263	(-0.000)	93	885883	10.397	41.59			0.1
23) 2-Chlorophenol	(1)	6.316	(-0.000)	128	704529	10.676	42.70			0.1
24) 1,3-Dichlorobenzene	(1)	6.537	(-0.000)	146	654334	9.454	37.82			0.1
26) 1,4-Dichlorobenzene	(1)	6.648	(0.000)	146	666889	9.475	37.90			0.1
27) Benzyl alcohol	(1)	6.852	(0.000)	108	514836	10.454	41.82			3
28) 1,2-Dichlorobenzene	(1)	6.863	(0.000)	146	657342	9.916	39.66			0.1
31) 2-Methylphenol	(1)	7.044	(0.000)	108	703833	10.056	40.22			0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	(0.000)	45	974493	11.223	44.89			0.1
34) bis(2-Chloroisopropyl)ether	(1)	7.079	(0.000)	45	974493	11.223	44.89			0.1
35) N-Nitrosopyrrolidine	(1)	7.196	(0.000)	100	437627	10.624	42.50			0.1
36) Acetophenone	(1)	7.236	(0.000)	105	1123068	11.099	44.40			1
37) 4-Methylphenol	(1)	7.277	(0.000)	108	780661	10.006	40.02			0.1
38) N-Nitroso-di-n-propylamine	(1)	7.266	(0.000)	70	678112	11.327	45.31			0.2
39) N-Nitrosomorpholine	(1)	7.266	(0.000)	56	482182	10.706	42.83			0.5
40) o-Toluidine	(1)	7.289	(0.000)	106	1100648	9.025	36.10			1
43) Hexachloroethane	(1)	7.376	(0.000)	117	280219	8.785	35.14			0.3
45) Nitrobenzene	(2)	7.481	(-0.000)	77	945200	10.197	40.79			0.1
48) N-Nitrosopiperidine	(2)	7.709	(0.000)	114	402580	10.296	41.19			0.1

Data file: /chem/HP19760.i/18jun20a.b/df1406.d Injection date and time: **20-JUN-2018 22:14**
Data file Sample Info. Line: 170WBLCSD;170WBLCSD;1;3;LCSD;;; Instrument ID: **HP19760.i** Batch: **18170WAB**
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20a.b/df1404.d**

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: **QC170WBM**
Calibration date and time (Last Method Edit): 20-JUN-2018 21:16
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20a.b/df1401.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
50) Isophorone	(2)	7.866(0.000)	82	1761118	10.883	43.53			0.1
51) 2-Nitrophenol	(2)	7.971(0.000)	139	375913	10.767	43.07			0.8
53) 2,4-Dimethylphenol	(2)	8.087(-0.000)	107	683912	8.636	34.54			0.8
57) O,O,O-Triethylphosphorothioate	(2)	8.210(0.000)	198	342635	11.004	44.02			0.5
55) bis(2-Chloroethoxy)methane	(2)	8.233(0.000)	93	1094981	10.489	41.96			0.1
60) 2,4-Dichlorophenol	(2)	8.356(-0.000)	162	590054	11.282	45.13			0.1
62) 1,2,4-Trichlorobenzene	(2)	8.478(0.000)	180	555041	9.901	39.60			0.1
66) Naphthalene	(2)	8.589(-0.000)	128	2015046	10.023	40.09			0.03
67) 4-Chloroaniline	(2)	8.694(0.000)	127	804757	9.545	38.18			1
68) 2,6-Dichlorophenol	(2)	8.705(0.000)	162	582624	11.168	44.67			0.1
69) Hexachloropropene	(2)	8.740(-0.000)	213	305066	8.329	33.32			0.5
71) Hexachlorobutadiene	(2)	8.816(0.000)	225	270839	8.573	34.29			0.1
77) N-Nitrosodi-n-butylamine	(2)	9.271(0.000)	84	654602	10.170	40.68			3
81) 1,4-Phenylenediamine	(2)			Not Detected					19
80) 4-Chloro-3-methylphenol	(2)	9.498(0.000)	107	752241	11.364	45.46			0.1
82) Safrole	(2)	9.585(-0.000)	162	539096	10.819	43.28			0.5
83) 2-Methylnaphthalene	(2)	9.690(-0.000)	142	1356890	10.619	42.48			0.03
85) Hexachlorocyclopentadiene	(3)	9.958(-0.000)	237	236076	7.719	30.88			1
86) 1,2,4,5-Tetrachlorobenzene	(3)	9.958(-0.000)	216	535516	9.637	38.55			0.1
88) cis-Isosafrole	(3)	10.052(0.000)	162	71211	1.384	5.54			0.3
90) 2,4,6-Trichlorophenol	(3)	10.151(-0.000)	196	418056	11.623	46.49			0.1
92) 2,4,5-Trichlorophenol	(3)	10.209(-0.000)	196	443688	12.219	48.88			0.1
94) trans-Isosafrole	(3)	10.413(-0.000)	162	587494	10.361	41.44			0.3
97) Isosafrole	(3)			658705	11.745	46.98			1
96) 2-Chloronaphthalene	(3)	10.454(-0.000)	162	1306315	11.088	44.35			0.1
100) 2-Nitroaniline	(3)	10.634(-0.000)	138	474380	12.270	49.08			0.5
104) 1,4-Naphthoquinone	(3)			Not Detected					6
106) Dimethylphthalate	(3)	10.978(0.000)	163	1221662	10.127	40.51			0.5
107) 1,3-Dinitrobenzene	(3)	10.978(0.000)	168	277428	11.741	46.96			0.5
108) 2,6-Dinitrotoluene	(3)	11.048(-0.000)	165	363394	12.816	51.27			0.1
109) Acenaphthylene	(3)	11.107(0.000)	152	1957398	11.554	46.22			0.03
112) 3-Nitroaniline	(3)	11.293(-0.000)	138	381078	11.661	46.64			0.8
114) Acenaphthene	(3)	11.392(-0.000)	153	1366044	11.883	47.53			0.03
115) 2,4-Dinitrophenol	(3)	11.468(-0.000)	184	219076	11.110	44.44			4
116) 4-Nitrophenol	(3)	11.625(-0.002)	109	204755	8.315	33.26			3
117) Pentachlorobenzene	(3)	11.602(-0.000)	250	505246	11.061	44.24			0.1
118) 2,4-Dinitrotoluene	(3)	11.666(-0.000)	165	474464	12.288	49.15			0.3
119) Dibenzofuran	(3)	11.655(-0.000)	168	1843660	11.323	45.29			0.1
121) 1-Naphthylamine	(3)	11.765(-0.000)	143	1924825	15.629	62.51			2
122) 2,3,4,6-Tetrachlorophenol	(3)	11.847(-0.000)	232	363378	11.923	47.69			1
123) 2-Naphthylamine	(3)	11.876(-0.000)	143	1592433	13.346	53.38			2
124) Diethylphthalate	(3)	12.045(-0.000)	149	1367700	11.146	44.58			0.5
125) Thionazin	(3)	12.138(-0.000)	107	328643	11.568	46.27			0.5
126) Fluorene	(3)	12.115(-0.000)	166	1524782	11.750	47.00			0.03
127) 4-Chlorophenyl-phenylether	(3)	12.150(-0.000)	204	689514	11.227	44.91			0.1
128) 5-Nitro-o-toluidine	(3)	12.144(-0.000)	152	385509	10.017	40.07			1
129) 4-Nitroaniline	(3)	12.156(-0.000)	138	416455	11.572	46.29			0.2
130) 4,6-Dinitro-2-methylphenol	(4)	12.202(0.000)	198	274034	11.625	46.50			2
131) N-Nitrosodiphenylamine	(4)	12.296(-0.000)	169	1329789	12.638	50.55			0.2
137) Tetraethyldithiopyrophosphate	(4)	12.529(-0.000)	97	300207	11.486	45.94			0.3
139) 1,3,5-Trinitrobenzene	(4)			Not Detected					24
140) Diallate (peak 1)	(4)	12.657(0.000)	86	644991	8.211	32.85			0.06
142) Phenacetin	(4)	12.680(0.000)	108	921211	11.704	46.82			0.1
143) 4-Bromophenyl-phenylether	(4)	12.727(0.000)	248	386936	12.024	48.09			0.1

Data file: /chem/HP19760.i/18jun20a.b/df1406.d Injection date and time: **20-JUN-2018 22:14**
Data file Sample Info. Line: 170WBLCSD;170WBLCSD;1;3;LCSD;;; Instrument ID: **HP19760.i** Batch: **18170WAB**
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Blank Data file reference: **/chem/HP19760.i/18jun20a.b/df1404.d**

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: **QC170WBM**
Calibration date and time (Last Method Edit): 20-JUN-2018 21:16
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18jun20a.b/df1401.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

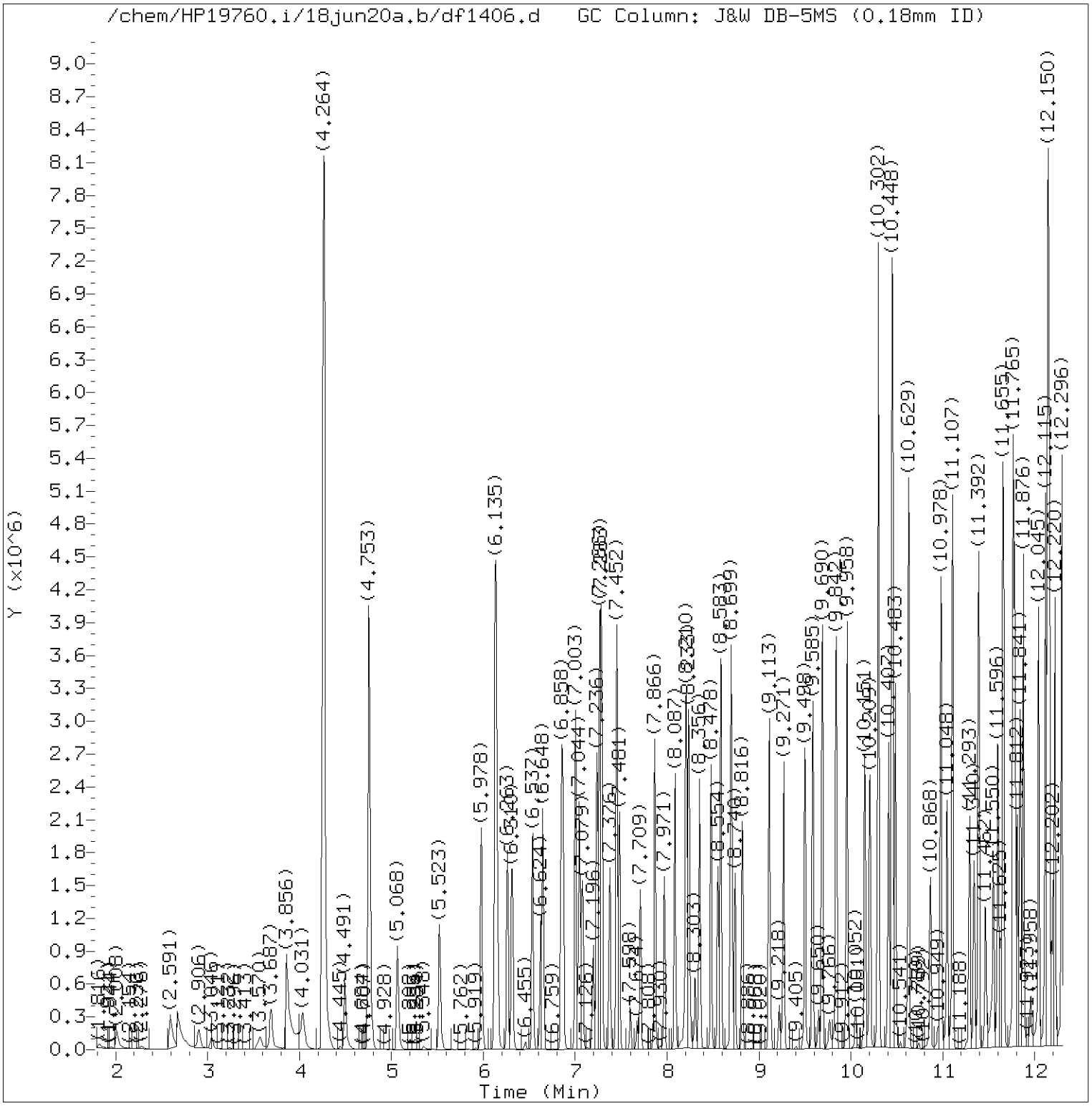
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
144) Diallate (peak 2)	(4)	12.756(-0.000)	86	202352	3.277	13.11			0.06
146) Diallate trans/cis	(4)			847343	11.489	45.95			0.3
145) Hexachlorobenzene	(4)	12.780(0.000)	284	372734	11.658	46.63			0.03
147) Dimethoate	(4)	12.844(0.000)	87	574640	8.638	34.55			0.8
149) Pentachlorophenol	(4)	13.036(-0.000)	266	256705	11.634	46.54			0.3
150) 4-Aminobiphenyl	(4)	13.036(0.000)	169	1260294	10.508	42.03			1
151) Pentachloronitrobenzene	(4)	13.036(0.000)	237	170444	12.035	48.14			0.5
152) Pronamide	(4)	13.147(-0.000)	173	676790	12.823	51.29			0.1
155) Phenanthrene	(4)	13.275(-0.000)	178	2282193	12.649	50.59			0.03
157) Anthracene	(4)	13.339(-0.000)	178	2285378	12.904	51.62			0.03
163) Carbazole	(4)	13.549(-0.000)	167	2196759	12.943	51.77			0.1
165) Di-n-butylphthalate	(4)	14.073(-0.000)	149	2635878	12.166	48.66			0.5
168) 4-Nitroquinoline-1-oxide	(4)	14.307(-0.001)	190	2754735	117.016	468.07		E	5
170) Methapyrilene	(4)	14.446(-0.000)	97	6697521	92.839	371.36		E	4
171) Isodrin	(4)	14.662(-0.000)	193	263829	12.996	51.98			0.1
173) Fluoranthene	(4)	14.872(-0.000)	202	2464885	12.526	50.11			0.03
177) Pyrene	(5)	15.204(0.000)	202	2570383	11.928	47.71			0.03
182) p-Dimethylaminoazobenzene	(5)	15.717(0.000)	225	487615	12.815	51.26			1
185) Chlorobenzilate	(5)	15.816(-0.000)	139	700943	10.468	41.87			0.8
187) 3,3'-Dimethylbenzidine	(5)	16.265(0.000)	212	1563189	11.324	45.30		J	6
188) Butylbenzylphthalate	(5)	16.335(-0.000)	149	1212079	11.279	45.12			0.5
191) 2-Acetylaminofluorene	(5)	16.679(0.000)	181	1160505	13.478	53.91			3
193) 3,3'-Dichlorobenzidine	(5)	17.174(0.000)	252	840182	11.706	46.82			0.8
195) Benzo(a)anthracene	(5)	17.174(0.000)	228	2325115	12.272	49.09			0.03
196) Chrysene	(5)	17.238(-0.000)	228	2360116	12.440	49.76			0.03
199) bis(2-Ethylhexyl)phthalate	(5)	17.402(-0.000)	149	1735694	11.755	47.02			1
205) Di-n-octylphthalate	(6)	18.550(0.000)	149	2905987	12.124	48.50			1
206) Benzo(b)fluoranthene	(6)	19.004(-0.000)	252	2165879	12.154	48.62			0.03
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.016(0.000)	256	1035468	12.386	49.55			1
208) Benzo(k)fluoranthene	(6)	19.057(-0.000)	252	2369341	13.370	53.48			0.03
211) Benzo(a)pyrene	(6)	19.523(0.000)	252	2006858	12.473	49.89			0.03
215) 3-Methylcholanthrene	(6)	20.100(-0.000)	268	1087334	13.119	52.48			1
219) Indeno(1,2,3-cd)pyrene	(6)	21.208(-0.000)	276	1486226M	9.966	39.86			0.03
220) Dibenz(a,h)anthracene	(6)	21.248(-0.000)	278	1690406	10.465	41.86			0.03
221) Benzo(g,h,i)perylene	(6)	21.563(-0.000)	276	1628306	10.234	40.93			0.03

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

Total number of targets = 116

Digitally signed by Edward Monborne on 06/21/2018 at 11:29. Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/24/2018 at 20:41. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

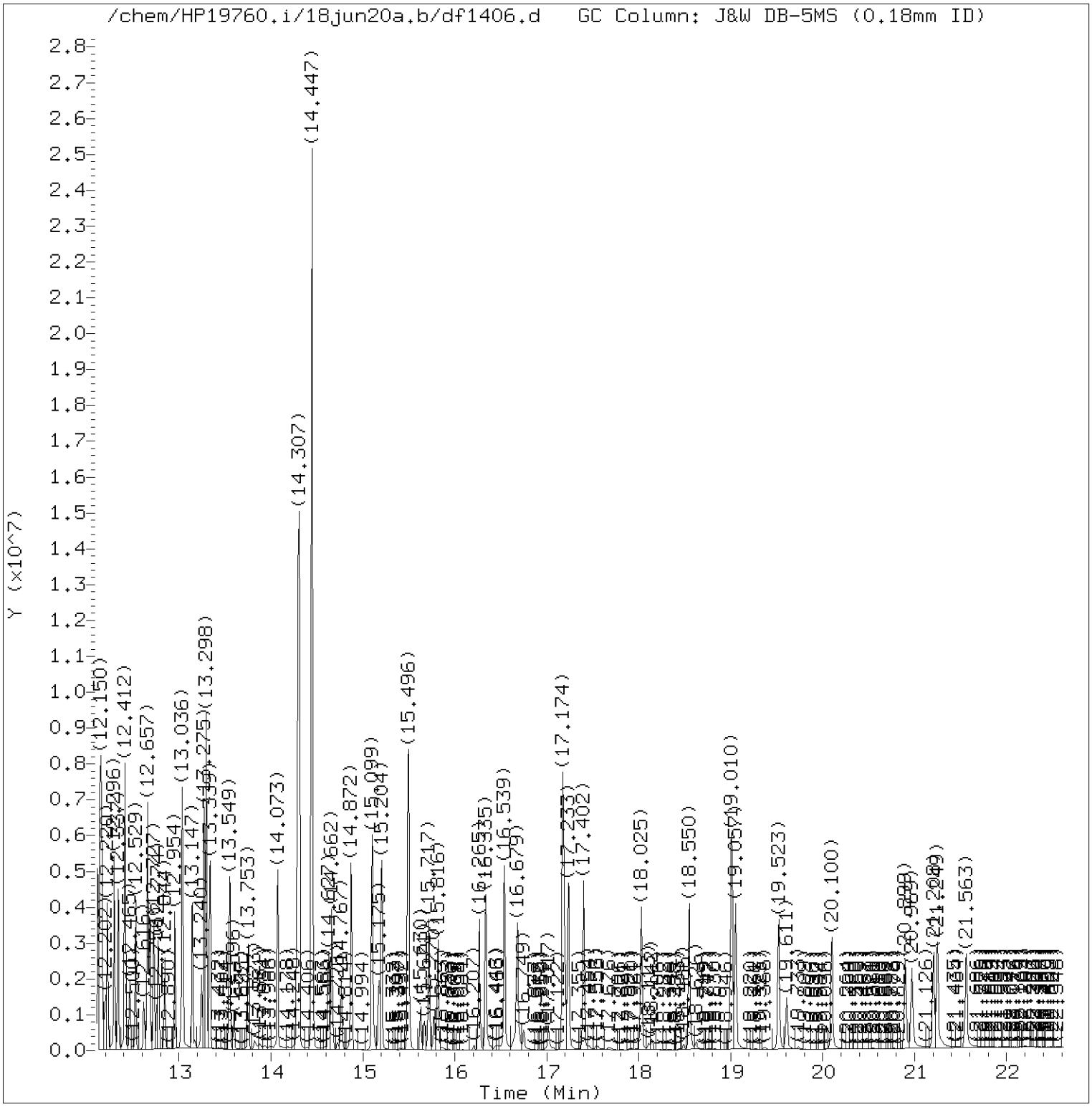
Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1406.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 22:14 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Sample Name: 170WBLCSD Lab Sample ID: 170WBLCSD

Digitally signed by Edward Monborne
on 06/21/2018 at 11:29.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1406.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 22:14 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Sample Name: 170WBLCSD Lab Sample ID: 170WBLCSD

Digitally signed by Edward Monborne
on 06/21/2018 at 11:29.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1406.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 22:14 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Sample Name: 170WBLCSD Lab Sample ID: 170WBLCSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
4) N-Nitrosodimethylamine	(1)	2.591	74	356994	6.734
5) Pyridine	(1)	2.667	79	434273	4.793
7) 2-Picoline	(1)	3.856	93	766323	7.903
8) N-Nitrosomethylethylamine	(1)	4.031	88	412734	9.740
9) Methyl methanesulfonate	(1)	4.491	80	431608	9.111
11)$2-Fluorophenol	(1)	4.753	112	2101616	28.204
13) N-Nitrosodiethylamine	(1)	5.068	102	431144	10.949
15) Ethyl methanesulfonate	(1)	5.523	109	404655	10.586
17)$Phenol-d6	(1)	6.129	99	2194735	22.218
19) Aniline	(1)	6.147	93	1046660	7.828
18) Phenol	(1)	6.147	94	703164	6.100
22) bis(2-Chloroethyl)ether	(1)	6.263	93	885883	10.397
23) 2-Chlorophenol	(1)	6.316	128	704529	10.676
24) 1,3-Dichlorobenzene	(1)	6.537	146	654334	9.454
25)*1,4-Dichlorobenzene-d4	(1)	6.624	152	225928	5.000
26) 1,4-Dichlorobenzene	(1)	6.648	146	666889	9.475
27) Benzyl alcohol	(1)	6.852	108	514836	10.454
28) 1,2-Dichlorobenzene	(1)	6.863	146	657342	9.916
31) 2-Methylphenol	(1)	7.044	108	703833	10.056
34) bis(2-Chloroisopropyl)ether	(1)	7.079	45	974493	11.223
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.079	45	974493	11.223
35) N-Nitrosopyrrolidine	(1)	7.196	100	437627	10.624
36) Acetophenone	(1)	7.236	105	1123068	11.099
39) N-Nitrosomorpholine	(1)	7.266	56	482182	10.706
38) N-Nitroso-di-n-propylamine	(1)	7.266	70	678112	11.327
37) 4-Methylphenol	(1)	7.277	108	780661	10.006
40) o-Toluidine	(1)	7.289	106	1100648	9.025
43) Hexachloroethane	(1)	7.376	117	280219	8.785
97) Isosafrole	(3)			658705	11.745
44)$Nitrobenzene-d5	(2)	7.452	82	1813227	19.214
45) Nitrobenzene	(2)	7.481	77	945200	10.197
48) N-Nitrosopiperidine	(2)	7.709	114	402580	10.296
50) Isophorone	(2)	7.866	82	1761118	10.883
51) 2-Nitrophenol	(2)	7.971	139	375913	10.767
53) 2,4-Dimethylphenol	(2)	8.087	107	683912	8.636
57) O,O,O-Triethylphosphorothioate	(2)	8.210	198	342635	11.004
55) bis(2-Chloroethoxy)methane	(2)	8.233	93	1094981	10.489
60) 2,4-Dichlorophenol	(2)	8.356	162	590054	11.282
62) 1,2,4-Trichlorobenzene	(2)	8.478	180	555041	9.901
65)*Naphthalene-d8	(2)	8.554	136	906042	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/21/2018 at 11:29.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1406.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 22:14 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Sample Name: 170WBLCSD Lab Sample ID: 170WBLCSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
66) Naphthalene	(2)	8.589	128	2015046	10.023
67) 4-Chloroaniline	(2)	8.694	127	804757	9.545
68) 2,6-Dichlorophenol	(2)	8.705	162	582624	11.168
69) Hexachloropropene	(2)	8.740	213	305066	8.329
146) Diallate trans/cis	(4)			847343	11.489
71) Hexachlorobutadiene	(2)	8.816	225	270839	8.573
77) N-Nitrosodi-n-butylamine	(2)	9.271	84	654602	10.170
80) 4-Chloro-3-methylphenol	(2)	9.498	107	752241	11.364
82) Safrole	(2)	9.585	162	539096	10.819
83) 2-Methylnaphthalene	(2)	9.690	142	1356890	10.619
86) 1,2,4,5-Tetrachlorobenzene	(3)	9.958	216	535516	9.637
85) Hexachlorocyclopentadiene	(3)	9.958	237	236076	7.719
88) cis-Isosafrole	(3)	10.052	162	71211	1.384
90) 2,4,6-Trichlorophenol	(3)	10.151	196	418056	11.623
92) 2,4,5-Trichlorophenol	(3)	10.209	196	443688	12.219
93)$2-Fluorobiphenyl	(3)	10.302	172	2743335	20.160
94) trans-Isosafrole	(3)	10.413	162	587494	10.361
96) 2-Chloronaphthalene	(3)	10.454	162	1306315	11.088
100) 2-Nitroaniline	(3)	10.635	138	474380	12.270
106) Dimethylphthalate	(3)	10.978	163	1221662	10.127
107) 1,3-Dinitrobenzene	(3)	10.978	168	277428	11.741
108) 2,6-Dinitrotoluene	(3)	11.048	165	363394	12.816
109) Acenaphthylene	(3)	11.107	152	1957398	11.554
112) 3-Nitroaniline	(3)	11.293	138	381078	11.661
113)*Acenaphthene-d10	(3)	11.340	164	422580	5.000
114) Acenaphthene	(3)	11.392	153	1366044	11.883
115) 2,4-Dinitrophenol	(3)	11.468	184	219076	11.110
117) Pentachlorobenzene	(3)	11.602	250	505246	11.061
116) 4-Nitrophenol	(3)	11.625	109	204755	8.315
119) Dibenzofuran	(3)	11.655	168	1843660	11.323
118) 2,4-Dinitrotoluene	(3)	11.666	165	474464	12.288
121) 1-Naphthylamine	(3)	11.765	143	1924825	15.629
122) 2,3,4,6-Tetrachlorophenol	(3)	11.847	232	363378	11.923
123) 2-Naphthylamine	(3)	11.876	143	1592433	13.346
124) Diethylphthalate	(3)	12.045	149	1367700	11.146
126) Fluorene	(3)	12.115	166	1524782	11.750
125) Thionazin	(3)	12.138	107	328643	11.568
128) 5-Nitro-o-toluidine	(3)	12.144	152	385509	10.017
127) 4-Chlorophenyl-phenylether	(3)	12.150	204	689514	11.227
129) 4-Nitroaniline	(3)	12.156	138	416455	11.572

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/21/2018 at 11:29.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1406.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 22:14 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Sample Name: 170WBLCSD Lab Sample ID: 170WBLCSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
130) 4,6-Dinitro-2-methylphenol	(4)	12.202	198	274034	11.625
131) N-Nitrosodiphenylamine	(4)	12.296	169	1329789	12.638
135)$2,4,6-Tribromophenol	(3)	12.412	330	677811	45.888
137) Tetraethyldithiopyrophosphate	(4)	12.529	97	300207	11.486
140) Diallate (peak 1)	(4)	12.657	86	644991	8.211
142) Phenacetin	(4)	12.680	108	921211	11.704
143) 4-Bromophenyl-phenylether	(4)	12.727	248	386936	12.024
144) Diallate (peak 2)	(4)	12.756	86	202352	3.277
145) Hexachlorobenzene	(4)	12.780	284	372734	11.658
147) Dimethoate	(4)	12.844	87	574640	8.638
150) 4-Aminobiphenyl	(4)	13.036	169	1260294	10.508
151) Pentachloronitrobenzene	(4)	13.036	237	170444	12.035
149) Pentachlorophenol	(4)	13.036	266	256705	11.634
152) Pronamide	(4)	13.147	173	676790	12.823
153)*Phenanthrene-d10	(4)	13.246	188	769659	5.000
155) Phenanthrene	(4)	13.275	178	2282193	12.649
157) Anthracene	(4)	13.339	178	2285378	12.904
163) Carbazole	(4)	13.549	167	2196759	12.943
165) Di-n-butylphthalate	(4)	14.073	149	2635878	12.166
168) 4-Nitroquinoline-1-oxide	(4)	14.307	190	2754735	117.016
170) Methapyrilene	(4)	14.447	97	6697521	92.839
171) Isodrin	(4)	14.662	193	263829	12.996
173) Fluoranthene	(4)	14.872	202	2464885	12.526
175)*Pyrene-d10	(5)	15.175	212	786175	5.000
177) Pyrene	(5)	15.204	202	2570383	11.928
179)$Terphenyl-d14	(5)	15.490	244	3143705	22.979
182) p-Dimethylaminoazobenzene	(5)	15.717	225	487615	12.815
185) Chlorobenzilate	(5)	15.816	139	700943	10.468
187) 3,3'-Dimethylbenzidine	(5)	16.265	212	1563189	11.324
188) Butylbenzylphthalate	(5)	16.335	149	1212079	11.279
191) 2-Acetylaminofluorene	(5)	16.679	181	1160505	13.478
193) 3,3'-Dichlorobenzidine	(5)	17.174	252	840182	11.706
195) Benzo(a)anthracene	(5)	17.174	228	2325115	12.272
196) Chrysene	(5)	17.238	228	2360116	12.440
199) bis(2-Ethylhexyl)phthalate	(5)	17.402	149	1735694	11.755
205) Di-n-octylphthalate	(6)	18.550	149	2905987	12.124
206) Benzo(b)fluoranthene	(6)	19.005	252	2165879	12.154
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.016	256	1035468	12.386
208) Benzo(k)fluoranthene	(6)	19.057	252	2369341	13.370
211) Benzo(a)pyrene	(6)	19.523	252	2006858	12.473

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 06/21/2018 at 11:29.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18jun20a.b/df1406.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 22:14 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

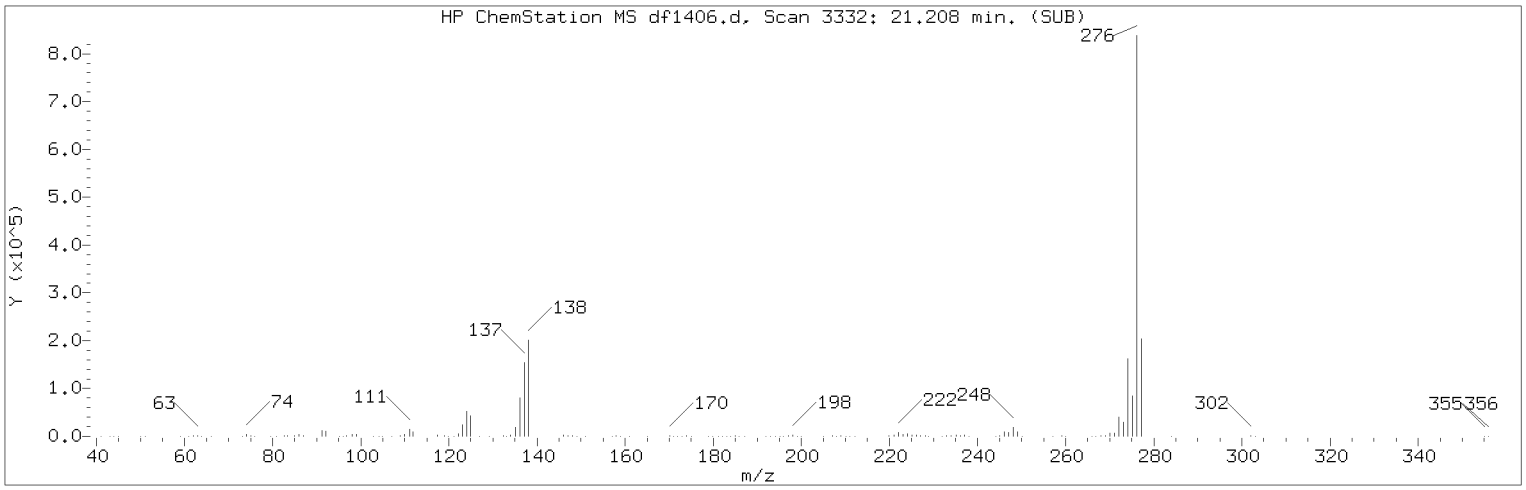
Sample Name: 170WBLCSD Lab Sample ID: 170WBLCSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
213)*Perylene-d12	(6)	19.611	264	738808	5.000
215) 3-Methylcholanthrene	(6)	20.100	268	1087334	13.119
219) Indeno(1,2,3-cd)pyrene	(6)	21.208	276	1486226M	9.966
220) Dibenz(a,h)anthracene	(6)	21.249	278	1690406	10.465
221) Benzo(g,h,i)perylene	(6)	21.563	276	1628306	10.234

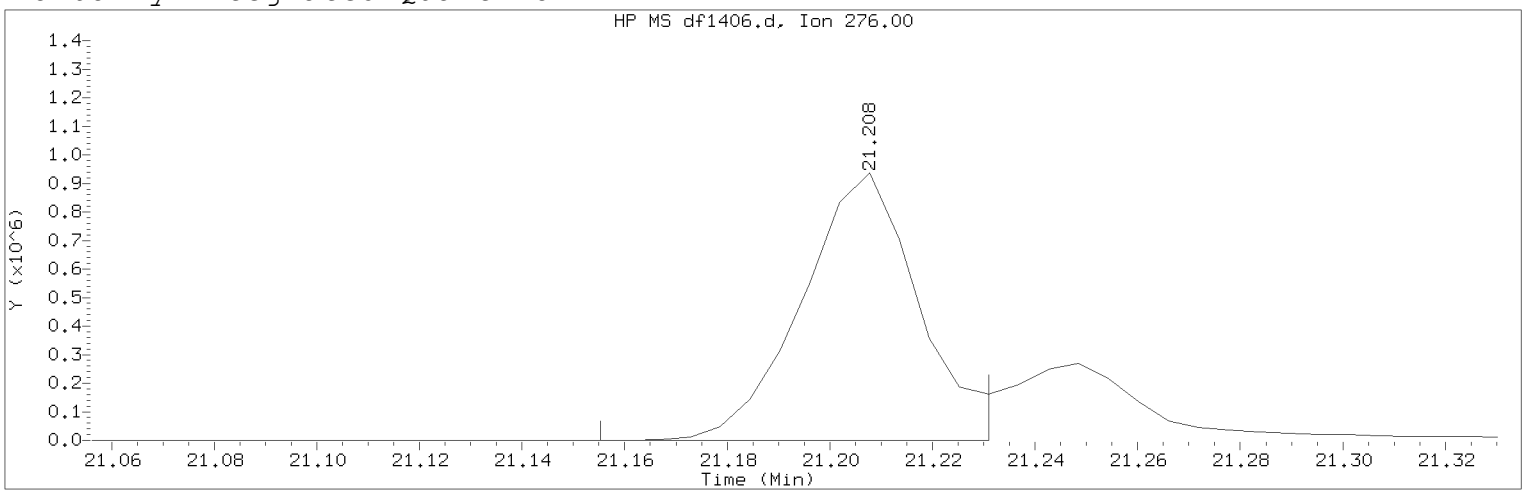
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Edward Monborne
on 06/21/2018 at 11:29.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18jun20a.b/df1406.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 22:14 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 23:36 art12405

Sample Name: 170WBLCSD Lab Sample ID: 170WBLCSD

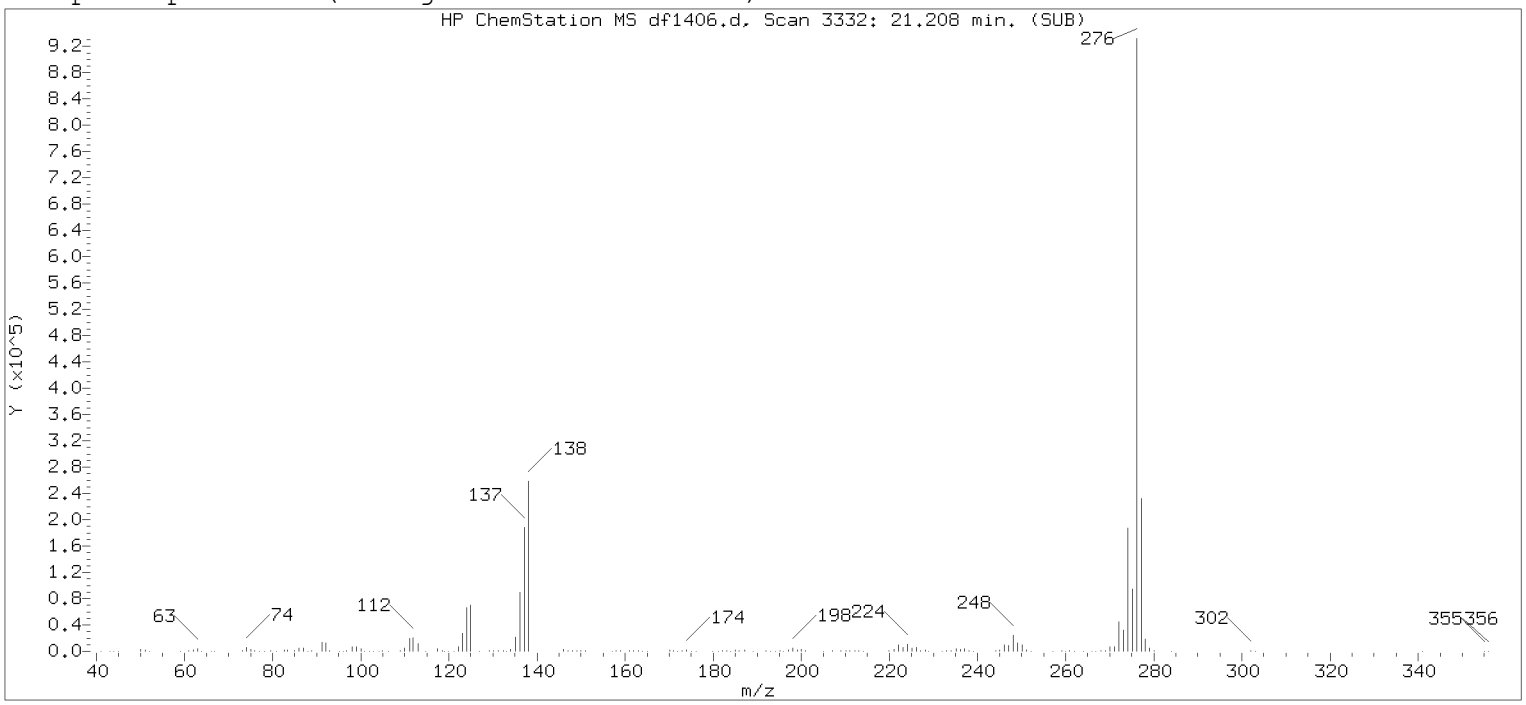
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3332
Retention Time (minutes) : 21.208
Quant Ion : 276.00
Area (flag) : 1486226M
On-Column Amount (ng/ul) : 9.9658
Integration start scan : 3322 Integration stop scan: 3335
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

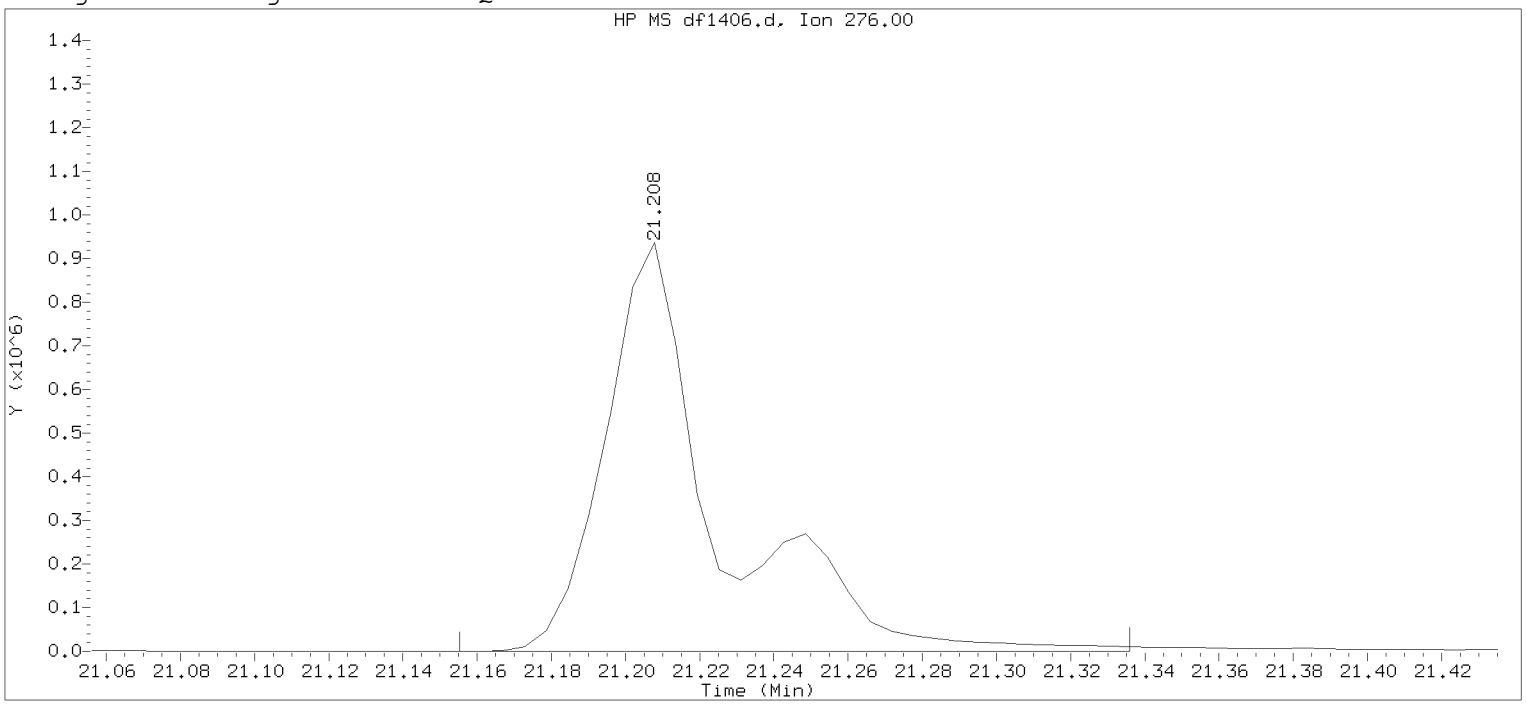
Analyst responsible for change: Digitally signed by Edward Monborne
on 06/21/2018 at 11:29.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Matthew E. Barton on 06/24/2018 at 20:41.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18jun20a.b/df1406.d Instrument ID: HP19760.i
Injection date and time: 20-JUN-2018 22:14 Analyst ID: art12405

Method used: /chem/HP19760.i/18jun20a.b/rv8270d.m Sublist used: QC170WBM
Calibration date and time: 20-JUN-2018 21:16
Date, time and analyst ID of latest file update: 20-Jun-2018 22:41 Automation

Sample Name: 170WBLCSD Lab Sample ID: 170WBLCSD

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3332		
Retention Time (minutes)	: 21.208		
Quant Ion	: 276.00		
Area	: 1970298		
On-column Amount (ng/ul)	: 13.2117		
Integration start scan	: 3322	Integration stop scan:	3353
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 06/21/2018 at 11:29.
Target 3.5 esignature user email: [redacted]

Extraction/Distillation/Digestion Logs

Semivolatiles by GC/MS

Organic Extraction Batchlog Assigned to: 26557 Logan Brosemer Reviewed by: MB10205 6/20/18 Start Date: 6-19-18 Start time: 8:30

18169WAM026

Tech 1: LMB 26557 Tech 2: _____

Dept: 26 Prep Analysis: 11010 8270D BNA Extraction SVOAs 8270D MINI

QC	Sample Code	Amt (mL)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments
9662311MS	C5009	241	SS1816526A	1.0 ⑧	~~MS1816226B~~ MS1816526B MS1816626A	1.0	1	✓	✓	153A	Tan Tint
9662312MSD	C5009	237	SS1816526A	⑧	~~MS1816226B~~ MS1816526B MS1816626A	↓	1	✓	✓	153A	Tan Tint
BLANKA	SBLKWM169	250	SS1816526A		—	—	1	✓	✓	Z	Tap H2O
LCSA	169WMLCS	250	SS1816526A	↓ ⑧	~~MS1816226B~~ MS1816526B MS1816626A	1.0 ↓	1	✓	✓	Z	↓

LMB 26557 6-19-18
⑧ MS1816926A

Solvent Used	Lot No.
10N NaOH	175869
Methylene Chloride	184111
Sodium Sulfate	181694
Sulfuric Acid	175080

Spike Solutions: Witness: _____

MS1816526B	APPIX #1 MINI SPIKE
~~MS1816226B~~	MINI SEP. LCS SPIKE #1
MS1816626A	MINI SEP. LCS SPIKE #2
SS1816526A	MINI SEP. BNA SURROGATE

Sample #		Sample Code	Amt (mL)	SS/IS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments	Analyses	List	Due Date	Prio
1 9659869	R	CCD14	243	SS1816526A	1.0	1	✓	✓	153B	Tan Tint	14241	22149	06/22/2018	N
2 9659871	R	CCS10	241	SS1816526A		1	✓	✓	153B	Clear	14241	22149	06/22/2018	N
3 9659872	R	CCS11	240	SS1816526A		1	✓	✓	153B	Clear	14241	22149	06/22/2018	N
4 9659874	R	CCEB1	243	SS1816526A		1	✓	✓	153B	Clear	14241	22149	06/22/2018	N
5 9659875	R	CCEB2	242	SS1816526A		1	✓	✓	153B	Clear	14241	22149	06/22/2018	N
6 9660089	R	L3411	247	SS1816526A		1	✓	✓	153B	Cloudy	14241	24508	06/25/2018	N
7 9660091	R	L3413	233	SS1816526A		1	✓	✓	153B	Tan Tint	14241	24508	06/25/2018	N
8 9662303		C5002	246	SS1816526A		1	✓	✓	153A	Cloudy	14241	22143	06/26/2018	N
9 9662304		C5003	247	SS1816526A		1	✓	✓	153A	Cloudy	14241	22143	06/26/2018	N
10 9662305		C5004	243	SS1816526A		1	✓	✓	153A	Cloudy	14241	22143	06/26/2018	N
11 9662306		C5005	241	SS1816526A		1	✓	✓	153A	Cloudy	14241	22143	06/26/2018	N
12 9662307		C5006	240	SS1816526A		1	✓	✓	153A	Tan cloudy	14241	22143	06/26/2018	N
13 9662308		C5007	247	SS1816526A		1	✓	✓	153A	Clear	14241	22143	06/26/2018	N
14 9662309		C5008	249	SS1816526A	↓	1	✓	✓	153A	Clear	14241	22143	06/26/2018	N

CBD50 Page 882 of 967

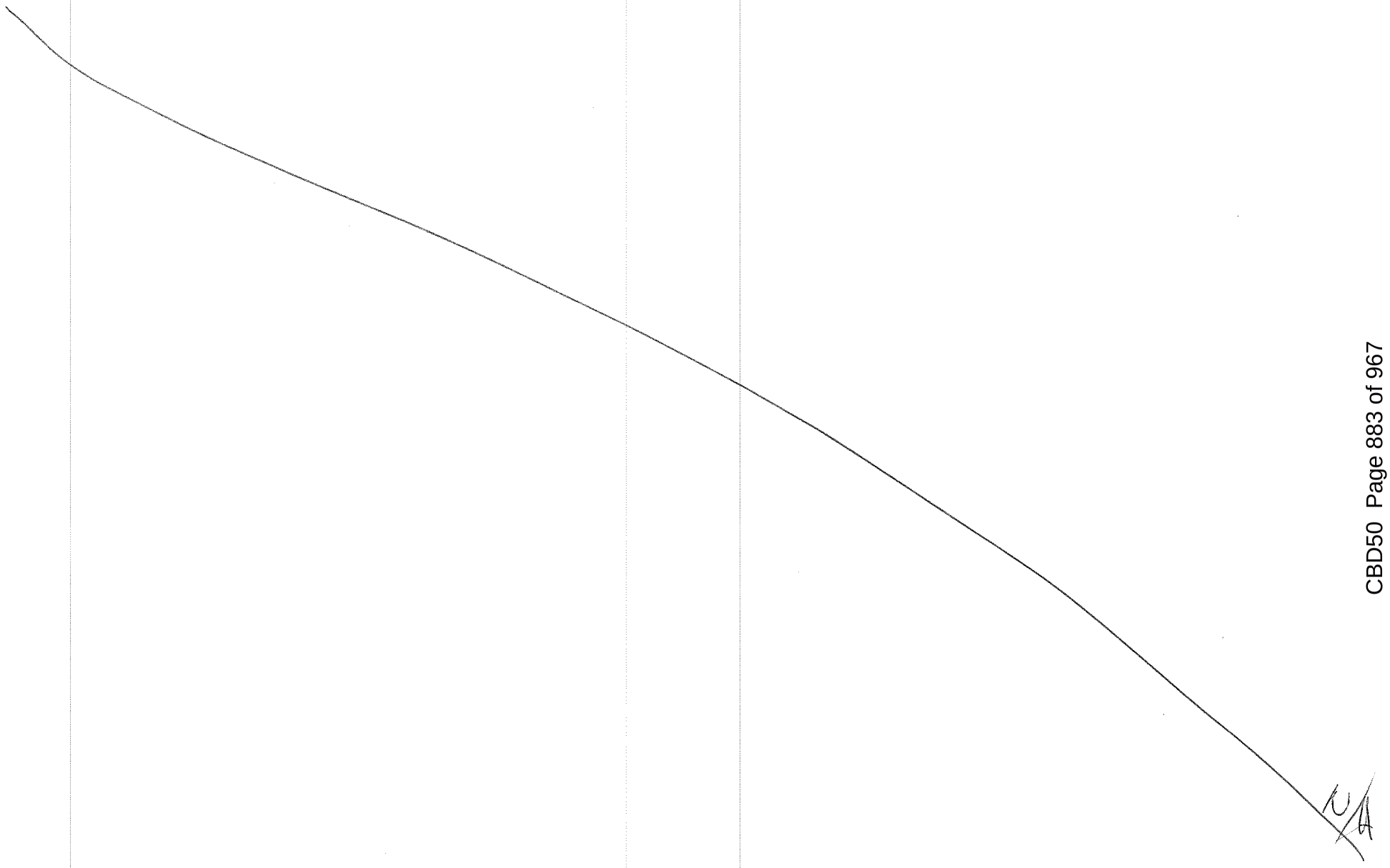
Bench#	Bench#	Bench#		
Rack ID:	—	Work Station	Tcable	Micro Temp 100? —
Internal Standard	RVISTD1686	Balance #	25996	

R-VAP ID 3	90 C	R-VAP ID 4	90 C	R-VAP ID 5	90 C			18169WAM026
S-bath ID	C	S-bath ID	C	N-Evap	C	M-vap	C	

DF = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

	Sample #	Sample Code	Amt (mL)	SS/IS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments	Analyses	List	Due Date	Prio
15	9662310BKG	C5009	243	SS1816526A	1.0	1	✓	✓	153A	Clear	14241	22143	06/26/2018	N



Bench#	Bench#	Bench#									
Rack ID:		Work Station	Tcemble	Micro Temp 100?		R-VAP ID	90 C	R-VAP ID	C	R-VAP ID	C
Internal Standard		Balance #	259960			S-bath ID	C	S-bath ID	C	N-Evap	C	M-vap	C

18169WAM026

DF = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

Organic Extraction Batchlog Assigned to: 10217 Kate Lutte Reviewed by: ATT2405 6/20/18 Start Date: 6/19/18 Start time: 16:50

18170WAB026 Tech 1: MO13536 Tech 2: KLUCZN

Dept: 26 Prep Analysis: 11010 8270D BNA Extraction SVOAs 8270D MINI

QC	Sample Code	Amt mL	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments
BLANKA	SBLKWB170	250	SS1816526A	1.0	—	—		✓	✓	7	Tap H_2O
LCSA	170WBLCS	250	SS1816526A	↓	~~MS1816226B~~ (5)	1.0	1	✓	✓		Tap H_2O
					MS1816526B	1.0	1				
					MS1816626A	1.0	1				
LCSDA	170WBLCSD	250	SS1816526A	↓	~~MS1816226B~~ (5)	1.0	1	✓	✓	7	Tap H_2O
					MS1816526B	1.0	1				
					MS1816626A	1.0	1				

Solvent Used	Lot No.
10N NaOH	175869
Methylene Chloride 184111	~~184111~~ (3) MO13536 6/19/18
Sodium Sulfate	18170A
Sulfuric Acid	175680

Spike Solutions: Witness:

MS1816526B APPIX #1 MINI SPIKE

~~MS1816226B~~ MINI SEP. LCS SPIKE #1

MS1816626A MINI SEP. LCS SPIKE #2

SS1816526A MINI SEP. BNA SURROGATE

(5) MS1816926A MO13536 6/19/18

Sample #	Sample Code	Amt mL	SS/IS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments	Analyses	List	Due Date	Prio
1 9662185	AR50E	248	SS1816526A	1.0	1.0	✓	✓	153A	clear	14241	27993	06/26/2018	N
2 9662314	C5010	249	SS1816526A	1.0	1.0	✓	✓	153A	yellow tint	14241	22143	06/26/2018	N
3 9662315	C5011	244	SS1816526A	1.0	1.0	✓	✓	153A	clear	14241	22143	06/26/2018	N
4 9664270	OO22-	249	SS1816526A	1.0	1.0	✓	✓	153A	clear	14241	22189	06/27/2018	N
5 9664796	39G05	234	SS1816526A	1.0	1.0	✓	✓	153A	brown - cloudy	14241	28048	06/25/2018	S

CBD50 Page 884 of 967

N/A MO13536

Bench#	Bench# 5	Bench# 4		
Rack ID:		Work Station	Fumble	Micro Temp 100?
Internal Standard	RVISTD1688	Balance #	25996	

R-VAP ID 2	90 C	R-VAP ID 6	90 C	R-VAP ID	C
S-bath ID	C	S-bath ID	C	N-Evap	C

M-vap C

18170WAB026

DF = Dilution Factor FV = Final Volume Page 1 of 1

Documented temps are NIST corrected.

Metals in Liquid Data

Case Narrative/Conformance Summary

Metals in Liquid

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD50

ICP Metals

Fraction: Metals in Liquid

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9662303	TF-23-WD-5.26-180612	X		1	Field Duplicate Sample
9662304	TF-5-W-4.59-180612	X		1	
9662305	TF-23-W-5.26-180612	X		1	
9662306	DC-2-W-7.50-180612	X		1	
9662307	DC-1-W-2.00-180612	X		1	
9662308	DB-8A-W-5.00-180612	X		1	
9662309	OS-2-W-6.00-180613	X		1	
9662310	OR-2-W-26.00-180613	X		1	Background/Unspiked
9662311	OR-2-W-26.00-180613 MS	X		1	Matrix Spike
9662312	OR-2-W-26.00-180613 MSD	X		1	Matrix Spike Duplicate
9662313	OR-2-W-26.00-180613 DUP	X		1	Duplicate
9662314	OR-3-W-65.50-180614	X		1	
9662315	OS-3-W-6.00-180614	X		1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

All QC is within specification.

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD50

ICP Metals

Fraction: Metals in Liquid

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

The instrument detection limits (IDLs) are used for determining the U flags on the initial and continuing calibration blanks. The highest IDL is selected when multiple instruments are used for an analysis. The method detection limits (MDLs) are used for determining all other U flags.

The final concentration (ug/l) is obtained using the following calculation:

$$\text{Instrument reading (ug/l)} \times \frac{\text{final volume}}{\text{initial volume}} \times \text{dilution factor}$$

Abbreviation Key

BKG – Background	AF - Cold Vapor Atomic Fluorescence
DUP – Duplicate	U - Below MDL
MS - Matrix Spike	B - Below LOQ
MSD - Matrix Spike Dup	N - Matrix Spike out of specifications
B – Blank	* - Duplicate out of specifications
Q - Laboratory Control Sample	E - Matrix Effects exist as proven by Serial Dilution or Spiked Dilution
Y - Laboratory Control Sample Duplicate	A - Post Digestion Spike
P - ICP Atomic Emission Spectrometer	L - Serial Dilution
MS - ICP Mass Spectrometry	R - Internal Standard Relative Intensity OOS
CV - Cold Vapor	NR - Not Required

Sample Data

Metals in Liquid

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9662303 % Solids: 0.0
Concentration Units: UG/L Date Received: 06/15/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	6.0	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9662304 % Solids: 0.0
Concentration Units: UG/L Date Received: 06/15/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	6.0	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9662305 % Solids: 0.0
Concentration Units: UG/L Date Received: 06/15/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	6.0	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9662306 % Solids: 0.0
Concentration Units: UG/L Date Received: 06/15/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	6.0	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9662307 % Solids: 0.0
Concentration Units: UG/L Date Received: 06/15/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	6.0	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9662308 % Solids: 0.0
Concentration Units: UG/L Date Received: 06/15/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	6.0	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9662309 % Solids: 0.0
Concentration Units: UG/L Date Received: 06/15/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	6.0	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9662310BKG % Solids: 0.0
Concentration Units: UG/L Date Received: 06/15/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	6.0	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9662311MS % Solids: 0.0
Concentration Units: UG/L Date Received: 06/15/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	147			P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9662312MSD % Solids: 0.0
Concentration Units: UG/L Date Received: 06/15/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	146			P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9662313DUP % Solids: 0.0
Concentration Units: UG/L Date Received: 06/15/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	6.0	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9662314 % Solids: 0.0
Concentration Units: UG/L Date Received: 06/15/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	6.0	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9662315 % Solids: 0.0
Concentration Units: UG/L Date Received: 06/15/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	6.0	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

Quality Control and Calibration Summary Forms

Metals in Liquid

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QUALITY CONTROL REFERENCE LIST

SDG No.: CBD50
Matrix: WATER

Analyte	Batch Number	Lab Sample ID
Lead	181701063501	9662303
		9662304
		9662305
		9662306
		9662307
		9662308
		9662309
		9662310BKG
		9662311MS
		9662312MSD
		9662313DUP
		9662314
		9662315
		P17063AB
		P17063AQ

LEGEND:

BKG = Background	B = Blank
DUP = Duplicate	Q = Laboratory Control Sample
MS = Matrix Spike	Y = Laboratory Control Sample Duplicate
MSD = Matrix Spike Duplicate	

Method: P
Run Name: 1817105T75
Calibration Date(s): 06/20/2018
Concentration Units: UG/L

Analyte	Mass	Initial Calibration			Continuing Calibration					
		True	Found	%R(1)	True	Found	%R(2)	True	Found	%R(2)
Lead		600.0	601.93	100.3	500.0	496.46	99.3	500.0	487.31	97.5

(1) Control Limits: 90 - 110
(2) Control Limits: 90 - 110
* Outside Limits. If Continuing Calibration is outside limits, high, only ND samples are accepted.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

QUALITY ASSURANCE SUMMARY
FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
SDG No.: CBD50

Method: P
Run Name: 1817105T75
Calibration Date(s): 06/20/2018
Concentration Units: UG/L

Analyte	Mass	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(2)	True	Found	%R(2)
Lead					500.0	484.93	97.0	500.0	496.15	99.2

(1) Control Limits: 90 - 110
(2) Control Limits: 90 - 110
* Outside Limits. If Continuing Calibration is outside limits, high, only ND samples are accepted.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 2B
LOW LEVEL CHECK STANDARD
SDG No.: CBD50

Method: P
Run Name: 1817105T75
Calibration Date(s): 06/20/2018
Concentration Units: UG/L

Analyte	Mass	Initial True	Initial Found	Initial %R	Final Found	Final %R
Lead		30.0	27.12	90.4	30.43	101.4

Control limits: 70% - 130%

For 6010B - Control limits apply to values up to 10 times the true value of the low level check standard. If LLC is out of specification, high, results < RL are acceptable.
For 6010C - If Low Level Check (LLC) is out of specification, results > CCV are acceptable. If LLC is out of specification, high, results < RL are acceptable.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 3
BLANKS
SDG No.: CBD50

Method: P
Run Name: 1817105T75
Calibration Date(s): 06/20/2018
Preparation Blank Matrix: WATER

		Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)								Preparation Blank (UG/L)			
Analyte	Mass		C	1	C	2	C	3	C	Mass		C	Batch Number
Lead		2.9	U	2.9	U	2.9	U	2.9	U		6.000	U	181701063501

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below IDL/MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	
AF = Cold Vapor Atomic Fluorescence	

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QUALITY ASSURANCE SUMMARY
FORM 3
BLANKS
SDG No.: CBD50

Method: P
Run Name: 1817105T75
Calibration Date(s): 06/20/2018

		Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank (UG/L)			
Analyte	Mass		C	1	C	2	C	3	C	Mass		C	Batch Number
Lead				2.9	U								

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence	U= Below IDL/MDL B= Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 4A
ICP-AES INTERFERENCE CHECK SAMPLE
SDG No.: CBD50

Instrument ID: 23290
Run Name: 1817105T75
Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	500000	500000	490795	98.2	498957.2	99.8	498442	99.7	505168.2	101.0
Calcium	500000	500000	489322	97.9	492778.2	98.6	490247	98.0	497951.6	99.6
Iron	200000	200000	194983	97.5	198273.0	99.1	197275	98.6	200132.2	100.1
Lead	0	550	-2		521.5	94.8	-8		508.4	92.4
Magnesium	500000	500000	518119	103.6	517890.4	103.6	522275	104.5	528537.6	105.7

Control Limits: All Metals 80%-120%

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QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Background Lab Sample ID: 9662310BKG Matrix Spike Lab Sample ID: 9662311MS Matrix Spike Duplicate Lab Sample ID: 9662312MSD
Batch Number(s): 181701063501

		BKG Sample		MS Sample		MSD Sample		MS Spike	MSD Spike		MS		MSD				Control Limit		
Analyte	Mass	Result	C	Result	C	Result	C	Added	Added	Units	%R	Q	%R	Q	RPD	Q	%R	RPD	M
Lead		6.0000	U	147.1600		146.1800		150.0000	150.0000	UG/L	98		97		1		75 - 125	20	P

Note: Results shown are reported on an as-received basis.
If Matrix Spike/ Matrix Spike Duplicate were out of specification, see Post Digestion Spike form.

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

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QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Background Lab Sample ID: 9662310BKG Duplicate Lab Sample ID: 9662313DUP
Batch Number(s): 181701063501
Concentration Units: UG/L

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Lead			6.0000	U	6.0000	U			P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

Note: Results shown are reported on an as-received basis.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
* = Duplicate Out of Spec

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QUALITY ASSURANCE SUMMARY
FORM 7
LABORATORY CONTROL SAMPLE
SDG No.: CBD50
Matrix: WATER

Analyte	Mass	Batch Number	Units	True	Found	C	Control Limits (%)	%R	M	In Spec
Lead		181701063501	UG/L	150.000	146.220		87 - 113	97	P	Yes

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence	U= Below MDL B= Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: CBD50
Matrix: WATER Level (low/med): LOW

Background Lab Sample ID: 9662310BKG Serial Dilution Lab Sample ID: 9662310L
Batch Number(s): 181701063501
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Lead		6.0000	U	30.0000	U			P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

Method: P
Instrument ID: 23290
Date: 04/2018

Analyte	Wavelength (nm)	Background	IDL (UG/L)
Lead	220.35		2.9

Comments:

_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 10 MDL
METHOD DETECTION LIMITS (ANNUALLY)
SDG No.: CBD50
Matrix: WATER

Method: P
Date: 06/2017

Analyte	Wavelength (nm)	Background	LOQ (UG/L)	MDL (UG/L)
Lead	220.35		30.0	6.0

The LOQ/MDL must be adjusted for % Solids and Sample Weight for samples reporting in mg/kg and ug/L.

Comments:

_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 11
ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)
SDG No.: CBD50

Instrument ID: 23290
Date: 02/2018

Analyte	Wavelength (nm)	Interelement Correction Factor for: AL	CA	FE	MG	CU
Lead	220.35	0.0002420	0.0000000	0.0000000	0.0000000	0.0004980

Comments:
_____
_____
_____
_____

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QUALITY ASSURANCE SUMMARY
FORM 11
ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)
SDG No.: CBD50

Instrument ID: 23290
Date: 02/2018

Analyte	Wavelength (nm)	Interelement Correction Factor for: SI	--	--	--	--
Lead	220.35	0.0000350				

Comments:

_____
_____
_____
_____

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QUALITY ASSURANCE SUMMARY
FORM 12
LINEAR RANGES
SDG No.: CBD50

Method: P
Instrument ID: 23290
Date: 04/2018

Analyte	Wavelength (nm)	Integration Time (Sec.)	Concentration (ug/L)
Lead	220.35	10.00	20000.0

Comments:
_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

Method: P
Batch Number: 181701063501

Lab Sample ID	Date	Initial Volume(ml)	Final Volume(ml)
9662303	06/20/2018	50.00	50
9662304	06/20/2018	50.00	50
9662305	06/20/2018	50.00	50
9662306	06/20/2018	50.00	50
9662307	06/20/2018	50.00	50
9662308	06/20/2018	50.00	50
9662309	06/20/2018	50.00	50
9662314	06/20/2018	50.00	50
9662315	06/20/2018	50.00	50
9662310BKG	06/20/2018	50.00	50
9662313DUP	06/20/2018	50.00	50
9662312MSD	06/20/2018	50.00	50
9662311MS	06/20/2018	50.00	50
P17063AB	06/20/2018	50.00	50
P17063AQ	06/20/2018	1.00	1

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

LEGEND:
BKG = Background
DUP = Duplicate
MS = Matrix Spike
MSD = Matrix Spike Duplicate
B = Blank
Q = Laboratory Control Sample
Y = Laboratory Control Sample Duplicate

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QUALITY ASSURANCE SUMMARY
FORM 14
ANALYSIS RUN LOG
SDG No.: CBD50

Method: P
Instrument ID: 23290
Run Name: 1817105T75

Run Start Date: 06/20/2018
Run End Date: 06/20/2018

Lab Sample ID	D/F	Time	Analytes
			P B
S0	1.00	14:29	X
S	1.00	14:32	
S	1.00	14:35	X
S	1.00	14:38	
ICV	1.00	14:41	X
ICB	1.00	14:44	X
LLC	1.00	14:47	X
ICSA	1.00	14:50	X
ICSAB	1.00	14:54	X
CCV	1.00	14:57	X
CCB	1.00	15:00	X
P17063AB	1.00	15:03	X
P17063AQ	1.00	15:06	X
9662310BKG	1.00	15:09	X
9662310A	1.00	15:12	
9662313DUP	1.00	15:15	X
9662311MS	1.00	15:19	X
9662312MSD	1.00	15:22	X
9662310L	5.00	15:25	X
ZZZZZZ	1.00	15:28	
9662303	1.00	15:31	X
CCV	1.00	15:34	X
CCB	1.00	15:37	X
9662304	1.00	15:40	X
9662305	1.00	15:44	X
9662306	1.00	15:47	X
9662307	1.00	15:50	X
9662308	1.00	15:53	X
9662309	1.00	15:56	X
9662314	1.00	15:59	X
9662315	1.00	16:02	X
CCV	1.00	16:05	X
CCB	1.00	16:08	X
LLC	1.00	16:11	X
ICSA	1.00	16:15	X
ICSAB	1.00	16:18	X
CCV	1.00	16:21	X
CCB	1.00	16:24	X

METHODS:
- P = ICP Atomic Emission Spectrometer
- MS = ICP Mass Spectrometry
- CV = Cold Vapor
- AF = Cold Vapor Atomic Fluorescence

LEGEND:
- BKG = Background
- DUP = Duplicate
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- A = Post Digest Spike
- L = Serial Dilution
- B = Blank
- Q = Laboratory Control Sample
- Y = Laboratory Control Sample Duplicate

Raw Data

Metals in Liquid

ICP Data

Metals in Liquid

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ICP-AES Run Data Report

Reviewed By
Cindy M Gehman

Reviewed Date
06/20/2018 4:51PM

Data File Name 1817105T75.TXT
Run Name: 1817105T75

Method Reference Name(s):

Verified By:
Parker D Lindstrom

Verified Date
06/21/2018 3:32PM

Analyst Employee: 3024

Instrument Parameters:

Individual Integration Time: 10.00 sec Total Integration Time: 30.00 sec Rinse Time: 15.00 sec

Element	Analyte Name	Wavelength Value
AG	Silver	328.06
AL	Aluminum	308.21
AS	Arsenic	189.04
AU	Gold	242.80
B	Boron	249.67
BA	Barium	455.40
BE	Beryllium	313.04
CA	Calcium	317.93
CD	Cadmium	226.50
CO	Cobalt	228.62
CR	Chromium	267.72
CU	Copper	327.40
FE	Iron	261.19
K	Potassium	766.49
LI	Lithium	670.78
MG	Magnesium	285.21
MN	Manganese	257.61
MO	Molybdenum	202.03
NA	Sodium	589.59
NI	Nickel	231.60
P	Phosphorus	177.49
PB	Lead	220.35
S	Sulfur	182.00
SB	Antimony	206.83
SE	Selenium	196.09
SI	Silicon	251.60
SN	Tin	189.99
SR	Strontium	421.55
TE	Tellurium	214.28
TH	Thorium	401.91
TI	Titanium	334.94
TL	Thallium	190.86
V	Vanadium	292.40
W	Tungsten	207.91
Y1	Yttrium	224.31
Y2	Yttrium	371.03
ZN	Zinc	213.86
ZR	Zirconium	339.19

The TRACE ICP utilizes Yttrium as an internal standard to compensate for fluctuations in nebulization and plasma conditions. All Yttrium readings are expressed in counts.

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 1 Date/Time: 06/20/2018 14:29

Sample Number: **S0**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AG	0.000	-9.83545	65.872	-0.00724	-0.00383	-0.00169
AL	0.000	0.01788	4761.003	0.00680	0.00774	-0.01429
AS	0.000	-0.69326	116.328	-0.01969	0.00288	-0.01312
B	0.000	-2.04345	112.610	-0.00004	-0.00002	0.00000
BA	0.000	216.18966	7.407	0.00171	0.00197	0.00192
BE	0.000	-7.84201	31.010	-0.00271	-0.00460	-0.00285
CA	0.000	26.60400	3.336	0.00184	0.00196	0.00186
CD	0.000	-2.13312	66.731	-0.03520	-0.00834	-0.04858
CO	0.000	0.15332	935.701	-0.02127	0.01812	0.00980
CR	0.000	-7.26033	46.963	-0.00009	-0.00007	-0.00003
CU	0.000	-3.04052	99.156	-0.00246	0.00011	-0.00160
FE	0.000	6.63522	14.618	0.00055	0.00043	0.00043
K	0.000	72.02522	17.480	0.22182	0.23862	0.30621
LI	0.000	15.70221	55.985	0.00172	0.00116	0.00047
MG	0.000	2.31200	72.036	0.00024	0.00022	0.00003
MN	0.000	8.63939	31.035	0.00431	0.00449	0.00240
MO	0.000	0.58294	114.004	-0.00228	0.01127	0.01620
NA	0.000	-79.44053	11.790	-0.00489	-0.00617	-0.00585
NI	0.000	4.70953	18.274	0.08119	0.06529	0.05679
P	0.000	0.13999	1005.725	0.00049	-0.00009	-0.00028
PB	0.000	0.39996	426.840	-0.00359	0.03356	-0.01273
S	0.000	0.54328	141.679	0.00035	-0.00009	0.00021
SB	0.000	-0.38996	156.548	-0.00029	0.00006	-0.00010
SE	0.000	0.11999	953.632	0.01868	0.00029	-0.01384
SI	0.000	1.38862	105.213	0.00012	-0.00001	0.00019
SN	0.000	-0.04000	673.036	0.00115	0.00216	-0.00505
SR	0.000	-106.80714	8.803	-0.00099	-0.00083	-0.00094
TH	0.000	-2.57557	90.795	0.00000	-0.00031	-0.00024
TI	0.000	22.27989	17.055	0.01045	0.01070	0.00774
TL	0.000	-2.45309	13.097	-0.03104	-0.03466	-0.04022
V	0.000	5.33325	94.240	0.00459	0.00026	0.00208
W	0.000	0.24849	59.242	0.00004	0.00005	0.00012
Y1	0.000	3474.73586	0.164	3479.35806	3476.46035	3468.38916
Y2A	0.000	115651.65157	0.279	115712.17105	115939.96711	115302.81655
Y2R	0.000	14085.55921	0.773	13961.33866	14164.33200	14131.00698
ZN	0.000	7.69923	6.553	0.11366	0.10254	0.11618
ZR	0.000	-2.07976	89.596	-0.00029	-0.00002	-0.00014

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 2 Date/Time: 06/20/2018 14:32

Sample Number: **S1**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AL	50.000	7458.25764	0.864	27.06975	26.60615	26.82416
CA	50.000	44459.51851	1.010	3.23603	3.17572	3.18573
FE	50.000	17663.49066	1.074	1.28597	1.25925	1.26780
K	50.000	15972.21321	0.706	57.92438	57.15695	57.31274
MG	50.000	95682.89528	1.051	6.96652	6.82815	6.86043
NA	50.000	61119.15888	0.776	4.43661	4.37229	4.38478
S	50.000	7452.18451	0.084	2.17785	2.17582	2.17418
SI	50.000	12089.12638	0.653	0.87638	0.86740	0.86587
Y1	50.000	3424.80055	0.285	3414.08487	3433.12869	3427.18809
Y2R	50.000	13897.80430	0.598	13802.10206	13952.56385	13938.74701

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 3 Date/Time: 06/20/2018 14:35

Sample Number: **S2**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AG	1.000	7683.31134	0.279	3.32465	3.33660	3.34297
AS	1.000	285.78954	0.703	4.18664	4.18966	4.13742
B	1.000	4996.57171	0.560	0.04309	0.04348	0.04354
BA	1.000	423319.85487	1.224	3.67075	3.63180	3.72152
BE	1.000	218802.79971	0.434	94.55685	94.96006	95.38070
CD	1.000	5739.01547	1.101	84.20949	84.38126	82.70481
CO	1.000	2969.93366	0.890	43.58036	43.56074	42.90281
CU	1.000	6283.85197	0.562	2.71304	2.72549	2.74353
LI	1.000	5731.76467	1.061	0.41479	0.40689	0.40768
MN	1.000	28946.00788	0.572	12.48111	12.59410	12.61454
NI	1.000	1683.58769	1.159	24.70844	24.76519	24.24617
P	1.000	272.34915	1.571	0.07990	0.08051	0.07811
PB	1.000	542.23606	0.809	7.91424	7.97825	7.85020
SE	1.000	314.26381	0.853	4.57509	4.63048	4.55496
SR	1.000	456481.78315	0.750	3.99624	3.94023	3.95105
TH	1.000	158.33393	1.390	0.01144	0.01114	0.01138
TL	1.000	247.77087	2.146	3.67856	3.64150	3.52951
W	1.000	656.66375	0.959	0.19281	0.19269	0.18957
Y1	1.000	3425.81177	0.621	3418.38816	3409.24308	3449.80408
Y2A	1.000	115200.95264	0.237	115112.63736	115507.10369	114983.11688
Y2R	1.000	13987.36360	0.640	13942.73534	13928.94212	14090.41335
ZN	1.000	5298.12824	0.804	77.62619	77.74629	76.61501

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 4 Date/Time: 06/20/2018 14:38

Sample Number: **S3**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
CR	1.000	5070.45220	0.242	0.04373	0.04388	0.04393
MO	1.000	1706.15138	0.360	24.54538	24.61602	24.44025
SB	1.000	317.95487	0.783	0.09173	0.09197	0.09063
SN	1.000	651.47485	0.312	9.36339	9.39921	9.34135
TI	1.000	21030.61569	0.103	9.08279	9.10098	9.09591
V	1.000	8343.32974	0.181	3.60681	3.61435	3.60132
Y1	1.000	3477.14162	0.109	3476.86431	3473.50665	3481.05389
Y2A	1.000	115639.01108	0.154	115776.25025	115437.01279	115703.77020
Y2R	1.000	14063.83751	0.291	14077.76279	14095.96388	14017.78587
ZR	1.000	2834.30398	0.130	0.20135	0.20142	0.20183

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 5

Date/Time: 06/20/2018 14:41

Sample Number: **ICV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.60294	4,589.47	0.683	0.59892	0.60275	0.60715
____ AL	29.76372	4,499.98	0.389	29.88110	29.64940	29.76065
____ AS	0.58599	168.03	0.614	0.58815	0.58799	0.58184
____ B	0.58512	2,957.41	0.339	0.58469	0.58339	0.58729
____ BA	0.60234	252,206.21	0.534	0.59942	0.60181	0.60579
____ BE	0.58036	125,503.84	0.390	0.57909	0.57902	0.58298
____ CA	29.38321	26,457.89	0.615	29.57076	29.21052	29.36835
____ CD	0.58796	3,380.06	0.316	0.59009	0.58668	0.58711
____ CO	0.58709	1,741.82	0.209	0.58828	0.58583	0.58717
____ CR	0.58303	2,911.75	0.710	0.58120	0.58012	0.58777
____ CU	0.61248	3,700.12	0.215	0.61149	0.61198	0.61398
____ FE	29.58386	10,635.33	0.316	29.64493	29.47612	29.63055
____ K	30.34221	9,823.50	0.503	30.37689	30.17532	30.47444
____ LI	0.59398	3,445.37	0.585	0.59779	0.59099	0.59317
____ MG	29.52882	57,588.61	0.602	29.70888	29.35360	29.52398
____ MN	0.60145	17,212.50	0.408	0.60050	0.59962	0.60423
____ MO	0.59202	993.00	0.197	0.59278	0.59260	0.59067
____ NA	28.66474	35,375.86	0.586	28.82914	28.49357	28.67151
____ NI	0.58713	986.08	0.251	0.58635	0.58883	0.58621
____ P	0.59059	160.70	0.741	0.59563	0.58834	0.58780
____ PB	0.60193	329.58	0.517	0.60382	0.60364	0.59834
____ S	30.89523	4,596.31	0.300	30.98549	30.89980	30.80040
____ SB	0.60789	190.11	0.477	0.60800	0.60494	0.61073
____ SE	0.58227	181.60	0.470	0.58234	0.57950	0.58497
____ SI	30.15185	7,371.61	0.558	30.22844	29.95883	30.26829
____ SN	0.59484	381.25	0.316	0.59682	0.59460	0.59309
____ SR	0.59546	269,179.25	0.574	0.59229	0.59500	0.59908
____ TH	0.57592	94.19	0.428	0.57481	0.57421	0.57875
____ TI	0.60344	12,505.45	0.472	0.60151	0.60210	0.60671
____ TL	0.59090	138.08	0.867	0.59678	0.58850	0.58742
____ V	0.59704	4,917.81	0.491	0.59459	0.59624	0.60029
____ W	0.59159	388.01	0.249	0.59083	0.59065	0.59329
____ Y1	3421.05429	3,421.05	0.135	3420.09184	3426.07471	3416.99631
____ Y2A	113874.41851	113,874.42	0.668	114332.12006	114295.46813	112995.66733
____ Y2R	14044.76295	14,044.76	0.471	13998.30339	14120.44141	14015.54404
____ ZN	0.58407	3,115.14	0.181	0.58528	0.58335	0.58357
____ ZR	0.60192	1,746.16	0.305	0.60104	0.60069	0.60402

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 6

Date/Time: 06/20/2018 14:44

Sample Number: **ICB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00013	-9.69	1087.885	0.00047	0.00084	-0.00168
____ AL	0.01791	2.78	16.508	0.01539	0.01719	0.02117
____ AS	-0.00013	-1.00	3922.804	0.00546	-0.00209	-0.00374
____ B	0.00186	7.30	22.911	0.00233	0.00149	0.00177
____ BA	0.00080	553.66	3.889	0.00084	0.00078	0.00079
____ BE	0.00020	1.22	16.072	0.00018	0.00018	0.00023
____ CA	0.00567	31.18	113.512	0.00045	0.01285	0.00369
____ CD	0.00011	-1.28	177.571	-0.00009	0.00029	0.00012
____ CO	-0.00044	-1.16	68.552	-0.00065	-0.00057	-0.00009
____ CR	-0.00072	-3.64	81.771	-0.00099	-0.00004	-0.00111
____ CU	-0.00006	1.07	683.612	-0.00048	0.00028	0.00003
____ FE	0.00286	7.59	148.504	-0.00139	0.00711	0.00287
____ K	-0.01217	67.23	346.134	-0.03812	0.03644	-0.03483
____ LI	0.00461	41.71	4.000	0.00466	0.00441	0.00477
____ MG	0.00666	15.36	80.536	0.00219	0.01261	0.00519
____ MN	0.00002	9.15	296.227	0.00009	0.00003	-0.00005
____ MO	0.00113	0.80	31.032	0.00115	0.00147	0.00077
____ NA	0.00891	-68.78	197.945	-0.00779	0.02735	0.00716
____ NI	-0.00060	3.68	142.652	-0.00131	0.00035	-0.00084
____ P	-0.00267	-0.60	46.080	-0.00257	-0.00395	-0.00150
____ PB	-0.00051	0.12	694.936	-0.00346	0.00338	-0.00143
____ S	0.00438	1.20	63.953	0.00353	0.00750	0.00210
____ SB	0.00033	-0.34	1305.695	-0.00463	0.00294	0.00267
____ SE	0.00696	0.80	93.078	0.00006	0.00790	0.01292
____ SI	0.01886	5.93	18.574	0.02246	0.01864	0.01547
____ SN	0.00138	0.86	55.660	0.00227	0.00096	0.00092
____ SR	-0.00008	-88.32	6.085	-0.00007	-0.00008	-0.00008
____ TH	0.00836	-1.18	136.517	-0.00437	0.01768	0.01177
____ TI	-0.00008	20.41	453.733	0.00034	-0.00037	-0.00022
____ TL	-0.00570	-1.49	24.756	-0.00647	-0.00657	-0.00407
____ V	-0.00001	5.14	3651.554	-0.00032	0.00051	-0.00023
____ W	0.00104	0.93	109.102	0.00123	0.00207	-0.00018
____ Y1	3469.59904	3,469.60	0.153	3475.16848	3464.61954	3469.00910
____ Y2A	114804.89269	114,804.89	0.036	114820.79844	114757.46604	114836.41359
____ Y2R	13895.42789	13,895.43	0.963	13764.46054	14031.79321	13890.02991
____ ZN	-0.00016	6.81	133.858	-0.00007	0.00000	-0.00041
____ ZR	0.00032	-0.53	161.056	0.00092	0.00009	-0.00004

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 7

Date/Time: 06/20/2018 14:47

Sample Number: **LLC**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.01114	20.39	3.501	0.01075	0.01114	0.01153
____ AL	0.44147	70.27	6.622	0.46559	0.44986	0.40896
____ AS	0.04451	11.99	3.386	0.04317	0.04422	0.04614
____ B	0.09970	503.10	0.957	0.10062	0.09978	0.09871
____ BA	0.01026	4,565.81	0.905	0.01030	0.01032	0.01015
____ BE	0.01035	2,222.53	0.271	0.01037	0.01037	0.01032
____ CA	0.41804	394.61	1.627	0.42397	0.41061	0.41952
____ CD	0.01027	58.03	1.814	0.01042	0.01033	0.01006
____ CO	0.01041	31.60	1.129	0.01030	0.01053	0.01041
____ CR	0.02991	150.97	3.077	0.02897	0.02997	0.03080
____ CU	0.02471	190.55	1.643	0.02516	0.02436	0.02463
____ FE	0.41609	156.73	2.997	0.42194	0.40177	0.42455
____ K	1.04717	406.26	6.388	1.00925	1.00786	1.12441
____ LI	0.04320	262.56	5.819	0.04448	0.04030	0.04482
____ MG	0.20743	409.63	0.798	0.20934	0.20653	0.20642
____ MN	0.01070	313.53	1.109	0.01066	0.01061	0.01083
____ MO	0.02072	34.19	1.371	0.02053	0.02104	0.02057
____ NA	2.09505	2,498.29	0.674	2.09262	2.08231	2.11022
____ NI	0.01979	38.39	4.777	0.01870	0.02033	0.02035
____ P	0.20300	56.09	2.442	0.20663	0.20501	0.19735
____ PB	0.02712	15.34	4.972	0.02838	0.02570	0.02729
____ S	1.05590	159.96	0.084	1.05683	1.05507	1.05579
____ SB	0.04336	13.30	6.779	0.04032	0.04357	0.04619
____ SE	0.04527	12.97	6.335	0.04318	0.04854	0.04410
____ SI	0.11569	29.63	4.930	0.12226	0.11275	0.11206
____ SN	0.04143	26.92	5.449	0.03972	0.04399	0.04059
____ SR	0.01000	4,517.99	0.160	0.00999	0.01000	0.01002
____ TH	0.39036	60.24	4.487	0.39752	0.37040	0.40315
____ TI	0.02090	459.23	1.131	0.02065	0.02113	0.02092
____ TL	0.05404	13.30	6.557	0.05808	0.05259	0.05146
____ V	0.01043	93.41	6.254	0.01084	0.01077	0.00968
____ W	0.02045	13.96	5.683	0.01949	0.02011	0.02174
____ Y1	3472.68673	3,472.69	0.172	3475.77842	3465.80542	3476.47635
____ Y2A	115114.37680	115,114.38	0.657	115985.56444	114736.95630	114620.60966
____ Y2R	13975.04033	13,975.04	0.610	13932.07876	14073.17682	13919.86540
____ ZN	0.04142	229.43	0.443	0.04162	0.04136	0.04127
____ ZR	0.10978	336.53	1.570	0.10898	0.10861	0.11176

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 8 Date/Time: 06/20/2018 14:50

Sample Number: **ICSA**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00001	-21.50	4918.930	-0.00113	0.00131	-0.00015
____ AL	490.79488	71,469.97	0.150	491.22711	491.21416	489.94338
____ AS	-0.00593	-8.45	50.942	-0.00574	-0.00903	-0.00300
____ B	-0.01590	505.36	4.814	-0.01502	-0.01642	-0.01625
____ BA	0.00117	651.20	2.684	0.00113	0.00120	0.00118
____ BE	-0.00020	-77.77	20.905	-0.00022	-0.00022	-0.00015
____ CA	489.32247	401,144.92	1.015	483.79854	490.75410	493.41478
____ CD	-0.00064	62.84	41.639	-0.00087	-0.00035	-0.00070
____ CO	-0.00037	-0.89	254.109	-0.00028	0.00052	-0.00133
____ CR	-0.00350	-16.21	14.427	-0.00304	-0.00404	-0.00341
____ CU	0.00584	166.52	3.311	0.00606	0.00572	0.00573
____ FE	194.98277	63,231.83	0.222	195.14991	195.30792	194.49047
____ K	-0.00052	68.28	6565.370	-0.03879	0.01207	0.02518
____ LI	-0.00156	331.64	93.514	-0.00323	-0.00056	-0.00089
____ MG	518.11920	771,840.86	1.338	523.95613	510.45557	519.94589
____ MN	0.00431	122.56	2.135	0.00422	0.00431	0.00441
____ MO	-0.00071	-2.14	142.758	-0.00167	-0.00083	0.00036
____ NA	0.02311	-49.65	61.258	0.02813	0.03407	0.00713
____ NI	-0.00892	-9.64	13.945	-0.00999	-0.00756	-0.00921
____ P	0.00651	1.79	13.409	0.00650	0.00564	0.00738
____ PB	-0.00196	54.08	267.572	-0.00377	0.00395	-0.00606
____ S	-0.05140	5.85	5.207	-0.05018	-0.05447	-0.04955
____ SB	0.00074	-0.20	407.338	-0.00162	-0.00030	0.00414
____ SE	0.03227	0.46	11.120	0.03106	0.03631	0.02944
____ SI	0.00685	2.91	42.901	0.00575	0.00462	0.01019
____ SN	0.00381	2.24	10.374	0.00375	0.00423	0.00344
____ SR	0.00767	11,186.46	3.486	0.00798	0.00753	0.00751
____ TH	-0.02325	17.36	83.917	-0.04167	-0.00280	-0.02528
____ TI	-0.00229	-23.55	26.897	-0.00196	-0.00190	-0.00300
____ TL	0.00484	-2.21	117.061	0.01008	0.00563	-0.00118
____ V	-0.00266	22.74	14.556	-0.00227	-0.00265	-0.00305
____ W	-0.00036	-0.03	214.693	-0.00101	-0.00055	0.00049
____ Y1	3191.75283	3,191.75	0.303	3183.55364	3189.28507	3202.41976
____ Y2A	105576.84956	105,576.85	0.187	105358.57956	105744.02500	105627.94411
____ Y2R	13397.77520	13,397.78	0.529	13467.14728	13400.71842	13325.45991
____ ZN	-0.00939	93.79	1.105	-0.00939	-0.00928	-0.00949
____ ZR	0.00510	10.13	15.359	0.00599	0.00452	0.00479

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 9

Date/Time: 06/20/2018 14:54

Sample Number: **ICSAB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.21167	1,511.80	0.939	0.21226	0.21329	0.20945
____ AL	498.95719	72,686.22	0.324	500.18411	499.56449	497.12296
____ AS	0.09489	18.42	5.678	0.08904	0.09966	0.09597
____ B	-0.01730	510.92	5.981	-0.01793	-0.01786	-0.01611
____ BA	0.52194	203,613.33	0.234	0.52325	0.52084	0.52172
____ BE	0.47952	96,621.36	0.264	0.48087	0.47931	0.47837
____ CA	492.77820	403,861.20	1.902	501.34453	494.22204	482.76802
____ CD	0.91582	4,979.10	0.369	0.91966	0.91454	0.91327
____ CO	0.47340	1,313.18	0.158	0.47425	0.47308	0.47286
____ CR	0.46943	2,184.12	0.281	0.46991	0.47044	0.46794
____ CU	0.53321	3,166.53	0.045	0.53296	0.53322	0.53345
____ FE	198.27299	64,230.73	0.372	198.87560	198.49208	197.45130
____ K	-0.05540	51.49	13.266	-0.05222	-0.05018	-0.06381
____ LI	-0.00152	334.19	262.488	0.00307	-0.00409	-0.00353
____ MG	517.89043	771,681.31	0.355	516.76378	516.89458	520.01293
____ MN	0.48141	12,845.70	0.223	0.48202	0.48017	0.48204
____ MO	-0.00105	-2.68	83.244	-0.00179	-0.00127	-0.00009
____ NA	0.02425	-48.38	31.260	0.03235	0.02308	0.01732
____ NI	0.91217	1,435.47	0.475	0.91715	0.91002	0.90932
____ P	0.00723	1.99	48.099	0.01124	0.00525	0.00519
____ PB	0.52149	320.08	0.316	0.51959	0.52234	0.52253
____ S	-0.04512	6.81	14.403	-0.05009	-0.03776	-0.04749
____ SB	0.61754	180.30	0.756	0.62284	0.61571	0.61406
____ SE	0.50406	137.99	0.399	0.50288	0.50639	0.50292
____ SI	0.00512	2.52	77.453	0.00967	0.00235	0.00335
____ SN	0.00497	2.94	53.572	0.00769	0.00238	0.00483
____ SR	0.00783	11,367.09	3.796	0.00761	0.00771	0.00817
____ TH	-0.04694	14.10	28.737	-0.03173	-0.05746	-0.05162
____ TI	-0.00028	15.07	160.538	0.00023	-0.00049	-0.00058
____ TL	0.09528	13.52	1.599	0.09556	0.09665	0.09364
____ V	0.50070	3,911.49	0.456	0.50323	0.50008	0.49879
____ W	0.00426	7.20	33.171	0.00311	0.00383	0.00584
____ Y1	3200.14999	3,200.15	0.139	3195.75242	3204.61954	3200.07799
____ Y2A	106112.17426	106,112.17	0.427	105593.15048	106432.21691	106311.15538
____ Y2R	13398.99395	13,398.99	0.414	13351.87587	13384.89802	13460.20796
____ ZN	0.93076	4,742.06	0.591	0.93648	0.92551	0.93027
____ ZR	0.00645	12.07	9.317	0.00576	0.00669	0.00689

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 10

Date/Time: 06/20/2018 14:57

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.50468	3,817.50	0.292	0.50637	0.50400	0.50366
____ AL	25.38164	3,799.76	0.892	25.63677	25.30302	25.20514
____ AS	0.48126	140.69	0.423	0.48059	0.48354	0.47964
____ B	0.49343	2,482.99	0.137	0.49363	0.49399	0.49268
____ BA	0.50500	210,429.40	0.268	0.50648	0.50469	0.50383
____ BE	0.48931	105,278.49	0.170	0.49025	0.48867	0.48902
____ CA	24.68445	22,025.50	0.679	24.87699	24.60605	24.57032
____ CD	0.48851	2,865.67	0.239	0.48720	0.48943	0.48890
____ CO	0.49367	1,494.61	0.292	0.49384	0.49501	0.49215
____ CR	0.48912	2,430.57	0.173	0.48844	0.49007	0.48886
____ CU	0.51932	3,123.82	0.354	0.52144	0.51821	0.51830
____ FE	25.28386	9,014.75	0.969	25.56201	25.18892	25.10065
____ K	24.79519	7,962.48	1.126	25.07221	24.79961	24.51376
____ LI	0.50665	2,912.39	0.426	0.50909	0.50586	0.50500
____ MG	24.82125	48,030.72	0.825	25.05656	24.72468	24.68251
____ MN	0.49784	14,177.15	0.436	0.49935	0.49881	0.49535
____ MO	0.49505	847.13	0.213	0.49525	0.49599	0.49391
____ NA	25.07778	30,638.72	0.823	25.30007	25.04129	24.89197
____ NI	0.48498	831.92	0.706	0.48523	0.48828	0.48144
____ P	0.49649	137.86	0.910	0.49543	0.50144	0.49259
____ PB	0.49646	277.54	0.326	0.49820	0.49617	0.49500
____ S	25.13360	3,815.60	0.158	25.11957	25.17851	25.10273
____ SB	0.50021	159.58	0.896	0.50206	0.50348	0.49510
____ SE	0.47964	152.38	0.719	0.47797	0.47734	0.48360
____ SI	25.36127	6,140.30	1.013	25.61520	25.36718	25.10143
____ SN	0.49249	322.10	0.519	0.49544	0.49097	0.49106
____ SR	0.50098	225,329.52	0.217	0.50222	0.50049	0.50022
____ TH	0.50623	81.60	5.069	0.52917	0.47852	0.51100
____ TI	0.51041	10,528.13	0.181	0.51134	0.50950	0.51040
____ TL	0.48990	116.71	0.297	0.49155	0.48883	0.48931
____ V	0.50232	4,118.26	0.252	0.50370	0.50205	0.50121
____ W	0.48983	327.88	0.444	0.48818	0.49229	0.48902
____ Y1	3490.94757	3,490.95	0.321	3500.18798	3478.49615	3494.15858
____ Y2A	113303.27188	113,303.27	0.054	113374.35065	113263.23002	113272.23498
____ Y2R	13908.91489	13,908.91	1.087	13804.77023	13839.58126	14082.39317
____ ZN	0.48462	2,639.35	0.093	0.48419	0.48509	0.48458
____ ZR	0.51293	1,474.35	1.116	0.51884	0.51253	0.50741

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 11

Date/Time: 06/20/2018 15:00

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00066	-12.39	101.804	-0.00046	-0.00011	-0.00140
____ AL	0.18336	27.55	149.071	0.02740	0.49897	0.02371
____ AS	-0.00244	-1.70	141.100	-0.00064	-0.00027	-0.00642
____ B	0.00120	4.20	66.757	0.00041	0.00201	0.00117
____ BA	0.00078	536.48	3.157	0.00081	0.00078	0.00076
____ BE	0.00026	14.09	19.497	0.00022	0.00024	0.00031
____ CA	0.16860	178.15	166.372	0.00453	0.49250	0.00878
____ CD	0.00018	-0.86	177.373	0.00003	0.00053	-0.00003
____ CO	-0.00019	-0.41	326.586	-0.00081	0.00040	-0.00014
____ CR	-0.00139	-6.93	55.762	-0.00077	-0.00226	-0.00113
____ CU	-0.00068	-3.52	79.172	-0.00088	-0.00007	-0.00108
____ FE	0.07230	32.75	175.640	-0.00667	0.21880	0.00479
____ K	-0.00797	68.60	612.596	0.00116	0.03562	-0.06068
____ LI	0.00407	38.86	72.220	0.00202	0.00744	0.00276
____ MG	0.16924	335.71	168.181	0.00534	0.49790	0.00448
____ MN	-0.00001	8.31	2377.920	0.00007	0.00005	-0.00013
____ MO	0.00056	-0.15	102.409	0.00022	0.00123	0.00024
____ NA	0.02946	-43.66	91.065	0.00513	0.05823	0.02501
____ NI	-0.00004	4.71	630.538	0.00025	-0.00023	-0.00015
____ P	-0.00068	-0.05	563.647	-0.00470	0.00300	-0.00035
____ PB	0.00240	1.77	50.594	0.00253	0.00354	0.00112
____ S	0.00733	1.68	78.634	0.00582	0.01369	0.00247
____ SB	-0.00040	-0.58	241.174	-0.00151	0.00013	0.00018
____ SE	0.00273	-0.55	33.255	0.00189	0.00259	0.00369
____ SI	0.01822	5.81	125.634	0.01018	0.04405	0.00044
____ SN	0.00056	0.33	241.157	0.00142	-0.00099	0.00124
____ SR	-0.00011	-97.03	29.073	-0.00013	-0.00012	-0.00007
____ TH	0.00031	-2.48	2931.205	0.00549	-0.01005	0.00547
____ TI	-0.00008	20.23	131.401	-0.00006	-0.00018	0.00002
____ TL	-0.00434	-1.17	80.850	-0.00456	-0.00772	-0.00072
____ V	-0.00032	2.56	96.338	-0.00027	-0.00065	-0.00004
____ W	-0.00003	0.23	3465.469	-0.00107	0.00111	-0.00013
____ Y1	3528.63780	3,528.64	0.299	3524.51555	3540.61994	3520.77792
____ Y2A	113203.63186	113,203.63	0.913	112034.81360	113578.34928	113997.73271
____ Y2R	13903.41637	13,903.42	0.777	13864.31069	14025.62438	13820.31406
____ ZN	0.00002	7.98	2406.291	-0.00031	0.00054	-0.00018
____ ZR	0.00136	1.78	96.513	0.00184	0.00236	-0.00013

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 12 Date/Time: 06/20/2018 15:03

Sample Number: **PBW** Class: **** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00110	-17.19	46.830	-0.00132	-0.00146	-0.00051
____ AL	0.02358	3.66	106.391	0.04885	0.02320	-0.00132
____ AS	0.00198	-0.39	25.214	0.00248	0.00200	0.00148
____ B	0.00120	3.94	36.131	0.00080	0.00115	0.00166
____ BA	0.00000	214.72	926.308	0.00003	0.00001	-0.00003
____ BE	0.00018	-2.63	13.243	0.00018	0.00015	0.00020
____ CA	0.00829	33.81	94.935	0.01706	0.00597	0.00184
____ CD	-0.00017	-2.91	56.176	-0.00006	-0.00021	-0.00024
____ CO	-0.00036	-0.93	83.631	-0.00039	-0.00005	-0.00064
____ CR	-0.00068	-3.43	35.822	-0.00092	-0.00068	-0.00043
____ CU	0.00744	46.84	25.114	0.00658	0.00958	0.00615
____ FE	-0.00279	5.61	157.737	0.00074	-0.00772	-0.00139
____ K	-0.02916	62.33	58.531	-0.03926	-0.00945	-0.03877
____ LI	0.00203	27.35	216.659	0.00644	-0.00234	0.00198
____ MG	0.00357	9.35	45.450	0.00495	0.00178	0.00397
____ MN	0.00022	14.64	75.890	0.00004	0.00026	0.00036
____ MO	0.00079	0.23	46.285	0.00070	0.00047	0.00119
____ NA	0.02012	-55.73	33.044	0.01570	0.01688	0.02776
____ NI	-0.00045	3.98	85.118	-0.00044	-0.00083	-0.00007
____ P	0.00133	0.51	153.013	0.00249	-0.00102	0.00252
____ PB	0.00039	0.62	785.232	-0.00312	0.00191	0.00237
____ S	0.00236	0.90	77.014	0.00445	0.00113	0.00151
____ SB	0.00204	0.20	187.850	-0.00168	0.00183	0.00596
____ SE	0.00388	-0.17	107.846	0.00868	0.00199	0.00097
____ SI	0.01719	5.59	49.631	0.02588	0.00882	0.01689
____ SN	0.00027	0.14	347.973	-0.00076	0.00108	0.00049
____ SR	-0.00008	-89.46	9.349	-0.00007	-0.00008	-0.00009
____ TH	0.00844	-1.18	218.951	0.00964	-0.01061	0.02629
____ TI	0.00010	24.04	205.084	0.00001	0.00034	-0.00004
____ TL	-0.00645	-1.70	28.189	-0.00476	-0.00621	-0.00838
____ V	0.00061	10.33	45.718	0.00093	0.00050	0.00041
____ W	0.00083	0.82	78.930	0.00132	0.00009	0.00108
____ Y1	3503.70296	3,503.70	0.140	3506.29937	3506.75132	3498.05819
____ Y2A	114021.42387	114,021.42	0.287	114378.19616	113949.26089	113736.81456
____ Y2R	14030.68264	14,030.68	0.444	14051.42358	13960.61439	14080.00997
____ ZN	0.00429	30.83	4.325	0.00438	0.00442	0.00408
____ ZR	-0.00021	-2.05	433.907	0.00060	-0.00003	-0.00121

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 13 Date/Time: 06/20/2018 15:06

Sample Number: **LCSW** Class: **** Batch: 181701063501

Initial Vol: 1.00 Final Vol: 1.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.05265	417.52	0.897	0.05260	0.05220	0.05314
____ AL	2.12109	329.33	0.222	2.12644	2.11932	2.11753
____ AS	0.14155	41.17	2.014	0.13948	0.14038	0.14480
____ B	1.93485	9,628.19	0.428	1.94439	1.92953	1.93063
____ BA	2.02224	839,697.99	1.218	2.03492	1.99386	2.03793
____ BE	0.05056	10,813.77	0.305	0.05073	0.05043	0.05052
____ CA	4.03688	3,651.23	0.554	4.06102	4.01684	4.03278
____ CD	0.04872	285.94	0.699	0.04842	0.04909	0.04864
____ CO	0.49728	1,524.38	0.299	0.49695	0.49890	0.49599
____ CR	0.19959	989.02	0.256	0.19901	0.19994	0.19983
____ CU	0.27925	1,495.80	0.686	0.28132	0.27889	0.27754
____ FE	1.02102	375.11	1.760	1.03973	1.01942	1.00390
____ K	10.09040	3,299.37	0.637	10.05595	10.16456	10.05069
____ LI	1.02639	5,882.13	0.371	1.03064	1.02519	1.02332
____ MG	2.01561	3,958.75	0.559	2.02829	2.00670	2.01185
____ MN	0.50546	14,364.59	0.141	0.50618	0.50544	0.50475
____ MO	1.95835	3,384.68	0.244	1.95301	1.95984	1.96222
____ NA	10.28045	12,576.99	0.388	10.32589	10.25123	10.26423
____ NI	0.49243	854.49	0.171	0.49308	0.49273	0.49148
____ P	0.97296	272.89	0.561	0.96924	0.97042	0.97923
____ PB	0.14622	82.16	1.972	0.14755	0.14820	0.14291
____ S	1.01985	156.89	0.563	1.02177	1.01339	1.02438
____ SB	0.50826	162.35	0.718	0.50430	0.50898	0.51150
____ SE	0.14022	43.69	1.770	0.14309	0.13880	0.13878
____ SI	1.08654	271.82	0.606	1.09278	1.08716	1.07966
____ SN	3.93094	2,593.49	0.177	3.92412	3.93065	3.93806
____ SR	1.00890	451,871.46	0.608	1.01442	1.01000	1.00230
____ TH	0.00396	-1.78	72.600	0.00727	0.00202	0.00260
____ TI	1.02139	20,992.03	0.258	1.02397	1.01871	1.02149
____ TL	0.14123	29.50	2.171	0.14387	0.13787	0.14196
____ V	0.50039	3,961.62	0.608	0.50390	0.49859	0.49869
____ W	0.00283	4.65	29.478	0.00258	0.00376	0.00215
____ Y1	3521.21855	3,521.22	0.337	3533.07269	3521.26787	3509.31507
____ Y2A	113012.45584	113,012.46	0.295	112765.14697	113391.02180	112881.19876
____ Y2R	13979.37071	13,979.37	0.127	13979.89737	13996.83387	13961.38090
____ ZN	0.48298	2,635.32	0.288	0.48142	0.48342	0.48409
____ ZR	1.01675	2,864.86	0.462	1.02082	1.01782	1.01162

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 14 Date/Time: 06/20/2018 15:09

Sample Number: **9662310** Class: U*** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00009	-5.78	686.690	0.00055	0.00038	-0.00064
____ AL	0.00684	1.00	180.484	-0.00540	0.00663	0.01929
____ AS	0.00399	0.19	23.470	0.00445	0.00291	0.00460
____ B	0.04879	234.68	2.241	0.04966	0.04915	0.04756
____ BA	0.05009	20,981.77	0.907	0.05056	0.05006	0.04965
____ BE	0.00016	-5.93	27.188	0.00021	0.00013	0.00014
____ CA	82.72003	73,131.94	0.081	82.65985	82.79258	82.70766
____ CD	-0.00010	-2.48	352.897	0.00015	-0.00049	0.00005
____ CO	0.00047	0.95	54.961	0.00070	0.00052	0.00019
____ CR	-0.00031	-1.55	157.163	0.00025	-0.00062	-0.00055
____ CU	0.00065	17.03	128.346	-0.00014	0.00057	0.00153
____ FE	-0.00276	5.54	134.670	-0.00260	0.00087	-0.00656
____ K	1.02883	397.44	8.000	1.09932	0.93838	1.04878
____ LI	0.00581	105.29	16.517	0.00527	0.00692	0.00524
____ MG	27.53329	53,055.06	0.065	27.52609	27.52015	27.55363
____ MN	0.32039	9,099.34	0.389	0.31898	0.32135	0.32084
____ MO	0.00308	4.15	15.480	0.00275	0.00286	0.00363
____ NA	21.74277	26,471.91	0.240	21.73689	21.69374	21.79769
____ NI	0.00046	4.84	182.205	0.00115	0.00072	-0.00048
____ P	0.00113	0.45	185.215	-0.00125	0.00192	0.00272
____ PB	0.00349	2.45	30.240	0.00247	0.00458	0.00341
____ S	16.17052	2,454.29	0.363	16.10302	16.19980	16.20873
____ SB	-0.00190	-1.04	164.995	-0.00493	0.00133	-0.00210
____ SE	0.00340	-0.08	119.060	0.00431	0.00693	-0.00103
____ SI	6.67470	1,611.29	0.286	6.69038	6.68022	6.65349
____ SN	0.00172	1.08	59.279	0.00072	0.00276	0.00169
____ SR	0.27033	122,347.77	0.406	0.26977	0.27159	0.26962
____ TH	-0.00458	-3.26	249.855	-0.01746	0.00445	-0.00074
____ TI	0.00133	49.09	27.814	0.00160	0.00149	0.00091
____ TL	-0.00677	-1.65	15.380	-0.00706	-0.00764	-0.00561
____ V	0.00011	5.87	169.215	0.00031	-0.00008	0.00011
____ W	0.00140	1.18	126.669	-0.00057	0.00288	0.00189
____ Y1	3484.47222	3,484.47	0.508	3503.11169	3482.40176	3467.90321
____ Y2A	112901.26344	112,901.26	0.281	113181.01639	112557.43108	112965.34283
____ Y2R	13865.32019	13,865.32	0.818	13955.91172	13738.07385	13901.97500
____ ZN	0.00129	14.66	3.731	0.00134	0.00129	0.00125
____ ZR	0.00268	5.08	50.720	0.00115	0.00373	0.00316

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 15 Date/Time: 06/20/2018 15:12

Sample Number: **9662310** Class: UP** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.02294	185.67	3.917	0.02378	0.02305	0.02199
____ AL	1.02508	155.37	1.415	1.04085	1.02209	1.01230
____ AS	0.48885	141.96	0.243	0.48996	0.48898	0.48760
____ B	0.24258	1,201.06	0.534	0.24361	0.24113	0.24300
____ BA	0.09986	41,822.76	0.368	0.09978	0.09954	0.10026
____ BE	0.01990	4,235.21	0.302	0.01997	0.01987	0.01987
____ CA	81.55613	72,524.22	0.190	81.73291	81.49054	81.44495
____ CD	0.04791	278.75	1.663	0.04724	0.04879	0.04769
____ CO	0.09726	294.51	0.305	0.09761	0.09707	0.09712
____ CR	0.19679	975.96	0.339	0.19753	0.19662	0.19623
____ CU	0.50304	3,042.73	0.482	0.50559	0.50277	0.50077
____ FE	0.50326	187.81	2.388	0.48968	0.50757	0.51253
____ K	3.02024	1,035.05	0.578	3.02913	3.00012	3.03146
____ LI	1.02266	5,900.00	0.154	1.02088	1.02326	1.02384
____ MG	27.82666	53,920.80	0.259	27.90026	27.75603	27.82369
____ MN	0.37299	10,611.34	0.237	0.37247	0.37250	0.37402
____ MO	0.20015	342.18	0.763	0.20170	0.20009	0.19865
____ NA	23.22648	28,445.37	0.265	23.29542	23.20718	23.17683
____ NI	0.14326	249.31	0.931	0.14410	0.14396	0.14172
____ P	1.00165	278.71	0.253	1.00371	1.00242	0.99881
____ PB	0.48772	270.16	0.680	0.49008	0.48915	0.48393
____ S	17.06530	2,596.57	0.151	17.05582	17.09437	17.04570
____ SB	0.40935	129.69	0.779	0.41003	0.41215	0.40588
____ SE	0.72522	229.59	0.332	0.72797	0.72351	0.72417
____ SI	7.55930	1,835.70	0.651	7.59747	7.57664	7.50380
____ SN	0.59511	389.49	0.500	0.59700	0.59665	0.59167
____ SR	0.28674	129,913.10	0.471	0.28669	0.28542	0.28812
____ TH	0.02433	1.43	49.697	0.01138	0.03533	0.02628
____ TI	0.10362	2,150.90	0.888	0.10467	0.10323	0.10295
____ TL	1.00014	250.22	0.695	0.99385	0.99896	1.00761
____ V	0.10142	824.07	0.103	0.10152	0.10131	0.10142
____ W	0.00190	2.11	48.232	0.00240	0.00084	0.00246
____ Y1	3493.39933	3,493.40	0.117	3496.23438	3488.72913	3495.23448
____ Y2A	113110.09983	113,110.10	0.649	112265.71543	113594.63502	113469.94904
____ Y2R	13944.78896	13,944.79	0.498	13867.45217	13964.86716	14002.04754
____ ZN	0.11552	632.29	0.327	0.11539	0.11595	0.11523
____ ZR	1.00969	2,839.37	0.583	1.01415	1.00302	1.01191

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 16 Date/Time: 06/20/2018 15:15

Sample Number: **9662313** Class: D*** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00072	-11.44	64.392	-0.00076	-0.00115	-0.00024
____ AL	0.02149	3.15	171.781	-0.00240	0.06399	0.00286
____ AS	0.00043	-0.85	1376.740	0.00441	-0.00638	0.00326
____ B	0.04727	224.98	1.245	0.04662	0.04777	0.04742
____ BA	0.05087	21,115.02	0.210	0.05082	0.05100	0.05081
____ BE	0.00015	-9.47	15.125	0.00014	0.00013	0.00017
____ CA	84.30234	74,576.85	0.401	84.10370	84.11082	84.69249
____ CD	0.00003	-1.77	381.391	-0.00008	0.00004	0.00011
____ CO	0.00003	-0.39	454.253	-0.00012	0.00018	0.00004
____ CR	-0.00012	-0.60	335.639	-0.00011	-0.00050	0.00027
____ CU	0.00048	15.71	191.830	0.00067	0.00128	-0.00052
____ FE	-0.00591	4.42	108.214	0.00147	-0.00948	-0.00974
____ K	1.06818	410.09	4.996	1.01594	1.06601	1.12260
____ LI	0.00823	120.24	25.671	0.01054	0.00639	0.00777
____ MG	28.15187	54,275.29	0.395	28.05013	28.13499	28.27048
____ MN	0.32600	9,175.40	0.255	0.32504	0.32653	0.32643
____ MO	0.00245	3.09	23.460	0.00311	0.00205	0.00219
____ NA	22.25114	27,113.49	0.347	22.19382	22.22075	22.33885
____ NI	0.00100	5.79	56.125	0.00165	0.00066	0.00070
____ P	0.00258	0.86	114.982	0.00452	-0.00083	0.00404
____ PB	0.00382	2.66	91.425	0.00646	-0.00014	0.00513
____ S	16.51421	2,525.04	0.607	16.40832	16.52677	16.60753
____ SB	0.00080	-0.19	532.432	0.00472	0.00136	-0.00369
____ SE	0.00334	-0.10	126.673	0.00699	-0.00130	0.00434
____ SI	6.80134	1,643.12	0.118	6.79406	6.80997	6.80000
____ SN	0.00140	0.88	20.528	0.00116	0.00132	0.00172
____ SR	0.27697	124,221.40	0.404	0.27647	0.27825	0.27619
____ TH	-0.00782	-3.78	110.978	-0.01724	-0.00606	-0.00016
____ TI	0.00154	52.84	7.949	0.00150	0.00144	0.00168
____ TL	-0.00547	-1.33	26.941	-0.00493	-0.00435	-0.00714
____ V	-0.00008	4.29	148.533	0.00003	-0.00020	-0.00007
____ W	0.00091	0.87	116.938	-0.00026	0.00183	0.00118
____ Y1	3510.27097	3,510.27	0.109	3507.91721	3508.19918	3514.69653
____ Y2A	111886.78873	111,886.79	0.753	112853.75947	111306.98126	111499.62545
____ Y2R	13876.15166	13,876.15	0.247	13888.23002	13902.70000	13837.52495
____ ZN	0.00102	13.30	23.060	0.00128	0.00082	0.00096
____ ZR	0.00097	0.07	137.978	0.00007	0.00250	0.00033

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 17 Date/Time: 06/20/2018 15:19

Sample Number: **9662311** Class: R*** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.05350	419.08	1.430	0.05311	0.05300	0.05438
____ AL	2.13689	327.73	1.670	2.12848	2.17603	2.10614
____ AS	0.14396	41.42	3.594	0.14755	0.14631	0.13803
____ B	2.00421	9,932.77	0.128	2.00693	2.00386	2.00184
____ BA	2.07370	858,079.73	1.245	2.10110	2.04985	2.07016
____ BE	0.05020	10,698.14	0.412	0.05031	0.05032	0.04996
____ CA	88.50752	77,850.83	0.527	88.92091	88.60009	88.00156
____ CD	0.04731	274.60	0.474	0.04707	0.04750	0.04737
____ CO	0.48398	1,466.79	0.242	0.48322	0.48532	0.48339
____ CR	0.19702	972.88	0.987	0.19890	0.19714	0.19502
____ CU	0.28053	1,515.33	0.563	0.28192	0.27881	0.28085
____ FE	0.99125	359.77	0.439	0.99000	0.99609	0.98765
____ K	11.14047	3,589.37	0.640	11.09665	11.22272	11.10204
____ LI	1.03209	5,897.96	0.387	1.03363	1.03509	1.02757
____ MG	30.25310	57,969.71	0.428	30.37038	30.27469	30.11424
____ MN	0.82068	23,236.54	0.237	0.82293	0.81951	0.81961
____ MO	1.95068	3,334.38	0.069	1.95177	1.95110	1.94916
____ NA	32.58621	39,534.74	0.383	32.64102	32.67435	32.44325
____ NI	0.47409	813.11	0.397	0.47372	0.47243	0.47614
____ P	1.00507	278.79	0.293	1.00377	1.00843	1.00299
____ PB	0.14716	81.90	1.780	0.15003	0.14489	0.14656
____ S	17.84230	2,706.40	0.350	17.79471	17.91298	17.81921
____ SB	0.51368	162.27	0.906	0.50831	0.51620	0.51653
____ SE	0.14220	44.08	1.975	0.14169	0.14523	0.13968
____ SI	7.82573	1,886.50	0.699	7.82158	7.88242	7.77321
____ SN	3.91436	2,554.17	0.170	3.90728	3.92043	3.91536
____ SR	1.29422	579,123.84	0.915	1.28262	1.29375	1.30629
____ TH	0.02580	1.71	71.750	0.04548	0.00873	0.02321
____ TI	1.01540	20,796.79	0.580	1.01545	1.02126	1.00949
____ TL	0.13902	28.70	1.516	0.14127	0.13868	0.13710
____ V	0.50336	3,972.89	0.665	0.50711	0.50068	0.50228
____ W	0.00446	5.65	17.316	0.00403	0.00535	0.00399
____ Y1	3482.53041	3,482.53	0.325	3493.46265	3483.23568	3470.89291
____ Y2A	112620.32649	112,620.33	0.141	112457.56697	112773.72281	112629.68968
____ Y2R	13803.15812	13,803.16	0.566	13834.77241	13714.11829	13860.58365
____ ZN	0.47733	2,575.55	0.200	0.47642	0.47723	0.47833
____ ZR	1.00946	2,809.98	0.477	1.01240	1.01208	1.00390

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 18 Date/Time: 06/20/2018 15:22

Sample Number: **9662312** Class: M*** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.05475	425.06	2.127	0.05564	0.05517	0.05343
____ AL	2.15991	333.57	1.432	2.13704	2.19509	2.14759
____ AS	0.14150	41.03	1.316	0.14057	0.14364	0.14028
____ B	2.00462	9,881.52	0.460	2.01522	1.99847	2.00018
____ BA	2.08816	859,419.94	0.849	2.10091	2.06792	2.09564
____ BE	0.05008	10,615.86	0.373	0.05024	0.05012	0.04988
____ CA	87.84421	77,806.43	0.690	87.21824	88.42771	87.88667
____ CD	0.04695	274.69	0.880	0.04689	0.04739	0.04657
____ CO	0.48284	1,475.15	0.448	0.48490	0.48302	0.48058
____ CR	0.19718	968.46	0.659	0.19842	0.19730	0.19583
____ CU	0.28024	1,505.70	0.870	0.28279	0.28001	0.27792
____ FE	1.00891	368.58	1.688	0.99040	1.02389	1.01245
____ K	11.08443	3,596.39	0.773	11.00874	11.17738	11.06718
____ LI	1.03579	5,959.28	0.746	1.02729	1.04237	1.03771
____ MG	29.98821	57,865.41	0.655	29.79425	30.18699	29.98340
____ MN	0.83055	23,389.56	0.483	0.83439	0.82638	0.83090
____ MO	1.96651	3,388.54	0.321	1.96759	1.97222	1.95973
____ NA	32.14743	39,271.13	0.590	31.95357	32.33255	32.15616
____ NI	0.46981	812.28	0.151	0.47041	0.46998	0.46903
____ P	1.00182	280.12	0.436	1.00578	1.00254	0.99713
____ PB	0.14618	82.02	1.635	0.14736	0.14343	0.14775
____ S	17.64911	2,698.68	0.300	17.69710	17.65786	17.59236
____ SB	0.51167	162.94	1.079	0.51309	0.50558	0.51635
____ SE	0.13511	42.17	3.644	0.13978	0.13559	0.12996
____ SI	7.80759	1,895.26	0.199	7.80587	7.82394	7.79296
____ SN	3.95025	2,598.38	0.475	3.95295	3.96751	3.93030
____ SR	1.28883	573,615.91	0.847	1.27970	1.28587	1.30091
____ TH	0.03574	3.30	57.222	0.02874	0.05878	0.01971
____ TI	1.01858	20,749.63	0.596	1.02471	1.01846	1.01257
____ TL	0.13867	28.84	3.125	0.14063	0.14167	0.13370
____ V	0.50329	3,949.81	0.333	0.50521	0.50253	0.50213
____ W	0.00367	5.14	26.760	0.00480	0.00314	0.00306
____ Y1	3510.57828	3,510.58	0.149	3511.36486	3515.35646	3505.01350
____ Y2A	112016.36339	112,016.36	0.429	111485.02799	112420.04099	112144.02120
____ Y2R	13898.77994	13,898.78	0.592	13951.98642	13804.04257	13940.31081
____ ZN	0.47250	2,570.19	0.333	0.47171	0.47432	0.47149
____ ZR	1.02073	2,861.73	0.831	1.01233	1.02930	1.02056

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 19 Date/Time: 06/20/2018 15:25

Sample Number: **9662310** Class: UL** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 5.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00001	-8.92	1010.603	-0.00105	-0.00050	0.00152
____ AL	0.04328	6.54	14.239	0.04798	0.04555	0.03630
____ AS	-0.00056	-1.16	454.065	-0.00262	0.00229	-0.00136
____ B	0.01366	64.76	1.305	0.01372	0.01346	0.01380
____ BA	0.01036	4,511.97	1.450	0.01028	0.01053	0.01026
____ BE	0.00020	1.45	16.548	0.00016	0.00022	0.00021
____ CA	16.51654	14,672.69	0.193	16.53367	16.53622	16.47973
____ CD	-0.00024	-3.36	70.355	-0.00033	-0.00034	-0.00004
____ CO	0.00038	1.20	80.416	0.00015	0.00026	0.00073
____ CR	-0.00155	-7.73	28.181	-0.00116	-0.00148	-0.00202
____ CU	0.00003	4.24	2648.903	0.00067	0.00021	-0.00080
____ FE	-0.00005	6.50	5522.830	0.00055	-0.00786	0.00717
____ K	0.18689	129.75	4.894	0.17759	0.18720	0.19587
____ LI	0.00312	44.36	115.471	0.00351	0.00650	-0.00066
____ MG	5.57362	10,804.53	0.222	5.57628	5.56014	5.58445
____ MN	0.06572	1,875.48	0.267	0.06563	0.06592	0.06561
____ MO	0.00166	1.76	37.412	0.00142	0.00120	0.00237
____ NA	4.44008	5,325.89	0.060	4.43765	4.43962	4.44296
____ NI	-0.00105	2.86	18.343	-0.00091	-0.00127	-0.00097
____ P	0.00264	0.89	19.245	0.00313	0.00267	0.00211
____ PB	0.00119	1.11	180.707	-0.00055	0.00359	0.00053
____ S	3.26592	507.44	0.273	3.26564	3.25714	3.27497
____ SB	0.00139	0.00	31.462	0.00112	0.00190	0.00116
____ SE	0.00108	-1.04	576.484	-0.00580	0.00624	0.00278
____ SI	1.34539	324.88	0.806	1.35523	1.34718	1.33377
____ SN	0.00109	0.69	38.113	0.00109	0.00151	0.00068
____ SR	0.05371	24,298.21	0.475	0.05349	0.05399	0.05365
____ TH	0.01009	-0.92	300.550	-0.01764	0.00543	0.04248
____ TI	0.00082	38.67	18.649	0.00090	0.00092	0.00065
____ TL	-0.00662	-1.74	20.870	-0.00679	-0.00517	-0.00792
____ V	-0.00008	4.45	749.314	0.00005	-0.00077	0.00046
____ W	0.00107	0.98	54.701	0.00083	0.00064	0.00173
____ Y1	3563.98293	3,563.98	0.365	3574.10459	3568.55514	3549.28907
____ Y2A	113045.04526	113,045.05	0.140	113150.14454	112863.60684	113121.38440
____ Y2R	13822.52905	13,822.53	0.521	13902.15000	13761.95110	13803.48606
____ ZN	0.00010	8.41	107.765	0.00001	0.00007	0.00022
____ ZR	0.00132	2.36	77.569	0.00078	0.00250	0.00068

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 20 Date/Time: 06/20/2018 15:28

Sample Number: **9661771** Class: **** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00139	-17.49	33.070	-0.00132	-0.00188	-0.00097
____ AL	0.02620	4.28	85.176	0.01287	0.01377	0.05197
____ AS	0.00253	-0.18	99.140	0.00281	-0.00011	0.00488
____ B	0.49831	2,430.13	0.586	0.49760	0.50152	0.49580
____ BA	0.16061	65,820.86	0.066	0.16069	0.16064	0.16049
____ BE	0.00011	-16.23	32.094	0.00008	0.00011	0.00015
____ CA	150.40610	130,181.32	0.736	150.11633	151.62907	149.47288
____ CD	-0.00015	-2.78	102.731	-0.00020	0.00002	-0.00028
____ CO	0.00423	11.97	7.192	0.00446	0.00434	0.00389
____ CR	0.00044	2.13	78.565	0.00007	0.00076	0.00051
____ CU	-0.00062	19.46	92.583	-0.00013	-0.00048	-0.00125
____ FE	0.00353	7.69	149.052	0.00954	0.00133	-0.00027
____ K	24.63779	7,775.79	0.469	24.64929	24.74716	24.51691
____ LI	0.11006	732.00	1.056	0.10997	0.11127	0.10895
____ MG	31.97639	60,627.08	0.785	31.96281	32.23405	31.73232
____ MN	0.60102	16,809.74	0.096	0.60147	0.60037	0.60124
____ MO	0.20864	355.16	0.508	0.20837	0.20981	0.20774
____ NA	38.04740	45,721.59	0.441	38.10613	38.17777	37.85830
____ NI	0.00279	8.46	22.916	0.00224	0.00349	0.00263
____ P	0.00590	1.77	34.392	0.00824	0.00486	0.00460
____ PB	0.00576	3.76	53.386	0.00275	0.00563	0.00889
____ S	14.16428	2,147.98	0.261	14.20687	14.14180	14.14417
____ SB	-0.00274	-1.30	17.961	-0.00219	-0.00286	-0.00315
____ SE	0.00100	-0.69	129.241	0.00249	0.00011	0.00040
____ SI	9.89536	2,354.69	0.610	9.86646	9.85493	9.96469
____ SN	0.00047	0.27	52.987	0.00020	0.00069	0.00052
____ SR	0.95921	425,369.58	0.440	0.96371	0.95861	0.95532
____ TH	-0.00141	-2.70	840.011	0.00251	-0.01466	0.00794
____ TI	0.00082	37.96	50.418	0.00127	0.00072	0.00046
____ TL	-0.00580	-1.28	21.351	-0.00703	-0.00582	-0.00455
____ V	-0.00096	-20.32	58.767	-0.00160	-0.00055	-0.00073
____ W	0.00047	0.60	237.601	0.00138	-0.00078	0.00082
____ Y1	3477.85821	3,477.86	0.043	3479.33207	3476.35836	3477.88421
____ Y2A	111230.21803	111,230.22	0.071	111181.40731	111187.92500	111321.32177
____ Y2R	13668.17607	13,668.18	1.005	13715.27084	13513.46768	13775.78968
____ ZN	0.00845	52.91	1.974	0.00864	0.00831	0.00840
____ ZR	-0.00003	-2.29	)448.223	-0.00070	0.00391	-0.00331

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 21 Date/Time: 06/20/2018 15:31

Sample Number: **9662303** Class: **** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00056	-12.43	129.792	-0.00139	-0.00015	-0.00013
____ AL	0.00057	0.19	5754.971	0.02751	-0.03595	0.01015
____ AS	0.00217	-0.34	131.036	0.00427	0.00332	-0.00107
____ B	0.02417	112.92	1.439	0.02378	0.02445	0.02427
____ BA	0.01589	6,701.00	0.382	0.01594	0.01582	0.01590
____ BE	0.00017	-4.03	13.981	0.00019	0.00018	0.00014
____ CA	62.07044	54,545.89	0.302	61.89344	62.26654	62.05134
____ CD	-0.00013	-2.69	291.547	-0.00053	-0.00007	0.00021
____ CO	-0.00019	-0.81	241.409	-0.00065	0.00024	-0.00014
____ CR	-0.00027	-1.36	248.739	-0.00053	0.00050	-0.00078
____ CU	-0.00066	6.89	5.996	-0.00070	-0.00062	-0.00066
____ FE	-0.00274	5.52	297.012	-0.00416	-0.01006	0.00601
____ K	0.70514	292.21	3.006	0.68071	0.71607	0.71865
____ LI	0.00081	62.36	466.836	-0.00080	-0.00190	0.00513
____ MG	18.52968	35,545.18	0.251	18.50167	18.58327	18.50410
____ MN	0.00185	60.09	3.843	0.00184	0.00193	0.00179
____ MO	0.00053	-0.22	12.739	0.00059	0.00046	0.00054
____ NA	75.06133	90,835.86	0.118	75.01953	75.16290	75.00157
____ NI	-0.00029	3.85	308.698	-0.00118	0.00063	-0.00032
____ P	0.00999	2.95	20.735	0.01185	0.01035	0.00776
____ PB	0.00461	3.06	39.250	0.00556	0.00574	0.00252
____ S	5.33672	822.44	0.451	5.33993	5.35900	5.31123
____ SB	-0.00063	-0.65	485.988	-0.00400	0.00020	0.00192
____ SE	0.00670	0.82	8.106	0.00638	0.00733	0.00640
____ SI	4.20677	1,007.75	0.255	4.21889	4.19855	4.20288
____ SN	0.00079	0.48	101.011	0.00003	0.00071	0.00162
____ SR	0.16134	72,175.13	0.163	0.16137	0.16106	0.16158
____ TH	0.00663	-1.46	190.885	0.01361	0.01425	-0.00798
____ TI	0.00125	46.66	7.986	0.00136	0.00118	0.00120
____ TL	-0.00748	-1.97	11.613	-0.00818	-0.00776	-0.00651
____ V	0.00007	5.69	1407.266	-0.00063	0.00118	-0.00035
____ W	-0.00061	-0.14	114.213	0.00012	-0.00068	-0.00126
____ Y1	3532.20078	3,532.20	0.166	3533.68263	3525.73943	3537.18028
____ Y2A	111285.92422	111,285.92	0.120	111415.00399	111295.09588	111147.67279
____ Y2R	13752.41452	13,752.41	0.659	13732.25355	13673.63328	13851.35674
____ ZN	0.00262	22.04	9.734	0.00235	0.00268	0.00285
____ ZR	-0.00120	-4.89	97.590	-0.00224	0.00007	-0.00143

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 22

Date/Time: 06/20/2018 15:34

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.51773	3,834.30	0.502	0.52062	0.51699	0.51559
____ AL	26.01369	3,804.99	0.645	26.20225	25.88069	25.95813
____ AS	0.45659	135.66	0.451	0.45877	0.45468	0.45631
____ B	0.50043	2,467.14	0.282	0.50194	0.49915	0.50020
____ BA	0.51193	208,772.23	0.207	0.51304	0.51092	0.51182
____ BE	0.49656	104,563.51	0.530	0.49958	0.49531	0.49478
____ CA	24.90283	21,709.68	0.332	24.99263	24.82975	24.88613
____ CD	0.47495	2,831.90	0.142	0.47573	0.47450	0.47463
____ CO	0.48737	1,499.56	0.230	0.48796	0.48607	0.48807
____ CR	0.49629	2,413.68	0.627	0.49924	0.49303	0.49660
____ CU	0.51980	3,060.51	0.822	0.52436	0.51590	0.51913
____ FE	25.80126	8,986.60	0.302	25.88744	25.73558	25.78077
____ K	24.63791	7,731.18	0.416	24.70175	24.51960	24.69238
____ LI	0.51518	2,893.10	0.675	0.51440	0.51217	0.51899
____ MG	25.39348	47,999.35	0.386	25.49772	25.30319	25.37954
____ MN	0.49793	13,878.16	0.111	0.49842	0.49733	0.49805
____ MO	0.48656	846.14	0.075	0.48690	0.48617	0.48660
____ NA	25.46110	30,394.78	0.305	25.54884	25.40153	25.43294
____ NI	0.46578	812.04	0.421	0.46775	0.46384	0.46573
____ P	0.48899	137.99	0.242	0.48988	0.48765	0.48944
____ PB	0.48731	277.00	0.824	0.49112	0.48769	0.48311
____ S	24.85011	3,834.06	0.106	24.82032	24.87073	24.85930
____ SB	0.49504	160.52	0.880	0.50006	0.49275	0.49231
____ SE	0.45214	145.90	0.209	0.45316	0.45197	0.45130
____ SI	25.41351	6,011.84	0.275	25.47056	25.43436	25.33560
____ SN	0.48837	324.60	0.289	0.48984	0.48826	0.48702
____ SR	0.51263	225,658.20	0.216	0.51378	0.51158	0.51252
____ TH	0.51055	80.46	1.415	0.51595	0.51335	0.50234
____ TI	0.51227	10,341.50	0.465	0.51502	0.51091	0.51089
____ TL	0.48771	117.87	1.250	0.49240	0.48082	0.48991
____ V	0.51497	4,133.63	0.442	0.51710	0.51257	0.51525
____ W	0.47245	321.41	0.618	0.47543	0.46959	0.47233
____ Y1	3547.75656	3,547.76	0.299	3548.95510	3557.71223	3536.60234
____ Y2A	110892.71075	110,892.71	0.511	110440.02789	110710.27944	111527.82492
____ Y2R	13589.24452	13,589.24	0.369	13562.41276	13558.27517	13647.04564
____ ZN	0.46934	2,598.82	0.061	0.46901	0.46951	0.46949
____ ZR	0.51951	1,458.92	1.113	0.52614	0.51553	0.51686

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 23

Date/Time: 06/20/2018 15:37

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00001	-6.48	9232.106	0.00043	-0.00127	0.00081
____ AL	0.01257	1.81	24.954	0.01094	0.01059	0.01619
____ AS	-0.00184	-1.54	264.893	0.00362	-0.00339	-0.00576
____ B	0.00241	9.84	10.160	0.00237	0.00267	0.00219
____ BA	0.00085	557.25	9.702	0.00092	0.00088	0.00076
____ BE	0.00025	11.86	11.246	0.00025	0.00022	0.00027
____ CA	0.00080	26.42	492.205	-0.00013	-0.00259	0.00513
____ CD	0.00015	-1.07	84.902	0.00006	0.00029	0.00009
____ CO	-0.00002	0.11	1158.847	-0.00020	0.00014	0.00002
____ CR	-0.00126	-6.18	18.343	-0.00148	-0.00129	-0.00102
____ CU	0.00019	1.13	699.898	0.00163	-0.00087	-0.00020
____ FE	0.00334	7.56	117.537	0.00639	0.00473	-0.00109
____ K	0.00332	70.36	806.004	0.01313	0.02375	-0.02693
____ LI	0.00204	26.52	142.305	-0.00042	0.00130	0.00524
____ MG	0.00150	5.09	116.244	0.00310	0.00177	-0.00036
____ MN	-0.00017	3.64	38.789	-0.00022	-0.00019	-0.00010
____ MO	0.00090	0.42	32.077	0.00098	0.00113	0.00057
____ NA	0.02482	-48.26	45.217	0.02346	0.01433	0.03665
____ NI	-0.00131	2.54	56.405	-0.00126	-0.00059	-0.00206
____ P	-0.00076	-0.07	77.688	-0.00104	-0.00115	-0.00008
____ PB	0.00230	1.71	36.196	0.00326	0.00180	0.00184
____ S	0.00249	0.94	240.024	0.00295	-0.00371	0.00823
____ SB	0.00326	0.60	57.134	0.00468	0.00395	0.00115
____ SE	0.00676	0.75	29.076	0.00457	0.00735	0.00837
____ SI	0.01410	4.67	28.074	0.01801	0.01009	0.01421
____ SN	0.00005	-0.01	1326.581	-0.00039	0.00078	-0.00025
____ SR	-0.00009	-91.78	17.239	-0.00010	-0.00007	-0.00010
____ TH	-0.00497	-3.24	426.764	0.01422	-0.02777	-0.00137
____ TI	-0.00008	19.79	538.676	-0.00032	0.00042	-0.00034
____ TL	-0.00515	-1.39	45.603	-0.00702	-0.00591	-0.00251
____ V	0.00044	8.54	226.715	-0.00053	0.00040	0.00144
____ W	0.00009	0.31	941.613	-0.00087	0.00042	0.00071
____ Y1	3556.87565	3,556.88	0.360	3563.10969	3542.16178	3565.35546
____ Y2A	111280.79217	111,280.79	0.463	111859.94817	110871.78529	111110.64307
____ Y2R	13570.26292	13,570.26	0.429	13551.14656	13524.07777	13635.56444
____ ZN	-0.00025	6.49	79.485	-0.00048	-0.00014	-0.00012
____ ZR	0.00078	-0.23	139.005	-0.00039	0.00098	0.00175

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 24 Date/Time: 06/20/2018 15:40

Sample Number: **9662304** Class: **** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00133	-17.51	83.728	-0.00009	-0.00224	-0.00167
____ AL	0.00445	0.72	118.176	0.00804	-0.00158	0.00688
____ AS	0.00151	-0.51	242.499	-0.00069	0.00575	-0.00052
____ B	0.03631	164.92	0.916	0.03636	0.03596	0.03662
____ BA	0.12387	48,822.49	0.401	0.12407	0.12423	0.12330
____ BE	0.00008	-21.85	37.506	0.00010	0.00005	0.00010
____ CA	238.30557	198,952.03	0.347	238.32039	237.47220	239.12411
____ CD	0.00040	0.39	13.579	0.00034	0.00041	0.00044
____ CO	0.00042	0.93	51.708	0.00066	0.00034	0.00025
____ CR	0.00008	0.33	440.864	0.00018	-0.00030	0.00036
____ CU	0.00203	48.99	63.627	0.00106	0.00152	0.00349
____ FE	-0.00091	5.96	793.300	0.00735	-0.00590	-0.00417
____ K	1.85970	633.98	2.932	1.80308	1.86417	1.91185
____ LI	0.01027	227.94	34.002	0.00627	0.01184	0.01271
____ MG	72.19211	131,006.97	0.420	72.34072	71.84343	72.39219
____ MN	0.00520	147.52	1.365	0.00523	0.00525	0.00512
____ MO	0.00127	1.02	68.780	0.00182	0.00026	0.00172
____ NA	805.51260	943,482.81	0.843	809.22443	809.64053	797.67284
____ NI	0.00063	5.15	107.626	0.00002	0.00050	0.00135
____ P	0.02658	7.31	17.933	0.02655	0.02183	0.03136
____ PB	0.00312	2.16	143.141	0.00298	0.00764	-0.00127
____ S	12.22786	1,812.48	0.267	12.25613	12.23524	12.19220
____ SB	0.00246	0.33	141.266	0.00628	-0.00049	0.00158
____ SE	0.00061	-1.07	488.983	0.00357	-0.00244	0.00071
____ SI	4.93979	1,144.20	0.324	4.95313	4.94422	4.92201
____ SN	0.00071	0.41	98.273	0.00110	0.00113	-0.00010
____ SR	0.86743	371,288.85	0.420	0.86632	0.86447	0.87150
____ TH	0.00659	-1.41	221.727	0.01778	0.01191	-0.00993
____ TI	0.00017	23.86	206.248	0.00053	0.00013	-0.00016
____ TL	-0.00491	-1.26	51.069	-0.00684	-0.00208	-0.00582
____ V	-0.00045	1.42	175.250	0.00045	-0.00078	-0.00101
____ W	0.00042	0.74	198.587	0.00047	-0.00044	0.00122
____ Y1	3393.70730	3,393.71	0.133	3397.55424	3394.83252	3388.73513
____ Y2A	106873.17394	106,873.17	0.743	107750.49910	106666.56705	106202.45567
____ Y2R	13300.07208	13,300.07	0.080	13296.42857	13312.01299	13291.77468
____ ZN	0.04565	245.31	0.958	0.04610	0.04560	0.04523
____ ZR	0.00126	1.86	85.981	0.00168	0.00003	0.00206

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 25 Date/Time: 06/20/2018 15:44

Sample Number: **9662305** Class: **** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00035	-11.57	97.530	-0.00022	-0.00009	-0.00074
____ AL	0.01851	2.85	140.209	0.03408	-0.01145	0.03291
____ AS	-0.00077	-1.21	69.368	-0.00118	-0.00017	-0.00096
____ B	0.02330	107.52	2.697	0.02392	0.02266	0.02334
____ BA	0.01591	6,644.81	0.375	0.01589	0.01587	0.01598
____ BE	0.00019	-0.42	12.311	0.00017	0.00019	0.00021
____ CA	63.10683	55,010.25	0.227	63.24822	62.96153	63.11075
____ CD	0.00007	-1.50	247.193	-0.00011	0.00025	0.00007
____ CO	0.00003	-0.15	695.172	-0.00014	0.00029	-0.00006
____ CR	0.00037	1.73	327.188	0.00107	-0.00101	0.00104
____ CU	-0.00004	11.17	1578.935	-0.00077	-0.00141	0.00206
____ FE	-0.00271	5.48	149.998	-0.00183	0.00084	-0.00714
____ K	0.78060	313.44	6.575	0.73250	0.83463	0.77467
____ LI	0.00608	91.87	21.548	0.00539	0.00759	0.00526
____ MG	18.85121	35,870.37	0.193	18.89308	18.83345	18.82710
____ MN	0.00126	42.82	2.649	0.00126	0.00128	0.00122
____ MO	0.00111	0.79	21.671	0.00138	0.00104	0.00092
____ NA	75.67696	90,854.14	0.254	75.82164	75.45879	75.75045
____ NI	0.00028	4.83	372.455	0.00132	-0.00076	0.00028
____ P	0.00872	2.59	23.016	0.00669	0.01070	0.00876
____ PB	0.00244	1.86	72.294	0.00217	0.00083	0.00433
____ S	5.41060	833.34	0.299	5.42563	5.41268	5.39348
____ SB	-0.00183	-1.03	88.331	-0.00102	-0.00369	-0.00077
____ SE	0.00579	0.53	7.705	0.00528	0.00595	0.00613
____ SI	4.27701	1,016.43	0.563	4.30481	4.26426	4.26197
____ SN	0.00116	0.72	127.526	0.00280	-0.00004	0.00071
____ SR	0.16477	72,955.71	0.350	0.16474	0.16421	0.16536
____ TH	0.01218	-0.57	107.186	0.01773	0.02154	-0.00273
____ TI	0.00136	48.44	4.123	0.00138	0.00140	0.00130
____ TL	-0.00424	-1.15	77.539	-0.00615	-0.00614	-0.00044
____ V	0.00020	6.70	319.469	0.00035	-0.00051	0.00077
____ W	-0.00068	-0.19	159.106	-0.00186	-0.00043	0.00026
____ Y1	3530.14499	3,530.14	0.184	3523.55364	3530.34097	3536.54035
____ Y2A	110150.32205	110,150.32	0.059	110136.57223	110221.21711	110093.17683
____ Y2R	13643.17084	13,643.17	0.421	13671.56569	13680.85266	13577.09416
____ ZN	0.00155	16.24	9.439	0.00170	0.00154	0.00141
____ ZR	0.00056	0.43	458.537	0.00349	-0.00038	-0.00142

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 26 Date/Time: 06/20/2018 15:47

Sample Number: **9662306** Class: **** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00030	-6.51	57.300	0.00022	0.00018	0.00050
____ AL	0.01520	2.41	126.507	0.03435	0.01535	-0.00410
____ AS	-0.00443	-2.30	12.205	-0.00482	-0.00465	-0.00381
____ B	0.00597	22.77	16.806	0.00486	0.00682	0.00624
____ BA	0.00525	2,380.38	0.239	0.00526	0.00525	0.00523
____ BE	0.00022	5.32	17.159	0.00026	0.00020	0.00019
____ CA	40.60417	36,373.96	0.059	40.57648	40.61899	40.61702
____ CD	-0.00014	-2.74	147.128	-0.00032	0.00008	-0.00016
____ CO	-0.00012	-0.74	183.982	-0.00022	0.00013	-0.00026
____ CR	-0.00056	-2.80	121.457	-0.00086	-0.00104	0.00022
____ CU	-0.00006	7.42	2517.668	-0.00167	0.00047	0.00102
____ FE	-0.00419	5.08	209.539	-0.01191	0.00536	-0.00603
____ K	0.14944	119.36	20.407	0.16398	0.16995	0.11440
____ LI	0.00524	73.78	10.457	0.00587	0.00485	0.00501
____ MG	11.65224	22,796.80	0.156	11.66488	11.66039	11.63144
____ MN	0.00046	21.19	30.059	0.00048	0.00058	0.00031
____ MO	0.00099	0.59	24.907	0.00071	0.00115	0.00112
____ NA	6.08701	7,417.60	0.204	6.07335	6.09763	6.09006
____ NI	0.00048	5.07	112.933	-0.00012	0.00094	0.00061
____ P	0.00078	0.36	100.973	-0.00001	0.00079	0.00155
____ PB	0.00202	1.66	211.265	-0.00281	0.00531	0.00356
____ S	4.81826	745.06	0.151	4.82479	4.81956	4.81044
____ SB	-0.00072	-0.68	852.827	-0.00521	0.00624	-0.00317
____ SE	0.00183	-0.71	166.075	-0.00142	0.00231	0.00461
____ SI	5.57625	1,358.06	0.446	5.54782	5.58684	5.59408
____ SN	0.00060	0.36	150.615	0.00059	-0.00030	0.00152
____ SR	0.10182	46,090.86	0.202	0.10163	0.10204	0.10178
____ TH	0.01013	-0.91	66.227	0.01676	0.01027	0.00335
____ TI	0.00173	57.08	11.726	0.00170	0.00194	0.00154
____ TL	-0.00894	-2.35	46.166	-0.00806	-0.01343	-0.00532
____ V	-0.00017	3.79	308.098	-0.00075	0.00001	0.00024
____ W	0.00038	0.51	201.762	0.00087	0.00075	-0.00050
____ Y1	3546.01873	3,546.02	0.275	3534.74853	3551.55684	3551.75082
____ Y2A	112595.70763	112,595.71	0.120	112743.56416	112477.84273	112565.71600
____ Y2R	13986.11912	13,986.12	0.661	14035.20000	14043.75000	13879.40737
____ ZN	0.00104	13.55	1.123	0.00103	0.00106	0.00104
____ ZR	0.00064	0.48	76.337	0.00008	0.00087	0.00097

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 27 Date/Time: 06/20/2018 15:50

Sample Number: **9662307** Class: **** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00118	-17.19	3.460	-0.00114	-0.00122	-0.00119
____ AL	0.01583	2.44	287.972	0.06126	0.01614	-0.02991
____ AS	-0.00246	-1.71	111.938	0.00029	-0.00522	-0.00246
____ B	0.03263	152.91	1.853	0.03281	0.03312	0.03195
____ BA	0.01249	5,303.72	0.668	0.01239	0.01255	0.01253
____ BE	0.00018	-1.65	4.672	0.00019	0.00018	0.00018
____ CA	87.24761	76,936.62	0.740	87.99156	86.91861	86.83266
____ CD	-0.00011	-2.57	203.379	-0.00012	0.00012	-0.00032
____ CO	0.00027	0.47	189.008	0.00084	-0.00017	0.00015
____ CR	0.00013	0.58	659.810	0.00044	0.00075	-0.00082
____ CU	-0.00065	10.93	165.291	-0.00150	-0.00102	0.00056
____ FE	-0.00521	4.66	115.550	0.00103	-0.01099	-0.00568
____ K	1.04390	401.25	3.359	1.00677	1.04850	1.07644
____ LI	0.00788	119.90	45.876	0.01205	0.00558	0.00602
____ MG	27.17652	52,264.89	0.620	27.36899	27.10466	27.05589
____ MN	0.00012	11.46	94.097	0.00002	0.00024	0.00009
____ MO	0.00050	-0.28	22.627	0.00041	0.00046	0.00062
____ NA	12.38774	15,016.11	0.267	12.42025	12.38876	12.35421
____ NI	0.00019	4.54	271.762	-0.00037	0.00030	0.00064
____ P	0.00193	0.68	142.196	0.00361	0.00340	-0.00123
____ PB	0.00383	2.64	46.732	0.00333	0.00234	0.00581
____ S	8.58634	1,319.90	0.306	8.60965	8.59150	8.55788
____ SB	0.00043	-0.31	859.090	0.00144	-0.00365	0.00349
____ SE	0.00238	-0.54	161.724	0.00051	-0.00018	0.00680
____ SI	5.51320	1,328.34	0.704	5.52893	5.54168	5.46898
____ SN	0.00068	0.41	147.387	0.00157	-0.00041	0.00088
____ SR	0.19537	87,460.99	0.239	0.19486	0.19578	0.19548
____ TH	0.00705	-1.40	240.271	0.02179	-0.01145	0.01081
____ TI	0.00131	47.75	5.551	0.00122	0.00136	0.00134
____ TL	-0.00781	-2.05	27.621	-0.00535	-0.00868	-0.00939
____ V	0.00032	7.73	249.066	0.00082	-0.00060	0.00073
____ W	0.00020	0.39	501.050	0.00097	-0.00090	0.00052
____ Y1	3525.10549	3,525.11	0.372	3539.73003	3521.24788	3514.33857
____ Y2A	111084.80232	111,084.80	0.574	111809.16317	110609.31255	110835.93125
____ Y2R	13836.23819	13,836.24	0.180	13807.65398	13848.32667	13852.73391
____ ZN	0.00093	12.82	3.732	0.00091	0.00096	0.00090
____ ZR	0.00026	-0.82	1137.355	-0.00015	0.00335	-0.00243

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 28 Date/Time: 06/20/2018 15:53

Sample Number: **9662308** Class: **** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00054	-10.15	104.281	-0.00007	-0.00039	-0.00117
____ AL	0.00842	1.20	311.070	0.03595	-0.01621	0.00553
____ AS	-0.00235	-1.69	140.123	0.00132	-0.00333	-0.00506
____ B	0.00970	41.49	0.633	0.00972	0.00975	0.00963
____ BA	0.01139	4,888.00	1.002	0.01152	0.01134	0.01130
____ BE	0.00019	0.10	5.236	0.00018	0.00020	0.00020
____ CA	68.67813	60,479.52	0.159	68.73203	68.75028	68.55208
____ CD	-0.00009	-2.47	134.685	-0.00016	-0.00016	0.00005
____ CO	0.00010	-0.01	242.991	0.00037	-0.00011	0.00004
____ CR	-0.00009	-0.48	874.004	-0.00045	0.00083	-0.00066
____ CU	0.00096	16.16	108.369	0.00175	0.00133	-0.00022
____ FE	-0.00598	4.37	36.374	-0.00843	-0.00426	-0.00525
____ K	1.39586	510.98	1.737	1.41076	1.40893	1.36788
____ LI	0.00943	115.56	19.152	0.00738	0.01012	0.01079
____ MG	18.16166	34,942.12	0.141	18.13323	18.16892	18.18284
____ MN	0.00032	17.48	32.025	0.00037	0.00039	0.00020
____ MO	0.00082	0.29	19.147	0.00073	0.00100	0.00074
____ NA	3.27341	3,896.64	0.255	3.27521	3.28071	3.26432
____ NI	-0.00080	2.90	87.656	-0.00014	-0.00073	-0.00153
____ P	0.00019	0.20	1528.936	0.00331	-0.00220	-0.00055
____ PB	0.00125	1.21	186.693	-0.00144	0.00261	0.00257
____ S	3.32949	517.33	0.620	3.31189	3.32435	3.35221
____ SB	0.00161	0.07	73.895	0.00093	0.00091	0.00298
____ SE	0.00463	0.18	86.702	0.00882	0.00081	0.00428
____ SI	5.04897	1,212.62	0.651	5.01103	5.06651	5.06936
____ SN	0.00029	0.16	494.124	0.00177	-0.00113	0.00024
____ SR	0.14707	66,354.24	0.170	0.14732	0.14682	0.14706
____ TH	-0.00786	-3.76	103.864	-0.01411	0.00138	-0.01085
____ TI	0.00124	46.66	16.205	0.00102	0.00141	0.00127
____ TL	-0.00563	-1.51	67.537	-0.00285	-0.00996	-0.00408
____ V	0.00063	10.20	92.118	-0.00003	0.00106	0.00086
____ W	-0.00002	0.25	3904.572	0.00088	-0.00047	-0.00047
____ Y1	3553.97860	3,553.98	0.430	3570.76292	3540.86791	3550.30497
____ Y2A	111887.93314	111,887.93	0.182	111903.66194	112082.93365	111677.20383
____ Y2R	13790.82115	13,790.82	0.213	13765.99301	13783.31673	13823.15369
____ ZN	0.00105	13.57	9.703	0.00105	0.00115	0.00095
____ ZR	-0.00043	-3.82	155.714	-0.00065	0.00032	-0.00096

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 29 Date/Time: 06/20/2018 15:56

Sample Number: **9662309** Class: **** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00022	-11.88	102.521	-0.00047	-0.00010	-0.00007
____ AL	0.02615	4.09	84.564	0.00941	0.05122	0.01783
____ AS	0.00057	-0.82	189.536	0.00051	-0.00048	0.00168
____ B	0.01153	51.40	6.733	0.01098	0.01119	0.01242
____ BA	0.00537	2,418.88	0.547	0.00537	0.00539	0.00533
____ BE	0.00024	10.40	5.386	0.00025	0.00023	0.00024
____ CA	8.70341	7,732.77	0.245	8.68425	8.72642	8.69956
____ CD	-0.00022	-3.28	54.904	-0.00031	-0.00008	-0.00028
____ CO	-0.00037	-1.39	88.487	-0.00047	0.00000	-0.00063
____ CR	0.00124	6.07	69.923	0.00173	0.00024	0.00176
____ CU	-0.00036	1.73	378.629	-0.00016	0.00088	-0.00178
____ FE	0.03197	17.89	15.499	0.03250	0.03663	0.02677
____ K	0.46006	215.69	4.170	0.48213	0.45060	0.44743
____ LI	0.00240	34.89	39.717	0.00149	0.00231	0.00339
____ MG	2.40650	4,662.02	0.321	2.40240	2.41541	2.40170
____ MN	0.00163	53.98	8.089	0.00176	0.00150	0.00162
____ MO	0.00128	1.10	49.172	0.00065	0.00191	0.00130
____ NA	40.61550	49,257.01	0.399	40.63205	40.76855	40.44588
____ NI	-0.00024	4.00	344.749	-0.00075	-0.00068	0.00072
____ P	0.00839	2.53	19.424	0.00931	0.00651	0.00936
____ PB	0.00253	1.93	65.255	0.00148	0.00168	0.00444
____ S	3.07523	479.87	0.648	3.07925	3.09283	3.05360
____ SB	-0.00008	-0.47	2622.439	-0.00250	0.00135	0.00091
____ SE	0.00178	-0.77	220.549	0.00501	-0.00258	0.00290
____ SI	4.11872	989.55	0.851	4.15697	4.08820	4.11098
____ SN	0.00030	0.16	764.504	0.00207	0.00109	-0.00227
____ SR	0.02471	11,075.53	0.694	0.02491	0.02459	0.02463
____ TH	0.01968	0.62	37.002	0.01863	0.02743	0.01298
____ TI	0.00058	33.47	52.435	0.00093	0.00049	0.00034
____ TL	-0.00772	-2.06	34.526	-0.01079	-0.00637	-0.00600
____ V	0.00015	6.41	281.577	-0.00009	0.00064	-0.00010
____ W	0.00094	0.90	119.999	0.00007	0.00054	0.00222
____ Y1	3580.49795	3,580.50	0.190	3582.86971	3585.80742	3572.81672
____ Y2A	112087.66831	112,087.67	0.371	112310.46697	112344.77418	111607.76379
____ Y2R	13792.20639	13,792.21	0.085	13785.01897	13785.91725	13805.68295
____ ZN	0.00109	13.91	12.576	0.00093	0.00118	0.00114
____ ZR	0.00068	1.30	96.016	0.00135	0.00063	0.00005

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 30 Date/Time: 06/20/2018 15:59

Sample Number: **9662314** Class: **** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00082	-14.13	108.965	-0.00153	0.00019	-0.00113
____ AL	0.00714	1.13	219.119	0.02520	-0.00220	-0.00158
____ AS	-0.00086	-1.24	142.454	-0.00060	-0.00220	0.00022
____ B	0.01324	61.34	7.620	0.01241	0.01437	0.01295
____ BA	0.01056	4,556.96	0.918	0.01065	0.01046	0.01058
____ BE	0.00023	7.45	7.046	0.00021	0.00022	0.00024
____ CA	32.40096	28,775.48	0.656	32.53852	32.50836	32.15601
____ CD	0.00103	4.20	15.736	0.00120	0.00102	0.00087
____ CO	0.00063	1.84	11.548	0.00055	0.00070	0.00063
____ CR	-0.00122	-6.04	19.913	-0.00099	-0.00148	-0.00119
____ CU	0.00170	16.18	99.061	-0.00003	0.00333	0.00179
____ FE	0.04919	24.13	4.510	0.04724	0.05160	0.04872
____ K	2.37605	823.99	1.547	2.33575	2.38467	2.40773
____ LI	0.00913	89.45	25.236	0.00832	0.00734	0.01172
____ MG	13.38777	25,922.27	0.618	13.43014	13.44075	13.29241
____ MN	0.00205	65.90	6.630	0.00189	0.00211	0.00213
____ MO	0.00221	2.71	14.808	0.00255	0.00218	0.00190
____ NA	46.56789	56,732.53	0.447	46.60848	46.75280	46.34238
____ NI	0.00066	5.69	40.256	0.00078	0.00035	0.00083
____ P	0.02243	6.48	15.224	0.02237	0.01905	0.02588
____ PB	-0.00098	-0.09	191.997	-0.00058	-0.00304	0.00067
____ S	3.70303	573.71	0.315	3.71595	3.69983	3.69331
____ SB	-0.00006	-0.47	1039.821	-0.00019	-0.00058	0.00059
____ SE	0.00460	0.11	17.565	0.00377	0.00464	0.00538
____ SI	2.55711	617.55	0.743	2.53570	2.57203	2.56359
____ SN	0.00050	0.29	181.235	-0.00027	0.00149	0.00027
____ SR	0.15463	69,175.03	0.299	0.15500	0.15411	0.15477
____ TH	0.00432	-1.83	313.030	-0.00710	0.01926	0.00081
____ TI	0.00107	43.33	6.402	0.00107	0.00114	0.00100
____ TL	-0.00690	-1.83	29.172	-0.00465	-0.00752	-0.00853
____ V	0.00011	5.89	325.144	-0.00017	0.00049	0.00000
____ W	-0.00006	0.25	602.155	0.00035	-0.00021	-0.00032
____ Y1	3551.79415	3,551.79	0.272	3540.66193	3558.01420	3556.70633
____ Y2A	112051.69546	112,051.70	0.439	111709.85803	112615.52653	111829.70183
____ Y2R	13852.24152	13,852.24	0.574	13861.30274	13768.59256	13926.82927
____ ZN	0.00779	50.37	2.928	0.00805	0.00767	0.00764
____ ZR	0.00121	1.63	57.859	0.00150	0.00172	0.00041

LANCASTER LABORATORIES

Run Name: 1817105T75 Instrument ID: 23290

Tube: 31 Date/Time: 06/20/2018 16:02

Sample Number: **9662315** Class: **** Batch: 181701063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00099	-11.61	31.983	-0.00062	-0.00114	-0.00120
____ AL	0.01859	2.58	47.716	0.02012	0.00905	0.02660
____ AS	-0.00129	-1.37	329.434	0.00278	-0.00096	-0.00570
____ B	0.00980	43.40	8.947	0.00910	0.01078	0.00951
____ BA	0.00652	2,934.05	1.031	0.00654	0.00658	0.00645
____ BE	0.00020	1.85	4.751	0.00019	0.00020	0.00021
____ CA	27.58822	24,501.69	0.356	27.47740	27.62328	27.66399
____ CD	0.00001	-1.87	1975.004	0.00018	0.00007	-0.00022
____ CO	0.00008	0.00	528.763	0.00047	0.00012	-0.00036
____ CR	-0.00088	-4.37	104.873	-0.00192	-0.00056	-0.00016
____ CU	0.00067	6.54	75.797	0.00096	0.00095	0.00008
____ FE	0.00189	7.20	82.001	0.00116	0.00366	0.00083
____ K	0.52865	238.23	10.085	0.53652	0.47183	0.57759
____ LI	0.00370	55.34	75.677	0.00066	0.00617	0.00427
____ MG	8.11076	15,729.13	0.313	8.08400	8.11383	8.13444
____ MN	0.00022	14.90	50.833	0.00034	0.00015	0.00016
____ MO	0.00110	0.77	48.247	0.00170	0.00088	0.00071
____ NA	17.06503	20,726.30	0.059	17.06756	17.07357	17.05396
____ NI	0.00001	4.38	1251.319	-0.00084	0.00066	0.00020
____ P	-0.00205	-0.43	91.096	-0.00184	-0.00401	-0.00030
____ PB	0.00058	0.81	315.172	0.00225	-0.00135	0.00082
____ S	3.23206	499.08	0.221	3.23294	3.23873	3.22452
____ SB	-0.00080	-0.71	227.240	-0.00242	0.00118	-0.00116
____ SE	0.00184	-0.75	223.904	-0.00162	0.00075	0.00639
____ SI	4.17621	1,007.04	1.024	4.22412	4.16257	4.14194
____ SN	0.00133	0.84	70.007	0.00097	0.00063	0.00239
____ SR	0.07164	32,690.74	0.604	0.07201	0.07174	0.07116
____ TH	-0.02135	-5.92	36.155	-0.01303	-0.02273	-0.02829
____ TI	0.00112	44.96	37.272	0.00064	0.00140	0.00131
____ TL	-0.00761	-2.01	51.562	-0.01203	-0.00454	-0.00627
____ V	0.00035	7.90	170.677	0.00094	0.00037	-0.00026
____ W	-0.00019	0.13	251.053	-0.00073	-0.00004	0.00020
____ Y1	3539.63404	3,539.63	0.162	3536.27237	3546.24538	3536.38436
____ Y2A	113623.21779	113,623.22	1.247	112364.74756	113347.27218	115157.63363
____ Y2R	13843.20659	13,843.21	0.129	13829.27559	13837.01616	13863.32801
____ ZN	0.00101	13.31	11.219	0.00089	0.00101	0.00112
____ ZR	0.00143	0.37	91.110	0.00160	0.00005	0.00265

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 32

Date/Time: 06/20/2018 16:05

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.51224	3,848.76	0.171	0.51310	0.51227	0.51134
____ AL	25.72730	3,799.96	0.058	25.71966	25.74450	25.71772
____ AS	0.46761	138.14	0.775	0.46392	0.47116	0.46774
____ B	0.49749	2,486.60	0.526	0.49991	0.49786	0.49472
____ BA	0.51068	211,216.95	0.071	0.51105	0.51033	0.51066
____ BE	0.49251	105,181.76	0.239	0.49353	0.49277	0.49123
____ CA	24.93217	21,948.81	0.121	24.96343	24.90299	24.93007
____ CD	0.47791	2,833.29	0.131	0.47745	0.47862	0.47766
____ CO	0.48658	1,488.68	0.208	0.48613	0.48588	0.48774
____ CR	0.49360	2,434.63	0.480	0.49511	0.49482	0.49087
____ CU	0.51893	3,097.88	0.291	0.51980	0.51980	0.51718
____ FE	25.54811	8,986.54	0.377	25.46030	25.65111	25.53292
____ K	24.96364	7,909.35	0.375	25.06121	24.87436	24.95535
____ LI	0.51417	2,915.78	0.459	0.51162	0.51628	0.51461
____ MG	25.21219	48,128.01	0.011	25.21195	25.20955	25.21508
____ MN	0.49951	14,119.75	0.241	0.50032	0.50010	0.49813
____ MO	0.48812	844.07	0.084	0.48796	0.48782	0.48859
____ NA	25.29499	30,492.34	0.141	25.25889	25.33020	25.29588
____ NI	0.47162	817.60	0.337	0.47139	0.47331	0.47016
____ P	0.48876	137.15	0.842	0.48819	0.48495	0.49312
____ PB	0.48493	274.07	1.068	0.47896	0.48759	0.48823
____ S	25.06671	3,845.61	0.304	25.07228	24.98799	25.13985
____ SB	0.49648	160.07	1.063	0.49384	0.49304	0.50255
____ SE	0.46322	148.66	0.801	0.46195	0.46740	0.46032
____ SI	25.14325	6,006.36	0.321	25.07975	25.23419	25.11582
____ SN	0.49269	325.62	0.363	0.49212	0.49469	0.49125
____ SR	0.51049	227,903.56	0.055	0.51016	0.51066	0.51063
____ TH	0.49599	78.93	5.786	0.52815	0.47300	0.48680
____ TI	0.50768	10,394.29	0.256	0.50769	0.50897	0.50637
____ TL	0.48748	117.21	0.734	0.49024	0.48878	0.48344
____ V	0.51075	4,157.30	0.391	0.51291	0.51035	0.50897
____ W	0.47773	323.16	0.164	0.47702	0.47758	0.47857
____ Y1	3527.72189	3,527.72	0.169	3533.33067	3528.36516	3521.46985
____ Y2A	112464.64704	112,464.65	0.262	112381.60000	112220.29159	112792.04954
____ Y2R	13722.61717	13,722.62	0.254	13762.32535	13708.39157	13697.13458
____ ZN	0.47464	2,612.87	0.218	0.47476	0.47355	0.47561
____ ZR	0.51545	1,460.95	0.202	0.51665	0.51495	0.51475

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 33

Date/Time: 06/20/2018 16:08

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00029	-10.00	350.772	-0.00028	-0.00131	0.00072
____ AL	0.04450	6.57	20.676	0.04956	0.03388	0.05005
____ AS	-0.00043	-1.11	991.020	0.00134	-0.00527	0.00265
____ B	0.00130	4.46	25.866	0.00166	0.00125	0.00099
____ BA	0.00087	570.04	4.935	0.00092	0.00086	0.00083
____ BE	0.00030	22.73	32.676	0.00041	0.00022	0.00026
____ CA	0.00341	28.70	137.893	-0.00067	0.00235	0.00856
____ CD	0.00010	-1.33	102.161	0.00000	0.00021	0.00009
____ CO	0.00040	1.36	47.808	0.00018	0.00050	0.00051
____ CR	-0.00096	-4.79	24.769	-0.00123	-0.00078	-0.00088
____ CU	0.00028	2.53	333.193	0.00075	0.00086	-0.00078
____ FE	-0.00197	5.74	294.588	-0.00833	0.00304	-0.00062
____ K	-0.01085	66.36	397.303	0.03730	-0.04582	-0.02402
____ LI	0.00296	31.73	9.771	0.00313	0.00312	0.00262
____ MG	0.00342	8.80	78.625	0.00651	0.00165	0.00210
____ MN	0.00009	10.84	153.201	0.00013	0.00020	-0.00006
____ MO	0.00089	0.41	17.761	0.00096	0.00071	0.00100
____ NA	0.02629	-46.79	1.210	0.02601	0.02622	0.02663
____ NI	-0.00031	4.23	190.562	-0.00097	-0.00013	0.00017
____ P	0.00268	0.89	33.788	0.00235	0.00199	0.00371
____ PB	0.00157	1.28	202.076	0.00048	-0.00092	0.00513
____ S	0.00320	1.04	175.151	0.00785	0.00476	-0.00302
____ SB	-0.00095	-0.75	146.198	-0.00010	-0.00020	-0.00256
____ SE	0.00384	-0.19	44.863	0.00394	0.00207	0.00551
____ SI	0.01078	3.91	34.491	0.01504	0.00918	0.00814
____ SN	0.00000	-0.04	6340.450	0.00011	-0.00023	0.00012
____ SR	-0.00003	-62.88	400.190	0.00009	-0.00007	-0.00010
____ TH	0.00362	-1.91	204.693	0.00088	-0.00203	0.01202
____ TI	0.00003	22.26	401.412	0.00008	-0.00010	0.00011
____ TL	-0.00487	-1.30	20.493	-0.00518	-0.00375	-0.00567
____ V	-0.00013	4.10	447.862	0.00053	-0.00046	-0.00045
____ W	-0.00030	0.05	62.196	-0.00044	-0.00009	-0.00037
____ Y1	3517.39493	3,517.39	0.377	3530.29297	3518.07619	3503.81562
____ Y2A	112516.82149	112,516.82	0.479	112853.12002	111895.27567	112802.06879
____ Y2R	13643.37855	13,643.38	0.319	13650.52448	13596.66002	13682.95115
____ ZN	-0.00003	7.59	867.090	-0.00028	0.00030	-0.00012
____ ZR	0.00047	-0.48	275.379	-0.00069	0.00184	0.00024

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 34

Date/Time: 06/20/2018 16:11

Sample Number: **LLC**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.01174	26.67	0.604	0.01178	0.01166	0.01178
____ AL	0.44738	71.32	5.809	0.46680	0.45749	0.41786
____ AS	0.03618	9.80	10.064	0.03846	0.03810	0.03198
____ B	0.10011	503.30	0.704	0.09953	0.10089	0.09990
____ BA	0.01041	4,610.98	0.283	0.01037	0.01041	0.01043
____ BE	0.01048	2,240.46	0.155	0.01046	0.01048	0.01048
____ CA	0.42140	399.45	1.358	0.42500	0.42440	0.41480
____ CD	0.01006	58.16	0.965	0.01002	0.01017	0.00999
____ CO	0.00981	30.48	2.710	0.00992	0.00999	0.00950
____ CR	0.02979	149.81	2.815	0.02886	0.03048	0.03004
____ CU	0.02448	187.25	5.280	0.02590	0.02337	0.02417
____ FE	0.42761	161.57	1.034	0.43240	0.42674	0.42369
____ K	1.05938	411.91	2.092	1.03531	1.06388	1.07894
____ LI	0.04410	268.83	5.031	0.04186	0.04630	0.04414
____ MG	0.20827	412.98	1.037	0.21076	0.20721	0.20685
____ MN	0.01068	311.88	0.703	0.01060	0.01075	0.01068
____ MO	0.02136	36.13	0.943	0.02146	0.02113	0.02150
____ NA	2.12093	2,540.46	0.913	2.13221	2.13200	2.09856
____ NI	0.02026	40.12	3.716	0.01987	0.01979	0.02113
____ P	0.20263	57.31	1.004	0.20496	0.20169	0.20124
____ PB	0.03043	17.56	7.558	0.03094	0.03243	0.02792
____ S	1.06337	164.89	0.489	1.05755	1.06756	1.06501
____ SB	0.04382	13.76	1.877	0.04293	0.04456	0.04396
____ SE	0.04124	11.97	6.585	0.04385	0.04146	0.03843
____ SI	0.11022	28.42	13.790	0.09274	0.11762	0.12030
____ SN	0.04026	26.77	3.285	0.03874	0.04089	0.04115
____ SR	0.01023	4,606.19	0.205	0.01023	0.01022	0.01026
____ TH	0.37989	58.82	5.398	0.36080	0.37731	0.40157
____ TI	0.02101	459.83	0.606	0.02113	0.02102	0.02088
____ TL	0.05285	13.31	7.149	0.05721	0.05062	0.05071
____ V	0.01021	91.07	7.326	0.01092	0.01029	0.00943
____ W	0.01998	13.97	4.754	0.01889	0.02066	0.02038
____ Y1	3554.47122	3,554.47	0.180	3557.00830	3559.19408	3547.21128
____ Y2A	114682.37550	114,682.38	0.536	114753.08826	114034.96503	115259.07319
____ Y2R	14032.42772	14,032.43	0.887	14032.97607	13907.65204	14156.65503
____ ZN	0.04026	228.55	0.393	0.04044	0.04017	0.04017
____ ZR	0.11010	338.05	1.770	0.11233	0.10930	0.10868

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 35

Date/Time: 06/20/2018 16:15

Sample Number: **ICSA**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00021	-21.25	546.697	0.00144	-0.00088	0.00008
____ AL	498.44177	72,356.10	0.329	496.59846	498.99924	499.72761
____ AS	-0.00021	-7.22	1385.383	-0.00010	0.00877	-0.00930
____ B	-0.01813	500.45	4.354	-0.01732	-0.01818	-0.01889
____ BA	0.00119	658.72	5.740	0.00113	0.00127	0.00118
____ BE	-0.00016	-69.53	15.121	-0.00013	-0.00016	-0.00018
____ CA	490.24674	400,537.58	0.073	489.83329	490.42168	490.48525
____ CD	-0.00166	59.33	6.505	-0.00160	-0.00159	-0.00178
____ CO	-0.00078	-2.08	36.749	-0.00110	-0.00072	-0.00053
____ CR	-0.00336	-15.54	26.807	-0.00439	-0.00270	-0.00300
____ CU	0.00546	165.53	9.841	0.00604	0.00498	0.00536
____ FE	197.27451	63,710.37	0.304	196.58471	197.56525	197.67356
____ K	-0.03513	57.50	53.804	-0.04949	-0.01372	-0.04218
____ LI	-0.00293	323.67	67.371	-0.00411	-0.00065	-0.00404
____ MG	522.27512	773,787.97	1.043	517.74683	528.32057	520.75797
____ MN	0.00431	121.93	3.425	0.00446	0.00416	0.00430
____ MO	-0.00013	-1.25	673.058	0.00003	-0.00107	0.00066
____ NA	0.05973	-6.53	38.420	0.03680	0.05969	0.08270
____ NI	-0.00890	-9.79	11.956	-0.01008	-0.00801	-0.00860
____ P	0.00457	1.32	83.471	0.00097	0.00856	0.00417
____ PB	-0.00802	52.92	53.974	-0.00309	-0.01118	-0.00981
____ S	-0.03984	7.64	14.054	-0.03431	-0.03969	-0.04551
____ SB	0.00375	0.69	75.529	0.00700	0.00250	0.00176
____ SE	0.02975	-0.37	16.619	0.03364	0.03143	0.02419
____ SI	0.00251	1.89	358.144	-0.00755	0.00534	0.00974
____ SN	0.00175	1.03	27.059	0.00197	0.00208	0.00121
____ SR	0.00796	11,290.74	1.163	0.00803	0.00800	0.00786
____ TH	-0.01594	18.70	211.635	-0.02153	0.02024	-0.04651
____ TI	-0.00250	-27.55	13.172	-0.00237	-0.00225	-0.00288
____ TL	0.00252	-2.83	78.052	0.00478	0.00119	0.00159
____ V	-0.00276	22.29	27.019	-0.00270	-0.00354	-0.00205
____ W	-0.00166	-0.84	118.365	-0.00372	0.00020	-0.00146
____ Y1	3254.49788	3,254.50	0.142	3250.33497	3253.69463	3259.46405
____ Y2A	105271.50201	105,271.50	0.194	105255.87766	105483.25335	105075.37500
____ Y2R	13353.08896	13,353.09	0.437	13419.74105	13328.35933	13311.16650
____ ZN	-0.01020	93.18	0.680	-0.01012	-0.01025	-0.01022
____ ZR	0.00538	11.39	54.393	0.00711	0.00200	0.00704

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 36

Date/Time: 06/20/2018 16:18

Sample Number: **ICSAB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.21563	1,543.37	0.910	0.21613	0.21347	0.21729
____ AL	505.16819	74,363.07	0.141	505.43344	505.71221	504.35892
____ AS	0.08775	16.66	6.571	0.08562	0.09427	0.08334
____ B	-0.01910	509.06	5.414	-0.01801	-0.02007	-0.01923
____ BA	0.52846	206,569.07	0.226	0.52969	0.52730	0.52840
____ BE	0.48037	96,986.90	0.623	0.48332	0.48045	0.47734
____ CA	497.95156	412,112.92	0.350	498.31315	499.48691	496.05463
____ CD	0.89924	4,970.30	0.440	0.90330	0.89900	0.89540
____ CO	0.46714	1,316.88	0.755	0.46952	0.46881	0.46309
____ CR	0.47354	2,207.63	0.561	0.47620	0.47353	0.47089
____ CU	0.53333	3,174.94	0.250	0.53401	0.53420	0.53180
____ FE	200.13220	65,459.89	0.230	200.57465	200.16738	199.65456
____ K	-0.02319	62.00	238.151	-0.04221	0.03904	-0.06639
____ LI	-0.00309	332.50	138.503	0.00184	-0.00581	-0.00531
____ MG	528.53761	791,344.63	0.134	529.12676	527.75086	528.73521
____ MN	0.48123	12,866.55	0.363	0.48229	0.48219	0.47921
____ MO	-0.00033	-1.57	66.991	-0.00009	-0.00051	-0.00038
____ NA	0.04720	-21.49	15.656	0.04829	0.05398	0.03933
____ NI	0.88912	1,422.06	0.620	0.89486	0.88866	0.88385
____ P	0.00708	1.98	85.441	0.00093	0.00728	0.01302
____ PB	0.50841	319.29	1.857	0.50526	0.51903	0.50095
____ S	-0.05410	5.78	16.925	-0.05640	-0.06189	-0.04402
____ SB	0.61142	181.44	0.571	0.61315	0.60740	0.61370
____ SE	0.48882	135.64	1.341	0.49000	0.49471	0.48176
____ SI	0.00928	3.53	68.518	0.00516	0.01660	0.00607
____ SN	0.00366	2.19	39.878	0.00321	0.00247	0.00529
____ SR	0.00818	11,620.35	1.667	0.00822	0.00802	0.00828
____ TH	-0.04735	14.41	44.481	-0.07093	-0.04068	-0.03043
____ TI	-0.00044	11.93	58.517	-0.00041	-0.00020	-0.00071
____ TL	0.09903	14.53	4.447	0.09646	0.09652	0.10412
____ V	0.50500	3,952.94	0.357	0.50693	0.50472	0.50336
____ W	0.00409	7.14	9.171	0.00436	0.00366	0.00426
____ Y1	3252.15345	3,252.15	0.109	3255.86241	3251.83682	3248.76112
____ Y2A	106324.96624	106,324.97	0.561	105644.86937	106762.31061	106567.71874
____ Y2R	13537.05925	13,537.06	0.255	13576.95570	13518.60639	13515.61565
____ ZN	0.91368	4,734.53	0.467	0.91666	0.91559	0.90880
____ ZR	0.00640	12.04	28.491	0.00832	0.00469	0.00619

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 37

Date/Time: 06/20/2018 16:21

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.51103	3,850.15	0.243	0.51164	0.51185	0.50960
____ AL	25.84060	3,813.27	1.077	25.95303	26.04517	25.52359
____ AS	0.47820	140.33	0.591	0.47761	0.48128	0.47572
____ B	0.49776	2,493.48	0.619	0.49507	0.50113	0.49708
____ BA	0.51081	211,805.89	0.165	0.51045	0.51177	0.51021
____ BE	0.49021	104,954.21	0.410	0.48914	0.49253	0.48895
____ CA	25.14045	22,112.39	1.058	25.28585	25.30193	24.83359
____ CD	0.48330	2,846.14	0.302	0.48411	0.48418	0.48161
____ CO	0.49242	1,496.56	0.609	0.49109	0.49586	0.49033
____ CR	0.49131	2,429.47	0.436	0.48984	0.49376	0.49032
____ CU	0.51890	3,104.92	0.668	0.51667	0.52289	0.51713
____ FE	25.50627	8,964.44	0.617	25.67073	25.49069	25.35739
____ K	25.10519	7,946.97	1.119	25.41949	25.01747	24.87861
____ LI	0.51087	2,894.89	1.268	0.51579	0.51329	0.50353
____ MG	25.25404	48,164.70	1.237	25.39729	25.46925	24.89558
____ MN	0.49995	14,167.89	0.265	0.49855	0.50118	0.50012
____ MO	0.49341	847.56	0.103	0.49312	0.49399	0.49311
____ NA	25.25152	30,414.26	0.900	25.51337	25.13381	25.10738
____ NI	0.47910	825.03	0.206	0.47993	0.47936	0.47801
____ P	0.49305	137.44	0.548	0.49157	0.49617	0.49141
____ PB	0.49615	278.49	0.602	0.49479	0.49958	0.49409
____ S	25.27839	3,852.36	0.209	25.27621	25.33220	25.22677
____ SB	0.49649	159.01	0.659	0.49970	0.49316	0.49662
____ SE	0.47861	152.61	0.344	0.47762	0.48051	0.47769
____ SI	25.15598	6,004.48	0.407	25.27325	25.08515	25.10954
____ SN	0.49318	323.78	0.400	0.49190	0.49545	0.49218
____ SR	0.51003	228,280.80	0.184	0.50980	0.51106	0.50923
____ TH	0.49062	78.02	3.959	0.49869	0.46847	0.50471
____ TI	0.50773	10,421.61	0.414	0.50573	0.50992	0.50753
____ TL	0.49428	118.16	1.636	0.49946	0.49841	0.48496
____ V	0.50966	4,158.39	0.447	0.50729	0.51183	0.50986
____ W	0.48558	326.29	0.515	0.48659	0.48741	0.48273
____ Y1	3504.35156	3,504.35	0.276	3508.22118	3493.35266	3511.48085
____ Y2A	112749.77084	112,749.77	0.537	113228.28908	112068.63772	112952.38571
____ Y2R	13711.36737	13,711.37	0.713	13661.76471	13648.31142	13824.02597
____ ZN	0.48087	2,629.25	0.171	0.48104	0.48159	0.47997
____ ZR	0.51815	1,466.75	0.887	0.52217	0.51913	0.51314

LANCASTER LABORATORIES

Run Name: 1817105T75

Instrument ID: 23290

Tube: 38

Date/Time: 06/20/2018 16:24

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00071	-2.35	179.492	0.00005	0.00218	-0.00010
____ AL	0.01330	2.05	166.305	0.03623	0.01159	-0.00791
____ AS	0.00007	-0.96	2149.043	-0.00133	0.00160	-0.00007
____ B	0.00302	13.08	62.438	0.00319	0.00481	0.00106
____ BA	0.00194	1,030.72	95.428	0.00087	0.00408	0.00087
____ BE	0.00133	248.62	144.976	0.00018	0.00354	0.00026
____ CA	0.00275	28.31	120.521	0.00502	0.00428	-0.00105
____ CD	0.00029	-0.23	98.644	0.00033	0.00054	-0.00002
____ CO	0.00026	0.95	105.576	0.00039	0.00044	-0.00005
____ CR	0.00091	4.55	211.315	-0.00098	0.00284	0.00085
____ CU	0.00104	7.22	346.342	0.00184	0.00416	-0.00289
____ FE	-0.00147	5.96	258.331	-0.00415	0.00287	-0.00311
____ K	-0.00551	68.43	661.247	0.01799	-0.04751	0.01298
____ LI	0.00273	30.64	122.352	-0.00083	0.00321	0.00579
____ MG	0.00317	8.37	49.929	0.00492	0.00184	0.00276
____ MN	0.00106	39.29	202.022	-0.00026	0.00353	-0.00009
____ MO	0.00099	0.57	36.063	0.00135	0.00063	0.00098
____ NA	0.01168	-64.79	83.906	0.02287	0.00756	0.00461
____ NI	-0.00020	4.45	337.532	-0.00089	-0.00013	0.00043
____ P	-0.00052	-0.01	79.804	-0.00039	-0.00098	-0.00018
____ PB	0.00030	0.58	1004.257	-0.00309	0.00278	0.00122
____ S	0.00566	1.42	132.858	-0.00106	0.01379	0.00426
____ SB	-0.00261	-1.28	166.819	0.00055	-0.00759	-0.00081
____ SE	0.00499	0.18	56.394	0.00422	0.00264	0.00810
____ SI	0.00211	1.86	87.305	0.00182	0.00043	0.00407
____ SN	0.00080	0.49	96.668	0.00068	0.00009	0.00162
____ SR	0.00064	242.14	191.608	-0.00007	0.00207	-0.00007
____ TH	0.00398	-1.88	437.496	-0.00033	-0.01087	0.02313
____ TI	0.00087	40.02	121.852	0.00012	0.00207	0.00041
____ TL	-0.00541	-1.46	34.951	-0.00473	-0.00395	-0.00755
____ V	0.00161	18.71	152.994	-0.00015	0.00443	0.00056
____ W	0.00136	1.16	127.135	0.00329	-0.00001	0.00079
____ Y1	3537.09496	3,537.09	0.237	3539.79002	3543.81362	3527.68123
____ Y2A	113910.36195	113,910.36	1.119	113266.53016	115378.26455	113086.29113
____ Y2R	13736.73826	13,736.74	0.600	13711.73826	13828.79620	13669.68032
____ ZN	-0.00020	6.75	99.267	-0.00042	-0.00013	-0.00005
____ ZR	0.00102	1.08	243.374	-0.00151	0.00342	0.00114

Extraction/Distillation/Digestion Logs

Metals in Liquid

LLENS Worksheet for 0635 SW846 Water

Batch# 18 170 10635 01

Start Time: 6/20/18 6:50 **End Time:** 6/20/18 10:45 **Hot Block:** 13

Pipette ID: W/1000

Spike/Reagent	Lot#	Volume Added(mL)
1:1 HCL	P18-163A	5.00
1:1 HNO3	P18-169C	2.00
ICP Spike 1A	1813008#5	1.00
ICP Spike 1B	1813009#5	1.00
LCS A1	1813008#5	1.00
LCS B1	1813009#5	1.00

Method Ref:

	SampleID	Date Due	ST	P	H	Balance	PH<2	BC	Vessel Lot#	Location ID	Comments
1)	PBW	.							1802043		
2)	LCSW	.							1802043		
3)	9661771	06/26/18 09:50	WW	P7			Y	800A	1802043	WMET01/A2	
4)	9662303FD	06/26/18 09:50	WW	N7			Y	800A	1802043	WMET01/F1	
5)	9662304	06/26/18 09:50	WW	N7			Y	800A	1802043	WMET01/E5	
6)	9662305	06/26/18 09:50	WW	N7			Y	800A	1802043	WMET01/D1	
7)	9662306	06/26/18 09:50	WW	N7			Y	800A	1802043	WMET01/A1	
8)	9662307	06/26/18 09:50	WW	N7			Y	800A	1802043	WMET01/F1	
9)	9662308	06/26/18 09:50	WW	N7			Y	800A	1802043	WMET01/F5	
10)	9662309	06/26/18 09:50	WW	N7			Y	800A	1802043	WMET01/F3	
11)	**9662310U**	06/26/18 09:50	WW	N7			Y	800A	1802043	WMET01/C1	
12)	**9662311R**	06/26/18 09:50	WW	N7			Y	800A	1802043	WMET01/F6	
13)	**9662312M**	06/26/18 09:50	WW	N7			Y	800A	1802043	WMET01/F4	
14)	**9662313D**	06/26/18 09:50	WW	N7			Y	800A	1802043	WMET01/B1	
15)	9662314	06/26/18 09:50	WW	N7			Y	800A	1802043	WMET01/C2	
16)	9662315	06/26/18 09:50	WW	N7			Y	800A	1802043	WMET01/D3	

Prep Employee:2807 D/I _____

6/20/2018

v 1.1.0

Batch# 18 170 1063 501

LLENS Batch Chronology and Change Log - SW846 Water

	Operation	Instrument	Operation Date	ANALYST
1)	Batch Creation		6/19/18 13:18	2807
2)	Sample Vol		6/20/18 7:35	2807
3)	Final Vol	CLEAR	6/20/18 7:35	2807
4)	Trial		6/20/18 7:35	2807
5)	Upload Prep	US19PCC06698	6/20/18 10:58	2807

Sample ID	Analysis	D	Operation	Measurement	Original Entry Date/Time	Data	Units	Analyst	Data Changed Date/Time	Analyst	Reason

Analysis: 0635 SW846 Water

Batch# 18 170 1063 501

Sample ID	Due Date	P	EPA#	SDG#	Initial Volume	Final Volume	Trial
PBW					50.0000	50.0000	1
LCSW					1.0000	1.0000	1
9661771	06/26/18	P7			50.0000	50.0000	1
9662303FD	06/26/18	N7	C5002	CBD50-02FD	50.0000	50.0000	1
9662304	06/26/18	N7	C5003	CBD50-03	50.0000	50.0000	1
9662305	06/26/18	N7	C5004	CBD50-04	50.0000	50.0000	1
9662306	06/26/18	N7	C5005	CBD50-05	50.0000	50.0000	1
9662307	06/26/18	N7	C5006	CBD50-06	50.0000	50.0000	1
9662308	06/26/18	N7	C5007	CBD50-07	50.0000	50.0000	1
9662309	06/26/18	N7	C5008	CBD50-08	50.0000	50.0000	1
9662310U	06/26/18	N7	C5009	CBD50-09BKG	50.0000	50.0000	1
9662311R	06/26/18	N7	C5009	CBD50-09MS	50.0000	50.0000	1
9662312M	06/26/18	N7	C5009	CBD50-09MSD	50.0000	50.0000	1
9662313D	06/26/18	N7	C5009	CBD50-09DUP	50.0000	50.0000	1
9662314	06/26/18	N7	C5010	CBD50-10	50.0000	50.0000	1
9662315	06/26/18	N7	C5011	CBD50-11	50.0000	50.0000	1

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NYSDEC ASP Category B Data Package

Prepared for:

Chevron Environmental Mgmt.
4800 Fournace Place
Bellaire TX 77401

Project: Beacon - NY Annual RCRA Event
Groundwater and Water Samples
Collected on 11/01/18-11/02/18

SDG# CBD53

GROUP	SAMPLE NUMBERS
2005546	9882891-9882899

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

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

Authorized by: Dana M Kauffman **Date:** **01/11/2019**

Dana M. Kauffman
Manager

Any questions or concerns you might have regarding this data package should be directed to your client representative, Megan Moeller at (717) 556-7261.

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Table of Contents for SDG# CBD53

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Sample Reference List for SDG Number CBD53
with a Data Package Type of NYSDEC B

11387 - Chevron Environmental Mgmt.

Project: Beacon - NY Annual RCRA Event

Lab Sample Number	Client Sample ID	Collection Date	Date Received
9882891	QA-WT1-181026	10/26/2018 00:00	11/03/2018 09:25
9882892	OS-3-W-6.00-181101	11/01/2018 14:10	11/03/2018 09:25
9882893	OS-2-W-6.00-181101	11/01/2018 14:50	11/03/2018 09:25
9882894	TF-23-W-5.26-181101	11/01/2018 15:55	11/03/2018 09:25
9882895	TF-5-W-4.59-181101	11/01/2018 16:25	11/03/2018 09:25
9882896	DB-8A-W-5.00-181102	11/02/2018 08:55	11/03/2018 09:25
9882897	DB-17-W-5.00-181102	11/02/2018 09:00	11/03/2018 09:25
9882898	DC-1-W-2.00-181102	11/02/2018 10:30	11/03/2018 09:25
9882899	DC-2-W-7.50-181102	11/02/2018 10:45	11/03/2018 09:25

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Sample pH Log

SDG: CBD53

LLI Sample Number	Bottle Code	Actual pH	Exp. pH	*pH Check Code	Adj. pH	Adjusted Date	Adjusted Time	Preservative Added	Preservative Lot #	LLI Supplied Bottle?	Sulfide Present?	Corrective Substance	CS Lot #	**Chlorine Present?	Corrective Substance	CS Lot #	Record Date	Employee
9882891	040A	5	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 3:11:13PM	27445
9882892	040A	5	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 3:11:13PM	27445
9882892	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 8:39:17PM	1201
9882892	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:43:18AM	25804
9882892	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:41:02AM	25804
9882893	040A	5	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 3:11:13PM	27445
9882893	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 8:24:55PM	1201
9882893	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:41:20AM	25804
9882893	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:41:59AM	25804
9882894	040A	5	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 3:11:13PM	27445
9882894	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 8:25:34PM	1201
9882894	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:42:43AM	25804
9882894	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:43:32AM	25804
9882895	040A	5	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 3:11:13PM	27445
9882895	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 8:20:55PM	1201
9882895	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:42:49AM	25804
9882895	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:41:08AM	25804
9882896	040A	5	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 3:11:14PM	27445
9882896	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 8:26:47PM	1201
9882896	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:43:12AM	25804
9882896	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:42:37AM	25804
9882897	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 7:37:37PM	10203
9882897	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 8:26:11PM	1201
9882897	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:42:11AM	25804
9882897	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:41:41AM	25804
9882898	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 7:37:37PM	10203
9882898	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 8:37:23PM	1201
9882898	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:41:25AM	25804
9882898	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:43:00AM	25804
9882899	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 7:37:37PM	10203
9882899	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 8:38:40PM	1201
9882899	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:41:15AM	25804
9882899	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/4/2018 5:41:32AM	25804

LLI Sample Number	Bottle Code	Actual pH	Exp. pH	*pH Check Code	Adj. pH	Adjusted Date	Adjusted Time	Preservative Added	Preservative Lot #	LLI Supplied Bottle?	Sulfide Present?	Corrective Substance	CS Lot #	**Chlorine Present?	Corrective Substance	CS Lot #	Record Date	Employee

*pH Check Code Key
PK = Original container checked - pH is within the correct range. (No preservative was added)
PA = Original container checked - pH adjusted to correct range. (Preservative was added)
PV = Volatile container checked
PC = pH checked (unpreserved container)
SPK = Subsampled from an original container. Original container checked - pH is within correct range
SPA = Subsampled from an original container. Subsample container checked - pH adjusted to correct range.
SPC = Subsampled from an original container. pH checked (unpreserved container).
SUP = Subsampled from original container. Unable to be preserved due to the matrix of the sample.
UP = Unable to preserve due to matrix of the sample.
NA = Not applicable

**Chlorine Present Code Key
NA = Chlorine Not Checked
Y = Chlorine Present
N = Chlorine Not Present

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01163 GC/MS VOA Water Prep

An undiluted aliquot of the water sample or a dilution of the sample is purged with an inert gas and the volatiles are collected on an adsorbent trap that is subsequently desorbed onto a gas chromatographic column.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 5030C, May 2003.

11997 VOCs- 5ml Water by 8260C

The water sample is purged and the volatile compounds are collected on a sorbent trap that is subsequently desorbed onto the GC/MS system for chromatographic and mass spectral analysis.

Reference: Volatile Organic Compounds by Gas Chromatography/ Mass Spectrometry (GC/MS), SW-846 Method 8260C, August 2006.

10635 ICP-WW, 3005A (tot rec) - U4

The sample is digested with nitric acid and hydrochloric acid.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3005A, July 1992

07055 Lead

The solution resulting from the metals digestion is analyzed by Trace ICP.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 6010C, February 2007.

11010 8270D BNA Extraction

The sample aliquot is extracted with methylene chloride by either separatory funnel or liquid/liquid apparatus. Extraction is performed at both a pH of 11 and 2. The extract is concentrated prior to analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3510C, Rev 3, December 1996

14241 SVOAs 8270D MINI

The sample extract is analyzed by capillary column Gas Chromatography/Mass Spectrometry.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8270D, February 2007.

Analysis Reports / Field Chain of Custody

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ANALYSIS REPORT

Prepared by:

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

Prepared for:

Chevron Environmental Mgmt.
4800 Fournace Place
Bellaire TX 77401

Report Date: November 14, 2018 11:30

Project: Beacon - NY Annual RCRA Event

Account #: 11387
Group Number: 2005546
SDG: CBD53
PO Number: 0015174181
Release Number: HENDRICKSON
State of Sample Origin: NY

Electronic Copy To	Parsons Engineering Science	Attn: Ed Ashton
Electronic Copy To	Parsons	Attn: Craig Butler
Electronic Copy To	Parsons	Attn: Heather Fettig

Respectfully Submitted,

Megan A. Moeller
Senior Specialist

(717) 556-7261

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

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
QA-WT1-181026 Water	10/26/2018	9882891
OS-3-W-6.00-181101 Grab Groundwater	11/01/2018 14:10	9882892
OS-2-W-6.00-181101 Grab Groundwater	11/01/2018 14:50	9882893
TF-23-W-5.26-181101 Grab Groundwater	11/01/2018 15:55	9882894
TF-5-W-4.59-181101 Grab Groundwater	11/01/2018 16:25	9882895
DB-8A-W-5.00-181102 Grab Groundwater	11/02/2018 08:55	9882896
DB-17-W-5.00-181102 Grab Groundwater	11/02/2018 09:00	9882897
DC-1-W-2.00-181102 Grab Groundwater	11/02/2018 10:30	9882898
DC-2-W-7.50-181102 Grab Groundwater	11/02/2018 10:45	9882899

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

Sample Description: **QA-WT1-181026 Water**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 10/26/2018
SDG#: CBD53-01TB

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882891
ELLE Group #: 2005546
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.2	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1
11997	Bromoform	75-25-2	N.D.	0.2	1
11997	Bromomethane	74-83-9	N.D.	0.3	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1
11997	Chloroethane	75-00-3	N.D.	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.2	1
11997	Chloromethane	74-87-3	N.D.	0.2	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.2	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1
11997	Toluene	108-88-3	N.D.	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1
11997	Xylene (Total)	1330-20-7	N.D.	1	1

A preserved vial was submitted for analysis. However, the pH at the time of analysis was 5.

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5183113AA	11/08/2018 04:14	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5183113AA	11/08/2018 04:14	Don V Viray	1

Sample Description: **OS-3-W-6.00-181101 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/01/2018 14:10
SDG#: CBD53-02

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882892
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.2	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1
11997	Bromoform	75-25-2	N.D.	0.2	1
11997	Bromomethane	74-83-9	N.D.	0.3	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1
11997	Chloroethane	75-00-3	N.D.	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.2	1
11997	Chloromethane	74-87-3	N.D.	0.2	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.2	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1
11997	Toluene	108-88-3	N.D.	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1
11997	Xylene (Total)	1330-20-7	N.D.	1	1
	A preserved vial was submitted for analysis. However, the pH at the time of analysis was 5.				
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1

Sample Description: **OS-3-W-6.00-181101 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/01/2018 14:10
SDG#: CBD53-02

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882892
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1

Sample Description: **OS-3-W-6.00-181101 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/01/2018 14:10
SDG#: CBD53-02

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882892
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5183113AA	11/08/2018 04:35	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5183113AA	11/08/2018 04:35	Don V Viray	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18310WAL026	11/09/2018 14:26	Edward C Monborne	1
11010	8270D BNA Extraction	SW-846 3510C	1	18310WAL026	11/07/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	183131063501	11/12/2018 11:16	Eric L Eby	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183131063501	11/11/2018 05:41	James L Mertz	1

Sample Description: **OS-2-W-6.00-181101 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/01/2018 14:50
SDG#: CBD53-03

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882893
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.2	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1
11997	Bromoform	75-25-2	N.D.	0.2	1
11997	Bromomethane	74-83-9	N.D.	0.3	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1
11997	Chloroethane	75-00-3	N.D.	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.2	1
11997	Chloromethane	74-87-3	N.D.	0.2	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.2	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1
11997	Toluene	108-88-3	N.D.	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1
11997	Xylene (Total)	1330-20-7	N.D.	1	1
	A preserved vial was submitted for analysis. However, the pH at the time of analysis was 5.				
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1

Sample Description: **OS-2-W-6.00-181101 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/01/2018 14:50
SDG#: CBD53-03

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882893
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	15	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1

Sample Description: **OS-2-W-6.00-181101 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/01/2018 14:50
SDG#: CBD53-03

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882893
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5183113AA	11/08/2018 04:56	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5183113AA	11/08/2018 04:56	Don V Viray	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18310WAL026	11/09/2018 14:54	Edward C Monborne	1
11010	8270D BNA Extraction	SW-846 3510C	1	18310WAL026	11/07/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	183131063501	11/12/2018 11:19	Eric L Eby	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183131063501	11/11/2018 05:41	James L Mertz	1

Sample Description: **TF-23-W-5.26-181101 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/01/2018 15:55
SDG#: CBD53-04

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882894
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.2	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1
11997	Bromoform	75-25-2	N.D.	0.2	1
11997	Bromomethane	74-83-9	N.D.	0.3	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1
11997	Chloroethane	75-00-3	N.D.	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.2	1
11997	Chloromethane	74-87-3	N.D.	0.2	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.2	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1
11997	Toluene	108-88-3	N.D.	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1
11997	Xylene (Total)	1330-20-7	N.D.	1	1
	A preserved vial was submitted for analysis. However, the pH at the time of analysis was 5.				
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1

Sample Description: **TF-23-W-5.26-181101 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/01/2018 15:55
SDG#: CBD53-04

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882894
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1

Sample Description: **TF-23-W-5.26-181101 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/01/2018 15:55
SDG#: CBD53-04

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882894
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5183113AA	11/08/2018 05:17	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5183113AA	11/08/2018 05:17	Don V Viray	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18310WAL026	11/09/2018 15:22	Edward C Monborne	1
11010	8270D BNA Extraction	SW-846 3510C	1	18310WAL026	11/07/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	183131063501	11/12/2018 11:22	Eric L Eby	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183131063501	11/11/2018 05:41	James L Mertz	1

Sample Description: **TF-5-W-4.59-181101 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/01/2018 16:25
SDG#: CBD53-05

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882895
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.2	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1
11997	Bromoform	75-25-2	N.D.	0.2	1
11997	Bromomethane	74-83-9	N.D.	0.3	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1
11997	Chloroethane	75-00-3	N.D.	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.2	1
11997	Chloromethane	74-87-3	N.D.	0.2	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.2	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1
11997	Toluene	108-88-3	N.D.	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1
11997	Xylene (Total)	1330-20-7	N.D.	1	1
	A preserved vial was submitted for analysis. However, the pH at the time of analysis was 5.				
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1

Sample Description: **TF-5-W-4.59-181101 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/01/2018 16:25
SDG#: CBD53-05

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882895
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	9	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	15	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	1	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1

Sample Description: **TF-5-W-4.59-181101 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/01/2018 16:25
SDG#: CBD53-05

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882895
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	11	1
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.8	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.8	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5183113AA	11/08/2018 05:38	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5183113AA	11/08/2018 05:38	Don V Viray	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18310WAL026	11/09/2018 15:51	Edward C Monborne	1
11010	8270D BNA Extraction	SW-846 3510C	1	18310WAL026	11/07/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	183131063501	11/12/2018 11:30	Eric L Eby	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183131063501	11/11/2018 05:41	James L Mertz	1

Sample Description: **DB-8A-W-5.00-181102 Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/02/2018 08:55
SDG#: CBD53-06

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882896
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.2	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1
11997	Bromoform	75-25-2	N.D.	0.2	1
11997	Bromomethane	74-83-9	N.D.	0.3	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1
11997	Chloroethane	75-00-3	N.D.	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	0.6 J	0.2	1
11997	Chloromethane	74-87-3	N.D.	0.2	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.2	1
11997	1,2-Dichloropropane	78-87-5	0.3 J	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1
11997	Toluene	108-88-3	N.D.	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1
11997	Trichloroethene	79-01-6	10	0.2	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1
11997	Xylene (Total)	1330-20-7	N.D.	1	1
	A preserved vial was submitted for analysis. However, the pH at the time of analysis was 5.				
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1

Sample Description: **DB-8A-W-5.00-181102 Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/02/2018 08:55
SDG#: CBD53-06

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882896
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	15	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	2	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1

Sample Description: **DB-8A-W-5.00-181102 Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/02/2018 08:55
SDG#: CBD53-06

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882896
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5183113AA	11/08/2018 06:00	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5183113AA	11/08/2018 06:00	Don V Viray	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18310WAL026	11/09/2018 16:19	Edward C Monborne	1
11010	8270D BNA Extraction	SW-846 3510C	1	18310WAL026	11/07/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	183131063501	11/12/2018 11:33	Eric L Eby	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183131063501	11/11/2018 05:41	James L Mertz	1

Sample Description: **DB-17-W-5.00-181102 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/02/2018 09:00
SDG#: CBD53-07

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882897
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.2	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1
11997	Bromoform	75-25-2	N.D.	0.2	1
11997	Bromomethane	74-83-9	N.D.	0.3	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1
11997	Chloroethane	75-00-3	N.D.	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.2	1
11997	Chloromethane	74-87-3	N.D.	0.2	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.2	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1
11997	Tetrachloroethene	127-18-4	0.6 J	0.2	1
11997	Toluene	108-88-3	N.D.	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1
11997	Xylene (Total)	1330-20-7	N.D.	1	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **DB-17-W-5.00-181102 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/02/2018 09:00
SDG#: CBD53-07

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882897
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	15	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	11	1

Sample Description: **DB-17-W-5.00-181102 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/02/2018 09:00
SDG#: CBD53-07

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882897
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5183121AA	11/08/2018 12:09	Corie Mellinger	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5183121AA	11/08/2018 12:09	Corie Mellinger	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18310WAL026	11/09/2018 16:47	Edward C Monborne	1
11010	8270D BNA Extraction	SW-846 3510C	1	18310WAL026	11/07/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	183131063501	11/12/2018 11:36	Eric L Eby	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183131063501	11/11/2018 05:41	James L Mertz	1

Sample Description: **DC-1-W-2.00-181102 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/02/2018 10:30
SDG#: CBD53-08

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882898
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.2	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1
11997	Bromoform	75-25-2	N.D.	0.2	1
11997	Bromomethane	74-83-9	N.D.	0.3	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1
11997	Chloroethane	75-00-3	N.D.	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.2	1
11997	Chloromethane	74-87-3	N.D.	0.2	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	3	0.2	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1
11997	Toluene	108-88-3	N.D.	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1
11997	Trichloroethene	79-01-6	7	0.2	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1
11997	Xylene (Total)	1330-20-7	N.D.	1	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **DC-1-W-2.00-181102 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/02/2018 10:30
SDG#: CBD53-08

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882898
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	15	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **DC-1-W-2.00-181102 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/02/2018 10:30
SDG#: CBD53-08

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882898
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5183121AA	11/08/2018 12:30	Corie Mellinger	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5183121AA	11/08/2018 12:30	Corie Mellinger	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18310WAL026	11/09/2018 17:15	Edward C Monborne	1
11010	8270D BNA Extraction	SW-846 3510C	1	18310WAL026	11/07/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	183131063501	11/12/2018 11:39	Eric L Eby	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183131063501	11/11/2018 05:41	James L Mertz	1

Sample Description: **DC-2-W-7.50-181102 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/02/2018 10:45
SDG#: CBD53-09

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882899
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.2	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1
11997	Bromoform	75-25-2	N.D.	0.2	1
11997	Bromomethane	74-83-9	N.D.	0.3	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1
11997	Chloroethane	75-00-3	N.D.	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.2	1
11997	Chloromethane	74-87-3	N.D.	0.2	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.2	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1
11997	Toluene	108-88-3	N.D.	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1
11997	Xylene (Total)	1330-20-7	N.D.	1	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **DC-2-W-7.50-181102 Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/02/2018 10:45
SDG#: CBD53-09

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882899
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	1 J	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **DC-2-W-7.50-181102 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/03/2018 09:25
Collection Date/Time: 11/02/2018 10:45
SDG#: CBD53-09

Chevron Environmental Mgmt.
ELLE Sample #: WW 9882899
ELLE Group #: 2005546
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	5183121AA	11/08/2018 12:52	Corie Mellinger	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	5183121AA	11/08/2018 12:52	Corie Mellinger	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18310WAL026	11/09/2018 17:43	Edward C Monborne	1
11010	8270D BNA Extraction	SW-846 3510C	1	18310WAL026	11/07/2018 08:30	Logan M Brosemer	1
07055	Lead	SW-846 6010C	1	183131063501	11/12/2018 11:41	Eric L Eby	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183131063501	11/11/2018 05:41	James L Mertz	1

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2005546
Reported: 11/14/2018 11:30

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

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

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: 5183113AA	Sample number(s): 9882891-9882896	
Benzene	N.D.	0.2
Bromodichloromethane	N.D.	0.2
Bromoform	N.D.	0.2
Bromomethane	N.D.	0.3
Carbon Tetrachloride	N.D.	0.2
Chlorobenzene	N.D.	0.2
Chloroethane	N.D.	0.2
2-Chloroethyl Vinyl Ether	N.D.	0.2
Chloroform	N.D.	0.2
Chloromethane	N.D.	0.2
Dibromochloromethane	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,1-Dichloroethane	N.D.	0.2
1,2-Dichloroethane	N.D.	0.3
1,1-Dichloroethene	N.D.	0.2
1,2-Dichloroethene (Total)	N.D.	0.2
1,2-Dichloropropane	N.D.	0.2
cis-1,3-Dichloropropene	N.D.	0.2
trans-1,3-Dichloropropene	N.D.	0.2
Ethylbenzene	N.D.	0.4
Methyl Tertiary Butyl Ether	N.D.	0.2
Methylene Chloride	N.D.	0.3
1,1,2,2-Tetrachloroethane	N.D.	0.2
Tetrachloroethene	N.D.	0.2
Toluene	N.D.	0.2
1,1,1-Trichloroethane	N.D.	0.3
1,1,2-Trichloroethane	N.D.	0.2
Trichloroethene	N.D.	0.2
Trichlorofluoromethane	N.D.	0.2
Vinyl Chloride	N.D.	0.2
Xylene (Total)	N.D.	1
Batch number: 5183121AA	Sample number(s): 9882897-9882899	
Benzene	N.D.	0.2
Bromodichloromethane	N.D.	0.2
Bromoform	N.D.	0.2
Bromomethane	N.D.	0.3

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2005546
Reported: 11/14/2018 11:30

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
Carbon Tetrachloride	N.D.	0.2
Chlorobenzene	N.D.	0.2
Chloroethane	N.D.	0.2
2-Chloroethyl Vinyl Ether	N.D.	0.2
Chloroform	N.D.	0.2
Chloromethane	N.D.	0.2
Dibromochloromethane	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,1-Dichloroethane	N.D.	0.2
1,2-Dichloroethane	N.D.	0.3
1,1-Dichloroethene	N.D.	0.2
1,2-Dichloroethene (Total)	N.D.	0.2
1,2-Dichloropropane	N.D.	0.2
cis-1,3-Dichloropropene	N.D.	0.2
trans-1,3-Dichloropropene	N.D.	0.2
Ethylbenzene	N.D.	0.4
Methyl Tertiary Butyl Ether	N.D.	0.2
Methylene Chloride	N.D.	0.3
1,1,2,2-Tetrachloroethane	N.D.	0.2
Tetrachloroethene	N.D.	0.2
Toluene	N.D.	0.2
1,1,1-Trichloroethane	N.D.	0.3
1,1,2-Trichloroethane	N.D.	0.2
Trichloroethene	N.D.	0.2
Trichlorofluoromethane	N.D.	0.2
Vinyl Chloride	N.D.	0.2
Xylene (Total)	N.D.	1
Batch number: 18310WAL026	Sample number(s): 9882892-9882899	
Acenaphthene	N.D.	0.1
Acenaphthylene	N.D.	0.1
Anthracene	N.D.	0.1
Benzo(a)anthracene	N.D.	0.1
Benzo(a)pyrene	N.D.	0.1
Benzo(b)fluoranthene	N.D.	0.1
Benzo(g,h,i)perylene	N.D.	0.1
Benzo(k)fluoranthene	N.D.	0.1
4-Bromophenyl-phenylether	N.D.	0.5
Butylbenzylphthalate	N.D.	2
Di-n-butylphthalate	N.D.	2
Carbazole	N.D.	0.5
4-Chloro-3-methylphenol	N.D.	0.5
4-Chloroaniline	N.D.	4

*- Outside of specification
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Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2005546
Reported: 11/14/2018 11:30

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
bis(2-Chloroethoxy)methane	N.D.	0.5
bis(2-Chloroethyl)ether	N.D.	0.5
2-Chloronaphthalene	N.D.	0.4
2-Chlorophenol	N.D.	0.5
4-Chlorophenyl-phenylether	N.D.	0.5
2,2'-oxybis(1-Chloropropane)	N.D.	0.5
Chrysene	N.D.	0.1
Dibenz(a,h)anthracene	N.D.	0.1
Dibenzofuran	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
3,3'-Dichlorobenzidine	N.D.	3
2,4-Dichlorophenol	N.D.	0.5
Diethylphthalate	N.D.	2
2,4-Dimethylphenol	N.D.	3
Dimethylphthalate	N.D.	2
4,6-Dinitro-2-methylphenol	N.D.	8
2,4-Dinitrophenol	N.D.	14
2,4-Dinitrotoluene	N.D.	1
2,6-Dinitrotoluene	N.D.	0.5
bis(2-Ethylhexyl)phthalate	N.D.	5
Fluoranthene	N.D.	0.1
Fluorene	N.D.	0.1
Hexachlorobenzene	N.D.	0.1
Hexachlorobutadiene	N.D.	0.5
Hexachlorocyclopentadiene	N.D.	5
Hexachloroethane	N.D.	1
Indeno(1,2,3-cd)pyrene	N.D.	0.1
Isophorone	N.D.	0.5
2-Methylnaphthalene	N.D.	0.1
2-Methylphenol	N.D.	0.5
4-Methylphenol	N.D.	0.5
Naphthalene	N.D.	0.1
2-Nitroaniline	N.D.	2
3-Nitroaniline	N.D.	3
4-Nitroaniline	N.D.	0.9
Nitrobenzene	N.D.	0.5
2-Nitrophenol	N.D.	3
4-Nitrophenol	N.D.	10
N-Nitroso-di-n-propylamine	N.D.	0.7
N-Nitrosodiphenylamine	N.D.	0.7
Di-n-octylphthalate	N.D.	5
Pentachlorophenol	N.D.	1
Phenanthrene	N.D.	0.1

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2005546
Reported: 11/14/2018 11:30

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
Phenol	N.D.	0.5
Pyrene	N.D.	0.1
1,2,4-Trichlorobenzene	N.D.	0.5
2,4,5-Trichlorophenol	N.D.	0.5
2,4,6-Trichlorophenol	N.D.	0.5
	mg/l	mg/l
Batch number: 183131063501	Sample number(s): 9882892-9882899	
Lead	N.D.	0.0071

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 5183113AA	Sample number(s): 9882891-9882896								
Benzene	20	21.21	20	21.27	106	106	80-120	0	30
Bromodichloromethane	20	20.62	20	20.78	103	104	71-120	1	30
Bromoform	20	18.44	20	18.14	92	91	51-120	2	30
Bromomethane	20	17.72	20	17.46	89	87	53-128	2	30
Carbon Tetrachloride	20	20.26	20	20.54	101	103	64-134	1	30
Chlorobenzene	20	20.88	20	21.08	104	105	80-120	1	30
Chloroethane	20	18.11	20	17.81	91	89	55-123	2	30
2-Chloroethyl Vinyl Ether	20	19.31	20	19.27	97	96	49-124	0	30
Chloroform	20	21.24	20	21.29	106	106	80-120	0	30
Chloromethane	20	19.04	20	19.1	95	95	56-121	0	30
Dibromochloromethane	20	20.33	20	20.27	102	101	71-120	0	30
1,2-Dichlorobenzene	20	20.63	20	20.77	103	104	80-120	1	30
1,3-Dichlorobenzene	20	20.46	20	20.55	102	103	80-120	0	30
1,4-Dichlorobenzene	20	20.59	20	20.66	103	103	80-120	0	30
1,1-Dichloroethane	20	20.81	20	20.91	104	105	80-120	0	30
1,2-Dichloroethane	20	20.88	20	20.94	104	105	73-124	0	30
1,1-Dichloroethene	20	21.07	20	21.17	105	106	80-131	0	30
1,2-Dichloroethene (Total)	40	42.85	40	43.06	107	108	80-120	0	30
1,2-Dichloropropane	20	22.01	20	22.26	110	111	80-120	1	30
cis-1,3-Dichloropropene	20	21.2	20	21.39	106	107	75-120	1	30
trans-1,3-Dichloropropene	20	19.45	20	19.52	97	98	67-120	0	30
Ethylbenzene	20	20.73	20	20.77	104	104	80-120	0	30
Methyl Tertiary Butyl Ether	20	19.39	20	19.41	97	97	69-122	0	30
Methylene Chloride	20	20.88	20	21.02	104	105	80-120	1	30
1,1,2,2-Tetrachloroethane	20	21.19	20	21.17	106	106	72-120	0	30
Tetrachloroethene	20	20.36	20	20.46	102	102	80-120	1	30

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2005546
Reported: 11/14/2018 11:30

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Toluene	20	20.51	20	20.54	103	103	80-120	0	30
1,1,1-Trichloroethane	20	20.39	20	20.51	102	103	67-126	1	30
1,1,2-Trichloroethane	20	22.05	20	21.94	110	110	80-120	1	30
Trichloroethene	20	21.34	20	21.48	107	107	80-120	1	30
Trichlorofluoromethane	20	17.21	20	17.5	86	88	55-135	2	30
Vinyl Chloride	20	19.9	20	19.66	99	98	56-120	1	30
Xylene (Total)	60	62.31	60	62.72	104	105	80-120	1	30
Batch number: 5183121AA	Sample number(s): 9882897-9882899								
Benzene	20	21.44			107		80-120		
Bromodichloromethane	20	20.48			102		71-120		
Bromoform	20	16.63			83		51-120		
Bromomethane	20	16.67			83		53-128		
Carbon Tetrachloride	20	20.58			103		64-134		
Chlorobenzene	20	21.12			106		80-120		
Chloroethane	20	16.95			85		55-123		
2-Chloroethyl Vinyl Ether	20	19.37			97		49-124		
Chloroform	20	21.59			108		80-120		
Chloromethane	20	16.88			84		56-121		
Dibromochloromethane	20	19.46			97		71-120		
1,2-Dichlorobenzene	20	20.44			102		80-120		
1,3-Dichlorobenzene	20	19.97			100		80-120		
1,4-Dichlorobenzene	20	20.38			102		80-120		
1,1-Dichloroethane	20	20.98			105		80-120		
1,2-Dichloroethane	20	22.05			110		73-124		
1,1-Dichloroethene	20	21.6			108		80-131		
1,2-Dichloroethene (Total)	40	43.02			108		80-120		
1,2-Dichloropropane	20	22.49			112		80-120		
cis-1,3-Dichloropropene	20	20.23			101		75-120		
trans-1,3-Dichloropropene	20	18.56			93		67-120		
Ethylbenzene	20	20.56			103		80-120		
Methyl Tertiary Butyl Ether	20	19.48			97		69-122		
Methylene Chloride	20	21.29			106		80-120		
1,1,2,2-Tetrachloroethane	20	21.27			106		72-120		
Tetrachloroethene	20	20.05			100		80-120		
Toluene	20	20.68			103		80-120		
1,1,1-Trichloroethane	20	20.53			103		67-126		
1,1,2-Trichloroethane	20	22.21			111		80-120		
Trichloroethene	20	21.55			108		80-120		
Trichlorofluoromethane	20	17.72			89		55-135		
Vinyl Chloride	20	17.56			88		56-120		
Xylene (Total)	60	62.22			104		80-120		
	ug/l	ug/l	ug/l	ug/l					

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2005546
Reported: 11/14/2018 11:30

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 18310WAL026	Sample number(s): 9882892-9882899								
Acenaphthene	50	43.88	50	47.55	88	95	62-119	8	30
Acenaphthylene	50	47.59	50	50.87	95	102	66-125	7	30
Anthracene	50	46.49	50	48.42	93	97	70-118	4	30
Benzo(a)anthracene	50	44.66	50	45.52	89	91	70-123	2	30
Benzo(a)pyrene	50	50.27	50	50.61	101	101	71-122	1	30
Benzo(b)fluoranthene	50	48.59	50	48.43	97	97	70-120	0	30
Benzo(g,h,i)perylene	50	49.52	50	48.96	99	98	64-119	1	30
Benzo(k)fluoranthene	50	48.96	50	49.61	98	99	73-122	1	30
4-Bromophenyl-phenylether	50	47	50	48.14	94	96	64-119	2	30
Butylbenzylphthalate	50	39.02	50	40.04	78	80	57-119	3	30
Di-n-butylphthalate	50	40.05	50	42.44	80	85	71-113	6	30
Carbazole	50	47.32	50	49.11	95	98	71-128	4	30
4-Chloro-3-methylphenol	50	41.59	50	42.01	83	84	65-122	1	30
4-Chloroaniline	50	37.17	50	36.08	74	72	42-110	3	30
bis(2-Chloroethoxy)methane	50	42.27	50	43.71	85	87	64-119	3	30
bis(2-Chloroethyl)ether	50	40.54	50	40.24	81	80	60-110	1	30
2-Chloronaphthalene	50	42.53	50	45	85	90	51-114	6	30
2-Chlorophenol	50	40.68	50	39.92	81	80	58-108	2	30
4-Chlorophenyl-phenylether	50	42.16	50	43.6	84	87	58-115	3	30
2,2'-oxybis(1-Chloropropane)	50	39.68	50	39.77	79	80	48-118	0	30
Chrysene	50	44.8	50	45.58	90	91	71-123	2	30
Dibenz(a,h)anthracene	50	50.13	50	49.65	100	99	67-123	1	30
Dibenzofuran	50	42.99	50	45.73	86	91	63-117	6	30
1,2-Dichlorobenzene	50	40.34	50	39.72	81	79	43-108	2	30
1,3-Dichlorobenzene	50	38.95	50	38.75	78	78	31-110	1	30
1,4-Dichlorobenzene	50	39.92	50	39.87	80	80	30-109	0	30
3,3'-Dichlorobenzidine	50	35.26	50	35.11	71	70	36-116	0	30
2,4-Dichlorophenol	50	42.45	50	43.46	85	87	65-117	2	30
Diethylphthalate	50	38.79	50	40.04	78	80	61-111	3	30
2,4-Dimethylphenol	50	33.63	50	34.86	67	70	52-106	4	30
Dimethylphthalate	50	40.94	50	41.67	82	83	37-116	2	30
4,6-Dinitro-2-methylphenol	50	41.49	50	42.63	83	85	63-129	3	30
2,4-Dinitrophenol	100	67.92	100	74.42	68	74	26-141	9	30
2,4-Dinitrotoluene	50	39.93	50	41.5	80	83	69-117	4	30
2,6-Dinitrotoluene	50	42.82	50	45.45	86	91	69-122	6	30
bis(2-Ethylhexyl)phthalate	50	36.12	50	37.79	72	76	68-120	5	30
Fluoranthene	50	45.28	50	46.43	91	93	70-124	3	30
Fluorene	50	43.67	50	46.3	87	93	62-116	6	30
Hexachlorobenzene	50	49.12	50	49.56	98	99	65-121	1	30
Hexachlorobutadiene	50	40.72	50	41.03	81	82	21-114	1	30
Hexachlorocyclopentadiene	100	50.94	100	55.16	51	55	10-117	8	30
Hexachloroethane	50	37.56	50	37.7	75	75	24-100	0	30
Indeno(1,2,3-cd)pyrene	50	47.39	50	47.85	95	96	61-121	1	30

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2005546
Reported: 11/14/2018 11:30

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Isophorone	50	42.56	50	44.55	85	89	65-123	5	30
2-Methylnaphthalene	50	40.82	50	42.66	82	85	51-112	4	30
2-Methylphenol	50	40.51	50	38.56	81	77	59-109	5	30
4-Methylphenol	50	38.57	50	36.76	77	74	56-108	5	30
Naphthalene	50	40.73	50	42.15	81	84	54-107	3	30
2-Nitroaniline	50	44.19	50	47.92	88	96	66-126	8	30
3-Nitroaniline	50	39.41	50	40.88	79	82	51-120	4	30
4-Nitroaniline	50	34.89	50	35.46	70	71	53-111	2	30
Nitrobenzene	50	41.5	50	43.3	83	87	59-117	4	30
2-Nitrophenol	50	41.5	50	42.7	83	85	63-121	3	30
4-Nitrophenol	50	21.43	50	20.7	43	41	28-88	3	30
N-Nitroso-di-n-propylamine	50	41.72	50	42.58	83	85	61-118	2	30
N-Nitrosodiphenylamine	50	51.07	50	52.45	102	105	68-122	3	30
Di-n-octylphthalate	50	38.77	50	40.01	78	80	67-120	3	30
Pentachlorophenol	50	42	50	45.09	84	90	64-130	7	30
Phenanthrene	50	46.08	50	47.39	92	95	68-118	3	30
Phenol	50	25.06	50	22.67	50	45	23-82	10	30
Pyrene	50	45.73	50	46.41	91	93	68-118	1	30
1,2,4-Trichlorobenzene	50	40.49	50	41.8	81	84	38-116	3	30
2,4,5-Trichlorophenol	50	46.35	50	47.94	93	96	73-124	3	30
2,4,6-Trichlorophenol	50	46.48	50	48.52	93	97	69-122	4	30
	mg/l	**mg/l**	**mg/l**	**mg/l**					
Batch number: 183131063501	Sample number(s): 9882892-9882899								
Lead	0.150	0.153			102		87-113		

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 5ml Water by 8260C
Batch number: 5183113AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9882891	99	101	100	97
9882892	100	102	98	96
9882893	100	101	99	96
9882894	101	100	99	97
9882895	101	101	99	97
9882896	102	102	99	96
Blank	99	100	100	98

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2005546
Reported: 11/14/2018 11:30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 5ml Water by 8260C
Batch number: 5183113AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
LCS	100	100	99	101
LCSD	100	101	99	102
Limits:	80-120	80-120	80-120	80-120

Analysis Name: VOCs- 5ml Water by 8260C
Batch number: 5183121AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9882897	100	102	99	96
9882898	101	101	99	98
9882899	100	103	99	97
Blank	100	101	99	96
LCS	101	102	100	104
Limits:	80-120	80-120	80-120	80-120

Analysis Name: SVOAs 8270D MINI
Batch number: 18310WAL026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9882892	32	45	77	67	77	87
9882893	28	41	67	63	71	83
9882894	42	58	84	79	82	95
9882895	44	60	80	82	83	85
9882896	42	58	87	85	86	100
9882897	43	59	88	84	83	104
9882898	36	47	74	78	82	88
9882899	42	59	83	84	85	91
Blank	32	44	78	71	80	99
LCS	45	61	79	82	87	90
LCSD	40	56	84	85	92	92
Limits:	10-72	10-85	29-133	30-111	39-105	27-126

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

11387 2005546 9882891-99

Chain of Custody

Client Contact:	**Privileged and Confidential**	**Site Name:**	BEACON
PARSONS 301 PLAINFIELD ROAD-SUITE 350 SYRACUSE, NY 13212	**EDD To:** Laura.Drachenberg@parsons.com **Sampler:** **Program:** BEACON-2018 RCRA Sampling R2	**Site Location:**	BEACON, NY
Hardcopy Report To: Edward.J.Ashton@parsons.com **Invoice To:** Chevron	**Analysis Turnaround Time:** **Standard -** Rush Charges Authorized for - 2 weeks - 1 week - Next Day -		

COC #: CVX-0227
Lab Use Only
Lab Proj #:
Lab ID: LANCASTER
Job No: 450996

Ship to:
Attn: Megan Moeller
Eurofins Lancaster Laboratories Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601
Phone: (717) 556-7261 Ext. 1246

Sample Identification												Preservative:															
														0	0	0											
Location ID	**Start Depth (ft)**	**End Depth (ft)**	**Field Sample ID**	**Sample Date**	**Sample Time**	**Sample Type**	**Sample Matrix**	**Sample Purpose**	**# of Cont.**	MS/MSD	Composite (y/n)	SW8260C-VOCs	SW8270D-SVOCs	SW6010C-Dissolved Lead (1)													Lab Sample Numbers
QA	—	—	QA-WT1-181026	10/26/18	—	BLKWATER	Water	TB	1	☐	N	☑	☐	☐													
OS-3	6.00	16.00	OS-3-W-6.00-181101	11/01/18	14:10	GW	Water	REG	6	☐	N	☑	☑	☑													
OS-2	6.00	16.00	OS-2-W-6.00-181101	11/01/18	14:50	GW	Water	REG	6	☐	N	☑	☑	☑													
TF-23	5.26	10.26	TF-23-W-5.26-181101	11/01/18	15:55	GW	Water	REG	6	☐	N	☑	☑	☑													
TF-5	4.59	9.59	TF-5-W-4.59-181101	11/01/18	16:25	GW	Water	REG	6	☐	N	☑	☑	☑													
DB-8A	5.00	10.00	DB-8A-W-5.00-181102	11/02/18	8:55	GW	Water	REG	6	☐	N	☑	☑	☑													
DB-17	5.00	9.10	DB-17-W-5.00-181102	11/02/18	9:00	GW	Water	REG	6	☐	N	☑	☑	☑													
DC-1	2.00	12.00	DC-1-W-2.00-181102	11/02/18	10:30	GW	Water	REG	6	☐	N	☑	☑	☑													
DC-2	7.50	17.50	DC-2-W-7.50-181102	11/02/18	10:45	GW	Water	REG	6	☐	N	☑	☑	☑													

Special Instructions: (1) Lab to filter sample prior to analysis.

Relinquished by: Ed Ashton	Company Parsons	Received by:	Company	Condition	Custody Seals Int
	Date/Time 11-2-18 @ 14a		Date/Time	Cooler Temp.	
Relinquished by:	Company	Received by:	Company ELE	Condition intact	Custody Seals Int
	Date/Time		Date/Time 11/3/18 0925	Cooler Temp.	1.9/1.2

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):

Date Printed: 11/2/2018

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Sample Administration Receipt Documentation Log

Doc Log ID: 232073

Group Number(s): 2005546

Client: Parsons

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	11/03/2018 9:25
Number of Packages:	2	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	1
Paperwork Enclosed:	Yes	Trip Blank Type:	See Below
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Trip Blank Type(s): Unpreserved

Unpacked by Nicole Reiff (25684) at 13:16 on 11/03/2018

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	1.4	DT	Wet	Y	Loose	N
2	DT146	1.2	DT	Wet	Y	Loose	N

2425 New Holland Pike
Lancaster, PA 17601-5994
T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

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

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

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

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

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

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

Volatiles by GC/MS Data

Case Narrative/Conformance Summary

Volatiles by GC/MS

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD53

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9882891	QA-WT1-181026	X		1	Trip Blank
9882892	OS-3-W-6.00-181101	X		1	
9882893	OS-2-W-6.00-181101	X		1	
9882894	TF-23-W-5.26-181101	X		1	
9882895	TF-5-W-4.59-181101	X		1	
9882896	DB-8A-W-5.00-181102	X		1	
9882897	DB-17-W-5.00-181102	X		1	
9882898	DC-1-W-2.00-181102	X		1	
9882899	DC-2-W-7.50-181102	X		1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

(Sample number(s): 9882891-9882899: Analysis: 11997)
2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD53

GC/MS Volatiles

Fraction: Volatiles by GC/MS

SAMPLE ANALYSIS:

(Sample number(s): 9882891-9882896: Analysis: 11997)
A preserved vial was submitted for analysis. However, the pH at the time of analysis was 5.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

1. Relative Response Factor (RRF)

$$RRF = \frac{AX}{Ais} \times \frac{Cis}{Cx}$$

Where:

Ax = Area of the characteristic ion for the compound to be measured
Ais = Area of the characteristic ion for the specific internal standard to be measured
Cis = Concentration of the internal standard
Cx = Concentration of the compound to be measured

2. % Relative Standard Deviation (%RSD)

$$\%RSD = \frac{standard\ deviation}{Mean} \times 100$$

3. % Difference

$$\%D = \frac{RRFc - RRFi}{RRFi} \times 100$$

Where:

RRFc = Relative response factor from the continuing calibration standard
RRFi = Mean relative response factor from the initial calibration

4. Concentration

$$Concentration\ (\mu g / L) = \frac{(Ax)(Is)(Df)}{(Ais)(RRF)}$$

Where:

Ax, Ais, and RRF are as given in 1. above
Is = Amount of internal standard added in parts per billion (µg/L)
Df = Dilution factor

5. % Recovery (% Rec)

$$\%Rec = \frac{SSR - SR}{SA} \times 100$$

Where:

SSR = Spiked sample result
SR = Sample result
SA = Spike added

6. Relative Percent Difference (RPD)

$$RPD = \frac{(MSR - MSRD)}{(1/2)(MSR + MSRD)} \times 100$$

Where:

MSR = Matrix spike recovery
MSRD = Matrix spike recovery duplicate

Quality Control and Calibration Summary Forms

Volatiles by GC/MS

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Quality Control Reference List
GC/MS Volatiles

CLIENT: Chevron Environmental Mgmt.
SDG: CBD53

Fraction: Volatiles by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
VOCs- 5ml Water by 8260C	5183113AA	VBLK557	11/07/2018 21:29
		LCS557	11/07/2018 20:25
		LCD557	11/07/2018 20:46
		9882891	11/08/2018 04:14
		9882892	11/08/2018 04:35
		9882893	11/08/2018 04:56
		9882894	11/08/2018 05:17
		9882895	11/08/2018 05:38
		9882896	11/08/2018 06:00
VOCs- 5ml Water by 8260C	5183121AA	VBLK558	11/08/2018 09:15
		LCS558	11/08/2018 08:54
		9882897	11/08/2018 12:09
		9882898	11/08/2018 12:30
		9882899	11/08/2018 12:52

Fraction: Volatiles by GC/MS

5183113AA / VBLK557 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Chloromethane	11/07/18	N.D.	ug/l	0.2	1
Vinyl Chloride	11/07/18	N.D.	ug/l	0.2	1
Bromomethane	11/07/18	N.D.	ug/l	0.3	1
Chloroethane	11/07/18	N.D.	ug/l	0.2	1
Trichlorofluoromethane	11/07/18	N.D.	ug/l	0.2	1
1,1-Dichloroethene	11/07/18	N.D.	ug/l	0.2	1
Methylene Chloride	11/07/18	N.D.	ug/l	0.3	1
Methyl Tertiary Butyl Ether	11/07/18	N.D.	ug/l	0.2	1
1,1-Dichloroethane	11/07/18	N.D.	ug/l	0.2	1
1,2-Dichloroethene (Total)	11/07/18	N.D.	ug/l	0.2	2
Chloroform	11/07/18	N.D.	ug/l	0.2	1
1,1,1-Trichloroethane	11/07/18	N.D.	ug/l	0.3	1
Carbon Tetrachloride	11/07/18	N.D.	ug/l	0.2	1
Benzene	11/07/18	N.D.	ug/l	0.2	1
1,2-Dichloroethane	11/07/18	N.D.	ug/l	0.3	1
Trichloroethene	11/07/18	N.D.	ug/l	0.2	1
1,2-Dichloropropane	11/07/18	N.D.	ug/l	0.2	1
Bromodichloromethane	11/07/18	N.D.	ug/l	0.2	1
2-Chloroethyl Vinyl Ether	11/07/18	N.D.	ug/l	0.2	10
cis-1,3-Dichloropropene	11/07/18	N.D.	ug/l	0.2	1
trans-1,3-Dichloropropene	11/07/18	N.D.	ug/l	0.2	1
Toluene	11/07/18	N.D.	ug/l	0.2	1
Tetrachloroethene	11/07/18	N.D.	ug/l	0.2	1
1,1,2-Trichloroethane	11/07/18	N.D.	ug/l	0.2	1
Dibromochloromethane	11/07/18	N.D.	ug/l	0.2	1
Chlorobenzene	11/07/18	N.D.	ug/l	0.2	1
Ethylbenzene	11/07/18	N.D.	ug/l	0.4	1
Xylene (Total)	11/07/18	N.D.	ug/l	1	5
Bromoform	11/07/18	N.D.	ug/l	0.2	4
1,1,2,2-Tetrachloroethane	11/07/18	N.D.	ug/l	0.2	1
1,3-Dichlorobenzene	11/07/18	N.D.	ug/l	0.2	5
1,4-Dichlorobenzene	11/07/18	N.D.	ug/l	0.2	5
1,2-Dichlorobenzene	11/07/18	N.D.	ug/l	0.2	5

5183121AA / VBLK558 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Chloromethane	11/08/18	N.D.	ug/l	0.2	1
Vinyl Chloride	11/08/18	N.D.	ug/l	0.2	1
Bromomethane	11/08/18	N.D.	ug/l	0.3	1
Chloroethane	11/08/18	N.D.	ug/l	0.2	1
Trichlorofluoromethane	11/08/18	N.D.	ug/l	0.2	1
1,1-Dichloroethene	11/08/18	N.D.	ug/l	0.2	1
Methylene Chloride	11/08/18	N.D.	ug/l	0.3	1
Methyl Tertiary Butyl Ether	11/08/18	N.D.	ug/l	0.2	1
1,1-Dichloroethane	11/08/18	N.D.	ug/l	0.2	1

Quality Control Summary
Method Blank
GC/MS Volatiles
SDG: CBD53
Matrix: LIQUID

Fraction: Volatiles by GC/MS

5183121AA / VBLK558 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
1,2-Dichloroethene (Total)	11/08/18	N.D.	ug/l	0.2	2
Chloroform	11/08/18	N.D.	ug/l	0.2	1
1,1,1-Trichloroethane	11/08/18	N.D.	ug/l	0.3	1
Carbon Tetrachloride	11/08/18	N.D.	ug/l	0.2	1
Benzene	11/08/18	N.D.	ug/l	0.2	1
1,2-Dichloroethane	11/08/18	N.D.	ug/l	0.3	1
Trichloroethene	11/08/18	N.D.	ug/l	0.2	1
1,2-Dichloropropane	11/08/18	N.D.	ug/l	0.2	1
Bromodichloromethane	11/08/18	N.D.	ug/l	0.2	1
2-Chloroethyl Vinyl Ether	11/08/18	N.D.	ug/l	0.2	10
cis-1,3-Dichloropropene	11/08/18	N.D.	ug/l	0.2	1
trans-1,3-Dichloropropene	11/08/18	N.D.	ug/l	0.2	1
Toluene	11/08/18	N.D.	ug/l	0.2	1
Tetrachloroethene	11/08/18	N.D.	ug/l	0.2	1
1,1,2-Trichloroethane	11/08/18	N.D.	ug/l	0.2	1
Dibromochloromethane	11/08/18	N.D.	ug/l	0.2	1
Chlorobenzene	11/08/18	N.D.	ug/l	0.2	1
Ethylbenzene	11/08/18	N.D.	ug/l	0.4	1
Xylene (Total)	11/08/18	N.D.	ug/l	1	5
Bromoform	11/08/18	N.D.	ug/l	0.2	4
1,1,2,2-Tetrachloroethane	11/08/18	N.D.	ug/l	0.2	1
1,3-Dichlorobenzene	11/08/18	N.D.	ug/l	0.2	5
1,4-Dichlorobenzene	11/08/18	N.D.	ug/l	0.2	5
1,2-Dichlorobenzene	11/08/18	N.D.	ug/l	0.2	5

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Quality Control Summary
Surrogates
GC/MS Volatiles
SDG: CBD53
Matrix: LIQUID

Fraction: Volatiles by GC/MS

5183113AA	1,2-Dichloroethane-d4		4-Bromofluorobenzene		Dibromofluoromethane		Toluene-d8	
	Spike Added	50 ug/l	Spike Added	50 ug/l	Spike Added	50 ug/l	Spike Added	50 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
VBLK557	100	80 - 120	98	80 - 120	99	80 - 120	100	80 - 120
LCS557	100	80 - 120	101	80 - 120	100	80 - 120	99	80 - 120
LCD557	101	80 - 120	102	80 - 120	100	80 - 120	99	80 - 120
9882891	101	80 - 120	97	80 - 120	99	80 - 120	100	80 - 120
9882892	102	80 - 120	96	80 - 120	100	80 - 120	98	80 - 120
9882893	101	80 - 120	96	80 - 120	100	80 - 120	99	80 - 120
9882894	100	80 - 120	97	80 - 120	101	80 - 120	99	80 - 120
9882895	101	80 - 120	97	80 - 120	101	80 - 120	99	80 - 120
9882896	102	80 - 120	96	80 - 120	102	80 - 120	99	80 - 120

5183121AA	1,2-Dichloroethane-d4		4-Bromofluorobenzene		Dibromofluoromethane		Toluene-d8	
	Spike Added	50 ug/l	Spike Added	50 ug/l	Spike Added	50 ug/l	Spike Added	50 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
VBLK558	101	80 - 120	96	80 - 120	100	80 - 120	99	80 - 120
LCS558	102	80 - 120	104	80 - 120	101	80 - 120	100	80 - 120
9882897	102	80 - 120	96	80 - 120	100	80 - 120	99	80 - 120
9882898	101	80 - 120	98	80 - 120	101	80 - 120	99	80 - 120
9882899	103	80 - 120	97	80 - 120	100	80 - 120	99	80 - 120

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: CBD53
Matrix: LIQUID

GC/MS Volatiles

Fraction: Volatiles by GC/MS

LCS: LCS557 LCSD: LCD557	Batch: **5183113AA** (Sample number(s): 9882891-9882896)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Chloromethane	20	19.04	19.1	95	95	56-121	0	30
Vinyl Chloride	20	19.9	19.66	99	98	56-120	1	30
Bromomethane	20	17.72	17.46	89	87	53-128	2	30
Chloroethane	20	18.11	17.81	91	89	55-123	2	30
Trichlorofluoromethane	20	17.21	17.5	86	88	55-135	2	30
1,1-Dichloroethene	20	21.07	21.17	105	106	80-131	0	30
Methylene Chloride	20	20.88	21.02	104	105	80-120	1	30
Methyl Tertiary Butyl Ether	20	19.39	19.41	97	97	69-122	0	30
1,1-Dichloroethane	20	20.81	20.91	104	105	80-120	0	30
1,2-Dichloroethene (Total)	40	42.85	43.06	107	108	80-120	0	30
1,1,1-Trichloroethane	20	20.39	20.51	102	103	67-126	1	30
Chloroform	20	21.24	21.29	106	106	80-120	0	30
Carbon Tetrachloride	20	20.26	20.54	101	103	64-134	1	30
1,2-Dichloroethane	20	20.88	20.94	104	105	73-124	0	30
Benzene	20	21.21	21.27	106	106	80-120	0	30
Trichloroethene	20	21.34	21.48	107	107	80-120	1	30
1,2-Dichloropropane	20	22.01	22.26	110	111	80-120	1	30
Bromodichloromethane	20	20.62	20.78	103	104	71-120	1	30
2-Chloroethyl Vinyl Ether	20	19.31	19.27	97	96	49-124	0	30
cis-1,3-Dichloropropene	20	21.2	21.39	106	107	75-120	1	30
Toluene	20	20.51	20.54	103	103	80-120	0	30
trans-1,3-Dichloropropene	20	19.45	19.52	97	98	67-120	0	30
1,1,2-Trichloroethane	20	22.05	21.94	110	110	80-120	1	30
Tetrachloroethene	20	20.36	20.46	102	102	80-120	1	30
Dibromochloromethane	20	20.33	20.27	102	101	71-120	0	30
Chlorobenzene	20	20.88	21.08	104	105	80-120	1	30
Ethylbenzene	20	20.73	20.77	104	104	80-120	0	30
Xylene (Total)	60	62.31	62.72	104	105	80-120	1	30
Bromoform	20	18.44	18.14	92	91	51-120	2	30
1,1,2,2-Tetrachloroethane	20	21.19	21.17	106	106	72-120	0	30
1,3-Dichlorobenzene	20	20.46	20.55	102	103	80-120	0	30
1,4-Dichlorobenzene	20	20.59	20.66	103	103	80-120	0	30
1,2-Dichlorobenzene	20	20.63	20.77	103	104	80-120	1	30

LCS: LCS558	Batch: **5183121AA** (Sample number(s): 9882897-9882899)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Chloromethane	20	16.88	NA	84	NA	56-121	NA	NA
Vinyl Chloride	20	17.56	NA	88	NA	56-120	NA	NA
Bromomethane	20	16.67	NA	83	NA	53-128	NA	NA
Chloroethane	20	16.95	NA	85	NA	55-123	NA	NA

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: CBD53
Matrix: LIQUID

GC/MS Volatiles
Fraction: Volatiles by GC/MS

LCS: LCS558	Batch: **5183121AA** (Sample number(s): 9882897-9882899)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Trichlorofluoromethane	20	17.72	NA	89	NA	55-135	NA	NA
1,1-Dichloroethene	20	21.6	NA	108	NA	80-131	NA	NA
Methylene Chloride	20	21.29	NA	106	NA	80-120	NA	NA
Methyl Tertiary Butyl Ether	20	19.48	NA	97	NA	69-122	NA	NA
1,1-Dichloroethane	20	20.98	NA	105	NA	80-120	NA	NA
1,2-Dichloroethene (Total)	40	43.02	NA	108	NA	80-120	NA	NA
1,1,1-Trichloroethane	20	20.53	NA	103	NA	67-126	NA	NA
Chloroform	20	21.59	NA	108	NA	80-120	NA	NA
Carbon Tetrachloride	20	20.58	NA	103	NA	64-134	NA	NA
1,2-Dichloroethane	20	22.05	NA	110	NA	73-124	NA	NA
Benzene	20	21.44	NA	107	NA	80-120	NA	NA
Trichloroethene	20	21.55	NA	108	NA	80-120	NA	NA
1,2-Dichloropropane	20	22.49	NA	112	NA	80-120	NA	NA
Bromodichloromethane	20	20.48	NA	102	NA	71-120	NA	NA
2-Chloroethyl Vinyl Ether	20	19.37	NA	97	NA	49-124	NA	NA
cis-1,3-Dichloropropene	20	20.23	NA	101	NA	75-120	NA	NA
Toluene	20	20.68	NA	103	NA	80-120	NA	NA
trans-1,3-Dichloropropene	20	18.56	NA	93	NA	67-120	NA	NA
1,1,2-Trichloroethane	20	22.21	NA	111	NA	80-120	NA	NA
Tetrachloroethene	20	20.05	NA	100	NA	80-120	NA	NA
Dibromochloromethane	20	19.46	NA	97	NA	71-120	NA	NA
Chlorobenzene	20	21.12	NA	106	NA	80-120	NA	NA
Ethylbenzene	20	20.56	NA	103	NA	80-120	NA	NA
Xylene (Total)	60	62.22	NA	104	NA	80-120	NA	NA
Bromoform	20	16.63	NA	83	NA	51-120	NA	NA
1,1,2,2-Tetrachloroethane	20	21.27	NA	106	NA	72-120	NA	NA
1,3-Dichlorobenzene	20	19.97	NA	100	NA	80-120	NA	NA
1,4-Dichlorobenzene	20	20.38	NA	102	NA	80-120	NA	NA
1,2-Dichlorobenzene	20	20.44	NA	102	NA	80-120	NA	NA

Fraction: Volatiles by GC/MS

11997: VOCs- 5ml Water by 8260C Analyte Name	Default MDL	Default LOQ	Units
Chloromethane	0.2	1	ug/l
Vinyl Chloride	0.2	1	ug/l
Bromomethane	0.3	1	ug/l
Chloroethane	0.2	1	ug/l
Trichlorofluoromethane	0.2	1	ug/l
1,1-Dichloroethene	0.2	1	ug/l
Methylene Chloride	0.3	1	ug/l
Methyl Tertiary Butyl Ether	0.2	1	ug/l
1,1-Dichloroethane	0.2	1	ug/l
1,2-Dichloroethene (Total)	0.2	2	ug/l
Chloroform	0.2	1	ug/l
1,1,1-Trichloroethane	0.3	1	ug/l
Carbon Tetrachloride	0.2	1	ug/l
Benzene	0.2	1	ug/l
1,2-Dichloroethane	0.3	1	ug/l
Trichloroethene	0.2	1	ug/l
1,2-Dichloropropane	0.2	1	ug/l
Bromodichloromethane	0.2	1	ug/l
2-Chloroethyl Vinyl Ether	0.2	10	ug/l
cis-1,3-Dichloropropene	0.2	1	ug/l
Toluene	0.2	1	ug/l
trans-1,3-Dichloropropene	0.2	1	ug/l
1,1,2-Trichloroethane	0.2	1	ug/l
Tetrachloroethene	0.2	1	ug/l
Dibromochloromethane	0.2	1	ug/l
Chlorobenzene	0.2	1	ug/l
Ethylbenzene	0.4	1	ug/l
Xylene (Total)	1	5	ug/l
Bromoform	0.2	4	ug/l
1,1,2,2-Tetrachloroethane	0.2	1	ug/l
1,3-Dichlorobenzene	0.2	5	ug/l
1,4-Dichlorobenzene	0.2	5	ug/l
1,2-Dichlorobenzene	0.2	5	ug/l

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: 5c25t05.d BFB Injection Date: 10/25/18

Instrument ID: HP26285 BFB Injection Time: 20:39

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.99
75	30.0 - 60.0% of mass 95	49.64
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.69
173	Less than 2.0% of mass 174	0.54 (0.65)1
174	Greater than 50.0% of mass 95	83.60
175	5.0 - 9.0% of mass 174	6.00 (7.17)1
176	Greater than 95.0%, but less than 101.0% of mass 174	80.97 (96.85)1
177	5.0 - 9.0% of mass 176	5.49 (6.78)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD300	5c25i01.d	10/25/18	21:46
02	VSTD100	5c25i02.d	10/25/18	22:07
03	VSTD50	5c25i03.d	10/25/18	22:28
04	VSTD20	5c25i04.d	10/25/18	22:50
05	VSTD10	5c25i05.d	10/25/18	23:11
06	VSTD4	5c25i06.d	10/25/18	23:32
07	VSTD1	5c25i07.d	10/25/18	23:53
08	0.5PPB - 0.5PPB	5c25m01.d	10/26/18	00:15
09	LG5ICV	5c25v01.d	10/26/18	00:36
10	VSTD300	5c25i11.d	10/26/18	01:18
11	VSTD100	5c25i12.d	10/26/18	01:39
12	VSTD50	5c25i13.d	10/26/18	02:01
13	VSTD20	5c25i14.d	10/26/18	02:22
14	VSTD10	5c25i15.d	10/26/18	02:44
15	VSTD4	5c25i16.d	10/26/18	03:05
16	1.0PPB - 1.0PPB	5c25m11.d	10/26/18	03:26
17	SM5ICV	5c25v11.d	10/26/18	03:47

FORM V VOA

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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: 5n07t05.d BFB Injection Date: 11/07/18

Instrument ID: HP26285 BFB Injection Time: 19:28

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.12
75	30.0 - 60.0% of mass 95	48.02
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.74
173	Less than 2.0% of mass 174	0.51 (0.61)1
174	Greater than 50.0% of mass 95	83.70
175	5.0 - 9.0% of mass 174	6.00 (7.17)1
176	Greater than 95.0%, but less than 101.0% of mass 174	81.29 (97.12)1
177	5.0 - 9.0% of mass 176	5.40 (6.64)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	5n07c05.d	11/07/18	20:04
02	LCS557	5n07s61.d	11/07/18	20:25
03	LCD557	5n07s62.d	11/07/18	20:46
04	LCS556	5n07s31.d	11/07/18	20:46
05	VBLK556	5n07b31.d	11/07/18	21:29
06	VBLK557	5n07b61.d	11/07/18	21:29
07	9879342	5n07s32.d	11/07/18	21:50
08	9879333	5n07s33.d	11/07/18	22:11
09	9879333MS	5n07s34.d	11/07/18	22:33
10	9879333MSD	5n07s35.d	11/07/18	22:54
11	9879332	5n07s36.d	11/07/18	23:37
12	9879335	5n07s37.d	11/07/18	23:58
13	9879336	5n07s38.d	11/08/18	00:19
14	9879334	5n07s39.d	11/08/18	00:40
15	9879338	5n07s40.d	11/08/18	01:02
16	9879339	5n07s41.d	11/08/18	01:23
17	9879340	5n07s42.d	11/08/18	01:45
18	9879341	5n07s43.d	11/08/18	02:06
19	9870391	5n07s44.d	11/08/18	02:28
20	9870392	5n07s45.d	11/08/18	02:49
21	9870393	5n07s46.d	11/08/18	03:10
22	9879337	5n07s47.d	11/08/18	03:31

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: 5n07t05.d BFB Injection Date: 11/07/18

Instrument ID: HP26285 BFB Injection Time: 19:28

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.12
75	30.0 - 60.0% of mass 95	48.02
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.74
173	Less than 2.0% of mass 174	0.51 (0.61)1
174	Greater than 50.0% of mass 95	83.70
175	5.0 - 9.0% of mass 174	6.00 (7.17)1
176	Greater than 95.0%, but less than 101.0% of mass 174	81.29 (97.12)1
177	5.0 - 9.0% of mass 176	5.40 (6.64)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
23	9882891	5n07s63.d	11/08/18	04:14
24	9882892	5n07s64.d	11/08/18	04:35
25	9882893	5n07s65.d	11/08/18	04:56
26	9882894	5n07s66.d	11/08/18	05:17
27	9882895	5n07s67.d	11/08/18	05:38
28	9882896	5n07s68.d	11/08/18	06:00
29	9873925	5n07s69.d	11/08/18	06:20

FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: 5n08t01.d BFB Injection Date: 11/08/18

Instrument ID: HP26285 BFB Injection Time: 07:24

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.75
75	30.0 - 60.0% of mass 95	49.01
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.77
173	Less than 2.0% of mass 174	0.54 (0.65)1
174	Greater than 50.0% of mass 95	83.82
175	5.0 - 9.0% of mass 174	6.03 (7.19)1
176	Greater than 95.0%, but less than 101.0% of mass 174	81.45 (97.18)1
177	5.0 - 9.0% of mass 176	5.37 (6.59)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	5n08c01.d	11/08/18	08:12
02	LCS558	5n08s01.d	11/08/18	08:54
03	VBLK558	5n08b01.d	11/08/18	09:15
04	9872270	5n08s02.d	11/08/18	10:44
05	9872272	5n08s03.d	11/08/18	11:05
06	9872273MS	5n08s04.d	11/08/18	11:26
07	9872274MSD	5n08s05.d	11/08/18	11:47
08	9882897	5n08s06.d	11/08/18	12:09
09	9882898	5n08s07.d	11/08/18	12:30
10	9882899	5n08s08.d	11/08/18	12:52
11	9872264	5n08s09.d	11/08/18	13:13
12	9872266	5n08s10.d	11/08/18	13:35
13	9872267	5n08s11.d	11/08/18	13:56
14	9872268	5n08s12.d	11/08/18	14:17
15	9872271	5n08s13.d	11/08/18	14:39
16	9872276	5n08s14.d	11/08/18	15:00
17	9872965	5n08s15.d	11/08/18	15:21
18	9879199	5n08s17.d	11/08/18	16:04
19	9879199MS	5n08s18.d	11/08/18	16:25
20	9881533	5n08s19.d	11/08/18	16:46
21	9881533MS	5n08s20.d	11/08/18	17:07
22	9874959DL	5n08s21.d	11/08/18	17:28

FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: 5n08t01.d BFB Injection Date: 11/08/18

Instrument ID: HP26285 BFB Injection Time: 07:24

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.75
75	30.0 - 60.0% of mass 95	49.01
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.77
173	Less than 2.0% of mass 174	0.54 (0.65)1
174	Greater than 50.0% of mass 95	83.82
175	5.0 - 9.0% of mass 174	6.03 (7.19)1
176	Greater than 95.0%, but less than 101.0% of mass 174	81.45 (97.18)1
177	5.0 - 9.0% of mass 176	5.37 (6.59)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
23	9876909	5n08s23.d	11/08/18	18:10
24	9876909DL	5n08s24.d	11/08/18	18:30

FORM V VOA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date(s): 10/25/18 10/25/18

Heated Purge: (Y/N) Y Calibration Times: 21:46 23:53

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

LAB FILE ID: RRF 1 = 5c25i07.d RRF 4 = 5c25i06.d RRF 10= 5c25i05.d
RRF 20= 5c25i04.d RRF 50= 5c25i03.d RRF100= 5c25i02.d RRF300= 5c25i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	RRF	% RSD	CAL. METHOD
Dichlorodifluoromethane	#0.3813	0.5367	0.5645	0.5131	0.4975	0.4921	0.4703	0.4936	12	AVG #
Chloromethane	#0.3891	0.4383	0.4322	0.4074	0.3854	0.3859	0.3598	0.3997	7	AVG #
1,3-Butadiene	0.2631	0.3236	0.2851	0.2825	0.2523	0.2458	0.2263	0.2684	12	AVG
Vinyl Chloride	#0.3362	0.4075	0.4089	0.3860	0.3663	0.3708	0.3393	0.3736	8	AVG #
Bromomethane	#0.2835	0.3036	0.3189	0.3045	0.2607	0.2470	0.2254	0.2776	12	AVG #
Chloroethane	#0.1872	0.2109	0.2096	0.1982	0.1708	0.1760	0.1470	0.1857	12	AVG #
Dichlorofluoromethane	0.4945	0.5386	0.5174	0.5076	0.4799	0.4768	0.4312	0.4923	7	AVG
n-Pentane	0.2667	0.3439	0.3434	0.3477	0.3241	0.3121	0.2898	0.3182	10	AVG
Trichlorofluoromethane	#0.4016	0.5413	0.5628	0.5180	0.4963	0.4964	0.4713	0.4982	11	AVG #
Ethyl ether	0.2327	0.2477	0.2420	0.2429	0.2449	0.2404	0.2282	0.2398	3	AVG
Freon 123a	0.3036	0.3547	0.3627	0.3574	0.3418	0.3313	0.3244	0.3394	6	AVG
Acrolein	1.8129	1.7672	1.8635	1.7780	1.7226	1.7188	1.6288	1.7560	4	AVG
1,1-Dichloroethene	#0.2004	0.2315	0.2448	0.2455	0.2401	0.2380	0.2384	0.2341	7	AVG #
1,1-Dichloroethene(2)	#0.0944	0.1287	0.1279	0.1313	0.1247	0.1226	0.1199	0.1213	10	AVG #
Acetone	#0.9731	0.9119	0.9632	0.9140	0.8830	0.8712	0.8545	0.9101	5	AVG #
Freon 113	#0.1525	0.2345	0.2529	0.2585	0.2487	0.2400	0.2459	0.2333	16	AVG #
2-Propanol	0.9898	0.6924	0.7373	0.6661	0.7793	0.8072	0.5511	0.7462	18	AVG
Methyl Iodide	0.4043	0.4538	0.4708	0.4714	0.4693	0.4652	0.4598	0.4563	5	AVG
Carbon Disulfide	#0.6647	0.7880	0.8238	0.8282	0.8306	0.8316	0.8166	0.7976	8	AVG #
Allyl Chloride	0.5083	0.5210	0.5051	0.5189	0.5028	0.5050	0.4792	0.5058	3	AVG
Methyl Acetate	#0.5968	0.4832	0.4387	0.4349	0.4244	0.4236	0.3942	0.4565	15	AVG #
Methylene Chloride	#0.2792	0.2776	0.2799	0.2792	0.2725	0.2693	0.2617	0.2742	2	AVG #
t-Butyl alcohol	1.5068	1.2694	1.3460	1.2808	1.2996	1.3399	1.1608	1.3148	8	AVG
Acrylonitrile	0.2071	0.2083	0.2260	0.2239	0.2164	0.2150	0.2036	0.2143	4	AVG
trans-1,2-Dichloroethene	#0.2253	0.2691	0.2743	0.2774	0.2745	0.2718	0.2723	0.2664	7	AVG #
Methyl Tertiary Butyl Ether	#0.7898	0.8322	0.8703	0.8697	0.8565	0.8479	0.8216	0.8411	3	AVG #
n-Hexane	0.2547	0.3478	0.4024	0.4331	0.4322	0.4140	0.4203	0.3864	17	AVG
1,1-Dichloroethane	#0.4413	0.5050	0.5198	0.5215	0.5127	0.5023	0.4875	0.4986	6	AVG #
di-Isopropyl ether	0.9218	0.9816	1.0109	0.9992	0.9795	0.9629	0.9184	0.9678	4	AVG
2-Chloro-1,3-butadiene	0.3727	0.4570	0.4691	0.4733	0.4674	0.4609	0.4497	0.4500	8	AVG
Ethyl t-butyl ether	0.8236	0.8666	0.9027	0.9003	0.8867	0.8712	0.8412	0.8703	3	AVG
cis-1,2-Dichloroethene	#0.2706	0.2936	0.3019	0.3034	0.3027	0.3028	0.3029	0.2968	4	AVG #
2-Butanone	#0.3459	0.3160	0.3361	0.3347	0.3231	0.3161	0.2948	0.3238	5	AVG #
2,2-Dichloropropane	0.3424	0.3945	0.4033	0.4149	0.4076	0.4026	0.4005	0.3951	6	AVG
Propionitrile	1.4045	1.3891	1.4231	1.3939	1.3691	1.3746	1.3722	1.3895	1	AVG
Methacrylonitrile	0.1925	0.1990	0.2093	0.2075	0.2073	0.2079	0.2026	0.2037	3	AVG
Bromochloromethane	0.1408	0.1507	0.1531	0.1576	0.1548	0.1581	0.1606	0.1537	4	AVG
Tetrahydrofuran	1.1502	1.2462	1.3272	1.2997	1.2604	1.2758	1.2902	1.2642	4	AVG
Chloroform	#0.4203	0.4769	0.4883	0.4879	0.4822	0.4762	0.4668	0.4712	5	AVG #
1,1,1-Trichloroethane	#0.3541	0.4111	0.4166	0.4194	0.4153	0.4088	0.4040	0.4042	6	AVG #
Cyclohexane	#0.3686	0.4683	0.5125	0.5163	0.5138	0.4959	0.4996	0.4821	11	AVG #
Cyclohexane(2)	#0.3165	0.4481	0.4069	0.4129	0.4068	0.3985	0.3984	0.3983	10	AVG #
Cyclohexane(3)	#0.0985	0.1437	0.1525	0.1555	0.1526	0.1511	0.1512	0.1436	14	AVG #
1,1-Dichloropropene	0.3547	0.3957	0.4019	0.3999	0.3919	0.3876	0.3902	0.3888	4	AVG
Carbon Tetrachloride	#0.2916	0.3493	0.3626	0.3678	0.3703	0.3701	0.3745	0.3552	8	AVG #
Isobutyl Alcohol	0.4964	0.4103	0.4304	0.4083	0.4210	0.4298	0.3841	0.4257	8	AVG
Benzene	#1.0471	1.1716	1.1982	1.2011	1.1848	1.1735	1.1555	1.1617	5	AVG #
1,2-Dichloroethane	#0.3876	0.3631	0.3642	0.3583	0.3490	0.3423	0.3304	0.3564	5	AVG #
1,2-Dichloroethane(2)	#0.0280	0.0322	0.0328	0.0310	0.0308	0.0304	0.0301	0.0308	5	AVG #<-
t-Amyl methyl ether	0.7659	0.8086	0.8393	0.8397	0.8333	0.8266	0.8071	0.8172	3	AVG
n-Heptane	0.3152	0.3719	0.4404	0.4951	0.5062	0.4898	0.4898	0.4441	17	AVG
n-Butanol	0.4035	0.2977	0.3335	0.3152	0.3649	0.3797	0.2986	0.3419	12	AVG

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

FORM VI VOA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date(s): 10/25/18 10/25/18

Heated Purge: (Y/N) Y Calibration Times: 21:46 23:53

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

LAB FILE ID: RRF 1 = 5c25i07.d RRF 4 = 5c25i06.d RRF 10= 5c25i05.d
RRF 20= 5c25i04.d RRF 50= 5c25i03.d RRF100= 5c25i02.d RRF300= 5c25i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	RRF	% RSD	CAL. METHOD	
Trichloroethene	#0.2612	0.2892	0.2960	0.2957	0.2954	0.2954	0.3009	0.2905	5	AVG	#
Methylcyclohexane	#0.3588	0.4800	0.5323	0.5508	0.5350	0.5351	0.5341	0.5037	13	AVG	#
Methylcyclohexane(2)	#0.1498	0.2045	0.2258	0.2349	0.2274	0.2259	0.2303	0.2141	14	AVG	#
1,2-Dichloropropane	#0.2604	0.2885	0.2942	0.2984	0.2972	0.2967	0.2972	0.2904	5	AVG	#
Dibromomethane	0.1623	0.1697	0.1774	0.1778	0.1810	0.1822	0.1863	0.1767	5	AVG	
Methyl Methacrylate	0.2632	0.2731	0.2877	0.2977	0.3036	0.3096	0.3151	0.2928	7	AVG	
Bromodichloromethane	#0.2847	0.3069	0.3288	0.3356	0.3447	0.3486	0.3553	0.3293	8	AVG	#
2-Nitropropane	0.1359	0.1317	0.1504	0.1542	0.1568	0.1549	0.1481	0.1474	7	AVG	
2-Chloroethyl Vinyl Ether	0.2047	0.2261	0.2295	0.2375	0.2434	0.2483	0.2456	0.2336	6	AVG	
cis-1,3-Dichloropropene	#0.3665	0.3987	0.4184	0.4328	0.4427	0.4490	0.4554	0.4234	7	AVG	#
4-Methyl-2-pentanone	#0.5490	0.5524	0.6012	0.5990	0.5952	0.5893	0.5522	0.5769	4	AVG	#
Toluene	#0.9600	0.9995	1.0089	1.0194	1.0290	1.0271	1.0392	1.0118	3	AVG	#
trans-1,3-Dichloropropene	#0.4430	0.4933	0.5313	0.5556	0.5747	0.5862	0.5990	0.5404	10	AVG	#
Ethyl Methacrylate	0.5328	0.6006	0.6455	0.6631	0.6867	0.6974	0.7096	0.6480	10	AVG	
1,1,2-Trichloroethane	#0.3032	0.3339	0.3487	0.3528	0.3526	0.3563	0.3651	0.3447	6	AVG	#
Tetrachloroethene	#0.4140	0.4453	0.4327	0.4420	0.4531	0.4416	0.4824	0.4444	5	AVG	#
1,3-Dichloropropane	0.5537	0.5724	0.5915	0.5883	0.5846	0.5870	0.6007	0.5826	3	AVG	
2-Hexanone	#0.6092	0.6146	0.6850	0.6858	0.6760	0.6697	0.6291	0.6528	5	AVG	#
Dibromochloromethane	#0.2711	0.3054	0.3404	0.3567	0.3800	0.3938	0.4227	0.3529	15	AVG	#
1,2-Dibromoethane	#0.3355	0.3547	0.3700	0.3799	0.3850	0.3894	0.4031	0.3739	6	AVG	#
1-Chlorohexane	0.6112	0.5378	0.5302	0.5524	0.5690	0.5942	0.6289	0.5748	7	AVG	
Chlorobenzene	#1.0575	1.0445	1.0641	1.0763	1.1015	1.1385	1.1905	1.0961	5	AVG	#
1,1,1,2-Tetrachloroethane	0.2856	0.3200	0.3481	0.3591	0.3790	0.4005	0.4348	0.3610	14	AVG	
Ethylbenzene	#1.9075	1.8599	1.8837	1.9352	1.9857	2.0468	1.9974	1.9452	3	AVG	#
m+p-Xylene	#0.7115	0.7027	0.7220	0.7446	0.7707	0.8042	0.8038	0.7514	6	AVG	#
o-Xylene	#0.6771	0.6752	0.6865	0.7032	0.7281	0.7592	0.8048	0.7192	7	AVG	#
Styrene	#1.0202	1.0482	1.1096	1.1664	1.2226	1.2916	1.3451	1.1720	10	AVG	#
Bromoform	#0.1749	0.2080	0.2310	0.2574	0.2842	0.3059	0.3519	0.2591	23	2NDDEG	#
Isopropylbenzene	#1.7721	1.7325	1.7547	1.8265	1.8777	1.9416	1.9265	1.8331	5	AVG	#
Bromobenzene	0.8216	0.8077	0.8345	0.8512	0.8557	0.8859	0.9604	0.8595	6	AVG	
1,1,2,2-Tetrachloroethane	#1.0195	1.0564	1.1070	1.1251	1.1527	1.1737	1.1999	1.1192	6	AVG	#
1,2,3-Trichloropropane	0.2873	0.3320	0.3388	0.3378	0.3380	0.3431	0.3531	0.3329	6	AVG	
trans-1,4-Dichloro-2-butene	0.3208	0.3660	0.3953	0.4070	0.4152	0.4114	0.3751	0.3844	9	AVG	
n-Propylbenzene	4.1615	4.0479	4.0244	4.1943	4.2088	4.2139	3.8127	4.0948	4	AVG	
2-Chlorotoluene	0.8316	0.7967	0.8042	0.8191	0.8194	0.8284	0.8835	0.8261	3	AVG	
4-Chlorotoluene	0.9015	0.8082	0.8154	0.8399	0.8495	0.8677	0.9347	0.8595	5	AVG	
1,3,5-Trimethylbenzene	2.7984	2.7090	2.7318	2.9029	2.9680	3.0311	2.9760	2.8739	4	AVG	
tert-Butylbenzene	0.5884	0.5418	0.5637	0.5859	0.6028	0.6240	0.6721	0.5969	7	AVG	
Pentachloroethane	0.3627	0.4380	0.4776	0.5155	0.5245	0.5944	0.6543	0.5096	19	AVG	
1,2,4-Trimethylbenzene	2.9116	2.7697	2.8010	2.9541	3.0387	3.1316	3.0554	2.9517	5	AVG	
sec-Butylbenzene	3.3778	3.3170	3.4118	3.6788	3.8169	3.8941	3.6126	3.5870	6	AVG	
1,3-Dichlorobenzene	#1.6513	1.5357	1.5259	1.5754	1.6167	1.6771	1.8001	1.6260	6	AVG	#
p-Isopropyltoluene	2.8870	2.8088	2.9147	3.1706	3.3063	3.4315	3.2879	3.1152	8	AVG	
1,4-Dichlorobenzene	#1.6891	1.5680	1.5831	1.6212	1.6595	1.7328	1.8385	1.6703	6	AVG	#
1,2,3-Trimethylbenzene	2.5963	2.9649	3.0269	3.1566	3.2193	3.3537	3.2046	3.0746	8	AVG	
Benzyl Chloride	1.6473	1.7906	2.0426	2.2619	2.4098	2.5052	2.5503	2.1725	16	AVG	
1,3-Diethylbenzene	1.4495	1.7751	1.8683	1.9827	2.0445	2.1527	2.1698	1.9204	13	AVG	
1,4-Diethylbenzene	1.5171	1.8741	1.9747	2.1086	2.1971	2.3350	2.3414	2.0497	14	AVG	
1,2-Dichlorobenzene	#1.5943	1.4605	1.4797	1.5033	1.5539	1.5959	1.7278	1.5594	6	AVG	#
n-Butylbenzene	1.4073	1.3983	1.4639	1.6231	1.7353	1.8014	1.8241	1.6076	12	AVG	
1,2-Diethylbenzene	1.2712	1.4827	1.5562	1.6484	1.6933	1.7810	1.8215	1.6078	12	AVG	
1,2-Dibromo-3-chloropropane	#0.2565	0.2674	0.2756	0.2915	0.3085	0.3044	0.3102	0.2877	7	AVG	#

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date(s): 10/25/18 10/25/18

Heated Purge: (Y/N) Y Calibration Times: 21:46 23:53

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

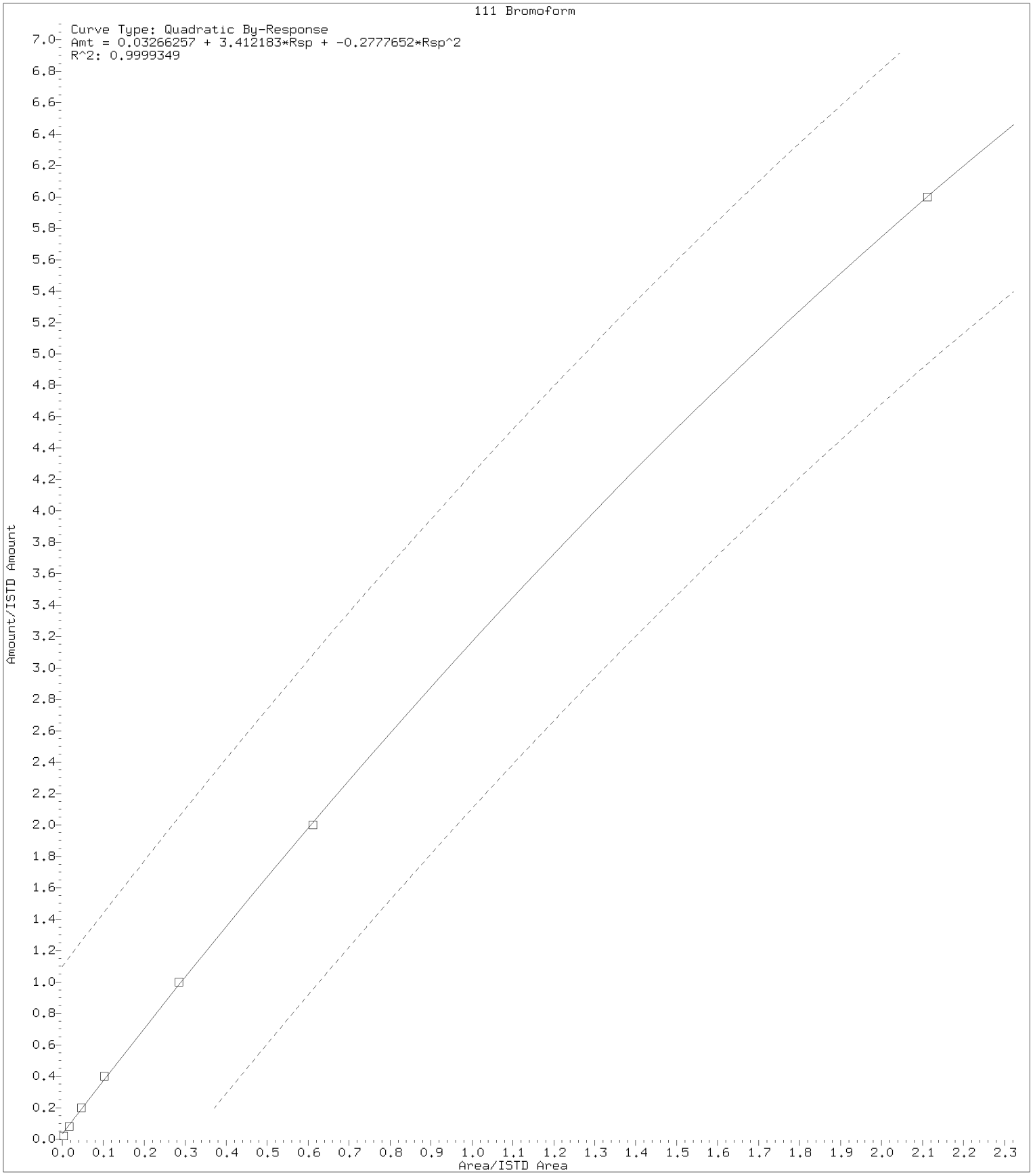
LAB FILE ID: RRF 1 = 5c25i07.d RRF 4 = 5c25i06.d RRF 10= 5c25i05.d
RRF 20= 5c25i04.d RRF 50= 5c25i03.d RRF100= 5c25i02.d RRF300= 5c25i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	RRF	% RSD	CAL. METHOD
1,3,5-Trichlorobenzene	1.1240	0.9938	1.0183	1.1028	1.1570	1.2118	1.3800	1.1411	11	AVG
1,2,4-Trichlorobenzene	#1.0311	0.8882	0.9057	0.9843	1.0406	1.0863	1.2479	1.0263	12	AVG #
Hexachlorobutadiene	0.5126	0.3765	0.4025	0.4641	0.5009	0.5213	0.6063	0.4835	16	AVG
Naphthalene	3.7284	3.4070	3.4656	3.6131	3.8197	3.8397	3.6110	3.6406	5	AVG
1,2,3-Trichlorobenzene	1.0286	0.8640	0.8924	0.9584	1.0184	1.0443	1.1932	0.9999	11	AVG
2-Methylnaphthalene	1.6901	1.8124	1.9921	2.1357	2.3593	2.4885	2.6007	2.1541	16	AVG
Dibromofluoromethane	0.2433	0.2434	0.2452	0.2432	0.2438	0.2430	0.2406	0.2432	1	AVG
Dibromofluoromethane(2)	0.2491	0.2493	0.2500	0.2488	0.2484	0.2477	0.2474	0.2487	0	AVG
1,2-Dichloroethane-d4	0.0581	0.0575	0.0575	0.0579	0.0582	0.0584	0.0590	0.0581	1	AVG
1,2-Dichloroethane-d4(2)	0.3037	0.3025	0.2989	0.2956	0.2936	0.2909	0.2829	0.2954	2	AVG
1,2-Dichloroethane-d4(3)	0.0369	0.0366	0.0370	0.0366	0.0366	0.0373	0.0379	0.0370	1	AVG
Toluene-d8	1.3703	1.3598	1.3593	1.3592	1.3575	1.3398	1.2952	1.3487	2	AVG
Toluene-d8(2)	0.8876	0.8793	0.8758	0.8800	0.8762	0.8694	0.8418	0.8729	2	AVG
4-Bromofluorobenzene	0.4848	0.4808	0.4849	0.4839	0.4895	0.4871	0.4826	0.4848	1	AVG
4-Bromofluorobenzene(2)	0.4120	0.4095	0.4134	0.4125	0.4166	0.4130	0.4044	0.4116	1	AVG

Average %RSD 7

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

FORM VI VOA



Digitally signed by Kevin Kelly on 10/29/2018 at 15:22.
Target 3.5 esignature user ID: kk10002

Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem2/HP26285.i/18oct25i.b/5c25i01.d	VSTD300
/chem2/HP26285.i/18oct25i.b/5c25i02.d	VSTD100
/chem2/HP26285.i/18oct25i.b/5c25i03.d	VSTD050
/chem2/HP26285.i/18oct25i.b/5c25i04.d	VSTD020
/chem2/HP26285.i/18oct25i.b/5c25i05.d	VSTD010
/chem2/HP26285.i/18oct25i.b/5c25i06.d	VSTD004
/chem2/HP26285.i/18oct25i.b/5c25i07.d	VSTD001

Area Summary

File ID:

Internal Standard Name	5c25i01.d	5c25i02.d	5c25i03.d	5c25i04.d	5c25i05.d	5c25i06.d	5c25i07.d	Avg. Area	%RSD	In Spec
t-Butyl alcohol-d10	382038	389704	390222	381429	365165	349936	344403	371842	5	Yes
Fluorobenzene	1235251	1205373	1187933	1171001	1146175	1135450	1123474	1172094	3	Yes
Chlorobenzene-d5	876748	852290	836232	820845	802679	797928	786537	824751	4	Yes
1,4-Dichlorobenzene-d4	502137	467781	448806	432302	419436	411500	405443	441058	8	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

File ID:

Internal Standard Name	5c25i01.d	5c25i02.d	5c25i03.d	5c25i04.d	5c25i05.d	5c25i06.d	5c25i07.d	Avg. RT
t-Butyl alcohol-d10	3.551	3.557	3.551	3.551	3.551	3.551	3.551	3.552
Fluorobenzene	7.014	7.014	7.014	7.014	7.014	7.008	7.014	7.013
Chlorobenzene-d5	10.757	10.757	10.757	10.757	10.757	10.757	10.757	10.757
1,4-Dichlorobenzene-d4	12.750	12.750	12.750	12.750	12.751	12.751	12.750	12.750

* indicates the retention time is greater than 30 seconds from the average RT.

Report generated on 10/30/2018 at 20:35.

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 ICV Date: 10/26/18 Time: 00:36

Lab File ID: 5c25v01.d Init. Calib. Date(s): 10/25/18 10/26/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	$\overline{RRF}$	RRF	CONC.	CONC.	DRIFT	
# Dichlorodifluoromethane	0.4936	0.3621	14.67	20	-27	#
# Chloromethane	0.3997	0.3788	18.95	20	-5	#
1,3-Butadiene	0.2684	0.2956	22.03	20	10	
# Vinyl Chloride	0.3736	0.3723	19.93	20	0	#
# Bromomethane	0.2776	0.2509	18.07	20	-10	#
# Chloroethane	0.1857	0.1935	20.84	20	4	#
Dichlorofluoromethane	0.4923	0.5146	20.91	20	5	
n-Pentane	0.3182	0.3848	24.18	20	21	
# Trichlorofluoromethane	0.4982	0.4743	19.04	20	-5	#
Ethyl ether	0.2398	0.2534	21.13	20	6	
Freon 123a	0.3394	0.3639	21.45	20	7	
Acrolein	1.7560	1.9277	164.67	150	10	
# 1,1-Dichloroethene	0.2341	0.2491	21.28	20	6	#
# Acetone	0.9101	0.8666	142.83	150	-5	#
# Freon 113	0.2333	0.2592	22.22	20	11	#
2-Propanol	0.7462	0.5767	115.93	150	-23	
Methyl Iodide	0.4563	0.4756	20.84	20	4	
# Carbon Disulfide	0.7976	0.8323	20.87	20	4	#
Allyl Chloride	0.5058	0.4880	19.30	20	-4	
# Methyl Acetate	0.4565	0.4240	18.57	20	-7	#
# Methylene Chloride	0.2742	0.2886	21.05	20	5	#
t-Butyl alcohol	1.3148	1.1876	180.66	200	-10	
Acrylonitrile	0.2143	0.2033	94.85	100	-5	
# trans-1,2-Dichloroethene	0.2664	0.2854	21.43	20	7	#
# Methyl Tertiary Butyl Ether	0.8411	0.8635	20.53	20	3	#
n-Hexane	0.3864	0.4413	22.84	20	14	
# 1,1-Dichloroethane	0.4986	0.5218	20.93	20	5	#
di-Isopropyl ether	0.9678	1.0263	21.21	20	6	
2-Chloro-1,3-butadiene	0.4500	0.4731	21.02	20	5	
Ethyl t-butyl ether	0.8703	0.8891	20.43	20	2	
# cis-1,2-Dichloroethene	0.2968	0.3171	21.36	20	7	#
# 2-Butanone	0.3238	0.3037	140.68	150	-6	#
2,2-Dichloropropane	0.3951	0.4124	20.87	20	4	
Propionitrile	1.3895	1.4858	160.40	150	7	
Methacrylonitrile	0.2037	0.2156	158.76	150	6	
Bromochloromethane	0.1537	0.1503	19.56	20	-2	

Compounds with required minimum RRF.
Maximum % Drift = 30 %

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 ICV Date: 10/26/18 Time: 00:36

Lab File ID: 5c25v01.d Init. Calib. Date(s): 10/25/18 10/26/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

	COMPOUND	$\overline{RRF}$	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT
	Tetrahydrofuran	1.2642	1.3353	105.62	100	6
#	Chloroform	0.4712	0.4966	21.07	20	5 #
#	1,1,1-Trichloroethane	0.4042	0.4206	20.82	20	4 #
#	Cyclohexane	0.4821	0.5162	21.41	20	7 #
	1,1-Dichloropropene	0.3888	0.3917	20.15	20	1
#	Carbon Tetrachloride	0.3552	0.3594	20.24	20	1 #
	Isobutyl Alcohol	0.4257	0.3878	455.40	500	-9
#	Benzene	1.1617	1.1935	20.55	20	3 #
#	1,2-Dichloroethane	0.3564	0.3774	21.18	20	6 #
	t-Amyl methyl ether	0.8172	0.8293	20.30	20	1
	n-Heptane	0.4441	0.4875	21.96	20	10
	n-Butanol	0.3419	0.2504	732.34	1000	-27
#	Trichloroethene	0.2905	0.2953	20.33	20	2 #
#	Methylcyclohexane	0.5037	0.4844	19.23	20	-4 #
#	1,2-Dichloropropane	0.2904	0.3032	20.88	20	4 #
	Dibromomethane	0.1767	0.1849	20.94	20	5
	Methyl Methacrylate	0.2928	0.2917	19.92	20	0
#	Bromodichloromethane	0.3293	0.3468	21.06	20	5 #
	2-Nitropropane	0.1474	0.1330	18.04	20	-10
	2-Chloroethyl Vinyl Ether	0.2336	0.2399	20.54	20	3
#	cis-1,3-Dichloropropene	0.4234	0.4382	20.70	20	4 #
#	4-Methyl-2-pentanone	0.5769	0.5650	97.93	100	-2 #
#	Toluene	1.0118	1.0249	20.26	20	1 #
#	trans-1,3-Dichloropropene	0.5404	0.5439	20.13	20	1 #
	Ethyl Methacrylate	0.6480	0.6387	19.71	20	-1
#	1,1,2-Trichloroethane	0.3447	0.3690	21.41	20	7 #
#	Tetrachloroethene	0.4444	0.4369	19.66	20	-2 #
	1,3-Dichloropropane	0.5826	0.5928	20.35	20	2
#	2-Hexanone	0.6528	0.6341	97.14	100	-3 #
#	Dibromochloromethane	0.3529	0.3669	20.79	20	4 #
#	1,2-Dibromoethane	0.3739	0.3888	20.79	20	4 #
	1-Chlorohexane	0.5748	0.5350	18.61	20	-7
#	Chlorobenzene	1.0961	1.0879	19.85	20	-1 #
	1,1,1,2-Tetrachloroethane	0.3610	0.3636	20.14	20	1
#	Ethylbenzene	1.9452	1.9174	19.71	20	-1 #
#	m+p-Xylene	0.7514	0.7454	39.68	40	-1 #

Compounds with required minimum RRF.
Maximum % Drift = 30 %

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 ICV Date: 10/26/18 Time: 00:36

Lab File ID: 5c25v01.d Init. Calib. Date(s): 10/25/18 10/26/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

	COMPOUND	$\overline{RRF}$	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT	
#	o-Xylene	0.7192	0.7123	19.81	20	-1	#
#	Styrene	1.1720	1.1791	20.12	20	1	#
#	Bromoform	0.2591	0.2573	19.05	20	-5	#
#	Isopropylbenzene	1.8331	1.8390	20.06	20	0	#
	Bromobenzene	0.8595	0.8552	19.90	20	-1	
#	1,1,2,2-Tetrachloroethane	1.1192	1.1663	20.84	20	4	#
	1,2,3-Trichloropropane	0.3329	0.3531	21.22	20	6	
	trans-1,4-Dichloro-2-butene	0.3844	0.4352	113.23	100	13	
	n-Propylbenzene	4.0948	4.2354	20.69	20	3	
	2-Chlorotoluene	0.8261	0.8173	19.79	20	-1	
	4-Chlorotoluene	0.8595	0.8414	19.58	20	-2	
	1,3,5-Trimethylbenzene	2.8739	2.8845	20.07	20	0	
	tert-Butylbenzene	0.5969	0.5826	19.52	20	-2	
	Pentachloroethane	0.5096	0.5122	20.10	20	1	
	1,2,4-Trimethylbenzene	2.9517	2.9294	19.85	20	-1	
	sec-Butylbenzene	3.5870	3.6222	20.20	20	1	
#	1,3-Dichlorobenzene	1.6260	1.5944	19.61	20	-2	#
	p-Isopropyltoluene	3.1152	3.1455	20.19	20	1	
#	1,4-Dichlorobenzene	1.6703	1.6525	19.79	20	-1	#
	1,2,3-Trimethylbenzene	3.0746	3.1352	20.39	20	2	
	Benzyl Chloride	2.1725	2.1050	19.38	20	-3	
	1,3-Diethylbenzene	1.9204	1.9055	19.85	20	-1	
	1,4-Diethylbenzene	2.0497	2.0023	19.54	20	-2	
#	1,2-Dichlorobenzene	1.5594	1.5476	19.85	20	-1	#
	n-Butylbenzene	1.6076	1.5729	19.57	20	-2	
	1,2-Diethylbenzene	1.6078	1.6140	20.08	20	0	
#	1,2-Dibromo-3-chloropropane	0.2877	0.2987	20.76	20	4	#
	1,3,5-Trichlorobenzene	1.1411	1.1165	19.57	20	-2	
#	1,2,4-Trichlorobenzene	1.0263	0.9973	19.43	20	-3	#
	Hexachlorobutadiene	0.4835	0.4265	17.64	20	-12	
	Naphthalene	3.6406	3.6344	19.97	20	0	
	1,2,3-Trichlorobenzene	0.9999	0.9674	19.35	20	-3	
	2-Methylnaphthalene	2.1541	2.1025	19.52	20	-2	

Average %Drift 5

Compounds with required minimum RRF.
Maximum % Drift = 30 %

^

Lancaster Laboratories

Continuing Calibration Internal Standard Check

Initial Calibration Standards:

/chem2/HP26285.i/18oct25i.b/5c25i07.d
/chem2/HP26285.i/18oct25i.b/5c25i06.d
/chem2/HP26285.i/18oct25i.b/5c25i05.d
/chem2/HP26285.i/18oct25i.b/5c25i04.d
/chem2/HP26285.i/18oct25i.b/5c25i03.d
/chem2/HP26285.i/18oct25i.b/5c25i02.d
/chem2/HP26285.i/18oct25i.b/5c25i01.d

File /chem2/HP26285.i/18oct25i.b/5c25i03.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem2/HP26285.i/18nov07b.b/5n07c05.d

RT Summary

Internal Standard Name	File ID: 5n07c05.d	ICAL RT	In Spec
t-Butyl alcohol-d10	3.521	3.551	Yes
Fluorobenzene	6.977	7.014	Yes
Chlorobenzene-d5	10.800	10.757	Yes
1,4-Dichlorobenzene-d4	12.836	12.750	Yes

A "No" indicates the retention time is greater than 10 seconds from the referenced ICAL standard.

Area Summary

Internal Standard Name	File ID: 5n07c05.d	ICAL Area	Low Limit	High Limit	In Spec
t-Butyl alcohol-d10	420610	390222	195111	780444	Yes
Fluorobenzene	1180061	1187933	593966	2375866	Yes
Chlorobenzene-d5	874401	836232	418116	1672464	Yes
1,4-Dichlorobenzene-d4	486229	448806	224403	897612	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

Comments: _____

report generated on 11/07/2018 at 20:40

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date: 11/07/18 Time: 20:04

Lab File ID: 5n07c05.d Init. Calib. Date(s): 10/25/18 10/25/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF50	CONC.	CONC.	DRIFT	
# Dichlorodifluoromethane	0.4936	0.4551	46.10	50	-8	#
# Chloromethane	0.3997	0.3852	48.19	50	-4	#
1,3-Butadiene	0.2684	0.2899	54.01	50	8	
# Vinyl Chloride	0.3736	0.3680	49.26	50	-1	#
# Bromomethane	0.2776	0.2898	52.19	50	4	#
# Chloroethane	0.1857	0.1931	52.01	50	4	#
n-Pentane	0.3182	0.3344	52.54	50	5	
# Trichlorofluoromethane	0.4982	0.4923	49.40	50	-1	#
Ethyl ether	0.2398	0.2288	47.69	50	-5	
Freon 123a	0.3394	0.3391	49.96	50	0	
Acrolein	1.7560	1.5083	429.47	500	-14	
# 1,1-Dichloroethene	0.2341	0.2328	49.72	50	-1	#
# 1,1-Dichloroethene(2)	0.1213	0.1222	50.35	50	1	#
# Acetone	0.9101	0.8312	91.32	100	-9	#
# Freon 113	0.2333	0.2364	50.68	50	1	#
2-Propanol	0.7462	0.6750	226.14	250	-10	
Methyl Iodide	0.4563	0.4525	49.58	50	-1	
# Carbon Disulfide	0.7976	0.7737	48.50	50	-3	#
Allyl Chloride	0.5058	0.4562	45.10	50	-10	
# Methyl Acetate	0.4565	0.4019	44.02	50	-12	#
# Methylene Chloride	0.2742	0.2654	48.39	50	-3	#
t-Butyl alcohol	1.3148	1.2115	230.36	250	-8	
Acrylonitrile	0.2143	0.2092	48.81	50	-2	
# trans-1,2-Dichloroethene	0.2664	0.2651	49.75	50	0	#
# Methyl Tertiary Butyl Ether	0.8411	0.8073	47.99	50	-4	#
n-Hexane	0.3864	0.4032	52.18	50	4	
# 1,1-Dichloroethane	0.4986	0.4957	49.71	50	-1	#
di-Isopropyl ether	0.9678	0.9370	48.41	50	-3	
2-Chloro-1,3-butadiene	0.4500	0.4446	49.40	50	-1	
Ethyl t-butyl ether	0.8703	0.8173	46.95	50	-6	
# cis-1,2-Dichloroethene	0.2968	0.2945	49.60	50	-1	#
# 2-Butanone	0.3238	0.3113	96.14	100	-4	#
2,2-Dichloropropane	0.3951	0.3692	46.72	50	-7	
Propionitrile	1.3895	1.3049	234.77	250	-6	
Methacrylonitrile	0.2037	0.2008	123.22	125	-1	
Bromochloromethane	0.1537	0.1506	49.01	50	-2	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date: 11/07/18 Time: 20:04

Lab File ID: 5n07c05.d Init. Calib. Date(s): 10/25/18 10/25/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF50	CONC.	CONC.	DRIFT	
Tetrahydrofuran	1.2642	1.1278	89.21	100	-11	
# Chloroform	0.4712	0.4686	49.72	50	-1	#
# 1,1,1-Trichloroethane	0.4042	0.3928	48.59	50	-3	#
# Cyclohexane	0.4821	0.4810	49.88	50	0	#
# Cyclohexane(2)	0.3983	0.3879	48.69	50	-3	#
# Cyclohexane(3)	0.1436	0.1449	50.46	50	1	#
1,1-Dichloropropene	0.3888	0.3845	49.44	50	-1	
# Carbon Tetrachloride	0.3552	0.3528	49.67	50	-1	#
Isobutyl Alcohol	0.4257	0.4143	608.22	625	-3	
# Benzene	1.1617	1.1596	49.91	50	0	#
# 1,2-Dichloroethane	0.3564	0.3379	47.40	50	-5	#
# 1,2-Dichloroethane(2)	0.0308	0.0301	48.88	50	-2	#<-
t-Amyl methyl ether	0.8172	0.7719	47.23	50	-6	
n-Heptane	0.4441	0.4804	54.09	50	8	
n-Butanol	0.3419	0.3347	1223.71	1250	-2	
# Trichloroethene	0.2905	0.2907	50.02	50	0	#
# Methylcyclohexane	0.5037	0.5099	50.61	50	1	#
# Methylcyclohexane(2)	0.2141	0.2170	50.69	50	1	#
# 1,2-Dichloropropane	0.2904	0.2958	50.93	50	2	#
Dibromomethane	0.1767	0.1764	49.94	50	0	
Methyl Methacrylate	0.2928	0.2960	50.54	50	1	
# Bromodichloromethane	0.3293	0.3280	49.81	50	0	#
2-Nitropropane	0.1474	0.1372	93.08	100	-7	
2-Chloroethyl Vinyl Ether	0.2336	0.2430	52.02	50	4	
# cis-1,3-Dichloropropene	0.4234	0.4379	51.72	50	3	#
# 4-Methyl-2-pentanone	0.5769	0.5685	98.55	100	-1	#
# Toluene	1.0118	0.9817	48.51	50	-3	#
# trans-1,3-Dichloropropene	0.5404	0.5290	48.95	50	-2	#
Ethyl Methacrylate	0.6480	0.6382	49.25	50	-2	
# 1,1,2-Trichloroethane	0.3447	0.3405	49.39	50	-1	#
# Tetrachloroethene	0.4444	0.4176	46.98	50	-6	#
1,3-Dichloropropane	0.5826	0.5795	49.73	50	-1	
# 2-Hexanone	0.6528	0.6219	95.26	100	-5	#
# Dibromochloromethane	0.3529	0.3560	50.44	50	1	#
# 1,2-Dibromoethane	0.3739	0.3742	50.03	50	0	#
1-Chlorohexane	0.5748	0.5346	46.50	50	-7	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date: 11/07/18 Time: 20:04

Lab File ID: 5n07c05.d Init. Calib. Date(s): 10/25/18 10/25/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF50	CONC.	CONC.	DRIFT	
# Chlorobenzene	1.0961	1.0915	49.79	50	0	#
1,1,1,2-Tetrachloroethane	0.3610	0.3644	50.47	50	1	
# Ethylbenzene	1.9452	1.9313	49.64	50	-1	#
# m+p-Xylene	0.7514	0.7458	99.26	100	-1	#
# o-Xylene	0.7192	0.7071	49.16	50	-2	#
# Styrene	1.1720	1.1832	50.48	50	1	#
# Bromoform	0.2591	0.2666	46.13	50	-8	#
# Isopropylbenzene	1.8331	1.8329	49.99	50	0	#
Bromobenzene	0.8595	0.8196	47.68	50	-5	
# 1,1,2,2-Tetrachloroethane	1.1192	1.1290	50.44	50	1	#
1,2,3-Trichloropropane	0.3329	0.3220	48.37	50	-3	
trans-1,4-Dichloro-2-butene	0.3844	0.3214	104.53	125	-16	
n-Propylbenzene	4.0948	4.0199	49.09	50	-2	
2-Chlorotoluene	0.8261	0.7890	47.75	50	-4	
4-Chlorotoluene	0.8595	0.8273	48.12	50	-4	
1,3,5-Trimethylbenzene	2.8739	2.8152	48.98	50	-2	
tert-Butylbenzene	0.5969	0.5723	47.93	50	-4	
Pentachloroethane	0.5096	0.5135	50.39	50	1	
1,2,4-Trimethylbenzene	2.9517	2.8777	48.75	50	-3	
sec-Butylbenzene	3.5870	3.6539	50.93	50	2	
# 1,3-Dichlorobenzene	1.6260	1.5588	47.93	50	-4	#
p-Isopropyltoluene	3.1152	3.1731	50.93	50	2	
# 1,4-Dichlorobenzene	1.6703	1.5969	47.80	50	-4	#
1,2,3-Trimethylbenzene	3.0746	3.0645	49.84	50	0	
Benzyl Chloride	2.1725	2.2098	50.86	50	2	
1,3-Diethylbenzene	1.9204	1.9958	51.96	50	4	
1,4-Diethylbenzene	2.0497	2.1604	52.70	50	5	
# 1,2-Dichlorobenzene	1.5594	1.4966	47.99	50	-4	#
n-Butylbenzene	1.6076	1.6861	52.44	50	5	
1,2-Diethylbenzene	1.6078	1.6540	51.44	50	3	
# 1,2-Dibromo-3-chloropropane	0.2877	0.2764	48.04	50	-4	#
1,3,5-Trichlorobenzene	1.1411	1.1312	49.57	50	-1	
# 1,2,4-Trichlorobenzene	1.0263	1.0046	48.94	50	-2	#
Hexachlorobutadiene	0.4835	0.4955	51.25	50	2	
Naphthalene	3.6406	3.5654	48.97	50	-2	
1,2,3-Trichlorobenzene	0.9999	0.9643	48.22	50	-4	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date: 11/07/18 Time: 20:04

Lab File ID: 5n07c05.d Init. Calib. Date(s): 10/25/18 10/25/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	RRF	RRF50	ACTUAL CONC.	TRUE CONC.	% DRIFT
2-Methylnaphthalene	2.1541	2.1153	49.10	50	-2
Dibromofluoromethane	0.2432	0.2455	50.48	50	1
Dibromofluoromethane(2)	0.2487	0.2504	50.35	50	1
1,2-Dichloroethane-d4	0.0581	0.0581	49.99	50	0
1,2-Dichloroethane-d4(2)	0.2954	0.2861	48.42	50	-3
1,2-Dichloroethane-d4(3)	0.0370	0.0368	49.70	50	-1
Toluene-d8	1.3487	1.3239	49.08	50	-2
Toluene-d8(2)	0.8729	0.8576	49.12	50	-2
4-Bromofluorobenzene	0.4848	0.4943	50.98	50	2
4-Bromofluorobenzene(2)	0.4116	0.4258	51.72	50	3

Average %Drift 3

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

Lancaster Laboratories

Continuing Calibration Internal Standard Check

Initial Calibration Standards:

/chem2/HP26285.i/18oct25i.b/5c25i07.d
/chem2/HP26285.i/18oct25i.b/5c25i06.d
/chem2/HP26285.i/18oct25i.b/5c25i05.d
/chem2/HP26285.i/18oct25i.b/5c25i04.d
/chem2/HP26285.i/18oct25i.b/5c25i03.d
/chem2/HP26285.i/18oct25i.b/5c25i02.d
/chem2/HP26285.i/18oct25i.b/5c25i01.d

File /chem2/HP26285.i/18oct25i.b/5c25i03.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem2/HP26285.i/18nov08a.b/5n08c01.d

RT Summary

Internal Standard Name	File ID: 5n08c01.d	ICAL RT	In Spec
t-Butyl alcohol-d10	3.496	3.551	Yes
Fluorobenzene	6.965	7.014	Yes
Chlorobenzene-d5	10.788	10.757	Yes
1,4-Dichlorobenzene-d4	12.824	12.750	Yes

A "No" indicates the retention time is greater than 10 seconds from the referenced ICAL standard.

Area Summary

Internal Standard Name	File ID: 5n08c01.d	ICAL Area	Low Limit	High Limit	In Spec
t-Butyl alcohol-d10	356663	390222	195111	780444	Yes
Fluorobenzene	1041330	1187933	593966	2375866	Yes
Chlorobenzene-d5	773806	836232	418116	1672464	Yes
1,4-Dichlorobenzene-d4	442222	448806	224403	897612	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

Comments: _____

report generated on 11/08/2018 at 08:34

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date: 11/08/18 Time: 08:12

Lab File ID: 5n08c01.d Init. Calib. Date(s): 10/25/18 10/25/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF50	CONC.	CONC.	DRIFT	
# Dichlorodifluoromethane	0.4936	0.4781	48.43	50	-3	#
# Chloromethane	0.3997	0.3840	48.04	50	-4	#
1,3-Butadiene	0.2684	0.2717	50.62	50	1	
# Vinyl Chloride	0.3736	0.3632	48.61	50	-3	#
# Bromomethane	0.2776	0.2904	52.29	50	5	#
# Chloroethane	0.1857	0.1932	52.03	50	4	#
Dichlorofluoromethane	0.4923	0.5174	52.55	50	5	
n-Pentane	0.3182	0.3056	48.02	50	-4	
# Trichlorofluoromethane	0.4982	0.5363	53.82	50	8	#
Ethyl ether	0.2398	0.2342	48.83	50	-2	
Freon 123a	0.3394	0.3190	46.99	50	-6	
Acrolein	1.7560	1.6197	461.20	500	-8	
# 1,1-Dichloroethene	0.2341	0.2096	44.76	50	-10	#
# 1,1-Dichloroethene(2)	0.1213	0.1129	46.50	50	-7	#
# Acetone	0.9101	0.9123	100.24	100	0	#
# Freon 113	0.2333	0.2218	47.54	50	-5	#
2-Propanol	0.7462	0.7360	246.60	250	-1	
Methyl Iodide	0.4563	0.4179	45.79	50	-8	
# Carbon Disulfide	0.7976	0.6895	43.22	50	-14	#
Allyl Chloride	0.5058	0.4622	45.69	50	-9	
# Methyl Acetate	0.4565	0.4239	46.43	50	-7	#
# Methylene Chloride	0.2742	0.2623	47.84	50	-4	#
t-Butyl alcohol	1.3148	1.2732	242.10	250	-3	
Acrylonitrile	0.2143	0.2217	51.72	50	3	
# trans-1,2-Dichloroethene	0.2664	0.2453	46.04	50	-8	#
# Methyl Tertiary Butyl Ether	0.8411	0.8109	48.20	50	-4	#
n-Hexane	0.3864	0.3771	48.79	50	-2	
# 1,1-Dichloroethane	0.4986	0.4775	47.89	50	-4	#
di-Isopropyl ether	0.9678	0.9296	48.03	50	-4	
2-Chloro-1,3-butadiene	0.4500	0.4108	45.65	50	-9	
Ethyl t-butyl ether	0.8703	0.7996	45.94	50	-8	
# cis-1,2-Dichloroethene	0.2968	0.2844	47.90	50	-4	#
# 2-Butanone	0.3238	0.3325	102.67	100	3	#
2,2-Dichloropropane	0.3951	0.3526	44.62	50	-11	
Propionitrile	1.3895	1.4183	255.17	250	2	
Methacrylonitrile	0.2037	0.2076	127.40	125	2	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date: 11/08/18 Time: 08:12

Lab File ID: 5n08c01.d Init. Calib. Date(s): 10/25/18 10/25/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

	COMPOUND	RRF	RRF50	ACTUAL CONC.	TRUE CONC.	% DRIFT	
	Bromochloromethane	0.1537	0.1528	49.74	50	-1	
	Tetrahydrofuran	1.2642	1.2173	96.29	100	-4	
#	Chloroform	0.4712	0.4686	49.72	50	-1	#
#	1,1,1-Trichloroethane	0.4042	0.3746	46.34	50	-7	#
#	Cyclohexane	0.4821	0.4528	46.95	50	-6	#
#	Cyclohexane(2)	0.3983	0.3609	45.31	50	-9	#
#	Cyclohexane(3)	0.1436	0.1348	46.94	50	-6	#
	1,1-Dichloropropene	0.3888	0.3565	45.84	50	-8	
#	Carbon Tetrachloride	0.3552	0.3330	46.87	50	-6	#
	Isobutyl Alcohol	0.4257	0.4656	683.45	625	9	
#	Benzene	1.1617	1.1292	48.60	50	-3	#
#	1,2-Dichloroethane	0.3564	0.3600	50.50	50	1	#
#	1,2-Dichloroethane(2)	0.0308	0.0300	48.73	50	-3	#<-
	t-Amyl methyl ether	0.8172	0.7680	46.99	50	-6	
	n-Heptane	0.4441	0.4836	54.45	50	9	
	n-Butanol	0.3419	0.3497	1278.66	1250	2	
#	Trichloroethene	0.2905	0.2796	48.12	50	-4	#
#	Methylcyclohexane	0.5037	0.5253	52.14	50	4	#
#	Methylcyclohexane(2)	0.2141	0.2202	51.42	50	3	#
#	1,2-Dichloropropane	0.2904	0.3015	51.92	50	4	#
	Dibromomethane	0.1767	0.1835	51.94	50	4	
	Methyl Methacrylate	0.2928	0.3045	51.99	50	4	
#	Bromodichloromethane	0.3293	0.3282	49.85	50	0	#
	2-Nitropropane	0.1474	0.1492	101.21	100	1	
	2-Chloroethyl Vinyl Ether	0.2336	0.2499	53.49	50	7	
#	cis-1,3-Dichloropropene	0.4234	0.4259	50.30	50	1	#
#	4-Methyl-2-pentanone	0.5769	0.6166	106.88	100	7	#
#	Toluene	1.0118	0.9440	46.65	50	-7	#
#	trans-1,3-Dichloropropene	0.5404	0.5218	48.28	50	-3	#
	Ethyl Methacrylate	0.6480	0.6587	50.83	50	2	
#	1,1,2-Trichloroethane	0.3447	0.3560	51.65	50	3	#
#	Tetrachloroethene	0.4444	0.3994	44.93	50	-10	#
	1,3-Dichloropropane	0.5826	0.5991	51.42	50	3	
#	2-Hexanone	0.6528	0.6828	104.61	100	5	#
#	Dibromochloromethane	0.3529	0.3513	49.78	50	0	#
#	1,2-Dibromoethane	0.3739	0.3837	51.31	50	3	#

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date: 11/08/18 Time: 08:12

Lab File ID: 5n08c01.d Init. Calib. Date(s): 10/25/18 10/25/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
	COMPOUND	RRF	RRF50	CONC.	CONC.	DRIFT	
	1-Chlorohexane	0.5748	0.5210	45.32	50	-9	
#	Chlorobenzene	1.0961	1.0847	49.48	50	-1	#
	1,1,1,2-Tetrachloroethane	0.3610	0.3717	51.47	50	3	
#	Ethylbenzene	1.9452	1.8883	48.54	50	-3	#
#	m+p-Xylene	0.7514	0.7328	97.53	100	-2	#
#	o-Xylene	0.7192	0.7055	49.05	50	-2	#
#	Styrene	1.1720	1.2020	51.28	50	3	#
#	Bromoform	0.2591	0.2538	44.03	50	-12	#
#	Isopropylbenzene	1.8331	1.8151	49.51	50	-1	#
	Bromobenzene	0.8595	0.8068	46.93	50	-6	
#	1,1,2,2-Tetrachloroethane	1.1192	1.1657	52.08	50	4	#
	1,2,3-Trichloropropane	0.3329	0.3330	50.01	50	0	
	trans-1,4-Dichloro-2-butene	0.3844	0.3316	107.85	125	-14	
	n-Propylbenzene	4.0948	3.9337	48.03	50	-4	
	2-Chlorotoluene	0.8261	0.7798	47.19	50	-6	
	4-Chlorotoluene	0.8595	0.8166	47.50	50	-5	
	1,3,5-Trimethylbenzene	2.8739	2.7789	48.35	50	-3	
	tert-Butylbenzene	0.5969	0.5514	46.18	50	-8	
	Pentachloroethane	0.5096	0.5034	49.39	50	-1	
	1,2,4-Trimethylbenzene	2.9517	2.8826	48.83	50	-2	
	sec-Butylbenzene	3.5870	3.6313	50.62	50	1	
#	1,3-Dichlorobenzene	1.6260	1.5611	48.00	50	-4	#
	p-Isopropyltoluene	3.1152	3.1487	50.54	50	1	
#	1,4-Dichlorobenzene	1.6703	1.6182	48.44	50	-3	#
	1,2,3-Trimethylbenzene	3.0746	3.0904	50.26	50	1	
	Benzyl Chloride	2.1725	2.2006	50.65	50	1	
	1,3-Diethylbenzene	1.9204	1.9895	51.80	50	4	
	1,4-Diethylbenzene	2.0497	2.1376	52.14	50	4	
#	1,2-Dichlorobenzene	1.5594	1.5229	48.83	50	-2	#
	n-Butylbenzene	1.6076	1.7003	52.88	50	6	
	1,2-Diethylbenzene	1.6078	1.6578	51.55	50	3	
#	1,2-Dibromo-3-chloropropane	0.2877	0.2786	48.41	50	-3	#
	1,3,5-Trichlorobenzene	1.1411	1.1603	50.84	50	2	
#	1,2,4-Trichlorobenzene	1.0263	1.0377	50.55	50	1	#
	Hexachlorobutadiene	0.4835	0.4991	51.62	50	3	
	Naphthalene	3.6406	3.7627	51.68	50	3	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP26285 Calibration Date: 11/08/18 Time: 08:12

Lab File ID: 5n08c01.d Init. Calib. Date(s): 10/25/18 10/25/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	RRF	RRF50	ACTUAL CONC.	TRUE CONC.	% DRIFT
1,2,3-Trichlorobenzene	0.9999	1.0109	50.55	50	1
2-Methylnaphthalene	2.1541	2.1723	50.42	50	1
Dibromofluoromethane	0.2432	0.2472	50.81	50	2
Dibromofluoromethane(2)	0.2487	0.2527	50.82	50	2
1,2-Dichloroethane-d4	0.0581	0.0584	50.26	50	1
1,2-Dichloroethane-d4(2)	0.2954	0.3002	50.81	50	2
1,2-Dichloroethane-d4(3)	0.0370	0.0370	50.02	50	0
Toluene-d8	1.3487	1.3357	49.52	50	-1
Toluene-d8(2)	0.8729	0.8615	49.35	50	-1
4-Bromofluorobenzene	0.4848	0.5083	52.43	50	5
4-Bromofluorobenzene(2)	0.4116	0.4283	52.03	50	4

Average %Drift 4

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): 5n07c05.d Date Analyzed: 11/07/18

Instrument ID: HP26285 Time Analyzed: 20:04

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

	IS1(TBA)		IS2(FBZ)		IS3(CBZ)		IS4(DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	420610	3.520	1180061	6.977	874401	10.800	486229	12.836
UPPER LIMIT	841220	4.020	2360122	7.477	1748802	11.300	972458	13.336
LOWER LIMIT	210305	3.020	590030	6.477	437200	10.300	243114	12.336
LAB SAMPLE ID								
01 LCS557	411790	3.502	1177924	6.971	872493	10.800	477668	12.836
02 LCD557	410870	3.520	1188098	6.971	879599	10.794	483544	12.836
03 LCS556	410870	3.520	1188098	6.971	879599	10.794	483544	12.836
04 VBLK556	394538	3.502	1141885	6.971	828767	10.794	437755	12.830
05 VBLK557	394538	3.502	1141885	6.971	828767	10.794	437755	12.830
06 9879342	387747	3.514	1119912	6.971	821714	10.794	431574	12.830
07 9879333	385382	3.508	1110747	6.971	811183	10.793	426447	12.830
08 9879333MS	400765	3.514	1145715	6.971	848214	10.793	471226	12.836
09 9879333MSD	407416	3.508	1153224	6.971	852999	10.793	475231	12.836
10 9879332	432627	3.502	1162877	6.965	878557	10.793	488570	12.830
11 9879335	416235	3.508	1157486	6.971	850942	10.794	450848	12.830
12 9879336	415342	3.508	1145880	6.965	848803	10.794	448416	12.830
13 9879334	411285	3.502	1145268	6.971	838848	10.793	443402	12.830
14 9879338	397748	3.502	1128068	6.965	824973	10.793	434444	12.830
15 9879339	392412	3.502	1125799	6.965	822299	10.793	434217	12.830
16 9879340	384440	3.508	1110482	6.971	812689	10.793	428508	12.830
17 9879341	374757	3.502	1089614	6.965	800402	10.793	421896	12.830
18 9870391	382171	3.502	1103608	6.971	809516	10.793	424296	12.830
19 9870392	359372	3.502	1069588	6.965	778124	10.794	408643	12.830
20 9870393	349225	3.502	1046346	6.965	766399	10.787	397893	12.830
21 9879337	368335	3.508	1090537	6.971	803773	10.794	445942	12.830
22 9882891	348350	3.502	1054470	6.965	764489	10.787	405429	12.830

IS1 (TBA)=t-Butyl alcohol-d10
IS2 (FBZ)=Fluorobenzene
IS3 (CBZ)=Chlorobenzene-d5
IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): 5n07c05.d Date Analyzed: 11/07/18

Instrument ID: HP26285 Time Analyzed: 20:04

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

	IS1(TBA)		IS2(FBZ)		IS3(CBZ)		IS4(DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	420610	3.520	1180061	6.977	874401	10.800	486229	12.836
UPPER LIMIT	841220	4.020	2360122	7.477	1748802	11.300	972458	13.336
LOWER LIMIT	210305	3.020	590030	6.477	437200	10.300	243114	12.336
LAB SAMPLE ID								
23 9882892	356654	3.514	1045975	6.965	765099	10.788	403320	12.824
24 9882893	348954	3.496	1035657	6.965	753988	10.787	394803	12.830
25 9882894	352804	3.508	1032323	6.965	754087	10.787	394201	12.830
26 9882895	350192	3.514	1023131	6.965	748694	10.787	391707	12.824
27 9882896	338726	3.496	998881	6.965	733975	10.787	381301	12.830
28 9873925	338723	3.502	982092	6.965	721620	10.787	377895	12.824

IS1 (TBA)=t-Butyl alcohol-d10
IS2 (FBZ)=Fluorobenzene
IS3 (CBZ)=Chlorobenzene-d5
IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM VIII VOA

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8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): 5n08c01.d Date Analyzed: 11/08/18

Instrument ID: HP26285 Time Analyzed: 08:12

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

	IS1(TBA)		IS2(FBZ)		IS3(CBZ)		IS4(DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	356663	3.496	1041330	6.965	773806	10.788	442222	12.824
UPPER LIMIT	713326	3.996	2082660	7.465	1547612	11.288	884444	13.324
LOWER LIMIT	178332	2.996	520665	6.465	386903	10.288	221111	12.324
LAB SAMPLE ID								
01 LCS558	345542	3.496	1048376	6.965	772735	10.781	434987	12.824
02 VBLK558	357972	3.502	1031290	6.965	756463	10.781	391832	12.824
03 9872270	371112	3.514	1027388	6.983	746713	10.800	390967	12.836
04 9872272	350544	3.496	992229	6.959	724413	10.787	379647	12.824
05 9872273MS	358721	3.502	1028357	6.965	760872	10.788	430212	12.824
06 9872274MSD	376840	3.502	1070126	6.965	789158	10.788	443942	12.824
07 9882897	367935	3.514	1030493	6.971	759321	10.788	392448	12.824
08 9882898	344991	3.502	980004	6.965	715933	10.781	374602	12.824
09 9882899	334639	3.514	978562	6.971	716795	10.787	373770	12.823
10 9872264	324285	3.508	964089	6.971	699947	10.787	362547	12.824
11 9872266	327661	3.514	951540	6.971	701611	10.787	366132	12.824
12 9872267	325703	3.508	939291	6.971	689055	10.781	361506	12.818
13 9872268	320336	3.514	930477	6.971	680723	10.787	355405	12.824
14 9872271	311377	3.514	914304	6.971	671326	10.788	349325	12.818
15 9872276	311302	3.508	901911	6.965	657753	10.781	344493	12.818
16 9872965	311227	3.508	937831	6.971	712061	10.781	385150	12.817
17 9879199	339724	3.514	997574	6.971	726914	10.781	379403	12.818
18 9879199MS	340952	3.520	1021790	6.971	756915	10.781	424869	12.811
19 9881533	338266	3.514	991619	6.971	727637	10.781	377006	12.817
20 9881533MS	339609	3.508	1033942	6.971	763493	10.781	428704	12.811
21 9874959DL	338972	3.508	1025950	6.971	756046	10.775	406842	12.811
22 9876909	339696	3.508	983305	6.971	727205	10.775	401190	12.805

IS1 (TBA)=t-Butyl alcohol-d10
IS2 (FBZ)=Fluorobenzene
IS3 (CBZ)=Chlorobenzene-d5
IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): 5n08c01.d Date Analyzed: 11/08/18

Instrument ID: HP26285 Time Analyzed: 08:12

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

	IS1(TBA)		IS2(FBZ)		IS3(CBZ)		IS4(DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	356663	3.496	1041330	6.965	773806	10.788	442222	12.824
UPPER LIMIT	713326	3.996	2082660	7.465	1547612	11.288	884444	13.324
LOWER LIMIT	178332	2.996	520665	6.465	386903	10.288	221111	12.324
LAB SAMPLE ID								
23 9876909DL	336937	3.520	987436	6.971	728860	10.775	384056	12.805

IS1 (TBA)=t-Butyl alcohol-d10
IS2 (FBZ)=Fluorobenzene
IS3 (CBZ)=Chlorobenzene-d5
IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM VIII VOA

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Sample Data

Volatiles by GC/MS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
QAWT1

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882891

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s63.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	5	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QAWT1

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882891

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s63.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

QAWT1 Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 9882891

Data file: /chem2/HP26285.i/18nov07b.b/5n07s63.d Injection date and time: **08-NOV-2018 04:14**
Data file Sample Info. Line: QAWT1;9882891;1;0;;CBD53;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 04:33 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 07-NOV-2018 22:09
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:pH=5

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(0.018)	347	65	348350	(-17)	250.00	
66) Fluorobenzene	6.965	(0.012)	915	96	1054470	(-11)	50.00	
101) Chlorobenzene-d5	10.787	(0.012)	1542	117	764489	(-13)	50.00	
132) 1,4-Dichlorobenzene-d4	12.830	(0.006)	1877	152	405429	(-17)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.038	(-0.001)	113	254811	49.676	99%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.514	(-0.001)	102	61739	50.415	101%		80 - 120
84) Toluene-d8	(3)	9.148	(0.000)	98	1028990	49.898	100%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.885	(-0.001)	95	360420	48.623	97%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.2	1
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
28) Methylene Chloride	(2)				Not Detected					0.3	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
71) Trichloroethene	(2)				Not Detected					0.2	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
79) Bromodichloromethane	(2)				Not Detected					0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
98) Dibromochloromethane	(3)				Not Detected					0.2	1
103) Chlorobenzene	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5

Digitally signed by Corie L. Mellinger on 11/08/2018 at 15:01. Target 3.5 esignature user ID: clm27445

Data file: /chem2/HP26285.i/18nov07b.b/5n07s63.d Injection date and time: **08-NOV-2018 04:14**
Data file Sample Info. Line: QAWT1;9882891;1;0;;CBD53;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 04:33 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 07-NOV-2018 22:09
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

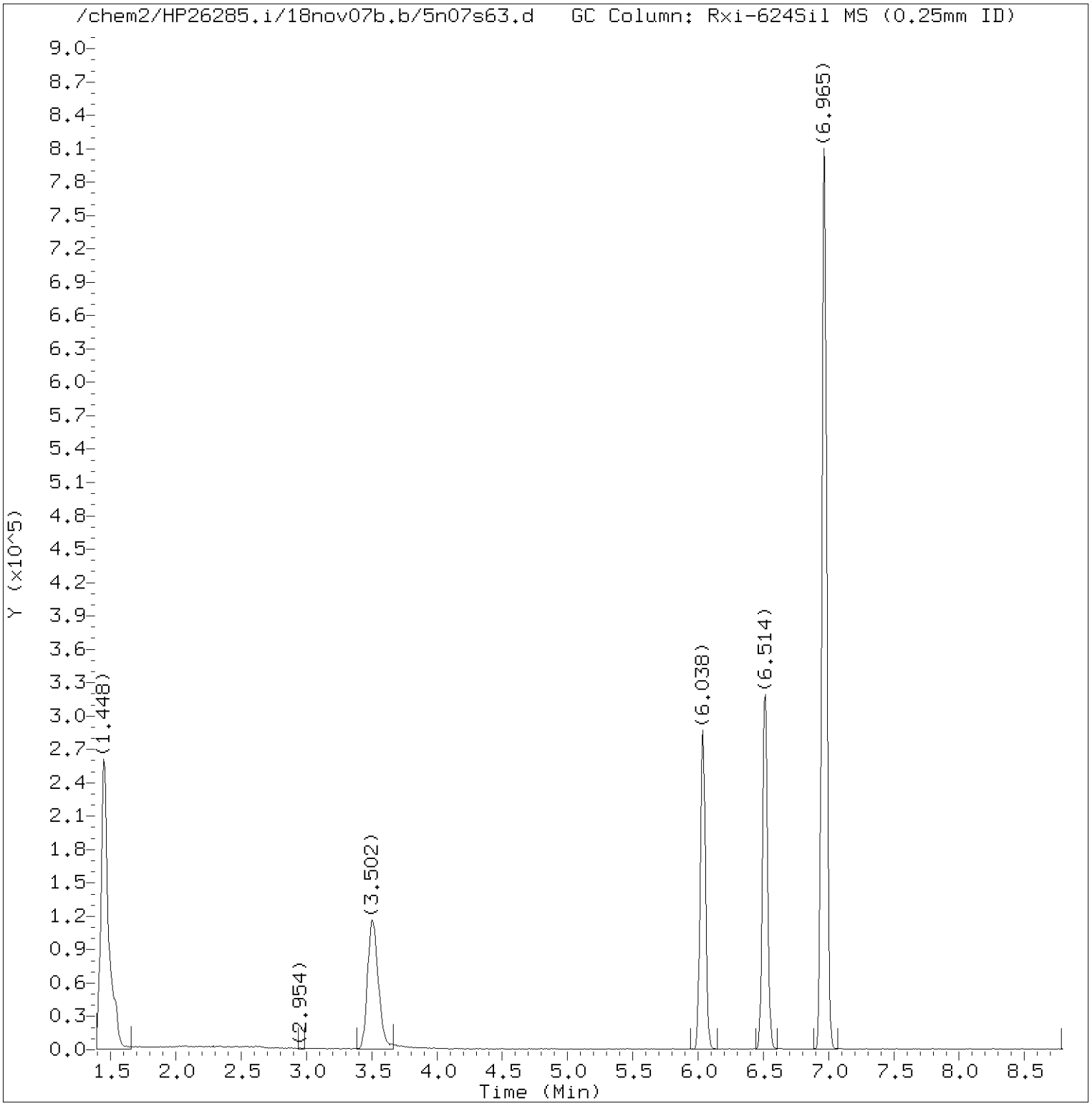
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5

Total number of targets = 37

Digitally signed by Corie L. Mellinger on 11/08/2018 at 15:01. Target 3.5 esignature user ID: clm27445

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

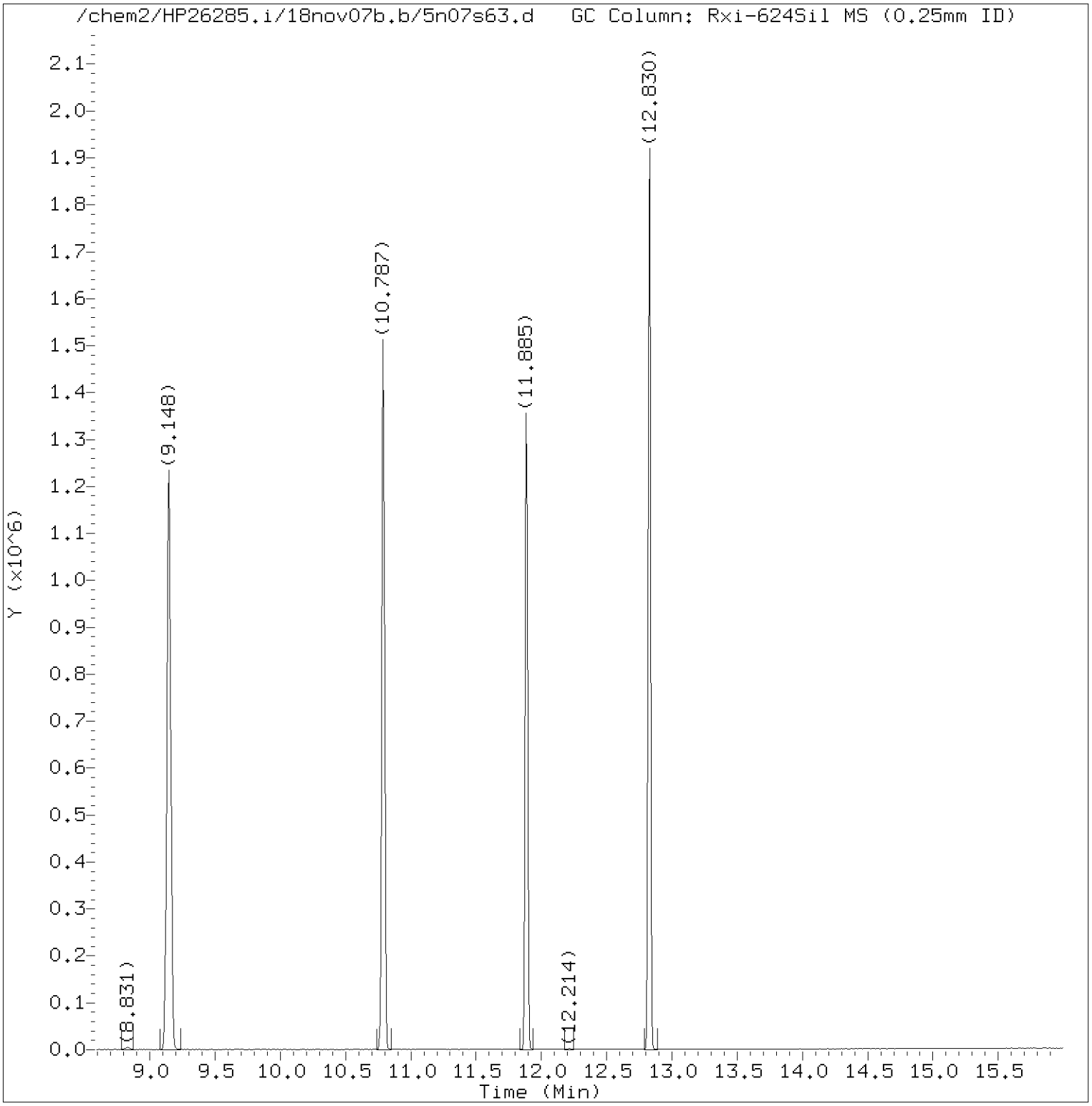
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s63.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 04:14 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 04:33 Unknown

Sample Name: QAWT1 Lab Sample ID: 9882891

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:01.
Target 3.5 esignature user ID: clm27445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s63.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 04:14 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 04:33 Unknown

Sample Name: QAWT1 Lab Sample ID: 9882891

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:01.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s63.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 04:14 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 04:33 Unknown

Sample Name: QAWT1 Lab Sample ID: 9882891

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.502	65	348350	250.000
52)$Dibromofluoromethane	(2)	6.038	113	254811	49.676
57)$1,2-Dichloroethane-d4	(2)	6.514	102	61739	50.415
66)*Fluorobenzene	(2)	6.965	96	1054470	50.000
84)$Toluene-d8	(3)	9.148	98	1028990	49.898
101)*Chlorobenzene-d5	(3)	10.787	117	764489	50.000
115)$4-Bromofluorobenzene	(3)	11.885	95	360420	48.623
132)*1,4-Dichlorobenzene-d4	(4)	12.830	152	405429	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:01.
Target 3.5 esignature user ID: clm27445

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
OS-03

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882892

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s64.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	5	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OS-03

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882892

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s64.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

OS-03

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

9882892

Data file: /chem2/HP26285.i/18nov07b.b/5n07s64.d
Injection date and time: **08-NOV-2018 04:35**
Data file Sample Info. Line: OS-03;9882892;1;0;;CBD53;;;5n07b61;
Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 04:54 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 07-NOV-2018 22:09
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:pH=5

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.515	(0.006)	349	65	356654	(-15)	250.00	
66) Fluorobenzene	6.965	(0.012)	915	96	1045975	(-11)	50.00	
101) Chlorobenzene-d5	10.787	(0.012)	1542	117	765099	(-13)	50.00	
132) 1,4-Dichlorobenzene-d4	12.824	(0.012)	1876	152	403320	(-17)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.038	(-0.001)	113	253505	49.823	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.514	(-0.001)	102	62101	51.122	102%		80 - 120
84) Toluene-d8	(3)	9.141	(0.000)	98	1016265	49.242	98%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.885	(-0.001)	95	357641	48.210	96%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.2	1
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
28) Methylene Chloride	(2)				Not Detected					0.3	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
71) Trichloroethene	(2)				Not Detected					0.2	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
79) Bromodichloromethane	(2)				Not Detected					0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
98) Dibromochloromethane	(3)				Not Detected					0.2	1
103) Chlorobenzene	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5

Digitally signed by Corie L. Mellinger on 11/08/2018 at 15:01. Target 3.5 esignature user ID: clm27445

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 9882892

Data file: /chem2/HP26285.i/18nov07b.b/5n07s64.d Injection date and time: **08-NOV-2018 04:35**
Data file Sample Info. Line: OS-03;9882892;1;0;;CBD53;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 04:54 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 07-NOV-2018 22:09
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

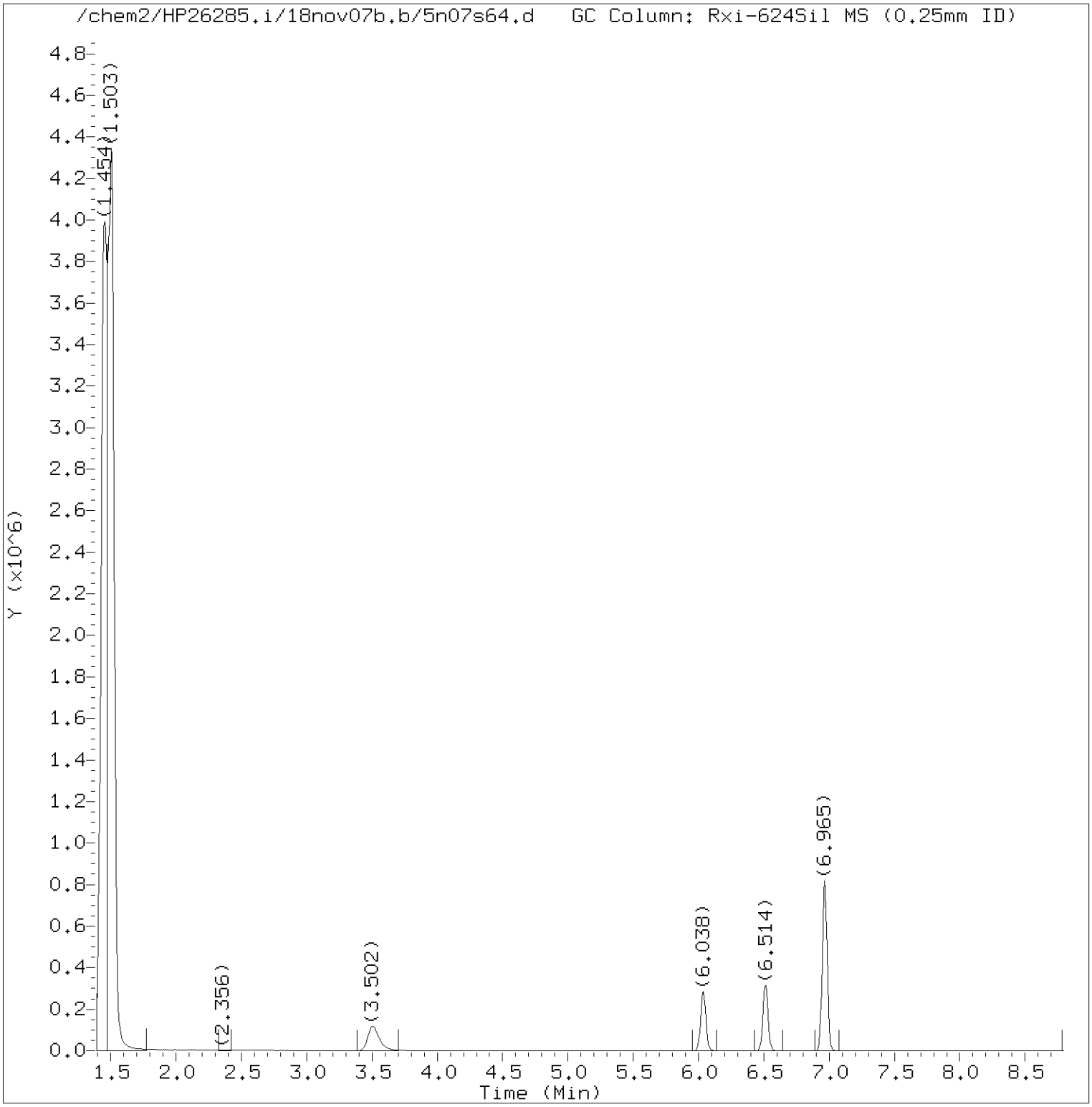
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5

Total number of targets = 37

Digitally signed by Corie L. Mellinger on 11/08/2018 at 15:01. Target 3.5 esignature user ID: clm27445

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

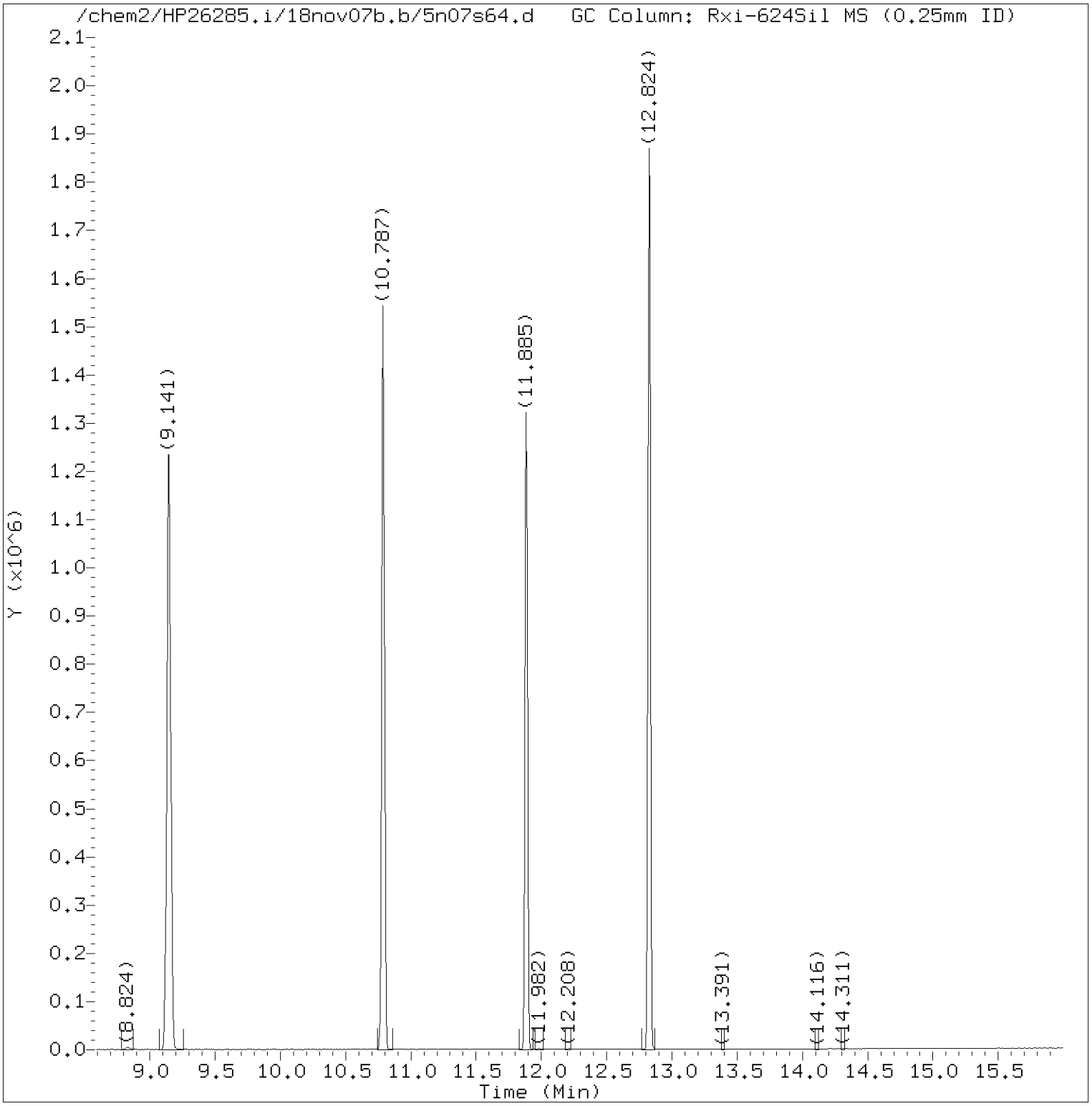
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s64.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 04:35 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 04:54 Unknown

Sample Name: OS-03 Lab Sample ID: 9882892

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:01.
Target 3.5 esignature user ID: clm27445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s64.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 04:35 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 04:54 Unknown

Sample Name: OS-03 Lab Sample ID: 9882892

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:01.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s64.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 04:35 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 04:54 Unknown

Sample Name: OS-03 Lab Sample ID: 9882892

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.515	65	356654	250.000
52)$Dibromofluoromethane	(2)	6.038	113	253505	49.823
57)$1,2-Dichloroethane-d4	(2)	6.514	102	62101	51.122
66)*Fluorobenzene	(2)	6.965	96	1045975	50.000
84)$Toluene-d8	(3)	9.141	98	1016265	49.242
101)*Chlorobenzene-d5	(3)	10.787	117	765099	50.000
115)$4-Bromofluorobenzene	(3)	11.885	95	357641	48.210
132)*1,4-Dichlorobenzene-d4	(4)	12.824	152	403320	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:01.
Target 3.5 esignature user ID: clm27445

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OS-02

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882893

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s65.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	5	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OS-02

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882893

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s65.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

OS-02 Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 9882893

Data file: /chem2/HP26285.i/18nov07b.b/5n07s65.d Injection date and time: **08-NOV-2018 04:56**
Data file Sample Info. Line: OS-02;9882893;1;0;;CBD53;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 05:15 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 07-NOV-2018 22:09
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:pH=5

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.496	(0.024)	346	65	348954	(-17)	250.00	
66) Fluorobenzene	6.965	(0.012)	915	96	1035657	(-12)	50.00	
101) Chlorobenzene-d5	10.787	(0.012)	1542	117	753988	(-14)	50.00	
132) 1,4-Dichlorobenzene-d4	12.830	(0.006)	1877	152	394803	(-19)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.032	(0.000)	113	252291	50.078	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.508	(0.000)	102	60770	50.524	101%		80 - 120
84) Toluene-d8	(3)	9.141	(0.000)	98	1011249	49.721	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.885	(-0.001)	95	351269	48.048	96%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.2	1
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
28) Methylene Chloride	(2)				Not Detected					0.3	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
71) Trichloroethene	(2)				Not Detected					0.2	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
79) Bromodichloromethane	(2)				Not Detected					0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
98) Dibromochloromethane	(3)				Not Detected					0.2	1
103) Chlorobenzene	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5

Digitally signed by Corie L. Mellinger on 11/08/2018 at 15:02. Target 3.5 esignature user ID: clm27445

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 9882893

Data file: /chem2/HP26285.i/18nov07b.b/5n07s65.d Injection date and time: **08-NOV-2018 04:56**
Data file Sample Info. Line: OS-02;9882893;1;0;;CBD53;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 05:15 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 07-NOV-2018 22:09
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

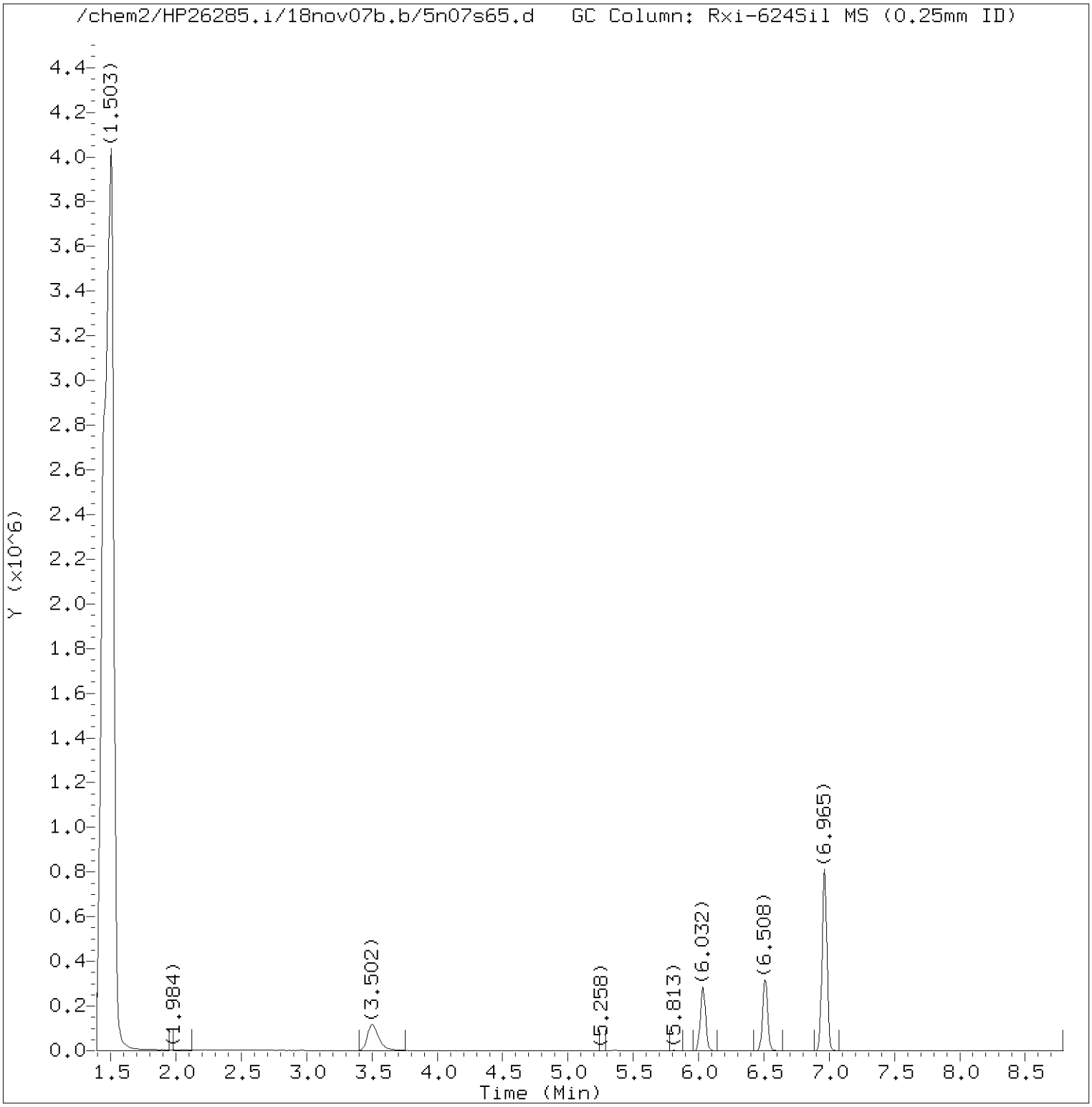
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5

Total number of targets = 37

Digitally signed by Corie L. Mellinger on 11/08/2018 at 15:02. Target 3.5 esignature user ID: clm27445

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

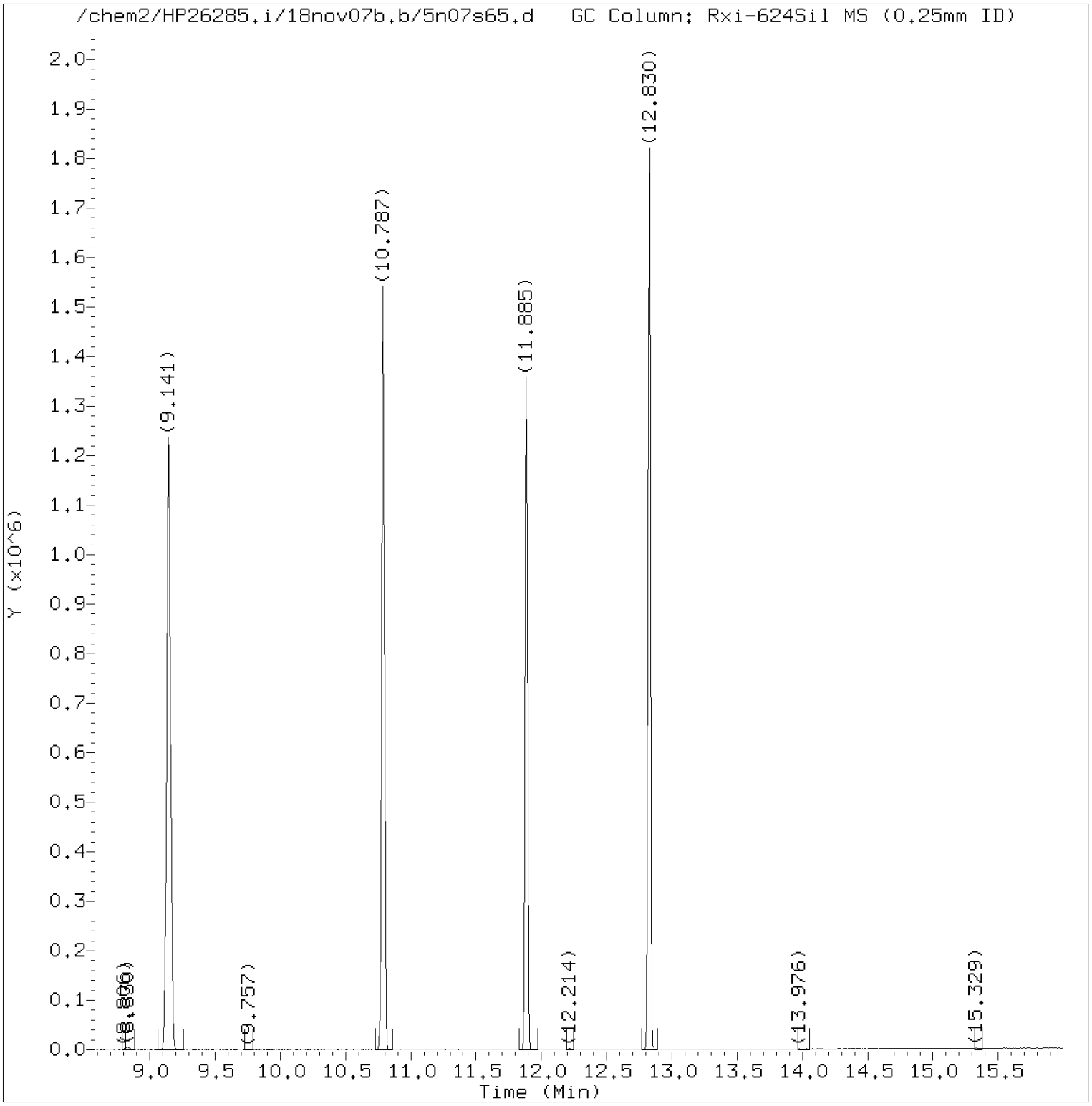
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s65.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 04:56 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 05:15 Unknown

Sample Name: OS-02 Lab Sample ID: 9882893

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:02.
Target 3.5 esignature user ID: clm27445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s65.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 04:56 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 05:15 Unknown

Sample Name: OS-02 Lab Sample ID: 9882893

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:02.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s65.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 04:56 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 05:15 Unknown

Sample Name: OS-02 Lab Sample ID: 9882893

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.496	65	348954	250.000
52)$Dibromofluoromethane	(2)	6.032	113	252291	50.078
57)$1,2-Dichloroethane-d4	(2)	6.508	102	60770	50.524
66)*Fluorobenzene	(2)	6.965	96	1035657	50.000
84)$Toluene-d8	(3)	9.141	98	1011249	49.721
101)*Chlorobenzene-d5	(3)	10.787	117	753988	50.000
115)$4-Bromofluorobenzene	(3)	11.885	95	351269	48.048
132)*1,4-Dichlorobenzene-d4	(4)	12.830	152	394803	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:02.
Target 3.5 esignature user ID: clm27445

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-23

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882894

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s66.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	5	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-23

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882894

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s66.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

TF-23

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

9882894

Data file: /chem2/HP26285.i/18nov07b.b/5n07s66.d
Data file Sample Info. Line: TF-23;9882894;1;0;;CBD53;;;5n07b61;
Date, time and analyst ID of latest file update: 08-Nov-2018 05:36 Unknown

Injection date and time: **08-NOV-2018 05:17**
Instrument ID: **HP26285.i** Batch: **5183113AA**

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 07-NOV-2018 22:09
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:pH=5

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.508	(0.012)	348	65	352804	(-16)	250.00	
66) Fluorobenzene	6.965	(0.012)	915	96	1032323	(-13)	50.00	
101) Chlorobenzene-d5	10.787	(0.012)	1542	117	754087	(-14)	50.00	
132) 1,4-Dichlorobenzene-d4	12.830	(0.006)	1877	152	394201	(-19)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.038	(-0.001)	113	253039	50.389	101%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.514	(-0.001)	102	60026	50.068	100%		80 - 120
84) Toluene-d8	(3)	9.141	(0.000)	98	1008562	49.582	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.885	(-0.001)	95	352808	48.253	97%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.2	1
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
28) Methylene Chloride	(2)				Not Detected					0.3	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
71) Trichloroethene	(2)				Not Detected					0.2	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
79) Bromodichloromethane	(2)				Not Detected					0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
98) Dibromochloromethane	(3)				Not Detected					0.2	1
103) Chlorobenzene	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5

Digitally signed by Corie L. Mellinger on 11/08/2018 at 15:02. Target 3.5 esignature user ID: clm27445

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 9882894

Data file: /chem2/HP26285.i/18nov07b.b/5n07s66.d Injection date and time: **08-NOV-2018 05:17**
Data file Sample Info. Line: TF-23;9882894;1;0;;CBD53;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 05:36 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 07-NOV-2018 22:09
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

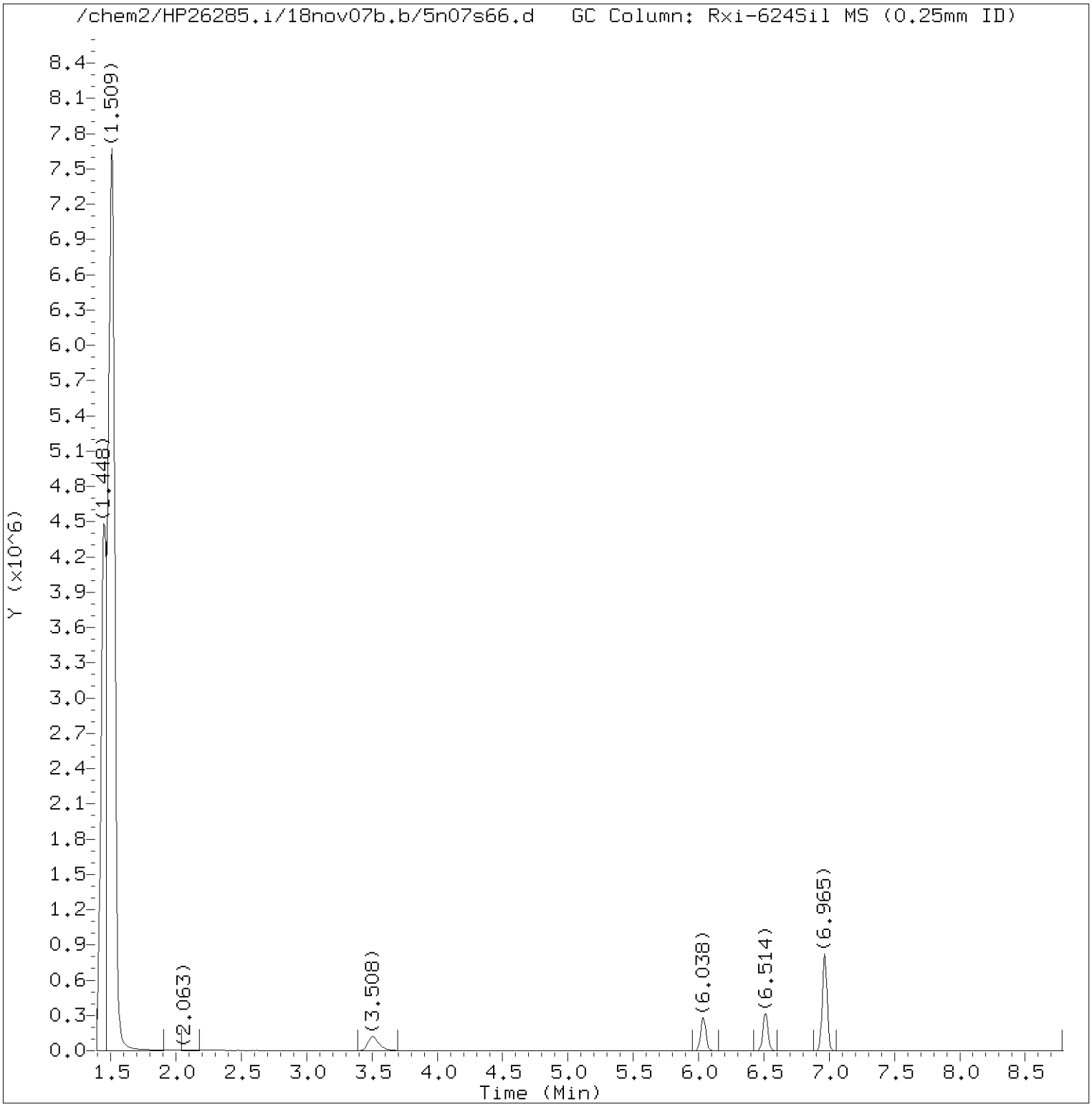
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5

Total number of targets = 37

Digitally signed by Corie L. Mellinger on 11/08/2018 at 15:02. Target 3.5 esignature user ID: clm27445

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

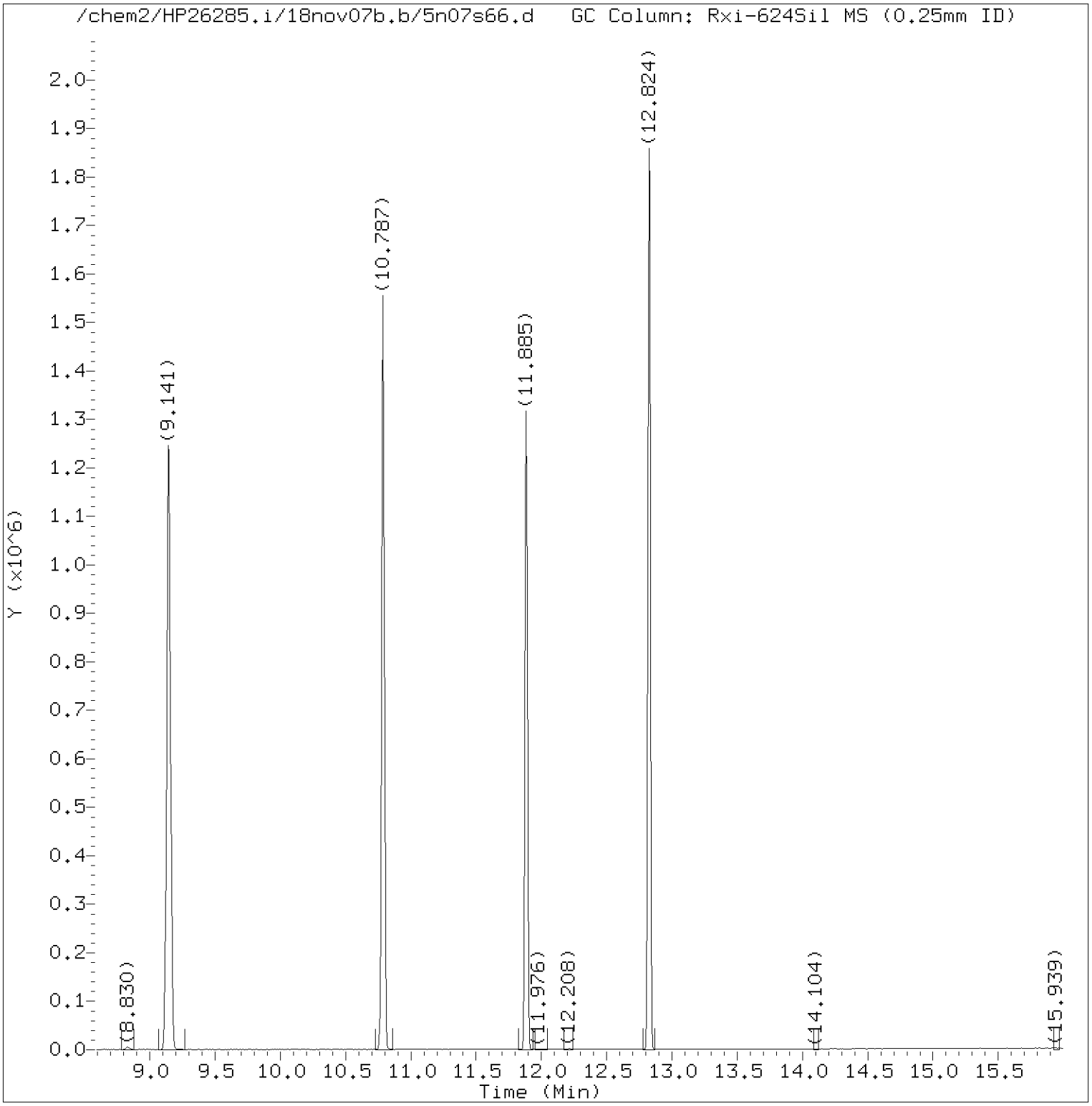
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s66.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 05:17 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 05:36 Unknown

Sample Name: TF-23 Lab Sample ID: 9882894

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:02.
Target 3.5 esignature user ID: clm27445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s66.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 05:17 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 05:36 Unknown

Sample Name: TF-23 Lab Sample ID: 9882894

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:02.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s66.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 05:17 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 05:36 Unknown

Sample Name: TF-23 Lab Sample ID: 9882894

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.508	65	352804	250.000
52)$Dibromofluoromethane	(2)	6.038	113	253039	50.389
57)$1,2-Dichloroethane-d4	(2)	6.514	102	60026	50.068
66)*Fluorobenzene	(2)	6.965	96	1032323	50.000
84)$Toluene-d8	(3)	9.141	98	1008562	49.582
101)*Chlorobenzene-d5	(3)	10.787	117	754087	50.000
115)$4-Bromofluorobenzene	(3)	11.885	95	352808	48.253
132)*1,4-Dichlorobenzene-d4	(4)	12.830	152	394201	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:02.
Target 3.5 esignature user ID: clm27445

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-05

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882895

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s67.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	5	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-05

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882895

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s67.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

TF-05 Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 9882895

Data file: /chem2/HP26285.i/18nov07b.b/5n07s67.d Injection date and time: **08-NOV-2018 05:38**
Data file Sample Info. Line: TF-05;9882895;1;0;;CBD53;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 05:56 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 07-NOV-2018 22:09
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:pH=5

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.514	(0.006)	349	65	350192	(-17)	250.00	
66) Fluorobenzene	6.965	(0.012)	915	96	1023131	(-13)	50.00	
101) Chlorobenzene-d5	10.787	(0.012)	1542	117	748694	(-14)	50.00	
132) 1,4-Dichlorobenzene-d4	12.824	(0.012)	1876	152	391707	(-19)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.038	(-0.001)	113	250646	50.360	101%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.514	(-0.001)	102	59790	50.319	101%		80 - 120
84) Toluene-d8	(3)	9.148	(0.000)	98	998764	49.454	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.885	(-0.001)	95	350482	48.280	97%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.2	1
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
28) Methylene Chloride	(2)				Not Detected					0.3	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
71) Trichloroethene	(2)				Not Detected					0.2	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
79) Bromodichloromethane	(2)				Not Detected					0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
98) Dibromochloromethane	(3)				Not Detected					0.2	1
103) Chlorobenzene	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5

Digitally signed by Corie L. Mellinger on 11/08/2018 at 15:03. Target 3.5 esignature user ID: clm27445

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 9882895

Data file: /chem2/HP26285.i/18nov07b.b/5n07s67.d Injection date and time: **08-NOV-2018 05:38**
Data file Sample Info. Line: TF-05;9882895;1;0;;CBD53;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 05:56 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 07-NOV-2018 22:09
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

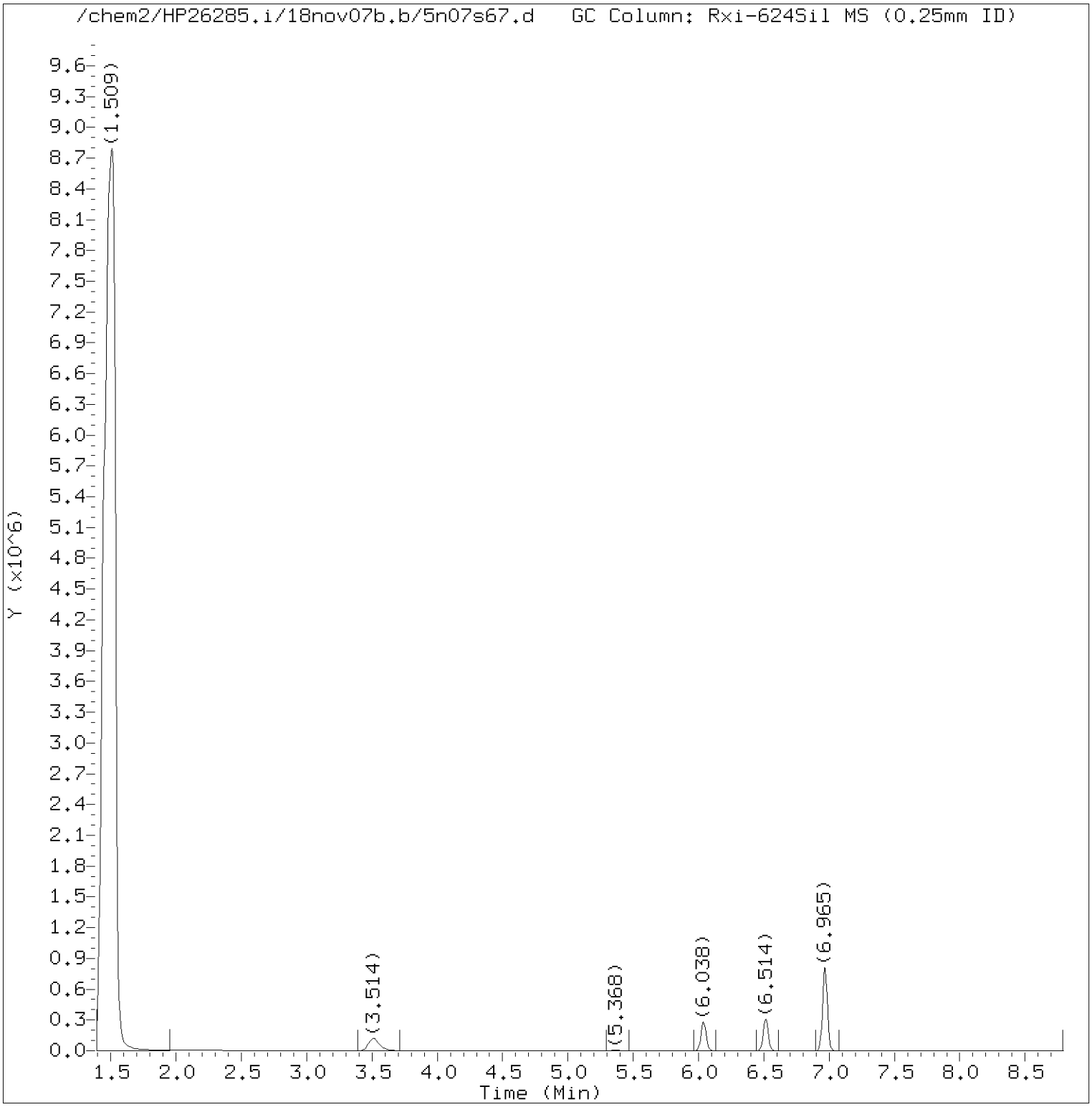
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5

Total number of targets = 37

Digitally signed by Corie L. Mellinger on 11/08/2018 at 15:03. Target 3.5 esignature user ID: clm27445

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

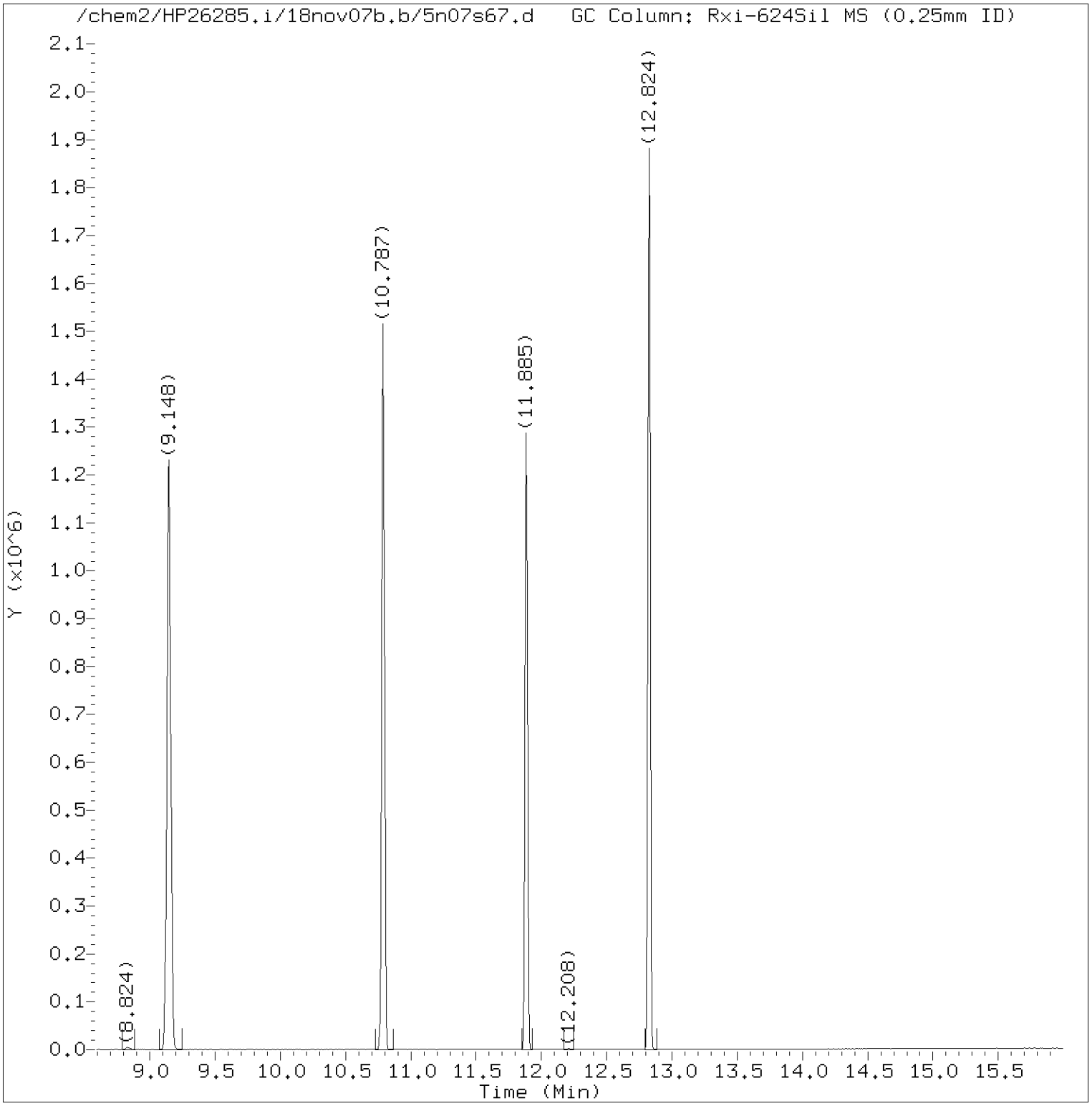
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s67.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 05:38 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 05:56 Unknown

Sample Name: TF-05 Lab Sample ID: 9882895

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:03.
Target 3.5 esignature user ID: clm27445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s67.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 05:38 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 05:56 Unknown

Sample Name: TF-05 Lab Sample ID: 9882895

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:03.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s67.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 05:38 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 05:56 Unknown

Sample Name: TF-05 Lab Sample ID: 9882895

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.514	65	350192	250.000
52)$Dibromofluoromethane	(2)	6.038	113	250646	50.360
57)$1,2-Dichloroethane-d4	(2)	6.514	102	59790	50.319
66)*Fluorobenzene	(2)	6.965	96	1023131	50.000
84)$Toluene-d8	(3)	9.148	98	998764	49.454
101)*Chlorobenzene-d5	(3)	10.787	117	748694	50.000
115)$4-Bromofluorobenzene	(3)	11.885	95	350482	48.280
132)*1,4-Dichlorobenzene-d4	(4)	12.824	152	391707	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:03.
Target 3.5 esignature user ID: clm27445

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DB-8A

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882896

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s68.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	2	U
67-66-3	Chloroform	0.6	J
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	10	
78-87-5	1,2-Dichloropropane	0.3	J
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	5	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DB-8A

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882896

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s68.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

DB-8A

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

9882896

Data file: /chem2/HP26285.i/18nov07b.b/5n07s68.d
Data file Sample Info. Line: DB-8A;9882896;1;0;;CBD53;;;5n07b61;
Date, time and analyst ID of latest file update: 08-Nov-2018 06:19 Unknown

Injection date and time: **08-NOV-2018 06:00**
Instrument ID: **HP26285.i** Batch: **5183113AA**

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 07-NOV-2018 22:09
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:pH=5

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.496	(0.024)	346	65	338726	(-19)	250.00	
66) Fluorobenzene	6.965	(0.012)	915	96	998881	(-15)	50.00	
101) Chlorobenzene-d5	10.787	(0.012)	1542	117	733975	(-16)	50.00	
132) 1,4-Dichlorobenzene-d4	12.830	(0.006)	1877	152	381301	(-22)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.032	(0.000)	113	247029	50.839	102%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.514	(-0.001)	102	59054	50.906	102%		80 - 120
84) Toluene-d8	(3)	9.147	(0.000)	98	983294	49.665	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.885	(-0.001)	95	339970	47.771	96%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.2	1
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
28) Methylene Chloride	(2)				Not Detected					0.3	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2
51) Chloroform	(2)	5.807	(0.000)	83	5508	0.585	0.59		J	0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
71) Trichloroethene	(2)	7.465	(-0.000)	95	57483	9.903	9.90			0.2	1
74) 1,2-Dichloropropane	(2)	7.824	(-0.000)	63	1761	0.304	0.30		J	0.2	1
79) Bromodichloromethane	(2)				Not Detected					0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
98) Dibromochloromethane	(3)				Not Detected					0.2	1
103) Chlorobenzene	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5

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Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 9882896

Data file: /chem2/HP26285.i/18nov07b.b/5n07s68.d Injection date and time: **08-NOV-2018 06:00**
Data file Sample Info. Line: DB-8A;9882896;1;0;;CBD53;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 06:19 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 07-NOV-2018 22:09
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5

Total number of targets = 37

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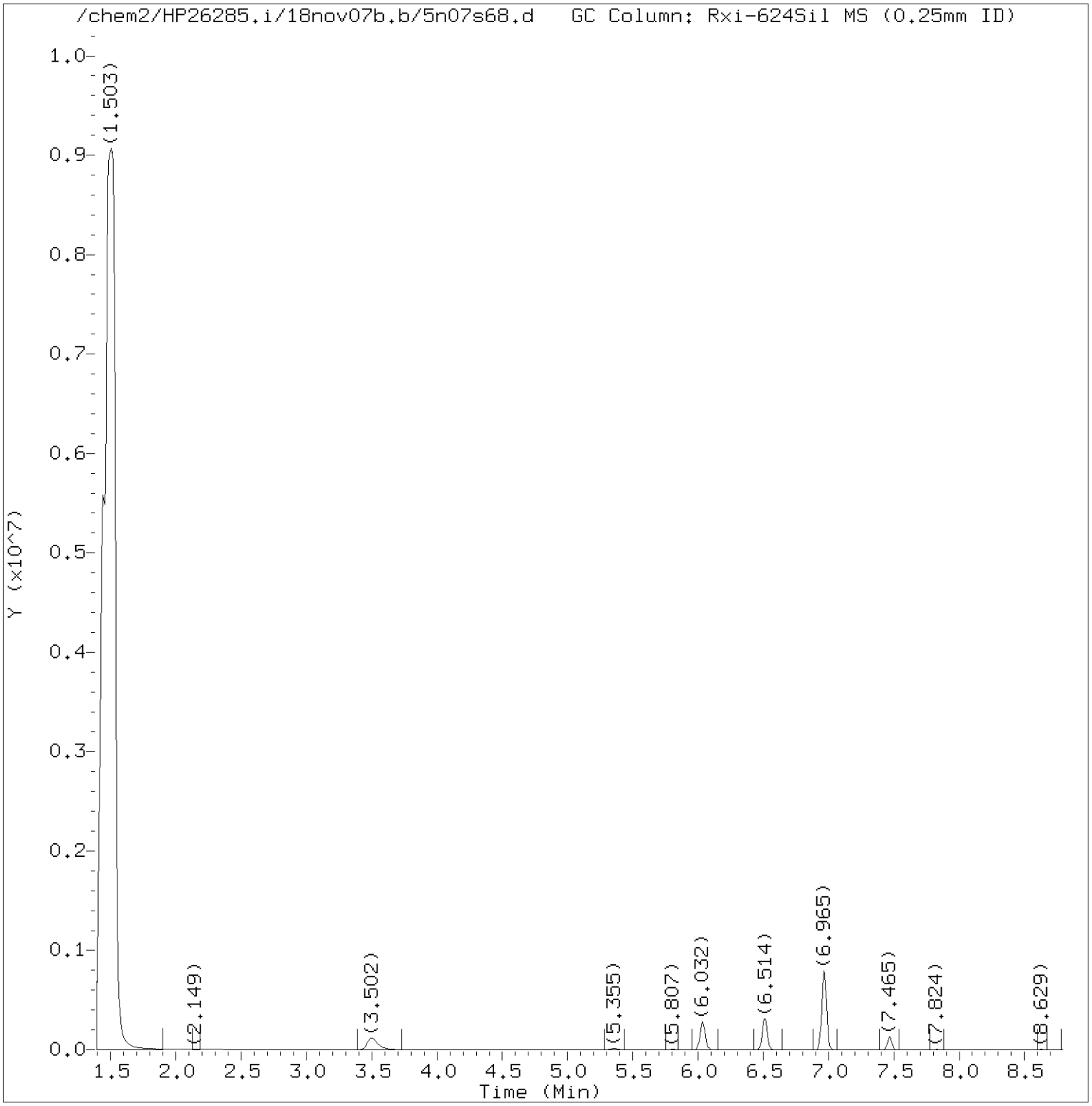
Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

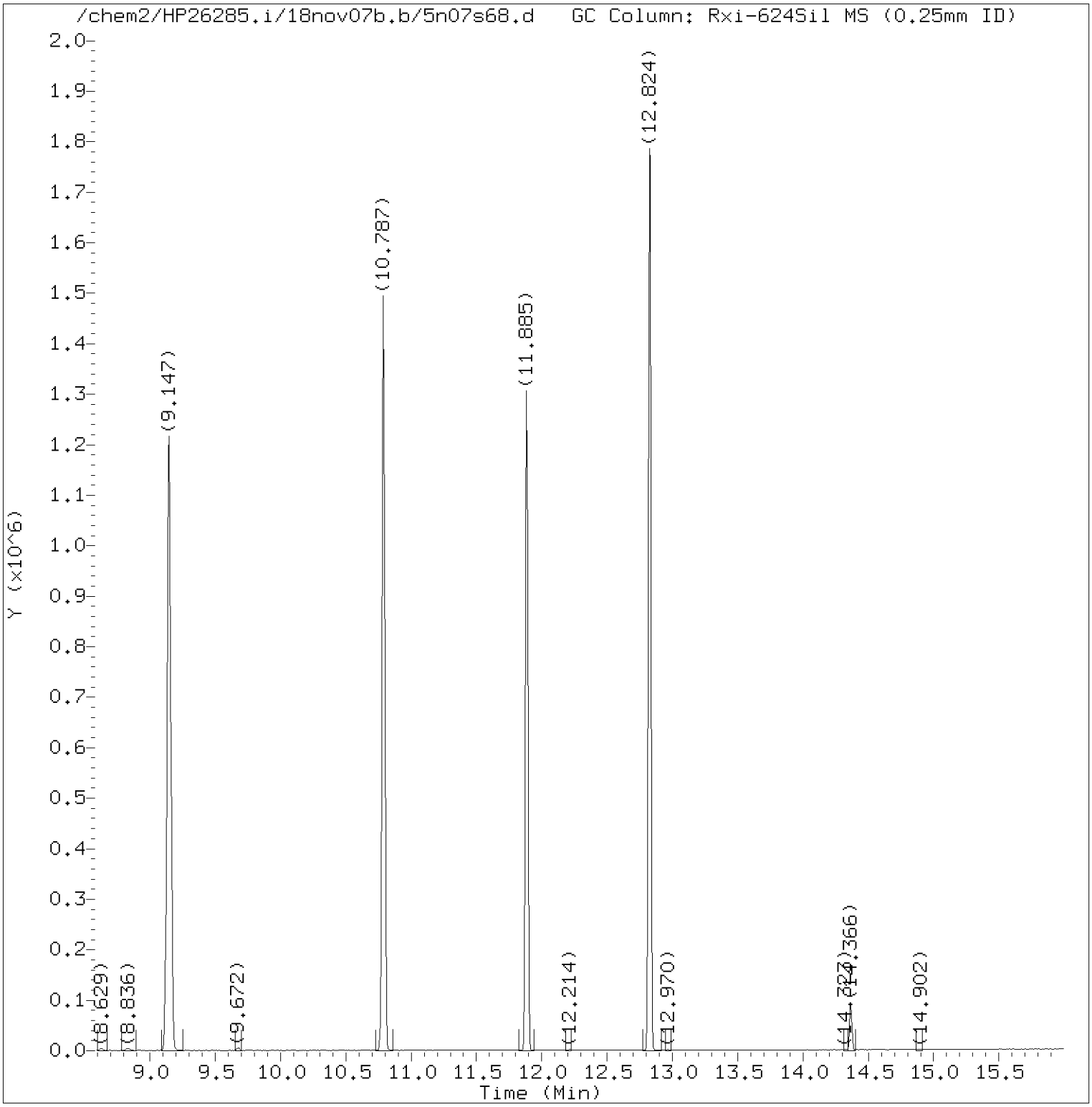
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s68.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 06:00 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 06:19 Unknown

Sample Name: DB-8A Lab Sample ID: 9882896

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:04.
Target 3.5 esignature user ID: clm27445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s68.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 06:00 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 06:19 Unknown

Sample Name: DB-8A Lab Sample ID: 9882896

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 15:04.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s68.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 06:00 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 06:19 Unknown

Sample Name: DB-8A Lab Sample ID: 9882896

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.496	65	338726	250.000
51) Chloroform	(2)	5.807	83	5508	0.585
52)$Dibromofluoromethane	(2)	6.032	113	247029	50.839
57)$1,2-Dichloroethane-d4	(2)	6.514	102	59054	50.906
66)*Fluorobenzene	(2)	6.965	96	998881	50.000
71) Trichloroethene	(2)	7.465	95	57483	9.903
74) 1,2-Dichloropropane	(2)	7.824	63	1761	0.304
84)$Toluene-d8	(3)	9.147	98	983294	49.665
101)*Chlorobenzene-d5	(3)	10.787	117	733975	50.000
115)$4-Bromofluorobenzene	(3)	11.885	95	339970	47.771
132)*1,4-Dichlorobenzene-d4	(4)	12.830	152	381301	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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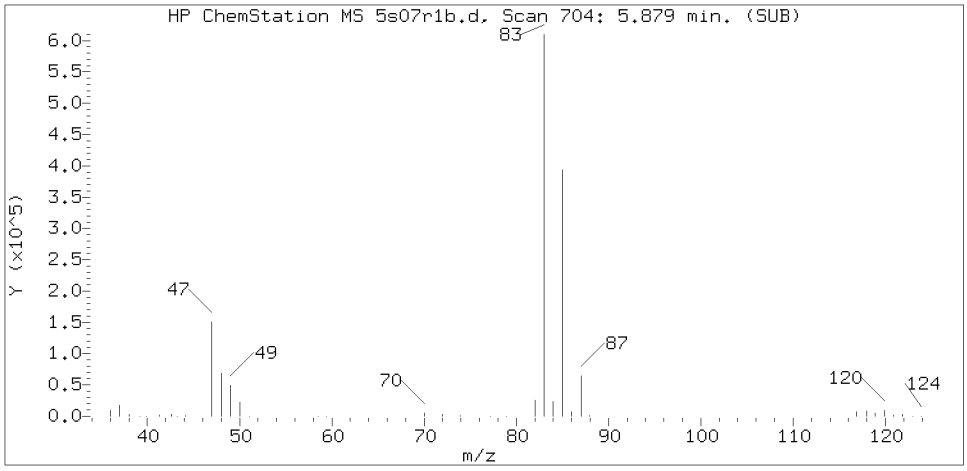
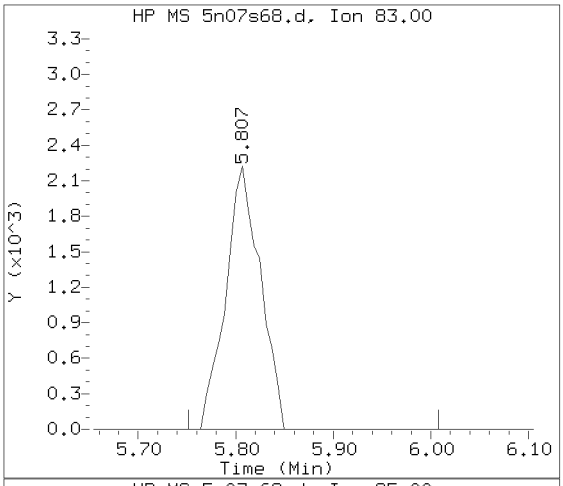
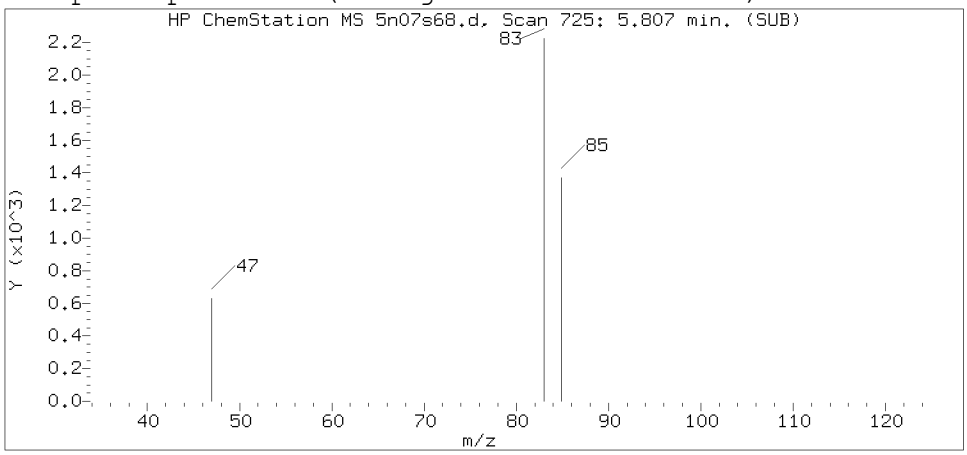
on 11/08/2018 at 15:04.
Target 3.5 esignature user ID: clm27445

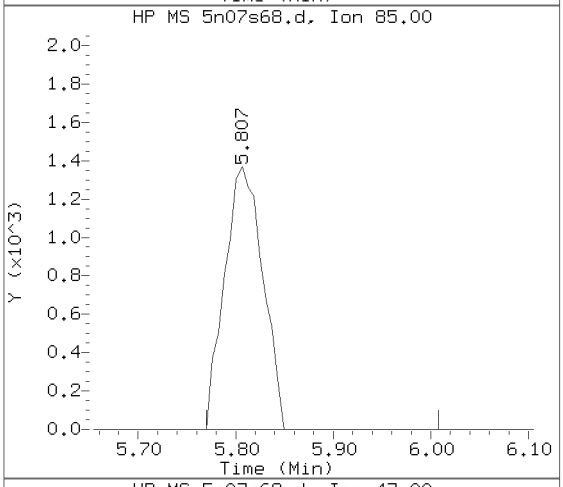
Reference Standard Spectrum for Chloroform



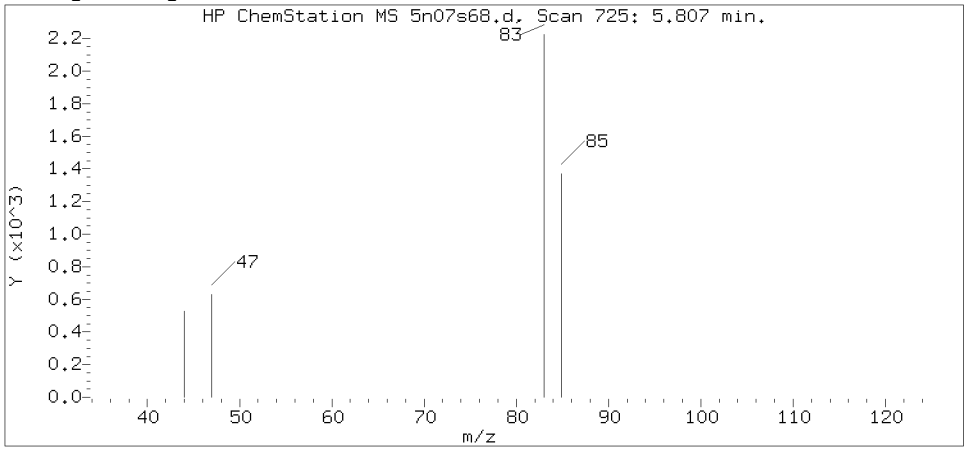


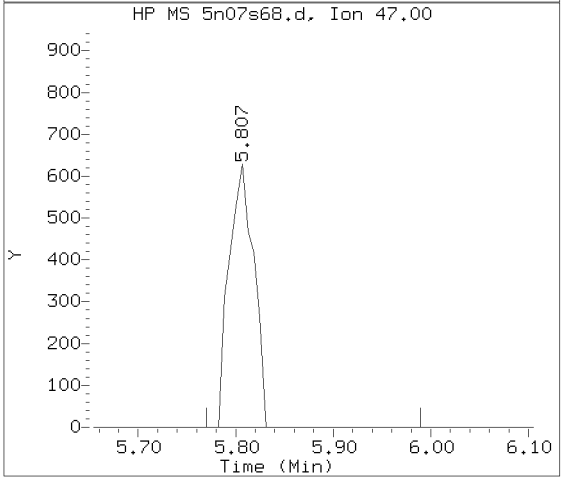
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP26285.i/18nov07b.b/5n07s68.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 06:00 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 06:19 Unknown

Sample Name: DB-8A Lab Sample ID: 9882896

Compound Number	: 51
Compound Name	: Chloroform
Scan Number	: 725
Retention Time (minutes)	: 5.807
Relative Retention Time	: 0.00029
Quant Ion	: 83.00
Area (flag)	: 5508
On-Column Amount (ng)	: 0.5851

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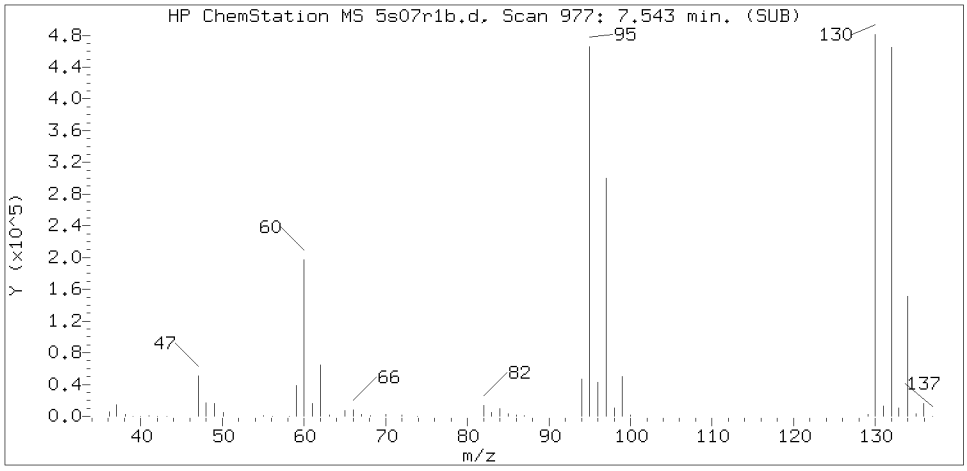
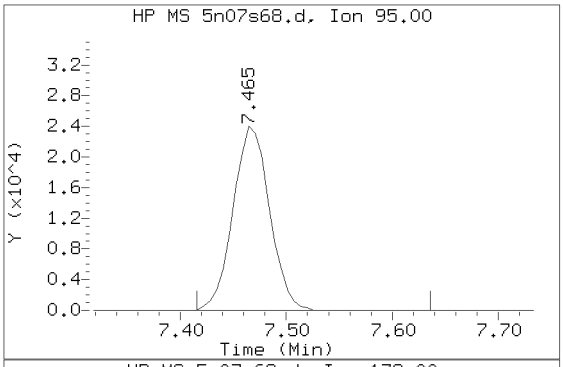
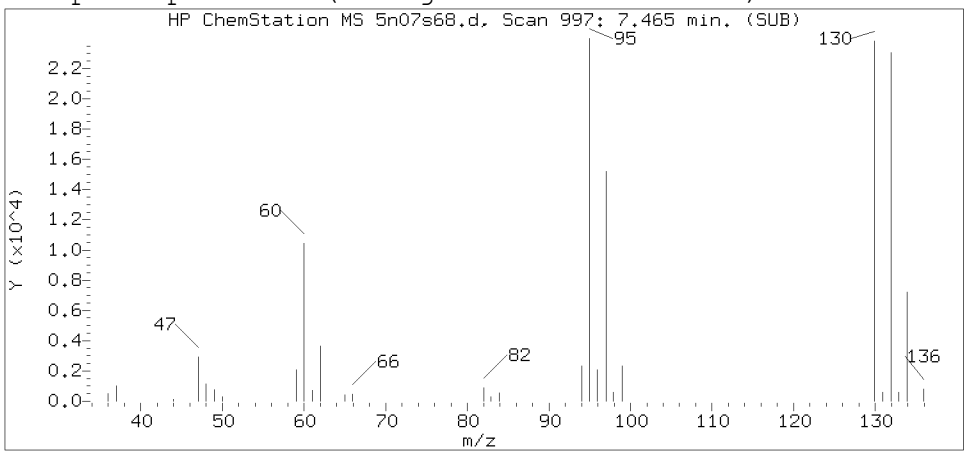
Target 3.5 esignature user ID: clm27445

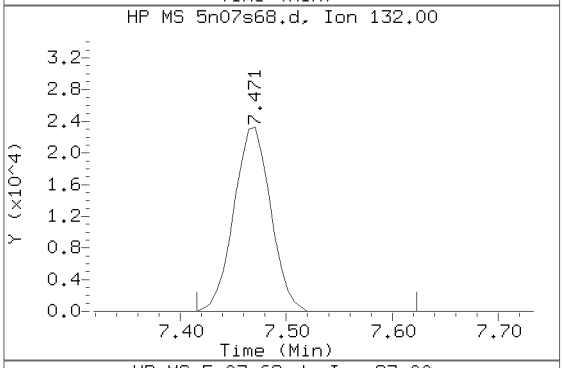
Reference Standard Spectrum for Trichloroethene

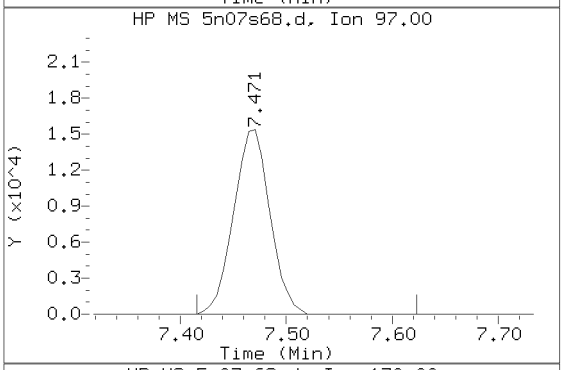




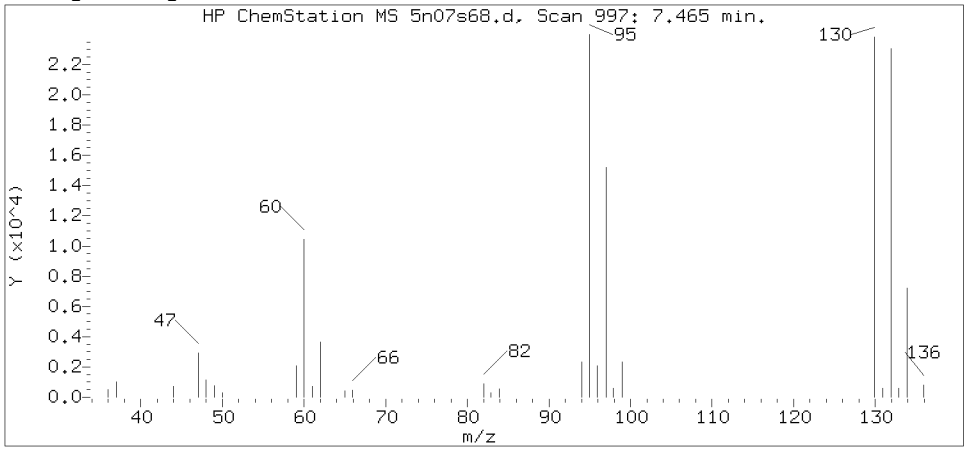
Sample Spectrum (Background Subtracted)

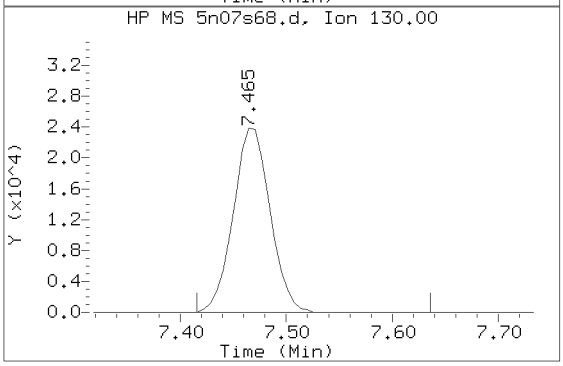






Sample Spectrum (Unaltered)





Data File: /chem2/HP26285.i/18nov07b.b/5n07s68.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 06:00 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 06:19 Unknown

Sample Name: DB-8A Lab Sample ID: 9882896

Compound Number : 71
Compound Name : Trichloroethene
Scan Number : 997
Retention Time (minutes): 7.465
Relative Retention Time :-0.00013
Quant Ion : 95.00
Area (flag) : 57483
On-Column Amount (ng) : 9.9034

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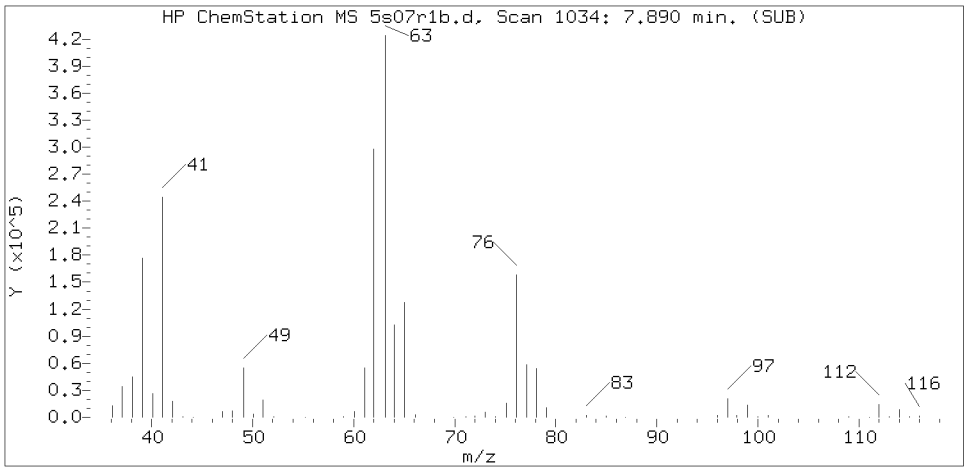
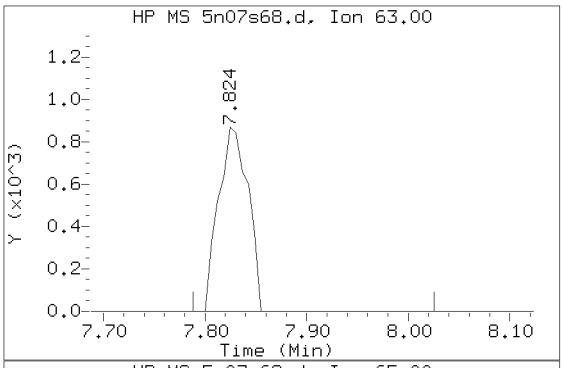
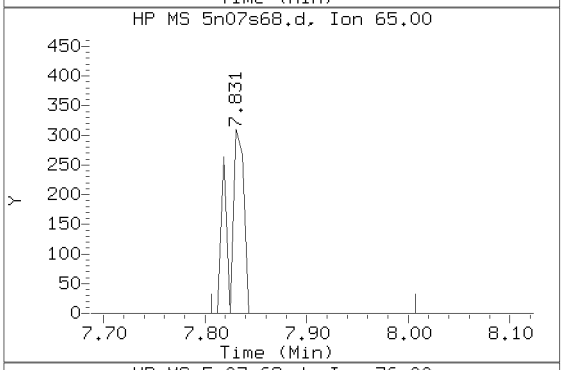
Target 3.5 esignature user ID: clm27445

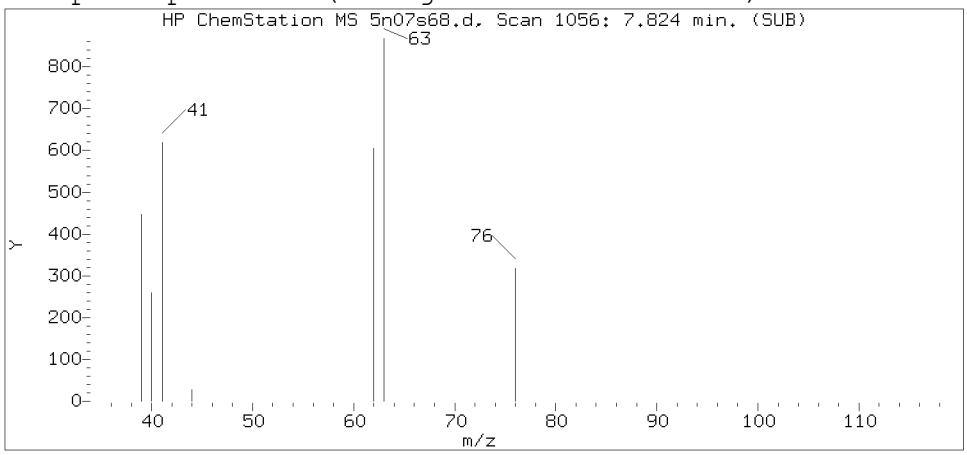
Reference Standard Spectrum for 1,2-Dichloropropane

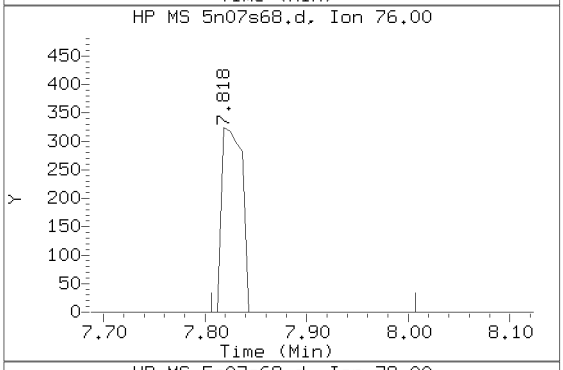




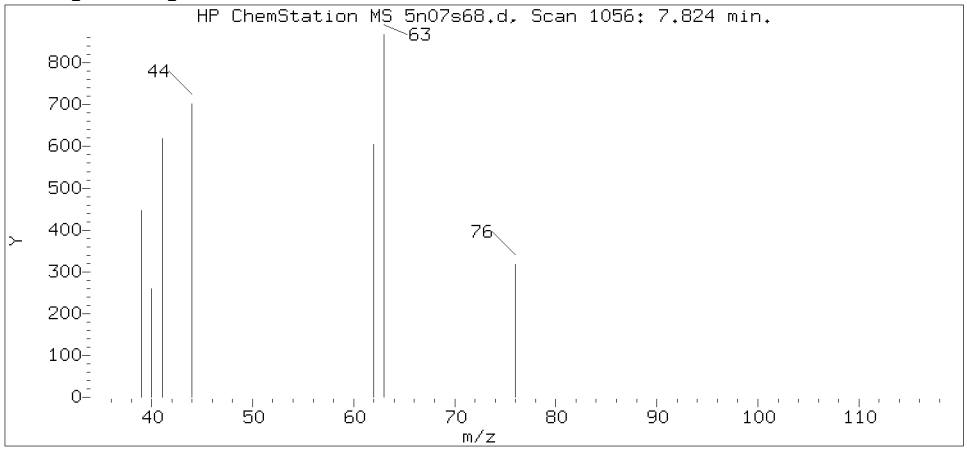


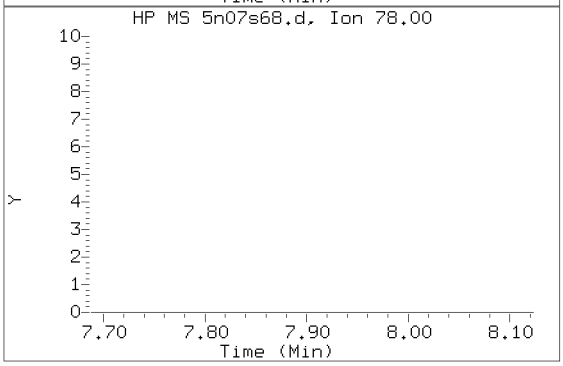
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP26285.i/18nov07b.b/5n07s68.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 06:00 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 13001
Calibration date and time: 07-NOV-2018 22:09
Date, time and analyst ID of latest file update: 08-Nov-2018 06:19 Unknown

Sample Name: DB-8A Lab Sample ID: 9882896

Compound Number : 74
Compound Name : 1,2-Dichloropropane
Scan Number : 1056
Retention Time (minutes): 7.824
Relative Retention Time :-0.00022
Quant Ion : 63.00
Area (flag) : 1761
On-Column Amount (ng) : 0.3037

Digitally signed by Corie L. Mellinger on 11/08/2018 at 15:04.
Target 3.5 esignature user ID: clm27445

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
DB-17

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882897

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov08a.b/5n08s06.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	0.6	J
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	5	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DB-17

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882897

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov08a.b/5n08s06.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

DB-17

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

9882897

Data file: /chem2/HP26285.i/18nov08a.b/5n08s06.d
Data file Sample Info. Line: DB-17;9882897;1;0;;CBD53;;;5n08b01;
Date, time and analyst ID of latest file update: 08-Nov-2018 12:28 Unknown

Injection date and time: **08-NOV-2018 12:09**
Instrument ID: **HP26285.i** Batch: **5183121AA**

Blank Data file reference: **/chem2/HP26285.i/18nov08a.b/5n08b01.d**

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 08-NOV-2018 08:34
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov08a.b/5n08c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:pH 7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.515	(-0.018)	349	65	367935	(3)	250.00	
66) Fluorobenzene	6.971	(-0.006)	916	96	1030493	(-1)	50.00	
101) Chlorobenzene-d5	10.788	(0.000)	1542	117	759321	(-2)	50.00	
132) 1,4-Dichlorobenzene-d4	12.824	(0.000)	1876	152	392448	(-11)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.038	(0.000)	113	251395	50.150	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.514	(0.000)	102	60820	50.820	102%		80 - 120
84) Toluene-d8	(3)	9.142	(0.000)	98	1010454	49.333	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.879	(0.001)	95	353968	48.078	96%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.2	1
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
28) Methylene Chloride	(2)				Not Detected					0.3	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
71) Trichloroethene	(2)				Not Detected					0.2	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
79) Bromodichloromethane	(2)				Not Detected					0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)	9.849	(0.000)	166	3729	0.553	0.55		J	0.2	1
98) Dibromochloromethane	(3)				Not Detected					0.2	1
103) Chlorobenzene	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5

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DB-17

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

9882897

Data file: /chem2/HP26285.i/18nov08a.b/5n08s06.d
Injection date and time: **08-NOV-2018 12:09**
Data file Sample Info. Line: DB-17;9882897;1;0;;CBD53;;;5n08b01;
Instrument ID: **HP26285.i** Batch: **5183121AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 12:28 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov08a.b/5n08b01.d**

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 08-NOV-2018 08:34
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov08a.b/5n08c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

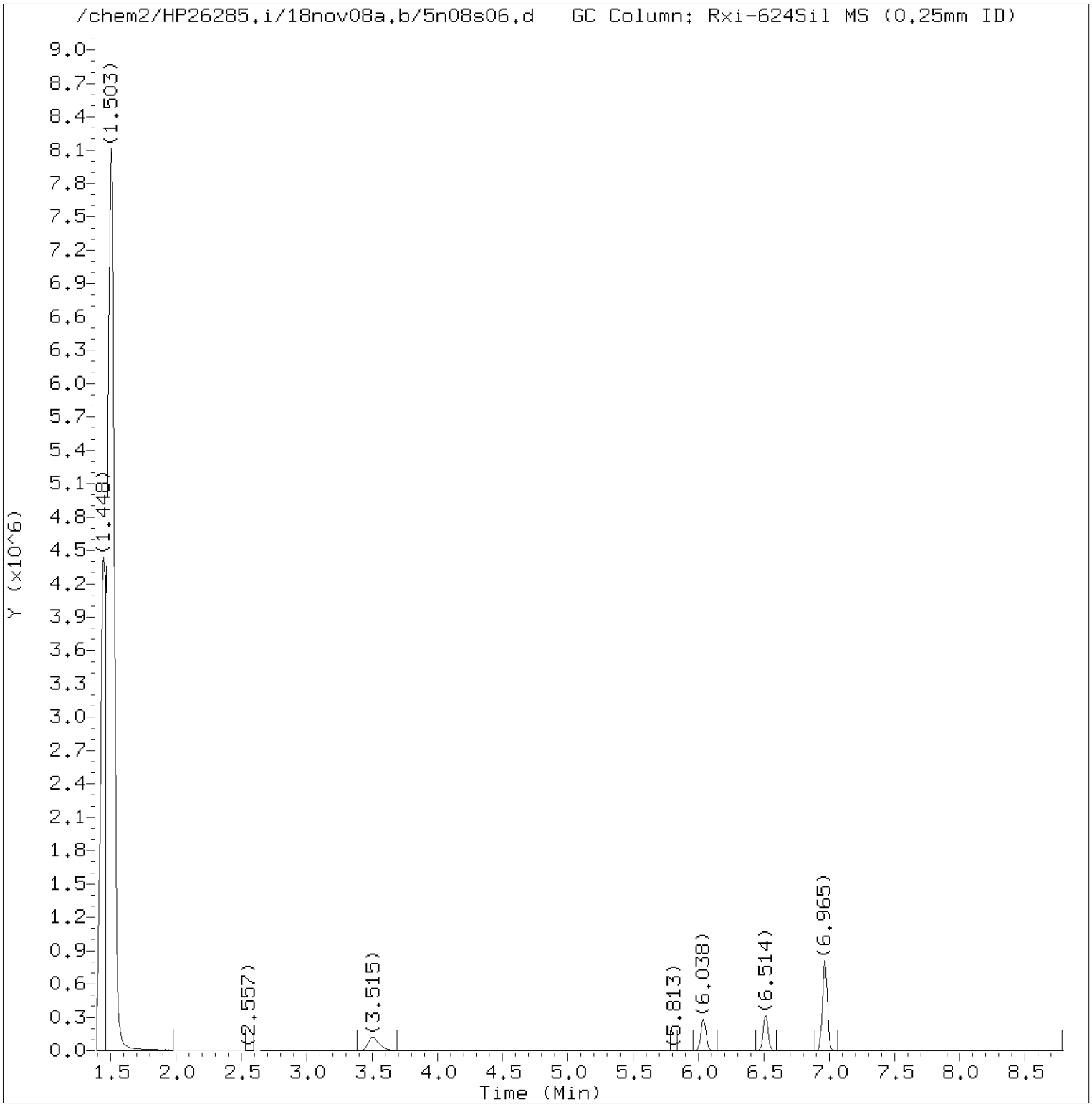
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5

Total number of targets = 37

Digitally signed by Don V. Viray on 11/08/2018 at 19:36. Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/08/2018 at 20:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

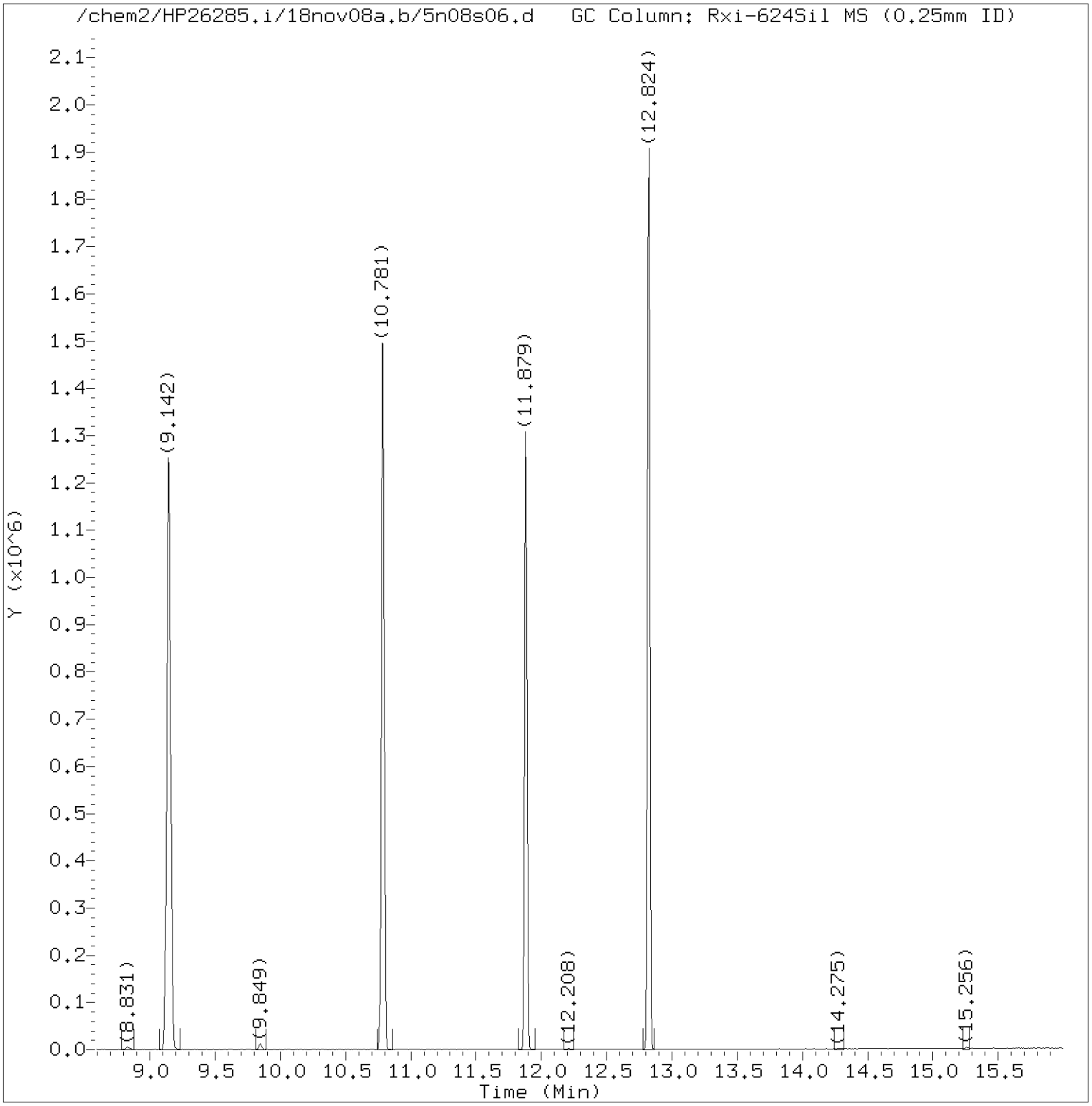
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s06.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 12:09 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 12:28 Unknown

Sample Name: DB-17 Lab Sample ID: 9882897

Digitally signed by Don V. Viray
on 11/08/2018 at 19:36.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s06.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 12:09 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 12:28 Unknown

Sample Name: DB-17 Lab Sample ID: 9882897

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on 11/08/2018 at 19:36.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s06.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 12:09 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 12:28 Unknown

Sample Name: DB-17 Lab Sample ID: 9882897

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.515	65	367935	250.000
52)$Dibromofluoromethane	(2)	6.038	113	251395	50.150
57)$1,2-Dichloroethane-d4	(2)	6.514	102	60820	50.820
66)*Fluorobenzene	(2)	6.971	96	1030493	50.000
84)$Toluene-d8	(3)	9.142	98	1010454	49.333
94) Tetrachloroethene	(3)	9.849	166	3729	0.553
101)*Chlorobenzene-d5	(3)	10.788	117	759321	50.000
115)$4-Bromofluorobenzene	(3)	11.879	95	353968	48.078
132)*1,4-Dichlorobenzene-d4	(4)	12.824	152	392448	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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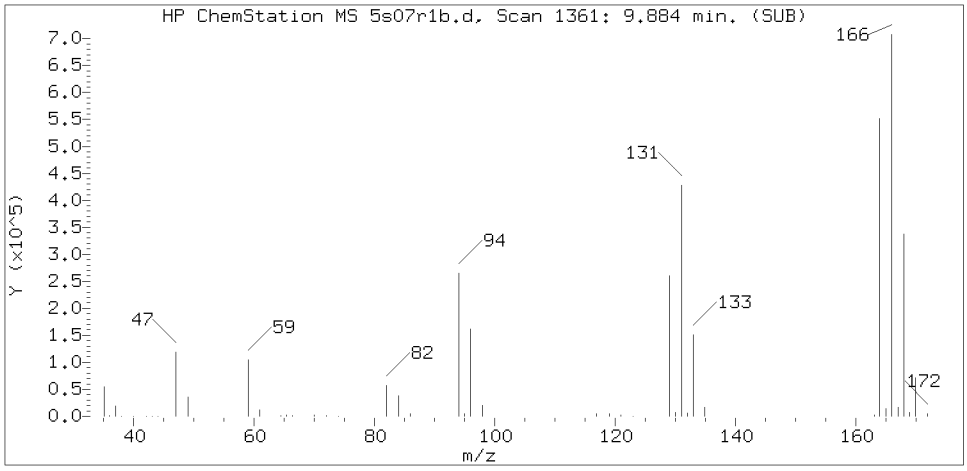
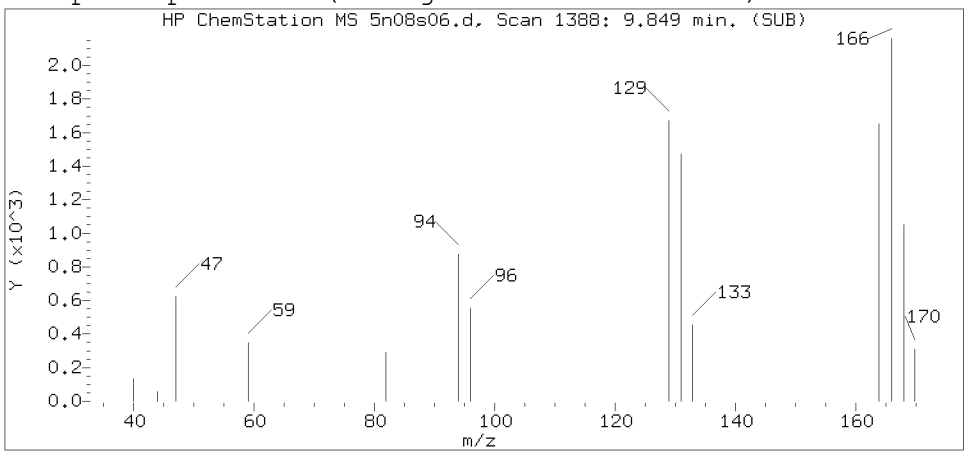
on 11/08/2018 at 19:36.
Target 3.5 esignature user ID: dvv10203

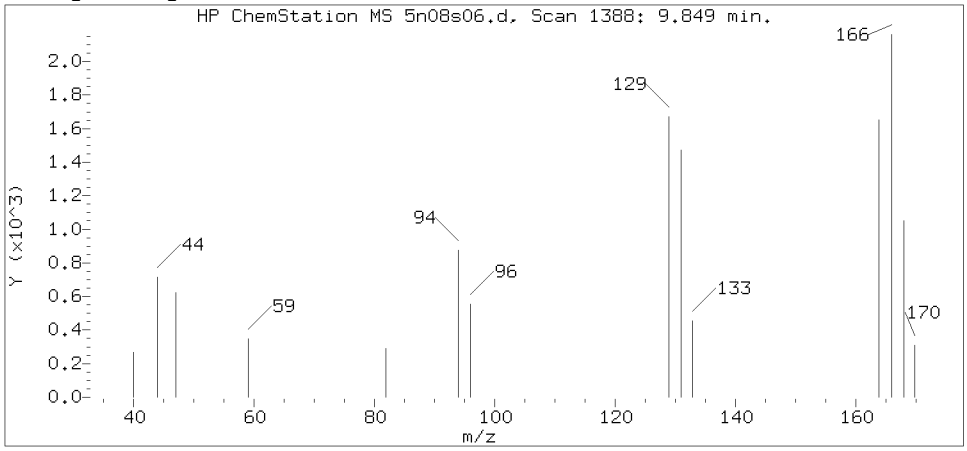
Reference Standard Spectrum for Tetrachloroethene

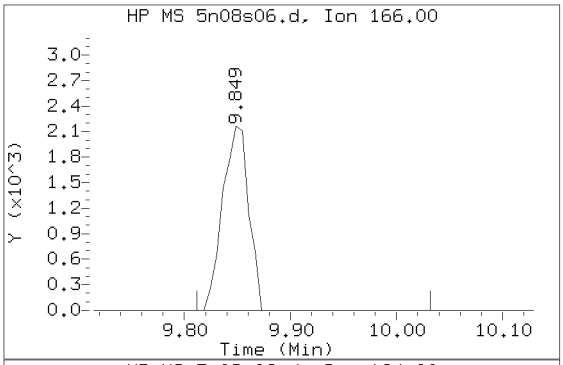


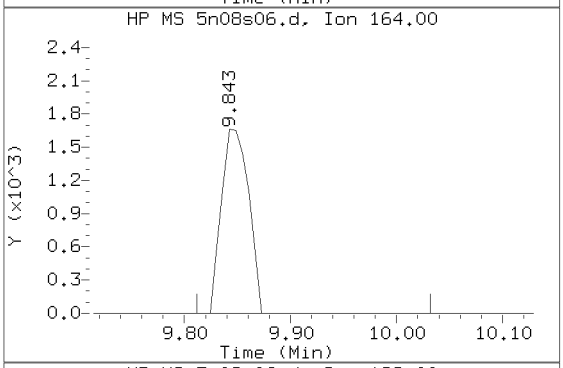
Sample Spectrum (Background Subtracted)

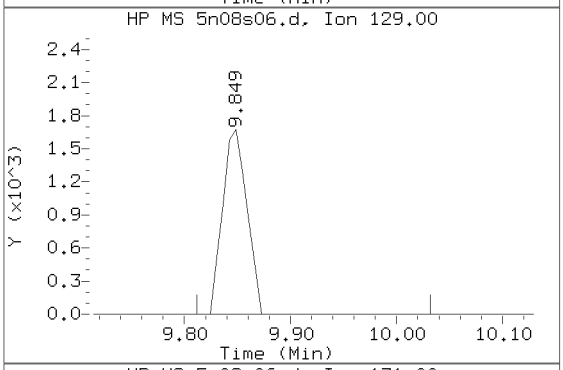


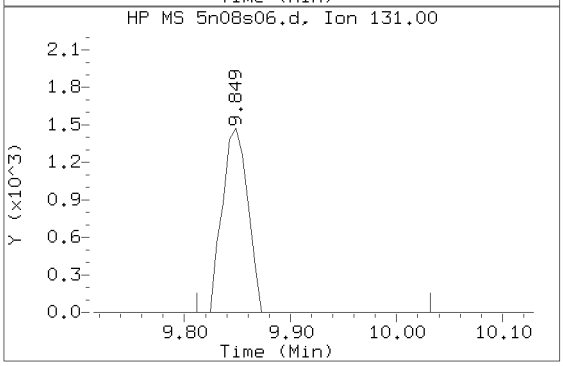
Sample Spectrum (Unaltered)











Data File: /chem2/HP26285.i/18nov08a.b/5n08s06.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 12:09 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 12:28 Unknown

Sample Name: DB-17 Lab Sample ID: 9882897

Compound Number : 94
Compound Name : Tetrachloroethene
Scan Number : 1388
Retention Time (minutes): 9.849
Relative Retention Time : 0.00000
Quant Ion : 166.00
Area (flag) : 3729
On-Column Amount (ng) : 0.5525

Digitally signed by Don V. Viray on 11/08/2018 at 19:36.
Target 3.5 esignature user ID: dvv10203

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
DC-01

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882898

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov08a.b/5n08s07.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	3	
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	7	
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	5	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DC-01

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882898

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov08a.b/5n08s07.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

DC-01

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

9882898

Data file: /chem2/HP26285.i/18nov08a.b/5n08s07.d
Data file Sample Info. Line: DC-01;9882898;1;0;;CBD53;;;5n08b01;
Date, time and analyst ID of latest file update: 08-Nov-2018 12:49 Unknown

Injection date and time: **08-NOV-2018 12:30**
Instrument ID: **HP26285.i** Batch: **5183121AA**

Blank Data file reference: **/chem2/HP26285.i/18nov08a.b/5n08b01.d**

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 08-NOV-2018 08:34
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov08a.b/5n08c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:pH 7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(-0.006)	347	65	344991	(-3)	250.00	
66) Fluorobenzene	6.965	(0.000)	915	96	980004	(-6)	50.00	
101) Chlorobenzene-d5	10.781	(0.006)	1541	117	715933	(-7)	50.00	
132) 1,4-Dichlorobenzene-d4	12.824	(0.000)	1876	152	374602	(-15)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.038	(-0.001)	113	240205	50.387	101%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.514	(-0.001)	102	57298	50.343	101%		80 - 120
84) Toluene-d8	(3)	9.141	(0.000)	98	959551	49.687	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.879	(0.000)	95	339259	48.872	98%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.2	1
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
28) Methylene Chloride	(2)				Not Detected					0.3	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)	5.294	(-0.000)	96	16392	2.817	2.82			0.2	1
43) 1,2-Dichloroethene (Total)	(2)			96	16392	2.817	2.82			0.2	2
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
71) Trichloroethene	(2)	7.465	(-0.000)	95	38829	6.818	6.82			0.2	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
79) Bromodichloromethane	(2)				Not Detected					0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
98) Dibromochloromethane	(3)				Not Detected					0.2	1
103) Chlorobenzene	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5

Digitally signed by Don V. Viray on 11/08/2018 at 19:36. Target 3.5 esignature user ID: dvv10203

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 9882898

Data file: /chem2/HP26285.i/18nov08a.b/5n08s07.d Injection date and time: **08-NOV-2018 12:30**
Data file Sample Info. Line: DC-01;9882898;1;0;;CBD53;;;5n08b01; Instrument ID: **HP26285.i** Batch: **5183121AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 12:49 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov08a.b/5n08b01.d**

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 08-NOV-2018 08:34
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov08a.b/5n08c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

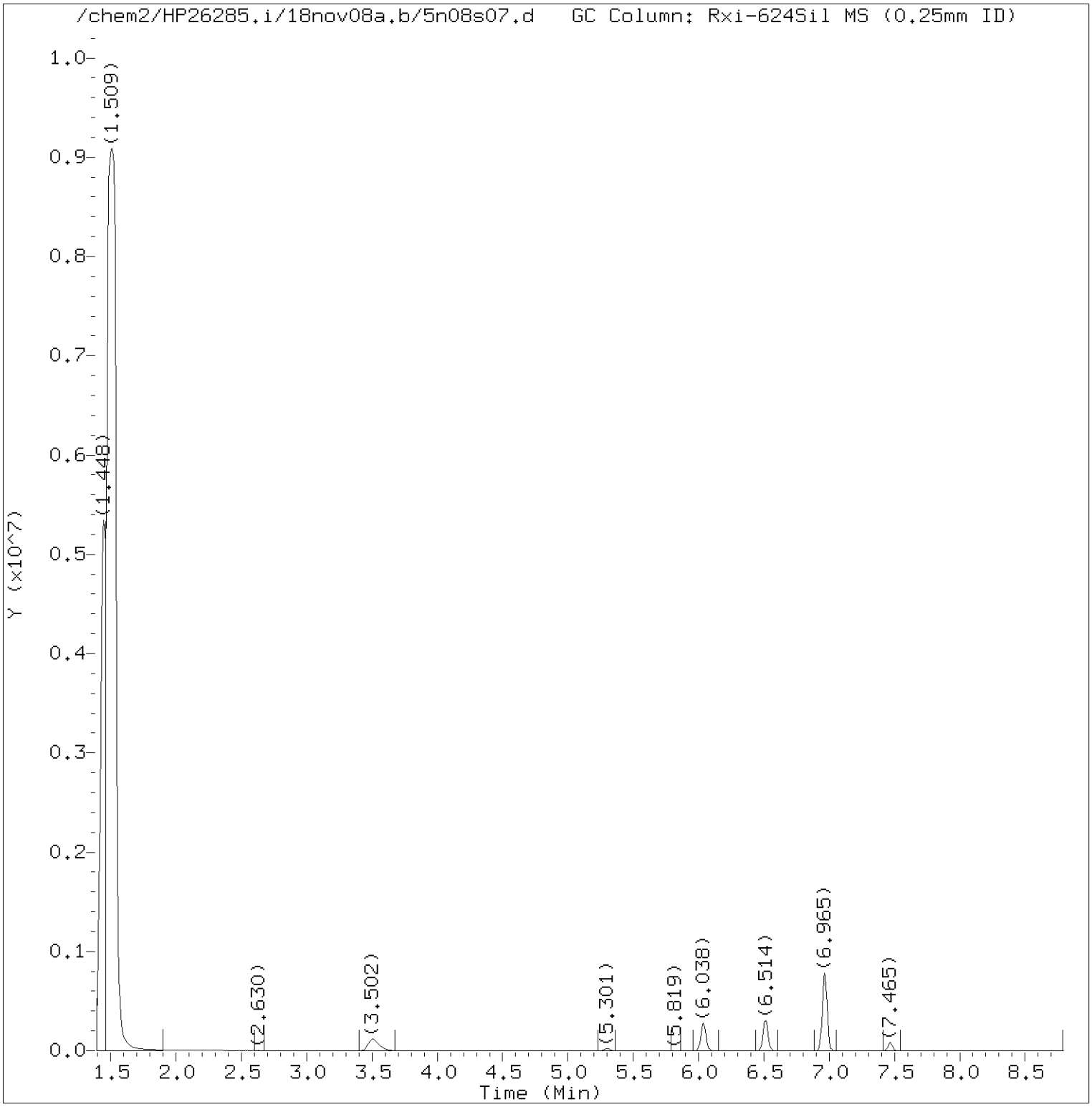
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5

Total number of targets = 37

Digitally signed by Don V. Viray on 11/08/2018 at 19:36. Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/08/2018 at 20:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

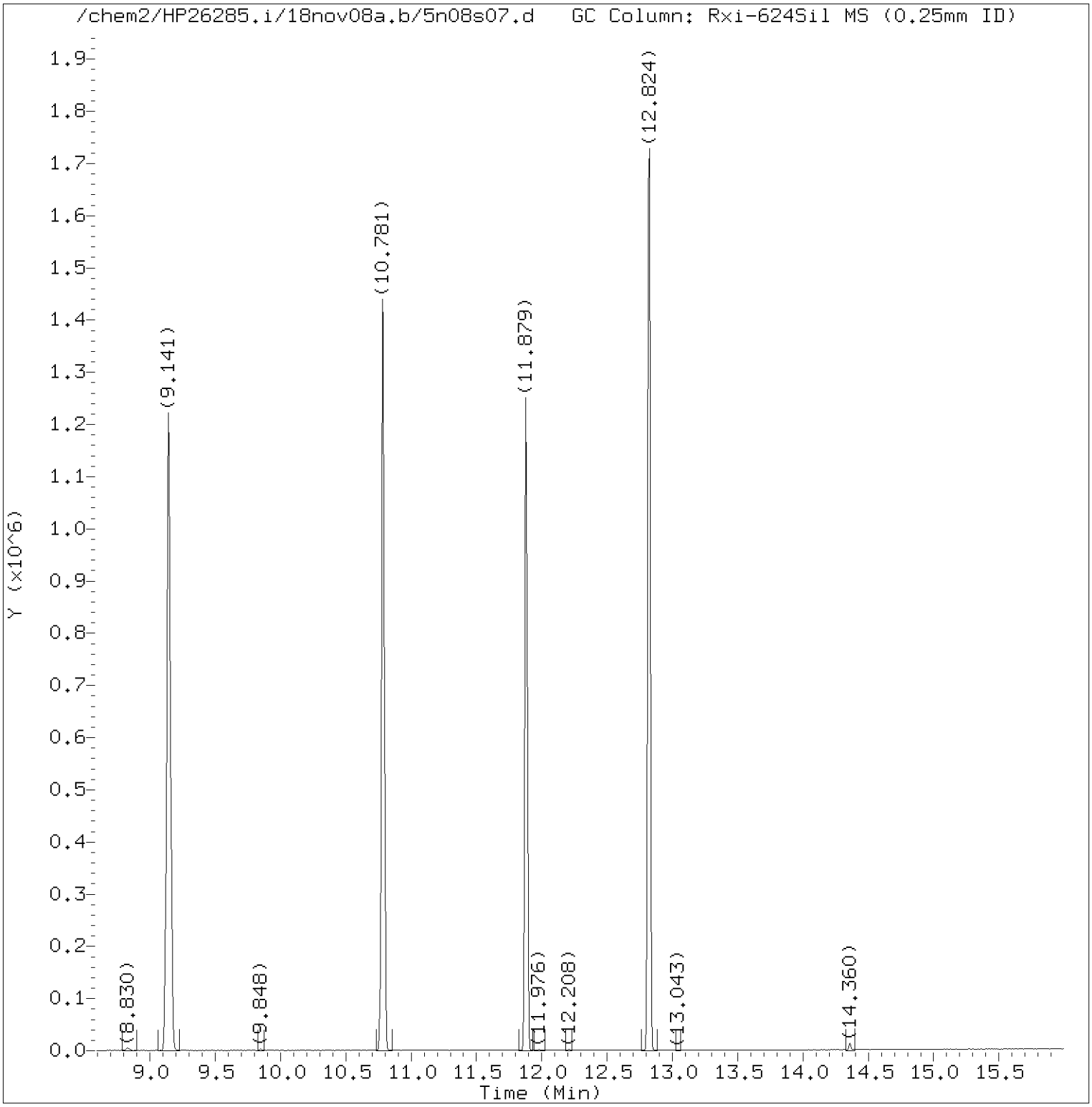
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s07.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 12:30 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 12:49 Unknown

Sample Name: DC-01 Lab Sample ID: 9882898

Digitally signed by Don V. Viray
on 11/08/2018 at 19:36.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s07.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 12:30 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 12:49 Unknown

Sample Name: DC-01 Lab Sample ID: 9882898

Digitally signed by Don V. Viray
on 11/08/2018 at 19:36.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s07.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 12:30 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 12:49 Unknown

Sample Name: DC-01 Lab Sample ID: 9882898

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.502	65	344991	250.000
42) cis-1,2-Dichloroethene	(2)	5.295	96	16392	2.817
52)$Dibromofluoromethane	(2)	6.038	113	240205	50.387
43) 1,2-Dichloroethene (Total)	(2)		96	16392	2.817
57)$1,2-Dichloroethane-d4	(2)	6.514	102	57298	50.343
66)*Fluorobenzene	(2)	6.965	96	980004	50.000
71) Trichloroethene	(2)	7.465	95	38829	6.818
84)$Toluene-d8	(3)	9.141	98	959551	49.687
101)*Chlorobenzene-d5	(3)	10.781	117	715933	50.000
115)$4-Bromofluorobenzene	(3)	11.879	95	339259	48.872
132)*1,4-Dichlorobenzene-d4	(4)	12.824	152	374602	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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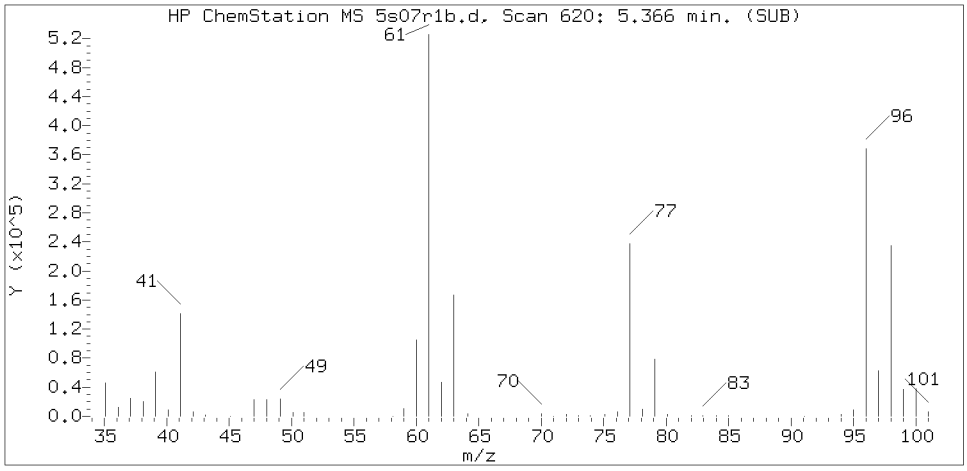
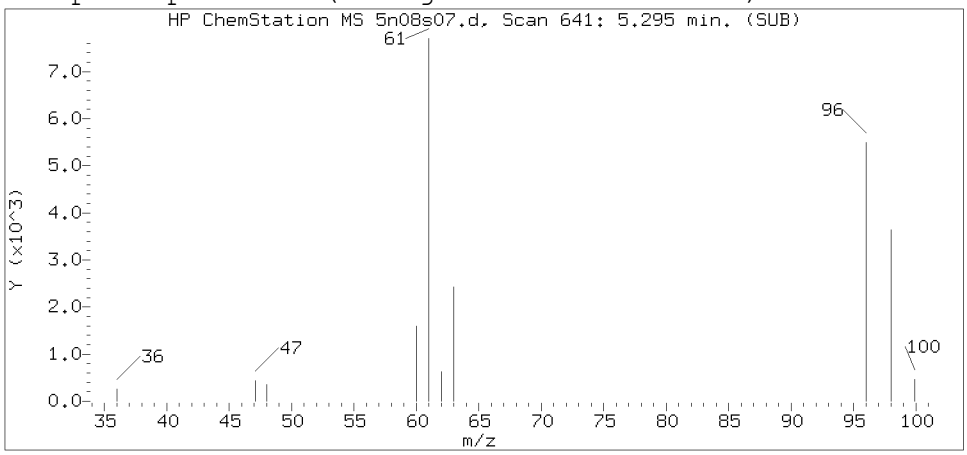
on 11/08/2018 at 19:36.
Target 3.5 esignature user ID: dvv10203

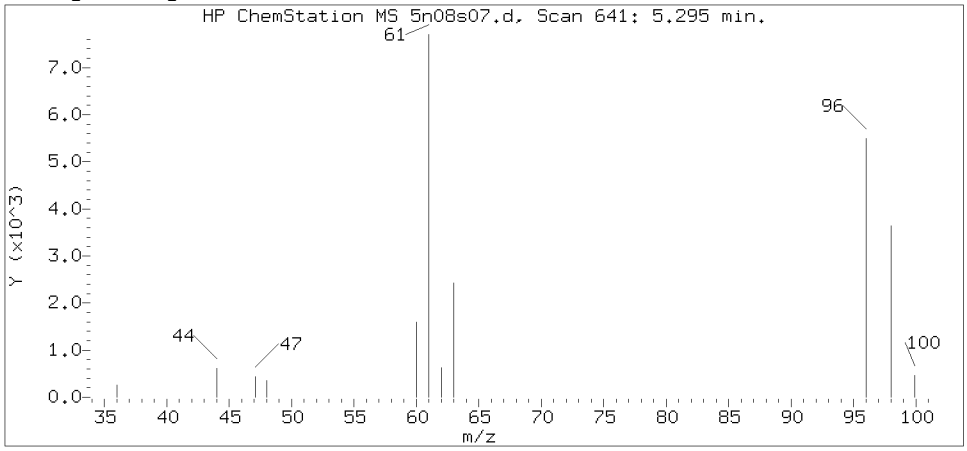
Reference Standard Spectrum for cis-1,2-Dichloroethene

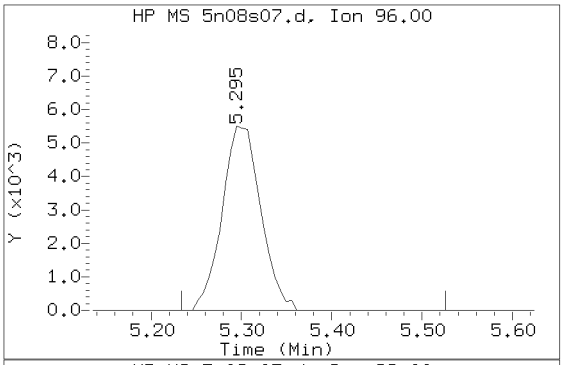


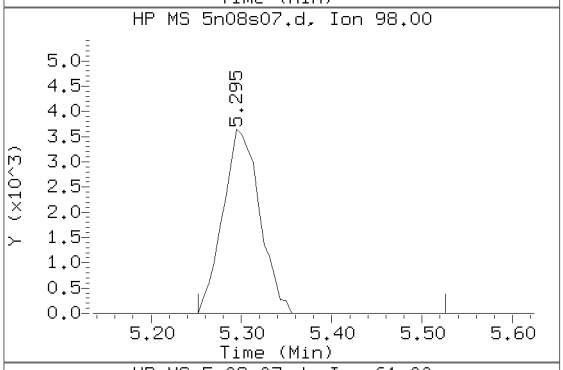
Sample Spectrum (Background Subtracted)

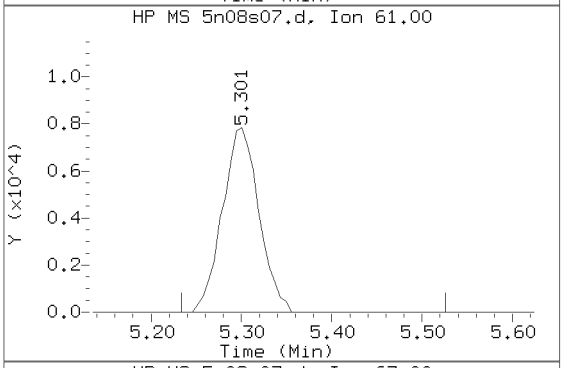


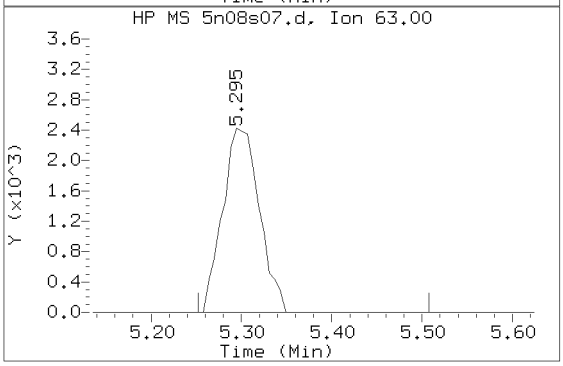
Sample Spectrum (Unaltered)











Data File: /chem2/HP26285.i/18nov08a.b/5n08s07.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 12:30 Analyst ID: CLM27445

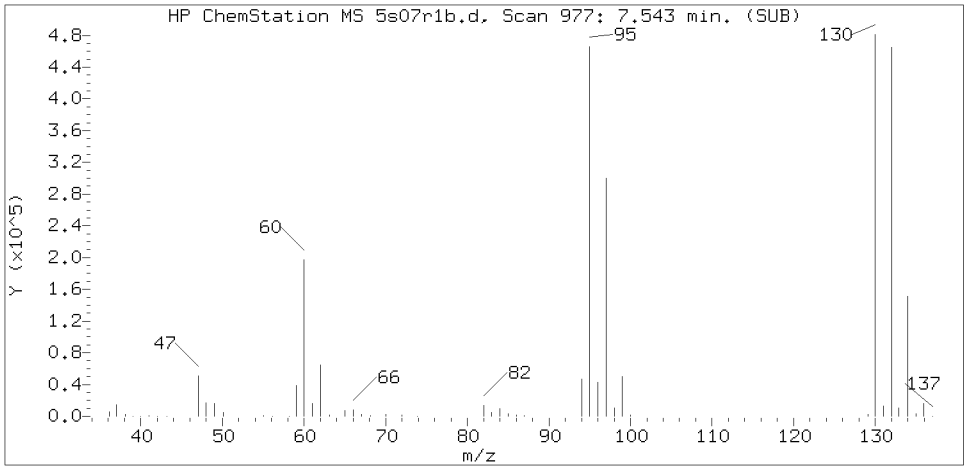
Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 12:49 Unknown

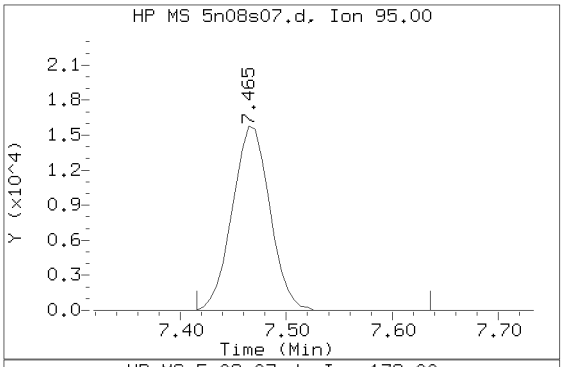
Sample Name: DC-01 Lab Sample ID: 9882898

Compound Number : 42
Compound Name : cis-1,2-Dichloroethene
Scan Number : 641
Retention Time (minutes): 5.295
Relative Retention Time :-0.00087
Quant Ion : 96.00
Area (flag) : 16392
On-Column Amount (ng) : 2.8173

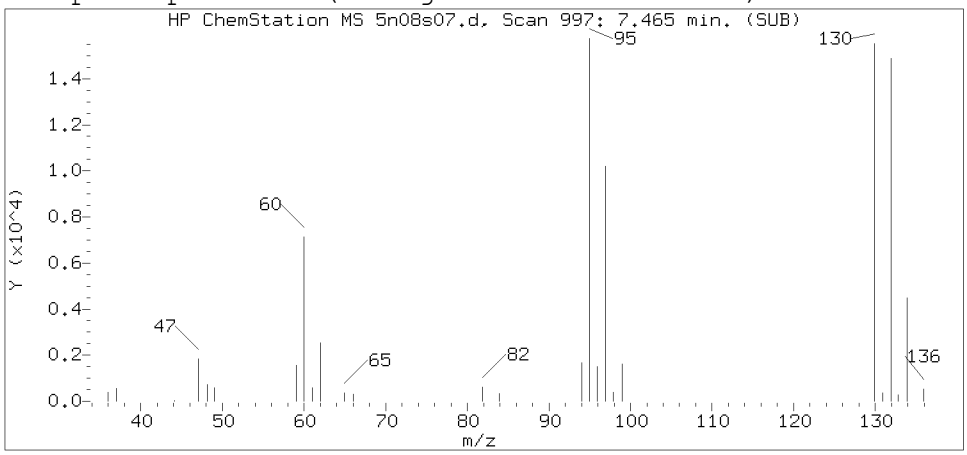
Digitally signed by Don V. Viray on 11/08/2018 at 19:36.
Target 3.5 esignature user ID: dvv10203

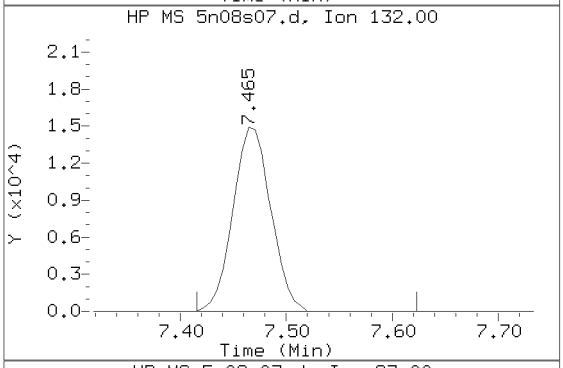
Reference Standard Spectrum for Trichloroethene

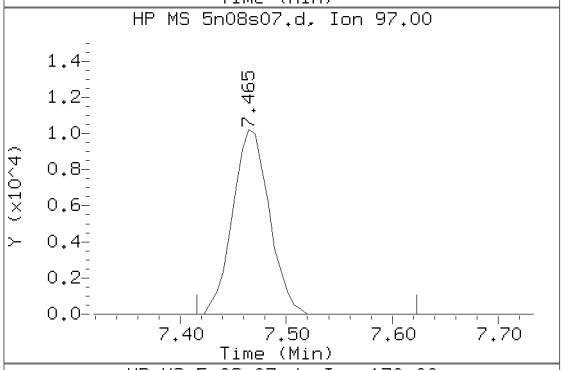




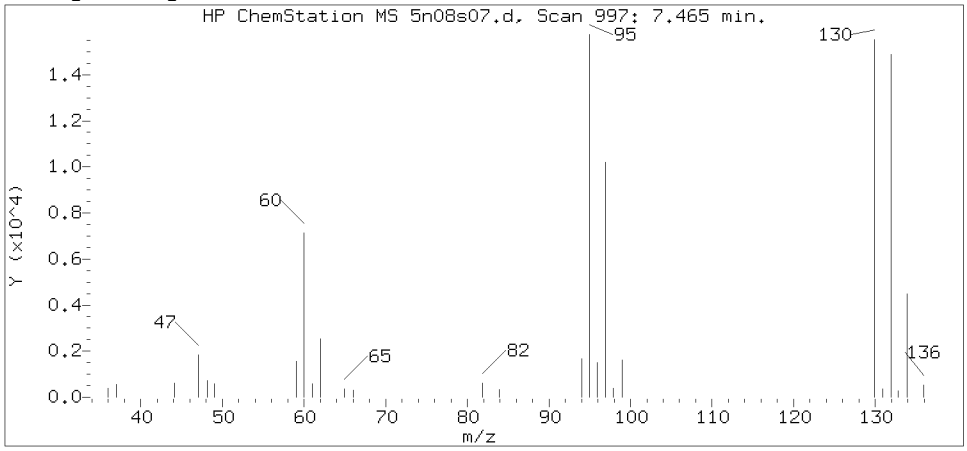
Sample Spectrum (Background Subtracted)

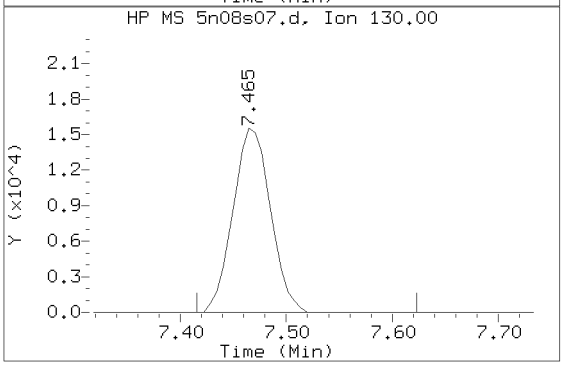






Sample Spectrum (Unaltered)





Data File: /chem2/HP26285.i/18nov08a.b/5n08s07.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 12:30 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 12:49 Unknown

Sample Name: DC-01 Lab Sample ID: 9882898

Compound Number : 71
Compound Name : Trichloroethene
Scan Number : 997
Retention Time (minutes): 7.465
Relative Retention Time :-0.00000
Quant Ion : 95.00
Area (flag) : 38829
On-Column Amount (ng) : 6.8184

Digitally signed by Don V. Viray on 11/08/2018 at 19:36.
Target 3.5 esignature user ID: dvv10203

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
DC-02

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882899

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov08a.b/5n08s08.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	5	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DC-02

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882899

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov08a.b/5n08s08.d

Level: (low/med) LOW Date Received: 11/03/18

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

DC-02 Lancaster Laboratories Analysis Summary for GC/MS Volatiles 9882899

Data file: /chem2/HP26285.i/18nov08a.b/5n08s08.d Injection date and time: **08-NOV-2018 12:52**
Data file Sample Info. Line: DC-02;9882899;1;0;;CBD53;;;5n08b01; Instrument ID: **HP26285.i** Batch: **5183121AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 13:11 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov08a.b/5n08b01.d**

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 08-NOV-2018 08:34
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov08a.b/5n08c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:pH 7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.514	(-0.018)	349	65	334639	(-6)	250.00	
66) Fluorobenzene	6.971	(-0.006)	916	96	978562	(-6)	50.00	
101) Chlorobenzene-d5	10.787	(0.000)	1542	117	716795	(-7)	50.00	
132) 1,4-Dichlorobenzene-d4	12.823	(0.000)	1876	152	373770	(-15)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.038	(0.000)	113	239164	50.242	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.514	(0.000)	102	58463	51.442	103%		80 - 120
84) Toluene-d8	(3)	9.147	(-0.001)	98	959938	49.647	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.879	(0.001)	95	336663	48.440	97%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.2	1
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
28) Methylene Chloride	(2)				Not Detected					0.3	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
71) Trichloroethene	(2)				Not Detected					0.2	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
79) Bromodichloromethane	(2)				Not Detected					0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
98) Dibromochloromethane	(3)				Not Detected					0.2	1
103) Chlorobenzene	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5

Digitally signed by Don V. Viray on 11/08/2018 at 19:37. Target 3.5 esignature user ID: dvv10203

DC-02

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

9882899

Data file: /chem2/HP26285.i/18nov08a.b/5n08s08.d
Injection date and time: **08-NOV-2018 12:52**
Data file Sample Info. Line: DC-02;9882899;1;0;;CBD53;;;5n08b01;
Instrument ID: **HP26285.i** Batch: **5183121AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 13:11 Unknown

Blank Data file reference: **/chem2/HP26285.i/18nov08a.b/5n08b01.d**

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 08-NOV-2018 08:34
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov08a.b/5n08c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

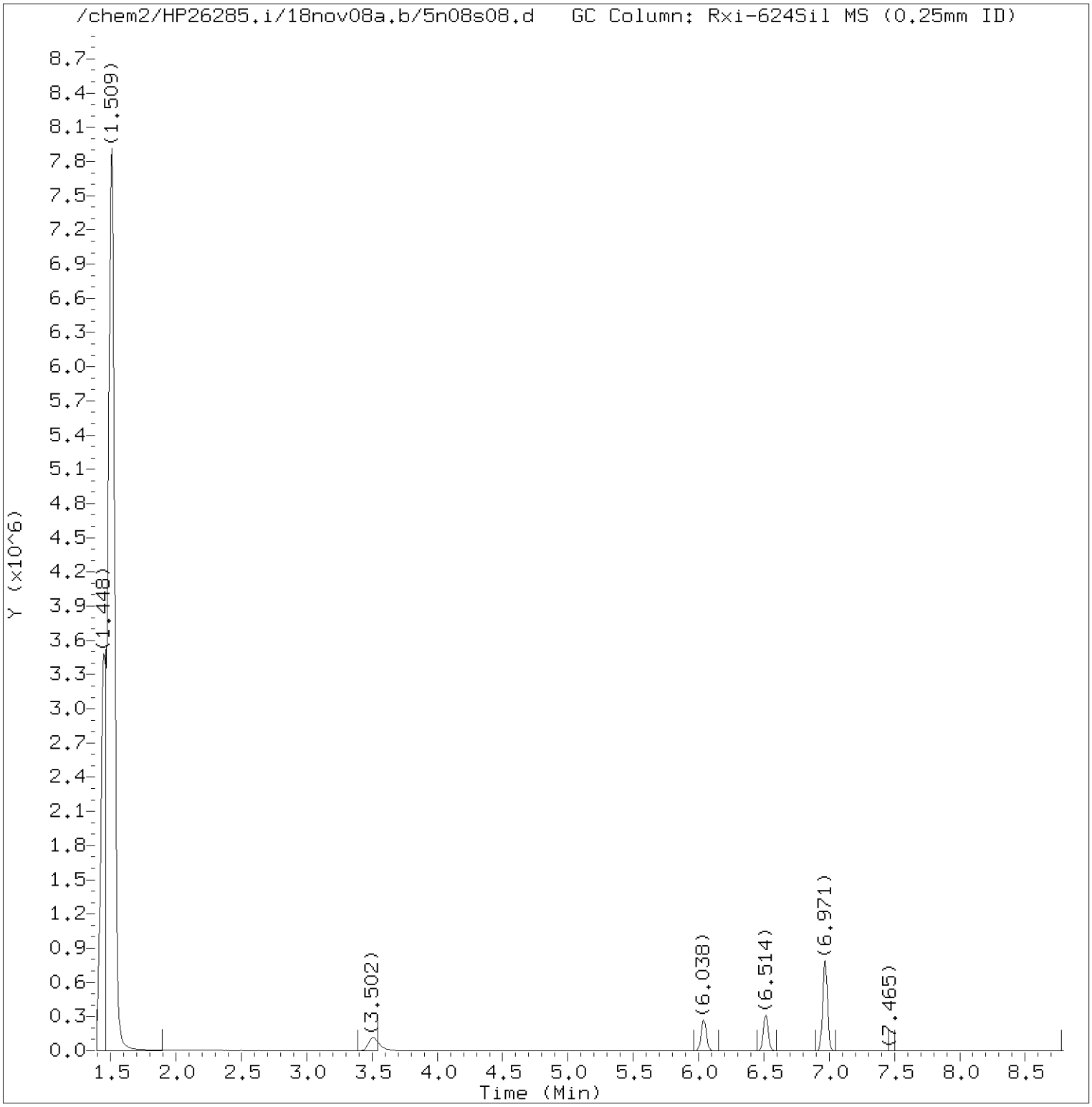
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5

Total number of targets = 37

Digitally signed by Don V. Viray on 11/08/2018 at 19:37. Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/08/2018 at 20:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

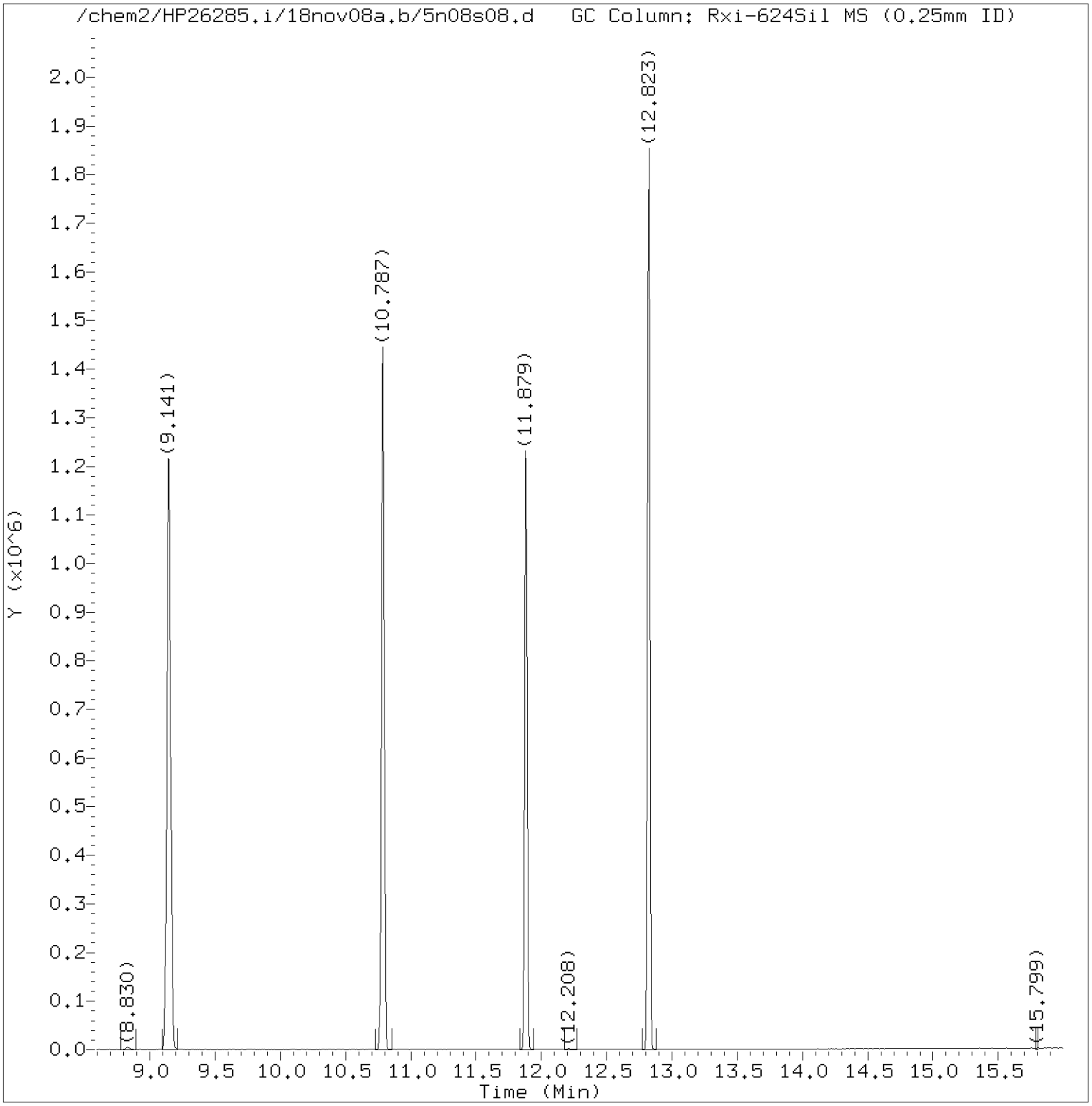
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s08.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 12:52 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 13:11 Unknown

Sample Name: DC-02 Lab Sample ID: 9882899

Digitally signed by Don V. Viray
on 11/08/2018 at 19:37.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s08.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 12:52 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 13:11 Unknown

Sample Name: DC-02 Lab Sample ID: 9882899

Digitally signed by Don V. Viray
on 11/08/2018 at 19:37.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s08.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 12:52 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 13:11 Unknown

Sample Name: DC-02 Lab Sample ID: 9882899

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.514	65	334639	250.000
52)$Dibromofluoromethane	(2)	6.038	113	239164	50.242
57)$1,2-Dichloroethane-d4	(2)	6.514	102	58463	51.442
66)*Fluorobenzene	(2)	6.971	96	978562	50.000
84)$Toluene-d8	(3)	9.147	98	959938	49.647
101)*Chlorobenzene-d5	(3)	10.787	117	716795	50.000
115)$4-Bromofluorobenzene	(3)	11.879	95	336663	48.440
132)*1,4-Dichlorobenzene-d4	(4)	12.823	152	373770	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 11/08/2018 at 19:37.
Target 3.5 esignature user ID: dvv10203

Standards Data

Volatiles by GC/MS

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP26285 **HP #05**

Data Directory Path is - C:\DATA\18OCT25I\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
DVV10203	5C25T05.D	50NGBFB	10/25/2018	20:39		
DVV10203	5C25X01.D	BLK	10/25/2018	21:04		
DVV10203	5C25X02.D	BLK	10/25/2018	21:25		
DVV10203	5C25I01.D	VSTD300	10/25/2018	21:46		
DVV10203	5C25I02.D	VSTD100	10/25/2018	22:07		
DVV10203	5C25I03.D	VSTD050	10/25/2018	22:28		
DVV10203	5C25I04.D	VSTD020	10/25/2018	22:50		
DVV10203	5C25I05.D	VSTD010	10/25/2018	23:11		
DVV10203	5C25I06.D	VSTD004	10/25/2018	23:32		
DVV10203	5C25I07.D	VSTD001	10/25/2018	23:53		
DVV10203	5C25M01.D	0.5PPB	10/26/2018	00:15		
DVV10203	5C25V01.D	LG5ICV	10/26/2018	00:36		
DVV10203	5C25X10.D	BLK	10/26/2018	00:57		
DVV10203	5C25I11.D	VSTD300	10/26/2018	01:18		
DVV10203	5C25I12.D	VSTD100	10/26/2018	01:39		
DVV10203	5C25I13.D	VSTD050	10/26/2018	02:01		
DVV10203	5C25I14.D	VSTD020	10/26/2018	02:22		
DVV10203	5C25I15.D	VSTD010	10/26/2018	02:44		
DVV10203	5C25I16.D	VSTD004	10/26/2018	03:05		
DVV10203	5C25M11.D	1.0PPB	10/26/2018	03:26		
DVV10203	5C25V11.D	SM5ICV	10/26/2018	03:47		

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP26285 **HP #05**

Data Directory Path is - C:\DATA\18NOV07B\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
DVV10203	5N07T05.D	50NGBFB	11/07/2018	19:28		
DVV10203	5N07X31.D	BLK	11/07/2018	19:42	5183112AA	
DVV10203	5N07C05.D	VSTD050	11/07/2018	20:04	5183112AA	
DVV10203	5N07S61.D	LCS557	11/07/2018	20:25	5183112AA	
DVV10203	5N07S62.D	LCD557	11/07/2018	20:46	5183113AA	
DVV10203	5N07X32.D	BLK	11/07/2018	21:07	5183113AA	
DVV10203	5N07B31.D	VBLK556	11/07/2018	21:29	5183112AA	
DVV10203	5N07S32.D	9879342	11/07/2018	21:50	5183112AA	
DVV10203	5N07S33.D	9879333	11/07/2018	22:11	5183112AA	
DVV10203	5N07S34.D	9879333MS	11/07/2018	22:33	5183112AA	
DVV10203	5N07S35.D	9879333MSD	11/07/2018	22:54	5183112AA	
DVV10203	5N07X33.D	BLK	11/07/2018	23:16	5183113AA	
DVV10203	5N07S36.D	9879332	11/07/2018	23:37	5183112AA	
DVV10203	5N07S37.D	9879335	11/07/2018	23:58	5183112AA	
DVV10203	5N07S38.D	9879336	11/08/2018	00:19	5183112AA	
DVV10203	5N07S39.D	9879334	11/08/2018	00:40	5183112AA	
DVV10203	5N07S40.D	9879338	11/08/2018	01:02	5183112AA	
DVV10203	5N07S41.D	9879339	11/08/2018	01:23	5183112AA	
DVV10203	5N07S42.D	9879340	11/08/2018	01:45	5183112AA	
DVV10203	5N07S43.D	9879341	11/08/2018	02:06	5183112AA	
DVV10203	5N07S44.D	9870391	11/08/2018	02:28	5183112AA	
DVV10203	5N07S45.D	9870392	11/08/2018	02:49	5183112AA	
DVV10203	5N07S46.D	9870393	11/08/2018	03:10	5183112AA	
DVV10203	5N07S47.D	9879337	11/08/2018	03:31	5183112AA	10
DVV10203	5N07X61.D	BLK	11/08/2018	03:53	5183113AA	
DVV10203	5N07S63.D	9882891	11/08/2018	04:14	5183113AA	
DVV10203	5N07S64.D	9882892	11/08/2018	04:35	5183113AA	
DVV10203	5N07S65.D	9882893	11/08/2018	04:56	5183113AA	
DVV10203	5N07S66.D	9882894	11/08/2018	05:17	5183113AA	
DVV10203	5N07S67.D	9882895	11/08/2018	05:38	5183113AA	
DVV10203	5N07S68.D	9882896	11/08/2018	06:00	5183113AA	
DVV10203	5N07S69.D	9873925	11/08/2018	06:20	5183113AA	

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP26285 **HP #05**

Data Directory Path is - C:\DATA\18nov08a\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
CLM27445	5N08T01.D	50NGBFB	11/08/2018	07:24	5183121AA	
CLM27445	5N08X01.D	VBLK558	11/08/2018	07:51	5183121AA	
CLM27445	5N08C01.D	VSTD050	11/08/2018	08:12	5183121AA	
CLM27445	5N08X02.D	VBLK558	11/08/2018	08:33	5183121AA	
CLM27445	5N08S01.D	LCS558	11/08/2018	08:54	5183121AA	
CLM27445	5N08B01.D	VBLK558	11/08/2018	09:15	5183121AA	
CLM27445	5N08S02.D	9872270	11/08/2018	10:44	5183121AA	
CLM27445	5N08S03.D	9872272	11/08/2018	11:05	5183121AA	
CLM27445	5N08S04.D	9872273MS	11/08/2018	11:26	5183121AA	
CLM27445	5N08S05.D	9872274MSD	11/08/2018	11:47	5183121AA	
CLM27445	5N08S06.D	9882897	11/08/2018	12:09	5183121AA	
CLM27445	5N08S07.D	9882898	11/08/2018	12:30	5183121AA	
CLM27445	5N08S08.D	9882899	11/08/2018	12:52	5183121AA	
CLM27445	5N08S09.D	9872264	11/08/2018	13:13	5183121AA	
CLM27445	5N08S10.D	9872266	11/08/2018	13:35	5183121AA	
CLM27445	5N08S11.D	9872267	11/08/2018	13:56	5183121AA	
CLM27445	5N08S12.D	9872268	11/08/2018	14:17	5183121AA	
CLM27445	5N08S13.D	9872271	11/08/2018	14:39	5183121AA	
CLM27445	5N08S14.D	9872276	11/08/2018	15:00	5183121AA	
CLM27445	5N08S15.D	9872965	11/08/2018	15:21	5183121AA	2
CLM27445	5N08S16.D	9872965DL	11/08/2018	15:43	5183121AA	20
CLM27445	5N08S17.D	9879199	11/08/2018	16:04	5183121AA	20
CLM27445	5N08S18.D	9879199MS	11/08/2018	16:25	5183121AA	20
CLM27445	5N08S19.D	9881533	11/08/2018	16:46	5183121AA	20
CLM27445	5N08S20.D	9881533MS	11/08/2018	17:07	5183121AA	20
CLM27445	5N08S21.D	9874959	11/08/2018	17:28	5183121AA	5
CLM27445	5N08S22.D	9874959DL	11/08/2018	17:49	5183121AA	50
CLM27445	5N08S23.D	9876909	11/08/2018	18:10	5183121AA	2
CLM27445	5N08S24.D	9876909DL	11/08/2018	18:30	5183121AA	20

Data File: /chem2/HP26285.i/18oct25i.b/5c25t05.d

Date : 25-OCT-2018 20:39

Client ID: BFB Aug07-18

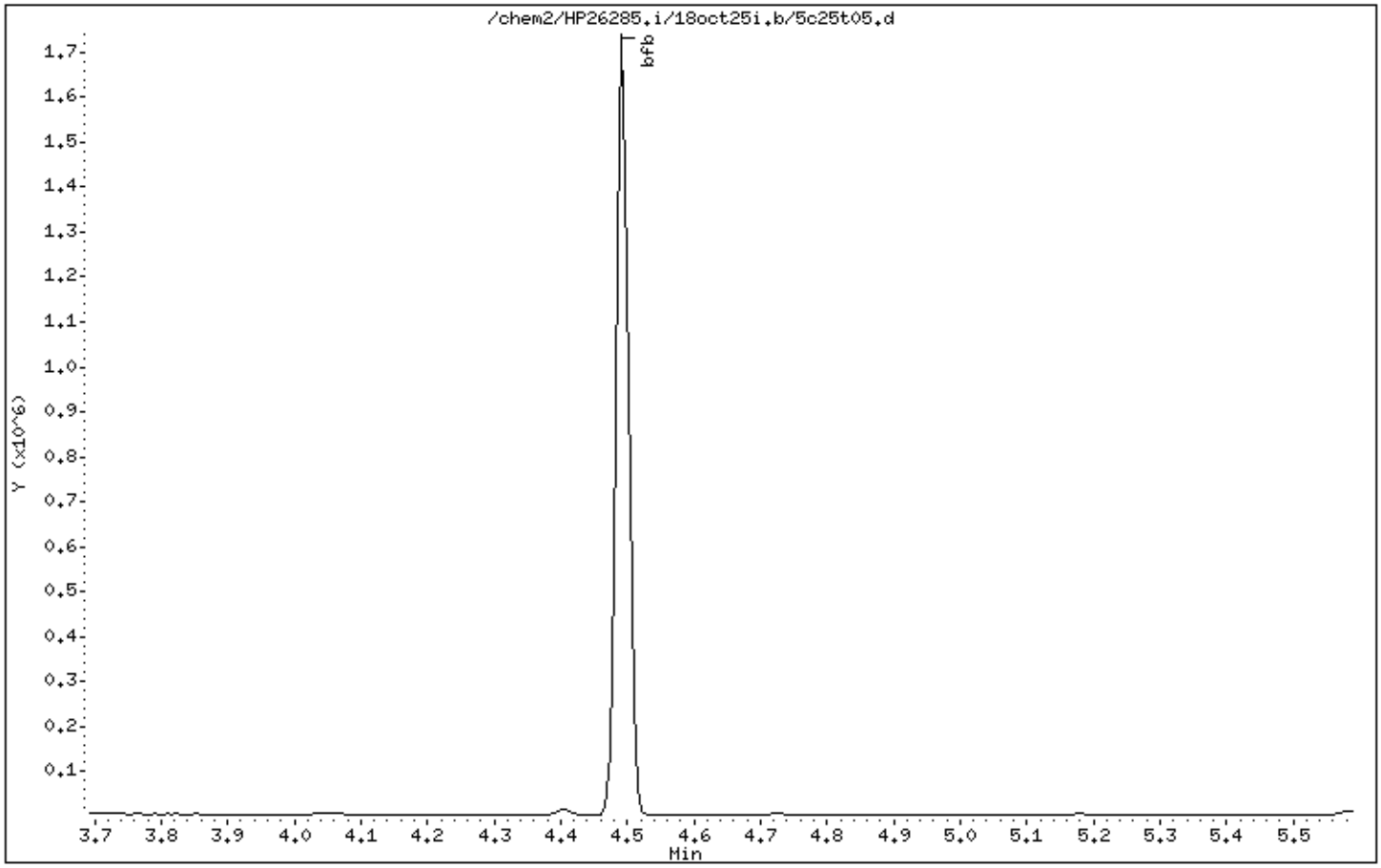
Instrument: HP26285.i

Sample Info: BFB Aug07-18;50NGBFB;1;3;;;;;;

Operator: DVV10203

Column phase: Rxi-624Sil MS

Column diameter: 0.25



Digitally signed by Don V. Viray on 10/25/2018 at 20:46.
Target 3.5 esignature user ID: dvv10203

Data File: /chem2/HP26285.i/18oct25i.b/5c25t05.d

Date : 25-OCT-2018 20:39

Client ID: BFB Aug07-18

Instrument: HP26285.i

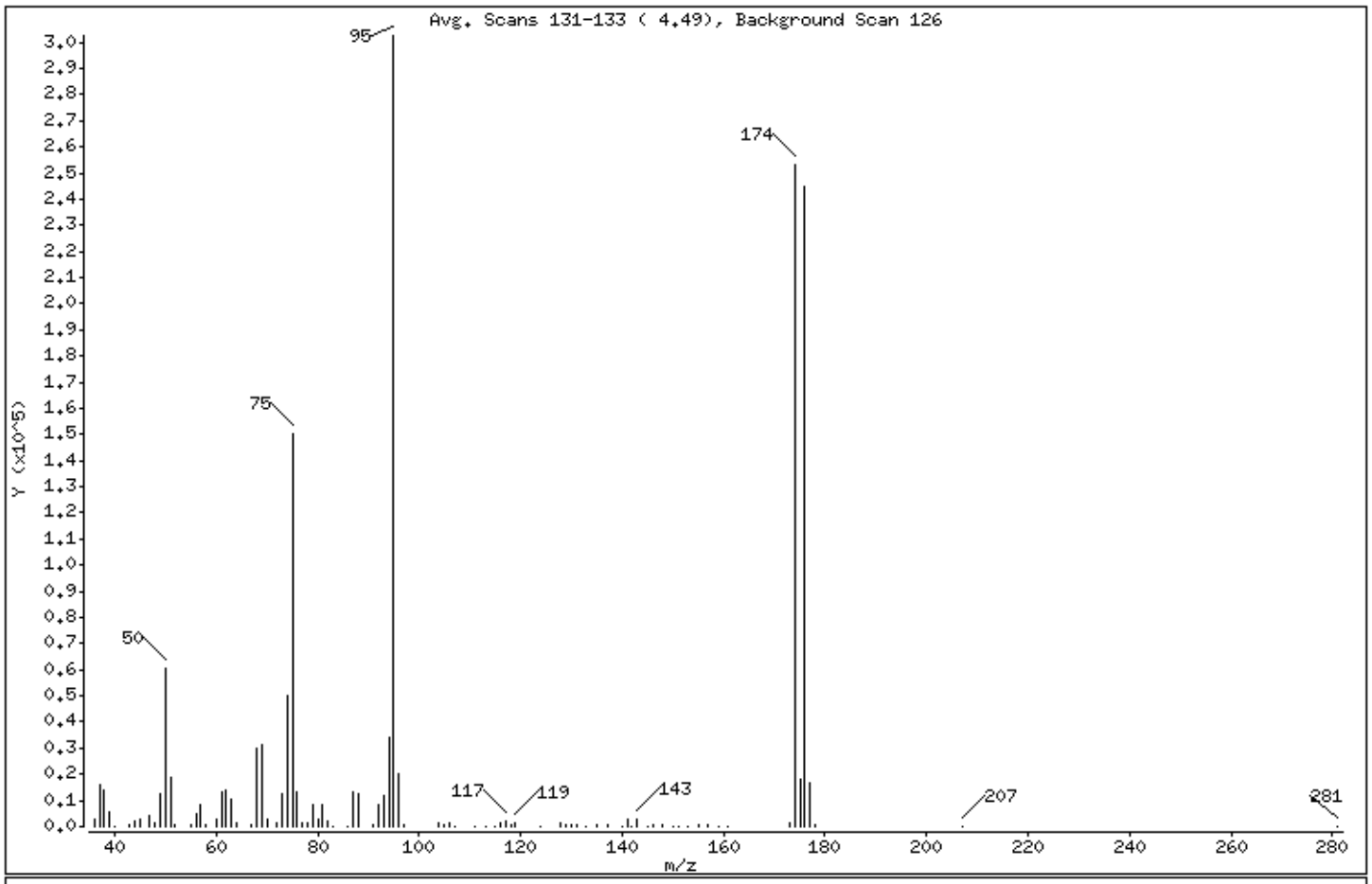
Sample Info: BFB Aug07-18;50NGBFB;1;3;;;;;;

Operator: DVV10203

Column phase: Rxi-624Sil MS

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.99
75	30.00 - 60.00% of mass 95	49.64
96	5.00 - 9.00% of mass 95	6.69
173	Less than 2.00% of mass 174	0.54 (0.65)
174	50.00 - 100.00% of mass 95	83.60
175	5.00 - 9.00% of mass 174	6.00 (7.17)
176	95.00 - 101.00% of mass 174	80.97 (96.85)
177	5.00 - 9.00% of mass 176	5.49 (6.78)

Digitally signed by Don V. Viray on 10/25/2018 at 20:46.
Target 3.5 esignature user ID: dvv10203

Data File: /chem2/HP26285.i/18oct25i.b/5c25t05.d

Date : 25-OCT-2018 20:39

Client ID: BFB Aug07-18 Instrument: HP26285.i

Sample Info: BFB Aug07-18;50NGBFB;1;3;;;;;;

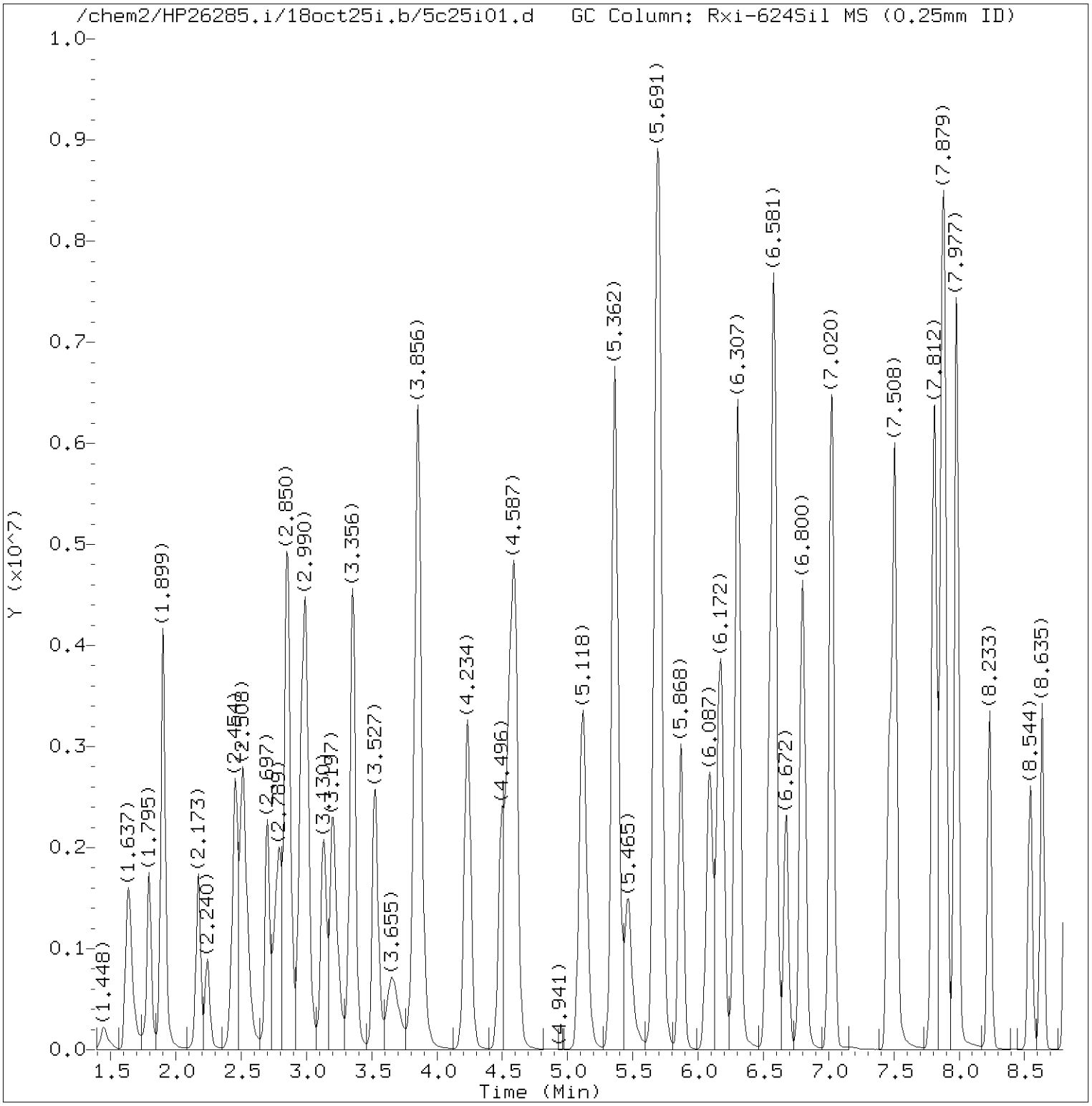
Operator: DVV10203

Column phase: Rxi-624Sil MS Column diameter: 0.25

Data File: 5c25t05.d
Spectrum: Avg. Scans 131-133 (4.49), Background Scan 126
Location of Maximum: 95.00
Number of points: 90

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2896	67.00	788	95.00	302592	141.00	2693
37.00	15919	68.00	30096	96.00	20256	142.00	227
38.00	13901	69.00	31048	97.00	623	143.00	2876
39.00	5745	70.00	2484	104.00	1282	145.00	198
40.00	131	72.00	1525	105.00	467	146.00	414
43.00	357	73.00	12373	106.00	1215	148.00	719
44.00	1824	74.00	50080	107.00	297	150.00	247
45.00	2944	75.00	150208	111.00	102	151.00	91
47.00	3857	76.00	12961	113.00	180	153.00	83
48.00	1696	77.00	1693	115.00	304	155.00	740
49.00	12368	78.00	1125	116.00	1060	157.00	555
50.00	60488	79.00	8238	117.00	1828	159.00	262
51.00	18952	80.00	2540	118.00	976	161.00	218
52.00	796	81.00	8463	119.00	1616	173.00	1640
55.00	828	82.00	1902	124.00	87	174.00	252928
56.00	4639	83.00	89	128.00	1052	175.00	18136
57.00	8210	86.00	334	129.00	482	176.00	244992
58.00	415	87.00	13067	130.00	1026	177.00	16616
60.00	2665	88.00	12515	131.00	414	178.00	495
61.00	13548	91.00	1029	133.00	248	207.00	71
62.00	13692	92.00	8088	135.00	524	281.00	121
63.00	10384	93.00	12152	137.00	507		
64.00	1063	94.00	33872	140.00	87		

Digitally signed by Don V. Viray on 10/25/2018 at 20:46.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

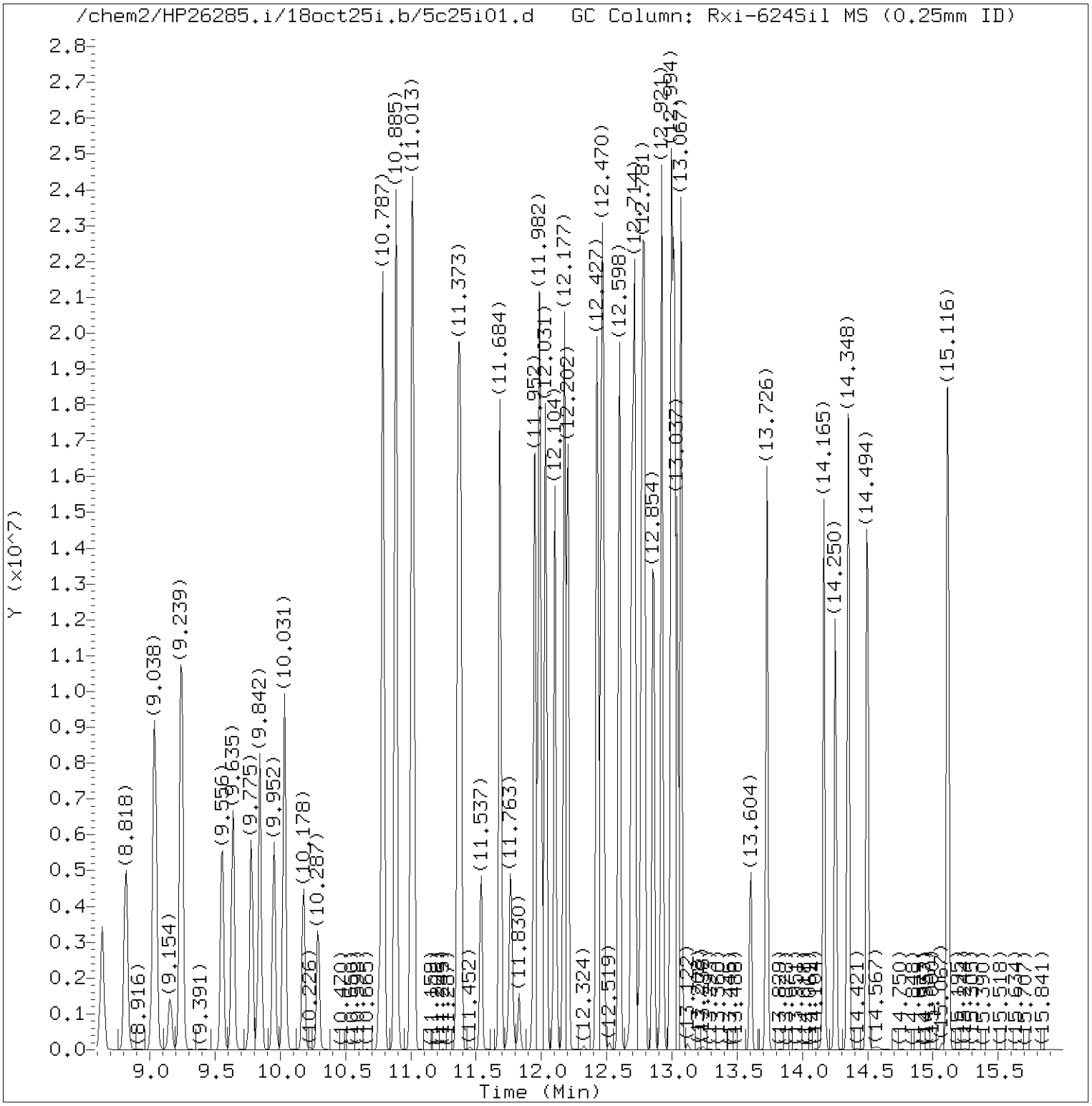
Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD300 Lab Sample ID: VSTD300

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD300 Lab Sample ID: VSTD300

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.637	85	3485854	285.841
4) Chloromethane	(2)	1.795	50	2666571	270.028
6) Vinyl Chloride	(2)	1.893	62	2514409	272.452
5) 1,3-Butadiene	(2)	1.905	39	1676995M	252.915
8) Bromomethane	(2)	2.173	94	1670400	243.518
9) Chloroethane	(2)	2.240	64	1089549	237.510
10) Dichlorofluoromethane	(2)	2.454	67	3195974	262.787
12) Trichlorofluoromethane	(2)	2.502	101	3493138M	283.793
11) n-Pentane	(2)	2.515	43	2148129	273.229
14) Ethyl ether	(2)	2.697	59	1690965	285.411
15) Freon 123a	(2)	2.789	67	2404156	286.714
16) Acrolein	(1)	2.850	56	7467079	2782.700
17) 1,1-Dichloroethene	(2)	2.960	96	1766767	305.492
17) 1,1-Dichloroethene	(2)	2.960	63	888549	296.421
18) Acetone	(1)	2.996	58	783455	563.314
19) Freon 113	(2)	2.996	101	1822361	316.196
22) Methyl Iodide	(2)	3.130	142	3407628	302.248
21) 2-Propanol	(1)	3.143	45	1263343	1107.927
23) Carbon Disulfide	(2)	3.203	76	6052108	307.126
27) Methyl Acetate	(2)	3.338	43	2921617	259.036
25) Allyl Chloride	(2)	3.356	41	3551931	284.276
28) Methylene Chloride	(2)	3.520	84	1939736	286.352
29)*t-Butyl alcohol-d10	(1)	3.551	65	382038	250.000
30) t-Butyl alcohol	(1)	3.655	59	2660921	1324.398
31) Acrylonitrile	(2)	3.819	53	1509319	285.041
32) trans-1,2-Dichloroethene	(2)	3.856	96	2017950	306.631
33) Methyl Tertiary Butyl Ether	(2)	3.856	73	6089426	293.036
34) n-Hexane	(2)	4.234	57	3115291	326.367
36) 1,1-Dichloroethane	(2)	4.490	63	3613319	293.357
38) di-Isopropyl ether	(2)	4.557	45	6807074	284.710
39) 2-Chloro-1,3-butadiene	(2)	4.600	53	3333315	299.818
40) Ethyl t-butyl ether	(2)	5.118	59	6234745	289.963
44) 2-Butanone	(2)	5.355	43	4370509	546.312
42) cis-1,2-Dichloroethene	(2)	5.362	96	2245004	306.113
45) 2,2-Dichloropropane	(2)	5.374	77	2968381	304.088
47) Propionitrile	(1)	5.465	54	3145458	1481.346
48) Methacrylonitrile	(2)	5.679	67	3753417	745.732
49) Bromochloromethane	(2)	5.703	128	1190053	313.495

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.715	71	1182943	612.308
51) Chloroform	(2)	5.868	83	3459764	297.189
53) 1,1,1-Trichloroethane	(2)	6.087	97	2994181	299.862
52)$Dibromofluoromethane	(2)	6.093	113	297192	49.459
52)$Dibromofluoromethane	(2)	6.093	111	305623	49.746
43) 1,2-Dichloroethene (Total)	(2)		96	4262954	612.743
54) Cyclohexane	(2)	6.172	56	3702830	310.863
54) Cyclohexane	(2)	6.172	84	2952442	300.048
54) Cyclohexane	(2)	6.172	69	1120921	316.016
56) Carbon Tetrachloride	(2)	6.294	117	2775839	316.344
55) 1,1-Dichloropropene	(2)	6.307	75	2892020	301.050
58) Isobutyl Alcohol	(1)	6.544	41	2201038	3383.004
57)$1,2-Dichloroethane-d4	(2)	6.569	102	72825	50.764
57)$1,2-Dichloroethane-d4	(2)	6.569	65	349392	47.872
57)$1,2-Dichloroethane-d4	(2)	6.569	104	46765	51.193
60) Benzene	(2)	6.581	78	8563797	298.395
61) 1,2-Dichloroethane	(2)	6.672	62	2448649	278.099
61) 1,2-Dichloroethane	(2)	6.672	98	223314	293.712
65) t-Amyl methyl ether	(2)	6.800	73	5982117	296.295
66)*Fluorobenzene	(2)	7.014	96	1235251	50.000
67) n-Heptane	(2)	7.026	43	3630380	330.913
69) n-Butanol	(1)	7.465	56	3422005	6550.423
71) Trichloroethene	(2)	7.508	95	2230447	310.735
73) Methylcyclohexane	(2)	7.812	83	3958568	318.082
73) Methylcyclohexane	(2)	7.812	98	1706518	322.665
74) 1,2-Dichloropropane	(2)	7.861	63	2202836	307.060
75) Dibromomethane	(2)	7.977	93	1380529	316.310
77) Methyl Methacrylate	(2)	7.983	69	2335012	322.754
79) Bromodichloromethane	(2)	8.233	83	2633604	323.772
80) 2-Nitropropane	(2)	8.544	41	2194999	602.578
81) 2-Chloroethyl Vinyl Ether	(2)	8.635	63	1820259	315.425
82) cis-1,3-Dichloropropene	(2)	8.818	75	3375495	322.718
83) 4-Methyl-2-pentanone	(2)	9.038	43	8185190	574.308
84)$Toluene-d8	(3)	9.154	98	1135574	48.016
84)$Toluene-d8	(3)	9.154	100	738030	48.219
89) Toluene	(3)	9.239	92	5466678	308.105
90) trans-1,3-Dichloropropene	(3)	9.556	75	3151085	332.525
92) Ethyl Methacrylate	(3)	9.635	69	3733024	328.552

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) 1,1,2-Trichloroethane	(3)	9.775	97	1920415	317.766
94) Tetrachloroethene	(3)	9.842	166	2537746	325.632
95) 1,3-Dichloropropane	(3)	9.952	76	3160125	309.326
97) 2-Hexanone	(3)	10.031	43	6618344	578.206
91) 1,3-Dichloropropene (total)	(3)		100	6526580	655.243
98) Dibromochloromethane	(3)	10.178	129	2223626	359.363
100) 1,2-Dibromoethane	(3)	10.287	107	2120758	323.431
101)*Chlorobenzene-d5	(3)	10.757	117	876748	50.000
102) 1-Chlorohexane	(3)	10.787	91	3308435	328.228
103) Chlorobenzene	(3)	10.787	112	6262502	325.818
104) 1,1,1,2-Tetrachloroethane	(3)	10.879	131	2287364	361.327
105) Ethylbenzene	(3)	10.885	91	10507131	308.052
107) m+p-Xylene	(3)	11.013	106	8456906	641.876
108) o-Xylene	(3)	11.360	106	4233628	335.721
110) Styrene	(3)	11.379	104	7075963	344.324
111) Bromoform	(3)	11.537	173	1851243	299.953
112) Isopropylbenzene	(3)	11.684	105	10134219	315.286
109) Xylene (Total)	(3)		106	12690534	977.597
115)$4-Bromofluorobenzene	(3)	11.830	95	423118	49.773
115)$4-Bromofluorobenzene	(3)	11.830	174	354529	49.119
116) Bromobenzene	(4)	11.946	156	2893653	335.212
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	3614987M	321.623
119) trans-1,4-Dichloro-2-butene	(4)	11.982	53	2825035	731.837
118) 1,2,3-Trichloropropane	(4)	11.994	110	1063918	318.261
120) n-Propylbenzene	(4)	12.031	91	11487080	279.336
121) 2-Chlorotoluene	(4)	12.104	126	2661693	320.820
123) 1,3,5-Trimethylbenzene	(4)	12.177	105	8966181	310.662
122) 4-Chlorotoluene	(4)	12.202	126	2816049	326.222
125) tert-Butylbenzene	(4)	12.427	134	2024896M	337.763
126) Pentachloroethane	(4)	12.458	167	1971224	385.199
127) 1,2,4-Trimethylbenzene	(4)	12.470	105	9205510M	310.542
128) sec-Butylbenzene	(4)	12.598	105	10884221	302.144
130) 1,3-Dichlorobenzene	(4)	12.696	146	5423396	332.119
131) p-Isopropyltoluene	(4)	12.714	119	9905900	316.629
132)*1,4-Dichlorobenzene-d4	(4)	12.750	152	502137	50.000
134) 1,4-Dichlorobenzene	(4)	12.769	146	5538953	330.200
135) 1,2,3-Trimethylbenzene	(4)	12.787	105	9654896	312.684
136) Benzyl Chloride	(4)	12.854	91	7683725	352.169

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

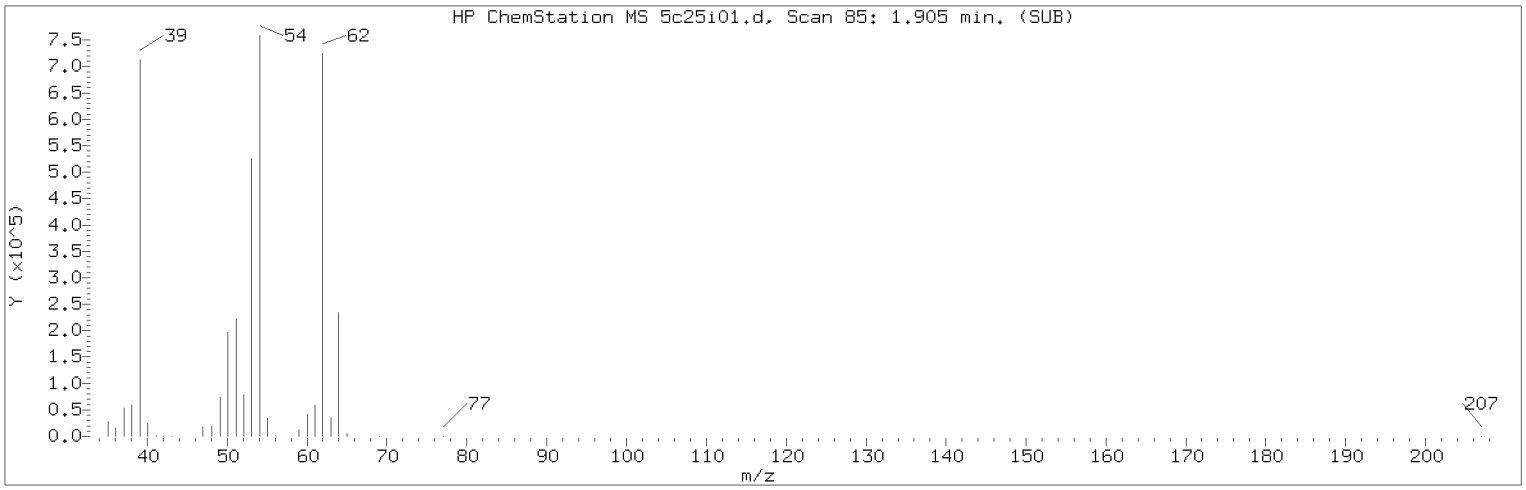
Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137) 1,3-Diethylbenzene	(4)	12.921	119	6537147	338.961
138) 1,4-Diethylbenzene	(4)	12.994	119	7054355	342.695
140) n-Butylbenzene	(4)	13.013	92	5495652	340.395
139) 1,2-Dichlorobenzene	(4)	13.037	146	5205696	332.416
141) 1,2-Diethylbenzene	(4)	13.067	119	5487865M	339.881
142) Diethylbenzene (total)	(4)		100	19079367	1021.538
143) 1,2-Dibromo-3-chloropropane	(4)	13.604	75	934562	323.432
145) 1,3,5-Trichlorobenzene	(4)	13.726	180	4157669	362.804
147) 1,2,4-Trichlorobenzene	(4)	14.165	180	3759719	364.780
148) Hexachlorobutadiene	(4)	14.250	225	1826527	376.191
149) Naphthalene	(4)	14.354	128	10879225	297.555
150) 1,2,3-Trichlorobenzene	(4)	14.494	180	3594981	358.004
151) 2-Methylnaphthalene	(4)	15.116	142	7835443	362.197

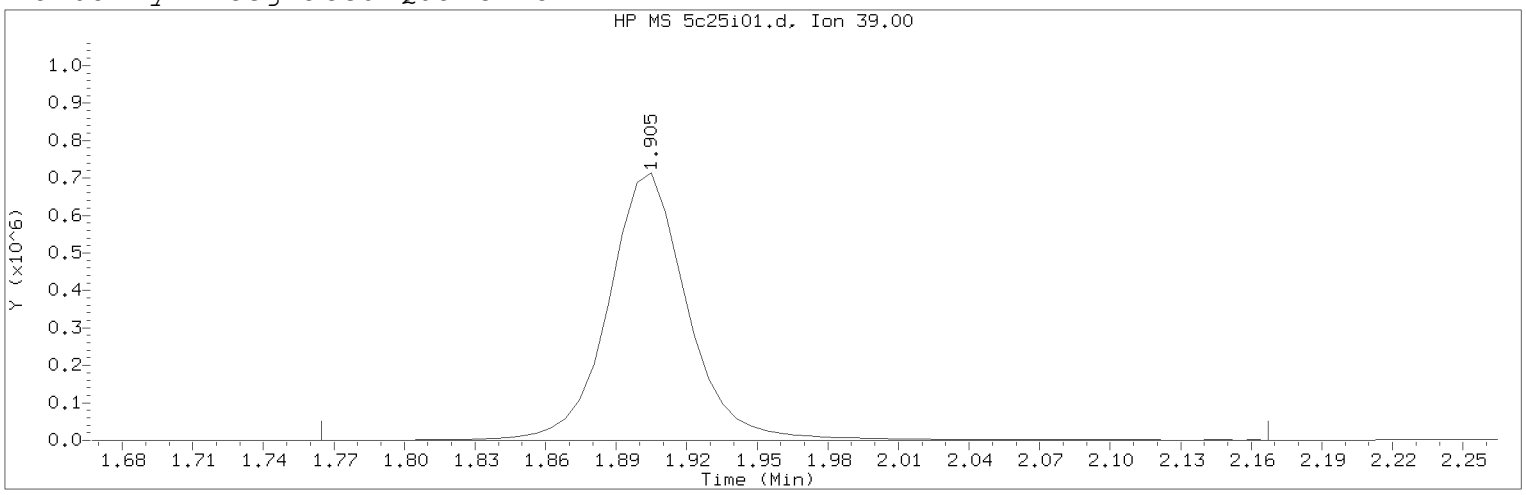
M = Compound was manually integrated.

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD300 Lab Sample ID: VSTD300

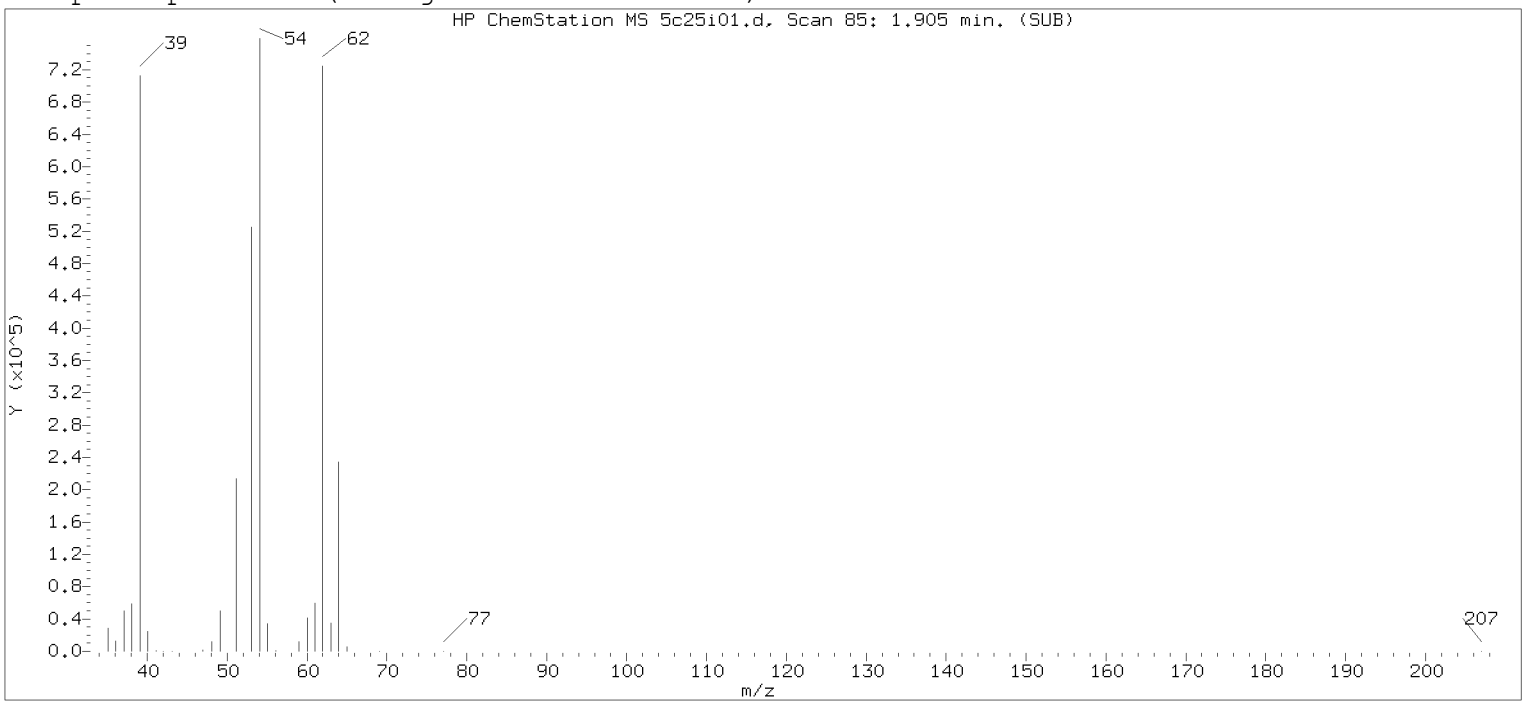
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 85
Retention Time (minutes): 1.905
Quant Ion : 39.00
Area (flag) : 1676995M
On-Column Amount (ng) : 252.9146
Integration start scan : 61 Integration stop scan: 127
Y at integration start : 261 Y at integration end: 261

Reason for manual integration: improper integration

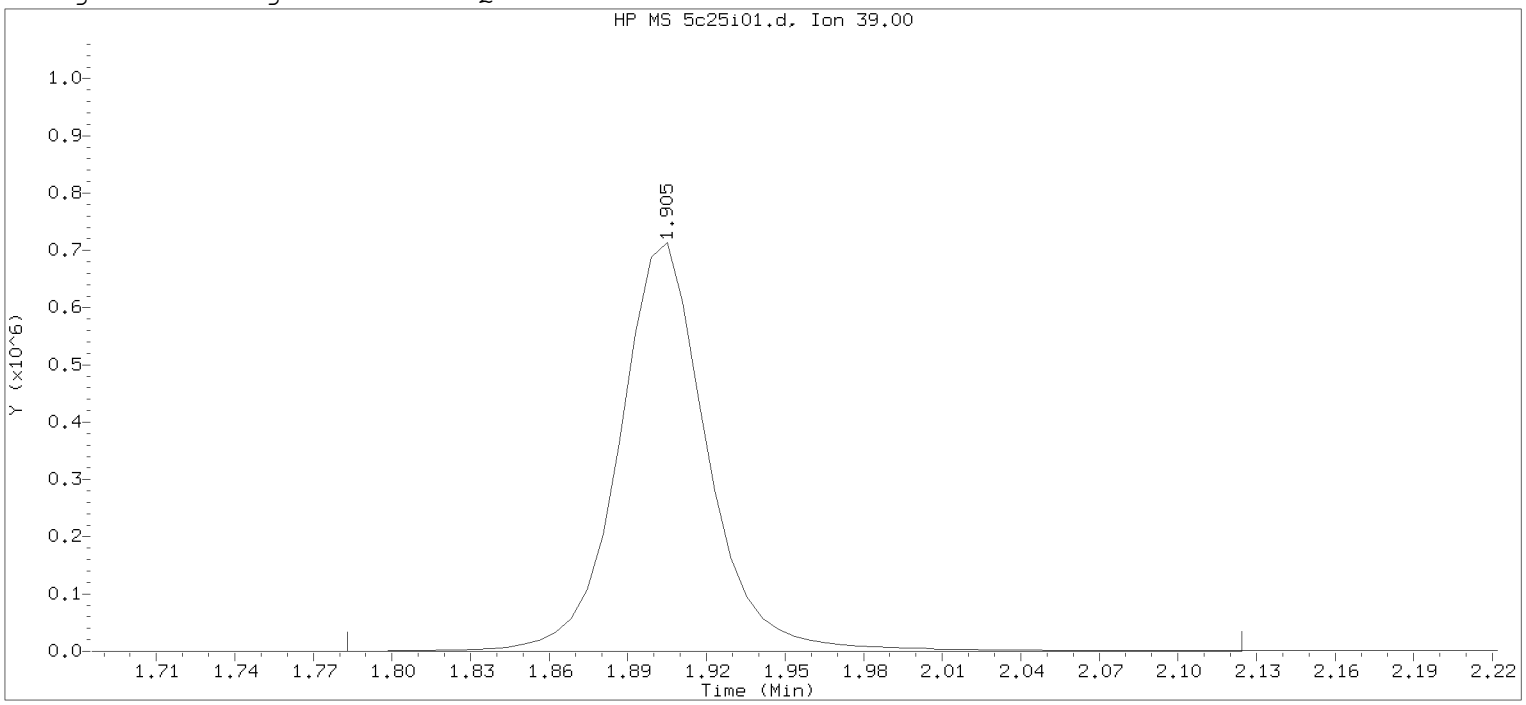
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

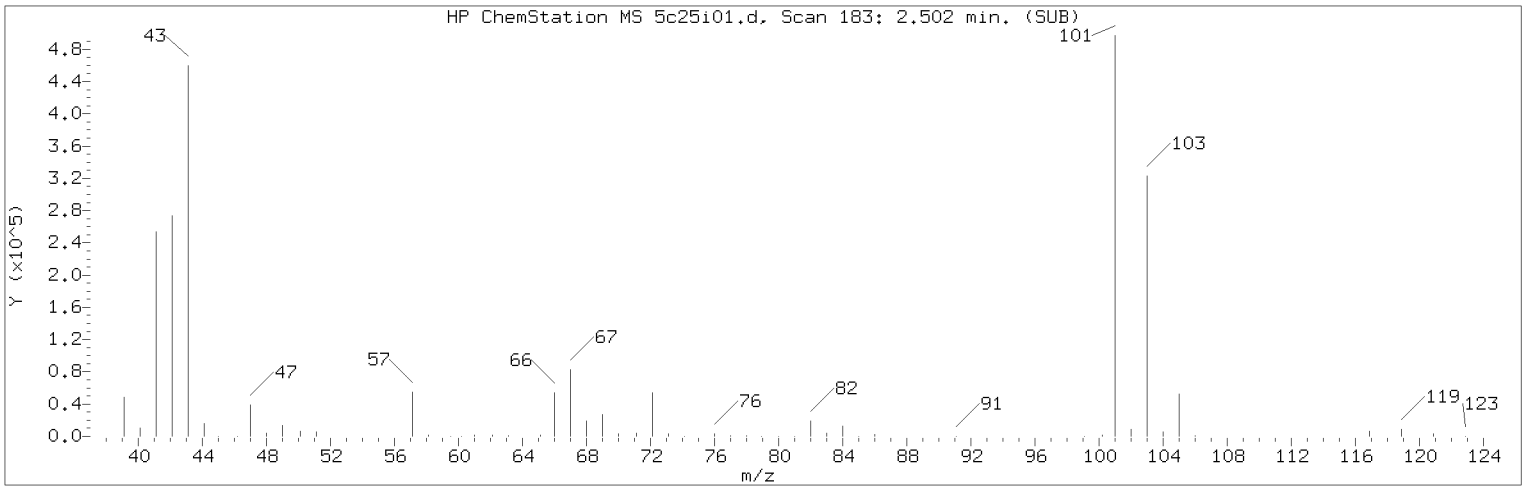
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:29
Date, time and analyst ID of latest file update: 26-Oct-2018 09:29 jkh09052

Sample Name: VSTD300 Lab Sample ID: VSTD300

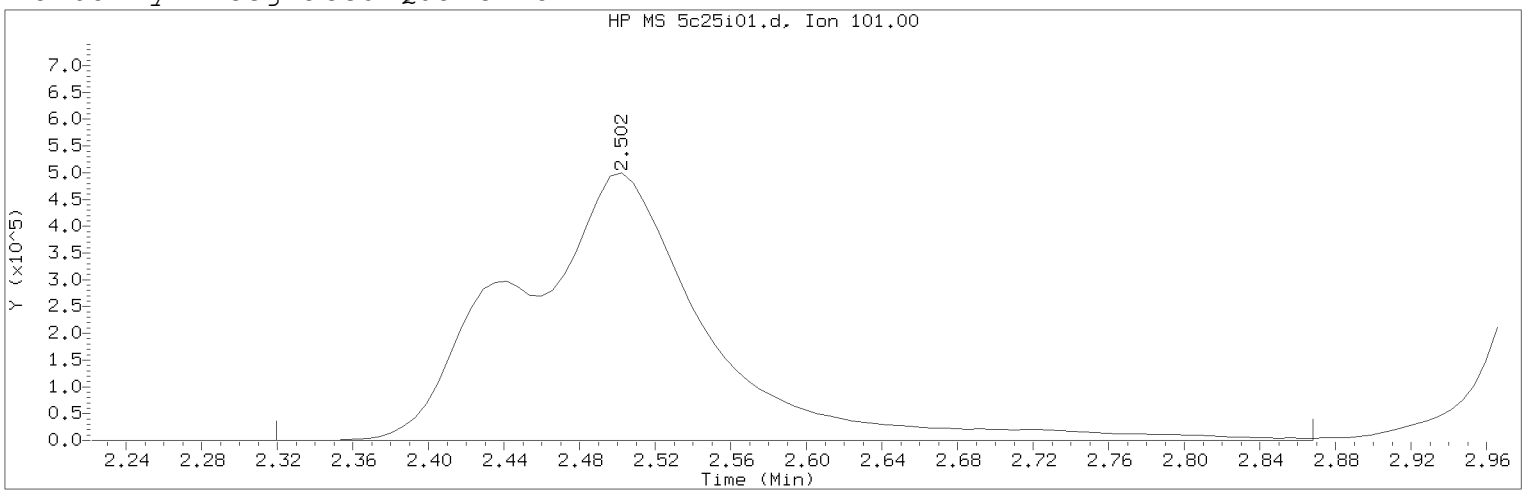
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 85
Retention Time (minutes): 1.905
Quant Ion : 39.00
Area : 1675836
On-column Amount (ng) : 285.7403
Integration start scan : 64 Integration stop scan: 120
Y at integration start : 123 Y at integration end: 343

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user id: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD300 Lab Sample ID: VSTD300

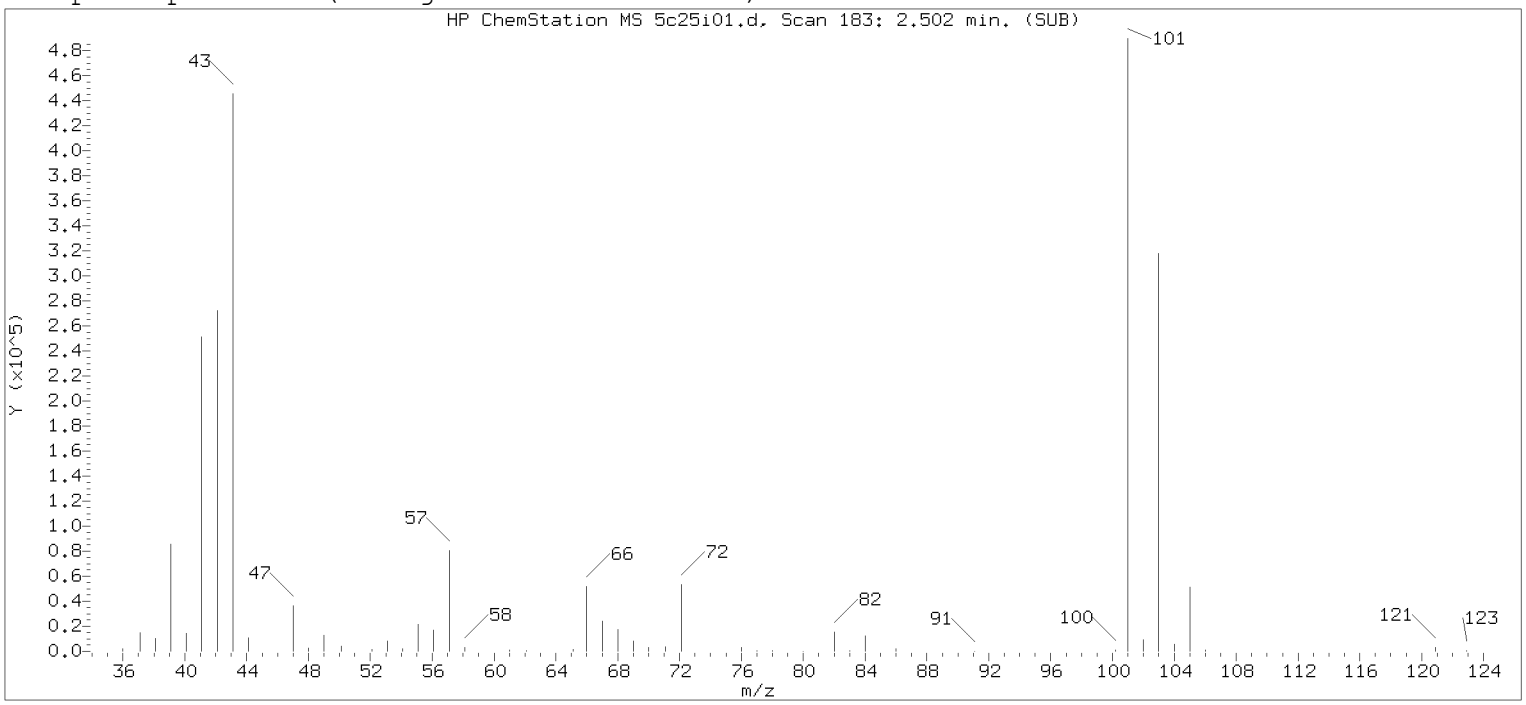
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 183
Retention Time (minutes): 2.502
Quant Ion : 101.00
Area (flag) : 3493138M
On-Column Amount (ng) : 283.7925
Integration start scan : 152 Integration stop scan: 242
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

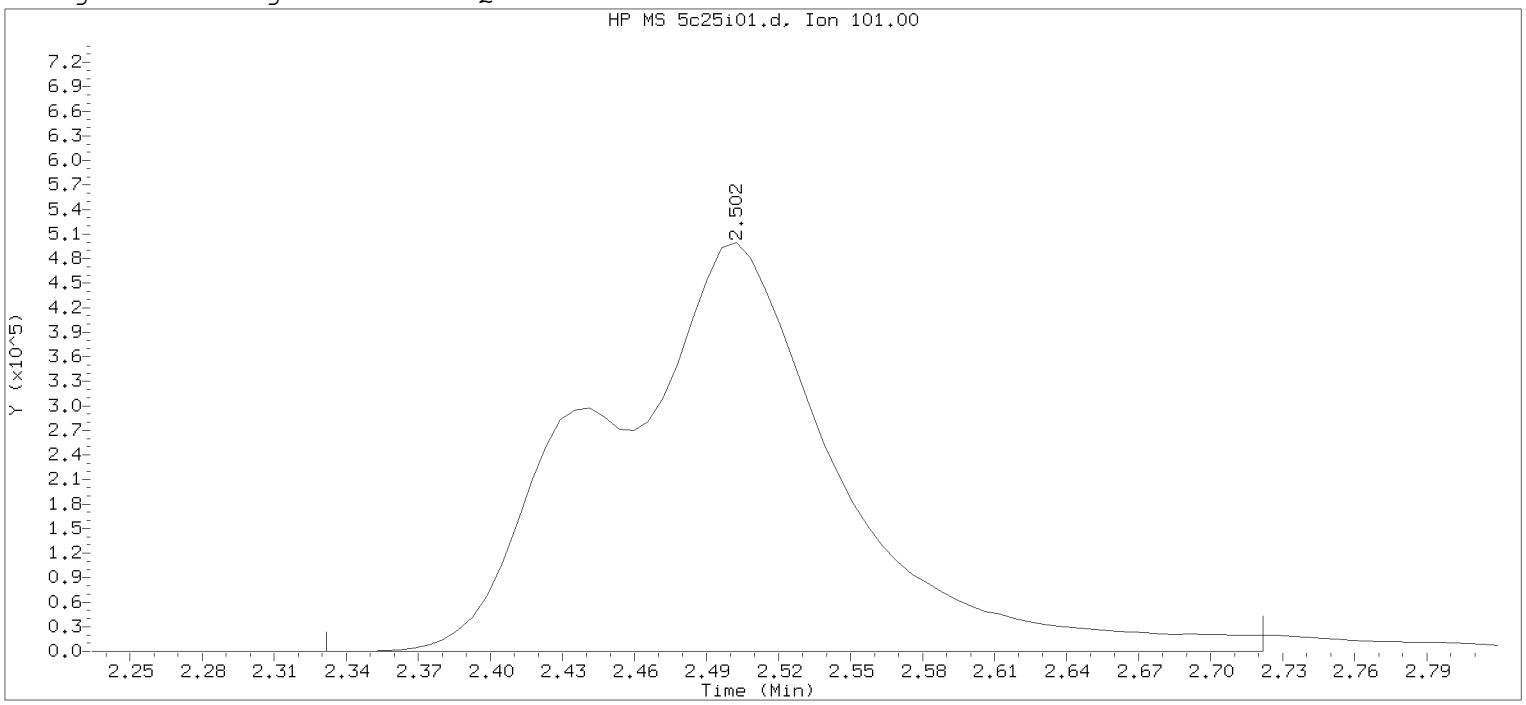
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:29
Date, time and analyst ID of latest file update: 26-Oct-2018 09:29 jkh09052

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 183
Retention Time (minutes): 2.502
Quant Ion : 101.00
Area : 3401726
On-column Amount (ng) : 288.2798
Integration start scan : 154 Integration stop scan: 218
Y at integration start : 0 Y at integration end: 0

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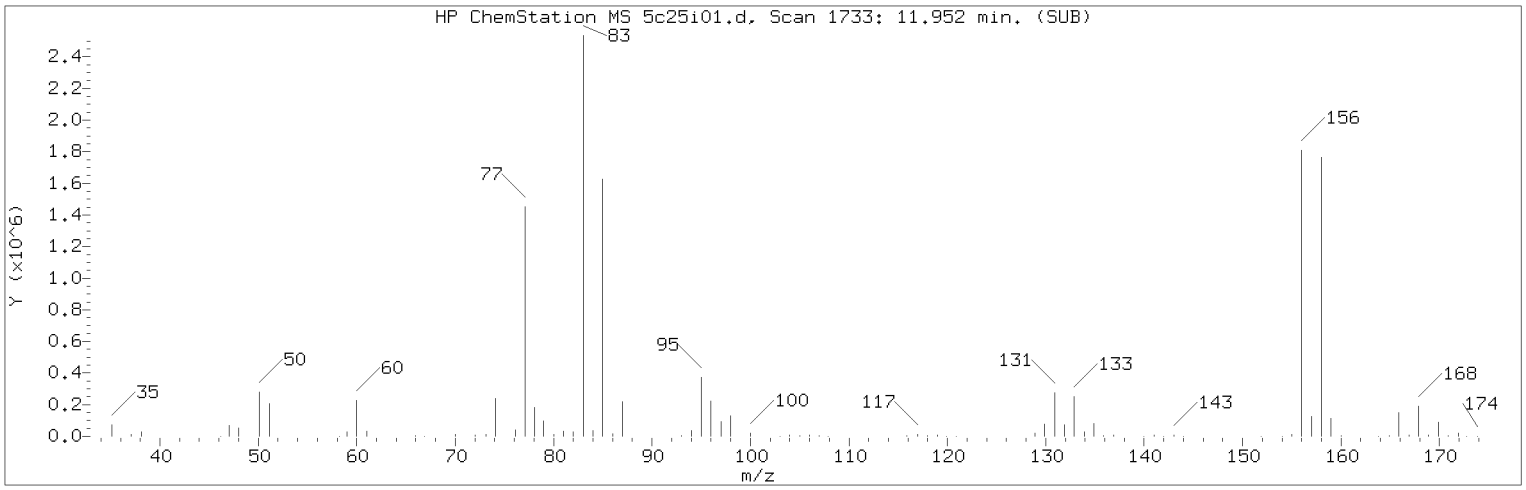
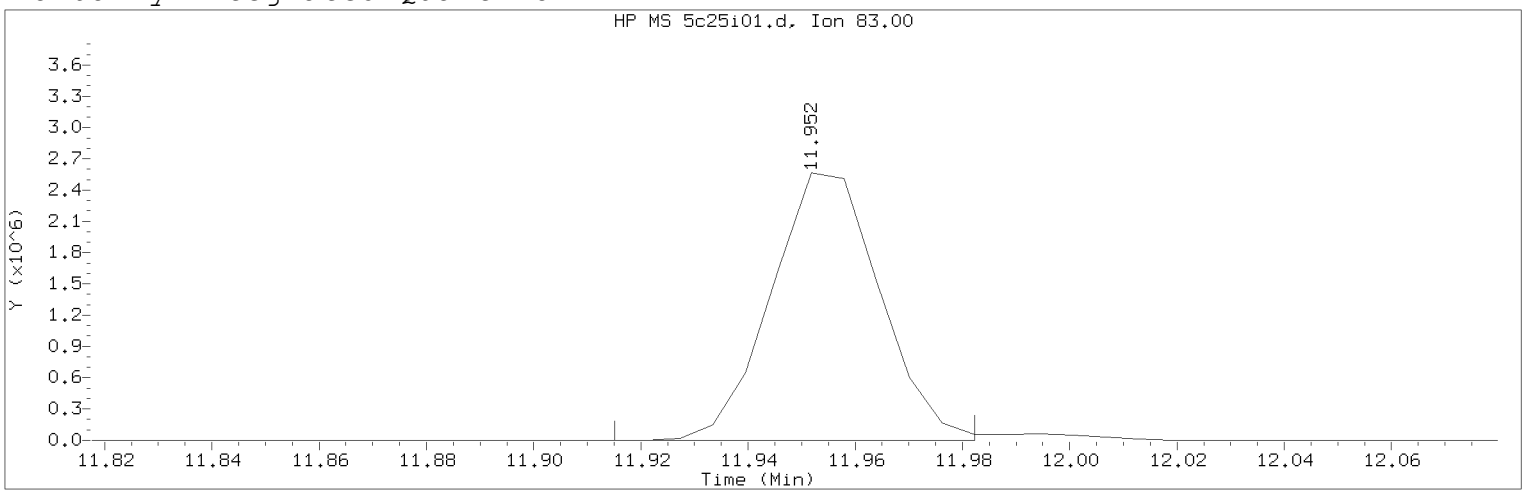
Target 3.5 esignature user id: kas09176

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD300 Lab Sample ID: VSTD300

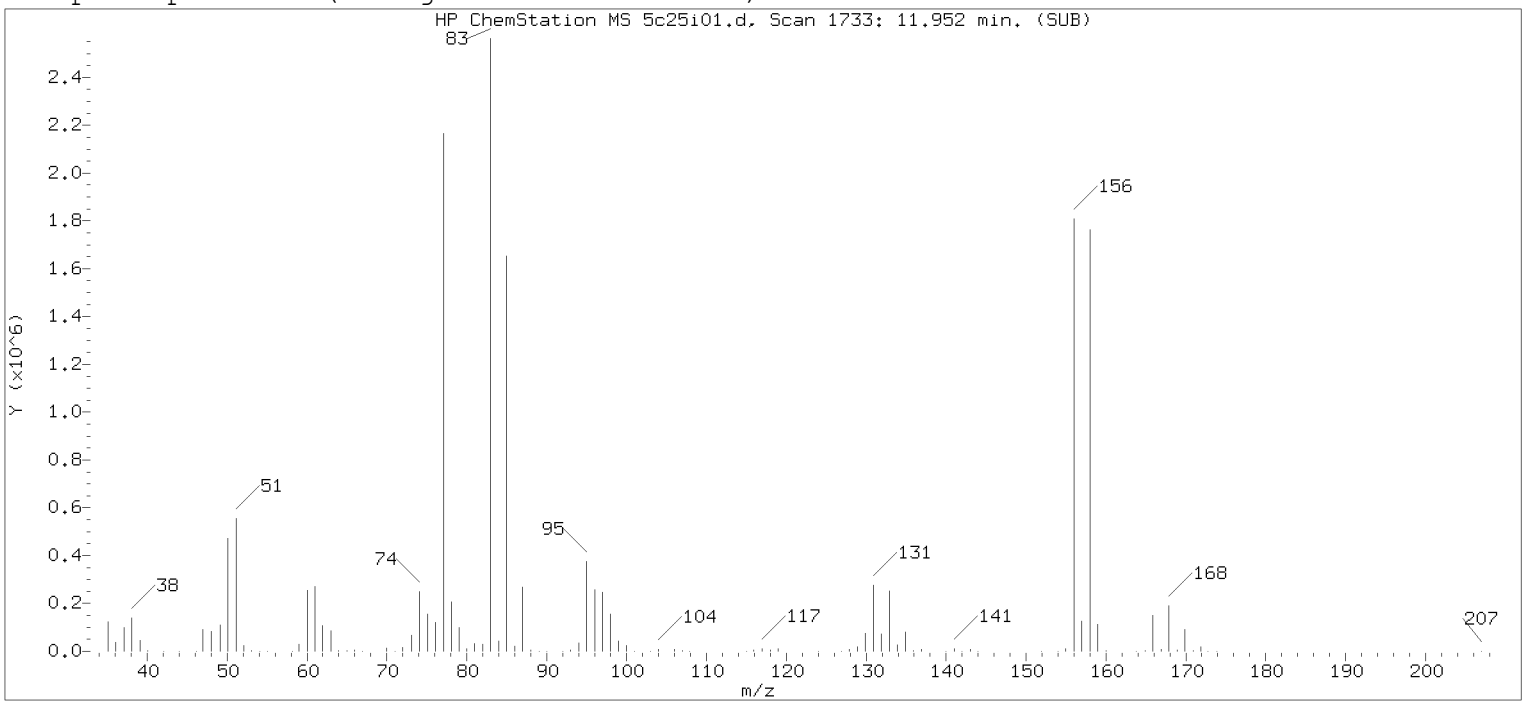
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area (flag) : 3614987M
On-Column Amount (ng) : 321.6230
Integration start scan : 1726 Integration stop scan: 1737
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

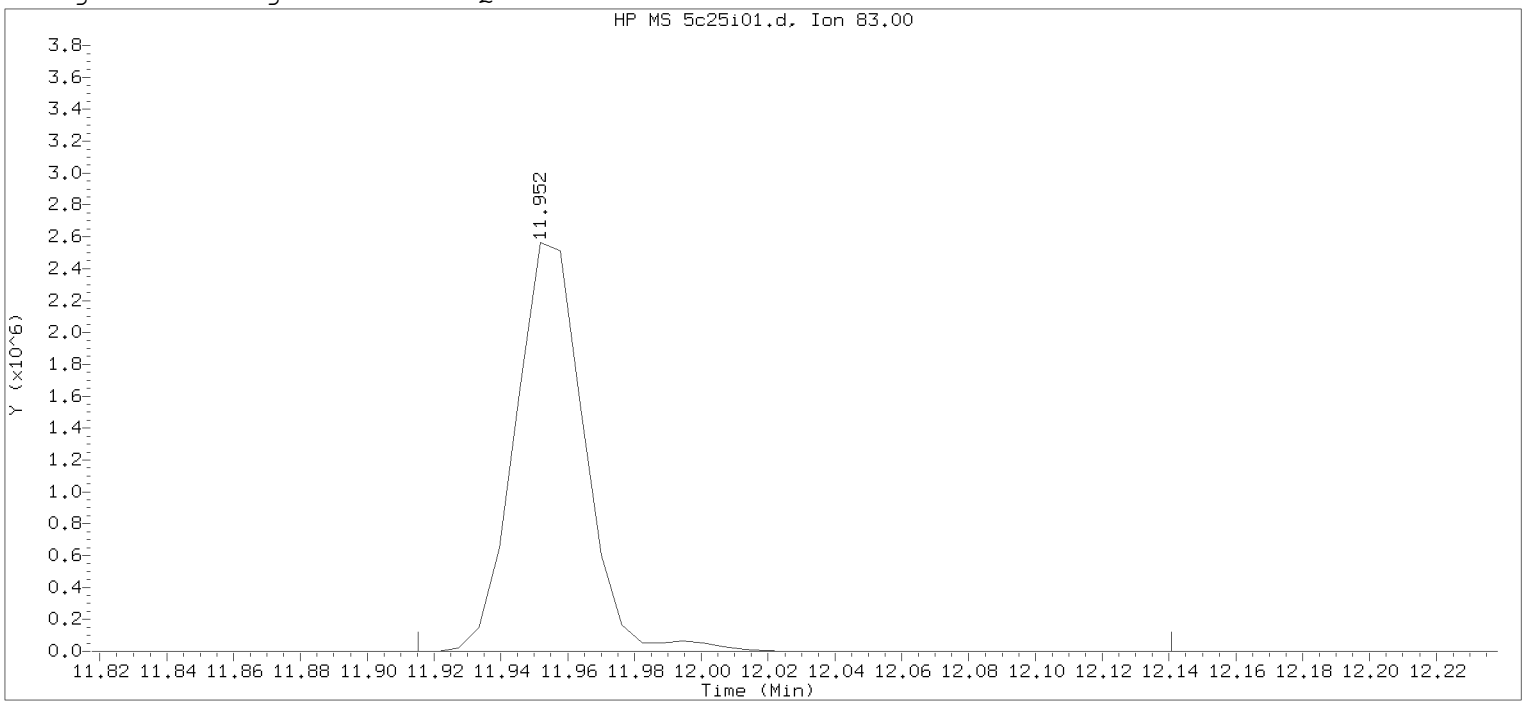
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

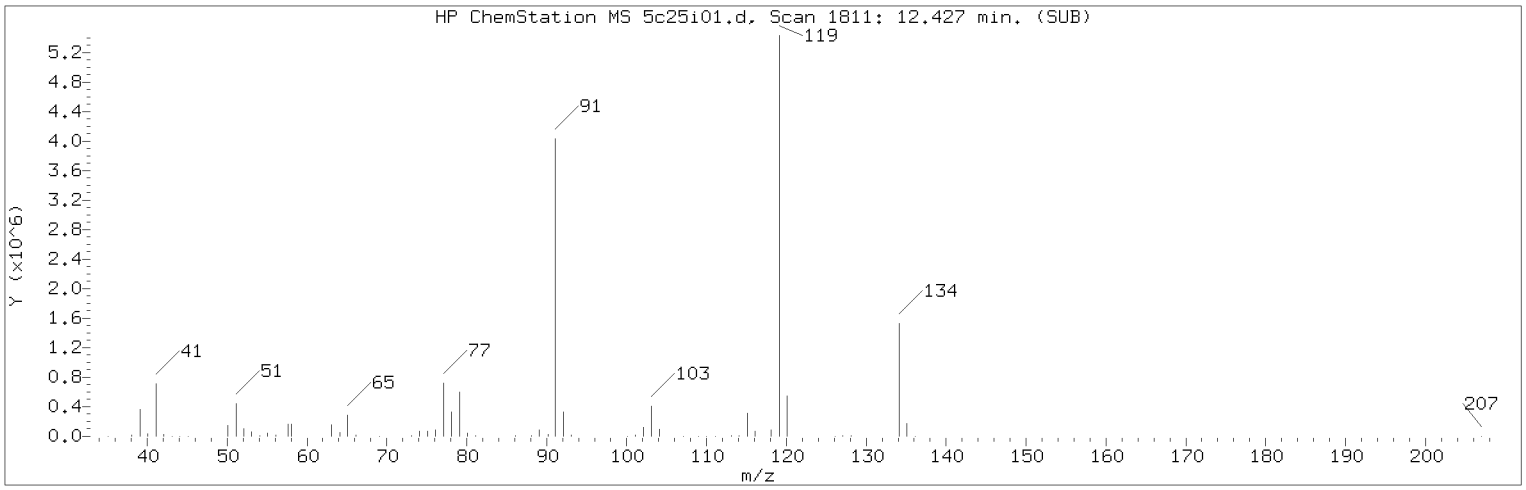
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:29
Date, time and analyst ID of latest file update: 26-Oct-2018 09:29 jkh09052

Sample Name: VSTD300 Lab Sample ID: VSTD300

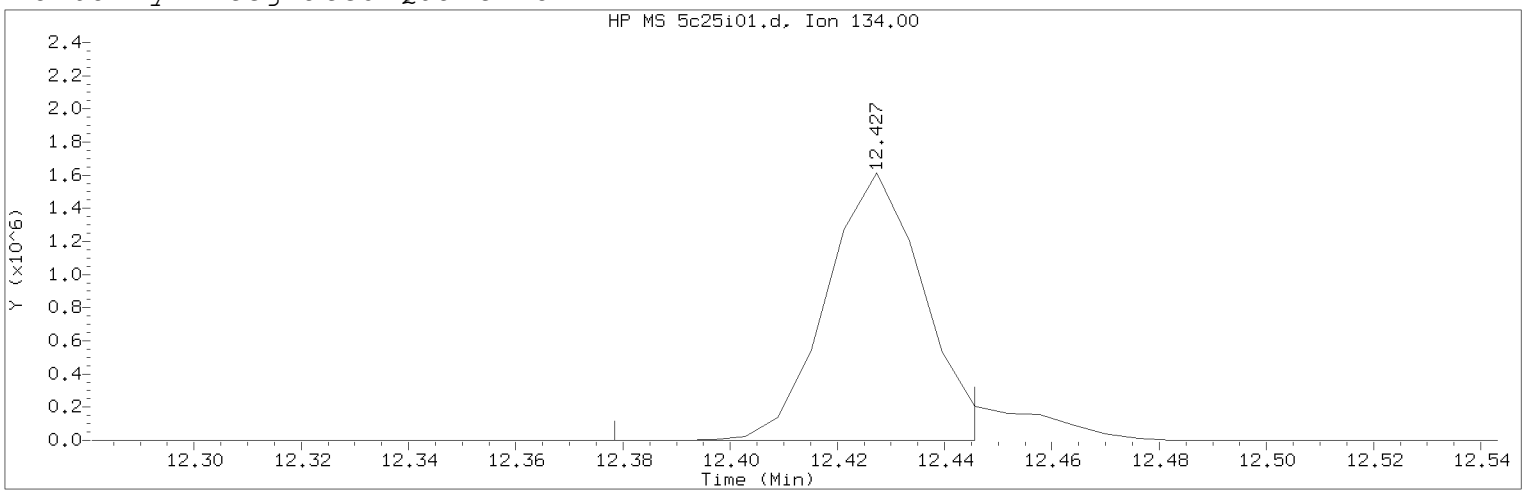
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area : 3692682
On-column Amount (ng) : 309.1961
Integration start scan : 1726 Integration stop scan: 1763
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user kas09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD300 Lab Sample ID: VSTD300

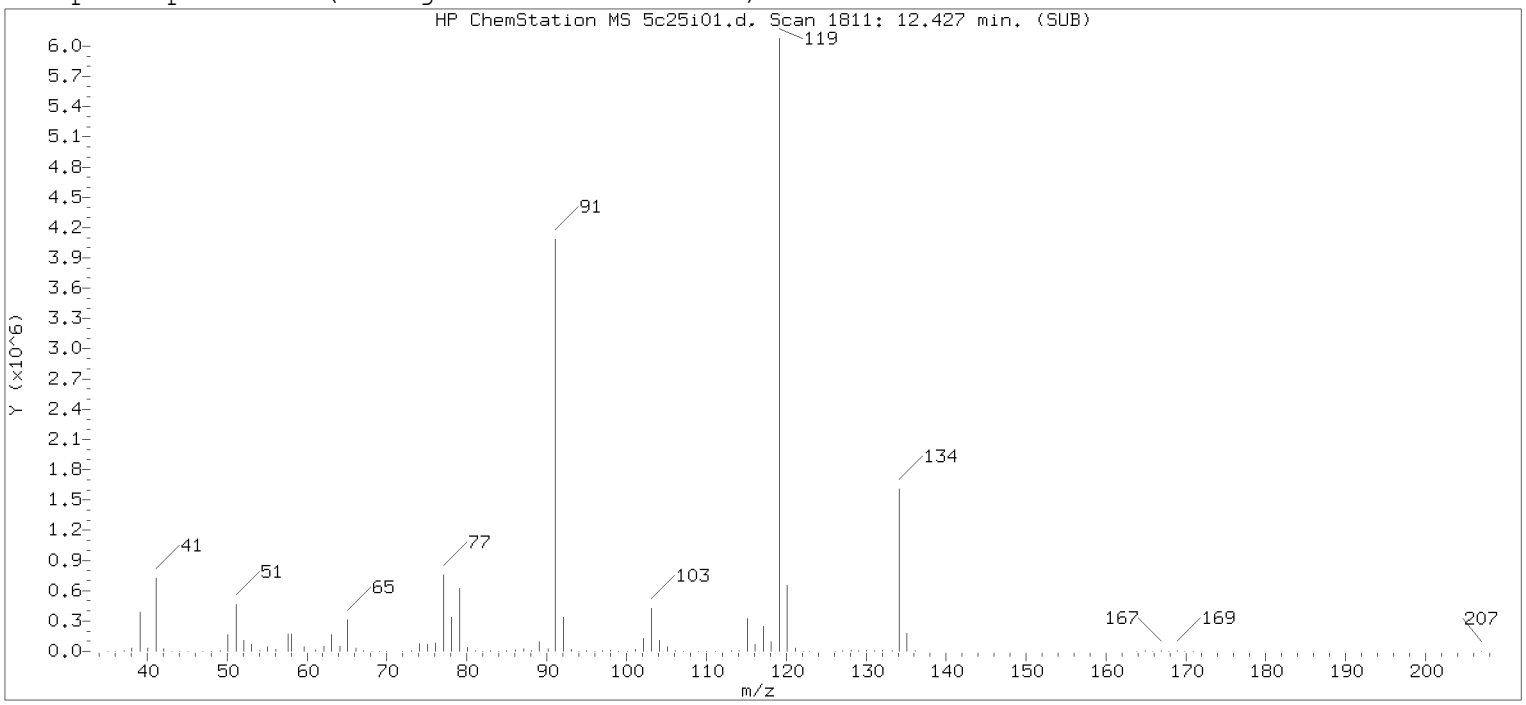
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1811
Retention Time (minutes): 12.427
Quant Ion : 134.00
Area (flag) : 2024896M
On-Column Amount (ng) : 337.7626
Integration start scan : 1802 Integration stop scan: 1813
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

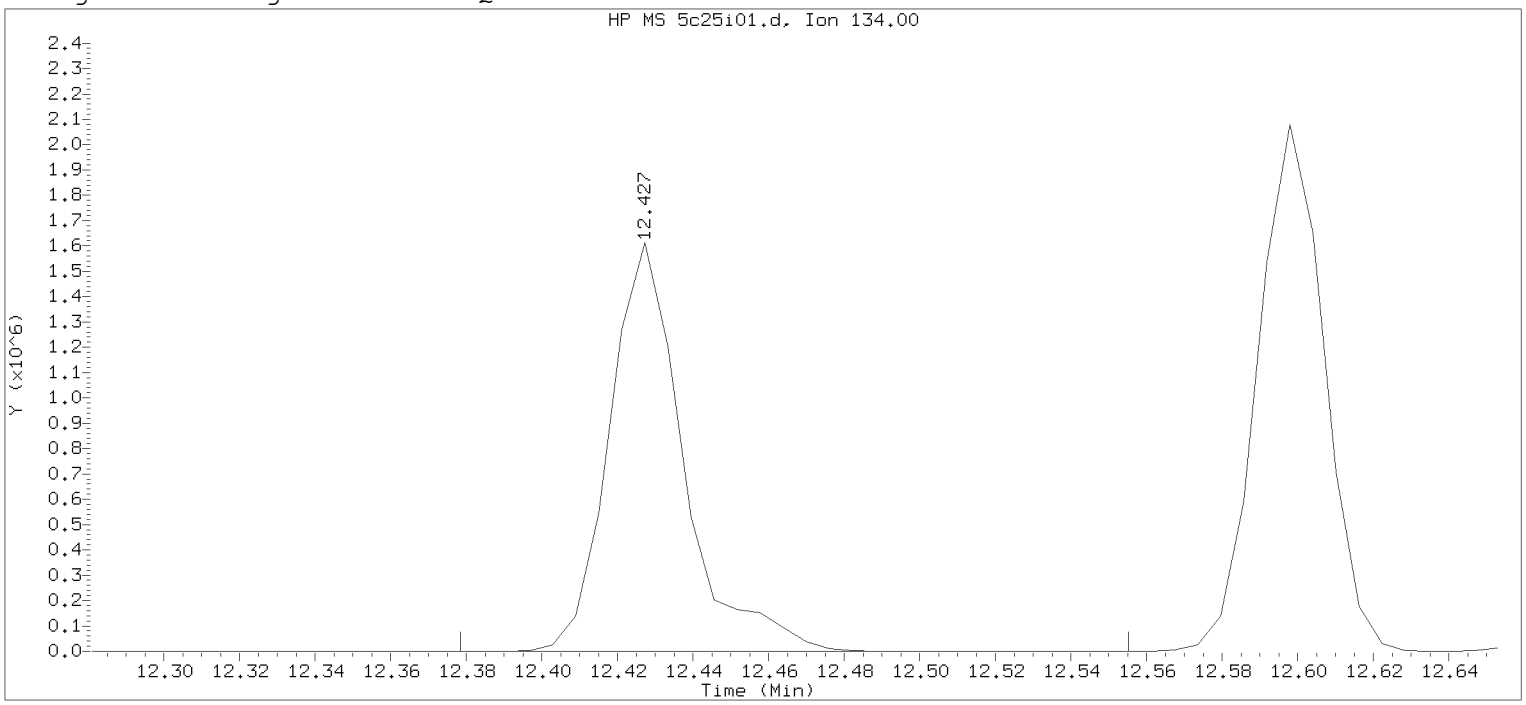
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

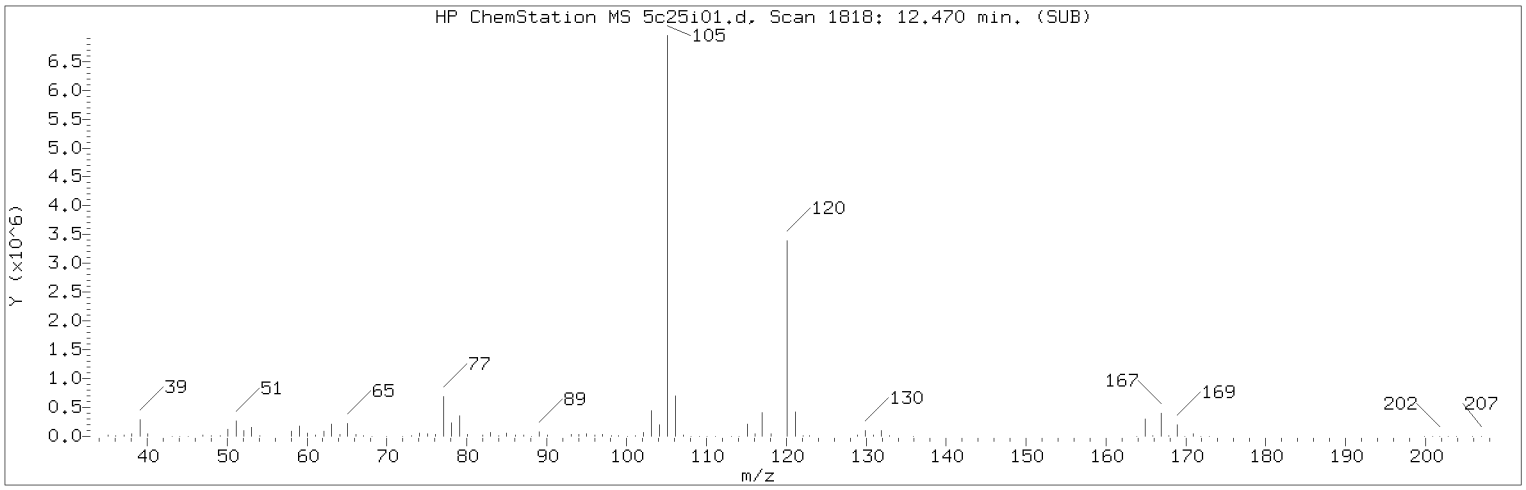
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:29
Date, time and analyst ID of latest file update: 26-Oct-2018 09:29 jkh09052

Sample Name: VSTD300 Lab Sample ID: VSTD300

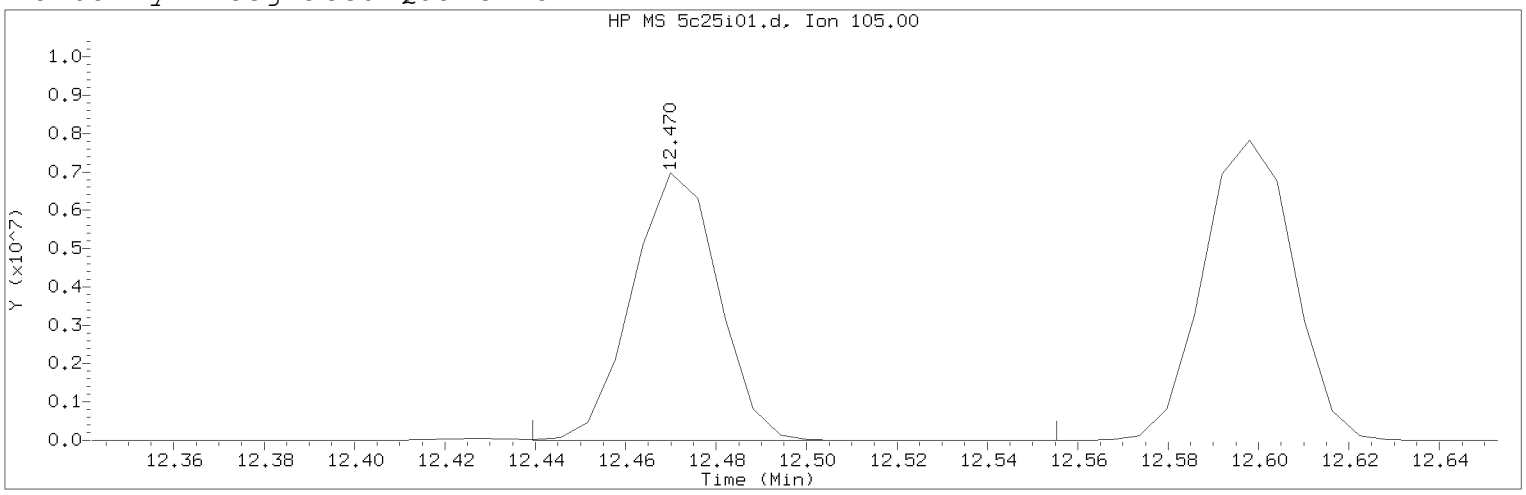
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1811
Retention Time (minutes): 12.427
Quant Ion : 134.00
Area : 2192689
On-column Amount (ng) : 328.1798
Integration start scan : 1802 Integration stop scan: 1831
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kasposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD300 Lab Sample ID: VSTD300

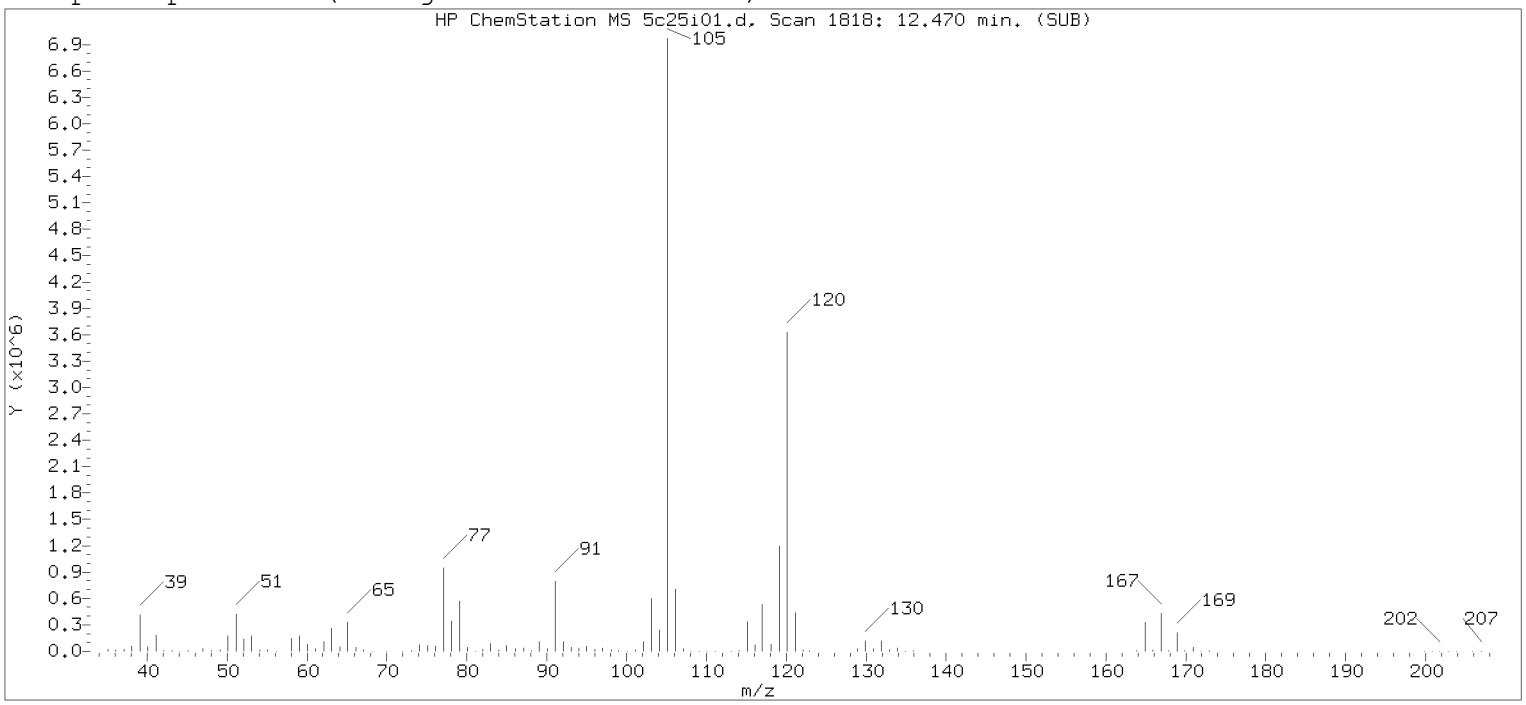
Compound Number : 127
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1818
Retention Time (minutes): 12.470
Quant Ion : 105.00
Area (flag) : 9205510M
On-Column Amount (ng) : 310.5419
Integration start scan : 1812 Integration stop scan: 1831
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

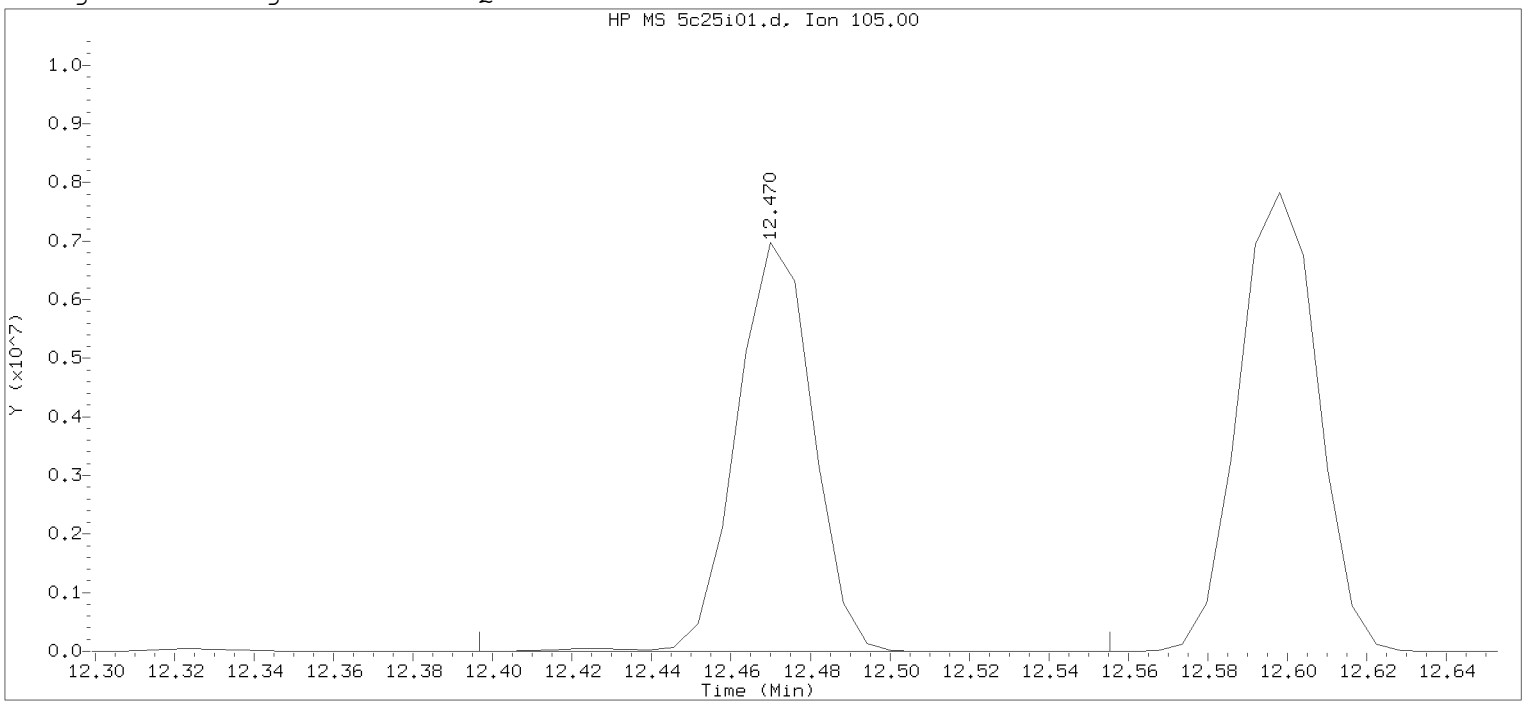
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

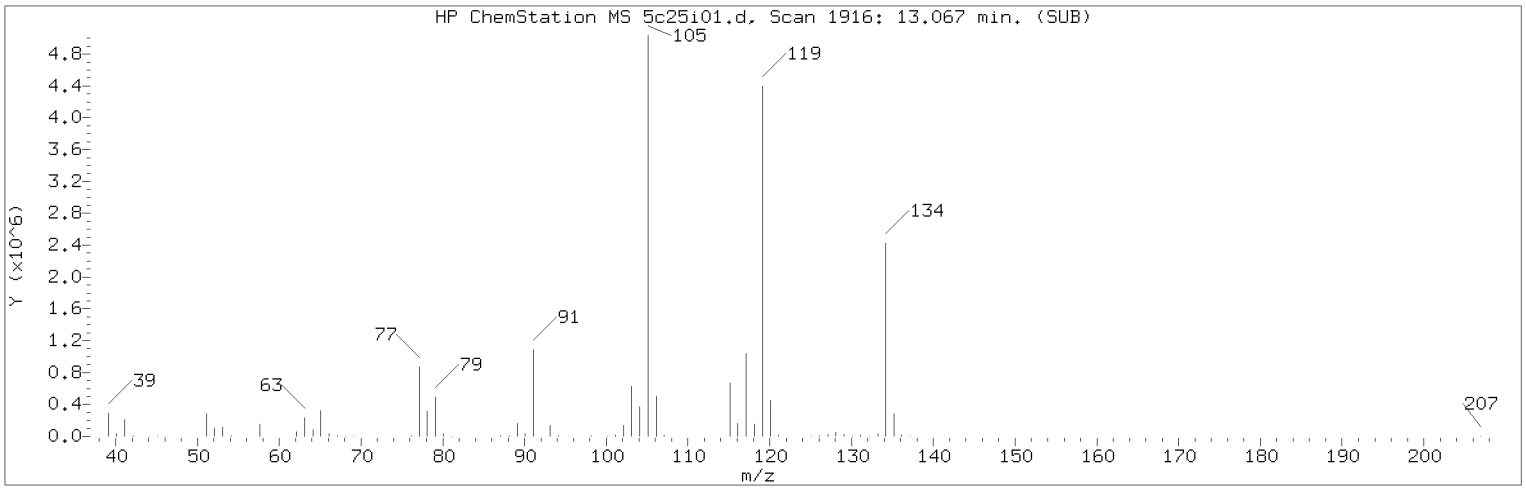
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:29
Date, time and analyst ID of latest file update: 26-Oct-2018 09:29 jkh09052

Sample Name: VSTD300 Lab Sample ID: VSTD300

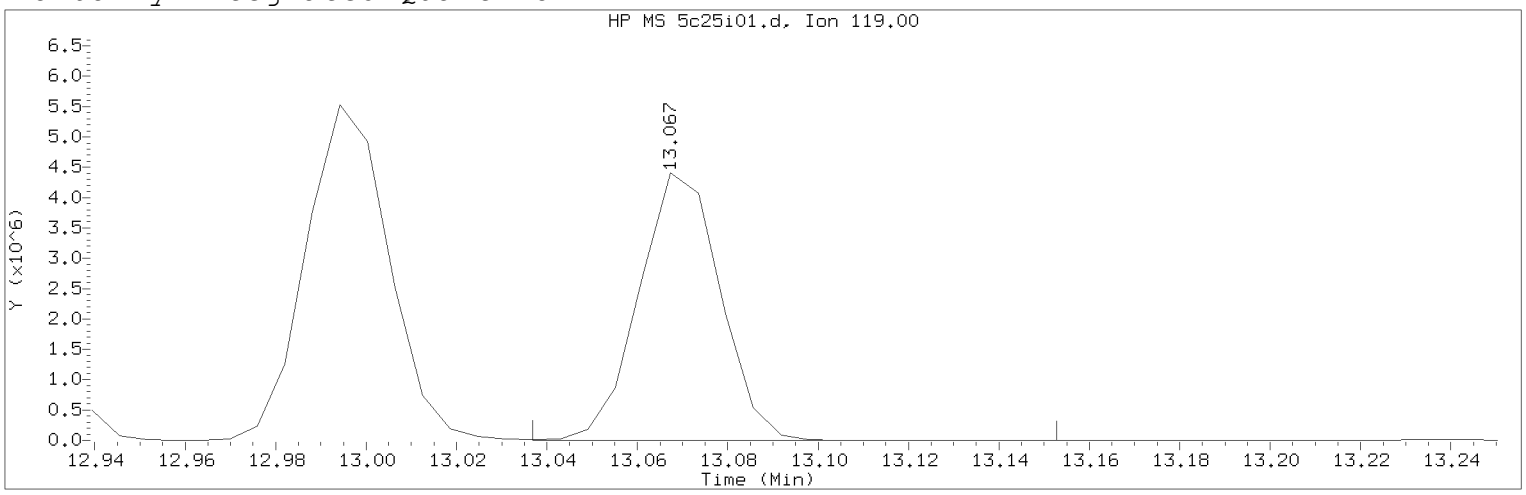
Compound Number : 127
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1818
Retention Time (minutes): 12.470
Quant Ion : 105.00
Area : 9258998
On-column Amount (ng) : 301.6931
Integration start scan : 1805 Integration stop scan: 1831
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user id: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD300 Lab Sample ID: VSTD300

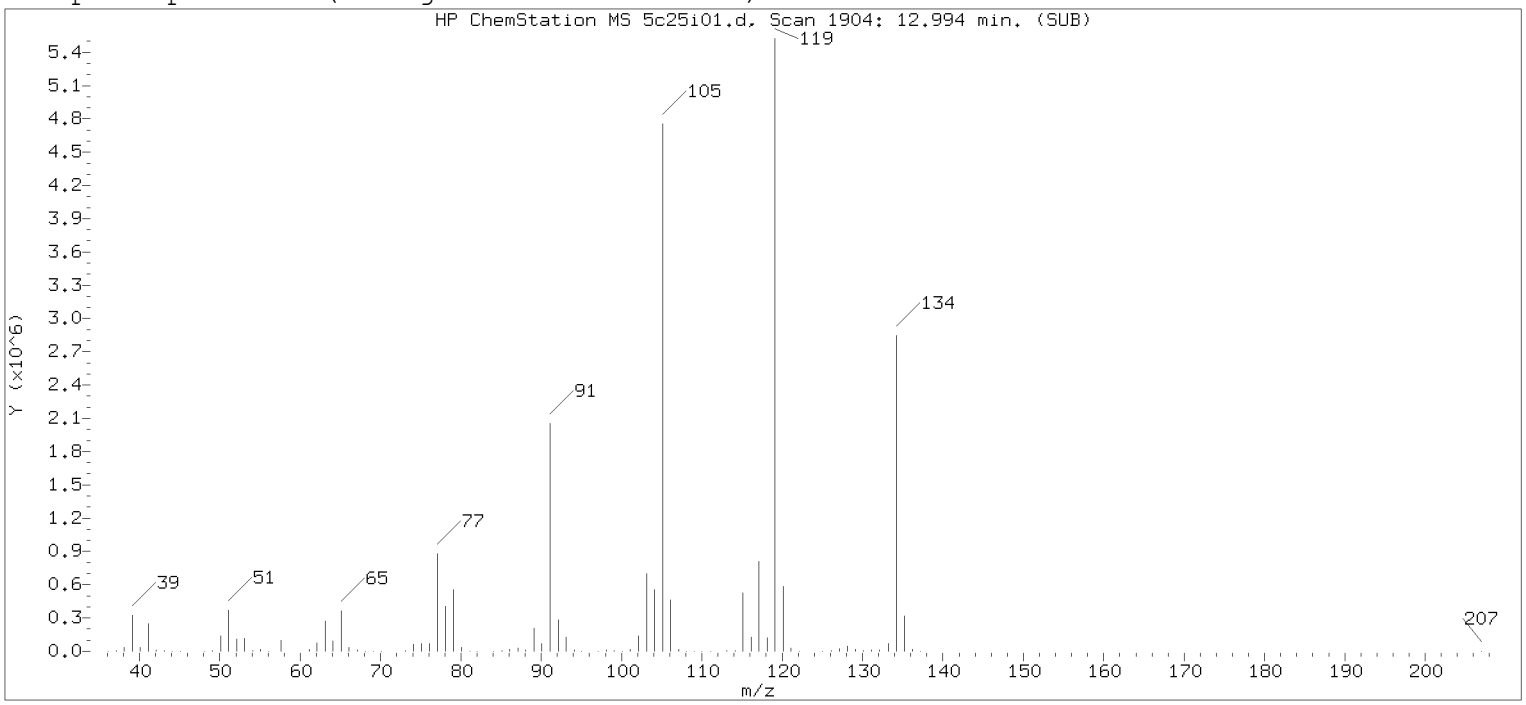
Compound Number : 141
Compound Name : 1,2-Diethylbenzene
Scan Number : 1916
Retention Time (minutes): 13.067
Quant Ion : 119.00
Area (flag) : 5487865M
On-Column Amount (ng) : 339.8809
Integration start scan : 1910 Integration stop scan: 1929
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

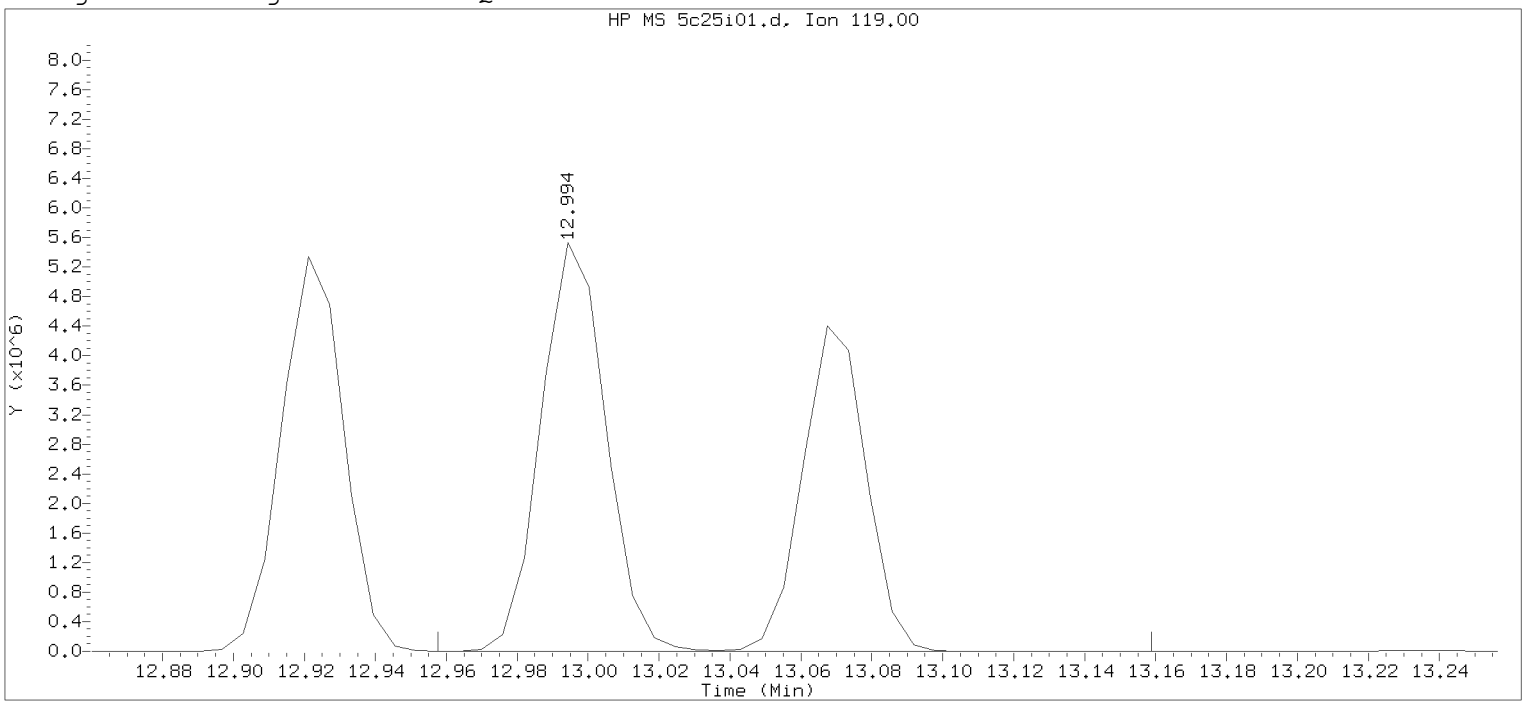
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



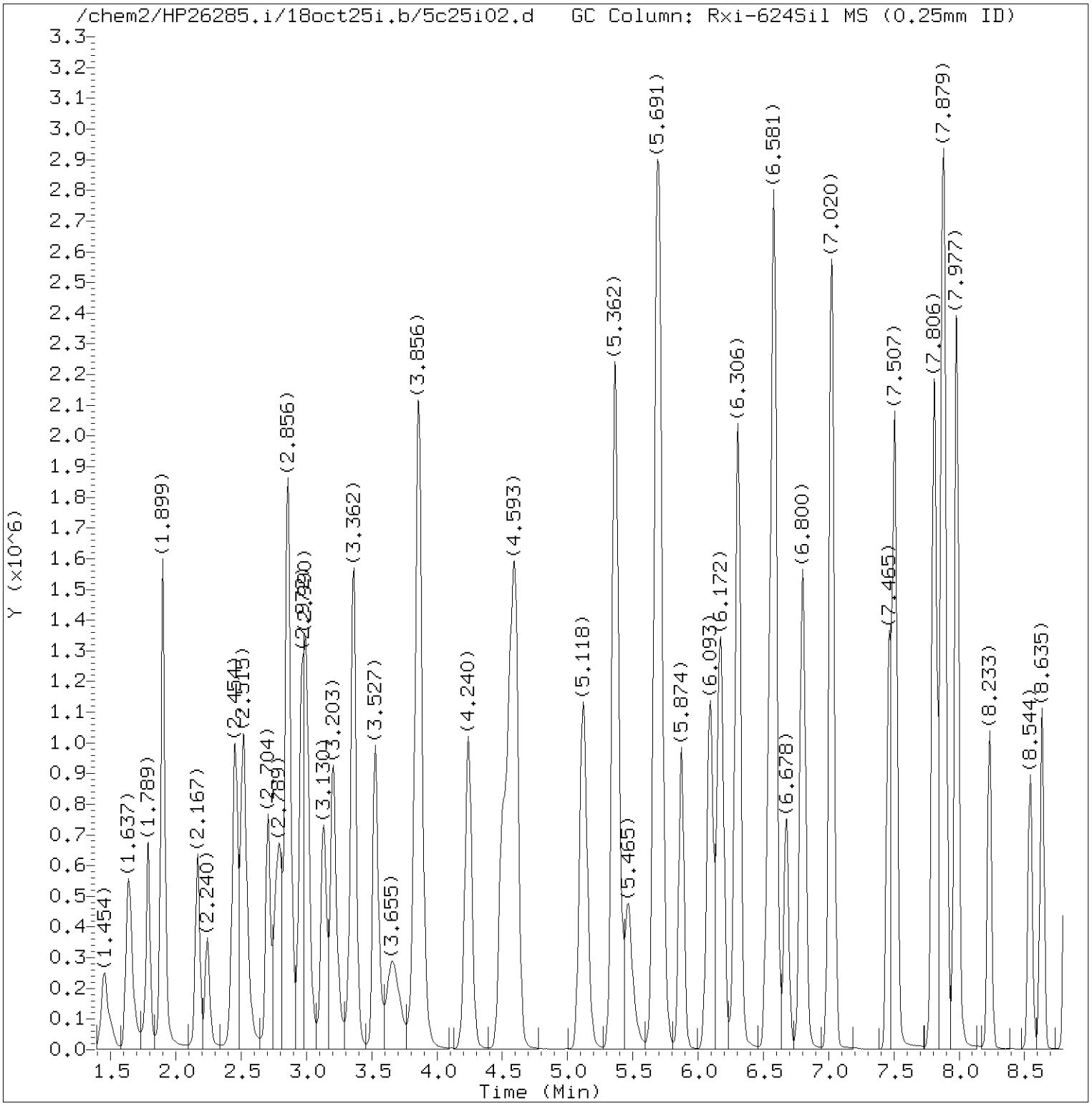
Data File: /chem2/HP26285.i/18oct25i.b/5c25i01.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 21:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:29
Date, time and analyst ID of latest file update: 26-Oct-2018 09:29 jkh09052

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compound Number : 141
Compound Name : 1,2-Diethylbenzene
Scan Number : 1904
Retention Time (minutes): 12.994
Quant Ion : 119.00
Area : 12540411
On-column Amount (ng) : 426.4933
Integration start scan : 1897 Integration stop scan: 1930
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user id: kevin.sposito



Total Ion Chromatogram (TIC)

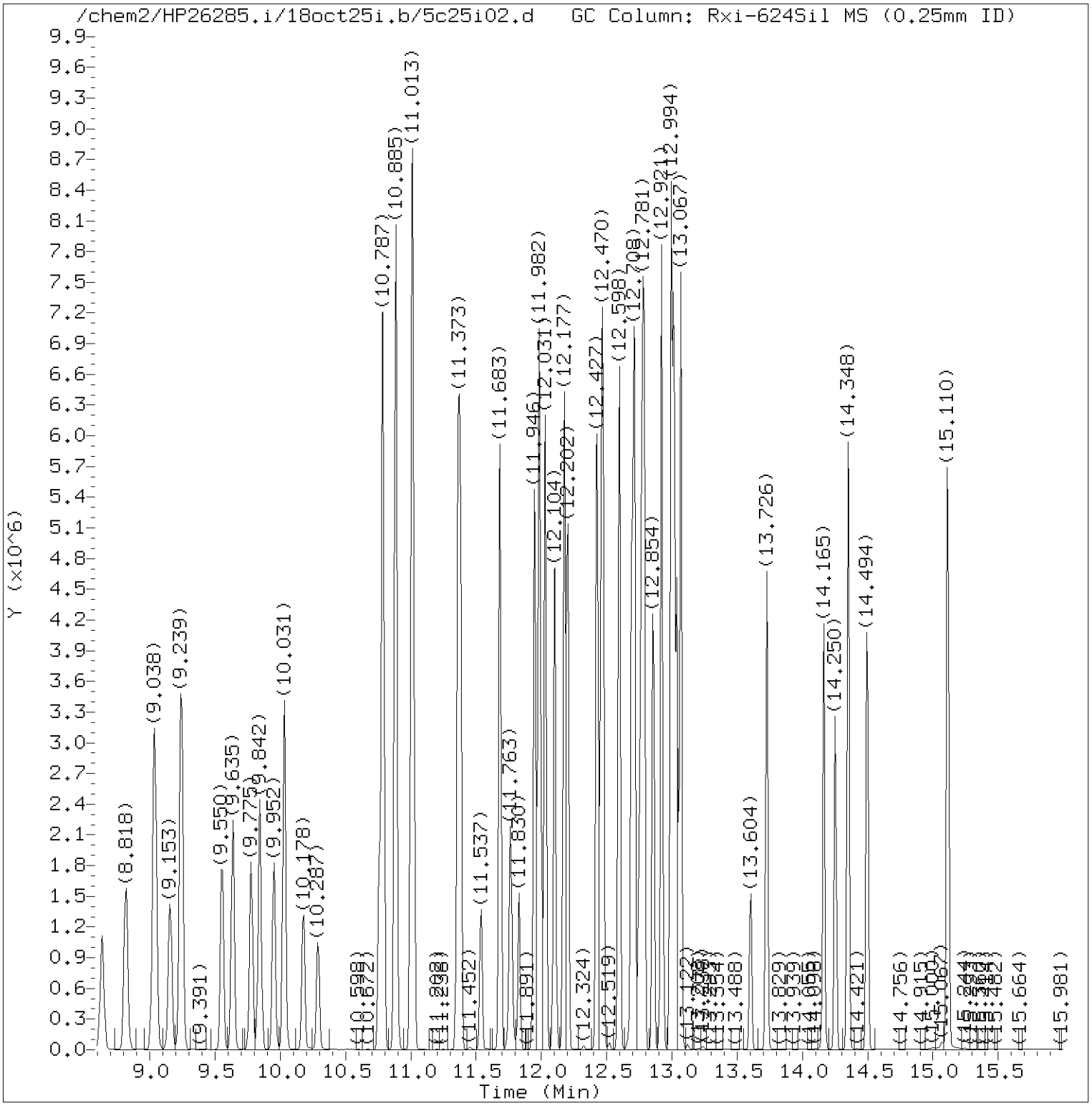
Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.637	85	1186250	99.684
4) Chloromethane	(2)	1.789	50	930309	96.542
6) Vinyl Chloride	(2)	1.893	62	893826	99.252
5) 1,3-Butadiene	(2)	1.899	39	592654M	91.596
8) Bromomethane	(2)	2.167	94	595347	88.944
9) Chloroethane	(2)	2.240	64	424377	94.803
10) Dichlorofluoromethane	(2)	2.454	67	1149492	96.859
12) Trichlorofluoromethane	(2)	2.502	101	1196668M	99.631
11) n-Pentane	(2)	2.521	43	752453	98.080
14) Ethyl ether	(2)	2.704	59	579476	100.232
15) Freon 123a	(2)	2.789	67	798756	97.619
16) Acrolein	(1)	2.856	56	2679264	978.820
17) 1,1-Dichloroethene	(2)	2.960	96	573743	101.665
17) 1,1-Dichloroethene	(2)	2.960	63	295455	101.007
19) Freon 113	(2)	2.996	101	578604	102.881
18) Acetone	(1)	3.002	58	271615	191.453
22) Methyl Iodide	(2)	3.130	142	1121477	101.938
21) 2-Propanol	(1)	3.155	45	629143	540.893
23) Carbon Disulfide	(2)	3.203	76	2004669	104.252
27) Methyl Acetate	(2)	3.344	43	1021168	92.783
25) Allyl Chloride	(2)	3.362	41	1217336	99.843
28) Methylene Chloride	(2)	3.527	84	649131	98.203
29)*t-Butyl alcohol-d10	(1)	3.557	65	389704	250.000
30) t-Butyl alcohol	(1)	3.661	59	1044325	509.558
31) Acrylonitrile	(2)	3.825	53	518269	100.303
32) trans-1,2-Dichloroethene	(2)	3.862	96	655349	102.050
33) Methyl Tertiary Butyl Ether	(2)	3.862	73	2044062	100.803
34) n-Hexane	(2)	4.240	57	998071	107.153
36) 1,1-Dichloroethane	(2)	4.496	63	1210801	100.739
38) di-Isopropyl ether	(2)	4.563	45	2321366	99.499
39) 2-Chloro-1,3-butadiene	(2)	4.606	53	1111068	102.413
40) Ethyl t-butyl ether	(2)	5.118	59	2100246	100.098
42) cis-1,2-Dichloroethene	(2)	5.362	96	730069	102.015
44) 2-Butanone	(2)	5.362	43	1524262	195.255
45) 2,2-Dichloropropane	(2)	5.374	77	970649	101.900
47) Propionitrile	(1)	5.465	54	1071410	494.652
48) Methacrylonitrile	(2)	5.679	67	1253129	255.144
49) Bromochloromethane	(2)	5.709	128	381091	102.879

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.715	71	397744	201.828
51) Chloroform	(2)	5.874	83	1147925	101.049
53) 1,1,1-Trichloroethane	(2)	6.087	97	985513	101.144
52)$Dibromofluoromethane	(2)	6.093	113	292931	49.958
52)$Dibromofluoromethane	(2)	6.099	111	298593	49.807
43) 1,2-Dichloroethene (Total)	(2)		96	1385418	204.064
54) Cyclohexane	(2)	6.172	56	1195385	102.843
54) Cyclohexane	(2)	6.172	84	960677	100.051
54) Cyclohexane	(2)	6.172	69	364143	105.206
56) Carbon Tetrachloride	(2)	6.294	117	892227	104.201
55) 1,1-Dichloropropene	(2)	6.306	75	934394	99.678
58) Isobutyl Alcohol	(1)	6.544	41	837485	1261.896
57)$1,2-Dichloroethane-d4	(2)	6.569	102	70334	50.243
57)$1,2-Dichloroethane-d4	(2)	6.569	65	350636	49.233
57)$1,2-Dichloroethane-d4	(2)	6.569	104	44935	50.409
60) Benzene	(2)	6.587	78	2829035	101.018
61) 1,2-Dichloroethane	(2)	6.678	62	825149	96.037
61) 1,2-Dichloroethane	(2)	6.678	98	73295	98.790
65) t-Amyl methyl ether	(2)	6.800	73	1992733	101.147
66)*Fluorobenzene	(2)	7.014	96	1205373	50.000
67) n-Heptane	(2)	7.026	43	1180832	110.302
69) n-Butanol	(1)	7.465	56	1479514	2776.384
71) Trichloroethene	(2)	7.507	95	712036	101.656
73) Methylcyclohexane	(2)	7.806	83	1290006	106.225
73) Methylcyclohexane	(2)	7.812	98	544474	105.500
74) 1,2-Dichloropropane	(2)	7.867	63	715306	102.180
75) Dibromomethane	(2)	7.977	93	439304	103.149
77) Methyl Methacrylate	(2)	7.983	69	746259	105.707
79) Bromodichloromethane	(2)	8.233	83	840373	105.875
80) 2-Nitropropane	(2)	8.544	41	746906	210.126
81) 2-Chloroethyl Vinyl Ether	(2)	8.635	63	598599M	106.300
82) cis-1,3-Dichloropropene	(2)	8.818	75	1082491	106.058
83) 4-Methyl-2-pentanone	(2)	9.038	43	2841449	204.310
84)$Toluene-d8	(3)	9.153	98	1141924	49.670
84)$Toluene-d8	(3)	9.153	100	741019	49.804
89) Toluene	(3)	9.239	92	1750803	101.508
90) trans-1,3-Dichloropropene	(3)	9.550	75	999143	108.462
92) Ethyl Methacrylate	(3)	9.635	69	1188795	107.631

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) 1,1,2-Trichloroethane	(3)	9.775	97	607286	103.370
94) Tetrachloroethene	(3)	9.842	166	752730	99.359
95) 1,3-Dichloropropane	(3)	9.952	76	1000632	100.757
97) 2-Hexanone	(3)	10.031	43	2283231	205.197
91) 1,3-Dichloropropene (total)	(3)		100	2081634	214.520
98) Dibromochloromethane	(3)	10.178	129	671320	111.606
100) 1,2-Dibromoethane	(3)	10.287	107	663732	104.129
101)*Chlorobenzene-d5	(3)	10.757	117	852290	50.000
102) 1-Chlorohexane	(3)	10.781	91	1012849	103.368
103) Chlorobenzene	(3)	10.787	112	1940686	103.865
104) 1,1,1,2-Tetrachloroethane	(3)	10.879	131	682720	110.942
105) Ethylbenzene	(3)	10.885	91	3488939	105.225
107) m+p-Xylene	(3)	11.013	106	2741760	214.070
108) o-Xylene	(3)	11.360	106	1294117	105.567
110) Styrene	(3)	11.379	104	2201706	110.212
111) Bromoform	(3)	11.537	173	521364	100.801
112) Isopropylbenzene	(3)	11.683	105	3309555	105.918
109) Xylene (Total)	(3)		106	4035877	319.637
115)$4-Bromofluorobenzene	(3)	11.830	95	415155	50.237
115)$4-Bromofluorobenzene	(3)	11.830	174	351983	50.166
116) Bromobenzene	(4)	11.946	156	828778	103.060
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	1098100M	104.873
119) trans-1,4-Dichloro-2-butene	(4)	11.982	53	962187	267.565
118) 1,2,3-Trichloropropane	(4)	11.994	110	320956	103.063
120) n-Propylbenzene	(4)	12.031	91	3942364	102.909
121) 2-Chlorotoluene	(4)	12.104	126	775020	100.276
123) 1,3,5-Trimethylbenzene	(4)	12.177	105	2835741	105.469
122) 4-Chlorotoluene	(4)	12.202	126	811830	100.953
125) tert-Butylbenzene	(4)	12.427	134	583796M	104.532
126) Pentachloroethane	(4)	12.452	167	556107	116.651
127) 1,2,4-Trimethylbenzene	(4)	12.470	105	2929770M	106.093
128) sec-Butylbenzene	(4)	12.598	105	3643136	108.560
130) 1,3-Dichlorobenzene	(4)	12.689	146	1569044	103.142
131) p-Isopropyltoluene	(4)	12.714	119	3210357	110.151
132)*1,4-Dichlorobenzene-d4	(4)	12.750	152	467781	50.000
134) 1,4-Dichlorobenzene	(4)	12.769	146	1621174	103.743
135) 1,2,3-Trimethylbenzene	(4)	12.787	105	3137578	109.077
136) Benzyl Chloride	(4)	12.854	91	2343788	115.313

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Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

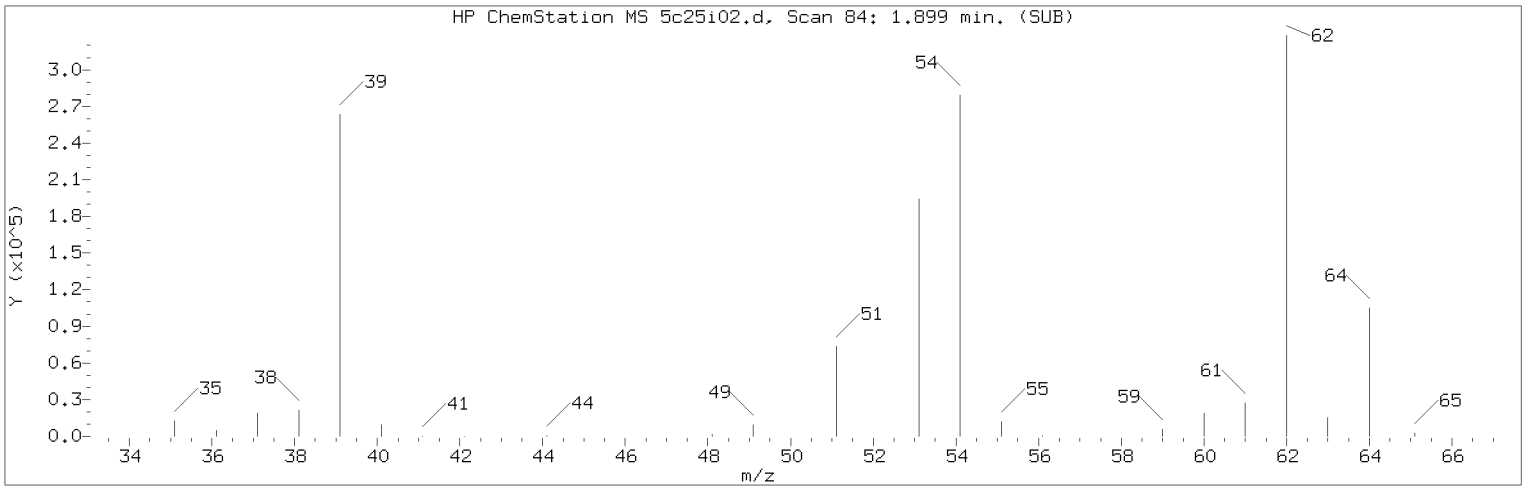
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD100 Lab Sample ID: VSTD100

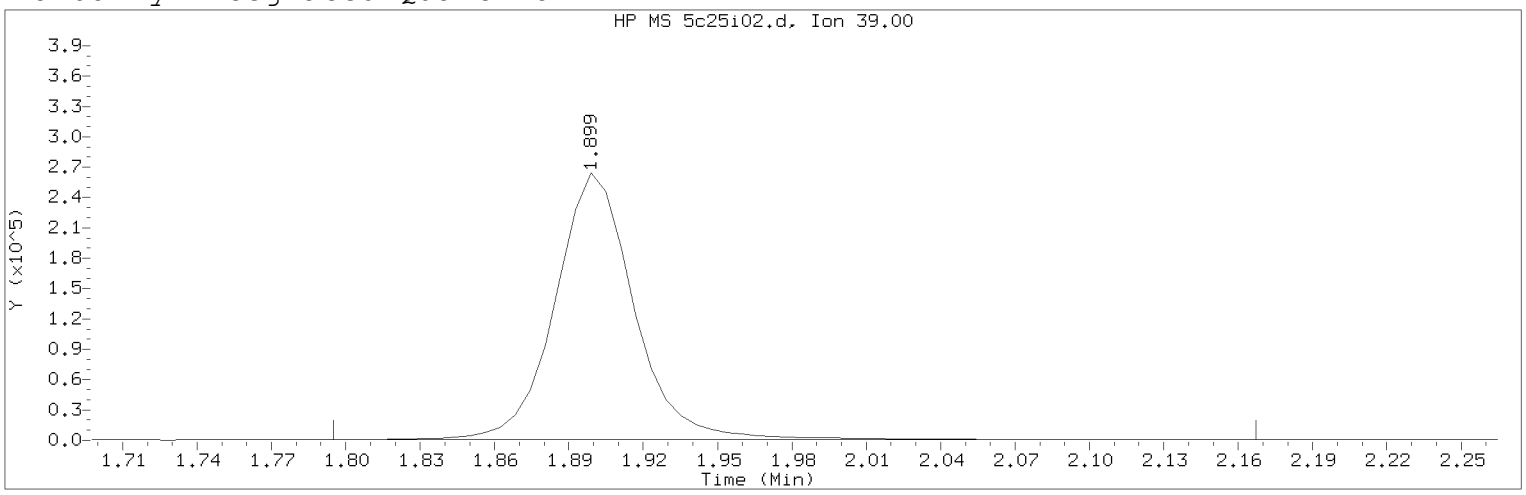
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137) 1,3-Diethylbenzene	(4)	12.921	119	2013991	112.098
138) 1,4-Diethylbenzene	(4)	12.994	119	2184568	113.919
140) n-Butylbenzene	(4)	13.012	92	1685359	112.056
139) 1,2-Dichlorobenzene	(4)	13.037	146	1493036	102.342
141) 1,2-Diethylbenzene	(4)	13.067	119	1666277	110.777
142) Diethylbenzene (total)	(4)		100	5864836	336.794
143) 1,2-Dibromo-3-chloropropane	(4)	13.604	75	284749	105.783
145) 1,3,5-Trichlorobenzene	(4)	13.726	180	1133749	106.199
147) 1,2,4-Trichlorobenzene	(4)	14.165	180	1016261	105.843
148) Hexachlorobutadiene	(4)	14.250	225	487682	107.820
149) Naphthalene	(4)	14.348	128	3592297	105.468
150) 1,2,3-Trichlorobenzene	(4)	14.494	180	977015	104.441
151) 2-Methylnaphthalene	(4)	15.110	142	2328131	115.523

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD100 Lab Sample ID: VSTD100

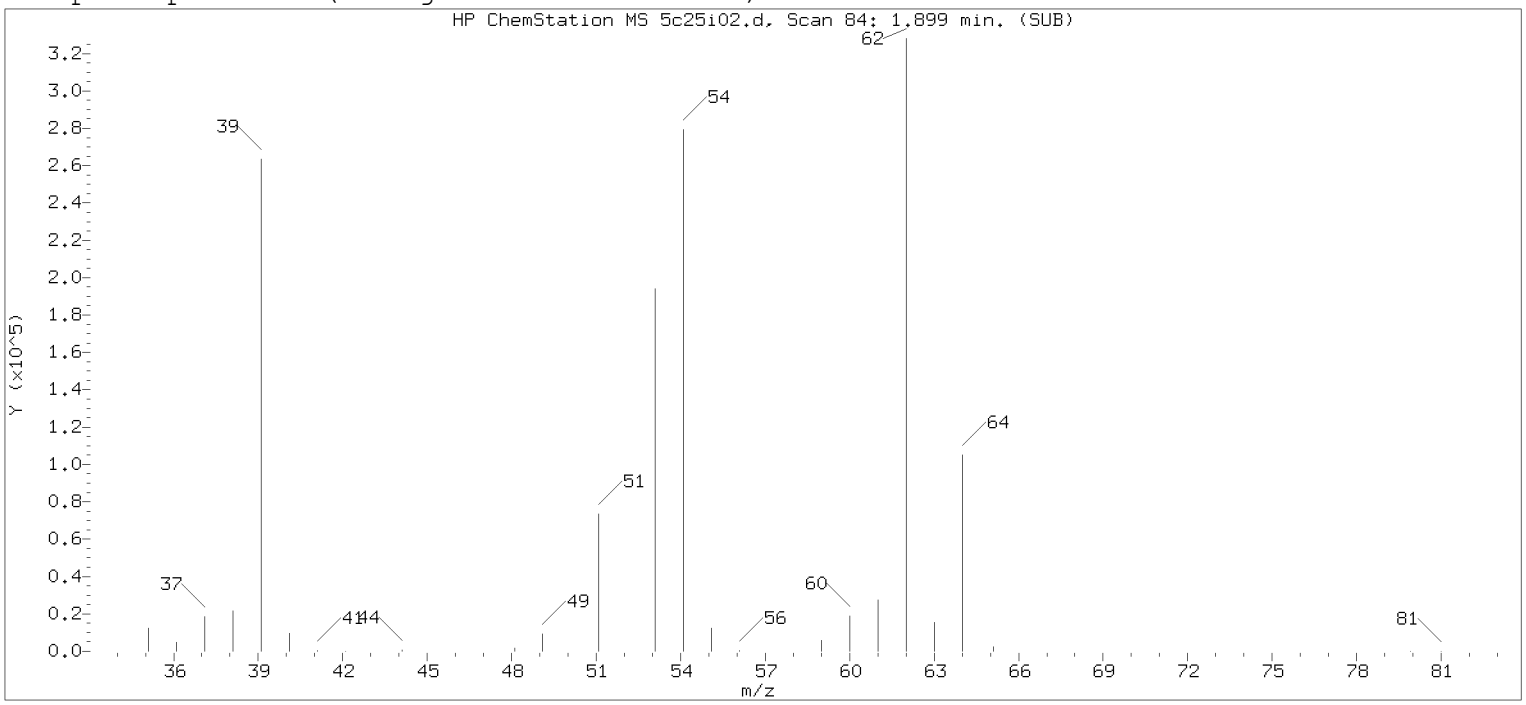
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 84
Retention Time (minutes): 1.899
Quant Ion : 39.00
Area (flag) : 592654M
On-Column Amount (ng) : 91.5961
Integration start scan : 66 Integration stop scan: 127
Y at integration start : 342 Y at integration end: 342

Reason for manual integration: improper integration

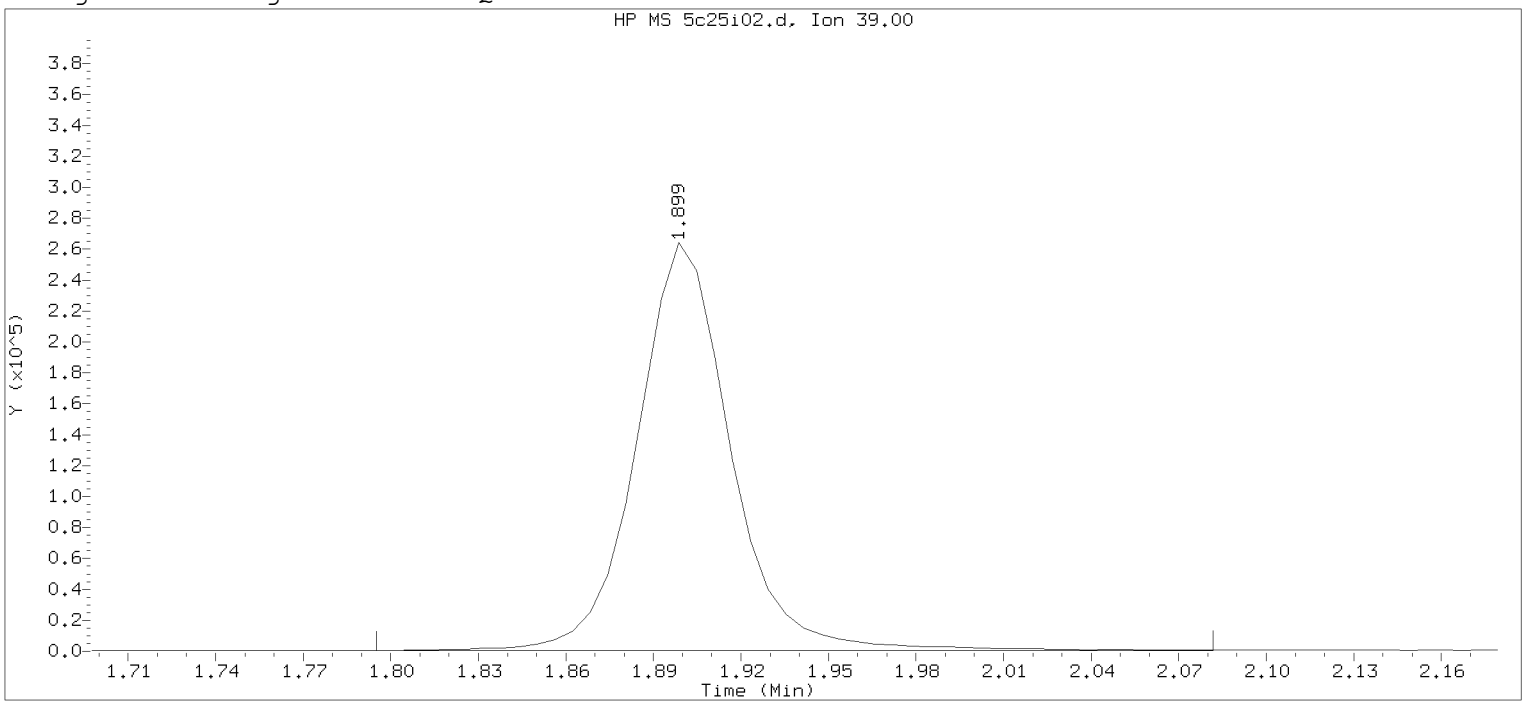
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

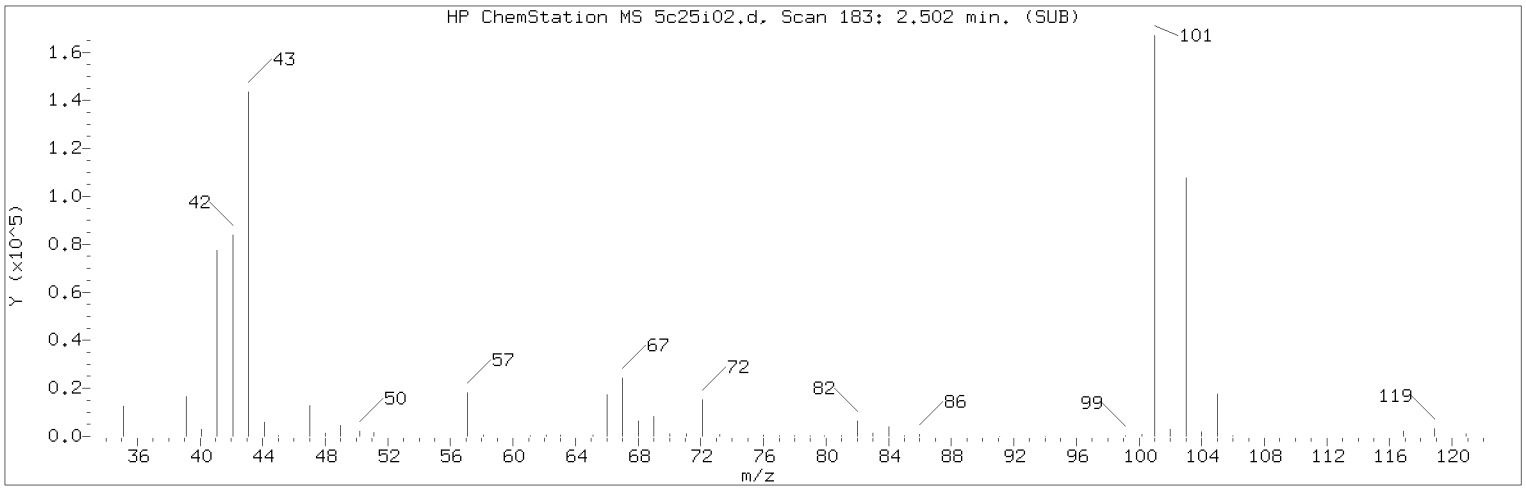
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:29
Date, time and analyst ID of latest file update: 26-Oct-2018 09:29 jkh09052

Sample Name: VSTD100 Lab Sample ID: VSTD100

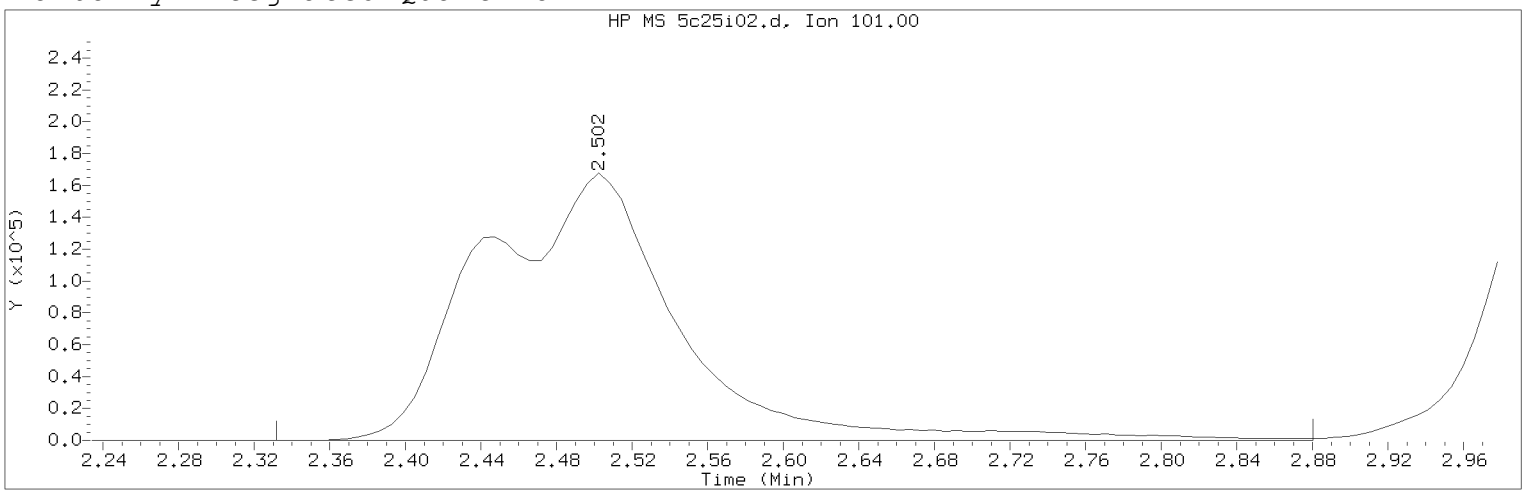
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 84
Retention Time (minutes): 1.899
Quant Ion : 39.00
Area : 590424
On-column Amount (ng) : 102.0888
Integration start scan : 66 Integration stop scan: 113
Y at integration start : 303 Y at integration end: 430

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user id: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD100 Lab Sample ID: VSTD100

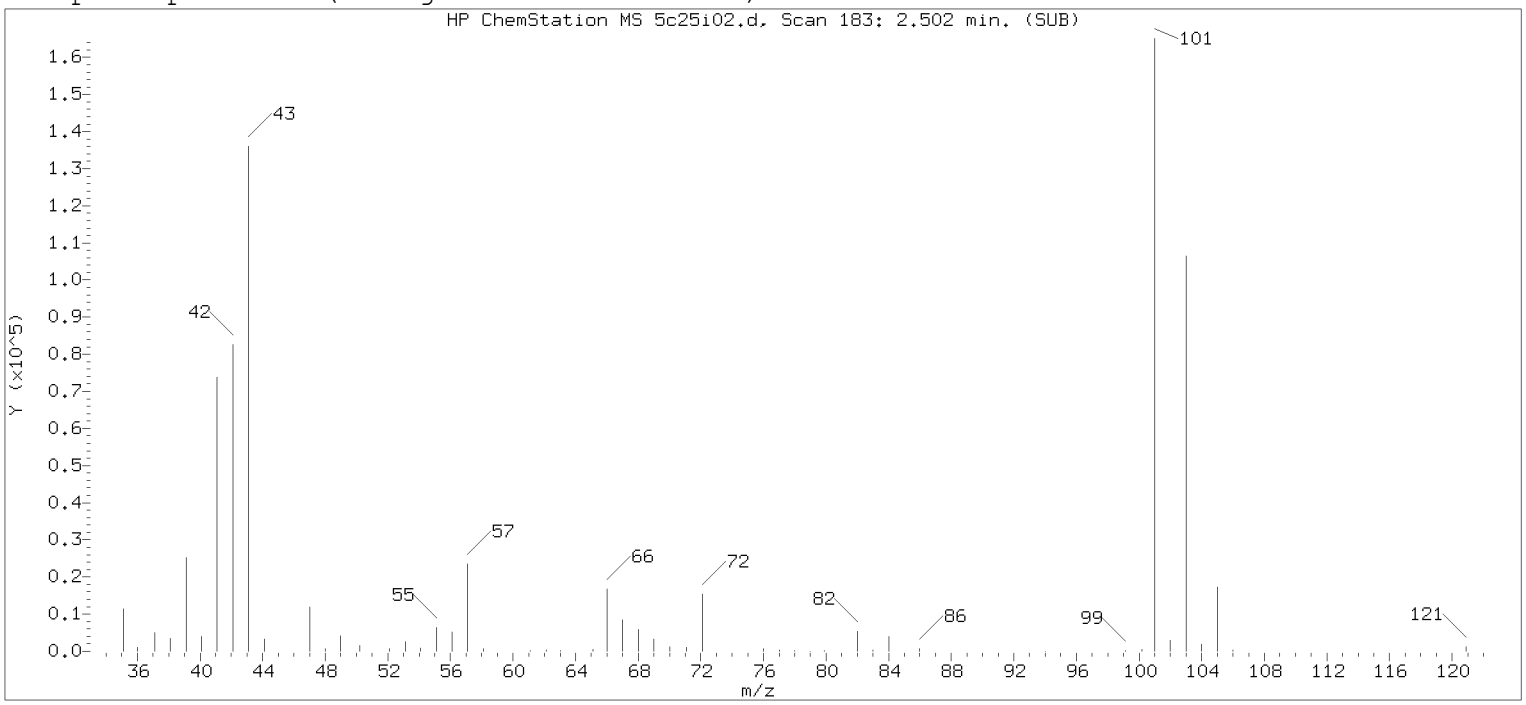
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 183
Retention Time (minutes): 2.502
Quant Ion : 101.00
Area (flag) : 1196668M
On-Column Amount (ng) : 99.6306
Integration start scan : 154 Integration stop scan: 244
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

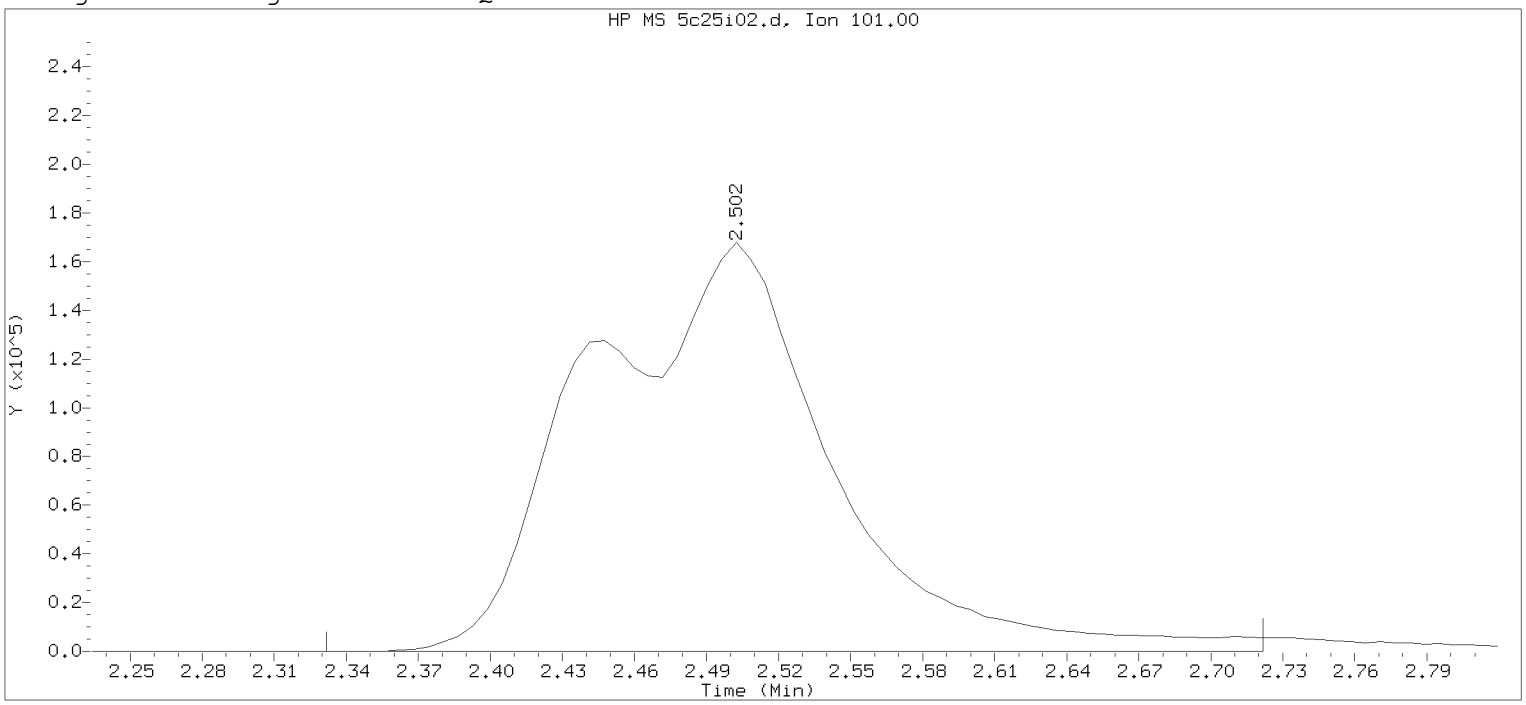
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

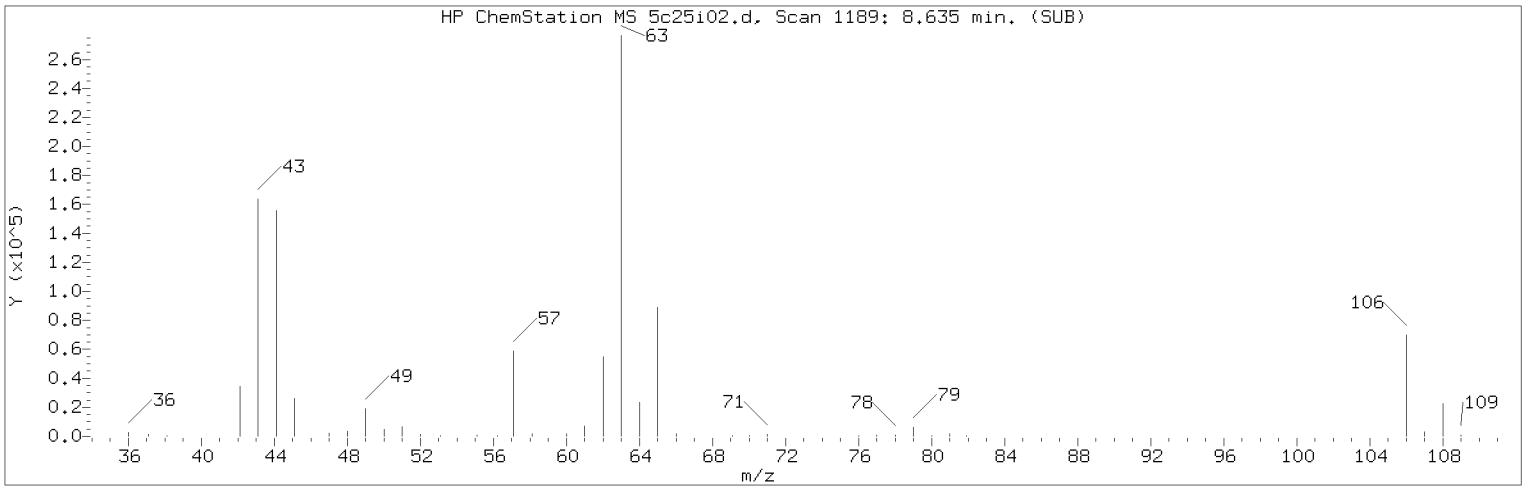
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:29
Date, time and analyst ID of latest file update: 26-Oct-2018 09:29 jkh09052

Sample Name: VSTD100 Lab Sample ID: VSTD100

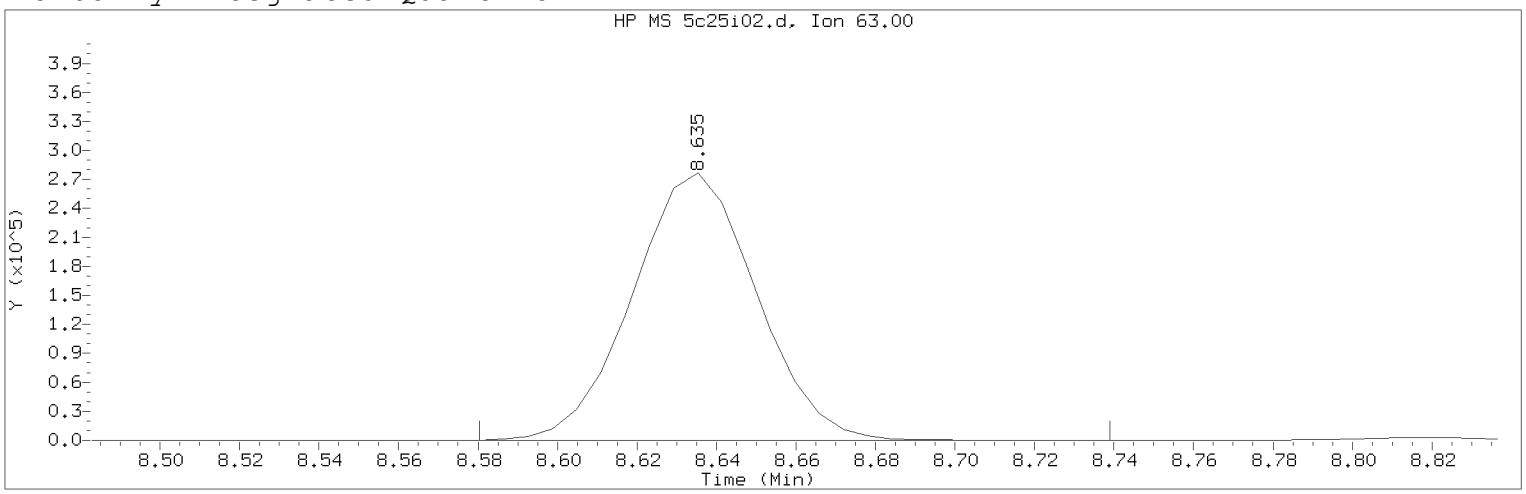
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 183
Retention Time (minutes): 2.502
Quant Ion : 101.00
Area : 1169236
On-column Amount (ng) : 101.0235
Integration start scan : 154 Integration stop scan: 218
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user id: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD100 Lab Sample ID: VSTD100

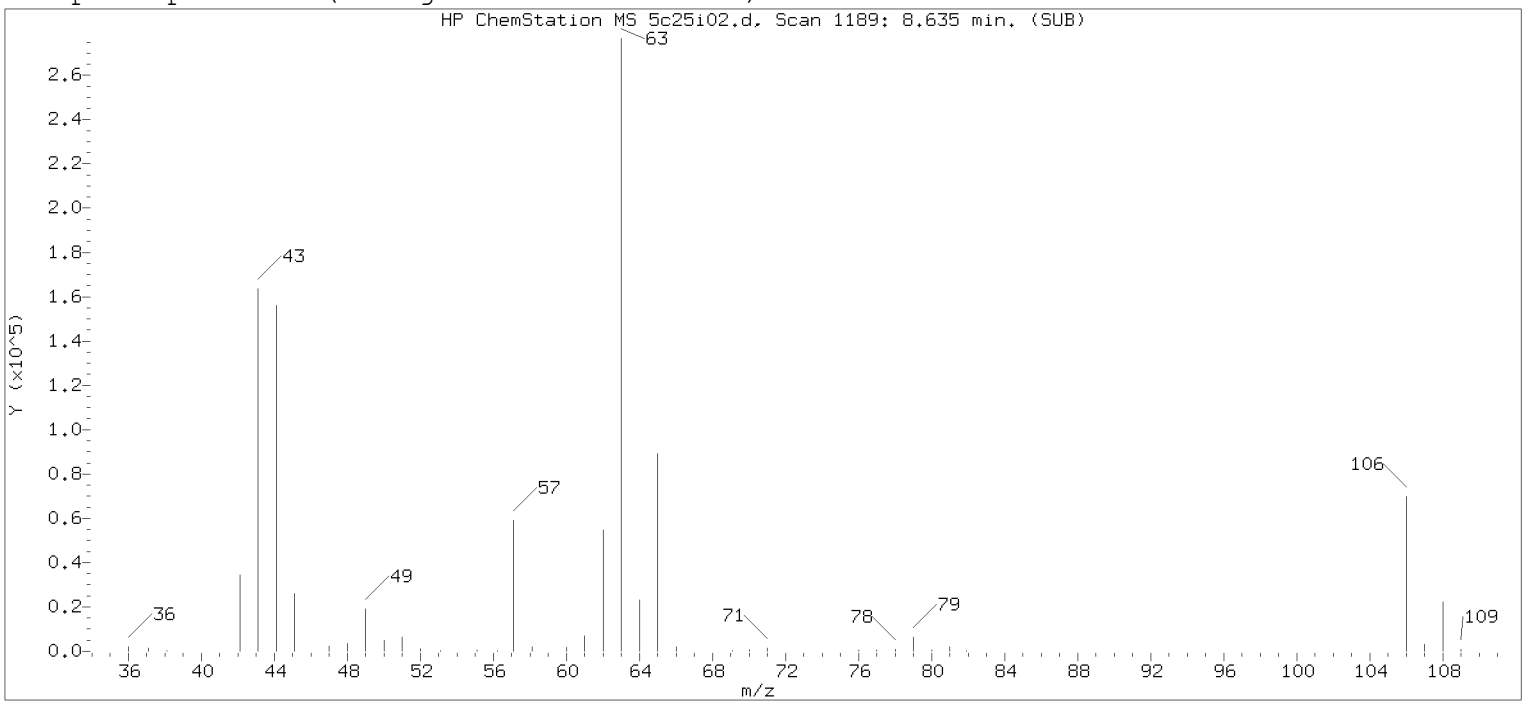
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1189
Retention Time (minutes): 8.635
Quant Ion : 63.00
Area (flag) : 598599M
On-Column Amount (ng) : 106.3000
Integration start scan : 1179 Integration stop scan: 1205
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

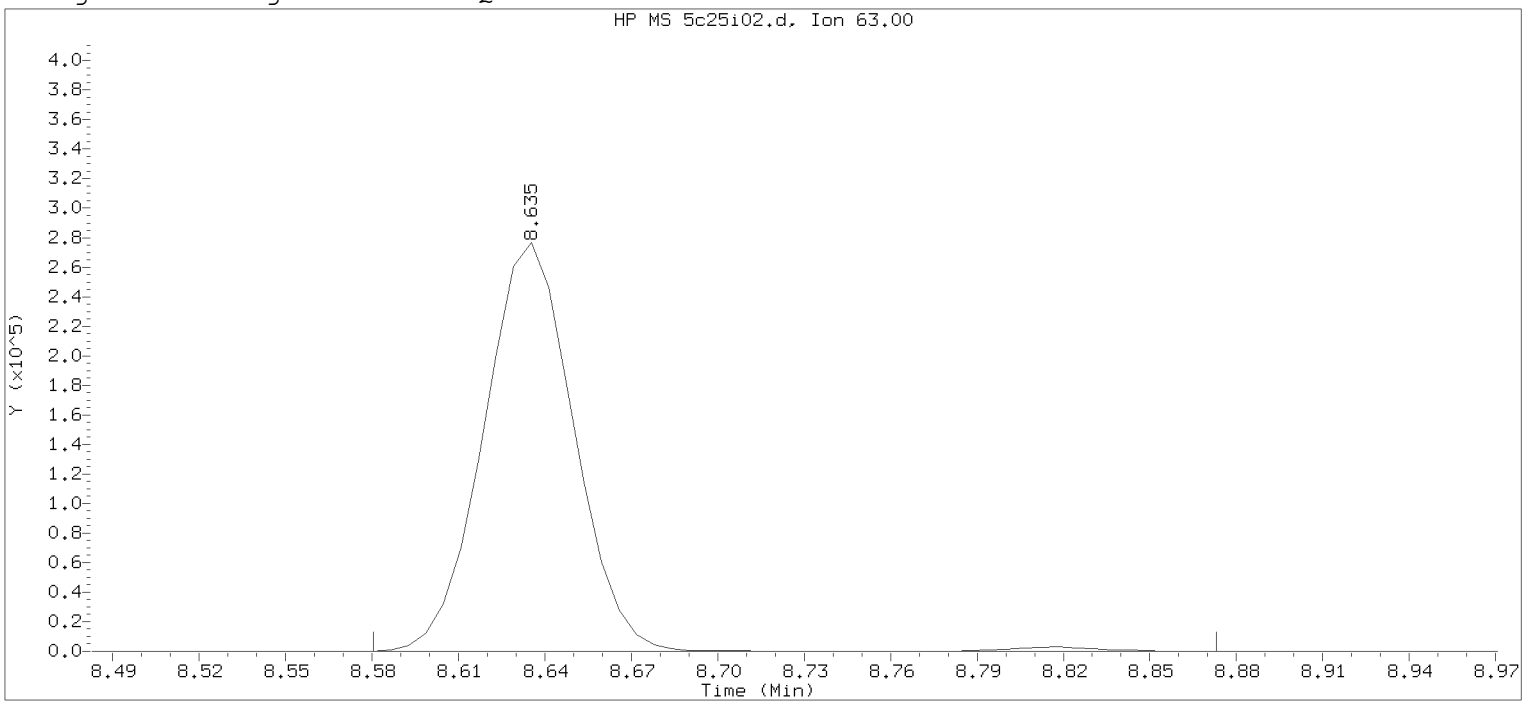
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

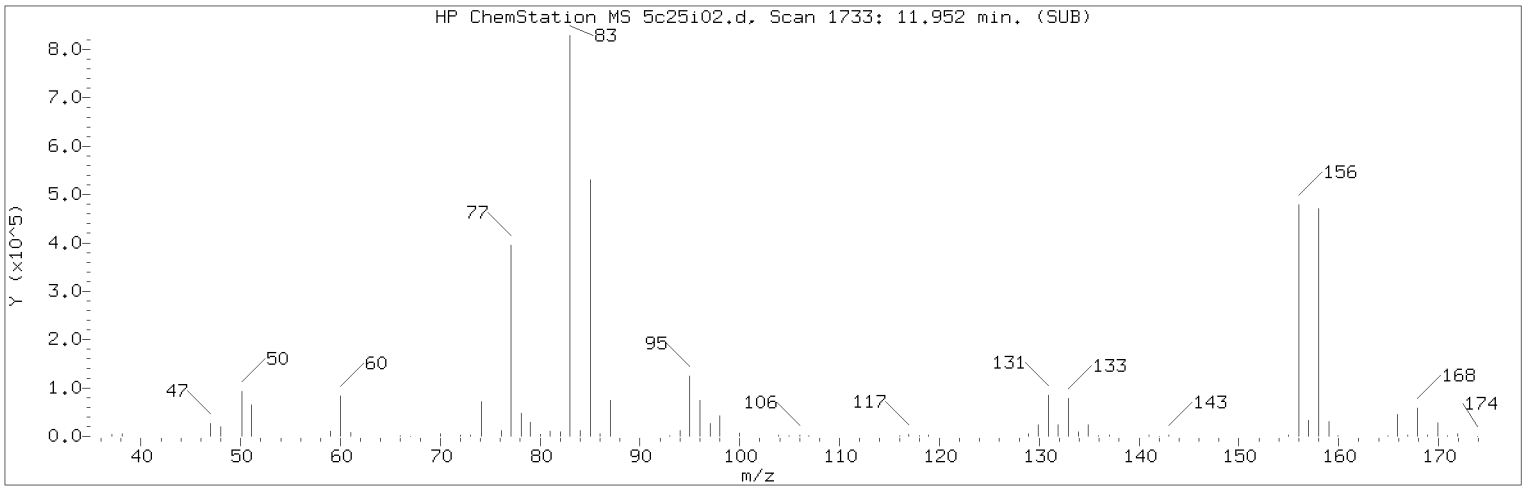
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:29
Date, time and analyst ID of latest file update: 26-Oct-2018 09:29 jkh09052

Sample Name: VSTD100 Lab Sample ID: VSTD100

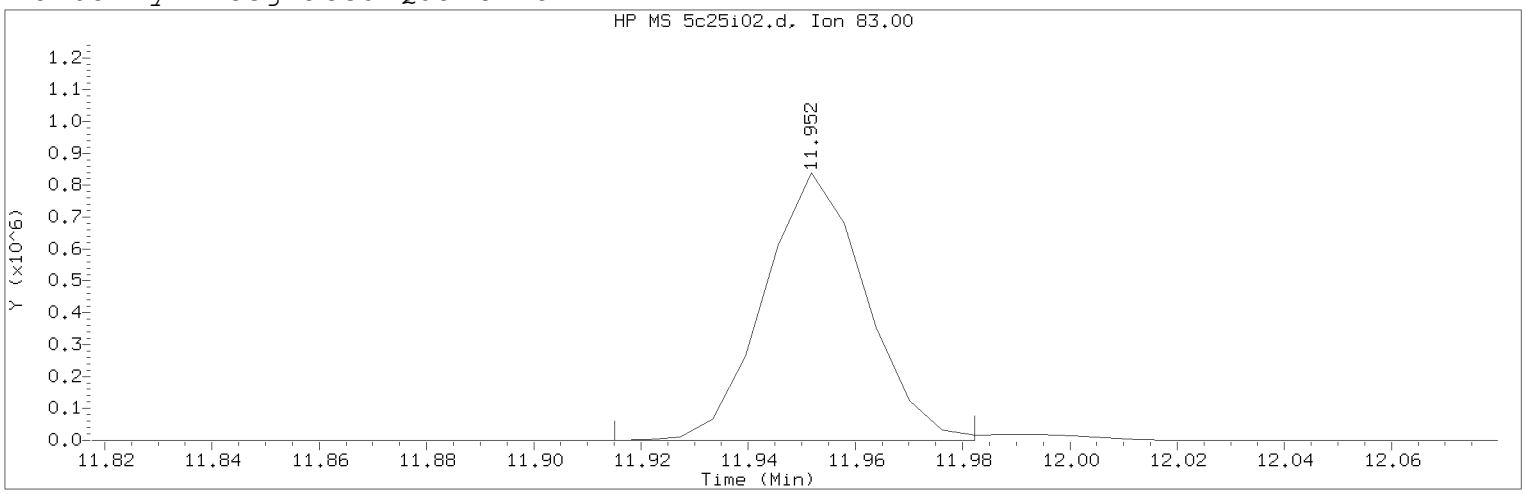
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1189
Retention Time (minutes): 8.635
Quant Ion : 63.00
Area : 604675
On-column Amount (ng) : 101.7161
Integration start scan : 1179 Integration stop scan: 1227
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user id: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD100 Lab Sample ID: VSTD100

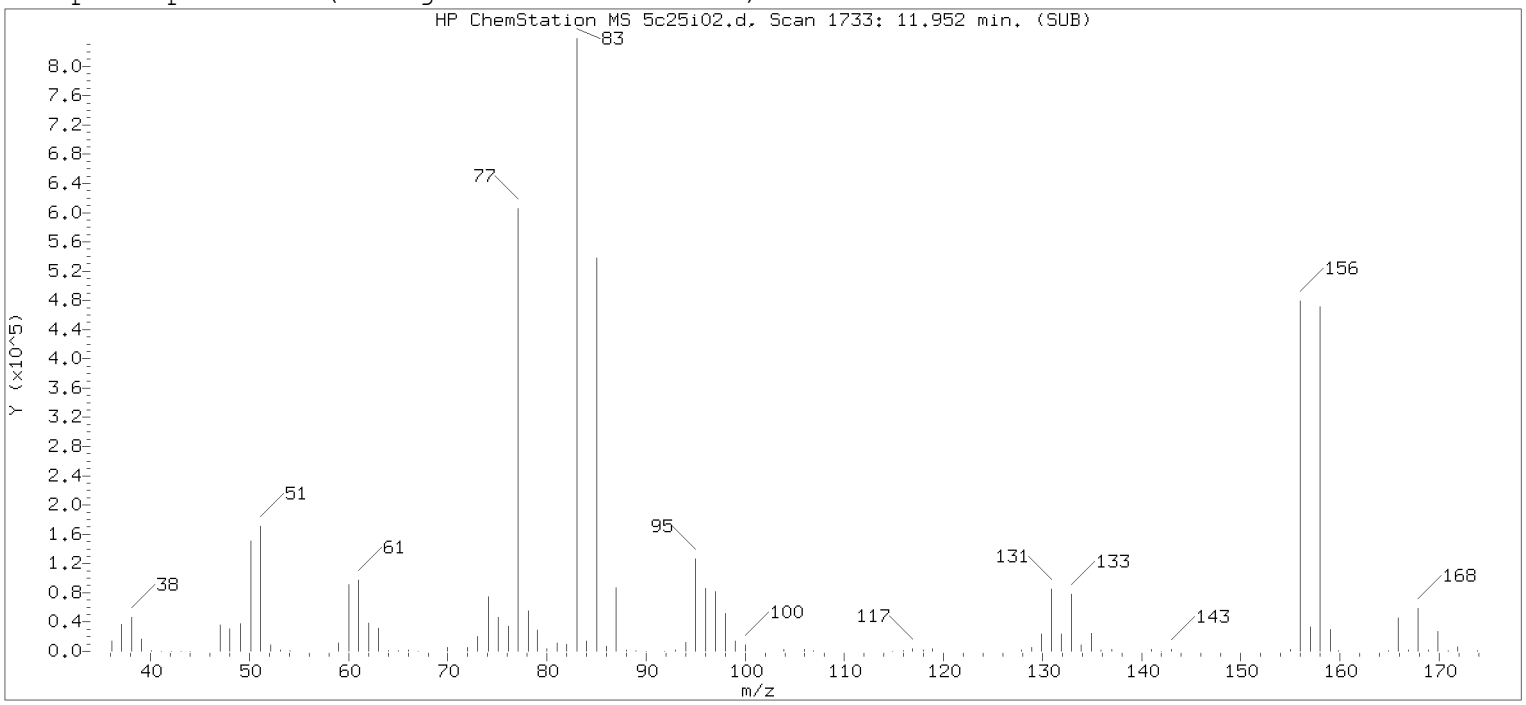
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area (flag) : 1098100M
On-Column Amount (ng) : 104.8726
Integration start scan : 1726 Integration stop scan: 1737
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

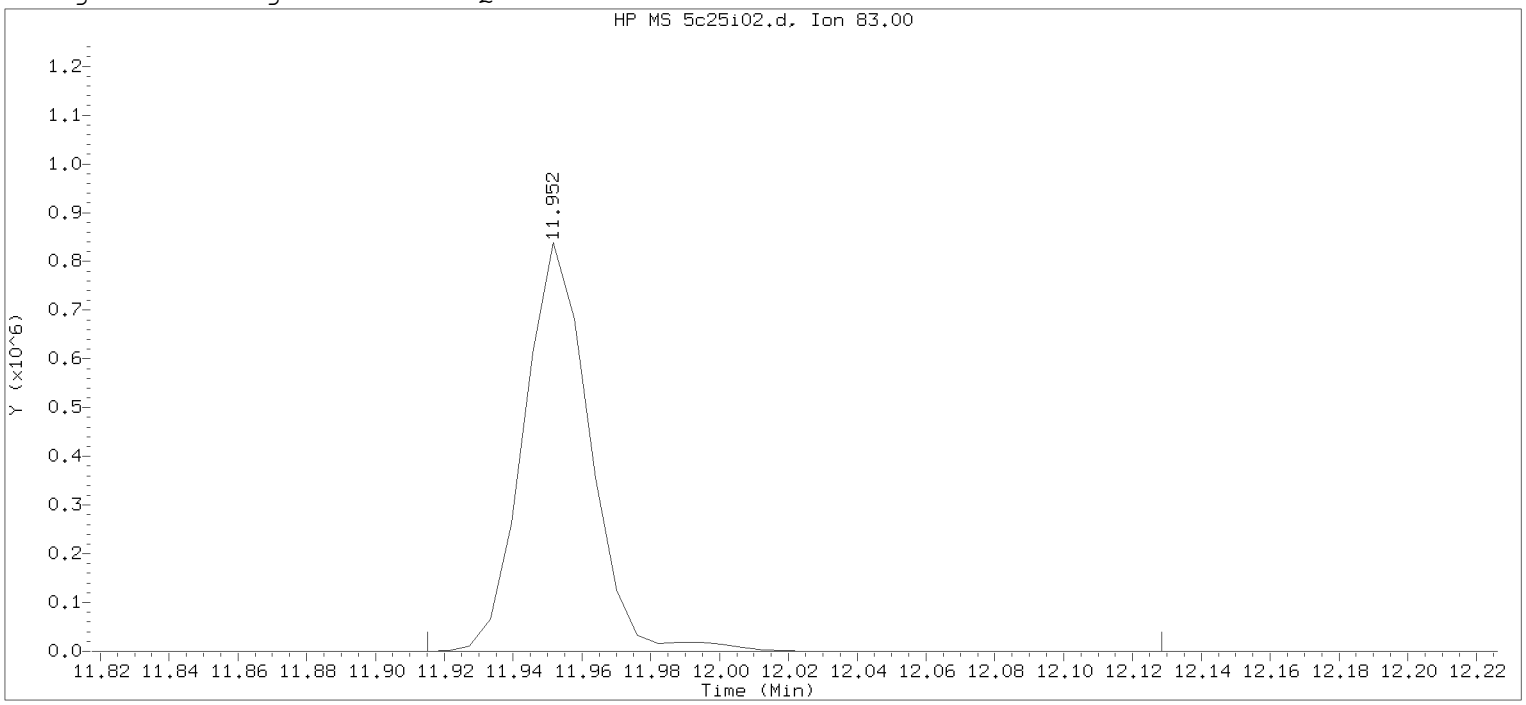
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

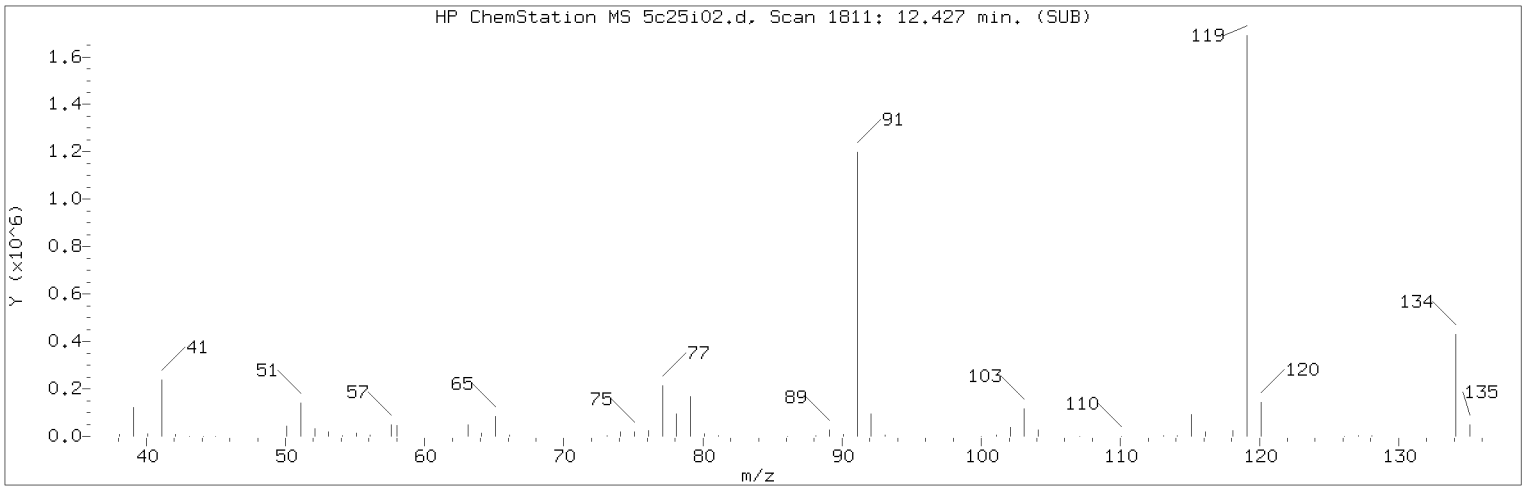
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:29
Date, time and analyst ID of latest file update: 26-Oct-2018 09:29 jkh09052

Sample Name: VSTD100 Lab Sample ID: VSTD100

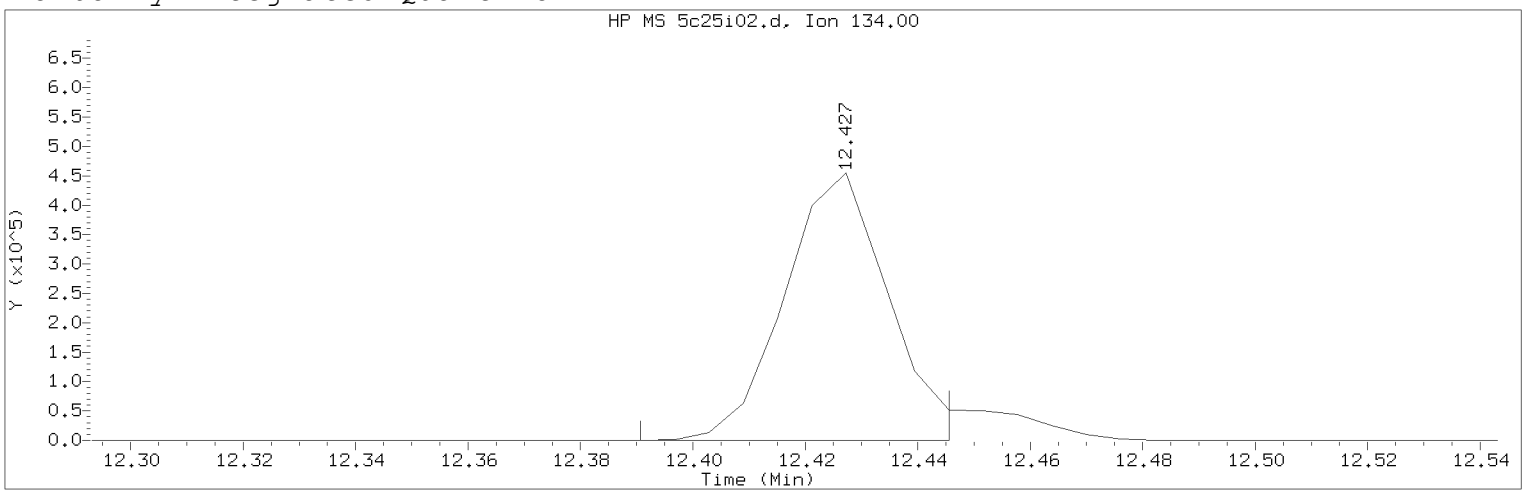
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area : 1120854
On-column Amount (ng) : 100.4950
Integration start scan : 1726 Integration stop scan: 1761
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD100 Lab Sample ID: VSTD100

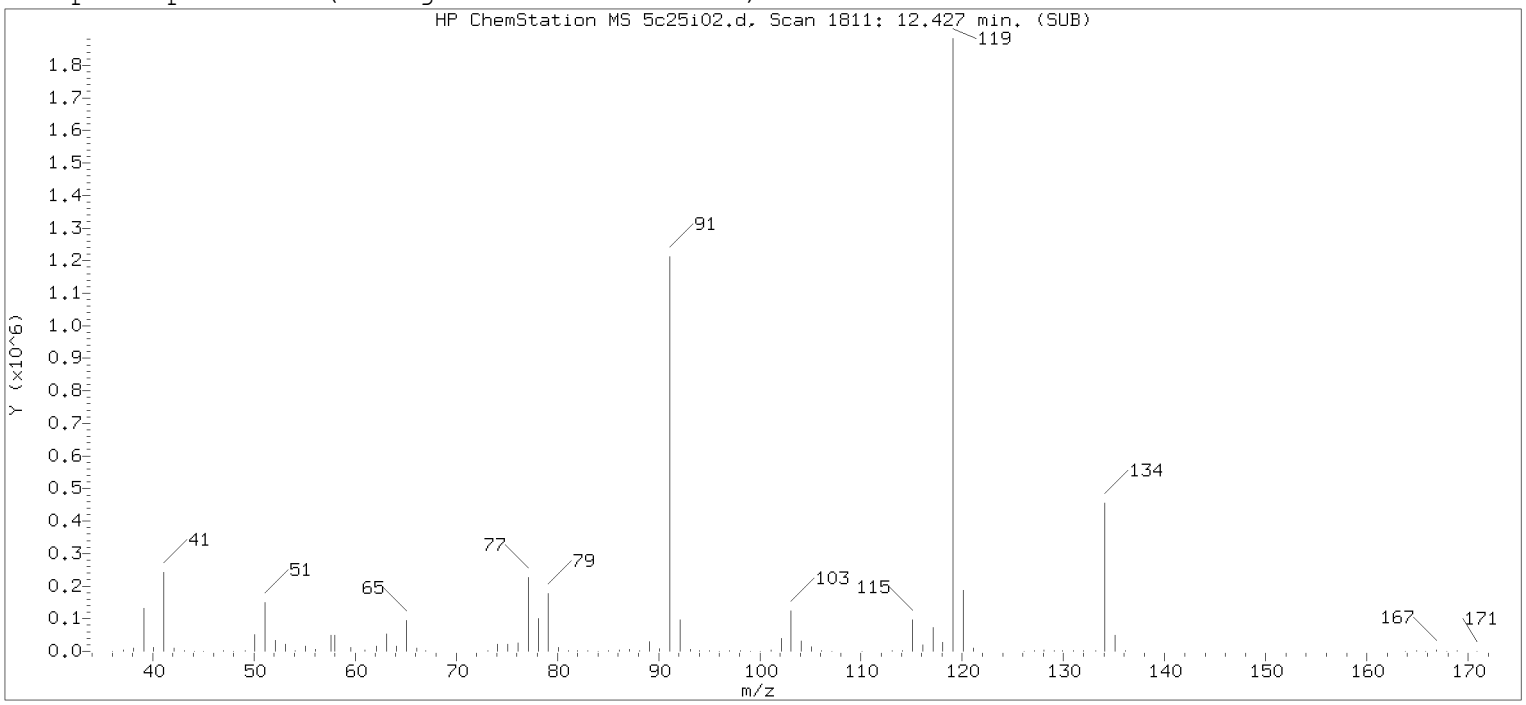
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1811
Retention Time (minutes): 12.427
Quant Ion : 134.00
Area (flag) : 583796M
On-Column Amount (ng) : 104.5321
Integration start scan : 1804 Integration stop scan: 1813
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

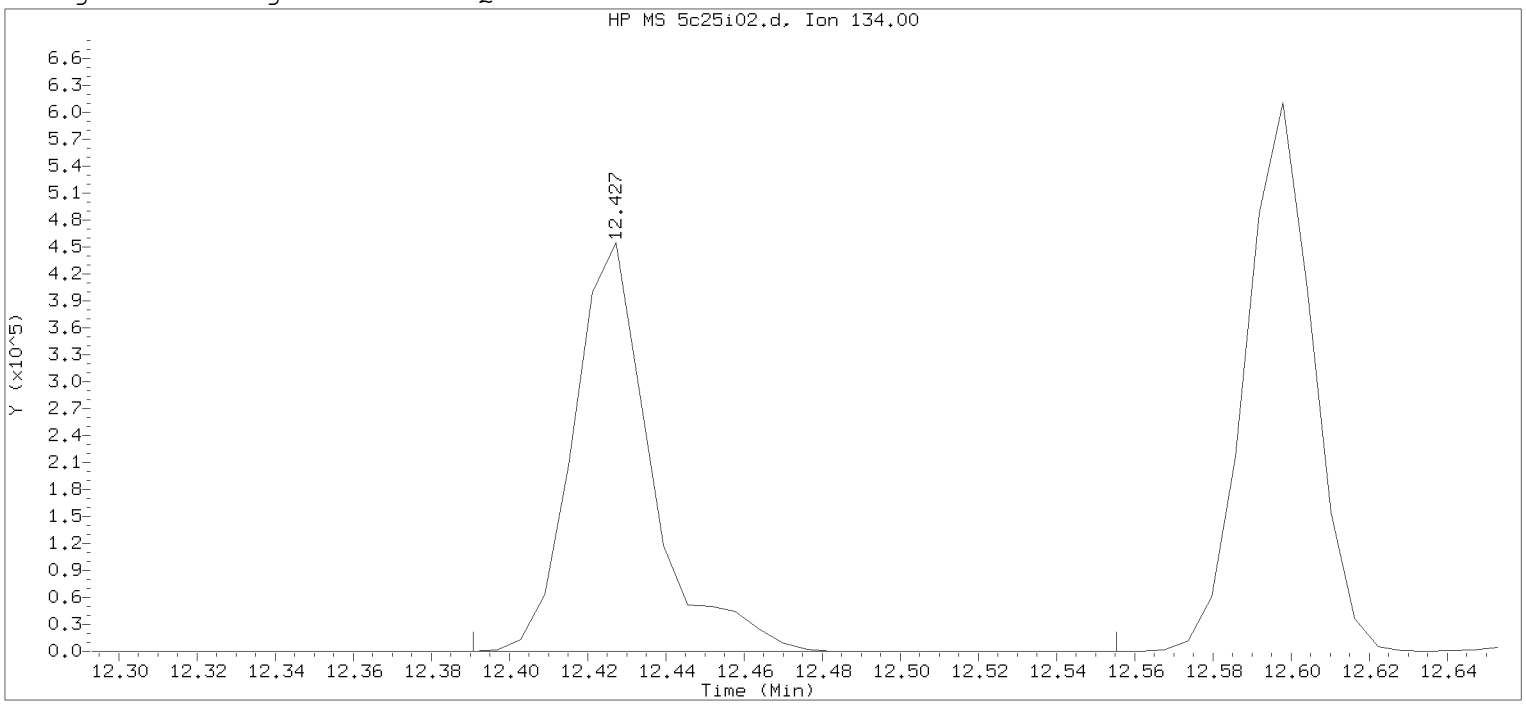
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

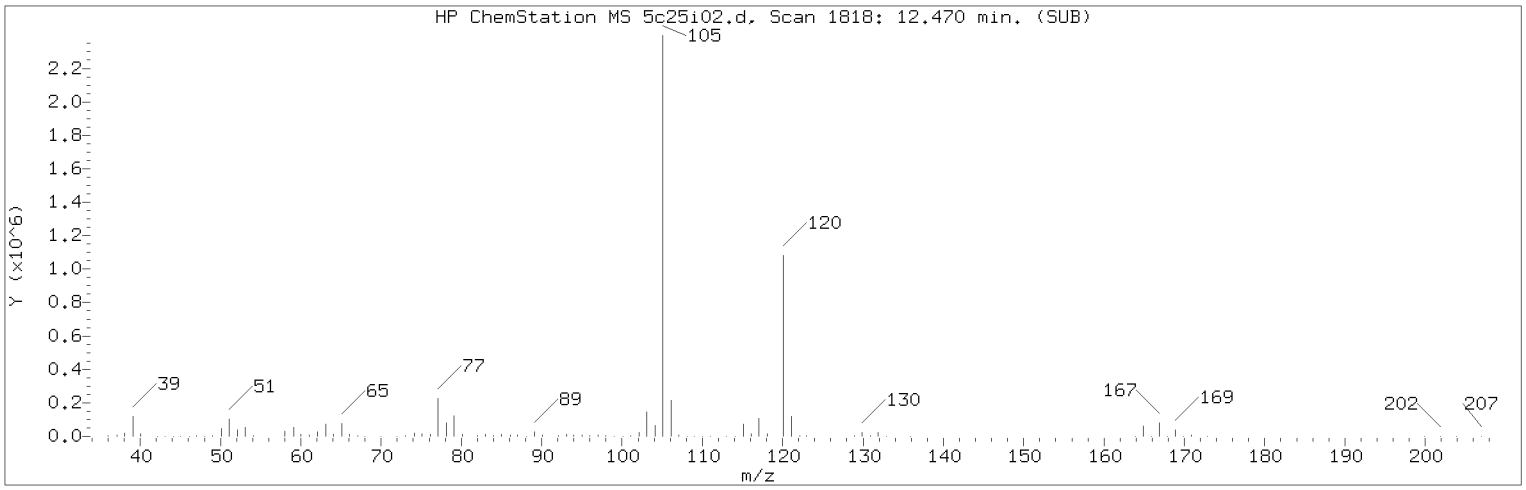
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:29
Date, time and analyst ID of latest file update: 26-Oct-2018 09:29 jkh09052

Sample Name: VSTD100 Lab Sample ID: VSTD100

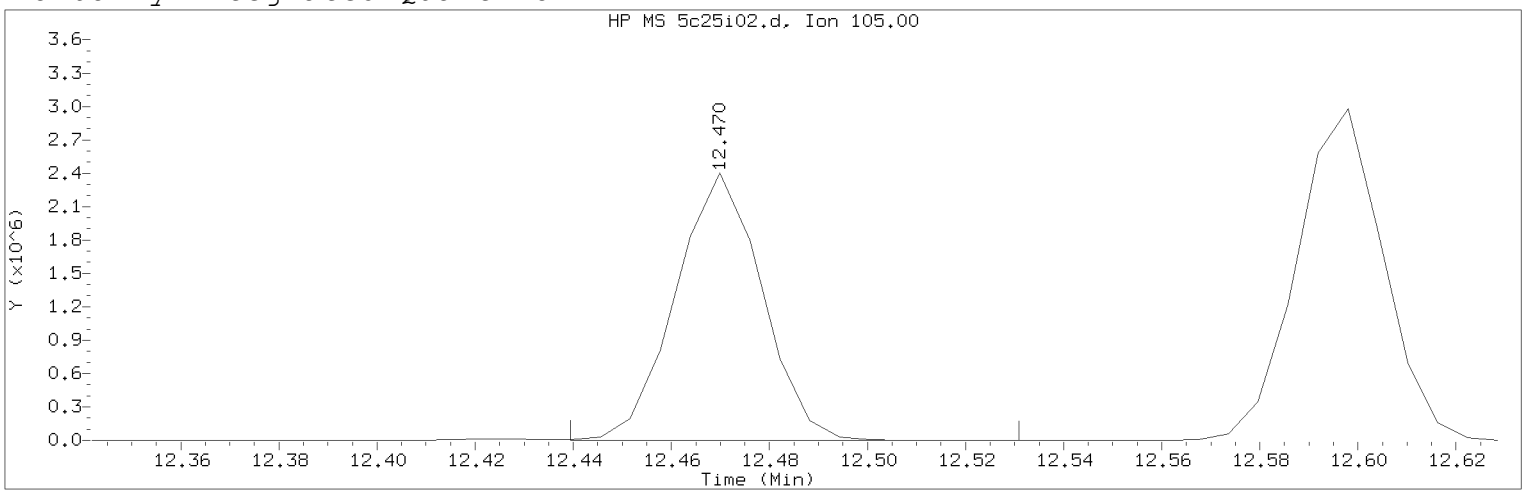
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1811
Retention Time (minutes): 12.427
Quant Ion : 134.00
Area : 631772
On-column Amount (ng) : 100.9964
Integration start scan : 1804 Integration stop scan: 1831
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD100 Lab Sample ID: VSTD100

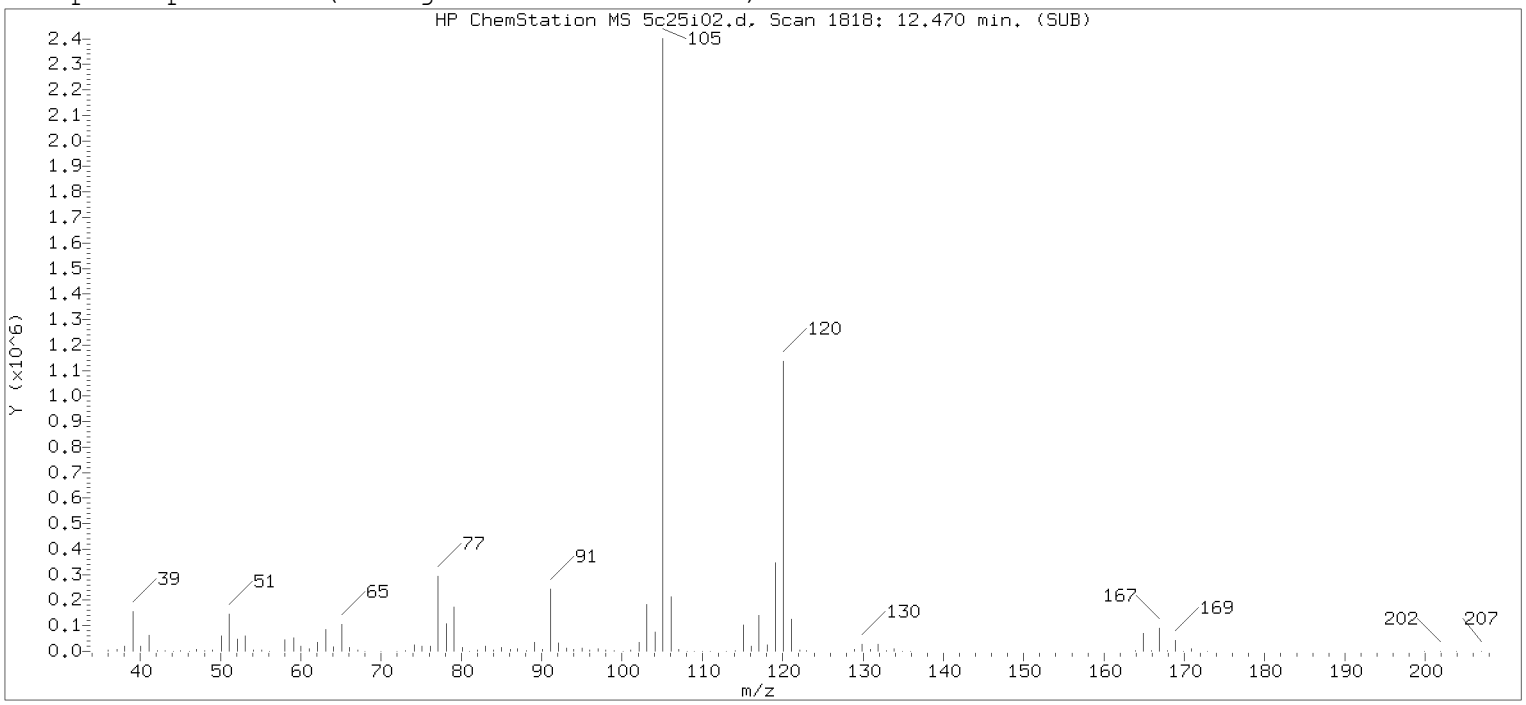
Compound Number : 127
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1818
Retention Time (minutes): 12.470
Quant Ion : 105.00
Area (flag) : 2929770M
On-Column Amount (ng) : 106.0927
Integration start scan : 1812 Integration stop scan: 1827
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

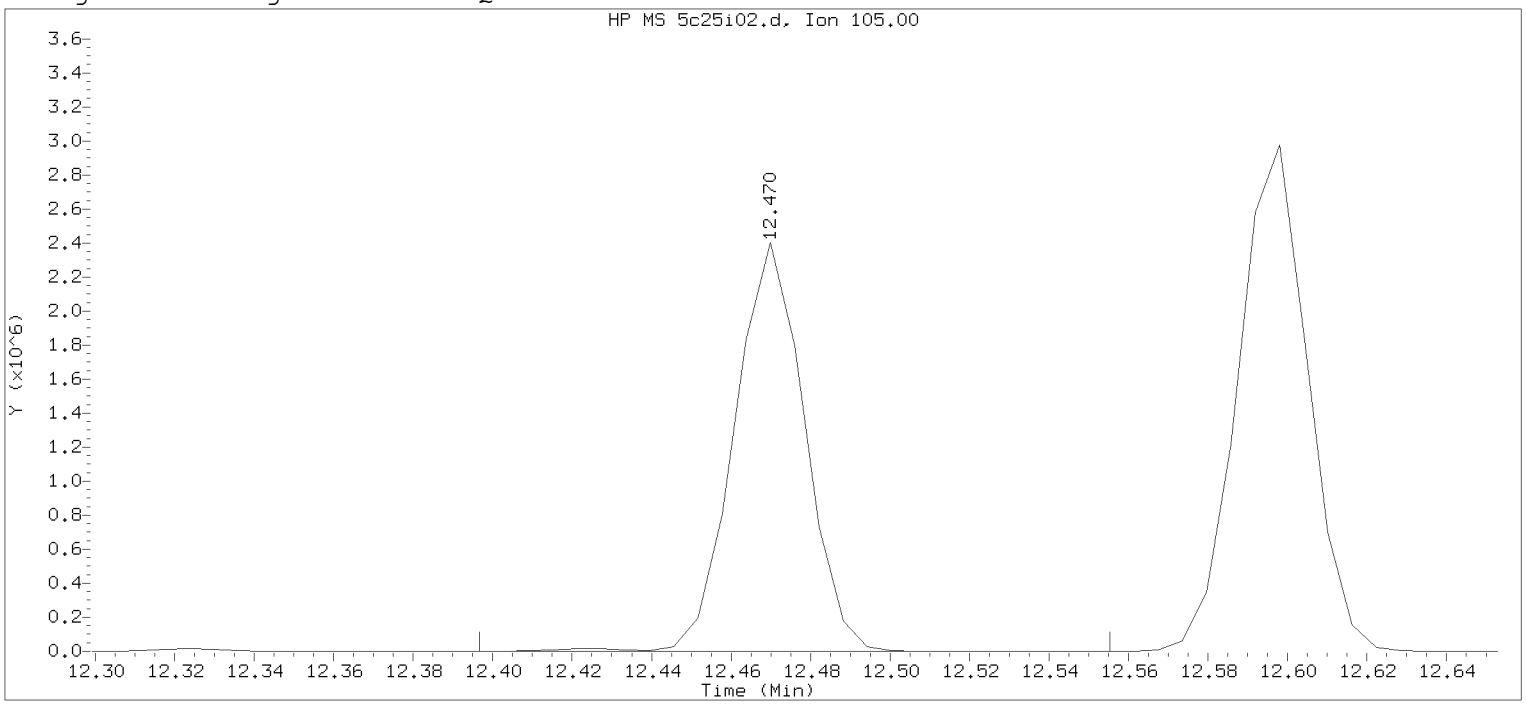
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



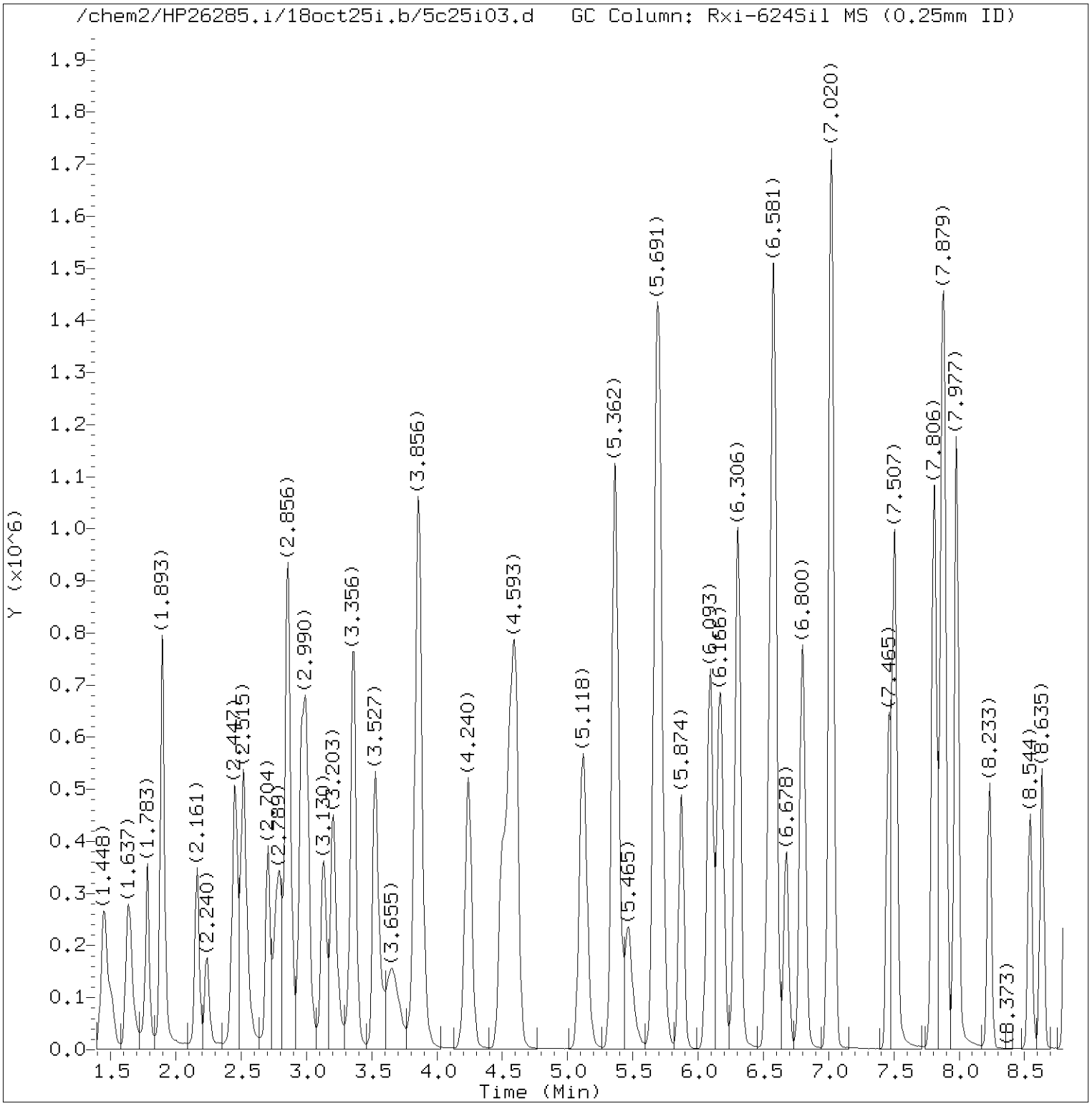
Data File: /chem2/HP26285.i/18oct25i.b/5c25i02.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:07 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:29
Date, time and analyst ID of latest file update: 26-Oct-2018 09:29 jkh09052

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compound Number : 127
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1818
Retention Time (minutes): 12.470
Quant Ion : 105.00
Area : 2946855
On-column Amount (ng) : 102.0271
Integration start scan : 1805 Integration stop scan: 1831
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito



Total Ion Chromatogram (TIC)

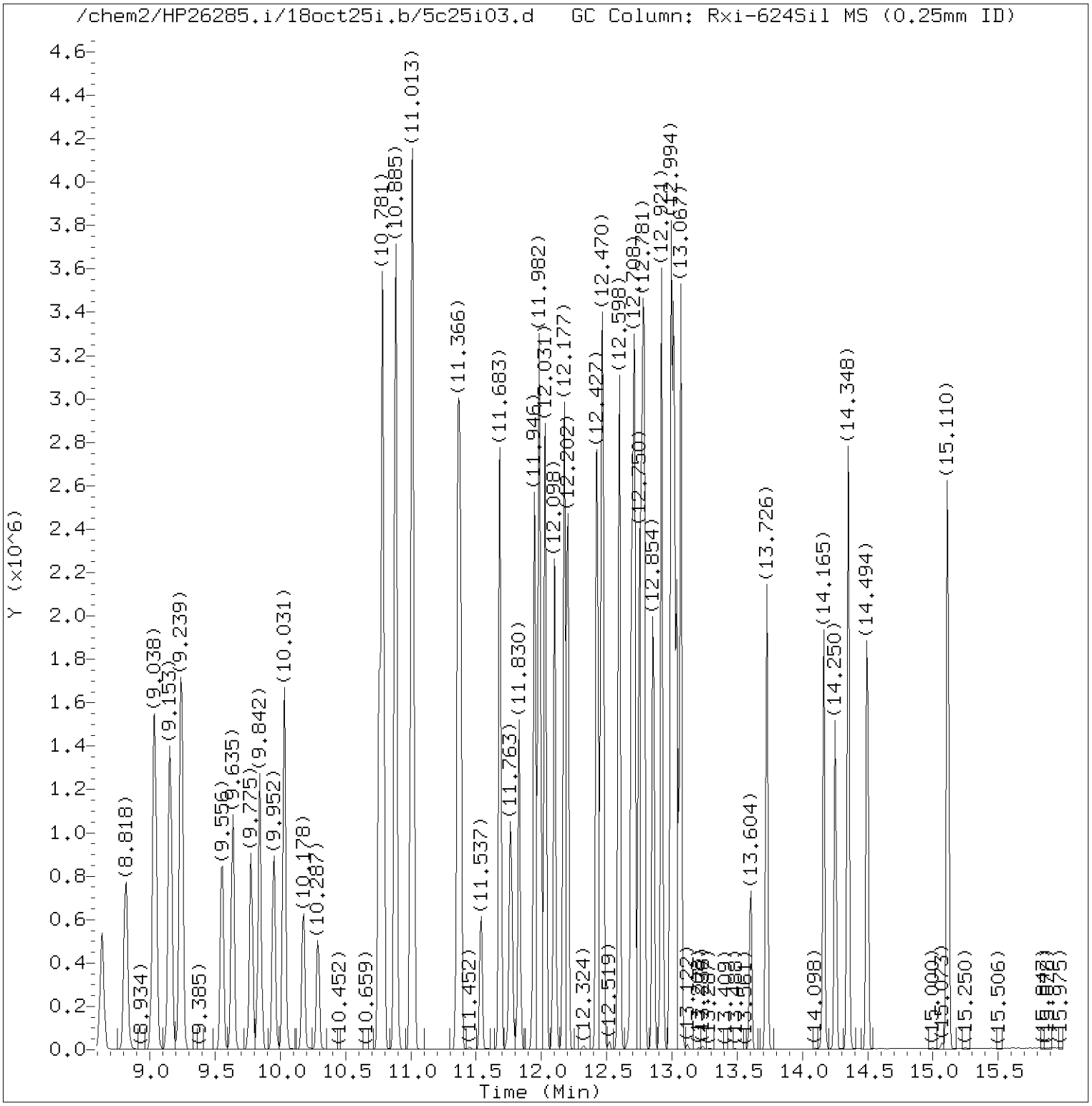
Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.637	85	591030	50.395
4) Chloromethane	(2)	1.783	50	457817	48.207
6) Vinyl Chloride	(2)	1.893	62	435171	49.032
5) 1,3-Butadiene	(2)	1.899	39	299721M	47.003
8) Bromomethane	(2)	2.161	94	309689	46.946
9) Chloroethane	(2)	2.234	64	202887	45.989
10) Dichlorofluoromethane	(2)	2.454	67	570042	48.738
12) Trichlorofluoromethane	(2)	2.502	101	589570M	49.806
11) n-Pentane	(2)	2.521	43	384955	50.914
14) Ethyl ether	(2)	2.704	59	290929	51.061
15) Freon 123a	(2)	2.789	67	405987	50.346
16) Acrolein	(1)	2.856	56	1344431	490.511
17) 1,1-Dichloroethene	(2)	2.960	96	285181	51.275
17) 1,1-Dichloroethene	(2)	2.960	63	148172	51.399
19) Freon 113	(2)	2.996	101	295416	53.299
18) Acetone	(1)	3.002	58	137827	97.021
22) Methyl Iodide	(2)	3.130	142	557469	51.416
21) 2-Propanol	(1)	3.149	45	304111M	261.106
23) Carbon Disulfide	(2)	3.203	76	986658	52.064
27) Methyl Acetate	(2)	3.344	43	504132	46.478
25) Allyl Chloride	(2)	3.362	41	597276	49.707
28) Methylene Chloride	(2)	3.527	84	323662	49.684
29)*t-Butyl alcohol-d10	(1)	3.551	65	390222	250.000
30) t-Butyl alcohol	(1)	3.661	59	507127	247.114
31) Acrylonitrile	(2)	3.825	53	257063	50.481
32) trans-1,2-Dichloroethene	(2)	3.862	96	326095	51.524
33) Methyl Tertiary Butyl Ether	(2)	3.862	73	1017422	50.911
34) n-Hexane	(2)	4.240	57	513451	55.933
36) 1,1-Dichloroethane	(2)	4.496	63	609082	51.420
38) di-Isopropyl ether	(2)	4.563	45	1163574	50.606
39) 2-Chloro-1,3-butadiene	(2)	4.606	53	555218	51.929
40) Ethyl t-butyl ether	(2)	5.118	59	1053378	50.941
42) cis-1,2-Dichloroethene	(2)	5.362	96	359627	50.989
44) 2-Butanone	(2)	5.362	43	767677	99.782
45) 2,2-Dichloropropane	(2)	5.374	77	484210	51.580
47) Propionitrile	(1)	5.465	54	534251	246.327
48) Methacrylonitrile	(2)	5.679	67	615678	127.196
49) Bromochloromethane	(2)	5.703	128	183876	50.368

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

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on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.715	71	196729	99.694
51) Chloroform	(2)	5.874	83	572785	51.161
53) 1,1,1-Trichloroethane	(2)	6.087	97	493305	51.372
52)$Dibromofluoromethane	(2)	6.093	113	289663	50.126
52)$Dibromofluoromethane	(2)	6.099	111	295119	49.950
43) 1,2-Dichloroethene (Total)	(2)		96	685722	102.514
54) Cyclohexane	(2)	6.166	56	610391	53.285
54) Cyclohexane	(2)	6.172	84	483282	51.071
54) Cyclohexane	(2)	6.172	69	181246	53.133
56) Carbon Tetrachloride	(2)	6.294	117	439927	52.133
55) 1,1-Dichloropropene	(2)	6.306	75	465560	50.394
58) Isobutyl Alcohol	(1)	6.544	41	410699	618.007
57)$1,2-Dichloroethane-d4	(2)	6.569	102	69095	50.082
57)$1,2-Dichloroethane-d4	(2)	6.569	65	348754	49.688
57)$1,2-Dichloroethane-d4	(2)	6.569	104	43516	49.534
60) Benzene	(2)	6.581	78	1407505	50.996
61) 1,2-Dichloroethane	(2)	6.678	62	414562	48.958
61) 1,2-Dichloroethane	(2)	6.678	98	36625	50.090
65) t-Amyl methyl ether	(2)	6.800	73	989957	50.986
66)*Fluorobenzene	(2)	7.014	96	1187933	50.000
67) n-Heptane	(2)	7.026	43	601348	56.997
69) n-Butanol	(1)	7.459	56	711864	1334.076
71) Trichloroethene	(2)	7.507	95	350859	50.827
73) Methylcyclohexane	(2)	7.806	83	635571	53.104
73) Methylcyclohexane	(2)	7.806	98	270131	53.110
74) 1,2-Dichloropropane	(2)	7.861	63	353041	51.172
75) Dibromomethane	(2)	7.977	93	214997	51.223
77) Methyl Methacrylate	(2)	7.983	69	360651	51.836
79) Bromodichloromethane	(2)	8.233	83	409486	52.347
80) 2-Nitropropane	(2)	8.544	41	372440	106.316
81) 2-Chloroethyl Vinyl Ether	(2)	8.635	63	289089M	52.090
82) cis-1,3-Dichloropropene	(2)	8.818	75	525955	52.287
83) 4-Methyl-2-pentanone	(2)	9.038	43	1414041	103.167
84)$Toluene-d8	(3)	9.153	98	1135147	50.323
84)$Toluene-d8	(3)	9.153	100	732724	50.192
89) Toluene	(3)	9.239	92	860504	50.848
90) trans-1,3-Dichloropropene	(3)	9.556	75	480588	53.172
92) Ethyl Methacrylate	(3)	9.635	69	574278	52.992

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$ = Compound is a surrogate standard.

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on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) 1,1,2-Trichloroethane	(3)	9.775	97	294844	51.151
94) Tetrachloroethene	(3)	9.842	166	378922	50.977
95) 1,3-Dichloropropane	(3)	9.952	76	488902	50.174
97) 2-Hexanone	(3)	10.031	43	1130646	103.564
91) 1,3-Dichloropropene (total)	(3)		100	1006543	105.460
98) Dibromochloromethane	(3)	10.178	129	317762	53.842
100) 1,2-Dibromoethane	(3)	10.287	107	321981	51.484
101)*Chlorobenzene-d5	(3)	10.757	117	836232	50.000
102) 1-Chlorohexane	(3)	10.781	91	475851	49.496
103) Chlorobenzene	(3)	10.787	112	921121	50.245
104) 1,1,1,2-Tetrachloroethane	(3)	10.879	131	316960	52.495
105) Ethylbenzene	(3)	10.885	91	1660505	51.042
107) m+p-Xylene	(3)	11.013	106	1288911	102.568
108) o-Xylene	(3)	11.360	106	608825	50.618
110) Styrene	(3)	11.379	104	1022369	52.160
111) Bromoform	(3)	11.537	173	237697	49.006
112) Isopropylbenzene	(3)	11.683	105	1570199	51.217
109) Xylene (Total)	(3)		106	1897736	153.186
115)$4-Bromofluorobenzene	(3)	11.830	95	409363	50.488
115)$4-Bromofluorobenzene	(3)	11.830	174	348359	50.603
116) Bromobenzene	(4)	11.946	156	384045	49.776
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	517360M	51.499
119) trans-1,4-Dichloro-2-butene	(4)	11.982	53	465825	135.013
118) 1,2,3-Trichloropropane	(4)	11.994	110	151679	50.765
120) n-Propylbenzene	(4)	12.031	91	1888926	51.392
121) 2-Chlorotoluene	(4)	12.104	126	367758	49.594
123) 1,3,5-Trimethylbenzene	(4)	12.177	105	1332043	51.637
122) 4-Chlorotoluene	(4)	12.202	126	381246	49.413
125) tert-Butylbenzene	(4)	12.427	134	270540M	50.490
126) Pentachloroethane	(4)	12.452	167	235383	51.462
127) 1,2,4-Trimethylbenzene	(4)	12.470	105	1363787M	51.473
128) sec-Butylbenzene	(4)	12.598	105	1713068	53.205
130) 1,3-Dichlorobenzene	(4)	12.689	146	725599	49.714
131) p-Isopropyltoluene	(4)	12.714	119	1483878	53.066
132)*1,4-Dichlorobenzene-d4	(4)	12.750	152	448806	50.000
134) 1,4-Dichlorobenzene	(4)	12.769	146	744779	49.675
135) 1,2,3-Trimethylbenzene	(4)	12.787	105	1444828	52.353
136) Benzyl Chloride	(4)	12.854	91	1081547	55.461

M = Compound was manually integrated.
* = Compound is an internal standard.
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on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

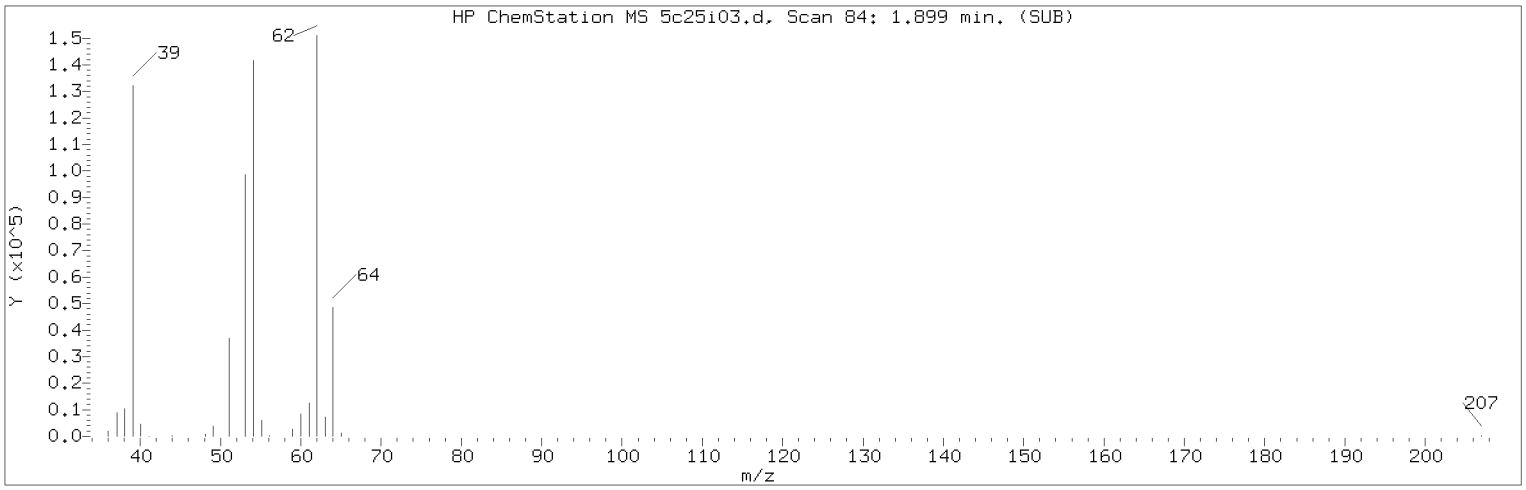
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD050 Lab Sample ID: VSTD050

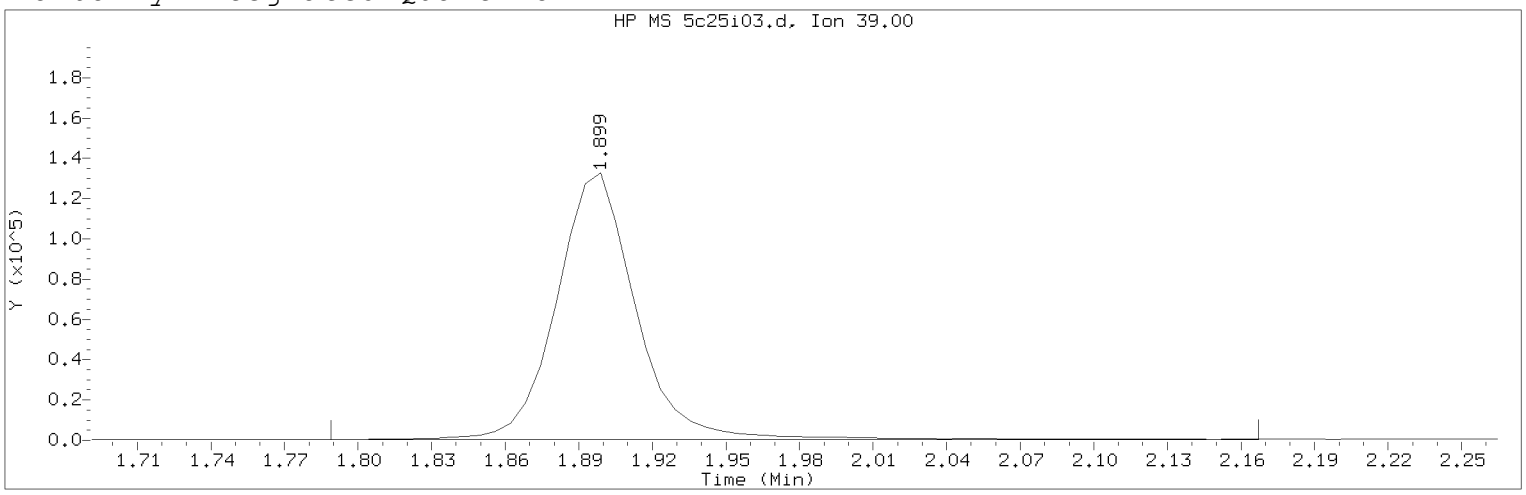
	Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137)	1,3-Diethylbenzene	(4)	12.921	119	917568	53.231
138)	1,4-Diethylbenzene	(4)	12.994	119	986088	53.596
140)	n-Butylbenzene	(4)	13.012	92	778792	53.970
139)	1,2-Dichlorobenzene	(4)	13.037	146	697407	49.826
141)	1,2-Diethylbenzene	(4)	13.067	119	759977	52.661
142)	Diethylbenzene (total)	(4)		100	2663633	159.487
143)	1,2-Dibromo-3-chloropropane	(4)	13.604	75	138439	53.604
145)	1,3,5-Trichlorobenzene	(4)	13.726	180	519277	50.697
147)	1,2,4-Trichlorobenzene	(4)	14.165	180	467022	50.696
148)	Hexachlorobutadiene	(4)	14.250	225	224815	51.805
149)	Naphthalene	(4)	14.348	128	1714322	52.460
150)	1,2,3-Trichlorobenzene	(4)	14.494	180	457049	50.923
151)	2-Methylnaphthalene	(4)	15.110	142	1058862	54.763

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD050 Lab Sample ID: VSTD050

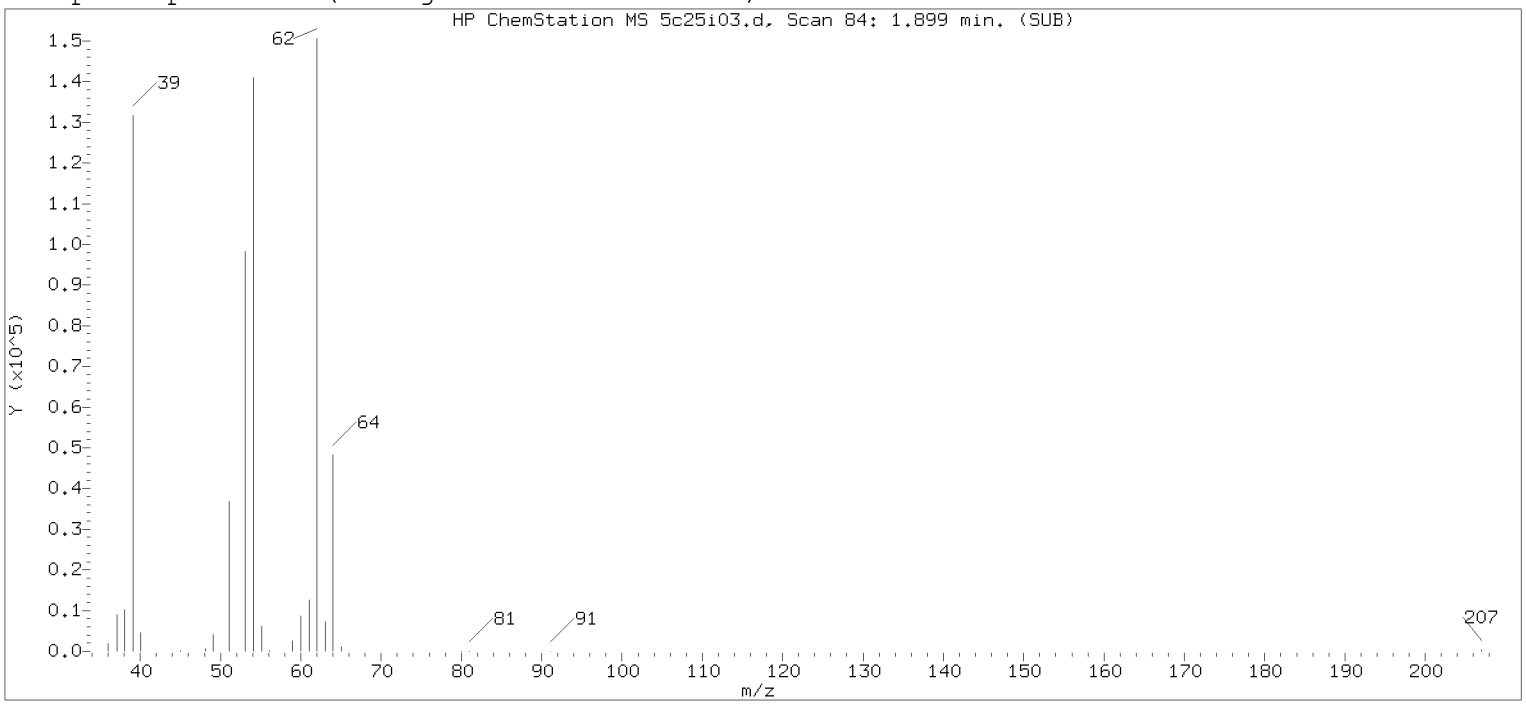
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 84
Retention Time (minutes): 1.899
Quant Ion : 39.00
Area (flag) : 299721M
On-Column Amount (ng) : 47.0027
Integration start scan : 65 Integration stop scan: 127
Y at integration start : 335 Y at integration end: 335

Reason for manual integration: improper integration

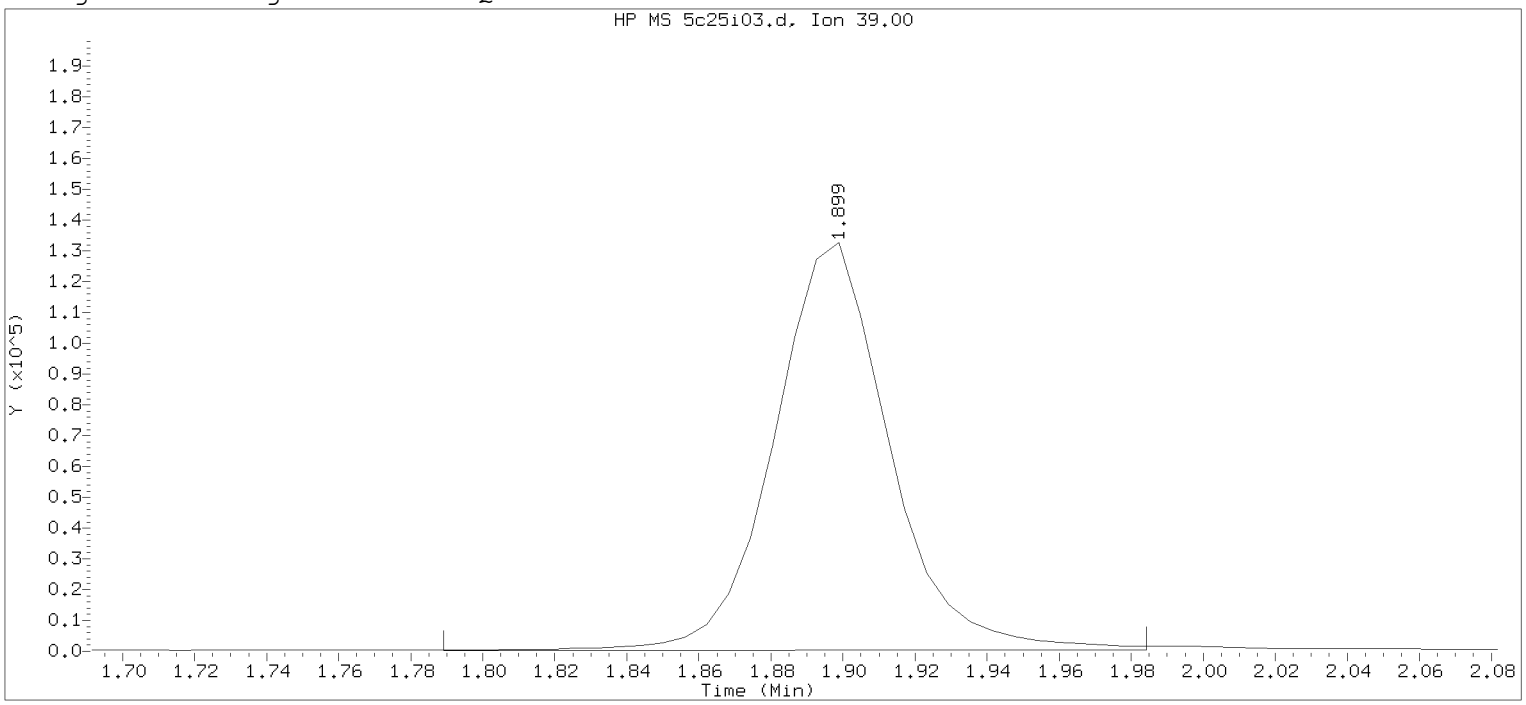
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

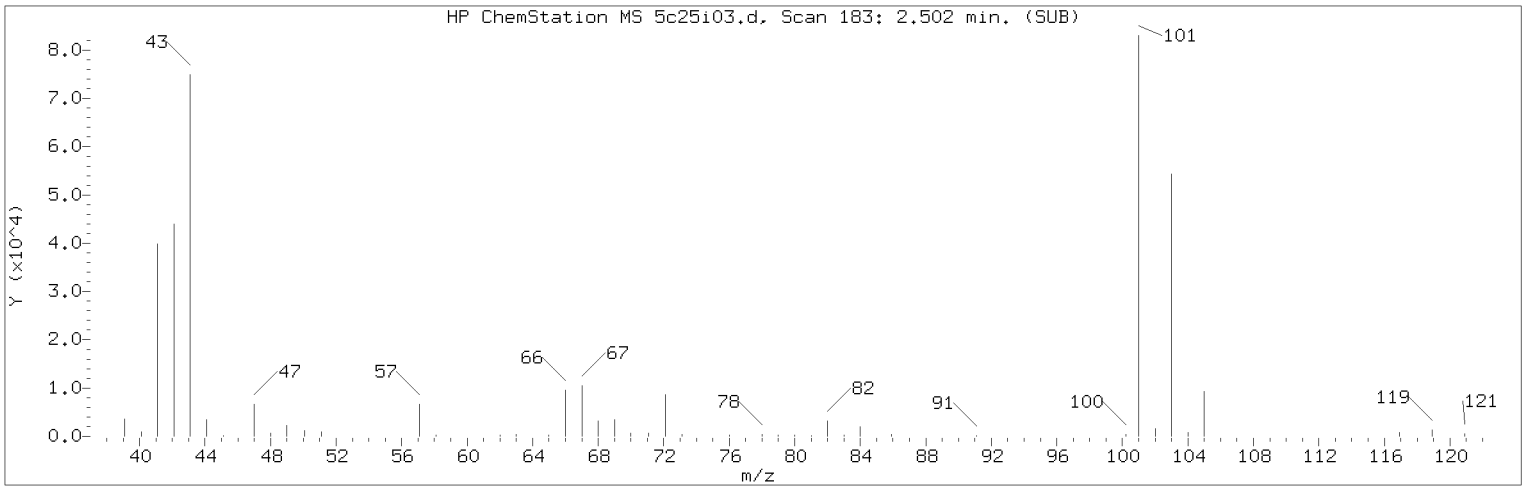
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 25-OCT-2018 22:46
Date, time and analyst ID of latest file update: 25-Oct-2018 22:46 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

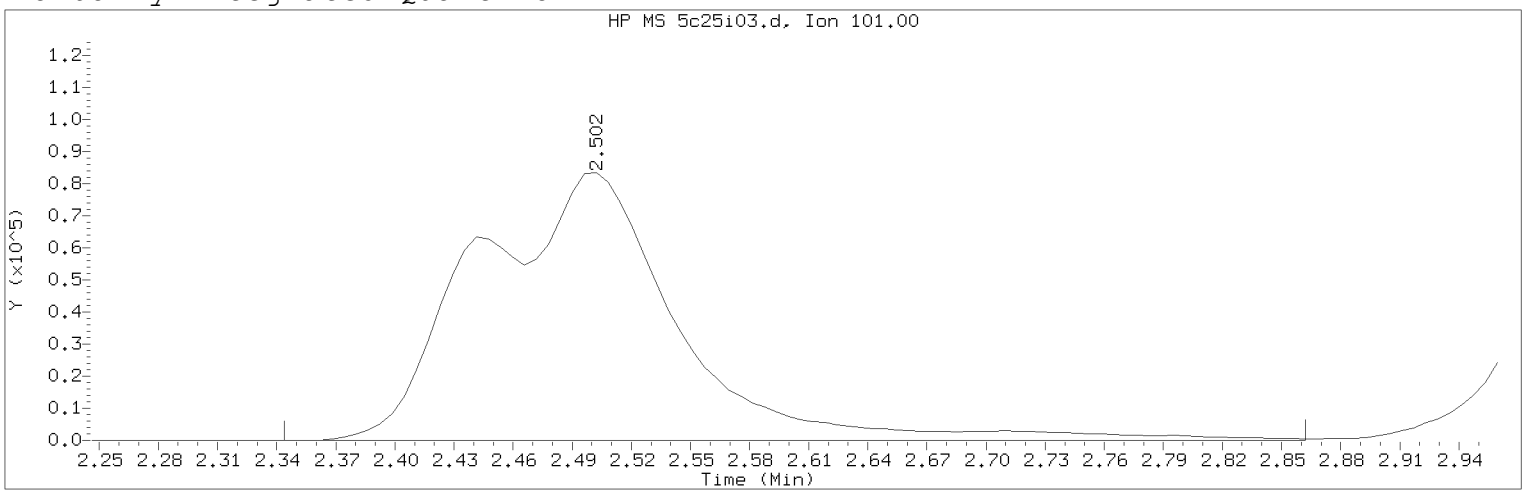
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 84
Retention Time (minutes): 1.899
Quant Ion : 39.00
Area : 295416
On-column Amount (ng) : 51.7700
Integration start scan : 65 Integration stop scan: 97
Y at integration start : 156 Y at integration end: 408

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user keeper 2018

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD050 Lab Sample ID: VSTD050

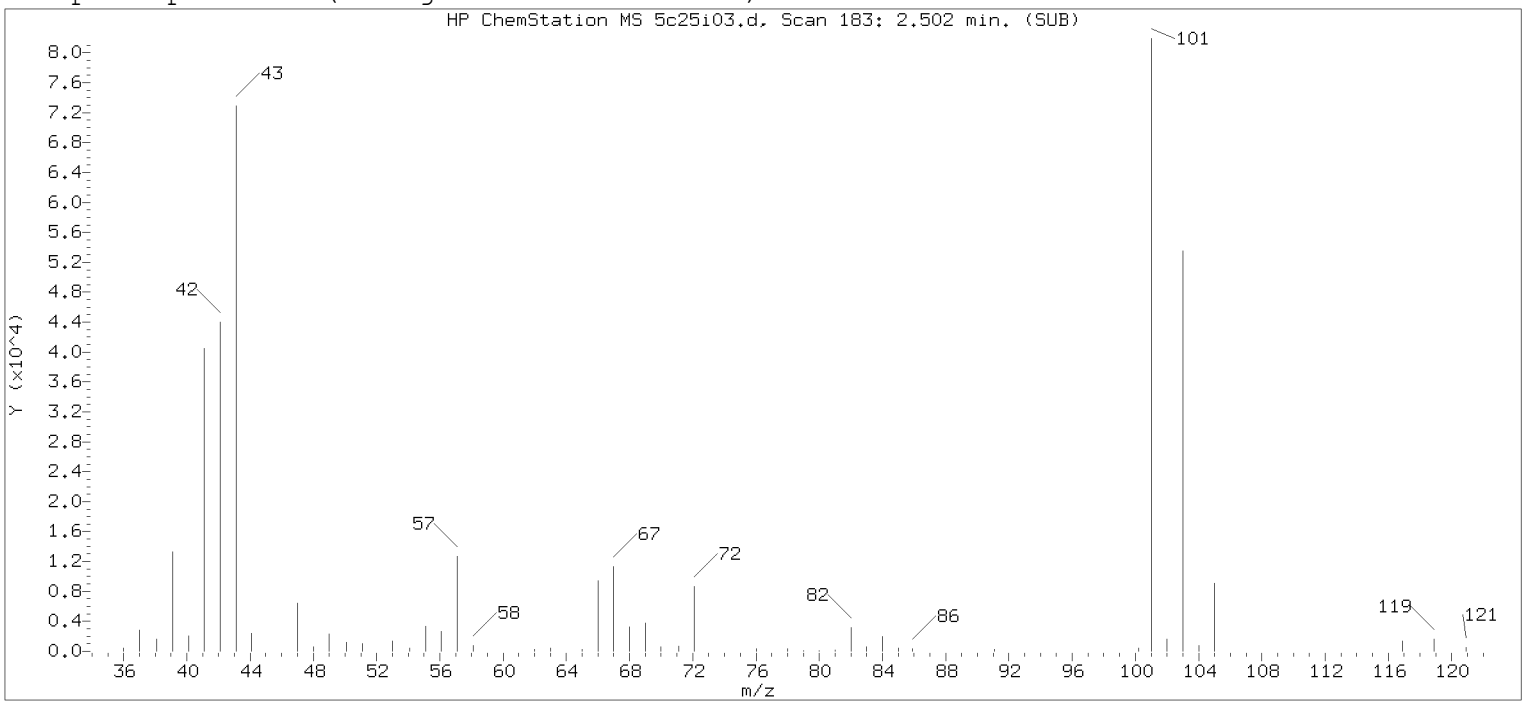
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 183
Retention Time (minutes): 2.502
Quant Ion : 101.00
Area (flag) : 589570M
On-Column Amount (ng) : 49.8062
Integration start scan : 156 Integration stop scan: 241
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

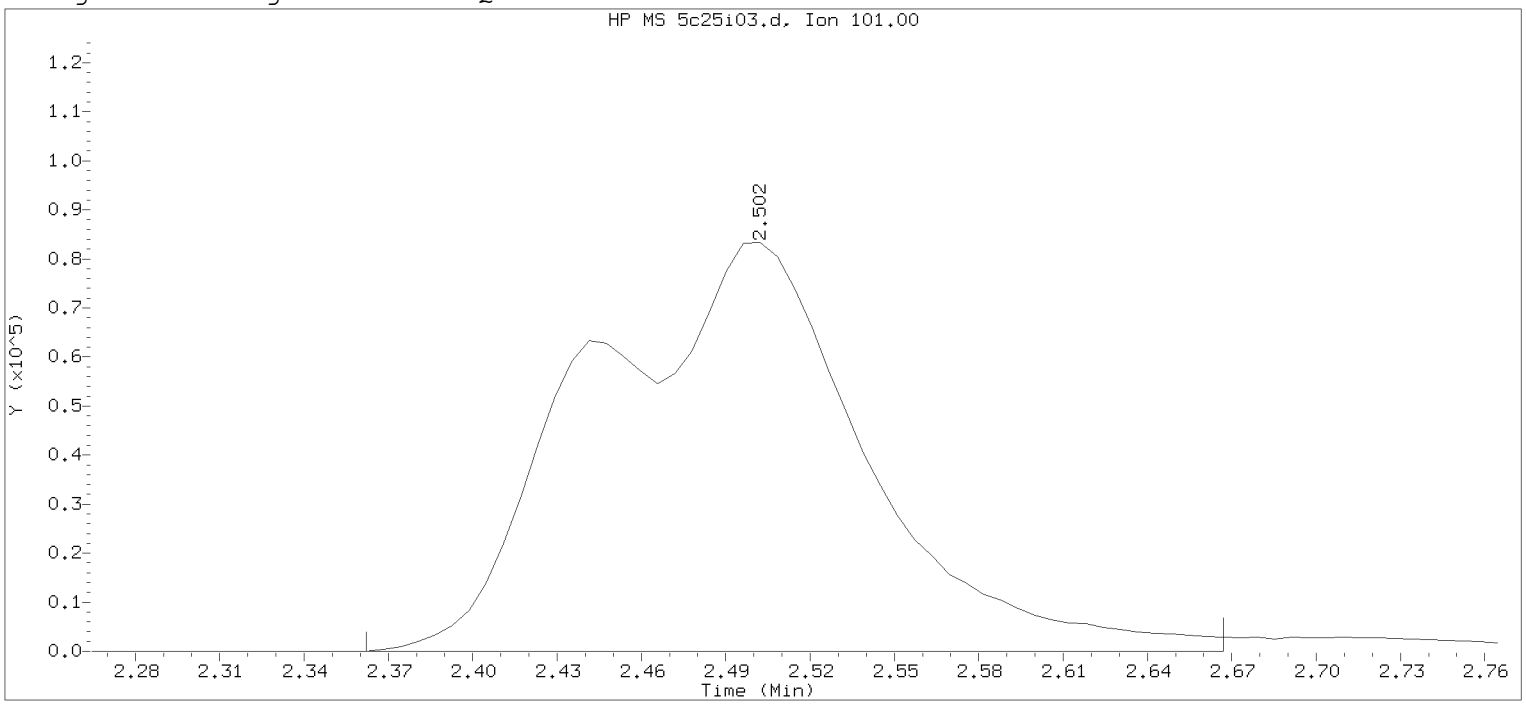
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

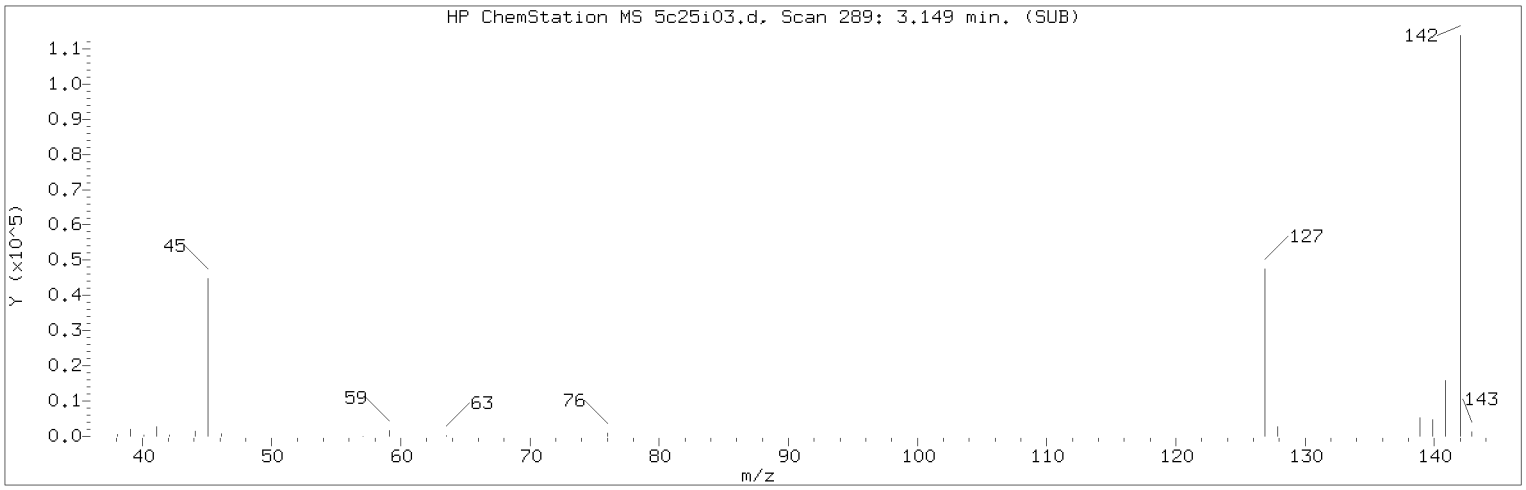
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 25-OCT-2018 22:46
Date, time and analyst ID of latest file update: 25-Oct-2018 22:46 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

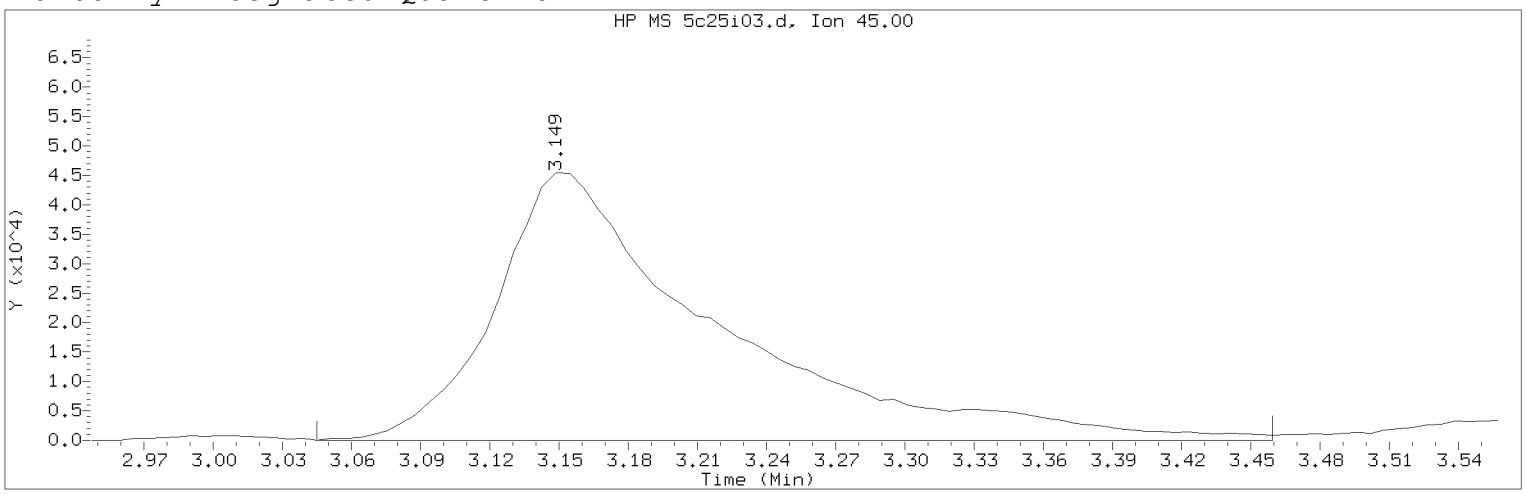
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 183
Retention Time (minutes): 2.502
Quant Ion : 101.00
Area : 568094
On-column Amount (ng) : 51.0609
Integration start scan : 159 Integration stop scan: 209
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: ksposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD050 Lab Sample ID: VSTD050

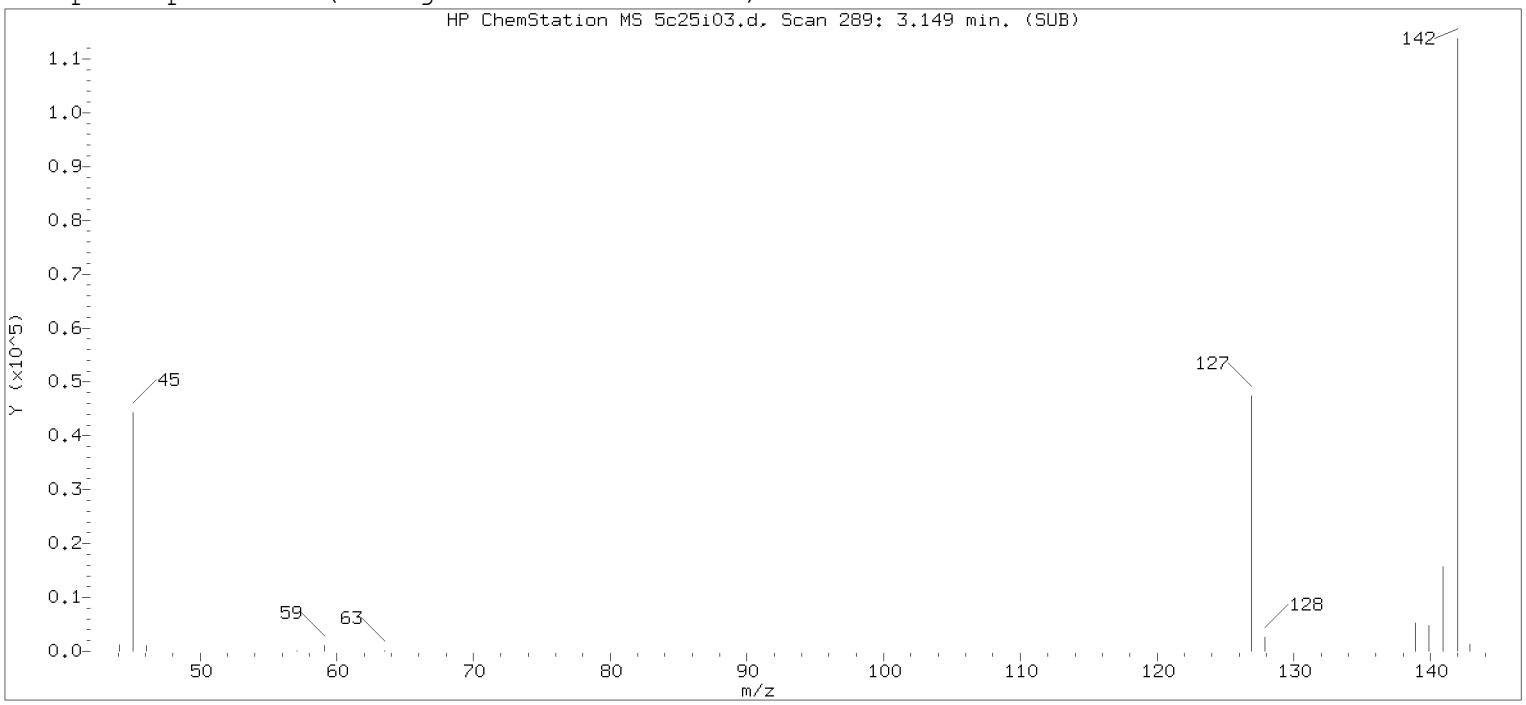
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 289
Retention Time (minutes): 3.149
Quant Ion : 45.00
Area (flag) : 304111M
On-Column Amount (ng) : 261.1061
Integration start scan : 271 Integration stop scan: 339
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

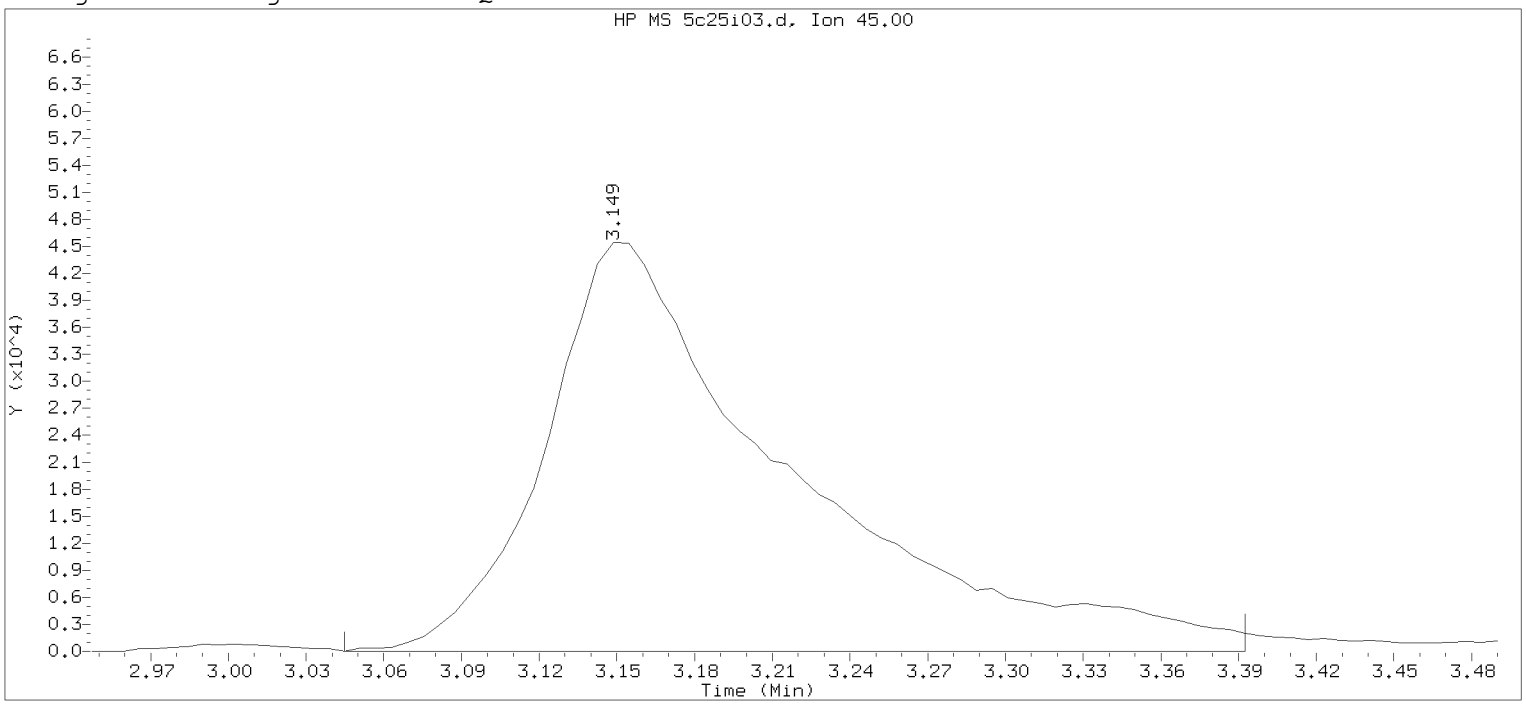
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

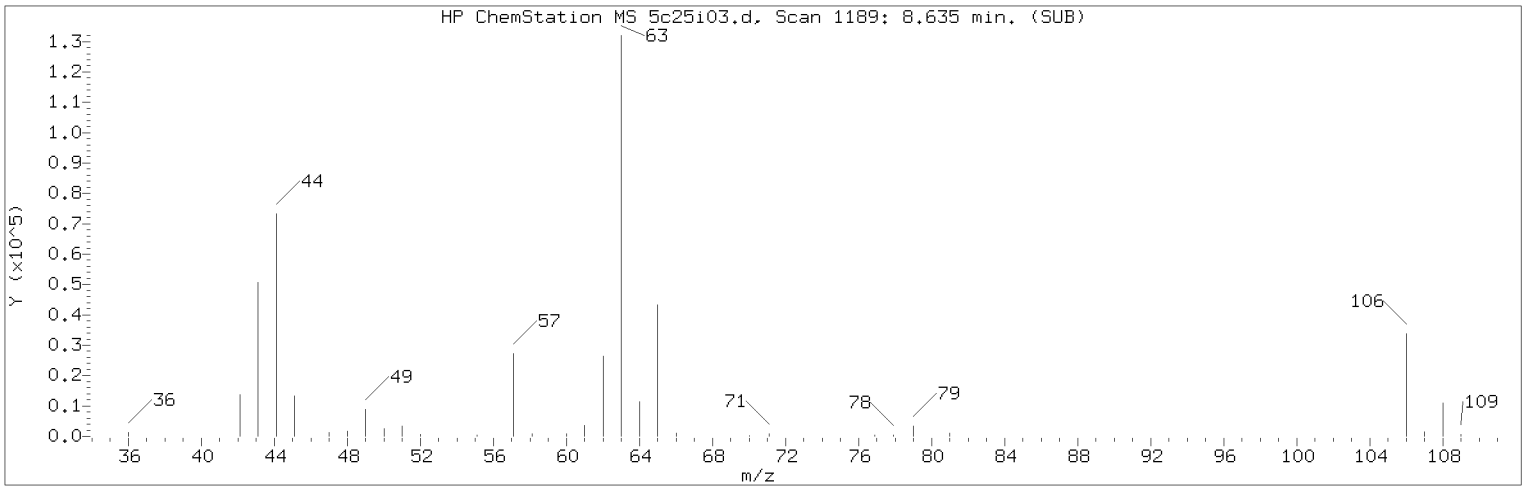
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 25-OCT-2018 22:46
Date, time and analyst ID of latest file update: 25-Oct-2018 22:46 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

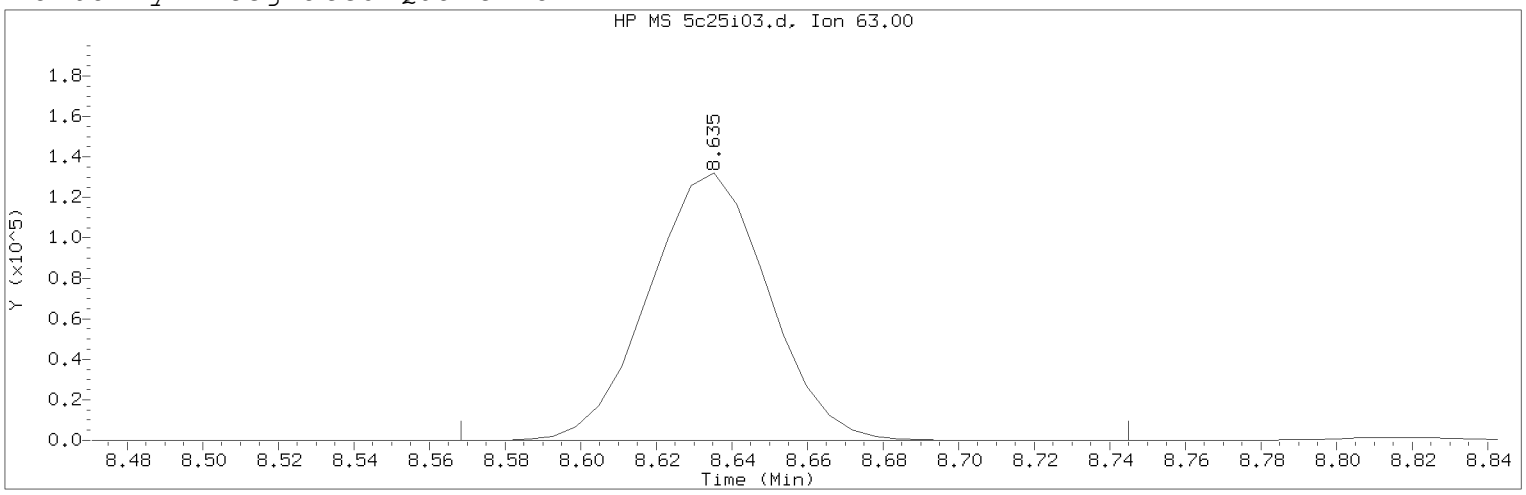
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 289
Retention Time (minutes): 3.149
Quant Ion : 45.00
Area : 298602
On-column Amount (ng) : 270.3019
Integration start scan : 271 Integration stop scan: 328
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user keeper 2018

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD050 Lab Sample ID: VSTD050

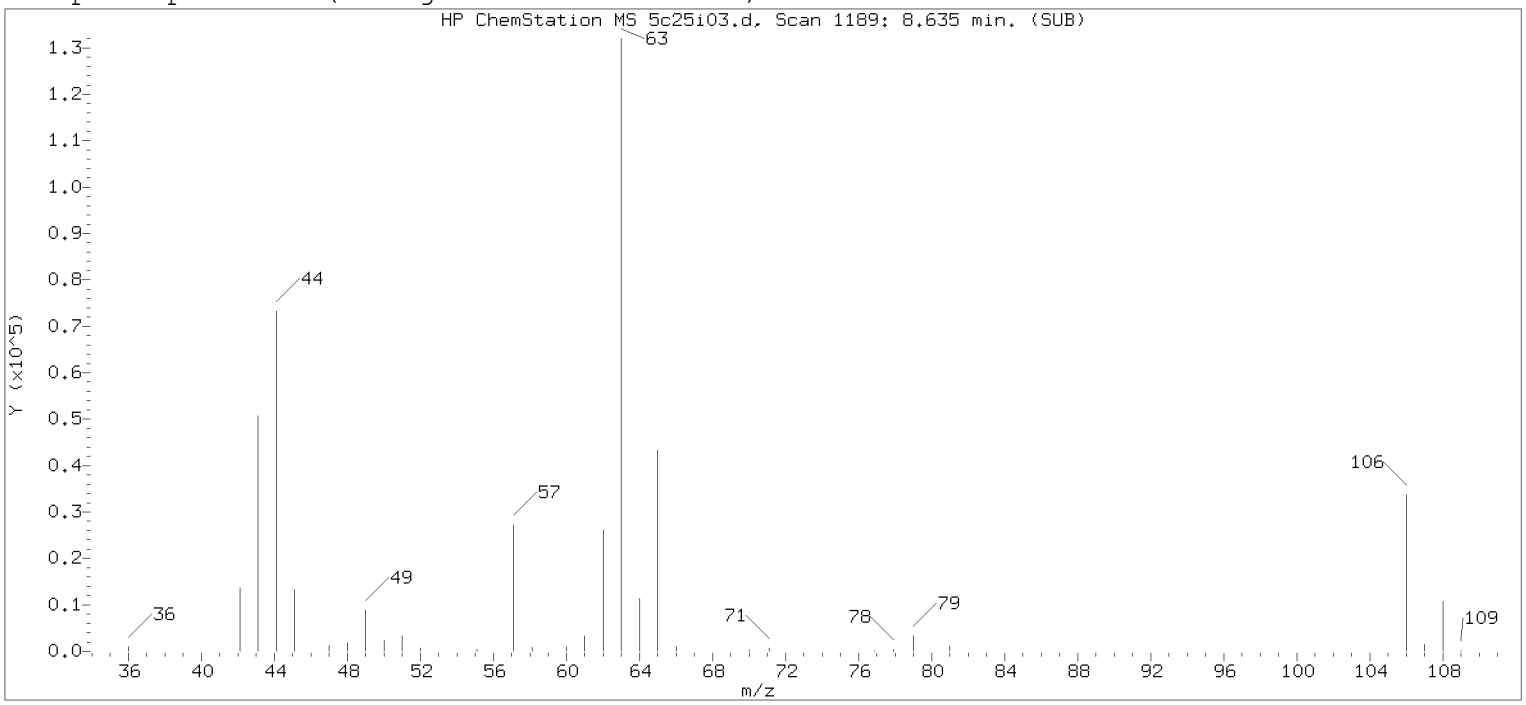
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1189
Retention Time (minutes): 8.635
Quant Ion : 63.00
Area (flag) : 289089M
On-Column Amount (ng) : 52.0905
Integration start scan : 1177 Integration stop scan: 1206
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

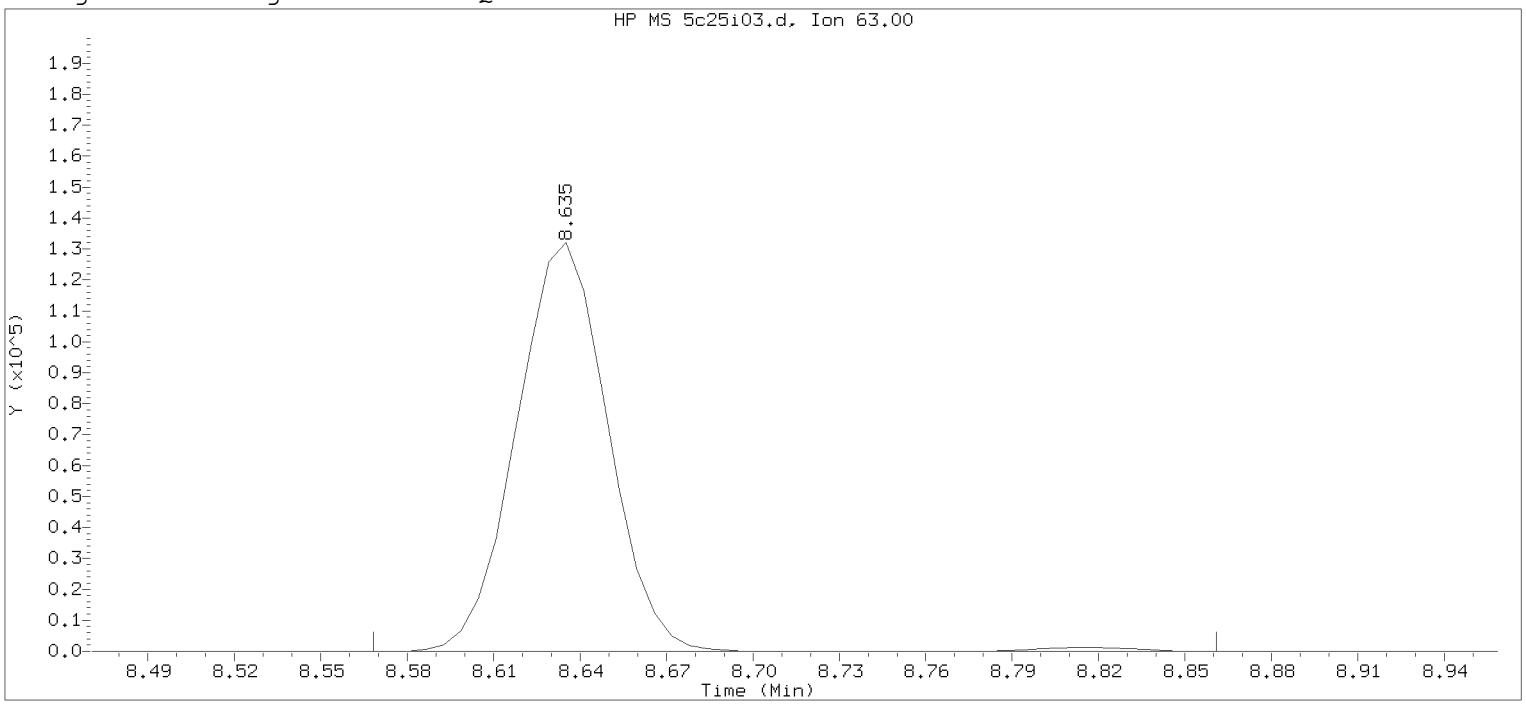
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

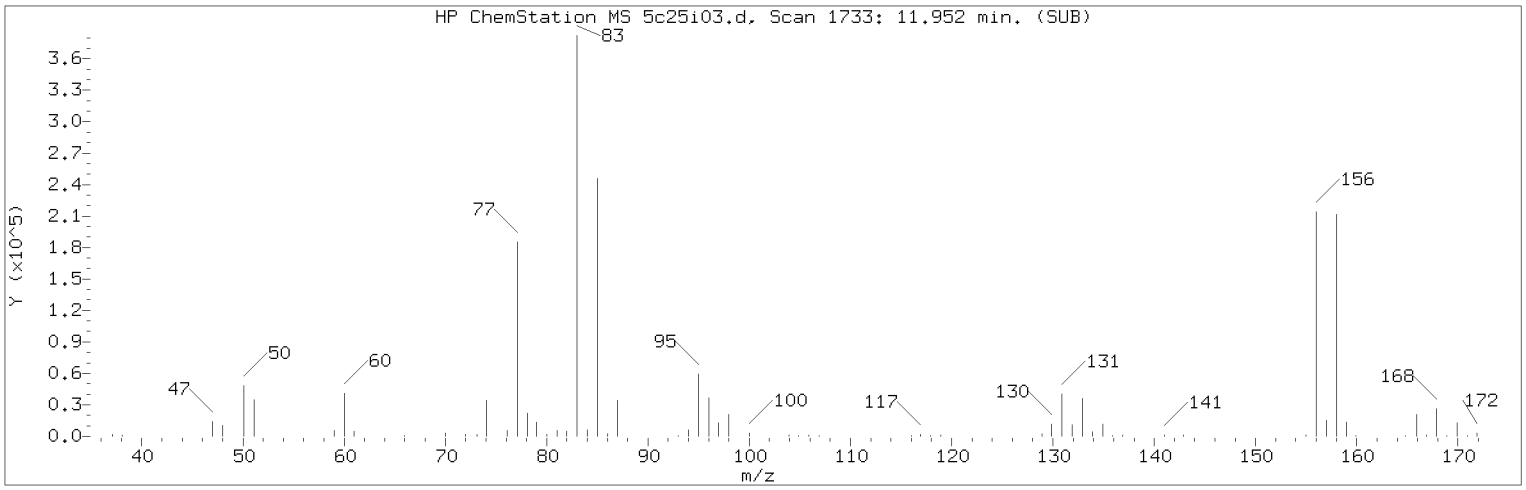
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 25-OCT-2018 22:46
Date, time and analyst ID of latest file update: 25-Oct-2018 22:46 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

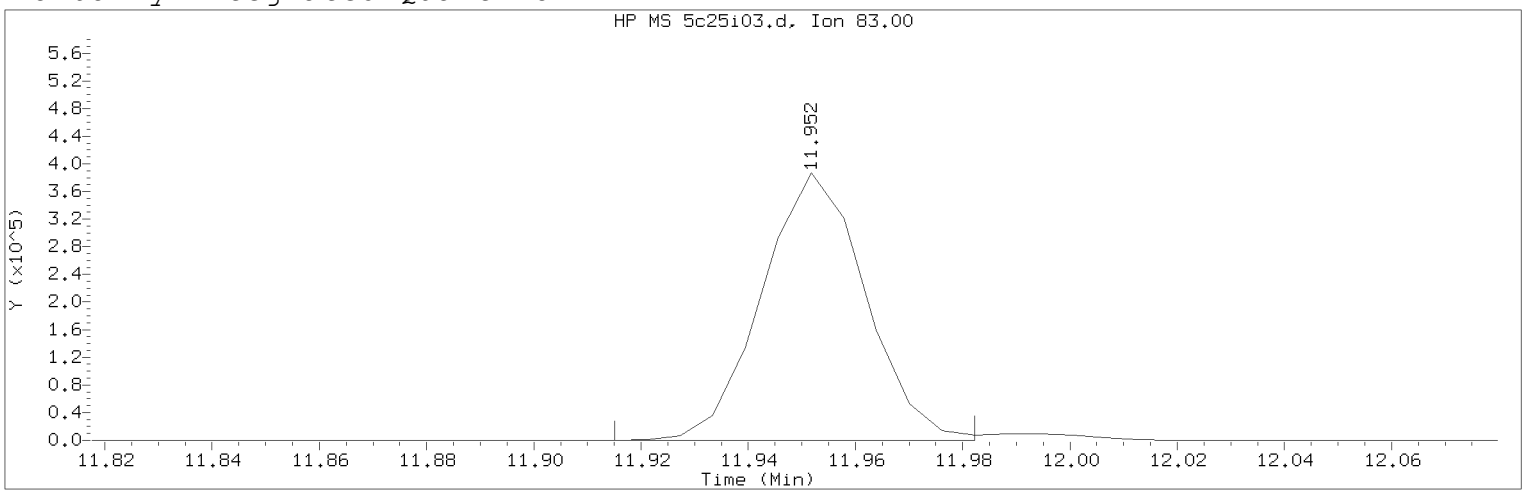
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1189
Retention Time (minutes): 8.635
Quant Ion : 63.00
Area : 292022
On-column Amount (ng) : 49.8483
Integration start scan : 1177 Integration stop scan: 1225
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: ksposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD050 Lab Sample ID: VSTD050

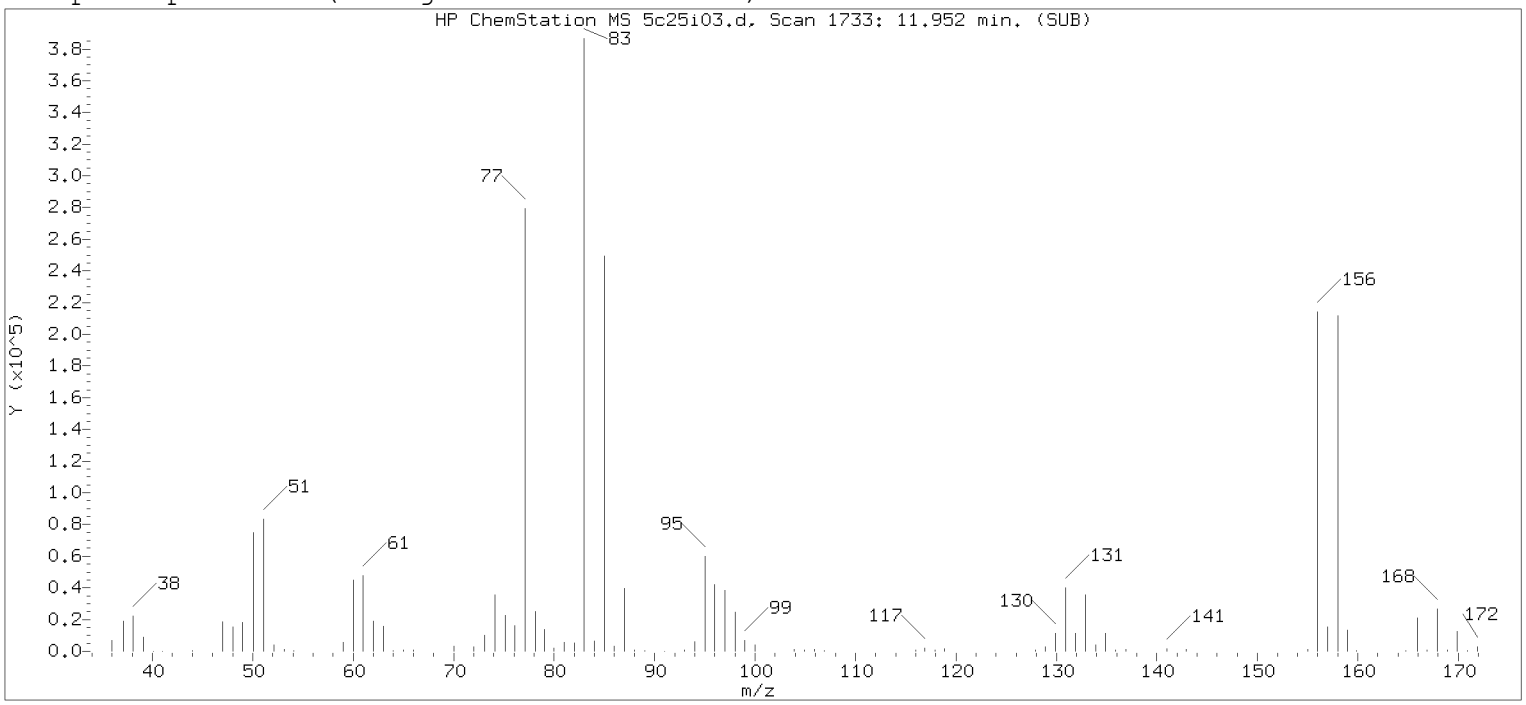
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area (flag) : 517360M
On-Column Amount (ng) : 51.4988
Integration start scan : 1726 Integration stop scan: 1737
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

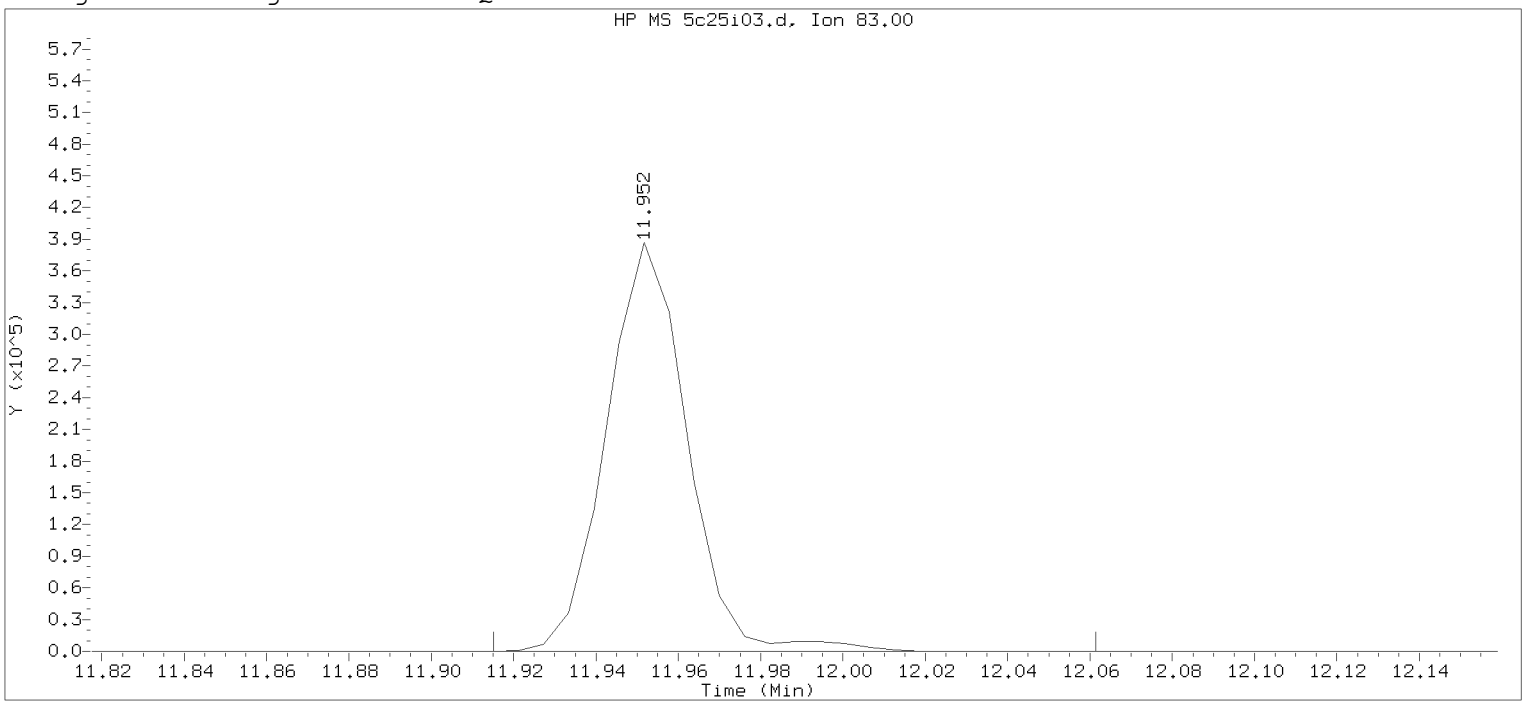
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

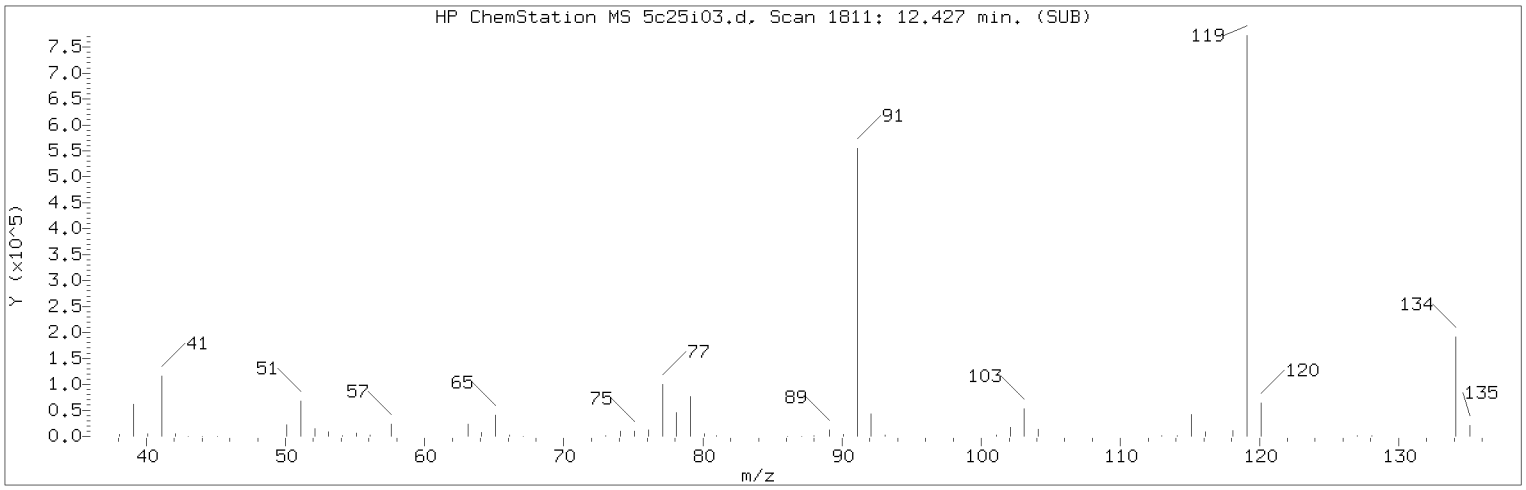
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 25-OCT-2018 22:46
Date, time and analyst ID of latest file update: 25-Oct-2018 22:46 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

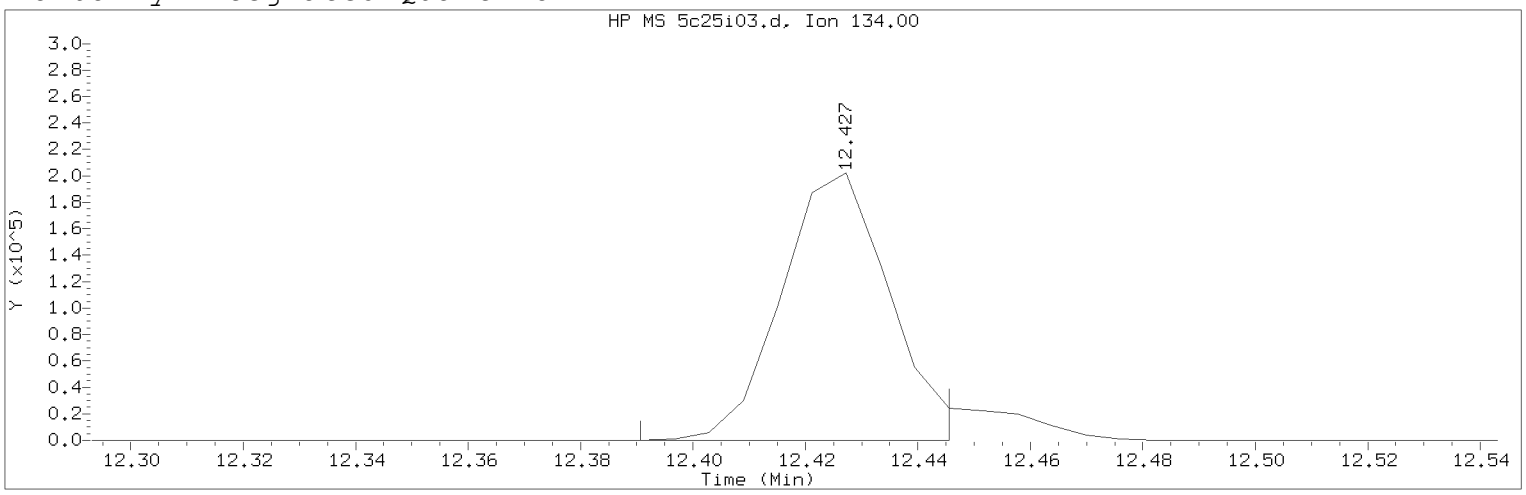
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area : 528315
On-column Amount (ng) : 49.0366
Integration start scan : 1726 Integration stop scan: 1750
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: ksposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD050 Lab Sample ID: VSTD050

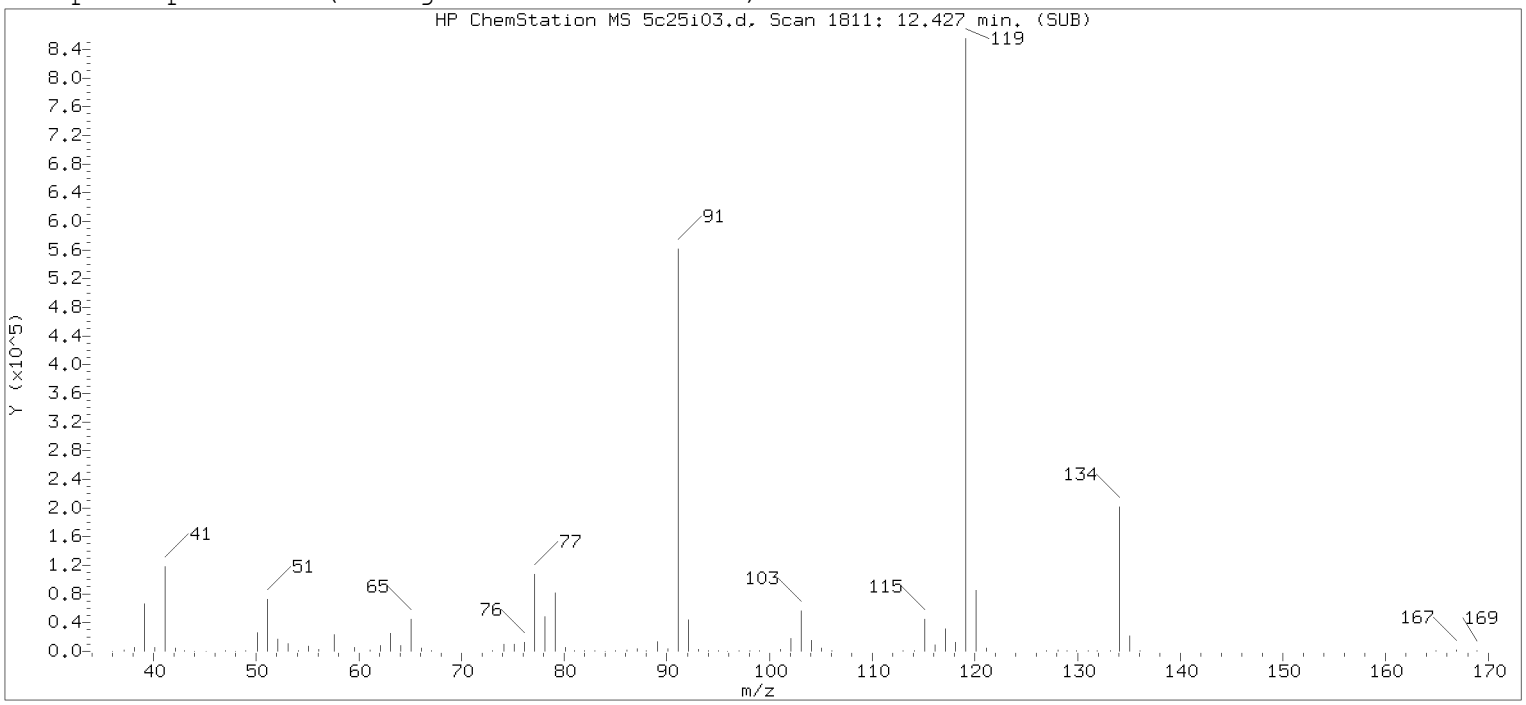
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1811
Retention Time (minutes): 12.427
Quant Ion : 134.00
Area (flag) : 270540M
On-Column Amount (ng) : 50.4898
Integration start scan : 1804 Integration stop scan: 1813
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

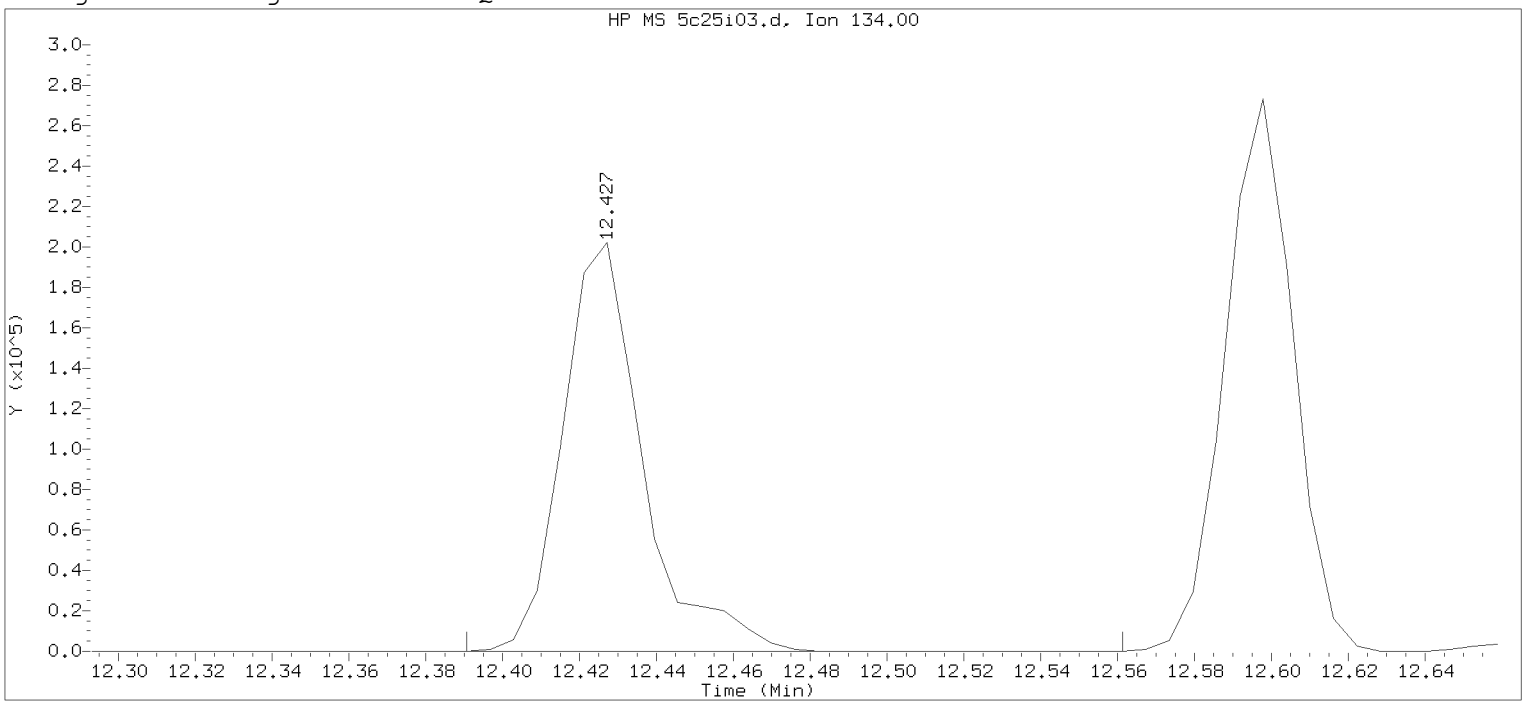
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

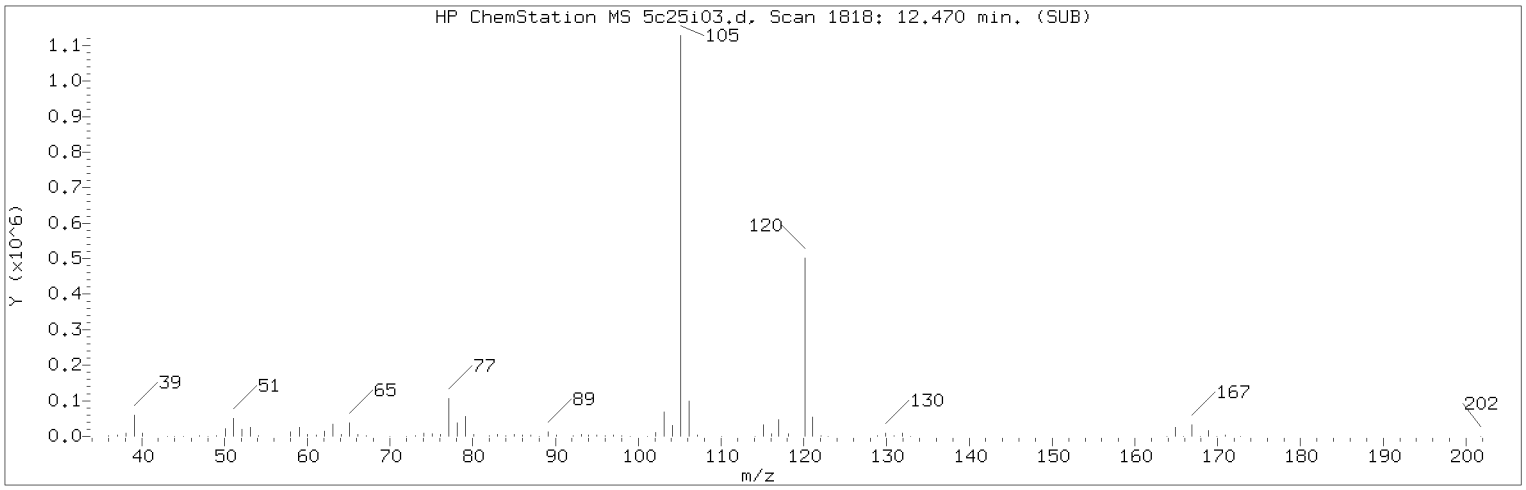
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 25-OCT-2018 22:46
Date, time and analyst ID of latest file update: 25-Oct-2018 22:46 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

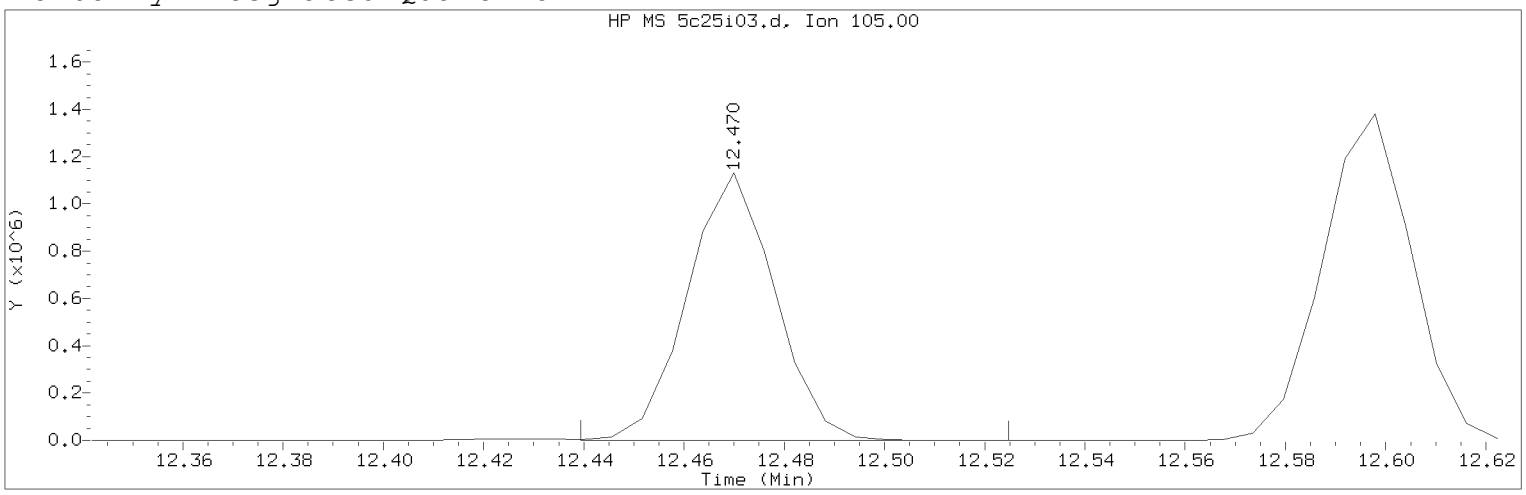
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1811
Retention Time (minutes): 12.427
Quant Ion : 134.00
Area : 291805
On-column Amount (ng) : 47.4991
Integration start scan : 1804 Integration stop scan: 1832
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kasposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD050 Lab Sample ID: VSTD050

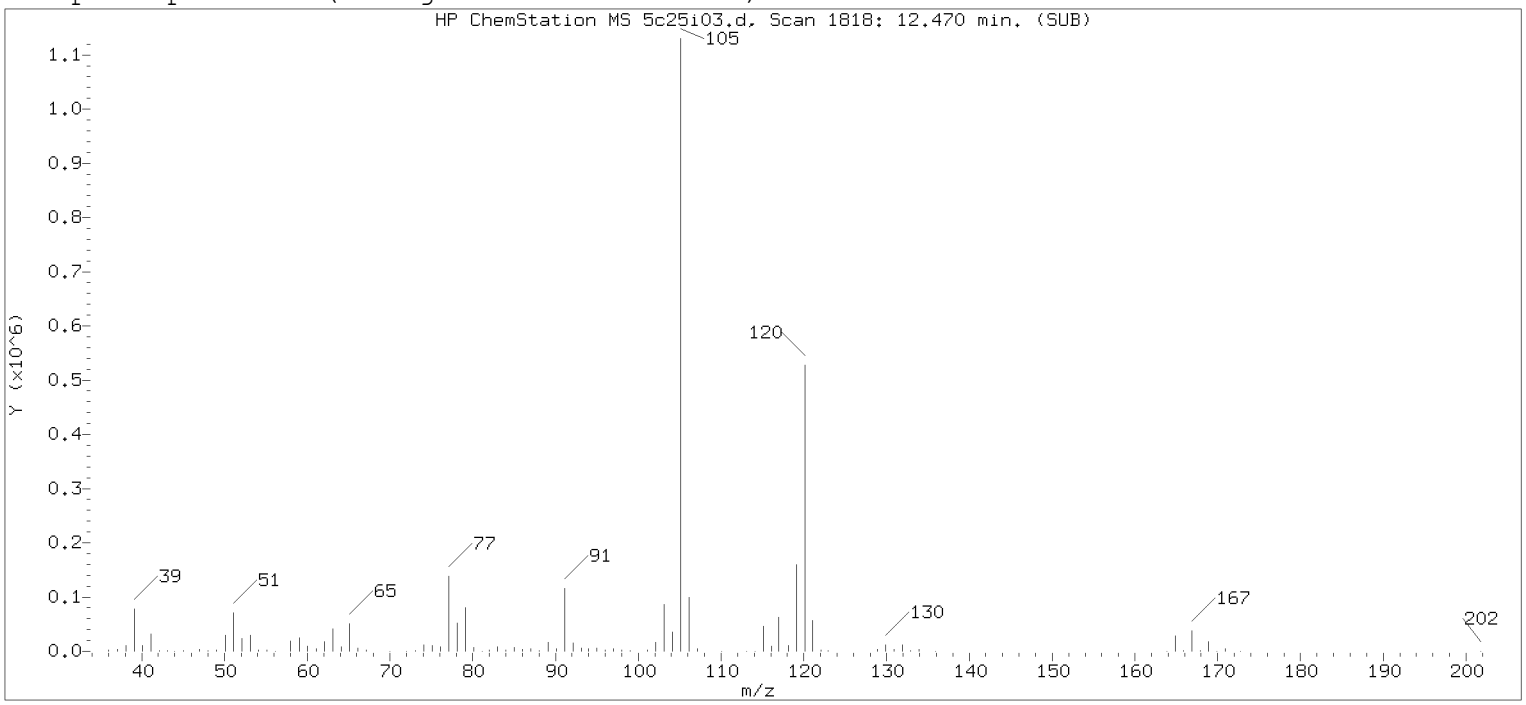
Compound Number : 127
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1818
Retention Time (minutes): 12.470
Quant Ion : 105.00
Area (flag) : 1363787M
On-Column Amount (ng) : 51.4734
Integration start scan : 1812 Integration stop scan: 1826
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

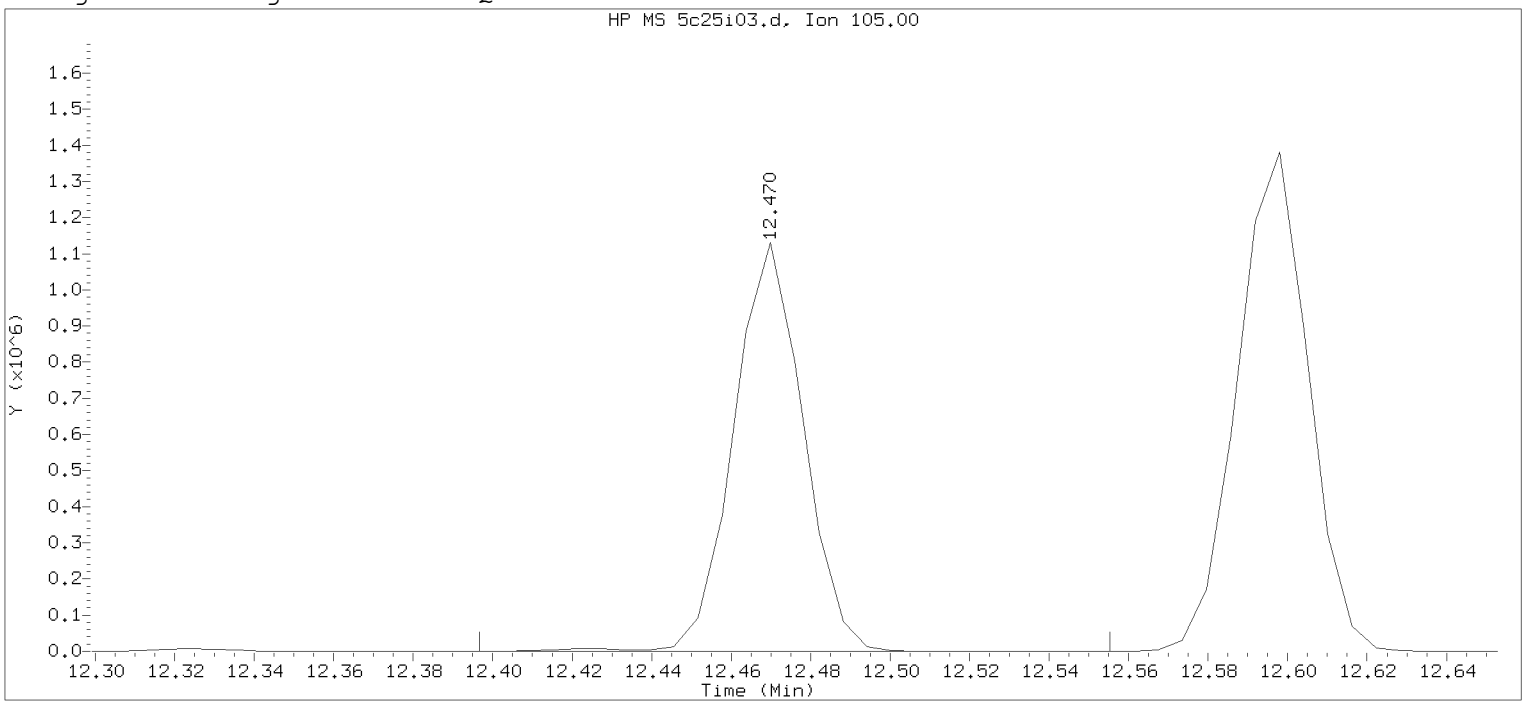
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



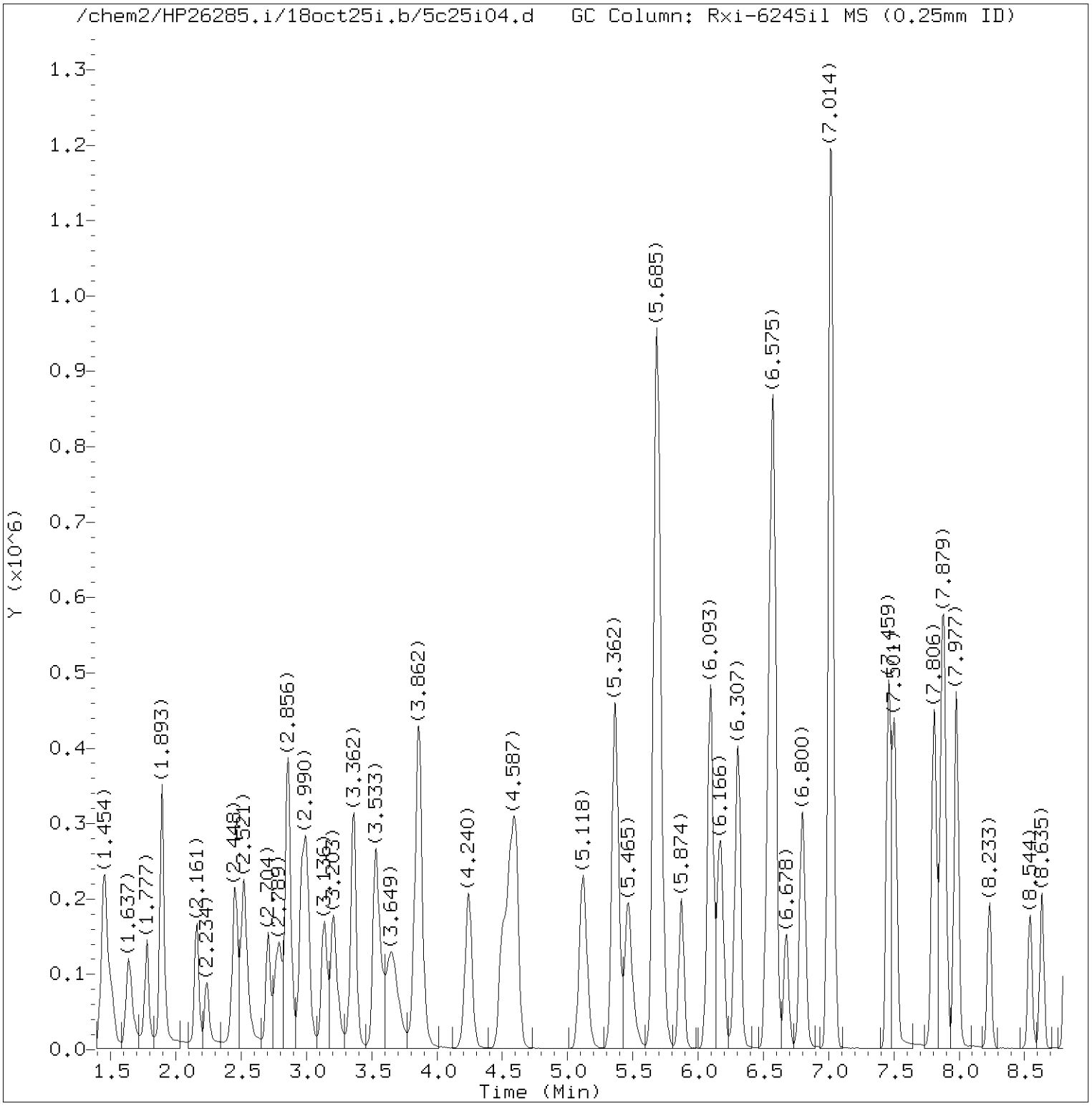
Data File: /chem2/HP26285.i/18oct25i.b/5c25i03.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:28 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 25-OCT-2018 22:46
Date, time and analyst ID of latest file update: 25-Oct-2018 22:46 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compound Number : 127
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1818
Retention Time (minutes): 12.470
Quant Ion : 105.00
Area : 1371849
On-column Amount (ng) : 49.4092
Integration start scan : 1805 Integration stop scan: 1831
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kasposito



Total Ion Chromatogram (TIC)

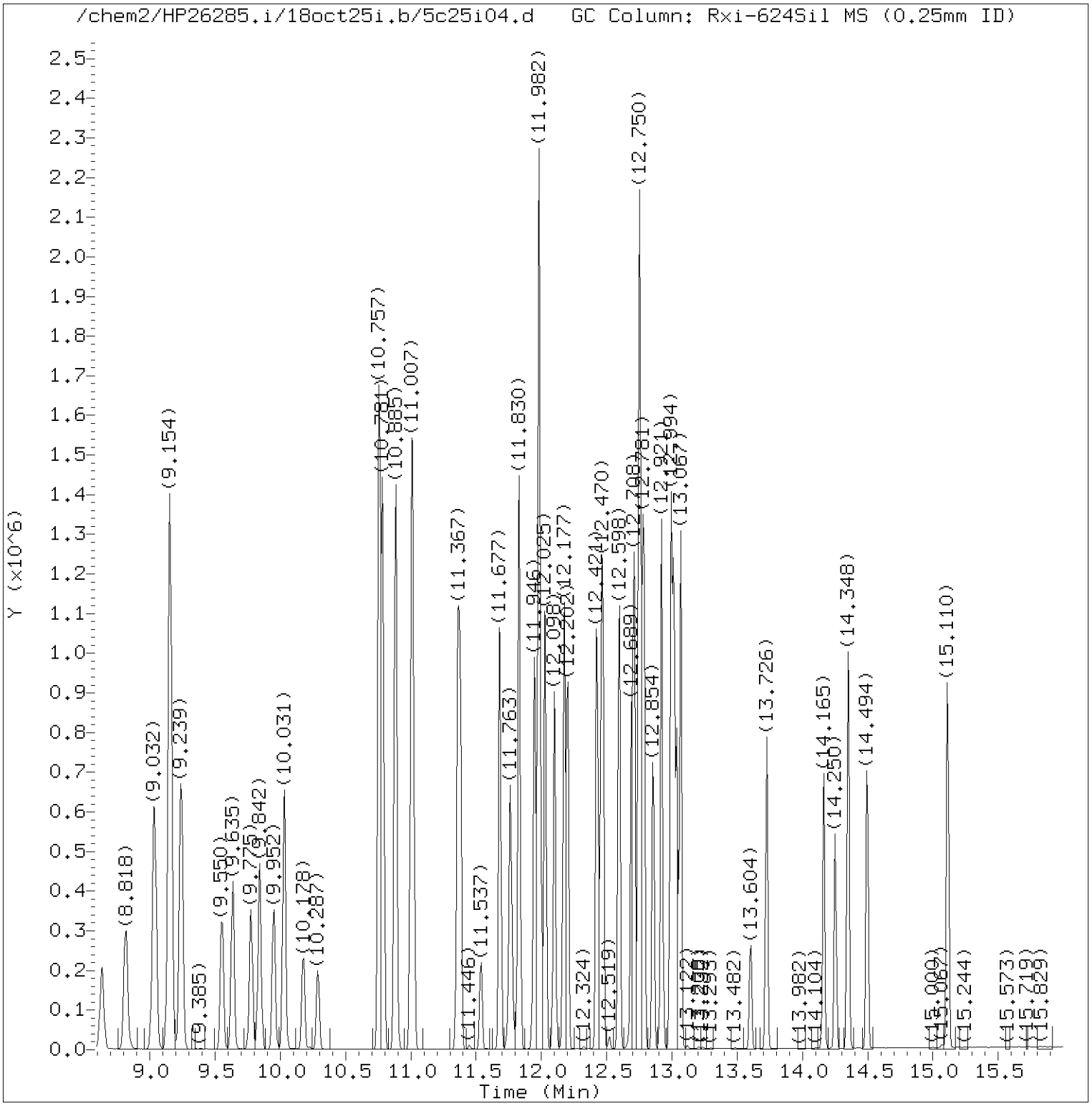
Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD020 Lab Sample ID: VSTD020

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD020 Lab Sample ID: VSTD020

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.637	85	240319	20.787
4) Chloromethane	(2)	1.777	50	190835	20.385
6) Vinyl Chloride	(2)	1.887	62	180789	20.664
5) 1,3-Butadiene	(2)	1.893	39	132331M	21.052
8) Bromomethane	(2)	2.161	94	142631	21.934
9) Chloroethane	(2)	2.234	64	92827	21.346
10) Dichlorofluoromethane	(2)	2.454	67	237771	20.623
12) Trichlorofluoromethane	(2)	2.502	101	242622M	20.793
11) n-Pentane	(2)	2.521	43	162873	21.853
14) Ethyl ether	(2)	2.704	59	113755	20.254
15) Freon 123a	(2)	2.789	67	167413	21.061
16) Acrolein	(1)	2.856	56	542530	202.503
17) 1,1-Dichloroethene	(2)	2.966	96	114999	20.975
17) 1,1-Dichloroethene	(2)	2.966	63	61485	21.637
18) Acetone	(1)	3.002	58	55780	40.171
19) Freon 113	(2)	3.002	101	121090	22.163
22) Methyl Iodide	(2)	3.130	142	220799	20.659
21) 2-Propanol	(1)	3.149	45	203267	178.546
23) Carbon Disulfide	(2)	3.203	76	387939	20.767
27) Methyl Acetate	(2)	3.350	43	203692	19.051
25) Allyl Chloride	(2)	3.362	41	243043	20.519
28) Methylene Chloride	(2)	3.527	84	130771	20.364
29)*t-Butyl alcohol-d10	(1)	3.551	65	381429	250.000
30) t-Butyl alcohol	(1)	3.661	59	390813	194.827
31) Acrylonitrile	(2)	3.831	53	104885	20.895
32) trans-1,2-Dichloroethene	(2)	3.862	96	129941	20.828
33) Methyl Tertiary Butyl Ether	(2)	3.862	73	407359	20.679
34) n-Hexane	(2)	4.240	57	202877	22.420
36) 1,1-Dichloroethane	(2)	4.496	63	244253	20.918
38) di-Isopropyl ether	(2)	4.563	45	468021	20.649
39) 2-Chloro-1,3-butadiene	(2)	4.606	53	221691	21.034
40) Ethyl t-butyl ether	(2)	5.118	59	421723	20.689
42) cis-1,2-Dichloroethene	(2)	5.362	96	142109	20.440
44) 2-Butanone	(2)	5.362	43	313550	41.344
45) 2,2-Dichloropropane	(2)	5.374	77	194320	20.999
47) Propionitrile	(1)	5.465	54	425351	200.638
48) Methacrylonitrile	(2)	5.679	67	485987	101.854
49) Bromochloromethane	(2)	5.703	128	73797	20.507

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.715	71	79318	41.122
51) Chloroform	(2)	5.874	83	228524	20.707
53) 1,1,1-Trichloroethane	(2)	6.087	97	196457	20.754
52)$Dibromofluoromethane	(2)	6.099	113	284759	49.990
52)$Dibromofluoromethane	(2)	6.093	111	291395	50.033
43) 1,2-Dichloroethene (Total)	(2)		96	272050	41.268
54) Cyclohexane	(2)	6.172	56	241853	21.418
54) Cyclohexane	(2)	6.172	84	193384	20.731
54) Cyclohexane	(2)	6.172	69	72821	21.657
56) Carbon Tetrachloride	(2)	6.294	117	172286	20.712
55) 1,1-Dichloropropene	(2)	6.313	75	187305	20.568
58) Isobutyl Alcohol	(1)	6.538	41	311450	479.464
57)$1,2-Dichloroethane-d4	(2)	6.569	102	67829	49.875
57)$1,2-Dichloroethane-d4	(2)	6.569	65	346139	50.028
57)$1,2-Dichloroethane-d4	(2)	6.569	104	42825	49.452
60) Benzene	(2)	6.587	78	562601	20.679
61) 1,2-Dichloroethane	(2)	6.678	62	167811	20.104
61) 1,2-Dichloroethane	(2)	6.672	98	14533	20.163
65) t-Amyl methyl ether	(2)	6.800	73	393320	20.550
66)*Fluorobenzene	(2)	7.014	96	1171001	50.000
67) n-Heptane	(2)	7.026	43	231920	22.300
69) n-Butanol	(1)	7.459	56	480872	921.958
71) Trichloroethene	(2)	7.508	95	138512	20.356
73) Methylcyclohexane	(2)	7.806	83	258018	21.870
73) Methylcyclohexane	(2)	7.806	98	110030	21.946
74) 1,2-Dichloropropane	(2)	7.867	63	139777	20.553
75) Dibromomethane	(2)	7.977	93	83285	20.129
77) Methyl Methacrylate	(2)	7.983	69	139432	20.330
79) Bromodichloromethane	(2)	8.233	83	157205	20.387
80) 2-Nitropropane	(2)	8.544	41	144494	41.843
81) 2-Chloroethyl Vinyl Ether	(2)	8.635	63	111260M	20.338
82) cis-1,3-Dichloropropene	(2)	8.818	75	202725	20.445
83) 4-Methyl-2-pentanone	(2)	9.032	43	561122	41.531
84)$Toluene-d8	(3)	9.154	98	1115706	50.389
84)$Toluene-d8	(3)	9.154	100	722315	50.406
89) Toluene	(3)	9.239	92	334693	20.148
90) trans-1,3-Dichloropropene	(3)	9.550	75	182413	20.560
92) Ethyl Methacrylate	(3)	9.635	69	217731	20.468

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$ = Compound is a surrogate standard.

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) 1,1,2-Trichloroethane	(3)	9.775	97	115834	20.472
94) Tetrachloroethene	(3)	9.842	166	145116	19.889
95) 1,3-Dichloropropane	(3)	9.952	76	193160	20.195
97) 2-Hexanone	(3)	10.031	43	450345	42.024
91) 1,3-Dichloropropene (total)	(3)		100	385138	41.006
98) Dibromochloromethane	(3)	10.178	129	117123	20.218
100) 1,2-Dibromoethane	(3)	10.287	107	124725	20.317
101)*Chlorobenzene-d5	(3)	10.757	117	820845	50.000
102) 1-Chlorohexane	(3)	10.781	91	181380	19.220
103) Chlorobenzene	(3)	10.787	112	353403	19.639
104) 1,1,1,2-Tetrachloroethane	(3)	10.879	131	117898	19.892
105) Ethylbenzene	(3)	10.885	91	635409	19.898
107) m+p-Xylene	(3)	11.007	106	488992	39.642
108) o-Xylene	(3)	11.360	106	230897	19.557
110) Styrene	(3)	11.379	104	382973	19.905
111) Bromoform	(3)	11.537	173	84530	19.055
112) Isopropylbenzene	(3)	11.684	105	599694	19.928
109) Xylene (Total)	(3)		106	719889	59.199
115)$4-Bromofluorobenzene	(3)	11.830	95	397174	49.903
115)$4-Bromofluorobenzene	(3)	11.830	174	338595	50.106
116) Bromobenzene	(4)	11.946	156	147189	19.805
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	194550M	20.105
119) trans-1,4-Dichloro-2-butene	(4)	11.982	53	351856	105.874
118) 1,2,3-Trichloropropane	(4)	11.994	110	58413	20.296
120) n-Propylbenzene	(4)	12.025	91	725276	20.486
121) 2-Chlorotoluene	(4)	12.098	126	141640	19.830
123) 1,3,5-Trimethylbenzene	(4)	12.177	105	501964	20.202
122) 4-Chlorotoluene	(4)	12.202	126	145230	19.542
125) tert-Butylbenzene	(4)	12.427	134	101322M	19.631
126) Pentachloroethane	(4)	12.452	167	89148	20.235
127) 1,2,4-Trimethylbenzene	(4)	12.470	105	510817	20.016
128) sec-Butylbenzene	(4)	12.598	105	636133	20.512
130) 1,3-Dichlorobenzene	(4)	12.689	146	272411	19.377
131) p-Isopropyltoluene	(4)	12.708	119	548259	20.355
132)*1,4-Dichlorobenzene-d4	(4)	12.750	152	432302	50.000
134) 1,4-Dichlorobenzene	(4)	12.769	146	280345	19.412
135) 1,2,3-Trimethylbenzene	(4)	12.787	105	545849	20.534
136) Benzyl Chloride	(4)	12.854	91	391137	20.823

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Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

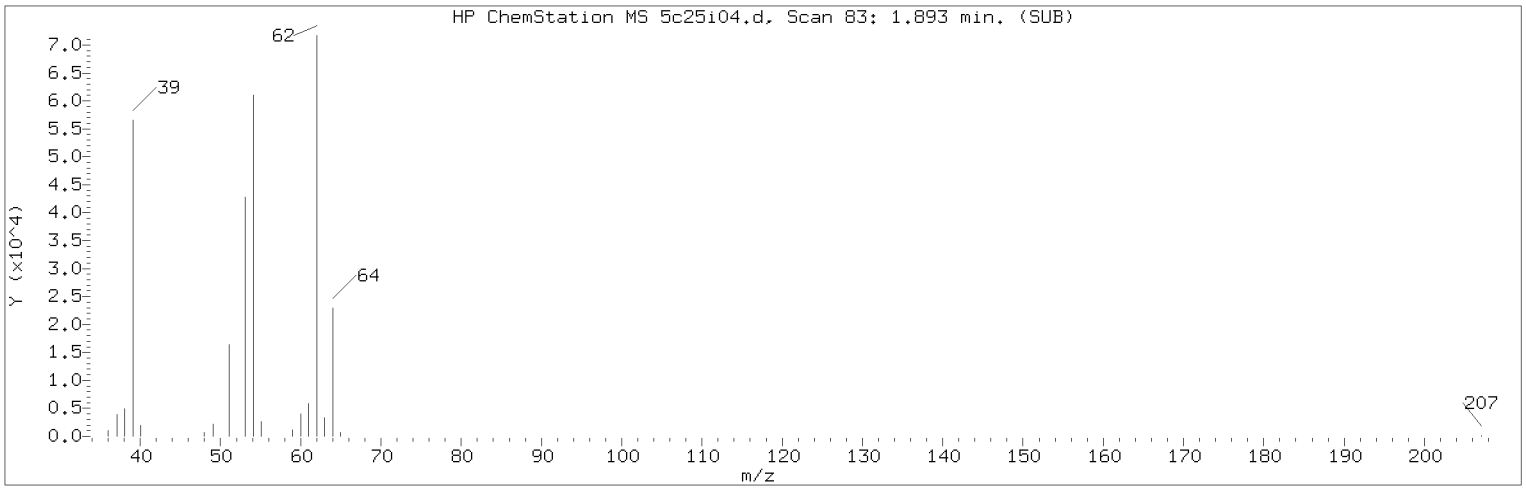
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD020 Lab Sample ID: VSTD020

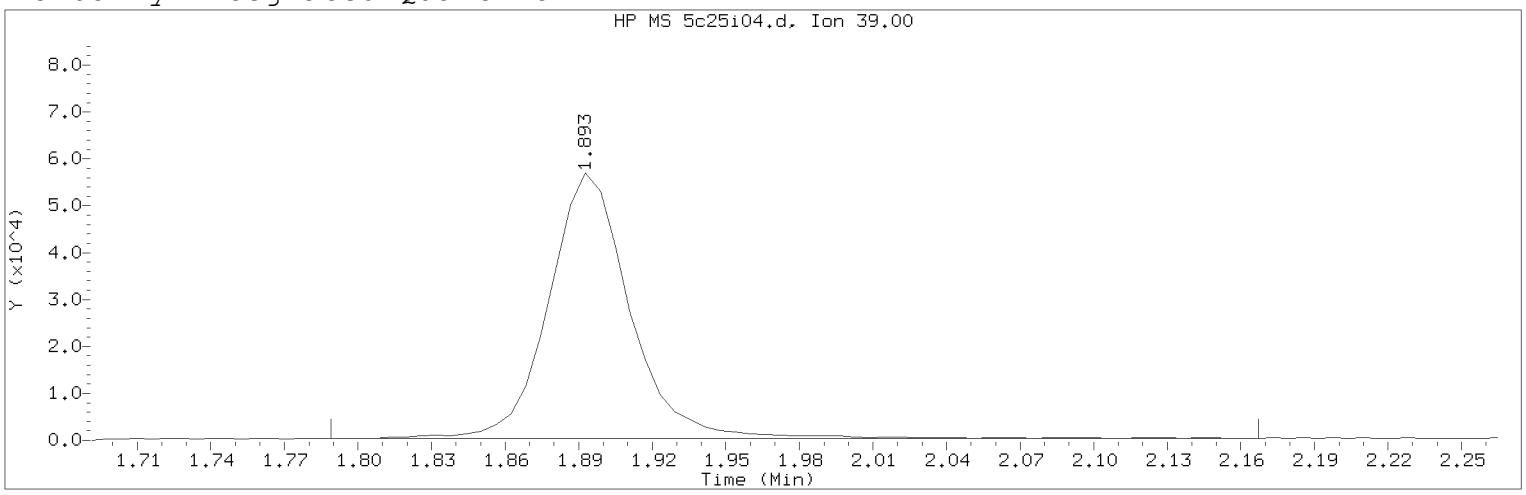
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137) 1,3-Diethylbenzene	(4)	12.921	119	342857	20.650
138) 1,4-Diethylbenzene	(4)	12.994	119	364628	20.575
140) n-Butylbenzene	(4)	13.013	92	280665	20.192
139) 1,2-Dichlorobenzene	(4)	13.037	146	259958	19.281
141) 1,2-Diethylbenzene	(4)	13.067	119	285051	20.506
142) Diethylbenzene (total)	(4)		100	992536	61.730
143) 1,2-Dibromo-3-chloropropane	(4)	13.604	75	50410	20.264
145) 1,3,5-Trichlorobenzene	(4)	13.726	180	190700	19.329
147) 1,2,4-Trichlorobenzene	(4)	14.165	180	170208	19.182
148) Hexachlorobutadiene	(4)	14.250	225	80261	19.201
149) Naphthalene	(4)	14.348	128	624781	19.849
150) 1,2,3-Trichlorobenzene	(4)	14.494	180	165732	19.170
151) 2-Methylnaphthalene	(4)	15.110	142	369307	19.829

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD020 Lab Sample ID: VSTD020

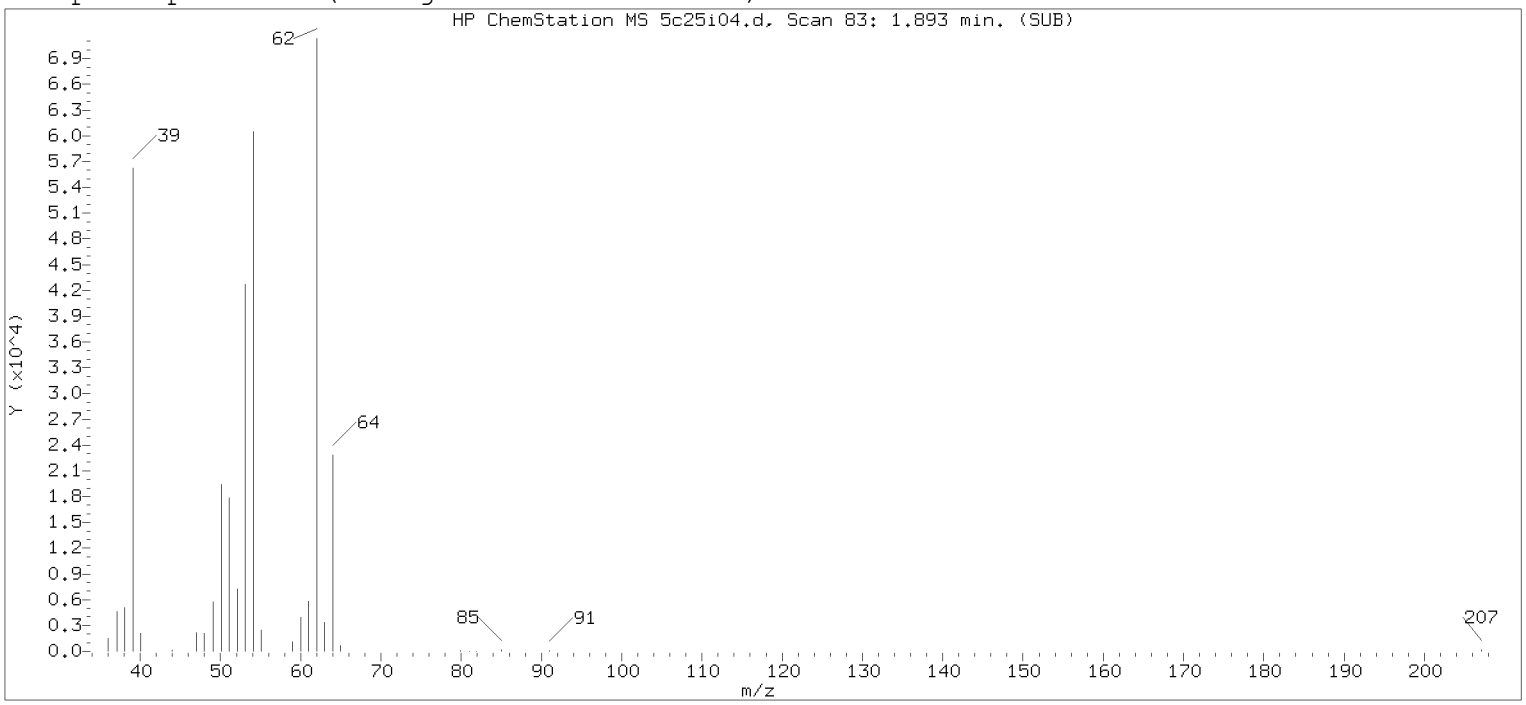
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 83
Retention Time (minutes): 1.893
Quant Ion : 39.00
Area (flag) : 132331M
On-Column Amount (ng) : 21.0524
Integration start scan : 65 Integration stop scan: 127
Y at integration start : 348 Y at integration end: 348

Reason for manual integration: improper integration

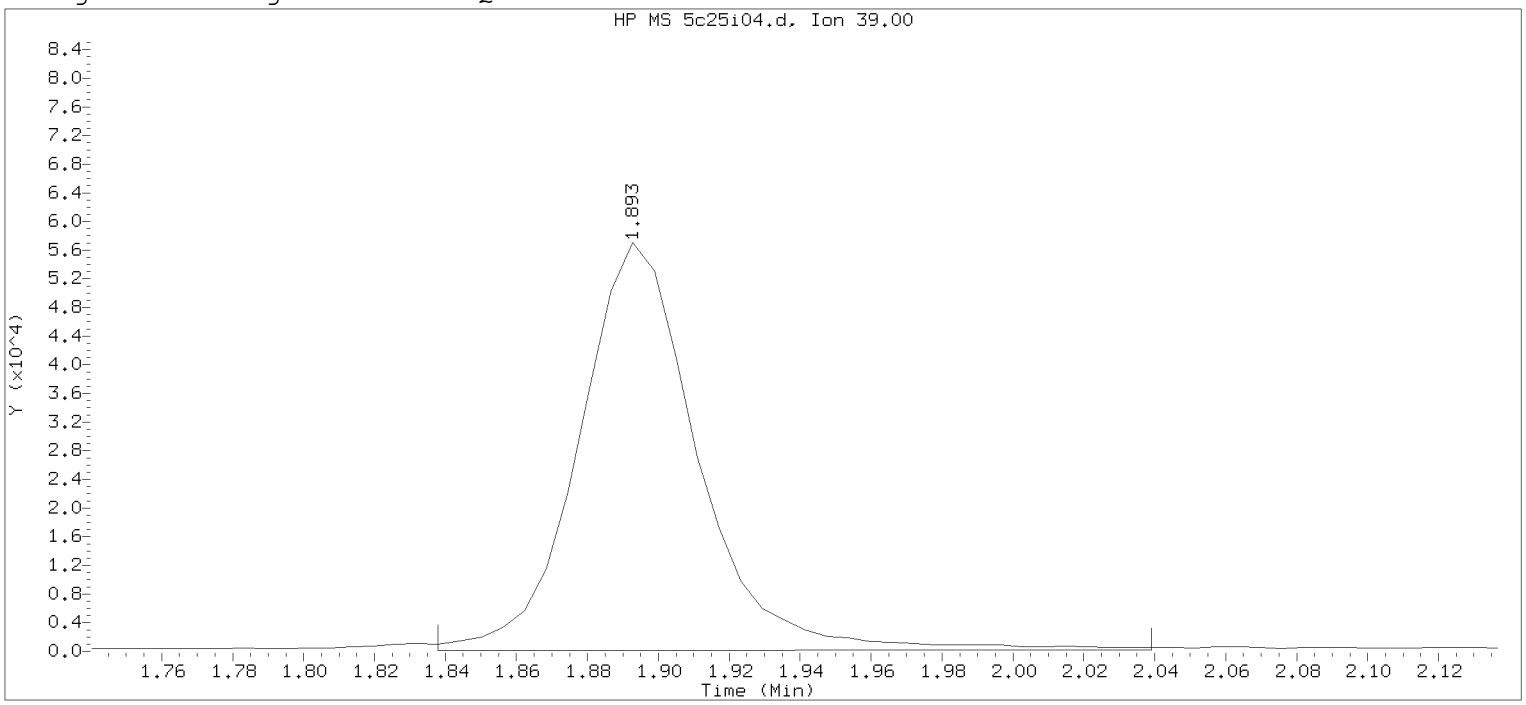
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

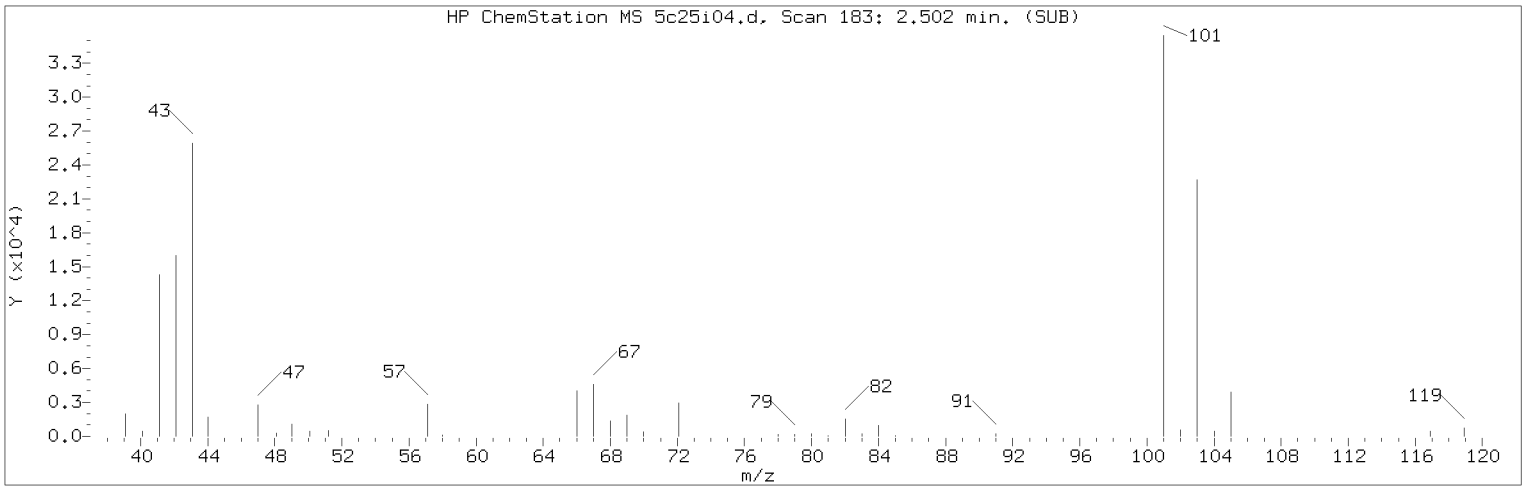
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD020 Lab Sample ID: VSTD020

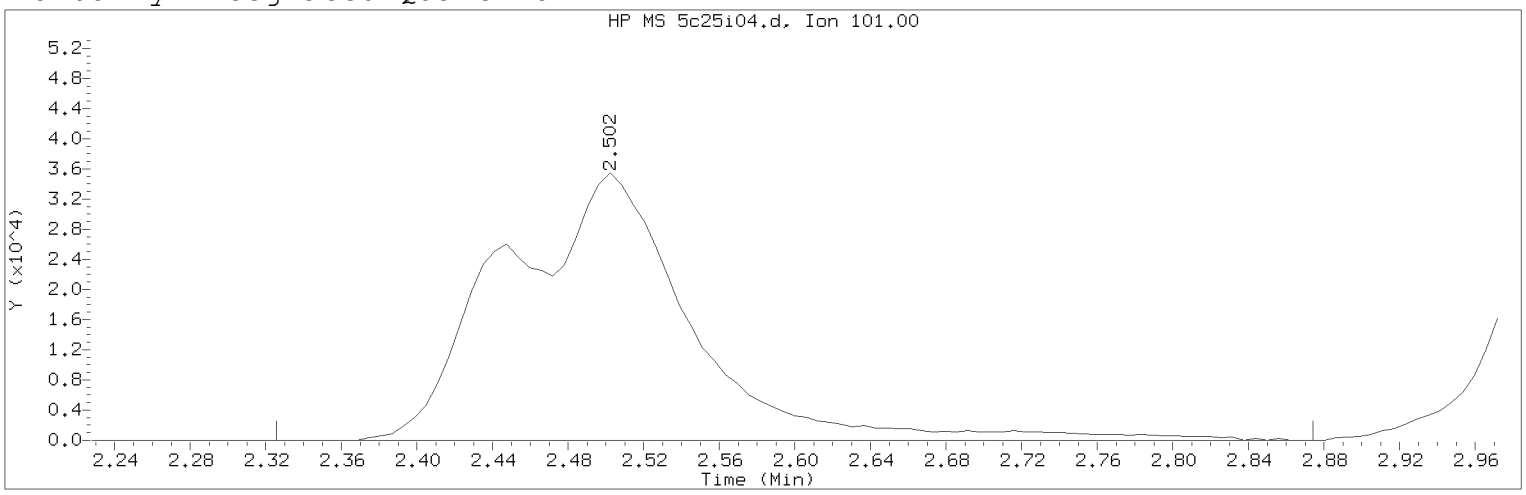
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 83
Retention Time (minutes): 1.893
Quant Ion : 39.00
Area : 132625
On-column Amount (ng) : 22.5872
Integration start scan : 73 Integration stop scan: 106
Y at integration start : 116 Y at integration end: 181

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD020 Lab Sample ID: VSTD020

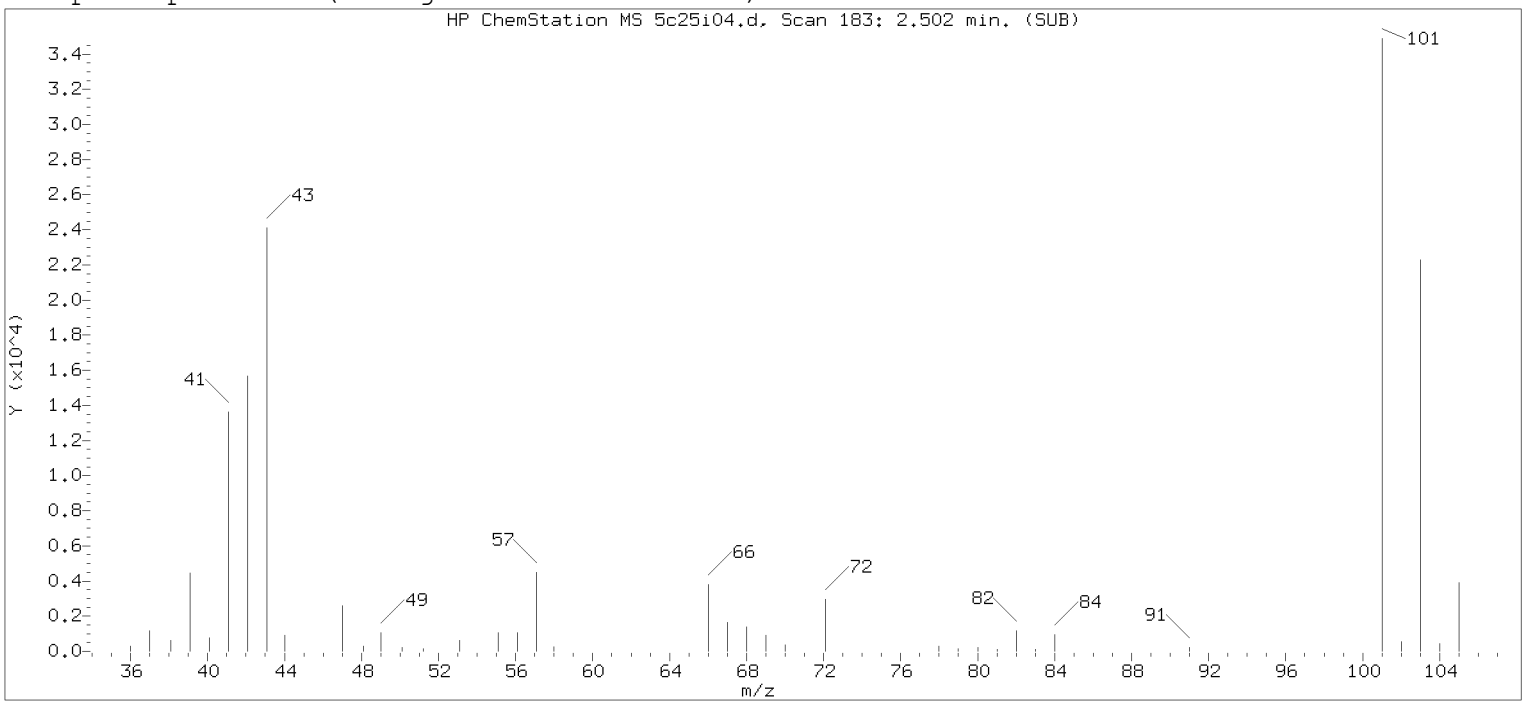
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 183
Retention Time (minutes): 2.502
Quant Ion : 101.00
Area (flag) : 242622M
On-Column Amount (ng) : 20.7928
Integration start scan : 153 Integration stop scan: 243
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

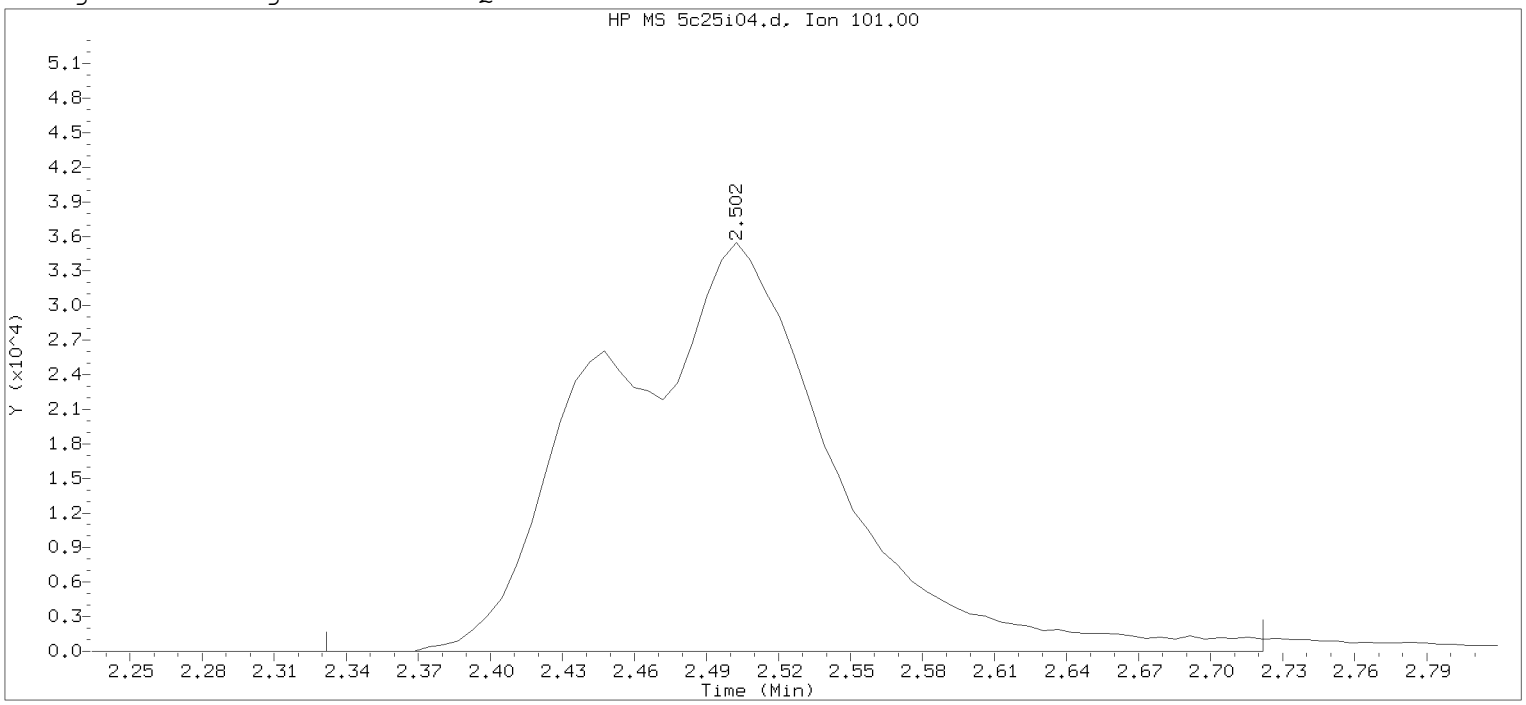
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

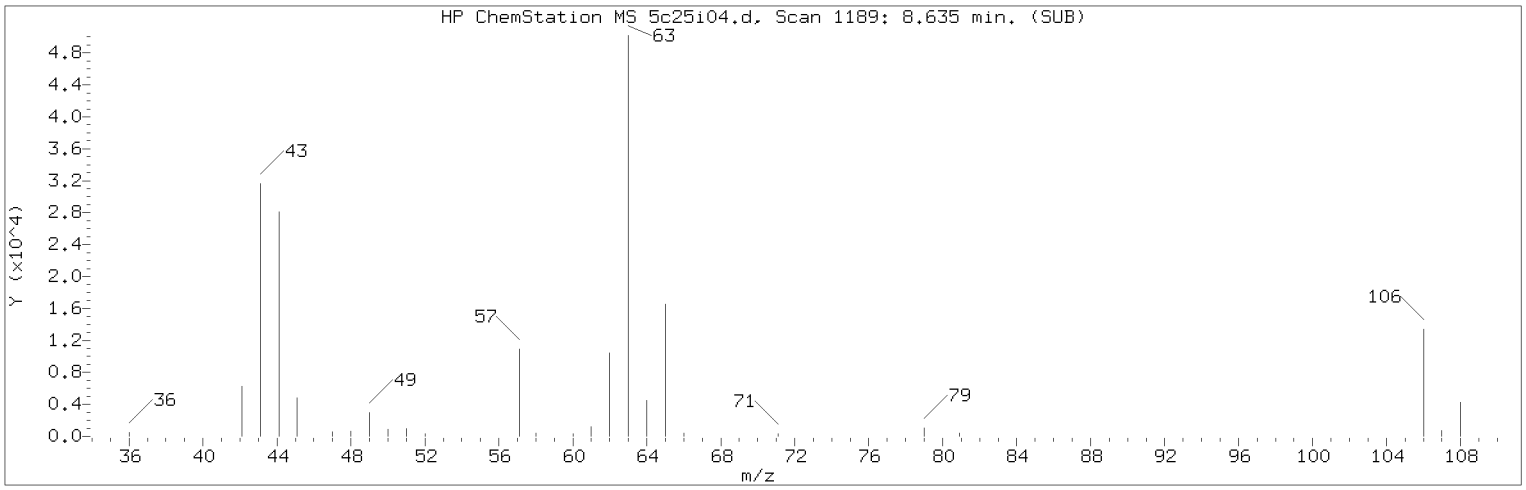
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD020 Lab Sample ID: VSTD020

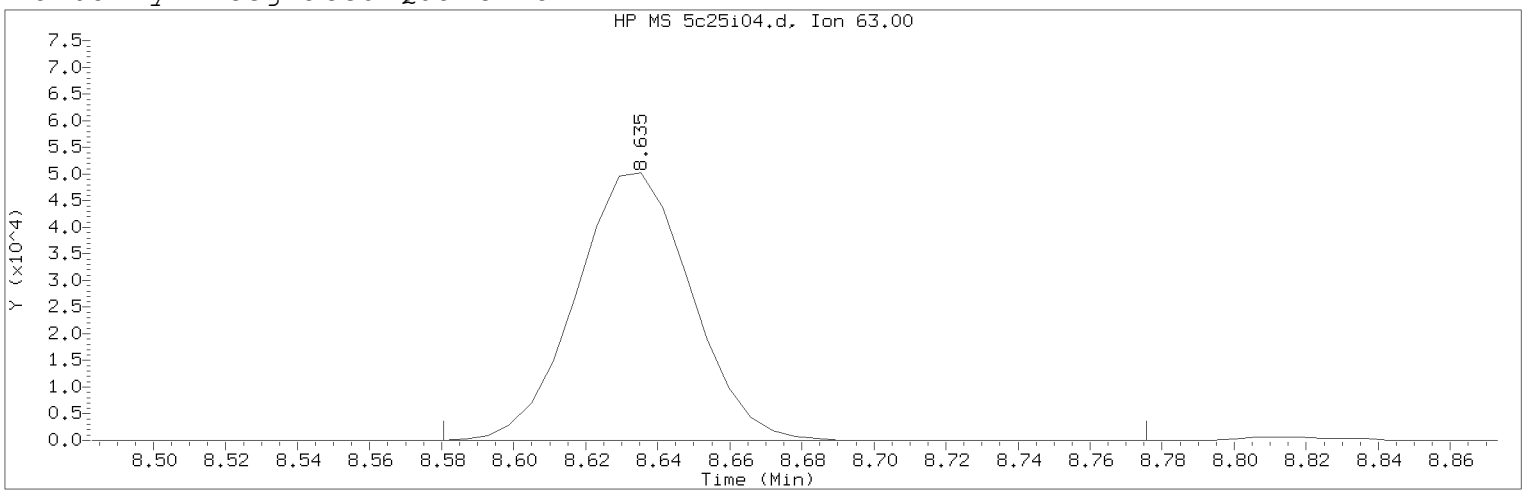
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 183
Retention Time (minutes): 2.502
Quant Ion : 101.00
Area : 237525
On-column Amount (ng) : 20.8320
Integration start scan : 154 Integration stop scan: 218
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD020 Lab Sample ID: VSTD020

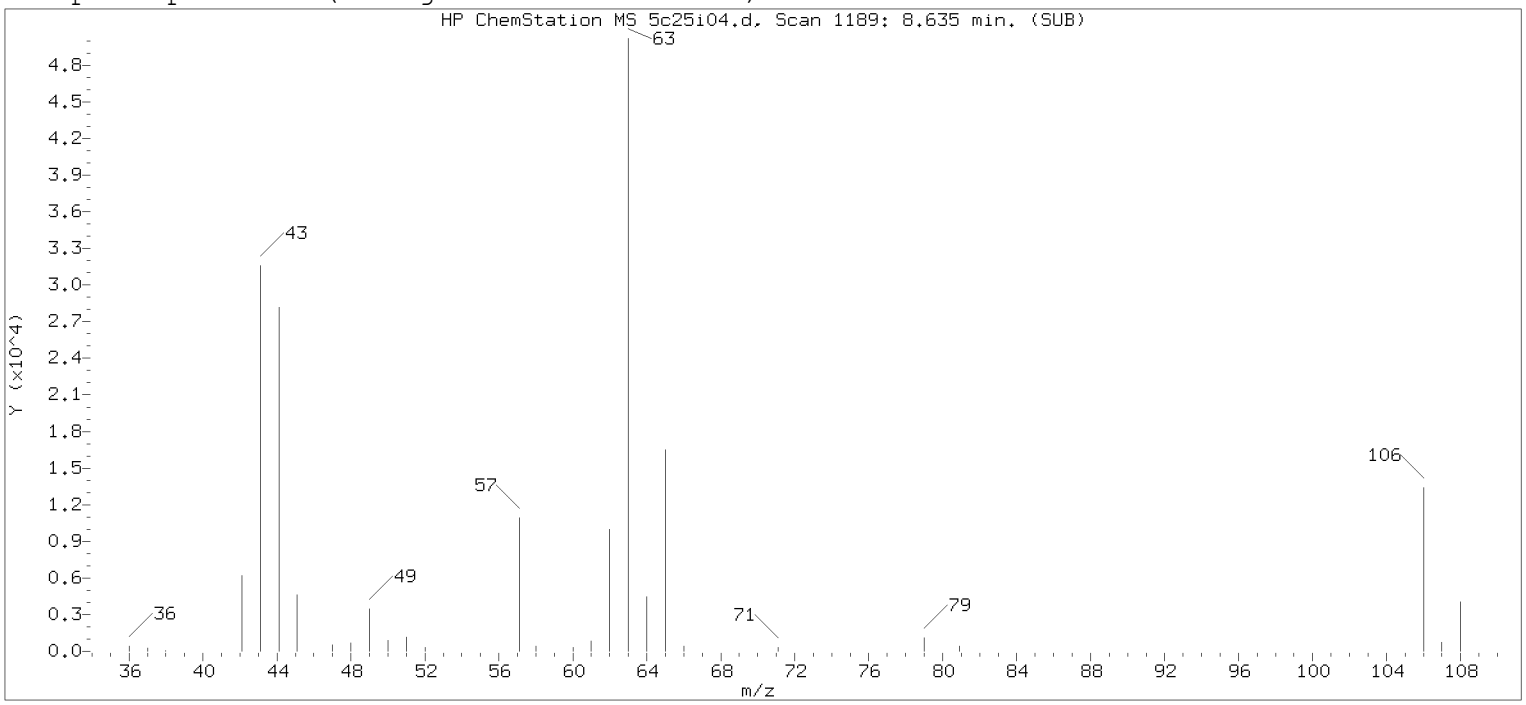
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1189
Retention Time (minutes): 8.635
Quant Ion : 63.00
Area (flag) : 111260M
On-Column Amount (ng) : 20.3376
Integration start scan : 1179 Integration stop scan: 1211
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

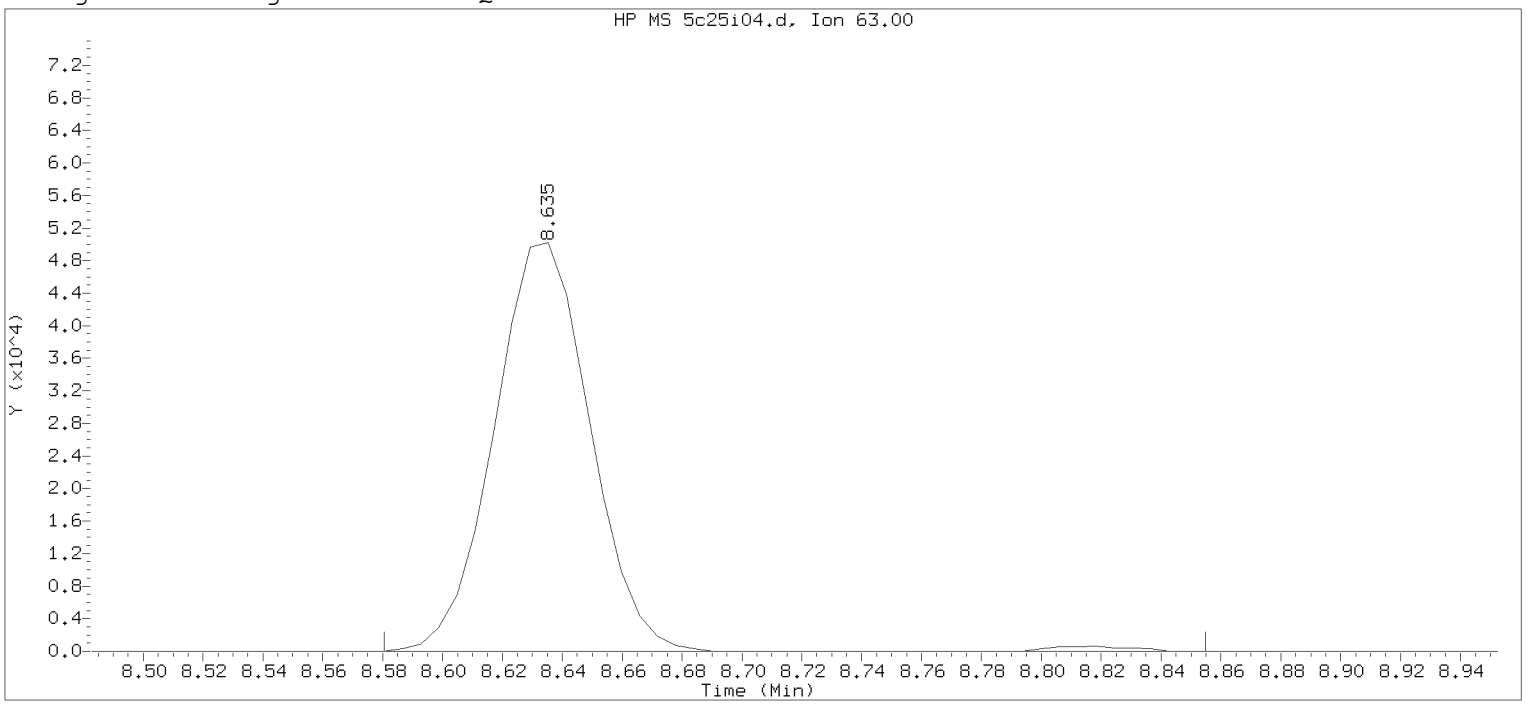
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

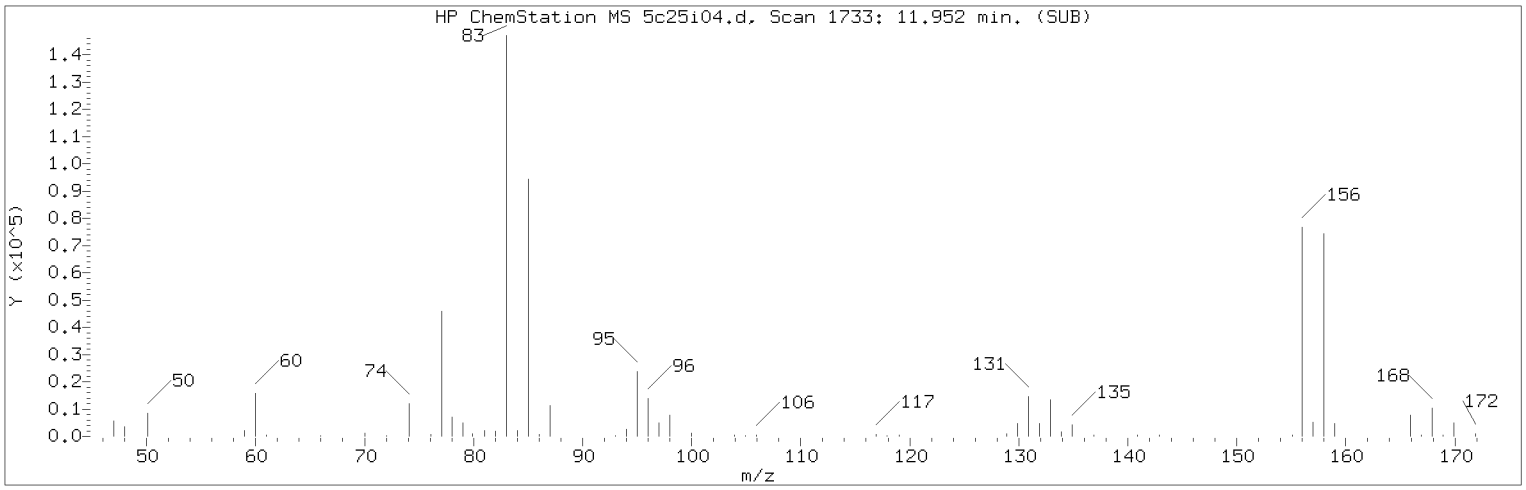
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD020 Lab Sample ID: VSTD020

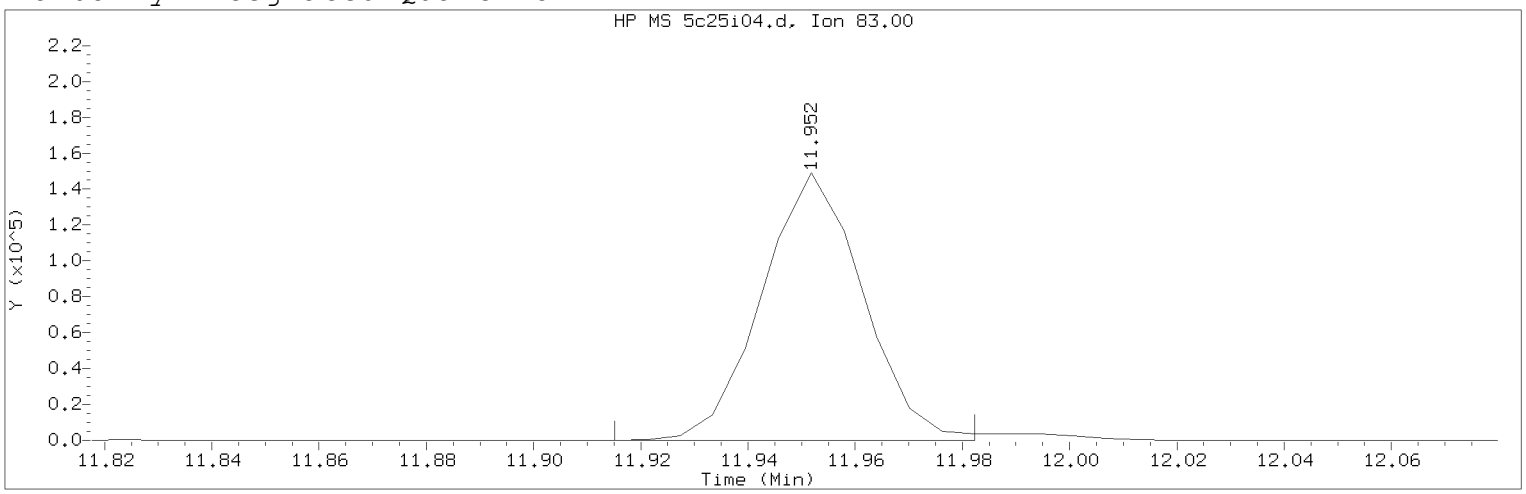
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1189
Retention Time (minutes): 8.635
Quant Ion : 63.00
Area : 112390
On-column Amount (ng) : 19.5929
Integration start scan : 1179 Integration stop scan: 1224
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD020 Lab Sample ID: VSTD020

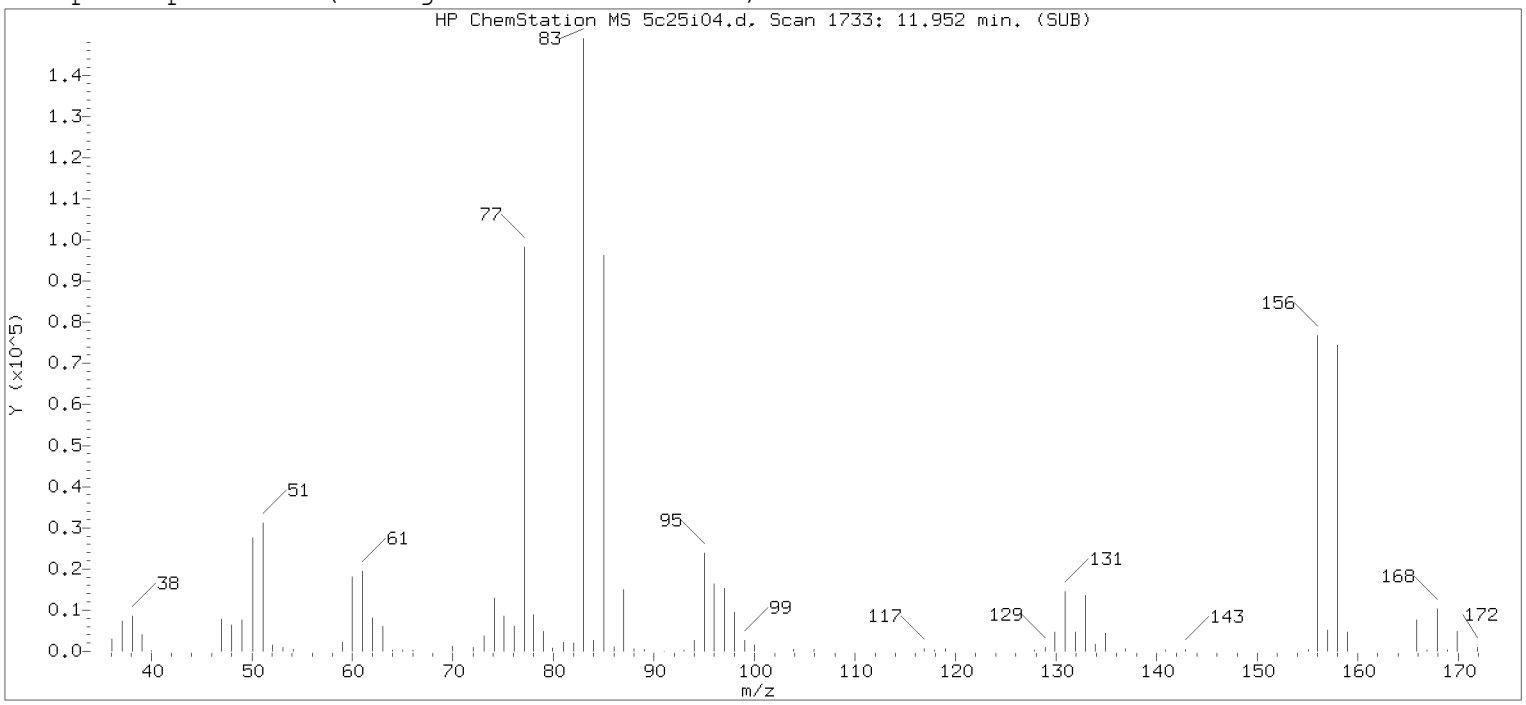
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area (flag) : 194550M
On-Column Amount (ng) : 20.1051
Integration start scan : 1726 Integration stop scan: 1737
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

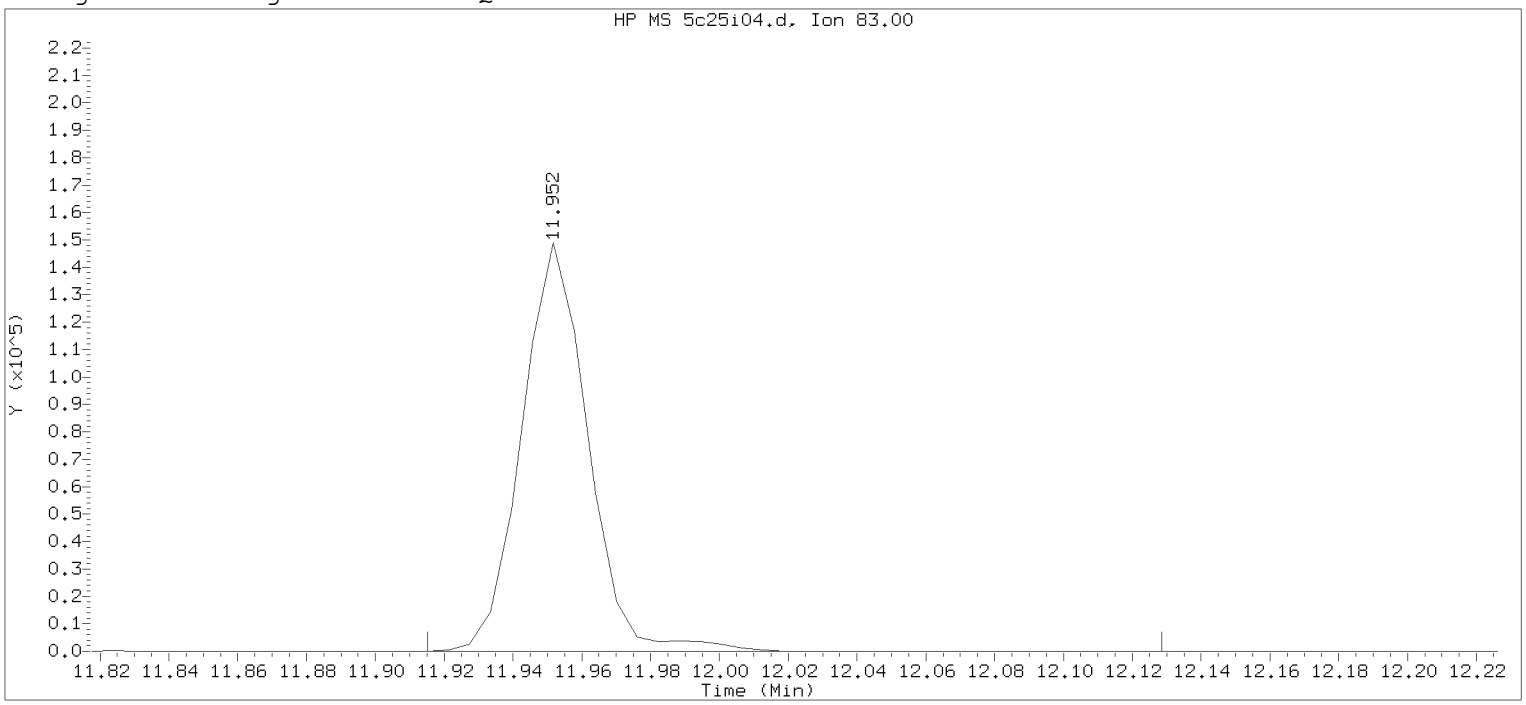
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

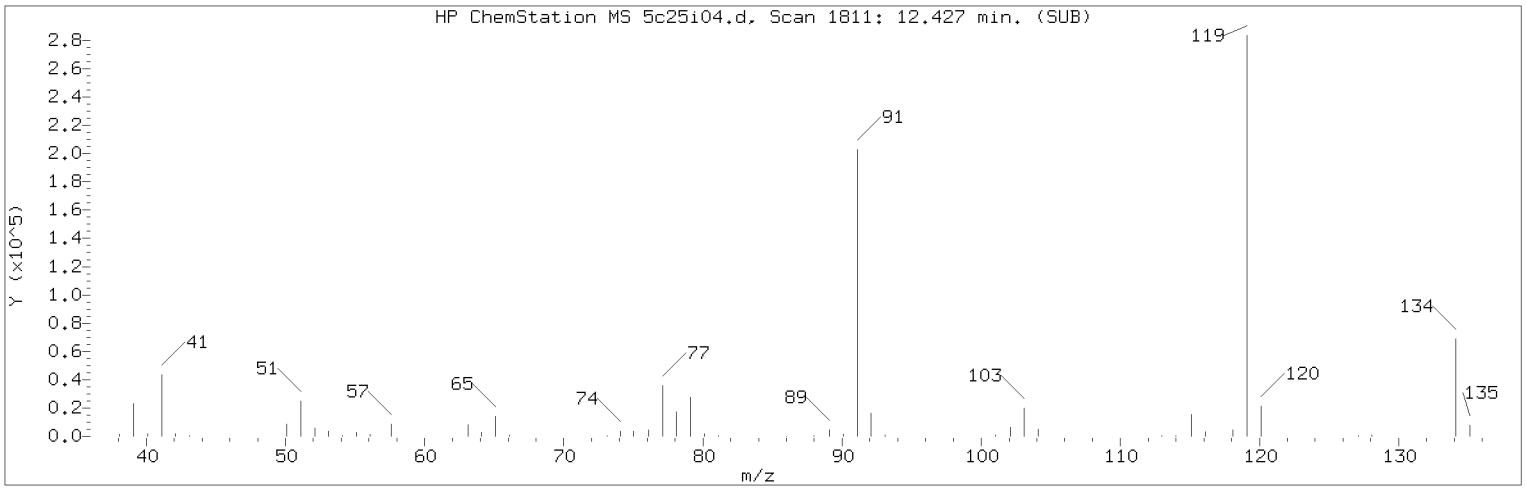
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD020 Lab Sample ID: VSTD020

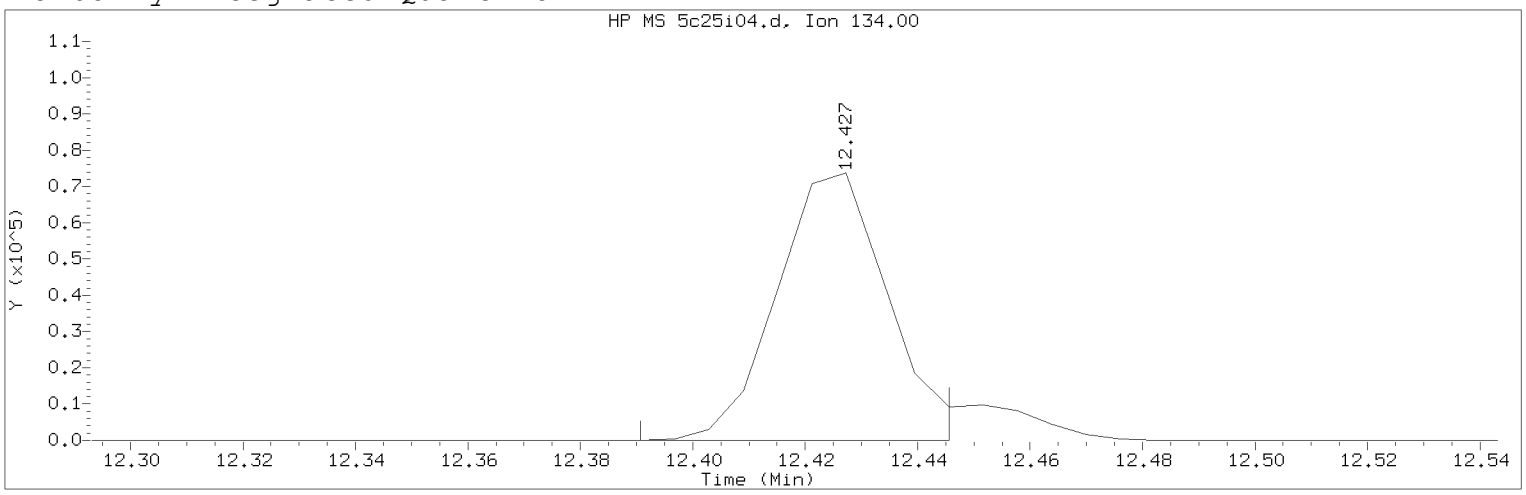
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area : 198690
On-column Amount (ng) : 19.4524
Integration start scan : 1726 Integration stop scan: 1761
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD020 Lab Sample ID: VSTD020

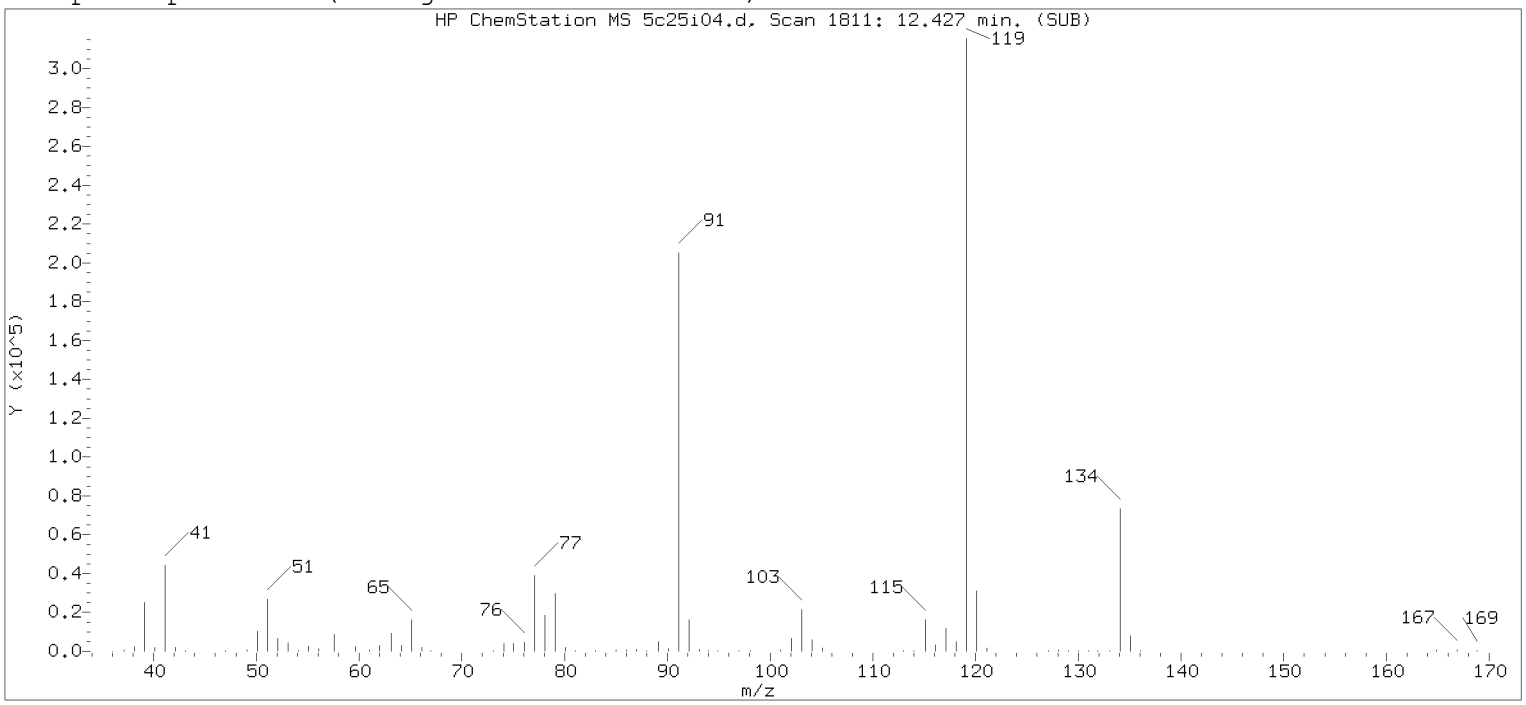
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1811
Retention Time (minutes): 12.427
Quant Ion : 134.00
Area (flag) : 101322M
On-Column Amount (ng) : 19.6312
Integration start scan : 1804 Integration stop scan: 1813
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

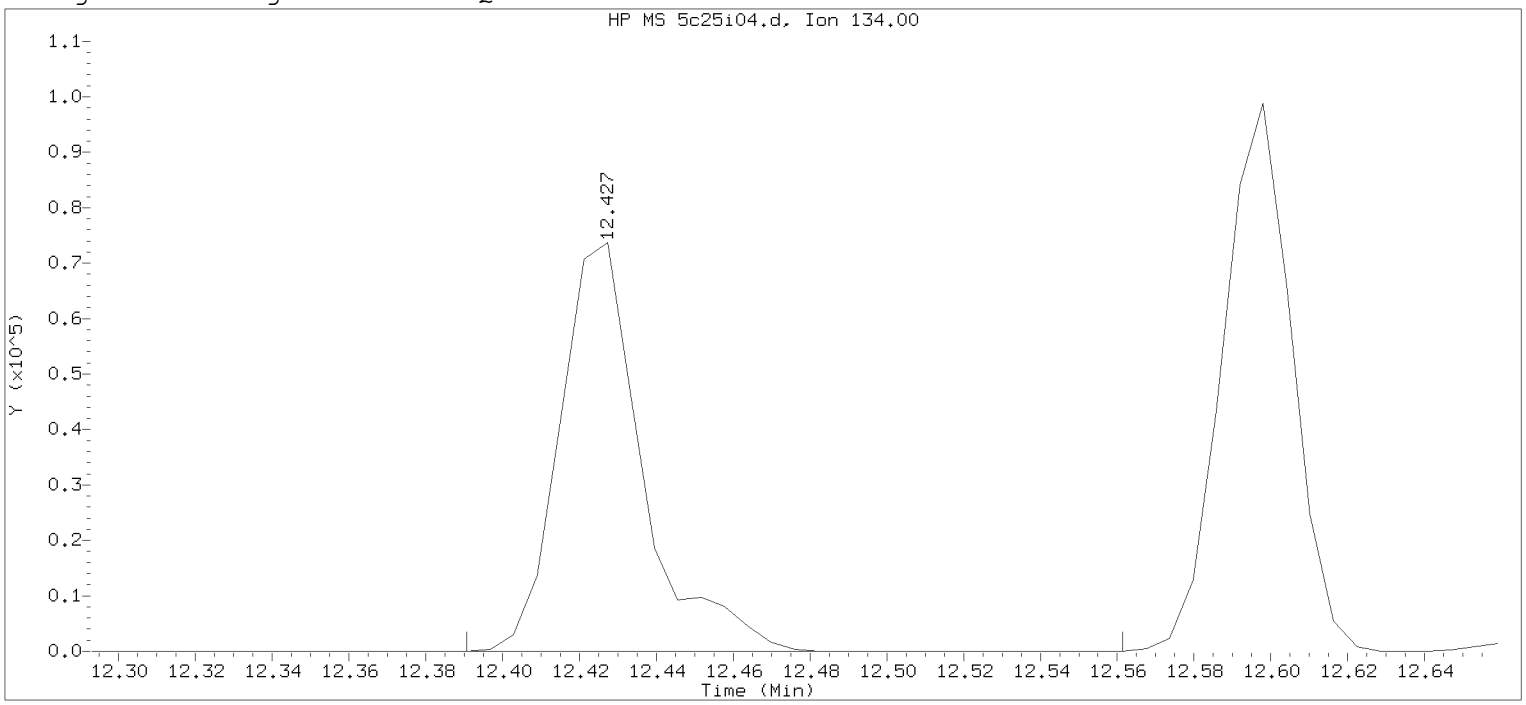
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



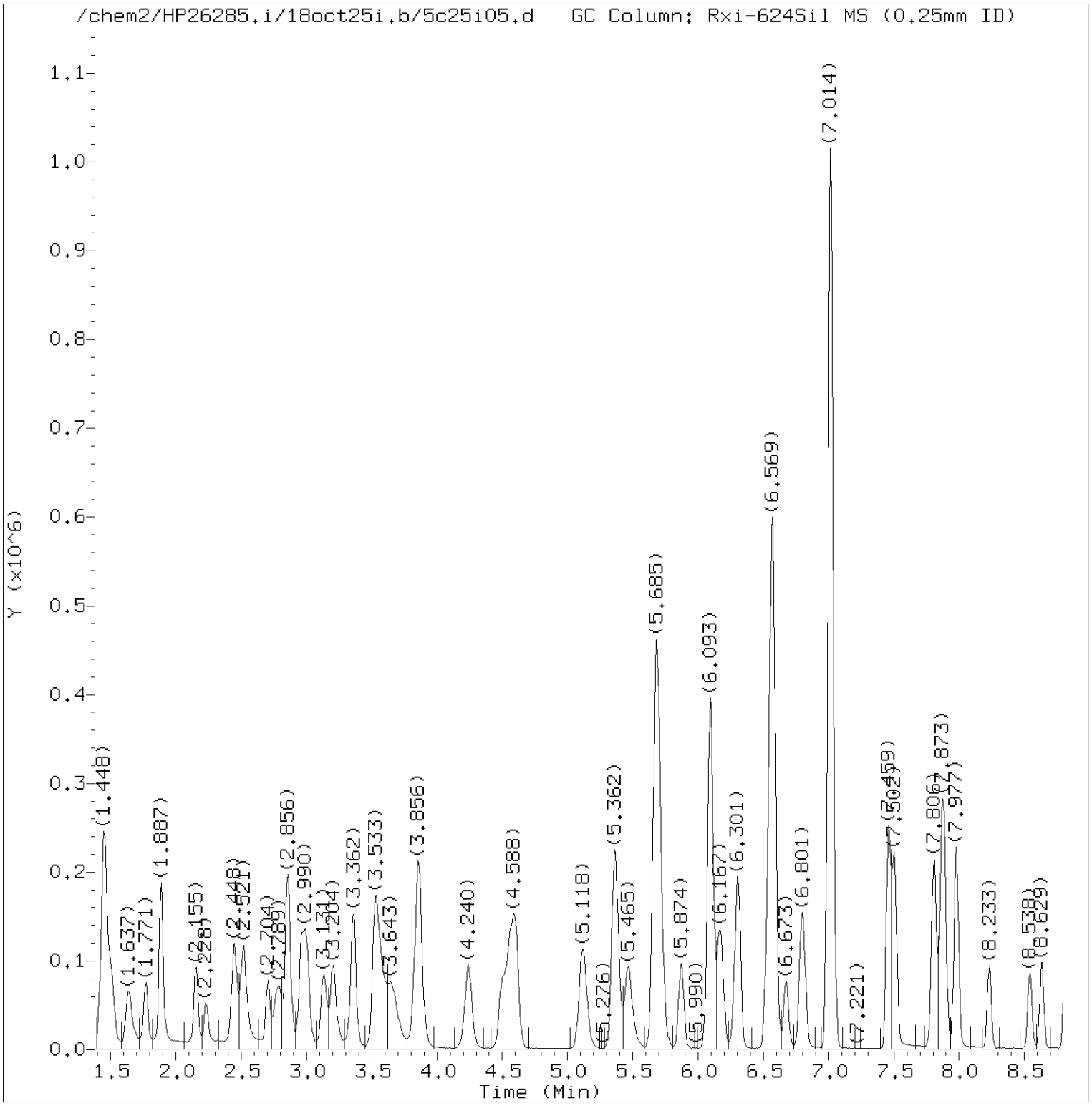
Data File: /chem2/HP26285.i/18oct25i.b/5c25i04.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 22:50 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1811
Retention Time (minutes): 12.427
Quant Ion : 134.00
Area : 110212
On-column Amount (ng) : 19.2903
Integration start scan : 1804 Integration stop scan: 1832
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito



Total Ion Chromatogram (TIC)

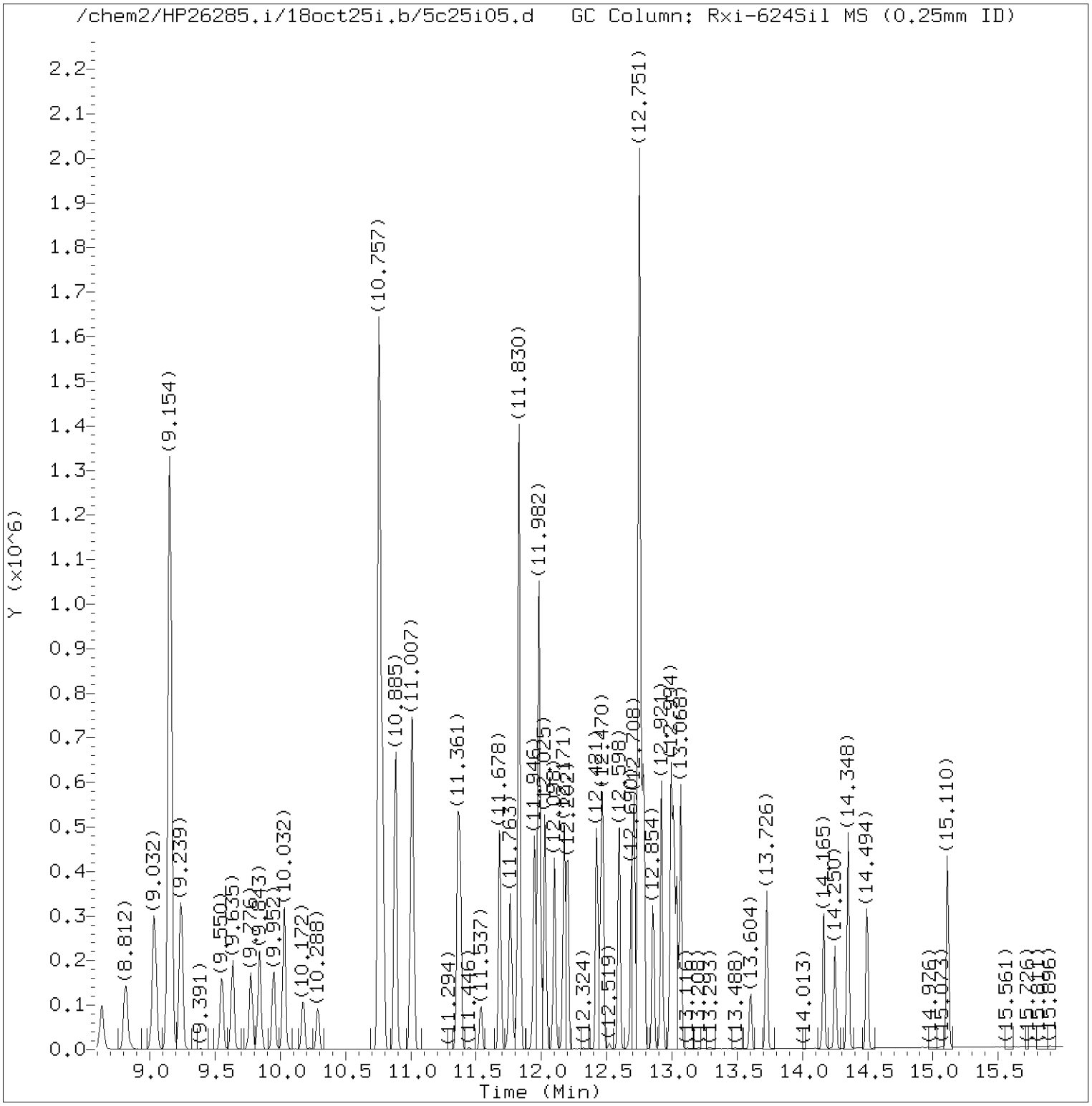
Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.637	85	129398	11.435
4) Chloromethane	(2)	1.771	50	99064	10.811
6) Vinyl Chloride	(2)	1.881	62	93725	10.945
5) 1,3-Butadiene	(2)	1.887	39	65365M	10.624
8) Bromomethane	(2)	2.155	94	73103	11.486
9) Chloroethane	(2)	2.228	64	48054	11.289
10) Dichlorofluoromethane	(2)	2.448	67	118597	10.509
12) Trichlorofluoromethane	(2)	2.496	101	129003M	11.295
11) n-Pentane	(2)	2.521	43	78709	10.789
14) Ethyl ether	(2)	2.704	59	55483	10.093
15) Freon 123a	(2)	2.783	67	83143	10.686
16) Acrolein	(1)	2.856	56	272193	106.123
17) 1,1-Dichloroethene	(2)	2.960	96	56114	10.457
17) 1,1-Dichloroethene	(2)	2.960	63	29308	10.537
19) Freon 113	(2)	2.996	101	57981	10.842
18) Acetone	(1)	3.002	58	28138	21.166
22) Methyl Iodide	(2)	3.131	142	107924	10.317
21) 2-Propanol	(1)	3.149	45	107691	98.807
23) Carbon Disulfide	(2)	3.204	76	188853	10.329
27) Methyl Acetate	(2)	3.350	43	100575	9.610
25) Allyl Chloride	(2)	3.362	41	115779	9.986
28) Methylene Chloride	(2)	3.527	84	64168	10.209
29)*t-Butyl alcohol-d10	(1)	3.551	65	365165M	250.000
30) t-Butyl alcohol	(1)	3.661	59	196609	102.378
31) Acrylonitrile	(2)	3.825	53	51796	10.542
33) Methyl Tertiary Butyl Ether	(2)	3.856	73	199506	10.347
32) trans-1,2-Dichloroethene	(2)	3.862	96	62868	10.295
34) n-Hexane	(2)	4.240	57	92248	10.415
36) 1,1-Dichloroethane	(2)	4.496	63	119146	10.425
38) di-Isopropyl ether	(2)	4.563	45	231733	10.446
39) 2-Chloro-1,3-butadiene	(2)	4.606	53	107536	10.424
40) Ethyl t-butyl ether	(2)	5.112	59	206934	10.372
42) cis-1,2-Dichloroethene	(2)	5.362	96	69214	10.171
44) 2-Butanone	(2)	5.362	43	154073	20.756
45) 2,2-Dichloropropane	(2)	5.380	77	92458	10.208
47) Propionitrile	(1)	5.465	54	207863	102.416
48) Methacrylonitrile	(2)	5.679	67	239869	51.361
49) Bromochloromethane	(2)	5.703	128	35092	9.963

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.721	71	38773	20.997
51) Chloroform	(2)	5.874	83	111940	10.363
53) 1,1,1-Trichloroethane	(2)	6.087	97	95494	10.307
52)$Dibromofluoromethane	(2)	6.093	113	281069	50.411
52)$Dibromofluoromethane	(2)	6.093	111	286556	50.267
43) 1,2-Dichloroethene (Total)	(2)		96	132082	20.466
54) Cyclohexane	(2)	6.167	56	117478	10.629
54) Cyclohexane	(2)	6.173	84	93266	10.215
54) Cyclohexane	(2)	6.179	69	34953	10.620
56) Carbon Tetrachloride	(2)	6.295	117	83121	10.209
55) 1,1-Dichloropropene	(2)	6.307	75	92133	10.336
58) Isobutyl Alcohol	(1)	6.544	41	157156	252.711
57)$1,2-Dichloroethane-d4	(2)	6.569	102	65897M	49.504
57)$1,2-Dichloroethane-d4	(2)	6.563	65	342573	50.585
57)$1,2-Dichloroethane-d4	(2)	6.569	104	42399	50.021
60) Benzene	(2)	6.581	78	274664	10.314
61) 1,2-Dichloroethane	(2)	6.673	62	83490	10.219
61) 1,2-Dichloroethane	(2)	6.679	98	7529	10.672
65) t-Amyl methyl ether	(2)	6.801	73	192406	10.271
66)*Fluorobenzene	(2)	7.014	96	1146175	50.000
67) n-Heptane	(2)	7.026	43	100956	9.917
69) n-Butanol	(1)	7.459	56	243600	487.847
71) Trichloroethene	(2)	7.508	95	67859	10.189
73) Methylcyclohexane	(2)	7.806	83	122033	10.568
73) Methylcyclohexane	(2)	7.806	98	51763	10.548
74) 1,2-Dichloropropane	(2)	7.861	63	67440	10.131
77) Methyl Methacrylate	(2)	7.977	69	65954	9.825
75) Dibromomethane	(2)	7.977	93	40670	10.043
79) Bromodichloromethane	(2)	8.233	83	75383	9.988
80) 2-Nitropropane	(2)	8.538	41	68975	20.407
81) 2-Chloroethyl Vinyl Ether	(2)	8.636	63	52611M	9.825
82) cis-1,3-Dichloropropene	(2)	8.812	75	95913	9.883
83) 4-Methyl-2-pentanone	(2)	9.032	43	275646	20.844
84)$Toluene-d8	(3)	9.154	98	1091092	50.392
84)$Toluene-d8	(3)	9.154	100	703010	50.169
89) Toluene	(3)	9.239	92	161964	9.971
90) trans-1,3-Dichloropropene	(3)	9.550	75	85286	9.830
92) Ethyl Methacrylate	(3)	9.635	69	103624	9.962

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) 1,1,2-Trichloroethane	(3)	9.776	97	55983M	10.118
94) Tetrachloroethene	(3)	9.843	166	69461	9.735
95) 1,3-Dichloropropane	(3)	9.952	76	94965	10.153
97) 2-Hexanone	(3)	10.032	43	219924	20.986
91) 1,3-Dichloropropene (total)	(3)		100	181199	19.713
98) Dibromochloromethane	(3)	10.178	129	54649	9.647
100) 1,2-Dibromoethane	(3)	10.288	107	59391	9.893
101)*Chlorobenzene-d5	(3)	10.757	117	802679	50.000
102) 1-Chlorohexane	(3)	10.781	91	85117	9.224
103) Chlorobenzene	(3)	10.788	112	170826	9.708
104) 1,1,1,2-Tetrachloroethane	(3)	10.879	131	55882	9.642
105) Ethylbenzene	(3)	10.885	91	302396	9.684
107) m+p-Xylene	(3)	11.013	106	231817	19.218
108) o-Xylene	(3)	11.361	106	110214	9.546
110) Styrene	(3)	11.379	104	178138	9.468
111) Bromoform	(3)	11.537	173	37088	9.487
112) Isopropylbenzene	(3)	11.684	105	281691	9.572
109) Xylene (Total)	(3)		106	342031	28.765
115)$4-Bromofluorobenzene	(3)	11.830	95	389229	50.011
115)$4-Bromofluorobenzene	(3)	11.830	174	331833	50.217
116) Bromobenzene	(4)	11.946	156	70001	9.708
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	92865M	9.891
119) trans-1,4-Dichloro-2-butene	(4)	11.976	53	165814	51.424
118) 1,2,3-Trichloropropane	(4)	11.995	110	28418	10.177
120) n-Propylbenzene	(4)	12.025	91	337597	9.828
121) 2-Chlorotoluene	(4)	12.098	126	67463	9.735
123) 1,3,5-Trimethylbenzene	(4)	12.171	105	229161	9.506
122) 4-Chlorotoluene	(4)	12.202	126	68403	9.486
125) tert-Butylbenzene	(4)	12.421	134	47283M	9.442
126) Pentachloroethane	(4)	12.452	167	40061	9.372
127) 1,2,4-Trimethylbenzene	(4)	12.470	105	234964	9.489
128) sec-Butylbenzene	(4)	12.598	105	286208	9.512
130) 1,3-Dichlorobenzene	(4)	12.690	146	128003	9.384
131) p-Isopropyltoluene	(4)	12.708	119	244503	9.356
132)*1,4-Dichlorobenzene-d4	(4)	12.751	152	419436	50.000
134) 1,4-Dichlorobenzene	(4)	12.769	146	132801	9.478
135) 1,2,3-Trimethylbenzene	(4)	12.781	105	253920	9.845
136) Benzyl Chloride	(4)	12.854	91	171347	9.402

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

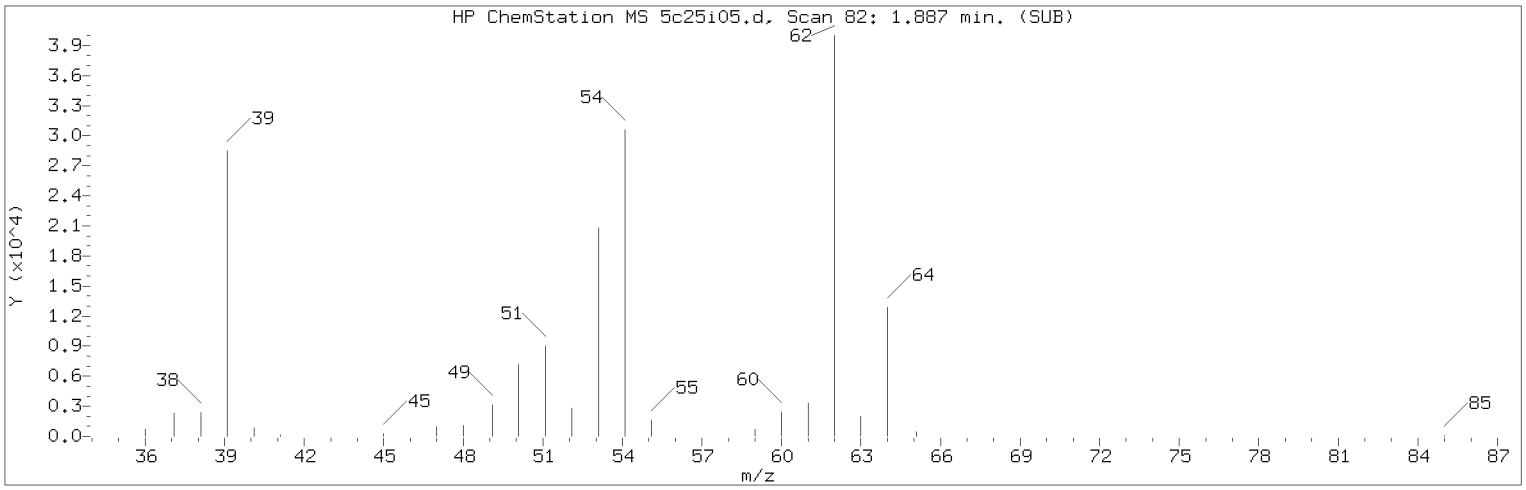
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

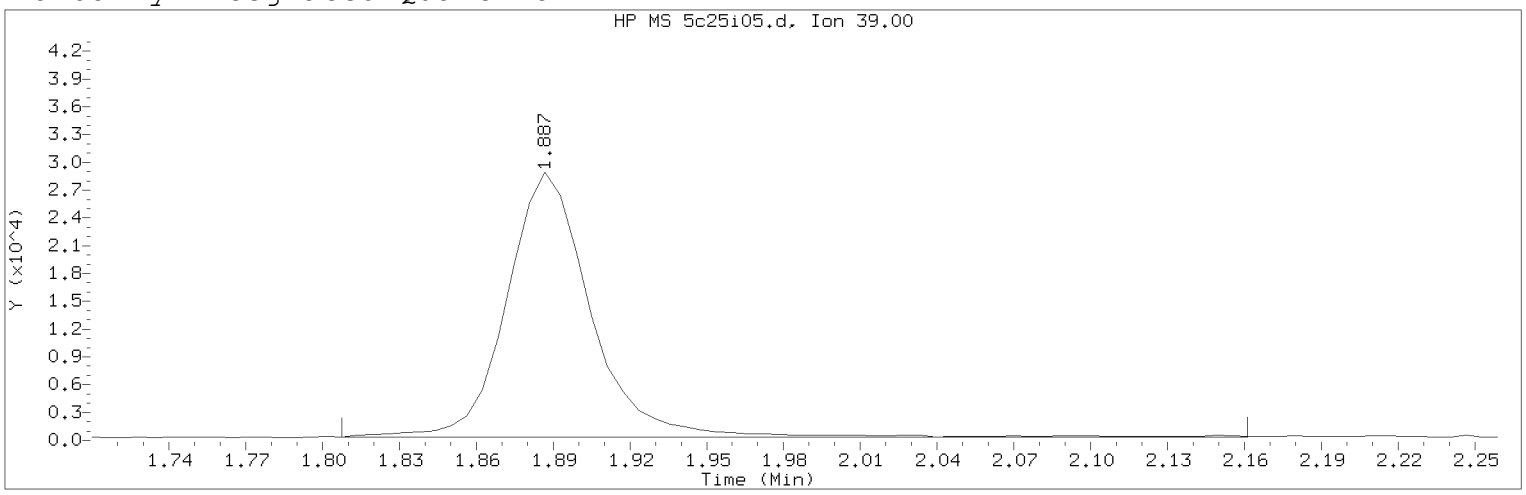
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137) 1,3-Diethylbenzene	(4)	12.921	119	156725	9.729
138) 1,4-Diethylbenzene	(4)	12.994	119	165649	9.634
140) n-Butylbenzene	(4)	13.013	92	122800	9.106
139) 1,2-Dichlorobenzene	(4)	13.037	146	124131	9.489
141) 1,2-Diethylbenzene	(4)	13.068	119	130542	9.679
142) Diethylbenzene (total)	(4)		100	452916	29.042
143) 1,2-Dibromo-3-chloropropane	(4)	13.604	75	23122	9.580
145) 1,3,5-Trichlorobenzene	(4)	13.726	180	85426	8.924
147) 1,2,4-Trichlorobenzene	(4)	14.165	180	75974	8.825
148) Hexachlorobutadiene	(4)	14.250	225	33765	8.325
149) Naphthalene	(4)	14.348	128	290721	9.519
150) 1,2,3-Trichlorobenzene	(4)	14.494	180	74858	8.925
151) 2-Methylnaphthalene	(4)	15.110	142	167109	9.248

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

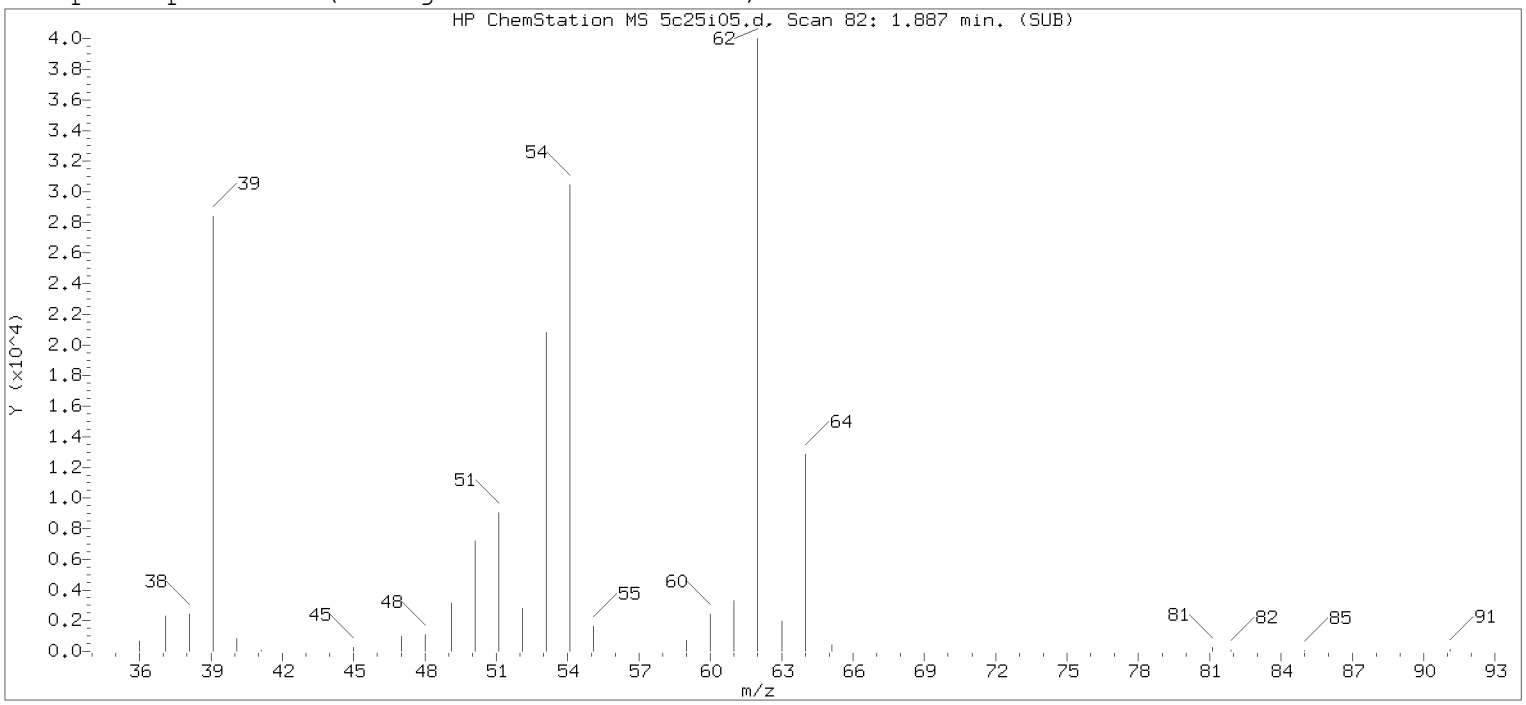
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 82
Retention Time (minutes): 1.887
Quant Ion : 39.00
Area (flag) : 65365M
On-Column Amount (ng) : 10.6241
Integration start scan : 68 Integration stop scan: 126
Y at integration start : 363 Y at integration end: 363

Reason for manual integration: improper integration

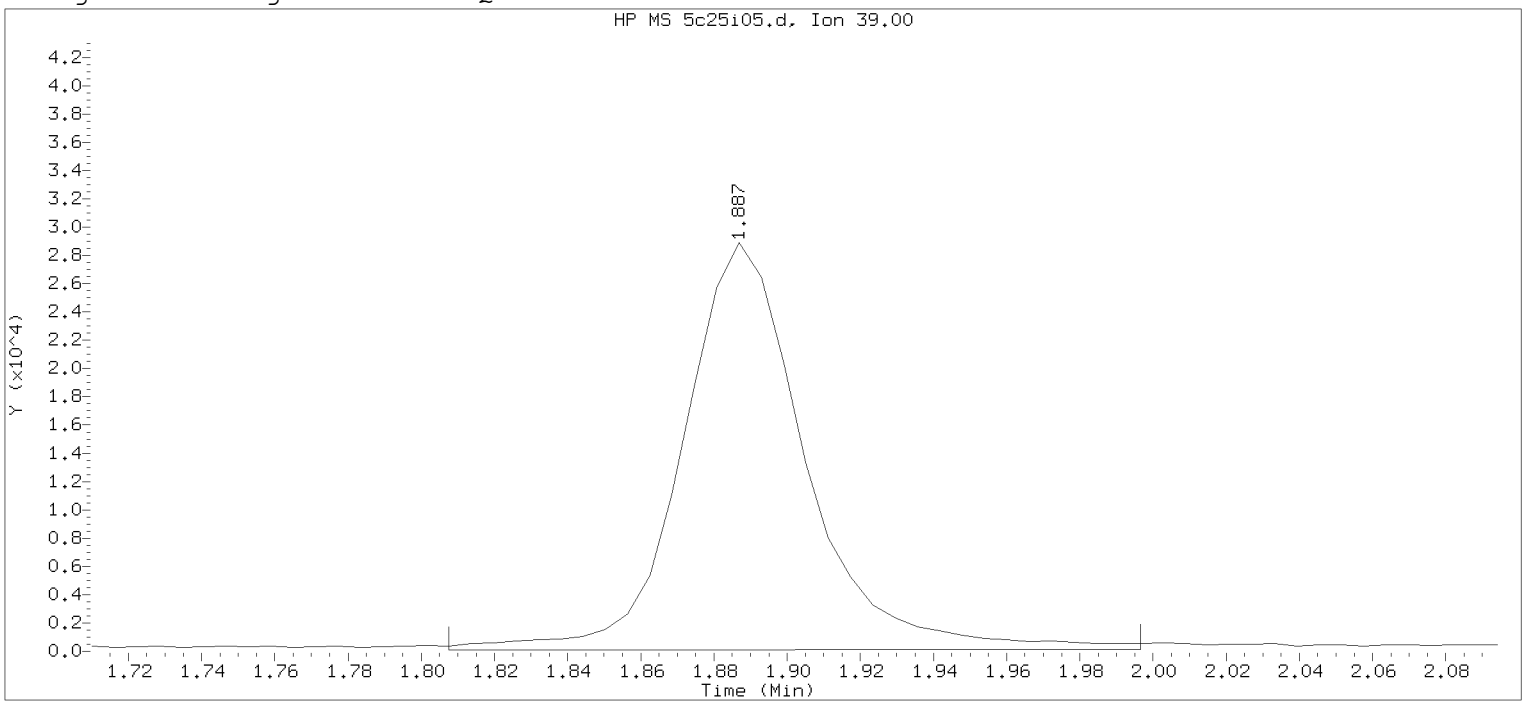
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

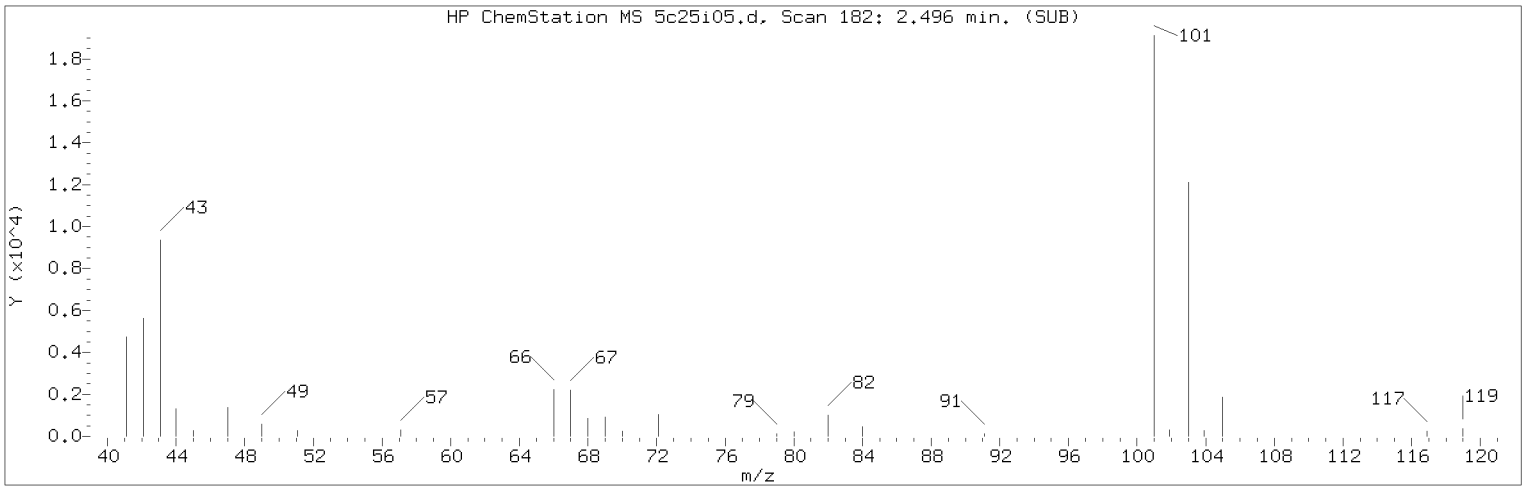
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

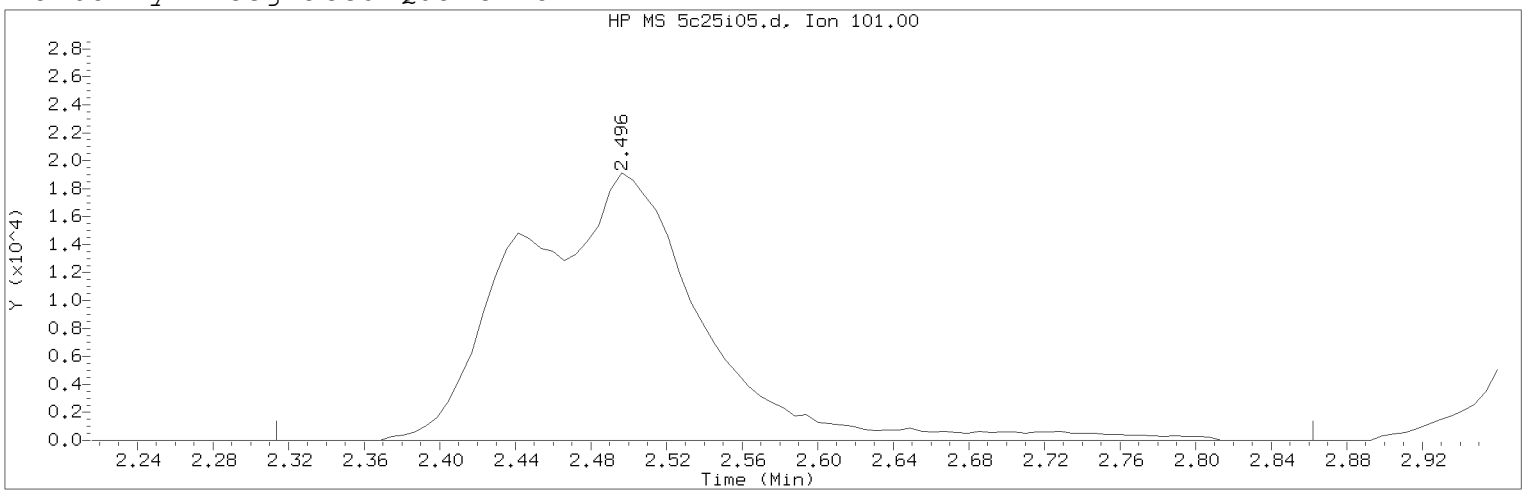
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 82
Retention Time (minutes): 1.887
Quant Ion : 39.00
Area : 67158
On-column Amount (ng) : 11.3044
Integration start scan : 68 Integration stop scan: 99
Y at integration start : 84 Y at integration end: 157

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

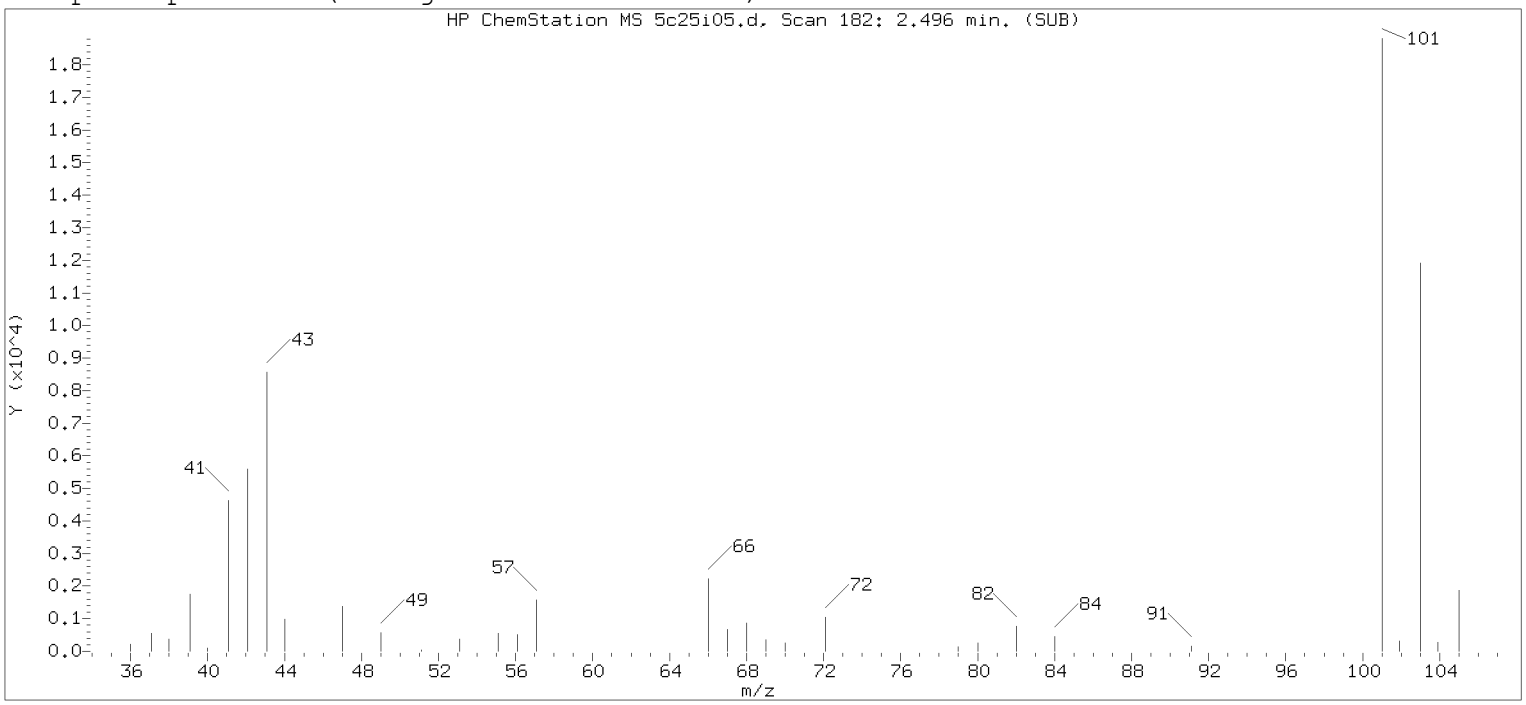
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 182
Retention Time (minutes): 2.496
Quant Ion : 101.00
Area (flag) : 129003M
On-Column Amount (ng) : 11.2951
Integration start scan : 151 Integration stop scan: 241
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

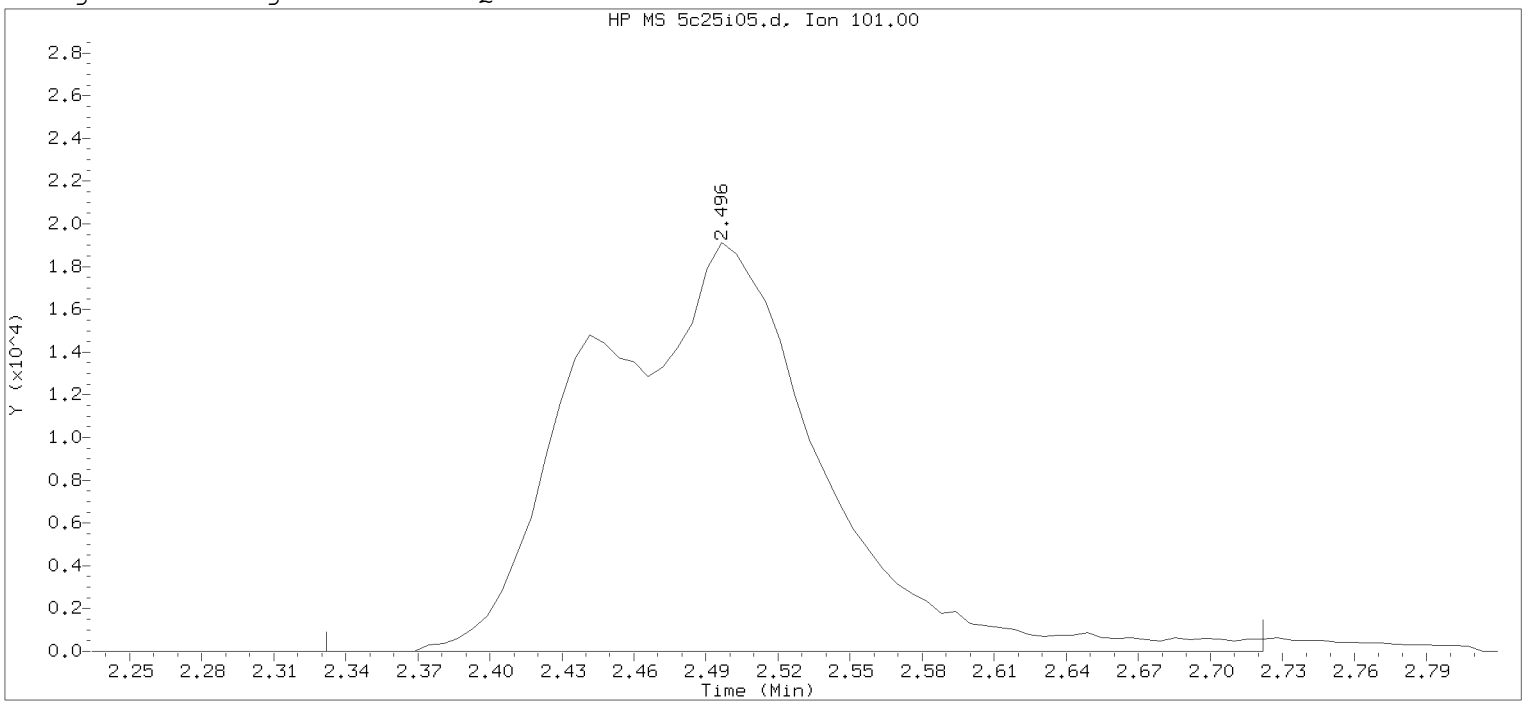
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

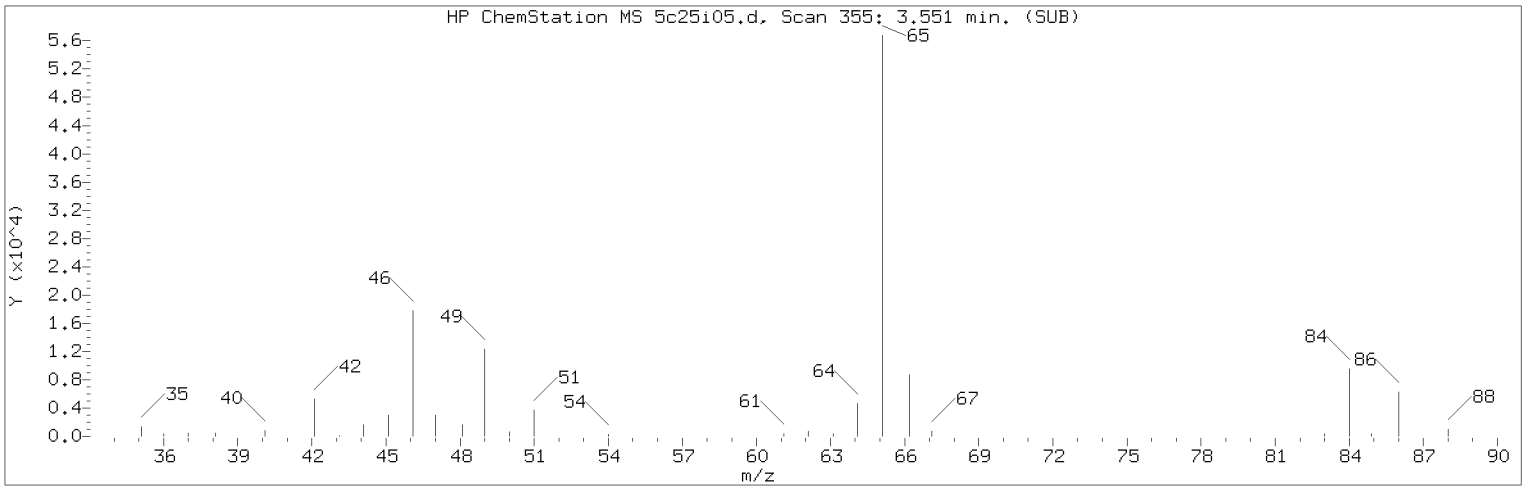
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

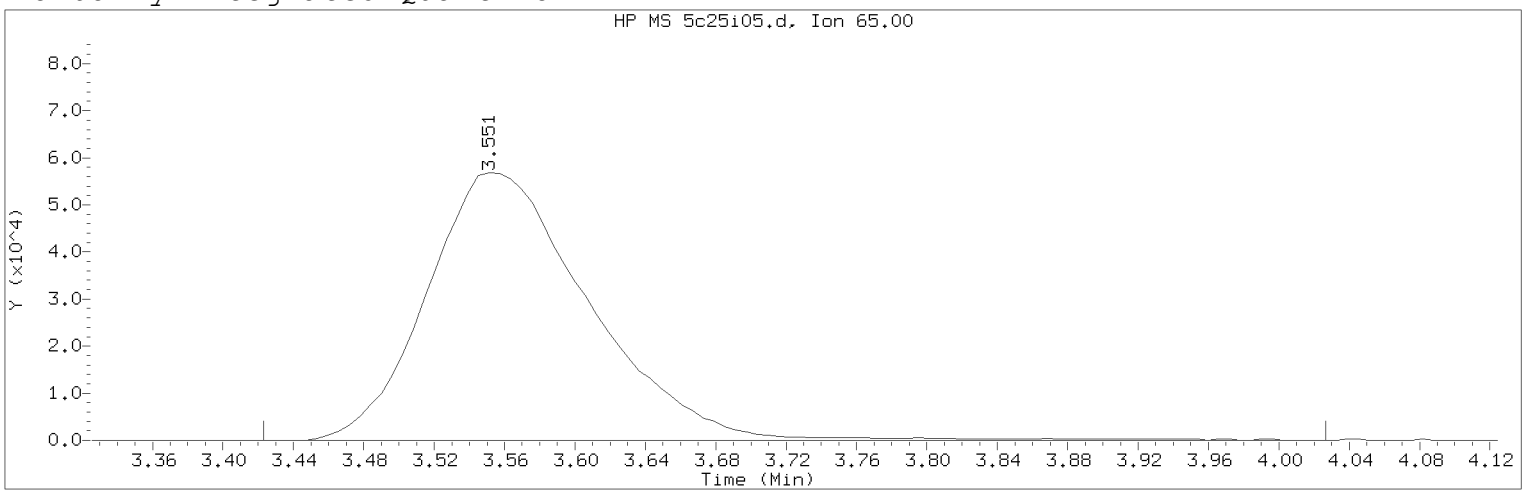
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 182
Retention Time (minutes): 2.496
Quant Ion : 101.00
Area : 126894
On-column Amount (ng) : 11.0670
Integration start scan : 154 Integration stop scan: 218
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

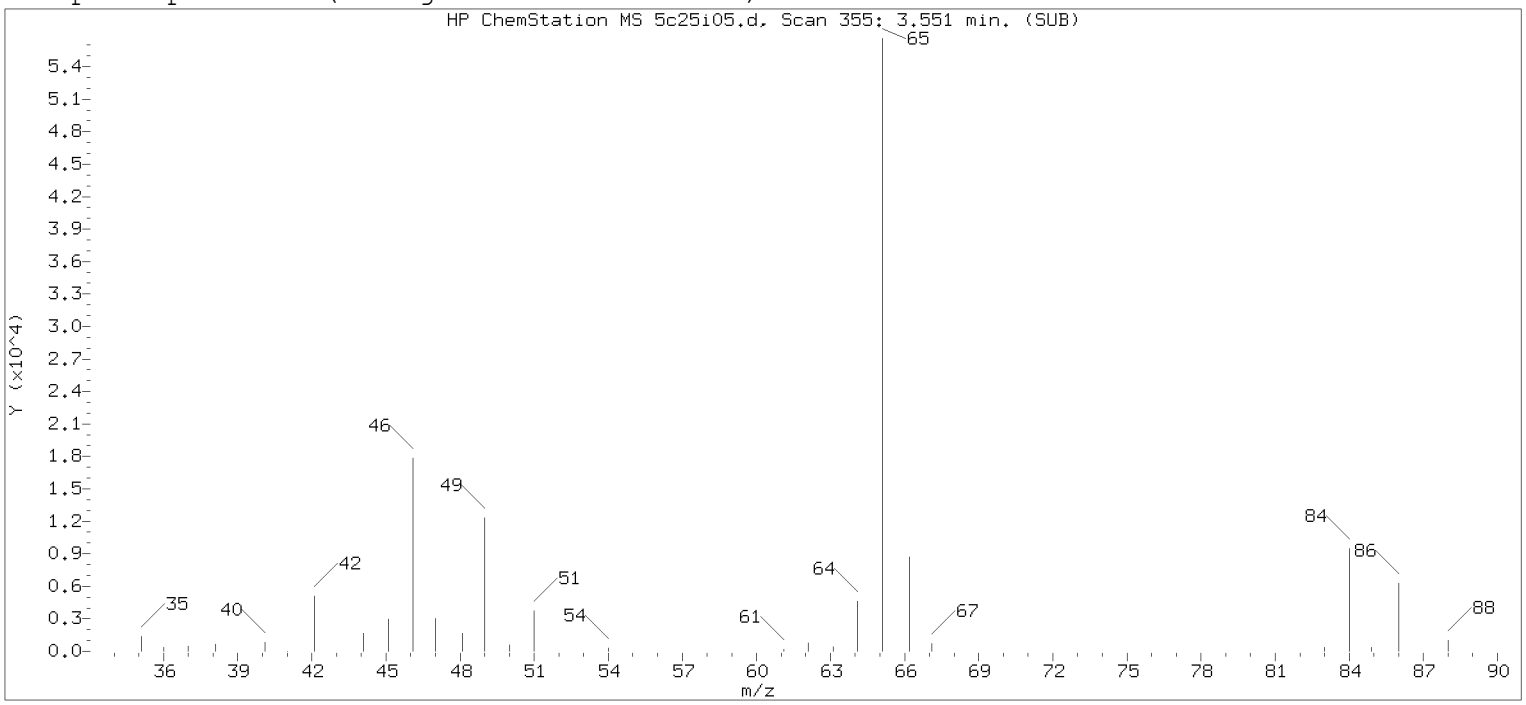
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 355
Retention Time (minutes): 3.551
Quant Ion : 65.00
Area (flag) : 365165M
On-Column Amount (ng) : 250.0000
Integration start scan : 333 Integration stop scan: 432
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

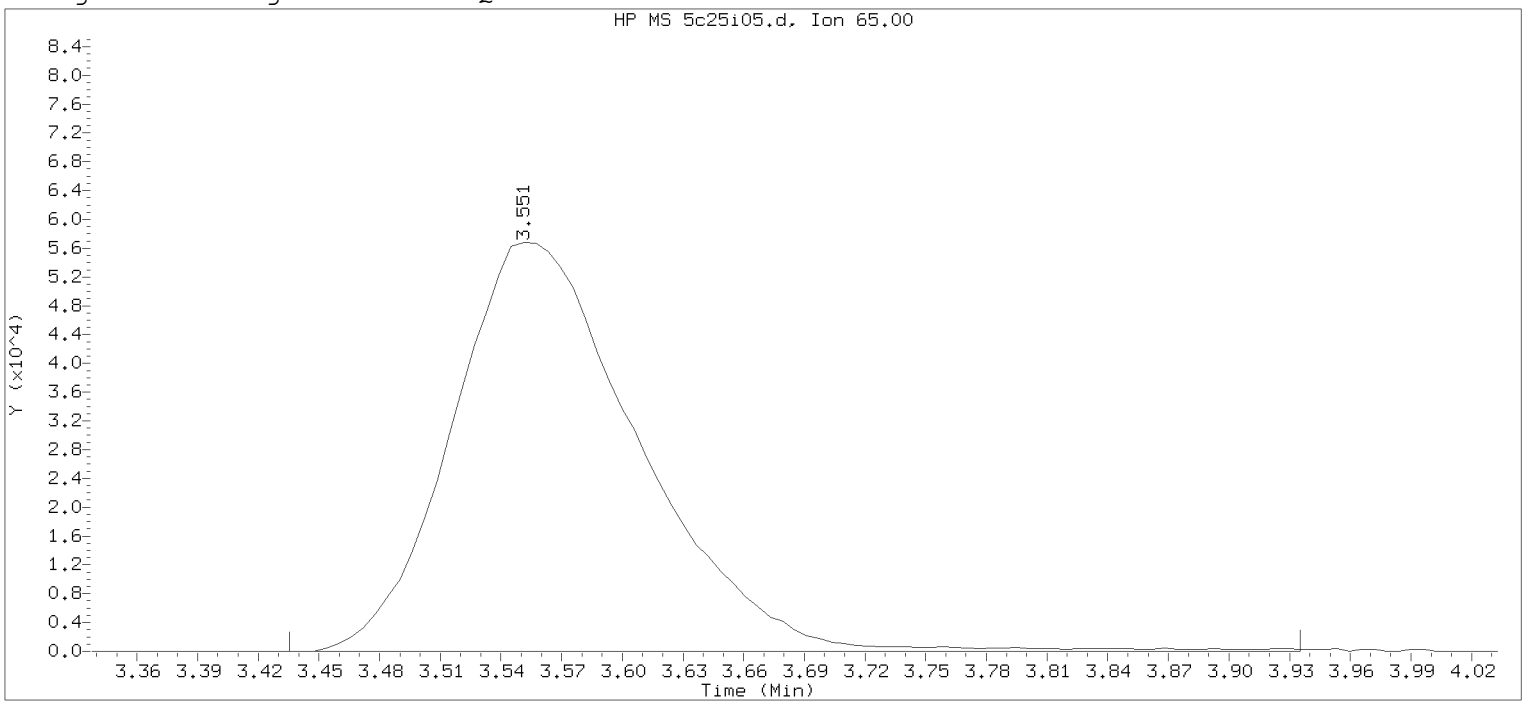
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

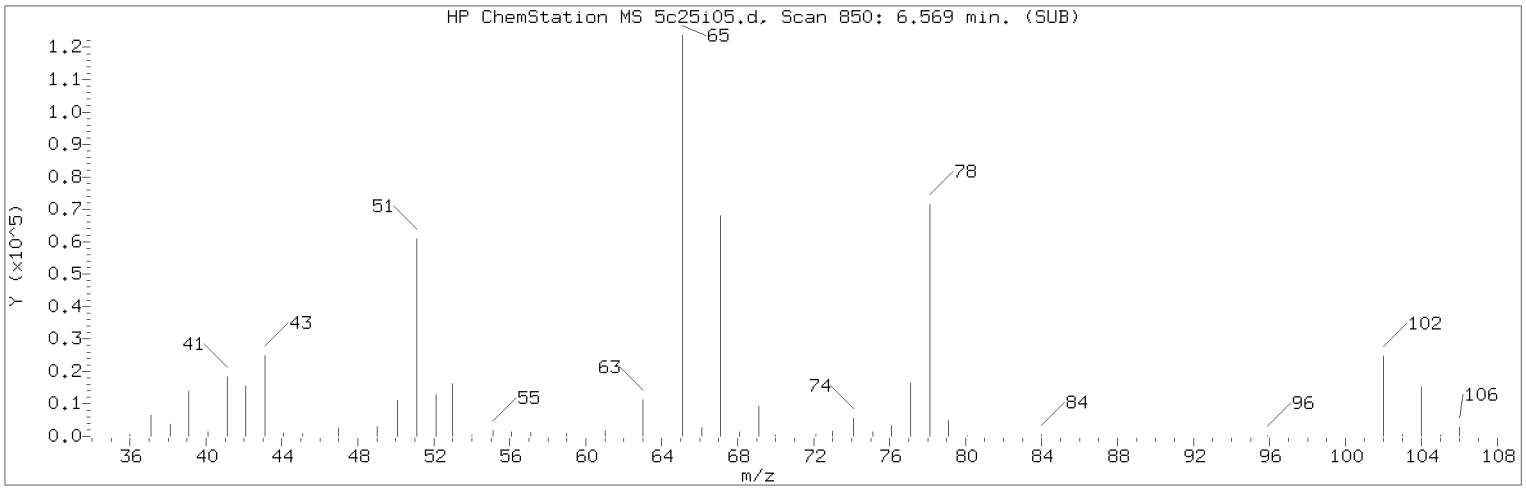
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

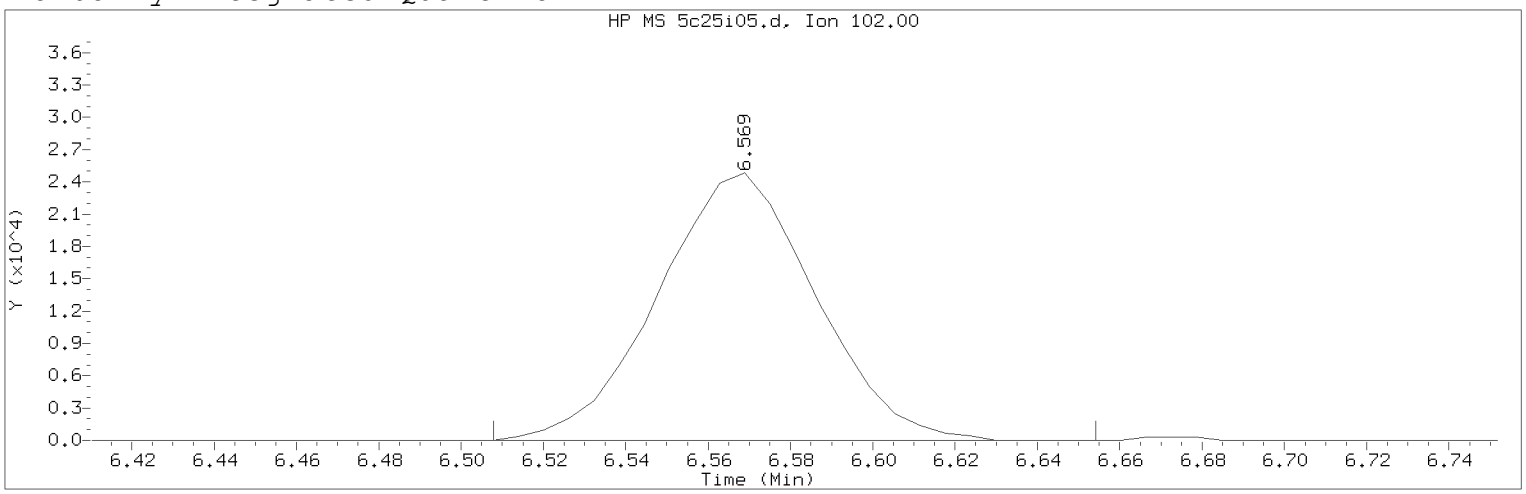
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 355
Retention Time (minutes): 3.551
Quant Ion : 65.00
Area : 364381
On-column Amount (ng) : 250.0000
Integration start scan : 335 Integration stop scan: 417
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas09250

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

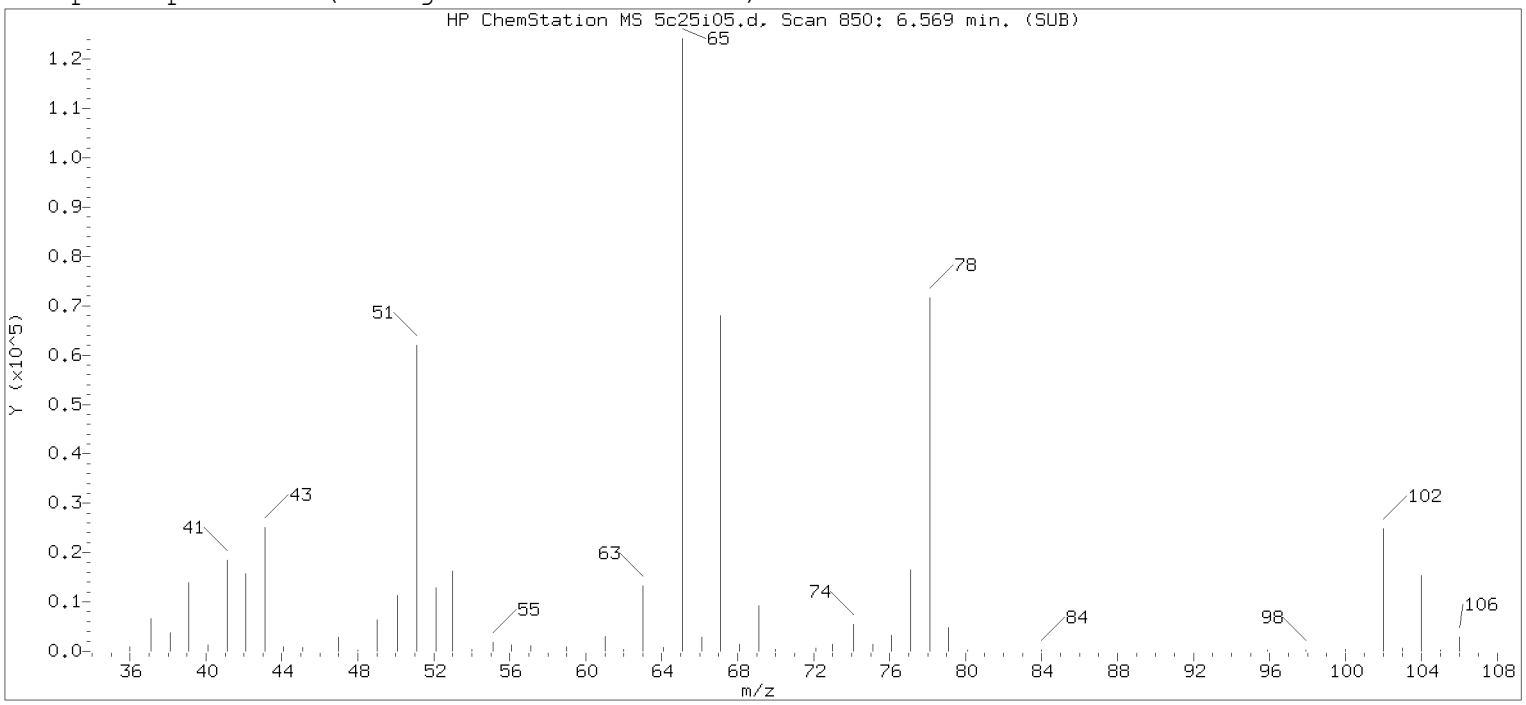
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 850
Retention Time (minutes): 6.569
Quant Ion : 102.00
Area (flag) : 65897M
On-Column Amount (ng) : 49.5043
Integration start scan : 839 Integration stop scan: 863
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

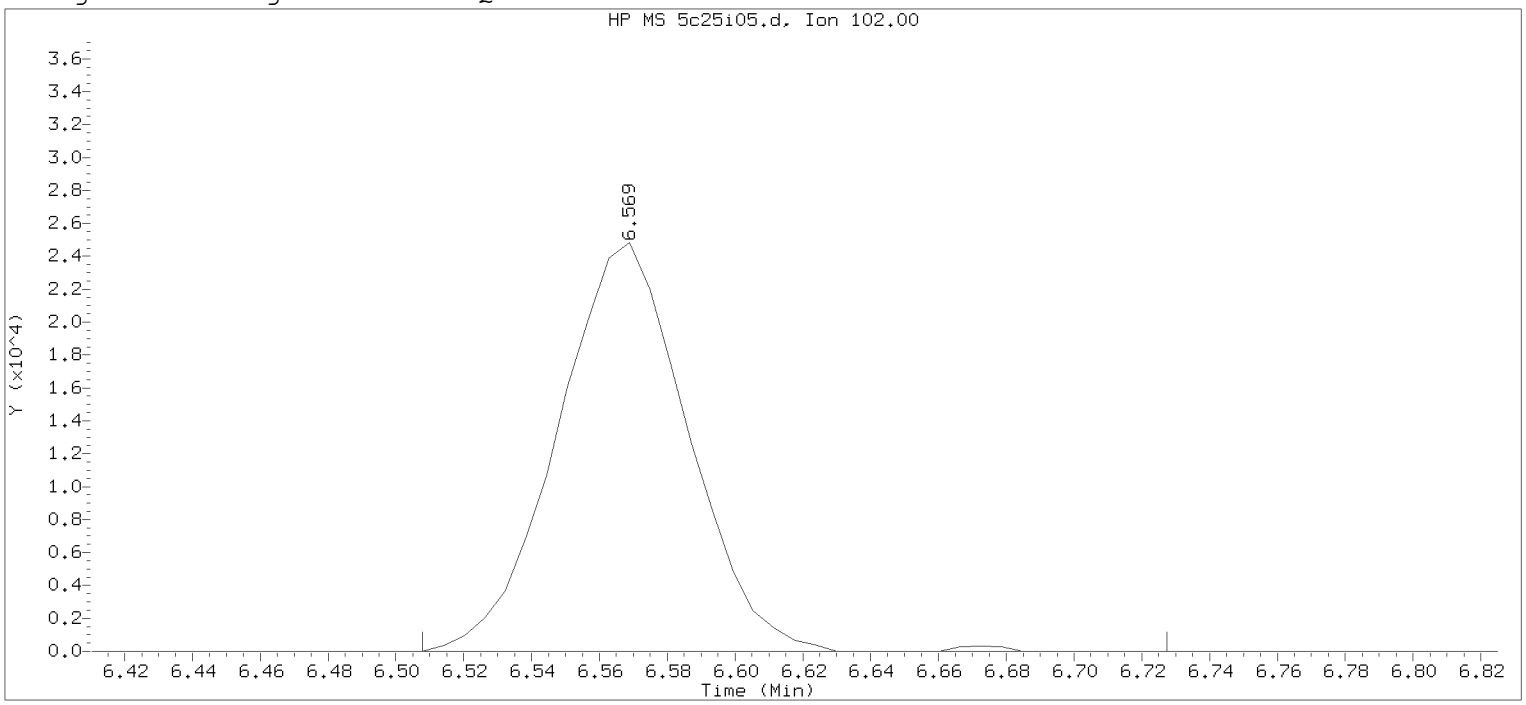
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

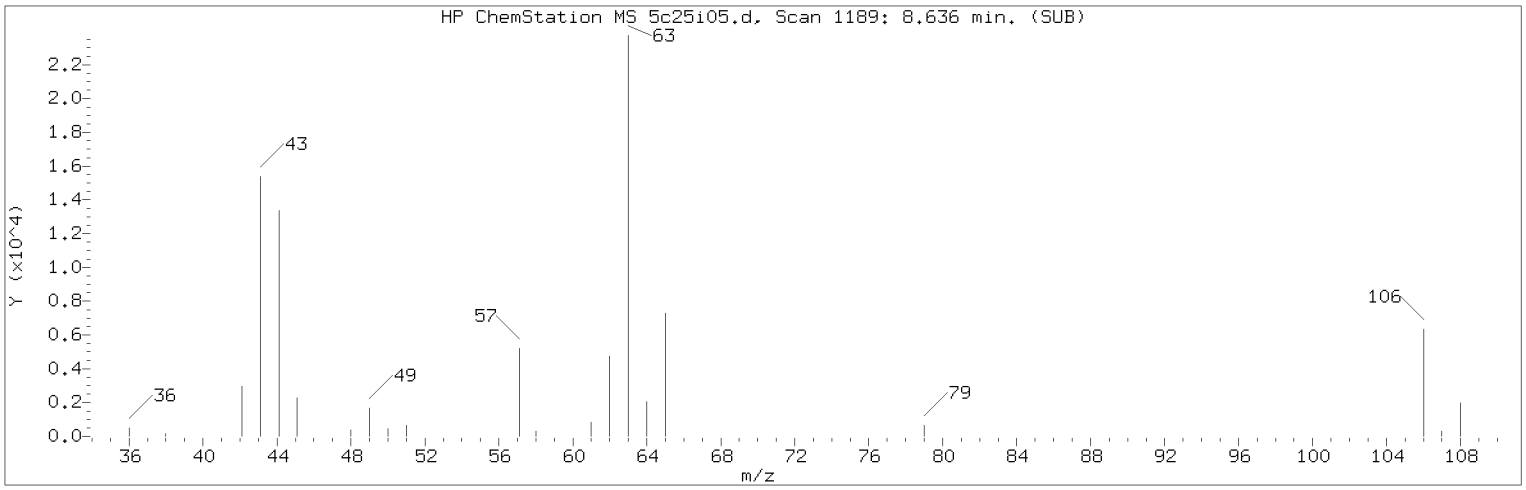
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

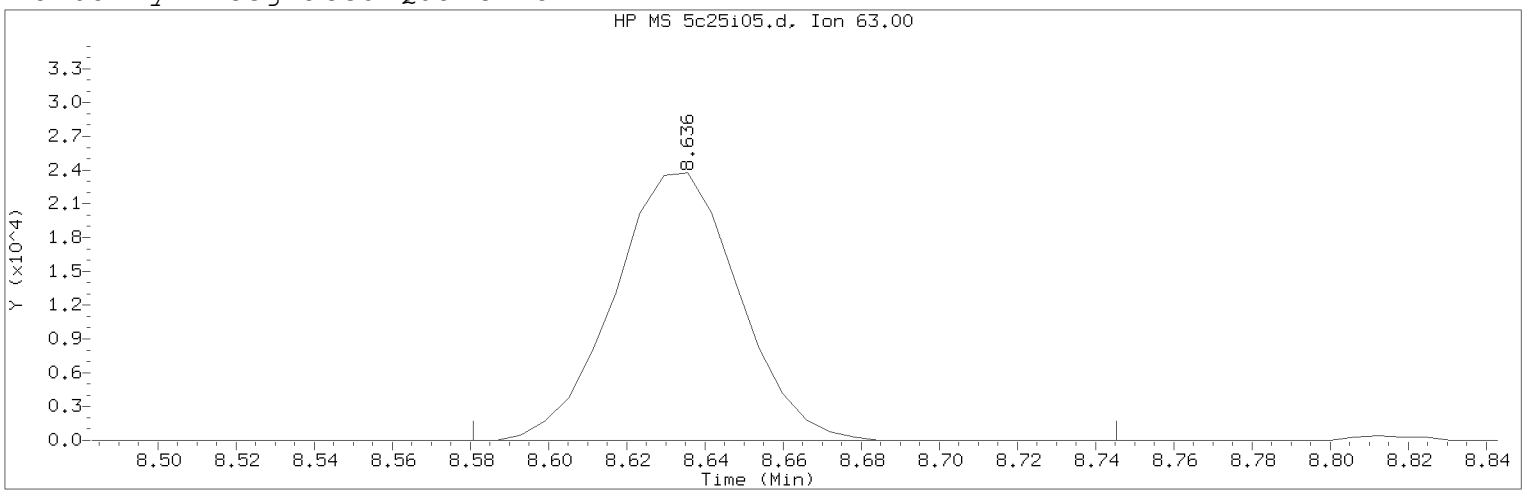
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 850
Retention Time (minutes): 6.569
Quant Ion : 102.00
Area : 66208
On-column Amount (ng) : 49.5992
Integration start scan : 839 Integration stop scan: 875
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

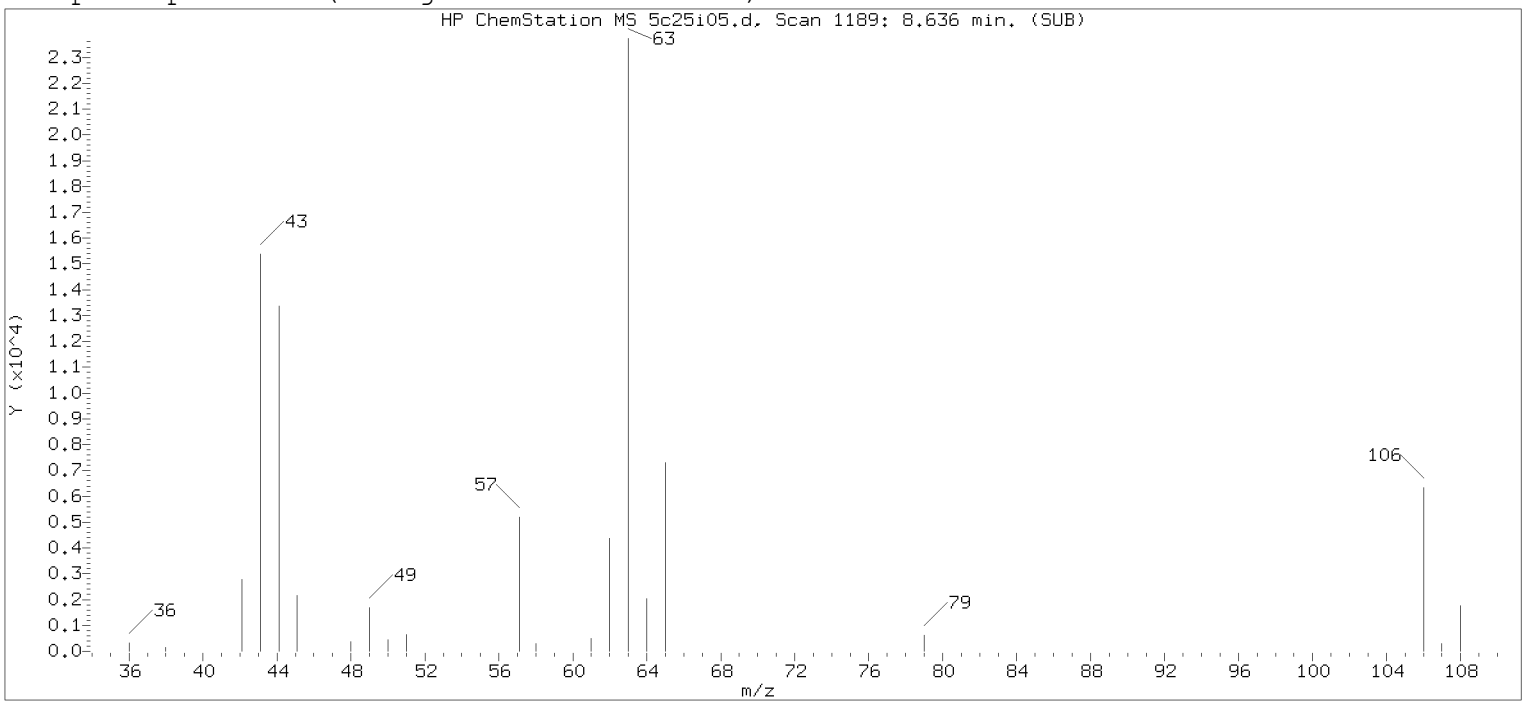
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1189
Retention Time (minutes): 8.636
Quant Ion : 63.00
Area (flag) : 52611M
On-Column Amount (ng) : 9.8253
Integration start scan : 1179 Integration stop scan: 1206
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

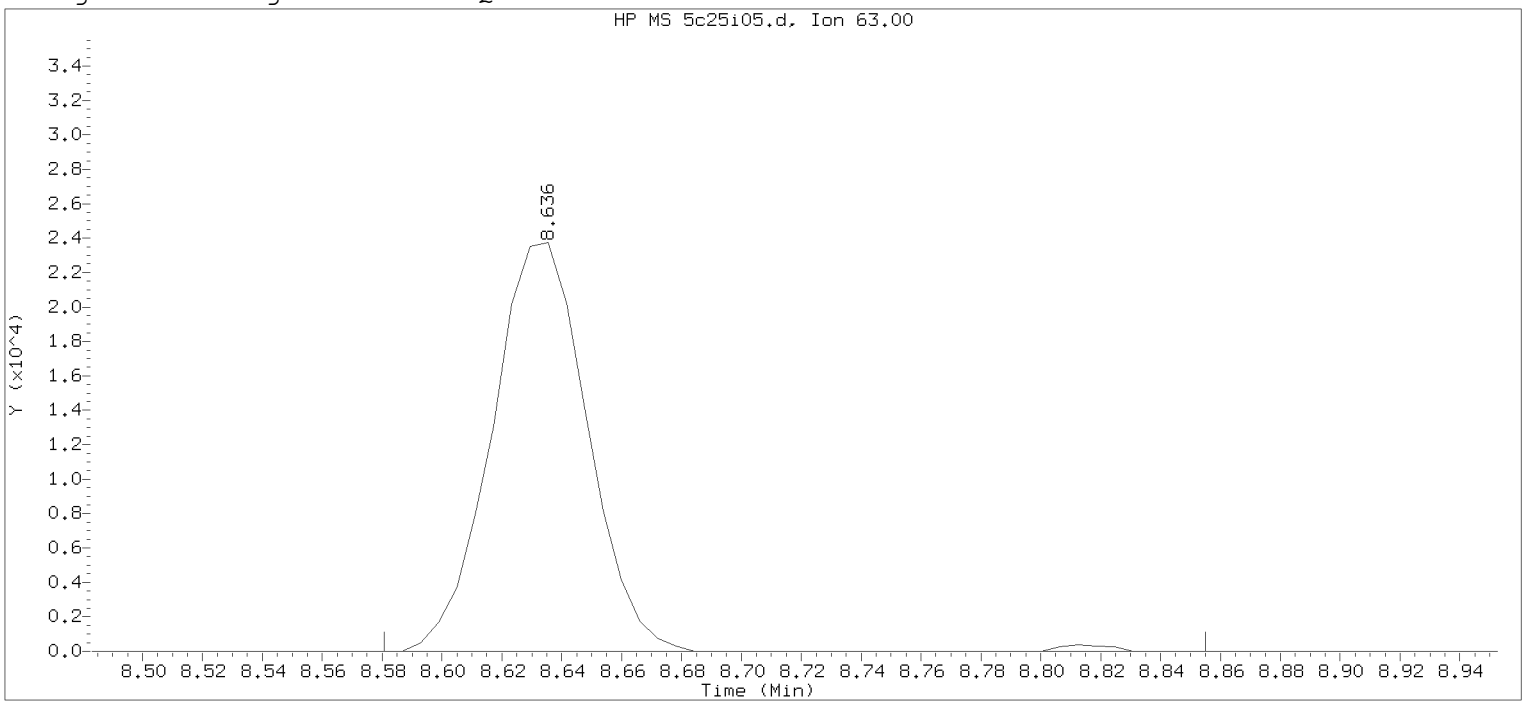
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

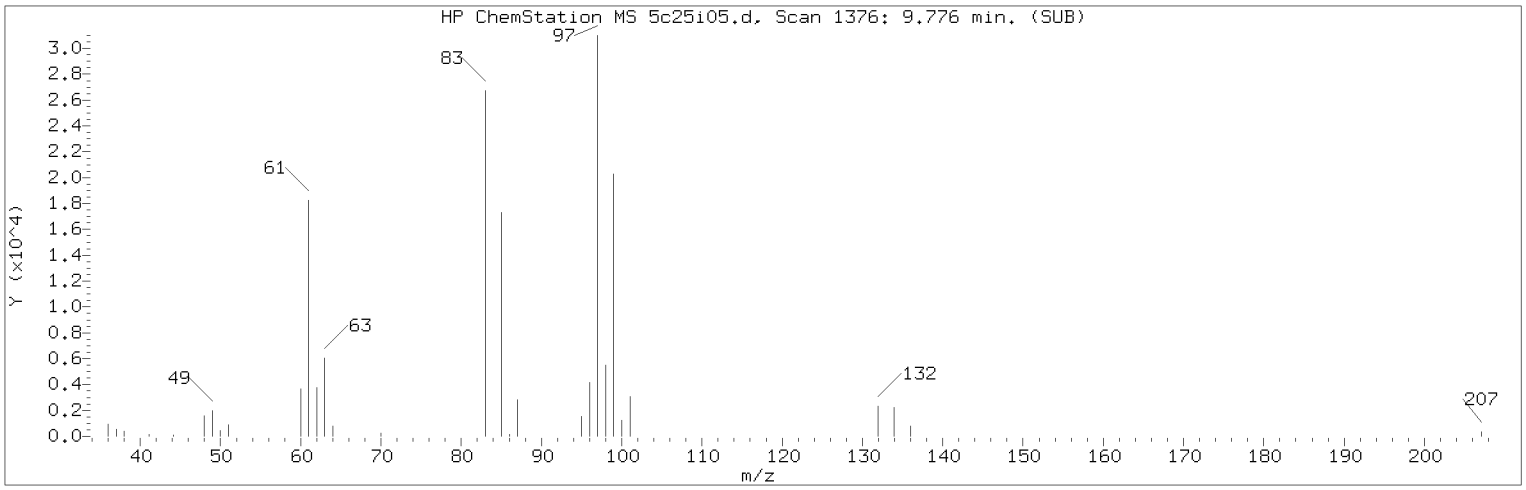
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

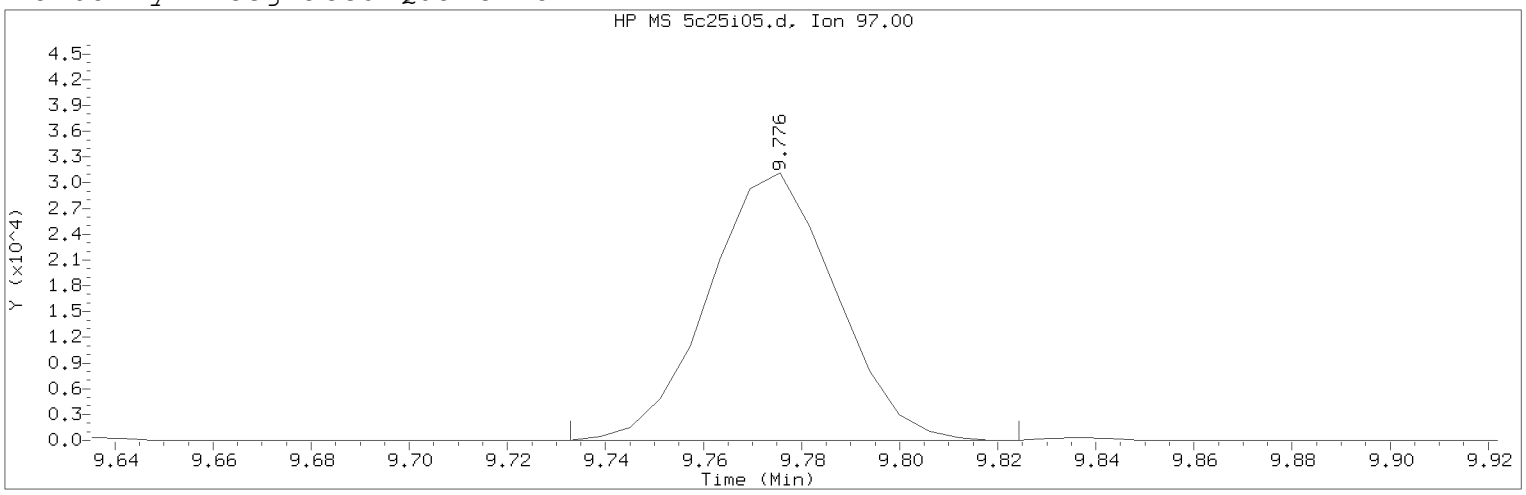
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1189
Retention Time (minutes): 8.636
Quant Ion : 63.00
Area : 53056
On-column Amount (ng) : 9.5548
Integration start scan : 1179 Integration stop scan: 1224
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

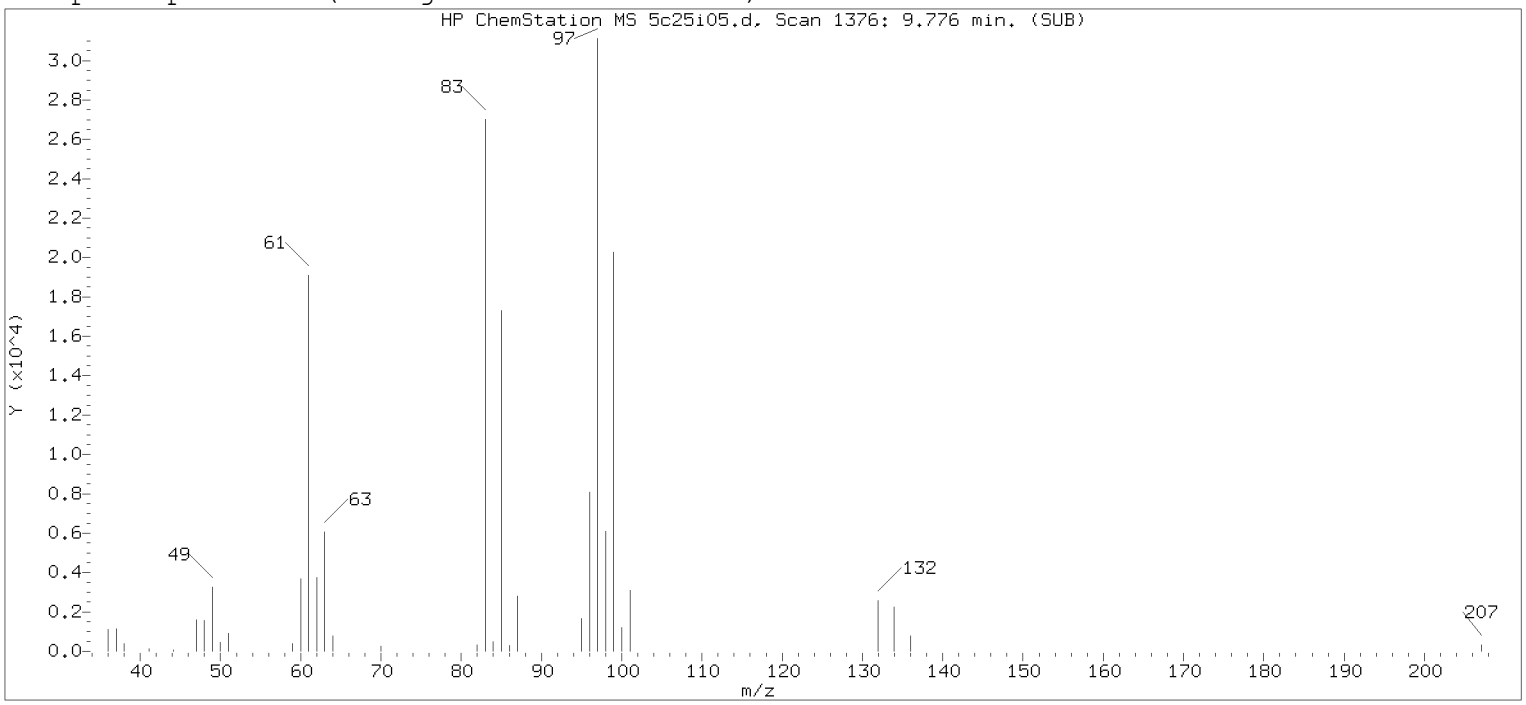
Compound Number : 93
Compound Name : 1,1,2-Trichloroethane
Scan Number : 1376
Retention Time (minutes): 9.776
Quant Ion : 97.00
Area (flag) : 55983M
On-Column Amount (ng) : 10.1182
Integration start scan : 1368 Integration stop scan: 1383
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

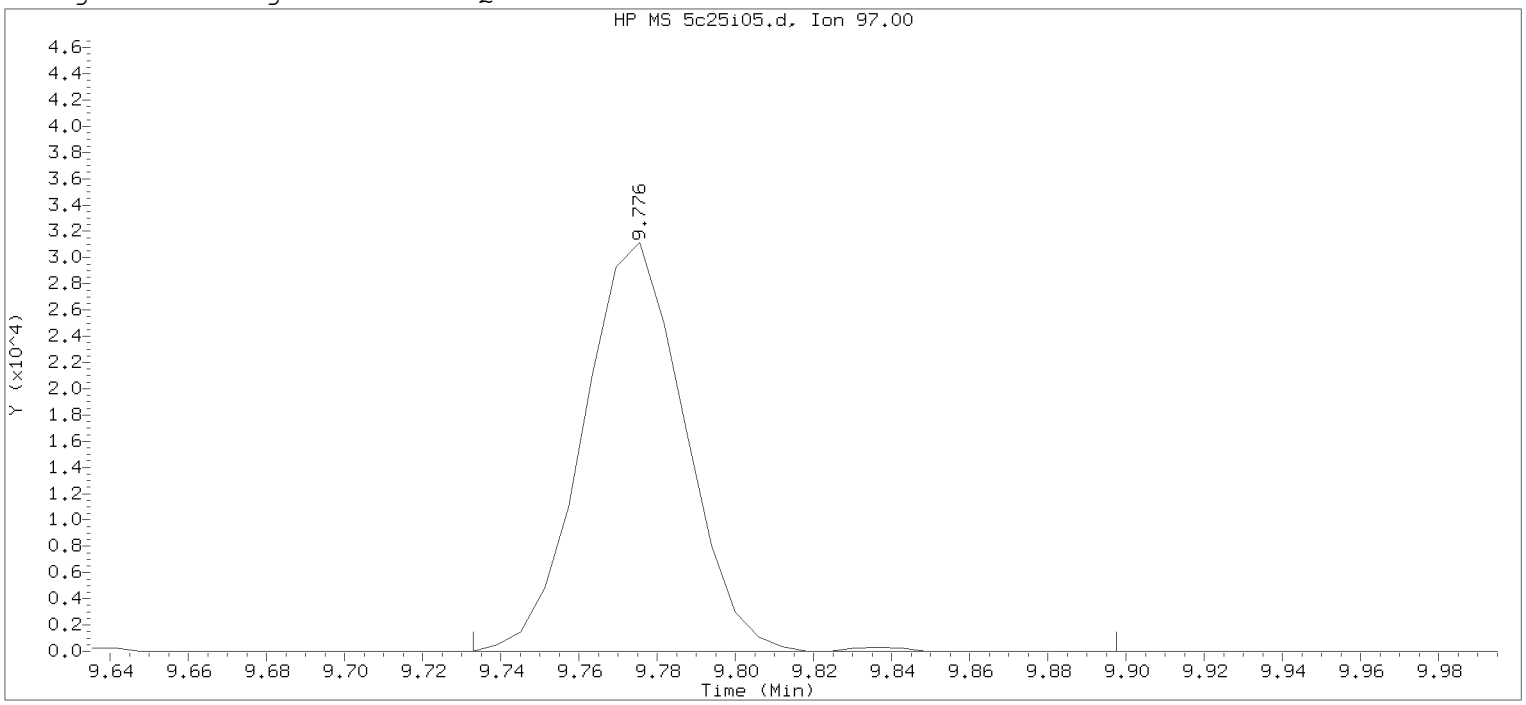
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

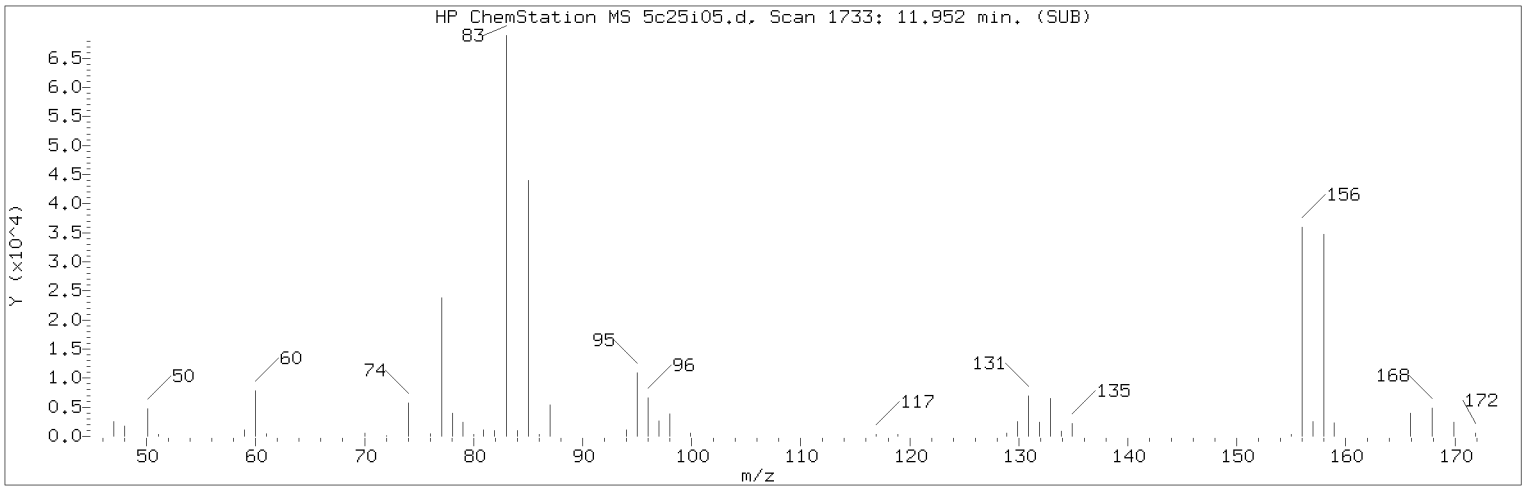
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

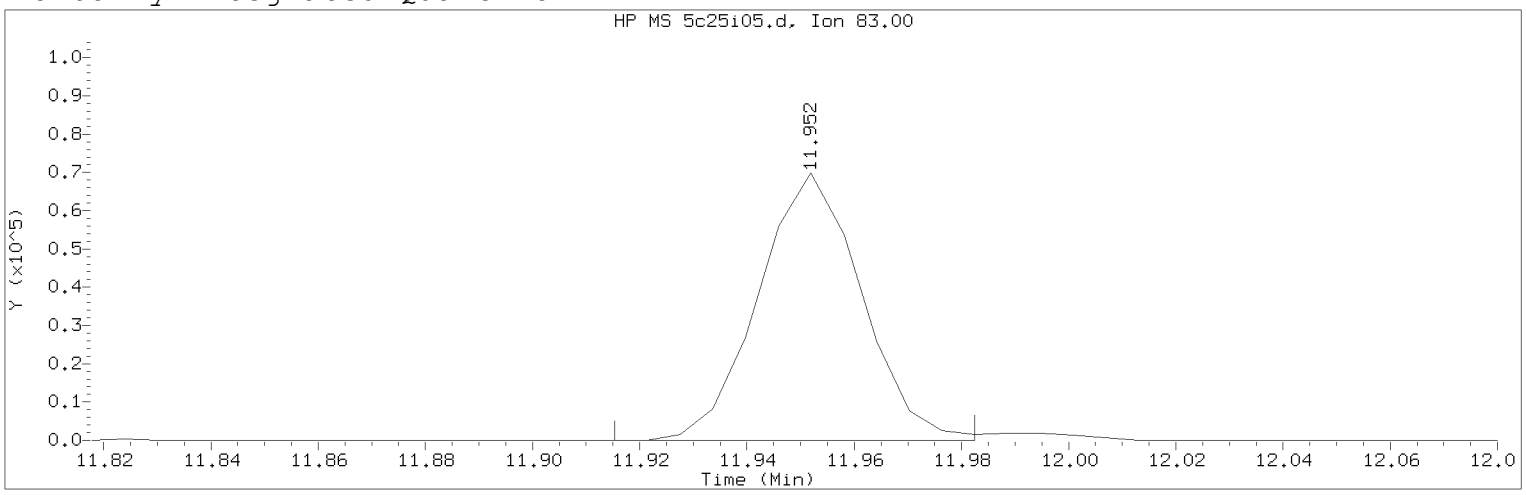
Compound Number : 93
Compound Name : 1,1,2-Trichloroethane
Scan Number : 1376
Retention Time (minutes): 9.776
Quant Ion : 97.00
Area : 56277
On-column Amount (ng) : 9.8623
Integration start scan : 1368 Integration stop scan: 1395
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

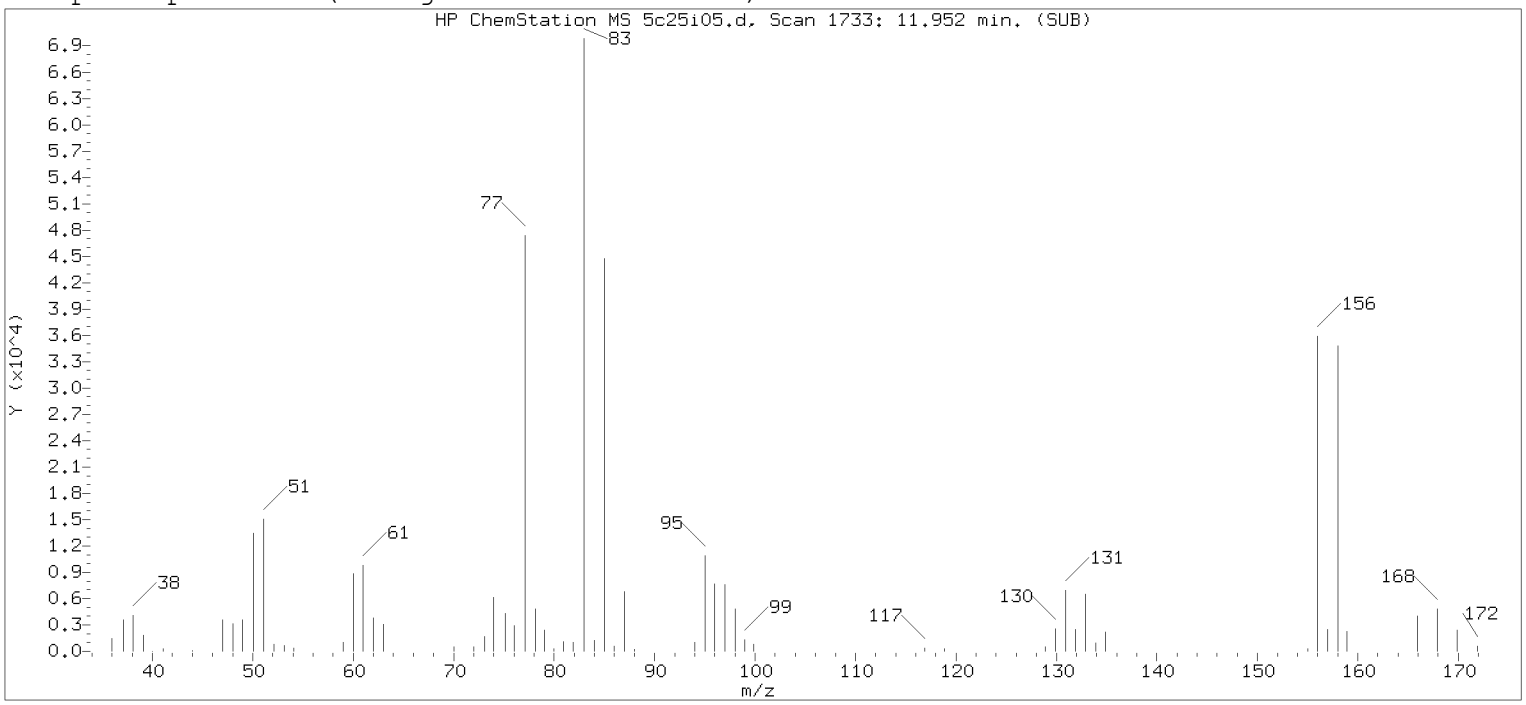
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area (flag) : 92865M
On-Column Amount (ng) : 9.8912
Integration start scan : 1726 Integration stop scan: 1737
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

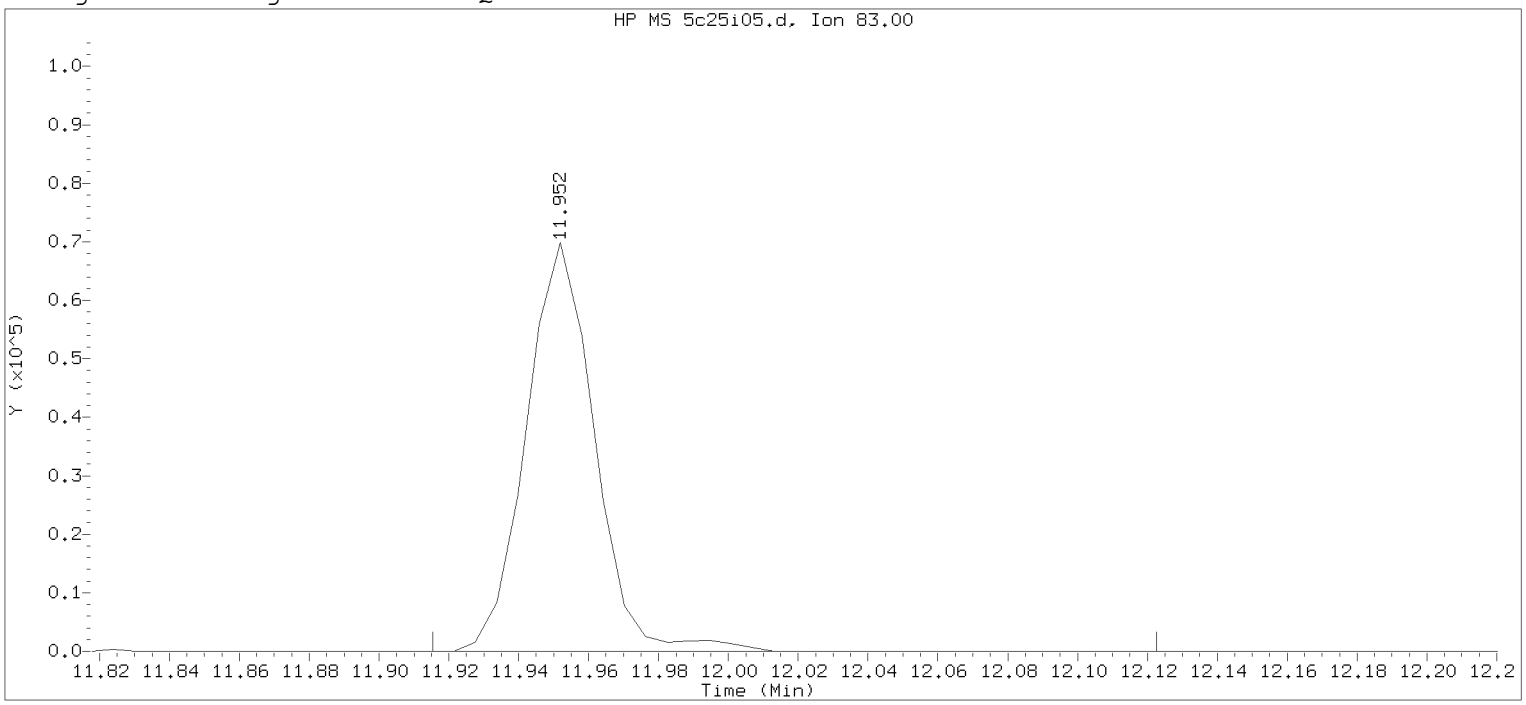
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

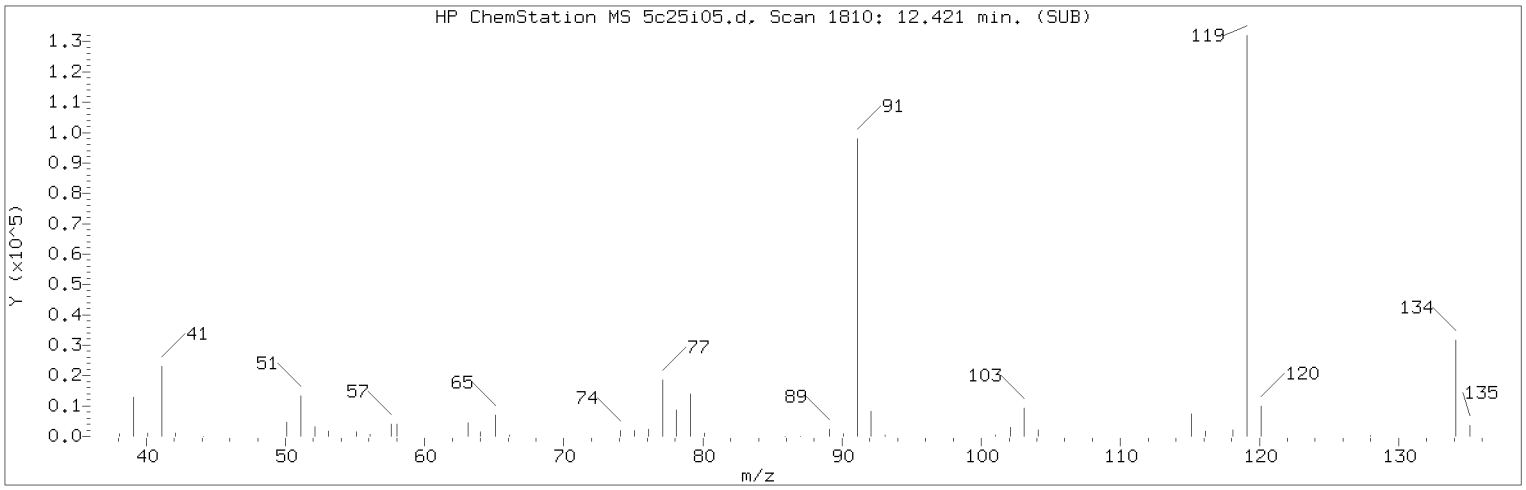
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

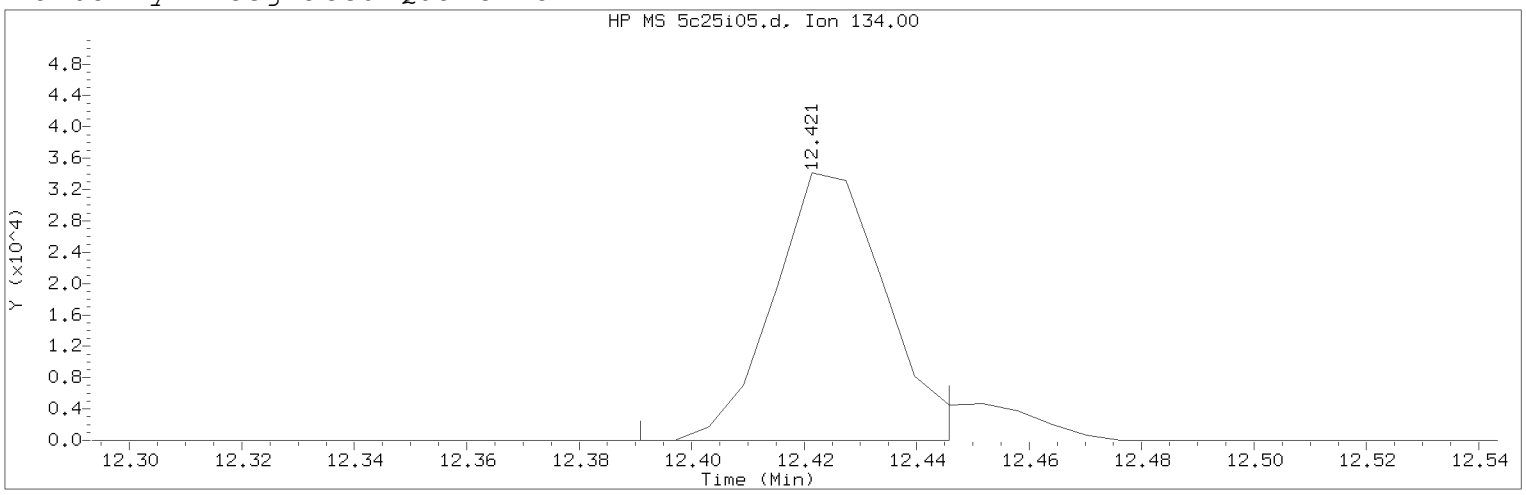
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area : 94940
On-column Amount (ng) : 9.6612
Integration start scan : 1726 Integration stop scan: 1760
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD010 Lab Sample ID: VSTD010

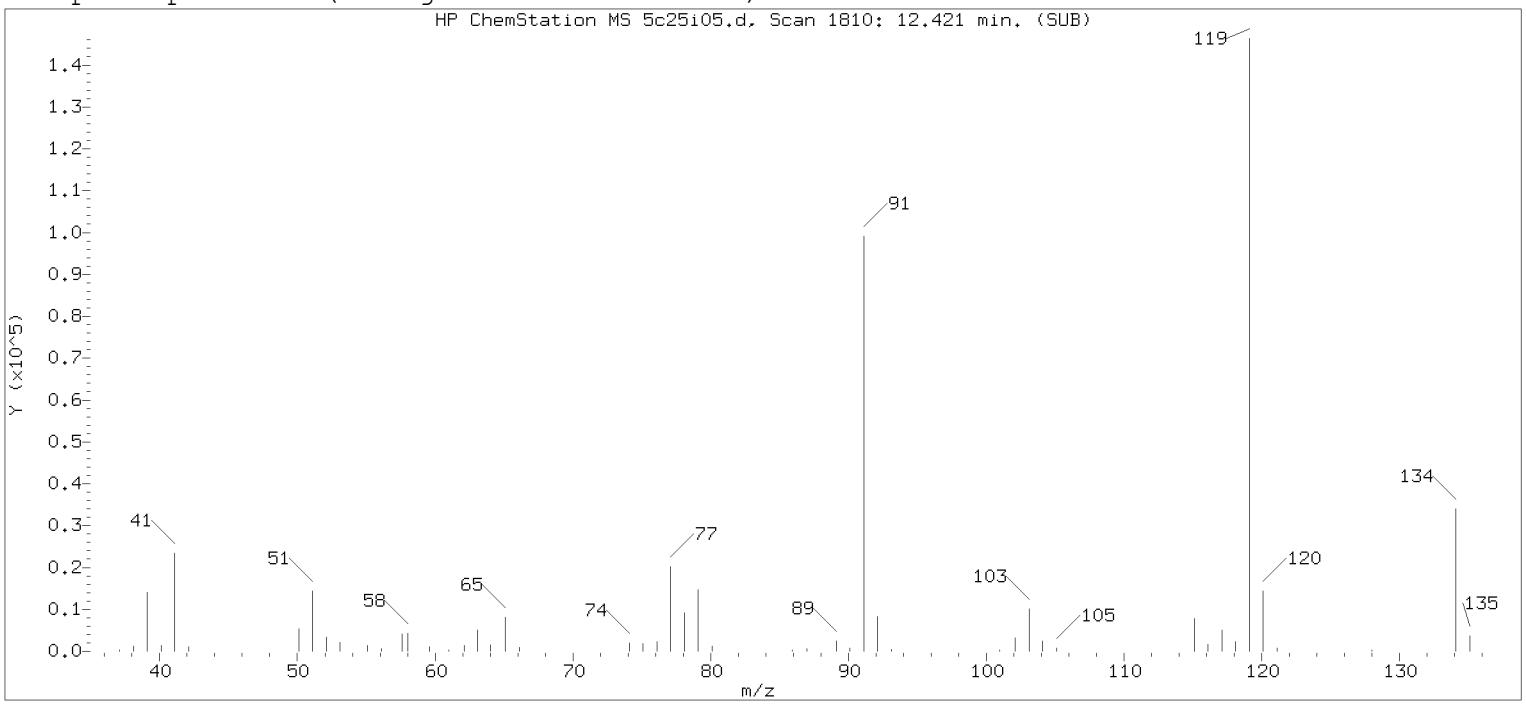
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1810
Retention Time (minutes): 12.421
Quant Ion : 134.00
Area (flag) : 47283M
On-Column Amount (ng) : 9.4421
Integration start scan : 1804 Integration stop scan: 1813
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

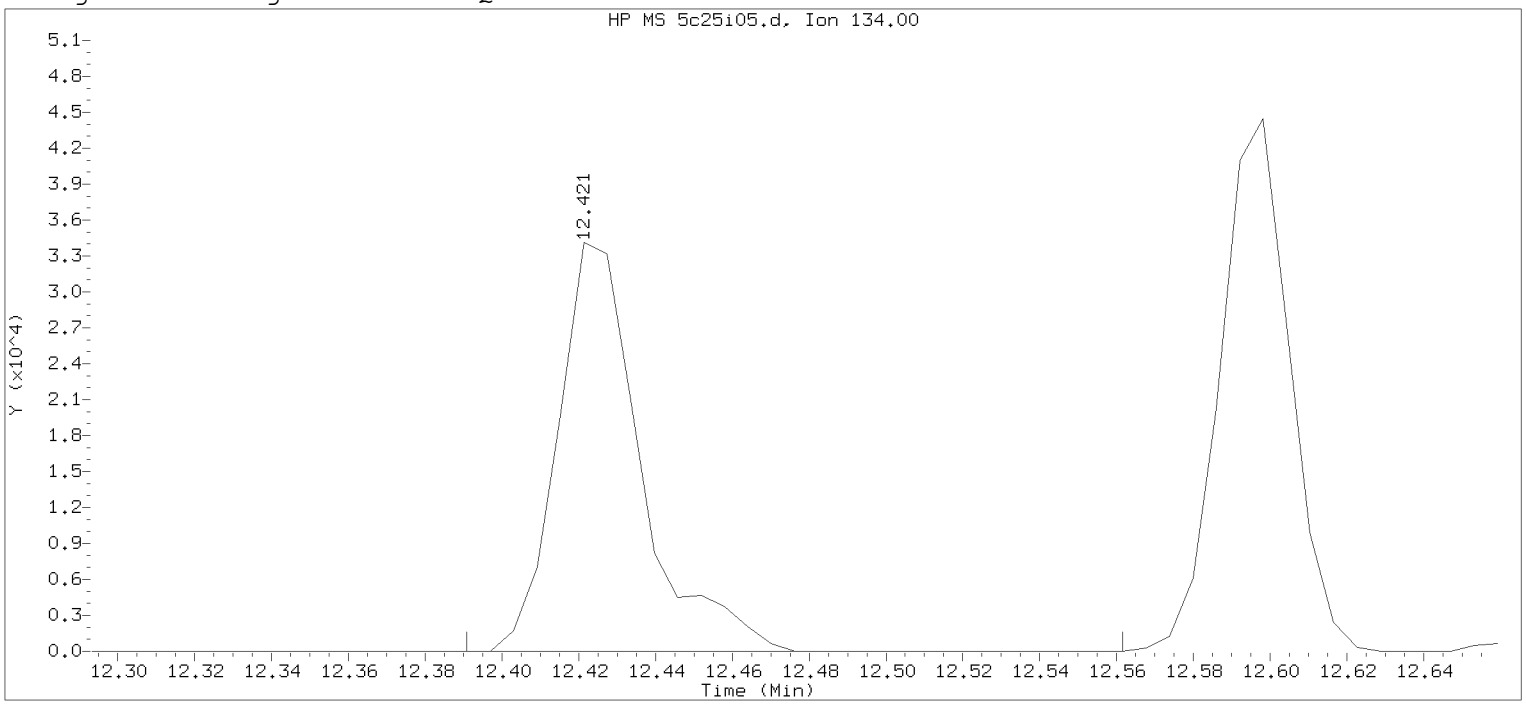
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



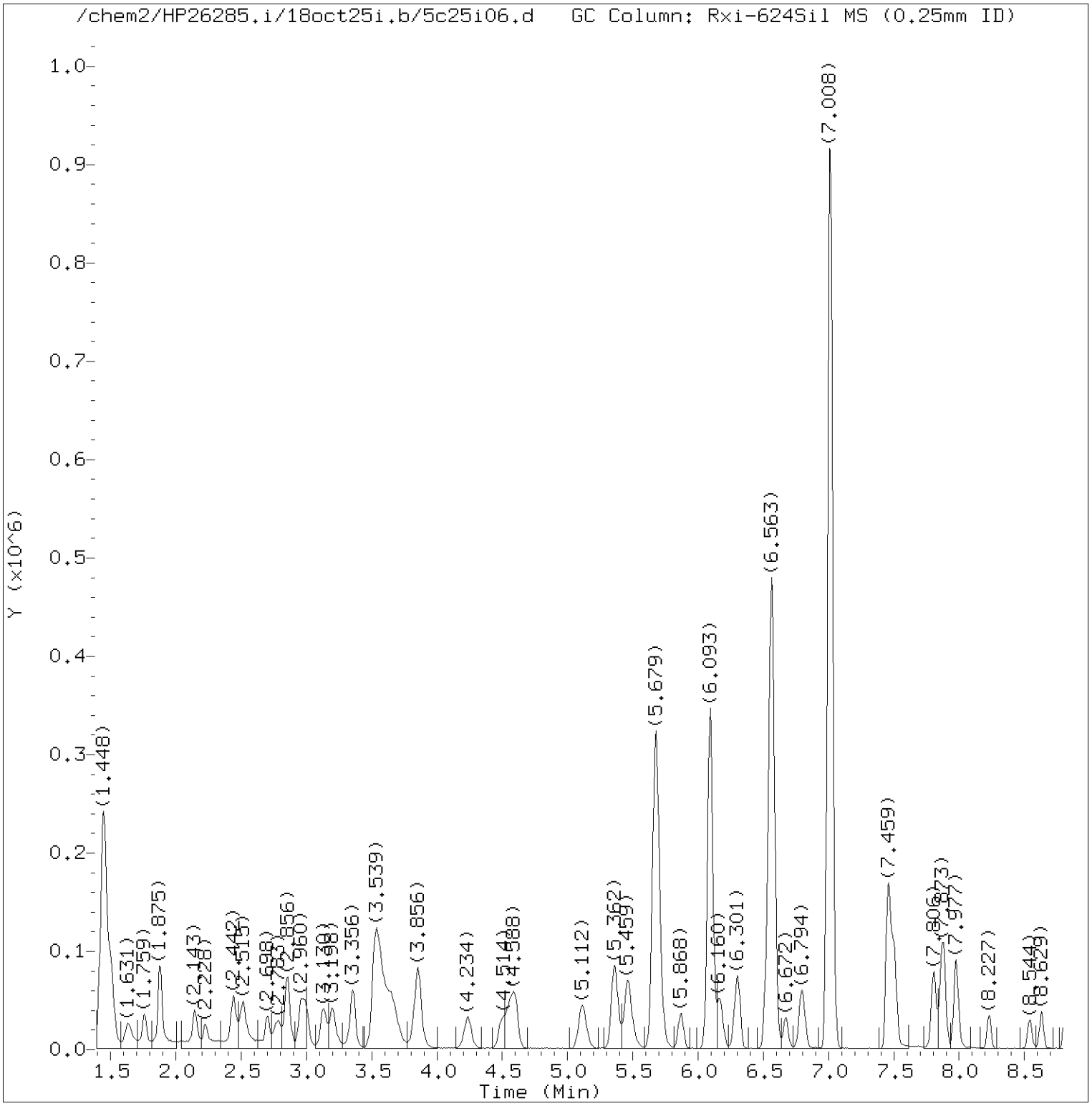
Data File: /chem2/HP26285.i/18oct25i.b/5c25i05.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:11 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1810
Retention Time (minutes): 12.421
Quant Ion : 134.00
Area : 51328
On-column Amount (ng) : 9.3988
Integration start scan : 1804 Integration stop scan: 1832
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito



Total Ion Chromatogram (TIC)

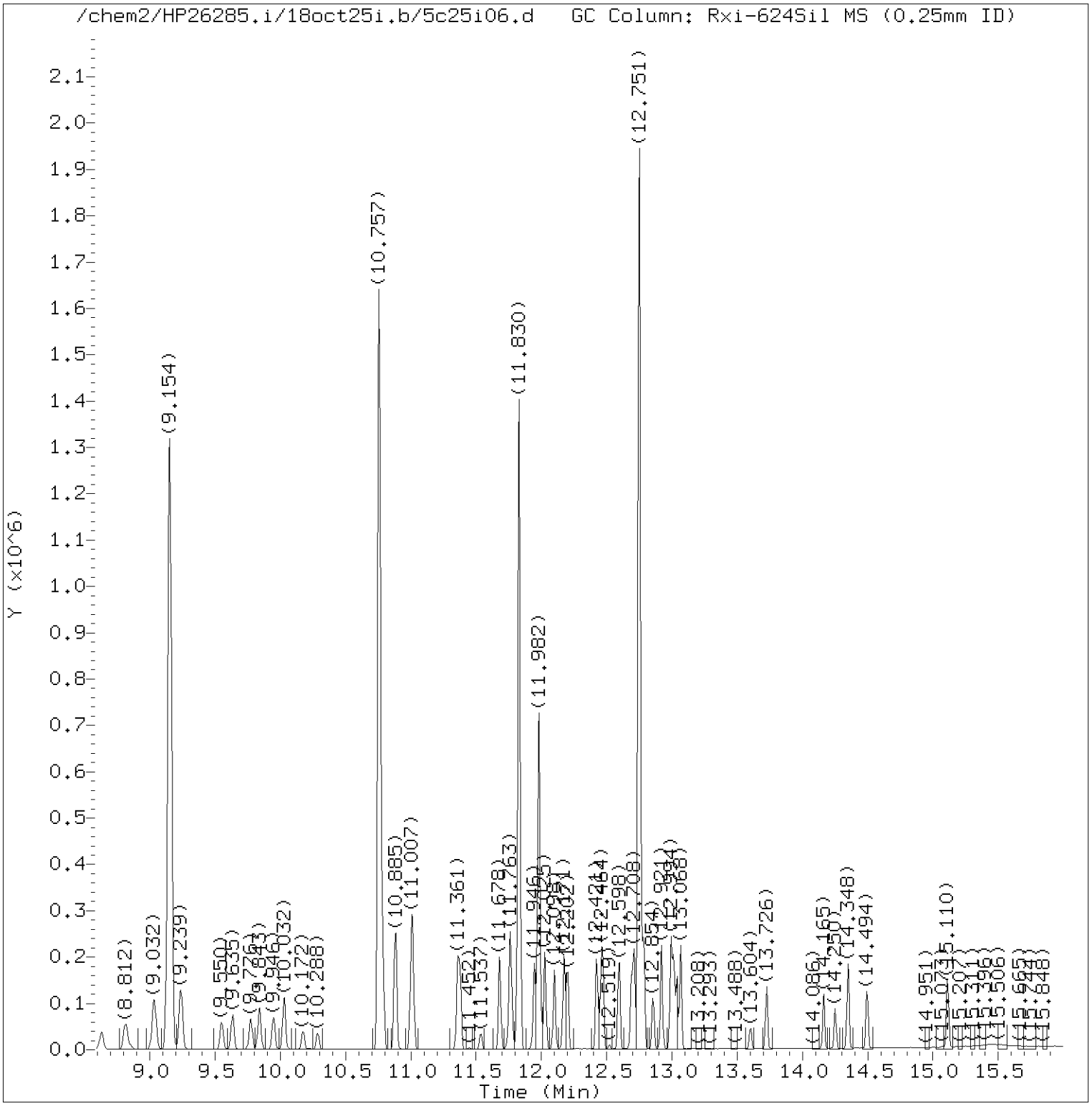
Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD004 Lab Sample ID: VSTD004

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD004 Lab Sample ID: VSTD004

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.631	85	48748	4.349
4) Chloromethane	(2)	1.759	50	39818	4.387
5) 1,3-Butadiene	(2)	1.875	39	29392M	4.822
6) Vinyl Chloride	(2)	1.875	62	37016	4.363
8) Bromomethane	(2)	2.143	94	27582	4.374
9) Chloroethane	(2)	2.222	64	19160	4.544
10) Dichlorofluoromethane	(2)	2.442	67	48920	4.376
12) Trichlorofluoromethane	(2)	2.496	101	49166	4.345
11) n-Pentane	(2)	2.521	43	31237	4.322
14) Ethyl ether	(2)	2.704	59	22502	4.132
15) Freon 123a	(2)	2.777	67	32223	4.181
16) Acrolein	(1)	2.856	56	98947	40.257
17) 1,1-Dichloroethene	(2)	2.960	96	21031	3.956
17) 1,1-Dichloroethene	(2)	2.960	63	11687	4.241
19) Freon 113	(2)	2.990	101	21303	4.021
18) Acetone	(1)	3.002	58	10211	8.015
22) Methyl Iodide	(2)	3.124	142	41218	3.977
21) 2-Propanol	(1)	3.149	45	77536	74.235
23) Carbon Disulfide	(2)	3.198	76	71580	3.952
27) Methyl Acetate	(2)	3.344	43	43891	4.233
25) Allyl Chloride	(2)	3.356	41	47326	4.121
28) Methylene Chloride	(2)	3.521	84	25214	4.049
29)*t-Butyl alcohol-d10	(1)	3.551	65	349936	250.000
30) t-Butyl alcohol	(1)	3.649	59	142144	77.238
31) Acrylonitrile	(2)	3.819	53	18922	3.888
32) trans-1,2-Dichloroethene	(2)	3.856	96	24446	4.041
33) Methyl Tertiary Butyl Ether	(2)	3.856	73	75594	3.957
34) n-Hexane	(2)	4.234	57	31593	3.601
36) 1,1-Dichloroethane	(2)	4.496	63	45871	4.052
38) di-Isopropyl ether	(2)	4.557	45	89167	4.057
39) 2-Chloro-1,3-butadiene	(2)	4.600	53	41513	4.062
40) Ethyl t-butyl ether	(2)	5.112	59	78717M	3.983
44) 2-Butanone	(2)	5.356	43	57404	7.806
42) cis-1,2-Dichloroethene	(2)	5.362	96	26671	3.956
45) 2,2-Dichloropropane	(2)	5.368	77	35836	3.994
47) Propionitrile	(1)	5.459	54	155552	79.977
48) Methacrylonitrile	(2)	5.673	67	180796	39.078
49) Bromochloromethane	(2)	5.697	128	13690	3.923

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.715	71	13955	7.886
51) Chloroform	(2)	5.868	83	43322	4.048
53) 1,1,1-Trichloroethane	(2)	6.081	97	37339	4.068
52)$Dibromofluoromethane	(2)	6.093	113	276372	50.036
52)$Dibromofluoromethane	(2)	6.093	111	283050	50.121
43) 1,2-Dichloroethene (Total)	(2)		96	51117	7.997
54) Cyclohexane	(2)	6.160	56	42538	3.885
54) Cyclohexane	(2)	6.166	84	40708	4.501
54) Cyclohexane	(2)	6.166	69	13056	4.004
56) Carbon Tetrachloride	(2)	6.294	117	31728	3.934
55) 1,1-Dichloropropene	(2)	6.307	75	35941	4.070
58) Isobutyl Alcohol	(1)	6.538	41	114872	192.756
57)$1,2-Dichloroethane-d4	(2)	6.563	102	65312	49.528
57)$1,2-Dichloroethane-d4	(2)	6.563	65	343431	51.191
57)$1,2-Dichloroethane-d4	(2)	6.563	104	41579	49.517
60) Benzene	(2)	6.581	78	106427	4.034
61) 1,2-Dichloroethane	(2)	6.672	62	32984	4.075
61) 1,2-Dichloroethane	(2)	6.666	98	2925	4.185
65) t-Amyl methyl ether	(2)	6.794	73	73446	3.958
66)*Fluorobenzene	(2)	7.008	96	1135450	50.000
67) n-Heptane	(2)	7.026	43	33784	3.350
69) n-Butanol	(1)	7.459	56	166659	348.286
71) Trichloroethene	(2)	7.508	95	26269	3.981
73) Methylcyclohexane	(2)	7.806	83	43602	3.811
73) Methylcyclohexane	(2)	7.812	98	18579	3.822
74) 1,2-Dichloropropane	(2)	7.861	63	26208	3.974
75) Dibromomethane	(2)	7.971	93	15413	3.842
77) Methyl Methacrylate	(2)	7.977	69	24803	3.730
79) Bromodichloromethane	(2)	8.233	83	27882	3.729
80) 2-Nitropropane	(2)	8.544	41	23935	7.148
81) 2-Chloroethyl Vinyl Ether	(2)	8.629	63	20538	3.872
82) cis-1,3-Dichloropropene	(2)	8.812	75	36219	3.767
83) 4-Methyl-2-pentanone	(2)	9.032	43	100355	7.660
84)$Toluene-d8	(3)	9.154	98	1085053	50.412
84)$Toluene-d8	(3)	9.154	100	701590	50.366
89) Toluene	(3)	9.239	92	63800	3.951
90) trans-1,3-Dichloropropene	(3)	9.550	75	31489	3.651
92) Ethyl Methacrylate	(3)	9.635	69	38337	3.707

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) 1,1,2-Trichloroethane	(3)	9.776	97	21315	3.875
94) Tetrachloroethene	(3)	9.843	166	28424	4.008
95) 1,3-Dichloropropane	(3)	9.946	76	36537	3.930
97) 2-Hexanone	(3)	10.032	43	78468M	7.532
91) 1,3-Dichloropropene (total)	(3)		100	67708	7.418
98) Dibromochloromethane	(3)	10.172	129	19496	3.462
100) 1,2-Dibromoethane	(3)	10.288	107	22641	3.794
101)*Chlorobenzene-d5	(3)	10.757	117	797928	50.000
102) 1-Chlorohexane	(3)	10.781	91	34332	3.743
103) Chlorobenzene	(3)	10.788	112	66677	3.812
104) 1,1,1,2-Tetrachloroethane	(3)	10.879	131	20429	3.546
105) Ethylbenzene	(3)	10.885	91	118724	3.825
107) m+p-Xylene	(3)	11.013	106	89713	7.482
108) o-Xylene	(3)	11.361	106	43101	3.755
110) Styrene	(3)	11.379	104	66910	3.578
111) Bromoform	(3)	11.537	173	13275	4.468
112) Isopropylbenzene	(3)	11.678	105	110594	3.781
109) Xylene (Total)	(3)		106	132814	11.237
115)$4-Bromofluorobenzene	(3)	11.830	95	383621	49.584
115)$4-Bromofluorobenzene	(3)	11.830	174	326766	49.745
116) Bromobenzene	(4)	11.946	156	26588	3.758
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	34778M	3.776
119) trans-1,4-Dichloro-2-butene	(4)	11.976	53	120475	38.084
118) 1,2,3-Trichloropropane	(4)	11.995	110	10930	3.990
120) n-Propylbenzene	(4)	12.025	91	133257	3.954
121) 2-Chlorotoluene	(4)	12.098	126	26228	3.858
123) 1,3,5-Trimethylbenzene	(4)	12.171	105	89181	3.771
122) 4-Chlorotoluene	(4)	12.202	126	26607	3.761
125) tert-Butylbenzene	(4)	12.427	134	17836M	3.630
126) Pentachloroethane	(4)	12.452	167	14419	3.438
127) 1,2,4-Trimethylbenzene	(4)	12.470	105	91179	3.753
128) sec-Butylbenzene	(4)	12.598	105	109195	3.699
130) 1,3-Dichlorobenzene	(4)	12.690	146	50554	3.778
131) p-Isopropyltoluene	(4)	12.708	119	92466	3.607
132)*1,4-Dichlorobenzene-d4	(4)	12.751	152	411500	50.000
134) 1,4-Dichlorobenzene	(4)	12.769	146	51618	3.755
135) 1,2,3-Trimethylbenzene	(4)	12.787	105	97603	3.857
136) Benzyl Chloride	(4)	12.854	91	58945	3.297

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

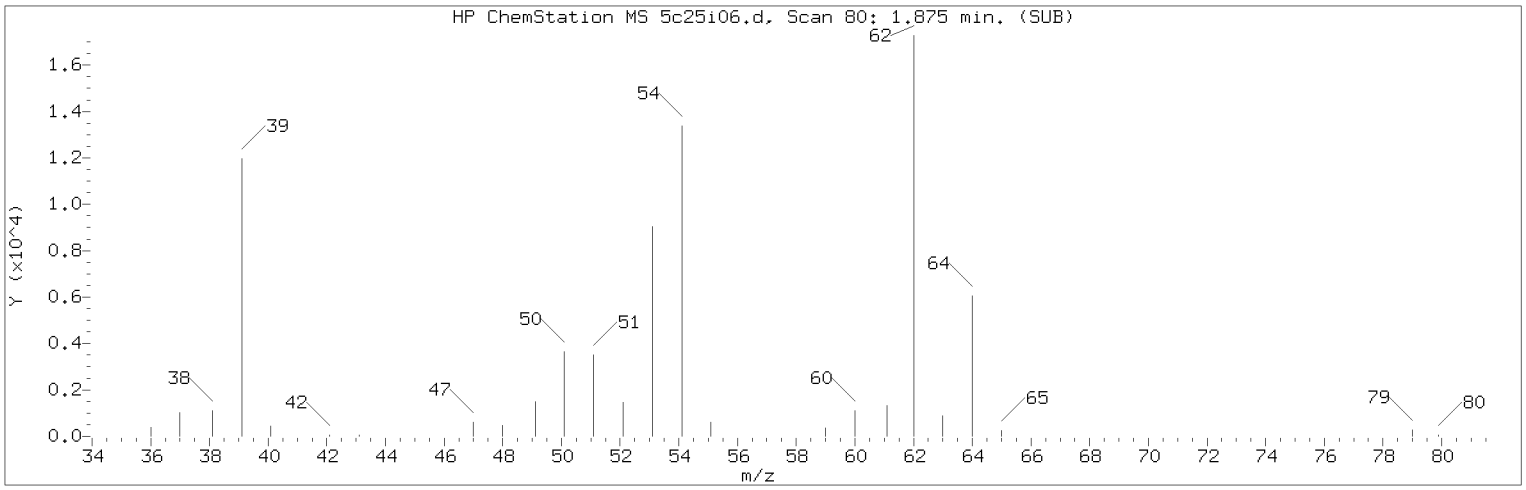
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD004 Lab Sample ID: VSTD004

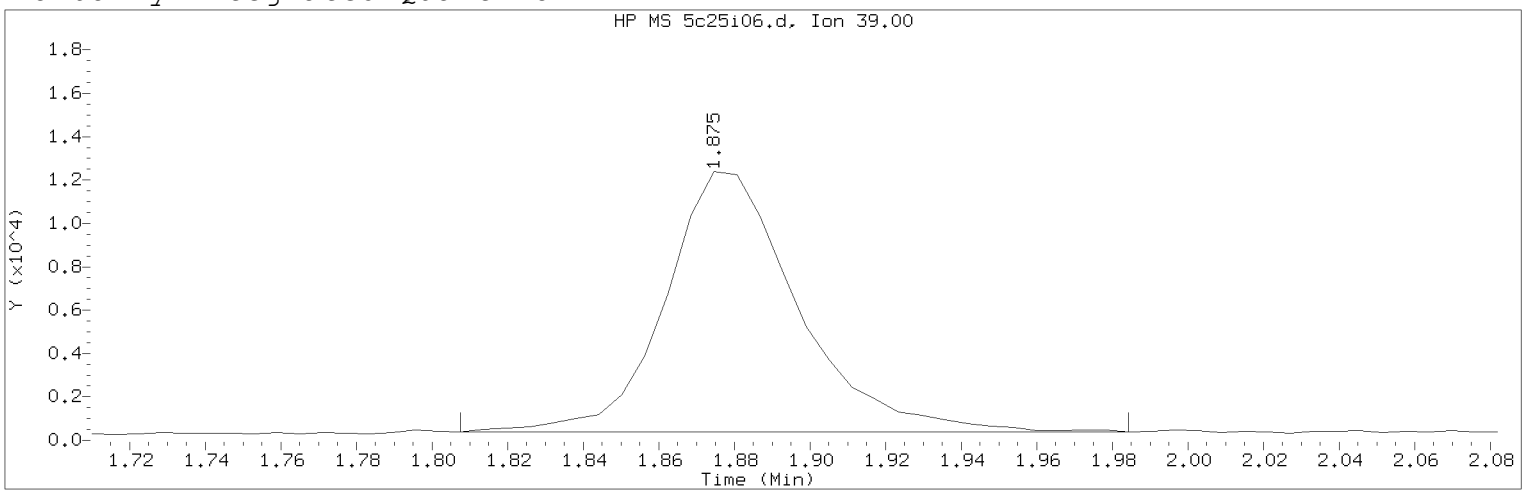
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137) 1,3-Diethylbenzene	(4)	12.921	119	58437	3.697
138) 1,4-Diethylbenzene	(4)	12.994	119	61695	3.657
140) n-Butylbenzene	(4)	13.013	92	46031	3.479
139) 1,2-Dichlorobenzene	(4)	13.037	146	48079	3.746
141) 1,2-Diethylbenzene	(4)	13.068	119	48811	3.689
142) Diethylbenzene (total)	(4)		100	168943	11.044
143) 1,2-Dibromo-3-chloropropane	(4)	13.604	75	8802	3.717
145) 1,3,5-Trichlorobenzene	(4)	13.726	180	32715	3.484
147) 1,2,4-Trichlorobenzene	(4)	14.165	180	29241	3.462
148) Hexachlorobutadiene	(4)	14.250	225	12395	3.115
149) Naphthalene	(4)	14.348	128	112158	3.743
150) 1,2,3-Trichlorobenzene	(4)	14.494	180	28442	3.456
151) 2-Methylnaphthalene	(4)	15.110	142	59663	3.365

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD004 Lab Sample ID: VSTD004

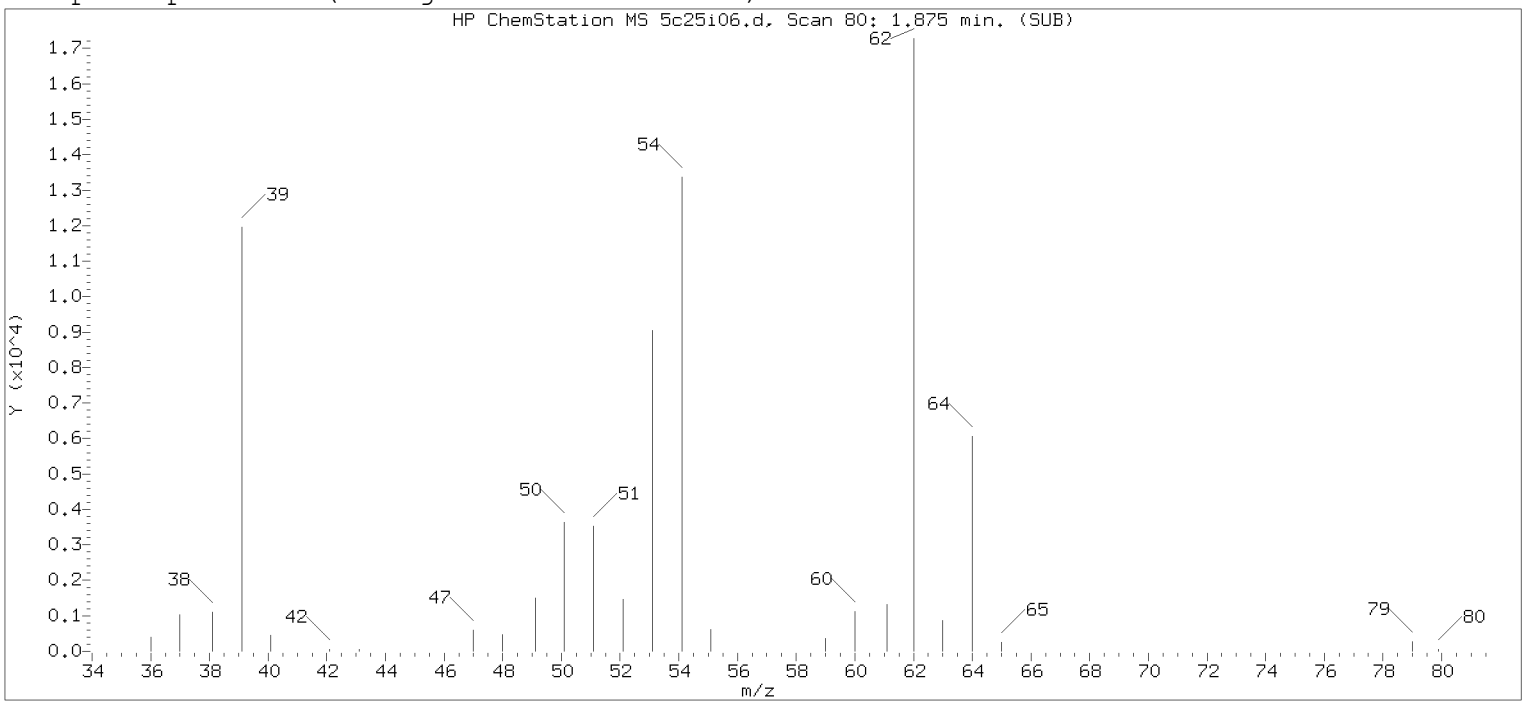
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 80
Retention Time (minutes): 1.875
Quant Ion : 39.00
Area (flag) : 29392M
On-Column Amount (ng) : 4.8223
Integration start scan : 68 Integration stop scan: 97
Y at integration start : 380 Y at integration end: 380

Reason for manual integration: improper integration

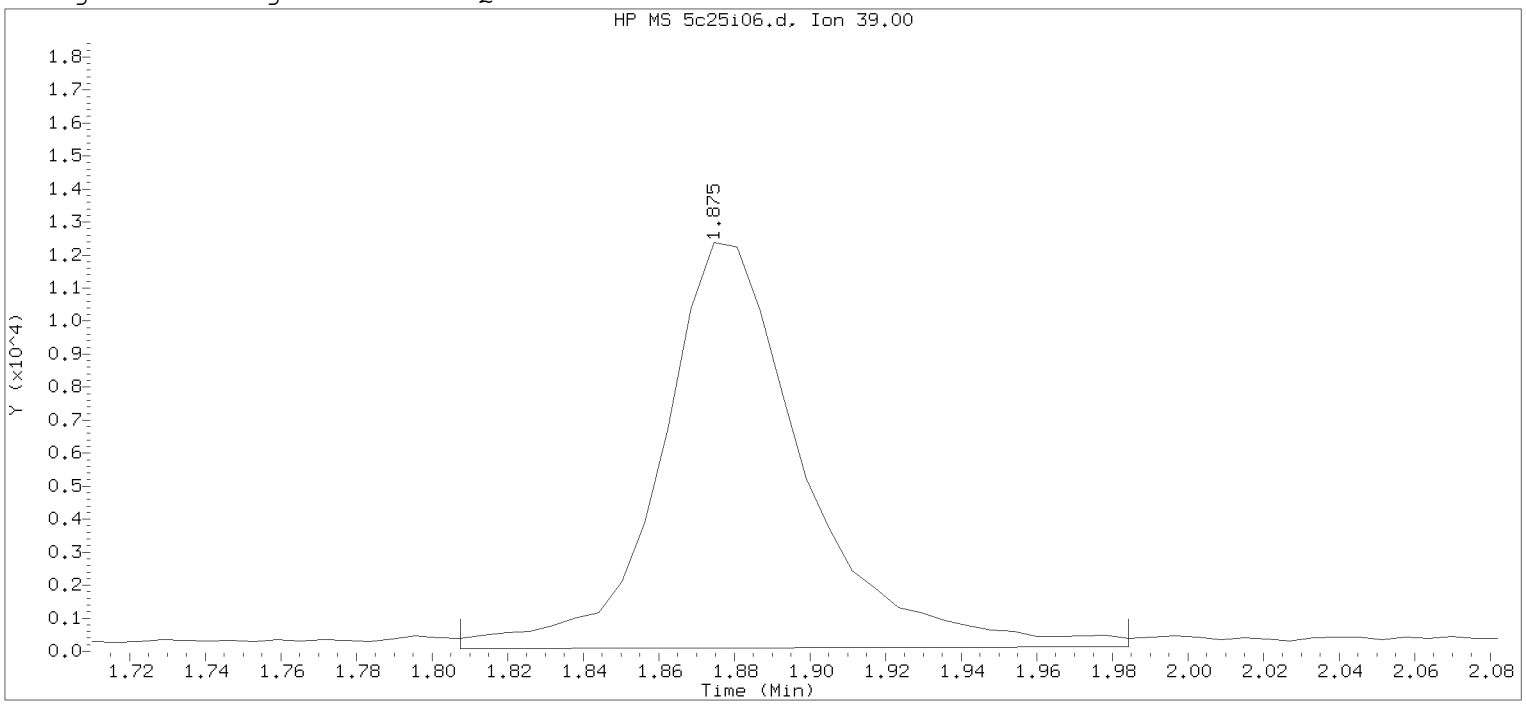
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

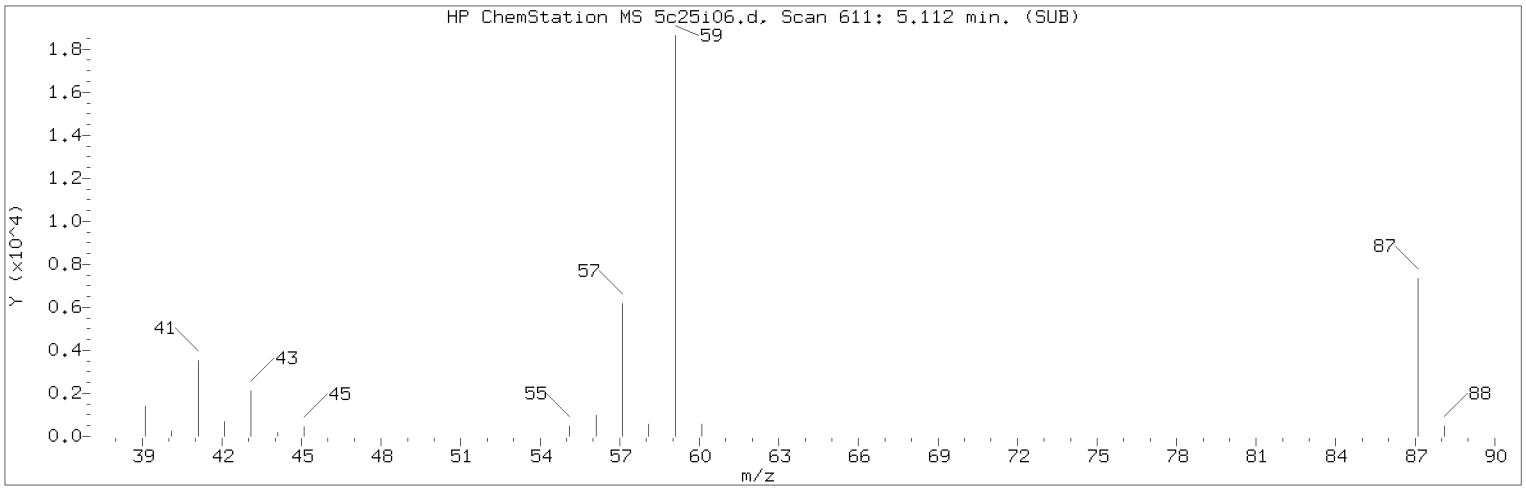
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD004 Lab Sample ID: VSTD004

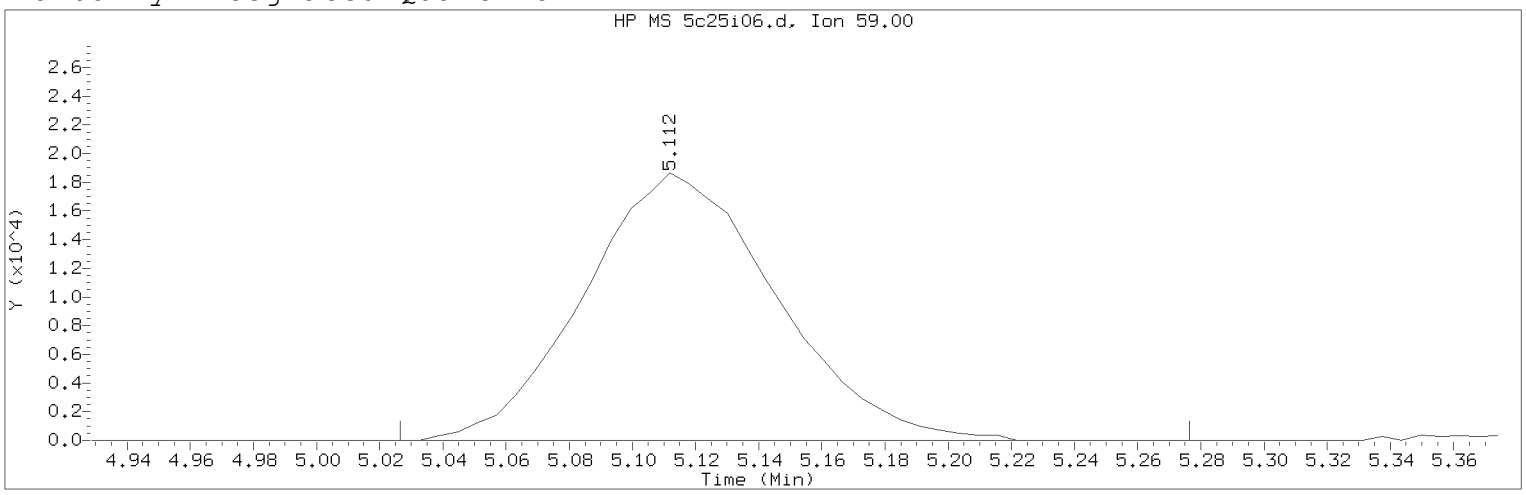
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 80
Retention Time (minutes): 1.875
Quant Ion : 39.00
Area : 32266
On-column Amount (ng) : 5.1635
Integration start scan : 68 Integration stop scan: 97
Y at integration start : 82 Y at integration end: 136

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD004 Lab Sample ID: VSTD004

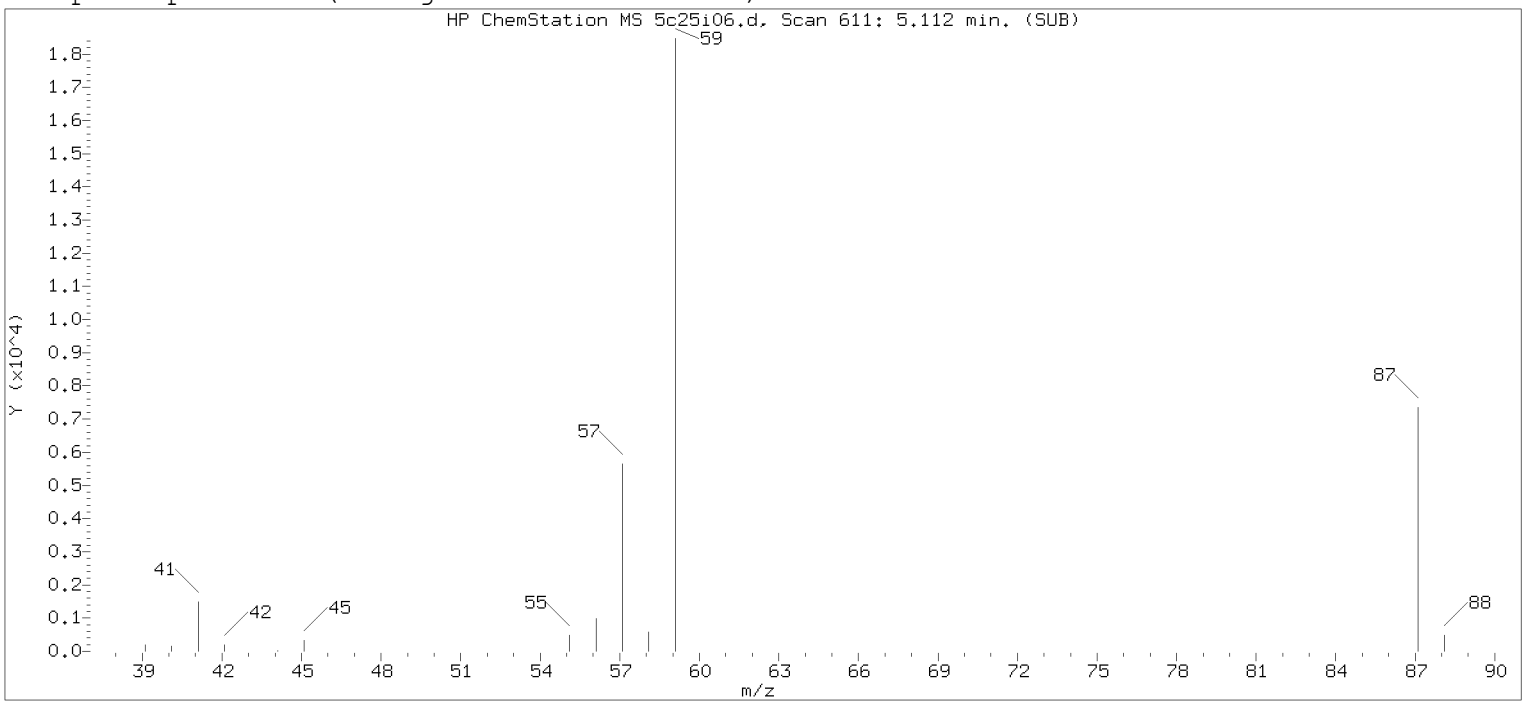
Compound Number : 40
Compound Name : Ethyl t-butyl ether
Scan Number : 611
Retention Time (minutes): 5.112
Quant Ion : 59.00
Area (flag) : 78717M
On-Column Amount (ng) : 3.9827
Integration start scan : 596 Integration stop scan: 637
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

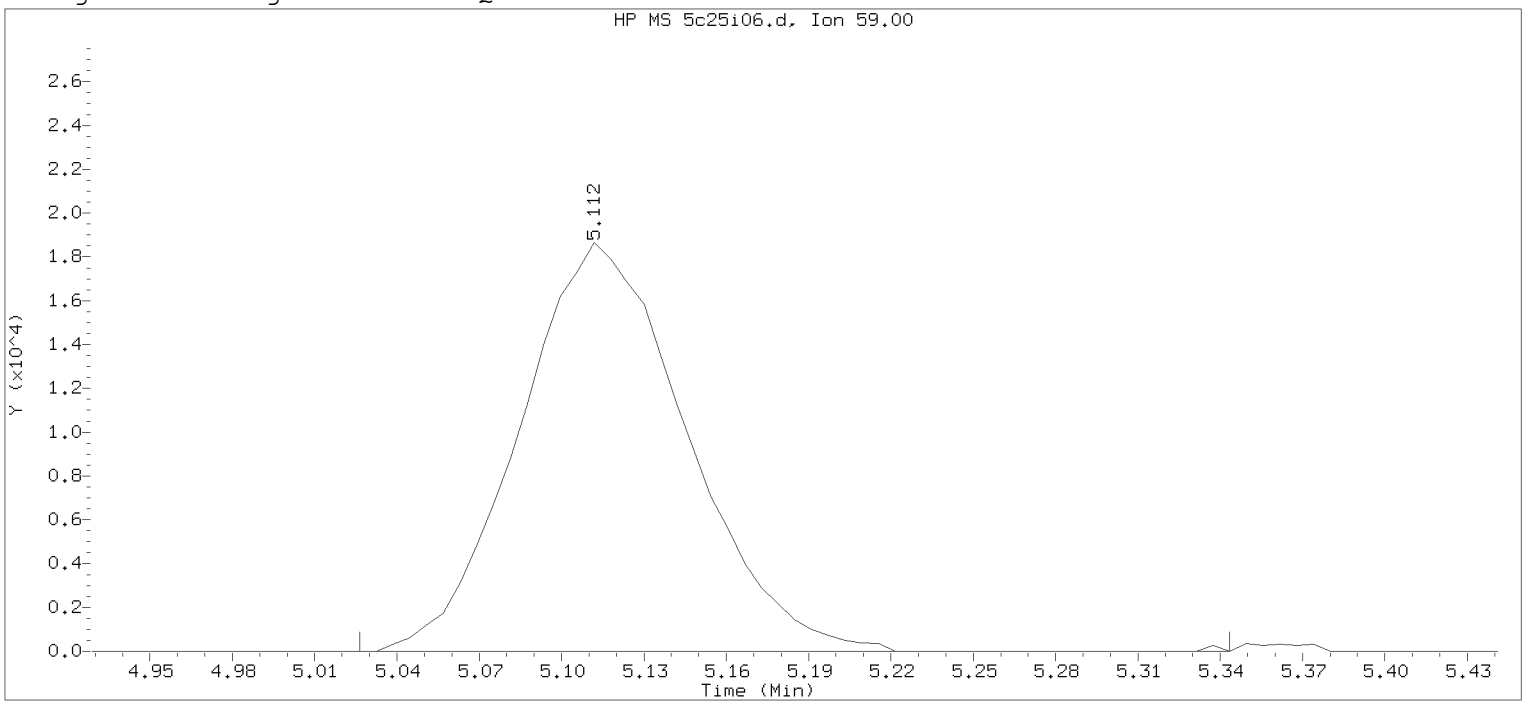
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

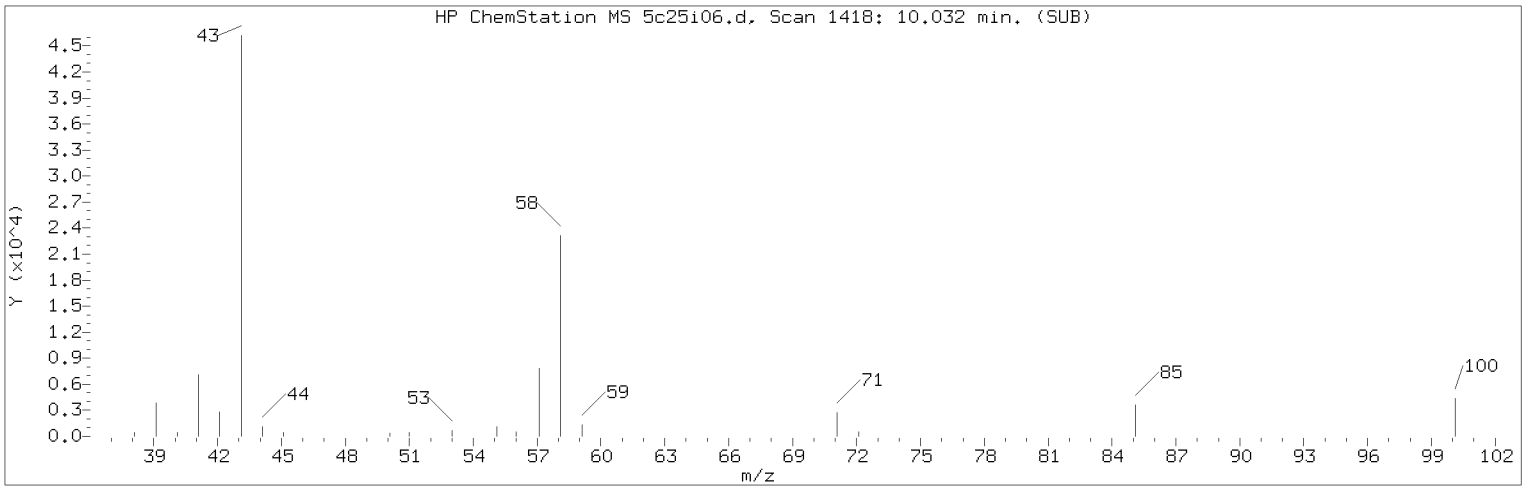
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD004 Lab Sample ID: VSTD004

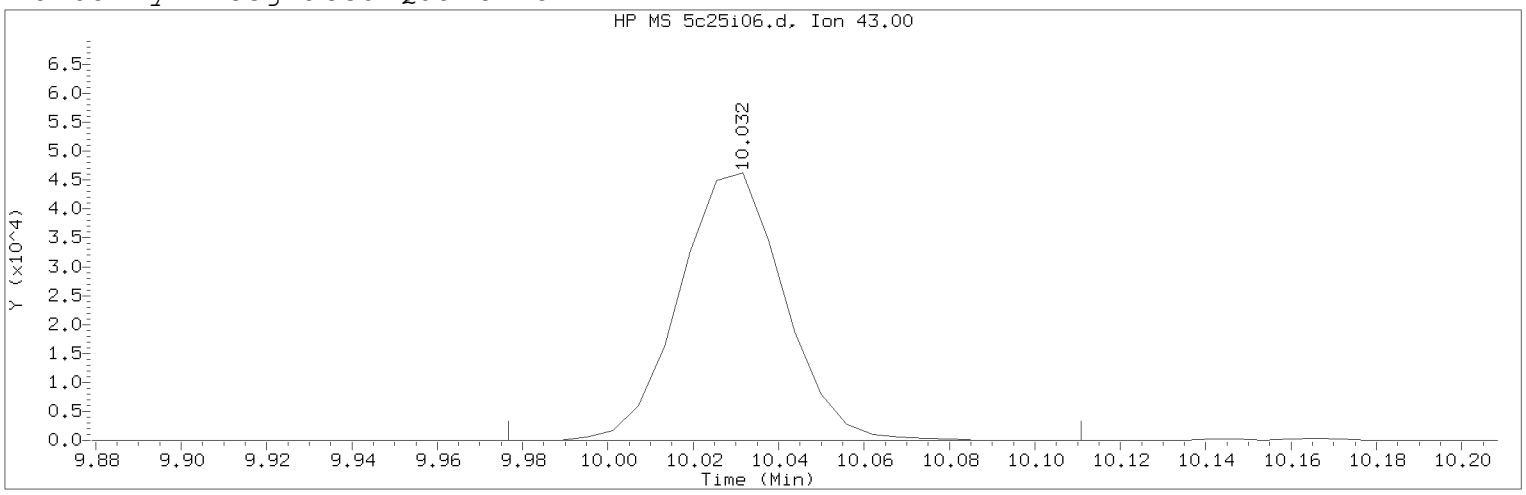
Compound Number : 40
Compound Name : Ethyl t-butyl ether
Scan Number : 611
Retention Time (minutes): 5.112
Quant Ion : 59.00
Area : 78818
On-column Amount (ng) : 3.9516
Integration start scan : 596 Integration stop scan: 648
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD004 Lab Sample ID: VSTD004

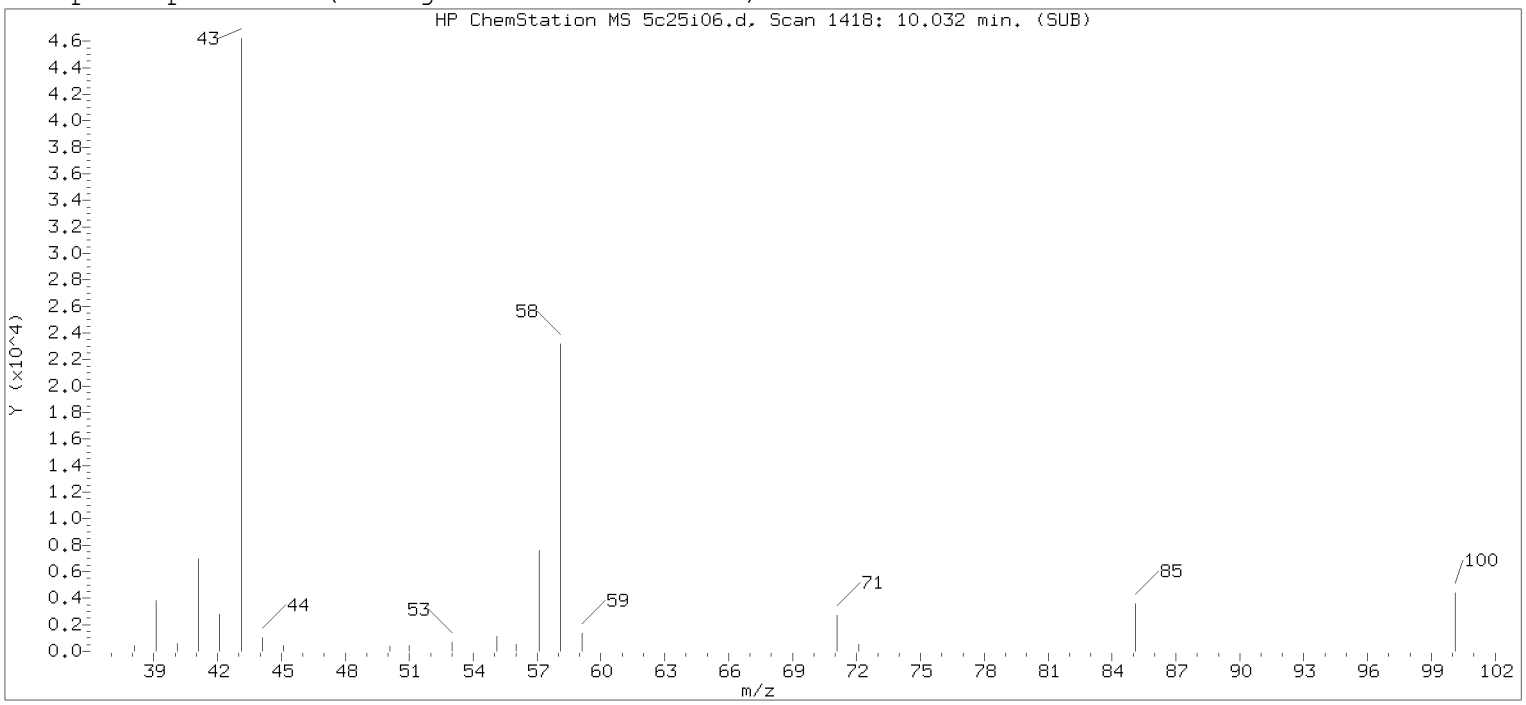
Compound Number : 97
Compound Name : 2-Hexanone
Scan Number : 1418
Retention Time (minutes): 10.032
Quant Ion : 43.00
Area (flag) : 78468M
On-Column Amount (ng) : 7.5325
Integration start scan : 1408 Integration stop scan: 1430
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

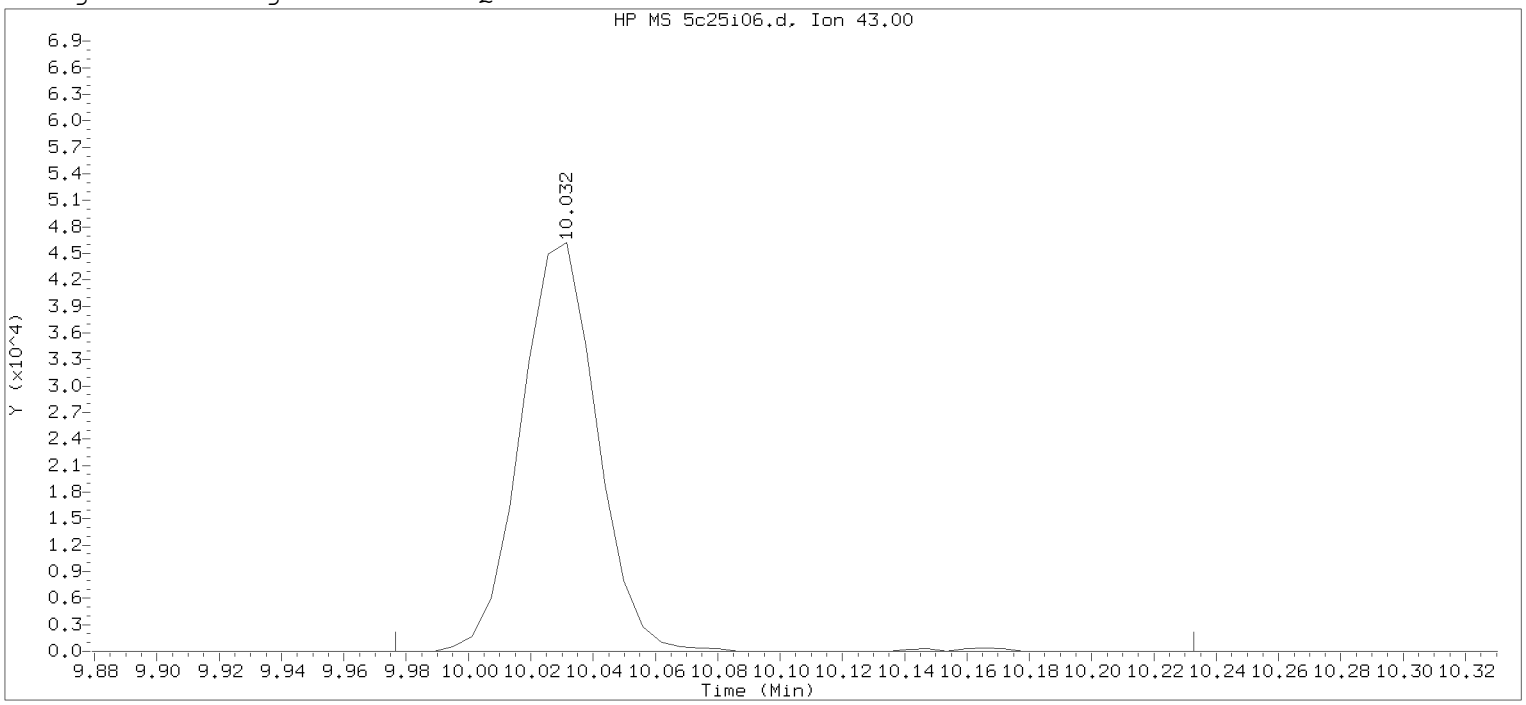
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

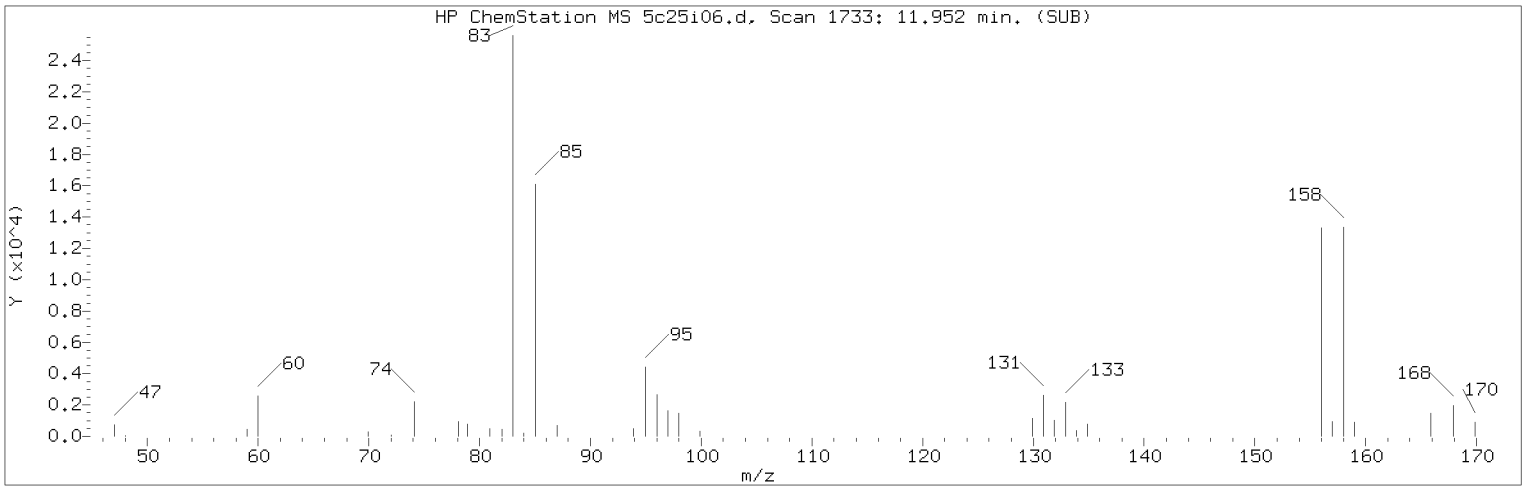
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD004 Lab Sample ID: VSTD004

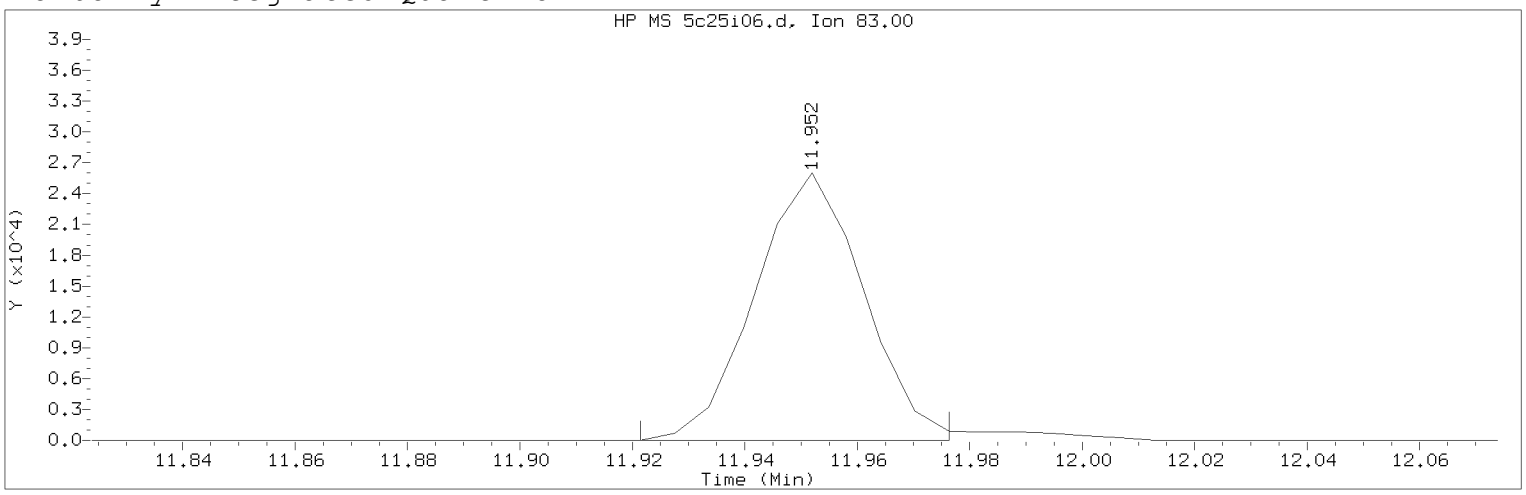
Compound Number : 97
Compound Name : 2-Hexanone
Scan Number : 1418
Retention Time (minutes): 10.032
Quant Ion : 43.00
Area : 78971
On-column Amount (ng) : 7.4899
Integration start scan : 1408 Integration stop scan: 1450
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user id: kas0272

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD004 Lab Sample ID: VSTD004

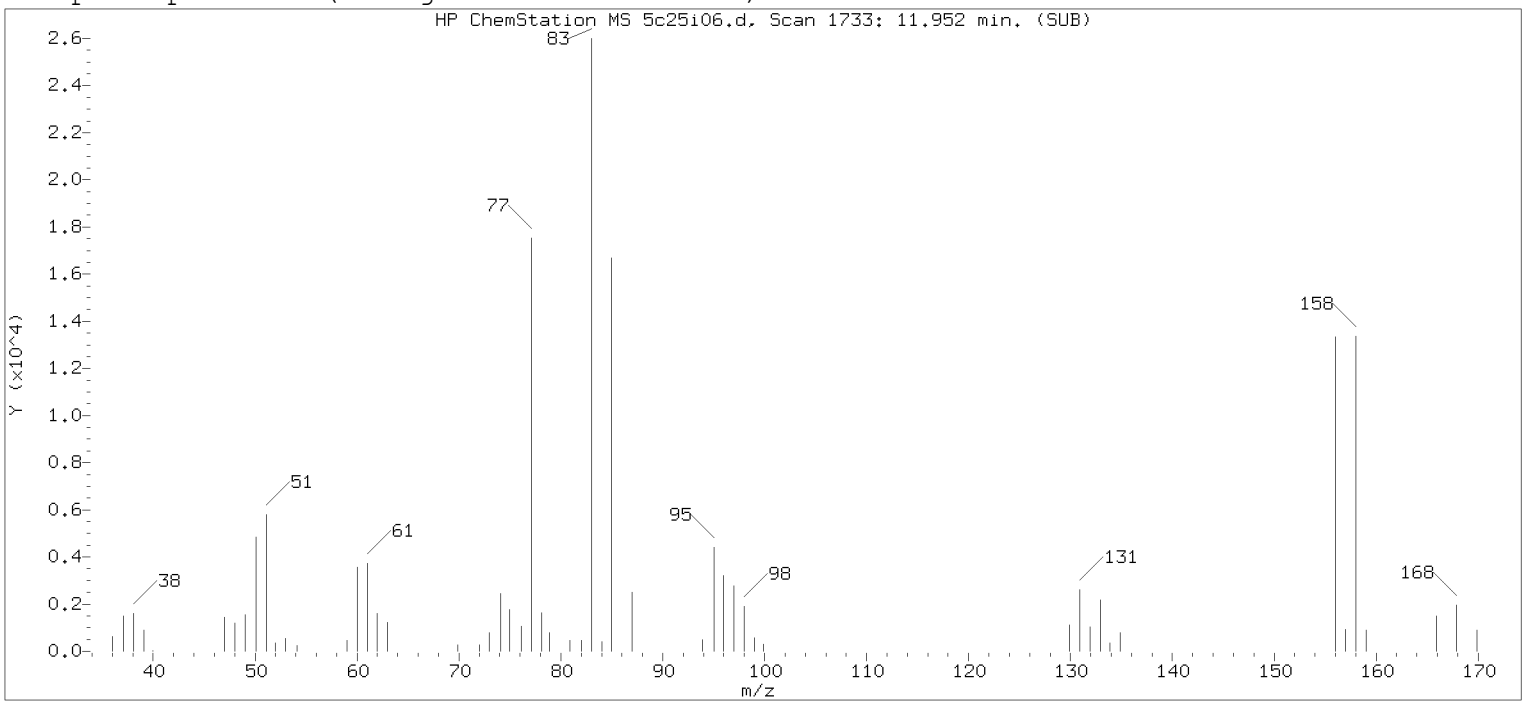
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area (flag) : 34778M
On-Column Amount (ng) : 3.7757
Integration start scan : 1727 Integration stop scan: 1736
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

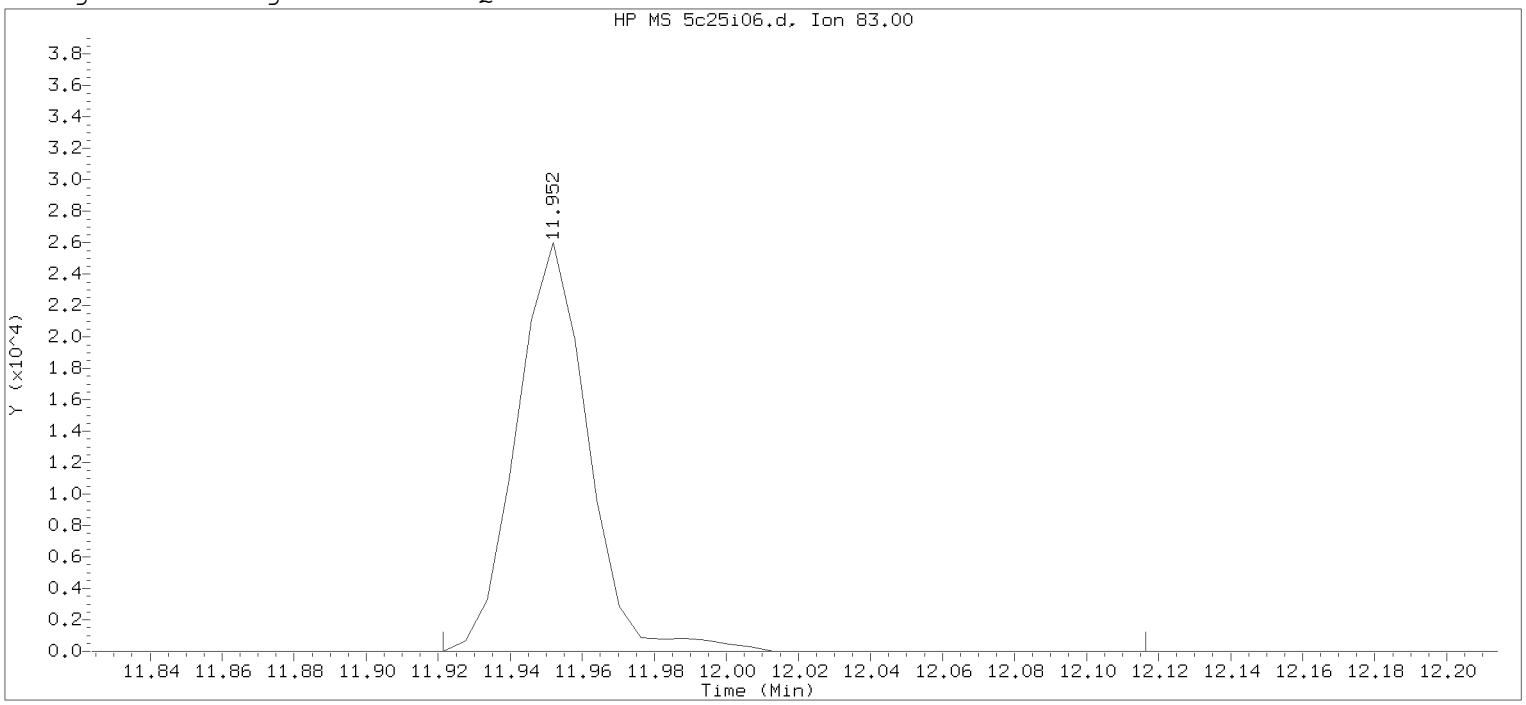
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

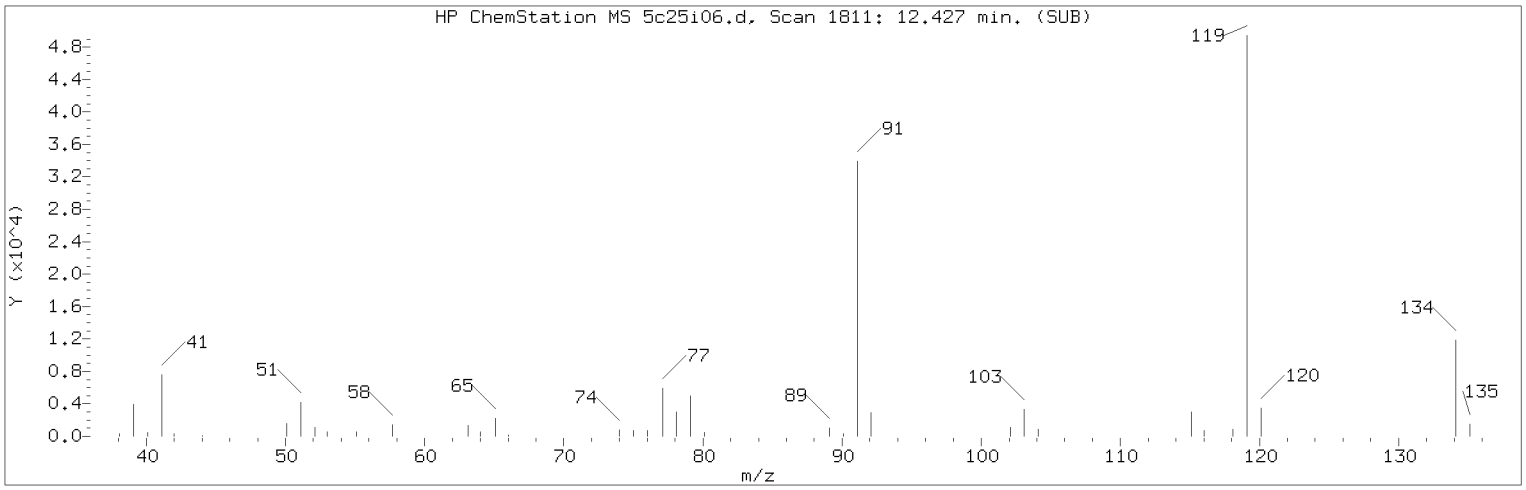
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD004 Lab Sample ID: VSTD004

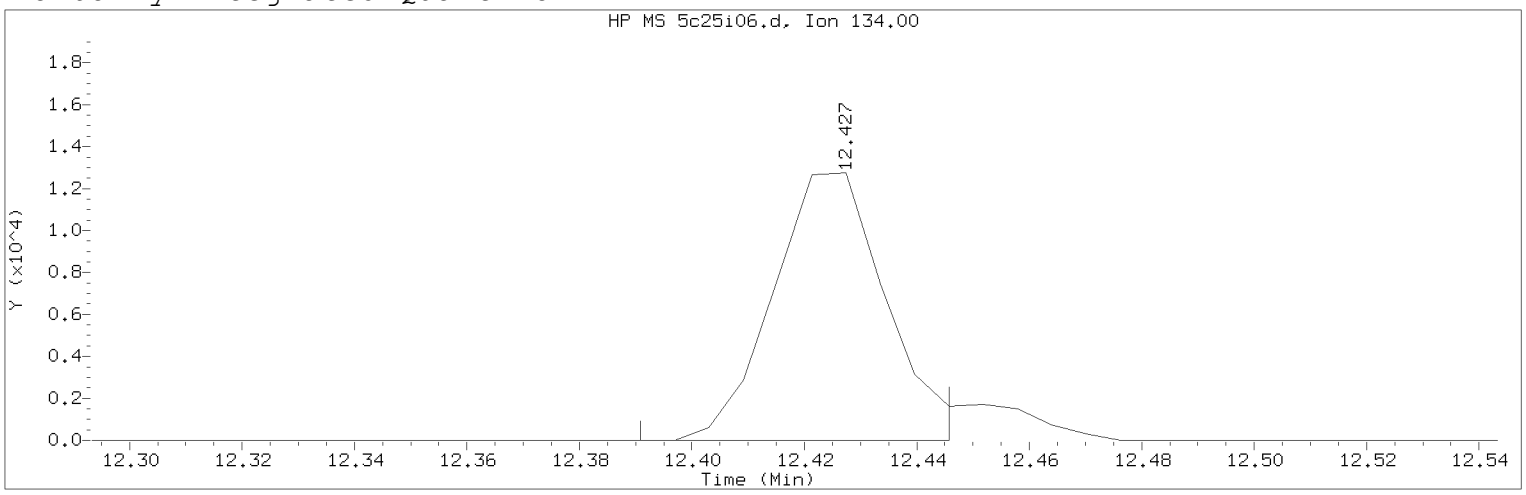
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area : 35891
On-column Amount (ng) : 3.7663
Integration start scan : 1727 Integration stop scan: 1759
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD004 Lab Sample ID: VSTD004

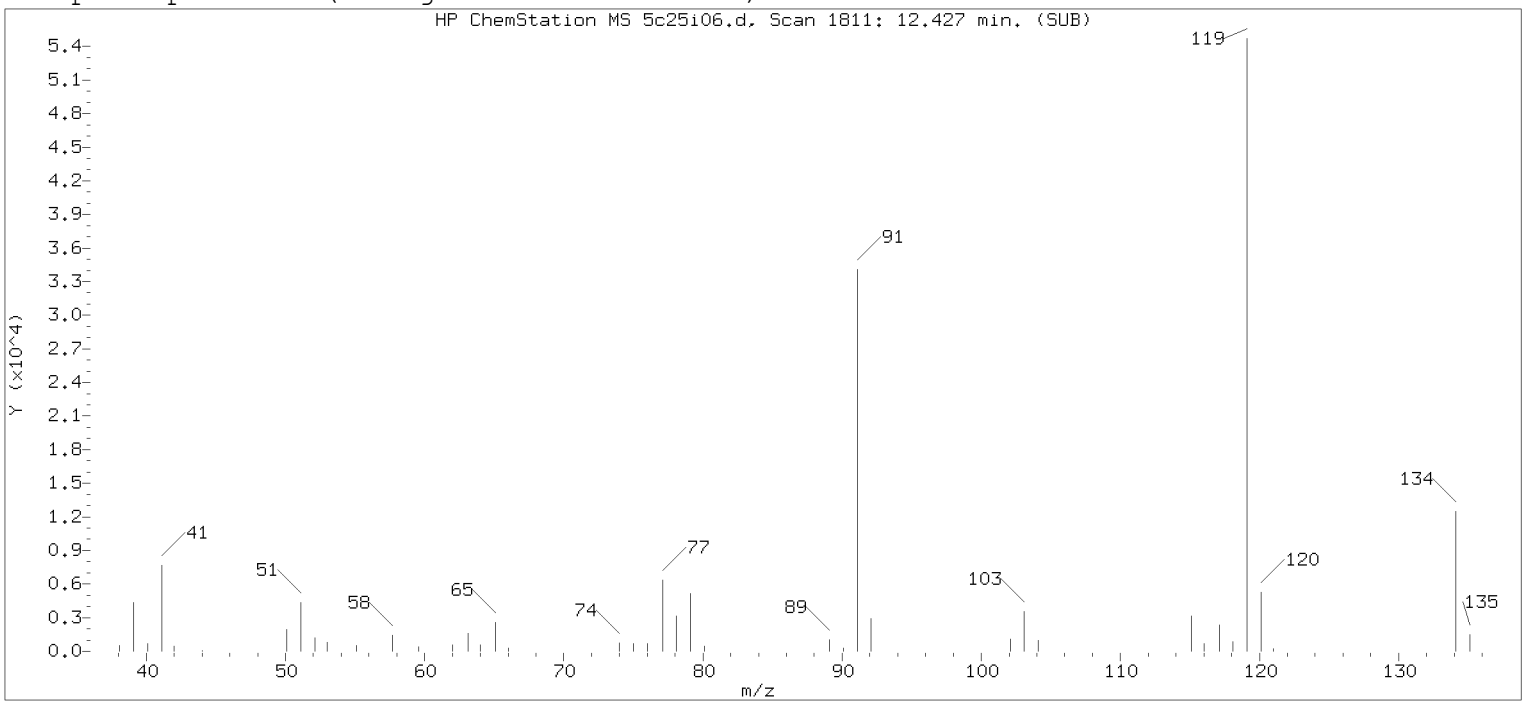
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1811
Retention Time (minutes): 12.427
Quant Ion : 134.00
Area (flag) : 17836M
On-Column Amount (ng) : 3.6304
Integration start scan : 1804 Integration stop scan: 1813
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

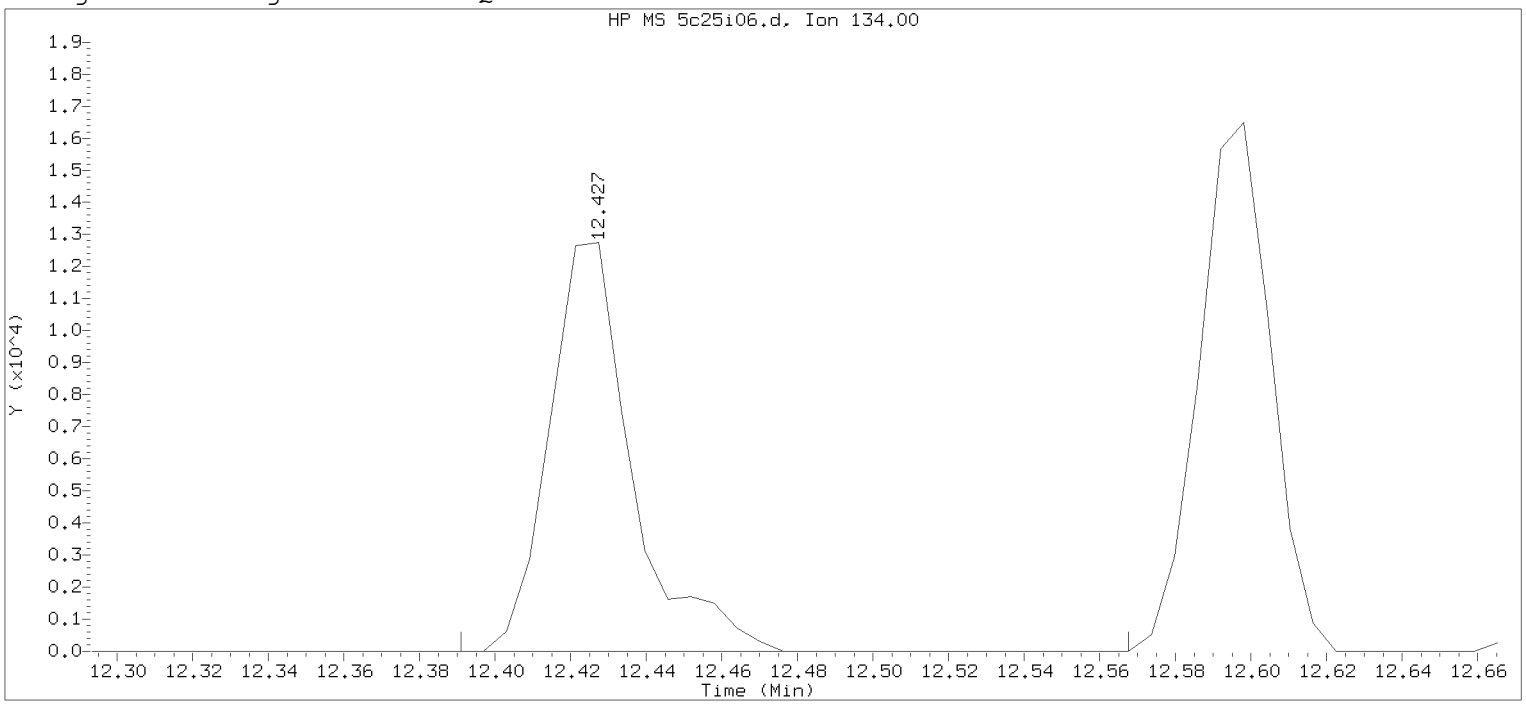
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



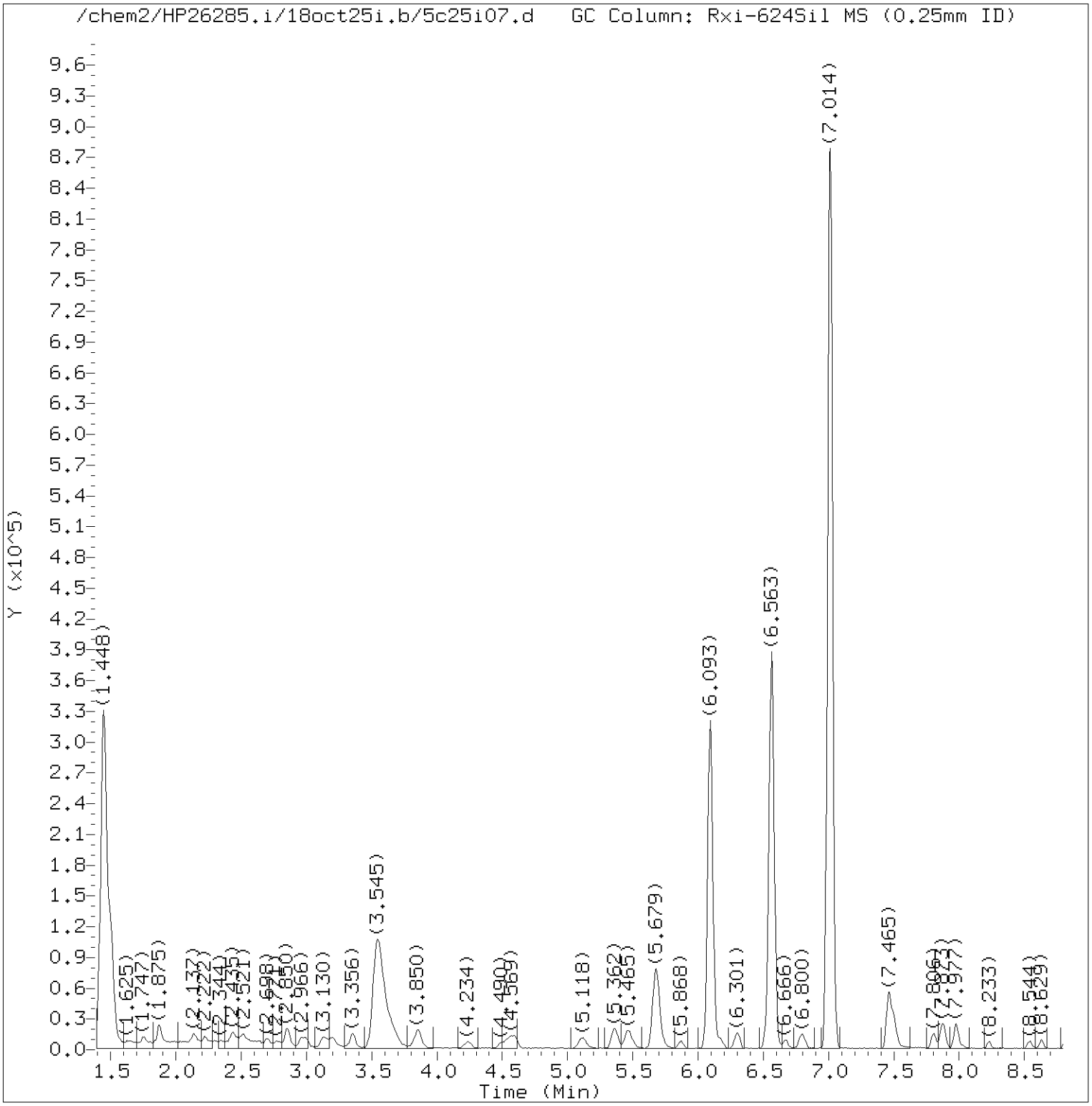
Data File: /chem2/HP26285.i/18oct25i.b/5c25i06.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:32 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1811
Retention Time (minutes): 12.427
Quant Ion : 134.00
Area : 19386
On-column Amount (ng) : 3.6768
Integration start scan : 1804 Integration stop scan: 1833
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito



Total Ion Chromatogram (TIC)

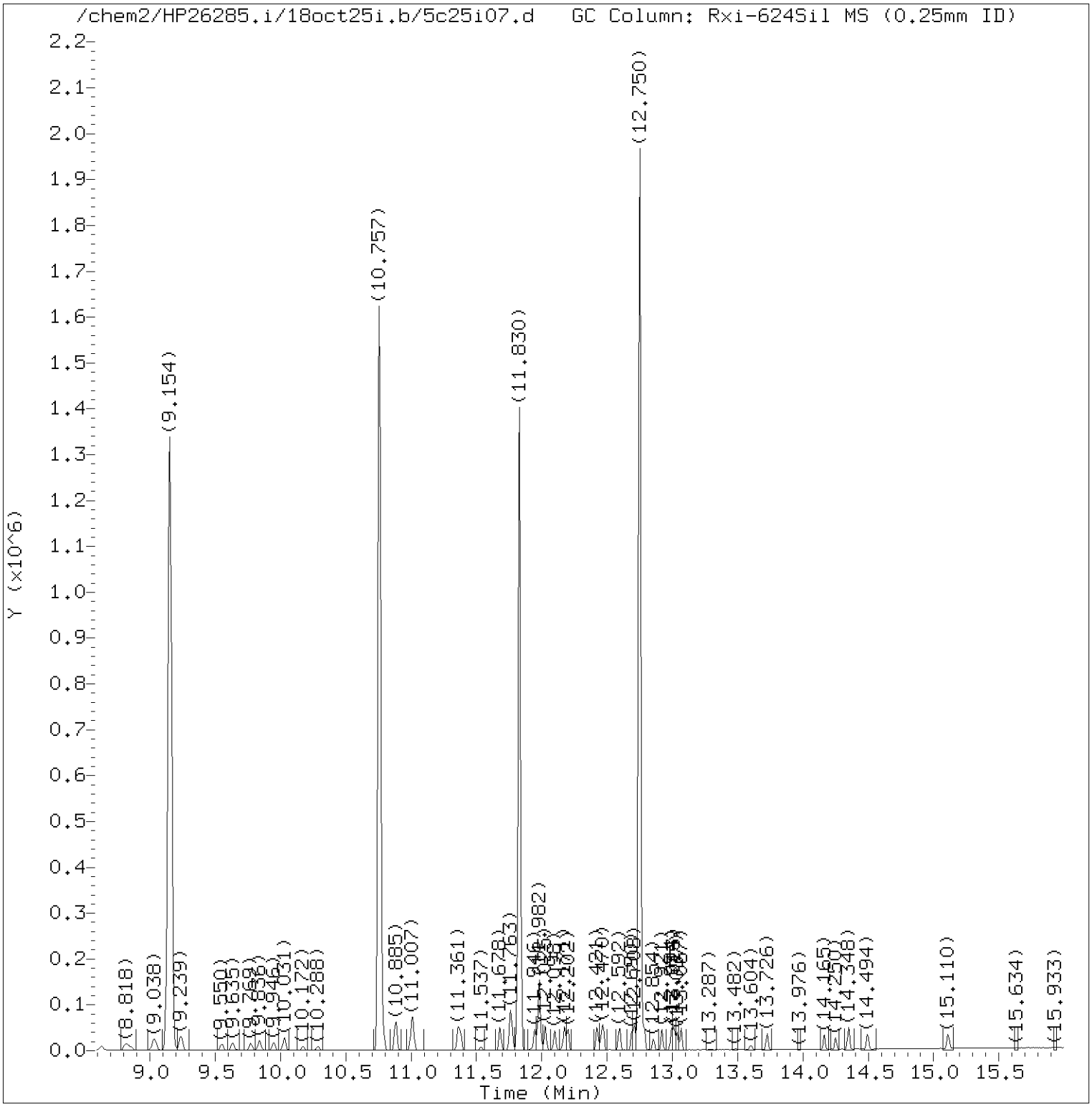
Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.625	85	8567	0.772
4) Chloromethane	(2)	1.753	50	8742	0.973
5) 1,3-Butadiene	(2)	1.868	39	5912M	0.980
6) Vinyl Chloride	(2)	1.875	62	7555	0.900
8) Bromomethane	(2)	2.137	94	6370	1.021
9) Chloroethane	(2)	2.222	64	4207	1.008
10) Dichlorofluoromethane	(2)	2.435	67	11112	1.005
12) Trichlorofluoromethane	(2)	2.490	101	9024	0.806
11) n-Pentane	(2)	2.521	43	5992M	0.838
14) Ethyl ether	(2)	2.698	59	5228	0.970
15) Freon 123a	(2)	2.771	67	6821	0.894
16) Acrolein	(1)	2.856	56	24975	10.324
17) 1,1-Dichloroethene	(2)	2.960	96	4503	0.856
17) 1,1-Dichloroethene	(2)	2.960	63	2121	0.778
19) Freon 113	(2)	2.984	101	3426	0.654
18) Acetone	(1)	3.002	58	2681	2.138
22) Methyl Iodide	(2)	3.124	142	9084	0.886
21) 2-Propanol	(1)	3.149	45	27270	26.529
23) Carbon Disulfide	(2)	3.204	76	14935	0.833
27) Methyl Acetate	(2)	3.344	43	13410	1.307
25) Allyl Chloride	(2)	3.356	41	11422	1.005
28) Methylene Chloride	(2)	3.527	84	6274	1.018
29)*t-Butyl alcohol-d10	(1)	3.551	65	344403	250.000
30) t-Butyl alcohol	(1)	3.661	59	41517	22.922
31) Acrylonitrile	(2)	3.819	53	4654	0.966
33) Methyl Tertiary Butyl Ether	(2)	3.850	73	17747	0.939
32) trans-1,2-Dichloroethene	(2)	3.856	96	5062	0.846
34) n-Hexane	(2)	4.234	57	5723	0.659
36) 1,1-Dichloroethane	(2)	4.490	63	9915	0.885
38) di-Isopropyl ether	(2)	4.557	45	20713	0.953
39) 2-Chloro-1,3-butadiene	(2)	4.600	53	8375	0.828
40) Ethyl t-butyl ether	(2)	5.106	59	18506	0.946
42) cis-1,2-Dichloroethene	(2)	5.356	96	6080	0.912
44) 2-Butanone	(2)	5.368	43	15545	2.136
45) 2,2-Dichloropropane	(2)	5.380	77	7694	0.867
47) Propionitrile	(1)	5.465	54	38696	20.215
48) Methacrylonitrile	(2)	5.679	67	43252	9.448
49) Bromochloromethane	(2)	5.697	128	3164	0.916

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.715	71	3169	1.820
51) Chloroform	(2)	5.868	83	9444	0.892
53) 1,1,1-Trichloroethane	(2)	6.081	97	7957	0.876
52)$Dibromofluoromethane	(2)	6.093	113	273377	50.022
52)$Dibromofluoromethane	(2)	6.093	111	279810	50.076
43) 1,2-Dichloroethene (Total)	(2)		96	11142	1.757
54) Cyclohexane	(2)	6.160	56	8283	0.765
54) Cyclohexane	(2)	6.173	84	7112	0.795
54) Cyclohexane	(2)	6.160	69	2213	0.686
56) Carbon Tetrachloride	(2)	6.288	117	6552	0.821
55) 1,1-Dichloropropene	(2)	6.307	75	7971	0.912
58) Isobutyl Alcohol	(1)	6.544	41	34194	58.299
57)$1,2-Dichloroethane-d4	(2)	6.563	102	65243	50.003
57)$1,2-Dichloroethane-d4	(2)	6.563	65	341220	51.403
57)$1,2-Dichloroethane-d4	(2)	6.563	104	41437	49.874
60) Benzene	(2)	6.581	78	23527	0.901
61) 1,2-Dichloroethane	(2)	6.672	62	8709	1.088
61) 1,2-Dichloroethane	(2)	6.678	98	629	0.910
65) t-Amyl methyl ether	(2)	6.794	73	17210	0.937
66)*Fluorobenzene	(2)	7.014	96	1123474	50.000
67) n-Heptane	(2)	7.020	43	7082	0.710
69) n-Butanol	(1)	7.465	56	55592	118.043
71) Trichloroethene	(2)	7.502	95	5870	0.899
73) Methylcyclohexane	(2)	7.812	83	8062	0.712
73) Methylcyclohexane	(2)	7.806	98	3366	0.700
74) 1,2-Dichloropropane	(2)	7.861	63	5852	0.897
75) Dibromomethane	(2)	7.971	93	3646	0.918
77) Methyl Methacrylate	(2)	7.977	69	5915	0.899
79) Bromodichloromethane	(2)	8.233	83	6397	0.865
80) 2-Nitropropane	(2)	8.538	41	6109	1.844
81) 2-Chloroethyl Vinyl Ether	(2)	8.635	63	4600	0.876
82) cis-1,3-Dichloropropene	(2)	8.812	75	8235	0.866
83) 4-Methyl-2-pentanone	(2)	9.032	43	24671	1.903
84)$Toluene-d8	(3)	9.154	98	1077759	50.798
84)$Toluene-d8	(3)	9.154	100	698145	50.845
89) Toluene	(3)	9.239	92	15101	0.949
90) trans-1,3-Dichloropropene	(3)	9.550	75	6968	0.820
92) Ethyl Methacrylate	(3)	9.635	69	8381	0.822

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) 1,1,2-Trichloroethane	(3)	9.769	97	4770	0.880
94) Tetrachloroethene	(3)	9.842	166	6513	0.932
95) 1,3-Dichloropropane	(3)	9.952	76	8710	0.950
97) 2-Hexanone	(3)	10.031	43	19166	1.866
91) 1,3-Dichloropropene (total)	(3)		100	15203	1.685
98) Dibromochloromethane	(3)	10.172	129	4264	0.768
100) 1,2-Dibromoethane	(3)	10.288	107	5278	0.897
101)*Chlorobenzene-d5	(3)	10.757	117	786537	50.000
102) 1-Chlorohexane	(3)	10.781	91	9615	1.063
103) Chlorobenzene	(3)	10.787	112	16636	0.965
104) 1,1,1,2-Tetrachloroethane	(3)	10.879	131	4492	0.791
105) Ethylbenzene	(3)	10.885	91	30006	0.981
107) m+p-Xylene	(3)	11.013	106	22386M	1.894
108) o-Xylene	(3)	11.361	106	10652	0.942
110) Styrene	(3)	11.379	104	16048	0.870
111) Bromoform	(3)	11.537	173	2752	2.230
112) Isopropylbenzene	(3)	11.684	105	27877	0.967
109) Xylene (Total)	(3)		106	33038	2.836
115)$4-Bromofluorobenzene	(3)	11.830	95	381352	50.005
115)$4-Bromofluorobenzene	(3)	11.830	174	324037	50.044
116) Bromobenzene	(4)	11.946	156	6662	0.956
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	8267	0.911
119) trans-1,4-Dichloro-2-butene	(4)	11.976	53	26011	8.345
118) 1,2,3-Trichloropropane	(4)	11.995	110	2330	0.863
120) n-Propylbenzene	(4)	12.025	91	33745	1.016
121) 2-Chlorotoluene	(4)	12.098	126	6743	1.007
123) 1,3,5-Trimethylbenzene	(4)	12.171	105	22692	0.974
122) 4-Chlorotoluene	(4)	12.202	126	7310	1.049
125) tert-Butylbenzene	(4)	12.421	134	4771M	0.986
126) Pentachloroethane	(4)	12.452	167	2941	0.712
127) 1,2,4-Trimethylbenzene	(4)	12.470	105	23610	0.986
128) sec-Butylbenzene	(4)	12.592	105	27390	0.942
130) 1,3-Dichlorobenzene	(4)	12.690	146	13390	1.016
131) p-Isopropyltoluene	(4)	12.714	119	23410	0.927
132)*1,4-Dichlorobenzene-d4	(4)	12.750	152	405443	50.000
134) 1,4-Dichlorobenzene	(4)	12.769	146	13697	1.011
135) 1,2,3-Trimethylbenzene	(4)	12.787	105	21053	0.844
136) Benzyl Chloride	(4)	12.854	91	13358	0.758

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

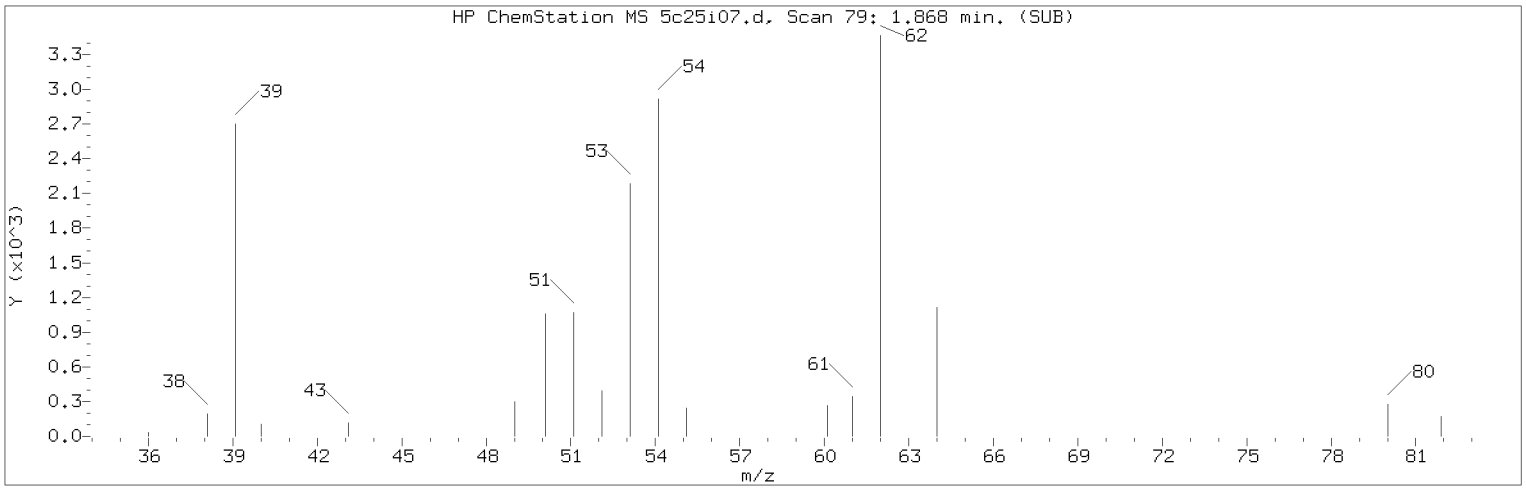
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137) 1,3-Diethylbenzene	(4)	12.921	119	11754	0.755
138) 1,4-Diethylbenzene	(4)	12.994	119	12302	0.740
140) n-Butylbenzene	(4)	13.013	92	11412M	0.875
139) 1,2-Dichlorobenzene	(4)	13.037	146	12928	1.022
141) 1,2-Diethylbenzene	(4)	13.067	119	10308	0.791
142) Diethylbenzene (total)	(4)		100	34364	2.286
143) 1,2-Dibromo-3-chloropropane	(4)	13.604	75	2080	0.892
145) 1,3,5-Trichlorobenzene	(4)	13.726	180	9114	0.985
147) 1,2,4-Trichlorobenzene	(4)	14.165	180	8361	1.005
148) Hexachlorobutadiene	(4)	14.250	225	4157	1.060
149) Naphthalene	(4)	14.348	128	30233	1.024
150) 1,2,3-Trichlorobenzene	(4)	14.494	180	8341	1.029
151) 2-Methylnaphthalene	(4)	15.110	142	13705	0.785

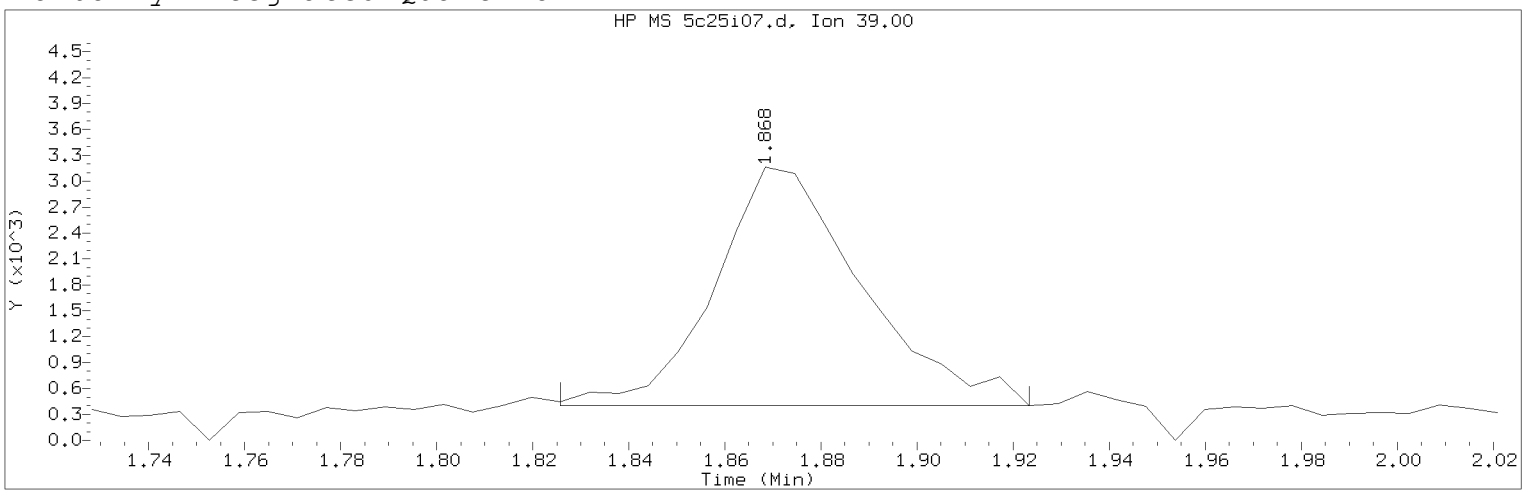
M = Compound was manually integrated.

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD001 Lab Sample ID: VSTD001

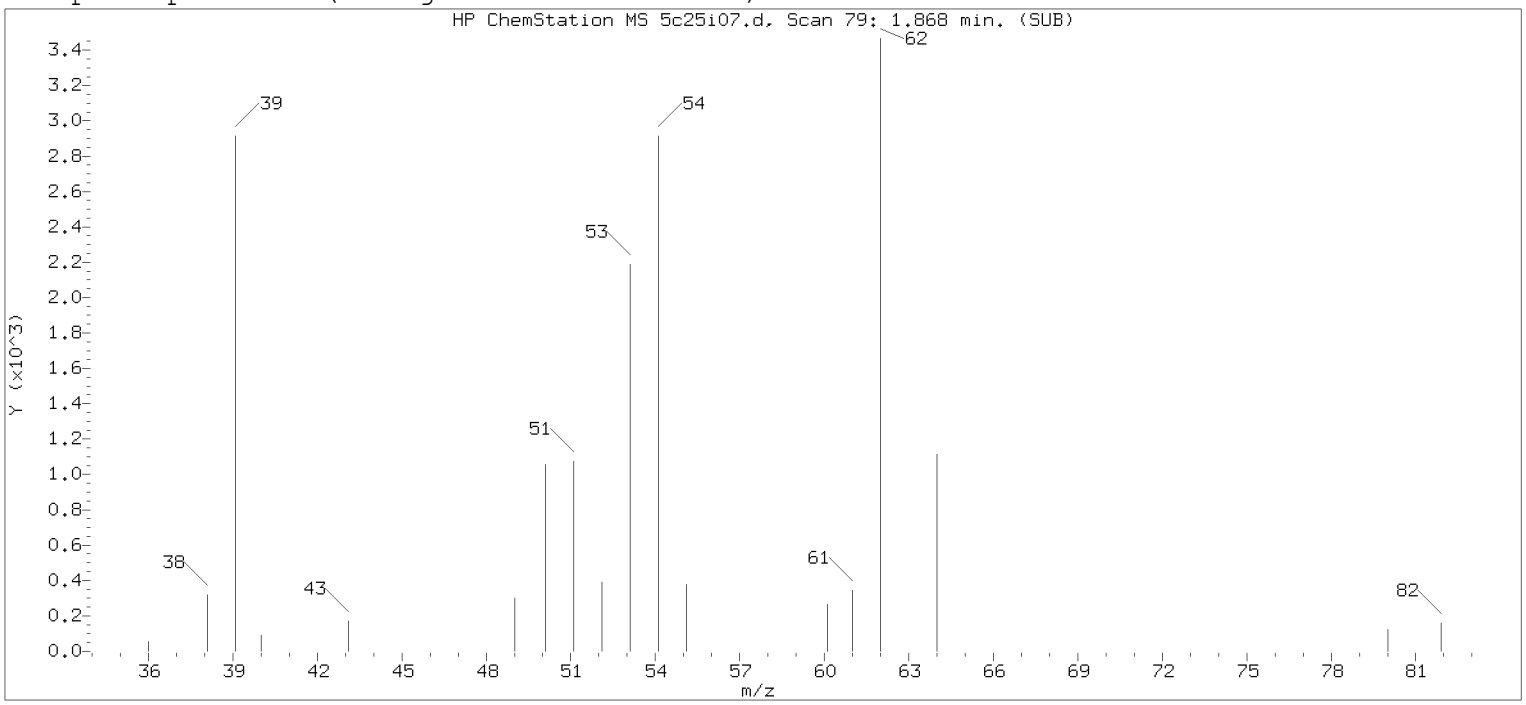
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 79
Retention Time (minutes): 1.868
Quant Ion : 39.00
Area (flag) : 5912M
On-Column Amount (ng) : 0.9803
Integration start scan : 71 Integration stop scan: 87
Y at integration start : 402 Y at integration end: 402

Reason for manual integration: improper integration

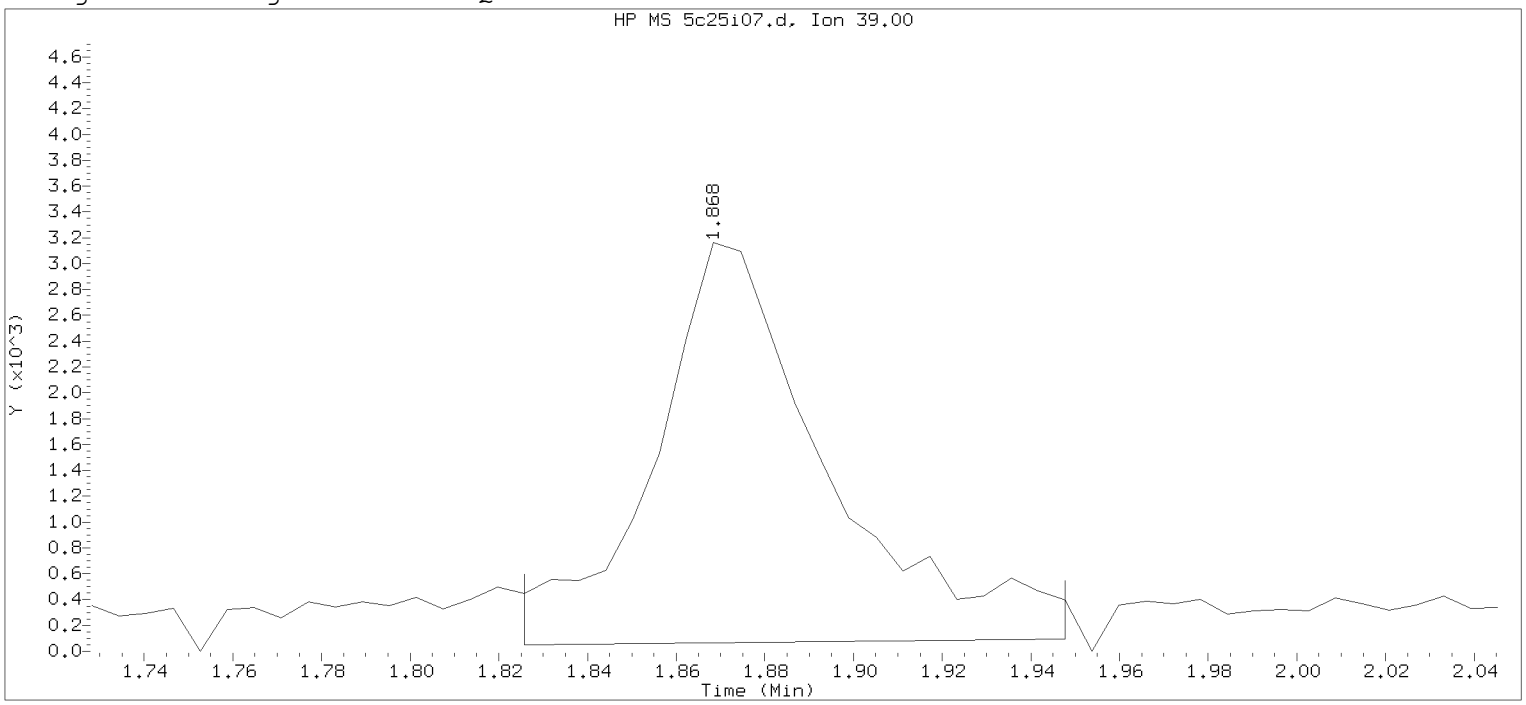
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

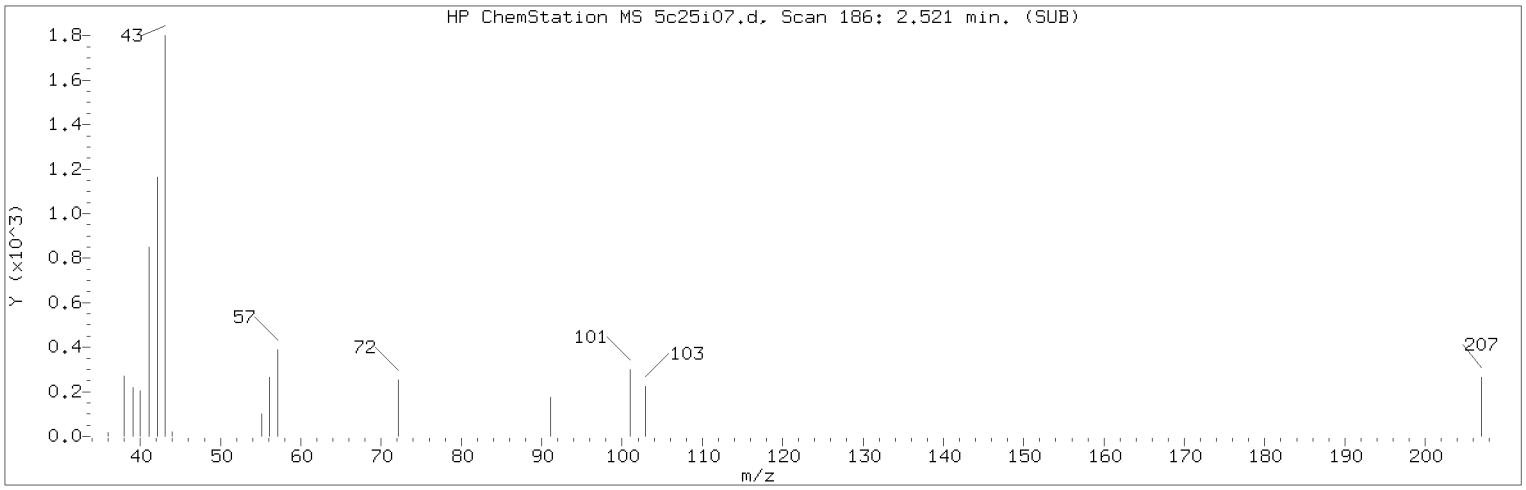
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

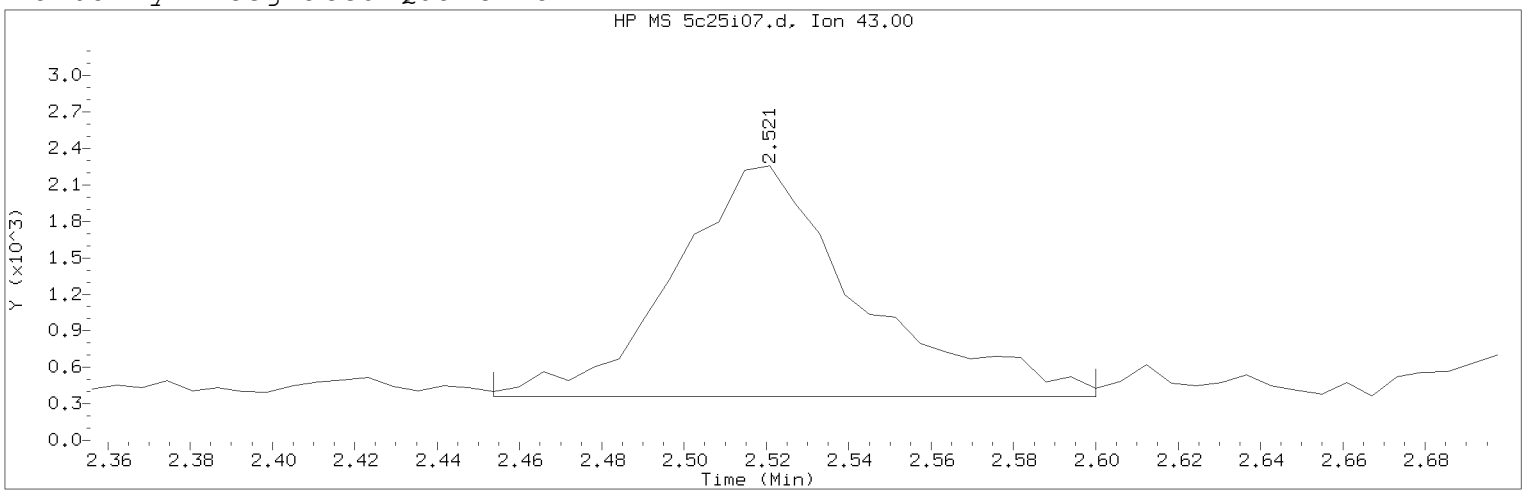
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 79
Retention Time (minutes): 1.868
Quant Ion : 39.00
Area : 8409
On-column Amount (ng) : 1.2936
Integration start scan : 71 Integration stop scan: 91
Y at integration start : 51 Y at integration end: 93

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user id: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD001 Lab Sample ID: VSTD001

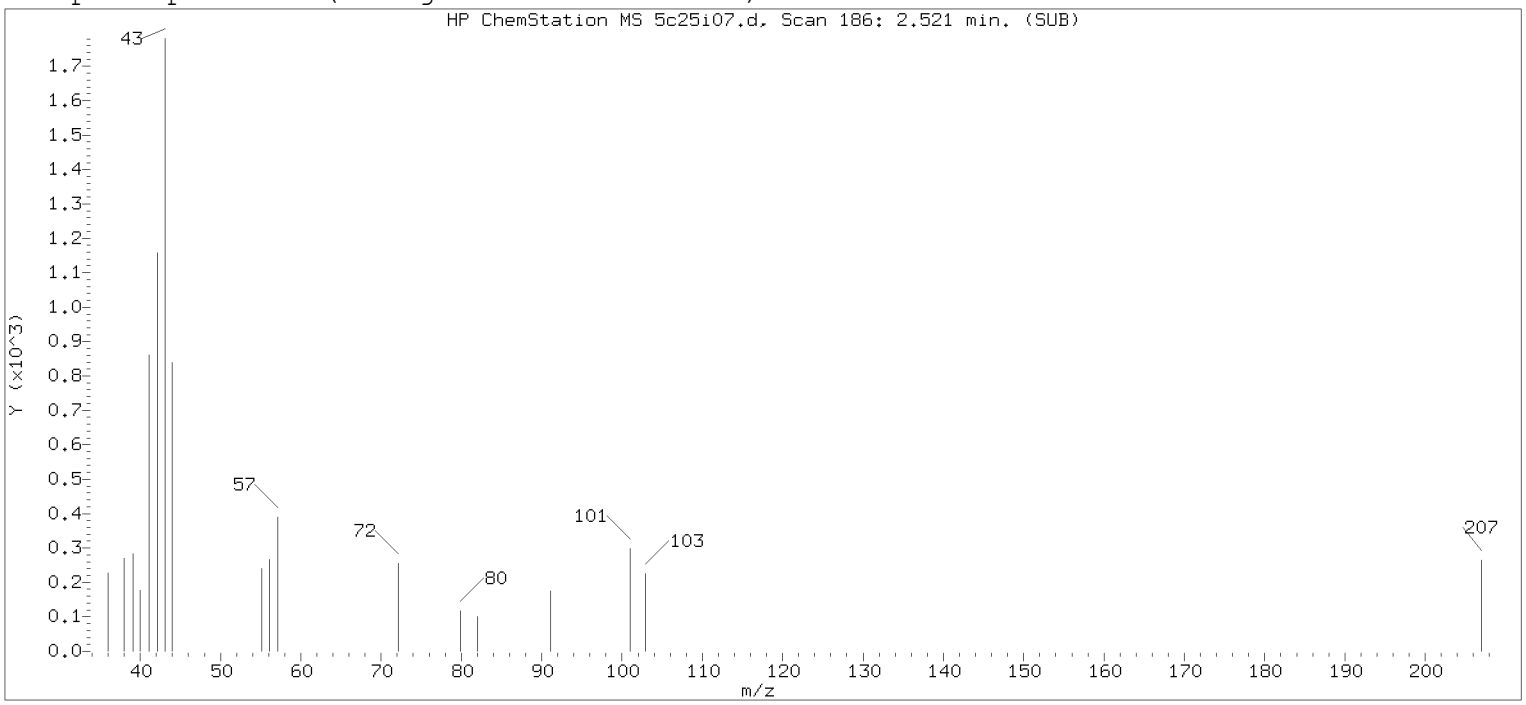
Compound Number : 11
Compound Name : n-Pentane
Scan Number : 186
Retention Time (minutes): 2.521
Quant Ion : 43.00
Area (flag) : 5992M
On-Column Amount (ng) : 0.8380
Integration start scan : 174 Integration stop scan: 198
Y at integration start : 359 Y at integration end: 359

Reason for manual integration: improper integration

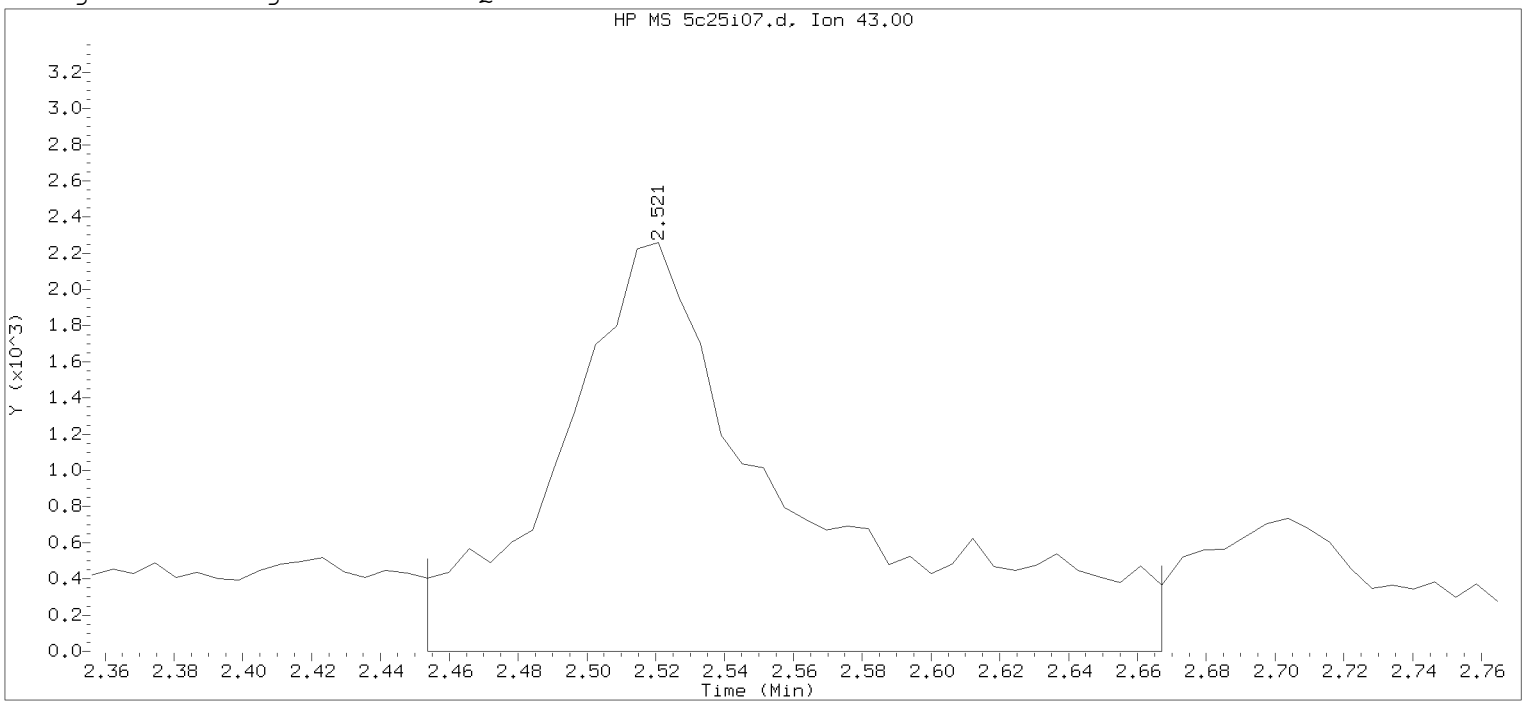
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

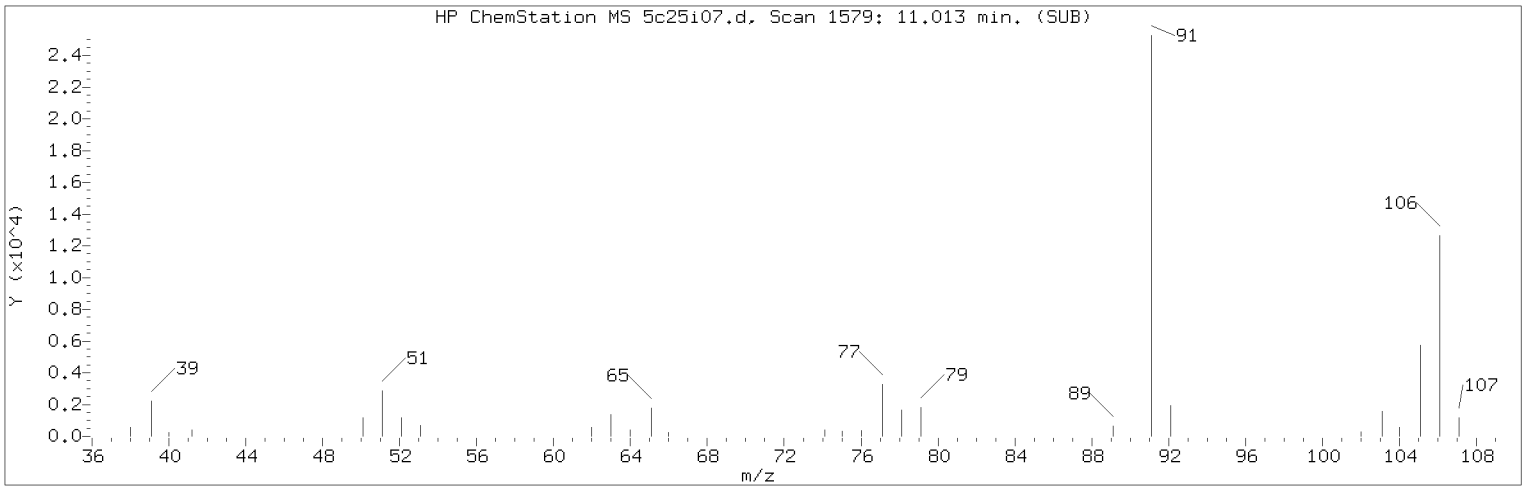
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

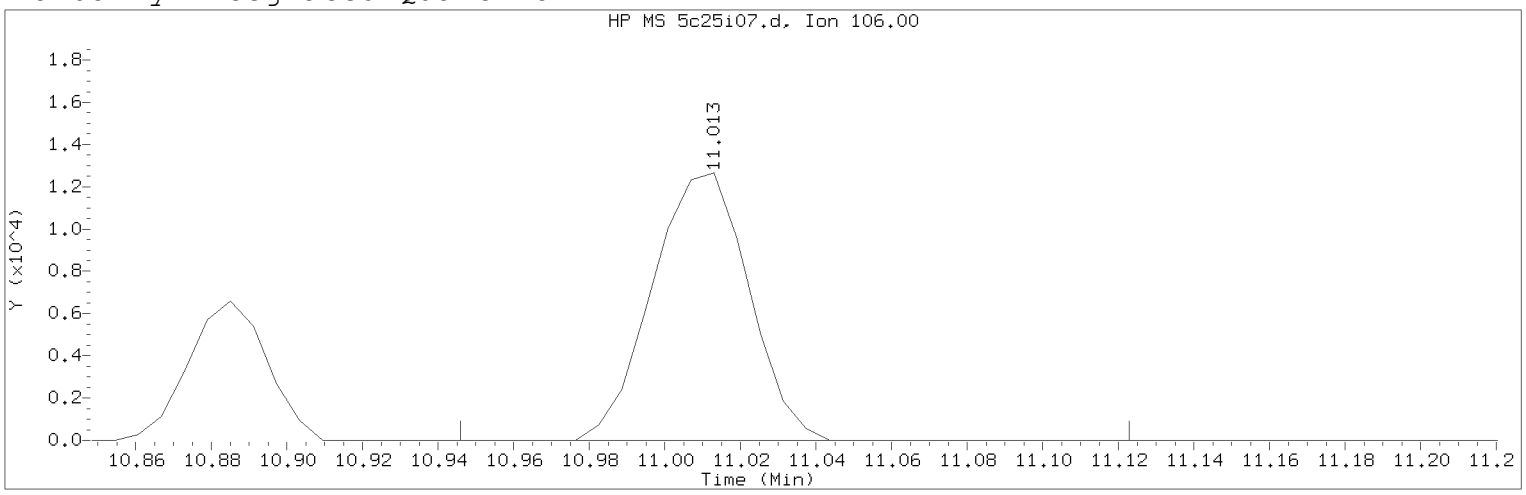
Compound Number : 11
Compound Name : n-Pentane
Scan Number : 186
Retention Time (minutes): 2.521
Quant Ion : 43.00
Area : 11006
On-column Amount (ng) : 1.3991
Integration start scan : 174 Integration stop scan: 209
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD001 Lab Sample ID: VSTD001

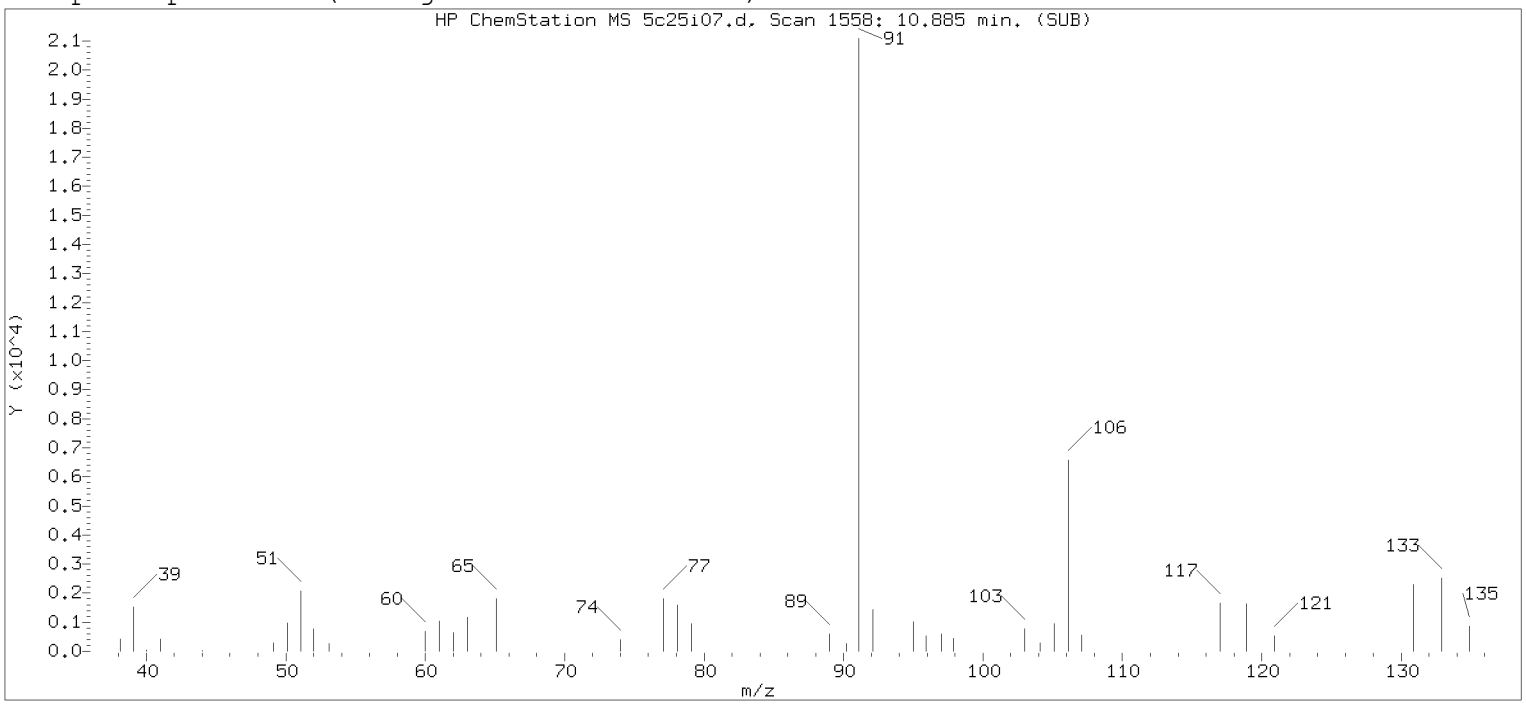
Compound Number : 107
Compound Name : m+p-Xylene
Scan Number : 1579
Retention Time (minutes): 11.013
Quant Ion : 106.00
Area (flag) : 22386M
On-Column Amount (ng) : 1.8940
Integration start scan : 1567 Integration stop scan: 1596
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

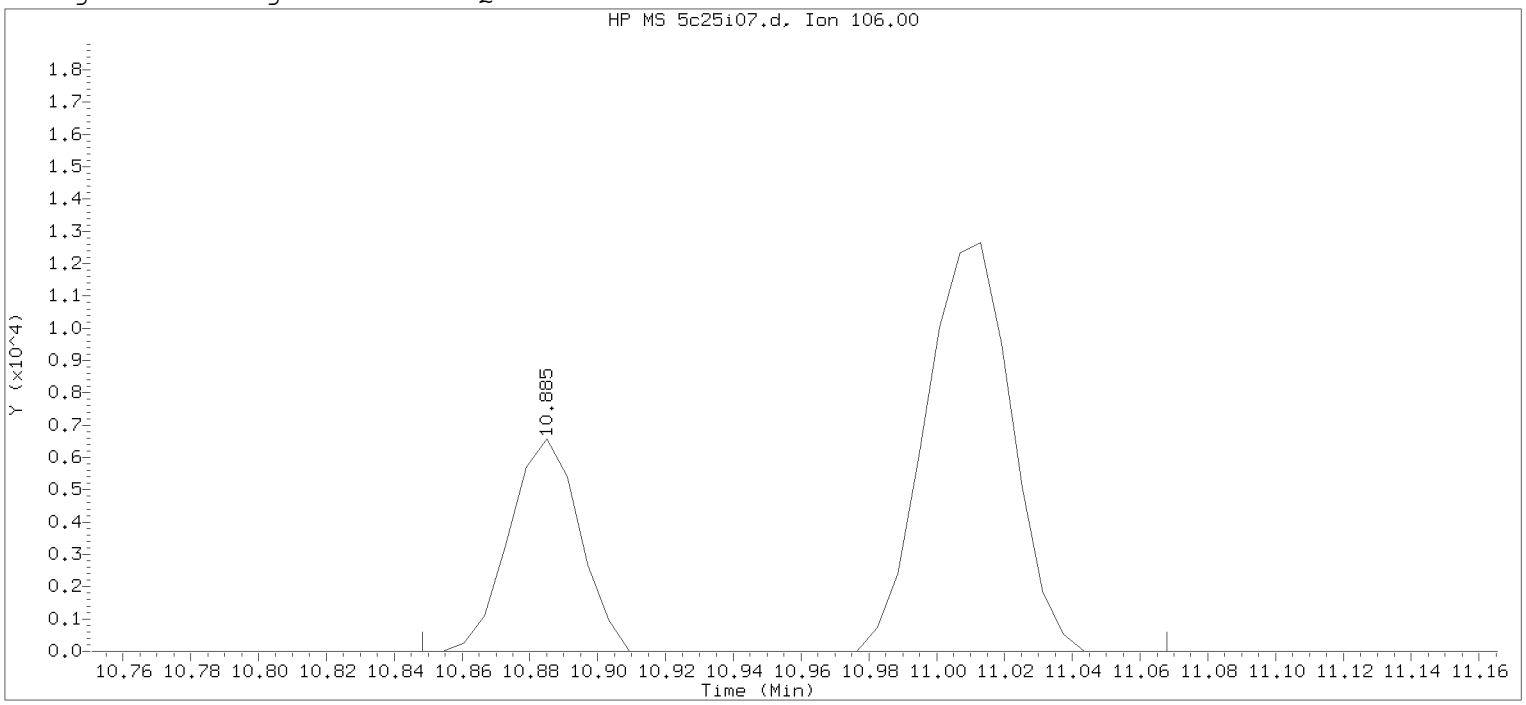
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

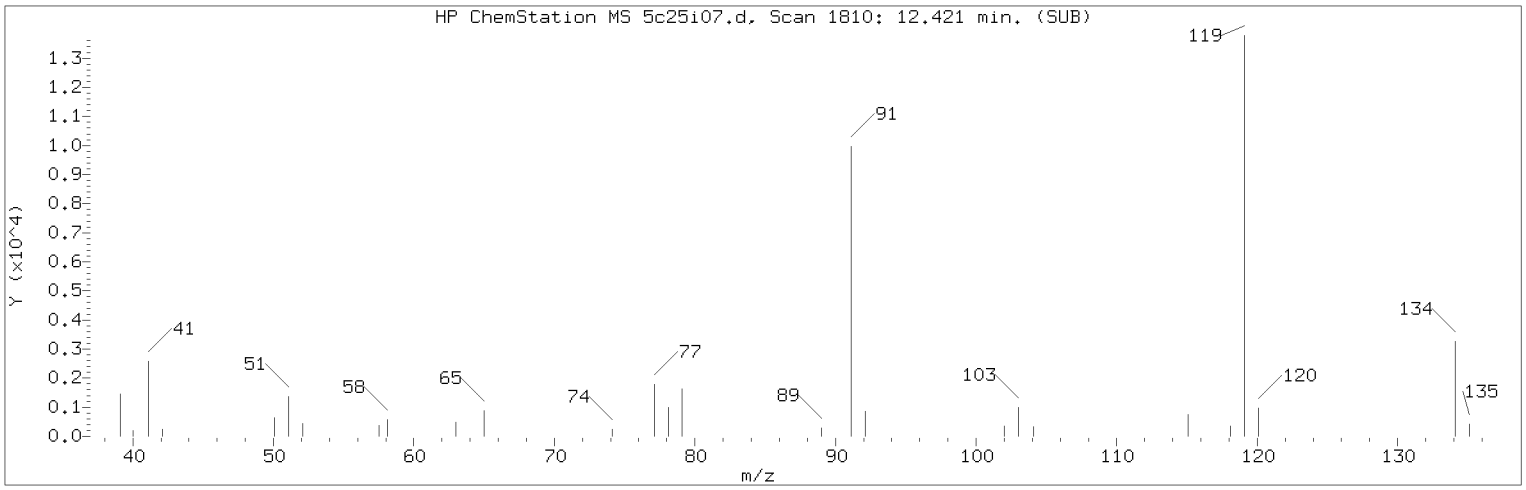
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

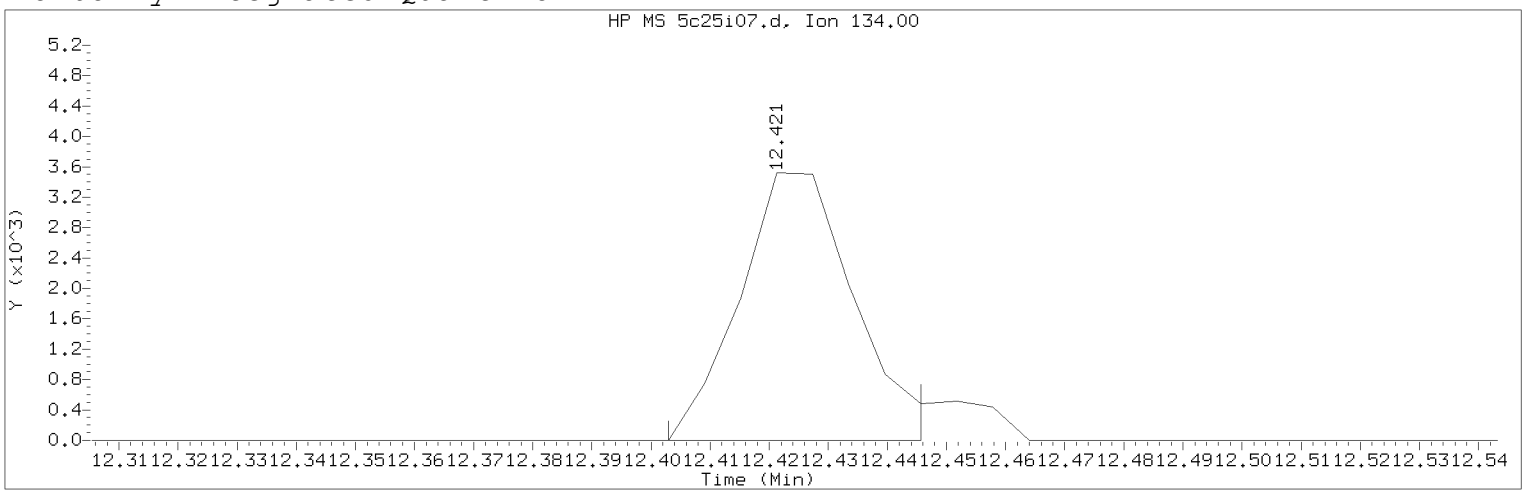
Compound Number : 107
Compound Name : m+p-Xylene
Scan Number : 1558
Retention Time (minutes): 10.885
Quant Ion : 106.00
Area : 31871
On-column Amount (ng) : 2.5503
Integration start scan : 1551 Integration stop scan: 1587
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD001 Lab Sample ID: VSTD001

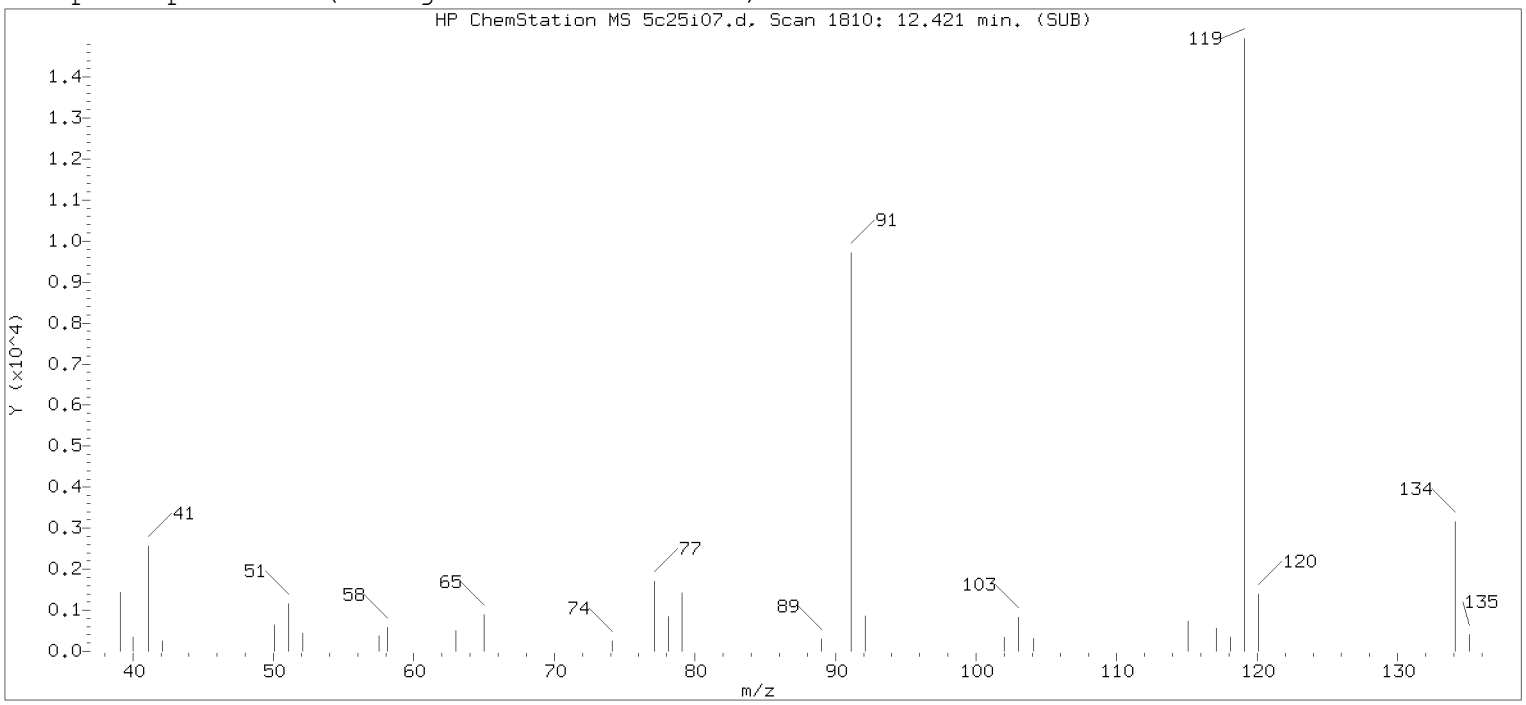
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1810
Retention Time (minutes): 12.421
Quant Ion : 134.00
Area (flag) : 4771M
On-Column Amount (ng) : 0.9856
Integration start scan : 1806 Integration stop scan: 1813
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

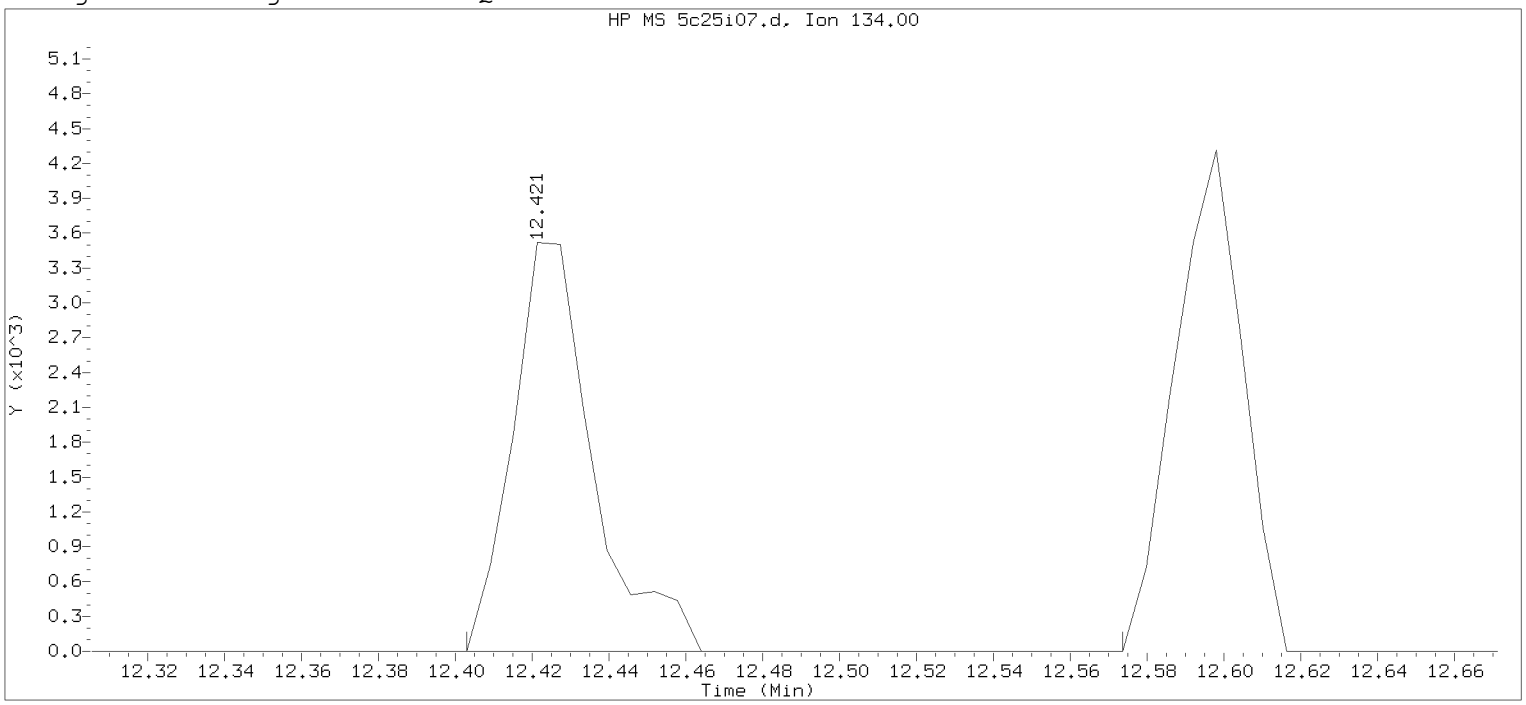
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

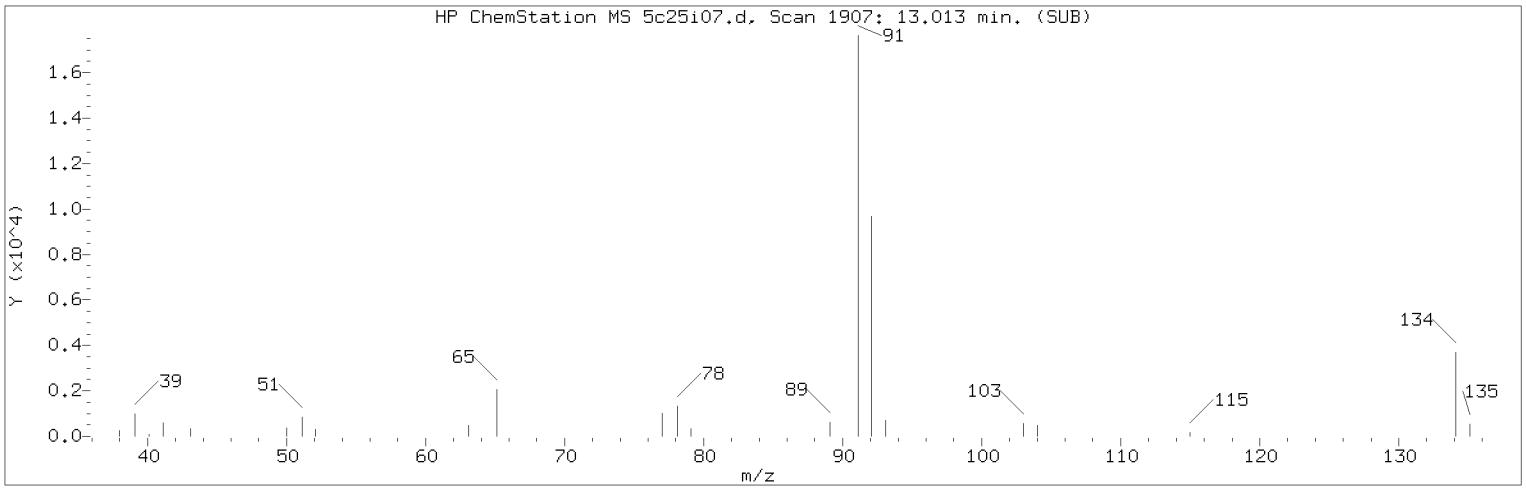
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

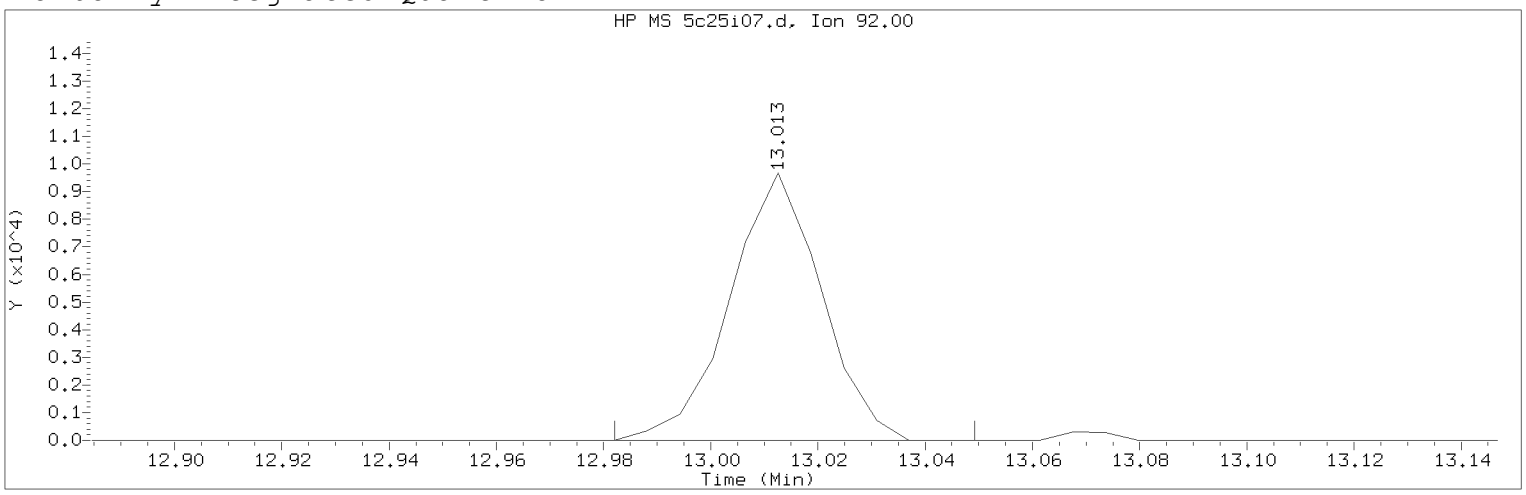
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1810
Retention Time (minutes): 12.421
Quant Ion : 134.00
Area : 5119
On-column Amount (ng) : 0.9876
Integration start scan : 1806 Integration stop scan: 1834
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: VSTD001 Lab Sample ID: VSTD001

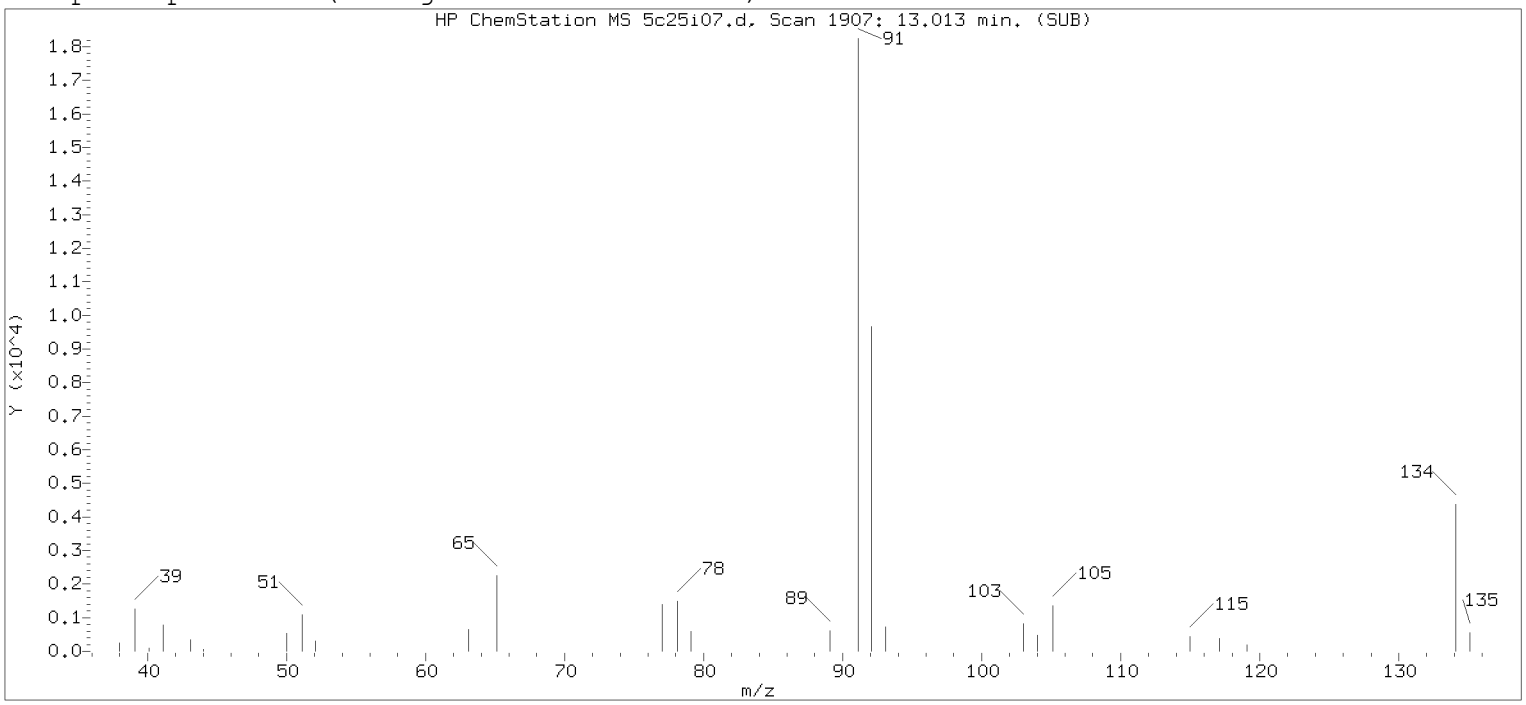
Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1907
Retention Time (minutes): 13.013
Quant Ion : 92.00
Area (flag) : 11412M
On-Column Amount (ng) : 0.8754
Integration start scan : 1901 Integration stop scan: 1912
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

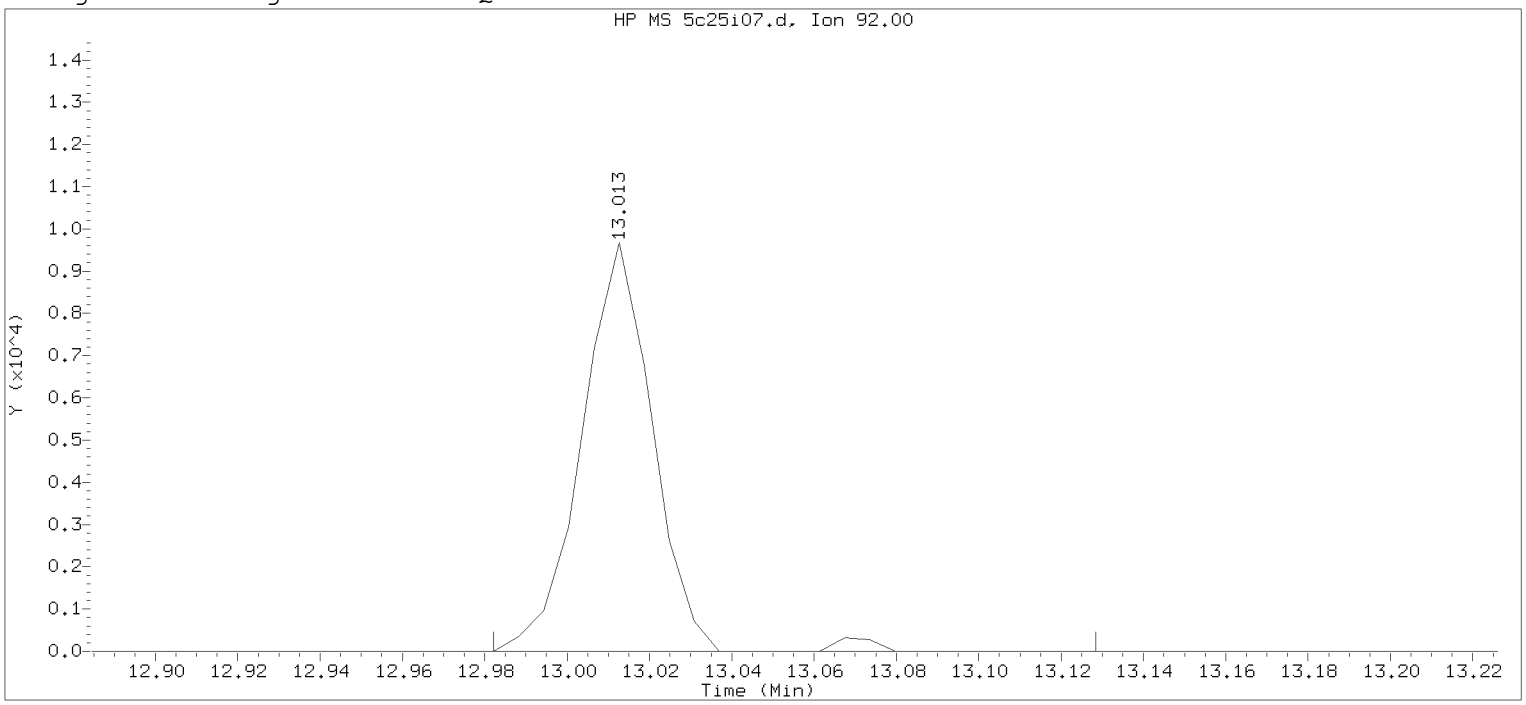
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:51.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:45.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



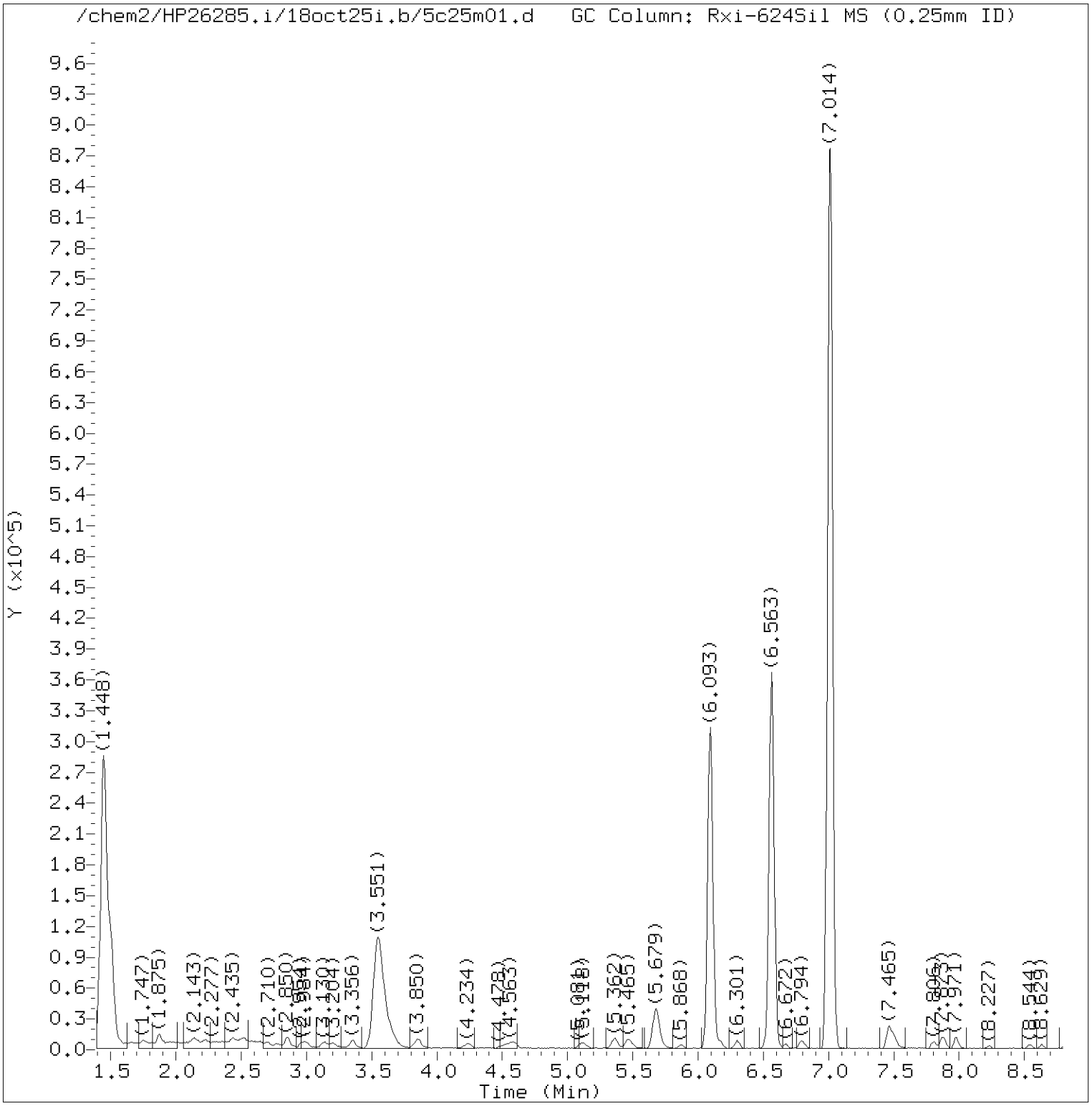
Data File: /chem2/HP26285.i/18oct25i.b/5c25i07.d Instrument ID: HP26285.i
Injection date and time: 25-OCT-2018 23:53 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 09:30
Date, time and analyst ID of latest file update: 26-Oct-2018 09:30 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1907
Retention Time (minutes): 13.013
Quant Ion : 92.00
Area : 11628
On-column Amount (ng) : 0.8899
Integration start scan : 1901 Integration stop scan: 1925
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:51.
Target 3.5 esignature user: kevin.sposito



Total Ion Chromatogram (TIC)

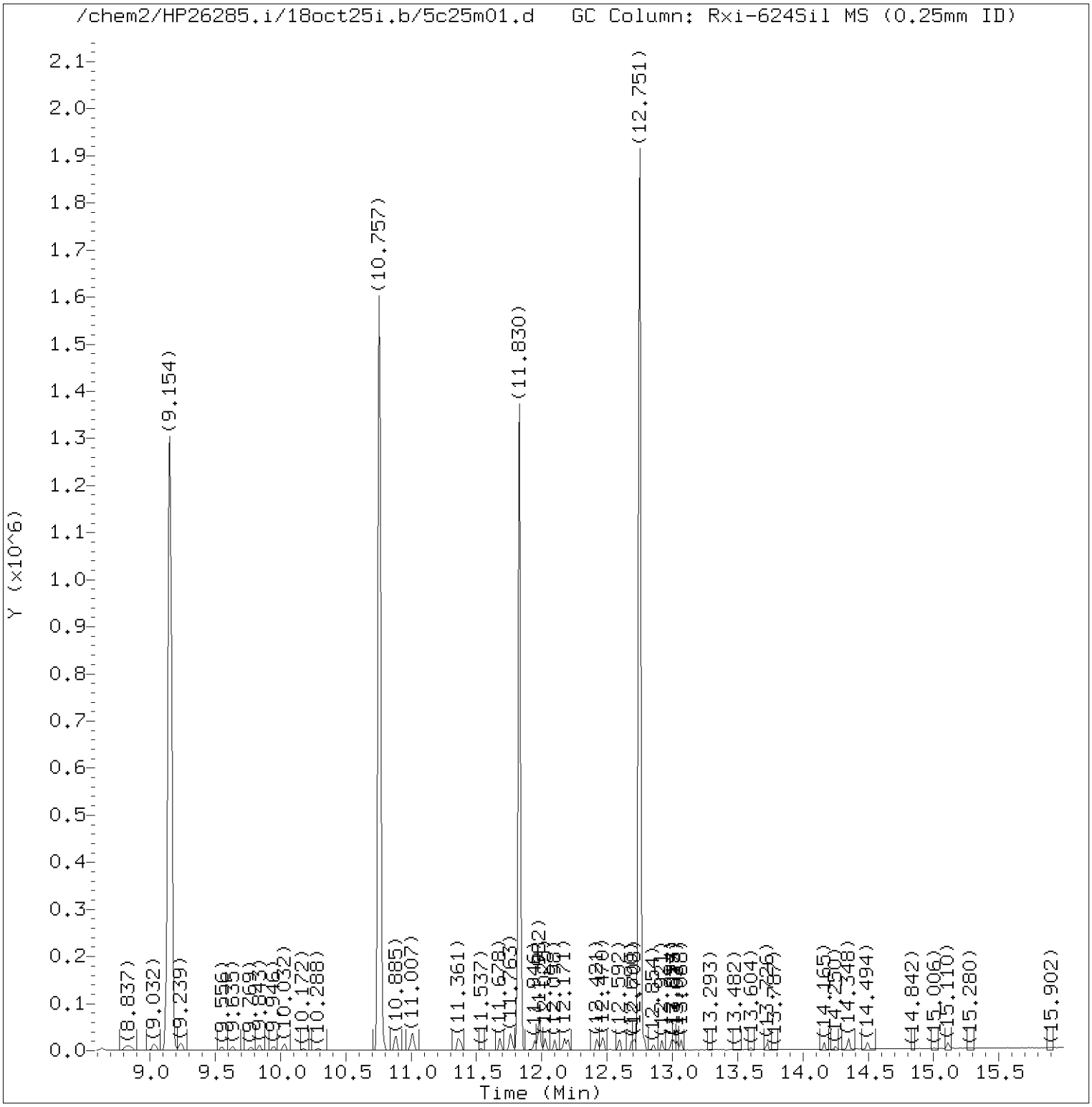
Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.643	85	3919	0.353
4) Chloromethane	(2)	1.747	50	4630	0.515
5) 1,3-Butadiene	(2)	1.868	39	2869M	0.475
6) Vinyl Chloride	(2)	1.875	62	3859	0.459
8) Bromomethane	(2)	2.137	94	3495	0.559
9) Chloroethane	(2)	2.222	64	2109	0.505
10) Dichlorofluoromethane	(2)	2.435	67	5695	0.514
12) Trichlorofluoromethane	(2)	2.496	101	4116	0.367
11) n-Pentane	(2)	2.515	43	4036M	0.564
14) Ethyl ether	(2)	2.704	59	2431	0.450
15) Freon 123a	(2)	2.777	67	3282	0.430
16) Acrolein	(1)	2.850	56	12094	4.971
17) 1,1-Dichloroethene	(2)	2.960	96	2195	0.417
19) Freon 113	(2)	2.990	101	2048	0.390
18) Acetone	(1)	2.996	58	1392	1.104
22) Methyl Iodide	(2)	3.130	142	4457	0.434
21) 2-Propanol	(1)	3.143	45	11606	11.225
23) Carbon Disulfide	(2)	3.197	76	7427	0.414
27) Methyl Acetate	(2)	3.344	43	8475M	0.825
25) Allyl Chloride	(2)	3.362	41	6200	0.545
28) Methylene Chloride	(2)	3.527	84	3430	0.556
29)*t-Butyl alcohol-d10	(1)	3.545	65	346398	250.000
30) t-Butyl alcohol	(1)	3.649	59	18748	10.291
31) Acrylonitrile	(2)	3.825	53	2194	0.455
33) Methyl Tertiary Butyl Ether	(2)	3.850	73	8742	0.462
32) trans-1,2-Dichloroethene	(2)	3.862	96	2420	0.404
34) n-Hexane	(2)	4.240	57	3906	0.449
36) 1,1-Dichloroethane	(2)	4.484	63	4694	0.418
38) di-Isopropyl ether	(2)	4.557	45	10436	0.479
39) 2-Chloro-1,3-butadiene	(2)	4.600	53	4072	0.402
40) Ethyl t-butyl ether	(2)	5.118	59	8936	0.456
45) 2,2-Dichloropropane	(2)	5.356	77	3481	0.391
42) cis-1,2-Dichloroethene	(2)	5.362	96	2899	0.434
44) 2-Butanone	(2)	5.362	43	7806	1.071
47) Propionitrile	(1)	5.465	54	19112	9.927
48) Methacrylonitrile	(2)	5.685	67	21638	4.719
49) Bromochloromethane	(2)	5.703	128	1494	0.432
50) Tetrahydrofuran	(1)	5.721	71	1380	0.788

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
51) Chloroform	(2)	5.868	83	4738	0.447
53) 1,1,1-Trichloroethane	(2)	6.081	97	3631	0.399
52)$Dibromofluoromethane	(2)	6.093	113	273721	50.004
43) 1,2-Dichloroethene (Total)	(2)		96	5319	0.838
54) Cyclohexane	(2)	6.166	56	5529	0.510
56) Carbon Tetrachloride	(2)	6.294	117	3206	0.401
55) 1,1-Dichloropropene	(2)	6.301	75	3654	0.418
58) Isobutyl Alcohol	(1)	6.544	41	15416M	26.132
57)$1,2-Dichloroethane-d4	(2)	6.563	102	64967	49.711
60) Benzene	(2)	6.581	78	11680	0.447
61) 1,2-Dichloroethane	(2)	6.672	62	5002	0.624
65) t-Amyl methyl ether	(2)	6.794	73	8169	0.444
66)*Fluorobenzene	(2)	7.008	96	1125294	50.000
67) n-Heptane	(2)	7.020	43	4306	0.431
69) n-Butanol	(1)	7.465	56	21477	45.341
71) Trichloroethene	(2)	7.508	95	2721	0.416
73) Methylcyclohexane	(2)	7.806	83	3719	0.328
74) 1,2-Dichloropropane	(2)	7.867	63	2831	0.433
75) Dibromomethane	(2)	7.971	93	1887	0.475
77) Methyl Methacrylate	(2)	7.983	69	2830	0.429
79) Bromodichloromethane	(2)	8.227	83	2853	0.385
80) 2-Nitropropane	(2)	8.538	41	3068	0.925
81) 2-Chloroethyl Vinyl Ether	(2)	8.629	63	2222	0.423
82) cis-1,3-Dichloropropene	(2)	8.812	75	3988	0.419
83) 4-Methyl-2-pentanone	(2)	9.032	43	11886	0.915
84)$Toluene-d8	(3)	9.154	98	1076756	50.636
89) Toluene	(3)	9.239	92	7592	0.476
90) trans-1,3-Dichloropropene	(3)	9.550	75	3276	0.384
92) Ethyl Methacrylate	(3)	9.635	69	4285	0.419
93) 1,1,2-Trichloroethane	(3)	9.769	97	2367	0.436
94) Tetrachloroethene	(3)	9.843	166	3376	0.482
95) 1,3-Dichloropropane	(3)	9.946	76	4515	0.492
97) 2-Hexanone	(3)	10.032	43	9214	0.895
91) 1,3-Dichloropropene (total)	(3)		100	7264	0.803
98) Dibromochloromethane	(3)	10.172	129	2025	0.364
100) 1,2-Dibromoethane	(3)	10.288	107	2647	0.449
101)*Chlorobenzene-d5	(3)	10.757	117	788321	50.000
102) 1-Chlorohexane	(3)	10.781	91	5758	0.635

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
103) Chlorobenzene	(3)	10.781	112	8039	0.465
104) 1,1,1,2-Tetrachloroethane	(3)	10.879	131	2232	0.392
105) Ethylbenzene	(3)	10.885	91	15310	0.499
107) m+p-Xylene	(3)	11.007	106	11510M	0.972
108) o-Xylene	(3)	11.361	106	5205	0.459
110) Styrene	(3)	11.379	104	7406	0.401
111) Bromoform	(3)	11.537	173	1304	1.915
112) Isopropylbenzene	(3)	11.678	105	14118	0.488
109) Xylene (Total)	(3)		106	16715	1.431
115)$4-Bromofluorobenzene	(3)	11.830	95	376893	49.308
116) Bromobenzene	(4)	11.946	156	3328	0.478
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	3987	0.440
119) trans-1,4-Dichloro-2-butene	(4)	11.976	53	12221	3.929
118) 1,2,3-Trichloropropane	(4)	11.995	110	1243	0.461
120) n-Propylbenzene	(4)	12.025	91	16999	0.513
121) 2-Chlorotoluene	(4)	12.098	126	3484	0.521
123) 1,3,5-Trimethylbenzene	(4)	12.171	105	11309	0.486
122) 4-Chlorotoluene	(4)	12.202	126	3415	0.491
125) tert-Butylbenzene	(4)	12.421	134	2175	0.450
126) Pentachloroethane	(4)	12.452	167	1304	0.316
127) 1,2,4-Trimethylbenzene	(4)	12.470	105	11509	0.482
128) sec-Butylbenzene	(4)	12.598	105	13131	0.452
130) 1,3-Dichlorobenzene	(4)	12.690	146	6854	0.521
131) p-Isopropyltoluene	(4)	12.708	119	10727	0.425
132)*1,4-Dichlorobenzene-d4	(4)	12.751	152	404641	50.000
134) 1,4-Dichlorobenzene	(4)	12.769	146	7102	0.525
135) 1,2,3-Trimethylbenzene	(4)	12.787	105	10446	0.420
136) Benzyl Chloride	(4)	12.854	91	5700	0.324
137) 1,3-Diethylbenzene	(4)	12.921	119	5663	0.364
138) 1,4-Diethylbenzene	(4)	12.994	119	5662	0.341
140) n-Butylbenzene	(4)	13.013	92	5079	0.390
139) 1,2-Dichlorobenzene	(4)	13.037	146	6514	0.516
141) 1,2-Diethylbenzene	(4)	13.068	119	4921	0.378
142) Diethylbenzene (total)	(4)		100	16246	1.084
143) 1,2-Dibromo-3-chloropropane	(4)	13.604	75	838	0.360
145) 1,3,5-Trichlorobenzene	(4)	13.726	180	4273	0.463
147) 1,2,4-Trichlorobenzene	(4)	14.165	180	4004	0.482
148) Hexachlorobutadiene	(4)	14.250	225	1273	0.325

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

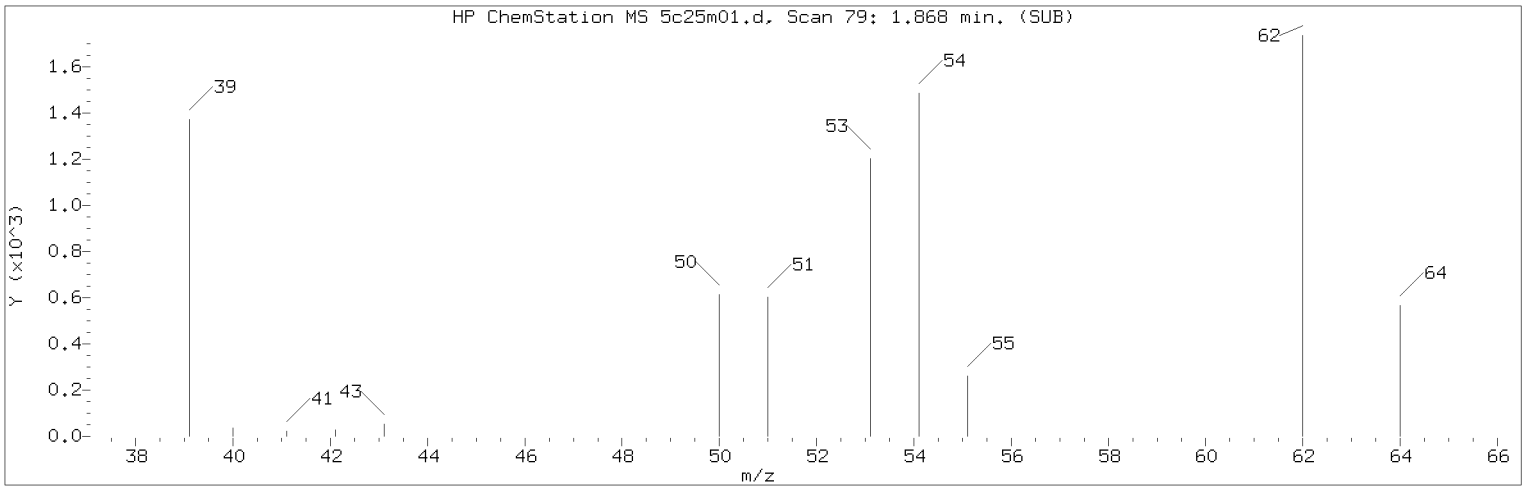
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

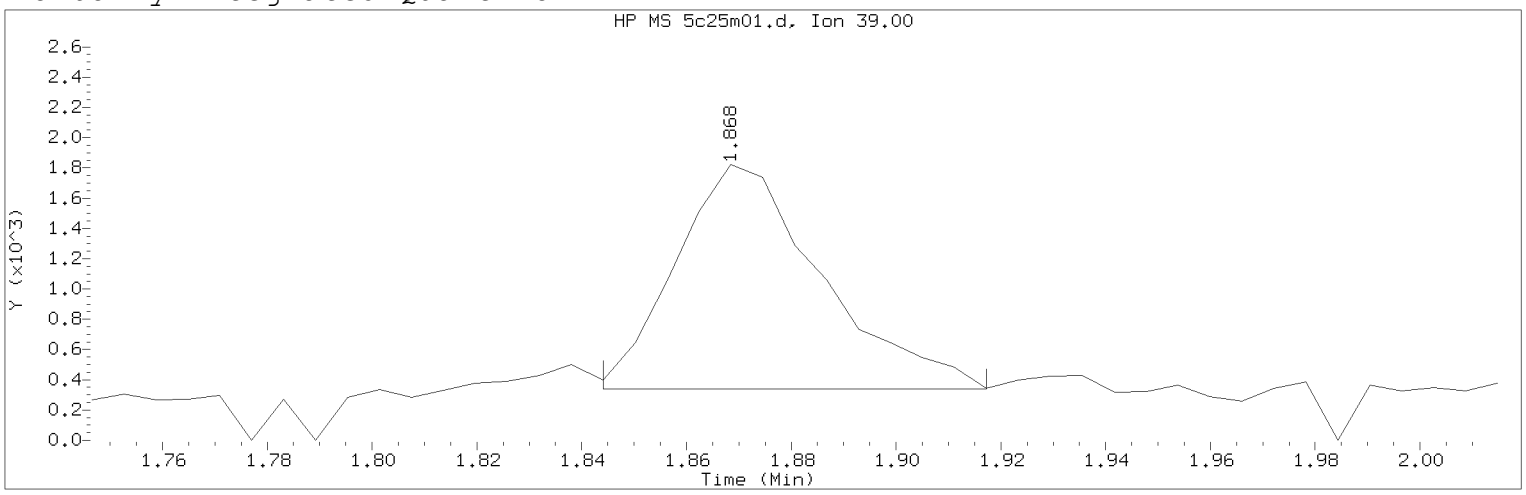
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
149) Naphthalene	(4)	14.348	128	14457	0.491
150) 1,2,3-Trichlorobenzene	(4)	14.494	180	3850	0.476
151) 2-Methylnaphthalene	(4)	15.110	142	5936	0.341

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

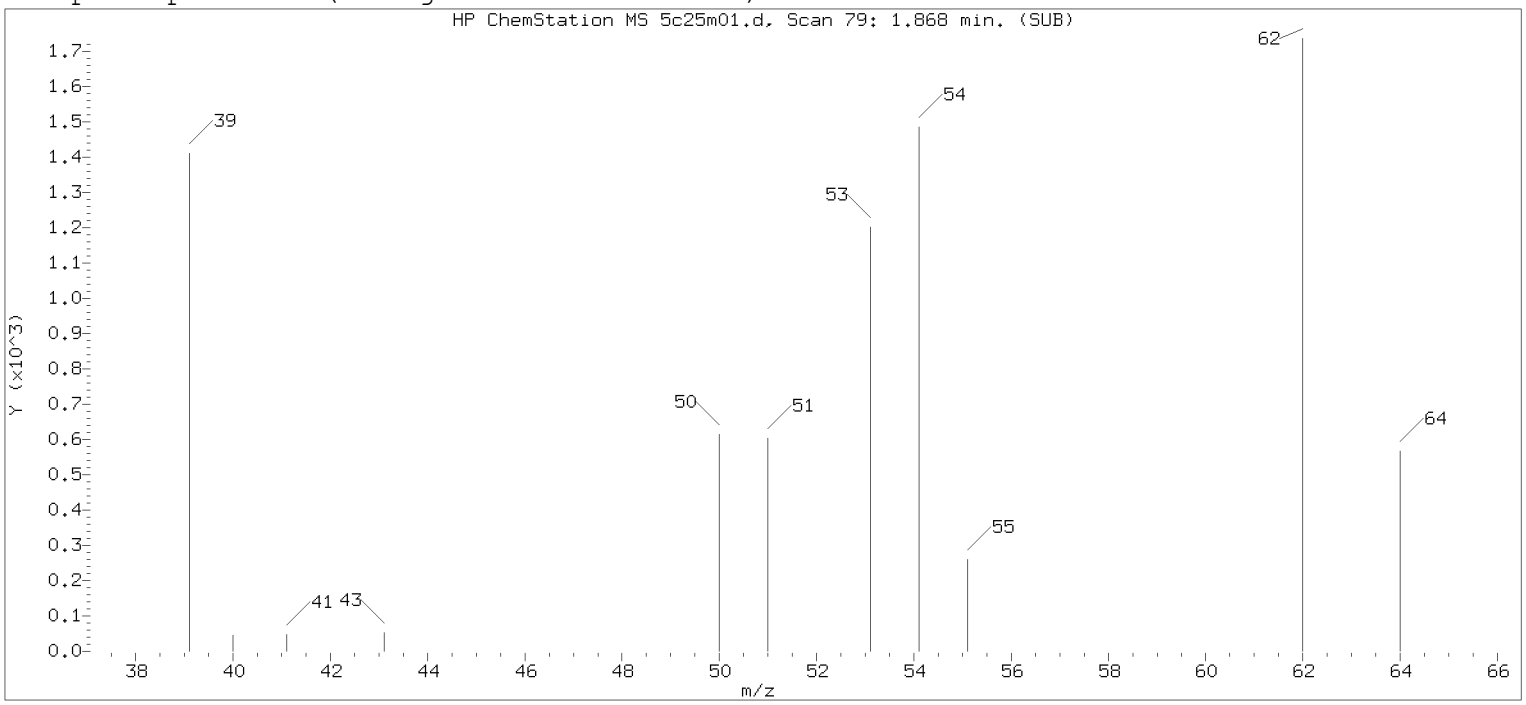
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 79
Retention Time (minutes): 1.868
Quant Ion : 39.00
Area (flag) : 2869M
On-Column Amount (ng) : 0.4750
Integration start scan : 74 Integration stop scan: 86
Y at integration start : 340 Y at integration end: 340

Reason for manual integration: improper integration

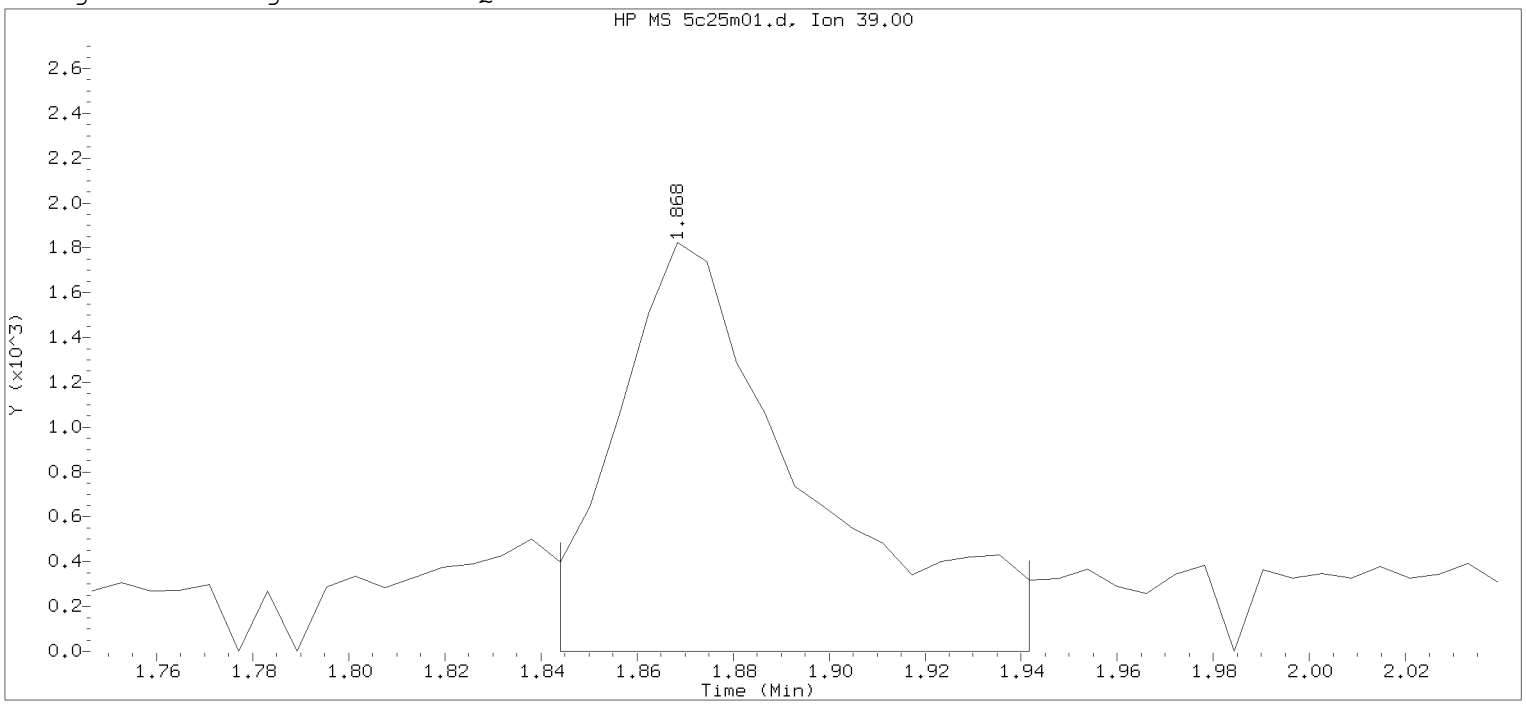
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:47.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

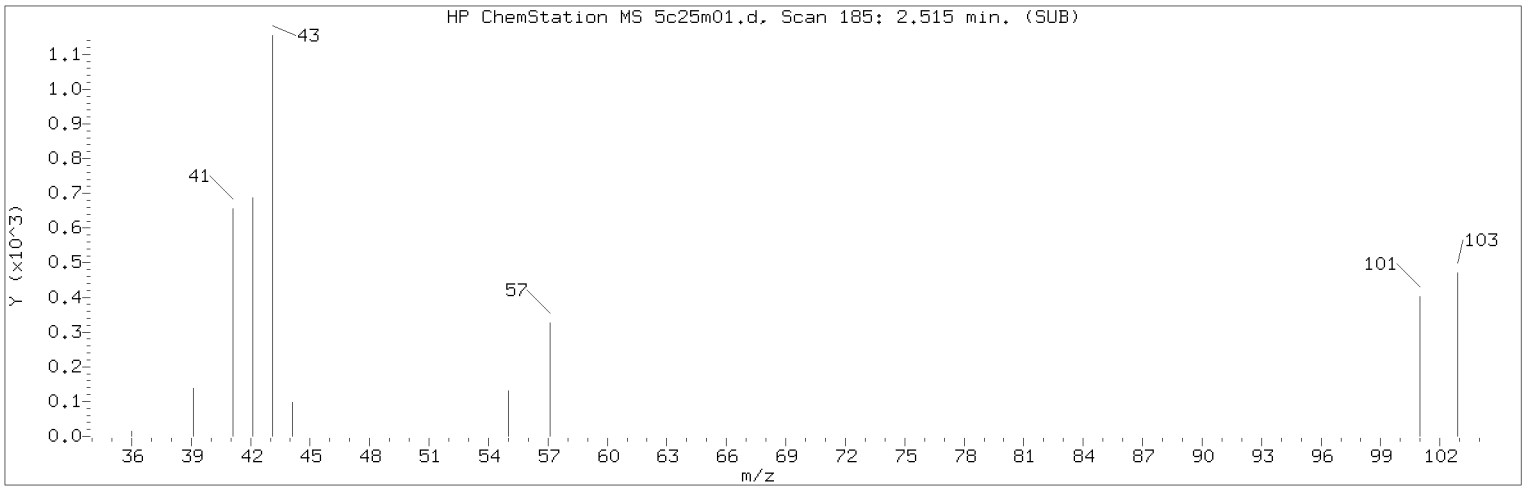
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 11:18
Date, time and analyst ID of latest file update: 26-Oct-2018 11:19 jkh09052

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

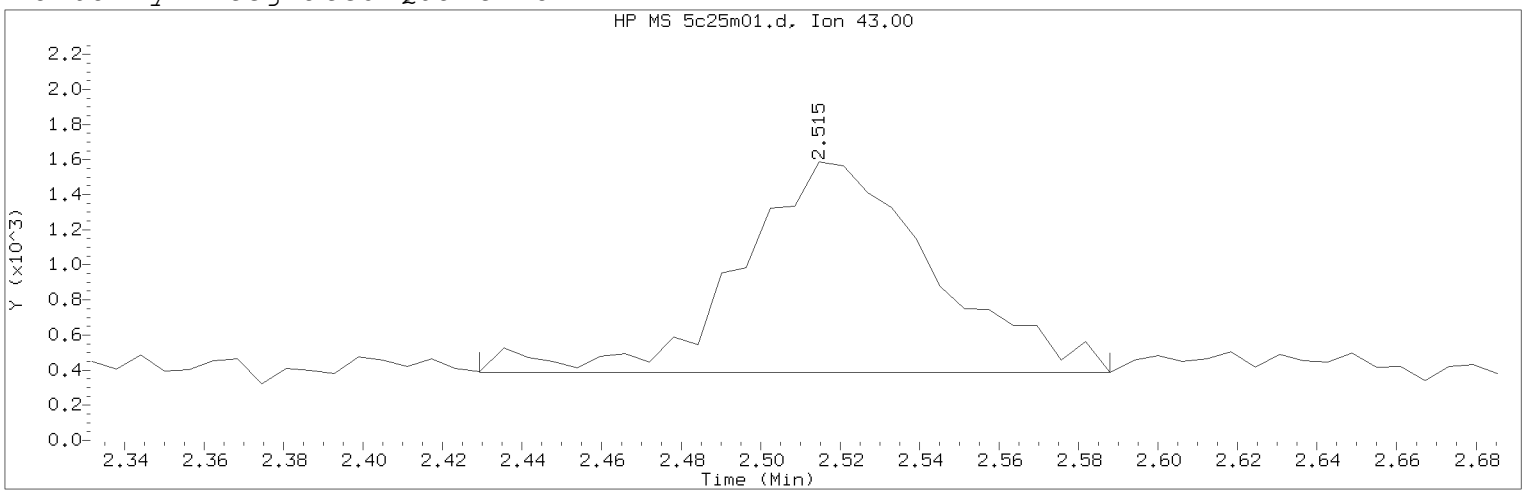
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 79
Retention Time (minutes): 1.868
Quant Ion : 39.00
Area : 4929
On-column Amount (ng) : 0.8161
Integration start scan : 74 Integration stop scan: 90
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

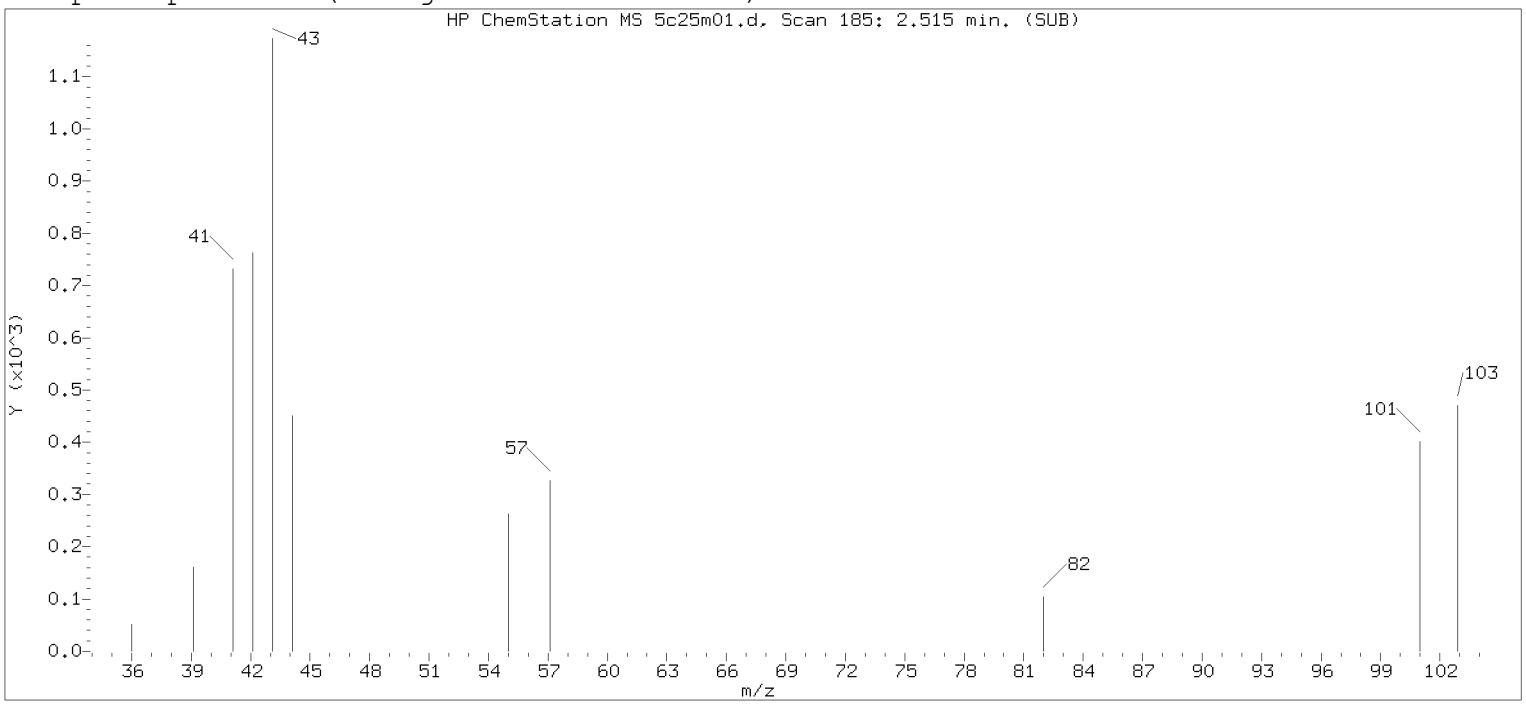
Compound Number : 11
Compound Name : n-Pentane
Scan Number : 185
Retention Time (minutes): 2.515
Quant Ion : 43.00
Area (flag) : 4036M
On-Column Amount (ng) : 0.5635
Integration start scan : 170 Integration stop scan: 196
Y at integration start : 389 Y at integration end: 389

Reason for manual integration: improper integration

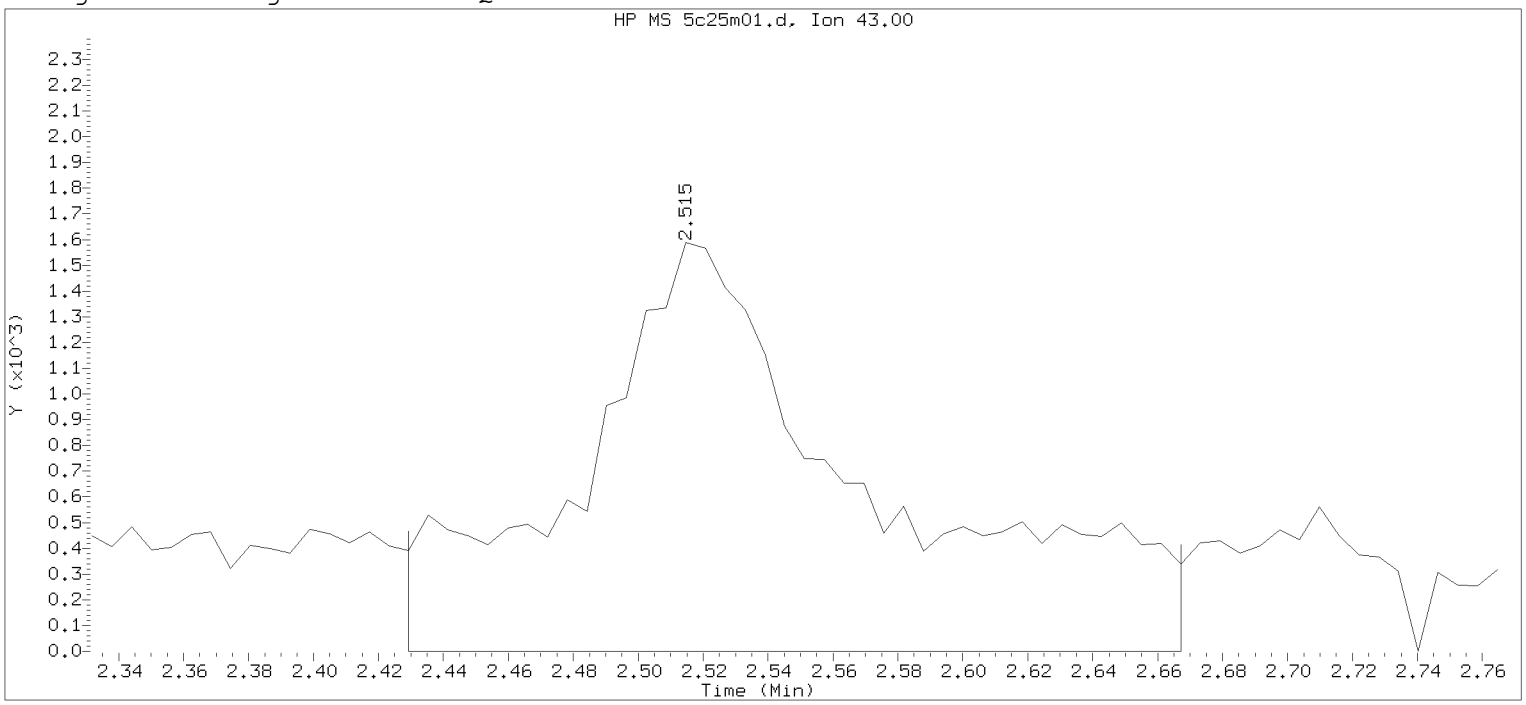
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:47.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

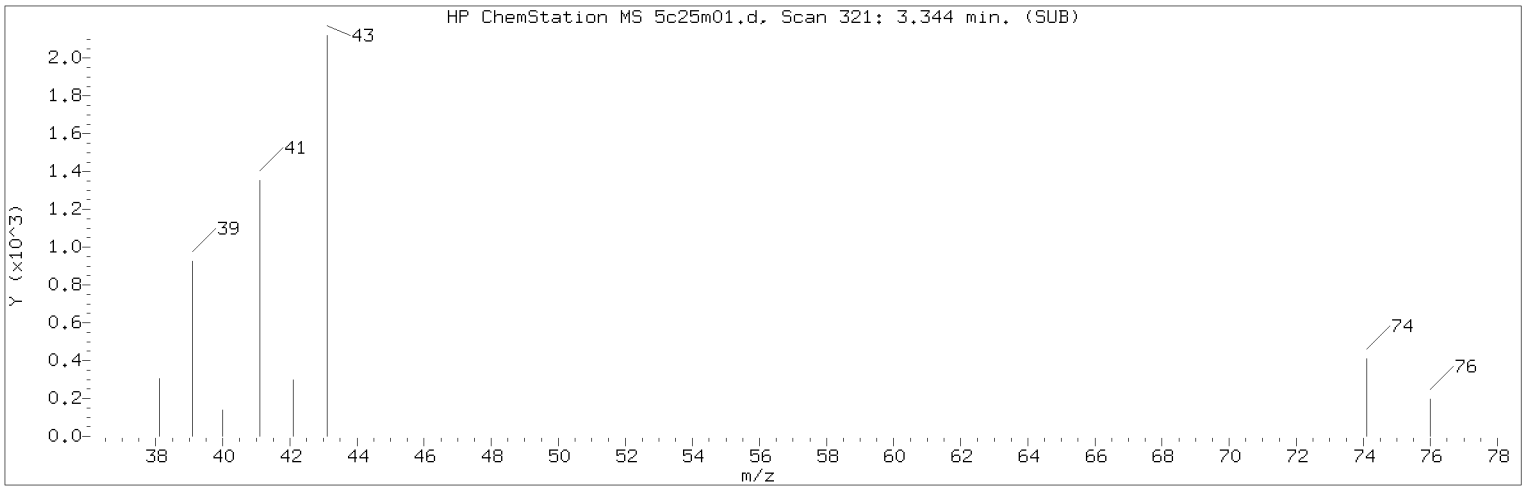
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 11:18
Date, time and analyst ID of latest file update: 26-Oct-2018 11:19 jkh09052

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

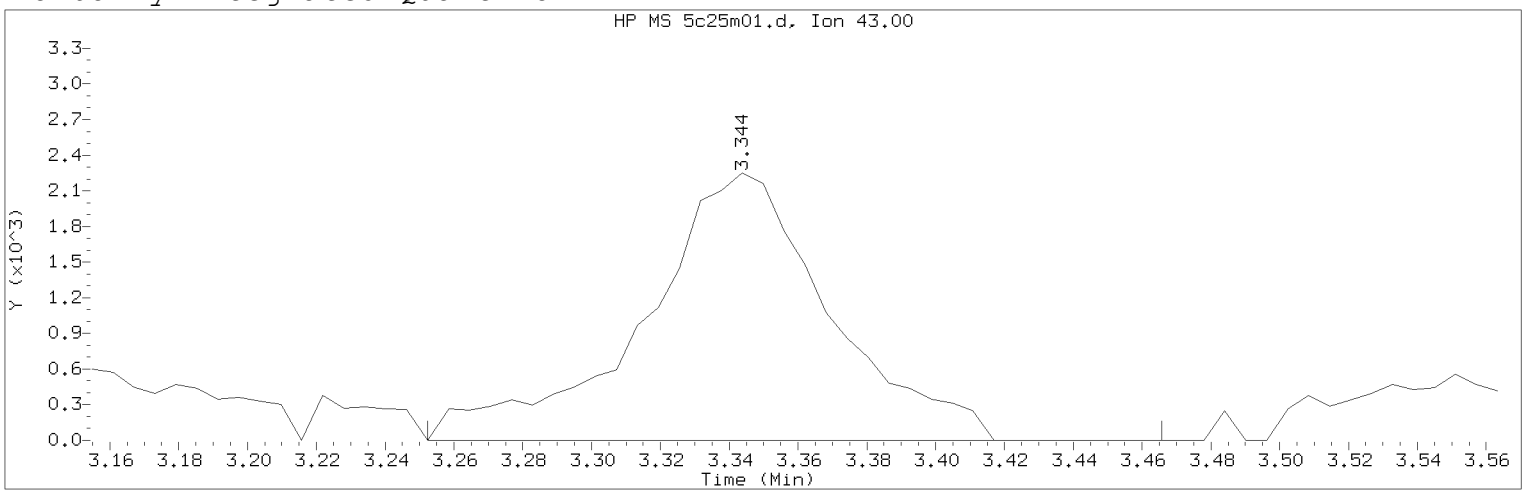
Compound Number : 11
Compound Name : n-Pentane
Scan Number : 185
Retention Time (minutes): 2.515
Quant Ion : 43.00
Area : 9879
On-column Amount (ng) : 1.3795
Integration start scan : 170 Integration stop scan: 209
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kasposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

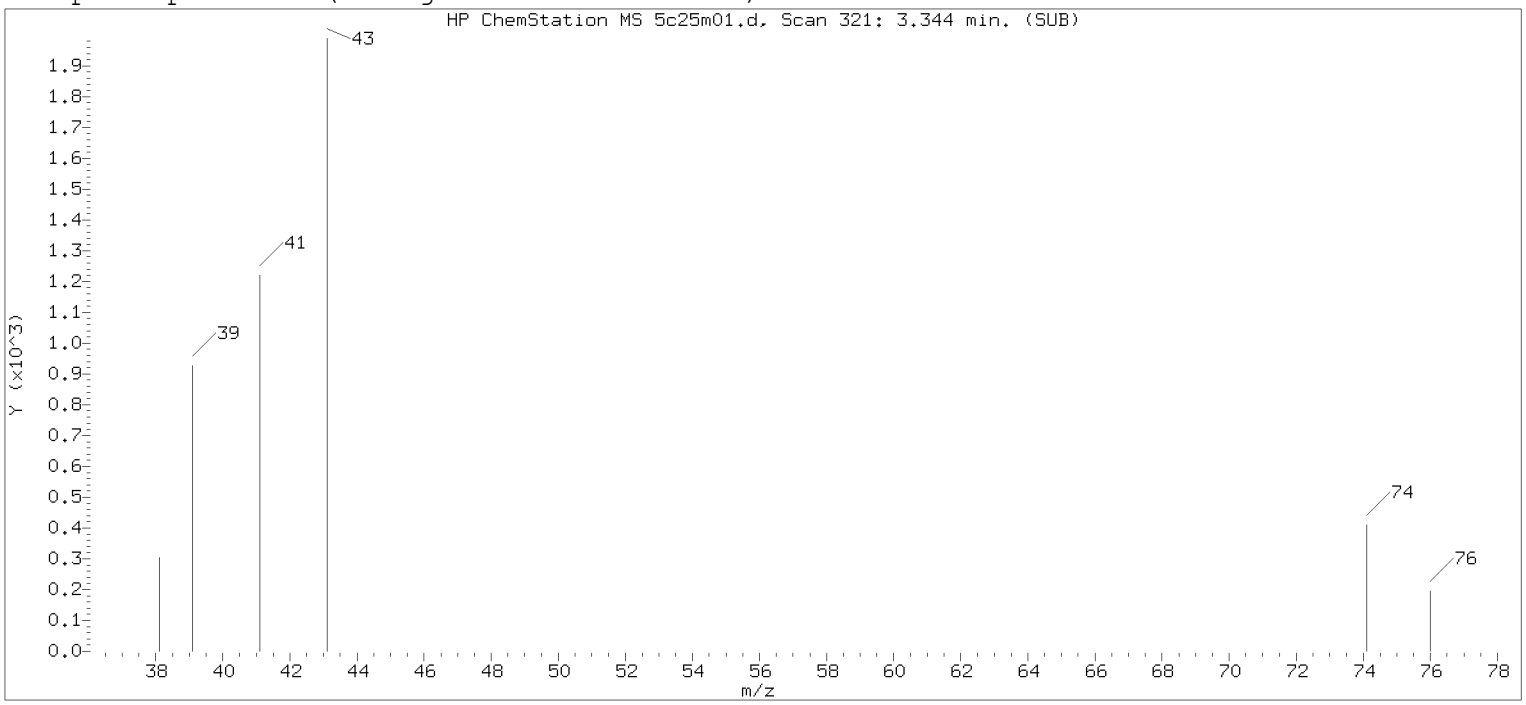
Compound Number : 27
Compound Name : Methyl Acetate
Scan Number : 321
Retention Time (minutes): 3.344
Quant Ion : 43.00
Area (flag) : 8475M
On-Column Amount (ng) : 0.8248
Integration start scan : 305 Integration stop scan: 340
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

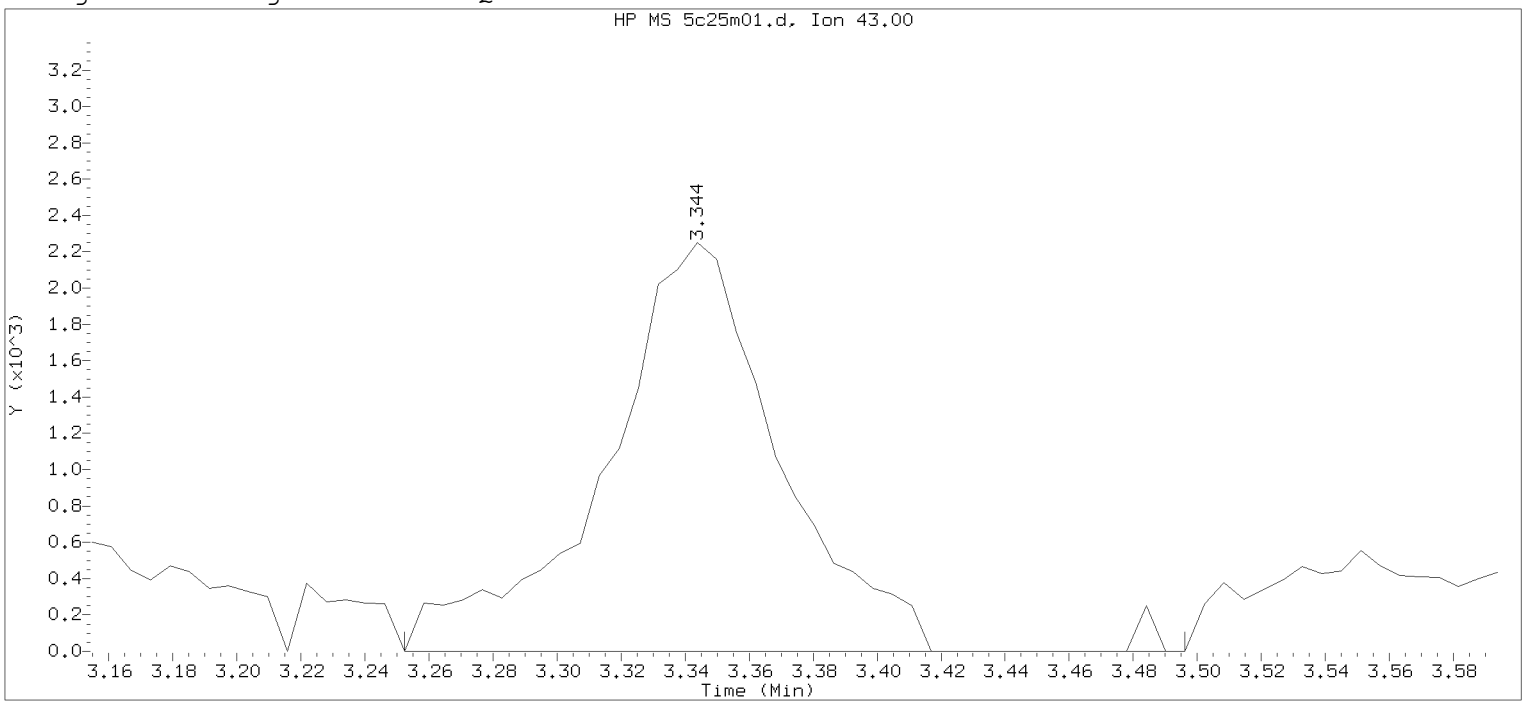
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:47.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

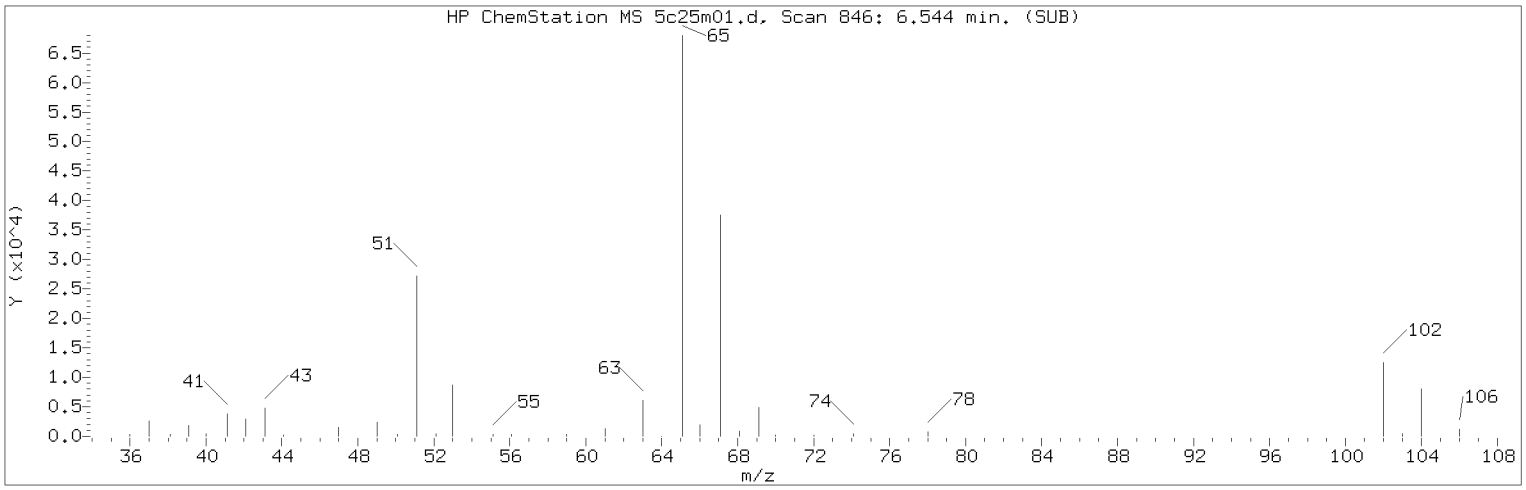
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 11:18
Date, time and analyst ID of latest file update: 26-Oct-2018 11:19 jkh09052

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

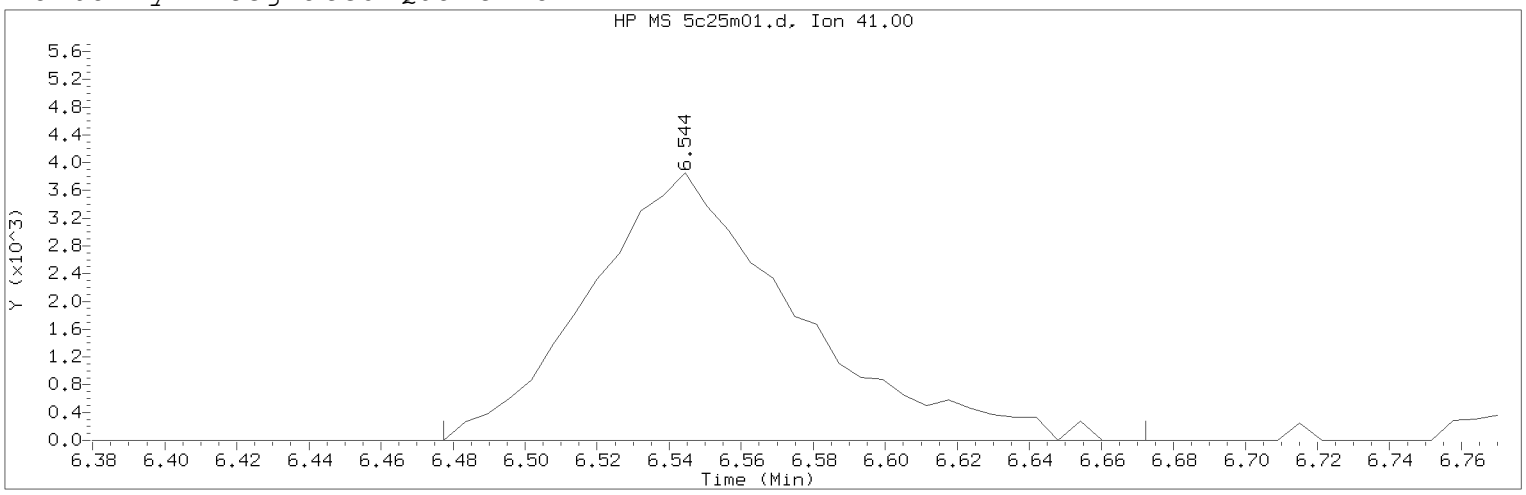
Compound Number : 27
Compound Name : Methyl Acetate
Scan Number : 321
Retention Time (minutes): 3.344
Quant Ion : 43.00
Area : 8567
On-column Amount (ng) : 0.8338
Integration start scan : 305 Integration stop scan: 345
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

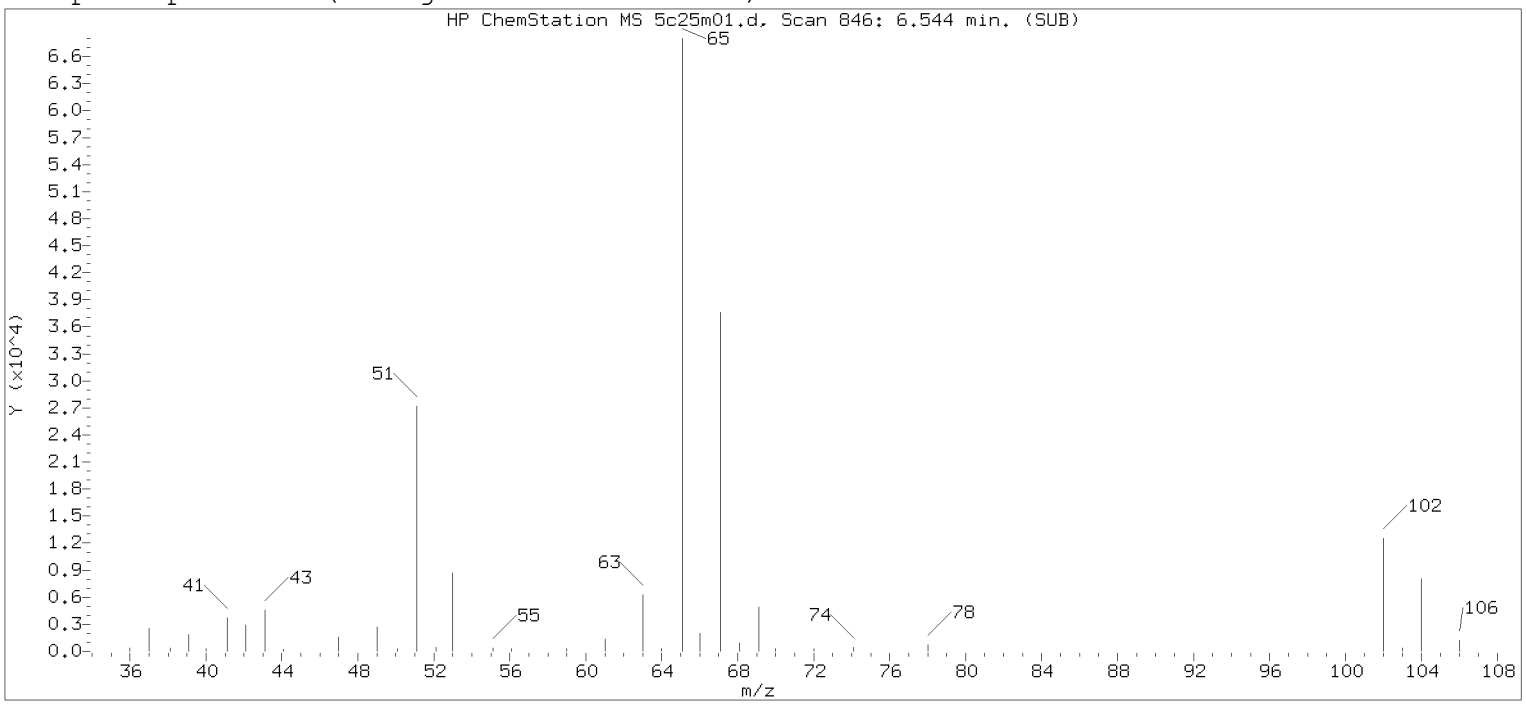
Compound Number : 58
Compound Name : Isobutyl Alcohol
Scan Number : 846
Retention Time (minutes): 6.544
Quant Ion : 41.00
Area (flag) : 15416M
On-Column Amount (ng) : 26.1323
Integration start scan : 834 Integration stop scan: 866
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

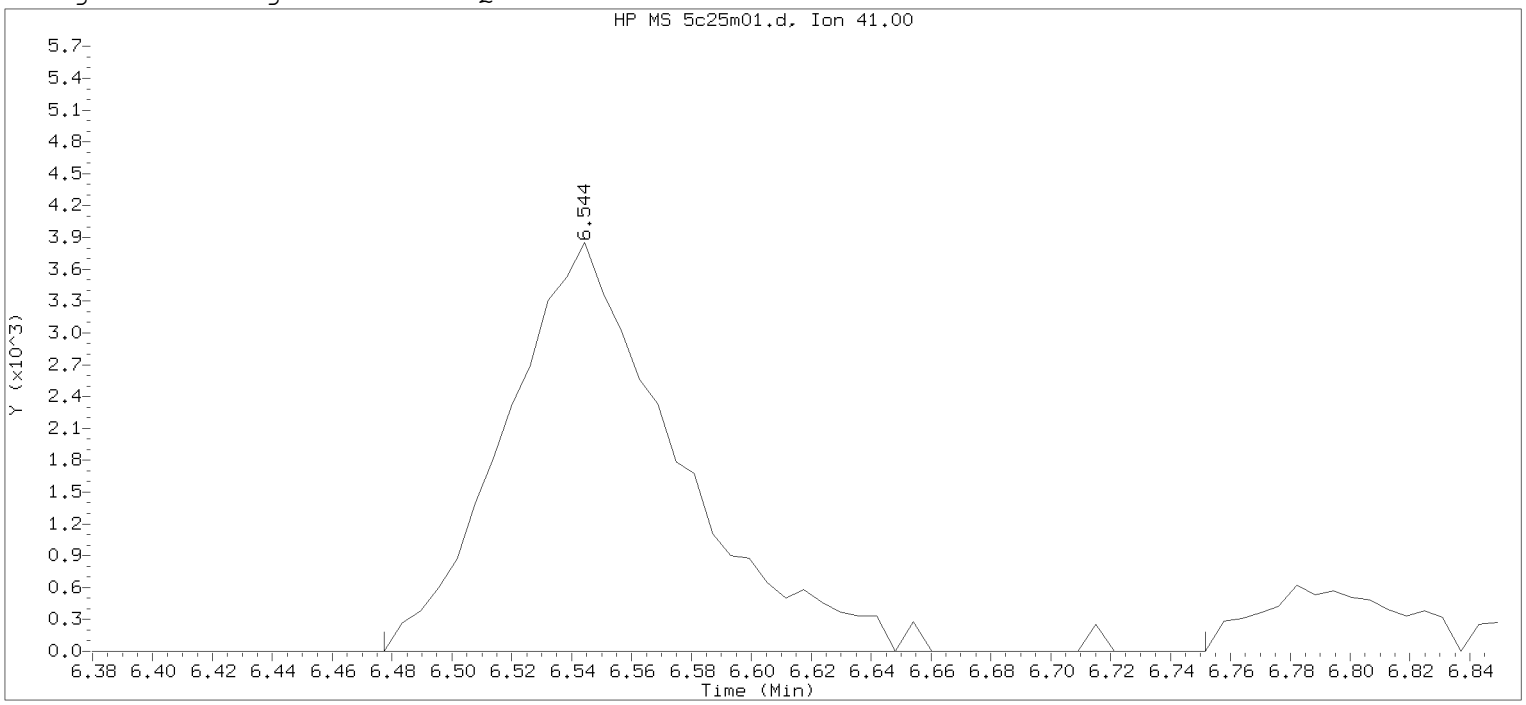
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:47.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

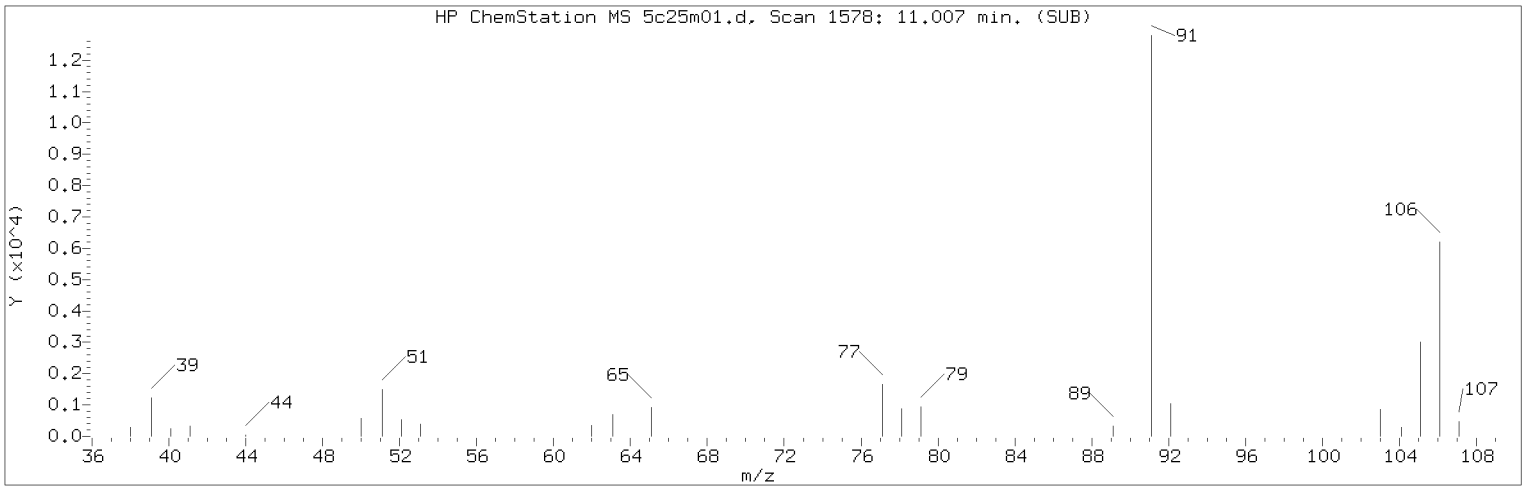
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 11:18
Date, time and analyst ID of latest file update: 26-Oct-2018 11:19 jkh09052

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

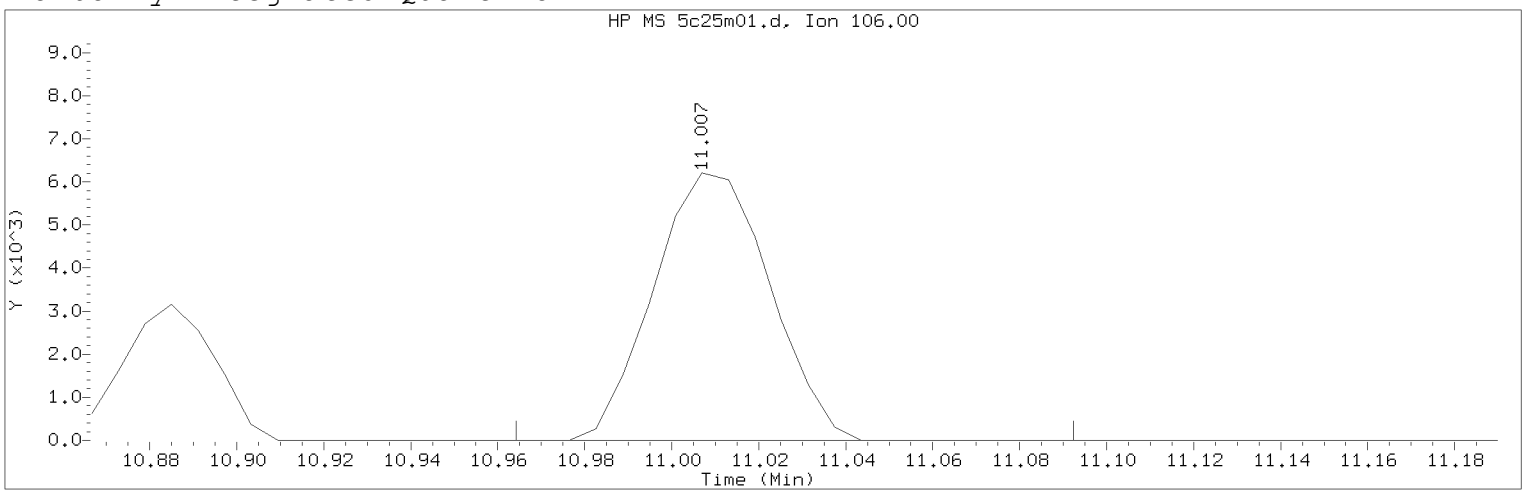
Compound Number : 58
Compound Name : Isobutyl Alcohol
Scan Number : 846
Retention Time (minutes): 6.544
Quant Ion : 41.00
Area : 15508
On-column Amount (ng) : 26.2895
Integration start scan : 834 Integration stop scan: 879
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:52.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

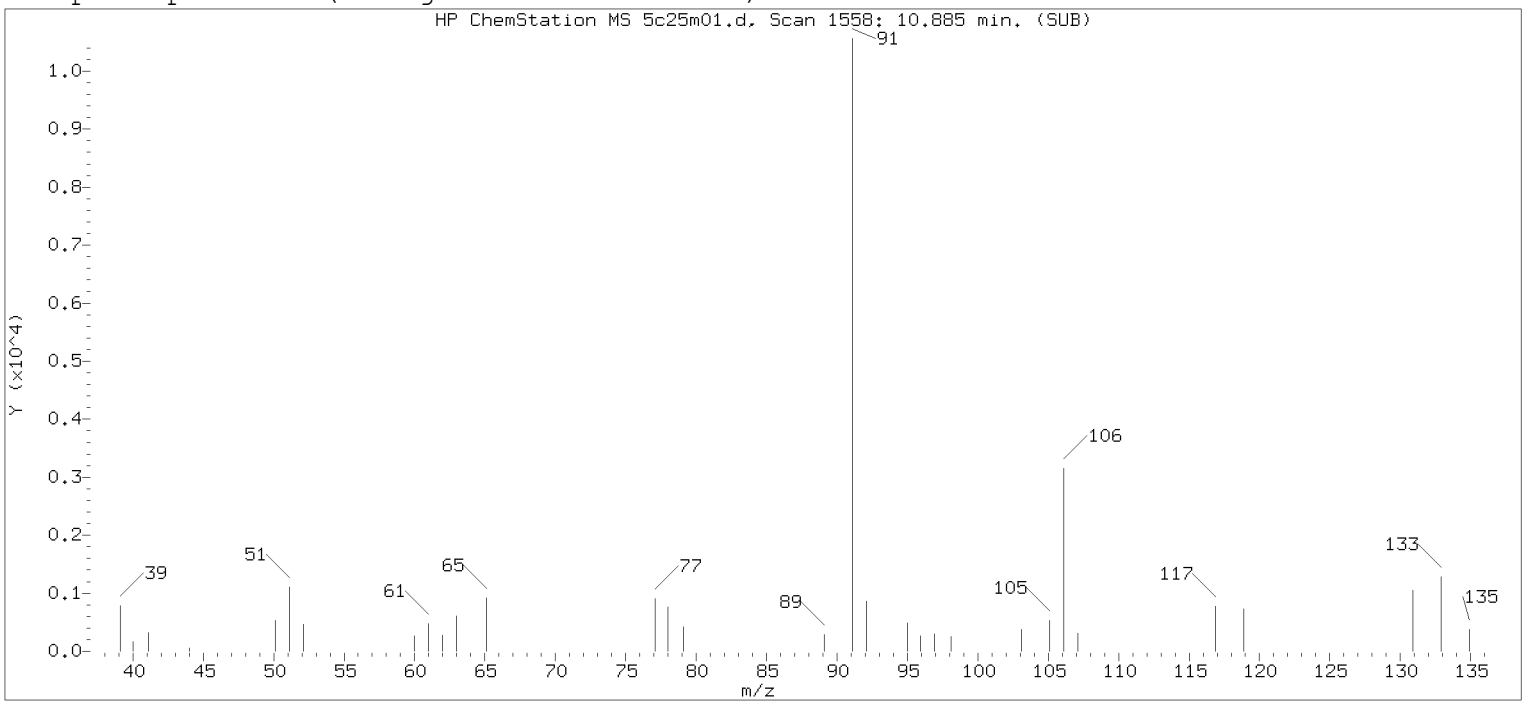
Compound Number : 107
Compound Name : m+p-Xylene
Scan Number : 1578
Retention Time (minutes): 11.007
Quant Ion : 106.00
Area (flag) : 11510M
On-Column Amount (ng) : 0.9716
Integration start scan : 1570 Integration stop scan: 1591
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

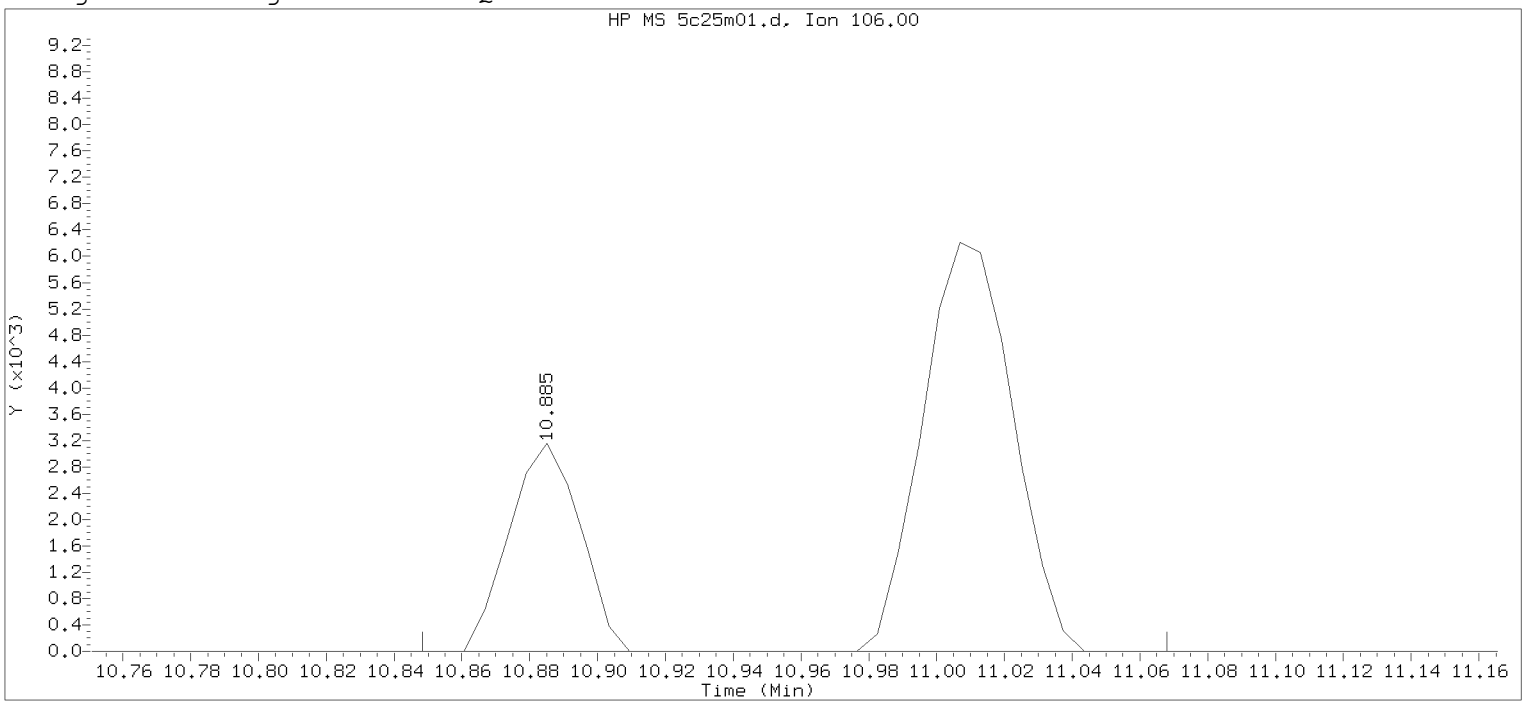
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:47.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



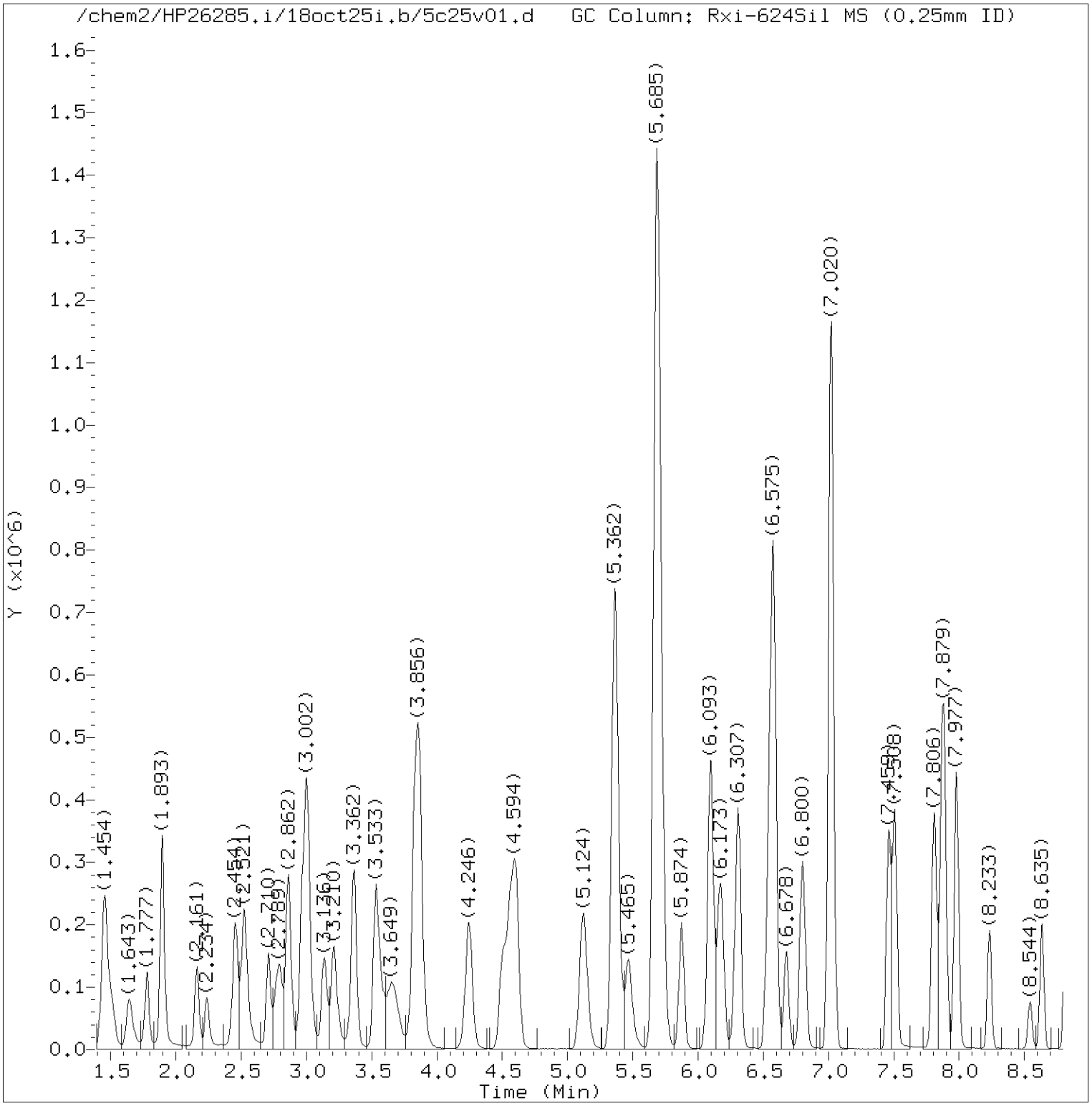
Data File: /chem2/HP26285.i/18oct25i.b/5c25m01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:15 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 11:18
Date, time and analyst ID of latest file update: 26-Oct-2018 11:19 jkh09052

Sample Name: 0.5PPB Lab Sample ID: 0.5PPB

Compound Number : 107
Compound Name : m+p-Xylene
Scan Number : 1558
Retention Time (minutes): 10.885
Quant Ion : 106.00
Area : 16106
On-column Amount (ng) : 1.3596
Integration start scan : 1551 Integration stop scan: 1587
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kasposito



Total Ion Chromatogram (TIC)

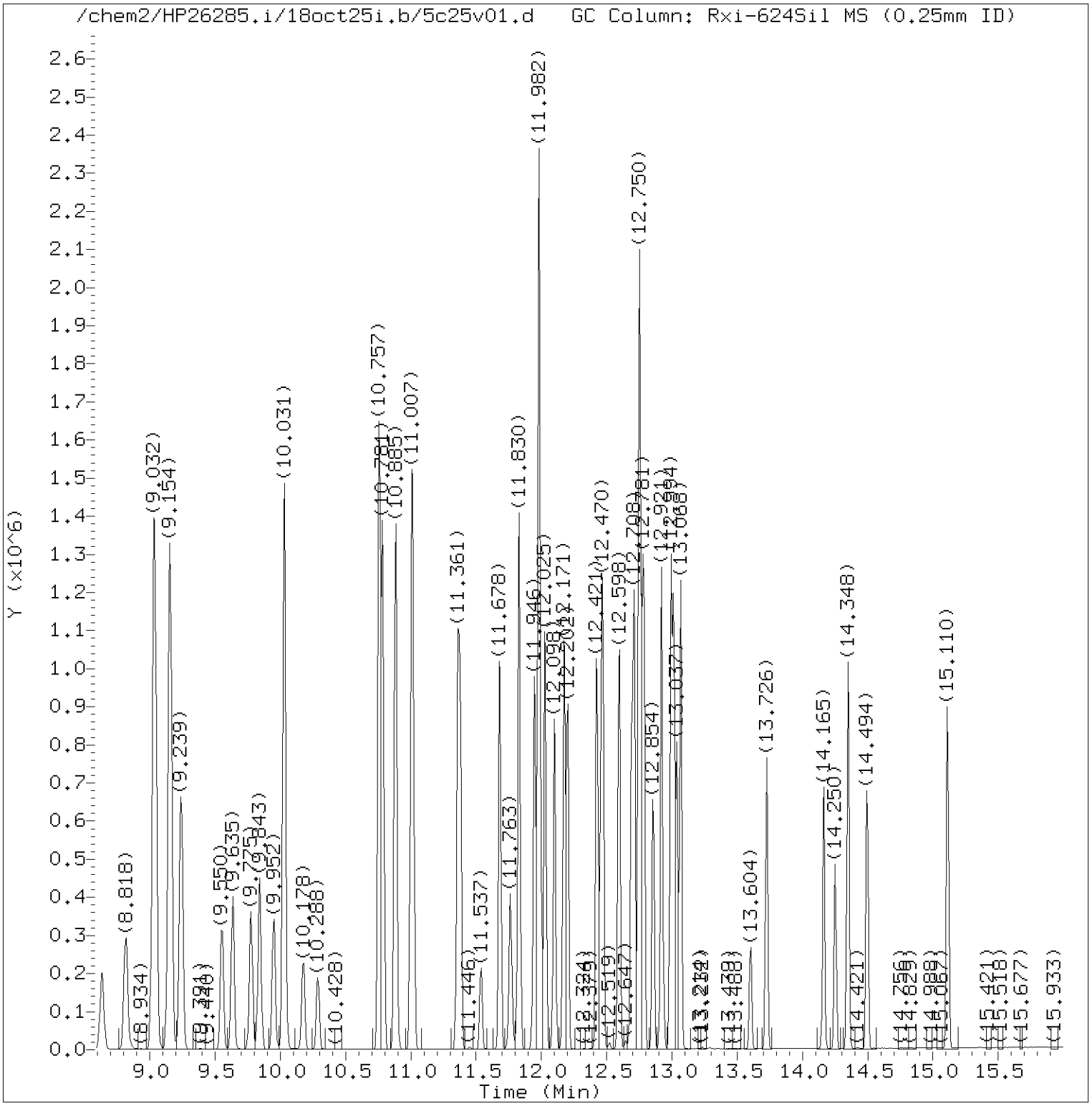
Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.643	85	162831	14.671
4) Chloromethane	(2)	1.777	50	170338	18.953
6) Vinyl Chloride	(2)	1.893	62	167426	19.934
5) 1,3-Butadiene	(2)	1.899	39	132912	22.025
8) Bromomethane	(2)	2.161	94	112816	18.072
9) Chloroethane	(2)	2.234	64	87022	20.844
10) Dichlorofluoromethane	(2)	2.454	67	231417	20.908
12) Trichlorofluoromethane	(2)	2.509	101	213269M	19.038
11) n-Pentane	(2)	2.527	43	173017	24.181
14) Ethyl ether	(2)	2.710	59	113950	21.133
15) Freon 123a	(2)	2.789	67	163658M	21.446
16) Acrolein	(1)	2.862	56	382763	164.666
17) 1,1-Dichloroethene	(2)	2.966	96	112026	21.284
19) Freon 113	(2)	3.002	101	116570	22.224
18) Acetone	(1)	3.008	58	172078	142.830
22) Methyl Iodide	(2)	3.136	142	213867	20.844
21) 2-Propanol	(1)	3.155	45	114510	115.929
23) Carbon Disulfide	(2)	3.210	76	374251	20.868
27) Methyl Acetate	(2)	3.350	43	190654	18.574
25) Allyl Chloride	(2)	3.368	41	219433	19.297
28) Methylene Chloride	(2)	3.533	84	129759	21.048
29)*t-Butyl alcohol-d10	(1)	3.557	65	330940	250.000
30) t-Butyl alcohol	(1)	3.661	59	314422	180.658
31) Acrylonitrile	(2)	3.832	53	457092	94.852
33) Methyl Tertiary Butyl Ether	(2)	3.862	73	388301	20.532
32) trans-1,2-Dichloroethene	(2)	3.868	96	128336	21.428
34) n-Hexane	(2)	4.246	57	198442	22.843
36) 1,1-Dichloroethane	(2)	4.502	63	234644	20.932
38) di-Isopropyl ether	(2)	4.563	45	461503	21.210
39) 2-Chloro-1,3-butadiene	(2)	4.606	53	212724	21.024
40) Ethyl t-butyl ether	(2)	5.124	59	399788	20.430
44) 2-Butanone	(2)	5.362	43	1024229	140.677
42) cis-1,2-Dichloroethene	(2)	5.368	96	142572	21.361
45) 2,2-Dichloropropane	(2)	5.380	77	185435	20.873
47) Propionitrile	(1)	5.465	54	295028	160.396
48) Methacrylonitrile	(2)	5.679	67	727214	158.758
49) Bromochloromethane	(2)	5.709	128	67583	19.562
50) Tetrahydrofuran	(1)	5.715	71	176763	105.622

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
51) Chloroform	(2)	5.874	83	223287	21.075
53) 1,1,1-Trichloroethane	(2)	6.093	97	189154	20.815
52)$Dibromofluoromethane	(2)	6.099	113	274382	50.174
43) 1,2-Dichloroethene (Total)	(2)		96	270908	42.788
54) Cyclohexane	(2)	6.173	56	232118	21.412
56) Carbon Tetrachloride	(2)	6.294	117	161596	20.235
55) 1,1-Dichloropropene	(2)	6.313	75	176135	20.147
58) Isobutyl Alcohol	(1)	6.544	41	256659	455.395
57)$1,2-Dichloroethane-d4	(2)	6.569	102	65195	49.935
60) Benzene	(2)	6.587	78	536671	20.547
61) 1,2-Dichloroethane	(2)	6.678	62	169723	21.180
65) t-Amyl methyl ether	(2)	6.800	73	372935	20.296
66)*Fluorobenzene	(2)	7.014	96	1124183	50.000
67) n-Heptane	(2)	7.026	43	219237	21.958
69) n-Butanol	(1)	7.459	56	331412	732.342
71) Trichloroethene	(2)	7.508	95	132785	20.327
73) Methylcyclohexane	(2)	7.806	83	217817M	19.231
74) 1,2-Dichloropropane	(2)	7.861	63	136324	20.880
75) Dibromomethane	(2)	7.977	93	83157	20.936
77) Methyl Methacrylate	(2)	7.983	69	131166	19.921
79) Bromodichloromethane	(2)	8.233	83	155937	21.065
80) 2-Nitropropane	(2)	8.544	41	59813	18.042
81) 2-Chloroethyl Vinyl Ether	(2)	8.635	63	107866M	20.538
82) cis-1,3-Dichloropropene	(2)	8.818	75	197063	20.702
83) 4-Methyl-2-pentanone	(2)	9.032	43	1270260	97.932
84)$Toluene-d8	(3)	9.154	98	1073297	50.315
89) Toluene	(3)	9.239	92	324196	20.258
90) trans-1,3-Dichloropropene	(3)	9.556	75	172052	20.129
92) Ethyl Methacrylate	(3)	9.635	69	202023	19.713
93) 1,1,2-Trichloroethane	(3)	9.775	97	116716	21.412
94) Tetrachloroethene	(3)	9.843	166	138201	19.661
95) 1,3-Dichloropropane	(3)	9.952	76	187518	20.350
97) 2-Hexanone	(3)	10.031	43	1002912	97.142
91) 1,3-Dichloropropene (total)	(3)		100	369115	40.831
98) Dibromochloromethane	(3)	10.178	129	116051	20.794
100) 1,2-Dibromoethane	(3)	10.288	107	122984	20.794
101)*Chlorobenzene-d5	(3)	10.757	117	790798	50.000
102) 1-Chlorohexane	(3)	10.781	91	169231	18.614

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
103) Chlorobenzene	(3)	10.787	112	344116	19.849
104) 1,1,1,2-Tetrachloroethane	(3)	10.879	131	115008	20.142
105) Ethylbenzene	(3)	10.885	91	606510	19.715
107) m+p-Xylene	(3)	11.013	106	471567	39.682
108) o-Xylene	(3)	11.361	106	225314	19.809
110) Styrene	(3)	11.379	104	372971	20.122
111) Bromoform	(3)	11.537	173	81397	19.047
112) Isopropylbenzene	(3)	11.684	105	581698	20.064
109) Xylene (Total)	(3)		106	696881	59.491
115)$4-Bromofluorobenzene	(3)	11.830	95	380990	49.688
116) Bromobenzene	(4)	11.946	156	143008	19.898
117) 1,1,2,2-Tetrachloroethane	(4)	11.952	83	195032M	20.841
119) trans-1,4-Dichloro-2-butene	(4)	11.982	53	363902	113.226
118) 1,2,3-Trichloropropane	(4)	11.995	110	59053	21.217
120) n-Propylbenzene	(4)	12.025	91	708281	20.687
121) 2-Chlorotoluene	(4)	12.098	126	136679	19.787
123) 1,3,5-Trimethylbenzene	(4)	12.171	105	482374	20.074
122) 4-Chlorotoluene	(4)	12.202	126	140708	19.578
125) tert-Butylbenzene	(4)	12.427	134	97423M	19.518
126) Pentachloroethane	(4)	12.452	167	85653	20.103
127) 1,2,4-Trimethylbenzene	(4)	12.470	105	489874	19.848
128) sec-Butylbenzene	(4)	12.598	105	605735	20.196
130) 1,3-Dichlorobenzene	(4)	12.690	146	266633	19.611
131) p-Isopropyltoluene	(4)	12.708	119	526024	20.194
132)*1,4-Dichlorobenzene-d4	(4)	12.750	152	418073	50.000
134) 1,4-Dichlorobenzene	(4)	12.769	146	276349	19.787
135) 1,2,3-Trimethylbenzene	(4)	12.787	105	524303	20.394
136) Benzyl Chloride	(4)	12.854	91	352014	19.378
137) 1,3-Diethylbenzene	(4)	12.921	119	318655	19.845
138) 1,4-Diethylbenzene	(4)	12.994	119	334838	19.537
140) n-Butylbenzene	(4)	13.013	92	263043	19.569
139) 1,2-Dichlorobenzene	(4)	13.037	146	258807	19.849
141) 1,2-Diethylbenzene	(4)	13.068	119	269907	20.077
142) Diethylbenzene (total)	(4)		100	923400	59.459
143) 1,2-Dibromo-3-chloropropane	(4)	13.604	75	49951	20.763
145) 1,3,5-Trichlorobenzene	(4)	13.726	180	186715	19.569
147) 1,2,4-Trichlorobenzene	(4)	14.165	180	166776	19.435
148) Hexachlorobutadiene	(4)	14.250	225	71320	17.643

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

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

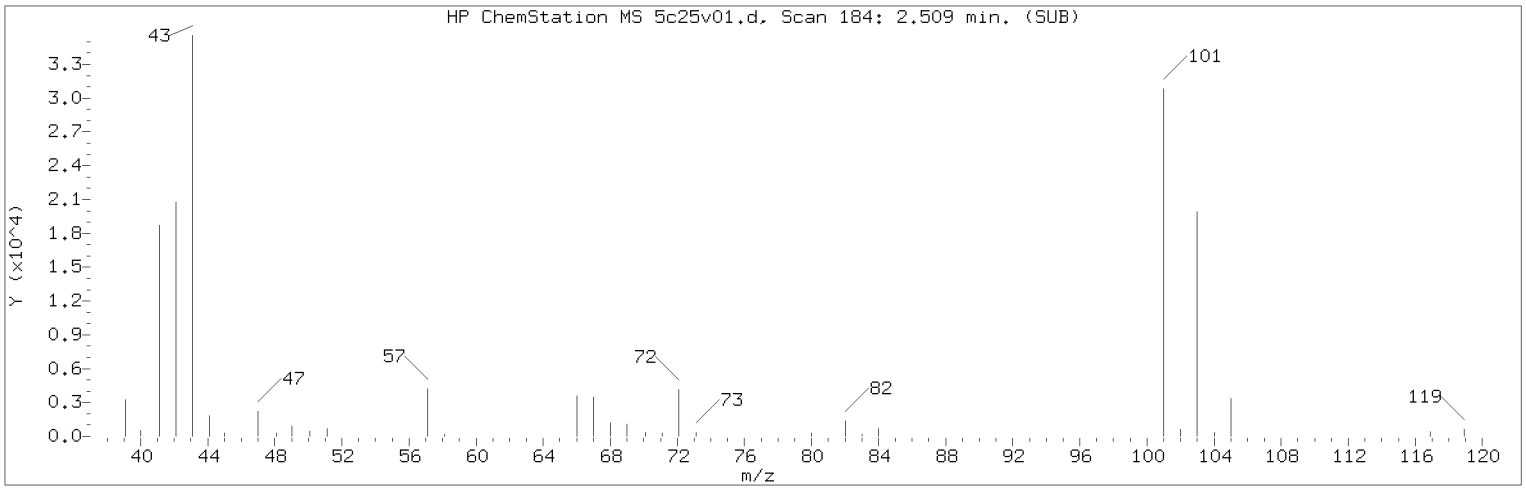
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

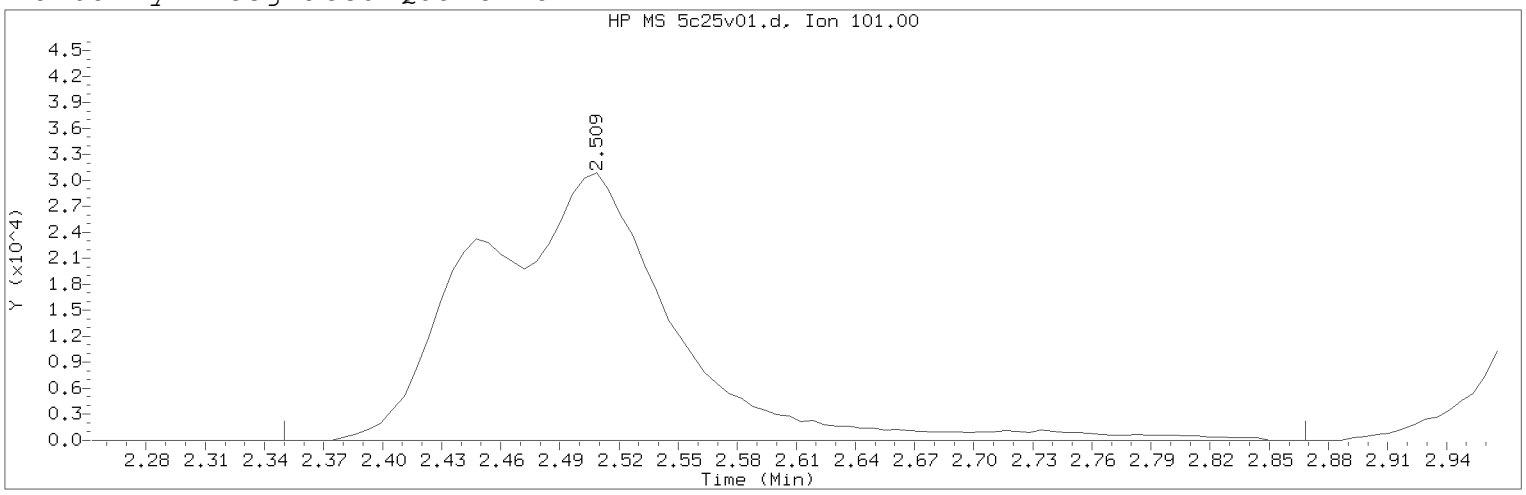
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
149) Naphthalene	(4)	14.348	128	607774	19.966
150) 1,2,3-Trichlorobenzene	(4)	14.494	180	161785	19.351
151) 2-Methylnaphthalene	(4)	15.110	142	351592	19.520

Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

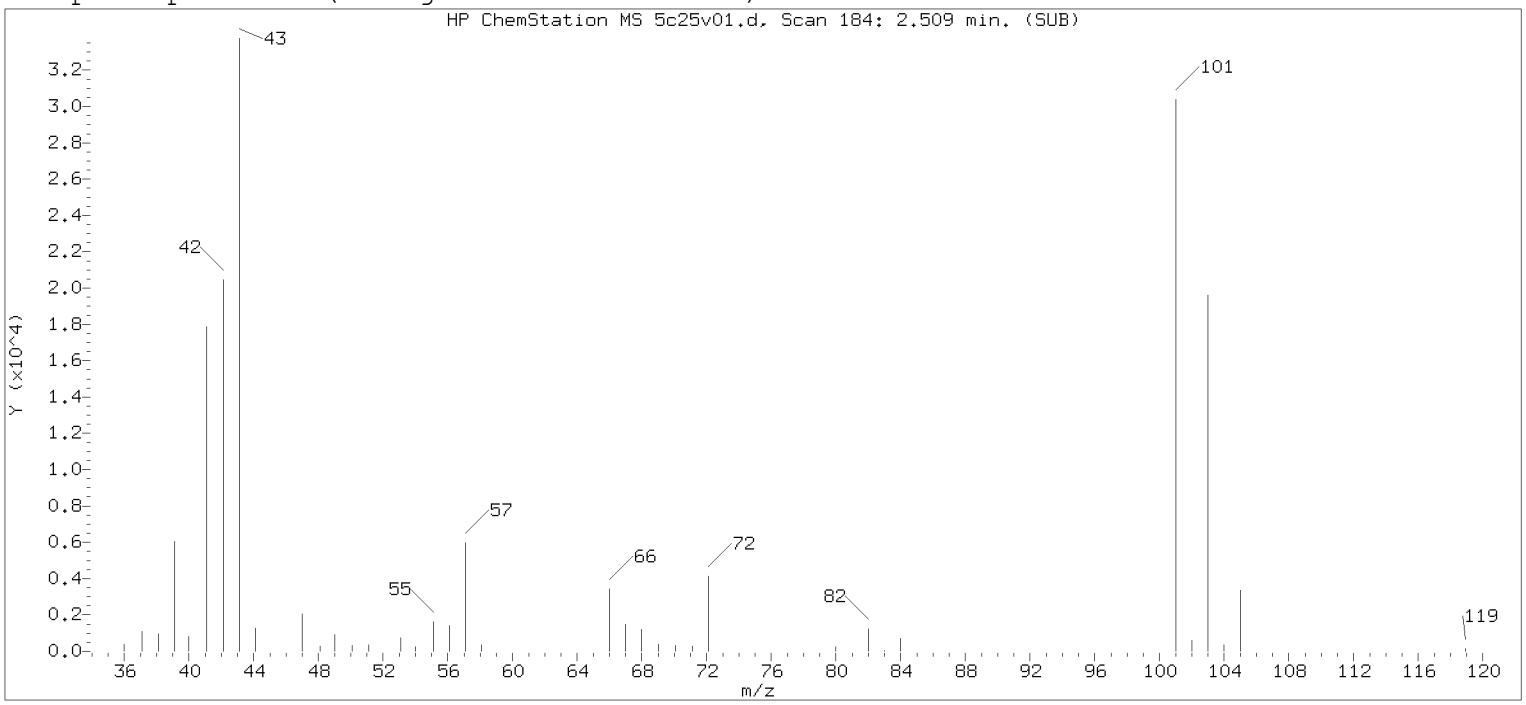
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 184
Retention Time (minutes): 2.509
Quant Ion : 101.00
Area (flag) : 213269M
On-Column Amount (ng) : 19.0384
Integration start scan : 157 Integration stop scan: 242
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

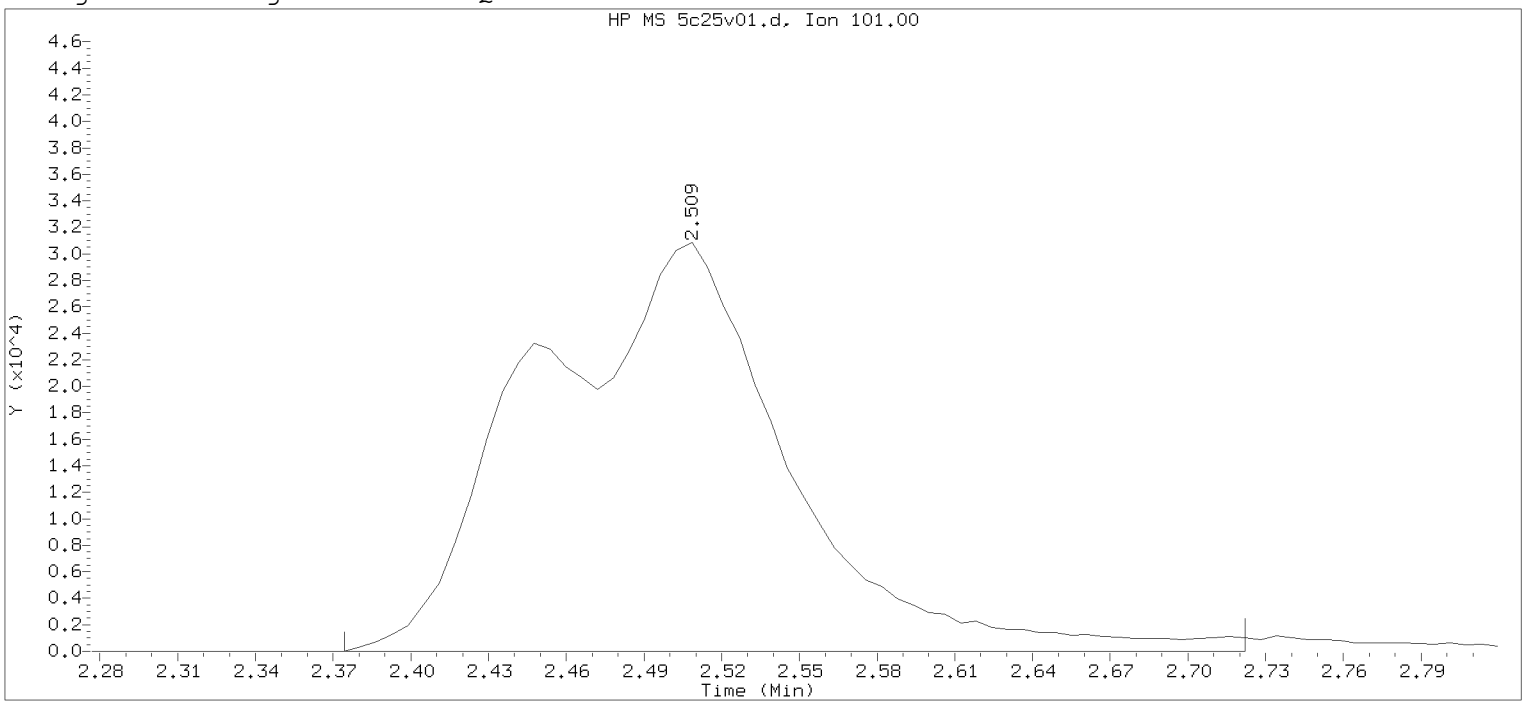
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:51.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

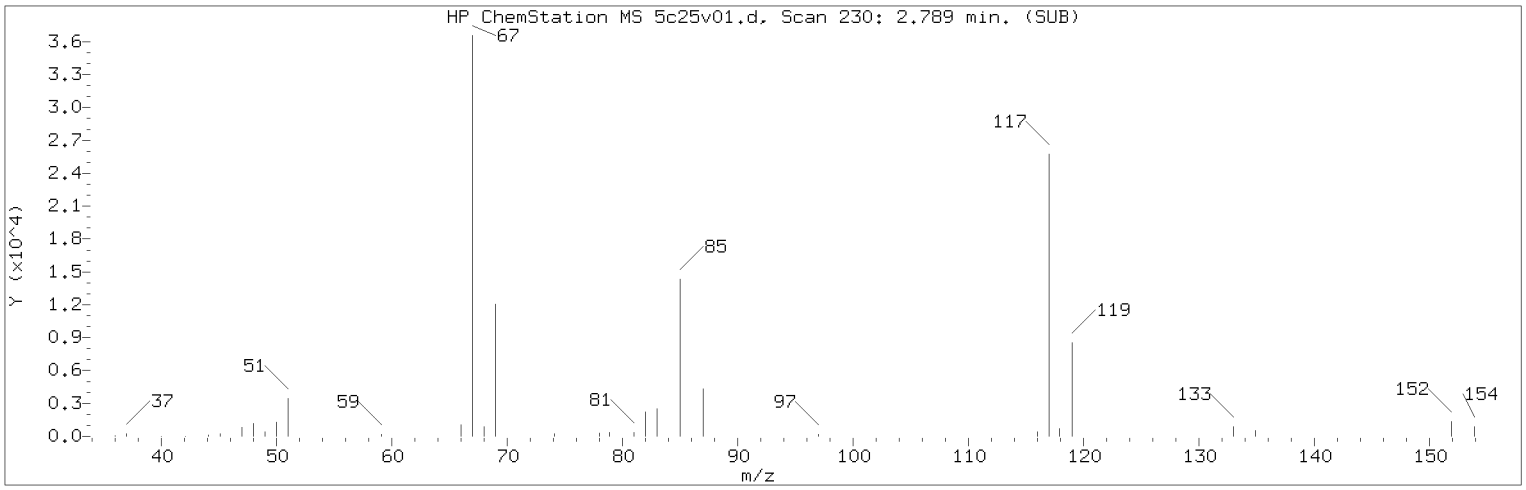
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 11:18
Date, time and analyst ID of latest file update: 26-Oct-2018 11:19 jkh09052

Sample Name: LG5ICV Lab Sample ID: LG5ICV

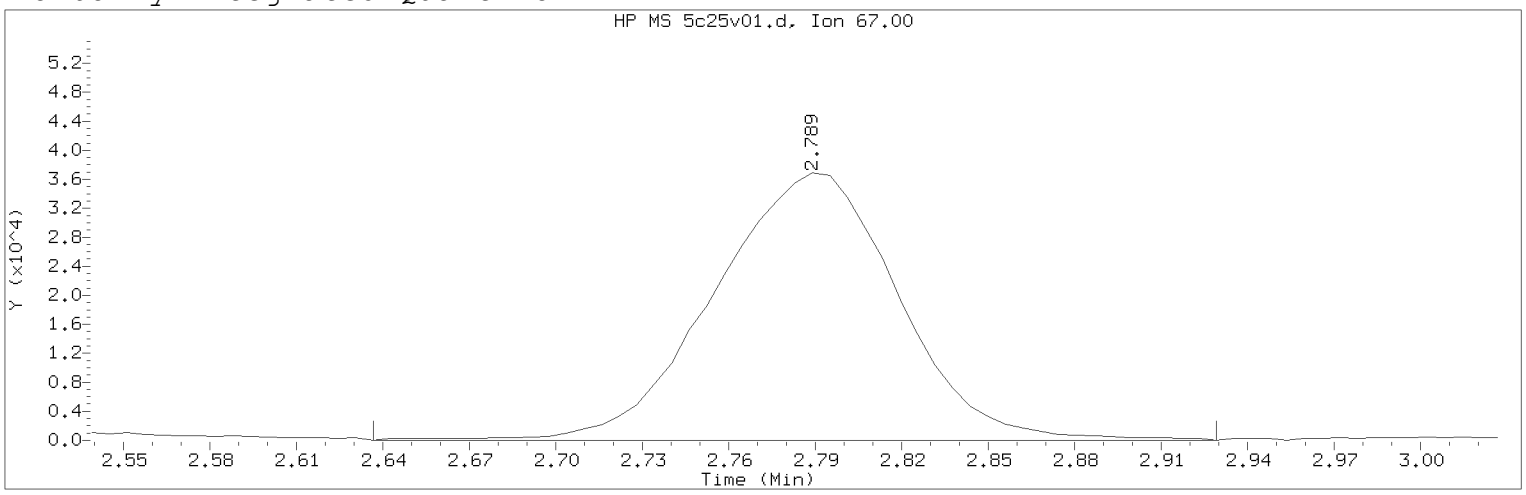
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 184
Retention Time (minutes): 2.509
Quant Ion : 101.00
Area : 208500
On-column Amount (ng) : 18.6128
Integration start scan : 161 Integration stop scan: 218
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:52.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

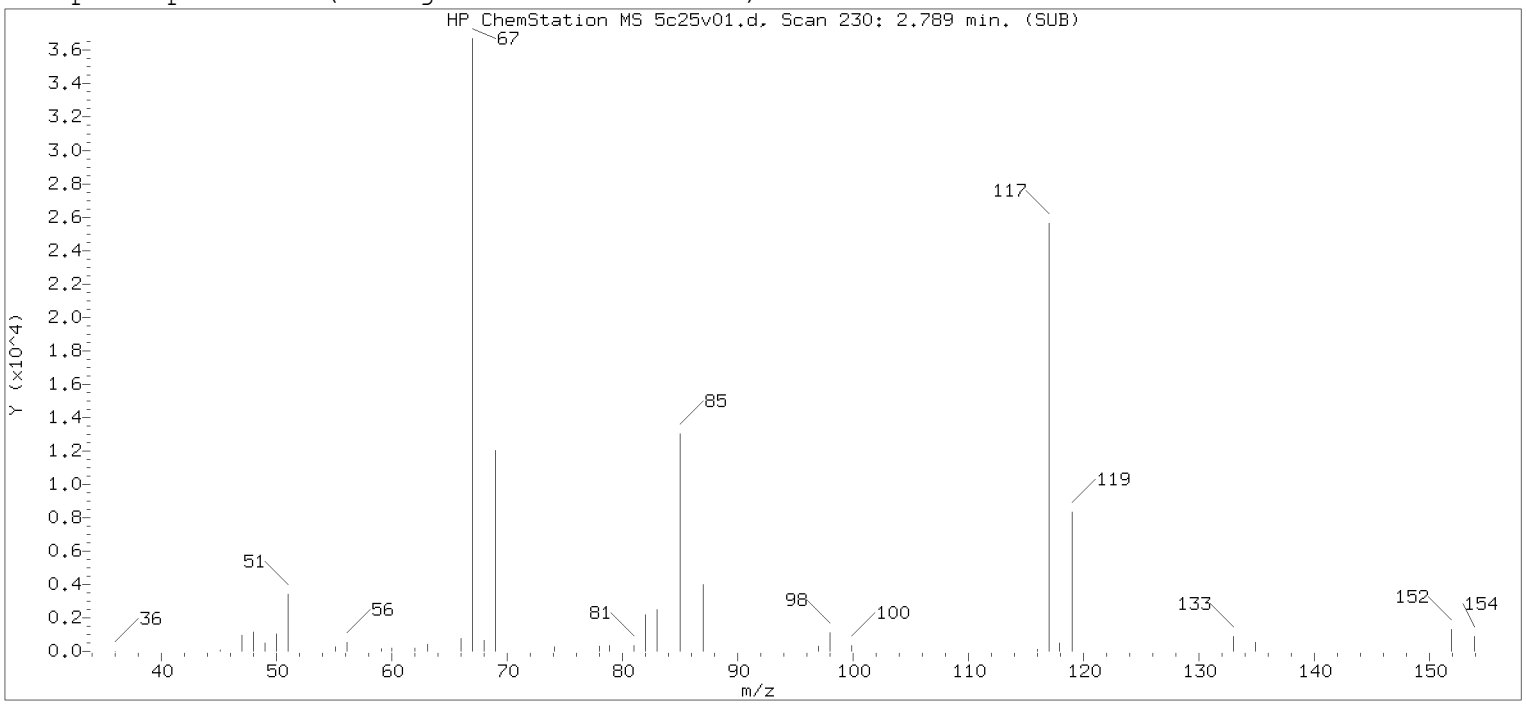
Compound Number : 15
Compound Name : Freon 123a
Scan Number : 230
Retention Time (minutes): 2.789
Quant Ion : 67.00
Area (flag) : 163658M
On-Column Amount (ng) : 21.4458
Integration start scan : 204 Integration stop scan: 252
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

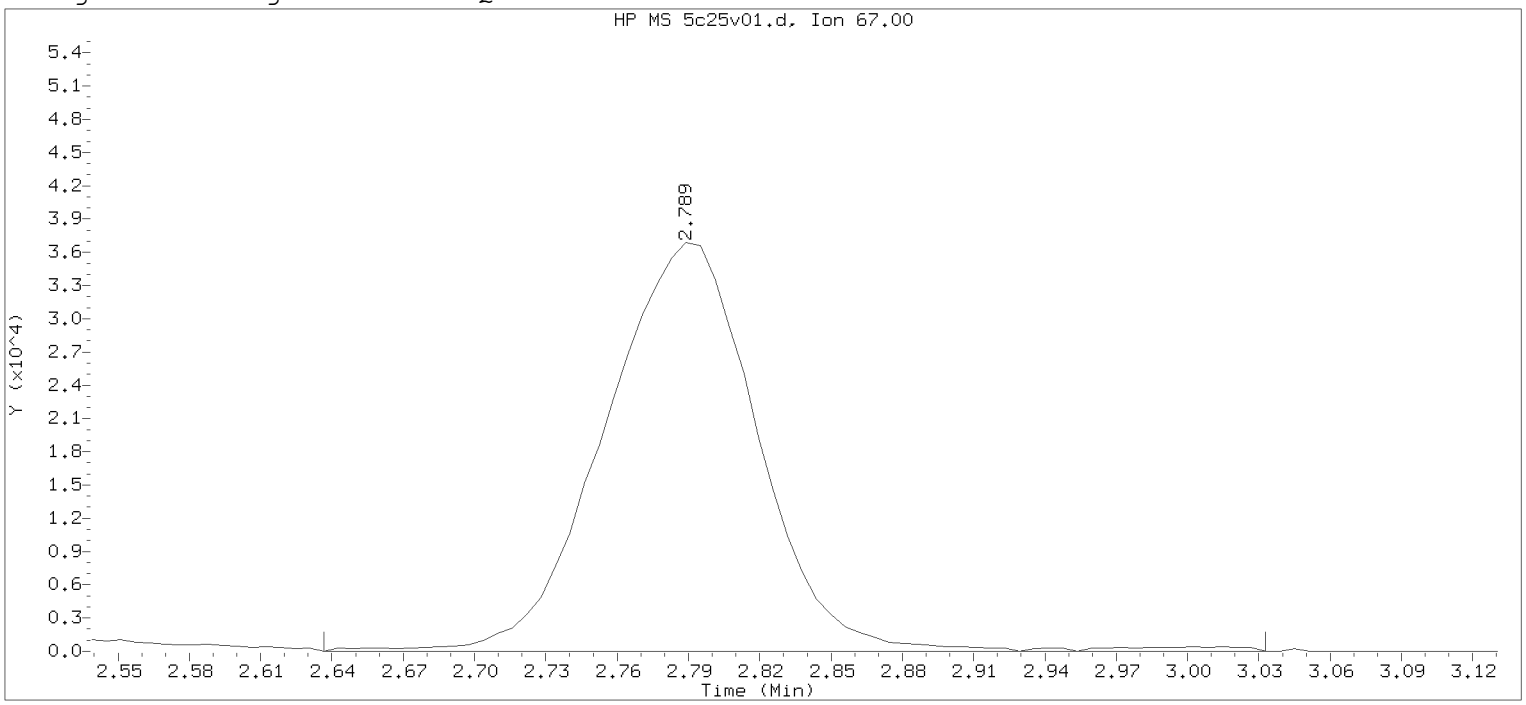
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:51.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

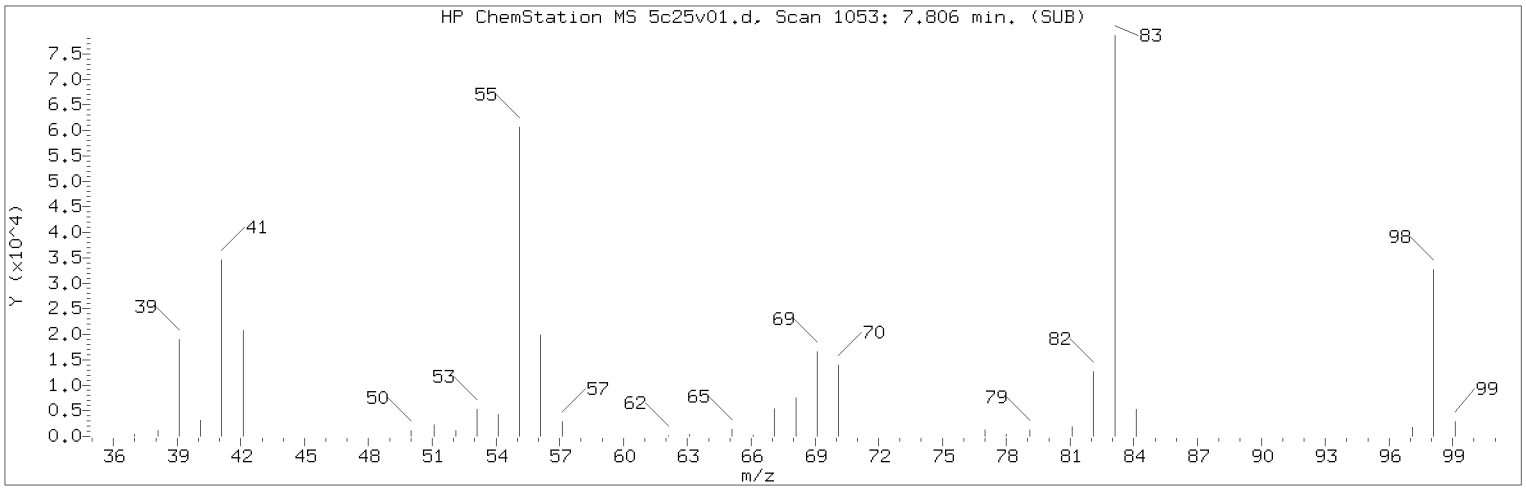
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 11:18
Date, time and analyst ID of latest file update: 26-Oct-2018 11:19 jkh09052

Sample Name: LG5ICV Lab Sample ID: LG5ICV

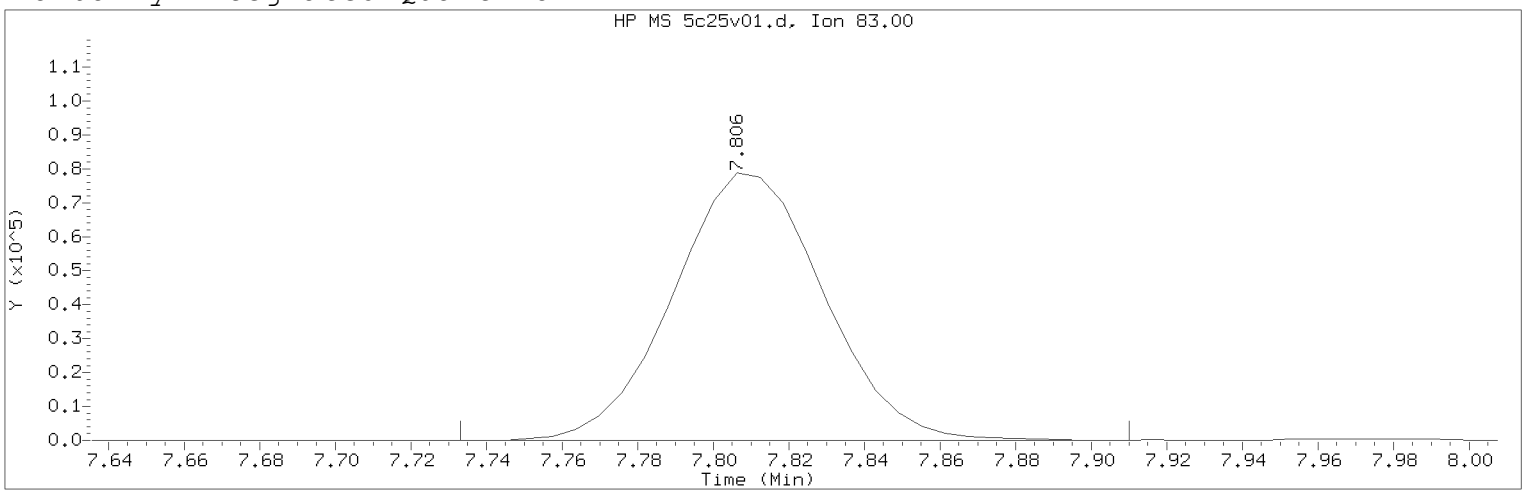
Compound Number : 15
Compound Name : Freon 123a
Scan Number : 230
Retention Time (minutes): 2.789
Quant Ion : 67.00
Area : 165470
On-column Amount (ng) : 21.6833
Integration start scan : 204 Integration stop scan: 269
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:52.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

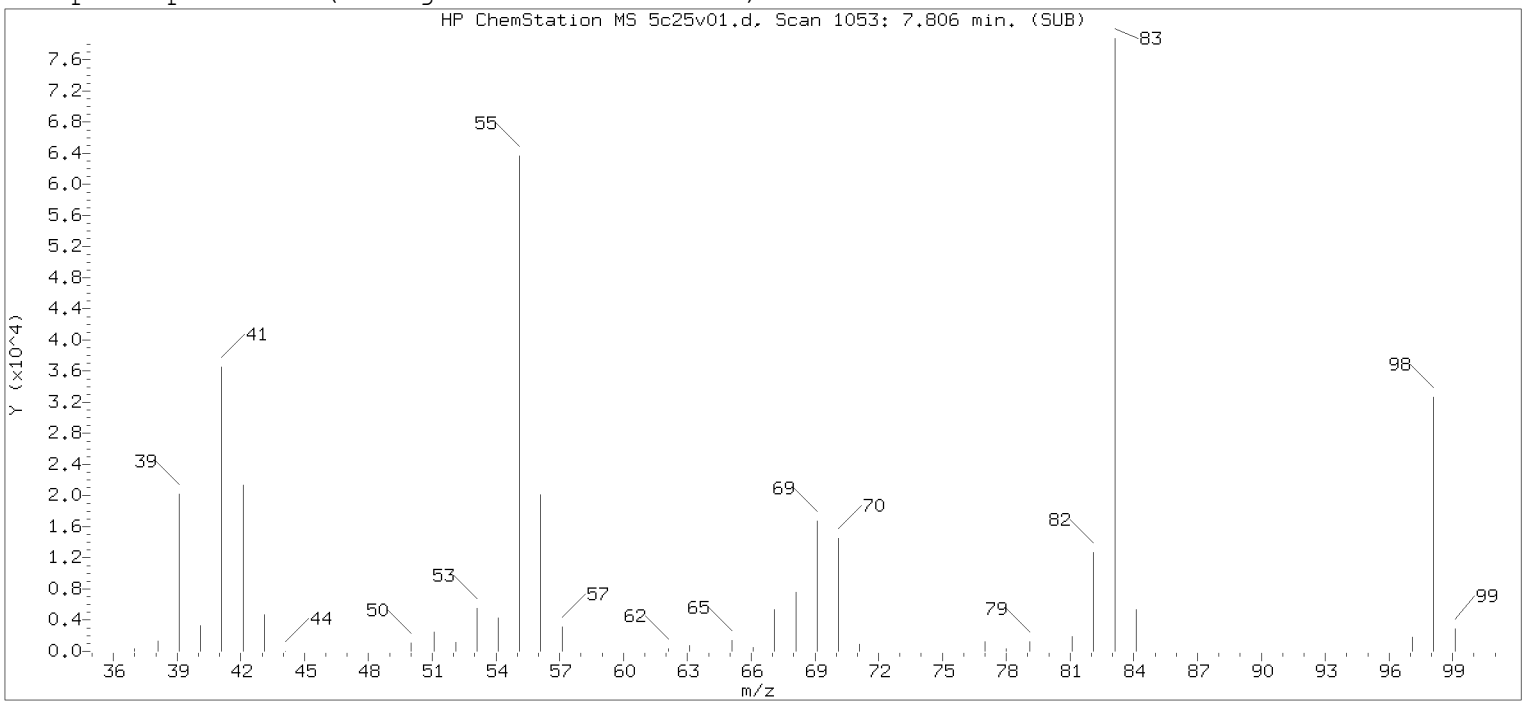
Compound Number : 73
Compound Name : Methylcyclohexane
Scan Number : 1053
Retention Time (minutes): 7.806
Quant Ion : 83.00
Area (flag) : 217817M
On-Column Amount (ng) : 19.2314
Integration start scan : 1040 Integration stop scan: 1069
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

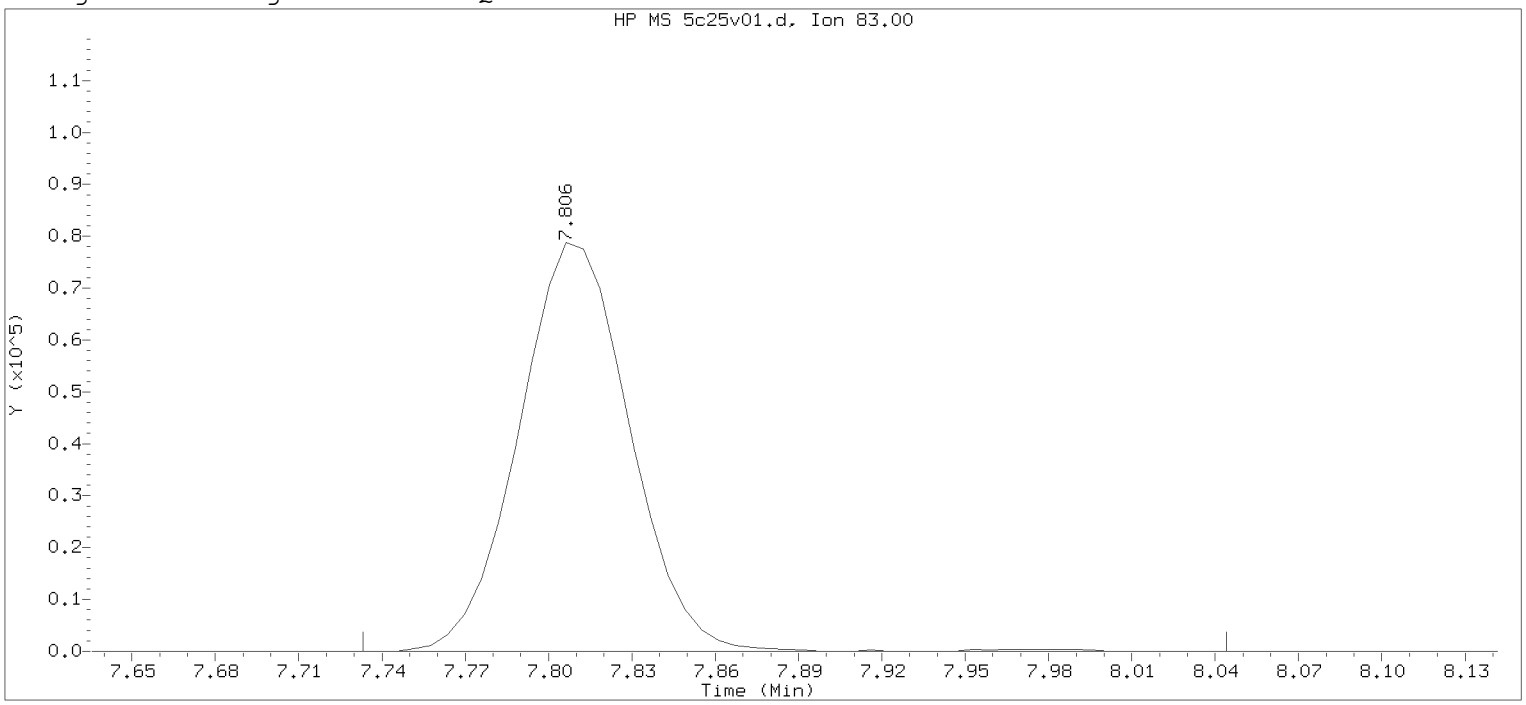
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:51.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

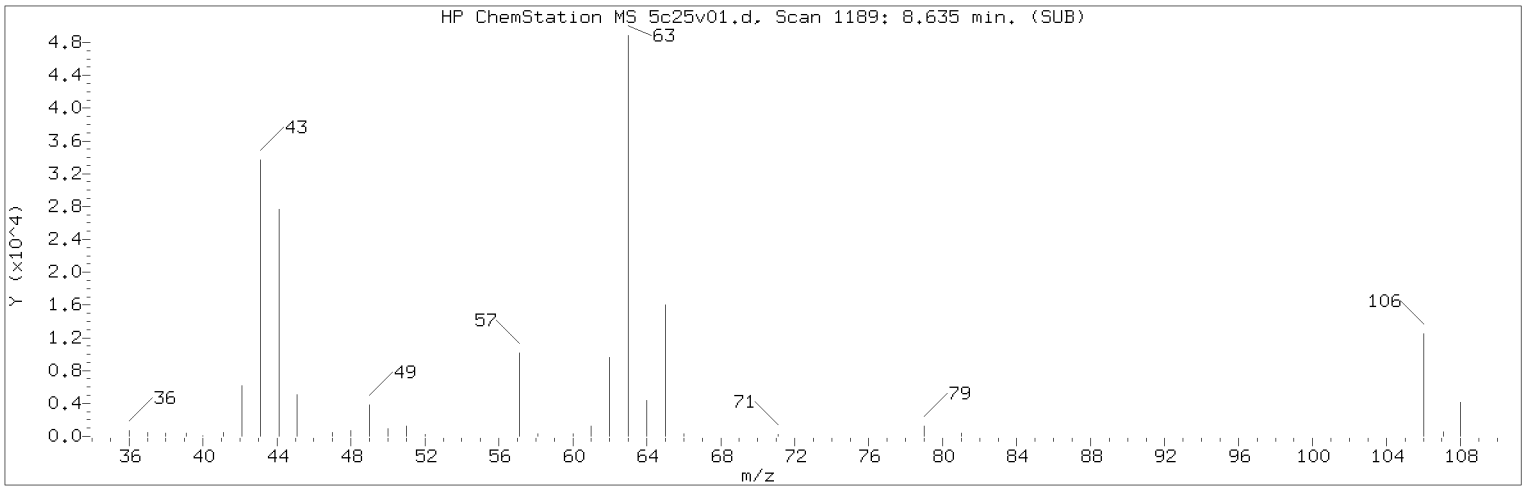
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 11:18
Date, time and analyst ID of latest file update: 26-Oct-2018 11:19 jkh09052

Sample Name: LG5ICV Lab Sample ID: LG5ICV

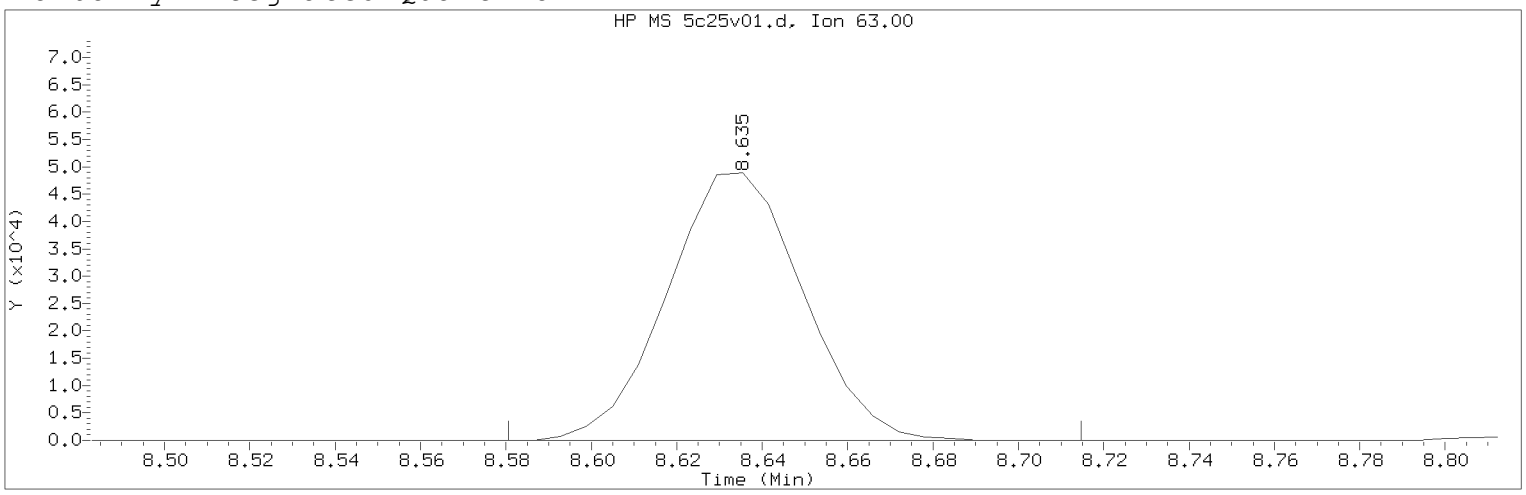
Compound Number : 73
Compound Name : Methylcyclohexane
Scan Number : 1053
Retention Time (minutes): 7.806
Quant Ion : 83.00
Area : 218933
On-column Amount (ng) : 19.3299
Integration start scan : 1040 Integration stop scan: 1091
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kasposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

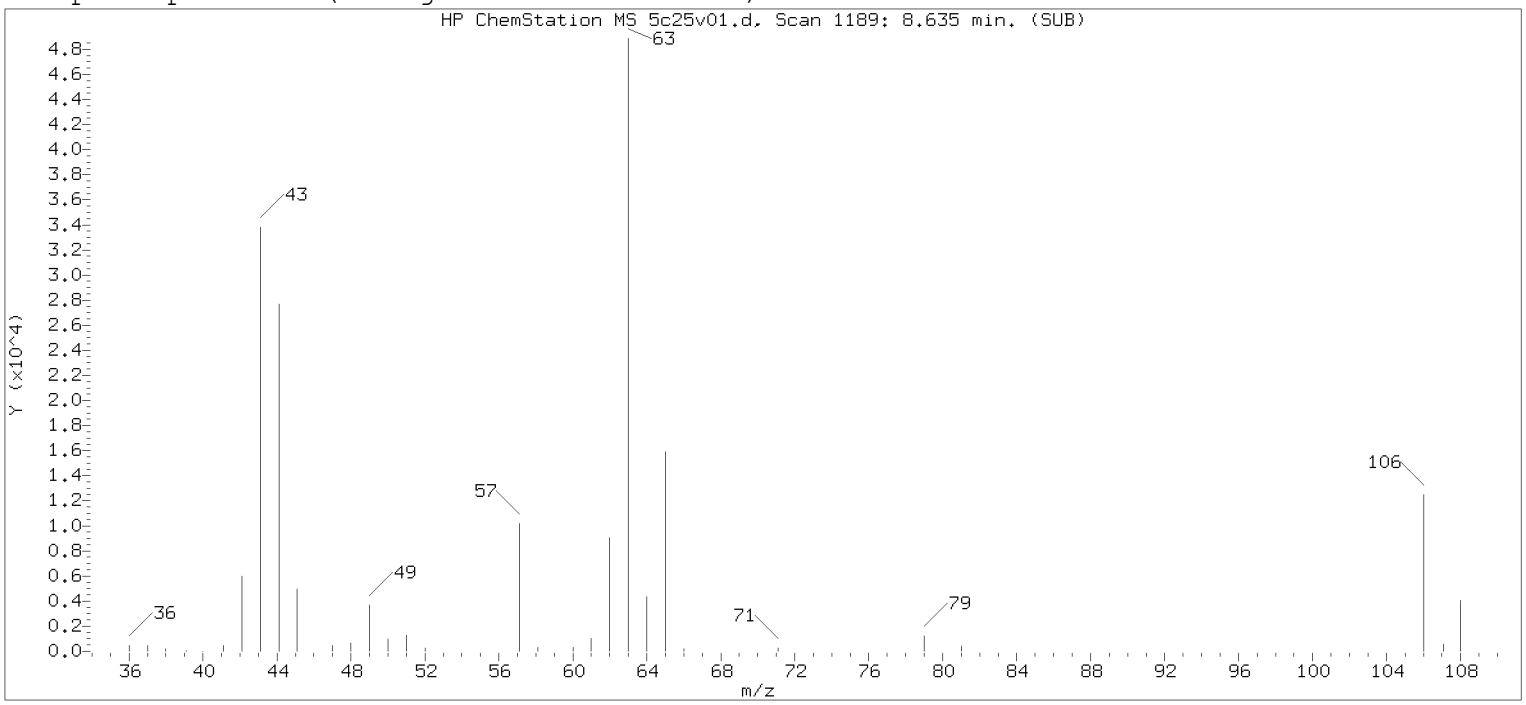
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1189
Retention Time (minutes): 8.635
Quant Ion : 63.00
Area (flag) : 107866M
On-Column Amount (ng) : 20.5384
Integration start scan : 1179 Integration stop scan: 1201
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

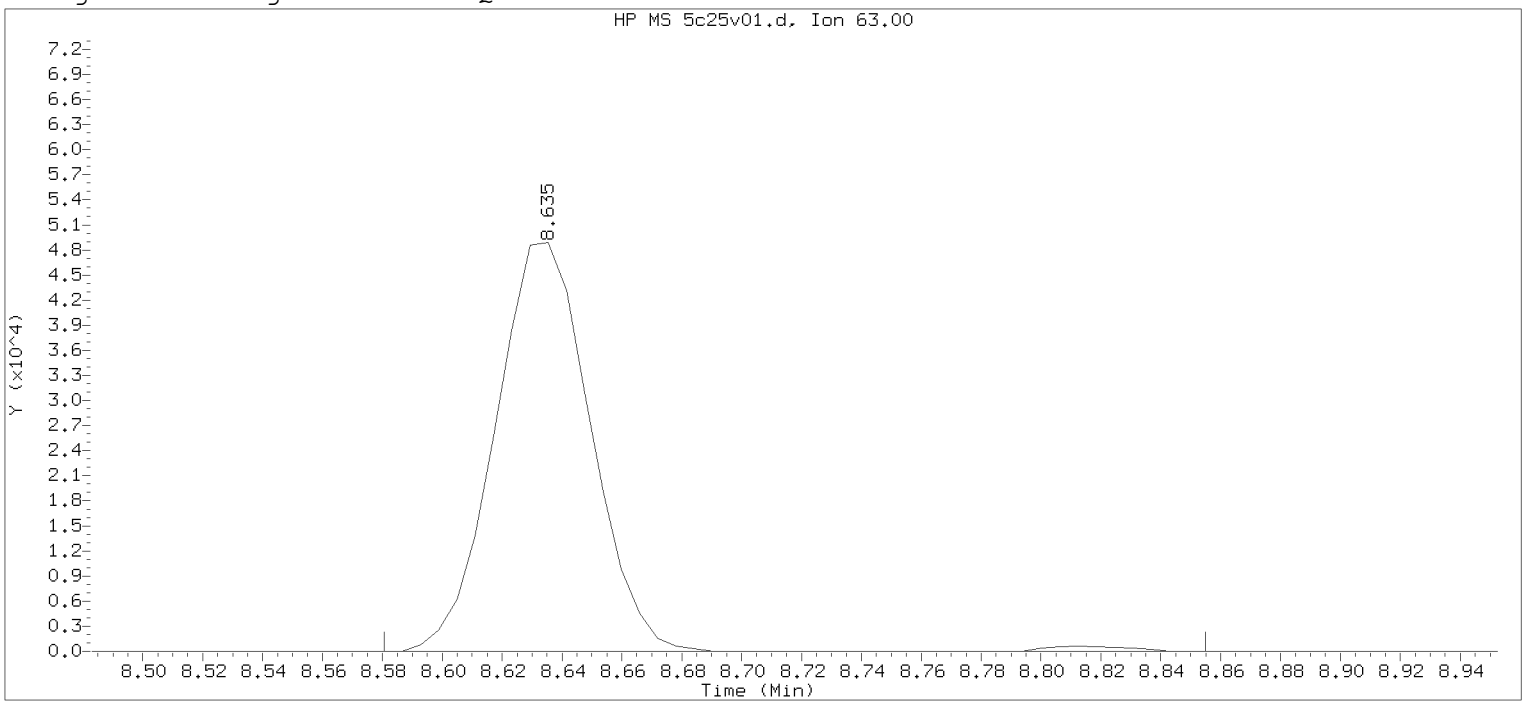
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:51.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

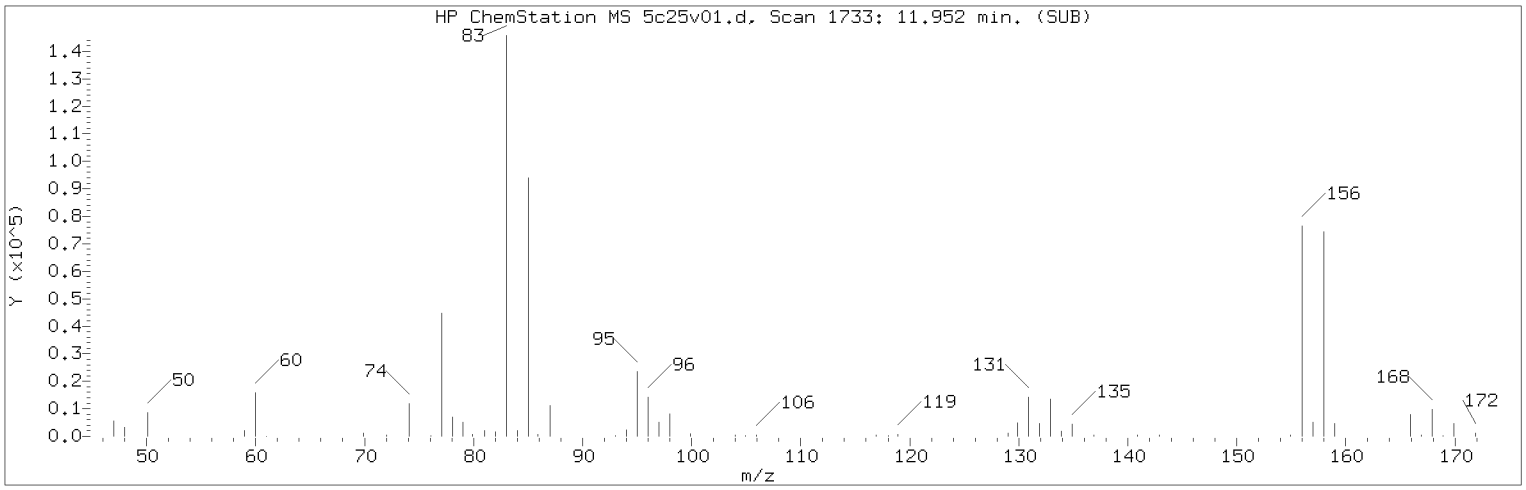
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 11:18
Date, time and analyst ID of latest file update: 26-Oct-2018 11:19 jkh09052

Sample Name: LG5ICV Lab Sample ID: LG5ICV

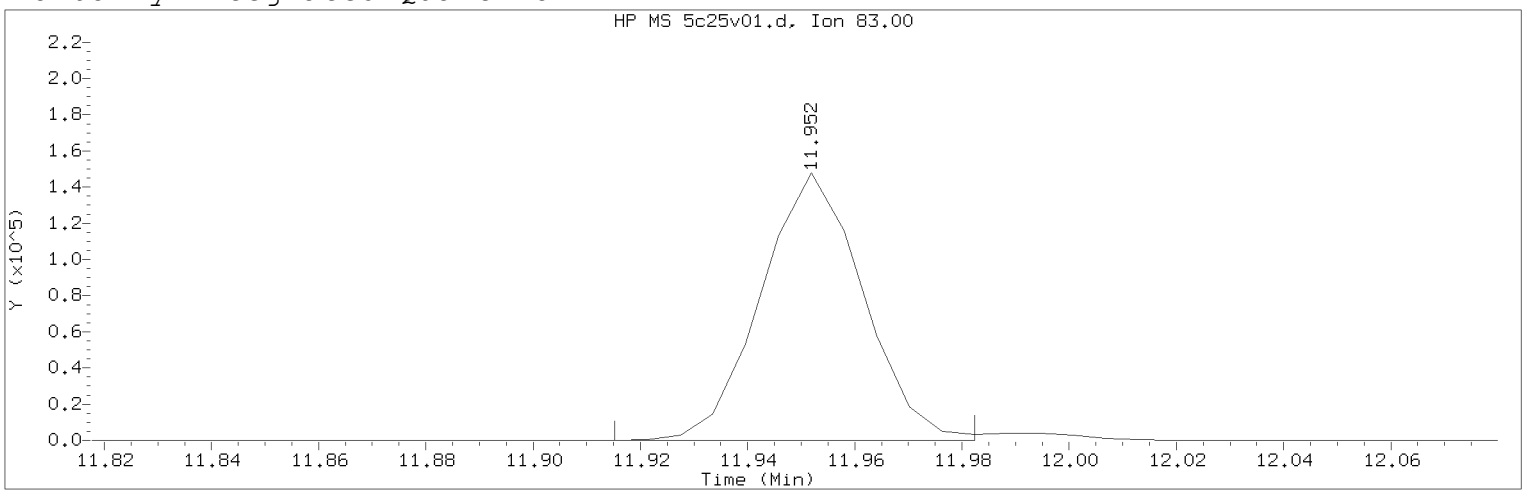
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1189
Retention Time (minutes): 8.635
Quant Ion : 63.00
Area : 109031
On-column Amount (ng) : 20.7602
Integration start scan : 1179 Integration stop scan: 1224
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:52.
Target 3.5 esignature user kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

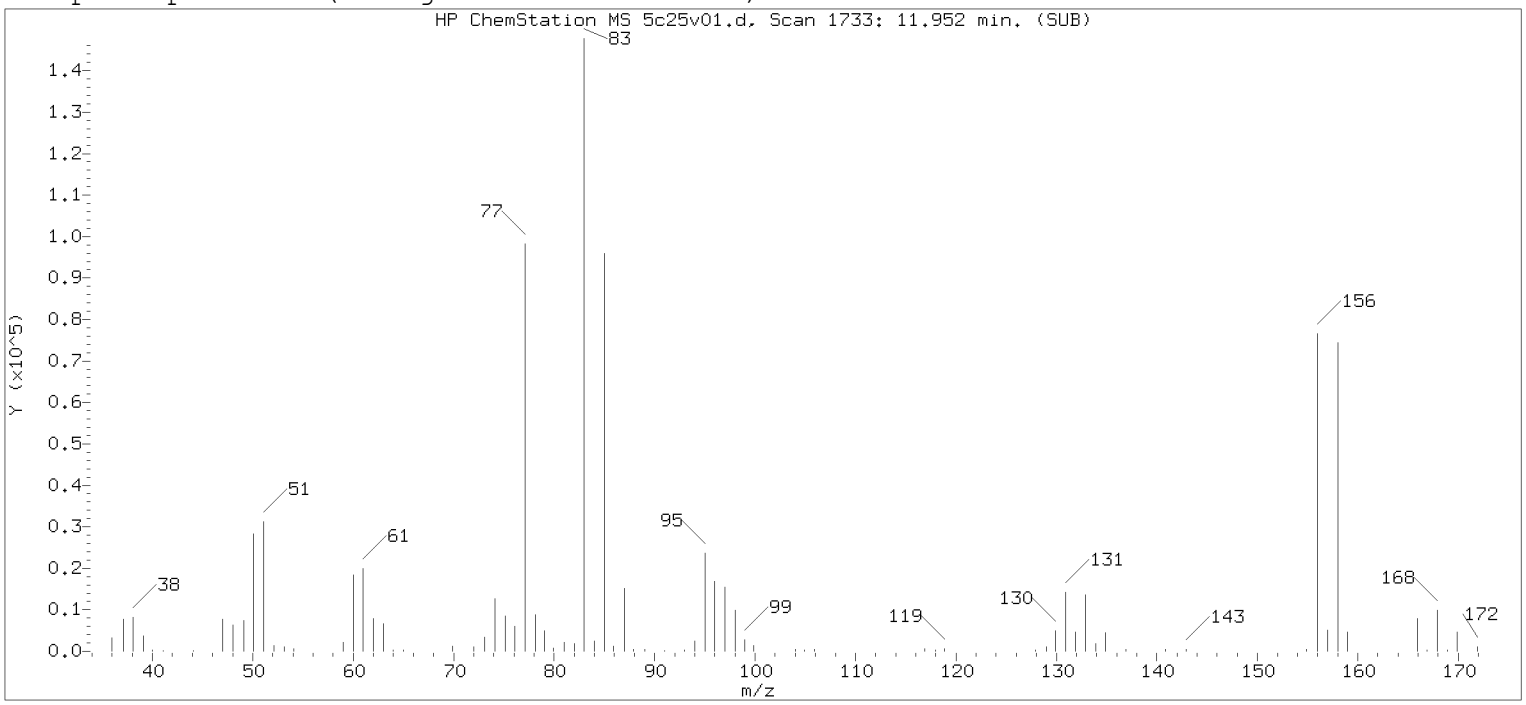
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area (flag) : 195032M
On-Column Amount (ng) : 20.8409
Integration start scan : 1726 Integration stop scan: 1737
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

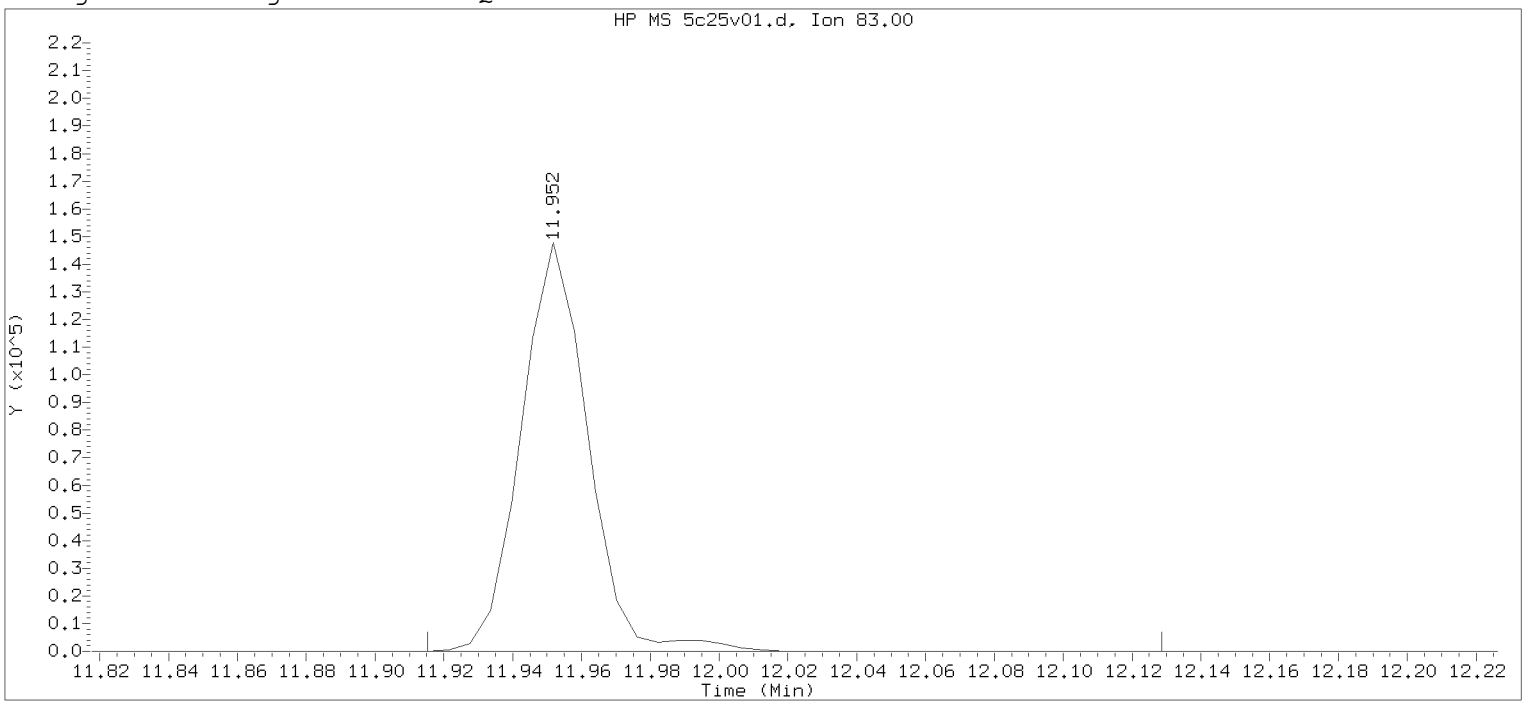
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:51.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

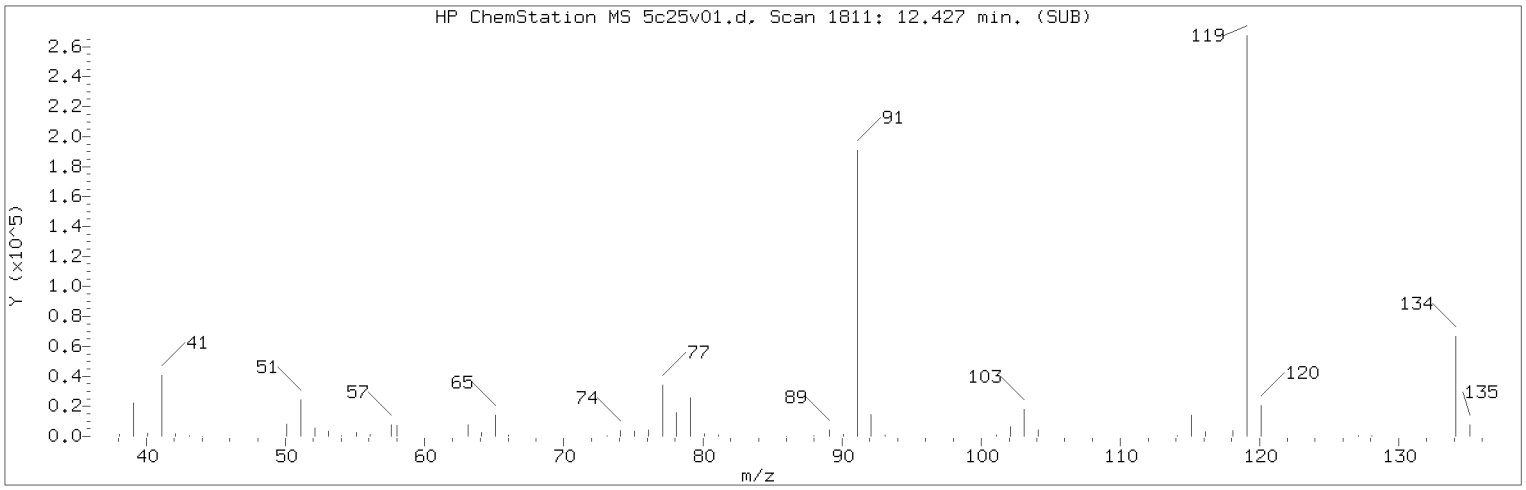
Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 11:18
Date, time and analyst ID of latest file update: 26-Oct-2018 11:19 jkh09052

Sample Name: LG5ICV Lab Sample ID: LG5ICV

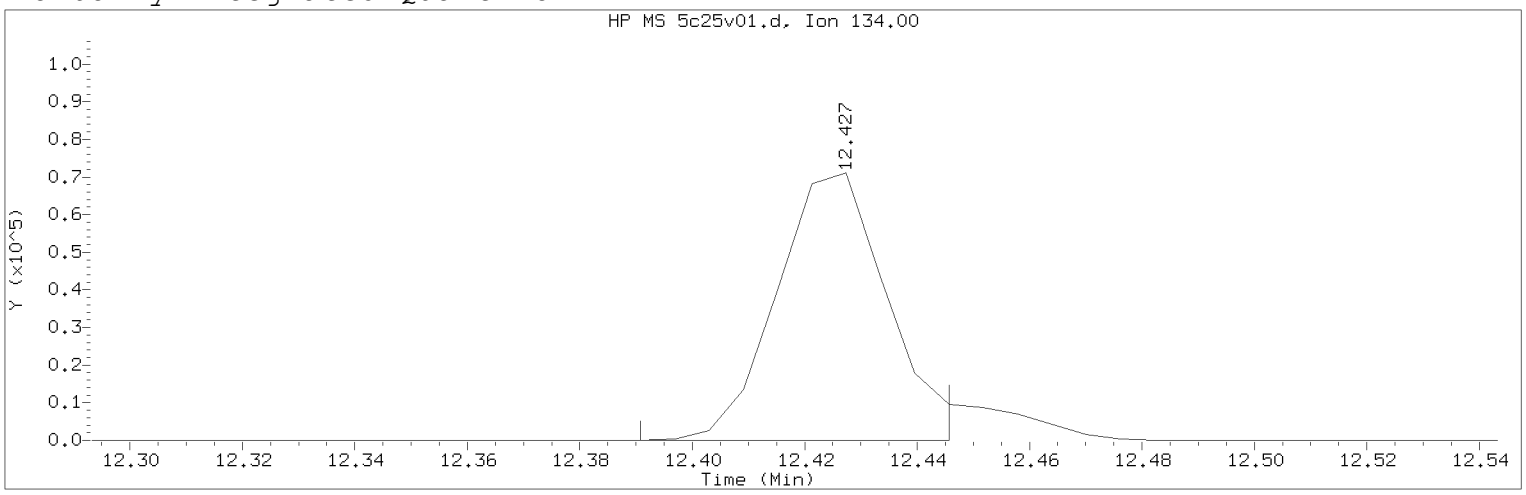
Compound Number : 117
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1733
Retention Time (minutes): 11.952
Quant Ion : 83.00
Area : 199532
On-column Amount (ng) : 21.3217
Integration start scan : 1726 Integration stop scan: 1761
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:52.
Target 3.5 esignature user: kevin.sposito

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 27-OCT-2018 09:50
Date, time and analyst ID of latest file update: 27-Oct-2018 09:50 kas02648

Sample Name: LG5ICV Lab Sample ID: LG5ICV

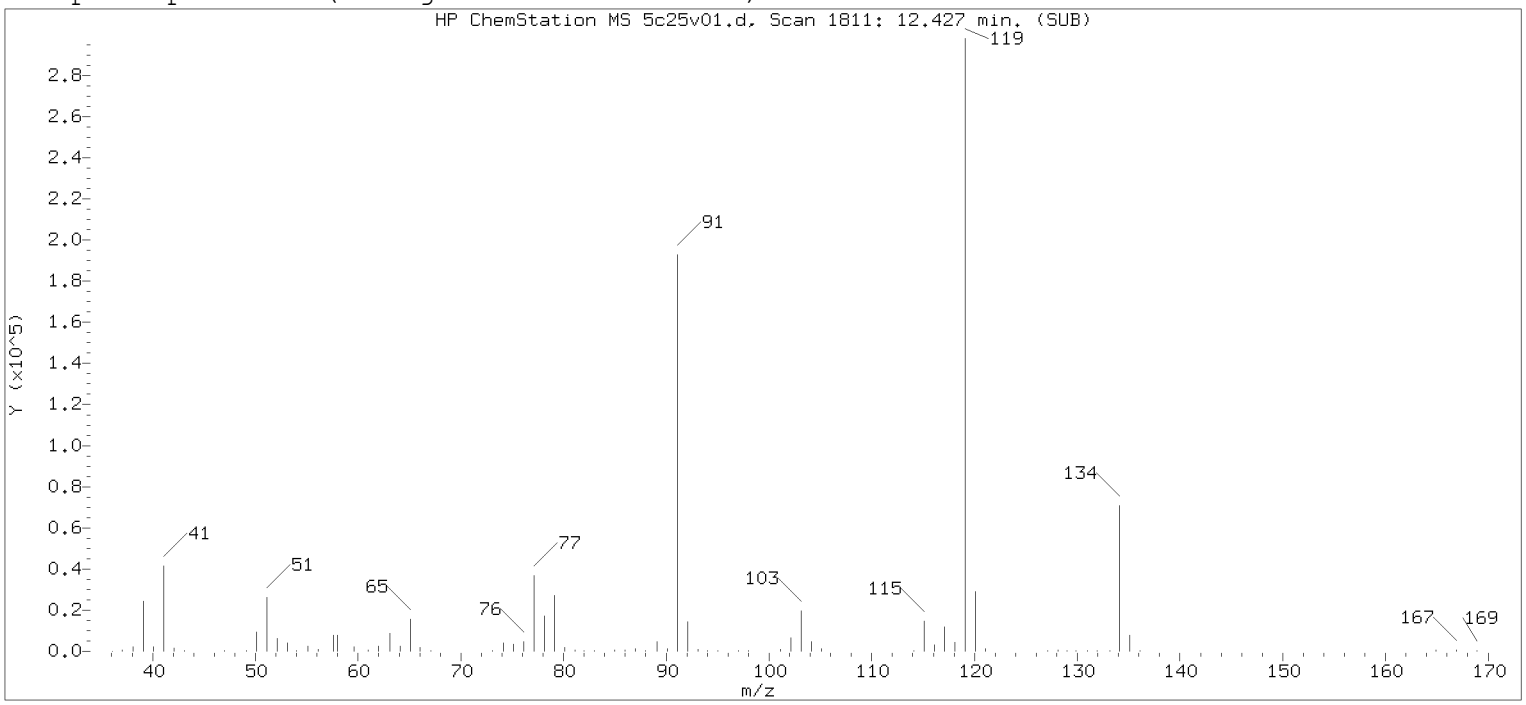
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1811
Retention Time (minutes): 12.427
Quant Ion : 134.00
Area (flag) : 97423M
On-Column Amount (ng) : 19.5182
Integration start scan : 1804 Integration stop scan: 1813
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

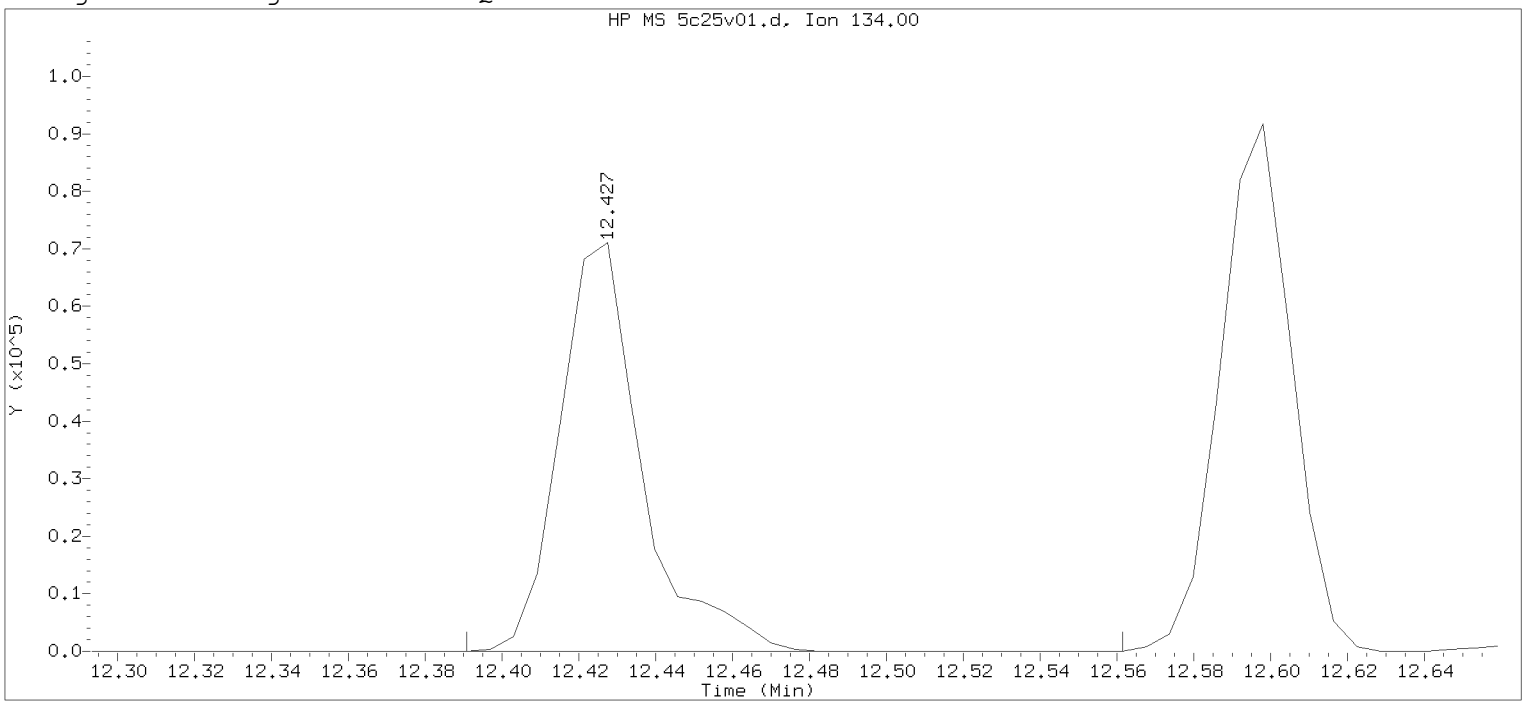
Analyst responsible for change: Digitally signed by Kevin A. Sposito
on 10/27/2018 at 09:52.
Target 3.5 esignature user ID: kas02648

Secondary review performed and digitally signed by Marla S. Brewer on 10/29/2018 at 15:51.
PARALLAX ID: msl01251

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18oct25i.b/5c25v01.d Instrument ID: HP26285.i
Injection date and time: 26-OCT-2018 00:36 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18oct25i.b/m8260c5.m Sublist used: 8260W-H
Calibration date and time: 26-OCT-2018 11:18
Date, time and analyst ID of latest file update: 26-Oct-2018 11:19 jkh09052

Sample Name: LG5ICV Lab Sample ID: LG5ICV

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1811
Retention Time (minutes): 12.427
Quant Ion : 134.00
Area : 105340
On-column Amount (ng) : 21.1043
Integration start scan : 1804 Integration stop scan: 1832
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kevin A. Sposito on 10/27/2018 at 09:52.
Target 3.5 esignature user id: kevin.sposito

Data File: /chem2/HP26285.i/18nov07b.b/5n07t05.d

Date : 07-NOV-2018 19:28

Client ID: BFB Aug07-18

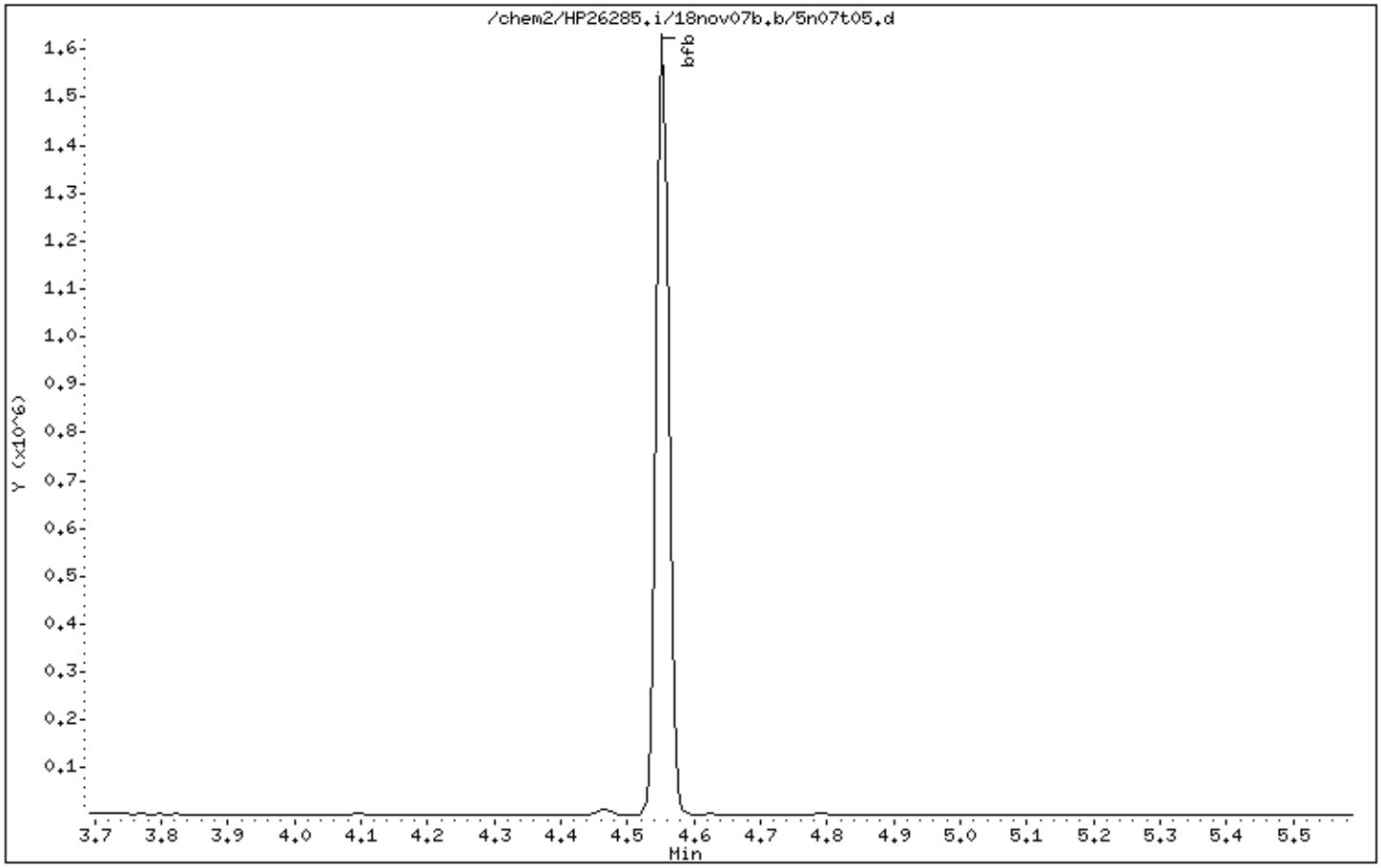
Instrument: HP26285.i

Sample Info: BFB Aug07-18;50NGBFB;1;3;;;;;;

Operator: DVV10203

Column phase: Rxi-624Sil MS

Column diameter: 0.25



Digitally signed by Don V. Viray on 11/07/2018 at 19:35.
Target 3.5 esignature user ID: dvv10203

Data File: /chem2/HP26285.i/18nov07b.b/5n07t05.d

Date : 07-NOV-2018 19:28

Client ID: BFB Aug07-18

Instrument: HP26285.i

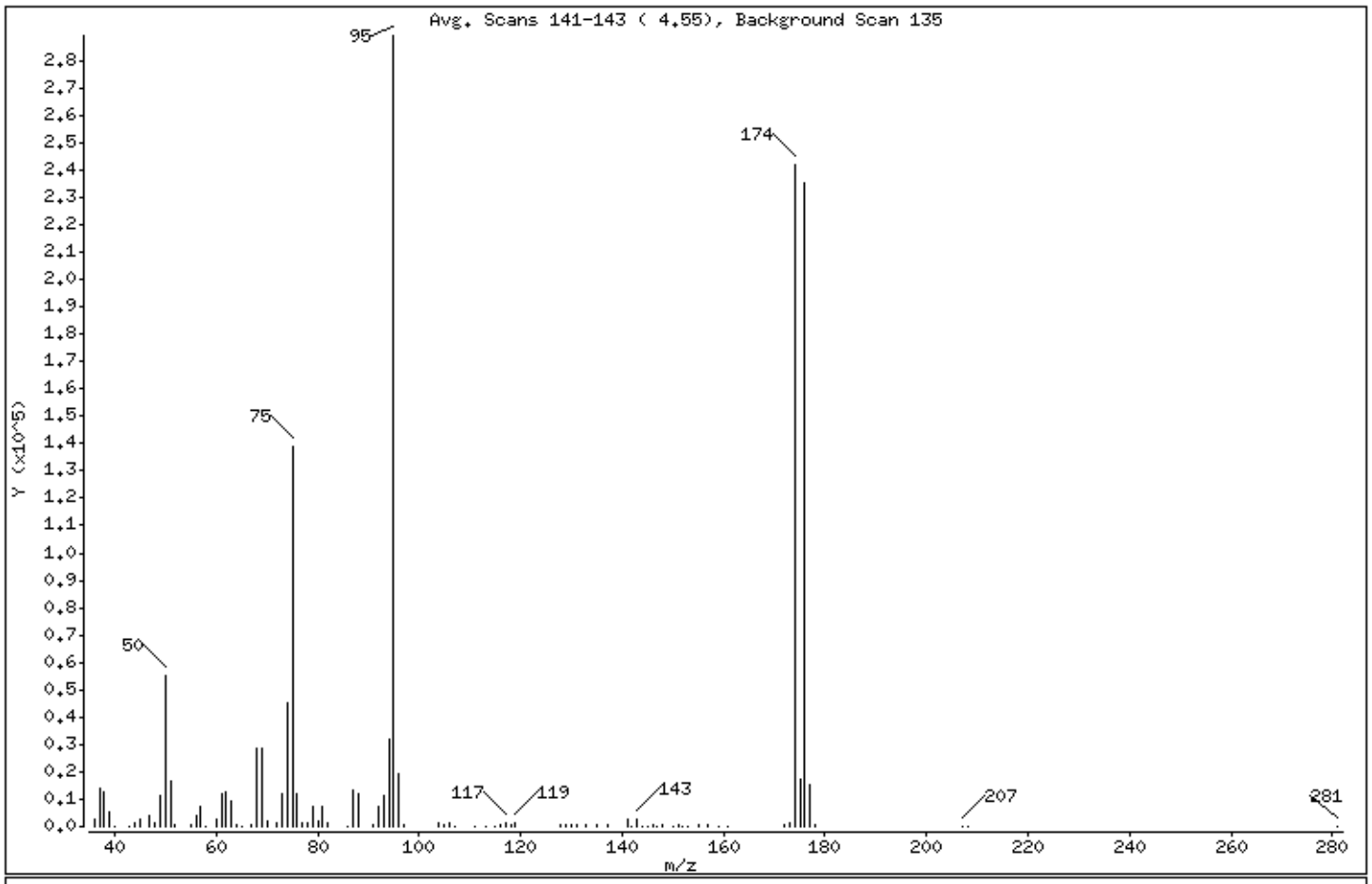
Sample Info: BFB Aug07-18;50NGBFB;1;3;;;;;;

Operator: DVV10203

Column phase: Rxi-624Sil MS

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.12
75	30.00 - 60.00% of mass 95	48.02
96	5.00 - 9.00% of mass 95	6.74
173	Less than 2.00% of mass 174	0.51 (0.61)
174	50.00 - 100.00% of mass 95	83.70
175	5.00 - 9.00% of mass 174	6.00 (7.17)
176	95.00 - 101.00% of mass 174	81.29 (97.12)
177	5.00 - 9.00% of mass 176	5.40 (6.64)

Digitally signed by Don V. Viray on 11/07/2018 at 19:35.
Target 3.5 esignature user ID: dvv10203

Data File: /chem2/HP26285.i/18nov07b.b/5n07t05.d

Date : 07-NOV-2018 19:28

Client ID: BFB Aug07-18

Instrument: HP26285.i

Sample Info: BFB Aug07-18;50NGBFB;1;3;;;;;;

Operator: DVV10203

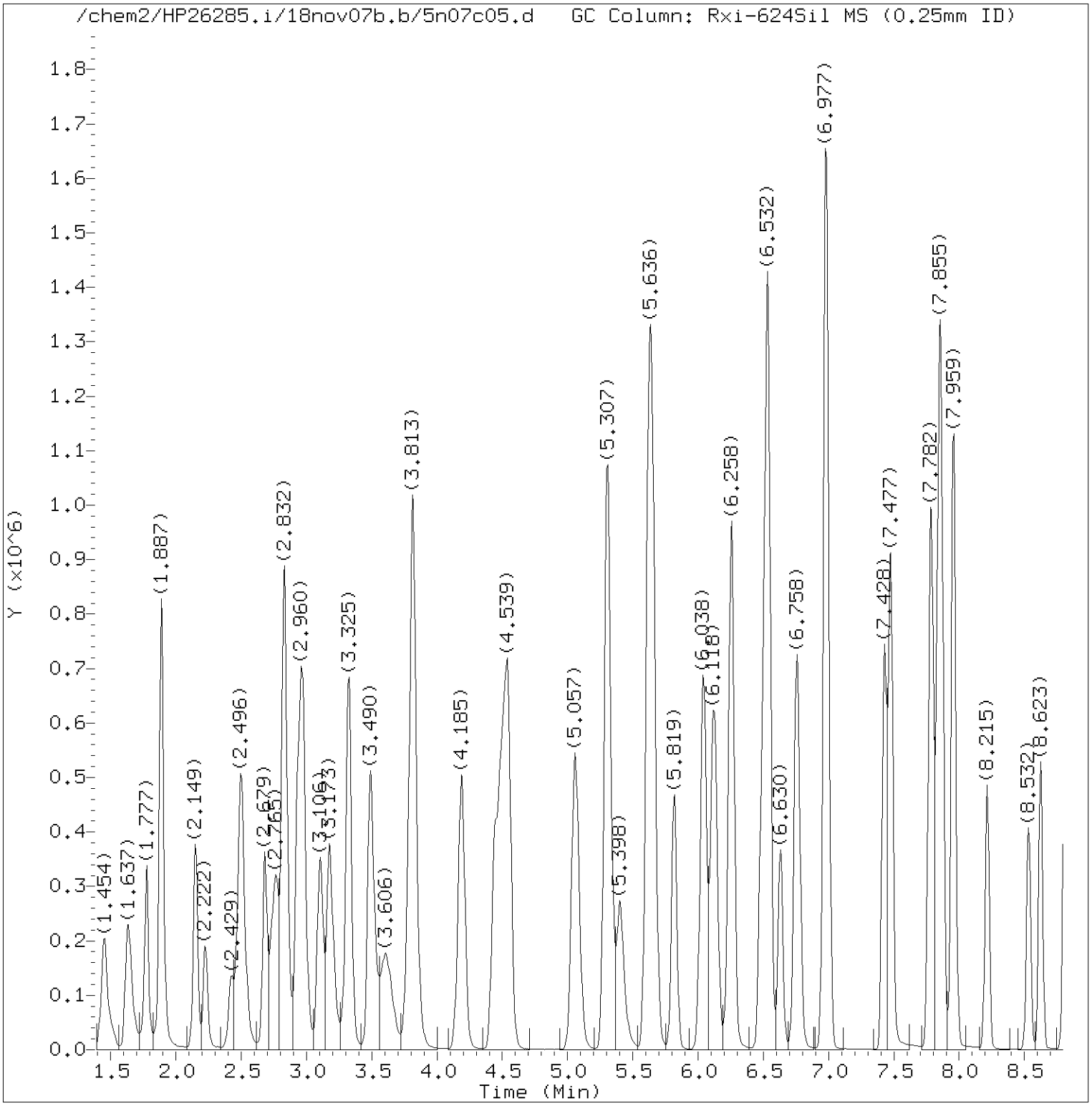
Column phase: Rxi-624Sil MS

Column diameter: 0.25

Data File: 5n07t05.d
Spectrum: Avg. Scans 141-143 (4.55), Background Scan 135
Location of Maximum: 95.00
Number of points: 93

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2432	67.00	659	97.00	609	146.00	384
37.00	14154	68.00	28344	104.00	1095	147.00	90
38.00	12536	69.00	28336	105.00	440	148.00	671
39.00	5034	70.00	2282	106.00	1152	150.00	96
40.00	107	72.00	1367	107.00	206	151.00	352
43.00	85	73.00	11692	111.00	90	152.00	84
44.00	1365	74.00	45376	113.00	85	153.00	99
45.00	2567	75.00	138816	115.00	227	155.00	672
47.00	4032	76.00	12260	116.00	837	157.00	481
48.00	1546	77.00	1661	117.00	1638	159.00	239
49.00	11513	78.00	1169	118.00	946	161.00	202
50.00	55280	79.00	7105	119.00	1397	172.00	362
51.00	16944	80.00	2170	128.00	926	173.00	1487
52.00	713	81.00	7129	129.00	451	174.00	241984
55.00	739	82.00	1592	130.00	908	175.00	17344
56.00	3952	86.00	315	131.00	383	176.00	235008
57.00	7255	87.00	13140	133.00	774	177.00	15614
58.00	300	88.00	12032	135.00	644	178.00	422
60.00	2351	91.00	858	137.00	429	207.00	67
61.00	12094	92.00	7565	141.00	2539	208.00	28
62.00	12546	93.00	11504	142.00	287	281.00	66
63.00	9356	94.00	31952	143.00	2714		
64.00	878	95.00	289088	144.00	86		
65.00	210	96.00	19496	145.00	184		

Digitally signed by Don V. Viray on 11/07/2018 at 19:35.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

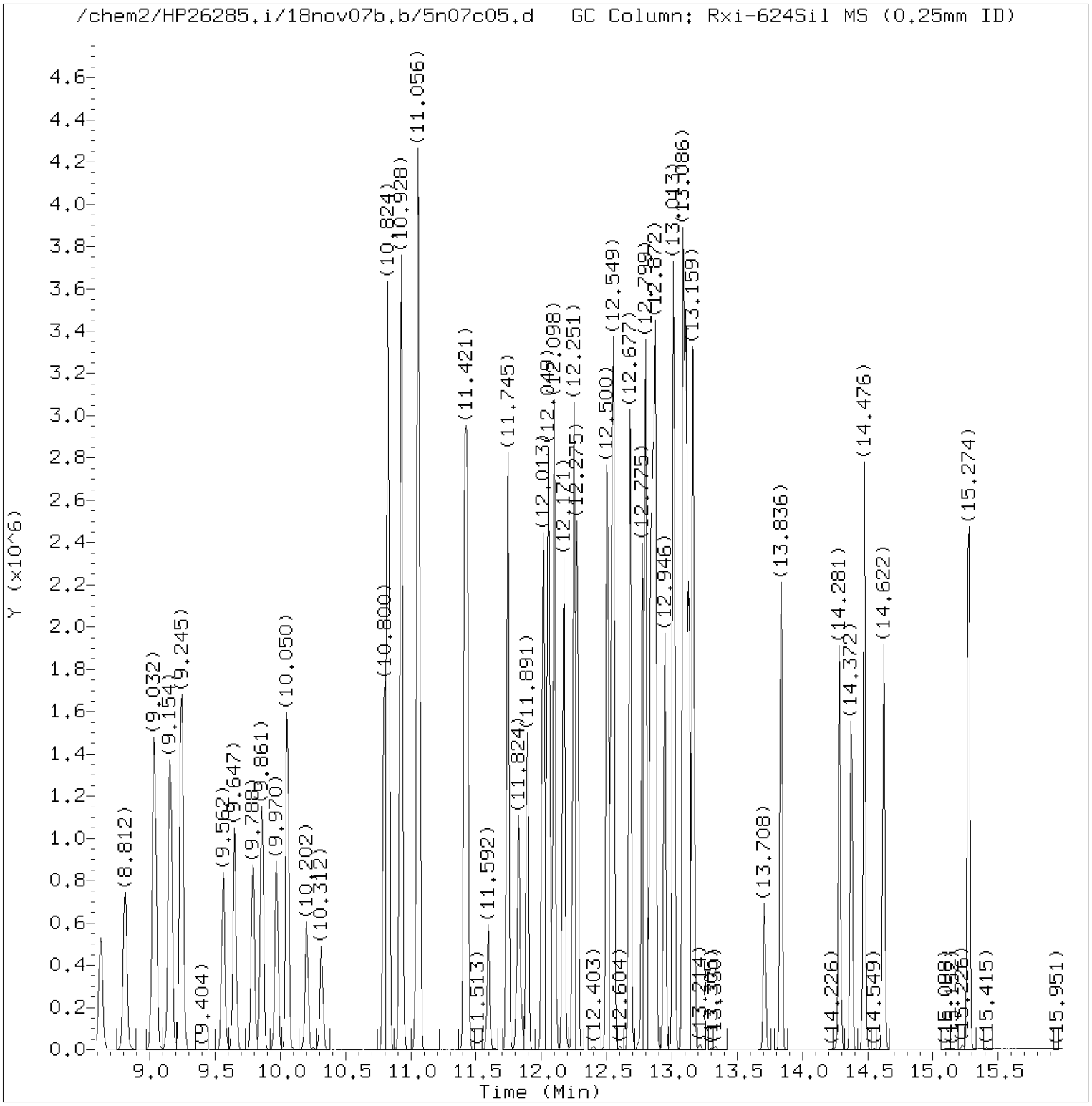
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:39 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Don V. Viray
on 11/07/2018 at 20:39.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:39 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Don V. Viray
on 11/07/2018 at 20:39.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:39 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.637	85	537056	46.098
4) Chloromethane	(2)	1.777	50	454597	48.187
5) 1,3-Butadiene	(2)	1.887	39	342092	54.005
6) Vinyl Chloride	(2)	1.887	62	434288	49.259
8) Bromomethane	(2)	2.149	94	341999	52.190
9) Chloroethane	(2)	2.228	64	227917	52.007
12) Trichlorofluoromethane	(2)	2.478	101	580932	49.404
11) n-Pentane	(2)	2.502	43	394635	52.543
14) Ethyl ether	(2)	2.679	59	269949	47.694
15) Freon 123a	(2)	2.765	67	400170	49.955
16) Acrolein	(1)	2.832	56	1268783	429.466
17) 1,1-Dichloroethene	(2)	2.935	96	274719	49.723
17) 1,1-Dichloroethene	(2)	2.935	63	144183	50.349
18) Acetone	(1)	2.972	58	139837	91.324
19) Freon 113	(2)	2.972	101	279013M	50.675
22) Methyl Iodide	(2)	3.106	142	533950	49.575
21) 2-Propanol	(1)	3.112	45	283895	226.138
23) Carbon Disulfide	(2)	3.173	76	912998	48.499
27) Methyl Acetate	(2)	3.307	43	474308	44.020
25) Allyl Chloride	(2)	3.325	41	538375	45.104
28) Methylene Chloride	(2)	3.490	84	313129	48.387
29)*t-Butyl alcohol-d10	(1)	3.521	65	420610M	250.000
30) t-Butyl alcohol	(1)	3.612	59	509564	230.362
31) Acrylonitrile	(2)	3.777	53	246884	48.806
33) Methyl Tertiary Butyl Ether	(2)	3.813	73	952624	47.986
32) trans-1,2-Dichloroethene	(2)	3.819	96	312796	49.753
34) n-Hexane	(2)	4.185	57	475858	52.184
36) 1,1-Dichloroethane	(2)	4.441	63	584965	49.713
38) di-Isopropyl ether	(2)	4.496	45	1105723	48.410
39) 2-Chloro-1,3-butadiene	(2)	4.545	53	524638	49.396
40) Ethyl t-butyl ether	(2)	5.057	59	964409	46.950
42) cis-1,2-Dichloroethene	(2)	5.301	96	347475	49.595
44) 2-Butanone	(2)	5.301	43	734728	96.136
45) 2,2-Dichloropropane	(2)	5.319	77	435703	46.722
47) Propionitrile	(1)	5.404	54	548835	234.769
48) Methacrylonitrile	(2)	5.624	67	592483	123.220
49) Bromochloromethane	(2)	5.648	128	177730	49.009
50) Tetrahydrofuran	(1)	5.660	71	189753	89.211

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

Digitally signed by Don V. Viray
on 11/07/2018 at 20:39.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:39 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
51) Chloroform	(2)	5.819	83	552929	49.717
53) 1,1,1-Trichloroethane	(2)	6.038	97	463502	48.590
52)$Dibromofluoromethane	(2)	6.044	113	289758	50.477
52)$Dibromofluoromethane	(2)	6.044	111	295512	50.350
54) Cyclohexane	(2)	6.118	56	567601	49.880
54) Cyclohexane	(2)	6.124	84	457709	48.691
54) Cyclohexane	(2)	6.118	69	170974	50.456
43) 1,2-Dichloroethene (Total)	(2)		96	660271	99.348
56) Carbon Tetrachloride	(2)	6.246	117	416352	49.668
55) 1,1-Dichloropropene	(2)	6.258	75	453748	49.443
58) Isobutyl Alcohol	(1)	6.489	41	435669	608.216
57)$1,2-Dichloroethane-d4	(2)	6.520	102	68513	49.992
57)$1,2-Dichloroethane-d4	(2)	6.520	65	337623	48.423
57)$1,2-Dichloroethane-d4	(2)	6.526	104	43376	49.704
60) Benzene	(2)	6.538	78	1368370	49.909
61) 1,2-Dichloroethane	(2)	6.630	62	398729	47.402
61) 1,2-Dichloroethane	(2)	6.630	98	35505	48.882
65) t-Amyl methyl ether	(2)	6.758	73	910941	47.229
66)*Fluorobenzene	(2)	6.977	96	1180061	50.000
67) n-Heptane	(2)	6.983	43	566949	54.095
69) n-Butanol	(1)	7.428	56	703824	1223.711
71) Trichloroethene	(2)	7.477	95	343027	50.024
73) Methylcyclohexane	(2)	7.782	83	601750	50.614
73) Methylcyclohexane	(2)	7.782	98	256099	50.687
74) 1,2-Dichloropropane	(2)	7.837	63	349018	50.926
75) Dibromomethane	(2)	7.953	93	208221	49.939
77) Methyl Methacrylate	(2)	7.959	69	349278	50.536
79) Bromodichloromethane	(2)	8.215	83	387078	49.812
80) 2-Nitropropane	(2)	8.532	41	323902	93.077
81) 2-Chloroethyl Vinyl Ether	(2)	8.623	63	286790	52.021
82) cis-1,3-Dichloropropene	(2)	8.812	75	516795	51.720
83) 4-Methyl-2-pentanone	(2)	9.032	43	1341766	98.547
84)$Toluene-d8	(3)	9.154	98	1157626	49.080
84)$Toluene-d8	(3)	9.154	100	749855	49.123
89) Toluene	(3)	9.245	92	858414	48.510
90) trans-1,3-Dichloropropene	(3)	9.562	75	462584	48.946
92) Ethyl Methacrylate	(3)	9.647	69	558071	49.249
93) 1,1,2-Trichloroethane	(3)	9.788	97	297708	49.393

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 11/07/2018 at 20:39.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:39 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
94) Tetrachloroethene	(3)	9.861	166	365153	46.981
95) 1,3-Dichloropropane	(3)	9.970	76	506720	49.733
97) 2-Hexanone	(3)	10.050	43	1087514	95.265
91) 1,3-Dichloropropene (total)	(3)		100	979379	100.666
98) Dibromochloromethane	(3)	10.202	129	311262	50.439
100) 1,2-Dibromoethane	(3)	10.312	107	327157	50.028
101)*Chlorobenzene-d5	(3)	10.800	117	874401	50.000
102) 1-Chlorohexane	(3)	10.824	91	467449	46.500
103) Chlorobenzene	(3)	10.824	112	954387	49.787
104) 1,1,1,2-Tetrachloroethane	(3)	10.922	131	318614	50.465
105) Ethylbenzene	(3)	10.928	91	1688747	49.644
107) m+p-Xylene	(3)	11.056	106	1304309	99.262
108) o-Xylene	(3)	11.415	106	618251	49.158
110) Styrene	(3)	11.434	104	1034592	50.479
111) Bromoform	(3)	11.592	173	233091	46.126
112) Isopropylbenzene	(3)	11.745	105	1602649	49.994
109) Xylene (Total)	(3)		106	1922560	148.420
115)$4-Bromofluorobenzene	(3)	11.891	95	432236	50.982
115)$4-Bromofluorobenzene	(3)	11.897	174	372312	51.721
116) Bromobenzene	(4)	12.013	156	398534	47.678
117) 1,1,2,2-Tetrachloroethane	(4)	12.019	83	548944	50.437
119) trans-1,4-Dichloro-2-butene	(4)	12.049	53	390732	104.532
118) 1,2,3-Trichloropropane	(4)	12.062	110	156589	48.375
120) n-Propylbenzene	(4)	12.098	91	1954603	49.086
121) 2-Chlorotoluene	(4)	12.171	126	383629	47.752
123) 1,3,5-Trimethylbenzene	(4)	12.251	105	1368821	48.979
122) 4-Chlorotoluene	(4)	12.275	126	402240	48.122
125) tert-Butylbenzene	(4)	12.507	134	278264M	47.935
126) Pentachloroethane	(4)	12.531	167	249688	50.388
127) 1,2,4-Trimethylbenzene	(4)	12.549	105	1399232	48.746
128) sec-Butylbenzene	(4)	12.677	105	1776625	50.932
130) 1,3-Dichlorobenzene	(4)	12.775	146	757952	47.934
131) p-Isopropyltoluene	(4)	12.799	119	1542868	50.929
132)*1,4-Dichlorobenzene-d4	(4)	12.836	152	486229	50.000
134) 1,4-Dichlorobenzene	(4)	12.854	146	776482	47.804
135) 1,2,3-Trimethylbenzene	(4)	12.872	105	1490052	49.836
136) Benzyl Chloride	(4)	12.946	91	1074475	50.858
137) 1,3-Diethylbenzene	(4)	13.013	119	970428	51.964

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

Digitally signed by Don V. Viray
on 11/07/2018 at 20:39.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:39 dvv10203

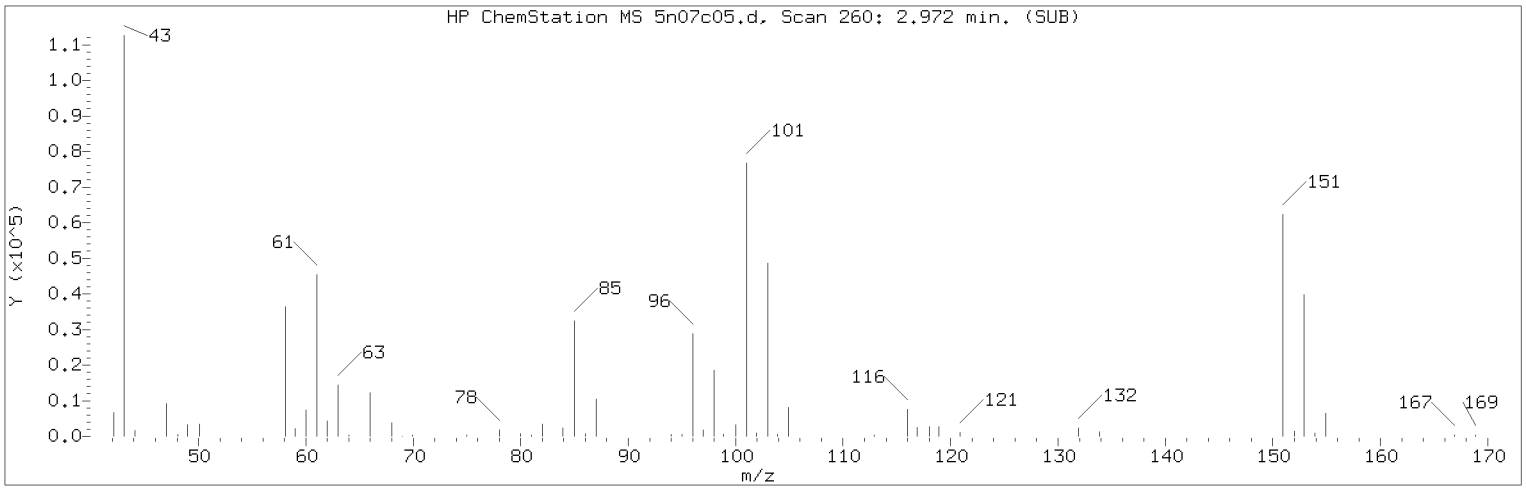
Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
138) 1,4-Diethylbenzene	(4)	13.086	119	1050449	52.700
140) n-Butylbenzene	(4)	13.110	92	819812M	52.440
139) 1,2-Dichlorobenzene	(4)	13.128	146	727693	47.988
141) 1,2-Diethylbenzene	(4)	13.165	119	804204	51.436
142) Diethylbenzene (total)	(4)		100	2825081	156.101
143) 1,2-Dibromo-3-chloropropane	(4)	13.708	75	134414	48.040
145) 1,3,5-Trichlorobenzene	(4)	13.836	180	550025	49.566
147) 1,2,4-Trichlorobenzene	(4)	14.281	180	488461	48.943
148) Hexachlorobutadiene	(4)	14.372	225	240949	51.249
149) Naphthalene	(4)	14.476	128	1733608	48.967
150) 1,2,3-Trichlorobenzene	(4)	14.622	180	468854	48.218
151) 2-Methylnaphthalene	(4)	15.274	142	1028536	49.100

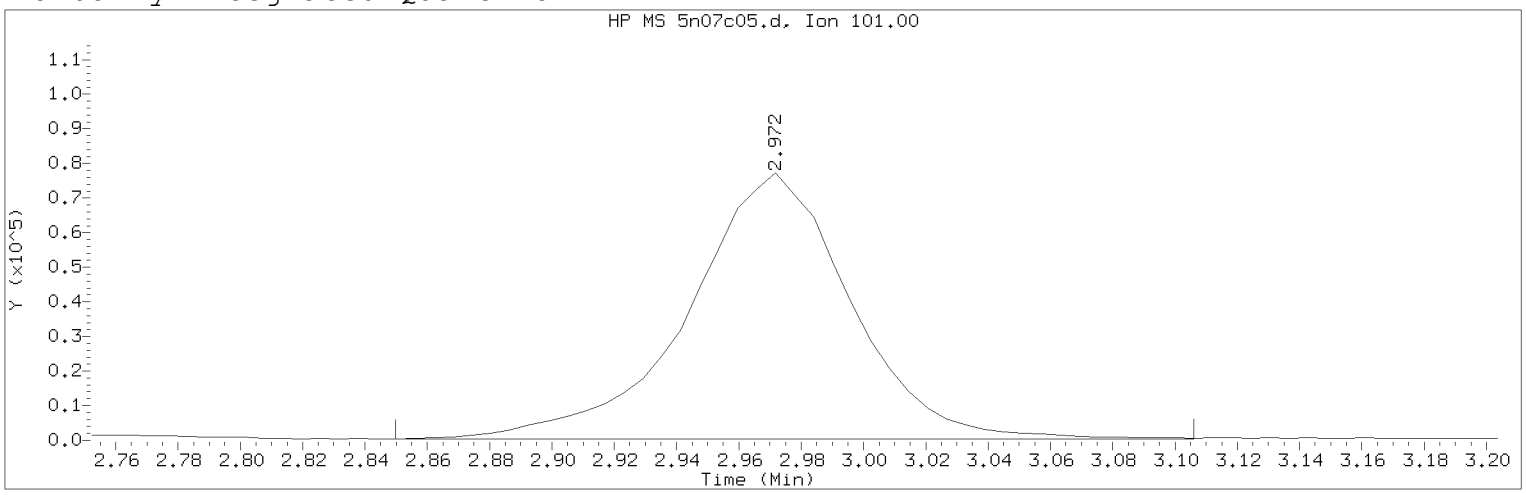
M = Compound was manually integrated.

Digitally signed by Don V. Viray
on 11/07/2018 at 20:39.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:39 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

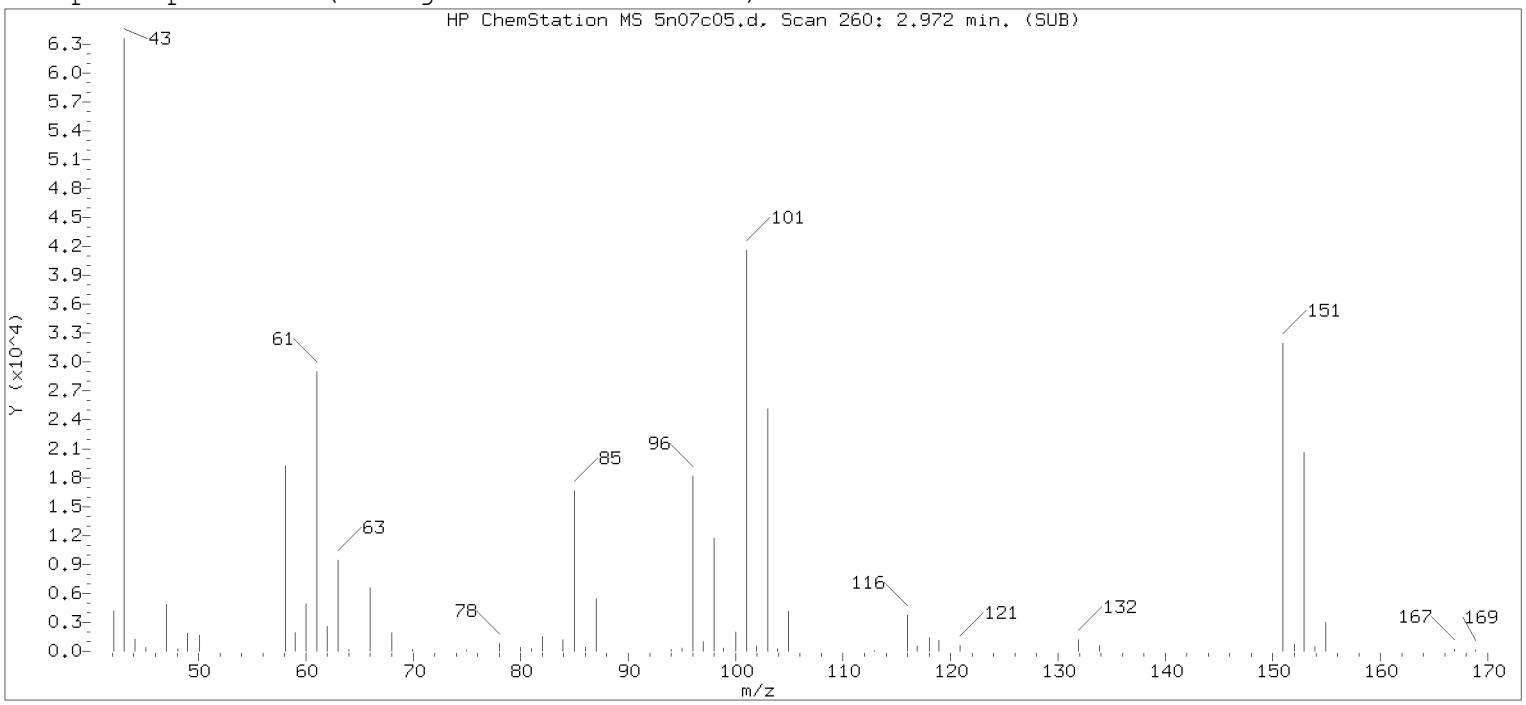
Compound Number : 19
Compound Name : Freon 113
Scan Number : 260
Retention Time (minutes): 2.972
Quant Ion : 101.00
Area (flag) : 279013M
On-Column Amount (ng) : 50.6754
Integration start scan : 239 Integration stop scan: 281
Y at integration start : 291 Y at integration end: 291

Reason for manual integration: improper integration

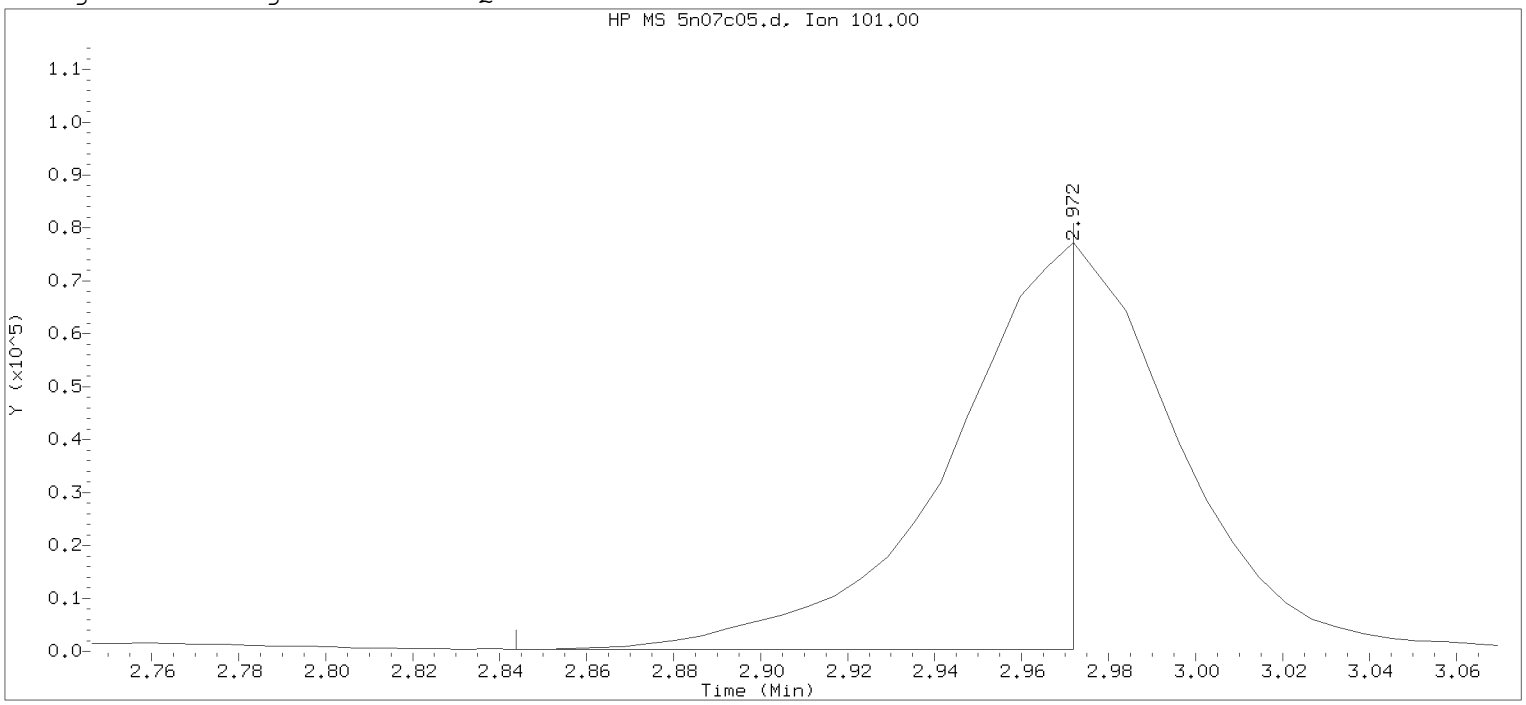
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 20:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Chelsea B. Riehl on 11/08/2018 at 15:07.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

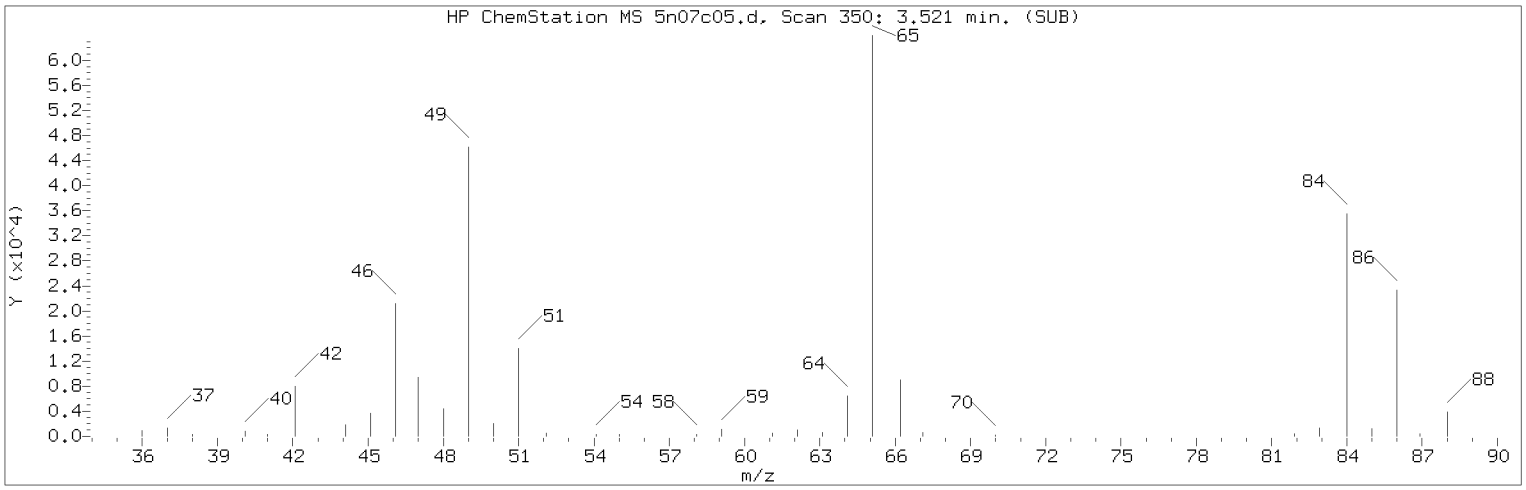
Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:23 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

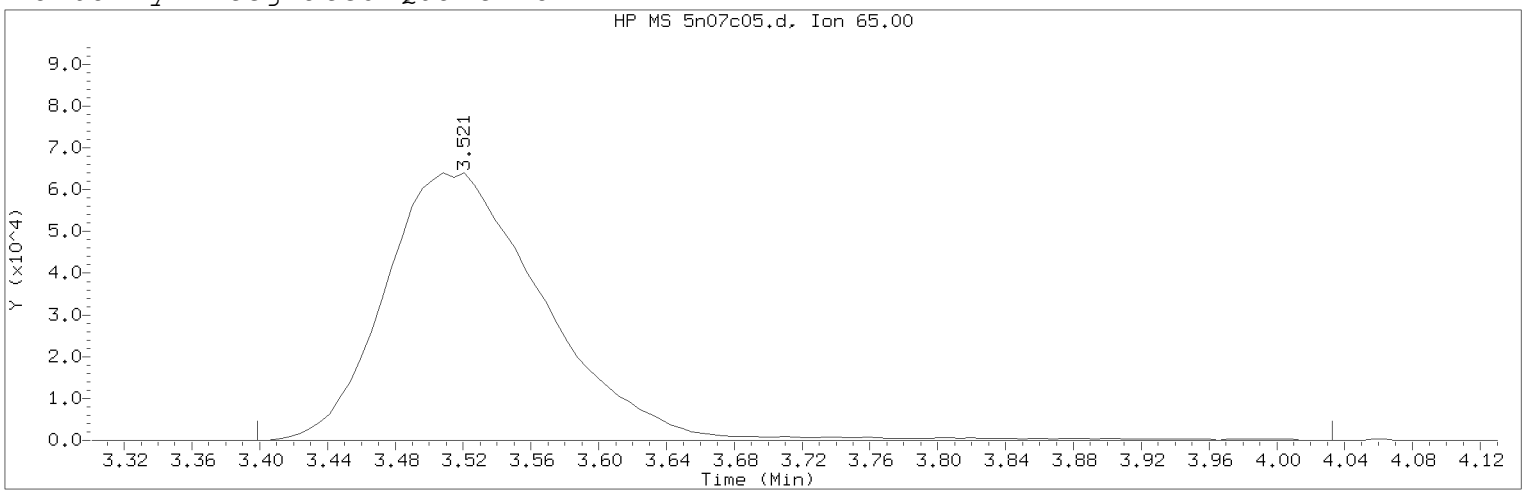
Compound Number : 19
Compound Name : Freon 113
Scan Number : 260
Retention Time (minutes): 2.972
Quant Ion : 101.00
Area : 147180
On-column Amount (ng) : 26.7315
Integration start scan : 238 Integration stop scan: 259
Y at integration start : 382 Y at integration end: 382

Digitally signed by Don V. Viray on 11/07/2018 at 20:39.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:39 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

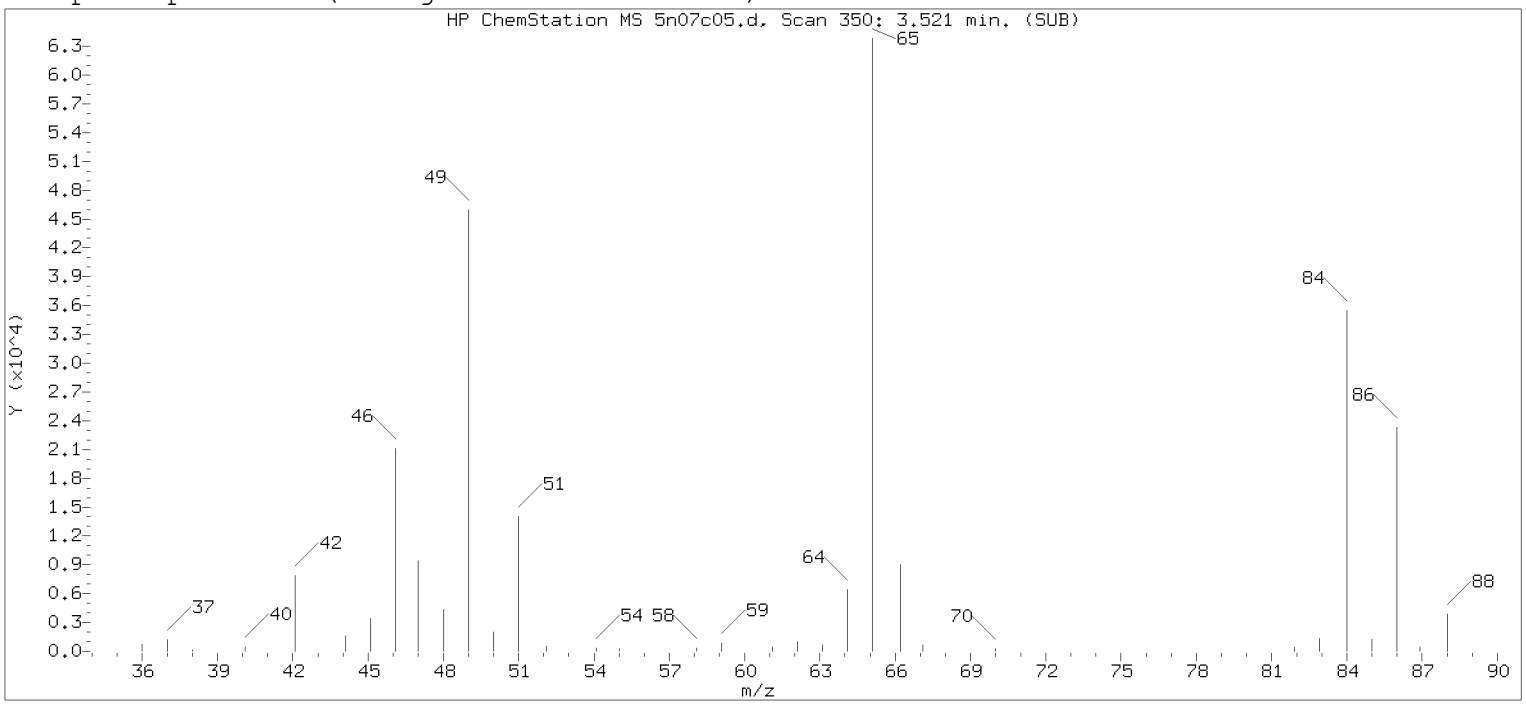
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 350
Retention Time (minutes): 3.521
Quant Ion : 65.00
Area (flag) : 420610M
On-Column Amount (ng) : 250.0000
Integration start scan : 329 Integration stop scan: 433
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

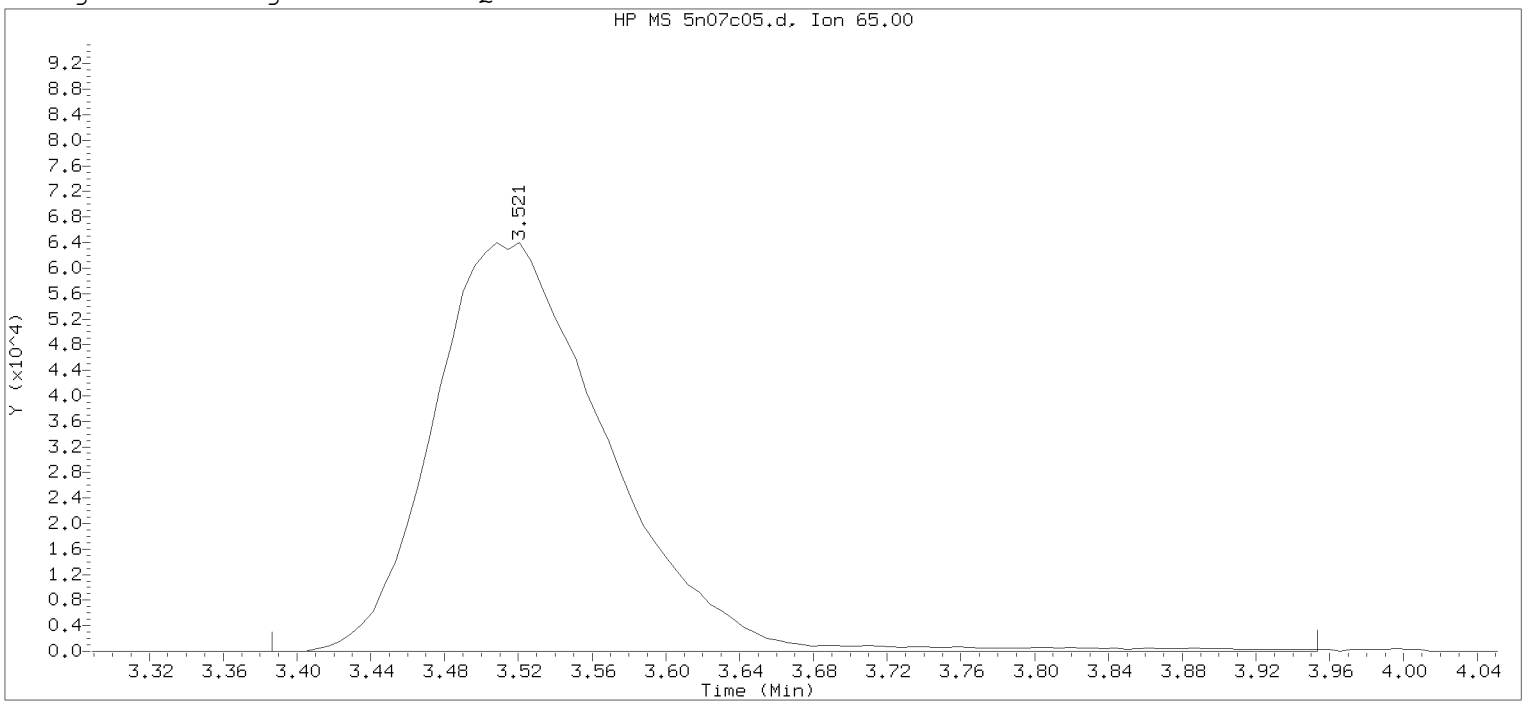
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 20:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Chelsea B. Riehl on 11/08/2018 at 15:07.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

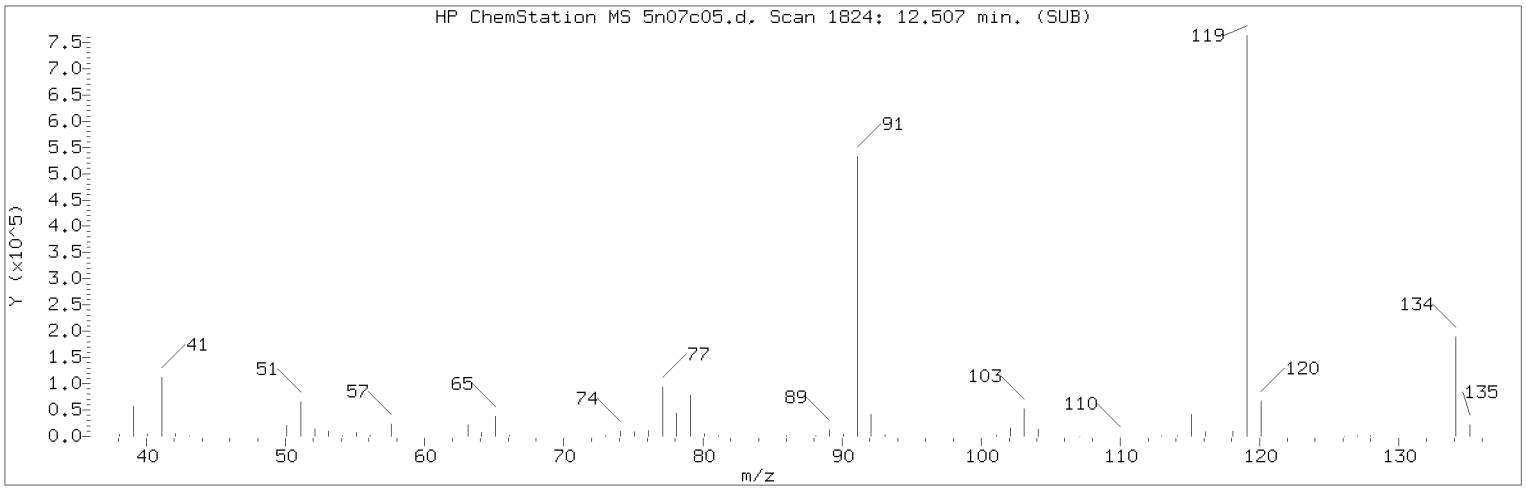
Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:23 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

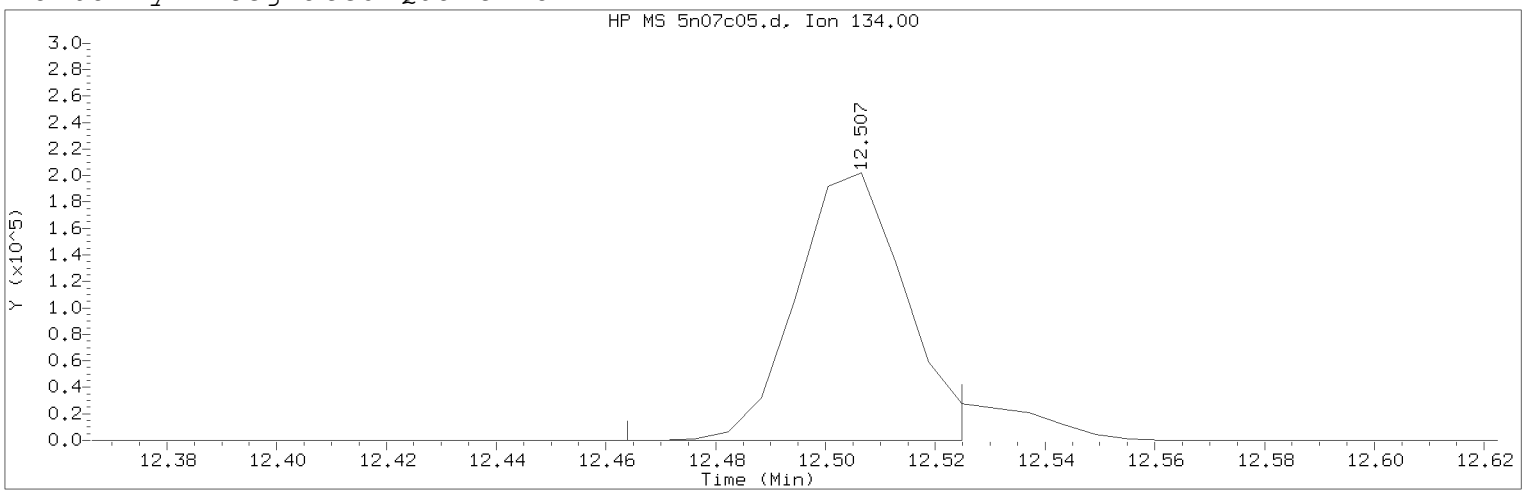
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 350
Retention Time (minutes): 3.521
Quant Ion : 65.00
Area : 419621
On-column Amount (ng) : 250.0000
Integration start scan : 327 Integration stop scan: 420
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/07/2018 at 20:39.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:39 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

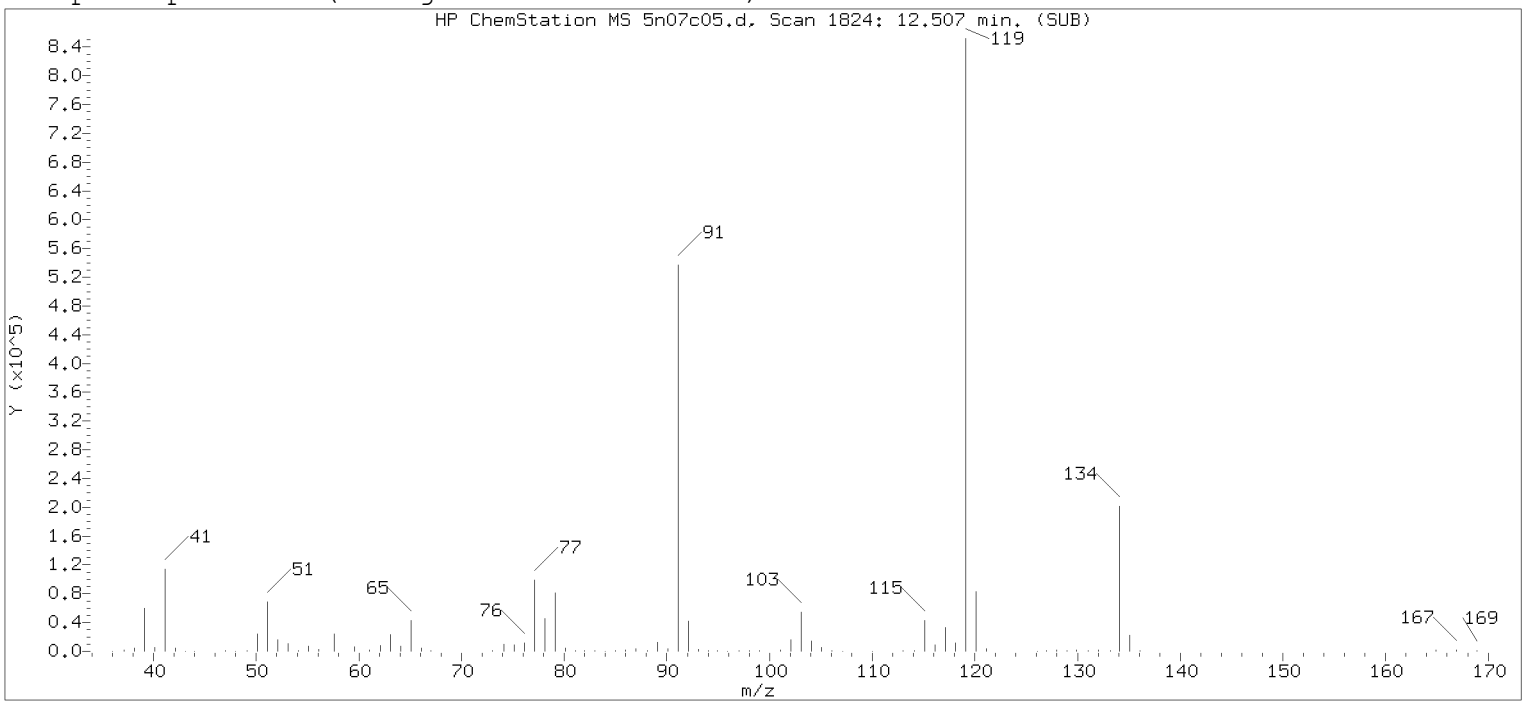
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1824
Retention Time (minutes): 12.507
Quant Ion : 134.00
Area (flag) : 278264M
On-Column Amount (ng) : 47.9345
Integration start scan : 1816 Integration stop scan: 1826
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

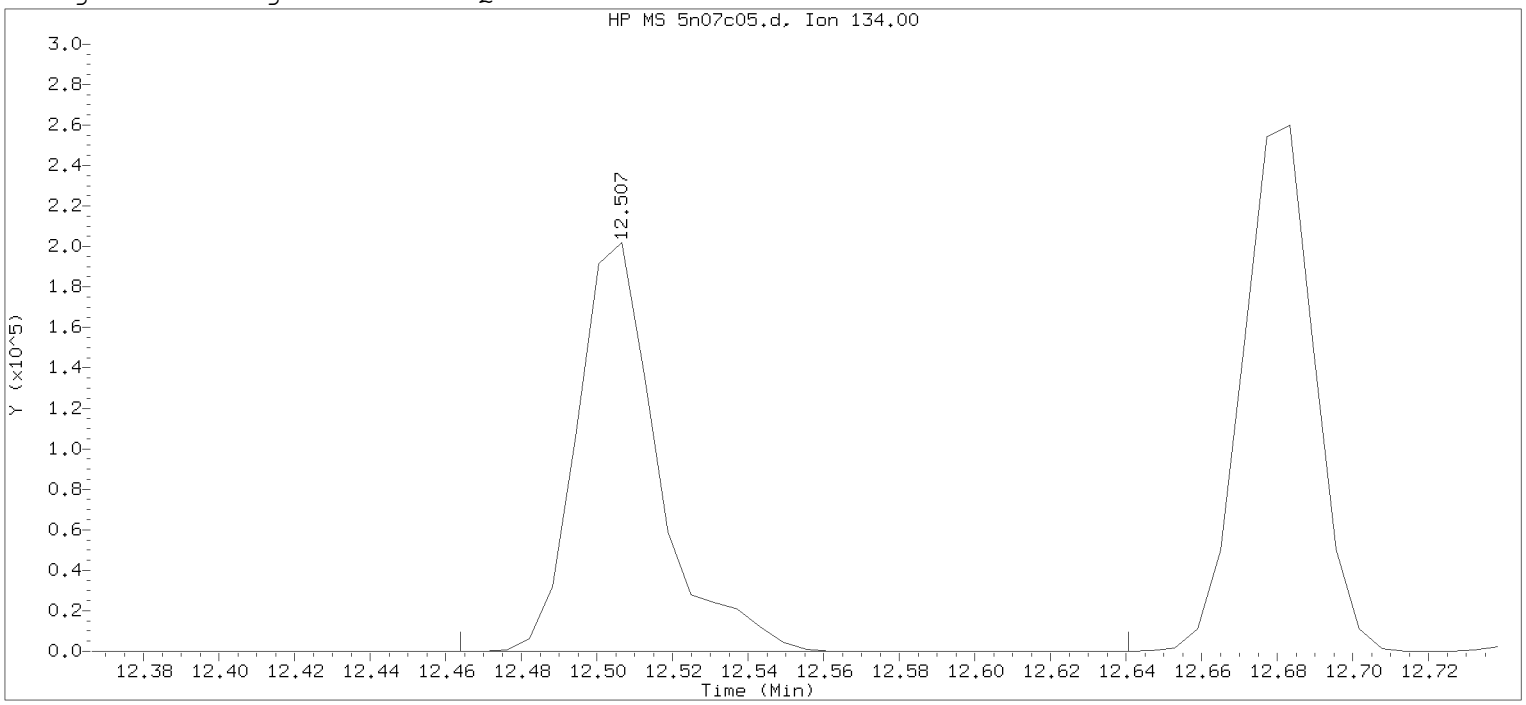
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 20:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Chelsea B. Riehl on 11/08/2018 at 15:07.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

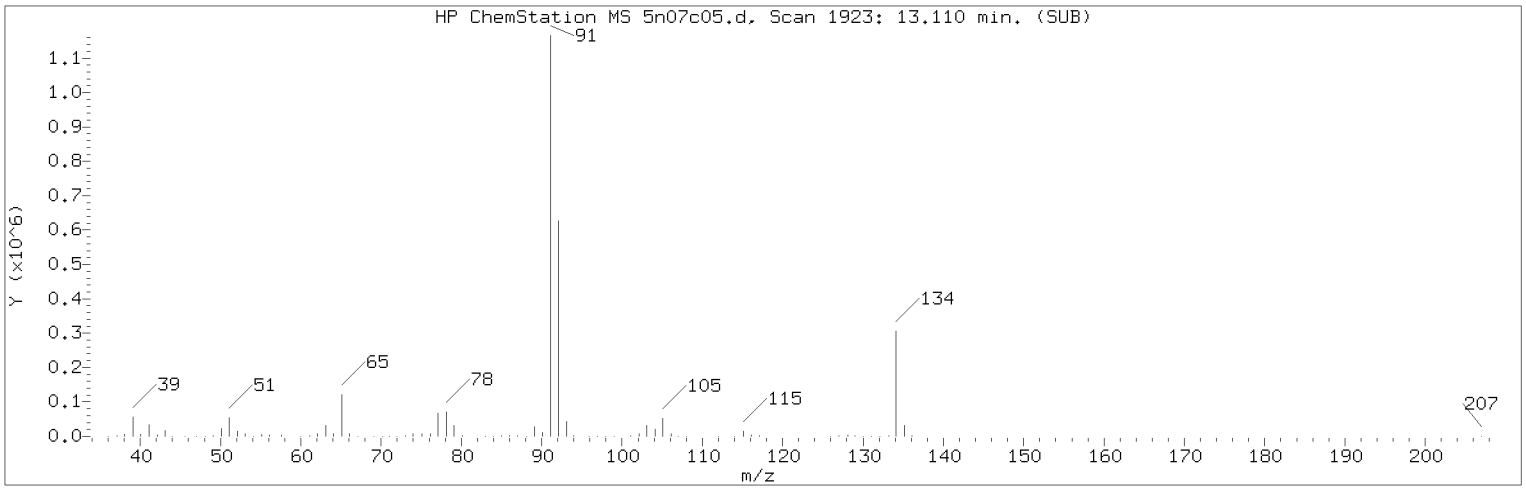
Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:23 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

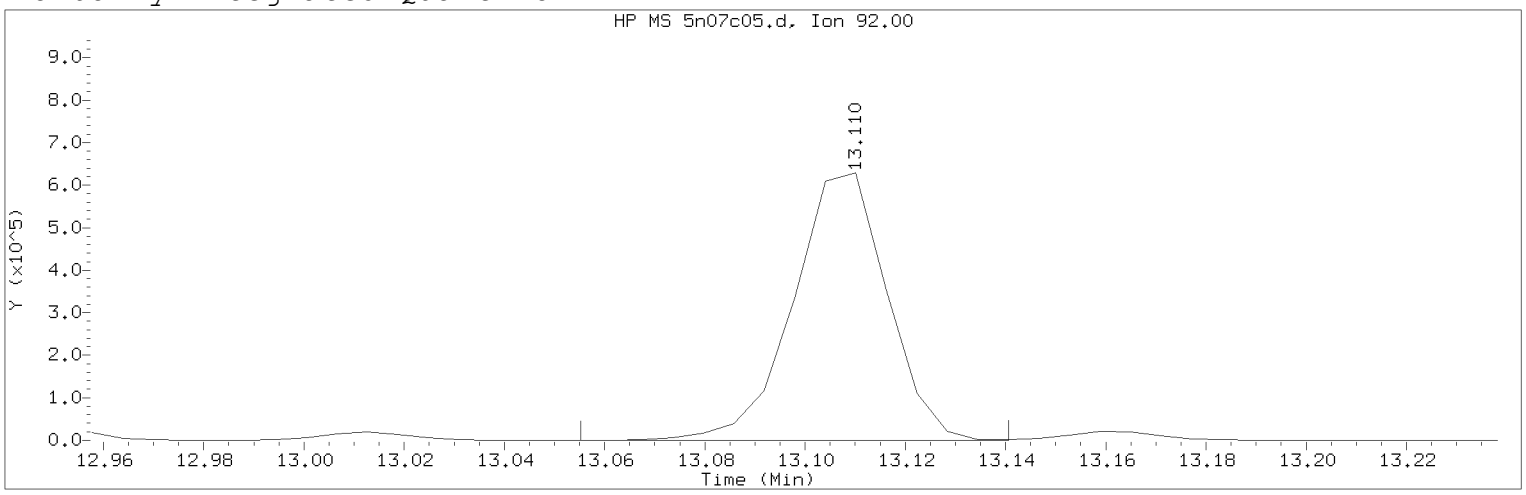
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1824
Retention Time (minutes): 12.507
Quant Ion : 134.00
Area : 301087
On-column Amount (ng) : 51.8659
Integration start scan : 1816 Integration stop scan: 1845
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/07/2018 at 20:39.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:39 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

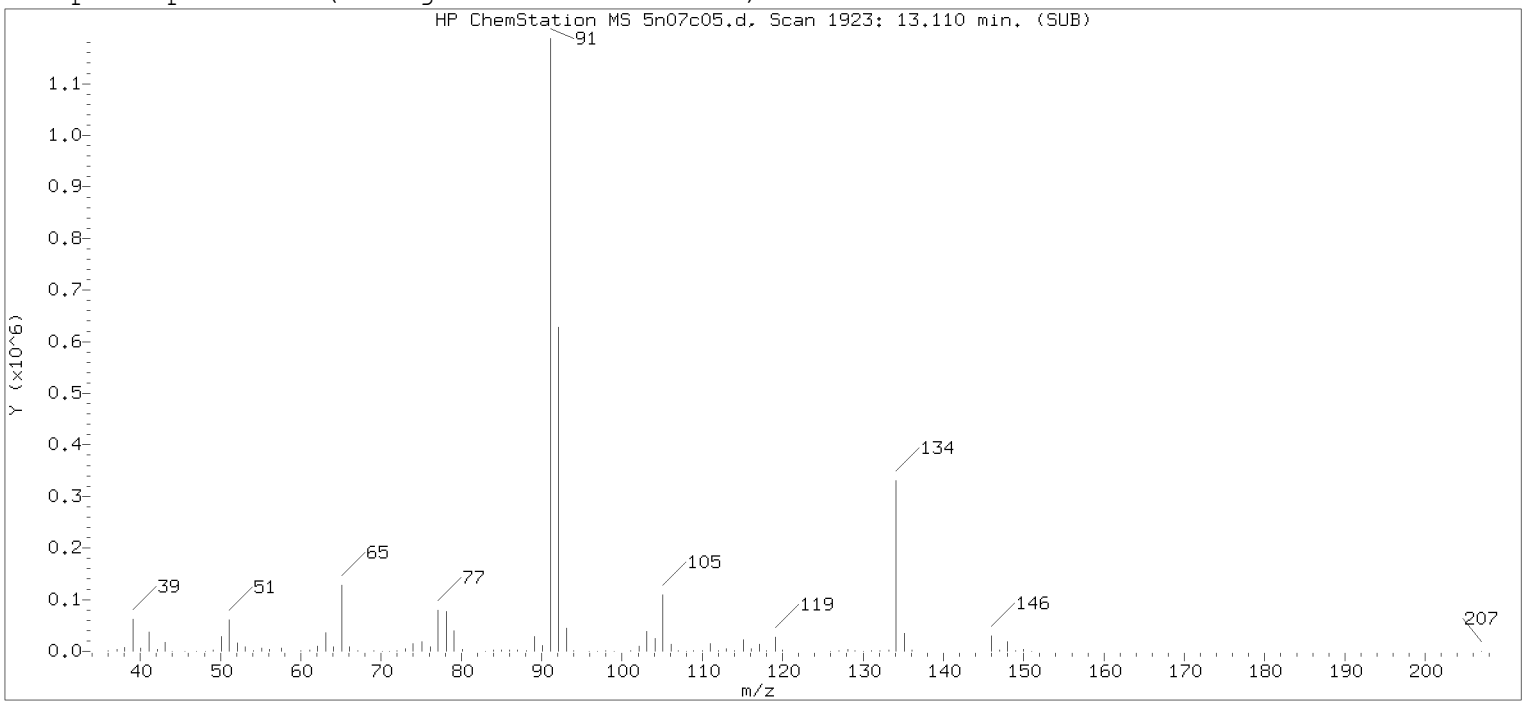
Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1923
Retention Time (minutes): 13.110
Quant Ion : 92.00
Area (flag) : 819812M
On-Column Amount (ng) : 52.4396
Integration start scan : 1913 Integration stop scan: 1927
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

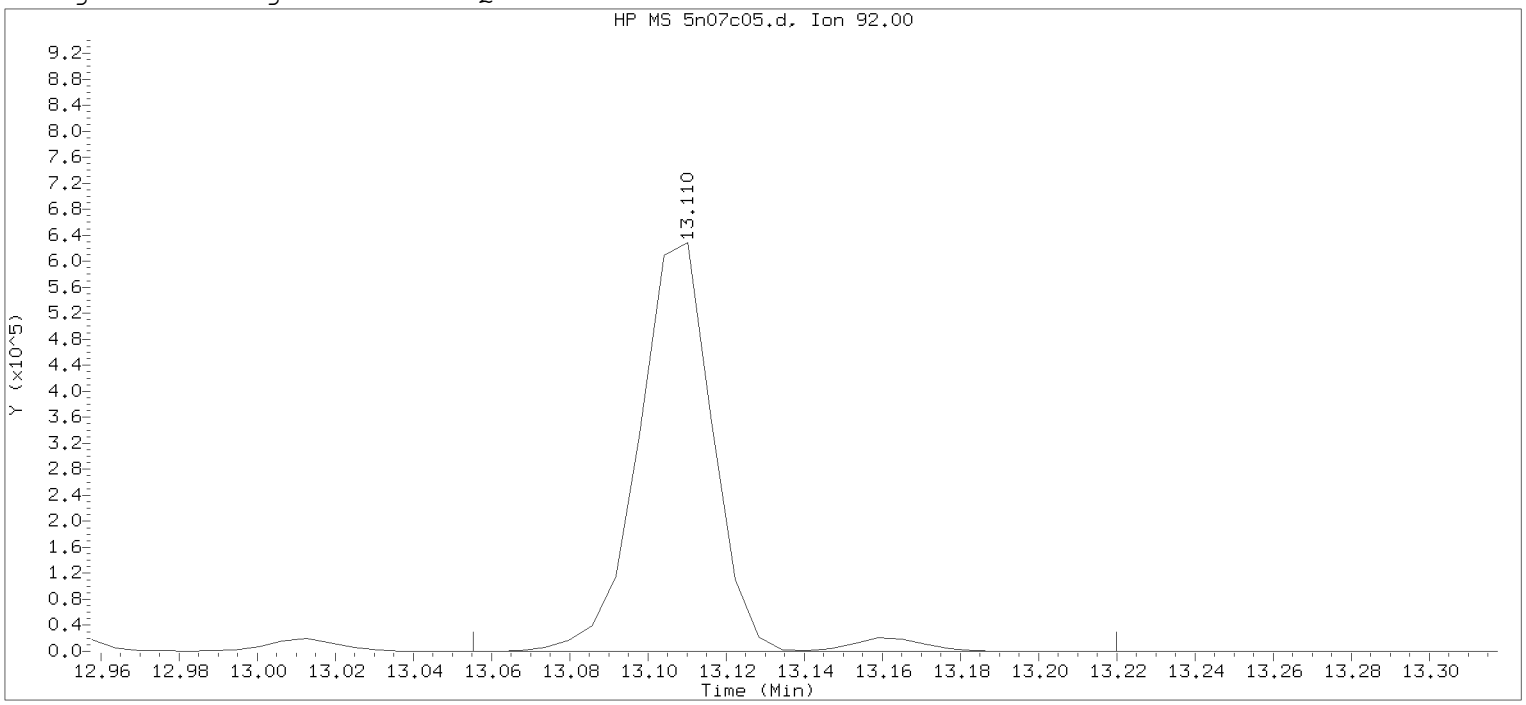
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 20:39.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Chelsea B. Riehl on 11/08/2018 at 15:07.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07c05.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:04 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:23 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1923
Retention Time (minutes): 13.110
Quant Ion : 92.00
Area : 845843
On-column Amount (ng) : 54.1046
Integration start scan : 1913 Integration stop scan: 1940
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/07/2018 at 20:39.
Target 3.5 esignature user id: dviray0203

Data File: /chem2/HP26285.i/18nov08a.b/5n08t01.d

Date : 08-NOV-2018 07:24

Client ID: aug-07-18

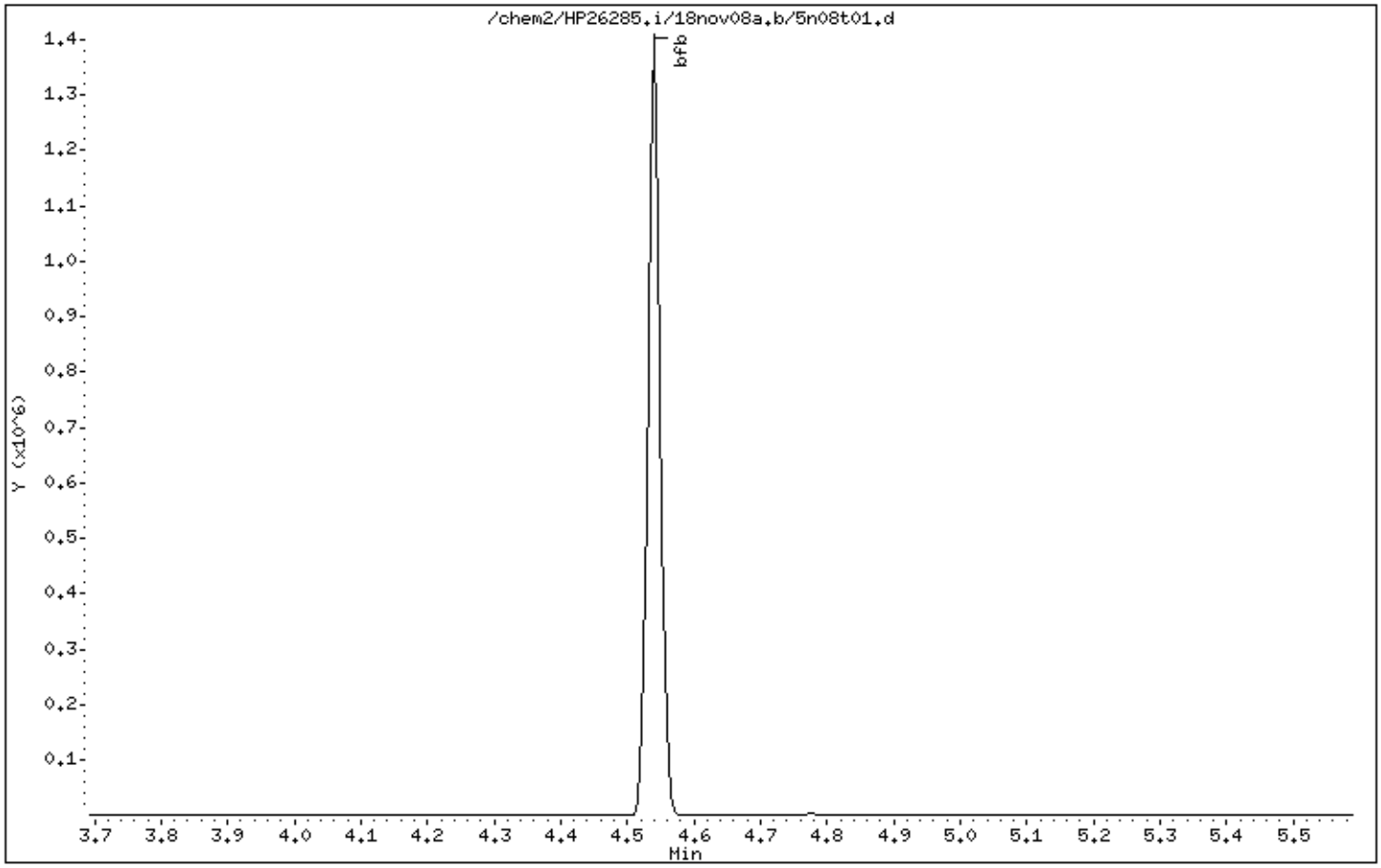
Instrument: HP26285.i

Sample Info: aug-07-18;50NGBFB;1;3;;;;;;

Operator: CLM27445

Column phase: Rxi-624Sil MS

Column diameter: 0.25



Digitally signed by Corie L. Mellinger on 11/08/2018 at 09:46.
Target 3.5 esignature user ID: clm27445

Data File: /chem2/HP26285.i/18nov08a.b/5n08t01.d

Date : 08-NOV-2018 07:24

Client ID: aug-07-18

Instrument: HP26285.i

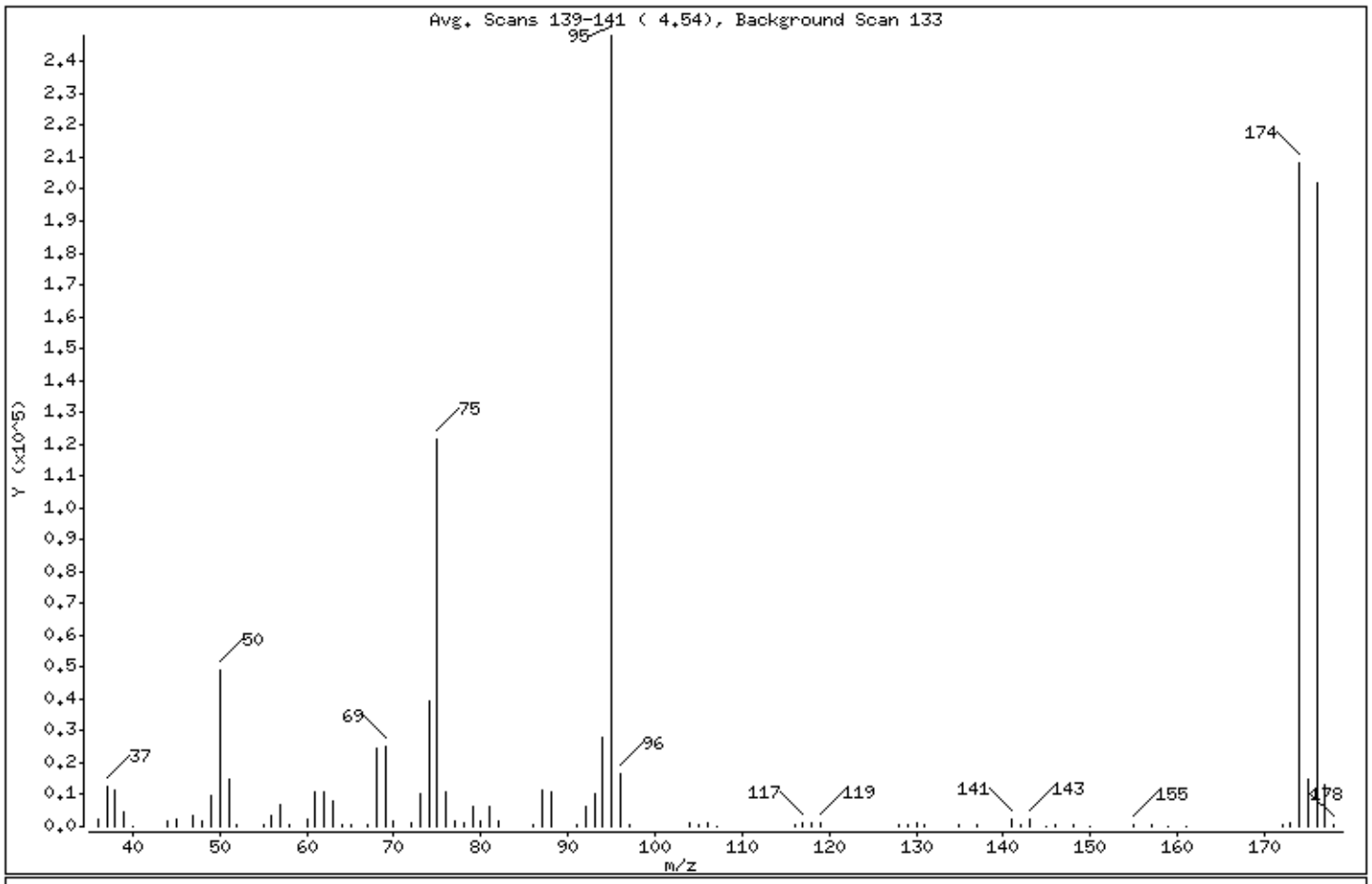
Sample Info: aug-07-18;50NGBFB;1;3;;;;;;

Operator: CLM27445

Column phase: Rxi-624Sil MS

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.75
75	30.00 - 60.00% of mass 95	49.01
96	5.00 - 9.00% of mass 95	6.77
173	Less than 2.00% of mass 174	0.54 (0.65)
174	50.00 - 100.00% of mass 95	83.82
175	5.00 - 9.00% of mass 174	6.03 (7.19)
176	95.00 - 101.00% of mass 174	81.45 (97.18)
177	5.00 - 9.00% of mass 176	5.37 (6.59)

Digitally signed by Corie L. Mellinger on 11/08/2018 at 09:46.
Target 3.5 esignature user ID: clm27445

Date : 08-NOV-2018 07:24

Client ID: aug-07-18 Instrument: HP26285.i

Sample Info: aug-07-18;50NGBFB;1;3;;;;;;

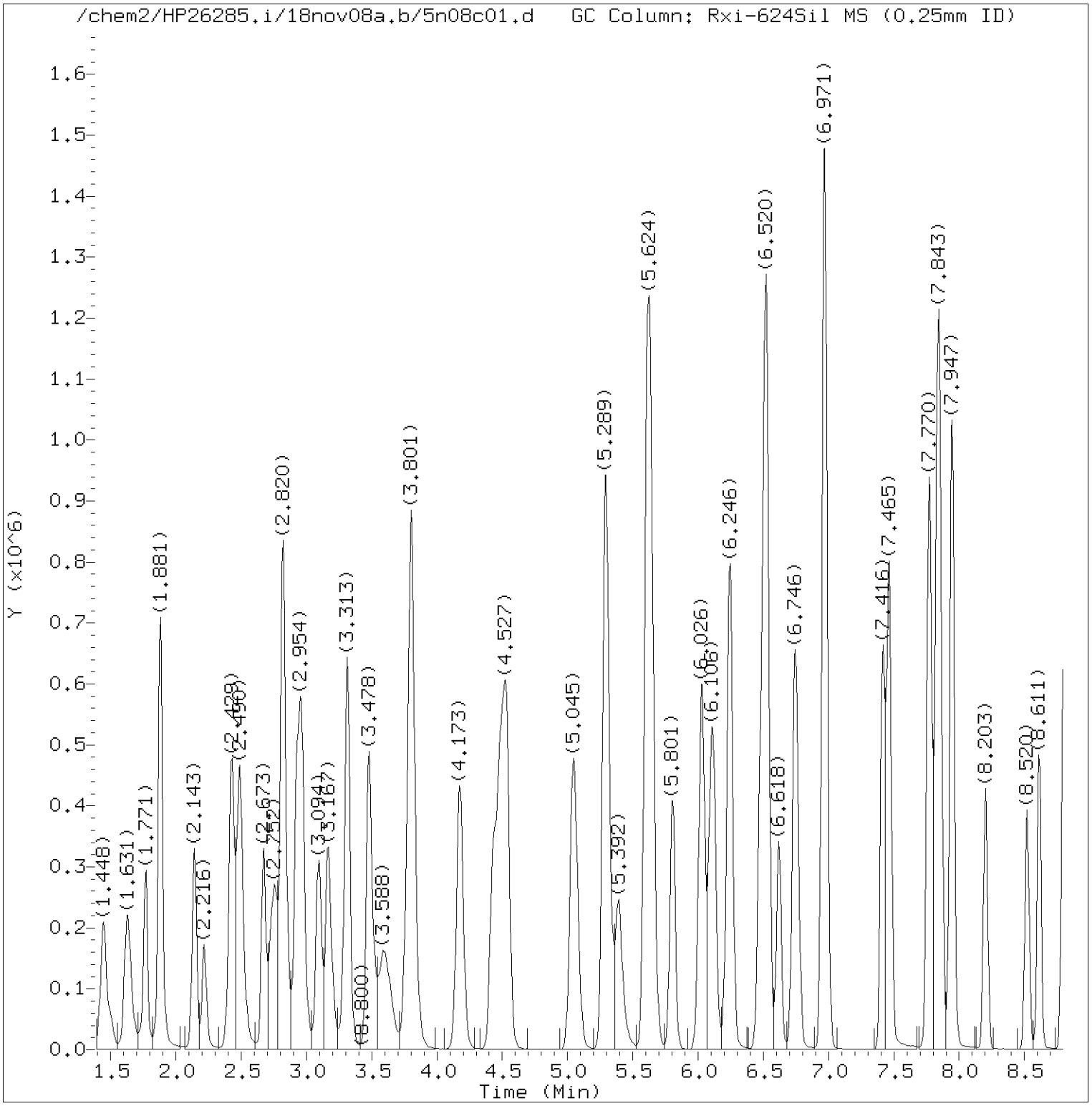
Operator: CLM27445

Column phase: Rxi-624Sil MS Column diameter: 0.25

Data File: 5n08t01.d
Spectrum: Avg. Scans 139-141 (4.54), Background Scan 133
Location of Maximum: 95.00
Number of points: 80

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2187	64.00	826	92.00	6497	142.00	300
37.00	12685	65.00	469	93.00	10207	143.00	2360
38.00	11424	67.00	589	94.00	27736	145.00	100
39.00	4469	68.00	24464	95.00	248192	146.00	321
40.00	179	69.00	24968	96.00	16792	148.00	570
44.00	1473	70.00	1905	97.00	479	150.00	187
45.00	2269	72.00	1307	104.00	908	155.00	550
47.00	3546	73.00	10313	105.00	329	157.00	424
48.00	1503	74.00	39296	106.00	928	159.00	204
49.00	9885	75.00	121656	107.00	175	161.00	226
50.00	49032	76.00	10563	116.00	819	172.00	679
51.00	15045	77.00	1538	117.00	1364	173.00	1344
52.00	700	78.00	1027	118.00	868	174.00	208000
55.00	575	79.00	6183	119.00	1164	175.00	14957
56.00	3477	80.00	1940	128.00	823	176.00	202176
57.00	6878	81.00	6505	129.00	370	177.00	13319
58.00	340	82.00	1533	130.00	860	178.00	387
60.00	2124	86.00	334	131.00	391		
61.00	11098	87.00	11286	135.00	495		
62.00	10813	88.00	10803	137.00	391		
63.00	8251	91.00	828	141.00	2221		

Digitally signed by Corie L. Mellinger on 11/08/2018 at 09:46.
Target 3.5 esignature user ID: clm27445



Total Ion Chromatogram (TIC)

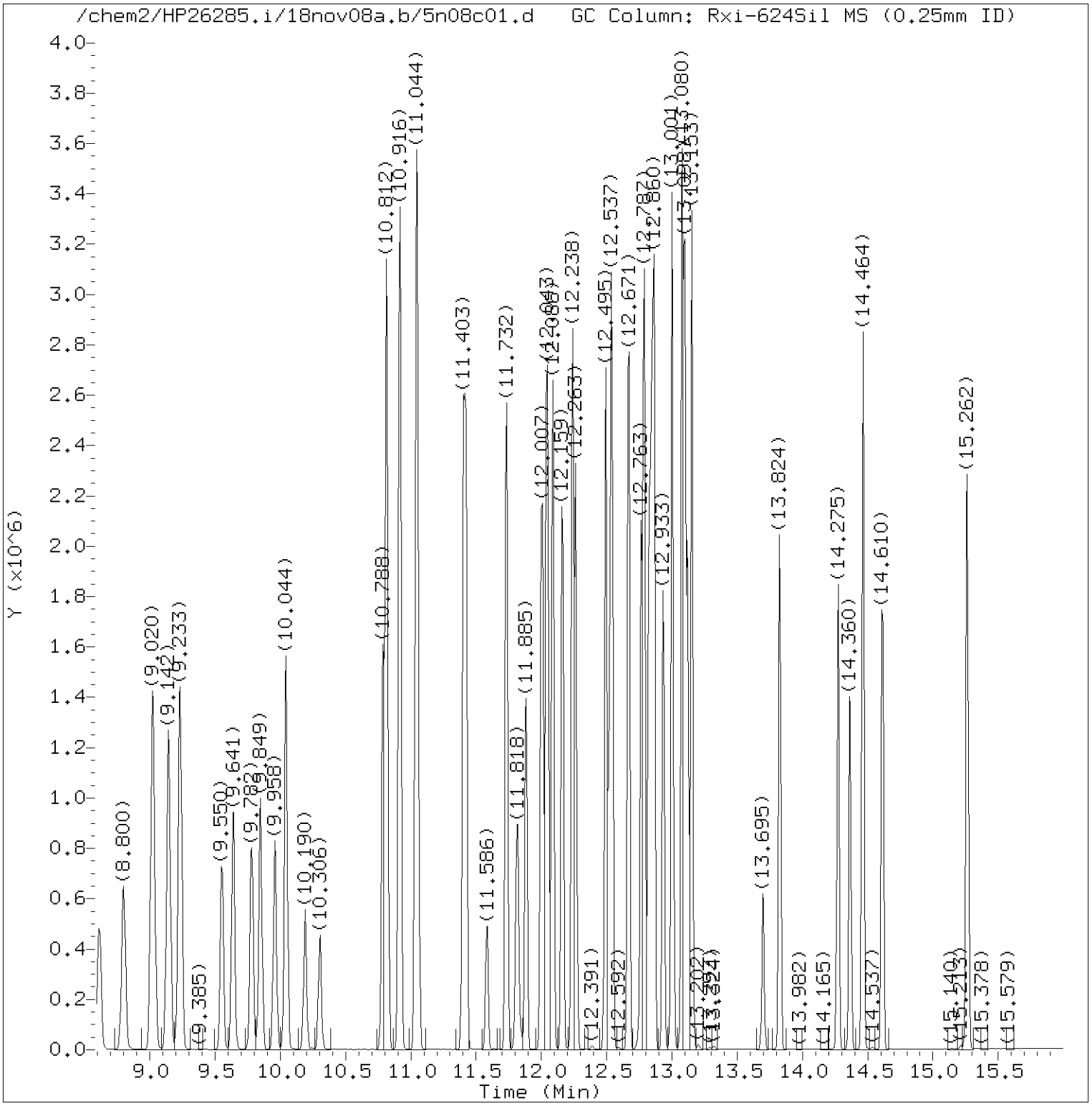
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08c01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:12 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 08:34 clm27445

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:45.
Target 3.5 esignature user ID: clm27445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08c01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:12 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 08:34 clm27445

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:45.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08c01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:12 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 08:34 clm27445

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.631	85	497887	48.430
4) Chloromethane	(2)	1.765	50	399908	48.038
6) Vinyl Chloride	(2)	1.875	62	378192	48.611
5) 1,3-Butadiene	(2)	1.881	39	282956	50.621
8) Bromomethane	(2)	2.143	94	302354	52.287
9) Chloroethane	(2)	2.216	64	201192	52.025
10) Dichlorofluoromethane	(2)	2.429	67	538791	52.552
12) Trichlorofluoromethane	(2)	2.466	101	558475	53.821
11) n-Pentane	(2)	2.490	43	318270	48.021
14) Ethyl ether	(2)	2.673	59	243876	48.828
15) Freon 123a	(2)	2.752	67	332186	46.993
16) Acrolein	(1)	2.820	56	1155378	461.199
17) 1,1-Dichloroethene	(2)	2.923	96	218245	44.764
17) 1,1-Dichloroethene	(2)	2.923	63	117515	46.504
19) Freon 113	(2)	2.960	101	230973	47.539
18) Acetone	(1)	2.966	58	130158	100.243
22) Methyl Iodide	(2)	3.094	142	435186	45.788
21) 2-Propanol	(1)	3.100	45	262513	246.598
23) Carbon Disulfide	(2)	3.167	76	718006	43.222
27) Methyl Acetate	(2)	3.295	43	441427	46.426
25) Allyl Chloride	(2)	3.319	41	481253	45.689
28) Methylene Chloride	(2)	3.478	84	273182	47.838
29)*t-Butyl alcohol-d10	(1)	3.496	65	356663	250.000
30) t-Butyl alcohol	(1)	3.600	59	454105	242.098
31) Acrylonitrile	(2)	3.764	53	230853	51.716
32) trans-1,2-Dichloroethene	(2)	3.801	96	255445	46.044
33) Methyl Tertiary Butyl Ether	(2)	3.807	73	844447	48.204
34) n-Hexane	(2)	4.173	57	392633	48.793
36) 1,1-Dichloroethane	(2)	4.423	63	497253	47.889
38) di-Isopropyl ether	(2)	4.490	45	968047	48.029
39) 2-Chloro-1,3-butadiene	(2)	4.533	53	427817	45.646
40) Ethyl t-butyl ether	(2)	5.045	59	832644	45.936
44) 2-Butanone	(2)	5.282	43	692438	102.673
42) cis-1,2-Dichloroethene	(2)	5.289	96	296165	47.903
45) 2,2-Dichloropropane	(2)	5.307	77	367205	44.623
47) Propionitrile	(1)	5.392	54	505841	255.173
48) Methacrylonitrile	(2)	5.612	67	540569	127.401
49) Bromochloromethane	(2)	5.636	128	159160	49.735

* = Compound is an internal standard.

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:45.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08c01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:12 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 08:34 clm27445

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	5.648	71	173672	96.291
51) Chloroform	(2)	5.801	83	487931	49.718
53) 1,1,1-Trichloroethane	(2)	6.026	97	390077	46.341
52)$Dibromofluoromethane	(2)	6.032	113	257383	50.810
52)$Dibromofluoromethane	(2)	6.032	111	263194	50.818
54) Cyclohexane	(2)	6.106	56	471497	46.955
54) Cyclohexane	(2)	6.106	84	375858	45.311
54) Cyclohexane	(2)	6.112	69	140364	46.942
43) 1,2-Dichloroethene (Total)	(2)		96	551610	93.947
56) Carbon Tetrachloride	(2)	6.234	117	346718	46.871
55) 1,1-Dichloropropene	(2)	6.246	75	371253	45.843
58) Isobutyl Alcohol	(1)	6.477	41	415130	683.451
57)$1,2-Dichloroethane-d4	(2)	6.508	102	60782	50.259
57)$1,2-Dichloroethane-d4	(2)	6.508	65	312617	50.810
57)$1,2-Dichloroethane-d4	(2)	6.514	104	38519	50.019
60) Benzene	(2)	6.526	78	1175886	48.602
61) 1,2-Dichloroethane	(2)	6.618	62	374881	50.505
61) 1,2-Dichloroethane	(2)	6.618	98	31231	48.726
65) t-Amyl methyl ether	(2)	6.746	73	799734	46.987
66)*Fluorobenzene	(2)	6.965	96	1041330	50.000
67) n-Heptane	(2)	6.977	43	503587	54.451
69) n-Butanol	(1)	7.416	56	623618	1278.662
71) Trichloroethene	(2)	7.465	95	291161	48.117
73) Methylcyclohexane	(2)	7.770	83	547031	52.141
73) Methylcyclohexane	(2)	7.770	98	229256	51.420
74) 1,2-Dichloropropane	(2)	7.825	63	313971	51.915
75) Dibromomethane	(2)	7.941	93	191093	51.937
77) Methyl Methacrylate	(2)	7.947	69	317071	51.988
79) Bromodichloromethane	(2)	8.203	83	341809	49.847
80) 2-Nitropropane	(2)	8.520	41	310788	101.207
81) 2-Chloroethyl Vinyl Ether	(2)	8.611	63	260202	53.486
82) cis-1,3-Dichloropropene	(2)	8.800	75	443490	50.296
83) 4-Methyl-2-pentanone	(2)	9.020	43	1284124	106.878
84)$Toluene-d8	(3)	9.142	98	1033603	49.518
84)$Toluene-d8	(3)	9.142	100	666662	49.350
89) Toluene	(3)	9.233	92	730478	46.647
90) trans-1,3-Dichloropropene	(3)	9.550	75	403787	48.279
92) Ethyl Methacrylate	(3)	9.641	69	509692	50.827

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:45.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08c01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:12 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 08:34 clm27445

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
93) 1,1,2-Trichloroethane	(3)	9.782	97	275481	51.647
94) Tetrachloroethene	(3)	9.849	166	309056	44.932
95) 1,3-Dichloropropane	(3)	9.958	76	463619	51.418
97) 2-Hexanone	(3)	10.044	43	1056761	104.605
91) 1,3-Dichloropropene (total)	(3)		100	847277	98.575
98) Dibromochloromethane	(3)	10.190	129	271856	49.780
100) 1,2-Dibromoethane	(3)	10.306	107	296915	51.306
101)*Chlorobenzene-d5	(3)	10.788	117	773806	50.000
102) 1-Chlorohexane	(3)	10.812	91	403145	45.317
103) Chlorobenzene	(3)	10.812	112	839366	49.479
104) 1,1,1,2-Tetrachloroethane	(3)	10.909	131	287587	51.473
105) Ethylbenzene	(3)	10.916	91	1461147	48.537
107) m+p-Xylene	(3)	11.044	106	1134084	97.528
108) o-Xylene	(3)	11.403	106	545883	49.046
110) Styrene	(3)	11.422	104	930112	51.281
111) Bromoform	(3)	11.586	173	196371	44.035
112) Isopropylbenzene	(3)	11.732	105	1404531	49.509
109) Xylene (Total)	(3)		106	1679967	146.574
115)$4-Bromofluorobenzene	(3)	11.885	95	393344	52.426
115)$4-Bromofluorobenzene	(3)	11.885	174	331425	52.027
116) Bromobenzene	(4)	12.001	156	356779	46.930
117) 1,1,2,2-Tetrachloroethane	(4)	12.013	83	515480	52.076
119) trans-1,4-Dichloro-2-butene	(4)	12.037	53	366638	107.847
118) 1,2,3-Trichloropropane	(4)	12.056	110	147244	50.014
120) n-Propylbenzene	(4)	12.086	91	1739551	48.033
121) 2-Chlorotoluene	(4)	12.159	126	344827	47.194
123) 1,3,5-Trimethylbenzene	(4)	12.238	105	1228911	48.348
122) 4-Chlorotoluene	(4)	12.263	126	361118	47.501
125) tert-Butylbenzene	(4)	12.495	134	243820M	46.181
126) Pentachloroethane	(4)	12.525	167	222594	49.391
127) 1,2,4-Trimethylbenzene	(4)	12.537	105	1274734	48.829
128) sec-Butylbenzene	(4)	12.671	105	1605846	50.618
130) 1,3-Dichlorobenzene	(4)	12.763	146	690335	48.002
131) p-Isopropyltoluene	(4)	12.787	119	1392432	50.537
132)*1,4-Dichlorobenzene-d4	(4)	12.824	152	442222	50.000
134) 1,4-Dichlorobenzene	(4)	12.842	146	715593	48.439
135) 1,2,3-Trimethylbenzene	(4)	12.860	105	1366659	50.257
136) Benzyl Chloride	(4)	12.933	91	973152	50.646

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

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:45.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08c01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:12 Analyst ID: CLM27445

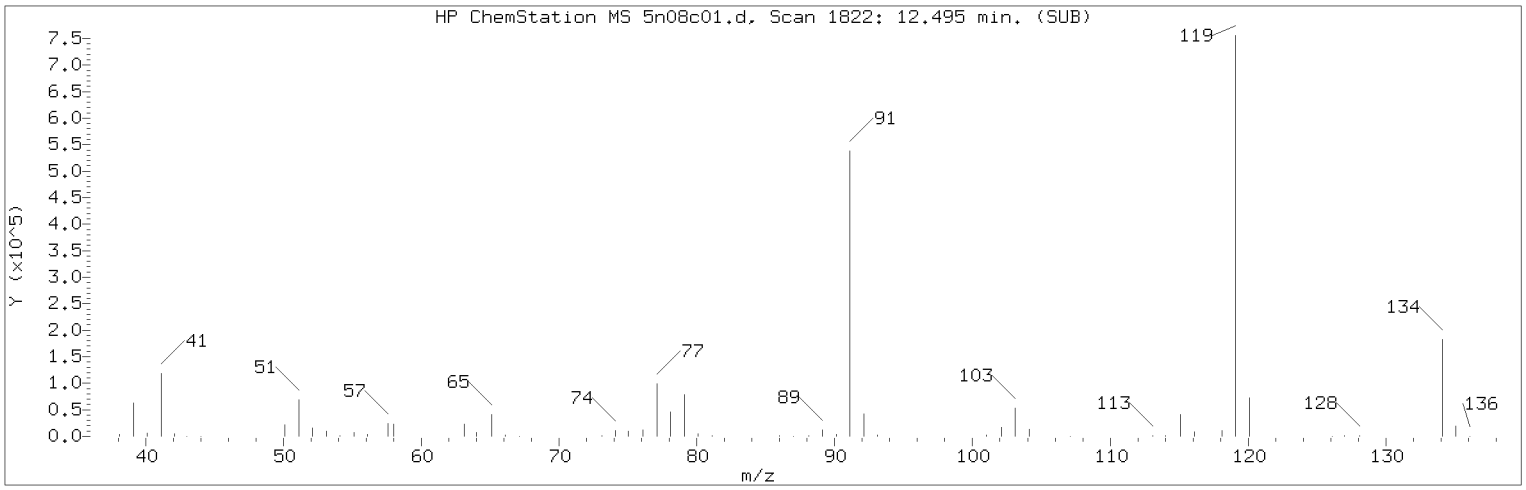
Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 08:34 clm27445

Sample Name: VSTD050 Lab Sample ID: VSTD050

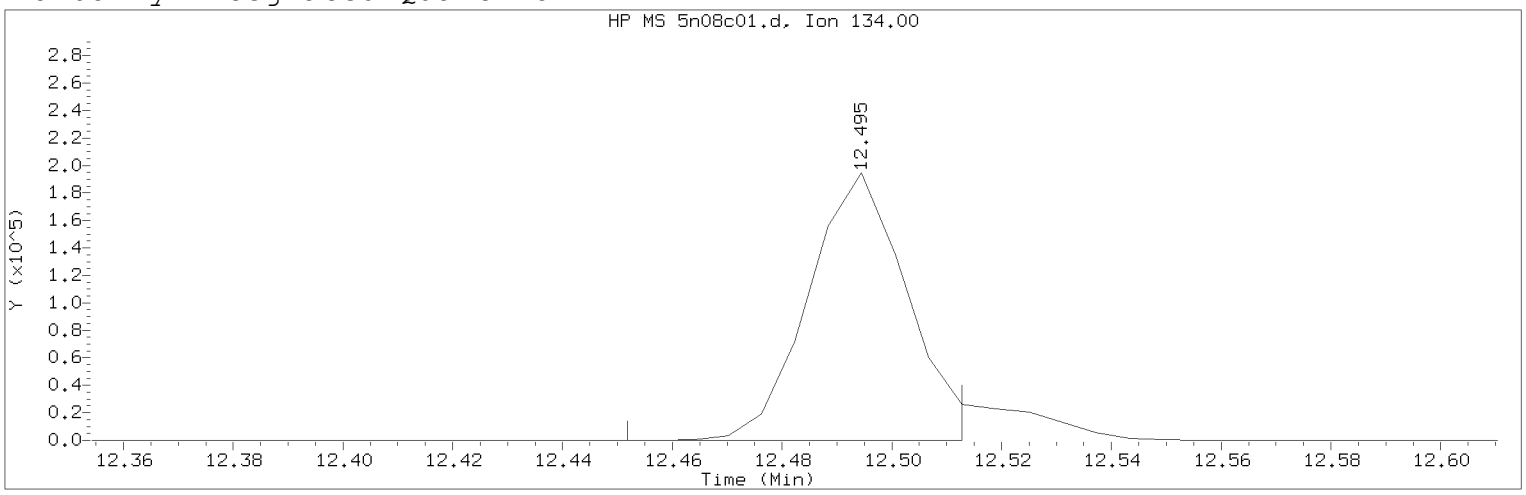
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137) 1,3-Diethylbenzene	(4)	13.001	119	879818	51.801
138) 1,4-Diethylbenzene	(4)	13.080	119	945287	52.143
140) n-Butylbenzene	(4)	13.098	92	751928	52.884
139) 1,2-Dichlorobenzene	(4)	13.122	146	673438	48.829
141) 1,2-Diethylbenzene	(4)	13.153	119	733103	51.555
142) Diethylbenzene (total)	(4)		100	2558208	155.499
143) 1,2-Dibromo-3-chloropropane	(4)	13.695	75	123188	48.409
145) 1,3,5-Trichlorobenzene	(4)	13.824	180	513103	50.840
147) 1,2,4-Trichlorobenzene	(4)	14.275	180	458882	50.554
148) Hexachlorobutadiene	(4)	14.366	225	220706	51.615
149) Naphthalene	(4)	14.464	128	1663946	51.676
150) 1,2,3-Trichlorobenzene	(4)	14.616	180	447044	50.550
151) 2-Methylnaphthalene	(4)	15.262	142	960617	50.421

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:45.
Target 3.5 esignature user ID: clm27445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov08a.b/5n08c01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:12 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 08:34 clm27445

Sample Name: VSTD050 Lab Sample ID: VSTD050

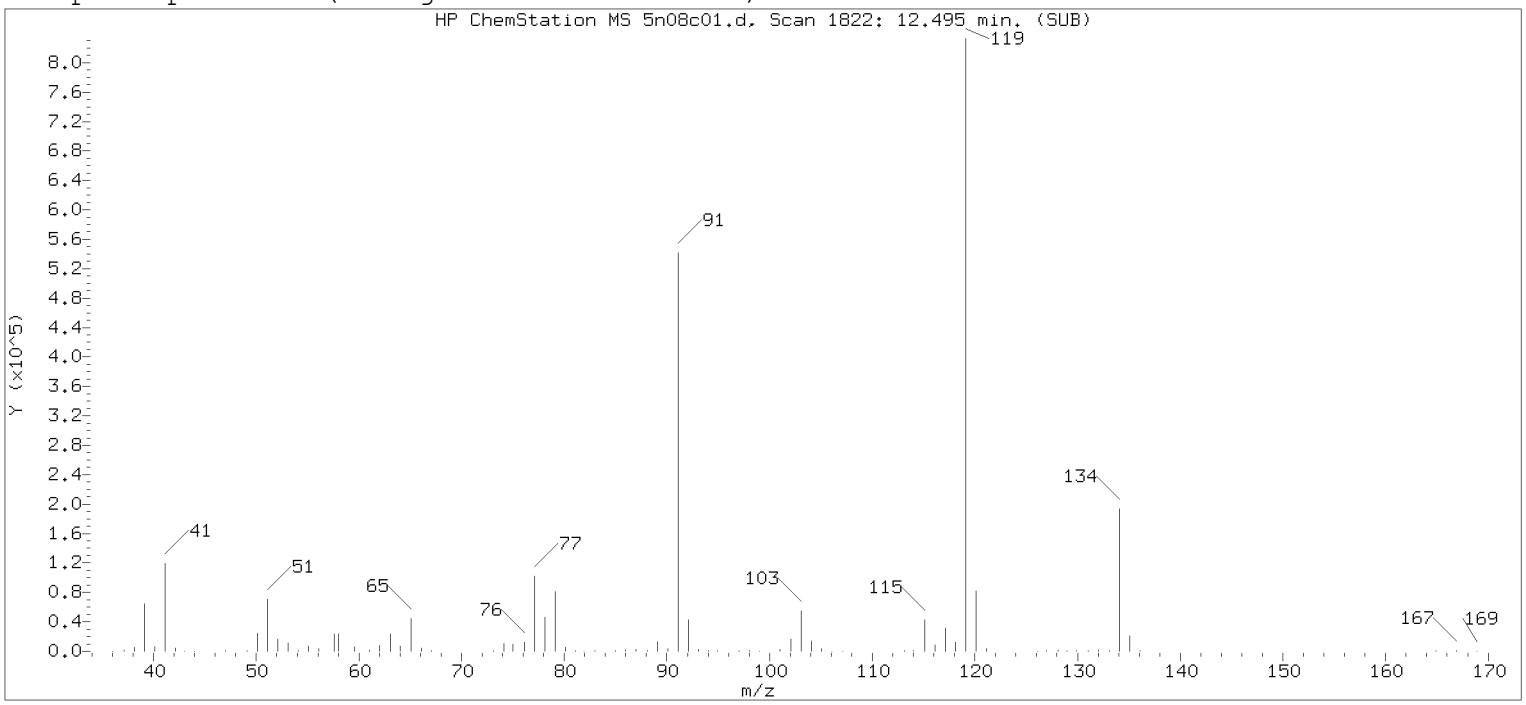
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1822
Retention Time (minutes): 12.495
Quant Ion : 134.00
Area (flag) : 243820M
On-Column Amount (ng) : 46.1807
Integration start scan : 1814 Integration stop scan: 1824
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

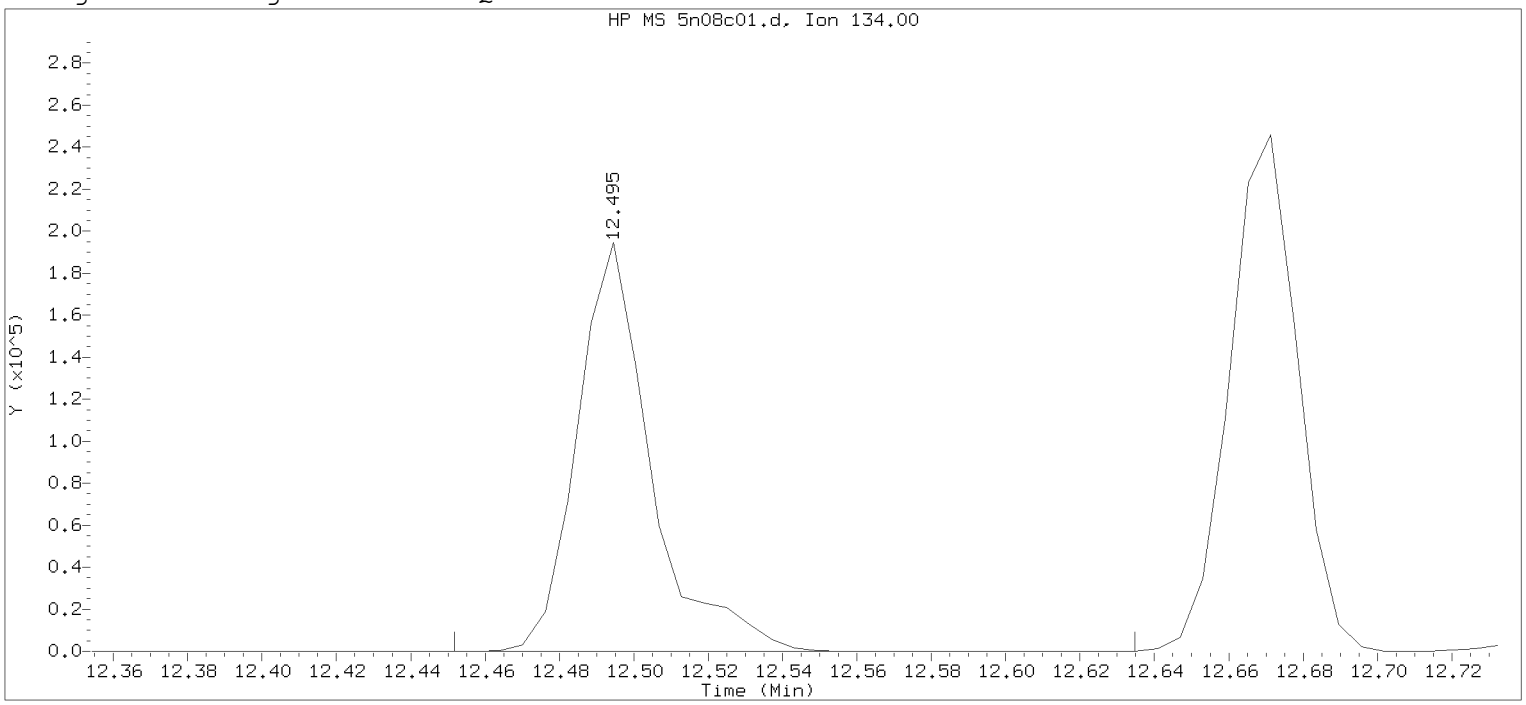
Analyst responsible for change: Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:45.
Target 3.5 esignature user ID: clm27445

Secondary review performed and digitally signed by Joshua E. Berrios on 11/08/2018 at 20:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov08a.b/5n08c01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:12 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 08-NOV-2018 08:31
Date, time and analyst ID of latest file update: 08-Nov-2018 08:31 Unknown

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1822
Retention Time (minutes): 12.495
Quant Ion : 134.00
Area : 267085
On-column Amount (ng) : 50.5872
Integration start scan : 1814 Integration stop scan: 1844
Y at integration start : 0 Y at integration end: 0

Digitally signed by Corie L. Mellinger on 11/08/2018 at 09:45.
Target 3.5 esignature user comment: 267454

Raw QC Data

Volatiles by GC/MS

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov07b.b/5n07b61.d
Data file Sample Info. Line: VBLK557;VBLK557;1;3;;;;;;
Date, time and analyst ID of latest file update: 07-Nov-2018 22:05 dvv10203

Injection date and time: **07-NOV-2018 21:29**
Instrument ID: **HP26285.i** Batch: **5183113AA**

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 07-NOV-2018 20:23
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(0.018)	347	65	394538	(-6)	250.00	
66) Fluorobenzene	6.971	(0.006)	916	96	1141885	(-3)	50.00	
101) Chlorobenzene-d5	10.794	(0.006)	1543	117	828767	(-5)	50.00	
132) 1,4-Dichlorobenzene-d4	12.830	(0.006)	1877	152	437755	(-10)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.038	(0.000)	113	276192	49.722	99%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.514	(0.000)	102	66483	50.132	100%		80 - 120
84) Toluene-d8	(3)	9.148	(0.000)	98	1115770	49.910	100%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.891	(-0.001)	95	392040	48.787	98%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)				Not Detected					0.2	1
4) Chloromethane	(2)				Not Detected					0.2	1
5) 1,3-Butadiene	(2)				Not Detected					1	3
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
11) n-Pentane	(2)				Not Detected					0.4	10
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
14) Ethyl ether	(2)				Not Detected					0.2	5
15) Freon 123a	(2)				Not Detected					0.4	5
16) Acrolein	(1)				Not Detected					2	100
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
18) Acetone	(1)				Not Detected					0.7	20
19) Freon 113	(2)				Not Detected					0.2	10
21) 2-Propanol	(1)				Not Detected					18	100
22) Methyl Iodide	(2)				Not Detected					0.2	1
23) Carbon Disulfide	(2)				Not Detected					0.2	5
25) Allyl Chloride	(2)				Not Detected					0.3	5
27) Methyl Acetate	(2)				Not Detected					0.2	5
28) Methylene Chloride	(2)				Not Detected					0.3	1
30) t-Butyl alcohol	(1)				Not Detected					12	50
31) Acrylonitrile	(2)				Not Detected					0.3	20
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
34) n-Hexane	(2)				Not Detected					0.2	5
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
38) di-Isopropyl ether	(2)				Not Detected					0.2	1
39) 2-Chloro-1,3-butadiene	(2)				Not Detected					0.2	5
40) Ethyl t-butyl ether	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2

Digitally signed by Don V. Viray on 11/07/2018 at 22:10. Target 3.5 esignature user ID: dvv10203

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov07b.b/5n07b61.d Injection date and time: **07-NOV-2018 21:29**
Data file Sample Info. Line: VBLK557;VBLK557;1;3;;;;;; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 07-Nov-2018 22:05 dvv10203

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 07-NOV-2018 20:23
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
44) 2-Butanone	(2)				Not Detected					0.3	10
45) 2,2-Dichloropropane	(2)				Not Detected					0.3	1
47) Propionitrile	(1)				Not Detected					14	100
48) Methacrylonitrile	(2)				Not Detected					6	50
49) Bromochloromethane	(2)				Not Detected					0.2	5
50) Tetrahydrofuran	(1)				Not Detected					0.7	10
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
54) Cyclohexane	(2)				Not Detected					0.2	5
55) 1,1-Dichloropropene	(2)				Not Detected					0.2	5
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
58) Isobutyl Alcohol	(1)				Not Detected					36	250
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
65) t-Amyl methyl ether	(2)				Not Detected					0.8	5
67) n-Heptane	(2)				Not Detected					0.2	5
69) n-Butanol	(1)				Not Detected					61	250
71) Trichloroethene	(2)				Not Detected					0.2	1
73) Methylcyclohexane	(2)				Not Detected					0.2	5
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
75) Dibromomethane	(2)				Not Detected					0.2	1
77) Methyl Methacrylate	(2)				Not Detected					0.2	5
79) Bromodichloromethane	(2)				Not Detected					0.2	1
80) 2-Nitropropane	(2)				Not Detected					0.8	10
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
83) 4-Methyl-2-pentanone	(2)				Not Detected					0.5	10
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
91) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	5
92) Ethyl Methacrylate	(3)				Not Detected					0.2	5
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
95) 1,3-Dichloropropane	(3)				Not Detected					0.2	1
97) 2-Hexanone	(3)				Not Detected					0.3	10
98) Dibromochloromethane	(3)				Not Detected					0.2	1
100) 1,2-Dibromoethane	(3)				Not Detected					0.2	1
102) 1-Chlorohexane	(3)				Not Detected					0.3	5
103) Chlorobenzene	(3)				Not Detected					0.2	1
104) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
110) Styrene	(3)				Not Detected					0.2	5
111) Bromoform	(3)				Not Detected					0.2	4
112) Isopropylbenzene	(3)				Not Detected					0.2	5
116) Bromobenzene	(4)				Not Detected					0.2	5
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
118) 1,2,3-Trichloropropane	(4)				Not Detected					0.2	5
119) trans-1,4-Dichloro-2-butene	(4)				Not Detected					6	50
120) n-Propylbenzene	(4)				Not Detected					0.2	5
121) 2-Chlorotoluene	(4)				Not Detected					0.2	5
122) 4-Chlorotoluene	(4)				Not Detected					0.2	5

Digitally signed by Don V. Viray on 11/07/2018 at 22:10. Target 3.5 esignature user ID: dvv10203

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov07b.b/5n07b61.d Injection date and time: **07-NOV-2018 21:29**
Data file Sample Info. Line: VBLK557;VBLK557;1;3;;;;;; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 07-Nov-2018 22:05 dvv10203

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 07-NOV-2018 20:23
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

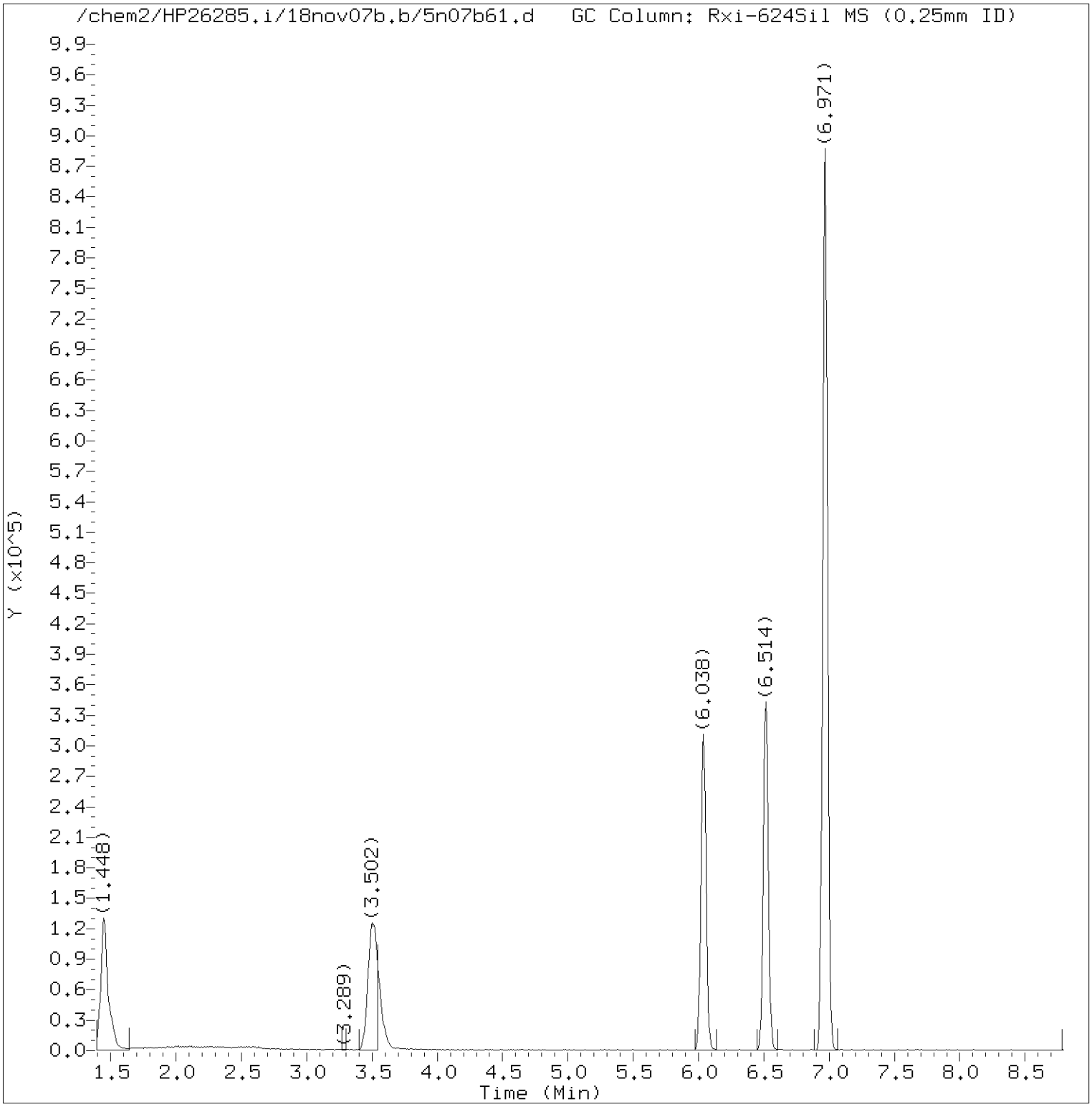
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
123) 1,3,5-Trimethylbenzene	(4)				Not Detected					0.3	5
125) tert-Butylbenzene	(4)				Not Detected					0.3	5
126) Pentachloroethane	(4)				Not Detected					0.2	5
127) 1,2,4-Trimethylbenzene	(4)				Not Detected					1	5
128) sec-Butylbenzene	(4)				Not Detected					0.2	5
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
131) p-Isopropyltoluene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
135) 1,2,3-Trimethylbenzene	(4)				Not Detected					0.3	5
136) Benzyl Chloride	(4)				Not Detected					0.3	5
137) 1,3-Diethylbenzene	(4)				Not Detected					0.2	5
138) 1,4-Diethylbenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5
140) n-Butylbenzene	(4)				Not Detected					0.2	5
141) 1,2-Diethylbenzene	(4)				Not Detected					0.2	5
142) Diethylbenzene (total)	(4)				Not Detected					0.2	5
143) 1,2-Dibromo-3-chloropropane	(4)				Not Detected					0.3	5
145) 1,3,5-Trichlorobenzene	(4)				Not Detected					0.2	5
147) 1,2,4-Trichlorobenzene	(4)				Not Detected					0.3	5
148) Hexachlorobutadiene	(4)				Not Detected					0.7	5
149) Naphthalene	(4)				Not Detected					1	5
150) 1,2,3-Trichlorobenzene	(4)				Not Detected					0.4	5
151) 2-Methylnaphthalene	(4)				Not Detected					0.7	5

Total number of targets = 108

Digitally signed by Don V. Viray on 11/07/2018 at 22:10. Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

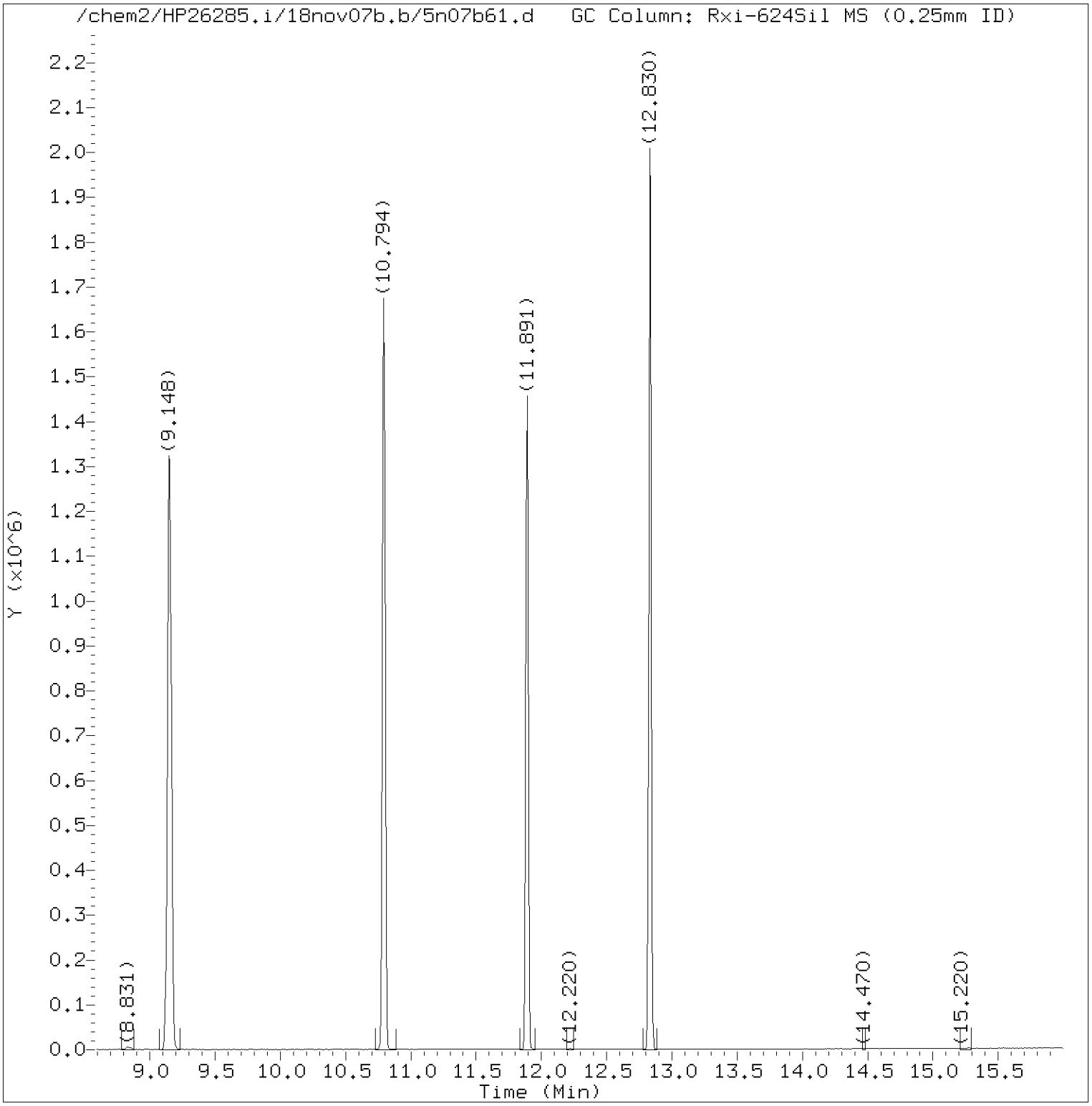
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07b61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 21:29 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:05 dvv10203

Sample Name: VBLK557 Lab Sample ID: VBLK557

Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07b61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 21:29 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:05 dvv10203

Sample Name: VBLK557 Lab Sample ID: VBLK557

Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07b61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 21:29 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:05 dvv10203

Sample Name: VBLK557 Lab Sample ID: VBLK557

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.502	65	394538	250.000
52)$Dibromofluoromethane	(2)	6.038	113	276192	49.722
57)$1,2-Dichloroethane-d4	(2)	6.514	102	66483	50.132
66)*Fluorobenzene	(2)	6.971	96	1141885	50.000
84)$Toluene-d8	(3)	9.148	98	1115770	49.910
101)*Chlorobenzene-d5	(3)	10.794	117	828767	50.000
115)$4-Bromofluorobenzene	(3)	11.891	95	392040	48.787
132)*1,4-Dichlorobenzene-d4	(4)	12.830	152	437755	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov08a.b/5n08b01.d
Data file Sample Info. Line: VBLK558;VBLK558;1;3;;;;;;
Date, time and analyst ID of latest file update: 08-Nov-2018 09:47 clm27445

Injection date and time: **08-NOV-2018 09:15**
Instrument ID: **HP26285.i** Batch: **5183121AA**

Blank Data file reference: **/chem2/HP26285.i/18nov08a.b/5n08b01.d**

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 08-NOV-2018 08:34
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov08a.b/5n08c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(-0.006)	347	65	357972	(0)	250.00	
66) Fluorobenzene	6.965	(0.000)	915	96	1031290	(-1)	50.00	
101) Chlorobenzene-d5	10.781	(0.006)	1541	117	756463	(-2)	50.00	
132) 1,4-Dichlorobenzene-d4	12.824	(0.000)	1876	152	391832	(-11)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.032	(0.000)	113	250974	50.027	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.514	(-0.001)	102	60496	50.510	101%		80 - 120
84) Toluene-d8	(3)	9.141	(0.000)	98	1007025	49.351	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.879	(0.000)	95	352498	48.059	96%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ (in sample)
3) Dichlorodifluoromethane	(2)				Not Detected					0.2	1
4) Chloromethane	(2)				Not Detected					0.2	1
5) 1,3-Butadiene	(2)				Not Detected					1	3
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
11) n-Pentane	(2)				Not Detected					0.4	10
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
14) Ethyl ether	(2)				Not Detected					0.2	5
15) Freon 123a	(2)				Not Detected					0.4	5
16) Acrolein	(1)				Not Detected					2	100
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
18) Acetone	(1)				Not Detected					0.7	20
19) Freon 113	(2)				Not Detected					0.2	10
21) 2-Propanol	(1)				Not Detected					18	100
22) Methyl Iodide	(2)				Not Detected					0.2	1
23) Carbon Disulfide	(2)				Not Detected					0.2	5
25) Allyl Chloride	(2)				Not Detected					0.3	5
27) Methyl Acetate	(2)				Not Detected					0.2	5
28) Methylene Chloride	(2)				Not Detected					0.3	1
30) t-Butyl alcohol	(1)				Not Detected					12	50
31) Acrylonitrile	(2)				Not Detected					0.3	20
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
34) n-Hexane	(2)				Not Detected					0.2	5
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
38) di-Isopropyl ether	(2)				Not Detected					0.2	1
39) 2-Chloro-1,3-butadiene	(2)				Not Detected					0.2	5
40) Ethyl t-butyl ether	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov08a.b/5n08b01.d Injection date and time: **08-NOV-2018 09:15**
Data file Sample Info. Line: VBLK558;VBLK558;1;3;;;;;; Instrument ID: **HP26285.i** Batch: **5183121AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 09:47 clm27445

Blank Data file reference: **/chem2/HP26285.i/18nov08a.b/5n08b01.d**

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 08-NOV-2018 08:34
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov08a.b/5n08c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
44) 2-Butanone	(2)				Not Detected					0.3	10
45) 2,2-Dichloropropane	(2)				Not Detected					0.3	1
47) Propionitrile	(1)				Not Detected					14	100
48) Methacrylonitrile	(2)				Not Detected					6	50
49) Bromochloromethane	(2)				Not Detected					0.2	5
50) Tetrahydrofuran	(1)				Not Detected					0.7	10
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
54) Cyclohexane	(2)				Not Detected					0.2	5
55) 1,1-Dichloropropene	(2)				Not Detected					0.2	5
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
58) Isobutyl Alcohol	(1)				Not Detected					36	250
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
65) t-Amyl methyl ether	(2)				Not Detected					0.8	5
67) n-Heptane	(2)				Not Detected					0.2	5
69) n-Butanol	(1)				Not Detected					61	250
71) Trichloroethene	(2)				Not Detected					0.2	1
73) Methylcyclohexane	(2)				Not Detected					0.2	5
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
75) Dibromomethane	(2)				Not Detected					0.2	1
77) Methyl Methacrylate	(2)				Not Detected					0.2	5
79) Bromodichloromethane	(2)				Not Detected					0.2	1
80) 2-Nitropropane	(2)				Not Detected					0.8	10
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
83) 4-Methyl-2-pentanone	(2)				Not Detected					0.5	10
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
91) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	5
92) Ethyl Methacrylate	(3)				Not Detected					0.2	5
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
95) 1,3-Dichloropropane	(3)				Not Detected					0.2	1
97) 2-Hexanone	(3)				Not Detected					0.3	10
98) Dibromochloromethane	(3)				Not Detected					0.2	1
100) 1,2-Dibromoethane	(3)				Not Detected					0.2	1
102) 1-Chlorohexane	(3)				Not Detected					0.3	5
103) Chlorobenzene	(3)				Not Detected					0.2	1
104) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
110) Styrene	(3)				Not Detected					0.2	5
111) Bromoform	(3)				Not Detected					0.2	4
112) Isopropylbenzene	(3)				Not Detected					0.2	5
116) Bromobenzene	(4)				Not Detected					0.2	5
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
118) 1,2,3-Trichloropropane	(4)				Not Detected					0.2	5
119) trans-1,4-Dichloro-2-butene	(4)				Not Detected					6	50
120) n-Propylbenzene	(4)				Not Detected					0.2	5
121) 2-Chlorotoluene	(4)				Not Detected					0.2	5
122) 4-Chlorotoluene	(4)				Not Detected					0.2	5

Digitally signed by Corie L. Mellinger on 11/08/2018 at 09:59. Target 3.5 esignature user ID: clm27445

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov08a.b/5n08b01.d Injection date and time: **08-NOV-2018 09:15**
Data file Sample Info. Line: VBLK558;VBLK558;1;3;;;;;; Instrument ID: **HP26285.i** Batch: **5183121AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 09:47 clm27445

Blank Data file reference: **/chem2/HP26285.i/18nov08a.b/5n08b01.d**

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 08-NOV-2018 08:34
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov08a.b/5n08c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

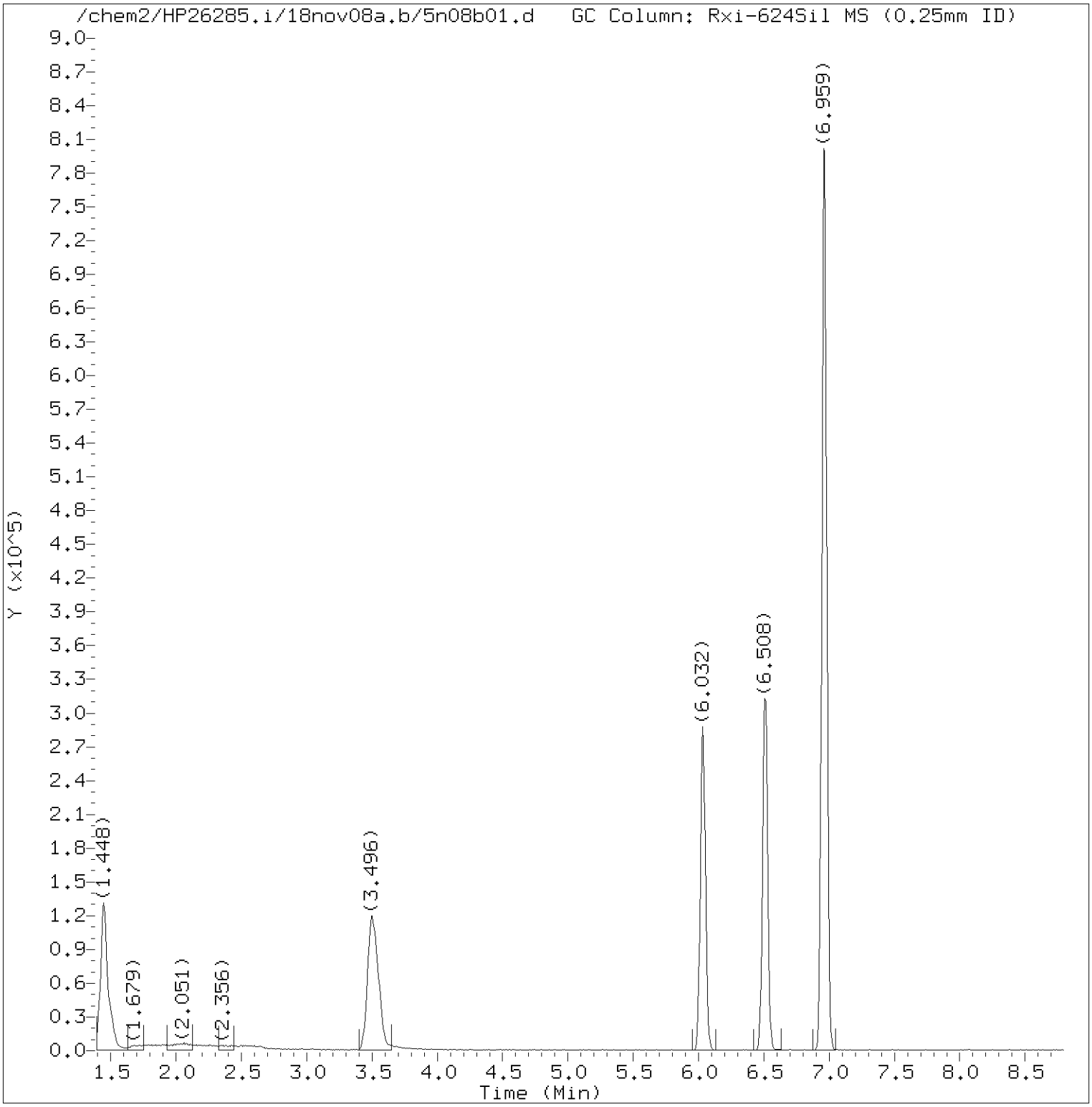
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
123) 1,3,5-Trimethylbenzene	(4)				Not Detected					0.3	5
125) tert-Butylbenzene	(4)				Not Detected					0.3	5
126) Pentachloroethane	(4)				Not Detected					0.2	5
127) 1,2,4-Trimethylbenzene	(4)				Not Detected					1	5
128) sec-Butylbenzene	(4)				Not Detected					0.2	5
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
131) p-Isopropyltoluene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
135) 1,2,3-Trimethylbenzene	(4)				Not Detected					0.3	5
136) Benzyl Chloride	(4)				Not Detected					0.3	5
137) 1,3-Diethylbenzene	(4)				Not Detected					0.2	5
138) 1,4-Diethylbenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5
140) n-Butylbenzene	(4)				Not Detected					0.2	5
141) 1,2-Diethylbenzene	(4)				Not Detected					0.2	5
142) Diethylbenzene (total)	(4)				Not Detected					0.2	5
143) 1,2-Dibromo-3-chloropropane	(4)				Not Detected					0.3	5
145) 1,3,5-Trichlorobenzene	(4)				Not Detected					0.2	5
147) 1,2,4-Trichlorobenzene	(4)				Not Detected					0.3	5
148) Hexachlorobutadiene	(4)				Not Detected					0.7	5
149) Naphthalene	(4)				Not Detected					1	5
150) 1,2,3-Trichlorobenzene	(4)				Not Detected					0.4	5
151) 2-Methylnaphthalene	(4)				Not Detected					0.7	5

Total number of targets = 108

Digitally signed by Corie L. Mellinger on 11/08/2018 at 09:59. Target 3.5 esignature user ID: clm27445

Secondary review performed and digitally signed by Joshua E. Berrios on 11/08/2018 at 20:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

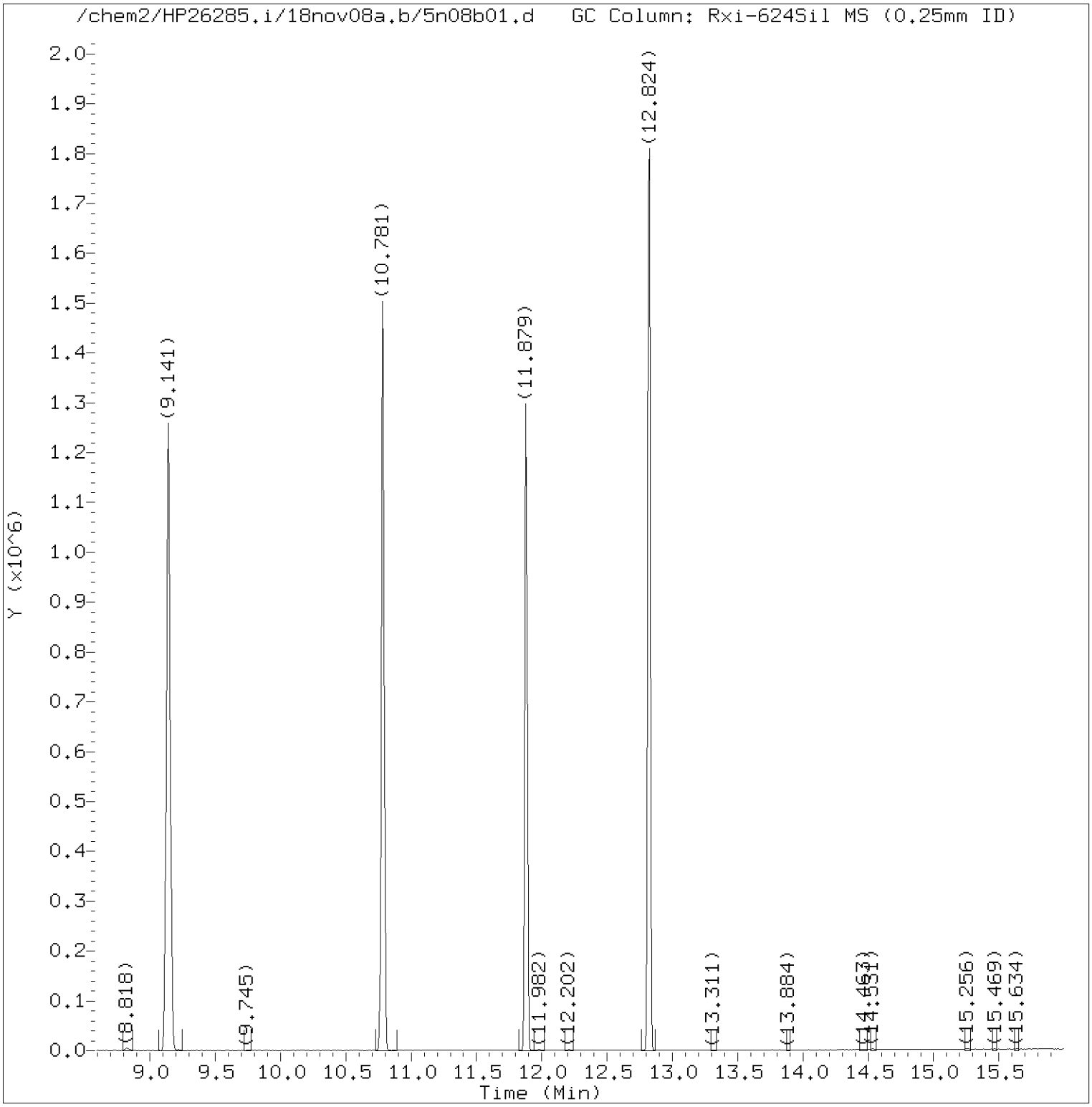
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08b01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 09:15 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:47 clm27445

Sample Name: VBLK558 Lab Sample ID: VBLK558

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:59.
Target 3.5 esignature user ID: clm27445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08b01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 09:15 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:47 clm27445

Sample Name: VBLK558 Lab Sample ID: VBLK558

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:59.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08b01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 09:15 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:47 clm27445

Sample Name: VBLK558 Lab Sample ID: VBLK558

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	3.502	65	357972	250.000
52)$Dibromofluoromethane	(2)	6.032	113	250974	50.027
57)$1,2-Dichloroethane-d4	(2)	6.514	102	60496	50.510
66)*Fluorobenzene	(2)	6.965	96	1031290	50.000
84)$Toluene-d8	(3)	9.141	98	1007025	49.351
101)*Chlorobenzene-d5	(3)	10.781	117	756463	50.000
115)$4-Bromofluorobenzene	(3)	11.879	95	352498	48.059
132)*1,4-Dichlorobenzene-d4	(4)	12.824	152	391832	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:59.
Target 3.5 esignature user ID: clm27445

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS557

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCS557

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s61.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/07/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	16	
74-87-3	Chloromethane	19	
106-99-0	1,3-Butadiene	23	
75-01-4	Vinyl Chloride	20	
74-83-9	Bromomethane	18	
75-00-3	Chloroethane	18	
109-66-0	n-Pentane	17	
75-69-4	Trichlorofluoromethane	17	
60-29-7	Ethyl ether	21	
354-23-4	Freon 123a	20	
107-02-8	Acrolein	130	
75-35-4	1,1-Dichloroethene	21	
67-64-1	Acetone	130	
76-13-1	Freon 113	21	
67-63-0	2-Propanol	130	
74-88-4	Methyl Iodide	19	
75-15-0	Carbon Disulfide	18	
107-05-1	Allyl Chloride	17	
79-20-9	Methyl Acetate	18	
75-09-2	Methylene Chloride	21	
75-65-0	t-Butyl alcohol	180	
107-13-1	Acrylonitrile	97	
156-60-5	trans-1,2-Dichloroethene	21	
1634-04-4	Methyl Tertiary Butyl Ether	19	
110-54-3	n-Hexane	20	
75-34-3	1,1-Dichloroethane	21	
108-20-3	di-Isopropyl ether	20	
126-99-8	2-Chloro-1,3-butadiene	19	
637-92-3	Ethyl t-butyl ether	19	
156-59-2	cis-1,2-Dichloroethene	22	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS557

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCS557

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s61.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/07/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
540-59-0	1,2-Dichloroethene (Total)	43	
78-93-3	2-Butanone	150	
594-20-7	2,2-Dichloropropane	20	
107-12-0	Propionitrile	140	
126-98-7	Methacrylonitrile	150	
74-97-5	Bromochloromethane	19	
109-99-9	Tetrahydrofuran	92	
67-66-3	Chloroform	21	
71-55-6	1,1,1-Trichloroethane	20	
110-82-7	Cyclohexane	20	
563-58-6	1,1-Dichloropropene	21	
56-23-5	Carbon Tetrachloride	20	
78-83-1	Isobutyl Alcohol	490	
71-43-2	Benzene	21	
107-06-2	1,2-Dichloroethane	21	
994-05-8	t-Amyl methyl ether	19	
142-82-5	n-Heptane	21	
71-36-3	n-Butanol	930	
79-01-6	Trichloroethene	21	
108-87-2	Methylcyclohexane	19	
78-87-5	1,2-Dichloropropane	22	
74-95-3	Dibromomethane	21	
80-62-6	Methyl Methacrylate	19	
75-27-4	Bromodichloromethane	21	
79-46-9	2-Nitropropane	17	
110-75-8	2-Chloroethyl Vinyl Ether	19	
10061-01-5	cis-1,3-Dichloropropene	21	
108-10-1	4-Methyl-2-pentanone	100	
108-88-3	Toluene	21	
10061-02-6	trans-1,3-Dichloropropene	19	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS557

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCS557

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s61.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/07/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
542-75-6	1,3-Dichloropropene (total)	41	
97-63-2	Ethyl Methacrylate	19	
79-00-5	1,1,2-Trichloroethane	22	
127-18-4	Tetrachloroethene	20	
142-28-9	1,3-Dichloropropane	21	
591-78-6	2-Hexanone	97	
124-48-1	Dibromochloromethane	20	
106-93-4	1,2-Dibromoethane	21	
544-10-5	1-Chlorohexane	20	
108-90-7	Chlorobenzene	21	
630-20-6	1,1,1,2-Tetrachloroethane	20	
100-41-4	Ethylbenzene	21	
179601-23-1	m+p-Xylene	42	
95-47-6	o-Xylene	21	
1330-20-7	Xylene (Total)	62	
100-42-5	Styrene	21	
75-25-2	Bromoform	18	
98-82-8	Isopropylbenzene	21	
108-86-1	Bromobenzene	20	
79-34-5	1,1,2,2-Tetrachloroethane	21	
96-18-4	1,2,3-Trichloropropane	21	
110-57-6	trans-1,4-Dichloro-2-butene	88	
103-65-1	n-Propylbenzene	22	
95-49-8	2-Chlorotoluene	21	
106-43-4	4-Chlorotoluene	21	
108-67-8	1,3,5-Trimethylbenzene	21	
98-06-6	tert-Butylbenzene	21	
76-01-7	Pentachloroethane	19	
95-63-6	1,2,4-Trimethylbenzene	21	
135-98-8	sec-Butylbenzene	22	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS557

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCS557

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s61.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/07/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	20	
99-87-6	p-Isopropyltoluene	22	
106-46-7	1,4-Dichlorobenzene	21	
526-73-8	1,2,3-Trimethylbenzene	20	
100-44-7	Benzyl Chloride	18	
141-93-5	1,3-Diethylbenzene	20	
105-05-5	1,4-Diethylbenzene	20	
95-50-1	1,2-Dichlorobenzene	21	
104-51-8	n-Butylbenzene	22	
135-01-3	1,2-Diethylbenzene	21	
25340-17-4	Diethylbenzene (total)	61	
96-12-8	1,2-Dibromo-3-chloropropane	19	
108-70-3	1,3,5-Trichlorobenzene	21	
120-82-1	1,2,4-Trichlorobenzene	21	
87-68-3	Hexachlorobutadiene	22	
91-20-3	Naphthalene	20	
87-61-6	1,2,3-Trichlorobenzene	21	
91-57-6	2-Methylnaphthalene	18	

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov07b.b/5n07s61.d Injection date and time: **07-NOV-2018 20:25**
Data file Sample Info. Line: LCS557;LCS557;1;3;LCS;;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 07-NOV-2018 20:23
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.502	(0.018)	347	65	411790M	(-2)	250.00	
66) Fluorobenzene	6.971	(0.006)	916	96	1177924	(0)	50.00	
101) Chlorobenzene-d5	10.800	(0.000)	1544	117	872493	(0)	50.00	
132) 1,4-Dichlorobenzene-d4	12.836	(0.000)	1878	152	477668	(-2)	50.00	

M = Internal Standard was manually integrated

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.038	(0.000)	113	287431	50.162	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.520	(-0.001)	102	68447	50.034	100%		80 - 120
84) Toluene-d8	(3)	9.154	(0.000)	98	1170362	49.728	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.891	(0.000)	95	426767	50.447	101%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)	1.631	(0.000)	85	180888	15.555	15.55			0.2	1
4) Chloromethane	(2)	1.765	(0.001)	50	179299	19.040	19.04			0.2	1
5) 1,3-Butadiene	(2)	1.881	(0.000)	39	144589	22.867	22.87			1	3
6) Vinyl Chloride	(2)	1.874	(0.001)	62	175128	19.900	19.90			0.2	1
8) Bromomethane	(2)	2.137	(0.001)	94	115938	17.725	17.72			0.3	1
9) Chloroethane	(2)	2.216	(0.001)	64	79238	18.114	18.11			0.2	1
11) n-Pentane	(2)	2.496	(0.000)	43	128143	17.092	17.09			0.4	10
12) Trichlorofluoromethane	(2)	2.472	(0.000)	101	201954M	17.206	17.21			0.2	1
14) Ethyl ether	(2)	2.673	(0.000)	59	116012	20.534	20.53			0.2	5
15) Freon 123a	(2)	2.758	(0.000)	67	163486	20.446	20.45			0.4	5
16) Acrolein	(1)	2.826	(-0.002)	56	370701	128.165	128.17			2	100
17) 1,1-Dichloroethene	(2)	2.929	(0.000)	96	116215	21.073	21.07			0.2	1
18) Acetone	(1)	2.966	(-0.002)	58	201149	134.179	134.18			0.7	20
19) Freon 113	(2)	2.966	(0.000)	101	114032	20.748	20.75			0.2	10
21) 2-Propanol	(1)	3.112	(-0.004)	45	158682	129.107	129.11			18	100
22) Methyl Iodide	(2)	3.100	(0.000)	142	207933	19.341	19.34			0.2	1
23) Carbon Disulfide	(2)	3.173	(-0.000)	76	329881	17.555	17.56			0.2	5
25) Allyl Chloride	(2)	3.319	(0.000)	41	197934	16.612	16.61			0.3	5
27) Methyl Acetate	(2)	3.301	(0.000)	43	188376	17.515	17.51			0.2	5
28) Methylene Chloride	(2)	3.484	(0.000)	84	134881	20.881	20.88			0.3	1
30) t-Butyl alcohol	(1)	3.606	(-0.003)	59	396032	182.872	182.87			12	50
31) Acrylonitrile	(2)	3.770	(0.000)	53	489698	96.982	96.98			0.3	20
32) trans-1,2-Dichloroethene	(2)	3.813	(0.000)	96	133280	21.238	21.24			0.2	1
33) Methyl Tertiary Butyl Ether	(2)	3.813	(-0.000)	73	384216	19.389	19.39			0.2	1
34) n-Hexane	(2)	4.185	(-0.000)	57	182083	20.004	20.00			0.2	5
36) 1,1-Dichloroethane	(2)	4.435	(0.000)	63	244403	20.808	20.81			0.2	1
38) di-Isopropyl ether	(2)	4.496	(-0.000)	45	451112	19.786	19.79			0.2	1
39) 2-Chloro-1,3-butadiene	(2)	4.545	(-0.000)	53	199278	18.797	18.80			0.2	5
40) Ethyl t-butyl ether	(2)	5.051	(0.000)	59	383005	18.680	18.68			0.2	1
42) cis-1,2-Dichloroethene	(2)	5.301	(-0.000)	96	151160	21.614	21.61			0.2	1

M = Compound was manually integrated.

Digitally signed by Don V. Viray on 11/07/2018 at 22:10. Target 3.5 esignature user ID: dvv10203

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov07b.b/5n07s61.d Injection date and time: **07-NOV-2018 20:25**
Data file Sample Info. Line: LCS557;LCS557;1;3;LCS;;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 07-NOV-2018 20:23
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
43) 1,2-Dichloroethene (Total)	(2)		96	284440	42.852	42.85			0.2	2
44) 2-Butanone	(2)	5.295(0.000)	43	1120589	146.890	146.89			0.3	10
45) 2,2-Dichloropropane	(2)	5.313(0.000)	77	184753	19.848	19.85			0.3	1
47) Propionitrile	(1)	5.398(-0.006)	54	331865	144.999	145.00			14	100
48) Methacrylonitrile	(2)	5.618(0.000)	67	727187	151.510	151.51			6	50
49) Bromochloromethane	(2)	5.648(-0.000)	128	68289	18.865	18.86			0.2	5
50) Tetrahydrofuran	(1)	5.660(-0.008)	71	190678	91.567	91.57			0.7	10
51) Chloroform	(2)	5.813(0.000)	83	235748	21.236	21.24			0.2	1
53) 1,1,1-Trichloroethane	(2)	6.032(0.000)	97	194188	20.394	20.39			0.3	1
54) Cyclohexane	(2)	6.124(-0.001)	56	225904	19.888	19.89			0.2	5
55) 1,1-Dichloropropene	(2)	6.258(-0.000)	75	190536	20.799	20.80			0.2	5
56) Carbon Tetrachloride	(2)	6.246(-0.000)	117	169555	20.263	20.26			0.2	1
58) Isobutyl Alcohol	(1)	6.489(-0.009)	41	340455	485.473	485.47			36	250
60) Benzene	(2)	6.538(-0.000)	78	580442	21.209	21.21			0.2	1
61) 1,2-Dichloroethane	(2)	6.630(-0.000)	62	175344	20.883	20.88			0.3	1
65) t-Amyl methyl ether	(2)	6.752(0.000)	73	372796	19.363	19.36			0.8	5
67) n-Heptane	(2)	6.983(-0.000)	43	221939	21.214	21.21			0.2	5
69) n-Butanol	(1)	7.428(-0.011)	56	525374	933.014	933.01			61	250
71) Trichloroethene	(2)	7.477(-0.000)	95	146068	21.340	21.34			0.2	1
73) Methylcyclohexane	(2)	7.782(-0.000)	83	227835	19.198	19.20			0.2	5
74) 1,2-Dichloropropane	(2)	7.837(-0.000)	63	150568	22.010	22.01			0.2	1
75) Dibromomethane	(2)	7.953(-0.000)	93	88143	21.178	21.18			0.2	1
77) Methyl Methacrylate	(2)	7.959(-0.000)	69	133073	19.289	19.29			0.2	5
79) Bromodichloromethane	(2)	8.215(-0.001)	83	159949	20.621	20.62			0.2	1
80) 2-Nitropropane	(2)	8.532(-0.001)	41	57421	16.531	16.53			0.8	10
81) 2-Chloroethyl Vinyl Ether	(2)	8.623(-0.001)	63	106266M	19.311	19.31			0.2	10
82) cis-1,3-Dichloropropene	(2)	8.806(-0.000)	75	211490	21.204	21.20			0.2	1
83) 4-Methyl-2-pentanone	(2)	9.032(-0.001)	43	1366236M	100.526	100.53			0.5	10
89) Toluene	(3)	9.239(0.000)	92	362127	20.509	20.51			0.2	1
90) trans-1,3-Dichloropropene	(3)	9.562(-0.000)	75	183408	19.449	19.45			0.2	1
91) 1,3-Dichloropropene (total)	(3)		100	394898	40.653	40.65			0.2	5
92) Ethyl Methacrylate	(3)	9.647(-0.000)	69	209652	18.542	18.54			0.2	5
93) 1,1,2-Trichloroethane	(3)	9.788(-0.000)	97	132633	22.053	22.05			0.2	1
94) Tetrachloroethene	(3)	9.861(-0.000)	166	157868	20.356	20.36			0.2	1
95) 1,3-Dichloropropane	(3)	9.970(-0.000)	76	213347	20.985	20.99			0.2	1
97) 2-Hexanone	(3)	10.050(-0.000)	43	1105920	97.089	97.09			0.3	10
98) Dibromochloromethane	(3)	10.202(-0.000)	129	125181	20.329	20.33			0.2	1
100) 1,2-Dibromoethane	(3)	10.312(-0.000)	107	135534	20.771	20.77			0.2	1
102) 1-Chlorohexane	(3)	10.824(0.000)	91	200785	20.017	20.02			0.3	5
103) Chlorobenzene	(3)	10.824(0.000)	112	399465	20.884	20.88			0.2	1
104) 1,1,1,2-Tetrachloroethane	(3)	10.922(-0.000)	131	128481	20.395	20.39			0.2	1
105) Ethylbenzene	(3)	10.928(-0.000)	91	703687	20.732	20.73			0.4	1
107) m+p-Xylene	(3)	11.056(0.000)	106	546684	41.695	41.70			1	5
108) o-Xylene	(3)	11.415(0.000)	106	258638	20.610	20.61			0.4	1
109) Xylene (Total)	(3)		106	805322	62.305	62.31			1	5
110) Styrene	(3)	11.434(0.000)	104	421515	20.611	20.61			0.2	5
111) Bromoform	(3)	11.592(0.000)	173	86660	18.442	18.44			0.2	4
112) Isopropylbenzene	(3)	11.744(0.000)	105	685283	21.424	21.42			0.2	5
116) Bromobenzene	(4)	12.013(-0.000)	156	164733	20.061	20.06			0.2	5
117) 1,1,2,2-Tetrachloroethane	(4)	12.019(-0.000)	83	226536	21.187	21.19			0.2	1
118) 1,2,3-Trichloropropane	(4)	12.062(-0.000)	110	66262	20.837	20.84			0.2	5
119) trans-1,4-Dichloro-2-butene	(4)	12.049(-0.000)	53	324306	88.316	88.32			6	50
120) n-Propylbenzene	(4)	12.098(-0.000)	91	857416	21.918	21.92			0.2	5
121) 2-Chlorotoluene	(4)	12.171(-0.000)	126	164617	20.858	20.86			0.2	5

M = Compound was manually integrated.

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Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov07b.b/5n07s61.d Injection date and time: **07-NOV-2018 20:25**
Data file Sample Info. Line: LCS557;LCS557;1;3;LCS;;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 07-NOV-2018 20:23
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

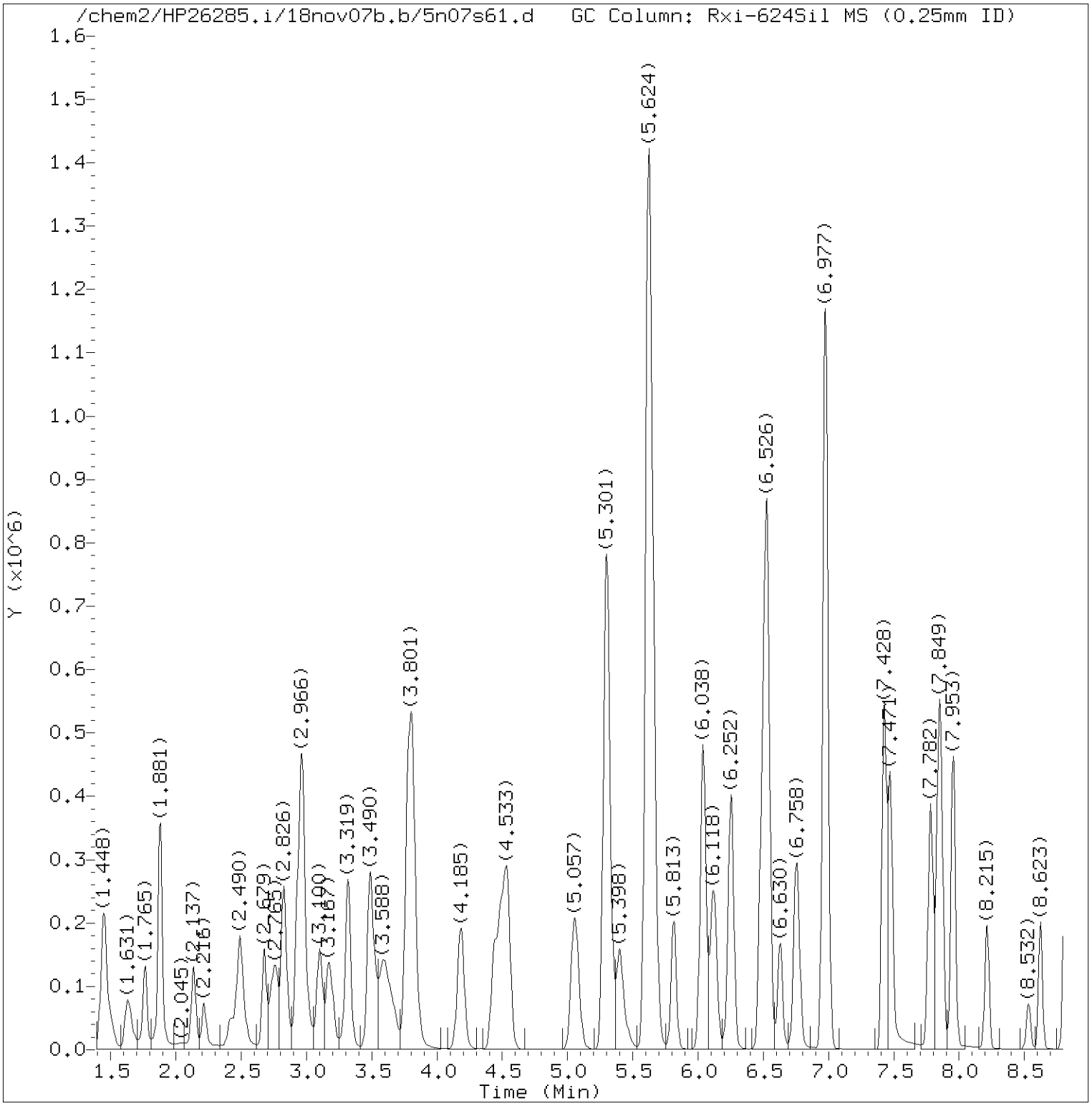
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
122) 4-Chlorotoluene	(4)	12.275(-0.000)	126	170077	20.712	20.71			0.2	5
123) 1,3,5-Trimethylbenzene	(4)	12.250(-0.000)	105	579315	21.100	21.10			0.3	5
125) tert-Butylbenzene	(4)	12.507(-0.000)	134	118850M	20.840	20.84			0.3	5
126) Pentachloroethane	(4)	12.531(-0.000)	167	94068	19.324	19.32			0.2	5
127) 1,2,4-Trimethylbenzene	(4)	12.549(-0.000)	105	590578	20.943	20.94			1	5
128) sec-Butylbenzene	(4)	12.677(-0.000)	105	770115	22.473	22.47			0.2	5
130) 1,3-Dichlorobenzene	(4)	12.775(-0.000)	146	317834	20.461	20.46			0.2	5
131) p-Isopropyltoluene	(4)	12.799(-0.000)	119	657186	22.082	22.08			0.2	5
134) 1,4-Dichlorobenzene	(4)	12.854(-0.000)	146	328586	20.592	20.59			0.2	5
135) 1,2,3-Trimethylbenzene	(4)	12.872(0.000)	105	593201	20.196	20.20			0.3	5
136) Benzyl Chloride	(4)	12.946(0.000)	91	378739	18.248	18.25			0.3	5
137) 1,3-Diethylbenzene	(4)	13.013(0.000)	119	374094	20.391	20.39			0.2	5
138) 1,4-Diethylbenzene	(4)	13.086(0.000)	119	391422	19.989	19.99			0.2	5
139) 1,2-Dichlorobenzene	(4)	13.128(0.000)	146	307401	20.635	20.63			0.2	5
140) n-Butylbenzene	(4)	13.104(0.000)	92	342345M	22.291	22.29			0.2	5
141) 1,2-Diethylbenzene	(4)	13.159(0.000)	119	315738	20.556	20.56			0.2	5
142) Diethylbenzene (total)	(4)		100	1081254	60.936	60.94			0.2	5
143) 1,2-Dibromo-3-chloropropane	(4)	13.708(0.000)	75	53137	19.332	19.33			0.3	5
145) 1,3,5-Trichlorobenzene	(4)	13.836(-0.000)	180	234347	21.497	21.50			0.2	5
147) 1,2,4-Trichlorobenzene	(4)	14.281(0.000)	180	204695	20.878	20.88			0.3	5
148) Hexachlorobutadiene	(4)	14.372(-0.000)	225	103252	22.355	22.36			0.7	5
149) Naphthalene	(4)	14.476(0.000)	128	697817	20.064	20.06			1	5
150) 1,2,3-Trichlorobenzene	(4)	14.622(-0.000)	180	200167	20.955	20.95			0.4	5
151) 2-Methylnaphthalene	(4)	15.274(0.000)	142	380615	18.495	18.50			0.7	5

M = Compound was manually integrated.

Total number of targets = 108

Digitally signed by Don V. Viray on 11/07/2018 at 22:10. Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

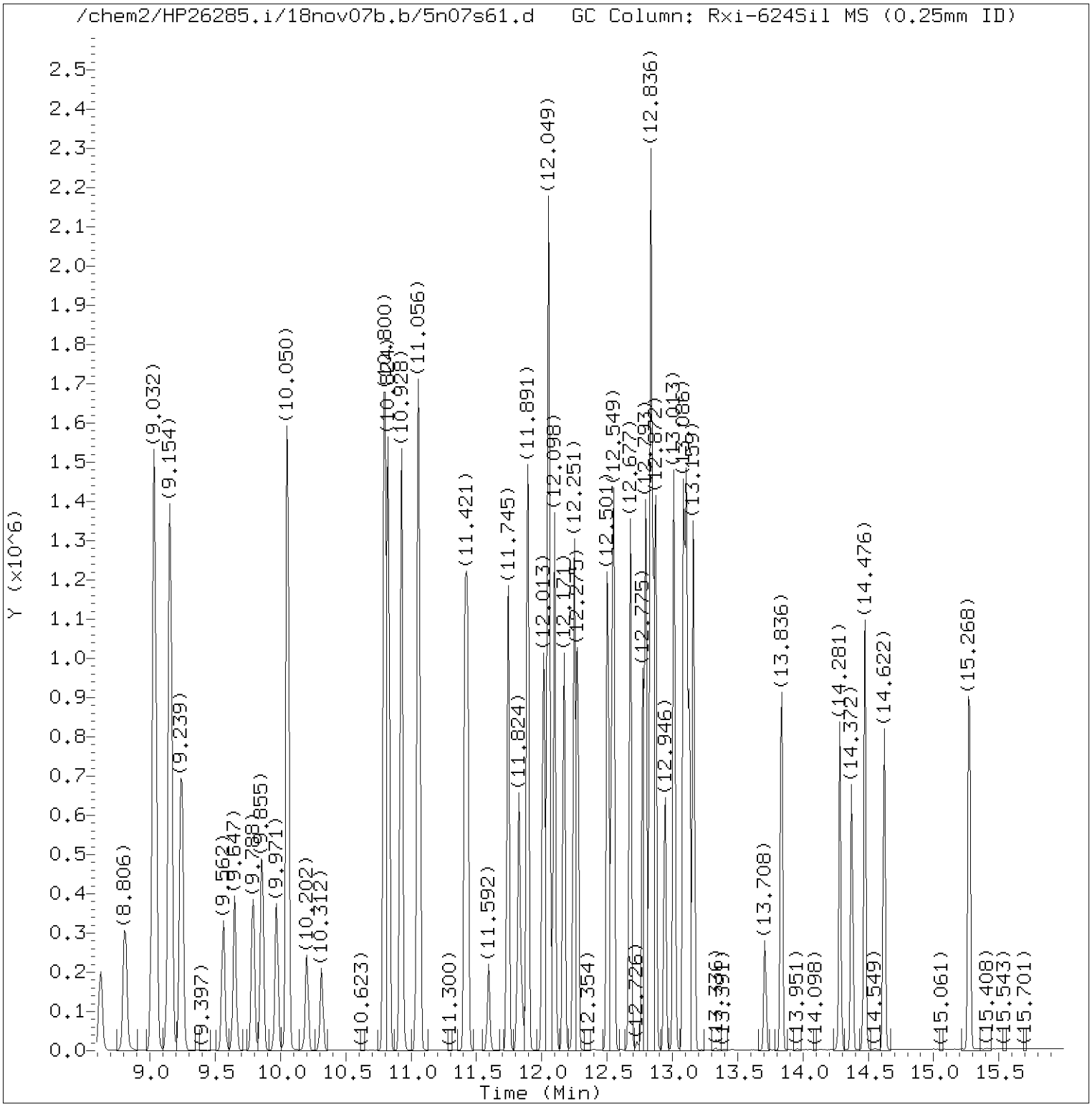
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.631	85	180888	15.555
4) Chloromethane	(2)	1.765	50	179299	19.040
6) Vinyl Chloride	(2)	1.875	62	175128	19.900
5) 1,3-Butadiene	(2)	1.881	39	144589	22.867
8) Bromomethane	(2)	2.137	94	115938	17.725
9) Chloroethane	(2)	2.216	64	79238	18.114
12) Trichlorofluoromethane	(2)	2.472	101	201954M	17.206
11) n-Pentane	(2)	2.496	43	128143	17.092
14) Ethyl ether	(2)	2.673	59	116012	20.534
15) Freon 123a	(2)	2.759	67	163486	20.446
16) Acrolein	(1)	2.826	56	370701	128.165
17) 1,1-Dichloroethene	(2)	2.929	96	116215	21.073
18) Acetone	(1)	2.966	58	201149	134.179
19) Freon 113	(2)	2.966	101	114032	20.748
22) Methyl Iodide	(2)	3.100	142	207933	19.341
21) 2-Propanol	(1)	3.112	45	158682	129.107
23) Carbon Disulfide	(2)	3.173	76	329881	17.555
27) Methyl Acetate	(2)	3.301	43	188376	17.515
25) Allyl Chloride	(2)	3.319	41	197934	16.612
28) Methylene Chloride	(2)	3.484	84	134881	20.881
29)*t-Butyl alcohol-d10	(1)	3.502	65	411790M	250.000
30) t-Butyl alcohol	(1)	3.606	59	396032	182.872
31) Acrylonitrile	(2)	3.771	53	489698	96.982
32) trans-1,2-Dichloroethene	(2)	3.813	96	133280	21.238
33) Methyl Tertiary Butyl Ether	(2)	3.813	73	384216	19.389
34) n-Hexane	(2)	4.185	57	182083	20.004
36) 1,1-Dichloroethane	(2)	4.435	63	244403	20.808
38) di-Isopropyl ether	(2)	4.496	45	451112	19.786
39) 2-Chloro-1,3-butadiene	(2)	4.545	53	199278	18.797
40) Ethyl t-butyl ether	(2)	5.051	59	383005	18.680
44) 2-Butanone	(2)	5.295	43	1120589	146.890
42) cis-1,2-Dichloroethene	(2)	5.301	96	151160	21.614
45) 2,2-Dichloropropane	(2)	5.313	77	184753	19.848
47) Propionitrile	(1)	5.398	54	331865	144.999
48) Methacrylonitrile	(2)	5.618	67	727187	151.510
49) Bromochloromethane	(2)	5.648	128	68289	18.865
50) Tetrahydrofuran	(1)	5.660	71	190678	91.567
51) Chloroform	(2)	5.813	83	235748	21.236

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

Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
53) 1,1,1-Trichloroethane	(2)	6.032	97	194188	20.394
52)$Dibromofluoromethane	(2)	6.038	113	287431	50.162
54) Cyclohexane	(2)	6.124	56	225904	19.888
43) 1,2-Dichloroethene (Total)	(2)		96	284440	42.852
56) Carbon Tetrachloride	(2)	6.246	117	169555	20.263
55) 1,1-Dichloropropene	(2)	6.258	75	190536	20.799
58) Isobutyl Alcohol	(1)	6.489	41	340455	485.473
57)$1,2-Dichloroethane-d4	(2)	6.520	102	68447	50.034
60) Benzene	(2)	6.538	78	580442	21.209
61) 1,2-Dichloroethane	(2)	6.630	62	175344	20.883
65) t-Amyl methyl ether	(2)	6.752	73	372796	19.363
66)*Fluorobenzene	(2)	6.971	96	1177924	50.000
67) n-Heptane	(2)	6.983	43	221939	21.214
69) n-Butanol	(1)	7.428	56	525374	933.014
71) Trichloroethene	(2)	7.477	95	146068	21.340
73) Methylcyclohexane	(2)	7.782	83	227835	19.198
74) 1,2-Dichloropropane	(2)	7.837	63	150568	22.010
75) Dibromomethane	(2)	7.953	93	88143	21.178
77) Methyl Methacrylate	(2)	7.959	69	133073	19.289
79) Bromodichloromethane	(2)	8.215	83	159949	20.621
80) 2-Nitropropane	(2)	8.532	41	57421	16.531
81) 2-Chloroethyl Vinyl Ether	(2)	8.623	63	106266M	19.311
82) cis-1,3-Dichloropropene	(2)	8.806	75	211490	21.204
83) 4-Methyl-2-pentanone	(2)	9.032	43	1366236M	100.526
84)$Toluene-d8	(3)	9.154	98	1170362	49.728
89) Toluene	(3)	9.239	92	362127	20.509
90) trans-1,3-Dichloropropene	(3)	9.562	75	183408	19.449
92) Ethyl Methacrylate	(3)	9.647	69	209652	18.542
93) 1,1,2-Trichloroethane	(3)	9.788	97	132633	22.053
94) Tetrachloroethene	(3)	9.861	166	157868	20.356
95) 1,3-Dichloropropane	(3)	9.971	76	213347	20.985
97) 2-Hexanone	(3)	10.050	43	1105920	97.089
91) 1,3-Dichloropropene (total)	(3)		100	394898	40.653
98) Dibromochloromethane	(3)	10.202	129	125181	20.329
100) 1,2-Dibromoethane	(3)	10.312	107	135534	20.771
101)*Chlorobenzene-d5	(3)	10.800	117	872493	50.000
102) 1-Chlorohexane	(3)	10.824	91	200785	20.017
103) Chlorobenzene	(3)	10.824	112	399465	20.884

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

Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
104) 1,1,1,2-Tetrachloroethane	(3)	10.922	131	128481	20.395
105) Ethylbenzene	(3)	10.928	91	703687	20.732
107) m+p-Xylene	(3)	11.056	106	546684	41.695
108) o-Xylene	(3)	11.415	106	258638	20.610
110) Styrene	(3)	11.434	104	421515	20.611
111) Bromoform	(3)	11.592	173	86660	18.442
112) Isopropylbenzene	(3)	11.745	105	685283	21.424
109) Xylene (Total)	(3)		106	805322	62.305
115)$4-Bromofluorobenzene	(3)	11.891	95	426767	50.447
116) Bromobenzene	(4)	12.013	156	164733	20.061
117) 1,1,2,2-Tetrachloroethane	(4)	12.019	83	226536	21.187
119) trans-1,4-Dichloro-2-butene	(4)	12.049	53	324306	88.316
118) 1,2,3-Trichloropropane	(4)	12.062	110	66262	20.837
120) n-Propylbenzene	(4)	12.098	91	857416	21.918
121) 2-Chlorotoluene	(4)	12.171	126	164617	20.858
123) 1,3,5-Trimethylbenzene	(4)	12.251	105	579315	21.100
122) 4-Chlorotoluene	(4)	12.275	126	170077	20.712
125) tert-Butylbenzene	(4)	12.507	134	118850M	20.840
126) Pentachloroethane	(4)	12.531	167	94068	19.324
127) 1,2,4-Trimethylbenzene	(4)	12.549	105	590578	20.943
128) sec-Butylbenzene	(4)	12.677	105	770115	22.473
130) 1,3-Dichlorobenzene	(4)	12.775	146	317834	20.461
131) p-Isopropyltoluene	(4)	12.799	119	657186	22.082
132)*1,4-Dichlorobenzene-d4	(4)	12.836	152	477668	50.000
134) 1,4-Dichlorobenzene	(4)	12.854	146	328586	20.592
135) 1,2,3-Trimethylbenzene	(4)	12.872	105	593201	20.196
136) Benzyl Chloride	(4)	12.946	91	378739	18.248
137) 1,3-Diethylbenzene	(4)	13.013	119	374094	20.391
138) 1,4-Diethylbenzene	(4)	13.086	119	391422	19.989
140) n-Butylbenzene	(4)	13.104	92	342345M	22.291
139) 1,2-Dichlorobenzene	(4)	13.128	146	307401	20.635
141) 1,2-Diethylbenzene	(4)	13.159	119	315738	20.556
142) Diethylbenzene (total)	(4)		100	1081254	60.936
143) 1,2-Dibromo-3-chloropropane	(4)	13.708	75	53137	19.332
145) 1,3,5-Trichlorobenzene	(4)	13.836	180	234347	21.497
147) 1,2,4-Trichlorobenzene	(4)	14.281	180	204695	20.878
148) Hexachlorobutadiene	(4)	14.372	225	103252	22.355
149) Naphthalene	(4)	14.476	128	697817	20.064

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

Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

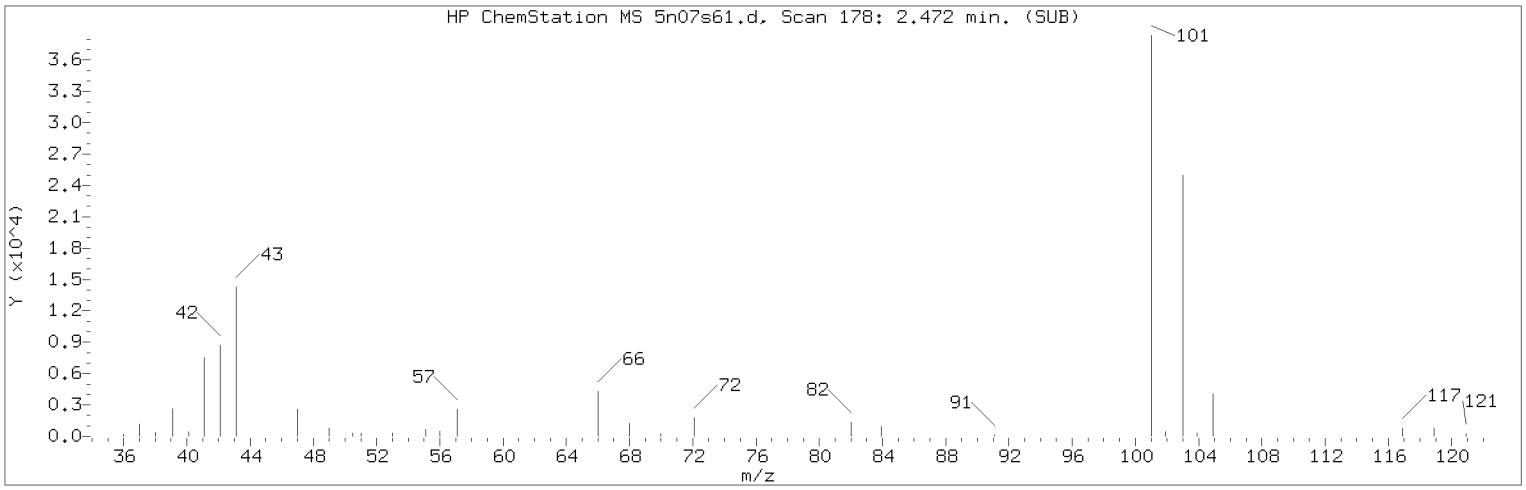
Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

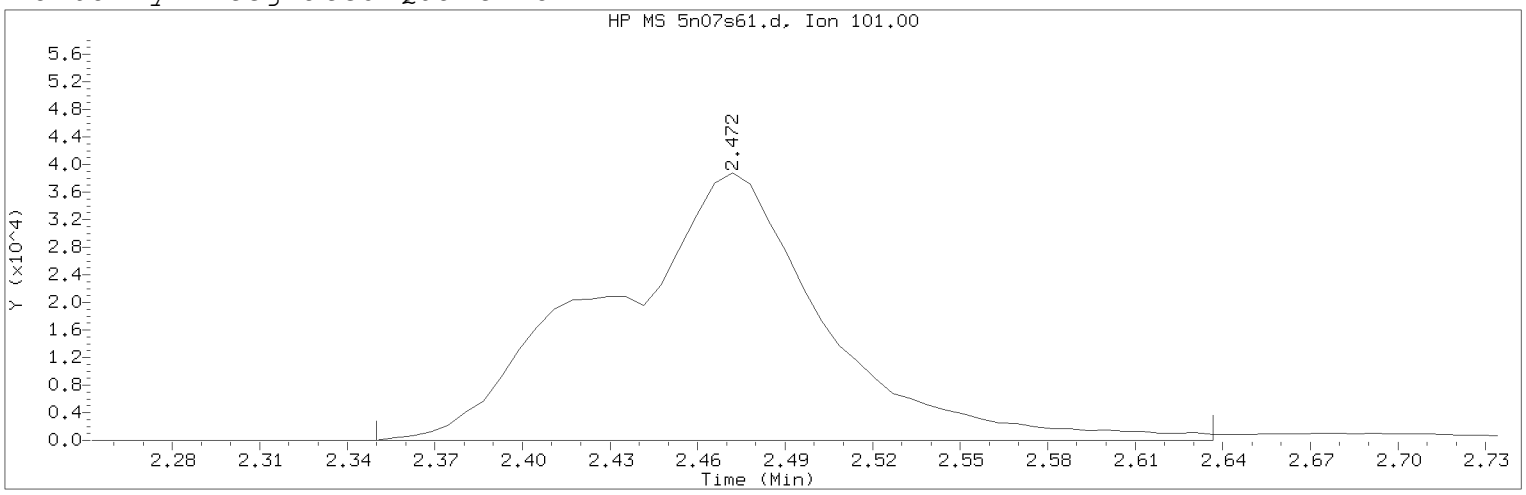
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
150) 1,2,3-Trichlorobenzene	(4)	14.622	180	200167	20.955
151) 2-Methylnaphthalene	(4)	15.274	142	380615	18.495

Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

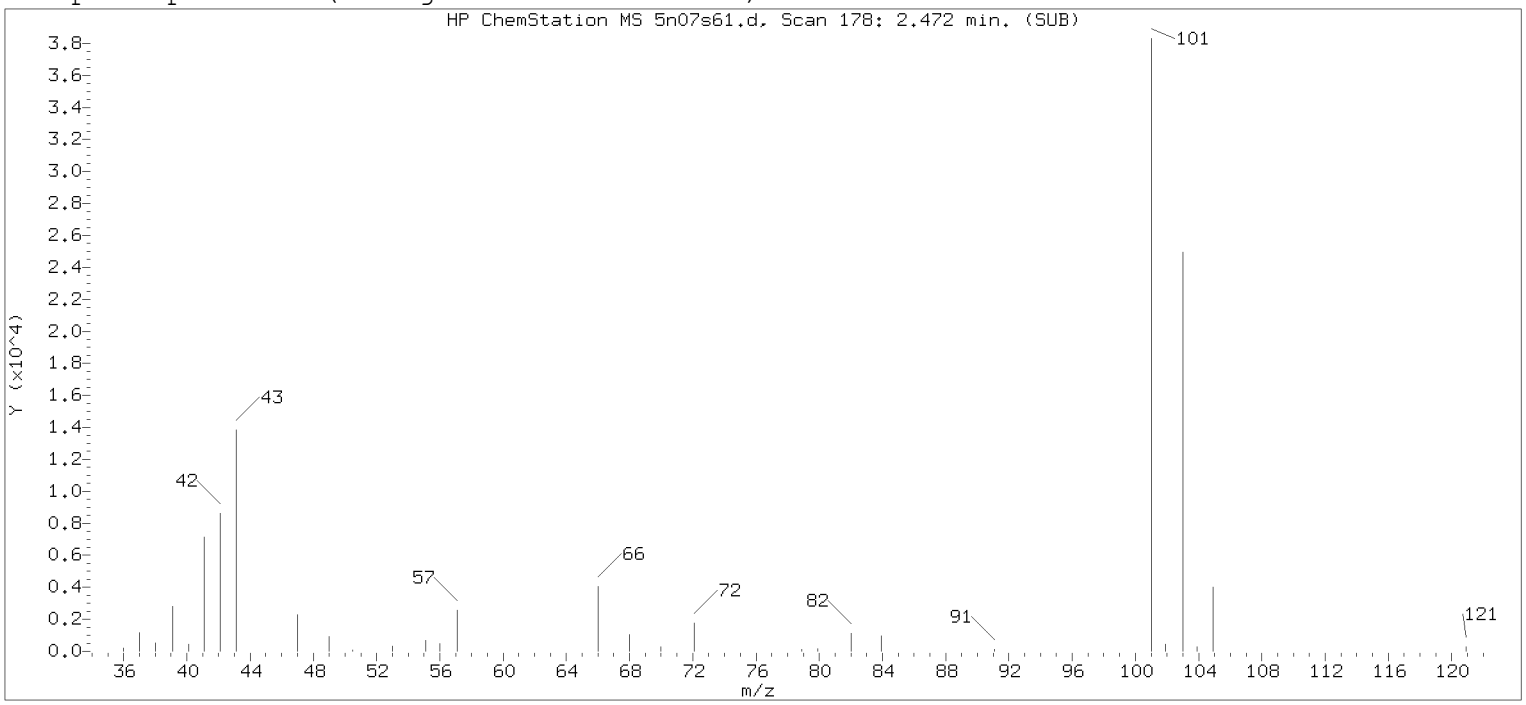
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 178
Retention Time (minutes): 2.472
Quant Ion : 101.00
Area (flag) : 201954M
On-Column Amount (ng) : 17.2058
Integration start scan : 157 Integration stop scan: 204
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

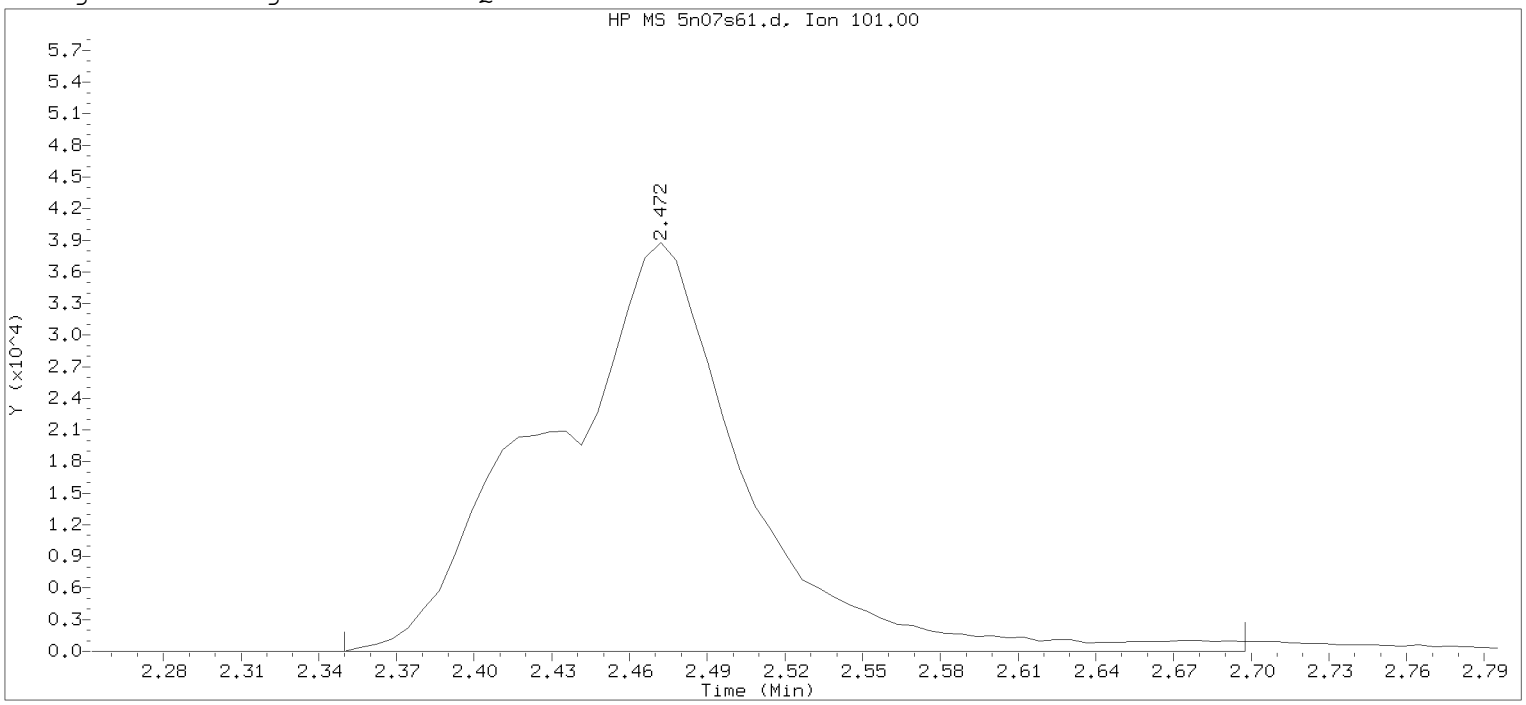
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

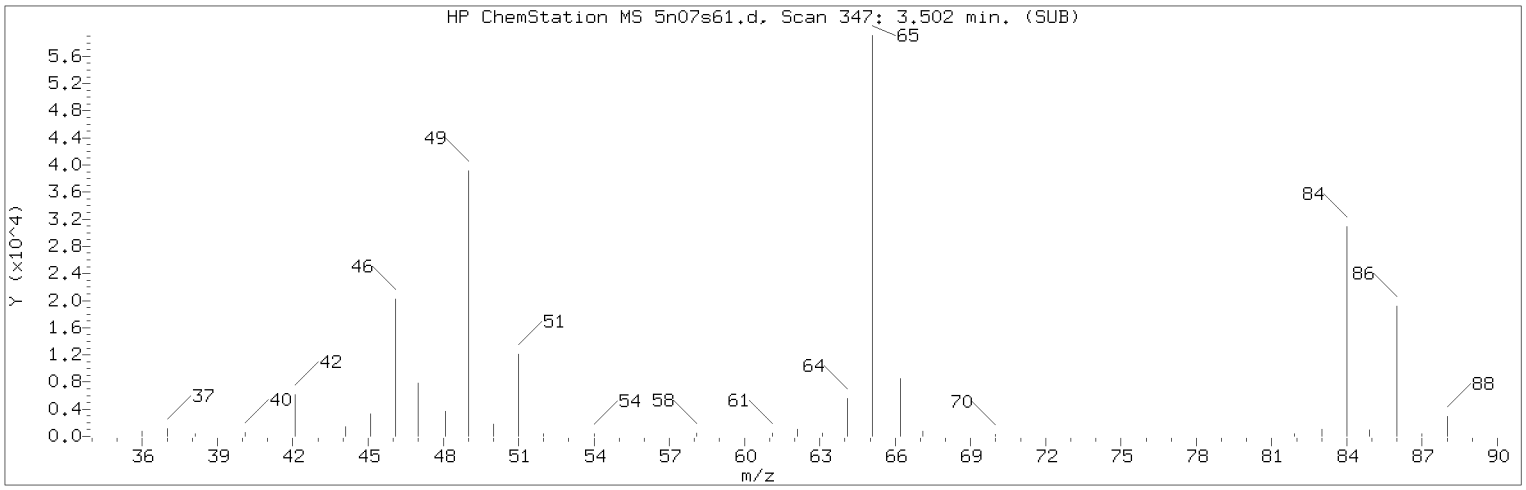
Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:56 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

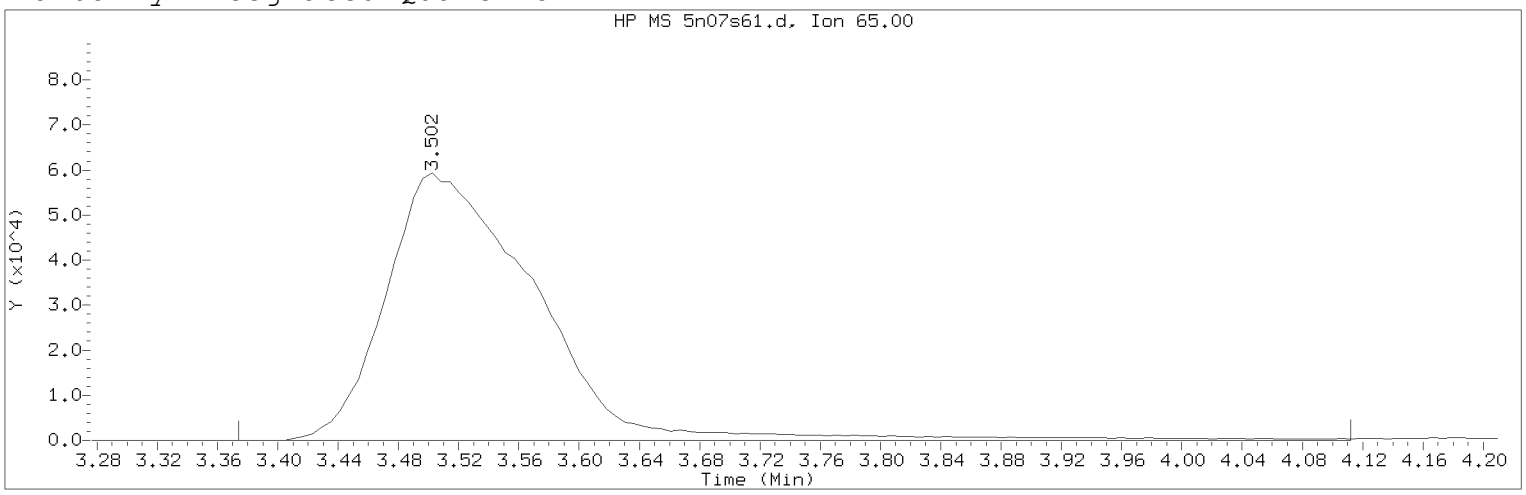
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 178
Retention Time (minutes): 2.472
Quant Ion : 101.00
Area : 205166
On-column Amount (ng) : 17.4795
Integration start scan : 157 Integration stop scan: 214
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/07/2018 at 22:10.
Target 3.5 esignature user id: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

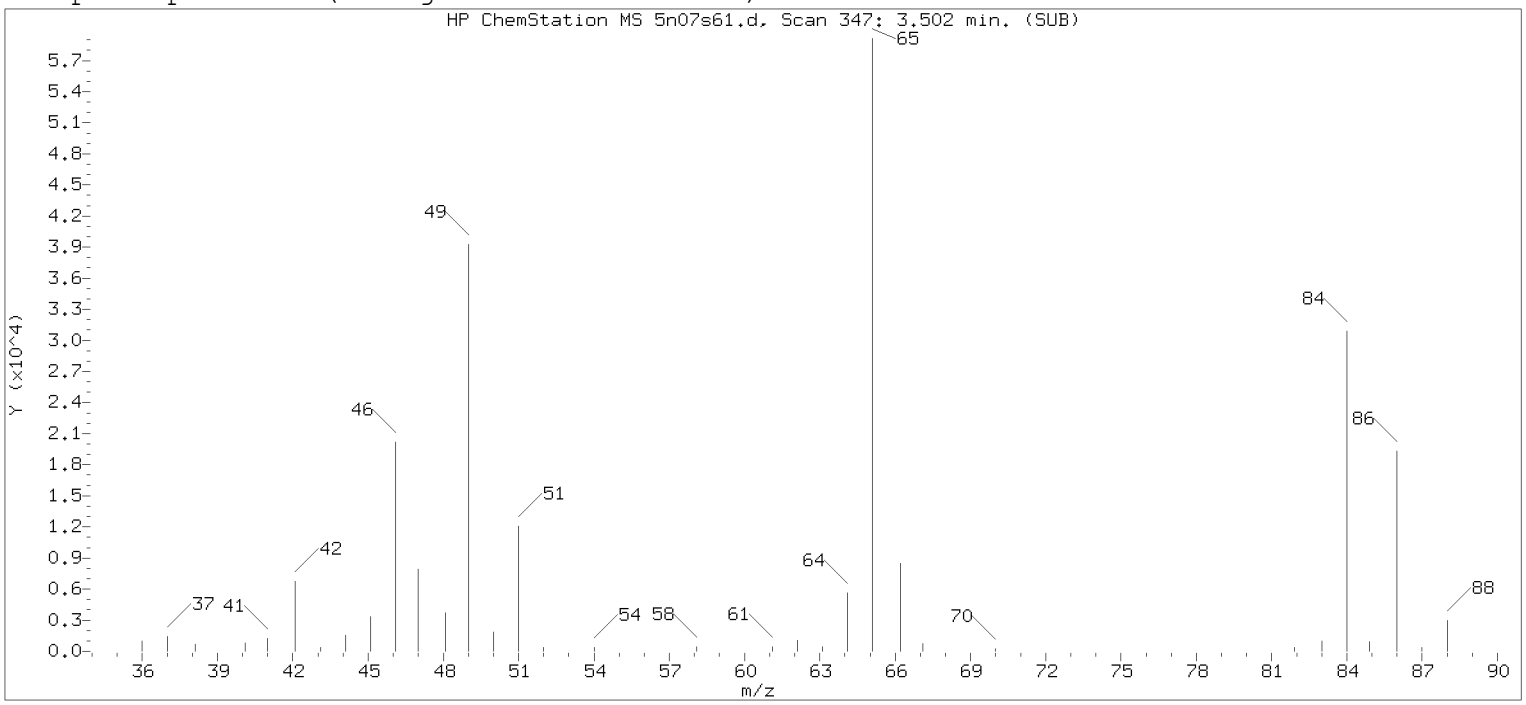
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 347
Retention Time (minutes): 3.502
Quant Ion : 65.00
Area (flag) : 411790M
On-Column Amount (ng) : 250.0000
Integration start scan : 325 Integration stop scan: 446
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

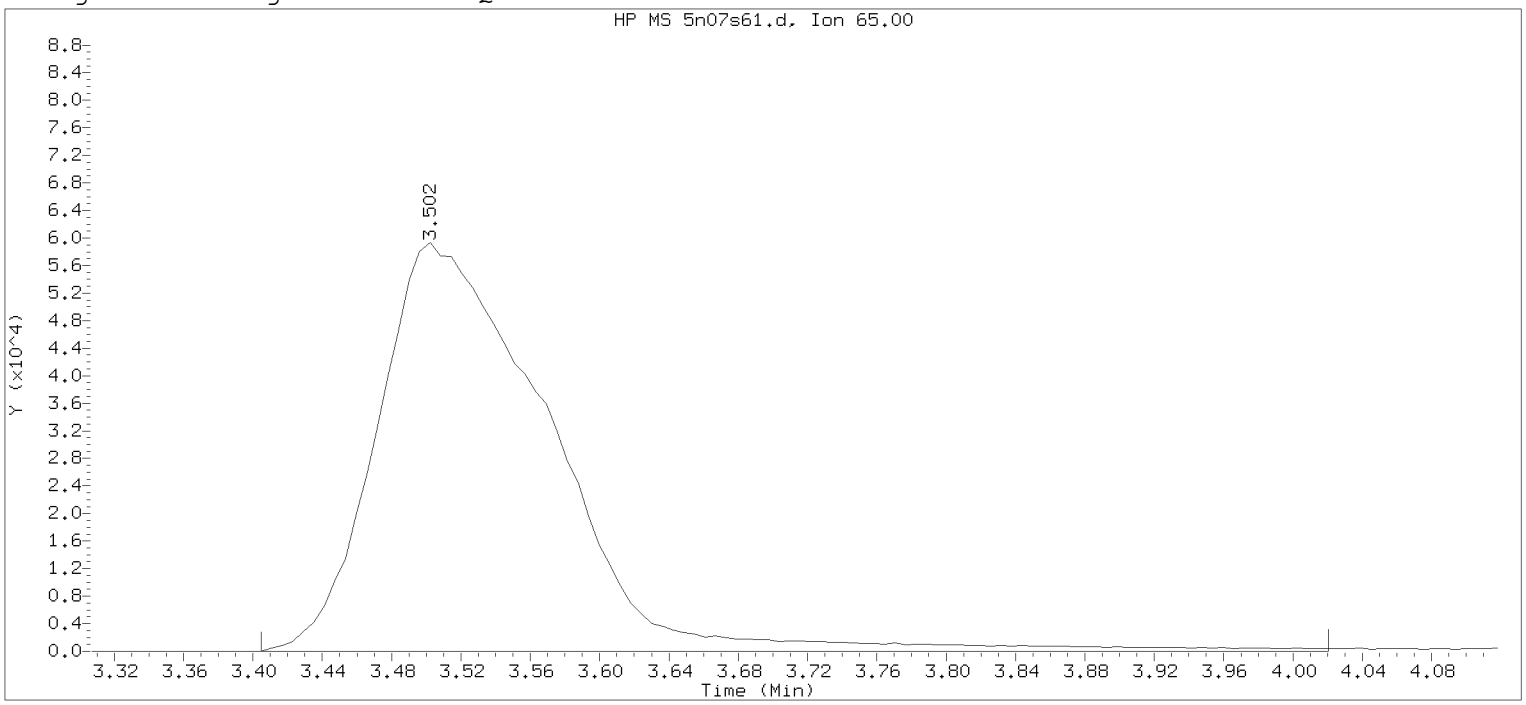
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

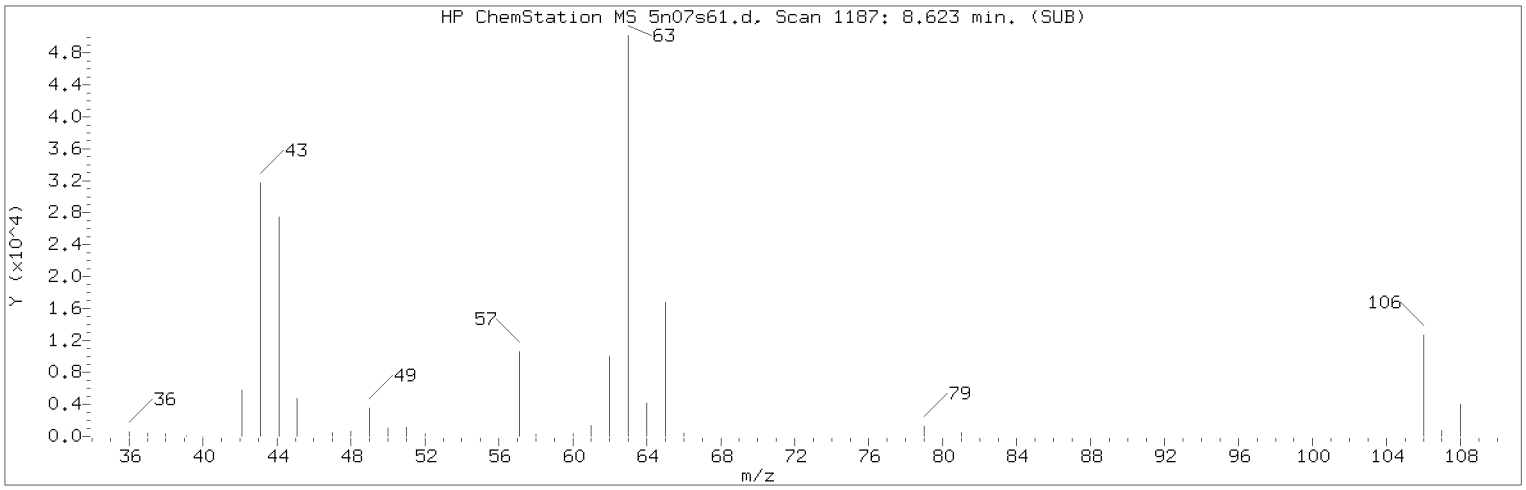
Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:56 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

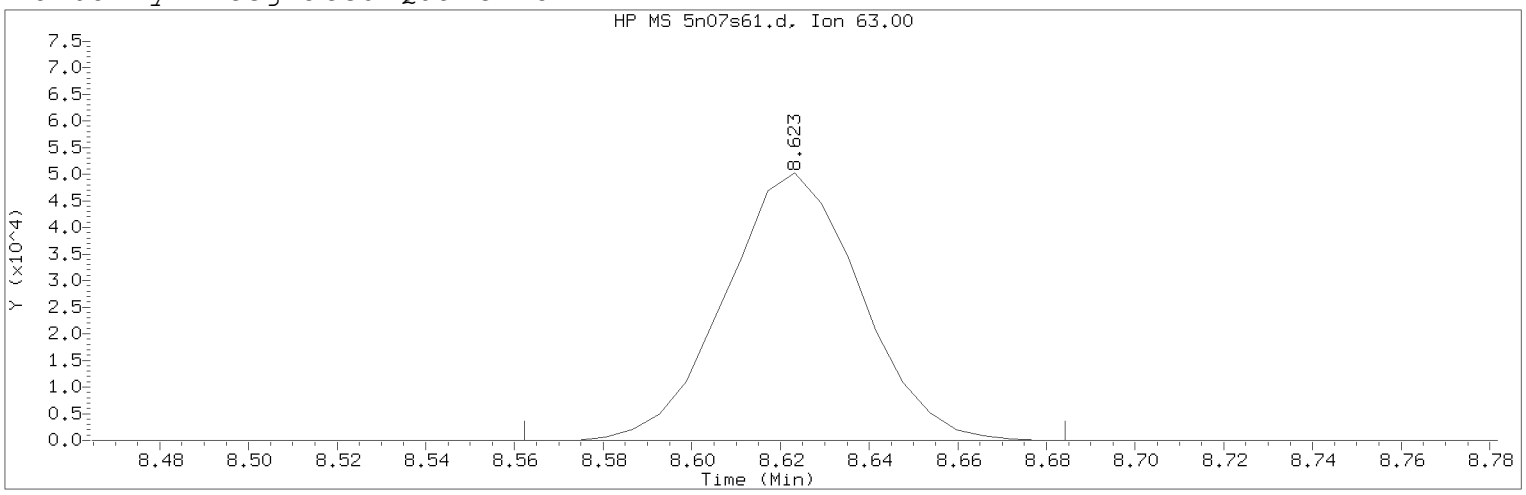
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 347
Retention Time (minutes): 3.502
Quant Ion : 65.00
Area : 409771
On-column Amount (ng) : 250.0000
Integration start scan : 330 Integration stop scan: 431
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/07/2018 at 22:10.
Target 3.5 esignature user id: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

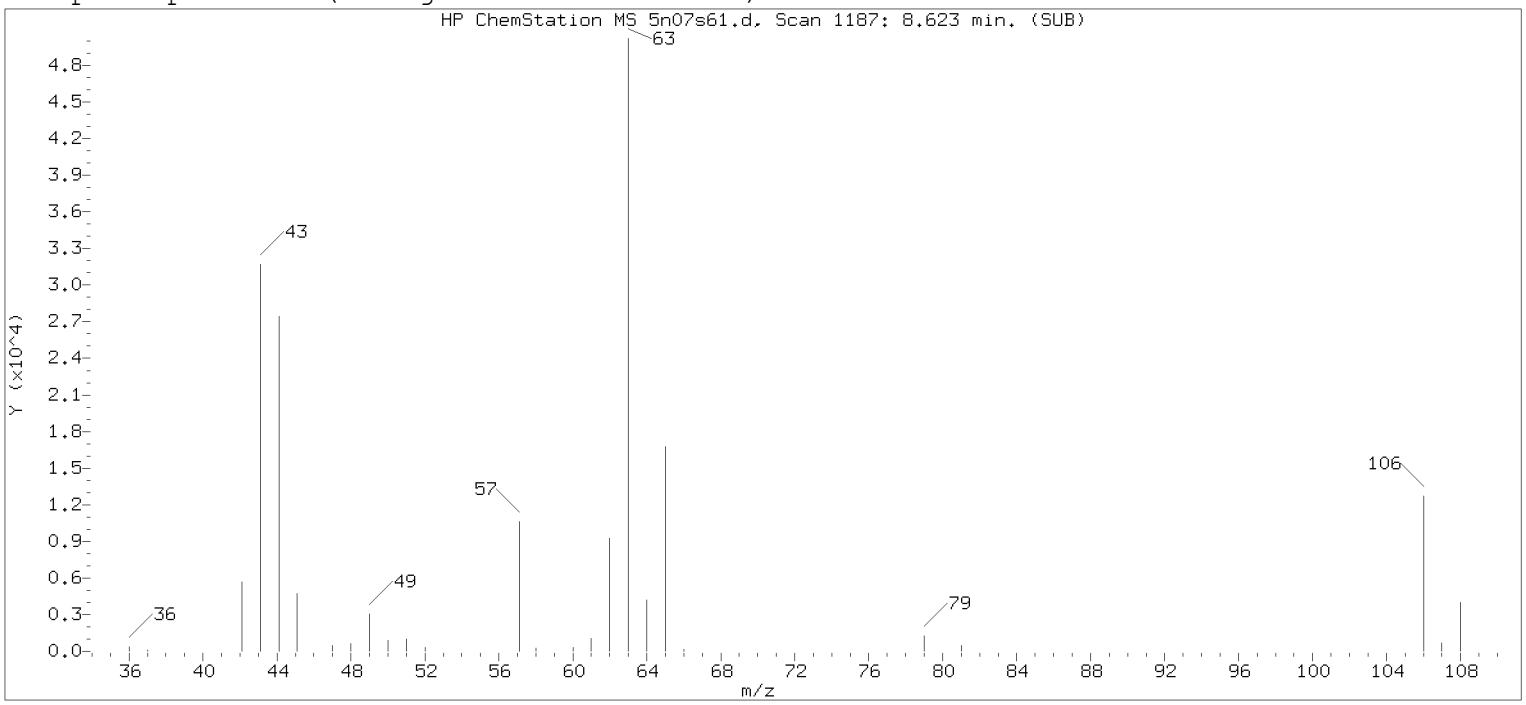
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1187
Retention Time (minutes): 8.623
Quant Ion : 63.00
Area (flag) : 106266M
On-Column Amount (ng) : 19.3106
Integration start scan : 1176 Integration stop scan: 1196
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

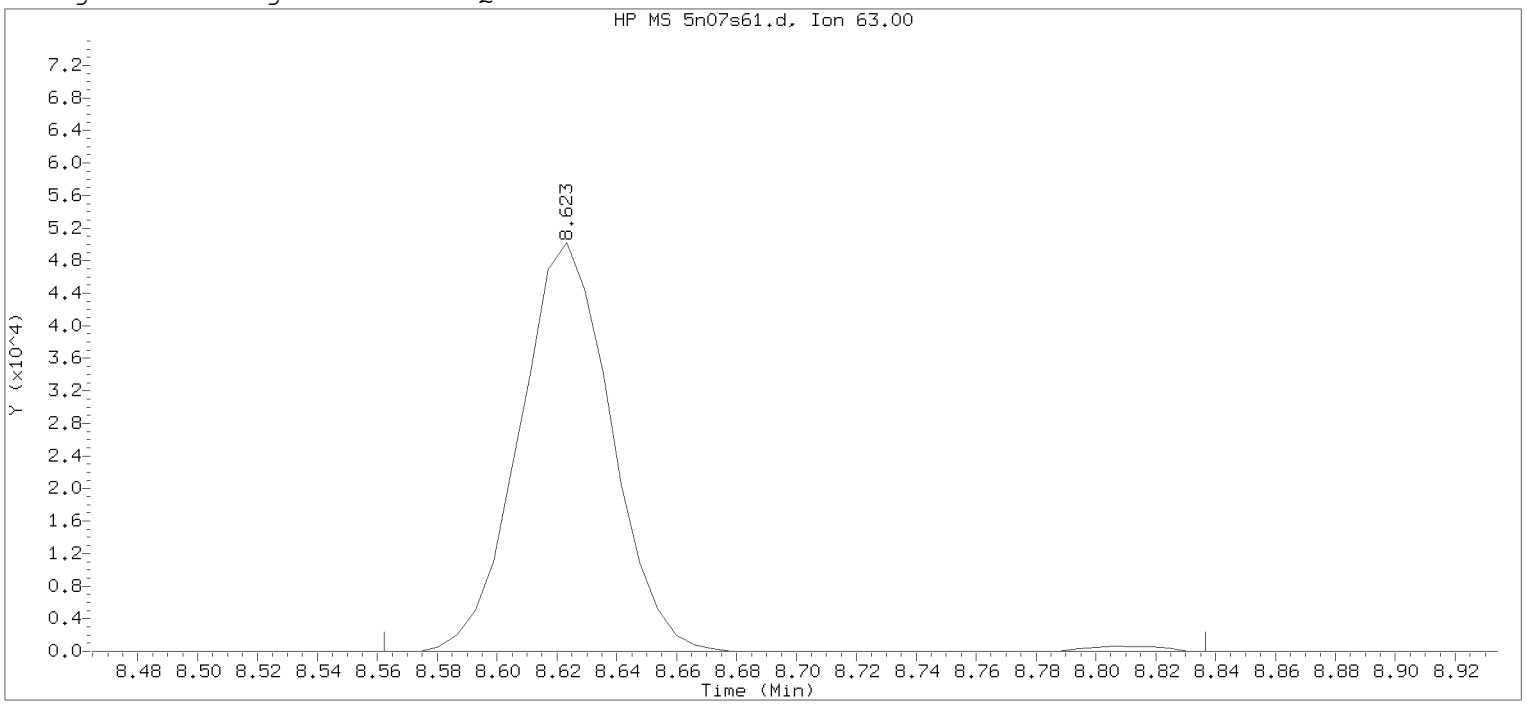
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

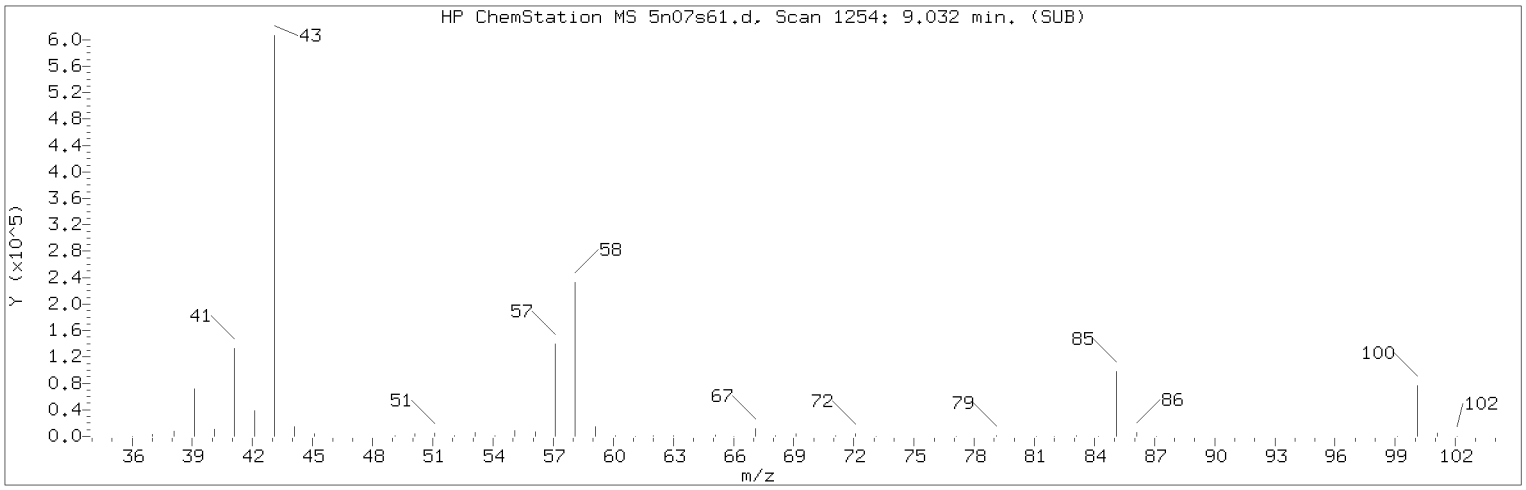
Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:56 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

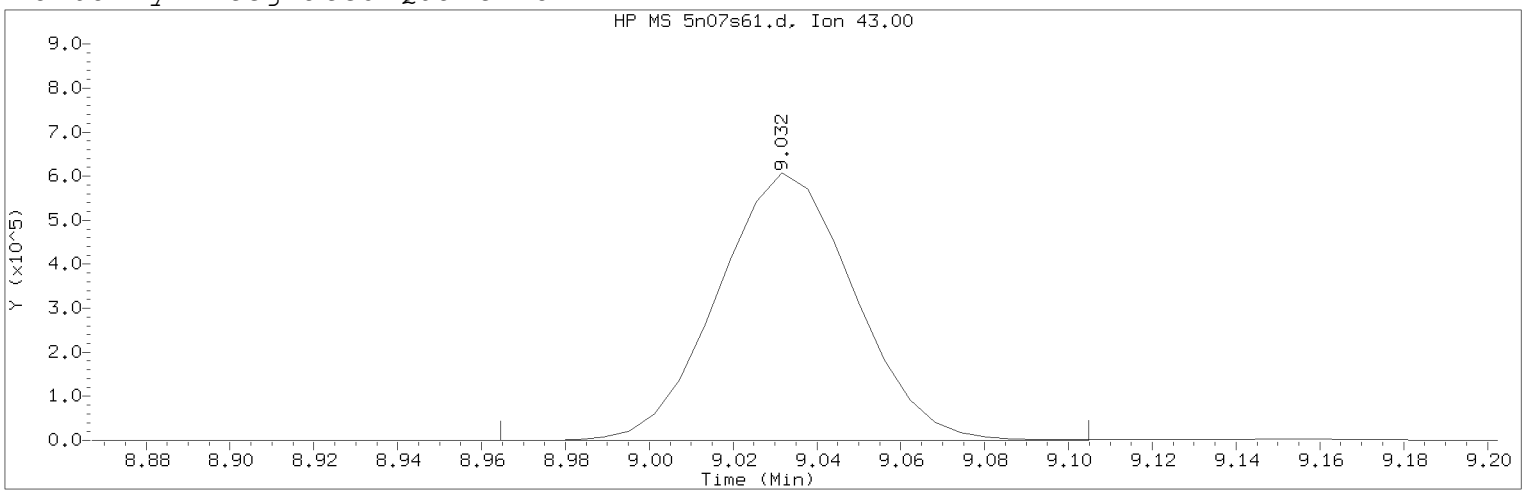
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1187
Retention Time (minutes): 8.623
Quant Ion : 63.00
Area : 107301
On-column Amount (ng) : 19.4987
Integration start scan : 1176 Integration stop scan: 1221
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/07/2018 at 22:10.
Target 3.5 esignature user id: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

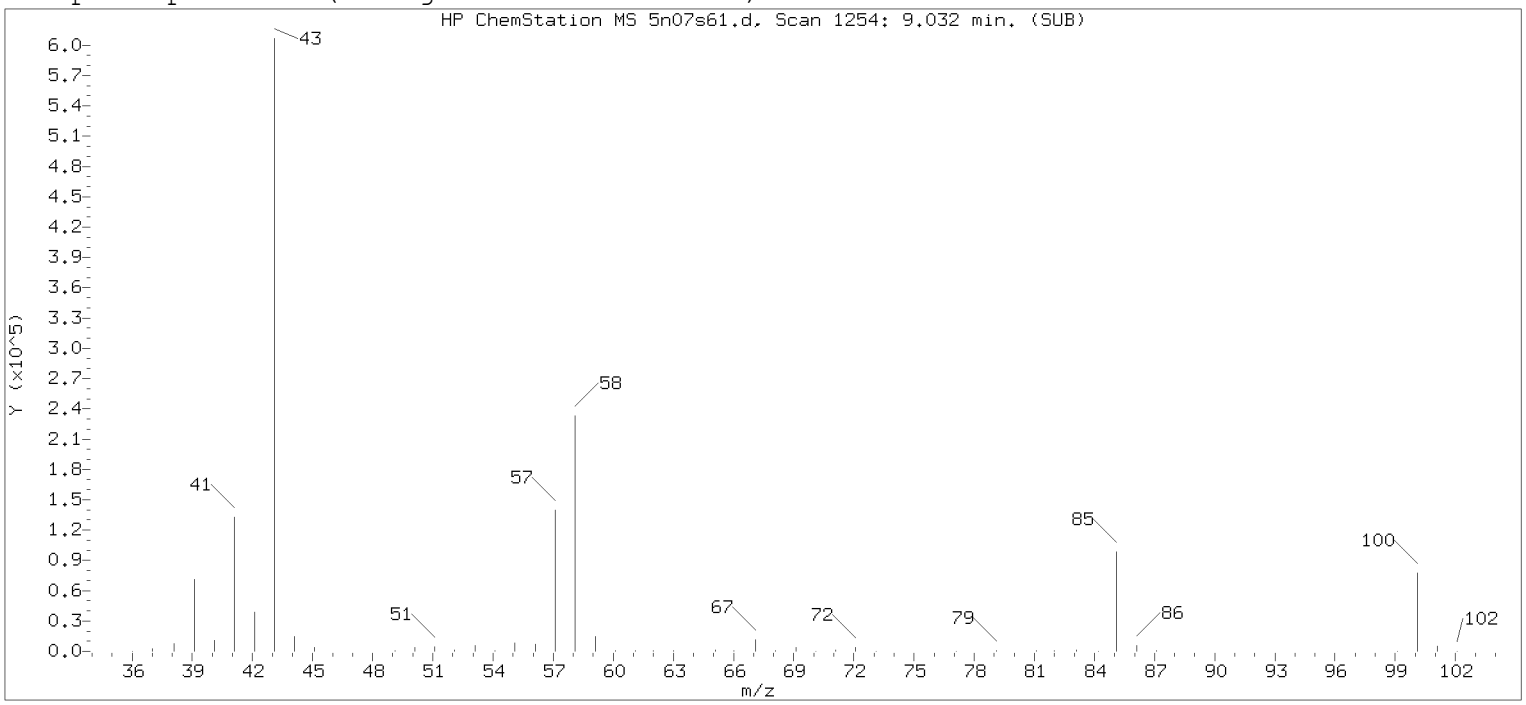
Compound Number : 83
Compound Name : 4-Methyl-2-pentanone
Scan Number : 1254
Retention Time (minutes): 9.032
Quant Ion : 43.00
Area (flag) : 1366236M
On-Column Amount (ng) : 100.5262
Integration start scan : 1242 Integration stop scan: 1265
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

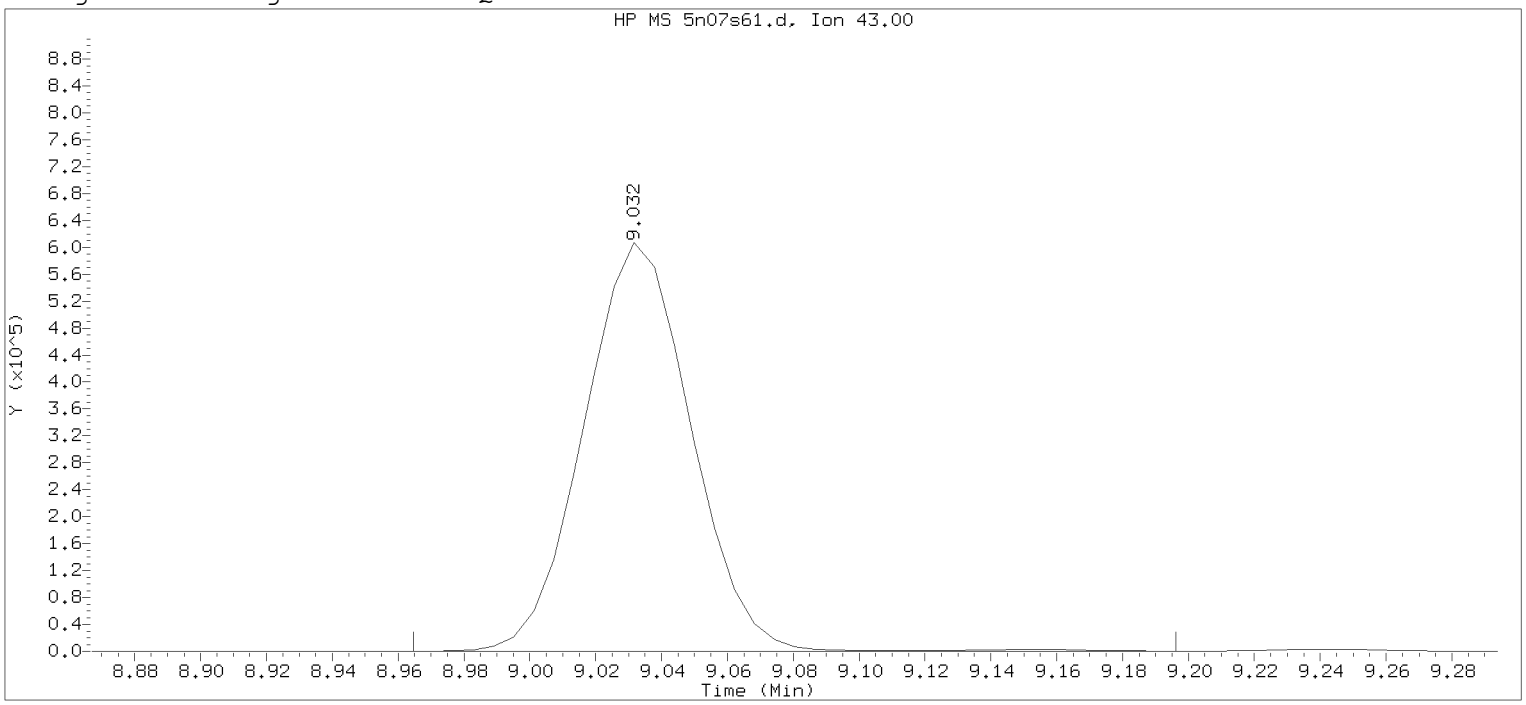
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

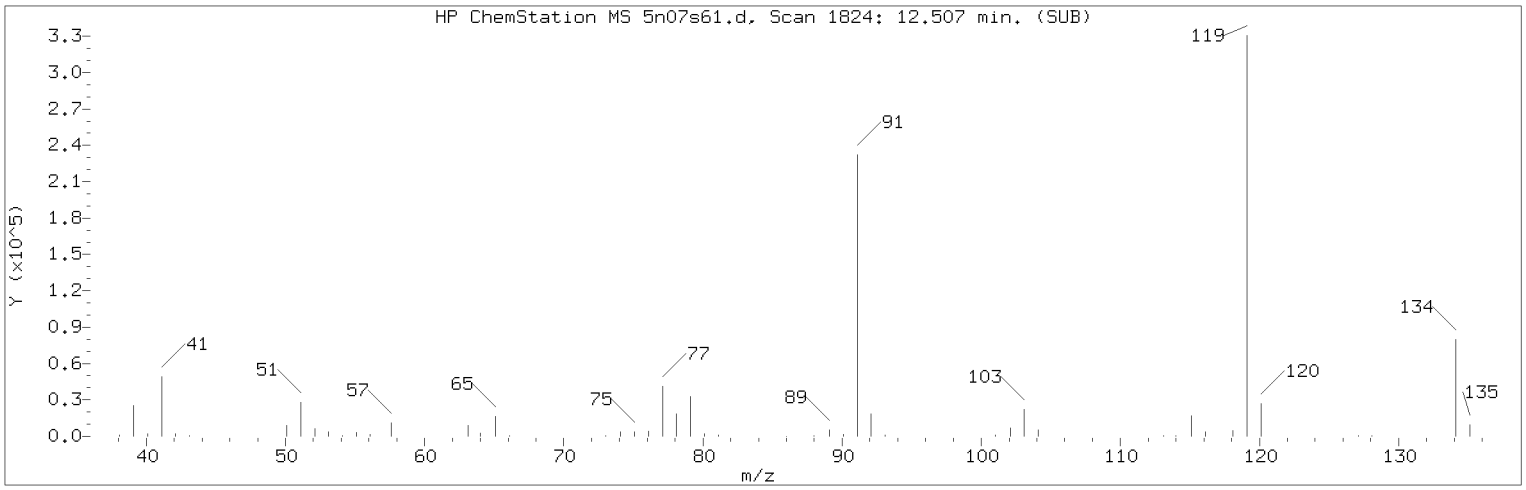
Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:56 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

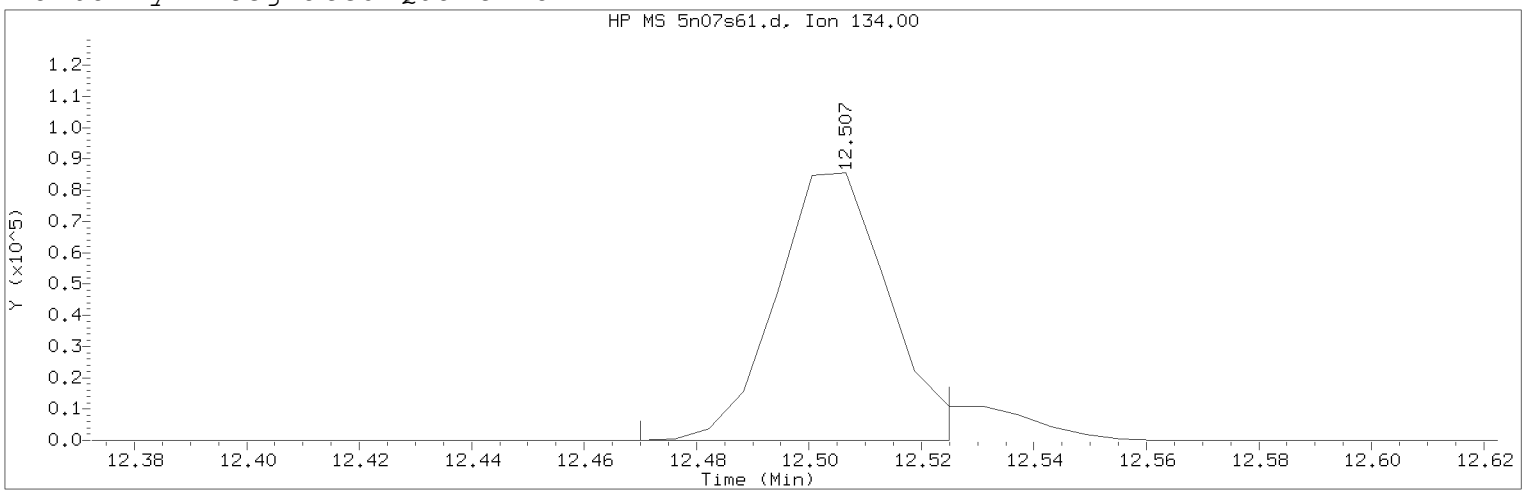
Compound Number : 83
Compound Name : 4-Methyl-2-pentanone
Scan Number : 1254
Retention Time (minutes): 9.032
Quant Ion : 43.00
Area : 1374015
On-column Amount (ng) : 101.0986
Integration start scan : 1242 Integration stop scan: 1280
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/07/2018 at 22:10.
Target 3.5 esignature user id: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

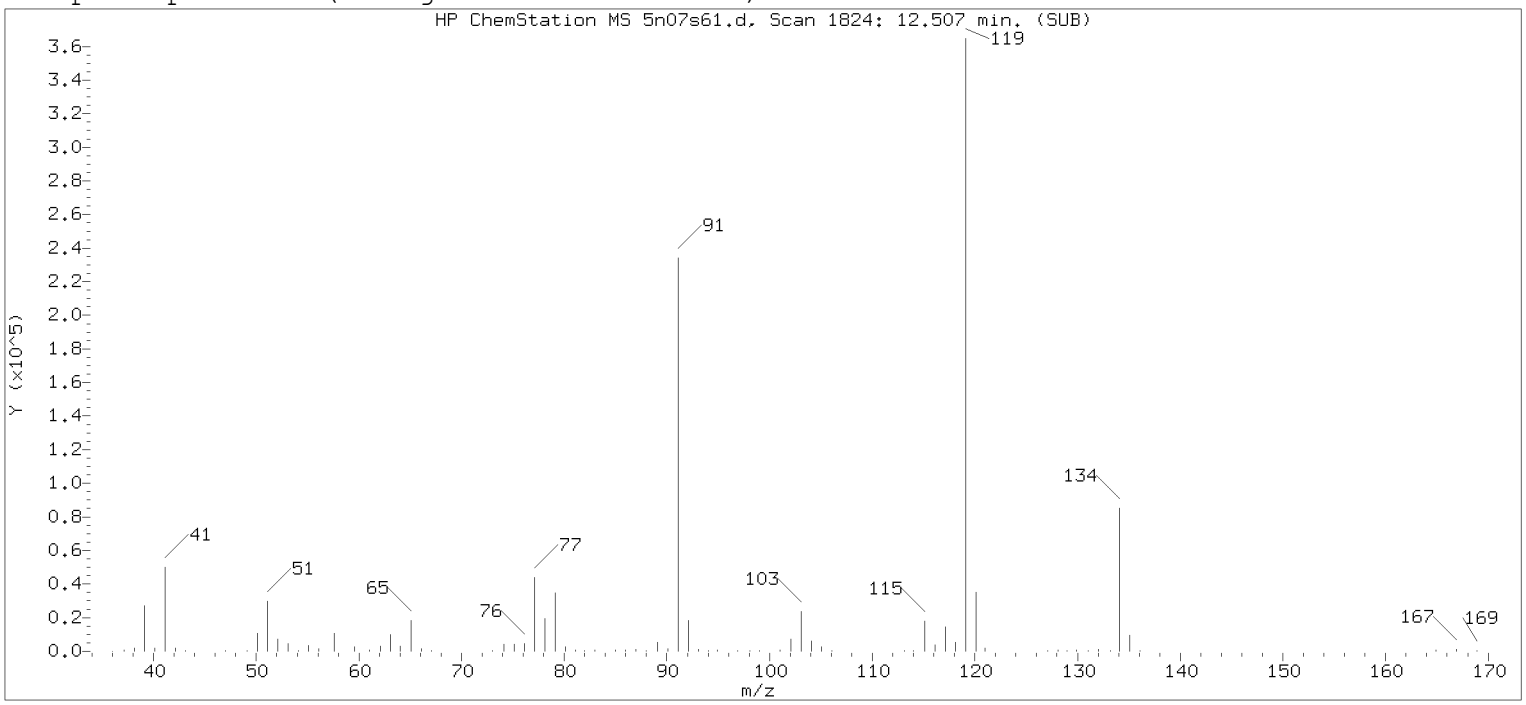
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1824
Retention Time (minutes): 12.507
Quant Ion : 134.00
Area (flag) : 118850M
On-Column Amount (ng) : 20.8403
Integration start scan : 1817 Integration stop scan: 1826
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

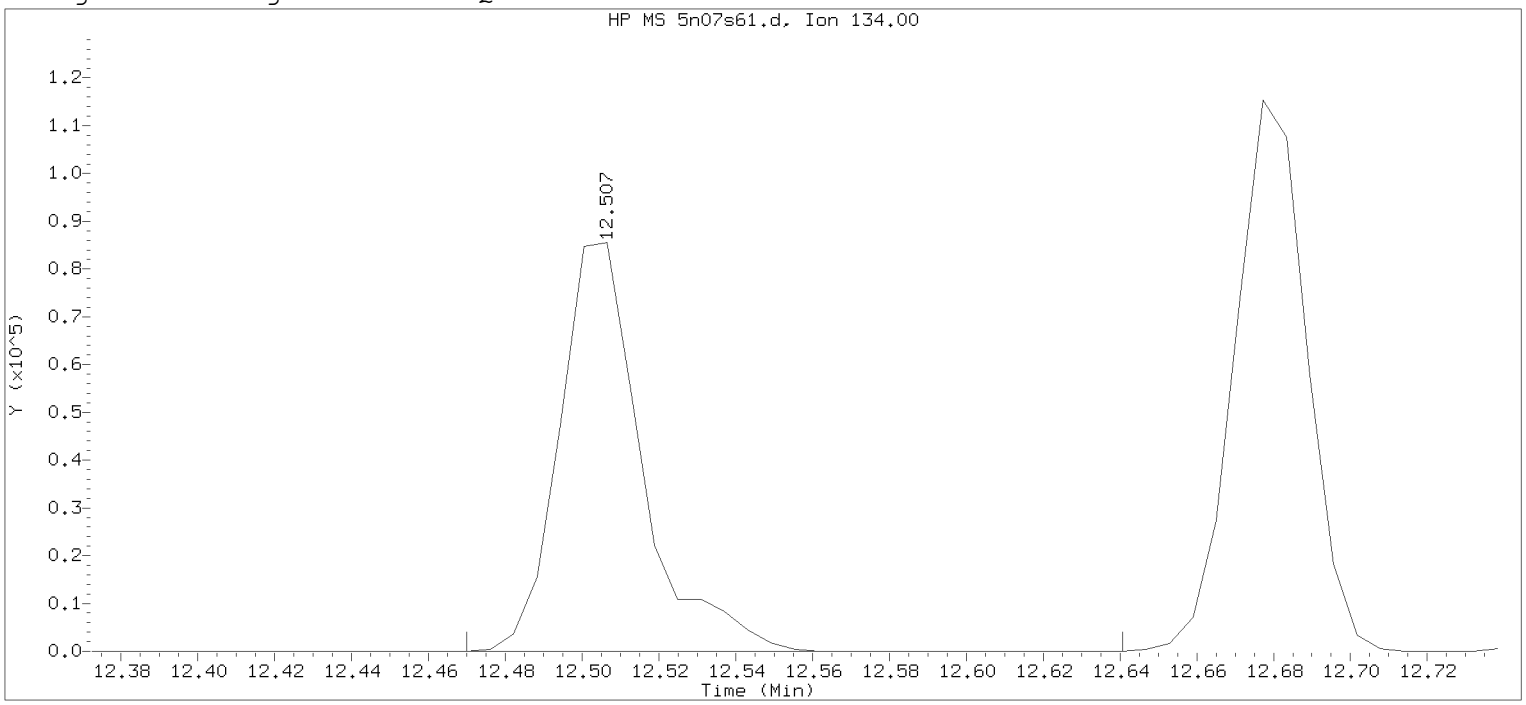
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

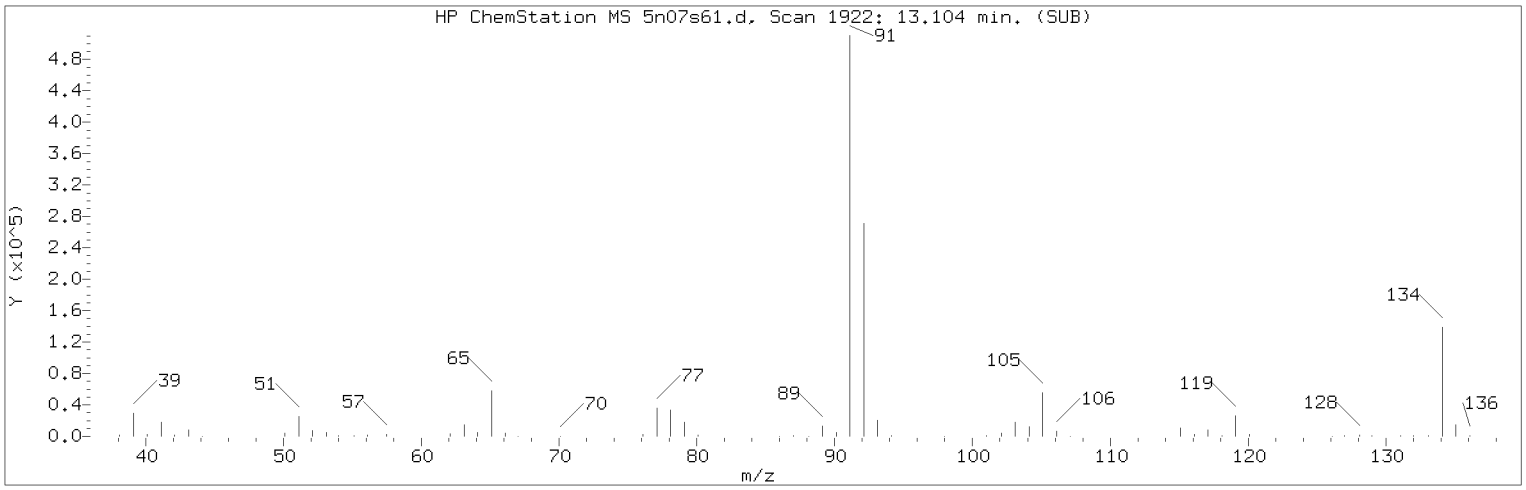
Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:56 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

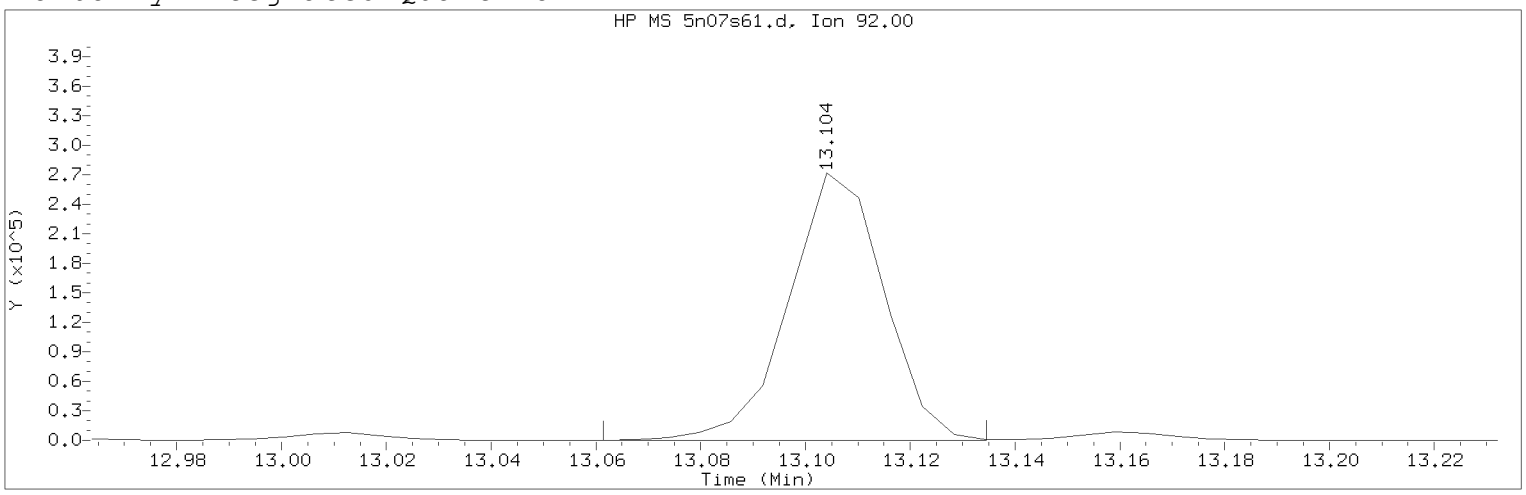
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1824
Retention Time (minutes): 12.507
Quant Ion : 134.00
Area : 128241
On-column Amount (ng) : 22.4871
Integration start scan : 1817 Integration stop scan: 1845
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/07/2018 at 22:10.
Target 3.5 esignature user id: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:06 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

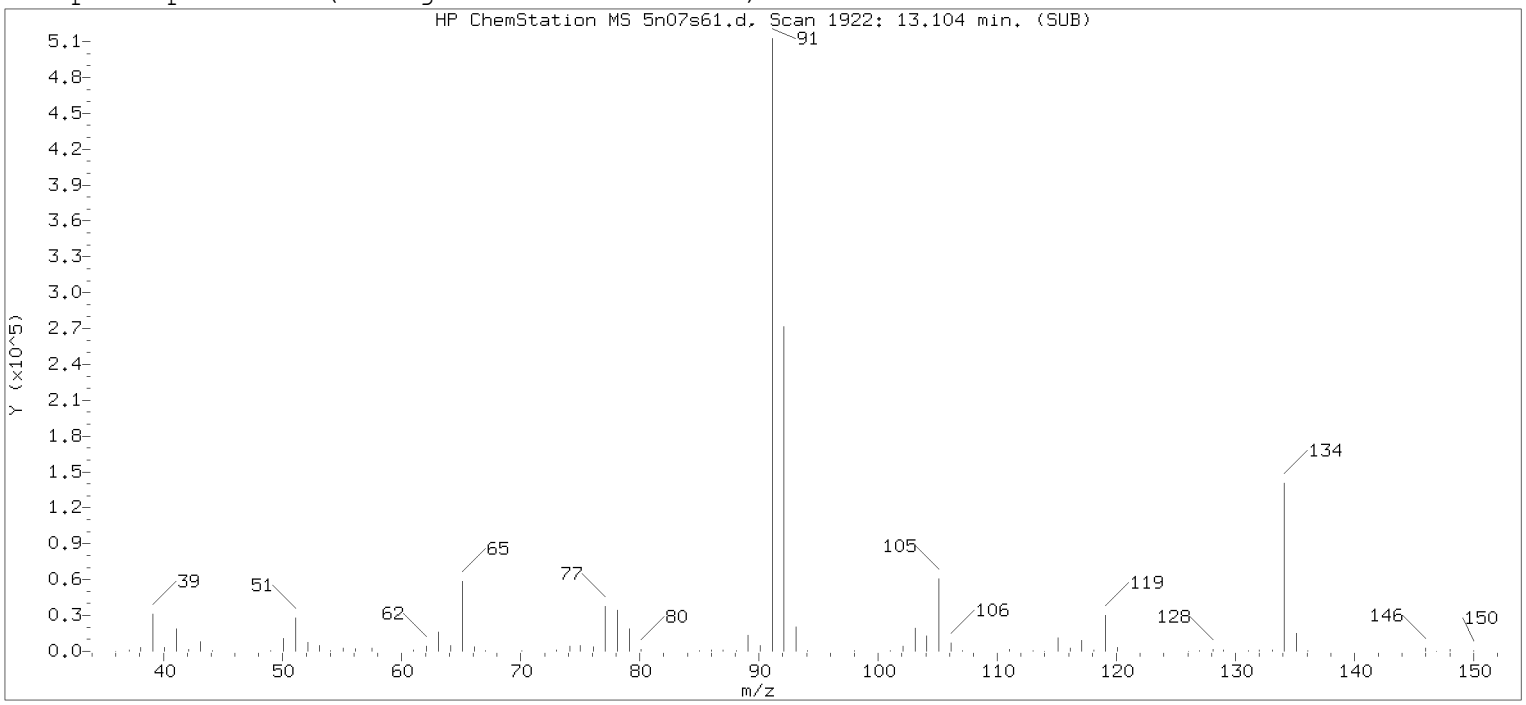
Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1922
Retention Time (minutes): 13.104
Quant Ion : 92.00
Area (flag) : 342345M
On-Column Amount (ng) : 22.2907
Integration start scan : 1914 Integration stop scan: 1926
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

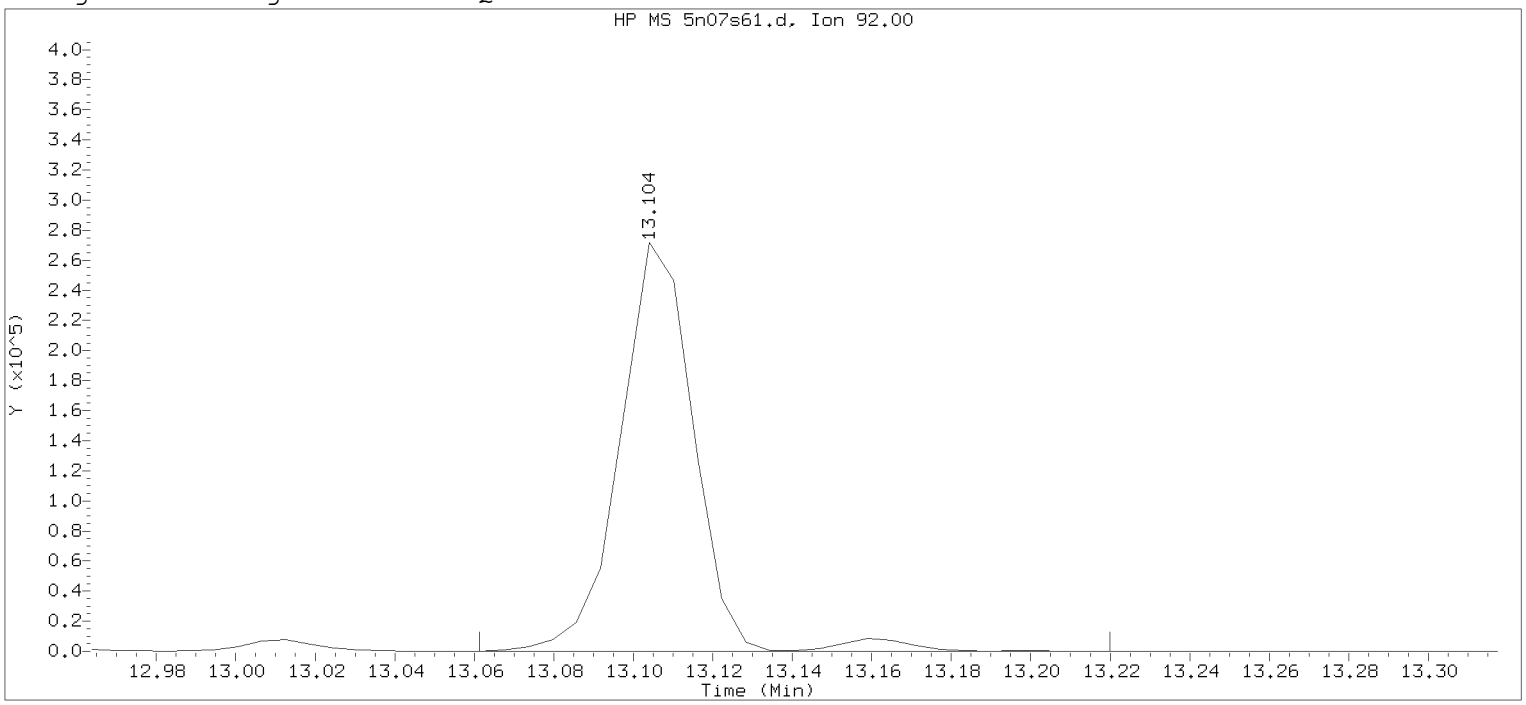
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 22:10.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s61.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:25 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 20:56 dvv10203

Sample Name: LCS557 Lab Sample ID: LCS557

Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1922
Retention Time (minutes): 13.104
Quant Ion : 92.00
Area : 353056
On-column Amount (ng) : 22.9881
Integration start scan : 1914 Integration stop scan: 1940
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/07/2018 at 22:10.
Target 3.5 esignature user id: dvv10203

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCD557

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCD557

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s62.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/07/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	16	
74-87-3	Chloromethane	19	
106-99-0	1,3-Butadiene	22	
75-01-4	Vinyl Chloride	20	
74-83-9	Bromomethane	17	
75-00-3	Chloroethane	18	
109-66-0	n-Pentane	17	
75-69-4	Trichlorofluoromethane	18	
60-29-7	Ethyl ether	21	
354-23-4	Freon 123a	20	
107-02-8	Acrolein	130	
75-35-4	1,1-Dichloroethene	21	
67-64-1	Acetone	130	
76-13-1	Freon 113	21	
67-63-0	2-Propanol	130	
74-88-4	Methyl Iodide	19	
75-15-0	Carbon Disulfide	18	
107-05-1	Allyl Chloride	17	
79-20-9	Methyl Acetate	17	
75-09-2	Methylene Chloride	21	
75-65-0	t-Butyl alcohol	180	
107-13-1	Acrylonitrile	97	
156-60-5	trans-1,2-Dichloroethene	21	
1634-04-4	Methyl Tertiary Butyl Ether	19	
110-54-3	n-Hexane	20	
75-34-3	1,1-Dichloroethane	21	
108-20-3	di-Isopropyl ether	20	
126-99-8	2-Chloro-1,3-butadiene	19	
637-92-3	Ethyl t-butyl ether	19	
156-59-2	cis-1,2-Dichloroethene	22	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCD557

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCD557

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s62.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/07/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
540-59-0	1,2-Dichloroethene (Total)	43	
78-93-3	2-Butanone	140	
594-20-7	2,2-Dichloropropane	20	
107-12-0	Propionitrile	150	
126-98-7	Methacrylonitrile	150	
74-97-5	Bromochloromethane	19	
109-99-9	Tetrahydrofuran	93	
67-66-3	Chloroform	21	
71-55-6	1,1,1-Trichloroethane	21	
110-82-7	Cyclohexane	20	
563-58-6	1,1-Dichloropropene	21	
56-23-5	Carbon Tetrachloride	21	
78-83-1	Isobutyl Alcohol	480	
71-43-2	Benzene	21	
107-06-2	1,2-Dichloroethane	21	
994-05-8	t-Amyl methyl ether	19	
142-82-5	n-Heptane	21	
71-36-3	n-Butanol	930	
79-01-6	Trichloroethene	21	
108-87-2	Methylcyclohexane	19	
78-87-5	1,2-Dichloropropane	22	
74-95-3	Dibromomethane	21	
80-62-6	Methyl Methacrylate	19	
75-27-4	Bromodichloromethane	21	
79-46-9	2-Nitropropane	16	
110-75-8	2-Chloroethyl Vinyl Ether	19	
10061-01-5	cis-1,3-Dichloropropene	21	
108-10-1	4-Methyl-2-pentanone	100	
108-88-3	Toluene	21	
10061-02-6	trans-1,3-Dichloropropene	20	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCD557

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCD557

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s62.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/07/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
542-75-6	1,3-Dichloropropene (total)	41	
97-63-2	Ethyl Methacrylate	19	
79-00-5	1,1,2-Trichloroethane	22	
127-18-4	Tetrachloroethene	20	
142-28-9	1,3-Dichloropropane	21	
591-78-6	2-Hexanone	97	
124-48-1	Dibromochloromethane	20	
106-93-4	1,2-Dibromoethane	21	
544-10-5	1-Chlorohexane	20	
108-90-7	Chlorobenzene	21	
630-20-6	1,1,1,2-Tetrachloroethane	21	
100-41-4	Ethylbenzene	21	
179601-23-1	m+p-Xylene	42	
95-47-6	o-Xylene	21	
1330-20-7	Xylene (Total)	63	
100-42-5	Styrene	21	
75-25-2	Bromoform	18	
98-82-8	Isopropylbenzene	22	
108-86-1	Bromobenzene	20	
79-34-5	1,1,2,2-Tetrachloroethane	21	
96-18-4	1,2,3-Trichloropropane	21	
110-57-6	trans-1,4-Dichloro-2-butene	89	
103-65-1	n-Propylbenzene	22	
95-49-8	2-Chlorotoluene	21	
106-43-4	4-Chlorotoluene	21	
108-67-8	1,3,5-Trimethylbenzene	21	
98-06-6	tert-Butylbenzene	21	
76-01-7	Pentachloroethane	19	
95-63-6	1,2,4-Trimethylbenzene	21	
135-98-8	sec-Butylbenzene	22	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCD557

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCD557

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov07b.b/5n07s62.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/07/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	21	
99-87-6	p-Isopropyltoluene	22	
106-46-7	1,4-Dichlorobenzene	21	
526-73-8	1,2,3-Trimethylbenzene	20	
100-44-7	Benzyl Chloride	18	
141-93-5	1,3-Diethylbenzene	21	
105-05-5	1,4-Diethylbenzene	20	
95-50-1	1,2-Dichlorobenzene	21	
104-51-8	n-Butylbenzene	22	
135-01-3	1,2-Diethylbenzene	21	
25340-17-4	Diethylbenzene (total)	62	
96-12-8	1,2-Dibromo-3-chloropropane	19	
108-70-3	1,3,5-Trichlorobenzene	21	
120-82-1	1,2,4-Trichlorobenzene	21	
87-68-3	Hexachlorobutadiene	23	
91-20-3	Naphthalene	20	
87-61-6	1,2,3-Trichlorobenzene	21	
91-57-6	2-Methylnaphthalene	18	

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov07b.b/5n07s62.d Injection date and time: **07-NOV-2018 20:46**
Data file Sample Info. Line: LCD557;LCD557;1;3;LCSD;;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 07-Nov-2018 22:07 dvv10203

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 07-NOV-2018 20:23
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.521	(0.000)	350	65	410870M	(-2)	250.00	
66) Fluorobenzene	6.971	(0.006)	916	96	1188098	(1)	50.00	
101) Chlorobenzene-d5	10.794	(0.006)	1543	117	879599	(1)	50.00	
132) 1,4-Dichlorobenzene-d4	12.836	(0.000)	1878	152	483544	(-1)	50.00	

M = Internal Standard was manually integrated

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.044	(-0.001)	113	289766	50.137	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.520	(-0.001)	102	69713	50.523	101%		80 - 120
84) Toluene-d8	(3)	9.154	(0.000)	98	1176910	49.602	99%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.891	(-0.001)	95	434850	50.987	102%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)	1.637	(-0.000)	85	183480	15.643	15.64			0.2	1
4) Chloromethane	(2)	1.771	(0.000)	50	181368	19.095	19.09			0.2	1
5) 1,3-Butadiene	(2)	1.887	(-0.000)	39	139861	21.930	21.93			1	3
6) Vinyl Chloride	(2)	1.881	(0.000)	62	174512	19.660	19.66			0.2	1
8) Bromomethane	(2)	2.143	(0.000)	94	115166	17.456	17.46			0.3	1
9) Chloroethane	(2)	2.222	(0.000)	64	78571	17.807	17.81			0.2	1
11) n-Pentane	(2)	2.502	(-0.000)	43	128392	16.979	16.98			0.4	10
12) Trichlorofluoromethane	(2)	2.478	(-0.000)	101	207232	17.504	17.50			0.2	1
14) Ethyl ether	(2)	2.679	(-0.000)	59	117538	20.626	20.63			0.2	5
15) Freon 123a	(2)	2.765	(-0.000)	67	163667	20.293	20.29			0.4	5
16) Acrolein	(1)	2.832	(-0.000)	56	373877	129.553	129.55			2	100
17) 1,1-Dichloroethene	(2)	2.935	(-0.000)	96	117770	21.172	21.17			0.2	1
18) Acetone	(1)	2.972	(-0.000)	58	201058	134.419	134.42			0.7	20
19) Freon 113	(2)	2.972	(-0.000)	101	115581	20.850	20.85			0.2	10
21) 2-Propanol	(1)	3.118	(-0.001)	45	156968	127.998	128.00			18	100
22) Methyl Iodide	(2)	3.100	(0.000)	142	210417	19.404	19.40			0.2	1
23) Carbon Disulfide	(2)	3.179	(-0.001)	76	334540	17.651	17.65			0.2	5
25) Allyl Chloride	(2)	3.332	(-0.001)	41	199942	16.637	16.64			0.3	5
27) Methyl Acetate	(2)	3.307	(-0.000)	43	187813	17.313	17.31			0.2	5
28) Methylene Chloride	(2)	3.490	(-0.000)	84	136982	21.024	21.02			0.3	1
30) t-Butyl alcohol	(1)	3.624	(-0.003)	59	393817	182.257	182.26			12	50
31) Acrylonitrile	(2)	3.777	(-0.000)	53	493566	96.911	96.91			0.3	20
32) trans-1,2-Dichloroethene	(2)	3.819	(-0.000)	96	135755	21.447	21.45			0.2	1
33) Methyl Tertiary Butyl Ether	(2)	3.819	(-0.001)	73	387913	19.408	19.41			0.2	1
34) n-Hexane	(2)	4.191	(-0.001)	57	183270	19.962	19.96			0.2	5
36) 1,1-Dichloroethane	(2)	4.441	(-0.000)	63	247715	20.910	20.91			0.2	1
38) di-Isopropyl ether	(2)	4.496	(-0.000)	45	455661	19.815	19.81			0.2	1
39) 2-Chloro-1,3-butadiene	(2)	4.545	(-0.000)	53	202547	18.941	18.94			0.2	5
40) Ethyl t-butyl ether	(2)	5.057	(-0.000)	59	384926	18.612	18.61			0.2	1
42) cis-1,2-Dichloroethene	(2)	5.307	(-0.001)	96	152441	21.611	21.61			0.2	1

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Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov07b.b/5n07s62.d Injection date and time: **07-NOV-2018 20:46**
Data file Sample Info. Line: LCD557;LCD557;1;3;LCSD;;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 07-Nov-2018 22:07 dvv10203

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 07-NOV-2018 20:23
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
43) 1,2-Dichloroethene (Total)	(2)		96	288196	43.058	43.06			0.2	2
44) 2-Butanone	(2)	5.295(0.000)	43	1113612	144.726	144.73			0.3	10
45) 2,2-Dichloropropane	(2)	5.325(-0.001)	77	188075	20.032	20.03			0.3	1
47) Propionitrile	(1)	5.404(0.000)	54	333156	145.889	145.89			14	100
48) Methacrylonitrile	(2)	5.618(0.000)	67	727649	150.308	150.31			6	50
49) Bromochloromethane	(2)	5.648(-0.000)	128	69161	18.942	18.94			0.2	5
50) Tetrahydrofuran	(1)	5.660(0.000)	71	192600	92.697	92.70			0.7	10
51) Chloroform	(2)	5.813(0.000)	83	238375	21.289	21.29			0.2	1
53) 1,1,1-Trichloroethane	(2)	6.038(-0.000)	97	196950	20.507	20.51			0.3	1
54) Cyclohexane	(2)	6.118(-0.000)	56	229980	20.074	20.07			0.2	5
55) 1,1-Dichloropropene	(2)	6.258(-0.000)	75	192657	20.851	20.85			0.2	5
56) Carbon Tetrachloride	(2)	6.246(-0.000)	117	173381	20.543	20.54			0.2	1
58) Isobutyl Alcohol	(1)	6.490(0.000)	41	335268	479.147	479.15			36	250
60) Benzene	(2)	6.538(-0.000)	78	587161	21.271	21.27			0.2	1
61) 1,2-Dichloroethane	(2)	6.630(-0.000)	62	177322	20.938	20.94			0.3	1
65) t-Amyl methyl ether	(2)	6.752(0.000)	73	374846	19.303	19.30			0.8	5
67) n-Heptane	(2)	6.983(-0.000)	43	223862	21.215	21.22			0.2	5
69) n-Butanol	(1)	7.428(0.000)	56	523976	932.615	932.61			61	250
71) Trichloroethene	(2)	7.471(-0.000)	95	148329	21.485	21.48			0.2	1
73) Methylcyclohexane	(2)	7.782(-0.000)	83	230738	19.276	19.28			0.2	5
74) 1,2-Dichloropropane	(2)	7.837(-0.000)	63	153629	22.265	22.26			0.2	1
75) Dibromomethane	(2)	7.953(-0.000)	93	88831	21.161	21.16			0.2	1
77) Methyl Methacrylate	(2)	7.953(-0.000)	69	132960	19.108	19.11			0.2	5
79) Bromodichloromethane	(2)	8.209(-0.000)	83	162569	20.779	20.78			0.2	1
80) 2-Nitropropane	(2)	8.532(-0.001)	41	56733	16.193	16.19			0.8	10
81) 2-Chloroethyl Vinyl Ether	(2)	8.623(-0.001)	63	106931M	19.265	19.27			0.2	10
82) cis-1,3-Dichloropropene	(2)	8.806(-0.000)	75	215181	21.389	21.39			0.2	1
83) 4-Methyl-2-pentanone	(2)	9.032(-0.001)	43	1367455	99.754	99.75			0.5	10
89) Toluene	(3)	9.239(0.000)	92	365631	20.540	20.54			0.2	1
90) trans-1,3-Dichloropropene	(3)	9.562(-0.000)	75	185575	19.520	19.52			0.2	1
91) 1,3-Dichloropropene (total)	(3)		100	400756	40.909	40.91			0.2	5
92) Ethyl Methacrylate	(3)	9.647(-0.000)	69	211199	18.528	18.53			0.2	5
93) 1,1,2-Trichloroethane	(3)	9.788(-0.000)	97	133013	21.938	21.94			0.2	1
94) Tetrachloroethene	(3)	9.855(0.000)	166	160005	20.465	20.46			0.2	1
95) 1,3-Dichloropropane	(3)	9.970(-0.000)	76	213833	20.863	20.86			0.2	1
97) 2-Hexanone	(3)	10.050(-0.000)	43	1108734	96.550	96.55			0.3	10
98) Dibromochloromethane	(3)	10.196(0.000)	129	125839	20.271	20.27			0.2	1
100) 1,2-Dibromoethane	(3)	10.312(-0.000)	107	136405	20.735	20.74			0.2	1
102) 1-Chlorohexane	(3)	10.824(-0.000)	91	205331	20.305	20.30			0.3	5
103) Chlorobenzene	(3)	10.824(-0.000)	112	406399	21.075	21.08			0.2	1
104) 1,1,1,2-Tetrachloroethane	(3)	10.922(-0.000)	131	131153	20.651	20.65			0.2	1
105) Ethylbenzene	(3)	10.928(-0.000)	91	710664	20.768	20.77			0.4	1
107) m+p-Xylene	(3)	11.056(-0.000)	106	555701	42.041	42.04			1	5
108) o-Xylene	(3)	11.409(-0.000)	106	261583	20.676	20.68			0.4	1
109) Xylene (Total)	(3)		106	817284	62.717	62.72			1	5
110) Styrene	(3)	11.428(-0.000)	104	424942	20.611	20.61			0.2	5
111) Bromoform	(3)	11.592(-0.000)	173	85774	18.138	18.14			0.2	4
112) Isopropylbenzene	(3)	11.738(-0.000)	105	697543	21.631	21.63			0.2	5
116) Bromobenzene	(4)	12.007(0.000)	156	165938	19.962	19.96			0.2	5
117) 1,1,2,2-Tetrachloroethane	(4)	12.019(-0.000)	83	229156	21.172	21.17			0.2	1
118) 1,2,3-Trichloropropane	(4)	12.062(-0.000)	110	67401	20.938	20.94			0.2	5
119) trans-1,4-Dichloro-2-butene	(4)	12.049(-0.000)	53	331432	89.160	89.16			6	50
120) n-Propylbenzene	(4)	12.098(-0.000)	91	867620	21.909	21.91			0.2	5
121) 2-Chlorotoluene	(4)	12.171(-0.000)	126	166446	20.834	20.83			0.2	5

M = Compound was manually integrated.

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Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov07b.b/5n07s62.d Injection date and time: **07-NOV-2018 20:46**
Data file Sample Info. Line: LCD557;LCD557;1;3;LCSD;;;;5n07b61; Instrument ID: **HP26285.i** Batch: **5183113AA**
Date, time and analyst ID of latest file update: 07-Nov-2018 22:07 dvv10203

Blank Data file reference: **/chem2/HP26285.i/18nov07b.b/5n07b61.d**

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 07-NOV-2018 20:23
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov07b.b/5n07c05.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

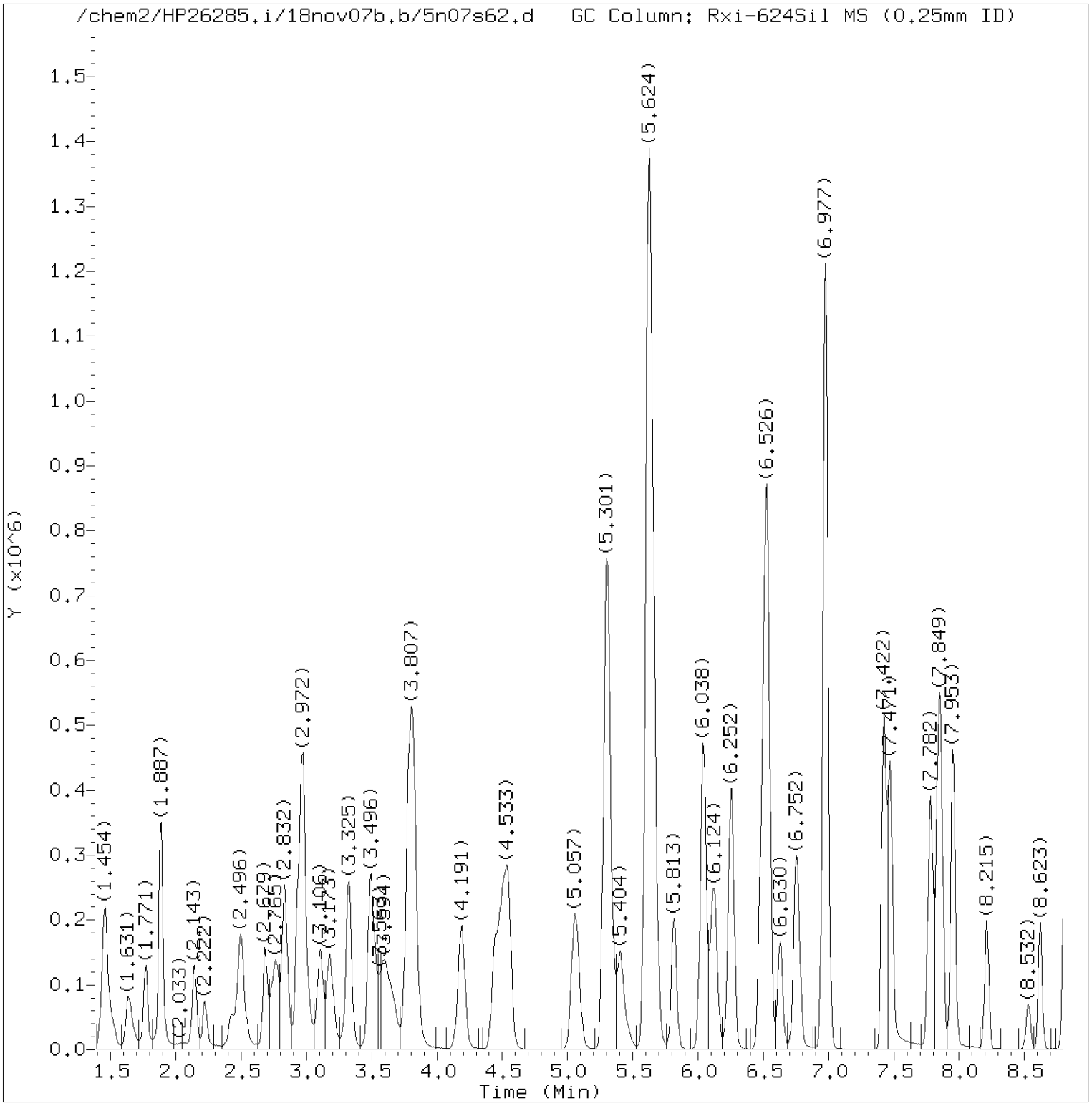
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
122) 4-Chlorotoluene	(4)	12.275(-0.000)	126	172455	20.746	20.75			0.2	5
123) 1,3,5-Trimethylbenzene	(4)	12.244(0.000)	105	584061	21.015	21.01			0.3	5
125) tert-Butylbenzene	(4)	12.500(0.000)	134	121659M	21.074	21.07			0.3	5
126) Pentachloroethane	(4)	12.531(-0.000)	167	95729	19.426	19.43			0.2	5
127) 1,2,4-Trimethylbenzene	(4)	12.549(-0.000)	105	593179	20.780	20.78			1	5
128) sec-Butylbenzene	(4)	12.677(-0.000)	105	774837	22.336	22.34			0.2	5
130) 1,3-Dichlorobenzene	(4)	12.775(-0.000)	146	323120	20.548	20.55			0.2	5
131) p-Isopropyltoluene	(4)	12.799(-0.000)	119	659895	21.904	21.90			0.2	5
134) 1,4-Dichlorobenzene	(4)	12.854(0.000)	146	333690	20.658	20.66			0.2	5
135) 1,2,3-Trimethylbenzene	(4)	12.872(0.000)	105	599589	20.165	20.16			0.3	5
136) Benzyl Chloride	(4)	12.946(0.000)	91	383609	18.258	18.26			0.3	5
137) 1,3-Diethylbenzene	(4)	13.013(0.000)	119	384165	20.685	20.69			0.2	5
138) 1,4-Diethylbenzene	(4)	13.086(0.000)	119	401444	20.252	20.25			0.2	5
139) 1,2-Dichlorobenzene	(4)	13.128(0.000)	146	313155	20.766	20.77			0.2	5
140) n-Butylbenzene	(4)	13.104(0.000)	92	346870M	22.311	22.31			0.2	5
141) 1,2-Diethylbenzene	(4)	13.159(0.000)	119	322537	20.744	20.74			0.2	5
142) Diethylbenzene (total)	(4)		100	1108146	61.681	61.68			0.2	5
143) 1,2-Dibromo-3-chloropropane	(4)	13.708(0.000)	75	53469	19.216	19.22			0.3	5
145) 1,3,5-Trichlorobenzene	(4)	13.836(0.000)	180	235160	21.309	21.31			0.2	5
147) 1,2,4-Trichlorobenzene	(4)	14.281(0.000)	180	208005	20.957	20.96			0.3	5
148) Hexachlorobutadiene	(4)	14.372(0.000)	225	106006	22.672	22.67			0.7	5
149) Naphthalene	(4)	14.476(0.000)	128	700384	19.893	19.89			1	5
150) 1,2,3-Trichlorobenzene	(4)	14.622(0.000)	180	200790	20.764	20.76			0.4	5
151) 2-Methylnaphthalene	(4)	15.268(0.000)	142	379702	18.227	18.23			0.7	5

M = Compound was manually integrated.

Total number of targets = 108

Digitally signed by Don V. Viray on 11/07/2018 at 22:11. Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

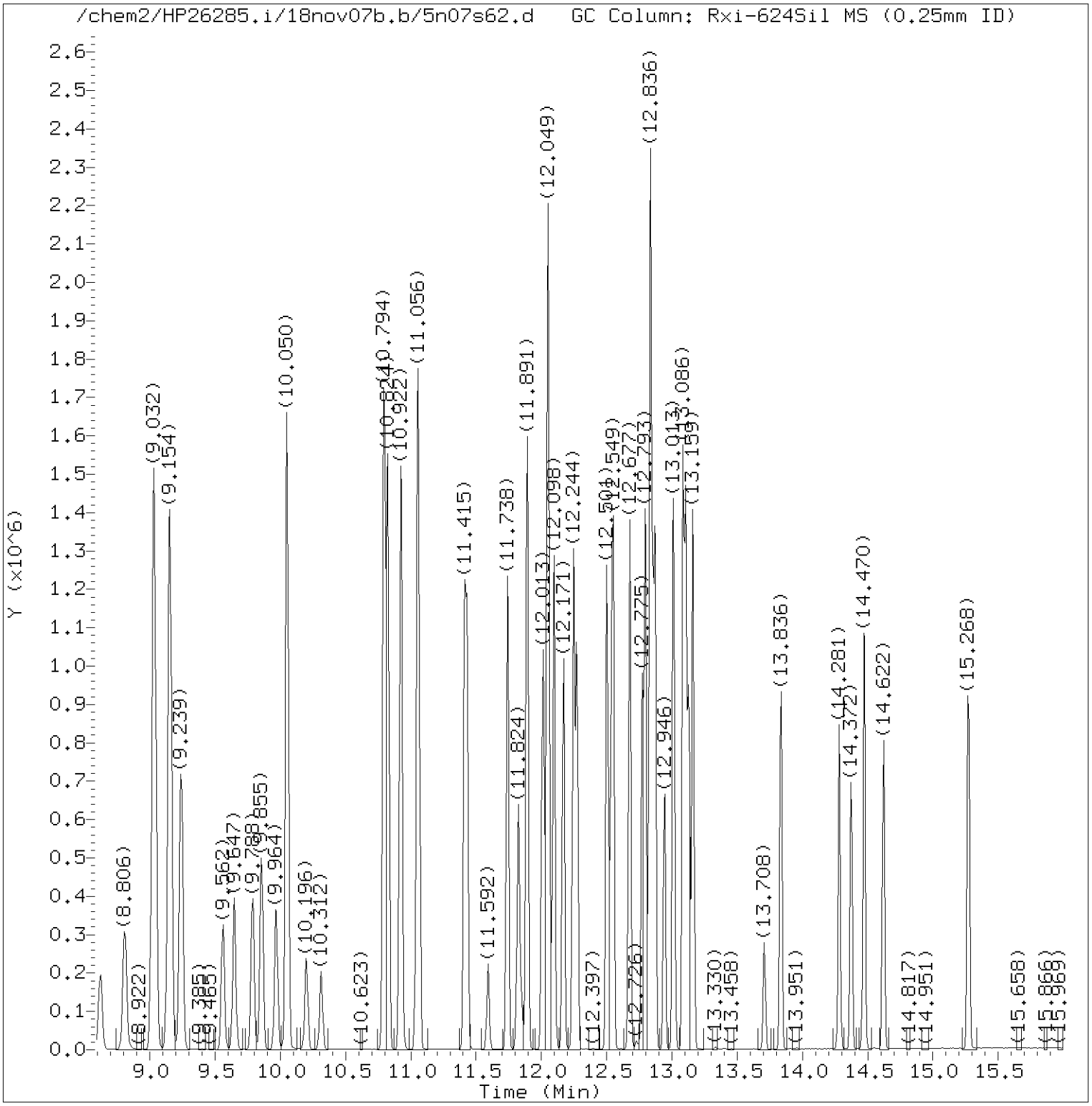
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:07 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

Digitally signed by Don V. Viray
on 11/07/2018 at 22:11.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:07 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

Digitally signed by Don V. Viray
on 11/07/2018 at 22:11.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:07 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.637	85	183480	15.643
4) Chloromethane	(2)	1.771	50	181368	19.095
6) Vinyl Chloride	(2)	1.881	62	174512	19.660
5) 1,3-Butadiene	(2)	1.887	39	139861	21.930
8) Bromomethane	(2)	2.143	94	115166	17.456
9) Chloroethane	(2)	2.222	64	78571	17.807
12) Trichlorofluoromethane	(2)	2.478	101	207232	17.504
11) n-Pentane	(2)	2.502	43	128392	16.979
14) Ethyl ether	(2)	2.679	59	117538	20.626
15) Freon 123a	(2)	2.765	67	163667	20.293
16) Acrolein	(1)	2.832	56	373877	129.553
17) 1,1-Dichloroethene	(2)	2.935	96	117770	21.172
18) Acetone	(1)	2.972	58	201058	134.419
19) Freon 113	(2)	2.972	101	115581	20.850
22) Methyl Iodide	(2)	3.100	142	210417	19.404
21) 2-Propanol	(1)	3.118	45	156968	127.998
23) Carbon Disulfide	(2)	3.179	76	334540	17.651
27) Methyl Acetate	(2)	3.307	43	187813	17.313
25) Allyl Chloride	(2)	3.332	41	199942	16.637
28) Methylene Chloride	(2)	3.490	84	136982	21.024
29)*t-Butyl alcohol-d10	(1)	3.521	65	410870M	250.000
30) t-Butyl alcohol	(1)	3.624	59	393817	182.257
31) Acrylonitrile	(2)	3.777	53	493566	96.911
32) trans-1,2-Dichloroethene	(2)	3.819	96	135755	21.447
33) Methyl Tertiary Butyl Ether	(2)	3.819	73	387913	19.408
34) n-Hexane	(2)	4.191	57	183270	19.962
36) 1,1-Dichloroethane	(2)	4.441	63	247715	20.910
38) di-Isopropyl ether	(2)	4.496	45	455661	19.815
39) 2-Chloro-1,3-butadiene	(2)	4.545	53	202547	18.941
40) Ethyl t-butyl ether	(2)	5.057	59	384926	18.612
44) 2-Butanone	(2)	5.295	43	1113612	144.726
42) cis-1,2-Dichloroethene	(2)	5.307	96	152441	21.611
45) 2,2-Dichloropropane	(2)	5.325	77	188075	20.032
47) Propionitrile	(1)	5.404	54	333156	145.889
48) Methacrylonitrile	(2)	5.618	67	727649	150.308
49) Bromochloromethane	(2)	5.648	128	69161	18.942
50) Tetrahydrofuran	(1)	5.660	71	192600	92.697
51) Chloroform	(2)	5.813	83	238375	21.289

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

Digitally signed by Don V. Viray
on 11/07/2018 at 22:11.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:07 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
53) 1,1,1-Trichloroethane	(2)	6.038	97	196950	20.507
52)$Dibromofluoromethane	(2)	6.044	113	289766	50.137
54) Cyclohexane	(2)	6.118	56	229980	20.074
43) 1,2-Dichloroethene (Total)	(2)		96	288196	43.058
56) Carbon Tetrachloride	(2)	6.246	117	173381	20.543
55) 1,1-Dichloropropene	(2)	6.258	75	192657	20.851
58) Isobutyl Alcohol	(1)	6.489	41	335268	479.147
57)$1,2-Dichloroethane-d4	(2)	6.520	102	69713	50.523
60) Benzene	(2)	6.538	78	587161	21.271
61) 1,2-Dichloroethane	(2)	6.630	62	177322	20.938
65) t-Amyl methyl ether	(2)	6.752	73	374846	19.303
66)*Fluorobenzene	(2)	6.971	96	1188098	50.000
67) n-Heptane	(2)	6.983	43	223862	21.215
69) n-Butanol	(1)	7.428	56	523976	932.615
71) Trichloroethene	(2)	7.471	95	148329	21.485
73) Methylcyclohexane	(2)	7.782	83	230738	19.276
74) 1,2-Dichloropropane	(2)	7.837	63	153629	22.265
75) Dibromomethane	(2)	7.953	93	88831	21.161
77) Methyl Methacrylate	(2)	7.953	69	132960	19.108
79) Bromodichloromethane	(2)	8.209	83	162569	20.779
80) 2-Nitropropane	(2)	8.532	41	56733	16.193
81) 2-Chloroethyl Vinyl Ether	(2)	8.623	63	106931M	19.265
82) cis-1,3-Dichloropropene	(2)	8.806	75	215181	21.389
83) 4-Methyl-2-pentanone	(2)	9.032	43	1367455	99.754
84)$Toluene-d8	(3)	9.154	98	1176910	49.602
89) Toluene	(3)	9.239	92	365631	20.540
90) trans-1,3-Dichloropropene	(3)	9.562	75	185575	19.520
92) Ethyl Methacrylate	(3)	9.647	69	211199	18.528
93) 1,1,2-Trichloroethane	(3)	9.788	97	133013	21.938
94) Tetrachloroethene	(3)	9.855	166	160005	20.465
95) 1,3-Dichloropropane	(3)	9.971	76	213833	20.863
97) 2-Hexanone	(3)	10.050	43	1108734	96.550
91) 1,3-Dichloropropene (total)	(3)		100	400756	40.909
98) Dibromochloromethane	(3)	10.196	129	125839	20.271
100) 1,2-Dibromoethane	(3)	10.312	107	136405	20.735
101)*Chlorobenzene-d5	(3)	10.794	117	879599	50.000
102) 1-Chlorohexane	(3)	10.824	91	205331	20.305
103) Chlorobenzene	(3)	10.824	112	406399	21.075

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

Digitally signed by Don V. Viray
on 11/07/2018 at 22:11.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:07 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
104) 1,1,1,2-Tetrachloroethane	(3)	10.922	131	131153	20.651
105) Ethylbenzene	(3)	10.928	91	710664	20.768
107) m+p-Xylene	(3)	11.056	106	555701	42.041
108) o-Xylene	(3)	11.409	106	261583	20.676
110) Styrene	(3)	11.428	104	424942	20.611
111) Bromoform	(3)	11.592	173	85774	18.138
112) Isopropylbenzene	(3)	11.738	105	697543	21.631
109) Xylene (Total)	(3)		106	817284	62.717
115)$4-Bromofluorobenzene	(3)	11.891	95	434850	50.987
116) Bromobenzene	(4)	12.007	156	165938	19.962
117) 1,1,2,2-Tetrachloroethane	(4)	12.019	83	229156	21.172
119) trans-1,4-Dichloro-2-butene	(4)	12.049	53	331432	89.160
118) 1,2,3-Trichloropropane	(4)	12.062	110	67401	20.938
120) n-Propylbenzene	(4)	12.098	91	867620	21.909
121) 2-Chlorotoluene	(4)	12.171	126	166446	20.834
123) 1,3,5-Trimethylbenzene	(4)	12.244	105	584061	21.015
122) 4-Chlorotoluene	(4)	12.275	126	172455	20.746
125) tert-Butylbenzene	(4)	12.501	134	121659M	21.074
126) Pentachloroethane	(4)	12.531	167	95729	19.426
127) 1,2,4-Trimethylbenzene	(4)	12.549	105	593179	20.780
128) sec-Butylbenzene	(4)	12.677	105	774837	22.336
130) 1,3-Dichlorobenzene	(4)	12.775	146	323120	20.548
131) p-Isopropyltoluene	(4)	12.799	119	659895	21.904
132)*1,4-Dichlorobenzene-d4	(4)	12.836	152	483544	50.000
134) 1,4-Dichlorobenzene	(4)	12.854	146	333690	20.658
135) 1,2,3-Trimethylbenzene	(4)	12.872	105	599589	20.165
136) Benzyl Chloride	(4)	12.946	91	383609	18.258
137) 1,3-Diethylbenzene	(4)	13.013	119	384165	20.685
138) 1,4-Diethylbenzene	(4)	13.086	119	401444	20.252
140) n-Butylbenzene	(4)	13.104	92	346870M	22.311
139) 1,2-Dichlorobenzene	(4)	13.128	146	313155	20.766
141) 1,2-Diethylbenzene	(4)	13.159	119	322537	20.744
142) Diethylbenzene (total)	(4)		100	1108146	61.681
143) 1,2-Dibromo-3-chloropropane	(4)	13.708	75	53469	19.216
145) 1,3,5-Trichlorobenzene	(4)	13.836	180	235160	21.309
147) 1,2,4-Trichlorobenzene	(4)	14.281	180	208005	20.957
148) Hexachlorobutadiene	(4)	14.372	225	106006	22.672
149) Naphthalene	(4)	14.476	128	700384	19.893

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

Digitally signed by Don V. Viray
on 11/07/2018 at 22:11.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

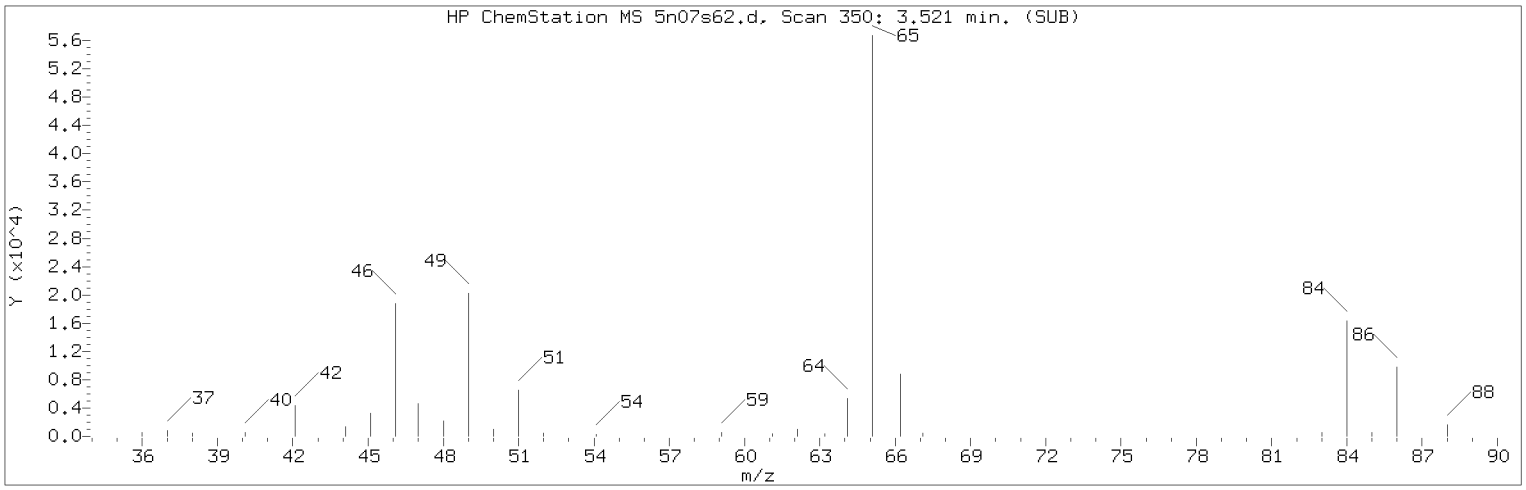
Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:07 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

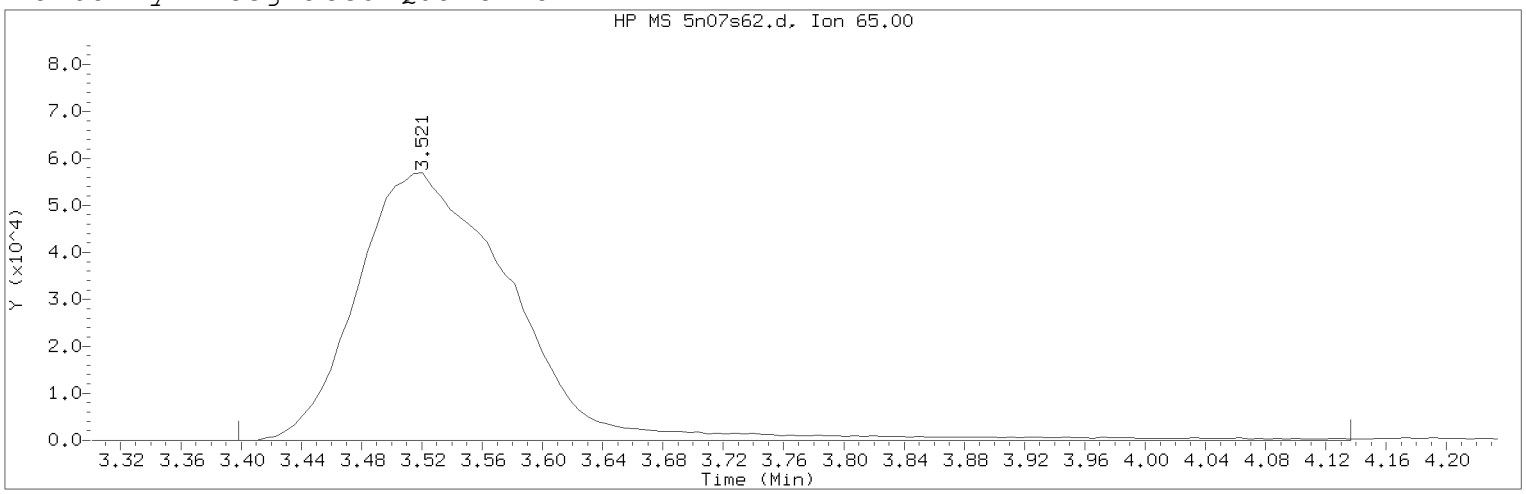
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
150) 1,2,3-Trichlorobenzene	(4)	14.622	180	200790	20.764
151) 2-Methylnaphthalene	(4)	15.268	142	379702	18.227

Digitally signed by Don V. Viray
on 11/07/2018 at 22:11.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:07 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

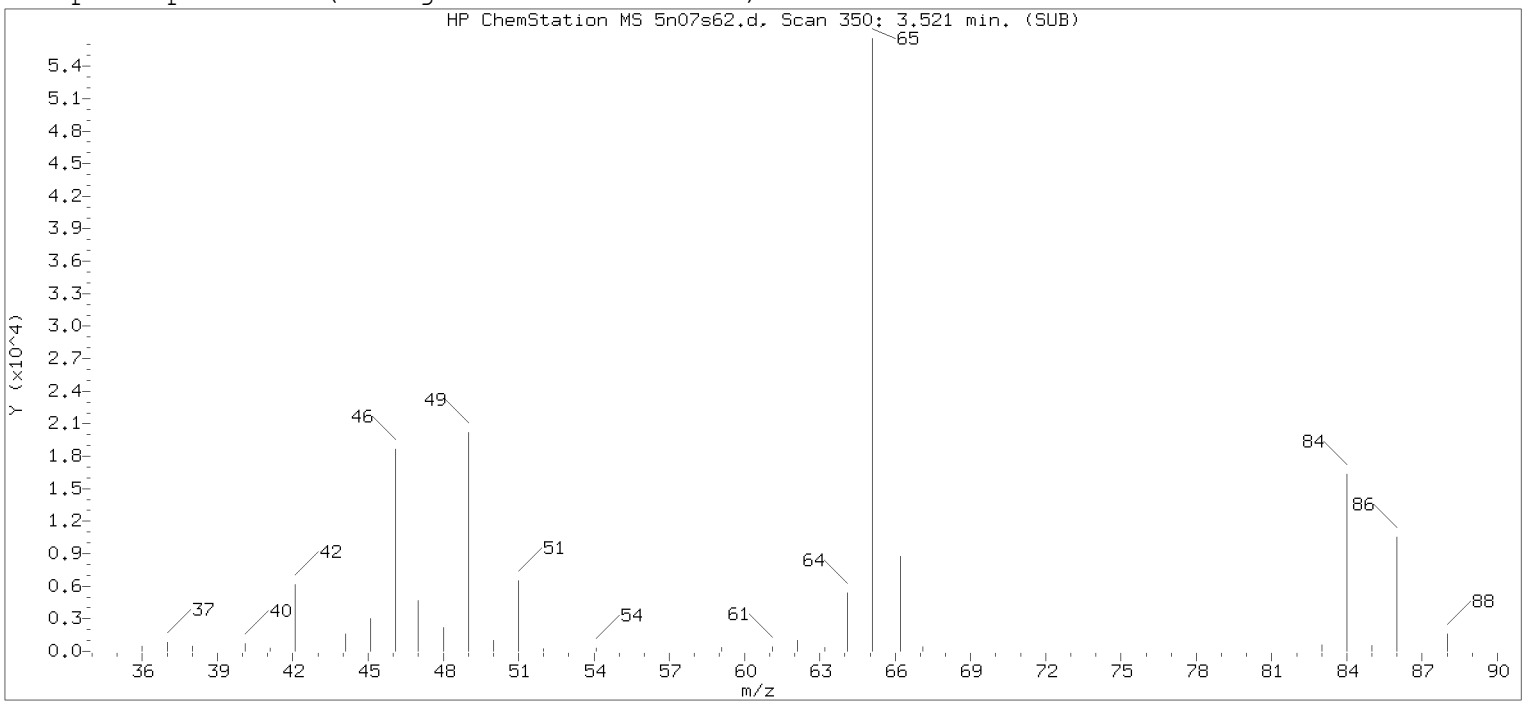
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 350
Retention Time (minutes): 3.521
Quant Ion : 65.00
Area (flag) : 410870M
On-Column Amount (ng) : 250.0000
Integration start scan : 329 Integration stop scan: 450
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

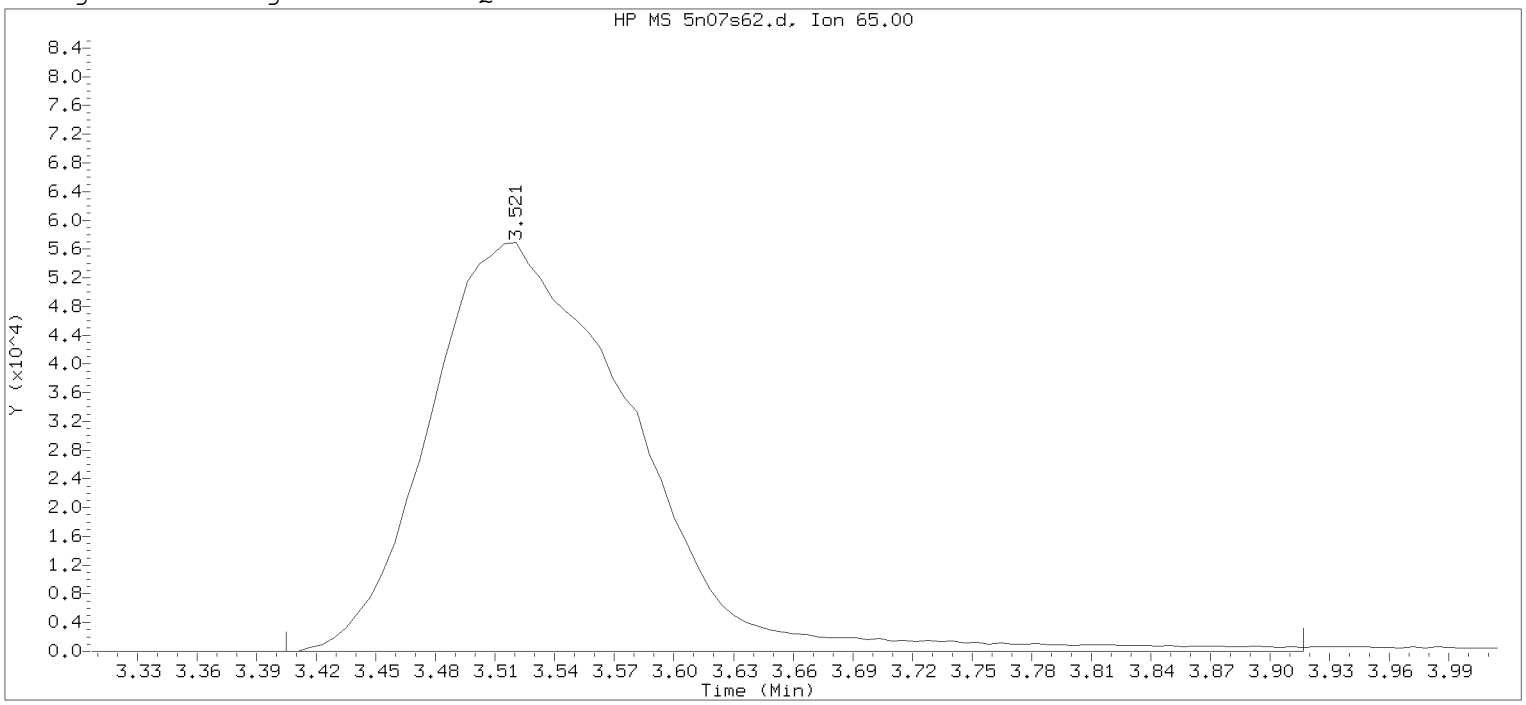
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 22:11.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

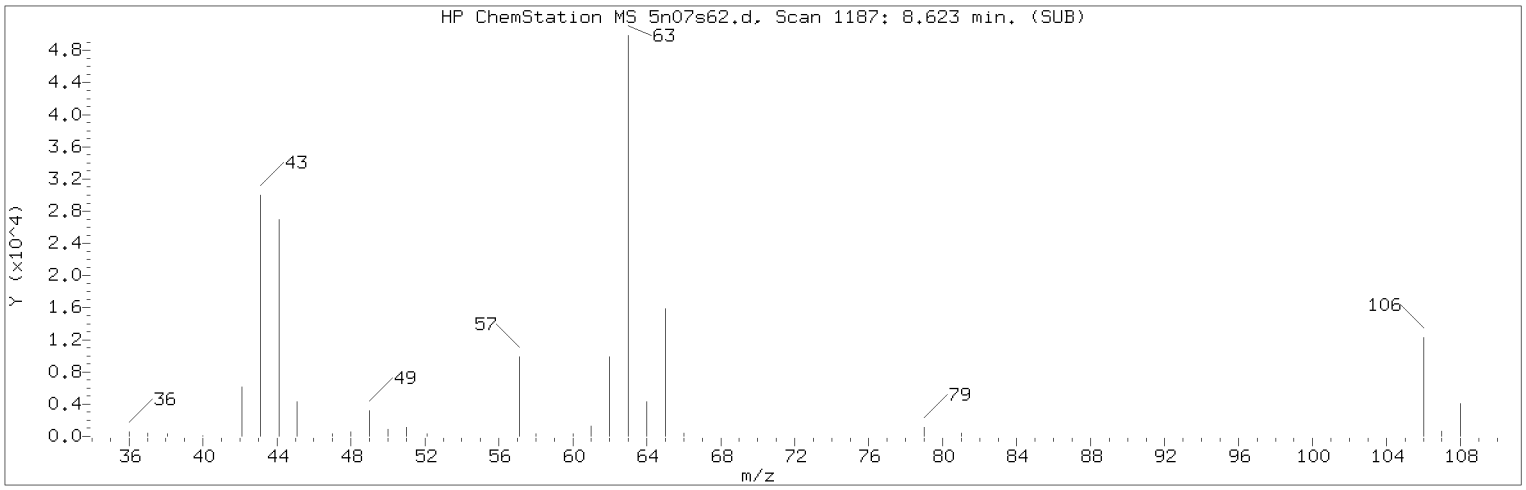
Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 21:09 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

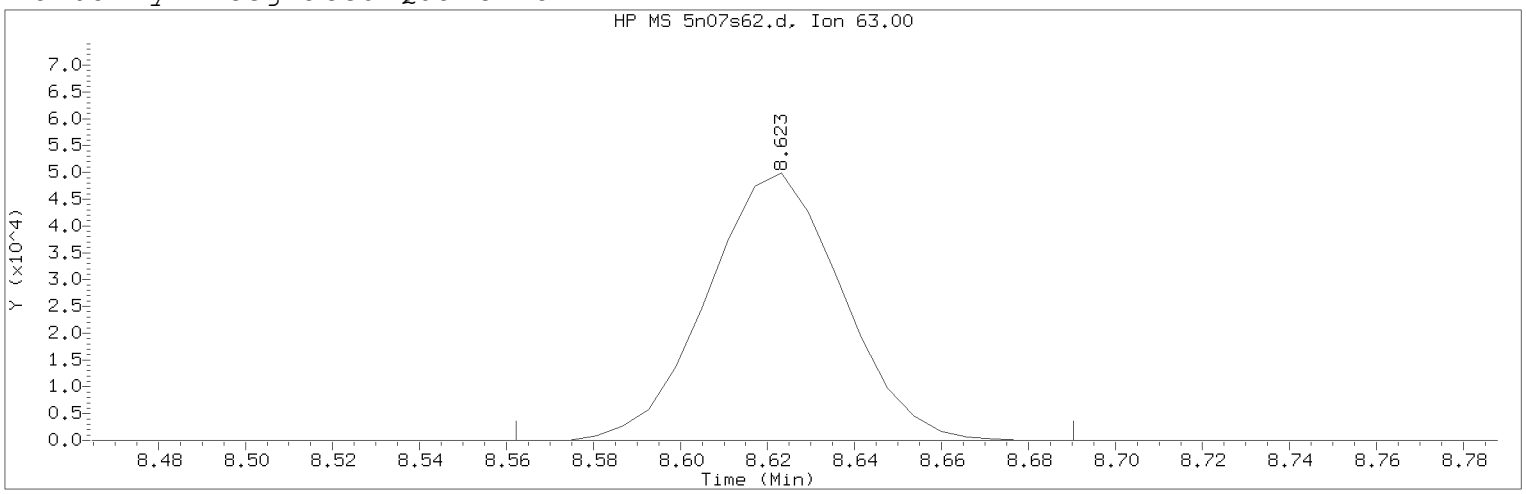
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 350
Retention Time (minutes): 3.521
Quant Ion : 65.00
Area : 404880
On-column Amount (ng) : 250.0000
Integration start scan : 330 Integration stop scan: 414
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/07/2018 at 22:11.
Target 3.5 esignature user id: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:07 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

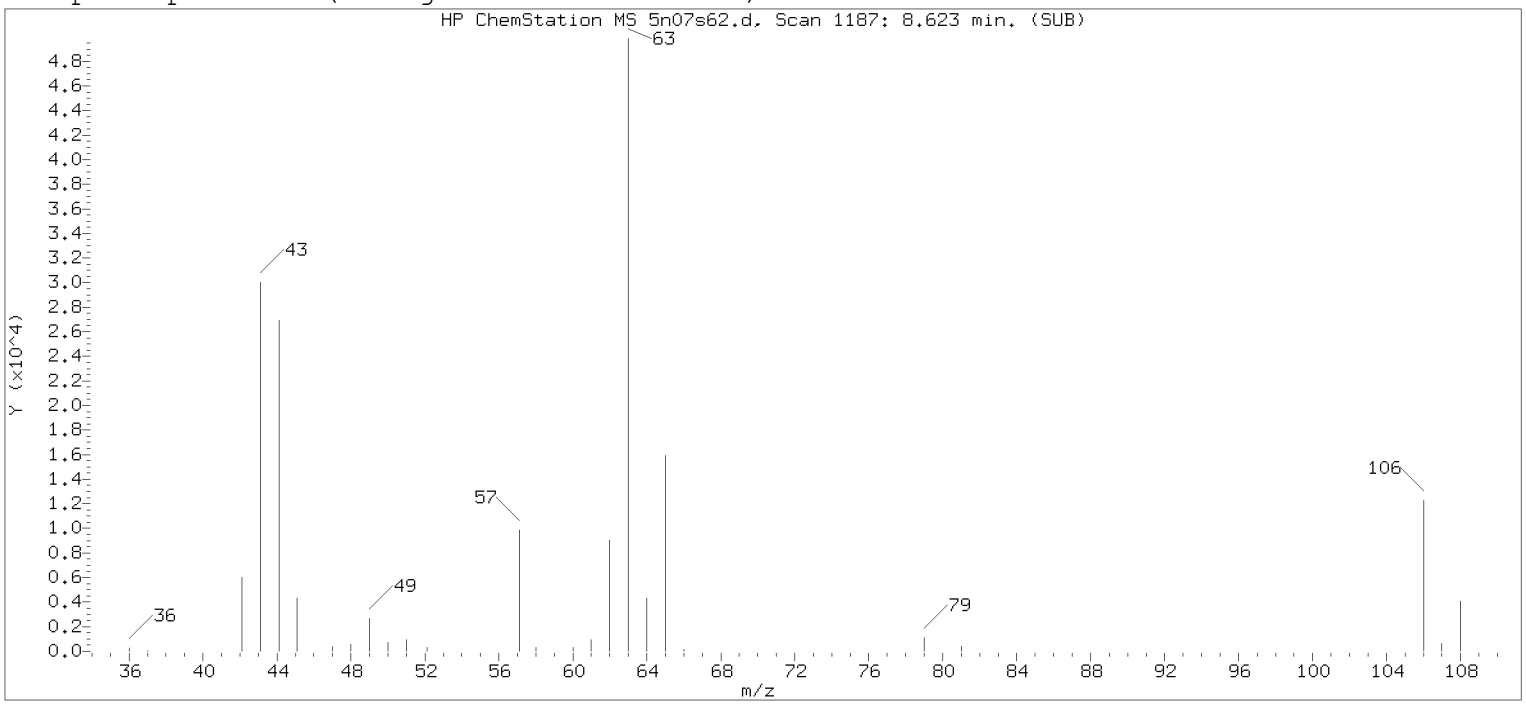
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1187
Retention Time (minutes): 8.623
Quant Ion : 63.00
Area (flag) : 106931M
On-Column Amount (ng) : 19.2650
Integration start scan : 1176 Integration stop scan: 1197
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

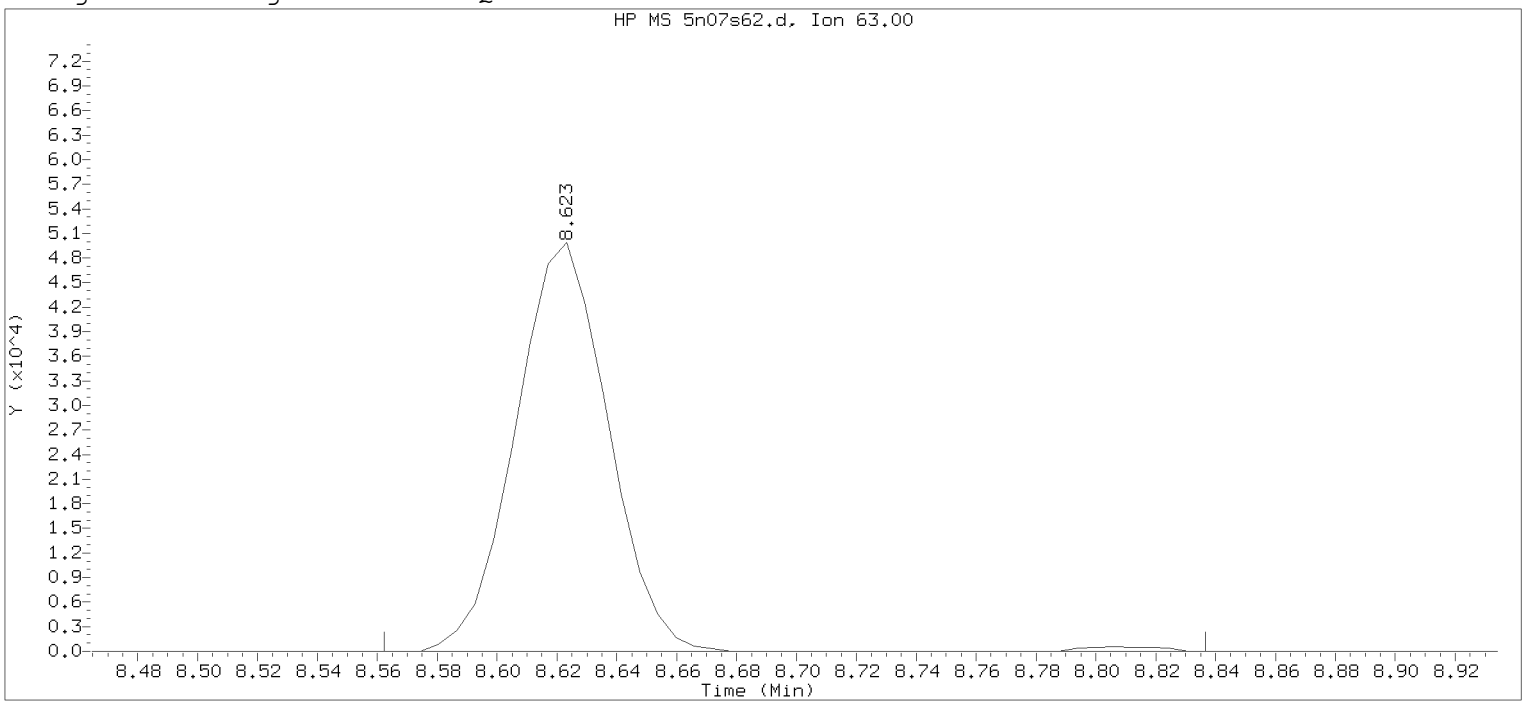
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 22:11.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

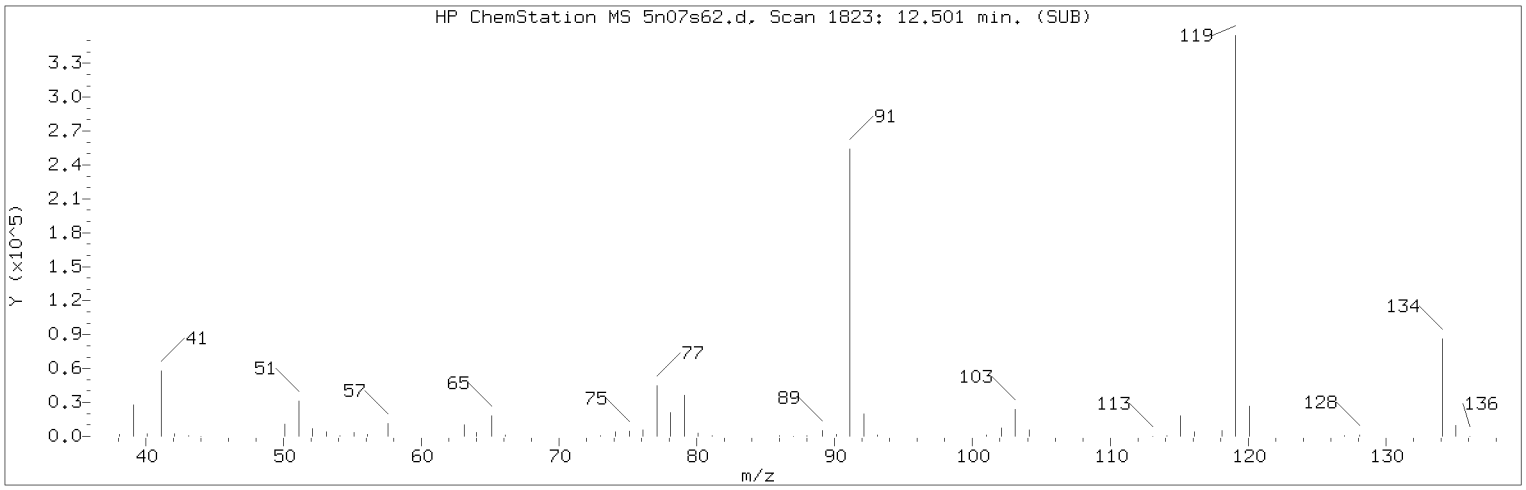
Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 21:09 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

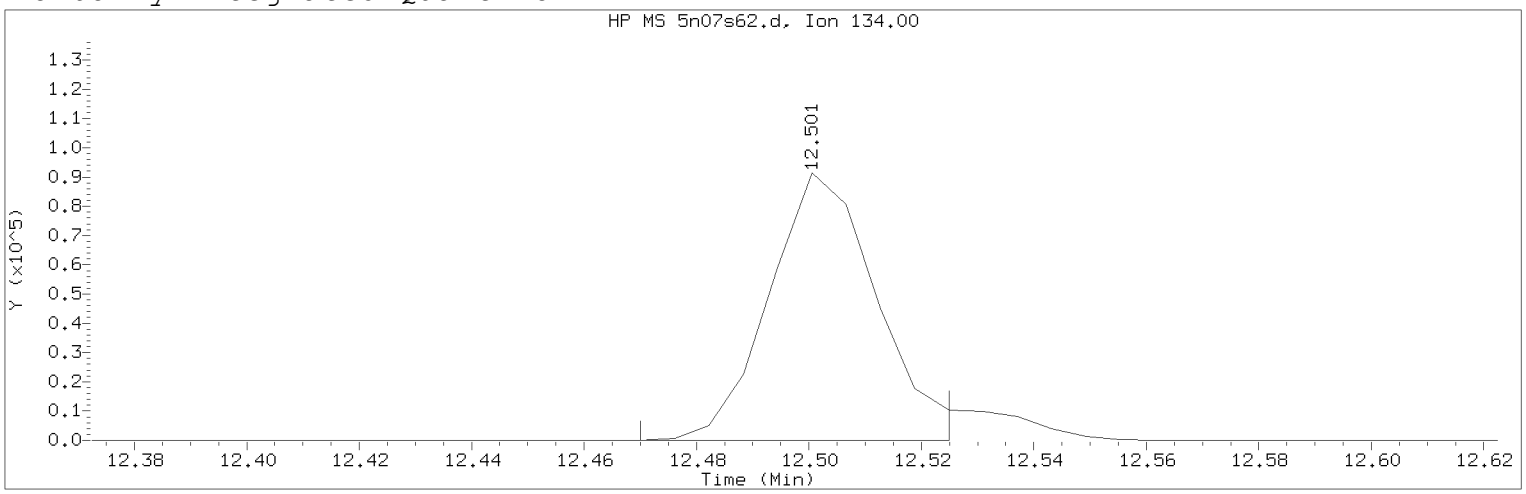
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1187
Retention Time (minutes): 8.623
Quant Ion : 63.00
Area : 107962
On-column Amount (ng) : 19.4510
Integration start scan : 1176 Integration stop scan: 1221
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/07/2018 at 22:11.
Target 3.5 esignature user id: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:07 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

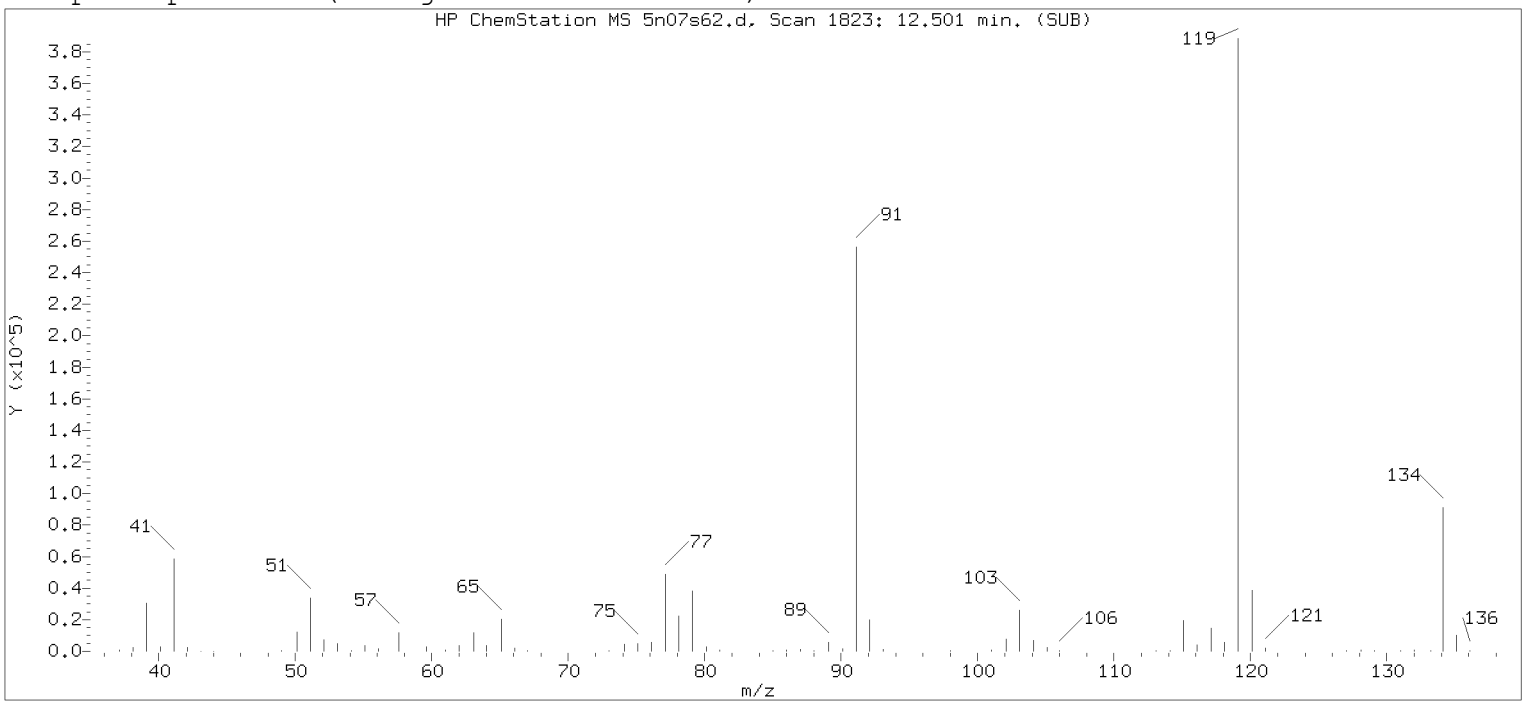
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1823
Retention Time (minutes): 12.501
Quant Ion : 134.00
Area (flag) : 121659M
On-Column Amount (ng) : 21.0736
Integration start scan : 1817 Integration stop scan: 1826
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

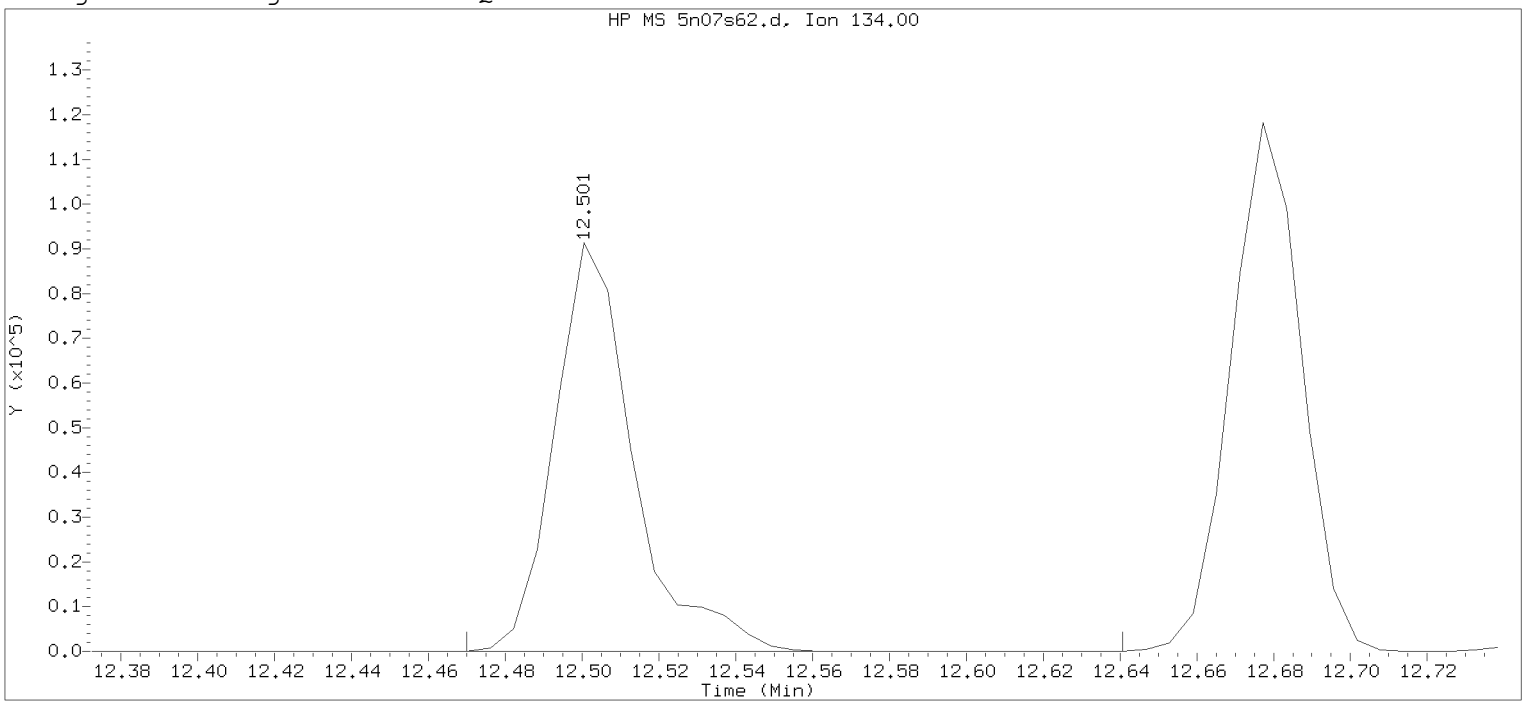
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 22:11.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

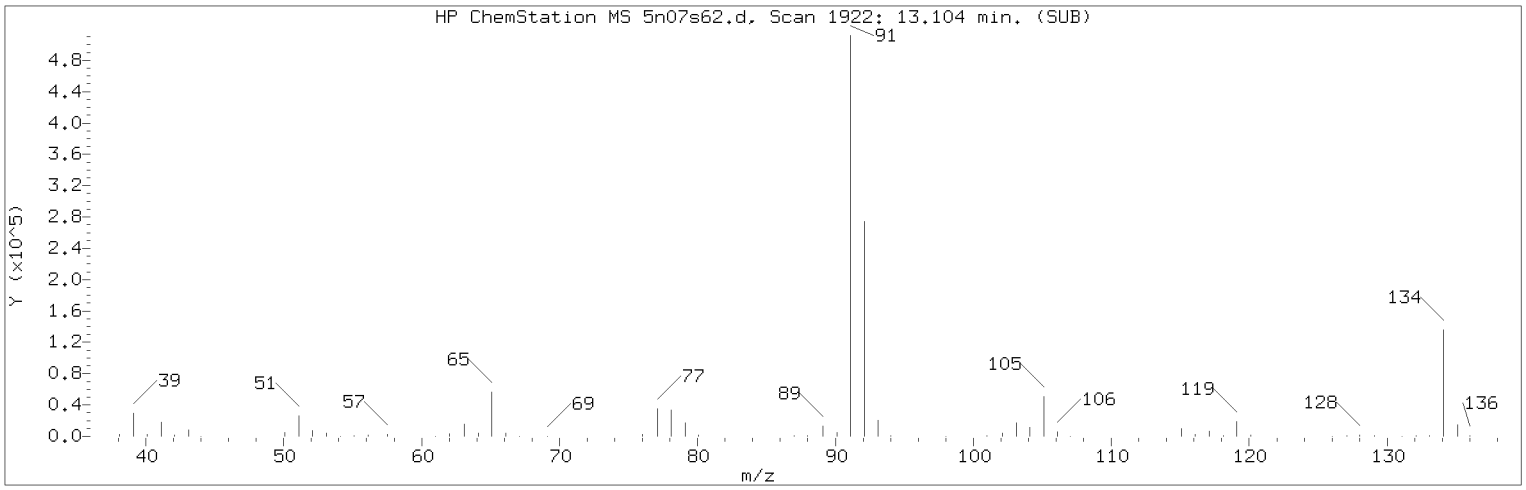
Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 21:09 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

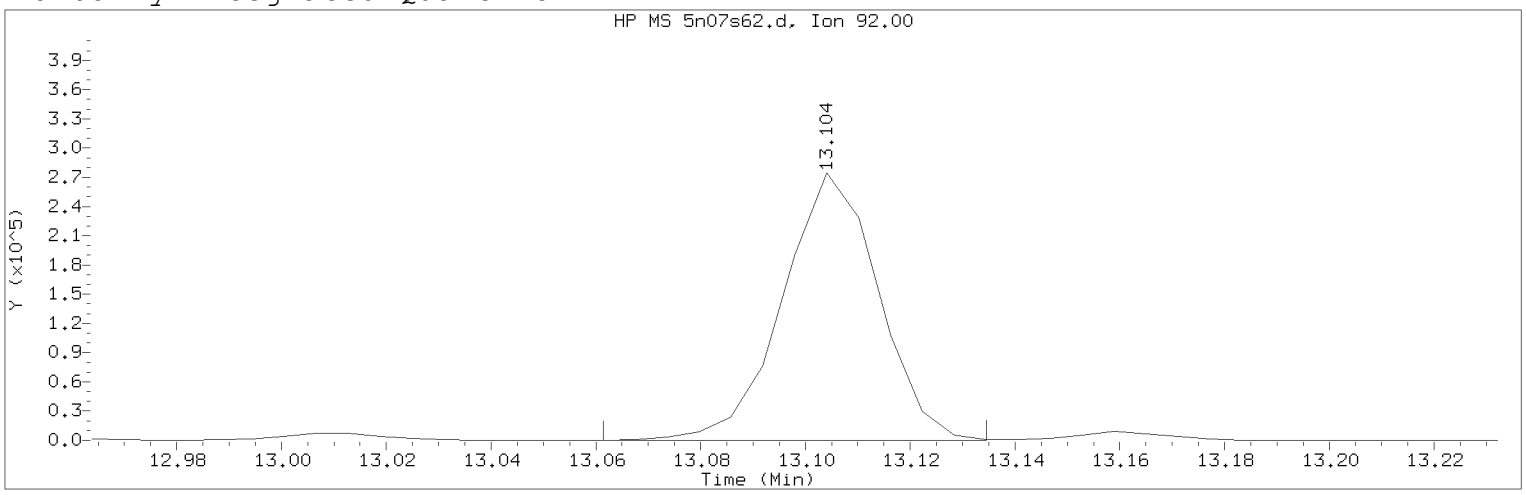
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1823
Retention Time (minutes): 12.501
Quant Ion : 134.00
Area : 130224
On-column Amount (ng) : 22.5572
Integration start scan : 1817 Integration stop scan: 1845
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/07/2018 at 22:11.
Target 3.5 esignature user id: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 22:07 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

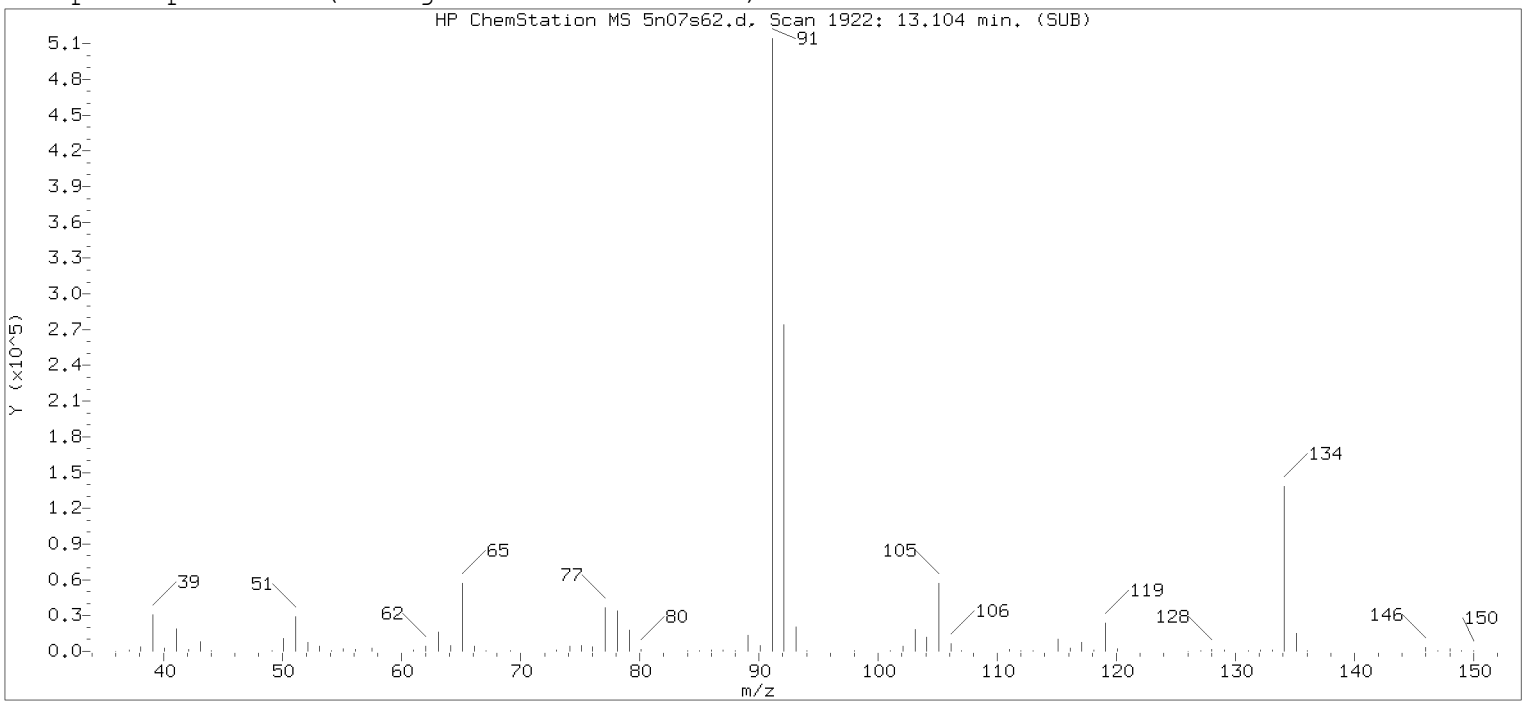
Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1922
Retention Time (minutes): 13.104
Quant Ion : 92.00
Area (flag) : 346870M
On-Column Amount (ng) : 22.3109
Integration start scan : 1914 Integration stop scan: 1926
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

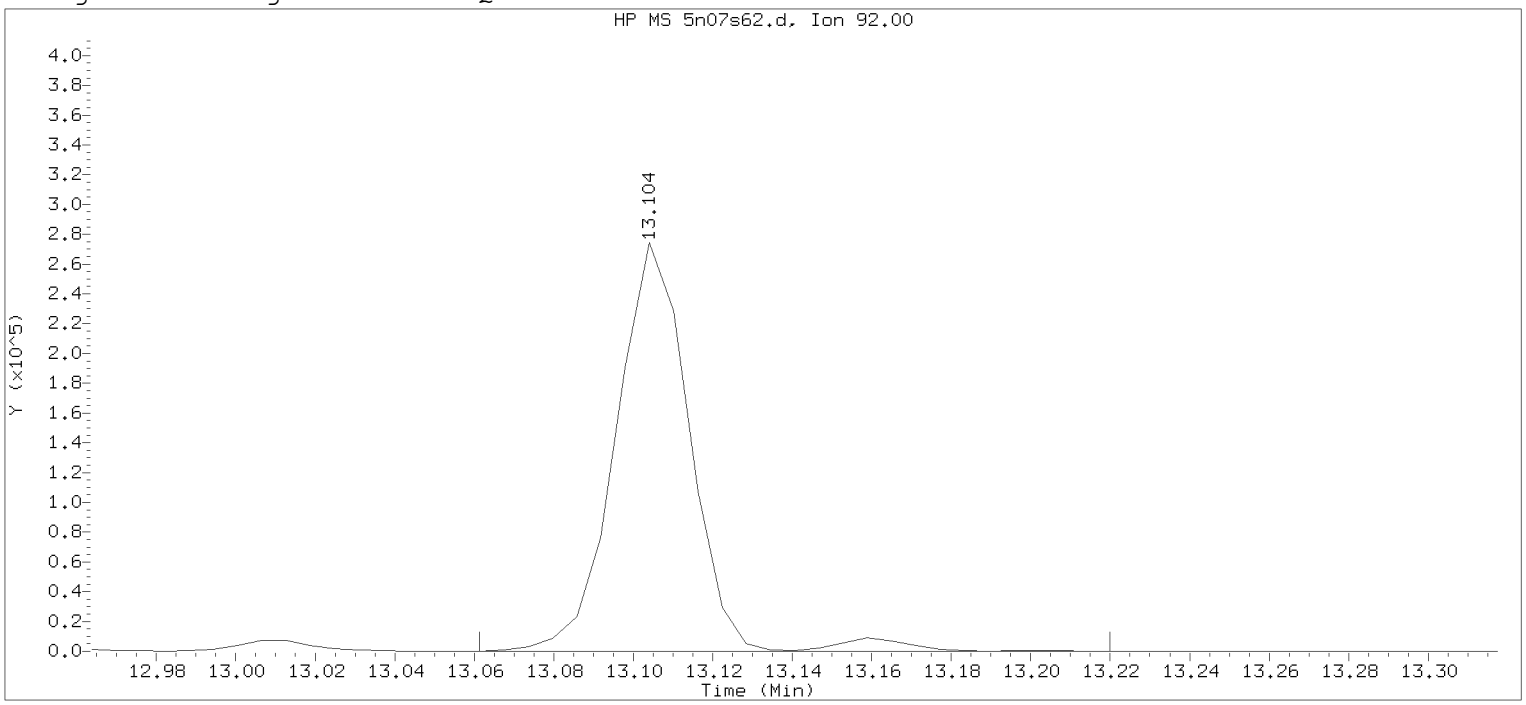
Analyst responsible for change: Digitally signed by Don V. Viray
on 11/07/2018 at 22:11.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Joshua E. Berrios on 11/13/2018 at 23:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov07b.b/5n07s62.d Instrument ID: HP26285.i
Injection date and time: 07-NOV-2018 20:46 Analyst ID: DVV10203

Method used: /chem2/HP26285.i/18nov07b.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 07-NOV-2018 20:23
Date, time and analyst ID of latest file update: 07-Nov-2018 21:09 dvv10203

Sample Name: LCD557 Lab Sample ID: LCD557

Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1922
Retention Time (minutes): 13.104
Quant Ion : 92.00
Area : 357699
On-column Amount (ng) : 23.0074
Integration start scan : 1914 Integration stop scan: 1940
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 11/07/2018 at 22:11.
Target 3.5 esignature user id: dvv10203

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS558

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCS558

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov08a.b/5n08s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	13	
74-87-3	Chloromethane	17	
106-99-0	1,3-Butadiene	28	
75-01-4	Vinyl Chloride	18	
74-83-9	Bromomethane	17	
75-00-3	Chloroethane	17	
109-66-0	n-Pentane	20	
75-69-4	Trichlorofluoromethane	18	
60-29-7	Ethyl ether	20	
354-23-4	Freon 123a	21	
107-02-8	Acrolein	140	
75-35-4	1,1-Dichloroethene	22	
67-64-1	Acetone	150	
76-13-1	Freon 113	22	
67-63-0	2-Propanol	140	
74-88-4	Methyl Iodide	19	
75-15-0	Carbon Disulfide	17	
107-05-1	Allyl Chloride	17	
79-20-9	Methyl Acetate	18	
75-09-2	Methylene Chloride	21	
75-65-0	t-Butyl alcohol	190	
107-13-1	Acrylonitrile	100	
156-60-5	trans-1,2-Dichloroethene	21	
1634-04-4	Methyl Tertiary Butyl Ether	19	
110-54-3	n-Hexane	21	
75-34-3	1,1-Dichloroethane	21	
108-20-3	di-Isopropyl ether	20	
126-99-8	2-Chloro-1,3-butadiene	19	
637-92-3	Ethyl t-butyl ether	18	
156-59-2	cis-1,2-Dichloroethene	22	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS558

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCS558

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov08a.b/5n08s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
540-59-0	1,2-Dichloroethene (Total)	43	
78-93-3	2-Butanone	150	
594-20-7	2,2-Dichloropropane	20	
107-12-0	Propionitrile	160	
126-98-7	Methacrylonitrile	150	
74-97-5	Bromochloromethane	19	
109-99-9	Tetrahydrofuran	98	
67-66-3	Chloroform	22	
71-55-6	1,1,1-Trichloroethane	21	
110-82-7	Cyclohexane	21	
563-58-6	1,1-Dichloropropene	21	
56-23-5	Carbon Tetrachloride	21	
78-83-1	Isobutyl Alcohol	520	
71-43-2	Benzene	21	
107-06-2	1,2-Dichloroethane	22	
994-05-8	t-Amyl methyl ether	19	
142-82-5	n-Heptane	23	
71-36-3	n-Butanol	970	
79-01-6	Trichloroethene	22	
108-87-2	Methylcyclohexane	19	
78-87-5	1,2-Dichloropropane	22	
74-95-3	Dibromomethane	22	
80-62-6	Methyl Methacrylate	19	
75-27-4	Bromodichloromethane	20	
79-46-9	2-Nitropropane	16	
110-75-8	2-Chloroethyl Vinyl Ether	19	
10061-01-5	cis-1,3-Dichloropropene	20	
108-10-1	4-Methyl-2-pentanone	100	
108-88-3	Toluene	21	
10061-02-6	trans-1,3-Dichloropropene	19	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS558

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCS558

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov08a.b/5n08s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
542-75-6	1,3-Dichloropropene (total)	39	
97-63-2	Ethyl Methacrylate	18	
79-00-5	1,1,2-Trichloroethane	22	
127-18-4	Tetrachloroethene	20	
142-28-9	1,3-Dichloropropane	21	
591-78-6	2-Hexanone	100	
124-48-1	Dibromochloromethane	19	
106-93-4	1,2-Dibromoethane	21	
544-10-5	1-Chlorohexane	20	
108-90-7	Chlorobenzene	21	
630-20-6	1,1,1,2-Tetrachloroethane	20	
100-41-4	Ethylbenzene	21	
179601-23-1	m+p-Xylene	42	
95-47-6	o-Xylene	20	
1330-20-7	Xylene (Total)	62	
100-42-5	Styrene	21	
75-25-2	Bromoform	17	
98-82-8	Isopropylbenzene	21	
108-86-1	Bromobenzene	20	
79-34-5	1,1,2,2-Tetrachloroethane	21	
96-18-4	1,2,3-Trichloropropane	21	
110-57-6	trans-1,4-Dichloro-2-butene	85	
103-65-1	n-Propylbenzene	22	
95-49-8	2-Chlorotoluene	20	
106-43-4	4-Chlorotoluene	20	
108-67-8	1,3,5-Trimethylbenzene	21	
98-06-6	tert-Butylbenzene	20	
76-01-7	Pentachloroethane	19	
95-63-6	1,2,4-Trimethylbenzene	20	
135-98-8	sec-Butylbenzene	22	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS558

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCS558

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP26285.i/18nov08a.b/5n08s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/08/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	20	
99-87-6	p-Isopropyltoluene	21	
106-46-7	1,4-Dichlorobenzene	20	
526-73-8	1,2,3-Trimethylbenzene	20	
100-44-7	Benzyl Chloride	18	
141-93-5	1,3-Diethylbenzene	20	
105-05-5	1,4-Diethylbenzene	20	
95-50-1	1,2-Dichlorobenzene	20	
104-51-8	n-Butylbenzene	22	
135-01-3	1,2-Diethylbenzene	21	
25340-17-4	Diethylbenzene (total)	61	
96-12-8	1,2-Dibromo-3-chloropropane	18	
108-70-3	1,3,5-Trichlorobenzene	21	
120-82-1	1,2,4-Trichlorobenzene	20	
87-68-3	Hexachlorobutadiene	22	
91-20-3	Naphthalene	20	
87-61-6	1,2,3-Trichlorobenzene	20	
91-57-6	2-Methylnaphthalene	18	

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

LCS558

Data file: /chem2/HP26285.i/18nov08a.b/5n08s01.d Injection date and time: **08-NOV-2018 08:54**
Data file Sample Info. Line: LCS558;LCS558;1;3;LCS;;;;5n08b01; Instrument ID: **HP26285.i** Batch: **5183121AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 09:58 clm27445

Blank Data file reference: **/chem2/HP26285.i/18nov08a.b/5n08b01.d**

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 08-NOV-2018 08:34
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov08a.b/5n08c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	3.496	(0.000)	346	65	345542	(-3)	250.00	
66) Fluorobenzene	6.965	(0.000)	915	96	1048376	(1)	50.00	
101) Chlorobenzene-d5	10.781	(0.006)	1541	117	772735	(0)	50.00	
132) 1,4-Dichlorobenzene-d4	12.824	(0.000)	1876	152	434987	(-2)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	6.032	(0.000)	113	257724	50.536	101%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	6.508	(0.000)	102	61803	50.760	102%		80 - 120
84) Toluene-d8	(3)	9.141	(0.000)	98	1044472	50.108	100%		80 - 120
115) 4-Bromofluorobenzene	(3)	11.879	(0.000)	95	390689	52.144	104%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)	1.624	(0.000)	85	139154	13.445	13.44			0.2	1
4) Chloromethane	(2)	1.752	(0.001)	50	141511	16.884	16.88			0.2	1
5) 1,3-Butadiene	(2)	1.874	(0.000)	39	155688	27.665	27.67			1	3
6) Vinyl Chloride	(2)	1.868	(0.000)	62	137580	17.565	17.56			0.2	1
8) Bromomethane	(2)	2.130	(0.001)	94	97058	16.672	16.67			0.3	1
9) Chloroethane	(2)	2.210	(0.000)	64	66001	16.952	16.95			0.2	1
11) n-Pentane	(2)	2.490	(0.000)	43	130290	19.526	19.53			0.4	10
12) Trichlorofluoromethane	(2)	2.466	(0.000)	101	185144	17.723	17.72			0.2	1
14) Ethyl ether	(2)	2.667	(0.000)	59	100135	19.914	19.91			0.2	5
15) Freon 123a	(2)	2.746	(0.000)	67	151234	21.251	21.25			0.4	5
16) Acrolein	(1)	2.819	(0.000)	56	331812	136.714	136.71			2	100
17) 1,1-Dichloroethene	(2)	2.923	(0.000)	96	106020	21.600	21.60			0.2	1
18) Acetone	(1)	2.960	(0.001)	58	188329	149.713	149.71			0.7	20
19) Freon 113	(2)	2.960	(0.000)	101	108673	22.217	22.22			0.2	10
21) 2-Propanol	(1)	3.106	(-0.001)	45	144376	139.988	139.99			18	100
22) Methyl Iodide	(2)	3.094	(0.000)	142	183101	19.136	19.14			0.2	1
23) Carbon Disulfide	(2)	3.167	(0.000)	76	288291	17.238	17.24			0.2	5
25) Allyl Chloride	(2)	3.313	(0.000)	41	176237	16.619	16.62			0.3	5
27) Methyl Acetate	(2)	3.295	(0.000)	43	176827	18.472	18.47			0.2	5
28) Methylene Chloride	(2)	3.478	(0.000)	84	122405	21.291	21.29			0.3	1
30) t-Butyl alcohol	(1)	3.600	(-0.000)	59	336733	185.301	185.30			12	50
31) Acrylonitrile	(2)	3.764	(0.000)	53	447628	99.605	99.60			0.3	20
32) trans-1,2-Dichloroethene	(2)	3.807	(-0.000)	96	118902	21.288	21.29			0.2	1
33) Methyl Tertiary Butyl Ether	(2)	3.801	(0.000)	73	343624	19.483	19.48			0.2	1
34) n-Hexane	(2)	4.179	(-0.000)	57	168449	20.793	20.79			0.2	5
36) 1,1-Dichloroethane	(2)	4.423	(0.000)	63	219285	20.977	20.98			0.2	1
38) di-Isopropyl ether	(2)	4.490	(0.000)	45	399409	19.683	19.68			0.2	1
39) 2-Chloro-1,3-butadiene	(2)	4.532	(0.000)	53	180223	19.100	19.10			0.2	5
40) Ethyl t-butyl ether	(2)	5.044	(0.000)	59	328920	18.024	18.02			0.2	1
42) cis-1,2-Dichloroethene	(2)	5.288	(0.000)	96	135248	21.729	21.73			0.2	1
43) 1,2-Dichloroethene (Total)	(2)			96	254150	43.017	43.02			0.2	2

Digitally signed by Corie L. Mellinger on 11/08/2018 at 09:58. Target 3.5 esignature user ID: clm27445

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov08a.b/5n08s01.d Injection date and time: **08-NOV-2018 08:54**
Data file Sample Info. Line: LCS558;LCS558;1;3;LCS;;;;5n08b01; Instrument ID: **HP26285.i** Batch: **5183121AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 09:58 clm27445

Blank Data file reference: **/chem2/HP26285.i/18nov08a.b/5n08b01.d**

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 08-NOV-2018 08:34
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov08a.b/5n08c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
44) 2-Butanone	(2)	5.288(-0.000)	43	1023863	150.796	150.80			0.3	10
45) 2,2-Dichloropropane	(2)	5.307(0.000)	77	163392	19.722	19.72			0.3	1
47) Propionitrile	(1)	5.392(-0.000)	54	301300	156.884	156.88			14	100
48) Methacrylonitrile	(2)	5.605(0.000)	67	655857	153.534	153.53			6	50
49) Bromochloromethane	(2)	5.636(0.000)	128	62007	19.246	19.25			0.2	5
50) Tetrahydrofuran	(1)	5.648(-0.000)	71	171208	97.980	97.98			0.7	10
51) Chloroform	(2)	5.807(-0.000)	83	213305	21.589	21.59			0.2	1
53) 1,1,1-Trichloroethane	(2)	6.020(0.000)	97	173962	20.528	20.53			0.3	1
54) Cyclohexane	(2)	6.111(-0.000)	56	207390	20.514	20.51			0.2	5
55) 1,1-Dichloropropene	(2)	6.246(0.000)	75	167403	20.532	20.53			0.2	5
56) Carbon Tetrachloride	(2)	6.233(0.000)	117	153293	20.584	20.58			0.2	1
58) Isobutyl Alcohol	(1)	6.483(-0.001)	41	305963	519.936	519.94			36	250
60) Benzene	(2)	6.526(0.000)	78	522315	21.444	21.44			0.2	1
61) 1,2-Dichloroethane	(2)	6.617(-0.000)	62	164761	22.048	22.05			0.3	1
65) t-Amyl methyl ether	(2)	6.745(0.000)	73	320810	18.722	18.72			0.8	5
67) n-Heptane	(2)	6.971(0.000)	43	209890	22.542	22.54			0.2	5
69) n-Butanol	(1)	7.416(-0.000)	56	459915	973.357	973.36			61	250
71) Trichloroethene	(2)	7.459(0.000)	95	131258	21.546	21.55			0.2	1
73) Methylcyclohexane	(2)	7.770(-0.000)	83	204628	19.373	19.37			0.2	5
74) 1,2-Dichloropropane	(2)	7.824(-0.000)	63	136914	22.487	22.49			0.2	1
75) Dibromomethane	(2)	7.940(-0.000)	93	80519	21.737	21.74			0.2	1
77) Methyl Methacrylate	(2)	7.946(-0.000)	69	118989	19.379	19.38			0.2	5
79) Bromodichloromethane	(2)	8.202(-0.000)	83	141405	20.483	20.48			0.2	1
80) 2-Nitropropane	(2)	8.519(-0.000)	41	49886	16.136	16.14			0.8	10
81) 2-Chloroethyl Vinyl Ether	(2)	8.611(-0.000)	63	94863M	19.369	19.37			0.2	10
82) cis-1,3-Dichloropropene	(2)	8.794(0.000)	75	179592	20.231	20.23			0.2	1
83) 4-Methyl-2-pentanone	(2)	9.019(-0.000)	43	1247719	103.150	103.15			0.5	10
89) Toluene	(3)	9.227(0.000)	92	323453	20.684	20.68			0.2	1
90) trans-1,3-Dichloropropene	(3)	9.550(-0.000)	75	154985	18.557	18.56			0.2	1
91) 1,3-Dichloropropene (total)	(3)		100	334577	38.787	38.79			0.2	5
92) Ethyl Methacrylate	(3)	9.635(0.000)	69	184741	18.448	18.45			0.2	5
93) 1,1,2-Trichloroethane	(3)	9.775(0.000)	97	118293	22.208	22.21			0.2	1
94) Tetrachloroethene	(3)	9.842(0.000)	166	137689	20.046	20.05			0.2	1
95) 1,3-Dichloropropane	(3)	9.958(-0.000)	76	190925	21.204	21.20			0.2	1
97) 2-Hexanone	(3)	10.037(0.000)	43	1019486	101.055	101.06			0.3	10
98) Dibromochloromethane	(3)	10.190(-0.000)	129	106121	19.459	19.46			0.2	1
100) 1,2-Dibromoethane	(3)	10.300(0.000)	107	120985	20.935	20.93			0.2	1
102) 1-Chlorohexane	(3)	10.812(-0.000)	91	177099	19.935	19.93			0.3	5
103) Chlorobenzene	(3)	10.812(-0.000)	112	357850	21.124	21.12			0.2	1
104) 1,1,1,2-Tetrachloroethane	(3)	10.909(-0.000)	131	113153	20.280	20.28			0.2	1
105) Ethylbenzene	(3)	10.915(-0.000)	91	618161	20.563	20.56			0.4	1
107) m+p-Xylene	(3)	11.043(-0.000)	106	487924	42.018	42.02			1	5
108) o-Xylene	(3)	11.403(-0.000)	106	224570	20.205	20.21			0.4	1
109) Xylene (Total)	(3)		106	712494	62.223	62.22			1	5
110) Styrene	(3)	11.421(-0.000)	104	374100	20.654	20.65			0.2	5
111) Bromoform	(3)	11.580(-0.000)	173	68402	16.627	16.63			0.2	4
112) Isopropylbenzene	(3)	11.732(-0.000)	105	599331	21.156	21.16			0.2	5
116) Bromobenzene	(4)	12.000(-0.000)	156	145930	19.515	19.51			0.2	5
117) 1,1,2,2-Tetrachloroethane	(4)	12.007(0.000)	83	207148	21.275	21.27			0.2	1
118) 1,2,3-Trichloropropane	(4)	12.049(0.000)	110	60307	20.825	20.83			0.2	5
119) trans-1,4-Dichloro-2-butene	(4)	12.037(0.000)	53	285855	85.484	85.48			6	50
120) n-Propylbenzene	(4)	12.086(-0.000)	91	767338	21.540	21.54			0.2	5
121) 2-Chlorotoluene	(4)	12.159(-0.000)	126	146148	20.335	20.33			0.2	5
122) 4-Chlorotoluene	(4)	12.263(0.000)	126	149897	20.045	20.05			0.2	5

M = Compound was manually integrated.

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Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP26285.i/18nov08a.b/5n08s01.d Injection date and time: **08-NOV-2018 08:54**
Data file Sample Info. Line: LCS558;LCS558;1;3;LCS;;;;5n08b01; Instrument ID: **HP26285.i** Batch: **5183121AA**
Date, time and analyst ID of latest file update: 08-Nov-2018 09:58 clm27445

Blank Data file reference: **/chem2/HP26285.i/18nov08a.b/5n08b01.d**

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 08-NOV-2018 08:34
Mid Level Daily Calibration Standard Reference: **/chem2/HP26285.i/18nov08a.b/5n08c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
123) 1,3,5-Trimethylbenzene	(4)	12.238(0.000)	105	514515	20.579	20.58			0.3	5
125) tert-Butylbenzene	(4)	12.488(0.000)	134	103387M	19.908	19.91			0.3	5
126) Pentachloroethane	(4)	12.519(0.000)	167	83547	18.846	18.85			0.2	5
127) 1,2,4-Trimethylbenzene	(4)	12.537(0.000)	105	525701	20.472	20.47			1	5
128) sec-Butylbenzene	(4)	12.665(0.000)	105	677193	21.701	21.70			0.2	5
130) 1,3-Dichlorobenzene	(4)	12.762(0.000)	146	282424	19.965	19.97			0.2	5
131) p-Isopropyltoluene	(4)	12.781(0.000)	119	579749	21.392	21.39			0.2	5
134) 1,4-Dichlorobenzene	(4)	12.842(-0.000)	146	296210	20.384	20.38			0.2	5
135) 1,2,3-Trimethylbenzene	(4)	12.860(-0.000)	105	544283	20.348	20.35			0.3	5
136) Benzyl Chloride	(4)	12.933(-0.000)	91	332785	17.607	17.61			0.3	5
137) 1,3-Diethylbenzene	(4)	13.000(-0.000)	119	337086	20.177	20.18			0.2	5
138) 1,4-Diethylbenzene	(4)	13.073(0.000)	119	355312	19.925	19.93			0.2	5
139) 1,2-Dichlorobenzene	(4)	13.116(0.000)	146	277337	20.444	20.44			0.2	5
140) n-Butylbenzene	(4)	13.092(0.000)	92	307800M	22.008	22.01			0.2	5
141) 1,2-Diethylbenzene	(4)	13.147(0.000)	119	287254	20.537	20.54			0.2	5
142) Diethylbenzene (total)	(4)		100	979652	60.639	60.64			0.2	5
143) 1,2-Dibromo-3-chloropropane	(4)	13.695(-0.000)	75	46194	18.455	18.45			0.3	5
145) 1,3,5-Trichlorobenzene	(4)	13.823(-0.000)	180	205672	20.718	20.72			0.2	5
147) 1,2,4-Trichlorobenzene	(4)	14.268(0.000)	180	178283	19.968	19.97			0.3	5
148) Hexachlorobutadiene	(4)	14.360(0.000)	225	90675	21.558	21.56			0.7	5
149) Naphthalene	(4)	14.457(0.000)	128	623009	19.670	19.67			1	5
150) 1,2,3-Trichlorobenzene	(4)	14.610(0.000)	180	177996	20.462	20.46			0.4	5
151) 2-Methylnaphthalene	(4)	15.256(0.000)	142	331966	17.714	17.71			0.7	5

M = Compound was manually integrated.

Total number of targets = 108

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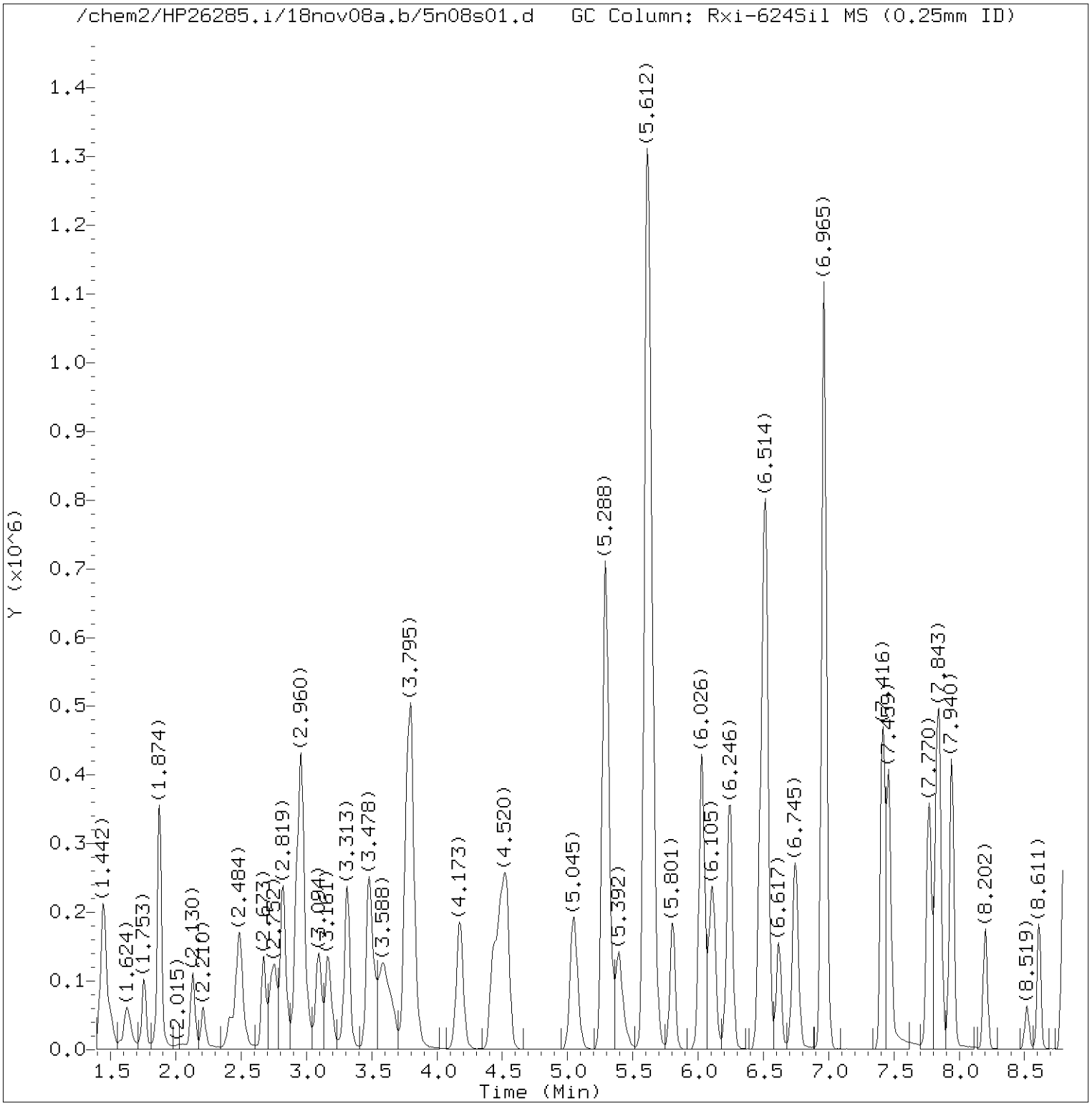
Secondary review performed and digitally signed by Joshua E. Berrios on 11/08/2018 at 20:46. PARALLAX ID: jeb12641



Total Ion Chromatogram (TIC)

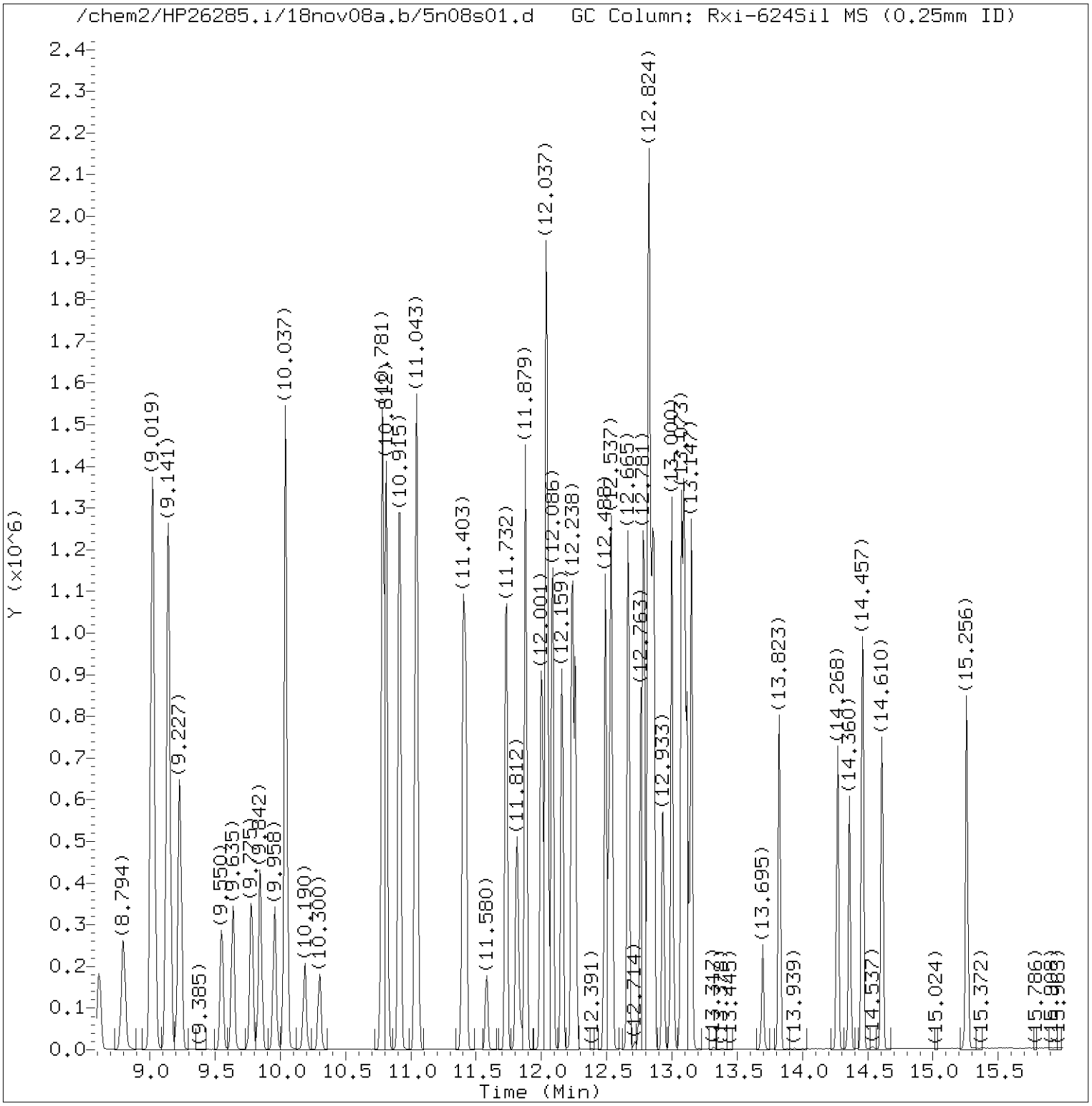
Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:54 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:58 clm27445

Sample Name: LCS558 Lab Sample ID: LCS558

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:58.
Target 3.5 esignature user ID: clm27445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:54 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:58 clm27445

Sample Name: LCS558 Lab Sample ID: LCS558

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:58.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:54 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:58 clm27445

Sample Name: LCS558 Lab Sample ID: LCS558

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.624	85	139154	13.445
4) Chloromethane	(2)	1.753	50	141511	16.884
6) Vinyl Chloride	(2)	1.868	62	137580	17.565
5) 1,3-Butadiene	(2)	1.874	39	155688	27.665
8) Bromomethane	(2)	2.130	94	97058	16.672
9) Chloroethane	(2)	2.210	64	66001	16.952
12) Trichlorofluoromethane	(2)	2.466	101	185144	17.723
11) n-Pentane	(2)	2.490	43	130290	19.526
14) Ethyl ether	(2)	2.667	59	100135	19.914
15) Freon 123a	(2)	2.746	67	151234	21.251
16) Acrolein	(1)	2.819	56	331812	136.714
17) 1,1-Dichloroethene	(2)	2.923	96	106020	21.600
18) Acetone	(1)	2.960	58	188329	149.713
19) Freon 113	(2)	2.960	101	108673	22.217
22) Methyl Iodide	(2)	3.094	142	183101	19.136
21) 2-Propanol	(1)	3.106	45	144376	139.988
23) Carbon Disulfide	(2)	3.167	76	288291	17.238
27) Methyl Acetate	(2)	3.295	43	176827	18.472
25) Allyl Chloride	(2)	3.313	41	176237	16.619
28) Methylene Chloride	(2)	3.478	84	122405	21.291
29)*t-Butyl alcohol-d10	(1)	3.496	65	345542	250.000
30) t-Butyl alcohol	(1)	3.600	59	336733	185.301
31) Acrylonitrile	(2)	3.764	53	447628	99.605
33) Methyl Tertiary Butyl Ether	(2)	3.801	73	343624	19.483
32) trans-1,2-Dichloroethene	(2)	3.807	96	118902	21.288
34) n-Hexane	(2)	4.179	57	168449	20.793
36) 1,1-Dichloroethane	(2)	4.423	63	219285	20.977
38) di-Isopropyl ether	(2)	4.490	45	399409	19.683
39) 2-Chloro-1,3-butadiene	(2)	4.532	53	180223	19.100
40) Ethyl t-butyl ether	(2)	5.045	59	328920	18.024
42) cis-1,2-Dichloroethene	(2)	5.288	96	135248	21.729
44) 2-Butanone	(2)	5.288	43	1023863	150.796
45) 2,2-Dichloropropane	(2)	5.307	77	163392	19.722
47) Propionitrile	(1)	5.392	54	301300	156.884
48) Methacrylonitrile	(2)	5.605	67	655857	153.534
49) Bromochloromethane	(2)	5.636	128	62007	19.246
50) Tetrahydrofuran	(1)	5.648	71	171208	97.980
51) Chloroform	(2)	5.807	83	213305	21.589

* = Compound is an internal standard.

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on 11/08/2018 at 09:58.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:54 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:58 clm27445

Sample Name: LCS558 Lab Sample ID: LCS558

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
53) 1,1,1-Trichloroethane	(2)	6.020	97	173962	20.528
52)$Dibromofluoromethane	(2)	6.032	113	257724	50.536
54) Cyclohexane	(2)	6.111	56	207390	20.514
43) 1,2-Dichloroethene (Total)	(2)		96	254150	43.017
56) Carbon Tetrachloride	(2)	6.233	117	153293	20.584
55) 1,1-Dichloropropene	(2)	6.246	75	167403	20.532
58) Isobutyl Alcohol	(1)	6.483	41	305963	519.936
57)$1,2-Dichloroethane-d4	(2)	6.508	102	61803	50.760
60) Benzene	(2)	6.526	78	522315	21.444
61) 1,2-Dichloroethane	(2)	6.617	62	164761	22.048
65) t-Amyl methyl ether	(2)	6.745	73	320810	18.722
66)*Fluorobenzene	(2)	6.965	96	1048376	50.000
67) n-Heptane	(2)	6.971	43	209890	22.542
69) n-Butanol	(1)	7.416	56	459915	973.357
71) Trichloroethene	(2)	7.459	95	131258	21.546
73) Methylcyclohexane	(2)	7.770	83	204628	19.373
74) 1,2-Dichloropropane	(2)	7.824	63	136914	22.487
75) Dibromomethane	(2)	7.940	93	80519	21.737
77) Methyl Methacrylate	(2)	7.946	69	118989	19.379
79) Bromodichloromethane	(2)	8.202	83	141405	20.483
80) 2-Nitropropane	(2)	8.519	41	49886	16.136
81) 2-Chloroethyl Vinyl Ether	(2)	8.611	63	94863M	19.369
82) cis-1,3-Dichloropropene	(2)	8.794	75	179592	20.231
83) 4-Methyl-2-pentanone	(2)	9.019	43	1247719	103.150
84)$Toluene-d8	(3)	9.141	98	1044472	50.108
89) Toluene	(3)	9.227	92	323453	20.684
90) trans-1,3-Dichloropropene	(3)	9.550	75	154985	18.557
92) Ethyl Methacrylate	(3)	9.635	69	184741	18.448
93) 1,1,2-Trichloroethane	(3)	9.775	97	118293	22.208
94) Tetrachloroethene	(3)	9.842	166	137689	20.046
95) 1,3-Dichloropropane	(3)	9.958	76	190925	21.204
97) 2-Hexanone	(3)	10.037	43	1019486	101.055
91) 1,3-Dichloropropene (total)	(3)		100	334577	38.787
98) Dibromochloromethane	(3)	10.190	129	106121	19.459
100) 1,2-Dibromoethane	(3)	10.300	107	120985	20.935
101)*Chlorobenzene-d5	(3)	10.781	117	772735	50.000
102) 1-Chlorohexane	(3)	10.812	91	177099	19.935
103) Chlorobenzene	(3)	10.812	112	357850	21.124

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

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on 11/08/2018 at 09:58.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:54 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:58 clm27445

Sample Name: LCS558 Lab Sample ID: LCS558

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
104) 1,1,1,2-Tetrachloroethane	(3)	10.909	131	113153	20.280
105) Ethylbenzene	(3)	10.915	91	618161	20.563
107) m+p-Xylene	(3)	11.043	106	487924	42.018
108) o-Xylene	(3)	11.403	106	224570	20.205
110) Styrene	(3)	11.421	104	374100	20.654
111) Bromoform	(3)	11.580	173	68402	16.627
112) Isopropylbenzene	(3)	11.732	105	599331	21.156
109) Xylene (Total)	(3)		106	712494	62.223
115)$4-Bromofluorobenzene	(3)	11.879	95	390689	52.144
116) Bromobenzene	(4)	12.001	156	145930	19.515
117) 1,1,2,2-Tetrachloroethane	(4)	12.007	83	207148	21.275
119) trans-1,4-Dichloro-2-butene	(4)	12.037	53	285855	85.484
118) 1,2,3-Trichloropropane	(4)	12.049	110	60307	20.825
120) n-Propylbenzene	(4)	12.086	91	767338	21.540
121) 2-Chlorotoluene	(4)	12.159	126	146148	20.335
123) 1,3,5-Trimethylbenzene	(4)	12.238	105	514515	20.579
122) 4-Chlorotoluene	(4)	12.263	126	149897	20.045
125) tert-Butylbenzene	(4)	12.488	134	103387M	19.908
126) Pentachloroethane	(4)	12.519	167	83547	18.846
127) 1,2,4-Trimethylbenzene	(4)	12.537	105	525701	20.472
128) sec-Butylbenzene	(4)	12.665	105	677193	21.701
130) 1,3-Dichlorobenzene	(4)	12.763	146	282424	19.965
131) p-Isopropyltoluene	(4)	12.781	119	579749	21.392
132)*1,4-Dichlorobenzene-d4	(4)	12.824	152	434987	50.000
134) 1,4-Dichlorobenzene	(4)	12.842	146	296210	20.384
135) 1,2,3-Trimethylbenzene	(4)	12.860	105	544283	20.348
136) Benzyl Chloride	(4)	12.933	91	332785	17.607
137) 1,3-Diethylbenzene	(4)	13.000	119	337086	20.177
138) 1,4-Diethylbenzene	(4)	13.073	119	355312	19.925
140) n-Butylbenzene	(4)	13.092	92	307800M	22.008
139) 1,2-Dichlorobenzene	(4)	13.116	146	277337	20.444
141) 1,2-Diethylbenzene	(4)	13.147	119	287254	20.537
142) Diethylbenzene (total)	(4)		100	979652	60.639
143) 1,2-Dibromo-3-chloropropane	(4)	13.695	75	46194	18.455
145) 1,3,5-Trichlorobenzene	(4)	13.823	180	205672	20.718
147) 1,2,4-Trichlorobenzene	(4)	14.268	180	178283	19.968
148) Hexachlorobutadiene	(4)	14.360	225	90675	21.558
149) Naphthalene	(4)	14.457	128	623009	19.670

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

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:58.
Target 3.5 esignature user ID: clm27445

Quant Report

Target Revision 3.5

Data File: /chem2/HP26285.i/18nov08a.b/5n08s01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:54 Analyst ID: CLM27445

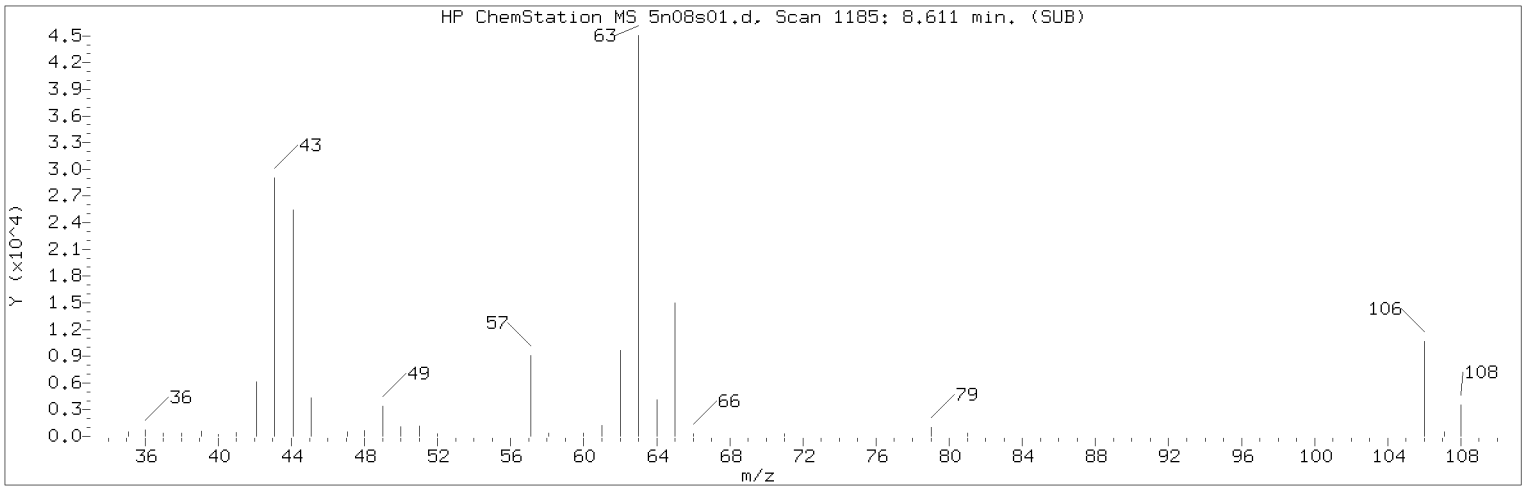
Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:58 clm27445

Sample Name: LCS558 Lab Sample ID: LCS558

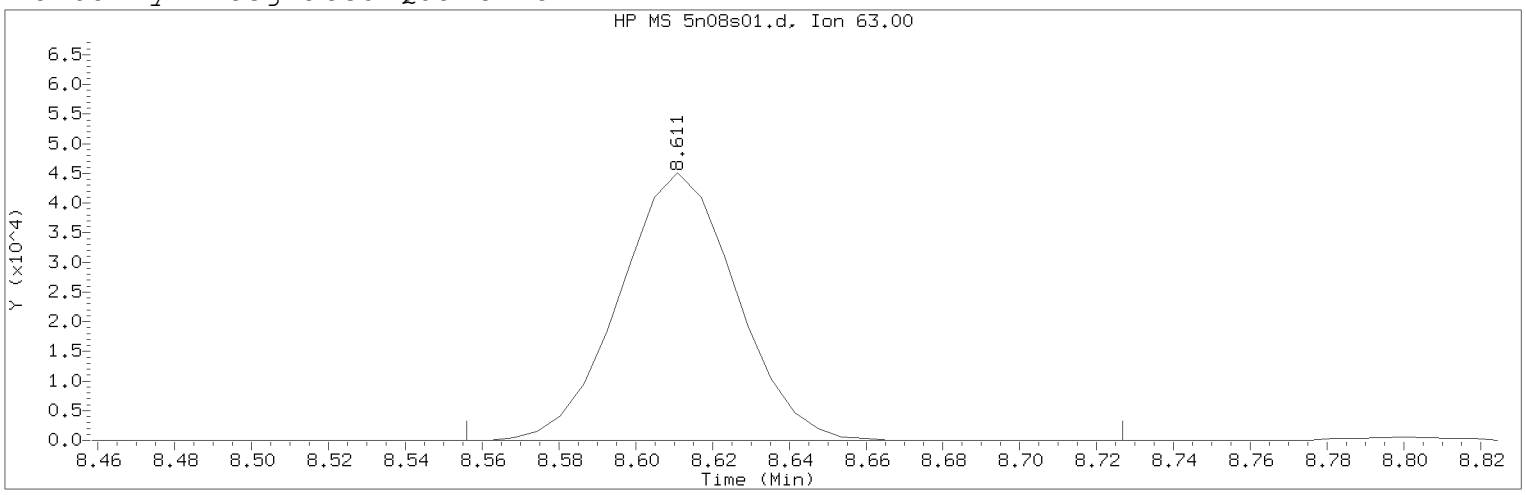
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
150) 1,2,3-Trichlorobenzene	(4)	14.610	180	177996	20.462
151) 2-Methylnaphthalene	(4)	15.256	142	331966	17.714

Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:58.
Target 3.5 esignature user ID: clm27445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov08a.b/5n08s01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:54 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:58 clm27445

Sample Name: LCS558 Lab Sample ID: LCS558

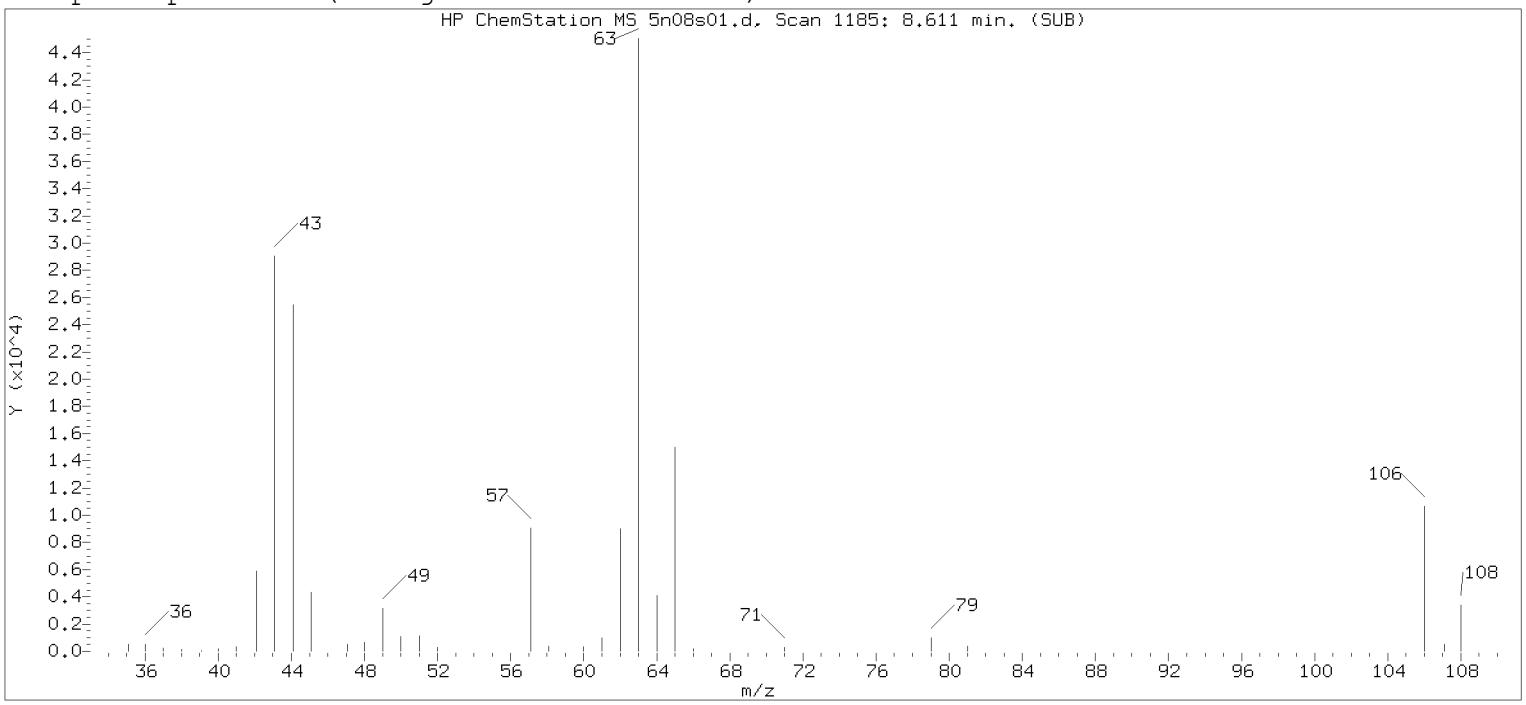
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1185
Retention Time (minutes): 8.611
Quant Ion : 63.00
Area (flag) : 94863M
On-Column Amount (ng) : 19.3688
Integration start scan : 1175 Integration stop scan: 1203
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

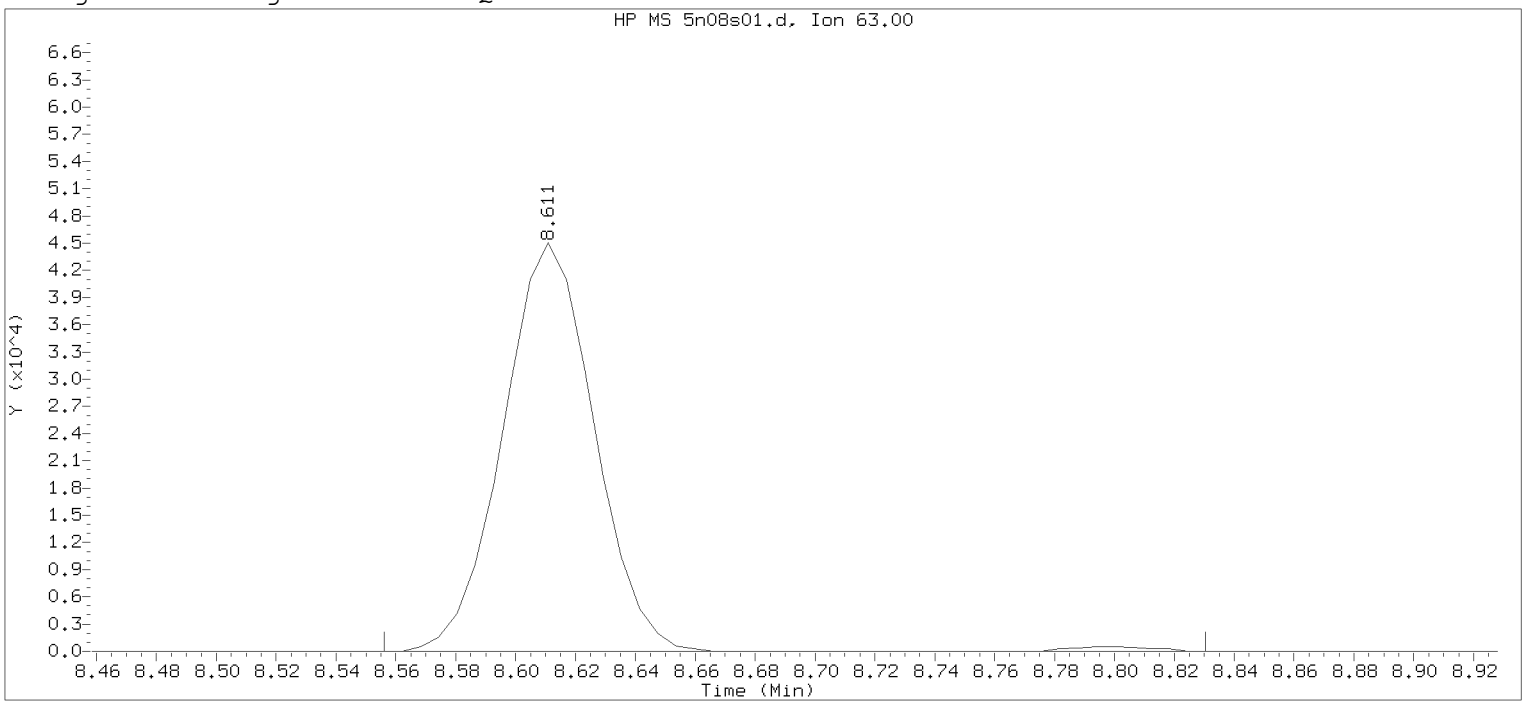
Analyst responsible for change: Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:58.
Target 3.5 esignature user ID: clm27445

Secondary review performed and digitally signed by Joshua E. Berrios on 11/08/2018 at 20:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov08a.b/5n08s01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:54 Analyst ID: CLM27445

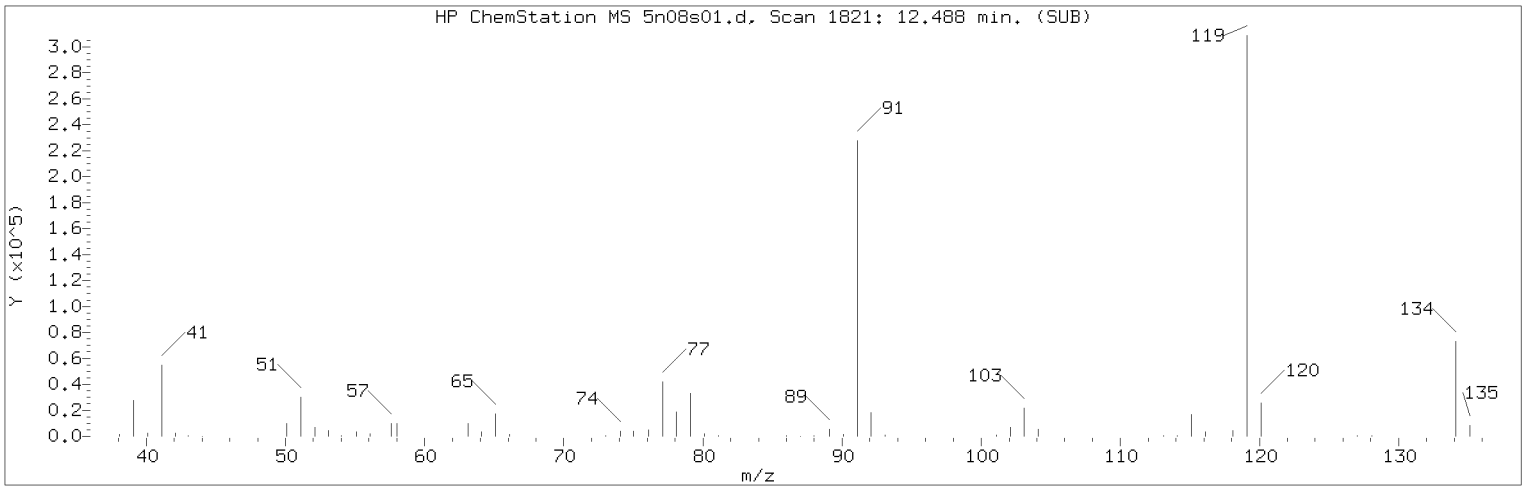
Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:46 clm27445

Sample Name: LCS558 Lab Sample ID: LCS558

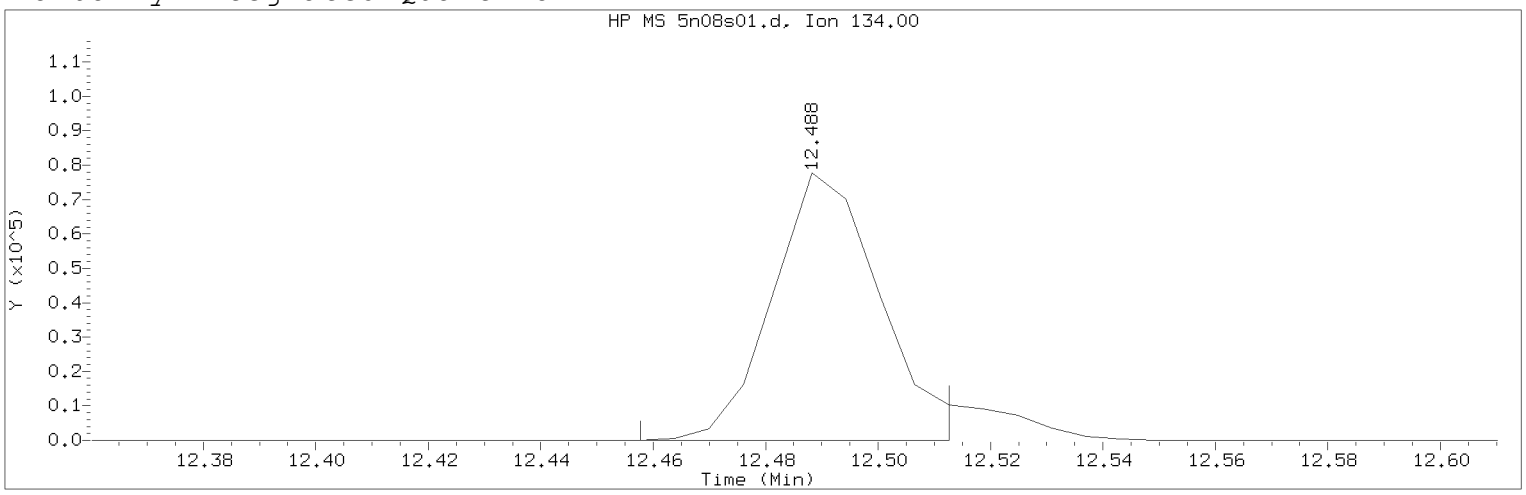
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 1185
Retention Time (minutes): 8.611
Quant Ion : 63.00
Area : 95844
On-column Amount (ng) : 19.5690
Integration start scan : 1175 Integration stop scan: 1220
Y at integration start : 0 Y at integration end: 0

Digitally signed by Corie L. Mellinger on 11/08/2018 at 09:58.
Target 3.5 esignature user script 7.4.28

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov08a.b/5n08s01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:54 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:58 clm27445

Sample Name: LCS558 Lab Sample ID: LCS558

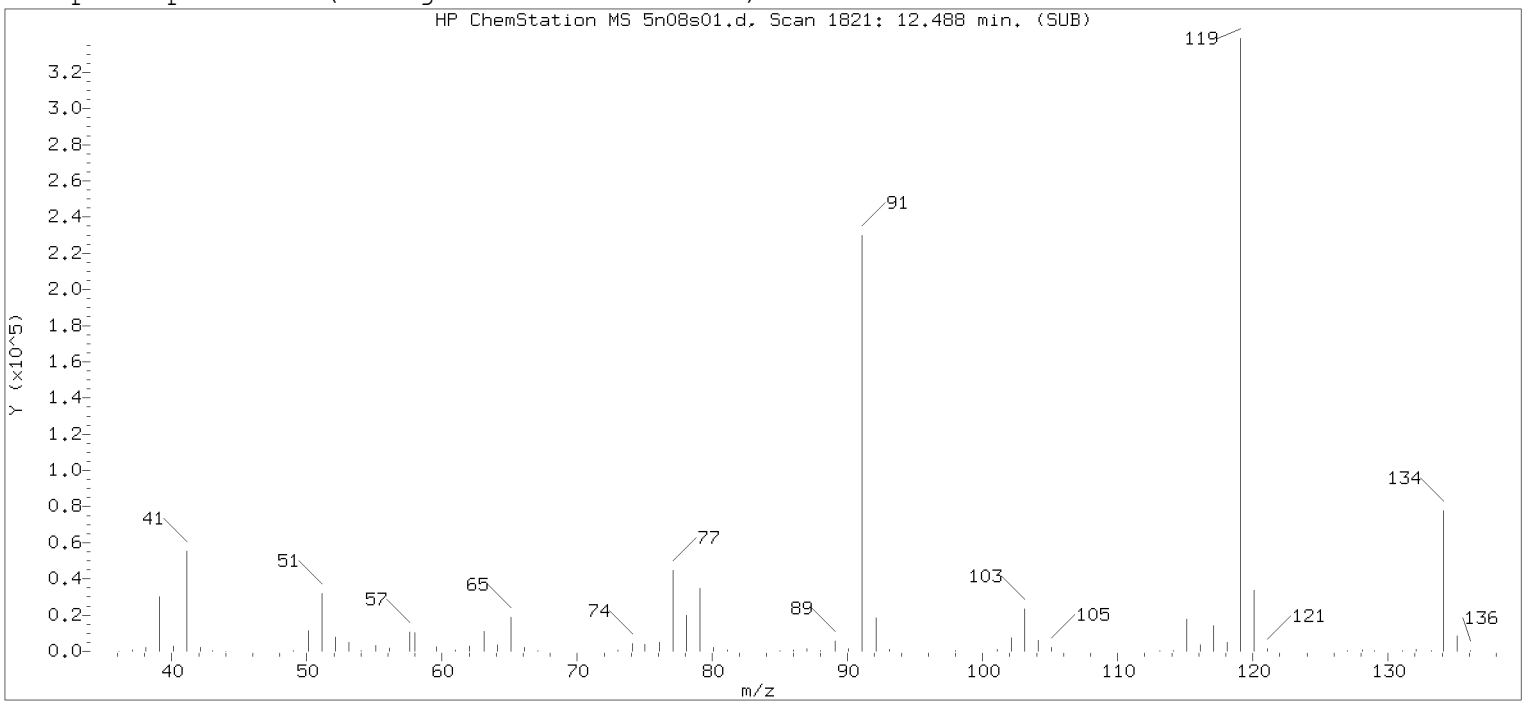
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1821
Retention Time (minutes): 12.488
Quant Ion : 134.00
Area (flag) : 103387M
On-Column Amount (ng) : 19.9078
Integration start scan : 1815 Integration stop scan: 1824
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

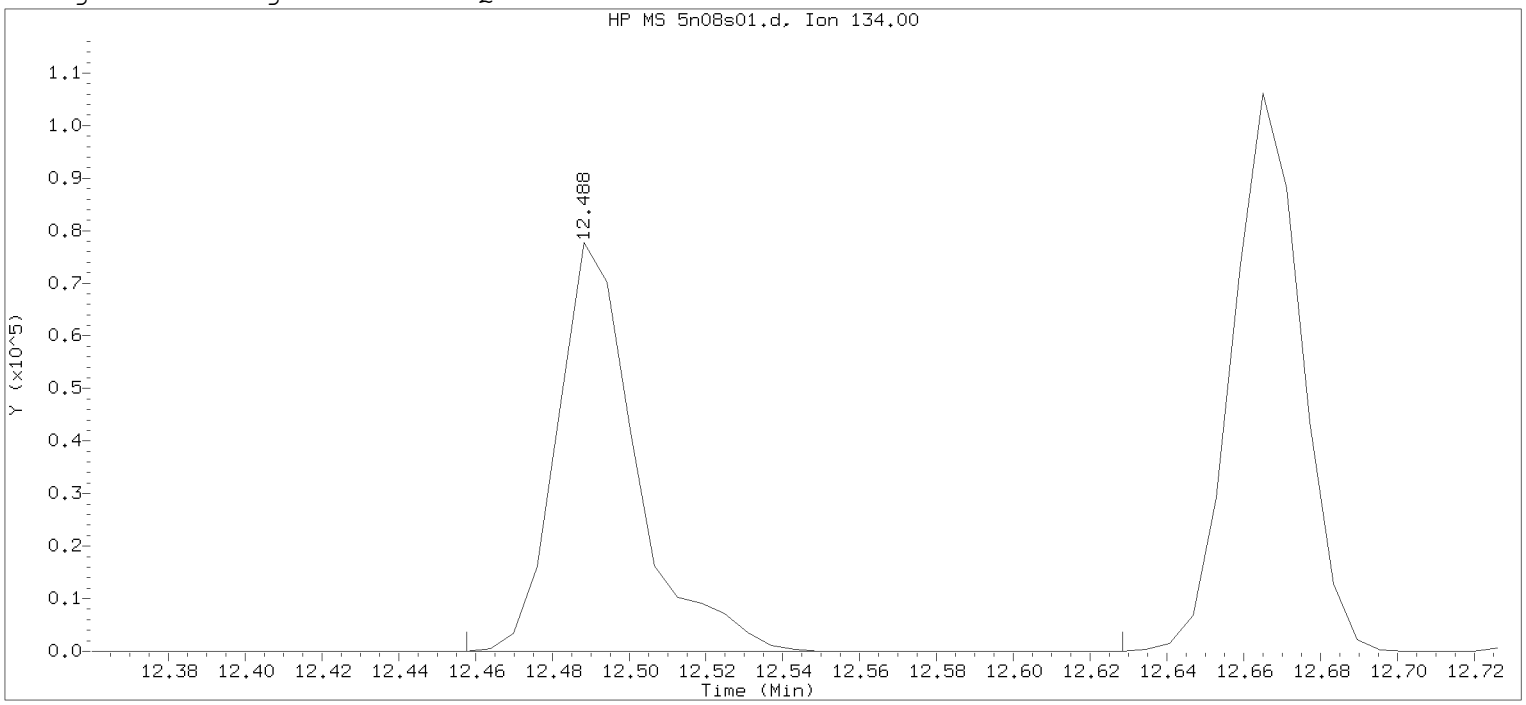
Analyst responsible for change: Digitally signed by Corie L. Mellinger
on 11/08/2018 at 09:58.
Target 3.5 esignature user ID: clm27445

Secondary review performed and digitally signed by Joshua E. Berrios on 11/08/2018 at 20:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov08a.b/5n08s01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:54 Analyst ID: CLM27445

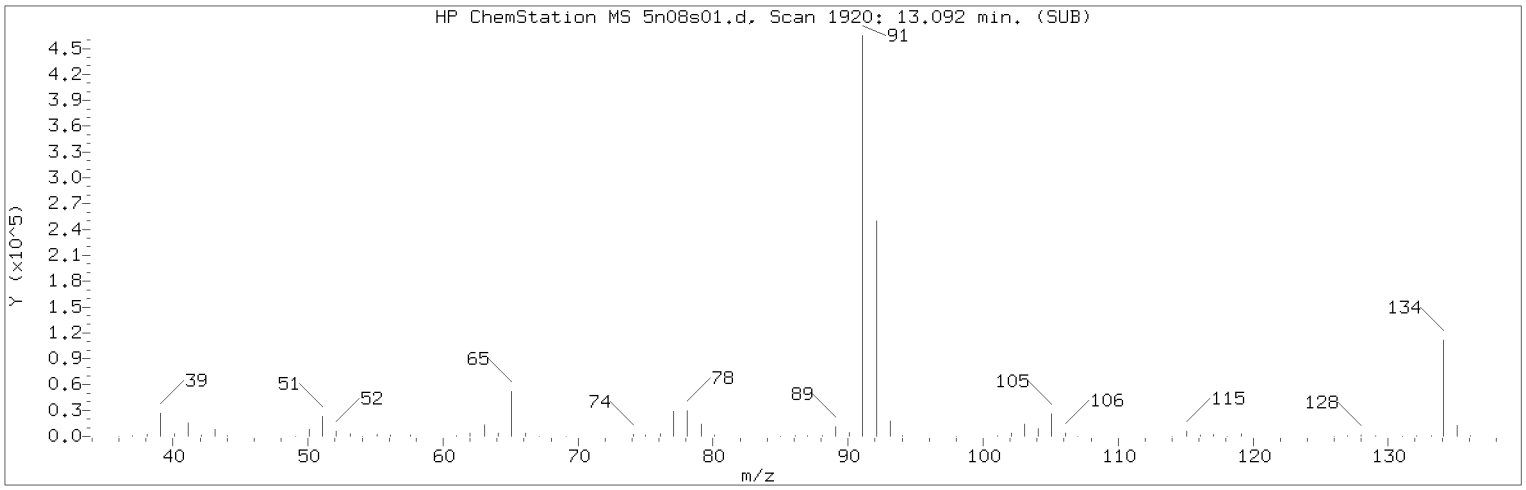
Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:46 clm27445

Sample Name: LCS558 Lab Sample ID: LCS558

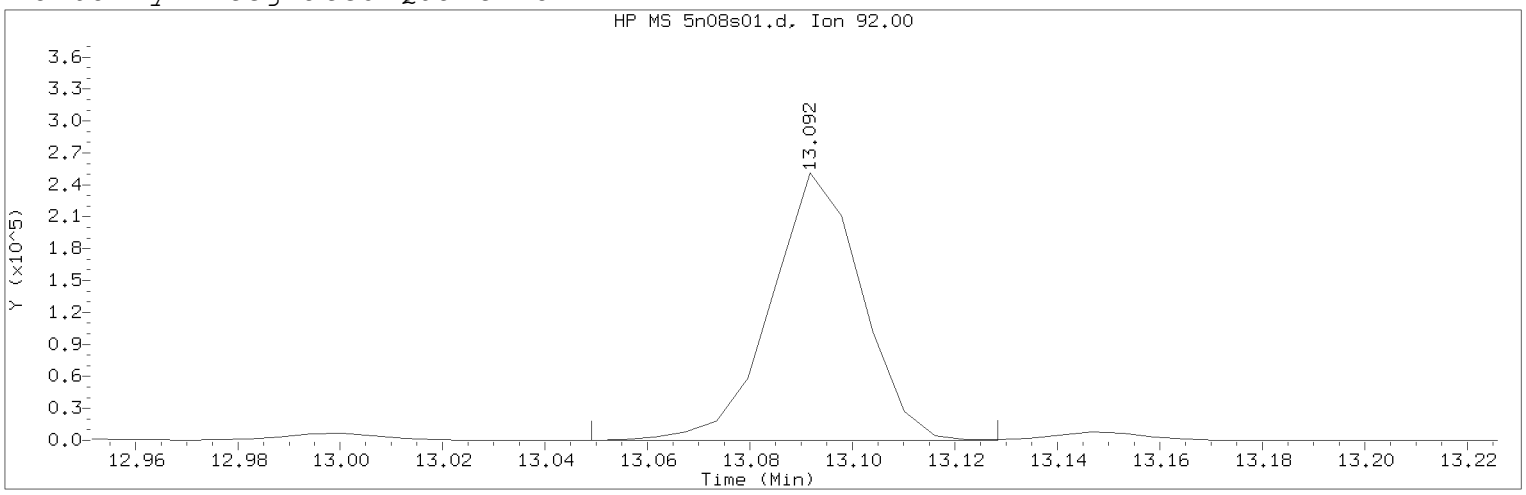
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1821
Retention Time (minutes): 12.488
Quant Ion : 134.00
Area : 111213
On-column Amount (ng) : 21.4147
Integration start scan : 1815 Integration stop scan: 1843
Y at integration start : 0 Y at integration end: 0

Digitally signed by Corie L. Mellinger on 11/08/2018 at 09:58.
Target 3.5 esignature user script 27445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP26285.i/18nov08a.b/5n08s01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:54 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:58 clm27445

Sample Name: LCS558 Lab Sample ID: LCS558

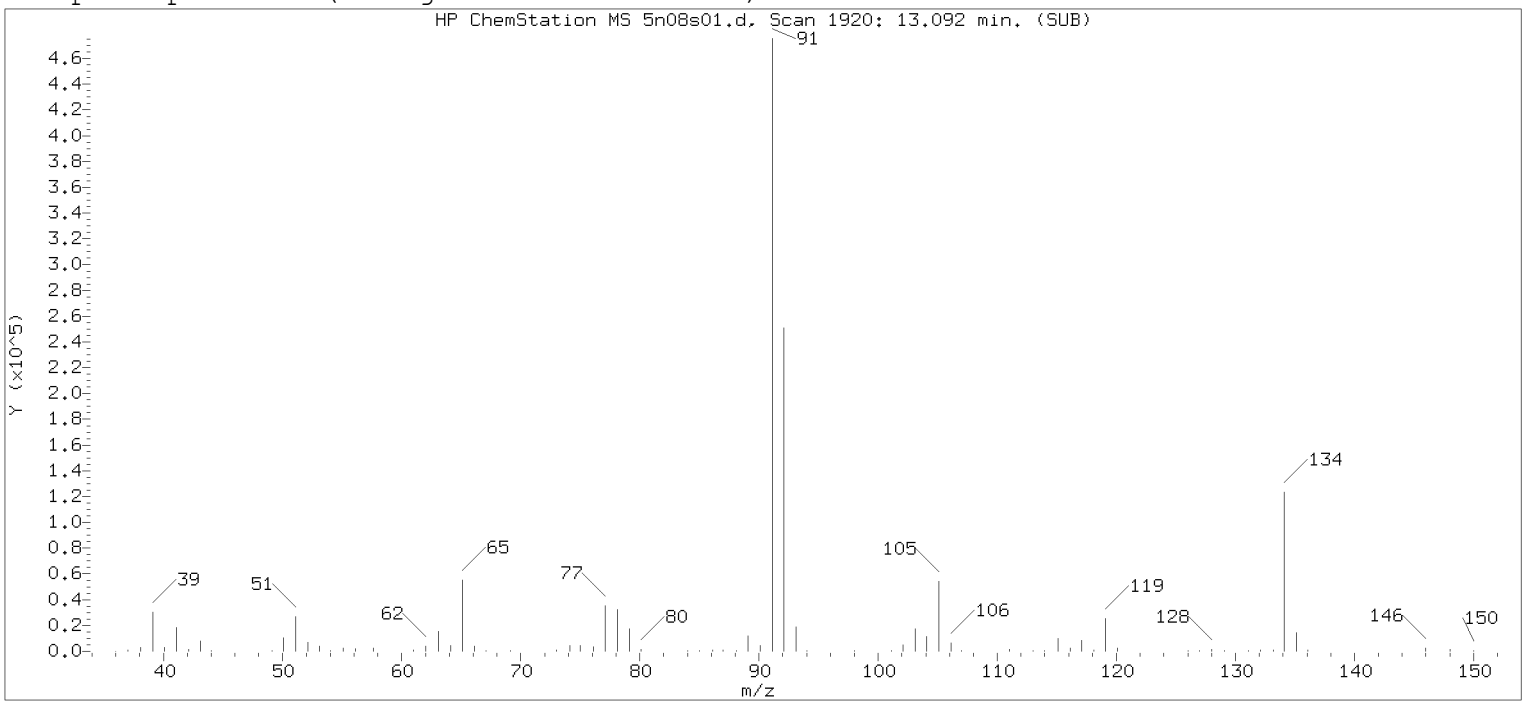
Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1920
Retention Time (minutes): 13.092
Quant Ion : 92.00
Area (flag) : 307800M
On-Column Amount (ng) : 22.0079
Integration start scan : 1912 Integration stop scan: 1925
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

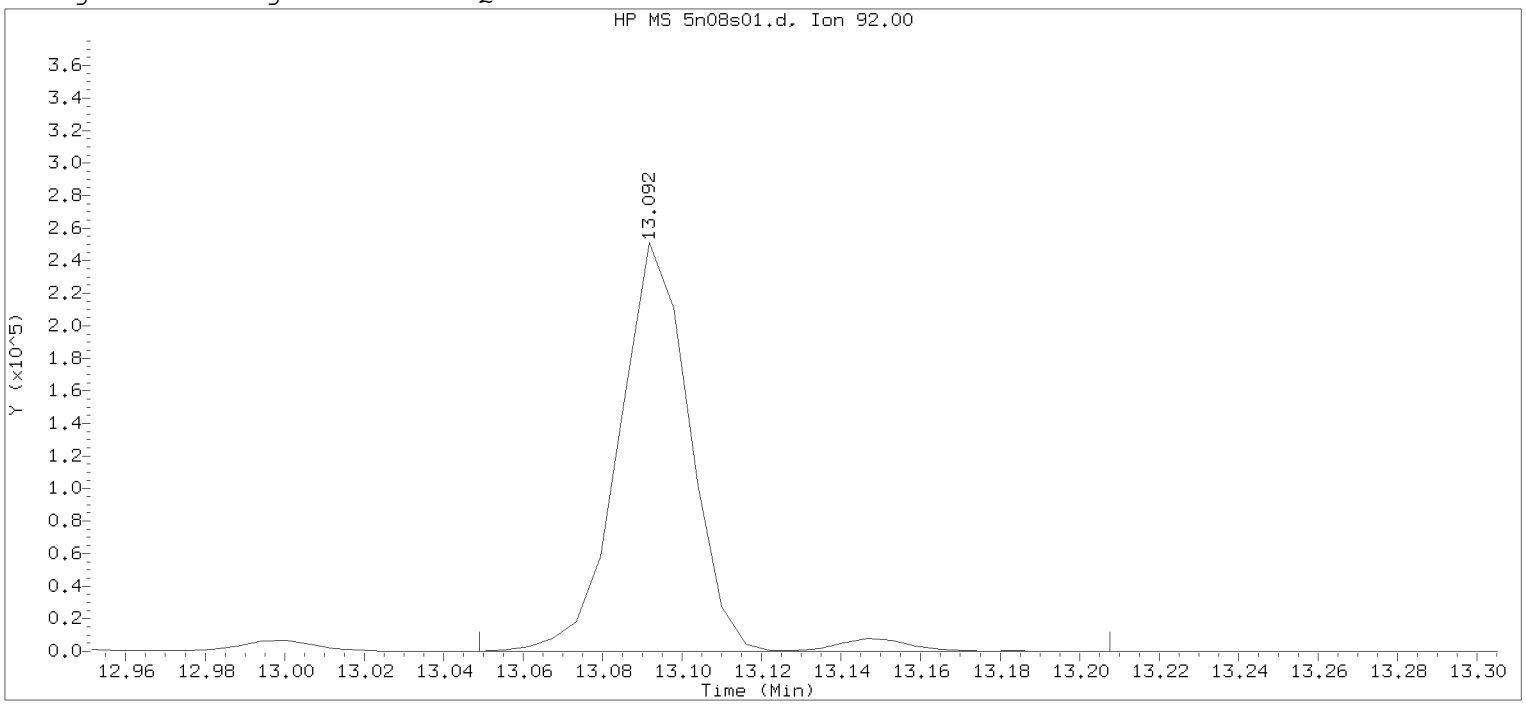
Analyst responsible for change: Digitally signed by Corie L. Mellinger on 11/08/2018 at 09:58.
Target 3.5 esignature user ID: clm27445

Secondary review performed and digitally signed by Joshua E. Berrios on 11/08/2018 at 20:46.
PARALLAX ID: jeb12641

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP26285.i/18nov08a.b/5n08s01.d Instrument ID: HP26285.i
Injection date and time: 08-NOV-2018 08:54 Analyst ID: CLM27445

Method used: /chem2/HP26285.i/18nov08a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 08-NOV-2018 08:34
Date, time and analyst ID of latest file update: 08-Nov-2018 09:46 clm27445

Sample Name: LCS558 Lab Sample ID: LCS558

Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1920
Retention Time (minutes): 13.092
Quant Ion : 92.00
Area : 317352
On-column Amount (ng) : 22.6909
Integration start scan : 1912 Integration stop scan: 1938
Y at integration start : 0 Y at integration end: 0

Digitally signed by Corie L. Mellinger on 11/08/2018 at 09:58.
Target 3.5 esignature user: CLM27445

Semivolatiles by GC/MS Data

Case Narrative/Conformance Summary

Semivolatiles by GC/MS

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD53

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9882892	OS-3-W-6.00-181101	X		1	
9882893	OS-2-W-6.00-181101	X		1	
9882894	TF-23-W-5.26-181101	X		1	
9882895	TF-5-W-4.59-181101	X		1	
9882896	DB-8A-W-5.00-181102	X		1	
9882897	DB-17-W-5.00-181102	X		1	
9882898	DC-1-W-2.00-181102	X		1	
9882899	DC-2-W-7.50-181102	X		1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD53

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

1. Relative Response Factor (RRF)

$$RRF = \frac{AX}{Ais} \times \frac{Cis}{Cx}$$

Where:

Ax = Area of the characteristic ion for the compound to be measured
Ais = Area of the characteristic ion for the specific internal standard to be measured
Cis = Concentration of the internal standard
Cx = Concentration of the compound to be measured

2. % Relative Standard Deviation (%RSD)

$$\%RSD = \frac{standard\ deviation}{Mean} \times 100$$

3. % Difference

$$\%D = \frac{RRFc - RRFi}{RRFi} \times 100$$

Where:

RRFc = Relative response factor from the continuing calibration standard

RRFi = Mean relative response factor from the initial calibration

4. Concentration

Concentration waters

$$(\mu g / L) = \frac{(Ax)(Is)(Df)(Vt)}{(Ais)(RRF)(Vo)(Vi)}$$

Where:

Ax, Ais, and RRF are as given in 1 above
Is = Amount of internal standard added in parts per billion (ng)
Df = Dilution factor
Vt = Volume of the concentrated extract (ul)
Vo = Volume of the water extracted (ml)
Vi = Volume of extract injection (ul)

Concentration soils

$$(\mu g / Kg) = \frac{(Ax)(Is)(Df)(Vt)}{(Ais)(RRF)(Ws)(Vi)}$$

Where:

Ax, Ais, and RRF are as given in 1 above
Is = Amount of internal standard added in parts per billion (ng)
Df = Dilution factor
Vt = Volume of the concentrated extract (µL)
Ws = Sample weight of the soil extracted (g)
Vi = Volume of extract injection (µL)

5. % Recovery

$$\%Rec = \frac{SSR - SR}{SA} \times 100$$

Where:

SSR = Spiked sample result
SR = Sample result
SA = Spike added

Quality Control and Calibration Summary Forms

Semivolatiles by GC/MS

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Quality Control Reference List
GC/MS Semivolatiles

CLIENT: Chevron Environmental Mgmt.
SDG: CBD53

Fraction: Semivolatiles by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
SVOAs 8270D MINI	18310WAL026	SBLKWL310	11/09/2018 10:12
		310WLLCS	11/09/2018 10:40
		310WLLCSD	11/09/2018 11:08
		9882892	11/09/2018 14:26
		9882893	11/09/2018 14:54
		9882894	11/09/2018 15:22
		9882895	11/09/2018 15:51
		9882896	11/09/2018 16:19
		9882897	11/09/2018 16:47
		9882898	11/09/2018 17:15
		9882899	11/09/2018 17:43

Quality Control Summary
Method Blank
GC/MS Semivolatiles
SDG: CBD53
Matrix: LIQUID

Fraction: Semivolatiles by GC/MS

18310WAL026 / SBLKWL310 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Phenol	11/09/18	N.D.	ug/l	0.5	2
bis(2-Chloroethyl)ether	11/09/18	N.D.	ug/l	0.5	2
2-Chlorophenol	11/09/18	N.D.	ug/l	0.5	2
1,3-Dichlorobenzene	11/09/18	N.D.	ug/l	0.5	2
1,4-Dichlorobenzene	11/09/18	N.D.	ug/l	0.5	2
1,2-Dichlorobenzene	11/09/18	N.D.	ug/l	0.5	2
2-Methylphenol	11/09/18	N.D.	ug/l	0.5	2
2,2'-oxybis(1-Chloropropane)	11/09/18	N.D.	ug/l	0.5	2
2,4-Dichlorophenol	11/09/18	N.D.	ug/l	0.5	2
4-Methylphenol	11/09/18	N.D.	ug/l	0.5	2
N-Nitroso-di-n-propylamine	11/09/18	N.D.	ug/l	0.7	3
Hexachloroethane	11/09/18	N.D.	ug/l	1	5
Nitrobenzene	11/09/18	N.D.	ug/l	0.5	2
Isophorone	11/09/18	N.D.	ug/l	0.5	2
2-Nitrophenol	11/09/18	N.D.	ug/l	3	10
2,4-Dimethylphenol	11/09/18	N.D.	ug/l	3	10
bis(2-Chloroethoxy)methane	11/09/18	N.D.	ug/l	0.5	2
1,2,4-Trichlorobenzene	11/09/18	N.D.	ug/l	0.5	2
Naphthalene	11/09/18	N.D.	ug/l	0.1	0.5
4-Chloroaniline	11/09/18	N.D.	ug/l	4	10
Hexachlorobutadiene	11/09/18	N.D.	ug/l	0.5	2
4-Chloro-3-methylphenol	11/09/18	N.D.	ug/l	0.5	2
2-Methylnaphthalene	11/09/18	N.D.	ug/l	0.1	0.5
Hexachlorocyclopentadiene	11/09/18	N.D.	ug/l	5	11
2,4,6-Trichlorophenol	11/09/18	N.D.	ug/l	0.5	2
2,4,5-Trichlorophenol	11/09/18	N.D.	ug/l	0.5	2
2-Chloronaphthalene	11/09/18	N.D.	ug/l	0.4	1
2-Nitroaniline	11/09/18	N.D.	ug/l	2	7
Dimethylphthalate	11/09/18	N.D.	ug/l	2	5
2,6-Dinitrotoluene	11/09/18	N.D.	ug/l	0.5	2
Acenaphthylene	11/09/18	N.D.	ug/l	0.1	0.5
3-Nitroaniline	11/09/18	N.D.	ug/l	3	7
Acenaphthene	11/09/18	N.D.	ug/l	0.1	0.5
2,4-Dinitrophenol	11/09/18	N.D.	ug/l	14	30
4-Nitrophenol	11/09/18	N.D.	ug/l	10	30
2,4-Dinitrotoluene	11/09/18	N.D.	ug/l	1	5
Dibenzofuran	11/09/18	N.D.	ug/l	0.5	2
Diethylphthalate	11/09/18	N.D.	ug/l	2	5
Fluorene	11/09/18	N.D.	ug/l	0.1	0.5
4-Chlorophenyl-phenylether	11/09/18	N.D.	ug/l	0.5	2
4-Nitroaniline	11/09/18	N.D.	ug/l	0.9	3
4,6-Dinitro-2-methylphenol	11/09/18	N.D.	ug/l	8	21
N-Nitrosodiphenylamine	11/09/18	N.D.	ug/l	0.7	3
4-Bromophenyl-phenylether	11/09/18	N.D.	ug/l	0.5	2
Hexachlorobenzene	11/09/18	N.D.	ug/l	0.1	0.5

Fraction: Semivolatiles by GC/MS

18310WAL026 / SBLKWL310 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Pentachlorophenol	11/09/18	N.D.	ug/l	1	5
Phenanthrene	11/09/18	N.D.	ug/l	0.1	0.5
Anthracene	11/09/18	N.D.	ug/l	0.1	0.5
Carbazole	11/09/18	N.D.	ug/l	0.5	2
Di-n-butylphthalate	11/09/18	N.D.	ug/l	2	5
Fluoranthene	11/09/18	N.D.	ug/l	0.1	0.5
Pyrene	11/09/18	N.D.	ug/l	0.1	0.5
Butylbenzylphthalate	11/09/18	N.D.	ug/l	2	5
3,3'-Dichlorobenzidine	11/09/18	N.D.	ug/l	3	10
Benzo(a)anthracene	11/09/18	N.D.	ug/l	0.1	0.5
Chrysene	11/09/18	N.D.	ug/l	0.1	0.5
bis(2-Ethylhexyl)phthalate	11/09/18	N.D.	ug/l	5	11
Di-n-octylphthalate	11/09/18	N.D.	ug/l	5	11
Benzo(b)fluoranthene	11/09/18	N.D.	ug/l	0.1	0.5
Benzo(k)fluoranthene	11/09/18	N.D.	ug/l	0.1	0.5
Benzo(a)pyrene	11/09/18	N.D.	ug/l	0.1	0.5
Indeno(1,2,3-cd)pyrene	11/09/18	N.D.	ug/l	0.1	0.5
Dibenz(a,h)anthracene	11/09/18	N.D.	ug/l	0.1	0.5
Benzo(g,h,i)perylene	11/09/18	N.D.	ug/l	0.1	0.5

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Quality Control Summary
Surrogates
GC/MS Semivolatiles
SDG: CBD53
Matrix: LIQUID

Fraction: Semivolatiles by GC/MS

18310WAL026	2,4,6-Tribromophenol		2-Fluorobiphenyl		2-Fluorophenol		Nitrobenzene-d5		Phenol-d6		Terphenyl-d14	
	Spike Added	200 ug/l	Spike Added	100 ug/l	Spike Added	200 ug/l	Spike Added	100 ug/l	Spike Added	200 ug/l	Spike Added	100 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
SBLKWL310	78	29 - 133	80	39 - 105	44	10 - 85	71	30 - 111	32	10 - 72	99	27 - 126
310WLLCS	79	29 - 133	87	39 - 105	61	10 - 85	82	30 - 111	45	10 - 72	90	27 - 126
310WLLCSD	84	29 - 133	92	39 - 105	56	10 - 85	85	30 - 111	40	10 - 72	92	27 - 126
9882892	77	29 - 133	77	39 - 105	45	10 - 85	67	30 - 111	32	10 - 72	87	27 - 126
9882893	67	29 - 133	71	39 - 105	41	10 - 85	63	30 - 111	28	10 - 72	83	27 - 126
9882894	84	29 - 133	82	39 - 105	58	10 - 85	79	30 - 111	42	10 - 72	95	27 - 126
9882895	80	29 - 133	83	39 - 105	60	10 - 85	82	30 - 111	44	10 - 72	85	27 - 126
9882896	87	29 - 133	86	39 - 105	58	10 - 85	85	30 - 111	42	10 - 72	100	27 - 126
9882897	88	29 - 133	83	39 - 105	59	10 - 85	84	30 - 111	43	10 - 72	104	27 - 126
9882898	74	29 - 133	82	39 - 105	47	10 - 85	78	30 - 111	36	10 - 72	88	27 - 126
9882899	83	29 - 133	85	39 - 105	59	10 - 85	84	30 - 111	42	10 - 72	91	27 - 126

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Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: CBD53
Matrix: LIQUID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

LCS: 310WLLCS LCSD: 310WLLCSD	Batch: **18310WAL026** (Sample number(s): 9882892-9882899)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Phenol	50	25.06	22.67	50	45	23-82	10	30
bis(2-Chloroethyl)ether	50	40.54	40.24	81	80	60-110	1	30
2-Chlorophenol	50	40.68	39.92	81	80	58-108	2	30
1,3-Dichlorobenzene	50	38.95	38.75	78	78	31-110	1	30
1,4-Dichlorobenzene	50	39.92	39.87	80	80	30-109	0	30
1,2-Dichlorobenzene	50	40.34	39.72	81	79	43-108	2	30
2-Methylphenol	50	40.51	38.56	81	77	59-109	5	30
2,2'-oxybis(1-Chloropropane)	50	39.68	39.77	79	80	48-118	0	30
2,4-Dichlorophenol	50	42.45	43.46	85	87	65-117	2	30
4-Methylphenol	50	38.57	36.76	77	74	56-108	5	30
N-Nitroso-di-n-propylamine	50	41.72	42.58	83	85	61-118	2	30
Hexachloroethane	50	37.56	37.7	75	75	24-100	0	30
Nitrobenzene	50	41.5	43.3	83	87	59-117	4	30
Isophorone	50	42.56	44.55	85	89	65-123	5	30
2-Nitrophenol	50	41.5	42.7	83	85	63-121	3	30
2,4-Dimethylphenol	50	33.63	34.86	67	70	52-106	4	30
bis(2-Chloroethoxy)methane	50	42.27	43.71	85	87	64-119	3	30
1,2,4-Trichlorobenzene	50	40.49	41.8	81	84	38-116	3	30
Naphthalene	50	40.73	42.15	81	84	54-107	3	30
4-Chloroaniline	50	37.17	36.08	74	72	42-110	3	30
Hexachlorobutadiene	50	40.72	41.03	81	82	21-114	1	30
4-Chloro-3-methylphenol	50	41.59	42.01	83	84	65-122	1	30
2-Methylnaphthalene	50	40.82	42.66	82	85	51-112	4	30
Hexachlorocyclopentadiene	100	50.94	55.16	51	55	10-117	8	30
2,4,6-Trichlorophenol	50	46.48	48.52	93	97	69-122	4	30
2,4,5-Trichlorophenol	50	46.35	47.94	93	96	73-124	3	30
2-Chloronaphthalene	50	42.53	45	85	90	51-114	6	30
2-Nitroaniline	50	44.19	47.92	88	96	66-126	8	30
Dimethylphthalate	50	40.94	41.67	82	83	37-116	2	30
2,6-Dinitrotoluene	50	42.82	45.45	86	91	69-122	6	30
Acenaphthylene	50	47.59	50.87	95	102	66-125	7	30
3-Nitroaniline	50	39.41	40.88	79	82	51-120	4	30
Acenaphthene	50	43.88	47.55	88	95	62-119	8	30
2,4-Dinitrophenol	100	67.92	74.42	68	74	26-141	9	30
4-Nitrophenol	50	21.43 J	20.7 J	43	41	28-88	3	30
2,4-Dinitrotoluene	50	39.93	41.5	80	83	69-117	4	30
Dibenzofuran	50	42.99	45.73	86	91	63-117	6	30
Diethylphthalate	50	38.79	40.04	78	80	61-111	3	30
Fluorene	50	43.67	46.3	87	93	62-116	6	30
4-Chlorophenyl-phenylether	50	42.16	43.6	84	87	58-115	3	30
4-Nitroaniline	50	34.89	35.46	70	71	53-111	2	30
4,6-Dinitro-2-methylphenol	50	41.49	42.63	83	85	63-129	3	30

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: CBD53
Matrix: LIQUID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

LCS: 310WLLCS LCSD: 310WLLCSD **Analyte**	Batch: **18310WAL026** (Sample number(s): 9882892-9882899)							
	Spike Added ug/l	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
N-Nitrosodiphenylamine	50	51.07	52.45	102	105	68-122	3	30
4-Bromophenyl-phenylether	50	47	48.14	94	96	64-119	2	30
Hexachlorobenzene	50	49.12	49.56	98	99	65-121	1	30
Pentachlorophenol	50	42	45.09	84	90	64-130	7	30
Phenanthrene	50	46.08	47.39	92	95	68-118	3	30
Anthracene	50	46.49	48.42	93	97	70-118	4	30
Carbazole	50	47.32	49.11	95	98	71-128	4	30
Di-n-butylphthalate	50	40.05	42.44	80	85	71-113	6	30
Fluoranthene	50	45.28	46.43	91	93	70-124	3	30
Pyrene	50	45.73	46.41	91	93	68-118	1	30
Butylbenzylphthalate	50	39.02	40.04	78	80	57-119	3	30
3,3'-Dichlorobenzidine	50	35.26	35.11	71	70	36-116	0	30
Benzo(a)anthracene	50	44.66	45.52	89	91	70-123	2	30
Chrysene	50	44.8	45.58	90	91	71-123	2	30
bis(2-Ethylhexyl)phthalate	50	36.12	37.79	72	76	68-120	5	30
Di-n-octylphthalate	50	38.77	40.01	78	80	67-120	3	30
Benzo(b)fluoranthene	50	48.59	48.43	97	97	70-120	0	30
Benzo(k)fluoranthene	50	48.96	49.61	98	99	73-122	1	30
Benzo(a)pyrene	50	50.27	50.61	101	101	71-122	1	30
Indeno(1,2,3-cd)pyrene	50	47.39	47.85	95	96	61-121	1	30
Dibenz(a,h)anthracene	50	50.13	49.65	100	99	67-123	1	30
Benzo(g,h,i)perylene	50	49.52	48.96	99	98	64-119	1	30

Fraction: Semivolatiles by GC/MS

14241: SVOAs 8270D MINI Analyte Name	Default MDL	Default LOQ	Units
Phenol	0.5	2	ug/l
bis(2-Chloroethyl)ether	0.5	2	ug/l
2-Chlorophenol	0.5	2	ug/l
1,3-Dichlorobenzene	0.5	2	ug/l
1,4-Dichlorobenzene	0.5	2	ug/l
1,2-Dichlorobenzene	0.5	2	ug/l
2-Methylphenol	0.5	2	ug/l
2,2'-oxybis(1-Chloropropane)	0.5	2	ug/l
2,4-Dichlorophenol	0.5	2	ug/l
4-Methylphenol	0.5	2	ug/l
N-Nitroso-di-n-propylamine	0.7	3	ug/l
Hexachloroethane	1	5	ug/l
Nitrobenzene	0.5	2	ug/l
Isophorone	0.5	2	ug/l
2-Nitrophenol	3	10	ug/l
2,4-Dimethylphenol	3	10	ug/l
bis(2-Chloroethoxy)methane	0.5	2	ug/l
1,2,4-Trichlorobenzene	0.5	2	ug/l
Naphthalene	0.1	0.5	ug/l
4-Chloroaniline	4	10	ug/l
Hexachlorobutadiene	0.5	2	ug/l
4-Chloro-3-methylphenol	0.5	2	ug/l
2-Methylnaphthalene	0.1	0.5	ug/l
Hexachlorocyclopentadiene	5	11	ug/l
2,4,6-Trichlorophenol	0.5	2	ug/l
2,4,5-Trichlorophenol	0.5	2	ug/l
2-Chloronaphthalene	0.4	1	ug/l
2-Nitroaniline	2	7	ug/l
Dimethylphthalate	2	5	ug/l
2,6-Dinitrotoluene	0.5	2	ug/l
Acenaphthylene	0.1	0.5	ug/l
3-Nitroaniline	3	7	ug/l
Acenaphthene	0.1	0.5	ug/l
2,4-Dinitrophenol	14	30	ug/l
4-Nitrophenol	10	30	ug/l
2,4-Dinitrotoluene	1	5	ug/l
Dibenzofuran	0.5	2	ug/l
Diethylphthalate	2	5	ug/l
Fluorene	0.1	0.5	ug/l
4-Chlorophenyl-phenylether	0.5	2	ug/l
4-Nitroaniline	0.9	3	ug/l
4,6-Dinitro-2-methylphenol	8	21	ug/l
N-Nitrosodiphenylamine	0.7	3	ug/l
4-Bromophenyl-phenylether	0.5	2	ug/l
Hexachlorobenzene	0.1	0.5	ug/l
Pentachlorophenol	1	5	ug/l
Phenanthrene	0.1	0.5	ug/l

Fraction: Semivolatiles by GC/MS

14241: SVOAs 8270D MINI Analyte Name	Default MDL	Default LOQ	Units
Anthracene	0.1	0.5	ug/l
Carbazole	0.5	2	ug/l
Di-n-butylphthalate	2	5	ug/l
Fluoranthene	0.1	0.5	ug/l
Pyrene	0.1	0.5	ug/l
Butylbenzylphthalate	2	5	ug/l
3,3'-Dichlorobenzidine	3	10	ug/l
Benzo(a)anthracene	0.1	0.5	ug/l
Chrysene	0.1	0.5	ug/l
bis(2-Ethylhexyl)phthalate	5	11	ug/l
Di-n-octylphthalate	5	11	ug/l
Benzo(b)fluoranthene	0.1	0.5	ug/l
Benzo(k)fluoranthene	0.1	0.5	ug/l
Benzo(a)pyrene	0.1	0.5	ug/l
Indeno(1,2,3-cd)pyrene	0.1	0.5	ug/l
Dibenz(a,h)anthracene	0.1	0.5	ug/l
Benzo(g,h,i)perylene	0.1	0.5	ug/l

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: dk0210.d DFTPP Injection Date: 11/04/18

Instrument ID: HP19760 DFTPP Injection Time: 11:11

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	51.0
68	Less than 2.0% of mass 69	0.82 (1.43)1
69	Mass 69 relative abundance	57.5
70	Less than 2.0% of mass 69	0.29 (0.5)1
127	10.0 - 80.00% of mass 198	52.5
197	Less than 2.0% of mass 198	1.19
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.29
275	10.0 - 60.0% of mass 198	21.0
365	Greater than 1.00% of mass 198	2.38
441	Present, and less than mass 443	8.47
442	Greater than 50.00% of mass 198	58.6
443	15.00 - 24.00% of mass 442	11.3 (19.2)2

1-Value is % mass 69 2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	rvSTD2648 - SSTD7.5	dk0211.d	11/04/18	11:51
02	rvSTD2648 - SSTD.125	dk0212.d	11/04/18	12:44
03	rvSTD2648 - SSTD30	dk0213.d	11/04/18	13:12
04	rvSTD2648 - SSTD20	dk0214.d	11/04/18	13:40
05	rvSTD2648 - SSTD12.5	dk0215.d	11/04/18	14:09
06	rvSTD2648 - SSTD3.75	dk0216.d	11/04/18	14:37
07	rvSTD2648 - SSTD1.25	dk0217.d	11/04/18	15:06
08	rvSTD2648 - SSTD.25	dk0218.d	11/04/18	15:35
09	rvMDL2648 - SSTD0.125	dk0219.d	11/04/18	16:03
10	PAHMDL2648 - SSTD0.025	dk0220.d	11/04/18	16:31
11	rvICV2628 - SSTD12.5	dk0221.d	11/04/18	17:00
12	rvBASICV3028 - SSTD12.5	dk0222.d	11/04/18	17:29

FORM V SV

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: dk0300.d DFTPP Injection Date: 11/04/18

Instrument ID: HP19760 DFTPP Injection Time: 20:00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	55.4
68	Less than 2.0% of mass 69	1.08 (1.75)1
69	Mass 69 relative abundance	61.5
70	Less than 2.0% of mass 69	0.34 (0.56)1
127	10.0 - 80.00% of mass 198	56.2
197	Less than 2.0% of mass 198	0.87
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.67
275	10.0 - 60.0% of mass 198	21.1
365	Greater than 1.00% of mass 198	2.35
441	Present, and less than mass 443	7.27
442	Greater than 50.00% of mass 198	52.8
443	15.00 - 24.00% of mass 442	9.94 (18.8)2

1-Value is % mass 69 2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	rvSTD2648 - SSTD7.5	dk0301.d	11/04/18	21:12
02	rvICV2628 - SSTD12.5	dk0302.d	11/04/18	22:13
03	SBLKWR302	dk0303.d	11/05/18	00:08
04	302WRLCS	dk0304.d	11/05/18	00:36
05	302WRLCSD	dk0305.d	11/05/18	01:04
06	9869228	dk0306.d	11/05/18	01:32
07	9869230	dk0307.d	11/05/18	02:00
08	9869232	dk0308.d	11/05/18	02:29
09	9869234	dk0309.d	11/05/18	02:57
10	9867287	dk0310.d	11/05/18	03:25
11	9868253	dk0311.d	11/05/18	03:53
12	9868527	dk0312.d	11/05/18	04:22
13	9868532	dk0313.d	11/05/18	04:50
14	9868540	dk0314.d	11/05/18	05:18
15	9868554	dk0315.d	11/05/18	05:47
16	9869112	dk0316.d	11/05/18	06:15
17	9870353	dk0317.d	11/05/18	06:43
18	9870354	dk0318.d	11/05/18	07:12

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: dk0300.d DFTPP Injection Date: 11/04/18

Instrument ID: HP19760 DFTPP Injection Time: 20:00

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	55.4
68	Less than 2.0% of mass 69	1.08 (1.75)1
69	Mass 69 relative abundance	61.5
70	Less than 2.0% of mass 69	0.34 (0.56)1
127	10.0 - 80.00% of mass 198	56.2
197	Less than 2.0% of mass 198	0.87
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.67
275	10.0 - 60.0% of mass 198	21.1
365	Greater than 1.00% of mass 198	2.35
441	Present, and less than mass 443	7.27
442	Greater than 50.00% of mass 198	52.8
443	15.00 - 24.00% of mass 442	9.94 (18.8)2

1-Value is % mass 69 2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED

FORM V SV

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: dk0730.d DFTPP Injection Date: 11/09/18

Instrument ID: HP19760 DFTPP Injection Time: 08:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	54.8
68	Less than 2.0% of mass 69	0.84 (1.37)1
69	Mass 69 relative abundance	61.1
70	Less than 2.0% of mass 69	0.3 (0.49)1
127	10.0 - 80.00% of mass 198	54.8
197	Less than 2.0% of mass 198	1.09
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.93
275	10.0 - 60.0% of mass 198	22.3
365	Greater than 1.00% of mass 198	2.82
441	Present, and less than mass 443	8.85
442	Greater than 50.00% of mass 198	60.3
443	15.00 - 24.00% of mass 442	11.3 (18.7)2

1-Value is % mass 69 2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RVSTD2648 - SSTD7.5	dk0731.d	11/09/18	08:48
02	SBLKWL310	dk0732.d	11/09/18	10:12
03	310WLLCS	dk0733.d	11/09/18	10:40
04	310WLLCSD	dk0734.d	11/09/18	11:08
05	9882676	dk0735.d	11/09/18	11:36
06	9882677	dk0736.d	11/09/18	12:05
07	9882678	dk0737.d	11/09/18	12:33
08	9882679	dk0738.d	11/09/18	13:01
09	9882680	dk0739.d	11/09/18	13:29
10	9882682	dk0740.d	11/09/18	13:58
11	9882892	dk0741.d	11/09/18	14:26
12	9882893	dk0742.d	11/09/18	14:54
13	9882894	dk0743.d	11/09/18	15:22
14	9882895	dk0744.d	11/09/18	15:51
15	9882896	dk0745.d	11/09/18	16:19
16	9882897	dk0746.d	11/09/18	16:47
17	9882898	dk0747.d	11/09/18	17:15
18	9882899	dk0748.d	11/09/18	17:43

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SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: dk0730.d DFTPP Injection Date: 11/09/18

Instrument ID: HP19760 DFTPP Injection Time: 08:33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	54.8
68	Less than 2.0% of mass 69	0.84 (1.37)1
69	Mass 69 relative abundance	61.1
70	Less than 2.0% of mass 69	0.3 (0.49)1
127	10.0 - 80.00% of mass 198	54.8
197	Less than 2.0% of mass 198	1.09
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.93
275	10.0 - 60.0% of mass 198	22.3
365	Greater than 1.00% of mass 198	2.82
441	Present, and less than mass 443	8.85
442	Greater than 50.00% of mass 198	60.3
443	15.00 - 24.00% of mass 442	11.3 (18.7)2

1-Value is % mass 69 2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED

FORM V SV

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SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date(s): 11/04/18 11/04/18

Calibration Times: 11:51 15:35

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = dk0212.d RRF0.25 = dk0218.d RRF1.25 = dk0217.d RRF3.75 = dk0216.d
RRF7.5 = dk0211.d RRF12.5 = dk0215.d RRF20 = dk0214.d RRF30 = dk0213.d

COMPOUND	RRF0.125	RF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. METHOD
1,4-Dioxane			0.827	0.813	0.860	0.868	0.859	0.839	0.844	3	AVG
N-Nitrosodimethylamine			1.203	1.280	1.292	1.327	1.331	1.299	1.289	4	AVG
Pyridine			1.999	2.186	2.190	2.202	2.216	2.166	2.160	4	AVG
2-Picoline			2.049	2.144	2.192	2.211	2.195	2.147	2.156	3	AVG
N-Nitrosomethylethylamine			0.915	0.904	0.945	0.969	0.957	0.941	0.939	3	AVG
Methyl methanesulfonate			0.992	1.039	1.063	1.036	1.045	1.022	1.033	2	AVG
N-Nitrosodiethylamine		0.692	0.762	0.832	0.879	0.902	0.898	0.882	0.835	10	AVG
Ethyl methanesulfonate		0.651	0.802	0.811	0.849	0.840	0.847	0.834	0.805	9	AVG
Benzaldehyde			1.408	1.537	1.454	1.393	1.238	1.051	1.347	13	AVG
Phenol		2.425	2.457	2.602	2.654	2.675	2.662	2.590	2.581	4	AVG
Aniline		2.919	2.933	3.052	3.096	3.125	3.105	3.022	3.036	3	AVG
a-methylstyrene			0.154	0.140	0.161	0.163	0.160	0.157	0.156	6	AVG
bis(2-Chloroethyl)ether		1.861	1.829	1.926	1.972	1.968	1.927	1.906	1.913	3	AVG
2-Chlorophenol		1.312	1.464	1.525	1.578	1.598	1.585	1.549	1.516	7	AVG
1,3-Dichlorobenzene		1.527	1.581	1.616	1.648	1.660	1.645	1.596	1.610	3	AVG
1,4-Dichlorobenzene		1.550	1.536	1.608	1.663	1.663	1.635	1.609	1.609	3	AVG
Benzyl alcohol			0.985	1.009	1.091	1.137	1.099	1.083	1.067	5	AVG
1,2-Dichlorobenzene		1.468	1.502	1.536	1.570	1.571	1.547	1.523	1.531	2	AVG
Indene			1.615	1.609	1.787	1.821	1.780	1.764	1.729	5	AVG
2-Methylphenol		1.316	1.447	1.592	1.633	1.652	1.628	1.584	1.550	8	AVG
2,2'-oxybis(1-Chloropropane)		2.072	2.130	2.248	2.267	2.288	2.247	2.208	2.209	4	AVG
bis(2-Chloroisopropyl)ether		2.072	2.130	2.248	2.267	2.288	2.247	2.208	2.209	4	AVG
N-Nitrosopyrrolidine		0.695	0.806	0.883	0.905	0.953	0.945	0.884	0.867	10	AVG
Acetophenone		1.983	2.061	2.254	2.229	2.278	2.231	2.216	2.179	5	AVG
4-Methylphenol		1.520	1.681	1.806	1.848	1.861	1.816	1.788	1.760	7	AVG
Total Cresols		1.418	1.564	1.699	1.740	1.757	1.722	1.686	1.655	7	AVG
N-Nitroso-di-n-propylamine		1.268	1.309	1.373	1.419	1.436	1.405	1.334	1.363	5	AVG
N-Nitrosomorpholine			0.993	1.007	1.072	1.031	1.010	1.000	1.019	3	AVG
o-Toluidine		2.565	2.582	2.746	2.782	2.796	2.776	2.684	2.704	4	AVG
Hexachloroethane			0.692	0.761	0.781	0.771	0.763	0.748	0.753	4	AVG
Nitrobenzene		0.498	0.526	0.550	0.563	0.560	0.565	0.553	0.545	5	AVG
N-Nitrosopiperidine		0.187	0.186	0.215	0.219	0.221	0.226	0.221	0.211	8	AVG
Isophorone		0.763	0.842	0.923	0.956	0.974	0.997	0.978	0.919	9	AVG
2-Nitrophenol			0.180	0.198	0.205	0.215	0.222	0.216	0.206	8	AVG
2,4-Dimethylphenol		0.374	0.421	0.449	0.459	0.464	0.472	0.466	0.444	8	AVG
O,O,O-Triethylphosphorothioat			0.155	0.167	0.168	0.170	0.175	0.172	0.168	4	AVG
bis(2-Chloroethoxy)methane		0.544	0.550	0.586	0.602	0.595	0.605	0.572	0.579	4	AVG
Benzoic acid			0.235	0.280	0.288	0.325	0.338	0.330	0.299	13	AVG
2,4-Dichlorophenol		0.244	0.282	0.300	0.312	0.317	0.323	0.314	0.299	9	AVG
1,2,4-Trichlorobenzene		0.319	0.317	0.325	0.329	0.331	0.339	0.329	0.327	2	AVG
Naphthalene	1.208	1.143	1.138	1.177	1.194	1.192	1.216	1.191	1.182	2	AVG
4-Chloroaniline		0.392	0.435	0.458	0.467	0.465	0.477	0.465	0.451	7	AVG
2,6-Dichlorophenol		0.262	0.270	0.293	0.300	0.303	0.308	0.303	0.291	6	AVG
Hexachloropropene			0.195	0.203	0.206	0.208	0.213	0.211	0.206	3	AVG
Hexachlorobutadiene		0.178	0.169	0.176	0.181	0.175	0.179	0.175	0.176	2	AVG
Quinoline			0.609	0.654	0.678	0.679	0.702	0.684	0.668	5	AVG
Caprolactam			0.092	0.120	0.122	0.132	0.132	0.131	0.122	13	AVG
N-Nitrosodi-n-butylamine			0.286	0.313	0.324	0.330	0.425	0.413	0.348	16	AVG
4-Chloro-3-methylphenol		0.266	0.328	0.359	0.368	0.377	0.392	0.387	0.354	13	AVG
Safrole			0.244	0.260	0.278	0.281	0.285	0.283	0.272	6	AVG
2-Methylnaphthalene	0.698	0.662	0.664	0.723	0.746	0.746	0.756	0.745	0.718	5	AVG
1-Methylnaphthalene	0.614	0.635	0.648	0.691	0.705	0.709	0.726	0.712	0.680	6	AVG

4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date(s): 11/04/18 11/04/18

Calibration Times: 11:51 15:35

Min $\overline{\text{RRF}}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = dk0212.d RRF0.25 = dk0218.d RRF1.25 = dk0217.d RRF3.75 = dk0216.d
RRF7.5 = dk0211.d RRF12.5 = dk0215.d RRF20 = dk0214.d RRF30 = dk0213.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{\text{RRF}}$	% RSD	CAL. METHOD
Hexachlorocyclopentadiene			0.358	0.397	0.415	0.413	0.400	0.397	0.397	5	AVG
1,2,4,5-Tetrachlorobenzene		0.684	0.620	0.664	0.679	0.675	0.664	0.660	0.664	3	AVG
cis-Isosafrole			0.557	0.573	0.612	0.625	0.623	0.641	0.605	5	AVG
2,4,6-Trichlorophenol		0.327	0.382	0.417	0.451	0.451	0.450	0.460	0.420	12	AVG
2,4,5-Trichlorophenol		0.352	0.412	0.451	0.463	0.479	0.467	0.461	0.441	10	AVG
trans-Isosafrole			0.583	0.650	0.674	0.675	0.675	0.704	0.660	6	AVG
Isosafrole			0.579	0.637	0.663	0.666	0.666	0.693	0.651	6	AVG
1,1'-Biphenyl		1.698	1.732	1.844	1.864	1.877	1.817	1.739	1.796	4	AVG
2-Chloronaphthalene		1.402	1.426	1.476	1.477	1.446	1.458	1.536	1.460	3	AVG
1-Chloronaphthalene		1.258	1.253	1.313	1.377	1.397	1.285	1.194	1.297	6	AVG
Diphenyl ether		0.739	0.718	0.757	0.780	0.768	0.750	0.749	0.752	3	AVG
2-Nitroaniline		0.343	0.418	0.473	0.498	0.521	0.506	0.509	0.467	14	AVG
1,4-Naphthoquinone			0.438	0.512	0.562	0.587	0.580	0.561	0.540	10	AVG
1,4-Dinitrobenzene			0.220	0.246	0.262	0.266	0.265	0.263	0.254	7	AVG
Dimethylphthalate			1.402	1.524	1.570	1.537	1.509	1.500	1.507	4	AVG
1,3-Dinitrobenzene			0.245	0.275	0.287	0.296	0.292	0.291	0.281	7	AVG
2,6-Dinitrotoluene		0.283	0.320	0.360	0.374	0.370	0.370	0.363	0.349	10	AVG
Acenaphthylene	1.730	1.745	1.864	2.048	2.128	2.127	2.113	2.121	1.985	9	AVG
3-Nitroaniline		0.291	0.372	0.421	0.423	0.437	0.432	0.437	0.402	13	AVG
Acenaphthene	1.467	1.423	1.374	1.466	1.498	1.492	1.482	1.458	1.457	3	AVG
2,4-Dinitrophenol				0.212	0.220	0.248	0.263	0.267	0.242	10	AVG
4-Nitrophenol				0.284	0.309	0.314	0.310	0.316	0.307	4	AVG
Pentachlorobenzene		0.509	0.516	0.531	0.544	0.522	0.526	0.519	0.524	2	AVG
2,4-Dinitrotoluene			0.413	0.470	0.480	0.500	0.487	0.496	0.474	7	AVG
2,4_2,6-Dinitrotoluenes		0.317	0.367	0.415	0.427	0.435	0.428	0.429	0.403	11	AVG
Dibenzofuran		2.032	1.966	2.017	2.066	2.063	2.030	1.981	2.022	2	AVG
1-Naphthylamine				1.501	1.543	1.537	1.527	1.548	1.531	1	AVG
2,3,4,6-Tetrachlorophenol			0.291	0.327	0.347	0.354	0.353	0.357	0.338	8	AVG
2-Naphthylamine				1.535	1.537	1.562	1.558	1.545	1.548	1	AVG
Diethylphthalate			1.369	1.497	1.529	1.598	1.565	1.595	1.526	6	AVG
Thionazin			0.295	0.329	0.333	0.350	0.341	0.342	0.332	6	AVG
Fluorene	1.394	1.354	1.501	1.578	1.638	1.614	1.587	1.589	1.532	7	AVG
4-Chlorophenyl-phenylether		0.668	0.725	0.757	0.767	0.769	0.740	0.727	0.736	5	AVG
5-Nitro-o-toluidine		0.356	0.434	0.487	0.485	0.507	0.497	0.501	0.467	12	AVG
4-Nitroaniline		0.329	0.408	0.461	0.461	0.482	0.471	0.478	0.441	13	AVG
4,6-Dinitro-2-methylphenol				0.137	0.146	0.165	0.167	0.169	0.157	9	AVG
N-Nitrosodiphenylamine (1)		0.595	0.661	0.701	0.722	0.717	0.720	0.708	0.689	7	AVG
NDPA as diphenylamine		0.595	0.661	0.701	0.722	0.717	0.720	0.708	0.689	7	AVG
1,2-Diphenylhydrazine		0.965	1.086	1.157	1.192	1.176	1.164	1.148	1.127	7	AVG
Tetraethyldithiopyrophosphate			0.143	0.166	0.171	0.171	0.174	0.171	0.166	7	AVG
1,3,5-Trinitrobenzene				0.085	0.095	0.103	0.109	0.113	0.101	11	AVG
Diallate (peak 1)			0.473	0.522	0.538	0.547	0.548	0.544	0.529	5	AVG
Phorate		0.513	0.597	0.662	0.686	0.703	0.702	0.688	0.650	11	AVG
Phenacetin			0.412	0.495	0.507	0.536	0.540	0.544	0.506	10	AVG
4-Bromophenyl-phenylether		0.160	0.207	0.208	0.207	0.206	0.209	0.207	0.200	9	AVG
Diallate (peak 2)			0.364	0.412	0.415	0.431	0.426	0.429	0.413	6	AVG
Diallate trans/cis			0.454	0.503	0.517	0.527	0.527	0.525	0.509	6	AVG
Hexachlorobenzene	0.210	0.205	0.199	0.206	0.212	0.208	0.214	0.209	0.208	2	AVG
Dimethoate			0.353	0.415	0.442	0.459	0.456	0.454	0.430	10	AVG
Atrazine			0.184	0.219	0.215	0.216	0.203	0.186	0.204	8	AVG
Pentachlorophenol			0.099	0.130	0.142	0.151	0.157	0.157	0.139	16	AVG
4-Aminobiphenyl		0.476	0.541	0.609	0.628	0.642	0.632	0.610	0.591	10	AVG

(1) Cannot be separated from Diphenylamine
4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date(s): 11/04/18 11/04/18

Calibration Times: 11:51 15:35

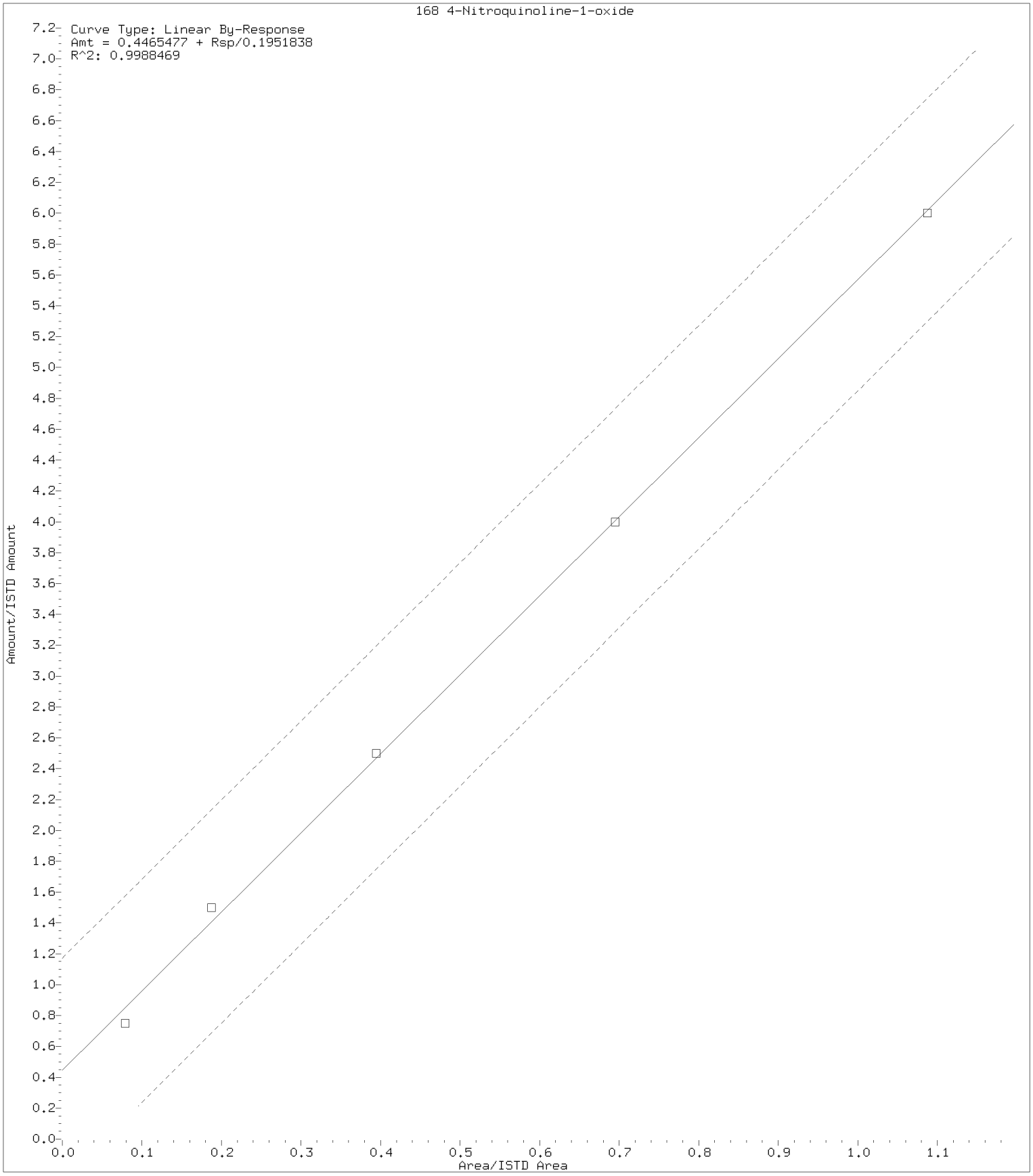
Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = dk0212.d RRF0.25 = dk0218.d RRF1.25 = dk0217.d RRF3.75 = dk0216.d
RRF7.5 = dk0211.d RRF12.5 = dk0215.d RRF20 = dk0214.d RRF30 = dk0213.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. METHOD
Pentachloronitrobenzene			0.086	0.096	0.097	0.099	0.101	0.101	0.097	6	AVG
Pronamide			0.296	0.349	0.366	0.383	0.386	0.384	0.361	10	AVG
Dinoseb				0.192	0.209	0.235	0.245	0.249	0.226	11	AVG
Phenanthrene	1.237	1.166	1.161	1.184	1.215	1.217	1.230	1.213	1.203	2	AVG
Anthracene	1.061	1.020	1.103	1.200	1.225	1.252	1.254	1.252	1.171	8	AVG
Carbazole		0.982	1.046	1.140	1.183	1.213	1.222	1.234	1.146	8	AVG
Methyl parathion			0.244	0.306	0.327	0.354	0.365	0.359	0.326	14	AVG
Di-n-butylphthalate			1.166	1.372	1.428	1.520	1.560	1.514	1.427	10	AVG
Parathion			0.138	0.196	0.210	0.227	0.232	0.238	0.207	18	AVG
4-Nitroquinoline-1-oxide				0.106	0.125	0.158	0.174	0.181	0.149	22	1STDEG
Octachlorostyrene			0.070	0.077	0.081	0.086	0.086	0.086	0.081	8	AVG
Isodrin		0.112	0.123	0.135	0.141	0.144	0.146	0.147	0.136	10	AVG
Fluoranthene	1.003	1.048	1.158	1.290	1.335	1.390	1.406	1.442	1.259	13	AVG
Benzidine				0.996	1.047	1.044	1.026	0.891	1.001	6	AVG
Pyrene	1.495	1.435	1.384	1.420	1.444	1.453	1.440	1.418	1.436	2	AVG
p-Dimethylaminoazobenzene			0.162	0.211	0.228	0.251	0.255	0.258	0.228	16	AVG
Chlorobenzilate			0.379	0.438	0.450	0.478	0.480	0.475	0.450	9	AVG
3,3'-Dimethylbenzidine			0.652	0.818	0.889	0.927	0.942	0.924	0.859	13	AVG
Butylbenzylphthalate			0.582	0.702	0.729	0.769	0.775	0.769	0.721	10	AVG
2-Acetylaminofluorene				0.490	0.523	0.609	0.644	0.642	0.582	12	AVG
3,3'-Dichlorobenzidine			0.403	0.472	0.493	0.529	0.533	0.523	0.492	10	AVG
4,4'-Methylenebis(2-chloroani				0.260	0.270	0.293	0.296	0.285	0.281	6	AVG
Benzo(a)anthracene	0.868	0.860	1.086	1.215	1.278	1.364	1.342	1.329	1.168	18	AVG
Chrysene	1.109	1.060	1.155	1.266	1.294	1.324	1.323	1.291	1.228	8	AVG
bis(2-Ethylhexyl)phthalate			0.756	0.969	1.034	1.093	1.114	1.098	1.011	13	AVG
6-Methylchrysene			0.702	0.812	0.858	0.918	0.934	0.921	0.858	10	AVG
Di-n-octylphthalate			1.184	1.579	1.725	1.835	1.941	1.925	1.698	17	AVG
Benzo(b)fluoranthene	0.900	0.954	1.139	1.221	1.296	1.323	1.339	1.395	1.196	15	AVG
7,12-Dimethylbenz[a]anthracen			0.460	0.559	0.611	0.618	0.640	0.631	0.586	12	AVG
Benzo(k)fluoranthene	1.063	0.999	1.220	1.307	1.350	1.343	1.386	1.279	1.243	11	AVG
Benzo(a)pyrene	0.773	0.826	1.024	1.133	1.196	1.252	1.290	1.273	1.096	18	AVG
3-Methylcholanthrene		0.351	0.458	0.538	0.562	0.587	0.614	0.613	0.532	18	AVG
Dibenz(a,h)acridine			0.760	0.848	0.915	0.920	0.963	0.930	0.890	8	AVG
Dibenz(a,j)acridine			0.876	0.949	0.990	1.024	1.029	0.963	0.972	6	AVG
Indeno(1,2,3-cd)pyrene	0.773	0.735	0.956	1.012	1.070	1.113	1.129	1.045	0.979	15	AVG
Dibenz(a,h)anthracene	0.895	0.892	1.104	1.104	1.189	1.190	1.195	1.122	1.086	12	AVG
Benzo(g,h,i)perylene	1.043	0.965	1.085	1.110	1.166	1.157	1.151	1.026	1.088	7	AVG
Total PAHs	1.097	1.062	1.130	1.142	1.177	1.164	1.176	1.139	1.136	4	AVG
2-Fluorophenol		1.431	1.498	1.618	1.659	1.677	1.685	1.655	1.603	6	AVG
Phenol-d6		1.916	2.093	2.252	2.310	2.340	2.322	2.281	2.216	7	AVG
Nitrobenzene-d5		0.481	0.509	0.545	0.559	0.561	0.565	0.556	0.539	6	AVG
2-Fluorobiphenyl		1.576	1.622	1.696	1.726	1.699	1.660	1.656	1.662	3	AVG
2,4,6-Tribromophenol		0.132	0.145	0.166	0.169	0.178	0.179	0.183	0.165	12	AVG
Terphenyl-d14		0.755	0.760	0.823	0.835	0.855	0.854	0.836	0.817	5	AVG

Average %RSD 8

4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.
Benzidine Levels in the 5,15,30,50,80,120 standards are 15,45,90,150,240,360 ng/ul, respectively.
Benzoic acid and 2,4-Dinitrophenol are at 15 ng/ul, 30 ng/ul,40 ng/ul in the 5,15,30 standards.



Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP19760.i/18nov04.b/dk0211.d SSTD7.5
/chem/HP19760.i/18nov04.b/dk0212.d SSTD0.125
/chem/HP19760.i/18nov04.b/dk0213.d SSTD30
/chem/HP19760.i/18nov04.b/dk0214.d SSTD20
/chem/HP19760.i/18nov04.b/dk0215.d SSTD12.5
/chem/HP19760.i/18nov04.b/dk0216.d SSTD3.75
/chem/HP19760.i/18nov04.b/dk0217.d SSTD1.25
/chem/HP19760.i/18nov04.b/dk0218.d SSTD0.25

Area Summary

File ID:

Internal Standard Name	dk0211.d	dk0212.d	dk0213.d	dk0214.d	dk0215.d	dk0216.d	dk0217.d	dk0218.d	Avg. Area	%RSD	In Spec
1,4-Dichlorobenzene-d4	261444	343195	297977	288736	285497	266319	282310	262568	286006	9	Yes
Naphthalene-d8	972956	1266142	1086871	1049909	1063802	987946	1049459	974943	1056504	9	Yes
Acenaphthene-d10	434824	556706	494386	490246	481163	443565	468772	425772	474429	9	Yes
Phenanthrene-d10	809458	976796	930619	907307	903320	826051	855772	764307	871704	8	Yes
Pyrene-d10	787242	907950	973269	912844	895336	807478	812866	719433	852052	10	Yes
Perylene-d12	796000	848103	972401	925359	922764	804596	772686	668655	838820	12	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

File ID:

Internal Standard Name	dk0211.d	dk0212.d	dk0213.d	dk0214.d	dk0215.d	dk0216.d	dk0217.d	dk0218.d	Avg. RT
1,4-Dichlorobenzene-d4	6.755	6.755	6.760	6.761	6.761	6.760	6.760	6.760	6.759
Naphthalene-d8	8.690	8.690	8.696	8.696	8.690	8.690	8.690	8.690	8.691
Acenaphthene-d10	11.482	11.482	11.488	11.488	11.482	11.482	11.482	11.482	11.483
Phenanthrene-d10	13.382	13.382	13.388	13.388	13.388	13.382	13.382	13.382	13.384
Pyrene-d10	15.340	15.340	15.346	15.340	15.340	15.340	15.340	15.340	15.341
Perylene-d12	19.811	19.811	19.822	19.817	19.817	19.817	19.817	19.817	19.816

Comments:_____

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Report generated on 11/04/2018 at 19:23

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: dk0221.d

ICV SAMPLE ID: rvICV2628 BATCH: 18NOV04026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
Diphenyl ether	12.50	15.14	21	30	YES
2-Nitroaniline	12.50	11.87	-5	30	YES
Acenaphthylene	12.50	12.81	3	30	YES
1,2-Diphenylhydrazine	12.50	12.71	2	30	YES
Pentachlorophenol	12.50	12.55	0	30	YES
Benzo(b)fluoranthene	12.50	12.16	-3	30	YES
Benzo(k)fluoranthene	12.50	11.91	-5	30	YES
Benzo(a)pyrene	12.50	12.62	1	30	YES
Dibenz(a,h)anthracene	12.50	12.44	-1	30	YES

NC = Could not calculate

Comments: _____

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Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: dk0222.d

ICV SAMPLE ID: rvBASICV3028 BATCH: 18NOV04026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
Benzaldehyde	12.50	15.02	20	30	YES
Caprolactam	12.50	11.59	-7	30	YES
Atrazine	12.50	12.13	-3	30	YES

NC = Could not calculate

Comments: _____

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Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: dk0302.d

ICV SAMPLE ID: rvICV2628 BATCH: 18NOV04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,4-Dioxane	12.50	12.04	-4	30	YES
N-Nitrosodimethylamine	12.50	14.10	13	30	YES
Pyridine	12.50	13.33	7	30	YES
2-Picoline	12.50	13.50	8	30	YES
N-Nitrosomethylethylamine	12.50	12.00	-4	30	YES
Methyl methanesulfonate	12.50	12.59	1	30	YES
N-Nitrosodiethylamine	12.50	12.59	1	30	YES
Ethyl methanesulfonate	12.50	12.24	-2	30	YES
Phenol	12.50	13.42	7	30	YES
Aniline	12.50	12.63	1	30	YES
bis(2-Chloroethyl)ether	12.50	13.46	8	30	YES
2-Chlorophenol	12.50	13.84	11	30	YES
1,3-Dichlorobenzene	12.50	13.57	9	30	YES
1,4-Dichlorobenzene	12.50	13.86	11	30	YES
Benzyl alcohol	12.50	14.52	16	30	YES
1,2-Dichlorobenzene	12.50	13.61	9	30	YES
Indene	12.50	19.93	59	30	NO*
2-Methylphenol	12.50	13.81	10	30	YES
2,2'-oxybis(1-Chloropropane	12.50	13.07	5	30	YES
bis(2-Chloroisopropyl)ether	12.50	13.07	5	30	YES
N-Nitrosopyrrolidine	12.50	12.50	0	30	YES
Acetophenone	12.50	14.31	14	30	YES
4-Methylphenol	12.50	13.92	11	30	YES
N-Nitroso-di-n-propylamine	12.50	14.12	13	30	YES
N-Nitrosomorpholine	12.50	12.28	-2	30	YES
o-Toluidine	12.50	13.41	7	30	YES
Total Cresols	25.00	27.74	11	30	YES
Hexachloroethane	12.50	13.20	6	30	YES
Nitrobenzene	12.50	13.70	10	30	YES
N-Nitrosopiperidine	12.50	12.02	-4	30	YES
Isophorone	12.50	14.46	16	30	YES
2-Nitrophenol	12.50	13.90	11	30	YES
2,4-Dimethylphenol	12.50	11.54	-8	30	YES
bis(2-Chloroethoxy)methane	12.50	14.17	13	30	YES
Benzoic acid	25.00	25.84	3	30	YES
O,O,O-Triethylphosphorothio	12.50	12.73	2	30	YES
2,4-Dichlorophenol	12.50	14.04	12	30	YES

NC = Could not calculate

Comments: _____*Compound fails high, run any hits under valid ICV_____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: dk0302.d

ICV SAMPLE ID: rvICV2628 BATCH: 18NOV04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,2,4-Trichlorobenzene	12.50	13.61	9	30	YES
Naphthalene	12.50	13.45	8	30	YES
4-Chloroaniline	12.50	14.35	15	30	YES
2,6-Dichlorophenol	12.50	12.24	-2	30	YES
Hexachloropropene	12.50	13.22	6	30	YES
Hexachlorobutadiene	12.50	13.45	8	30	YES
Quinoline	12.50	12.98	4	30	YES
N-Nitrosodi-n-butylamine	12.50	10.88	-13	30	YES
4-Chloro-3-methylphenol	12.50	14.53	16	30	YES
Safrole	12.50	12.08	-3	30	YES
2-Methylnaphthalene	12.50	13.87	11	30	YES
1-Methylnaphthalene	12.50	13.47	8	30	YES
Hexachlorocyclopentadiene	25.00	26.78	7	30	YES
1,2,4,5-Tetrachlorobenzene	12.50	13.49	8	30	YES
cis-Isosafrole	1.50	1.54	3	30	YES
2,4,6-Trichlorophenol	12.50	14.57	17	30	YES
2,4,5-Trichlorophenol	12.50	14.85	19	30	YES
trans-Isosafrole	11.00	11.47	4	30	YES
1,1'-Biphenyl	12.50	14.51	16	30	YES
2-Chloronaphthalene	12.50	13.51	8	30	YES
Isosafrole	12.50	13.07	5	30	YES
1-Chloronaphthalene	12.50	12.79	2	30	YES
1,4-Naphthoquinone	15.63	16.56	6	30	YES
1,4-Dinitrobenzene	12.50	14.05	12	30	YES
Dimethylphthalate	12.50	13.45	8	30	YES
1,3-Dinitrobenzene	12.50	13.81	11	30	YES
2,6-Dinitrotoluene	12.50	14.14	13	30	YES
3-Nitroaniline	12.50	14.60	17	30	YES
Acenaphthene	12.50	14.19	14	30	YES
2,4-Dinitrophenol	25.00	28.73	15	30	YES
4-Nitrophenol	12.50	13.61	9	30	YES
Pentachlorobenzene	12.50	12.03	-4	30	YES
2,4-Dinitrotoluene	12.50	13.77	10	30	YES
Dibenzofuran	12.50	13.87	11	30	YES
2,4_2,6-Dinitrotoluenes	25.00	28.47	14	30	YES
1-Naphthylamine	25.00	25.51	2	30	YES
2,3,4,6-Tetrachlorophenol	12.50	12.72	2	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: dk0302.d

ICV SAMPLE ID: rvICV2628 BATCH: 18NOV04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
2-Naphthylamine	25.00	24.94	0	30	YES
Diethylphthalate	12.50	13.66	9	30	YES
Thionazin	12.50	13.30	6	30	YES
Fluorene	12.50	14.33	15	30	YES
4-Chlorophenyl-phenylether	12.50	13.54	8	30	YES
5-Nitro-o-toluidine	12.50	12.69	2	30	YES
4-Nitroaniline	12.50	14.28	14	30	YES
4,6-Dinitro-2-methylphenol	12.50	14.17	13	30	YES
N-Nitrosodiphenylamine	12.50	14.72	18	30	YES
NDPA as diphenylamine	12.50	14.72	18	30	YES
Tetraethyldithiopyrophospha	12.50	13.10	5	30	YES
1,3,5-Trinitrobenzene	12.50	12.19	-2	30	YES
Diallate (peak 1)	9.38	9.09	-3	30	YES
Phorate	12.50	13.91	11	30	YES
Phenacetin	12.50	12.47	0	30	YES
4-Bromophenyl-phenylether	12.50	13.77	10	30	YES
Diallate (peak 2)	3.13	3.56	14	30	YES
Hexachlorobenzene	12.50	13.81	11	30	YES
Diallate trans/cis	12.50	12.33	-1	30	YES
Dimethoate	12.50	13.50	8	30	YES
4-Aminobiphenyl	12.50	19.44	56	30	NO*
Pentachloronitrobenzene	12.50	12.46	0	30	YES
Pronamide	12.50	13.04	4	30	YES
Dinoseb	12.50	11.73	-6	30	YES
Phenanthrene	12.50	13.96	12	30	YES
Anthracene	12.50	14.48	16	30	YES
Carbazole	12.50	14.66	17	30	YES
Methyl parathion	12.50	14.00	12	30	YES
Di-n-butylphthalate	12.50	14.39	15	30	YES
Parathion	12.50	14.61	17	30	YES
4-Nitroquinoline-1-oxide	150.00	147.12	-2	30	YES
Isodrin	12.50	13.33	7	30	YES
Fluoranthene	12.50	14.53	16	30	YES
Benzidine	62.50	55.60	-11	30	YES
Pyrene	12.50	13.52	8	30	YES
p-Dimethylaminoazobenzene	12.50	14.42	15	30	YES
Chlorobenzilate	12.50	13.14	5	30	YES

NC = Could not calculate

Comments: _____*Compound fails high, run any hits under valid ICV_____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP19760

Method: SW-846 8270D MINI File ID: dk0302.d

ICV SAMPLE ID: rvICV2628 BATCH: 18NOV04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
3,3'-Dimethylbenzidine	25.00	25.78	3	30	YES
Butylbenzylphthalate	12.50	14.09	13	30	YES
2-Acetylaminofluorene	12.50	11.81	-6	30	YES
3,3'-Dichlorobenzidine	12.50	12.51	0	30	YES
Benzo(a)anthracene	12.50	14.80	18	30	YES
Chrysene	12.50	14.05	12	30	YES
4,4'-Methylenebis(2-chloroa	12.50	12.09	-3	30	YES
bis(2-Ethylhexyl)phthalate	12.50	14.24	14	30	YES
6-Methylchrysene	12.50	12.42	-1	30	YES
Di-n-octylphthalate	12.50	14.65	17	30	YES
7,12-Dimethylbenz[a]anthrac	12.50	14.73	18	30	YES
3-Methylcholanthrene	12.50	14.99	20	30	YES
Dibenz(a,h)acridine	12.50	12.74	2	30	YES
Dibenz(a,j)acridine	12.50	13.20	6	30	YES
Indeno(1,2,3-cd)pyrene	12.50	14.89	19	30	YES
Benzo(g,h,i)perylene	12.50	14.38	15	30	YES

NC = Could not calculate

Comments: _____

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7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 11/09/18 Time: 08:48

Lab File ID: dk0731.d Init. Calib. Date(s): 11/04/18 11/04/18

Init. Calib. Times(s): 11:51 15:35

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
1,4-Dioxane	0.844	0.792	7.040	7.5	-6
N-Nitrosodimethylamine	1.289	1.250	7.270	7.5	-3
Pyridine	2.160	2.108	7.320	7.5	-2
2-Picoline	2.156	2.138	7.440	7.5	-1
N-Nitrosomethylethylamine	0.939	0.931	7.440	7.5	-1
Methyl methanesulfonate	1.033	1.041	7.560	7.5	1
N-Nitrosodiethylamine	0.835	0.859	7.710	7.5	3
Ethyl methanesulfonate	0.805	0.830	7.730	7.5	3
Benzaldehyde	1.347	1.377	7.670	7.5	2
Phenol	2.581	2.606	7.570	7.5	1
Aniline	3.036	3.027	7.480	7.5	0
a-methylstyrene	0.156	0.160	7.720	7.5	3
bis(2-Chloroethyl)ether	1.913	1.946	7.630	7.5	2
2-Chlorophenol	1.516	1.582	7.830	7.5	4
1,3-Dichlorobenzene	1.610	1.677	7.810	7.5	4
1,4-Dichlorobenzene	1.609	1.669	7.780	7.5	4
Benzyl alcohol	1.067	1.038	7.300	7.5	-3
1,2-Dichlorobenzene	1.531	1.571	7.700	7.5	3
Indene	1.729	1.788	7.750	7.5	3
2-Methylphenol	1.550	1.624	7.860	7.5	5
2,2'-oxybis(1-Chloropropane)	2.209	2.279	7.740	7.5	3
bis(2-Chloroisopropyl)ether	2.209	2.279	7.740	7.5	3
N-Nitrosopyrrolidine	0.867	0.871	7.530	7.5	0
Acetophenone	2.179	2.156	7.420	7.5	-1
4-Methylphenol	1.760	1.807	7.700	7.5	3
Total Cresols	1.655	1.716	15.550	15.0	4
N-Nitroso-di-n-propylamine	1.363	1.363	7.500	7.5	0
N-Nitrosomorpholine	1.019	1.021	7.520	7.5	0
o-Toluidine	2.704	2.724	7.550	7.5	1
Hexachloroethane	0.753	0.757	7.550	7.5	1
Nitrobenzene	0.545	0.556	7.650	7.5	2
N-Nitrosopiperidine	0.211	0.211	7.530	7.5	0
Isophorone	0.919	0.906	7.390	7.5	-1
2-Nitrophenol	0.206	0.208	7.580	7.5	1
2,4-Dimethylphenol	0.444	0.450	7.610	7.5	1
O,O,O-Triethylphosphorothioate	0.168	0.167	7.480	7.5	0

FORM VII SV-1

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 11/09/18 Time: 08:48

Lab File ID: dk0731.d Init. Calib. Date(s): 11/04/18 11/04/18

Init. Calib. Times(s): 11:51 15:35

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
bis(2-Chloroethoxy)methane	0.579	0.578	7.490	7.5	0
Benzoic acid	0.299	0.240	8.030	10.0	-20
2,4-Dichlorophenol	0.299	0.313	7.850	7.5	5
1,2,4-Trichlorobenzene	0.327	0.335	7.680	7.5	2
Naphthalene	1.182	1.215	7.710	7.5	3
4-Chloroaniline	0.451	0.458	7.600	7.5	1
2,6-Dichlorophenol	0.291	0.301	7.750	7.5	3
Hexachloropropene	0.206	0.203	7.390	7.5	-1
Hexachlorobutadiene	0.176	0.174	7.410	7.5	-1
Quinoline	0.668	0.638	7.160	7.5	-5
Caprolactam	0.122	0.107	6.580	7.5	-12
N-Nitrosodi-n-butylamine	0.348	0.297	6.400	7.5	-15
4-Chloro-3-methylphenol	0.354	0.339	7.190	7.5	-4
Safrole	0.272	0.264	7.280	7.5	-3
2-Methylnaphthalene	0.718	0.726	7.590	7.5	1
1-Methylnaphthalene	0.680	0.688	7.590	7.5	1
Hexachlorocyclopentadiene	0.397	0.416	7.870	7.5	5
1,2,4,5-Tetrachlorobenzene	0.664	0.702	7.930	7.5	6
cis-Isosafrole	0.605	0.619	1.300	1.3	2
2,4,6-Trichlorophenol	0.420	0.435	7.770	7.5	4
2,4,5-Trichlorophenol	0.441	0.460	7.830	7.5	4
trans-Isosafrole	0.660	0.655	6.170	6.2	-1
Isosafrole	0.651	0.649	7.470	7.5	0
1,1'-Biphenyl	1.796	1.894	7.910	7.5	5
2-Chloronaphthalene	1.460	1.507	7.740	7.5	3
1-Chloronaphthalene	1.297	1.405	8.130	7.5	8
Diphenyl ether	0.752	0.795	7.930	7.5	6
2-Nitroaniline	0.467	0.472	7.590	7.5	1
1,4-Naphthoquinone	0.540	0.510	7.090	7.5	-5
1,4-Dinitrobenzene	0.254	0.232	6.870	7.5	-8
Dimethylphthalate	1.507	1.461	7.270	7.5	-3
1,3-Dinitrobenzene	0.281	0.275	7.350	7.5	-2
2,6-Dinitrotoluene	0.349	0.348	7.480	7.5	0
Acenaphthylene	1.985	2.116	8.000	7.5	7
3-Nitroaniline	0.402	0.391	7.300	7.5	-3
Acenaphthene	1.457	1.489	7.660	7.5	2

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 11/09/18 Time: 08:48

Lab File ID: dk0731.d Init. Calib. Date(s): 11/04/18 11/04/18

Init. Calib. Times(s): 11:51 15:35

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
2,4-Dinitrophenol	0.242	0.183	7.570	10.0	-24
4-Nitrophenol	0.307	0.264	6.460	7.5	-14
Pentachlorobenzene	0.524	0.529	7.570	7.5	1
2,4-Dinitrotoluene	0.474	0.436	6.900	7.5	-8
2,4_2,6-Dinitrotoluenes	0.403	0.392	14.610	15.0	-3
Dibenzofuran	2.022	2.033	7.540	7.5	1
1-Naphthylamine	1.531	1.445	7.080	7.5	-6
2,3,4,6-Tetrachlorophenol	0.338	0.317	7.040	7.5	-6
2-Naphthylamine	1.548	1.442	6.990	7.5	-7
Diethylphthalate	1.526	1.382	6.790	7.5	-9
Thionazin	0.332	0.299	6.770	7.5	-10
Fluorene	1.532	1.577	7.720	7.5	3
4-Chlorophenyl-phenylether	0.736	0.731	7.440	7.5	-1
5-Nitro-o-toluidine	0.467	0.429	6.900	7.5	-8
4-Nitroaniline	0.441	0.408	6.940	7.5	-7
4,6-Dinitro-2-methylphenol	0.157	0.138	6.620	7.5	-12
N-Nitrosodiphenylamine (1)	0.689	0.731	7.960	7.5	6
NDPA as diphenylamine	0.689	0.731	7.960	7.5	6
1,2-Diphenylhydrazine	1.127	1.231	8.200	7.5	9
Tetraethyldithiopyrophosphate	0.166	0.158	7.150	7.5	-5
1,3,5-Trinitrobenzene	0.101	0.079	5.890	7.5	-21
Diallate (peak 1)	0.529	0.530	6.240	6.2	0
Phorate	0.650	0.670	7.720	7.5	3
Phenacetin	0.506	0.446	6.610	7.5	-12
4-Bromophenyl-phenylether	0.200	0.211	7.890	7.5	5
Diallate (peak 2)	0.413	0.395	1.220	1.3	-4
Diallate trans/cis	0.509	0.507	7.470	7.5	0
Hexachlorobenzene	0.208	0.218	7.880	7.5	5
Dimethoate	0.430	0.386	6.730	7.5	-10
Atrazine	0.204	0.192	7.080	7.5	-6
Pentachlorophenol	0.139	0.130	7.030	7.5	-6
4-Aminobiphenyl	0.591	0.589	7.480	7.5	0
Pentachloronitrobenzene	0.097	0.090	6.990	7.5	-7
Pronamide	0.361	0.332	6.890	7.5	-8
Dinoseb	0.226	0.183	6.060	7.5	-19
Phenanthrene	1.203	1.212	7.560	7.5	1

(1) Cannot be Separated from Diphenylamine

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 11/09/18 Time: 08:48

Lab File ID: dk0731.d Init. Calib. Date(s): 11/04/18 11/04/18

Init. Calib. Times(s): 11:51 15:35

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Anthracene	1.171	1.217	7.800	7.5	4
Carbazole	1.146	1.127	7.380	7.5	-2
Methyl parathion	0.326	0.287	6.610	7.5	-12
Di-n-butylphthalate	1.427	1.262	6.630	7.5	-12
Parathion	0.207	0.176	6.370	7.5	-15
4-Nitroquinoline-1-oxide	0.149	0.083	5.420	7.5	-28
Octachlorostyrene	0.081	0.076	7.070	7.5	-6
Isodrin	0.136	0.132	7.290	7.5	-3
Fluoranthene	1.259	1.221	7.270	7.5	-3
Benzidine	1.001	0.926	20.830	22.5	-7
Pyrene	1.436	1.446	7.550	7.5	1
p-Dimethylaminoazobenzene	0.228	0.201	6.640	7.5	-11
Chlorobenzilate	0.450	0.410	6.830	7.5	-9
3,3'-Dimethylbenzidine	0.859	0.748	6.530	7.5	-13
Butylbenzylphthalate	0.721	0.635	6.600	7.5	-12
2-Acetylaminofluorene	0.582	0.450	5.800	7.5	-23
3,3'-Dichlorobenzidine	0.492	0.438	6.670	7.5	-11
4,4'-Methylenebis(2-chloroanil	0.281	0.235	6.260	7.5	-16
Benzo(a)anthracene	1.168	1.134	7.280	7.5	-3
Chrysene	1.228	1.214	7.420	7.5	-1
bis(2-Ethylhexyl)phthalate	1.010	0.806	5.980	7.5	-20
6-Methylchrysene	0.858	0.780	6.820	7.5	-9
Di-n-octylphthalate	1.698	1.464	6.470	7.5	-14
Benzo(b)fluoranthene	1.196	1.308	8.200	7.5	9
7,12-Dimethylbenz[a]anthracene	0.586	0.611	7.810	7.5	4
Benzo(k)fluoranthene	1.243	1.355	8.170	7.5	9
Benzo(a)pyrene	1.096	1.257	8.600	7.5	15
3-Methylcholanthrene	0.532	0.549	7.740	7.5	3
Dibenz(a,h)acridine	0.890	0.887	7.480	7.5	0
Dibenz(a,j)acridine	0.972	1.027	7.930	7.5	6
Indeno(1,2,3-cd)pyrene	0.979	1.058	8.100	7.5	8
Dibenz(a,h)anthracene	1.086	1.207	8.330	7.5	11
Benzo(g,h,i)perylene	1.088	1.231	8.490	7.5	13
Total PAHs	1.136	1.375	163.450	135.0	21
2-Fluorophenol	1.603	1.653	15.460	15.0	3

FORM VII SV-1

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19760 Calibration Date: 11/09/18 Time: 08:48

Lab File ID: dk0731.d Init. Calib. Date(s): 11/04/18 11/04/18

Init. Calib. Times(s): 11:51 15:35

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Phenol-d6	2.216	2.258	15.280	15.0	2
Nitrobenzene-d5	0.539	0.547	15.220	15.0	1
2-Fluorobiphenyl	1.662	1.735	15.650	15.0	4
2,4,6-Tribromophenol	0.165	0.154	13.990	15.0	-7
Terphenyl-d14	0.817	0.796	14.620	15.0	-3
			Average %Drift:		6

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP19760.i/18nov04.b/dk0211.d **
/chem/HP19760.i/18nov04.b/dk0212.d
/chem/HP19760.i/18nov04.b/dk0213.d
/chem/HP19760.i/18nov04.b/dk0214.d
/chem/HP19760.i/18nov04.b/dk0215.d
/chem/HP19760.i/18nov04.b/dk0216.d
/chem/HP19760.i/18nov04.b/dk0217.d
/chem/HP19760.i/18nov04.b/dk0218.d

** indicates the Mid Level Calibration Standard.

Mid Level Calibration Standard is used for comparison.

Current Continuing Calibration Standard:

/chem/HP19760.i/18nov09.b/dk0731.d

Area Summary

Internal Standard Name	File ID: dk0731.d	ICAL Area	Low Limit	High Limit	In Spec
1,4-Dichlorobenzene-d4	217845	261444	130722	522888	Yes
Naphthalene-d8	791698	972956	486478	1945912	Yes
Acenaphthene-d10	335776	434824	217412	869648	Yes
Phenanthrene-d10	562609	809458	404729	1618916	Yes
Pyrene-d10	505815	787242	393621	1574484	Yes
Perylene-d12	449576	796000	398000	1592000	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

Internal Standard Name	File ID: dk0731.d	ICAL RT	In Spec
1,4-Dichlorobenzene-d4	6.682	6.755	Yes
Naphthalene-d8	8.617	8.690	Yes
Acenaphthene-d10	11.415	11.482	Yes
Phenanthrene-d10	13.321	13.382	Yes
Pyrene-d10	15.262	15.340	Yes
Perylene-d12	19.727	19.811	Yes

A "No" indicates the retention time is greater than 10 seconds from the RT of the referenced standard.

Comments: _____

Report generated on 11/09/2018 at 09:30

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): dk0731.d Date Analyzed: 11/09/18

Instrument ID: HP19760 Time Analyzed: 08:48

	IS1(DCB)		IS2(NPT)		IS3(ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	217845	6.682	791698	8.617	335776	11.415
UPPER LIMIT	435690	7.182	1583396	9.117	671552	11.915
LOWER LIMIT	108923	6.182	395849	8.117	167888	10.915
LLI SAMPLE NO.						
01 SBLKWL310	193914	6.682	695817	8.617	284880	11.415
02 310WLLCS	190970	6.682	697329	8.617	293134	11.415
03 310WLLCSD	220585	6.682	778984	8.617	321246	11.415
04 9882676	204229	6.682	733820	8.617	302352	11.409
05 9882677	196816	6.682	721046	8.617	294326	11.409
06 9882678	197568	6.682	715680	8.617	293424	11.415
07 9882679	195202	6.688	717364	8.623	312876	11.415
08 9882680	194241	6.699	717265	8.629	306968	11.415
09 9882682	218202	6.682	779174	8.617	311617	11.409
10 9882892	205525	6.682	740773	8.617	298894	11.409
11 9882893	206538	6.682	753497	8.617	308142	11.415
12 9882894	208161	6.682	764427	8.617	307296	11.409
13 9882895	208766	6.682	756154	8.617	308158	11.409
14 9882896	203256	6.682	738115	8.617	299954	11.409
15 9882897	215180	6.682	785317	8.617	321621	11.409
16 9882898	198545	6.682	728693	8.617	295914	11.415
17 9882899	210097	6.682	745051	8.617	304984	11.409

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): dk0731.d Date Analyzed: 11/09/18

Instrument ID: HP19760 Time Analyzed: 08:48

	IS4(PHN)		IS5(PYR)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	562609	13.321	505815	15.262	449576	19.727
UPPER LIMIT	1125218	13.821	1011630	15.762	899152	20.227
LOWER LIMIT	281305	12.821	252908	14.762	224788	19.227
LLI SAMPLE NO.						
01 SBLKWL310	466776	13.321	367948	15.262	298313	19.726
02 310WLLCS	452219	13.321	416067	15.262	391593	19.721
03 310WLLCSD	507503	13.321	472526	15.262	452142	19.721
04 9882676	498053	13.321	400403	15.262	344870	19.721
05 9882677	487287	13.321	401991	15.262	350392	19.721
06 9882678	469522	13.321	372063	15.262	318932	19.721
07 9882679	516083	13.321	461124	15.262	414448	19.721
08 9882680	508220	13.321	444440	15.262	414261	19.721
09 9882682	530383	13.321	442877	15.262	419923	19.721
10 9882892	481410	13.321	406319	15.262	365704	19.721
11 9882893	506736	13.321	413171	15.262	352873	19.721
12 9882894	489022	13.321	393625	15.262	342929	19.726
13 9882895	490406	13.321	392156	15.262	332842	19.726
14 9882896	486460	13.321	398428	15.262	347397	19.721
15 9882897	534608	13.321	440067	15.262	360193	19.721
16 9882898	479303	13.321	388733	15.262	326533	19.721
17 9882899	494513	13.321	394535	15.262	337585	19.726

IS4 (PHN) = Phenanthrene-d10
IS5 (PYR) = Pyrene-d10
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

Sample Data

Semivolatiles by GC/MS

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

OS-03

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882892

Sample wt/vol: 249 (g/mL)ML Lab File ID: dk0741.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OS-03

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882892

Sample wt/vol: 249 (g/mL)ML Lab File ID: dk0741.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene			0.1	U
99-09-2	3-Nitroaniline			3	U
83-32-9	Acenaphthene			0.1	U
51-28-5	2,4-Dinitrophenol			14	U
100-02-7	4-Nitrophenol			10	U
121-14-2	2,4-Dinitrotoluene			1	U
132-64-9	Dibenzofuran			0.5	U
84-66-2	Diethylphthalate			2	U
86-73-7	Fluorene			0.1	U
7005-72-3	4-Chlorophenyl-phenylether			0.5	U
100-01-6	4-Nitroaniline			0.9	U
534-52-1	4,6-Dinitro-2-methylphenol			8	U
86-30-6	N-Nitrosodiphenylamine			0.7	U
101-55-3	4-Bromophenyl-phenylether			0.5	U
118-74-1	Hexachlorobenzene			0.1	U
87-86-5	Pentachlorophenol			1	U
85-01-8	Phenanthrene			0.1	U
120-12-7	Anthracene			0.1	U
86-74-8	Carbazole			0.5	U
84-74-2	Di-n-butylphthalate			2	U
206-44-0	Fluoranthene			0.1	U
129-00-0	Pyrene			0.1	U
85-68-7	Butylbenzylphthalate			2	U
91-94-1	3,3'-Dichlorobenzidine			3	U
56-55-3	Benzo(a)anthracene			0.1	U
218-01-9	Chrysene			0.1	U
117-81-7	bis(2-Ethylhexyl)phthalate			5	U
117-84-0	Di-n-octylphthalate			5	U
205-99-2	Benzo(b)fluoranthene			0.1	U
207-08-9	Benzo(k)fluoranthene			0.1	U

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OS-03

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882892

Sample wt/vol: 249 (g/mL)ML Lab File ID: dk0741.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

OS-03 Lancaster Laboratories, Inc. 9882892
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18nov09.b/dk0741.d Injection date and time: **09-NOV-2018 14:26**
Data file Sample Info. Line: OS-03;9882892;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18310WAL**
Date, time and analyst ID of latest file update: 09-Nov-2018 17:19 art12405

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 249 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.682	(0.000)	857	152	205525	(-6)	5.00	
65) Naphthalene-d8	8.617	(0.000)	1189	136	740773	(-6)	5.00	
113) Acenaphthene-d10	11.409	(0.006)	1668	164	298894	(-11)	5.00	
153) Phenanthrene-d10	13.321	(0.000)	1996	188	481410	(-14)	5.00	
175) Pyrene-d10	15.262	(0.000)	2329	212	406319	(-20)	5.00	
213) Perylene-d12	19.721	(0.006)	3094	264	365704	(-19)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.782	(0.000)	112	1495429	22.691	45%		10 - 85
17) Phenol-d6	(1)	6.163	(0.001)	99	1462567	16.055	32%		10 - 72
44) Nitrobenzene-d5	(2)	7.515	(0.000)	82	1332150	16.668	67%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.366	(0.000)	172	1911220	19.236	77%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.481	(-0.001)	330	379390	38.546	77%		29 - 133
179) Terphenyl-d14	(5)	15.582	(0.000)	244	1445195	21.769	87%		27 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

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Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18nov09.b/dk0741.d
Injection date and time: **09-NOV-2018 14:26**
Data file Sample Info. Line: OS-03;9882892;1;0;SAMPLE;;;
Instrument ID: **HP19760.i** Batch: **18310WAL**
Date, time and analyst ID of latest file update: 09-Nov-2018 17:19 art12405

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 249 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

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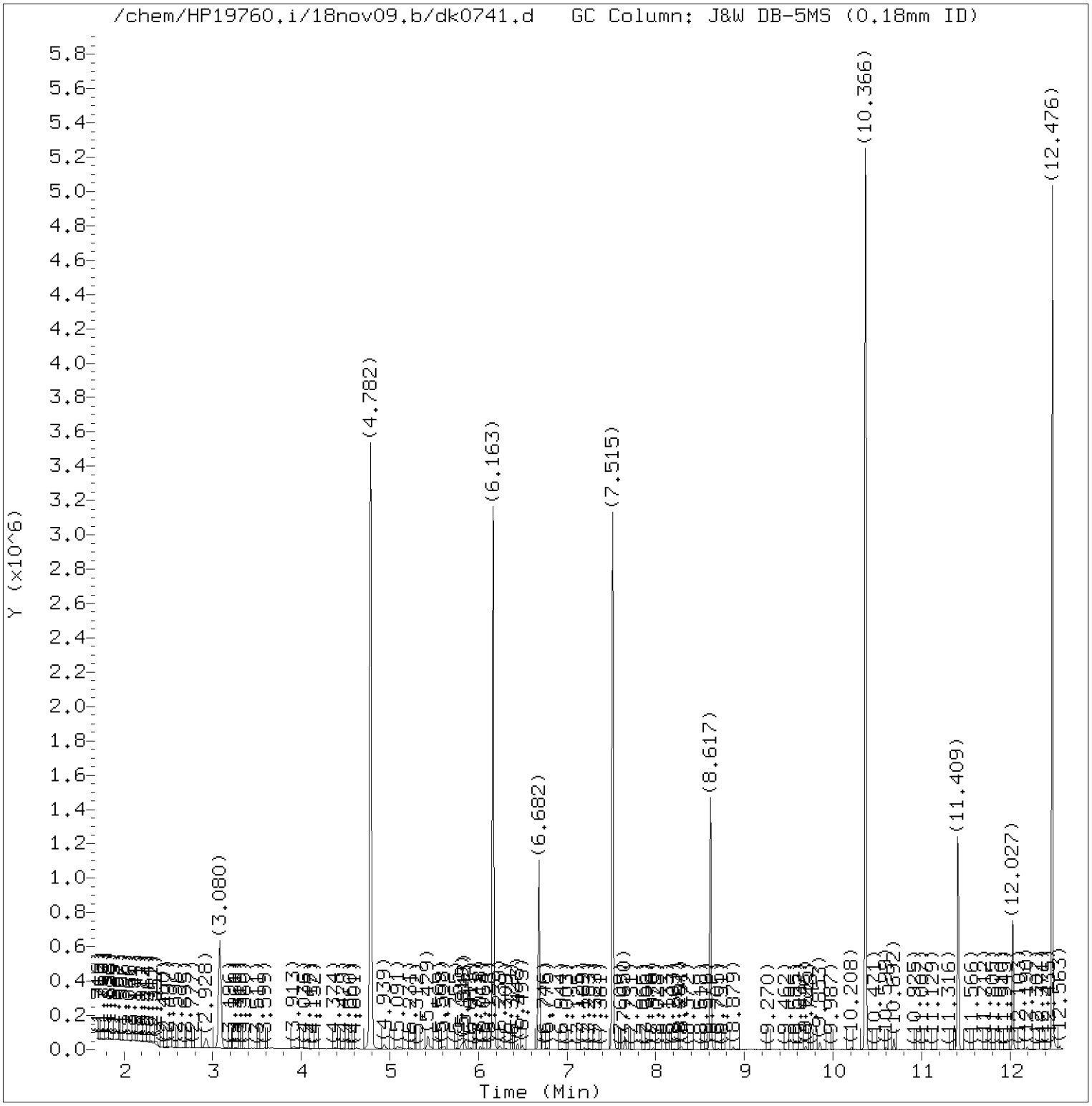
Secondary review performed and digitally signed by Chad A. Moline on 11/12/2018 at 15:58. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0741.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 14:26 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:19 art12405

Sample Name: OS-03 Lab Sample ID: 9882892

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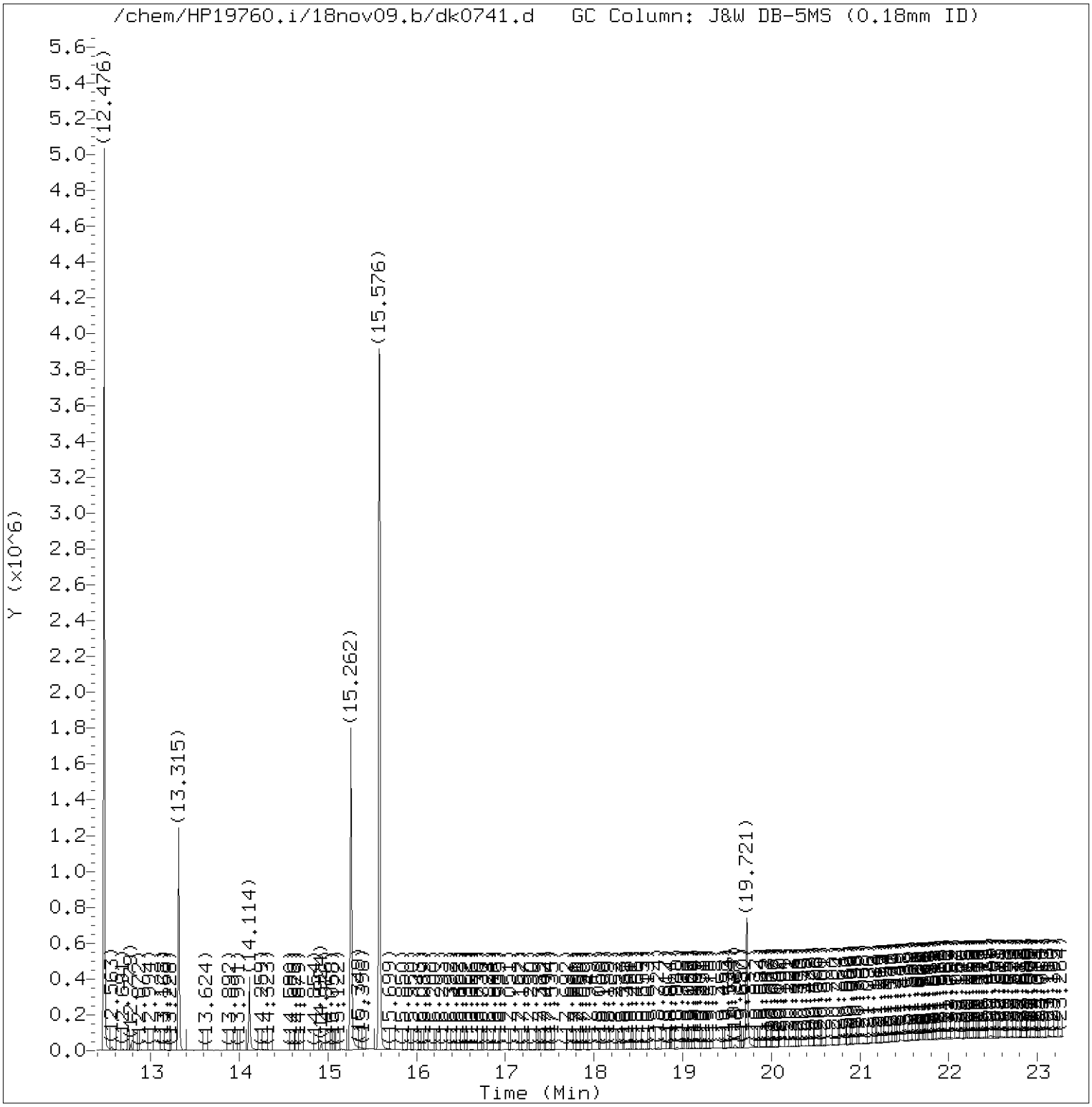
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0741.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 14:26 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:19 art12405

Sample Name: OS-03 Lab Sample ID: 9882892

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0741.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 14:26 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:19 art12405

Sample Name: OS-03 Lab Sample ID: 9882892

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.782	112	1495429	22.691
17)$Phenol-d6	(1)	6.163	99	1462567	16.055
25)*1,4-Dichlorobenzene-d4	(1)	6.682	152	205525	5.000
44)$Nitrobenzene-d5	(2)	7.515	82	1332150	16.668
65)*Naphthalene-d8	(2)	8.617	136	740773	5.000
93)$2-Fluorobiphenyl	(3)	10.366	172	1911220	19.236
113)*Acenaphthene-d10	(3)	11.409	164	298894	5.000
135)$2,4,6-Tribromophenol	(3)	12.481	330	379390	38.546
153)*Phenanthrene-d10	(4)	13.321	188	481410	5.000
175)*Pyrene-d10	(5)	15.262	212	406319	5.000
179)$Terphenyl-d14	(5)	15.582	244	1445195	21.769
213)*Perylene-d12	(6)	19.721	264	365704	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

OS-02

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882893

Sample wt/vol: 239 (g/mL)ML Lab File ID: dk0742.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OS-02

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882893

Sample wt/vol: 239 (g/mL)ML Lab File ID: dk0742.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		15	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OS-02

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882893

Sample wt/vol: 239 (g/mL)ML Lab File ID: dk0742.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

OS-02 Lancaster Laboratories, Inc. 9882893
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18nov09.b/dk0742.d Injection date and time: **09-NOV-2018 14:54**
Data file Sample Info. Line: OS-02;9882893;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18310WAL**
Date, time and analyst ID of latest file update: 09-Nov-2018 17:19 art12405

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 239 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.682	(0.000)	857	152	206538	(-5)	5.00	
65) Naphthalene-d8	8.617	(0.000)	1189	136	753497	(-5)	5.00	
113) Acenaphthene-d10	11.415	(0.000)	1669	164	308142	(-8)	5.00	
153) Phenanthrene-d10	13.321	(0.000)	1996	188	506736	(-10)	5.00	
175) Pyrene-d10	15.262	(0.000)	2329	212	413171	(-18)	5.00	
213) Perylene-d12	19.721	(0.006)	3094	264	352873	(-22)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.782	(0.000)	112	1343854	20.291	41%		10 - 85
17) Phenol-d6	(1)	6.163	(0.001)	99	1299024	14.190	28%		10 - 72
44) Nitrobenzene-d5	(2)	7.516	(0.000)	82	1276198	15.698	63%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.372	(0.000)	172	1818809	17.756	71%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.482	(0.000)	330	339625	33.470	67%		29 - 133
179) Terphenyl-d14	(5)	15.582	(0.000)	244	1408086	20.859	83%		27 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

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Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18nov09.b/dk0742.d
Injection date and time: **09-NOV-2018 14:54**
Data file Sample Info. Line: OS-02;9882893;1;0;SAMPLE;;;
Instrument ID: **HP19760.i** Batch: **18310WAL**
Date, time and analyst ID of latest file update: 09-Nov-2018 17:19 art12405

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

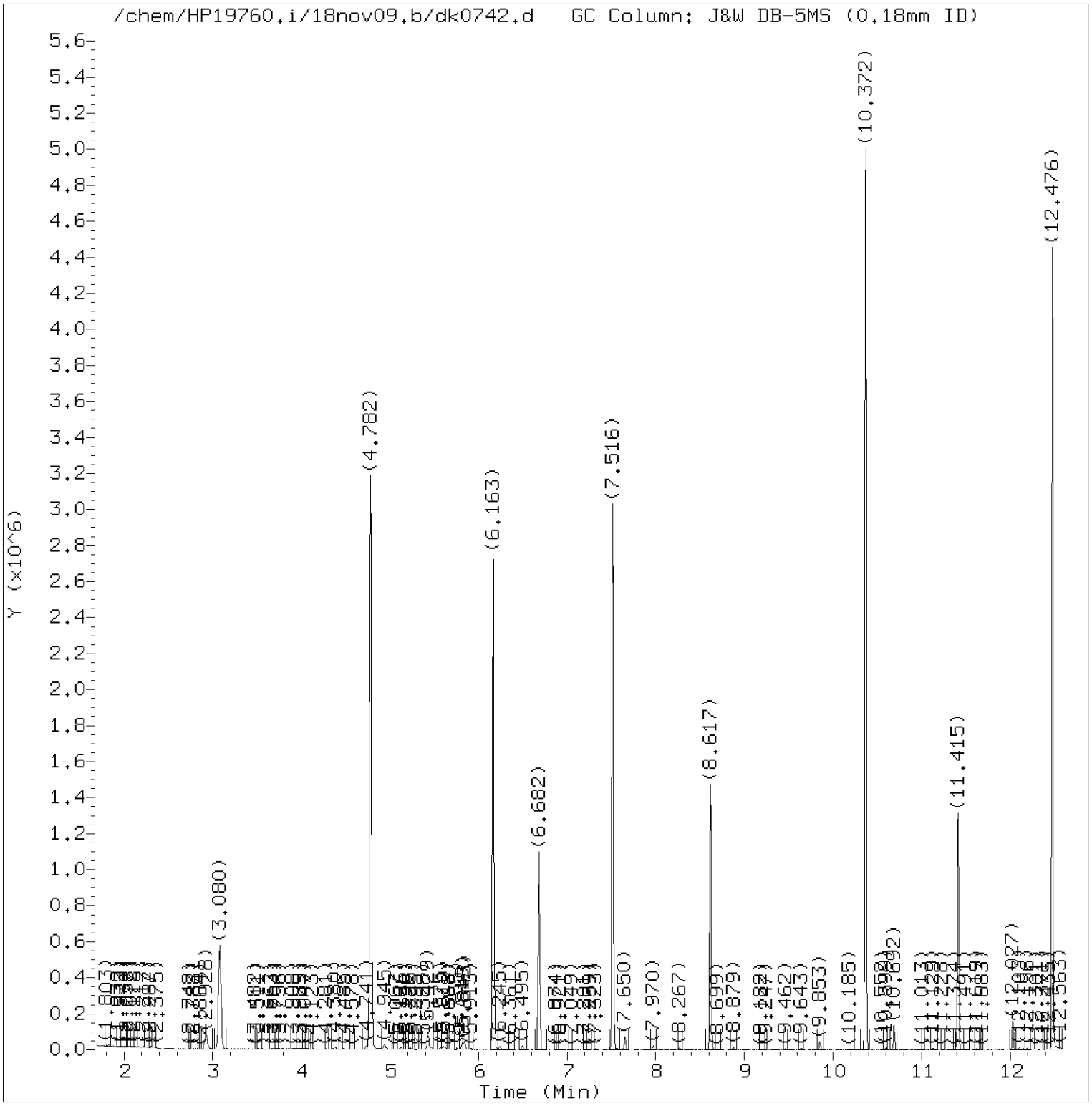
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 239 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

Digitally signed by Ashley R. Transue on 11/09/2018 at 17:58. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 09:11. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

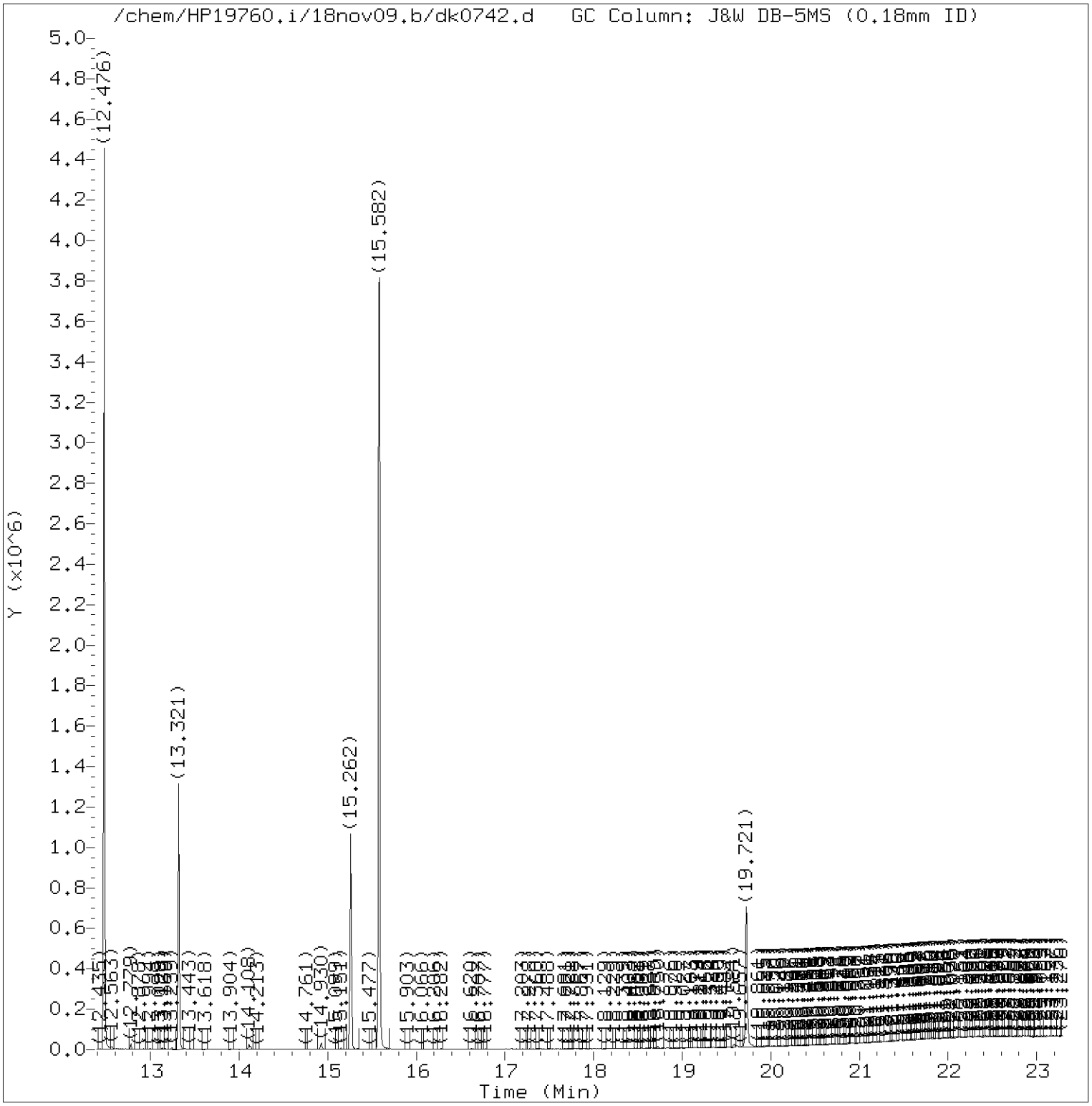
Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0742.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 14:54 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:19 art12405

Sample Name: OS-02 Lab Sample ID: 9882893

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0742.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 14:54 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:19 art12405

Sample Name: OS-02 Lab Sample ID: 9882893

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0742.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 14:54 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:19 art12405

Sample Name: OS-02 Lab Sample ID: 9882893

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.782	112	1343854	20.291
17)$Phenol-d6	(1)	6.163	99	1299024	14.190
25)*1,4-Dichlorobenzene-d4	(1)	6.682	152	206538	5.000
44)$Nitrobenzene-d5	(2)	7.516	82	1276198	15.698
65)*Naphthalene-d8	(2)	8.617	136	753497	5.000
93)$2-Fluorobiphenyl	(3)	10.372	172	1818809	17.756
113)*Acenaphthene-d10	(3)	11.415	164	308142	5.000
135)$2,4,6-Tribromophenol	(3)	12.482	330	339625	33.470
153)*Phenanthrene-d10	(4)	13.321	188	506736	5.000
175)*Pyrene-d10	(5)	15.262	212	413171	5.000
179)$Terphenyl-d14	(5)	15.582	244	1408086	20.859
213)*Perylene-d12	(6)	19.721	264	352873	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TF-23

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882894

Sample wt/vol: 246 (g/mL)ML Lab File ID: dk0743.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-23

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882894

Sample wt/vol: 246 (g/mL)ML Lab File ID: dk0743.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		14	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-23

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882894

Sample wt/vol: 246 (g/mL)ML Lab File ID: dk0743.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

TF-23

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

9882894

Data file: /chem/HP19760.i/18nov09.b/dk0743.d
Data file Sample Info. Line: TF-23;9882894;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 09-Nov-2018 17:16 art12405

Injection date and time: **09-NOV-2018 15:22**
Instrument ID: **HP19760.i** Batch: **18310WAL**

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143Ms**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 246 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.682	(0.000)	857	152	208161	(-4)	5.00	
65) Naphthalene-d8	8.617	(0.000)	1189	136	764427	(-3)	5.00	
113) Acenaphthene-d10	11.409	(0.006)	1668	164	307296	(-8)	5.00	
153) Phenanthrene-d10	13.321	(0.000)	1996	188	489022	(-13)	5.00	
175) Pyrene-d10	15.262	(0.000)	2329	212	393625	(-22)	5.00	
213) Perylene-d12	19.726	(0.000)	3095	264	342929	(-24)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.793	(-0.002)	112	5774043	86.505	58%		10 - 85
17) Phenol-d6	(1)	6.175	(-0.001)	99	5776159	62.604	42%		10 - 72
44) Nitrobenzene-d5	(2)	7.527	(-0.001)	82	8183570	99.223	79%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.377	(-0.001)	172	10471857	102.514	82%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.481	(-0.001)	330	1278955	126.389	84%		29 - 133
179) Terphenyl-d14	(5)	15.588	(0.000)	244	7646430	118.895	95%		27 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

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TF-23

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

9882894

Data file: /chem/HP19760.i/18nov09.b/dk0743.d
Data file Sample Info. Line: TF-23;9882894;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 09-Nov-2018 17:16 art12405

Injection date and time: **09-NOV-2018 15:22**
Instrument ID: **HP19760.i** Batch: **18310WAL**

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143Ms**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

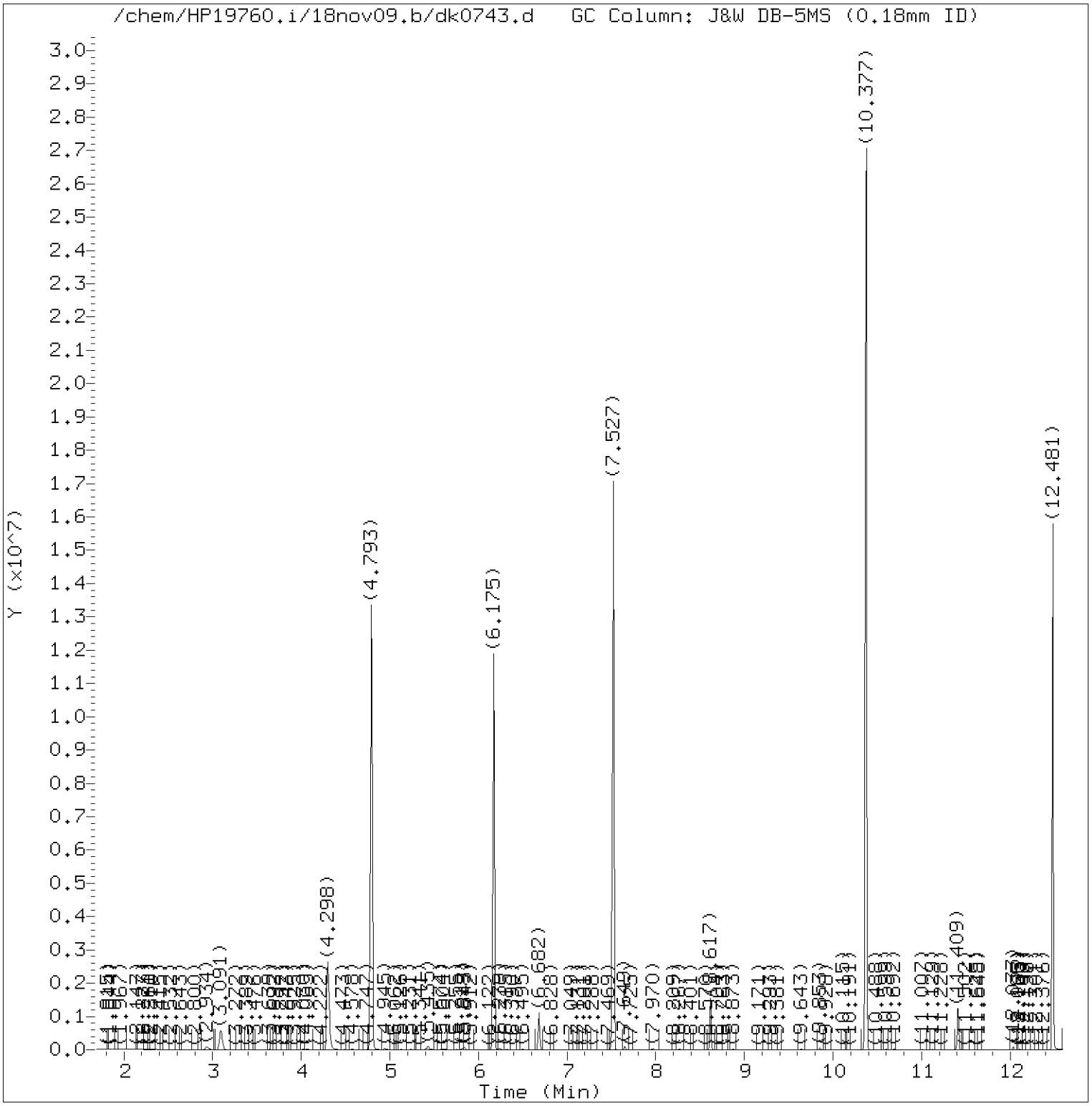
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 246 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

Digitally signed by Ashley R. Transue on 11/09/2018 at 17:58. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 09:11. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

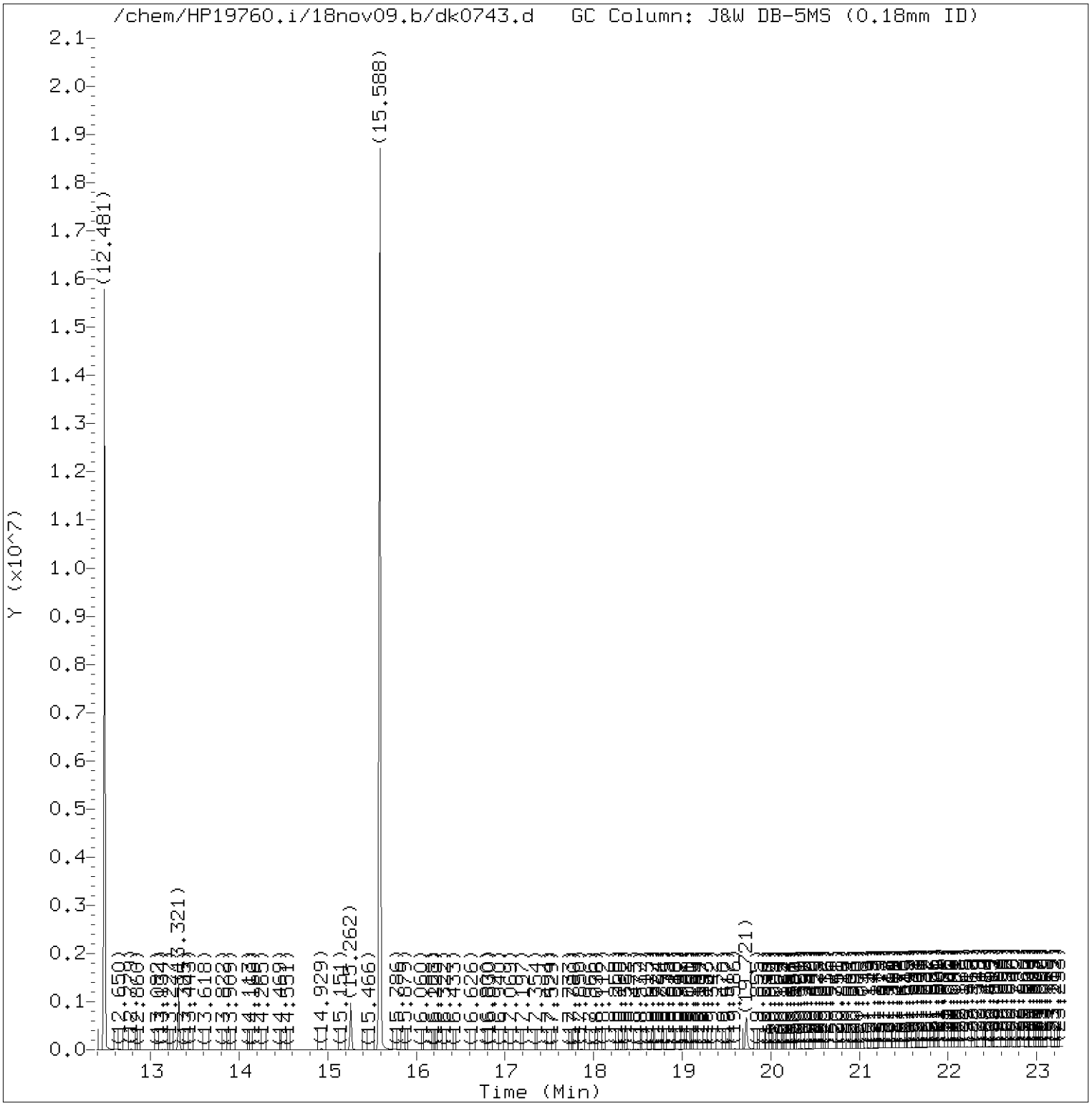
Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0743.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 15:22 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:16 art12405

Sample Name: TF-23 Lab Sample ID: 9882894

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0743.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 15:22 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:16 art12405

Sample Name: TF-23 Lab Sample ID: 9882894

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0743.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 15:22 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:16 art12405

Sample Name: TF-23 Lab Sample ID: 9882894

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.793	112	5774043	86.505
17)$Phenol-d6	(1)	6.175	99	5776159	62.604
25)*1,4-Dichlorobenzene-d4	(1)	6.682	152	208161	5.000
44)$Nitrobenzene-d5	(2)	7.527	82	8183570	99.223
65)*Naphthalene-d8	(2)	8.617	136	764427	5.000
93)$2-Fluorobiphenyl	(3)	10.377	172	10471857	102.514
113)*Acenaphthene-d10	(3)	11.409	164	307296	5.000
135)$2,4,6-Tribromophenol	(3)	12.481	330	1278955	126.389
153)*Phenanthrene-d10	(4)	13.321	188	489022	5.000
175)*Pyrene-d10	(5)	15.262	212	393625	5.000
179)$Terphenyl-d14	(5)	15.588	244	7646430	118.895
213)*Perylene-d12	(6)	19.726	264	342929	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-05

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882895

Sample wt/vol: 228 (g/mL)ML Lab File ID: dk0744.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.8	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-05

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882895

Sample wt/vol: 228 (g/mL)ML Lab File ID: dk0744.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		15	U	
100-02-7	4-Nitrophenol		11	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		1	U	
534-52-1	4,6-Dinitro-2-methylphenol		9	U	
86-30-6	N-Nitrosodiphenylamine		0.8	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TF-05

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882895

Sample wt/vol: 228 (g/mL)ML Lab File ID: dk0744.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

TF-05 Lancaster Laboratories, Inc. 9882895
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18nov09.b/dk0744.d Injection date and time: **09-NOV-2018 15:51**
Data file Sample Info. Line: TF-05;9882895;1;0;SAMPLE;;; Instrument ID: **HP19760.i** Batch: **18310WAL**
Date, time and analyst ID of latest file update: 09-Nov-2018 17:17 art12405

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143Ms**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 228 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.682	(0.000)	857	152	208766	(-4)	5.00	
65) Naphthalene-d8	8.617	(0.000)	1189	136	756154	(-4)	5.00	
113) Acenaphthene-d10	11.409	(0.006)	1668	164	308158	(-8)	5.00	
153) Phenanthrene-d10	13.321	(0.000)	1996	188	490406	(-13)	5.00	
175) Pyrene-d10	15.262	(0.000)	2329	212	392156	(-22)	5.00	
213) Perylene-d12	19.726	(0.000)	3095	264	332842	(-26)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.793	(-0.002)	112	6033652	90.132	60%		10 - 85
17) Phenol-d6	(1)	6.175	(-0.001)	99	6133142	66.280	44%		10 - 72
44) Nitrobenzene-d5	(2)	7.527	(-0.001)	82	8389330	102.831	82%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.377	(-0.001)	172	10625722	103.729	83%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.481	(-0.001)	330	1212773	119.513	80%		29 - 133
179) Terphenyl-d14	(5)	15.588	(0.000)	244	6824236	106.508	85%		27 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

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Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18nov09.b/dk0744.d
Injection date and time: **09-NOV-2018 15:51**
Data file Sample Info. Line: TF-05;9882895;1;0;SAMPLE;;;
Instrument ID: **HP19760.i** Batch: **18310WAL**
Date, time and analyst ID of latest file update: 09-Nov-2018 17:17 art12405

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143Ms**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 228 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

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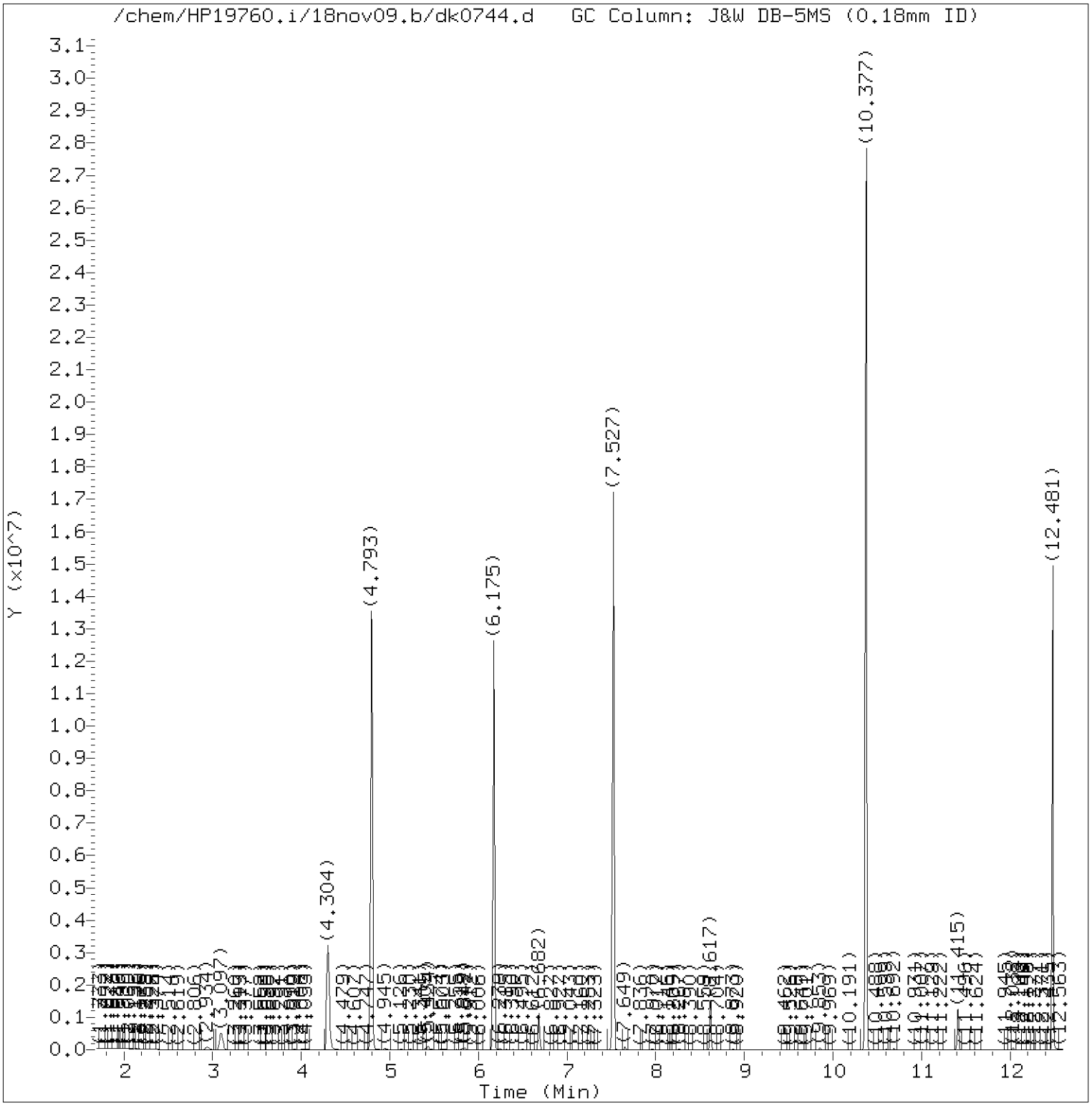
Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 09:11. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0744.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 15:51 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:17 art12405

Sample Name: TF-05 Lab Sample ID: 9882895

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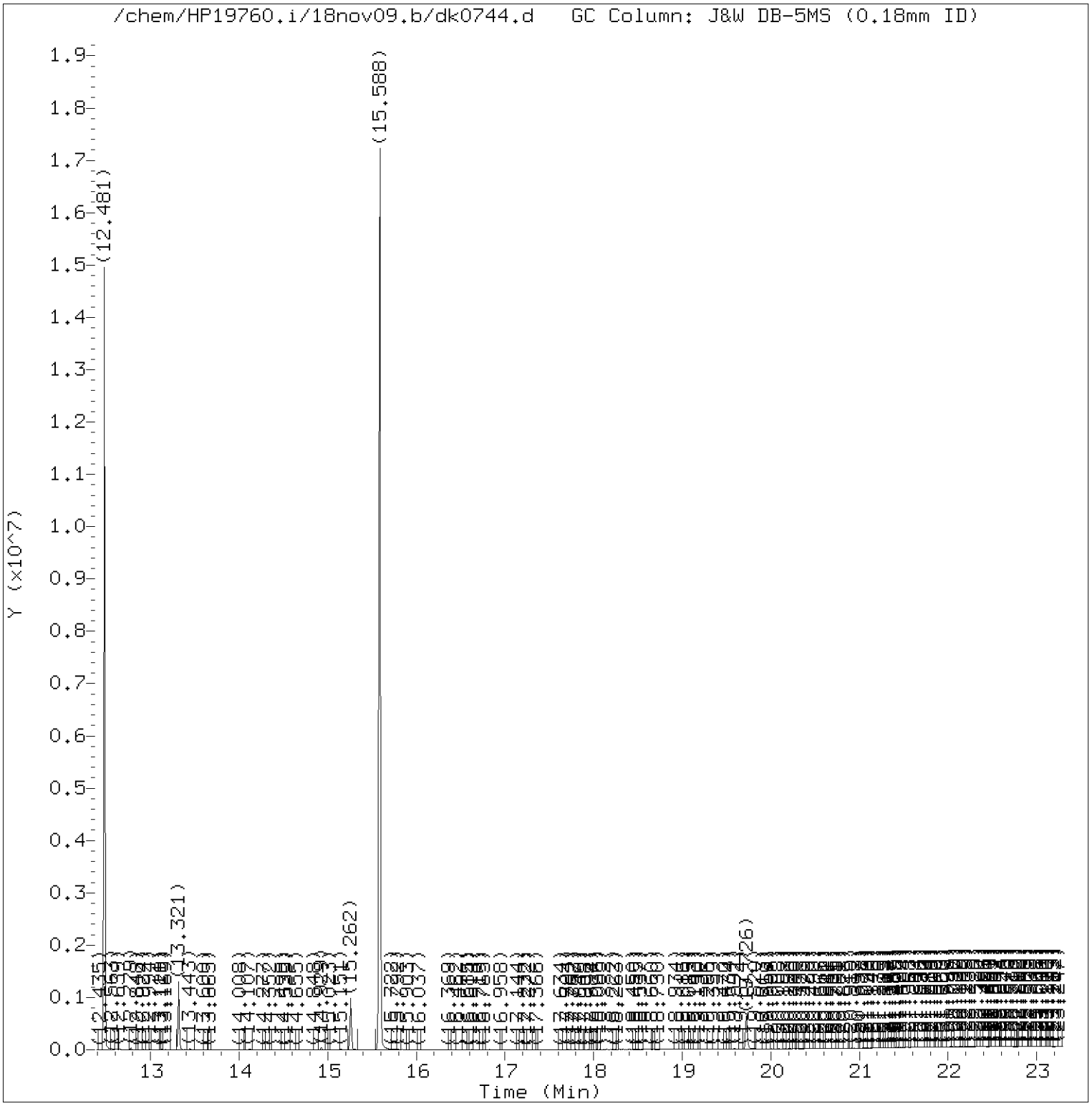
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0744.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 15:51 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:17 art12405

Sample Name: TF-05 Lab Sample ID: 9882895

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on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0744.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 15:51 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:17 art12405

Sample Name: TF-05 Lab Sample ID: 9882895

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.793	112	6033652	90.132
17)$Phenol-d6	(1)	6.175	99	6133142	66.280
25)*1,4-Dichlorobenzene-d4	(1)	6.682	152	208766	5.000
44)$Nitrobenzene-d5	(2)	7.527	82	8389330	102.831
65)*Naphthalene-d8	(2)	8.617	136	756154	5.000
93)$2-Fluorobiphenyl	(3)	10.377	172	10625722	103.729
113)*Acenaphthene-d10	(3)	11.409	164	308158	5.000
135)$2,4,6-Tribromophenol	(3)	12.481	330	1212773	119.513
153)*Phenanthrene-d10	(4)	13.321	188	490406	5.000
175)*Pyrene-d10	(5)	15.262	212	392156	5.000
179)$Terphenyl-d14	(5)	15.588	244	6824236	106.508
213)*Perylene-d12	(6)	19.726	264	332842	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DB-8A

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882896

Sample wt/vol: 239 (g/mL)ML Lab File ID: dk0745.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			2	
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DB-8A

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882896

Sample wt/vol: 239 (g/mL)ML Lab File ID: dk0745.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		15	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DB-8A

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882896

Sample wt/vol: 239 (g/mL)ML Lab File ID: dk0745.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

DB-8A

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

9882896

Data file: /chem/HP19760.i/18nov09.b/dk0745.d
Data file Sample Info. Line: DB-8A;9882896;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 09-Nov-2018 17:17 art12405

Injection date and time: **09-NOV-2018 16:19**
Instrument ID: **HP19760.i** Batch: **18310WAL**

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143Ms**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 239 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.682	(0.000)	857	152	203256	(-7)	5.00	
65) Naphthalene-d8	8.617	(0.000)	1189	136	738115	(-7)	5.00	
113) Acenaphthene-d10	11.409	(0.006)	1668	164	299954	(-11)	5.00	
153) Phenanthrene-d10	13.321	(0.000)	1996	188	486460	(-14)	5.00	
175) Pyrene-d10	15.262	(0.000)	2329	212	398428	(-21)	5.00	
213) Perylene-d12	19.721	(0.006)	3094	264	347397	(-23)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.793	(-0.002)	112	5673659	87.052	58%		10 - 85
17) Phenol-d6	(1)	6.175	(-0.001)	99	5700037	63.269	42%		10 - 72
44) Nitrobenzene-d5	(2)	7.527	(-0.001)	82	8415597	105.674	85%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.377	(-0.001)	172	10699288	107.304	86%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.481	(-0.001)	330	1285517	130.146	87%		29 - 133
179) Terphenyl-d14	(5)	15.588	(0.000)	244	8142322	125.080	100%		27 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)	8.879	(-0.000)	225	14576	0.560	2.34			0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18nov09.b/dk0745.d
Injection date and time: **09-NOV-2018 16:19**
Data file Sample Info. Line: DB-8A;9882896;1;0;SAMPLE;;;
Instrument ID: **HP19760.i** Batch: **18310WAL**
Date, time and analyst ID of latest file update: 09-Nov-2018 17:17 art12405

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143Ms**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

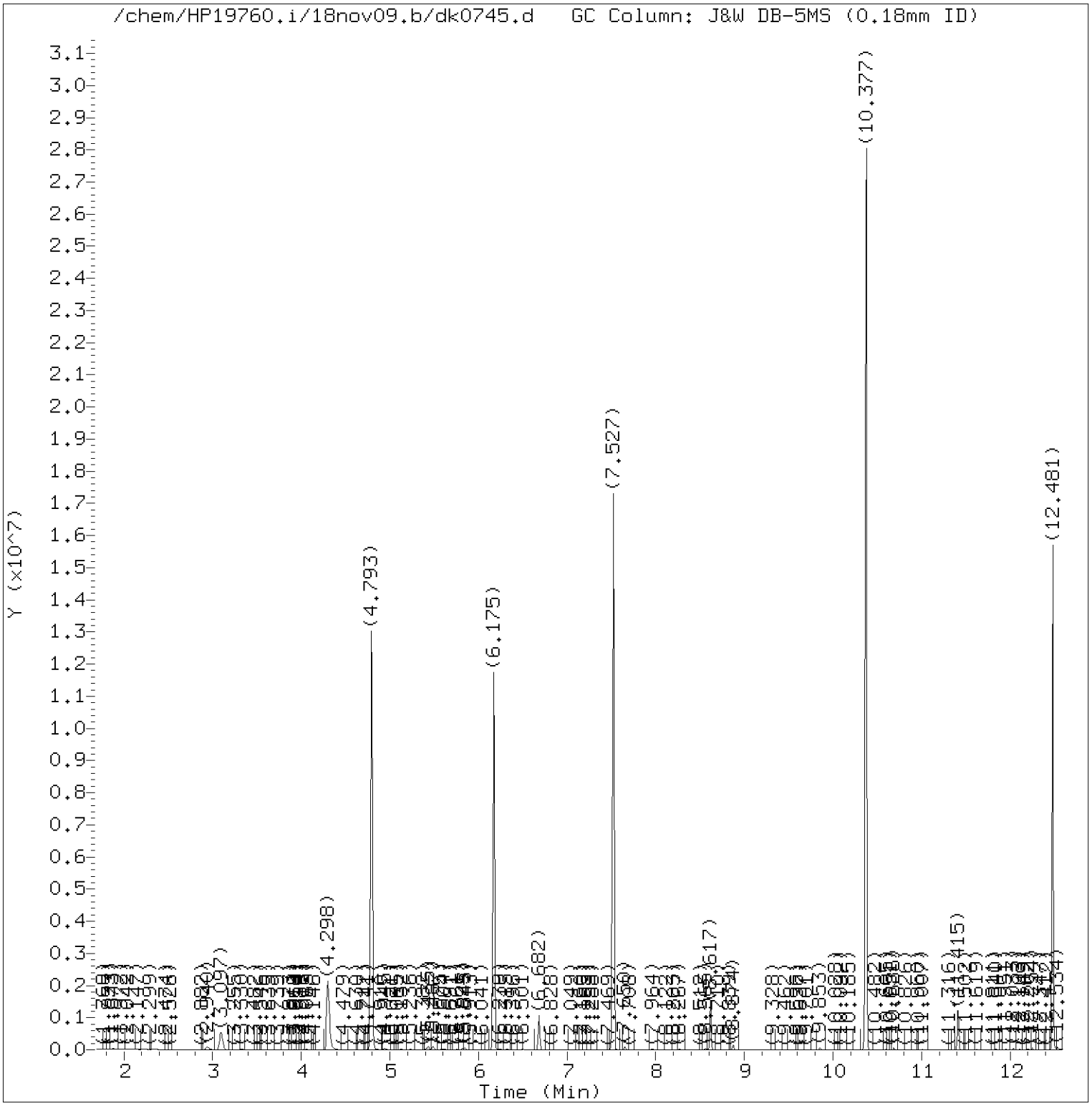
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 239 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

Digitally signed by Ashley R. Transue on 11/09/2018 at 17:58. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 09:11. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

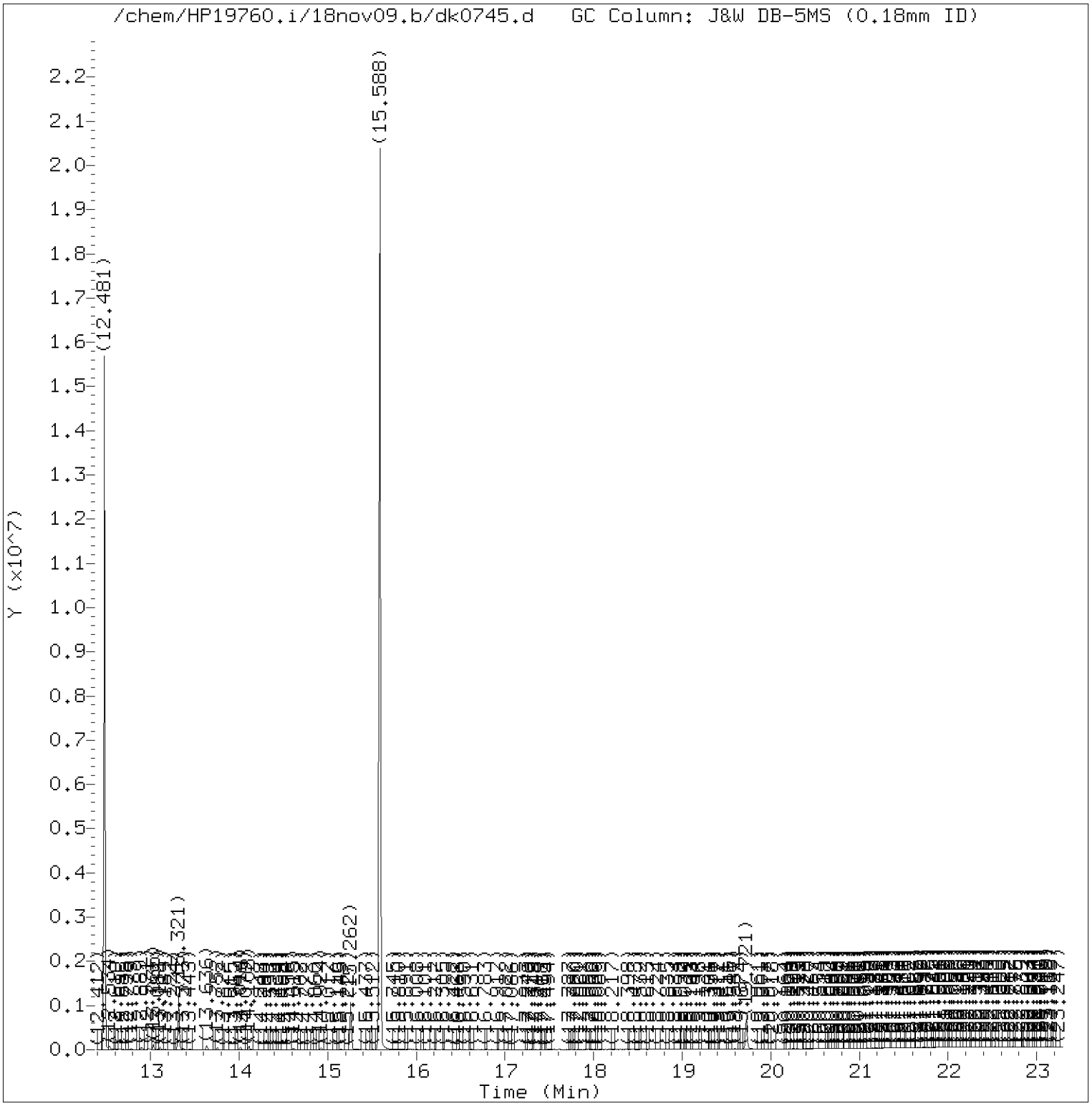
Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0745.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 16:19 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:17 art12405

Sample Name: DB-8A Lab Sample ID: 9882896

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0745.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 16:19 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:17 art12405

Sample Name: DB-8A Lab Sample ID: 9882896

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0745.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 16:19 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:17 art12405

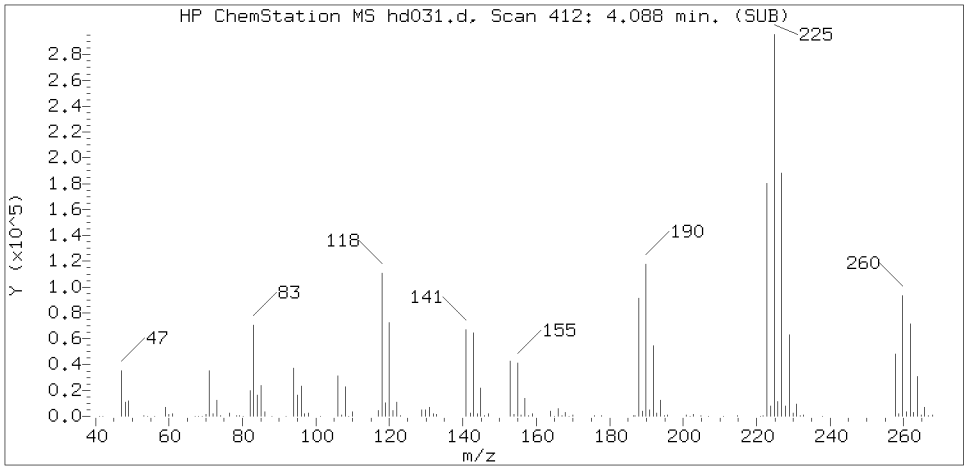
Sample Name: DB-8A Lab Sample ID: 9882896

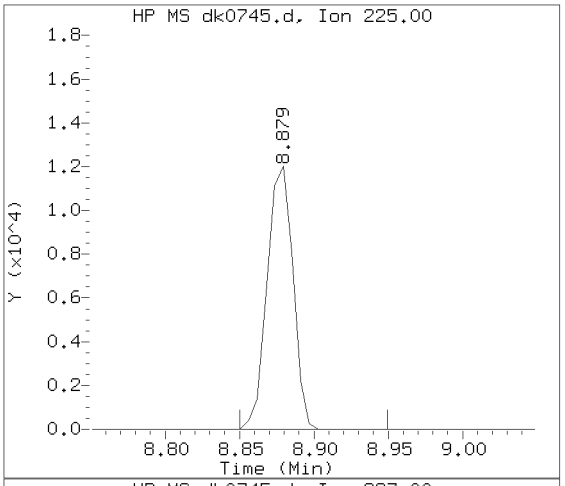
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.793	112	5673659	87.052
17)$Phenol-d6	(1)	6.175	99	5700037	63.269
25)*1,4-Dichlorobenzene-d4	(1)	6.682	152	203256	5.000
44)$Nitrobenzene-d5	(2)	7.527	82	8415597	105.674
65)*Naphthalene-d8	(2)	8.617	136	738115	5.000
71) Hexachlorobutadiene	(2)	8.879	225	14576	0.560
93)$2-Fluorobiphenyl	(3)	10.377	172	10699288	107.304
113)*Acenaphthene-d10	(3)	11.409	164	299954	5.000
135)$2,4,6-Tribromophenol	(3)	12.481	330	1285517	130.146
153)*Phenanthrene-d10	(4)	13.321	188	486460	5.000
175)*Pyrene-d10	(5)	15.262	212	398428	5.000
179)$Terphenyl-d14	(5)	15.588	244	8142322	125.080
213)*Perylene-d12	(6)	19.721	264	347397	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

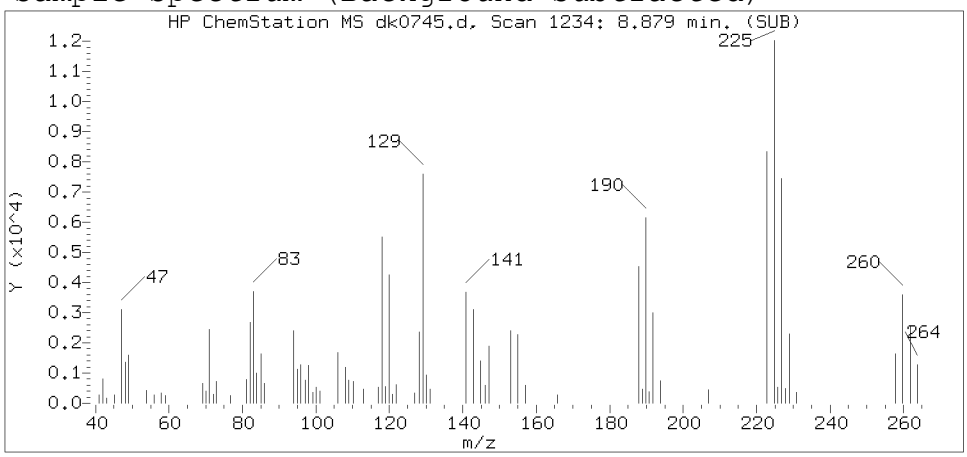
Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405

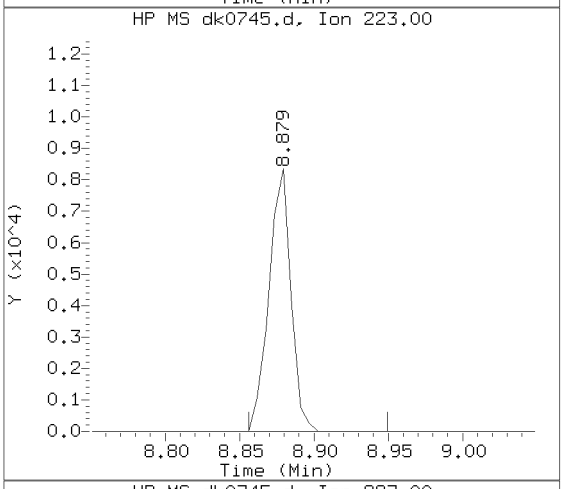
Reference Standard Spectrum for Hexachlorobutadiene



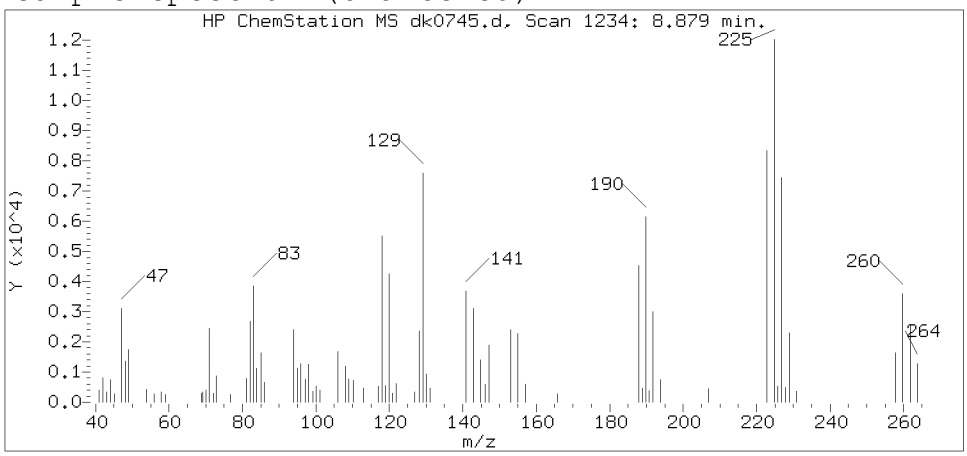


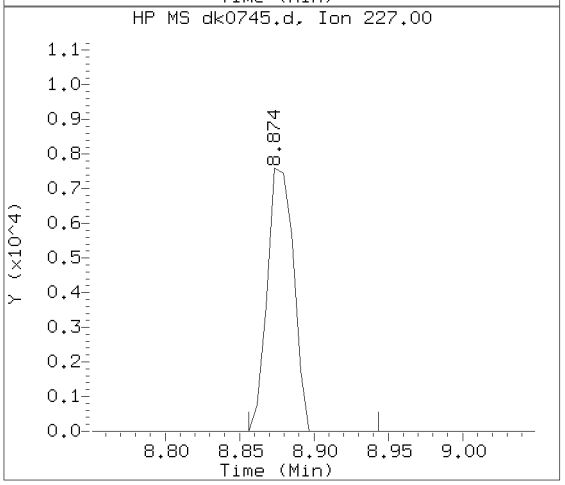
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP19760.i/18nov09.b/dk0745.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 16:19 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:17 art12405

Sample Name: DB-8A Lab Sample ID: 9882896

Compound Number : 71
Compound Name : Hexachlorobutadiene
Scan Number : 1234
Retention Time (minutes) : 8.879
Relative Retention Time :-0.00000
Quant Ion : 225.00
Area (flag) : 14576
On-column Amount (ng/ul) : 0.5602

Digitally signed by Ashley R. Transue on 11/09/2018 at 17:58.
Target 3.5 esignature user ID: art12405

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DB-17

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882897

Sample wt/vol: 238 (g/mL)ML Lab File ID: dk0746.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL UG/L	Q
108-95-2	Phenol		0.5	U
111-44-4	bis(2-Chloroethyl)ether		0.5	U
95-57-8	2-Chlorophenol		0.5	U
541-73-1	1,3-Dichlorobenzene		0.5	U
106-46-7	1,4-Dichlorobenzene		0.5	U
95-50-1	1,2-Dichlorobenzene		0.5	U
95-48-7	2-Methylphenol		0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)		0.5	U
106-44-5	4-Methylphenol		0.5	U
621-64-7	N-Nitroso-di-n-propylamine		0.7	U
67-72-1	Hexachloroethane		1	U
98-95-3	Nitrobenzene		0.5	U
78-59-1	Isophorone		0.5	U
88-75-5	2-Nitrophenol		3	U
105-67-9	2,4-Dimethylphenol		3	U
111-91-1	bis(2-Chloroethoxy)methane		0.5	U
120-83-2	2,4-Dichlorophenol		0.5	U
120-82-1	1,2,4-Trichlorobenzene		0.5	U
91-20-3	Naphthalene		0.1	U
106-47-8	4-Chloroaniline		4	U
87-68-3	Hexachlorobutadiene		0.5	U
59-50-7	4-Chloro-3-methylphenol		0.5	U
91-57-6	2-Methylnaphthalene		0.1	U
77-47-4	Hexachlorocyclopentadiene		5	U
88-06-2	2,4,6-Trichlorophenol		0.5	U
95-95-4	2,4,5-Trichlorophenol		0.5	U
91-58-7	2-Chloronaphthalene		0.4	U
88-74-4	2-Nitroaniline		2	U
131-11-3	Dimethylphthalate		2	U
606-20-2	2,6-Dinitrotoluene		0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DB-17

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882897

Sample wt/vol: 238 (g/mL)ML Lab File ID: dk0746.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		15	U	
100-02-7	4-Nitrophenol		11	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DB-17

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882897

Sample wt/vol: 238 (g/mL)ML Lab File ID: dk0746.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

DB-17

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

9882897

Data file: /chem/HP19760.i/18nov09.b/dk0746.d
Data file Sample Info. Line: DB-17;9882897;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 09-Nov-2018 17:18 art12405

Injection date and time: **09-NOV-2018 16:47**
Instrument ID: **HP19760.i** Batch: **18310WAL**

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143Ms**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 238 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.682	(0.000)	857	152	215180	(-1)	5.00	
65) Naphthalene-d8	8.617	(0.000)	1189	136	785317	(-1)	5.00	
113) Acenaphthene-d10	11.409	(0.006)	1668	164	321621	(-4)	5.00	
153) Phenanthrene-d10	13.321	(0.000)	1996	188	534608	(-5)	5.00	
175) Pyrene-d10	15.262	(0.000)	2329	212	440067	(-13)	5.00	
213) Perylene-d12	19.721	(0.006)	3094	264	360193	(-20)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.799	(-0.003)	112	6111317	88.571	59%		10 - 85
17) Phenol-d6	(1)	6.175	(-0.001)	99	6151617	64.498	43%		10 - 72
44) Nitrobenzene-d5	(2)	7.527	(-0.001)	82	8867187	104.652	84%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.377	(-0.001)	172	11058285	103.433	83%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.481	(-0.001)	330	1394767	131.694	88%		29 - 133
179) Terphenyl-d14	(5)	15.594	(-0.001)	244	9377090	130.418	104%		27 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

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Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP19760.i/18nov09.b/dk0746.d
Injection date and time: **09-NOV-2018 16:47**
Data file Sample Info. Line: DB-17;9882897;1;0;SAMPLE;;;
Instrument ID: **HP19760.i** Batch: **18310WAL**
Date, time and analyst ID of latest file update: 09-Nov-2018 17:18 art12405

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143Ms**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 238 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

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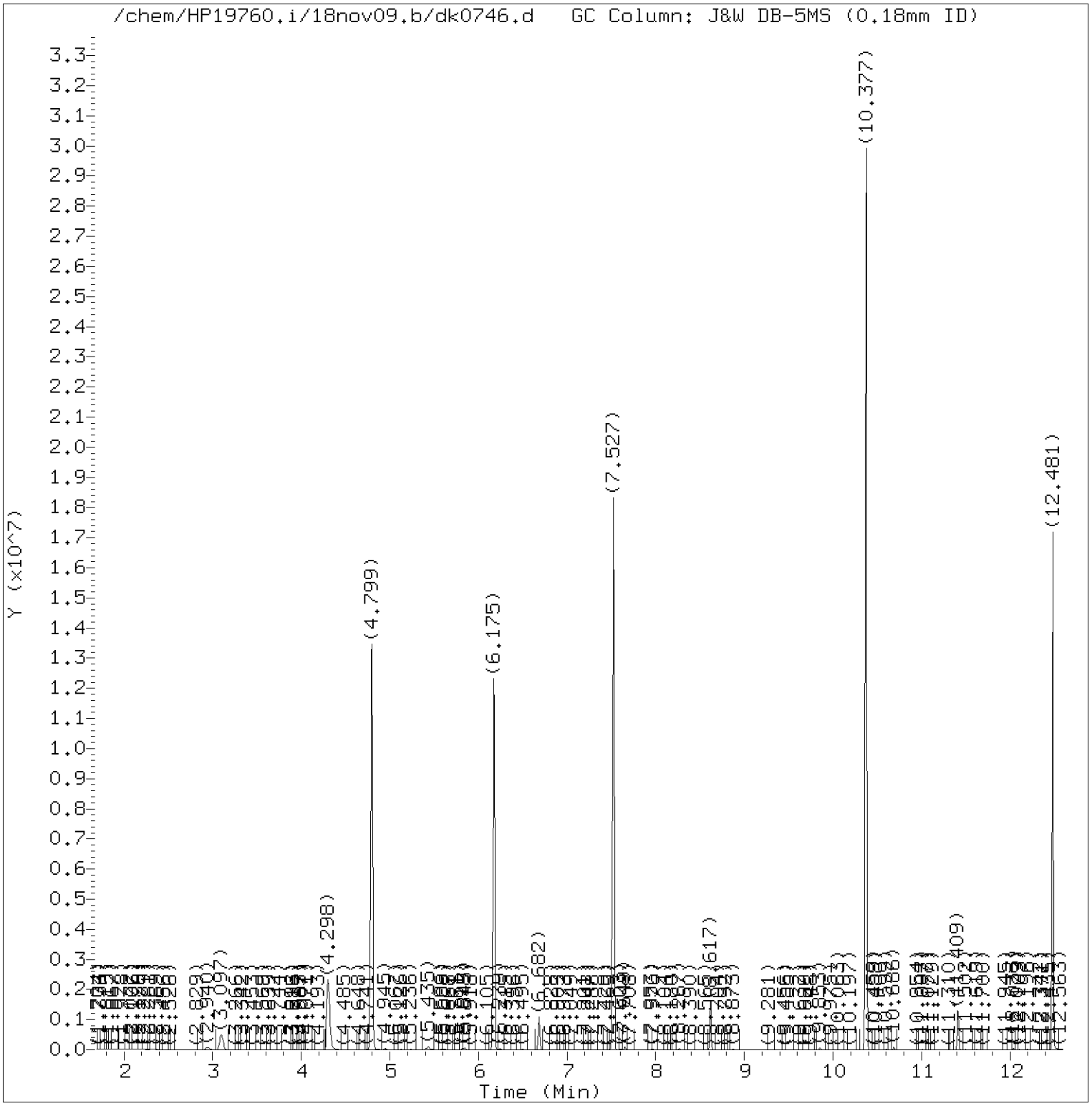
Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 09:11. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0746.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 16:47 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:18 art12405

Sample Name: DB-17 Lab Sample ID: 9882897

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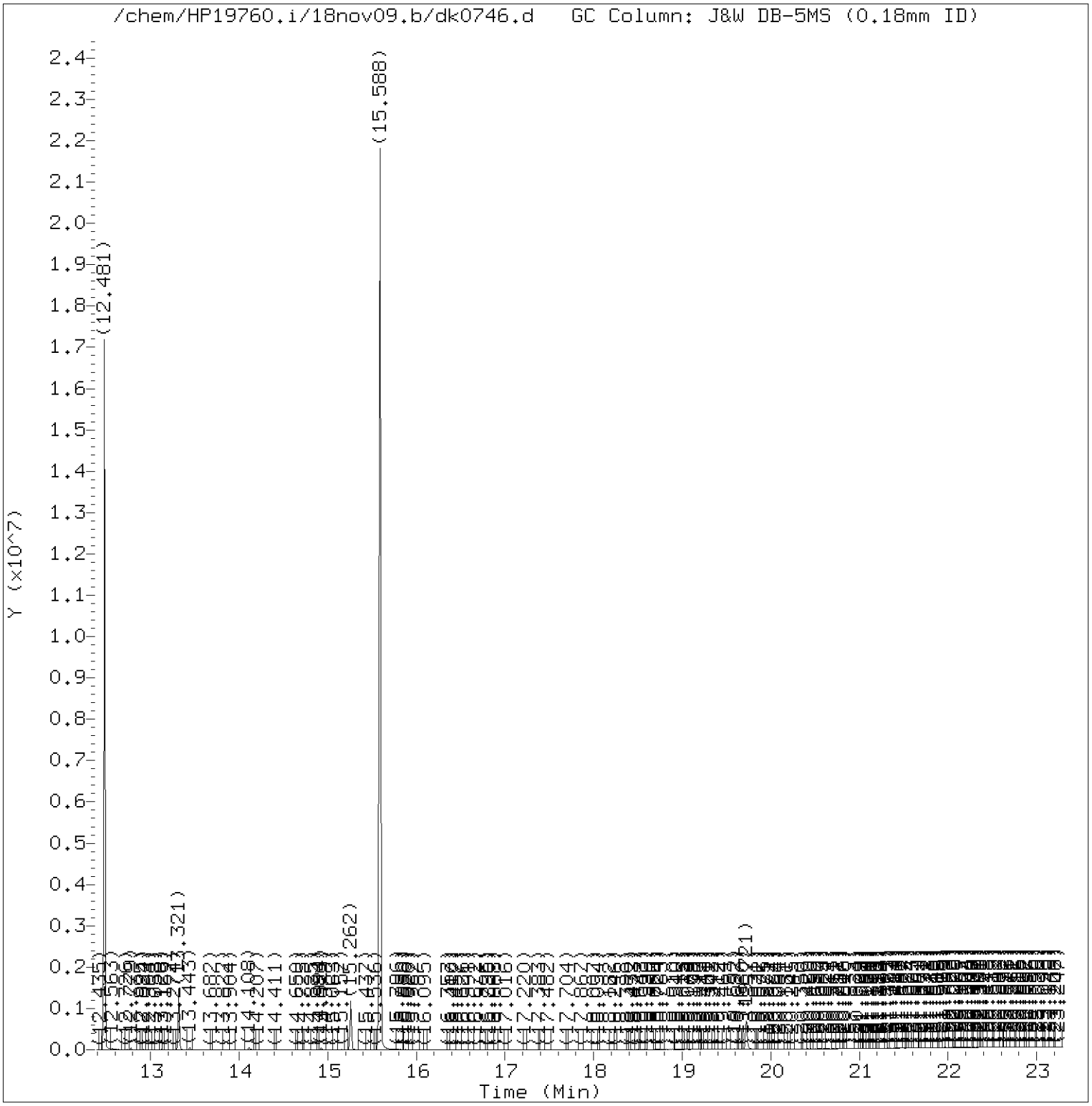
on 11/09/2018 at 17:59.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0746.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 16:47 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:18 art12405

Sample Name: DB-17 Lab Sample ID: 9882897

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:59.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0746.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 16:47 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:18 art12405

Sample Name: DB-17 Lab Sample ID: 9882897

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.799	112	6111317	88.571
17)$Phenol-d6	(1)	6.175	99	6151617	64.498
25)*1,4-Dichlorobenzene-d4	(1)	6.682	152	215180	5.000
44)$Nitrobenzene-d5	(2)	7.527	82	8867187	104.652
65)*Naphthalene-d8	(2)	8.617	136	785317	5.000
93)$2-Fluorobiphenyl	(3)	10.377	172	11058285	103.433
113)*Acenaphthene-d10	(3)	11.409	164	321621	5.000
135)$2,4,6-Tribromophenol	(3)	12.481	330	1394767	131.694
153)*Phenanthrene-d10	(4)	13.321	188	534608	5.000
175)*Pyrene-d10	(5)	15.262	212	440067	5.000
179)$Terphenyl-d14	(5)	15.594	244	9377090	130.418
213)*Perylene-d12	(6)	19.721	264	360193	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:59.
Target 3.5 esignature user ID: art12405

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DC-01

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882898

Sample wt/vol: 239 (g/mL)ML Lab File ID: dk0747.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DC-01

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882898

Sample wt/vol: 239 (g/mL)ML Lab File ID: dk0747.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene			0.1	U
99-09-2	3-Nitroaniline			3	U
83-32-9	Acenaphthene			0.1	U
51-28-5	2,4-Dinitrophenol			15	U
100-02-7	4-Nitrophenol			10	U
121-14-2	2,4-Dinitrotoluene			1	U
132-64-9	Dibenzofuran			0.5	U
84-66-2	Diethylphthalate			2	U
86-73-7	Fluorene			0.1	U
7005-72-3	4-Chlorophenyl-phenylether			0.5	U
100-01-6	4-Nitroaniline			0.9	U
534-52-1	4,6-Dinitro-2-methylphenol			8	U
86-30-6	N-Nitrosodiphenylamine			0.7	U
101-55-3	4-Bromophenyl-phenylether			0.5	U
118-74-1	Hexachlorobenzene			0.1	U
87-86-5	Pentachlorophenol			1	U
85-01-8	Phenanthrene			0.1	U
120-12-7	Anthracene			0.1	U
86-74-8	Carbazole			0.5	U
84-74-2	Di-n-butylphthalate			2	U
206-44-0	Fluoranthene			0.1	U
129-00-0	Pyrene			0.1	U
85-68-7	Butylbenzylphthalate			2	U
91-94-1	3,3'-Dichlorobenzidine			3	U
56-55-3	Benzo(a)anthracene			0.1	U
218-01-9	Chrysene			0.1	U
117-81-7	bis(2-Ethylhexyl)phthalate			5	U
117-84-0	Di-n-octylphthalate			5	U
205-99-2	Benzo(b)fluoranthene			0.1	U
207-08-9	Benzo(k)fluoranthene			0.1	U

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DC-01

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882898

Sample wt/vol: 239 (g/mL)ML Lab File ID: dk0747.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

DC-01

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

9882898

Data file: /chem/HP19760.i/18nov09.b/dk0747.d
Data file Sample Info. Line: DC-01;9882898;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 09-Nov-2018 17:46 art12405

Injection date and time: **09-NOV-2018 17:15**
Instrument ID: **HP19760.i** Batch: **18310WAL**

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143Ms**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 239 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.682	(0.000)	857	152	198545	(-9)	5.00	
65) Naphthalene-d8	8.617	(0.000)	1189	136	728693	(-8)	5.00	
113) Acenaphthene-d10	11.415	(0.000)	1669	164	295914	(-12)	5.00	
153) Phenanthrene-d10	13.321	(0.000)	1996	188	479303	(-15)	5.00	
175) Pyrene-d10	15.262	(0.000)	2329	212	388733	(-23)	5.00	
213) Perylene-d12	19.721	(0.006)	3094	264	326533	(-27)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.793	(-0.002)	112	4468133	70.182	47%		10 - 85
17) Phenol-d6	(1)	6.175	(-0.001)	99	4749215	53.966	36%		10 - 72
44) Nitrobenzene-d5	(2)	7.527	(-0.001)	82	7673653	97.603	78%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.377	(-0.001)	172	10034482	102.010	82%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.481	(0.000)	330	1087469	111.599	74%		29 - 133
179) Terphenyl-d14	(5)	15.588	(0.000)	244	6964248	109.651	88%		27 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)				Not Detected					0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

Digitally signed by Ashley R. Transue on 11/09/2018 at 17:59. Target 3.5 esignature user ID: art12405

DC-01

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

9882898

Data file: /chem/HP19760.i/18nov09.b/dk0747.d
Data file Sample Info. Line: DC-01;9882898;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 09-Nov-2018 17:46 art12405

Injection date and time: **09-NOV-2018 17:15**
Instrument ID: **HP19760.i** Batch: **18310WAL**

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143Ms**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 239 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

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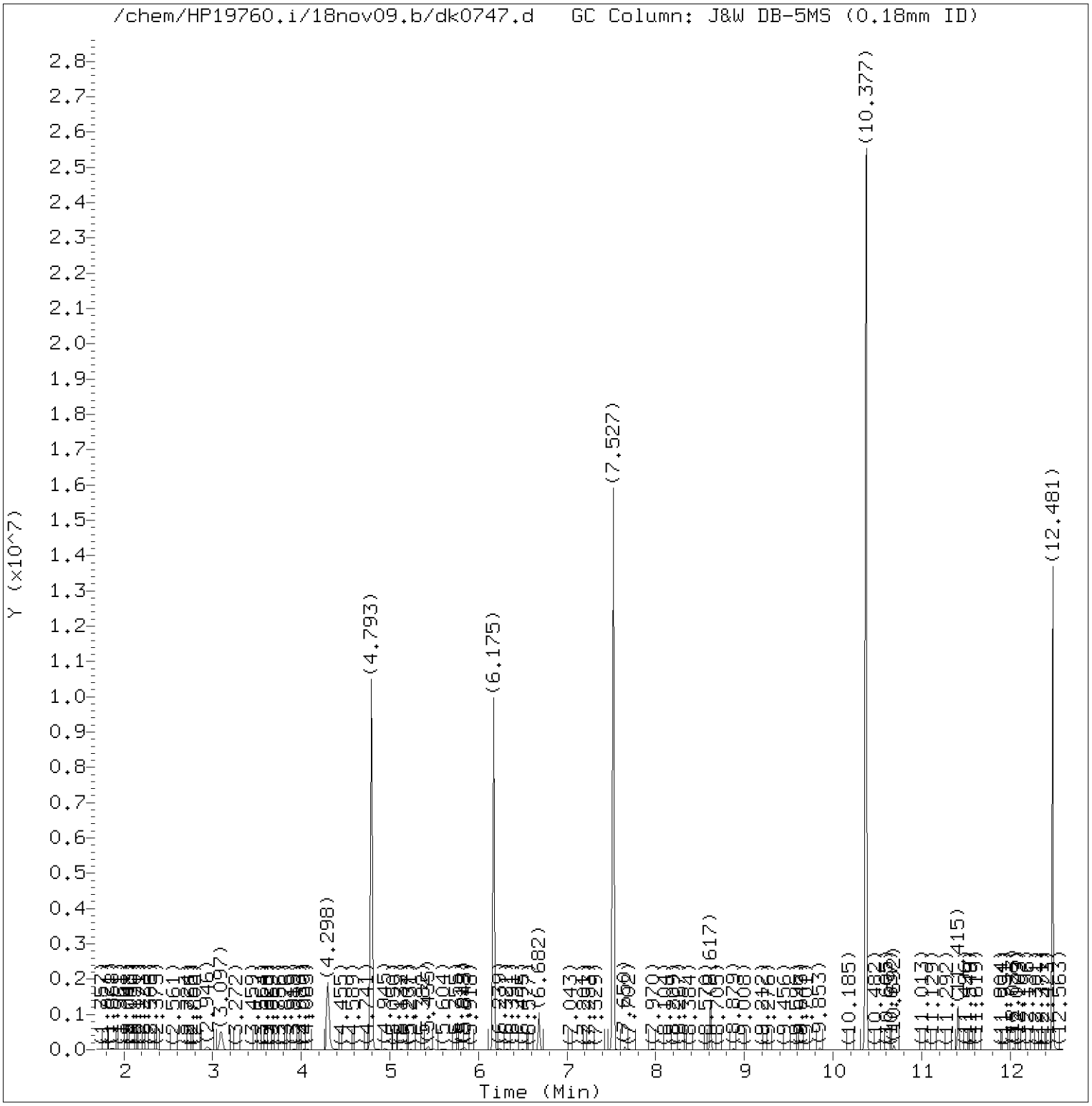
Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 09:11. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

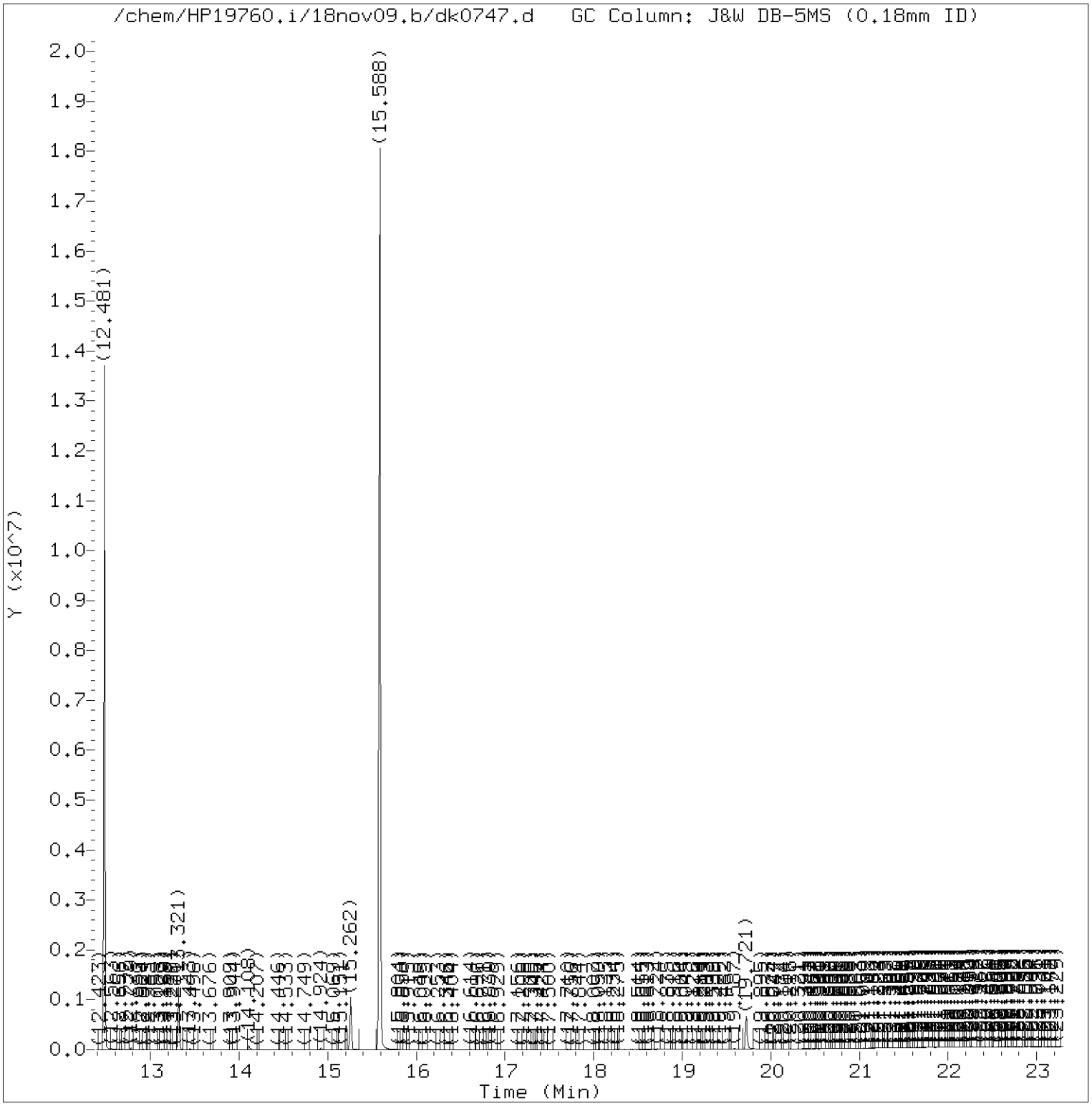
Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0747.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 17:15 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:46 art12405

Sample Name: DC-01 Lab Sample ID: 9882898

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:59.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0747.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 17:15 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:46 art12405

Sample Name: DC-01 Lab Sample ID: 9882898

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:59.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0747.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 17:15 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 17:46 art12405

Sample Name: DC-01 Lab Sample ID: 9882898

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.793	112	4468133	70.182
17)$Phenol-d6	(1)	6.175	99	4749215	53.966
25)*1,4-Dichlorobenzene-d4	(1)	6.682	152	198545	5.000
44)$Nitrobenzene-d5	(2)	7.527	82	7673653	97.603
65)*Naphthalene-d8	(2)	8.617	136	728693	5.000
93)$2-Fluorobiphenyl	(3)	10.377	172	10034482	102.010
113)*Acenaphthene-d10	(3)	11.415	164	295914	5.000
135)$2,4,6-Tribromophenol	(3)	12.481	330	1087469	111.599
153)*Phenanthrene-d10	(4)	13.321	188	479303	5.000
175)*Pyrene-d10	(5)	15.262	212	388733	5.000
179)$Terphenyl-d14	(5)	15.588	244	6964248	109.651
213)*Perylene-d12	(6)	19.721	264	326533	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/09/2018 at 17:59.
Target 3.5 esignature user ID: art12405

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DC-02

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882899

Sample wt/vol: 242 (g/mL)ML Lab File ID: dk0748.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			1	J
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DC-02

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882899

Sample wt/vol: 242 (g/mL)ML Lab File ID: dk0748.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		14	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DC-02

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9882899

Sample wt/vol: 242 (g/mL)ML Lab File ID: dk0748.d

Level: (low/med) LOW Date Received: 11/03/18

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

DC-02

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

9882899

Data file: /chem/HP19760.i/18nov09.b/dk0748.d
Data file Sample Info. Line: DC-02;9882899;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 09-Nov-2018 18:20 art12405

Injection date and time: **09-NOV-2018 17:43**
Instrument ID: **HP19760.i** Batch: **18310WAL**

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143Ms**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 242 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.682	(0.000)	857	152	210097	(-4)	5.00	
65) Naphthalene-d8	8.617	(0.000)	1189	136	745051	(-6)	5.00	
113) Acenaphthene-d10	11.409	(0.006)	1668	164	304984	(-9)	5.00	
153) Phenanthrene-d10	13.321	(0.000)	1996	188	494513	(-12)	5.00	
175) Pyrene-d10	15.262	(0.000)	2329	212	394535	(-22)	5.00	
213) Perylene-d12	19.726	(0.000)	3095	264	337585	(-25)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
11) 2-Fluorophenol	(1)	4.793	(-0.002)	112	5941276	88.190	59%		10 - 85
17) Phenol-d6	(1)	6.175	(-0.001)	99	5924921	63.624	42%		10 - 72
44) Nitrobenzene-d5	(2)	7.527	(-0.001)	82	8444707	105.052	84%		30 - 111
93) 2-Fluorobiphenyl	(3)	10.377	(-0.001)	172	10757386	106.107	85%		39 - 105
135) 2,4,6-Tribromophenol	(3)	12.481	(-0.001)	330	1251391	124.602	83%		29 - 133
179) Terphenyl-d14	(5)	15.588	(0.000)	244	7347646	113.986	91%		27 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)				Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
23) 2-Chlorophenol	(1)				Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
31) 2-Methylphenol	(1)				Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
37) 4-Methylphenol	(1)				Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
43) Hexachloroethane	(1)				Not Detected					0.3
45) Nitrobenzene	(2)	7.527	(0.002)	77	27154	0.334	1.38		J	0.1
50) Isophorone	(2)				Not Detected					0.1
51) 2-Nitrophenol	(2)				Not Detected					0.8
53) 2,4-Dimethylphenol	(2)				Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
60) 2,4-Dichlorophenol	(2)				Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
66) Naphthalene	(2)				Not Detected					0.03
67) 4-Chloroaniline	(2)				Not Detected					1
71) Hexachlorobutadiene	(2)				Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
83) 2-Methylnaphthalene	(2)				Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)				Not Detected					1
90) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
96) 2-Chloronaphthalene	(3)				Not Detected					0.1

Digitally signed by Ashley R. Transue on 11/09/2018 at 18:21. Target 3.5 esignature user ID: art12405

DC-02

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

9882899

Data file: /chem/HP19760.i/18nov09.b/dk0748.d
Data file Sample Info. Line: DC-02;9882899;1;0;SAMPLE;;;
Date, time and analyst ID of latest file update: 09-Nov-2018 18:20 art12405

Injection date and time: **09-NOV-2018 17:43**
Instrument ID: **HP19760.i** Batch: **18310WAL**

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143Ms**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:55
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

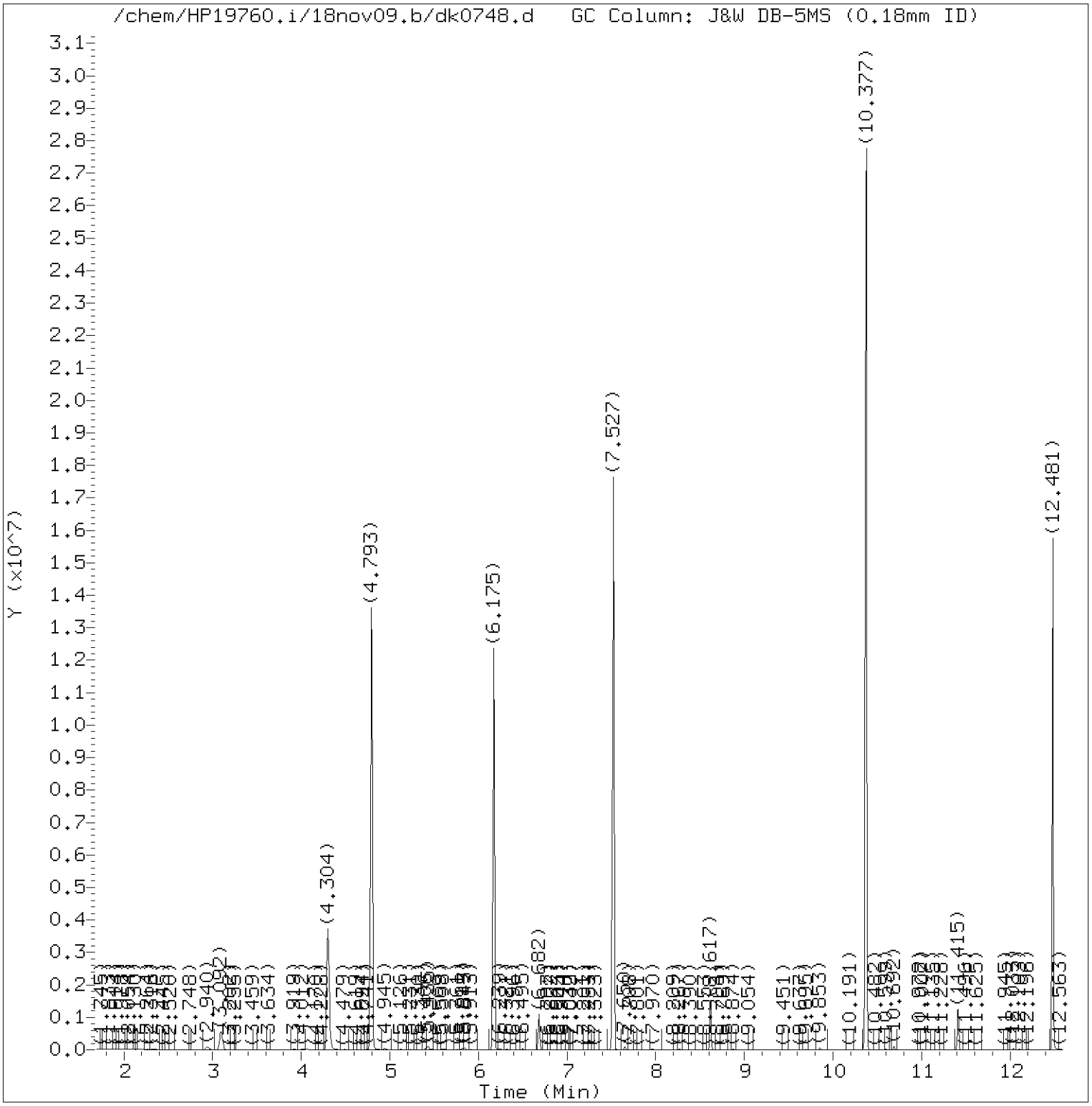
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 242 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

Digitally signed by Ashley R. Transue on 11/09/2018 at 18:21. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 09:11. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

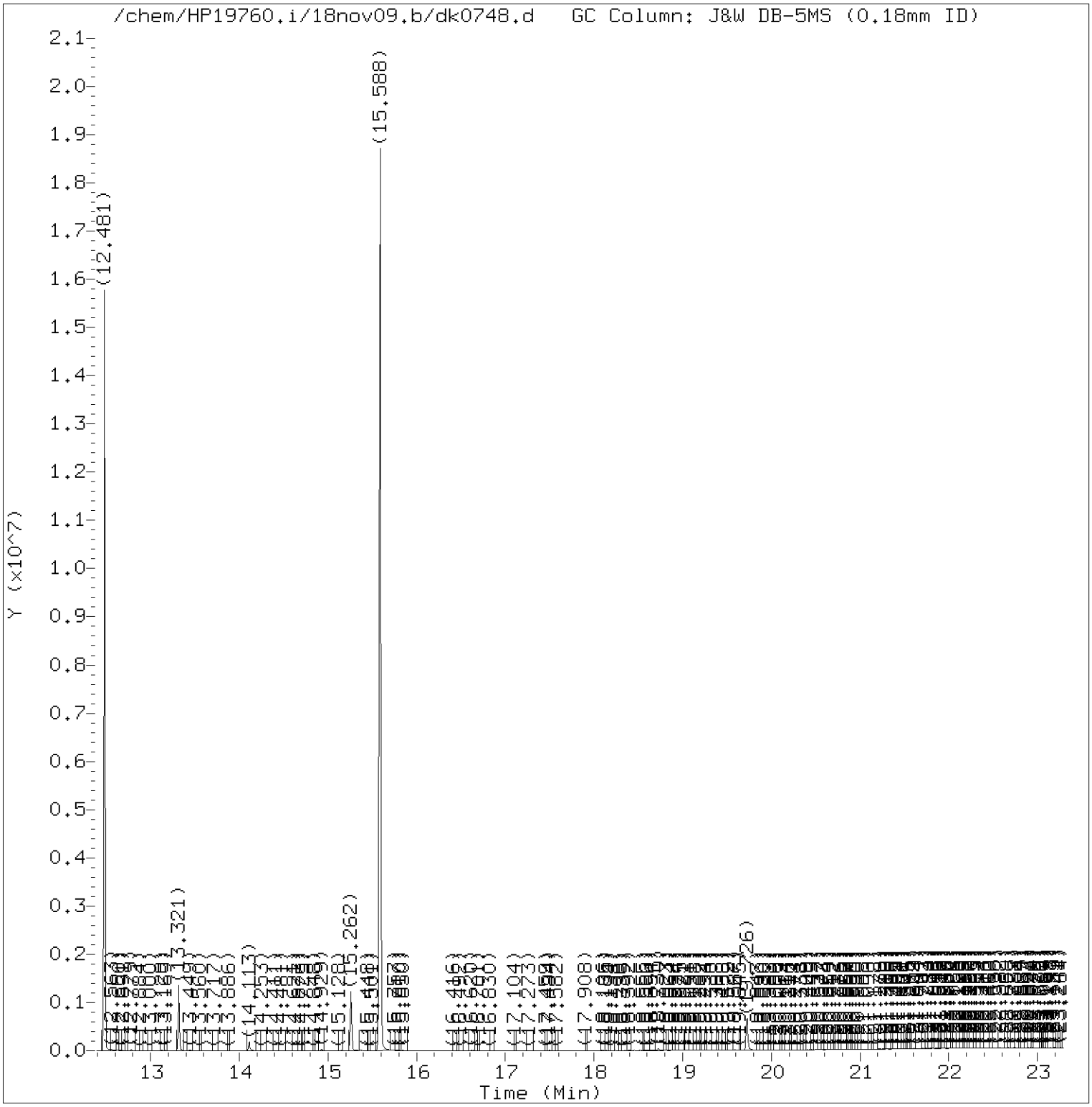
Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0748.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 18:20 art12405

Sample Name: DC-02 Lab Sample ID: 9882899

Digitally signed by Ashley R. Transue
on 11/09/2018 at 18:21.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0748.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 18:20 art12405

Sample Name: DC-02 Lab Sample ID: 9882899

Digitally signed by Ashley R. Transue
on 11/09/2018 at 18:21.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0748.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 18:20 art12405

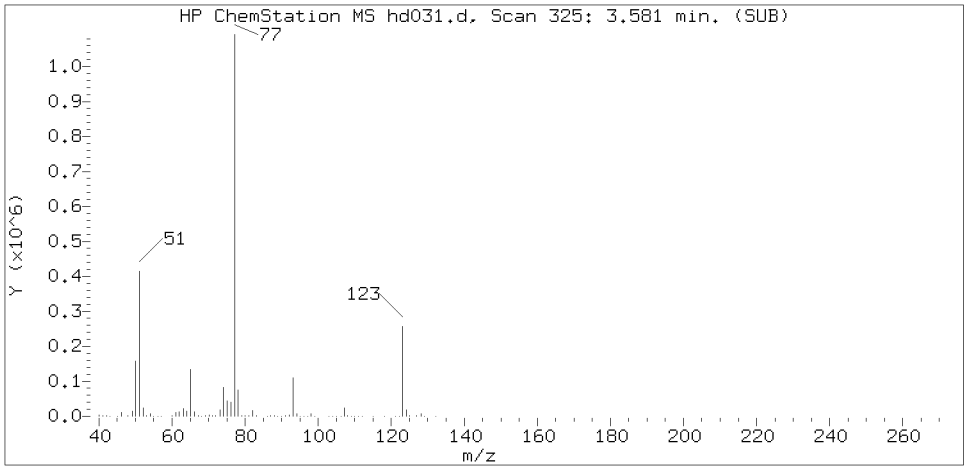
Sample Name: DC-02 Lab Sample ID: 9882899

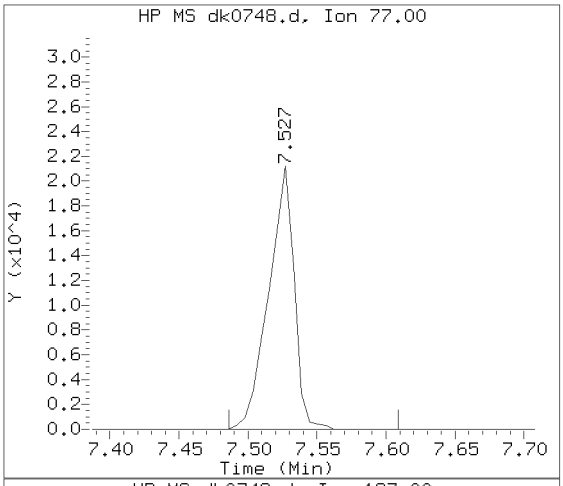
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.793	112	5941276	88.190
17)$Phenol-d6	(1)	6.175	99	5924921	63.624
25)*1,4-Dichlorobenzene-d4	(1)	6.682	152	210097	5.000
45) Nitrobenzene	(2)	7.527	77	27154	0.334
44)$Nitrobenzene-d5	(2)	7.527	82	8444707	105.052
65)*Naphthalene-d8	(2)	8.617	136	745051	5.000
93)$2-Fluorobiphenyl	(3)	10.377	172	10757386	106.107
113)*Acenaphthene-d10	(3)	11.409	164	304984	5.000
135)$2,4,6-Tribromophenol	(3)	12.481	330	1251391	124.602
153)*Phenanthrene-d10	(4)	13.321	188	494513	5.000
175)*Pyrene-d10	(5)	15.262	212	394535	5.000
179)$Terphenyl-d14	(5)	15.588	244	7347646	113.986
213)*Perylene-d12	(6)	19.726	264	337585	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

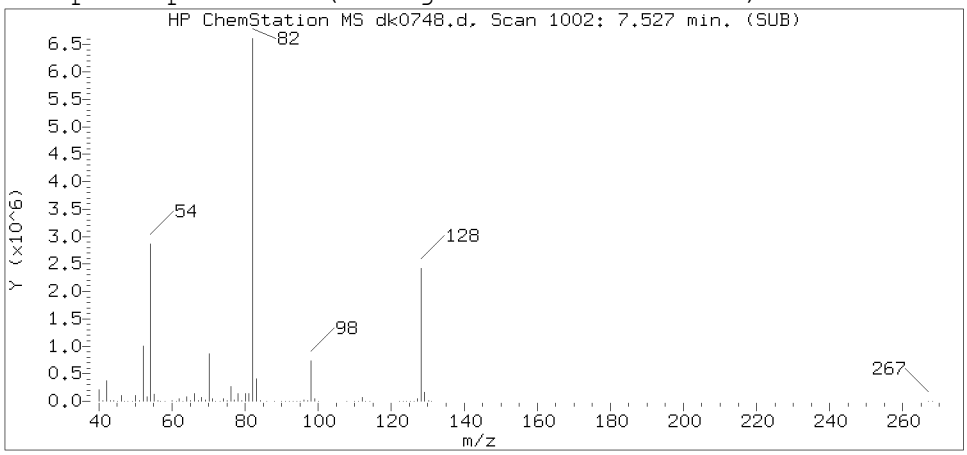
Digitally signed by Ashley R. Transue
on 11/09/2018 at 18:21.
Target 3.5 esignature user ID: art12405

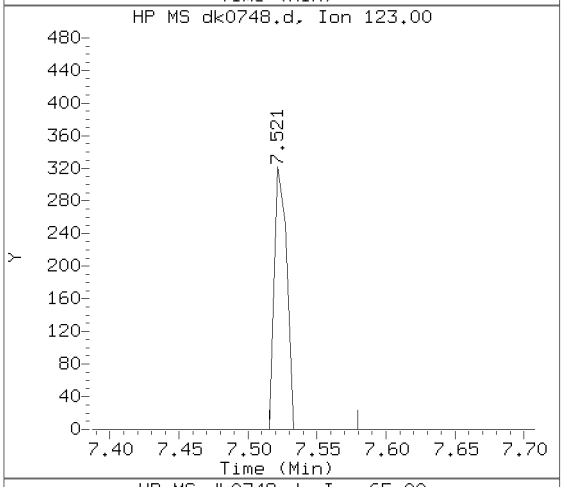
Reference Standard Spectrum for Nitrobenzene



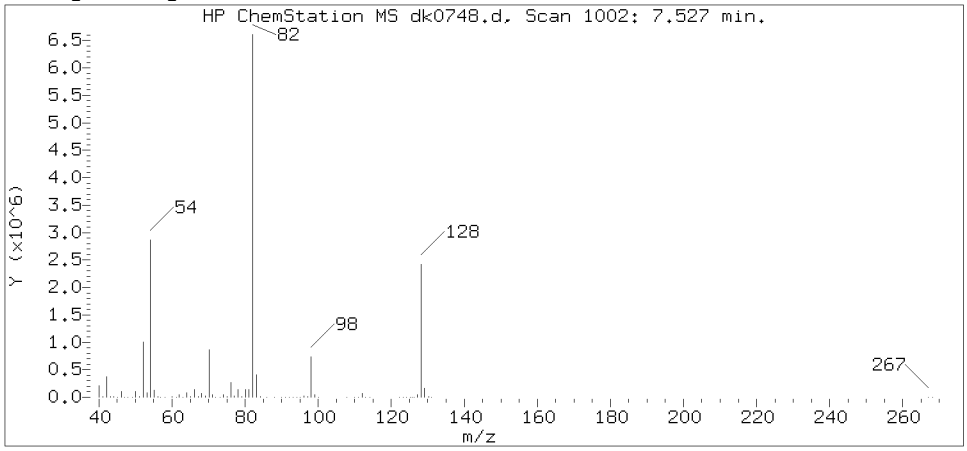


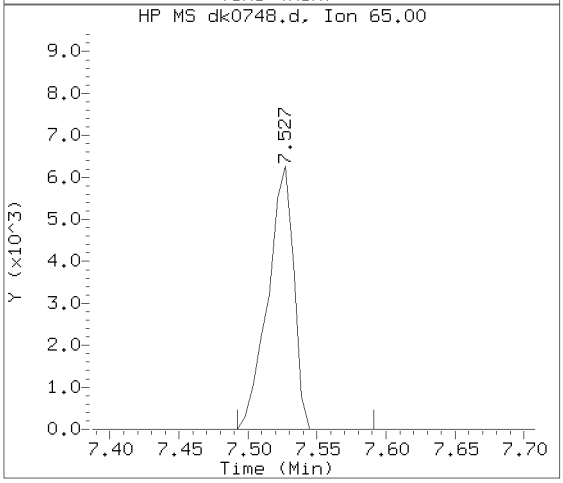
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP19760.i/18nov09.b/dk0748.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143Ms
Calibration date and time: 09-NOV-2018 13:55
Date, time and analyst ID of latest file update: 09-Nov-2018 18:20 art12405

Sample Name: DC-02 Lab Sample ID: 9882899

Compound Number	: 45
Compound Name	: Nitrobenzene
Scan Number	: 1002
Retention Time (minutes)	: 7.527
Relative Retention Time	: 0.00203
Quant Ion	: 77.00
Area (flag)	: 27154
On-column Amount (ng/ul)	: 0.3343

Digitally signed by Ashley R. Transue on 11/09/2018 at 18:21.
Target 3.5 esignature user ID: art12405

Standards Data

Semivolatiles by GC/MS

SAMPLE INFORMATION SUMMARY

BATCH: /chem/HP19760.i/18nov04.b

Data File	Injection Date	Sample Type	Dil Factor	Inst ID	Method	Method Batch
dk0200.d	04-NOV-2018 09:30	DFTPP	1.00	HP19760	rvdftpp8270d.m	18nov04.b
dk0200a.d	04-NOV-2018 10:02	DFTPP	1.00	HP19760	rvdftpp8270d.m	18nov04.b
dk0201.d	04-NOV-2018 10:16	Continuing Cal	1.00	HP19760	rv8270d.m	18nov04.b
dk0210.d	04-NOV-2018 11:11	DFTPP	1.00	HP19760	rvdftpp8270d.m	18nov04.b
dk0211.d	04-NOV-2018 11:51	Cal Level 5	1.00	HP19760	rv8270d.m	18nov04.b
dk0212.d	04-NOV-2018 12:44	Cal Level 1	1.00	HP19760	rv8270d.m	18nov04.b
dk0213.d	04-NOV-2018 13:12	Cal Level 8	1.00	HP19760	rv8270d.m	18nov04.b
dk0214.d	04-NOV-2018 13:40	Cal Level 7	1.00	HP19760	rv8270d.m	18nov04.b
dk0215.d	04-NOV-2018 14:09	Cal Level 6	1.00	HP19760	rv8270d.m	18nov04.b
dk0216.d	04-NOV-2018 14:37	Cal Level 4	1.00	HP19760	rv8270d.m	18nov04.b
dk0217.d	04-NOV-2018 15:06	Cal Level 3	1.00	HP19760	rv8270d.m	18nov04.b
dk0218.d	04-NOV-2018 15:35	Cal Level 2	1.00	HP19760	rv8270d.m	18nov04.b
dk0219.d	04-NOV-2018 16:03	MDL/LOQ	1.00	HP19760	rv8270d.m	18nov04.b
dk0220.d	04-NOV-2018 16:31	MDL/LOQ	1.00	HP19760	rv8270d.m	18nov04.b

Data File	Matrix	Fraction	Lab Sample ID	Lab Prep Batch	Client Sample ID	Client Sample Group
dk0200.d	LIQUID	SV	rvDFTPP2878	18nov04	DFTPP12.5	18nov04
dk0200a.d	LIQUID	SV	rvDFTPP2878	18nov04	DFTPP12.5	18nov04
dk0201.d	LIQUID	SV	rvSTD2648	18nov04	SSTD7.5	18nov04
dk0210.d	LIQUID	SV	rvDFTPP2878	18nov04	DFTPP12.5	18nov04
dk0211.d	LIQUID	SV	rvSTD2648	18nov04	SSTD7.5	18nov04
dk0212.d	LIQUID	SV	rvSTD2648	18nov04	SSTD0.125	18nov04
dk0213.d	LIQUID	SV	rvSTD2648	18nov04	SSTD30	18nov04
dk0214.d	LIQUID	SV	rvSTD2648	18nov04	SSTD20	18nov04
dk0215.d	LIQUID	SV	rvSTD2648	18nov04	SSTD12.5	18nov04
dk0216.d	LIQUID	SV	rvSTD2648	18nov04	SSTD3.75	18nov04
dk0217.d	LIQUID	SV	rvSTD2648	18nov04	SSTD1.25	18nov04
dk0218.d	LIQUID	SV	rvSTD2648	18nov04	SSTD0.25	18nov04
dk0219.d	LIQUID	SV	rvMDL2648	18nov04	SSTD0.125	18nov04
dk0220.d	LIQUID	SV	PAHMDL2648	18nov04	SSTD0.025	18nov04

Data File	Compound Sublist	Spike List File	Sample Ref #	QC Group Ref #	Init Cal Ref #	Batch Ref #
dk0200.d	all.sub		202546469	202546470	200002637	202546468
dk0200a.d	all.sub		202546482	202546483	200002637	202546468
dk0201.d	all1.sub		202546497	202546483	202546444	202546499
dk0210.d	all.sub		202546501	202546502	200002637	202546468
dk0211.d	all1.sub		202546521	202546502	202546652	202546499
dk0212.d	all1.sub		202546529	202546502	202546652	202546499
dk0213.d	all1.sub		202546531	202546502	202546652	202546499
dk0214.d	all1.sub		202546533	202546502	202546652	202546499
dk0215.d	all1.sub		202546535	202546502	202546652	202546499
dk0216.d	all1.sub		202546537	202546502	202546652	202546499
dk0217.d	all1.sub		202546539	202546502	202546652	202546499
dk0218.d	all1.sub		202546541	202546502	202546652	202546499
dk0219.d	mdlall1.sub		202546543	202546502	202546652	202546499
dk0220.d	pahmdlall1.sub		202546545	202546502	202546652	202546499

SAMPLE INFORMATION SUMMARY

BATCH: /chem/HP19760.i/18nov04.b

Data File	Injection Date	Sample Type	Dil Factor	Inst ID	Method	Method Batch
dk0221.d	04-NOV-2018 17:00	ICV	1.00	HP19760	rv8270d.m	18nov04.b
dk0222.d	04-NOV-2018 17:29	ICV	1.00	HP19760	rv8270d.m	18nov04.b

Data File	Matrix	Fraction	Lab Sample ID	Lab Prep Batch	Client Sample ID	Client Sample Group
dk0221.d	LIQUID	SV	rv1CV2628	18nov04	SSTD12.5	18nov04
dk0222.d	LIQUID	SV	rvBASICV3028	18nov04	SSTD12.5	18nov04

Data File	Compound Sublist	Spike List File	Sample Ref #	QC Group Ref #	Init Cal Ref #	Batch Ref #
dk0221.d	icv2.sub	ICV4X.spk	202546585	202546502	202546652	202546499
dk0222.d	basicval11.sub	ICV4X.spk	202546595	202546502	202546652	202546499

SAMPLE INFORMATION SUMMARY

BATCH: /chem/HP19760.i/18nov04a.b

Data File	Injection Date	Sample Type	Dil Factor	Inst ID	Method	Method Batch
dk0300.d	04-NOV-2018 20:00	DFTPP	1.00	HP19760	rvdftpp8270d.m	18nov04a.b
dk0301.d	04-NOV-2018 21:12	Continuing Cal	1.00	HP19760	rv8270d.m	18nov04a.b
dk0302.d	04-NOV-2018 22:13	ICV	1.00	HP19760	rv8270d.m	18nov04a.b
dk0303.d	05-NOV-2018 00:08	BLANK	1.00	HP19760	rv8270d.m	18nov04a.b
dk0304.d	05-NOV-2018 00:36	LCS	1.00	HP19760	rv8270d.m	18nov04a.b
dk0305.d	05-NOV-2018 01:04	LCSD	1.00	HP19760	rv8270d.m	18nov04a.b
dk0306.d	05-NOV-2018 01:32	Unknown	1.00	HP19760	rv8270d.m	18nov04a.b
dk0307.d	05-NOV-2018 02:00	Unknown	1.00	HP19760	rv8270d.m	18nov04a.b
dk0308.d	05-NOV-2018 02:29	Unknown	1.00	HP19760	rv8270d.m	18nov04a.b
dk0309.d	05-NOV-2018 02:57	Unknown	1.00	HP19760	rv8270d.m	18nov04a.b
dk0310.d	05-NOV-2018 03:25	Unknown	1.00	HP19760	rv8270d.m	18nov04a.b
dk0311.d	05-NOV-2018 03:53	Unknown	1.00	HP19760	rv8270d.m	18nov04a.b
dk0312.d	05-NOV-2018 04:22	Unknown	1.00	HP19760	rv8270d.m	18nov04a.b
dk0313.d	05-NOV-2018 04:50	Unknown	1.00	HP19760	rv8270d.m	18nov04a.b

Data File	Matrix	Fraction	Lab Sample ID	Lab Prep Batch	Client Sample ID	Client Sample Group
dk0300.d	LIQUID	SV	rvDFTPP2878	18nov04a	DFTPP12.5	18nov04a
dk0301.d	LIQUID	SV	rvSTD2648	18nov04a	SSTD7.5	18nov04a
dk0302.d	LIQUID	SV	rvICV2628	18nov04a	SSTD12.5	18nov04a
dk0303.d	LIQUID	SV	SBLKWR302	18302WAR	SBLKWR302	18nov04a
dk0304.d	LIQUID	SV	302WRLCS	18302WAR	302WRLCS	18nov04a
dk0305.d	LIQUID	SV	302WRLCSD	18302WAR	302WRLCSD	18nov04a
dk0306.d	LIQUID	SV	9869228	18299WAL	79E01	18nov04a
dk0307.d	LIQUID	SV	9869230	18299WAL	79E03	18nov04a
dk0308.d	LIQUID	SV	9869232	18299WAL	79E05	18nov04a
dk0309.d	LIQUID	SV	9869234	18299WAL	79E07	18nov04a
dk0310.d	LIQUID	SV	9867287	18302WAR	2977B	18nov04a
dk0311.d	LIQUID	SV	9868253	18302WAR	1--50	18nov04a
dk0312.d	LIQUID	SV	9868527	18302WAR	11822	18nov04a
dk0313.d	LIQUID	SV	9868532	18302WAR	-1832	18nov04a

Data File	Compound Sublist	Spike List File	Sample Ref #	QC Group Ref #	Init Cal Ref #	Batch Ref #
dk0300.d	all.sub		202546672	202546673	200002637	202546671
dk0301.d	all1.sub		202546742	202546673	202546652	202546760
dk0302.d	icvall1.sub	ICV4X.spk	202546777	202546673	202546652	202546760
dk0303.d	21365M.sub		202546841	202546673	202546652	202546760
dk0304.d	21365M.sub		202546860	202546673	202546652	202546760
dk0305.d	21365M.sub		202546874	202546673	202546652	202546760
dk0306.d	25271M.sub		202546887	202546673	202546652	202546760
dk0307.d	25271M.sub		202546903	202546673	202546652	202546760
dk0308.d	25271M.sub		202546920	202546673	202546652	202546760
dk0309.d	25271M.sub		202546935	202546673	202546652	202546760
dk0310.d	21365M.sub		202546950	202546673	202546652	202546760
dk0311.d	28126M.sub		202546978	202546673	202546652	202546760
dk0312.d	21365M.sub		202546997	202546673	202546652	202546760
dk0313.d	21365M.sub		202547013	202546673	202546652	202546760

SAMPLE INFORMATION SUMMARY

BATCH: /chem/HP19760.i/18nov04a.b

Data File	Injection Date	Sample Type	Dil Factor	Inst ID	Method	Method Batch
dk0314.d	05-NOV-2018 05:18	Unknown	1.00	HP19760	rv8270d.m	18nov04a.b
dk0315.d	05-NOV-2018 05:47	Unknown	1.00	HP19760	rv8270d.m	18nov04a.b
dk0316.d	05-NOV-2018 06:15	Unknown	1.00	HP19760	rv8270d.m	18nov04a.b
dk0317.d	05-NOV-2018 06:43	Unknown	1.00	HP19760	rv8270d.m	18nov04a.b
dk0318.d	05-NOV-2018 07:12	Unknown	1.00	HP19760	rv8270d.m	18nov04a.b

Data File	Matrix	Fraction	Lab Sample ID	Lab Prep Batch	Client Sample ID	Client Sample Group
dk0314.d	LIQUID	SV	9868540	18302WAR	706-2	18nov04a
dk0315.d	LIQUID	SV	9868554	18302WAR	70611	18nov04a
dk0316.d	LIQUID	SV	9869112	18302WAR	E7802	18nov04a
dk0317.d	LIQUID	SV	9870353	18302WAR	VB-55	18nov04a
dk0318.d	LIQUID	SV	9870354	18302WAR	VB-28	18nov04a

Data File	Compound Sublist	Spike List File	Sample Ref #	QC Group Ref #	Init Cal Ref #	Batch Ref #
dk0314.d	21365M.sub		202547039	202546673	202546652	202546760
dk0315.d	21365M.sub		202547051	202546673	202546652	202546760
dk0316.d	21365M.sub		202547065	202546673	202546652	202546760
dk0317.d	21365M.sub		202547102	202546673	202546652	202546760
dk0318.d	21365M.sub		202547114	202546673	202546652	202546760

Lancaster Laboratories
Semi-Volatiles
Runlog for Agilent GC/MS System HP19760 **HP #04**

Data Directory Path is - D:\data\l8nov09\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
em10340	DK0730.D	rvDFTPP2878	11/09/2018	08:33		
em10340	DK0731.D	RVSTD2648	11/09/2018	08:48		
em10340	DK0732.D	SBLKWL310	11/09/2018	10:12	18310WAL	
em10340	DK0733.D	310WLLCS	11/09/2018	10:40	18310WAL	
em10340	DK0734.D	310WLLCSD	11/09/2018	11:08	18310WAL	
em10340	DK0735.D	9882676	11/09/2018	11:36	18310WAL	
em10340	DK0736.D	9882677	11/09/2018	12:05	18310WAL	
em10340	DK0737.D	9882678	11/09/2018	12:33	18310WAL	
em10340	DK0738.D	9882679	11/09/2018	13:01	18310WAL	
em10340	DK0739.D	9882680	11/09/2018	13:29	18310WAL	
em10340	DK0740.D	9882682	11/09/2018	13:58	18310WAL	
em10340	DK0741.D	9882892	11/09/2018	14:26	18310WAL	
em10340	DK0742.D	9882893	11/09/2018	14:54	18310WAL	
em10340	DK0743.D	9882894	11/09/2018	15:22	18310WAL	
em10340	DK0744.D	9882895	11/09/2018	15:51	18310WAL	
em10340	DK0745.D	9882896	11/09/2018	16:19	18310WAL	
em10340	DK0746.D	9882897	11/09/2018	16:47	18310WAL	
em10340	DK0747.D	9882898	11/09/2018	17:15	18310WAL	
em10340	DK0748.D	9882899	11/09/2018	17:43	18310WAL	

Data File: /chem/HP19760.i/18nov04.b/dk0210.d

Date : 04-NOV-2018 11:11

Client ID: DFTPP12.5

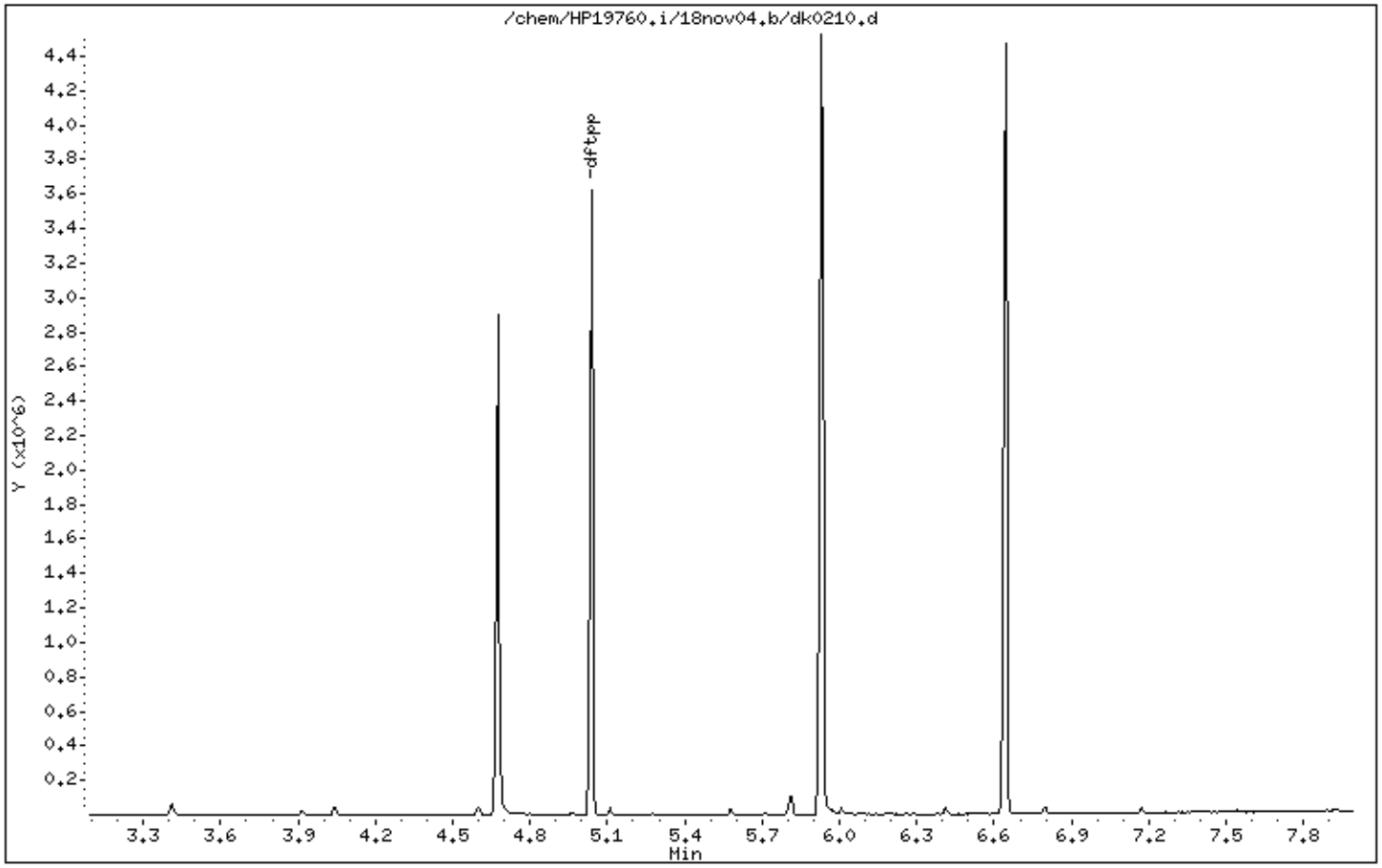
Instrument: HP19760.i

Sample Info: DFTPP12.5;rvDFTPP2878;1;3;DFTPP;

Operator: em10340

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Data File: /chem/HP19760.i/18nov04.b/dk0210.d

Date : 04-NOV-2018 11:11

Client ID: DFTPP12.5

Instrument: HP19760.i

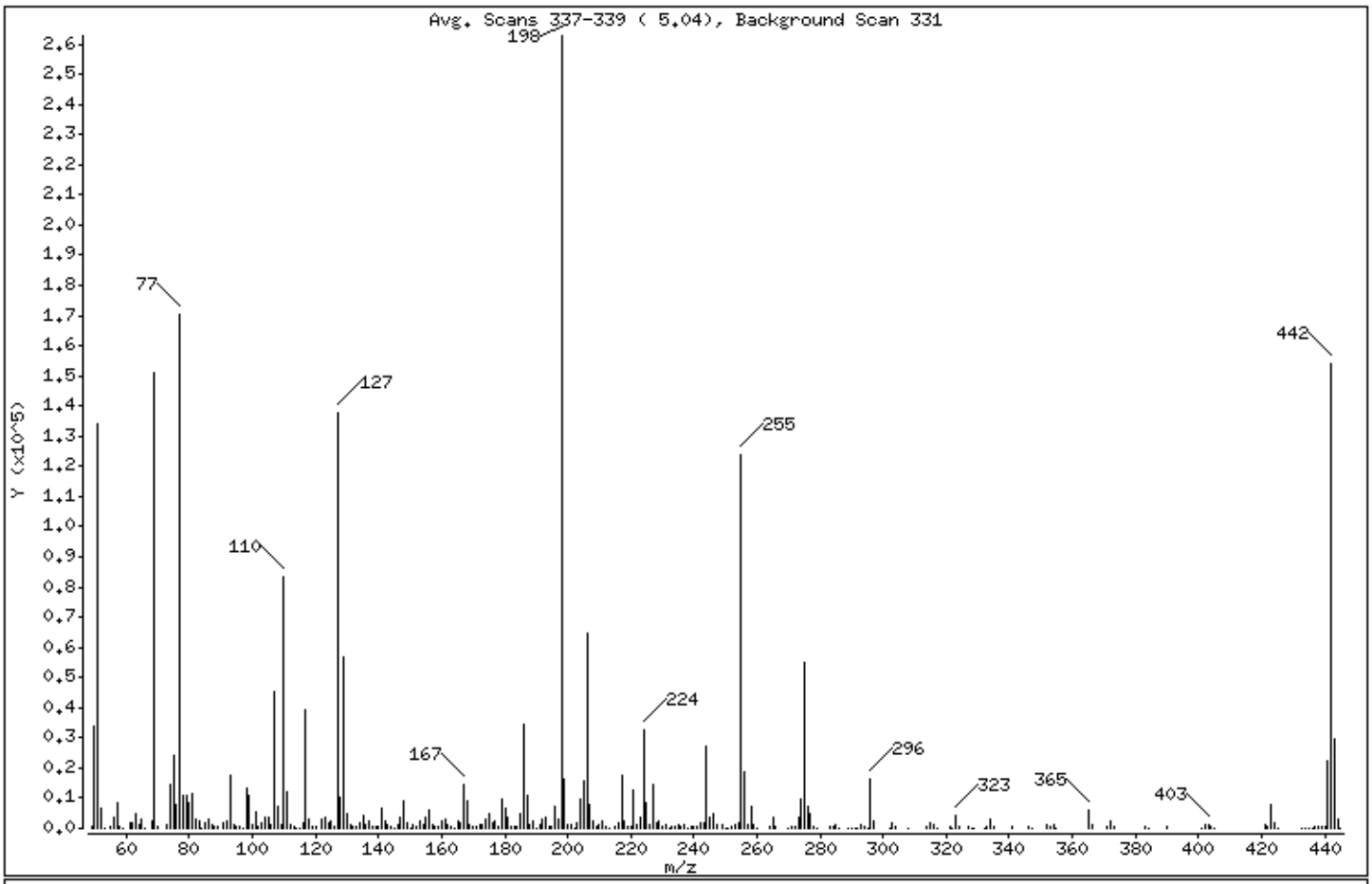
Sample Info: DFTPP12.5;rvDFTPP2878;1;3;DFTPP;

Operator: em10340

Column phase: DB-5MS

Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	51.03
68	Less than 2.00% of mass 69	0.82 (1.43)
69	Mass 69 relative abundance	57.48
70	Less than 2.00% of mass 69	0.29 (0.50)
127	10.00 - 80.00% of mass 198	52.53
197	Less than 2.00% of mass 198	1.19
199	5.00 - 9.00% of mass 198	6.29
275	10.00 - 60.00% of mass 198	20.99
365	Greater than 1.00% of mass 198	2.38
441	0.01 - 24.00% of mass 442	8.47 (14.45)
442	50.00 - 99.99% of mass 198	58.57
443	15.00 - 24.00% of mass 442	11.25 (19.21)

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Target 3.5 esignature user ID: art12405

Date : 04-NOV-2018 11:11

Client ID: DFTPP12.5 Instrument: HP19760.i

Sample Info: DFTPP12.5;rvDFTPP2878;1;3;DFTPP;

Operator: em10340

Column phase: DB-5MS Column diameter: 0.18

Data File: dk0210.d
Spectrum: Avg. Scans 337-339 (5.04), Background Scan 331
Location of Maximum: 198.00
Number of points: 286

m/z	Y	m/z	Y	m/z	Y	m/z	Y
49.00	495	128.00	10112	200.00	1426	283.00	692
50.00	34072	129.00	56584	201.00	1458	284.00	373
51.00	134080	130.00	4762	202.00	143	285.00	932
52.00	6890	131.00	983	203.00	2064	286.00	158
53.00	176	132.00	484	204.00	9720	289.00	105
55.00	815	133.00	352	205.00	15583	290.00	223
56.00	3883	134.00	1759	206.00	64480	291.00	135
57.00	8416	135.00	4378	207.00	8132	292.00	103
58.00	525	136.00	1410	208.00	2261	293.00	1243
59.00	98	137.00	2219	209.00	682	294.00	349
61.00	1650	138.00	504	210.00	1072	295.00	242
62.00	1696	139.00	342	211.00	2584	296.00	16049
63.00	5128	140.00	611	212.00	398	297.00	2263
64.00	927	141.00	6617	213.00	95	302.00	293
65.00	2897	142.00	2193	215.00	821	303.00	2058
66.00	85	143.00	1372	216.00	1590	304.00	411
68.00	2166	144.00	413	217.00	17408	308.00	260
69.00	150976	145.00	221	218.00	2473	314.00	688
70.00	749	146.00	1197	219.00	462	315.00	1987
73.00	1146	147.00	3663	220.00	361	316.00	943
74.00	14539	148.00	9222	221.00	12916	317.00	198
75.00	24216	149.00	2071	222.00	1233	321.00	405
76.00	7713	150.00	289	223.00	3693	322.00	251
77.00	170176	151.00	950	224.00	32416	323.00	4318
78.00	11081	152.00	432	225.00	8585	324.00	680
79.00	10614	153.00	2404	226.00	998	327.00	805
80.00	8239	154.00	1508	227.00	14285	328.00	253
81.00	11539	155.00	3828	228.00	1994	329.00	88
82.00	2761	156.00	5946	229.00	2667	332.00	156
83.00	2487	157.00	956	230.00	311	333.00	382
84.00	149	158.00	791	231.00	1145	334.00	2923
85.00	1803	159.00	851	232.00	104	335.00	792
86.00	3283	160.00	2154	233.00	350	341.00	472
87.00	1296	161.00	3122	234.00	903	346.00	786
88.00	571	162.00	1089	235.00	1182	347.00	104

Date : 04-NOV-2018 11:11

Client ID: DFTPP12.5 Instrument: HP19760.i

Sample Info: DFTPP12.5;rvDFTPP2878;1;3;DFTPP;

Operator: em10340

Column phase: DB-5MS Column diameter: 0.18

Data File: dk0210.d
Spectrum: Avg. Scans 337-339 (5.04), Background Scan 331
Location of Maximum: 198.00
Number of points: 286

m/z	Y	m/z	Y	m/z	Y	m/z	Y
89.00	460	163.00	385	236.00	529	352.00	1038
91.00	1945	164.00	208	237.00	1184	353.00	883
92.00	2646	165.00	2260	238.00	138	354.00	1447
93.00	17560	166.00	1922	239.00	783	355.00	208
94.00	1261	167.00	14234	240.00	599	365.00	6254
95.00	460	168.00	9259	241.00	806	366.00	942
96.00	823	169.00	1173	242.00	1819	371.00	419
97.00	119	170.00	544	243.00	1896	372.00	2350
98.00	13475	171.00	404	244.00	26896	373.00	564
99.00	11107	172.00	1333	245.00	3561	383.00	658
100.00	985	173.00	1351	246.00	5089	384.00	90
101.00	5537	174.00	2739	247.00	1089	390.00	350
102.00	367	175.00	4916	249.00	926	401.00	150
103.00	1715	176.00	1673	250.00	90	402.00	956
104.00	3689	177.00	2286	251.00	227	403.00	1104
105.00	3494	178.00	882	252.00	540	404.00	325
106.00	1304	179.00	9534	253.00	914	405.00	117
107.00	45304	180.00	6755	254.00	1706	421.00	1162
108.00	7136	181.00	3471	255.00	123616	422.00	777
109.00	1472	182.00	480	256.00	18488	423.00	7888
110.00	83064	183.00	504	257.00	1449	424.00	1699
111.00	12277	184.00	842	258.00	7326	425.00	126
112.00	1244	185.00	4532	259.00	1251	433.00	84
113.00	623	186.00	34656	260.00	95	434.00	243
114.00	87	187.00	10720	264.00	404	435.00	211
115.00	92	188.00	1104	265.00	3379	436.00	99
116.00	1900	189.00	2132	266.00	489	437.00	398
117.00	39256	190.00	281	270.00	205	438.00	499
118.00	2883	191.00	1147	271.00	373	439.00	445
119.00	373	192.00	3286	272.00	484	440.00	456
120.00	597	193.00	3387	273.00	3751	441.00	22240
122.00	3033	194.00	696	274.00	9882	442.00	153856
123.00	3850	195.00	518	275.00	55152	443.00	29560
124.00	1931	196.00	7186	276.00	7418	444.00	3122
125.00	2177	197.00	3140	277.00	4894	445.00	200

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Target 3.5 esignature user ID: art12405

Date : 04-NOV-2018 11:11

Client ID: DFTPP12.5 Instrument: HP19760.i

Sample Info: DFTPP12.5;rvDFTPP2878;1;3;DFTPP;

Operator: em10340

Column phase: DB-5MS Column diameter: 0.18

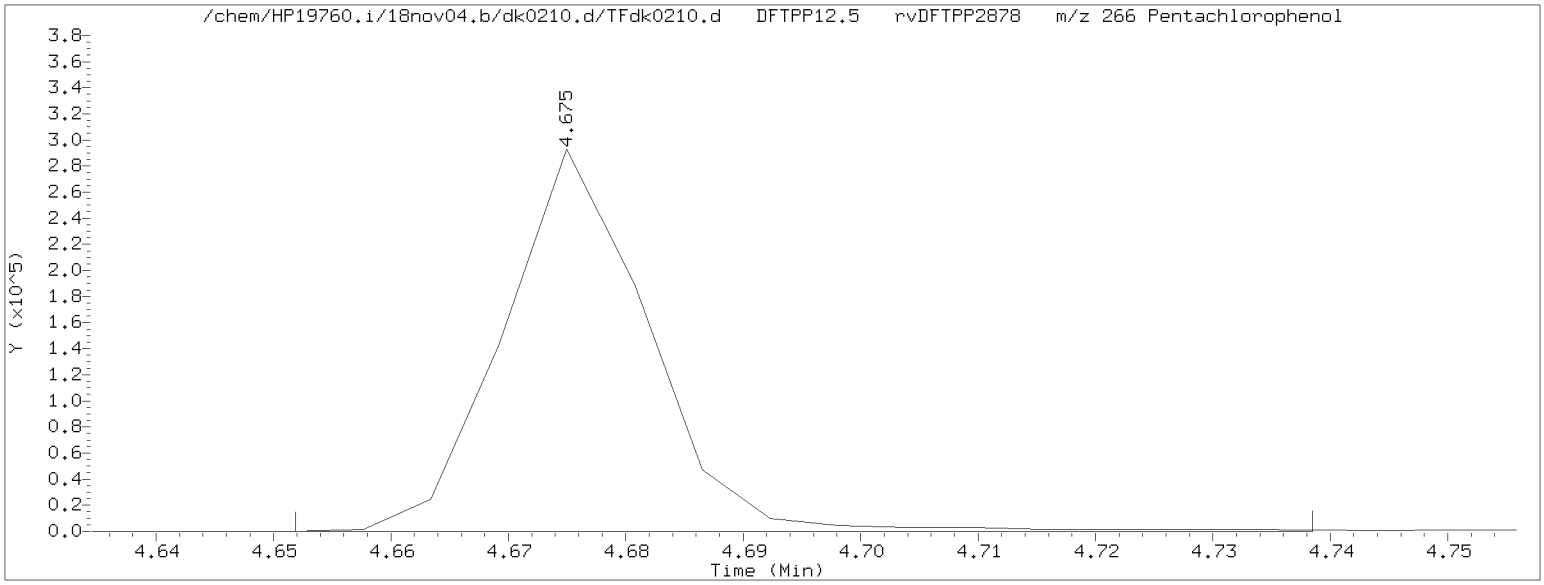
Data File: dk0210.d
Spectrum: Avg. Scans 337-339 (5.04), Background Scan 331
Location of Maximum: 198.00
Number of points: 286

m/z	Y	m/z	Y	m/z	Y	m/z	Y
126.00	825	198.00	262720	278.00	752		
127.00	137984	199.00	16520	279.00	139		

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Assessment of GC Column Performance and Injection Port Inertness for

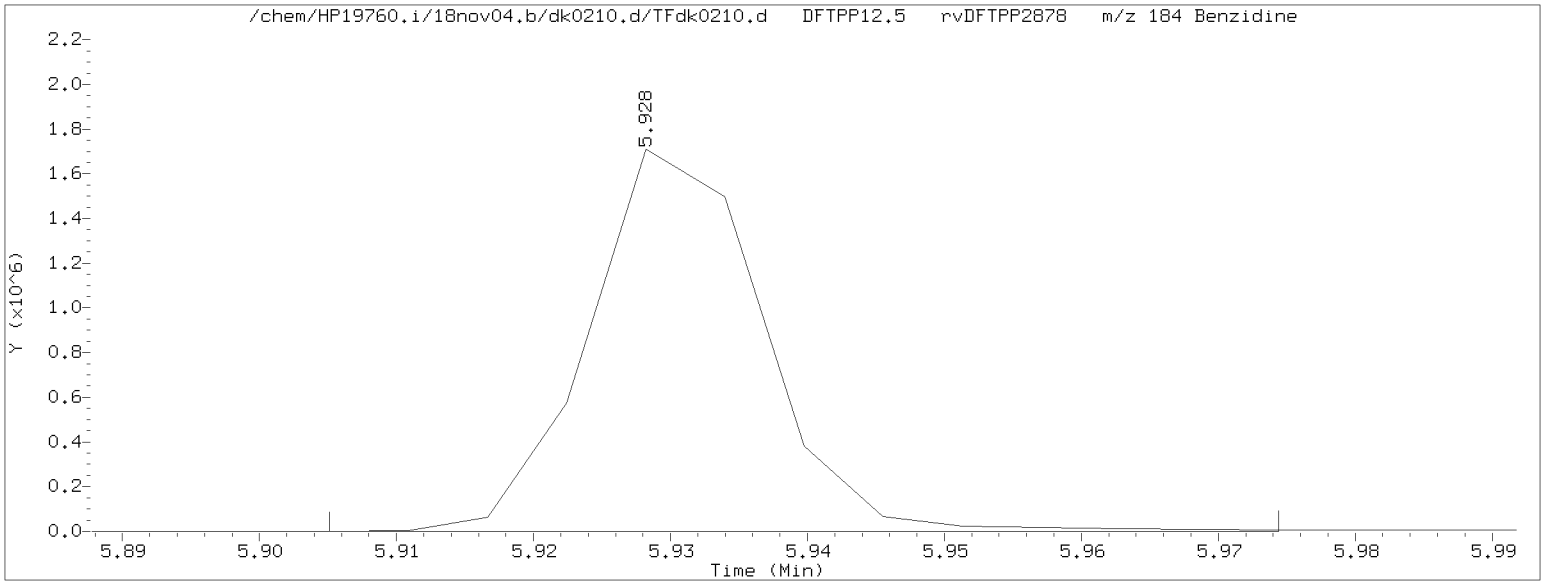
Instrument ID: HP19760.i Injection Date: 04-NOV-2018 11:11 Operator: em10340



Pentachlorophenol EICP peak height = 292992 EICP peak height at 10% = 29299 Pentachlorophenol EICP area = 251221

Pentachlorophenol EICP peak apex (min.) = 4.675
RT at 10% of front half of EICP (min.) = 4.664 'Front' peak width (min.) = 0.0112833333
RT at 10% of back half of EICP (min.) = 4.689 'Tailing' peak width (min.) = 0.0142833333

$$\text{PCP tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0142833333}{0.0112833333} = 1.266$$



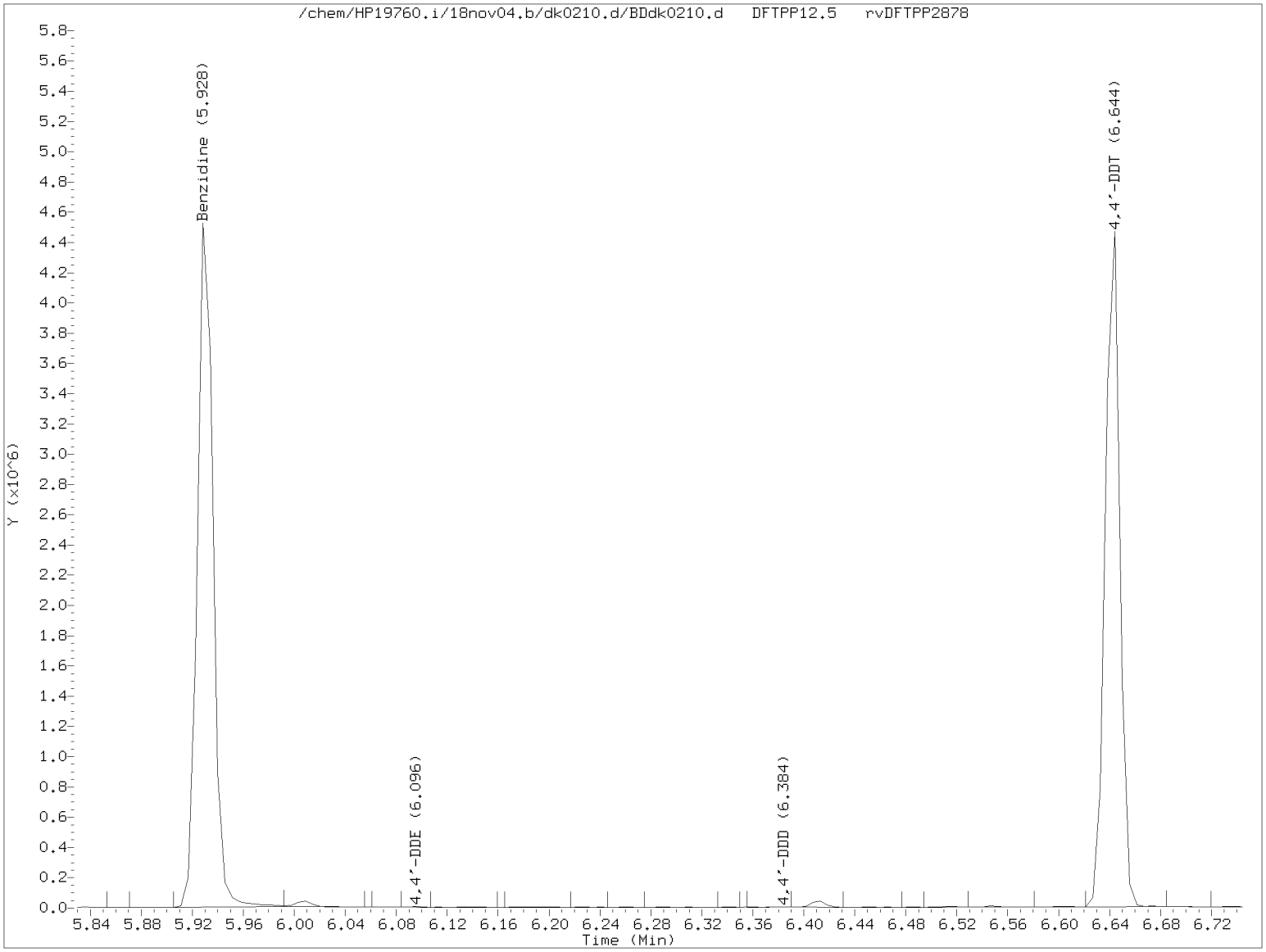
Benzidine EICP peak height = 1710515 EICP peak height at 10% = 171052 Benzidine EICP area = 1509829

Benzidine EICP peak apex (min.) = 5.928
RT at 10% of front half of EICP (min.) = 5.918 'Front' peak width (min.) = 0.0102833333
RT at 10% of back half of EICP (min.) = 5.944 'Tailing' peak width (min.) = 0.0153333333

$$\text{Benzidine tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0153333333}{0.0102833333} = 1.491$$

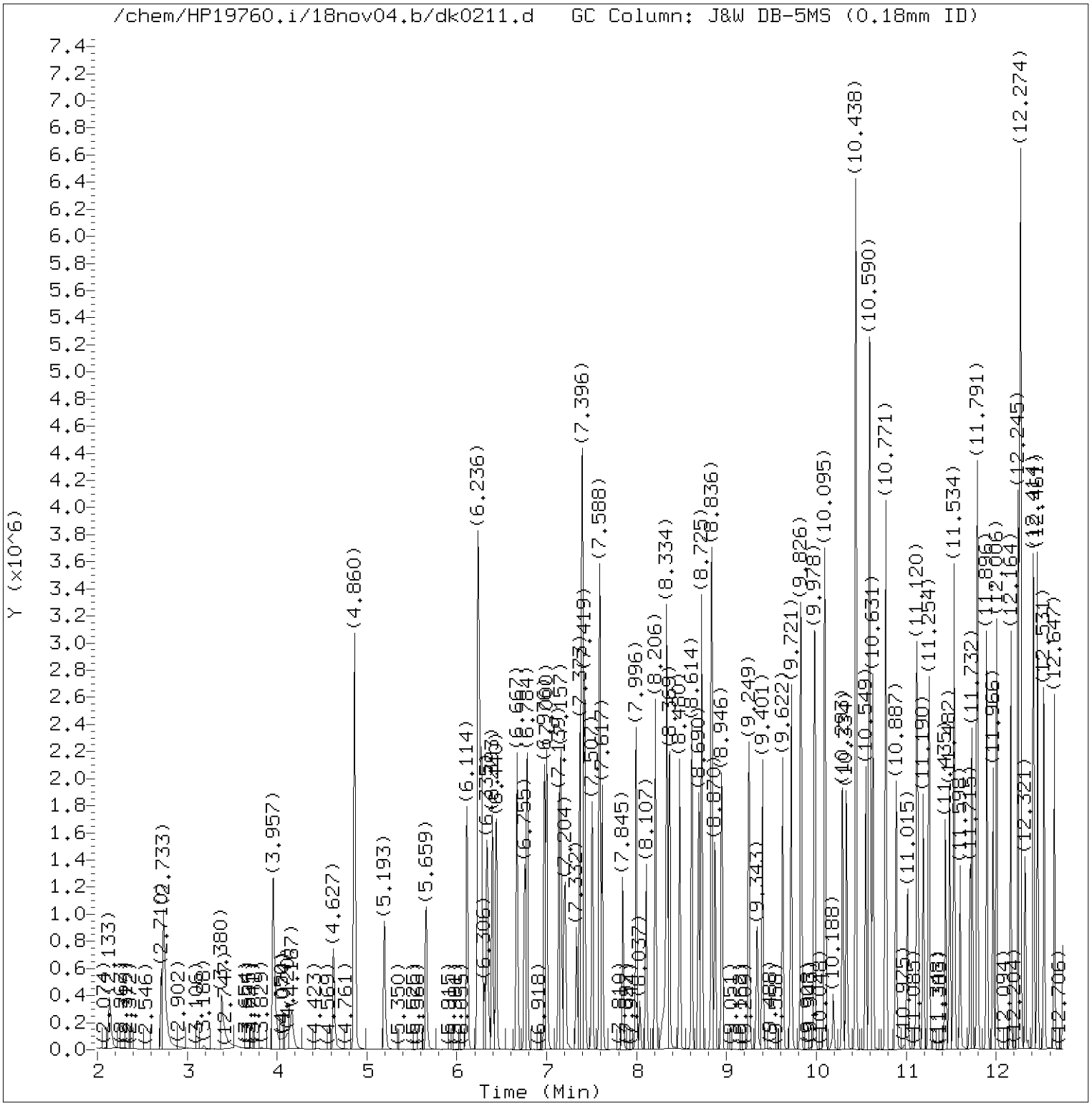
Assessment of GC Column Performance and Injection Port Inertness for

Instrument ID: HP19760.i Injection Date: 04-NOV-2018 11:11 Operator: em10340



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{3958 + 2747}{3958 + 2747 + 3611345} \times 100 = 0.2$$



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0211.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 11:51 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

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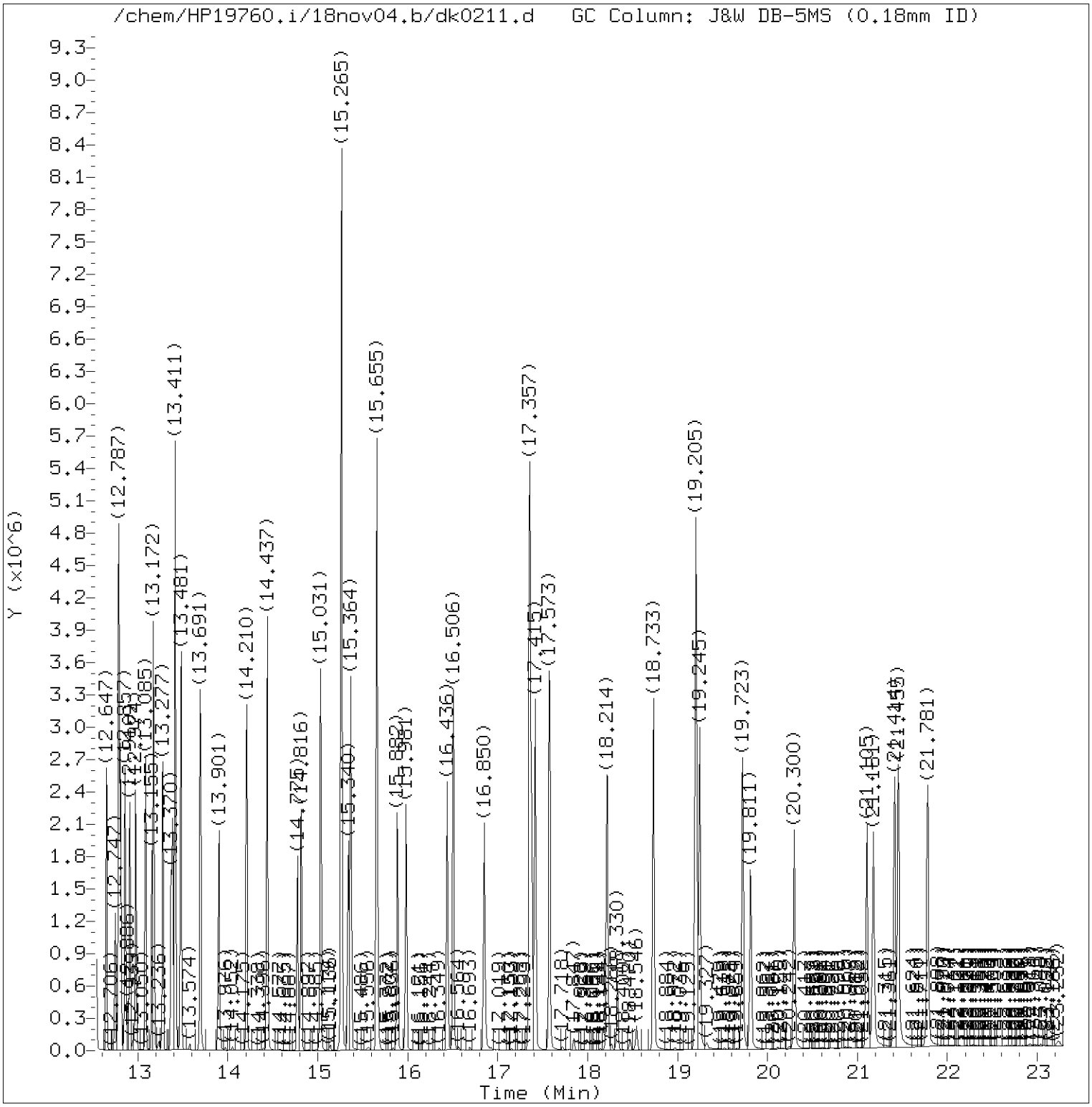
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0211.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 11:51 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0211.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 11:51 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.133	88	337383	7.500
4) N-Nitrosodimethylamine	(1)	2.710	74	506608	7.500
5) Pyridine	(1)	2.739	79	858820	7.500
7) 2-Picoline	(1)	3.957	93	859537	7.500
8) N-Nitrosomethylethylamine	(1)	4.167	88	370780	7.500
9) Methyl methanesulfonate	(1)	4.627	80	416769	7.500
11)$2-Fluorophenol	(1)	4.860	112	1301248	15.000
13) N-Nitrosodiethylamine	(1)	5.193	102	344598	7.500
15) Ethyl methanesulfonate	(1)	5.659	109	332764	7.500
42) Total Cresols	(1)			1364836	15.000
16) Benzaldehyde	(1)	6.114	77	570078	7.500
17)$Phenol-d6	(1)	6.236	99	1811991	15.000
18) Phenol	(1)	6.253	94	1040667	7.500
19) Aniline	(1)	6.277	93	1213966	7.500
20) a-methylstyrene	(1)	6.358	118	63196	7.500
22) bis(2-Chloroethyl)ether	(1)	6.393	93	773512	7.500
23) 2-Chlorophenol	(1)	6.440	128	618661	7.500
24) 1,3-Dichlorobenzene	(1)	6.667	146	646116	7.500
25)*1,4-Dichlorobenzene-d4	(1)	6.755	152	261444	5.000
26) 1,4-Dichlorobenzene	(1)	6.784	146	652333	7.500
27) Benzyl alcohol	(1)	6.976	108	427952	7.500
28) 1,2-Dichlorobenzene	(1)	7.000	146	615800	7.500
30) Indene	(1)	7.134	115	700793	7.500
31) 2-Methylphenol	(1)	7.157	108	640300	7.500
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.204	45	889221	7.500
34) bis(2-Chloroisopropyl)ether	(1)	7.204	45	889221	7.500
35) N-Nitrosopyrrolidine	(1)	7.332	100	354843	7.500
36) Acetophenone	(1)	7.373	105	874034	7.500
97) Isosafrole	(3)			432570	7.500
38) N-Nitroso-di-n-propylamine	(1)	7.390	70	556580	7.500
37) 4-Methylphenol	(1)	7.396	108	724536	7.500
39) N-Nitrosomorpholine	(1)	7.402	56	420517	7.500
40) o-Toluidine	(1)	7.419	106	1091018	7.500
43) Hexachloroethane	(1)	7.507	117	306404	7.500
44)$Nitrobenzene-d5	(2)	7.588	82	1631294	15.000
45) Nitrobenzene	(2)	7.617	77	821656	7.500
48) N-Nitrosopiperidine	(2)	7.845	114	320154	7.500
50) Isophorone	(2)	7.996	82	1394514	7.500
120) 2,4_2,6-Dinitrotoluenes	(3)			557309	15.000
51) 2-Nitrophenol	(2)	8.107	139	299119	7.500

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0211.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 11:51 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.212	107	670573	7.500
57) O,O,O-Triethylphosphorothioate	(2)	8.334	198	245788	7.500
56) Benzoic acid	(2)	8.340	105	561216	10.000
55) bis(2-Chloroethoxy)methane	(2)	8.369	93	877886	7.500
60) 2,4-Dichlorophenol	(2)	8.480	162	454683	7.500
62) 1,2,4-Trichlorobenzene	(2)	8.614	180	479930	7.500
65)*Naphthalene-d8	(2)	8.690	136	972956	5.000
66) Naphthalene	(2)	8.725	128	1742990	7.500
146) Diallate trans/cis	(4)			628086	7.500
67) 4-Chloroaniline	(2)	8.830	127	681940	7.500
68) 2,6-Dichlorophenol	(2)	8.836	162	438352	7.500
69) Hexachloropropene	(2)	8.870	213	300119	7.500
71) Hexachlorobutadiene	(2)	8.946	225	264632	7.500
75) Quinoline	(2)	9.249	129	989952	7.500
76) Caprolactam	(2)	9.343	113	177798	7.500
77) N-Nitrosodi-n-butylamine	(2)	9.401	84	472909	7.500
80) 4-Chloro-3-methylphenol	(2)	9.622	107	537248	7.500
82) Safrole	(2)	9.721	162	406325	7.500
83) 2-Methylnaphthalene	(2)	9.826	142	1089161	7.500
84) 1-Methylnaphthalene	(2)	9.984	142	1029475	7.500
85) Hexachlorocyclopentadiene	(3)	10.095	237	270669	7.500
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.100	216	442558	7.500
88) cis-Isosafrole	(3)	10.188	162	67816	1.275
90) 2,4,6-Trichlorophenol	(3)	10.293	196	294214	7.500
92) 2,4,5-Trichlorophenol	(3)	10.334	196	302047	7.500
93)$2-Fluorobiphenyl	(3)	10.438	172	2251520	15.000
99) Diphenyl ether	(3)	10.438	170	508851	7.500
94) trans-Isosafrole	(3)	10.549	162	364754	6.225
95) 1,1'-Biphenyl	(3)	10.590	154	1215464	7.500
96) 2-Chloronaphthalene	(3)	10.596	162	963624	7.500
98) 1-Chloronaphthalene	(3)	10.631	162	898193	7.500
100) 2-Nitroaniline	(3)	10.776	138	324836	7.500
104) 1,4-Naphthoquinone	(3)	10.887	158	366579	7.500
105) 1,4-Dinitrobenzene	(3)	11.015	168	170911	7.500
106) Dimethylphthalate	(3)	11.120	163	1023801	7.500
107) 1,3-Dinitrobenzene	(3)	11.126	168	187253	7.500
108) 2,6-Dinitrotoluene	(3)	11.190	165	244048	7.500
109) Acenaphthylene	(3)	11.254	152	1388100	7.500
112) 3-Nitroaniline	(3)	11.435	138	275756	7.500
113)*Acenaphthene-d10	(3)	11.482	164	434824	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0211.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 11:51 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.534	153	976728	7.500
115) 2,4-Dinitrophenol	(3)	11.604	184	191226	10.000
116) 4-Nitrophenol	(3)	11.715	109	201659	7.500
117) Pentachlorobenzene	(3)	11.732	250	354919	7.500
119) Dibenzofuran	(3)	11.791	168	1347798	7.500
118) 2,4-Dinitrotoluene	(3)	11.796	165	313261	7.500
121) 1-Naphthylamine	(3)	11.896	143	1006616	7.500
122) 2,3,4,6-Tetrachlorophenol	(3)	11.966	232	226160	7.500
123) 2-Naphthylamine	(3)	12.006	143	1002388	7.500
124) Diethylphthalate	(3)	12.164	149	997118	7.500
126) Fluorene	(3)	12.245	166	1068099	7.500
125) Thionazin	(3)	12.257	107	217233	7.500
128) 5-Nitro-o-toluidine	(3)	12.269	152	316356	7.500
127) 4-Chlorophenyl-phenylether	(3)	12.274	204	500502	7.500
129) 4-Nitroaniline	(3)	12.280	138	300588	7.500
130) 4,6-Dinitro-2-methylphenol	(4)	12.321	198	177719	7.500
131) N-Nitrosodiphenylamine	(4)	12.414	169	876175	7.500
132) NDPA as diphenylamine	(4)	12.414	169	876175	7.500
134) 1,2-Diphenylhydrazine	(4)	12.461	77	1447087	7.500
135)$2,4,6-Tribromophenol	(3)	12.537	330	220126	15.000
137) Tetraethyldithiopyrophosphate	(4)	12.647	97	207774	7.500
139) 1,3,5-Trinitrobenzene	(4)	12.747	213	114767	7.500
140) Diallate (peak 1)	(4)	12.782	86	542483	6.225
141) Phorate	(4)	12.787	75	832631	7.500
142) Phenacetin	(4)	12.805	108	615931	7.500
143) 4-Bromophenyl-phenylether	(4)	12.857	248	251100	7.500
144) Diallate (peak 2)	(4)	12.886	86	85603	1.275
145) Hexachlorobenzene	(4)	12.910	284	257723	7.500
147) Dimethoate	(4)	12.974	87	536322	7.500
148) Atrazine	(4)	13.085	200	260939	7.500
149) Pentachlorophenol	(4)	13.155	266	172617	7.500
150) 4-Aminobiphenyl	(4)	13.172	169	762401	7.500
151) Pentachloronitrobenzene	(4)	13.178	237	118076	7.500
152) Pronamide	(4)	13.277	173	444903	7.500
153)*Phenanthrene-d10	(4)	13.382	188	809458	5.000
154) Dinoseb	(4)	13.411	211	253453	7.500
155) Phenanthrene	(4)	13.411	178	1475371	7.500
157) Anthracene	(4)	13.481	178	1486900	7.500
163) Carbazole	(4)	13.691	167	1436515	7.500
164) Methyl parathion	(4)	13.901	109	397570	7.500

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0211.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 11:51 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.210	149	1734224	7.500
168) 4-Nitroquinoline-1-oxide	(4)	14.437	190	151939	7.500
167) Parathion	(4)	14.437	109	255292	7.500
169) Octachlorostyrene	(4)	14.775	308	98843	7.500
171) Isodrin	(4)	14.816	193	171326	7.500
222) Total PAHs	(6)			25295488	135.000
173) Fluoranthene	(4)	15.031	202	1620829	7.500
174) Benzidine	(5)	15.265	184	3708968	22.500
175)*Pyrene-d10	(5)	15.340	212	787242	5.000
177) Pyrene	(5)	15.369	202	1705241	7.500
179)$Terphenyl-d14	(5)	15.655	244	1972257	15.000
182) p-Dimethylaminoazobenzene	(5)	15.882	225	269648	7.500
185) Chlorobenzilate	(5)	15.981	139	531728	7.500
187) 3,3'-Dimethylbenzidine	(5)	16.436	212	1049308	7.500
188) Butylbenzylphthalate	(5)	16.506	149	860840	7.500
191) 2-Acetylaminofluorene	(5)	16.850	181	617439	7.500
193) 3,3'-Dichlorobenzidine	(5)	17.357	252	581908	7.500
195) Benzo(a)anthracene	(5)	17.357	228	1508713	7.500
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.374	231	318578	7.500
196) Chrysene	(5)	17.415	228	1527801	7.500
199) bis(2-Ethylhexyl)phthalate	(5)	17.578	149	1220957	7.500
203) 6-Methylchrysene	(5)	18.220	242	1013313	7.500
205) Di-n-octylphthalate	(6)	18.733	149	2059368	7.500
206) Benzo(b)fluoranthene	(6)	19.199	252	1547025	7.500
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.205	256	730096	7.500
208) Benzo(k)fluoranthene	(6)	19.245	252	1611447	7.500
211) Benzo(a)pyrene	(6)	19.723	252	1428454	7.500
213)*Perylene-d12	(6)	19.811	264	796000	5.000
215) 3-Methylcholanthrene	(6)	20.300	268	671411	7.500
217) Dibenz(a,h)acridine	(6)	21.105	279	1092591	7.500
218) Dibenz(a,j)acridine	(6)	21.181	279	1182111	7.500
219) Indeno(1,2,3-cd)pyrene	(6)	21.414	276	1277792M	7.500
220) Dibenz(a,h)anthracene	(6)	21.455	278	1419693	7.500
221) Benzo(g,h,i)perylene	(6)	21.781	276	1391669	7.500

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

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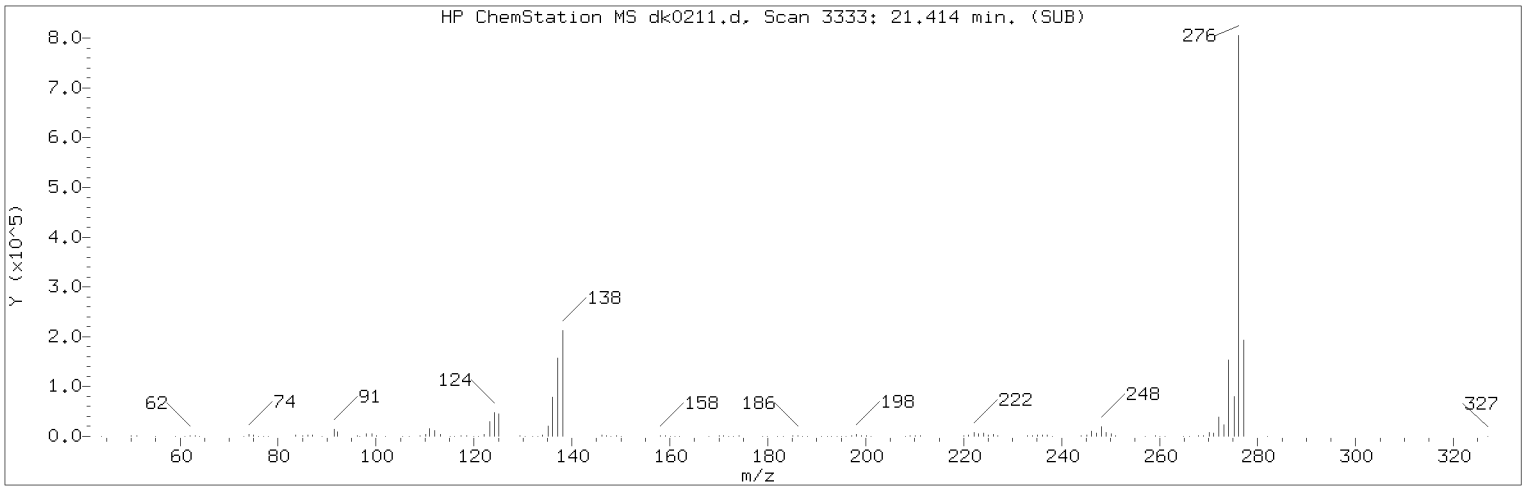
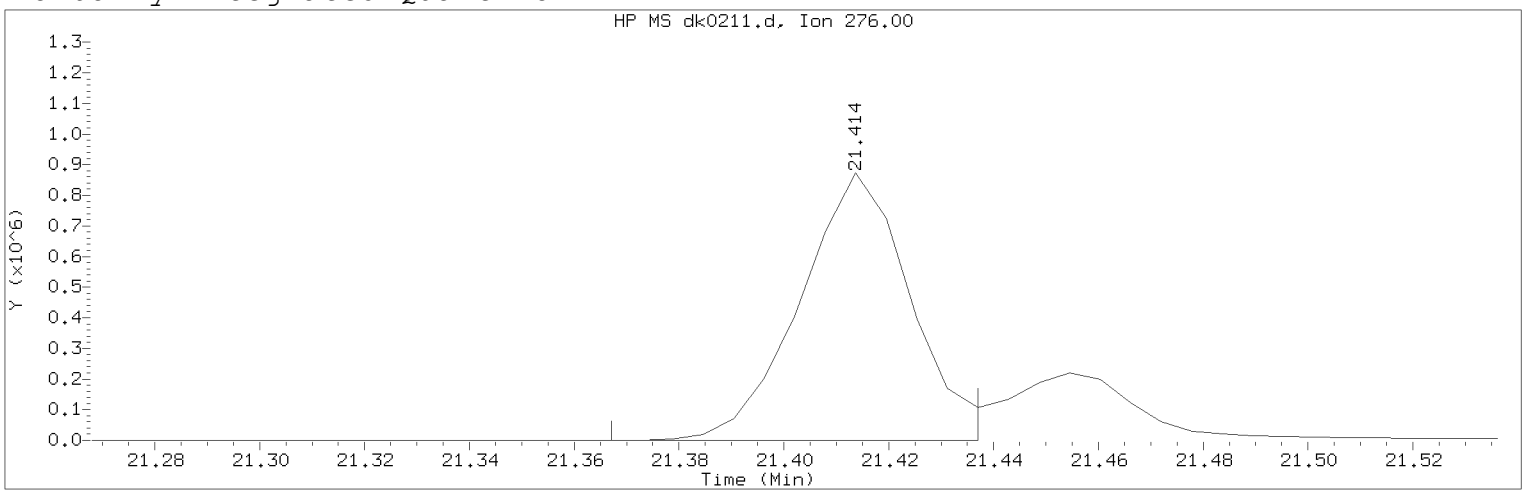
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0211.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 11:51 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

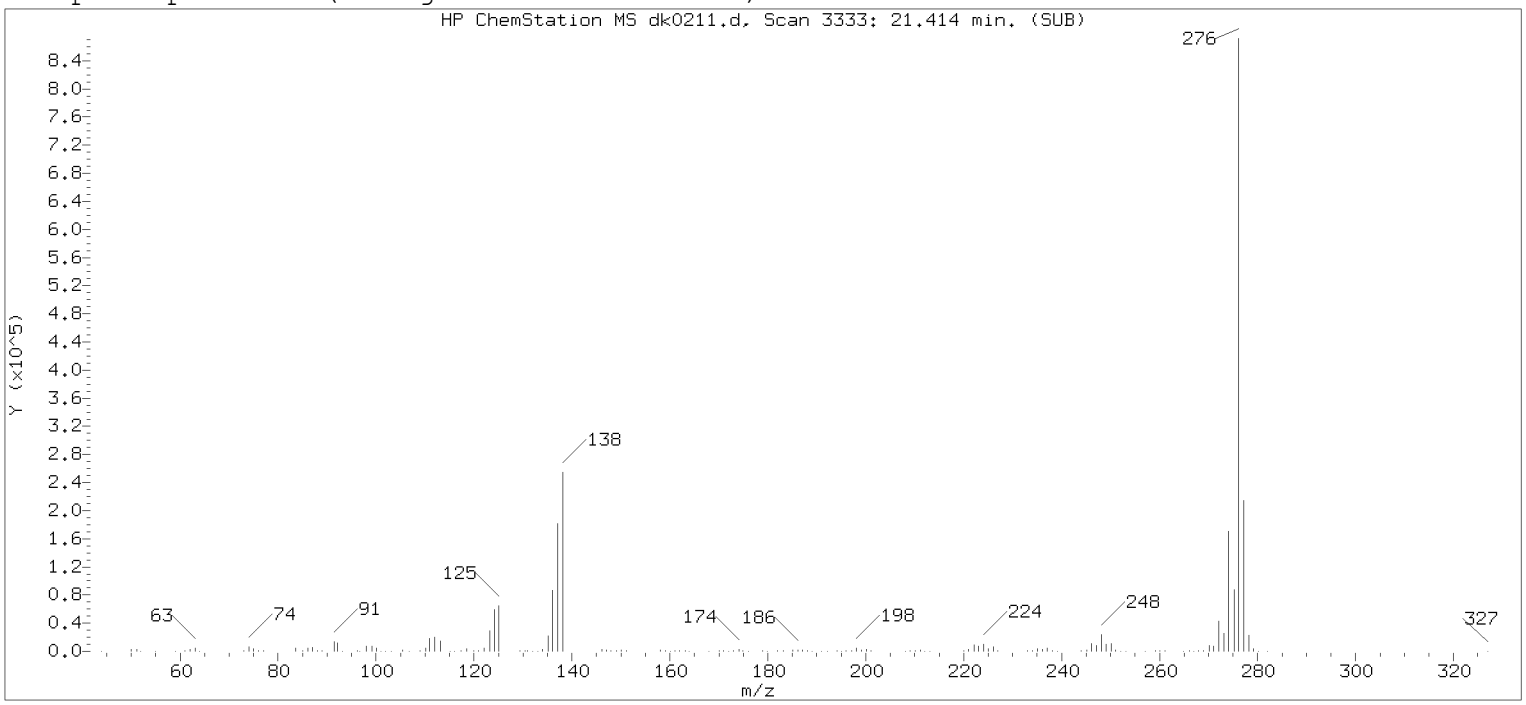
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3333
Retention Time (minutes) : 21.414
Quant Ion : 276.00
Area (flag) : 1277792M
On-Column Amount (ng/ul) : 7.5000
Integration start scan : 3324 Integration stop scan: 3336
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

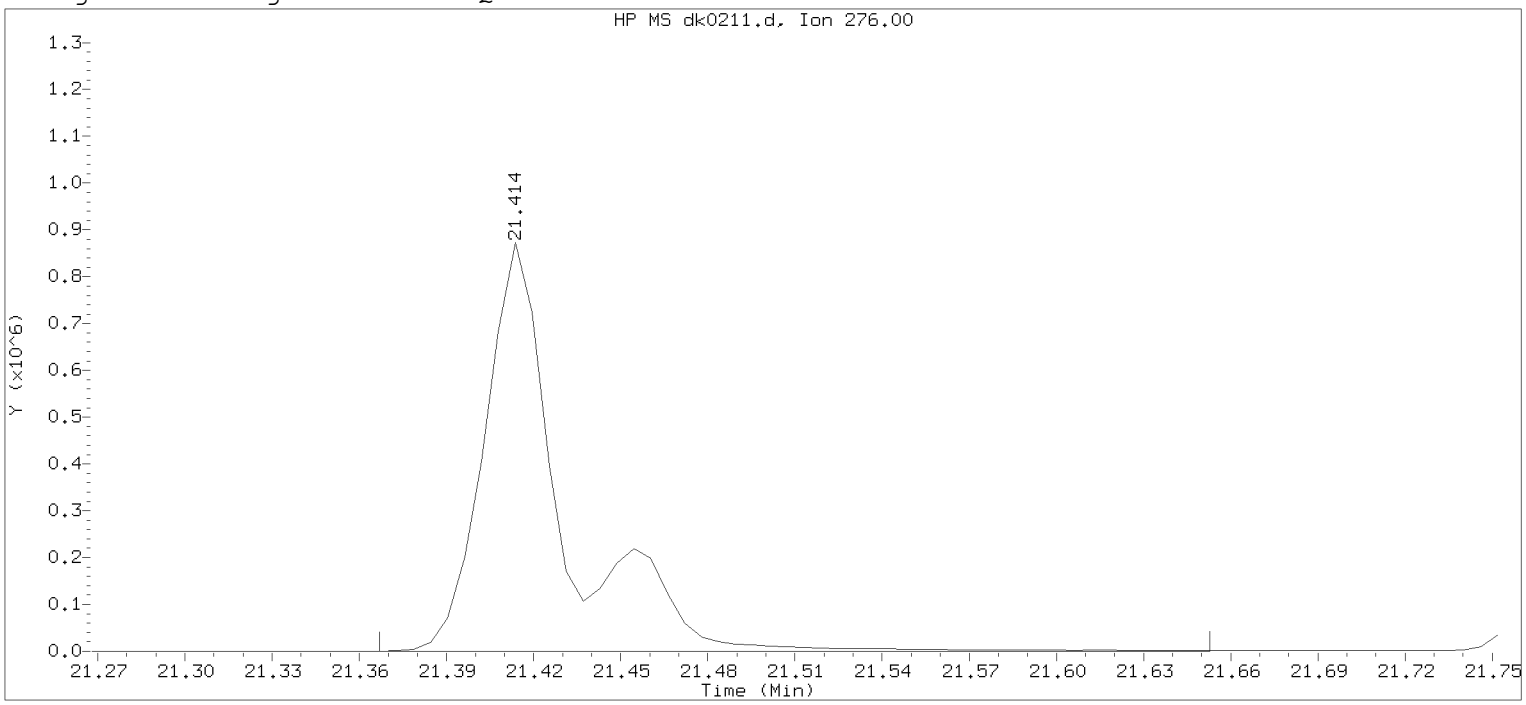
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



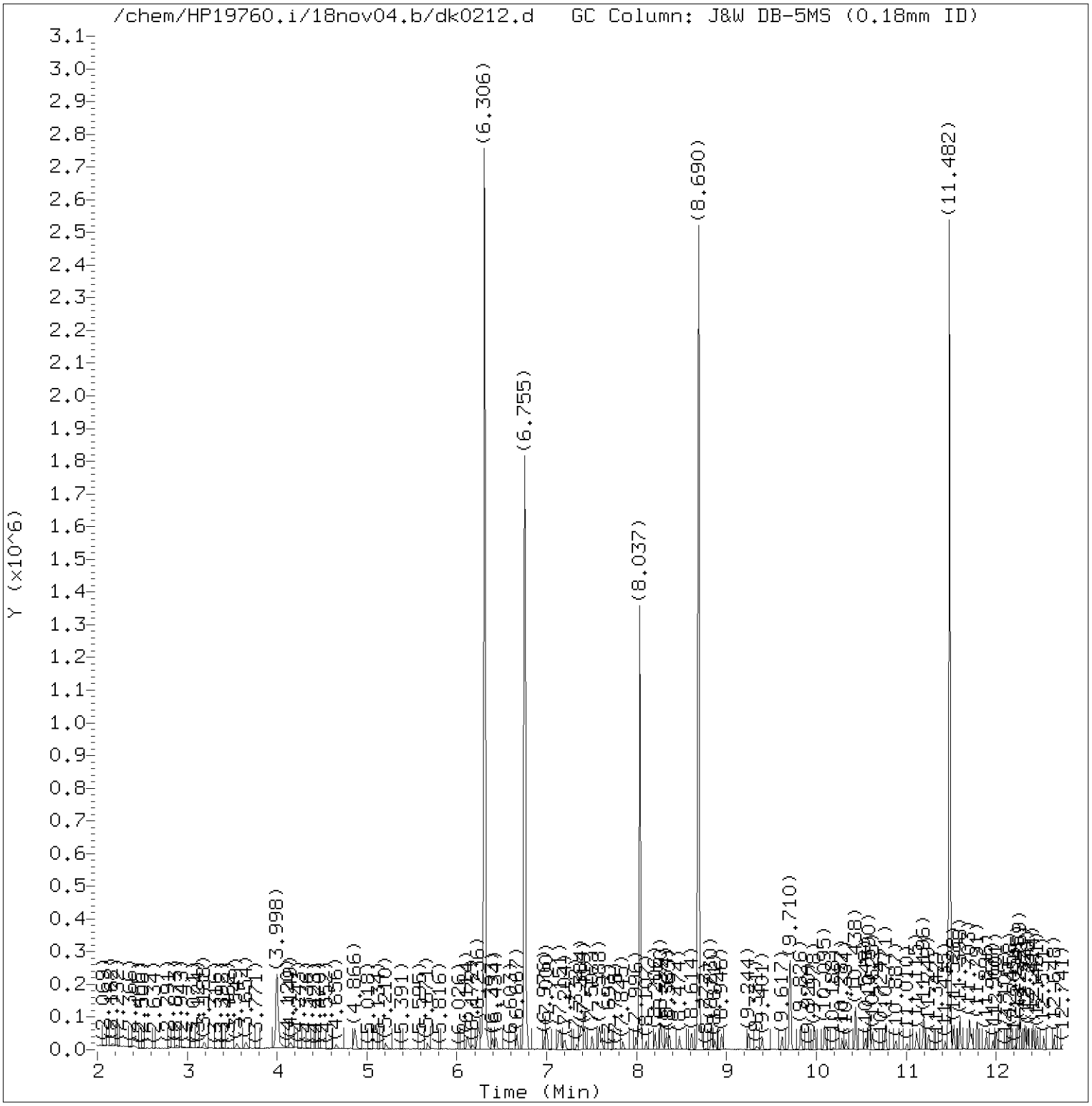
Data File: /chem/HP19760.i/18nov04.b/dk0211.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 11:51 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 12:20
Date, time and analyst ID of latest file update: 04-Nov-2018 12:20 Automation

Sample Name: SSTD7.5 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3333		
Retention Time (minutes)	: 21.414		
Quant Ion	: 276.00		
Area	: 1663892		
On-column Amount (ng/ul)	: 16.3484		
Integration start scan	: 3324	Integration stop scan:	3373
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user name: atransue



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

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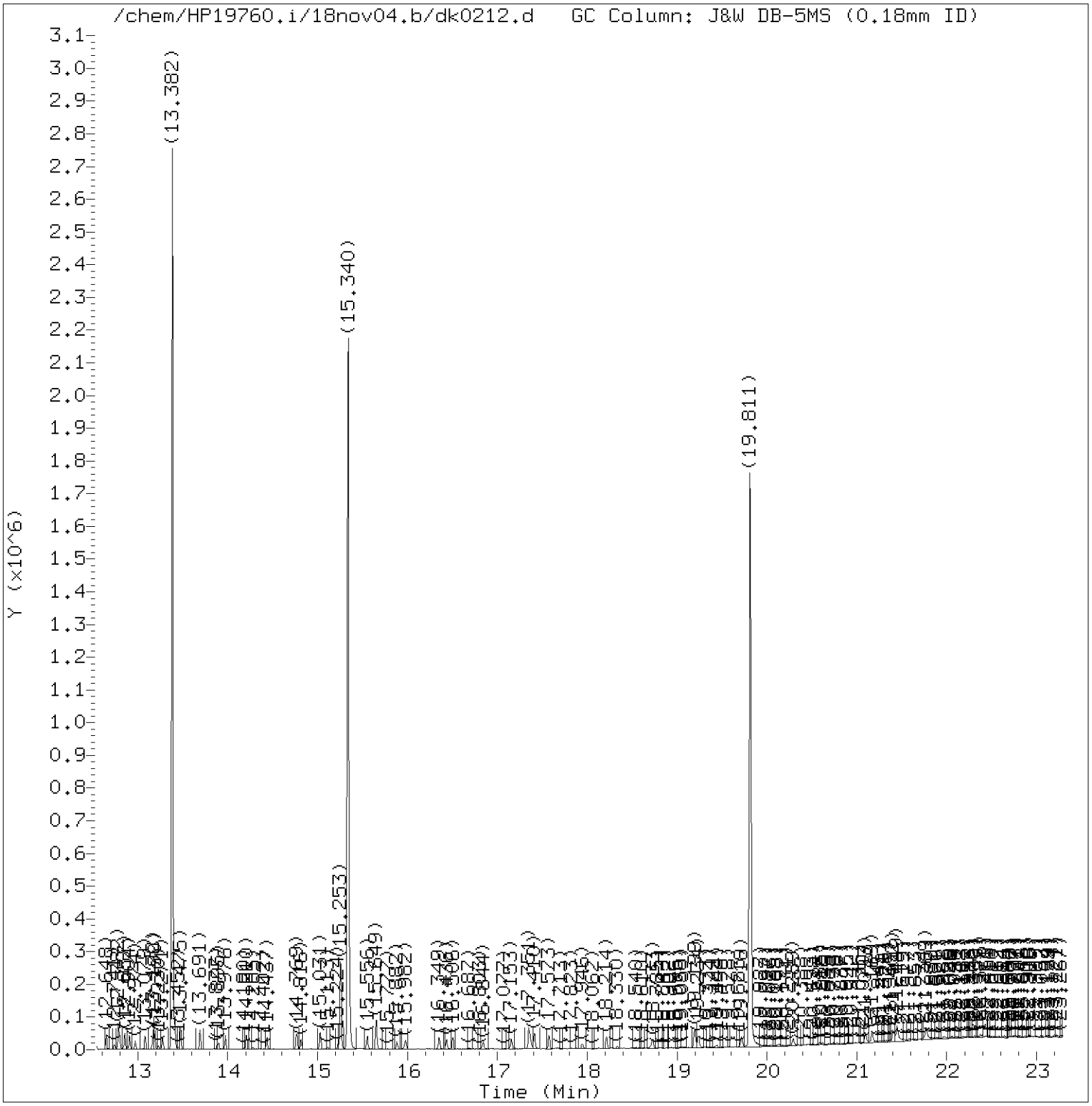
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.162	88	10005M	0.169
4) N-Nitrosodimethylamine	(1)	2.791	74	9534M	0.108
5) Pyridine	(1)	2.879	79	21919M	0.146
7) 2-Picoline	(1)	4.027	93	20678M	0.137
8) N-Nitrosomethylethylamine	(1)	4.208	88	8172M	0.126
9) Methyl methanesulfonate	(1)	4.662	80	8244M	0.113
11)$2-Fluorophenol	(1)	4.860	112	26437	0.232
13) N-Nitrosodiethylamine	(1)	5.210	102	6104	0.101
42) Total Cresols	(1)			26606	0.223
15) Ethyl methanesulfonate	(1)	5.671	109	6255	0.107
16) Benzaldehyde	(1)	6.114	77	12885	0.129
17)$Phenol-d6	(1)	6.236	99	37301	0.235
18) Phenol	(1)	6.253	94	21893	0.120
19) Aniline	(1)	6.277	93	24975	0.118
20) a-methylstyrene	(1)	6.358	118	1521A	0.138
22) bis(2-Chloroethyl)ether	(1)	6.393	93	16745	0.124
23) 2-Chlorophenol	(1)	6.434	128	11682	0.108
24) 1,3-Dichlorobenzene	(1)	6.667	146	13015	0.115
25)*1,4-Dichlorobenzene-d4	(1)	6.755	152	343195	5.000
26) 1,4-Dichlorobenzene	(1)	6.778	146	14526	0.127
27) Benzyl alcohol	(1)	6.982	108	7778	0.104
28) 1,2-Dichlorobenzene	(1)	7.000	146	13212	0.123
30) Indene	(1)	7.134	115	14311	0.117
31) 2-Methylphenol	(1)	7.151	108	12154	0.108
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.204	45	18345	0.118
34) bis(2-Chloroisopropyl)ether	(1)	7.204	45	18345	0.118
35) N-Nitrosopyrrolidine	(1)	7.332	100	6254	0.101
36) Acetophenone	(1)	7.367	105	18170	0.119
97) Isosafrole	(3)			7196	0.097
38) N-Nitroso-di-n-propylamine	(1)	7.384	70	9880	0.101
37) 4-Methylphenol	(1)	7.390	108	14452	0.114
39) N-Nitrosomorpholine	(1)	7.402	56	8393	0.114
40) o-Toluidine	(1)	7.419	106	23800	0.125
43) Hexachloroethane	(1)	7.507	117	6504	0.121
44)$Nitrobenzene-d5	(2)	7.588	82	30548	0.216
45) Nitrobenzene	(2)	7.612	77	16577	0.116
48) N-Nitrosopiperidine	(2)	7.845	114	5739	0.103
50) Isophorone	(2)	7.996	82	24712	0.102
120) 2,4_2,6-Dinitrotoluenes	(3)			8366	0.176
51) 2-Nitrophenol	(2)	8.107	139	4935	0.095

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.206	107	12225	0.105
56) Benzoic acid	(2)	8.270	105	32341M	0.443
57) O,O,O-Triethylphosphorothioate	(2)	8.334	198	4530	0.106
55) bis(2-Chloroethoxy)methane	(2)	8.363	93	17631	0.116
60) 2,4-Dichlorophenol	(2)	8.480	162	9000	0.114
62) 1,2,4-Trichlorobenzene	(2)	8.614	180	10211	0.123
65)*Naphthalene-d8	(2)	8.690	136	1266142	5.000
66) Naphthalene	(2)	8.725	128	38223	0.126
146) Diallate trans/cis	(4)			10312	0.102
67) 4-Chloroaniline	(2)	8.830	127	13084	0.111
68) 2,6-Dichlorophenol	(2)	8.836	162	7927	0.104
69) Hexachloropropene	(2)	8.871	213	5572	0.107
71) Hexachlorobutadiene	(2)	8.946	225	5846	0.127
75) Quinoline	(2)	9.249	129	21162	0.123
76) Caprolactam	(2)	9.325	113	2451M	0.079
77) N-Nitrosodi-n-butylamine	(2)	9.401	84	8513	0.104
80) 4-Chloro-3-methylphenol	(2)	9.617	107	9791	0.105
82) Safrole	(2)	9.716	162	7171	0.102
83) 2-Methylnaphthalene	(2)	9.826	142	22095	0.121
84) 1-Methylnaphthalene	(2)	9.978	142	19450	0.116
85) Hexachlorocyclopentadiene	(3)	10.089	237	5016	0.109
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.095	216	9808	0.130
88) cis-Isosafrole	(3)	10.194	162	1273	0.019
90) 2,4,6-Trichlorophenol	(3)	10.287	196	4976	0.099
92) 2,4,5-Trichlorophenol	(3)	10.334	196	5510	0.107
93)$2-Fluorobiphenyl	(3)	10.438	172	44603	0.232
99) Diphenyl ether	(3)	10.438	170	9602	0.111
94) trans-Isosafrole	(3)	10.549	162	5923	0.079
95) 1,1'-Biphenyl	(3)	10.590	154	24693	0.119
96) 2-Chloronaphthalene	(3)	10.596	162	19219	0.117
98) 1-Chloronaphthalene	(3)	10.625	162	18769	0.122
100) 2-Nitroaniline	(3)	10.771	138	5360	0.097
104) 1,4-Naphthoquinone	(3)	10.887	158	4599	0.073
105) 1,4-Dinitrobenzene	(3)	11.010	168	2448	0.084
106) Dimethylphthalate	(3)	11.115	163	18384	0.105
107) 1,3-Dinitrobenzene	(3)	11.126	168	2702	0.085
108) 2,6-Dinitrotoluene	(3)	11.185	165	3890	0.093
109) Acenaphthylene	(3)	11.249	152	24080	0.112
112) 3-Nitroaniline	(3)	11.435	138	4569	0.097
113)*Acenaphthene-d10	(3)	11.482	164	556706	5.000

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

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.528	153	20413	0.124
115) 2,4-Dinitrophenol	(3)	11.598	184	12258	0.501
116) 4-Nitrophenol	(3)	11.703	109	12918	0.375
117) Pentachlorobenzene	(3)	11.732	250	6883	0.114
119) Dibenzofuran	(3)	11.785	168	27099	0.118
118) 2,4-Dinitrotoluene	(3)	11.791	165	4476	0.084
121) 1-Naphthylamine	(3)	11.896	143	17196	0.100
122) 2,3,4,6-Tetrachlorophenol	(3)	11.966	232	3948	0.102
123) 2-Naphthylamine	(3)	12.001	143	17915	0.105
124) Diethylphthalate	(3)	12.158	149	17421	0.102
126) Fluorene	(3)	12.240	166	19403	0.115
125) Thionazin	(3)	12.251	107	3365	0.091
128) 5-Nitro-o-toluidine	(3)	12.263	152	3878M	0.072
127) 4-Chlorophenyl-phenylether	(3)	12.269	204	9446	0.111
129) 4-Nitroaniline	(3)	12.274	138	3963	0.077
130) 4,6-Dinitro-2-methylphenol	(4)	12.321	198	8188	0.286
131) N-Nitrosodiphenylamine	(4)	12.414	169	15571	0.110
132) NDPA as diphenylamine	(4)	12.414	169	15571	0.110
134) 1,2-Diphenylhydrazine	(4)	12.461	77	24794	0.106
135)$2,4,6-Tribromophenol	(3)	12.537	330	3587	0.191
137) Tetraethyldithiopyrophosphate	(4)	12.648	97	3453	0.103
139) 1,3,5-Trinitrobenzene	(4)	12.735	213	958M	0.052
140) Diallate (peak 1)	(4)	12.782	86	8628	0.082
141) Phorate	(4)	12.787	75	11054	0.083
142) Phenacetin	(4)	12.799	108	8752	0.088
143) 4-Bromophenyl-phenylether	(4)	12.857	248	4284	0.106
144) Diallate (peak 2)	(4)	12.886	86	1684	0.021
145) Hexachlorobenzene	(4)	12.904	284	5134	0.124
147) Dimethoate	(4)	12.968	87	6493	0.075
148) Atrazine	(4)	13.079	200	4219	0.100
149) Pentachlorophenol	(4)	13.160	266	1989	0.072
150) 4-Aminobiphenyl	(4)	13.172	169	12256	0.100
151) Pentachloronitrobenzene	(4)	13.172	237	1821	0.096
152) Pronamide	(4)	13.271	173	6111	0.085
153)*Phenanthrene-d10	(4)	13.382	188	976796	5.000
155) Phenanthrene	(4)	13.411	178	30211	0.126
154) Dinoseb	(4)	13.411	211	1992	0.049
157) Anthracene	(4)	13.475	178	25898	0.116
163) Carbazole	(4)	13.691	167	23074	0.100
164) Methyl parathion	(4)	13.895	109	4139	0.065

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

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

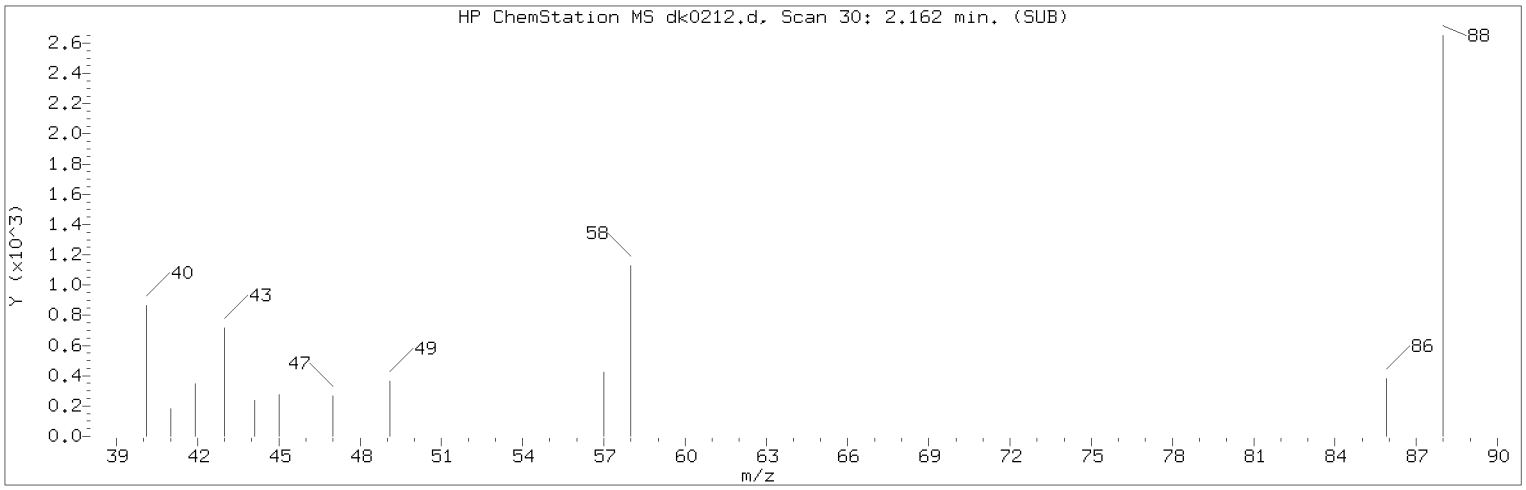
Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.210	149	24479	0.088
168) 4-Nitroquinoline-1-oxide	(4)	14.431	190	1479	0.060
167) Parathion	(4)	14.437	109	2536	0.062
169) Octachlorostyrene	(4)	14.775	308	1839	0.116
171) Isodrin	(4)	14.816	193	2898	0.105
222) Total PAHs	(6)			418552	2.171
173) Fluoranthene	(4)	15.031	202	24493	0.107
174) Benzidine	(5)	15.259	184	122422	0.644
175)*Pyrene-d10	(5)	15.340	212	907950	5.000
177) Pyrene	(5)	15.364	202	33944	0.127
179)$Terphenyl-d14	(5)	15.655	244	34381	0.227
182) p-Dimethylaminoazobenzene	(5)	15.877	225	2229	0.054
185) Chlorobenzilate	(5)	15.982	139	6558	0.080
187) 3,3'-Dimethylbenzidine	(5)	16.436	212	14764	0.091
188) Butylbenzylphthalate	(5)	16.506	149	8969	0.068
191) 2-Acetylaminofluorene	(5)	16.844	181	6170	0.065
193) 3,3'-Dichlorobenzidine	(5)	17.351	252	7247	0.081
195) Benzo(a)anthracene	(5)	17.351	228	19696	0.101
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.375	231	3683	0.075
196) Chrysene	(5)	17.415	228	25164	0.115
199) bis(2-Ethylhexyl)phthalate	(5)	17.573	149	12042	0.064
203) 6-Methylchrysene	(5)	18.220	242	14174	0.091
205) Di-n-octylphthalate	(6)	18.733	149	17253	0.059
206) Benzo(b)fluoranthene	(6)	19.193	252	19089	0.102
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.199	256	7081	0.068
208) Benzo(k)fluoranthene	(6)	19.246	252	22536	0.110
211) Benzo(a)pyrene	(6)	19.718	252	16380M	0.098
213)*Perylene-d12	(6)	19.811	264	848103	5.000
215) 3-Methylcholanthrene	(6)	20.289	268	7633	0.080
217) Dibenz(a,h)acridine	(6)	21.099	279	13772	0.089
218) Dibenz(a,j)acridine	(6)	21.169	279	16133	0.096
219) Indeno(1,2,3-cd)pyrene	(6)	21.402	276	16389M	0.105
220) Dibenz(a,h)anthracene	(6)	21.449	278	18972	0.107
221) Benzo(g,h,i)perylene	(6)	21.775	276	22116	0.118

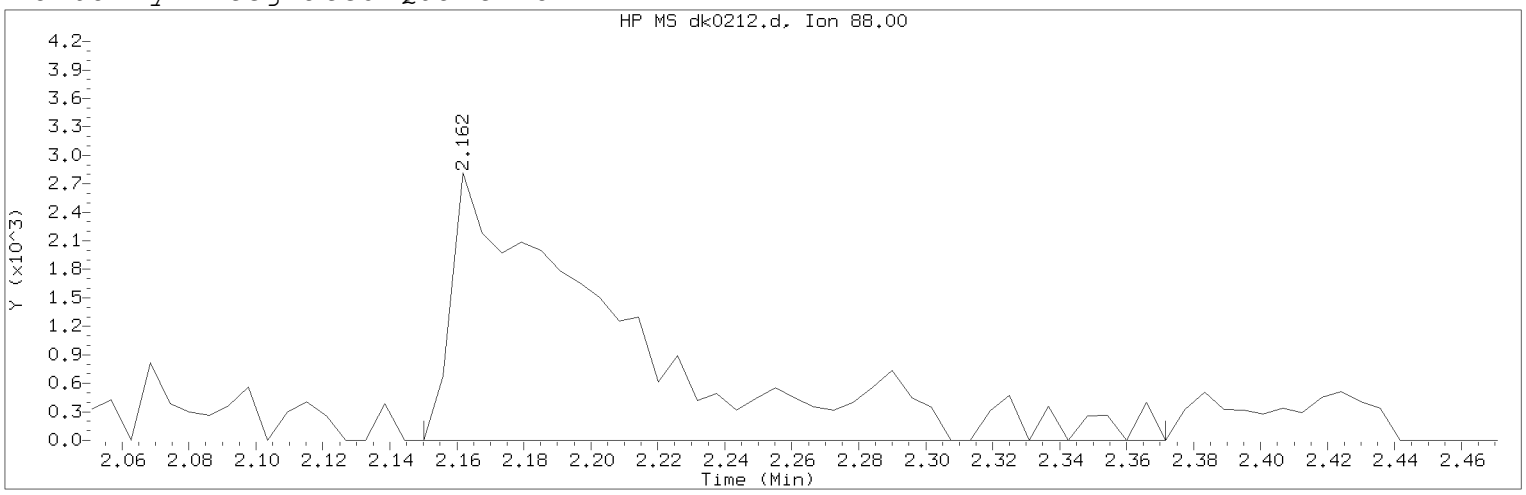
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

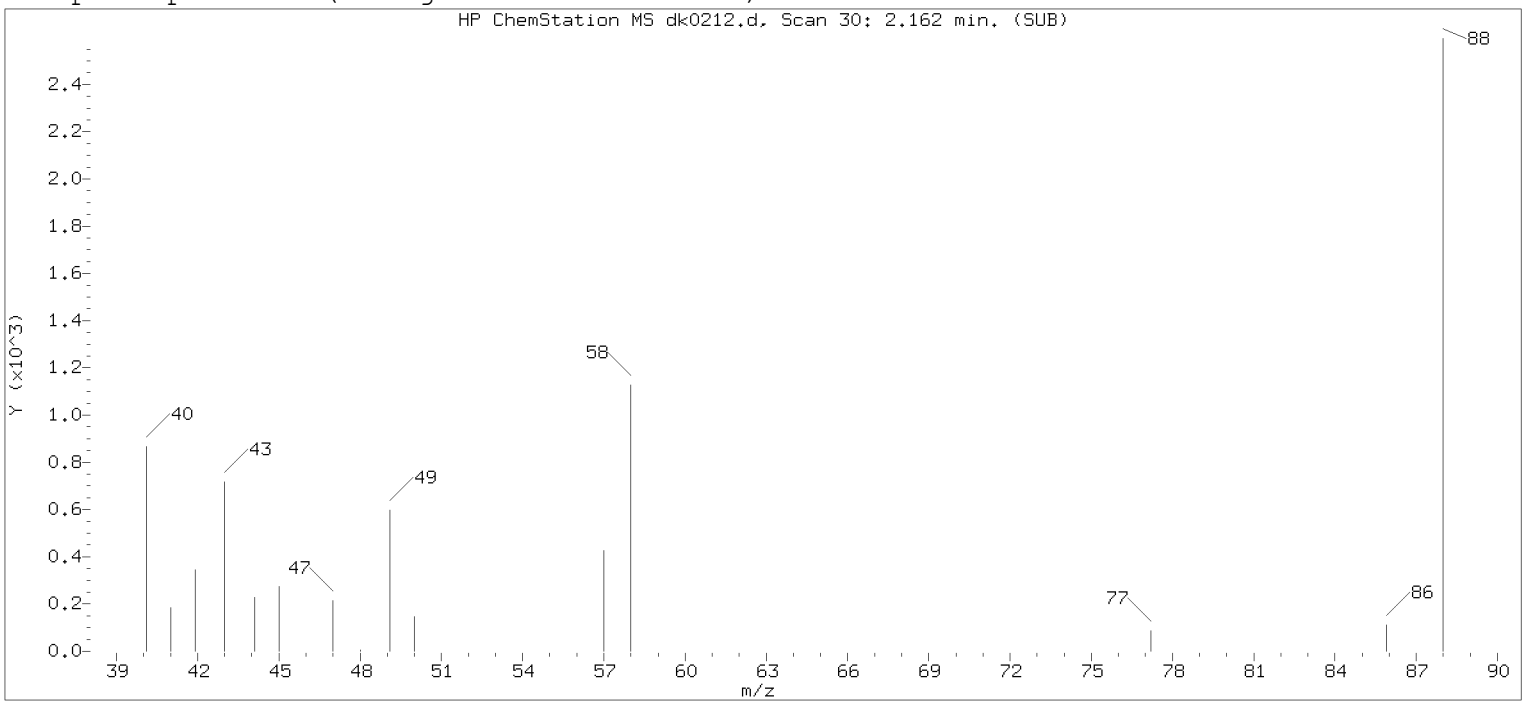
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 30
Retention Time (minutes) : 2.162
Quant Ion : 88.00
Area (flag) : 10005M
On-Column Amount (ng/ul) : 0.1694
Integration start scan : 27 Integration stop scan: 65
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

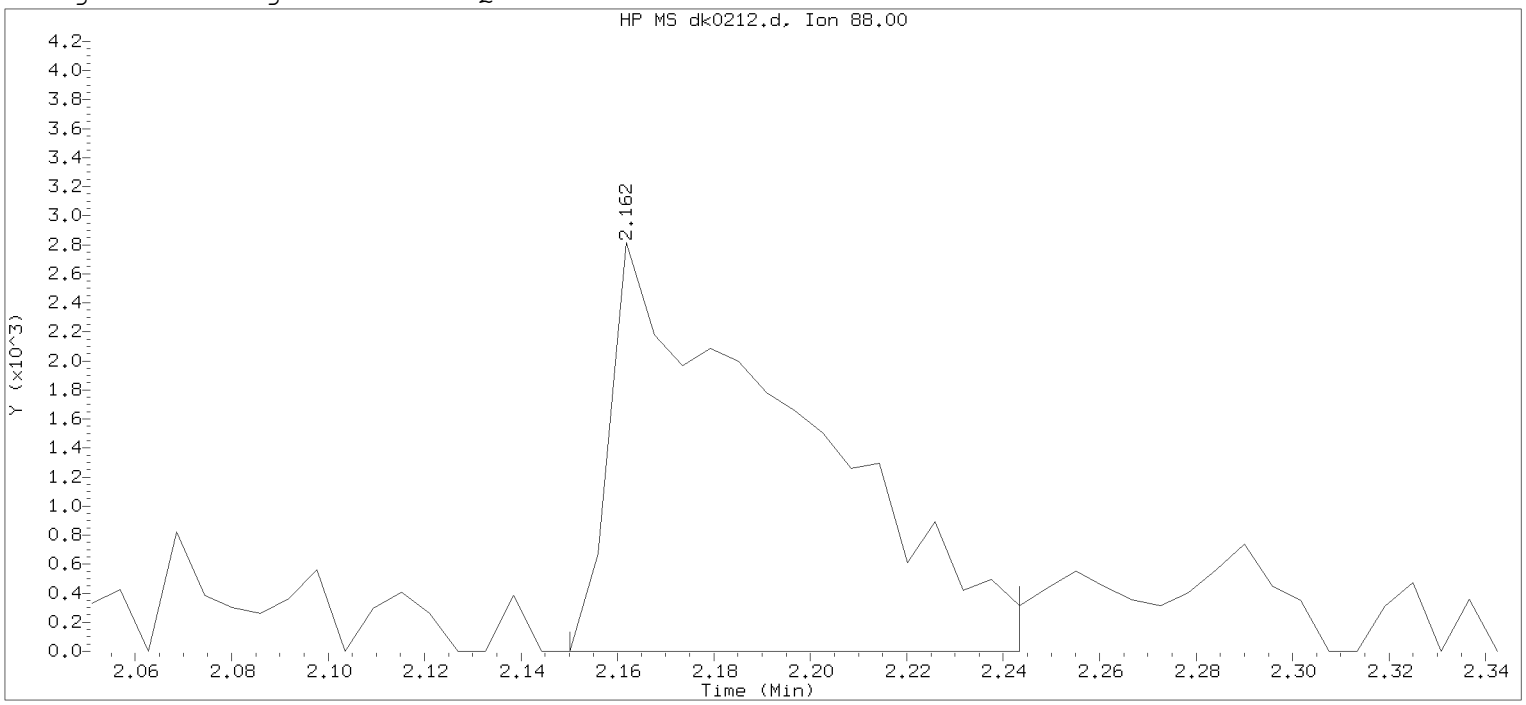
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

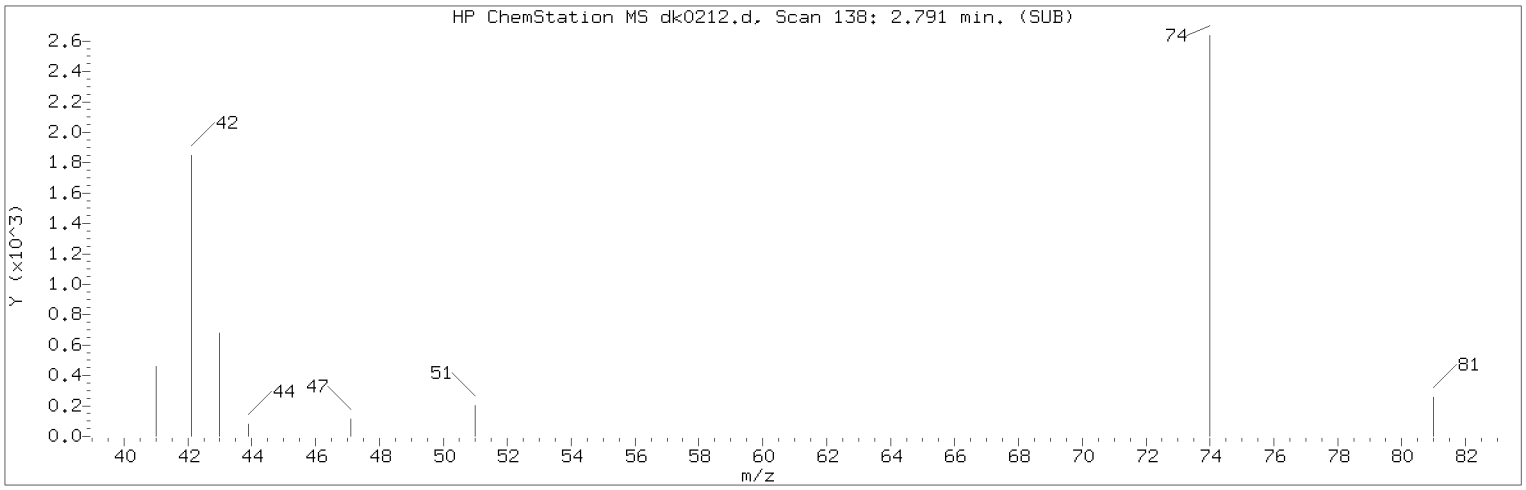
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:12
Date, time and analyst ID of latest file update: 04-Nov-2018 13:12 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

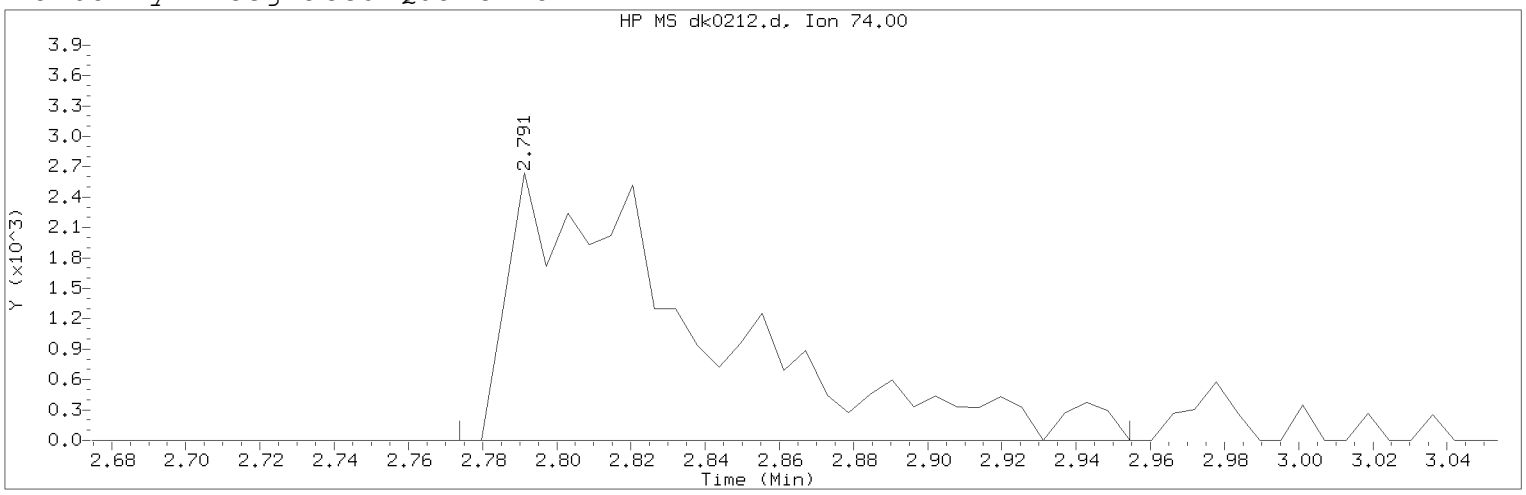
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 30		
Retention Time (minutes)	: 2.162		
Quant Ion	: 88.00		
Area	: 7621		
On-column Amount (ng/ul)	: 0.1424		
Integration start scan	: 27	Integration stop scan:	43
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

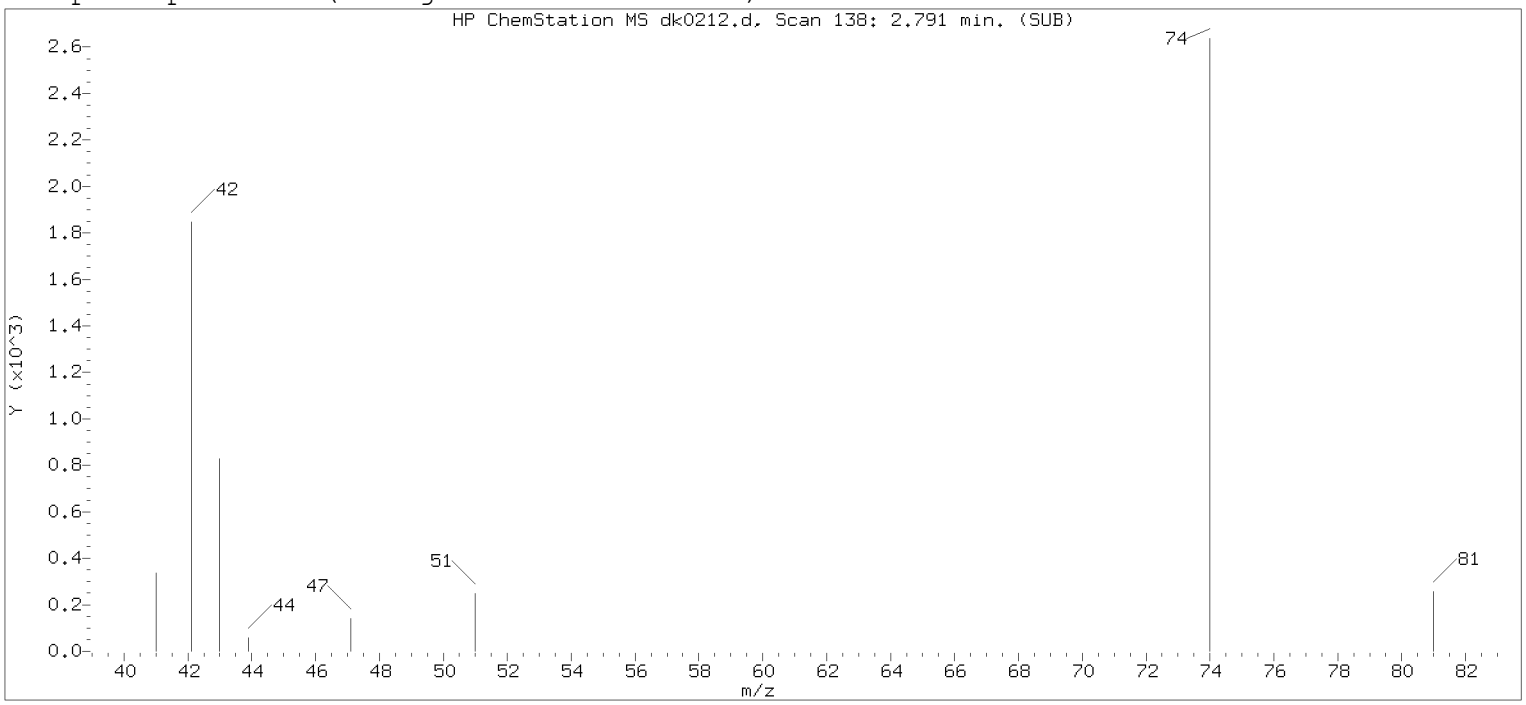
Compound Number : 4
Compound Name : N-Nitrosodimethylamine
Scan Number : 138
Retention Time (minutes) : 2.791
Quant Ion : 74.00
Area (flag) : 9534M
On-Column Amount (ng/ul) : 0.1075
Integration start scan : 134 Integration stop scan: 165
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

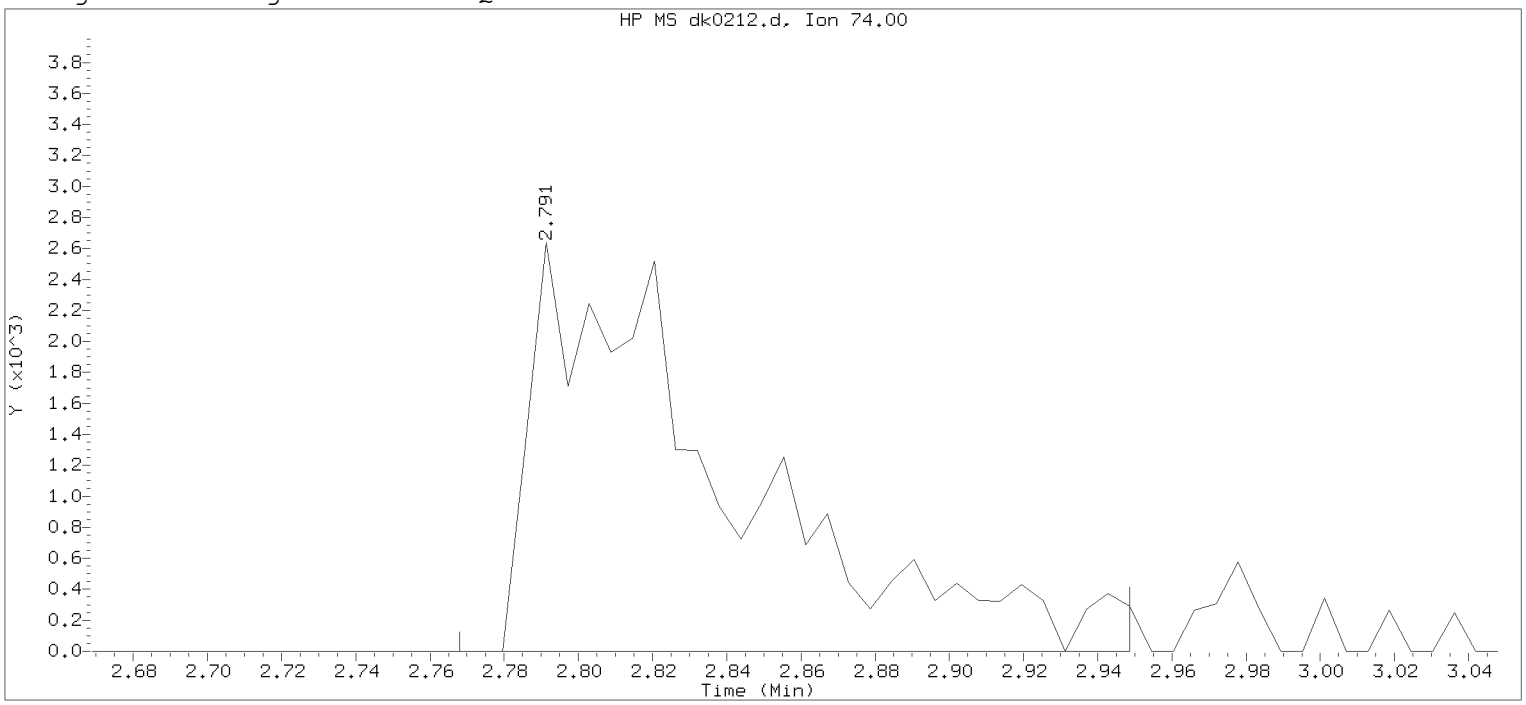
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

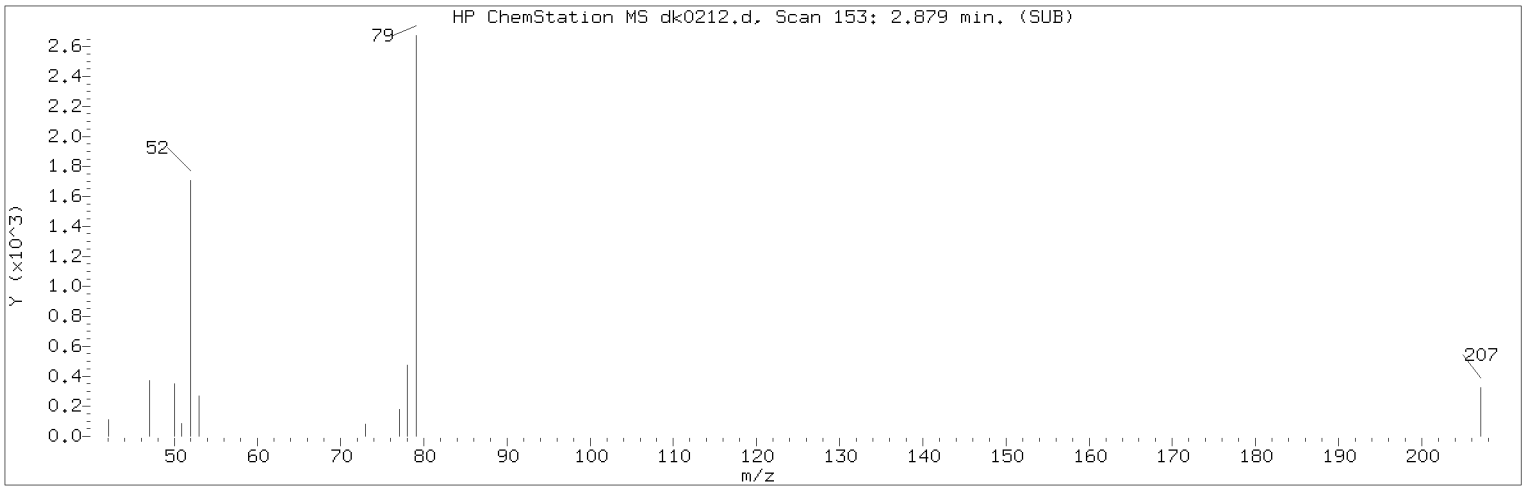
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:12
Date, time and analyst ID of latest file update: 04-Nov-2018 13:12 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

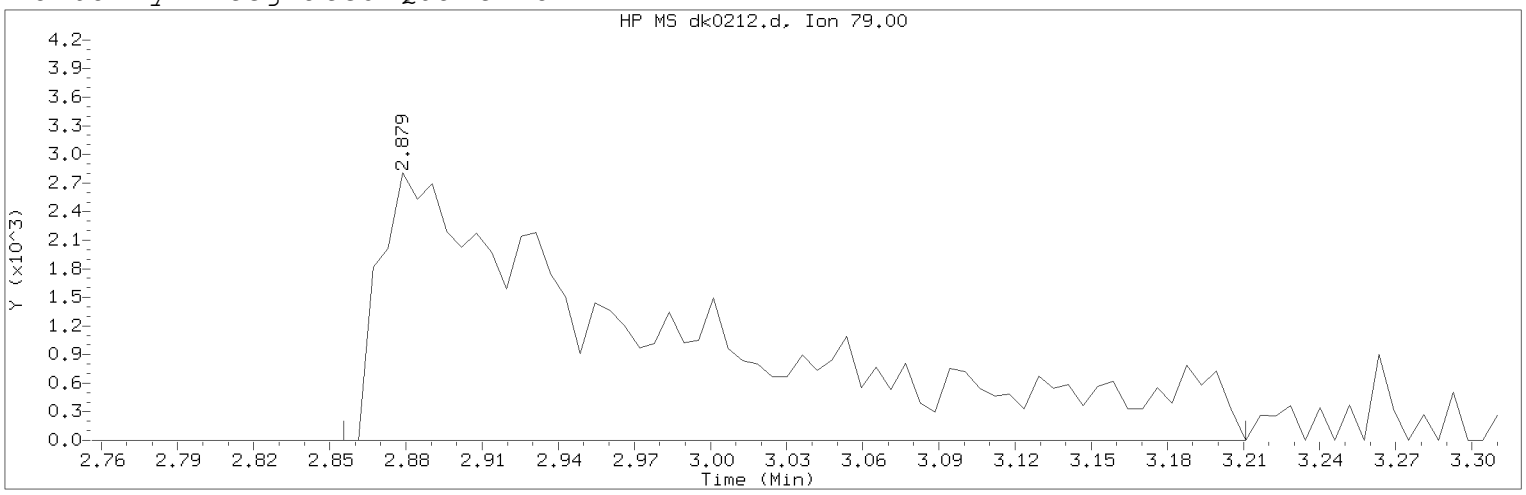
Compound Number	: 4		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 138		
Retention Time (minutes)	: 2.791		
Quant Ion	: 74.00		
Area	: 9483		
On-column Amount (ng/ul)	: 0.1297		
Integration start scan	: 133	Integration stop scan:	164
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user name: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

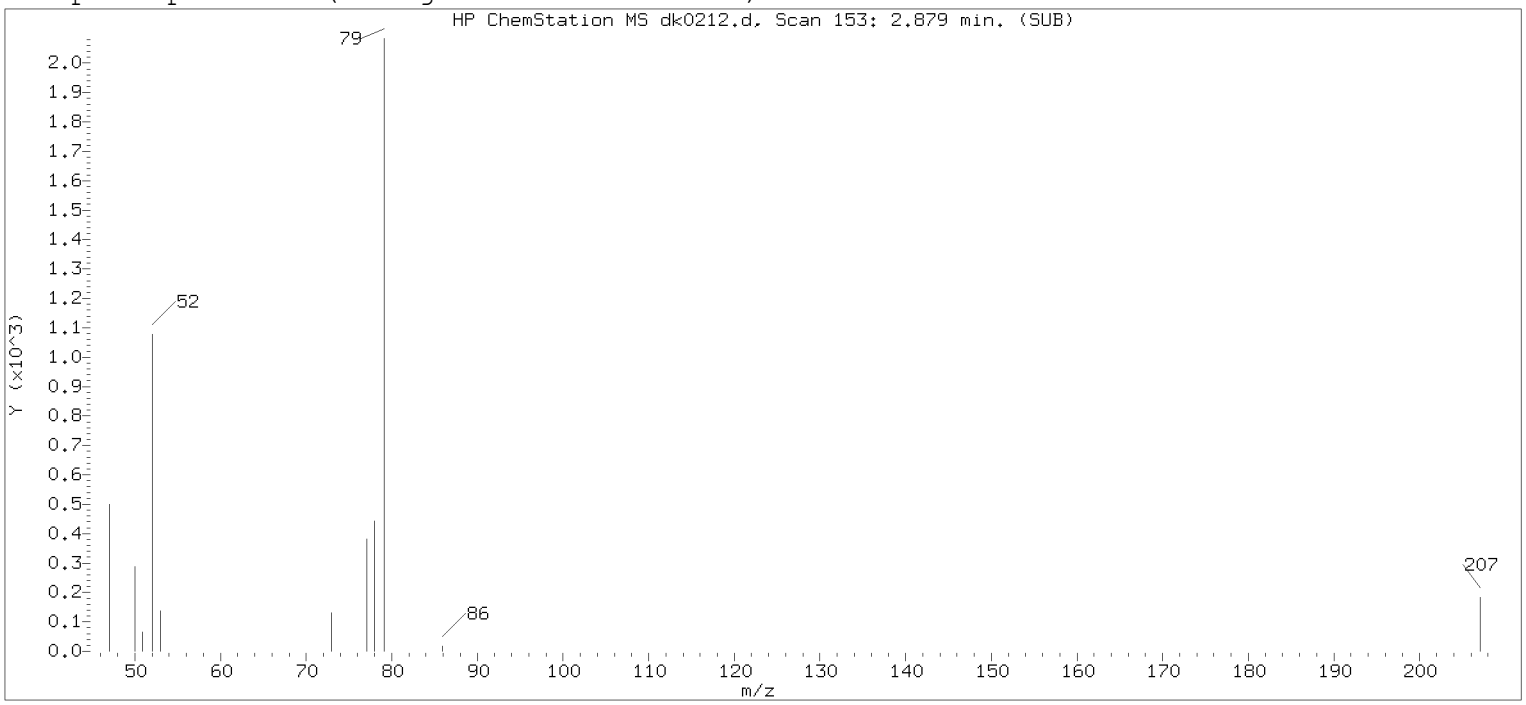
Compound Number : 5
Compound Name : Pyridine
Scan Number : 153
Retention Time (minutes) : 2.879
Quant Ion : 79.00
Area (flag) : 21919M
On-Column Amount (ng/ul) : 0.1458
Integration start scan : 148 Integration stop scan: 209
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

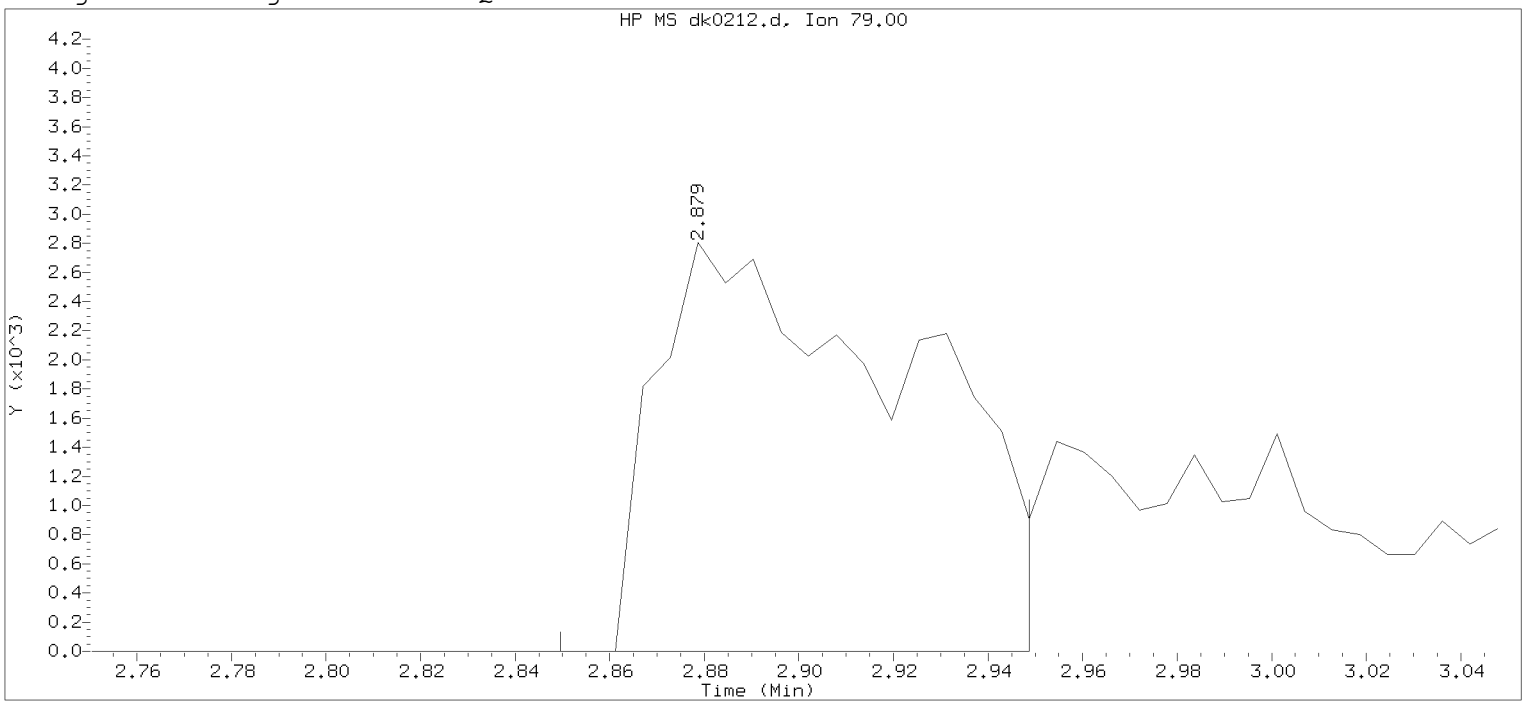
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

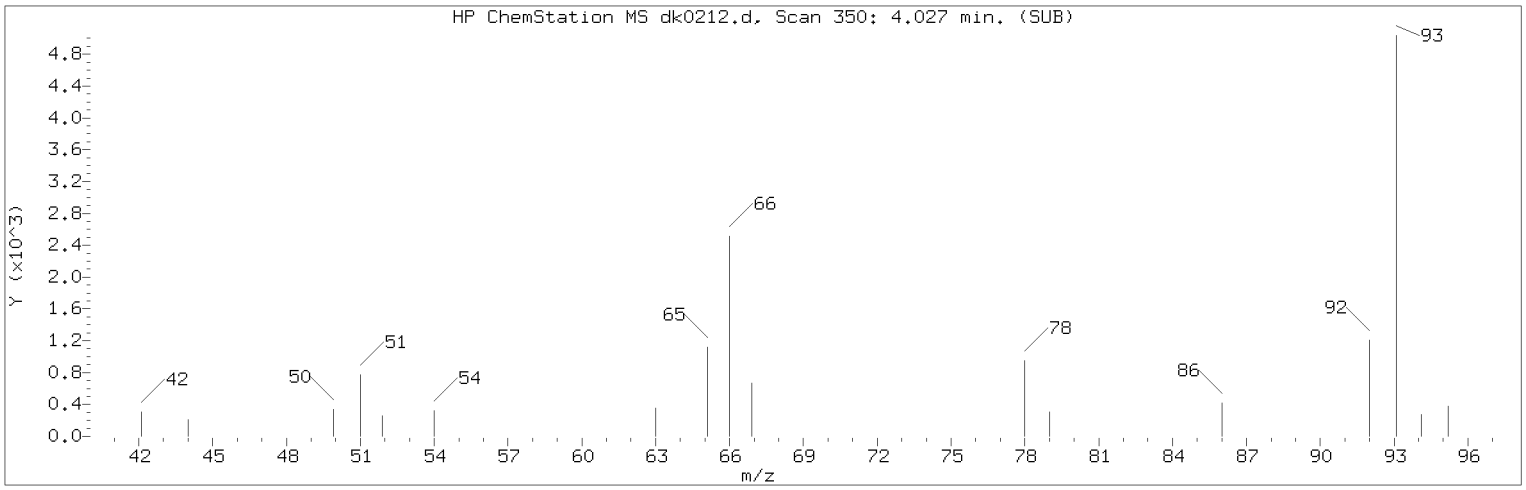
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:12
Date, time and analyst ID of latest file update: 04-Nov-2018 13:12 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

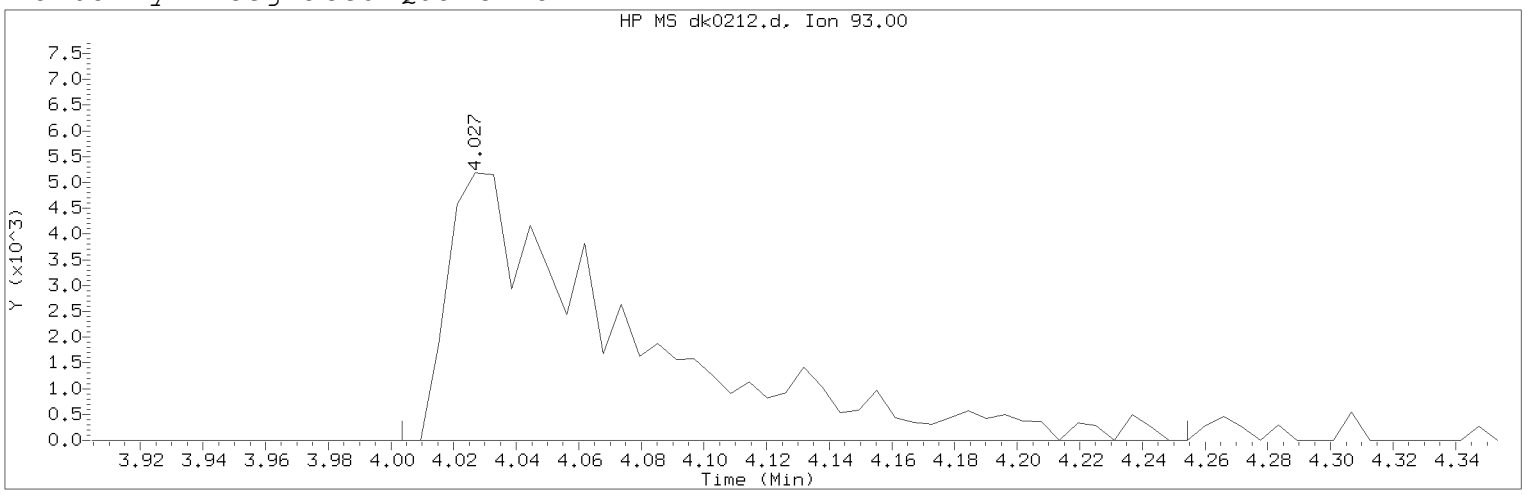
Compound Number	: 5		
Compound Name	: Pyridine		
Scan Number	: 153		
Retention Time (minutes)	: 2.879		
Quant Ion	: 79.00		
Area	: 10429		
On-column Amount (ng/ul)	: 0.0856		
Integration start scan	: 147	Integration stop scan:	164
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user name: ARTransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

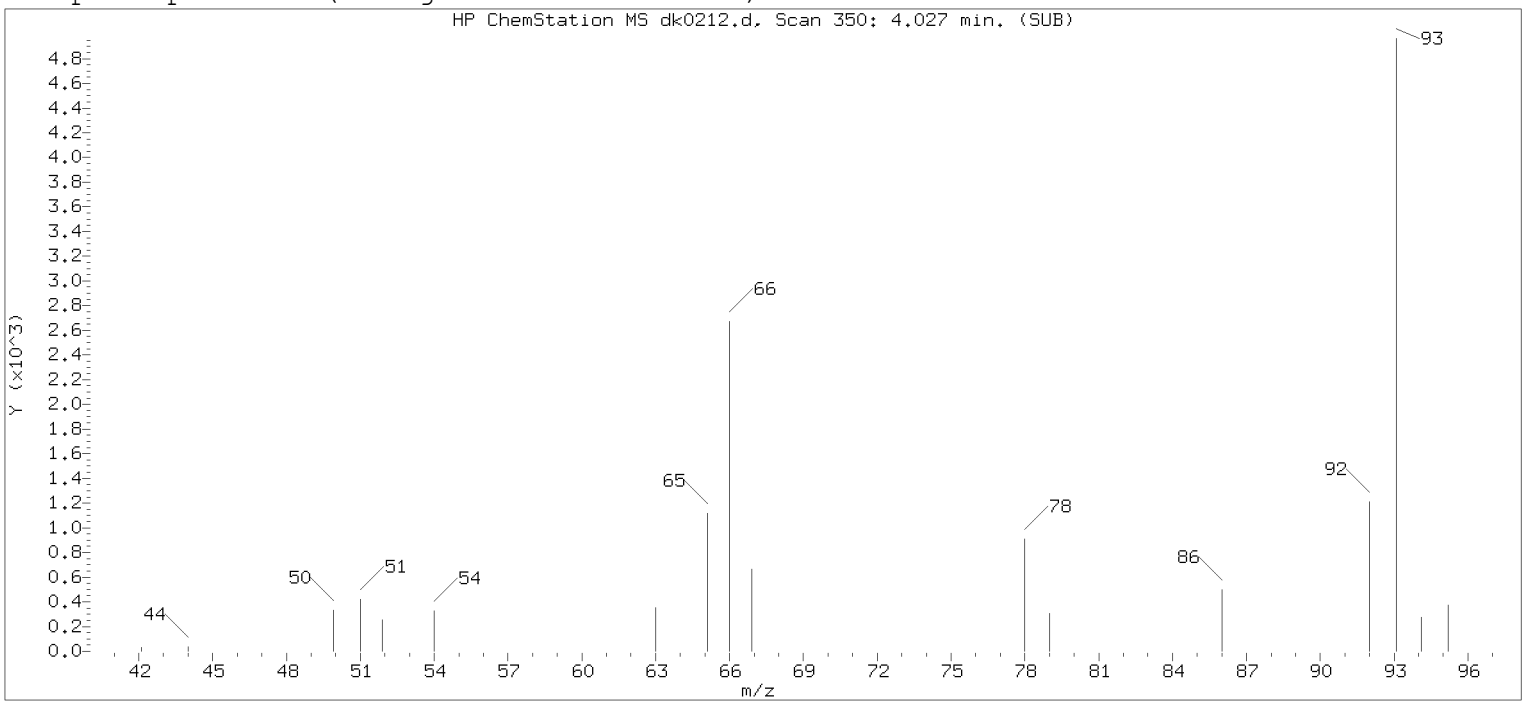
Compound Number : 7
Compound Name : 2-Picoline
Scan Number : 350
Retention Time (minutes) : 4.027
Quant Ion : 93.00
Area (flag) : 20678M
On-Column Amount (ng/ul) : 0.1374
Integration start scan : 345 Integration stop scan: 388
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

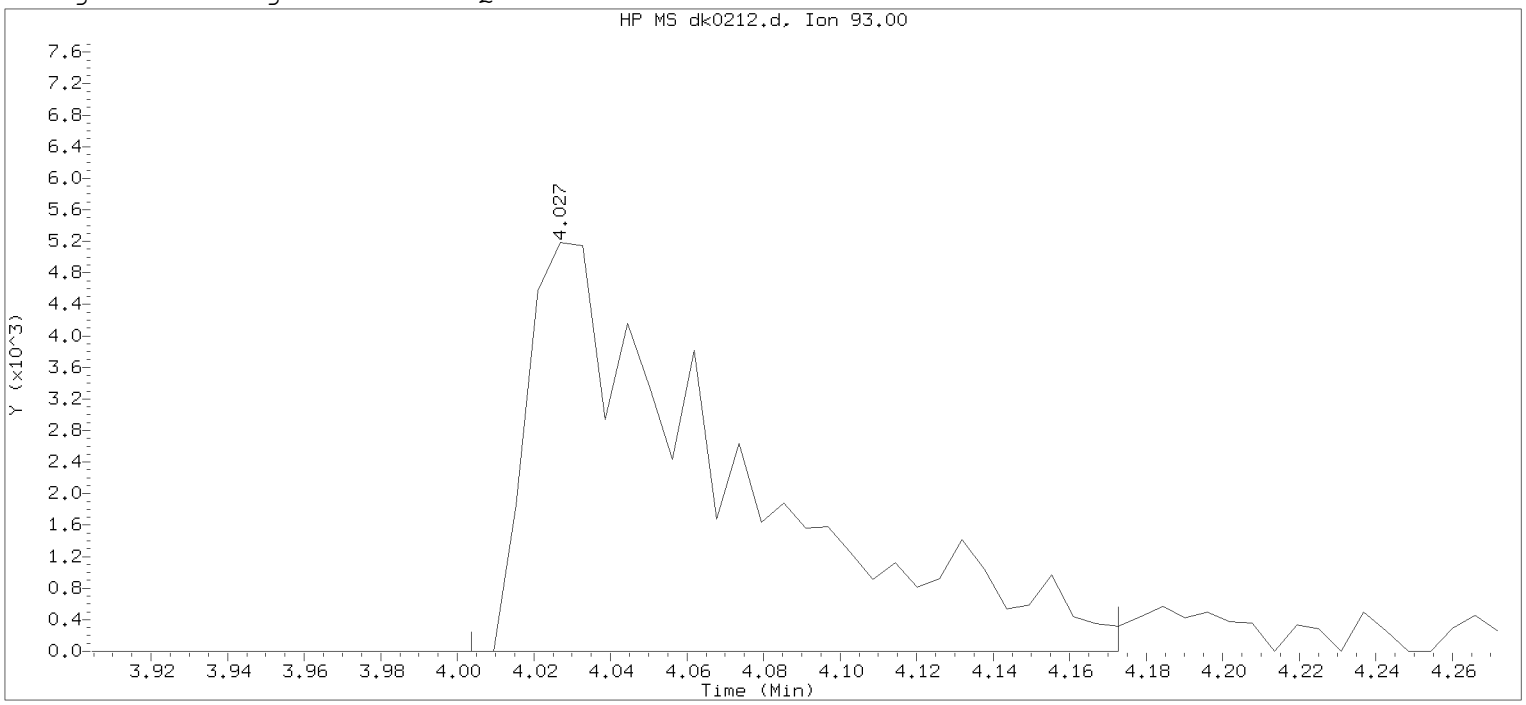
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

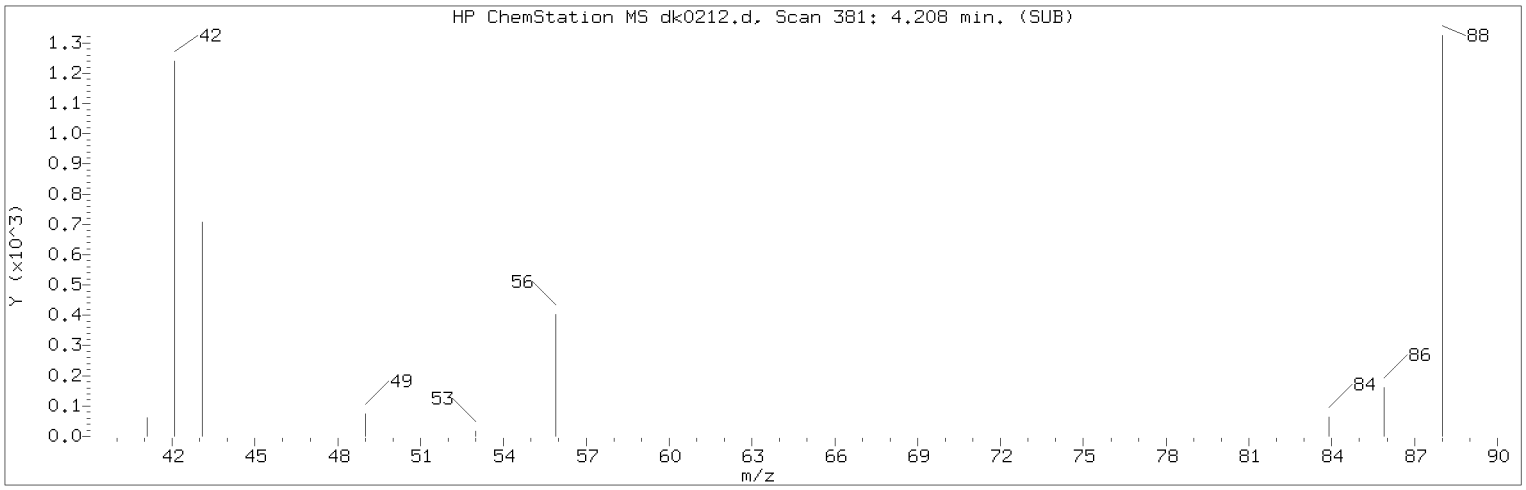
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:12
Date, time and analyst ID of latest file update: 04-Nov-2018 13:12 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

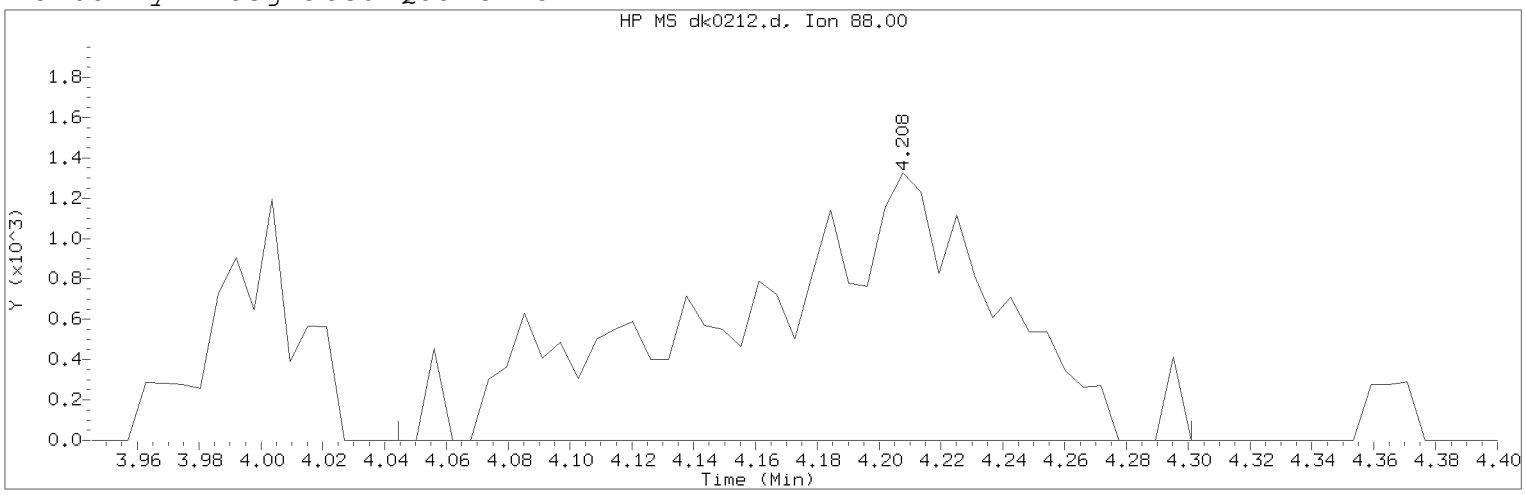
Compound Number	: 7		
Compound Name	: 2-Picoline		
Scan Number	: 350		
Retention Time (minutes)	: 4.027		
Quant Ion	: 93.00		
Area	: 19215		
On-column Amount (ng/ul)	: 0.1495		
Integration start scan	: 345	Integration stop scan:	374
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

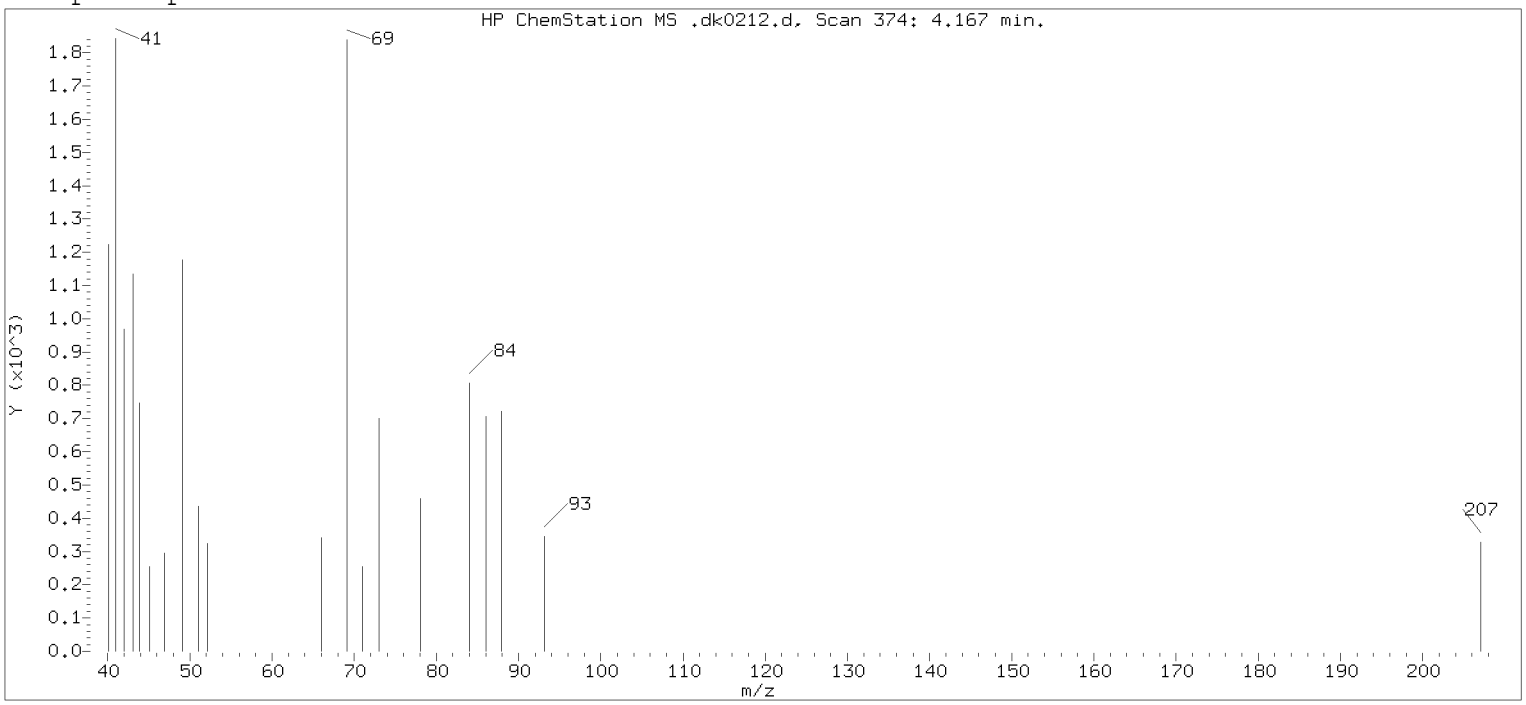
Compound Number : 8
Compound Name : N-Nitrosomethylethylamine
Scan Number : 381
Retention Time (minutes) : 4.208
Quant Ion : 88.00
Area (flag) : 8172M
On-Column Amount (ng/ul) : 0.1259
Integration start scan : 352 Integration stop scan: 396
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

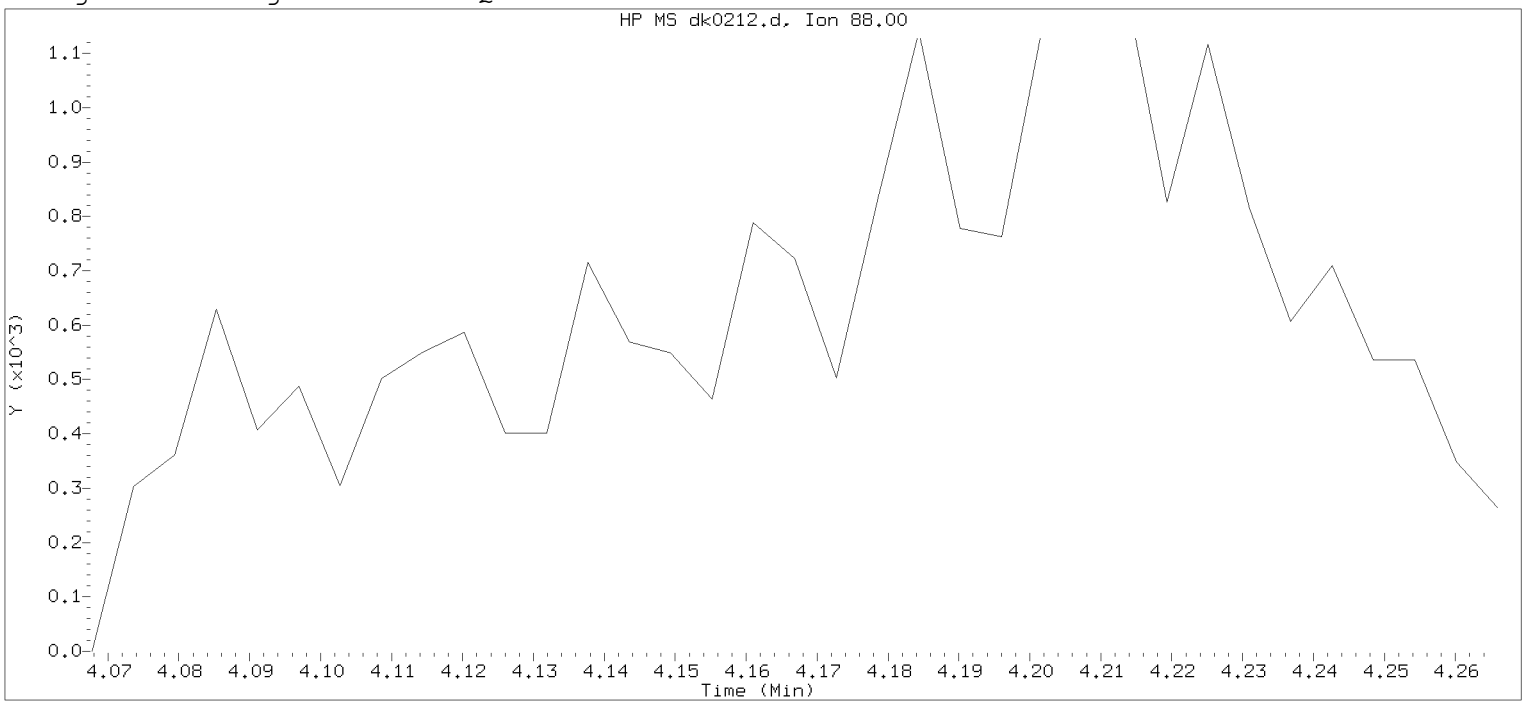
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

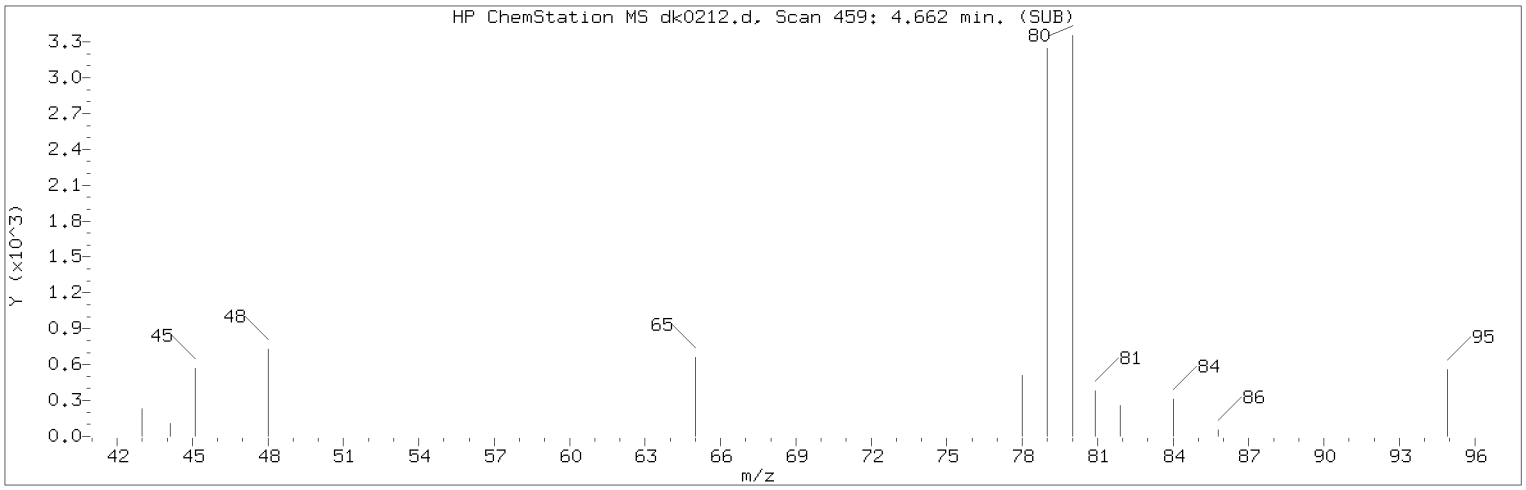
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:12
Date, time and analyst ID of latest file update: 04-Nov-2018 13:12 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

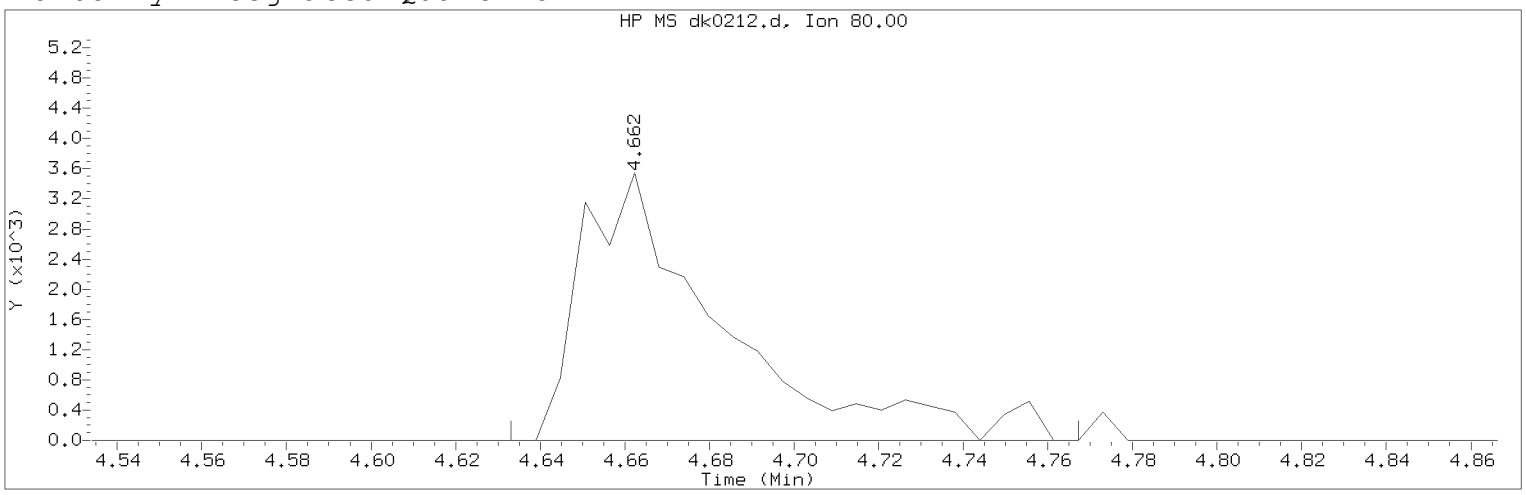
Compound Number : 8
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.167
Quant Ion : 88.00

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user name: ARTRANSUE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

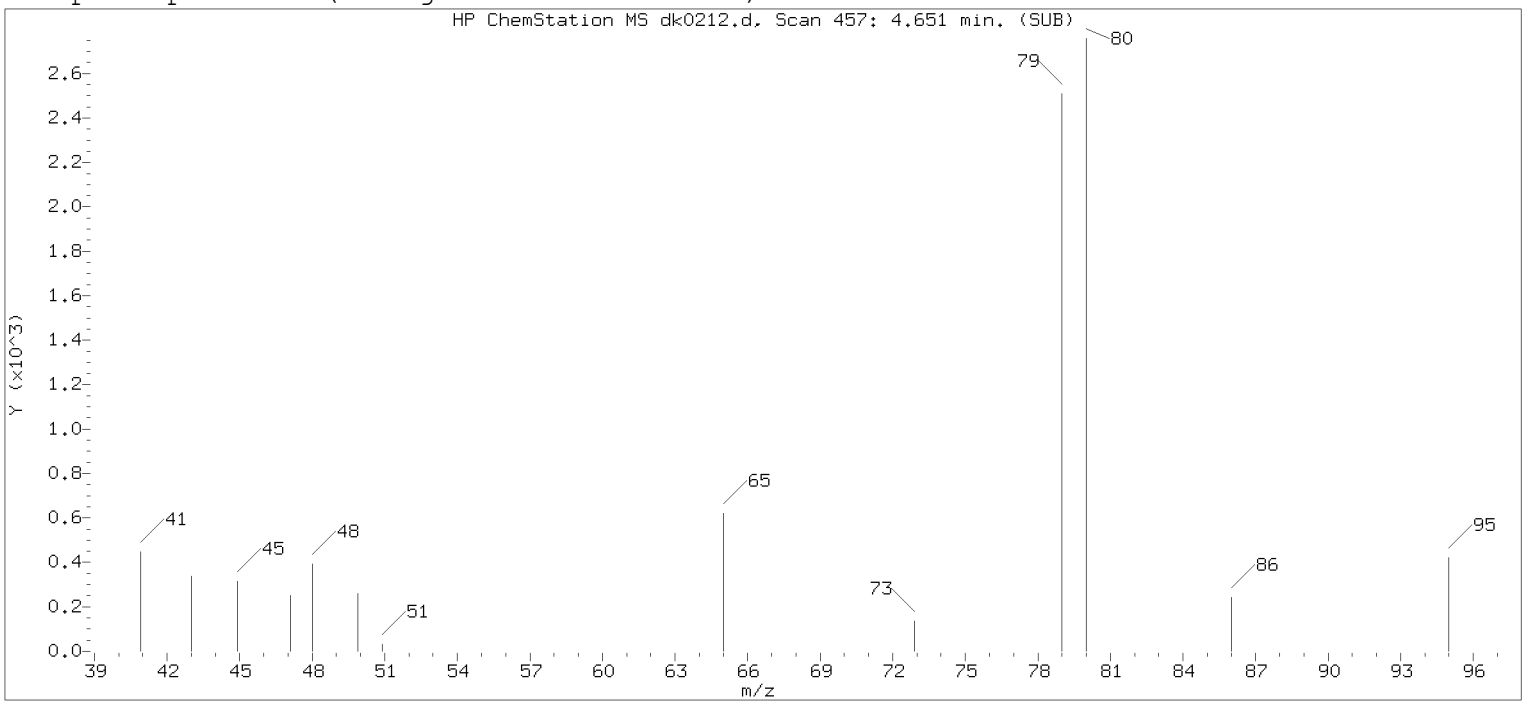
Compound Number : 9
Compound Name : Methyl methanesulfonate
Scan Number : 459
Retention Time (minutes) : 4.662
Quant Ion : 80.00
Area (flag) : 8244M
On-Column Amount (ng/ul) : 0.1130
Integration start scan : 453 Integration stop scan: 476
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

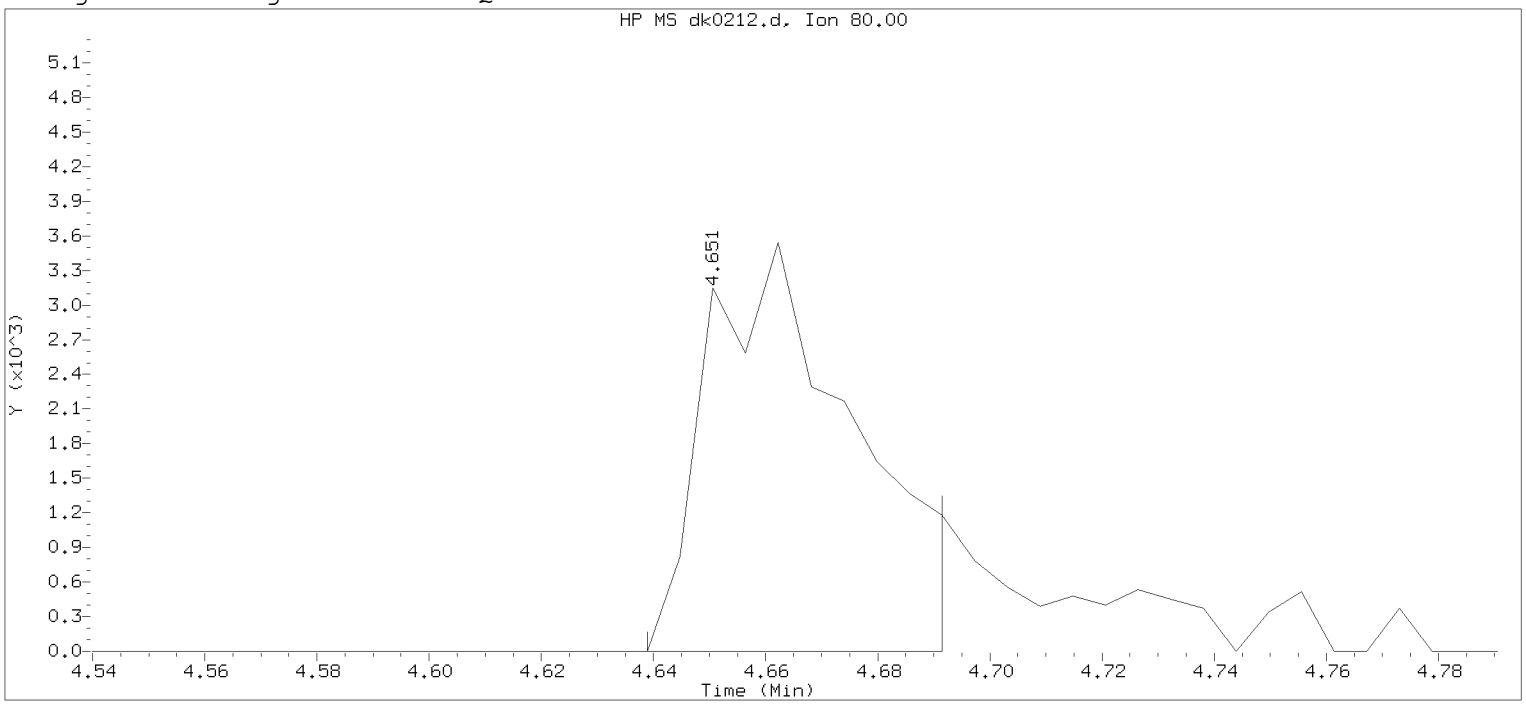
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

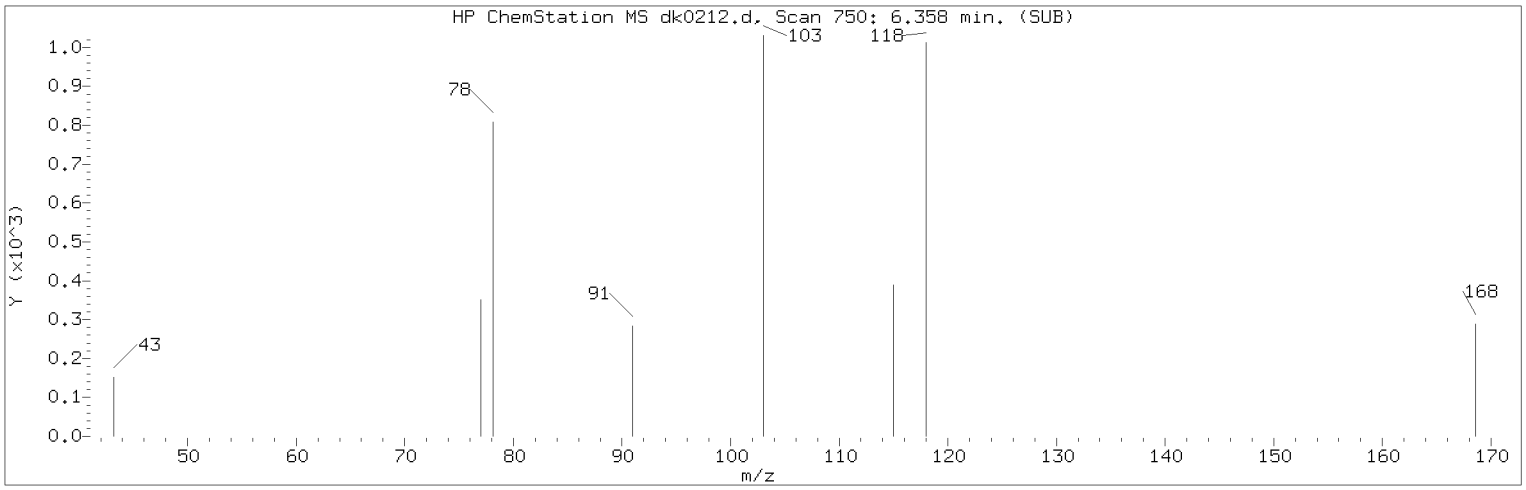
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:12
Date, time and analyst ID of latest file update: 04-Nov-2018 13:12 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

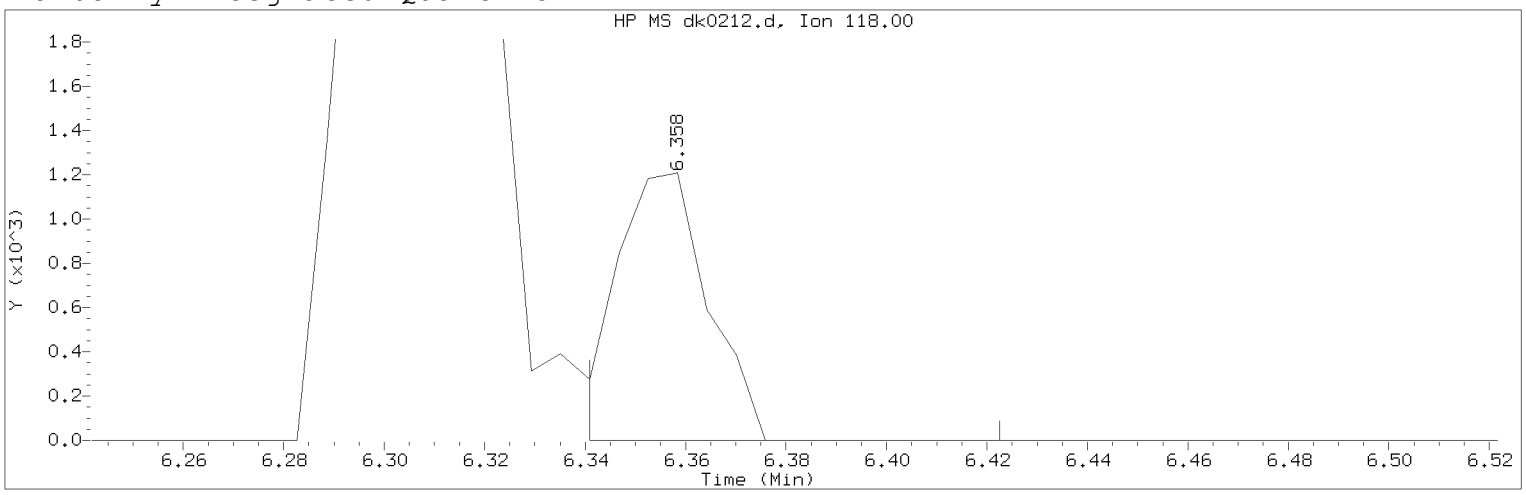
Compound Number	: 9		
Compound Name	: Methyl methanesulfonate		
Scan Number	: 457		
Retention Time (minutes)	: 4.651		
Quant Ion	: 80.00		
Area	: 6351		
On-column Amount (ng/ul)	: 0.1088		
Integration start scan	: 454	Integration stop scan:	463
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user name: ARTransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

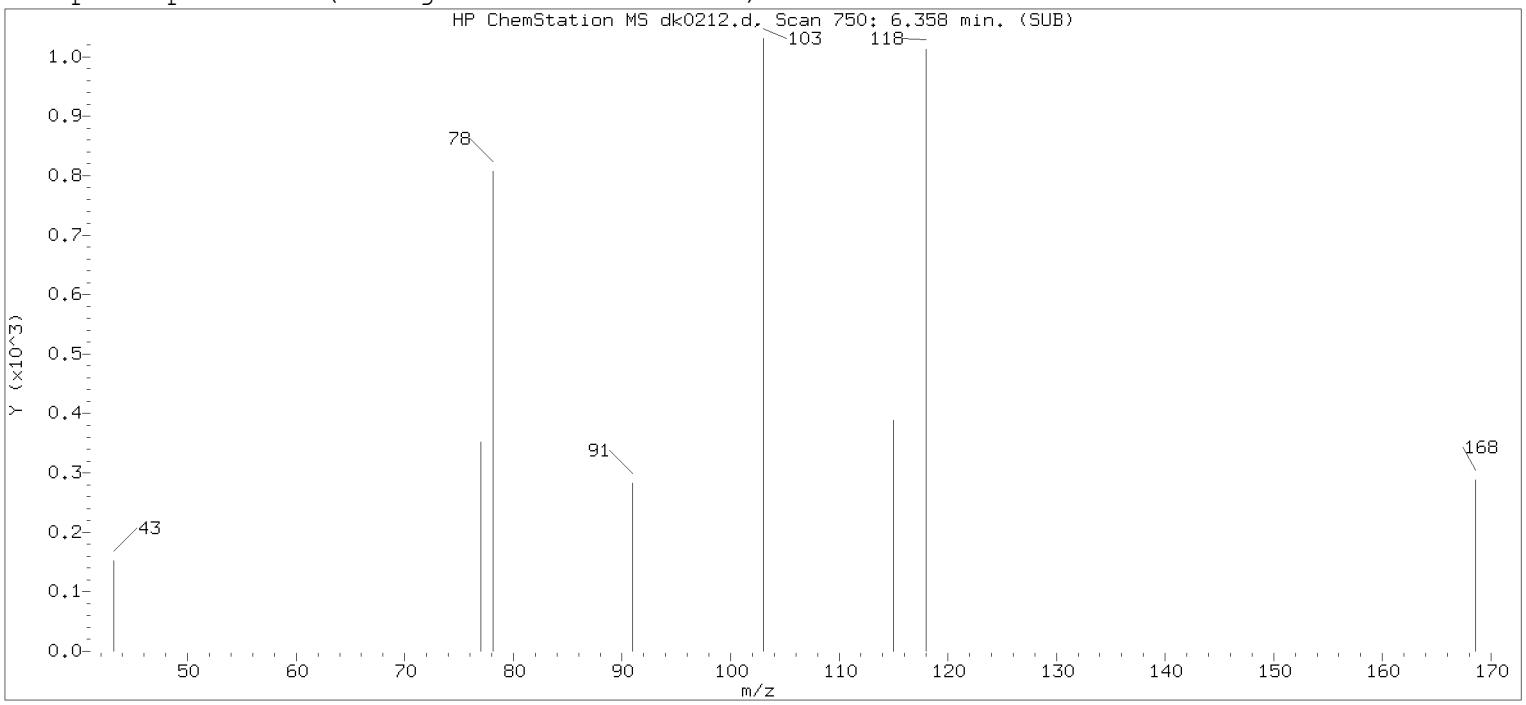
Compound Number : 20
Compound Name : a-methylstyrene
Scan Number : 750
Retention Time (minutes) : 6.358
Quant Ion : 118.00
Area (flag) : 1521A
On-Column Amount (ng/ul) : 0.1375
Integration start scan : 746 Integration stop scan: 760
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

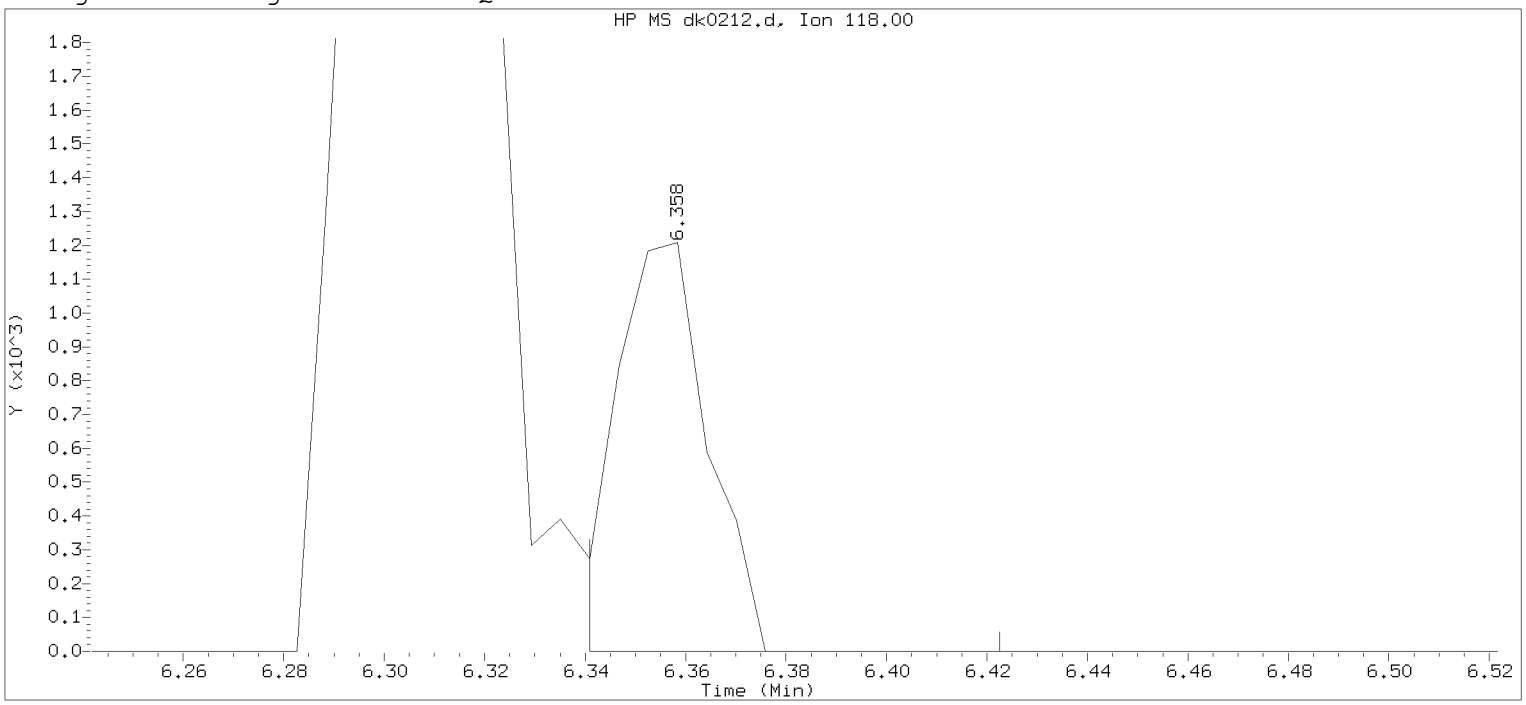
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

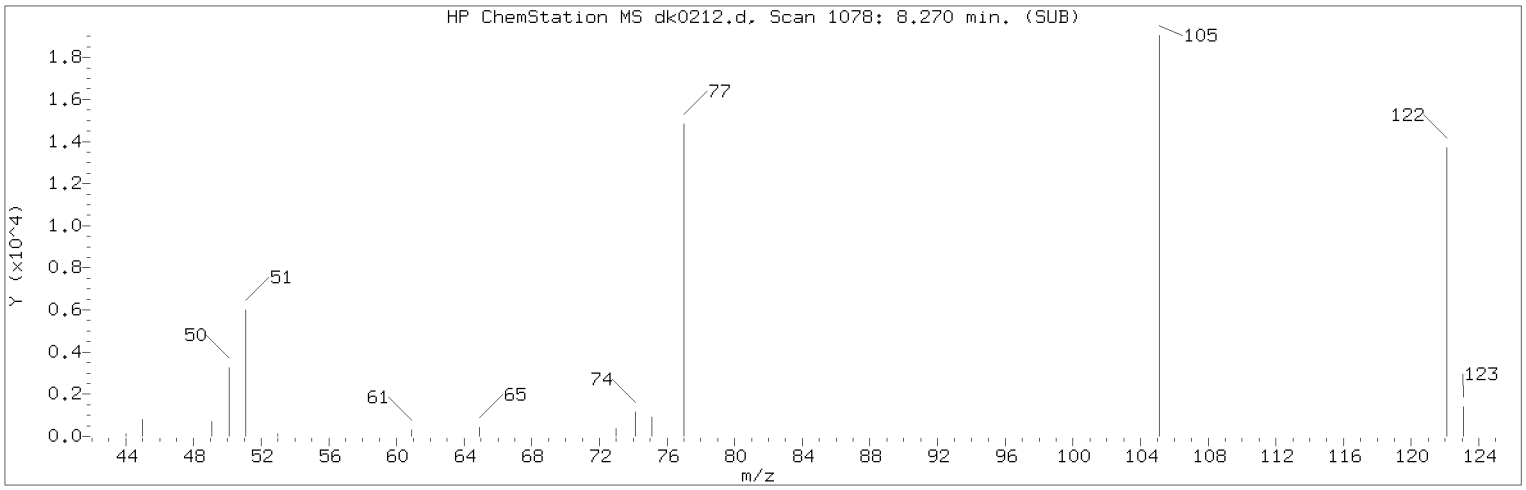
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:12
Date, time and analyst ID of latest file update: 04-Nov-2018 13:12 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

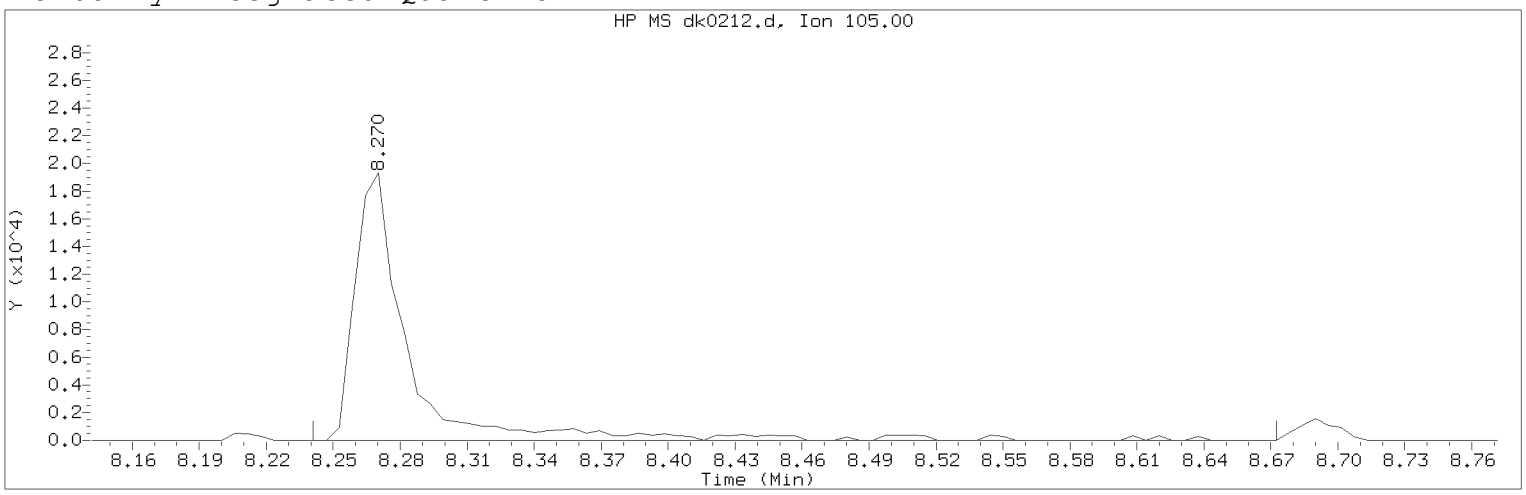
Compound Number : 20
Compound Name : a-methylstyrene
Scan Number : 750
Retention Time (minutes) : 6.358
Quant Ion : 118.00
Area : 1521
On-column Amount (ng/ul) : 0.1450
Integration start scan : 746 Integration stop scan: 760
Y at integration start : 0 Y at integration end: 0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user name: Ashley R. Transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

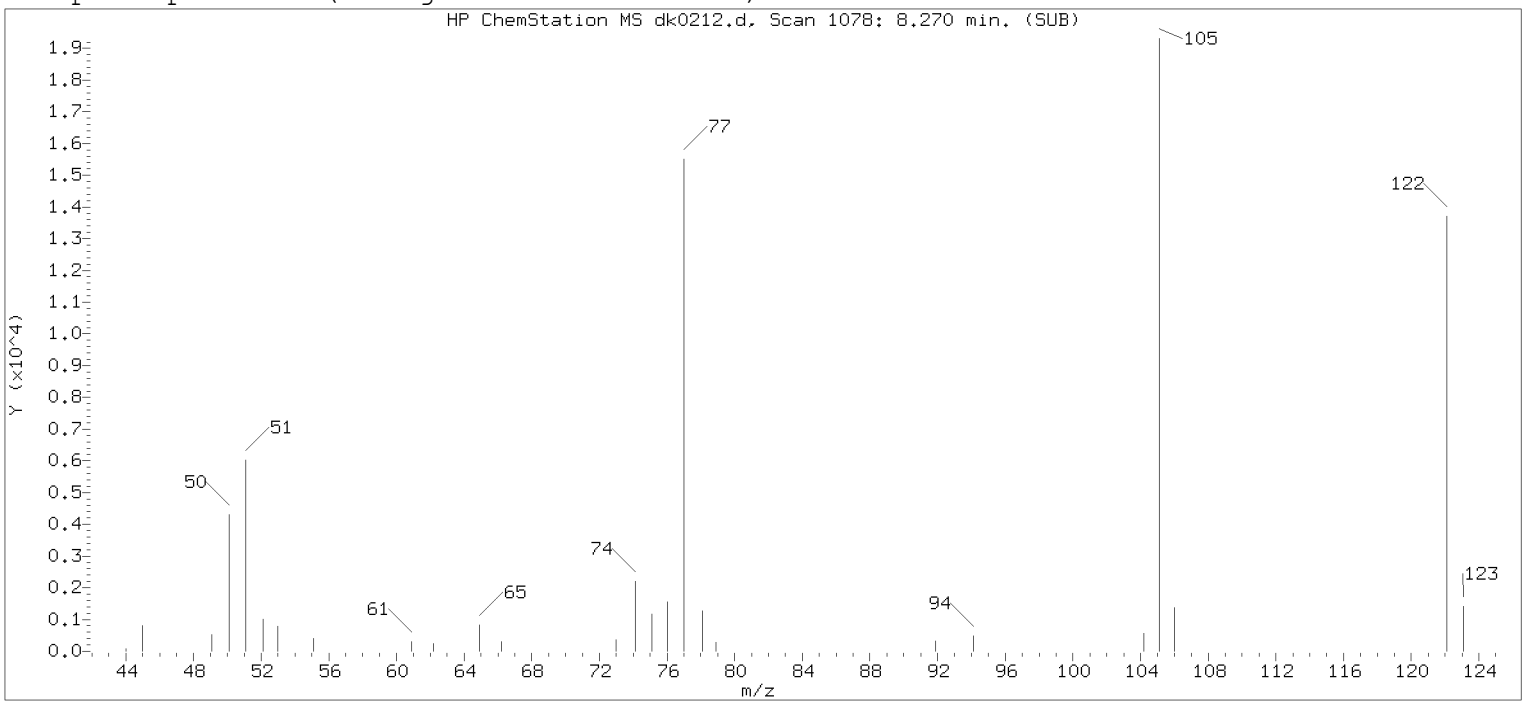
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1078		
Retention Time (minutes)	: 8.270		
Quant Ion	: 105.00		
Area (flag)	: 32341M		
On-Column Amount (ng/ul)	: 0.4428		
Integration start scan	: 1072	Integration stop scan:	1146
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

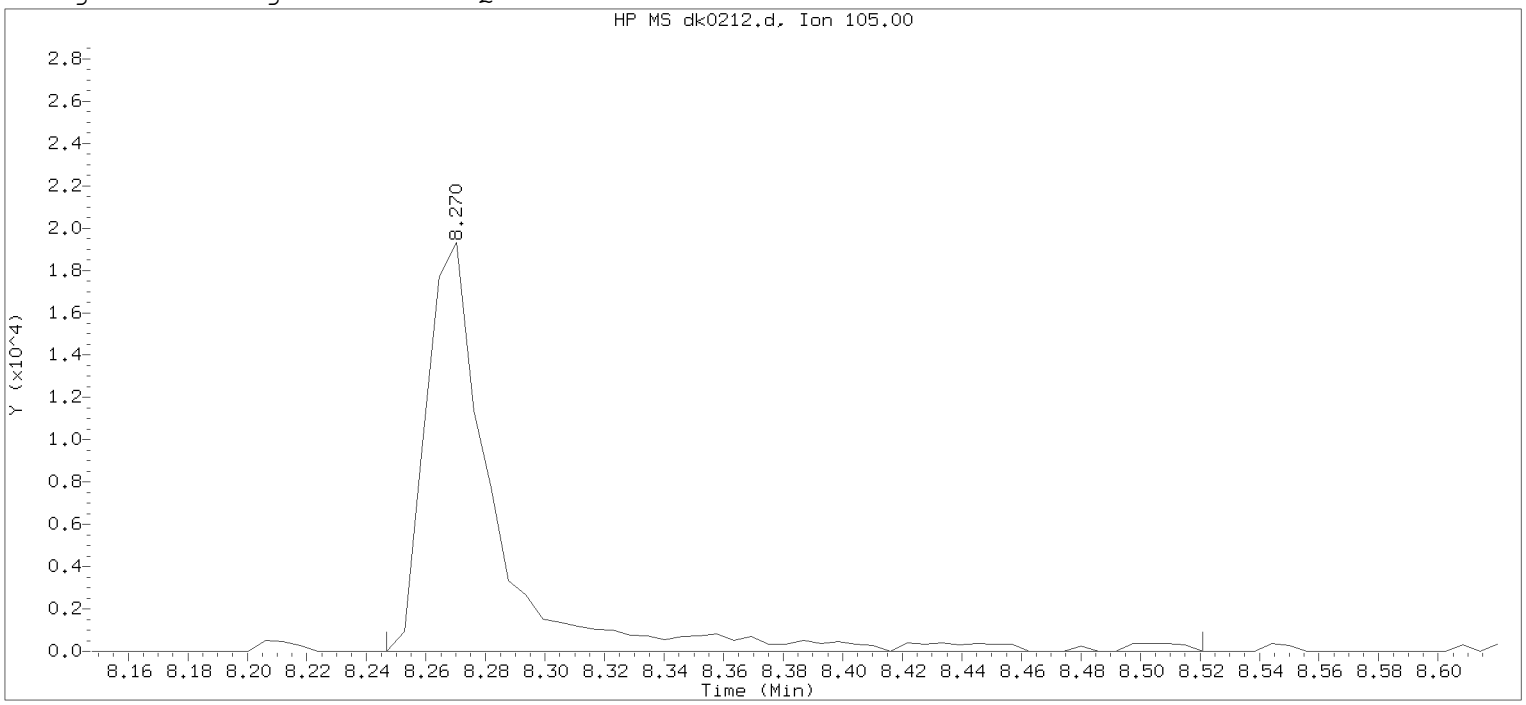
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

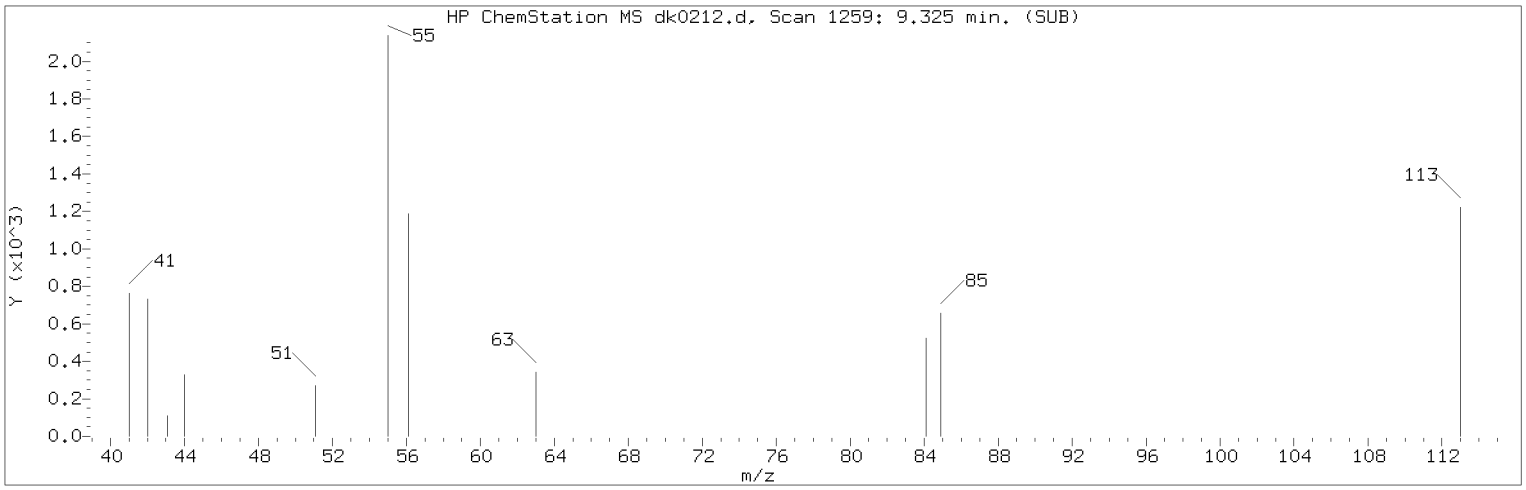
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:12
Date, time and analyst ID of latest file update: 04-Nov-2018 13:12 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

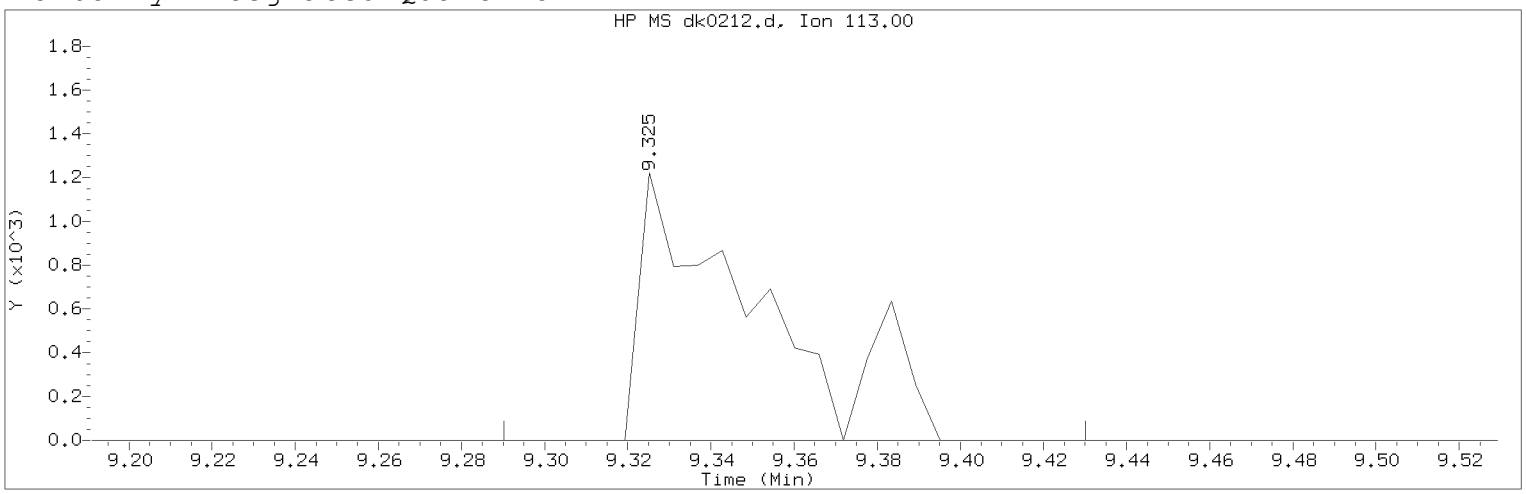
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1078		
Retention Time (minutes)	: 8.270		
Quant Ion	: 105.00		
Area	: 31801		
On-column Amount (ng/ul)	: 0.4596		
Integration start scan	: 1073	Integration stop scan:	1120
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

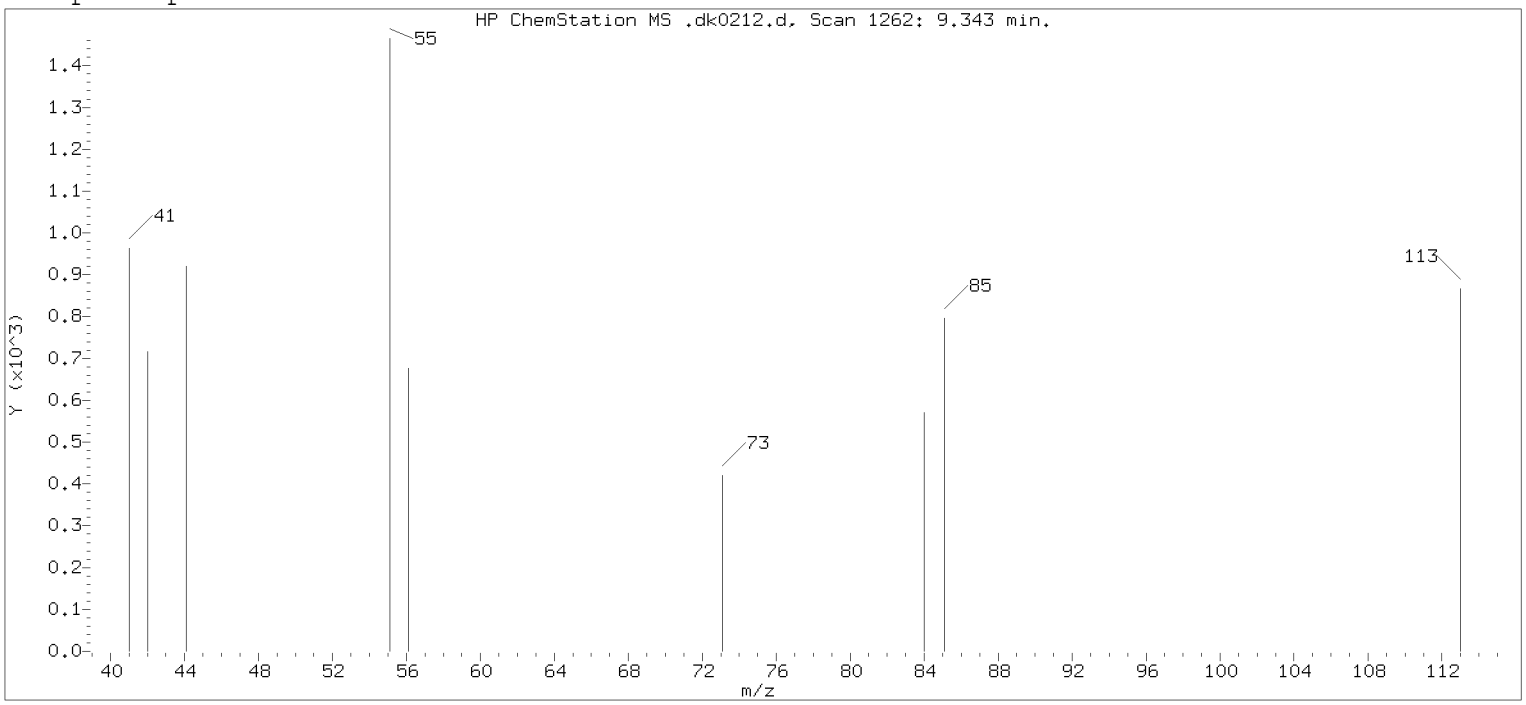
Compound Number : 76
Compound Name : Caprolactam
Scan Number : 1259
Retention Time (minutes) : 9.325
Quant Ion : 113.00
Area (flag) : 2451M
On-Column Amount (ng/ul) : 0.0794
Integration start scan : 1252 Integration stop scan: 1276
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

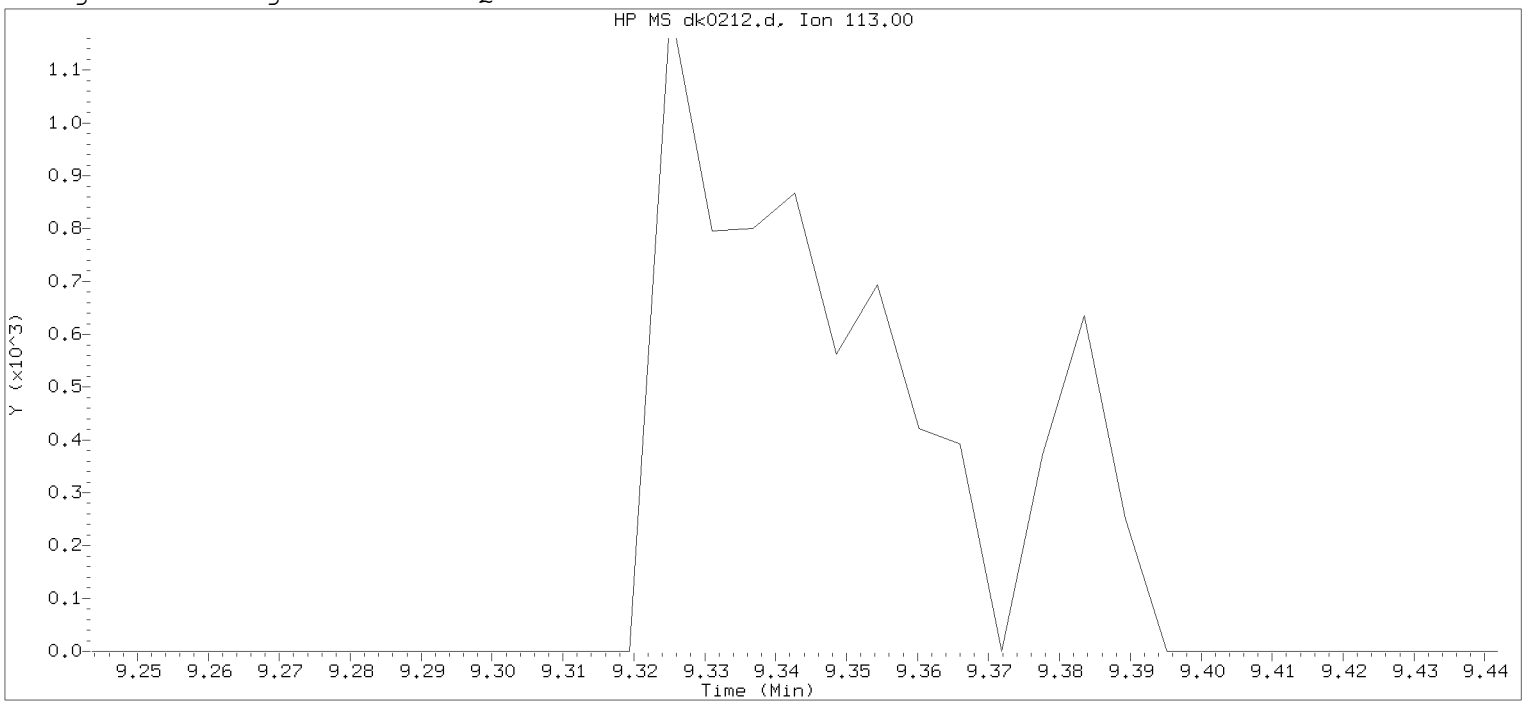
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

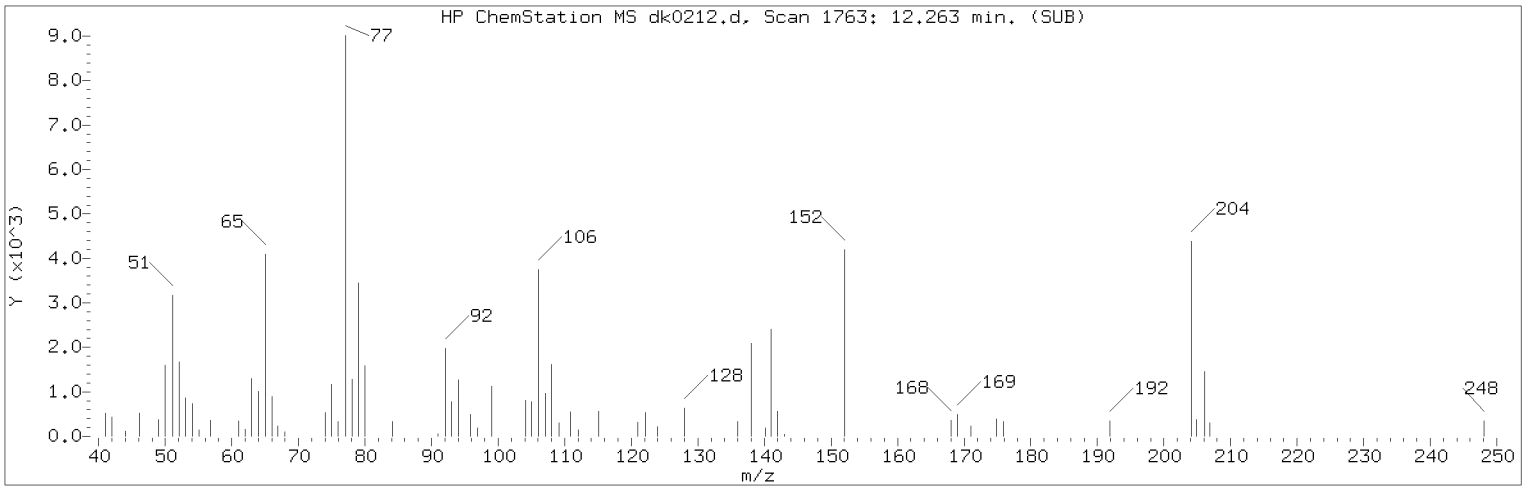
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:12
Date, time and analyst ID of latest file update: 04-Nov-2018 13:12 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

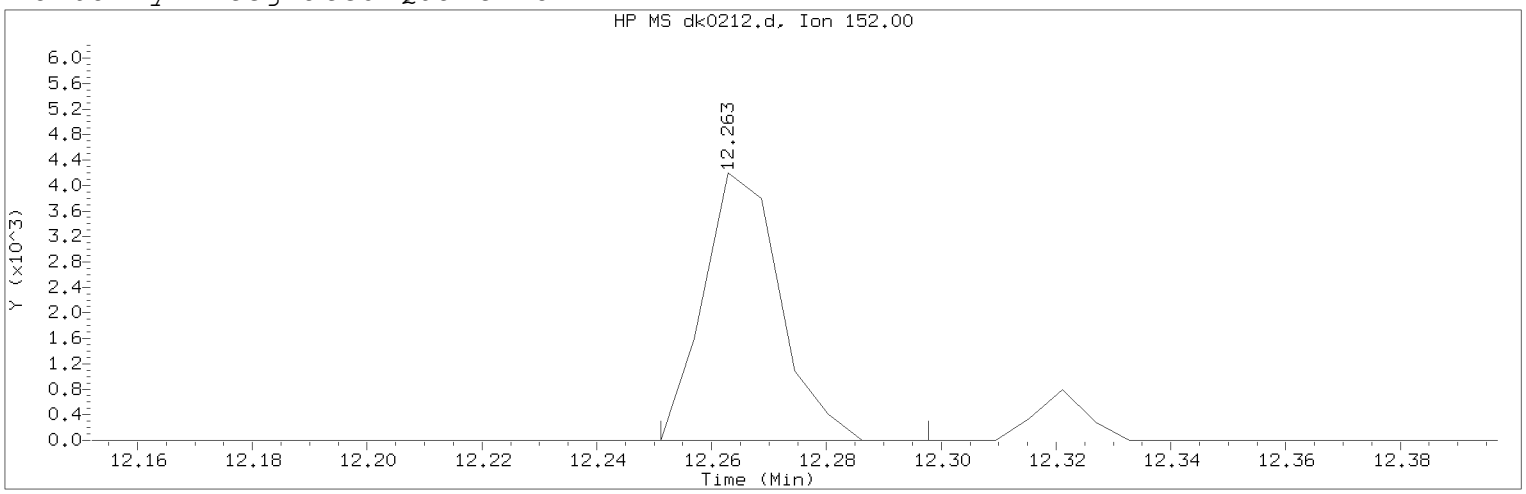
Compound Number : 76
Compound Name : Caprolactam
Expected RT (minutes) : 9.343
Quant Ion : 113.00

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user ... Page 583

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

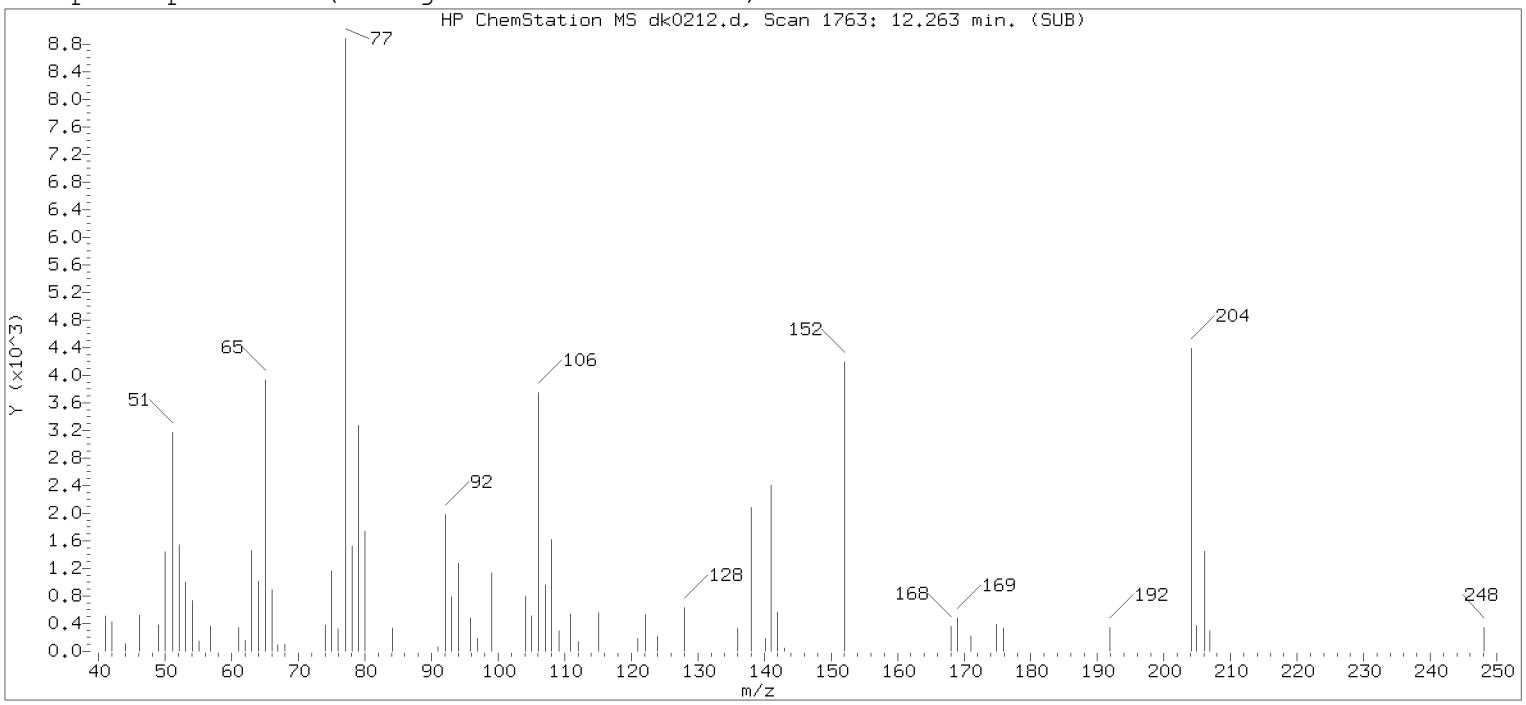
Compound Number : 128
Compound Name : 5-Nitro-o-toluidine
Scan Number : 1763
Retention Time (minutes) : 12.263
Quant Ion : 152.00
Area (flag) : 3878M
On-Column Amount (ng/ul) : 0.0718
Integration start scan : 1760 Integration stop scan: 1768
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

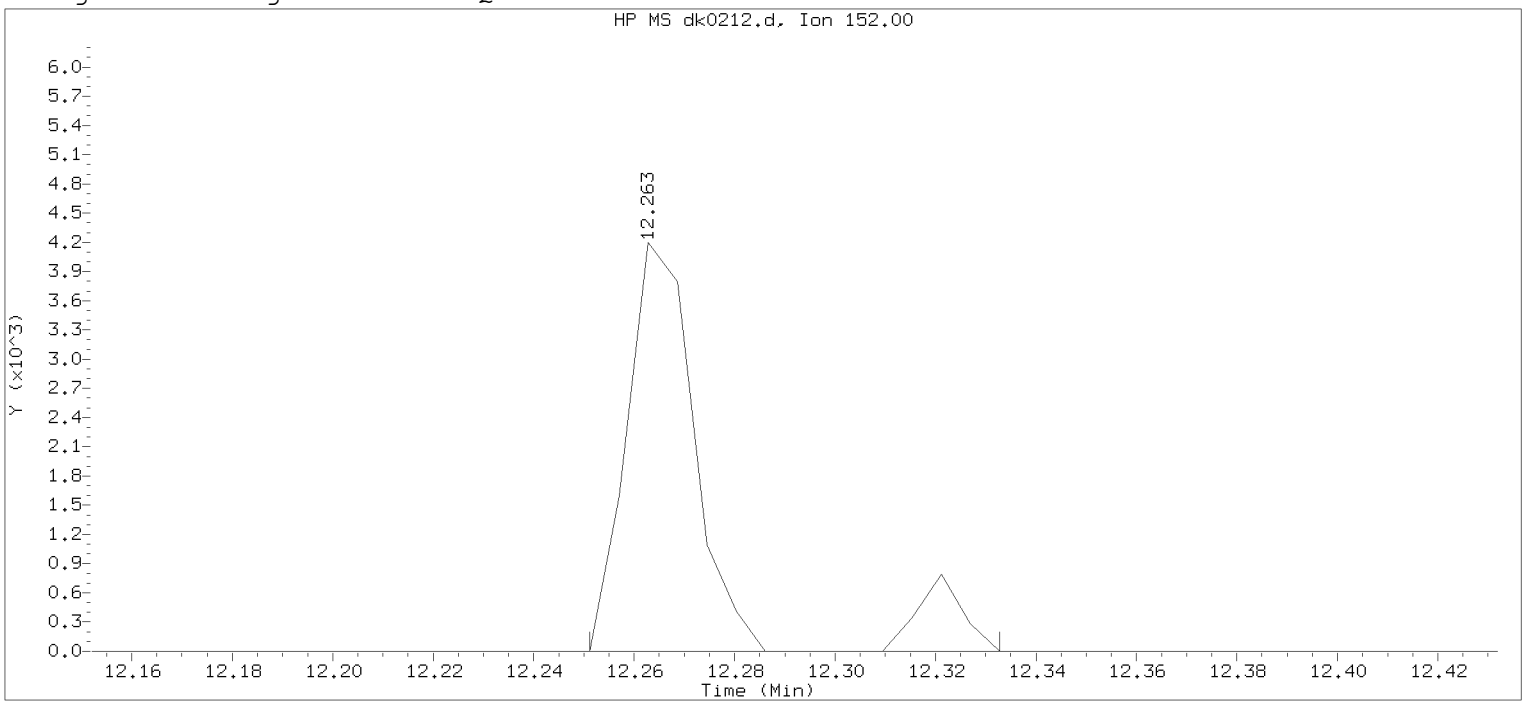
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

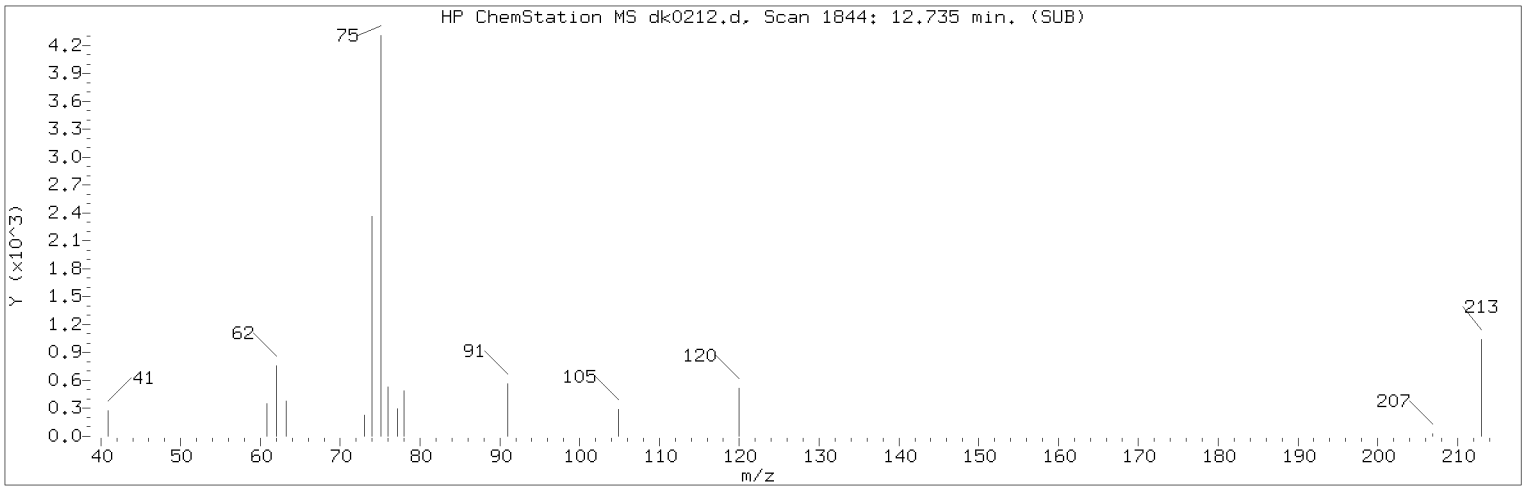
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:12
Date, time and analyst ID of latest file update: 04-Nov-2018 13:12 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

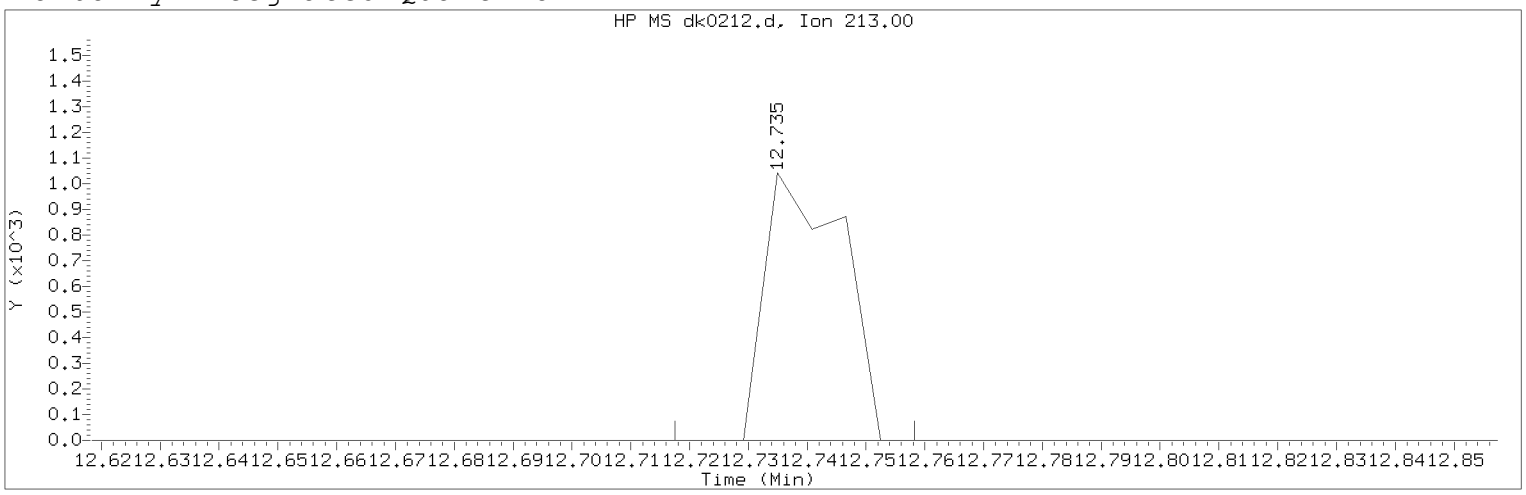
Compound Number	: 128		
Compound Name	: 5-Nitro-o-toluidine		
Scan Number	: 1763		
Retention Time (minutes)	: 12.263		
Quant Ion	: 152.00		
Area	: 4375		
On-column Amount (ng/ul)	: 0.0860		
Integration start scan	: 1760	Integration stop scan:	1774
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user name: ARTransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

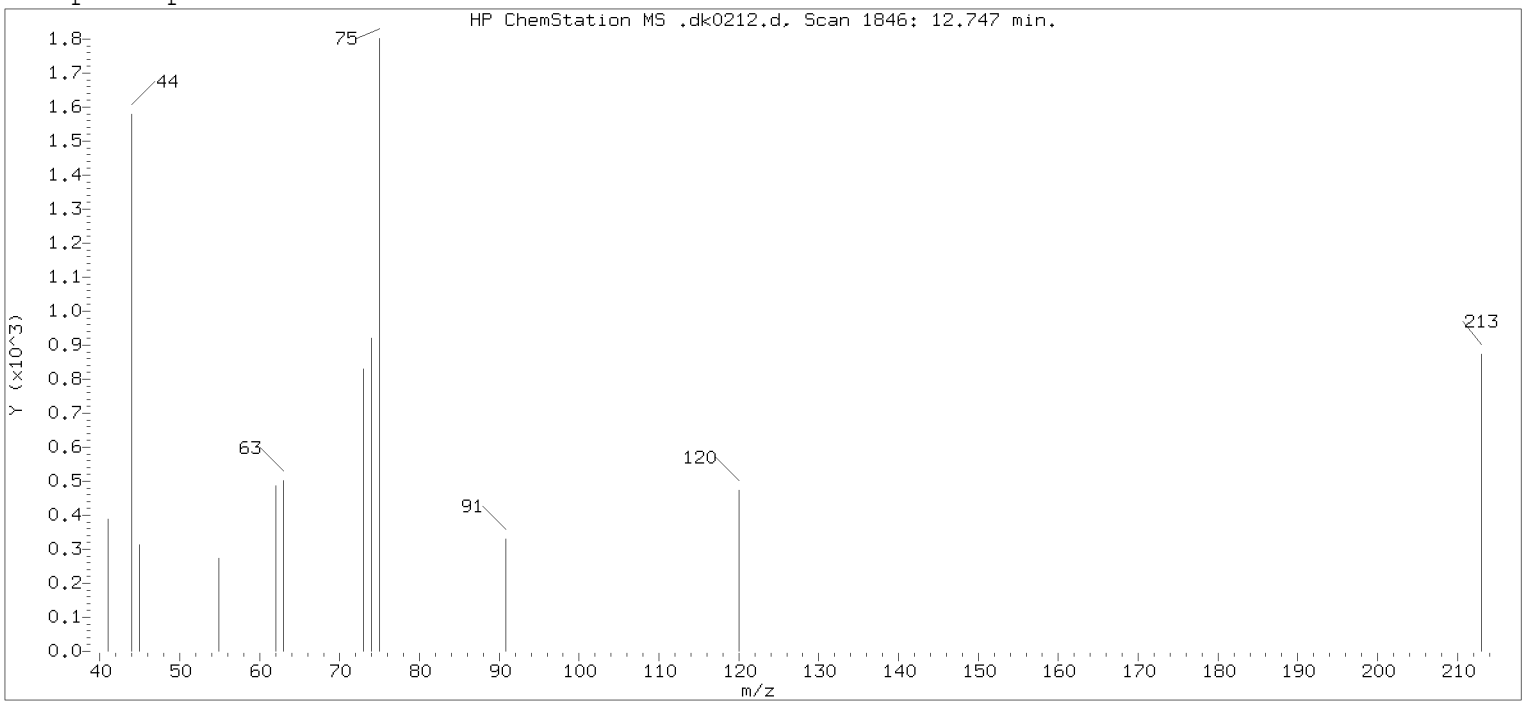
Compound Number : 139
Compound Name : 1,3,5-Trinitrobenzene
Scan Number : 1844
Retention Time (minutes) : 12.735
Quant Ion : 213.00
Area (flag) : 958M
On-Column Amount (ng/ul) : 0.0519
Integration start scan : 1840 Integration stop scan: 1847
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

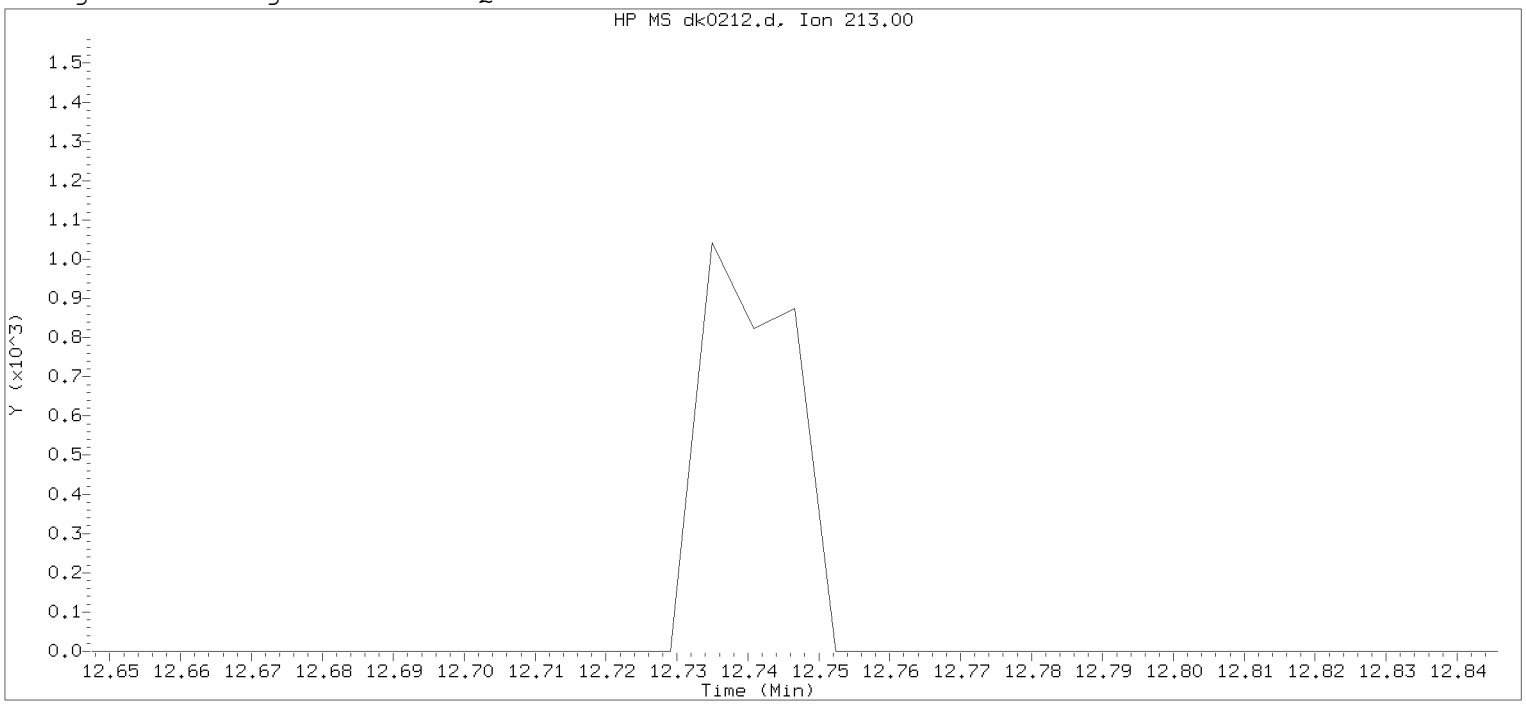
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

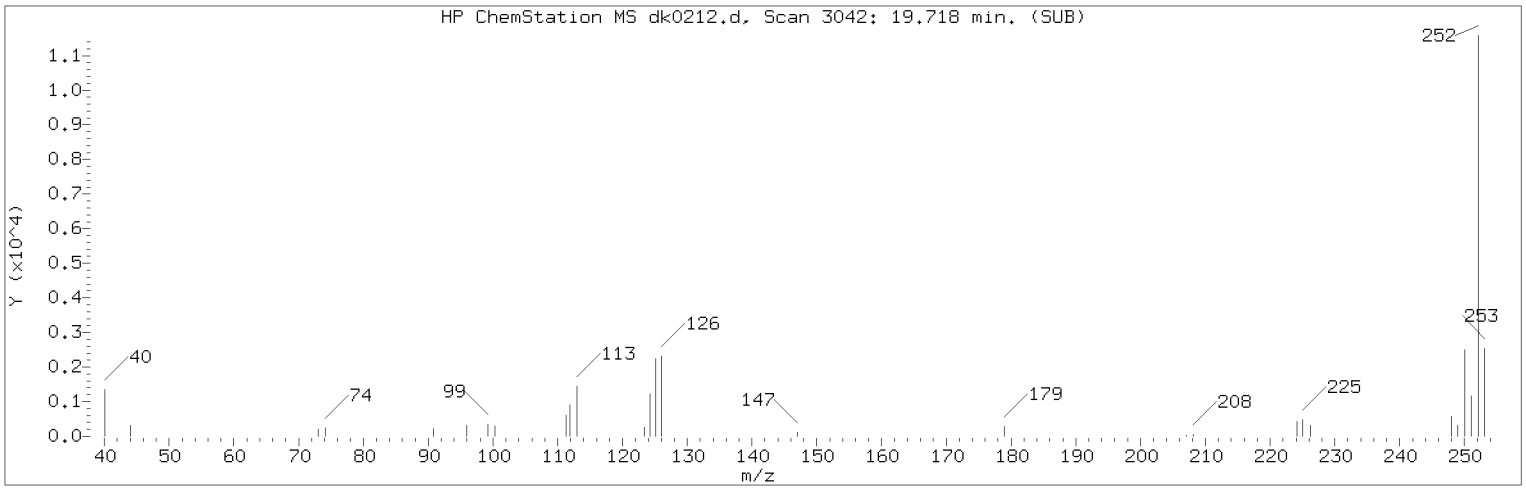
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:12
Date, time and analyst ID of latest file update: 04-Nov-2018 13:12 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

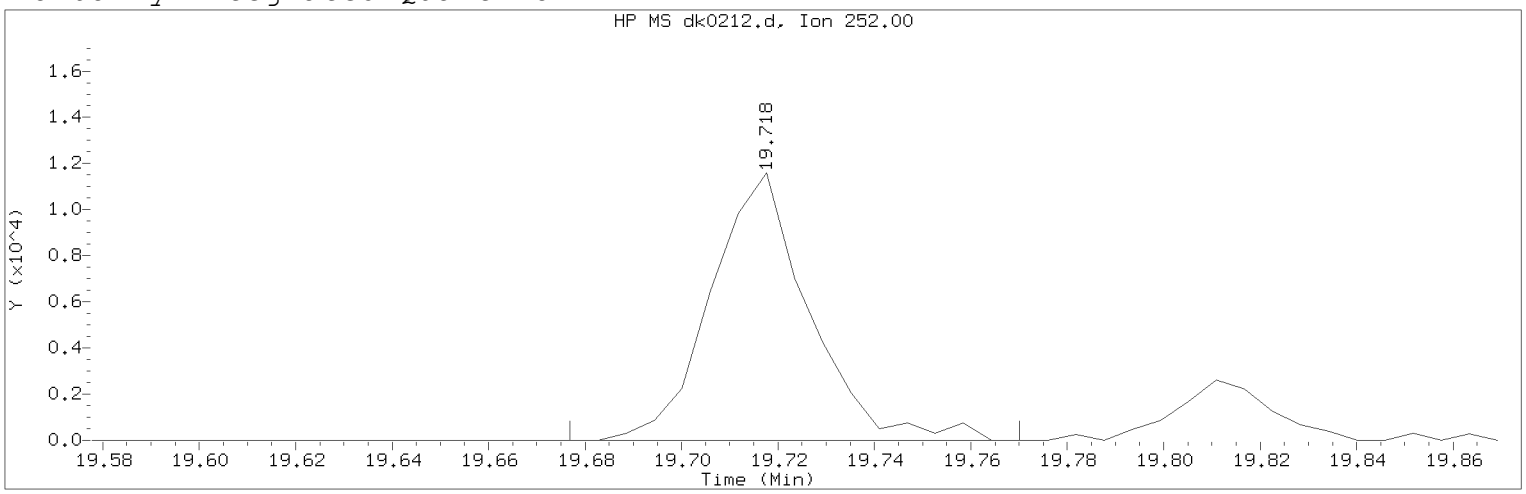
Compound Number : 139
Compound Name : 1,3,5-Trinitrobenzene
Expected RT (minutes) : 12.747
Quant Ion : 213.00

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: ashley.r.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

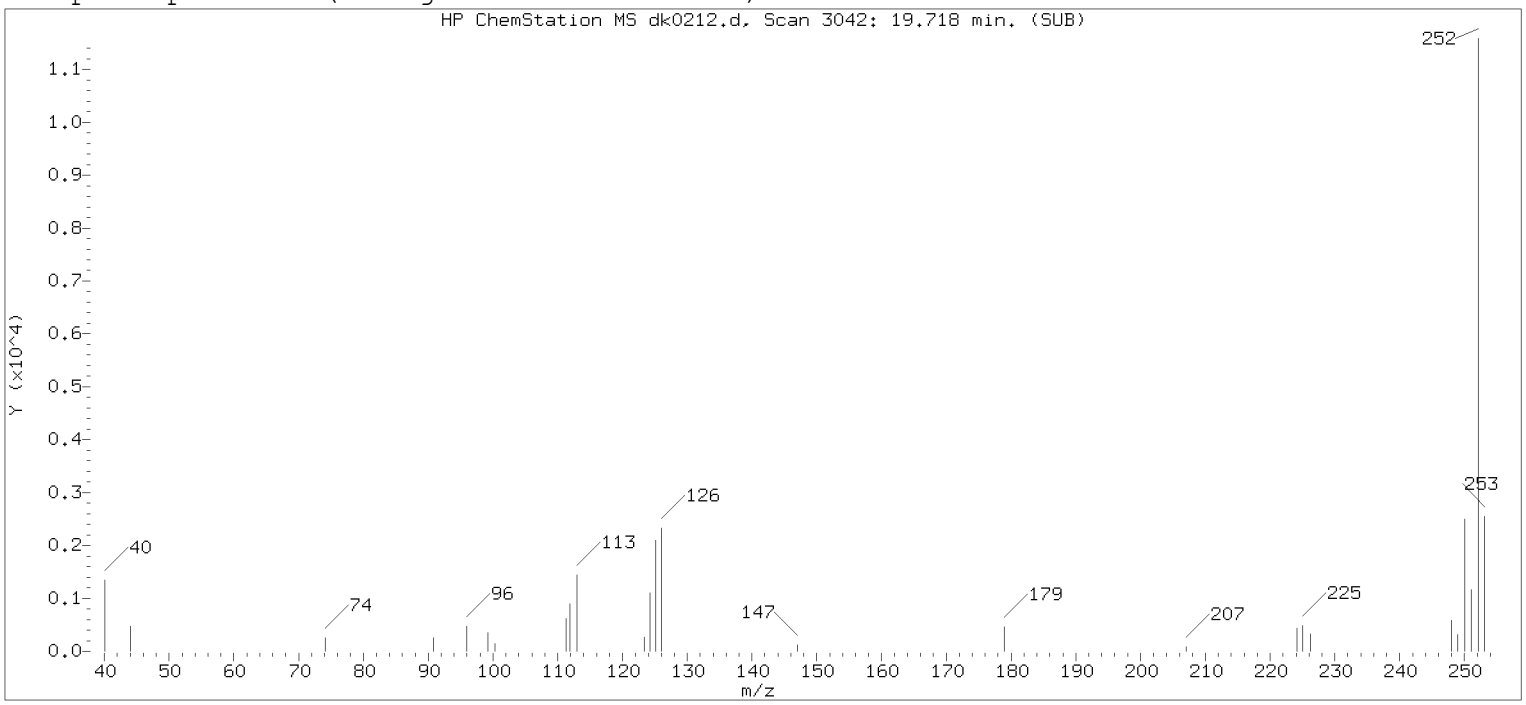
Compound Number : 211
Compound Name : Benzo(a)pyrene
Scan Number : 3042
Retention Time (minutes) : 19.718
Quant Ion : 252.00
Area (flag) : 16380M
On-Column Amount (ng/ul) : 0.0981
Integration start scan : 3034 Integration stop scan: 3050
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

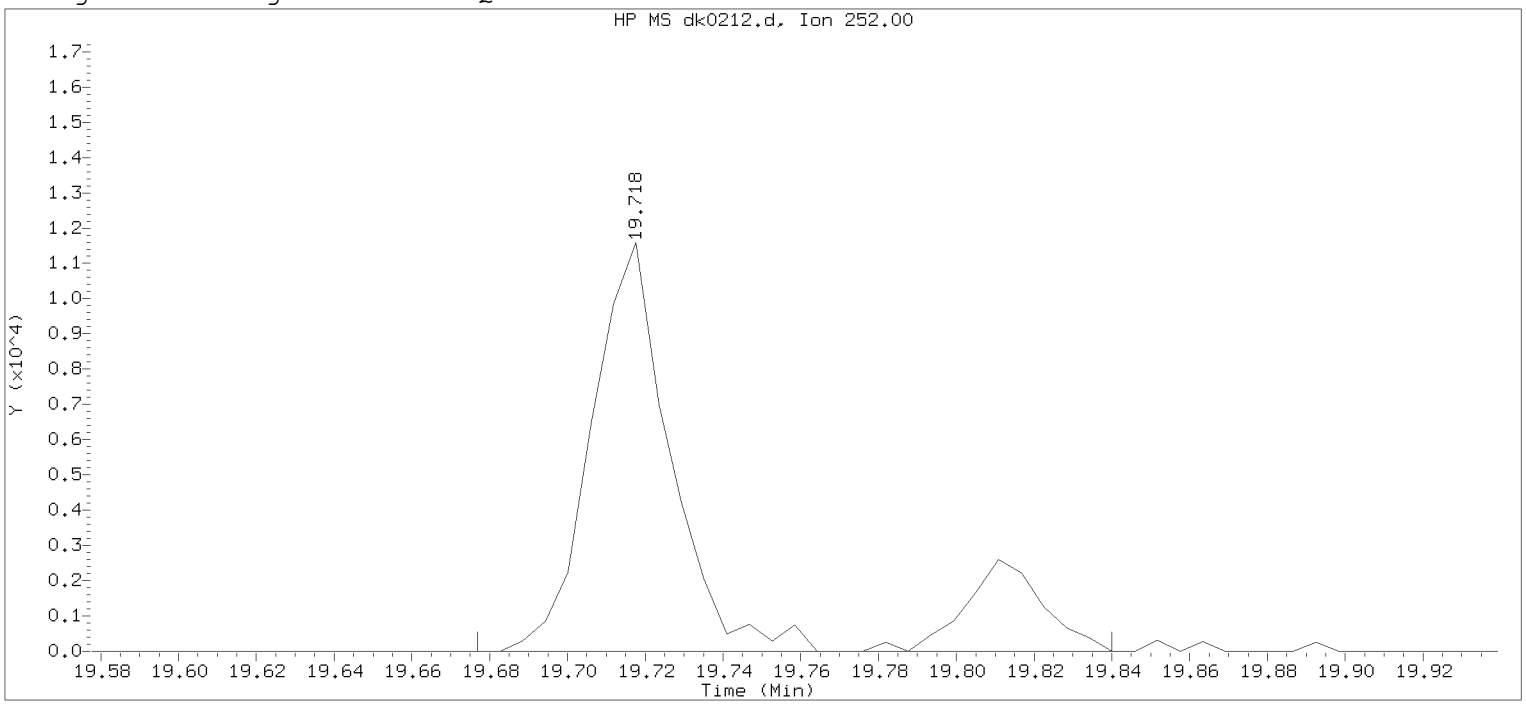
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

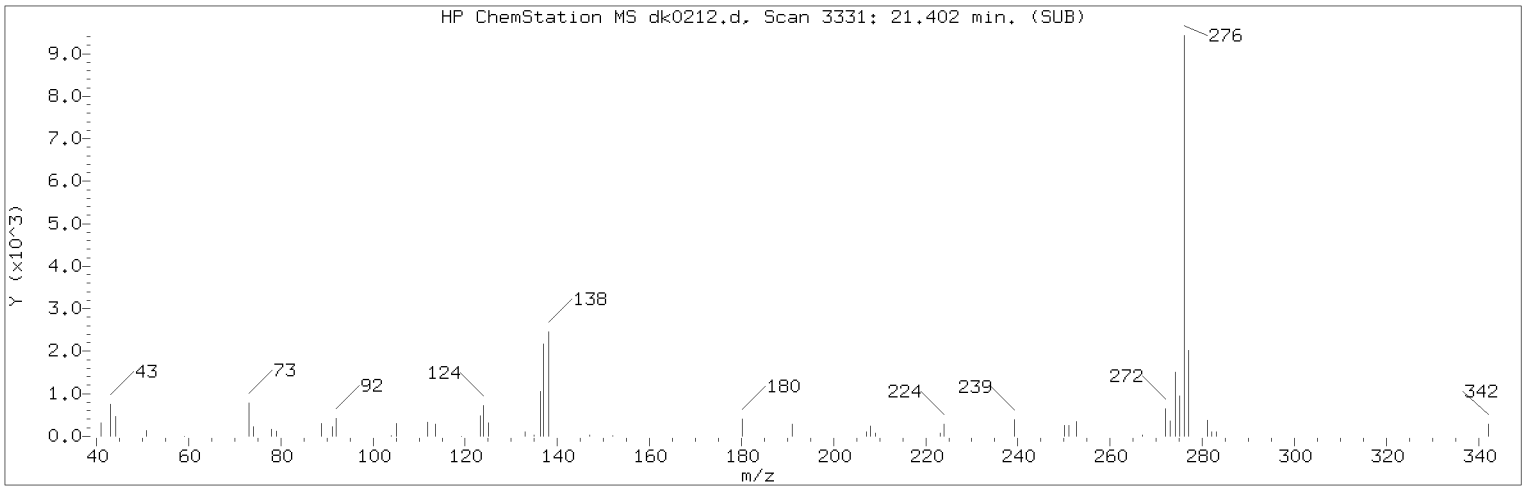
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:12
Date, time and analyst ID of latest file update: 04-Nov-2018 13:12 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

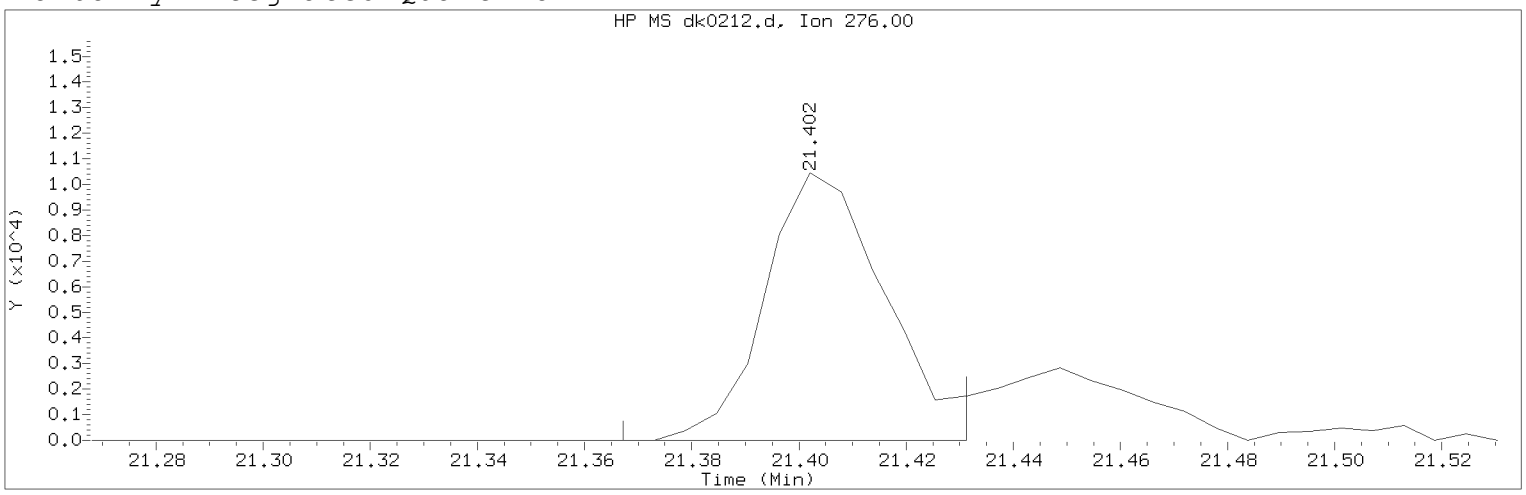
Compound Number	: 211		
Compound Name	: Benzo(a)pyrene		
Scan Number	: 3042		
Retention Time (minutes)	: 19.718		
Quant Ion	: 252.00		
Area	: 20008		
On-column Amount (ng/ul)	: 0.1043		
Integration start scan	: 3034	Integration stop scan:	3062
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user name: Ashley R. Transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

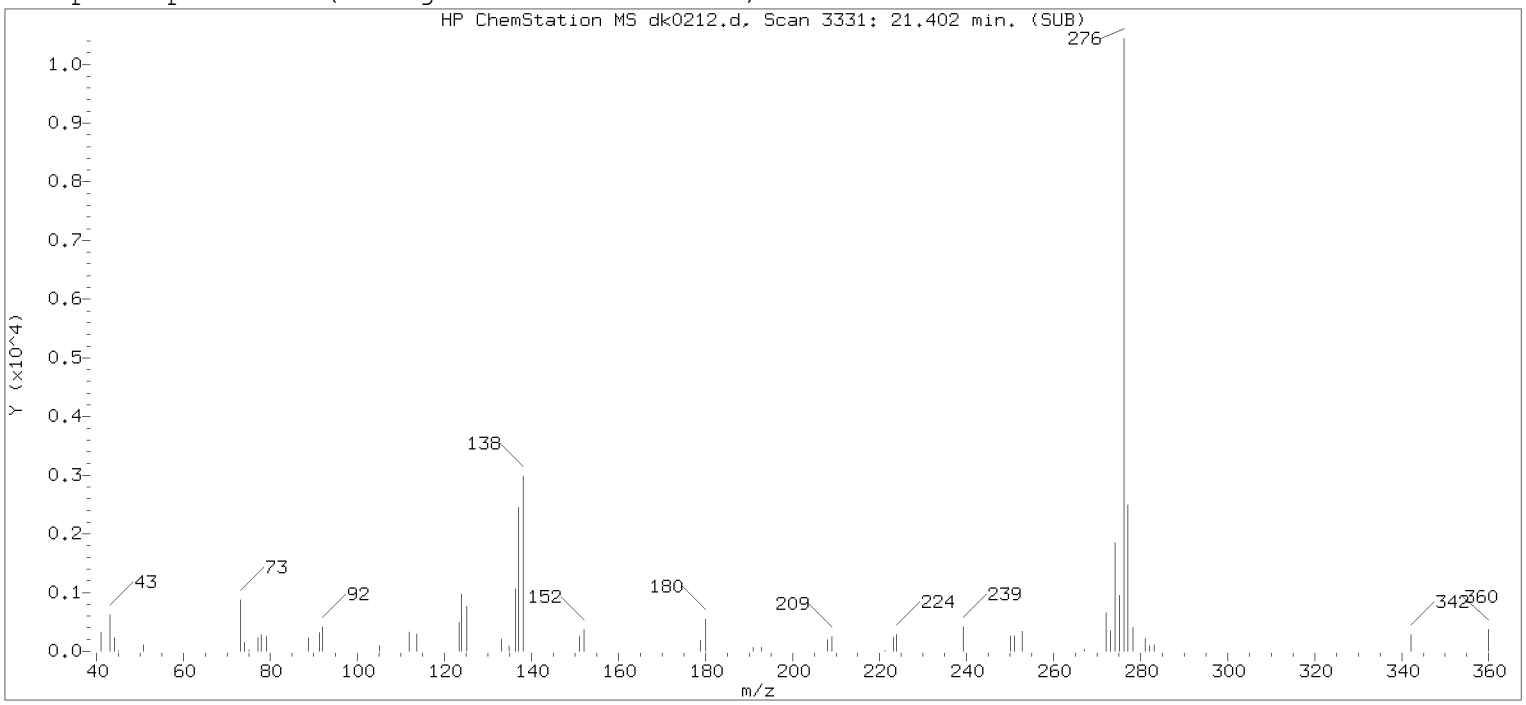
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3331
Retention Time (minutes) : 21.402
Quant Ion : 276.00
Area (flag) : 16389M
On-Column Amount (ng/ul) : 0.1048
Integration start scan : 3324 Integration stop scan: 3335
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

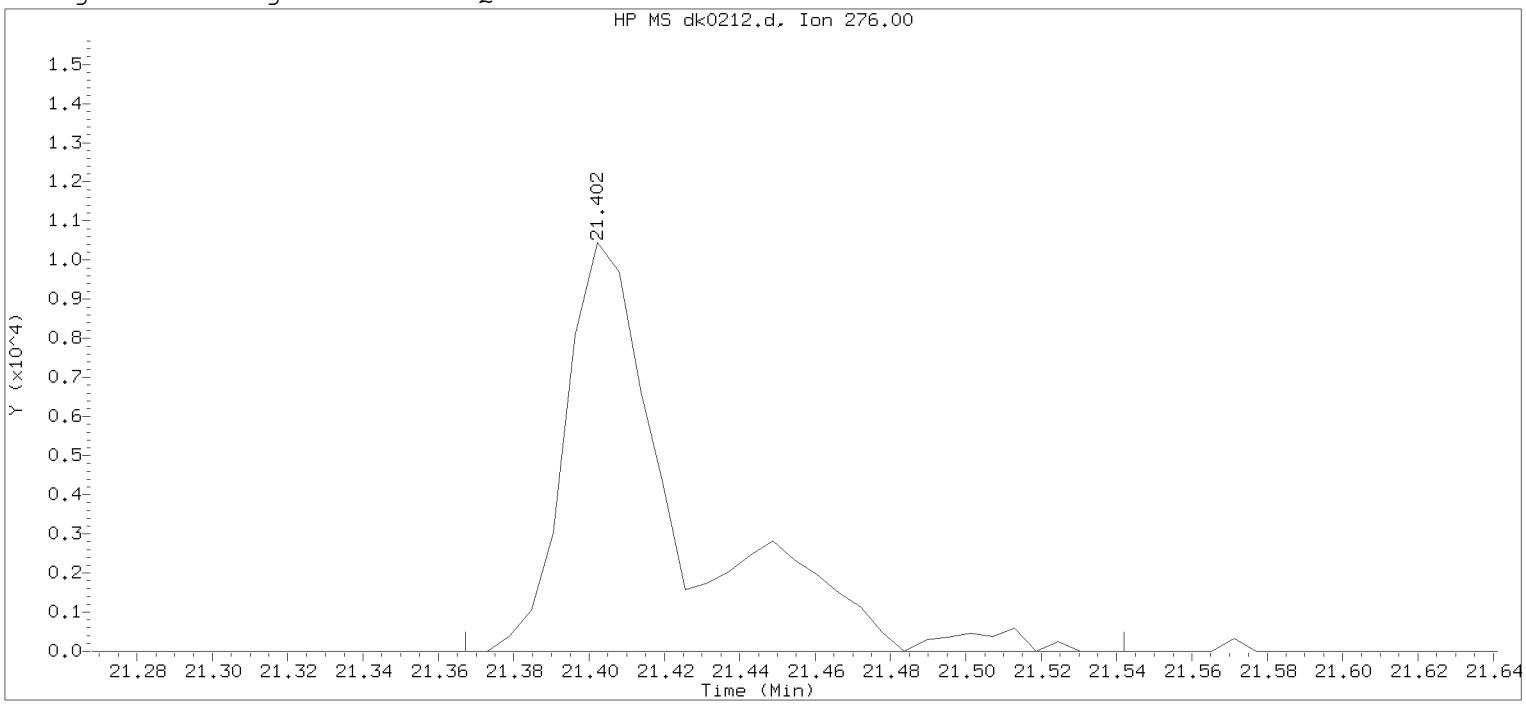
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



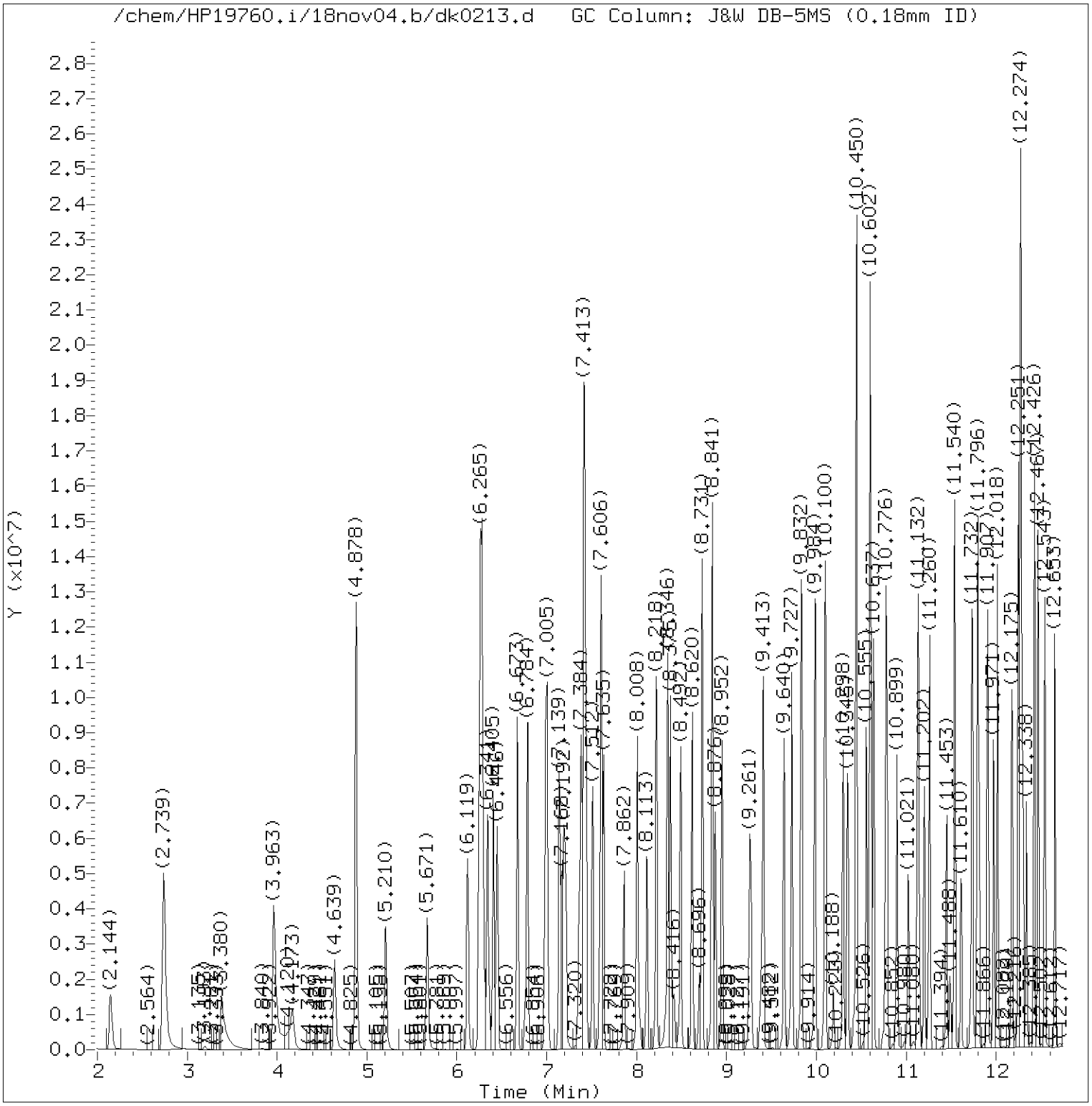
Data File: /chem/HP19760.i/18nov04.b/dk0212.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 12:44 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:12
Date, time and analyst ID of latest file update: 04-Nov-2018 13:12 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3331		
Retention Time (minutes)	: 21.402		
Quant Ion	: 276.00		
Area	: 22352		
On-column Amount (ng/ul)	: 0.1822		
Integration start scan	: 3324	Integration stop scan:	3354
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: ashley.transue



Total Ion Chromatogram (TIC)

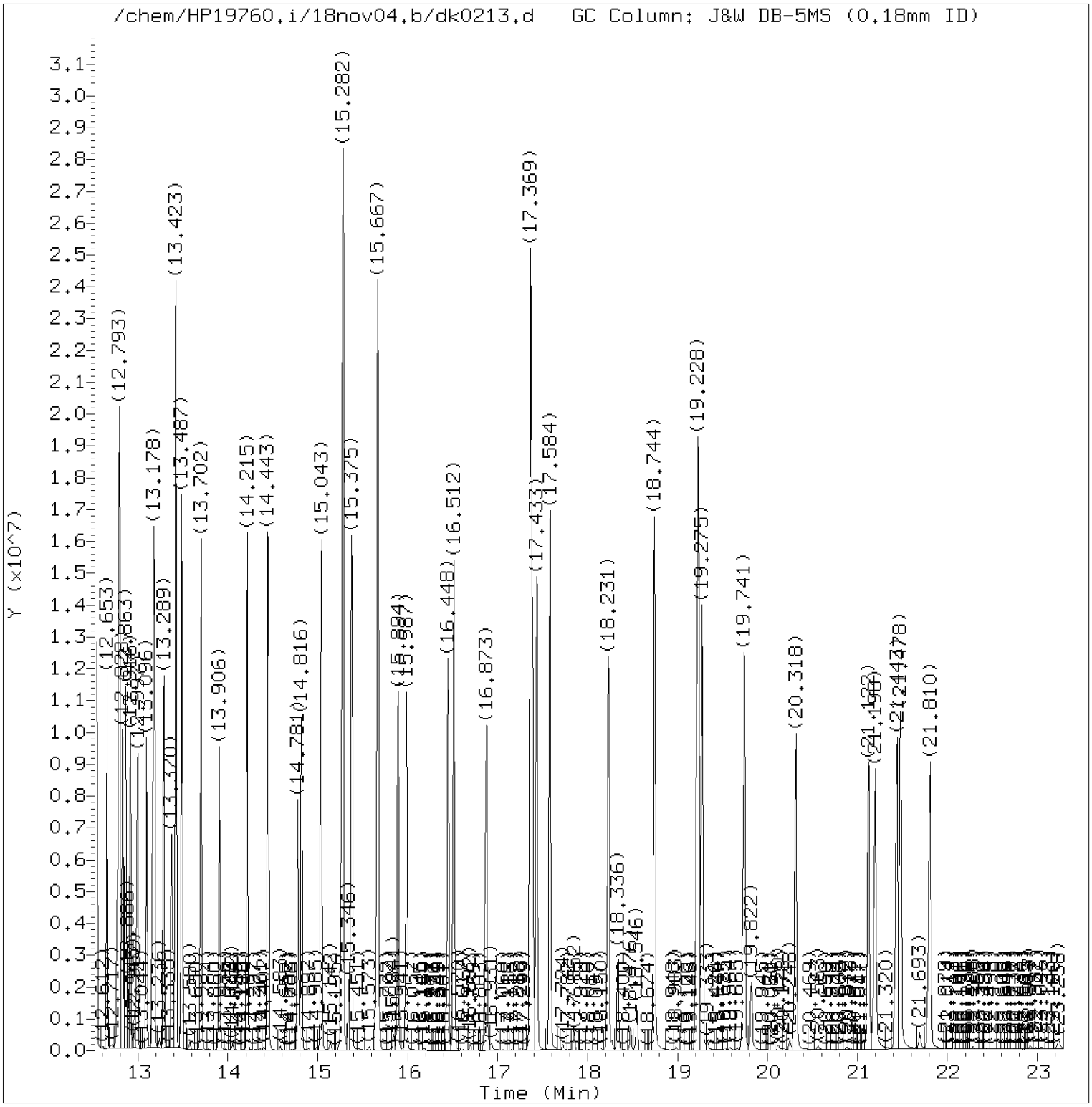
Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.144	88	1500246	29.626
4) N-Nitrosodimethylamine	(1)	2.727	74	2322106	30.081
5) Pyridine	(1)	2.745	79	3872563	29.835
7) 2-Picoline	(1)	3.963	93	3838802	29.691
8) N-Nitrosomethylethylamine	(1)	4.173	88	1682821	29.933
9) Methyl methanesulfonate	(1)	4.645	80	1827981	29.420
11)$2-Fluorophenol	(1)	4.878	112	5917767	59.926
13) N-Nitrosodiethylamine	(1)	5.210	102	1576865	30.056
42) Total Cresols	(1)			6028125	59.049
15) Ethyl methanesulfonate	(1)	5.671	109	1491215	29.742
16) Benzaldehyde	(1)	6.119	77	1879456	25.180
17)$Phenol-d6	(1)	6.259	99	8157402	59.622
18) Phenol	(1)	6.277	94	4630664	29.636
19) Aniline	(1)	6.288	93	5403216	29.640
20) a-methylstyrene	(1)	6.364	118	280641	29.606
22) bis(2-Chloroethyl)ether	(1)	6.405	93	3408172	29.489
23) 2-Chlorophenol	(1)	6.452	128	2769358	29.726
24) 1,3-Dichlorobenzene	(1)	6.673	146	2854109	29.527
25)*1,4-Dichlorobenzene-d4	(1)	6.760	152	297977	5.000
26) 1,4-Dichlorobenzene	(1)	6.790	146	2877044	29.503
27) Benzyl alcohol	(1)	6.988	108	1936198	29.886
28) 1,2-Dichlorobenzene	(1)	7.005	146	2722582	29.540
30) Indene	(1)	7.139	115	3154164	29.808
31) 2-Methylphenol	(1)	7.168	108	2831934	29.545
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.209	45	3947775	29.602
34) bis(2-Chloroisopropyl)ether	(1)	7.209	45	3947775	29.602
35) N-Nitrosopyrrolidine	(1)	7.361	100	1581061A	29.656
97) Isosafrole	(3)			2056648	30.666
36) Acetophenone	(1)	7.384	105	3961763	29.914
37) 4-Methylphenol	(1)	7.413	108	3196191	29.506
38) N-Nitroso-di-n-propylamine	(1)	7.419	70	2385266A	29.073
39) N-Nitrosomorpholine	(1)	7.425	56	1788171	28.956
40) o-Toluidine	(1)	7.437	106	4799105	29.463
43) Hexachloroethane	(1)	7.512	117	1337706	29.351
44)$Nitrobenzene-d5	(2)	7.606	82	7253701	59.854
45) Nitrobenzene	(2)	7.635	77	3608903	29.742
48) N-Nitrosopiperidine	(2)	7.862	114	1438813	30.086
50) Isophorone	(2)	8.008	82	6377624	30.349
120) 2,4_2,6-Dinitrotoluenes	(3)			2546856	60.145
51) 2-Nitrophenol	(2)	8.119	139	1410272	30.805

A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.218	107	3040481	30.219
57) O,O,O-Triethylphosphorothioate	(2)	8.346	198	1118952	30.280
55) bis(2-Chloroethoxy)methane	(2)	8.375	93	3728580	29.239
56) Benzoic acid	(2)	8.416	105	2154489M	32.035
60) 2,4-Dichlorophenol	(2)	8.492	162	2045423	30.101
62) 1,2,4-Trichlorobenzene	(2)	8.620	180	2146317	30.013
65)*Naphthalene-d8	(2)	8.696	136	1086871	5.000
66) Naphthalene	(2)	8.731	128	7769721	29.842
146) Diallate trans/cis	(4)			2929352	30.211
67) 4-Chloroaniline	(2)	8.841	127	3032561	29.928
68) 2,6-Dichlorophenol	(2)	8.847	162	1978238	30.149
69) Hexachloropropene	(2)	8.876	213	1377634	30.404
71) Hexachlorobutadiene	(2)	8.952	225	1143893	29.503
75) Quinoline	(2)	9.261	129	4461439	30.128
76) Caprolactam	(2)	9.407	113	856443A	31.126
77) N-Nitrosodi-n-butylamine	(2)	9.413	84	2693068	33.620
80) 4-Chloro-3-methylphenol	(2)	9.640	107	2520451	30.731
82) Safrole	(2)	9.727	162	1844161	30.234
83) 2-Methylnaphthalene	(2)	9.832	142	4860909	30.637
84) 1-Methylnaphthalene	(2)	9.984	142	4640169	31.525
85) Hexachlorocyclopentadiene	(3)	10.094	237	1177088	29.329
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.106	216	1958817	29.593
88) cis-Isosafrole	(3)	10.188	162	323462	5.221
90) 2,4,6-Trichlorophenol	(3)	10.298	196	1364433	30.293
92) 2,4,5-Trichlorophenol	(3)	10.351	196	1368414	29.942
93)$2-Fluorobiphenyl	(3)	10.450	172	9826209	58.764
99) Diphenyl ether	(3)	10.450	170	2223017	29.397
94) trans-Isosafrole	(3)	10.555	162	1733186	25.446
95) 1,1'-Biphenyl	(3)	10.596	154	5157032	28.959
96) 2-Chloronaphthalene	(3)	10.607	162	4555940	30.582
98) 1-Chloronaphthalene	(3)	10.637	162	3542306	27.866
100) 2-Nitroaniline	(3)	10.788	138	1508659	30.315
104) 1,4-Naphthoquinone	(3)	10.899	158	1663108	29.963
105) 1,4-Dinitrobenzene	(3)	11.027	168	780365	30.059
106) Dimethylphthalate	(3)	11.132	163	4450254	29.322
107) 1,3-Dinitrobenzene	(3)	11.144	168	862551	30.191
108) 2,6-Dinitrotoluene	(3)	11.202	165	1076591	29.543
109) Acenaphthylene	(3)	11.260	152	6292155	31.927
112) 3-Nitroaniline	(3)	11.453	138	1297441	30.509
113)*Acenaphthene-d10	(3)	11.488	164	494386	5.000

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.540	153	4325689	29.677
115) 2,4-Dinitrophenol	(3)	11.616	184	792461	32.911
116) 4-Nitrophenol	(3)	11.732	109	937690	30.333
117) Pentachlorobenzene	(3)	11.738	250	1538852	29.284
119) Dibenzofuran	(3)	11.796	168	5876039	29.366
118) 2,4-Dinitrotoluene	(3)	11.814	165	1470265	30.472
121) 1-Naphthylamine	(3)	11.907	143	4591173	30.043
122) 2,3,4,6-Tetrachlorophenol	(3)	11.971	232	1060010	30.452
123) 2-Naphthylamine	(3)	12.018	143	4581897	30.076
124) Diethylphthalate	(3)	12.175	149	4732433	30.640
126) Fluorene	(3)	12.251	166	4712305	30.945
125) Thionazin	(3)	12.269	107	1014830	30.403
127) 4-Chlorophenyl-phenylether	(3)	12.280	204	2156099	29.187
128) 5-Nitro-o-toluidine	(3)	12.286	152	1486201	30.487
129) 4-Nitroaniline	(3)	12.298	138	1416825	30.536
130) 4,6-Dinitro-2-methylphenol	(4)	12.338	198	940895	32.109
131) N-Nitrosodiphenylamine	(4)	12.426	169	3951403	29.707
132) NDPA as diphenylamine	(4)	12.426	169	3951403	29.707
134) 1,2-Diphenylhydrazine	(4)	12.467	77	6408891	29.435
135)$2,4,6-Tribromophenol	(3)	12.543	330	1084364	62.395
137) Tetraethyldithiopyrophosphate	(4)	12.653	97	955095	29.994
139) 1,3,5-Trinitrobenzene	(4)	12.770	213	632371	32.705
140) Diallate (peak 1)	(4)	12.787	86	2521975	25.035
141) Phorate	(4)	12.799	75	3843218	30.055
142) Phenacetin	(4)	12.828	108	3037751	31.049
143) 4-Bromophenyl-phenylether	(4)	12.863	248	1155078	30.004
144) Diallate (peak 2)	(4)	12.886	86	407377	5.187
145) Hexachlorobenzene	(4)	12.916	284	1165429	29.760
147) Dimethoate	(4)	12.997	87	2535035	30.412
148) Atrazine	(4)	13.096	200	1036556	27.808
149) Pentachlorophenol	(4)	13.166	266	878110	31.512
150) 4-Aminobiphenyl	(4)	13.178	169	3404904	29.561
151) Pentachloronitrobenzene	(4)	13.184	237	564203	30.575
152) Pronamide	(4)	13.289	173	2146488	30.719
153)*Phenanthrene-d10	(4)	13.388	188	930619	5.000
154) Dinoseb	(4)	13.417	211	1388594	32.620
155) Phenanthrene	(4)	13.423	178	6772442	29.783
157) Anthracene	(4)	13.487	178	6988883	31.851
163) Carbazole	(4)	13.702	167	6888463	30.628
164) Methyl parathion	(4)	13.906	109	2003329	31.370

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

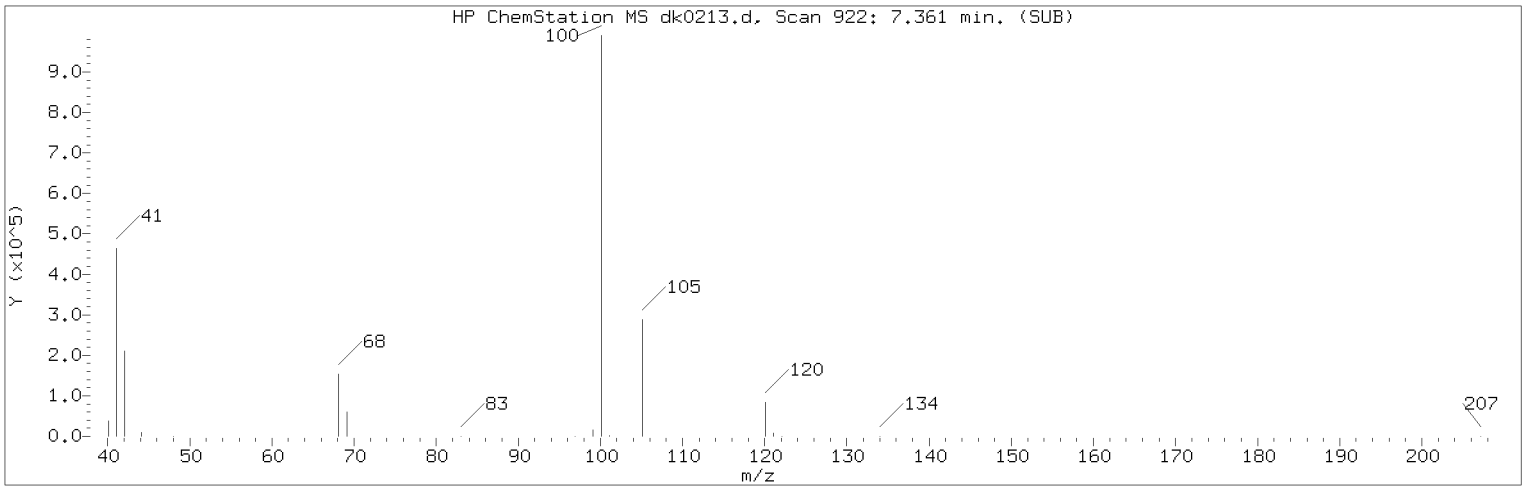
Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.215	149	8455338	30.877
167) Parathion	(4)	14.443	109	1329952	31.868
168) 4-Nitroquinoline-1-oxide	(4)	14.448	190	1011726	35.490
169) Octachlorostyrene	(4)	14.781	308	479336	30.796
171) Isodrin	(4)	14.816	193	821070	30.619
222) Total PAHs	(6)			119657689	540.807
173) Fluoranthene	(4)	15.043	202	8053053	34.338
174) Benzidine	(5)	15.288	184	15606625	82.749
175)*Pyrene-d10	(5)	15.346	212	973269	5.000
177) Pyrene	(5)	15.375	202	8282158	29.291
179)$Terphenyl-d14	(5)	15.667	244	9758259	60.015
182) p-Dimethylaminoazobenzene	(5)	15.894	225	1508636	31.849
185) Chlorobenzilate	(5)	15.987	139	2776405	30.815
187) 3,3'-Dimethylbenzidine	(5)	16.448	212	5395960	30.586
188) Butylbenzylphthalate	(5)	16.512	149	4487937	30.792
191) 2-Acetylaminofluorene	(5)	16.879	181	3747705	33.063
193) 3,3'-Dichlorobenzidine	(5)	17.369	252	3053328	30.889
195) Benzo(a)anthracene	(5)	17.369	228	7760678	34.426
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.392	231	1663934	30.820
196) Chrysene	(5)	17.439	228	7541705	31.466
199) bis(2-Ethylhexyl)phthalate	(5)	17.584	149	6410805	30.899
203) 6-Methylchrysene	(5)	18.231	242	5376837	31.056
205) Di-n-octylphthalate	(6)	18.744	149	11230424	31.645
206) Benzo(b)fluoranthene	(6)	19.228	252	8138974	34.963
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.234	256	3681355	30.471
208) Benzo(k)fluoranthene	(6)	19.275	252	7460406	31.177
211) Benzo(a)pyrene	(6)	19.747	252	7425842	35.336
213)*Perylene-d12	(6)	19.822	264	972401	5.000
215) 3-Methylcholanthrene	(6)	20.318	268	3578625	31.303
217) Dibenz(a,h)acridine	(6)	21.128	279	5426236	30.243
218) Dibenz(a,j)acridine	(6)	21.198	279	5617143	29.581
219) Indeno(1,2,3-cd)pyrene	(6)	21.443	276	6098266M	32.569
220) Dibenz(a,h)anthracene	(6)	21.484	278	6548945	31.508
221) Benzo(g,h,i)perylene	(6)	21.810	276	5985389	28.545

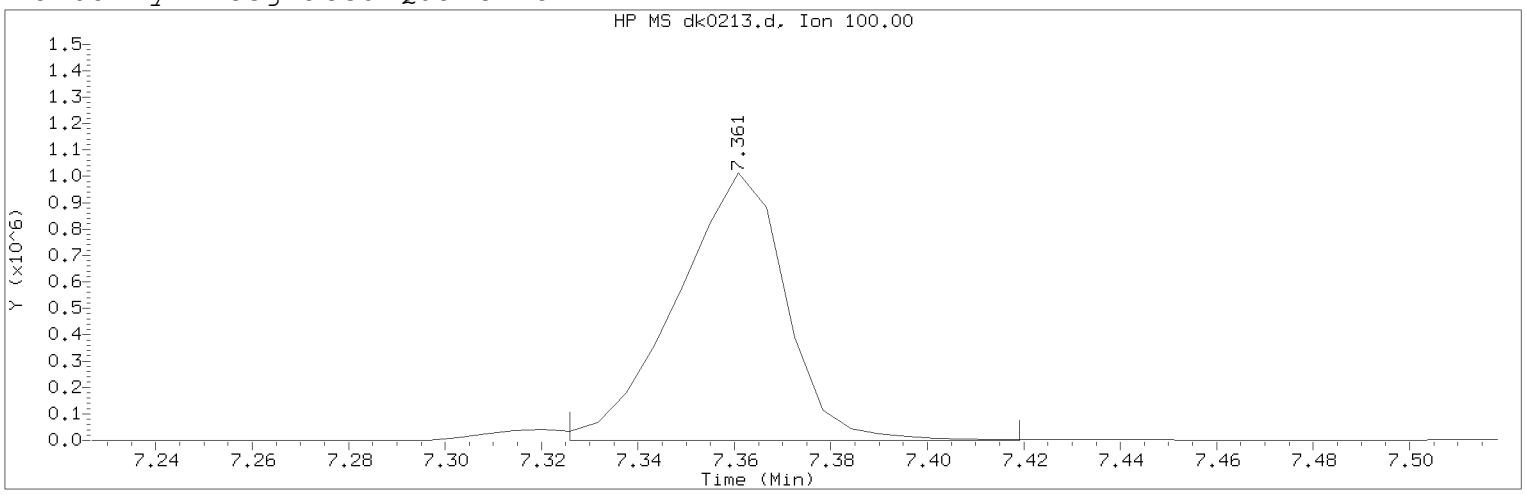
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

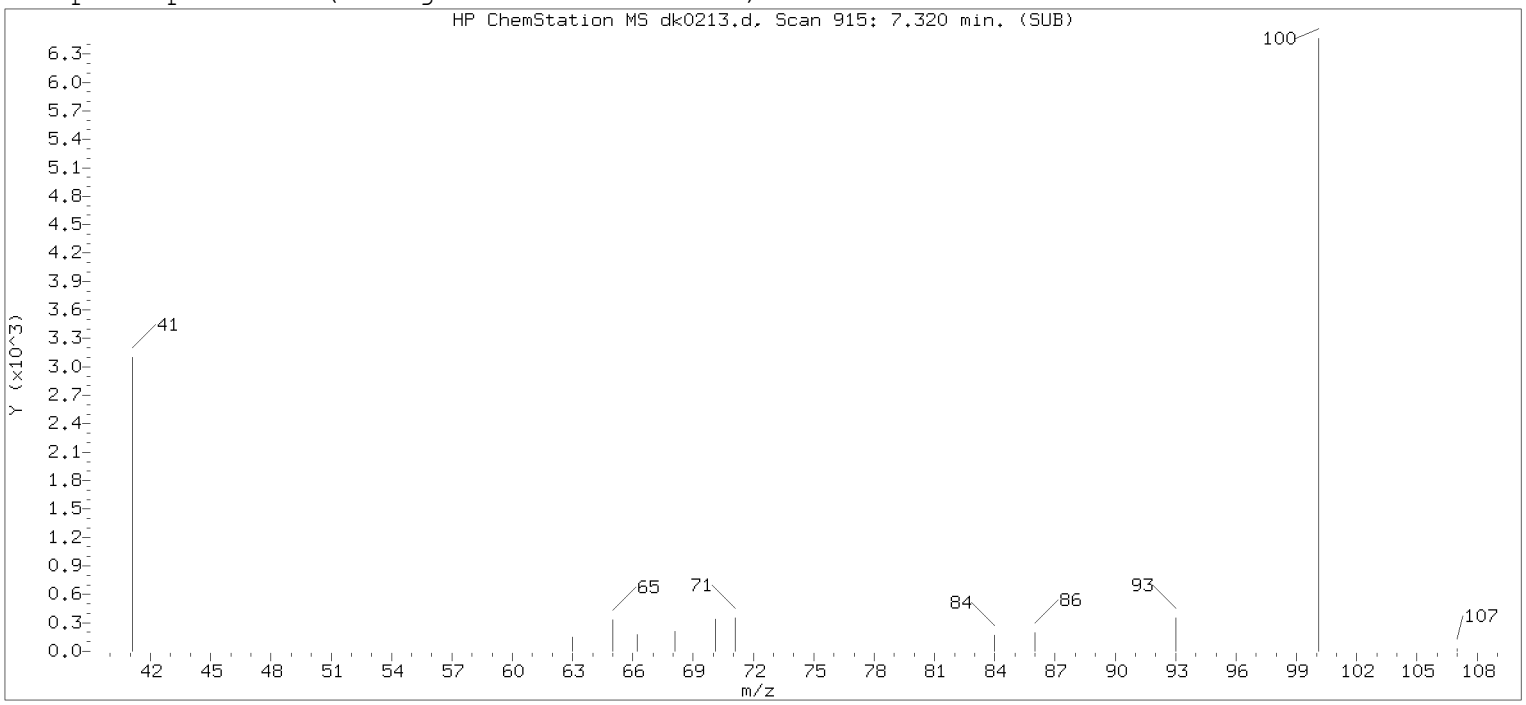
Compound Number : 35
Compound Name : N-Nitrosopyrrolidine
Scan Number : 922
Retention Time (minutes) : 7.361
Quant Ion : 100.00
Area (flag) : 1581061A
On-Column Amount (ng/ul) : 29.6563
Integration start scan : 915 Integration stop scan: 931
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

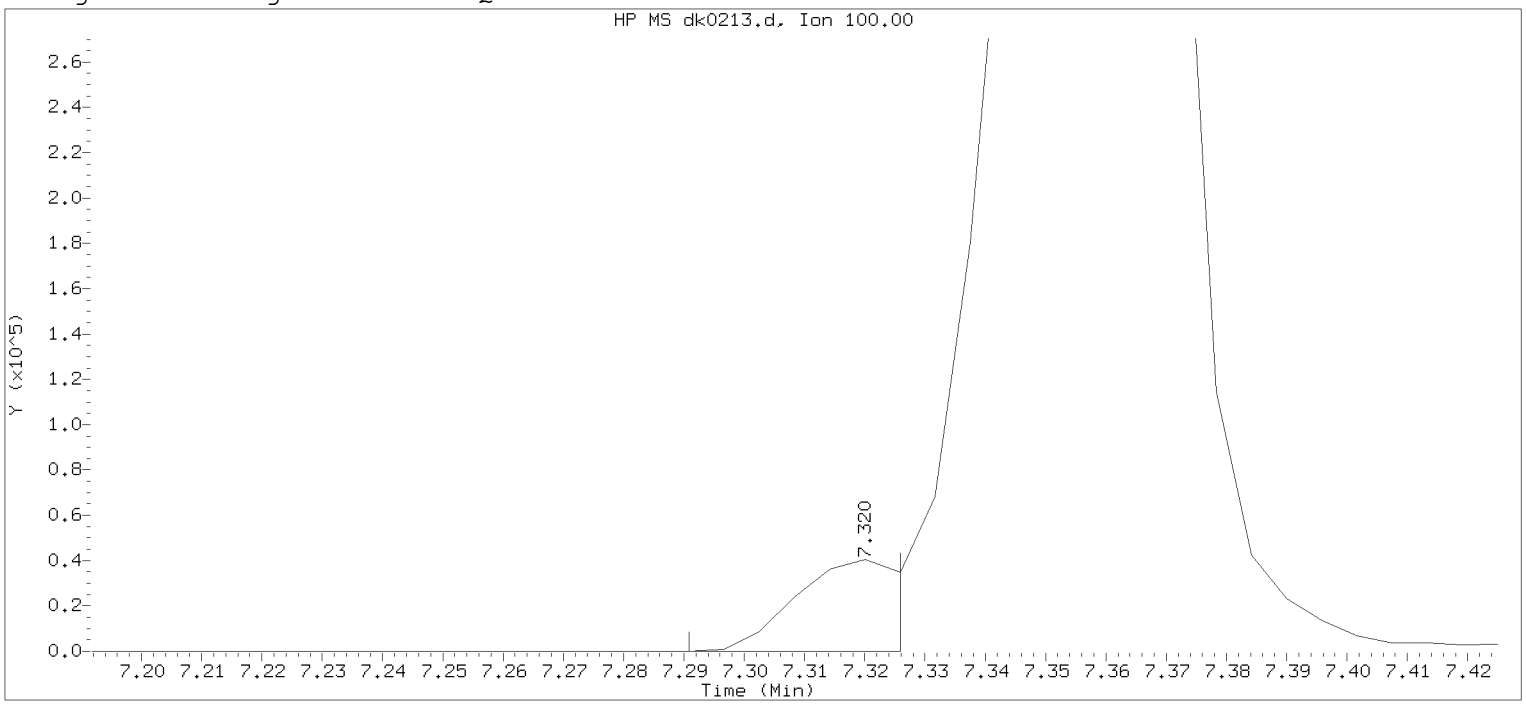
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

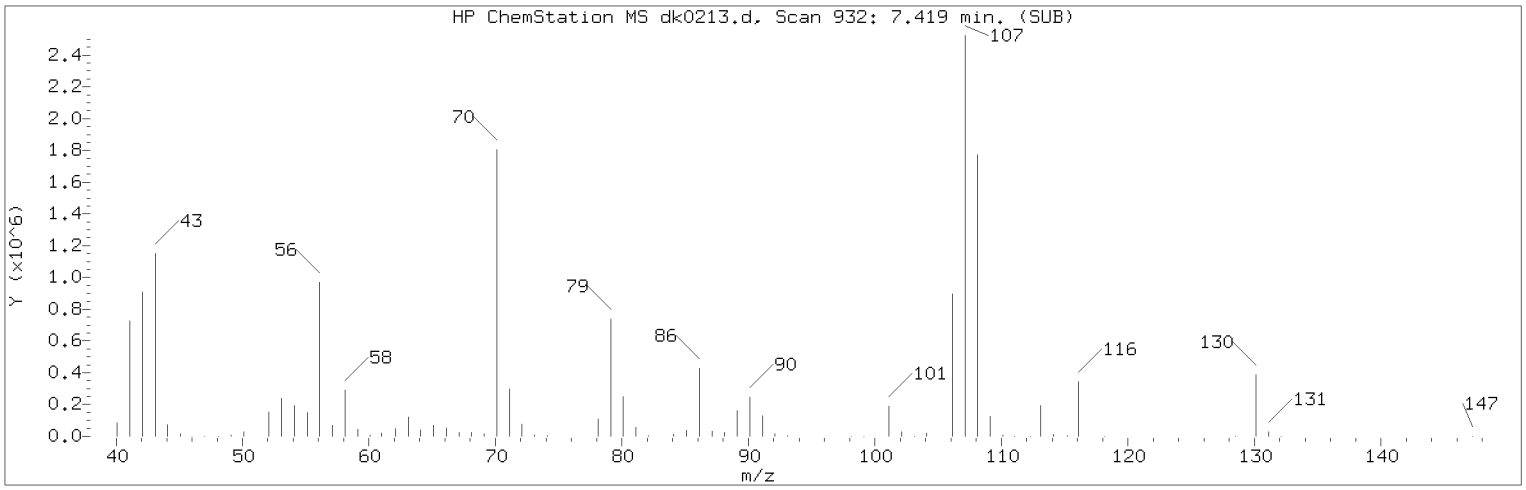
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:40
Date, time and analyst ID of latest file update: 04-Nov-2018 13:40 Automation

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

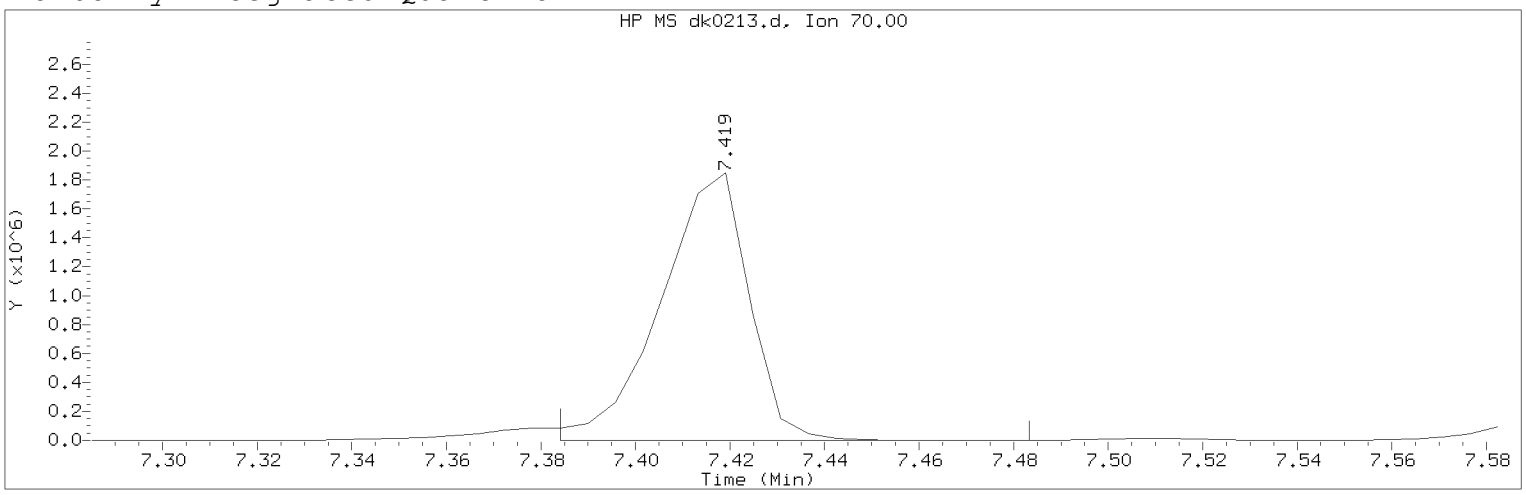
Compound Number	: 35		
Compound Name	: N-Nitrosopyrrolidine		
Scan Number	: 915		
Retention Time (minutes)	: 7.320		
Quant Ion	: 100.00		
Area	: 44851		
On-column Amount (ng/ul)	: 1.1128		
Integration start scan	: 909	Integration stop scan:	915
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user name: Ashley R. Transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

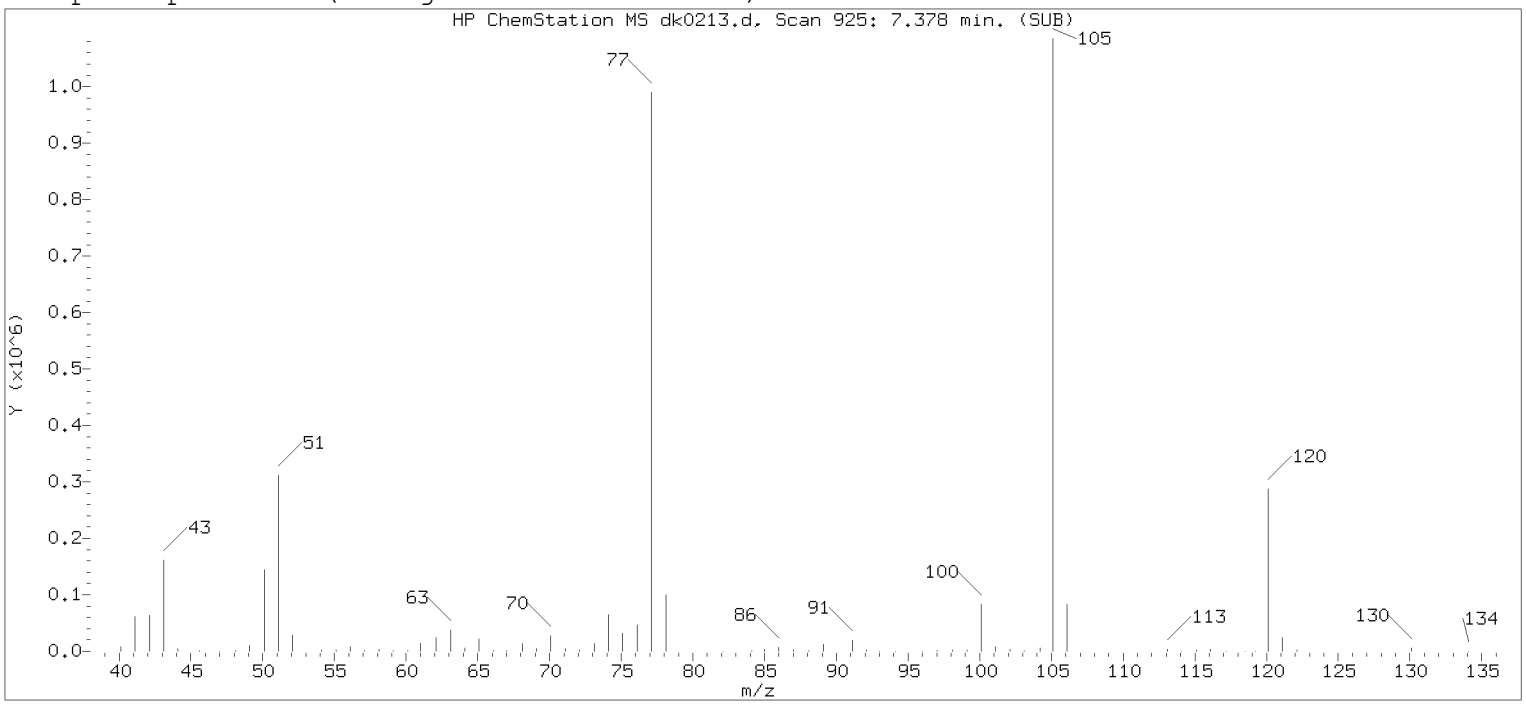
Compound Number : 38
Compound Name : N-Nitroso-di-n-propylamine
Scan Number : 932
Retention Time (minutes) : 7.419
Quant Ion : 70.00
Area (flag) : 2385266A
On-Column Amount (ng/ul) : 29.0728
Integration start scan : 925 Integration stop scan: 942
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

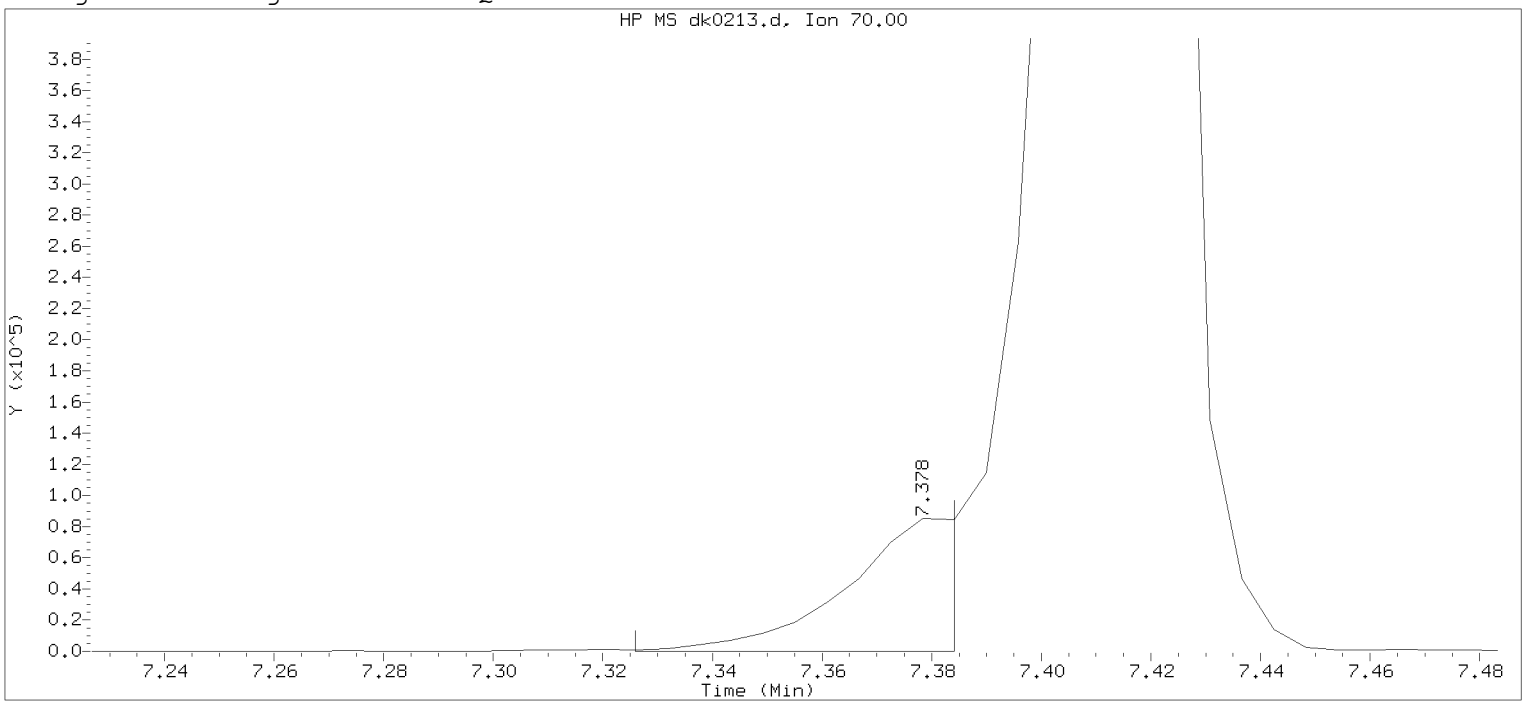
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:40
Date, time and analyst ID of latest file update: 04-Nov-2018 13:40 Automation

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Compound Number	: 38		
Compound Name	: N-Nitroso-di-n-propylamine		
Scan Number	: 925		
Retention Time (minutes)	: 7.378		
Quant Ion	: 70.00		
Area	: 111317		
On-column Amount (ng/ul)	: 1.9680		
Integration start scan	: 915	Integration stop scan:	925
Y at integration start	: 0	Y at integration end:	0

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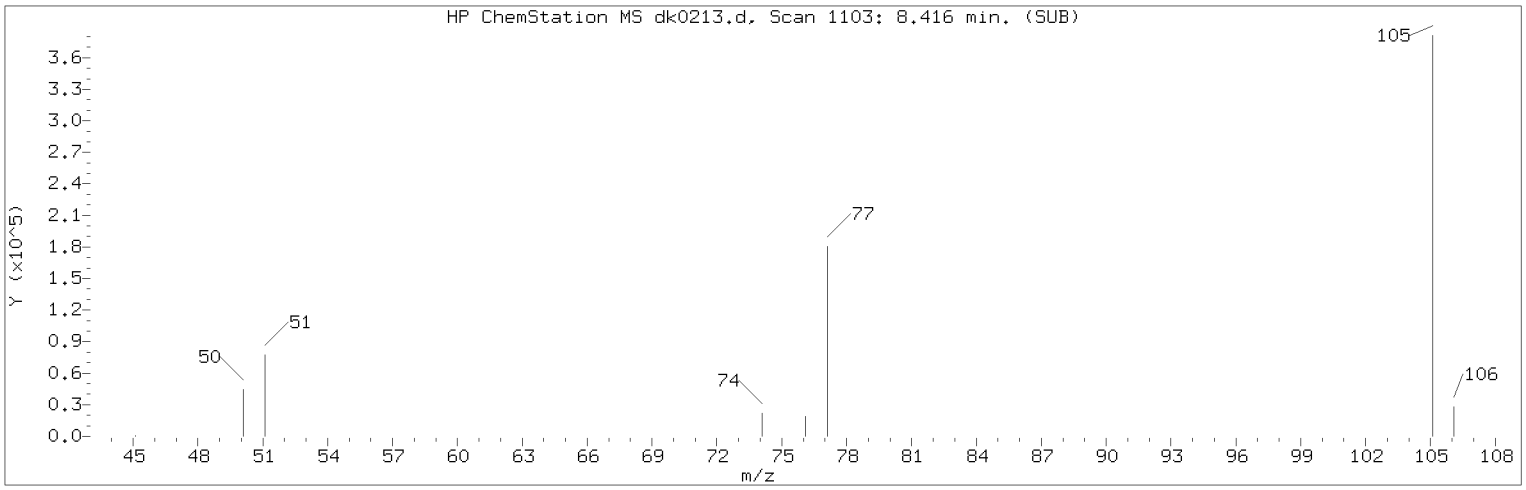
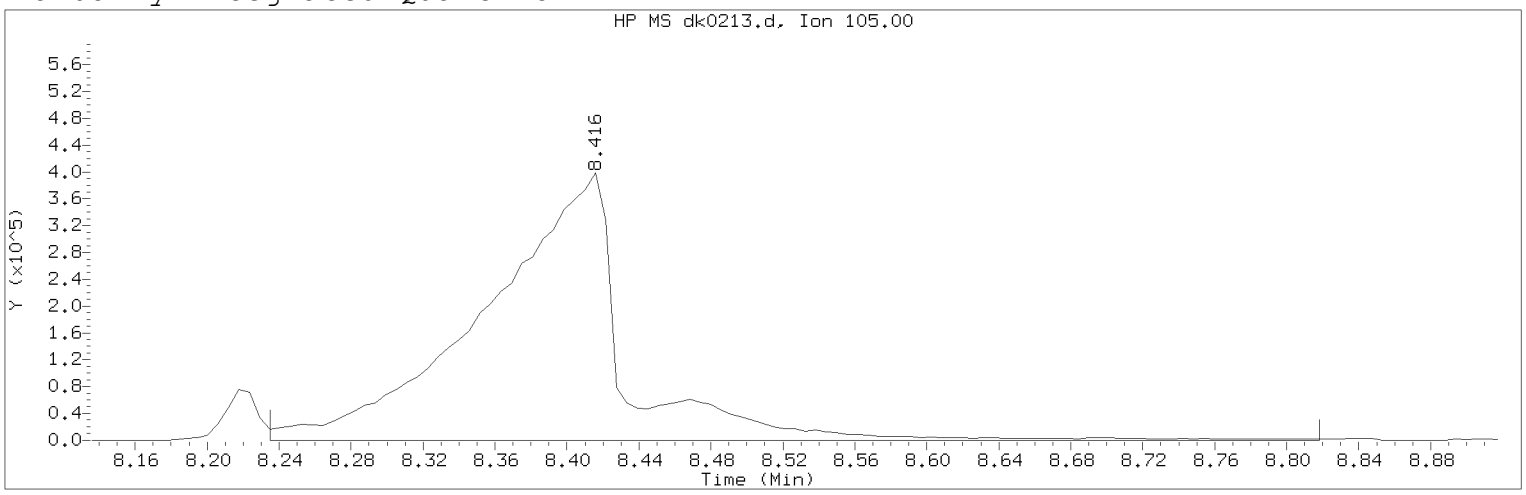
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

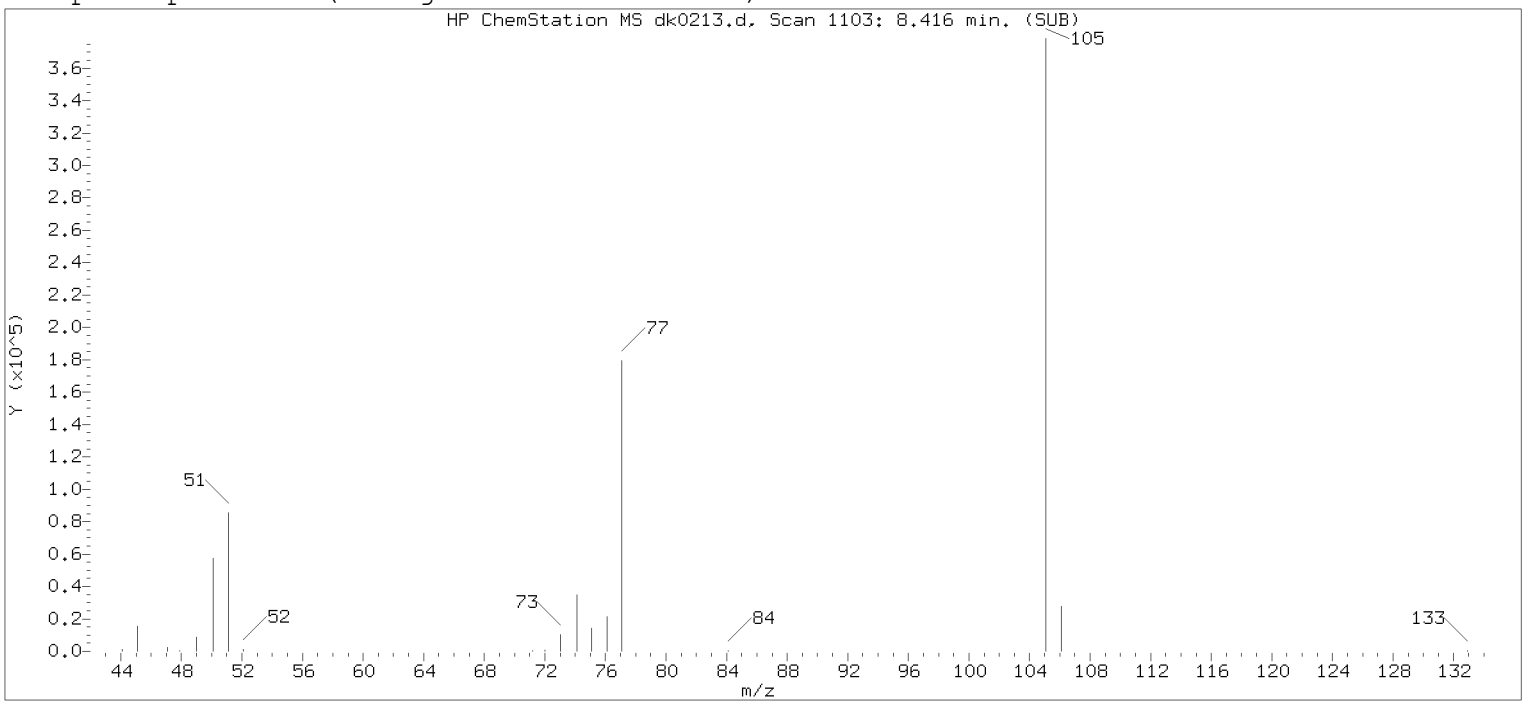
Compound Number : 56
Compound Name : Benzoic acid
Scan Number : 1103
Retention Time (minutes) : 8.416
Quant Ion : 105.00
Area (flag) : 2154489M
On-Column Amount (ng/ul) : 32.0349
Integration start scan : 1071 Integration stop scan: 1171
Y at integration start : -270 Y at integration end: -270

Reason for manual integration: improper integration

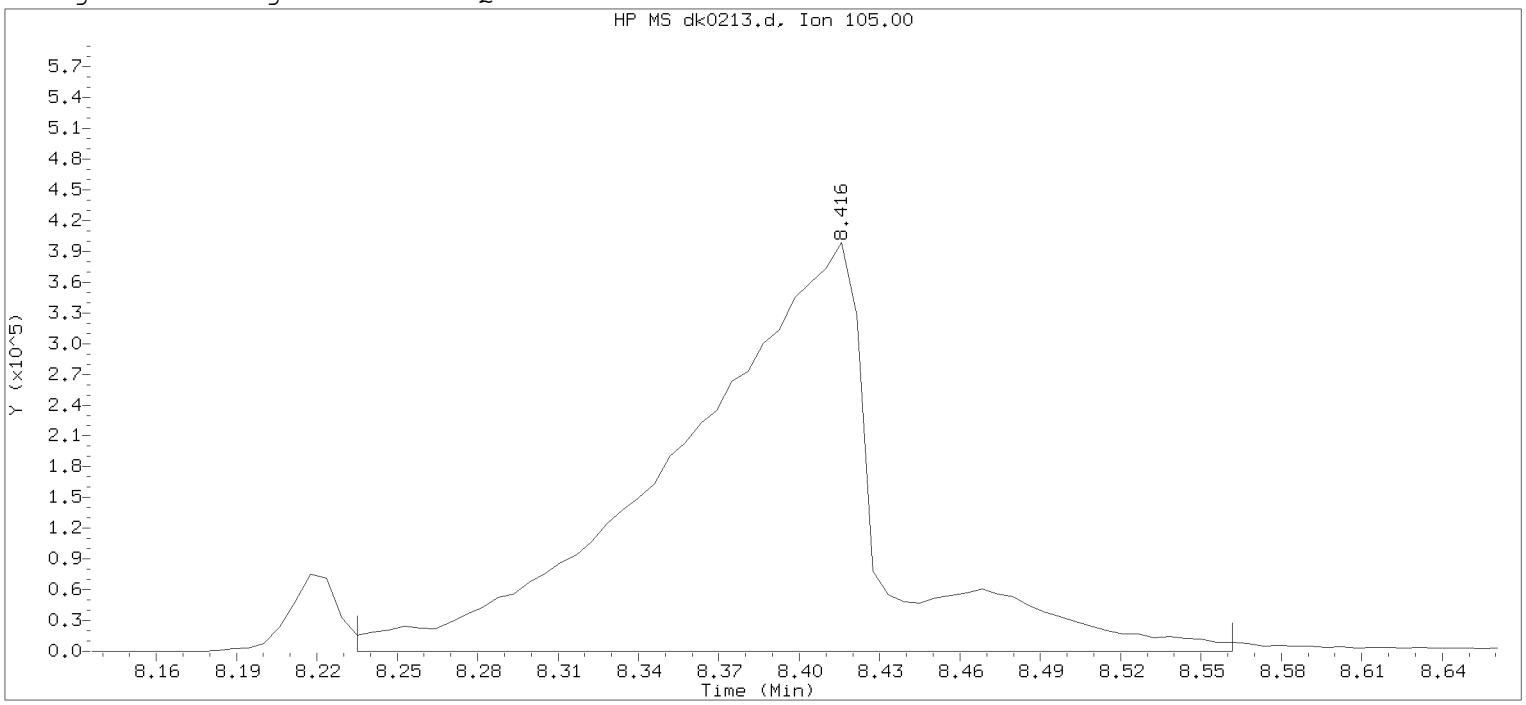
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

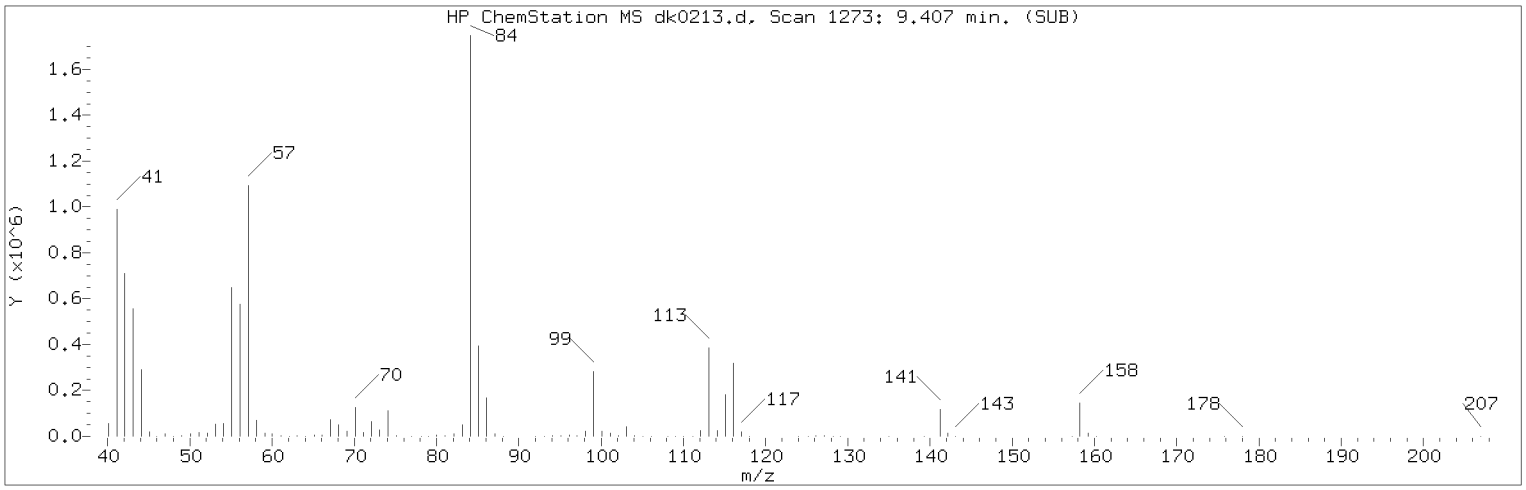
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:40
Date, time and analyst ID of latest file update: 04-Nov-2018 13:40 Automation

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

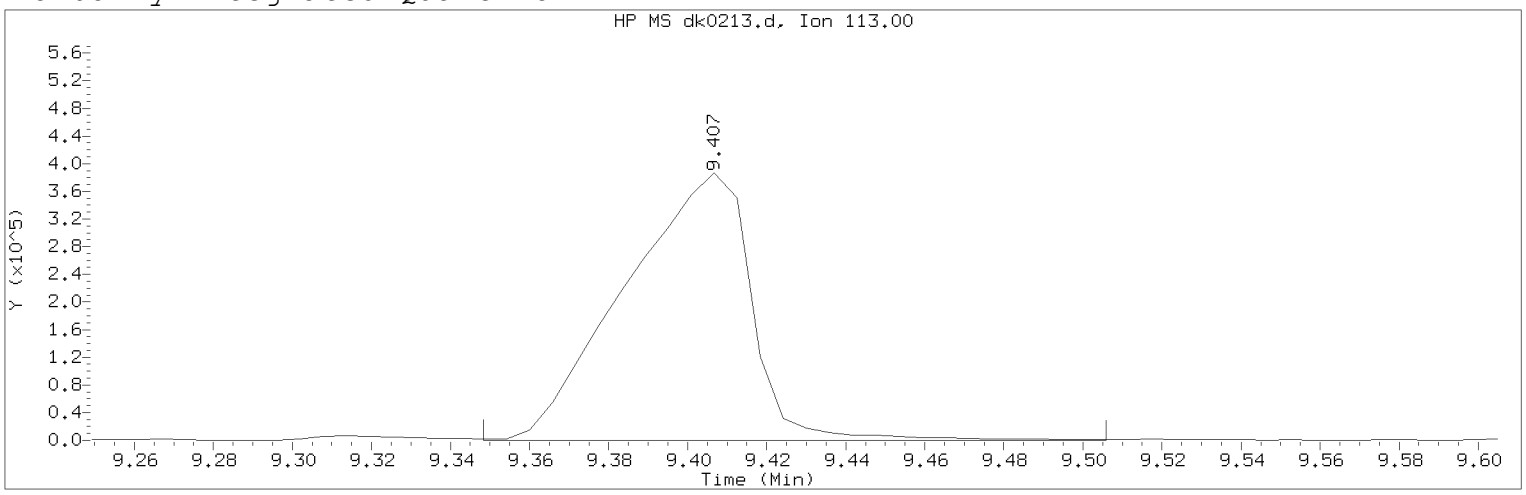
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1103		
Retention Time (minutes)	: 8.416		
Quant Ion	: 105.00		
Area	: 2096087		
On-column Amount (ng/ul)	: 34.1707		
Integration start scan	: 1071	Integration stop scan:	1127
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

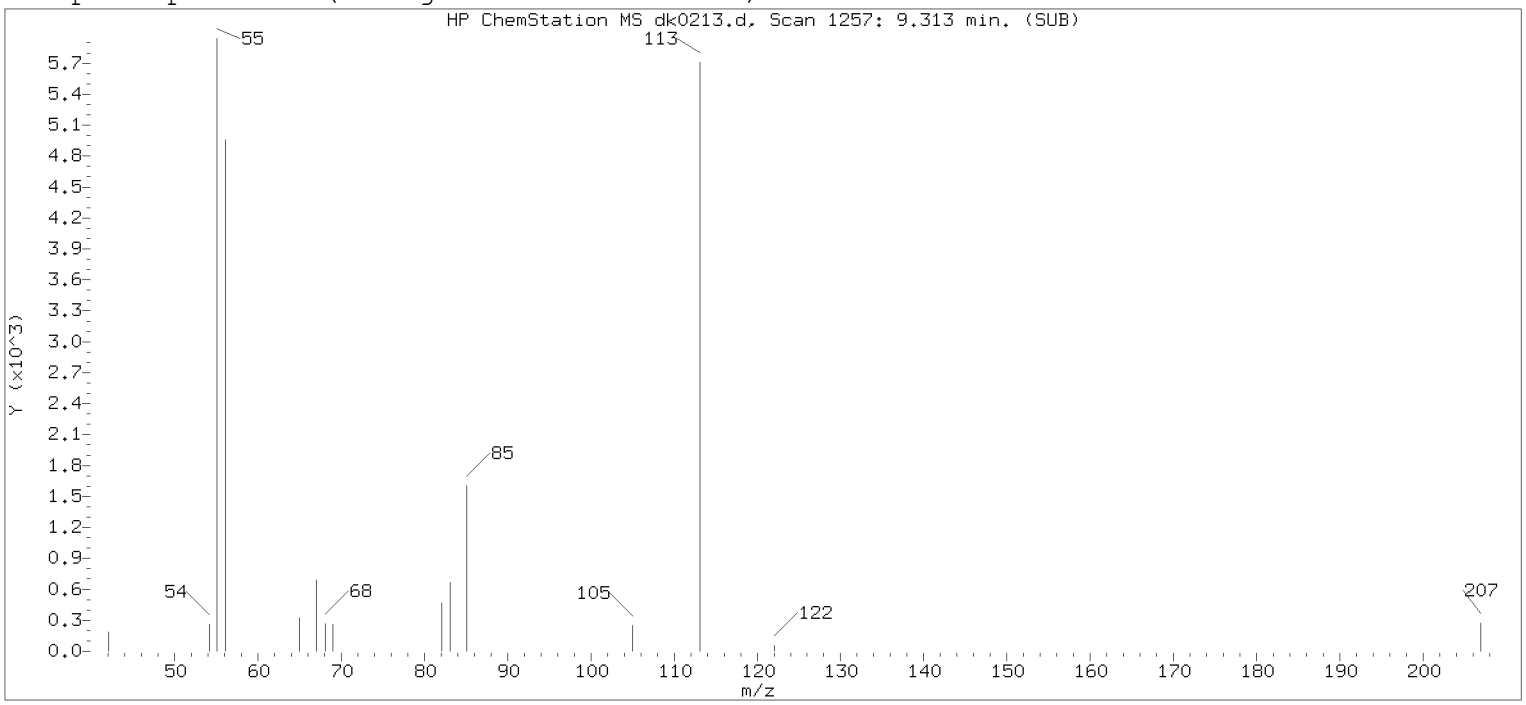
Compound Number : 76
Compound Name : Caprolactam
Scan Number : 1273
Retention Time (minutes) : 9.407
Quant Ion : 113.00
Area (flag) : 856443A
On-Column Amount (ng/ul) : 31.1264
Integration start scan : 1262 Integration stop scan: 1289
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

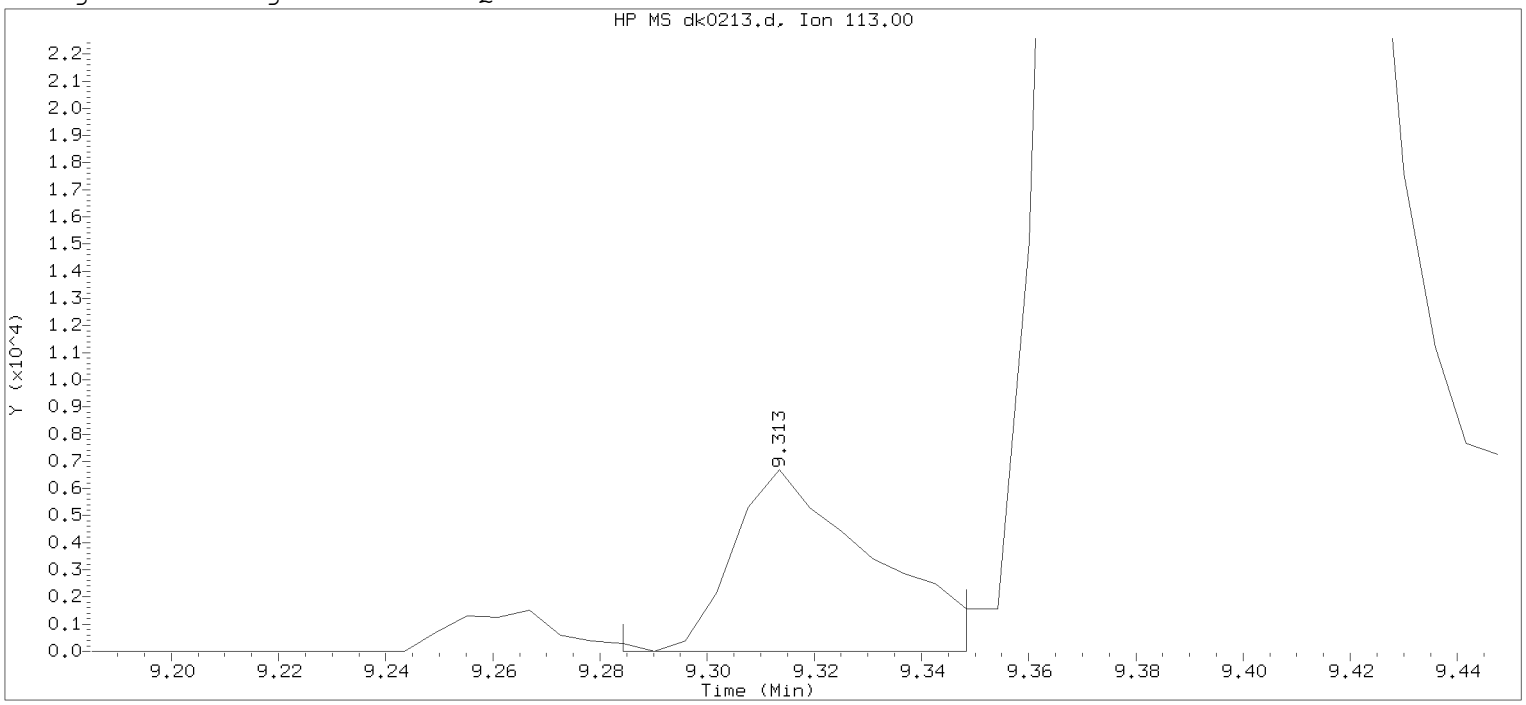
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

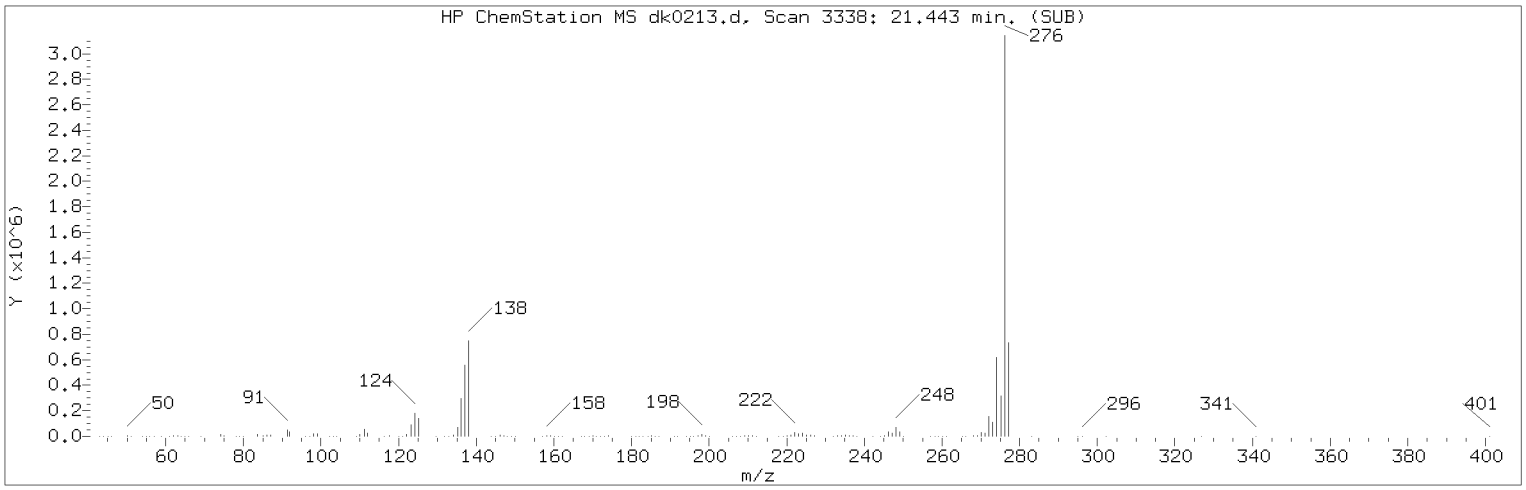
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:40
Date, time and analyst ID of latest file update: 04-Nov-2018 13:40 Automation

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

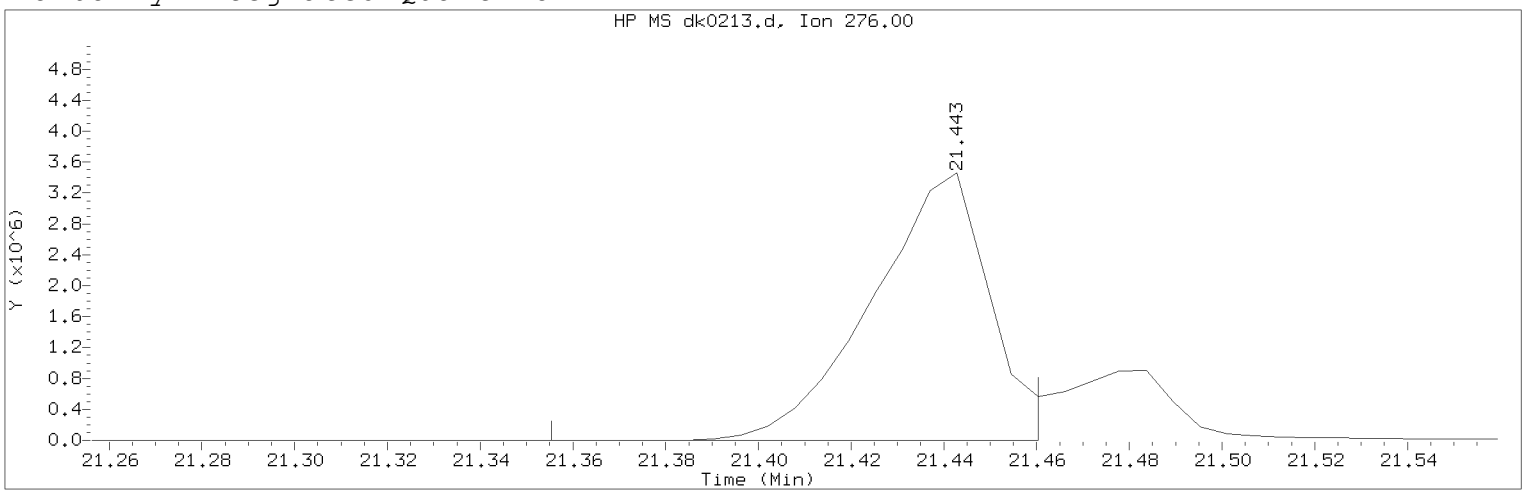
Compound Number	: 76		
Compound Name	: Caprolactam		
Scan Number	: 1257		
Retention Time (minutes)	: 9.313		
Quant Ion	: 113.00		
Area	: 11847		
On-column Amount (ng/ul)	: 0.5482		
Integration start scan	: 1251	Integration stop scan:	1262
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

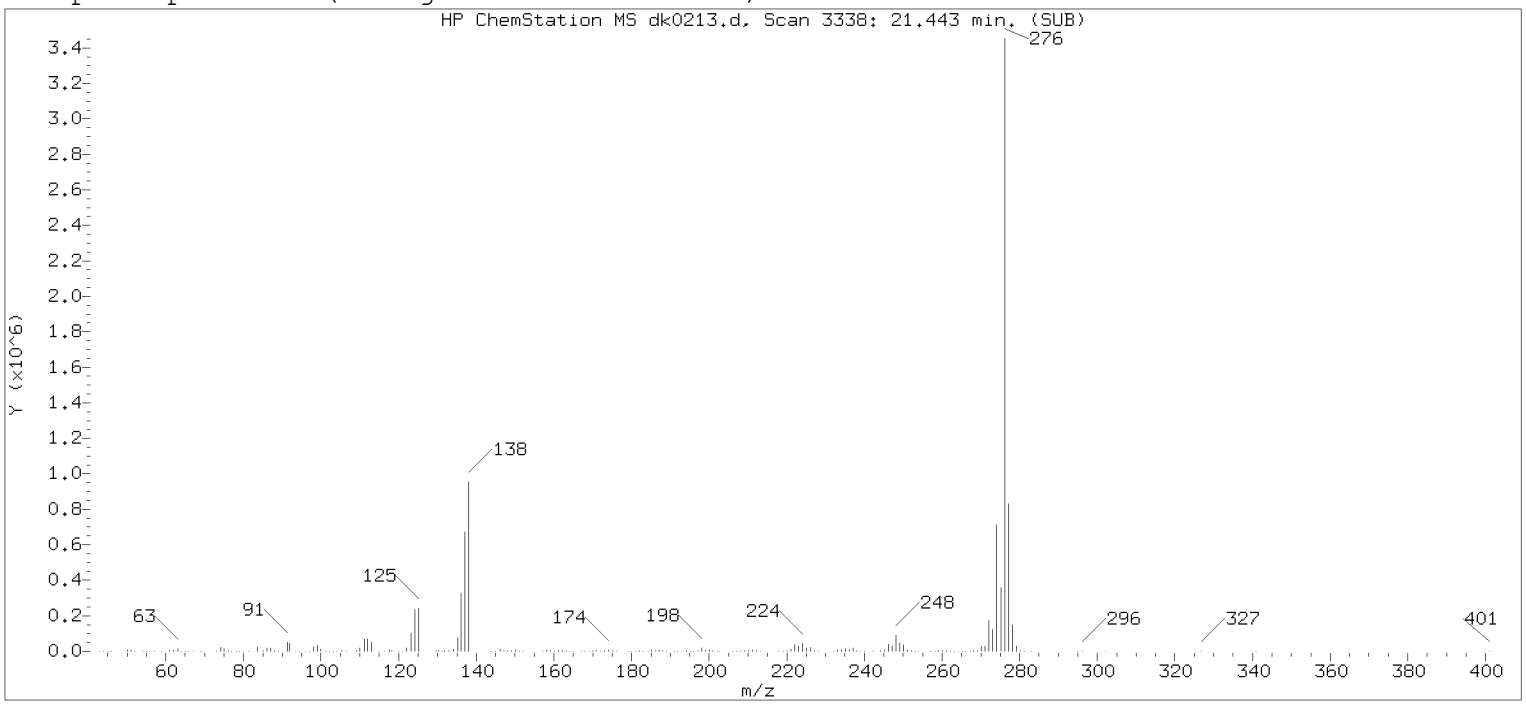
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3338
Retention Time (minutes) : 21.443
Quant Ion : 276.00
Area (flag) : 6098266M
On-Column Amount (ng/ul) : 32.5686
Integration start scan : 3322 Integration stop scan: 3340
Y at integration start : 366 Y at integration end: 366

Reason for manual integration: improper integration

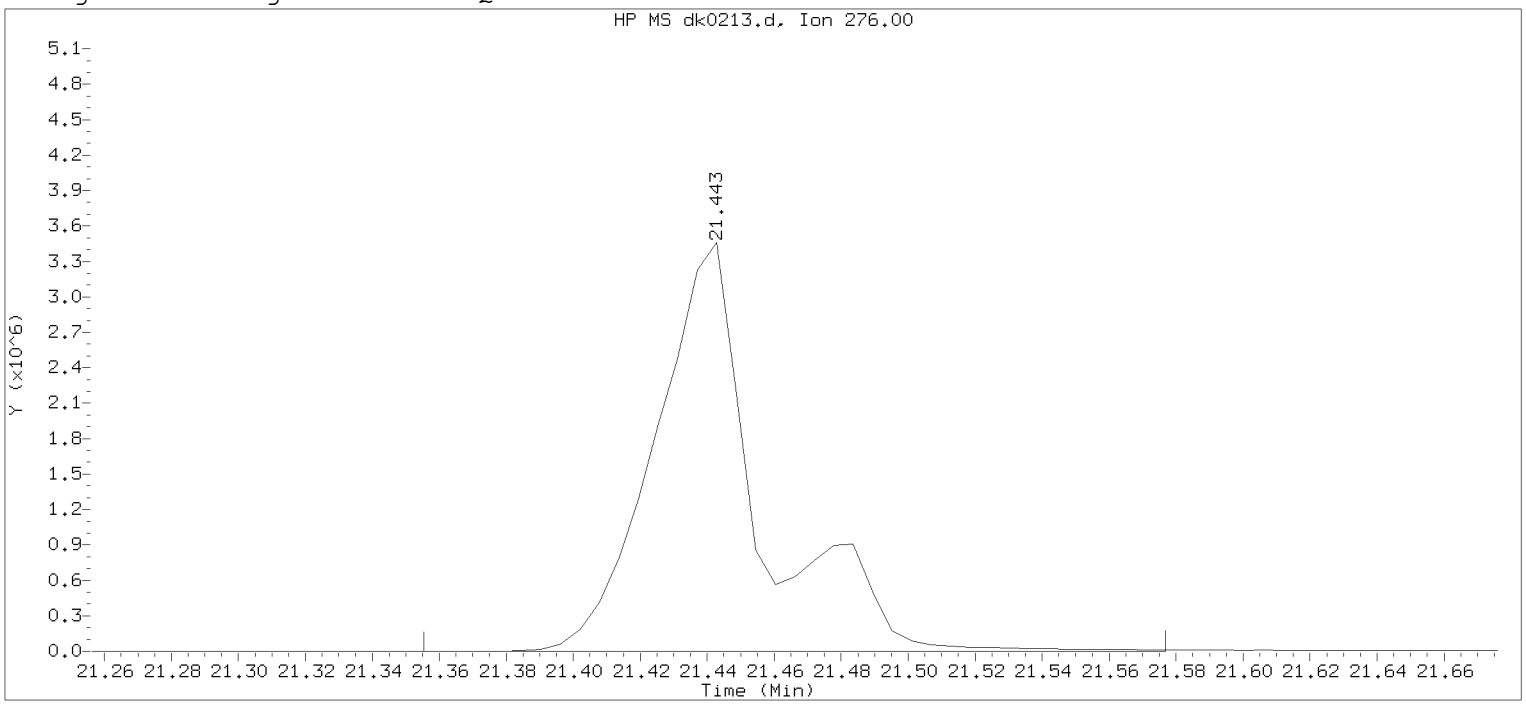
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:24.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



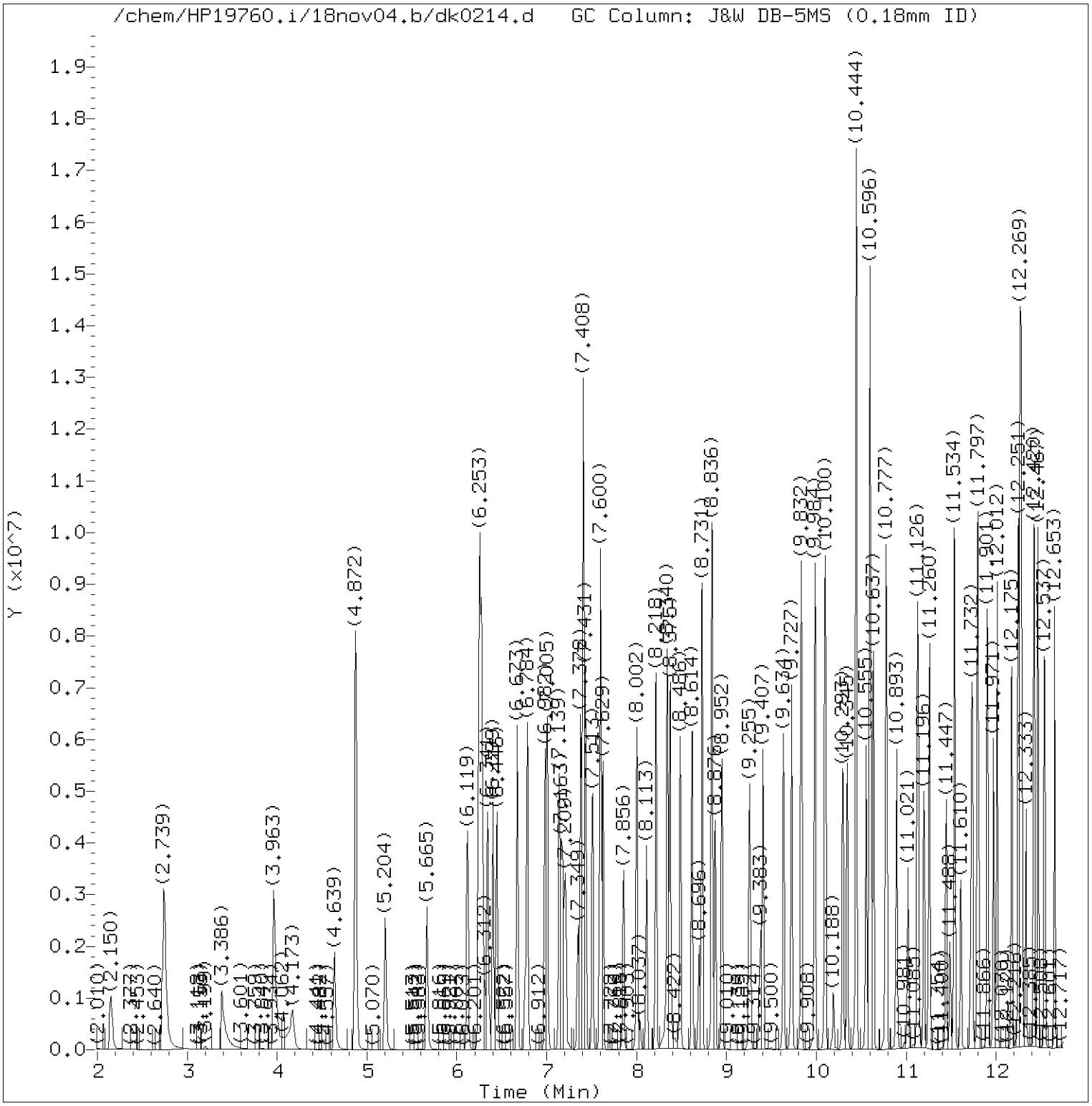
Data File: /chem/HP19760.i/18nov04.b/dk0213.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 13:40
Date, time and analyst ID of latest file update: 04-Nov-2018 13:40 Automation

Sample Name: SSTD30 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3338		
Retention Time (minutes)	: 21.443		
Quant Ion	: 276.00		
Area	: 7586985		
On-column Amount (ng/ul)	: 49.7146		
Integration start scan	: 3322	Integration stop scan:	3360
Y at integration start	: 366	Y at integration end:	366

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:24.
Target 3.5 esignature user name: ashley.transue



Total Ion Chromatogram (TIC)

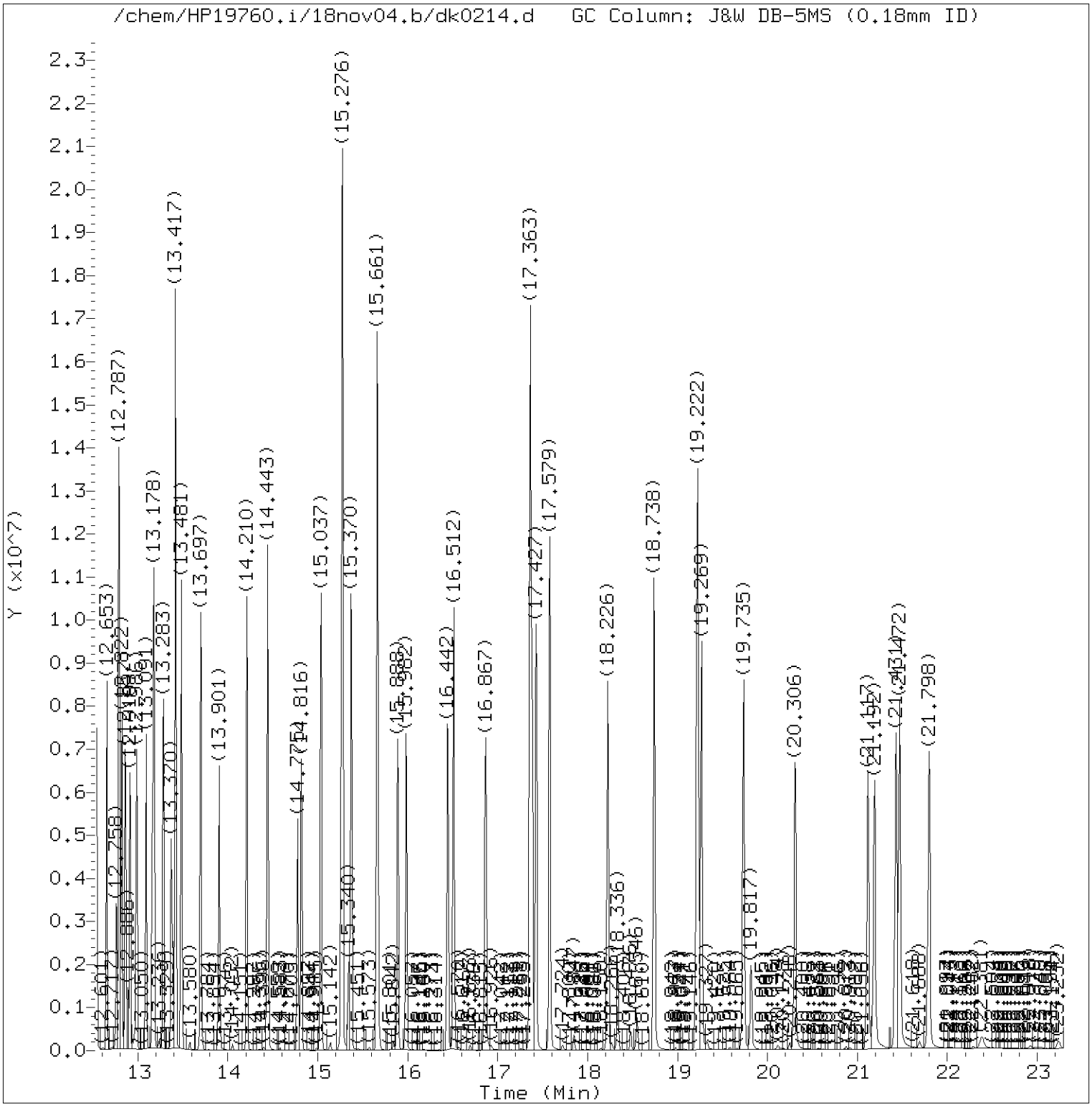
Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0214.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0214.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0214.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.150	88	992206	20.147
4) N-Nitrosodimethylamine	(1)	2.727	74	1536656	20.359
5) Pyridine	(1)	2.745	79	2559662	20.233
7) 2-Picoline	(1)	3.963	93	2534853	20.155
8) N-Nitrosomethylethylamine	(1)	4.173	88	1104802	20.186
9) Methyl methanesulfonate	(1)	4.639	80	1206979	20.032
11)$2-Fluorophenol	(1)	4.872	112	3893131	40.454
13) N-Nitrosodiethylamine	(1)	5.204	102	1037513	20.270
42) Total Cresols	(1)			3977305	40.138
15) Ethyl methanesulfonate	(1)	5.665	109	977782	20.084
16) Benzaldehyde	(1)	6.119	77	1429956	19.847
17)$Phenol-d6	(1)	6.253	99	5362888	40.300
18) Phenol	(1)	6.271	94	3074778	20.205
19) Aniline	(1)	6.283	93	3585648	20.198
20) a-methylstyrene	(1)	6.358	118	184792	20.079
22) bis(2-Chloroethyl)ether	(1)	6.405	93	2225145	19.912
23) 2-Chlorophenol	(1)	6.446	128	1830309	20.183
24) 1,3-Dichlorobenzene	(1)	6.673	146	1899653	20.187
25)*1,4-Dichlorobenzene-d4	(1)	6.761	152	288736	5.000
26) 1,4-Dichlorobenzene	(1)	6.784	146	1887808	19.986
27) Benzyl alcohol	(1)	6.982	108	1268770	20.140
28) 1,2-Dichlorobenzene	(1)	7.005	146	1787015	20.006
30) Indene	(1)	7.139	115	2055744	20.033
31) 2-Methylphenol	(1)	7.163	108	1880165	20.162
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.209	45	2594601	20.052
34) bis(2-Chloroisopropyl)ether	(1)	7.209	45	2594601	20.052
35) N-Nitrosopyrrolidine	(1)	7.349	100	1091620	20.740
36) Acetophenone	(1)	7.378	105	2576219	20.050
97) Isosafrole	(3)			1306208	19.759
38) N-Nitroso-di-n-propylamine	(1)	7.408	70	1622737	20.273
37) 4-Methylphenol	(1)	7.408	108	2097140	19.987
39) N-Nitrosomorpholine	(1)	7.413	56	1166336	19.658
40) o-Toluidine	(1)	7.431	106	3206490	20.209
43) Hexachloroethane	(1)	7.507	117	881050	19.967
44)$Nitrobenzene-d5	(2)	7.600	82	4744838	40.352
45) Nitrobenzene	(2)	7.629	77	2374006	20.169
48) N-Nitrosopiperidine	(2)	7.856	114	949051	20.359
50) Isophorone	(2)	8.002	82	4185124	20.407
120) 2,4_2,6-Dinitrotoluenes	(3)			1678815	39.987
51) 2-Nitrophenol	(2)	8.113	139	932375	20.709

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0214.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.218	107	1982828	20.266
57) O,O,O-Triethylphosphorothioate	(2)	8.340	198	733991	20.371
55) bis(2-Chloroethoxy)methane	(2)	8.375	93	2541060	20.414
56) Benzoic acid	(2)	8.387	105	1417558M	21.177
60) 2,4-Dichlorophenol	(2)	8.486	162	1357374	20.448
62) 1,2,4-Trichlorobenzene	(2)	8.620	180	1423612	20.401
65)*Naphthalene-d8	(2)	8.696	136	1049909	5.000
66) Naphthalene	(2)	8.731	128	5107993	20.231
146) Diallate trans/cis	(4)			1913334	20.159
67) 4-Chloroaniline	(2)	8.836	127	2005124	20.321
68) 2,6-Dichlorophenol	(2)	8.841	162	1291871	20.253
69) Hexachloropropene	(2)	8.876	213	894762	20.293
71) Hexachlorobutadiene	(2)	8.952	225	753832	20.084
75) Quinoline	(2)	9.255	129	2946389	20.394
76) Caprolactam	(2)	9.383	113	555217A	20.584
77) N-Nitrosodi-n-butylamine	(2)	9.407	84	1783132	21.931
80) 4-Chloro-3-methylphenol	(2)	9.634	107	1648319	20.529
82) Safrole	(2)	9.727	162	1198436	20.225
83) 2-Methylnaphthalene	(2)	9.832	142	3173937	20.527
84) 1-Methylnaphthalene	(2)	9.984	142	3049506	21.066
85) Hexachlorocyclopentadiene	(3)	10.095	237	784999	19.815
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.100	216	1301340	19.884
88) cis-Isosafrole	(3)	10.188	162	207692	3.387
90) 2,4,6-Trichlorophenol	(3)	10.299	196	883399	19.852
92) 2,4,5-Trichlorophenol	(3)	10.345	196	915519	20.134
93)$2-Fluorobiphenyl	(3)	10.444	172	6511063	39.508
99) Diphenyl ether	(3)	10.444	170	1469922	19.733
94) trans-Isosafrole	(3)	10.555	162	1098516	16.374
95) 1,1'-Biphenyl	(3)	10.596	154	3563348	20.119
96) 2-Chloronaphthalene	(3)	10.602	162	2859530	19.567
98) 1-Chloronaphthalene	(3)	10.637	162	2519792	19.993
100) 2-Nitroaniline	(3)	10.788	138	992629	20.076
104) 1,4-Naphthoquinone	(3)	10.893	158	1136936	20.433
105) 1,4-Dinitrobenzene	(3)	11.021	168	518934	20.105
106) Dimethylphthalate	(3)	11.126	163	2959557	19.775
107) 1,3-Dinitrobenzene	(3)	11.138	168	571970	20.126
108) 2,6-Dinitrotoluene	(3)	11.196	165	724683	20.036
109) Acenaphthylene	(3)	11.260	152	4143798	20.889
112) 3-Nitroaniline	(3)	11.447	138	847952	20.072
113)*Acenaphthene-d10	(3)	11.488	164	490246	5.000

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0214.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.534	153	2905445	20.076
115) 2,4-Dinitrophenol	(3)	11.610	184	515504	21.033
116) 4-Nitrophenol	(3)	11.727	109	608572	19.901
117) Pentachlorobenzene	(3)	11.738	250	1031475	19.862
119) Dibenzofuran	(3)	11.791	168	3980792	20.042
118) 2,4-Dinitrotoluene	(3)	11.808	165	954132	19.961
121) 1-Naphthylamine	(3)	11.901	143	2994675	19.840
122) 2,3,4,6-Tetrachlorophenol	(3)	11.971	232	692354	20.038
123) 2-Naphthylamine	(3)	12.012	143	3056191	20.153
124) Diethylphthalate	(3)	12.175	149	3069393	20.027
126) Fluorene	(3)	12.251	166	3111988	20.453
125) Thionazin	(3)	12.269	107	668913	20.139
127) 4-Chlorophenyl-phenylether	(3)	12.274	204	1450894	19.871
128) 5-Nitro-o-toluidine	(3)	12.280	152	974182	20.101
129) 4-Nitroaniline	(3)	12.292	138	922764	20.037
130) 4,6-Dinitro-2-methylphenol	(4)	12.333	198	607551	20.827
131) N-Nitrosodiphenylamine	(4)	12.426	169	2611322	20.091
132) NDPA as diphenylamine	(4)	12.426	169	2611322	20.091
134) 1,2-Diphenylhydrazine	(4)	12.467	77	4226057	19.939
135)$2,4,6-Tribromophenol	(3)	12.543	330	702104	40.491
137) Tetraethyldithiopyrophosphate	(4)	12.653	97	629895	20.192
139) 1,3,5-Trinitrobenzene	(4)	12.764	213	394200	20.598
140) Diallate (peak 1)	(4)	12.787	86	1650755	16.738
141) Phorate	(4)	12.793	75	2546775	20.284
142) Phenacetin	(4)	12.822	108	1959952	20.362
143) 4-Bromophenyl-phenylether	(4)	12.863	248	757125	20.115
144) Diallate (peak 2)	(4)	12.886	86	262579	3.420
145) Hexachlorobenzene	(4)	12.910	284	775373	20.230
147) Dimethoate	(4)	12.986	87	1655180	20.243
148) Atrazine	(4)	13.091	200	736794	20.182
149) Pentachlorophenol	(4)	13.160	266	568569	20.609
151) Pentachloronitrobenzene	(4)	13.178	237	366225	20.236
150) 4-Aminobiphenyl	(4)	13.178	169	2295037	20.289
152) Pronamide	(4)	13.283	173	1402297	20.386
153)*Phenanthrene-d10	(4)	13.388	188	907307	5.000
154) Dinoseb	(4)	13.417	211	890811	20.953
155) Phenanthrene	(4)	13.417	178	4465372	20.106
157) Anthracene	(4)	13.481	178	4550720	20.939
163) Carbazole	(4)	13.697	167	4433714	20.146
164) Methyl parathion	(4)	13.901	109	1323199	20.818

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$ = Compound is a surrogate standard.

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on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0214.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.210	149	5661555	20.788
168) 4-Nitroquinoline-1-oxide	(4)	14.443	190	630365	21.711
167) Parathion	(4)	14.443	109	841269	20.446
169) Octachlorostyrene	(4)	14.775	308	310753	20.316
171) Isodrin	(4)	14.816	193	531272	20.213
222) Total PAHs	(6)			78321633	368.910
173) Fluoranthene	(4)	15.037	202	5102257	21.687
174) Benzidine	(5)	15.276	184	11241799	62.322
175)*Pyrene-d10	(5)	15.340	212	912844	5.000
177) Pyrene	(5)	15.370	202	5257718	19.869
179)$Terphenyl-d14	(5)	15.661	244	6239546	40.605
182) p-Dimethylaminoazobenzene	(5)	15.888	225	929932	20.611
185) Chlorobenzilate	(5)	15.982	139	1753142	20.491
187) 3,3'-Dimethylbenzidine	(5)	16.448	212	3440855	20.523
188) Butylbenzylphthalate	(5)	16.512	149	2830370	20.464
191) 2-Acetylaminofluorene	(5)	16.867	181	2352835	21.372
193) 3,3'-Dichlorobenzidine	(5)	17.363	252	1947806	20.662
195) Benzo(a)anthracene	(5)	17.363	228	4899873	22.290
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.386	231	1081023	20.879
196) Chrysene	(5)	17.427	228	4831001	21.098
199) bis(2-Ethylhexyl)phthalate	(5)	17.579	149	4067536	20.593
203) 6-Methylchrysene	(5)	18.226	242	3411432	20.661
205) Di-n-octylphthalate	(6)	18.738	149	7184253	20.831
206) Benzo(b)fluoranthene	(6)	19.216	252	4956435	21.729
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.228	256	2369031	20.400
208) Benzo(k)fluoranthene	(6)	19.269	252	5129463	21.837
211) Benzo(a)pyrene	(6)	19.735	252	4775047	22.774
213)*Perylene-d12	(6)	19.817	264	925359	5.000
215) 3-Methylcholanthrene	(6)	20.312	268	2271169	20.576
217) Dibenz(a,h)acridine	(6)	21.117	279	3565350	20.579
218) Dibenz(a,j)acridine	(6)	21.192	279	3808171	20.703
219) Indeno(1,2,3-cd)pyrene	(6)	21.431	276	4179809M	22.486
220) Dibenz(a,h)anthracene	(6)	21.472	278	4422337	21.718
221) Benzo(g,h,i)perylene	(6)	21.798	276	4258934	20.991

M = Compound was manually integrated.
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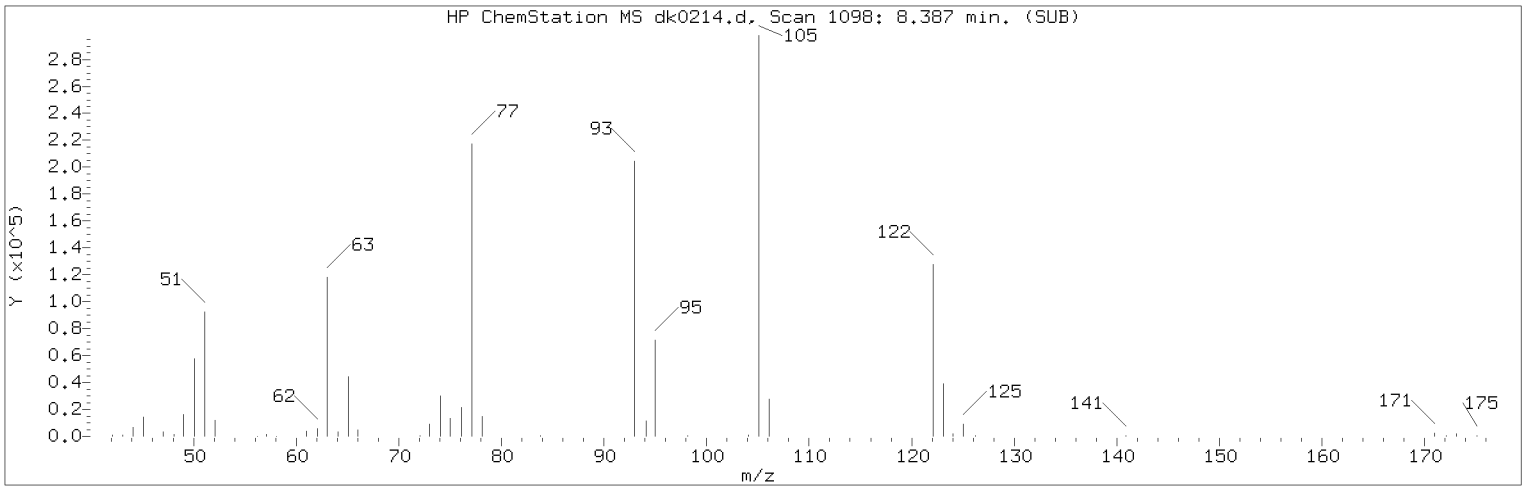
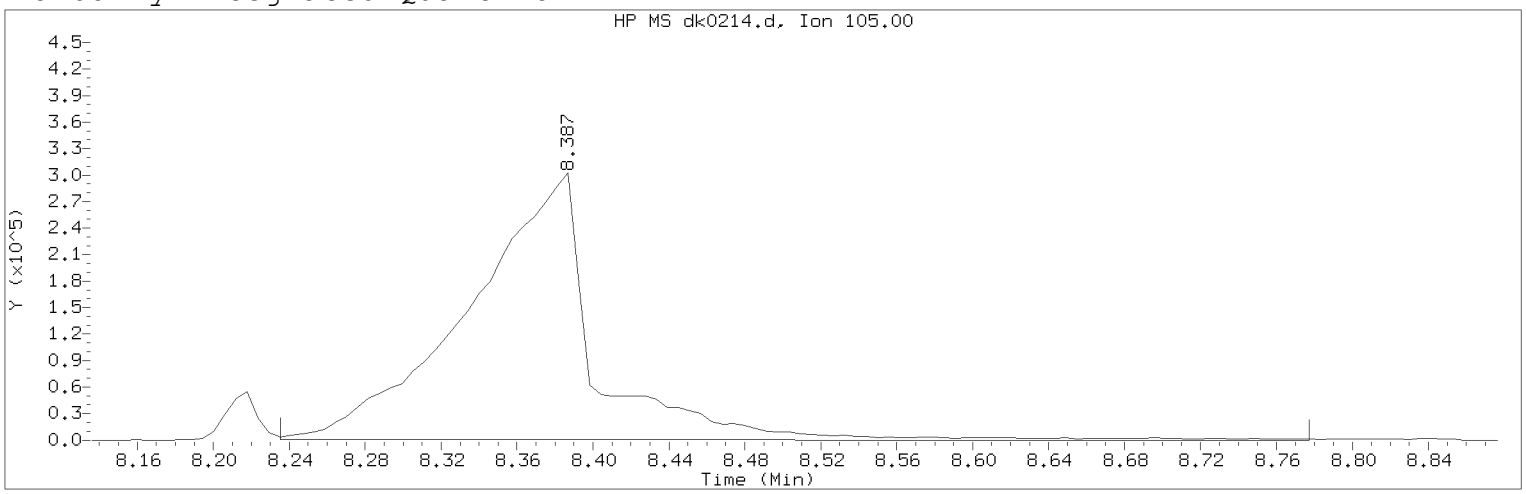
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0214.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

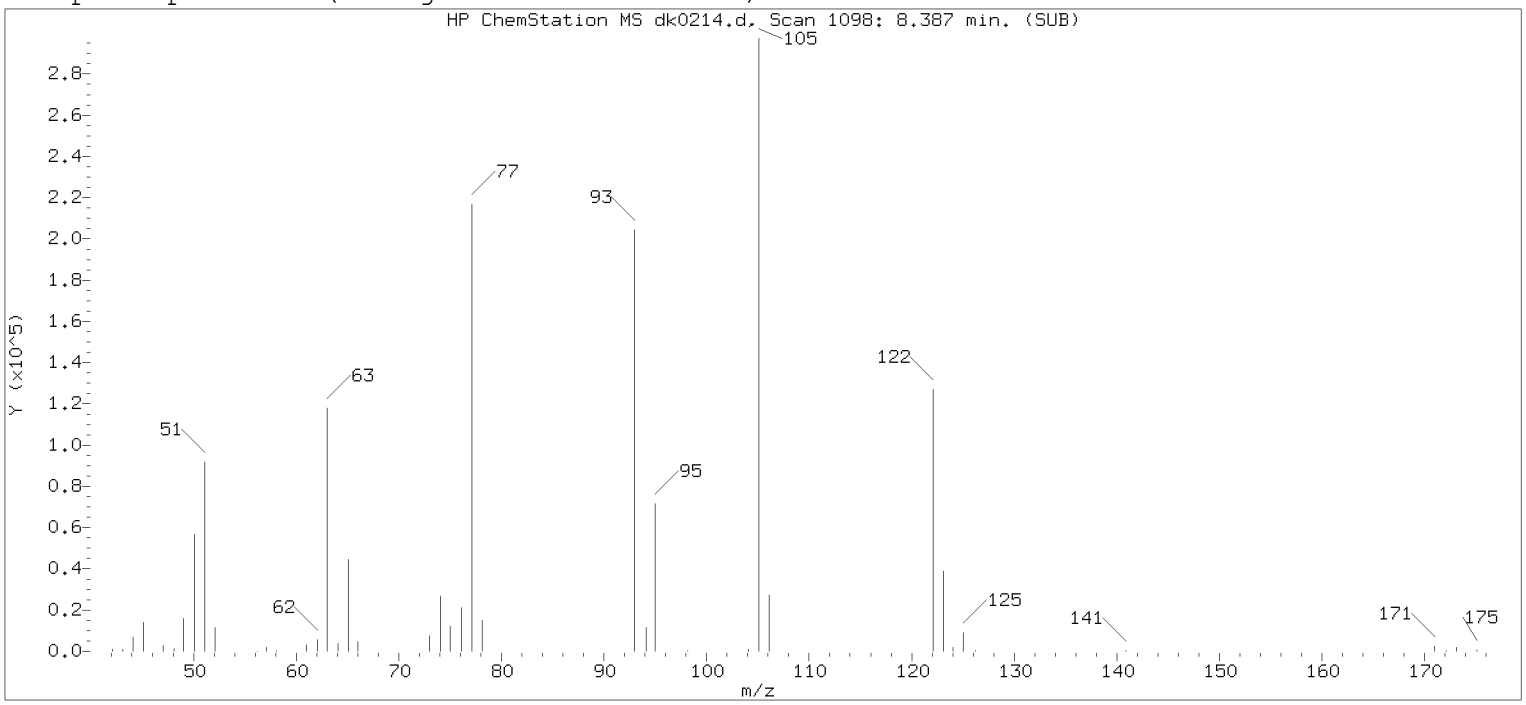
Compound Number : 56
Compound Name : Benzoic acid
Scan Number : 1098
Retention Time (minutes) : 8.387
Quant Ion : 105.00
Area (flag) : 1417558M
On-Column Amount (ng/ul) : 21.1774
Integration start scan : 1071 Integration stop scan: 1164
Y at integration start : 118 Y at integration end: -334

Reason for manual integration: improper integration

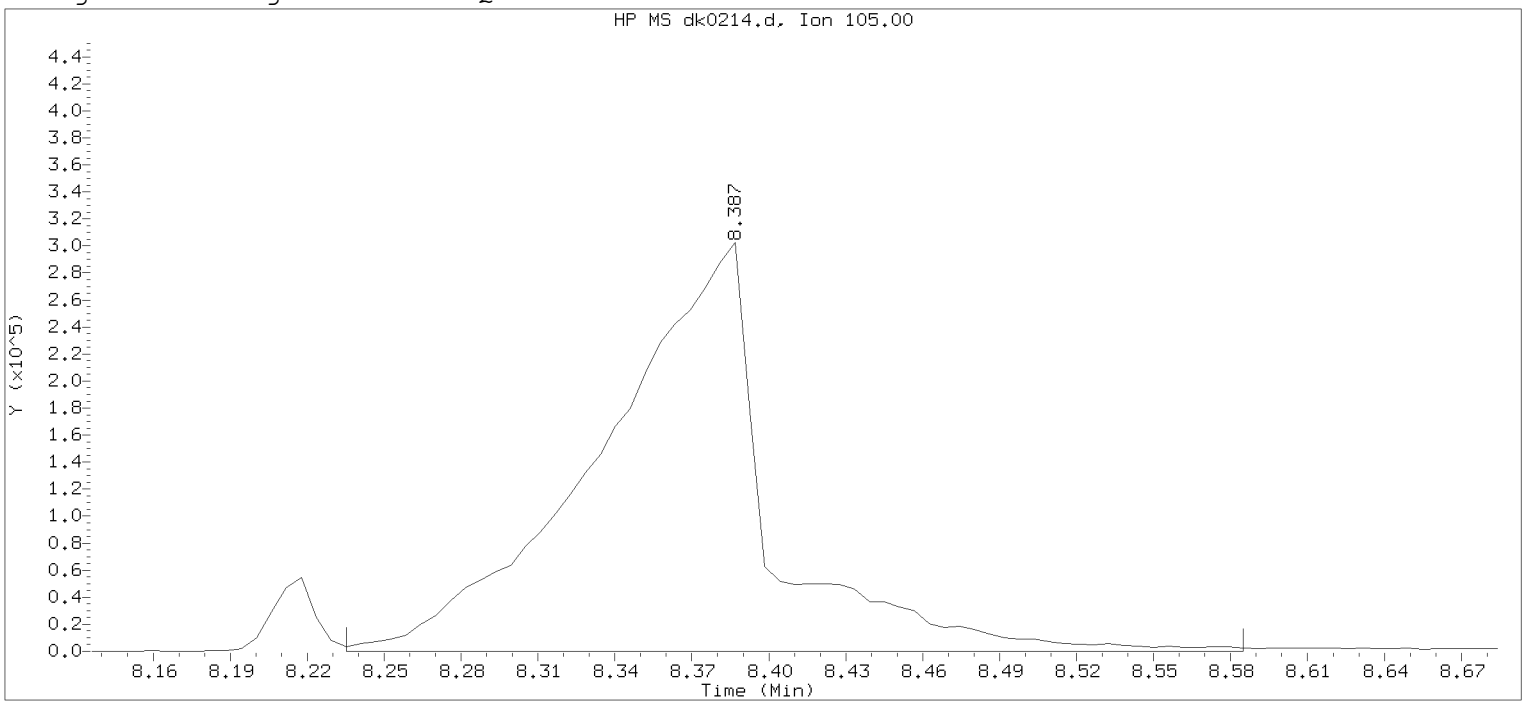
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0214.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:40 Analyst ID: em10340

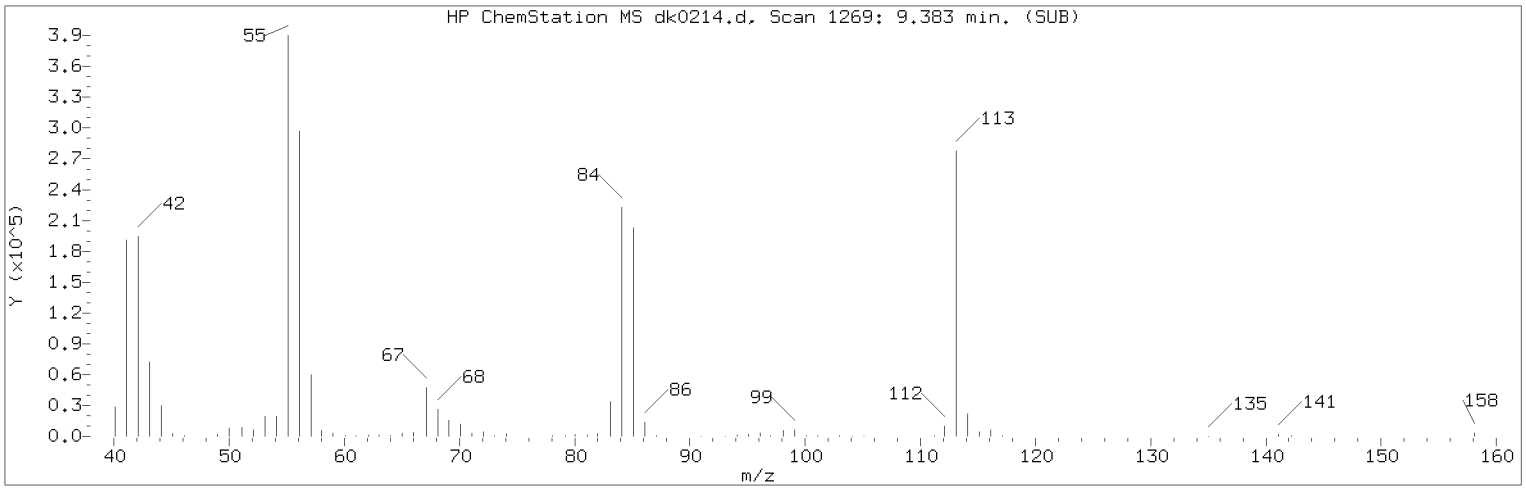
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 14:09
Date, time and analyst ID of latest file update: 04-Nov-2018 14:09 Automation

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

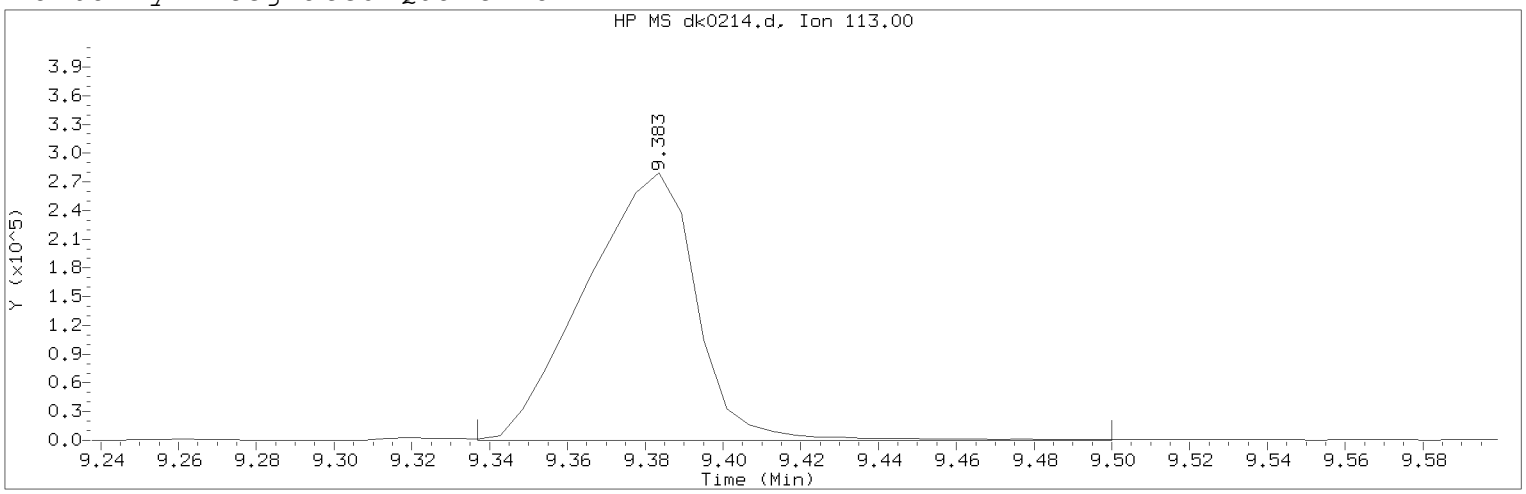
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1098		
Retention Time (minutes)	: 8.387		
Quant Ion	: 105.00		
Area	: 1392294		
On-column Amount (ng/ul)	: 23.1518		
Integration start scan	: 1071	Integration stop scan:	1131
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user name: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0214.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

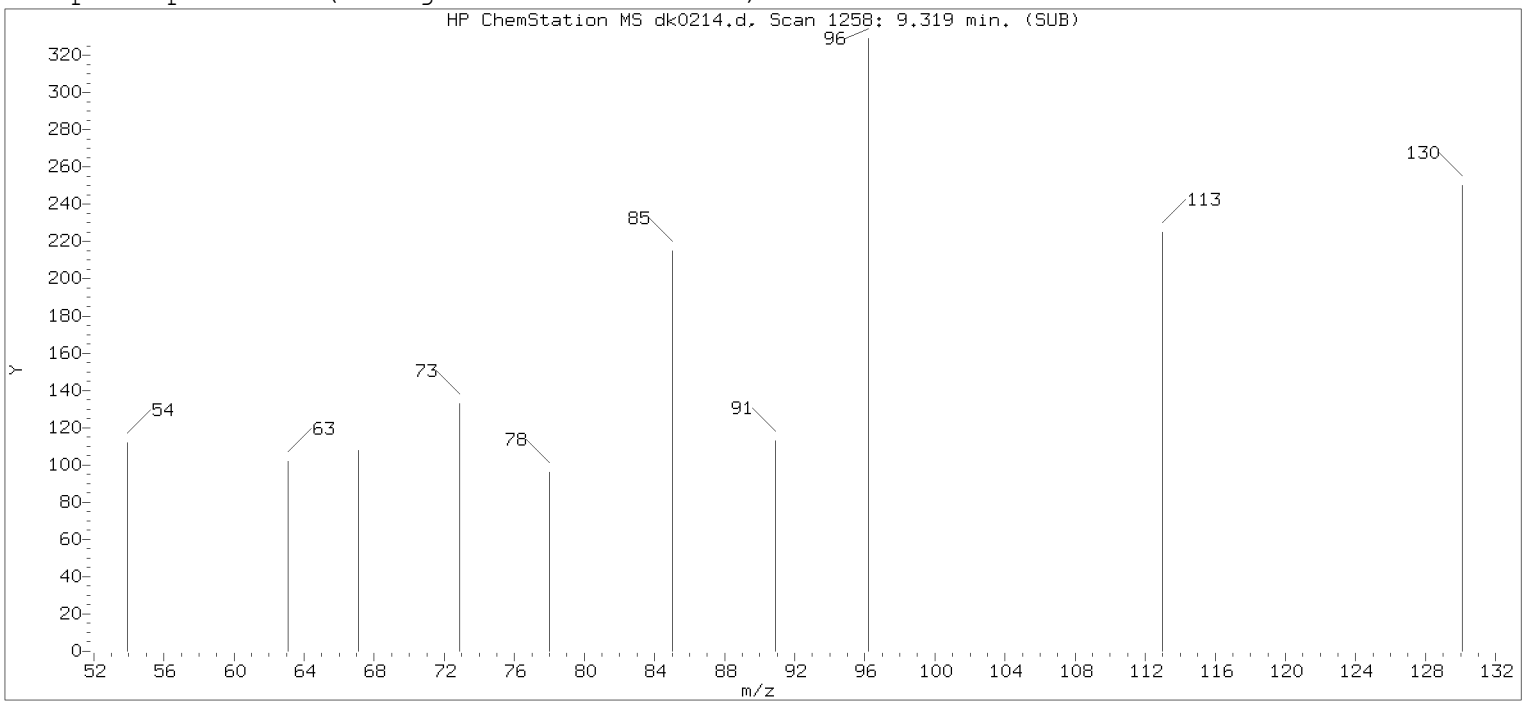
Compound Number : 76
Compound Name : Caprolactam
Scan Number : 1269
Retention Time (minutes) : 9.383
Quant Ion : 113.00
Area (flag) : 555217A
On-Column Amount (ng/ul) : 20.5841
Integration start scan : 1260 Integration stop scan: 1288
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

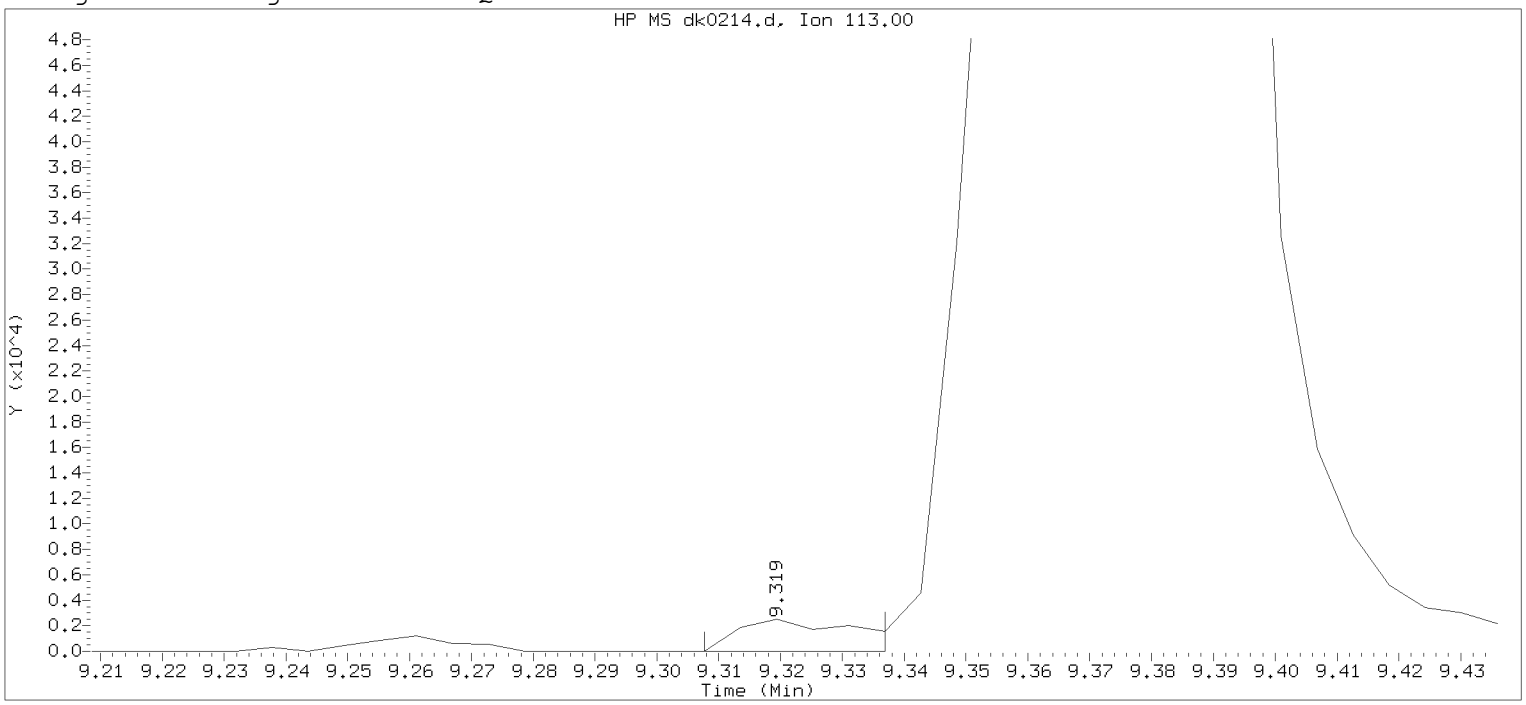
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0214.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:40 Analyst ID: em10340

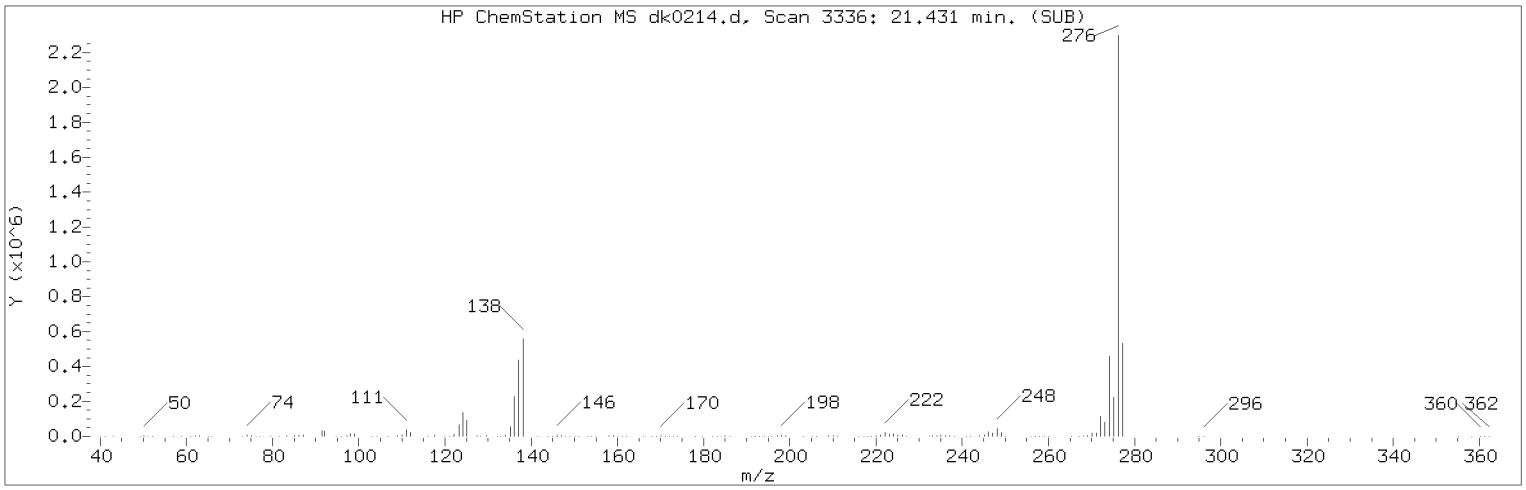
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 14:09
Date, time and analyst ID of latest file update: 04-Nov-2018 14:09 Automation

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

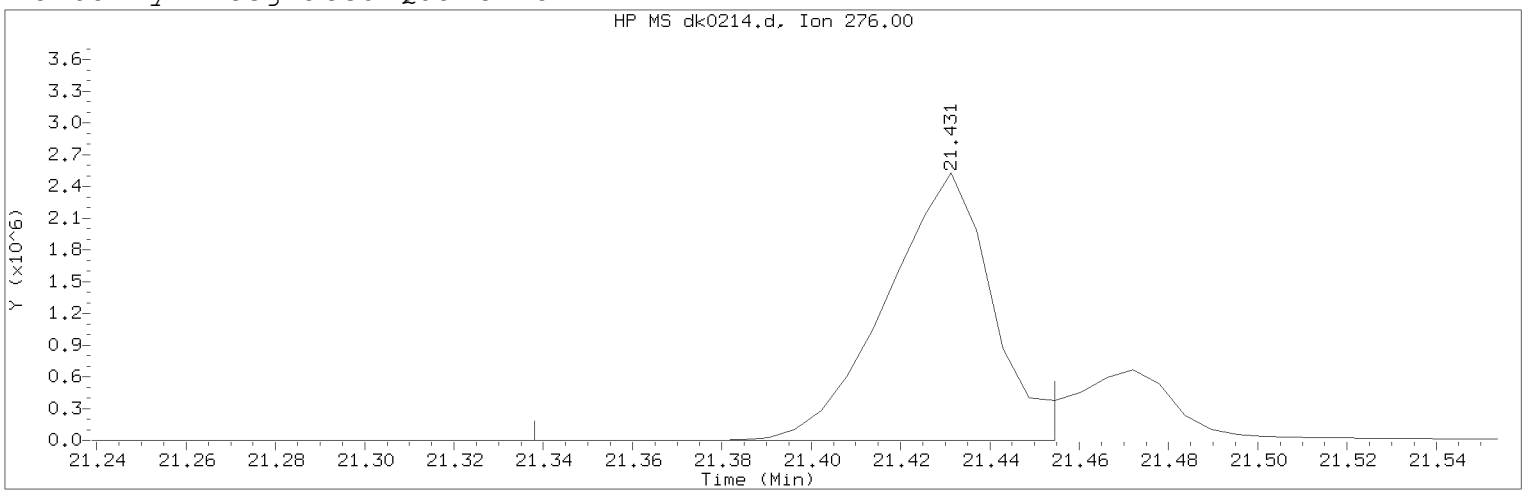
Compound Number	: 76		
Compound Name	: Caprolactam		
Scan Number	: 1258		
Retention Time (minutes)	: 9.319		
Quant Ion	: 113.00		
Area	: 3089		
On-column Amount (ng/ul)	: 0.1879		
Integration start scan	: 1255	Integration stop scan:	1260
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0214.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

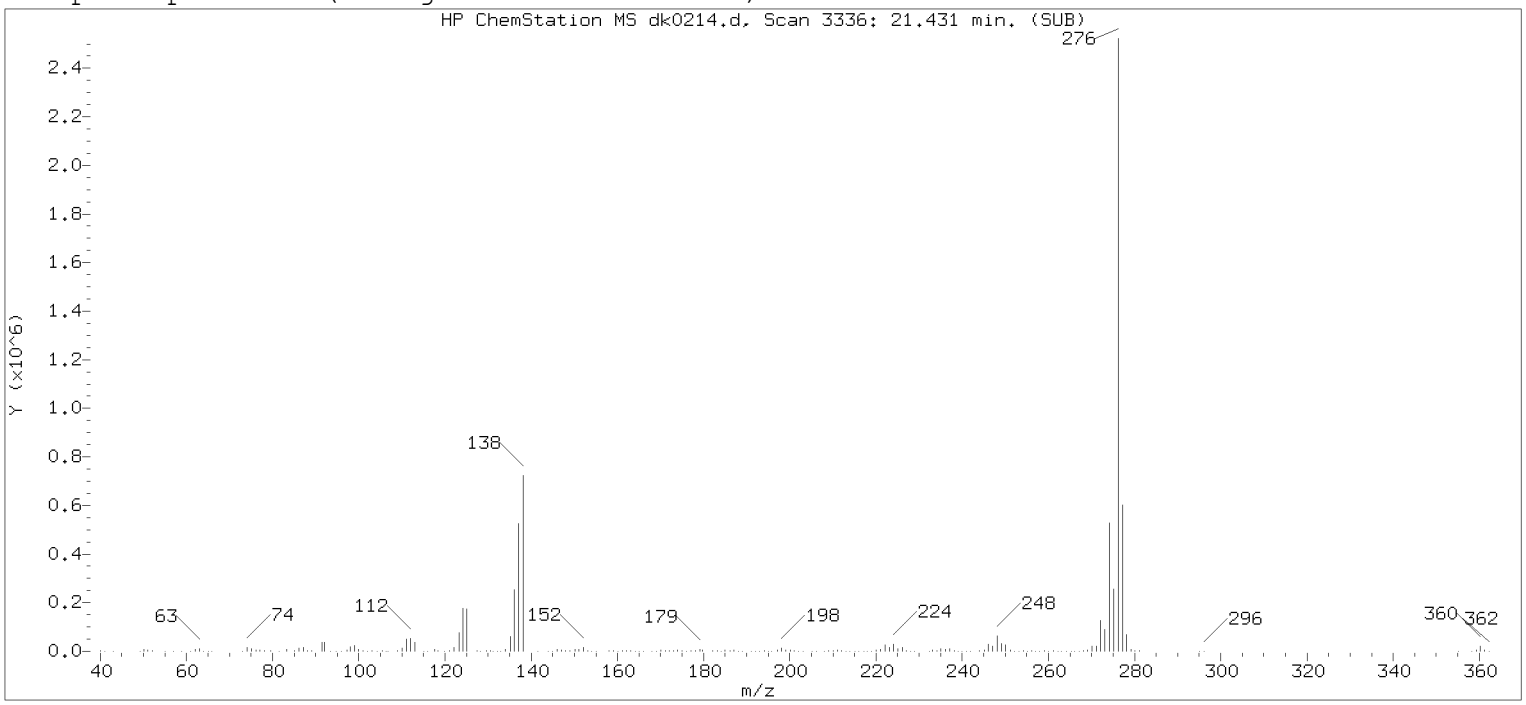
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3336
Retention Time (minutes) : 21.431
Quant Ion : 276.00
Area (flag) : 4179809M
On-Column Amount (ng/ul) : 22.4858
Integration start scan : 3319 Integration stop scan: 3339
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

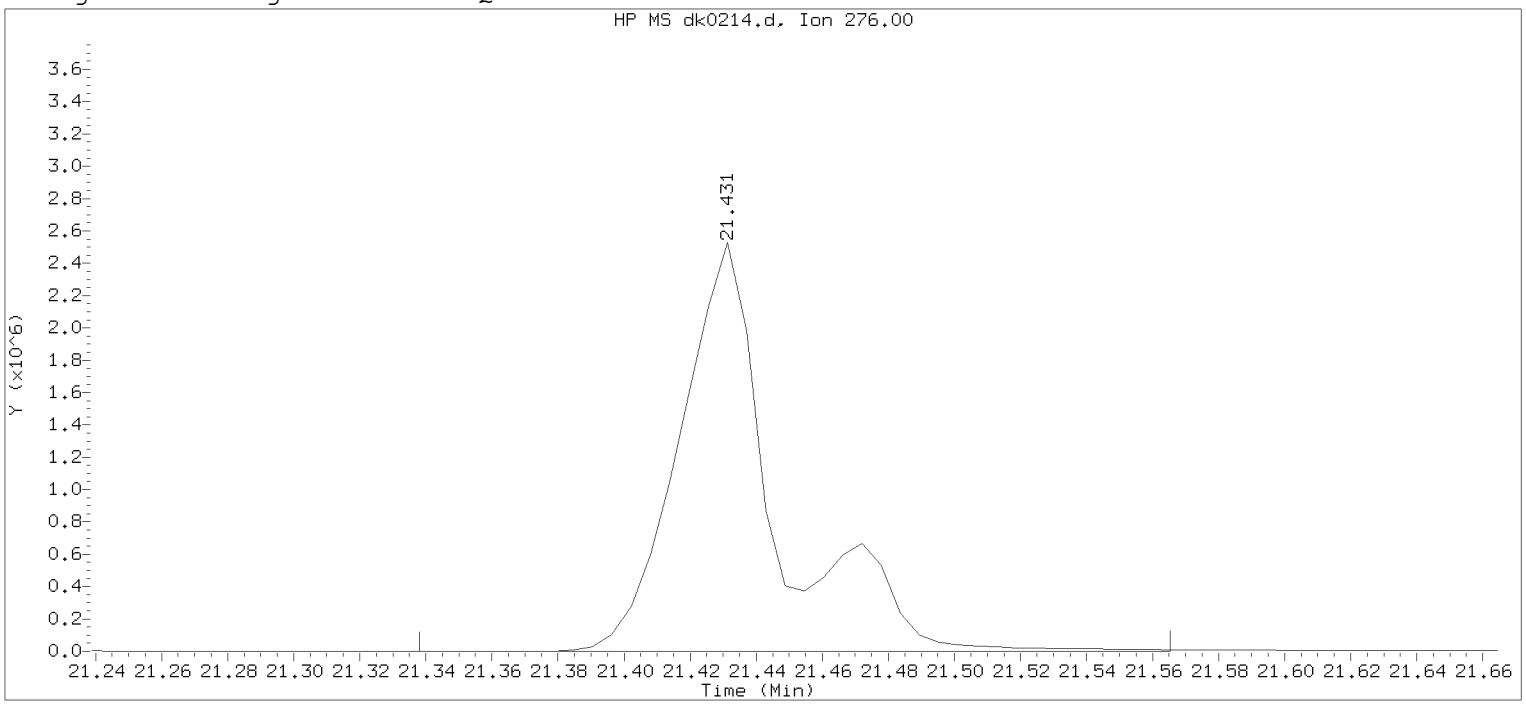
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:18.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



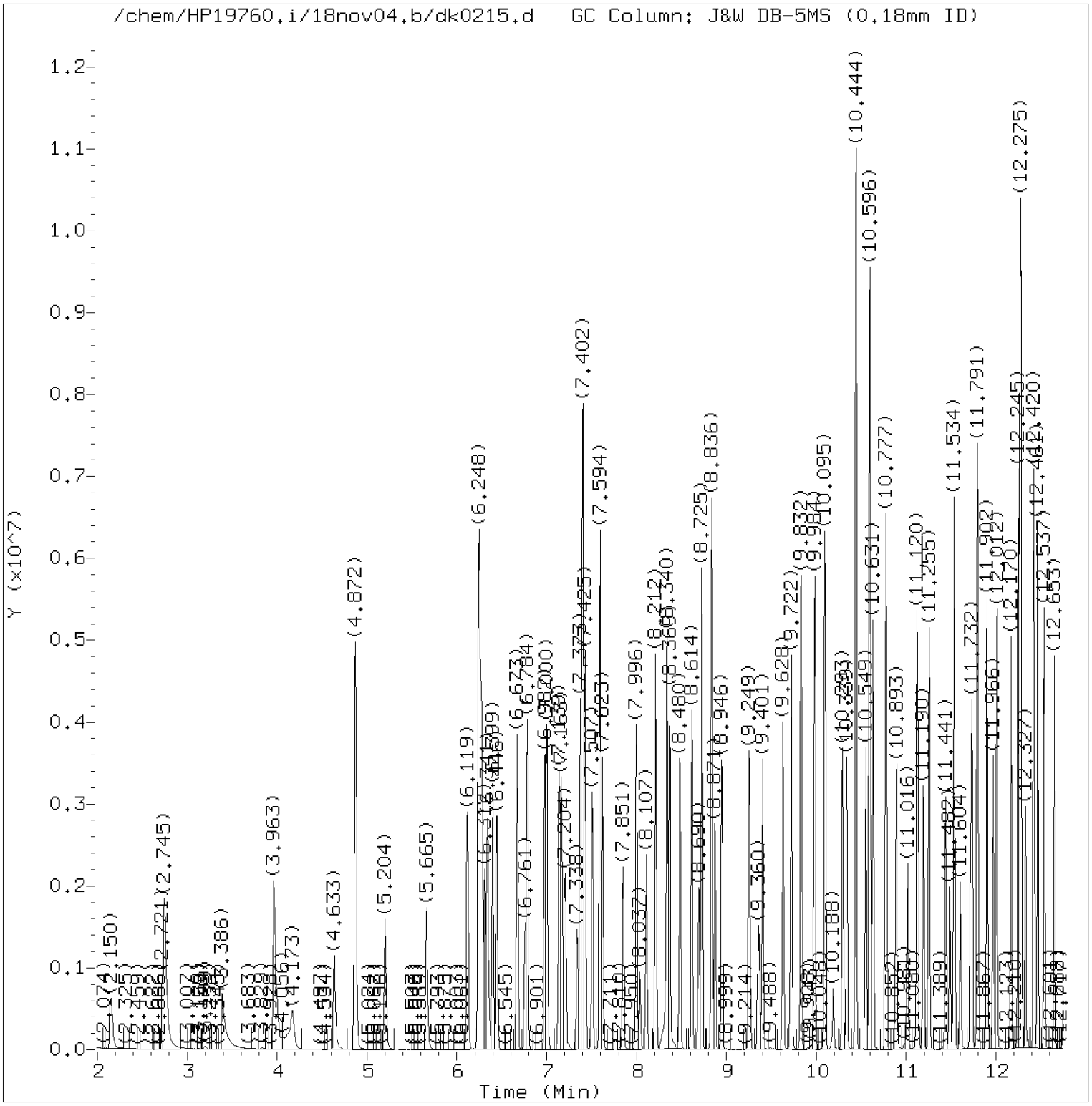
Data File: /chem/HP19760.i/18nov04.b/dk0214.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 13:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 14:09
Date, time and analyst ID of latest file update: 04-Nov-2018 14:09 Automation

Sample Name: SSTD20 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3336		
Retention Time (minutes)	: 21.431		
Quant Ion	: 276.00		
Area	: 5181161		
On-column Amount (ng/ul)	: 32.5444		
Integration start scan	: 3319	Integration stop scan:	3358
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user name: Ashley R. Transue



Total Ion Chromatogram (TIC)

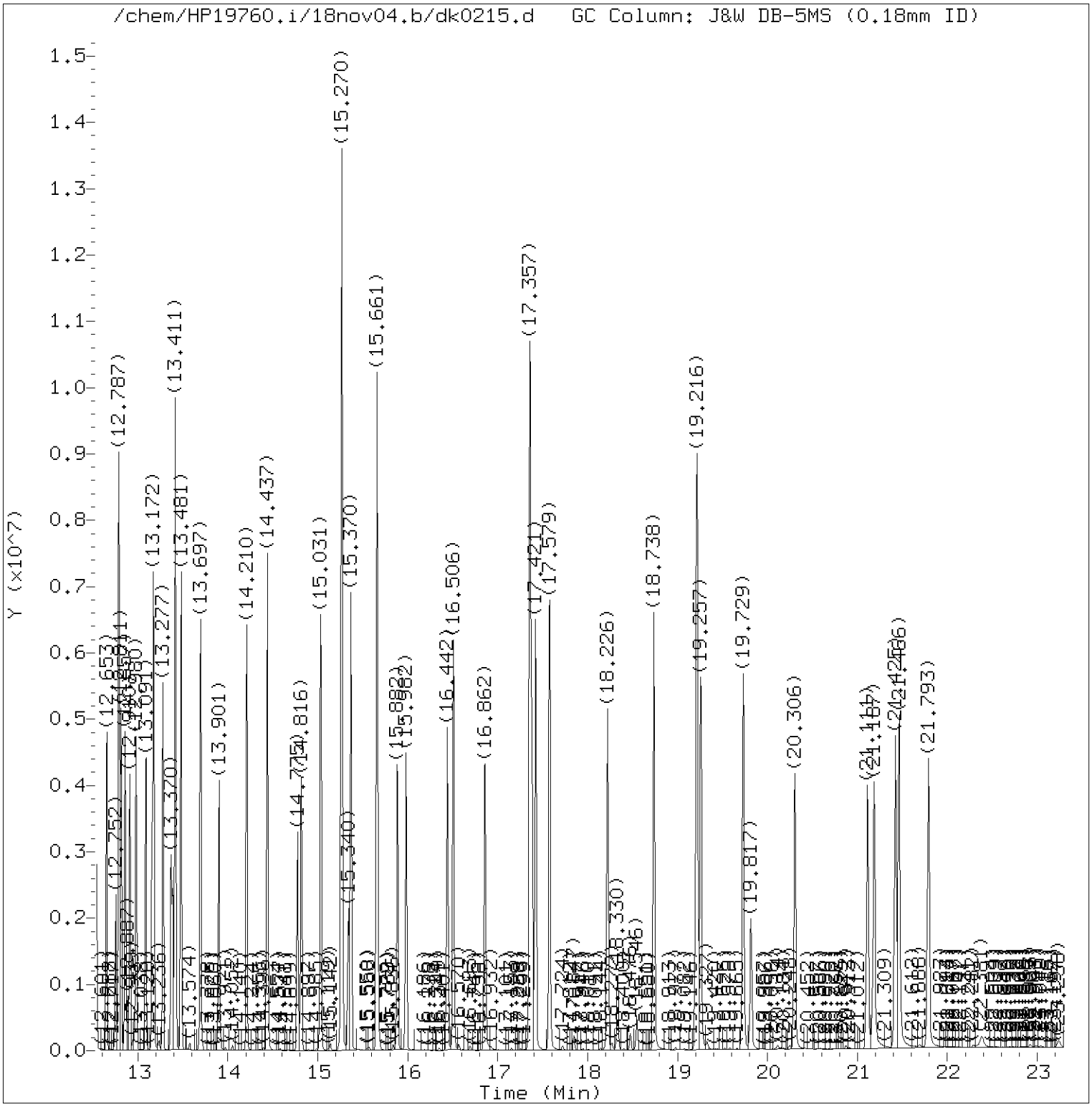
Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0215.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0215.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0215.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.150	88	619438	12.664
4) N-Nitrosodimethylamine	(1)	2.721	74	947413	12.645
5) Pyridine	(1)	2.751	79	1571322	12.546
7) 2-Picoline	(1)	3.963	93	1577765	12.640
8) N-Nitrosomethylethylamine	(1)	4.173	88	691280	12.704
9) Methyl methanesulfonate	(1)	4.639	80	739349	12.432
11)$2-Fluorophenol	(1)	4.872	112	2393412	25.114
13) N-Nitrosodiethylamine	(1)	5.204	102	643941	12.667
42) Total Cresols	(1)			2507502	25.441
15) Ethyl methanesulfonate	(1)	5.665	109	599472	12.465
16) Benzaldehyde	(1)	6.119	77	994103	13.560
17)$Phenol-d6	(1)	6.242	99	3340550	25.290
18) Phenol	(1)	6.265	94	1908980	12.639
19) Aniline	(1)	6.283	93	2230443	12.655
20) a-methylstyrene	(1)	6.358	118	116649	12.737
22) bis(2-Chloroethyl)ether	(1)	6.399	93	1404680	12.659
23) 2-Chlorophenol	(1)	6.446	128	1140619	12.664
24) 1,3-Dichlorobenzene	(1)	6.673	146	1184471	12.671
25)*1,4-Dichlorobenzene-d4	(1)	6.761	152	285497	5.000
26) 1,4-Dichlorobenzene	(1)	6.784	146	1187008	12.656
27) Benzyl alcohol	(1)	6.976	108	811853	12.896
28) 1,2-Dichlorobenzene	(1)	7.005	146	1121596	12.649
30) Indene	(1)	7.139	115	1299584	12.729
31) 2-Methylphenol	(1)	7.163	108	1179077	12.714
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.204	45	1633082	12.697
34) bis(2-Chloroisopropyl)ether	(1)	7.204	45	1633082	12.697
35) N-Nitrosopyrrolidine	(1)	7.338	100	679858	12.918
36) Acetophenone	(1)	7.373	105	1626130	12.723
97) Isosafrole	(3)			801400	12.388
38) N-Nitroso-di-n-propylamine	(1)	7.396	70	1024583	12.831
37) 4-Methylphenol	(1)	7.402	108	1328425	12.727
39) N-Nitrosomorpholine	(1)	7.408	56	736172	12.536
40) o-Toluidine	(1)	7.425	106	1995888	12.666
43) Hexachloroethane	(1)	7.507	117	550084	12.581
44)$Nitrobenzene-d5	(2)	7.594	82	2981318	25.017
45) Nitrobenzene	(2)	7.623	77	1490200	12.496
48) N-Nitrosopiperidine	(2)	7.851	114	588884	12.476
50) Isophorone	(2)	7.996	82	2589533	12.471
120) 2,4_2,6-Dinitrotoluenes	(3)			1046730	25.300
51) 2-Nitrophenol	(2)	8.113	139	571136	12.515

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0215.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

	Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53)	2,4-Dimethylphenol	(2)	8.212	107	1232729	12.451
57)	O,O,O-Triethylphosphorothioate	(2)	8.340	198	453125	12.434
56)	Benzoic acid	(2)	8.358	105	864102M	12.680
55)	bis(2-Chloroethoxy)methane	(2)	8.369	93	1583642	12.542
60)	2,4-Dichlorophenol	(2)	8.486	162	843828	12.534
62)	1,2,4-Trichlorobenzene	(2)	8.614	180	880297	12.463
65)	*Naphthalene-d8	(2)	8.690	136	1063802	5.000
66)	Naphthalene	(2)	8.725	128	3169457	12.411
146)	Diallate trans/cis	(4)			1190952	12.577
67)	4-Chloroaniline	(2)	8.836	127	1236637	12.401
68)	2,6-Dichlorophenol	(2)	8.841	162	806746	12.487
69)	Hexachloropropene	(2)	8.876	213	552732	12.404
71)	Hexachlorobutadiene	(2)	8.952	225	466266	12.320
75)	Quinoline	(2)	9.249	129	1807089	12.383
76)	Caprolactam	(2)	9.360	113	352320	12.791
77)	N-Nitrosodi-n-butylamine	(2)	9.407	84	876797	11.054
80)	4-Chloro-3-methylphenol	(2)	9.628	107	1003636	12.377
82)	Safrole	(2)	9.722	162	747729	12.465
83)	2-Methylnaphthalene	(2)	9.832	142	1984143	12.631
84)	1-Methylnaphthalene	(2)	9.984	142	1884881	12.779
85)	Hexachlorocyclopentadiene	(3)	10.095	237	496784	12.706
86)	1,2,4,5-Tetrachlorobenzene	(3)	10.100	216	812368	12.610
88)	cis-Isosafrole	(3)	10.188	162	127881	2.125
90)	2,4,6-Trichlorophenol	(3)	10.293	196	542790	12.446
92)	2,4,5-Trichlorophenol	(3)	10.339	196	575761	12.798
93)	$2-Fluorobiphenyl	(3)	10.444	172	4086975	25.200
99)	Diphenyl ether	(3)	10.444	170	923729	12.601
94)	trans-Isosafrole	(3)	10.549	162	673519	10.265
95)	1,1'-Biphenyl	(3)	10.590	154	2257813	12.863
96)	2-Chloronaphthalene	(3)	10.602	162	1738975	12.216
98)	1-Chloronaphthalene	(3)	10.631	162	1679909	13.293
100)	2-Nitroaniline	(3)	10.782	138	626629	12.807
104)	1,4-Naphthoquinone	(3)	10.893	158	705628	12.813
105)	1,4-Dinitrobenzene	(3)	11.016	168	319562	12.586
106)	Dimethylphthalate	(3)	11.120	163	1849427	12.568
107)	1,3-Dinitrobenzene	(3)	11.132	168	355979	12.696
108)	2,6-Dinitrotoluene	(3)	11.196	165	445575	12.539
109)	Acenaphthylene	(3)	11.255	152	2558620	13.008
112)	3-Nitroaniline	(3)	11.441	138	525922	12.638
113)	*Acenaphthene-d10	(3)	11.482	164	481163	5.000

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

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0215.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.534	153	1794468	12.606
115) 2,4-Dinitrophenol	(3)	11.604	184	297775	12.409
116) 4-Nitrophenol	(3)	11.715	109	377665	12.562
117) Pentachlorobenzene	(3)	11.732	250	627642	12.360
119) Dibenzofuran	(3)	11.791	168	2481719	12.672
118) 2,4-Dinitrotoluene	(3)	11.802	165	601155	12.734
121) 1-Naphthylamine	(3)	11.902	143	1848343	12.483
122) 2,3,4,6-Tetrachlorophenol	(3)	11.971	232	426158	12.550
123) 2-Naphthylamine	(3)	12.012	143	1879190	12.594
124) Diethylphthalate	(3)	12.170	149	1922005	12.707
126) Fluorene	(3)	12.245	166	1941635	12.898
125) Thionazin	(3)	12.263	107	421134	12.811
128) 5-Nitro-o-toluidine	(3)	12.275	152	609954	12.741
127) 4-Chlorophenyl-phenylether	(3)	12.275	204	924803	12.801
129) 4-Nitroaniline	(3)	12.286	138	579656	12.742
130) 4,6-Dinitro-2-methylphenol	(4)	12.327	198	371929	12.728
131) N-Nitrosodiphenylamine	(4)	12.420	169	1618263	12.504
132) NDPA as diphenylamine	(4)	12.420	169	1618263	12.504
134) 1,2-Diphenylhydrazine	(4)	12.461	77	2655176	12.562
135)$2,4,6-Tribromophenol	(3)	12.537	330	429385	25.172
137) Tetraethyldithiopyrophosphate	(4)	12.648	97	385319	12.430
139) 1,3,5-Trinitrobenzene	(4)	12.752	213	232420	12.272
140) Diallate (peak 1)	(4)	12.782	86	1025438	10.426
141) Phorate	(4)	12.787	75	1588629	12.656
142) Phenacetin	(4)	12.811	108	1211349	12.605
143) 4-Bromophenyl-phenylether	(4)	12.857	248	465259	12.436
144) Diallate (peak 2)	(4)	12.887	86	165514	2.155
145) Hexachlorobenzene	(4)	12.910	284	470478	12.363
147) Dimethoate	(4)	12.980	87	1036684	12.675
148) Atrazine	(4)	13.091	200	488169	13.185
149) Pentachlorophenol	(4)	13.155	266	340691	12.428
150) 4-Aminobiphenyl	(4)	13.172	169	1449756	12.778
151) Pentachloronitrobenzene	(4)	13.178	237	223678	12.435
152) Pronamide	(4)	13.277	173	864918	12.597
153)*Phenanthrene-d10	(4)	13.388	188	903320	5.000
154) Dinoseb	(4)	13.411	211	531058	12.535
155) Phenanthrene	(4)	13.417	178	2748827	12.445
157) Anthracene	(4)	13.481	178	2828379	12.953
163) Carbazole	(4)	13.697	167	2740234	12.505
164) Methyl parathion	(4)	13.901	109	799319	12.598

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Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0215.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.210	149	3431782	12.617
167) Parathion	(4)	14.437	109	511664	12.493
168) 4-Nitroquinoline-1-oxide	(4)	14.443	190	356255	12.368
169) Octachlorostyrene	(4)	14.775	308	194438	12.700
171) Isodrin	(4)	14.816	193	325917	12.466
222) Total PAHs	(6)			48341528	227.663
173) Fluoranthene	(4)	15.031	202	3139264	13.212
174) Benzidine	(5)	15.270	184	7010773	39.072
175)*Pyrene-d10	(5)	15.340	212	895336	5.000
177) Pyrene	(5)	15.370	202	3252227	12.524
179)$Terphenyl-d14	(5)	15.661	244	3829508	25.305
182) p-Dimethylaminoazobenzene	(5)	15.888	225	562377	12.656
185) Chlorobenzilate	(5)	15.982	139	1069455	12.683
187) 3,3'-Dimethylbenzidine	(5)	16.442	212	2074045	12.584
188) Butylbenzylphthalate	(5)	16.506	149	1721466	12.642
191) 2-Acetylaminofluorene	(5)	16.862	181	1363775	12.597
193) 3,3'-Dichlorobenzidine	(5)	17.357	252	1184524	12.732
195) Benzo(a)anthracene	(5)	17.357	228	3054173	13.798
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.380	231	656543	12.819
196) Chrysene	(5)	17.421	228	2963817	13.051
199) bis(2-Ethylhexyl)phthalate	(5)	17.579	149	2446511	12.596
203) 6-Methylchrysene	(5)	18.226	242	2055007	12.642
205) Di-n-octylphthalate	(6)	18.738	149	4232953	12.355
206) Benzo(b)fluoranthene	(6)	19.211	252	3051054	13.220
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.216	256	1425066	12.354
208) Benzo(k)fluoranthene	(6)	19.257	252	3098928	13.077
211) Benzo(a)pyrene	(6)	19.729	252	2889399	13.534
213)*Perylene-d12	(6)	19.817	264	922764	5.000
215) 3-Methylcholanthrene	(6)	20.306	268	1354186	12.351
217) Dibenz(a,h)acridine	(6)	21.111	279	2123381	12.342
218) Dibenz(a,j)acridine	(6)	21.187	279	2361914	12.781
219) Indeno(1,2,3-cd)pyrene	(6)	21.425	276	2567603M	13.558
220) Dibenz(a,h)anthracene	(6)	21.466	278	2745348	13.303
221) Benzo(g,h,i)perylene	(6)	21.793	276	2669305	13.049

M = Compound was manually integrated.
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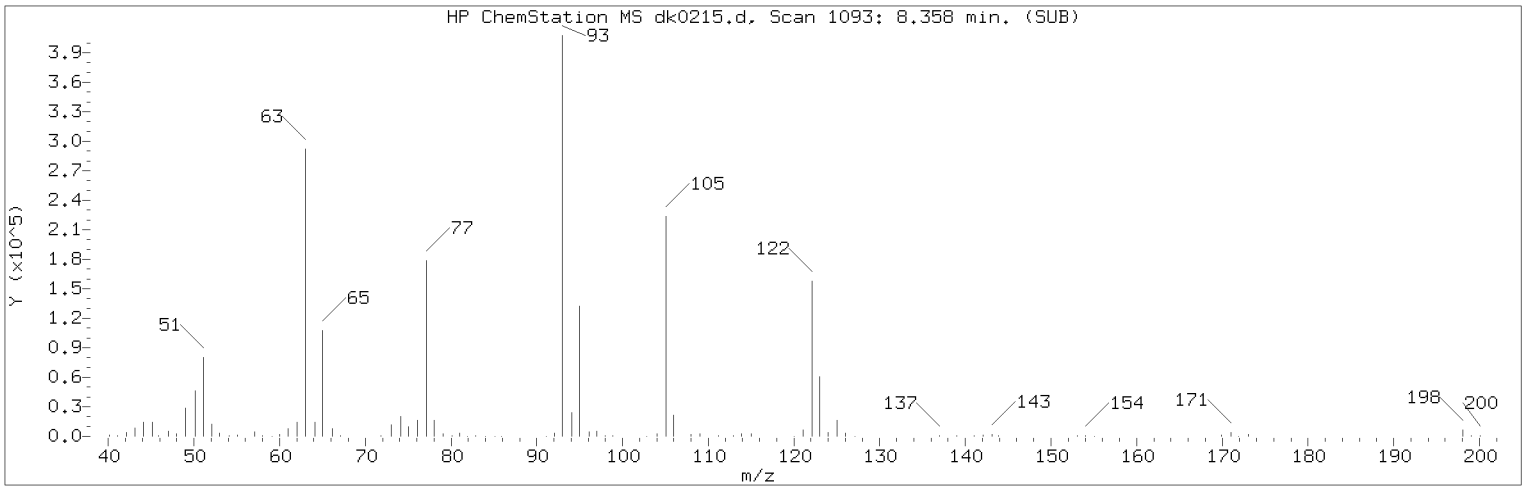
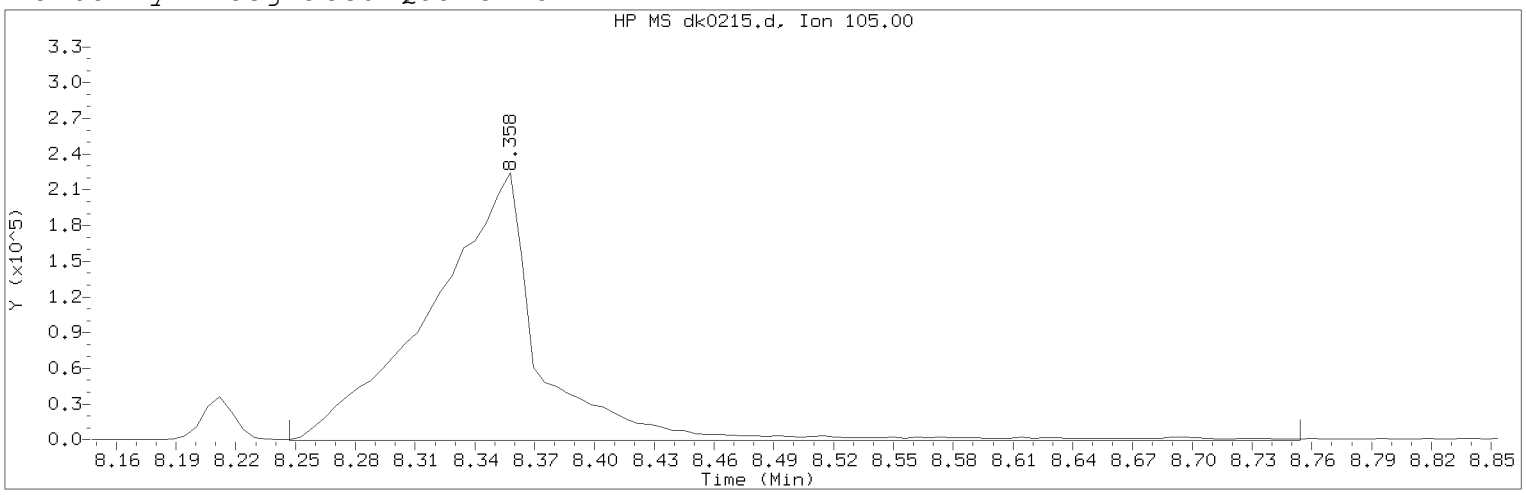
Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0215.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

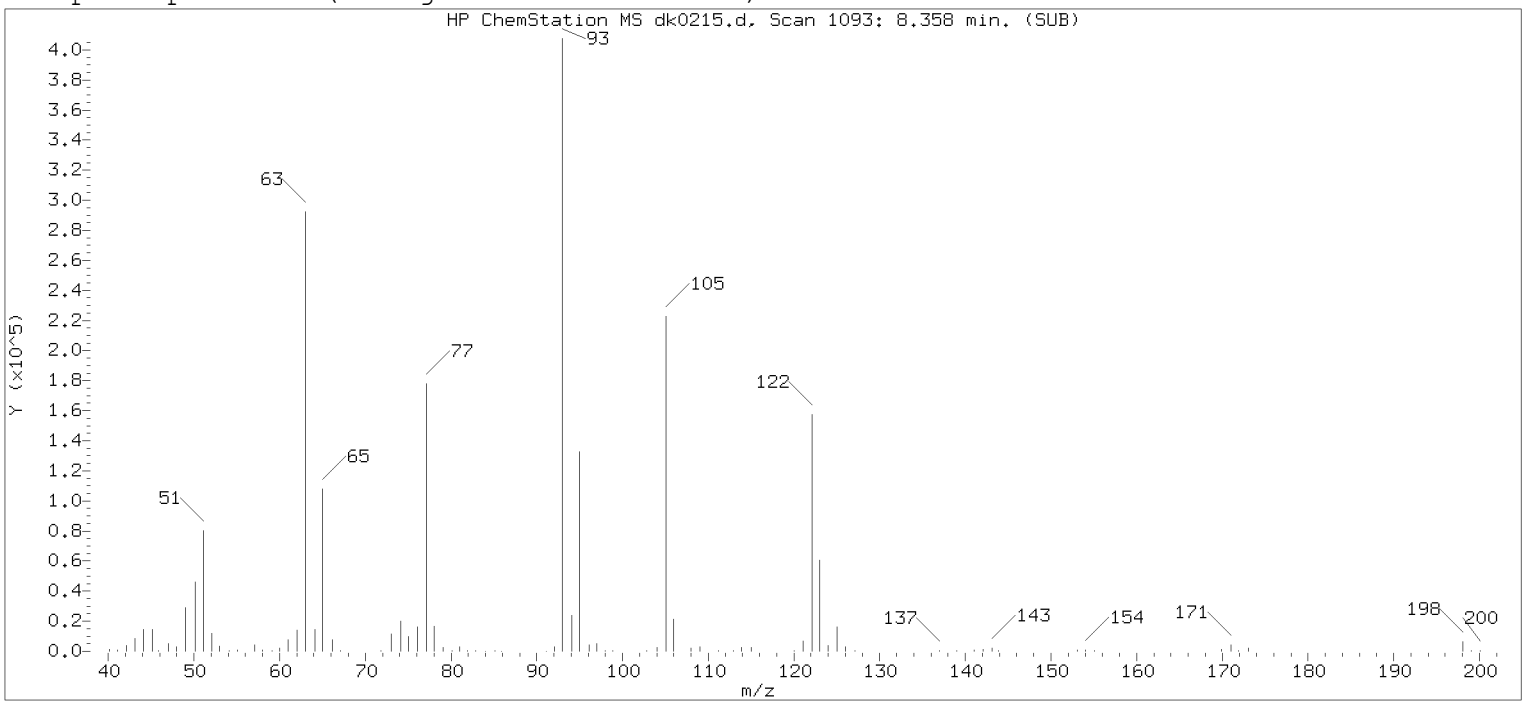
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1093		
Retention Time (minutes)	: 8.358		
Quant Ion	: 105.00		
Area (flag)	: 864102M		
On-Column Amount (ng/ul)	: 12.6795		
Integration start scan	: 1073	Integration stop scan:	1160
Y at integration start	: -378	Y at integration end:	-378

Reason for manual integration: improper integration

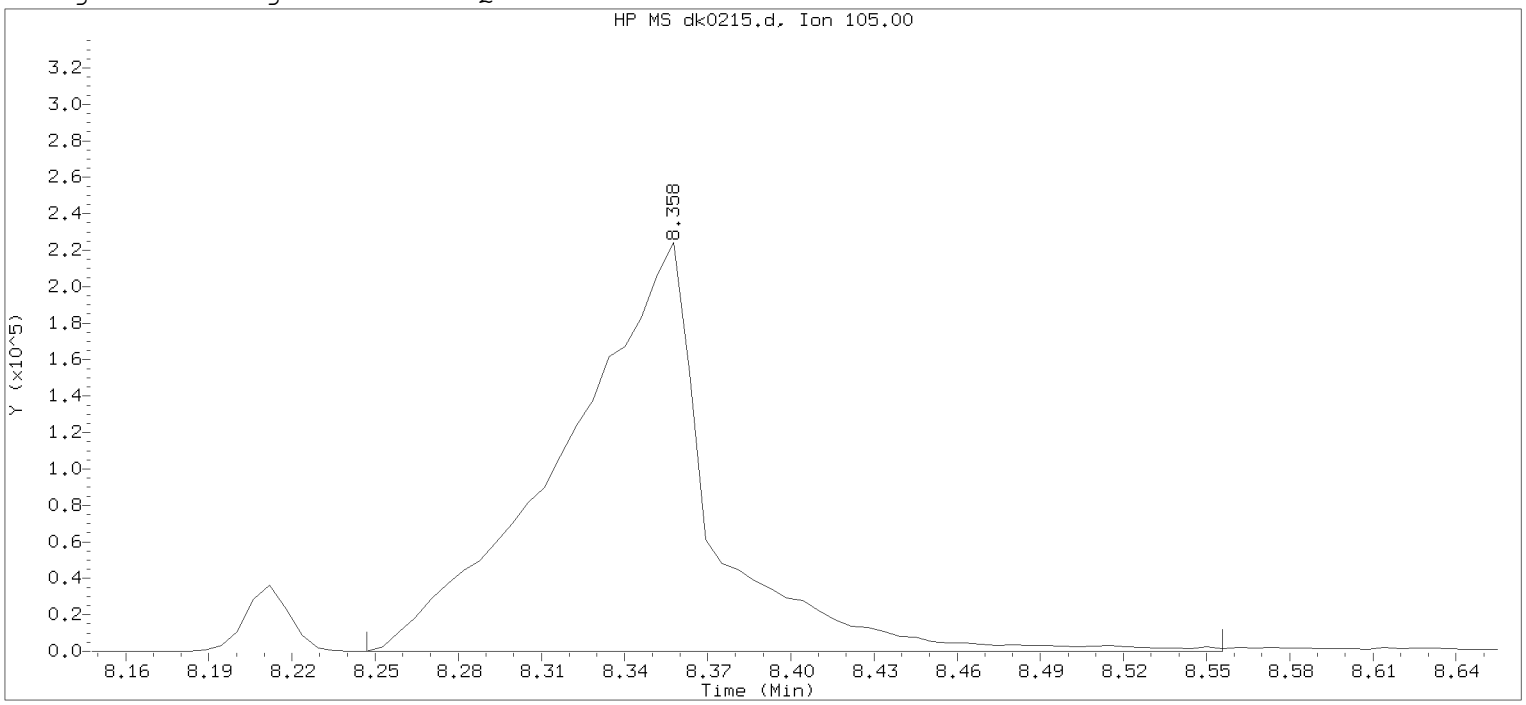
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0215.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:09 Analyst ID: em10340

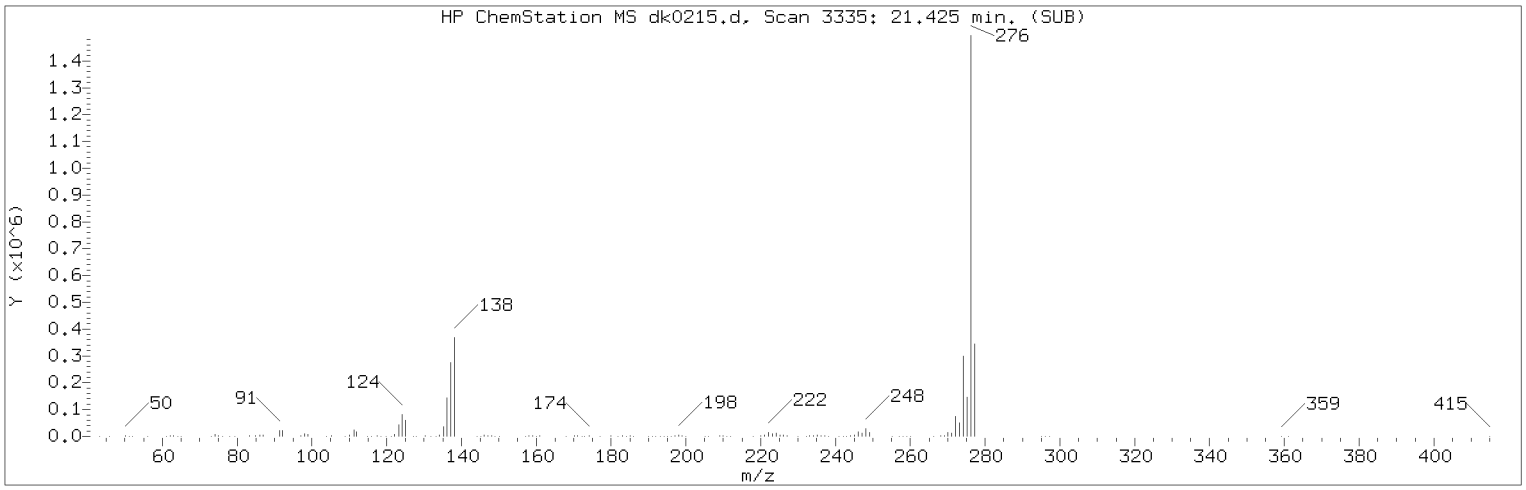
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 14:37
Date, time and analyst ID of latest file update: 04-Nov-2018 14:37 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

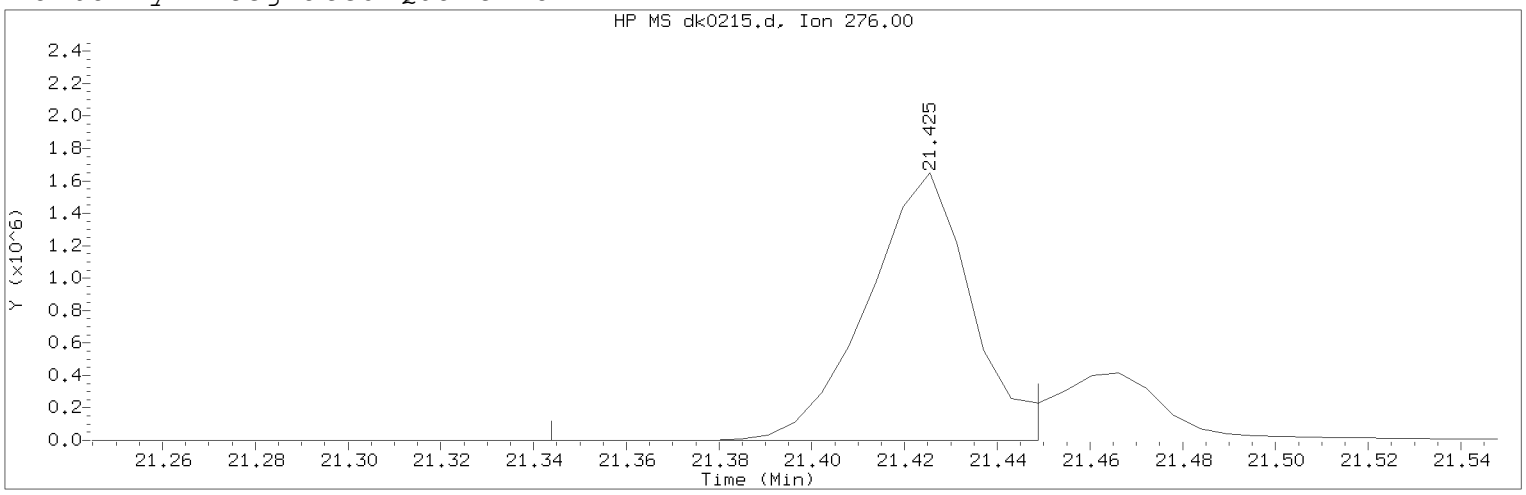
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1093		
Retention Time (minutes)	: 8.358		
Quant Ion	: 105.00		
Area	: 835592		
On-column Amount (ng/ul)	: 13.6130		
Integration start scan	: 1073	Integration stop scan:	1126
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0215.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

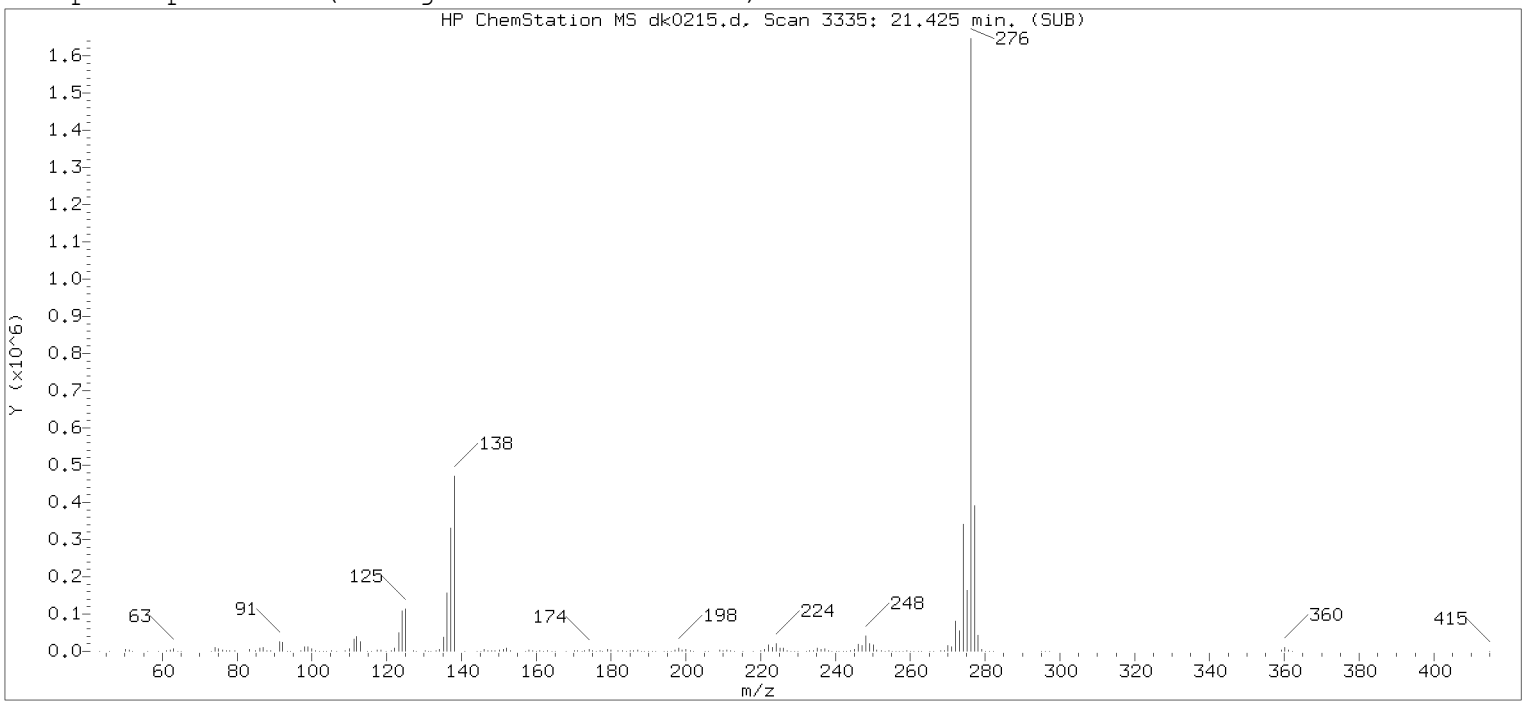
Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3335		
Retention Time (minutes)	: 21.425		
Quant Ion	: 276.00		
Area (flag)	: 2567603M		
On-Column Amount (ng/ul)	: 13.5584		
Integration start scan	: 3320	Integration stop scan:	3338
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

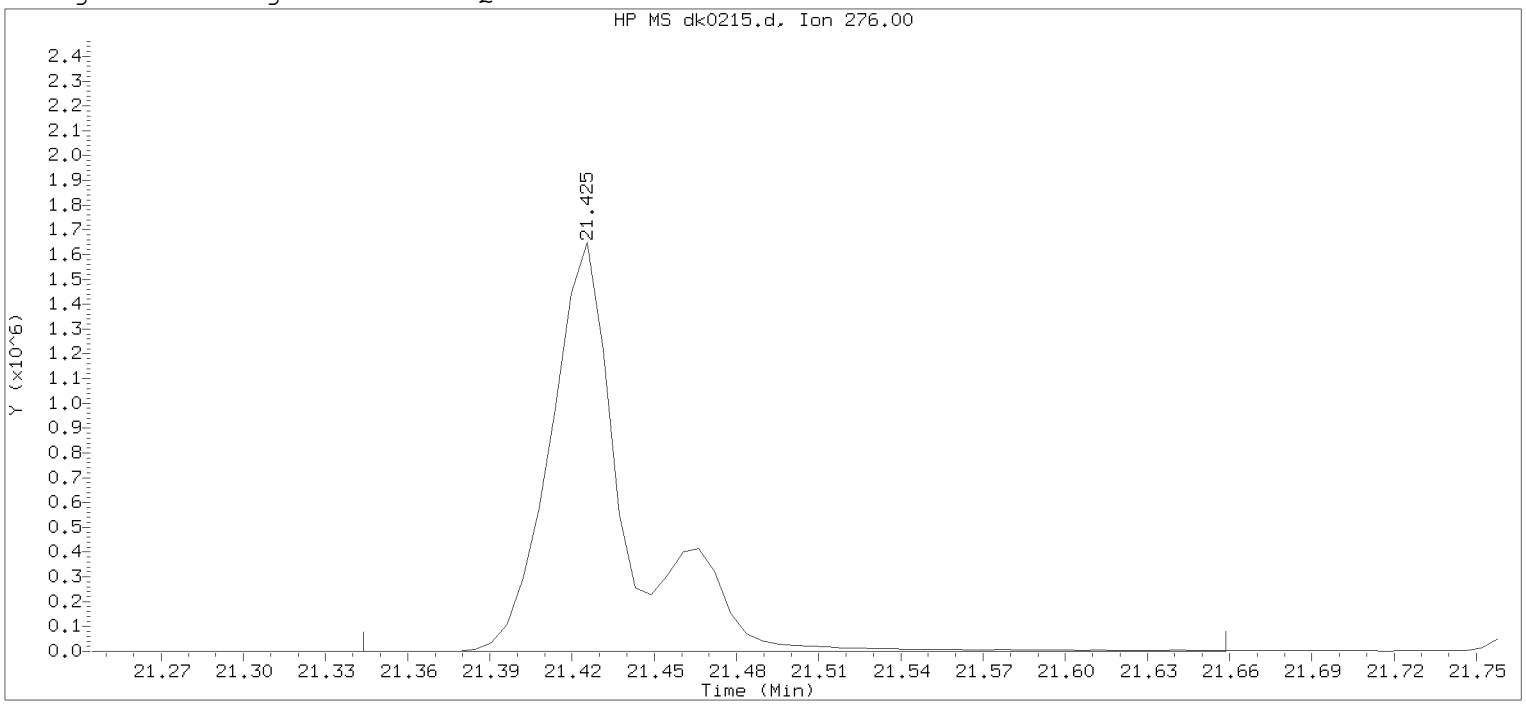
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



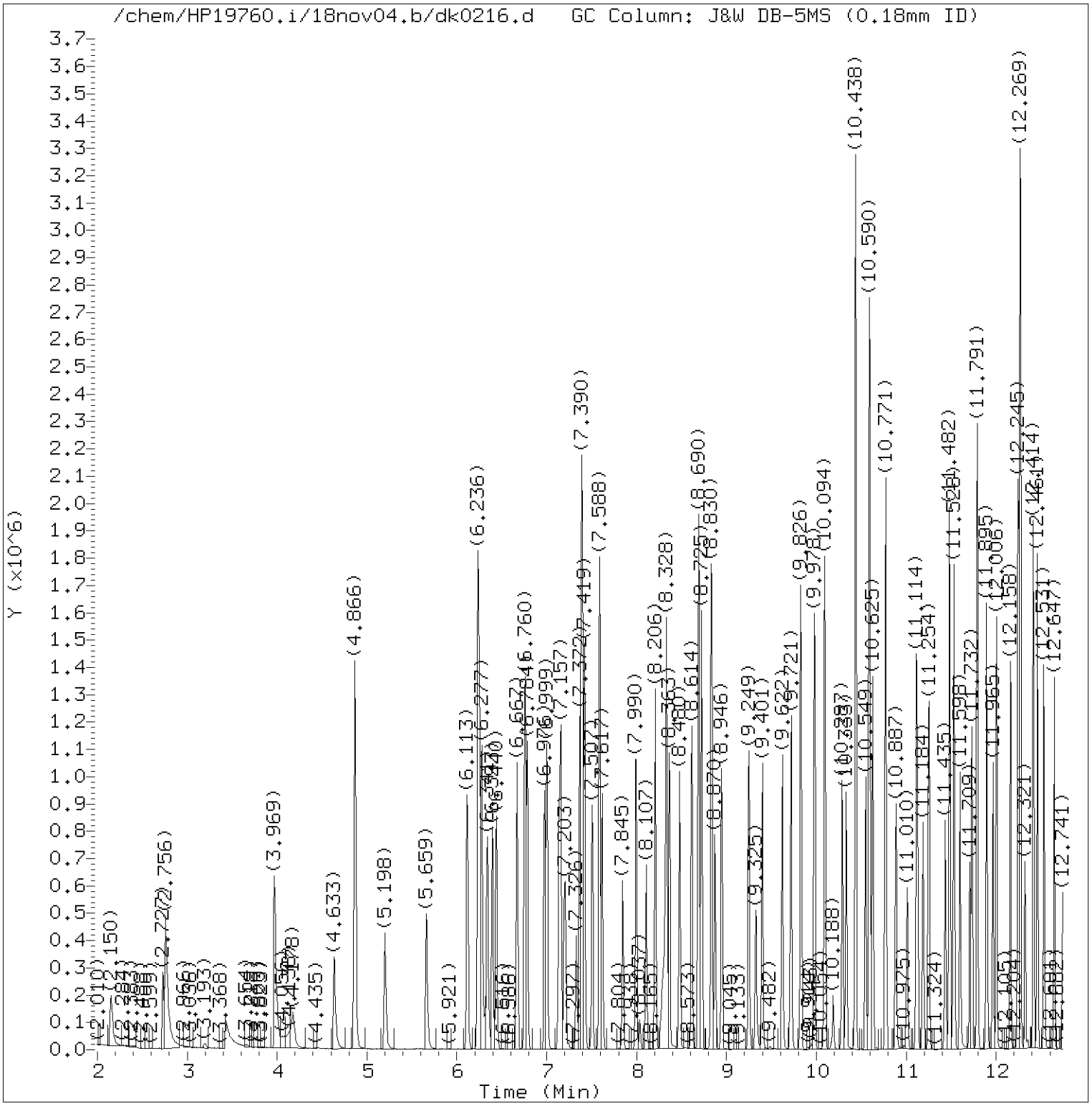
Data File: /chem/HP19760.i/18nov04.b/dk0215.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:09 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 14:37
Date, time and analyst ID of latest file update: 04-Nov-2018 14:37 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3335		
Retention Time (minutes)	: 21.425		
Quant Ion	: 276.00		
Area	: 3246543		
On-column Amount (ng/ul)	: 18.6965		
Integration start scan	: 3320	Integration stop scan:	3374
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: ashley.transue



Total Ion Chromatogram (TIC)

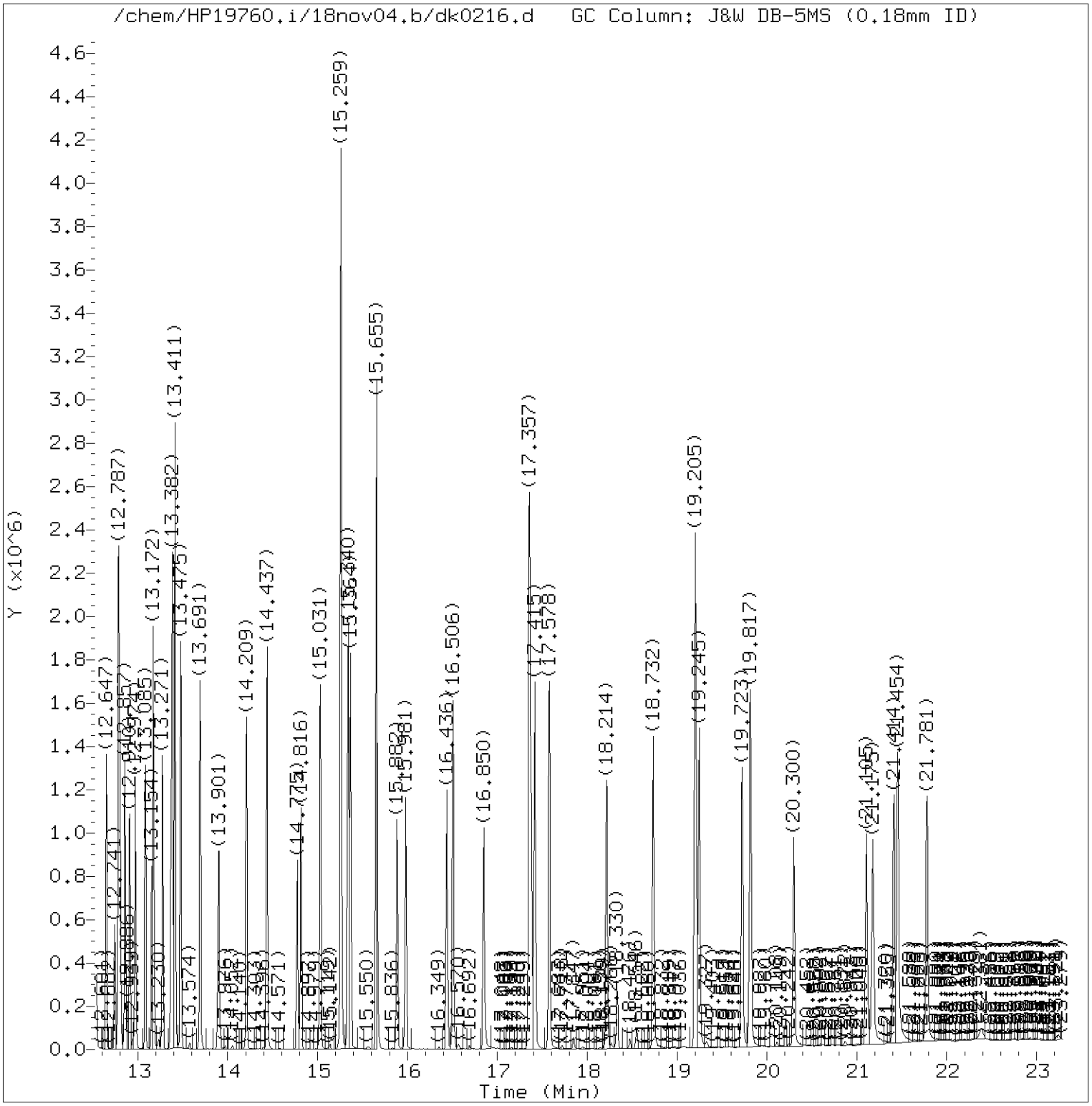
Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0216.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:37 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0216.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:37 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0216.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:37 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.150	88	162380	3.596
4) N-Nitrosodimethylamine	(1)	2.727	74	255665	3.676
5) Pyridine	(1)	2.756	79	436698	3.740
7) 2-Picoline	(1)	3.969	93	428332	3.693
8) N-Nitrosomethylethylamine	(1)	4.178	88	180642	3.596
9) Methyl methanesulfonate	(1)	4.633	80	207580	3.743
11)$2-Fluorophenol	(1)	4.866	112	646360	7.315
13) N-Nitrosodiethylamine	(1)	5.198	102	166117	3.550
15) Ethyl methanesulfonate	(1)	5.659	109	161940	3.637
42) Total Cresols	(1)			678780	7.406
16) Benzaldehyde	(1)	6.113	77	307081	4.320
17)$Phenol-d6	(1)	6.236	99	899507	7.339
18) Phenol	(1)	6.253	94	519692	3.701
19) Aniline	(1)	6.277	93	609646	3.716
20) a-methylstyrene	(1)	6.358	118	27885	3.351
22) bis(2-Chloroethyl)ether	(1)	6.393	93	384677	3.723
23) 2-Chlorophenol	(1)	6.440	128	304578	3.650
24) 1,3-Dichlorobenzene	(1)	6.667	146	322745	3.711
25)*1,4-Dichlorobenzene-d4	(1)	6.760	152	266319	5.000
26) 1,4-Dichlorobenzene	(1)	6.784	146	321270	3.687
27) Benzyl alcohol	(1)	6.976	108	201530	3.491
28) 1,2-Dichlorobenzene	(1)	6.999	146	306791	3.717
30) Indene	(1)	7.139	115	321396	3.444
31) 2-Methylphenol	(1)	7.157	108	317956	3.690
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.203	45	448945	3.744
34) bis(2-Chloroisopropyl)ether	(1)	7.203	45	448945	3.744
35) N-Nitrosopyrrolidine	(1)	7.326	100	176315	3.622
36) Acetophenone	(1)	7.367	105	450200	3.771
97) Isosafrole	(3)			211925	3.591
38) N-Nitroso-di-n-propylamine	(1)	7.390	70	274249	3.695
37) 4-Methylphenol	(1)	7.390	108	360824	3.714
39) N-Nitrosomorpholine	(1)	7.396	56	201232	3.689
40) o-Toluidine	(1)	7.419	106	548422	3.735
43) Hexachloroethane	(1)	7.507	117	152003	3.731
44)$Nitrobenzene-d5	(2)	7.588	82	807731	7.338
45) Nitrobenzene	(2)	7.617	77	407240	3.691
48) N-Nitrosopiperidine	(2)	7.845	114	159521	3.661
50) Isophorone	(2)	7.996	82	684105	3.586
120) 2,4_2,6-Dinitrotoluenes	(3)			275923	7.286
51) 2-Nitrophenol	(2)	8.107	139	146405	3.510

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0216.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:37 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.206	107	333034	3.647
56) Benzoic acid	(2)	8.328	105	414806M	6.724
57) O,O,O-Triethylphosphorothioate	(2)	8.334	198	123803	3.676
55) bis(2-Chloroethoxy)methane	(2)	8.363	93	433841	3.710
60) 2,4-Dichlorophenol	(2)	8.480	162	222393	3.594
62) 1,2,4-Trichlorobenzene	(2)	8.614	180	240912	3.688
65)*Naphthalene-d8	(2)	8.690	136	987946	5.000
66) Naphthalene	(2)	8.725	128	872274	3.690
146) Diallate trans/cis	(4)			311778	3.630
67) 4-Chloroaniline	(2)	8.830	127	339227	3.680
68) 2,6-Dichlorophenol	(2)	8.835	162	217114	3.644
69) Hexachloropropene	(2)	8.870	213	150771	3.664
71) Hexachlorobutadiene	(2)	8.946	225	130230	3.714
75) Quinoline	(2)	9.249	129	484404	3.608
76) Caprolactam	(2)	9.325	113	88828	3.525
77) N-Nitrosodi-n-butylamine	(2)	9.401	84	231630	3.249
80) 4-Chloro-3-methylphenol	(2)	9.622	107	265686	3.570
82) Safrole	(2)	9.721	162	193017	3.518
83) 2-Methylnaphthalene	(2)	9.826	142	535899	3.686
84) 1-Methylnaphthalene	(2)	9.978	142	511732	3.738
85) Hexachlorocyclopentadiene	(3)	10.094	237	131936	3.678
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.094	216	220830	3.725
88) cis-Isosafrole	(3)	10.188	162	32394	0.594
90) 2,4,6-Trichlorophenol	(3)	10.287	196	138599	3.504
92) 2,4,5-Trichlorophenol	(3)	10.333	196	150157	3.646
93)$2-Fluorobiphenyl	(3)	10.438	172	1128176	7.537
99) Diphenyl ether	(3)	10.438	170	251875	3.732
94) trans-Isosafrole	(3)	10.549	162	179531	2.996
95) 1,1'-Biphenyl	(3)	10.590	154	613599	3.783
96) 2-Chloronaphthalene	(3)	10.596	162	490891	3.742
98) 1-Chloronaphthalene	(3)	10.625	162	436807	3.750
100) 2-Nitroaniline	(3)	10.776	138	157210	3.535
104) 1,4-Naphthoquinone	(3)	10.887	158	170278	3.426
105) 1,4-Dinitrobenzene	(3)	11.010	168	81690	3.539
106) Dimethylphthalate	(3)	11.114	163	507089	3.740
107) 1,3-Dinitrobenzene	(3)	11.126	168	91516	3.581
108) 2,6-Dinitrotoluene	(3)	11.190	165	119656	3.672
109) Acenaphthylene	(3)	11.254	152	681395	3.757
112) 3-Nitroaniline	(3)	11.435	138	139914	3.667
113)*Acenaphthene-d10	(3)	11.482	164	443565	5.000

M = Compound was manually integrated.
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Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0216.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:37 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.528	153	487758	3.722
115) 2,4-Dinitrophenol	(3)	11.598	184	141364	6.585
116) 4-Nitrophenol	(3)	11.709	109	94494	3.473
117) Pentachlorobenzene	(3)	11.732	250	176644	3.769
119) Dibenzofuran	(3)	11.791	168	670937	3.723
118) 2,4-Dinitrotoluene	(3)	11.796	165	156267	3.622
121) 1-Naphthylamine	(3)	11.895	143	499277	3.676
122) 2,3,4,6-Tetrachlorophenol	(3)	11.965	232	108820	3.528
123) 2-Naphthylamine	(3)	12.006	143	510772	3.721
124) Diethylphthalate	(3)	12.158	149	498008	3.606
126) Fluorene	(3)	12.245	166	525033	3.778
125) Thionazin	(3)	12.257	107	109402	3.637
128) 5-Nitro-o-toluidine	(3)	12.269	152	161902	3.685
129) 4-Nitroaniline	(3)	12.274	138	153212	3.672
127) 4-Chlorophenyl-phenylether	(3)	12.274	204	251877	3.776
130) 4,6-Dinitro-2-methylphenol	(4)	12.321	198	84859	3.276
131) N-Nitrosodiphenylamine	(4)	12.414	169	434044	3.684
132) NDPA as diphenylamine	(4)	12.414	169	434044	3.684
134) 1,2-Diphenylhydrazine	(4)	12.461	77	716504	3.715
135)$2,4,6-Tribromophenol	(3)	12.537	330	110632	7.124
137) Tetraethyldithiopyrophosphate	(4)	12.647	97	102884	3.653
139) 1,3,5-Trinitrobenzene	(4)	12.741	213	52362	3.145
140) Diallate (peak 1)	(4)	12.781	86	268419	3.009
141) Phorate	(4)	12.787	75	410240	3.608
142) Phenacetin	(4)	12.805	108	306648	3.539
143) 4-Bromophenyl-phenylether	(4)	12.857	248	129028	3.767
144) Diallate (peak 2)	(4)	12.886	86	43359	0.621
145) Hexachlorobenzene	(4)	12.910	284	127338	3.674
147) Dimethoate	(4)	12.974	87	256978	3.494
148) Atrazine	(4)	13.085	200	135485	3.949
149) Pentachlorophenol	(4)	13.154	266	80466	3.305
151) Pentachloronitrobenzene	(4)	13.172	237	59589	3.647
150) 4-Aminobiphenyl	(4)	13.172	169	377155	3.658
152) Pronamide	(4)	13.271	173	216404	3.503
153)*Phenanthrene-d10	(4)	13.382	188	826051	5.000
154) Dinoseb	(4)	13.411	211	118925	3.185
155) Phenanthrene	(4)	13.411	178	733428	3.651
157) Anthracene	(4)	13.475	178	743192	3.727
163) Carbazole	(4)	13.691	167	706561	3.569
164) Methyl parathion	(4)	13.895	109	189430	3.352

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on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0216.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:37 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.209	149	849816	3.478
168) 4-Nitroquinoline-1-oxide	(4)	14.437	190	65390	2.662
167) Parathion	(4)	14.437	109	121523	3.334
169) Octachlorostyrene	(4)	14.775	308	47592	3.464
171) Isodrin	(4)	14.816	193	83937	3.556
222) Total PAHs	(6)			12408213	67.098
173) Fluoranthene	(4)	15.031	202	799243	3.690
174) Benzidine	(5)	15.259	184	1809950	11.198
175)*Pyrene-d10	(5)	15.340	212	807478	5.000
177) Pyrene	(5)	15.364	202	859968	3.685
179)$Terphenyl-d14	(5)	15.655	244	996571	7.341
182) p-Dimethylaminoazobenzene	(5)	15.882	225	127828	3.288
185) Chlorobenzilate	(5)	15.981	139	265422	3.539
187) 3,3'-Dimethylbenzidine	(5)	16.436	212	495453	3.409
188) Butylbenzylphthalate	(5)	16.506	149	425152	3.516
191) 2-Acetylaminofluorene	(5)	16.850	181	296745	3.159
193) 3,3'-Dichlorobenzidine	(5)	17.351	252	285991	3.472
195) Benzo(a)anthracene	(5)	17.357	228	735989	3.697
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.374	231	157350	3.470
196) Chrysene	(5)	17.415	228	766698	3.745
199) bis(2-Ethylhexyl)phthalate	(5)	17.578	149	586569	3.422
203) 6-Methylchrysene	(5)	18.214	242	491979	3.428
205) Di-n-octylphthalate	(6)	18.732	149	952614	3.287
206) Benzo(b)fluoranthene	(6)	19.199	252	736870	3.676
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.205	256	337353	3.426
208) Benzo(k)fluoranthene	(6)	19.245	252	788587	3.805
211) Benzo(a)pyrene	(6)	19.723	252	683606	3.685
213)*Perylene-d12	(6)	19.817	264	804596	5.000
215) 3-Methylcholanthrene	(6)	20.300	268	324873	3.463
217) Dibenz(a,h)acridine	(6)	21.105	279	511826	3.475
218) Dibenz(a,j)acridine	(6)	21.181	279	572666	3.591
219) Indeno(1,2,3-cd)pyrene	(6)	21.414	276	610774M	3.707
220) Dibenz(a,h)anthracene	(6)	21.454	278	666034	3.709
221) Benzo(g,h,i)perylene	(6)	21.781	276	669733	3.754

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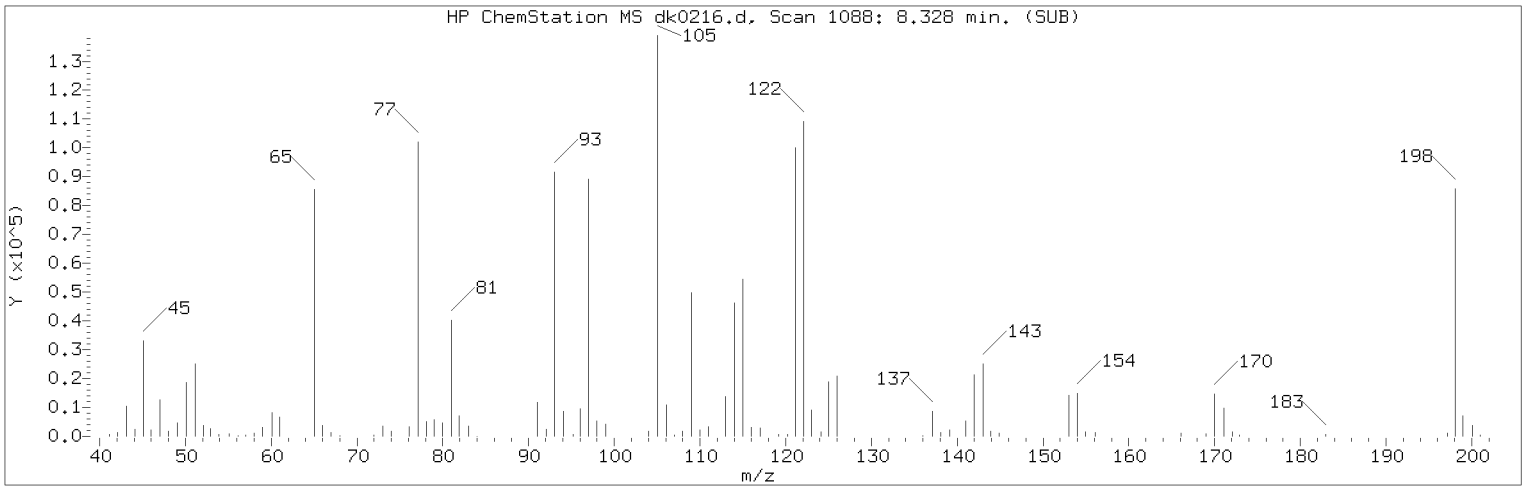
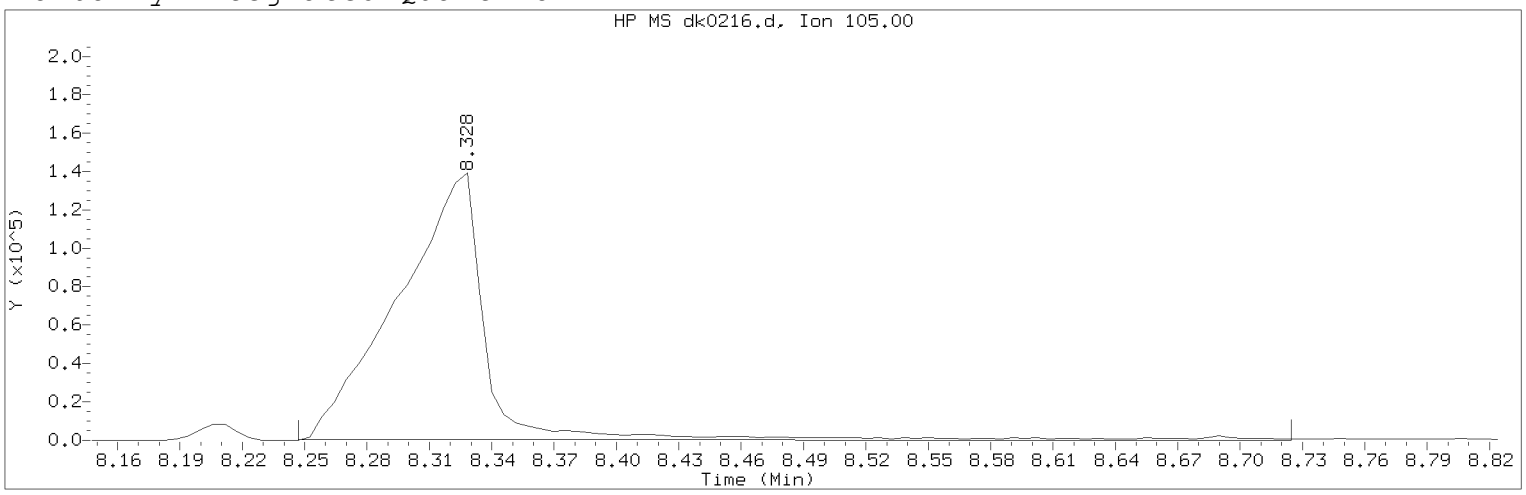
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0216.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:37 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

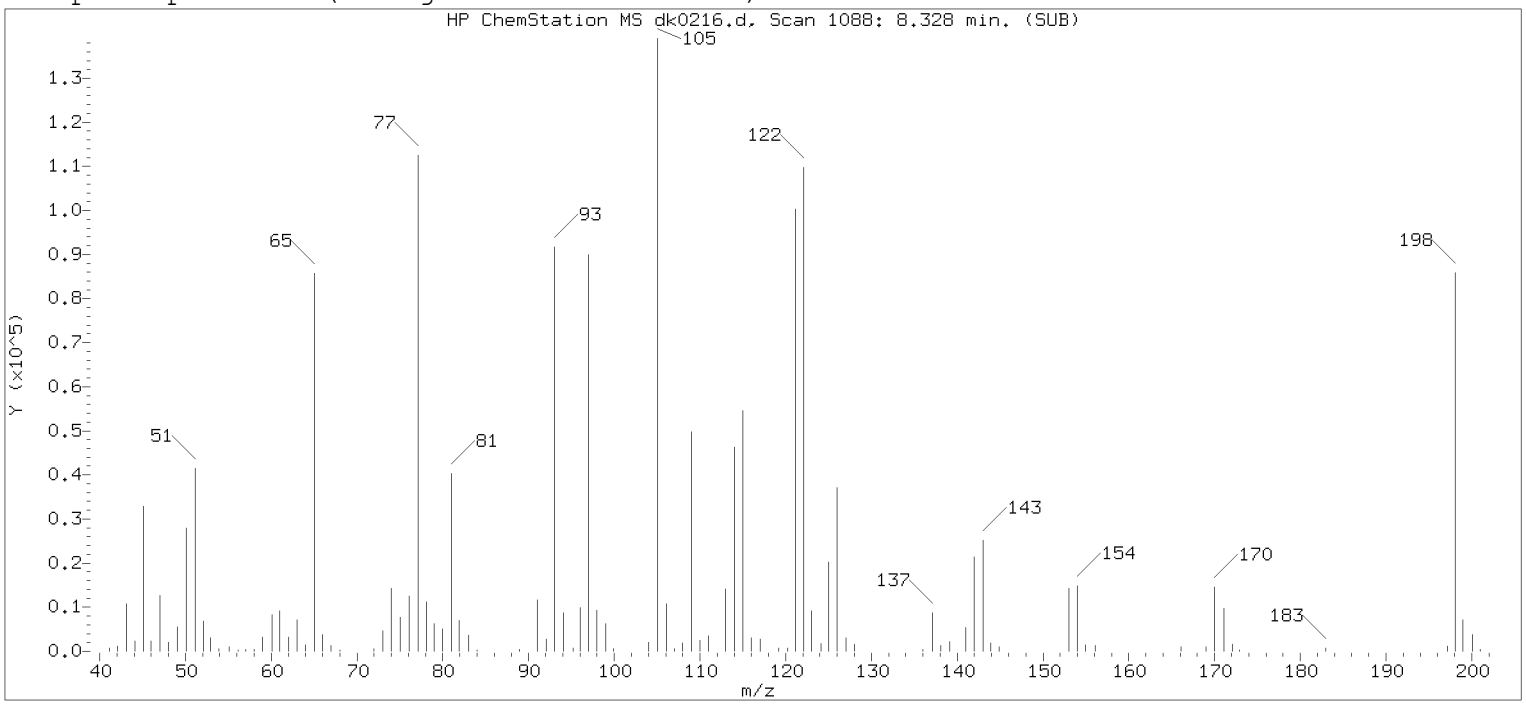
Compound Number : 56
Compound Name : Benzoic acid
Scan Number : 1088
Retention Time (minutes) : 8.328
Quant Ion : 105.00
Area (flag) : 414806M
On-Column Amount (ng/ul) : 6.7237
Integration start scan : 1073 Integration stop scan: 1155
Y at integration start : 90 Y at integration end: -144

Reason for manual integration: improper integration

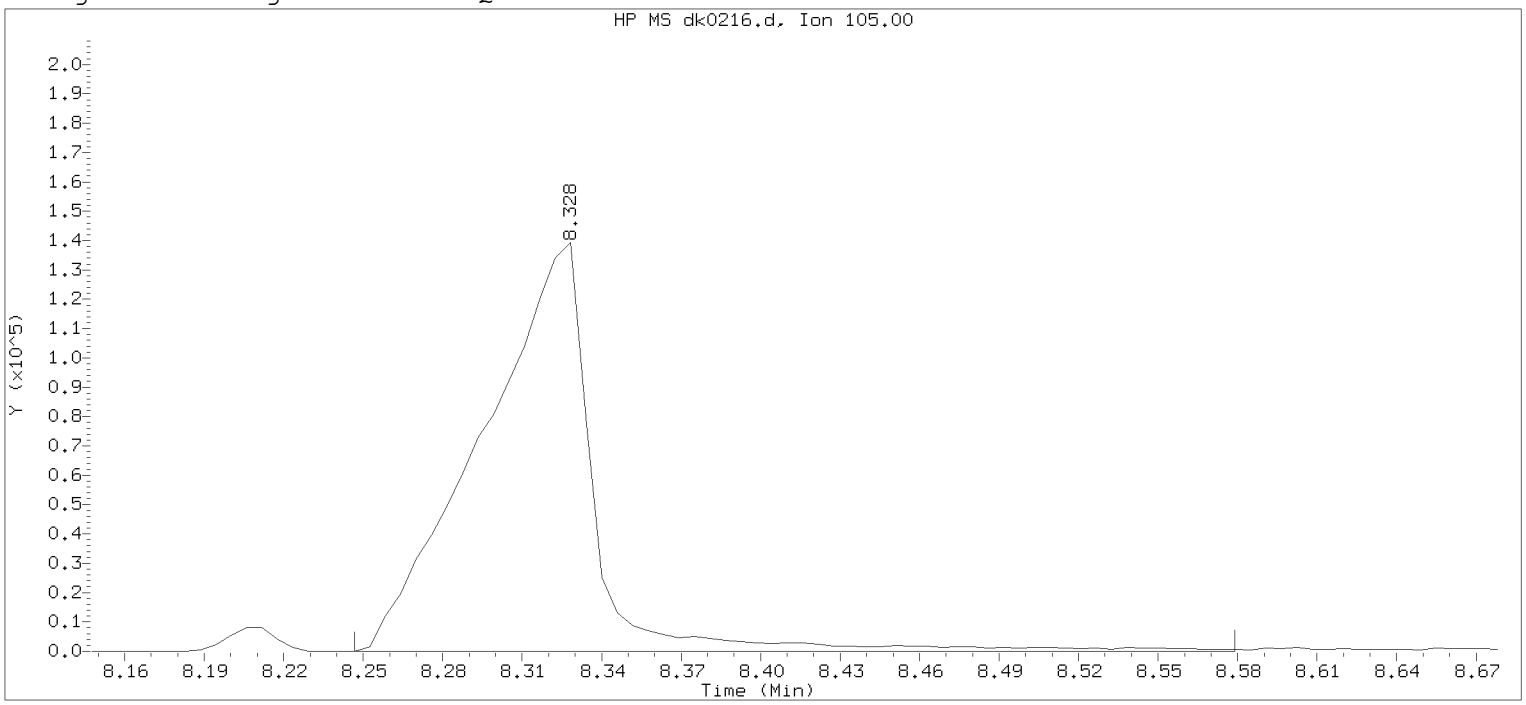
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0216.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:37 Analyst ID: em10340

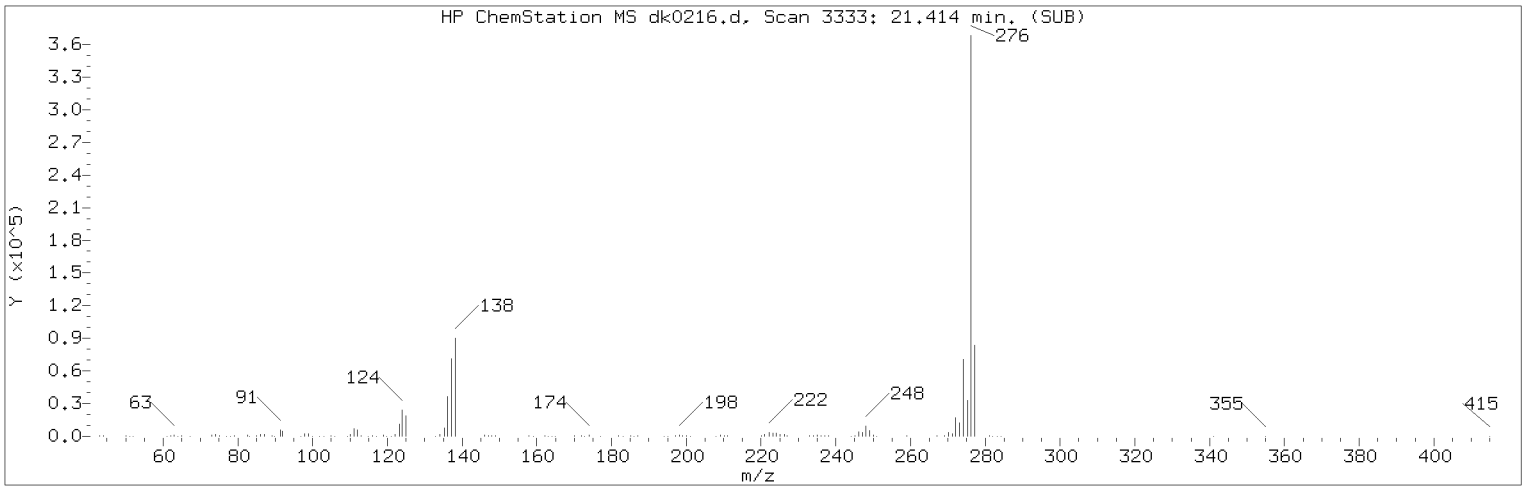
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 15:06
Date, time and analyst ID of latest file update: 04-Nov-2018 15:06 Automation

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

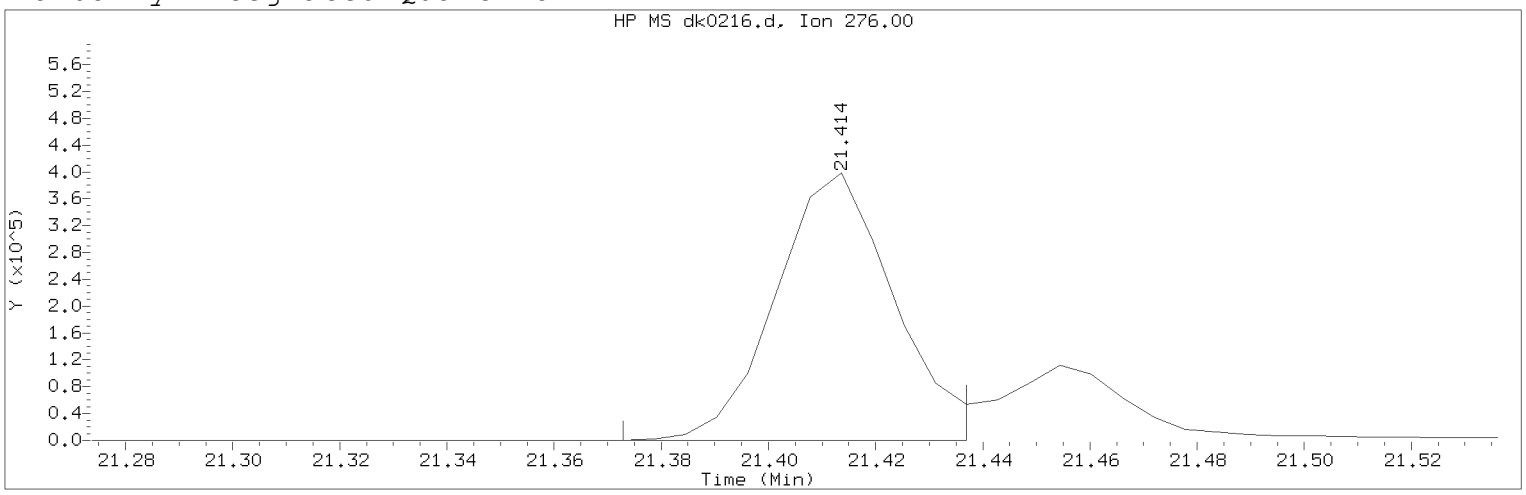
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1088		
Retention Time (minutes)	: 8.328		
Quant Ion	: 105.00		
Area	: 406493		
On-column Amount (ng/ul)	: 7.0817		
Integration start scan	: 1073	Integration stop scan:	1130
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user name: [illegible]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0216.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:37 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

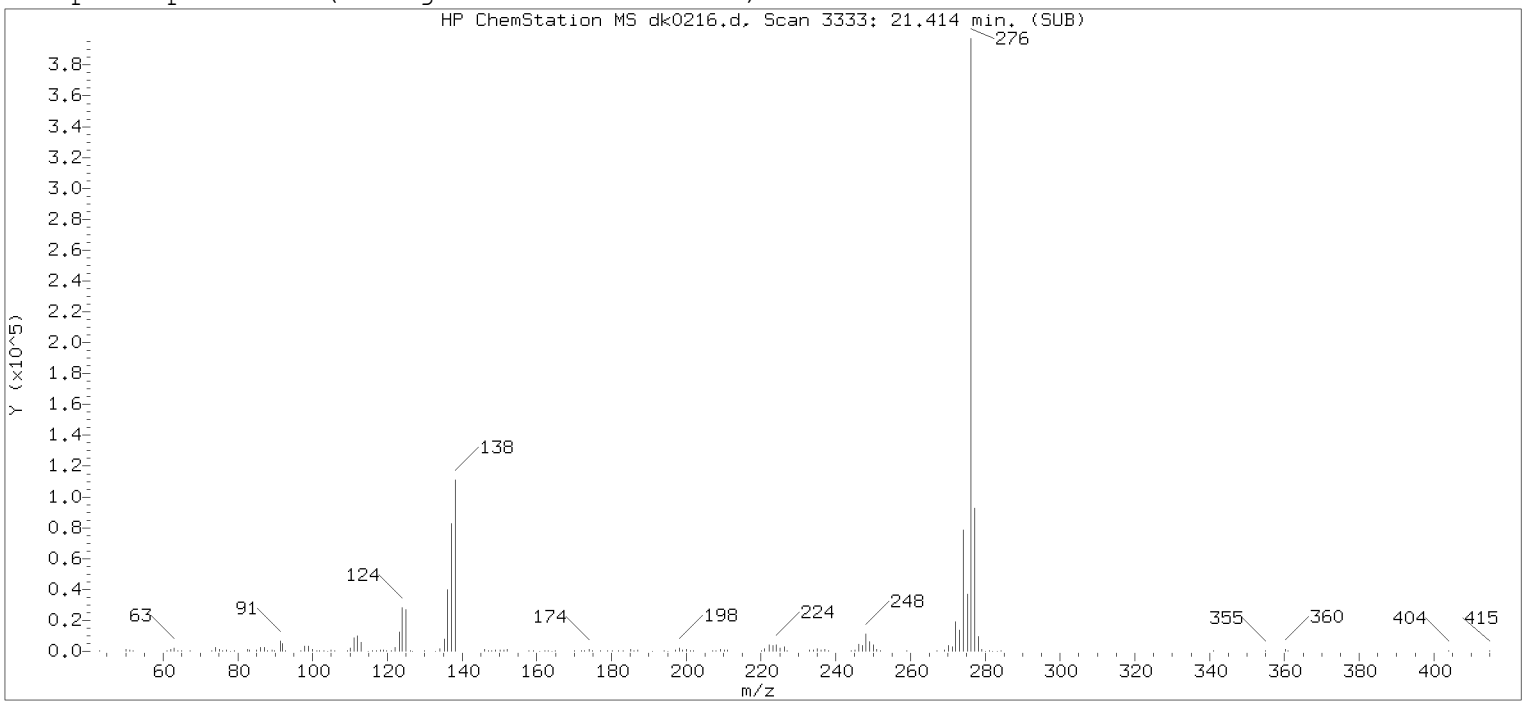
Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3333		
Retention Time (minutes)	: 21.414		
Quant Ion	: 276.00		
Area (flag)	: 610774M		
On-Column Amount (ng/ul)	: 3.7073		
Integration start scan	: 3325	Integration stop scan:	3336
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

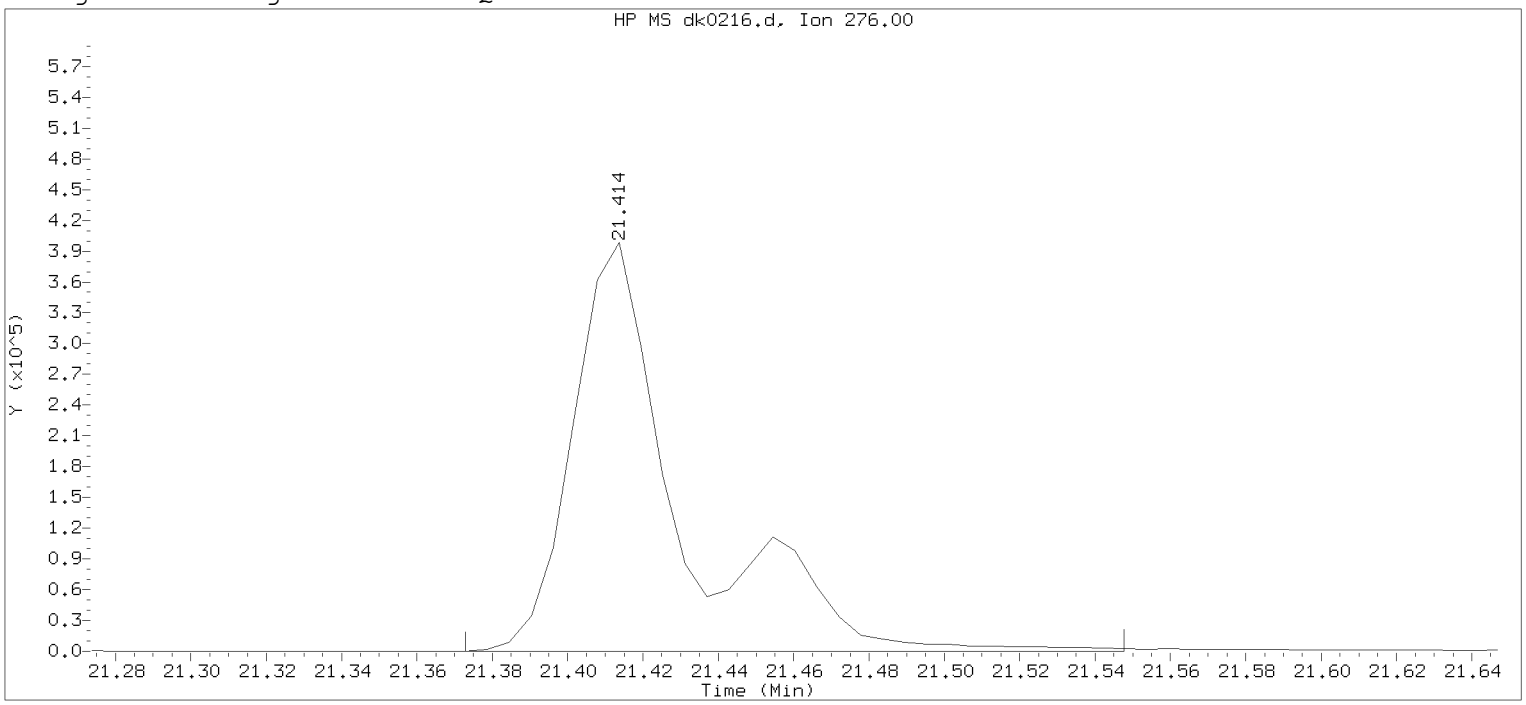
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



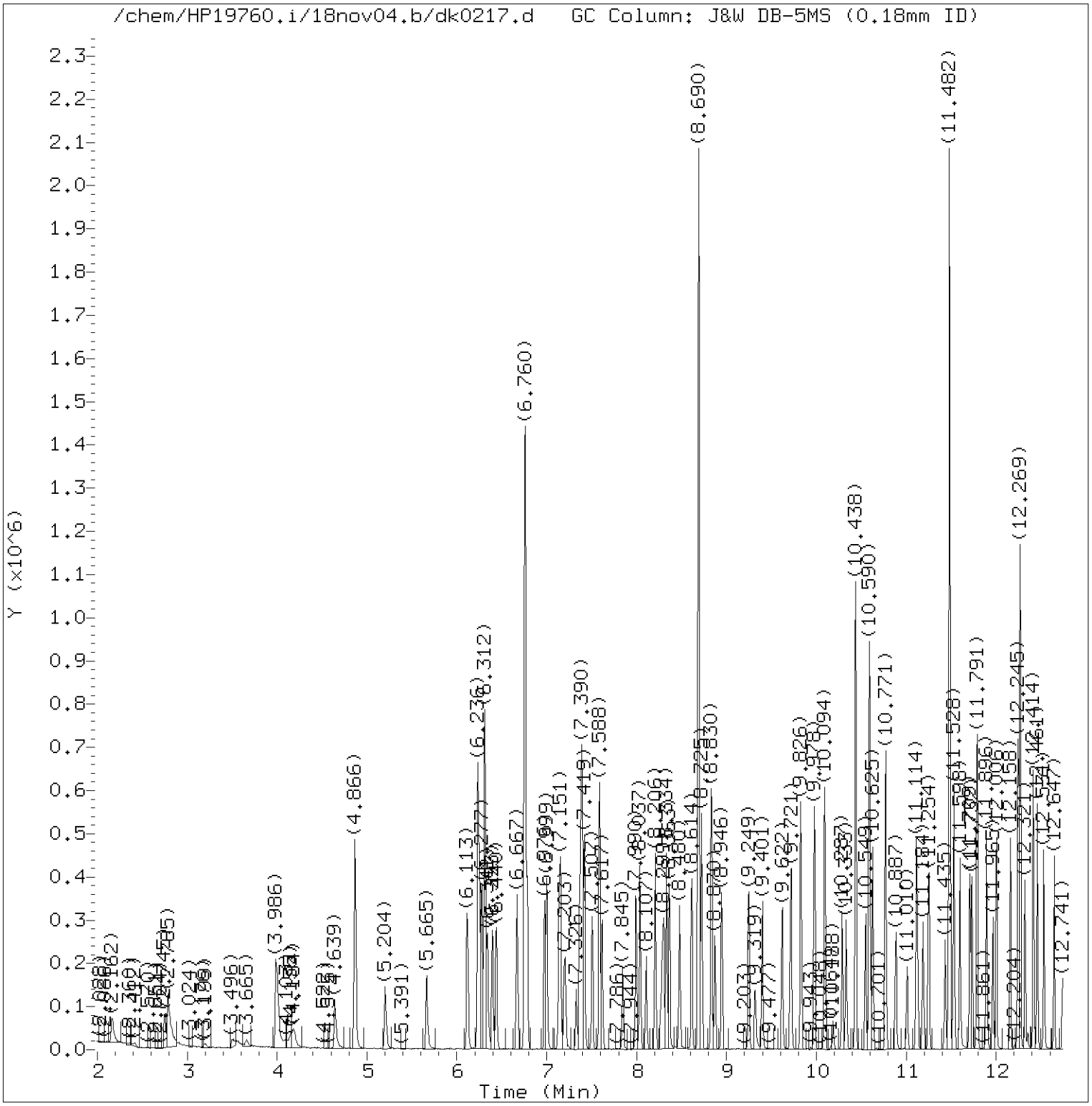
Data File: /chem/HP19760.i/18nov04.b/dk0216.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 14:37 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 15:06
Date, time and analyst ID of latest file update: 04-Nov-2018 15:06 Automation

Sample Name: SSTD3.75 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3333		
Retention Time (minutes)	: 21.414		
Quant Ion	: 276.00		
Area	: 797475		
On-column Amount (ng/ul)	: 4.8380		
Integration start scan	: 3325	Integration stop scan:	3355
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: Date: 11/04/2018



Total Ion Chromatogram (TIC)

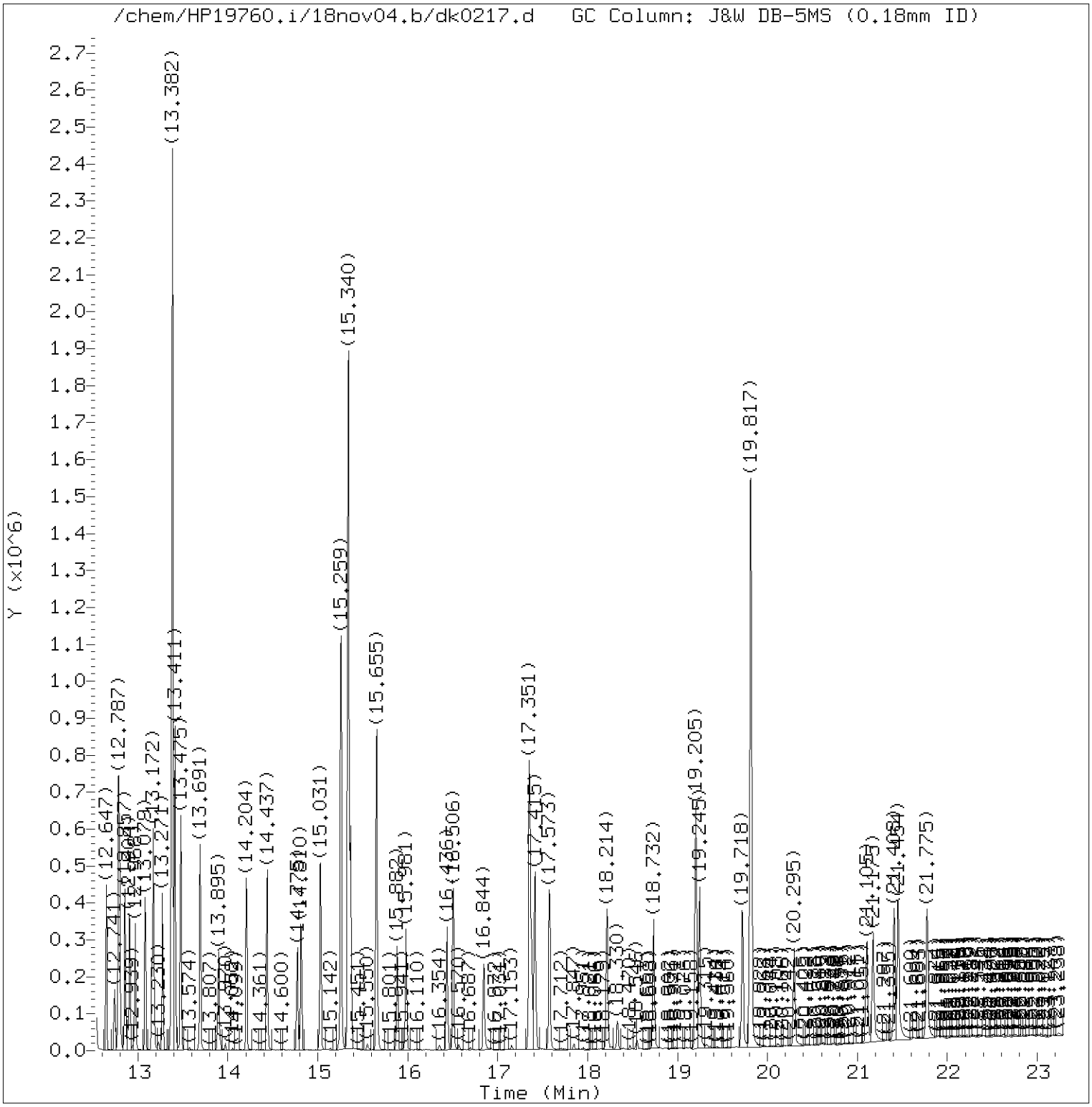
Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0217.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:06 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0217.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:06 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0217.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:06 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.167	88	58357M	1.224
4) N-Nitrosodimethylamine	(1)	2.745	74	84913	1.167
5) Pyridine	(1)	2.785	79	141054	1.157
7) 2-Picoline	(1)	3.980	93	144629	1.188
8) N-Nitrosomethylethylamine	(1)	4.178	88	64595	1.219
9) Methyl methanesulfonate	(1)	4.639	80	70039	1.201
11)$2-Fluorophenol	(1)	4.866	112	211425	2.294
13) N-Nitrosodiethylamine	(1)	5.204	102	53770	1.108
42) Total Cresols	(1)			220717	2.307
15) Ethyl methanesulfonate	(1)	5.665	109	56620	1.208
16) Benzaldehyde	(1)	6.113	77	99400	1.307
17)$Phenol-d6	(1)	6.236	99	295376	2.308
18) Phenol	(1)	6.253	94	173422	1.178
19) Aniline	(1)	6.277	93	207001	1.200
20) a-methylstyrene	(1)	6.358	118	10845	1.233
22) bis(2-Chloroethyl)ether	(1)	6.393	93	129052	1.190
23) 2-Chlorophenol	(1)	6.440	128	103314	1.181
24) 1,3-Dichlorobenzene	(1)	6.667	146	111573	1.217
25)*1,4-Dichlorobenzene-d4	(1)	6.760	152	282310	5.000
26) 1,4-Dichlorobenzene	(1)	6.784	146	108389	1.186
27) Benzyl alcohol	(1)	6.976	108	69486	1.153
28) 1,2-Dichlorobenzene	(1)	6.999	146	106000	1.218
30) Indene	(1)	7.133	115	113992	1.167
31) 2-Methylphenol	(1)	7.151	108	102108	1.138
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.203	45	150365	1.193
34) bis(2-Chloroisopropyl)ether	(1)	7.203	45	150365	1.193
35) N-Nitrosopyrrolidine	(1)	7.326	100	56885	1.125
36) Acetophenone	(1)	7.367	105	145436	1.165
97) Isosafrole	(3)			67844	1.112
38) N-Nitroso-di-n-propylamine	(1)	7.384	70	92367	1.186
37) 4-Methylphenol	(1)	7.390	108	118609	1.167
39) N-Nitrosomorpholine	(1)	7.396	56	70106	1.218
40) o-Toluidine	(1)	7.419	106	182204	1.183
43) Hexachloroethane	(1)	7.507	117	48828	1.149
44)$Nitrobenzene-d5	(2)	7.588	82	267283	2.319
45) Nitrobenzene	(2)	7.617	77	138057	1.189
48) N-Nitrosopiperidine	(2)	7.845	114	48841	1.083
50) Isophorone	(2)	7.990	82	220989	1.114
120) 2,4_2,6-Dinitrotoluenes	(3)			85925	2.199
51) 2-Nitrophenol	(2)	8.107	139	47157	1.091

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

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0217.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:06 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.206	107	110335	1.155
56) Benzoic acid	(2)	8.299	105	185081M	2.945
57) O,O,O-Triethylphosphorothioate	(2)	8.334	198	40603	1.153
55) bis(2-Chloroethoxy)methane	(2)	8.363	93	144337	1.176
60) 2,4-Dichlorophenol	(2)	8.480	162	73928	1.144
62) 1,2,4-Trichlorobenzene	(2)	8.614	180	83158	1.207
65)*Naphthalene-d8	(2)	8.690	136	1049459	5.000
66) Naphthalene	(2)	8.725	128	298454	1.197
146) Diallate trans/cis	(4)			97234	1.116
67) 4-Chloroaniline	(2)	8.830	127	114197	1.179
68) 2,6-Dichlorophenol	(2)	8.835	162	70903	1.140
69) Hexachloropropene	(2)	8.870	213	51041	1.181
71) Hexachlorobutadiene	(2)	8.946	225	44290	1.199
75) Quinoline	(2)	9.249	129	159810	1.140
76) Caprolactam	(2)	9.313	113	24014	0.941
77) N-Nitrosodi-n-butylamine	(2)	9.401	84	74944	1.025
80) 4-Chloro-3-methylphenol	(2)	9.622	107	86014	1.112
82) Safrole	(2)	9.721	162	63956	1.120
83) 2-Methylnaphthalene	(2)	9.826	142	174232	1.144
84) 1-Methylnaphthalene	(2)	9.978	142	169958	1.180
85) Hexachlorocyclopentadiene	(3)	10.094	237	41956	1.128
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.094	216	72627	1.173
88) cis-Isosafrole	(3)	10.188	162	11092	0.196
90) 2,4,6-Trichlorophenol	(3)	10.287	196	44788	1.098
92) 2,4,5-Trichlorophenol	(3)	10.333	196	48235	1.130
93)$2-Fluorobiphenyl	(3)	10.438	172	380081	2.418
99) Diphenyl ether	(3)	10.438	170	84193	1.191
94) trans-Isosafrole	(3)	10.549	162	56752	0.917
95) 1,1'-Biphenyl	(3)	10.590	154	202940	1.195
96) 2-Chloronaphthalene	(3)	10.596	162	167064	1.212
98) 1-Chloronaphthalene	(3)	10.625	162	146818	1.202
100) 2-Nitroaniline	(3)	10.776	138	49014	1.073
104) 1,4-Naphthoquinone	(3)	10.887	158	51354	1.015
105) 1,4-Dinitrobenzene	(3)	11.010	168	25768	1.084
106) Dimethylphthalate	(3)	11.114	163	164292	1.163
107) 1,3-Dinitrobenzene	(3)	11.126	168	28679	1.089
108) 2,6-Dinitrotoluene	(3)	11.184	165	37522	1.113
109) Acenaphthylene	(3)	11.254	152	218445	1.154
112) 3-Nitroaniline	(3)	11.435	138	43582	1.106
113)*Acenaphthene-d10	(3)	11.482	164	468772	5.000

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0217.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:06 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.528	153	161076	1.175
115) 2,4-Dinitrophenol	(3)	11.598	184	59691	2.631
116) 4-Nitrophenol	(3)	11.709	109	58018	2.018
117) Pentachlorobenzene	(3)	11.732	250	60494	1.226
119) Dibenzofuran	(3)	11.785	168	230361	1.216
118) 2,4-Dinitrotoluene	(3)	11.791	165	48403	1.089
121) 1-Naphthylamine	(3)	11.896	143	156346	1.089
122) 2,3,4,6-Tetrachlorophenol	(3)	11.965	232	34116	1.076
123) 2-Naphthylamine	(3)	12.006	143	163266	1.125
124) Diethylphthalate	(3)	12.158	149	160427	1.122
126) Fluorene	(3)	12.245	166	175947	1.205
125) Thionazin	(3)	12.257	107	34575	1.112
128) 5-Nitro-o-toluidine	(3)	12.269	152	50917	1.119
129) 4-Nitroaniline	(3)	12.274	138	47779	1.108
127) 4-Chlorophenyl-phenylether	(3)	12.274	204	84990	1.213
130) 4,6-Dinitro-2-methylphenol	(4)	12.321	198	44518	1.659
131) N-Nitrosodiphenylamine	(4)	12.414	169	141345	1.172
132) NDPA as diphenylamine	(4)	12.414	169	141345	1.172
134) 1,2-Diphenylhydrazine	(4)	12.461	77	232276	1.176
135)$2,4,6-Tribromophenol	(3)	12.531	330	34067	2.136
137) Tetraethyldithiopyrophosphate	(4)	12.647	97	30689	1.080
139) 1,3,5-Trinitrobenzene	(4)	12.741	213	14208	0.824
140) Diallate (peak 1)	(4)	12.781	86	83980	0.928
141) Phorate	(4)	12.787	75	127723	1.109
142) Phenacetin	(4)	12.799	108	88157	1.018
143) 4-Bromophenyl-phenylether	(4)	12.857	248	44201	1.246
144) Diallate (peak 2)	(4)	12.886	86	13254	0.188
145) Hexachlorobenzene	(4)	12.910	284	42502	1.193
147) Dimethoate	(4)	12.968	87	75501	1.026
148) Atrazine	(4)	13.085	200	39429	1.130
149) Pentachlorophenol	(4)	13.154	266	21106	0.886
150) 4-Aminobiphenyl	(4)	13.166	169	115795	1.108
151) Pentachloronitrobenzene	(4)	13.172	237	18423	1.112
152) Pronamide	(4)	13.271	173	63342	1.025
153)*Phenanthrene-d10	(4)	13.382	188	855772	5.000
154) Dinoseb	(4)	13.411	211	27774	0.718
155) Phenanthrene	(4)	13.411	178	248306	1.201
157) Anthracene	(4)	13.475	178	235989	1.156
163) Carbazole	(4)	13.691	167	223819	1.115
164) Methyl parathion	(4)	13.895	109	52171	0.936

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$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0217.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:06 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

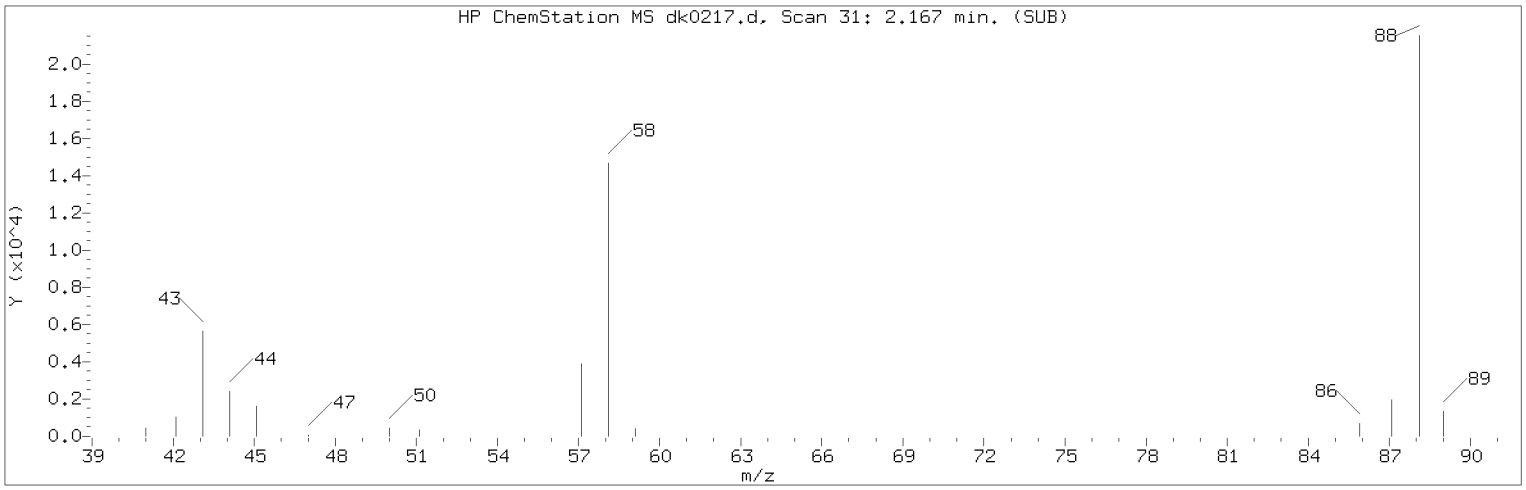
Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.204	149	249513	1.022
168) 4-Nitroquinoline-1-oxide	(4)	14.437	190	14042	0.552
167) Parathion	(4)	14.437	109	29482	0.833
169) Octachlorostyrene	(4)	14.775	308	15035	1.084
171) Isodrin	(4)	14.816	193	26363	1.103
222) Total PAHs	(6)			3928058	22.172
173) Fluoranthene	(4)	15.031	202	247790	1.123
174) Benzidine	(5)	15.259	184	505107	3.104
175)*Pyrene-d10	(5)	15.340	212	812866	5.000
177) Pyrene	(5)	15.364	202	281240	1.204
179)$Terphenyl-d14	(5)	15.655	244	308777	2.296
182) p-Dimethylaminoazobenzene	(5)	15.882	225	32843	0.888
185) Chlorobenzilate	(5)	15.981	139	77112	1.054
187) 3,3'-Dimethylbenzidine	(5)	16.436	212	132566	0.950
188) Butylbenzylphthalate	(5)	16.506	149	118317	1.009
191) 2-Acetylaminofluorene	(5)	16.844	181	69397	0.734
193) 3,3'-Dichlorobenzidine	(5)	17.351	252	81958	1.024
195) Benzo(a)anthracene	(5)	17.351	228	220792	1.121
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.374	231	43677	0.957
196) Chrysene	(5)	17.415	228	234771	1.154
199) bis(2-Ethylhexyl)phthalate	(5)	17.578	149	153580	0.935
203) 6-Methylchrysene	(5)	18.214	242	142566	1.023
205) Di-n-octylphthalate	(6)	18.732	149	228748	0.872
206) Benzo(b)fluoranthene	(6)	19.199	252	220017	1.157
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.205	256	88801	0.980
208) Benzo(k)fluoranthene	(6)	19.245	252	235674	1.193
211) Benzo(a)pyrene	(6)	19.723	252	197885	1.129
213)*Perylene-d12	(6)	19.817	264	772686	5.000
215) 3-Methylcholanthrene	(6)	20.300	268	88550	1.019
217) Dibenz(a,h)acridine	(6)	21.105	279	146864	1.068
218) Dibenz(a,j)acridine	(6)	21.175	279	169167	1.127
219) Indeno(1,2,3-cd)pyrene	(6)	21.408	276	184761M	1.179
220) Dibenz(a,h)anthracene	(6)	21.454	278	213177	1.238
221) Benzo(g,h,i)perylene	(6)	21.775	276	209544	1.227

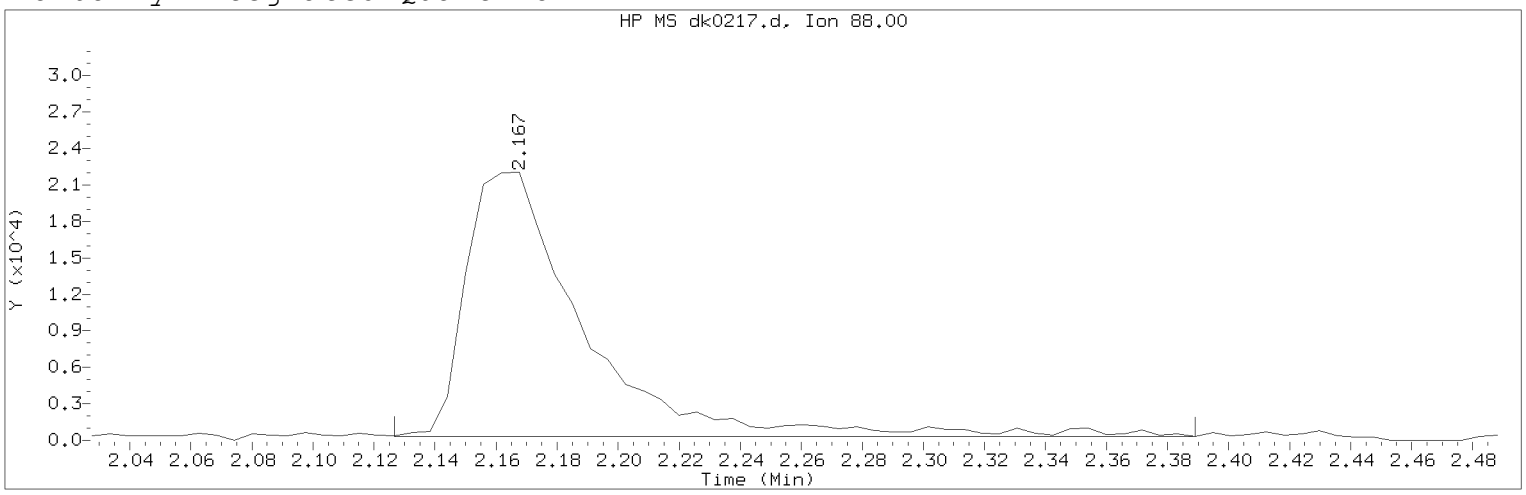
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0217.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:06 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

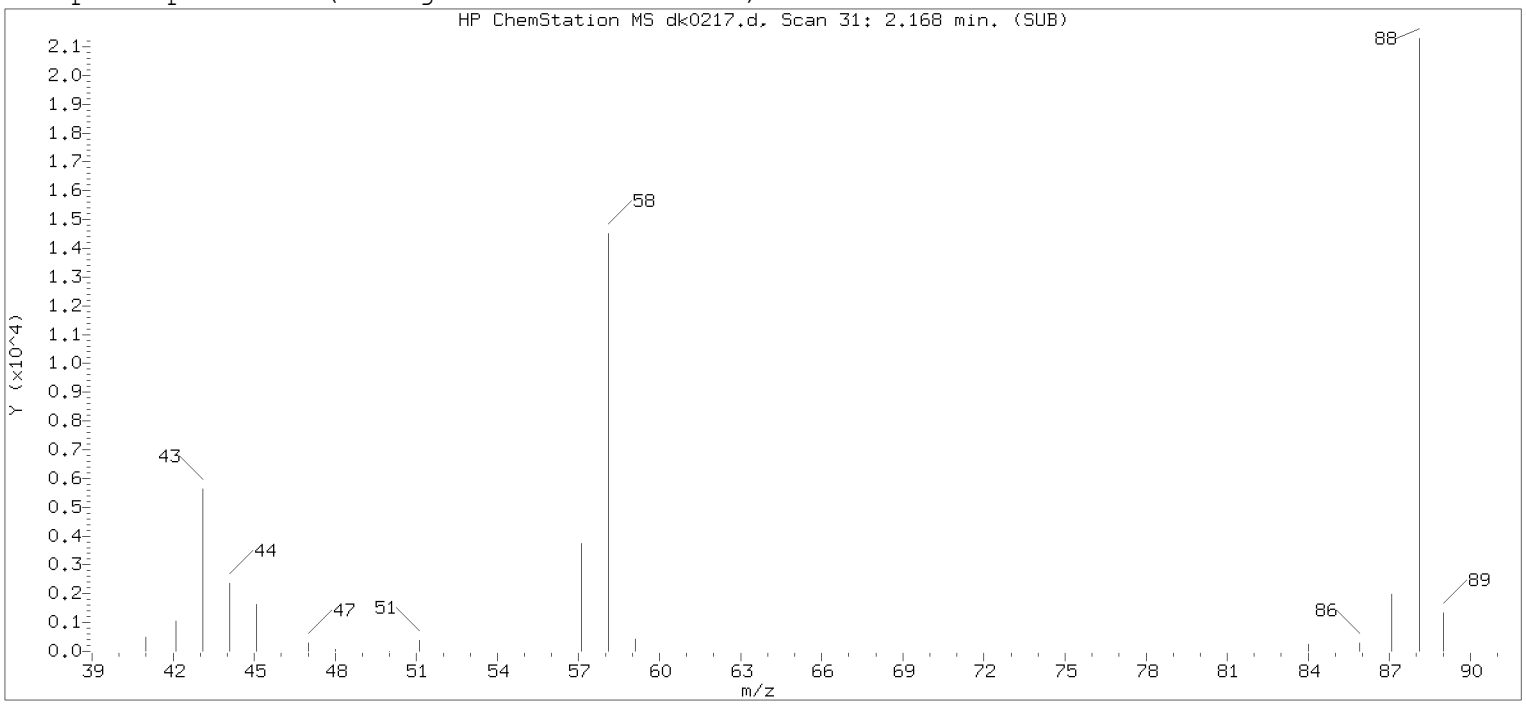
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 31		
Retention Time (minutes)	: 2.167		
Quant Ion	: 88.00		
Area (flag)	: 58357M		
On-Column Amount (ng/ul)	: 1.2241		
Integration start scan	: 23	Integration stop scan:	68
Y at integration start	: 328	Y at integration end:	328

Reason for manual integration: improper integration

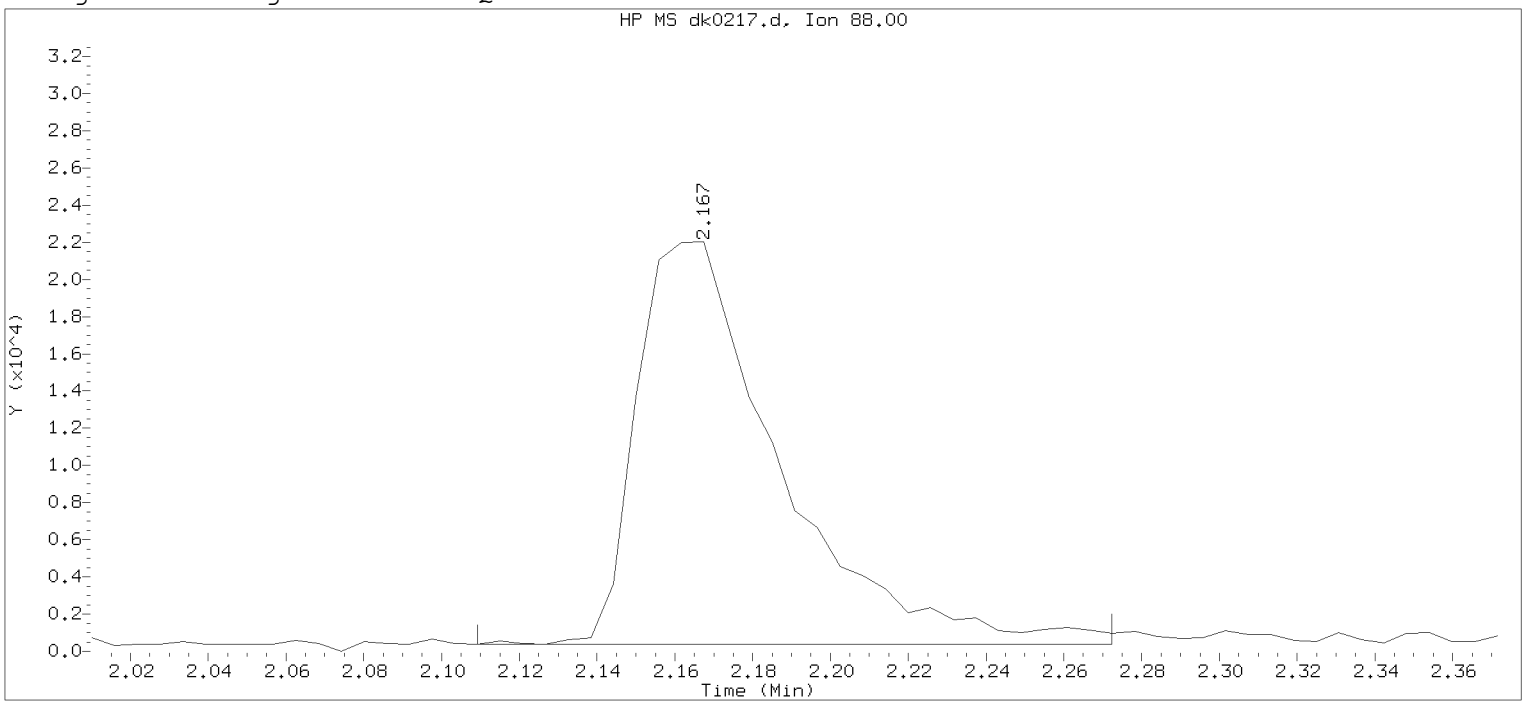
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0217.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:06 Analyst ID: em10340

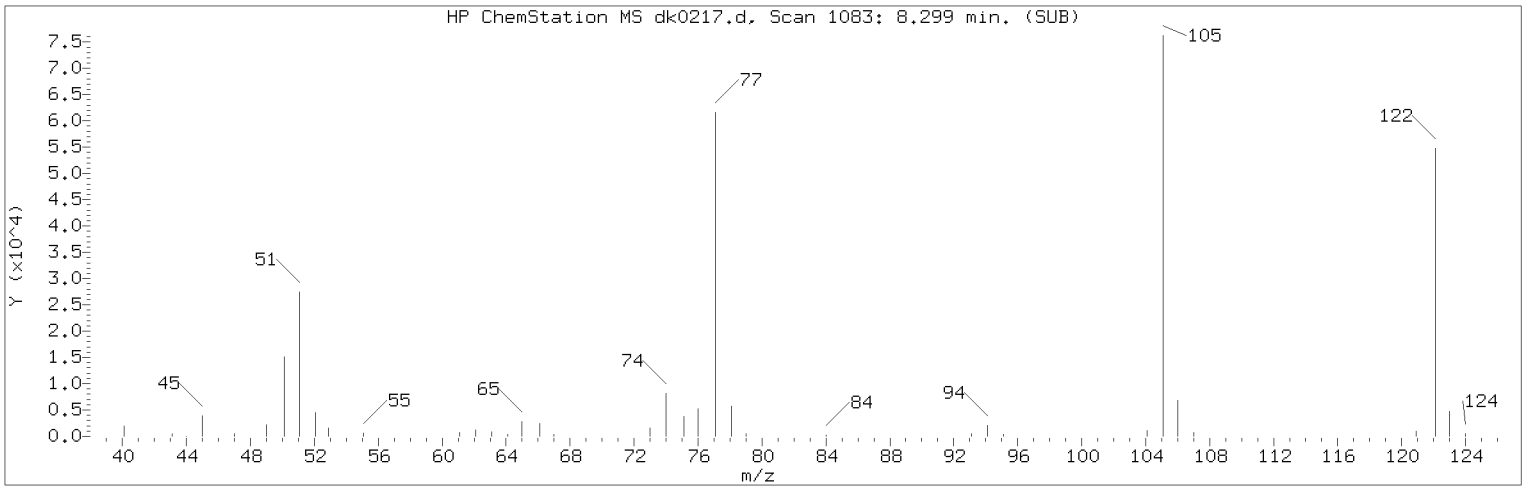
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 15:34
Date, time and analyst ID of latest file update: 04-Nov-2018 15:34 Automation

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

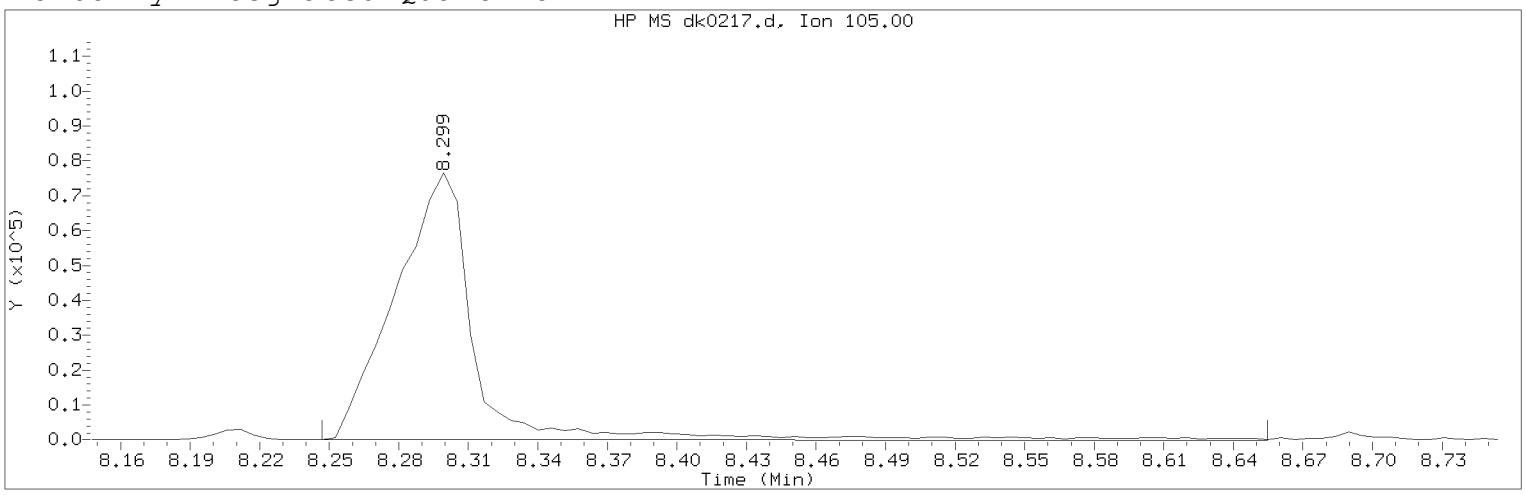
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 31		
Retention Time (minutes)	: 2.167		
Quant Ion	: 88.00		
Area	: 55210		
On-column Amount (ng/ul)	: 1.1813		
Integration start scan	: 20	Integration stop scan:	48
Y at integration start	: 370	Y at integration end:	370

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user name: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0217.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:06 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

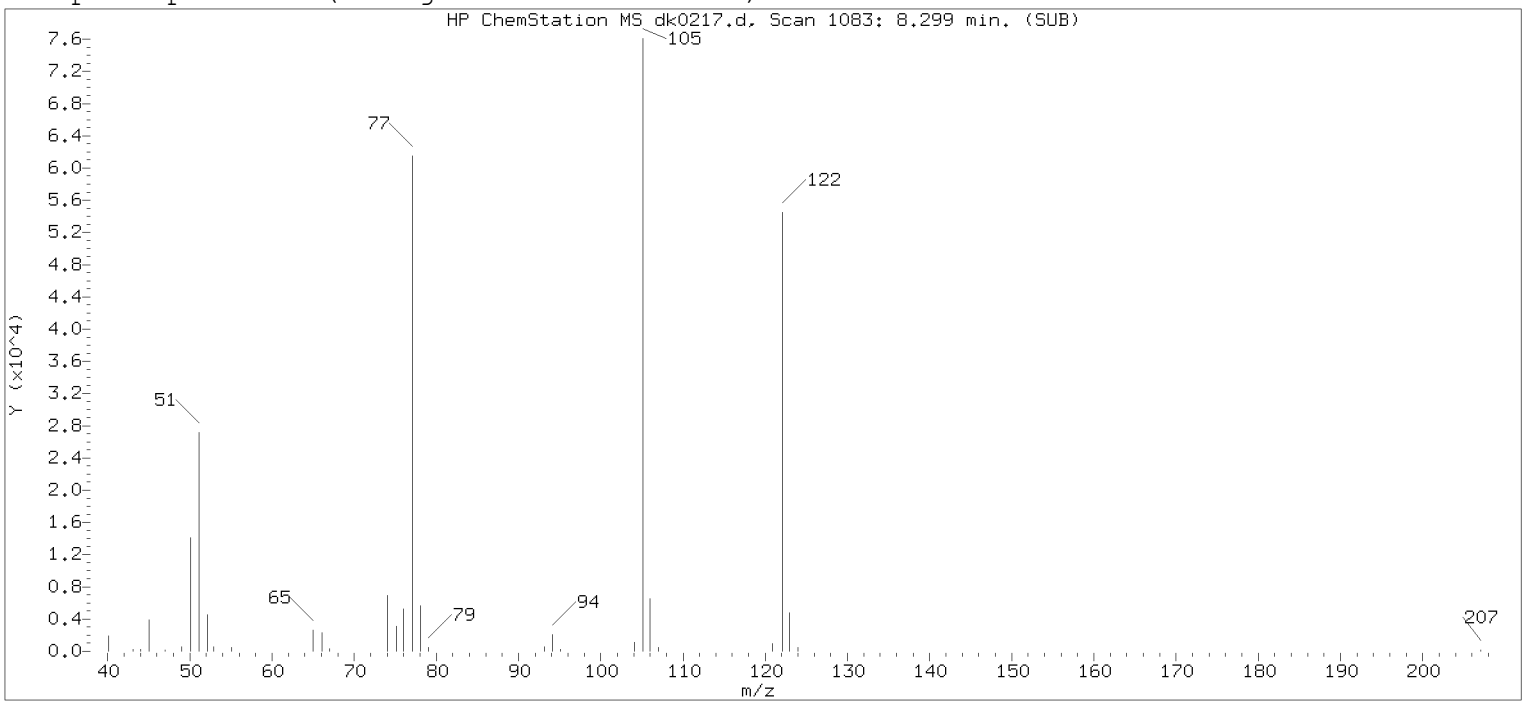
Compound Number : 56
Compound Name : Benzoic acid
Scan Number : 1083
Retention Time (minutes) : 8.299
Quant Ion : 105.00
Area (flag) : 185081M
On-Column Amount (ng/ul) : 2.9454
Integration start scan : 1073 Integration stop scan: 1143
Y at integration start : 9 Y at integration end: -114

Reason for manual integration: improper integration

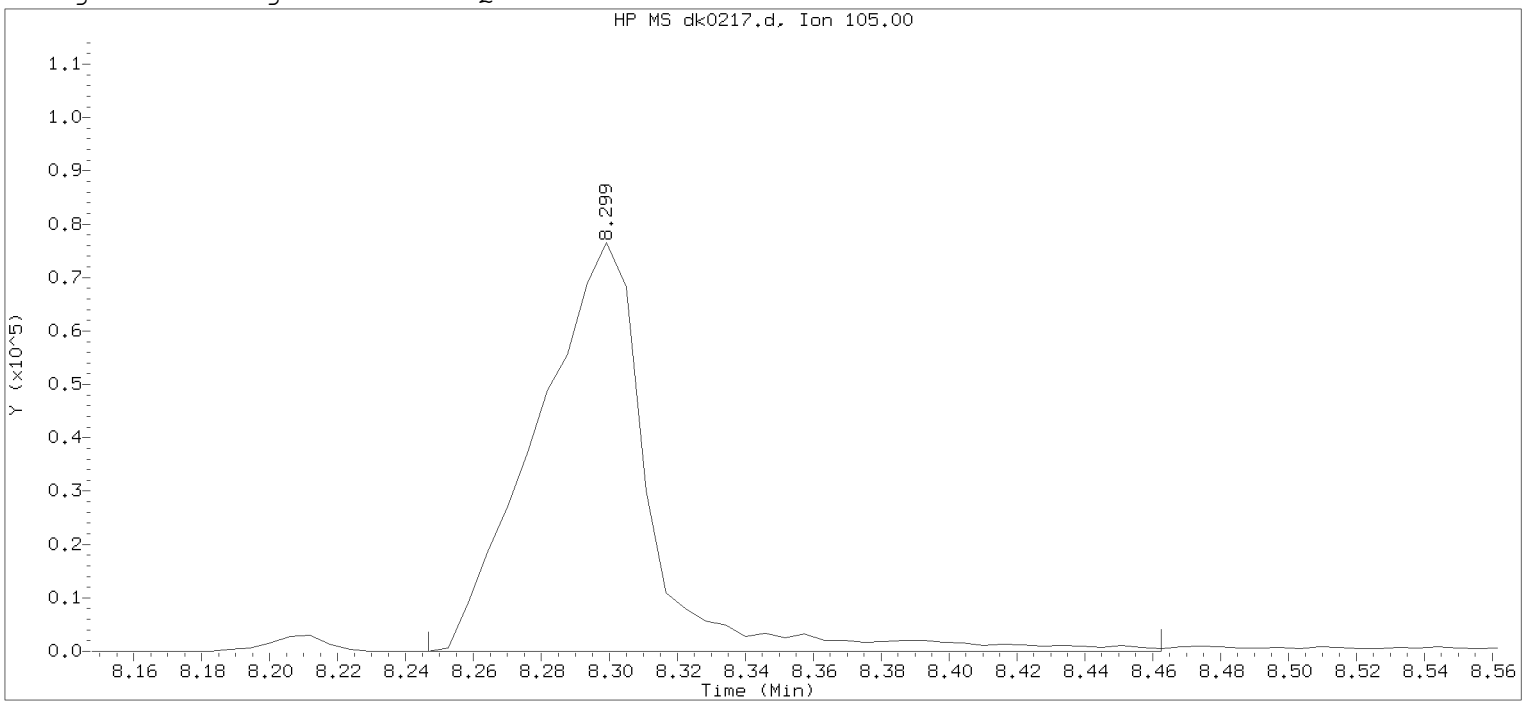
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0217.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:06 Analyst ID: em10340

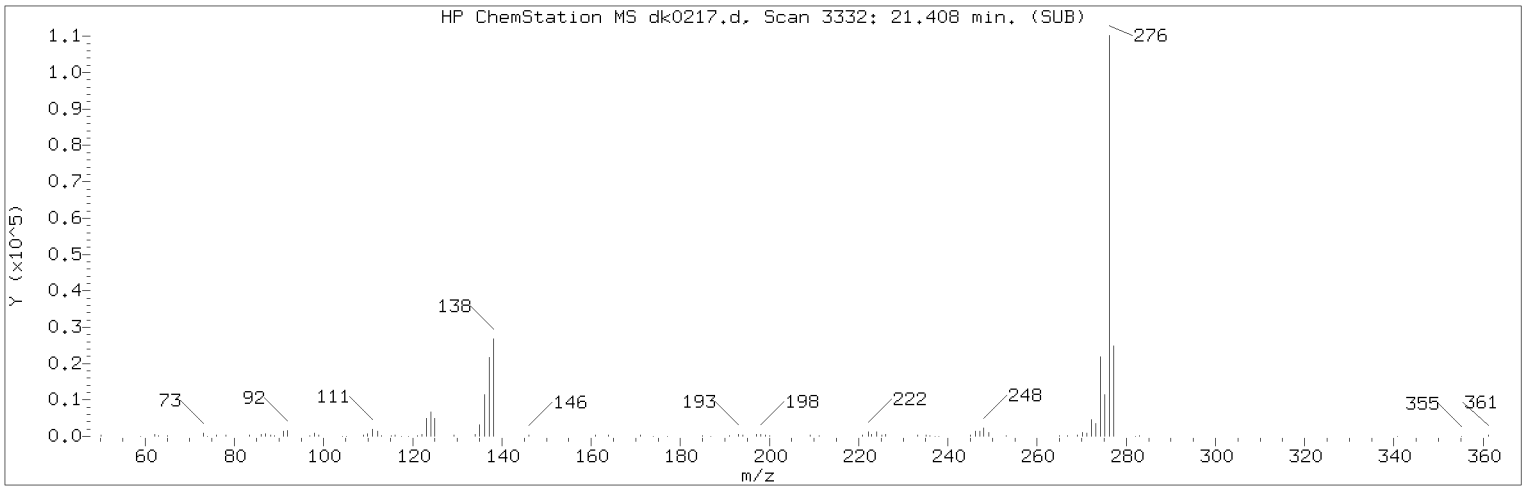
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 15:34
Date, time and analyst ID of latest file update: 04-Nov-2018 15:34 Automation

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

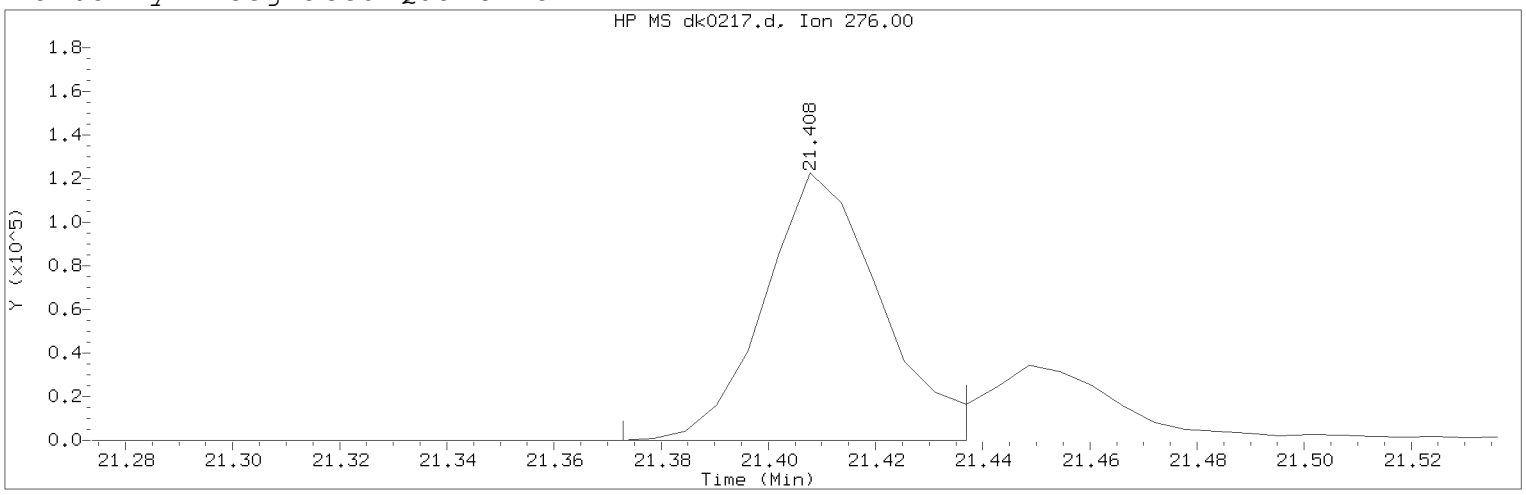
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1083		
Retention Time (minutes)	: 8.299		
Quant Ion	: 105.00		
Area	: 177150		
On-column Amount (ng/ul)	: 2.8855		
Integration start scan	: 1073	Integration stop scan:	1110
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0217.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:06 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

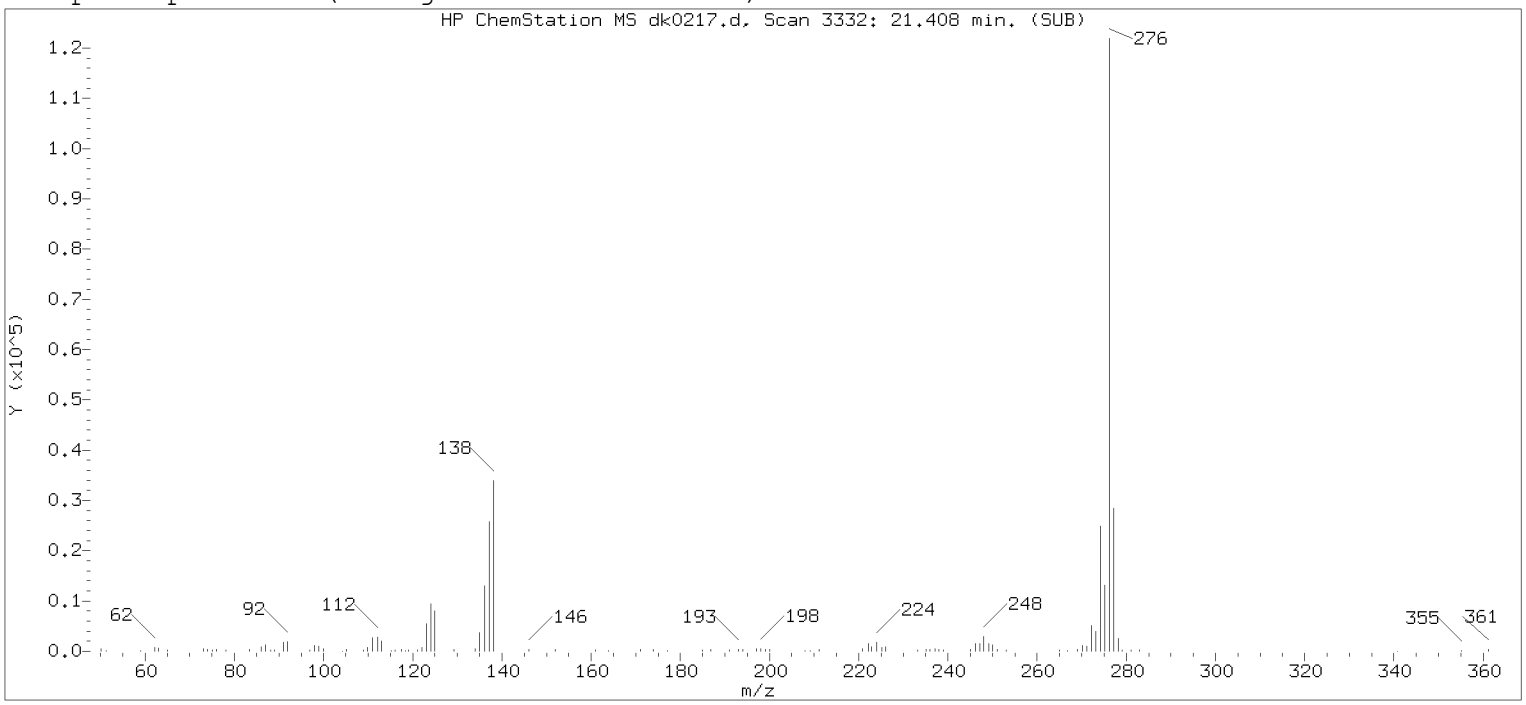
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3332
Retention Time (minutes) : 21.408
Quant Ion : 276.00
Area (flag) : 184761M
On-Column Amount (ng/ul) : 1.1789
Integration start scan : 3325 Integration stop scan: 3336
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

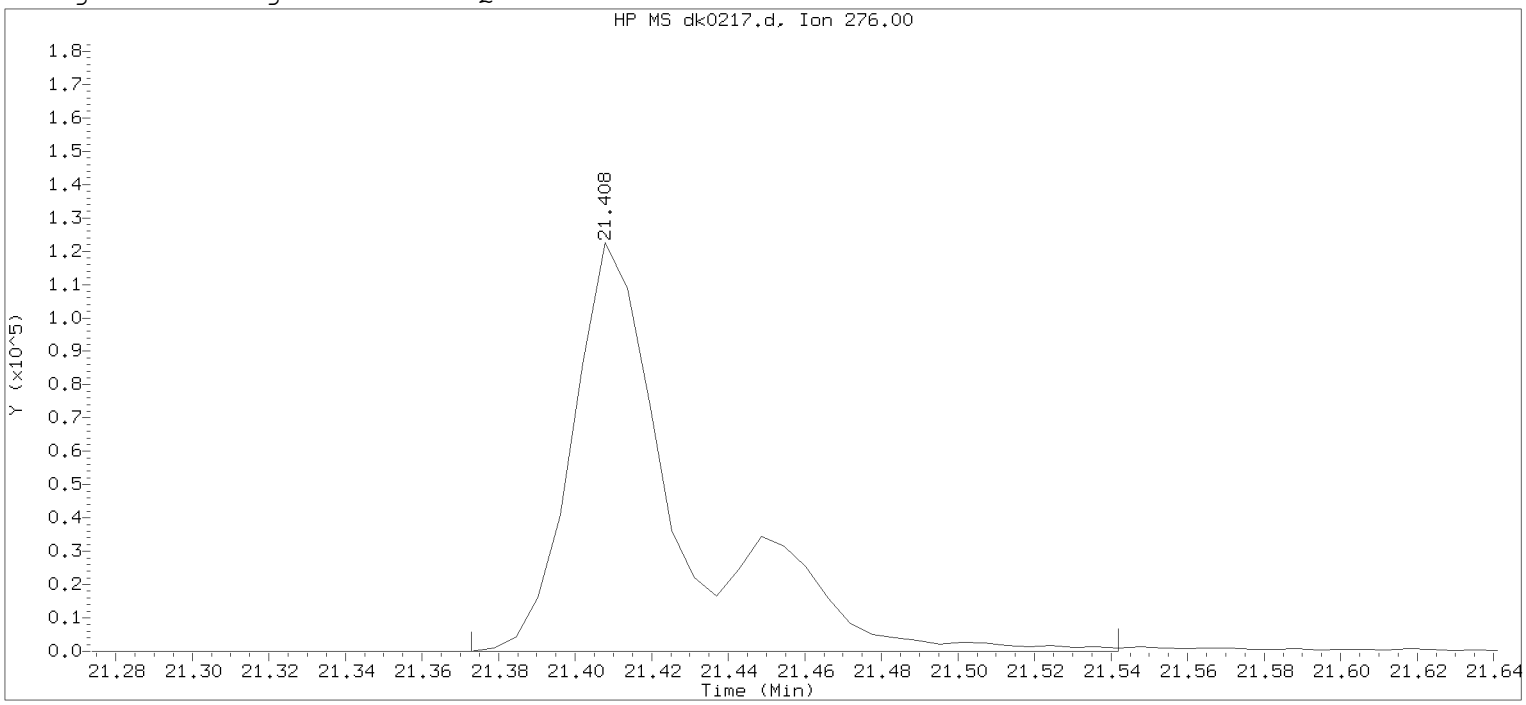
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



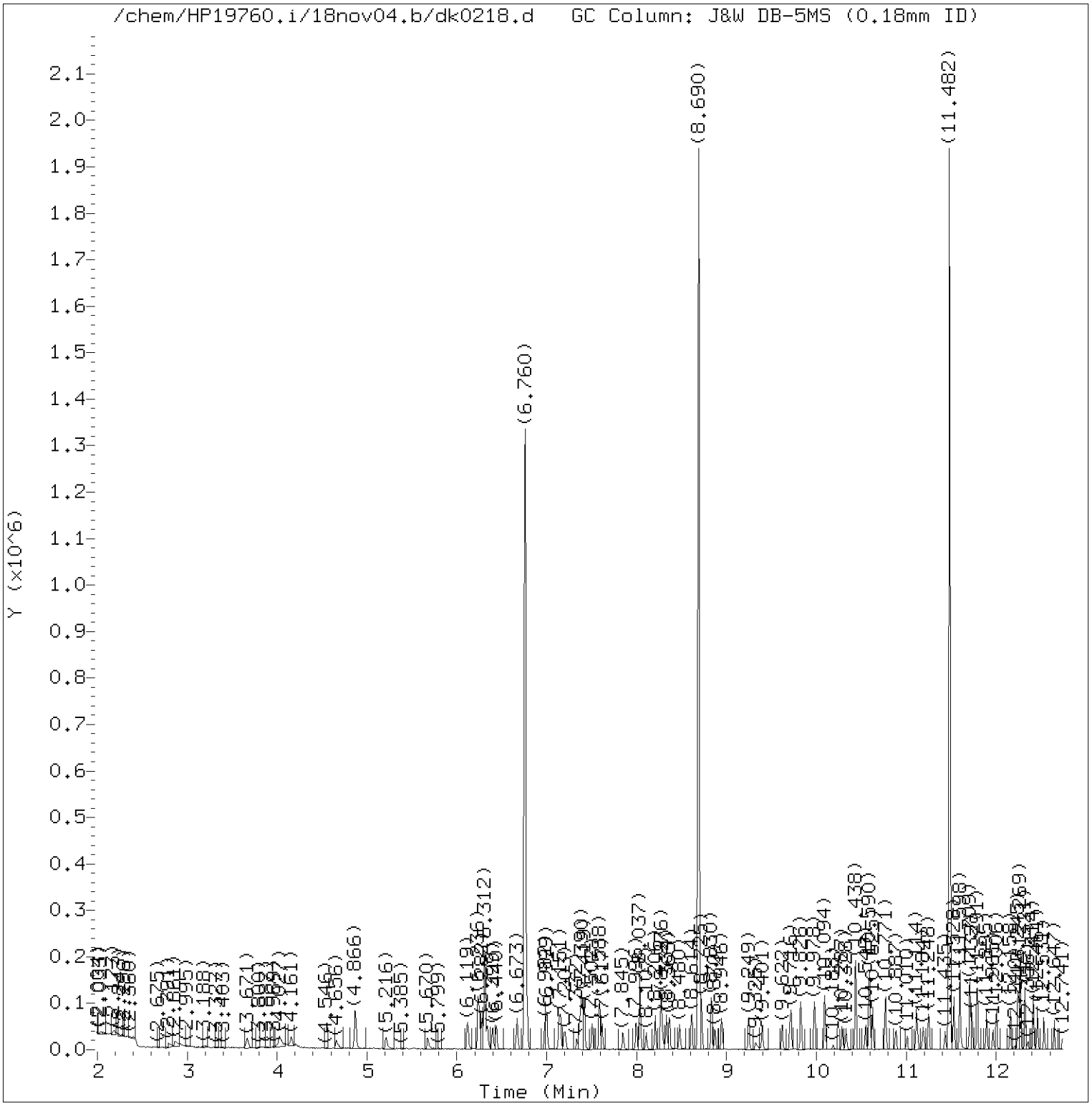
Data File: /chem/HP19760.i/18nov04.b/dk0217.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:06 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 15:34
Date, time and analyst ID of latest file update: 04-Nov-2018 15:34 Automation

Sample Name: SSTD1.25 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3332		
Retention Time (minutes)	: 21.408		
Quant Ion	: 276.00		
Area	: 243311		
On-column Amount (ng/ul)	: 1.4143		
Integration start scan	: 3325	Integration stop scan:	3354
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: ashley.transue



Total Ion Chromatogram (TIC)

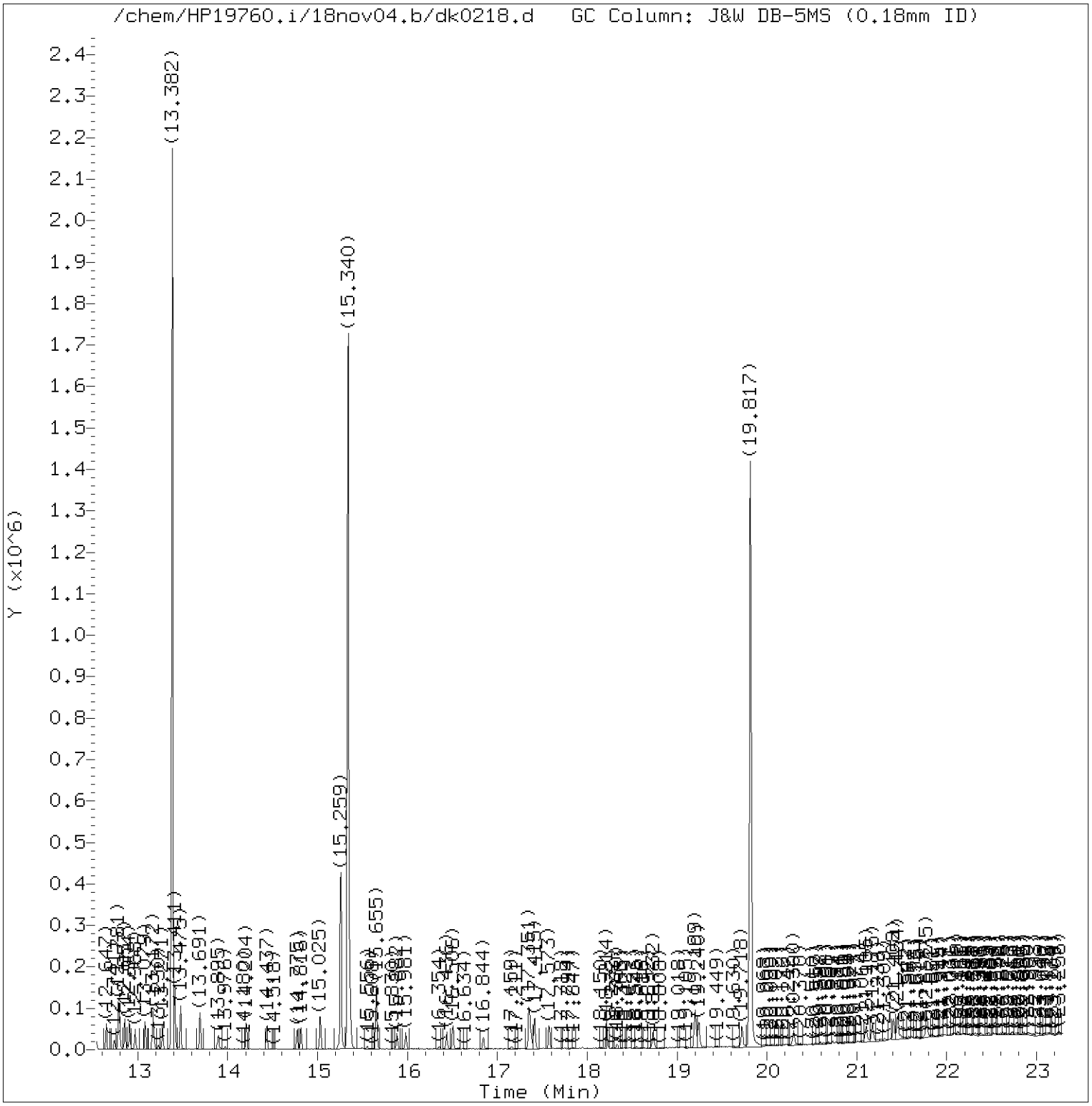
Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.185	88	23550M	0.531
4) N-Nitrosodimethylamine	(1)	2.797	74	14301M	0.211
5) Pyridine	(1)	2.873	79	29403M	0.259
7) 2-Picoline	(1)	4.027	93	25733	0.227
8) N-Nitrosomethylethylamine	(1)	4.219	88	11475M	0.233
9) Methyl methanesulfonate	(1)	4.656	80	11762	0.217
11)$2-Fluorophenol	(1)	4.872	112	37574	0.446
13) N-Nitrosodiethylamine	(1)	5.210	102	9091	0.207
42) Total Cresols	(1)			37223	0.428
15) Ethyl methanesulfonate	(1)	5.670	109	8541	0.202
16) Benzaldehyde	(1)	6.119	77	19593	0.277
17)$Phenol-d6	(1)	6.236	99	50301	0.432
18) Phenol	(1)	6.253	94	31842	0.235
19) Aniline	(1)	6.282	93	38328	0.240
20) a-methylstyrene	(1)	6.352	118	2115	0.259
22) bis(2-Chloroethyl)ether	(1)	6.399	93	24427	0.243
23) 2-Chlorophenol	(1)	6.440	128	17226	0.216
24) 1,3-Dichlorobenzene	(1)	6.667	146	20049	0.237
25)*1,4-Dichlorobenzene-d4	(1)	6.760	152	262568	5.000
26) 1,4-Dichlorobenzene	(1)	6.784	146	20348	0.241
27) Benzyl alcohol	(1)	6.982	108	12943	0.231
28) 1,2-Dichlorobenzene	(1)	7.005	146	19277	0.240
30) Indene	(1)	7.133	115	21353	0.235
31) 2-Methylphenol	(1)	7.151	108	17274	0.212
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.203	45	27199	0.235
34) bis(2-Chloroisopropyl)ether	(1)	7.203	45	27199	0.235
35) N-Nitrosopyrrolidine	(1)	7.332	100	9121	0.200
36) Acetophenone	(1)	7.372	105	26037	0.228
97) Isosafrole	(3)			11262	0.203
38) N-Nitroso-di-n-propylamine	(1)	7.390	70	16649	0.233
37) 4-Methylphenol	(1)	7.390	108	19949	0.216
39) N-Nitrosomorpholine	(1)	7.402	56	12426	0.232
40) o-Toluidine	(1)	7.419	106	33673	0.237
43) Hexachloroethane	(1)	7.507	117	9611	0.243
44)$Nitrobenzene-d5	(2)	7.588	82	46931	0.446
45) Nitrobenzene	(2)	7.617	77	24263	0.228
48) N-Nitrosopiperidine	(2)	7.850	114	9099	0.221
50) Isophorone	(2)	7.990	82	37198	0.208
120) 2,4_2,6-Dinitrotoluenes	(3)			13477	0.393
51) 2-Nitrophenol	(2)	8.107	139	7771	0.194

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

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.206	107	18242	0.211
56) Benzoic acid	(2)	8.276	105	54833M	0.939
57) O,O,O-Triethylphosphorothioate	(2)	8.334	198	7165	0.219
55) bis(2-Chloroethoxy)methane	(2)	8.363	93	26510	0.235
60) 2,4-Dichlorophenol	(2)	8.480	162	11885	0.204
62) 1,2,4-Trichlorobenzene	(2)	8.614	180	15557	0.244
65)*Naphthalene-d8	(2)	8.690	136	974943	5.000
66) Naphthalene	(2)	8.725	128	55704	0.242
146) Diallate trans/cis	(4)			15288	0.196
67) 4-Chloroaniline	(2)	8.830	127	19086	0.217
68) 2,6-Dichlorophenol	(2)	8.835	162	12765	0.225
69) Hexachloropropene	(2)	8.870	213	8904	0.222
71) Hexachlorobutadiene	(2)	8.946	225	8658	0.252
75) Quinoline	(2)	9.249	129	30109	0.231
76) Caprolactam	(2)	9.325	113	3268	0.138
77) N-Nitrosodi-n-butylamine	(2)	9.401	84	12749	0.188
80) 4-Chloro-3-methylphenol	(2)	9.622	107	12958	0.188
82) Safrole	(2)	9.721	162	10473	0.197
83) 2-Methylnaphthalene	(2)	9.826	142	32279	0.231
84) 1-Methylnaphthalene	(2)	9.978	142	30960	0.234
85) Hexachlorocyclopentadiene	(3)	10.094	237	7360	0.218
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.094	216	14551	0.258
88) cis-Isosafrole	(3)	10.188	162	1447	0.028
90) 2,4,6-Trichlorophenol	(3)	10.287	196	6971	0.195
92) 2,4,5-Trichlorophenol	(3)	10.328	196	7489	0.200
93)$2-Fluorobiphenyl	(3)	10.438	172	67109	0.474
99) Diphenyl ether	(3)	10.438	170	15738	0.246
94) trans-Isosafrole	(3)	10.549	162	9815	0.175
95) 1,1'-Biphenyl	(3)	10.584	154	36147	0.236
96) 2-Chloronaphthalene	(3)	10.596	162	29845	0.240
98) 1-Chloronaphthalene	(3)	10.625	162	26777	0.243
100) 2-Nitroaniline	(3)	10.771	138	7308	0.184
104) 1,4-Naphthoquinone	(3)	10.887	158	7886	0.172
105) 1,4-Dinitrobenzene	(3)	11.010	168	3470	0.161
106) Dimethylphthalate	(3)	11.114	163	29093	0.227
107) 1,3-Dinitrobenzene	(3)	11.126	168	4100	0.171
108) 2,6-Dinitrotoluene	(3)	11.184	165	6033	0.203
109) Acenaphthylene	(3)	11.248	152	37148	0.220
112) 3-Nitroaniline	(3)	11.435	138	6201	0.181
113)*Acenaphthene-d10	(3)	11.482	164	425772	5.000

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

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.528	153	30286	0.244
115) 2,4-Dinitrophenol	(3)	11.598	184	23093	1.121
116) 4-Nitrophenol	(3)	11.709	109	21350	0.817
117) Pentachlorobenzene	(3)	11.732	250	10845	0.243
119) Dibenzofuran	(3)	11.785	168	43253	0.251
118) 2,4-Dinitrotoluene	(3)	11.791	165	7444	0.184
121) 1-Naphthylamine	(3)	11.895	143	27064	0.208
122) 2,3,4,6-Tetrachlorophenol	(3)	11.965	232	5144	0.179
123) 2-Naphthylamine	(3)	12.006	143	26396	0.200
124) Diethylphthalate	(3)	12.158	149	26525	0.204
126) Fluorene	(3)	12.245	166	28834	0.221
125) Thionazin	(3)	12.257	107	5326	0.189
128) 5-Nitro-o-toluidine	(3)	12.269	152	7579	0.191
127) 4-Chlorophenyl-phenylether	(3)	12.269	204	14228	0.227
129) 4-Nitroaniline	(3)	12.274	138	7009	0.187
130) 4,6-Dinitro-2-methylphenol	(4)	12.321	198	14493	0.605
131) N-Nitrosodiphenylamine	(4)	12.414	169	22722	0.216
132) NDPA as diphenylamine	(4)	12.414	169	22722	0.216
134) 1,2-Diphenylhydrazine	(4)	12.461	77	36889	0.214
135)$2,4,6-Tribromophenol	(3)	12.537	330	5616	0.401
137) Tetraethyldithiopyrophosphate	(4)	12.647	97	4883	0.192
139) 1,3,5-Trinitrobenzene	(4)	12.741	213	1737	0.113
140) Diallate (peak 1)	(4)	12.781	86	12949	0.160
141) Phorate	(4)	12.787	75	19612	0.197
142) Phenacetin	(4)	12.799	108	12273	0.159
143) 4-Bromophenyl-phenylether	(4)	12.857	248	6118	0.200
144) Diallate (peak 2)	(4)	12.881	86	2339	0.037
145) Hexachlorobenzene	(4)	12.910	284	7827	0.246
147) Dimethoate	(4)	12.968	87	11116	0.169
148) Atrazine	(4)	13.079	200	5835	0.187
149) Pentachlorophenol	(4)	13.154	266	2852	0.134
150) 4-Aminobiphenyl	(4)	13.172	169	18190	0.201
151) Pentachloronitrobenzene	(4)	13.172	237	2799	0.189
152) Pronamide	(4)	13.271	173	8953	0.162
153)*Phenanthrene-d10	(4)	13.382	188	764307	5.000
155) Phenanthrene	(4)	13.411	178	44575	0.242
154) Dinoseb	(4)	13.411	211	3579	0.104
157) Anthracene	(4)	13.475	178	38989	0.218
163) Carbazole	(4)	13.691	167	37545	0.214
164) Methyl parathion	(4)	13.895	109	7842	0.157

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

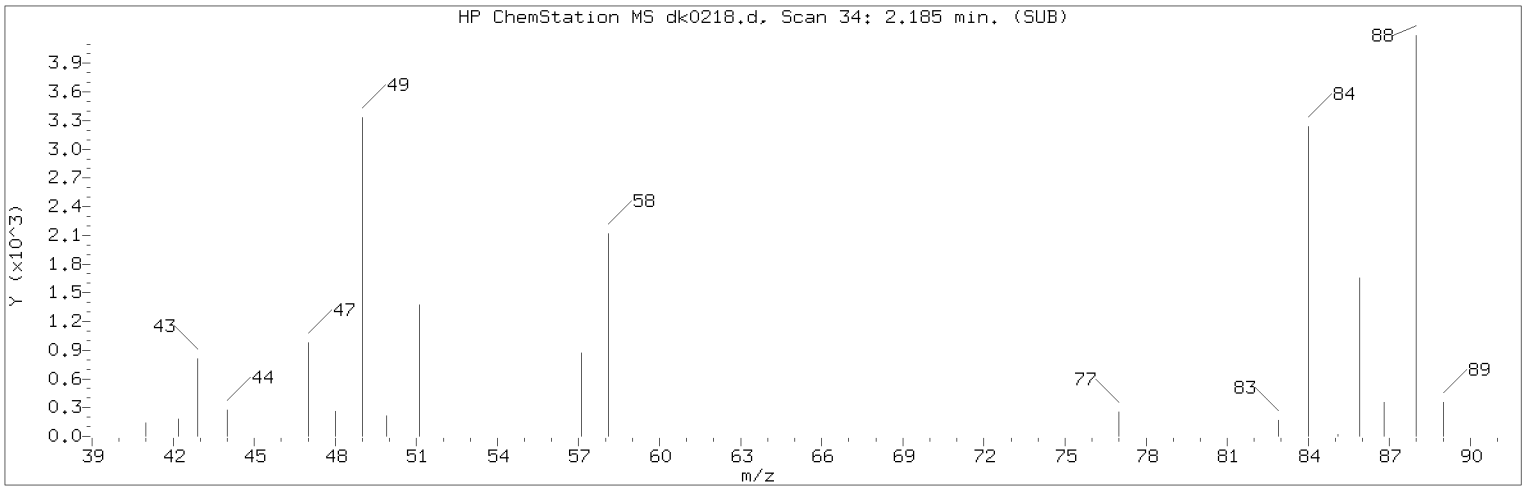
Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.204	149	37314	0.171
168) 4-Nitroquinoline-1-oxide	(4)	14.431	190	2301	0.101
167) Parathion	(4)	14.437	109	3212	0.102
169) Octachlorostyrene	(4)	14.775	308	2776	0.224
171) Isodrin	(4)	14.816	193	4275	0.206
222) Total PAHs	(6)			639100	4.207
173) Fluoranthene	(4)	15.031	202	40041	0.208
174) Benzidine	(5)	15.259	184	195495	1.357
175)*Pyrene-d10	(5)	15.340	212	719433	5.000
177) Pyrene	(5)	15.364	202	51616	0.250
179)$Terphenyl-d14	(5)	15.655	244	54353	0.462
182) p-Dimethylaminoazobenzene	(5)	15.882	225	4561	0.139
185) Chlorobenzilate	(5)	15.981	139	10341	0.160
187) 3,3'-Dimethylbenzidine	(5)	16.436	212	18391	0.149
188) Butylbenzylphthalate	(5)	16.506	149	15785	0.152
191) 2-Acetylaminofluorene	(5)	16.844	181	8232	0.098
193) 3,3'-Dichlorobenzidine	(5)	17.351	252	10863	0.153
195) Benzo(a)anthracene	(5)	17.357	228	30952	0.184
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.374	231	5916	0.146
196) Chrysene	(5)	17.415	228	38122	0.216
199) bis(2-Ethylhexyl)phthalate	(5)	17.573	149	17265	0.119
203) 6-Methylchrysene	(5)	18.214	242	20988	0.170
205) Di-n-octylphthalate	(6)	18.732	149	27135	0.119
206) Benzo(b)fluoranthene	(6)	19.193	252	31891	0.199
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.205	256	11505	0.147
208) Benzo(k)fluoranthene	(6)	19.240	252	33412	0.201
211) Benzo(a)pyrene	(6)	19.723	252	27618	0.188
213)*Perylene-d12	(6)	19.817	264	668655	5.000
215) 3-Methylcholanthrene	(6)	20.300	268	11723	0.165
217) Dibenz(a,h)acridine	(6)	21.105	279	20404	0.172
218) Dibenz(a,j)acridine	(6)	21.175	279	22971	0.177
219) Indeno(1,2,3-cd)pyrene	(6)	21.408	276	24572M	0.188
220) Dibenz(a,h)anthracene	(6)	21.454	278	29826	0.205
221) Benzo(g,h,i)perylene	(6)	21.775	276	32275	0.222

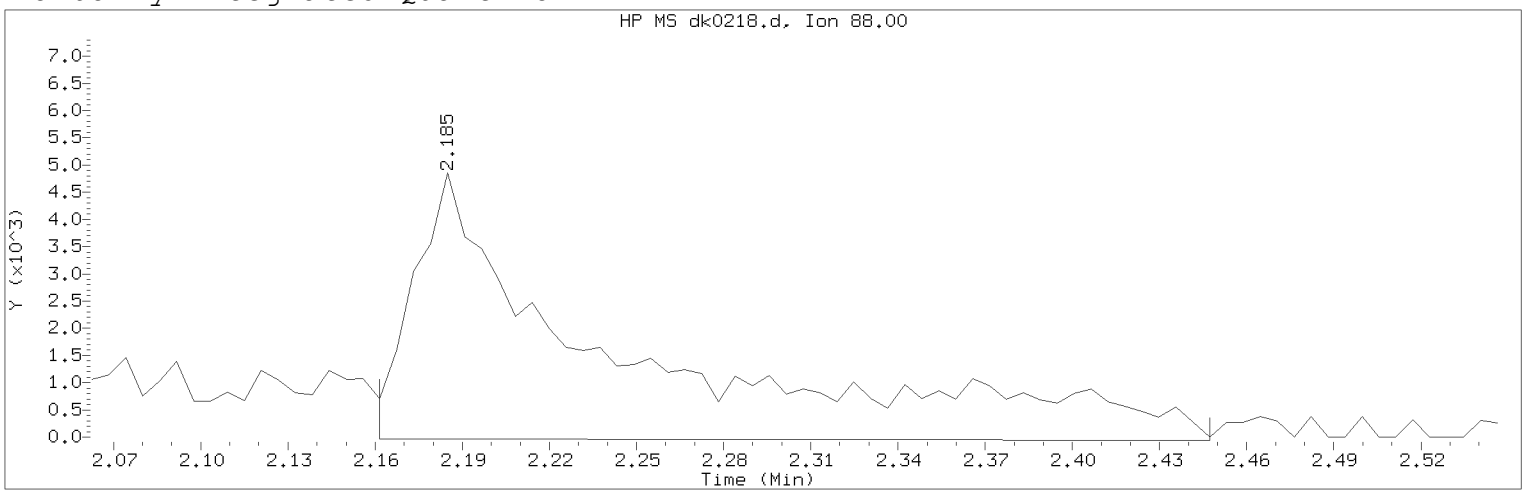
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

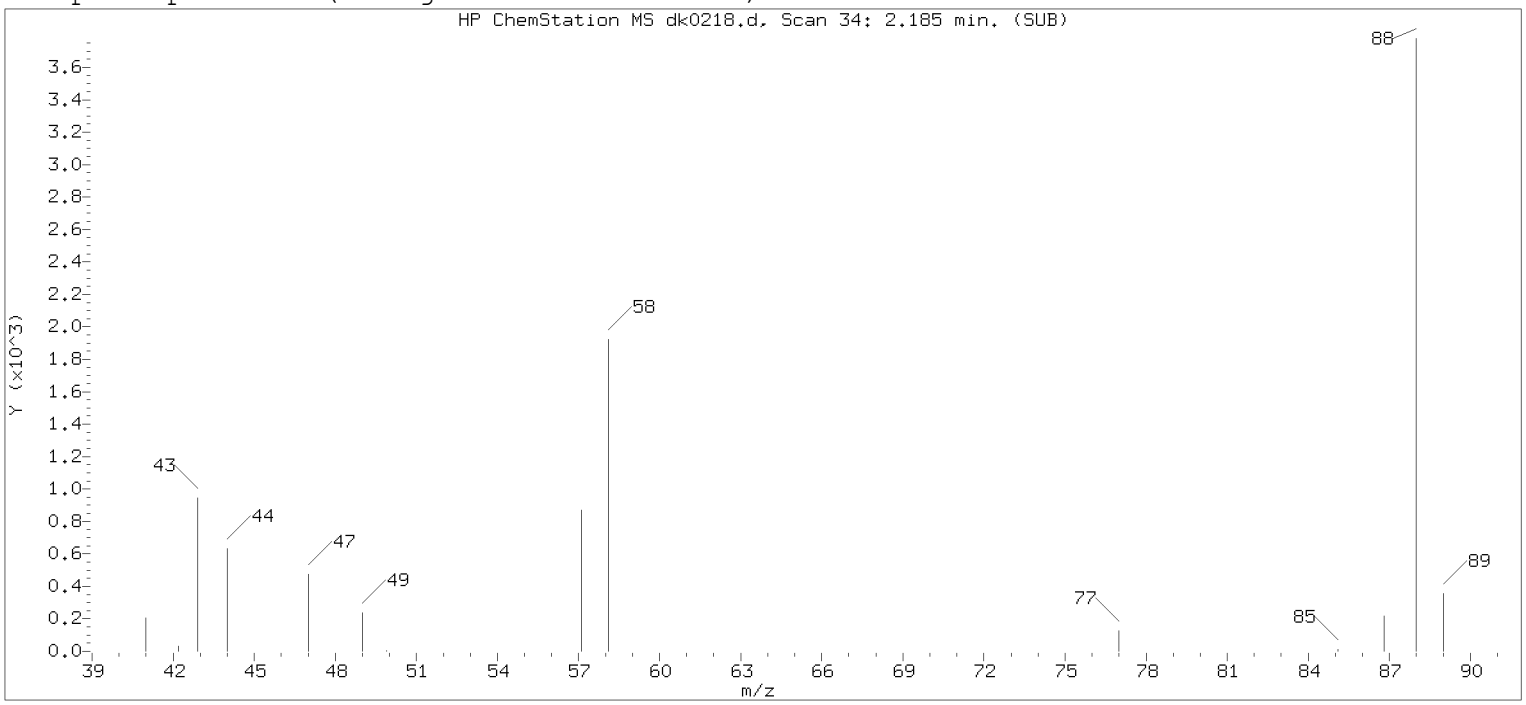
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 34		
Retention Time (minutes)	: 2.185		
Quant Ion	: 88.00		
Area (flag)	: 23550M		
On-Column Amount (ng/ul)	: 0.5311		
Integration start scan	: 29	Integration stop scan:	78
Y at integration start	: -37	Y at integration end:	-58

Reason for manual integration: improper integration

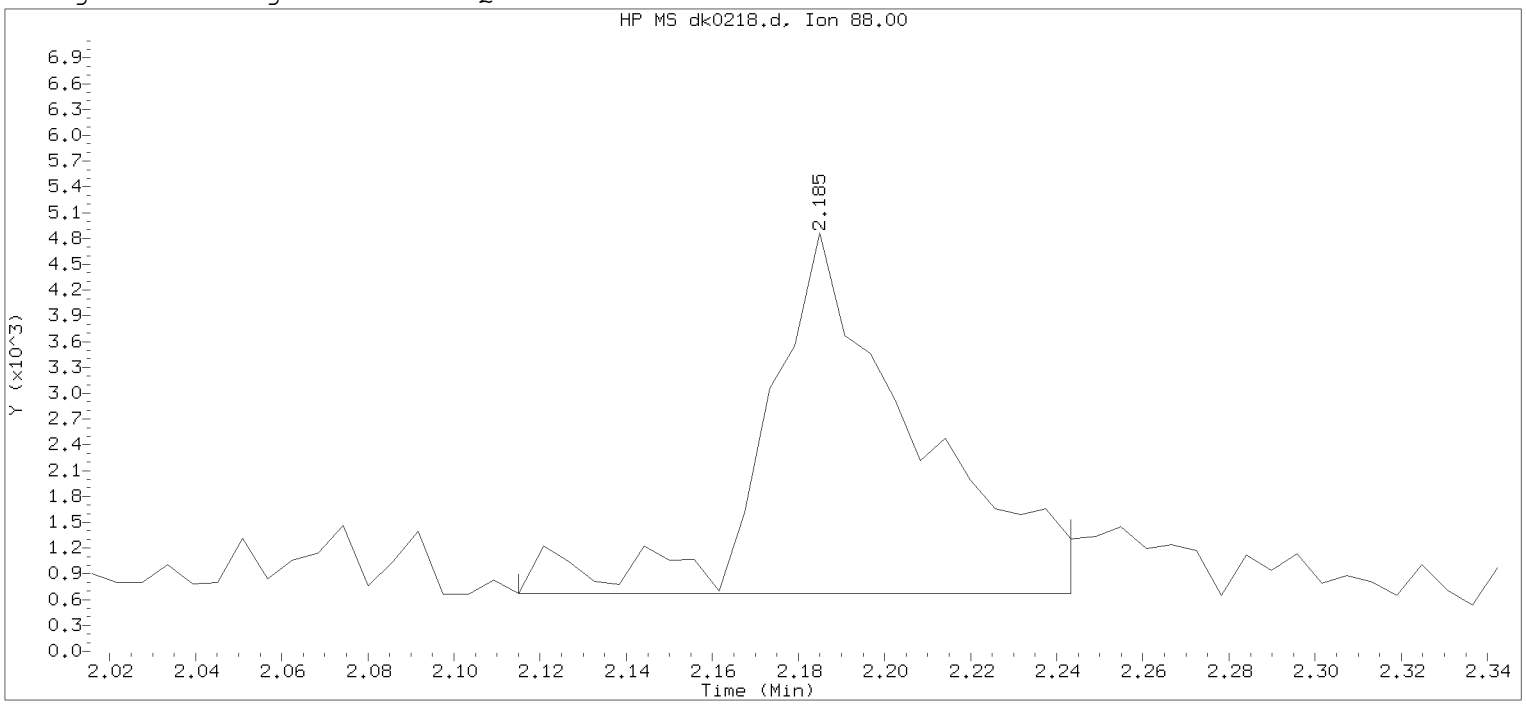
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

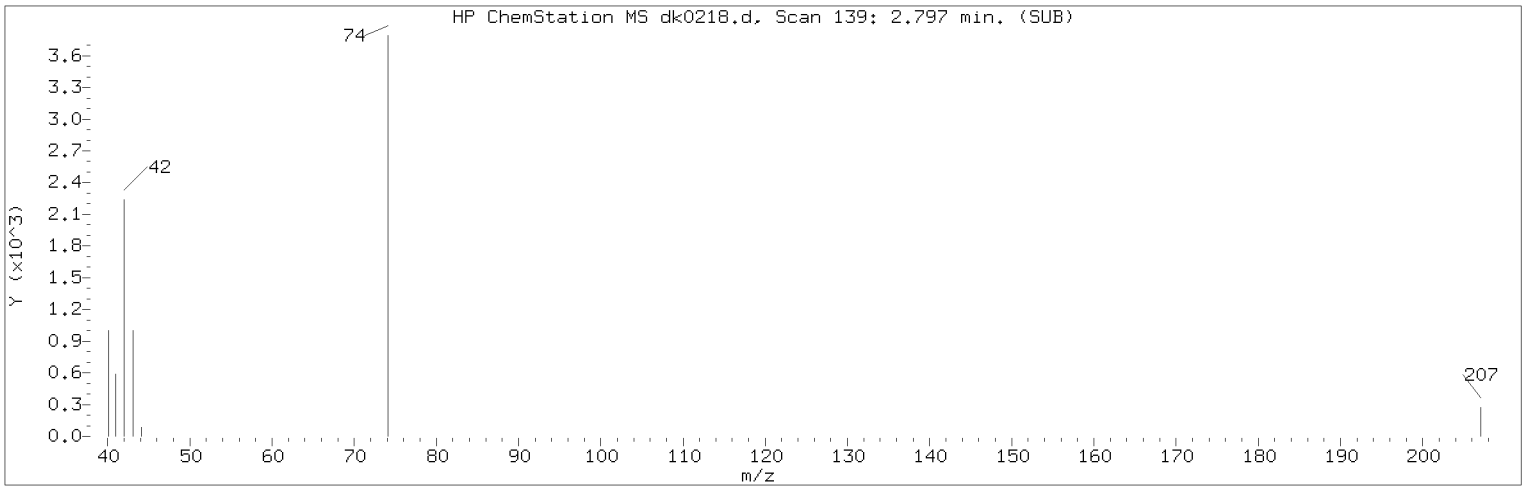
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 16:03 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

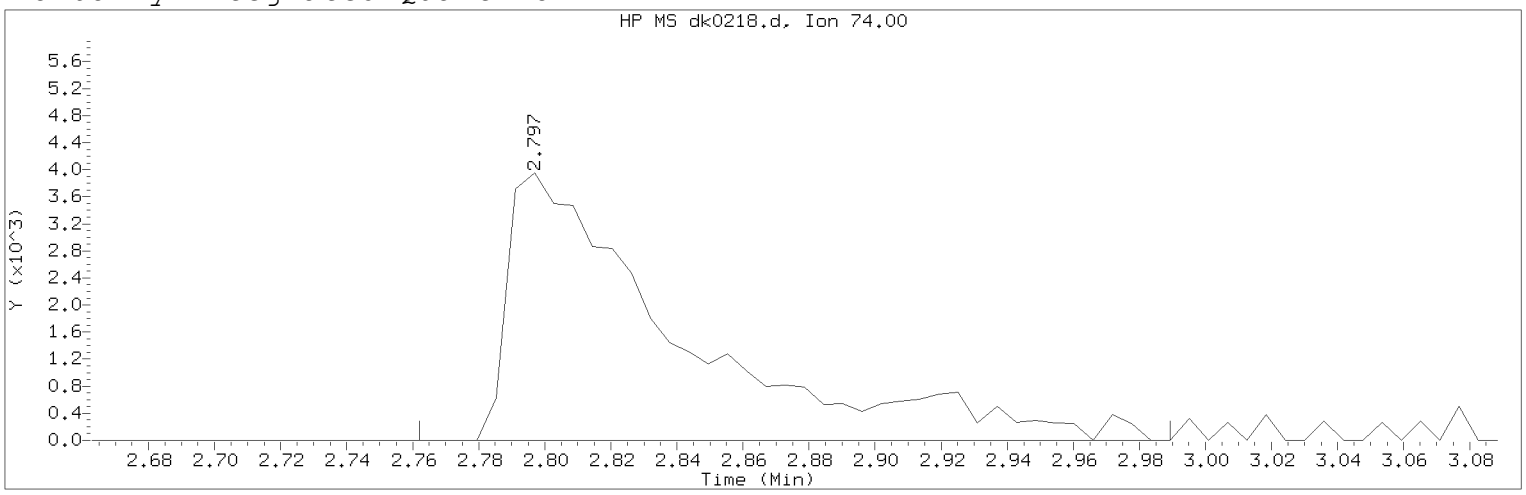
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 34		
Retention Time (minutes)	: 2.185		
Quant Ion	: 88.00		
Area	: 10070		
On-column Amount (ng/ul)	: 0.2317		
Integration start scan	: 21	Integration stop scan:	43
Y at integration start	: 675	Y at integration end:	675

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user name: ARTransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

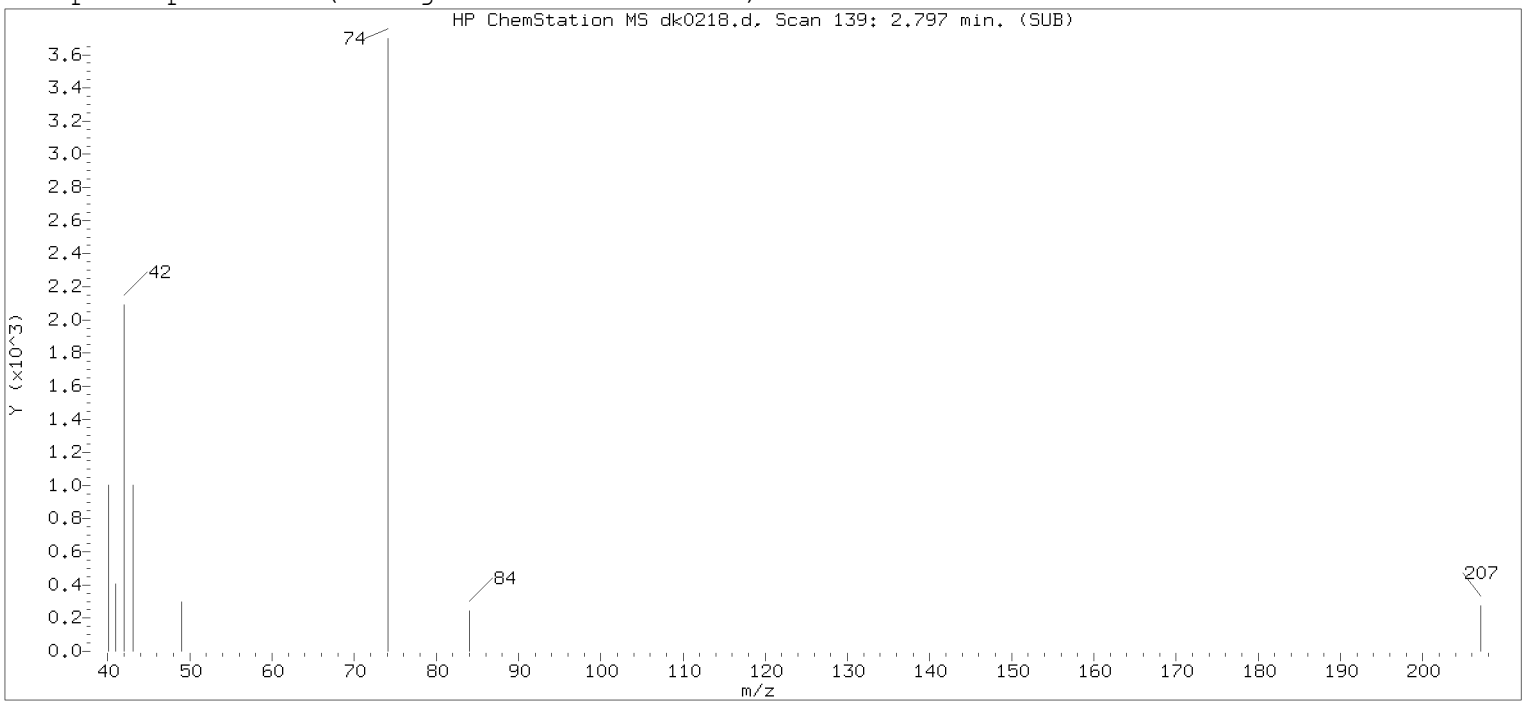
Compound Number : 4
Compound Name : N-Nitrosodimethylamine
Scan Number : 139
Retention Time (minutes) : 2.797
Quant Ion : 74.00
Area (flag) : 14301M
On-Column Amount (ng/ul) : 0.2113
Integration start scan : 132 Integration stop scan: 171
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

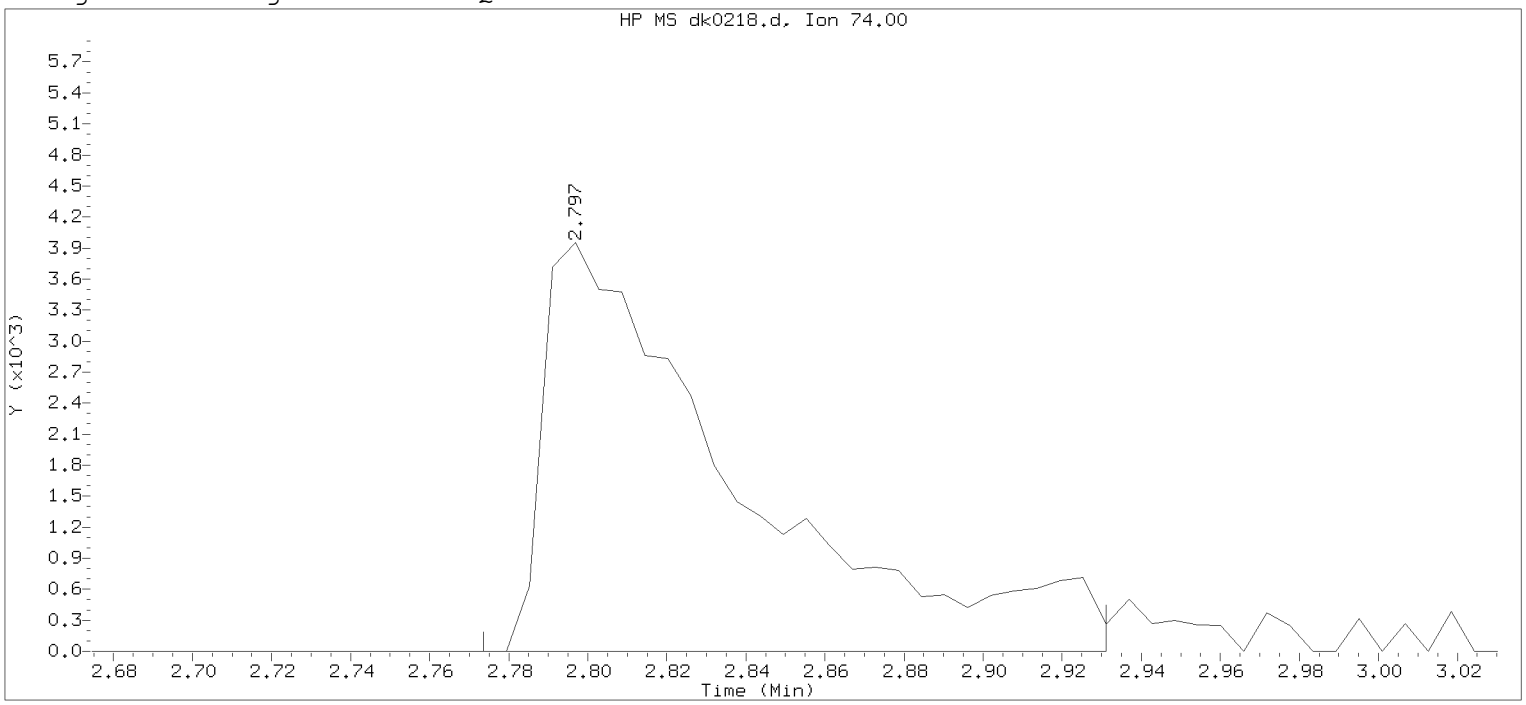
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

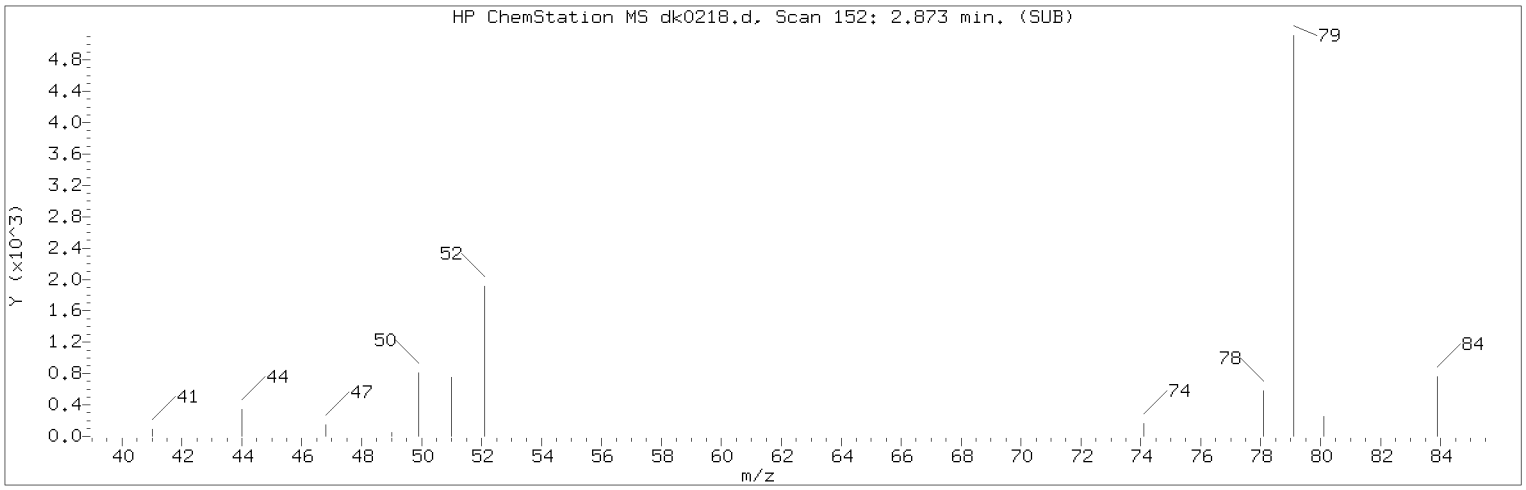
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 16:03 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

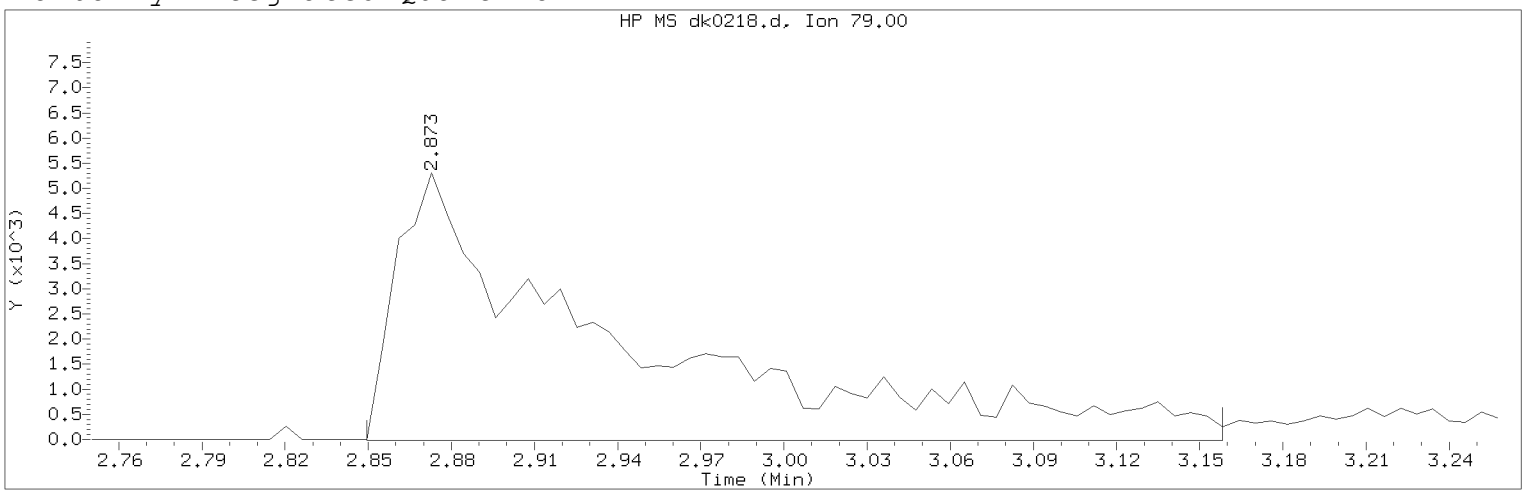
Compound Number	: 4		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 139		
Retention Time (minutes)	: 2.797		
Quant Ion	: 74.00		
Area	: 13487		
On-column Amount (ng/ul)	: 0.2045		
Integration start scan	: 134	Integration stop scan:	161
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

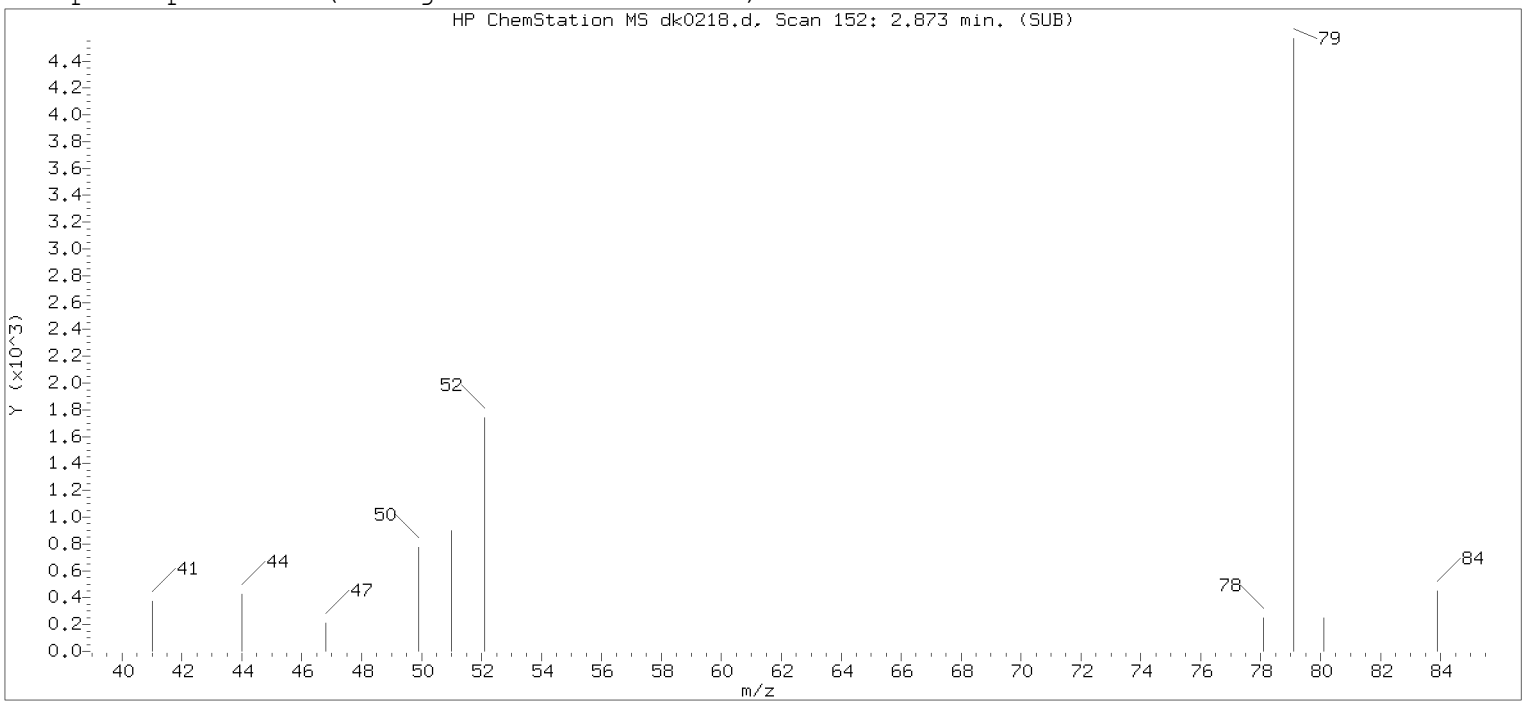
Compound Number : 5
Compound Name : Pyridine
Scan Number : 152
Retention Time (minutes) : 2.873
Quant Ion : 79.00
Area (flag) : 29403M
On-Column Amount (ng/ul) : 0.2592
Integration start scan : 147 Integration stop scan: 200
Y at integration start : -14 Y at integration end: -14

Reason for manual integration: improper integration

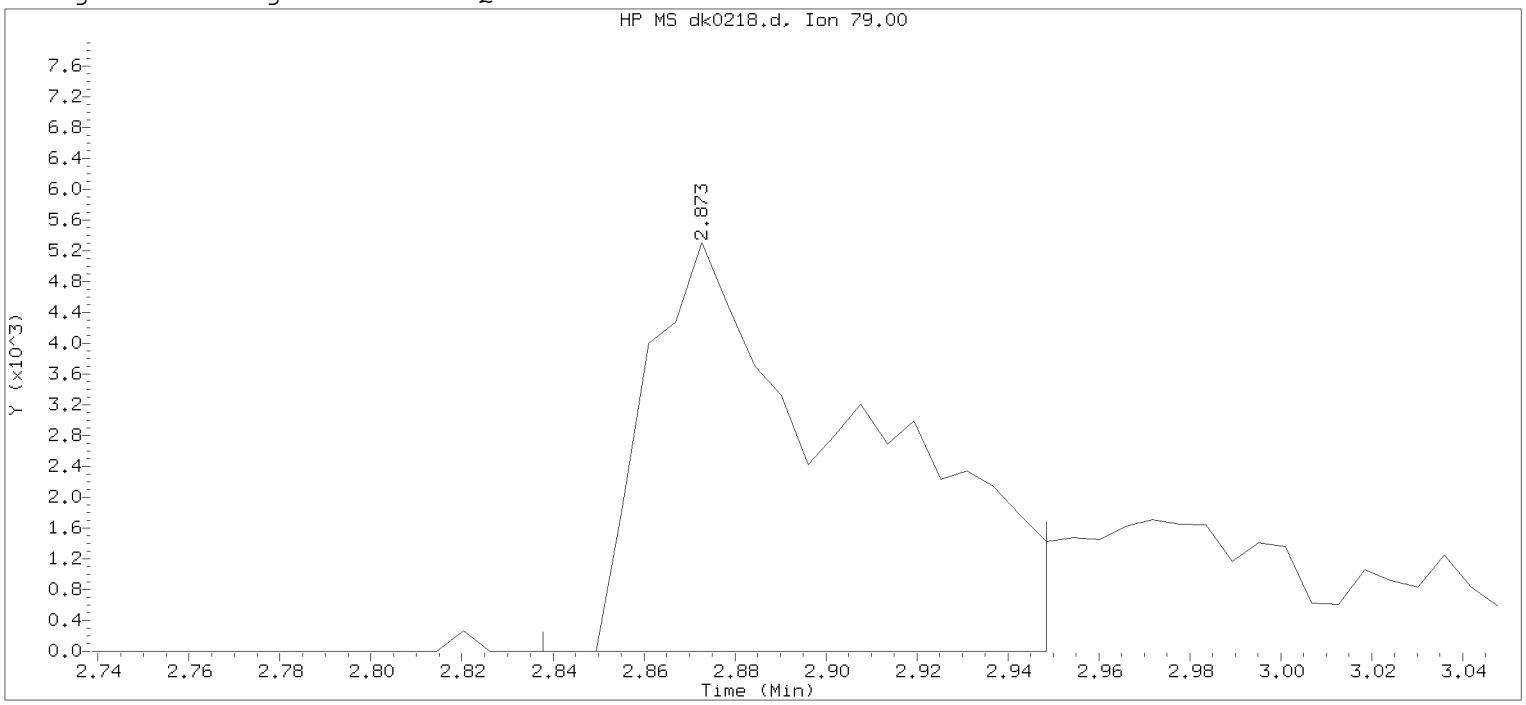
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

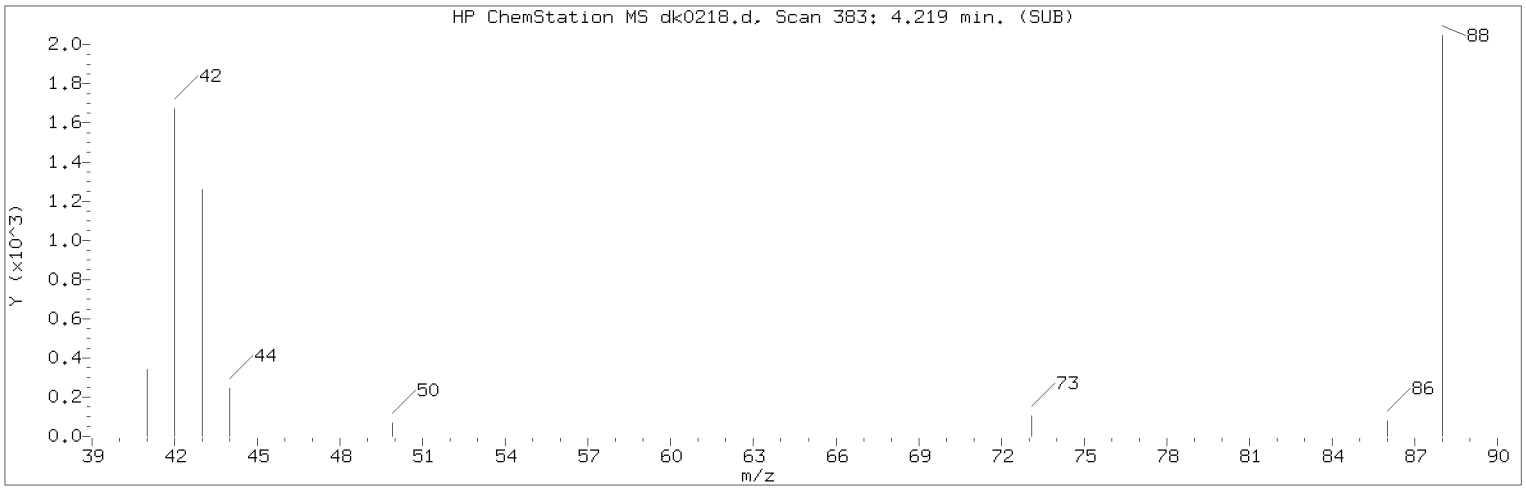
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 16:03 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

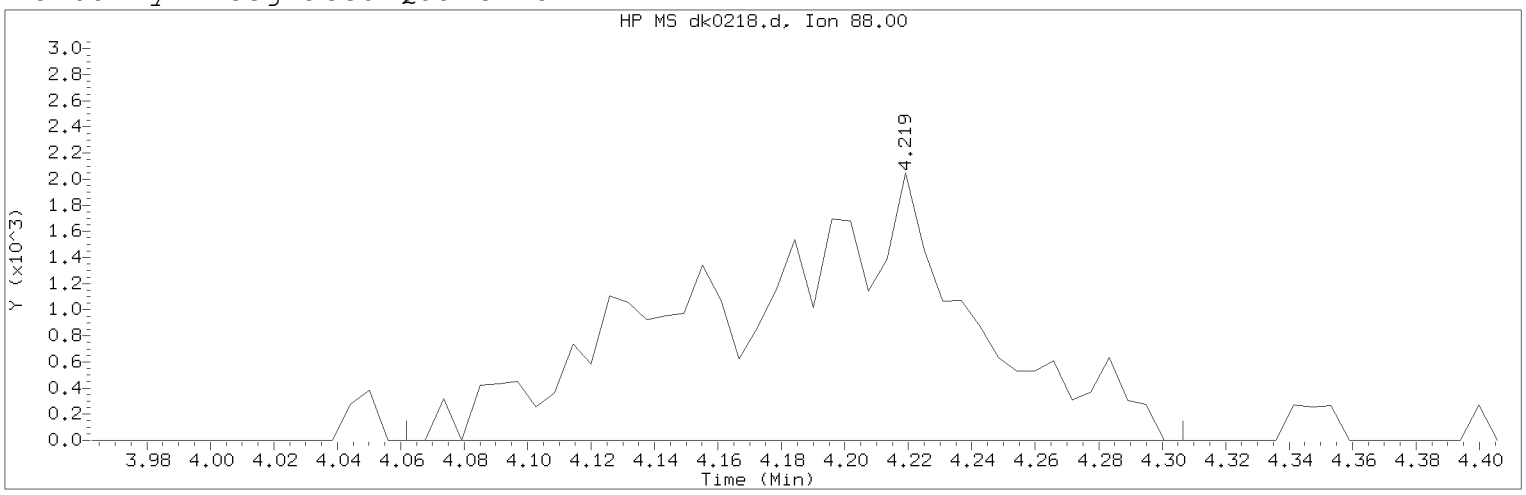
Compound Number	: 5		
Compound Name	: Pyridine		
Scan Number	: 152		
Retention Time (minutes)	: 2.873		
Quant Ion	: 79.00		
Area	: 17581		
On-column Amount (ng/ul)	: 0.1598		
Integration start scan	: 145	Integration stop scan:	164
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user name: ARTransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

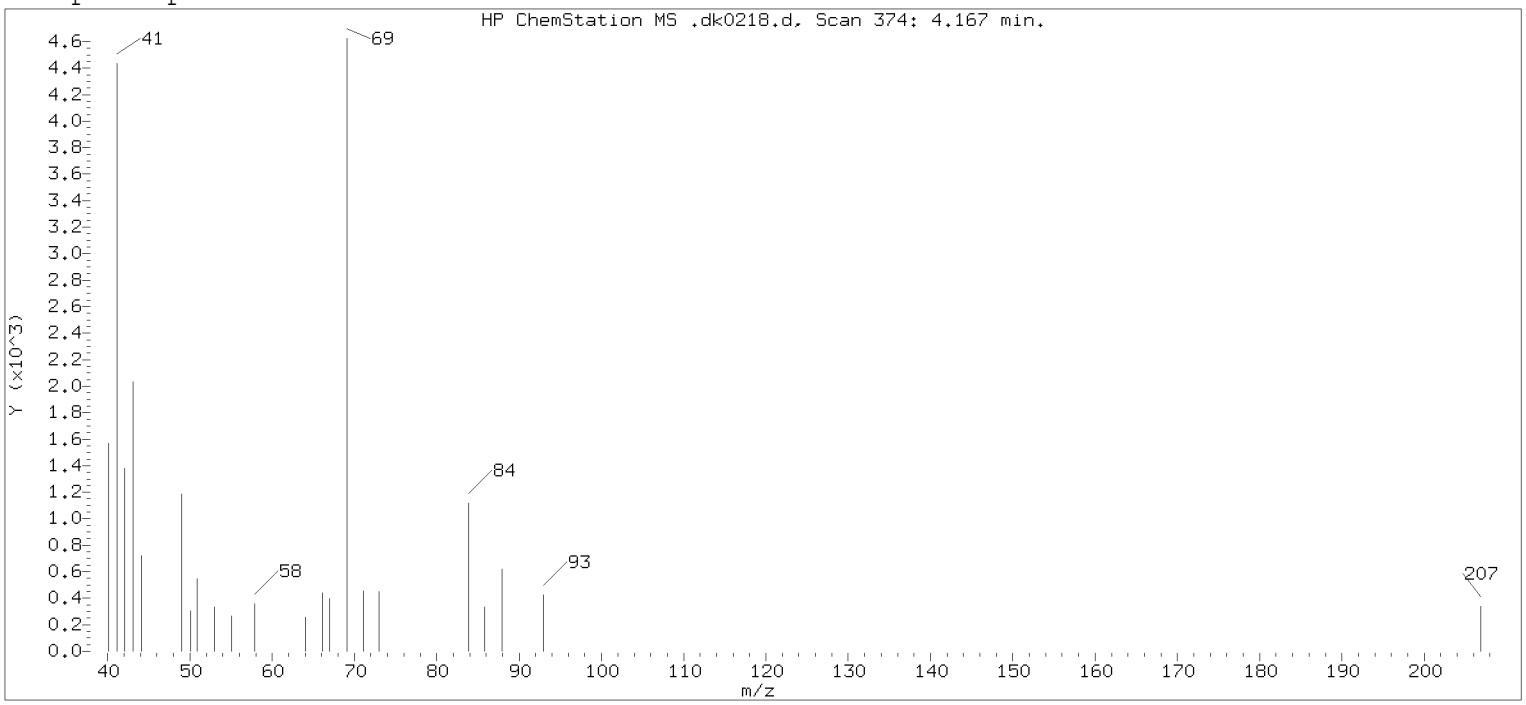
Compound Number	: 8		
Compound Name	: N-Nitrosomethylethylamine		
Scan Number	: 383		
Retention Time (minutes)	: 4.219		
Quant Ion	: 88.00		
Area (flag)	: 11475M		
On-Column Amount (ng/ul)	: 0.2328		
Integration start scan	: 355	Integration stop scan:	397
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

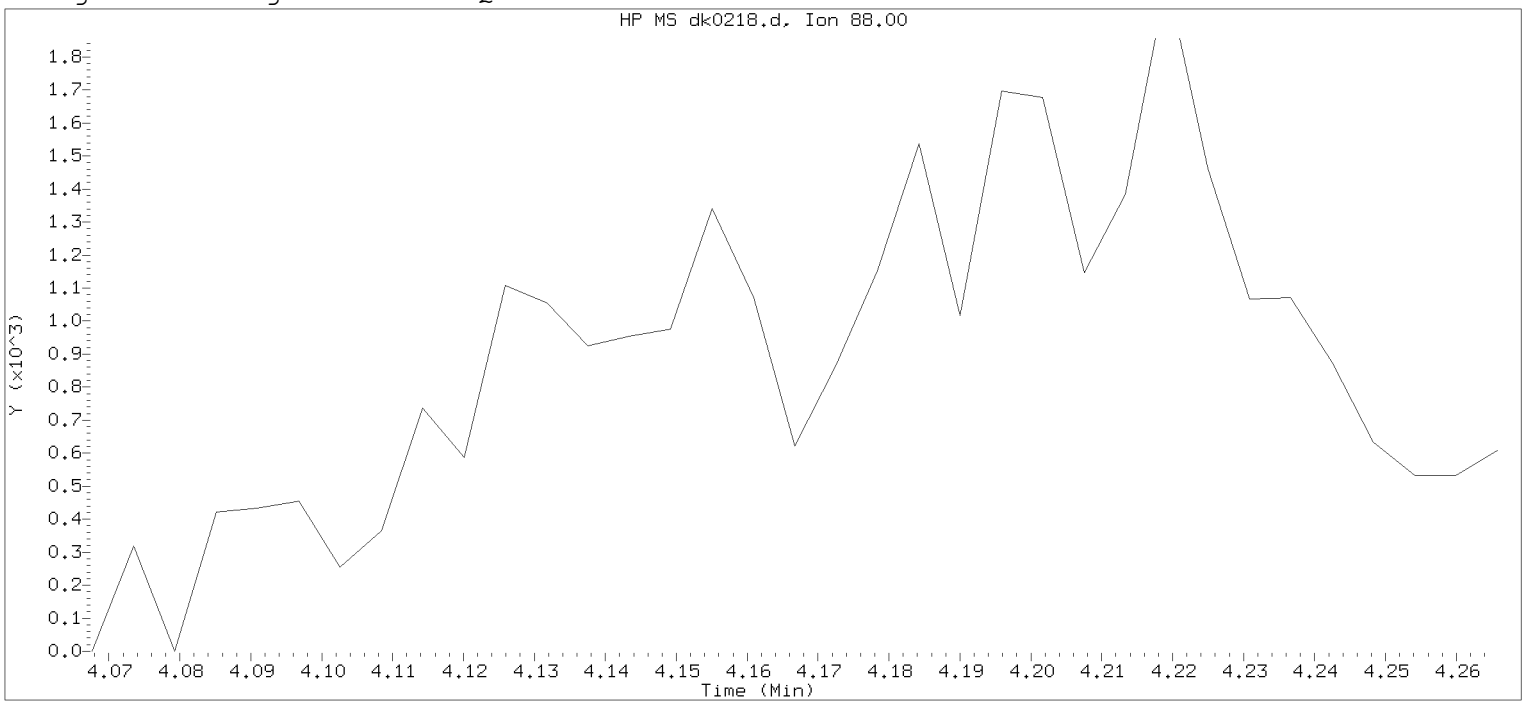
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

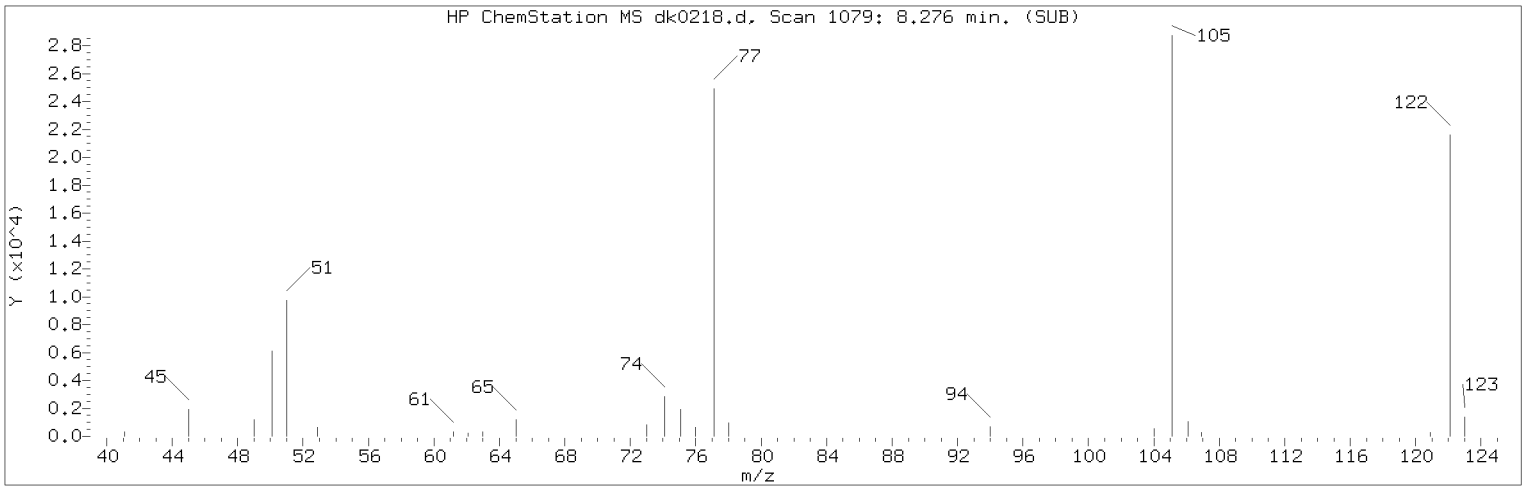
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 16:03 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

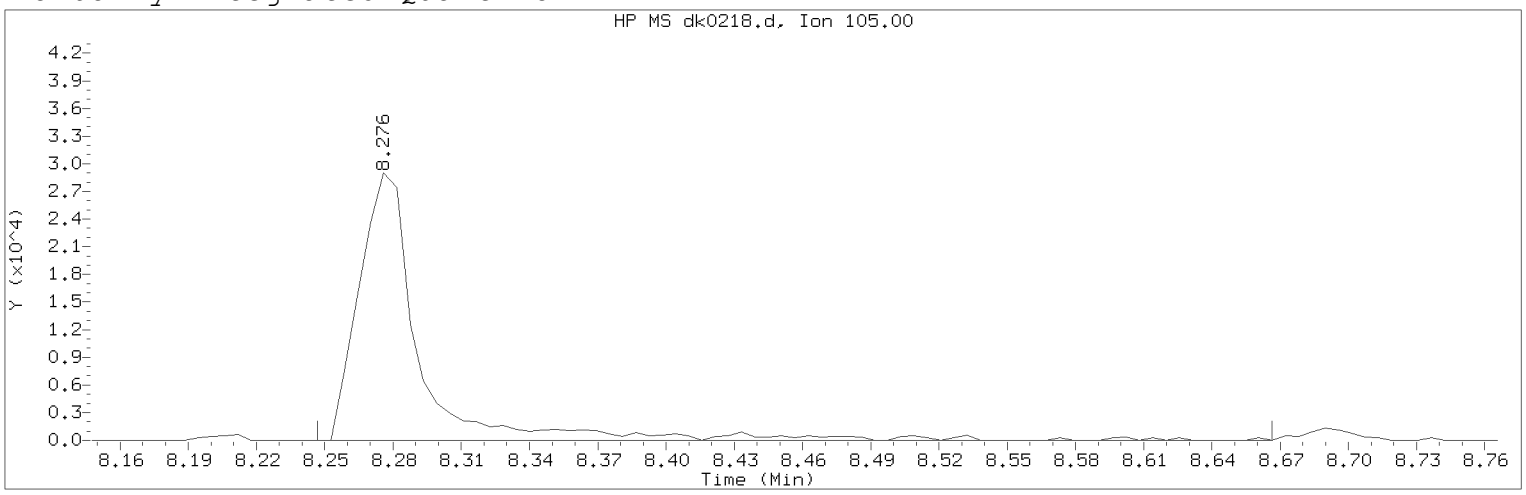
Compound Number : 8
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.167
Quant Ion : 88.00

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user name: [illegible]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

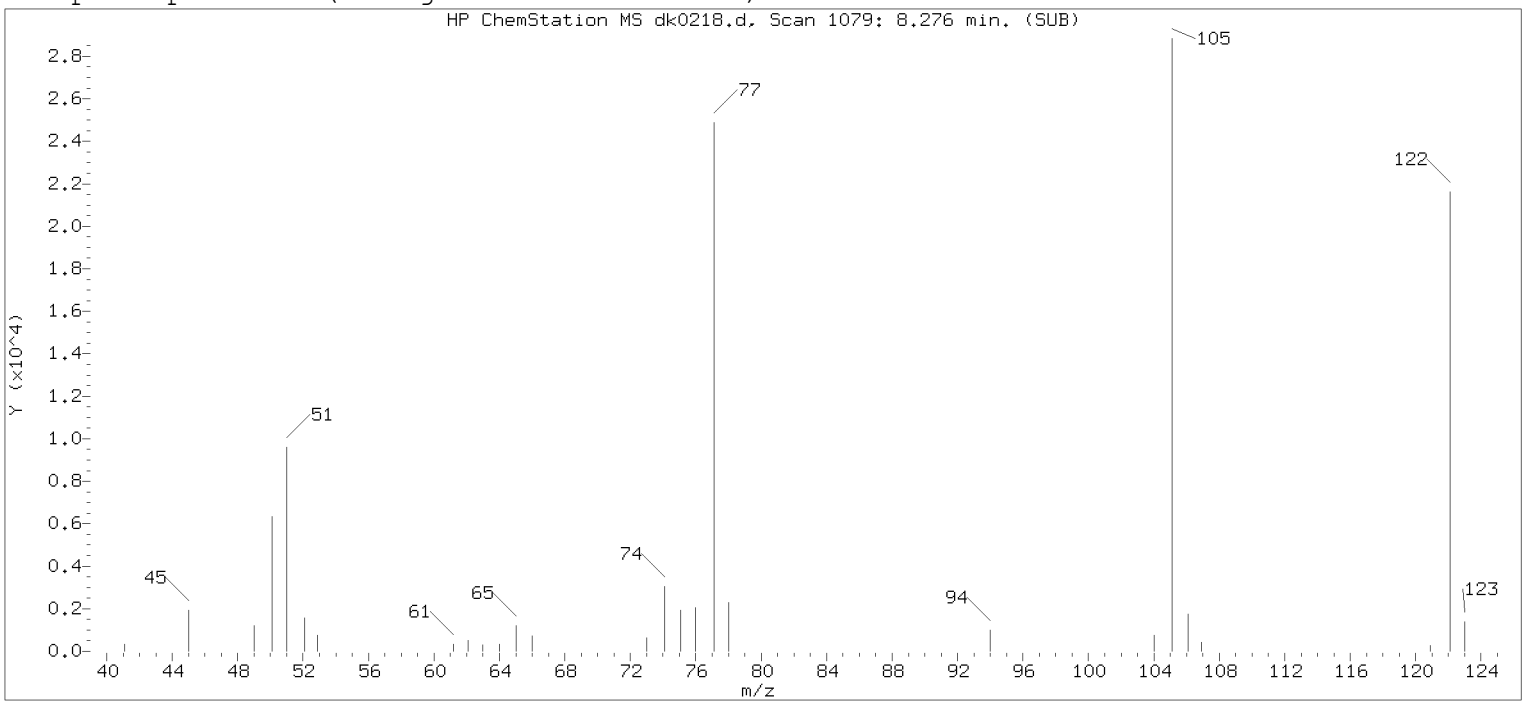
Compound Number : 56
Compound Name : Benzoic acid
Scan Number : 1079
Retention Time (minutes) : 8.276
Quant Ion : 105.00
Area (flag) : 54833M
On-Column Amount (ng/ul) : 0.9393
Integration start scan : 1073 Integration stop scan: 1145
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

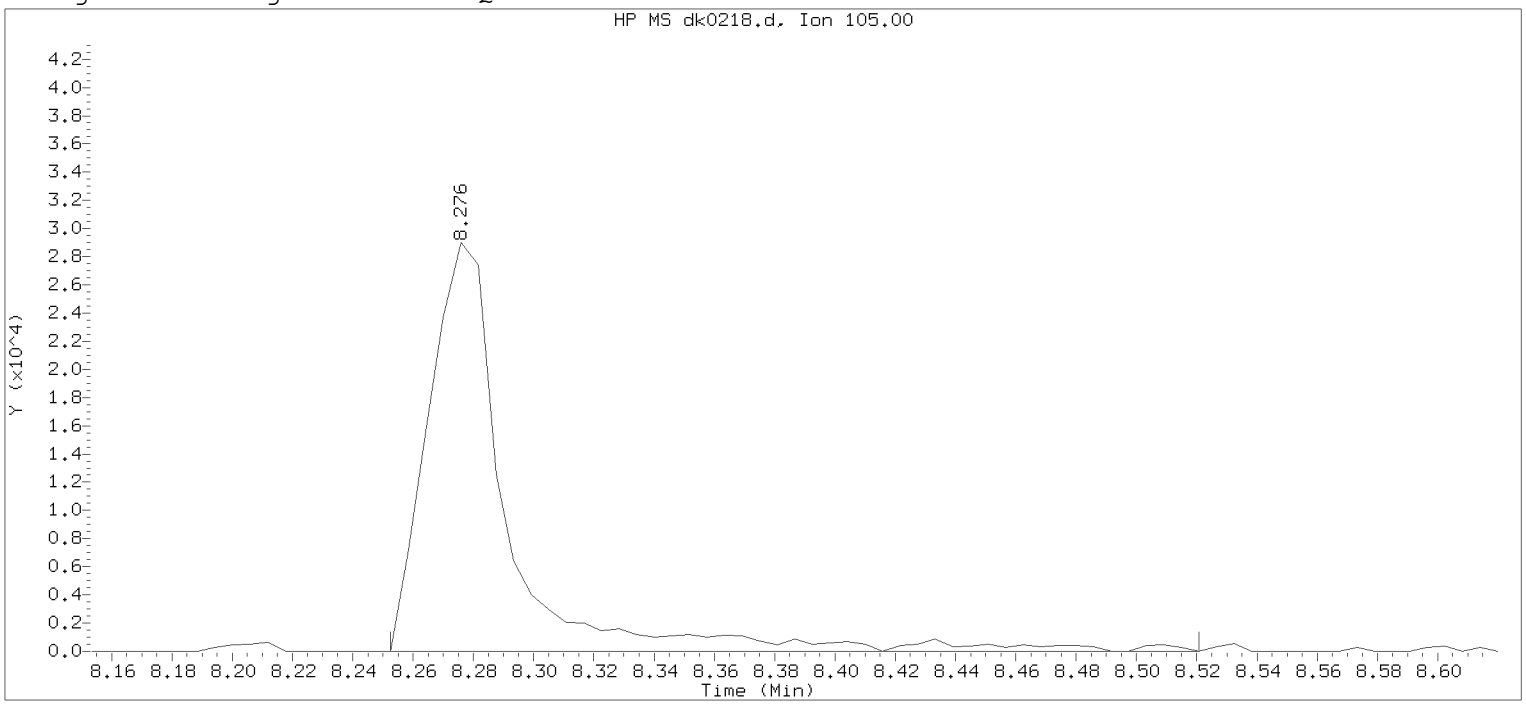
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

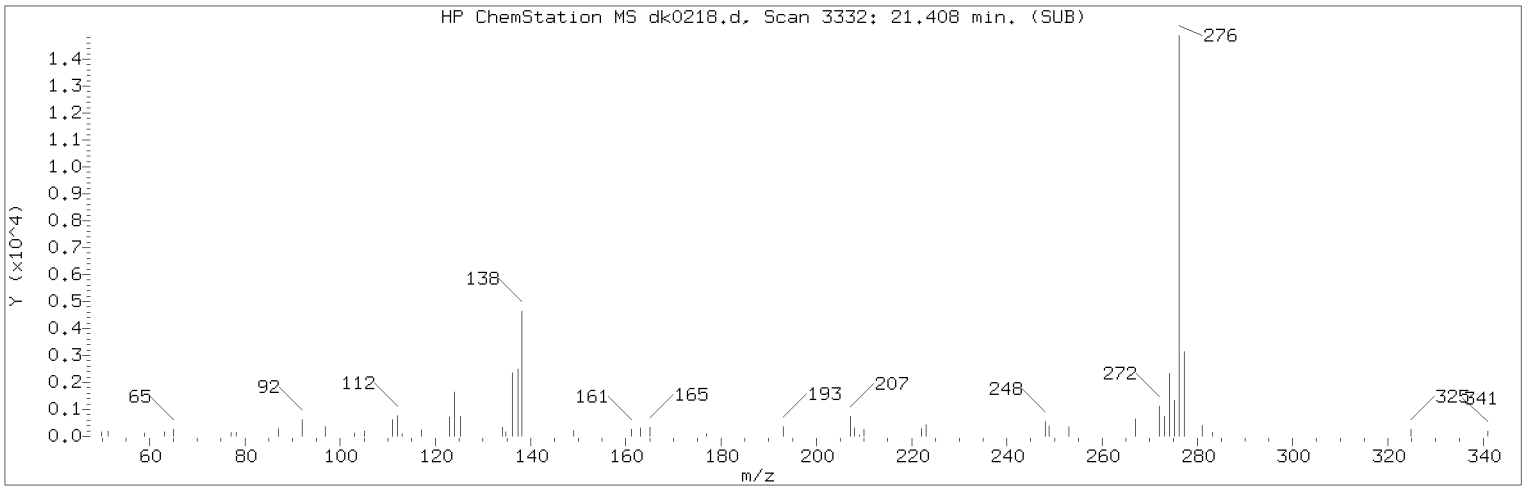
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 16:03 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

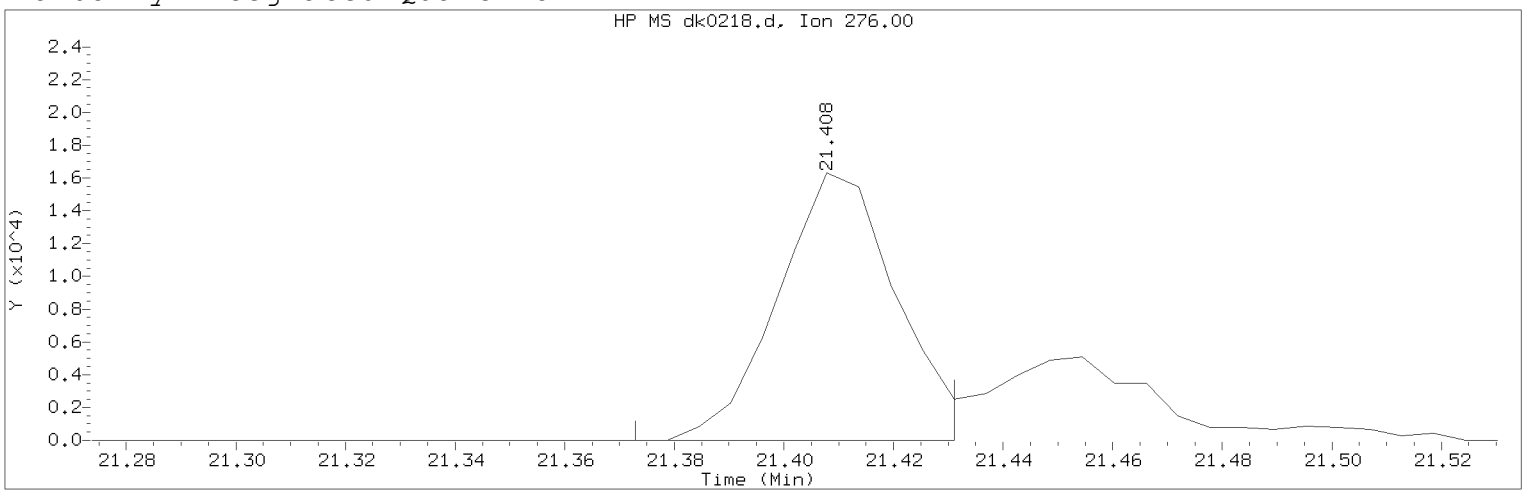
Compound Number	: 56		
Compound Name	: Benzoic acid		
Scan Number	: 1079		
Retention Time (minutes)	: 8.276		
Quant Ion	: 105.00		
Area	: 53923		
On-column Amount (ng/ul)	: 0.9455		
Integration start scan	: 1074	Integration stop scan:	1120
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 19:12
Date, time and analyst ID of latest file update: 04-Nov-2018 19:12 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

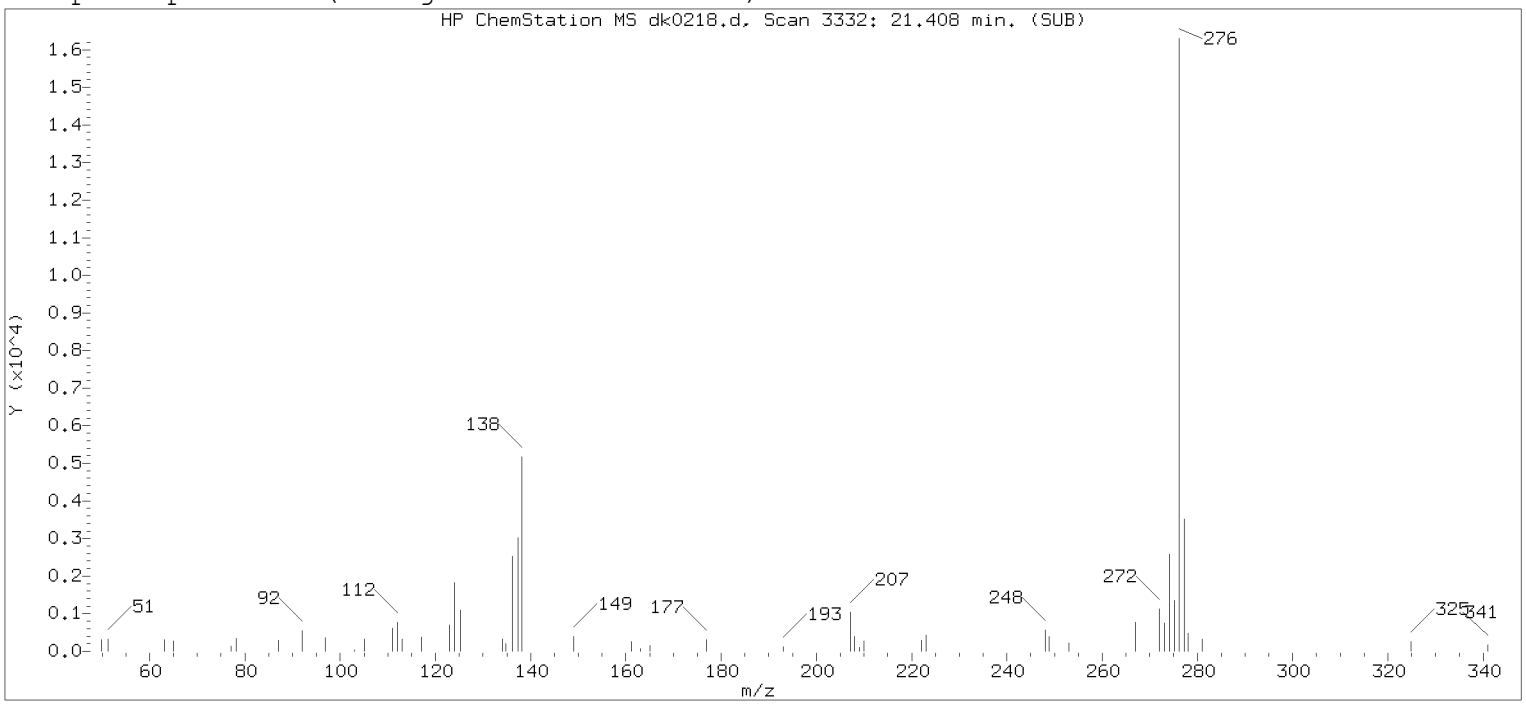
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3332
Retention Time (minutes) : 21.408
Quant Ion : 276.00
Area (flag) : 24572M
On-Column Amount (ng/ul) : 0.1876
Integration start scan : 3325 Integration stop scan: 3335
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

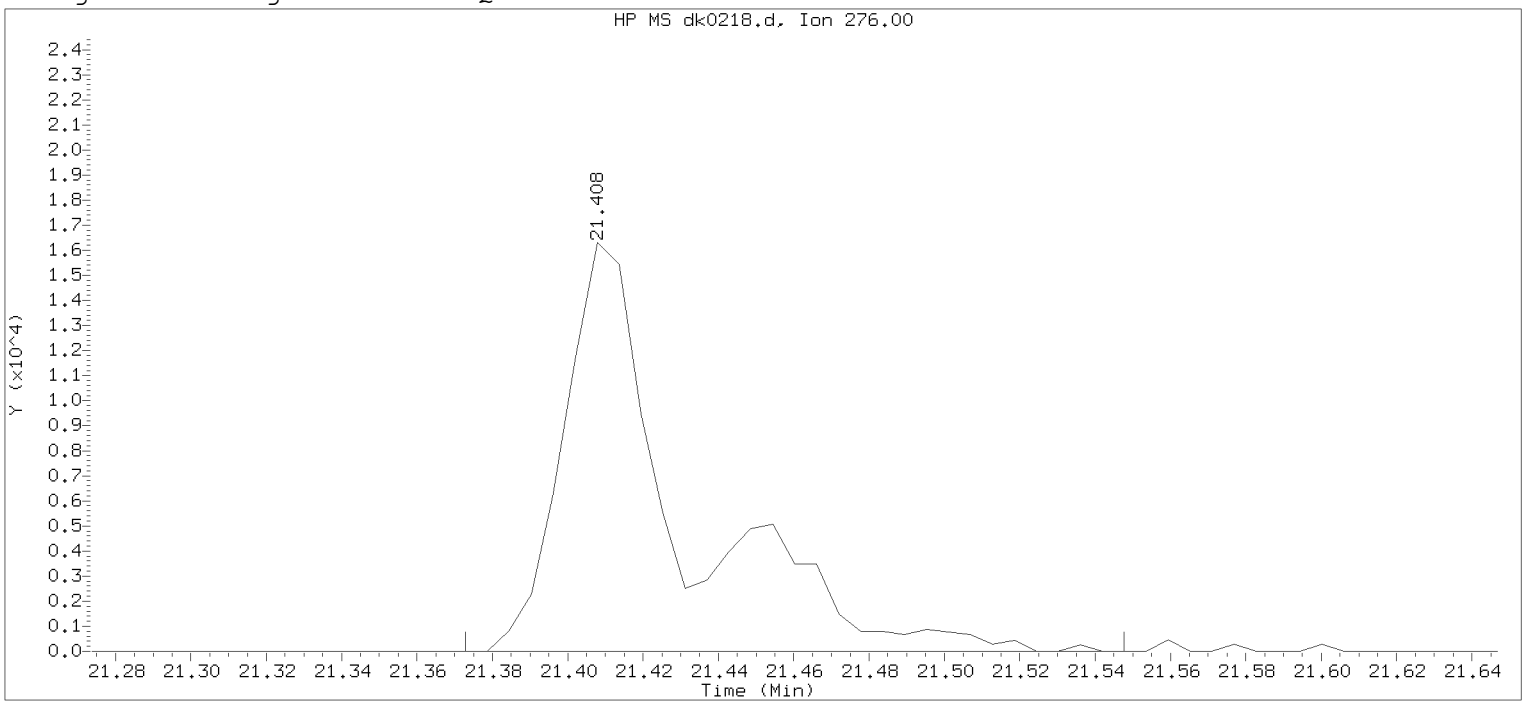
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:25.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



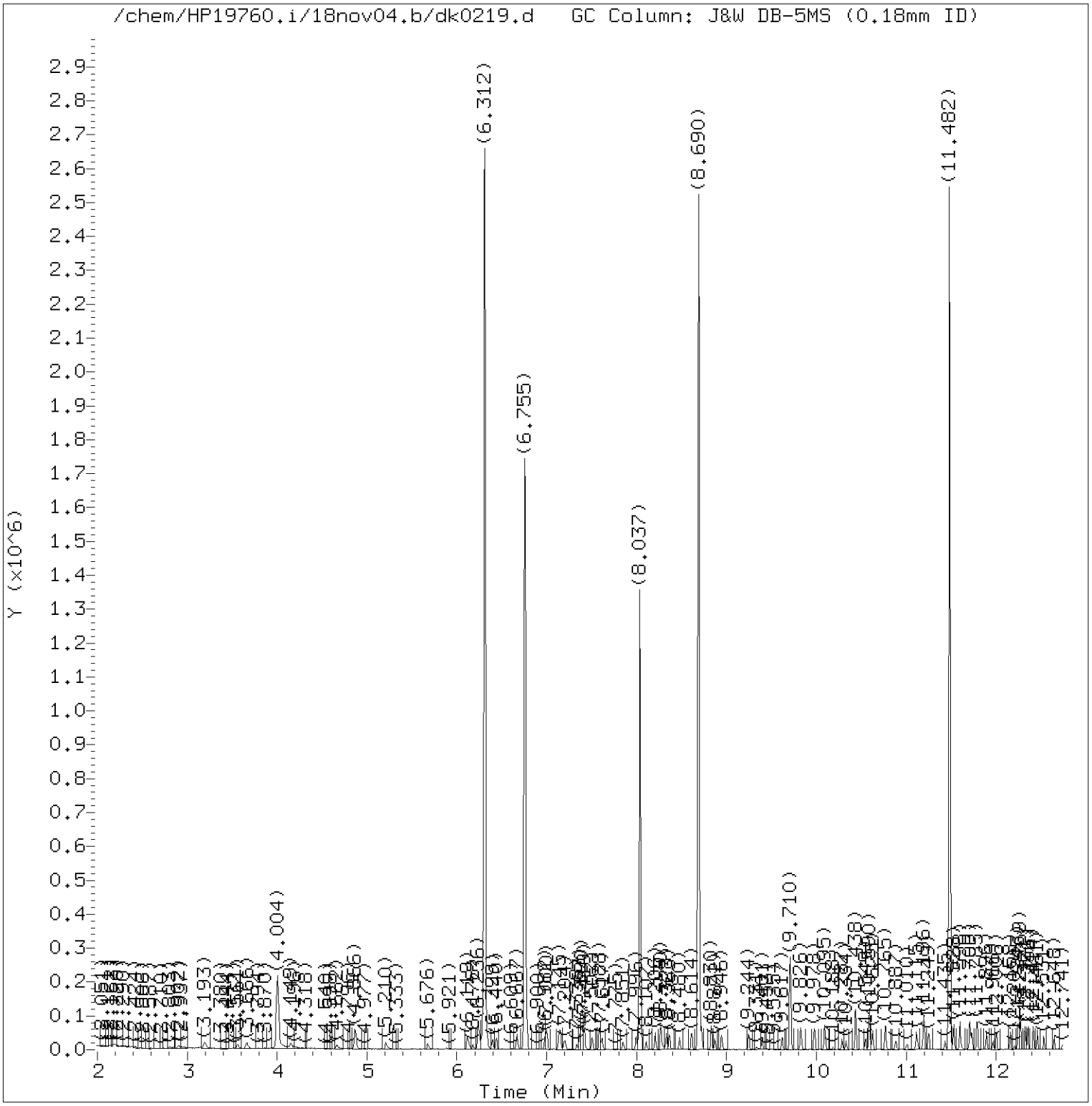
Data File: /chem/HP19760.i/18nov04.b/dk0218.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 15:35 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: all1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 16:03 Automation

Sample Name: SSTD0.25 Lab Sample ID: rvSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3332		
Retention Time (minutes)	: 21.408		
Quant Ion	: 276.00		
Area	: 35332		
On-column Amount (ng/ul)	: 0.2213		
Integration start scan	: 3325	Integration stop scan:	3355
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:25.
Target 3.5 esignature user name: ashley.transue



Total Ion Chromatogram (TIC)

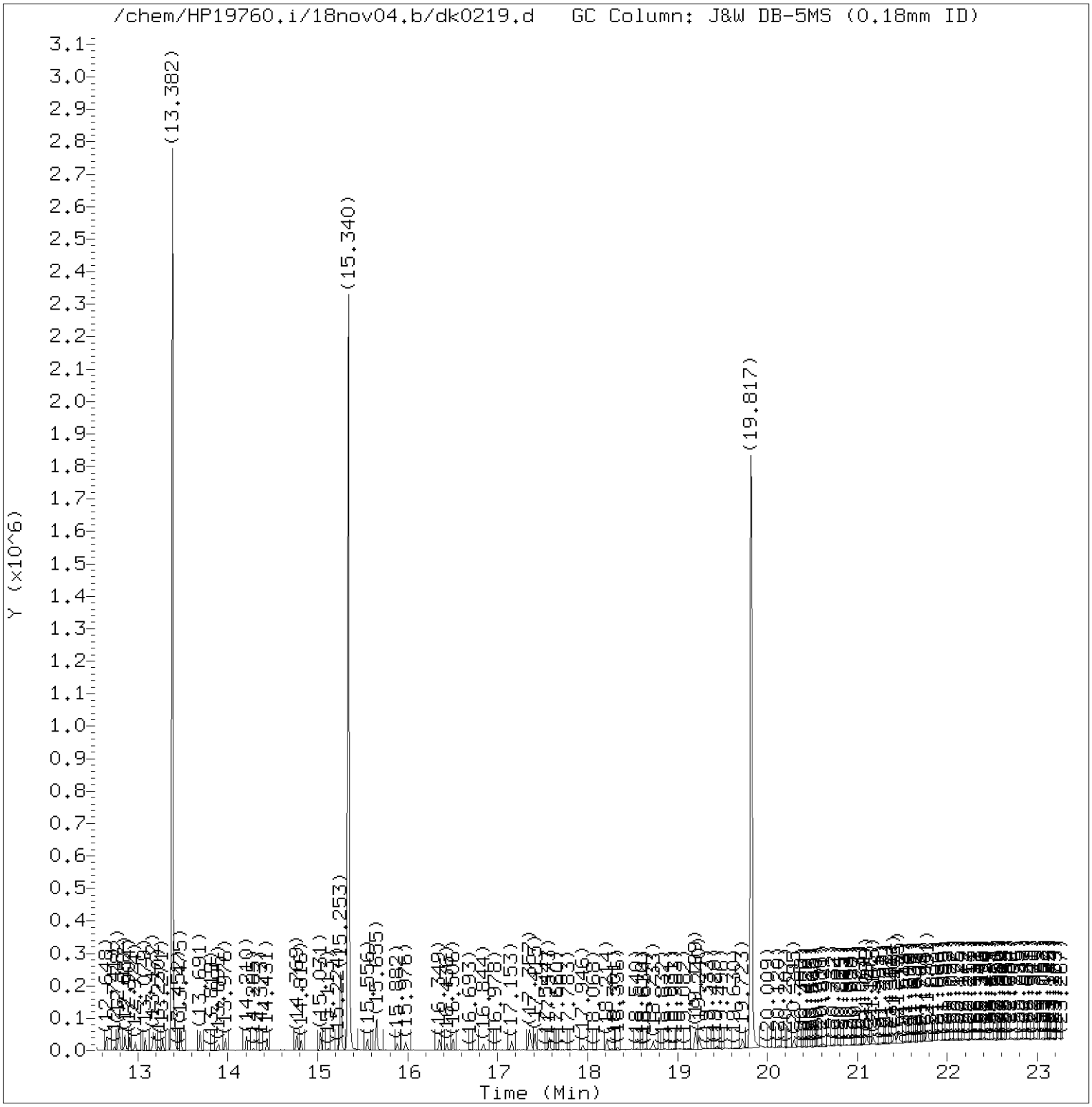
Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0219.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:03 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:38 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0219.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:03 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:38 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0219.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:03 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:38 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.191	88	7530	0.131
4) N-Nitrosodimethylamine	(1)	2.803	74	8699	0.099
5) Pyridine	(1)	2.902	79	9019	0.061
7) 2-Picoline	(1)	4.039	93	11788	0.080
8) N-Nitrosomethylethylamine	(1)	4.213	88	8409M	0.131
9) Methyl methanesulfonate	(1)	4.668	80	8419	0.119
11)$2-Fluorophenol	(1)	4.866	112	22670	0.207
13) N-Nitrosodiethylamine	(1)	5.210	102	5962	0.104
42) Total Cresols	(1)			24631	0.217
15) Ethyl methanesulfonate	(1)	5.676	109	6371	0.116
16) Benzaldehyde	(1)	6.119	77	12409	0.135
17)$Phenol-d6	(1)	6.236	99	32600	0.215
18) Phenol	(1)	6.254	94	19783	0.112
19) Aniline	(1)	6.277	93	23875	0.115
20) a-methylstyrene	(1)	6.358	118	946M	0.089
22) bis(2-Chloroethyl)ether	(1)	6.393	93	14416	0.110
23) 2-Chlorophenol	(1)	6.440	128	10719	0.104
24) 1,3-Dichlorobenzene	(1)	6.667	146	13635	0.124
25)*1,4-Dichlorobenzene-d4	(1)	6.755	152	341575	5.000
26) 1,4-Dichlorobenzene	(1)	6.784	146	13294	0.121
27) Benzyl alcohol	(1)	6.982	108	8293	0.114
28) 1,2-Dichlorobenzene	(1)	7.000	146	12713	0.122
30) Indene	(1)	7.134	115	13426	0.114
31) 2-Methylphenol	(1)	7.151	108	10915	0.103
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.198	45	17305	0.115
34) bis(2-Chloroisopropyl)ether	(1)	7.198	45	17305	0.115
35) N-Nitrosopyrrolidine	(1)	7.332	100	6172	0.104
36) Acetophenone	(1)	7.373	105	17300	0.116
97) Isosafrole	(3)			7725	0.108
38) N-Nitroso-di-n-propylamine	(1)	7.384	70	9971	0.107
37) 4-Methylphenol	(1)	7.390	108	13716	0.114
39) N-Nitrosomorpholine	(1)	7.402	56	7879	0.113
40) o-Toluidine	(1)	7.419	106	20742	0.112
43) Hexachloroethane	(1)	7.507	117	6218	0.121
44)$Nitrobenzene-d5	(2)	7.582	82	29022	0.214
45) Nitrobenzene	(2)	7.617	77	15484	0.113
48) N-Nitrosopiperidine	(2)	7.851	114	5644	0.107
50) Isophorone	(2)	7.996	82	23402	0.101
120) 2,4_2,6-Dinitrotoluenes	(3)			8087	0.179
51) 2-Nitrophenol	(2)	8.107	139	5082	0.098

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

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0219.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:03 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:38 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.206	107	10696	0.096
56) Benzoic acid	(2)	8.270	105	27675	0.368
57) O,O,O-Triethylphosphorothioate	(2)	8.334	198	4747	0.113
55) bis(2-Chloroethoxy)methane	(2)	8.363	93	16561	0.114
60) 2,4-Dichlorophenol	(2)	8.480	162	7448	0.099
62) 1,2,4-Trichlorobenzene	(2)	8.614	180	9842	0.120
65)*Naphthalene-d8	(2)	8.690	136	1256378	5.000
146) Diallate trans/cis	(4)			9308	0.093
67) 4-Chloroaniline	(2)	8.830	127	12559	0.111
68) 2,6-Dichlorophenol	(2)	8.836	162	7081	0.097
69) Hexachloropropene	(2)	8.871	213	5772	0.112
71) Hexachlorobutadiene	(2)	8.946	225	5422	0.122
75) Quinoline	(2)	9.244	129	18649	0.111
76) Caprolactam	(2)	9.337	113	1557M	0.051
77) N-Nitrosodi-n-butylamine	(2)	9.401	84	8191	0.094
80) 4-Chloro-3-methylphenol	(2)	9.622	107	9143	0.103
82) Safrole	(2)	9.722	162	6125	0.090
85) Hexachlorocyclopentadiene	(3)	10.089	237	4061	0.093
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.095	216	8655	0.118
88) cis-Isosafrole	(3)	10.188	162	1689	0.025
90) 2,4,6-Trichlorophenol	(3)	10.287	196	4110	0.089
92) 2,4,5-Trichlorophenol	(3)	10.334	196	4969	0.102
99) Diphenyl ether	(3)	10.433	170	9598	0.116
93)$2-Fluorobiphenyl	(3)	10.438	172	42085	0.229
94) trans-Isosafrole	(3)	10.549	162	6036	0.083
95) 1,1'-Biphenyl	(3)	10.590	154	22832	0.115
98) 1-Chloronaphthalene	(3)	10.625	162	19042	0.133
100) 2-Nitroaniline	(3)	10.777	138	4253	0.083
104) 1,4-Naphthoquinone	(3)	10.887	158	4916	0.082
105) 1,4-Dinitrobenzene	(3)	11.010	168	2371	0.085
106) Dimethylphthalate	(3)	11.115	163	18611	0.112
107) 1,3-Dinitrobenzene	(3)	11.126	168	2177	0.070
108) 2,6-Dinitrotoluene	(3)	11.185	165	3619	0.094
112) 3-Nitroaniline	(3)	11.435	138	3929	0.089
113)*Acenaphthene-d10	(3)	11.482	164	551905	5.000
115) 2,4-Dinitrophenol	(3)	11.598	184	10882	0.407
116) 4-Nitrophenol	(3)	11.709	109	11885	0.351
117) Pentachlorobenzene	(3)	11.732	250	6824	0.118
119) Dibenzofuran	(3)	11.785	168	26694	0.120
118) 2,4-Dinitrotoluene	(3)	11.791	165	4468	0.085

M = Compound was manually integrated.
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on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0219.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:03 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:38 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
121) 1-Naphthylamine	(3)	11.896	143	17200	0.102
122) 2,3,4,6-Tetrachlorophenol	(3)	11.966	232	2966	0.079
123) 2-Naphthylamine	(3)	12.006	143	16581	0.097
124) Diethylphthalate	(3)	12.158	149	16365	0.097
125) Thionazin	(3)	12.257	107	3276	0.089
128) 5-Nitro-o-toluidine	(3)	12.263	152	4150	0.081
127) 4-Chlorophenyl-phenylether	(3)	12.269	204	9561	0.118
129) 4-Nitroaniline	(3)	12.269	138	3894	0.080
130) 4,6-Dinitro-2-methylphenol	(4)	12.321	198	7868	0.252
131) N-Nitrosodiphenylamine	(4)	12.414	169	14871	0.109
132) NDPA as diphenylamine	(4)	12.414	169	14871	0.109
134) 1,2-Diphenylhydrazine	(4)	12.461	77	23932	0.107
135)$2,4,6-Tribromophenol	(3)	12.531	330	3537	0.195
137) Tetraethyldithiopyrophosphate	(4)	12.648	97	3298	0.100
139) 1,3,5-Trinitrobenzene	(4)	12.735	213	1202	0.060
140) Diallate (peak 1)	(4)	12.782	86	7782	0.074
141) Phorate	(4)	12.787	75	12027	0.093
142) Phenacetin	(4)	12.799	108	7724	0.077
143) 4-Bromophenyl-phenylether	(4)	12.857	248	4965	0.125
144) Diallate (peak 2)	(4)	12.886	86	1526	0.019
147) Dimethoate	(4)	12.968	87	6529	0.076
148) Atrazine	(4)	13.079	200	3719	0.092
149) Pentachlorophenol	(4)	13.155	266	937	0.034
151) Pentachloronitrobenzene	(4)	13.172	237	1675	0.087
150) 4-Aminobiphenyl	(4)	13.172	169	10630	0.090
152) Pronamide	(4)	13.271	173	5494	0.077
153)*Phenanthrene-d10	(4)	13.382	188	994197	5.000
154) Dinoseb	(4)	13.411	211	1424	0.032
163) Carbazole	(4)	13.691	167	23758	0.104
164) Methyl parathion	(4)	13.895	109	3962	0.061
165) Di-n-butylphthalate	(4)	14.210	149	22942	0.081
167) Parathion	(4)	14.431	109	2338	0.057
168) 4-Nitroquinoline-1-oxide	(4)	14.431	190	1350	2.268
169) Octachlorostyrene	(4)	14.775	308	1605	0.100
171) Isodrin	(4)	14.816	193	3381	0.125
174) Benzidine	(5)	15.253	184	113716	0.602
175)*Pyrene-d10	(5)	15.340	212	943367	5.000
179)$Terphenyl-d14	(5)	15.655	244	36095	0.234
182) p-Dimethylaminoazobenzene	(5)	15.877	225	2666	0.062
185) Chlorobenzilate	(5)	15.976	139	6487	0.076

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0219.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:03 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:38 art12405

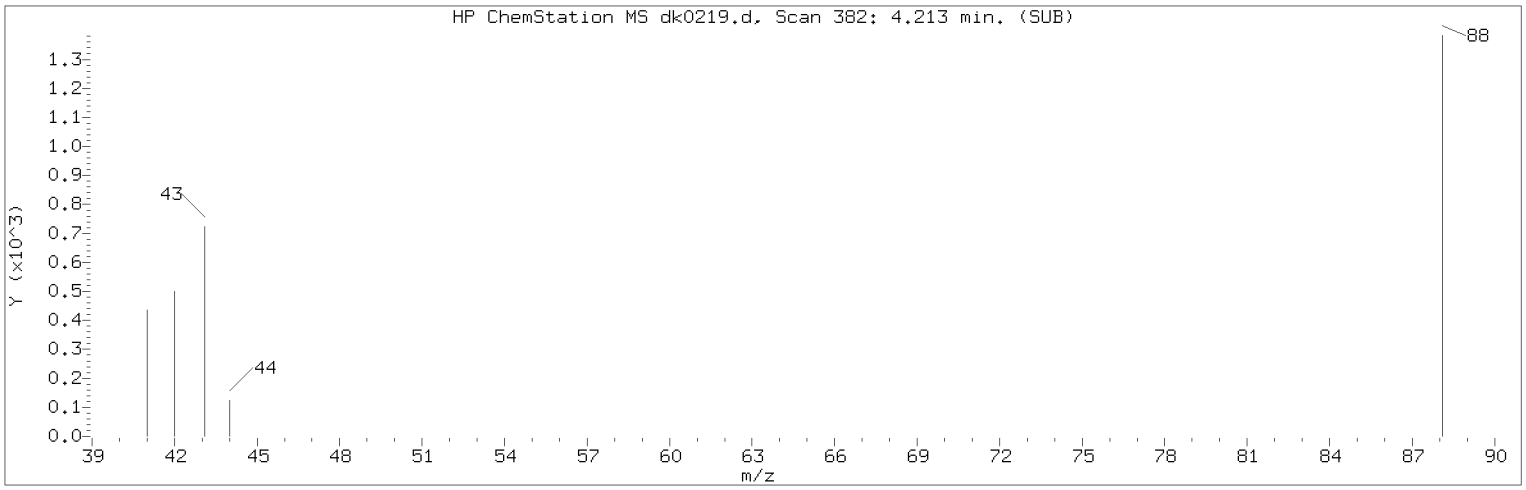
Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
187) 3,3'-Dimethylbenzidine	(5)	16.436	212	11362	0.070
188) Butylbenzylphthalate	(5)	16.506	149	9452	0.069
191) 2-Acetylaminofluorene	(5)	16.844	181	5304	0.048
193) 3,3'-Dichlorobenzidine	(5)	17.351	252	6989	0.075
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.375	231	3581	0.068
199) bis(2-Ethylhexyl)phthalate	(5)	17.573	149	11382	0.060
203) 6-Methylchrysene	(5)	18.220	242	13967	0.086
205) Di-n-octylphthalate	(6)	18.733	149	16283	0.054
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.205	256	6476	0.062
213)*Perylene-d12	(6)	19.817	264	884422	5.000
215) 3-Methylcholanthrene	(6)	20.301	268	6960	0.074
217) Dibenz(a,h)acridine	(6)	21.105	279	12650	0.080
218) Dibenz(a,j)acridine	(6)	21.181	279	13189	0.077

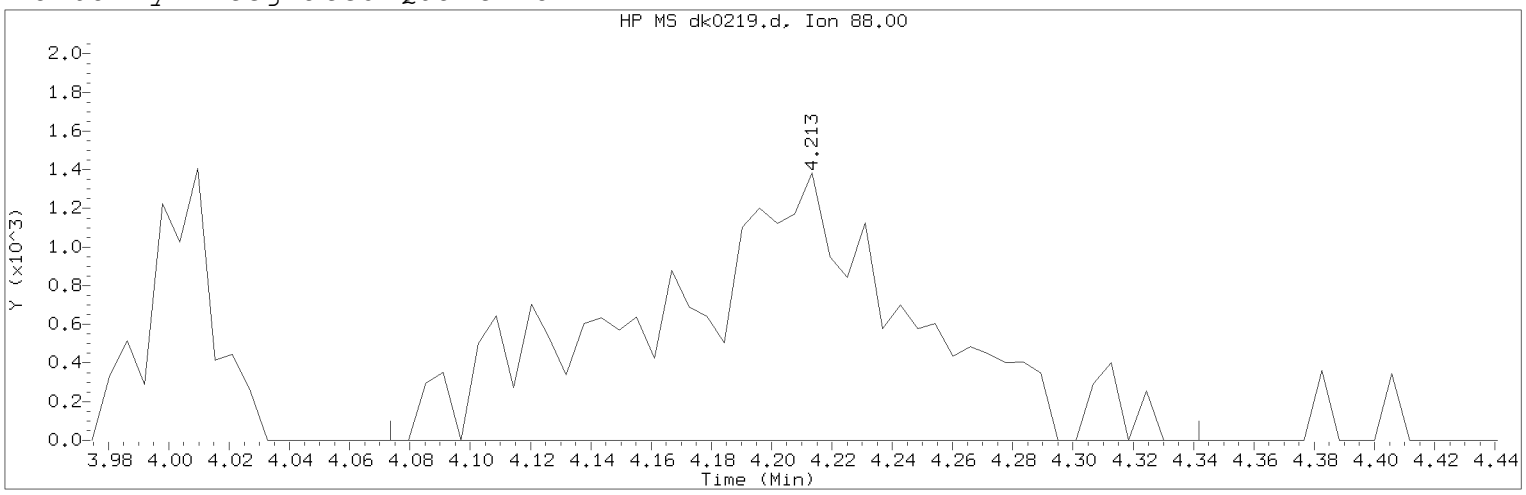
* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0219.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:03 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:38 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

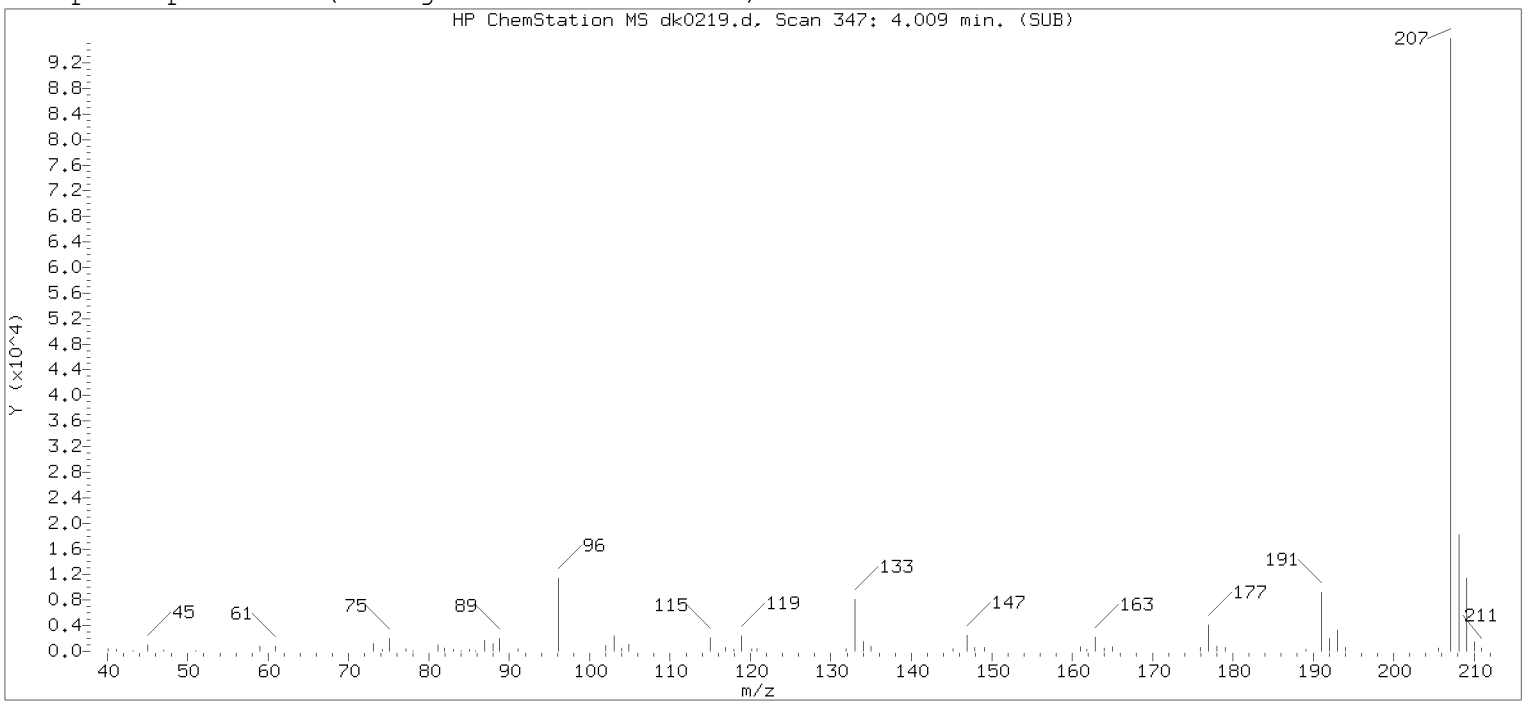
Compound Number : 8
Compound Name : N-Nitrosomethylethylamine
Scan Number : 382
Retention Time (minutes) : 4.213
Quant Ion : 88.00
Area (flag) : 8409M
On-Column Amount (ng/ul) : 0.1312
Integration start scan : 357 Integration stop scan: 403
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

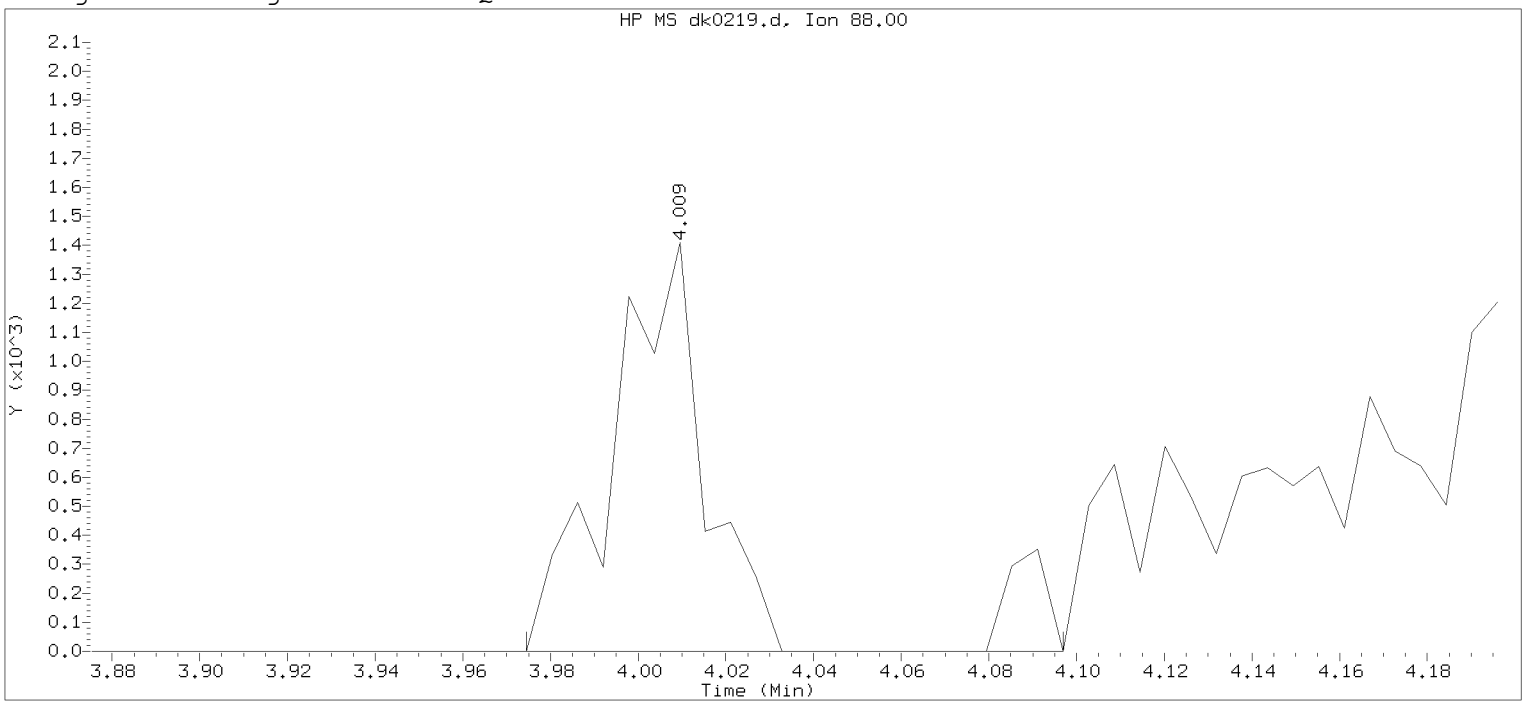
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0219.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:03 Analyst ID: em10340

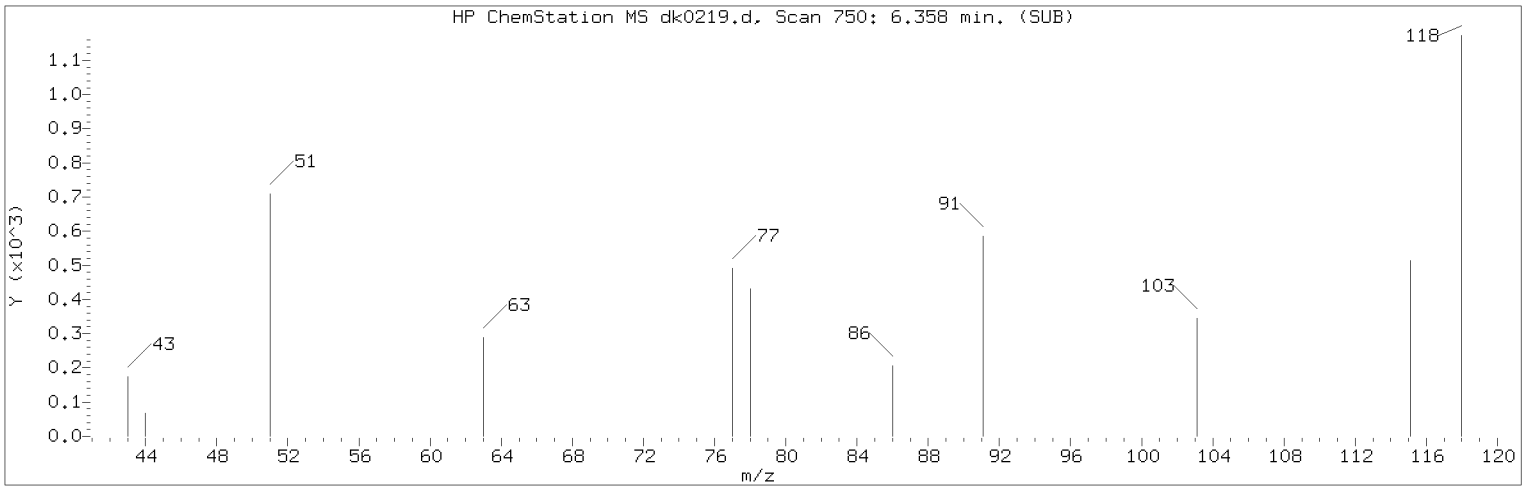
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 16:31 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

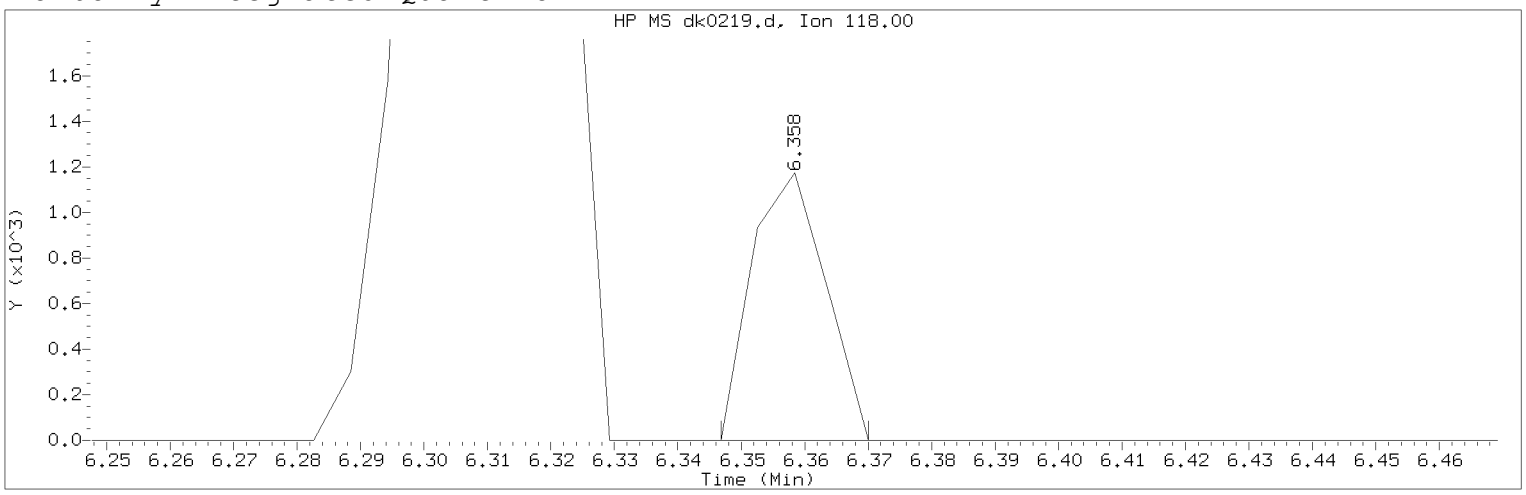
Compound Number	: 8		
Compound Name	: N-Nitrosomethylethylamine		
Scan Number	: 347		
Retention Time (minutes)	: 4.009		
Quant Ion	: 88.00		
Area	: 2290		
On-column Amount (ng/ul)	: 0.0366		
Integration start scan	: 340	Integration stop scan:	361
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:40.
Target 3.5 esignature user name: [illegible]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0219.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:03 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:38 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

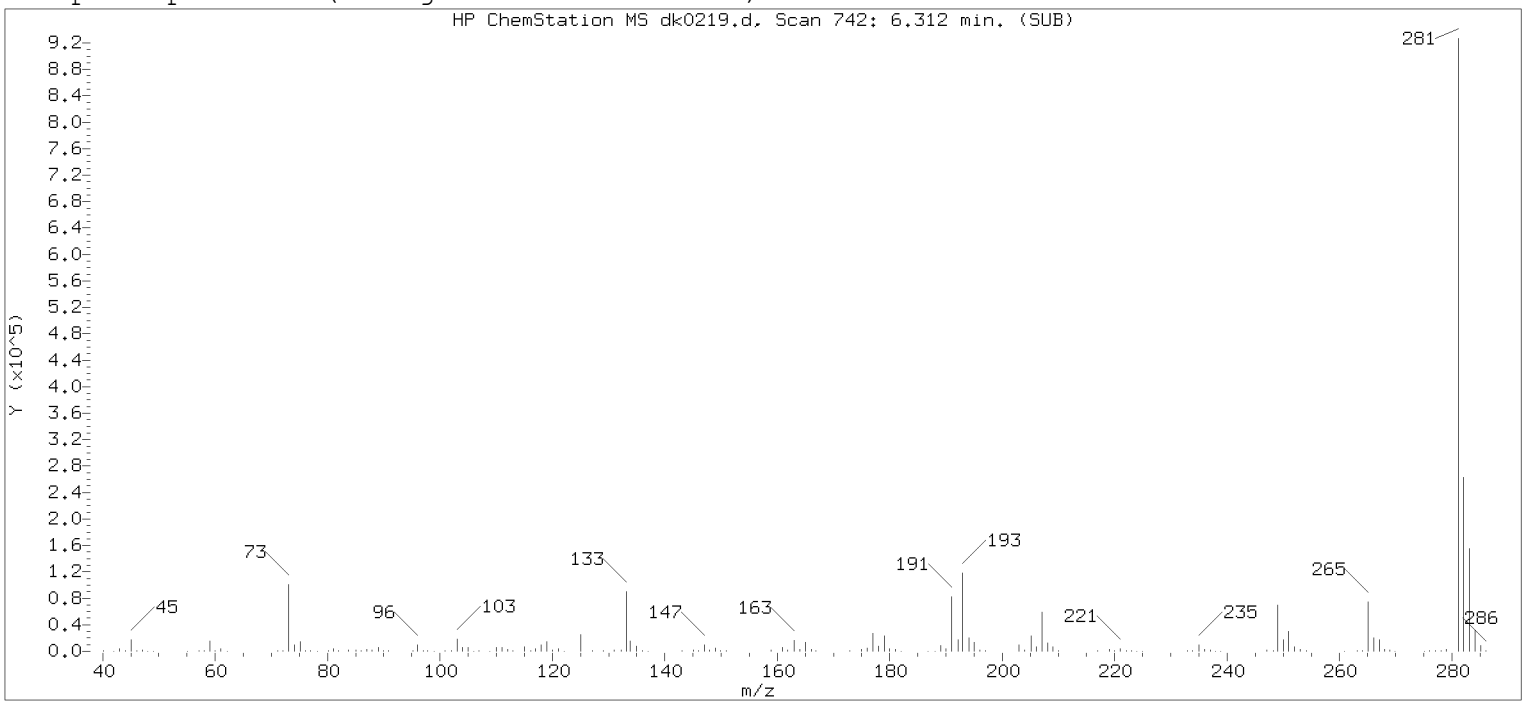
Compound Number : 20
Compound Name : a-methylstyrene
Scan Number : 750
Retention Time (minutes) : 6.358
Quant Ion : 118.00
Area (flag) : 946M
On-Column Amount (ng/ul) : 0.0889
Integration start scan : 747 Integration stop scan: 751
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

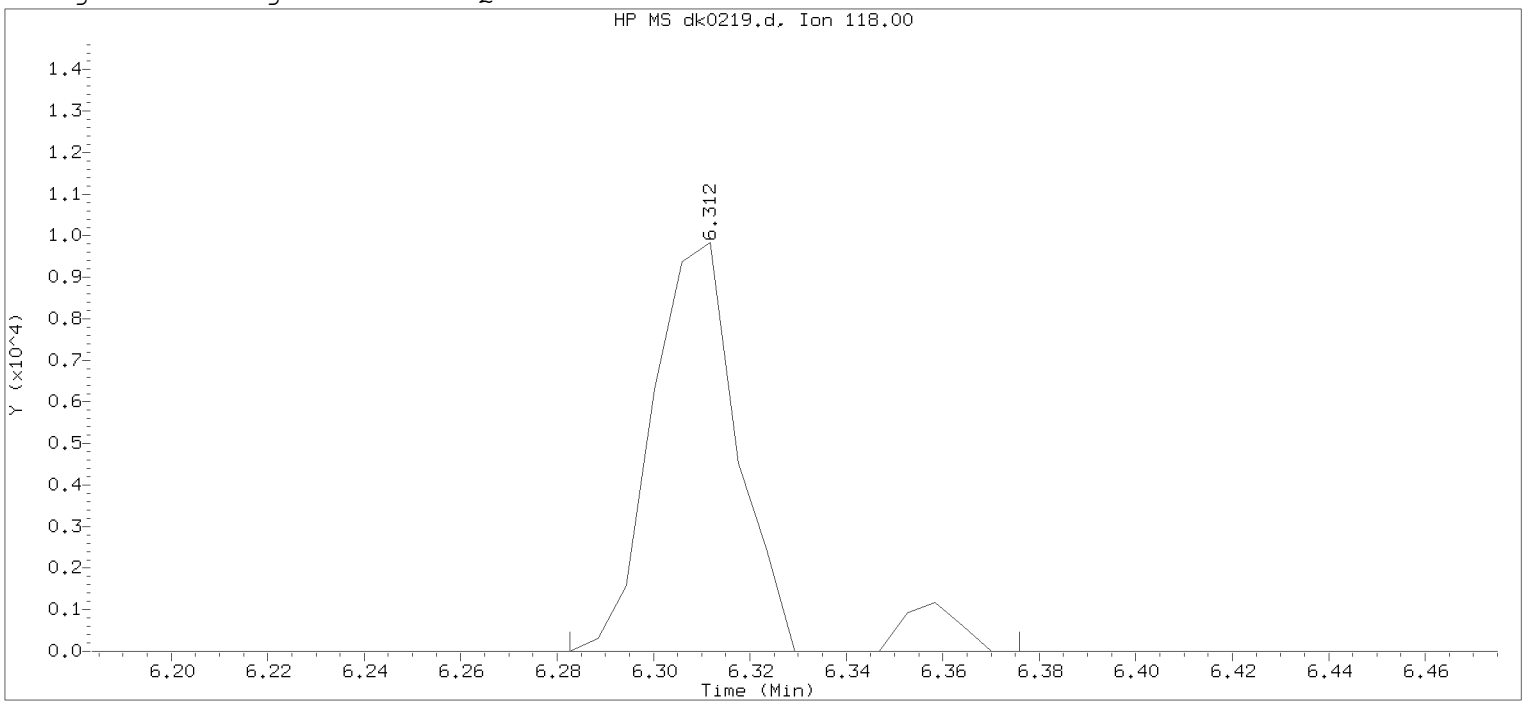
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0219.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:03 Analyst ID: em10340

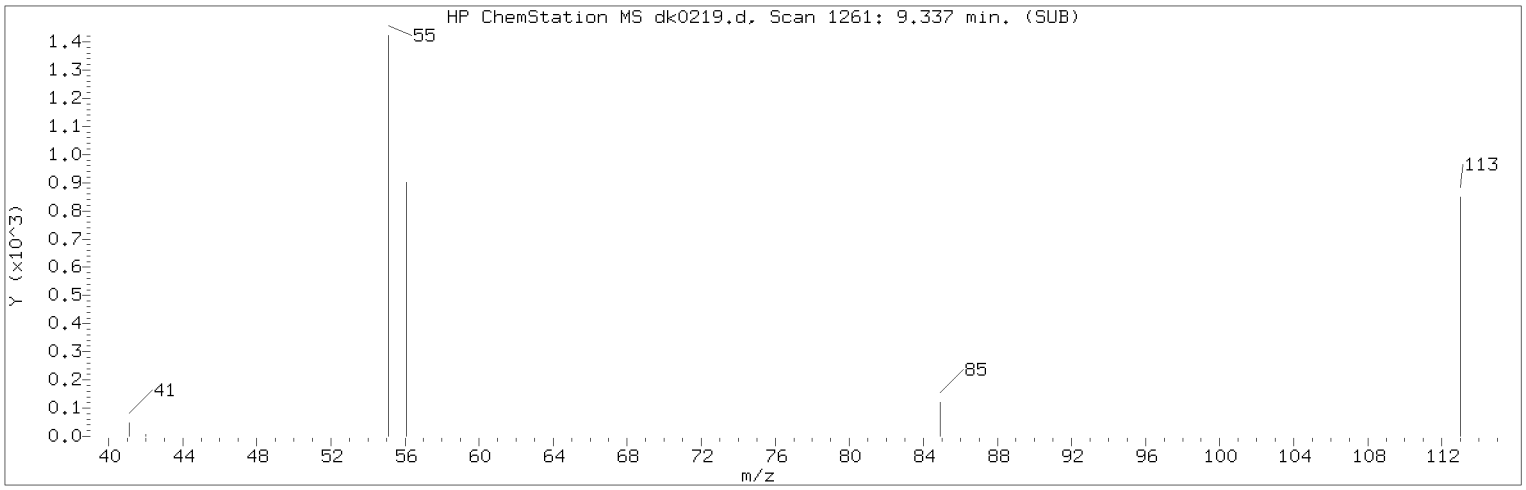
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 16:31 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

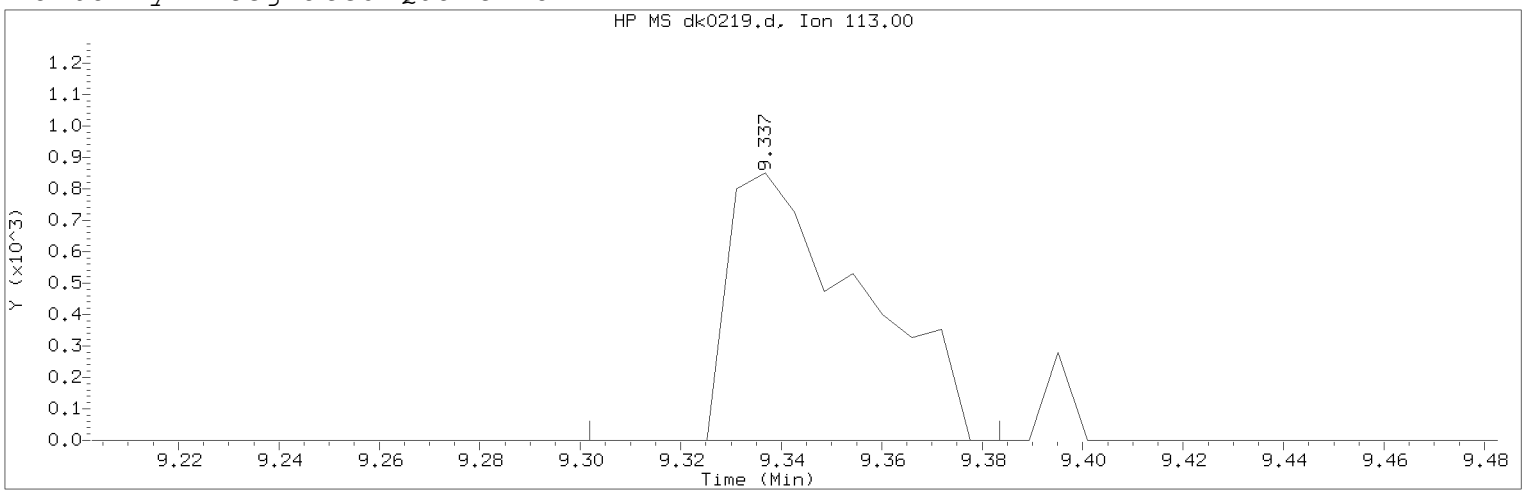
Compound Number	: 20		
Compound Name	: a-methylstyrene		
Scan Number	: 742		
Retention Time (minutes)	: 6.312		
Quant Ion	: 118.00		
Area	: 12962		
On-column Amount (ng/ul)	: 1.2272		
Integration start scan	: 736	Integration stop scan:	752
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0219.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:03 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:38 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

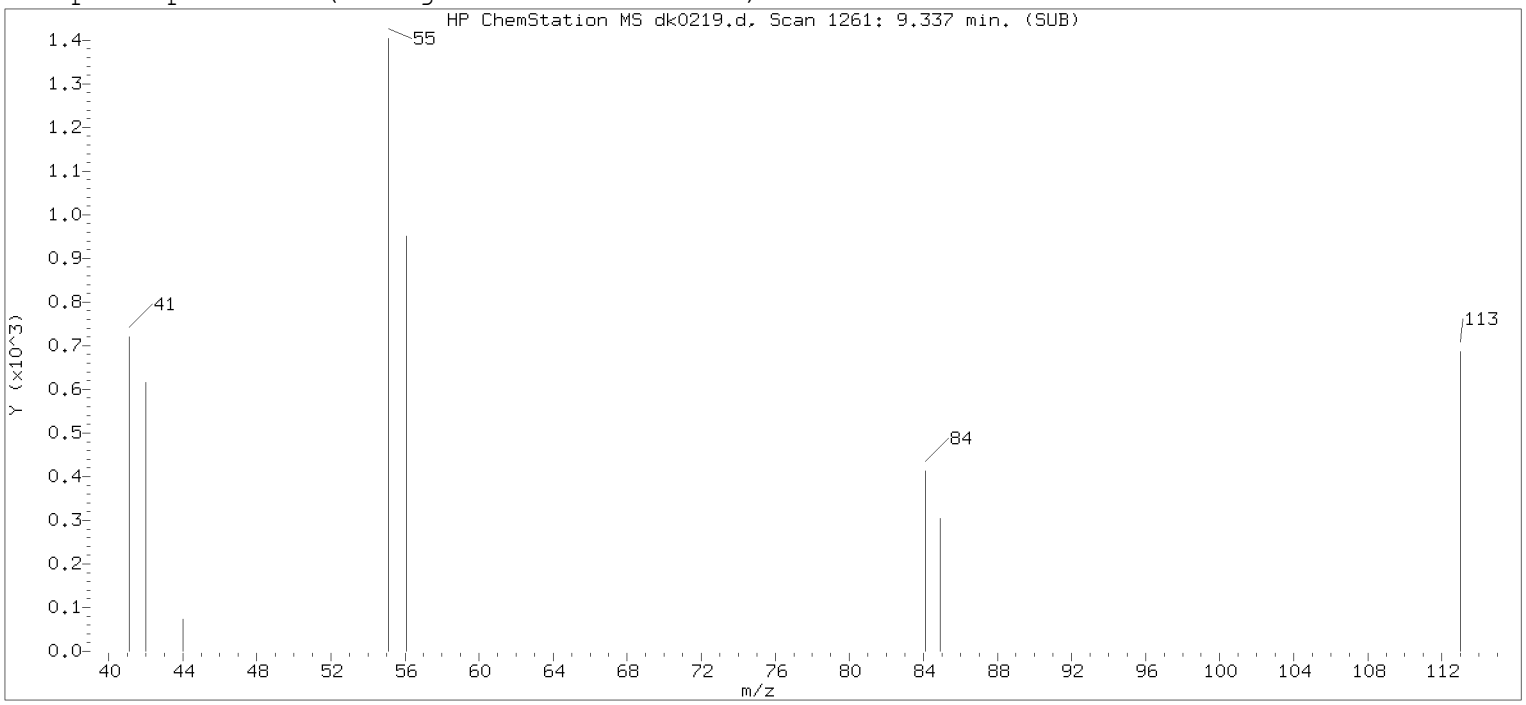
Compound Number : 76
Compound Name : Caprolactam
Scan Number : 1261
Retention Time (minutes) : 9.337
Quant Ion : 113.00
Area (flag) : 1557M
On-Column Amount (ng/ul) : 0.0510
Integration start scan : 1254 Integration stop scan: 1268
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

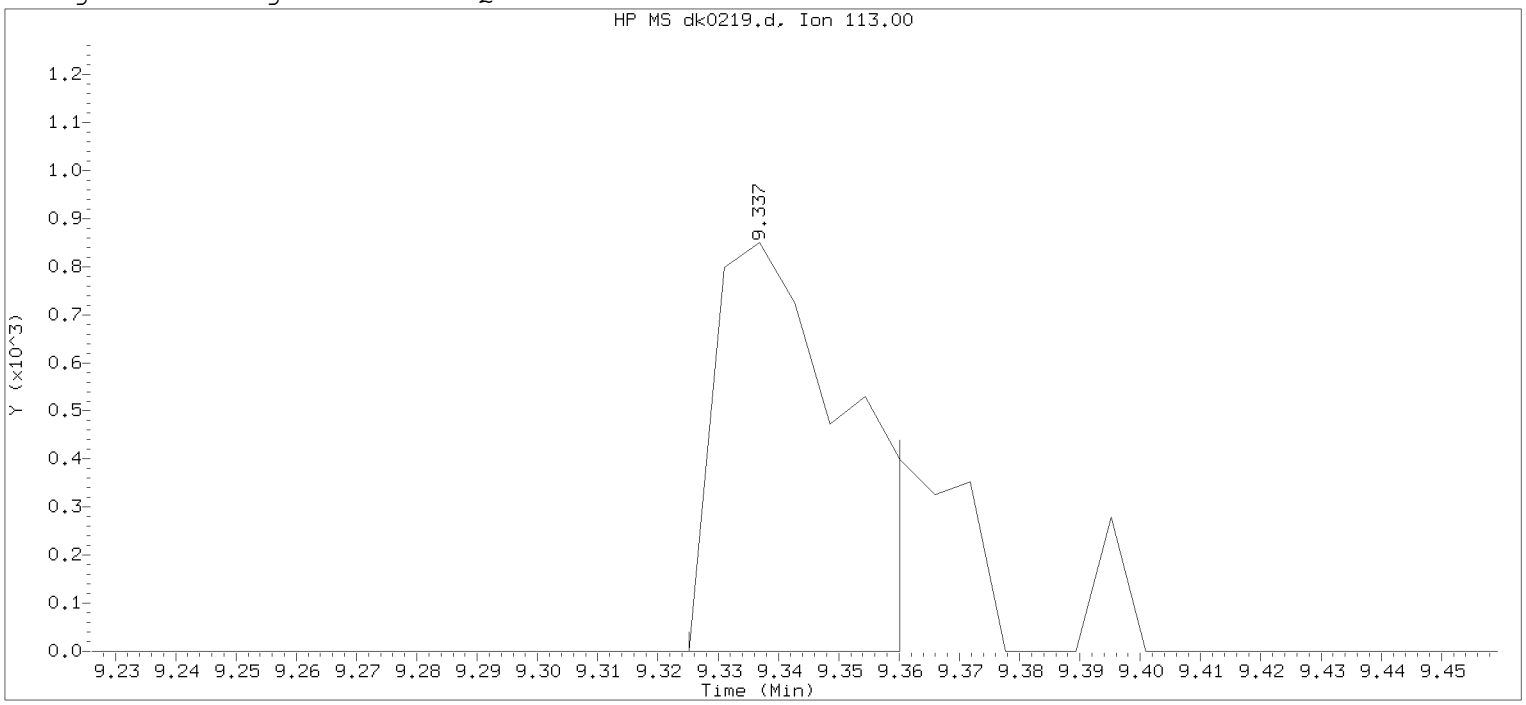
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



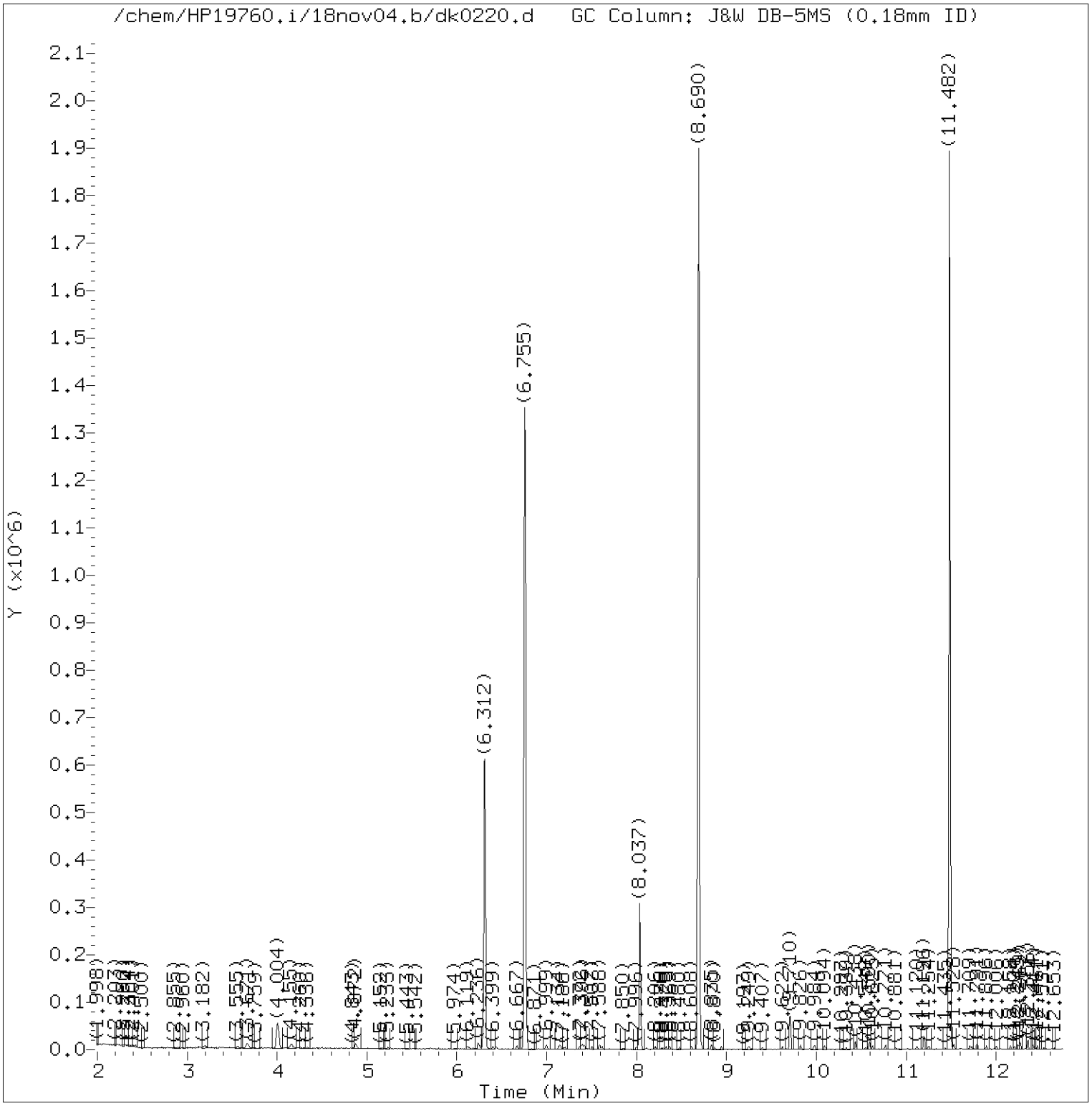
Data File: /chem/HP19760.i/18nov04.b/dk0219.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:03 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 16:31 Automation

Sample Name: SSTD0.125 Lab Sample ID: rvMDL2648

Compound Number	: 76		
Compound Name	: Caprolactam		
Scan Number	: 1261		
Retention Time (minutes)	: 9.337		
Quant Ion	: 113.00		
Area	: 1250		
On-column Amount (ng/ul)	: 0.0637		
Integration start scan	: 1258	Integration stop scan:	1264
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:40.
Target 3.5 esignature user name: atransue



Total Ion Chromatogram (TIC)

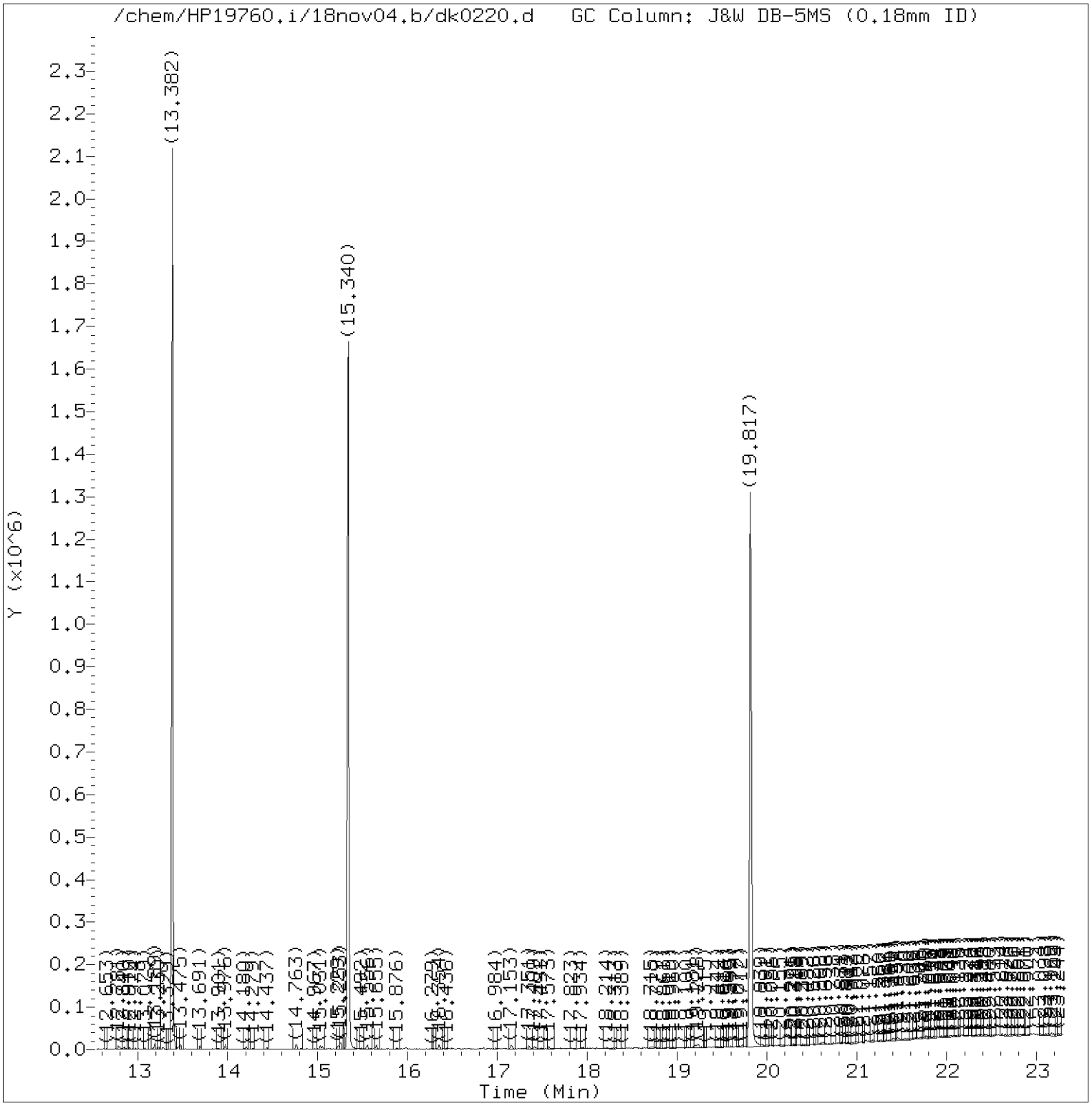
Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0220.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:31 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:40 art12405

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0220.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:31 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:40 art12405

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0220.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:31 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:40 art12405

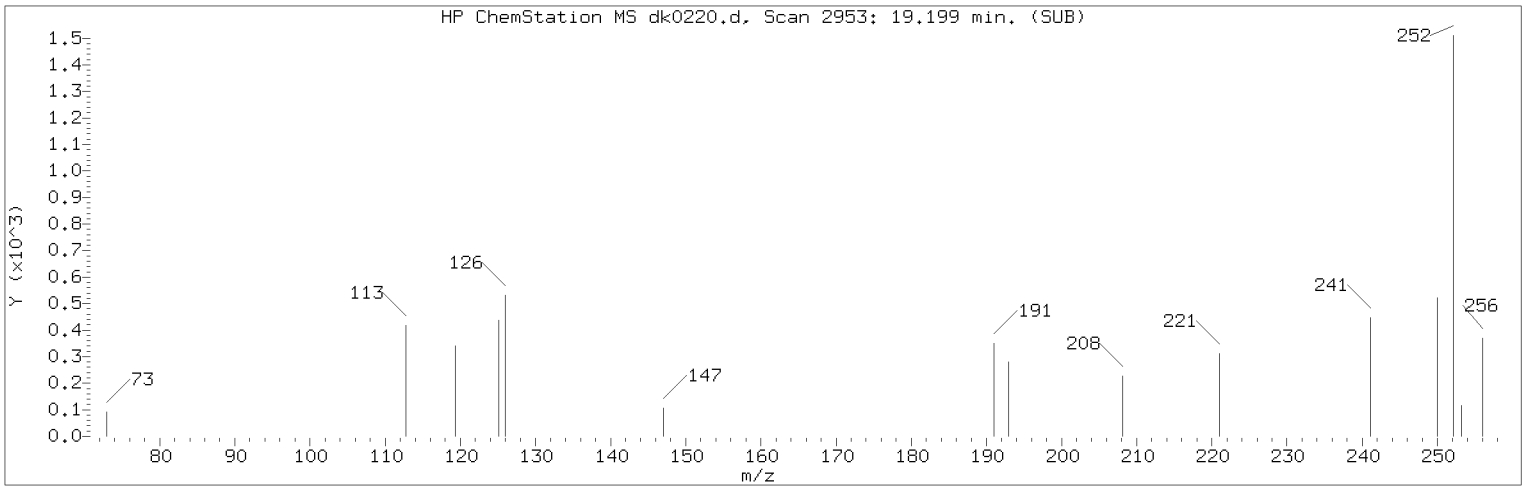
Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
25)*1,4-Dichlorobenzene-d4	(1)	6.755	152	265816	5.000
44)$Nitrobenzene-d5	(2)	7.588	82	4828	0.046
65)*Naphthalene-d8	(2)	8.690	136	964016	5.000
66) Naphthalene	(2)	8.725	128	6053	0.027
83) 2-Methylnaphthalene	(2)	9.826	142	2912	0.021
84) 1-Methylnaphthalene	(2)	9.978	142	2983	0.023
93)$2-Fluorobiphenyl	(3)	10.438	172	6643	0.048
96) 2-Chloronaphthalene	(3)	10.596	162	3031	0.025
109) Acenaphthylene	(3)	11.249	152	3547	0.022
113)*Acenaphthene-d10	(3)	11.482	164	415152	5.000
114) Acenaphthene	(3)	11.528	153	2811	0.023
126) Fluorene	(3)	12.239	166	2465	0.019
145) Hexachlorobenzene	(4)	12.910	284	799	0.026
153)*Phenanthrene-d10	(4)	13.382	188	742490	5.000
155) Phenanthrene	(4)	13.411	178	4647	0.026
157) Anthracene	(4)	13.475	178	3482	0.020
222) Total PAHs	(6)			58269	0.366
173) Fluoranthene	(4)	15.031	202	3959	0.021
175)*Pyrene-d10	(5)	15.340	212	680798	5.000
177) Pyrene	(5)	15.364	202	5049	0.026
179)$Terphenyl-d14	(5)	15.649	244	5199	0.047
195) Benzo(a)anthracene	(5)	17.351	228	2635	0.017
196) Chrysene	(5)	17.409	228	3345	0.020
206) Benzo(b)fluoranthene	(6)	19.199	252	2590M	0.017
208) Benzo(k)fluoranthene	(6)	19.245	252	2548M	0.016
211) Benzo(a)pyrene	(6)	19.723	252	2139M	0.015
213)*Perylene-d12	(6)	19.817	264	630337	5.000
219) Indeno(1,2,3-cd)pyrene	(6)	21.408	276	1729M	0.014
220) Dibenz(a,h)anthracene	(6)	21.460	278	2462	0.018
221) Benzo(g,h,i)perylene	(6)	21.775	276	2913	0.021

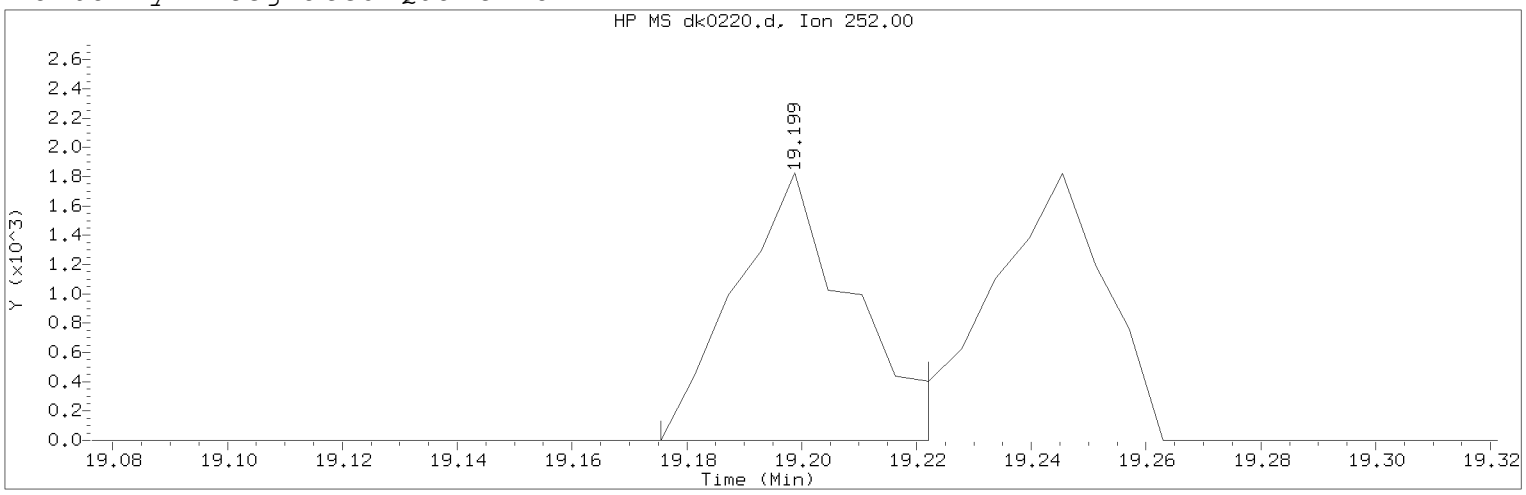
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0220.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:31 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:40 art12405

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

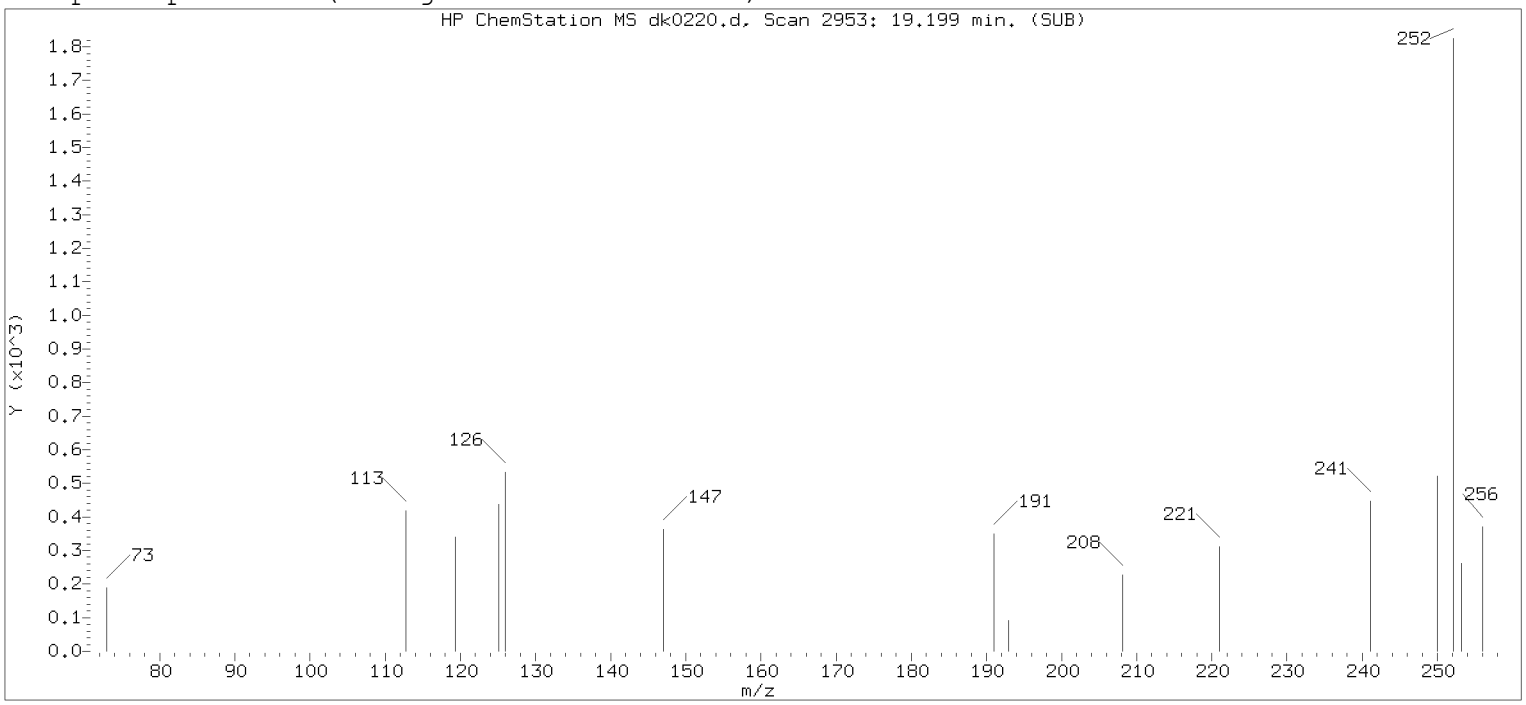
Compound Number : 206
Compound Name : Benzo(b)fluoranthene
Scan Number : 2953
Retention Time (minutes) : 19.199
Quant Ion : 252.00
Area (flag) : 2590M
On-Column Amount (ng/ul) : 0.0172
Integration start scan : 2948 Integration stop scan: 2956
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

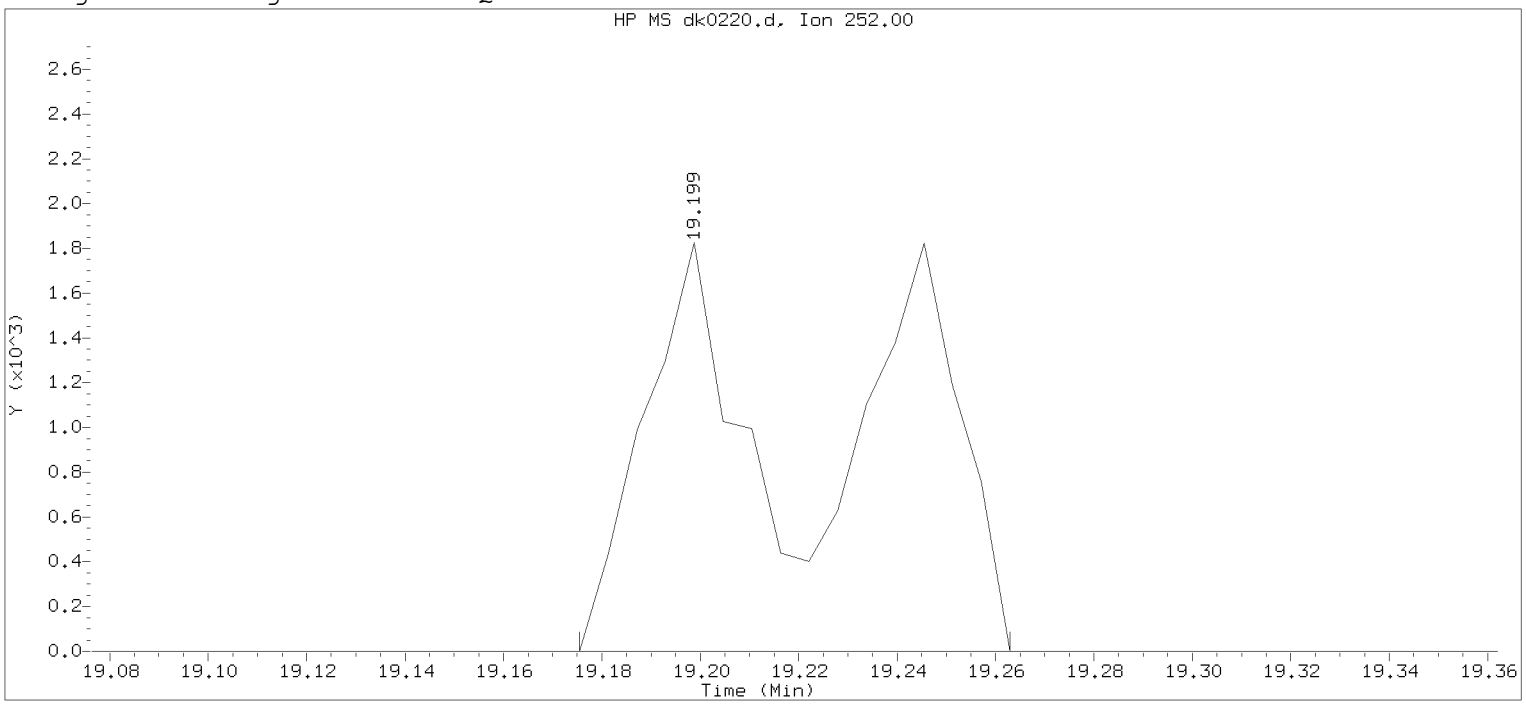
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0220.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:31 Analyst ID: em10340

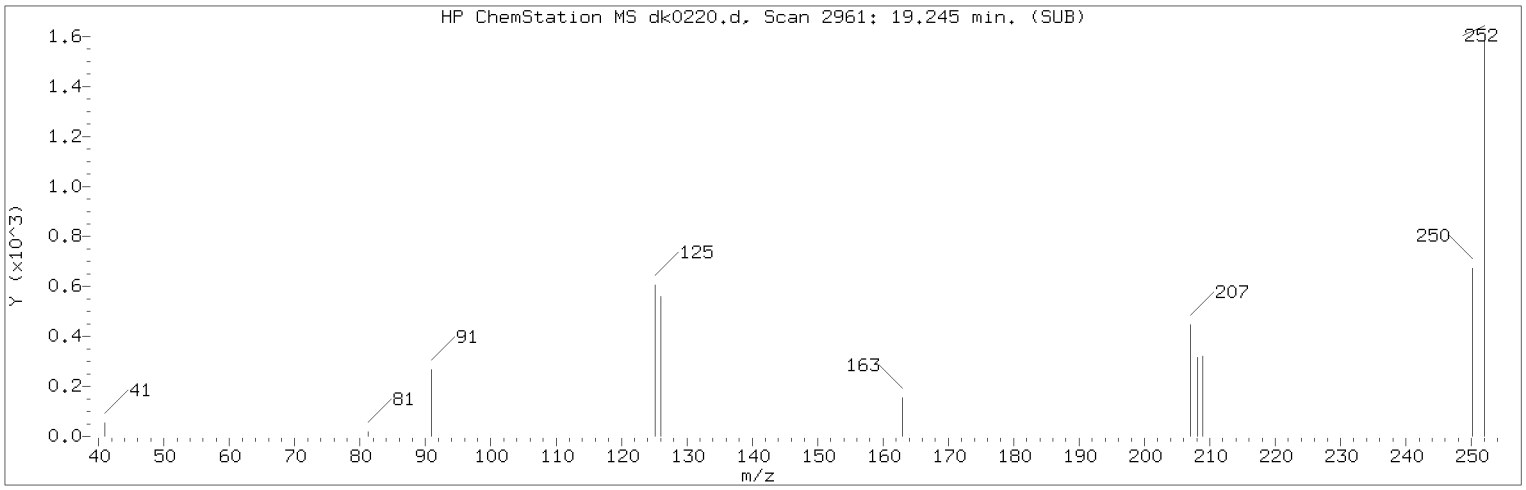
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 17:00 Automation

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

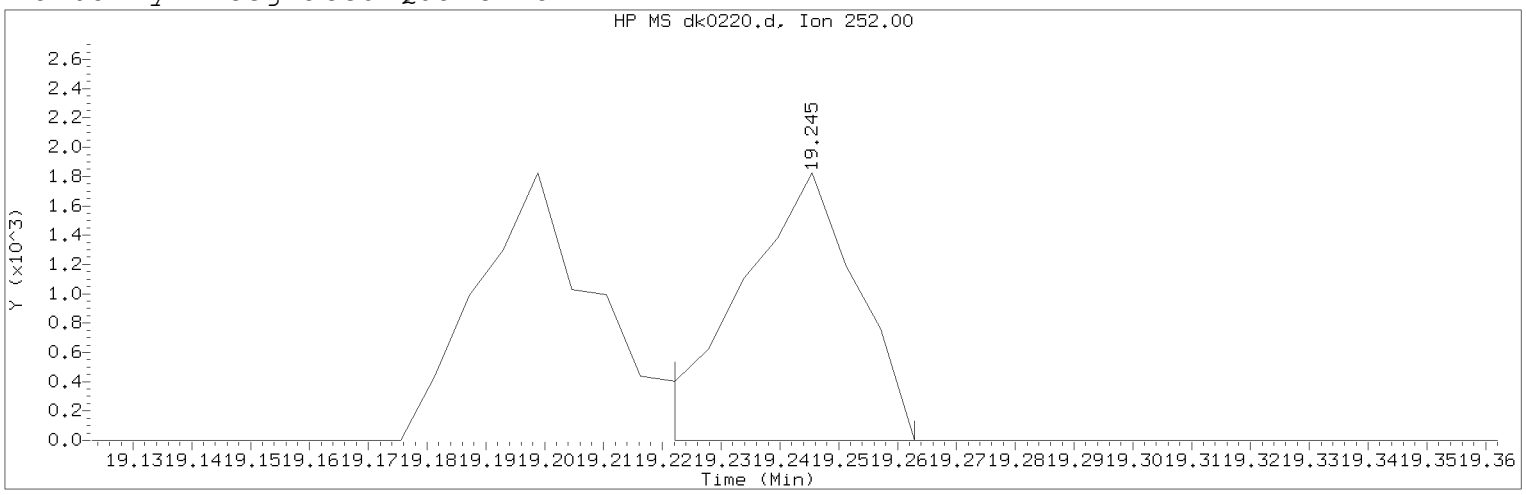
Compound Number	: 206		
Compound Name	: Benzo(b)fluoranthene		
Scan Number	: 2953		
Retention Time (minutes)	: 19.199		
Quant Ion	: 252.00		
Area	: 4999		
On-column Amount (ng/ul)	: 0.0327		
Integration start scan	: 2948	Integration stop scan:	2963
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:40.
Target 3.5 esignature user name: [illegible]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0220.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:31 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:40 art12405

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

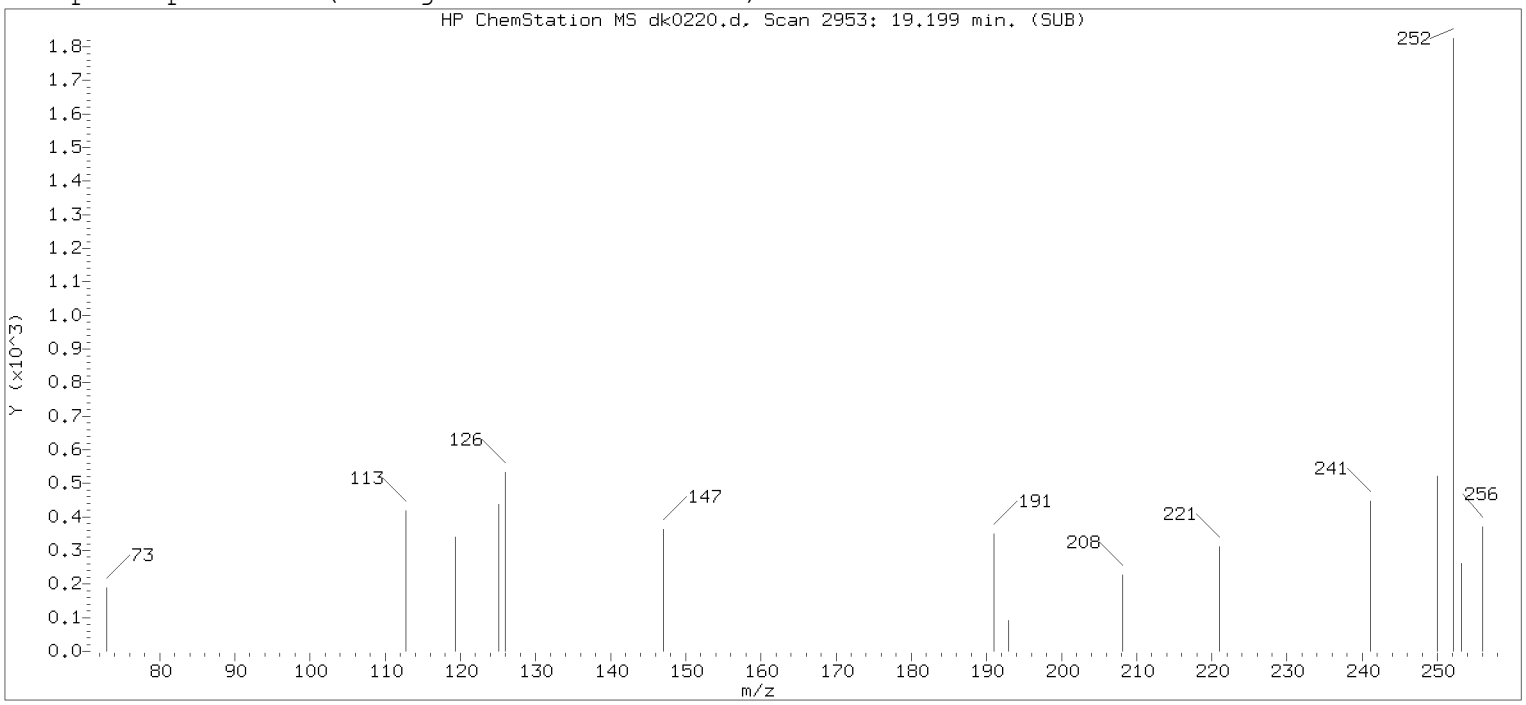
Compound Number : 208
Compound Name : Benzo(k)fluoranthene
Scan Number : 2961
Retention Time (minutes) : 19.245
Quant Ion : 252.00
Area (flag) : 2548M
On-Column Amount (ng/ul) : 0.0163
Integration start scan : 2956 Integration stop scan: 2963
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

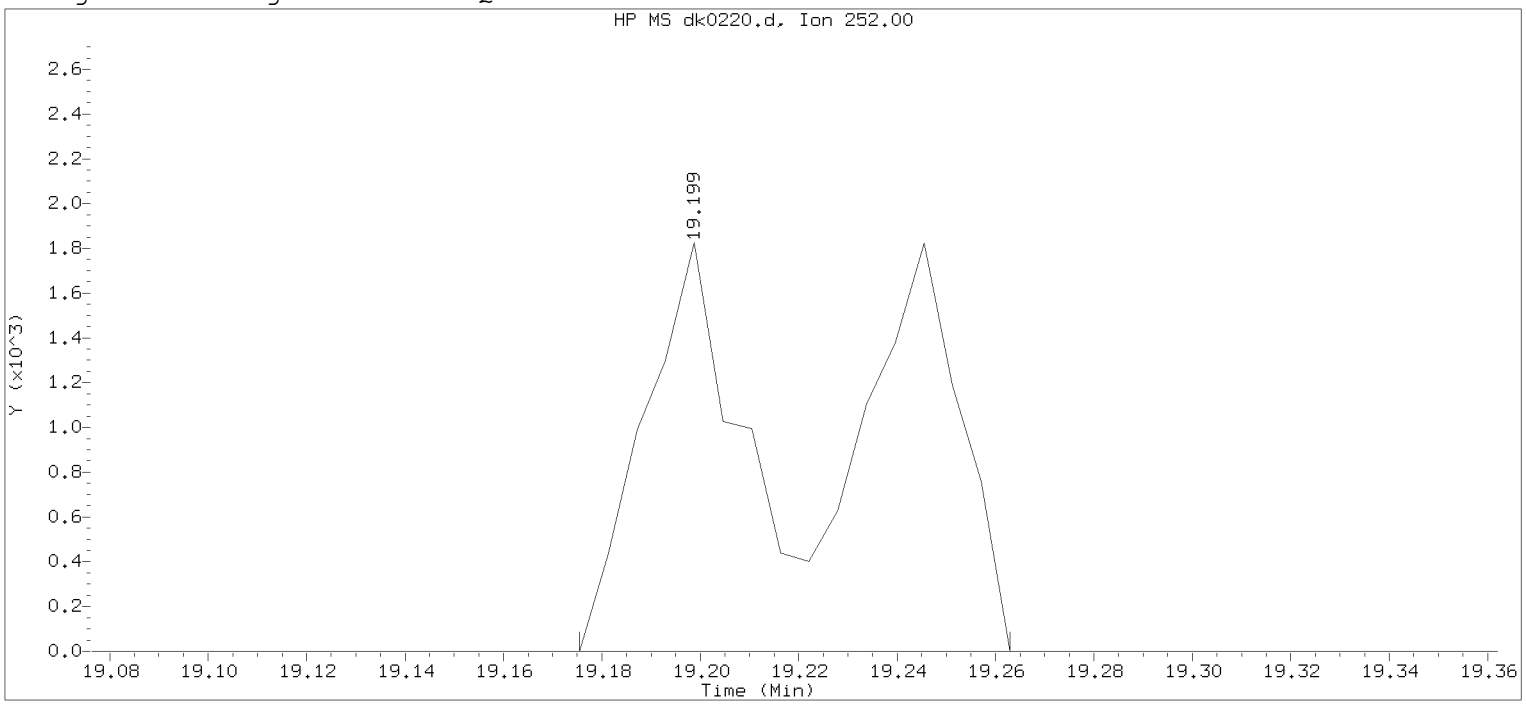
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0220.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:31 Analyst ID: em10340

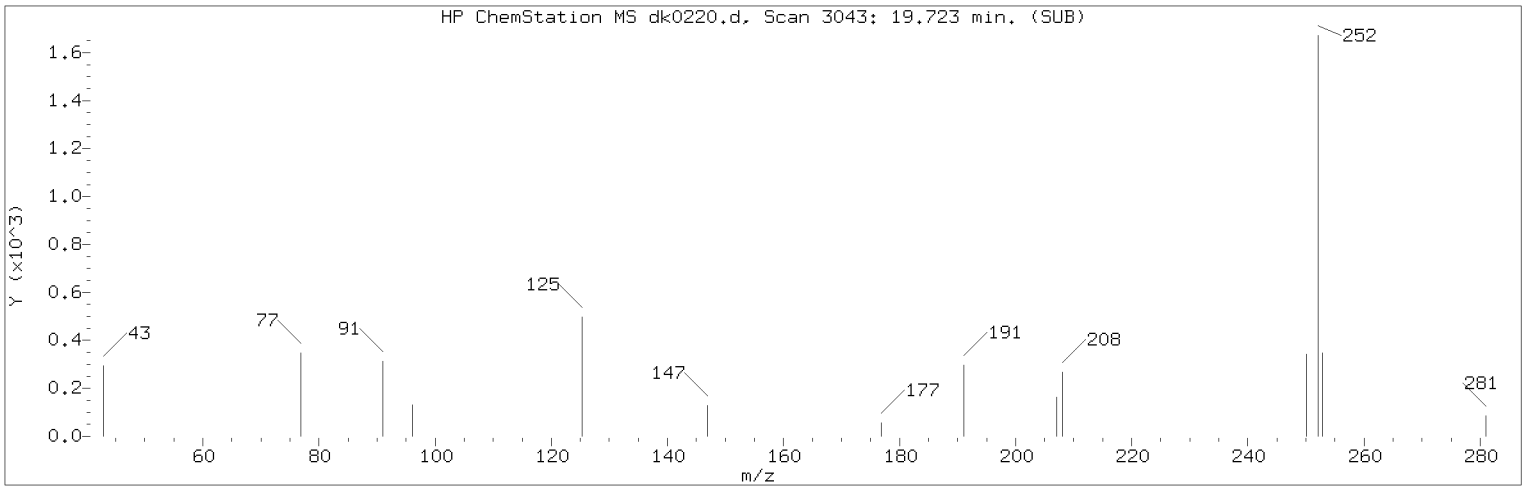
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 17:00 Automation

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

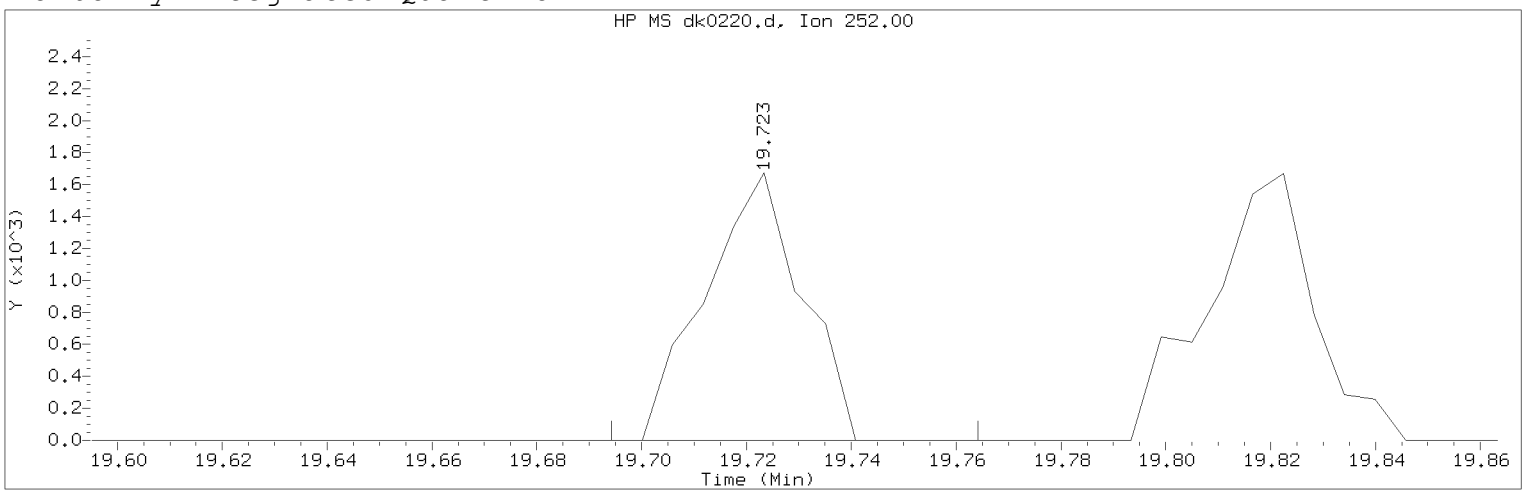
Compound Number	: 208		
Compound Name	: Benzo(k)fluoranthene		
Scan Number	: 2953		
Retention Time (minutes)	: 19.199		
Quant Ion	: 252.00		
Area	: 4999		
On-column Amount (ng/ul)	: 0.0318		
Integration start scan	: 2948	Integration stop scan:	2963
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:40.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0220.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:31 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:40 art12405

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

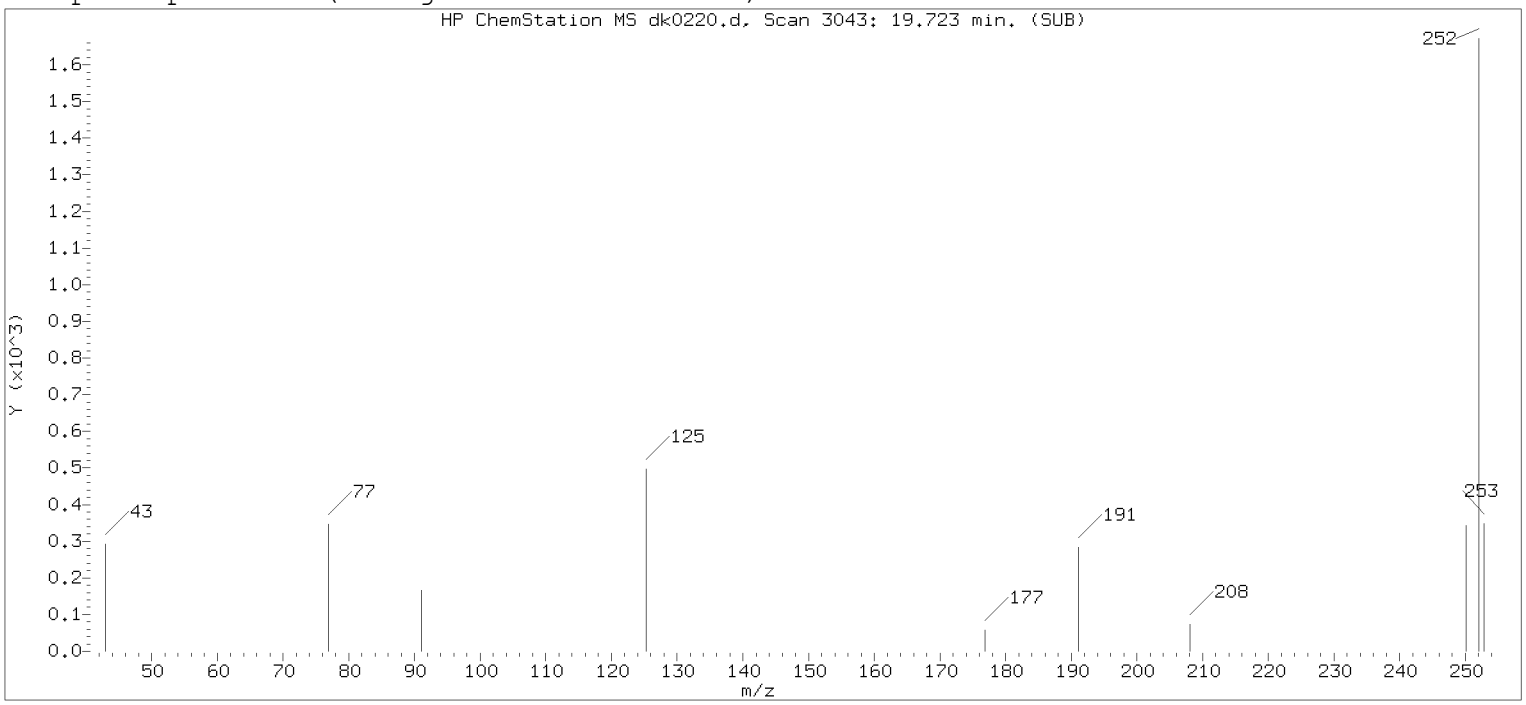
Compound Number : 211
Compound Name : Benzo(a)pyrene
Scan Number : 3043
Retention Time (minutes) : 19.723
Quant Ion : 252.00
Area (flag) : 2139M
On-Column Amount (ng/ul) : 0.0155
Integration start scan : 3037 Integration stop scan: 3049
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

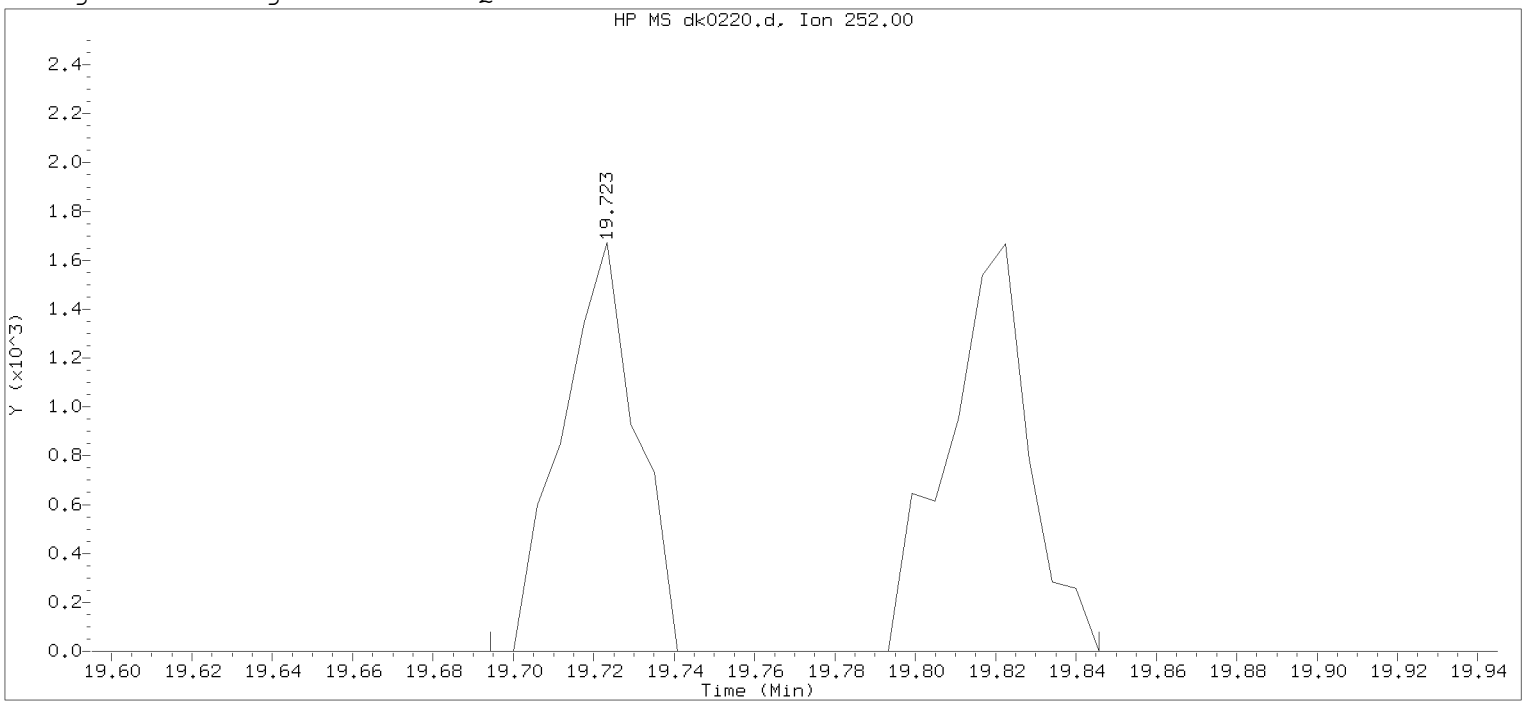
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0220.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:31 Analyst ID: em10340

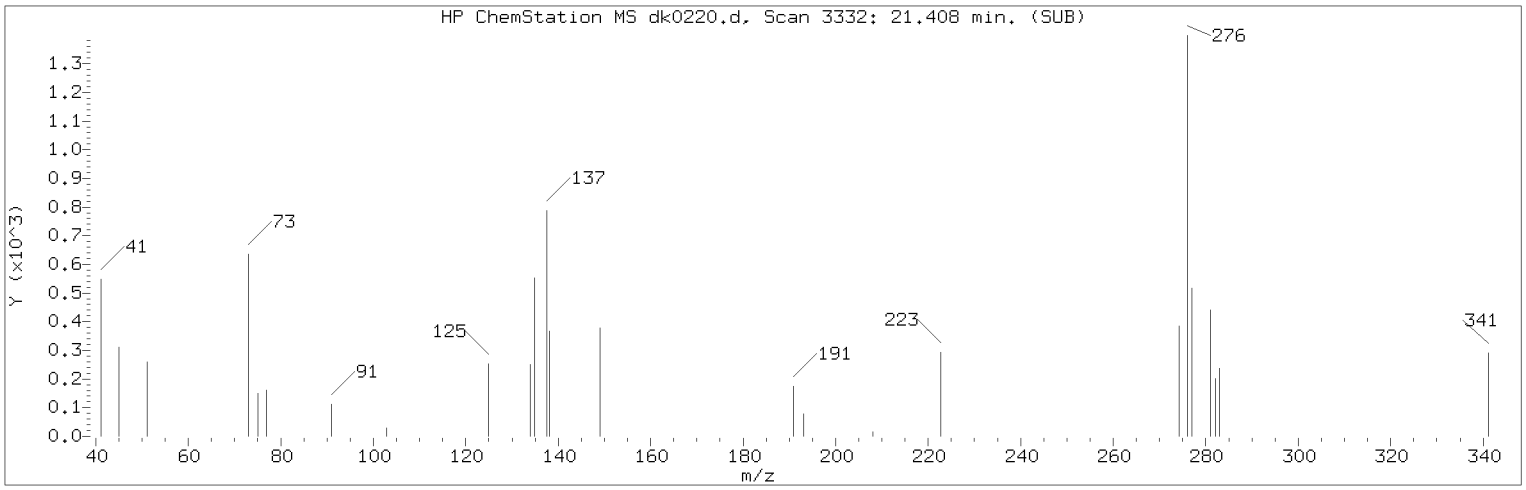
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 17:00 Automation

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

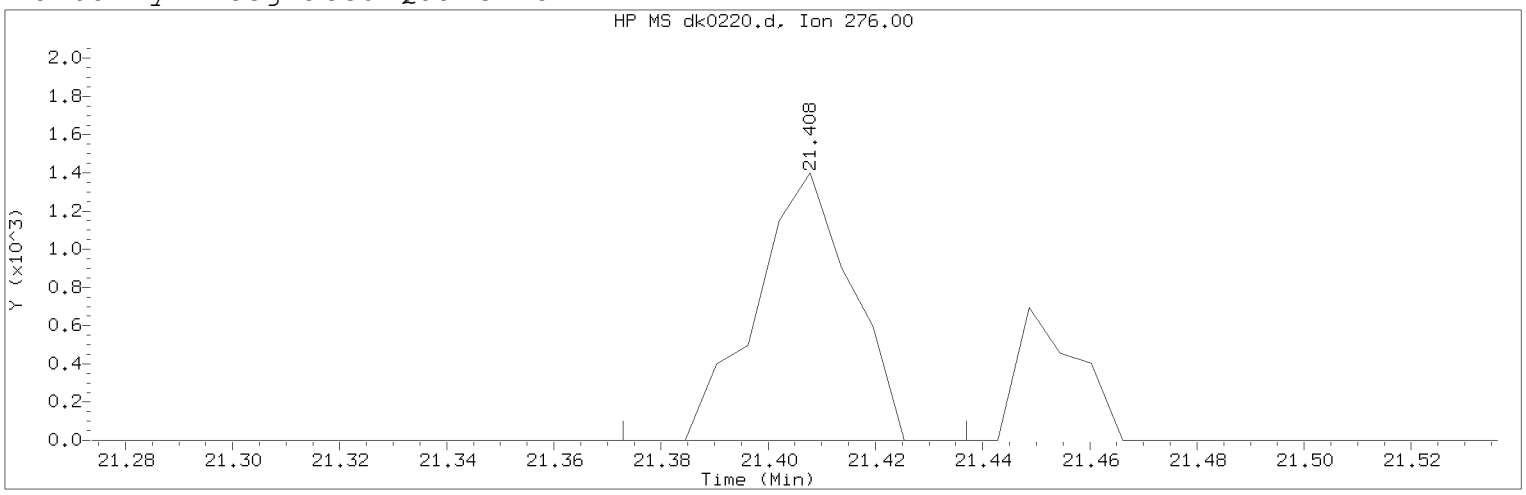
Compound Number	: 211		
Compound Name	: Benzo(a)pyrene		
Scan Number	: 3043		
Retention Time (minutes)	: 19.723		
Quant Ion	: 252.00		
Area	: 4500		
On-column Amount (ng/ul)	: 0.0318		
Integration start scan	: 3037	Integration stop scan:	3063
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:40.
Target 3.5 esignature user name: [illegible]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0220.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:31 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:40 art12405

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

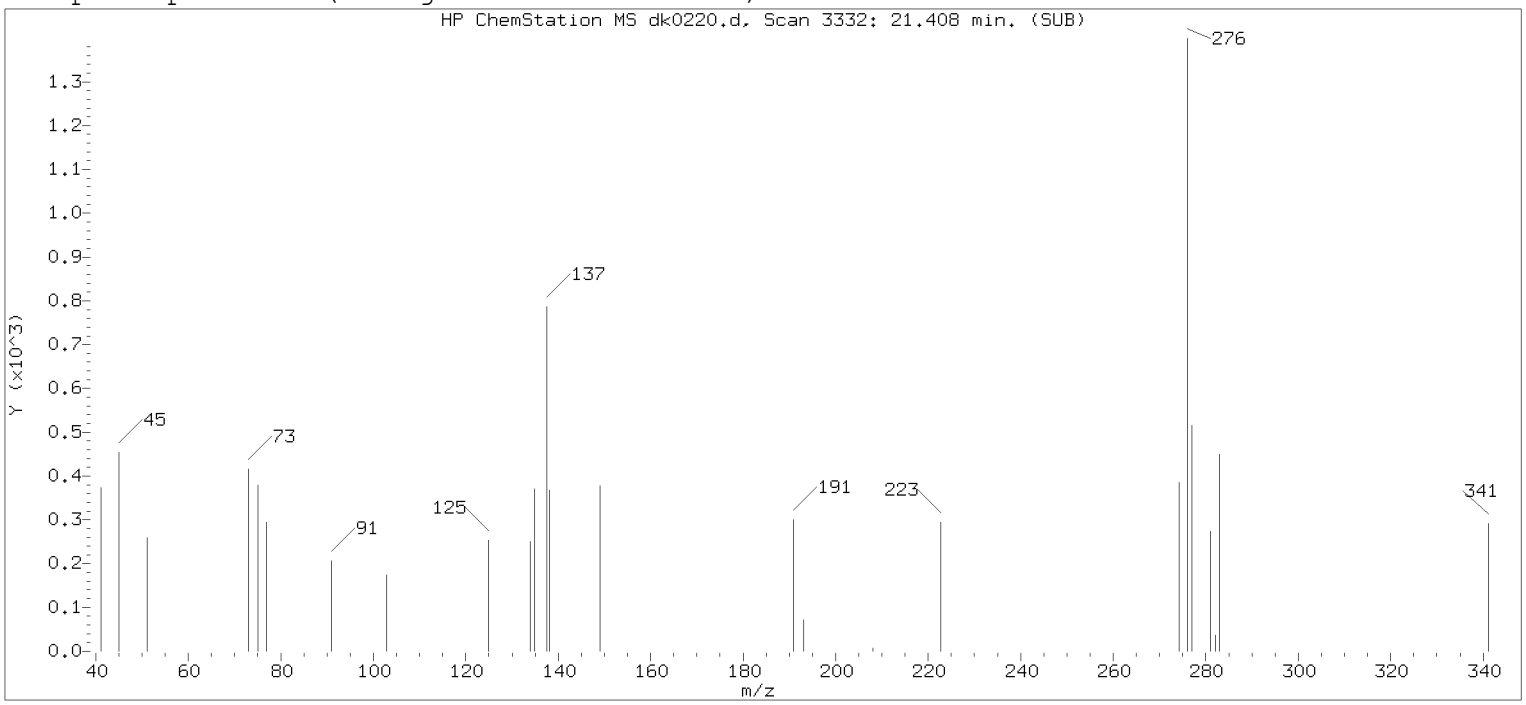
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3332
Retention Time (minutes) : 21.408
Quant Ion : 276.00
Area (flag) : 1729M
On-Column Amount (ng/ul) : 0.0140
Integration start scan : 3325 Integration stop scan: 3336
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

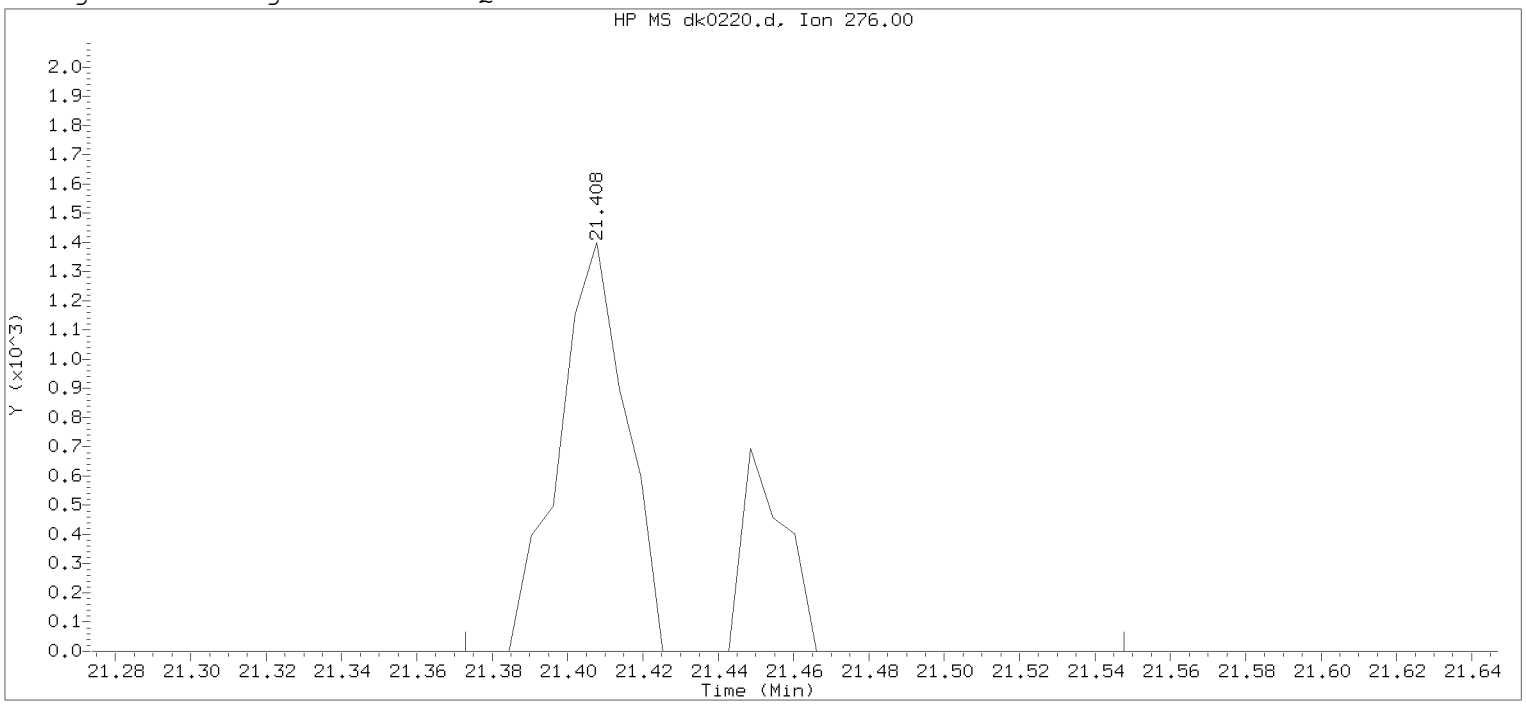
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:40.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/06/2018 at 11:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



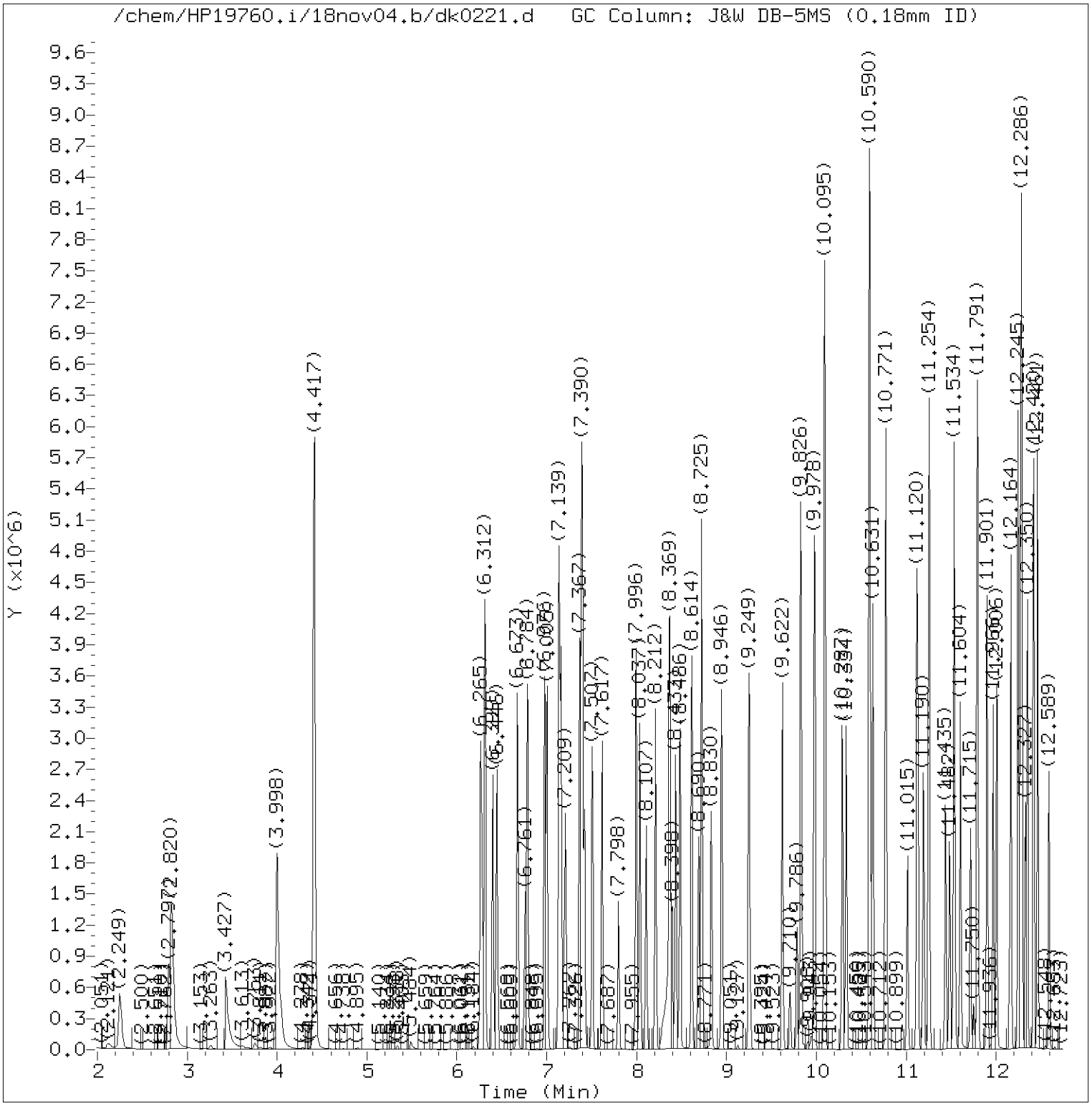
Data File: /chem/HP19760.i/18nov04.b/dk0220.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 16:31 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 17:00 Automation

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3332		
Retention Time (minutes)	: 21.408		
Quant Ion	: 276.00		
Area	: 2272		
On-column Amount (ng/ul)	: 0.0151		
Integration start scan	: 3325	Integration stop scan:	3355
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/04/2018 at 19:40.
Target 3.5 esignature user name: atransue



Total Ion Chromatogram (TIC)

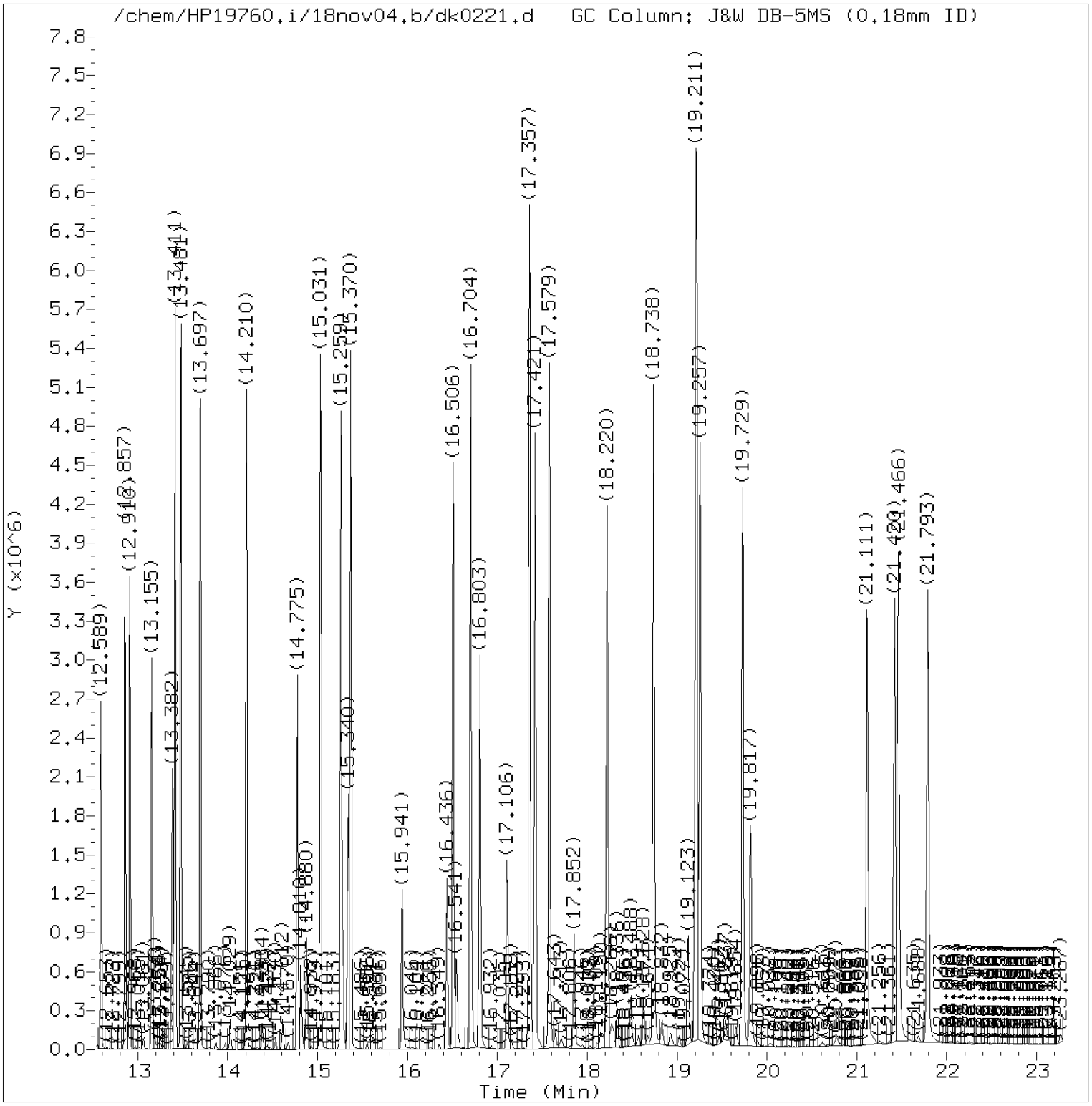
Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0221.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 17:00 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: icv2
Calibration date and time: 05-NOV-2018 17:05
Date, time and analyst ID of latest file update: 05-Nov-2018 17:10 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Digitally signed by Ashley R. Transue
on 11/05/2018 at 17:17.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0221.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 17:00 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: icv2
Calibration date and time: 05-NOV-2018 17:05
Date, time and analyst ID of latest file update: 05-Nov-2018 17:10 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Digitally signed by Ashley R. Transue
on 11/05/2018 at 17:17.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0221.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 17:00 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: icv2
Calibration date and time: 05-NOV-2018 17:05
Date, time and analyst ID of latest file update: 05-Nov-2018 17:10 art12405

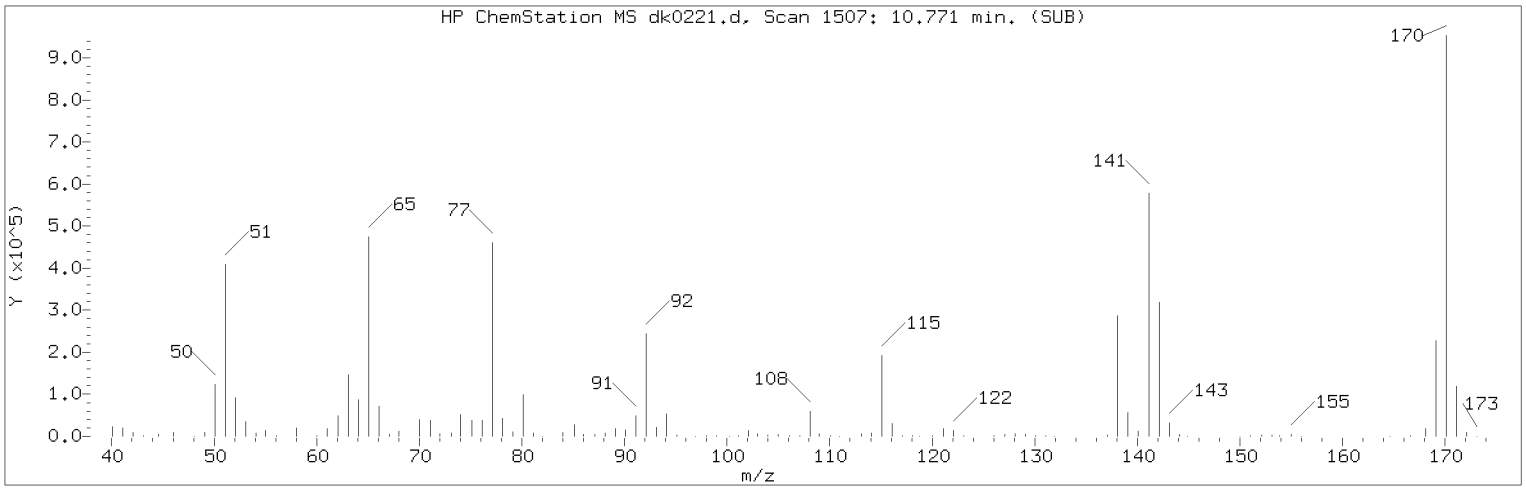
Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
25)*1,4-Dichlorobenzene-d4	(1)	6.761	152	270998	5.000
65)*Naphthalene-d8	(2)	8.690	136	1033320	5.000
99) Diphenyl ether	(3)	10.771	170	1079352M	15.137
100) 2-Nitroaniline	(3)	10.777	138	525570	11.868
109) Acenaphthylene	(3)	11.254	152	2412428	12.814
113)*Acenaphthene-d10	(3)	11.482	164	474293	5.000
134) 1,2-Diphenylhydrazine	(4)	12.461	77	2339867	12.713
149) Pentachlorophenol	(4)	13.155	266	285399	12.547
153)*Phenanthrene-d10	(4)	13.382	188	816740	5.000
175)*Pyrene-d10	(5)	15.340	212	811240	5.000
206) Benzo(b)fluoranthene	(6)	19.211	252	2388277	12.158
208) Benzo(k)fluoranthene	(6)	19.257	252	2432383	11.910
211) Benzo(a)pyrene	(6)	19.729	252	2272014	12.620
213)*Perylene-d12	(6)	19.817	264	821344	5.000
220) Dibenz(a,h)anthracene	(6)	21.466	278	2219072	12.435

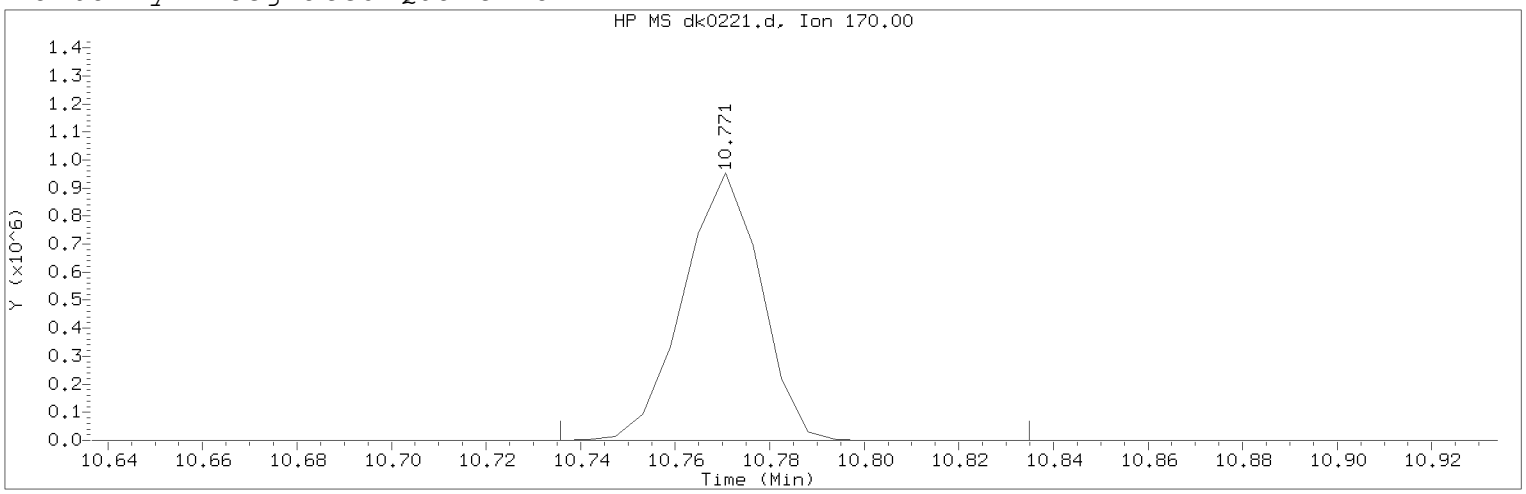
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 11/05/2018 at 17:17.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04.b/dk0221.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 17:00 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: icv2
Calibration date and time: 05-NOV-2018 17:05
Date, time and analyst ID of latest file update: 05-Nov-2018 17:10 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

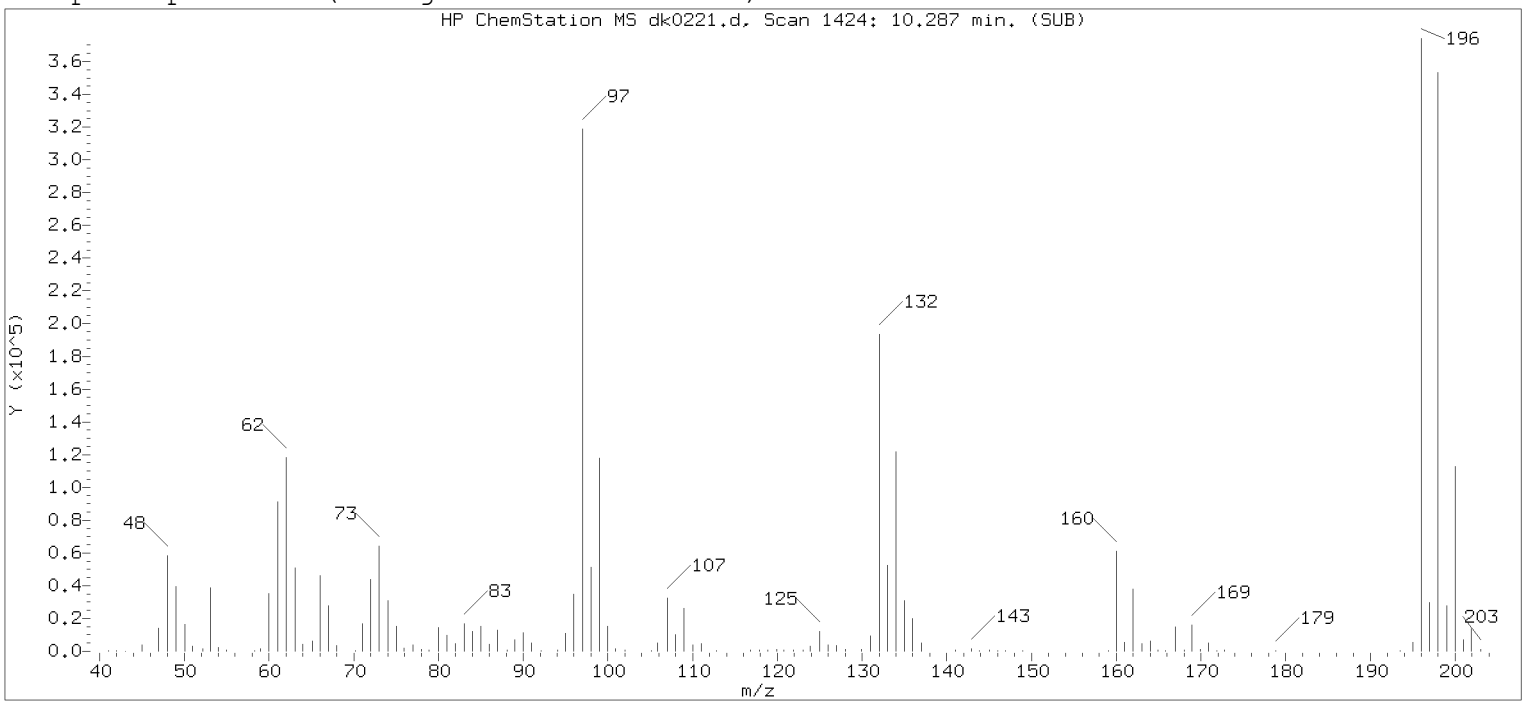
Compound Number : 99
Compound Name : Diphenyl ether
Scan Number : 1507
Retention Time (minutes) : 10.771
Quant Ion : 170.00
Area (flag) : 1079352M
On-Column Amount (ng/ul) : 15.1371
Integration start scan : 1500 Integration stop scan: 1517
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

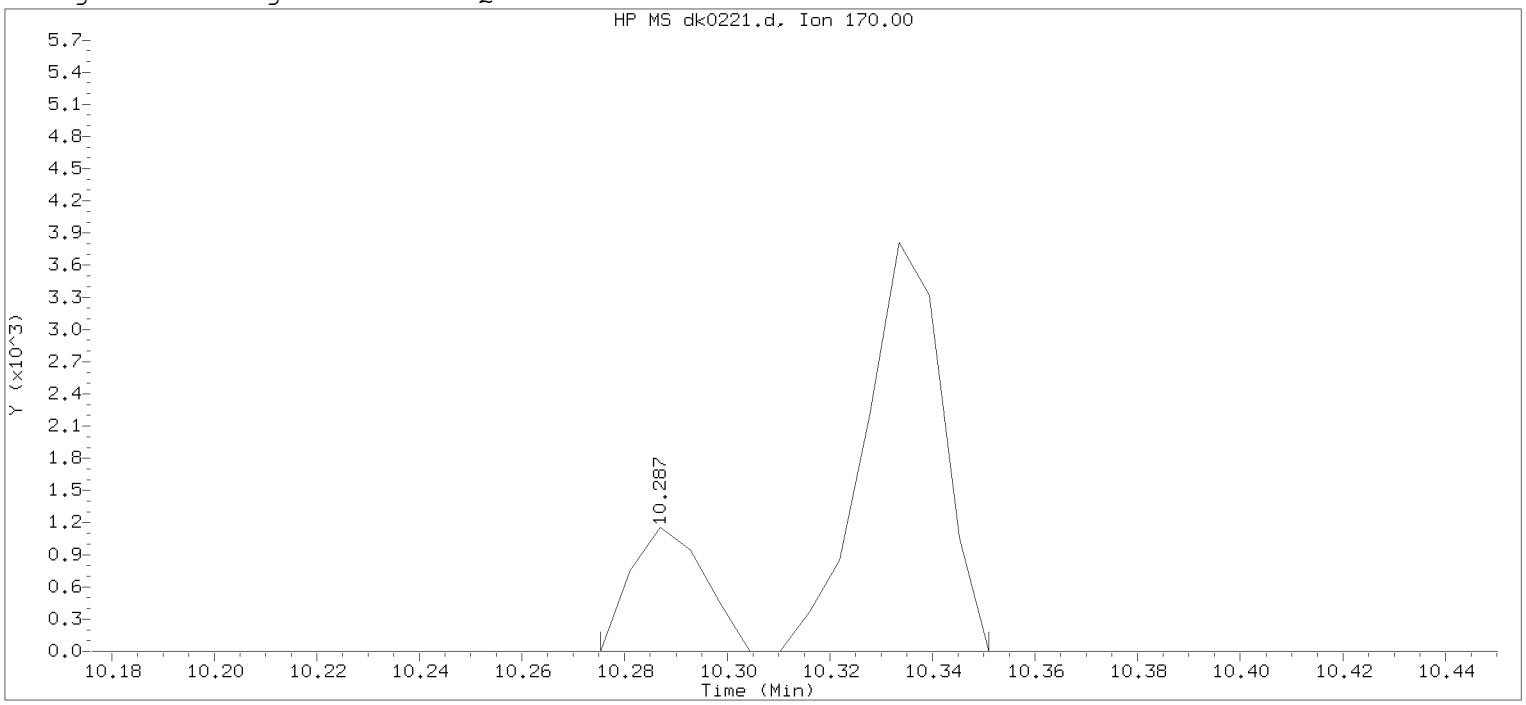
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/05/2018 at 17:17.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/12/2018 at 07:20.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



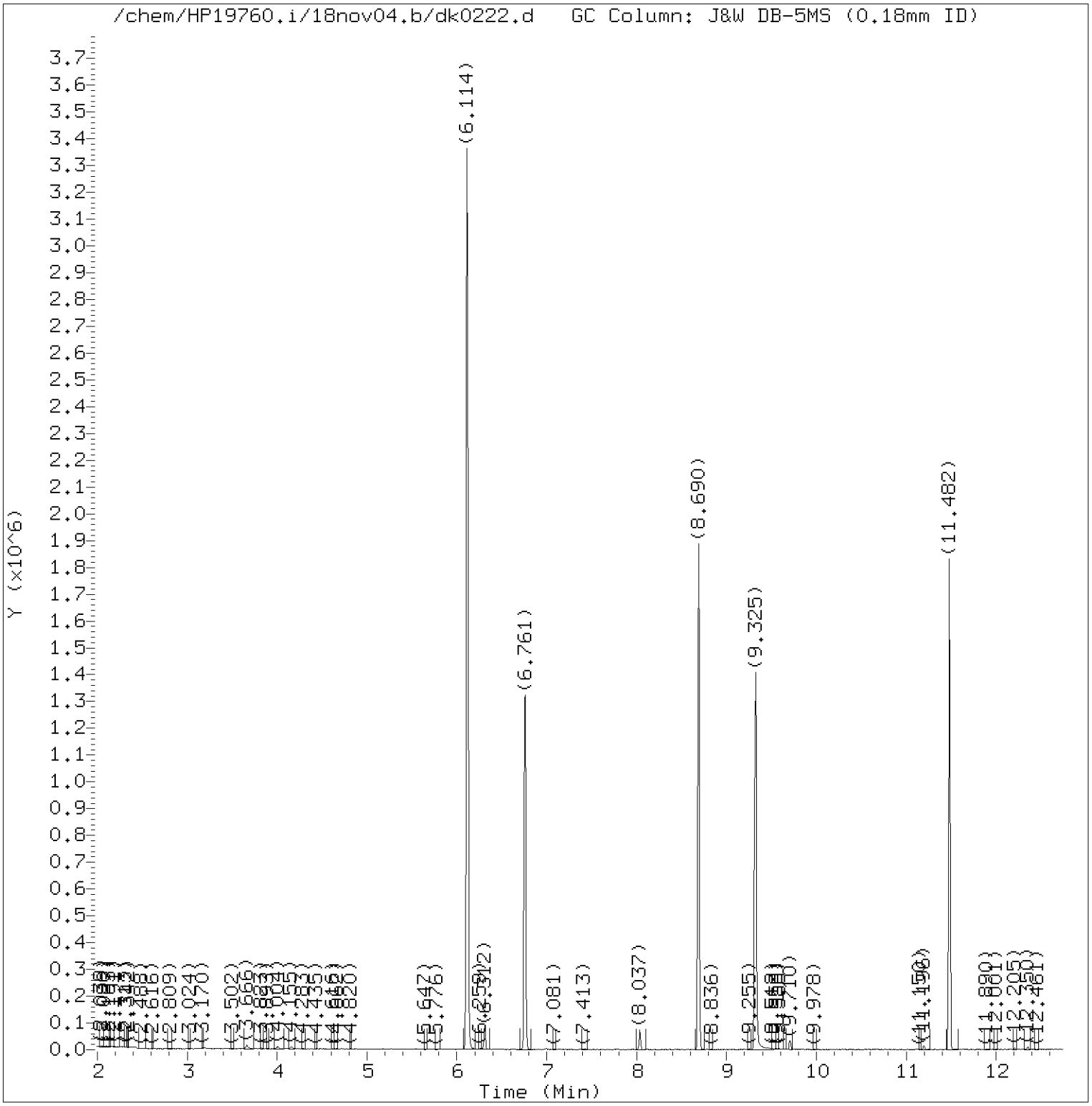
Data File: /chem/HP19760.i/18nov04.b/dk0221.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 17:00 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 04-NOV-2018 16:03
Date, time and analyst ID of latest file update: 04-Nov-2018 17:29 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Compound Number	: 99		
Compound Name	: Diphenyl ether		
Scan Number	: 1424		
Retention Time (minutes)	: 10.287		
Quant Ion	: 170.00		
Area	: 5213		
On-column Amount (ng/ul)	: 0.0739		
Integration start scan	: 1421	Integration stop scan:	1434
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/05/2018 at 17:17.
Target 3.5 esignature user name: atransue



Total Ion Chromatogram (TIC)

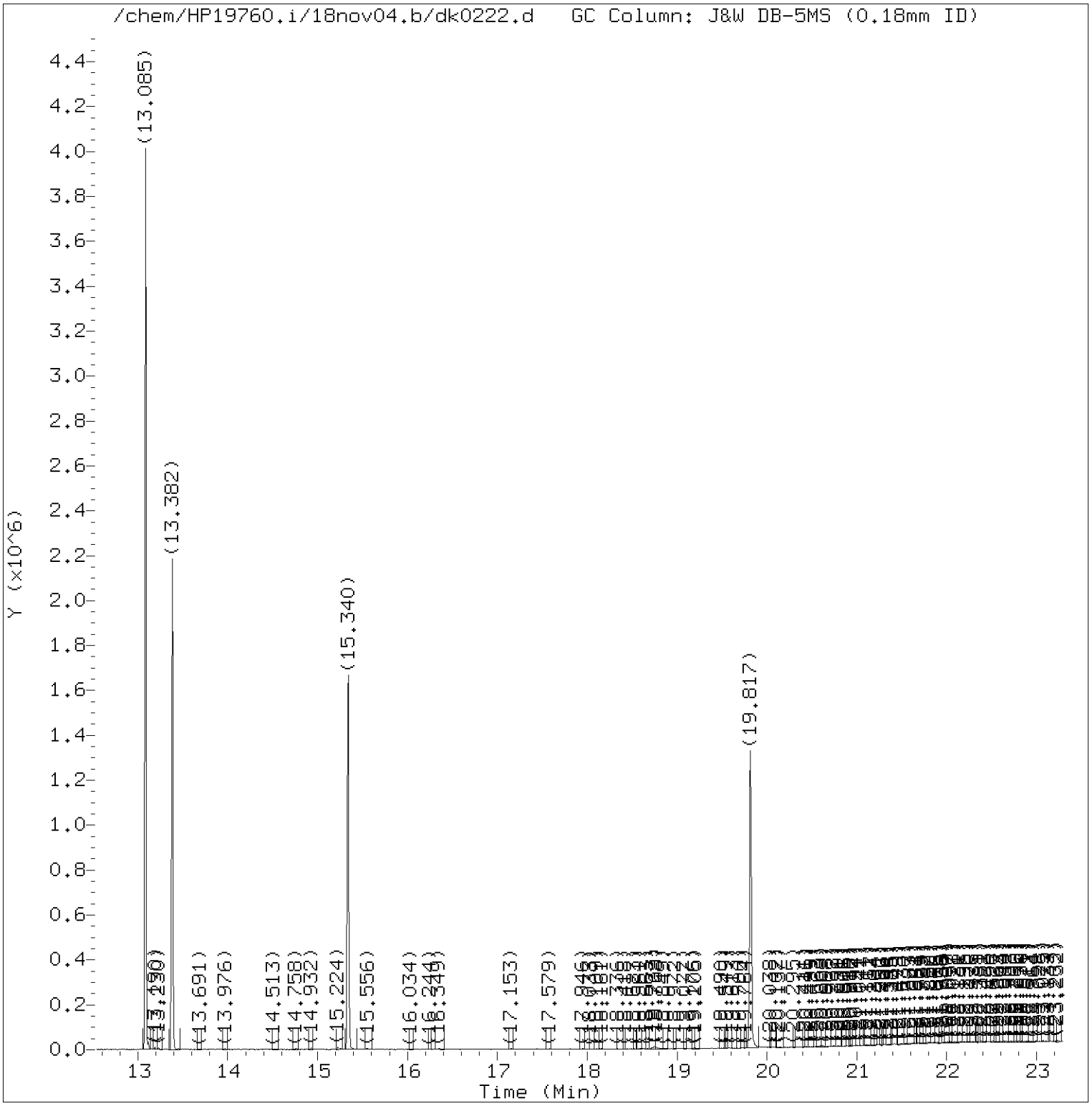
Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0222.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 17:29 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: basicvall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:52 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvBASICV3028

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:56.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0222.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 17:29 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: basicvall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:52 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvBASICV3028

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:56.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04.b/dk0222.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 17:29 Analyst ID: em10340

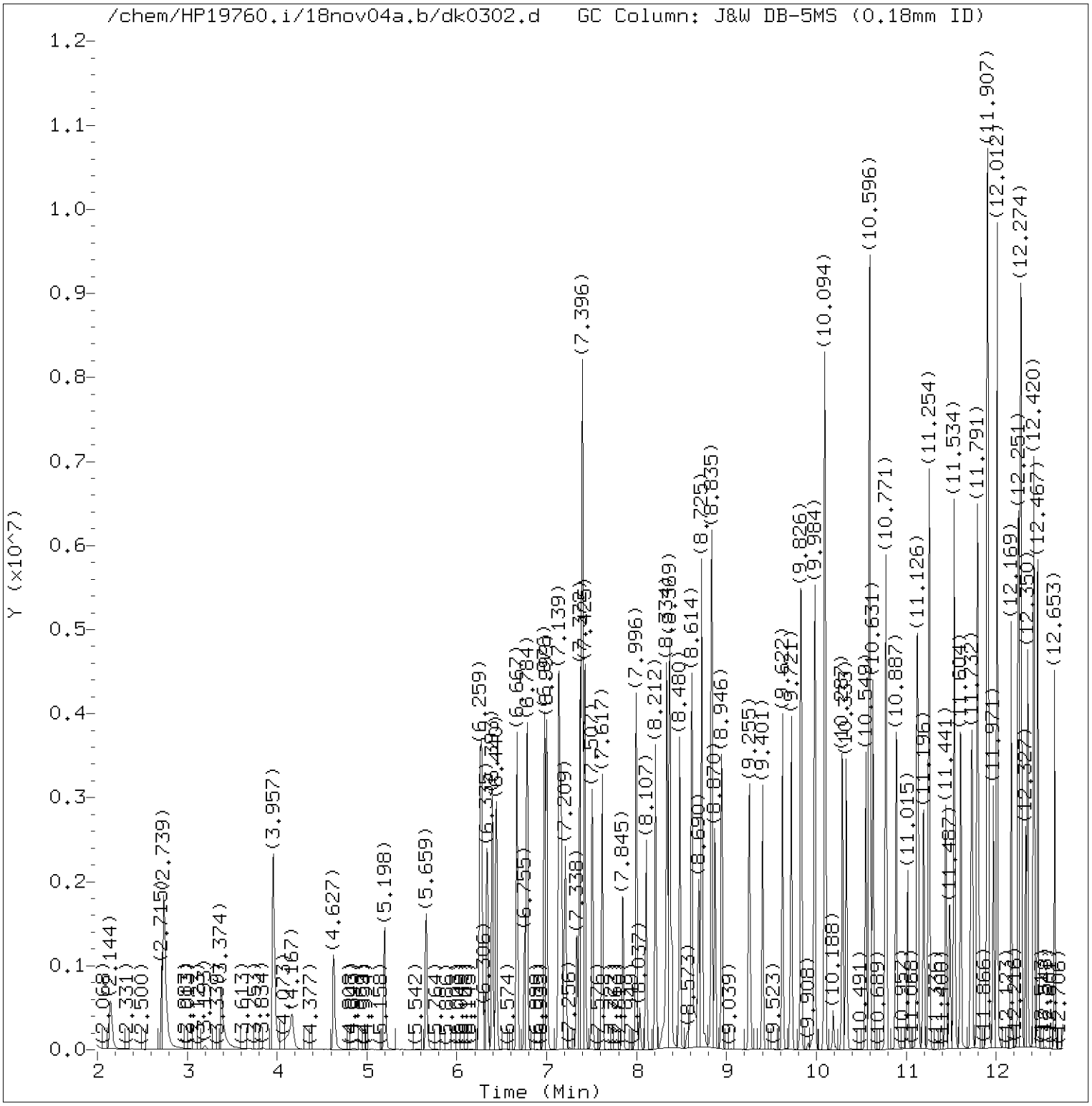
Method used: /chem/HP19760.i/18nov04.b/rv8270d.m Sublist used: basicvall1
Calibration date and time: 04-NOV-2018 19:17
Date, time and analyst ID of latest file update: 04-Nov-2018 19:52 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvBASICV3028

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
16) Benzaldehyde	(1)	6.114	77	1058206	15.025
25)*1,4-Dichlorobenzene-d4	(1)	6.761	152	261447	5.000
65)*Naphthalene-d8	(2)	8.690	136	954697	5.000
76) Caprolactam	(2)	9.325	113	268969	11.590
113)*Acenaphthene-d10	(3)	11.482	164	408703	5.000
148) Atrazine	(4)	13.085	200	385498	12.129
153)*Phenanthrene-d10	(4)	13.382	188	779786	5.000
175)*Pyrene-d10	(5)	15.340	212	685403	5.000
213)*Perylene-d12	(6)	19.817	264	625219	5.000

* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 11/04/2018 at 19:56.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

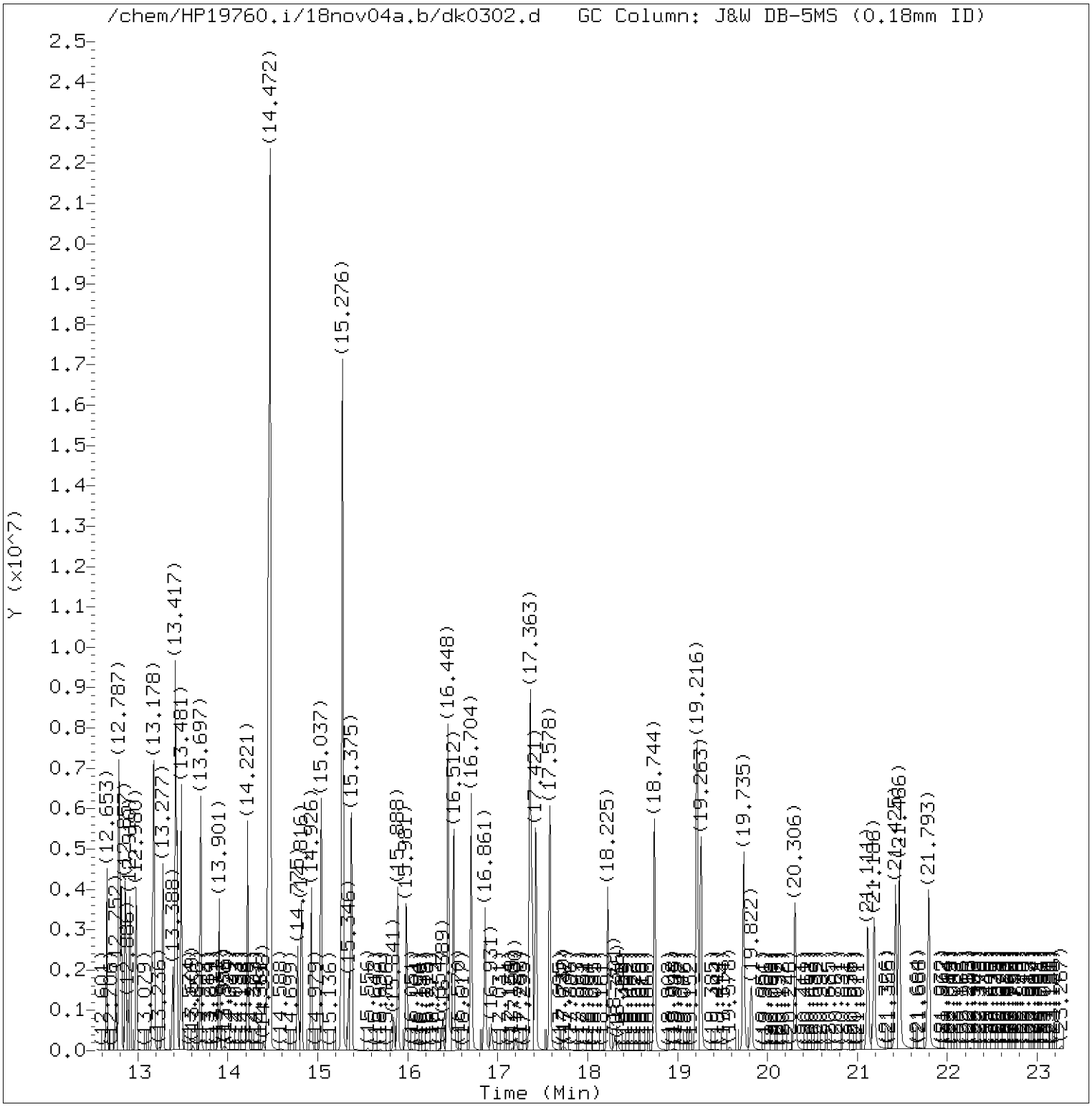
Target Revision 3.5

Data File: /chem/HP19760.i/18nov04a.b/dk0302.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 22:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18nov04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-NOV-2018 17:24
Date, time and analyst ID of latest file update: 05-Nov-2018 17:25 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Digitally signed by Ashley R. Transue
on 11/05/2018 at 17:26.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04a.b/dk0302.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 22:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18nov04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-NOV-2018 17:24
Date, time and analyst ID of latest file update: 05-Nov-2018 17:25 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Digitally signed by Ashley R. Transue
on 11/05/2018 at 17:26.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04a.b/dk0302.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 22:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18nov04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-NOV-2018 17:24
Date, time and analyst ID of latest file update: 05-Nov-2018 17:25 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.144	88	527989	12.043
4) N-Nitrosodimethylamine	(1)	2.715	74	943325	14.098
5) Pyridine	(1)	2.745	79	1495400	13.334
7) 2-Picoline	(1)	3.957	93	1511333	13.498
8) N-Nitrosomethylethylamine	(1)	4.167	88	584957	12.003
9) Methyl methanesulfonate	(1)	4.627	80	675443	12.593
13) N-Nitrosodiethylamine	(1)	5.198	102	545947	12.587
15) Ethyl methanesulfonate	(1)	5.659	109	511454	12.241
42) Total Cresols	(1)	5.660	100	2383412	27.735
18) Phenol	(1)	6.253	94	1798520	13.422
19) Aniline	(1)	6.277	93	1991372	12.632
22) bis(2-Chloroethyl)ether	(1)	6.393	93	1336376	13.456
23) 2-Chlorophenol	(1)	6.440	128	1089524	13.843
24) 1,3-Dichlorobenzene	(1)	6.667	146	1134539	13.569
25)*1,4-Dichlorobenzene-d4	(1)	6.755	152	259622	5.000
26) 1,4-Dichlorobenzene	(1)	6.784	146	1157704	13.855
27) Benzyl alcohol	(1)	6.976	108	804469	14.516
28) 1,2-Dichlorobenzene	(1)	6.999	146	1081763	13.606
30) Indene	(1)	7.133	115	1789925	19.933
31) 2-Methylphenol	(1)	7.157	108	1111405	13.808
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.209	45	1499076	13.072
34) bis(2-Chloroisopropyl)ether	(1)	7.209	45	1499076	13.072
35) N-Nitrosopyrrolidine	(1)	7.338	100	562983	12.503
36) Acetophenone	(1)	7.372	105	1618557	14.307
97) Isosafrole	(3)	7.383	162	715560	13.065
38) N-Nitroso-di-n-propylamine	(1)	7.396	70	999556	14.119
37) 4-Methylphenol	(1)	7.396	108	1272007	13.920
39) N-Nitrosomorpholine	(1)	7.402	56	649619	12.276
40) o-Toluidine	(1)	7.425	106	1883775	13.415
43) Hexachloroethane	(1)	7.507	117	515924	13.201
45) Nitrobenzene	(2)	7.617	77	1408380	13.698
48) N-Nitrosopiperidine	(2)	7.850	114	477955	12.021
50) Isophorone	(2)	7.996	82	2505613	14.456
120) 2,4_2,6-Dinitrotoluenes	(3)	8.050	165	964191	28.465
51) 2-Nitrophenol	(2)	8.107	139	539756	13.899
53) 2,4-Dimethylphenol	(2)	8.212	107	966026	11.544
57) O,O,O-Triethylphosphorothioate	(2)	8.334	198	402894	12.727
55) bis(2-Chloroethoxy)methane	(2)	8.369	93	1547131	14.165
56) Benzoic acid	(2)	8.392	105	1459044	25.837
60) 2,4-Dichlorophenol	(2)	8.480	162	791155	14.039

* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 11/05/2018 at 17:26.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04a.b/dk0302.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 22:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18nov04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-NOV-2018 17:24
Date, time and analyst ID of latest file update: 05-Nov-2018 17:25 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
62) 1,2,4-Trichlorobenzene	(2)	8.614	180	839551	13.610
65)*Naphthalene-d8	(2)	8.690	136	943114	5.000
66) Naphthalene	(2)	8.725	128	3000522	13.454
146) Diallate trans/cis	(4)	8.775	86	956223	12.333
67) 4-Chloroaniline	(2)	8.830	127	1221532	14.349
68) 2,6-Dichlorophenol	(2)	8.835	162	672750	12.240
69) Hexachloropropene	(2)	8.870	213	513734	13.223
71) Hexachlorobutadiene	(2)	8.946	225	447202	13.452
75) Quinoline	(2)	9.255	129	1634321	12.976
77) N-Nitrosodi-n-butylamine	(2)	9.401	84	714745	10.881
80) 4-Chloro-3-methylphenol	(2)	9.622	107	969525	14.527
82) Safrole	(2)	9.721	162	619823	12.081
83) 2-Methylnaphthalene	(2)	9.832	142	1878139	13.875
84) 1-Methylnaphthalene	(2)	9.984	142	1727810	13.471
85) Hexachlorocyclopentadiene	(3)	10.094	237	894015	26.785
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.100	216	753205	13.488
88) cis-Isosafrole	(3)	10.188	162	78315	1.538
90) 2,4,6-Trichlorophenol	(3)	10.293	196	514708	14.567
92) 2,4,5-Trichlorophenol	(3)	10.333	196	550668	14.849
94) trans-Isosafrole	(3)	10.549	162	637245	11.470
95) 1,1'-Biphenyl	(3)	10.590	154	2192938	14.511
96) 2-Chloronaphthalene	(3)	10.596	162	1659530	13.506
98) 1-Chloronaphthalene	(3)	10.631	162	1396029	12.794
104) 1,4-Naphthoquinone	(3)	10.893	158	752160	16.556
105) 1,4-Dinitrobenzene	(3)	11.015	168	299659	14.048
106) Dimethylphthalate	(3)	11.120	163	1706395	13.454
107) 1,3-Dinitrobenzene	(3)	11.132	168	326538	13.814
108) 2,6-Dinitrotoluene	(3)	11.196	165	414829	14.140
112) 3-Nitroaniline	(3)	11.441	138	493836	14.600
113)*Acenaphthene-d10	(3)	11.482	164	420779	5.000
114) Acenaphthene	(3)	11.534	153	1740352	14.190
115) 2,4-Dinitrophenol	(3)	11.610	184	585003	28.726
116) 4-Nitrophenol	(3)	11.721	109	351372	13.612
117) Pentachlorobenzene	(3)	11.732	250	530322	12.028
119) Dibenzofuran	(3)	11.791	168	2360051	13.869
118) 2,4-Dinitrotoluene	(3)	11.802	165	549362	13.767
121) 1-Naphthylamine	(3)	11.901	143	3286665	25.507
122) 2,3,4,6-Tetrachlorophenol	(3)	11.971	232	362163	12.722
123) 2-Naphthylamine	(3)	12.012	143	3248205	24.942
124) Diethylphthalate	(3)	12.169	149	1753254	13.657

* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 11/05/2018 at 17:26.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04a.b/dk0302.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 22:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18nov04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-NOV-2018 17:24
Date, time and analyst ID of latest file update: 05-Nov-2018 17:25 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
126) Fluorene	(3)	12.245	166	1847394	14.330
125) Thionazin	(3)	12.263	107	371211	13.298
128) 5-Nitro-o-toluidine	(3)	12.274	152	498613	12.695
127) 4-Chlorophenyl-phenylether	(3)	12.274	204	838775	13.538
129) 4-Nitroaniline	(3)	12.286	138	530145	14.278
130) 4,6-Dinitro-2-methylphenol	(4)	12.333	198	338442	14.172
131) N-Nitrosodiphenylamine	(4)	12.420	169	1544446	14.722
132) NDPA as diphenylamine	(4)	12.420	169	1544446	14.722
137) Tetraethyldithiopyrophosphate	(4)	12.653	97	331080	13.096
139) 1,3,5-Trinitrobenzene	(4)	12.752	213	187162	12.195
140) Diallate (peak 1)	(4)	12.787	86	732330	9.093
141) Phorate	(4)	12.793	75	1377579	13.910
142) Phenacetin	(4)	12.811	108	960332	12.465
143) 4-Bromophenyl-phenylether	(4)	12.863	248	420356	13.767
144) Diallate (peak 2)	(4)	12.886	86	223893	3.561
145) Hexachlorobenzene	(4)	12.910	284	437189	13.815
147) Dimethoate	(4)	12.980	87	883495	13.497
150) 4-Aminobiphenyl	(4)	13.172	169	1750281	19.439
151) Pentachloronitrobenzene	(4)	13.178	237	183696	12.465
152) Pronamide	(4)	13.277	173	717127	13.045
153)*Phenanthrene-d10	(4)	13.388	188	761566	5.000
154) Dinoseb	(4)	13.417	211	403945	11.735
155) Phenanthrene	(4)	13.417	178	2556979	13.955
157) Anthracene	(4)	13.481	178	2582918	14.485
163) Carbazole	(4)	13.697	167	2557967	14.657
164) Methyl parathion	(4)	13.901	109	694727	14.003
165) Di-n-butylphthalate	(4)	14.221	149	3126258	14.387
167) Parathion	(4)	14.443	109	460306	14.614
168) 4-Nitroquinoline-1-oxide	(4)	14.472	190	4307314	147.118
171) Isodrin	(4)	14.816	193	275434	13.333
222) Total PAHs	(6)	15.000	100	30886615	179.813
173) Fluoranthene	(4)	15.037	202	2785780	14.527
174) Benzidine	(5)	15.276	184	8452700	55.602
175)*Pyrene-d10	(5)	15.346	212	759450	5.000
177) Pyrene	(5)	15.375	202	2948743	13.518
182) p-Dimethylaminoazobenzene	(5)	15.888	225	498312	14.418
185) Chlorobenzilate	(5)	15.981	139	898435	13.138
187) 3,3'-Dimethylbenzidine	(5)	16.448	212	3362721	25.783
188) Butylbenzylphthalate	(5)	16.512	149	1542560	14.086
191) 2-Acetylaminofluorene	(5)	16.861	181	1043580	11.812

* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 11/05/2018 at 17:26.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov04a.b/dk0302.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 22:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18nov04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-NOV-2018 17:24
Date, time and analyst ID of latest file update: 05-Nov-2018 17:25 art12405

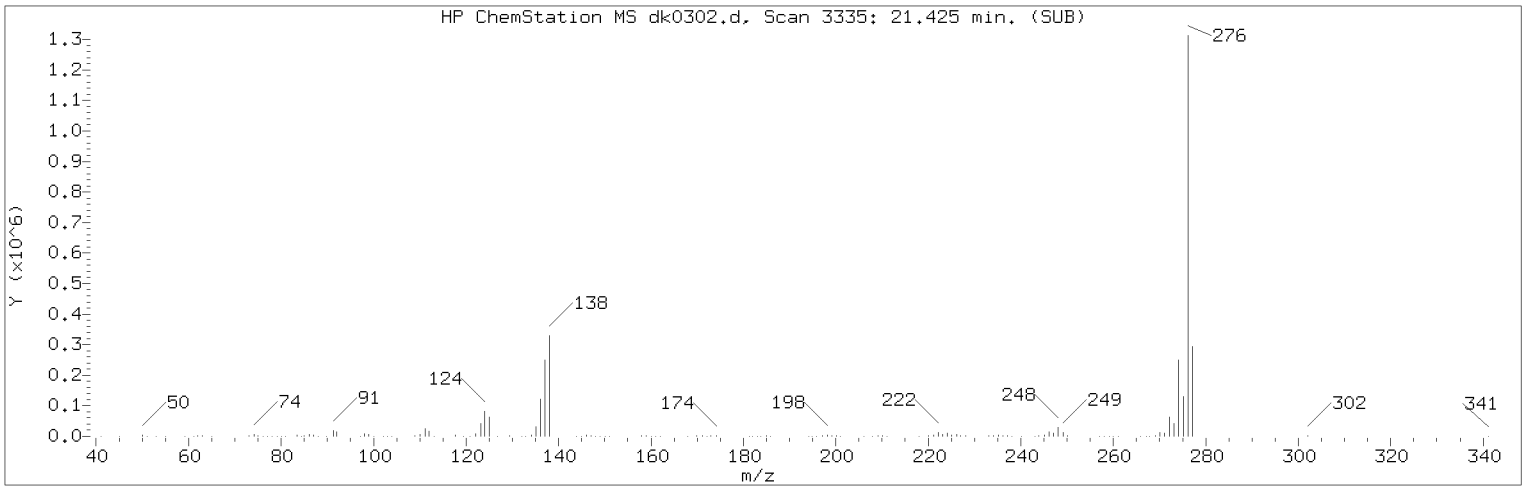
Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
193) 3,3'-Dichlorobenzidine	(5)	17.357	252	935447	12.510
195) Benzo(a)anthracene	(5)	17.363	228	2625612	14.802
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.380	231	515768	12.094
196) Chrysene	(5)	17.421	228	2620751	14.053
199) bis(2-Ethylhexyl)phthalate	(5)	17.578	149	2185908	14.242
203) 6-Methylchrysene	(5)	18.225	242	1618129	12.423
205) Di-n-octylphthalate	(6)	18.744	149	3761358	14.648
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.222	256	1306329	14.729
213)*Perylene-d12	(6)	19.822	264	756130	5.000
215) 3-Methylcholanthrene	(6)	20.306	268	1205540	14.986
217) Dibenz(a,h)acridine	(6)	21.116	279	1713468	12.738
218) Dibenz(a,j)acridine	(6)	21.186	279	1939984	13.202
219) Indeno(1,2,3-cd)pyrene	(6)	21.425	276	2205669M	14.894
221) Benzo(g,h,i)perylene	(6)	21.793	276	2365946	14.383

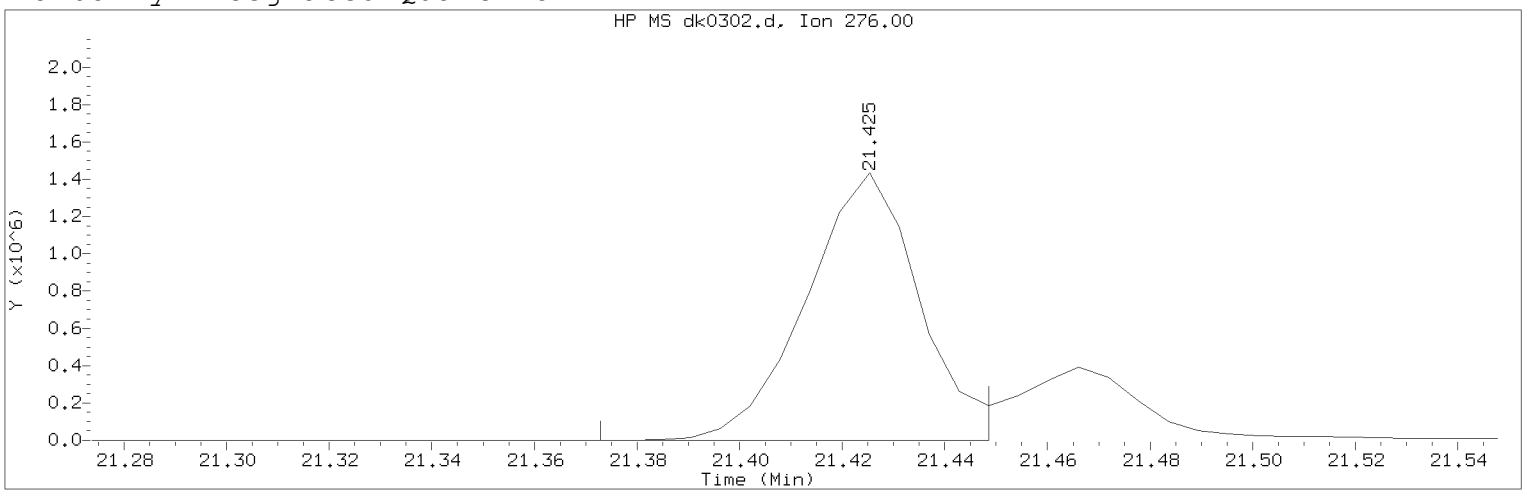
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 11/05/2018 at 17:26.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov04a.b/dk0302.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 22:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18nov04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-NOV-2018 17:24
Date, time and analyst ID of latest file update: 05-Nov-2018 17:25 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

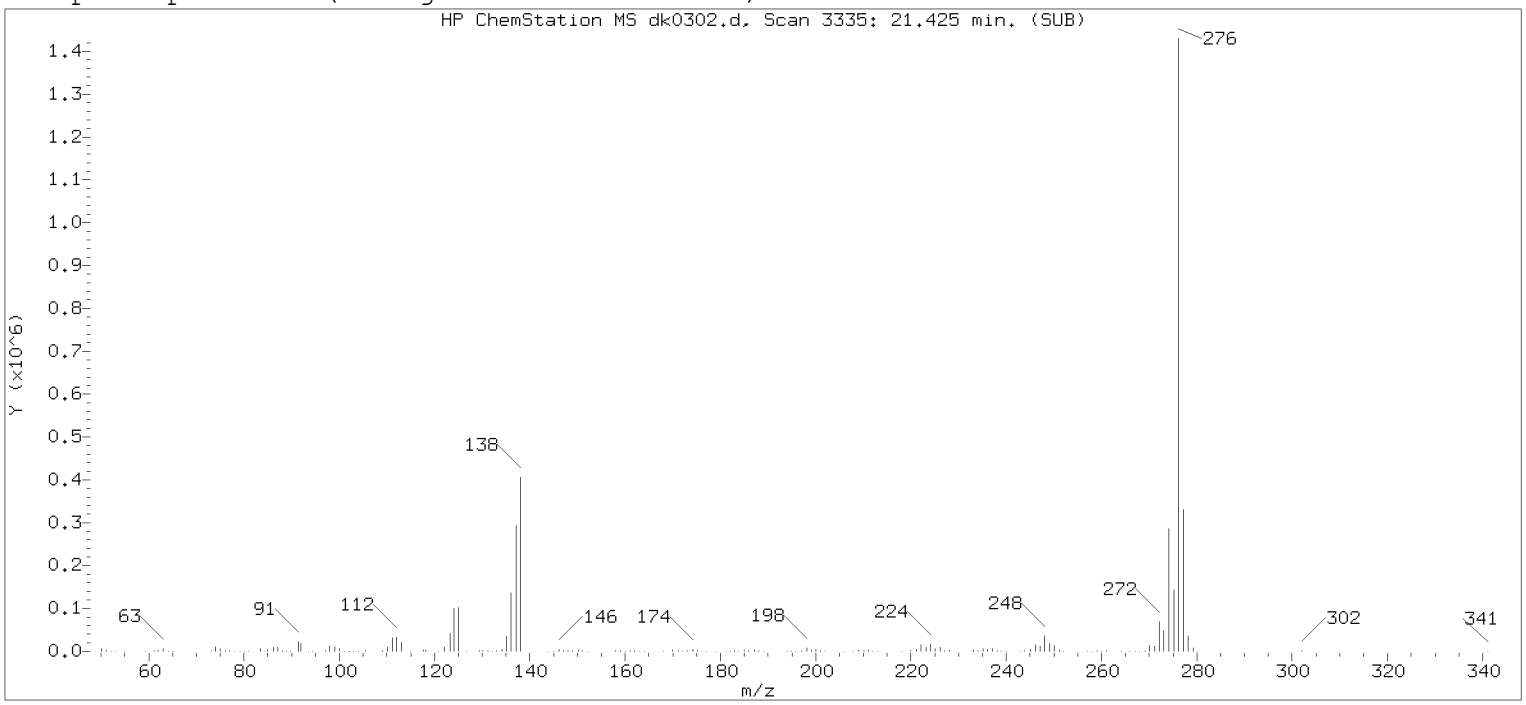
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3335
Retention Time (minutes) : 21.425
Quant Ion : 276.00
Area (flag) : 2205669M
On-Column Amount (ng/ul) : 14.8939
Integration start scan : 3325 Integration stop scan: 3338
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

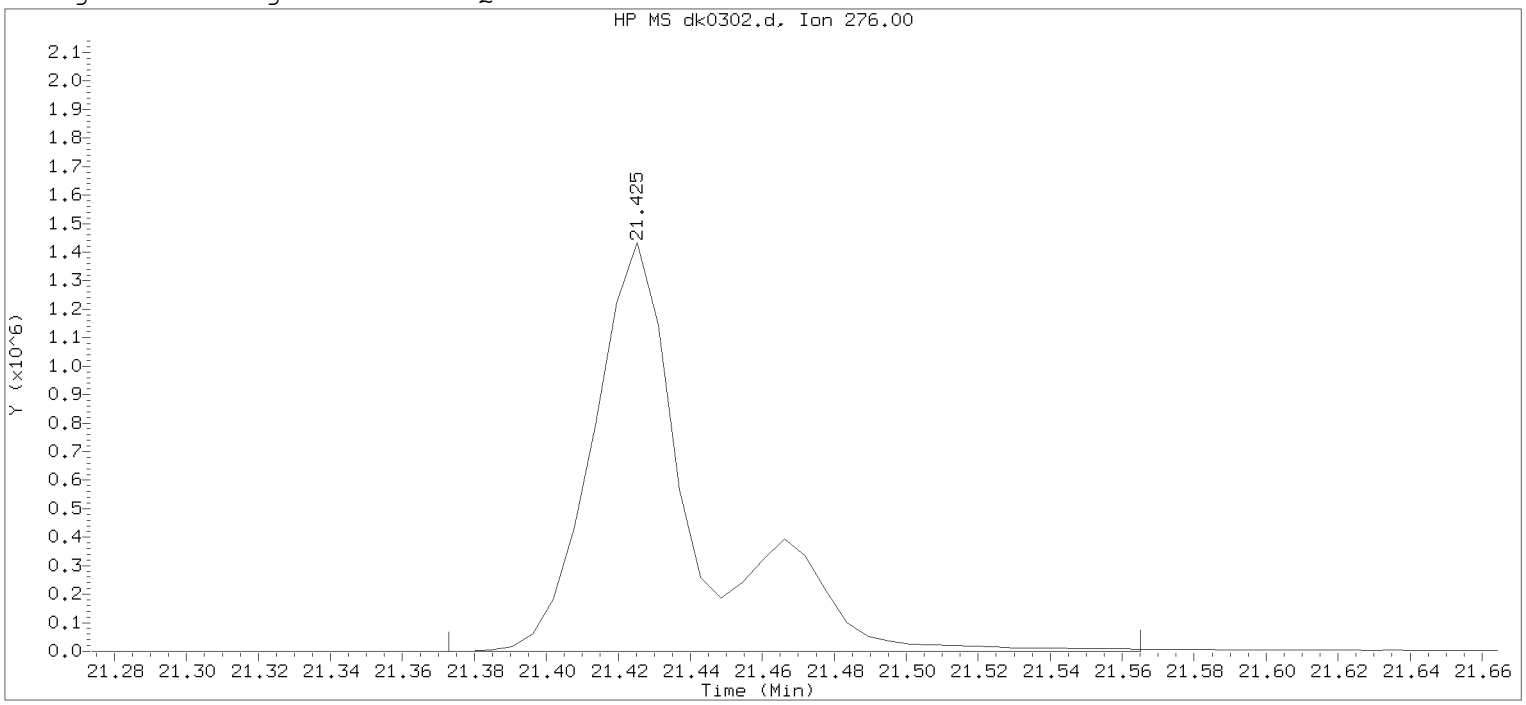
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/05/2018 at 17:26.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 11/12/2018 at 07:22.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov04a.b/dk0302.d Instrument ID: HP19760.i
Injection date and time: 04-NOV-2018 22:13 Analyst ID: art12405

Method used: /chem/HP19760.i/18nov04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 04-NOV-2018 22:12
Date, time and analyst ID of latest file update: 04-Nov-2018 22:42 Automation

Sample Name: SSTD12.5 Lab Sample ID: rvICV2628

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3335		
Retention Time (minutes)	: 21.425		
Quant Ion	: 276.00		
Area	: 2853020		
On-column Amount (ng/ul)	: 19.2652		
Integration start scan	: 3325	Integration stop scan:	3358
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/05/2018 at 17:26.
Target 3.5 esignature user name: art12405

Data File: /chem/HP19760.i/18nov09.b/dk0730.d

Date : 09-NOV-2018 08:33

Client ID: DFTPP12.5

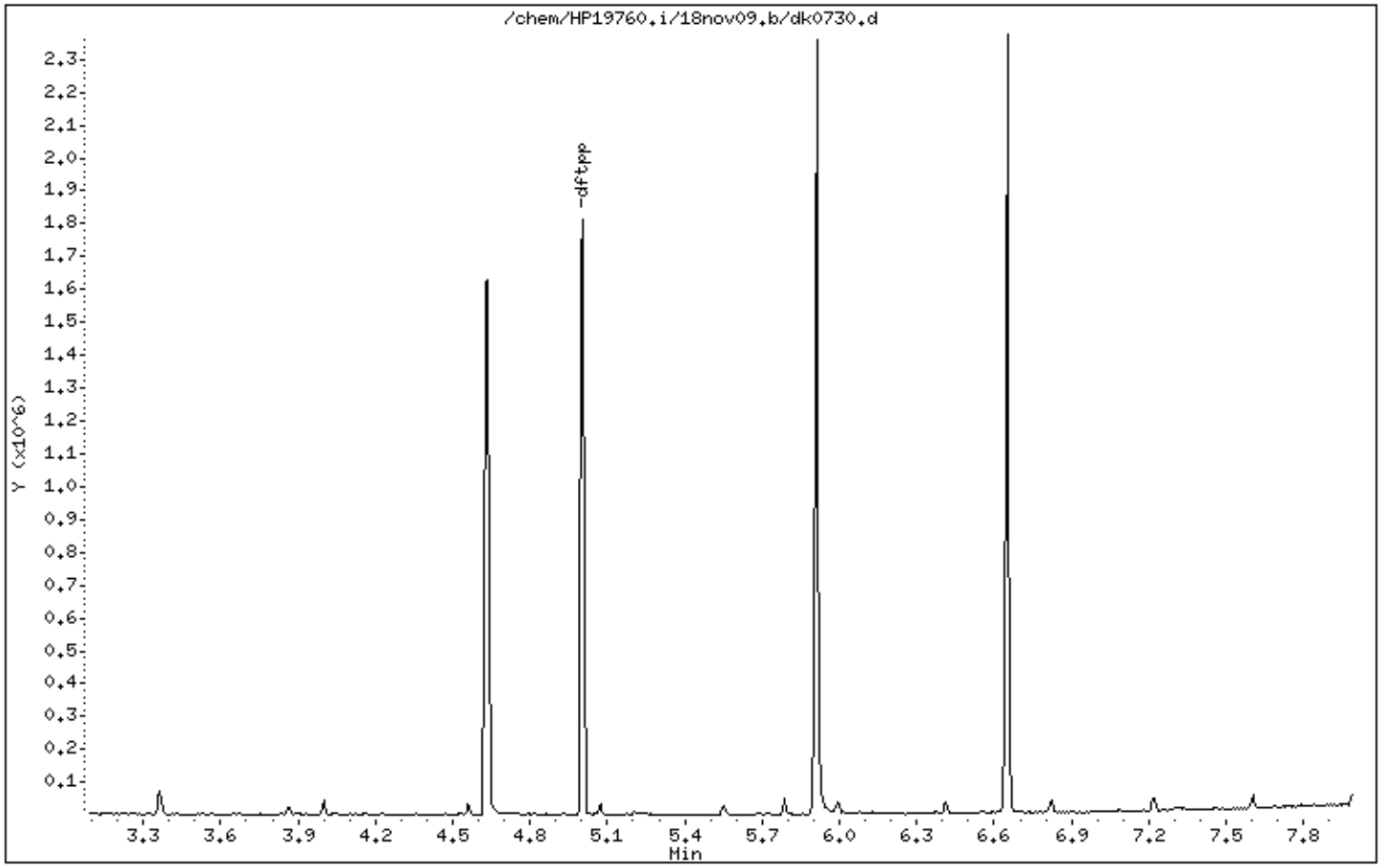
Instrument: HP19760.i

Sample Info: DFTPP12.5;rvDFTPP2878;1;3;DFTPP;

Operator: em10340

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Edward Monborne on 11/09/2018 at 09:57.
Target 3.5 esignature user ID: em10340

Data File: /chem/HP19760.i/18nov09.b/dk0730.d

Date : 09-NOV-2018 08:33

Client ID: DFTPP12.5

Instrument: HP19760.i

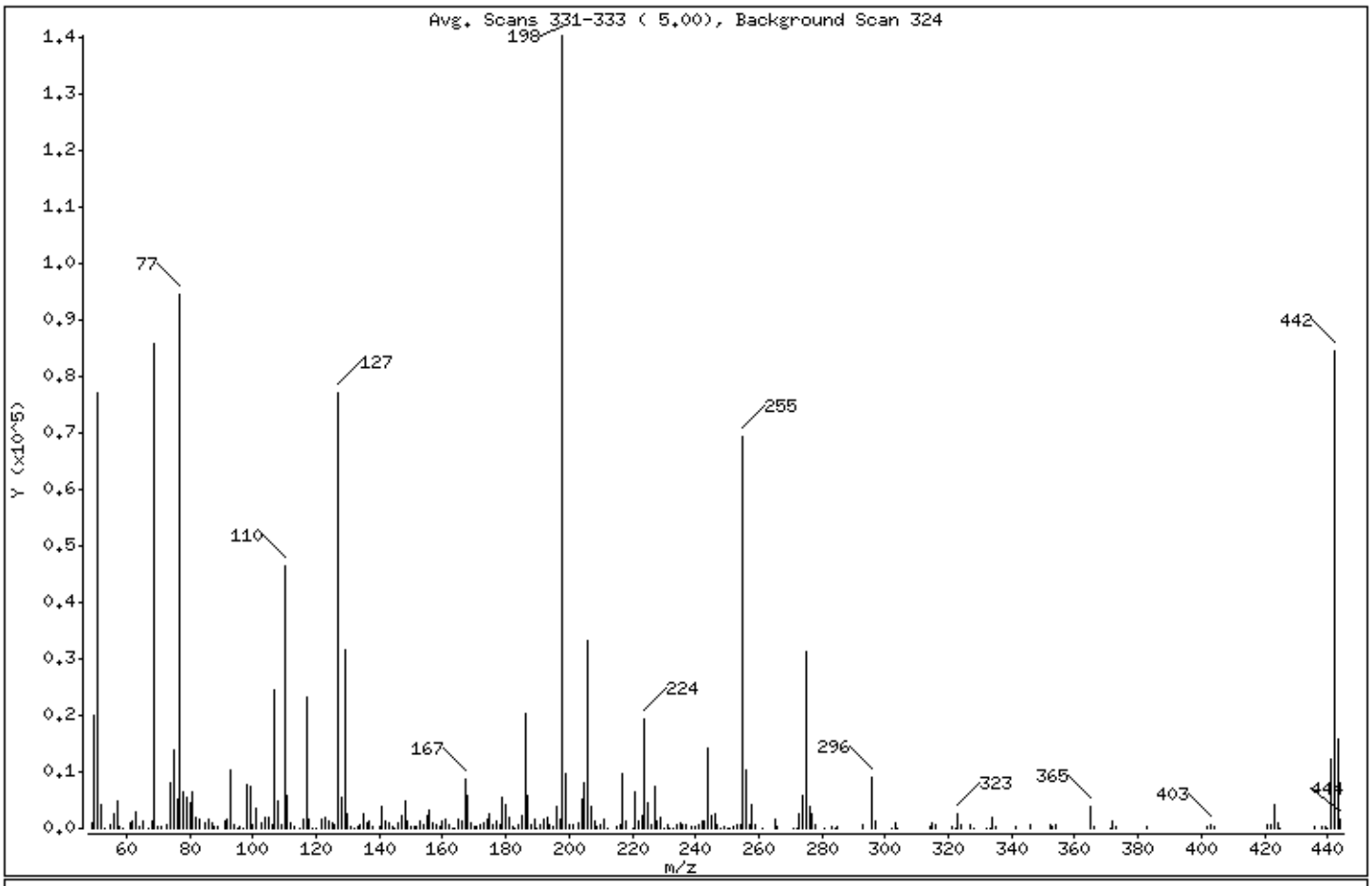
Sample Info: DFTPP12.5;rvDFTPP2878;1;3;DFTPP;

Operator: em10340

Column phase: DB-5MS

Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	54.84
68	Less than 2.00% of mass 69	0.84 (1.37)
69	Mass 69 relative abundance	61.08
70	Less than 2.00% of mass 69	0.30 (0.49)
127	10.00 - 80.00% of mass 198	54.85
197	Less than 2.00% of mass 198	1.09
199	5.00 - 9.00% of mass 198	6.93
275	10.00 - 60.00% of mass 198	22.29
365	Greater than 1.00% of mass 198	2.82
441	0.01 - 24.00% of mass 442	8.85 (14.67)
442	50.00 - 99.99% of mass 198	60.31
443	15.00 - 24.00% of mass 442	11.30 (18.74)

Digitally signed by Edward Monborne on 11/09/2018 at 09:57.
Target 3.5 esignature user ID: em10340

Date : 09-NOV-2018 08:33

Client ID: DFTPP12.5 Instrument: HP19760.i

Sample Info: DFTPP12.5;rvDFTPP2878;1;3;DFTPP; Operator: em10340

Column phase: DB-5MS Column diameter: 0.18

Data File: dk0730.d
Spectrum: Avg. Scans 331-333 (5.00), Background Scan 324
Location of Maximum: 198.00
Number of points: 257

m/z	Y	m/z	Y	m/z	Y	m/z	Y
49.00	952	123.00	2007	189.00	1536	259.00	638
50.00	20016	124.00	1200	190.00	108	261.00	99
51.00	76968	125.00	845	191.00	710	265.00	1588
52.00	4038	126.00	800	192.00	1497	266.00	268
53.00	140	127.00	76976	193.00	2075	271.00	103
55.00	504	128.00	5443	194.00	593	272.00	93
56.00	2590	129.00	31760	195.00	461	273.00	2542
57.00	4990	130.00	2708	196.00	3774	274.00	5735
58.00	225	131.00	467	197.00	1533	275.00	31288
59.00	87	132.00	123	198.00	140288	276.00	3950
61.00	896	133.00	319	199.00	9728	277.00	2563
62.00	1298	134.00	776	200.00	693	278.00	527
63.00	3046	135.00	2556	201.00	659	281.00	91
64.00	423	136.00	1024	203.00	1050	283.00	233
65.00	1433	137.00	1407	204.00	5176	284.00	90
67.00	85	138.00	343	205.00	8131	285.00	473
68.00	1172	140.00	322	206.00	33304	293.00	734
69.00	85728	141.00	3788	207.00	3807	296.00	9165
70.00	420	142.00	1342	208.00	1268	297.00	1171
71.00	250	143.00	895	209.00	463	302.00	106
73.00	674	144.00	296	210.00	535	303.00	1016
74.00	8181	145.00	127	211.00	1587	304.00	114
75.00	13783	146.00	835	212.00	149	314.00	358
76.00	5110	147.00	2312	215.00	326	315.00	1037
77.00	94440	148.00	4912	216.00	794	316.00	528
78.00	6527	149.00	1215	217.00	9580	321.00	194
79.00	5402	150.00	310	218.00	1369	322.00	85
80.00	4673	151.00	428	220.00	142	323.00	2669
81.00	6476	152.00	335	221.00	6407	324.00	575
82.00	1862	153.00	1377	222.00	1368	327.00	589
83.00	1584	154.00	730	223.00	2216	328.00	88
85.00	826	155.00	2211	224.00	19200	332.00	120
86.00	1505	156.00	3142	225.00	4565	333.00	156
87.00	977	157.00	903	226.00	587	334.00	1859
88.00	252	158.00	785	227.00	7567	335.00	466

Date : 09-NOV-2018 08:33

Client ID: DFTPP12.5 Instrument: HP19760.i

Sample Info: DFTPP12.5;rvDFTPP2878;1;3;DFTPP; Operator: em10340

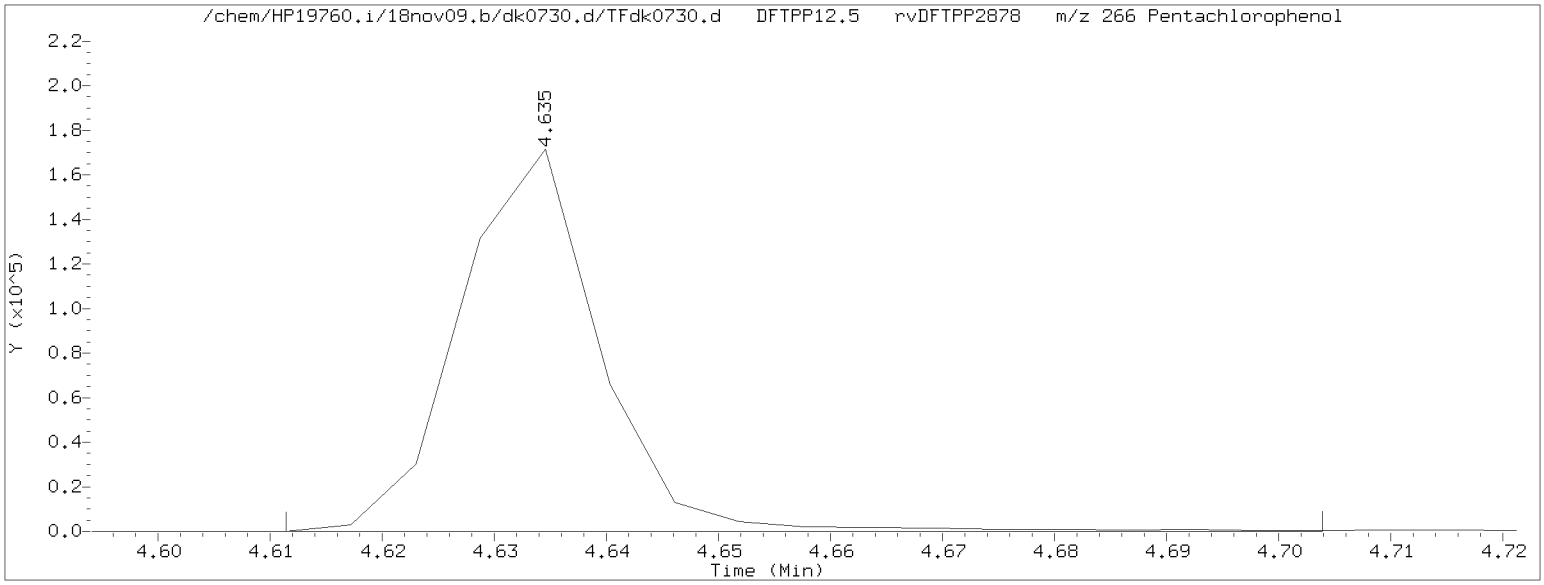
Column phase: DB-5MS Column diameter: 0.18

Data File: dk0730.d
Spectrum: Avg. Scans 331-333 (5.00), Background Scan 324
Location of Maximum: 198.00
Number of points: 257

m/z	Y	m/z	Y	m/z	Y	m/z	Y
89.00	288	159.00	388	228.00	1380	341.00	195
91.00	1411	160.00	1337	229.00	1805	346.00	609
92.00	1574	161.00	1665	230.00	130	352.00	678
93.00	10389	162.00	576	231.00	579	353.00	331
94.00	764	163.00	98	232.00	100	354.00	618
95.00	110	164.00	86	233.00	84	365.00	3957
96.00	363	165.00	1628	234.00	494	366.00	393
97.00	95	166.00	1129	235.00	862	371.00	86
98.00	7862	167.00	8734	236.00	523	372.00	1255
99.00	7318	168.00	5671	237.00	616	373.00	313
100.00	636	169.00	911	239.00	336	383.00	216
101.00	3503	170.00	284	240.00	410	402.00	356
103.00	1078	171.00	258	241.00	576	403.00	785
104.00	1860	172.00	734	242.00	1257	404.00	243
105.00	1891	173.00	1013	243.00	1308	421.00	653
106.00	596	174.00	1772	244.00	14105	422.00	796
107.00	24536	175.00	2701	245.00	2325	423.00	4266
108.00	4756	176.00	760	246.00	2687	424.00	1079
109.00	767	177.00	1400	247.00	511	425.00	97
110.00	46408	178.00	504	248.00	115	436.00	221
111.00	5876	179.00	5445	249.00	422	438.00	178
112.00	1116	180.00	4136	250.00	96	439.00	363
113.00	226	181.00	1857	251.00	98	440.00	94
115.00	90	182.00	301	252.00	297	441.00	12415
116.00	1562	183.00	139	253.00	664	442.00	84640
117.00	23320	184.00	541	254.00	762	443.00	15860
118.00	1659	185.00	2227	255.00	69368	444.00	1545
119.00	129	186.00	20368	256.00	10302		
120.00	128	187.00	5809	257.00	724		
122.00	1548	188.00	607	258.00	4169		

Assessment of GC Column Performance and Injection Port Inertness for

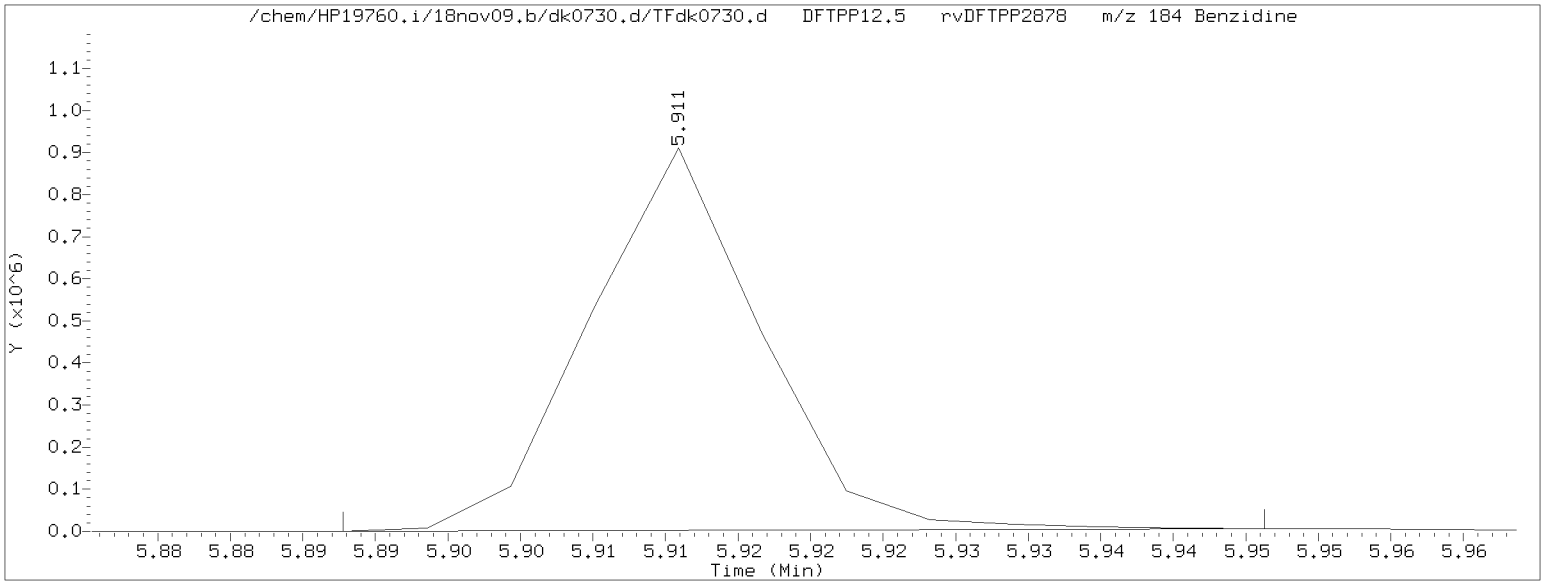
Instrument ID: HP19760.i Injection Date: 09-NOV-2018 08:33 Operator: em10340



Pentachlorophenol EICP peak height = 171584 EICP peak height at 10% = 17158 Pentachlorophenol EICP area = 148551

Pentachlorophenol EICP peak apex (min.) = 4.635
RT at 10% of front half of EICP (min.) = 4.620 'Front' peak width (min.) = 0.0143166667
RT at 10% of back half of EICP (min.) = 4.646 'Tailing' peak width (min.) = 0.0110833333

$$\text{PCP tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0110833333}{0.0143166667} = 0.774$$



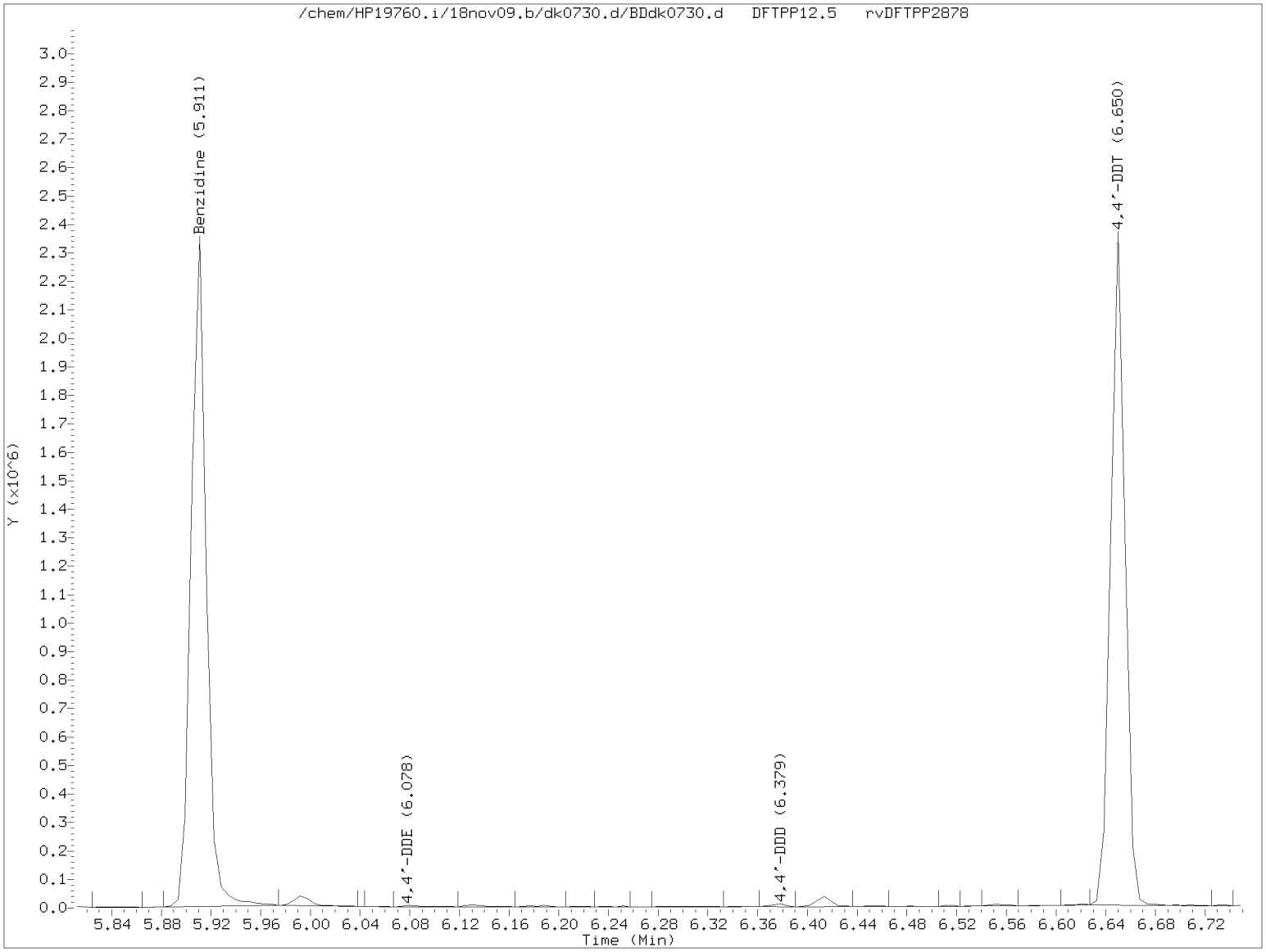
Benzidine EICP peak height = 908255 EICP peak height at 10% = 90826 Benzidine EICP area = 748076

Benzidine EICP peak apex (min.) = 5.911
RT at 10% of front half of EICP (min.) = 5.899 'Front' peak width (min.) = 0.0123000000
RT at 10% of back half of EICP (min.) = 5.923 'Tailing' peak width (min.) = 0.0117500000

$$\text{Benzidine tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0117500000}{0.0123000000} = 0.955$$

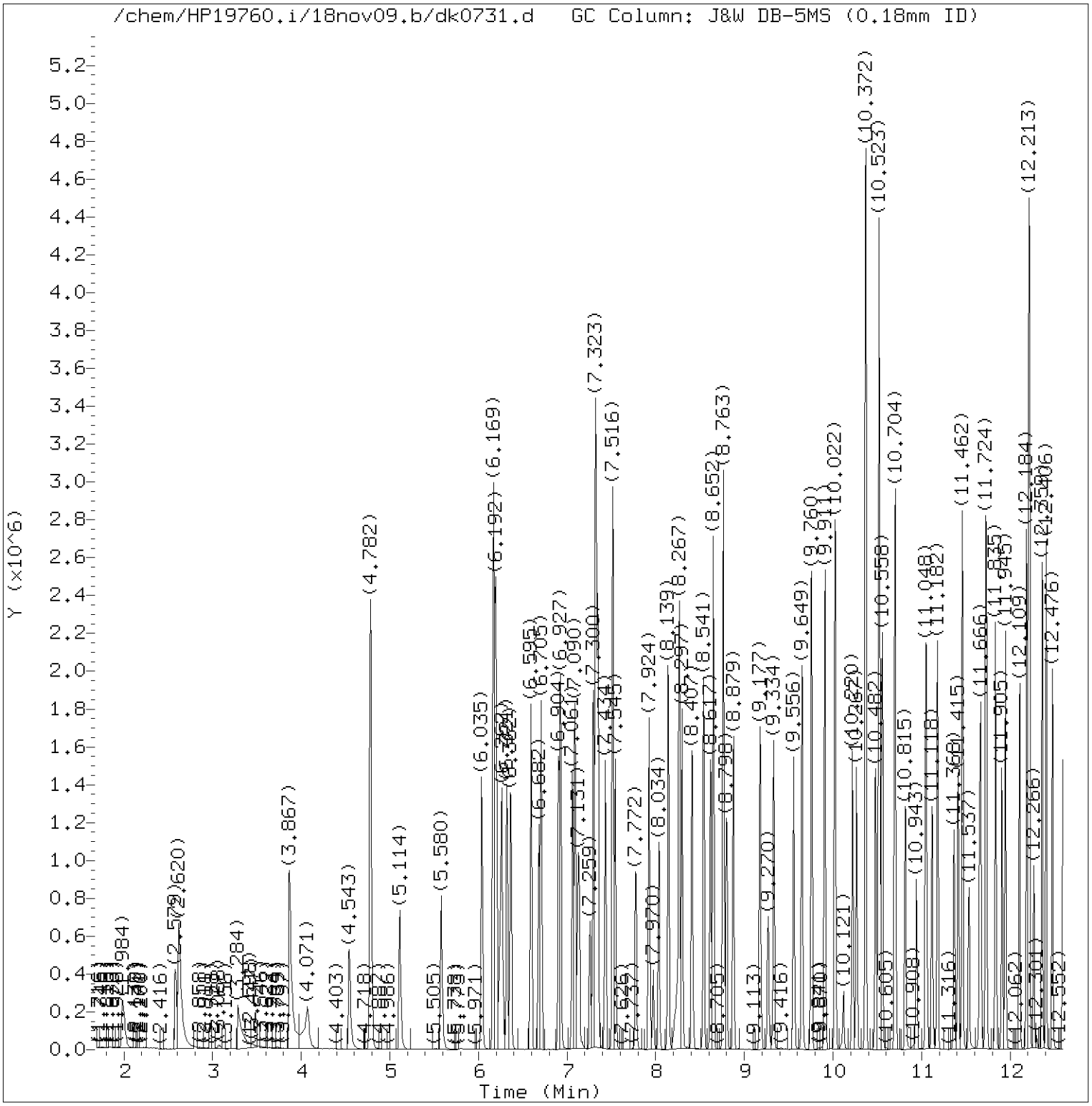
Assessment of GC Column Performance and Injection Port Inertness for

Instrument ID: HP19760.i Injection Date: 09-NOV-2018 08:33 Operator: em10340



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{5116 + 7544}{5116 + 7544 + 1906509} \times 100 = 0.7$$



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0731.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 08:48 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 09:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

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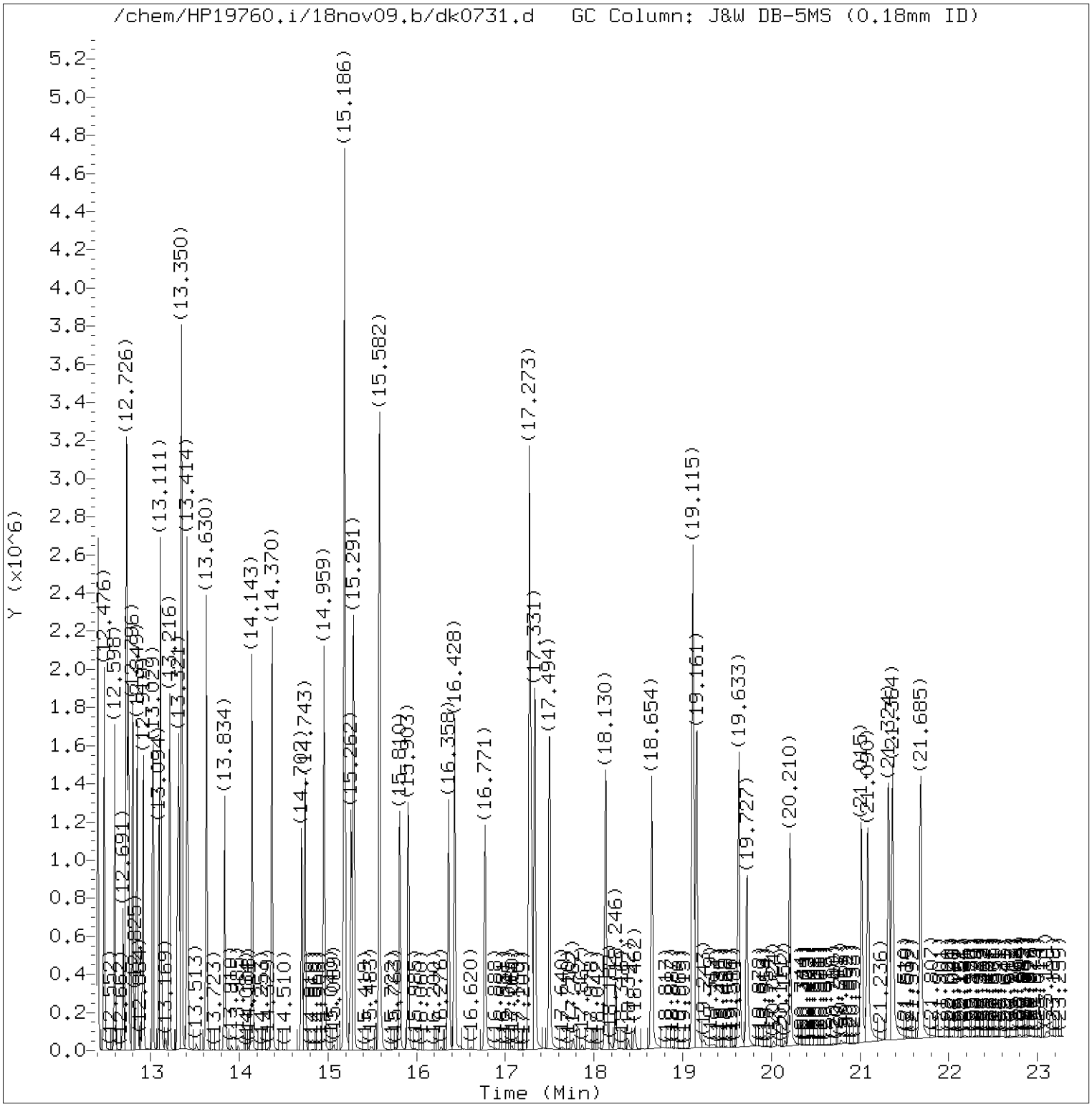
on 11/09/2018 at 09:57.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0731.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 08:48 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 09:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Digitally signed by Edward Monborne
on 11/09/2018 at 09:57.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0731.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 08:48 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 09:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	1.984	88	258894	7.037
4) N-Nitrosodimethylamine	(1)	2.579	74	408386	7.274
5) Pyridine	(1)	2.620	79	688958	7.322
7) 2-Picoline	(1)	3.867	93	698658	7.437
8) N-Nitrosomethylethylamine	(1)	4.071	88	304062	7.436
9) Methyl methanesulfonate	(1)	4.543	80	340186	7.559
11)$2-Fluorophenol	(1)	4.782	112	1080111	15.463
13) N-Nitrosodiethylamine	(1)	5.114	102	280603	7.710
15) Ethyl methanesulfonate	(1)	5.580	109	271153	7.734
42) Total Cresols	(1)			1121407	15.552
16) Benzaldehyde	(1)	6.035	77	450094	7.670
17)$Phenol-d6	(1)	6.169	99	1475441	15.280
18) Phenol	(1)	6.187	94	851415	7.572
19) Aniline	(1)	6.198	93	989088	7.478
20) a-methylstyrene	(1)	6.280	118	52438	7.725
22) bis(2-Chloroethyl)ether	(1)	6.321	93	636051	7.633
23) 2-Chlorophenol	(1)	6.367	128	516995	7.829
24) 1,3-Dichlorobenzene	(1)	6.595	146	547965	7.810
25)*1,4-Dichlorobenzene-d4	(1)	6.682	152	217845	5.000
26) 1,4-Dichlorobenzene	(1)	6.711	146	545322	7.778
27) Benzyl alcohol	(1)	6.904	108	339326	7.297
28) 1,2-Dichlorobenzene	(1)	6.927	146	513405	7.696
30) Indene	(1)	7.061	115	584299	7.755
31) 2-Methylphenol	(1)	7.090	108	530827	7.860
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.131	45	744553	7.738
34) bis(2-Chloroisopropyl)ether	(1)	7.131	45	744553	7.738
35) N-Nitrosopyrrolidine	(1)	7.259	100	284679	7.535
36) Acetophenone	(1)	7.300	105	704438	7.421
38) N-Nitroso-di-n-propylamine	(1)	7.317	70	445241	7.495
39) N-Nitrosomorpholine	(1)	7.329	56	333764	7.517
37) 4-Methylphenol	(1)	7.329	108	590580	7.702
40) o-Toluidine	(1)	7.347	106	890095	7.554
97) Isosafrole	(3)			326636	7.474
43) Hexachloroethane	(1)	7.434	117	247503	7.548
44)$Nitrobenzene-d5	(2)	7.516	82	1300195	15.221
45) Nitrobenzene	(2)	7.545	77	660613	7.654
48) N-Nitrosopiperidine	(2)	7.778	114	251156	7.525
50) Isophorone	(2)	7.924	82	1075684	7.393
51) 2-Nitrophenol	(2)	8.040	139	247026	7.578
120) 2,4_2,6-Dinitrotoluenes	(3)			394809	14.606

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 11/09/2018 at 09:57.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0731.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 08:48 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 09:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
53) 2,4-Dimethylphenol	(2)	8.139	107	534393	7.607
56) Benzoic acid	(2)	8.262	105	380640	8.030
57) O,O,O-Triethylphosphorothioate	(2)	8.267	198	198726	7.478
55) bis(2-Chloroethoxy)methane	(2)	8.297	93	686686	7.490
60) 2,4-Dichlorophenol	(2)	8.413	162	371348	7.850
62) 1,2,4-Trichlorobenzene	(2)	8.541	180	397798	7.682
65)*Naphthalene-d8	(2)	8.617	136	791698	5.000
66) Naphthalene	(2)	8.652	128	1442863	7.707
67) 4-Chloroaniline	(2)	8.763	127	543439	7.604
68) 2,6-Dichlorophenol	(2)	8.769	162	357684	7.752
146) Diallate trans/cis	(4)			427618	7.466
69) Hexachloropropene	(2)	8.804	213	241129	7.394
71) Hexachlorobutadiene	(2)	8.879	225	206652	7.405
75) Quinoline	(2)	9.177	129	757201	7.162
76) Caprolactam	(2)	9.270	113	126583	6.577
77) N-Nitrosodi-n-butylamine	(2)	9.334	84	353166	6.405
80) 4-Chloro-3-methylphenol	(2)	9.561	107	403026	7.194
82) Safrole	(2)	9.655	162	313739	7.285
83) 2-Methylnaphthalene	(2)	9.760	142	862693	7.592
84) 1-Methylnaphthalene	(2)	9.911	142	816970	7.588
85) Hexachlorocyclopentadiene	(3)	10.022	237	209596	7.869
86) 1,2,4,5-Tetrachlorobenzene	(3)	10.028	216	353578	7.935
88) cis-Isosafrole	(3)	10.121	162	53013	1.304
90) 2,4,6-Trichlorophenol	(3)	10.220	196	219045	7.769
92) 2,4,5-Trichlorophenol	(3)	10.267	196	231590	7.826
93)$2-Fluorobiphenyl	(3)	10.372	172	1747279	15.654
99) Diphenyl ether	(3)	10.372	170	400246	7.929
94) trans-Isosafrole	(3)	10.482	162	273623	6.172
95) 1,1'-Biphenyl	(3)	10.517	154	954010	7.911
96) 2-Chloronaphthalene	(3)	10.523	162	759199	7.743
98) 1-Chloronaphthalene	(3)	10.558	162	707594	8.126
100) 2-Nitroaniline	(3)	10.710	138	237965	7.591
104) 1,4-Naphthoquinone	(3)	10.820	158	257097	7.092
105) 1,4-Dinitrobenzene	(3)	10.943	168	116987	6.873
106) Dimethylphthalate	(3)	11.048	163	735618	7.268
107) 1,3-Dinitrobenzene	(3)	11.059	168	138578	7.347
108) 2,6-Dinitrotoluene	(3)	11.118	165	175059	7.477
109) Acenaphthylene	(3)	11.182	152	1065777	7.997
112) 3-Nitroaniline	(3)	11.368	138	196955	7.297
113)*Acenaphthene-d10	(3)	11.415	164	335776	5.000

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Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0731.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 08:48 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 09:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
114) Acenaphthene	(3)	11.462	153	750078	7.664
115) 2,4-Dinitrophenol	(3)	11.537	184	123082	7.574
116) 4-Nitrophenol	(3)	11.654	109	133111	6.462
117) Pentachlorobenzene	(3)	11.666	250	266445	7.573
119) Dibenzofuran	(3)	11.724	168	1023966	7.541
118) 2,4-Dinitrotoluene	(3)	11.736	165	219750	6.901
121) 1-Naphthylamine	(3)	11.835	143	727851	7.079
122) 2,3,4,6-Tetrachlorophenol	(3)	11.905	232	159824	7.035
123) 2-Naphthylamine	(3)	11.945	143	726353	6.989
124) Diethylphthalate	(3)	12.109	149	695869	6.793
126) Fluorene	(3)	12.184	166	794030	7.718
125) Thionazin	(3)	12.202	107	150769	6.768
128) 5-Nitro-o-toluidine	(3)	12.213	152	216148	6.896
129) 4-Nitroaniline	(3)	12.219	138	205607	6.939
127) 4-Chlorophenyl-phenylether	(3)	12.219	204	367946	7.442
130) 4,6-Dinitro-2-methylphenol	(4)	12.266	198	116743	6.617
131) N-Nitrosodiphenylamine	(4)	12.365	169	616596	7.956
132) NDPA as diphenylamine	(4)	12.365	169	616596	7.956
134) 1,2-Diphenylhydrazine	(4)	12.406	77	1039199	8.197
135)$2,4,6-Tribromophenol	(3)	12.482	330	154728	13.994
137) Tetraethyldithiopyrophosphate	(4)	12.592	97	133509	7.149
139) 1,3,5-Trinitrobenzene	(4)	12.691	213	66785	5.890
140) Diallate (peak 1)	(4)	12.726	86	371011	6.236
141) Phorate	(4)	12.732	75	565053	7.723
142) Phenacetin	(4)	12.750	108	376469	6.615
143) 4-Bromophenyl-phenylether	(4)	12.802	248	178019	7.892
144) Diallate (peak 2)	(4)	12.825	86	56607	1.219
145) Hexachlorobenzene	(4)	12.849	284	184330	7.884
147) Dimethoate	(4)	12.919	87	325518	6.732
148) Atrazine	(4)	13.029	200	162324	7.079
149) Pentachlorophenol	(4)	13.094	266	110081	7.026
151) Pentachloronitrobenzene	(4)	13.111	237	76116	6.991
150) 4-Aminobiphenyl	(4)	13.111	169	497449	7.479
152) Pronamide	(4)	13.216	173	279858	6.891
153)*Phenanthrene-d10	(4)	13.321	188	562609	5.000
154) Dinoseb	(4)	13.350	211	154142	6.061
155) Phenanthrene	(4)	13.350	178	1022927	7.557
157) Anthracene	(4)	13.414	178	1027235	7.798
163) Carbazole	(4)	13.630	167	951002	7.376
164) Methyl parathion	(4)	13.834	109	242241	6.609

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 11/09/2018 at 09:57.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0731.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 08:48 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 09:30 em10340

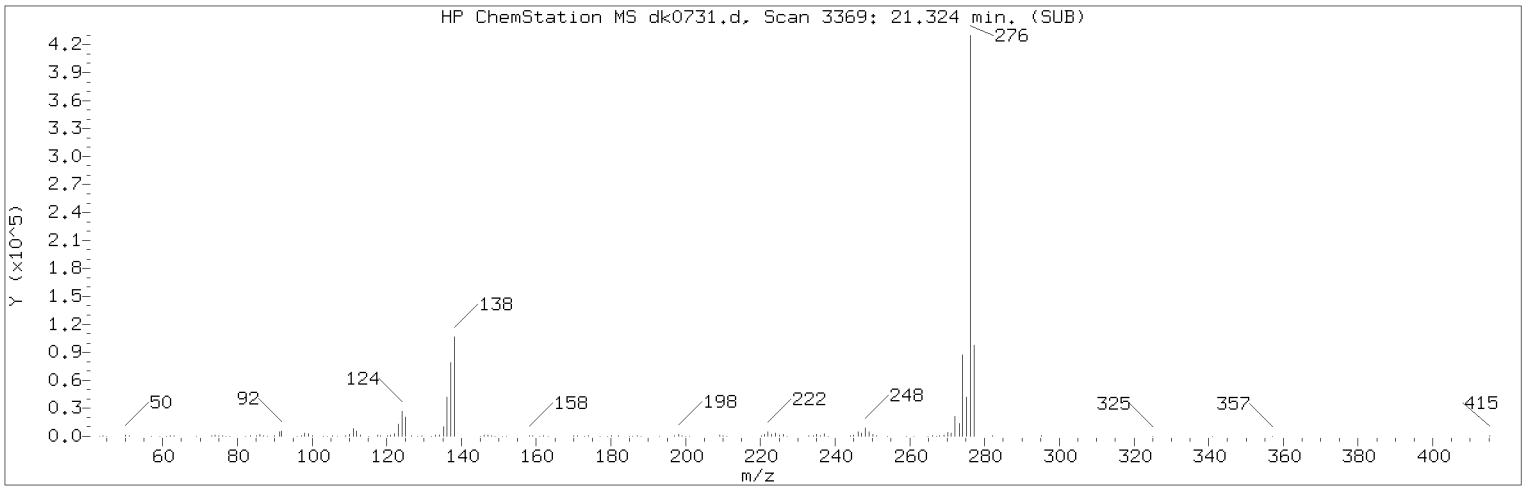
Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
165) Di-n-butylphthalate	(4)	14.143	149	1064889	6.633
168) 4-Nitroquinoline-1-oxide	(4)	14.370	190	69903	5.416
167) Parathion	(4)	14.370	109	148222	6.370
169) Octachlorostyrene	(4)	14.702	308	64430	7.068
171) Isodrin	(4)	14.743	193	111245	7.289
173) Fluoranthene	(4)	14.959	202	1030149	7.272
222) Total PAHs	(6)			16692726	163.445
174) Benzidine	(5)	15.186	184	2108835	20.828
175)*Pyrene-d10	(5)	15.262	212	505815	5.000
177) Pyrene	(5)	15.291	202	1097176	7.552
179)$Terphenyl-d14	(5)	15.582	244	1208205	14.620
182) p-Dimethylaminoazobenzene	(5)	15.810	225	152865	6.641
185) Chlorobenzilate	(5)	15.903	139	311227	6.833
187) 3,3'-Dimethylbenzidine	(5)	16.363	212	567194	6.530
188) Butylbenzylphthalate	(5)	16.428	149	481693	6.604
191) 2-Acetylaminofluorene	(5)	16.771	181	341199	5.799
193) 3,3'-Dichlorobenzidine	(5)	17.273	252	331944	6.665
195) Benzo(a)anthracene	(5)	17.273	228	860531	7.284
198) 4,4'-Methylenebis(2-chloroanil	(5)	17.296	231	177945	6.265
196) Chrysene	(5)	17.331	228	921181	7.417
199) bis(2-Ethylhexyl)phthalate	(5)	17.500	149	611413	5.981
203) 6-Methylchrysene	(5)	18.130	242	591757	6.821
205) Di-n-octylphthalate	(6)	18.654	149	987453	6.467
206) Benzo(b)fluoranthene	(6)	19.115	252	882164	8.204
207) 7,12-Dimethylbenz[a]anthracene	(6)	19.120	256	412080	7.814
208) Benzo(k)fluoranthene	(6)	19.161	252	913557	8.172
211) Benzo(a)pyrene	(6)	19.633	252	847589	8.601
213)*Perylene-d12	(6)	19.727	264	449576	5.000
215) 3-Methylcholanthrene	(6)	20.210	268	369989	7.735
217) Dibenz(a,h)acridine	(6)	21.015	279	598369	7.481
218) Dibenz(a,j)acridine	(6)	21.090	279	692587	7.927
219) Indeno(1,2,3-cd)pyrene	(6)	21.324	276	713401M	8.102
220) Dibenz(a,h)anthracene	(6)	21.364	278	814051	8.334
221) Benzo(g,h,i)perylene	(6)	21.685	276	830354	8.490

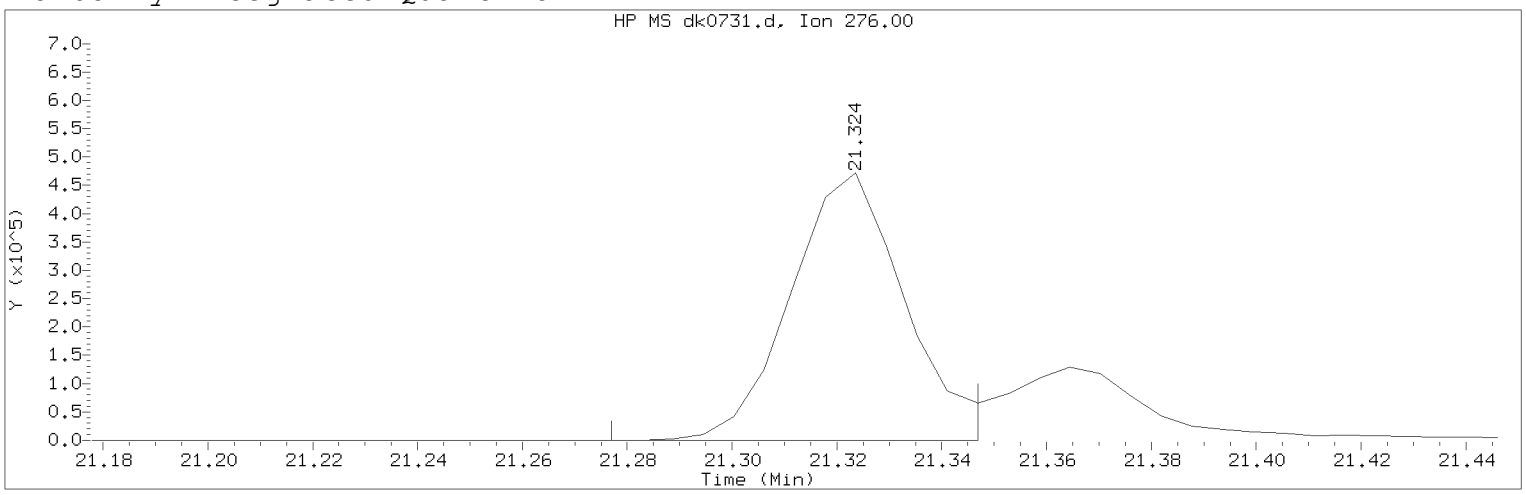
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 11/09/2018 at 09:57.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov09.b/dk0731.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 08:48 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 09:30 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

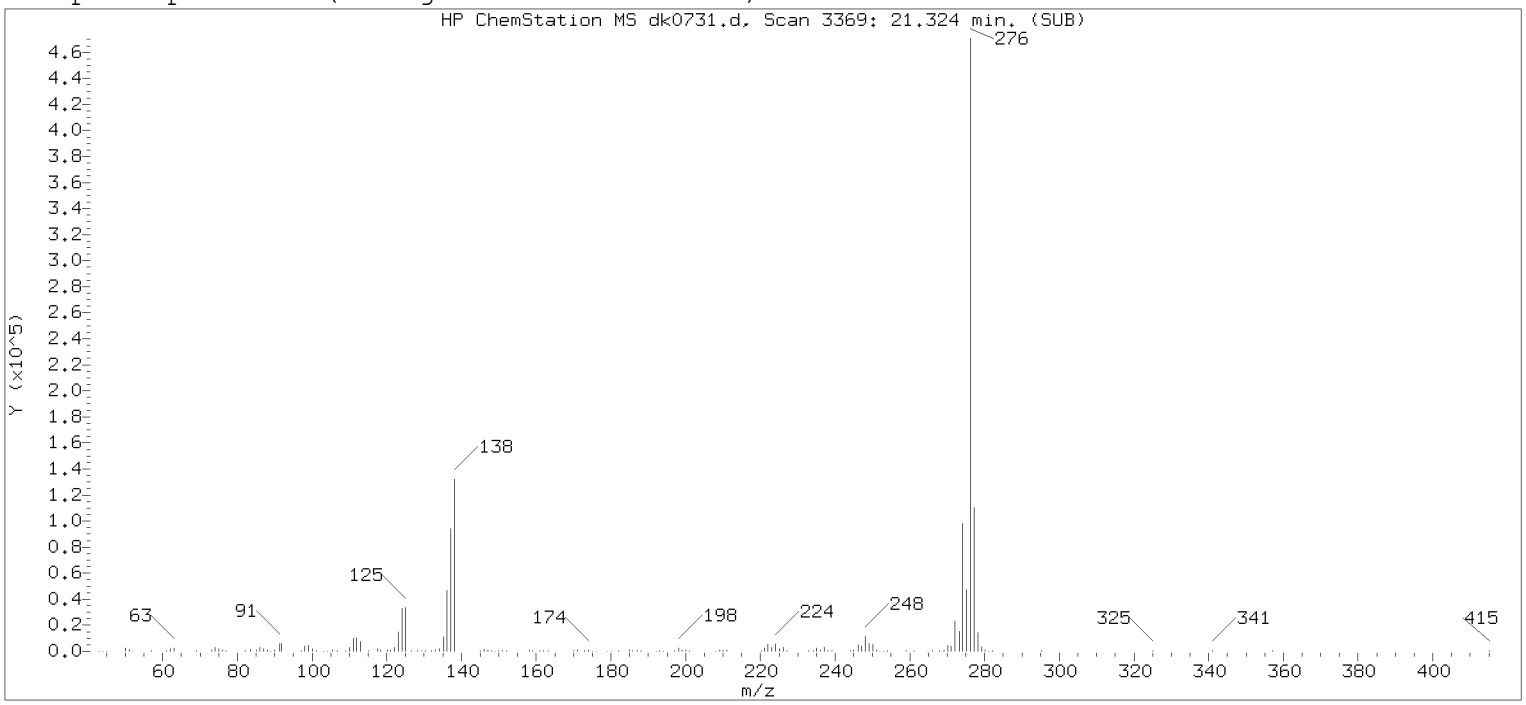
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3369
Retention Time (minutes) : 21.324
Quant Ion : 276.00
Area (flag) : 713401M
On-Column Amount (ng/ul) : 8.1021
Integration start scan : 3360 Integration stop scan: 3372
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

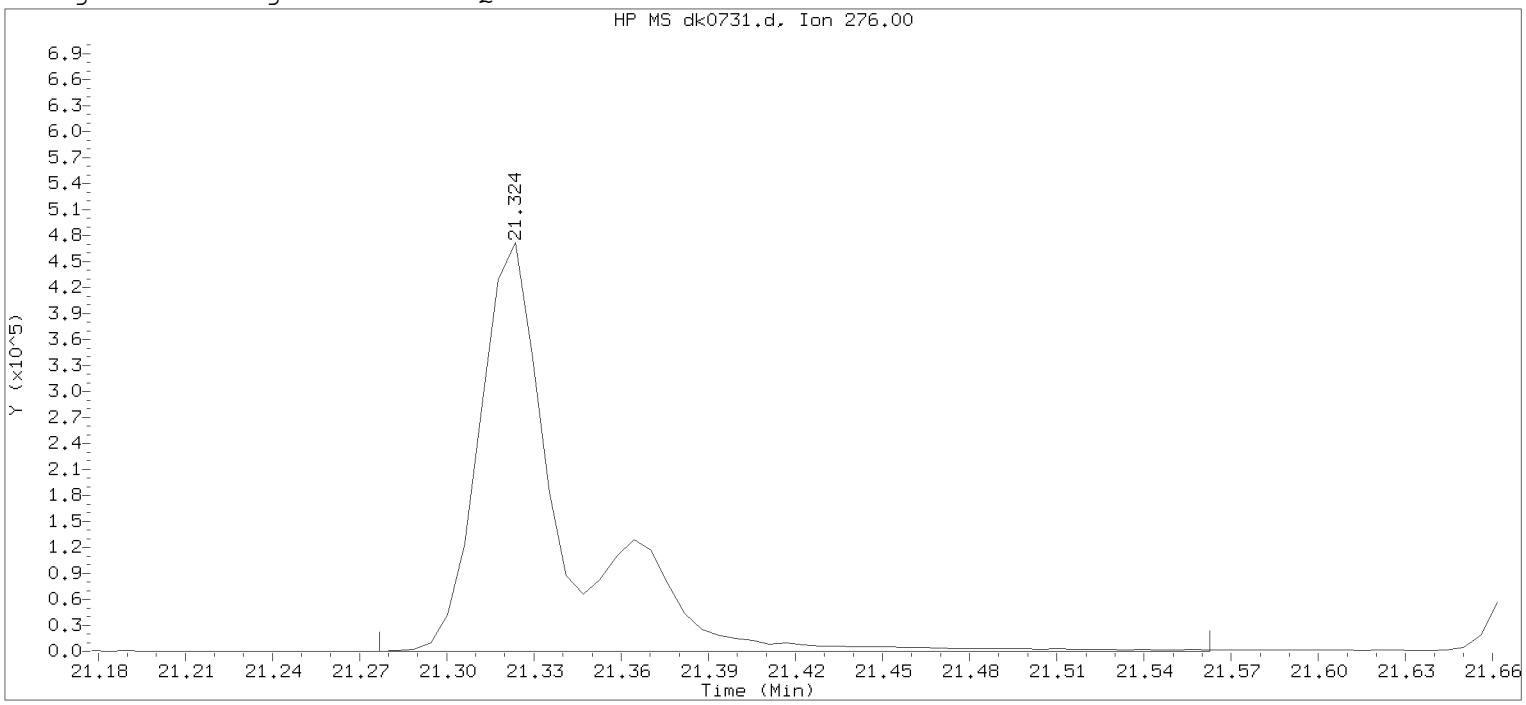
Analyst responsible for change: Digitally signed by Edward Monborne
on 11/09/2018 at 09:57.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 11/12/2018 at 15:17.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov09.b/dk0731.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 08:48 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 09:28
Date, time and analyst ID of latest file update: 09-Nov-2018 09:28 em10340

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3369		
Retention Time (minutes)	: 21.324		
Quant Ion	: 276.00		
Area	: 969996		
On-column Amount (ng/ul)	: 11.0162		
Integration start scan	: 3360	Integration stop scan:	3409
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 11/09/2018 at 09:57.
Target 3.5 esignature user em10340

Raw QC Data

Semivolatiles by GC/MS

Data file: /chem/HP19760.i/18nov09.b/dk0732.d Injection date and time: **09-NOV-2018 10:12**
Data file Sample Info. Line: SBLKWL310;SBLKWL310;1;3;BLANK;;; Instrument ID: **HP19760.i** Batch: **18310WAL**
Date, time and analyst ID of latest file update: 09-Nov-2018 10:40 Automation

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 09:29
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.682(0.000)	857	152	193914 (-11)	5.00	
65) Naphthalene-d8	8.617(0.000)	1189	136	695817 (-12)	5.00	
113) Acenaphthene-d10	11.415(0.000)	1669	164	284880 (-15)	5.00	
153) Phenanthrene-d10	13.321(0.000)	1996	188	466776 (-17)	5.00	
175) Pyrene-d10	15.262(0.000)	2329	212	367948 (-27)	5.00	
213) Perylene-d12	19.726(0.000)	3095	264	298313 (-34)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
11) 2-Fluorophenol	(1)	4.776(0.001)	112	1382978	22.242	44%
17) Phenol-d6	(1)	6.163(0.001)	99	1395207	16.233	32%
44) Nitrobenzene-d5	(2)	7.515(0.000)	82	1328625	17.698	71%
93) 2-Fluorobiphenyl	(3)	10.372(0.000)	172	1887587	19.932	80%
135) 2,4,6-Tribromophenol	(3)	12.481(0.000)	330	366927	39.113	78%
179) Terphenyl-d14	(5)	15.582(0.000)	244	1485151	24.704	99%

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)			Not Detected					0.1
22) bis(2-Chloroethyl)ether	(1)			Not Detected					0.1
23) 2-Chlorophenol	(1)			Not Detected					0.1
24) 1,3-Dichlorobenzene	(1)			Not Detected					0.1
26) 1,4-Dichlorobenzene	(1)			Not Detected					0.1
28) 1,2-Dichlorobenzene	(1)			Not Detected					0.1
31) 2-Methylphenol	(1)			Not Detected					0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)			Not Detected					0.1
37) 4-Methylphenol	(1)			Not Detected					0.1
38) N-Nitroso-di-n-propylamine	(1)			Not Detected					0.2
43) Hexachloroethane	(1)			Not Detected					0.3
45) Nitrobenzene	(2)			Not Detected					0.1
50) Isophorone	(2)			Not Detected					0.1
51) 2-Nitrophenol	(2)			Not Detected					0.8
53) 2,4-Dimethylphenol	(2)			Not Detected					0.8
55) bis(2-Chloroethoxy)methane	(2)			Not Detected					0.1
60) 2,4-Dichlorophenol	(2)			Not Detected					0.1
62) 1,2,4-Trichlorobenzene	(2)			Not Detected					0.1
66) Naphthalene	(2)			Not Detected					0.03
67) 4-Chloroaniline	(2)			Not Detected					1
71) Hexachlorobutadiene	(2)			Not Detected					0.1
80) 4-Chloro-3-methylphenol	(2)			Not Detected					0.1
83) 2-Methylnaphthalene	(2)			Not Detected					0.03
85) Hexachlorocyclopentadiene	(3)			Not Detected					1
90) 2,4,6-Trichlorophenol	(3)			Not Detected					0.1
92) 2,4,5-Trichlorophenol	(3)			Not Detected					0.1
96) 2-Chloronaphthalene	(3)			Not Detected					0.1

Digitally signed by Edward Monborne on 11/09/2018 at 13:58. Target 3.5 esignature user ID: em10340

Data file: /chem/HP19760.i/18nov09.b/dk0732.d Injection date and time: **09-NOV-2018 10:12**
Data file Sample Info. Line: SBLKWL310;SBLKWL310;1;3;BLANK;;; Instrument ID: **HP19760.i** Batch: **18310WAL**
Date, time and analyst ID of latest file update: 09-Nov-2018 10:40 Automation

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 09:29
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

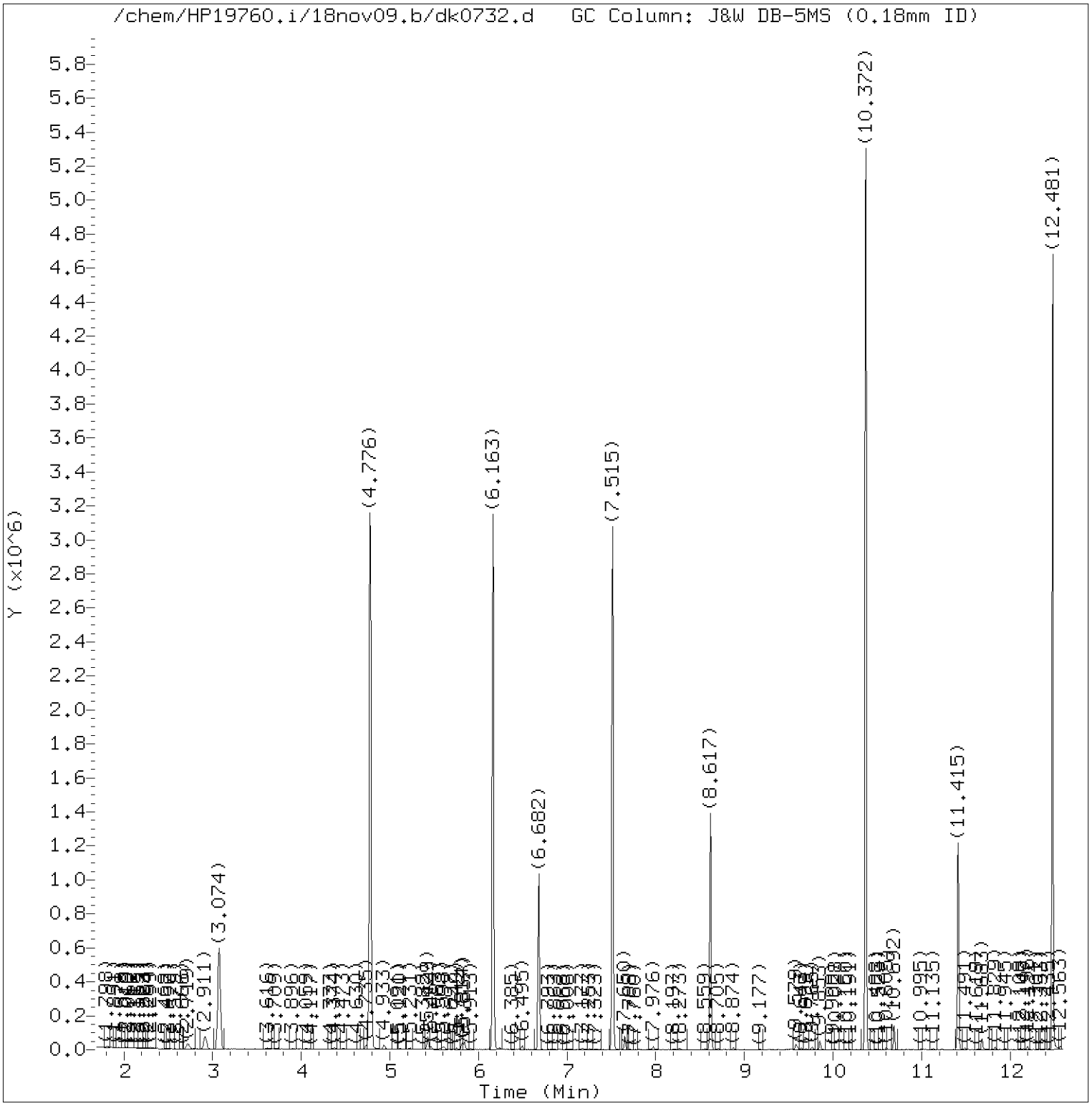
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)				Not Detected					0.5
106) Dimethylphthalate	(3)				Not Detected					0.5
108) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
109) Acenaphthylene	(3)				Not Detected					0.03
112) 3-Nitroaniline	(3)				Not Detected					0.8
114) Acenaphthene	(3)				Not Detected					0.03
115) 2,4-Dinitrophenol	(3)				Not Detected					4
116) 4-Nitrophenol	(3)				Not Detected					3
118) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
119) Dibenzofuran	(3)				Not Detected					0.1
124) Diethylphthalate	(3)				Not Detected					0.5
126) Fluorene	(3)				Not Detected					0.03
127) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
129) 4-Nitroaniline	(3)				Not Detected					0.2
130) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
131) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
143) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
145) Hexachlorobenzene	(4)				Not Detected					0.03
149) Pentachlorophenol	(4)				Not Detected					0.3
155) Phenanthrene	(4)				Not Detected					0.03
157) Anthracene	(4)				Not Detected					0.03
163) Carbazole	(4)				Not Detected					0.1
165) Di-n-butylphthalate	(4)				Not Detected					0.5
173) Fluoranthene	(4)				Not Detected					0.03
177) Pyrene	(5)				Not Detected					0.03
188) Butylbenzylphthalate	(5)				Not Detected					0.5
193) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
195) Benzo(a)anthracene	(5)				Not Detected					0.03
196) Chrysene	(5)				Not Detected					0.03
199) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
205) Di-n-octylphthalate	(6)				Not Detected					1
206) Benzo(b)fluoranthene	(6)				Not Detected					0.03
208) Benzo(k)fluoranthene	(6)				Not Detected					0.03
211) Benzo(a)pyrene	(6)				Not Detected					0.03
219) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
220) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
221) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

Digitally signed by Edward Monborne on 11/09/2018 at 13:58. Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 11/12/2018 at 15:58. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

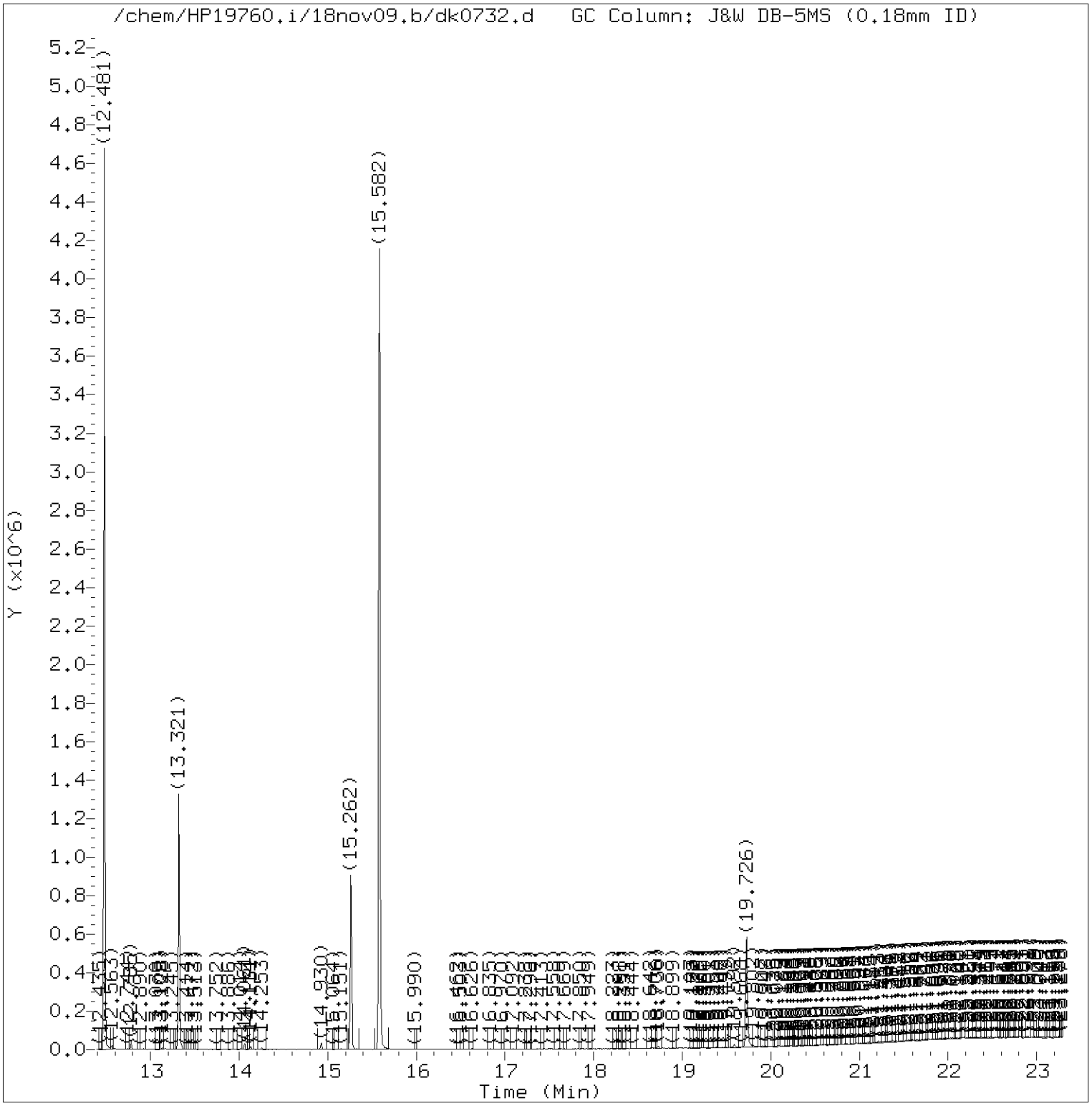
Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0732.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 10:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 10:40 Automation

Sample Name: SBLKWL310 Lab Sample ID: SBLKWL310

Digitally signed by Edward Monborne
on 11/09/2018 at 13:58.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0732.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 10:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 10:40 Automation

Sample Name: SBLKWL310 Lab Sample ID: SBLKWL310

Digitally signed by Edward Monborne
on 11/09/2018 at 13:58.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0732.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 10:12 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 10:40 Automation

Sample Name: SBLKWL310 Lab Sample ID: SBLKWL310

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.776	112	1382978	22.242
17)$Phenol-d6	(1)	6.163	99	1395207	16.233
25)*1,4-Dichlorobenzene-d4	(1)	6.682	152	193914	5.000
44)$Nitrobenzene-d5	(2)	7.515	82	1328625	17.698
65)*Naphthalene-d8	(2)	8.617	136	695817	5.000
93)$2-Fluorobiphenyl	(3)	10.372	172	1887587	19.932
113)*Acenaphthene-d10	(3)	11.415	164	284880	5.000
135)$2,4,6-Tribromophenol	(3)	12.481	330	366927	39.113
153)*Phenanthrene-d10	(4)	13.321	188	466776	5.000
175)*Pyrene-d10	(5)	15.262	212	367948	5.000
179)$Terphenyl-d14	(5)	15.582	244	1485151	24.704
213)*Perylene-d12	(6)	19.726	264	298313	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 11/09/2018 at 13:58.
Target 3.5 esignature user ID: em10340

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

310WLLCS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 310WLLCS

Sample wt/vol: 250 (g/mL)ML Lab File ID: dk0733.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			25	
111-44-4	bis(2-Chloroethyl)ether			41	
95-57-8	2-Chlorophenol			41	
541-73-1	1,3-Dichlorobenzene			39	
106-46-7	1,4-Dichlorobenzene			40	
95-50-1	1,2-Dichlorobenzene			40	
95-48-7	2-Methylphenol			41	
108-60-1	2,2'-oxybis(1-Chloropropane)			40	
106-44-5	4-Methylphenol			39	
621-64-7	N-Nitroso-di-n-propylamine			42	
67-72-1	Hexachloroethane			38	
98-95-3	Nitrobenzene			42	
78-59-1	Isophorone			43	
88-75-5	2-Nitrophenol			41	
105-67-9	2,4-Dimethylphenol			34	
111-91-1	bis(2-Chloroethoxy)methane			42	
120-83-2	2,4-Dichlorophenol			42	
120-82-1	1,2,4-Trichlorobenzene			40	
91-20-3	Naphthalene			41	
106-47-8	4-Chloroaniline			37	
87-68-3	Hexachlorobutadiene			41	
59-50-7	4-Chloro-3-methylphenol			42	
91-57-6	2-Methylnaphthalene			41	
77-47-4	Hexachlorocyclopentadiene			51	
88-06-2	2,4,6-Trichlorophenol			46	
95-95-4	2,4,5-Trichlorophenol			46	
91-58-7	2-Chloronaphthalene			43	
88-74-4	2-Nitroaniline			44	
131-11-3	Dimethylphthalate			41	
606-20-2	2,6-Dinitrotoluene			43	

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

310WLLCS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 310WLLCS

Sample wt/vol: 250 (g/mL)ML Lab File ID: dk0733.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene			48	
99-09-2	3-Nitroaniline			39	
83-32-9	Acenaphthene			44	
51-28-5	2,4-Dinitrophenol			68	
100-02-7	4-Nitrophenol			21	J
121-14-2	2,4-Dinitrotoluene			40	
132-64-9	Dibenzofuran			43	
84-66-2	Diethylphthalate			39	
86-73-7	Fluorene			44	
7005-72-3	4-Chlorophenyl-phenylether			42	
100-01-6	4-Nitroaniline			35	
534-52-1	4,6-Dinitro-2-methylphenol			41	
86-30-6	N-Nitrosodiphenylamine			51	
101-55-3	4-Bromophenyl-phenylether			47	
118-74-1	Hexachlorobenzene			49	
87-86-5	Pentachlorophenol			42	
85-01-8	Phenanthrene			46	
120-12-7	Anthracene			46	
86-74-8	Carbazole			47	
84-74-2	Di-n-butylphthalate			40	
206-44-0	Fluoranthene			45	
129-00-0	Pyrene			46	
85-68-7	Butylbenzylphthalate			39	
91-94-1	3,3'-Dichlorobenzidine			35	
56-55-3	Benzo(a)anthracene			45	
218-01-9	Chrysene			45	
117-81-7	bis(2-Ethylhexyl)phthalate			36	
117-84-0	Di-n-octylphthalate			39	
205-99-2	Benzo(b)fluoranthene			49	
207-08-9	Benzo(k)fluoranthene			49	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

310WLLCS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 310WLLCS

Sample wt/vol: 250 (g/mL)ML Lab File ID: dk0733.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene			50	
193-39-5	Indeno(1,2,3-cd)pyrene			47	
53-70-3	Dibenz(a,h)anthracene			50	
191-24-2	Benzo(g,h,i)perylene			50	

FORM I SV-3

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

310WLLCS

Data file: /chem/HP19760.i/18nov09.b/dk0733.d
Data file Sample Info. Line: 310WLLCS;310WLLCS;1;3;LCS;;;
Date, time and analyst ID of latest file update: 09-Nov-2018 13:46 em10340

Injection date and time: **09-NOV-2018 10:40**
Instrument ID: **HP19760.i** Batch: **18310WAL**

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 09:29
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.682	(0.000)	857	152	190970	(-12)	5.00	
65) Naphthalene-d8	8.617	(0.000)	1189	136	697329	(-12)	5.00	
113) Acenaphthene-d10	11.415	(0.000)	1669	164	293134	(-13)	5.00	
153) Phenanthrene-d10	13.321	(0.000)	1996	188	452219	(-20)	5.00	
175) Pyrene-d10	15.262	(0.000)	2329	212	416067	(-18)	5.00	
213) Perylene-d12	19.721	(0.006)	3094	264	391593	(-13)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
11) 2-Fluorophenol	(1)	4.788	(-0.001)	112	1870404	30.544	61%
17) Phenol-d6	(1)	6.169	(0.000)	99	1903376	22.486	45%
44) Nitrobenzene-d5	(2)	7.515	(0.000)	82	1544671	20.531	82%
93) 2-Fluorobiphenyl	(3)	10.371	(0.000)	172	2116064	21.716	87%
135) 2,4,6-Tribromophenol	(3)	12.481	(0.000)	330	380232	39.391	79%
179) Terphenyl-d14	(5)	15.582	(0.000)	244	1530012	22.507	90%

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)	6.186	(-0.000)	94	617509	6.265	25.06			0.1
22) bis(2-Chloroethyl)ether	(1)	6.320	(0.000)	93	740328	10.134	40.54			0.1
23) 2-Chlorophenol	(1)	6.367	(0.000)	128	588764	10.170	40.68			0.1
24) 1,3-Dichlorobenzene	(1)	6.594	(0.000)	146	598959	9.739	38.95			0.1
26) 1,4-Dichlorobenzene	(1)	6.711	(-0.000)	146	613404	9.980	39.92			0.1
28) 1,2-Dichlorobenzene	(1)	6.927	(-0.000)	146	589792	10.085	40.34			0.1
31) 2-Methylphenol	(1)	7.090	(-0.000)	108	599658	10.128	40.51			0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.136	(-0.000)	45	836703	9.919	39.68			0.1
37) 4-Methylphenol	(1)	7.329	(-0.000)	108	648158	9.643	38.57			0.1
38) N-Nitroso-di-n-propylamine	(1)	7.317	(-0.000)	70	543154	10.430	41.72			0.2
43) Hexachloroethane	(1)	7.434	(-0.000)	117	269937	9.390	37.56			0.3
45) Nitrobenzene	(2)	7.544	(0.000)	77	788753	10.376	41.50			0.1
50) Isophorone	(2)	7.923	(0.000)	82	1363719	10.641	42.56			0.1
51) 2-Nitrophenol	(2)	8.034	(0.000)	139	297895	10.375	41.50			0.8
53) 2,4-Dimethylphenol	(2)	8.139	(0.000)	107	520239	8.408	33.63			0.8
55) bis(2-Chloroethoxy)methane	(2)	8.296	(-0.000)	93	853353	10.567	42.27			0.1
60) 2,4-Dichlorophenol	(2)	8.413	(0.000)	162	442224	10.613	42.45			0.1
62) 1,2,4-Trichlorobenzene	(2)	8.541	(0.000)	180	461655	10.122	40.49			0.1
66) Naphthalene	(2)	8.652	(-0.000)	128	1679015	10.182	40.73			0.03
67) 4-Chloroaniline	(2)	8.763	(-0.000)	127	584891	9.292	37.17			1
71) Hexachlorobutadiene	(2)	8.879	(-0.000)	225	250226	10.180	40.72			0.1
80) 4-Chloro-3-methylphenol	(2)	9.555	(0.000)	107	513018	10.396	41.59			0.1
83) 2-Methylnaphthalene	(2)	9.754	(0.000)	142	1021454	10.206	40.82			0.03
85) Hexachlorocyclopentadiene	(3)	10.022	(0.000)	237	296139	12.736	50.94			1
90) 2,4,6-Trichlorophenol	(3)	10.220	(0.000)	196	286057	11.621	46.48			0.1
92) 2,4,5-Trichlorophenol	(3)	10.266	(0.000)	196	299338	11.587	46.35			0.1
96) 2-Chloronaphthalene	(3)	10.523	(0.000)	162	910140	10.633	42.53			0.1

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

310WLLCS

Data file: /chem/HP19760.i/18nov09.b/dk0733.d Injection date and time: **09-NOV-2018 10:40**
Data file Sample Info. Line: 310WLLCS;310WLLCS;1;3;LCS;;; Instrument ID: **HP19760.i** Batch: **18310WAL**
Date, time and analyst ID of latest file update: 09-Nov-2018 13:46 em10340

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 09:29
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

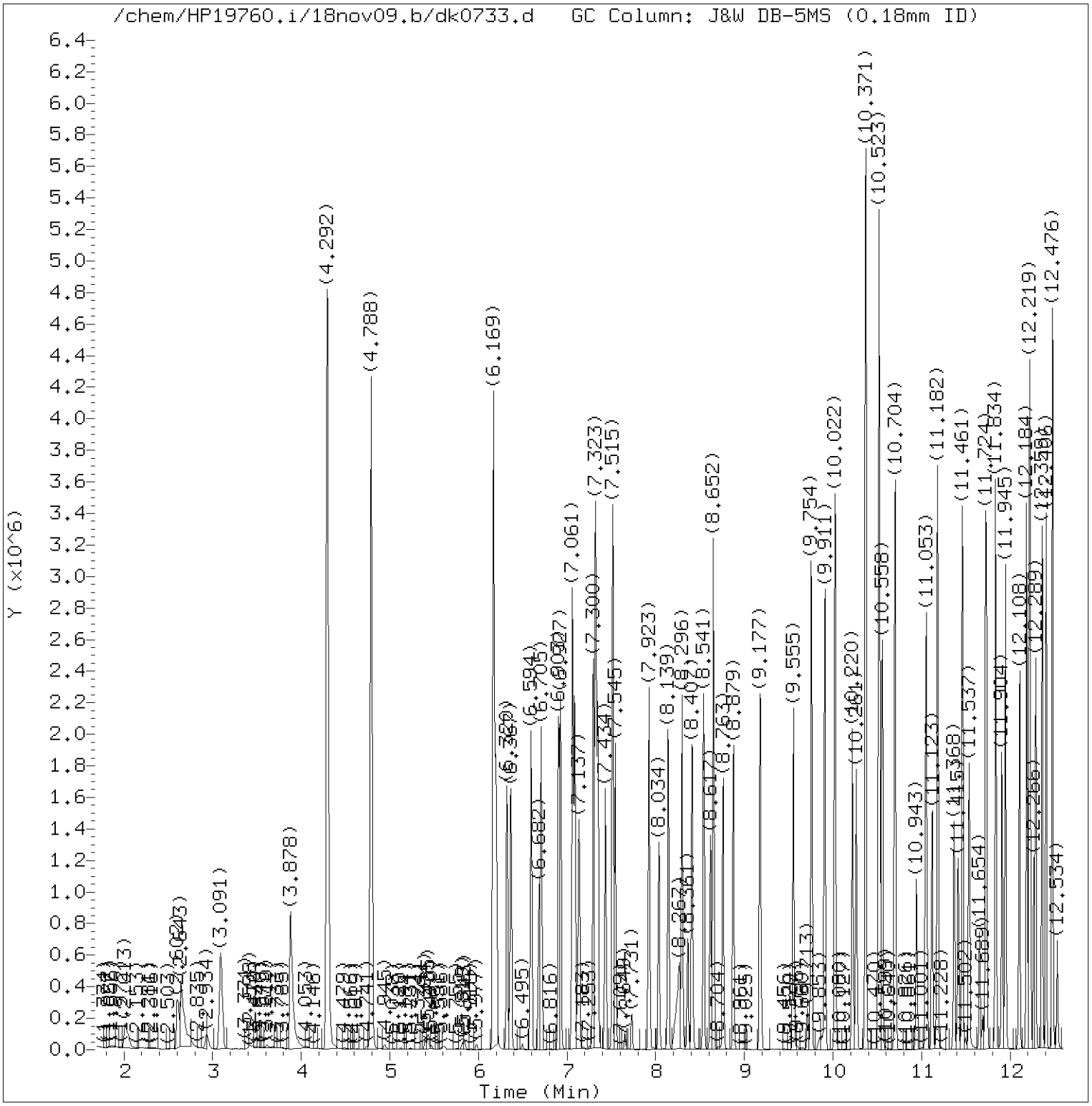
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)	10.709(0.000)	138	302346	11.047	44.19			0.5
106) Dimethylphthalate	(3)	11.048(-0.000)	163	904449	10.236	40.94			0.5
108) 2,6-Dinitrotoluene	(3)	11.123(-0.000)	165	218809	10.706	42.82			0.1
109) Acenaphthylene	(3)	11.182(0.000)	152	1384193	11.897	47.59			0.03
112) 3-Nitroaniline	(3)	11.368(0.000)	138	232149	9.852	39.41			0.8
114) Acenaphthene	(3)	11.461(-0.000)	153	937275	10.970	43.88			0.03
115) 2,4-Dinitrophenol	(3)	11.537(-0.000)	184	240886	16.979	67.92			4
116) 4-Nitrophenol	(3)	11.654(-0.000)	109	96338	5.357	21.43		J	3
118) 2,4-Dinitrotoluene	(3)	11.735(-0.000)	165	277525	9.983	39.93			0.3
119) Dibenzofuran	(3)	11.724(-0.000)	168	1274161	10.748	42.99			0.1
124) Diethylphthalate	(3)	12.108(-0.000)	149	867323	9.698	38.79			0.5
126) Fluorene	(3)	12.184(-0.000)	166	980512	10.917	43.67			0.03
127) 4-Chlorophenyl-phenylether	(3)	12.213(0.000)	204	454923	10.540	42.16			0.1
129) 4-Nitroaniline	(3)	12.219(-0.000)	138	225621	8.723	34.89			0.2
130) 4,6-Dinitro-2-methylphenol	(4)	12.266(0.000)	198	147100	10.373	41.49			2
131) N-Nitrosodiphenylamine	(4)	12.359(0.000)	169	795339	12.768	51.07			0.2
143) 4-Bromophenyl-phenylether	(4)	12.796(0.000)	248	213048	11.750	47.00			0.1
145) Hexachlorobenzene	(4)	12.848(-0.000)	284	230754	12.279	49.12			0.03
149) Pentachlorophenol	(4)	13.093(0.000)	266	132248	10.501	42.00			0.3
155) Phenanthrene	(4)	13.350(-0.000)	178	1253407	11.520	46.08			0.03
157) Anthracene	(4)	13.414(-0.000)	178	1230586	11.622	46.49			0.03
163) Carbazole	(4)	13.630(-0.000)	167	1226010	11.830	47.32			0.1
165) Di-n-butylphthalate	(4)	14.142(-0.000)	149	1292069	10.013	40.05			0.5
173) Fluoranthene	(4)	14.958(-0.000)	202	1288929	11.319	45.28			0.03
177) Pyrene	(5)	15.291(-0.000)	202	1366377	11.433	45.73			0.03
188) Butylbenzylphthalate	(5)	16.427(-0.000)	149	585255	9.755	39.02			0.5
193) 3,3'-Dichlorobenzidine	(5)	17.272(-0.000)	252	361139	8.815	35.26			0.8
195) Benzo(a)anthracene	(5)	17.272(-0.000)	228	1085139	11.166	44.66			0.03
196) Chrysene	(5)	17.331(-0.000)	228	1144301	11.200	44.80			0.03
199) bis(2-Ethylhexyl)phthalate	(5)	17.494(0.000)	149	759386	9.031	36.12			1
205) Di-n-octylphthalate	(6)	18.654(-0.000)	149	1288956	9.692	38.77			1
206) Benzo(b)fluoranthene	(6)	19.114(-0.000)	252	1137764	12.148	48.59			0.03
208) Benzo(k)fluoranthene	(6)	19.161(-0.000)	252	1191812	12.239	48.96			0.03
211) Benzo(a)pyrene	(6)	19.633(-0.000)	252	1078630M	12.567	50.27			0.03
219) Indeno(1,2,3-cd)pyrene	(6)	21.323(-0.000)	276	908644M	11.847	47.39			0.03
220) Dibenz(a,h)anthracene	(6)	21.364(-0.000)	278	1066276	12.533	50.13			0.03
221) Benzo(g,h,i)perylene	(6)	21.685(-0.000)	276	1054601M	12.379	49.52			0.03

M = Compound was manually integrated.

Total number of targets = 64

Digitally signed by Edward Monborne on 11/09/2018 at 13:58. Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 11/12/2018 at 15:58. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

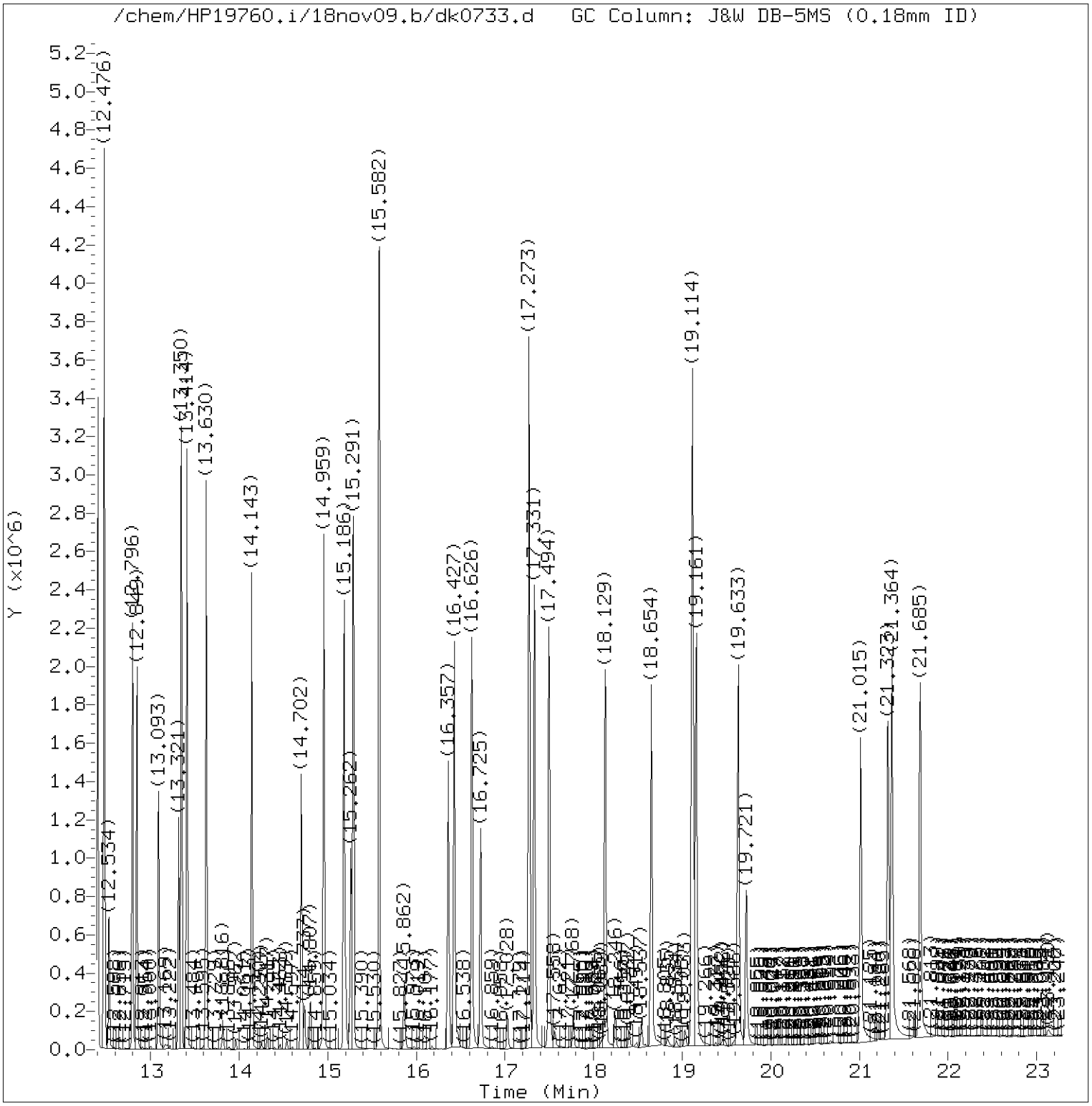
Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0733.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 10:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 13:46 em10340

Sample Name: 310WLLCS Lab Sample ID: 310WLLCS

Digitally signed by Edward Monborne
on 11/09/2018 at 13:58.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0733.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 10:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 13:46 em10340

Sample Name: 310WLLCS Lab Sample ID: 310WLLCS

Digitally signed by Edward Monborne
on 11/09/2018 at 13:58.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0733.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 10:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 13:46 em10340

Sample Name: 310WLLCS Lab Sample ID: 310WLLCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.788	112	1870404	30.544
17)$Phenol-d6	(1)	6.169	99	1903376	22.486
18) Phenol	(1)	6.186	94	617509	6.265
22) bis(2-Chloroethyl)ether	(1)	6.320	93	740328	10.134
23) 2-Chlorophenol	(1)	6.367	128	588764	10.170
24) 1,3-Dichlorobenzene	(1)	6.594	146	598959	9.739
25)*1,4-Dichlorobenzene-d4	(1)	6.682	152	190970	5.000
26) 1,4-Dichlorobenzene	(1)	6.711	146	613404	9.980
28) 1,2-Dichlorobenzene	(1)	6.927	146	589792	10.085
31) 2-Methylphenol	(1)	7.090	108	599658	10.128
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.137	45	836703	9.919
38) N-Nitroso-di-n-propylamine	(1)	7.317	70	543154	10.430
37) 4-Methylphenol	(1)	7.329	108	648158	9.643
43) Hexachloroethane	(1)	7.434	117	269937	9.390
44)$Nitrobenzene-d5	(2)	7.515	82	1544671	20.531
45) Nitrobenzene	(2)	7.545	77	788753	10.376
50) Isophorone	(2)	7.923	82	1363719	10.641
51) 2-Nitrophenol	(2)	8.034	139	297895	10.375
53) 2,4-Dimethylphenol	(2)	8.139	107	520239	8.408
55) bis(2-Chloroethoxy)methane	(2)	8.296	93	853353	10.567
60) 2,4-Dichlorophenol	(2)	8.413	162	442224	10.613
62) 1,2,4-Trichlorobenzene	(2)	8.541	180	461655	10.122
65)*Naphthalene-d8	(2)	8.617	136	697329	5.000
66) Naphthalene	(2)	8.652	128	1679015	10.182
67) 4-Chloroaniline	(2)	8.763	127	584891	9.292
71) Hexachlorobutadiene	(2)	8.879	225	250226	10.180
80) 4-Chloro-3-methylphenol	(2)	9.555	107	513018	10.396
83) 2-Methylnaphthalene	(2)	9.754	142	1021454	10.206
85) Hexachlorocyclopentadiene	(3)	10.022	237	296139	12.736
90) 2,4,6-Trichlorophenol	(3)	10.220	196	286057	11.621
92) 2,4,5-Trichlorophenol	(3)	10.267	196	299338	11.587
93)$2-Fluorobiphenyl	(3)	10.371	172	2116064	21.716
96) 2-Chloronaphthalene	(3)	10.523	162	910140	10.633
100) 2-Nitroaniline	(3)	10.709	138	302346	11.047
106) Dimethylphthalate	(3)	11.048	163	904449	10.236
108) 2,6-Dinitrotoluene	(3)	11.123	165	218809	10.706
109) Acenaphthylene	(3)	11.182	152	1384193	11.897
112) 3-Nitroaniline	(3)	11.368	138	232149	9.852
113)*Acenaphthene-d10	(3)	11.415	164	293134	5.000
114) Acenaphthene	(3)	11.461	153	937275	10.970

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 11/09/2018 at 13:58.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0733.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 10:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 13:46 em10340

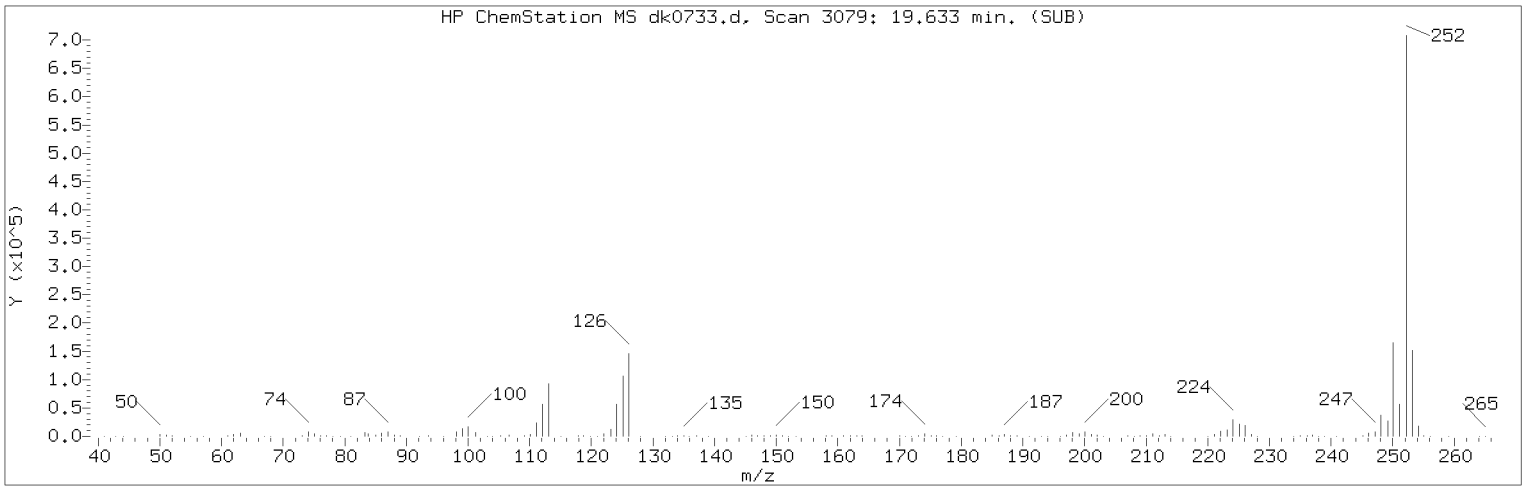
Sample Name: 310WLLCS Lab Sample ID: 310WLLCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
115) 2,4-Dinitrophenol	(3)	11.537	184	240886	16.979
116) 4-Nitrophenol	(3)	11.654	109	96338	5.357
119) Dibenzofuran	(3)	11.724	168	1274161	10.748
118) 2,4-Dinitrotoluene	(3)	11.735	165	277525	9.983
124) Diethylphthalate	(3)	12.108	149	867323	9.698
126) Fluorene	(3)	12.184	166	980512	10.917
127) 4-Chlorophenyl-phenylether	(3)	12.213	204	454923	10.540
129) 4-Nitroaniline	(3)	12.219	138	225621	8.723
130) 4,6-Dinitro-2-methylphenol	(4)	12.266	198	147100	10.373
131) N-Nitrosodiphenylamine	(4)	12.359	169	795339	12.768
135)$2,4,6-Tribromophenol	(3)	12.481	330	380232	39.391
143) 4-Bromophenyl-phenylether	(4)	12.796	248	213048	11.750
145) Hexachlorobenzene	(4)	12.849	284	230754	12.279
149) Pentachlorophenol	(4)	13.093	266	132248	10.501
153)*Phenanthrene-d10	(4)	13.321	188	452219	5.000
155) Phenanthrene	(4)	13.350	178	1253407	11.520
157) Anthracene	(4)	13.414	178	1230586	11.622
163) Carbazole	(4)	13.630	167	1226010	11.830
165) Di-n-butylphthalate	(4)	14.143	149	1292069	10.013
173) Fluoranthene	(4)	14.959	202	1288929	11.319
175)*Pyrene-d10	(5)	15.262	212	416067	5.000
177) Pyrene	(5)	15.291	202	1366377	11.433
179)$Terphenyl-d14	(5)	15.582	244	1530012	22.507
188) Butylbenzylphthalate	(5)	16.427	149	585255	9.755
195) Benzo(a)anthracene	(5)	17.273	228	1085139	11.166
193) 3,3'-Dichlorobenzidine	(5)	17.273	252	361139	8.815
196) Chrysene	(5)	17.331	228	1144301	11.200
199) bis(2-Ethylhexyl)phthalate	(5)	17.494	149	759386	9.031
205) Di-n-octylphthalate	(6)	18.654	149	1288956	9.692
206) Benzo(b)fluoranthene	(6)	19.114	252	1137764	12.148
208) Benzo(k)fluoranthene	(6)	19.161	252	1191812	12.239
211) Benzo(a)pyrene	(6)	19.633	252	1078630M	12.567
213)*Perylene-d12	(6)	19.721	264	391593	5.000
219) Indeno(1,2,3-cd)pyrene	(6)	21.323	276	908644M	11.847
220) Dibenz(a,h)anthracene	(6)	21.364	278	1066276	12.533
221) Benzo(g,h,i)perylene	(6)	21.685	276	1054601M	12.379

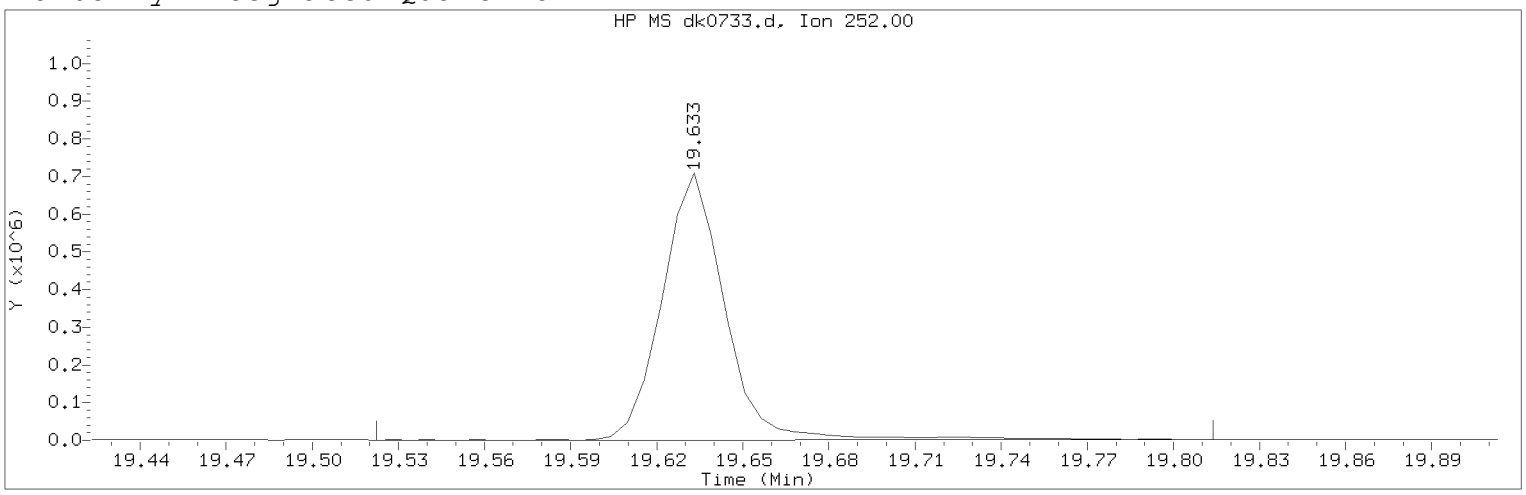
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 11/09/2018 at 13:58.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov09.b/dk0733.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 10:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 13:46 em10340

Sample Name: 310WLLCS Lab Sample ID: 310WLLCS

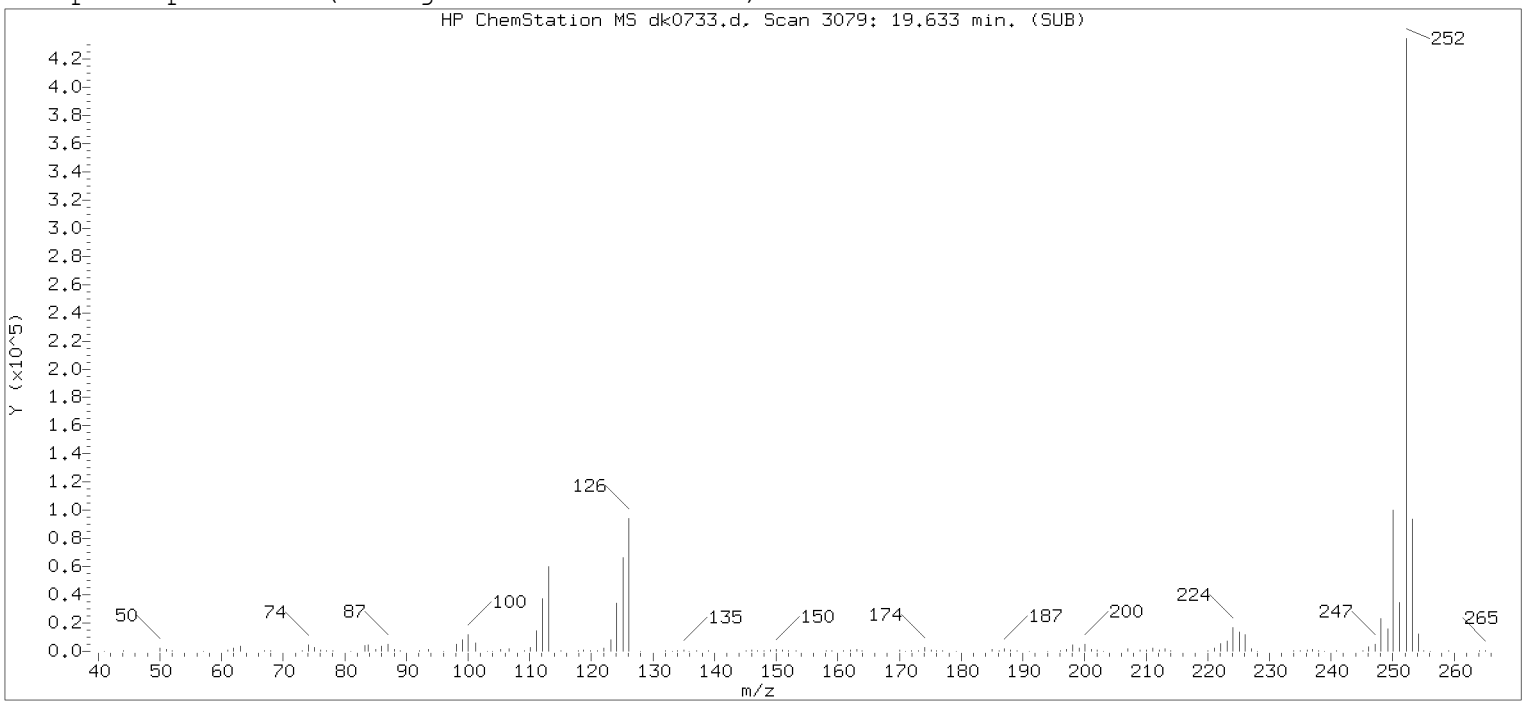
Compound Number : 211
Compound Name : Benzo(a)pyrene
Scan Number : 3079
Retention Time (minutes) : 19.633
Quant Ion : 252.00
Area (flag) : 1078630M
On-Column Amount (ng/ul) : 12.5667
Integration start scan : 3059 Integration stop scan: 3109
Y at integration start : 623 Y at integration end: 2225

Reason for manual integration: improper integration

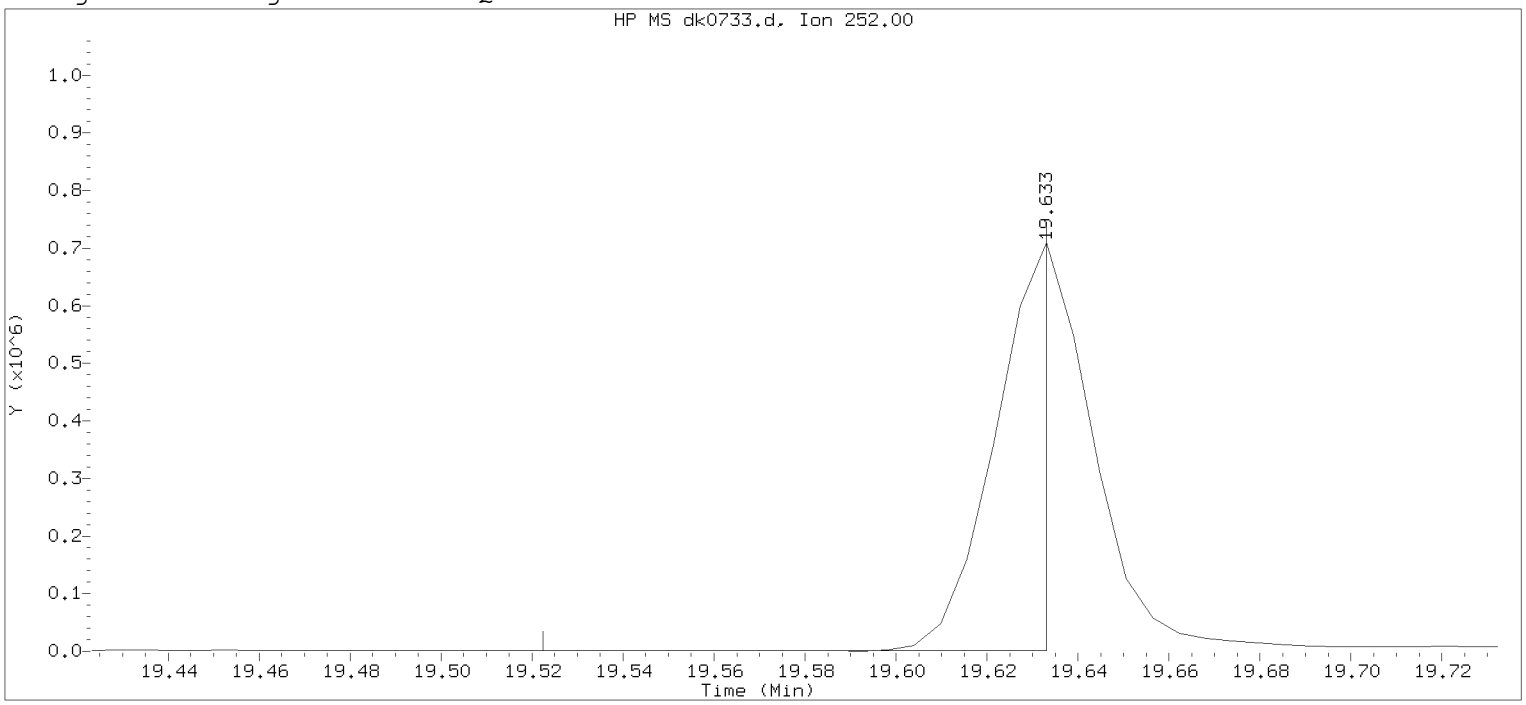
Analyst responsible for change: Digitally signed by Edward Monborne
on 11/09/2018 at 13:58.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 11/12/2018 at 15:58.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov09.b/dk0733.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 10:40 Analyst ID: em10340

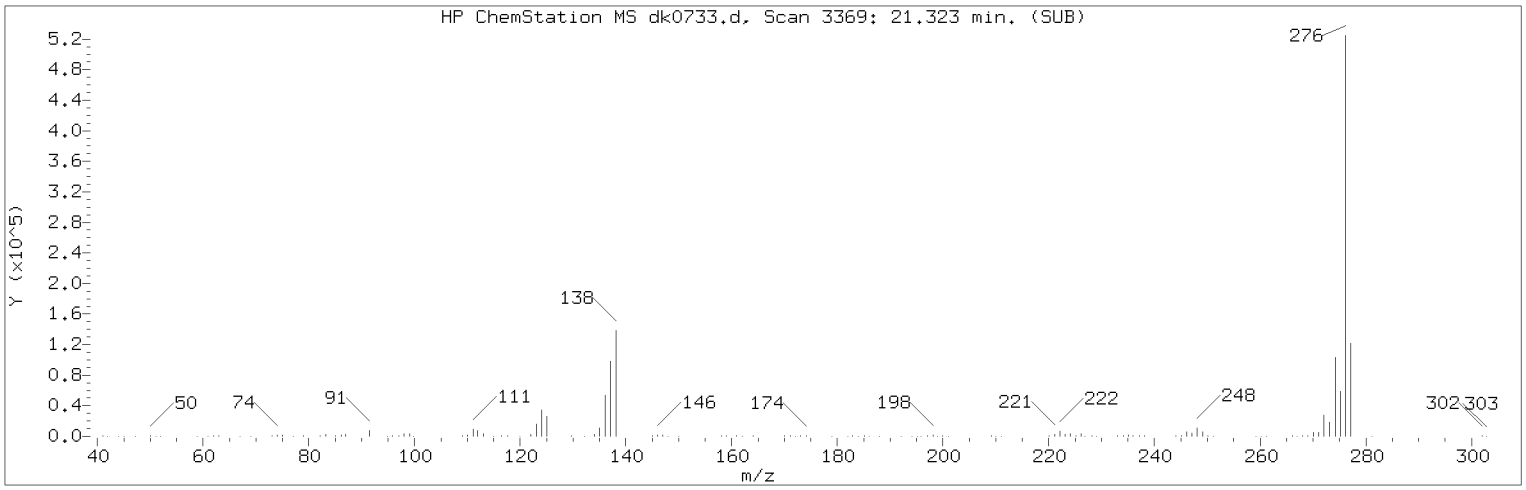
Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 11:09 Automation

Sample Name: 310WLLCS Lab Sample ID: 310WLLCS

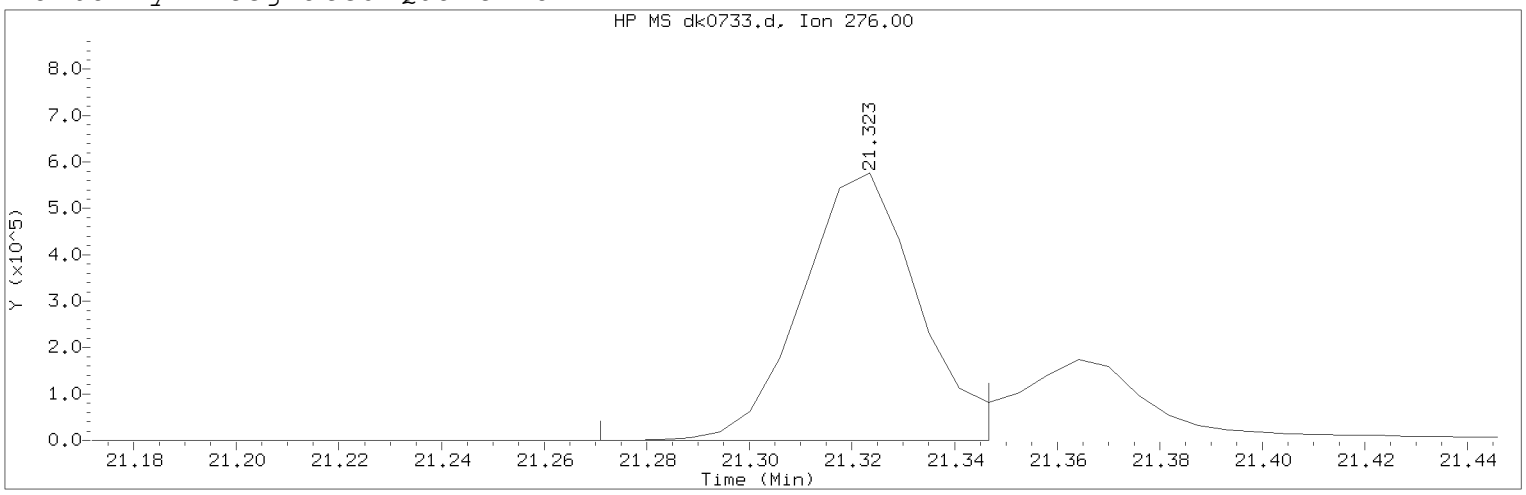
Compound Number	: 211		
Compound Name	: Benzo(a)pyrene		
Scan Number	: 3079		
Retention Time (minutes)	: 19.633		
Quant Ion	: 252.00		
Area	: 535055		
On-column Amount (ng/ul)	: 6.2337		
Integration start scan	: 3059	Integration stop scan:	3078
Y at integration start	: 623	Y at integration end:	623

Digitally signed by Edward Monborne on 11/09/2018 at 13:58.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov09.b/dk0733.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 10:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 13:46 em10340

Sample Name: 310WLLCS Lab Sample ID: 310WLLCS

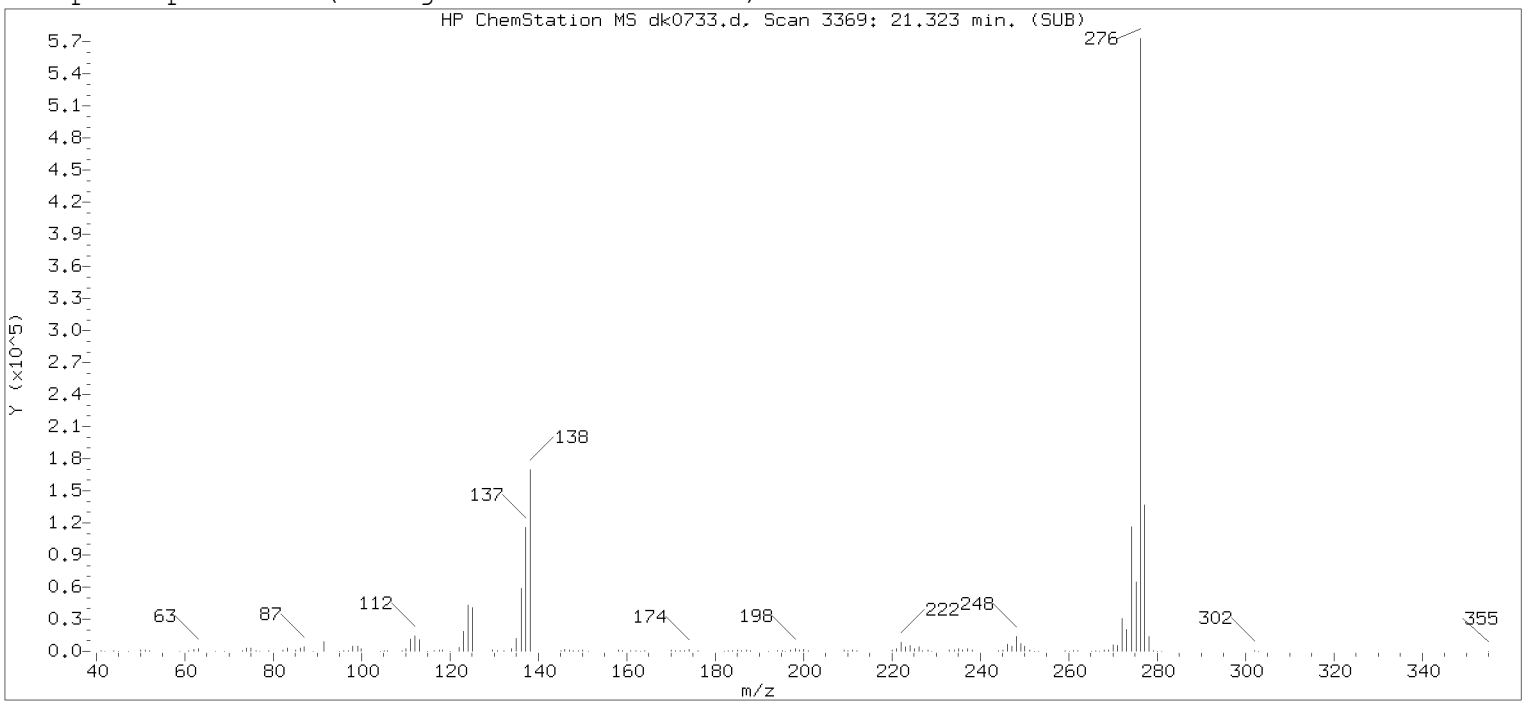
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3369
Retention Time (minutes) : 21.323
Quant Ion : 276.00
Area (flag) : 908644M
On-Column Amount (ng/ul) : 11.8475
Integration start scan : 3359 Integration stop scan: 3372
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

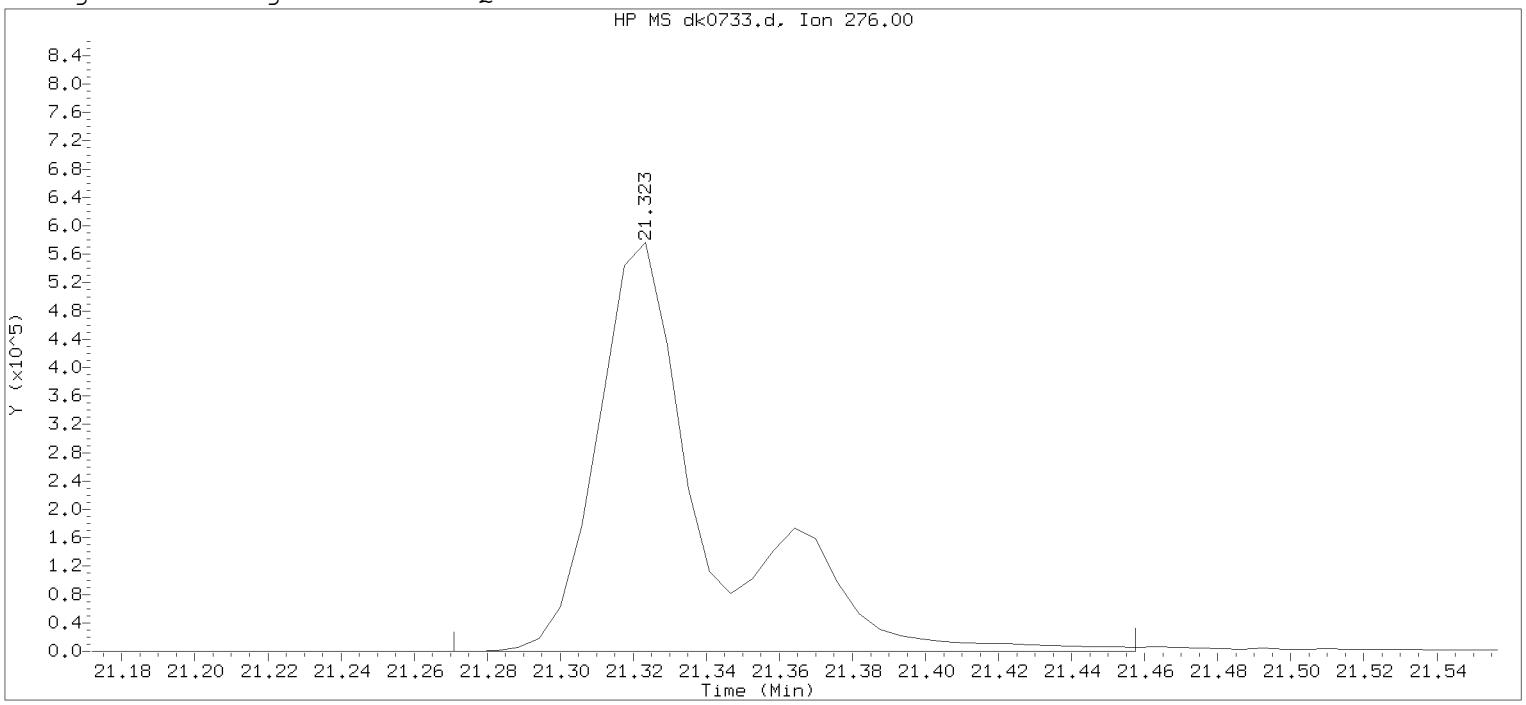
Analyst responsible for change: Digitally signed by Edward Monborne
on 11/09/2018 at 13:58.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 11/12/2018 at 15:58.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov09.b/dk0733.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 10:40 Analyst ID: em10340

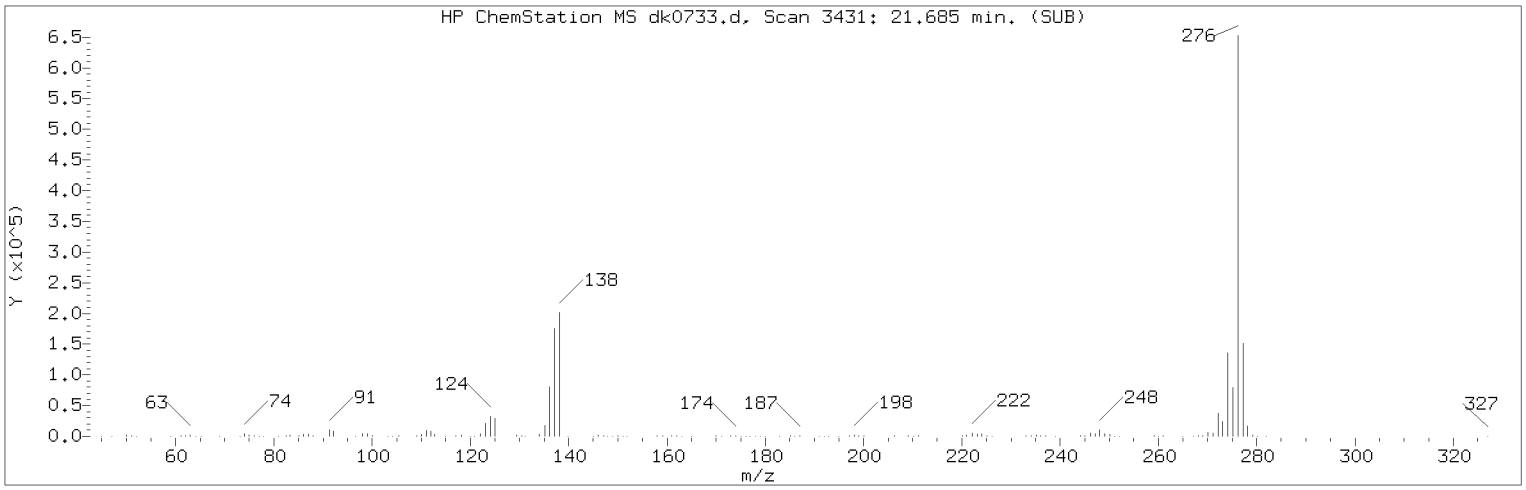
Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 11:09 Automation

Sample Name: 310WLLCS Lab Sample ID: 310WLLCS

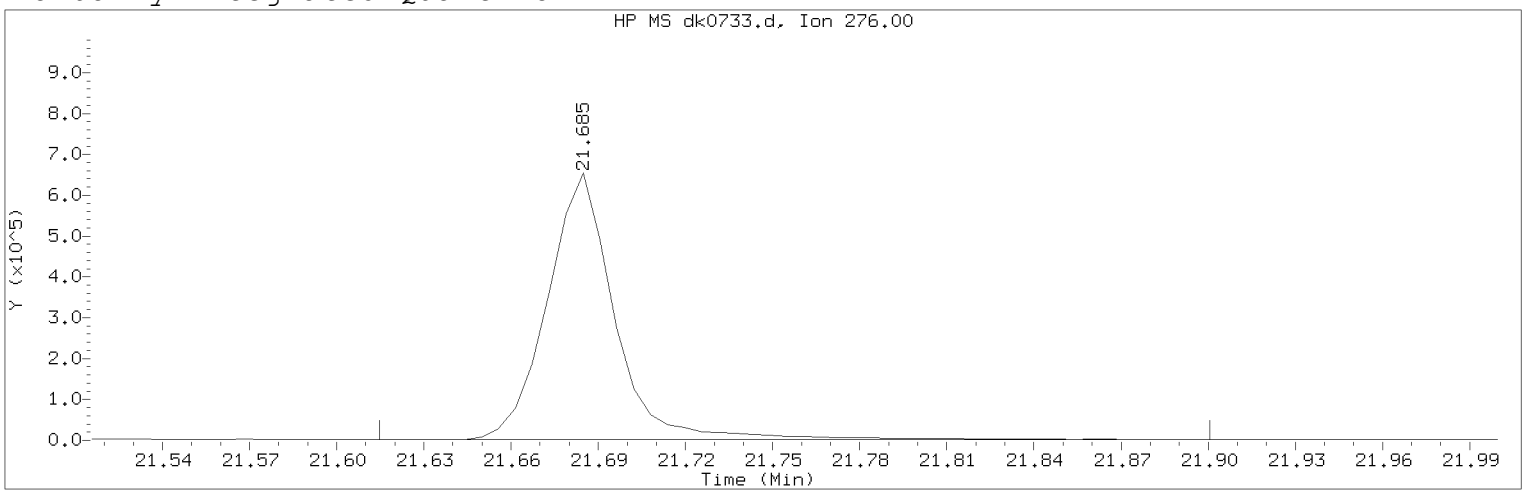
Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3369		
Retention Time (minutes)	: 21.323		
Quant Ion	: 276.00		
Area	: 1218465		
On-column Amount (ng/ul)	: 15.8870		
Integration start scan	: 3359	Integration stop scan:	3391
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 11/09/2018 at 13:58.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov09.b/dk0733.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 10:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 13:46 em10340

Sample Name: 310WLLCS Lab Sample ID: 310WLLCS

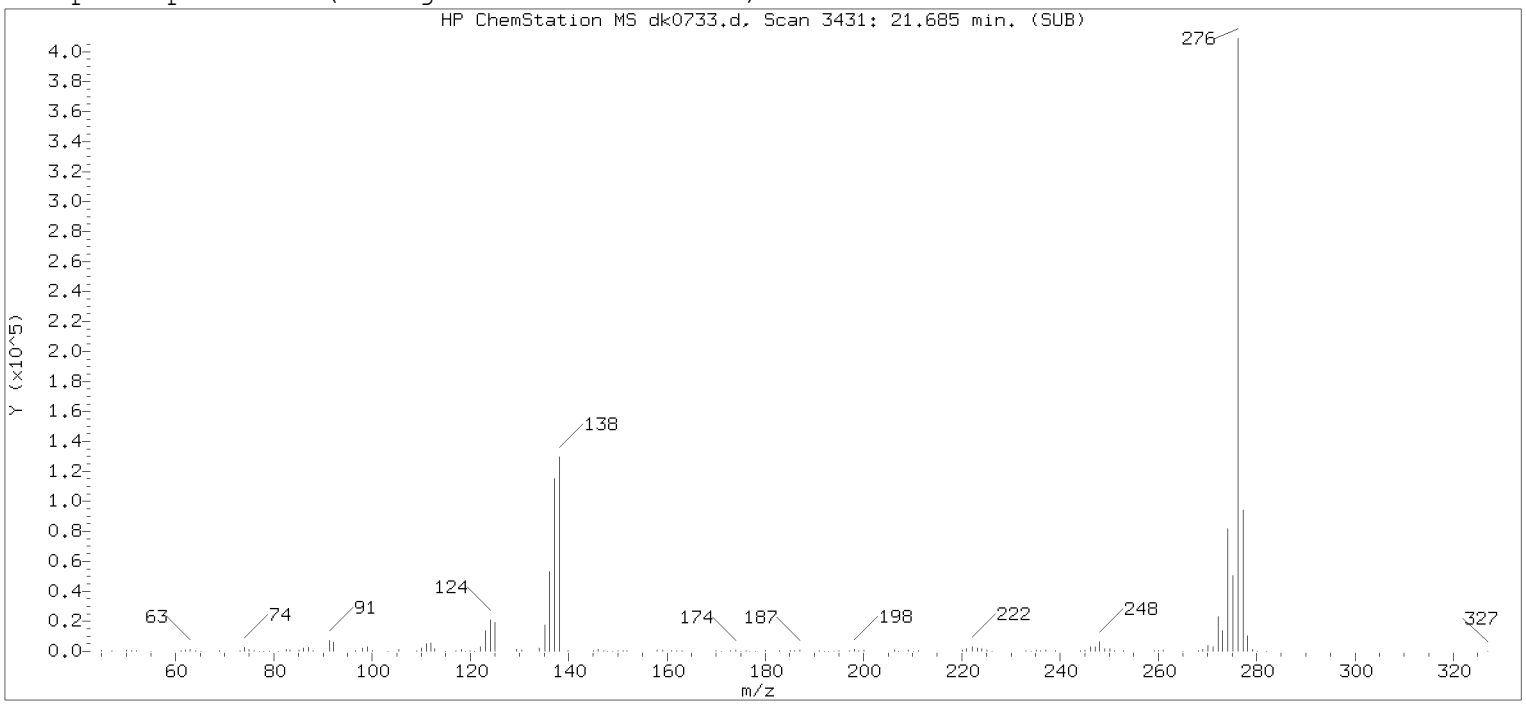
Compound Number : 221
Compound Name : Benzo(g,h,i)perylene
Scan Number : 3431
Retention Time (minutes) : 21.685
Quant Ion : 276.00
Area (flag) : 1054601M
On-Column Amount (ng/ul) : 12.3790
Integration start scan : 3418 Integration stop scan: 3467
Y at integration start : 1347 Y at integration end: 1925

Reason for manual integration: improper integration

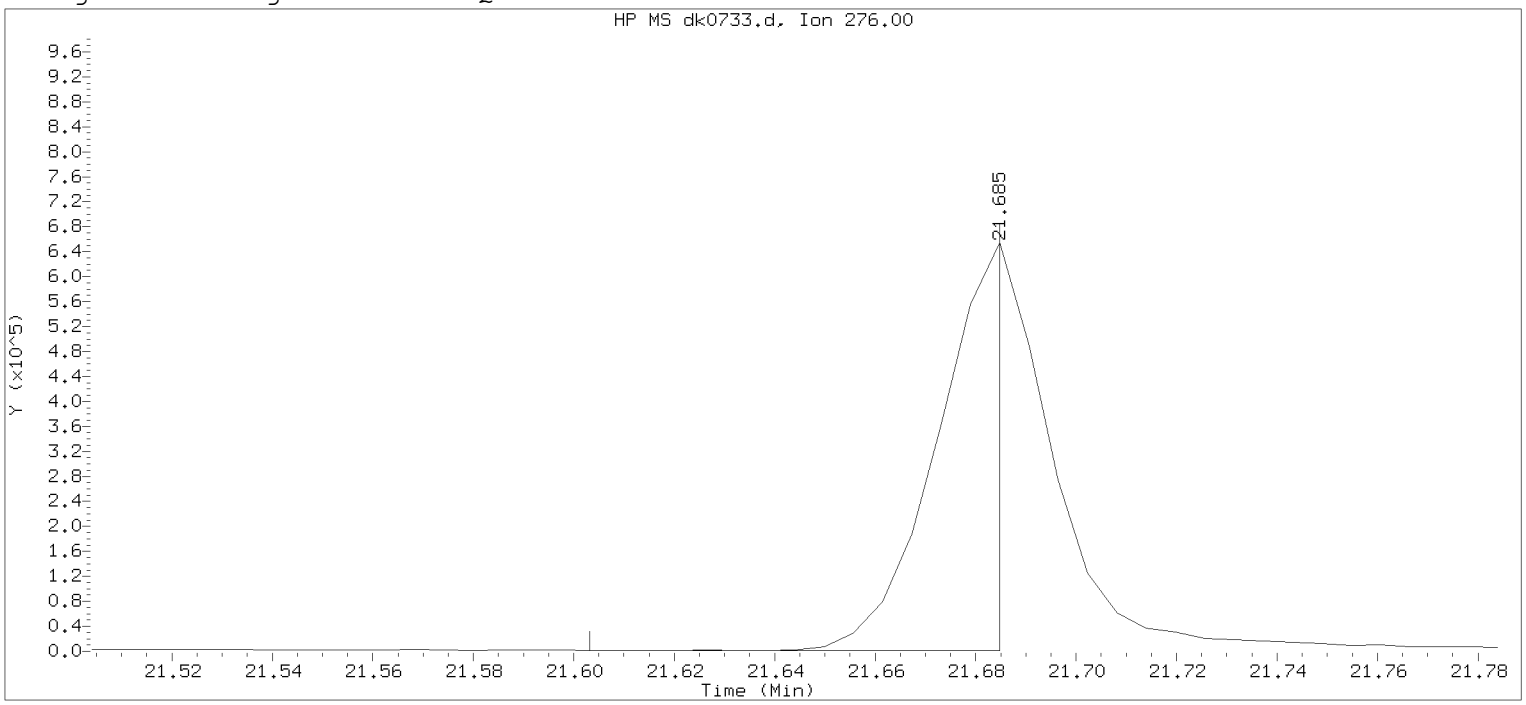
Analyst responsible for change: Digitally signed by Edward Monborne
on 11/09/2018 at 13:58.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 11/12/2018 at 15:58.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov09.b/dk0733.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 10:40 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 11:09 Automation

Sample Name: 310WLLCS Lab Sample ID: 310WLLCS

Compound Number : 221
Compound Name : Benzo(g,h,i)perylene
Scan Number : 3431
Retention Time (minutes) : 21.685
Quant Ion : 276.00
Area : 539835
On-column Amount (ng/ul) : 6.3366
Integration start scan : 3416 Integration stop scan: 3430
Y at integration start : 1160 Y at integration end: 1160

Digitally signed by Edward Monborne on 11/09/2018 at 13:58.
Target 3.5 esignature user email: [illegible]

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

310WLLCSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 310WLLCSD

Sample wt/vol: 250 (g/mL)ML Lab File ID: dk0734.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			23	
111-44-4	bis(2-Chloroethyl)ether			40	
95-57-8	2-Chlorophenol			40	
541-73-1	1,3-Dichlorobenzene			39	
106-46-7	1,4-Dichlorobenzene			40	
95-50-1	1,2-Dichlorobenzene			40	
95-48-7	2-Methylphenol			39	
108-60-1	2,2'-oxybis(1-Chloropropane)			40	
106-44-5	4-Methylphenol			37	
621-64-7	N-Nitroso-di-n-propylamine			43	
67-72-1	Hexachloroethane			38	
98-95-3	Nitrobenzene			43	
78-59-1	Isophorone			45	
88-75-5	2-Nitrophenol			43	
105-67-9	2,4-Dimethylphenol			35	
111-91-1	bis(2-Chloroethoxy)methane			44	
120-83-2	2,4-Dichlorophenol			43	
120-82-1	1,2,4-Trichlorobenzene			42	
91-20-3	Naphthalene			42	
106-47-8	4-Chloroaniline			36	
87-68-3	Hexachlorobutadiene			41	
59-50-7	4-Chloro-3-methylphenol			42	
91-57-6	2-Methylnaphthalene			43	
77-47-4	Hexachlorocyclopentadiene			55	
88-06-2	2,4,6-Trichlorophenol			49	
95-95-4	2,4,5-Trichlorophenol			48	
91-58-7	2-Chloronaphthalene			45	
88-74-4	2-Nitroaniline			48	
131-11-3	Dimethylphthalate			42	
606-20-2	2,6-Dinitrotoluene			45	

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

310WLLCSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 310WLLCSD

Sample wt/vol: 250 (g/mL)ML Lab File ID: dk0734.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene			51	
99-09-2	3-Nitroaniline			41	
83-32-9	Acenaphthene			48	
51-28-5	2,4-Dinitrophenol			74	
100-02-7	4-Nitrophenol			21	J
121-14-2	2,4-Dinitrotoluene			41	
132-64-9	Dibenzofuran			46	
84-66-2	Diethylphthalate			40	
86-73-7	Fluorene			46	
7005-72-3	4-Chlorophenyl-phenylether			44	
100-01-6	4-Nitroaniline			35	
534-52-1	4,6-Dinitro-2-methylphenol			43	
86-30-6	N-Nitrosodiphenylamine			52	
101-55-3	4-Bromophenyl-phenylether			48	
118-74-1	Hexachlorobenzene			50	
87-86-5	Pentachlorophenol			45	
85-01-8	Phenanthrene			47	
120-12-7	Anthracene			48	
86-74-8	Carbazole			49	
84-74-2	Di-n-butylphthalate			42	
206-44-0	Fluoranthene			46	
129-00-0	Pyrene			46	
85-68-7	Butylbenzylphthalate			40	
91-94-1	3,3'-Dichlorobenzidine			35	
56-55-3	Benzo(a)anthracene			46	
218-01-9	Chrysene			46	
117-81-7	bis(2-Ethylhexyl)phthalate			38	
117-84-0	Di-n-octylphthalate			40	
205-99-2	Benzo(b)fluoranthene			48	
207-08-9	Benzo(k)fluoranthene			50	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

310WLLCSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 310WLLCSD

Sample wt/vol: 250 (g/mL)ML Lab File ID: dk0734.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 11/07/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		51		
193-39-5	Indeno(1,2,3-cd)pyrene		48		
53-70-3	Dibenz(a,h)anthracene		50		
191-24-2	Benzo(g,h,i)perylene		49		

FORM I SV-3

Data file: /chem/HP19760.i/18nov09.b/dk0734.d Injection date and time: **09-NOV-2018 11:08**
Data file Sample Info. Line: 310WLLCSD;310WLLCSD;1;3;LCSD;;; Instrument ID: **HP19760.i** Batch: **18310WAL**
Date, time and analyst ID of latest file update: 09-Nov-2018 13:48 em10340

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 09:29
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
25) 1,4-Dichlorobenzene-d4	6.682	(0.000)	857	152	220585	(1)	5.00	
65) Naphthalene-d8	8.617	(0.000)	1189	136	778984	(-2)	5.00	
113) Acenaphthene-d10	11.415	(0.000)	1669	164	321246	(-4)	5.00	
153) Phenanthrene-d10	13.321	(0.000)	1996	188	507503	(-10)	5.00	
175) Pyrene-d10	15.262	(0.000)	2329	212	472526	(-7)	5.00	
213) Perylene-d12	19.721	(0.006)	3094	264	452142	(1)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
11) 2-Fluorophenol	(1)	4.794	(-0.002)	112	1994400	28.197	56%
17) Phenol-d6	(1)	6.169	(0.000)	99	1967097	20.119	40%
44) Nitrobenzene-d5	(2)	7.516	(0.000)	82	1784921	21.237	85%
93) 2-Fluorobiphenyl	(3)	10.372	(0.000)	172	2443064	22.878	92%
135) 2,4,6-Tribromophenol	(3)	12.482	(0.000)	330	445221	42.087	84%
179) Terphenyl-d14	(5)	15.582	(0.000)	244	1776578	23.012	92%

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
18) Phenol	(1)	6.187	(-0.000)	94	645253	5.667	22.67			0.1
22) bis(2-Chloroethyl)ether	(1)	6.321	(-0.000)	93	848859	10.060	40.24			0.1
23) 2-Chlorophenol	(1)	6.367	(0.000)	128	667349	9.980	39.92			0.1
24) 1,3-Dichlorobenzene	(1)	6.595	(0.000)	146	688258	9.688	38.75			0.1
26) 1,4-Dichlorobenzene	(1)	6.711	(-0.000)	146	707587	9.967	39.87			0.1
28) 1,2-Dichlorobenzene	(1)	6.927	(-0.000)	146	670808	9.931	39.72			0.1
31) 2-Methylphenol	(1)	7.090	(-0.000)	108	659316	9.641	38.56			0.1
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.137	(-0.000)	45	968797	9.943	39.77			0.1
37) 4-Methylphenol	(1)	7.329	(-0.000)	108	713591	9.191	36.76			0.1
38) N-Nitroso-di-n-propylamine	(1)	7.323	(-0.000)	70	640320	10.645	42.58			0.2
43) Hexachloroethane	(1)	7.434	(-0.000)	117	312927	9.424	37.70			0.3
45) Nitrobenzene	(2)	7.545	(0.000)	77	919292	10.825	43.30			0.1
50) Isophorone	(2)	7.924	(0.000)	82	1594325	11.136	44.55			0.1
51) 2-Nitrophenol	(2)	8.034	(0.000)	139	342415	10.675	42.70			0.8
53) 2,4-Dimethylphenol	(2)	8.145	(-0.000)	107	602404	8.715	34.86			0.8
55) bis(2-Chloroethoxy)methane	(2)	8.296	(0.000)	93	985855	10.928	43.71			0.1
60) 2,4-Dichlorophenol	(2)	8.413	(0.000)	162	505712	10.864	43.46			0.1
62) 1,2,4-Trichlorobenzene	(2)	8.541	(0.000)	180	532367	10.449	41.80			0.1
66) Naphthalene	(2)	8.652	(-0.000)	128	1940941	10.537	42.15			0.03
67) 4-Chloroaniline	(2)	8.763	(0.000)	127	634238	9.020	36.08			1
71) Hexachlorobutadiene	(2)	8.879	(-0.000)	225	281628	10.256	41.03			0.1
80) 4-Chloro-3-methylphenol	(2)	9.556	(0.000)	107	578953	10.503	42.01			0.1
83) 2-Methylnaphthalene	(2)	9.760	(0.000)	142	1192471	10.666	42.66			0.03
85) Hexachlorocyclopentadiene	(3)	10.022	(-0.000)	237	351418	13.791	55.16			1
90) 2,4,6-Trichlorophenol	(3)	10.220	(-0.000)	196	327204	12.130	48.52			0.1
92) 2,4,5-Trichlorophenol	(3)	10.267	(-0.000)	196	339306	11.984	47.94			0.1
96) 2-Chloronaphthalene	(3)	10.529	(-0.000)	162	1055286	11.250	45.00			0.1

Data file: /chem/HP19760.i/18nov09.b/dk0734.d Injection date and time: **09-NOV-2018 11:08**
Data file Sample Info. Line: 310WLLCSD;310WLLCSD;1;3;LCSD;;; Instrument ID: **HP19760.i** Batch: **18310WAL**
Date, time and analyst ID of latest file update: 09-Nov-2018 13:48 em10340

Blank Data file reference: **/chem/HP19760.i/18nov09.b/dk0732.d**

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 09:29
Mid Level Daily Calibration Standard Reference: **/chem/HP19760.i/18nov09.b/dk0731.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf * (Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 0.5 ul

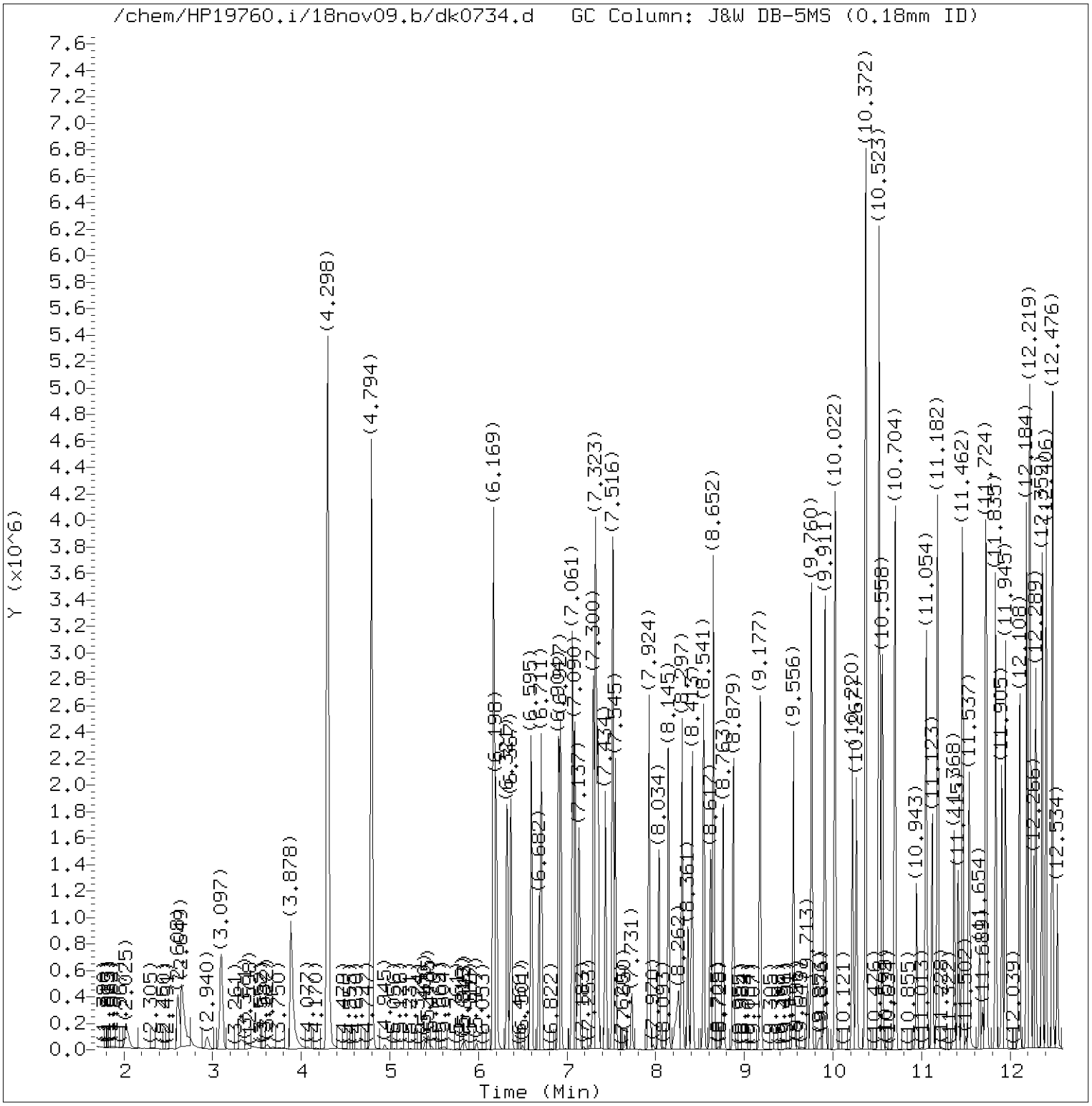
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
100) 2-Nitroaniline	(3)	10.710(0.000)	138	359311	11.980	47.92			0.5
106) Dimethylphthalate	(3)	11.048(-0.000)	163	1008766	10.418	41.67			0.5
108) 2,6-Dinitrotoluene	(3)	11.123(-0.000)	165	254524	11.364	45.45			0.1
109) Acenaphthylene	(3)	11.182(-0.000)	152	1621629	12.718	50.87			0.03
112) 3-Nitroaniline	(3)	11.368(-0.000)	138	263922	10.220	40.88			0.8
114) Acenaphthene	(3)	11.462(-0.000)	153	1113047	11.887	47.55			0.03
115) 2,4-Dinitrophenol	(3)	11.537(-0.000)	184	289248	18.604	74.42			4
116) 4-Nitrophenol	(3)	11.654(-0.000)	109	101967	5.174	20.70		J	3
118) 2,4-Dinitrotoluene	(3)	11.735(-0.000)	165	316055	10.374	41.50			0.3
119) Dibenzofuran	(3)	11.724(-0.000)	168	1485343	11.433	45.73			0.1
124) Diethylphthalate	(3)	12.108(-0.000)	149	981146	10.010	40.04			0.5
126) Fluorene	(3)	12.184(-0.000)	166	1139200	11.574	46.30			0.03
127) 4-Chlorophenyl-phenylether	(3)	12.213(0.000)	204	515614	10.900	43.60			0.1
129) 4-Nitroaniline	(3)	12.219(-0.000)	138	251293	8.865	35.46			0.2
130) 4,6-Dinitro-2-methylphenol	(4)	12.266(0.000)	198	169622	10.659	42.63			2
131) N-Nitrosodiphenylamine	(4)	12.359(0.000)	169	916657	13.112	52.45			0.2
143) 4-Bromophenyl-phenylether	(4)	12.796(0.000)	248	244858	12.034	48.14			0.1
145) Hexachlorobenzene	(4)	12.849(-0.000)	284	261312	12.391	49.56			0.03
149) Pentachlorophenol	(4)	13.094(0.000)	266	159320	11.272	45.09			0.3
155) Phenanthrene	(4)	13.350(-0.000)	178	1446715	11.849	47.39			0.03
157) Anthracene	(4)	13.414(-0.000)	178	1438492	12.105	48.42			0.03
163) Carbazole	(4)	13.630(-0.000)	167	1427834	12.277	49.11			0.1
165) Di-n-butylphthalate	(4)	14.143(-0.000)	149	1536471	10.610	42.44			0.5
173) Fluoranthene	(4)	14.959(-0.000)	202	1483261	11.607	46.43			0.03
177) Pyrene	(5)	15.291(-0.000)	202	1574630M	11.601	46.41			0.03
188) Butylbenzylphthalate	(5)	16.428(-0.000)	149	682023	10.009	40.04			0.5
193) 3,3'-Dichlorobenzidine	(5)	17.273(-0.000)	252	408431	8.779	35.11			0.8
195) Benzo(a)anthracene	(5)	17.273(-0.000)	228	1255994	11.380	45.52			0.03
196) Chrysene	(5)	17.331(-0.000)	228	1322222	11.396	45.58			0.03
199) bis(2-Ethylhexyl)phthalate	(5)	17.494(0.000)	149	902288	9.448	37.79			1
205) Di-n-octylphthalate	(6)	18.654(-0.000)	149	1535977	10.003	40.01			1
206) Benzo(b)fluoranthene	(6)	19.114(-0.000)	252	1309132	12.106	48.43			0.03
208) Benzo(k)fluoranthene	(6)	19.161(-0.000)	252	1394306	12.401	49.61			0.03
211) Benzo(a)pyrene	(6)	19.633(-0.000)	252	1253874	12.652	50.61			0.03
219) Indeno(1,2,3-cd)pyrene	(6)	21.324(-0.000)	276	1059421M	11.964	47.85			0.03
220) Dibenz(a,h)anthracene	(6)	21.364(-0.000)	278	1219240	12.412	49.65			0.03
221) Benzo(g,h,i)perylene	(6)	21.685(-0.000)	276	1203937	12.239	48.96			0.03

M = Compound was manually integrated.

Total number of targets = 64

Digitally signed by Edward Monborne on 11/09/2018 at 13:59. Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 11/12/2018 at 15:58. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

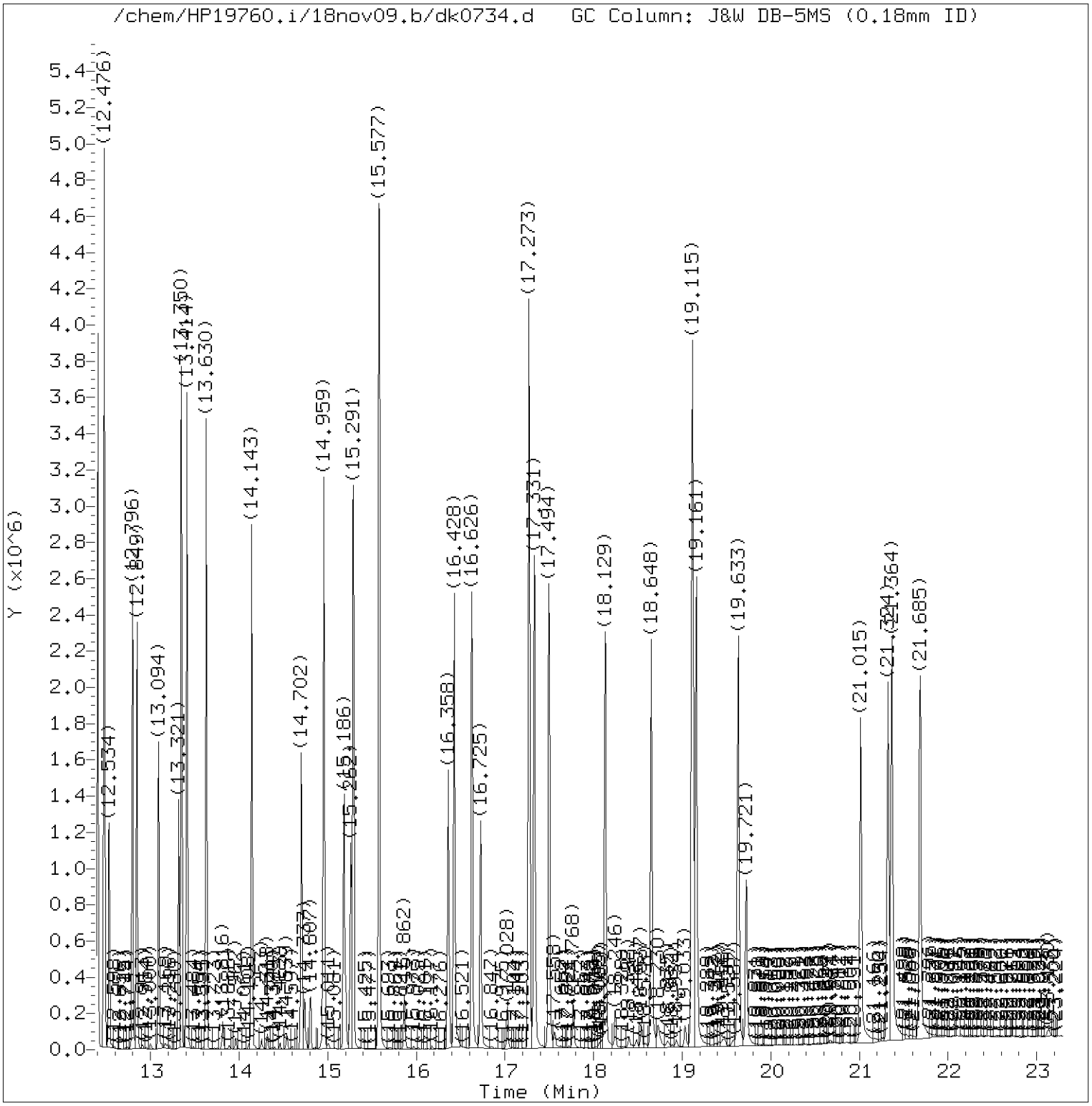
Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0734.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 11:08 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 13:48 em10340

Sample Name: 310WLLCSD Lab Sample ID: 310WLLCSD

Digitally signed by Edward Monborne
on 11/09/2018 at 13:59.
Target 3.5 esignature user ID: em10340



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0734.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 11:08 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 13:48 em10340

Sample Name: 310WLLCSD Lab Sample ID: 310WLLCSD

Digitally signed by Edward Monborne
on 11/09/2018 at 13:59.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0734.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 11:08 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 13:48 em10340

Sample Name: 310WLLCSD Lab Sample ID: 310WLLCSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
11)$2-Fluorophenol	(1)	4.794	112	1994400	28.197
17)$Phenol-d6	(1)	6.169	99	1967097	20.119
18) Phenol	(1)	6.187	94	645253	5.667
22) bis(2-Chloroethyl)ether	(1)	6.321	93	848859	10.060
23) 2-Chlorophenol	(1)	6.367	128	667349	9.980
24) 1,3-Dichlorobenzene	(1)	6.595	146	688258	9.688
25)*1,4-Dichlorobenzene-d4	(1)	6.682	152	220585	5.000
26) 1,4-Dichlorobenzene	(1)	6.711	146	707587	9.967
28) 1,2-Dichlorobenzene	(1)	6.927	146	670808	9.931
31) 2-Methylphenol	(1)	7.090	108	659316	9.641
33) 2,2'-oxybis(1-Chloropropane)	(1)	7.137	45	968797	9.943
38) N-Nitroso-di-n-propylamine	(1)	7.323	70	640320	10.645
37) 4-Methylphenol	(1)	7.329	108	713591	9.191
43) Hexachloroethane	(1)	7.434	117	312927	9.424
44)$Nitrobenzene-d5	(2)	7.516	82	1784921	21.237
45) Nitrobenzene	(2)	7.545	77	919292	10.825
50) Isophorone	(2)	7.924	82	1594325	11.136
51) 2-Nitrophenol	(2)	8.034	139	342415	10.675
53) 2,4-Dimethylphenol	(2)	8.145	107	602404	8.715
55) bis(2-Chloroethoxy)methane	(2)	8.297	93	985855	10.928
60) 2,4-Dichlorophenol	(2)	8.413	162	505712	10.864
62) 1,2,4-Trichlorobenzene	(2)	8.541	180	532367	10.449
65)*Naphthalene-d8	(2)	8.617	136	778984	5.000
66) Naphthalene	(2)	8.652	128	1940941	10.537
67) 4-Chloroaniline	(2)	8.763	127	634238	9.020
71) Hexachlorobutadiene	(2)	8.879	225	281628	10.256
80) 4-Chloro-3-methylphenol	(2)	9.556	107	578953	10.503
83) 2-Methylnaphthalene	(2)	9.760	142	1192471	10.666
85) Hexachlorocyclopentadiene	(3)	10.022	237	351418	13.791
90) 2,4,6-Trichlorophenol	(3)	10.220	196	327204	12.130
92) 2,4,5-Trichlorophenol	(3)	10.267	196	339306	11.984
93)$2-Fluorobiphenyl	(3)	10.372	172	2443064	22.878
96) 2-Chloronaphthalene	(3)	10.529	162	1055286	11.250
100) 2-Nitroaniline	(3)	10.710	138	359311	11.980
106) Dimethylphthalate	(3)	11.048	163	1008766	10.418
108) 2,6-Dinitrotoluene	(3)	11.123	165	254524	11.364
109) Acenaphthylene	(3)	11.182	152	1621629	12.718
112) 3-Nitroaniline	(3)	11.368	138	263922	10.220
113)*Acenaphthene-d10	(3)	11.415	164	321246	5.000
114) Acenaphthene	(3)	11.462	153	1113047	11.887

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 11/09/2018 at 13:59.
Target 3.5 esignature user ID: em10340

Quant Report

Target Revision 3.5

Data File: /chem/HP19760.i/18nov09.b/dk0734.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 11:08 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 13:48 em10340

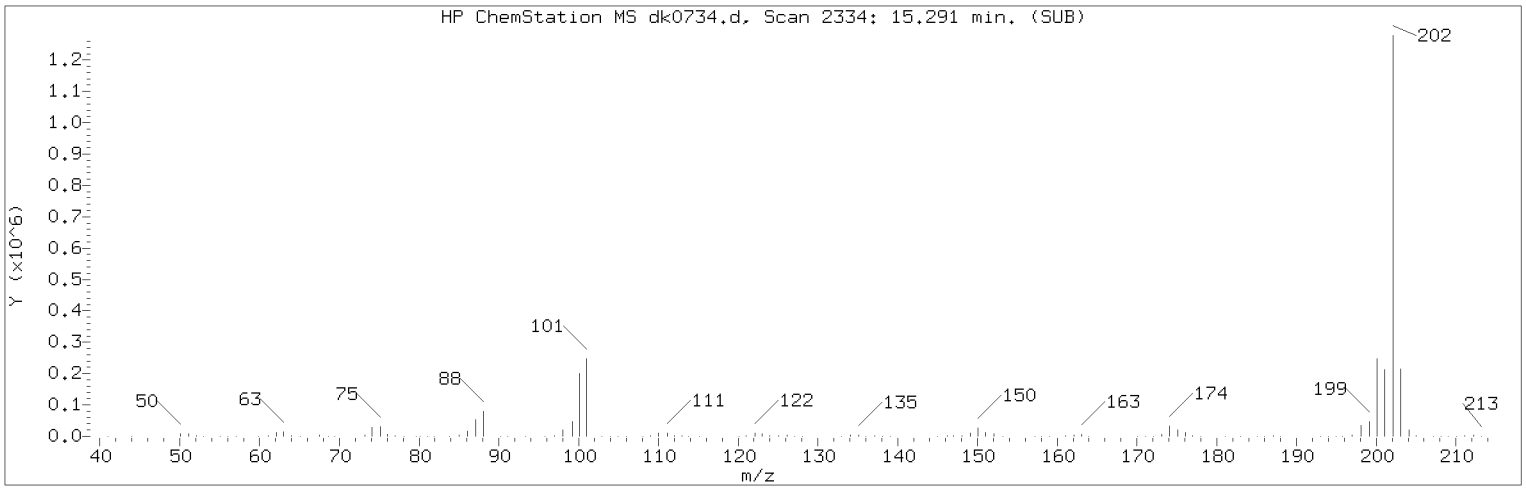
Sample Name: 310WLLCSD Lab Sample ID: 310WLLCSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
115) 2,4-Dinitrophenol	(3)	11.537	184	289248	18.604
116) 4-Nitrophenol	(3)	11.654	109	101967	5.174
119) Dibenzofuran	(3)	11.724	168	1485343	11.433
118) 2,4-Dinitrotoluene	(3)	11.735	165	316055	10.374
124) Diethylphthalate	(3)	12.108	149	981146	10.010
126) Fluorene	(3)	12.184	166	1139200	11.574
127) 4-Chlorophenyl-phenylether	(3)	12.213	204	515614	10.900
129) 4-Nitroaniline	(3)	12.219	138	251293	8.865
130) 4,6-Dinitro-2-methylphenol	(4)	12.266	198	169622	10.659
131) N-Nitrosodiphenylamine	(4)	12.359	169	916657	13.112
135)$2,4,6-Tribromophenol	(3)	12.482	330	445221	42.087
143) 4-Bromophenyl-phenylether	(4)	12.796	248	244858	12.034
145) Hexachlorobenzene	(4)	12.849	284	261312	12.391
149) Pentachlorophenol	(4)	13.094	266	159320	11.272
153)*Phenanthrene-d10	(4)	13.321	188	507503	5.000
155) Phenanthrene	(4)	13.350	178	1446715	11.849
157) Anthracene	(4)	13.414	178	1438492	12.105
163) Carbazole	(4)	13.630	167	1427834	12.277
165) Di-n-butylphthalate	(4)	14.143	149	1536471	10.610
173) Fluoranthene	(4)	14.959	202	1483261	11.607
175)*Pyrene-d10	(5)	15.262	212	472526	5.000
177) Pyrene	(5)	15.291	202	1574630M	11.601
179)$Terphenyl-d14	(5)	15.582	244	1776578	23.012
188) Butylbenzylphthalate	(5)	16.428	149	682023	10.009
195) Benzo(a)anthracene	(5)	17.273	228	1255994	11.380
193) 3,3'-Dichlorobenzidine	(5)	17.273	252	408431	8.779
196) Chrysene	(5)	17.331	228	1322222	11.396
199) bis(2-Ethylhexyl)phthalate	(5)	17.494	149	902288	9.448
205) Di-n-octylphthalate	(6)	18.654	149	1535977	10.003
206) Benzo(b)fluoranthene	(6)	19.115	252	1309132	12.106
208) Benzo(k)fluoranthene	(6)	19.161	252	1394306	12.401
211) Benzo(a)pyrene	(6)	19.633	252	1253874	12.652
213)*Perylene-d12	(6)	19.721	264	452142	5.000
219) Indeno(1,2,3-cd)pyrene	(6)	21.324	276	1059421M	11.964
220) Dibenz(a,h)anthracene	(6)	21.364	278	1219240	12.412
221) Benzo(g,h,i)perylene	(6)	21.685	276	1203937	12.239

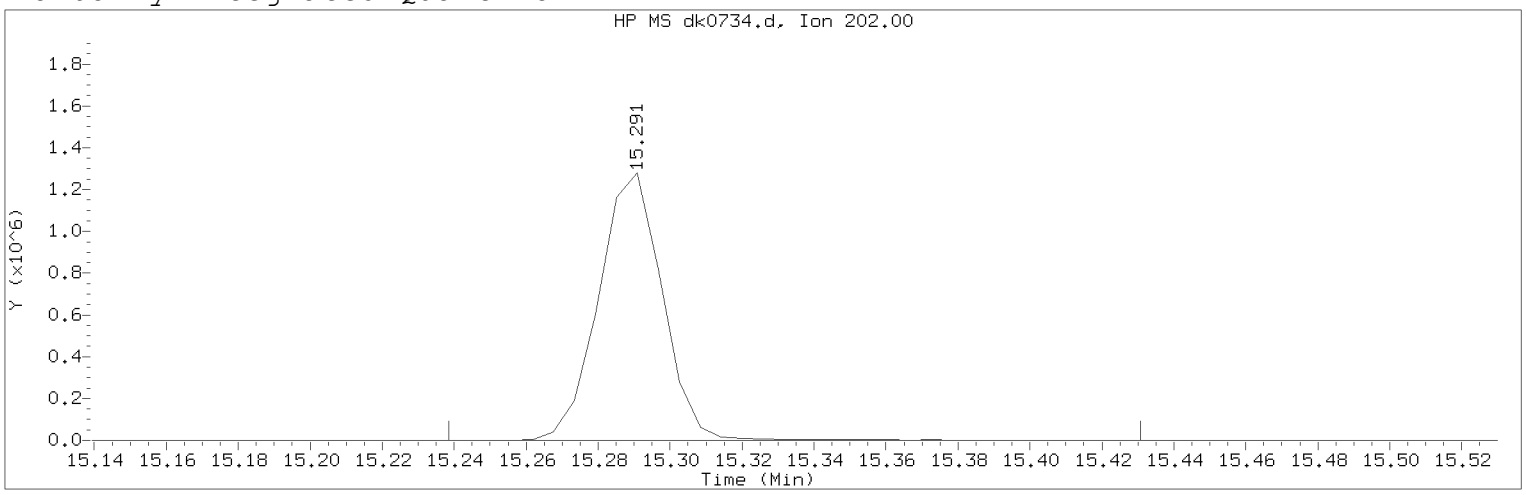
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Edward Monborne
on 11/09/2018 at 13:59.
Target 3.5 esignature user ID: em10340

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov09.b/dk0734.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 11:08 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 13:48 em10340

Sample Name: 310WLLCSD Lab Sample ID: 310WLLCSD

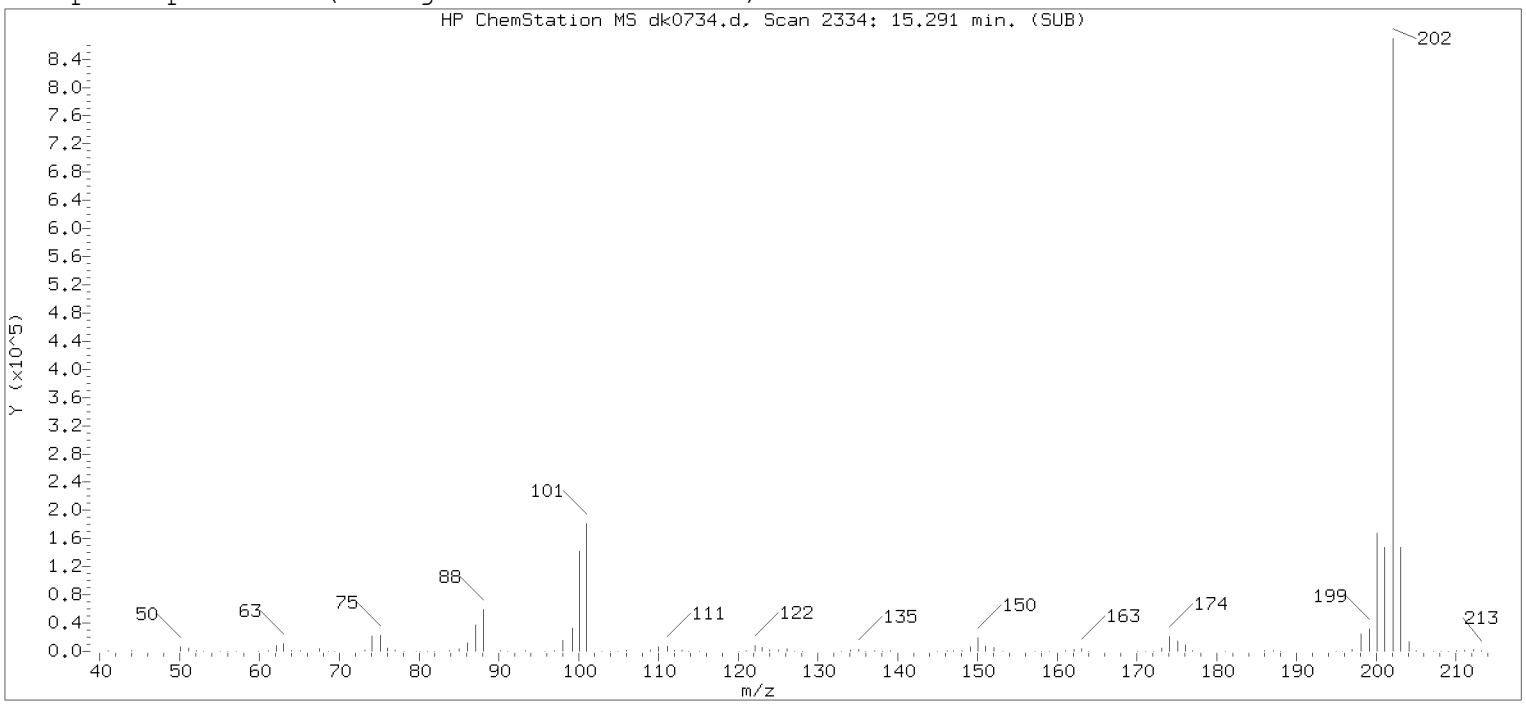
Compound Number : 177
Compound Name : Pyrene
Scan Number : 2334
Retention Time (minutes) : 15.291
Quant Ion : 202.00
Area (flag) : 1574630M
On-Column Amount (ng/ul) : 11.6014
Integration start scan : 2324 Integration stop scan: 2357
Y at integration start : 5 Y at integration end: 5

Reason for manual integration: improper integration

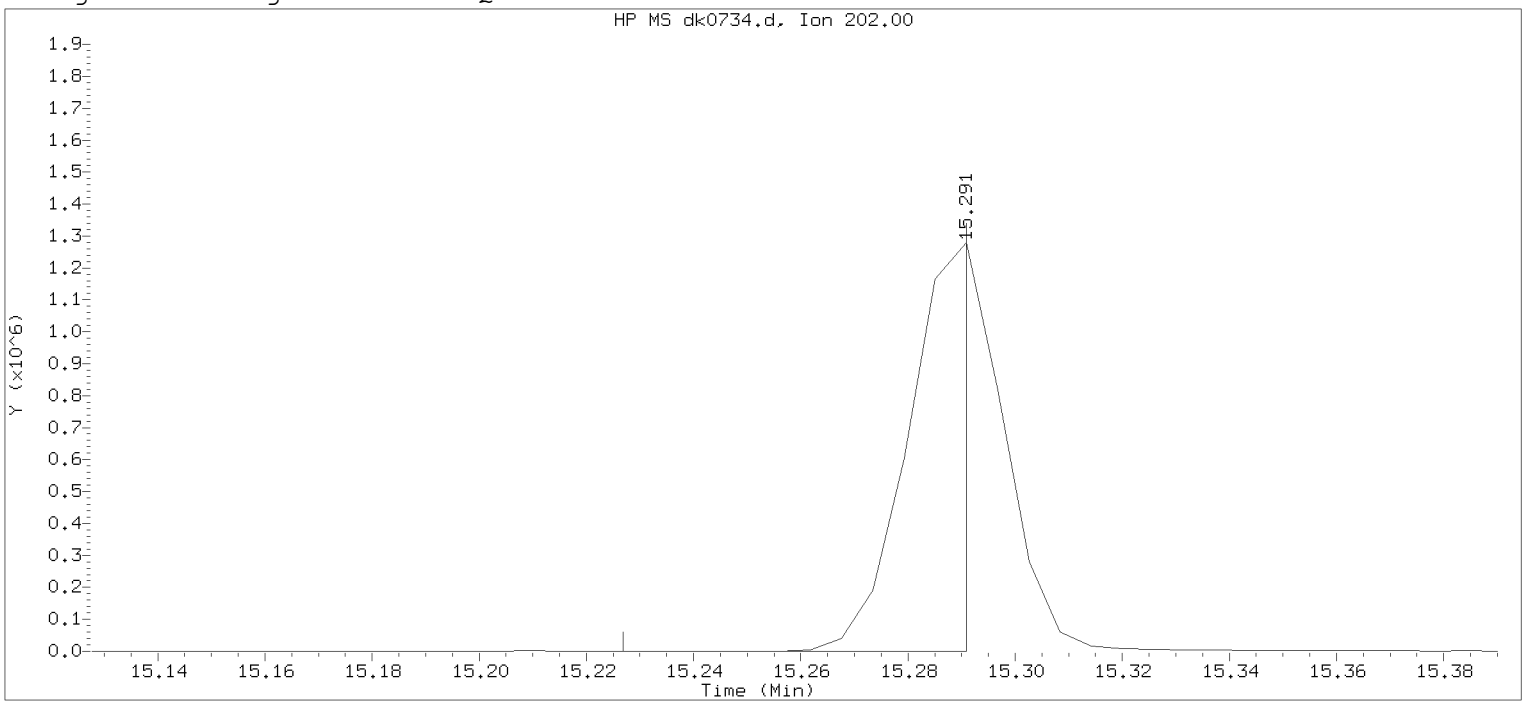
Analyst responsible for change: Digitally signed by Edward Monborne
on 11/09/2018 at 13:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 11/12/2018 at 15:58.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov09.b/dk0734.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 11:08 Analyst ID: em10340

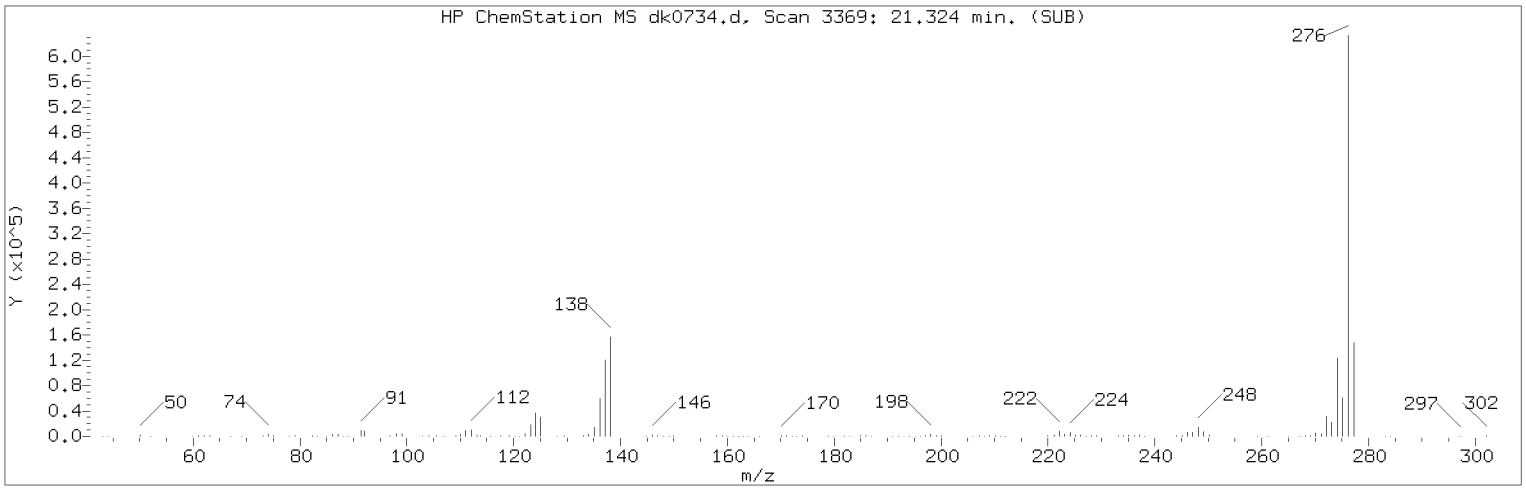
Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 11:37 Automation

Sample Name: 310WLLCSD Lab Sample ID: 310WLLCSD

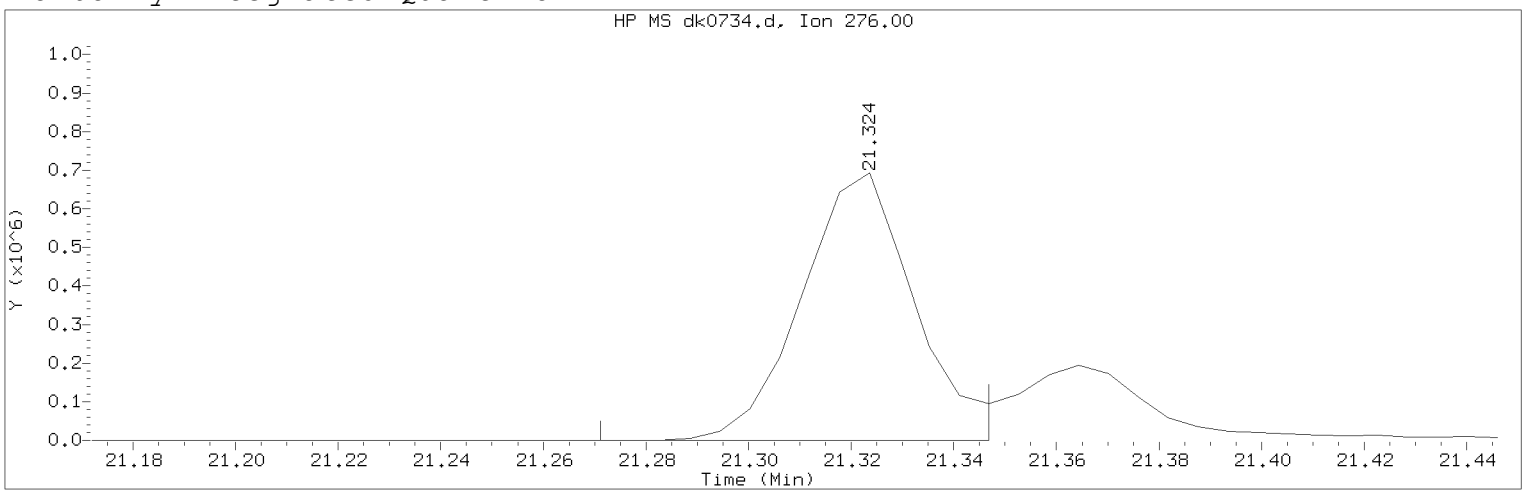
Compound Number	: 177		
Compound Name	: Pyrene		
Scan Number	: 2334		
Retention Time (minutes)	: 15.291		
Quant Ion	: 202.00		
Area	: 924370		
On-column Amount (ng/ul)	: 6.8105		
Integration start scan	: 2322	Integration stop scan:	2333
Y at integration start	: 283	Y at integration end:	283

Digitally signed by Edward Monborne on 11/09/2018 at 13:59.
Target 3.5 esignature user email: [redacted]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP19760.i/18nov09.b/dk0734.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 11:08 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 13:48 em10340

Sample Name: 310WLLCSD Lab Sample ID: 310WLLCSD

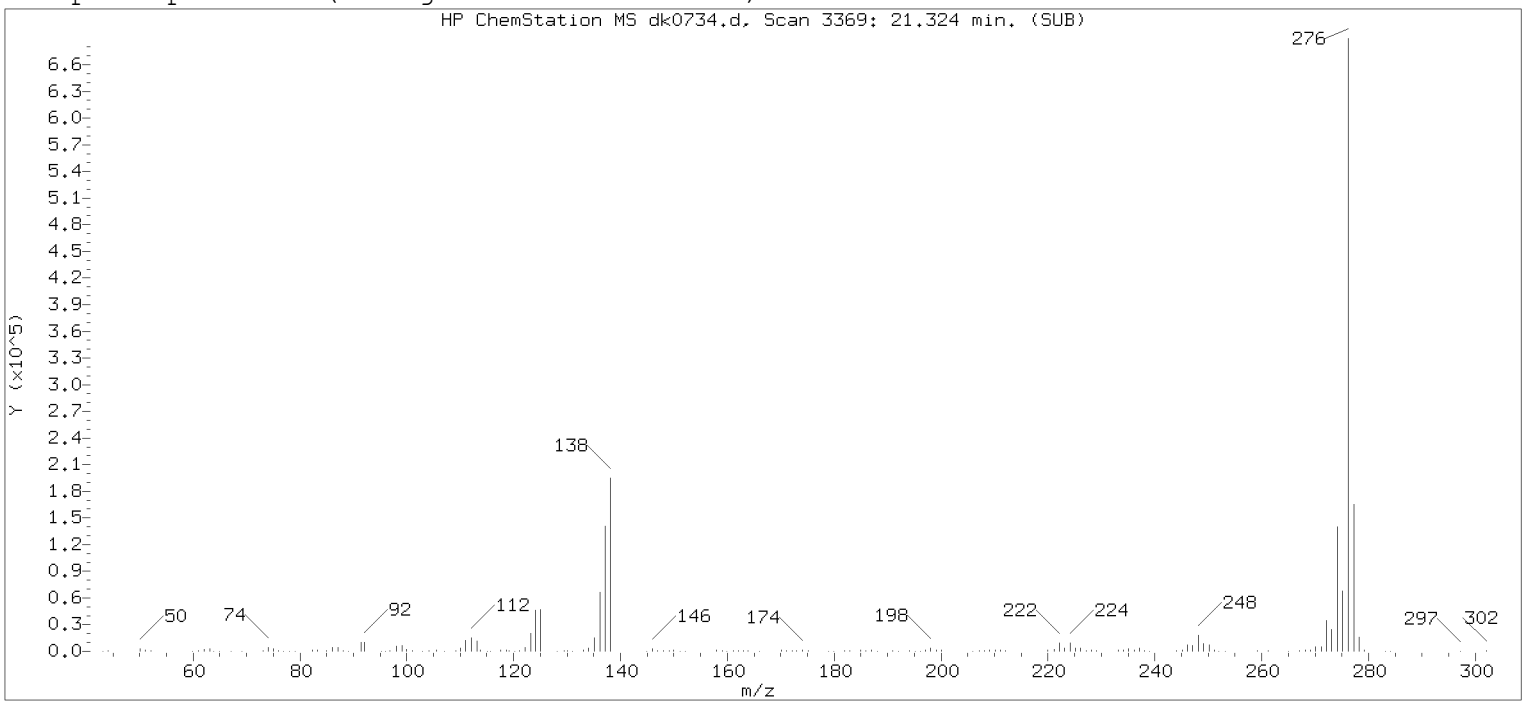
Compound Number : 219
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3369
Retention Time (minutes) : 21.324
Quant Ion : 276.00
Area (flag) : 1059421M
On-Column Amount (ng/ul) : 11.9635
Integration start scan : 3359 Integration stop scan: 3372
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

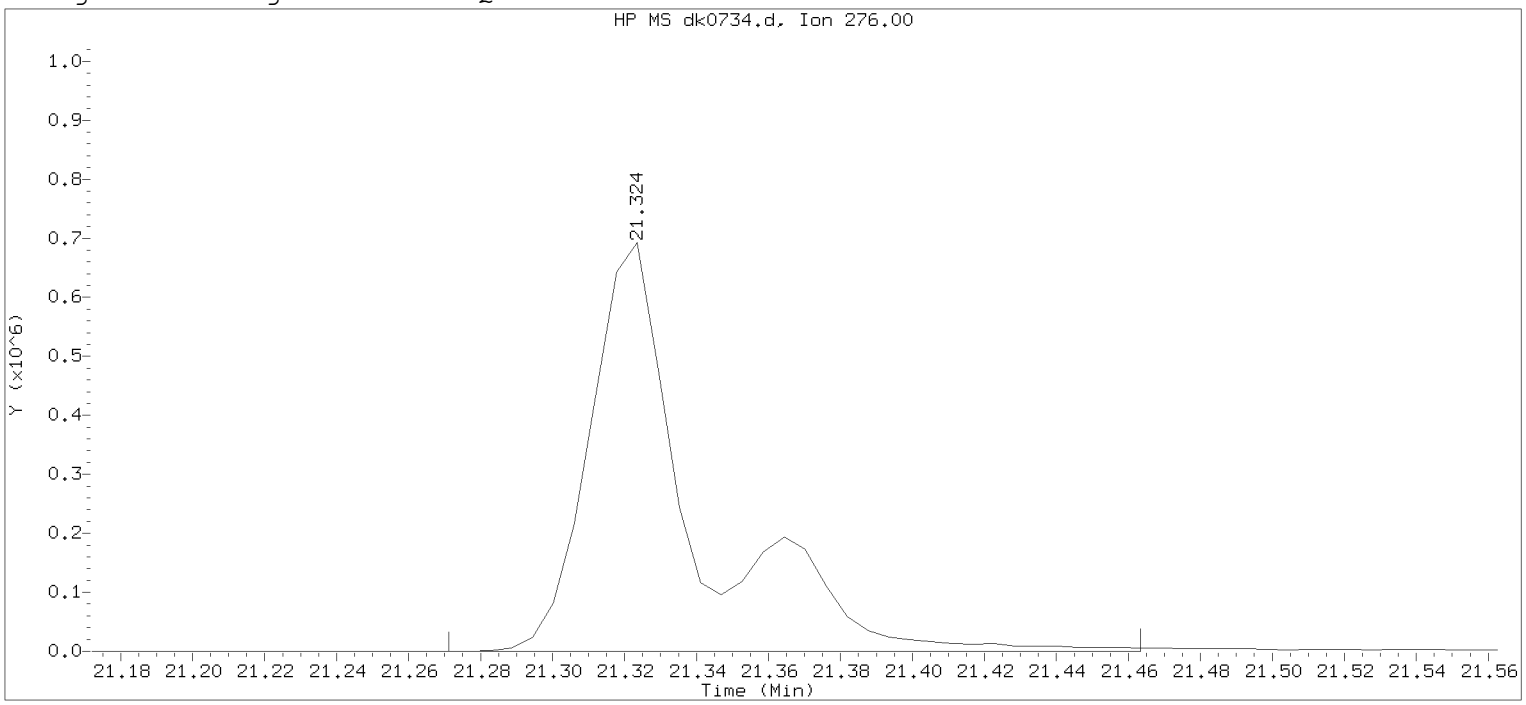
Analyst responsible for change: Digitally signed by Edward Monborne
on 11/09/2018 at 13:59.
Target 3.5 esignature user ID: em10340

Secondary review performed and digitally signed by Chad A. Moline on 11/12/2018 at 15:58.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP19760.i/18nov09.b/dk0734.d Instrument ID: HP19760.i
Injection date and time: 09-NOV-2018 11:08 Analyst ID: em10340

Method used: /chem/HP19760.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 09:29
Date, time and analyst ID of latest file update: 09-Nov-2018 11:37 Automation

Sample Name: 310WLLCSD Lab Sample ID: 310WLLCSD

Compound Number	: 219		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3369		
Retention Time (minutes)	: 21.324		
Quant Ion	: 276.00		
Area	: 1411099		
On-column Amount (ng/ul)	: 15.9349		
Integration start scan	: 3359	Integration stop scan:	3392
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Edward Monborne on 11/09/2018 at 13:59.
Target 3.5 esignature user email: [redacted]

Extraction/Distillation/Digestion Logs

Semivolatiles by GC/MS

Organic Extraction Batchlog Assigned to: 26557 Logan Brosemer Reviewed by: EM10340 Start Date: 11/7/18 Start time: 8:30

18310WAL026 Tech 1: LMB 26557 Tech 2: —

Dept: 26 Prep Analysis: 11010 8270D BNA Extraction SVOAs 8270D MINI

QC	Sample Code	Amt mL	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments
BLANKA (8c)	SBLKWL310	250	SS1830626A	1.0	—	—	1	✓	✓		TapH2O
LCSA (8c)	310WLLCS	250	SS1830626A	(A8)	MS1830426A	1.0	1	✓	✓		
LCSAPI (8c)	310WLLCS	250	SS1830626A		MS1830526C		1	✓	✓		
LCSDA (8c)	310WLLCSD	250	SS1830626A	(A8)	MS1830426A		1	✓	✓		
LCSDAPI (8c)	310WLLCSD	250	SS1830626A	↓	MS1830526C	↓	1	✓	✓		

(8) Added 1.0 mL of 625 surrogate SS1825026A, along with BNA surrogate. LMB 26557 11/7/18

LMB 26557 11/7/18

A(8) MS1831026A

Solvent Used	Lot No.
10N NaOH	471IFS1
Methylene Chloride	187001
Sodium Sulfate	18309A
Sulfuric Acid	184517
—	—

Spike Solutions: Witness: —

MS1830526C APPIX #1 MINI SPIKE

~~MS1830426A~~ MINI SEP. LCS SPIKE #1

SS1830626A MINI SEP. BNA SURROGATE

(8b) 9882463 moved to batch 18310WAX026. WS2991 11/9/18

	Sample #	Sample Code	Amt mL	SS/IS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments	Analyses	List	Due Date	Prio
(8b)	1 9882463 (8c)	13WTD	237	SS1830626A	1.0	1	✓	✓	153a	Clear	14241	31899	11/14/2018	N
	2 9882676 (8c)	HYF01	248	SS1830626A		1	✓	✓	153a	Tan cloudy	14241	22172	11/14/2018	N
	3 9882677 (8c)	HYF02	248	SS1830626A		1	✓	✓	153a	Tan cloudy	14241	22172	11/14/2018	N
	4 9882678 (8c)	HYF03	247	SS1830626A		1	✓	✓	153a	Tan TINT	14241	22172	11/14/2018	N
	5 9882679 (8c)	HYF04	247	SS1830626A		1	✓	✓	153a	Grey cloudy	14241	22172	11/14/2018	N
	6 9882680 (8c)	HYF05	232	SS1830626A		1	✓	✓	153a	Tan cloudy	14241	22172	11/14/2018	N
	7 9882682 (8c)	HYF07	210	SS1830626A		1	✓	✓	153a	Tan TINT	14241	22172	11/14/2018	N
	8 9882892 (8c)	OS-03	249	SS1830626A		1	✓	✓	153A	Cloudy	14241	22143	11/14/2018	N
	9 9882893	OS-02	239	SS1830626A		1	✓	✓	153A	Clear	14241	22143	11/14/2018	N
(8)	10 9882894	TF-23	246	SS1830626A		1	✓	✓	153A	Tan cloudy	14241	22143	11/14/2018	N
(8)	11 9882895	TF-05	228	SS1830626A		1	✓	✓	153A	cloudy	14241	22143	11/14/2018	N
(8)	12 9882896	DB-8A	239	SS1830626A		1	✓	✓	153A	clear	14241	22143	11/14/2018	N
(8)	13 9882897	DB-17	238	SS1830626A		1	✓	✓	153A	Tan Tint	14241	22143	11/14/2018	N
(8)	14 9882898	DC-01	239	SS1830626A		1	✓	✓	153A	Tan TINT	14241	22143	11/14/2018	N
(8)	15 9882899	DC-02	242	SS1830626A	↓	1	✓	✓	153A	Cloudy	14241	22143	11/14/2018	N

CBD53 Page 758 of 858

(8c) internalized w/ Istd2998, remaining samples w/ Istd3138 - EM10340 11/9/18

NH LMB 26557 11/7/18

Bench# —	~~Bench#~~	~~Bench#~~
Rack ID: —	Work Station	Tumble
Internal Standard (8c)	Balance #	25996
	Micro Temp 100?	—

R-VAP ID 6	90 C	R-VAP ID 7	90 C	R-VAP ID 3	90 C
S-bath ID —	~~C~~	~~S-bath ID~~	~~C~~	N-Evap	C
~~M-vap~~	~~C~~				

18310WAL026

DF = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

Metals in Liquid Data

Case Narrative/Conformance Summary

Metals in Liquid

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD53

ICP Metals

Fraction: Metals in Liquid

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9882892	OS-3-W-6.00-181101	X		1	
9882893	OS-2-W-6.00-181101	X		1	
9882894	TF-23-W-5.26-181101	X		1	
9882895	TF-5-W-4.59-181101	X		1	
9882896	DB-8A-W-5.00-181102	X		1	
9882897	DB-17-W-5.00-181102	X		1	
9882898	DC-1-W-2.00-181102	X		1	
9882899	DC-2-W-7.50-181102	X		1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD53

ICP Metals

Fraction: Metals in Liquid

The instrument detection limits (IDLs) are used for determining the U flags on the initial and continuing calibration blanks. The highest IDL is selected when multiple instruments are used for an analysis. The method detection limits (MDLs) are used for determining all other U flags.

The final concentration (ug/l) is obtained using the following calculation:

$$\text{Instrument reading (ug/l)} \times \frac{\text{final volume}}{\text{initial volume}} \times \text{dilution factor}$$

Abbreviation Key

BKG – Background	AF - Cold Vapor Atomic Fluorescence
DUP – Duplicate	U - Below MDL
MS - Matrix Spike	B - Below LOQ
MSD - Matrix Spike Dup	N - Matrix Spike out of specifications
B – Blank	* - Duplicate out of specifications
Q - Laboratory Control Sample	E - Matrix Effects exist as proven by Serial Dilution or Spiked Dilution
Y - Laboratory Control Sample Duplicate	A - Post Digestion Spike
P - ICP Atomic Emission Spectrometer	L - Serial Dilution
MS - ICP Mass Spectrometry	R - Internal Standard Relative Intensity OOS
CV - Cold Vapor	NR - Not Required

Sample Data

Metals in Liquid

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD53
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9882892 % Solids: 0.0
Concentration Units: UG/L Date Received: 11/03/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	7.1	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD53
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9882893 % Solids: 0.0
Concentration Units: UG/L Date Received: 11/03/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	7.1	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD53
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9882894 % Solids: 0.0
Concentration Units: UG/L Date Received: 11/03/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	7.1	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD53
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9882895 % Solids: 0.0
Concentration Units: UG/L Date Received: 11/03/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	7.1	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD53
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9882896 % Solids: 0.0
Concentration Units: UG/L Date Received: 11/03/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	7.1	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD53
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9882897 % Solids: 0.0
Concentration Units: UG/L Date Received: 11/03/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	7.1	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD53
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9882898 % Solids: 0.0
Concentration Units: UG/L Date Received: 11/03/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	7.1	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD53
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9882899 % Solids: 0.0
Concentration Units: UG/L Date Received: 11/03/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	7.1	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

Quality Control and Calibration Summary Forms

Metals in Liquid

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QUALITY CONTROL REFERENCE LIST

SDG No.: CBD53
Matrix: WATER

Analyte	Batch Number	Lab Sample ID
Lead	183131063501	*82790BKG
		9882892
		9882893
		9882894
		9882895
		9882896
		9882897
		9882898
		9882899
		P31363AB
		P31363AQ

LEGEND:

BKG = Background	B = Blank
DUP = Duplicate	Q = Laboratory Control Sample
MS = Matrix Spike	Y = Laboratory Control Sample Duplicate
MSD = Matrix Spike Duplicate	

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QUALITY ASSURANCE SUMMARY
FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
SDG No.: CBD53

Method: P
Run Name: 1831602T74
Calibration Date(s): 11/12/2018
Concentration Units: UG/L

Analyte	Mass	Initial Calibration			Continuing Calibration					
		True	Found	%R(1)	True	Found	%R(2)	True	Found	%R(2)
Lead		600.0	595.03	99.2	500.0	487.46	97.5	500.0	496.41	99.3

(1) Control Limits: 90 - 110
(2) Control Limits: 90 - 110
* Outside Limits. If Continuing Calibration is outside limits, high, only ND samples are accepted.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

QUALITY ASSURANCE SUMMARY
FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
SDG No.: CBD53

Method: P
Run Name: 1831602T74
Calibration Date(s): 11/12/2018
Concentration Units: UG/L

		Initial Calibration			Continuing Calibration					
Analyte	Mass	True	Found	%R(1)	True	Found	%R(2)	True	Found	%R(2)
Lead					500.0	507.01	101.4	500.0	498.80	99.8

(1) Control Limits: 90 - 110
(2) Control Limits: 90 - 110
* Outside Limits. If Continuing Calibration is outside limits, high, only ND samples are accepted.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

QUALITY ASSURANCE SUMMARY
FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
SDG No.: CBD53

Method: P
Run Name: 1831602T74
Calibration Date(s): 11/12/2018
Concentration Units: UG/L

Analyte	Mass	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(2)	True	Found	%R(2)
Lead					500.0	501.82	100.4			

(1) Control Limits: 90 - 110
(2) Control Limits: 90 - 110
* Outside Limits. If Continuing Calibration is outside limits, high, only ND samples are accepted.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 2B
LOW LEVEL CHECK STANDARD
SDG No.: CBD53

Method: P
Run Name: 1831602T74
Calibration Date(s): 11/12/2018
Concentration Units: UG/L

Analyte	Mass	Initial True	Initial Found	Initial %R	Final Found	Final %R
Lead		15.0	15.13	100.9	17.11	114.1

Control limits: 70% - 130%

For 6010B - Control limits apply to values up to 10 times the true value of the low level check standard. If LLC is out of specification, high, results < RL are acceptable.
For 6010C - If Low Level Check (LLC) is out of specification, results > CCV are acceptable. If LLC is out of specification, high, results < RL are acceptable.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 3
BLANKS
SDG No.: CBD53

Method: P
Run Name: 1831602T74
Calibration Date(s): 11/12/2018
Preparation Blank Matrix: WATER

		Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank (UG/L)			
Analyte	Mass		C	1	C	2	C	3	C	Mass		C	Batch Number
Lead		3.3	U	3.3	U	3.3	U	3.3	U		7.100	U	183131063501

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below IDL/MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	
AF = Cold Vapor Atomic Fluorescence	

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QUALITY ASSURANCE SUMMARY
FORM 3
BLANKS
SDG No.: CBD53

Method: P
Run Name: 1831602T74
Calibration Date(s): 11/12/2018

		Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank (UG/L)			
Analyte	Mass		C	1	C	2	C	3	C	Mass		C	Batch Number
Lead				3.3	U	3.3	U						

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence	U= Below IDL/MDL B= Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 4A
ICP-AES INTERFERENCE CHECK SAMPLE
SDG No.: CBD53

Instrument ID: 23745
Run Name: 1831602T74
Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	500000	500000	481683	96.3	483493.0	96.7	489073	97.8	487834.0	97.6
Calcium	500000	500000	486114	97.2	490028.8	98.0	501634	100.3	500775.9	100.2
Iron	200000	200000	195042	97.5	196354.6	98.2	199017	99.5	198740.1	99.4
Lead	0	550	5		507.1	92.2	4		521.5	94.8
Magnesium	500000	500000	455961	91.2	451262.1	90.3	476479	95.3	480788.2	96.2

Control Limits: All Metals 80%-120%

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QUALITY ASSURANCE SUMMARY
FORM 7
LABORATORY CONTROL SAMPLE
SDG No.: CBD53
Matrix: WATER

Analyte	Mass	Batch Number	Units	True	Found	C	Control Limits (%)	%R	M	In Spec
Lead		183131063501	UG/L	150.000	152.850		87 - 113	102	P	Yes

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence	U= Below MDL B= Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: CBD53
Matrix: WATER Level (low/med): LOW

Background Lab Sample ID: *82790BKG Serial Dilution Lab Sample ID: *82790L
Batch Number(s): 183131063501
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Lead		7.1000	U	35.5000	U			P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

QUALITY ASSURANCE SUMMARY
FORM 10
INSTRUMENT DETECTION LIMITS (QUARTERLY)
SDG No.: CBD53

Method: P
Instrument ID: 23745
Date: 07/2018

Analyte	Wavelength (nm)	Background	IDL (UG/L)
Lead	220.35		3.3

Comments:

_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 10 MDL
METHOD DETECTION LIMITS (ANNUALLY)
SDG No.: CBD53
Matrix: WATER

Method: P
Date: 09/2018

Analyte	Wavelength (nm)	Background	LOQ (UG/L)	MDL (UG/L)
Lead	220.35		15.0	7.1

The LOQ/MDL must be adjusted for % Solids and Sample Weight for samples reporting in mg/kg and ug/L.

Comments:

_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 11
ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)
SDG No.: CBD53

Instrument ID: 23745
Date: 05/2018

Analyte	Wavelength (nm)	Interelement Correction Factor for: AL	CA	FE	MG	MO
Lead	220.35	0.0002530	0.0000000	0.0000000	0.0000000	-0.0014300

Comments:

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QUALITY ASSURANCE SUMMARY
FORM 11
ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)
SDG No.: CBD53

Instrument ID: 23745
Date: 05/2018

Analyte	Wavelength (nm)	Interelement Correction Factor for: SI	--	--	--	--
Lead	220.35	0.0000300				

Comments:

_____
_____
_____
_____

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QUALITY ASSURANCE SUMMARY
FORM 12
LINEAR RANGES
SDG No.: CBD53

Method: P
Instrument ID: 23745
Date: 10/2018

Analyte	Wavelength (nm)	Integration Time (Sec.)	Concentration (ug/L)
Lead	220.35	10.00	20000.0

Comments:
_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

Method: P
Batch Number: 183131063501

Lab Sample ID	Date	Initial Volume(ml)	Final Volume(ml)
9882892	11/11/2018	50.00	50
9882893	11/11/2018	50.00	50
9882894	11/11/2018	50.00	50
9882895	11/11/2018	50.00	50
9882896	11/11/2018	50.00	50
9882897	11/11/2018	50.00	50
9882898	11/11/2018	50.00	50
9882899	11/11/2018	50.00	50
*82790BKG	11/11/2018	50.00	50
P31363AB	11/11/2018	50.00	50
P31363AQ	11/11/2018	1.00	1

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

LEGEND:
BKG = Background
DUP = Duplicate
MS = Matrix Spike
MSD = Matrix Spike Duplicate
B = Blank
Q = Laboratory Control Sample
Y = Laboratory Control Sample Duplicate

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QUALITY ASSURANCE SUMMARY
FORM 14
ANALYSIS RUN LOG
SDG No.: CBD53

Method: P
Instrument ID: 23745
Run Name: 1831602T74

Run Start Date: 11/12/2018
Run End Date: 11/12/2018

Lab Sample ID	D/F	Time	Analytes: P B
S0	1.00	09:51	X
S	1.00	09:54	
S	1.00	09:57	X
S	1.00	10:00	
ICV	1.00	10:03	X
ICB	1.00	10:05	X
LLC	1.00	10:08	X
ICSA	1.00	10:11	X
ICSAB	1.00	10:14	X
CCV	1.00	10:16	X
CCB	1.00	10:19	X
P31363AB	1.00	10:22	X
P31363AQ	1.00	10:25	X
*82790BKG	1.00	10:27	X
ZZZZZZ	1.00	10:30	
ZZZZZZ	1.00	10:33	
ZZZZZZ	1.00	10:36	
ZZZZZZ	1.00	10:39	
*82790L	5.00	10:42	X
ZZZZZZ	1.00	10:45	
ZZZZZZ	1.00	10:48	
CCV	1.00	10:51	X
CCB	1.00	10:53	X
ZZZZZZ	1.00	10:56	
ZZZZZZ	1.00	10:59	
ZZZZZZ	1.00	11:02	
ZZZZZZ	1.00	11:05	
ZZZZZZ	1.00	11:08	
ZZZZZZ	1.00	11:10	
ZZZZZZ	1.00	11:13	
9882892	1.00	11:16	X
9882893	1.00	11:19	X
9882894	1.00	11:22	X
CCV	1.00	11:25	X
CCB	1.00	11:27	X
9882895	1.00	11:30	X
9882896	1.00	11:33	X
9882897	1.00	11:36	X

METHODS:
- P = ICP Atomic Emission Spectrometer
- MS = ICP Mass Spectrometry
- CV = Cold Vapor
- AF = Cold Vapor Atomic Fluorescence

LEGEND:
- BKG = Background
- DUP = Duplicate
- MS = Matrix Spike
- MSD = Matrix Spike Duplicate
- A = Post Digest Spike
- L = Serial Dilution
- B = Blank
- Q = Laboratory Control Sample
- Y = Laboratory Control Sample Duplicate

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QUALITY ASSURANCE SUMMARY
FORM 14
ANALYSIS RUN LOG
SDG No.: CBD53

Method: P
Instrument ID: 23745
Run Name: 1831602T74

Run Start Date: 11/12/2018
Run End Date: 11/12/2018

Lab Sample ID	D/F	Time	Analytes
			P B
9882898	1.00	11:39	X
9882899	1.00	11:41	X
ZZZZZZ	1.00	11:44	
ZZZZZZ	1.00	11:47	
ZZZZZZ	1.00	11:50	
ZZZZZZ	1.00	11:53	
ZZZZZZ	1.00	11:55	
CCV	1.00	11:58	X
CCB	1.00	12:01	X
ZZZZZZ	1.00	12:04	
LLC	1.00	12:07	X
ICSA	1.00	12:09	X
ICSAB	1.00	12:12	X
CCV	1.00	12:15	X
CCB	1.00	12:18	X

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

LEGEND:
BKG = Background
DUP = Duplicate
MS = Matrix Spike
MSD = Matrix Spike Duplicate
A = Post Digest Spike
L = Serial Dilution
B = Blank
Q = Laboratory Control Sample
Y = Laboratory Control Sample Duplicate

Raw Data

Metals in Liquid

ICP Data

Metals in Liquid

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ICP-AES Run Data Report

Reviewed By	Reviewed Date
Eric L Eby	11/12/2018 2:33PM
Parker D Lindstrom	11/12/2018 2:50PM

Verified By:	Verified Date
Parker D Lindstrom	11/12/2018 3:06PM

Data File Name 1831602T74.TXT
Run Name: 1831602T74

Method Reference Name(s):

Analyst Employee: 420

Instrument Parameters:

Individual Integration Time: 10.00 sec Total Integration Time: 30.00 sec Rinse Time: 15.00 sec

Element	Analyte Name	Wavelength Value
AG	Silver	328.06
AL	Aluminum	308.21
AS	Arsenic	189.04
AU	Gold	242.80
B	Boron	249.67
BA	Barium	455.40
BE	Beryllium	313.04
CA	Calcium	317.93
CD	Cadmium	226.50
CO	Cobalt	228.62
CR	Chromium	267.72
CU	Copper	327.40
FE	Iron	261.19
K	Potassium	766.49
LI	Lithium	670.78
MG	Magnesium	285.21
MN	Manganese	257.61
MO	Molybdenum	202.03
NA	Sodium	589.59
NI	Nickel	231.60
P	Phosphorus	177.49
PB	Lead	220.35
S	Sulfur	182.00
SB	Antimony	206.83
SE	Selenium	196.09
SI	Silicon	251.60
SN	Tin	189.99
SR	Strontium	421.55
TE	Tellurium	214.28
TH	Thorium	401.91
TI	Titanium	334.94
TL	Thallium	190.86
V	Vanadium	292.40
W	Tungsten	207.91
Y1	Yttrium	224.31
Y2	Yttrium	371.03
ZN	Zinc	213.86
ZR	Zirconium	339.19

The TRACE ICP utilizes Yttrium as an internal standard to compensate for fluctuations in nebulization and plasma conditions. All Yttrium readings are expressed in counts.

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 1 Date/Time: 11/12/2018 09:51

Sample Number: **S0**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AG	0.000	-14.81848	63.129	-0.00121	-0.00609	-0.00458
AL	0.000	1.55000	45.662	0.02886	0.01962	0.01081
AS	0.000	2.12733	29.558	0.01294	0.02129	0.01340
B	0.000	-11.64182	86.679	0.00000	-0.00008	-0.00011
BA	0.000	122.11408	6.207	0.00067	0.00061	0.00068
BE	0.000	-265.74670	0.424	-0.07104	-0.07114	-0.07058
CA	0.000	8.03333	20.117	0.00177	0.00185	0.00252
CD	0.000	-1.40548	163.290	-0.01344	-0.02590	0.00792
CO	0.000	7.93370	10.834	0.06342	0.05189	0.06256
CR	0.000	-17.37474	11.178	-0.00010	-0.00010	-0.00008
CU	0.000	-60.64213	17.348	-0.01806	-0.01751	-0.01295
FE	0.000	-1.08333	54.906	-0.00036	-0.00010	-0.00037
K	0.000	158.58333	18.178	1.64645	2.37992	2.02781
LI	0.000	28.80000	34.130	0.01024	0.00604	0.00576
MG	0.000	-2.01667	117.030	0.00018	-0.00086	-0.00085
MN	0.000	2.26520	145.260	0.00157	-0.00015	0.00039
MO	0.000	-0.40685	243.199	-0.00140	0.00341	-0.01115
NA	0.000	-95.00000	24.865	-0.01873	-0.03062	-0.02317
NI	0.000	15.01706	4.047	0.11735	0.11046	0.10878
P	0.000	0.05320	739.398	0.00007	-0.00005	0.00001
PB	0.000	2.29793	44.799	0.02607	0.01304	0.01245
S	0.000	-3.59717	4.094	-0.00056	-0.00053	-0.00052
SB	0.000	3.37764	27.272	0.00035	0.00057	0.00059
SE	0.000	3.68182	22.379	0.02039	0.03080	0.03128
SI	0.000	0.29667	290.559	0.00005	0.00031	-0.00013
SN	0.000	1.50105	57.623	0.01154	0.01748	0.00458
SR	0.000	-31.63752	36.281	-0.00021	-0.00010	-0.00020
TH	0.000	13.46667	37.658	0.00476	0.00337	0.00218
TI	0.000	-1.19801	122.477	-0.00054	0.00013	-0.00055
TL	0.000	-0.07784	1310.680	0.00320	-0.00901	0.00413
V	0.000	-25.65710	14.822	-0.00768	-0.00572	-0.00714
W	0.000	0.17738	787.182	0.00019	-0.00022	0.00011
Y1	0.000	6692.96990	0.507	6661.22245	6728.72468	6688.96255
Y2A	0.000	187354.85870	0.708	188411.34773	187788.30211	185864.92627
Y2R	0.000	3925.94667	0.668	3897.78000	3949.71000	3930.35000
ZN	0.000	10.20973	12.253	0.08006	0.06565	0.08318
ZR	0.000	0.70000	412.914	0.00103	-0.00009	-0.00039

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 2 Date/Time: 11/12/2018 09:54

Sample Number: **S1**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AL	50.000	889.46023	0.630	11.38741	11.26045	11.26803
CA	50.000	9453.10945	0.452	2.40304	2.39211	2.41385
FE	50.000	1976.10466	0.107	0.50295	0.50202	0.50201
K	50.000	14592.03291	0.486	186.18478	184.45725	185.76205
MG	50.000	11095.67341	0.674	2.82853	2.79887	2.83433
NA	50.000	32801.89013	0.555	8.37816	8.28761	8.34947
S	50.000	8125.23450	0.243	1.26861	1.26507	1.27121
SI	50.000	1433.51987	0.285	0.36551	0.36425	0.36345
Y1	50.000	6406.36752	0.521	6434.19265	6369.31425	6415.59566
Y2R	50.000	3933.90151	0.520	3912.21093	3952.88538	3936.60821

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 3 Date/Time: 11/12/2018 09:57

Sample Number: **S2**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AG	1.000	11994.54703	0.304	3.29611	3.28012	3.29856
AS	1.000	235.24853	0.165	1.81500	1.82029	1.81517
B	1.000	7637.66485	0.775	0.04192	0.04159	0.04224
BA	1.000	499865.40725	0.434	2.73729	2.73599	2.75725
BE	1.000	370478.37868	1.568	103.50731	100.79846	100.69685
CD	1.000	16784.62682	0.152	129.66723	129.80129	129.41302
CO	1.000	3406.13932	0.225	26.30496	26.24565	26.36418
CU	1.000	6971.48998	0.337	1.92057	1.90901	1.90985
LI	1.000	4627.53657	0.367	1.17780	1.16987	1.17093
MN	1.000	64268.41574	0.247	17.68125	17.59419	17.63492
NI	1.000	1669.77873	0.213	12.89031	12.87086	12.92497
P	1.000	512.73805	0.286	0.07907	0.07906	0.07946
PB	1.000	1374.31639	0.353	10.61075	10.57751	10.65221
SE	1.000	472.79815	0.492	3.64706	3.63580	3.67095
SR	1.000	599510.48207	0.896	3.32372	3.26768	3.27979
TH	1.000	126.82451	3.218	0.03318	0.03111	0.03216
TL	1.000	726.87926	0.616	5.63191	5.57357	5.63481
W	1.000	962.34516	0.497	0.14888	0.14781	0.14923
Y1	1.000	6474.24968	0.897	6479.55166	6413.69448	6529.50290
Y2A	1.000	182200.04826	0.184	182283.34998	182484.94301	181831.85178
Y2R	1.000	3945.63340	1.621	3874.80504	3962.99480	3999.10036
ZN	1.000	12745.57262	0.123	98.54006	98.45771	98.30194

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 4 Date/Time: 11/12/2018 10:00

Sample Number: **S3**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
CR	1.000	10191.52876	0.933	0.05393	0.05353	0.05294
MO	1.000	3413.72685	0.085	25.45110	25.49114	25.48499
SB	1.000	614.59413	0.656	0.09104	0.09203	0.09213
SN	1.000	600.36365	0.281	4.49464	4.47525	4.47105
TI	1.000	47604.16673	0.576	12.52339	12.53227	12.40347
V	1.000	9858.84955	0.935	2.61210	2.58113	2.56443
Y1	1.000	6699.97060	0.402	6731.06272	6685.45358	6683.39550
Y2A	1.000	190623.19237	0.440	191589.18216	190089.44322	190190.95172
Y2R	1.000	4001.96333	0.286	4012.70000	4003.26000	3989.93000
ZR	1.000	406.90000	0.781	0.10190	0.10233	0.10079

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 5

Date/Time: 11/12/2018 10:03

Sample Number: **ICV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.60156	7,097.54	0.294	0.59952	0.60255	0.60261
____ AL	29.83008	529.66	1.006	29.69650	29.61995	30.17378
____ AS	0.60821	141.56	0.281	0.60862	0.60633	0.60967
____ B	0.57535	4,759.05	0.514	0.57436	0.57868	0.57302
____ BA	0.59462	292,554.80	2.505	0.60453	0.57749	0.60184
____ BE	0.58572	213,291.05	0.444	0.58275	0.58759	0.58681
____ CA	30.15890	5,677.35	0.627	29.97189	30.35024	30.15456
____ CD	0.60209	9,956.08	0.032	0.60209	0.60190	0.60228
____ CO	0.59455	2,000.17	0.429	0.59403	0.59732	0.59230
____ CR	0.59208	5,663.49	1.066	0.58979	0.59922	0.58723
____ CU	0.59704	4,060.46	1.461	0.59293	0.60705	0.59112
____ FE	29.77194	1,173.94	0.629	29.58043	29.95439	29.78099
____ K	29.94724	8,752.13	0.071	29.94836	29.96796	29.92539
____ LI	0.59914	2,764.35	0.567	0.59524	0.60146	0.60072
____ MG	30.30119	6,728.37	0.116	30.30090	30.26618	30.33648
____ MN	0.60347	38,171.53	0.101	0.60336	0.60292	0.60412
____ MO	0.60149	1,952.03	0.462	0.60253	0.60359	0.59834
____ NA	28.56067	18,586.84	0.728	28.49208	28.79436	28.39557
____ NI	0.59872	988.49	0.540	0.59805	0.60224	0.59588
____ P	0.60799	306.52	0.713	0.60586	0.61298	0.60513
____ PB	0.59503	814.47	0.629	0.59586	0.59829	0.59094
____ S	30.73985	4,965.75	0.018	30.73982	30.74555	30.73419
____ SB	0.60851	356.80	0.763	0.60913	0.61281	0.60359
____ SE	0.58727	274.68	0.779	0.58566	0.59243	0.58372
____ SI	30.08492	859.30	0.297	29.98703	30.16226	30.10547
____ SN	0.58594	335.04	0.582	0.58828	0.58751	0.58203
____ SR	0.61107	360,816.19	0.104	0.61155	0.61130	0.61034
____ TH	0.60567	81.46	6.190	0.59825	0.57245	0.64632
____ TI	0.61420	27,482.36	0.306	0.61618	0.61399	0.61243
____ TL	0.60474	431.34	0.172	0.60371	0.60579	0.60472
____ V	0.60922	5,653.10	0.362	0.61040	0.61058	0.60668
____ W	0.59884	567.03	0.635	0.60108	0.60099	0.59445
____ Y1	6369.78867	6,369.79	1.024	6374.33198	6432.59770	6302.43634
____ Y2A	179216.48614	179,216.49	0.223	179677.42965	178968.61628	179003.41249
____ Y2R	3910.89111	3,910.89	0.297	3908.72081	3900.50878	3923.44374
____ ZN	0.59599	7,507.36	0.283	0.59693	0.59700	0.59405
____ ZR	0.60562	252.59	1.961	0.59199	0.61382	0.61104

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 6

Date/Time: 11/12/2018 10:05

Sample Number: **ICB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00138	-19.81	101.225	0.00007	-0.00273	-0.00150
____ AL	0.06343	2.65	198.395	0.00812	0.20745	-0.02528
____ AS	0.00345	2.94	97.936	0.00032	0.00299	0.00704
____ B	0.00073	2.81	71.314	0.00126	0.00022	0.00072
____ BA	0.00004	144.86	202.998	0.00014	0.00000	-0.00001
____ BE	0.00037	-237.81	19.275	0.00045	0.00031	0.00034
____ CA	-0.00265	7.68	877.519	0.00991	-0.02949	0.01163
____ CD	0.00006	-1.11	259.238	0.00005	-0.00009	0.00024
____ CO	0.00015	8.42	356.343	0.00030	0.00057	-0.00044
____ CR	0.00008	-23.69	675.773	0.00068	-0.00035	-0.00010
____ CU	0.00030	-63.33	341.293	0.00024	-0.00068	0.00133
____ FE	0.03012	-0.23	65.821	0.03830	0.00751	0.04455
____ K	0.06850	181.67	48.627	0.06600	0.03651	0.10299
____ LI	-0.00020	28.40	1611.683	-0.00382	0.00116	0.00207
____ MG	0.00502	-0.77	161.602	0.00926	0.01014	-0.00433
____ MN	0.00007	-0.05	180.325	0.00015	0.00013	-0.00008
____ MO	0.00010	-0.05	195.044	0.00024	-0.00013	0.00020
____ NA	0.00768	-91.62	4.732	0.00809	0.00755	0.00741
____ NI	0.00250	19.20	20.956	0.00189	0.00282	0.00277
____ P	-0.00056	-0.72	320.321	0.00146	-0.00116	-0.00197
____ PB	0.00041	2.89	381.826	0.00204	0.00019	-0.00102
____ S	0.00413	-2.21	79.101	0.00723	0.00442	0.00073
____ SB	0.00098	3.95	182.301	-0.00070	0.00285	0.00078
____ SE	-0.00245	2.49	96.222	-0.00235	-0.00486	-0.00014
____ SI	-0.00561	0.14	604.037	0.02934	-0.00789	-0.03826
____ SN	0.00012	1.57	543.536	-0.00065	0.00042	0.00060
____ SR	0.00009	20.52	63.557	0.00016	0.00005	0.00006
____ TH	-0.04159	8.97	101.448	-0.02526	-0.08950	-0.01000
____ TI	0.00035	-1.34	101.631	0.00075	0.00008	0.00022
____ TL	0.00510	0.89	8.265	0.00534	0.00462	0.00536
____ V	-0.00131	-29.32	78.195	-0.00093	-0.00248	-0.00053
____ W	0.00008	0.26	1260.825	0.00129	-0.00033	-0.00071
____ Y1	6662.95032	6,662.95	0.484	6699.20714	6637.54828	6652.09555
____ Y2A	188949.25757	188,949.26	0.205	188931.92975	189344.26066	188571.58230
____ Y2R	4003.00667	4,003.01	0.902	4042.78000	3993.90000	3972.34000
____ ZN	-0.00041	5.10	2.683	-0.00041	-0.00041	-0.00039
____ ZR	0.00143	0.50	556.730	0.00052	0.00977	-0.00602

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 7

Date/Time: 11/12/2018 10:08

Sample Number: **LLC**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00967	-11.91	12.374	0.01058	0.00831	0.01013
____ AL	0.35998	9.02	36.918	0.21570	0.47739	0.38686
____ AS	0.05581	15.64	2.423	0.05734	0.05476	0.05533
____ B	0.04688	377.60	1.869	0.04765	0.04592	0.04705
____ BA	0.00521	2,873.01	1.041	0.00520	0.00516	0.00527
____ BE	0.00518	1,636.32	0.451	0.00521	0.00518	0.00516
____ CA	0.53145	111.70	7.420	0.48776	0.56440	0.54219
____ CD	0.00523	88.95	1.002	0.00518	0.00529	0.00521
____ CO	0.00489	25.28	10.093	0.00489	0.00538	0.00439
____ CR	0.01551	134.41	3.153	0.01607	0.01514	0.01533
____ CU	0.02125	147.20	2.644	0.02135	0.02064	0.02175
____ FE	0.24381	8.53	2.272	0.23741	0.24689	0.24712
____ K	0.53495	321.65	5.778	0.54400	0.50052	0.56032
____ LI	0.04833	257.40	8.985	0.04904	0.05228	0.04368
____ MG	0.12163	26.25	3.924	0.12112	0.12665	0.11714
____ MN	0.01028	699.64	0.594	0.01024	0.01035	0.01025
____ MO	0.00985	33.32	1.585	0.00989	0.00999	0.00968
____ NA	1.05161	612.93	1.945	1.05857	1.02859	1.06768
____ NI	0.01002	32.26	0.092	0.01003	0.01002	0.01001
____ P	0.10169	52.51	0.390	0.10209	0.10169	0.10129
____ PB	0.01513	23.97	4.923	0.01578	0.01529	0.01432
____ S	0.53038	87.47	1.186	0.52325	0.53513	0.53276
____ SB	0.04882	33.50	6.113	0.05220	0.04656	0.04769
____ SE	0.05297	29.38	2.777	0.05130	0.05407	0.05353
____ SI	0.49908	15.10	6.741	0.47548	0.53760	0.48415
____ SN	0.05045	31.80	2.236	0.04978	0.05175	0.04982
____ SR	0.00543	3,393.58	0.073	0.00543	0.00542	0.00543
____ TH	0.46729	68.07	8.567	0.50783	0.46627	0.42779
____ TI	0.01050	484.44	2.097	0.01072	0.01051	0.01028
____ TL	0.03661	24.69	2.871	0.03579	0.03779	0.03625
____ V	0.00963	83.80	2.477	0.00955	0.00990	0.00945
____ W	0.03117	31.17	2.564	0.03083	0.03060	0.03209
____ Y1	6718.03211	6,718.03	0.276	6736.95985	6699.94334	6717.19312
____ Y2A	191532.72498	191,532.72	0.225	191297.67697	192029.49000	191271.00798
____ Y2R	4040.53667	4,040.54	1.294	3982.33000	4083.56000	4055.72000
____ ZN	0.02077	284.28	0.504	0.02080	0.02086	0.02066
____ ZR	0.04623	28.85	0.682	0.04630	0.04589	0.04651

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 8

Date/Time: 11/12/2018 10:11

Sample Number: **ICSA**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00426	-90.29	20.083	0.00479	0.00328	0.00472
____ AL	481.68319	8,621.28	0.655	485.32414	479.97853	479.74689
____ AS	0.01411	5.02	30.743	0.00914	0.01604	0.01714
____ B	0.05593	3,087.79	11.897	0.04914	0.06244	0.05620
____ BA	0.00057	375.59	11.732	0.00062	0.00061	0.00050
____ BE	0.00010	-303.43	35.858	0.00006	0.00012	0.00012
____ CA	486.11359	88,746.63	1.021	491.23879	485.76829	481.33367
____ CD	0.00405	150.10	4.673	0.00398	0.00427	0.00391
____ CO	0.00147	11.89	18.860	0.00128	0.00179	0.00134
____ CR	-0.00377	-55.76	106.314	-0.00569	0.00084	-0.00645
____ CU	0.00121	21.56	113.853	-0.00034	0.00169	0.00229
____ FE	195.04194	7,397.12	1.111	197.32175	194.79383	193.01024
____ K	0.07518	178.25	62.464	0.08826	0.11422	0.02307
____ LI	-0.00394	84.47	111.029	-0.00552	0.00101	-0.00729
____ MG	455.96058	86,390.65	1.154	460.77366	456.76409	450.34400
____ MN	0.00225	277.65	9.565	0.00213	0.00250	0.00212
____ MO	-0.00108	-3.71	36.910	-0.00153	-0.00080	-0.00089
____ NA	0.08600	-38.05	9.605	0.08306	0.09533	0.07961
____ NI	-0.01032	7.53	11.401	-0.01165	-0.00992	-0.00940
____ P	0.00736	3.04	18.796	0.00678	0.00636	0.00894
____ PB	0.00484	145.84	34.637	0.00677	0.00380	0.00394
____ S	-0.04087	-8.96	13.861	-0.04236	-0.03461	-0.04565
____ SB	0.01381	10.76	5.809	0.01303	0.01375	0.01463
____ SE	0.00190	4.18	140.881	0.00482	-0.00043	0.00130
____ SI	-0.04436	-0.96	60.969	-0.07219	-0.01818	-0.04271
____ SN	0.00352	3.27	46.624	0.00503	0.00178	0.00374
____ SR	0.00061	7,662.50	27.736	0.00045	0.00059	0.00078
____ TH	0.00783	14.21	270.514	0.03210	-0.00693	-0.00168
____ TI	-0.00069	-44.78	32.438	-0.00073	-0.00089	-0.00045
____ TL	0.00717	2.22	8.374	0.00748	0.00647	0.00754
____ V	-0.00128	11.42	26.036	-0.00158	-0.00134	-0.00092
____ W	0.00260	2.59	42.563	0.00354	0.00138	0.00287
____ Y1	6078.82872	6,078.83	0.226	6094.70373	6070.77922	6071.00320
____ Y2A	167891.95759	167,891.96	0.568	168933.86323	167063.51944	167678.49011
____ Y2R	3886.39874	3,886.40	0.877	3851.56781	3887.96167	3919.66673
____ ZN	0.00892	298.46	0.873	0.00884	0.00891	0.00900
____ ZR	0.00760	3.84	63.478	0.00779	0.01233	0.00269

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 9

Date/Time: 11/12/2018 10:14

Sample Number: **ICSAB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.21563	2,284.58	0.262	0.21501	0.21577	0.21611
____ AL	483.49295	8,780.23	0.708	486.85837	483.60715	480.01333
____ AS	0.10549	24.97	5.886	0.10806	0.09840	0.11000
____ B	0.05056	3,060.19	16.562	0.04576	0.04569	0.06023
____ BA	0.50262	230,965.08	0.521	0.49986	0.50294	0.50507
____ BE	0.50785	172,752.77	0.563	0.50487	0.50813	0.51056
____ CA	490.02876	90,735.93	1.184	496.48726	488.33621	485.26281
____ CD	0.94189	14,897.19	0.117	0.94302	0.94186	0.94081
____ CO	0.46857	1,498.78	0.102	0.46862	0.46902	0.46807
____ CR	0.48121	4,296.69	1.190	0.47748	0.47834	0.48780
____ CU	0.51084	3,265.61	1.594	0.50387	0.50887	0.51979
____ FE	196.35457	7,552.69	0.969	198.35409	196.14154	194.56808
____ K	0.04115	170.98	146.361	0.07307	-0.02832	0.07869
____ LI	-0.00602	76.67	37.148	-0.00414	-0.00849	-0.00543
____ MG	451.26212	86,892.98	1.401	458.13187	449.96648	445.68801
____ MN	0.49205	29,216.22	0.269	0.49075	0.49199	0.49339
____ MO	-0.00156	-5.20	37.384	-0.00179	-0.00090	-0.00200
____ NA	0.08019	-42.40	25.580	0.07630	0.06190	0.10237
____ NI	0.92131	1,452.61	0.105	0.92173	0.92020	0.92201
____ P	0.00796	3.25	4.595	0.00763	0.00836	0.00789
____ PB	0.50712	791.55	0.585	0.50792	0.50384	0.50960
____ S	-0.04654	-9.81	11.621	-0.04945	-0.04987	-0.04030
____ SB	0.59637	338.48	0.469	0.59640	0.59357	0.59916
____ SE	0.50362	222.60	0.587	0.50157	0.50228	0.50701
____ SI	-0.02269	-0.36	212.535	-0.01266	0.01973	-0.07514
____ SN	0.00557	4.38	15.510	0.00484	0.00535	0.00652
____ SR	0.00049	7,637.81	35.749	0.00031	0.00051	0.00066
____ TH	0.03678	17.70	57.506	0.04447	0.01286	0.05301
____ TI	-0.00027	-27.00	55.929	-0.00043	-0.00015	-0.00022
____ TL	0.09519	63.10	2.205	0.09499	0.09321	0.09739
____ V	0.51006	4,510.90	1.228	0.50832	0.50484	0.51701
____ W	-0.00425	7.89	42.804	-0.00341	-0.00300	-0.00634
____ Y1	6064.41599	6,064.42	0.224	6068.12579	6049.33089	6075.79130
____ Y2A	167454.73138	167,454.73	0.532	168391.40000	167356.49000	166616.30413
____ Y2R	3942.73045	3,942.73	1.340	3881.96133	3968.39012	3977.83989
____ ZN	0.98660	11,954.98	0.134	0.98813	0.98579	0.98588
____ ZR	0.01389	6.96	49.557	0.01873	0.00601	0.01694

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 10

Date/Time: 11/12/2018 10:16

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.49079	6,007.78	0.222	0.49156	0.49127	0.48954
____ AL	25.08597	459.20	0.309	25.17279	25.06115	25.02397
____ AS	0.49551	119.91	0.950	0.49020	0.49917	0.49717
____ B	0.47411	4,063.66	0.883	0.46933	0.47587	0.47713
____ BA	0.49965	254,090.29	0.803	0.50358	0.49981	0.49556
____ BE	0.48184	181,289.33	0.273	0.48131	0.48334	0.48087
____ CA	25.33446	4,919.86	0.532	25.46690	25.19724	25.33923
____ CD	0.49322	8,452.03	0.140	0.49321	0.49253	0.49391
____ CO	0.49152	1,714.89	0.392	0.49021	0.49062	0.49373
____ CR	0.49030	4,843.26	0.542	0.48972	0.49320	0.48799
____ CU	0.49971	3,490.73	0.950	0.49552	0.50486	0.49875
____ FE	25.23253	1,026.60	0.197	25.17572	25.26707	25.25481
____ K	25.15155	7,605.07	0.382	25.25012	25.05812	25.14640
____ LI	0.50102	2,388.33	0.507	0.50285	0.50209	0.49812
____ MG	25.19707	5,778.41	0.096	25.16972	25.20641	25.21508
____ MN	0.49363	32,270.85	0.150	0.49344	0.49301	0.49445
____ MO	0.48749	1,639.41	0.372	0.48657	0.48633	0.48958
____ NA	25.26731	16,943.42	0.474	25.40533	25.19168	25.20493
____ NI	0.49225	844.83	0.268	0.49073	0.49291	0.49311
____ P	0.49489	258.73	0.742	0.49182	0.49389	0.49896
____ PB	0.48746	692.08	0.048	0.48734	0.48773	0.48731
____ S	24.93347	4,173.49	0.192	24.92783	24.88870	24.98389
____ SB	0.47334	288.33	0.438	0.47447	0.47095	0.47461
____ SE	0.49061	238.33	0.397	0.48986	0.48914	0.49281
____ SI	25.21927	742.73	0.239	25.27322	25.23018	25.15442
____ SN	0.48161	285.64	0.805	0.48298	0.47724	0.48462
____ SR	0.49318	300,990.94	0.859	0.49094	0.49807	0.49053
____ TH	0.39577	59.67	13.013	0.40153	0.44414	0.34163
____ TI	0.50545	23,372.23	0.109	0.50607	0.50525	0.50502
____ TL	0.49692	366.79	0.523	0.49494	0.49596	0.49986
____ V	0.51069	4,896.80	0.407	0.50857	0.51272	0.51077
____ W	0.48772	478.69	0.481	0.48503	0.48934	0.48879
____ Y1	6601.09496	6,601.09	0.036	6602.07514	6602.79609	6598.41365
____ Y2A	185233.66455	185,233.66	0.350	184943.00000	184781.67367	185976.31998
____ Y2R	4032.46891	4,032.47	0.619	4004.02115	4042.60774	4050.77782
____ ZN	0.49243	6,430.30	0.175	0.49248	0.49155	0.49327
____ ZR	0.50053	213.32	2.557	0.50397	0.48636	0.51126

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 11

Date/Time: 11/12/2018 10:19

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00013	-23.31	1346.979	0.00187	-0.00149	-0.00001
____ AL	0.09712	3.43	168.615	0.28568	0.01515	-0.00947
____ AS	0.00475	3.26	99.498	0.00218	0.01020	0.00187
____ B	0.00046	0.82	81.309	0.00089	0.00022	0.00027
____ BA	-0.00002	111.68	125.283	0.00000	-0.00001	-0.00006
____ BE	0.00033	-251.67	6.250	0.00035	0.00032	0.00032
____ CA	0.01279	10.77	131.105	0.01623	0.02756	-0.00543
____ CD	-0.00004	-2.94	75.585	-0.00006	-0.00001	-0.00006
____ CO	-0.00012	7.49	172.760	-0.00004	0.00004	-0.00036
____ CR	0.00027	-21.79	144.713	0.00058	-0.00016	0.00038
____ CU	-0.00239	-72.69	18.807	-0.00290	-0.00203	-0.00225
____ FE	0.04012	0.17	105.840	0.05426	-0.00761	0.07370
____ K	0.03952	174.95	125.517	-0.00693	0.09177	0.03373
____ LI	0.00372	47.18	34.841	0.00337	0.00263	0.00515
____ MG	0.00959	0.27	98.356	0.01273	-0.00101	0.01703
____ MN	0.00006	0.72	101.210	0.00010	0.00007	-0.00001
____ MO	0.00006	-0.20	452.259	0.00037	-0.00002	-0.00016
____ NA	0.00168	-96.50	1360.208	-0.02115	0.02441	0.00176
____ NI	0.00254	19.33	27.772	0.00190	0.00330	0.00242
____ P	0.00018	-0.59	808.551	0.00110	-0.00145	0.00088
____ PB	0.00071	3.33	39.267	0.00068	0.00100	0.00044
____ S	0.00599	-1.90	108.975	0.00308	0.00142	0.01346
____ SB	-0.00111	2.68	149.957	-0.00101	0.00050	-0.00282
____ SE	-0.00147	2.97	197.276	-0.00430	-0.00159	0.00148
____ SI	-0.01572	-0.16	133.147	-0.03801	0.00353	-0.01269
____ SN	-0.00046	1.22	256.098	0.00041	-0.00181	0.00002
____ SR	0.00002	-24.17	70.200	0.00001	0.00003	0.00001
____ TH	0.04482	19.05	128.533	0.08382	-0.02135	0.07200
____ TI	0.00028	-4.80	33.823	0.00019	0.00027	0.00037
____ TL	0.00367	-0.19	22.093	0.00453	0.00293	0.00355
____ V	-0.00117	-27.09	9.724	-0.00116	-0.00129	-0.00106
____ W	0.00004	0.21	107.170	0.00000	0.00008	0.00003
____ Y1	6677.22673	6,677.23	0.274	6676.74612	6659.18897	6695.74511
____ Y2A	188991.70595	188,991.71	0.529	190113.33000	188665.14577	188196.64209
____ Y2R	4042.27333	4,042.27	0.783	4014.81000	4076.86000	4035.15000
____ ZN	-0.00050	3.90	41.223	-0.00063	-0.00060	-0.00026
____ ZR	0.00384	3.18	25.908	0.00366	0.00492	0.00295

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 12 Date/Time: 11/12/2018 10:22

Sample Number: **PBW** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00020	-18.43	313.723	0.00044	-0.00051	0.00065
____ AL	0.10415	3.63	173.928	0.27906	-0.08264	0.11603
____ AS	0.00366	3.07	82.821	0.00300	0.00101	0.00696
____ B	-0.00052	-7.63	97.552	-0.00071	0.00006	-0.00089
____ BA	-0.00005	100.93	84.887	-0.00009	-0.00006	0.00000
____ BE	0.00035	-252.35	2.958	0.00036	0.00034	0.00036
____ CA	0.00719	9.95	137.717	0.01019	-0.00386	0.01524
____ CD	-0.00008	-3.72	82.720	-0.00015	-0.00002	-0.00007
____ CO	-0.00010	7.79	442.695	0.00008	0.00021	-0.00057
____ CR	0.00367	13.18	5.139	0.00348	0.00369	0.00386
____ CU	-0.00053	-63.61	94.590	-0.00103	-0.00002	-0.00055
____ FE	0.01307	-0.97	124.595	0.03111	-0.00053	0.00862
____ K	0.05332	184.38	101.299	0.04574	0.11073	0.00350
____ LI	0.00094	35.13	246.865	0.00228	0.00226	-0.00173
____ MG	0.01512	1.60	36.553	0.02018	0.00922	0.01594
____ MN	0.00272	184.49	1.597	0.00271	0.00268	0.00276
____ MO	-0.00004	-0.55	489.476	0.00009	-0.00024	0.00005
____ NA	0.02667	-82.08	68.906	0.04524	0.02627	0.00850
____ NI	0.01116	34.88	3.418	0.01111	0.01080	0.01156
____ P	-0.00014	-0.73	294.806	-0.00033	0.00034	-0.00044
____ PB	0.00061	3.27	176.900	0.00154	-0.00058	0.00088
____ S	-0.00136	-3.23	43.694	-0.00112	-0.00204	-0.00093
____ SB	0.00056	3.81	602.406	-0.00029	-0.00232	0.00430
____ SE	-0.00162	2.97	71.395	-0.00033	-0.00196	-0.00256
____ SI	-0.01664	-0.19	191.125	-0.03115	0.01983	-0.03858
____ SN	-0.00028	1.37	420.115	0.00057	0.00019	-0.00159
____ SR	0.00003	-19.28	122.197	0.00005	-0.00001	0.00004
____ TH	0.02763	17.60	25.199	0.03350	0.02946	0.01994
____ TI	0.00018	-9.81	188.812	0.00051	-0.00016	0.00018
____ TL	0.00407	0.12	22.325	0.00427	0.00486	0.00308
____ V	-0.00115	-28.07	16.631	-0.00134	-0.00116	-0.00096
____ W	-0.00095	-0.75	52.916	-0.00085	-0.00050	-0.00149
____ Y1	6841.43961	6,841.44	1.214	6866.97849	6908.71202	6748.62831
____ Y2A	196001.66994	196,001.67	0.503	196884.17317	196184.19529	194936.64137
____ Y2R	4163.33000	4,163.33	0.664	4140.24000	4193.97000	4155.78000
____ ZN	0.00049	17.76	28.805	0.00064	0.00047	0.00036
____ ZR	0.00646	4.03	74.327	0.01173	0.00233	0.00532

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 13 Date/Time: 11/12/2018 10:25

Sample Number: **LCSW** Class: **** Batch: 183131063501

Initial Vol: 1.00 Final Vol: 1.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.05048	699.63	1.973	0.05033	0.04957	0.05155
____ AL	2.04460	41.51	3.772	2.11894	1.96497	2.04987
____ AS	0.16061	41.37	1.424	0.15797	0.16191	0.16195
____ B	1.86352	15,177.83	0.539	1.86696	1.85221	1.87140
____ BA	2.06949	1,094,987.54	2.107	2.08054	2.02142	2.10652
____ BE	0.04913	18,900.95	0.383	0.04906	0.04899	0.04935
____ CA	4.17051	845.31	0.511	4.15090	4.19316	4.16746
____ CD	0.05157	904.87	0.416	0.05133	0.05172	0.05168
____ CO	0.52127	1,871.47	0.227	0.52005	0.52136	0.52241
____ CR	0.20574	2,101.56	0.854	0.20731	0.20384	0.20608
____ CU	0.25113	1,735.21	1.130	0.25438	0.24914	0.24987
____ FE	1.02243	41.76	2.775	1.04884	1.02602	0.99244
____ K	10.30605	3,320.96	1.512	10.14709	10.45847	10.31259
____ LI	1.02003	4,987.60	0.261	1.02137	1.02177	1.01696
____ MG	2.08337	495.87	0.831	2.06370	2.09627	2.09013
____ MN	0.52373	35,633.99	0.445	0.52409	0.52124	0.52586
____ MO	2.04083	7,050.48	0.194	2.03635	2.04388	2.04227
____ NA	10.23221	7,033.67	0.074	10.23450	10.23842	10.22371
____ NI	0.53927	949.98	0.507	0.53666	0.54211	0.53904
____ P	1.00890	544.88	0.658	1.00175	1.01487	1.01009
____ PB	0.15285	218.45	0.804	0.15322	0.15385	0.15148
____ S	1.05972	179.35	0.510	1.05358	1.06378	1.06180
____ SB	0.52951	311.75	0.112	0.52986	0.52882	0.52984
____ SE	0.15018	76.82	2.170	0.14644	0.15175	0.15236
____ SI	0.94221	32.43	3.087	0.90863	0.95804	0.95995
____ SN	4.00576	2,429.04	0.275	3.99305	4.01251	4.01171
____ SR	1.05418	669,036.03	0.842	1.05343	1.04570	1.06340
____ TH	-0.03665	9.91	133.935	-0.02870	-0.08923	0.00798
____ TI	1.02828	49,526.85	0.366	1.03120	1.02404	1.02960
____ TL	0.16440	123.38	1.721	0.16233	0.16324	0.16762
____ V	0.52131	4,965.73	0.602	0.52460	0.51834	0.52100
____ W	-0.00345	3.44	39.502	-0.00311	-0.00495	-0.00229
____ Y1	6779.96264	6,779.96	0.075	6774.92507	6779.81070	6785.15214
____ Y2A	192871.86669	192,871.87	1.258	192889.86244	195290.06180	190435.67584
____ Y2R	4168.87510	4,168.88	0.621	4189.01757	4177.93296	4139.67478
____ ZN	0.51267	6,848.13	0.181	0.51164	0.51344	0.51293
____ ZR	1.02757	434.79	1.063	1.01841	1.03966	1.02465

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 14 Date/Time: 11/12/2018 10:27

Sample Number: **9882790** Class: U*** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00106	-10.67	88.096	0.00002	-0.00165	-0.00155
____ AL	0.07869	2.94	323.976	0.32688	0.09166	-0.18248
____ AS	0.04469	12.35	6.913	0.04149	0.04765	0.04492
____ B	0.18376	1,389.77	0.705	0.18513	0.18360	0.18256
____ BA	0.08140	40,221.55	0.371	0.08175	0.08121	0.08125
____ BE	0.00023	-277.16	8.490	0.00021	0.00022	0.00025
____ CA	228.37597	44,230.31	1.392	231.37276	228.71321	225.04193
____ CD	-0.00002	-2.45	395.672	-0.00010	-0.00001	0.00006
____ CO	0.00067	9.88	30.204	0.00083	0.00044	0.00075
____ CR	0.00456	20.60	14.581	0.00446	0.00395	0.00527
____ CU	0.00372	-5.11	42.765	0.00372	0.00213	0.00531
____ FE	0.03037	-0.23	125.189	0.03828	0.06381	-0.01098
____ K	4.03183	1,367.98	0.926	4.00740	4.07478	4.01329
____ LI	0.01527	138.57	11.167	0.01506	0.01708	0.01369
____ MG	54.86065	12,571.69	0.890	55.35216	54.85373	54.37606
____ MN	3.49024	221,173.74	0.271	3.50113	3.48426	3.48533
____ MO	0.01251	40.45	1.645	0.01231	0.01249	0.01272
____ NA	45.23397	30,683.15	1.401	45.72777	45.45498	44.51915
____ NI	0.01180	32.53	1.507	0.01165	0.01176	0.01200
____ P	0.29082	148.22	0.595	0.28926	0.29268	0.29052
____ PB	0.00364	7.75	51.271	0.00149	0.00469	0.00476
____ S	61.06398	9,927.47	0.076	61.09598	61.08516	61.01079
____ SB	-0.00038	2.90	726.834	0.00280	-0.00233	-0.00163
____ SE	0.00164	4.28	178.773	0.00105	0.00481	-0.00095
____ SI	14.56136	432.02	0.669	14.59818	14.63494	14.45096
____ SN	-0.00010	1.38	1197.820	-0.00069	0.00124	-0.00083
____ SR	2.00428	1,188,216.65	0.943	1.99731	1.98985	2.02567
____ TH	-0.05744	7.25	45.196	-0.04018	-0.04484	-0.08729
____ TI	0.00197	71.62	12.825	0.00191	0.00225	0.00176
____ TL	0.00441	1.98	33.759	0.00611	0.00375	0.00336
____ V	-0.00048	-21.89	123.294	-0.00062	-0.00098	0.00017
____ W	0.00077	0.96	101.808	-0.00005	0.00084	0.00150
____ Y1	6408.77329	6,408.77	0.110	6415.54090	6409.31092	6401.46804
____ Y2A	179611.32415	179,611.32	0.398	179836.95826	180185.52027	178811.49391
____ Y2R	4068.87327	4,068.87	0.654	4069.18396	4042.09214	4095.34373
____ ZN	0.00547	79.20	1.827	0.00557	0.00537	0.00548
____ ZR	0.00825	3.01	51.354	0.01197	0.00364	0.00912

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 15 Date/Time: 11/12/2018 10:30

Sample Number: **Z882790**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00091	-10.97	72.824	-0.00117	-0.00016	-0.00140
____ AL	0.01263	2.38	1127.189	0.05768	0.12701	-0.14681
____ AS	-0.00089	3.21	122.635	0.00036	-0.00137	-0.00167
____ B	0.00003	-4.54	2502.492	-0.00022	-0.00060	0.00092
____ BA	-0.00002	204.02	777.756	-0.00009	-0.00008	0.00012
____ BE	0.00026	-485.93	5.079	0.00027	0.00025	0.00026
____ CA	0.00430	13.98	341.395	-0.01220	0.00919	0.01591
____ CD	-0.00001	-4.10	412.067	-0.00007	0.00002	0.00002
____ CO	-0.00084	8.31	16.854	-0.00100	-0.00072	-0.00081
____ CR	0.00079	-28.63	48.128	0.00044	0.00074	0.00120
____ CU	0.00417	-67.64	31.601	0.00460	0.00269	0.00521
____ FE	0.04077	0.25	43.883	0.05413	0.04774	0.02045
____ K	-0.16535	172.50	29.912	-0.17145	-0.11313	-0.21149
____ LI	-0.00652	-1.55	22.867	-0.00491	-0.00785	-0.00680
____ MG	0.01189	1.33	46.346	0.01030	0.00734	0.01801
____ MN	0.00034	31.19	147.535	0.00008	0.00002	0.00093
____ MO	0.00044	1.84	23.110	0.00055	0.00036	0.00041
____ NA	0.02807	-119.72	48.172	0.04230	0.01538	0.02654
____ NI	-0.00354	15.00	3.170	-0.00361	-0.00341	-0.00360
____ P	0.00024	-0.37	107.104	0.00000	0.00052	0.00020
____ PB	-0.00103	1.36	95.267	-0.00217	-0.00036	-0.00058
____ S	0.01625	-0.24	53.851	0.02434	0.01746	0.00696
____ SB	-0.00079	4.83	107.605	-0.00135	0.00019	-0.00120
____ SE	-0.00421	2.78	7.374	-0.00385	-0.00444	-0.00433
____ SI	0.02201	1.51	121.155	0.02206	-0.00468	0.04866
____ SN	-0.00068	1.83	36.189	-0.00045	-0.00066	-0.00094
____ SR	0.00025	210.70	127.139	0.00004	0.00009	0.00061
____ TH	-0.06934	8.68	32.013	-0.07084	-0.04643	-0.09075
____ TI	0.00024	-11.37	37.813	0.00013	0.00029	0.00029
____ TL	0.00496	1.31	9.771	0.00520	0.00529	0.00441
____ V	0.00017	-25.98	102.654	-0.00003	0.00028	0.00025
____ W	0.00053	1.16	76.726	0.00061	0.00089	0.00009
____ Y1	11207.22478	11,207.22	2.592	11542.39297	11029.50792	11049.77345
____ Y2A	329648.31123	329,648.31	1.671	323398.27586	331756.38650	333790.27134
____ Y2R	6147.54000	6,147.54	7.906	5930.42000	5807.90000	6704.30000
____ ZN	-0.00063	3.01	10.772	-0.00060	-0.00059	-0.00071
____ ZR	0.00450	1.78	39.363	0.00360	0.00654	0.00336

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 16 Date/Time: 11/12/2018 10:33

Sample Number: **9882793** Class: D*** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00099	-16.62	175.199	-0.00024	-0.00298	0.00024
____ AL	0.21388	5.37	28.193	0.23245	0.26272	0.14648
____ AS	0.04462	12.27	6.897	0.04207	0.04376	0.04804
____ B	0.17944	1,344.40	0.851	0.17989	0.17774	0.18070
____ BA	0.08117	39,734.44	0.066	0.08123	0.08112	0.08116
____ BE	0.00022	-277.85	12.098	0.00019	0.00024	0.00022
____ CA	229.83130	43,674.89	0.893	232.04855	229.44783	227.99753
____ CD	-0.00008	-3.43	68.425	-0.00012	-0.00010	-0.00002
____ CO	0.00039	8.87	35.228	0.00028	0.00034	0.00054
____ CR	0.00536	28.01	13.370	0.00472	0.00613	0.00522
____ CU	0.00230	-11.41	115.235	0.00192	0.00512	-0.00014
____ FE	0.02688	-0.37	52.936	0.04085	0.01240	0.02740
____ K	4.03254	1,342.39	3.312	4.18674	3.95542	3.95547
____ LI	0.01632	141.39	39.907	0.01176	0.01342	0.02378
____ MG	55.24168	12,419.87	0.965	55.59099	55.50621	54.62785
____ MN	3.50061	219,770.84	0.156	3.49503	3.50591	3.50087
____ MO	0.01196	38.47	0.856	0.01206	0.01195	0.01186
____ NA	45.67681	30,404.41	0.806	46.06916	45.62225	45.33902
____ NI	0.01459	36.92	2.559	0.01470	0.01490	0.01418
____ P	0.29069	147.33	1.080	0.28730	0.29128	0.29349
____ PB	0.00233	5.99	18.066	0.00188	0.00241	0.00271
____ S	61.35008	9,924.20	0.196	61.39898	61.43832	61.21295
____ SB	-0.00240	1.72	66.527	-0.00363	-0.00297	-0.00059
____ SE	0.00074	3.85	629.241	0.00531	-0.00396	0.00087
____ SI	14.61605	425.53	0.271	14.63604	14.64162	14.57049
____ SN	-0.00063	1.07	216.481	-0.00220	-0.00005	0.00035
____ SR	1.99763	1,173,342.62	0.219	1.99330	2.00204	1.99756
____ TH	-0.02946	10.37	250.243	-0.00557	-0.11216	0.02935
____ TI	0.00189	67.30	10.321	0.00168	0.00206	0.00194
____ TL	0.00495	2.36	12.840	0.00452	0.00568	0.00465
____ V	-0.00039	-20.48	123.212	0.00009	-0.00086	-0.00039
____ W	0.00108	1.26	29.369	0.00117	0.00073	0.00135
____ Y1	6376.77151	6,376.77	0.273	6396.82709	6368.12125	6365.36618
____ Y2A	177944.40991	177,944.41	0.453	178751.87363	177141.49191	177939.86419
____ Y2R	3992.80293	3,992.80	1.444	3945.83001	3975.43877	4057.14001
____ ZN	0.00576	82.51	1.234	0.00570	0.00573	0.00583
____ ZR	0.00954	3.99	101.385	0.01293	0.01705	-0.00137

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 17 Date/Time: 11/12/2018 10:36

Sample Number: **9882791** Class: R*** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.05178	647.38	2.134	0.05051	0.05231	0.05252
____ AL	2.04108	40.11	11.157	2.22006	1.78477	2.11842
____ AS	0.20193	48.13	1.244	0.20228	0.19925	0.20424
____ B	2.09752	15,782.39	0.773	2.08607	2.09041	2.11607
____ BA	2.12527	1,039,019.14	1.248	2.13139	2.09621	2.14821
____ BE	0.05034	17,899.94	0.907	0.05013	0.05003	0.05086
____ CA	226.44588	43,373.25	1.116	227.66840	223.53985	228.12938
____ CD	0.05090	835.18	0.328	0.05080	0.05081	0.05110
____ CO	0.50477	1,695.33	0.343	0.50572	0.50278	0.50582
____ CR	0.20950	1,977.44	1.667	0.20754	0.20742	0.21353
____ CU	0.25115	1,641.37	1.465	0.24979	0.24834	0.25531
____ FE	1.03585	40.86	2.941	1.04366	1.06165	1.00223
____ K	14.50747	4,446.16	0.469	14.56790	14.52078	14.43372
____ LI	1.04855	4,982.91	0.623	1.05385	1.05055	1.04125
____ MG	55.53616	12,581.92	1.209	55.56802	54.84962	56.19082
____ MN	3.89960	245,157.18	0.558	3.90154	3.87694	3.92032
____ MO	2.08553	6,737.55	0.117	2.08754	2.08622	2.08282
____ NA	54.43954	36,537.22	1.119	54.85729	53.74053	54.72078
____ NI	0.52352	861.67	0.099	0.52293	0.52389	0.52375
____ P	1.34414	678.82	0.105	1.34572	1.34300	1.34369
____ PB	0.14890	199.46	2.156	0.14530	0.15147	0.14992
____ S	60.84489	9,785.94	0.100	60.84975	60.78148	60.90343
____ SB	0.52783	290.12	0.264	0.52939	0.52738	0.52671
____ SE	0.15546	74.24	1.387	0.15745	0.15575	0.15317
____ SI	15.25444	450.96	0.511	15.31868	15.27697	15.16767
____ SN	3.98806	2,261.45	0.047	3.98702	3.98696	3.99020
____ SR	2.94323	1,729,330.48	0.995	2.92525	2.92741	2.97702
____ TH	0.02199	16.31	225.237	0.01452	-0.02338	0.07484
____ TI	1.05130	46,781.37	0.778	1.05861	1.04246	1.05283
____ TL	0.15569	110.71	0.933	0.15728	0.15444	0.15534
____ V	0.53872	4,745.02	1.357	0.53784	0.53189	0.54643
____ W	-0.00259	4.10	29.205	-0.00253	-0.00186	-0.00337
____ Y1	6340.17365	6,340.17	0.319	6359.25161	6342.32998	6318.93934
____ Y2A	178191.43561	178,191.44	0.710	177615.91363	179641.67333	177316.71987
____ Y2R	4023.90958	4,023.91	1.387	4002.41421	4087.26019	3982.05436
____ ZN	0.51926	6,484.48	0.082	0.51891	0.51973	0.51913
____ ZR	1.02717	420.67	0.724	1.02505	1.03544	1.02103

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 18 Date/Time: 11/12/2018 10:39

Sample Number: **9882792** Class: M*** Batch: 183131063501

Initial Vol: 25.00 Final Vol: 25.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.05236	644.09	4.096	0.05428	0.05004	0.05276
____ AL	2.38526	45.72	6.218	2.50444	2.21918	2.43218
____ AS	0.19923	47.32	1.095	0.19920	0.20143	0.19707
____ B	2.13621	15,876.07	0.177	2.13820	2.13857	2.13185
____ BA	2.14808	1,037,294.23	0.516	2.16080	2.14299	2.14047
____ BE	0.05100	17,917.09	0.327	0.05102	0.05116	0.05083
____ CA	232.22694	43,793.13	0.384	233.09417	231.31411	232.27253
____ CD	0.05139	839.78	0.293	0.05157	0.05132	0.05129
____ CO	0.50818	1,699.79	0.158	0.50879	0.50847	0.50727
____ CR	0.21265	1,982.94	0.542	0.21278	0.21373	0.21144
____ CU	0.25522	1,650.26	1.145	0.25288	0.25850	0.25429
____ FE	1.07212	41.69	3.323	1.03773	1.10887	1.06977
____ K	14.78288	4,458.33	0.408	14.79406	14.71782	14.83676
____ LI	1.06599	4,988.17	0.237	1.06371	1.06870	1.06555
____ MG	56.87927	12,685.12	0.712	57.33490	56.74148	56.56143
____ MN	4.00546	248,717.29	0.185	4.00045	4.01397	4.00196
____ MO	2.10595	6,775.70	0.147	2.10696	2.10843	2.10247
____ NA	55.85118	36,918.60	0.437	56.10896	55.62404	55.82055
____ NI	0.52626	862.52	0.382	0.52801	0.52669	0.52406
____ P	1.34745	677.66	0.294	1.35201	1.34480	1.34553
____ PB	0.15127	201.91	0.731	0.15080	0.15254	0.15048
____ S	62.04859	9,938.81	0.024	62.03697	62.06554	62.04326
____ SB	0.53758	294.38	0.660	0.54159	0.53488	0.53625
____ SE	0.15524	73.84	1.811	0.15350	0.15848	0.15373
____ SI	15.60800	454.31	0.732	15.65049	15.47860	15.69492
____ SN	4.01584	2,267.86	0.283	4.02892	4.01022	4.00838
____ SR	2.98514	1,732,437.72	0.893	2.98255	3.01301	2.95987
____ TH	0.03488	17.57	96.684	0.07314	0.00950	0.02199
____ TI	1.06637	46,869.35	0.037	1.06658	1.06661	1.06592
____ TL	0.15559	110.24	0.986	0.15705	0.15399	0.15572
____ V	0.54876	4,777.07	0.580	0.54834	0.55213	0.54580
____ W	-0.00197	4.70	61.042	-0.00067	-0.00304	-0.00219
____ Y1	6314.25334	6,314.25	0.558	6273.85932	6330.52519	6338.37550
____ Y2A	175996.51332	175,996.51	0.129	175753.65124	176034.61922	176201.26949
____ Y2R	3962.49741	3,962.50	0.175	3955.56777	3962.45004	3969.47442
____ ZN	0.52368	6,512.85	0.193	0.52435	0.52418	0.52252
____ ZR	1.05229	424.58	0.776	1.05629	1.04290	1.05769

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 19 Date/Time: 11/12/2018 10:42

Sample Number: **9882790** Class: UL** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 5.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00176	-22.47	49.281	-0.00078	-0.00243	-0.00207
____ AL	0.21138	5.27	60.157	0.07006	0.31657	0.24752
____ AS	0.01404	5.41	25.566	0.01167	0.01227	0.01816
____ B	0.03970	306.46	2.429	0.03891	0.03941	0.04077
____ BA	0.01628	8,376.92	0.803	0.01642	0.01616	0.01627
____ BE	0.00031	-254.24	12.721	0.00035	0.00029	0.00028
____ CA	45.57180	8,718.31	1.063	45.78355	45.01773	45.91411
____ CD	-0.00002	-2.56	136.791	-0.00001	-0.00006	0.00000
____ CO	-0.00024	6.99	245.670	-0.00024	0.00035	-0.00083
____ CR	0.00095	-14.55	54.949	0.00155	0.00061	0.00068
____ CU	-0.00098	-64.62	15.494	-0.00103	-0.00110	-0.00081
____ FE	0.02267	-0.53	76.128	0.03954	0.02342	0.00505
____ K	0.81269	397.85	5.417	0.76519	0.85212	0.82075
____ LI	0.00182	44.69	186.786	-0.00209	0.00410	0.00346
____ MG	11.20603	2,546.59	0.641	11.18428	11.28626	11.14753
____ MN	0.70331	45,858.77	0.070	0.70278	0.70375	0.70339
____ MO	0.00311	10.02	29.357	0.00270	0.00415	0.00247
____ NA	8.95197	5,861.90	0.760	9.01154	8.87786	8.96652
____ NI	0.00296	19.49	19.873	0.00256	0.00269	0.00364
____ P	0.05725	29.59	0.706	0.05679	0.05750	0.05747
____ PB	0.00158	4.66	189.102	-0.00178	0.00391	0.00260
____ S	11.88837	1,979.69	0.339	11.86768	11.93480	11.86264
____ SB	-0.00070	2.86	431.665	0.00111	0.00097	-0.00417
____ SE	-0.00134	2.98	182.818	0.00056	-0.00411	-0.00048
____ SI	2.84425	82.77	2.006	2.77842	2.87534	2.87899
____ SN	0.00104	2.09	97.738	-0.00001	0.00201	0.00112
____ SR	0.40685	248,172.28	1.005	0.40964	0.40875	0.40216
____ TH	-0.04682	8.34	88.166	-0.00578	-0.08833	-0.04634
____ TI	0.00246	95.85	3.013	0.00240	0.00254	0.00243
____ TL	0.00456	0.81	27.001	0.00431	0.00590	0.00348
____ V	-0.00104	-26.52	29.447	-0.00127	-0.00117	-0.00069
____ W	0.00118	1.33	25.109	0.00112	0.00150	0.00092
____ Y1	6572.00482	6,572.00	0.757	6517.76364	6615.52276	6582.72806
____ Y2A	184829.46337	184,829.46	0.318	185503.64708	184418.20272	184566.54030
____ Y2R	3979.25197	3,979.25	0.755	4008.67703	3948.59253	3980.48635
____ ZN	0.00075	19.95	36.295	0.00046	0.00100	0.00080
____ ZR	0.00718	2.71	127.506	0.00682	0.01651	-0.00179

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 20 Date/Time: 11/12/2018 10:45

Sample Number: **9882788** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00004	-27.16	4303.963	0.00177	-0.00033	-0.00156
____ AL	2.78987	51.41	6.844	2.71682	2.64625	3.00654
____ AS	0.00913	4.14	16.707	0.00829	0.01089	0.00822
____ B	0.43511	3,406.67	0.529	0.43750	0.43492	0.43290
____ BA	0.10018	48,886.57	0.389	0.10038	0.09973	0.10042
____ BE	0.00037	-221.67	9.680	0.00041	0.00034	0.00036
____ CA	197.59479	37,319.59	0.373	196.84761	198.32287	197.61388
____ CD	0.00052	11.37	12.220	0.00057	0.00054	0.00045
____ CO	0.00134	12.54	14.488	0.00129	0.00156	0.00118
____ CR	0.00581	32.31	4.603	0.00594	0.00599	0.00551
____ CU	0.00251	-8.83	96.578	-0.00024	0.00344	0.00434
____ FE	10.35903	414.44	0.050	10.36290	10.36108	10.35310
____ K	5.95332	1,890.43	1.261	5.87274	6.02129	5.96594
____ LI	0.03595	225.71	4.336	0.03766	0.03559	0.03461
____ MG	47.40593	10,603.23	0.358	47.25134	47.58764	47.37880
____ MN	0.72930	45,676.88	0.125	0.72957	0.72828	0.73005
____ MO	0.00100	2.85	25.815	0.00128	0.00092	0.00078
____ NA	42.97810	28,380.83	0.196	42.94545	43.07360	42.91524
____ NI	0.01609	39.33	7.030	0.01595	0.01729	0.01504
____ P	0.74793	380.91	1.165	0.75133	0.75443	0.73803
____ PB	0.00469	10.36	6.052	0.00463	0.00444	0.00500
____ S	72.10747	11,704.61	0.796	72.43454	72.44349	71.44437
____ SB	-0.00105	2.64	122.893	0.00030	-0.00118	-0.00227
____ SE	0.00093	3.95	218.279	0.00320	0.00031	-0.00071
____ SI	23.42913	676.65	0.610	23.45765	23.27405	23.55569
____ SN	0.00062	1.79	111.910	-0.00006	0.00059	0.00133
____ SR	1.79855	1,053,591.90	0.387	1.79882	1.79145	1.80536
____ TH	0.02968	17.00	249.412	0.10271	0.03165	-0.04531
____ TI	0.05856	2,580.21	2.667	0.06017	0.05847	0.05705
____ TL	0.00379	0.25	43.761	0.00413	0.00199	0.00525
____ V	0.00453	29.92	8.855	0.00446	0.00416	0.00495
____ W	0.00177	1.95	70.988	0.00312	0.00063	0.00157
____ Y1	6398.64079	6,398.64	0.375	6394.67071	6376.91079	6424.34088
____ Y2A	177496.30540	177,496.31	0.295	177779.57000	177818.16913	176891.17706
____ Y2R	3961.62880	3,961.63	0.820	3994.67000	3929.69062	3960.52579
____ ZN	0.00909	134.89	1.208	0.00916	0.00897	0.00915
____ ZR	0.00328	2.62	191.227	0.00366	-0.00317	0.00934

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 21 Date/Time: 11/12/2018 10:48

Sample Number: **9882789** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00015	-18.45	865.456	-0.00142	-0.00015	0.00113
____ AL	0.13759	4.09	125.704	0.16352	0.29612	-0.04687
____ AS	0.00755	3.75	30.653	0.00488	0.00905	0.00871
____ B	0.21957	1,641.23	1.792	0.21586	0.21915	0.22369
____ BA	0.18067	88,041.54	0.053	0.18058	0.18067	0.18077
____ BE	0.00023	-273.17	10.778	0.00023	0.00025	0.00020
____ CA	208.78214	39,444.50	0.640	209.68315	207.24575	209.41751
____ CD	0.00023	1.61	42.612	0.00014	0.00021	0.00033
____ CO	0.00197	14.11	30.083	0.00205	0.00134	0.00251
____ CR	0.00398	14.87	2.581	0.00390	0.00395	0.00410
____ CU	-0.00029	-26.64	118.383	-0.00062	-0.00031	0.00006
____ FE	0.04632	0.42	43.039	0.04082	0.02971	0.06843
____ K	5.20345	1,673.97	1.139	5.13937	5.21468	5.25632
____ LI	0.02631	183.02	6.624	0.02442	0.02667	0.02784
____ MG	49.34880	11,040.43	0.398	49.45636	49.12200	49.46806
____ MN	4.17975	261,631.31	0.861	4.19180	4.20817	4.13929
____ MO	0.01367	43.87	9.751	0.01302	0.01278	0.01520
____ NA	43.09711	28,484.13	0.694	43.23868	42.75331	43.29935
____ NI	0.01629	39.61	1.322	0.01628	0.01608	0.01651
____ P	0.36552	184.61	0.142	0.36494	0.36593	0.36570
____ PB	0.00318	7.06	69.883	0.00459	0.00062	0.00433
____ S	58.37602	9,410.55	0.044	58.39260	58.34659	58.38887
____ SB	-0.00031	2.91	245.002	-0.00067	0.00056	-0.00080
____ SE	0.00559	6.04	62.476	0.00242	0.00933	0.00501
____ SI	13.91535	402.33	0.707	13.92733	13.81148	14.00723
____ SN	0.00215	2.64	156.208	-0.00032	0.00079	0.00598
____ SR	1.90728	1,116,811.26	0.887	1.92670	1.89576	1.89937
____ TH	0.01877	15.73	198.801	-0.01323	0.00978	0.05975
____ TI	0.00230	85.10	9.135	0.00213	0.00223	0.00253
____ TL	0.00613	3.52	7.413	0.00582	0.00592	0.00665
____ V	0.01388	112.71	1.421	0.01369	0.01386	0.01408
____ W	-0.00039	-0.15	438.386	0.00012	0.00101	-0.00231
____ Y1	6354.87959	6,354.88	0.283	6374.95501	6340.36618	6349.31758
____ Y2A	177421.51712	177,421.52	0.590	177211.12443	176495.66693	178557.76000
____ Y2R	3965.10193	3,965.10	0.766	3976.60936	3988.04868	3930.64774
____ ZN	0.00389	59.18	7.355	0.00369	0.00377	0.00422
____ ZR	0.00974	4.98	72.468	0.00999	0.00255	0.01666

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 22

Date/Time: 11/12/2018 10:51

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.50121	5,923.97	0.245	0.50010	0.50099	0.50253
____ AL	25.30913	450.20	0.484	25.17781	25.32934	25.42024
____ AS	0.50053	117.80	0.718	0.49951	0.49756	0.50452
____ B	0.48421	4,016.97	1.289	0.47913	0.49117	0.48232
____ BA	0.50913	250,929.44	1.857	0.50580	0.50178	0.51980
____ BE	0.48945	178,483.76	0.365	0.48760	0.48957	0.49118
____ CA	25.53718	4,817.47	0.627	25.45242	25.72178	25.43733
____ CD	0.49987	8,332.56	0.128	0.49935	0.49968	0.50059
____ CO	0.49834	1,691.20	0.325	0.49683	0.49815	0.50005
____ CR	0.49601	4,748.95	1.006	0.49154	0.50139	0.49510
____ CU	0.50489	3,429.15	0.842	0.50054	0.50903	0.50510
____ FE	25.39407	1,003.62	0.705	25.28288	25.60054	25.29878
____ K	25.33389	7,440.01	0.296	25.41628	25.26928	25.31611
____ LI	0.49973	2,314.18	0.413	0.49879	0.49831	0.50209
____ MG	25.62464	5,707.58	0.215	25.58017	25.60756	25.68618
____ MN	0.50058	31,718.72	0.042	0.50048	0.50083	0.50045
____ MO	0.49364	1,614.82	0.636	0.49072	0.49324	0.49696
____ NA	25.37520	16,529.66	0.392	25.34540	25.29391	25.48627
____ NI	0.49816	831.48	0.511	0.49612	0.49734	0.50101
____ P	0.49881	253.40	0.509	0.49613	0.49912	0.50118
____ PB	0.49641	685.45	0.777	0.49211	0.49958	0.49753
____ S	25.20061	4,103.29	0.228	25.24860	25.21626	25.13698
____ SB	0.48418	286.83	0.464	0.48197	0.48646	0.48409
____ SE	0.49784	235.19	0.656	0.49463	0.50115	0.49774
____ SI	25.48114	728.97	0.316	25.47991	25.40117	25.56233
____ SN	0.48779	281.40	0.552	0.48532	0.48738	0.49066
____ SR	0.50707	299,922.29	0.823	0.50254	0.51075	0.50791
____ TH	0.49464	69.10	7.005	0.51055	0.51847	0.45489
____ TI	0.51159	22,928.05	0.316	0.51261	0.51245	0.50973
____ TL	0.50587	363.27	0.591	0.50277	0.50873	0.50612
____ V	0.51605	4,796.49	1.015	0.51292	0.52210	0.51312
____ W	0.49292	470.59	0.595	0.49054	0.49202	0.49620
____ Y1	6421.19385	6,421.19	0.315	6443.43919	6403.87561	6416.26675
____ Y2A	179527.13620	179,527.14	0.411	180378.37433	179130.12552	179072.90876
____ Y2R	3917.14123	3,917.14	0.542	3906.30874	3941.61335	3903.50160
____ ZN	0.49666	6,308.78	0.146	0.49584	0.49692	0.49722
____ ZR	0.50942	212.64	0.818	0.51069	0.50477	0.51281

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 23 Date/Time: 11/12/2018 10:53

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00148	-16.01	78.044	-0.00092	-0.00282	-0.00072
____ AL	0.05380	2.37	226.588	0.00140	0.19313	-0.03314
____ AS	0.00234	2.57	63.799	0.00309	0.00330	0.00062
____ B	0.00092	4.46	34.781	0.00110	0.00111	0.00055
____ BA	0.00013	186.87	178.274	-0.00004	0.00039	0.00004
____ BE	0.00046	-195.72	46.246	0.00034	0.00070	0.00034
____ CA	0.00753	9.28	349.747	0.00515	-0.01754	0.03498
____ CD	0.00012	-0.14	88.281	0.00020	0.00015	0.00000
____ CO	0.00069	9.89	15.976	0.00079	0.00071	0.00057
____ CR	0.00060	-17.84	105.126	-0.00013	0.00096	0.00097
____ CU	-0.00131	-74.09	115.760	-0.00158	0.00032	-0.00266
____ FE	0.04658	0.42	92.705	0.05756	-0.00103	0.08322
____ K	0.03949	166.93	126.674	0.08907	0.04038	-0.01097
____ LI	-0.00491	6.23	130.049	-0.01133	-0.00485	0.00144
____ MG	0.01036	0.43	143.975	-0.00652	0.01583	0.02176
____ MN	0.00072	41.70	111.824	0.00012	0.00164	0.00040
____ MO	-0.00015	-0.89	202.731	-0.00019	0.00017	-0.00044
____ NA	0.01537	-83.33	162.494	-0.00788	0.04178	0.01221
____ NI	0.00348	20.02	20.701	0.00352	0.00273	0.00417
____ P	0.00075	0.02	202.503	0.00246	0.00015	-0.00038
____ PB	-0.00073	1.22	377.558	-0.00007	-0.00377	0.00164
____ S	0.01691	-0.05	19.961	0.01820	0.01945	0.01308
____ SB	0.00042	3.47	730.516	-0.00133	0.00400	-0.00141
____ SE	-0.00126	2.94	150.784	-0.00074	0.00032	-0.00337
____ SI	0.00229	0.35	2890.113	0.00534	-0.06526	0.06678
____ SN	0.00031	1.61	375.242	-0.00023	0.00162	-0.00047
____ SR	0.00042	220.56	104.421	0.00007	0.00092	0.00028
____ TH	-0.05665	6.97	101.572	0.00090	-0.11418	-0.05668
____ TI	0.00037	-0.32	23.000	0.00033	0.00047	0.00031
____ TL	0.00385	-0.06	19.663	0.00298	0.00433	0.00424
____ V	-0.00069	-22.50	42.879	-0.00099	-0.00069	-0.00039
____ W	-0.00045	-0.25	136.509	0.00018	-0.00105	-0.00049
____ Y1	6390.11547	6,390.12	1.057	6461.93950	6380.48041	6327.92649
____ Y2A	182847.01673	182,847.02	0.530	183876.92462	182713.21885	181950.90674
____ Y2R	3858.61000	3,858.61	0.285	3858.46000	3869.68000	3847.69000
____ ZN	-0.00043	4.61	16.540	-0.00050	-0.00036	-0.00043
____ ZR	0.01429	5.23	40.053	0.02077	0.00991	0.01219

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 24 Date/Time: 11/12/2018 10:56

Sample Number: **9882794** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00081	-13.49	156.853	0.00021	-0.00041	-0.00222
____ AL	0.08814	3.09	286.362	-0.14423	0.35667	0.05197
____ AS	0.11372	27.96	2.148	0.11187	0.11280	0.11649
____ B	0.20862	1,545.42	1.116	0.20789	0.20674	0.21122
____ BA	0.11054	53,435.38	0.251	0.11054	0.11027	0.11083
____ BE	0.00022	-273.09	15.810	0.00025	0.00023	0.00018
____ CA	223.63888	42,169.62	0.412	224.14593	222.57568	224.19504
____ CD	0.00014	0.20	86.310	0.00023	0.00019	0.00000
____ CO	0.00169	13.15	31.720	0.00212	0.00109	0.00187
____ CR	0.00551	29.12	8.724	0.00545	0.00506	0.00602
____ CU	0.00150	-17.74	83.323	0.00036	0.00284	0.00131
____ FE	0.05695	0.85	36.238	0.06565	0.07181	0.03339
____ K	2.37517	850.09	3.096	2.43523	2.29315	2.39713
____ LI	0.00357	80.17	124.220	0.00758	-0.00120	0.00435
____ MG	56.38888	12,571.19	0.192	56.40028	56.49083	56.27552
____ MN	6.94815	431,069.62	0.679	6.89365	6.97496	6.97585
____ MO	0.01791	57.45	1.154	0.01770	0.01811	0.01794
____ NA	45.99160	30,368.14	0.719	46.07135	45.62855	46.27489
____ NI	0.01584	38.88	1.493	0.01573	0.01568	0.01611
____ P	0.51238	258.37	0.301	0.51392	0.51084	0.51236
____ PB	0.00134	4.47	82.683	0.00174	0.00219	0.00009
____ S	41.01291	6,590.76	0.033	41.00379	41.00630	41.02863
____ SB	-0.00393	0.75	20.595	-0.00393	-0.00473	-0.00312
____ SE	0.00406	5.33	56.438	0.00517	0.00143	0.00560
____ SI	12.49730	360.94	0.584	12.55654	12.41575	12.51960
____ SN	0.00001	1.42	2394.286	0.00101	-0.00107	0.00008
____ SR	1.87064	1,085,946.06	1.131	1.89415	1.85313	1.86463
____ TH	-0.03139	10.03	167.302	0.02919	-0.06393	-0.05943
____ TI	0.00182	63.51	5.470	0.00187	0.00171	0.00189
____ TL	0.00603	4.71	20.299	0.00683	0.00462	0.00665
____ V	0.00023	-15.36	214.877	-0.00017	0.00079	0.00008
____ W	0.00058	0.75	238.708	-0.00024	0.00218	-0.00020
____ Y1	6335.71987	6,335.72	0.312	6314.47710	6339.11059	6353.57190
____ Y2A	175846.43351	175,846.43	0.285	176296.09703	175936.84368	175306.35982
____ Y2R	3960.37788	3,960.38	0.055	3957.94094	3962.16594	3961.02677
____ ZN	0.00286	46.21	2.149	0.00280	0.00292	0.00287
____ ZR	0.01557	6.37	14.523	0.01793	0.01342	0.01534

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 25 Date/Time: 11/12/2018 10:59

Sample Number: **9882795** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00146	-22.20	84.193	-0.00125	-0.00035	-0.00278
____ AL	0.17612	4.69	95.649	0.23757	-0.01443	0.30523
____ AS	0.11755	28.77	4.077	0.12262	0.11693	0.11309
____ B	0.20872	1,564.10	1.331	0.20624	0.20821	0.21172
____ BA	0.11031	53,951.97	1.459	0.10845	0.11126	0.11120
____ BE	0.00021	-280.56	13.308	0.00024	0.00021	0.00018
____ CA	224.92534	42,794.41	0.581	225.36270	223.45515	225.95816
____ CD	-0.00005	-2.93	218.358	-0.00008	0.00007	-0.00014
____ CO	0.00191	13.85	21.526	0.00144	0.00209	0.00220
____ CR	0.00537	28.15	10.550	0.00486	0.00598	0.00527
____ CU	0.00266	-9.79	42.469	0.00330	0.00135	0.00332
____ FE	0.01591	-0.81	338.173	-0.04620	0.04813	0.04580
____ K	2.37107	856.64	0.135	2.37470	2.36983	2.36868
____ LI	0.00429	84.41	52.699	0.00187	0.00467	0.00635
____ MG	56.73588	12,761.83	0.746	56.91232	56.25290	57.04242
____ MN	6.93861	435,649.03	0.542	6.93740	6.97681	6.90163
____ MO	0.01801	57.63	2.228	0.01829	0.01819	0.01755
____ NA	46.10757	30,721.62	0.267	46.10924	45.98359	46.22987
____ NI	0.01450	36.62	4.498	0.01375	0.01480	0.01494
____ P	0.51405	258.66	0.464	0.51536	0.51549	0.51129
____ PB	0.00158	4.82	50.591	0.00238	0.00078	0.00159
____ S	41.02963	6,579.53	0.108	40.97869	41.05648	41.05372
____ SB	0.00025	3.19	1203.864	-0.00275	0.00331	0.00019
____ SE	0.00358	5.10	16.785	0.00290	0.00403	0.00381
____ SI	12.53699	365.37	0.702	12.44295	12.55053	12.61749
____ SN	-0.00003	1.40	3489.696	-0.00082	-0.00049	0.00122
____ SR	1.85655	1,090,686.90	1.253	1.83747	1.84974	1.88245
____ TH	-0.03056	10.22	39.410	-0.02819	-0.01988	-0.04362
____ TI	0.00201	72.47	17.242	0.00182	0.00241	0.00180
____ TL	0.00645	4.99	13.683	0.00701	0.00543	0.00690
____ V	0.00062	-11.92	165.834	0.00174	0.00035	-0.00024
____ W	0.00040	0.58	30.757	0.00029	0.00053	0.00037
____ Y1	6322.34870	6,322.35	0.125	6313.33733	6328.13582	6325.57295
____ Y2A	177958.57313	177,958.57	1.176	180343.35266	176427.50548	177104.86125
____ Y2R	3996.41023	3,996.41	0.741	4011.69661	4015.25390	3962.28018
____ ZN	0.00282	45.46	1.173	0.00284	0.00278	0.00284
____ ZR	0.00380	1.68	191.089	0.01219	-0.00047	-0.00032

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 26 Date/Time: 11/12/2018 11:02

Sample Number: **9882880** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00172	-18.51	69.009	-0.00121	-0.00307	-0.00086
____ AL	0.19020	4.86	33.917	0.15684	0.26456	0.14920
____ AS	0.00731	3.64	25.299	0.00903	0.00754	0.00535
____ B	0.01849	133.77	5.859	0.01969	0.01760	0.01816
____ BA	0.08744	42,117.96	0.312	0.08772	0.08717	0.08744
____ BE	0.00028	-250.27	8.821	0.00028	0.00026	0.00031
____ CA	85.55002	16,246.29	0.965	86.45771	84.84292	85.34943
____ CD	-0.00009	-3.62	16.426	-0.00011	-0.00008	-0.00010
____ CO	0.00045	8.90	89.281	0.00022	0.00021	0.00090
____ CR	0.00423	17.01	7.524	0.00388	0.00449	0.00432
____ CU	0.00073	-45.05	409.790	0.00147	0.00330	-0.00257
____ FE	0.02588	-0.40	133.447	0.03212	0.05686	-0.01135
____ K	2.52520	893.65	4.699	2.58892	2.59839	2.38829
____ LI	0.00277	55.05	87.153	0.00435	-0.00001	0.00397
____ MG	41.06228	9,199.58	0.740	41.34200	40.73927	41.10558
____ MN	0.00566	345.02	2.565	0.00559	0.00583	0.00556
____ MO	0.00017	0.16	261.300	0.00001	-0.00017	0.00067
____ NA	212.72947	140,790.77	1.153	215.27830	210.38370	212.52640
____ NI	0.01470	37.26	7.764	0.01602	0.01404	0.01405
____ P	0.00533	2.30	29.068	0.00391	0.00698	0.00510
____ PB	0.00103	3.75	20.969	0.00113	0.00118	0.00078
____ S	13.96626	2,216.26	0.352	13.91221	13.97842	14.00816
____ SB	-0.00112	2.54	383.263	-0.00483	0.00356	-0.00207
____ SE	-0.00046	3.23	465.016	-0.00158	0.00201	-0.00181
____ SI	4.36991	126.38	1.133	4.41419	4.31647	4.37905
____ SN	-0.00021	1.29	552.575	0.00010	-0.00147	0.00075
____ SR	0.17779	103,773.06	0.291	0.17759	0.17741	0.17838
____ TH	-0.05609	7.21	73.480	-0.05335	-0.09862	-0.01632
____ TI	0.00263	98.49	11.067	0.00234	0.00263	0.00292
____ TL	0.00284	-0.75	69.460	0.00401	0.00396	0.00056
____ V	-0.00156	-29.61	56.300	-0.00145	-0.00250	-0.00075
____ W	-0.00091	-0.62	116.919	-0.00151	0.00032	-0.00153
____ Y1	6261.47971	6,261.48	0.294	6269.81547	6274.26250	6240.36116
____ Y2A	175124.08279	175,124.08	0.226	175242.98421	175446.07079	174683.19336
____ Y2R	3959.93740	3,959.94	0.559	3943.37000	3985.09596	3951.34623
____ ZN	0.00329	50.82	4.370	0.00320	0.00321	0.00346
____ ZR	0.00604	2.06	18.263	0.00626	0.00701	0.00484

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 27 Date/Time: 11/12/2018 11:05

Sample Number: **9882881** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00252	-24.00	22.513	-0.00314	-0.00240	-0.00202
____ AL	0.41031	8.69	64.248	0.10827	0.52862	0.59404
____ AS	0.00737	3.67	41.653	0.01087	0.00512	0.00612
____ B	0.00886	66.11	5.074	0.00937	0.00861	0.00858
____ BA	0.12927	62,811.27	0.191	0.12928	0.12951	0.12902
____ BE	0.00026	-259.67	2.304	0.00027	0.00026	0.00027
____ CA	79.59915	15,002.45	0.517	79.97825	79.65812	79.16107
____ CD	-0.00011	-3.77	133.451	0.00002	-0.00027	-0.00007
____ CO	0.00066	9.67	125.292	0.00157	0.00042	-0.00002
____ CR	0.00502	24.60	7.719	0.00461	0.00537	0.00506
____ CU	0.00341	-30.30	27.847	0.00250	0.00440	0.00332
____ FE	0.22857	7.69	4.167	0.23943	0.22465	0.22163
____ K	4.00144	1,312.18	0.940	4.02498	3.95808	4.02126
____ LI	0.00216	50.95	177.154	-0.00162	0.00605	0.00206
____ MG	35.02806	7,801.67	0.860	35.01060	34.73589	35.33768
____ MN	0.01344	833.26	0.902	0.01330	0.01347	0.01354
____ MO	0.00166	4.92	3.272	0.00171	0.00160	0.00166
____ NA	112.14806	73,595.59	0.368	112.42431	112.34574	111.67412
____ NI	0.01607	39.47	3.539	0.01641	0.01638	0.01541
____ P	0.06616	32.81	1.702	0.06739	0.06589	0.06519
____ PB	0.00045	3.10	136.286	-0.00024	0.00064	0.00094
____ S	11.49139	1,828.61	0.442	11.44929	11.54782	11.47707
____ SB	-0.00025	3.04	1273.269	0.00208	-0.00390	0.00107
____ SE	-0.00111	2.96	222.042	-0.00048	-0.00384	0.00098
____ SI	5.59108	160.35	0.149	5.58215	5.59867	5.59242
____ SN	-0.00017	1.31	780.445	-0.00074	0.00132	-0.00108
____ SR	0.17612	103,707.17	0.076	0.17597	0.17616	0.17623
____ TH	-0.07246	5.33	34.380	-0.07719	-0.09466	-0.04552
____ TI	0.00742	310.79	5.625	0.00694	0.00760	0.00771
____ TL	0.00410	0.13	35.819	0.00394	0.00564	0.00271
____ V	0.00102	-6.10	90.857	0.00203	0.00083	0.00020
____ W	0.00039	0.71	454.103	0.00242	-0.00055	-0.00070
____ Y1	6280.74078	6,280.74	0.954	6343.65423	6224.37887	6274.18925
____ Y2A	176813.96272	176,813.96	0.171	177009.89427	176966.27420	176465.71970
____ Y2R	3928.74361	3,928.74	0.461	3928.01355	3911.01559	3947.20168
____ ZN	0.01469	191.24	1.103	0.01464	0.01487	0.01455
____ ZR	0.01498	5.29	67.880	0.01852	0.02289	0.00351

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 28 Date/Time: 11/12/2018 11:08

Sample Number: **9882882** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00093	-17.65	229.754	-0.00208	-0.00222	0.00153
____ AL	0.15103	4.13	92.532	0.26239	0.19650	-0.00579
____ AS	0.00773	3.80	32.040	0.00488	0.00893	0.00937
____ B	0.00498	34.55	9.040	0.00472	0.00472	0.00550
____ BA	0.09929	48,482.09	0.441	0.09922	0.09975	0.09888
____ BE	0.00025	-264.16	10.793	0.00023	0.00025	0.00028
____ CA	110.53617	20,565.87	0.886	111.42348	110.69890	109.48613
____ CD	-0.00017	-4.90	75.627	-0.00009	-0.00010	-0.00032
____ CO	0.00023	8.35	74.634	0.00041	0.00007	0.00021
____ CR	0.00479	22.66	21.087	0.00362	0.00534	0.00540
____ CU	-0.00142	-53.02	65.452	-0.00113	-0.00066	-0.00245
____ FE	0.03656	0.03	71.003	0.01163	0.03460	0.06344
____ K	2.19666	782.95	2.736	2.23730	2.22505	2.12762
____ LI	-0.00051	43.03	605.325	0.00154	-0.00402	0.00096
____ MG	64.10531	13,982.96	0.921	64.76543	63.92190	63.62860
____ MN	0.00602	373.36	5.043	0.00597	0.00635	0.00575
____ MO	0.00101	2.89	48.089	0.00153	0.00092	0.00057
____ NA	63.89544	41,422.45	0.741	64.22017	64.11399	63.35215
____ NI	0.01411	36.84	3.018	0.01371	0.01456	0.01405
____ P	0.00958	4.41	6.508	0.01030	0.00924	0.00920
____ PB	0.00179	4.91	48.024	0.00205	0.00249	0.00083
____ S	29.13581	4,714.69	0.216	29.06601	29.15298	29.18843
____ SB	-0.00112	2.58	279.345	-0.00281	0.00248	-0.00302
____ SE	-0.00258	2.33	55.774	-0.00274	-0.00394	-0.00107
____ SI	6.14929	174.36	0.949	6.16757	6.19635	6.08396
____ SN	-0.00041	1.20	85.490	-0.00062	-0.00001	-0.00060
____ SR	0.19750	117,154.89	0.205	0.19769	0.19776	0.19703
____ TH	-0.02314	10.78	221.065	-0.02306	-0.07432	0.02797
____ TI	0.00267	101.49	6.869	0.00249	0.00286	0.00264
____ TL	0.00360	-0.23	52.259	0.00562	0.00327	0.00190
____ V	0.00102	-5.68	84.052	0.00073	0.00199	0.00035
____ W	0.00059	0.76	205.639	-0.00059	0.00053	0.00183
____ Y1	6380.91107	6,380.91	0.088	6387.37343	6377.42838	6377.93138
____ Y2A	177602.17169	177,602.17	1.328	174877.98000	178936.15831	178992.37677
____ Y2R	3885.04057	3,885.04	0.794	3857.91525	3878.63845	3918.56801
____ ZN	0.00311	49.54	2.496	0.00320	0.00305	0.00309
____ ZR	0.00087	0.61	718.420	-0.00387	0.00798	-0.00149

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 29 Date/Time: 11/12/2018 11:10

Sample Number: **9882883** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00066	-13.61	352.373	-0.00168	0.00070	0.00296
____ AL	-0.00333	1.55	2874.818	-0.00315	-0.09904	0.09221
____ AS	0.00949	3.86	44.514	0.01182	0.01203	0.00461
____ B	0.00371	23.14	20.387	0.00284	0.00422	0.00407
____ BA	0.49132	214,380.04	0.099	0.49076	0.49151	0.49168
____ BE	0.00014	-272.52	8.600	0.00014	0.00014	0.00016
____ CA	362.06559	66,298.35	1.098	357.74744	365.57790	362.87143
____ CD	-0.00009	-3.30	150.592	-0.00012	0.00006	-0.00021
____ CO	0.00101	10.05	4.907	0.00098	0.00107	0.00098
____ CR	0.00524	24.00	11.507	0.00580	0.00460	0.00531
____ CU	0.00313	19.31	56.595	0.00233	0.00516	0.00190
____ FE	0.09242	2.23	21.964	0.10687	0.06921	0.10117
____ K	3.14072	1,048.76	3.650	3.01440	3.23814	3.16963
____ LI	0.04552	288.83	7.842	0.04773	0.04140	0.04743
____ MG	203.57283	42,197.75	1.261	200.61035	205.16249	204.94566
____ MN	0.00855	477.06	0.983	0.00849	0.00852	0.00864
____ MO	0.00070	1.74	59.883	0.00050	0.00042	0.00119
____ NA	853.07483	552,506.49	1.423	839.38358	862.53935	857.30158
____ NI	0.01690	37.93	3.217	0.01752	0.01652	0.01665
____ P	0.01310	5.52	10.439	0.01188	0.01283	0.01458
____ PB	0.00225	5.07	85.600	0.00448	0.00114	0.00114
____ S	33.03848	4,906.89	0.067	33.06376	33.02285	33.02883
____ SB	-0.00152	2.16	192.709	-0.00058	-0.00481	0.00083
____ SE	-0.00132	2.66	140.641	-0.00258	-0.00221	0.00082
____ SI	7.14421	201.91	1.589	7.03415	7.26092	7.13755
____ SN	-0.00111	0.73	208.407	0.00069	-0.00030	-0.00371
____ SR	1.03651	547,462.51	0.431	1.03209	1.03639	1.04103
____ TH	0.04349	18.09	97.757	-0.00373	0.05546	0.07872
____ TI	0.00103	25.95	35.667	0.00146	0.00082	0.00082
____ TL	0.00467	0.50	25.999	0.00602	0.00366	0.00434
____ V	-0.00032	-15.74	325.336	-0.00013	0.00062	-0.00145
____ W	0.00029	0.45	257.065	-0.00045	0.00105	0.00027
____ Y1	5856.14474	5,856.14	0.135	5855.72219	5848.46436	5864.24767
____ Y2A	159003.85562	159,003.86	1.172	159720.90818	160402.88423	156887.77445
____ Y2R	3873.58748	3,873.59	1.486	3940.05183	3839.54000	3841.17060
____ ZN	0.00373	52.77	4.127	0.00355	0.00384	0.00379
____ ZR	0.00814	4.71	65.374	0.00849	0.01327	0.00265

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 30 Date/Time: 11/12/2018 11:13

Sample Number: **9882884** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00260	-23.31	73.562	-0.00194	-0.00475	-0.00110
____ AL	0.06370	2.63	212.351	0.09374	-0.08406	0.18143
____ AS	0.00436	3.18	77.183	0.00556	0.00695	0.00056
____ B	0.00576	43.90	6.345	0.00602	0.00591	0.00534
____ BA	0.00019	228.73	16.151	0.00017	0.00022	0.00017
____ BE	0.00032	-260.09	1.570	0.00033	0.00033	0.00032
____ CA	0.06973	22.05	70.136	0.03626	0.04708	0.12586
____ CD	-0.00010	-4.02	60.291	-0.00003	-0.00012	-0.00016
____ CO	0.00030	8.98	68.748	0.00006	0.00042	0.00042
____ CR	0.00421	18.53	11.669	0.00376	0.00413	0.00474
____ CU	0.00123	-63.16	19.729	0.00151	0.00115	0.00105
____ FE	0.03105	-0.20	62.323	0.03108	0.05039	0.01168
____ K	0.01292	168.80	370.924	0.04629	0.03443	-0.04198
____ LI	-0.00094	25.62	277.151	0.00194	-0.00309	-0.00166
____ MG	0.04151	7.75	44.894	0.02640	0.03581	0.06234
____ MN	0.00323	214.22	0.624	0.00321	0.00323	0.00325
____ MO	-0.00010	-0.76	376.936	-0.00026	0.00034	-0.00039
____ NA	0.54851	276.10	6.030	0.57246	0.51077	0.56229
____ NI	0.01242	36.27	5.543	0.01313	0.01237	0.01175
____ P	0.02479	12.93	2.550	0.02545	0.02419	0.02473
____ PB	0.00046	2.98	117.041	0.00073	-0.00016	0.00082
____ S	0.02619	1.52	20.834	0.03081	0.02759	0.02017
____ SB	-0.00091	2.83	262.621	0.00185	-0.00209	-0.00249
____ SE	-0.00291	2.28	43.284	-0.00244	-0.00196	-0.00434
____ SI	0.08472	2.83	36.830	0.10679	0.04902	0.09834
____ SN	0.00060	1.86	165.744	0.00012	0.00176	-0.00007
____ SR	0.00017	70.00	13.937	0.00014	0.00019	0.00017
____ TH	-0.08658	3.88	94.042	-0.06245	-0.17733	-0.01995
____ TI	0.00006	-15.23	198.923	0.00017	0.00009	-0.00007
____ TL	0.00246	-1.10	6.847	0.00229	0.00245	0.00263
____ V	-0.00025	-19.53	179.177	-0.00023	0.00019	-0.00069
____ W	-0.00094	-0.69	87.830	-0.00050	-0.00042	-0.00188
____ Y1	6692.47161	6,692.47	0.193	6684.09015	6707.32787	6685.99680
____ Y2A	193196.23262	193,196.23	0.352	193965.01499	192675.96922	192947.71366
____ Y2R	4085.46000	4,085.46	0.620	4114.68000	4069.92000	4071.78000
____ ZN	0.00330	54.25	3.636	0.00339	0.00333	0.00316
____ ZR	0.01326	4.52	37.460	0.00887	0.01227	0.01865

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 31 Date/Time: 11/12/2018 11:16

Sample Number: **9882892** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00050	-20.36	223.029	0.00006	-0.00177	0.00022
____ AL	0.11110	3.56	163.509	0.05489	0.31423	-0.03581
____ AS	0.00372	2.99	97.810	0.00790	0.00201	0.00125
____ B	0.01057	80.70	4.842	0.01068	0.01101	0.01001
____ BA	0.00863	4,548.02	1.463	0.00859	0.00876	0.00852
____ BE	0.00032	-254.41	7.296	0.00032	0.00034	0.00029
____ CA	15.03213	2,886.22	0.530	14.94747	15.10553	15.04339
____ CD	0.00004	-1.46	134.269	-0.00002	0.00010	0.00005
____ CO	0.00013	8.31	103.706	-0.00003	0.00020	0.00022
____ CR	0.00401	15.94	4.750	0.00380	0.00404	0.00418
____ CU	-0.00043	-60.24	537.092	-0.00145	0.00221	-0.00204
____ FE	0.05258	0.67	81.331	0.05693	0.09300	0.00781
____ K	0.80453	395.54	6.735	0.80737	0.85725	0.74898
____ LI	-0.00023	30.62	2931.449	-0.00793	0.00224	0.00499
____ MG	4.24089	965.05	0.084	4.24027	4.23767	4.24471
____ MN	0.00305	197.47	1.280	0.00306	0.00308	0.00301
____ MO	-0.00011	-0.78	590.081	-0.00035	-0.00060	0.00062
____ NA	46.49666	30,855.89	0.496	46.51694	46.71665	46.25639
____ NI	0.01287	36.23	9.976	0.01200	0.01227	0.01435
____ P	0.00228	0.64	28.535	0.00180	0.00201	0.00301
____ PB	0.00022	2.81	866.738	0.00228	-0.00030	-0.00133
____ S	3.73950	624.51	0.283	3.75027	3.72908	3.73913
____ SB	-0.00195	2.17	77.447	-0.00307	-0.00253	-0.00023
____ SE	-0.00093	3.20	282.155	0.00176	-0.00107	-0.00347
____ SI	4.53236	131.74	2.259	4.50032	4.64695	4.44982
____ SN	0.00117	2.17	48.833	0.00162	0.00053	0.00136
____ SR	0.04206	26,102.22	0.126	0.04210	0.04208	0.04200
____ TH	0.00500	14.26	843.534	0.02717	-0.04360	0.03142
____ TI	0.00170	61.61	23.421	0.00153	0.00141	0.00215
____ TL	0.00244	-1.10	73.742	0.00324	0.00370	0.00038
____ V	-0.00107	-26.21	36.396	-0.00128	-0.00132	-0.00062
____ W	0.00051	0.72	267.657	0.00169	0.00085	-0.00100
____ Y1	6611.92635	6,611.93	0.511	6647.27345	6608.49427	6580.01133
____ Y2A	187006.47069	187,006.47	0.263	187526.68063	186941.58168	186551.14977
____ Y2R	3980.24399	3,980.24	0.895	3961.20191	3958.18690	4021.34316
____ ZN	0.00263	45.05	1.690	0.00260	0.00268	0.00261
____ ZR	0.00727	3.74	86.827	0.00956	0.01211	0.00013

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 32 Date/Time: 11/12/2018 11:19

Sample Number: **9882893** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00196	-17.46	49.560	-0.00132	-0.00148	-0.00307
____ AL	0.07782	2.87	105.272	-0.01244	0.14747	0.09844
____ AS	0.00425	3.09	65.739	0.00111	0.00645	0.00519
____ B	0.00747	56.59	5.174	0.00716	0.00790	0.00735
____ BA	0.00611	3,265.23	1.111	0.00610	0.00605	0.00618
____ BE	0.00031	-256.17	2.977	0.00031	0.00031	0.00032
____ CA	25.82881	5,009.77	0.535	25.79987	25.97907	25.70750
____ CD	-0.00005	-3.03	203.477	-0.00016	0.00003	-0.00002
____ CO	0.00039	9.14	77.765	0.00004	0.00060	0.00051
____ CR	0.00451	20.97	4.287	0.00432	0.00470	0.00449
____ CU	0.00209	-50.11	40.924	0.00280	0.00234	0.00114
____ FE	0.05992	0.98	23.690	0.07623	0.05309	0.05043
____ K	0.62437	347.13	3.345	0.62369	0.60383	0.64558
____ LI	0.00050	36.08	965.292	0.00405	-0.00504	0.00250
____ MG	7.54254	1,736.47	0.276	7.52665	7.56609	7.53487
____ MN	0.00366	236.75	2.955	0.00368	0.00354	0.00375
____ MO	-0.00022	-1.15	20.688	-0.00021	-0.00027	-0.00018
____ NA	16.73814	11,178.13	0.663	16.80671	16.79765	16.61005
____ NI	0.01259	35.57	5.858	0.01328	0.01268	0.01181
____ P	0.00216	0.81	30.520	0.00146	0.00276	0.00226
____ PB	0.00016	2.70	377.461	0.00085	-0.00018	-0.00019
____ S	3.29248	546.66	0.376	3.30632	3.28864	3.28247
____ SB	0.00165	4.34	131.857	0.00001	0.00082	0.00412
____ SE	-0.00091	3.18	162.403	-0.00224	0.00069	-0.00118
____ SI	4.46317	131.29	0.919	4.48070	4.49249	4.41630
____ SN	-0.00012	1.41	62.373	-0.00003	-0.00016	-0.00016
____ SR	0.06860	42,724.62	0.616	0.06891	0.06812	0.06878
____ TH	-0.07660	4.95	62.124	-0.09276	-0.02304	-0.11400
____ TI	0.00180	66.41	4.326	0.00171	0.00186	0.00182
____ TL	0.00468	0.56	26.060	0.00593	0.00350	0.00461
____ V	-0.00045	-20.77	185.163	-0.00081	-0.00102	0.00050
____ W	-0.00047	-0.25	322.205	0.00078	-0.00213	-0.00004
____ Y1	6577.60634	6,577.61	0.239	6594.50363	6574.92010	6563.39530
____ Y2A	187479.39439	187,479.39	0.262	187090.39497	187316.66667	188031.12153
____ Y2R	4027.82287	4,027.82	0.691	4021.39860	4003.77000	4058.30000
____ ZN	0.00182	34.39	2.569	0.00181	0.00187	0.00178
____ ZR	0.00781	2.43	100.048	0.01159	-0.00117	0.01302

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 33 Date/Time: 11/12/2018 11:22

Sample Number: **9882894** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00230	-25.33	54.295	-0.00314	-0.00087	-0.00290
____ AL	0.04526	2.28	490.317	0.18889	0.15725	-0.21035
____ AS	0.00372	2.88	39.924	0.00424	0.00204	0.00487
____ B	0.03024	226.67	2.481	0.03002	0.02962	0.03107
____ BA	0.01645	8,229.63	0.432	0.01650	0.01637	0.01647
____ BE	0.00028	-259.06	6.534	0.00029	0.00029	0.00026
____ CA	61.63455	11,665.40	1.703	62.54304	60.48560	61.87501
____ CD	0.00001	-1.94	229.302	0.00001	0.00004	-0.00001
____ CO	0.00050	9.27	122.135	-0.00019	0.00096	0.00073
____ CR	0.00414	16.62	3.748	0.00410	0.00402	0.00432
____ CU	0.00059	-51.07	208.773	0.00026	-0.00044	0.00196
____ FE	0.04821	0.52	98.605	0.03587	0.10069	0.00806
____ K	1.00069	448.27	7.959	1.03377	0.90984	1.05847
____ LI	-0.00012	37.89	1067.091	-0.00131	-0.00024	0.00120
____ MG	18.06378	4,058.54	0.227	18.03639	18.11101	18.04394
____ MN	0.00542	339.15	1.766	0.00535	0.00539	0.00553
____ MO	-0.00027	-1.26	60.850	-0.00037	-0.00035	-0.00008
____ NA	72.62441	47,776.30	1.384	73.35496	71.47858	73.03970
____ NI	0.01275	34.75	2.733	0.01241	0.01275	0.01310
____ P	0.00181	0.56	16.449	0.00147	0.00197	0.00200
____ PB	0.00116	3.99	167.061	-0.00009	0.00018	0.00340
____ S	5.09039	822.21	0.624	5.12586	5.08070	5.06461
____ SB	-0.00009	3.19	3442.153	-0.00346	0.00091	0.00229
____ SE	-0.00221	2.51	158.535	-0.00395	0.00182	-0.00450
____ SI	5.10872	147.01	1.248	5.09966	5.04997	5.17654
____ SN	0.00006	1.46	5677.820	-0.00350	0.00133	0.00233
____ SR	0.16123	96,341.14	0.087	0.16118	0.16113	0.16139
____ TH	-0.05875	6.90	41.397	-0.03940	-0.05081	-0.08605
____ TI	0.00262	100.49	10.402	0.00246	0.00293	0.00245
____ TL	0.00411	0.13	18.915	0.00339	0.00399	0.00493
____ V	-0.00184	-32.98	7.127	-0.00193	-0.00191	-0.00169
____ W	0.00141	1.53	102.097	-0.00025	0.00218	0.00231
____ Y1	6386.99214	6,386.99	0.255	6400.41287	6391.68444	6368.87912
____ Y2A	179766.63105	179,766.63	0.254	179732.02673	180239.89202	179327.97441
____ Y2R	3941.80380	3,941.80	1.816	3907.78844	4024.05038	3893.57257
____ ZN	0.00272	44.58	2.391	0.00266	0.00279	0.00270
____ ZR	0.00871	3.08	16.021	0.00779	0.01031	0.00802

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 34

Date/Time: 11/12/2018 11:25

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.49342	5,910.85	0.441	0.49323	0.49568	0.49134
____ AL	25.51356	441.84	1.360	25.32180	25.30478	25.91409
____ AS	0.51410	118.94	3.478	0.53474	0.50328	0.50429
____ B	0.47928	4,032.41	0.222	0.47874	0.47859	0.48051
____ BA	0.50508	252,185.06	0.377	0.50626	0.50610	0.50289
____ BE	0.48674	179,808.87	0.337	0.48840	0.48670	0.48513
____ CA	25.60875	4,703.87	0.680	25.57269	25.45553	25.79805
____ CD	0.51103	8,376.36	3.932	0.53423	0.49931	0.49954
____ CO	0.50899	1,698.36	3.759	0.53102	0.49929	0.49665
____ CR	0.48989	4,751.29	0.189	0.48882	0.49052	0.49032
____ CU	0.50479	3,470.87	0.171	0.50490	0.50560	0.50388
____ FE	25.49943	981.26	0.715	25.46840	25.33450	25.69539
____ K	25.56074	7,308.05	0.192	25.51718	25.55120	25.61383
____ LI	0.50279	2,267.06	1.499	0.50763	0.49411	0.50664
____ MG	25.80688	5,596.80	0.267	25.72857	25.85801	25.83408
____ MN	0.49960	32,067.79	0.111	0.50022	0.49916	0.49941
____ MO	0.50988	1,640.18	3.953	0.53315	0.49765	0.49885
____ NA	25.49776	16,173.69	0.401	25.50328	25.39292	25.59706
____ NI	0.51060	837.72	3.943	0.53384	0.49864	0.49932
____ P	0.51178	255.77	3.908	0.53460	0.50348	0.49726
____ PB	0.50701	688.39	3.246	0.52592	0.49915	0.49596
____ S	25.69932	4,114.99	3.743	26.80989	25.12758	25.16049
____ SB	0.49469	287.97	3.693	0.51578	0.48386	0.48443
____ SE	0.50292	233.66	4.021	0.52614	0.49348	0.48914
____ SI	25.66736	715.05	0.453	25.73439	25.73472	25.53296
____ SN	0.49912	283.12	3.802	0.52078	0.49117	0.48541
____ SR	0.50584	303,106.53	0.219	0.50699	0.50478	0.50576
____ TH	0.47408	65.02	5.661	0.44313	0.48820	0.49090
____ TI	0.50818	23,071.68	0.129	0.50854	0.50858	0.50742
____ TL	0.51618	364.57	3.692	0.53789	0.50841	0.50223
____ V	0.50800	4,779.72	0.176	0.50746	0.50903	0.50752
____ W	0.51125	479.93	4.024	0.53494	0.49786	0.50096
____ Y1	6320.23327	6,320.23	3.647	6054.05432	6452.42440	6454.22108
____ Y2A	181867.97782	181,867.98	0.676	180957.47000	181379.86000	183266.60347
____ Y2R	3814.22323	3,814.22	0.366	3829.90402	3809.61692	3803.14874
____ ZN	0.51364	6,414.31	3.876	0.53663	0.50259	0.50171
____ ZR	0.50753	205.94	1.017	0.50778	0.51257	0.50226

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 35 Date/Time: 11/12/2018 11:27

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00164	-19.56	129.283	0.00058	-0.00186	-0.00363
____ AL	0.10930	3.42	201.821	-0.14299	0.20512	0.26577
____ AS	0.00433	3.11	58.076	0.00257	0.00322	0.00722
____ B	0.00018	-2.30	264.300	-0.00028	0.00016	0.00066
____ BA	-0.00003	109.69	81.868	-0.00005	0.00000	-0.00003
____ BE	0.00034	-247.59	4.809	0.00032	0.00033	0.00035
____ CA	-0.00497	7.17	170.125	0.00204	-0.01436	-0.00259
____ CD	-0.00001	-2.28	3062.378	-0.00010	-0.00008	0.00016
____ CO	0.00010	8.12	470.103	-0.00035	0.00007	0.00057
____ CR	0.00057	-18.54	36.976	0.00044	0.00045	0.00081
____ CU	0.00040	-63.22	661.753	-0.00227	0.00302	0.00045
____ FE	-0.01213	-1.93	51.819	-0.00488	-0.01600	-0.01550
____ K	0.07561	182.20	23.372	0.07448	0.09381	0.05853
____ LI	-0.00252	17.50	111.957	-0.00554	0.00004	-0.00205
____ MG	0.00848	0.02	110.740	0.01582	-0.00210	0.01172
____ MN	0.00002	-3.98	612.739	-0.00004	-0.00003	0.00012
____ MO	0.00013	0.02	465.777	-0.00054	0.00036	0.00056
____ NA	0.09005	-36.10	24.169	0.11417	0.08409	0.07188
____ NI	0.00211	18.27	29.277	0.00211	0.00149	0.00272
____ P	0.00030	-0.23	449.441	-0.00119	0.00065	0.00145
____ PB	0.00116	3.91	127.692	-0.00051	0.00166	0.00234
____ S	0.03348	2.71	122.366	0.01531	0.00474	0.08039
____ SB	0.00123	4.05	82.162	0.00031	0.00230	0.00106
____ SE	-0.00161	2.85	147.565	0.00064	-0.00410	-0.00138
____ SI	-0.00514	0.15	923.773	0.01403	-0.05920	0.02975
____ SN	-0.00025	1.33	540.441	0.00037	-0.00179	0.00068
____ SR	0.00008	12.29	41.792	0.00005	0.00007	0.00011
____ TH	-0.05248	7.68	139.059	0.02494	-0.06237	-0.12002
____ TI	0.00020	-8.41	60.336	0.00024	0.00029	0.00006
____ TL	0.00353	-0.29	24.245	0.00452	0.00307	0.00300
____ V	-0.00035	-19.68	348.977	-0.00172	0.00061	0.00007
____ W	0.00116	1.29	31.173	0.00139	0.00074	0.00133
____ Y1	6565.40393	6,565.40	0.155	6561.22911	6558.00373	6576.97894
____ Y2A	186998.84299	186,998.84	0.367	187752.71403	186411.33187	186832.48306
____ Y2R	3968.19333	3,968.19	0.833	3987.89000	3986.64000	3930.05000
____ ZN	-0.00032	6.02	85.991	-0.00048	-0.00049	0.00000
____ ZR	0.00845	3.13	81.954	0.01358	0.01121	0.00057

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 36 Date/Time: 11/12/2018 11:30

Sample Number: **9882895** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00090	-8.75	101.224	-0.00187	-0.00006	-0.00077
____ AL	0.18202	4.77	153.200	0.23513	0.43050	-0.11957
____ AS	0.00718	3.58	59.135	0.00425	0.01205	0.00524
____ B	0.02970	212.89	0.690	0.02993	0.02958	0.02958
____ BA	0.05175	24,554.64	0.784	0.05129	0.05203	0.05194
____ BE	0.00025	-257.75	6.197	0.00026	0.00026	0.00023
____ CA	90.12375	17,399.33	0.581	89.85125	90.72723	89.79277
____ CD	0.00043	4.78	30.225	0.00046	0.00028	0.00053
____ CO	0.00035	8.53	133.661	0.00070	0.00054	-0.00018
____ CR	0.00430	17.40	14.601	0.00374	0.00498	0.00419
____ CU	0.00318	-27.61	77.185	0.00103	0.00264	0.00585
____ FE	0.02285	-0.53	20.099	0.02616	0.02478	0.01761
____ K	1.36450	565.73	0.675	1.37486	1.35724	1.36140
____ LI	0.00362	60.62	120.816	-0.00116	0.00741	0.00460
____ MG	26.35461	6,032.97	0.558	26.18519	26.42859	26.45003
____ MN	0.00489	292.27	0.465	0.00488	0.00491	0.00487
____ MO	0.00033	0.66	97.051	0.00065	0.00002	0.00031
____ NA	417.60909	281,159.80	0.509	419.88410	417.27309	415.67008
____ NI	0.01254	33.48	12.595	0.01132	0.01432	0.01197
____ P	0.04690	22.87	0.867	0.04675	0.04736	0.04659
____ PB	0.00085	3.50	156.543	-0.00028	0.00230	0.00052
____ S	10.18548	1,603.05	0.211	10.19197	10.20293	10.16154
____ SB	0.00031	3.33	253.685	0.00119	0.00004	-0.00030
____ SE	0.00139	4.04	163.860	0.00043	-0.00025	0.00400
____ SI	4.97782	146.35	0.935	4.95149	5.03158	4.95041
____ SN	0.00001	1.40	1646.148	-0.00004	-0.00011	0.00017
____ SR	0.31974	182,520.28	0.223	0.31943	0.32056	0.31923
____ TH	-0.05565	7.37	63.100	-0.08397	-0.01636	-0.06663
____ TI	0.00275	102.16	5.702	0.00290	0.00259	0.00277
____ TL	0.00439	0.33	21.166	0.00526	0.00341	0.00451
____ V	-0.00188	-32.03	26.327	-0.00137	-0.00236	-0.00192
____ W	-0.00005	0.57	650.868	-0.00005	0.00028	-0.00037
____ Y1	6212.97195	6,212.97	0.108	6216.99540	6216.68111	6205.23933
____ Y2A	172175.93749	172,175.94	0.864	170609.75610	173571.46571	172346.59068
____ Y2R	4026.78937	4,026.79	0.898	4054.04595	3985.75274	4040.56943
____ ZN	0.03745	465.21	0.163	0.03740	0.03742	0.03751
____ ZR	0.00804	2.93	24.747	0.01000	0.00602	0.00810

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 37 Date/Time: 11/12/2018 11:33

Sample Number: **9882896** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00332	-26.40	50.851	-0.00148	-0.00367	-0.00480
____ AL	0.19399	4.92	54.973	0.22445	0.07544	0.28210
____ AS	0.00200	2.53	101.945	0.00226	0.00391	-0.00016
____ B	0.01073	80.53	3.658	0.01061	0.01117	0.01041
____ BA	0.01853	9,458.19	0.294	0.01859	0.01848	0.01853
____ BE	0.00028	-265.33	13.026	0.00024	0.00029	0.00031
____ CA	89.94302	17,371.72	0.776	90.45403	90.22740	89.14761
____ CD	-0.00001	-2.23	1726.433	0.00005	-0.00011	0.00004
____ CO	0.00006	7.89	448.746	0.00006	-0.00020	0.00031
____ CR	0.00373	12.96	12.378	0.00426	0.00338	0.00356
____ CU	0.00158	-46.06	117.408	0.00159	0.00344	-0.00028
____ FE	0.05221	0.66	51.064	0.04194	0.03222	0.08248
____ K	2.27329	834.59	4.764	2.20928	2.39834	2.21226
____ LI	0.01139	97.24	9.160	0.01224	0.01171	0.01023
____ MG	22.27231	5,106.92	0.406	22.16804	22.32047	22.32841
____ MN	0.00375	236.97	2.336	0.00365	0.00376	0.00383
____ MO	-0.00011	-0.75	139.041	-0.00013	0.00005	-0.00025
____ NA	3.98495	2,587.44	0.847	4.02273	3.97440	3.95771
____ NI	0.01108	32.38	3.762	0.01153	0.01100	0.01071
____ P	-0.00032	-0.40	380.695	-0.00159	0.00083	-0.00019
____ PB	0.00135	4.39	61.042	0.00044	0.00203	0.00157
____ S	4.11697	673.81	0.694	4.14942	4.10584	4.09565
____ SB	-0.00108	2.64	128.545	-0.00269	-0.00026	-0.00030
____ SE	-0.00175	2.75	243.353	0.00193	-0.00641	-0.00077
____ SI	6.26451	184.18	0.491	6.27650	6.22954	6.28750
____ SN	0.00030	1.63	483.027	0.00085	-0.00136	0.00142
____ SR	0.21809	133,296.88	0.141	0.21840	0.21808	0.21778
____ TH	-0.10506	1.68	7.809	-0.11357	-0.09720	-0.10440
____ TI	0.00233	89.73	5.424	0.00221	0.00246	0.00233
____ TL	0.00392	0.00	53.848	0.00195	0.00367	0.00615
____ V	-0.00100	-25.96	35.087	-0.00105	-0.00063	-0.00132
____ W	0.00147	1.59	37.693	0.00132	0.00100	0.00208
____ Y1	6477.04627	6,477.05	0.340	6493.69045	6485.34919	6452.09916
____ Y2A	183715.45110	183,715.45	1.478	185241.76142	185323.59808	180580.99380
____ Y2R	4028.19301	4,028.19	0.533	4042.18812	4038.91994	4003.47098
____ ZN	0.00181	33.55	6.667	0.00189	0.00167	0.00185
____ ZR	0.00861	2.19	14.357	0.00984	0.00737	0.00861

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 38 Date/Time: 11/12/2018 11:36

Sample Number: **9882897** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00026	-5.91	470.922	0.00053	0.00133	-0.00108
____ AL	0.09221	3.27	118.299	0.04542	0.21688	0.01433
____ AS	0.00501	3.25	38.717	0.00381	0.00724	0.00397
____ B	0.00722	54.49	4.396	0.00687	0.00729	0.00750
____ BA	0.00800	4,237.75	0.800	0.00793	0.00806	0.00800
____ BE	0.00023	-288.01	20.350	0.00018	0.00026	0.00026
____ CA	62.51510	12,242.83	0.722	62.80913	62.74087	61.99528
____ CD	0.00104	15.48	7.234	0.00097	0.00104	0.00112
____ CO	-0.00004	7.64	1147.927	-0.00035	0.00043	-0.00018
____ CR	0.00483	24.19	11.719	0.00426	0.00539	0.00483
____ CU	0.00142	-42.25	30.832	0.00163	0.00171	0.00091
____ FE	0.05717	0.88	23.275	0.06605	0.06359	0.04187
____ K	1.00166	464.34	13.596	0.86736	1.13965	0.99796
____ LI	-0.00076	36.34	371.218	-0.00375	-0.00033	0.00181
____ MG	26.29441	6,096.18	0.342	26.32220	26.36727	26.19374
____ MN	0.00278	180.00	4.506	0.00265	0.00279	0.00290
____ MO	-0.00029	-1.35	139.879	0.00014	-0.00066	-0.00034
____ NA	3.30727	2,157.21	0.715	3.30121	3.33336	3.28722
____ NI	0.01210	34.30	3.439	0.01225	0.01241	0.01162
____ P	0.00225	0.68	85.819	0.00364	0.00307	0.00004
____ PB	-0.00068	1.61	383.045	-0.00311	-0.00101	0.00207
____ S	2.87908	474.13	0.170	2.87395	2.87960	2.88369
____ SB	-0.00224	1.99	78.418	-0.00301	-0.00023	-0.00347
____ SE	-0.00160	2.85	69.946	-0.00038	-0.00184	-0.00258
____ SI	6.66284	198.30	0.752	6.64002	6.72026	6.62825
____ SN	0.00031	1.65	68.452	0.00007	0.00045	0.00042
____ SR	0.10082	63,260.76	0.346	0.10041	0.10098	0.10105
____ TH	-0.01514	12.22	345.767	0.00294	0.02578	-0.07415
____ TI	0.00223	86.69	3.540	0.00229	0.00225	0.00214
____ TL	0.00453	0.45	10.017	0.00493	0.00461	0.00404
____ V	-0.00121	-27.79	41.537	-0.00168	-0.00068	-0.00127
____ W	0.00139	1.72	130.288	0.00090	0.00339	-0.00013
____ Y1	6529.01460	6,529.01	0.250	6544.10081	6531.20336	6511.73962
____ Y2A	187612.98571	187,612.99	0.452	188495.75255	186804.27914	187538.92544
____ Y2R	4078.16465	4,078.16	0.323	4072.00479	4069.18709	4093.30206
____ ZN	0.01653	221.89	0.182	0.01656	0.01652	0.01651
____ ZR	0.00067	0.71	504.634	-0.00301	0.00362	0.00140

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 39 Date/Time: 11/12/2018 11:39

Sample Number: **9882898** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00157	-13.13	92.677	-0.00233	0.00011	-0.00248
____ AL	0.10684	3.41	53.305	0.04109	0.13864	0.14079
____ AS	0.00708	3.66	40.492	0.00892	0.00377	0.00854
____ B	0.04306	330.62	0.312	0.04294	0.04303	0.04320
____ BA	0.01591	8,138.45	0.619	0.01603	0.01588	0.01584
____ BE	0.00024	-279.96	11.888	0.00023	0.00021	0.00027
____ CA	99.04656	19,185.09	0.471	99.14906	99.45282	98.53781
____ CD	-0.00005	-3.00	77.259	-0.00010	-0.00005	-0.00002
____ CO	0.00024	8.39	157.997	-0.00004	0.00066	0.00009
____ CR	0.00402	15.77	22.188	0.00504	0.00342	0.00359
____ CU	0.00088	-46.01	81.416	0.00135	0.00006	0.00125
____ FE	0.02857	-0.30	40.619	0.03587	0.03465	0.01519
____ K	1.61275	641.48	1.852	1.57852	1.62615	1.63357
____ LI	0.00315	60.17	65.065	0.00311	0.00112	0.00522
____ MG	31.41898	7,207.70	0.185	31.39403	31.37749	31.48541
____ MN	0.00278	174.67	3.612	0.00272	0.00289	0.00272
____ MO	-0.00024	-1.16	158.404	0.00002	-0.00066	-0.00006
____ NA	15.58332	10,436.94	0.502	15.54658	15.67318	15.53019
____ NI	0.01291	34.96	2.949	0.01279	0.01334	0.01260
____ P	0.00079	0.08	155.756	0.00207	-0.00037	0.00066
____ PB	0.00295	6.49	26.773	0.00209	0.00364	0.00313
____ S	10.09316	1,635.07	0.502	10.14590	10.04479	10.08880
____ SB	0.00269	4.83	11.524	0.00291	0.00283	0.00234
____ SE	-0.00154	2.82	152.534	0.00085	-0.00162	-0.00385
____ SI	6.28773	185.49	0.897	6.24750	6.26352	6.35217
____ SN	-0.00023	1.30	307.638	-0.00034	0.00052	-0.00087
____ SR	0.23278	142,271.23	0.143	0.23242	0.23308	0.23286
____ TH	-0.07225	5.50	74.904	-0.08125	-0.01420	-0.12130
____ TI	0.00229	87.65	7.991	0.00243	0.00208	0.00235
____ TL	0.00366	-0.18	26.834	0.00437	0.00408	0.00254
____ V	-0.00100	-25.67	92.223	-0.00114	-0.00184	-0.00001
____ W	0.00109	1.21	41.355	0.00136	0.00057	0.00133
____ Y1	6395.15293	6,395.15	0.449	6401.96444	6419.83678	6363.65756
____ Y2A	183638.22161	183,638.22	0.562	184785.79693	183343.15506	182785.71286
____ Y2R	4041.92642	4,041.93	0.179	4033.56615	4046.27149	4045.94162
____ ZN	0.00163	31.07	3.386	0.00162	0.00169	0.00158
____ ZR	0.01320	4.73	24.424	0.01222	0.01058	0.01680

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 40 Date/Time: 11/12/2018 11:41

Sample Number: **9882899** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00221	-22.58	24.625	-0.00167	-0.00276	-0.00220
____ AL	0.08243	2.90	48.989	0.12103	0.04048	0.08579
____ AS	0.00114	2.29	346.374	0.00137	-0.00292	0.00497
____ B	0.00592	43.24	18.195	0.00700	0.00592	0.00484
____ BA	0.00589	3,079.96	0.697	0.00593	0.00588	0.00585
____ BE	0.00023	-280.54	15.359	0.00021	0.00021	0.00027
____ CA	50.17653	9,479.74	0.497	50.26854	50.36704	49.89401
____ CD	0.00004	-1.41	113.669	-0.00001	0.00008	0.00007
____ CO	0.00040	8.91	119.324	-0.00015	0.00068	0.00067
____ CR	0.00426	18.05	8.103	0.00448	0.00443	0.00386
____ CU	-0.00008	-59.26	1462.844	0.00125	-0.00092	-0.00057
____ FE	0.05623	0.82	47.283	0.04091	0.04086	0.08693
____ K	0.44201	286.21	12.867	0.39959	0.50664	0.41980
____ LI	-0.00301	22.82	64.322	-0.00495	-0.00301	-0.00107
____ MG	14.34939	3,218.75	0.503	14.37222	14.40737	14.26859
____ MN	0.00329	207.61	4.400	0.00337	0.00313	0.00338
____ MO	0.00020	0.26	258.058	-0.00038	0.00039	0.00059
____ NA	6.69316	4,305.72	0.218	6.67704	6.69705	6.70539
____ NI	0.01347	35.76	4.246	0.01290	0.01347	0.01404
____ P	0.00013	-0.28	1147.154	-0.00038	-0.00101	0.00177
____ PB	0.00125	4.18	145.263	0.00297	-0.00065	0.00144
____ S	5.49326	886.19	0.023	5.49238	5.49470	5.49271
____ SB	-0.00234	1.86	181.302	-0.00719	-0.00049	0.00066
____ SE	-0.00191	2.63	53.183	-0.00249	-0.00074	-0.00249
____ SI	6.43136	184.52	0.870	6.43753	6.48400	6.37254
____ SN	0.00062	1.79	99.900	0.00073	0.00119	-0.00004
____ SR	0.12961	78,873.81	0.081	0.12950	0.12963	0.12971
____ TH	-0.06628	6.01	30.681	-0.04297	-0.07549	-0.08038
____ TI	0.00237	91.12	4.392	0.00225	0.00243	0.00243
____ TL	0.00418	0.19	21.932	0.00313	0.00484	0.00457
____ V	-0.00058	-21.57	181.388	-0.00174	0.00033	-0.00033
____ W	-0.00113	-0.86	71.322	-0.00097	-0.00200	-0.00041
____ Y1	6377.66161	6,377.66	0.388	6404.92109	6371.35243	6356.71130
____ Y2A	183073.97759	183,073.98	0.282	182885.02892	183657.51850	182679.38535
____ Y2R	3931.15943	3,931.16	0.643	3902.09623	3943.48912	3947.89295
____ ZN	0.00197	35.22	5.846	0.00188	0.00192	0.00210
____ ZR	0.01345	4.81	15.090	0.01502	0.01418	0.01116

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 41 Date/Time: 11/12/2018 11:44

Sample Number: **9883540** Class: **** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00013	-13.14	739.783	-0.00109	-0.00018	0.00087
____ AL	0.07880	3.07	93.343	0.05875	0.16029	0.01734
____ AS	0.00445	3.19	30.705	0.00357	0.00603	0.00376
____ B	0.00493	37.63	0.862	0.00493	0.00498	0.00489
____ BA	0.00028	276.76	6.822	0.00030	0.00026	0.00027
____ BE	0.00027	-281.65	9.076	0.00025	0.00030	0.00026
____ CA	0.09556	27.22	10.644	0.10704	0.08766	0.09200
____ CD	-0.00009	-3.77	100.963	-0.00011	-0.00017	0.00001
____ CO	-0.00021	7.19	160.679	-0.00032	0.00017	-0.00048
____ CR	0.00432	19.68	7.300	0.00427	0.00465	0.00403
____ CU	0.00098	-55.48	147.969	-0.00065	0.00146	0.00214
____ FE	0.05990	1.00	8.517	0.05746	0.06576	0.05647
____ K	-0.05984	147.22	111.540	-0.04194	-0.13370	-0.00387
____ LI	0.00084	34.07	294.060	0.00002	-0.00112	0.00363
____ MG	0.03925	7.25	1.501	0.03897	0.03993	0.03886
____ MN	0.00323	216.43	3.355	0.00323	0.00313	0.00334
____ MO	-0.00028	-1.36	42.350	-0.00029	-0.00039	-0.00016
____ NA	0.19445	34.25	8.850	0.19784	0.20972	0.17580
____ NI	0.01195	35.41	6.897	0.01253	0.01231	0.01101
____ P	0.00328	1.21	39.120	0.00193	0.00449	0.00343
____ PB	0.00117	3.99	91.119	0.00241	0.00058	0.00053
____ S	0.01732	0.02	36.774	0.01789	0.02339	0.01069
____ SB	-0.00100	2.78	300.687	0.00232	-0.00348	-0.00183
____ SE	-0.00422	1.65	66.263	-0.00105	-0.00635	-0.00526
____ SI	0.19611	6.16	17.563	0.18524	0.23468	0.16842
____ SN	0.00041	1.74	178.918	0.00115	0.00041	-0.00033
____ SR	0.00033	175.26	6.683	0.00033	0.00031	0.00035
____ TH	-0.00538	13.43	120.286	-0.00506	0.00093	-0.01199
____ TI	0.00055	8.42	27.387	0.00038	0.00061	0.00067
____ TL	0.00516	0.93	35.660	0.00350	0.00484	0.00713
____ V	-0.00097	-26.20	110.606	0.00025	-0.00177	-0.00140
____ W	-0.00021	-0.02	169.060	-0.00005	-0.00061	0.00003
____ Y1	6680.06373	6,680.06	0.202	6688.46026	6687.22533	6664.50560
____ Y2A	193374.79802	193,374.80	0.719	191814.43000	193829.97204	194479.99201
____ Y2R	4095.00000	4,095.00	0.712	4105.02000	4117.84000	4062.14000
____ ZN	0.00048	17.33	27.797	0.00047	0.00061	0.00035
____ ZR	0.01420	6.53	47.222	0.00650	0.01875	0.01734

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 42 Date/Time: 11/12/2018 11:47

Sample Number: **PBW** Class: **** Batch: 183081063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00033	-18.80	100.472	-0.00047	0.00005	-0.00055
____ AL	0.10326	3.50	122.021	0.06229	0.24465	0.00285
____ AS	0.00401	3.06	39.220	0.00581	0.00290	0.00332
____ B	-0.00152	-15.76	18.825	-0.00128	-0.00145	-0.00183
____ BA	0.00002	138.95	33.957	0.00002	0.00003	0.00001
____ BE	0.00027	-282.99	1.570	0.00027	0.00026	0.00027
____ CA	0.00210	8.73	1436.876	0.01977	0.01921	-0.03269
____ CD	-0.00013	-4.50	96.049	-0.00009	-0.00004	-0.00028
____ CO	-0.00053	6.03	99.890	-0.00069	-0.00095	0.00006
____ CR	-0.00002	-25.32	2148.846	0.00055	-0.00035	-0.00027
____ CU	-0.00033	-64.03	146.453	-0.00005	-0.00089	-0.00005
____ FE	0.01650	-0.80	75.738	0.00213	0.02252	0.02485
____ K	0.01451	168.02	229.060	0.03836	-0.02345	0.02862
____ LI	-0.00283	16.43	214.212	0.00067	-0.00981	0.00067
____ MG	0.00530	-0.73	229.361	-0.00419	0.00109	0.01901
____ MN	0.00022	11.21	47.439	0.00021	0.00033	0.00012
____ MO	-0.00001	-0.43	6580.421	-0.00057	0.00009	0.00046
____ NA	0.06395	-54.72	30.487	0.04146	0.07606	0.07431
____ NI	-0.00072	13.65	96.022	-0.00036	-0.00152	-0.00028
____ P	0.00094	-0.07	110.205	-0.00025	0.00139	0.00166
____ PB	0.00085	3.50	185.285	0.00259	-0.00047	0.00043
____ S	0.00676	-1.76	46.108	0.00627	0.01010	0.00392
____ SB	-0.00036	3.12	718.081	-0.00283	-0.00058	0.00233
____ SE	-0.00096	3.19	204.859	0.00131	-0.00207	-0.00212
____ SI	-0.01621	-0.17	125.689	-0.01279	-0.03808	0.00224
____ SN	0.00070	1.90	275.983	0.00269	-0.00118	0.00060
____ SR	0.00004	-12.86	22.001	0.00004	0.00004	0.00003
____ TH	0.00488	14.48	500.337	-0.00540	-0.01271	0.03274
____ TI	0.00029	-4.10	61.573	0.00009	0.00034	0.00045
____ TL	0.00289	-0.77	22.275	0.00234	0.00274	0.00360
____ V	-0.00102	-26.63	69.880	-0.00183	-0.00075	-0.00048
____ W	0.00096	1.12	11.186	0.00108	0.00088	0.00092
____ Y1	6624.24861	6,624.25	0.129	6614.78446	6631.38326	6626.57811
____ Y2A	193618.61741	193,618.62	0.562	194787.03000	192631.94500	193436.87724
____ Y2R	4055.69000	4,055.69	0.778	4086.77000	4056.65000	4023.65000
____ ZN	0.00011	11.48	123.751	0.00026	0.00007	0.00000
____ ZR	0.00725	3.82	91.936	0.01294	-0.00008	0.00889

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 43 Date/Time: 11/12/2018 11:50

Sample Number: **PBW** Class: **** Batch: 183081063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00241	-9.25	27.113	-0.00315	-0.00193	-0.00214
____ AL	0.17074	4.57	23.331	0.17958	0.12722	0.20541
____ AS	0.00518	3.38	42.466	0.00647	0.00264	0.00642
____ B	-0.00078	-9.60	103.429	-0.00149	-0.00095	0.00010
____ BA	-0.00001	122.20	294.740	-0.00001	-0.00003	0.00002
____ BE	0.00025	-291.01	10.592	0.00027	0.00022	0.00025
____ CA	-0.00114	8.23	986.679	-0.01151	-0.00265	0.01076
____ CD	0.00004	-1.48	68.132	0.00008	0.00003	0.00002
____ CO	-0.00018	7.34	443.012	0.00073	-0.00070	-0.00057
____ CR	0.00093	-15.41	3.095	0.00092	0.00096	0.00091
____ CU	0.00119	-68.79	63.504	0.00176	0.00033	0.00147
____ FE	0.02724	-0.37	62.798	0.04670	0.01462	0.02039
____ K	-0.01991	160.82	230.224	-0.07083	0.01801	-0.00689
____ LI	-0.00059	27.60	750.551	-0.00258	0.00451	-0.00371
____ MG	0.01127	0.68	13.155	0.01159	0.01257	0.00966
____ MN	0.00035	16.79	29.091	0.00042	0.00039	0.00023
____ MO	0.00003	-0.29	719.004	0.00027	0.00006	-0.00022
____ NA	0.05672	-60.68	69.605	0.03860	0.02956	0.10202
____ NI	-0.00109	13.20	97.319	-0.00023	-0.00076	-0.00228
____ P	-0.00061	-0.49	286.963	-0.00265	0.00037	0.00043
____ PB	0.00115	4.00	89.257	0.00062	0.00234	0.00050
____ S	0.00575	-1.96	142.360	-0.00138	0.00394	0.01468
____ SB	-0.00145	2.50	138.520	-0.00084	0.00018	-0.00370
____ SE	-0.00134	3.06	216.979	-0.00302	-0.00300	0.00201
____ SI	0.00517	0.47	330.341	0.02034	-0.01335	0.00853
____ SN	0.00049	1.80	31.092	0.00049	0.00033	0.00064
____ SR	0.00007	6.11	32.857	0.00008	0.00004	0.00008
____ TH	-0.13140	-1.38	20.260	-0.15151	-0.10121	-0.14148
____ TI	0.00046	3.69	20.340	0.00053	0.00049	0.00035
____ TL	0.00284	-0.82	41.318	0.00382	0.00154	0.00315
____ V	-0.00146	-32.34	46.752	-0.00074	-0.00210	-0.00155
____ W	0.00186	2.01	74.728	0.00346	0.00106	0.00105
____ Y1	6716.18319	6,716.18	0.054	6718.06583	6718.46682	6712.01692
____ Y2A	193280.24602	193,280.25	0.333	192551.22730	193769.53874	193519.97201
____ Y2R	4131.73333	4,131.73	0.987	4089.45000	4170.80000	4134.95000
____ ZN	0.00002	10.48	221.016	0.00006	-0.00003	0.00003
____ ZR	0.00200	-1.03	393.383	-0.00562	0.00152	0.01011

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 44 Date/Time: 11/12/2018 11:53

Sample Number: **9878252** Class: **** Batch: 183081063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00244	-19.68	43.941	-0.00365	-0.00205	-0.00162
____ AL	0.06750	2.70	219.347	-0.09958	0.11968	0.18241
____ AS	0.00380	3.02	33.924	0.00356	0.00265	0.00520
____ B	0.00336	24.04	23.297	0.00415	0.00259	0.00333
____ BA	0.00032	298.32	1.603	0.00032	0.00033	0.00031
____ BE	0.00025	-289.81	14.185	0.00023	0.00029	0.00023
____ CA	0.05078	18.48	23.080	0.06261	0.05056	0.03917
____ CD	-0.00003	-2.79	188.022	0.00001	-0.00010	-0.00001
____ CO	-0.00018	7.27	267.937	-0.00033	0.00036	-0.00058
____ CR	0.00035	-21.51	37.802	0.00044	0.00040	0.00020
____ CU	0.00192	-59.07	30.245	0.00259	0.00154	0.00163
____ FE	0.01328	-0.93	216.255	0.00839	0.04415	-0.01268
____ K	0.02560	173.88	185.826	0.02954	0.07106	-0.02382
____ LI	0.00337	46.42	62.895	0.00550	0.00333	0.00127
____ MG	0.01026	0.45	39.770	0.01114	0.01384	0.00581
____ MN	0.00062	36.37	23.243	0.00046	0.00067	0.00073
____ MO	0.00008	-0.15	351.494	-0.00023	0.00026	0.00020
____ NA	0.18647	28.78	7.232	0.19016	0.17153	0.19773
____ NI	-0.00067	13.77	152.635	-0.00047	-0.00178	0.00023
____ P	0.00014	-0.20	909.144	-0.00097	-0.00018	0.00158
____ PB	0.00026	2.68	605.204	-0.00032	0.00203	-0.00093
____ S	0.00738	-1.66	64.371	0.00860	0.01141	0.00214
____ SB	-0.00328	1.35	60.294	-0.00194	-0.00235	-0.00555
____ SE	-0.00136	3.01	201.433	-0.00201	-0.00372	0.00165
____ SI	0.13874	4.46	14.514	0.13958	0.11819	0.15844
____ SN	-0.00124	0.75	27.918	-0.00162	-0.00114	-0.00095
____ SR	0.00013	46.19	10.021	0.00011	0.00013	0.00014
____ TH	-0.09317	3.13	16.090	-0.09930	-0.07609	-0.10413
____ TI	0.00050	5.78	22.083	0.00061	0.00039	0.00049
____ TL	0.00274	-0.88	10.012	0.00297	0.00244	0.00282
____ V	-0.00026	-19.76	20.505	-0.00019	-0.00028	-0.00029
____ W	0.00097	1.13	58.359	0.00032	0.00130	0.00129
____ Y1	6651.84120	6,651.84	0.494	6668.13245	6673.38194	6614.00920
____ Y2A	193740.25863	193,740.26	0.353	194056.68866	194208.96565	192955.12156
____ Y2R	4113.66333	4,113.66	1.303	4120.71000	4163.40000	4056.88000
____ ZN	0.00041	15.50	14.247	0.00044	0.00034	0.00045
____ ZR	0.01026	3.13	108.482	0.00404	0.00363	0.02311

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 45 Date/Time: 11/12/2018 11:55

Sample Number: **9878253** Class: **** Batch: 183081063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00058	-5.08	29.656	-0.00039	-0.00073	-0.00062
____ AL	0.23888	5.82	29.554	0.31441	0.22769	0.17455
____ AS	0.00118	2.41	309.329	-0.00249	0.00482	0.00121
____ B	0.00382	27.40	12.377	0.00424	0.00331	0.00391
____ BA	0.00051	394.09	5.894	0.00050	0.00049	0.00055
____ BE	0.00026	-279.37	10.902	0.00023	0.00027	0.00029
____ CA	0.03385	14.80	15.662	0.03992	0.03153	0.03011
____ CD	-0.00007	-3.46	85.888	-0.00008	-0.00001	-0.00013
____ CO	-0.00020	7.22	157.001	0.00016	-0.00036	-0.00041
____ CR	0.00067	-17.79	82.861	0.00131	0.00029	0.00042
____ CU	0.00194	-53.80	25.875	0.00252	0.00167	0.00163
____ FE	0.01929	-0.68	135.816	0.01260	0.04818	-0.00291
____ K	-0.05446	146.47	36.215	-0.03952	-0.07682	-0.04705
____ LI	-0.00164	21.92	45.220	-0.00246	-0.00141	-0.00103
____ MG	0.02474	3.78	19.582	0.02270	0.02125	0.03028
____ MN	0.00062	36.17	15.875	0.00055	0.00057	0.00073
____ MO	-0.00017	-0.97	158.003	-0.00014	-0.00044	0.00008
____ NA	0.16352	12.75	19.922	0.20052	0.15088	0.13916
____ NI	-0.00061	13.94	79.491	-0.00021	-0.00048	-0.00115
____ P	0.00057	-0.08	213.025	-0.00051	0.00033	0.00189
____ PB	0.00165	4.72	71.097	0.00105	0.00089	0.00300
____ S	0.00963	-1.29	24.846	0.01215	0.00937	0.00738
____ SB	-0.00030	3.19	879.555	-0.00252	0.00260	-0.00097
____ SE	-0.00168	2.87	213.066	0.00244	-0.00348	-0.00398
____ SI	0.12092	3.85	10.764	0.13505	0.10941	0.11830
____ SN	-0.00017	1.39	358.105	-0.00025	-0.00075	0.00048
____ SR	0.00019	83.01	5.229	0.00018	0.00020	0.00019
____ TH	-0.05779	7.13	37.371	-0.04552	-0.04512	-0.08272
____ TI	0.00056	8.71	30.025	0.00069	0.00037	0.00062
____ TL	0.00307	-0.64	31.982	0.00358	0.00369	0.00194
____ V	-0.00127	-29.20	20.014	-0.00101	-0.00128	-0.00151
____ W	0.00127	1.43	2.071	0.00124	0.00129	0.00128
____ Y1	6681.43672	6,681.44	0.245	6663.02683	6686.99360	6694.28971
____ Y2A	190383.84864	190,383.85	0.202	190827.43451	190147.22444	190176.88698
____ Y2R	4027.18000	4,027.18	0.810	4020.14000	3998.65000	4062.75000
____ ZN	0.00018	12.48	32.171	0.00014	0.00015	0.00024
____ ZR	0.00756	2.70	119.327	0.01338	-0.00283	0.01212

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 46

Date/Time: 11/12/2018 11:58

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.48613	5,817.87	0.514	0.48666	0.48833	0.48341
____ AL	25.17965	453.78	0.774	24.97484	25.36303	25.20106
____ AS	0.51894	120.04	1.104	0.52116	0.51243	0.52322
____ B	0.48203	4,045.59	1.312	0.48343	0.48754	0.47513
____ BA	0.50218	250,443.48	0.709	0.50588	0.49878	0.50188
____ BE	0.48558	179,172.29	0.261	0.48704	0.48485	0.48485
____ CA	25.69492	4,911.39	0.166	25.66339	25.74336	25.67802
____ CD	0.50068	8,207.77	0.191	0.50089	0.50152	0.49964
____ CO	0.49854	1,663.81	0.649	0.50217	0.49745	0.49599
____ CR	0.48251	4,674.11	0.979	0.48088	0.48783	0.47882
____ CU	0.50497	3,467.01	1.318	0.50845	0.50917	0.49730
____ FE	25.27976	1,012.37	0.448	25.19150	25.24048	25.40729
____ K	25.18582	7,495.68	0.480	25.04680	25.26686	25.24379
____ LI	0.49737	2,333.96	0.872	0.49294	0.50161	0.49755
____ MG	25.96236	5,859.02	0.091	25.94819	25.94922	25.98968
____ MN	0.50215	32,194.39	0.049	0.50236	0.50223	0.50188
____ MO	0.50952	1,639.22	0.533	0.51252	0.50881	0.50723
____ NA	24.89004	16,426.96	0.560	24.79136	25.04937	24.82940
____ NI	0.50987	836.65	0.622	0.51333	0.50919	0.50710
____ P	0.51043	255.15	0.663	0.51431	0.50811	0.50887
____ PB	0.49880	677.25	0.619	0.50229	0.49643	0.49768
____ S	25.05609	4,012.17	0.220	25.04850	25.11469	25.00507
____ SB	0.48961	284.99	0.757	0.49258	0.49078	0.48546
____ SE	0.49127	228.41	0.826	0.49573	0.49030	0.48779
____ SI	25.50302	739.34	0.214	25.53199	25.53693	25.44015
____ SN	0.49756	282.26	0.726	0.50087	0.49810	0.49370
____ SR	0.50126	300,017.55	0.122	0.50194	0.50107	0.50076
____ TH	0.46255	66.35	6.338	0.49277	0.46066	0.43422
____ TI	0.50275	22,798.91	0.302	0.50120	0.50283	0.50423
____ TL	0.50518	356.76	0.513	0.50637	0.50696	0.50220
____ V	0.49869	4,685.30	0.627	0.49711	0.50229	0.49668
____ W	0.51183	480.53	0.670	0.51577	0.51024	0.50948
____ Y1	6314.87239	6,314.87	0.388	6342.86761	6297.13991	6304.60965
____ Y2A	181657.55746	181,657.56	0.608	180754.88000	182888.38414	181329.40825
____ Y2R	3969.18093	3,969.18	0.650	3986.21034	3939.51516	3981.81727
____ ZN	0.51324	6,409.65	0.339	0.51394	0.51451	0.51125
____ ZR	0.49958	210.90	2.180	0.50491	0.48705	0.50677

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 47

Date/Time: 11/12/2018 12:01

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00199	-18.73	71.565	-0.00051	-0.00210	-0.00335
____ AL	0.19515	4.90	89.670	0.13368	0.05919	0.39259
____ AS	0.00434	3.05	77.398	0.00727	0.00508	0.00067
____ B	-0.00060	-8.22	26.245	-0.00076	-0.00044	-0.00061
____ BA	-0.00005	100.79	47.699	-0.00005	-0.00002	-0.00006
____ BE	0.00024	-283.10	5.424	0.00024	0.00023	0.00026
____ CA	-0.00913	6.32	300.002	-0.00615	-0.03788	0.01664
____ CD	0.00003	-1.65	468.651	0.00002	0.00018	-0.00011
____ CO	-0.00021	6.91	30.246	-0.00023	-0.00014	-0.00027
____ CR	0.00055	-18.75	41.464	0.00049	0.00080	0.00035
____ CU	-0.00107	-75.93	72.225	-0.00114	-0.00181	-0.00026
____ FE	-0.00273	-1.55	1137.708	0.02338	0.00548	-0.03705
____ K	0.01606	164.92	157.520	-0.01070	0.01929	0.03959
____ LI	-0.00380	11.47	76.224	-0.00080	-0.00658	-0.00402
____ MG	0.00605	-0.53	184.948	-0.00620	0.00861	0.01574
____ MN	0.00007	-0.53	70.941	0.00002	0.00012	0.00008
____ MO	-0.00009	-0.69	168.739	-0.00008	0.00006	-0.00025
____ NA	0.04086	-69.00	63.921	0.03095	0.02115	0.07048
____ NI	0.00257	18.69	31.433	0.00166	0.00320	0.00286
____ P	0.00068	0.02	220.683	0.00233	0.00028	-0.00058
____ PB	0.00018	2.52	234.752	0.00057	-0.00028	0.00026
____ S	0.01024	-1.14	59.181	0.01080	0.01600	0.00392
____ SB	-0.00192	2.11	51.030	-0.00192	-0.00094	-0.00289
____ SE	-0.00105	3.06	386.800	-0.00247	-0.00419	0.00352
____ SI	-0.01017	0.00	159.987	-0.00192	-0.02890	0.00033
____ SN	-0.00040	1.22	316.296	0.00066	-0.00177	-0.00007
____ SR	0.00005	-1.95	73.526	0.00010	0.00004	0.00003
____ TH	-0.07283	5.30	37.420	-0.04672	-0.10110	-0.07068
____ TI	-0.00002	-18.46	1643.146	0.00029	-0.00025	-0.00010
____ TL	0.00380	-0.09	30.015	0.00391	0.00488	0.00261
____ V	-0.00096	-25.76	30.703	-0.00129	-0.00078	-0.00079
____ W	-0.00086	-0.65	115.973	-0.00076	0.00008	-0.00191
____ Y1	6439.70781	6,439.71	0.324	6454.74207	6415.88290	6448.49847
____ Y2A	186939.59006	186,939.59	0.175	187305.21896	186675.00000	186838.55122
____ Y2R	3970.24667	3,970.25	1.799	3943.04000	4051.27000	3916.43000
____ ZN	-0.00042	4.68	22.967	-0.00051	-0.00044	-0.00032
____ ZR	0.00766	2.38	117.766	-0.00055	0.00621	0.01732

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 48 Date/Time: 11/12/2018 12:04

Sample Number: **Z882790**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00001	-9.16	1937.959	0.00015	-0.00042	0.00025
____ AL	0.06220	3.83	166.391	0.05033	-0.03485	0.17111
____ AS	0.00060	3.62	271.010	0.00025	-0.00082	0.00235
____ B	-0.00075	-16.89	86.633	-0.00067	-0.00144	-0.00015
____ BA	-0.00010	130.22	23.432	-0.00012	-0.00008	-0.00010
____ BE	0.00021	-538.88	5.648	0.00022	0.00020	0.00020
____ CA	-0.00342	11.57	240.068	-0.00759	0.00604	-0.00871
____ CD	-0.00001	-3.83	2435.032	0.00001	-0.00013	0.00011
____ CO	-0.00070	8.82	19.690	-0.00085	-0.00059	-0.00064
____ CR	0.00083	-29.02	55.919	0.00083	0.00037	0.00130
____ CU	0.00274	-80.35	20.489	0.00329	0.00217	0.00276
____ FE	0.01399	-1.35	25.709	0.01009	0.01469	0.01718
____ K	-0.18509	160.80	32.673	-0.14119	-0.25406	-0.16000
____ LI	-0.00646	-1.35	74.693	-0.01179	-0.00521	-0.00239
____ MG	0.01294	1.43	52.668	0.01148	0.00697	0.02037
____ MN	0.00008	1.11	63.200	0.00005	0.00014	0.00005
____ MO	0.00001	-0.68	4553.123	-0.00031	0.00004	0.00030
____ NA	0.02439	-122.07	12.071	0.02528	0.02111	0.02679
____ NI	-0.00337	14.82	16.523	-0.00323	-0.00398	-0.00290
____ P	0.00085	0.01	100.815	0.00054	0.00183	0.00019
____ PB	0.00005	3.82	2927.876	0.00128	-0.00141	0.00026
____ S	0.00731	-2.74	44.334	0.00669	0.00443	0.01082
____ SB	-0.00147	3.97	89.130	-0.00288	-0.00029	-0.00125
____ SE	-0.00274	3.72	102.216	-0.00480	-0.00388	0.00045
____ SI	-0.02290	-0.51	206.239	-0.07715	0.00891	-0.00045
____ SN	-0.00077	1.71	180.479	-0.00092	0.00069	-0.00208
____ SR	0.00001	-47.97	90.598	0.00002	0.00002	0.00000
____ TH	-0.03049	15.57	58.508	-0.05107	-0.01962	-0.02076
____ TI	0.00018	-16.72	39.377	0.00021	0.00010	0.00024
____ TL	0.00352	-0.54	31.620	0.00312	0.00266	0.00478
____ V	0.00028	-24.28	187.860	0.00029	0.00079	-0.00025
____ W	0.00177	3.08	6.635	0.00190	0.00167	0.00175
____ Y1	10758.20125	10,758.20	6.063	11155.13350	11114.06978	10005.40045
____ Y2A	341275.49655	341,275.50	2.610	351556.62891	335894.06499	336375.79576
____ Y2R	6065.08667	6,065.09	10.169	5921.55000	6740.96000	5532.75000
____ ZN	-0.00069	1.61	18.517	-0.00068	-0.00082	-0.00056
____ ZR	0.00248	1.58	295.316	-0.00383	0.00076	0.01052

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 49

Date/Time: 11/12/2018 12:07

Sample Number: **LLC**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.01103	-4.91	9.672	0.01092	0.01003	0.01215
____ AL	0.33351	8.27	52.951	0.33109	0.51131	0.15814
____ AS	0.05577	15.17	4.424	0.05404	0.05466	0.05859
____ B	0.04703	365.39	1.142	0.04643	0.04721	0.04746
____ BA	0.00526	2,799.55	0.597	0.00528	0.00522	0.00528
____ BE	0.00512	1,556.50	0.161	0.00513	0.00512	0.00511
____ CA	0.52939	107.02	1.522	0.53452	0.53354	0.52011
____ CD	0.00528	87.17	1.900	0.00538	0.00518	0.00528
____ CO	0.00488	24.51	9.769	0.00532	0.00437	0.00495
____ CR	0.01450	119.79	6.209	0.01512	0.01491	0.01347
____ CU	0.02063	142.33	11.928	0.01972	0.02341	0.01875
____ FE	0.21456	7.05	17.726	0.21537	0.17614	0.25219
____ K	0.52584	306.88	0.479	0.52381	0.52505	0.52866
____ LI	0.05029	256.47	15.325	0.04156	0.05616	0.05316
____ MG	0.11760	24.35	0.909	0.11781	0.11644	0.11854
____ MN	0.01044	686.33	1.415	0.01027	0.01047	0.01056
____ MO	0.01026	33.71	2.289	0.01004	0.01051	0.01024
____ NA	1.02723	573.85	3.968	1.05472	0.98040	1.04656
____ NI	0.01031	31.79	3.983	0.01052	0.00983	0.01056
____ P	0.10411	52.12	2.172	0.10177	0.10427	0.10629
____ PB	0.01711	25.98	4.867	0.01781	0.01732	0.01619
____ S	0.53547	85.76	0.174	0.53588	0.53441	0.53613
____ SB	0.05209	34.46	2.491	0.05358	0.05149	0.05120
____ SE	0.05256	28.35	7.109	0.04847	0.05579	0.05343
____ SI	0.49688	14.46	3.198	0.50878	0.50303	0.47884
____ SN	0.05320	32.47	2.755	0.05340	0.05164	0.05455
____ SR	0.00548	3,309.75	0.627	0.00545	0.00547	0.00552
____ TH	0.50717	69.95	8.496	0.48652	0.47829	0.55669
____ TI	0.01047	466.11	1.603	0.01066	0.01037	0.01037
____ TL	0.03786	24.89	4.578	0.03721	0.03654	0.03982
____ V	0.00934	78.36	8.703	0.01028	0.00885	0.00889
____ W	0.03233	31.38	1.678	0.03214	0.03191	0.03294
____ Y1	6521.44628	6,521.45	0.908	6453.23806	6559.48477	6551.61602
____ Y2A	184970.45451	184,970.45	0.305	184936.65335	185550.76892	184423.94127
____ Y2R	3887.20667	3,887.21	0.391	3895.37000	3896.60000	3869.65000
____ ZN	0.02209	292.70	0.113	0.02210	0.02210	0.02206
____ ZR	0.04437	27.78	21.784	0.04539	0.05347	0.03423

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 50

Date/Time: 11/12/2018 12:09

Sample Number: **ICSA**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00510	-98.49	20.482	0.00630	0.00446	0.00453
____ AL	489.07324	8,638.01	0.574	492.24459	486.90879	488.06635
____ AS	0.01344	4.67	20.643	0.01046	0.01594	0.01393
____ B	0.01705	2,817.17	29.529	0.01333	0.01503	0.02277
____ BA	0.00056	360.55	6.253	0.00060	0.00054	0.00054
____ BE	-0.00001	-334.20	385.426	-0.00005	0.00002	0.00001
____ CA	501.63376	90,270.12	0.643	505.29338	499.20035	500.40756
____ CD	0.00370	140.09	2.116	0.00364	0.00379	0.00368
____ CO	0.00134	10.98	14.596	0.00111	0.00145	0.00145
____ CR	-0.00644	-78.27	6.949	-0.00603	-0.00636	-0.00692
____ CU	0.00057	26.35	226.573	0.00088	0.00167	-0.00084
____ FE	199.01669	7,439.77	0.692	200.60511	198.17192	198.27304
____ K	-0.00610	152.94	1025.754	0.02127	-0.07764	0.03808
____ LI	-0.00105	98.61	183.366	-0.00171	0.00112	-0.00255
____ MG	476.47917	88,350.41	0.790	480.72792	473.56095	475.14864
____ MN	0.00223	276.10	1.297	0.00224	0.00220	0.00225
____ MO	-0.00115	-3.77	48.995	-0.00153	-0.00050	-0.00142
____ NA	0.10435	-25.81	10.342	0.11461	0.09310	0.10535
____ NI	-0.01097	6.44	12.495	-0.01110	-0.01227	-0.00954
____ P	0.00631	2.24	31.181	0.00698	0.00785	0.00409
____ PB	0.00391	140.49	113.783	0.00879	0.00283	0.00010
____ S	-0.04284	-8.87	16.621	-0.04558	-0.04818	-0.03476
____ SB	0.01263	9.66	16.263	0.01234	0.01074	0.01481
____ SE	-0.00117	2.73	558.599	0.00631	-0.00561	-0.00420
____ SI	-0.00008	0.29	3454.284	0.04687	-0.02233	-0.02479
____ SN	0.00569	4.27	13.789	0.00628	0.00600	0.00480
____ SR	0.00032	7,600.94	22.705	0.00023	0.00034	0.00037
____ TH	0.07773	21.72	61.854	0.10279	0.10810	0.02230
____ TI	-0.00069	-44.12	20.471	-0.00075	-0.00080	-0.00053
____ TL	0.00603	1.38	17.061	0.00488	0.00687	0.00632
____ V	-0.00216	4.89	4.015	-0.00222	-0.00220	-0.00206
____ W	0.00267	2.54	23.703	0.00249	0.00337	0.00214
____ Y1	5819.62059	5,819.62	0.171	5831.08315	5813.04884	5814.72979
____ Y2A	164959.94964	164,959.95	0.515	164758.46307	165892.34297	164229.04287
____ Y2R	3833.78888	3,833.79	1.024	3792.24086	3870.23358	3838.89221
____ ZN	0.00949	295.75	2.985	0.00930	0.00981	0.00935
____ ZR	-0.00083	1.84	1341.276	-0.01371	0.00575	0.00546

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 51

Date/Time: 11/12/2018 12:12

Sample Number: **ICSAB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.21202	2,198.15	0.421	0.21147	0.21305	0.21153
____ AL	487.83396	8,522.64	0.323	489.56686	487.45004	486.48498
____ AS	0.11401	25.88	2.400	0.11176	0.11705	0.11321
____ B	0.02142	2,820.60	28.623	0.01781	0.01795	0.02850
____ BA	0.50867	228,339.44	0.065	0.50865	0.50835	0.50901
____ BE	0.51345	170,623.20	0.010	0.51339	0.51347	0.51348
____ CA	500.77586	89,141.80	0.594	502.52605	502.45757	497.34395
____ CD	0.95442	14,561.71	0.059	0.95442	0.95386	0.95499
____ CO	0.47617	1,469.14	0.844	0.47772	0.47918	0.47160
____ CR	0.47776	4,167.38	0.839	0.47439	0.47670	0.48220
____ CU	0.52507	3,276.81	1.181	0.52151	0.52148	0.53224
____ FE	198.74008	7,349.18	0.597	198.78207	199.90576	197.53241
____ K	0.00857	155.42	838.147	0.07053	0.02538	-0.07020
____ LI	-0.00316	88.02	12.938	-0.00314	-0.00276	-0.00358
____ MG	480.78821	88,033.49	0.704	481.51609	483.74767	477.10089
____ MN	0.50160	29,093.54	0.142	0.50178	0.50221	0.50082
____ MO	-0.00130	-4.24	28.401	-0.00170	-0.00123	-0.00097
____ NA	0.10649	-24.17	15.719	0.09855	0.12571	0.09519
____ NI	0.96132	1,461.26	0.555	0.96448	0.96432	0.95517
____ P	0.01116	4.72	14.585	0.01296	0.00980	0.01073
____ PB	0.52150	782.59	1.522	0.52616	0.52601	0.51233
____ S	-0.04243	-8.86	14.859	-0.04261	-0.03604	-0.04864
____ SB	0.61653	337.33	1.170	0.61705	0.62347	0.60908
____ SE	0.50939	217.15	1.654	0.51140	0.51662	0.50013
____ SI	-0.03663	-0.73	49.016	-0.01820	-0.05407	-0.03763
____ SN	0.00349	3.13	50.186	0.00356	0.00520	0.00170
____ SR	0.00033	7,534.28	32.801	0.00029	0.00025	0.00046
____ TH	0.00236	13.28	307.258	-0.00599	0.00610	0.00696
____ TI	-0.00004	-17.11	130.879	-0.00006	0.00002	-0.00008
____ TL	0.09838	62.98	1.562	0.09937	0.09917	0.09661
____ V	0.50352	4,350.79	1.028	0.49980	0.50132	0.50944
____ W	-0.00424	8.07	70.744	-0.00727	-0.00419	-0.00127
____ Y1	5850.05296	5,850.05	0.322	5871.70584	5837.34021	5841.11281
____ Y2A	163581.91042	163,581.91	0.484	163016.43057	163241.82817	164487.47253
____ Y2R	3792.07033	3,792.07	0.552	3803.76719	3767.90197	3804.54182
____ ZN	1.02728	12,002.49	0.088	1.02820	1.02727	1.02638
____ ZR	0.00831	3.92	60.797	0.00276	0.01264	0.00952

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 52

Date/Time: 11/12/2018 12:15

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.48728	5,878.22	0.785	0.48940	0.48287	0.48958
____ AL	25.42691	460.49	1.381	25.78307	25.41648	25.08118
____ AS	0.52244	121.79	0.755	0.52466	0.51788	0.52477
____ B	0.48993	4,138.95	0.235	0.48877	0.48995	0.49107
____ BA	0.50615	254,377.53	0.818	0.51093	0.50371	0.50381
____ BE	0.49061	182,432.29	0.178	0.48973	0.49147	0.49064
____ CA	25.86675	4,968.89	0.277	25.85894	25.79931	25.94200
____ CD	0.50282	8,307.78	0.197	0.50274	0.50186	0.50384
____ CO	0.50177	1,687.72	0.335	0.49988	0.50236	0.50308
____ CR	0.49081	4,791.42	0.560	0.48776	0.49310	0.49156
____ CU	0.51862	3,587.84	0.468	0.51647	0.51814	0.52125
____ FE	25.37286	1,021.17	0.124	25.35690	25.40901	25.35268
____ K	25.32237	7,572.63	1.424	25.58079	24.91043	25.47588
____ LI	0.50000	2,357.80	2.081	0.51025	0.50030	0.48945
____ MG	26.10272	5,919.96	0.356	26.10234	26.19584	26.00998
____ MN	0.50524	32,641.79	0.132	0.50449	0.50579	0.50542
____ MO	0.51181	1,659.58	0.066	0.51158	0.51220	0.51166
____ NA	24.97838	16,567.03	1.383	25.27522	24.59905	25.06088
____ NI	0.51410	850.10	0.430	0.51271	0.51294	0.51666
____ P	0.51608	260.05	0.408	0.51392	0.51813	0.51620
____ PB	0.50182	686.76	0.756	0.50445	0.50353	0.49747
____ S	25.16220	4,061.01	0.190	25.21630	25.12593	25.14438
____ SB	0.49239	288.90	0.116	0.49297	0.49183	0.49236
____ SE	0.49065	229.94	1.004	0.49566	0.48582	0.49047
____ SI	25.63365	746.84	0.133	25.66744	25.63431	25.59921
____ SN	0.49938	285.52	0.117	0.49956	0.49873	0.49986
____ SR	0.50218	302,887.25	0.821	0.50090	0.49885	0.50679
____ TH	0.45615	65.92	11.026	0.48309	0.39812	0.48723
____ TI	0.50488	23,072.11	0.142	0.50417	0.50487	0.50560
____ TL	0.50609	360.24	0.089	0.50653	0.50563	0.50610
____ V	0.50452	4,776.97	0.631	0.50157	0.50408	0.50790
____ W	0.51487	487.19	0.259	0.51368	0.51631	0.51463
____ Y1	6364.72728	6,364.73	0.767	6400.50636	6384.56005	6309.11543
____ Y2A	183060.51037	183,060.51	0.410	183620.36000	183352.68978	182208.48134
____ Y2R	3989.04776	3,989.05	1.020	3946.45779	4027.55898	3993.12650
____ ZN	0.51620	6,497.62	0.099	0.51589	0.51593	0.51679
____ ZR	0.49557	210.18	0.411	0.49577	0.49344	0.49750

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 53

Date/Time: 11/12/2018 12:18

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00186	-17.39	53.105	-0.00116	-0.00298	-0.00143
____ AL	0.16642	4.35	32.281	0.10443	0.19537	0.19946
____ AS	0.00615	3.39	59.827	0.00887	0.00762	0.00196
____ B	0.00001	-3.18	3872.671	-0.00054	0.00016	0.00042
____ BA	-0.00002	116.09	167.054	0.00001	-0.00001	-0.00004
____ BE	0.00023	-287.13	15.354	0.00019	0.00023	0.00026
____ CA	0.00432	8.82	166.530	0.01232	0.00225	-0.00161
____ CD	-0.00012	-4.03	1.549	-0.00012	-0.00012	-0.00012
____ CO	0.00048	9.06	64.120	0.00083	0.00037	0.00024
____ CR	-0.00010	-25.12	867.872	0.00091	-0.00058	-0.00063
____ CU	0.00120	-59.22	190.558	-0.00100	0.00357	0.00103
____ FE	0.01383	-0.88	448.007	-0.05408	0.02825	0.06733
____ K	0.00846	160.27	823.682	0.06785	0.02583	-0.06829
____ LI	-0.00020	27.93	2279.157	0.00492	-0.00308	-0.00242
____ MG	0.01806	2.17	75.015	0.00751	0.01334	0.03335
____ MN	-0.00003	-7.47	371.022	0.00005	-0.00017	0.00003
____ MO	0.00018	0.20	290.107	-0.00030	0.00011	0.00072
____ NA	0.01946	-81.68	151.315	0.04160	-0.01396	0.03075
____ NI	0.00282	18.69	46.596	0.00205	0.00433	0.00207
____ P	-0.00092	-0.79	87.109	-0.00149	0.00000	-0.00126
____ PB	0.00062	3.05	141.040	0.00075	-0.00031	0.00141
____ S	0.00064	-2.66	1152.520	0.00920	-0.00359	-0.00368
____ SB	-0.00080	2.70	74.070	-0.00042	-0.00050	-0.00148
____ SE	-0.00067	3.17	47.360	-0.00056	-0.00042	-0.00102
____ SI	-0.00647	0.11	321.945	0.00468	-0.03052	0.00642
____ SN	-0.00137	0.65	107.597	-0.00211	-0.00232	0.00033
____ SR	0.00006	-1.28	15.525	0.00005	0.00005	0.00006
____ TH	-0.07059	5.52	55.098	-0.06392	-0.11239	-0.03547
____ TI	0.00001	-17.32	2188.864	-0.00013	0.00009	0.00006
____ TL	0.00394	0.02	19.817	0.00306	0.00424	0.00453
____ V	-0.00053	-21.44	63.753	-0.00053	-0.00086	-0.00019
____ W	0.00121	1.29	45.585	0.00058	0.00141	0.00162
____ Y1	6308.43115	6,308.43	1.463	6245.22953	6265.68784	6414.37608
____ Y2A	186004.64866	186,004.65	0.597	185469.48713	187281.17013	185263.28874
____ Y2R	3909.98000	3,909.98	0.833	3941.34000	3876.30000	3912.30000
____ ZN	-0.00035	5.56	10.494	-0.00038	-0.00031	-0.00035
____ ZR	0.01170	4.02	47.401	0.00990	0.00728	0.01792

LANCASTER LABORATORIES

Run Name: 1831602T74 Instrument ID: 23745

Tube: 54 Date/Time: 11/12/2018 12:22

Sample Number: **9882790** Class: UP** Batch: 183131063501

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00011	26.12	524.724	-0.00035	-0.00007	0.00073
____ AL	1.13481	22.47	5.928	1.16880	1.17830	1.05734
____ AS	0.58823	132.82	0.336	0.59016	0.58831	0.58621
____ B	0.37807	2,820.07	0.571	0.37558	0.37944	0.37918
____ BA	0.13261	64,550.66	0.584	0.13199	0.13348	0.13237
____ BE	0.02042	6,984.86	0.873	0.02023	0.02057	0.02048
____ CA	226.44778	43,457.45	2.149	230.32436	220.98642	228.03255
____ CD	0.05175	826.86	0.813	0.05207	0.05189	0.05127
____ CO	0.10239	340.05	0.121	0.10234	0.10253	0.10229
____ CR	0.20314	1,899.14	0.513	0.20238	0.20433	0.20271
____ CU	0.53186	3,537.09	1.594	0.52253	0.53909	0.53397
____ FE	0.48712	18.48	7.696	0.44636	0.49489	0.52012
____ K	6.11200	1,970.83	2.263	6.25672	5.98113	6.09816
____ LI	1.02607	4,886.20	2.260	1.03696	0.99944	1.04182
____ MG	55.73547	12,650.58	2.214	56.71612	54.35009	56.14019
____ MN	3.56915	222,311.82	0.198	3.56602	3.57723	3.56419
____ MO	0.22712	714.42	0.814	0.22739	0.22881	0.22514
____ NA	45.36357	30,488.09	2.198	46.13588	44.23781	45.71701
____ NI	0.16810	278.17	1.060	0.16910	0.16915	0.16604
____ P	1.37904	678.45	0.803	1.38406	1.38670	1.36635
____ PB	0.51163	672.34	0.597	0.51417	0.51249	0.50824
____ S	61.73399	9,672.61	0.138	61.73348	61.64891	61.81959
____ SB	0.42397	242.15	1.117	0.42403	0.42867	0.41920
____ SE	0.79815	357.34	0.180	0.79650	0.79893	0.79903
____ SI	15.51514	456.55	2.044	15.60306	15.16340	15.77896
____ SN	0.60924	337.71	0.972	0.61022	0.61462	0.60290
____ SR	2.01651	1,175,016.40	1.140	2.04267	2.00736	1.99950
____ TH	0.02345	16.58	134.070	-0.01279	0.03977	0.04337
____ TI	0.10713	4,708.26	0.631	0.10635	0.10753	0.10751
____ TL	1.00009	693.32	0.808	0.99634	1.00937	0.99456
____ V	0.10401	919.57	1.826	0.10354	0.10610	0.10239
____ W	0.00046	2.16	410.214	-0.00044	0.00263	-0.00081
____ Y1	6176.43020	6,176.43	0.472	6179.31770	6145.91524	6204.05765
____ Y2A	176542.60601	176,542.61	0.230	176429.98803	176992.39304	176205.43695
____ Y2R	4032.41522	4,032.42	2.030	3985.09577	4126.94844	3985.20144
____ ZN	0.13334	1,635.94	0.752	0.13393	0.13391	0.13218
____ ZR	0.99850	409.64	3.887	1.00467	0.95697	1.03386

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 55

Date/Time: 11/12/2018 12:25

Sample Number: **LLC**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.01066	-7.54	16.172	0.00875	0.01210	0.01111
____ AL	0.46577	10.62	40.644	0.28240	0.66051	0.45441
____ AS	0.05529	14.93	10.256	0.05160	0.06182	0.05245
____ B	0.04774	375.77	1.294	0.04752	0.04727	0.04844
____ BA	0.00523	2,814.38	0.169	0.00523	0.00522	0.00523
____ BE	0.00510	1,565.29	0.413	0.00509	0.00508	0.00512
____ CA	0.52717	107.05	2.125	0.51773	0.52423	0.53954
____ CD	0.00508	83.15	0.478	0.00508	0.00511	0.00506
____ CO	0.00522	25.47	6.416	0.00559	0.00494	0.00513
____ CR	0.01557	131.77	7.664	0.01482	0.01494	0.01694
____ CU	0.02036	141.07	10.264	0.01893	0.02276	0.01940
____ FE	0.25423	8.65	3.442	0.26414	0.25101	0.24755
____ K	0.59517	327.72	17.505	0.61160	0.69017	0.48375
____ LI	0.05175	263.82	13.128	0.05448	0.05674	0.04401
____ MG	0.12320	25.70	0.849	0.12326	0.12421	0.12212
____ MN	0.01058	703.48	1.533	0.01060	0.01041	0.01073
____ MO	0.01033	33.65	2.125	0.01048	0.01043	0.01008
____ NA	1.03214	579.48	1.434	1.02743	1.02026	1.04872
____ NI	0.01066	32.09	6.123	0.01048	0.01011	0.01138
____ P	0.10642	52.88	1.220	0.10694	0.10494	0.10738
____ PB	0.01759	26.47	3.104	0.01696	0.01794	0.01788
____ S	0.55671	88.51	1.029	0.56290	0.55563	0.55160
____ SB	0.05147	33.81	4.844	0.05283	0.05299	0.04859
____ SE	0.04996	26.88	4.926	0.04958	0.05259	0.04771
____ SI	0.53398	15.56	9.056	0.53248	0.58306	0.48638
____ SN	0.05274	31.93	3.566	0.05398	0.05366	0.05057
____ SR	0.00552	3,372.18	0.605	0.00553	0.00548	0.00555
____ TH	0.49925	69.37	8.460	0.52206	0.45052	0.52518
____ TI	0.01079	486.33	3.004	0.01062	0.01116	0.01058
____ TL	0.03739	24.34	3.361	0.03883	0.03648	0.03687
____ V	0.00907	76.49	6.892	0.00905	0.00845	0.00970
____ W	0.03133	30.16	2.888	0.03102	0.03235	0.03062
____ Y1	6465.32550	6,465.33	0.294	6480.59791	6471.37005	6444.00853
____ Y2A	187061.25394	187,061.25	0.670	188475.26421	186618.65761	186089.84000
____ Y2R	3902.82333	3,902.82	1.788	3839.73000	3890.96000	3977.78000
____ ZN	0.02147	282.41	1.270	0.02157	0.02167	0.02116
____ ZR	0.04970	29.87	6.508	0.04856	0.04719	0.05335

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 56

Date/Time: 11/12/2018 12:28

Sample Number: **ICSA**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00464	-98.31	11.363	0.00524	0.00424	0.00444
____ AL	493.43601	8,443.74	0.671	497.23526	491.89129	491.18149
____ AS	0.00946	3.80	7.481	0.01025	0.00923	0.00889
____ B	0.01360	2,766.19	40.897	0.01707	0.00718	0.01654
____ BA	0.00072	423.44	12.410	0.00079	0.00062	0.00073
____ BE	-0.00002	-329.16	62.731	-0.00003	-0.00002	-0.00001
____ CA	505.44714	88,090.20	0.438	503.99357	507.99279	504.35504
____ CD	0.00359	138.34	6.781	0.00365	0.00331	0.00379
____ CO	0.00109	10.16	49.772	0.00071	0.00085	0.00171
____ CR	-0.00653	-77.48	7.027	-0.00609	-0.00651	-0.00700
____ CU	-0.00043	18.42	431.056	-0.00197	0.00162	-0.00093
____ FE	201.41665	7,290.02	0.550	200.90589	202.68843	200.65562
____ K	0.11674	181.70	58.690	0.03804	0.14909	0.16308
____ LI	-0.00331	86.27	138.484	-0.00686	-0.00494	0.00187
____ MG	499.43894	88,903.89	0.350	500.07014	500.78607	497.46059
____ MN	0.00238	280.16	1.650	0.00238	0.00234	0.00242
____ MO	-0.00097	-3.21	50.663	-0.00070	-0.00154	-0.00067
____ NA	0.25993	71.66	6.776	0.25781	0.27851	0.24348
____ NI	-0.01096	6.53	4.777	-0.01156	-0.01061	-0.01071
____ P	0.00675	2.48	34.793	0.00542	0.00946	0.00537
____ PB	0.00431	141.11	29.263	0.00367	0.00576	0.00349
____ S	-0.02609	-6.36	79.819	-0.00316	-0.04383	-0.03128
____ SB	0.01096	8.69	10.106	0.01223	0.01044	0.01020
____ SE	0.00009	3.22	5404.764	-0.00165	0.00538	-0.00347
____ SI	-0.02143	-0.30	187.666	0.01957	-0.06079	-0.02305
____ SN	0.00390	3.31	56.213	0.00201	0.00630	0.00339
____ SR	0.00032	7,499.98	78.675	0.00053	0.00004	0.00040
____ TH	0.05939	19.09	42.247	0.03214	0.06450	0.08154
____ TI	-0.00093	-52.81	17.099	-0.00111	-0.00089	-0.00080
____ TL	0.00641	1.61	33.544	0.00755	0.00774	0.00393
____ V	-0.00186	7.58	33.889	-0.00164	-0.00257	-0.00137
____ W	0.00158	1.58	101.736	-0.00026	0.00231	0.00268
____ Y1	5776.32143	5,776.32	0.628	5742.53647	5771.73174	5814.69609
____ Y2A	161485.72463	161,485.72	1.176	160238.83223	163671.71828	160546.62338
____ Y2R	3713.57520	3,713.58	0.289	3713.01178	3703.14804	3724.56578
____ ZN	0.00780	276.65	0.995	0.00771	0.00785	0.00784
____ ZR	0.00992	5.49	102.310	0.01019	-0.00036	0.01993

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 57

Date/Time: 11/12/2018 12:30

Sample Number: **ICSAB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.20925	2,164.56	0.612	0.20862	0.20840	0.21072
____ AL	486.00995	8,452.54	2.031	492.05790	491.35246	474.61949
____ AS	0.11250	25.39	1.427	0.11408	0.11087	0.11255
____ B	0.01469	2,781.29	65.335	0.00851	0.00981	0.02574
____ BA	0.50275	226,085.49	0.404	0.50305	0.50461	0.50058
____ BE	0.50568	168,336.41	0.462	0.50575	0.50799	0.50332
____ CA	499.16213	88,472.55	1.839	506.62933	501.94050	488.91656
____ CD	0.93989	14,245.71	0.450	0.93614	0.93906	0.94447
____ CO	0.46629	1,429.26	0.391	0.46438	0.46801	0.46649
____ CR	0.47739	4,171.52	0.629	0.47884	0.47393	0.47939
____ CU	0.51595	3,228.73	1.057	0.51811	0.50974	0.51999
____ FE	198.90405	7,322.85	1.770	201.70338	200.05713	194.95164
____ K	0.08634	176.32	18.637	0.07059	0.10276	0.08568
____ LI	-0.00191	93.15	290.292	-0.00204	-0.00740	0.00370
____ MG	487.44457	88,624.18	2.225	493.23643	494.16467	474.93263
____ MN	0.49579	28,809.63	0.739	0.49435	0.49996	0.49308
____ MO	-0.00077	-2.63	66.785	-0.00122	-0.00087	-0.00021
____ NA	0.20747	39.51	17.786	0.21178	0.24202	0.16860
____ NI	0.94371	1,425.41	0.665	0.93880	0.95078	0.94156
____ P	0.01010	4.12	13.641	0.00894	0.01163	0.00974
____ PB	0.50857	760.95	0.790	0.50405	0.50989	0.51176
____ S	-0.04497	-9.17	13.367	-0.05108	-0.03906	-0.04476
____ SB	0.59639	324.31	0.446	0.59429	0.59551	0.59938
____ SE	0.49621	210.21	0.554	0.49782	0.49777	0.49304
____ SI	-0.05107	-1.11	136.672	-0.11088	-0.06795	0.02562
____ SN	0.00362	3.18	64.655	0.00540	0.00097	0.00448
____ SR	0.00017	7,435.05	157.134	-0.00013	0.00025	0.00038
____ TH	0.03311	16.55	41.376	0.04665	0.03342	0.01926
____ TI	0.00002	-14.88	1062.444	0.00018	0.00000	-0.00013
____ TL	0.09710	61.71	0.894	0.09709	0.09624	0.09798
____ V	0.49760	4,307.69	0.196	0.49870	0.49684	0.49726
____ W	-0.00511	7.06	18.838	-0.00443	-0.00468	-0.00621
____ Y1	5811.17490	5,811.17	0.936	5831.76976	5852.23443	5749.52051
____ Y2A	163874.89588	163,874.90	0.657	164567.93695	162635.47453	164421.27617
____ Y2R	3776.06711	3,776.07	1.574	3755.07290	3729.97609	3843.15233
____ ZN	1.00690	11,690.08	0.090	1.00586	1.00752	1.00731
____ ZR	0.01182	5.80	45.094	0.00935	0.01793	0.00817

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 58

Date/Time: 11/12/2018 12:33

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.48693	5,816.59	0.548	0.48407	0.48936	0.48736
____ AL	25.17322	446.22	1.595	25.16259	25.57996	24.77711
____ AS	0.52468	123.10	1.342	0.52785	0.52958	0.51661
____ B	0.48939	4,090.09	1.114	0.48364	0.49005	0.49449
____ BA	0.51588	256,397.20	0.781	0.51419	0.51298	0.52048
____ BE	0.48878	179,737.91	0.351	0.48693	0.48907	0.49033
____ CA	25.92754	4,875.04	1.386	25.87186	26.31137	25.59938
____ CD	0.50199	8,348.63	0.880	0.50332	0.50559	0.49706
____ CO	0.50219	1,700.19	1.172	0.50279	0.50775	0.49602
____ CR	0.49076	4,737.92	0.905	0.48574	0.49419	0.49235
____ CU	0.51042	3,488.61	1.823	0.49986	0.51400	0.51741
____ FE	25.43870	1,002.14	0.901	25.37540	25.69295	25.24774
____ K	25.15042	7,362.75	1.573	25.46016	25.28633	24.70479
____ LI	0.49822	2,300.03	0.247	0.49889	0.49897	0.49680
____ MG	26.01131	5,774.57	0.208	26.05041	26.03396	25.94957
____ MN	0.50702	32,394.33	0.075	0.50697	0.50666	0.50742
____ MO	0.50976	1,663.75	0.919	0.51084	0.51381	0.50463
____ NA	24.93011	16,183.95	1.767	25.21997	25.14728	24.42307
____ NI	0.51417	855.79	1.022	0.51698	0.51742	0.50810
____ P	0.51748	262.55	0.891	0.51923	0.52096	0.51225
____ PB	0.50300	692.77	0.927	0.50078	0.50836	0.49986
____ S	25.26532	4,104.48	0.359	25.22851	25.36861	25.19885
____ SB	0.49083	289.87	1.729	0.48920	0.50001	0.48327
____ SE	0.49638	234.07	1.490	0.50043	0.50087	0.48784
____ SI	25.76538	734.77	1.268	25.72430	26.11070	25.46114
____ SN	0.50104	288.34	1.235	0.50306	0.50598	0.49410
____ SR	0.50623	301,958.01	0.504	0.50600	0.50888	0.50380
____ TH	0.42831	61.41	7.367	0.43813	0.45377	0.39301
____ TI	0.50888	22,997.63	0.444	0.50739	0.50777	0.51147
____ TL	0.50961	365.12	1.378	0.50950	0.51668	0.50264
____ V	0.50789	4,756.33	0.988	0.50237	0.50912	0.51219
____ W	0.51386	489.39	1.152	0.51537	0.51888	0.50733
____ Y1	6406.74207	6,406.74	0.899	6413.59611	6346.05491	6460.57519
____ Y2A	181036.63058	181,036.63	0.259	181541.09384	180954.13429	180614.66361
____ Y2R	3904.76109	3,904.76	1.712	3837.77689	3905.02793	3971.47845
____ ZN	0.51315	6,502.13	0.582	0.51416	0.51551	0.50979
____ ZR	0.50941	210.72	1.037	0.50433	0.50900	0.51488

LANCASTER LABORATORIES

Run Name: 1831602T74

Instrument ID: 23745

Tube: 59

Date/Time: 11/12/2018 12:36

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00110	-14.81	39.549	0.00066	0.00152	0.00111
____ AL	0.11014	3.63	75.817	0.01593	0.13945	0.17504
____ AS	0.00481	3.20	72.079	0.00693	0.00081	0.00669
____ B	0.00013	-1.78	453.969	-0.00038	0.00001	0.00075
____ BA	-0.00001	119.59	184.297	0.00000	-0.00002	0.00000
____ BE	0.00023	-291.27	4.928	0.00024	0.00022	0.00022
____ CA	0.00831	9.68	196.432	-0.00491	0.02654	0.00329
____ CD	-0.00001	-2.30	445.540	0.00001	-0.00005	0.00001
____ CO	0.00001	7.76	1983.020	0.00018	-0.00021	0.00006
____ CR	-0.00017	-26.05	177.309	0.00017	-0.00040	-0.00026
____ CU	-0.00168	-65.61	63.406	-0.00053	-0.00264	-0.00189
____ FE	0.04708	0.45	18.446	0.04206	0.05710	0.04207
____ K	0.03590	170.40	136.756	0.05097	0.07570	-0.01897
____ LI	-0.00294	15.48	80.181	-0.00529	-0.00057	-0.00297
____ MG	0.00734	-0.23	113.086	0.01015	-0.00200	0.01388
____ MN	-0.00001	-3.53	460.330	0.00004	0.00000	-0.00008
____ MO	0.00005	-0.25	476.176	-0.00013	-0.00002	0.00029
____ NA	0.02389	-79.98	110.791	-0.00144	0.02174	0.05137
____ NI	0.00302	19.64	16.795	0.00342	0.00317	0.00245
____ P	0.00033	-0.54	345.204	-0.00096	0.00121	0.00075
____ PB	0.00069	3.22	76.720	0.00008	0.00099	0.00100
____ S	0.00541	-1.95	88.508	0.00764	-0.00009	0.00869
____ SB	-0.00081	2.80	128.327	-0.00131	-0.00150	0.00038
____ SE	0.00013	3.64	2276.720	-0.00054	0.00331	-0.00238
____ SI	-0.00807	0.06	485.745	-0.00588	0.03000	-0.04834
____ SN	0.00095	2.01	32.906	0.00106	0.00120	0.00060
____ SR	0.00002	-25.31	148.983	0.00002	-0.00001	0.00003
____ TH	0.05923	20.35	11.949	0.05281	0.06682	0.05805
____ TI	0.00031	-3.37	57.364	0.00011	0.00045	0.00036
____ TL	0.00394	0.01	24.882	0.00334	0.00508	0.00342
____ V	-0.00069	-22.13	70.800	-0.00120	-0.00023	-0.00064
____ W	0.00034	0.49	161.448	0.00047	0.00080	-0.00026
____ Y1	6513.74310	6,513.74	0.537	6518.26904	6476.73241	6546.22786
____ Y2A	188123.80390	188,123.80	0.705	189632.76345	187599.96014	187138.68810
____ Y2R	3963.72000	3,963.72	0.491	3979.44000	3941.95000	3969.77000
____ ZN	-0.00063	2.11	11.373	-0.00069	-0.00065	-0.00055
____ ZR	0.00273	2.95	201.119	0.00238	0.00839	-0.00258

Extraction/Distillation/Digestion Logs

Metals in Liquid

LLENS Worksheet for SW846 Water

Batch# 18 313 10635 01

Start Time: 11/11/18 5:41 **End Time:** 11/11/18 9:40 **Hot Block:** Deena1

Pipette ID: O22014G

Spike/Reagent	Lot#	Volume Added(mL)
1:1 HCL	P18-295D	5.00
1:1 HNO3	P18-310D	2.00
ICP Spike 1A	1824912#15	1.00
ICP Spike 1B	1824913#15	1.00
LCS A1	1824912#15	1.00
LCS B1	1824913#15	1.00

Method Ref:

	SampleID	Date Due	ST	P	H	Method	PH<2	BC	Vessel Lot#	Location ID	Comments
1)	PBW	.							1807160		Filtered Reagent H2O Lot# P18311B used
2)	LCSW	.							1807160		Filtered Reagent H2O Lot# P18311B used
3)	9882788	11/14/18 09:25	WW	N7		SW-846 6010C	Y	800D	1807160	WMET31/F7	
4)	9882789	11/14/18 09:25	WW	N7		SW-846 6010C	Y	800A	1807160	WMET1/C10	
5)	**9882790U**	11/14/18 09:25	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/B7	
6)	**9882791R**	11/14/18 09:25	WW	N7		SW-846 6010C	Y	800A	1807160	WMET1/A10	
7)	**9882792M**	11/14/18 09:25	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/D8	
8)	**9882793D**	11/14/18 09:25	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/E8	
9)	9882794	11/14/18 09:25	WW	N7		SW-846 6010C	Y	800A	1807160	WMET1/F10	
10)	9882795	11/14/18 09:25	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/C9	
11)	9882880	11/14/18 09:25	GW	N7		SW-846 6010C	Y	800A	1807160	WMET02/A4	
12)	9882881	11/14/18 09:25	GW	N7		SW-846 6010C	Y	800A	1807160	WMET02/B3	
13)	9882882	11/14/18 09:25	GW	N7		SW-846 6010C	Y	800A	1807160	WMET02/A3	
14)	9882883	11/14/18 09:25	GW	N7		SW-846 6010C	Y	800A	1807160	WMET04/A3	
15)	9882884EB	11/14/18 09:25	GW	N7		SW-846 6010C	Y	800A	1807160	WMET04/A2	
16)	9882892	11/14/18 18:14	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/E7	
17)	9882893	11/14/18 18:14	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/B9	
18)	9882894	11/14/18 18:14	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/A8	
19)	9882895	11/14/18 18:14	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/E9	
20)	9882896	11/14/18 18:14	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/C8	
21)	9882897	11/14/18 18:14	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/F8	
22)	9882898	11/14/18 18:14	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/C7	

Prep Employee:1184 D/I _____

11/11/2018

	SampleID	Date Due	ST	P	H	Method	PH<2	BC	Vessel Lot#	Location ID	Comments
23)	9882899	11/14/18 18:14	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/F7	
24)	9883540	11/14/18 14:53	WW	N7		SW-846 6010C	Y	800A	1807160	WMET02/C3	

Batch# 18 313 1063 501

LLENS Batch Chronology and Change Log - SW846 Water

	Operation	Instrument	Operation Date	ANALYST
1)	Batch Creation		11/9/18 8:03	1184
2)	Sample Vol		11/11/18 5:41	1184
3)	Final Vol	CLEAR	11/11/18 5:41	1184
4)	Trial		11/11/18 5:41	1184
5)	Upload Prep	US19PCC0672	11/11/18 9:50	1184

Sample ID	Analysis	D	Operation	Measurement	Original Entry				Data Changed		
					Date/Time	Data	Units	Analyst	Date/Time	Analyst	Reason

Analysis: 0635 SW846 Water

Batch# 18 313 1063 501

Sample ID	Due Date	P	EPA#	SDG#	Initial Volume	Final Volume	Trial
PBW					50.0000	50.0000	1
LCSW					1.0000	1.0000	1
9882788	11/14/18	N7	BM878		50.0000	50.0000	1
9882789	11/14/18	N7	BM904		50.0000	50.0000	1
9882790U	11/14/18	N7	BM902	XXX01-01BKG	50.0000	50.0000	1
9882791R	11/14/18	N7	BM902	XXX01-01MS	50.0000	50.0000	1
9882792M	11/14/18	N7	BM902	XXX01-01MSD	25.0000	25.0000	1
9882793D	11/14/18	N7	BM902	XXX01-01DUP	50.0000	50.0000	1
9882794	11/14/18	N7	BM903		50.0000	50.0000	1
9882795	11/14/18	N7	BM882		50.0000	50.0000	1
9882880	11/14/18	N7	S432S	SLB46-03	50.0000	50.0000	1
9882881	11/14/18	N7	S429S	SLB46-04	50.0000	50.0000	1
9882882	11/14/18	N7	S430S	SLB46-05	50.0000	50.0000	1
9882883	11/14/18	N7	S431S	SLB46-06	50.0000	50.0000	1
9882884EB	11/14/18	N7	S4EB1	SLB46-07EB	50.0000	50.0000	1
9882892	11/14/18	N7	OS-03	CBD53-02	50.0000	50.0000	1
9882893	11/14/18	N7	OS-02	CBD53-03	50.0000	50.0000	1
9882894	11/14/18	N7	TF-23	CBD53-04	50.0000	50.0000	1
9882895	11/14/18	N7	TF-05	CBD53-05	50.0000	50.0000	1
9882896	11/14/18	N7	DB-8A	CBD53-06	50.0000	50.0000	1
9882897	11/14/18	N7	DB-17	CBD53-07	50.0000	50.0000	1
9882898	11/14/18	N7	DC-01	CBD53-08	50.0000	50.0000	1
9882899	11/14/18	N7	DC-02	CBD53-09	50.0000	50.0000	1
9883540	11/14/18	N7		EB	50.0000	50.0000	1

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NYSDEC ASP Category B Data Package

Prepared for:

Chevron Environmental Mgmt.
4800 Fournace Place
Bellaire TX 77401

Project: Beacon - NY Annual RCRA Event
Groundwater and Water Samples
Collected on 11/05/18

SDG# CBD54

GROUP	SAMPLE NUMBERS
2006269	9885680-9885686

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

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

Authorized by: Dana M Kauffman **Date:** **01/11/2019**

Dana M. Kauffman
Manager

Any questions or concerns you might have regarding this data package should be directed to your client representative, Megan Moeller at (717) 556-7261.

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Table of Contents for SDG# CBD54

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Sample Reference List for SDG Number CBD54
with a Data Package Type of NYSDEC B

11387 - Chevron Environmental Mgmt.

Project: Beacon - NY Annual RCRA Event

Lab Sample Number	Client Sample ID	Collection Date	Date Received
9885680	QA-WT2-181026	10/26/2018 00:00	11/06/2018 10:35
9885681	OR-2-W-26.00-181105	11/05/2018 11:15	11/06/2018 10:35
9885682	OR-2-W-26.00-181105 MS	11/05/2018 11:15	11/06/2018 10:35
9885683	OR-2-W-26.00-181105 MSD	11/05/2018 11:15	11/06/2018 10:35
9885684	OR-2-W-26.00-181105 DUP	11/05/2018 11:15	11/06/2018 10:35
9885685	OR-3-WD-65.50-181105	11/05/2018 12:01	11/06/2018 10:35
9885686	OR-3-W-65.50-181105	11/05/2018 13:45	11/06/2018 10:35

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Sample pH Log

SDG: CBD54

LLI Sample Number	Bottle Code	Actual pH	Exp. pH	*pH Check Code	Adj. pH	Adjusted Date	Adjusted Time	Preservative Added	Preservative Lot #	LLI Supplied Bottle?	Sulfide Present?	Corrective Substance	CS Lot #	**Chlorine Present?	Corrective Substance	CS Lot #	Record Date	Employee
9885680	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/10/2018 10:51:53AM	1693
9885681	015A	7	5-7	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 10:52:15AM	12616
9885681	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/10/2018 10:51:53AM	1693
9885681	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 8:08:02PM	1201
9885681	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 8:11:16AM	1382
9885681	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 8:11:08AM	1382
9885682	015A	7	5-7	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 10:51:56AM	12616
9885682	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/10/2018 10:51:53AM	1693
9885682	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 7:58:14PM	1201
9885682	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 8:10:59AM	1382
9885682	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 8:10:56AM	1382
9885683	015A	7	5-7	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 10:52:38AM	12616
9885683	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/10/2018 10:51:53AM	1693
9885683	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 8:21:49PM	1201
9885683	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 8:11:05AM	1382
9885683	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 8:11:13AM	1382
9885685	015A	7	5-7	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 10:51:08AM	12616
9885685	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/10/2018 10:51:53AM	1693
9885685	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 7:54:30PM	1201
9885685	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 8:11:22AM	1382
9885685	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 8:11:34AM	1382
9885686	015A	6	5-7	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 10:51:33AM	12616
9885686	040A	7	>2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/10/2018 10:51:53AM	1693
9885686	089A	<2	<2	PK	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/8/2018 7:55:37PM	1201
9885686	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 8:12:40AM	1382
9885686	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	11/7/2018 8:11:25AM	1382

*pH Check Code Key
PK = Original container checked - pH is within the correct range. (No preservative was added)
PA = Original container checked - pH adjusted to correct range. (Preservative was added)
PV = Volatile container checked
PC = pH checked (unpreserved container)
SPK = Subsampled from an original container. Original container checked - pH is within correct range
SPA = Subsampled from an original container. Subsample container checked - pH adjusted to correct range.
SPC = Subsampled from an original container. pH checked (unpreserved container).
SUP = Subsampled from original container. Unable to be preserved due to the matrix of the sample.
UP = Unable to preserve due to matrix of the sample.
NA = Not applicable

**Chlorine Present Code Key
NA = Chlorine Not Checked
Y = Chlorine Present
N = Chlorine Not Present

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01163 GC/MS VOA Water Prep

An undiluted aliquot of the water sample or a dilution of the sample is purged with an inert gas and the volatiles are collected on an adsorbent trap that is subsequently desorbed onto a gas chromatographic column.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 5030C, May 2003.

11997 VOCs- 5ml Water by 8260C

The water sample is purged and the volatile compounds are collected on a sorbent trap that is subsequently desorbed onto the GC/MS system for chromatographic and mass spectral analysis.

Reference: Volatile Organic Compounds by Gas Chromatography/ Mass Spectrometry (GC/MS), SW-846 Method 8260C, August 2006.

10635 ICP-WW, 3005A (tot rec) - U4

The sample is digested with nitric acid and hydrochloric acid.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3005A, July 1992

07055 Lead

The solution resulting from the metals digestion is analyzed by Trace ICP.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 6010C, February 2007.

11010 8270D BNA Extraction

The sample aliquot is extracted with methylene chloride by either separatory funnel or liquid/liquid apparatus. Extraction is performed at both a pH of 11 and 2. The extract is concentrated prior to analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3510C, Rev 3, December 1996

14241 SVOAs 8270D MINI

The sample extract is analyzed by capillary column Gas Chromatography/Mass Spectrometry.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8270D, February 2007.

Analysis Reports / Field Chain of Custody

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ANALYSIS REPORT

Prepared by:

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

Prepared for:

Chevron Environmental Mgmt.
4800 Fournace Place
Bellaire TX 77401

Report Date: November 16, 2018 20:14

Project: Beacon - NY Annual RCRA Event

Account #: 11387
Group Number: 2006269
SDG: CBD54
PO Number: 0015174181
Release Number: HENDRICKSON
State of Sample Origin: NY

Electronic Copy To	Parsons Engineering Science	Attn: Ed Ashton
Electronic Copy To	Parsons	Attn: Craig Butler
Electronic Copy To	Parsons	Attn: Heather Fettig

Respectfully Submitted,

Megan A. Moeller
Senior Specialist

(717) 556-7261

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

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
QA-WT2-181026 Water	10/26/2018	9885680
OR-2-W-26.00-181105 Grab Groundwater	11/05/2018 11:15	9885681
OR-2-W-26.00-181105 MS Grab Groundwater	11/05/2018 11:15	9885682
OR-2-W-26.00-181105 MSD Grab Groundwater	11/05/2018 11:15	9885683
OR-2-W-26.00-181105 DUP Grab Groundwater	11/05/2018 11:15	9885684
OR-3-WD-65.50-181105 Grab Groundwater	11/05/2018 12:01	9885685
OR-3-W-65.50-181105 Grab Groundwater	11/05/2018 13:45	9885686

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

Sample Description: **QA-WT2-181026 Water**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 10/26/2018
SDG#: CBD54-01TB

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885680
ELLE Group #: 2006269
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.2	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1
11997	Bromoform	75-25-2	N.D.	0.2	1
11997	Bromomethane	74-83-9	N.D.	0.3	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1
11997	Chloroethane	75-00-3	N.D.	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.2	1
11997	Chloromethane	74-87-3	N.D.	0.2	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.2	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1
11997	Toluene	108-88-3	N.D.	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1
11997	Xylene (Total)	1330-20-7	N.D.	1	1

A preserved vial was submitted for analysis. However, the pH at the time of analysis was 7.

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	E183131AA	11/09/2018 16:35	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	E183131AA	11/09/2018 16:35	Angela D Sneeringer	1

Sample Description: **OR-2-W-26.00-181105 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 11:15
SDG#: CBD54-02BKG

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885681
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.2	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1
11997	Bromoform	75-25-2	N.D.	0.2	1
11997	Bromomethane	74-83-9	N.D.	0.3	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1
11997	Chloroethane	75-00-3	N.D.	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.2	1
11997	Chloromethane	74-87-3	N.D.	0.2	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	1
11997	1,1-Dichloroethane	75-34-3	0.2 J	0.2	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.2	1
11997	1,2-Dichloropropane	78-87-5	0.2 J	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1
11997	Toluene	108-88-3	N.D.	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1
11997	Xylene (Total)	1330-20-7	N.D.	1	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	N.D.	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	N.D.	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	N.D.	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **OR-2-W-26.00-181105 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 11:15
SDG#: CBD54-02BKG

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885681
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	N.D.	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	15	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	N.D.	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	11	1

Sample Description: **OR-2-W-26.00-181105 Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 11:15
SDG#: CBD54-02BKG

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885681
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	N.D.	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Dimethylphthalate				
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	E183131AA	11/09/2018 16:55	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	E183131AA	11/09/2018 16:55	Angela D Sneeringer	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18312WAA026	11/09/2018 19:37	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	18312WAA026	11/08/2018 16:50	Kate E Lutte	1
07055	Lead	SW-846 6010C	1	183151063504	11/16/2018 07:14	Lisa J Cooke	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183151063504	11/12/2018 15:50	JoElla L Rice	1

Sample Description: **OR-2-W-26.00-181105 MS Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 11:15
SDG#: CBD54-02MS

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885682
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	23	0.2	1
11997	Bromodichloromethane	75-27-4	22	0.2	1
11997	Bromoform	75-25-2	21	0.2	1
11997	Bromomethane	74-83-9	18	0.3	1
11997	Carbon Tetrachloride	56-23-5	24	0.2	1
11997	Chlorobenzene	108-90-7	22	0.2	1
11997	Chloroethane	75-00-3	19	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	21	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	23	0.2	1
11997	Chloromethane	74-87-3	20	0.2	1
11997	Dibromochloromethane	124-48-1	21	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	23	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	23	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	23	0.2	1
11997	1,1-Dichloroethane	75-34-3	23	0.2	1
11997	1,2-Dichloroethane	107-06-2	22	0.3	1
11997	1,1-Dichloroethene	75-35-4	24	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	47	0.2	1
11997	1,2-Dichloropropane	78-87-5	22	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	22	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	19	0.2	1
11997	Ethylbenzene	100-41-4	22	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	21	0.2	1
11997	Methylene Chloride	75-09-2	22	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	20	0.2	1
11997	Tetrachloroethene	127-18-4	25	0.2	1
11997	Toluene	108-88-3	22	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	23	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	22	0.2	1
11997	Trichloroethene	79-01-6	23	0.2	1
11997	Trichlorofluoromethane	75-69-4	22	0.2	1
11997	Vinyl Chloride	75-01-4	21	0.2	1
11997	Xylene (Total)	1330-20-7	67	1	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	40	0.1	1
14241	Acenaphthylene	208-96-8	45	0.1	1
14241	Anthracene	120-12-7	46	0.1	1
14241	Benzo(a)anthracene	56-55-3	51	0.1	1
14241	Benzo(a)pyrene	50-32-8	49	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	47	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	46	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	47	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	42	0.5	1
14241	Butylbenzylphthalate	85-68-7	35	2	1
14241	Di-n-butylphthalate	84-74-2	41	2	1
14241	Carbazole	86-74-8	48	0.5	1

Sample Description: **OR-2-W-26.00-181105 MS Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 11:15
SDG#: CBD54-02MS

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885682
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**		**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	45		0.5	1
14241	4-Chloroaniline	106-47-8	29		4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	43		0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	40		0.5	1
14241	2-Chloronaphthalene	91-58-7	36		0.4	1
14241	2-Chlorophenol	95-57-8	42		0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	39		0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	36		0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.					
14241	Chrysene	218-01-9	51		0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	49		0.1	1
14241	Dibenzofuran	132-64-9	42		0.5	1
14241	1,2-Dichlorobenzene	95-50-1	33		0.5	1
14241	1,3-Dichlorobenzene	541-73-1	31		0.5	1
14241	1,4-Dichlorobenzene	106-46-7	32		0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	42		3	1
14241	2,4-Dichlorophenol	120-83-2	46		0.5	1
14241	Diethylphthalate	84-66-2	33		2	1
14241	2,4-Dimethylphenol	105-67-9	33		3	1
14241	Dimethylphthalate	131-11-3	22		2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	42		8	1
14241	2,4-Dinitrophenol	51-28-5	63		15	1
14241	2,4-Dinitrotoluene	121-14-2	47		1	1
14241	2,6-Dinitrotoluene	606-20-2	51		0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	47		5	1
14241	Fluoranthene	206-44-0	48		0.1	1
14241	Fluorene	86-73-7	43		0.1	1
14241	Hexachlorobenzene	118-74-1	46		0.1	1
14241	Hexachlorobutadiene	87-68-3	31		0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	32		5	1
14241	Hexachloroethane	67-72-1	28		1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	48		0.1	1
14241	Isophorone	78-59-1	43		0.5	1
14241	2-Methylnaphthalene	91-57-6	37		0.1	1
14241	2-Methylphenol	95-48-7	39		0.5	1
14241	4-Methylphenol	106-44-5	40		0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
14241	Naphthalene	91-20-3	36		0.1	1
14241	2-Nitroaniline	88-74-4	52		2	1
14241	3-Nitroaniline	99-09-2	37		3	1
14241	4-Nitroaniline	100-01-6	39		0.9	1
14241	Nitrobenzene	98-95-3	42		0.5	1
14241	2-Nitrophenol	88-75-5	46		3	1
14241	4-Nitrophenol	100-02-7	24	J	10	1

Sample Description: **OR-2-W-26.00-181105 MS Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 11:15
SDG#: CBD54-02MS

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885682
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	42	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	48	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	45	5	1
14241	Pentachlorophenol	87-86-5	24	1	1
14241	Phenanthrene	85-01-8	46	0.1	1
14241	Phenol	108-95-2	25	0.5	1
14241	Pyrene	129-00-0	48	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	32	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	48	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	47	0.5	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Dimethylphthalate				
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	0.150	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	E183131AA	11/09/2018 17:15	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	E183131AA	11/09/2018 17:15	Angela D Sneeringer	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18312WAA026	11/09/2018 20:06	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	18312WAA026	11/08/2018 16:50	Kate E Lutte	1
07055	Lead	SW-846 6010C	1	183151063504	11/16/2018 07:22	Lisa J Cooke	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183151063504	11/12/2018 15:50	JoElla L Rice	1

Sample Description: **OR-2-W-26.00-181105 MSD Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 11:15
SDG#: CBD54-02MSD

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885683
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	22	0.2	1
11997	Bromodichloromethane	75-27-4	22	0.2	1
11997	Bromoform	75-25-2	21	0.2	1
11997	Bromomethane	74-83-9	18	0.3	1
11997	Carbon Tetrachloride	56-23-5	24	0.2	1
11997	Chlorobenzene	108-90-7	22	0.2	1
11997	Chloroethane	75-00-3	19	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	21	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	23	0.2	1
11997	Chloromethane	74-87-3	20	0.2	1
11997	Dibromochloromethane	124-48-1	21	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	22	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	22	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	22	0.2	1
11997	1,1-Dichloroethane	75-34-3	23	0.2	1
11997	1,2-Dichloroethane	107-06-2	22	0.3	1
11997	1,1-Dichloroethene	75-35-4	24	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	47	0.2	1
11997	1,2-Dichloropropane	78-87-5	22	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	22	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	20	0.2	1
11997	Ethylbenzene	100-41-4	22	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	21	0.2	1
11997	Methylene Chloride	75-09-2	22	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	20	0.2	1
11997	Tetrachloroethene	127-18-4	24	0.2	1
11997	Toluene	108-88-3	22	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	23	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	22	0.2	1
11997	Trichloroethene	79-01-6	23	0.2	1
11997	Trichlorofluoromethane	75-69-4	21	0.2	1
11997	Vinyl Chloride	75-01-4	20	0.2	1
11997	Xylene (Total)	1330-20-7	67	1	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	41	0.1	1
14241	Acenaphthylene	208-96-8	47	0.1	1
14241	Anthracene	120-12-7	46	0.1	1
14241	Benzo(a)anthracene	56-55-3	53	0.1	1
14241	Benzo(a)pyrene	50-32-8	49	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	48	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	46	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	46	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	42	0.5	1
14241	Butylbenzylphthalate	85-68-7	36	2	1
14241	Di-n-butylphthalate	84-74-2	41	2	1
14241	Carbazole	86-74-8	50	0.5	1

Sample Description: **OR-2-W-26.00-181105 MSD Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 11:15
SDG#: CBD54-02MSD

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885683
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**		**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	47		0.5	1
14241	4-Chloroaniline	106-47-8	33		4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	45		0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	40		0.5	1
14241	2-Chloronaphthalene	91-58-7	36		0.4	1
14241	2-Chlorophenol	95-57-8	41		0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	39		0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	35		0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.					
14241	Chrysene	218-01-9	52		0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	49		0.1	1
14241	Dibenzofuran	132-64-9	43		0.5	1
14241	1,2-Dichlorobenzene	95-50-1	29		0.5	1
14241	1,3-Dichlorobenzene	541-73-1	28		0.5	1
14241	1,4-Dichlorobenzene	106-46-7	29		0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	46		3	1
14241	2,4-Dichlorophenol	120-83-2	48		0.5	1
14241	Diethylphthalate	84-66-2	34		2	1
14241	2,4-Dimethylphenol	105-67-9	34		3	1
14241	Dimethylphthalate	131-11-3	19		2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	40		8	1
14241	2,4-Dinitrophenol	51-28-5	55		15	1
14241	2,4-Dinitrotoluene	121-14-2	52		1	1
14241	2,6-Dinitrotoluene	606-20-2	55		0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	49		5	1
14241	Fluoranthene	206-44-0	50		0.1	1
14241	Fluorene	86-73-7	44		0.1	1
14241	Hexachlorobenzene	118-74-1	48		0.1	1
14241	Hexachlorobutadiene	87-68-3	27		0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	29		5	1
14241	Hexachloroethane	67-72-1	23		1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	47		0.1	1
14241	Isophorone	78-59-1	45		0.5	1
14241	2-Methylnaphthalene	91-57-6	35		0.1	1
14241	2-Methylphenol	95-48-7	38		0.5	1
14241	4-Methylphenol	106-44-5	39		0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.					
14241	Naphthalene	91-20-3	37		0.1	1
14241	2-Nitroaniline	88-74-4	56		2	1
14241	3-Nitroaniline	99-09-2	42		3	1
14241	4-Nitroaniline	100-01-6	44		0.9	1
14241	Nitrobenzene	98-95-3	43		0.5	1
14241	2-Nitrophenol	88-75-5	48		3	1
14241	4-Nitrophenol	100-02-7	27	J	11	1

Sample Description: **OR-2-W-26.00-181105 MSD Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 11:15
SDG#: CBD54-02MSD

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885683
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	41	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	50	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	45	5	1
14241	Pentachlorophenol	87-86-5	18	1	1
14241	Phenanthrene	85-01-8	46	0.1	1
14241	Phenol	108-95-2	24	0.5	1
14241	Pyrene	129-00-0	50	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	31	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	51	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	51	0.5	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Dimethylphthalate				
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	0.145	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	E183131AA	11/09/2018 17:36	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	E183131AA	11/09/2018 17:36	Angela D Sneeringer	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18312WAA026	11/09/2018 20:35	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	18312WAA026	11/08/2018 16:50	Kate E Lutte	1
07055	Lead	SW-846 6010C	1	183151063504	11/16/2018 07:25	Lisa J Cooke	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183151063504	11/12/2018 15:50	JoElla L Rice	1

Sample Description: **OR-2-W-26.00-181105 DUP Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 11:15
SDG#: CBD54-02DUP

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885684
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07055	Lead	SW-846 6010C	1	183151063504	11/16/2018 07:19	Lisa J Cooke	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183151063504	11/12/2018 15:50	JoElla L Rice	1

Sample Description: **OR-3-WD-65.50-181105 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 12:01
SDG#: CBD54-03FD

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885685
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.2	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1
11997	Bromoform	75-25-2	N.D.	0.2	1
11997	Bromomethane	74-83-9	N.D.	0.3	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1
11997	Chloroethane	75-00-3	N.D.	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.2	1
11997	Chloromethane	74-87-3	N.D.	0.2	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.2	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1
11997	Toluene	108-88-3	N.D.	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1
11997	Xylene (Total)	1330-20-7	N.D.	1	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	0.2 J	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	0.3 J	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	0.2 J	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	0.1 J	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **OR-3-WD-65.50-181105 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 12:01
SDG#: CBD54-03FD

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885685
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	0.2 J	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	14	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	0.3 J	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **OR-3-WD-65.50-181105 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 12:01
SDG#: CBD54-03FD

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885685
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	0.1 J	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	0.2 J	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Dimethylphthalate				
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	E183131AA	11/09/2018 17:56	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	E183131AA	11/09/2018 17:56	Angela D Sneeringer	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18312WAA026	11/09/2018 21:03	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	18312WAA026	11/08/2018 16:50	Kate E Lutte	1
07055	Lead	SW-846 6010C	1	183151063504	11/16/2018 08:32	Lisa J Cooke	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183151063504	11/12/2018 15:50	JoElla L Rice	1

Sample Description: **OR-3-W-65.50-181105 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 13:45
SDG#: CBD54-04

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885686
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	
11997	Benzene	71-43-2	N.D.	0.2	1
11997	Bromodichloromethane	75-27-4	N.D.	0.2	1
11997	Bromoform	75-25-2	N.D.	0.2	1
11997	Bromomethane	74-83-9	N.D.	0.3	1
11997	Carbon Tetrachloride	56-23-5	N.D.	0.2	1
11997	Chlorobenzene	108-90-7	N.D.	0.2	1
11997	Chloroethane	75-00-3	N.D.	0.2	1
11997	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.2	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
11997	Chloroform	67-66-3	N.D.	0.2	1
11997	Chloromethane	74-87-3	N.D.	0.2	1
11997	Dibromochloromethane	124-48-1	N.D.	0.2	1
11997	1,2-Dichlorobenzene	95-50-1	N.D.	0.2	1
11997	1,3-Dichlorobenzene	541-73-1	N.D.	0.2	1
11997	1,4-Dichlorobenzene	106-46-7	N.D.	0.2	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.2	1
11997	1,2-Dichloroethane	107-06-2	N.D.	0.3	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.2	1
11997	1,2-Dichloroethene (Total)	540-59-0	N.D.	0.2	1
11997	1,2-Dichloropropane	78-87-5	N.D.	0.2	1
11997	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.2	1
11997	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.2	1
11997	Ethylbenzene	100-41-4	N.D.	0.4	1
11997	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.2	1
11997	Methylene Chloride	75-09-2	N.D.	0.3	1
11997	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.2	1
11997	Tetrachloroethene	127-18-4	N.D.	0.2	1
11997	Toluene	108-88-3	N.D.	0.2	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.3	1
11997	1,1,2-Trichloroethane	79-00-5	N.D.	0.2	1
11997	Trichloroethene	79-01-6	N.D.	0.2	1
11997	Trichlorofluoromethane	75-69-4	N.D.	0.2	1
11997	Vinyl Chloride	75-01-4	N.D.	0.2	1
11997	Xylene (Total)	1330-20-7	N.D.	1	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	Acenaphthene	83-32-9	N.D.	0.1	1
14241	Acenaphthylene	208-96-8	N.D.	0.1	1
14241	Anthracene	120-12-7	N.D.	0.1	1
14241	Benzo(a)anthracene	56-55-3	N.D.	0.1	1
14241	Benzo(a)pyrene	50-32-8	0.2 J	0.1	1
14241	Benzo(b)fluoranthene	205-99-2	0.2 J	0.1	1
14241	Benzo(g,h,i)perylene	191-24-2	0.1 J	0.1	1
14241	Benzo(k)fluoranthene	207-08-9	N.D.	0.1	1
14241	4-Bromophenyl-phenylether	101-55-3	N.D.	0.5	1
14241	Butylbenzylphthalate	85-68-7	N.D.	2	1
14241	Di-n-butylphthalate	84-74-2	N.D.	2	1
14241	Carbazole	86-74-8	N.D.	0.5	1

Sample Description: **OR-3-W-65.50-181105 Grab Groundwater Beacon - NY**

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 13:45
SDG#: CBD54-04

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885686
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	4-Chloro-3-methylphenol	59-50-7	N.D.	0.5	1
14241	4-Chloroaniline	106-47-8	N.D.	4	1
14241	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
14241	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.5	1
14241	2-Chloronaphthalene	91-58-7	N.D.	0.4	1
14241	2-Chlorophenol	95-57-8	N.D.	0.5	1
14241	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.5	1
14241	2,2'-oxybis(1-Chloropropane)	108-60-1	N.D.	0.5	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
14241	Chrysene	218-01-9	0.1 J	0.1	1
14241	Dibenz(a,h)anthracene	53-70-3	N.D.	0.1	1
14241	Dibenzofuran	132-64-9	N.D.	0.5	1
14241	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	1
14241	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	1
14241	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	1
14241	3,3'-Dichlorobenzidine	91-94-1	N.D.	3	1
14241	2,4-Dichlorophenol	120-83-2	N.D.	0.5	1
14241	Diethylphthalate	84-66-2	N.D.	2	1
14241	2,4-Dimethylphenol	105-67-9	N.D.	3	1
14241	Dimethylphthalate	131-11-3	N.D.	2	1
14241	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	8	1
14241	2,4-Dinitrophenol	51-28-5	N.D.	15	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.5	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5	1
14241	Fluoranthene	206-44-0	0.3 J	0.1	1
14241	Fluorene	86-73-7	N.D.	0.1	1
14241	Hexachlorobenzene	118-74-1	N.D.	0.1	1
14241	Hexachlorobutadiene	87-68-3	N.D.	0.5	1
14241	Hexachlorocyclopentadiene	77-47-4	N.D.	5	1
14241	Hexachloroethane	67-72-1	N.D.	1	1
14241	Indeno(1,2,3-cd)pyrene	193-39-5	0.1 J	0.1	1
14241	Isophorone	78-59-1	N.D.	0.5	1
14241	2-Methylnaphthalene	91-57-6	N.D.	0.1	1
14241	2-Methylphenol	95-48-7	N.D.	0.5	1
14241	4-Methylphenol	106-44-5	N.D.	0.5	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.				
14241	Naphthalene	91-20-3	N.D.	0.1	1
14241	2-Nitroaniline	88-74-4	N.D.	2	1
14241	3-Nitroaniline	99-09-2	N.D.	3	1
14241	4-Nitroaniline	100-01-6	N.D.	0.9	1
14241	Nitrobenzene	98-95-3	N.D.	0.5	1
14241	2-Nitrophenol	88-75-5	N.D.	3	1
14241	4-Nitrophenol	100-02-7	N.D.	10	1

Sample Description: **OR-3-W-65.50-181105 Grab Groundwater**
Beacon - NY

Project Name: **Beacon - NY Annual RCRA Event**

Submittal Date/Time: 11/06/2018 10:35
Collection Date/Time: 11/05/2018 13:45
SDG#: CBD54-04

Chevron Environmental Mgmt.
ELLE Sample #: WW 9885686
ELLE Group #: 2006269
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	
14241	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.7	1
14241	N-Nitrosodiphenylamine	86-30-6	N.D.	0.7	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
14241	Di-n-octylphthalate	117-84-0	N.D.	5	1
14241	Pentachlorophenol	87-86-5	N.D.	1	1
14241	Phenanthrene	85-01-8	N.D.	0.1	1
14241	Phenol	108-95-2	N.D.	0.5	1
14241	Pyrene	129-00-0	0.3 J	0.1	1
14241	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.5	1
14241	2,4,5-Trichlorophenol	95-95-4	N.D.	0.5	1
14241	2,4,6-Trichlorophenol	88-06-2	N.D.	0.5	1
	The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Dimethylphthalate				
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	
07055	Lead	7439-92-1	N.D.	0.0071	1

03277 Lab Filtration - Metals

The holding time was not met for dissolved sample filtration. The filtration time for dissolved metals is to be within 15 minutes from collection. Since the filtration occurred after receipt in the laboratory, the 15 minute criteria was exceeded. This sample was not collected per applicable Clean Water Act (40CFR136) or SW-846 regulations.

Sample Comments

State of New York Certification No. 10670
This sample was filtered in the lab for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	VOCs- 5ml Water by 8260C	SW-846 8260C	1	E183131AA	11/09/2018 18:16	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	E183131AA	11/09/2018 18:16	Angela D Sneeringer	1
14241	SVOAs 8270D MINI	SW-846 8270D	1	18312WAA026	11/09/2018 21:32	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	18312WAA026	11/08/2018 16:50	Kate E Lutte	1
07055	Lead	SW-846 6010C	1	183151063504	11/16/2018 08:34	Lisa J Cooke	1
10635	ICP-WW, 3005A (tot rec) - U4	SW-846 3005A	1	183151063504	11/12/2018 15:50	JoElla L Rice	1

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2006269
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Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

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

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: E183131AA	Sample number(s): 9885680-9885683,9885685-9885686	
Benzene	N.D.	0.2
Bromodichloromethane	N.D.	0.2
Bromoform	N.D.	0.2
Bromomethane	N.D.	0.3
Carbon Tetrachloride	N.D.	0.2
Chlorobenzene	N.D.	0.2
Chloroethane	N.D.	0.2
2-Chloroethyl Vinyl Ether	N.D.	0.2
Chloroform	N.D.	0.2
Chloromethane	N.D.	0.2
Dibromochloromethane	N.D.	0.2
1,2-Dichlorobenzene	N.D.	0.2
1,3-Dichlorobenzene	N.D.	0.2
1,4-Dichlorobenzene	N.D.	0.2
1,1-Dichloroethane	N.D.	0.2
1,2-Dichloroethane	N.D.	0.3
1,1-Dichloroethene	N.D.	0.2
1,2-Dichloroethene (Total)	N.D.	0.2
1,2-Dichloropropane	N.D.	0.2
cis-1,3-Dichloropropene	N.D.	0.2
trans-1,3-Dichloropropene	N.D.	0.2
Ethylbenzene	N.D.	0.4
Methyl Tertiary Butyl Ether	N.D.	0.2
Methylene Chloride	N.D.	0.3
1,1,2,2-Tetrachloroethane	N.D.	0.2
Tetrachloroethene	N.D.	0.2
Toluene	N.D.	0.2
1,1,1-Trichloroethane	N.D.	0.3
1,1,2-Trichloroethane	N.D.	0.2
Trichloroethene	N.D.	0.2
Trichlorofluoromethane	N.D.	0.2
Vinyl Chloride	N.D.	0.2
Xylene (Total)	N.D.	1
Batch number: 18312WAA026	Sample number(s): 9885681-9885683,9885685-9885686	
Acenaphthene	N.D.	0.1
Acenaphthylene	N.D.	0.1
Anthracene	N.D.	0.1
Benzo(a)anthracene	N.D.	0.1

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2006269
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Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
Benzo(a)pyrene	N.D.	0.1
Benzo(b)fluoranthene	N.D.	0.1
Benzo(g,h,i)perylene	N.D.	0.1
Benzo(k)fluoranthene	N.D.	0.1
4-Bromophenyl-phenylether	N.D.	0.5
Butylbenzylphthalate	N.D.	2
Di-n-butylphthalate	N.D.	2
Carbazole	N.D.	0.5
4-Chloro-3-methylphenol	N.D.	0.5
4-Chloroaniline	N.D.	4
bis(2-Chloroethoxy)methane	N.D.	0.5
bis(2-Chloroethyl)ether	N.D.	0.5
2-Chloronaphthalene	N.D.	0.4
2-Chlorophenol	N.D.	0.5
4-Chlorophenyl-phenylether	N.D.	0.5
2,2'-oxybis(1-Chloropropane)	N.D.	0.5
Chrysene	N.D.	0.1
Dibenz(a,h)anthracene	N.D.	0.1
Dibenzofuran	N.D.	0.5
1,2-Dichlorobenzene	N.D.	0.5
1,3-Dichlorobenzene	N.D.	0.5
1,4-Dichlorobenzene	N.D.	0.5
3,3'-Dichlorobenzidine	N.D.	3
2,4-Dichlorophenol	N.D.	0.5
Diethylphthalate	N.D.	2
2,4-Dimethylphenol	N.D.	3
Dimethylphthalate	N.D.	2
4,6-Dinitro-2-methylphenol	N.D.	8
2,4-Dinitrophenol	N.D.	14
2,4-Dinitrotoluene	N.D.	1
2,6-Dinitrotoluene	N.D.	0.5
bis(2-Ethylhexyl)phthalate	N.D.	5
Fluoranthene	N.D.	0.1
Fluorene	N.D.	0.1
Hexachlorobenzene	N.D.	0.1
Hexachlorobutadiene	N.D.	0.5
Hexachlorocyclopentadiene	N.D.	5
Hexachloroethane	N.D.	1
Indeno(1,2,3-cd)pyrene	N.D.	0.1
Isophorone	N.D.	0.5
2-Methylnaphthalene	N.D.	0.1
2-Methylphenol	N.D.	0.5
4-Methylphenol	N.D.	0.5
Naphthalene	N.D.	0.1
2-Nitroaniline	N.D.	2

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Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2006269
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Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
3-Nitroaniline	N.D.	3
4-Nitroaniline	N.D.	0.9
Nitrobenzene	N.D.	0.5
2-Nitrophenol	N.D.	3
4-Nitrophenol	N.D.	10
N-Nitroso-di-n-propylamine	N.D.	0.7
N-Nitrosodiphenylamine	N.D.	0.7
Di-n-octylphthalate	N.D.	5
Pentachlorophenol	N.D.	1
Phenanthrene	N.D.	0.1
Phenol	N.D.	0.5
Pyrene	N.D.	0.1
1,2,4-Trichlorobenzene	N.D.	0.5
2,4,5-Trichlorophenol	N.D.	0.5
2,4,6-Trichlorophenol	N.D.	0.5
	mg/l	mg/l
Batch number: 183151063504	Sample number(s): 9885681-9885686	
Lead	N.D.	0.0071

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: E183131AA	Sample number(s): 9885680-9885683,9885685-9885686								
Benzene	20	20.52			103		80-120		
Bromodichloromethane	20	21.24			106		71-120		
Bromoform	20	21.06			105		51-120		
Bromomethane	20	15.66			78		53-128		
Carbon Tetrachloride	20	21.65			108		64-134		
Chlorobenzene	20	20.81			104		80-120		
Chloroethane	20	16.63			83		55-123		
2-Chloroethyl Vinyl Ether	20	20.82			104		49-124		
Chloroform	20	21.32			107		80-120		
Chloromethane	20	16.5			83		56-121		
Dibromochloromethane	20	21.17			106		71-120		
1,2-Dichlorobenzene	20	21.72			109		80-120		
1,3-Dichlorobenzene	20	21.44			107		80-120		
1,4-Dichlorobenzene	20	21.19			106		80-120		
1,1-Dichloroethane	20	20.68			103		80-120		
1,2-Dichloroethane	20	21.02			105		73-124		

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2006269
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LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1-Dichloroethene	20	21.07			105		80-131		
1,2-Dichloroethene (Total)	40	43.31			108		80-120		
1,2-Dichloropropane	20	20.2			101		80-120		
cis-1,3-Dichloropropene	20	20.87			104		75-120		
trans-1,3-Dichloropropene	20	19.27			96		67-120		
Ethylbenzene	20	20.3			102		80-120		
Methyl Tertiary Butyl Ether	20	20.31			102		69-122		
Methylene Chloride	20	20.53			103		80-120		
1,1,2,2-Tetrachloroethane	20	19.99			100		72-120		
Tetrachloroethene	20	21.68			108		80-120		
Toluene	20	20.53			103		80-120		
1,1,1-Trichloroethane	20	20.88			104		67-126		
1,1,2-Trichloroethane	20	21.13			106		80-120		
Trichloroethene	20	20.72			104		80-120		
Trichlorofluoromethane	20	17.95			90		55-135		
Vinyl Chloride	20	17.23			86		56-120		
Xylene (Total)	60	62.85			105		80-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 18312WAA026	Sample number(s): 9885681-9885683,9885685-9885686								
Acenaphthene	50	38.25			76		62-119		
Acenaphthylene	50	42.81			86		66-125		
Anthracene	50	42.46			85		70-118		
Benzo(a)anthracene	50	51.32			103		70-123		
Benzo(a)pyrene	50	47.01			94		71-122		
Benzo(b)fluoranthene	50	47.33			95		70-120		
Benzo(g,h,i)perylene	50	34.78			70		64-119		
Benzo(k)fluoranthene	50	46.62			93		73-122		
4-Bromophenyl-phenylether	50	40.46			81		64-119		
Butylbenzylphthalate	50	31.29			63		57-119		
Di-n-butylphthalate	50	39.09			78		71-113		
Carbazole	50	47.79			96		71-128		
4-Chloro-3-methylphenol	50	46.2			92		65-122		
4-Chloroaniline	50	27.37			55		42-110		
bis(2-Chloroethoxy)methane	50	43.37			87		64-119		
bis(2-Chloroethyl)ether	50	38.4			77		60-110		
2-Chloronaphthalene	50	37.14			74		51-114		
2-Chlorophenol	50	41.33			83		58-108		
4-Chlorophenyl-phenylether	50	37.34			75		58-115		
2,2'-oxybis(1-Chloropropane)	50	34.17			68		48-118		
Chrysene	50	50.44			101		71-123		
Dibenz(a,h)anthracene	50	39.57			79		67-123		
Dibenzofuran	50	40.79			82		63-117		
1,2-Dichlorobenzene	50	30.46			61		43-108		

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2006269
Reported: 11/16/2018 20:14

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,3-Dichlorobenzene	50	29.82			60		31-110		
1,4-Dichlorobenzene	50	31.84			64		30-109		
3,3'-Dichlorobenzidine	50	37.21			74		36-116		
2,4-Dichlorophenol	50	45.68			91		65-117		
Diethylphthalate	50	31.58			63		61-111		
2,4-Dimethylphenol	50	36.39			73		52-106		
Dimethylphthalate	50	18.07			36*		37-116		
4,6-Dinitro-2-methylphenol	50	49.61			99		63-129		
2,4-Dinitrophenol	100	102.91			103		26-141		
2,4-Dinitrotoluene	50	43.16			86		69-117		
2,6-Dinitrotoluene	50	50.09			100		69-122		
bis(2-Ethylhexyl)phthalate	50	46.08			92		68-120		
Fluoranthene	50	50.1			100		70-124		
Fluorene	50	41.2			82		62-116		
Hexachlorobenzene	50	42.3			85		65-121		
Hexachlorobutadiene	50	33.66			67		21-114		
Hexachlorocyclopentadiene	100	10.12			10		10-117		
Hexachloroethane	50	27.22			54		24-100		
Indeno(1,2,3-cd)pyrene	50	37.67			75		61-121		
Isophorone	50	42.85			86		65-123		
2-Methylnaphthalene	50	37.57			75		51-112		
2-Methylphenol	50	38.14			76		59-109		
4-Methylphenol	50	40.04			80		56-108		
Naphthalene	50	36.18			72		54-107		
2-Nitroaniline	50	50.53			101		66-126		
3-Nitroaniline	50	36.23			72		51-120		
4-Nitroaniline	50	41.03			82		53-111		
Nitrobenzene	50	41.97			84		59-117		
2-Nitrophenol	50	47.52			95		63-121		
4-Nitrophenol	50	25.81			52		28-88		
N-Nitroso-di-n-propylamine	50	41.07			82		61-118		
N-Nitrosodiphenylamine	50	47.28			95		68-122		
Di-n-octylphthalate	50	44.51			89		67-120		
Pentachlorophenol	50	47.5			95		64-130		
Phenanthrene	50	42.62			85		68-118		
Phenol	50	23.43			47		23-82		
Pyrene	50	46.56			93		68-118		
1,2,4-Trichlorobenzene	50	33.89			68		38-116		
2,4,5-Trichlorophenol	50	48.8			98		73-124		
2,4,6-Trichlorophenol	50	50.86			102		69-122		
	mg/l	**mg/l**	**mg/l**	**mg/l**					
Batch number: 183151063504	Sample number(s): 9885681-9885686								
Lead	0.150	0.153			102		87-113		

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(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2006269
Reported: 11/16/2018 20:14

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: E183131AA	Sample number(s): 9885680-9885683,9885685-9885686 UNSPK: 9885681									
Benzene	N.D.	20	22.71	20	22.33	114	112	80-120	2	30
Bromodichloromethane	N.D.	20	22.28	20	22.3	111	112	71-120	0	30
Bromoform	N.D.	20	21.07	20	20.92	105	105	51-120	1	30
Bromomethane	N.D.	20	18.08	20	17.94	90	90	53-128	1	30
Carbon Tetrachloride	N.D.	20	24.04	20	24.25	120	121	64-134	1	30
Chlorobenzene	N.D.	20	22.1	20	22.28	110	111	80-120	1	30
Chloroethane	N.D.	20	19.33	20	18.52	97	93	55-123	4	30
2-Chloroethyl Vinyl Ether	N.D.	20	20.62	20	21.07	103	105	49-124	2	30
Chloroform	N.D.	20	23.11	20	23.05	116	115	80-120	0	30
Chloromethane	N.D.	20	19.92	20	19.52	100	98	56-121	2	30
Dibromochloromethane	N.D.	20	21.17	20	21.1	106	106	71-120	0	30
1,2-Dichlorobenzene	N.D.	20	22.52	20	21.94	113	110	80-120	3	30
1,3-Dichlorobenzene	N.D.	20	22.63	20	22.16	113	111	80-120	2	30
1,4-Dichlorobenzene	N.D.	20	22.56	20	22.35	113	112	80-120	1	30
1,1-Dichloroethane	0.208	20	22.79	20	22.78	113	113	80-120	0	30
1,2-Dichloroethane	N.D.	20	22.19	20	21.91	111	110	73-124	1	30
1,1-Dichloroethene	N.D.	20	23.76	20	23.82	119	119	80-131	0	30
1,2-Dichloroethene (Total)	N.D.	40	46.89	40	47.42	117	119	80-120	1	30
1,2-Dichloropropane	0.214	20	22.27	20	22.17	110	110	80-120	0	30
cis-1,3-Dichloropropene	N.D.	20	21.78	20	21.74	109	109	75-120	0	30
trans-1,3-Dichloropropene	N.D.	20	19.49	20	19.65	97	98	67-120	1	30
Ethylbenzene	N.D.	20	21.74	20	21.87	109	109	80-120	1	30
Methyl Tertiary Butyl Ether	N.D.	20	20.78	20	20.54	104	103	69-122	1	30
Methylene Chloride	N.D.	20	22.44	20	22.11	112	111	80-120	1	30
1,1,2,2-Tetrachloroethane	N.D.	20	20.22	20	20.29	101	101	72-120	0	30
Tetrachloroethene	N.D.	20	24.73	20	24.44	124*	122*	80-120	1	30
Toluene	N.D.	20	22.11	20	22.03	111	110	80-120	0	30
1,1,1-Trichloroethane	N.D.	20	23.21	20	22.89	116	114	67-126	1	30
1,1,2-Trichloroethane	N.D.	20	21.95	20	21.83	110	109	80-120	1	30
Trichloroethene	N.D.	20	23.36	20	23.12	117	116	80-120	1	30
Trichlorofluoromethane	N.D.	20	21.59	20	21.29	108	106	55-135	1	30
Vinyl Chloride	N.D.	20	21.15	20	20.38	106	102	56-120	4	30
Xylene (Total)	N.D.	60	67.05	60	67.44	112	112	80-120	1	30

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2006269
Reported: 11/16/2018 20:14

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l	ug/l					
Batch number: 18312WAA026	Sample number(s): 9885681-9885683,9885685-9885686 UNSPK: 9885681									
Acenaphthene	N.D.	51.87	39.79	52.52	41.33	77	79	62-119	4	30
Acenaphthylene	N.D.	51.87	45.23	52.52	47.12	87	90	66-125	4	30
Anthracene	N.D.	51.87	45.74	52.52	46.11	88	88	70-118	1	30
Benzo(a)anthracene	N.D.	51.87	50.84	52.52	53.03	98	101	70-123	4	30
Benzo(a)pyrene	N.D.	51.87	48.98	52.52	48.66	94	93	71-122	1	30
Benzo(b)fluoranthene	N.D.	51.87	47.25	52.52	47.56	91	91	70-120	1	30
Benzo(g,h,i)perylene	N.D.	51.87	46.42	52.52	46.36	89	88	64-119	0	30
Benzo(k)fluoranthene	N.D.	51.87	46.53	52.52	46.38	90	88	73-122	0	30
4-Bromophenyl-phenylether	N.D.	51.87	41.91	52.52	41.65	81	79	64-119	1	30
Butylbenzylphthalate	N.D.	51.87	35.19	52.52	36.31	68	69	57-119	3	30
Di-n-butylphthalate	N.D.	51.87	41.26	52.52	41.16	80	78	71-113	0	30
Carbazole	N.D.	51.87	48.06	52.52	49.58	93	94	71-128	3	30
4-Chloro-3-methylphenol	N.D.	51.87	44.75	52.52	47.02	86	90	65-122	5	30
4-Chloroaniline	N.D.	51.87	28.8	52.52	32.74	56	62	42-110	13	30
bis(2-Chloroethoxy)methane	N.D.	51.87	43.25	52.52	44.64	83	85	64-119	3	30
bis(2-Chloroethyl)ether	N.D.	51.87	39.88	52.52	39.62	77	75	60-110	1	30
2-Chloronaphthalene	N.D.	51.87	35.78	52.52	35.7	69	68	51-114	0	30
2-Chlorophenol	N.D.	51.87	41.64	52.52	41.27	80	79	58-108	1	30
4-Chlorophenyl-phenylether	N.D.	51.87	39.38	52.52	38.84	76	74	58-115	1	30
2,2'-oxybis(1-Chloropropane)	N.D.	51.87	36.14	52.52	35.21	70	67	48-118	3	30
Chrysene	N.D.	51.87	50.89	52.52	52.5	98	100	71-123	3	30
Dibenz(a,h)anthracene	N.D.	51.87	48.96	52.52	49.44	94	94	67-123	1	30
Dibenzofuran	N.D.	51.87	41.79	52.52	42.51	81	81	63-117	2	30
1,2-Dichlorobenzene	N.D.	51.87	32.8	52.52	29.09	63	55	43-108	12	30
1,3-Dichlorobenzene	N.D.	51.87	30.66	52.52	27.51	59	52	31-110	11	30
1,4-Dichlorobenzene	N.D.	51.87	31.93	52.52	28.68	62	55	30-109	11	30
3,3'-Dichlorobenzidine	N.D.	51.87	41.69	52.52	45.7	80	87	36-116	9	30
2,4-Dichlorophenol	N.D.	51.87	45.67	52.52	48.05	88	91	65-117	5	30
Diethylphthalate	N.D.	51.87	32.81	52.52	34.12	63	65	61-111	4	30
2,4-Dimethylphenol	N.D.	51.87	33.4	52.52	34.03	64	65	52-106	2	30
Dimethylphthalate	N.D.	51.87	21.6	52.52	19.12	42	36*	37-116	12	30
4,6-Dinitro-2-methylphenol	N.D.	51.87	41.91	52.52	40.25	81	77	63-129	4	30
2,4-Dinitrophenol	N.D.	103.73	62.7	105.04	55.16	60	53	26-141	13	30
2,4-Dinitrotoluene	N.D.	51.87	46.52	52.52	52.4	90	100	69-117	12	30
2,6-Dinitrotoluene	N.D.	51.87	50.96	52.52	55.44	98	106	69-122	8	30
bis(2-Ethylhexyl)phthalate	N.D.	51.87	46.93	52.52	48.54	90	92	68-120	3	30
Fluoranthene	N.D.	51.87	48.26	52.52	49.8	93	95	70-124	3	30
Fluorene	N.D.	51.87	43.37	52.52	44.18	84	84	62-116	2	30
Hexachlorobenzene	N.D.	51.87	45.87	52.52	47.76	88	91	65-121	4	30
Hexachlorobutadiene	N.D.	51.87	30.87	52.52	27.31	60	52	21-114	12	30

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2006269
Reported: 11/16/2018 20:14

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Hexachlorocyclopentadiene	N.D.	103.73	32.39	105.04	29.15	31	28	10-117	11	30
Hexachloroethane	N.D.	51.87	27.75	52.52	23.28	53	44	24-100	17	30
Indeno(1,2,3-cd)pyrene	N.D.	51.87	47.71	52.52	47.39	92	90	61-121	1	30
Isophorone	N.D.	51.87	43.08	52.52	44.79	83	85	65-123	4	30
2-Methylnaphthalene	N.D.	51.87	36.59	52.52	35.32	71	67	51-112	4	30
2-Methylphenol	N.D.	51.87	39.5	52.52	38.37	76	73	59-109	3	30
4-Methylphenol	N.D.	51.87	40.15	52.52	38.75	77	74	56-108	4	30
Naphthalene	N.D.	51.87	35.99	52.52	36.57	69	70	54-107	2	30
2-Nitroaniline	N.D.	51.87	52.08	52.52	55.98	100	107	66-126	7	30
3-Nitroaniline	N.D.	51.87	37.46	52.52	42.4	72	81	51-120	12	30
4-Nitroaniline	N.D.	51.87	38.96	52.52	43.56	75	83	53-111	11	30
Nitrobenzene	N.D.	51.87	41.7	52.52	42.68	80	81	59-117	2	30
2-Nitrophenol	N.D.	51.87	45.76	52.52	47.83	88	91	63-121	4	30
4-Nitrophenol	N.D.	51.87	23.88	52.52	26.91	46	51	28-88	12	30
N-Nitroso-di-n-propylamine	N.D.	51.87	41.66	52.52	41.49	80	79	61-118	0	30
N-Nitrosodiphenylamine	N.D.	51.87	47.73	52.52	50.44	92	96	68-122	6	30
Di-n-octylphthalate	N.D.	51.87	44.93	52.52	44.6	87	85	67-120	1	30
Pentachlorophenol	N.D.	51.87	24.02	52.52	18.46	46*	35*	64-130	26	30
Phenanthrene	N.D.	51.87	46.06	52.52	46.07	89	88	68-118	0	30
Phenol	N.D.	51.87	24.78	52.52	23.9	48	45	23-82	4	30
Pyrene	N.D.	51.87	47.75	52.52	50.3	92	96	68-118	5	30
1,2,4-Trichlorobenzene	N.D.	51.87	32.35	52.52	31.15	62	59	38-116	4	30
2,4,5-Trichlorophenol	N.D.	51.87	47.7	52.52	50.52	92	96	73-124	6	30
2,4,6-Trichlorophenol	N.D.	51.87	47.24	52.52	51.15	91	97	69-122	8	30
	mg/l	**mg/l**	**mg/l**	**mg/l**	**mg/l**					
Batch number: 183151063504	Sample number(s): 9885681-9885686 UNSPK: 9885681									
Lead	N.D.	0.150	0.150	0.150	0.145	100	97	75-125	3	20

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 183151063504	Sample number(s): 9885681-9885686 BKG: 9885681			
Lead	N.D.	N.D.	0 (1)	20

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

Quality Control Summary

Client Name: Chevron Environmental Mgmt. Group Number: 2006269
Reported: 11/16/2018 20:14

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- 5ml Water by 8260C
Batch number: E183131AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9885680	101	98	97	97
9885681	102	101	98	98
9885682	103	103	97	99
9885683	102	100	97	98
9885685	101	100	97	98
9885686	100	98	98	98
Blank	100	100	98	98
LCS	101	102	97	97
MS	103	103	97	99
MSD	102	100	97	98
Limits:	80-120	80-120	80-120	80-120

Analysis Name: SVOAs 8270D MINI
Batch number: 18312WAA026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9885681	31	43	79	66	65	80
9885682	42	57	89	76	72	89
9885683	41	54	94	79	75	92
9885685	32	43	84	67	64	74
9885686	31	44	80	69	64	63
Blank	31	43	98	66	49	89
LCS	41	56	101	79	68	93
MS	42	57	89	76	72	89
MSD	41	54	94	79	75	92
Limits:	10-72	10-85	29-133	30-111	39-105	27-126

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

11387 240629 9885680-86

Chain of Custody

COC #: CVX-0228
Lab Use Only
Lab Proj #
Lab ID: LANCASTER
Job No: 450996

Client Contact:

PARSONS
301 PLAINFIELD ROAD-SUITE 350
SYRACUSE, NY 13212

Privileged and Confidential
EDD to: Laura.Drachenberg@parsons.com
Sampler:
Program: BEACON-2018 RCRA Sampling R2
Analysis Turnaround Time:
Standard -
Rush Charges Authorized for -
2 weeks -
1 week -
Next Day -

Hardcopy Report to: Edward.J.Ashton@parsons.com
Invoice to: Chevron

Site Name: BEACON
Site Location: BEACON, NY

Ship to:
Attn: Megan Moeller
Eurofins Lancaster Laboratories
Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601
Phone: (717) 556-7261 Ext. 1246

Sample Identification												Preservative:											
Location ID	Start Depth (ft)	End Depth (ft)	Field Sample ID	Sample Date	Sample Time	Sample Type	Sample Matrix	Sample Purpose	# of Cont.	MS/MSD	Composite (y/n)		0	0	0								
													SW8260C-VOCs	SW8270D-SVOCs	SW6010C-Dissolved Lead (1)								Lab Sample Numbers
QA2			QA-WT2-181026	10/26/18		BLKWATER	Water	TB	1	☐	N		☑	☐	☐								
OR-2	26.00	46.00	OR-2-W-26.00-181105	11/05/18	11:15	GW	Water	REG	18	☑	N		☑	☑	☑								
OR-103	65.50	75.50	OR-3-WD-65.50-181105	11/05/18	12:01	GW	Water	FD	6	☐	N		☑	☑	☑								
OR-3	65.50	75.50	OR-3-W-65.50-181105	11/05/18	13:45	GW	Water	REG	6	☐	N		☑	☑	☑								

Special Instructions: (1) Lab to filter sample prior to analysis.

Relinquished by: E Ashton	Company Parsons	Received by:	Company	Condition	Custody Seals Int
	Date/Time 11-5-18 1600		Date/Time	Cooler Temp.	
Relinquished by:	Company	Received by:	Company GLE	Condition	Custody Seals Int
	Date/Time		Date/Time 11-6-18 1035	Cooler Temp.	5.3°C

Preservatives: 0 = None; [1 = HCL]; [2 = HNO3]; [3 = H2SO4]; [4 = NaOH]; [5 = Zn Acetate]; [6 = MeOH]; [7 = NaHSO4]; 8 = Other (specify):

Date Printed: 11/5/2018

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Sample Administration Receipt Documentation Log

Doc Log ID: 232246

Group Number(s): 2006269

Client: Parsons

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	11/06/2018 10:35
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	NY		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	1
Paperwork Enclosed:	Yes	Trip Blank Type:	See Below
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Trip Blank Type(s): Unpreserve

Unpacked by Cory Jeremiah (10469) at 16:55 on 11/06/2018

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-03	5.3	DT	Wet	Y	Loose	N

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

Explanation of Symbols and Abbreviations

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

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

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

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

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

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

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

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

Volatiles by GC/MS Data

Case Narrative/Conformance Summary

Volatiles by GC/MS

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD54

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9885680	QA-WT2-181026	X		1	Trip Blank
9885681	OR-2-W-26.00-181105	X		1	Unspiked
9885682	OR-2-W-26.00-181105 MS	X		1	Matrix Spike
9885683	OR-2-W-26.00-181105 MSD	X		1	Matrix Spike Duplicate
9885685	OR-3-WD-65.50-181105	X		1	Field Duplicate Sample
9885686	OR-3-W-65.50-181105	X		1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

(Sample number(s): 9885680-9885683, 9885685-9885686: Analysis: 11997)
2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.

Batch#: E183131AA (Sample number(s): 9885680-9885683, 9885685-9885686, UNSPK: 9885681)
The recovery(ies) for the following analyte(s) in the MS and MSD exceeded the acceptance window indicating a positive bias: Tetrachloroethene

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD54

GC/MS Volatiles

Fraction: Volatiles by GC/MS

SAMPLE ANALYSIS:

(Sample number(s): 9885680: Analysis: 11997)
A preserved vial was submitted for analysis. However, the pH at the time of analysis was 7.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

1. Relative Response Factor (RRF)

$$RRF = \frac{AX}{Ais} \times \frac{Cis}{Cx}$$

Where:

Ax = Area of the characteristic ion for the compound to be measured
Ais = Area of the characteristic ion for the specific internal standard to be measured
Cis = Concentration of the internal standard
Cx = Concentration of the compound to be measured

2. % Relative Standard Deviation (%RSD)

$$\%RSD = \frac{standard\ deviation}{Mean} \times 100$$

3. % Difference

$$\%D = \frac{RRFc - RRFi}{RRFi} \times 100$$

Where:

RRFc = Relative response factor from the continuing calibration standard
RRFi = Mean relative response factor from the initial calibration

4. Concentration

$$Concentration\ (\mu g / L) = \frac{(Ax)(Is)(Df)}{(Ais)(RRF)}$$

Where:

Ax, Ais, and RRF are as given in 1. above
Is = Amount of internal standard added in parts per billion (µg/L)
Df = Dilution factor

5. % Recovery (% Rec)

$$\%Rec = \frac{SSR - SR}{SA} \times 100$$

Where:

SSR = Spiked sample result
SR = Sample result
SA = Spike added

6. Relative Percent Difference (RPD)

$$RPD = \frac{(MSR - MSRD)}{(1/2)(MSR + MSRD)} \times 100$$

Where:

MSR = Matrix spike recovery
MSRD = Matrix spike recovery duplicate

Quality Control and Calibration Summary Forms

Volatiles by GC/MS

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Quality Control Reference List
GC/MS Volatiles

CLIENT: Chevron Environmental Mgmt.
SDG: CBD54

Fraction: Volatiles by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
VOCs- 5ml Water by 8260C	E183131AA	VBLKE81	11/09/2018 14:14
		LCSE81	11/09/2018 13:54
		9885680	11/09/2018 16:35
		9885681 UNSPK	11/09/2018 16:55
		9885682 MS	11/09/2018 17:15
		9885683 MSD	11/09/2018 17:36
		9885685	11/09/2018 17:56
		9885686	11/09/2018 18:16

Quality Control Summary
Method Blank
GC/MS Volatiles
SDG: CBD54
Matrix: LIQUID

Fraction: Volatiles by GC/MS

E183131AA / VBLKE81 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Chloromethane	11/09/18	N.D.	ug/l	0.2	1
Vinyl Chloride	11/09/18	N.D.	ug/l	0.2	1
Bromomethane	11/09/18	N.D.	ug/l	0.3	1
Chloroethane	11/09/18	N.D.	ug/l	0.2	1
Trichlorofluoromethane	11/09/18	N.D.	ug/l	0.2	1
1,1-Dichloroethene	11/09/18	N.D.	ug/l	0.2	1
Methylene Chloride	11/09/18	N.D.	ug/l	0.3	1
Methyl Tertiary Butyl Ether	11/09/18	N.D.	ug/l	0.2	1
1,1-Dichloroethane	11/09/18	N.D.	ug/l	0.2	1
1,2-Dichloroethene (Total)	11/09/18	N.D.	ug/l	0.2	2
Chloroform	11/09/18	N.D.	ug/l	0.2	1
1,1,1-Trichloroethane	11/09/18	N.D.	ug/l	0.3	1
Carbon Tetrachloride	11/09/18	N.D.	ug/l	0.2	1
Benzene	11/09/18	N.D.	ug/l	0.2	1
1,2-Dichloroethane	11/09/18	N.D.	ug/l	0.3	1
Trichloroethene	11/09/18	N.D.	ug/l	0.2	1
1,2-Dichloropropane	11/09/18	N.D.	ug/l	0.2	1
Bromodichloromethane	11/09/18	N.D.	ug/l	0.2	1
2-Chloroethyl Vinyl Ether	11/09/18	N.D.	ug/l	0.2	10
cis-1,3-Dichloropropene	11/09/18	N.D.	ug/l	0.2	1
trans-1,3-Dichloropropene	11/09/18	N.D.	ug/l	0.2	1
Toluene	11/09/18	N.D.	ug/l	0.2	1
Tetrachloroethene	11/09/18	N.D.	ug/l	0.2	1
1,1,2-Trichloroethane	11/09/18	N.D.	ug/l	0.2	1
Dibromochloromethane	11/09/18	N.D.	ug/l	0.2	1
Chlorobenzene	11/09/18	N.D.	ug/l	0.2	1
Ethylbenzene	11/09/18	N.D.	ug/l	0.4	1
Xylene (Total)	11/09/18	N.D.	ug/l	1	5
Bromoform	11/09/18	N.D.	ug/l	0.2	4
1,1,2,2-Tetrachloroethane	11/09/18	N.D.	ug/l	0.2	1
1,3-Dichlorobenzene	11/09/18	N.D.	ug/l	0.2	5
1,4-Dichlorobenzene	11/09/18	N.D.	ug/l	0.2	5
1,2-Dichlorobenzene	11/09/18	N.D.	ug/l	0.2	5

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Quality Control Summary
Surrogates
GC/MS Volatiles
SDG: CBD54
Matrix: LIQUID

Fraction: Volatiles by GC/MS

E183131AA	1,2-Dichloroethane-d4		4-Bromofluorobenzene		Dibromofluoromethane		Toluene-d8	
	Spike Added	50 ug/l	Spike Added	50 ug/l	Spike Added	50 ug/l	Spike Added	50 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
VBLKE81	100	80 - 120	98	80 - 120	100	80 - 120	98	80 - 120
LCSE81	102	80 - 120	97	80 - 120	101	80 - 120	97	80 - 120
9885680	98	80 - 120	97	80 - 120	101	80 - 120	97	80 - 120
9885681 UNSPK	101	80 - 120	98	80 - 120	102	80 - 120	98	80 - 120
9885682 MS	103	80 - 120	99	80 - 120	103	80 - 120	97	80 - 120
9885683 MSD	100	80 - 120	98	80 - 120	102	80 - 120	97	80 - 120
9885685	100	80 - 120	98	80 - 120	101	80 - 120	97	80 - 120
9885686	98	80 - 120	98	80 - 120	100	80 - 120	98	80 - 120

GC/MS Volatiles

Fraction: Volatiles by GC/MS

UNSPK: 9885681 MS: 9885682 MSD: 9885683 **Analyte**	Batch: **E183131AA** (Sample number(s): 9885680-9885683, 9885685-9885686)								
	Spike Added ug/l	**Unspiked Conc ug/l**	**MS Conc ug/l**	**MSD Conc ug/l**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Chloromethane	20	N.D.	19.92	19.52	100	98	56-121	2	30
Vinyl Chloride	20	N.D.	21.15	20.38	106	102	56-120	4	30
Bromomethane	20	N.D.	18.08	17.94	90	90	53-128	1	30
Chloroethane	20	N.D.	19.33	18.52	97	93	55-123	4	30
Trichlorofluoromethane	20	N.D.	21.59	21.29	108	106	55-135	1	30
1,1-Dichloroethene	20	N.D.	23.76	23.82	119	119	80-131	0	30
Methylene Chloride	20	N.D.	22.44	22.11	112	111	80-120	1	30
Methyl Tertiary Butyl Ether	20	N.D.	20.78	20.54	104	103	69-122	1	30
1,1-Dichloroethane	20	0.208 J	22.79	22.78	113	113	80-120	0	30
1,2-Dichloroethene (Total)	40	N.D.	46.89	47.42	117	119	80-120	1	30
1,1,1-Trichloroethane	20	N.D.	23.21	22.89	116	114	67-126	1	30
Chloroform	20	N.D.	23.11	23.05	116	115	80-120	0	30
Carbon Tetrachloride	20	N.D.	24.04	24.25	120	121	64-134	1	30
1,2-Dichloroethane	20	N.D.	22.19	21.91	111	110	73-124	1	30
Benzene	20	N.D.	22.71	22.33	114	112	80-120	2	30
Trichloroethene	20	N.D.	23.36	23.12	117	116	80-120	1	30
1,2-Dichloropropane	20	0.214 J	22.27	22.17	110	110	80-120	0	30
Bromodichloromethane	20	N.D.	22.28	22.3	111	112	71-120	0	30
2-Chloroethyl Vinyl Ether	20	N.D.	20.62	21.07	103	105	49-124	2	30
cis-1,3-Dichloropropene	20	N.D.	21.78	21.74	109	109	75-120	0	30
Toluene	20	N.D.	22.11	22.03	111	110	80-120	0	30
trans-1,3-Dichloropropene	20	N.D.	19.49	19.65	97	98	67-120	1	30
1,1,2-Trichloroethane	20	N.D.	21.95	21.83	110	109	80-120	1	30
Tetrachloroethene	20	N.D.	24.73	24.44	124 *	122 *	80-120	1	30
Dibromochloromethane	20	N.D.	21.17	21.1	106	106	71-120	0	30
Chlorobenzene	20	N.D.	22.1	22.28	110	111	80-120	1	30
Ethylbenzene	20	N.D.	21.74	21.87	109	109	80-120	1	30
Xylene (Total)	60	N.D.	67.05	67.44	112	112	80-120	1	30
Bromoform	20	N.D.	21.07	20.92	105	105	51-120	1	30
1,1,2,2-Tetrachloroethane	20	N.D.	20.22	20.29	101	101	72-120	0	30
1,3-Dichlorobenzene	20	N.D.	22.63	22.16	113	111	80-120	2	30
1,4-Dichlorobenzene	20	N.D.	22.56	22.35	113	112	80-120	1	30
1,2-Dichlorobenzene	20	N.D.	22.52	21.94	113	110	80-120	3	30

Comments:
(2) The unspiked sample result is greater than four times the spike added.
* = Out of Specification

Results are being reported on an as received basis.

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: CBD54
Matrix: LIQUID

GC/MS Volatiles
Fraction: Volatiles by GC/MS

LCS: LCSE81	Batch: **E183131AA** (Sample number(s): 9885680-9885683, 9885685-9885686)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Chloromethane	20	16.5	NA	83	NA	56-121	NA	NA
Vinyl Chloride	20	17.23	NA	86	NA	56-120	NA	NA
Bromomethane	20	15.66	NA	78	NA	53-128	NA	NA
Chloroethane	20	16.63	NA	83	NA	55-123	NA	NA
Trichlorofluoromethane	20	17.95	NA	90	NA	55-135	NA	NA
1,1-Dichloroethene	20	21.07	NA	105	NA	80-131	NA	NA
Methylene Chloride	20	20.53	NA	103	NA	80-120	NA	NA
Methyl Tertiary Butyl Ether	20	20.31	NA	102	NA	69-122	NA	NA
1,1-Dichloroethane	20	20.68	NA	103	NA	80-120	NA	NA
1,2-Dichloroethene (Total)	40	43.31	NA	108	NA	80-120	NA	NA
1,1,1-Trichloroethane	20	20.88	NA	104	NA	67-126	NA	NA
Chloroform	20	21.32	NA	107	NA	80-120	NA	NA
Carbon Tetrachloride	20	21.65	NA	108	NA	64-134	NA	NA
1,2-Dichloroethane	20	21.02	NA	105	NA	73-124	NA	NA
Benzene	20	20.52	NA	103	NA	80-120	NA	NA
Trichloroethene	20	20.72	NA	104	NA	80-120	NA	NA
1,2-Dichloropropane	20	20.2	NA	101	NA	80-120	NA	NA
Bromodichloromethane	20	21.24	NA	106	NA	71-120	NA	NA
2-Chloroethyl Vinyl Ether	20	20.82	NA	104	NA	49-124	NA	NA
cis-1,3-Dichloropropene	20	20.87	NA	104	NA	75-120	NA	NA
Toluene	20	20.53	NA	103	NA	80-120	NA	NA
trans-1,3-Dichloropropene	20	19.27	NA	96	NA	67-120	NA	NA
1,1,2-Trichloroethane	20	21.13	NA	106	NA	80-120	NA	NA
Tetrachloroethene	20	21.68	NA	108	NA	80-120	NA	NA
Dibromochloromethane	20	21.17	NA	106	NA	71-120	NA	NA
Chlorobenzene	20	20.81	NA	104	NA	80-120	NA	NA
Ethylbenzene	20	20.3	NA	102	NA	80-120	NA	NA
Xylene (Total)	60	62.85	NA	105	NA	80-120	NA	NA
Bromoform	20	21.06	NA	105	NA	51-120	NA	NA
1,1,2,2-Tetrachloroethane	20	19.99	NA	100	NA	72-120	NA	NA
1,3-Dichlorobenzene	20	21.44	NA	107	NA	80-120	NA	NA
1,4-Dichlorobenzene	20	21.19	NA	106	NA	80-120	NA	NA
1,2-Dichlorobenzene	20	21.72	NA	109	NA	80-120	NA	NA

Fraction: Volatiles by GC/MS

11997: VOCs- 5ml Water by 8260C Analyte Name	Default MDL	Default LOQ	Units
Chloromethane	0.2	1	ug/l
Vinyl Chloride	0.2	1	ug/l
Bromomethane	0.3	1	ug/l
Chloroethane	0.2	1	ug/l
Trichlorofluoromethane	0.2	1	ug/l
1,1-Dichloroethene	0.2	1	ug/l
Methylene Chloride	0.3	1	ug/l
Methyl Tertiary Butyl Ether	0.2	1	ug/l
1,1-Dichloroethane	0.2	1	ug/l
1,2-Dichloroethene (Total)	0.2	2	ug/l
Chloroform	0.2	1	ug/l
1,1,1-Trichloroethane	0.3	1	ug/l
Carbon Tetrachloride	0.2	1	ug/l
Benzene	0.2	1	ug/l
1,2-Dichloroethane	0.3	1	ug/l
Trichloroethene	0.2	1	ug/l
1,2-Dichloropropane	0.2	1	ug/l
Bromodichloromethane	0.2	1	ug/l
2-Chloroethyl Vinyl Ether	0.2	10	ug/l
cis-1,3-Dichloropropene	0.2	1	ug/l
Toluene	0.2	1	ug/l
trans-1,3-Dichloropropene	0.2	1	ug/l
1,1,2-Trichloroethane	0.2	1	ug/l
Tetrachloroethene	0.2	1	ug/l
Dibromochloromethane	0.2	1	ug/l
Chlorobenzene	0.2	1	ug/l
Ethylbenzene	0.4	1	ug/l
Xylene (Total)	1	5	ug/l
Bromoform	0.2	4	ug/l
1,1,2,2-Tetrachloroethane	0.2	1	ug/l
1,3-Dichlorobenzene	0.2	5	ug/l
1,4-Dichlorobenzene	0.2	5	ug/l
1,2-Dichlorobenzene	0.2	5	ug/l

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: ec29t01.d BFB Injection Date: 10/29/18

Instrument ID: HP15648 BFB Injection Time: 19:42

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.06
75	30.0 - 60.0% of mass 95	47.09
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.08
173	Less than 2.0% of mass 174	0.00 (0.00)1
174	Greater than 50.0% of mass 95	74.30
175	5.0 - 9.0% of mass 174	5.08 (6.83)1
176	Greater than 95.0%, but less than 101.0% of mass 174	70.79 (95.27)1
177	5.0 - 9.0% of mass 176	4.21 (5.95)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD300	ec29i01.d	10/29/18	20:39
02	VSTD100	ec29i02.d	10/29/18	20:59
03	VSTD50	ec29i03.d	10/29/18	21:20
04	VSTD20	ec29i04.d	10/29/18	21:40
05	VSTD10	ec29i05.d	10/29/18	22:00
06	VSTD4	ec29i06.d	10/29/18	22:20
07	VSTD1	ec29i07.d	10/29/18	22:41
08	MDL0.5 - MDL0.5	ec29m01.d	10/29/18	23:01
09	ICVELG	ec29v01.d	10/29/18	23:21

FORM V VOA

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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: en09t01.d BFB Injection Date: 11/09/18

Instrument ID: HP15648 BFB Injection Time: 12:52

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.67
75	30.0 - 60.0% of mass 95	47.72
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.47
173	Less than 2.0% of mass 174	0.00 (0.00)1
174	Greater than 50.0% of mass 95	73.35
175	5.0 - 9.0% of mass 174	5.61 (7.66)1
176	Greater than 95.0%, but less than 101.0% of mass 174	70.14 (95.63)1
177	5.0 - 9.0% of mass 176	4.61 (6.58)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	en09c01.d	11/09/18	13:35
02	LCSE81	en09s01.d	11/09/18	13:54
03	VBLKE81	en09b01.d	11/09/18	14:14
04	9878252	en09s02.d	11/09/18	14:54
05	9878253	en09s03.d	11/09/18	15:14
06	9878262	en09s04.d	11/09/18	15:35
07	9878964	en09s05.d	11/09/18	15:55
08	9878966	en09s06.d	11/09/18	16:15
09	9885680	en09s07.d	11/09/18	16:35
10	9885681	en09s08.d	11/09/18	16:55
11	9885682MS	en09s09.d	11/09/18	17:15
12	9885683MSD	en09s10.d	11/09/18	17:36
13	9885685	en09s11.d	11/09/18	17:56
14	9885686	en09s12.d	11/09/18	18:16
15	9875205	en09s13.d	11/09/18	18:36
16	9875206	en09s14.d	11/09/18	18:57
17	9875207	en09s15.d	11/09/18	19:17
18	9875211	en09s16.d	11/09/18	19:37
19	9879132	en09s17.d	11/09/18	19:57
20	9879139	en09s18.d	11/09/18	20:18
21	9879141	en09s19.d	11/09/18	20:38
22	9879142	en09s20.d	11/09/18	20:58

FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: en09t01.d BFB Injection Date: 11/09/18

Instrument ID: HP15648 BFB Injection Time: 12:52

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.67
75	30.0 - 60.0% of mass 95	47.72
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.47
173	Less than 2.0% of mass 174	0.00 (0.00)1
174	Greater than 50.0% of mass 95	73.35
175	5.0 - 9.0% of mass 174	5.61 (7.66)1
176	Greater than 95.0%, but less than 101.0% of mass 174	70.14 (95.63)1
177	5.0 - 9.0% of mass 176	4.61 (6.58)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
23	9879144	en09s21.d	11/09/18	21:18
24	9879145	en09s22.d	11/09/18	21:38
25	9879146	en09s23.d	11/09/18	21:59

FORM V VOA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP15648 Calibration Date(s): 10/29/18 10/29/18

Heated Purge: (Y/N) Y Calibration Times: 20:39 22:41

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

LAB FILE ID: RRF 1 = ec29i07.d RRF 4 = ec29i06.d RRF 10= ec29i05.d
RRF 20= ec29i04.d RRF 50= ec29i03.d RRF100= ec29i02.d RRF300= ec29i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	RRF	% RSD	CAL. METHOD	
Dichlorodifluoromethane	#0.3281	0.3835	0.4004	0.3771	0.3680	0.3853	0.3644	0.3724	6	AVG	#
Chloromethane	#0.3723	0.3813	0.3986	0.3756	0.3836	0.4003	0.4100	0.3888	4	AVG	#
1,3-Butadiene	0.4054	0.3134	0.3139	0.2902	0.2726	0.2847	0.2846	0.3092	15	AVG	
Vinyl Chloride	#0.2931	0.3809	0.3819	0.3617	0.3565	0.3657	0.3671	0.3581	8	AVG	#
Bromomethane	#0.2546	0.2659	0.2568	0.2376	0.2417	0.2474	0.2419	0.2494	4	AVG	#
Chloroethane	#0.1907	0.2076	0.2226	0.2039	0.2026	0.2082	0.2036	0.2056	5	AVG	#
Dichlorofluoromethane	0.4627	0.4935	0.4753	0.5168	0.4989	0.5034	0.5010	0.4931	4	AVG	
n-Pentane	0.2571	0.3216	0.4324	0.4306	0.4099	0.4368	0.4160	0.3863	18	AVG	
Trichlorofluoromethane	#0.3265	0.4514	0.4377	0.4167	0.4071	0.4256	0.4098	0.4107	10	AVG	#
Ethyl ether	0.1941	0.2023	0.2095	0.2053	0.2106	0.2117	0.2132	0.2067	3	AVG	
Freon 123a	0.2384	0.2762	0.2917	0.2811	0.2680	0.2816	0.2768	0.2734	6	AVG	
Acrolein	1.8665	1.9595	1.9216	1.9393	1.9647	1.8695	1.9500	1.9245	2	AVG	
1,1-Dichloroethene	#0.1897	0.1995	0.2029	0.1960	0.1944	0.1999	0.1978	0.1972	2	AVG	#
1,1-Dichloroethene(2)	#0.0606	0.1011	0.1121	0.1073	0.1080	0.1104	0.1090	0.1012	18	AVG	#
Acetone	#0.7499	0.6973	0.8789	0.8220	0.8605	0.7969	0.8338	0.8056	8	AVG	#
Freon 113	#0.1236	0.1627	0.2083	0.2114	0.2032	0.2122	0.2028	0.1892	18	AVG	#
2-Propanol	0.5811	0.5518	0.5592	0.5177	0.5492	0.5886	0.5320	0.5542	5	AVG	
Methyl Iodide	0.2889	0.3351	0.3428	0.3383	0.3421	0.3583	0.3499	0.3365	7	AVG	
Carbon Disulfide	#0.5892	0.6727	0.7213	0.7036	0.6876	0.7263	0.7206	0.6888	7	AVG	#
Allyl Chloride	0.4792	0.4399	0.4169	0.4230	0.4268	0.4290	0.4342	0.4356	5	AVG	
Methyl Acetate	#0.3041	0.2196	0.2129	0.2158	0.2287	0.2249	0.2236	0.2328	14	AVG	#
Methylene Chloride	#0.2549	0.2266	0.2338	0.2240	0.2233	0.2316	0.2258	0.2314	5	AVG	#
t-Butyl alcohol	0.9340	0.9743	1.0169	0.9250	0.9527	0.9241	0.9065	0.9476	4	AVG	
Acrylonitrile	0.1352	0.1116	0.1258	0.1237	0.1235	0.1245	0.1265	0.1244	6	AVG	
trans-1,2-Dichloroethene	#0.2092	0.2106	0.2254	0.2180	0.2195	0.2271	0.2235	0.2191	3	AVG	#
Methyl Tertiary Butyl Ether	#0.6782	0.6957	0.6981	0.6981	0.7006	0.7256	0.6957	0.6989	2	AVG	#
n-Hexane		0.2287	0.3995	0.4056	0.4042	0.4277	0.4107	0.3794	20	AVG	
1,1-Dichloroethane	#0.3456	0.4186	0.4469	0.4459	0.4434	0.4623	0.4574	0.4314	9	AVG	#
di-Isopropyl ether	0.7139	0.7746	0.8279	0.8237	0.8164	0.8499	0.8221	0.8041	6	AVG	
2-Chloro-1,3-butadiene	0.3563	0.4078	0.4217	0.4128	0.4100	0.4292	0.4224	0.4086	6	AVG	
Ethyl t-butyl ether	0.6798	0.7250	0.7828	0.7638	0.7666	0.7930	0.7507	0.7517	5	AVG	
cis-1,2-Dichloroethene	#0.2241	0.2381	0.2454	0.2417	0.2450	0.2569	0.2484	0.2428	4	AVG	#
2-Butanone	#0.1820	0.1506	0.1545	0.1478	0.1543	0.1550	0.1569	0.1573	7	AVG	#
2,2-Dichloropropane	0.3325	0.3761	0.3703	0.3652	0.3644	0.3768	0.3660	0.3645	4	AVG	
Propionitrile	1.2453	1.2762	1.3616	1.3458	1.3770	1.3962	1.3976	1.3428	4	AVG	
Methacrylonitrile	0.1166	0.1225	0.1299	0.1283	0.1300	0.1358	0.1310	0.1277	5	AVG	
Bromochloromethane	0.1216	0.1181	0.1128	0.1165	0.1160	0.1191	0.1172	0.1173	2	AVG	
Tetrahydrofuran	0.9299	1.1573	1.1663	1.1837	1.2088	1.1291	1.1896	1.1378	8	AVG	
Chloroform	#0.3426	0.3766	0.3822	0.3840	0.3866	0.4029	0.3894	0.3806	5	AVG	#
1,1,1-Trichloroethane	#0.3269	0.3572	0.3547	0.3441	0.3427	0.3570	0.3521	0.3478	3	AVG	#
Cyclohexane	#0.2759	0.3482	0.4856	0.4836	0.4671	0.4992	0.4828	0.4346	20	AVG	#
Cyclohexane(2)	#0.2677	0.2949	0.3904	0.3903	0.3831	0.4081	0.3902	0.3607	15	AVG	#
Cyclohexane(3)	#0.0837	0.1090	0.1492	0.1442	0.1401	0.1503	0.1453	0.1317	19	AVG	#
1,1-Dichloropropene	0.2885	0.3276	0.3510	0.3513	0.3422	0.3585	0.3526	0.3388	7	AVG	
Carbon Tetrachloride	#0.2147	0.2891	0.3006	0.2922	0.2950	0.3091	0.3051	0.2865	11	AVG	#
Isobutyl Alcohol	0.3757	0.3333	0.3386	0.3213	0.3177	0.3210	0.3279	0.3336	6	AVG	
Benzene	#0.8572	0.9645	1.0024	0.9843	0.9989	1.0465	1.0259	0.9828	6	AVG	#
1,2-Dichloroethane	#0.3557	0.3100	0.3033	0.3003	0.2980	0.3145	0.3055	0.3125	6	AVG	#
1,2-Dichloroethane(2)	#0.0605	0.0325	0.0308	0.0272	0.0286	0.0289	0.0279	0.0338	35	AVG	#<-
t-Amyl methyl ether	0.6844	0.7244	0.7429	0.7074	0.7205	0.7458	0.6974	0.7175	3	AVG	
n-Heptane	0.2491	0.2359	0.4202	0.4489	0.4545	0.4778	0.4659	0.3932	27	2NDDEG	
n-Butanol	0.2711	0.2592	0.2697	0.2686	0.2840	0.2925	0.2933	0.2769	5	AVG	

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

FORM VI VOA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP15648 Calibration Date(s): 10/29/18 10/29/18

Heated Purge: (Y/N) Y Calibration Times: 20:39 22:41

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

LAB FILE ID: RRF 1 = ec29i07.d RRF 4 = ec29i06.d RRF 10= ec29i05.d
RRF 20= ec29i04.d RRF 50= ec29i03.d RRF100= ec29i02.d RRF300= ec29i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	RRF	% RSD	CAL. METHOD
Trichloroethene	#0.2014	0.2430	0.2487	0.2375	0.2402	0.2532	0.2473	0.2388	7	AVG #
Methylcyclohexane	#0.3750	0.4517	0.4947	0.4881	0.4897	0.5013	0.4897	0.4700	10	AVG #
Methylcyclohexane(2)	#0.1733	0.2072	0.2171	0.2261	0.2189	0.2241	0.2181	0.2121	9	AVG #
1,2-Dichloropropane	#0.2477	0.2566	0.2602	0.2644	0.2641	0.2767	0.2730	0.2632	4	AVG #
Dibromomethane	0.1287	0.1354	0.1317	0.1346	0.1357	0.1415	0.1398	0.1354	3	AVG
1,4-Dioxane	0.0407	0.0619	0.0704	0.0674	0.0746	0.0782	0.0716	0.0664	19	AVG
Methyl Methacrylate	0.2178	0.2023	0.2136	0.2159	0.2186	0.2319	0.2265	0.2181	4	AVG
Bromodichloromethane	#0.2726	0.2918	0.2898	0.2849	0.2896	0.3104	0.3012	0.2914	4	AVG #
2-Nitropropane	0.0935	0.0847	0.0778	0.0771	0.0793	0.0811	0.0814	0.0821	7	AVG
2-Chloroethyl Vinyl Ether	0.1559	0.1738	0.1809	0.1867	0.1906	0.1993	0.2002	0.1839	8	AVG
cis-1,3-Dichloropropene	#0.3732	0.3878	0.3953	0.3990	0.4094	0.4330	0.4253	0.4033	5	AVG #
4-Methyl-2-pentanone	#0.3268	0.3179	0.3305	0.3289	0.3342	0.3403	0.3377	0.3309	2	AVG #
Toluene	#0.7386	0.8404	0.8748	0.8578	0.8862	0.8981	0.8742	0.8529	6	AVG #
trans-1,3-Dichloropropene	#0.4906	0.5033	0.5228	0.5154	0.5368	0.5494	0.5377	0.5223	4	AVG #
Ethyl Methacrylate	0.5275	0.5373	0.5507	0.5511	0.5641	0.5802	0.5624	0.5533	3	AVG
1,1,2-Trichloroethane	#0.2742	0.2777	0.2836	0.2738	0.2860	0.2875	0.2795	0.2803	2	AVG #
Tetrachloroethene	#0.2463	0.2956	0.3311	0.3273	0.3418	0.3451	0.3392	0.3180	11	AVG #
1,3-Dichloropropane	0.4725	0.5226	0.5307	0.5155	0.5372	0.5485	0.5352	0.5232	5	AVG
2-Hexanone	#0.3085	0.3187	0.3500	0.3357	0.3464	0.3376	0.3346	0.3331	4	AVG #
Dibromochloromethane	#0.2641	0.2949	0.2944	0.2932	0.3048	0.3188	0.3122	0.2975	6	AVG #
1,2-Dibromoethane	#0.2688	0.2826	0.2900	0.2878	0.2964	0.3090	0.2985	0.2904	4	AVG #
1-Chlorohexane	0.0168	0.0293	0.0280	0.0239	0.0275	0.0268	0.0273	0.0257	16	AVG
Chlorobenzene	#0.8004	0.8654	0.9292	0.9232	0.9457	0.9727	0.9567	0.9133	7	AVG #
1,1,1,2-Tetrachloroethane	0.2584	0.3001	0.2989	0.3030	0.3113	0.3203	0.3165	0.3012	7	AVG
Ethylbenzene	#1.3926	1.5885	1.7231	1.7158	1.7505	1.8045	1.7741	1.6784	9	AVG #
m+p-Xylene	#0.5251	0.5925	0.6570	0.6562	0.6763	0.6943	0.6866	0.6411	10	AVG #
o-Xylene	#0.5209	0.6092	0.6365	0.6400	0.6580	0.6699	0.6590	0.6276	8	AVG #
Styrene	#0.8853	1.0043	1.0669	1.0543	1.0958	1.1208	1.1127	1.0486	8	AVG #
Bromoform	#0.1572	0.1847	0.1891	0.1935	0.2046	0.2146	0.2122	0.1937	10	AVG #
Isopropylbenzene	#1.2694	1.4892	1.7283	1.7207	1.7600	1.8085	1.7804	1.6509	12	AVG #
Cyclohexanone	0.3833	0.3140	0.3322	0.3109	0.3286	0.3354	0.3377	0.3346	7	AVG
Bromobenzene	0.6047	0.6472	0.6668	0.6806	0.7031	0.7174	0.6945	0.6735	6	AVG
1,1,2,2-Tetrachloroethane	#0.8275	0.8475	0.8516	0.8686	0.8737	0.8834	0.8391	0.8559	2	AVG #
1,2,3-Trichloropropane	0.2454	0.2379	0.2379	0.2379	0.2428	0.2502	0.2369	0.2413	2	AVG
trans-1,4-Dichloro-2-butene	0.2525	0.2577	0.2791	0.2802	0.2858	0.2958	0.2828	0.2763	6	AVG
n-Propylbenzene	2.9466	3.2617	3.9774	4.0264	4.0597	4.1531	3.8770	3.7574	12	AVG
2-Chlorotoluene	0.5638	0.6290	0.7525	0.7418	0.7553	0.7774	0.7455	0.7093	11	AVG
4-Chlorotoluene	0.6379	0.6636	0.7395	0.7740	0.7775	0.7964	0.7784	0.7382	8	AVG
1,3,5-Trimethylbenzene	2.0886	2.3054	2.8260	2.8930	2.9320	3.0231	2.9264	2.7135	13	AVG
tert-Butylbenzene	0.4178	0.4929	0.6111	0.6233	0.6359	0.6476	0.6352	0.5805	15	AVG
Pentachloroethane	0.3836	0.4046	0.4275	0.4262	0.4585	0.4640	0.4673	0.4331	7	AVG
1,2,4-Trimethylbenzene	2.2306	2.4152	2.9415	2.9396	2.9890	3.0739	2.9835	2.7962	12	AVG
sec-Butylbenzene	2.6096	2.8240	3.6437	3.7994	3.8548	3.9501	3.7622	3.4920	15	AVG
1,3-Dichlorobenzene	#1.1296	1.2383	1.3634	1.4056	1.4317	1.4663	1.4395	1.3535	9	AVG #
p-Isopropyltoluene	2.3391	2.5307	3.1581	3.2989	3.3384	3.4865	3.3537	3.0722	15	AVG
1,4-Dichlorobenzene	#1.1646	1.2696	1.3838	1.4125	1.4263	1.4660	1.4385	1.3659	8	AVG #
1,2,3-Trimethylbenzene	2.5601	2.9694	2.8883	2.9715	3.0913	3.0729	3.0174	2.9387	6	AVG
Benzyl Chloride	1.9224	1.8575	1.9749	2.0180	2.0607	2.1545	2.0795	2.0096	5	AVG
1,3-Diethylbenzene	1.7301	1.9105	1.8697	1.9501	2.0163	2.0003	1.9845	1.9231	5	AVG
1,4-Diethylbenzene	1.7492	2.0908	2.0291	2.0687	2.1234	2.1231	2.1515	2.0480	7	AVG
1,2-Dichlorobenzene	#1.1043	1.2266	1.2930	1.2980	1.3332	1.3772	1.3601	1.2846	7	AVG #
n-Butylbenzene	1.0522	1.2308	1.5960	1.6372	1.6670	1.7121	1.6982	1.5133	17	AVG

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP15648 Calibration Date(s): 10/29/18 10/29/18

Heated Purge: (Y/N) Y Calibration Times: 20:39 22:41

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

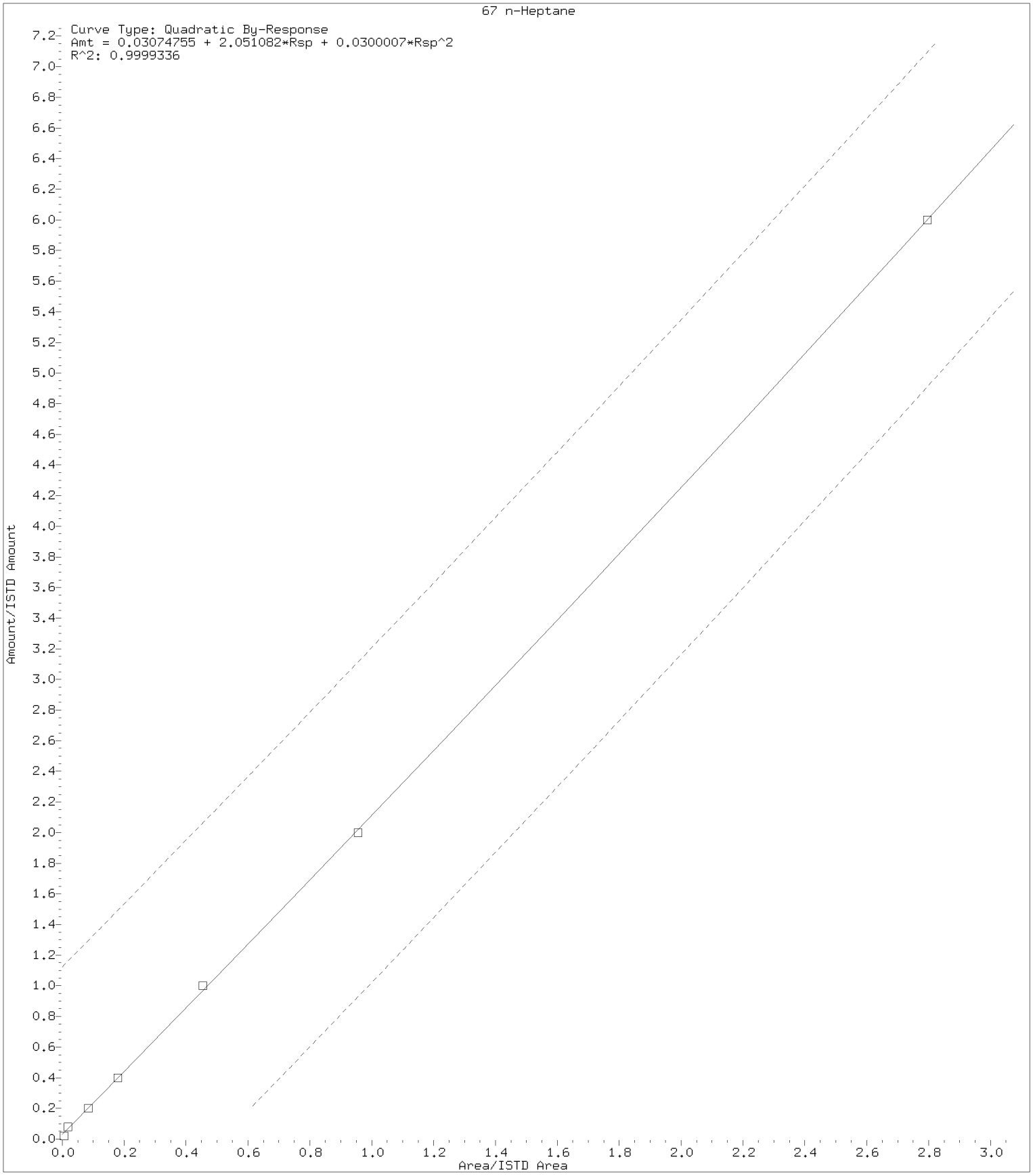
LAB FILE ID: RRF 1 = ec29i07.d RRF 4 = ec29i06.d RRF 10= ec29i05.d
RRF 20= ec29i04.d RRF 50= ec29i03.d RRF100= ec29i02.d RRF300= ec29i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	RRF	% RSD	CAL. METHOD
1,2-Diethylbenzene	1.4804	1.6277	1.5132	1.5737	1.6504	1.6360	1.6240	1.5865	4	AVG
1,2-Dibromo-3-chloropropane#	0.2098	0.1849	0.1959	0.1933	0.2013	0.2061	0.1920	0.1976	4	AVG #
1,3,5-Trichlorobenzene	0.8503	0.8295	0.9993	1.0306	1.0806	1.1134	1.0751	0.9970	11	AVG
1,2,4-Trichlorobenzene#	0.7498	0.7599	0.8815	0.9099	0.9605	0.9904	0.9325	0.8835	11	AVG #
Hexachlorobutadiene	0.4112	0.2900	0.3878	0.4042	0.4328	0.4459	0.4233	0.3993	13	AVG
Naphthalene	2.7809	2.5648	2.9527	2.9256	3.0428	3.1351	2.8352	2.8910	6	AVG
1,2,3-Trichlorobenzene	0.6665	0.7581	0.8273	0.8605	0.8944	0.9123	0.8453	0.8235	10	AVG
2-Methylnaphthalene	2.1539	1.7716	1.6923	1.7571	1.8272	1.8551	1.5128	1.7957	11	AVG
Dibromofluoromethane	0.2245	0.2229	0.2202	0.2175	0.2139	0.2184	0.2158	0.2190	2	AVG
Dibromofluoromethane(2)	0.2299	0.2301	0.2236	0.2268	0.2207	0.2253	0.2235	0.2257	2	AVG
1,2-Dichloroethane-d4	0.0601	0.0599	0.0595	0.0604	0.0583	0.0586	0.0602	0.0595	1	AVG
1,2-Dichloroethane-d4(2)	0.2977	0.2979	0.2876	0.2878	0.2807	0.2851	0.2870	0.2891	2	AVG
1,2-Dichloroethane-d4(3)	0.0385	0.0389	0.0372	0.0378	0.0371	0.0382	0.0375	0.0379	2	AVG
Toluene-d8	1.4043	1.3993	1.4076	1.4122	1.4133	1.3952	1.3826	1.4021	1	AVG
Toluene-d8(2)	0.9029	0.9037	0.8963	0.9032	0.9031	0.9050	0.8927	0.9010	1	AVG
4-Bromofluorobenzene	0.5265	0.5251	0.5259	0.5191	0.5181	0.5165	0.5219	0.5219	1	AVG
4-Bromofluorobenzene(2)	0.3782	0.3766	0.3733	0.3659	0.3705	0.3683	0.3674	0.3715	1	AVG

Average %RSD 8

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

FORM VI VOA



Digitally signed by Don V. Viray on 10/29/2018 at 23:48.
Target 3.5 esignature user ID: dvv10203

Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP15648.i/18oct29i.b/ec29i01.d	VSTD300
/chem/HP15648.i/18oct29i.b/ec29i02.d	VSTD100
/chem/HP15648.i/18oct29i.b/ec29i03.d	VSTD050
/chem/HP15648.i/18oct29i.b/ec29i04.d	VSTD020
/chem/HP15648.i/18oct29i.b/ec29i05.d	VSTD010
/chem/HP15648.i/18oct29i.b/ec29i06.d	VSTD004
/chem/HP15648.i/18oct29i.b/ec29i07.d	VSTD001

Area Summary

File ID:

Internal Standard Name	ec29i01.d	ec29i02.d	ec29i03.d	ec29i04.d	ec29i05.d	ec29i06.d	ec29i07.d	Avg. Area	%RSD	In Spec
t-Butyl alcohol-d10	187437	193435	183181	187491	189728	155996	160364	179662	8	Yes
Fluorobenzene	1097029	1091756	1092690	1102335	1092296	952453	949176	1053962	7	Yes
Chlorobenzene-d5	799641	790316	764465	789203	778569	683818	681764	755397	7	Yes
1,4-Dichlorobenzene-d4	427120	410928	397671	404398	405510	361668	358450	395106	6	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

File ID:

Internal Standard Name	ec29i01.d	ec29i02.d	ec29i03.d	ec29i04.d	ec29i05.d	ec29i06.d	ec29i07.d	Avg. RT
t-Butyl alcohol-d10	2.480	2.487	2.486	2.481	2.480	2.487	2.493	2.485
Fluorobenzene	4.736	4.742	4.742	4.742	4.736	4.736	4.742	4.740
Chlorobenzene-d5	7.888	7.888	7.888	7.888	7.888	7.888	7.888	7.888
1,4-Dichlorobenzene-d4	9.790	9.790	9.790	9.790	9.790	9.790	9.790	9.790

* indicates the retention time is greater than 30 seconds from the average RT.

Report generated on 10/29/2018 at 23:47.

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP15648 ICV Date: 10/29/18 Time: 23:21

Lab File ID: ec29v01.d Init. Calib. Date(s): 10/29/18 10/29/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

			ACTUAL	TRUE	%	
COMPOUND	$\overline{RRF}$	RRF	CONC.	CONC.	DRIFT	
# Dichlorodifluoromethane	0.3724	0.2993	16.07	20	-20	#
# Chloromethane	0.3888	0.3747	19.27	20	-4	#
1,3-Butadiene	0.3092	0.2702	17.48	20	-13	
# Vinyl Chloride	0.3581	0.3432	19.17	20	-4	#
# Bromomethane	0.2494	0.2145	17.20	20	-14	#
# Chloroethane	0.2056	0.1928	18.75	20	-6	#
Dichlorofluoromethane	0.4931	0.4948	20.07	20	0	
n-Pentane	0.3863	0.3958	20.49	20	2	
# Trichlorofluoromethane	0.4107	0.3835	18.68	20	-7	#
Ethyl ether	0.2067	0.1969	19.06	20	-5	
Freon 123a	0.2734	0.2715	19.86	20	-1	
Acrolein	1.9245	1.6745	130.52	150	-13	
# 1,1-Dichloroethene	0.1972	0.2001	20.30	20	2	#
# Acetone	0.8056	0.7315	136.20	150	-9	#
# Freon 113	0.1892	0.2009	21.24	20	6	#
2-Propanol	0.5542	0.5031	136.16	150	-9	
Methyl Iodide	0.3365	0.3271	19.44	20	-3	
# Carbon Disulfide	0.6888	0.6606	19.18	20	-4	#
Allyl Chloride	0.4356	0.4003	18.38	20	-8	
# Methyl Acetate	0.2328	0.2043	17.55	20	-12	#
# Methylene Chloride	0.2314	0.2313	19.99	20	0	#
t-Butyl alcohol	0.9476	0.8721	184.06	200	-8	
Acrylonitrile	0.1244	0.1114	89.56	100	-10	
# trans-1,2-Dichloroethene	0.2191	0.2246	20.50	20	3	#
# Methyl Tertiary Butyl Ether	0.6989	0.6799	19.46	20	-3	#
n-Hexane	0.3794	0.3710	19.55	20	-2	
# 1,1-Dichloroethane	0.4314	0.4336	20.10	20	1	#
di-Isopropyl ether	0.8041	0.7825	19.46	20	-3	
2-Chloro-1,3-butadiene	0.4086	0.3918	19.18	20	-4	
Ethyl t-butyl ether	0.7517	0.7346	19.55	20	-2	
# cis-1,2-Dichloroethene	0.2428	0.2502	20.61	20	3	#
# 2-Butanone	0.1573	0.1431	136.43	150	-9	#
2,2-Dichloropropane	0.3645	0.3711	20.37	20	2	
Propionitrile	1.3428	1.2538	140.05	150	-7	
Methacrylonitrile	0.1277	0.1247	146.39	150	-2	
Bromochloromethane	0.1173	0.1152	19.64	20	-2	

Compounds with required minimum RRF.
Maximum % Drift = 30 %

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP15648 ICV Date: 10/29/18 Time: 23:21

Lab File ID: ec29v01.d Init. Calib. Date(s): 10/29/18 10/29/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

			ACTUAL	TRUE	%	
	COMPOUND	$\overline{RRF}$	RRF	CONC.	CONC.	DRIFT	
	Tetrahydrofuran	1.1378	1.0701	94.05	100	-6	
#	Chloroform	0.3806	0.3978	20.90	20	5	#
#	1,1,1-Trichloroethane	0.3478	0.3534	20.32	20	2	#
#	Cyclohexane	0.4346	0.4388	20.19	20	1	#
	1,1-Dichloropropene	0.3388	0.3349	19.77	20	-1	
#	Carbon Tetrachloride	0.2865	0.2933	20.47	20	2	#
	Isobutyl Alcohol	0.3336	0.2911	436.23	500	-13	
#	Benzene	0.9828	0.9757	19.86	20	-1	#
#	1,2-Dichloroethane	0.3125	0.3139	20.09	20	0	#
	t-Amyl methyl ether	0.7175	0.7015	19.55	20	-2	
	n-Heptane	0.3932	0.3820	17.24	20	-14	
	n-Butanol	0.2769	0.2576	930.37	1000	-7	
#	Trichloroethene	0.2388	0.2400	20.10	20	1	#
#	Methylcyclohexane	0.4700	0.4600	19.57	20	-2	#
#	1,2-Dichloropropane	0.2632	0.2553	19.40	20	-3	#
	Dibromomethane	0.1354	0.1399	20.68	20	3	
	1,4-Dioxane	0.0664	0.0638	480.24	500	-4	
	Methyl Methacrylate	0.2181	0.2023	18.55	20	-7	
#	Bromodichloromethane	0.2914	0.2990	20.52	20	3	#
	2-Nitropropane	0.0821	0.0779	18.96	20	-5	
	2-Chloroethyl Vinyl Ether	0.1839	0.1831	19.92	20	0	
#	cis-1,3-Dichloropropene	0.4033	0.3991	19.79	20	-1	#
#	4-Methyl-2-pentanone	0.3309	0.3064	92.58	100	-7	#
#	Toluene	0.8529	0.8587	20.14	20	1	#
#	trans-1,3-Dichloropropene	0.5223	0.5147	19.71	20	-1	#
	Ethyl Methacrylate	0.5533	0.5121	18.51	20	-7	
#	1,1,2-Trichloroethane	0.2803	0.2902	20.70	20	4	#
#	Tetrachloroethene	0.3180	0.3462	21.77	20	9	#
	1,3-Dichloropropane	0.5232	0.5182	19.81	20	-1	
#	2-Hexanone	0.3331	0.3091	92.81	100	-7	#
#	Dibromochloromethane	0.2975	0.3062	20.59	20	3	#
#	1,2-Dibromoethane	0.2904	0.2954	20.34	20	2	#
	1-Chlorohexane	0.0257	0.0286	22.28	20	11	
#	Chlorobenzene	0.9133	0.9326	20.42	20	2	#
	1,1,1,2-Tetrachloroethane	0.3012	0.3099	20.57	20	3	
#	Ethylbenzene	1.6784	1.6687	19.88	20	-1	#

Compounds with required minimum RRF.
Maximum % Drift = 30 %

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP15648 ICV Date: 10/29/18 Time: 23:21

Lab File ID: ec29v01.d Init. Calib. Date(s): 10/29/18 10/29/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

			ACTUAL	TRUE	%	
COMPOUND	$\overline{RRF}$	RRF	CONC.	CONC.	DRIFT	
# m+p-Xylene	0.6411	0.6576	41.03	40	3	#
# o-Xylene	0.6276	0.6405	20.41	20	2	#
# Styrene	1.0486	1.0759	20.52	20	3	#
# Bromoform	0.1937	0.1986	20.51	20	3	#
# Isopropylbenzene	1.6509	1.7533	21.24	20	6	#
Cyclohexanone	0.3346	0.2762	412.70	500	-17	
Bromobenzene	0.6735	0.7013	20.83	20	4	
# 1,1,2,2-Tetrachloroethane	0.8559	0.8525	19.92	20	0	#
1,2,3-Trichloropropane	0.2413	0.2533	21.00	20	5	
trans-1,4-Dichloro-2-butene	0.2763	0.2741	99.23	100	-1	
n-Propylbenzene	3.7574	3.9721	21.14	20	6	
2-Chlorotoluene	0.7093	0.7446	20.99	20	5	
4-Chlorotoluene	0.7382	0.7662	20.76	20	4	
1,3,5-Trimethylbenzene	2.7135	2.8655	21.12	20	6	
tert-Butylbenzene	0.5805	0.6147	21.18	20	6	
Pentachloroethane	0.4331	0.4202	19.40	20	-3	
1,2,4-Trimethylbenzene	2.7962	2.8911	20.68	20	3	
sec-Butylbenzene	3.4920	3.7281	21.35	20	7	
# 1,3-Dichlorobenzene	1.3535	1.4056	20.77	20	4	#
p-Isopropyltoluene	3.0722	3.2688	21.28	20	6	
# 1,4-Dichlorobenzene	1.3659	1.4241	20.85	20	4	#
1,2,3-Trimethylbenzene	2.9387	3.0402	20.69	20	3	
Benzyl Chloride	2.0096	1.8427	18.34	20	-8	
1,3-Diethylbenzene	1.9231	1.9711	20.50	20	2	
1,4-Diethylbenzene	2.0480	2.0300	19.82	20	-1	
# 1,2-Dichlorobenzene	1.2846	1.3471	20.97	20	5	#
n-Butylbenzene	1.5133	1.5771	20.84	20	4	
1,2-Diethylbenzene	1.5865	1.6063	20.25	20	1	
# 1,2-Dibromo-3-chloropropane	0.1976	0.1968	19.92	20	0	#
1,3,5-Trichlorobenzene	0.9970	1.0256	20.58	20	3	
# 1,2,4-Trichlorobenzene	0.8835	0.9132	20.67	20	3	#
Hexachlorobutadiene	0.3993	0.4194	21.01	20	5	
Naphthalene	2.8910	2.8830	19.94	20	0	
1,2,3-Trichlorobenzene	0.8235	0.8629	20.96	20	5	
2-Methylnaphthalene	1.7957	1.5761	17.55	20	-12	

Average %Drift 5

Compounds with required minimum RRF.
Maximum % Drift = 30 %

^

Lancaster Laboratories
Continuing Calibration Internal Standard Check

Initial Calibration Standards:

/chem/HP15648.i/18oct29i.b/ec29i07.d
/chem/HP15648.i/18oct29i.b/ec29i06.d
/chem/HP15648.i/18oct29i.b/ec29i05.d
/chem/HP15648.i/18oct29i.b/ec29i04.d
/chem/HP15648.i/18oct29i.b/ec29i03.d
/chem/HP15648.i/18oct29i.b/ec29i02.d
/chem/HP15648.i/18oct29i.b/ec29i01.d

File /chem/HP15648.i/18oct29i.b/ec29i03.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem/HP15648.i/18nov09a.b/en09c01.d

RT Summary

Internal Standard Name	File ID: en09c01.d	ICAL RT	In Spec
t-Butyl alcohol-d10	2.480	2.486	Yes
Fluorobenzene	4.730	4.742	Yes
Chlorobenzene-d5	7.888	7.888	Yes
1,4-Dichlorobenzene-d4	9.802	9.790	Yes

A "No" indicates the retention time is greater than 10 seconds from the referenced ICAL standard.

Area Summary

Internal Standard Name	File ID: en09c01.d	ICAL Area	Low Limit	High Limit	In Spec
t-Butyl alcohol-d10	195324	183181	91590	366362	Yes
Fluorobenzene	958380	1092690	546345	2185380	Yes
Chlorobenzene-d5	709461	764465	382232	1528930	Yes
1,4-Dichlorobenzene-d4	372078	397671	198836	795342	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

Comments: _____

report generated on 11/09/2018 at 16:00

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP15648 Calibration Date: 11/09/18 Time: 13:35

Lab File ID: en09c01.d Init. Calib. Date(s): 10/29/18 10/29/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF50	CONC.	CONC.	DRIFT	
# Dichlorodifluoromethane	0.3724	0.3698	49.66	50	-1	#
# Chloromethane	0.3888	0.4009	51.56	50	3	#
1,3-Butadiene	0.3092	0.2531	40.93	50	-18	
# Vinyl Chloride	0.3581	0.3446	48.11	50	-4	#
# Bromomethane	0.2494	0.2501	50.14	50	0	#
# Chloroethane	0.2056	0.1983	48.22	50	-4	#
n-Pentane	0.3863	0.3729	48.26	50	-3	
# Trichlorofluoromethane	0.4107	0.4207	51.23	50	2	#
Ethyl ether	0.2067	0.2001	48.41	50	-3	
Freon 123a	0.2734	0.2738	50.07	50	0	
Acrolein	1.9245	1.5950	414.40	500	-17	
# 1,1-Dichloroethene	0.1972	0.1875	47.55	50	-5	#
# 1,1-Dichloroethene(2)	0.1012	0.1003	49.52	50	-1	#
# Acetone	0.8056	0.7855	97.50	100	-2	#
# Freon 113	0.1892	0.2094	55.33	50	11	#
2-Propanol	0.5542	0.6715	302.91	250	21	<-
Methyl Iodide	0.3365	0.3448	51.23	50	2	
# Carbon Disulfide	0.6888	0.6613	48.01	50	-4	#
Allyl Chloride	0.4356	0.3864	44.35	50	-11	
# Methyl Acetate	0.2328	0.2238	48.06	50	-4	#
# Methylene Chloride	0.2314	0.2199	47.51	50	-5	#
t-Butyl alcohol	0.9476	1.1029	290.97	250	16	
Acrylonitrile	0.1244	0.1283	51.56	50	3	
# trans-1,2-Dichloroethene	0.2191	0.2163	49.38	50	-1	#
# Methyl Tertiary Butyl Ether	0.6989	0.7213	51.60	50	3	#
n-Hexane	0.3794	0.3719	49.01	50	-2	
# 1,1-Dichloroethane	0.4314	0.4343	50.33	50	1	#
di-Isopropyl ether	0.8041	0.8009	49.80	50	0	
2-Chloro-1,3-butadiene	0.4086	0.3999	48.94	50	-2	
Ethyl t-butyl ether	0.7517	0.7682	51.10	50	2	
# cis-1,2-Dichloroethene	0.2428	0.2424	49.93	50	0	#
# 2-Butanone	0.1573	0.1640	104.29	100	4	#
2,2-Dichloropropane	0.3645	0.3628	49.77	50	0	
Propionitrile	1.3428	1.3345	248.45	250	-1	
Methacrylonitrile	0.1277	0.1410	138.00	125	10	
Bromochloromethane	0.1173	0.1185	50.49	50	1	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP15648 Calibration Date: 11/09/18 Time: 13:35

Lab File ID: en09c01.d Init. Calib. Date(s): 10/29/18 10/29/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF50	CONC.	CONC.	DRIFT	
Tetrahydrofuran	1.1378	1.0687	93.93	100	-6	
# Chloroform	0.3806	0.3887	51.07	50	2	#
# 1,1,1-Trichloroethane	0.3478	0.3438	49.42	50	-1	#
# Cyclohexane	0.4346	0.4588	52.78	50	6	#
# Cyclohexane(2)	0.3607	0.3899	54.05	50	8	#
# Cyclohexane(3)	0.1317	0.1408	53.45	50	7	#
1,1-Dichloropropene	0.3388	0.3347	49.39	50	-1	
# Carbon Tetrachloride	0.2865	0.2913	50.83	50	2	#
Isobutyl Alcohol	0.3336	0.3581	670.70	625	7	
# Benzene	0.9828	0.9866	50.19	50	0	#
# 1,2-Dichloroethane	0.3125	0.3116	49.86	50	0	#
# 1,2-Dichloroethane(2)	0.0338	0.0274	40.56	50	-19	#<-
t-Amyl methyl ether	0.7175	0.7567	52.73	50	5	
n-Heptane	0.3932	0.3891	41.67	50	-17	
n-Butanol	0.2769	0.3280	1480.81	1250	18	
# Trichloroethene	0.2388	0.2429	50.87	50	2	#
# Methylcyclohexane	0.4700	0.4747	50.49	50	1	#
# Methylcyclohexane(2)	0.2121	0.2178	51.35	50	3	#
# 1,2-Dichloropropane	0.2632	0.2603	49.44	50	-1	#
Dibromomethane	0.1354	0.1431	52.87	50	6	
1,4-Dioxane	0.0664	0.0925	870.82	625	39	<-
Methyl Methacrylate	0.2181	0.2402	55.08	50	10	
# Bromodichloromethane	0.2914	0.3082	52.87	50	6	#
2-Nitropropane	0.0821	0.0876	106.67	100	7	
2-Chloroethyl Vinyl Ether	0.1839	0.1928	52.42	50	5	
# cis-1,3-Dichloropropene	0.4033	0.4211	52.21	50	4	#
# 4-Methyl-2-pentanone	0.3309	0.3298	99.66	100	0	#
# Toluene	0.8529	0.8474	49.68	50	-1	#
# trans-1,3-Dichloropropene	0.5223	0.5311	50.84	50	2	#
Ethyl Methacrylate	0.5533	0.5871	53.06	50	6	
# 1,1,2-Trichloroethane	0.2803	0.2933	52.32	50	5	#
# Tetrachloroethene	0.3180	0.3675	57.78	50	16	#
1,3-Dichloropropane	0.5232	0.5405	51.65	50	3	
# 2-Hexanone	0.3331	0.3263	97.97	100	-2	#
# Dibromochloromethane	0.2975	0.3270	54.97	50	10	#
# 1,2-Dibromoethane	0.2904	0.3121	53.73	50	7	#

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP15648 Calibration Date: 11/09/18 Time: 13:35

Lab File ID: en09c01.d Init. Calib. Date(s): 10/29/18 10/29/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF50	CONC.	CONC.	DRIFT	
1-Chlorohexane	0.0257	0.0284	55.29	50	11	
Chlorobenzene	0.9133	0.9617	52.65	50	5	#
1,1,1,2-Tetrachloroethane	0.3012	0.3247	53.89	50	8	
Ethylbenzene	1.6784	1.7109	50.97	50	2	#
m+p-Xylene	0.6411	0.6631	103.43	100	3	#
o-Xylene	0.6276	0.6570	52.34	50	5	#
Styrene	1.0486	1.1060	52.74	50	5	#
Bromoform	0.1937	0.2268	58.54	50	17	#
Isopropylbenzene	1.6509	1.7374	52.62	50	5	#
Cyclohexanone	0.3346	0.3536	660.44	625	6	
Bromobenzene	0.6735	0.7230	53.67	50	7	
1,1,2,2-Tetrachloroethane	0.8559	0.9159	53.50	50	7	#
1,2,3-Trichloropropane	0.2413	0.2723	56.42	50	13	
trans-1,4-Dichloro-2-butene	0.2763	0.2844	128.70	125	3	
n-Propylbenzene	3.7574	3.8767	51.59	50	3	
2-Chlorotoluene	0.7093	0.7582	53.44	50	7	
4-Chlorotoluene	0.7382	0.7764	52.59	50	5	
1,3,5-Trimethylbenzene	2.7135	2.8259	52.07	50	4	
tert-Butylbenzene	0.5805	0.6125	52.75	50	6	
Pentachloroethane	0.4331	0.3919	45.24	50	-10	
1,2,4-Trimethylbenzene	2.7962	2.9483	52.72	50	5	
sec-Butylbenzene	3.4920	3.6653	52.48	50	5	
1,3-Dichlorobenzene	1.3535	1.4565	53.81	50	8	#
p-Isopropyltoluene	3.0722	3.2427	52.78	50	6	
1,4-Dichlorobenzene	1.3659	1.4712	53.86	50	8	#
1,2,3-Trimethylbenzene	2.9387	2.9080	49.48	50	-1	
Benzyl Chloride	2.0096	2.1167	52.66	50	5	
1,3-Diethylbenzene	1.9231	1.9204	49.93	50	0	
1,4-Diethylbenzene	2.0480	2.0426	49.87	50	0	
1,2-Dichlorobenzene	1.2846	1.3919	54.18	50	8	#
n-Butylbenzene	1.5133	1.5569	51.44	50	3	
1,2-Diethylbenzene	1.5865	1.5676	49.40	50	-1	
1,2-Dibromo-3-chloropropane	0.1976	0.2161	54.67	50	9	#
1,3,5-Trichlorobenzene	0.9970	1.0615	53.24	50	6	
1,2,4-Trichlorobenzene	0.8835	0.9720	55.01	50	10	#
Hexachlorobutadiene	0.3993	0.4032	50.48	50	1	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP15648 Calibration Date: 11/09/18 Time: 13:35

Lab File ID: en09c01.d Init. Calib. Date(s): 10/29/18 10/29/18

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

COMPOUND	RRF	RRF50	ACTUAL CONC.	TRUE CONC.	% DRIFT
Naphthalene	2.8910	3.1410	54.32	50	9
1,2,3-Trichlorobenzene	0.8235	0.9047	54.93	50	10
2-Methylnaphthalene	1.7957	1.6593	46.20	50	-8
Dibromofluoromethane	0.2190	0.2221	50.71	50	1
Dibromofluoromethane(2)	0.2257	0.2290	50.74	50	1
1,2-Dichloroethane-d4	0.0595	0.0584	49.04	50	-2
1,2-Dichloroethane-d4(2)	0.2891	0.2882	49.84	50	0
1,2-Dichloroethane-d4(3)	0.0379	0.0377	49.73	50	-1
Toluene-d8	1.4021	1.3731	48.97	50	-2
Toluene-d8(2)	0.9010	0.8789	48.78	50	-2
4-Bromofluorobenzene	0.5219	0.5116	49.02	50	-2
4-Bromofluorobenzene(2)	0.3715	0.3792	51.04	50	2

Average %Drift 5

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): en09c01.d Date Analyzed: 11/09/18

Instrument ID: HP15648 Time Analyzed: 13:35

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

	IS1(TBA)		IS2(FBZ)		IS3(CBZ)		IS4(DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	195324	2.480	958380	4.730	709461	7.888	372078	9.802
UPPER LIMIT	390648	2.980	1916760	5.230	1418922	8.388	744156	10.302
LOWER LIMIT	97662	1.980	479190	4.230	354730	7.388	186039	9.302
LAB SAMPLE ID								
01 LCSE81	189618	2.486	979321	4.730	726109	7.888	379260	9.802
02 VBLKE81	186564	2.480	973100	4.730	720296	7.888	376920	9.802
03 9878252	205746	2.480	1009258	4.730	746236	7.888	390705	9.796
04 9878253	191791	2.480	979081	4.736	721011	7.888	380150	9.802
05 9878262	187547	2.474	978627	4.730	724458	7.888	381664	9.802
06 9878964	181155	2.480	986151	4.730	728241	7.888	384257	9.796
07 9878966	189361	2.474	977611	4.730	725930	7.894	379287	9.802
08 9885680	176475	2.492	977360	4.736	723898	7.894	375393	9.802
09 9885681	182237	2.474	980980	4.736	723056	7.894	383936	9.802
10 9885682MS	185227	2.474	958550	4.730	716002	7.888	370623	9.802
11 9885683MSD	189218	2.480	964191	4.730	721101	7.888	380745	9.802
12 9885685	195448	2.474	1000532	4.736	743769	7.888	386195	9.802
13 9885686	198880	2.474	1003695	4.730	738412	7.888	385925	9.802
14 9875205	200892	2.468	1021951	4.730	754400	7.888	401410	9.802
15 9875206	186419	2.474	987868	4.736	734001	7.894	387756	9.802
16 9875207	195782	2.486	998833	4.736	736006	7.888	385286	9.796
17 9875211	188517	2.487	984167	4.736	727662	7.894	382503	9.802
18 9879132	190176	2.480	983244	4.736	728472	7.894	384122	9.802
19 9879139	190620	2.474	1000947	4.730	744388	7.888	393970	9.802
20 9879141	194309	2.480	981981	4.736	725766	7.888	385370	9.802
21 9879142	188904	2.480	979290	4.736	726759	7.888	384317	9.802
22 9879144	183232	2.480	966145	4.736	716860	7.894	374749	9.802

IS1 (TBA)=t-Butyl alcohol-d10
IS2 (FBZ)=Fluorobenzene
IS3 (CBZ)=Chlorobenzene-d5
IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): en09c01.d Date Analyzed: 11/09/18

Instrument ID: HP15648 Time Analyzed: 13:35

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

	IS1(TBA) AREA #	RT #	IS2(FBZ) AREA #	RT #	IS3(CBZ) AREA #	RT #	IS4(DCB) AREA #	RT #
12 HOUR STD	195324	2.480	958380	4.730	709461	7.888	372078	9.802
UPPER LIMIT	390648	2.980	1916760	5.230	1418922	8.388	744156	10.302
LOWER LIMIT	97662	1.980	479190	4.230	354730	7.388	186039	9.302
LAB SAMPLE ID								
23 9879145	186207	2.480	983381	4.736	724696	7.894	380991	9.802
24 9879146	191686	2.480	978787	4.730	724060	7.888	387408	9.796

IS1 (TBA)=t-Butyl alcohol-d10
IS2 (FBZ)=Fluorobenzene
IS3 (CBZ)=Chlorobenzene-d5
IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM VIII VOA

^

Sample Data

Volatiles by GC/MS

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
QAWT2

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885680

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s07.d

Level: (low/med) LOW Date Received: 11/06/18

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	5	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QAWT2

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885680

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s07.d

Level: (low/med) LOW Date Received: 11/06/18

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

QAWT2 Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 9885680

Data file: /chem/HP15648.i/18nov09a.b/en09s07.d Injection date and time: **09-NOV-2018 16:35**
Data file Sample Info. Line: QAWT2;9885680;1;0;;CBD54;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 09-Nov-2018 16:51 Automation

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:51
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	2.493	(-0.012)	247	65	176475	(-10)	250.00	
66) Fluorobenzene	4.736	(-0.006)	615	96	977360	(2)	50.00	
101) Chlorobenzene-d5	7.894	(-0.006)	1133	117	723898	(2)	50.00	
132) 1,4-Dichlorobenzene-d4	9.802	(0.000)	1446	152	375393	(1)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	4.071	(0.000)	113	216318	50.526	101%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	4.395	(0.000)	102	57273	49.197	98%		80 - 120
84) Toluene-d8	(3)	6.388	(0.000)	98	982856	48.418	97%		80 - 120
115) 4-Bromofluorobenzene	(3)	8.918	(0.001)	95	367230	48.604	97%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.2	1
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
28) Methylene Chloride	(2)				Not Detected					0.3	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
71) Trichloroethene	(2)				Not Detected					0.2	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
79) Bromodichloromethane	(2)				Not Detected					0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
98) Dibromochloromethane	(3)				Not Detected					0.2	1
103) Chlorobenzene	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5

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Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 9885680

Data file: /chem/HP15648.i/18nov09a.b/en09s07.d Injection date and time: **09-NOV-2018 16:35**
Data file Sample Info. Line: QAWT2;9885680;1;0;;CBD54;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 09-Nov-2018 16:51 Automation

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:51
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5

Total number of targets = 37

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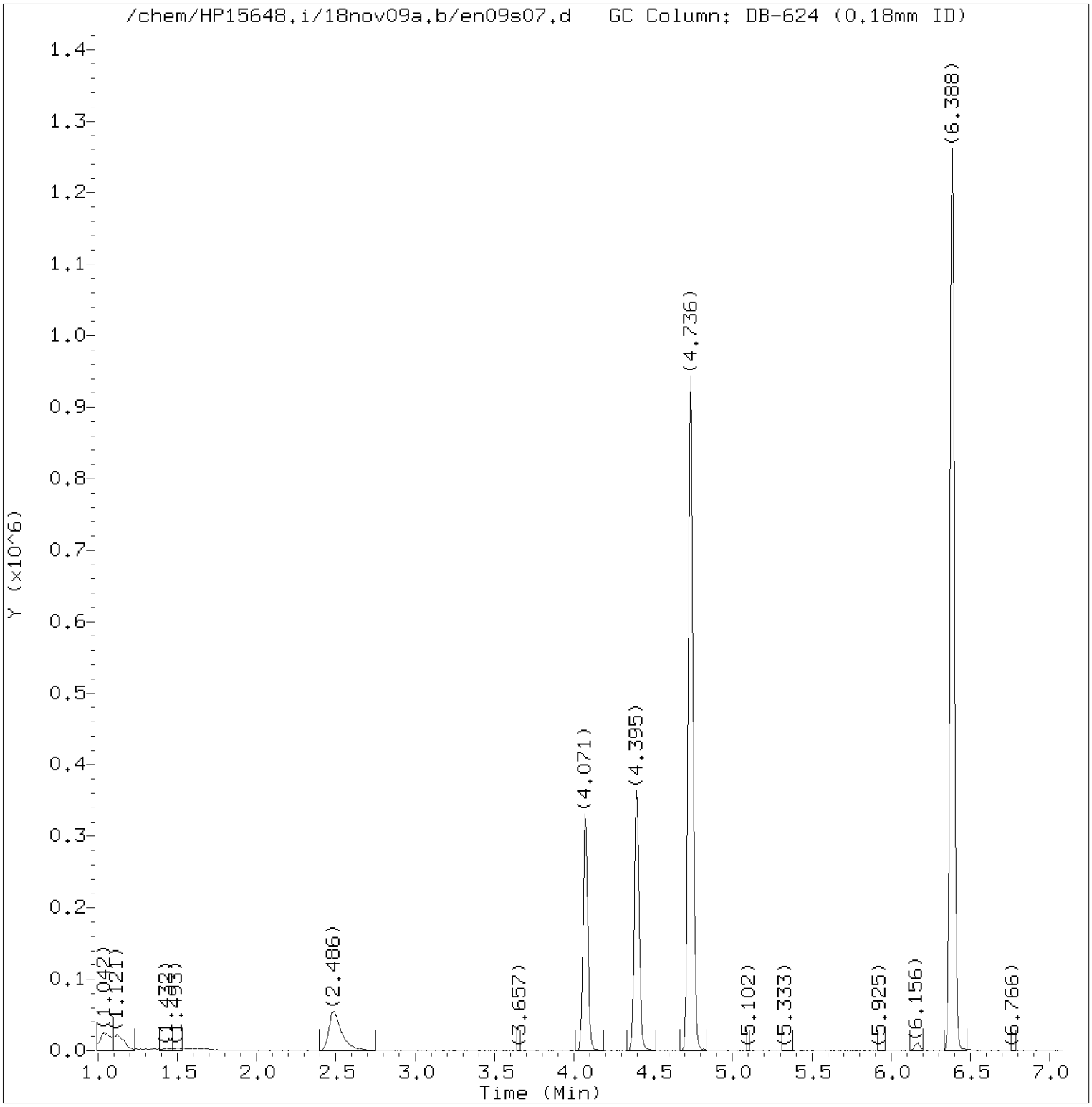
Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:36. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

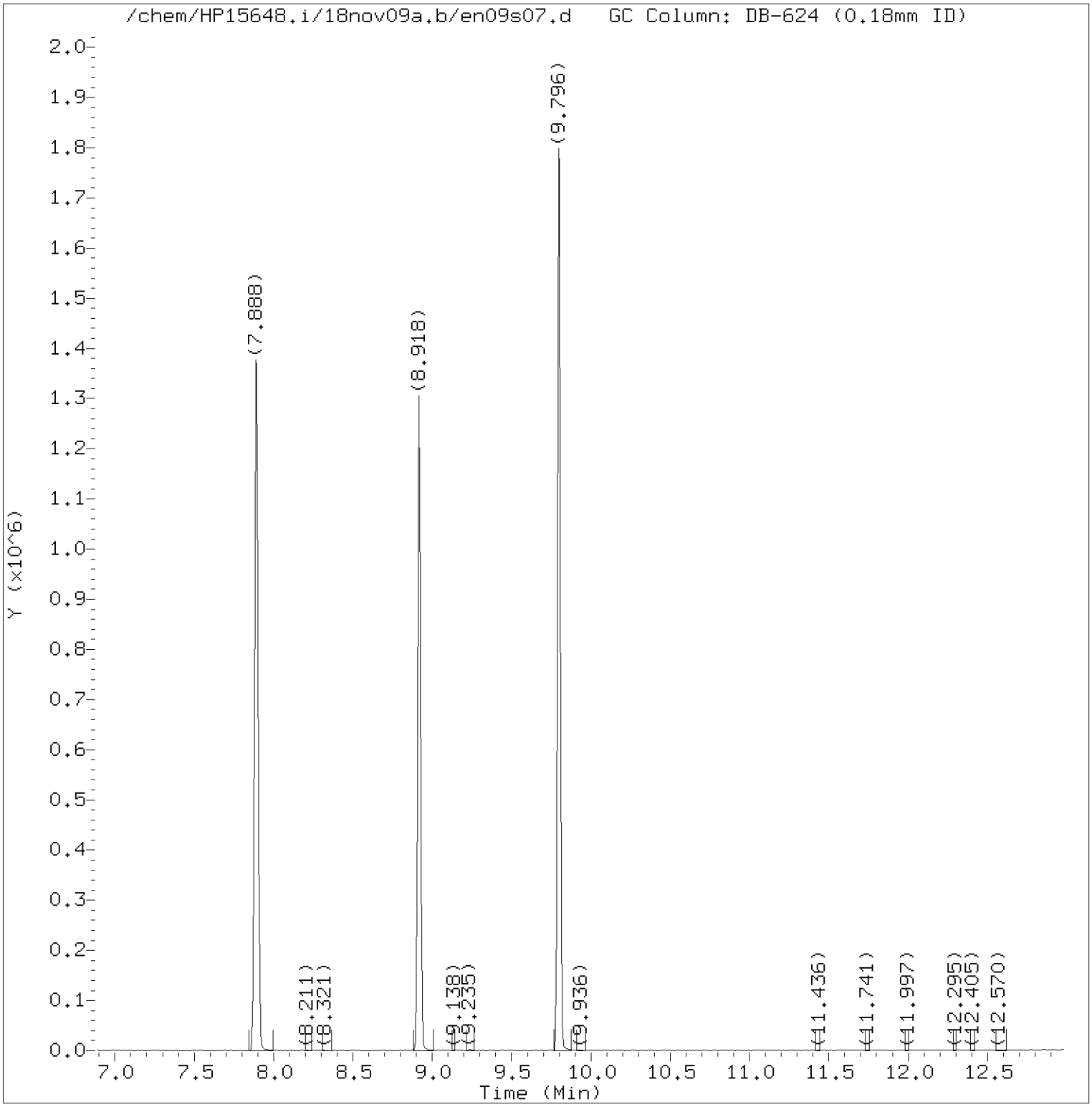
Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s07.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 16:35 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 16:51 Automation

Sample Name: QAWT2 Lab Sample ID: 9885680

Digitally signed by Jason M. Long
on 11/10/2018 at 06:53.
Target 3.5 esignature user ID: jml01693



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s07.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 16:35 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 16:51 Automation

Sample Name: QAWT2 Lab Sample ID: 9885680

Digitally signed by Jason M. Long
on 11/10/2018 at 06:53.
Target 3.5 esignature user ID: jml01693

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s07.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 16:35 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 16:51 Automation

Sample Name: QAWT2 Lab Sample ID: 9885680

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	2.493	65	176475	250.000
52)$Dibromofluoromethane	(2)	4.071	113	216318	50.526
57)$1,2-Dichloroethane-d4	(2)	4.395	102	57273	49.197
66)*Fluorobenzene	(2)	4.736	96	977360	50.000
84)$Toluene-d8	(3)	6.388	98	982856	48.418
101)*Chlorobenzene-d5	(3)	7.894	117	723898	50.000
115)$4-Bromofluorobenzene	(3)	8.918	95	367230	48.604
132)*1,4-Dichlorobenzene-d4	(4)	9.802	152	375393	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 11/10/2018 at 06:53.
Target 3.5 esignature user ID: jml01693

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
OR226

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885681

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s08.d

Level: (low/med) LOW Date Received: 11/06/18

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	0.2	J
540-59-0	1,2-Dichloroethene (Total)	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	0.2	J
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	5	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR226

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885681

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s08.d

Level: (low/med) LOW Date Received: 11/06/18

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

OR226 Lancaster Laboratories Analysis Summary for GC/MS Volatiles 9885681

Data file: /chem/HP15648.i/18nov09a.b/en09s08.d Injection date and time: **09-NOV-2018 16:55**
Data file Sample Info. Line: OR226;9885681;1;0;;CBD54;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 10-NOV-2018 06:21
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	2.474	(0.006)	244	65	182237	(-7)	250.00	
66) Fluorobenzene	4.736	(-0.006)	615	96	980980	(2)	50.00	
101) Chlorobenzene-d5	7.894	(-0.006)	1133	117	723056	(2)	50.00	
132) 1,4-Dichlorobenzene-d4	9.802	(0.000)	1446	152	383936	(3)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	4.065	(0.001)	113	219640	51.112	102%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	4.395	(0.000)	102	58861	50.373	101%		80 - 120
84) Toluene-d8	(3)	6.382	(0.001)	98	992897	48.970	98%		80 - 120
115) 4-Bromofluorobenzene	(3)	8.918	(0.001)	95	369095	48.908	98%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.2	1
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
28) Methylene Chloride	(2)				Not Detected					0.3	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
36) 1,1-Dichloroethane	(2)	3.078	(-0.000)	63	1757	0.208	0.21		J	0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
71) Trichloroethene	(2)				Not Detected					0.2	1
74) 1,2-Dichloropropane	(2)	5.327	(0.001)	63	1104	0.214	0.21		J	0.2	1
79) Bromodichloromethane	(2)				Not Detected					0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
98) Dibromochloromethane	(3)				Not Detected					0.2	1
103) Chlorobenzene	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5

Digitally signed by Jason M. Long on 11/10/2018 at 07:01. Target 3.5 esignature user ID: jml01693

Data file: /chem/HP15648.i/18nov09a.b/en09s08.d Injection date and time: **09-NOV-2018 16:55**
Data file Sample Info. Line: OR226;9885681;1;0;;CBD54;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 10-NOV-2018 06:21
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

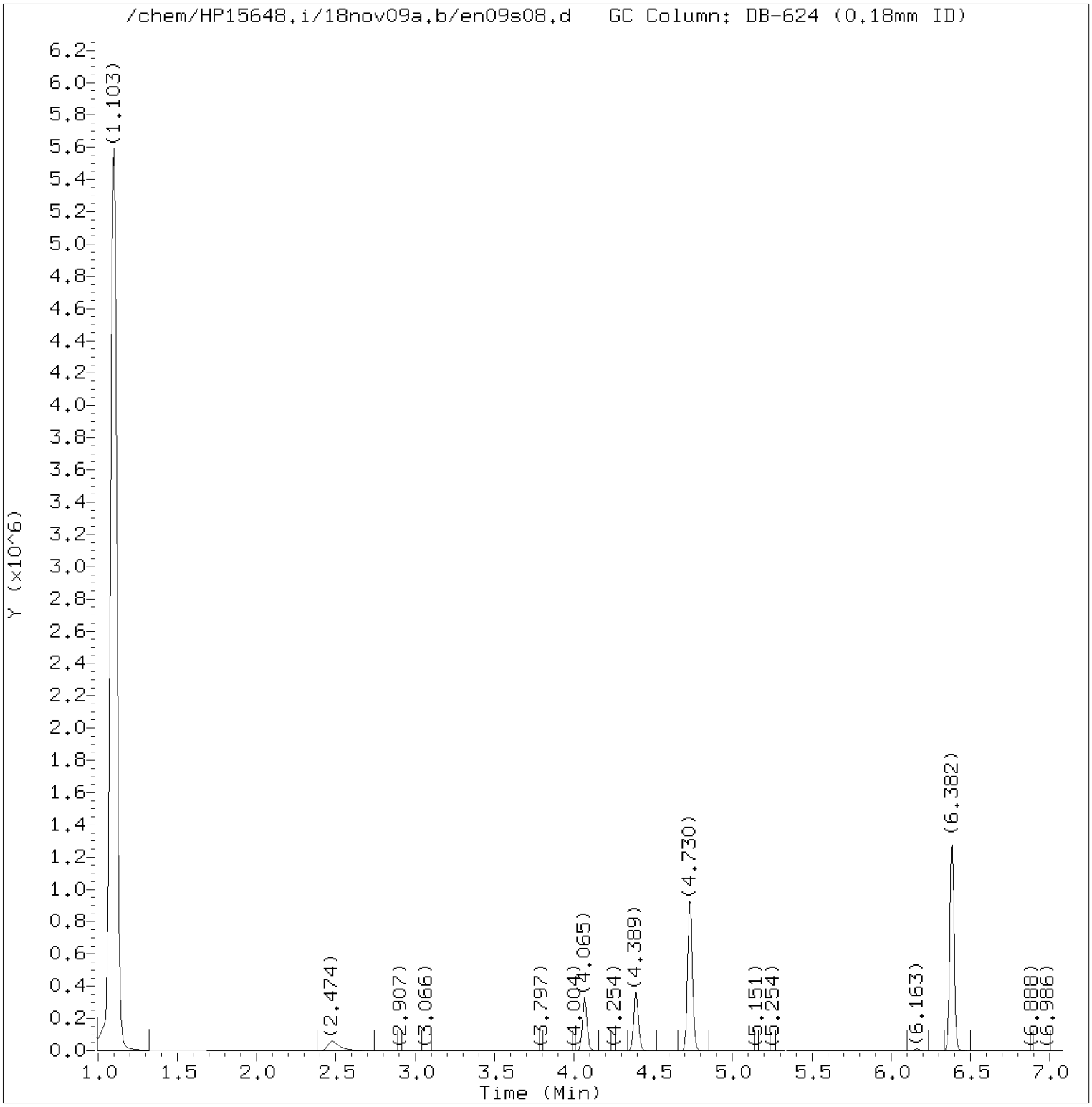
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5

Total number of targets = 37

Digitally signed by Jason M. Long on 11/10/2018 at 07:01. Target 3.5 esignature user ID: jml01693

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:36. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

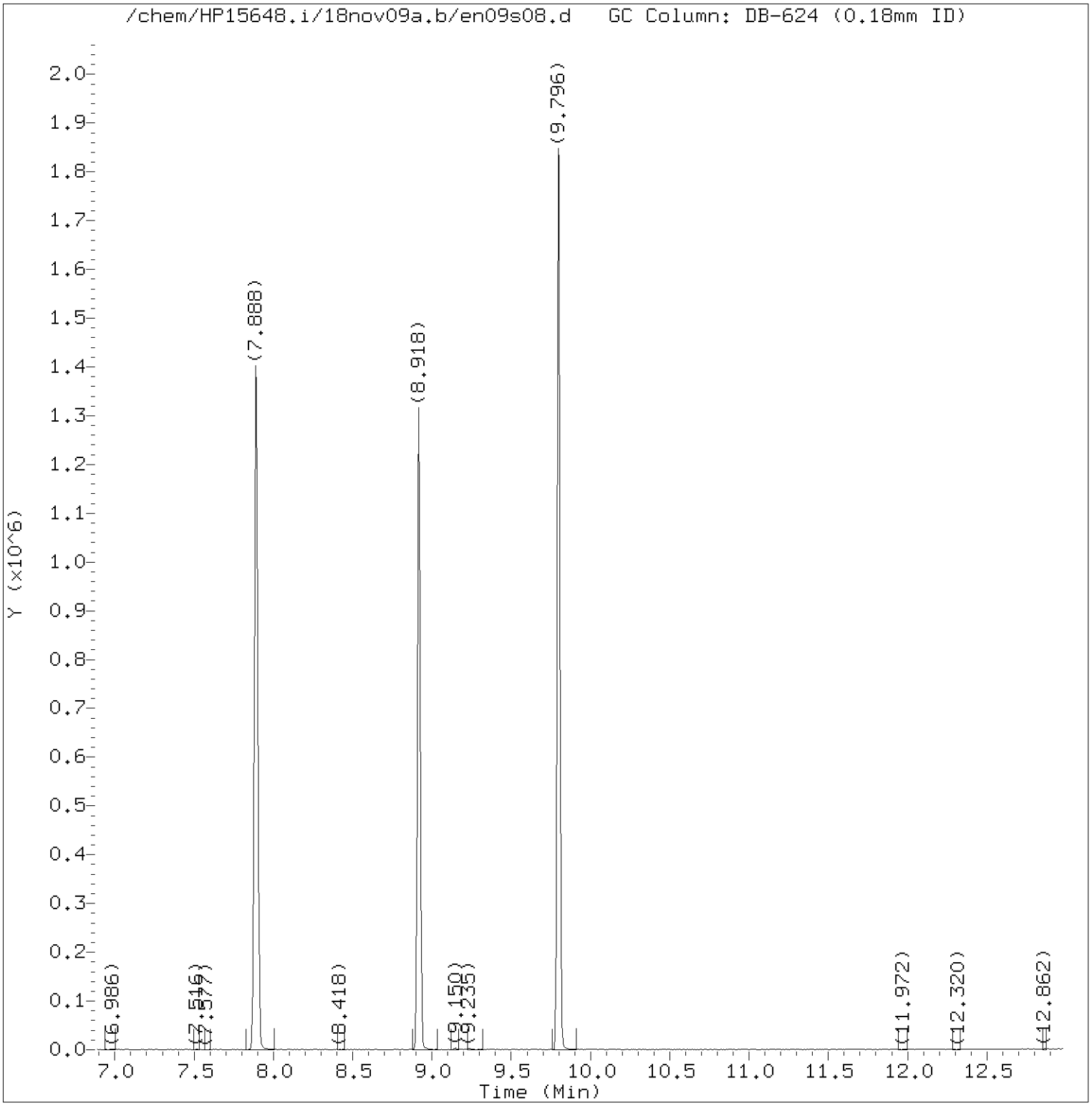
Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s08.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 16:55 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

Sample Name: OR226 Lab Sample ID: 9885681

Digitally signed by Jason M. Long
on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s08.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 16:55 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

Sample Name: OR226 Lab Sample ID: 9885681

Digitally signed by Jason M. Long
on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s08.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 16:55 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

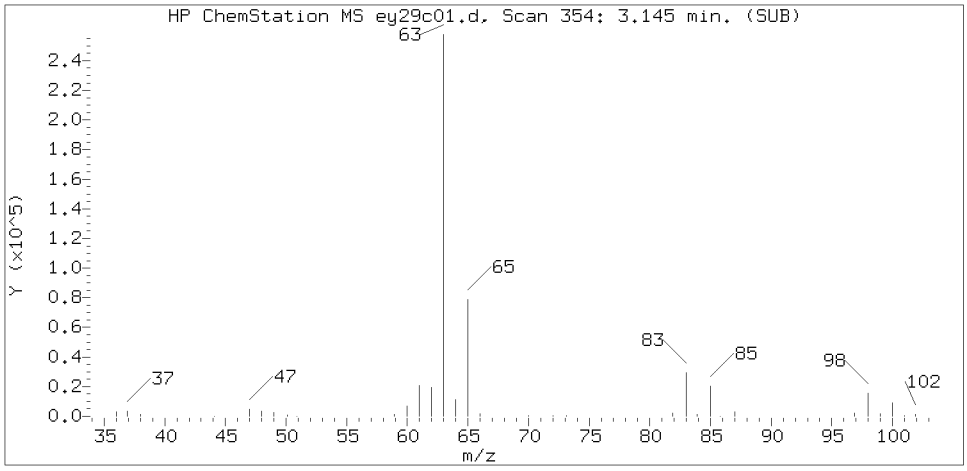
Sample Name: OR226 Lab Sample ID: 9885681

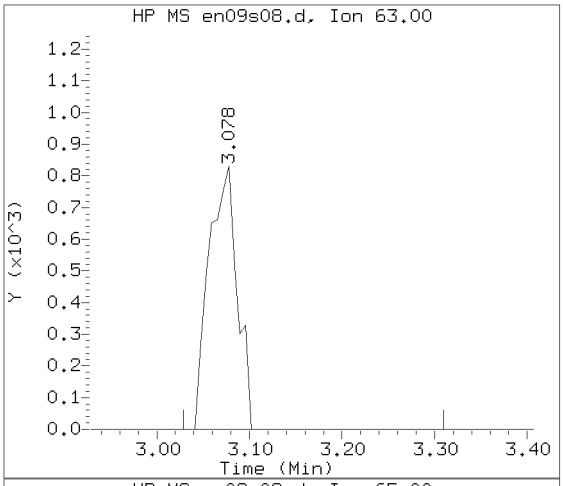
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	2.474	65	182237	250.000
36) 1,1-Dichloroethane	(2)	3.078	63	1757	0.208
52)$Dibromofluoromethane	(2)	4.065	113	219640	51.112
57)$1,2-Dichloroethane-d4	(2)	4.395	102	58861	50.373
66)*Fluorobenzene	(2)	4.736	96	980980	50.000
74) 1,2-Dichloropropane	(2)	5.327	63	1104	0.214
84)$Toluene-d8	(3)	6.382	98	992897	48.970
101)*Chlorobenzene-d5	(3)	7.894	117	723056	50.000
115)$4-Bromofluorobenzene	(3)	8.918	95	369095	48.908
132)*1,4-Dichlorobenzene-d4	(4)	9.802	152	383936	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

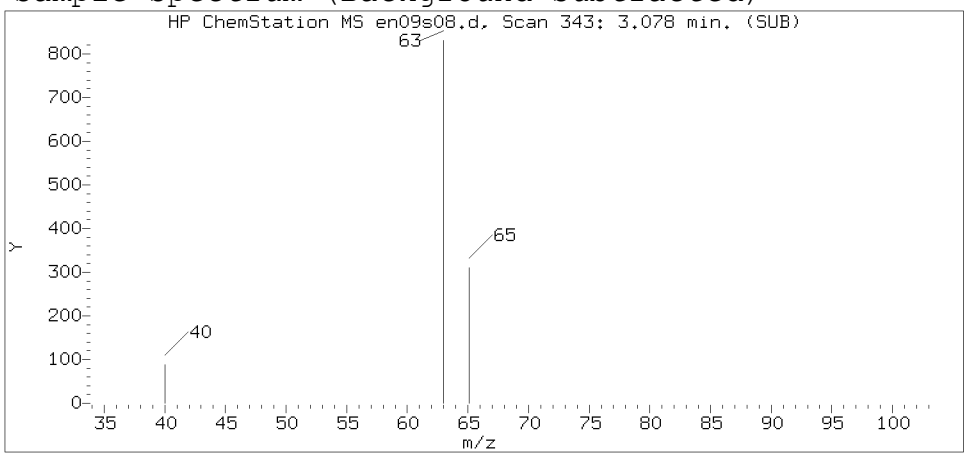
Digitally signed by Jason M. Long
on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693

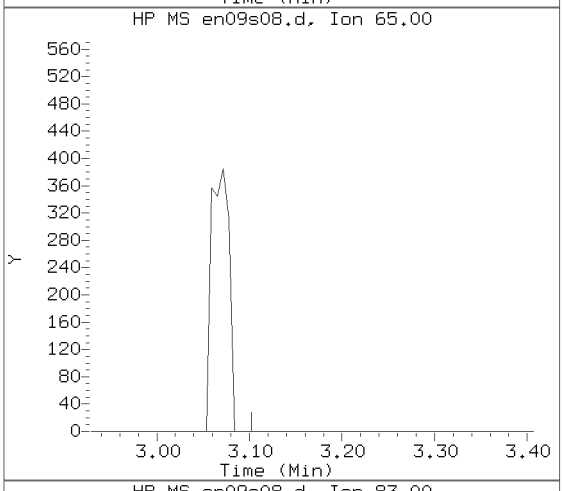
Reference Standard Spectrum for 1,1-Dichloroethane



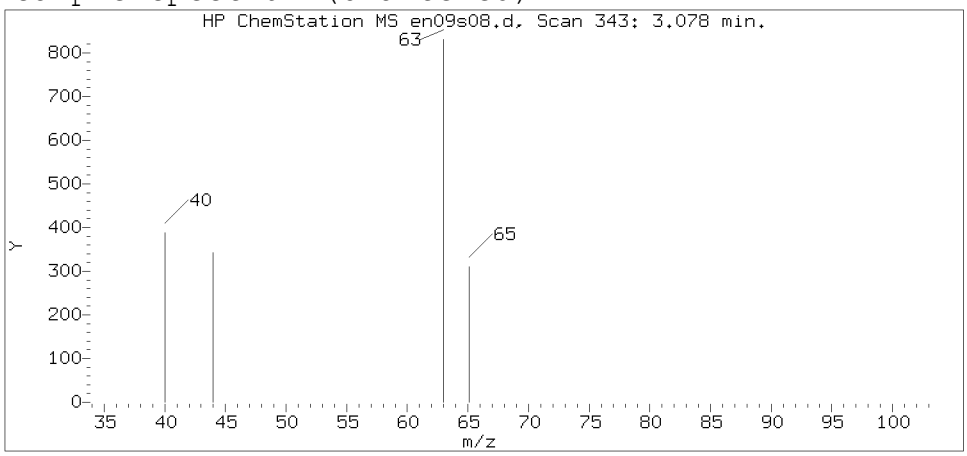


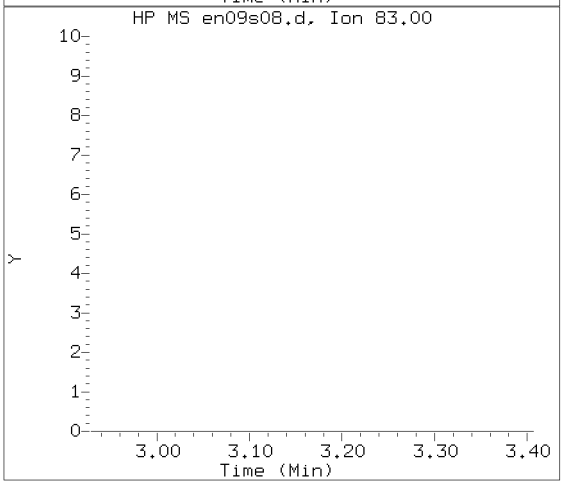
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP15648.i/18nov09a.b/en09s08.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 16:55 Analyst ID: ads01731

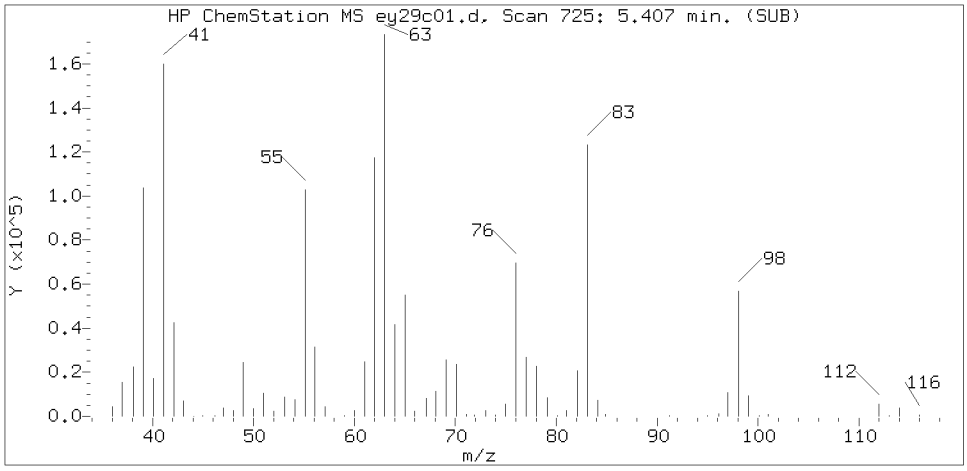
Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

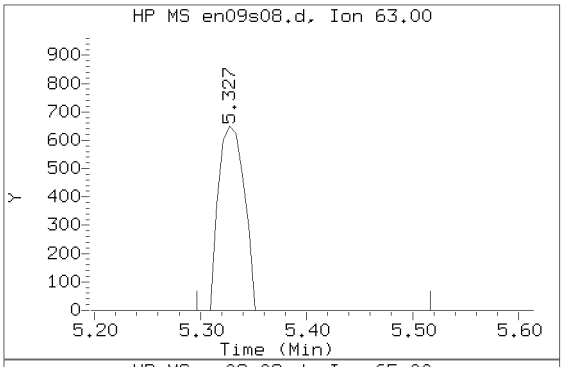
Sample Name: OR226 Lab Sample ID: 9885681

Compound Number : 36
Compound Name : 1,1-Dichloroethane
Scan Number : 343
Retention Time (minutes): 3.078
Relative Retention Time :-0.00045
Quant Ion : 63.00
Area (flag) : 1757
On-Column Amount (ng) : 0.2076

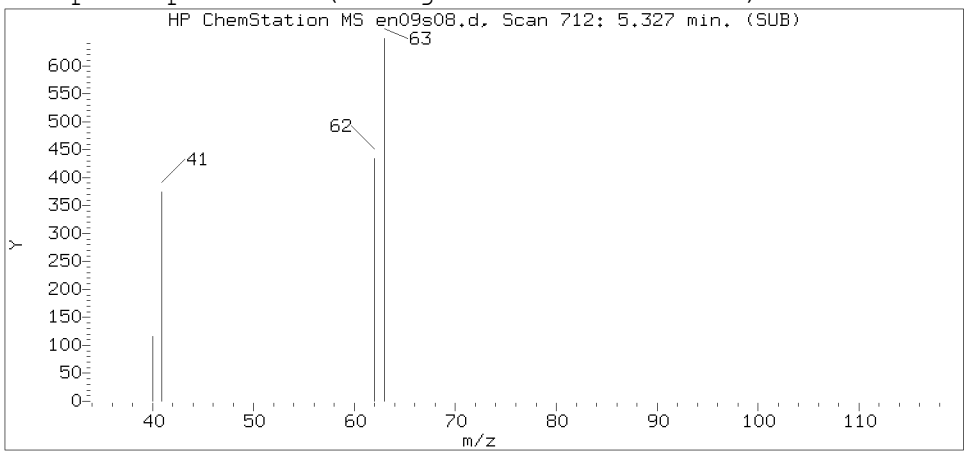
Digitally signed by Jason M. Long on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693

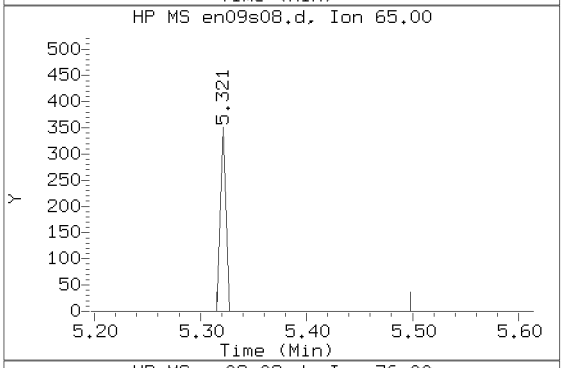
Reference Standard Spectrum for 1,2-Dichloropropane

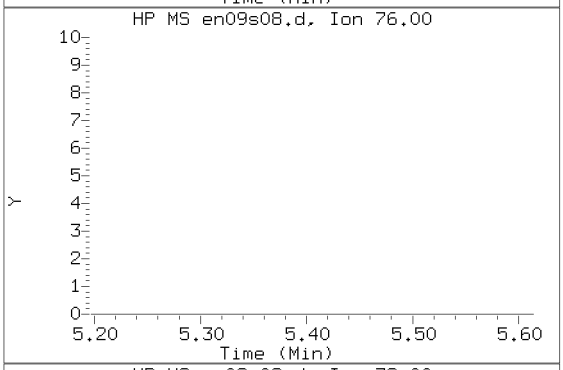




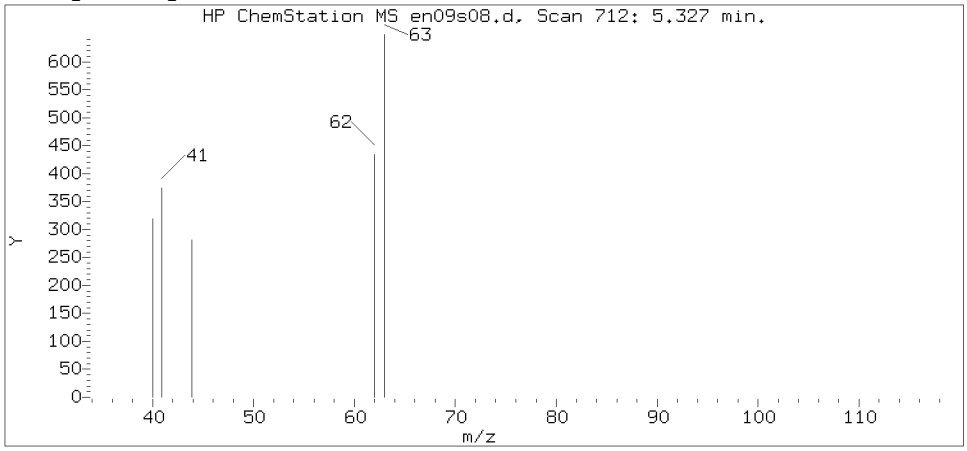
Sample Spectrum (Background Subtracted)

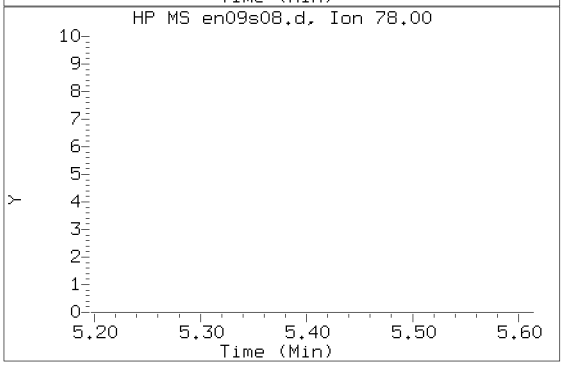






Sample Spectrum (Unaltered)





Data File: /chem/HP15648.i/18nov09a.b/en09s08.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 16:55 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

Sample Name: OR226 Lab Sample ID: 9885681

Compound Number	: 74
Compound Name	: 1,2-Dichloropropane
Scan Number	: 712
Retention Time (minutes)	: 5.327
Relative Retention Time	: 0.00145
Quant Ion	: 63.00
Area (flag)	: 1104
On-Column Amount (ng)	: 0.2138

Digitally signed by Jason M. Long on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
OR3WD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885685

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s11.d

Level: (low/med) LOW Date Received: 11/06/18

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	5	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR3WD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885685

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s11.d

Level: (low/med) LOW Date Received: 11/06/18

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

^

OR3WD

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

9885685

Data file: /chem/HP15648.i/18nov09a.b/en09s11.d
Data file Sample Info. Line: OR3WD;9885685;1;0;;CBD54;;;en09b01;
Date, time and analyst ID of latest file update: 09-Nov-2018 18:12 Automation

Injection date and time: **09-NOV-2018 17:56**
Instrument ID: **HP15648.i** Batch: **E183131AA**

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:51
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	2.474	(0.006)	244	65	195448	(0)	250.00	
66) Fluorobenzene	4.736	(-0.006)	615	96	1000532	(4)	50.00	
101) Chlorobenzene-d5	7.888	(0.000)	1132	117	743769	(5)	50.00	
132) 1,4-Dichlorobenzene-d4	9.802	(0.000)	1446	152	386195	(4)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	4.072	(0.000)	113	222031	50.659	101%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	4.395	(0.000)	102	59545	49.963	100%		80 - 120
84) Toluene-d8	(3)	6.382	(0.000)	98	1008110	48.336	97%		80 - 120
115) 4-Bromofluorobenzene	(3)	8.918	(0.000)	95	380510	49.017	98%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.2	1
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
28) Methylene Chloride	(2)				Not Detected					0.3	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
71) Trichloroethene	(2)				Not Detected					0.2	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
79) Bromodichloromethane	(2)				Not Detected					0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
98) Dibromochloromethane	(3)				Not Detected					0.2	1
103) Chlorobenzene	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5

Digitally signed by Jason M. Long on 11/10/2018 at 06:54. Target 3.5 esignature user ID: jml01693

Data file: /chem/HP15648.i/18nov09a.b/en09s11.d Injection date and time: **09-NOV-2018 17:56**
Data file Sample Info. Line: OR3WD;9885685;1;0;;CBD54;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 09-Nov-2018 18:12 Automation

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:51
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

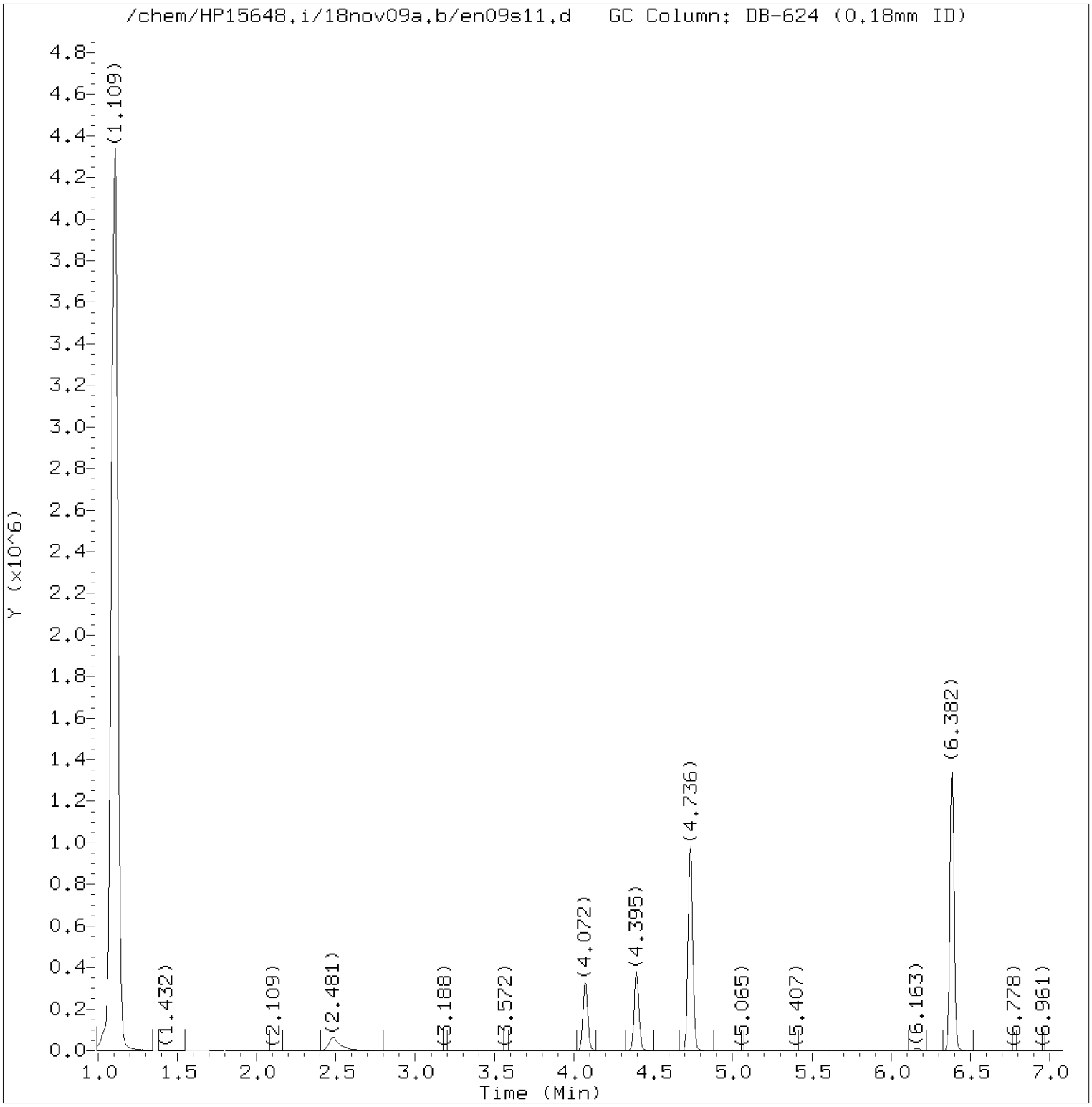
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5

Total number of targets = 37

Digitally signed by Jason M. Long on 11/10/2018 at 06:54. Target 3.5 esignature user ID: jml01693

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:36. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

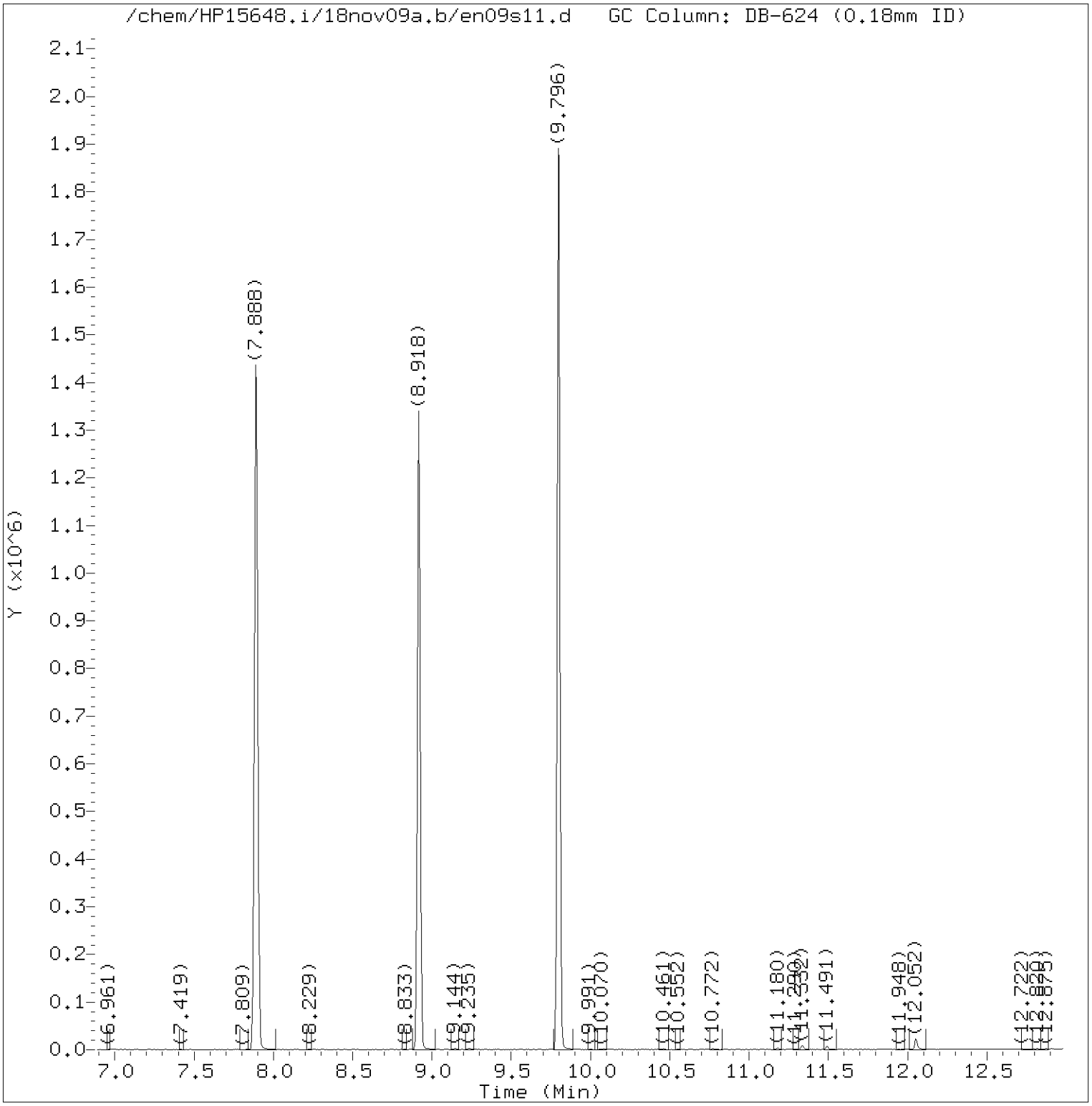
Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s11.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 17:56 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 18:12 Automation

Sample Name: OR3WD Lab Sample ID: 9885685

Digitally signed by Jason M. Long
on 11/10/2018 at 06:54.
Target 3.5 esignature user ID: jml01693



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s11.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 17:56 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 18:12 Automation

Sample Name: OR3WD Lab Sample ID: 9885685

Digitally signed by Jason M. Long
on 11/10/2018 at 06:54.
Target 3.5 esignature user ID: jml01693

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s11.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 17:56 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 18:12 Automation

Sample Name: OR3WD Lab Sample ID: 9885685

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	2.474	65	195448	250.000
52)$Dibromofluoromethane	(2)	4.072	113	222031	50.659
57)$1,2-Dichloroethane-d4	(2)	4.395	102	59545	49.963
66)*Fluorobenzene	(2)	4.736	96	1000532	50.000
84)$Toluene-d8	(3)	6.382	98	1008110	48.336
101)*Chlorobenzene-d5	(3)	7.888	117	743769	50.000
115)$4-Bromofluorobenzene	(3)	8.918	95	380510	49.017
132)*1,4-Dichlorobenzene-d4	(4)	9.802	152	386195	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jason M. Long
on 11/10/2018 at 06:54.
Target 3.5 esignature user ID: jml01693

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
OR365

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885686

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s12.d

Level: (low/med) LOW Date Received: 11/06/18

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
75-09-2	Methylene Chloride	1	U
1634-04-4	Methyl Tertiary Butyl Ether	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (Total)	2	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	1	U
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
75-27-4	Bromodichloromethane	1	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	1	U
124-48-1	Dibromochloromethane	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
1330-20-7	Xylene (Total)	5	U
75-25-2	Bromoform	4	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR365

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885686

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s12.d

Level: (low/med) LOW Date Received: 11/06/18

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U

OR365 Lancaster Laboratories Analysis Summary for GC/MS Volatiles 9885686

Data file: /chem/HP15648.i/18nov09a.b/en09s12.d Injection date and time: **09-NOV-2018 18:16**
Data file Sample Info. Line: OR365;9885686;1;0;;CBD54;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 09-Nov-2018 18:32 Automation

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:51
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	2.474	(0.006)	244	65	198880	(2)	250.00	
66) Fluorobenzene	4.730	(0.000)	614	96	1003695	(5)	50.00	
101) Chlorobenzene-d5	7.888	(0.000)	1132	117	738412	(4)	50.00	
132) 1,4-Dichlorobenzene-d4	9.802	(0.000)	1446	152	385925	(4)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	4.066	(0.000)	113	219400	49.901	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	4.395	(-0.001)	102	58436	48.879	98%		80 - 120
84) Toluene-d8	(3)	6.382	(0.000)	98	1010618	48.807	98%		80 - 120
115) 4-Bromofluorobenzene	(3)	8.918	(0.000)	95	378339	49.090	98%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)				Not Detected					0.2	1
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
28) Methylene Chloride	(2)				Not Detected					0.3	1
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
71) Trichloroethene	(2)				Not Detected					0.2	1
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
79) Bromodichloromethane	(2)				Not Detected					0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
98) Dibromochloromethane	(3)				Not Detected					0.2	1
103) Chlorobenzene	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5

Digitally signed by Jason M. Long on 11/10/2018 at 06:54. Target 3.5 esignature user ID: jml01693

Data file: /chem/HP15648.i/18nov09a.b/en09s12.d Injection date and time: **09-NOV-2018 18:16**
Data file Sample Info. Line: OR365;9885686;1;0;;CBD54;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 09-Nov-2018 18:32 Automation

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:51
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

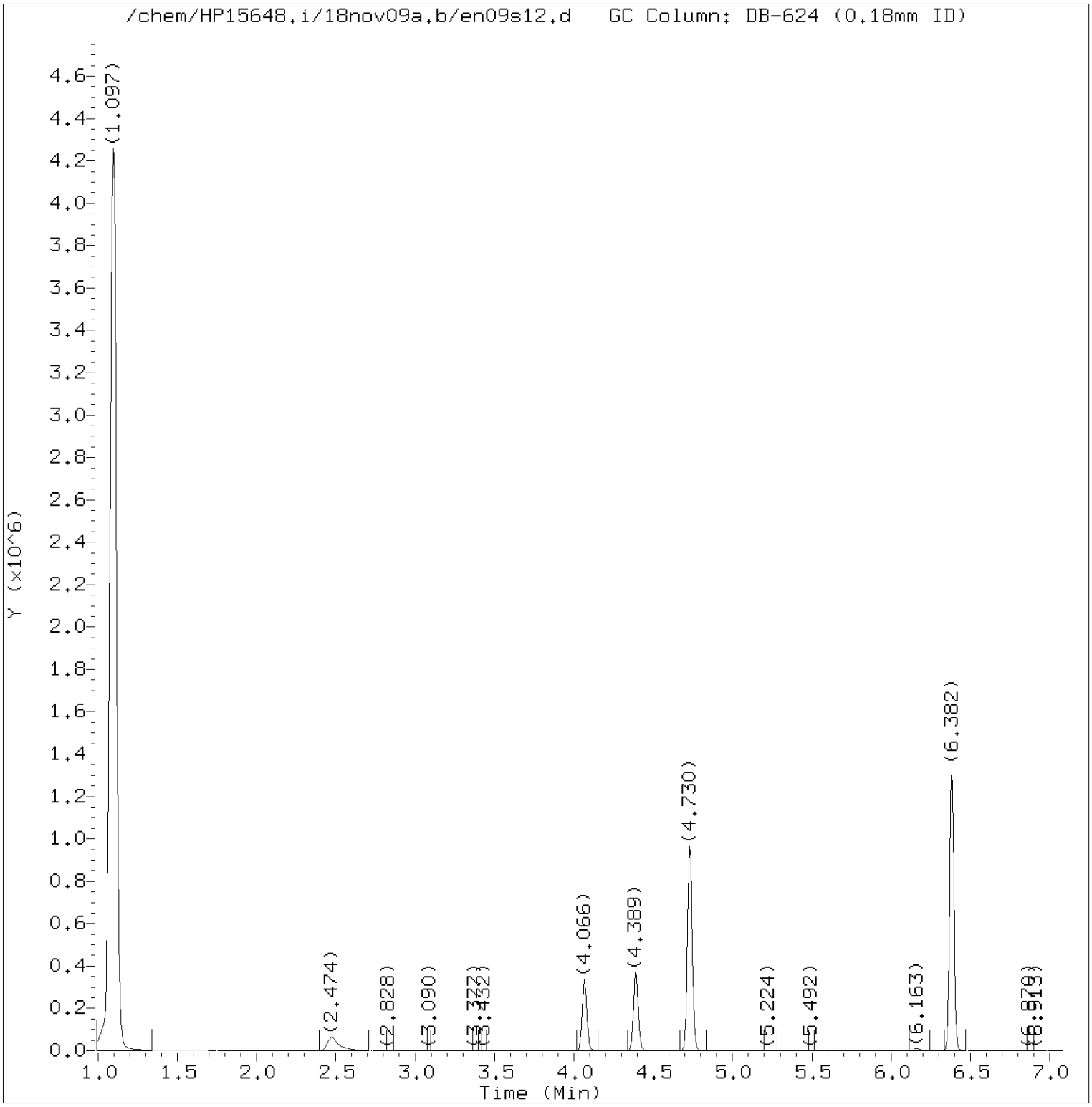
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
111) Bromoform	(3)				Not Detected					0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
130) 1,3-Dichlorobenzene	(4)				Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)				Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)				Not Detected					0.2	5

Total number of targets = 37

Digitally signed by Jason M. Long on 11/10/2018 at 06:54. Target 3.5 esignature user ID: jml01693

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:36. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

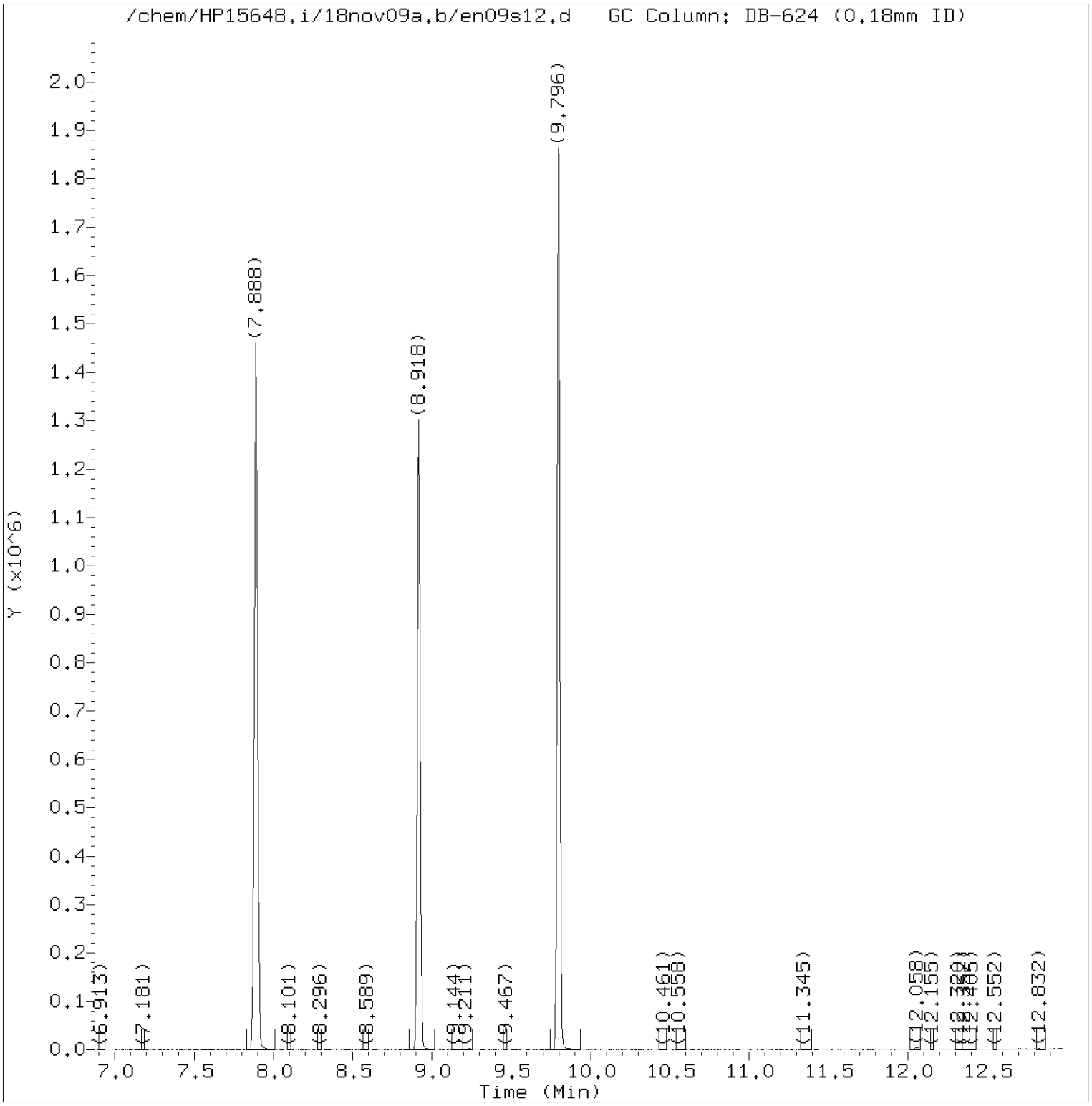
Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s12.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 18:16 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 18:32 Automation

Sample Name: OR365 Lab Sample ID: 9885686

Digitally signed by Jason M. Long
on 11/10/2018 at 06:54.
Target 3.5 esignature user ID: jml01693



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s12.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 18:16 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 18:32 Automation

Sample Name: OR365 Lab Sample ID: 9885686

Digitally signed by Jason M. Long
on 11/10/2018 at 06:54.
Target 3.5 esignature user ID: jml01693

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s12.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 18:16 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 18:32 Automation

Sample Name: OR365 Lab Sample ID: 9885686

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	2.474	65	198880	250.000
52)$Dibromofluoromethane	(2)	4.066	113	219400	49.901
57)$1,2-Dichloroethane-d4	(2)	4.395	102	58436	48.879
66)*Fluorobenzene	(2)	4.730	96	1003695	50.000
84)$Toluene-d8	(3)	6.382	98	1010618	48.807
101)*Chlorobenzene-d5	(3)	7.888	117	738412	50.000
115)$4-Bromofluorobenzene	(3)	8.918	95	378339	49.090
132)*1,4-Dichlorobenzene-d4	(4)	9.802	152	385925	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jason M. Long
on 11/10/2018 at 06:54.
Target 3.5 esignature user ID: jml01693

Standards Data

Volatiles by GC/MS

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP15648 **HP #27**

Data Directory Path is - D:\DATA\18OCT29I\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
DVV10203	EC29T01.D	50ng BFB	10/29/2018	19:42		
DVV10203	EC29X10.D	BLK	10/29/2018	19:59		
DVV10203	EC29X11.D	BLK	10/29/2018	20:19		
DVV10203	EC29I01.D	VSTD300	10/29/2018	20:39		
DVV10203	EC29I02.D	VSTD100	10/29/2018	20:59		
DVV10203	EC29I03.D	VSTD050	10/29/2018	21:20		
DVV10203	EC29I04.D	VSTD020	10/29/2018	21:40		
DVV10203	EC29I05.D	VSTD010	10/29/2018	22:00		
DVV10203	EC29I06.D	VSTD004	10/29/2018	22:20		
DVV10203	EC29I07.D	VSTD001	10/29/2018	22:41		
DVV10203	EC29M01.D	MDL0.5	10/29/2018	23:01		
DVV10203	EC29V01.D	ICVELG	10/29/2018	23:21		

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP15648 **HP #27**

Data Directory Path is - D:\DATA\18NOV09A\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
ADS01731	EN09T01.D	50ng BFB	11/09/2018	12:52		
ads01731	EN09x01.D	VBLKE81	11/09/2018	13:15	E183131AA	
ads01731	EN09C01.D	VSTD050	11/09/2018	13:35	E183131AA	
ads01731	EN09S01.D	LCSE81	11/09/2018	13:54	E183131AA	
ads01731	EN09B01.D	VBLKE81	11/09/2018	14:14	E183131AA	
ads01731	EN09S02.D	9878252	11/09/2018	14:54	E183131AA	
ads01731	EN09S03.D	9878253	11/09/2018	15:14	E183131AA	
ads01731	EN09S04.D	9878262	11/09/2018	15:35	E183131AA	
ads01731	EN09S05.D	9878964	11/09/2018	15:55	E183131AA	
ads01731	EN09S06.D	9878966	11/09/2018	16:15	E183131AA	
ads01731	EN09S07.D	9885680	11/09/2018	16:35	E183131AA	
ads01731	EN09S08.D	9885681	11/09/2018	16:55	E183131AA	
ads01731	EN09S09.D	9885682MS	11/09/2018	17:15	E183131AA	
ads01731	EN09S10.D	9885683MSD	11/09/2018	17:36	E183131AA	
ads01731	EN09S11.D	9885685	11/09/2018	17:56	E183131AA	
ads01731	EN09S12.D	9885686	11/09/2018	18:16	E183131AA	
ads01731	EN09S13.D	9875205	11/09/2018	18:36	E183131AA	
ads01731	EN09S14.D	9875206	11/09/2018	18:57	E183131AA	
ads01731	EN09S15.D	9875207	11/09/2018	19:17	E183131AA	
ads01731	EN09S16.D	9875211	11/09/2018	19:37	E183131AA	
ads01731	EN09S17.D	9879132	11/09/2018	19:57	E183131AA	
ads01731	EN09S18.D	9879139	11/09/2018	20:18	E183131AA	
ads01731	EN09S19.D	9879141	11/09/2018	20:38	E183131AA	
ads01731	EN09S20.D	9879142	11/09/2018	20:58	E183131AA	
ads01731	EN09S21.D	9879144	11/09/2018	21:18	E183131AA	
ads01731	EN09S22.D	9879145	11/09/2018	21:38	E183131AA	
ads01731	EN09S23.D	9879146	11/09/2018	21:59	E183131AA	

Data File: /chem/HP15648.i/18oct29i.b/ec29t01.d

Date : 29-OCT-2018 19:42

Client ID: BFB AUG07-18

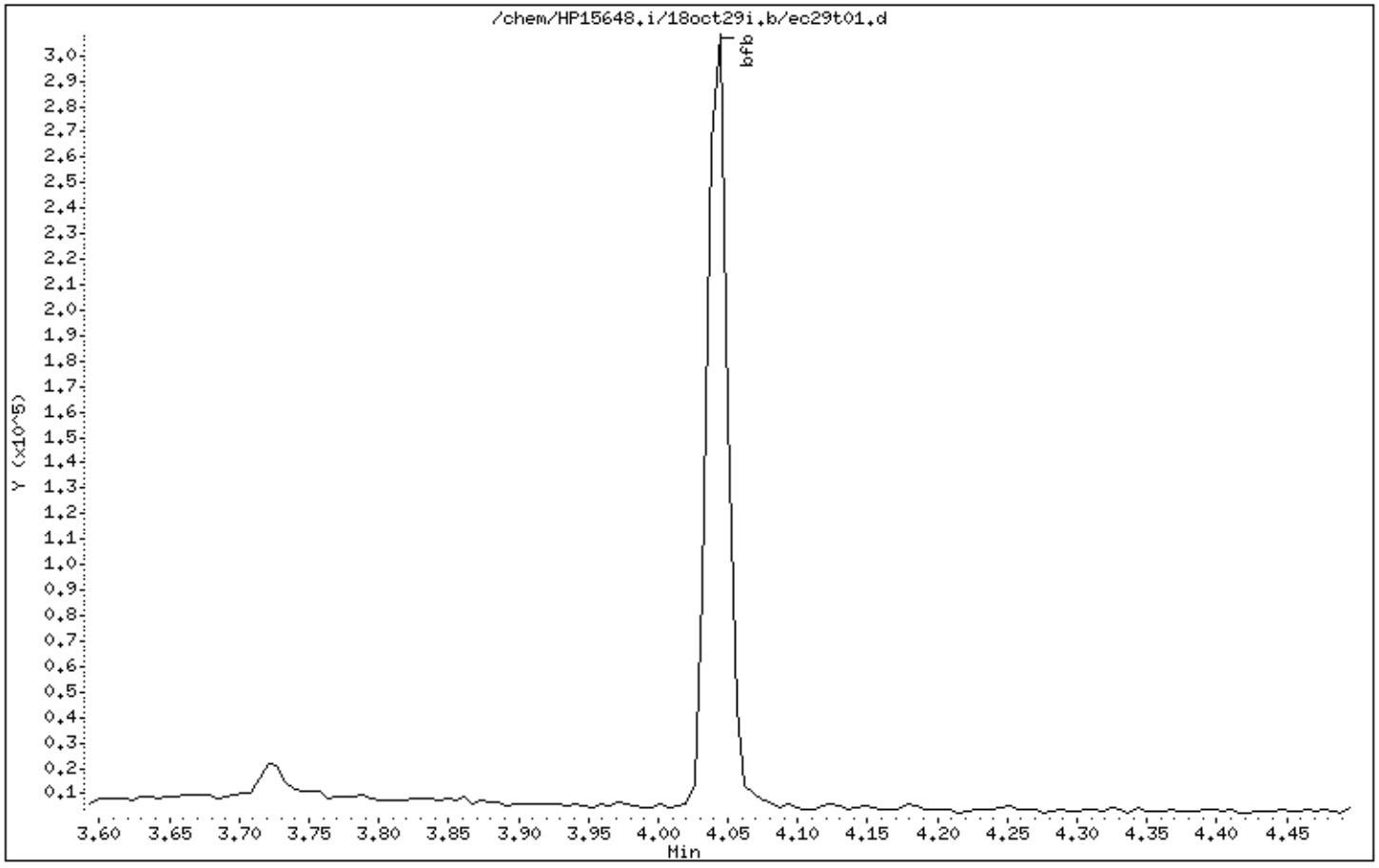
Instrument: HP15648.i

Sample Info: BFB AUG07-18;50ng BFB;1;3;;;;;;

Operator: DVV10203

Column phase: DB-624

Column diameter: 0.18



Digitally signed by Don V. Viray on 10/29/2018 at 19:43.
Target 3.5 esignature user ID: dvv10203

Data File: /chem/HP15648.i/18oct29i.b/ec29t01.d

Date : 29-OCT-2018 19:42

Client ID: BFB AUG07-18

Instrument: HP15648.i

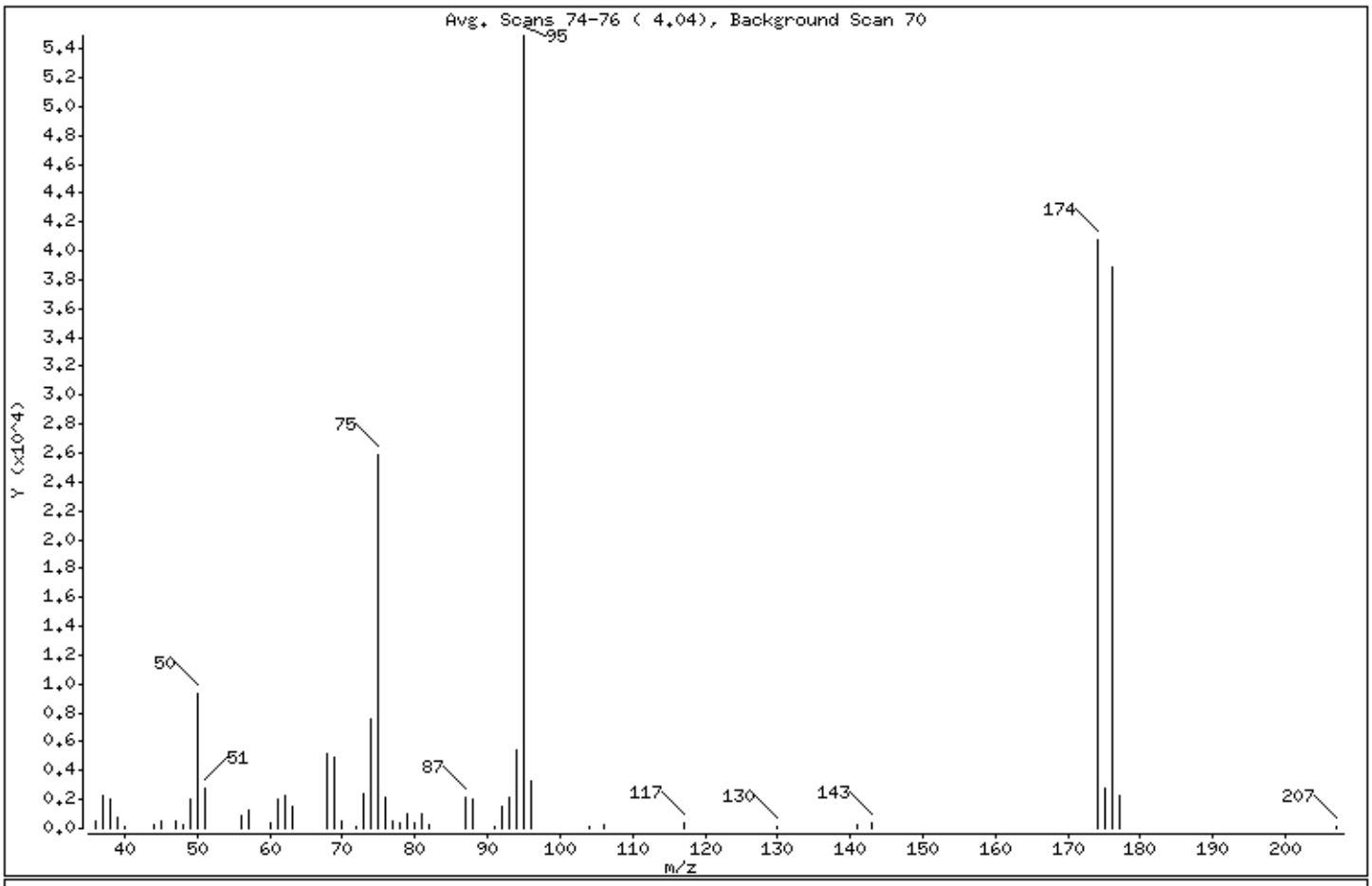
Sample Info: BFB AUG07-18;50ng BFB;1;3;;;;;;

Operator: DVV10203

Column phase: DB-624

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.06
75	30.00 - 60.00% of mass 95	47.09
96	5.00 - 9.00% of mass 95	6.08
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	74.30
175	5.00 - 9.00% of mass 174	5.08 (6.83)
176	95.00 - 101.00% of mass 174	70.79 (95.27)
177	5.00 - 9.00% of mass 176	4.21 (5.95)

Digitally signed by Don V. Viray on 10/29/2018 at 19:43.
Target 3.5 esignature user ID: dvv10203

Date : 29-OCT-2018 19:42

Client ID: BFB AUG07-18 Instrument: HP15648.i

Sample Info: BFB AUG07-18;50ng BFB;1;3;;;;;;

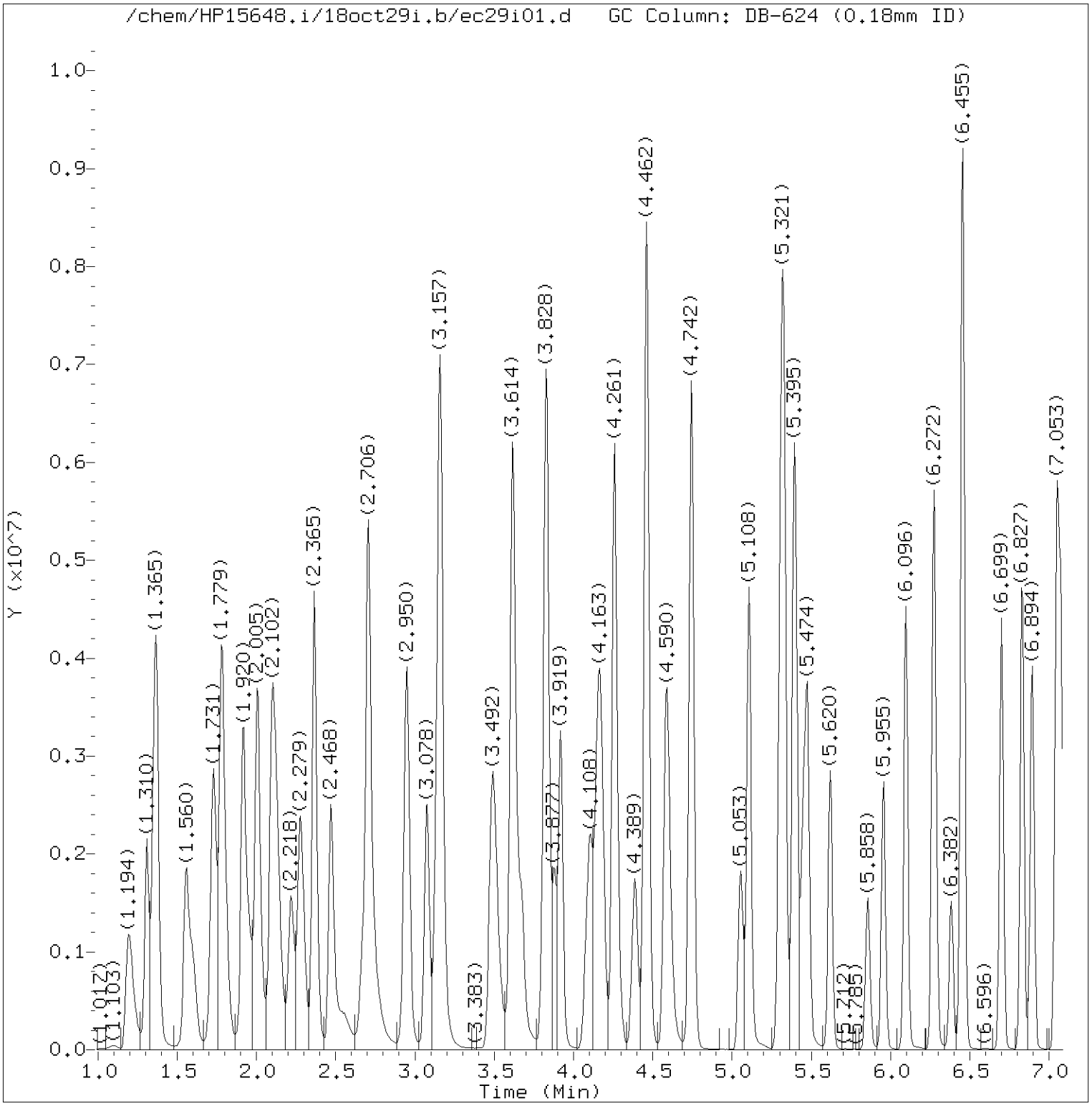
Operator: DVV10203

Column phase: DB-624 Column diameter: 0.18

Data File: ec29t01.d
Spectrum: Avg. Scans 74-76 (4.04), Background Scan 70
Location of Maximum: 95.00
Number of points: 51

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	489	57.00	1293	77.00	443	96.00	3340
37.00	2257	60.00	395	78.00	370	104.00	130
38.00	2072	61.00	2054	79.00	1003	106.00	217
39.00	758	62.00	2225	80.00	347	117.00	318
40.00	163	63.00	1567	81.00	1035	130.00	84
44.00	310	68.00	5117	82.00	192	141.00	311
45.00	539	69.00	4876	87.00	2149	143.00	371
47.00	540	70.00	473	88.00	2013	174.00	40800
48.00	237	72.00	178	91.00	136	175.00	2788
49.00	2054	73.00	2405	92.00	1510	176.00	38864
50.00	9367	74.00	7533	93.00	2109	177.00	2314
51.00	2825	75.00	25856	94.00	5370	207.00	84
56.00	870	76.00	2167	95.00	54904		

Digitally signed by Don V. Viray on 10/29/2018 at 19:43.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

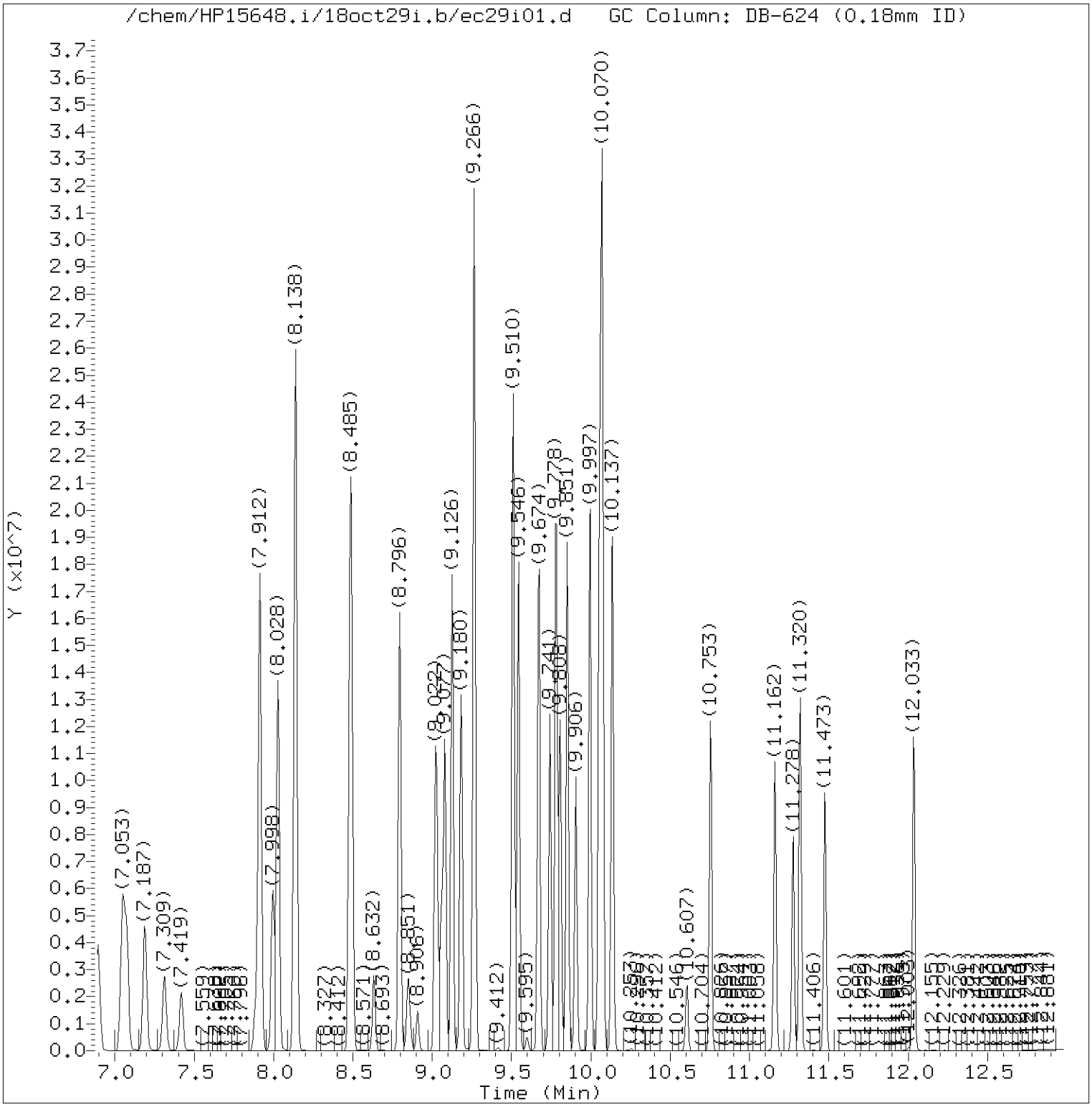
Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD300 Lab Sample ID: VSTD300

Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD300 Lab Sample ID: VSTD300

Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.194	85	2398612	293.577
4) Chloromethane	(2)	1.310	50	2698738	316.362
5) 1,3-Butadiene	(2)	1.359	39	1872960	276.055
6) Vinyl Chloride	(2)	1.371	62	2416224	307.512
8) Bromomethane	(2)	1.560	94	1592526	291.002
9) Chloroethane	(2)	1.596	64	1340144	297.088
10) Dichlorofluoromethane	(2)	1.731	67	3297971	304.826
11) n-Pentane	(2)	1.779	43	2737945	323.019
12) Trichlorofluoromethane	(2)	1.785	101	2697151	299.343
14) Ethyl ether	(2)	1.914	59	1403127A	309.434
15) Freon 123a	(2)	1.938	67	1822045	303.730
16) Acrolein	(1)	2.005	56	4386114	3039.865
17) 1,1-Dichloroethene	(2)	2.096	96	1301746	300.931
17) 1,1-Dichloroethene	(2)	2.096	63	717778	323.208
18) Acetone	(1)	2.115	58	375088	620.991
19) Freon 113	(2)	2.121	101	1334553	321.525
21) 2-Propanol	(1)	2.212	45	598350	1439.964
22) Methyl Iodide	(2)	2.218	142	2303433	311.988
23) Carbon Disulfide	(2)	2.279	76	4742926	313.857
25) Allyl Chloride	(2)	2.365	41	2857748	299.024
27) Methyl Acetate	(2)	2.371	43	1471600	288.125
28) Methylene Chloride	(2)	2.468	84	1486300	292.719
29)*t-Butyl alcohol-d10	(1)	2.480	65	187437M	250.000
30) t-Butyl alcohol	(1)	2.554	59	1019496	1434.918
31) Acrylonitrile	(2)	2.663	53	832811	305.103
32) trans-1,2-Dichloroethene	(2)	2.706	96	1471412	306.147
33) Methyl Tertiary Butyl Ether	(2)	2.712	73	4579517	298.663
34) n-Hexane	(2)	2.950	57	2703581	324.778
36) 1,1-Dichloroethane	(2)	3.078	63	3010388	318.026
38) di-Isopropyl ether	(2)	3.151	45	5411217	306.729
39) 2-Chloro-1,3-butadiene	(2)	3.157	53	2780011	310.107
40) Ethyl t-butyl ether	(2)	3.492	59	4941222M	299.617
42) cis-1,2-Dichloroethene	(2)	3.614	96	1634744	306.887
44) 2-Butanone	(2)	3.620	43	2064864	598.326
45) 2,2-Dichloropropane	(2)	3.627	77	2409022	301.248
47) Propionitrile	(1)	3.675	54	1571771	1561.189
48) Methacrylonitrile	(2)	3.822	67	2156424	769.402
49) Bromochloromethane	(2)	3.840	128	771109	299.539

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	3.883	71	535137	627.312
51) Chloroform	(2)	3.919	83	2563229	306.947
52)$Dibromofluoromethane	(2)	4.072	113	236688	49.253
52)$Dibromofluoromethane	(2)	4.072	111	245135	49.504
53) 1,1,1-Trichloroethane	(2)	4.102	97	2317365	303.684
54) Cyclohexane	(2)	4.163	56	3178030	333.262
54) Cyclohexane	(2)	4.163	84	2568185	324.545
54) Cyclohexane	(2)	4.163	69	956493	331.060
55) 1,1-Dichloropropene	(2)	4.255	75	2321143	312.233
56) Carbon Tetrachloride	(2)	4.267	117	2008395	319.454
58) Isobutyl Alcohol	(1)	4.383	41	922023	3685.753
57)$1,2-Dichloroethane-d4	(2)	4.395	102	66073	50.564
57)$1,2-Dichloroethane-d4	(2)	4.395	65	314806	49.626
57)$1,2-Dichloroethane-d4	(2)	4.395	104	41127	49.467
60) Benzene	(2)	4.456	78	6752833	313.164
61) 1,2-Dichloroethane	(2)	4.474	62	2011006	293.320
61) 1,2-Dichloroethane	(2)	4.474	98	183666	247.973
65) t-Amyl methyl ether	(2)	4.590	73	4590727	291.596
66)*Fluorobenzene	(2)	4.736	96	1097029	50.000
67) n-Heptane	(2)	4.742	43	3066582	299.933
69) n-Butanol	(1)	5.053	56	1649141	7943.318
71) Trichloroethene	(2)	5.108	95	1627726	310.721
73) Methylcyclohexane	(2)	5.309	83	3223102	312.541
73) Methylcyclohexane	(2)	5.309	98	1435652	308.498
74) 1,2-Dichloropropane	(2)	5.327	63	1796684	311.083
75) Dibromomethane	(2)	5.449	93	920413	309.910
77) Methyl Methacrylate	(2)	5.474	69	1491033	311.606
76) 1,4-Dioxane	(1)	5.474	88	201179M	4040.814
79) Bromodichloromethane	(2)	5.620	83	1982831	310.078
80) 2-Nitropropane	(2)	5.858	41	1072203	594.920
81) 2-Chloroethyl Vinyl Ether	(2)	5.955	63	1317955	326.618
82) cis-1,3-Dichloropropene	(2)	6.096	75	2799142	316.347
43) 1,2-Dichloroethene (Total)	(2)		96	3106156	613.034
83) 4-Methyl-2-pentanone	(2)	6.272	43	4444967	612.237
84)$Toluene-d8	(3)	6.382	98	1105564	49.304
84)$Toluene-d8	(3)	6.382	100	713853	49.540
89) Toluene	(3)	6.455	92	4194436	307.515
90) trans-1,3-Dichloropropene	(3)	6.699	75	2580000	308.867

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
92) Ethyl Methacrylate	(3)	6.827	69	2698357	304.923
93) 1,1,2-Trichloroethane	(3)	6.894	97	1340909	299.097
94) Tetrachloroethene	(3)	7.053	166	1627414	319.950
95) 1,3-Dichloropropane	(3)	7.077	76	2567957	306.904
97) 2-Hexanone	(3)	7.187	43	3210803	602.773
98) Dibromochloromethane	(3)	7.309	129	1497910	314.856
102) 1-Chlorohexane	(3)	7.315	91	130834	318.918
100) 1,2-Dibromoethane	(3)	7.419	107	1432246	308.340
101)*Chlorobenzene-d5	(3)	7.888	117	799641	50.000
103) Chlorobenzene	(3)	7.912	112	4589891	314.231
104) 1,1,1,2-Tetrachloroethane	(3)	7.998	131	1518677	315.248
105) Ethylbenzene	(3)	8.028	91	8511929	317.098
107) m+p-Xylene	(3)	8.138	106	6587920	642.486
108) o-Xylene	(3)	8.479	106	3161744	314.985
110) Styrene	(3)	8.491	104	5338497	318.340
111) Bromoform	(3)	8.632	173	1018013	328.634
112) Isopropylbenzene	(3)	8.796	105	8542257	323.535
113) Cyclohexanone	(1)	8.851	55	949398A	3784.696
115)$4-Bromofluorobenzene	(3)	8.906	95	417342	50.005
115)$4-Bromofluorobenzene	(3)	8.906	174	293798	49.455
116) Bromobenzene	(4)	9.022	156	1779736	309.357
117) 1,1,2,2-Tetrachloroethane	(4)	9.034	83	2150304	294.100
118) 1,2,3-Trichloropropane	(4)	9.058	110	607154	294.583
119) trans-1,4-Dichloro-2-butene	(4)	9.077	53	1811968	767.831
120) n-Propylbenzene	(4)	9.126	91	9935613	309.548
121) 2-Chlorotoluene	(4)	9.180	126	1910471	315.291
123) 1,3,5-Trimethylbenzene	(4)	9.266	105	7499517	323.537
122) 4-Chlorotoluene	(4)	9.266	126	1994715	316.329
125) tert-Butylbenzene	(4)	9.510	134	1627941	328.267
126) Pentachloroethane	(4)	9.516	167	1197597	323.699
127) 1,2,4-Trimethylbenzene	(4)	9.546	105	7645951	320.100
128) sec-Butylbenzene	(4)	9.674	105	9641485	323.216
130) 1,3-Dichlorobenzene	(4)	9.741	146	3688934	319.060
131) p-Isopropyltoluene	(4)	9.778	119	8594632	327.491
132)*1,4-Dichlorobenzene-d4	(4)	9.790	152	427120	50.000
134) 1,4-Dichlorobenzene	(4)	9.808	146	3686601	315.959
135) 1,2,3-Trimethylbenzene	(4)	9.851	105	7732835	308.038
136) Benzyl Chloride	(4)	9.906	91	5329265	310.432

A = User selected an alternate hit.
* = Compound is an internal standard.
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Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

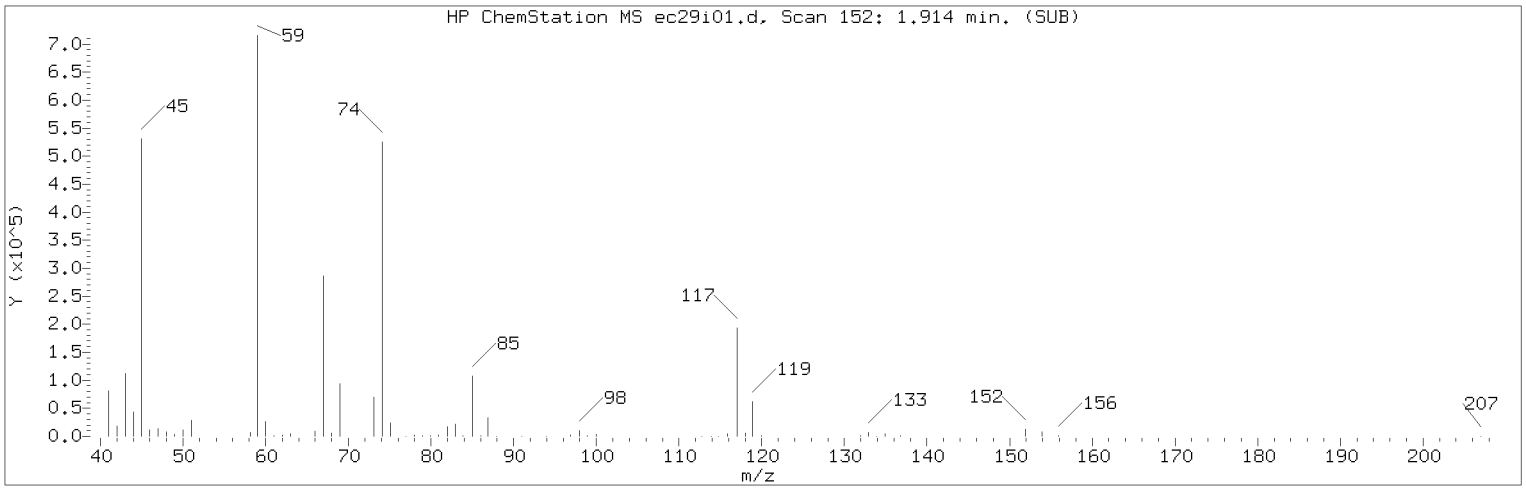
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD300 Lab Sample ID: VSTD300

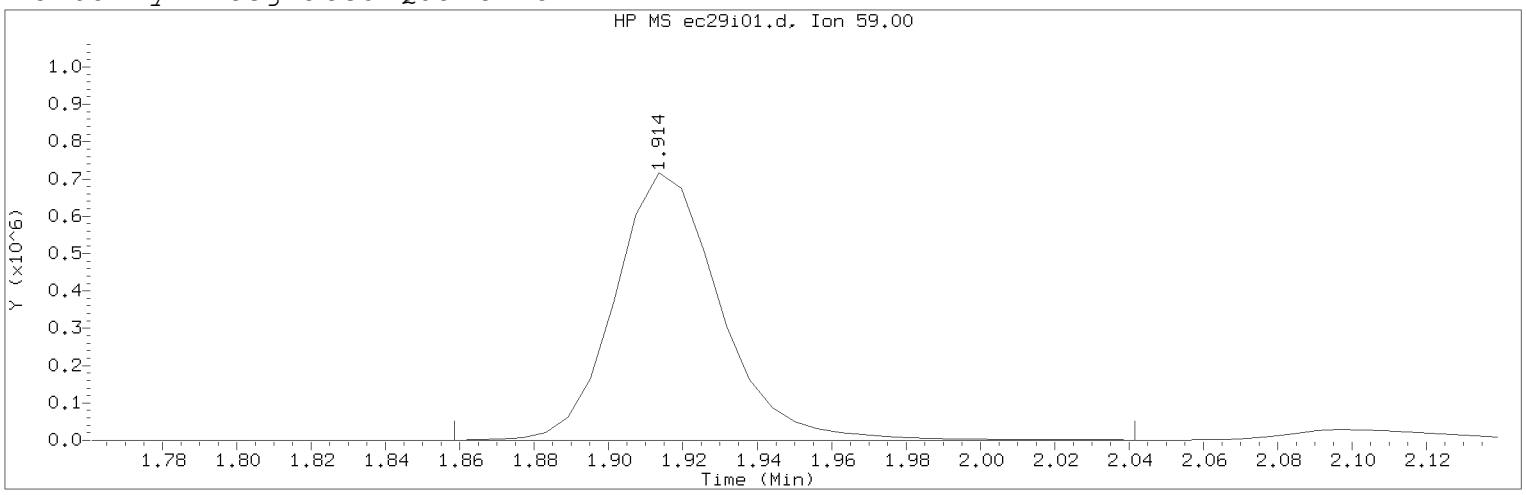
	Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137)	1,3-Diethylbenzene	(4)	9.997	119	5085689	309.580
138)	1,4-Diethylbenzene	(4)	10.052	119	5513782	315.168
139)	1,2-Dichlorobenzene	(4)	10.070	146	3485646	317.627
140)	n-Butylbenzene	(4)	10.070	92	4352092	336.652
91)	1,3-Dichloropropene (total)	(3)		100	5379142	625.215
141)	1,2-Diethylbenzene	(4)	10.137	119	4161893	307.098
143)	1,2-Dibromo-3-chloropropane	(4)	10.607	75	492006	291.455
145)	1,3,5-Trichlorobenzene	(4)	10.753	180	2755198	323.511
147)	1,2,4-Trichlorobenzene	(4)	11.162	180	2389675	316.636
148)	Hexachlorobutadiene	(4)	11.278	225	1084678	317.988
149)	Naphthalene	(4)	11.320	128	7265926	294.213
150)	1,2,3-Trichlorobenzene	(4)	11.479	180	2166273	307.952
109)	Xylene (Total)	(3)		106	9749664	957.471
151)	2-Methylnaphthalene	(4)	12.033	142	3876834	252.735
142)	Diethylbenzene (total)	(4)		100	14761364	931.847

Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD300 Lab Sample ID: VSTD300

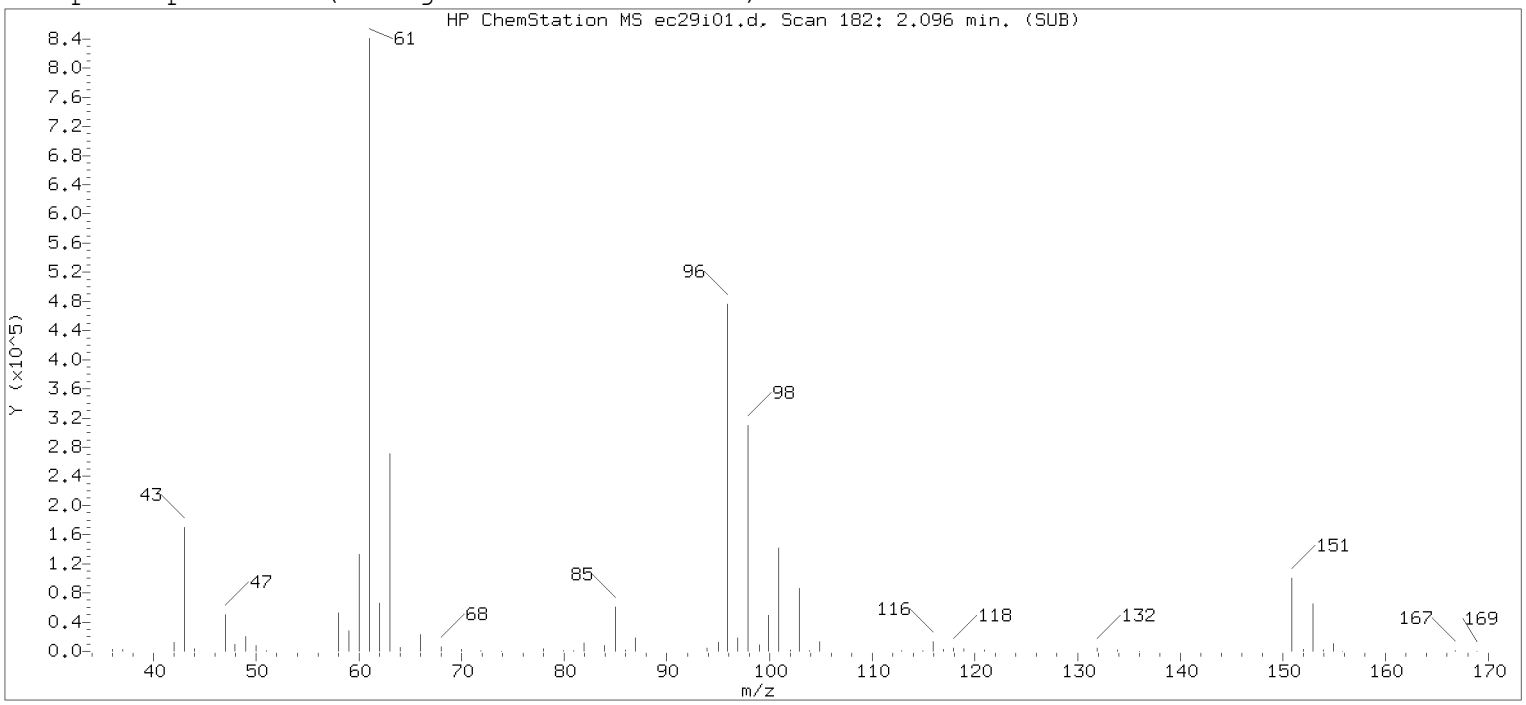
Compound Number : 14
Compound Name : Ethyl ether
Scan Number : 152
Retention Time (minutes): 1.914
Quant Ion : 59.00
Area (flag) : 1403127A
On-Column Amount (ng) : 309.4345
Integration start scan : 142 Integration stop scan: 172
Y at integration start : 251 Y at integration end: 251

Reason for manual integration: improper integration

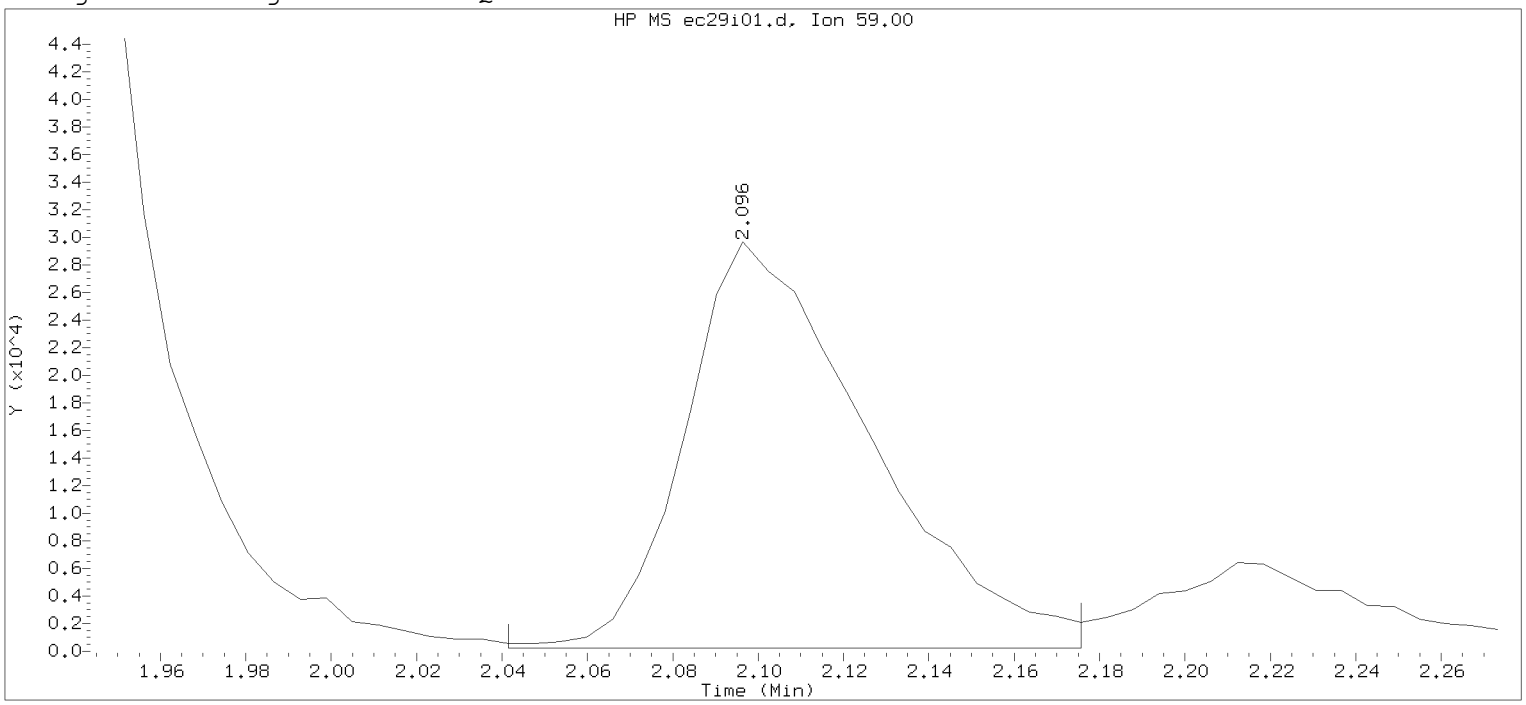
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

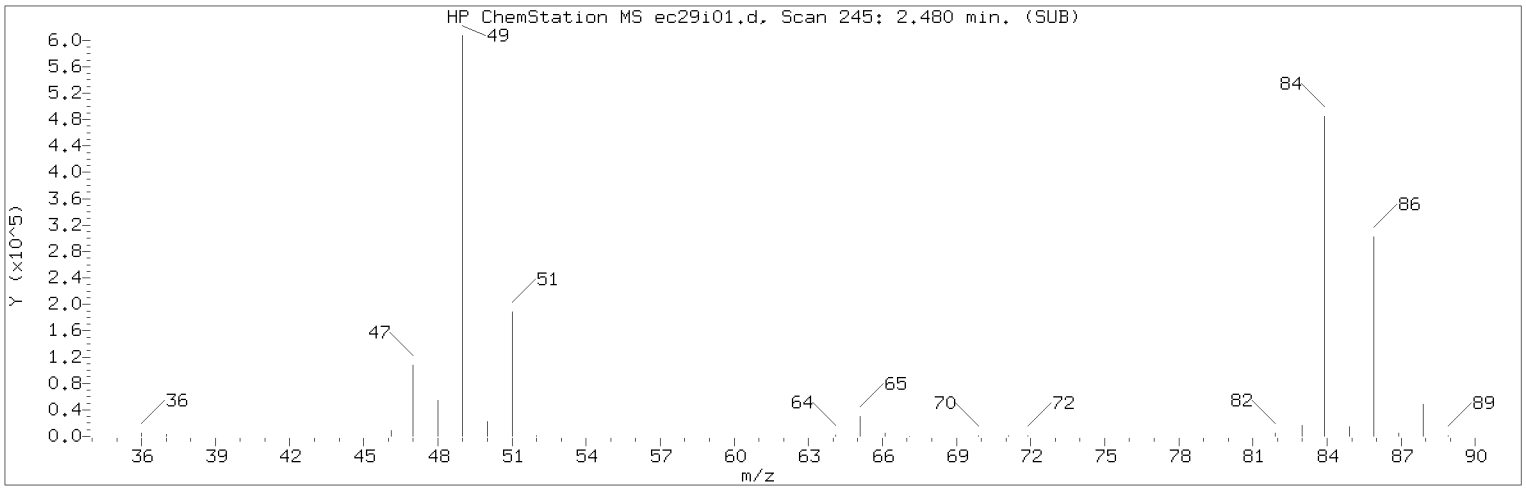
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 20:55
Date, time and analyst ID of latest file update: 29-Oct-2018 20:55 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

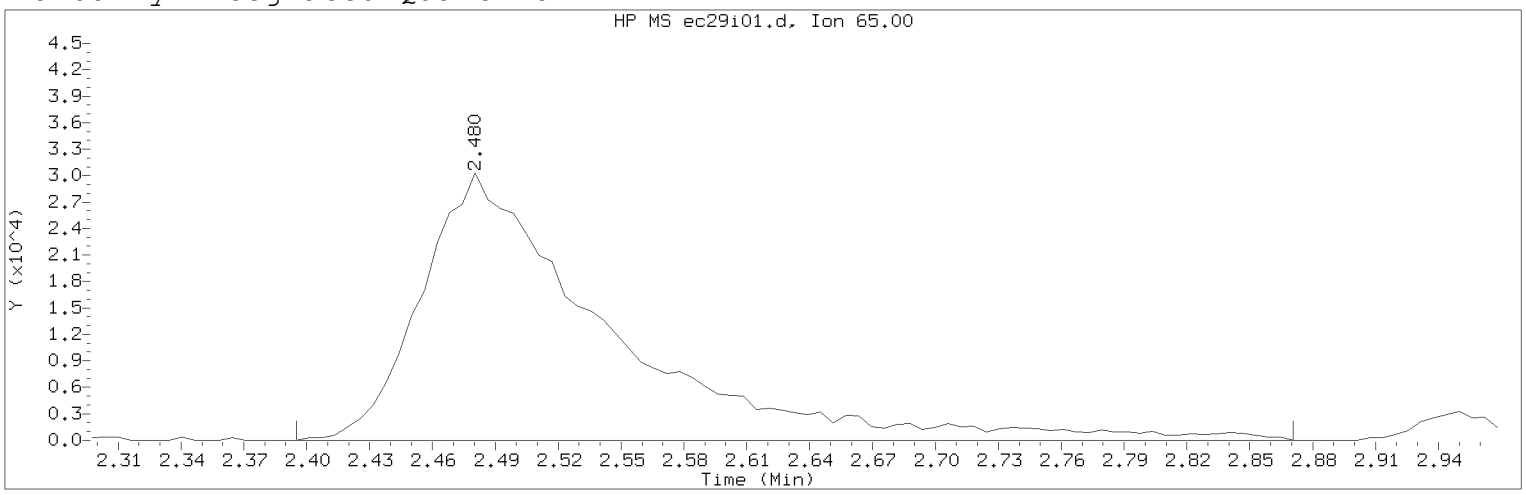
Compound Number : 14
Compound Name : Ethyl ether
Scan Number : 182
Retention Time (minutes): 2.096
Quant Ion : 59.00
Area : 87984
On-column Amount (ng) : 300.0000
Integration start scan : 172 Integration stop scan: 194
Y at integration start : 251 Y at integration end: 251

Digitally signed by Don V. Viray on 10/29/2018 at 23:44.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD300 Lab Sample ID: VSTD300

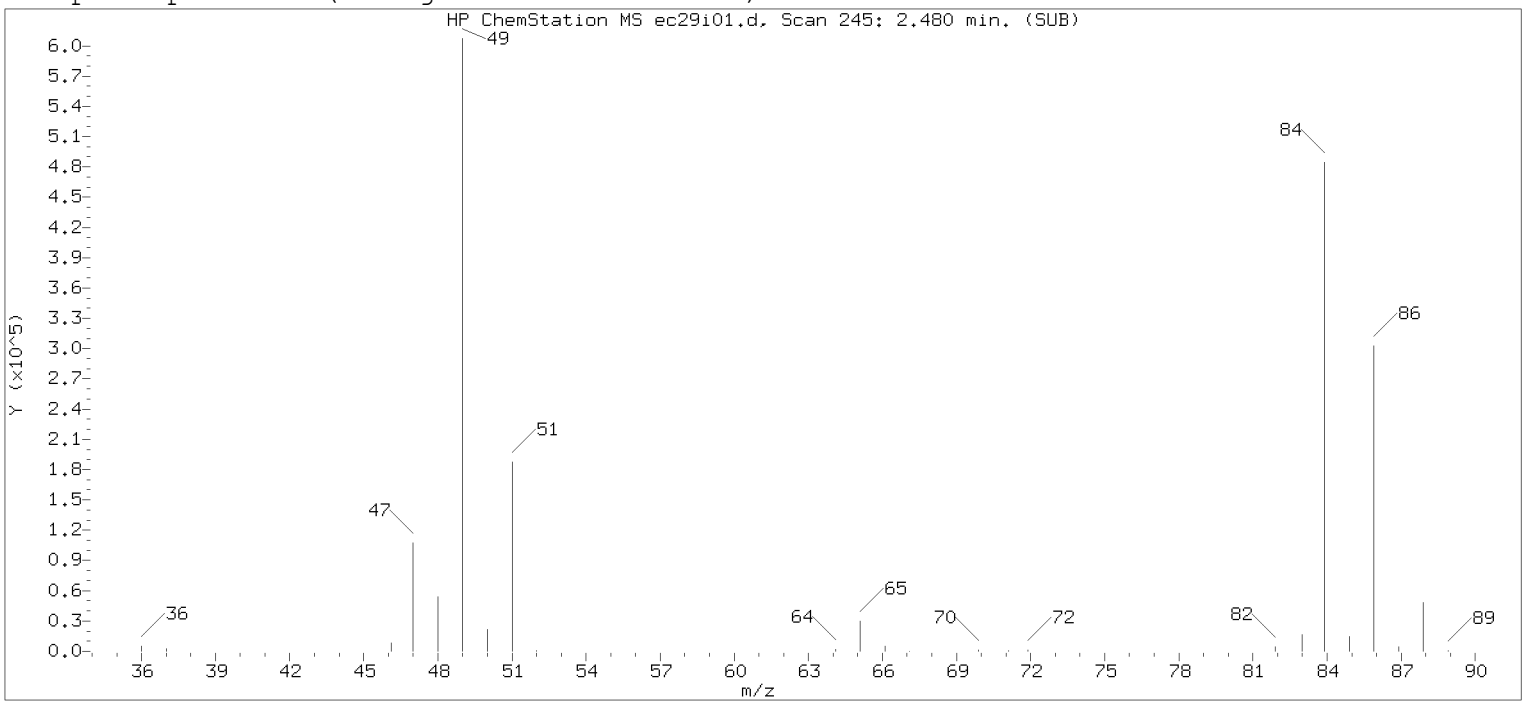
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 245
Retention Time (minutes): 2.480
Quant Ion : 65.00
Area (flag) : 187437M
On-Column Amount (ng) : 250.0000
Integration start scan : 230 Integration stop scan: 308
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

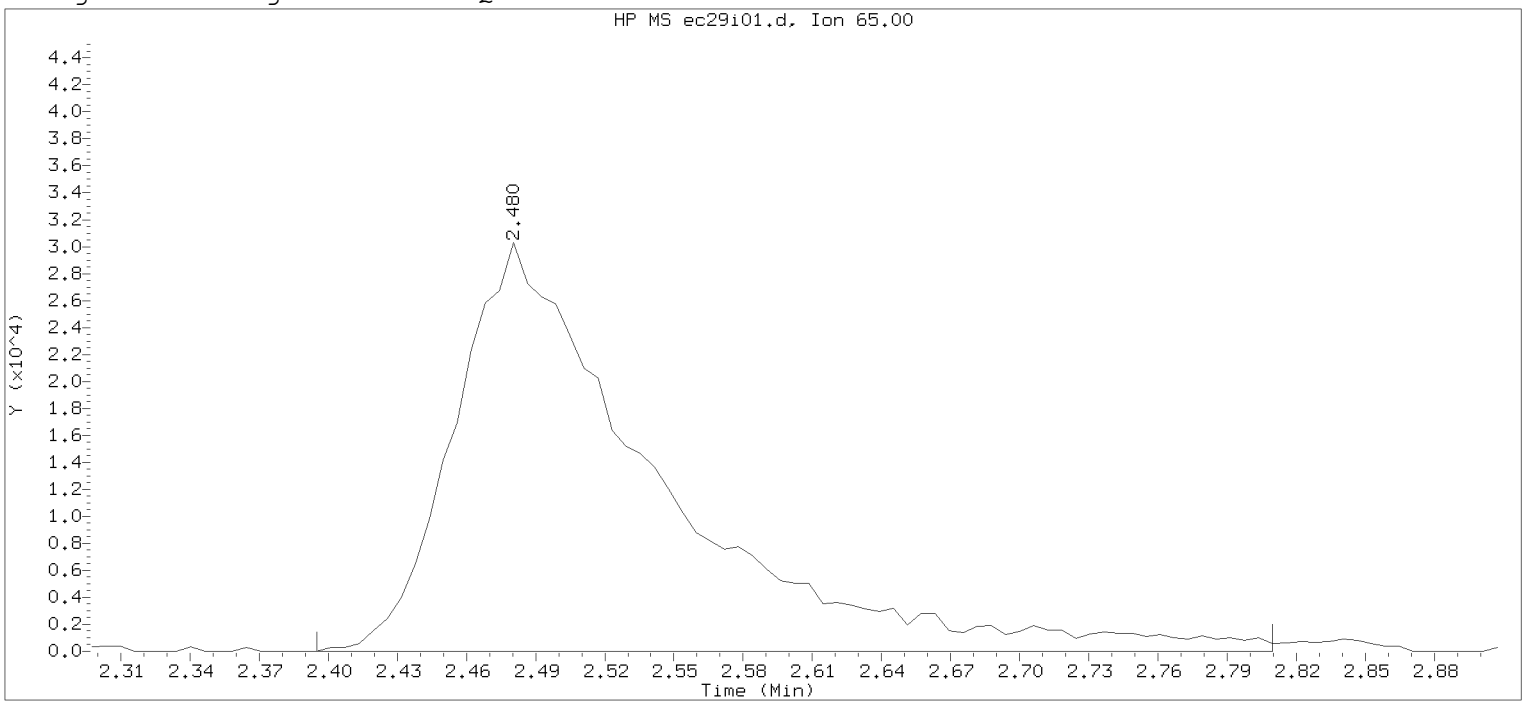
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

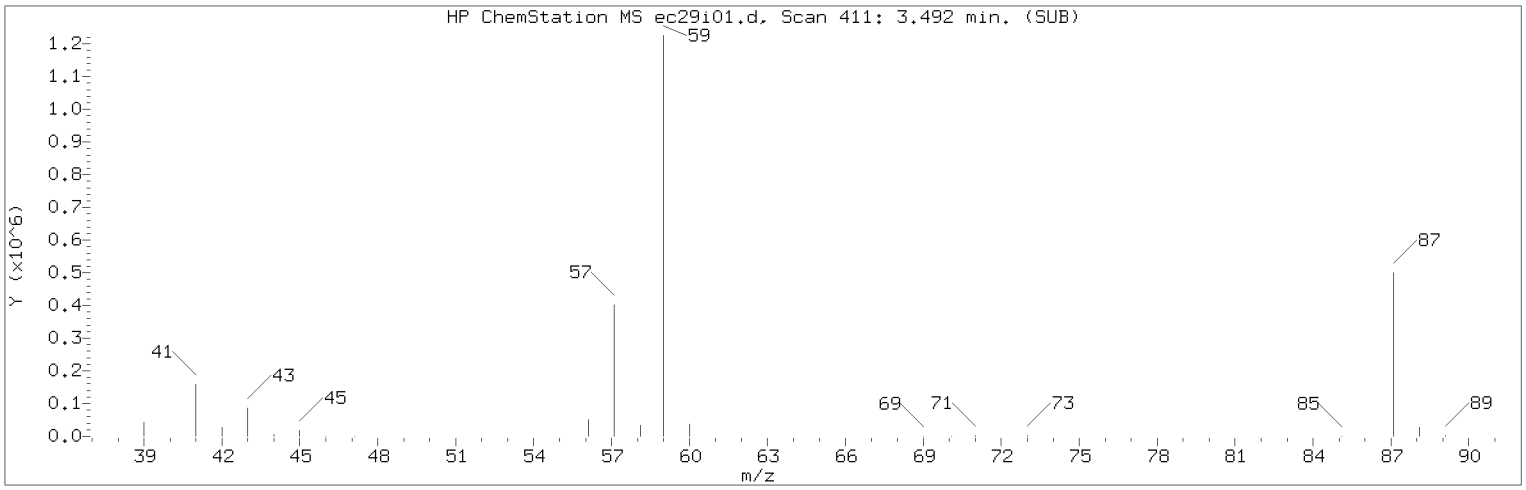
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 20:55
Date, time and analyst ID of latest file update: 29-Oct-2018 20:55 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

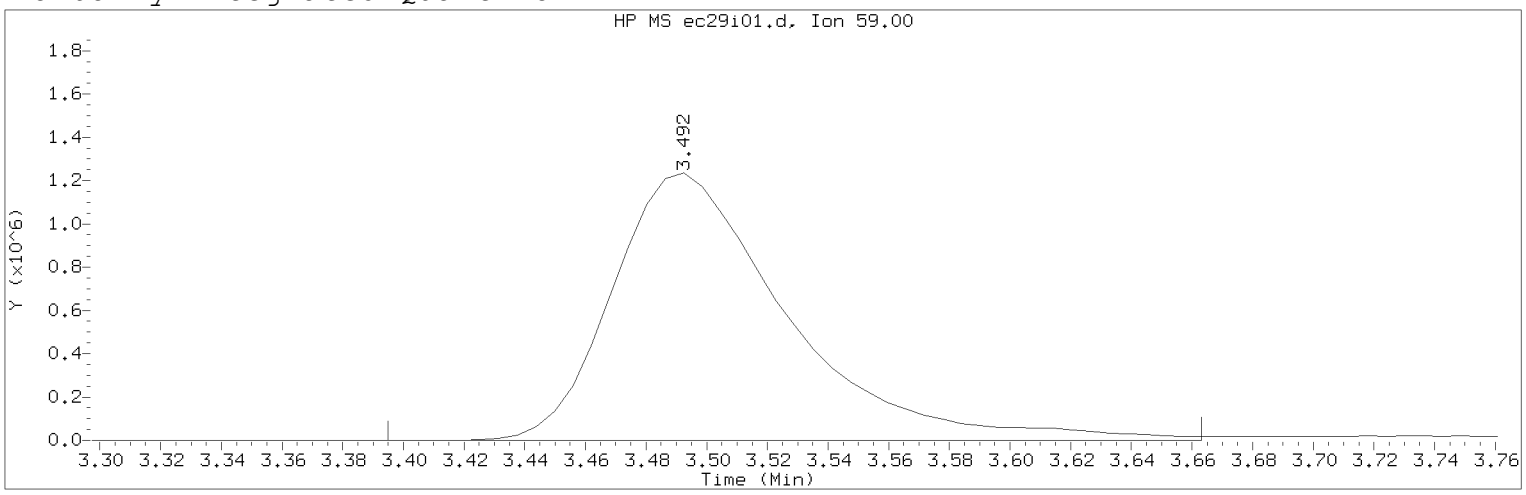
Compound Number	: 29		
Compound Name	: t-Butyl alcohol-d10		
Scan Number	: 245		
Retention Time (minutes)	: 2.480		
Quant Ion	: 65.00		
Area	: 185226		
On-column Amount (ng)	: 250.0000		
Integration start scan	: 230	Integration stop scan:	298
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:44.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD300 Lab Sample ID: VSTD300

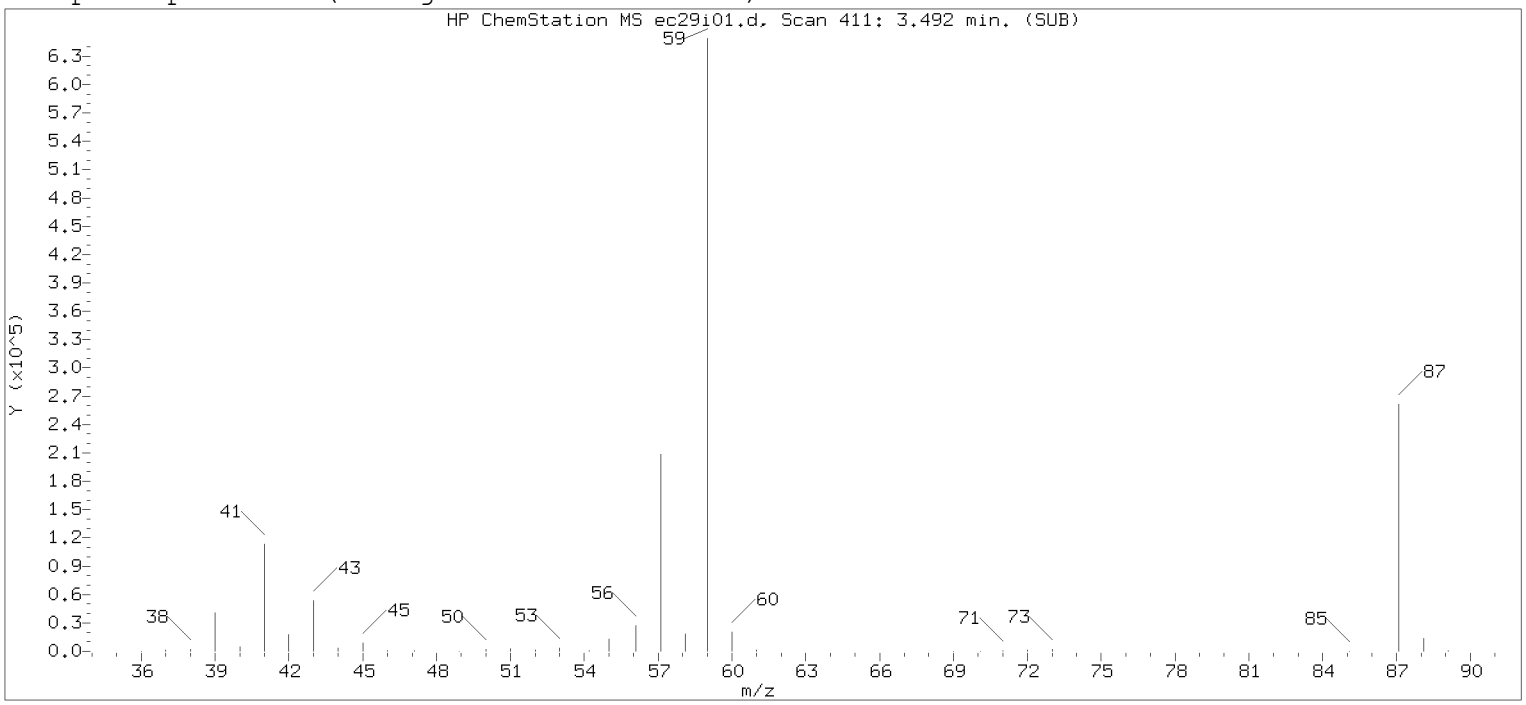
Compound Number : 40
Compound Name : Ethyl t-butyl ether
Scan Number : 411
Retention Time (minutes): 3.492
Quant Ion : 59.00
Area (flag) : 4941222M
On-Column Amount (ng) : 299.6166
Integration start scan : 394 Integration stop scan: 438
Y at integration start : 223 Y at integration end: 223

Reason for manual integration: improper integration

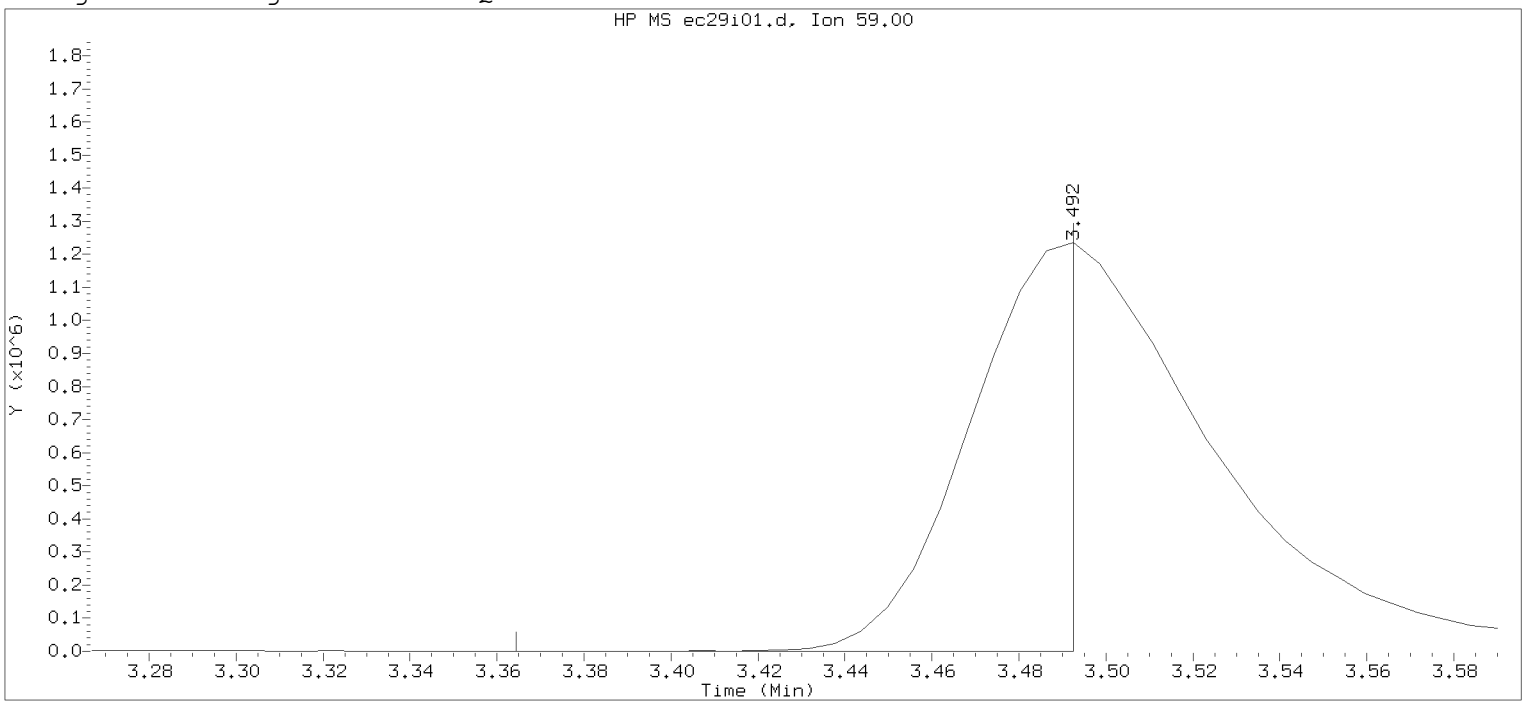
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

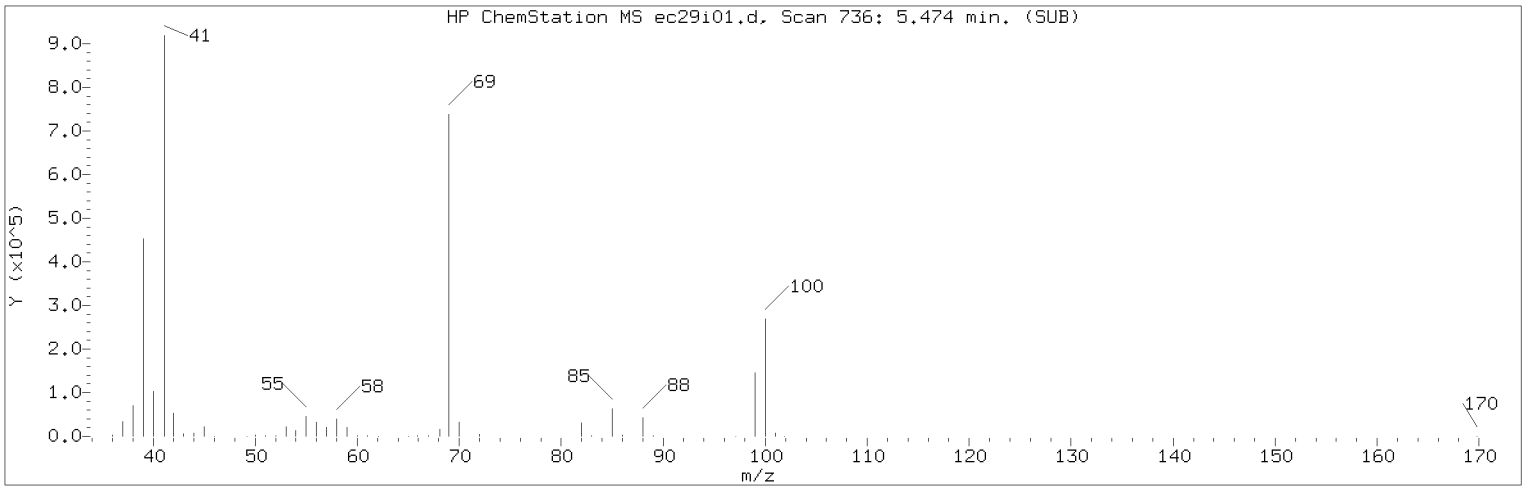
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 20:55
Date, time and analyst ID of latest file update: 29-Oct-2018 20:55 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

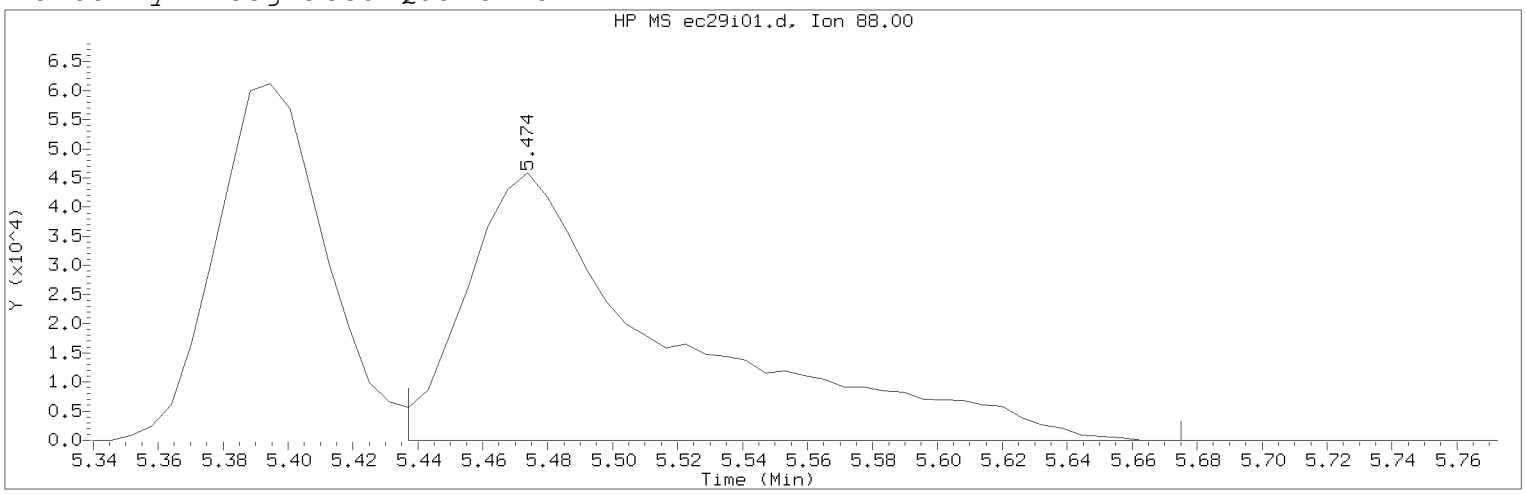
Compound Number : 40
Compound Name : Ethyl t-butyl ether
Scan Number : 411
Retention Time (minutes): 3.492
Quant Ion : 59.00
Area : 1969650
On-column Amount (ng) : 300.0000
Integration start scan : 389 Integration stop scan: 410
Y at integration start : 604 Y at integration end: 604

Digitally signed by Don V. Viray on 10/29/2018 at 23:44.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD300 Lab Sample ID: VSTD300

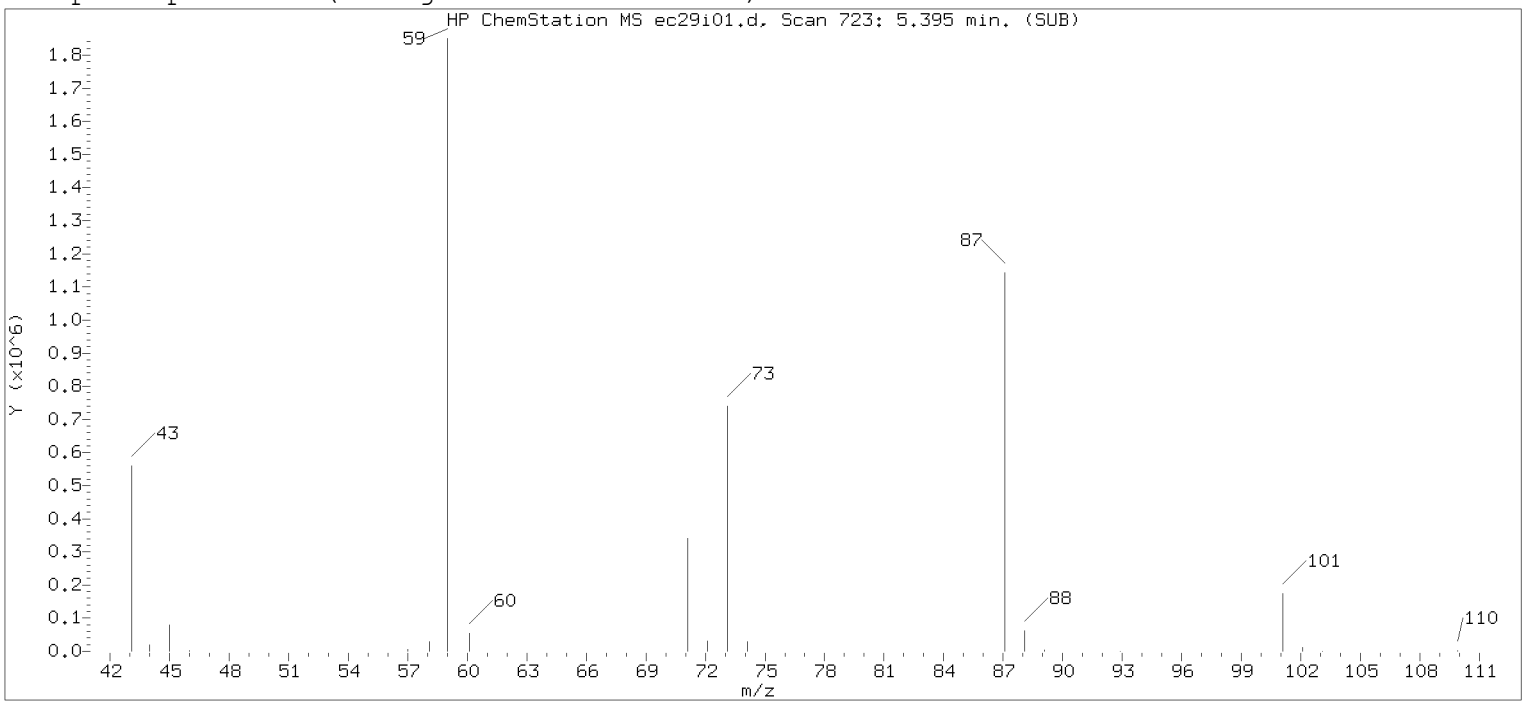
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 736
Retention Time (minutes): 5.474
Quant Ion : 88.00
Area (flag) : 201179M
On-Column Amount (ng) : 4040.8143
Integration start scan : 729 Integration stop scan: 768
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

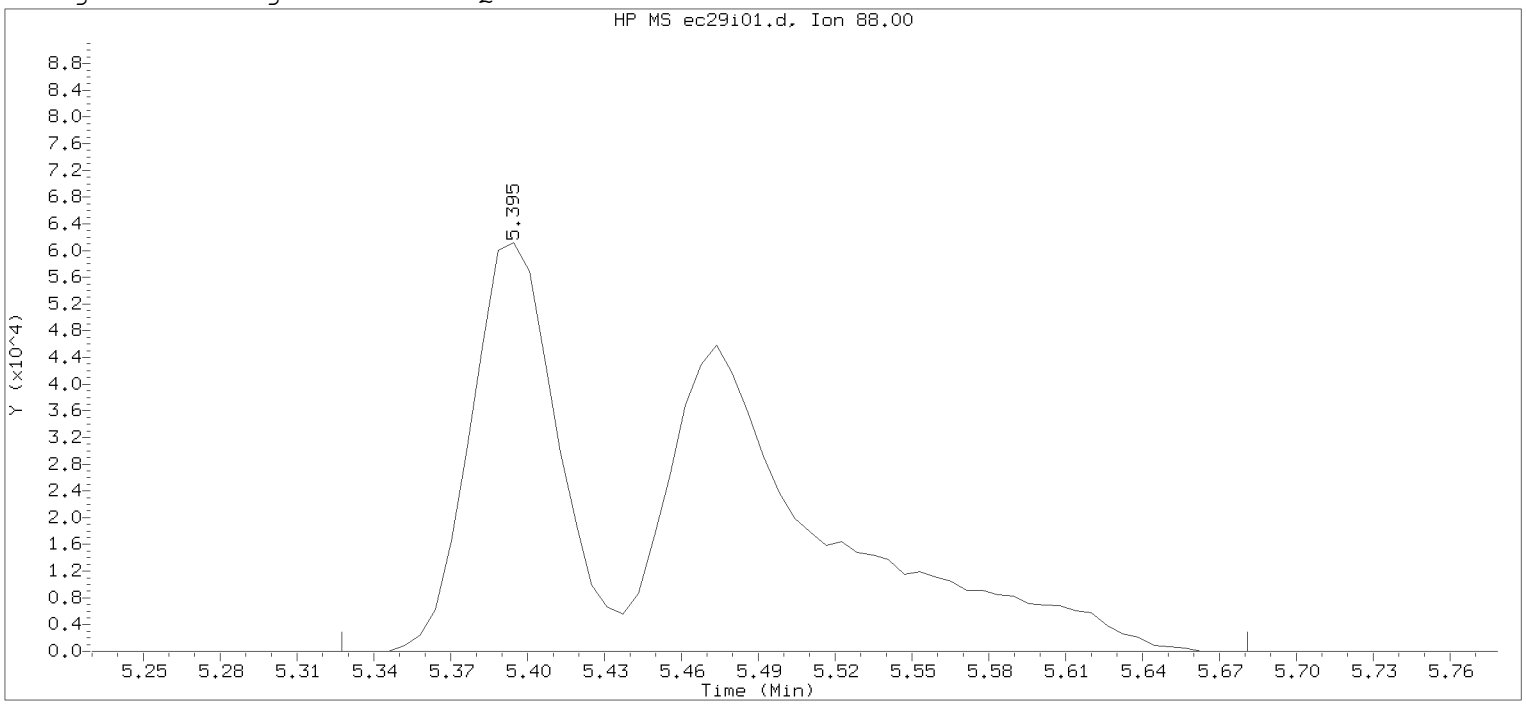
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

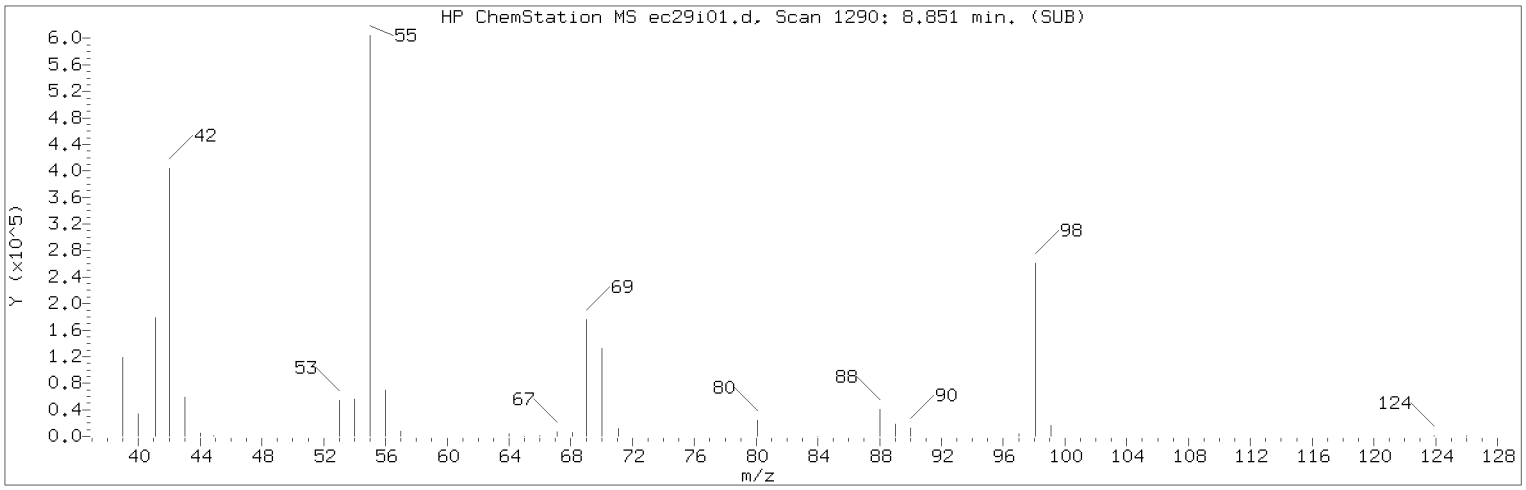
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 20:55
Date, time and analyst ID of latest file update: 29-Oct-2018 20:55 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

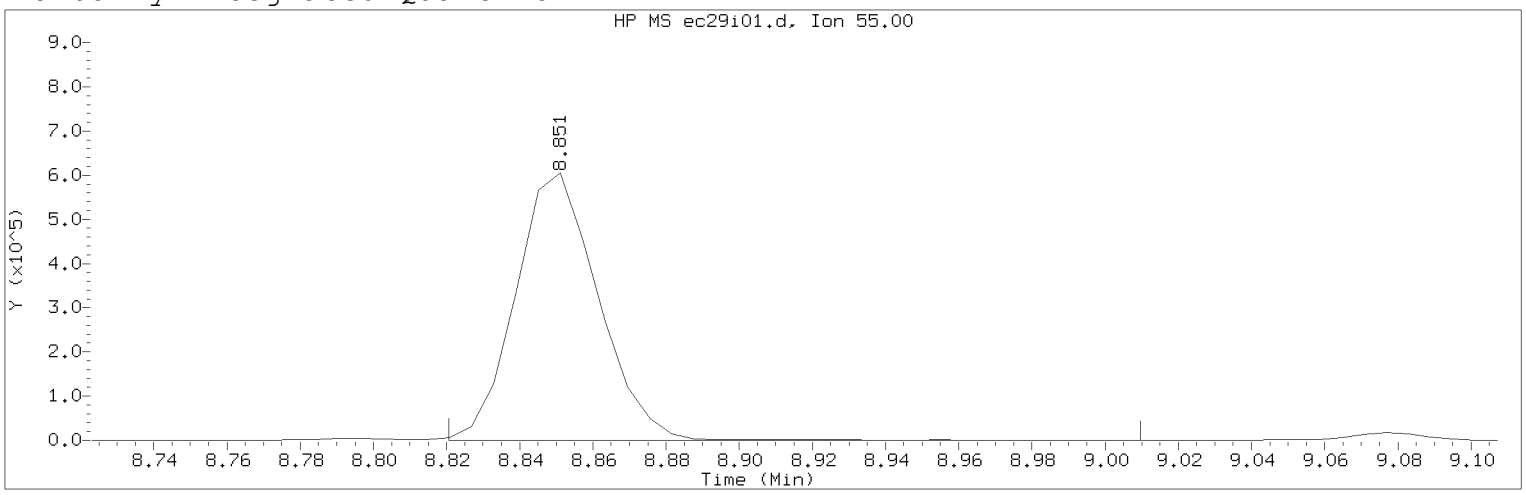
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 723
Retention Time (minutes): 5.395
Quant Ion : 88.00
Area : 343350
On-column Amount (ng) : 3750.0000
Integration start scan : 711 Integration stop scan: 769
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:44.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD300 Lab Sample ID: VSTD300

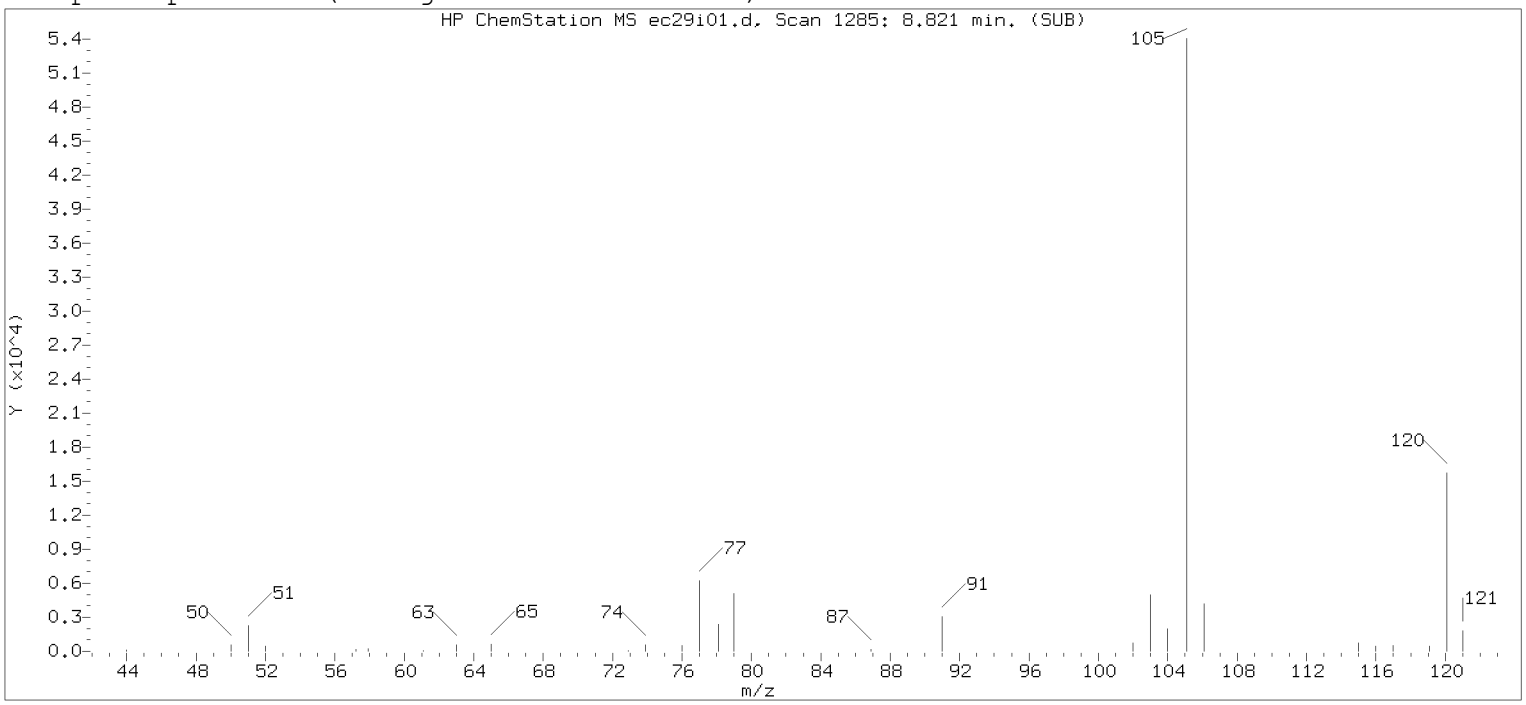
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1290
Retention Time (minutes): 8.851
Quant Ion : 55.00
Area (flag) : 949398A
On-Column Amount (ng) : 3784.6962
Integration start scan : 1284 Integration stop scan: 1315
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

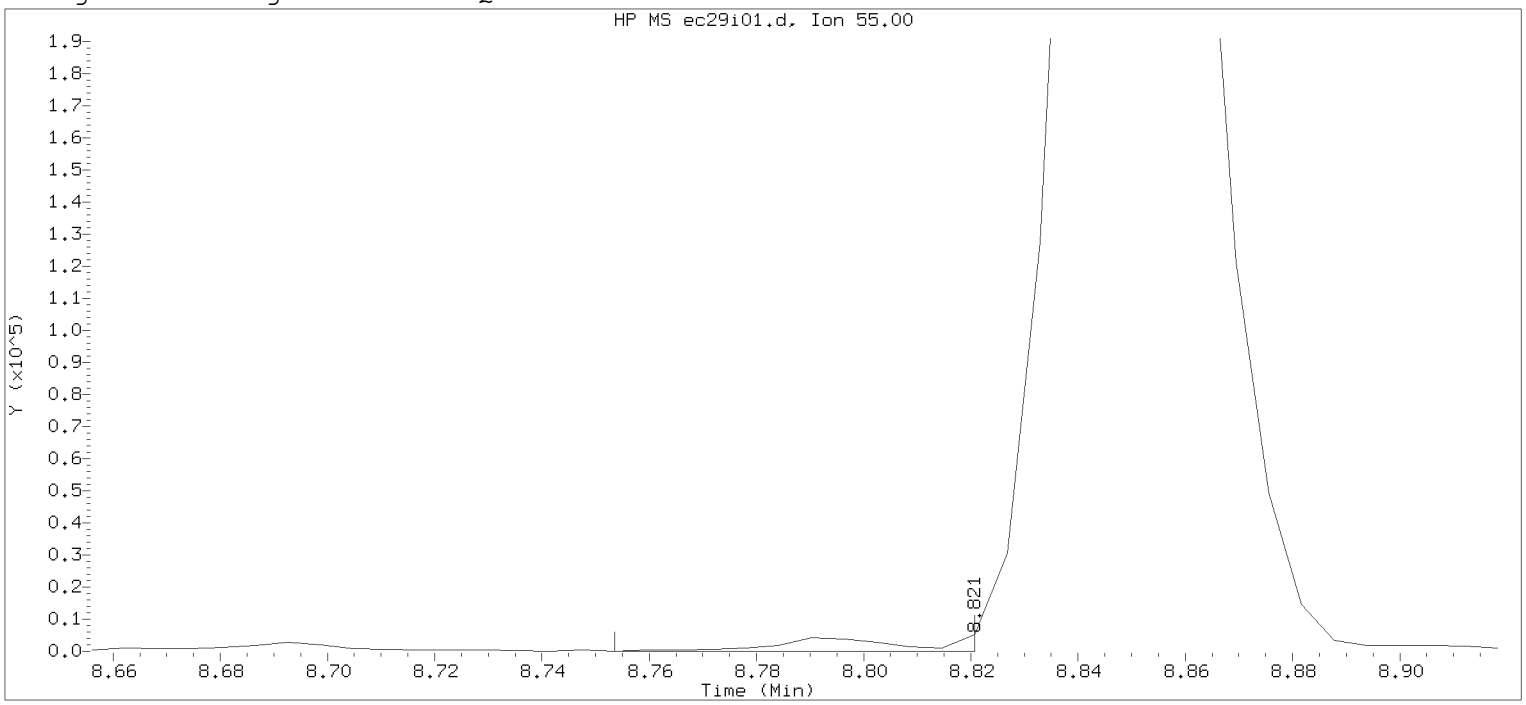
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



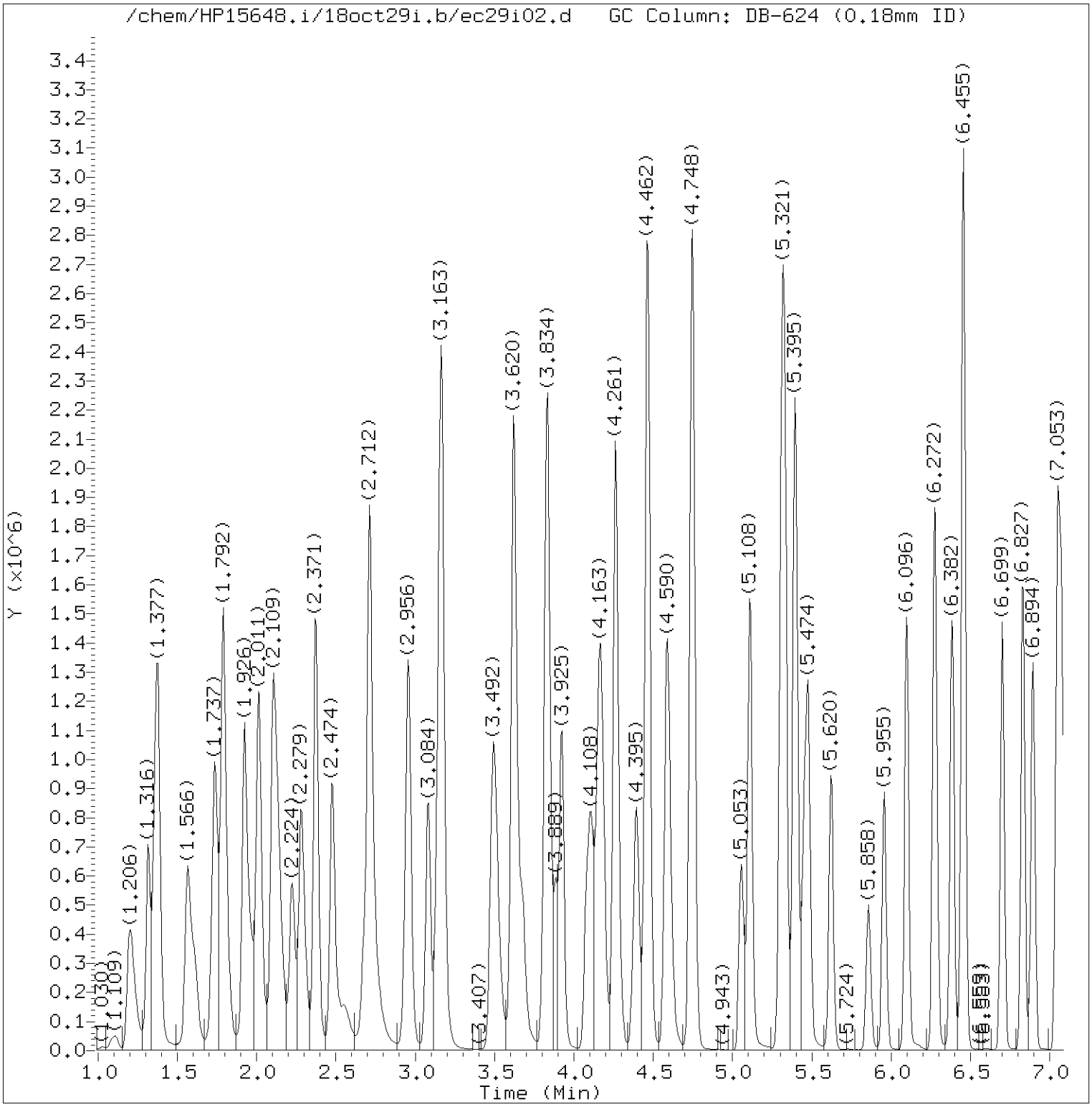
Data File: /chem/HP15648.i/18oct29i.b/ec29i01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:39 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 20:55
Date, time and analyst ID of latest file update: 29-Oct-2018 20:55 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compound Number	: 113		
Compound Name	: Cyclohexanone		
Scan Number	: 1285		
Retention Time (minutes)	: 8.821		
Quant Ion	: 55.00		
Area	: 7245		
On-column Amount (ng)	: 3750.0000		
Integration start scan	: 1273	Integration stop scan:	1284
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:44.
Target 3.5 esignature user id: dviray



Total Ion Chromatogram (TIC)

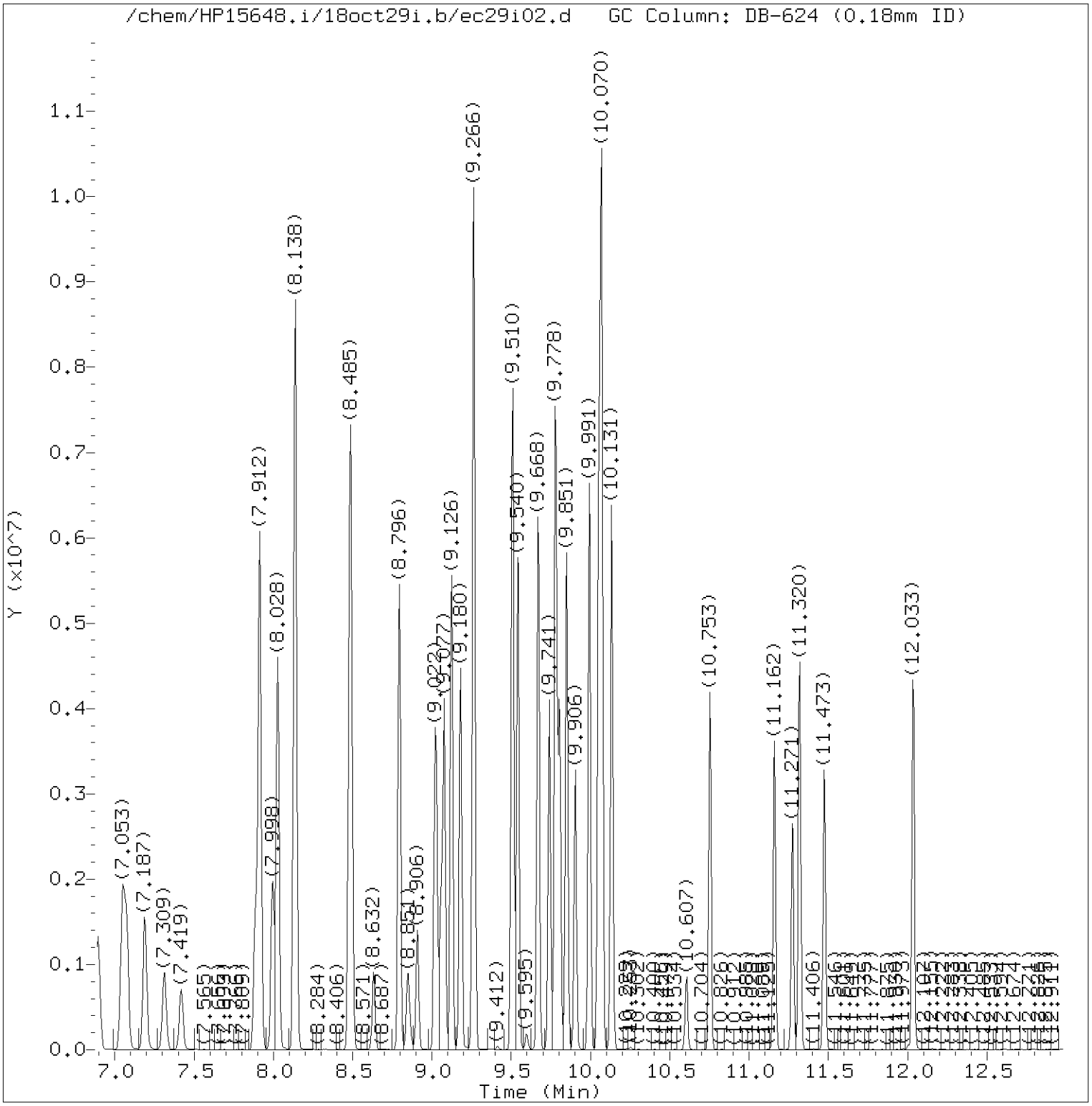
Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.206	85	841256	103.462
4) Chloromethane	(2)	1.316	50	874047	102.956
5) 1,3-Butadiene	(2)	1.365	39	621670M	92.070
6) Vinyl Chloride	(2)	1.383	62	798483	102.113
8) Bromomethane	(2)	1.566	94	540108	99.171
9) Chloroethane	(2)	1.609	64	454609	101.266
10) Dichlorofluoromethane	(2)	1.737	67	1099273	102.095
11) n-Pentane	(2)	1.792	43	953792	113.071
12) Trichlorofluoromethane	(2)	1.792	101	929218	103.627
14) Ethyl ether	(2)	1.926	59	462224A	102.428
15) Freon 123a	(2)	1.938	67	614941	103.004
16) Acrolein	(1)	2.017	56	1446538	971.459
17) 1,1-Dichloroethene	(2)	2.103	96	436531	101.403
17) 1,1-Dichloroethene	(2)	2.103	63	241054	109.068
18) Acetone	(1)	2.121	58	123326	197.846
19) Freon 113	(2)	2.133	101	463445	112.194
21) 2-Propanol	(1)	2.218	45	227723	531.035
22) Methyl Iodide	(2)	2.224	142	782355	106.478
23) Carbon Disulfide	(2)	2.285	76	1585819	105.446
25) Allyl Chloride	(2)	2.371	41	936812	98.498
27) Methyl Acetate	(2)	2.377	43	491051	96.607
28) Methylene Chloride	(2)	2.474	84	505731	100.082
29)*t-Butyl alcohol-d10	(1)	2.487	65	193435	250.000
30) t-Butyl alcohol	(1)	2.560	59	357508	487.582
31) Acrylonitrile	(2)	2.676	53	271952	100.112
32) trans-1,2-Dichloroethene	(2)	2.712	96	495900	103.677
33) Methyl Tertiary Butyl Ether	(2)	2.718	73	1584322	103.824
34) n-Hexane	(2)	2.956	57	933904	112.731
36) 1,1-Dichloroethane	(2)	3.078	63	1009391	107.150
38) di-Isopropyl ether	(2)	3.157	45	1855732	105.698
39) 2-Chloro-1,3-butadiene	(2)	3.163	53	937091	105.036
40) Ethyl t-butyl ether	(2)	3.492	59	1731423	105.494
42) cis-1,2-Dichloroethene	(2)	3.620	96	560872	105.800
44) 2-Butanone	(2)	3.627	43	676675	197.024
45) 2,2-Dichloropropane	(2)	3.633	77	822782	103.386
47) Propionitrile	(1)	3.681	54	540148	519.875
48) Methacrylonitrile	(2)	3.828	67	741437	265.819
49) Bromochloromethane	(2)	3.840	128	260036	101.499

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	3.889	71	174726	198.471
51) Chloroform	(2)	3.925	83	879742	105.858
52)$Dibromofluoromethane	(2)	4.078	113	238443	49.858
52)$Dibromofluoromethane	(2)	4.078	111	246016	49.922
53) 1,1,1-Trichloroethane	(2)	4.108	97	779448	102.638
54) Cyclohexane	(2)	4.169	56	1090025	114.857
54) Cyclohexane	(2)	4.169	84	891148	113.160
54) Cyclohexane	(2)	4.163	69	328103	114.111
55) 1,1-Dichloropropene	(2)	4.261	75	782855	105.816
56) Carbon Tetrachloride	(2)	4.267	117	674886	107.865
58) Isobutyl Alcohol	(1)	4.389	41	310458	1202.562
57)$1,2-Dichloroethane-d4	(2)	4.401	102	64002	49.216
57)$1,2-Dichloroethane-d4	(2)	4.401	65	311288	49.308
57)$1,2-Dichloroethane-d4	(2)	4.401	104	41729	50.433
60) Benzene	(2)	4.462	78	2284953	106.477
61) 1,2-Dichloroethane	(2)	4.474	62	686745	100.651
61) 1,2-Dichloroethane	(2)	4.480	98	63042	85.526
65) t-Amyl methyl ether	(2)	4.590	73	1628524	103.941
66)*Fluorobenzene	(2)	4.742	96	1091756	50.000
67) n-Heptane	(2)	4.748	43	1043369	100.916
69) n-Butanol	(1)	5.053	56	565841	2640.942
71) Trichloroethene	(2)	5.108	95	552808	106.037
73) Methylcyclohexane	(2)	5.315	83	1094645	106.659
73) Methylcyclohexane	(2)	5.315	98	489227	105.635
74) 1,2-Dichloropropane	(2)	5.334	63	604110	105.103
75) Dibromomethane	(2)	5.449	93	309012	104.549
76) 1,4-Dioxane	(1)	5.474	88	75679M	1472.929
77) Methyl Methacrylate	(2)	5.480	69	506279	106.317
79) Bromodichloromethane	(2)	5.620	83	677716	106.494
80) 2-Nitropropane	(2)	5.858	41	354301	197.536
81) 2-Chloroethyl Vinyl Ether	(2)	5.955	63	435152	108.361
82) cis-1,3-Dichloropropene	(2)	6.096	75	945520	107.375
43) 1,2-Dichloroethene (Total)	(2)		96	1056772	209.477
83) 4-Methyl-2-pentanone	(2)	6.272	43	1486303	205.708
84)$Toluene-d8	(3)	6.382	98	1102662	49.755
84)$Toluene-d8	(3)	6.382	100	715219	50.221
89) Toluene	(3)	6.455	92	1419581	105.304
90) trans-1,3-Dichloropropene	(3)	6.699	75	868470	105.196

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

Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
92) Ethyl Methacrylate	(3)	6.827	69	917097	104.858
93) 1,1,2-Trichloroethane	(3)	6.894	97	454460	102.566
94) Tetrachloroethene	(3)	7.053	166	545501	108.511
95) 1,3-Dichloropropane	(3)	7.077	76	866944	104.833
97) 2-Hexanone	(3)	7.187	43	1067227	202.717
102) 1-Chlorohexane	(3)	7.309	91	42430	104.647
98) Dibromochloromethane	(3)	7.315	129	503968	107.182
100) 1,2-Dibromoethane	(3)	7.419	107	488379	106.381
101)*Chlorobenzene-d5	(3)	7.888	117	790316	50.000
103) Chlorobenzene	(3)	7.912	112	1537534	106.504
104) 1,1,1,2-Tetrachloroethane	(3)	7.998	131	506266	106.331
105) Ethylbenzene	(3)	8.028	91	2852285	107.511
107) m+p-Xylene	(3)	8.138	106	2194850	216.578
108) o-Xylene	(3)	8.479	106	1058928	106.739
110) Styrene	(3)	8.492	104	1771603	106.889
111) Bromoform	(3)	8.632	173	339241	110.806
112) Isopropylbenzene	(3)	8.796	105	2858612	109.546
113) Cyclohexanone	(1)	8.851	55	324391A	1253.060
115)$4-Bromofluorobenzene	(3)	8.906	95	408229	49.490
115)$4-Bromofluorobenzene	(3)	8.912	174	291061	49.572
116) Bromobenzene	(4)	9.022	156	589612	106.526
117) 1,1,2,2-Tetrachloroethane	(4)	9.028	83	726040	103.214
118) 1,2,3-Trichloropropane	(4)	9.058	110	205607	103.689
119) trans-1,4-Dichloro-2-butene	(4)	9.077	53	607731	267.677
120) n-Propylbenzene	(4)	9.126	91	3413228	110.531
121) 2-Chlorotoluene	(4)	9.180	126	638929	109.599
123) 1,3,5-Trimethylbenzene	(4)	9.266	105	2484587	111.411
122) 4-Chlorotoluene	(4)	9.266	126	654493	107.882
125) tert-Butylbenzene	(4)	9.510	134	532204	111.545
126) Pentachloroethane	(4)	9.516	167	381330	107.131
127) 1,2,4-Trimethylbenzene	(4)	9.546	105	2526299	109.932
128) sec-Butylbenzene	(4)	9.668	105	3246409	113.119
130) 1,3-Dichlorobenzene	(4)	9.741	146	1205096	108.337
131) p-Isopropyltoluene	(4)	9.778	119	2865395	113.486
132)*1,4-Dichlorobenzene-d4	(4)	9.790	152	410928	50.000
134) 1,4-Dichlorobenzene	(4)	9.808	146	1204822	107.328
135) 1,2,3-Trimethylbenzene	(4)	9.851	105	2525501	104.568
136) Benzyl Chloride	(4)	9.906	91	1770672	107.207

A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137) 1,3-Diethylbenzene	(4)	9.991	119	1643938	104.014
138) 1,4-Diethylbenzene	(4)	10.052	119	1744868	103.667
139) 1,2-Dichlorobenzene	(4)	10.070	146	1131864	107.204
140) n-Butylbenzene	(4)	10.070	92	1407066	113.131
91) 1,3-Dichloropropene (total)	(3)		100	1813990	212.571
141) 1,2-Diethylbenzene	(4)	10.131	119	1344548	103.121
143) 1,2-Dibromo-3-chloropropane	(4)	10.607	75	169351	104.273
145) 1,3,5-Trichlorobenzene	(4)	10.753	180	915045	111.677
147) 1,2,4-Trichlorobenzene	(4)	11.162	180	813931	112.097
148) Hexachlorobutadiene	(4)	11.278	225	366427	111.656
149) Naphthalene	(4)	11.320	128	2576619	108.444
150) 1,2,3-Trichlorobenzene	(4)	11.479	180	749775	110.786
109) Xylene (Total)	(3)		106	3253778	323.317
151) 2-Methylnaphthalene	(4)	12.033	142	1524586	103.306
142) Diethylbenzene (total)	(4)		100	4733354	310.802

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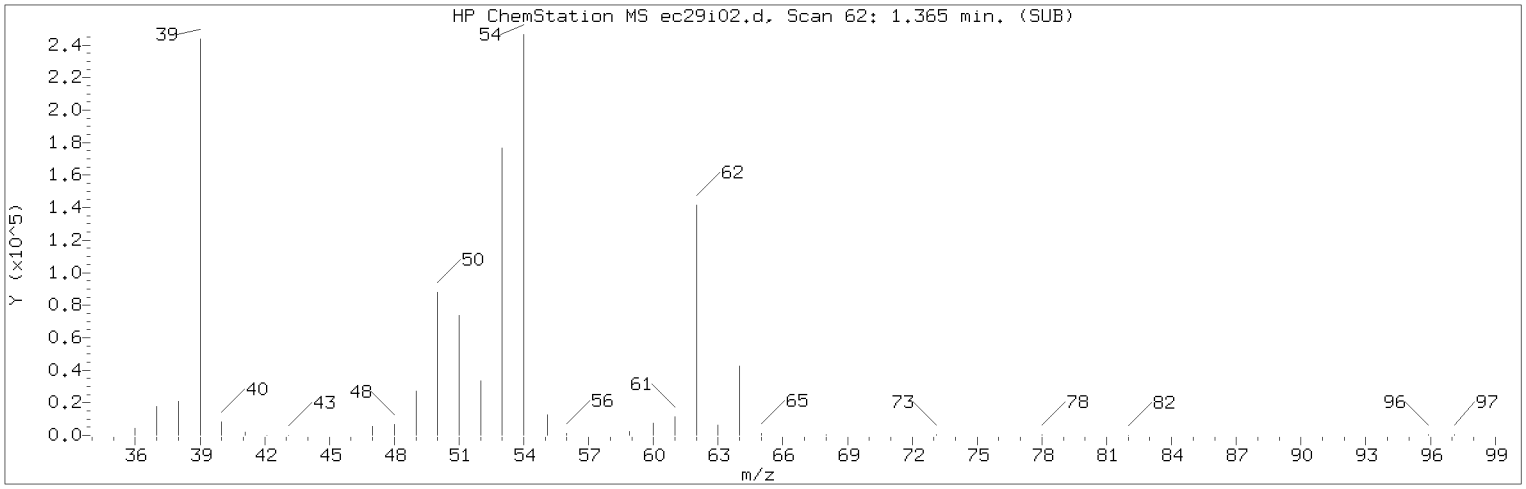
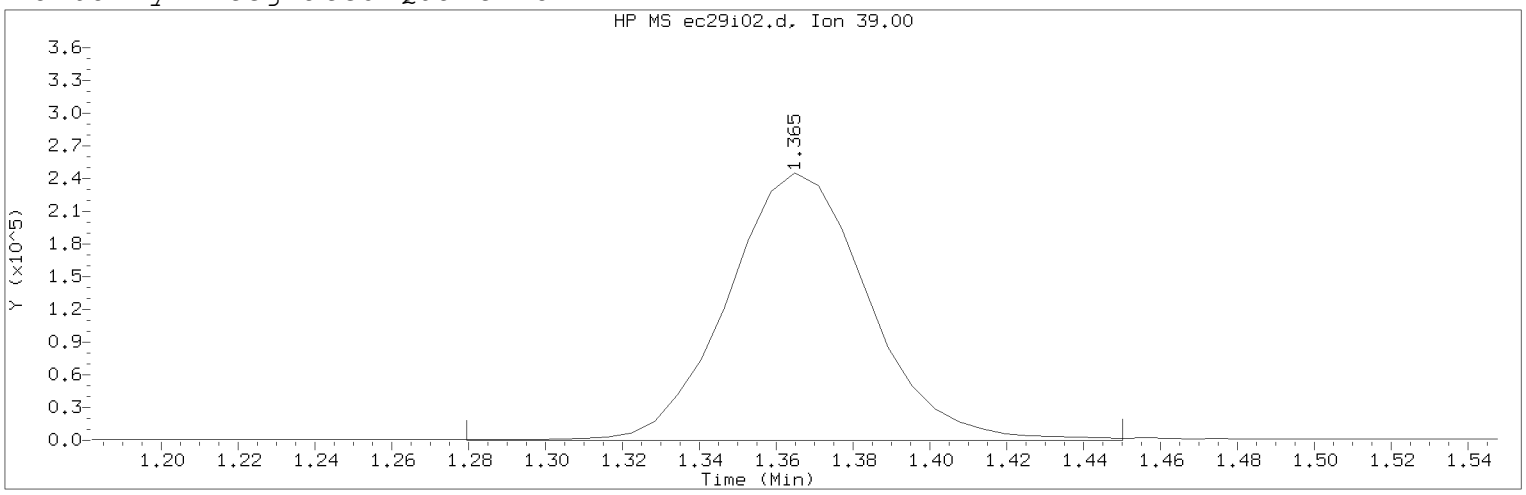
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD100 Lab Sample ID: VSTD100

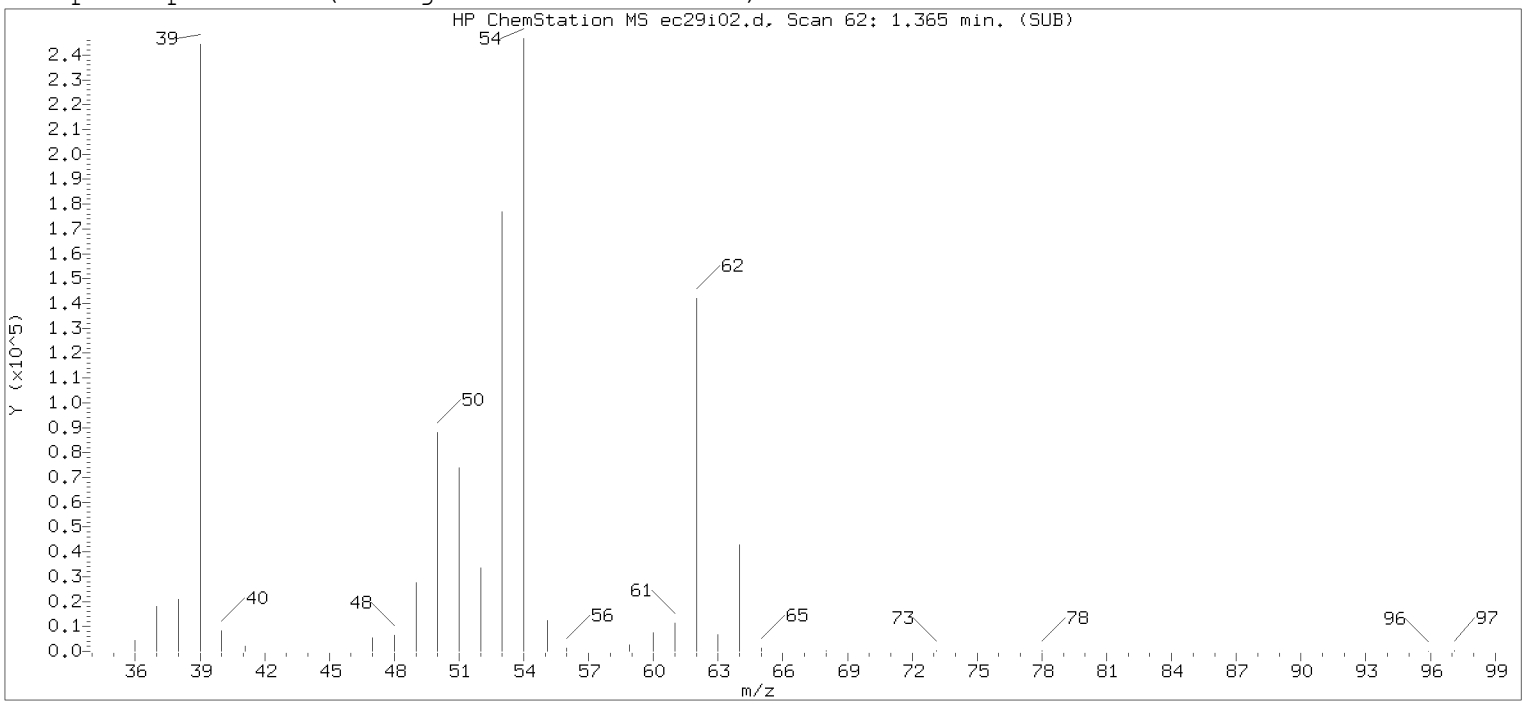
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 62
Retention Time (minutes): 1.365
Quant Ion : 39.00
Area (flag) : 621670M
On-Column Amount (ng) : 92.0703
Integration start scan : 47 Integration stop scan: 75
Y at integration start : 207 Y at integration end: 207

Reason for manual integration: improper integration

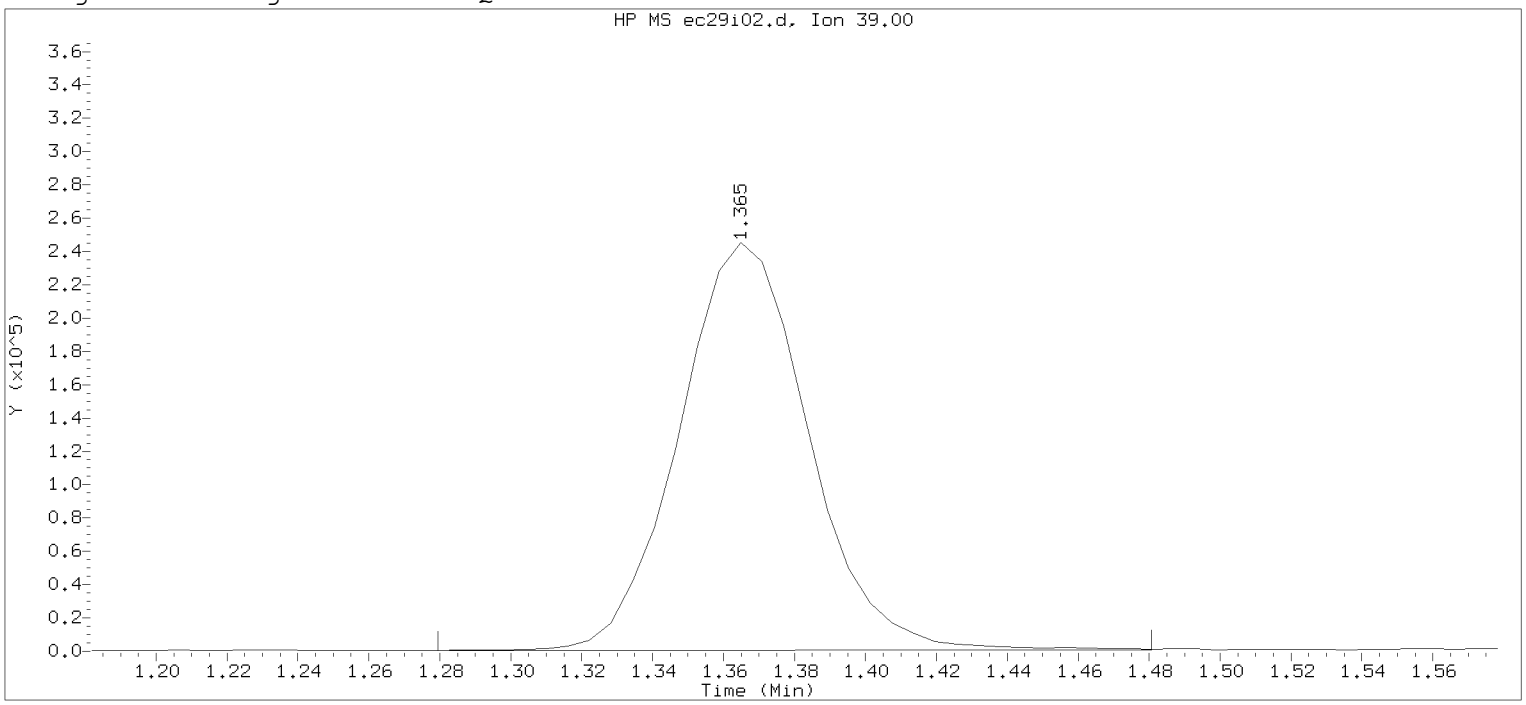
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

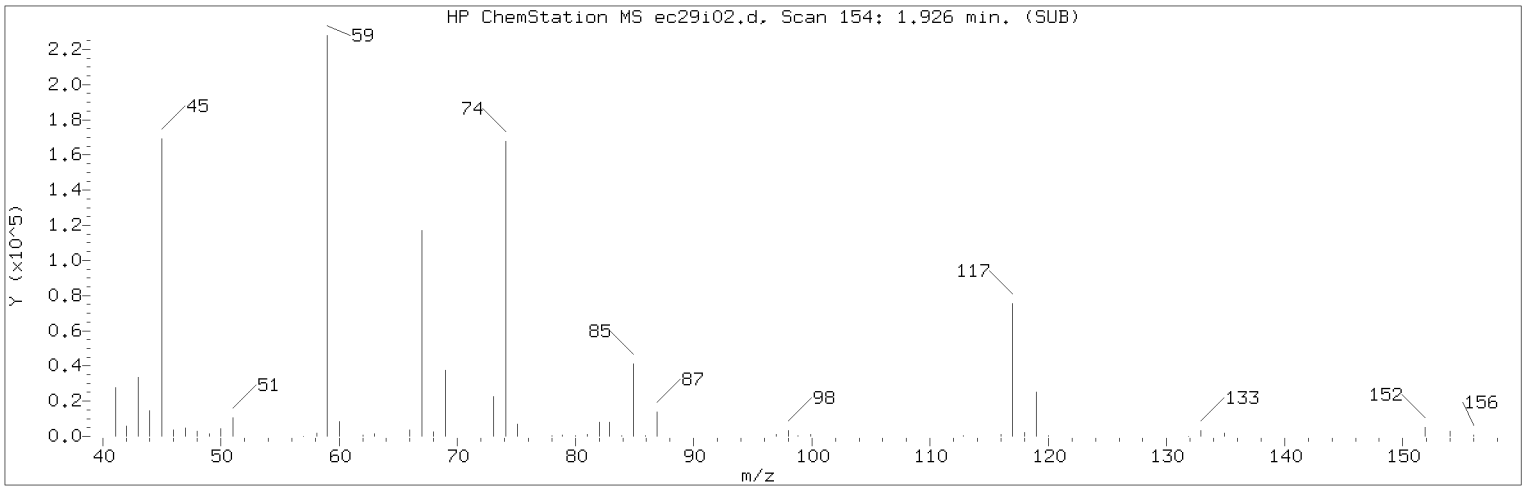
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:15
Date, time and analyst ID of latest file update: 29-Oct-2018 21:15 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

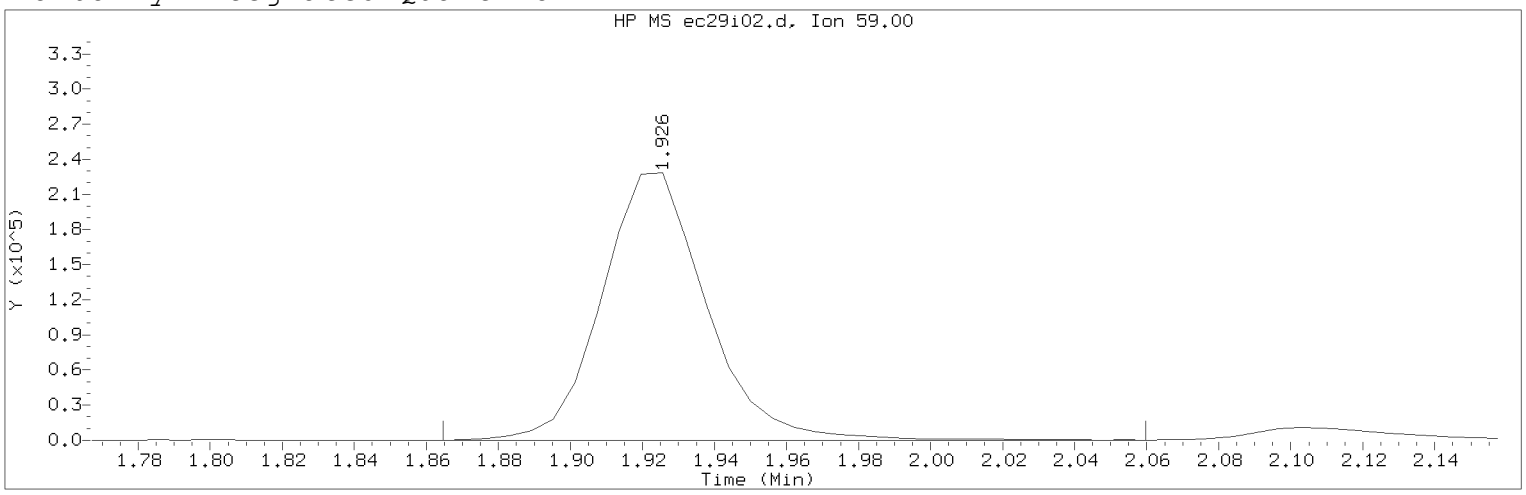
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 62
Retention Time (minutes): 1.365
Quant Ion : 39.00
Area : 619730
On-column Amount (ng) : 99.8720
Integration start scan : 47 Integration stop scan: 80
Y at integration start : 220 Y at integration end: 912

Digitally signed by Don V. Viray on 10/29/2018 at 23:44.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD100 Lab Sample ID: VSTD100

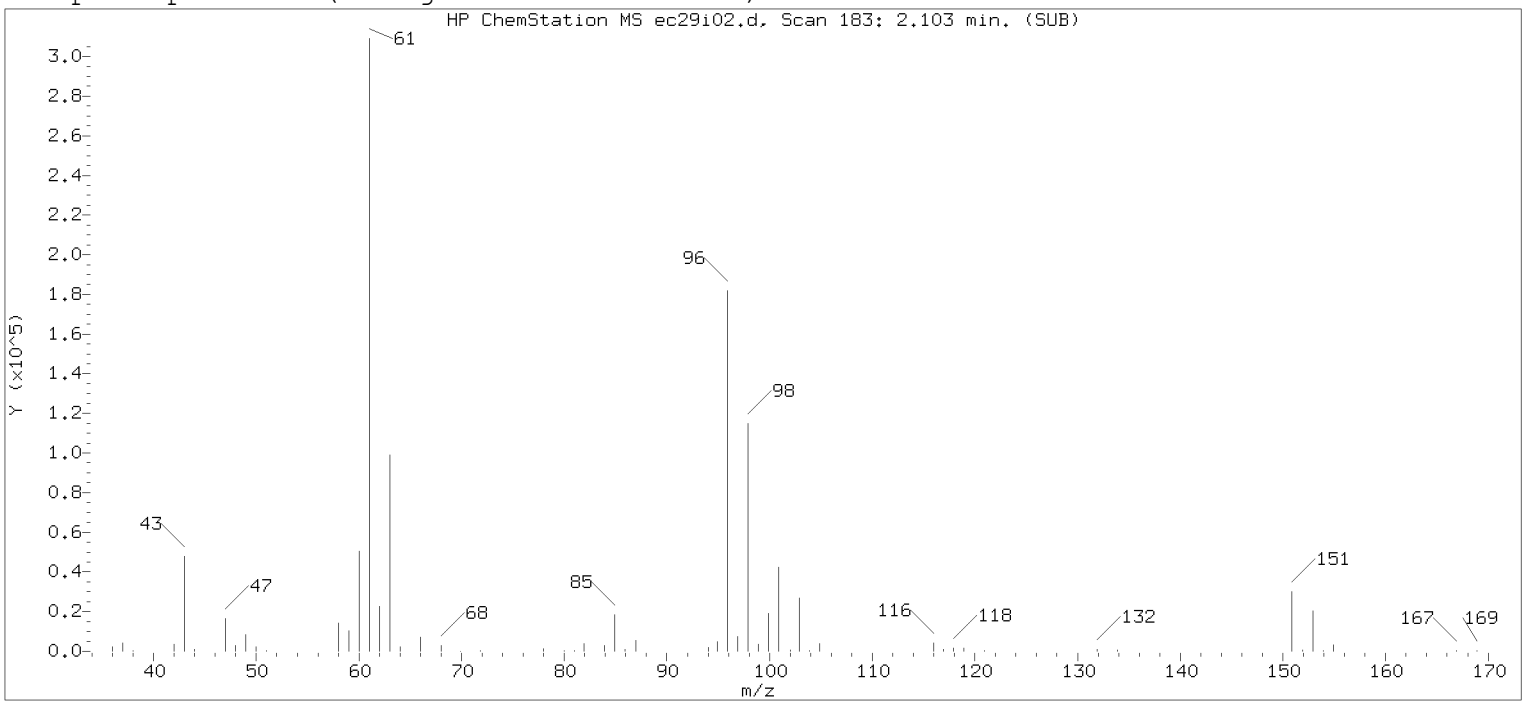
Compound Number : 14
Compound Name : Ethyl ether
Scan Number : 154
Retention Time (minutes): 1.926
Quant Ion : 59.00
Area (flag) : 462224A
On-Column Amount (ng) : 102.4275
Integration start scan : 143 Integration stop scan: 175
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

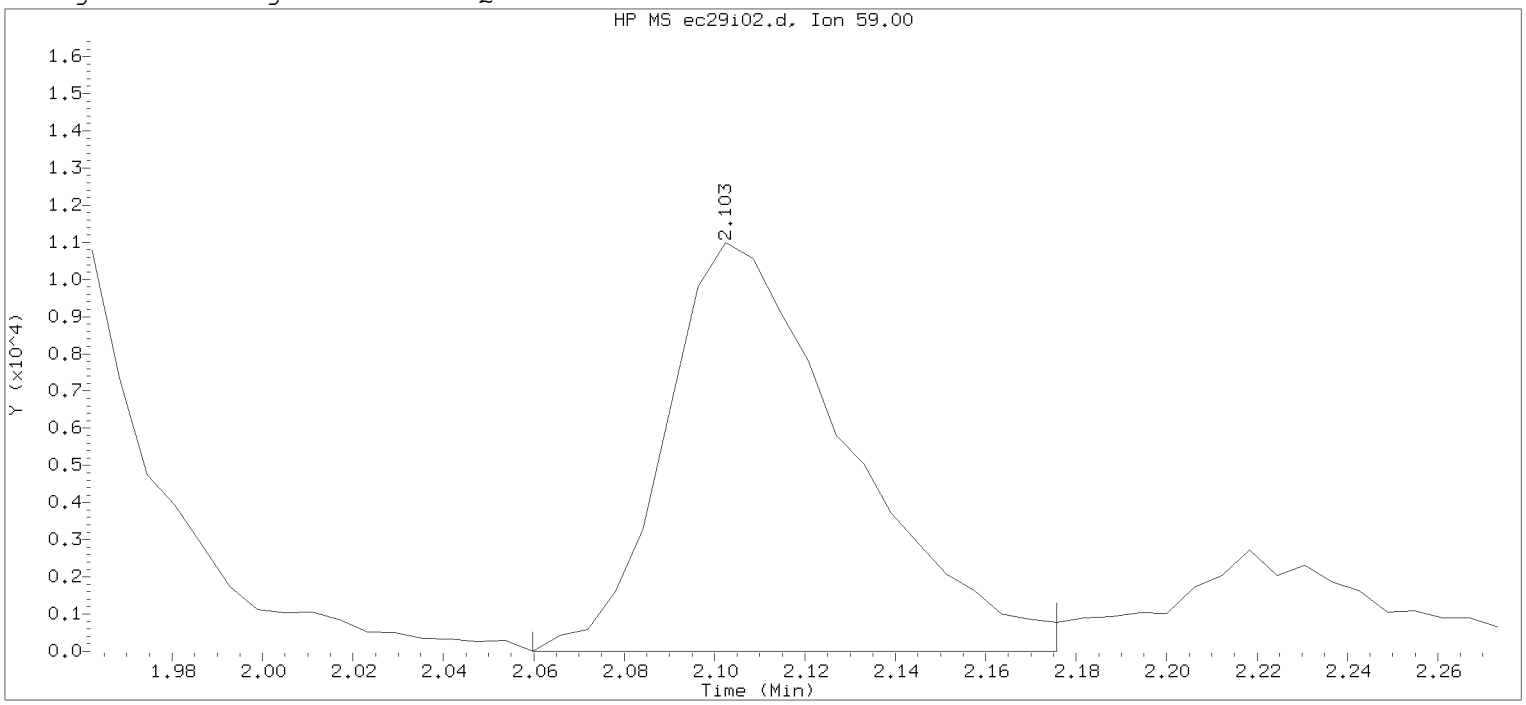
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

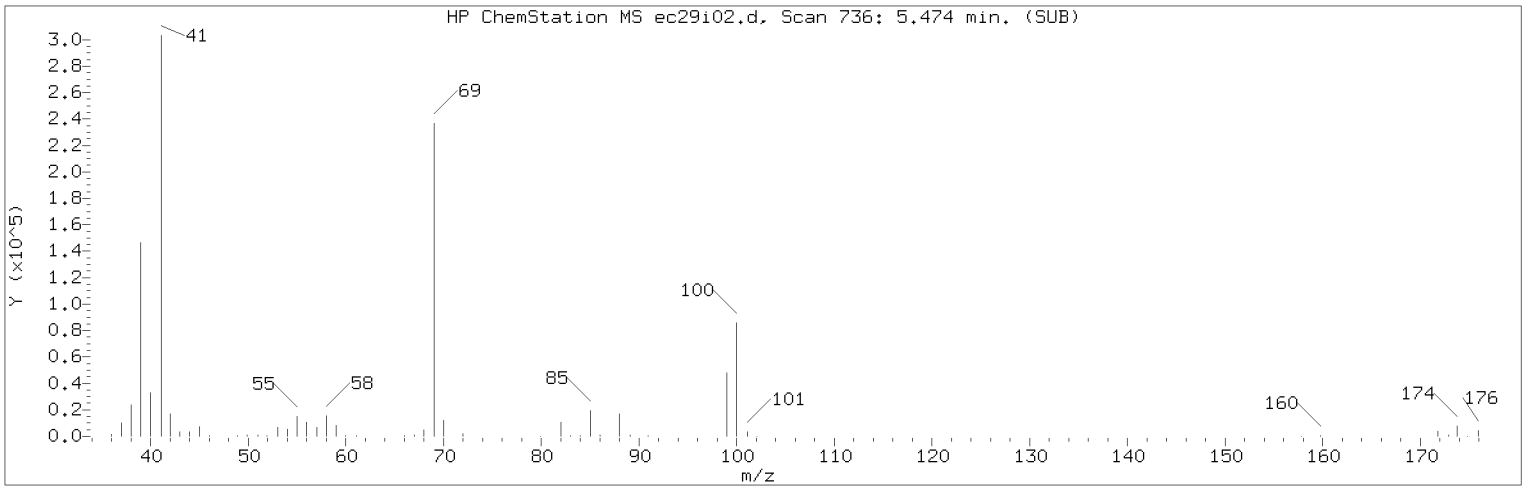
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:15
Date, time and analyst ID of latest file update: 29-Oct-2018 21:15 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

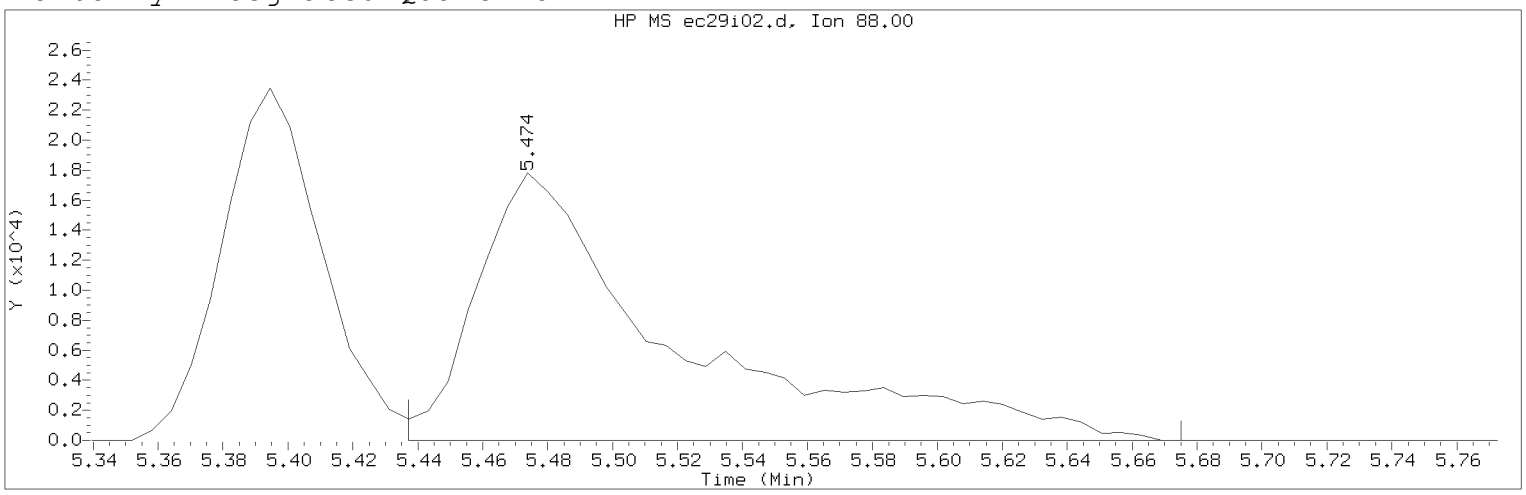
Compound Number : 14
Compound Name : Ethyl ether
Scan Number : 183
Retention Time (minutes): 2.103
Quant Ion : 59.00
Area : 30790
On-column Amount (ng) : 102.6736
Integration start scan : 175 Integration stop scan: 194
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:44.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD100 Lab Sample ID: VSTD100

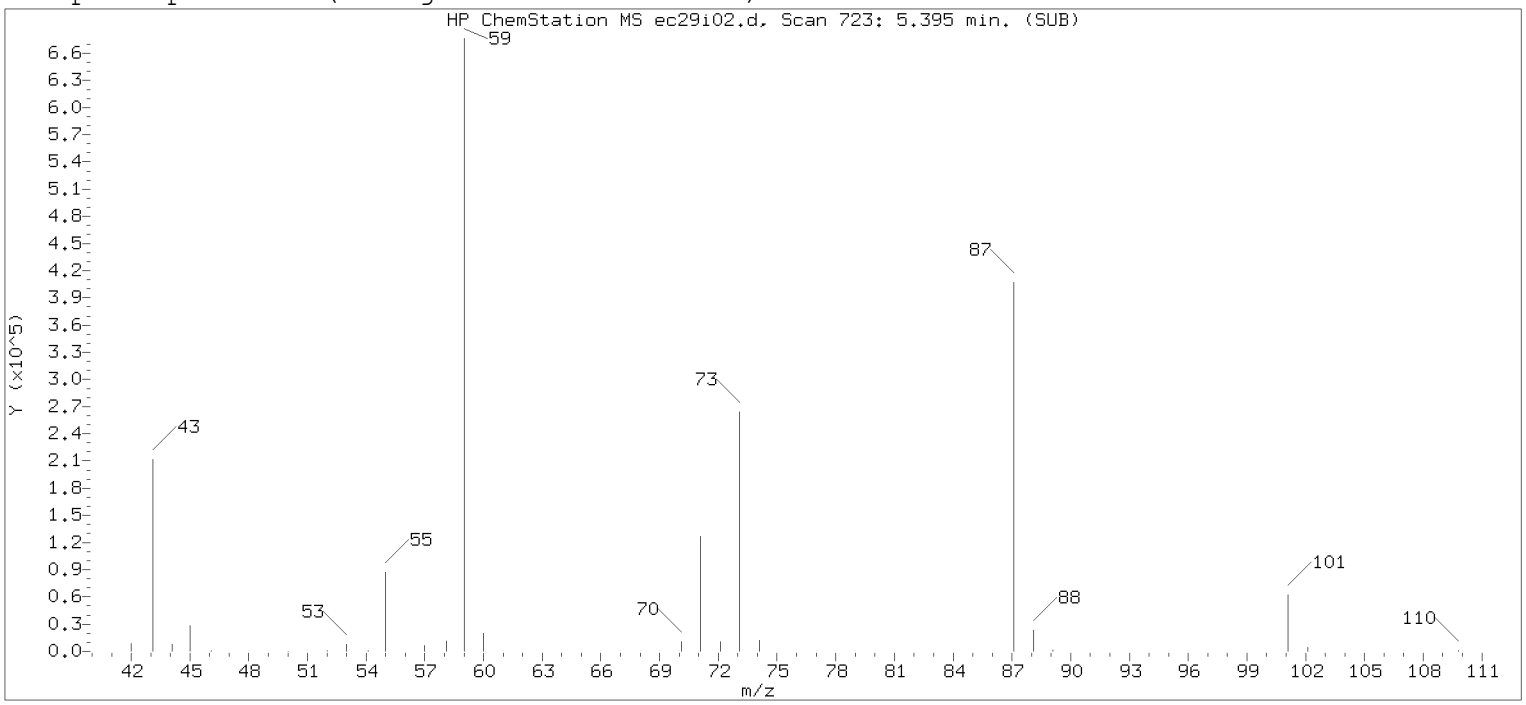
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 736
Retention Time (minutes): 5.474
Quant Ion : 88.00
Area (flag) : 75679M
On-Column Amount (ng) : 1472.9293
Integration start scan : 729 Integration stop scan: 768
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

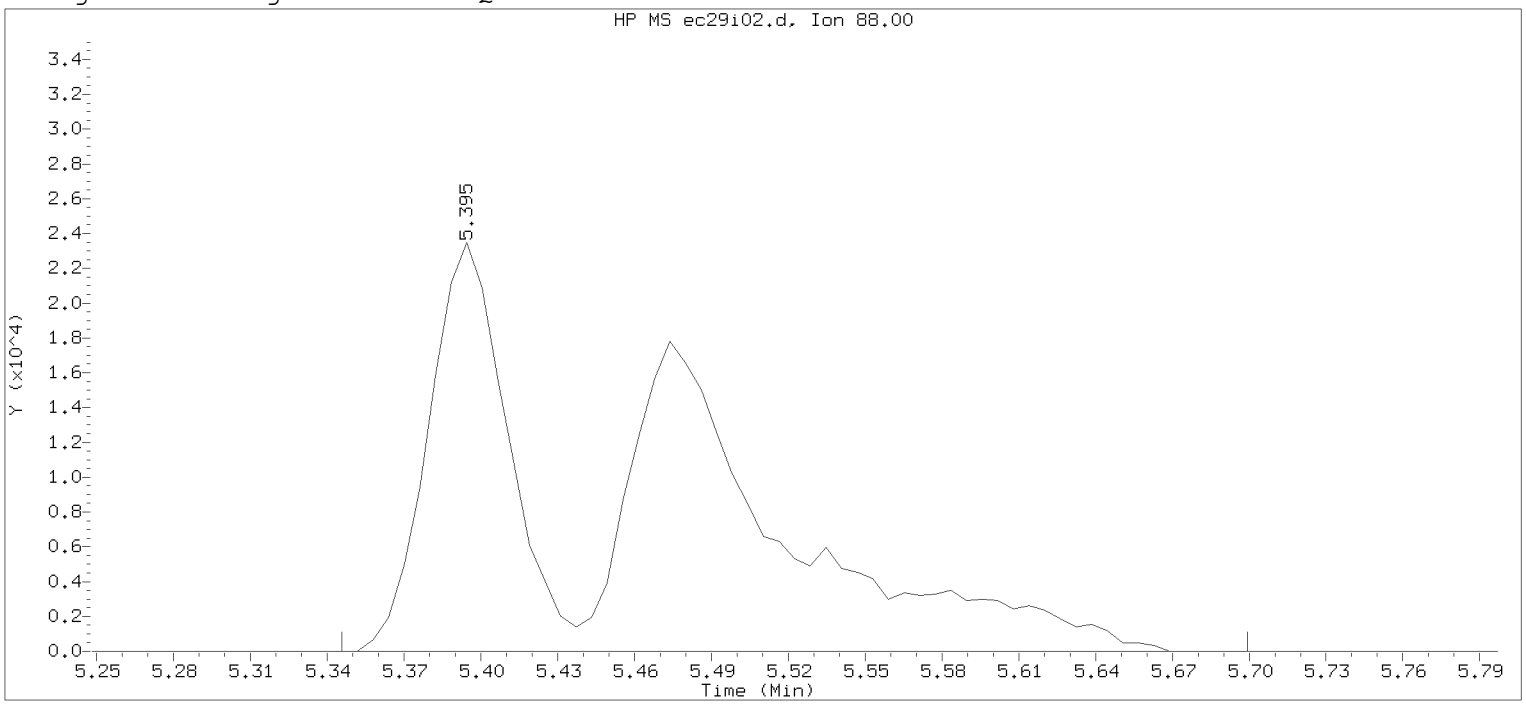
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

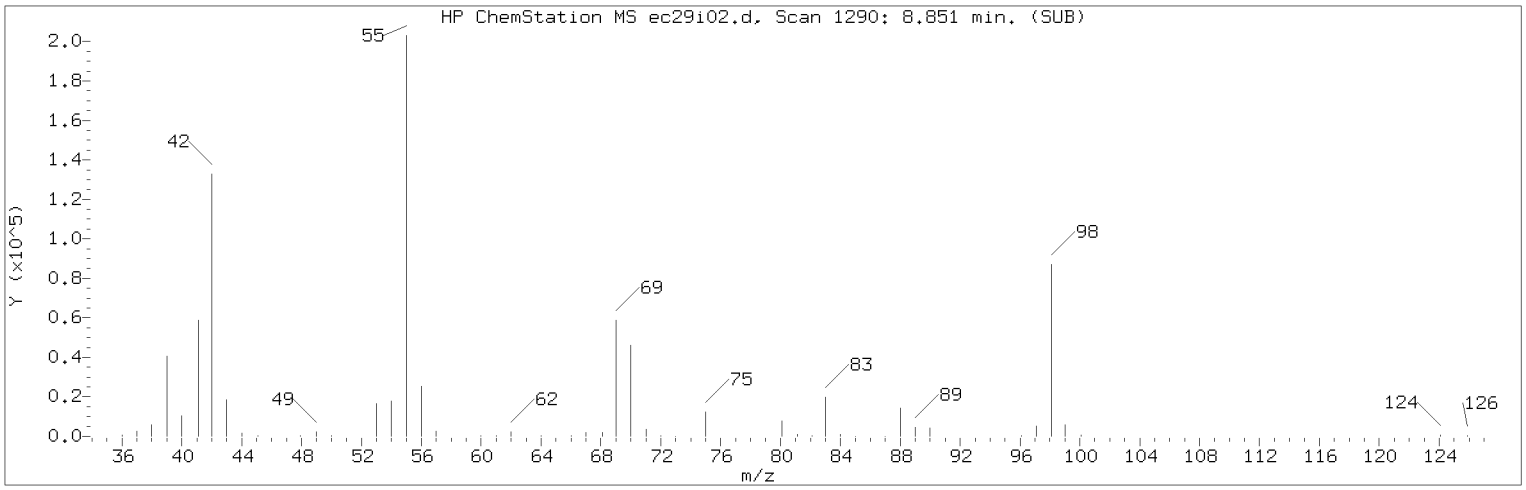
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:15
Date, time and analyst ID of latest file update: 29-Oct-2018 21:15 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

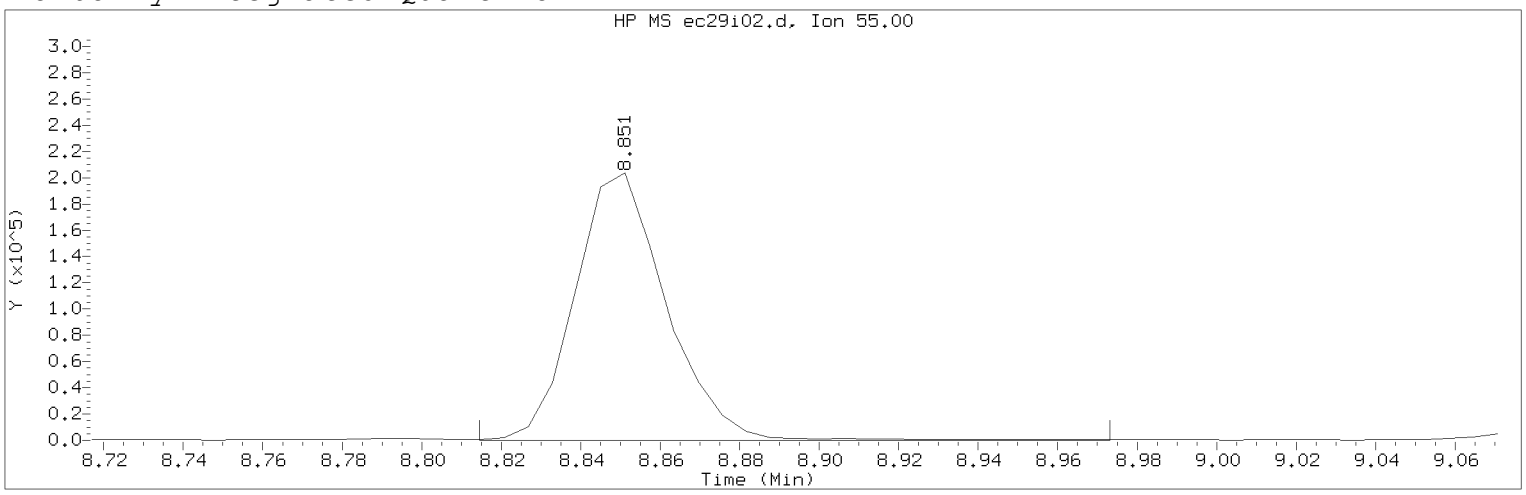
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 723
Retention Time (minutes): 5.395
Quant Ion : 88.00
Area : 125818
On-column Amount (ng) : 1282.0792
Integration start scan : 714 Integration stop scan: 772
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:44.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD100 Lab Sample ID: VSTD100

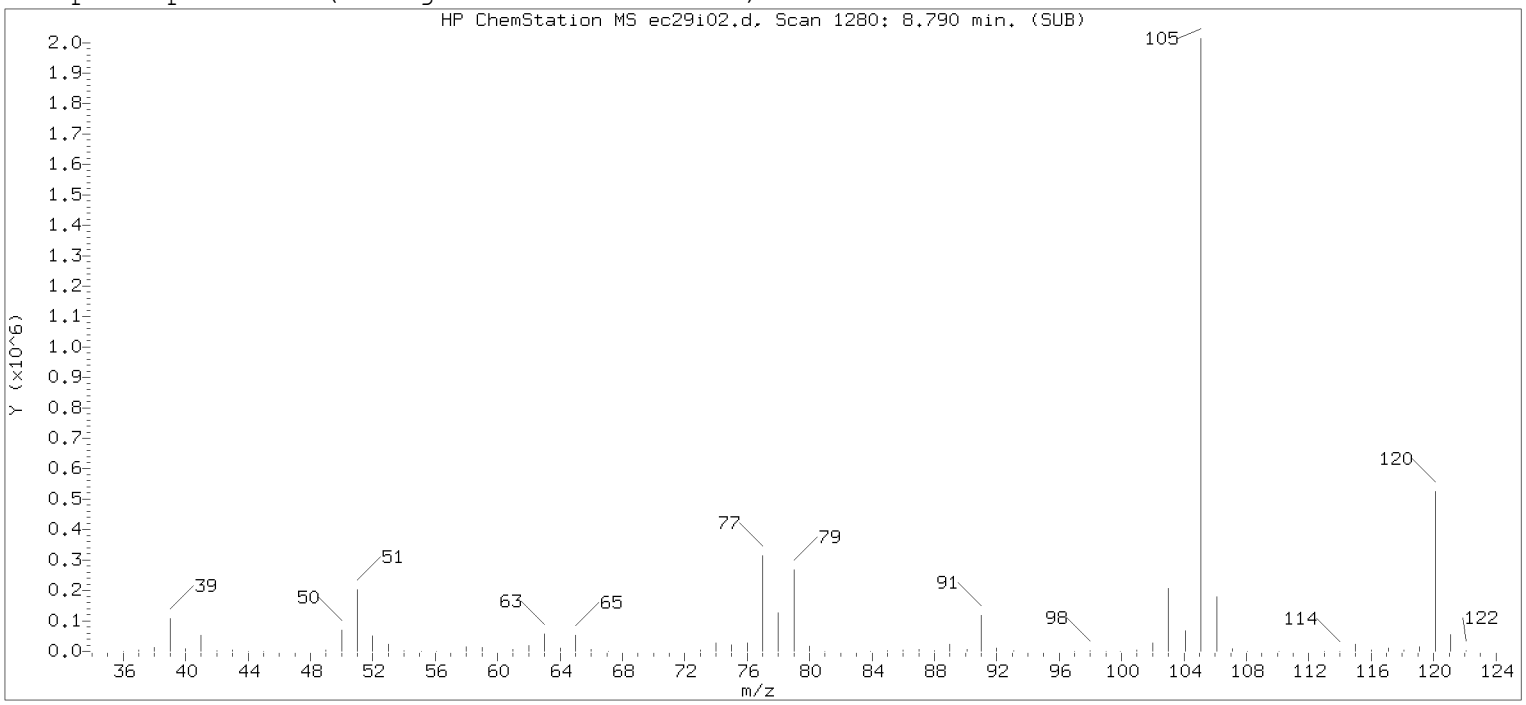
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1290
Retention Time (minutes): 8.851
Quant Ion : 55.00
Area (flag) : 324391A
On-Column Amount (ng) : 1253.0597
Integration start scan : 1283 Integration stop scan: 1309
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

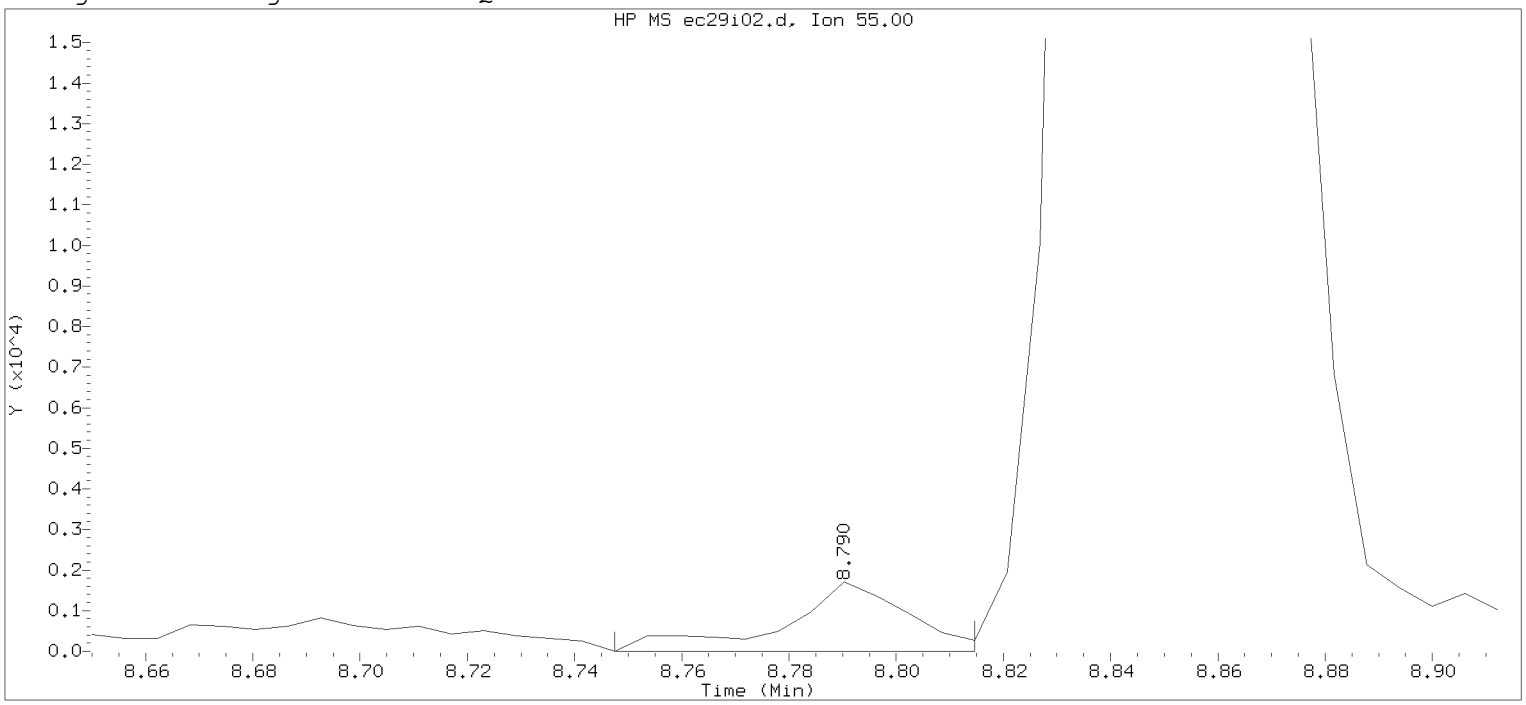
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:44.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



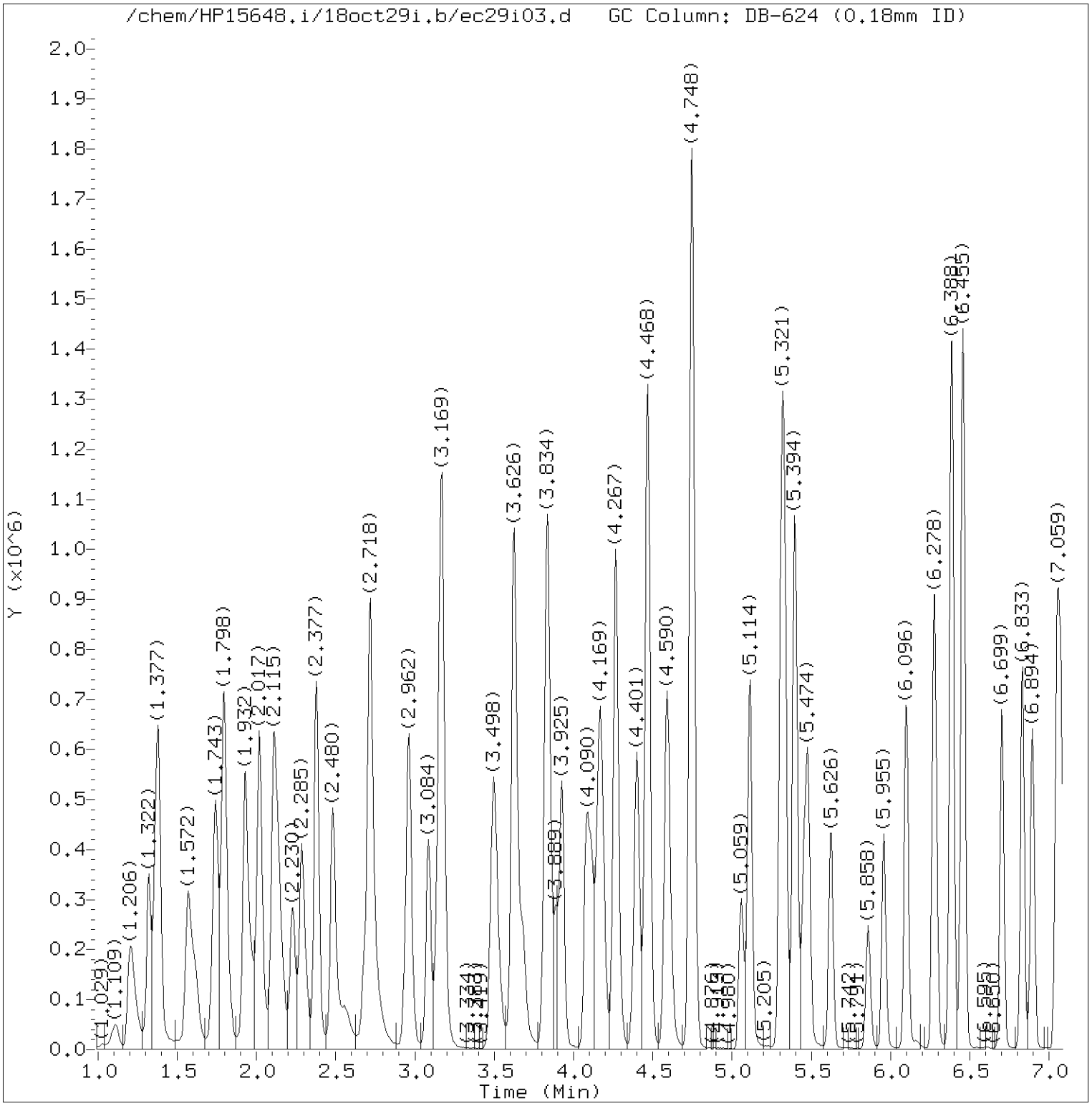
Data File: /chem/HP15648.i/18oct29i.b/ec29i02.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 20:59 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:15
Date, time and analyst ID of latest file update: 29-Oct-2018 21:15 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1280
Retention Time (minutes): 8.790
Quant Ion : 55.00
Area : 2720
On-column Amount (ng) : 1297.3603
Integration start scan : 1272 Integration stop scan: 1283
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:44.
Target 3.5 esignature user id: dviray



Total Ion Chromatogram (TIC)

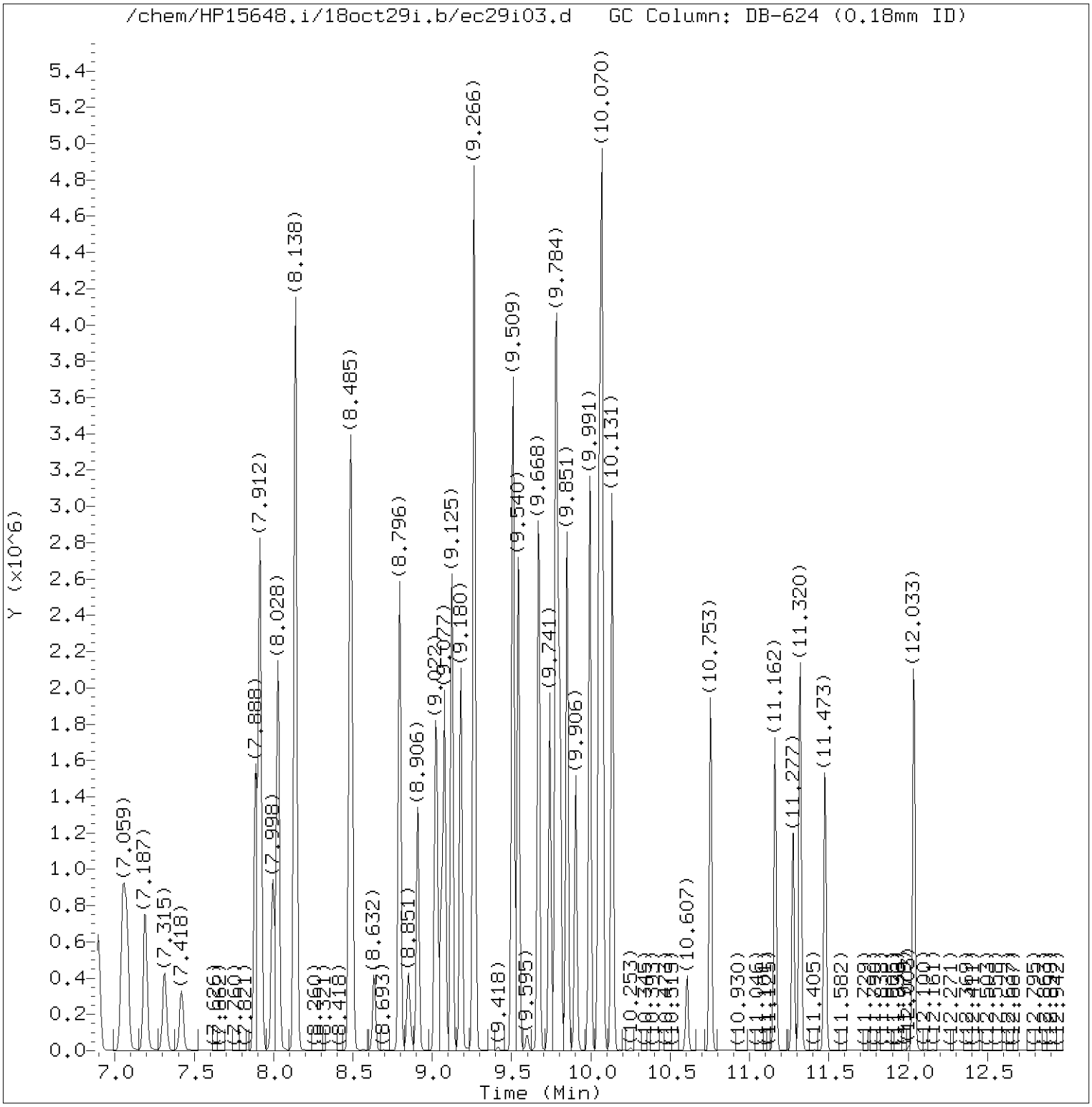
Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.206	85	402094	49.409
4) Chloromethane	(2)	1.322	50	419134M	49.329
5) 1,3-Butadiene	(2)	1.371	39	297868M	44.077
6) Vinyl Chloride	(2)	1.389	62	389541	49.774
8) Bromomethane	(2)	1.572	94	264088	48.448
9) Chloroethane	(2)	1.609	64	221406	49.277
10) Dichlorofluoromethane	(2)	1.743	67	545183	50.591
11) n-Pentane	(2)	1.798	43	447868	53.049
12) Trichlorofluoromethane	(2)	1.798	101	444859	49.569
14) Ethyl ether	(2)	1.926	59	230100A	50.946
15) Freon 123a	(2)	1.950	67	292875	49.015
16) Acrolein	(1)	2.017	56	719805	510.463
17) 1,1-Dichloroethene	(2)	2.108	96	212427	49.303
17) 1,1-Dichloroethene	(2)	2.108	63	118061	53.373
18) Acetone	(1)	2.127	58	63053	106.815
19) Freon 113	(2)	2.139	101	222048	53.709
21) 2-Propanol	(1)	2.230	45	100594	247.710
22) Methyl Iodide	(2)	2.230	142	373837	50.835
23) Carbon Disulfide	(2)	2.285	76	751381	49.919
25) Allyl Chloride	(2)	2.377	41	466346	48.990
27) Methyl Acetate	(2)	2.383	43	249939	49.130
28) Methylene Chloride	(2)	2.480	84	244026	48.251
29)*t-Butyl alcohol-d10	(1)	2.486	65	183181	250.000
30) t-Butyl alcohol	(1)	2.560	59	174518	251.337
31) Acrylonitrile	(2)	2.682	53	134896	49.616
32) trans-1,2-Dichloroethene	(2)	2.718	96	239890	50.111
33) Methyl Tertiary Butyl Ether	(2)	2.724	73	765534	50.124
34) n-Hexane	(2)	2.962	57	441655	53.266
36) 1,1-Dichloroethane	(2)	3.084	63	484460	51.383
38) di-Isopropyl ether	(2)	3.157	45	892088	50.768
39) 2-Chloro-1,3-butadiene	(2)	3.169	53	447988	50.171
40) Ethyl t-butyl ether	(2)	3.498	59	837634	50.993
42) cis-1,2-Dichloroethene	(2)	3.620	96	267666	50.448
44) 2-Butanone	(2)	3.633	43	337223	98.104
45) 2,2-Dichloropropane	(2)	3.633	77	398153	49.987
47) Propionitrile	(1)	3.681	54	252241	256.364
48) Methacrylonitrile	(2)	3.828	67	355134	127.213
49) Bromochloromethane	(2)	3.846	128	126764	49.437

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	3.889	71	88570	106.238
51) Chloroform	(2)	3.925	83	422390	50.782
52)$Dibromofluoromethane	(2)	4.078	113	233742	48.833
52)$Dibromofluoromethane	(2)	4.078	111	241188	48.900
53) 1,1,1-Trichloroethane	(2)	4.114	97	374447	49.265
54) Cyclohexane	(2)	4.169	56	510401	53.735
54) Cyclohexane	(2)	4.169	84	418568	53.105
54) Cyclohexane	(2)	4.169	69	153122	53.209
55) 1,1-Dichloropropene	(2)	4.267	75	373938	50.501
56) Carbon Tetrachloride	(2)	4.273	117	322365	51.479
58) Isobutyl Alcohol	(1)	4.389	41	145512	595.193
57)$1,2-Dichloroethane-d4	(2)	4.401	102	63715	48.953
57)$1,2-Dichloroethane-d4	(2)	4.401	65	306769	48.551
57)$1,2-Dichloroethane-d4	(2)	4.401	104	40584	49.007
60) Benzene	(2)	4.462	78	1091482	50.819
61) 1,2-Dichloroethane	(2)	4.474	62	325637	47.685
61) 1,2-Dichloroethane	(2)	4.480	98	31228	42.329
65) t-Amyl methyl ether	(2)	4.590	73	787274	50.205
66)*Fluorobenzene	(2)	4.742	96	1092690	50.000
67) n-Heptane	(2)	4.754	43	496674	48.462
69) n-Butanol	(1)	5.059	56	260150	1282.162
71) Trichloroethene	(2)	5.114	95	262458	50.300
73) Methylcyclohexane	(2)	5.315	83	535047	52.089
73) Methylcyclohexane	(2)	5.315	98	239188	51.602
74) 1,2-Dichloropropane	(2)	5.333	63	288584	50.165
75) Dibromomethane	(2)	5.449	93	148325	50.141
77) Methyl Methacrylate	(2)	5.480	69	238905	50.126
76) 1,4-Dioxane	(1)	5.486	88	34179M	702.458
79) Bromodichloromethane	(2)	5.626	83	316403	49.676
80) 2-Nitropropane	(2)	5.858	41	173288	96.532
81) 2-Chloroethyl Vinyl Ether	(2)	5.955	63	208222	51.807
82) cis-1,3-Dichloropropene	(2)	6.096	75	447362	50.760
43) 1,2-Dichloroethene (Total)	(2)		96	507556	100.558
83) 4-Methyl-2-pentanone	(2)	6.272	43	730306	100.990
84)$Toluene-d8	(3)	6.388	98	1080432	50.401
84)$Toluene-d8	(3)	6.388	100	690424	50.119
89) Toluene	(3)	6.455	92	677476	51.955
90) trans-1,3-Dichloropropene	(3)	6.699	75	410394	51.391

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$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
92) Ethyl Methacrylate	(3)	6.833	69	431226	50.972
93) 1,1,2-Trichloroethane	(3)	6.894	97	218631	51.011
94) Tetrachloroethene	(3)	7.053	166	261281	53.732
95) 1,3-Dichloropropane	(3)	7.077	76	410700	51.342
97) 2-Hexanone	(3)	7.193	43	529572	103.993
102) 1-Chlorohexane	(3)	7.309	91	20990	53.519
98) Dibromochloromethane	(3)	7.315	129	232984	51.226
100) 1,2-Dibromoethane	(3)	7.418	107	226573	51.022
101)*Chlorobenzene-d5	(3)	7.888	117	764465	50.000
103) Chlorobenzene	(3)	7.912	112	722957	51.772
104) 1,1,1,2-Tetrachloroethane	(3)	7.998	131	238008	51.679
105) Ethylbenzene	(3)	8.028	91	1338224	52.147
107) m+p-Xylene	(3)	8.138	106	1034085	105.490
108) o-Xylene	(3)	8.479	106	503024	52.419
110) Styrene	(3)	8.491	104	837725	52.253
111) Bromoform	(3)	8.632	173	156393	52.810
112) Isopropylbenzene	(3)	8.796	105	1345430	53.302
113) Cyclohexanone	(1)	8.851	55	150486A	613.838
115)$4-Bromofluorobenzene	(3)	8.906	95	396056	49.638
115)$4-Bromofluorobenzene	(3)	8.912	174	283213	49.867
116) Bromobenzene	(4)	9.022	156	279616	52.203
117) 1,1,2,2-Tetrachloroethane	(4)	9.028	83	347458	51.042
118) 1,2,3-Trichloropropane	(4)	9.058	110	96535	50.306
119) trans-1,4-Dichloro-2-butene	(4)	9.077	53	284158	129.330
120) n-Propylbenzene	(4)	9.125	91	1614422	54.023
121) 2-Chlorotoluene	(4)	9.180	126	300352	53.239
123) 1,3,5-Trimethylbenzene	(4)	9.266	105	1165990	54.027
122) 4-Chlorotoluene	(4)	9.266	126	309208	52.667
125) tert-Butylbenzene	(4)	9.509	134	252880	54.768
126) Pentachloroethane	(4)	9.516	167	182336	52.933
127) 1,2,4-Trimethylbenzene	(4)	9.540	105	1188631	53.447
128) sec-Butylbenzene	(4)	9.668	105	1532956	55.196
130) 1,3-Dichlorobenzene	(4)	9.741	146	569340	52.889
131) p-Isopropyltoluene	(4)	9.778	119	1327578	54.332
132)*1,4-Dichlorobenzene-d4	(4)	9.790	152	397671	50.000
134) 1,4-Dichlorobenzene	(4)	9.808	146	567187	52.210
135) 1,2,3-Trimethylbenzene	(4)	9.851	105	1229309	52.596
136) Benzyl Chloride	(4)	9.906	91	819469	51.269

A = User selected an alternate hit.
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Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

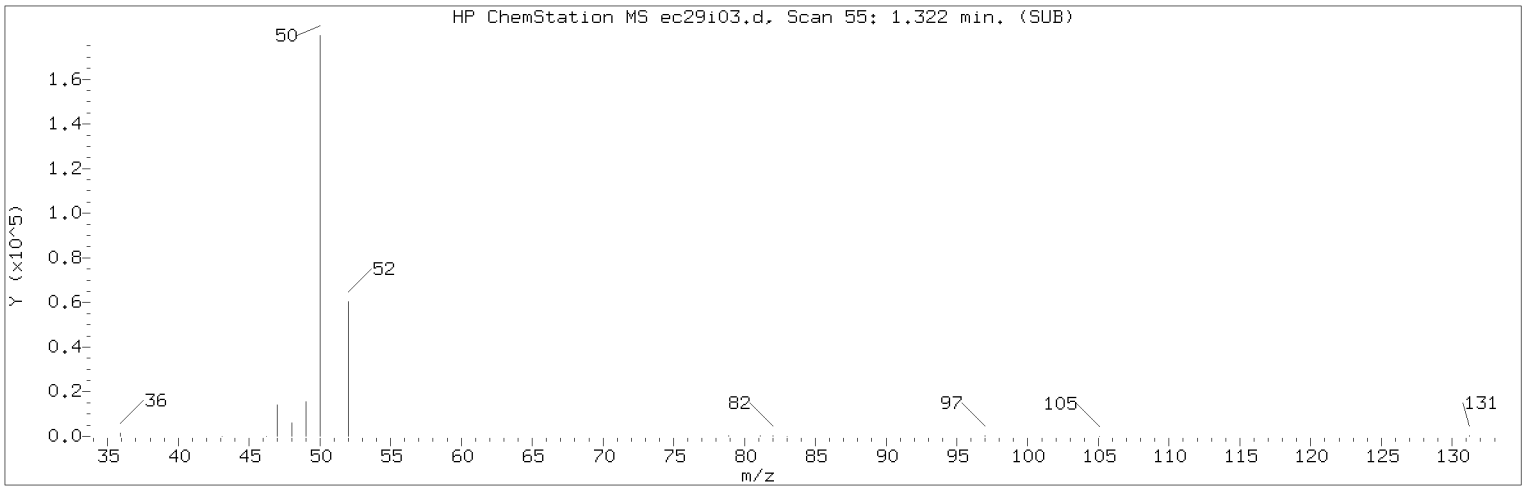
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

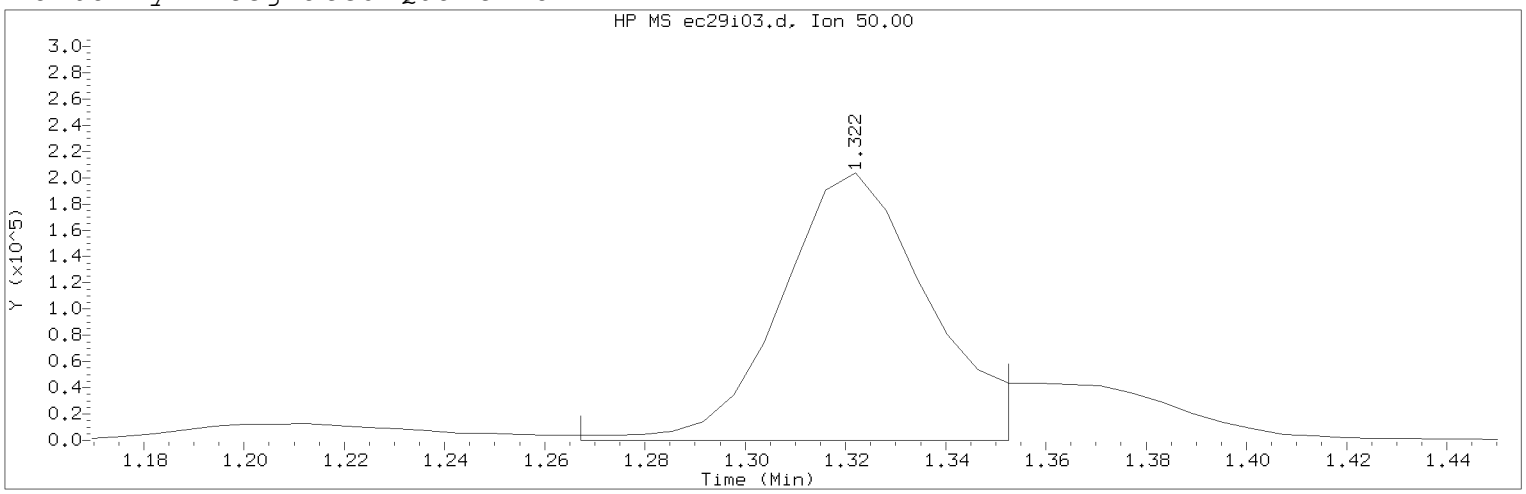
	Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137)	1,3-Diethylbenzene	(4)	9.997	119	801822	52.424
138)	1,4-Diethylbenzene	(4)	10.052	119	844401	51.840
139)	1,2-Dichlorobenzene	(4)	10.070	146	530194	51.891
140)	n-Butylbenzene	(4)	10.070	92	662903	55.076
91)	1,3-Dichloropropene (total)	(3)		100	857756	102.151
141)	1,2-Diethylbenzene	(4)	10.131	119	656307	52.014
143)	1,2-Dibromo-3-chloropropane	(4)	10.607	75	80062	50.939
145)	1,3,5-Trichlorobenzene	(4)	10.753	180	429719	54.194
147)	1,2,4-Trichlorobenzene	(4)	11.162	180	381948	54.357
148)	Hexachlorobutadiene	(4)	11.277	225	172100	54.190
149)	Naphthalene	(4)	11.320	128	1210038	52.625
150)	1,2,3-Trichlorobenzene	(4)	11.479	180	355660	54.304
109)	Xylene (Total)	(3)		106	1537109	157.909
151)	2-Methylnaphthalene	(4)	12.033	142	726613	50.876
142)	Diethylbenzene (total)	(4)		100	2302530	156.278

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

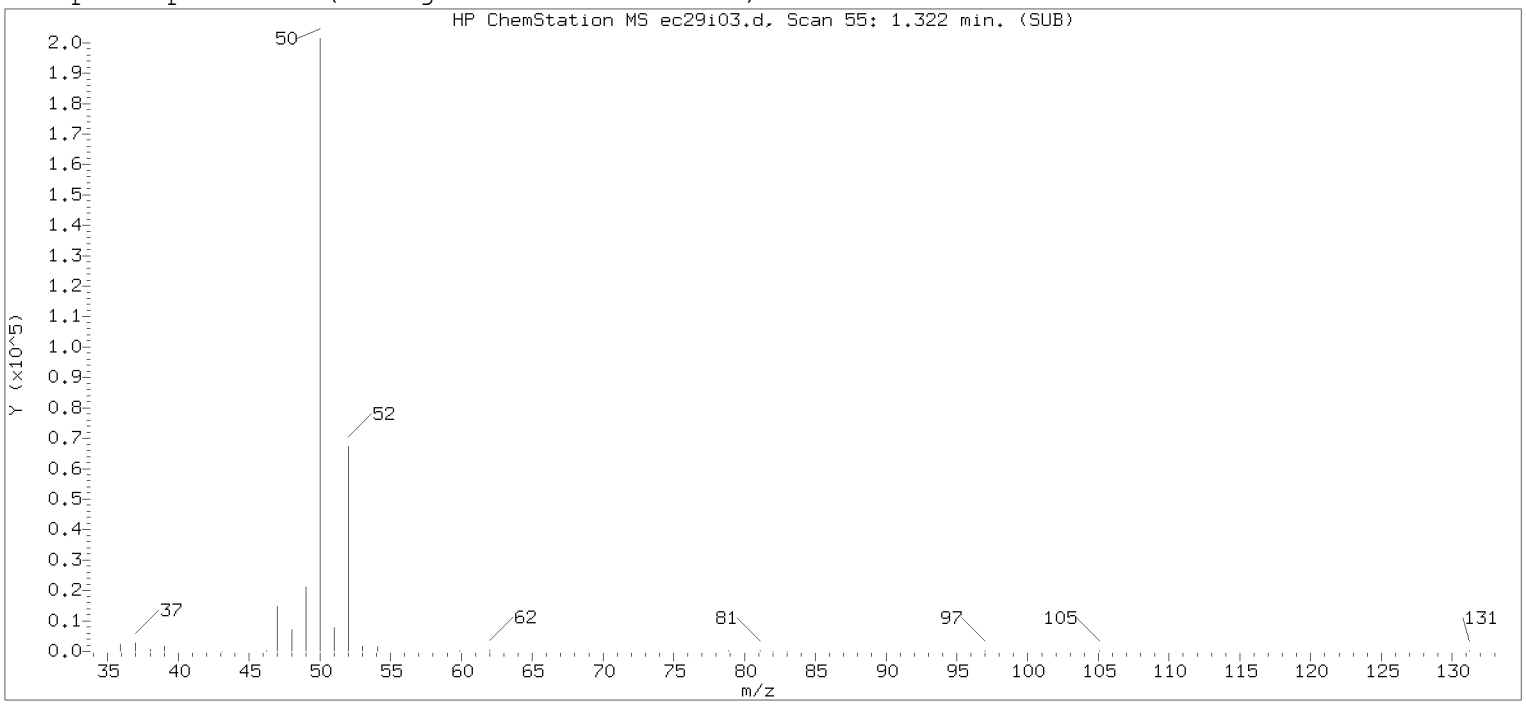
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 55
Retention Time (minutes): 1.322
Quant Ion : 50.00
Area (flag) : 419134M
On-Column Amount (ng) : 49.3285
Integration start scan : 45 Integration stop scan: 59
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

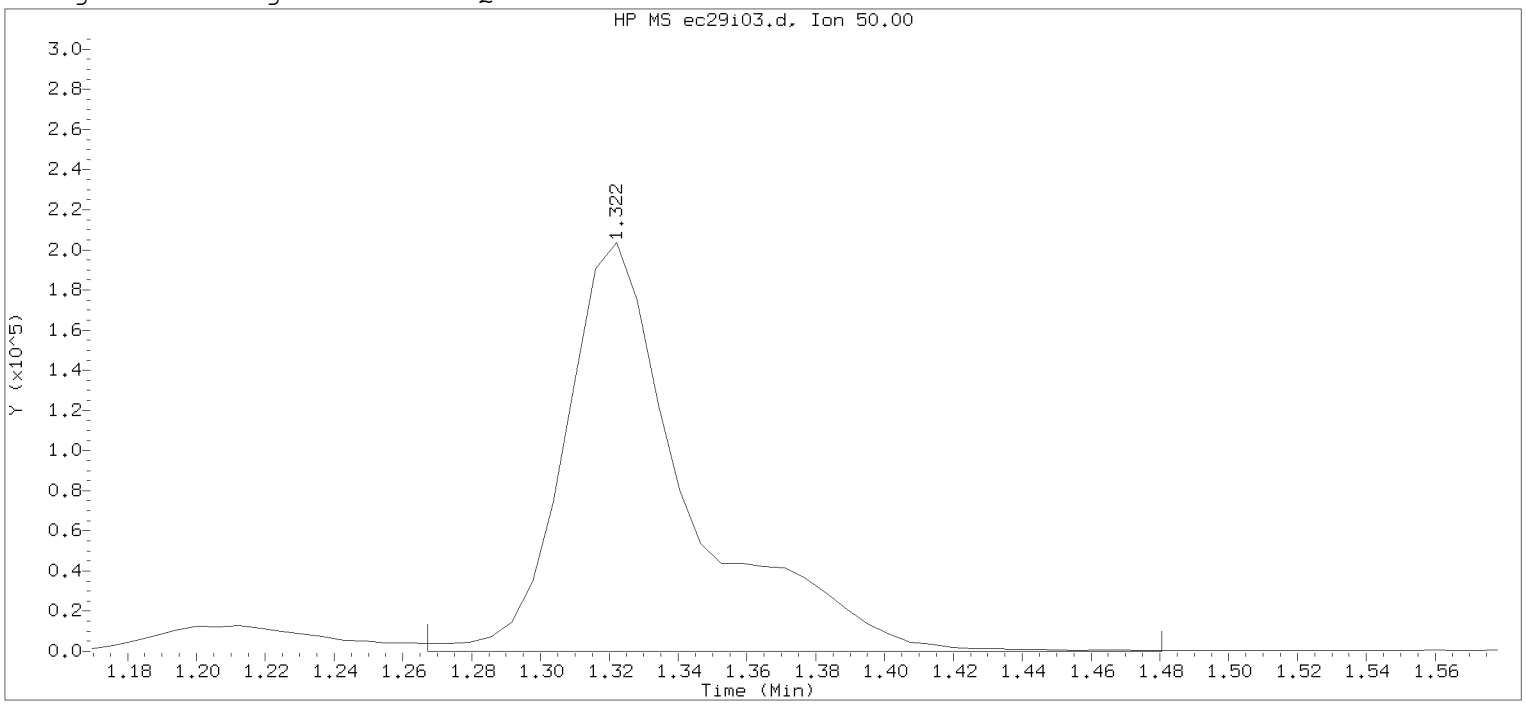
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

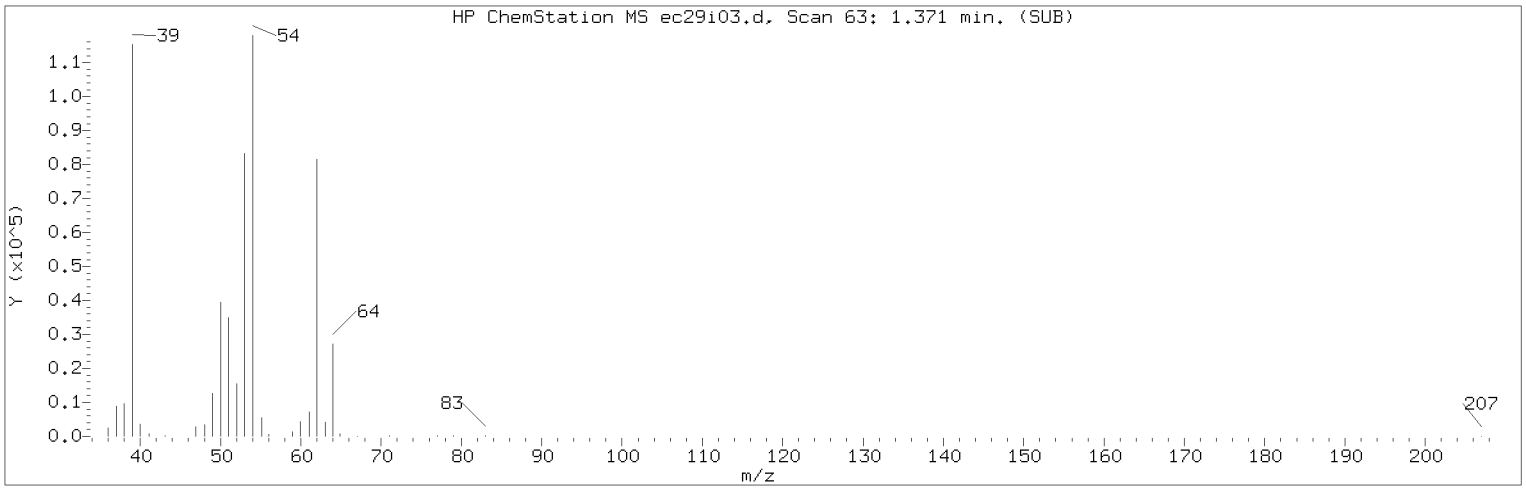
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:36
Date, time and analyst ID of latest file update: 29-Oct-2018 21:36 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

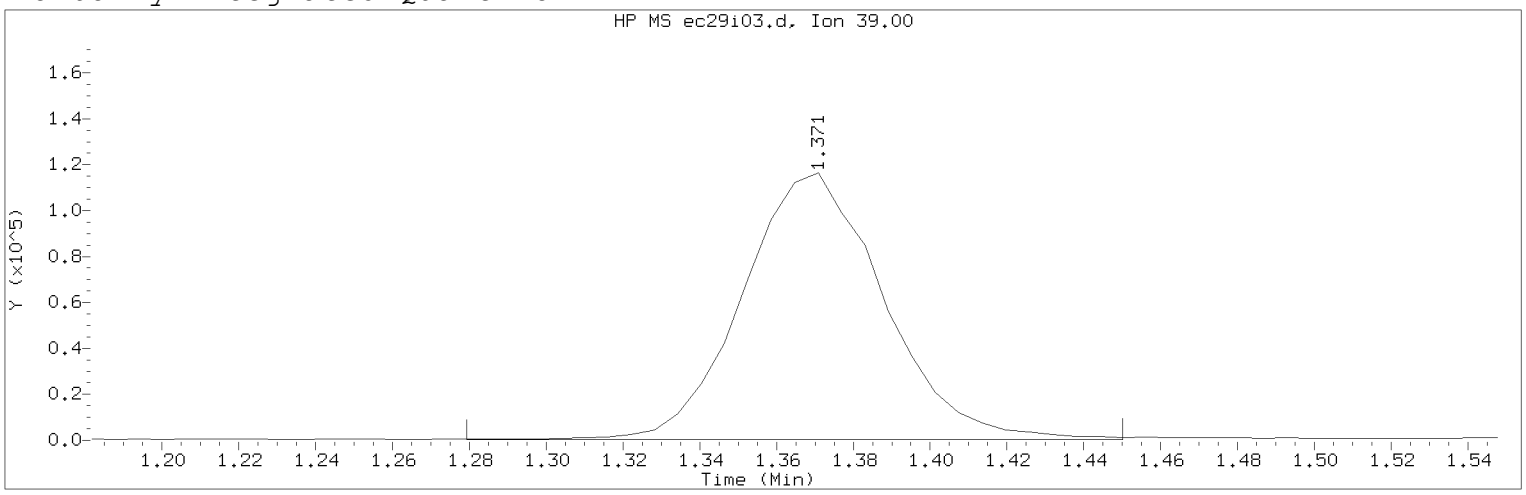
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 55
Retention Time (minutes): 1.322
Quant Ion : 50.00
Area : 511062
On-column Amount (ng) : 54.8951
Integration start scan : 45 Integration stop scan: 80
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

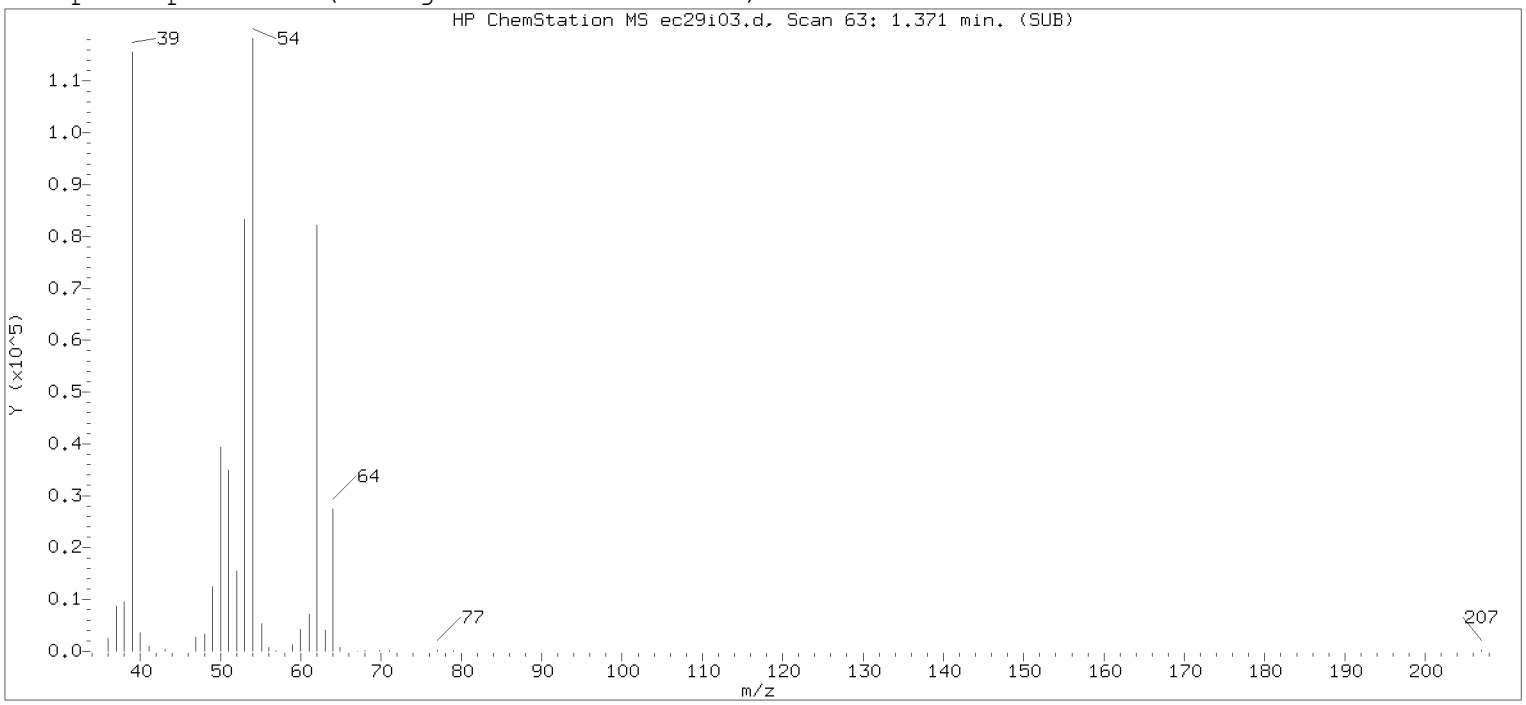
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 63
Retention Time (minutes): 1.371
Quant Ion : 39.00
Area (flag) : 297868M
On-Column Amount (ng) : 44.0770
Integration start scan : 47 Integration stop scan: 75
Y at integration start : 158 Y at integration end: 158

Reason for manual integration: improper integration

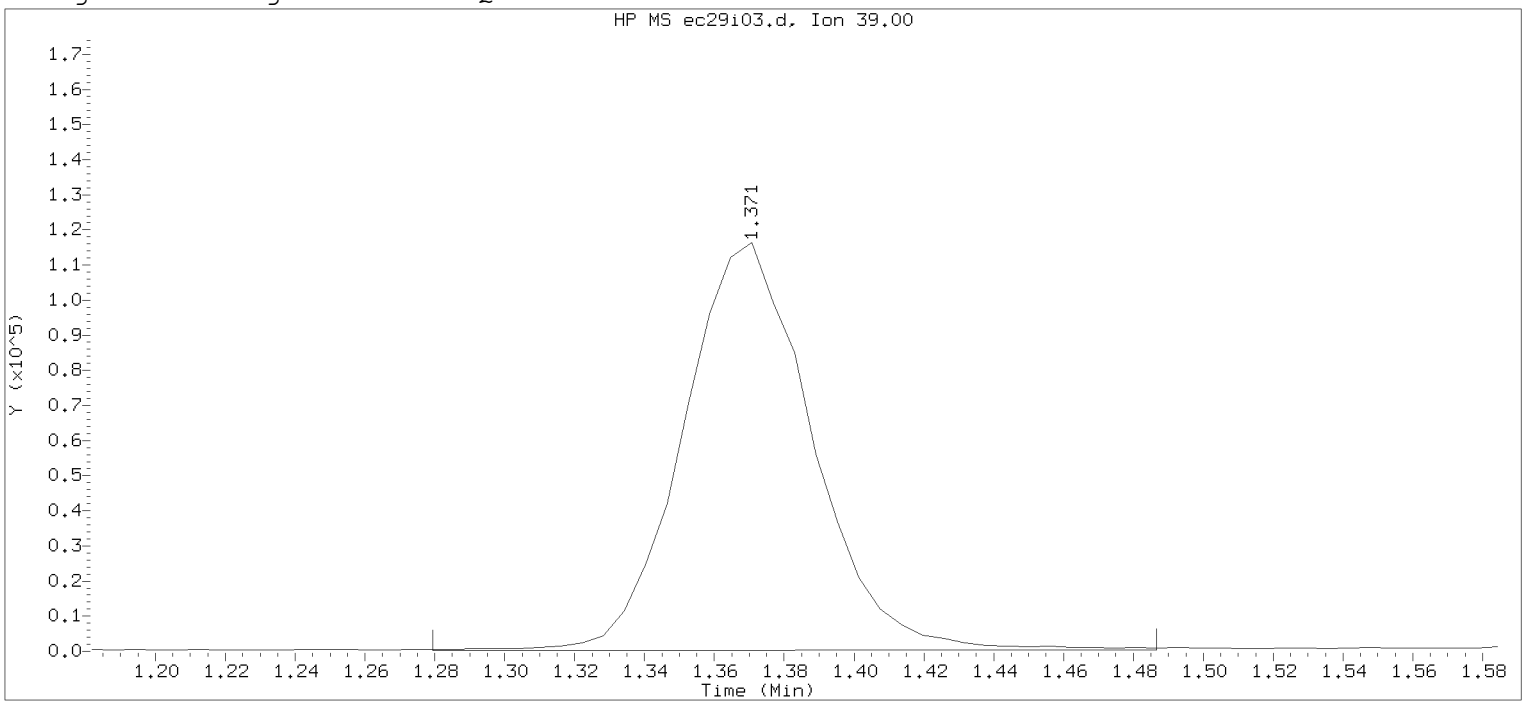
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

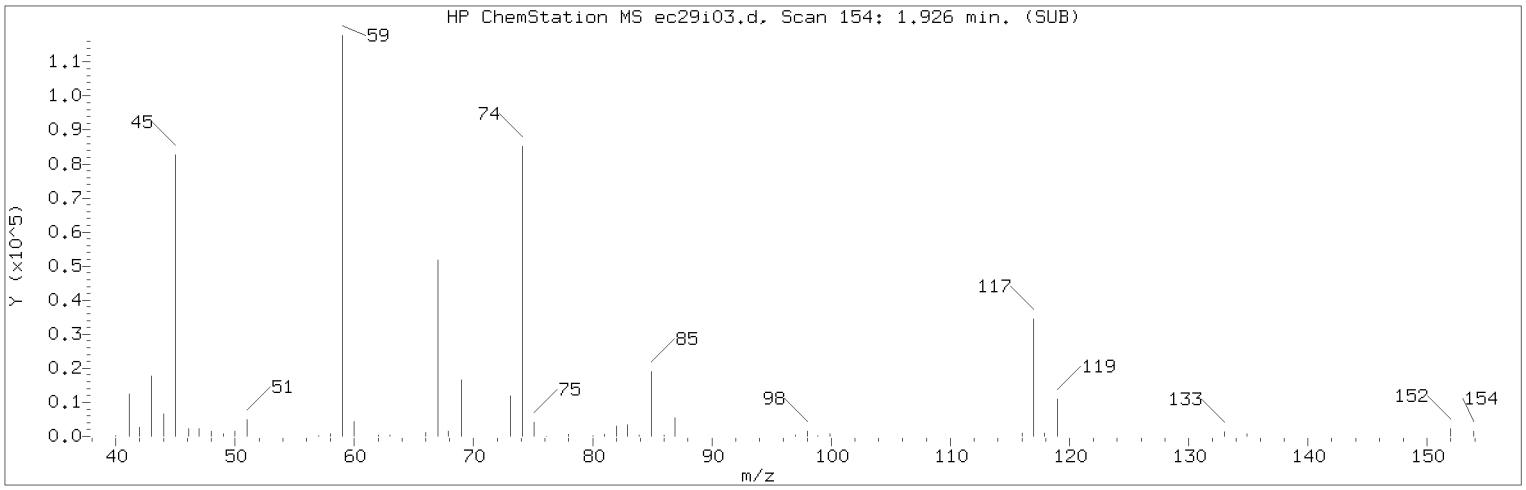
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:36
Date, time and analyst ID of latest file update: 29-Oct-2018 21:36 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

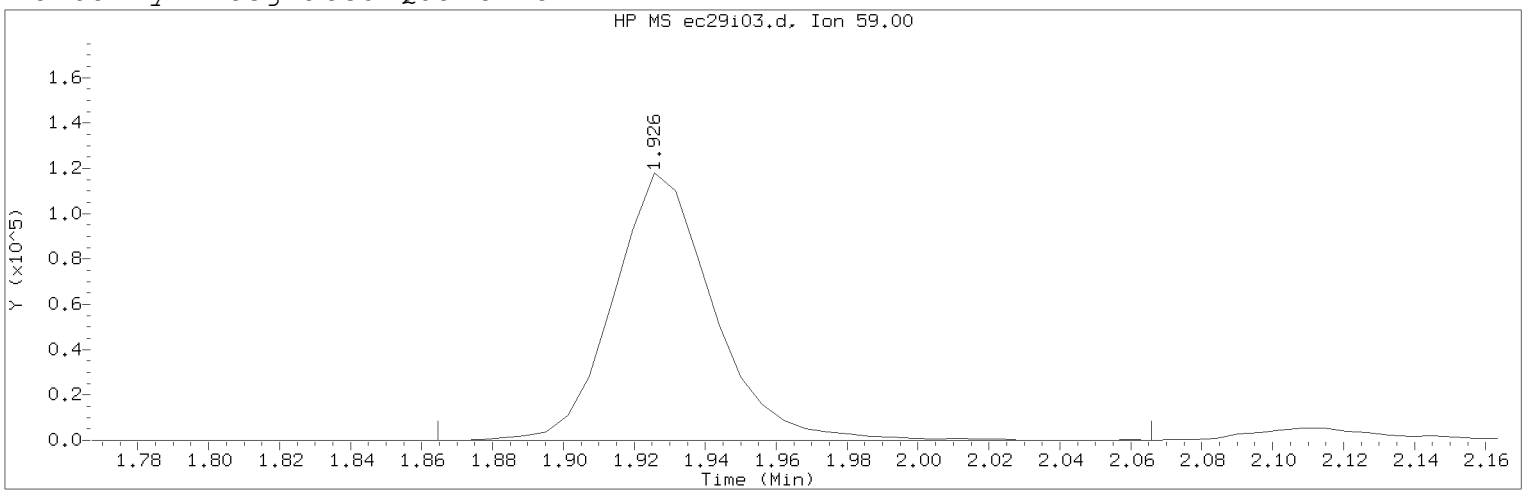
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 63
Retention Time (minutes): 1.371
Quant Ion : 39.00
Area : 297692
On-column Amount (ng) : 48.6030
Integration start scan : 47 Integration stop scan: 81
Y at integration start : 201 Y at integration end: 453

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

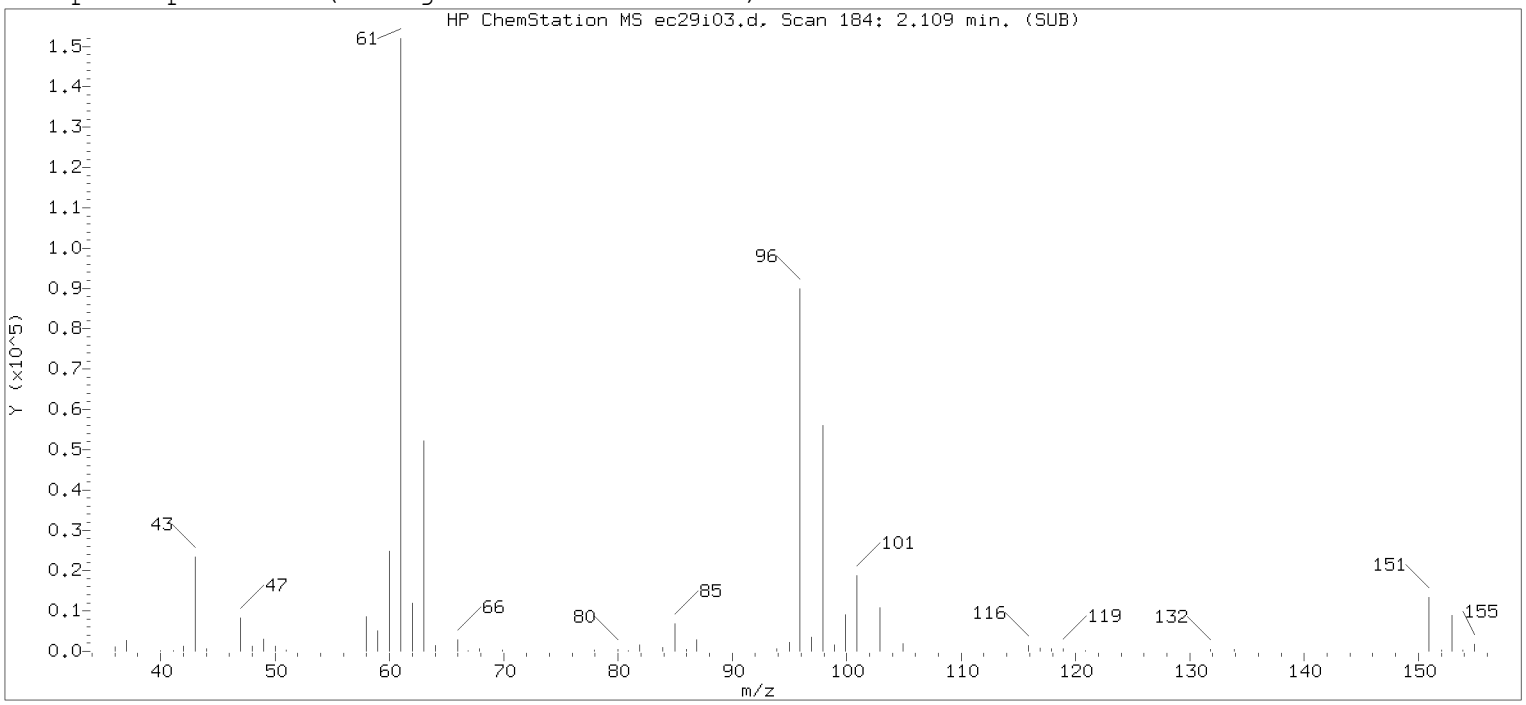
Compound Number : 14
Compound Name : Ethyl ether
Scan Number : 154
Retention Time (minutes): 1.926
Quant Ion : 59.00
Area (flag) : 230100A
On-Column Amount (ng) : 50.9459
Integration start scan : 143 Integration stop scan: 176
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

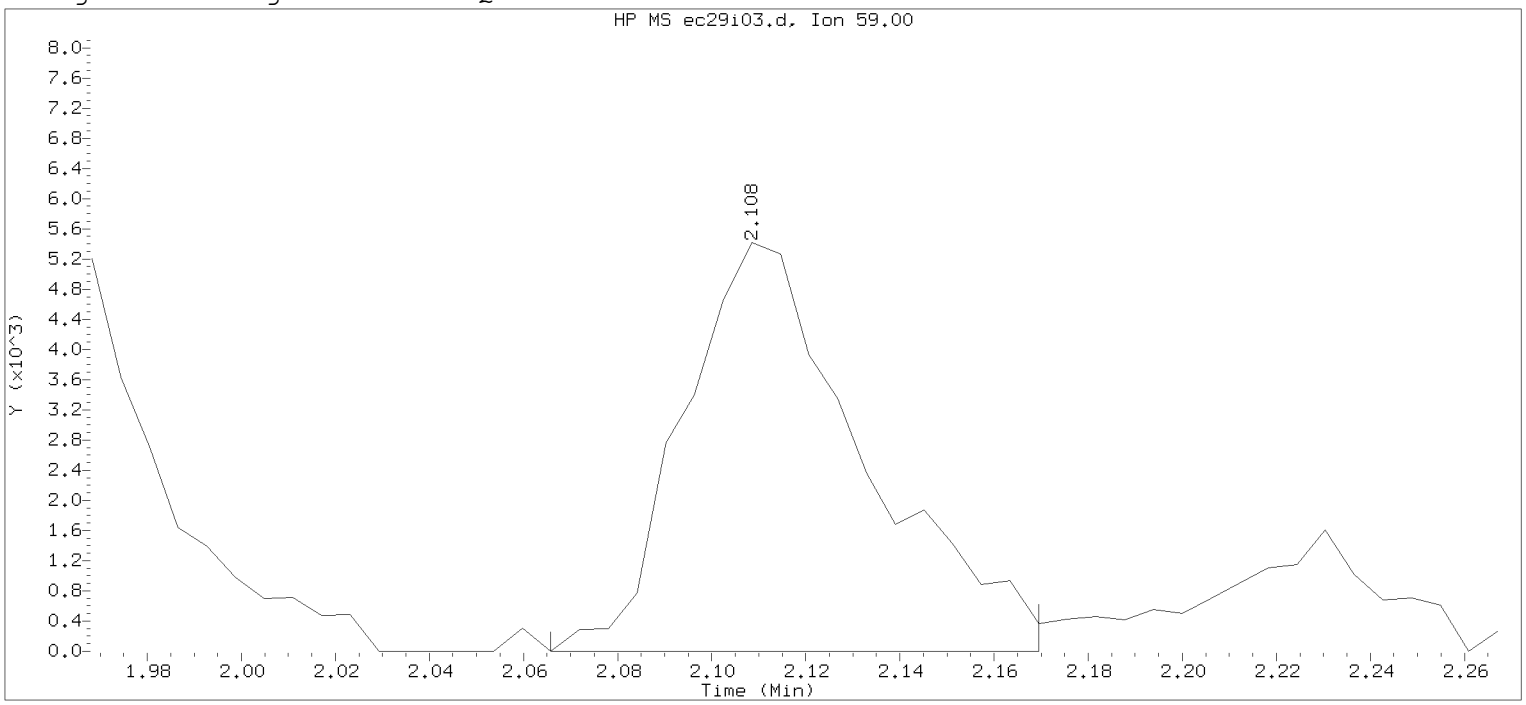
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

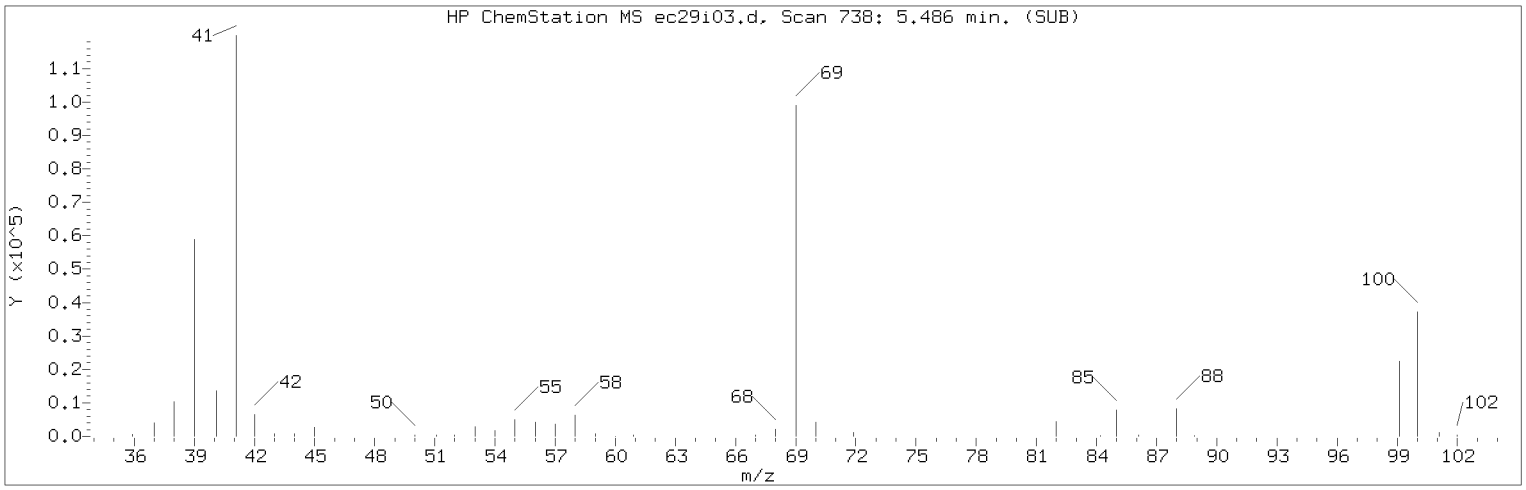
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:36
Date, time and analyst ID of latest file update: 29-Oct-2018 21:36 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

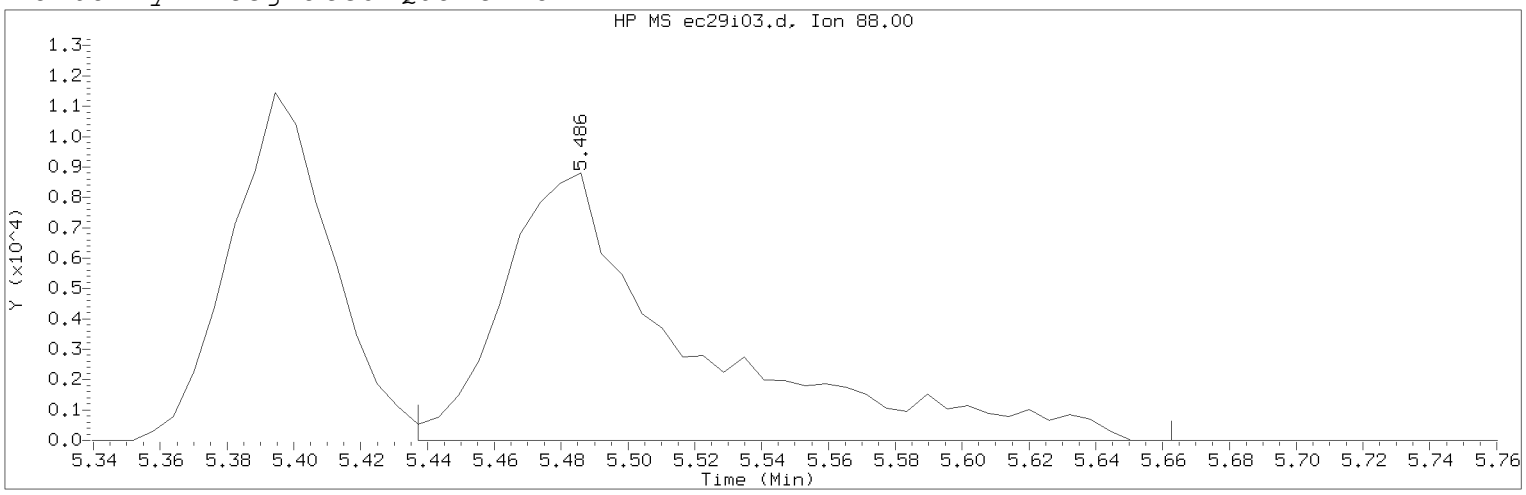
Compound Number : 14
Compound Name : Ethyl ether
Scan Number : 184
Retention Time (minutes): 2.108
Quant Ion : 59.00
Area : 14441
On-column Amount (ng) : 48.7287
Integration start scan : 176 Integration stop scan: 193
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

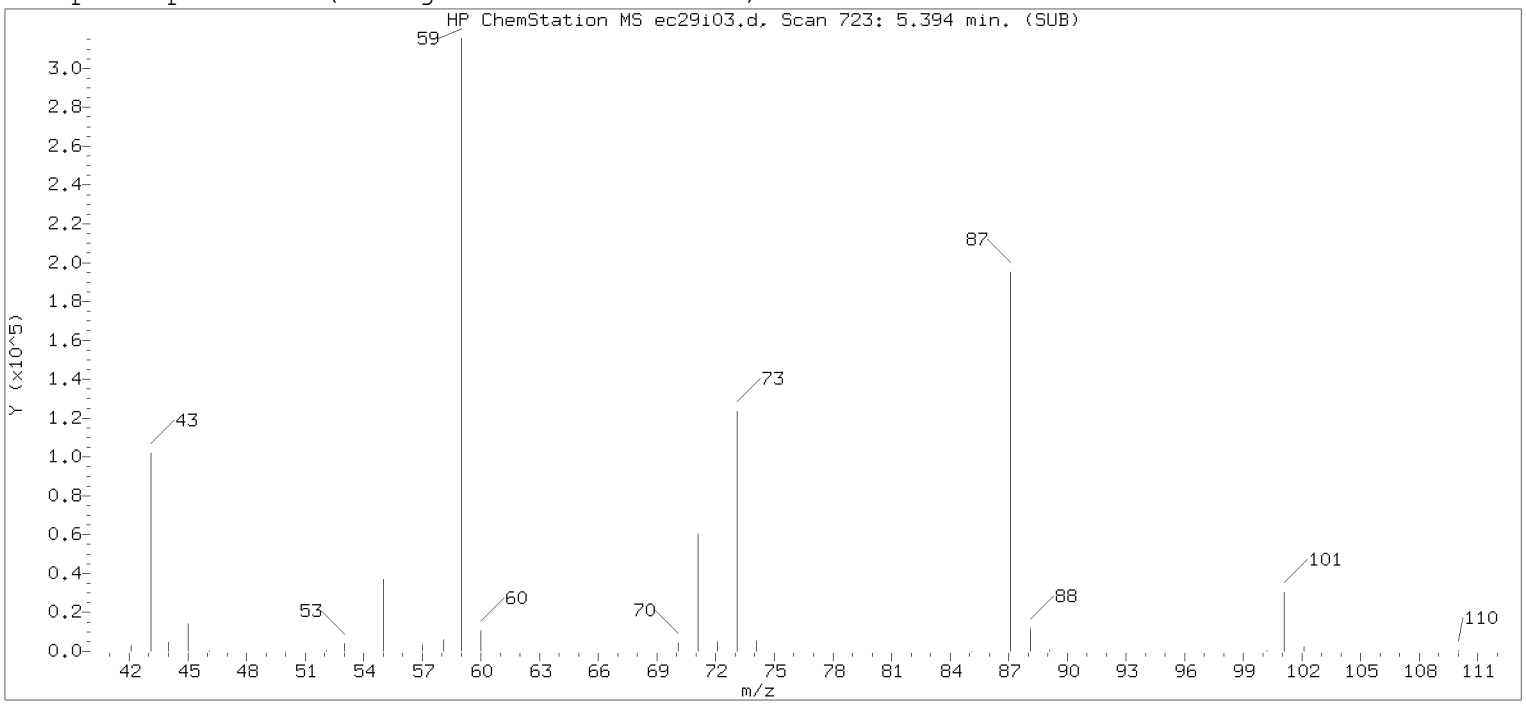
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 738
Retention Time (minutes): 5.486
Quant Ion : 88.00
Area (flag) : 34179M
On-Column Amount (ng) : 702.4582
Integration start scan : 729 Integration stop scan: 766
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

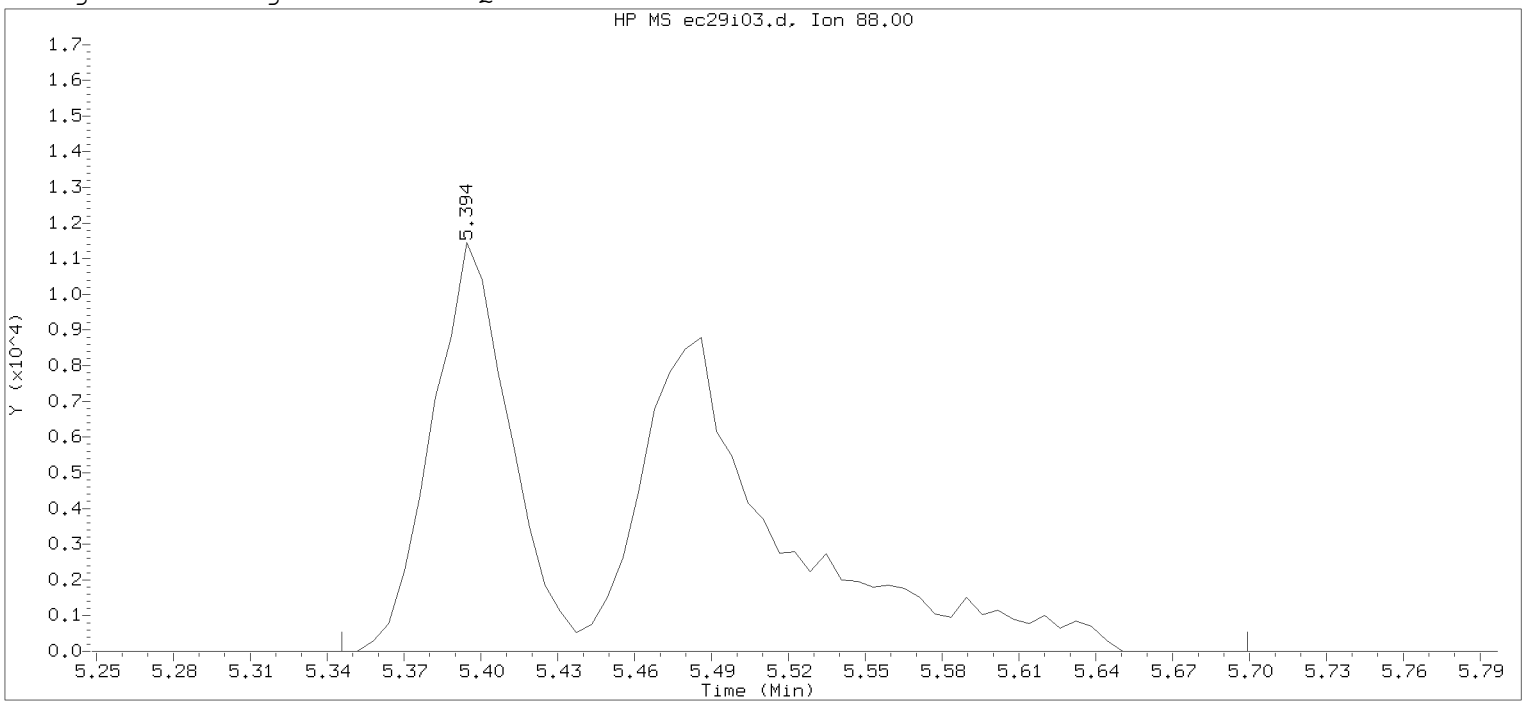
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

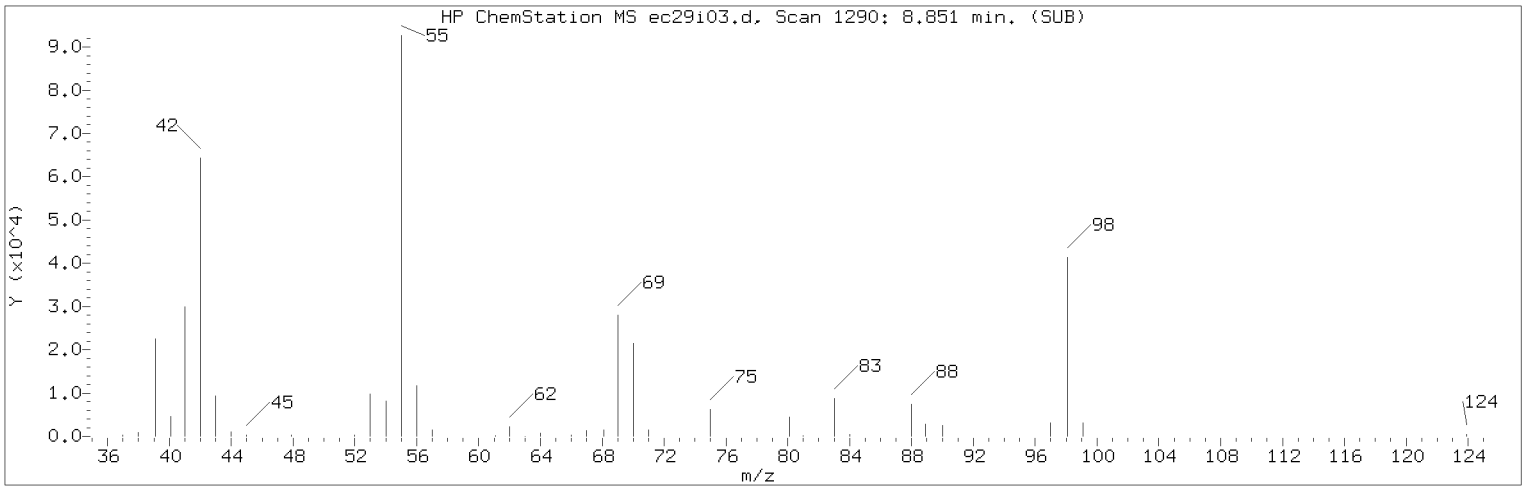
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:36
Date, time and analyst ID of latest file update: 29-Oct-2018 21:36 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

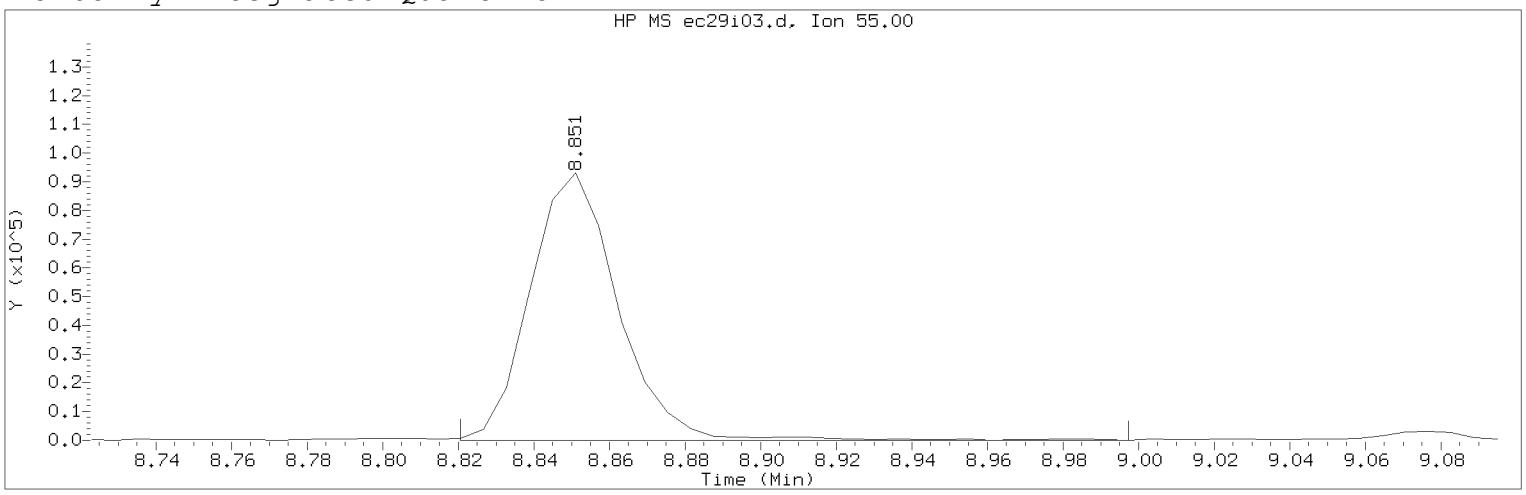
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 723
Retention Time (minutes): 5.394
Quant Ion : 88.00
Area : 58148
On-column Amount (ng) : 625.4602
Integration start scan : 714 Integration stop scan: 772
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD050 Lab Sample ID: VSTD050

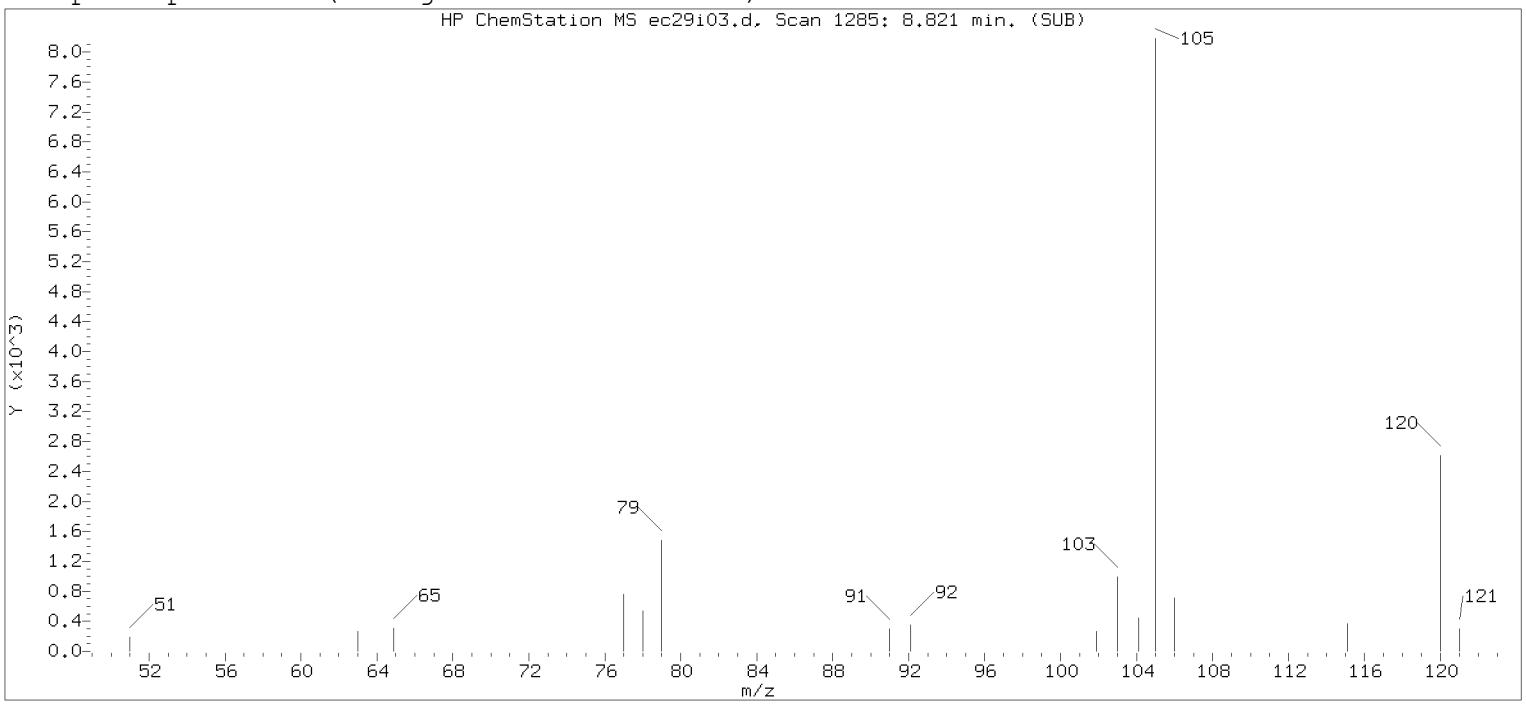
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1290
Retention Time (minutes): 8.851
Quant Ion : 55.00
Area (flag) : 150486A
On-Column Amount (ng) : 613.8379
Integration start scan : 1284 Integration stop scan: 1313
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

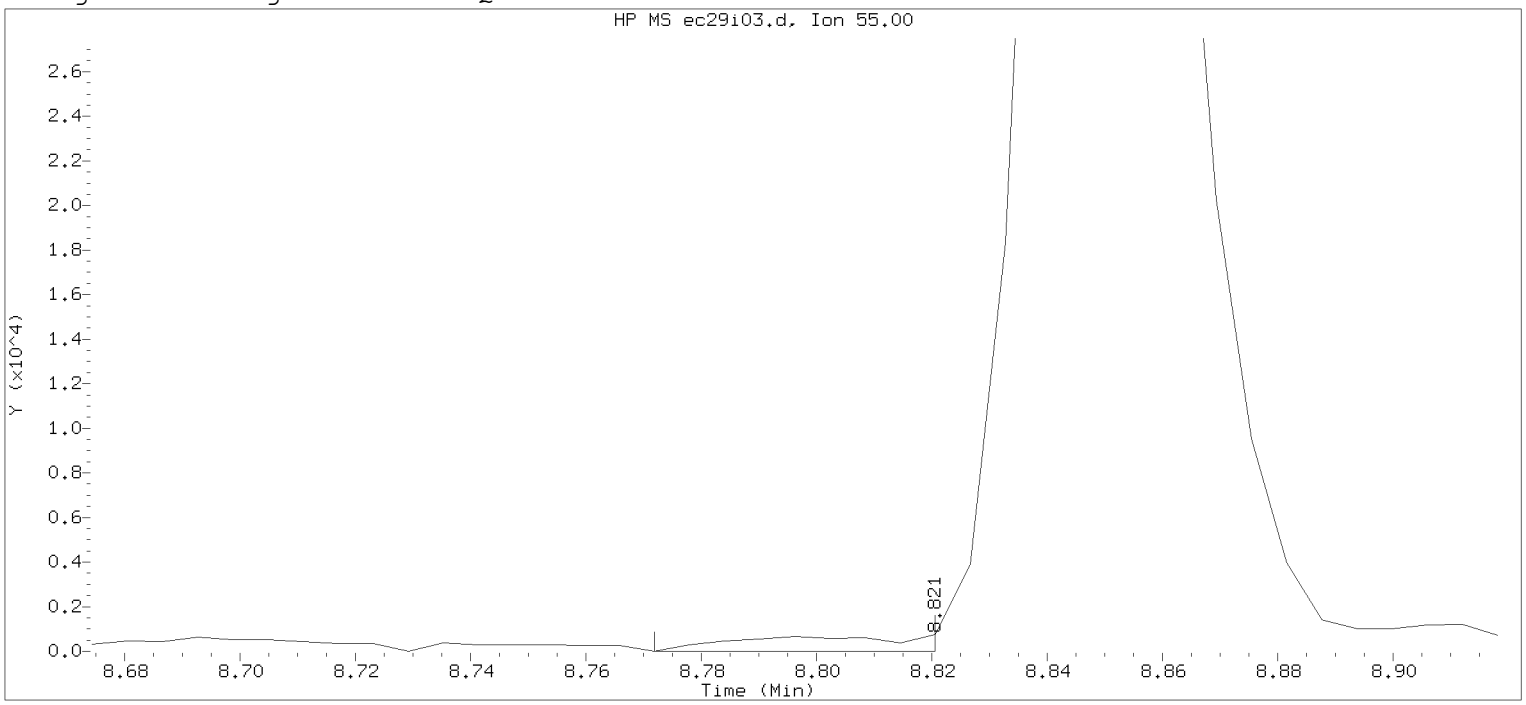
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:31.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



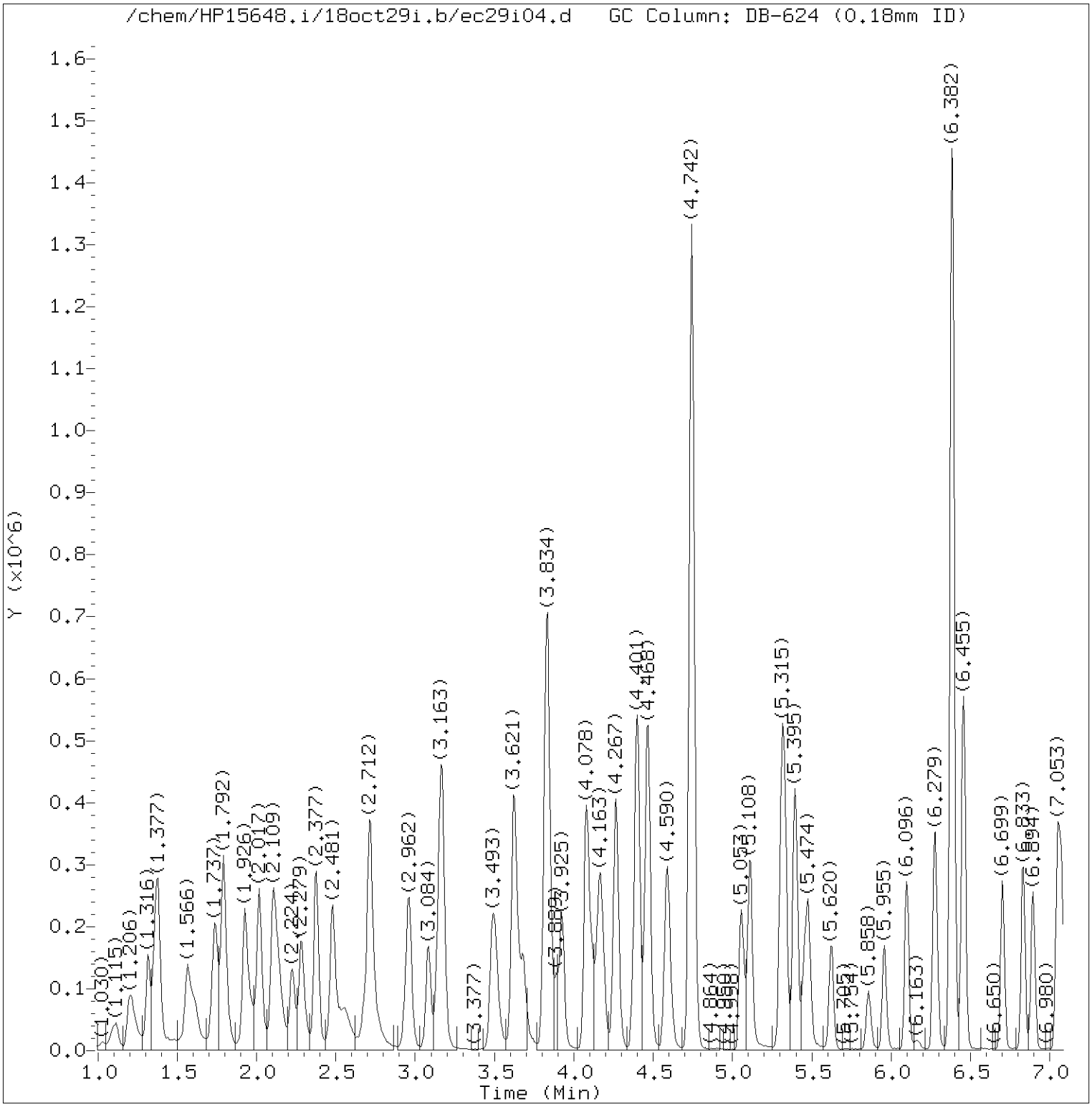
Data File: /chem/HP15648.i/18oct29i.b/ec29i03.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:36
Date, time and analyst ID of latest file update: 29-Oct-2018 21:36 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1285
Retention Time (minutes): 8.821
Quant Ion : 55.00
Area : 1400
On-column Amount (ng) : 676.4730
Integration start scan : 1276 Integration stop scan: 1284
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203



Total Ion Chromatogram (TIC)

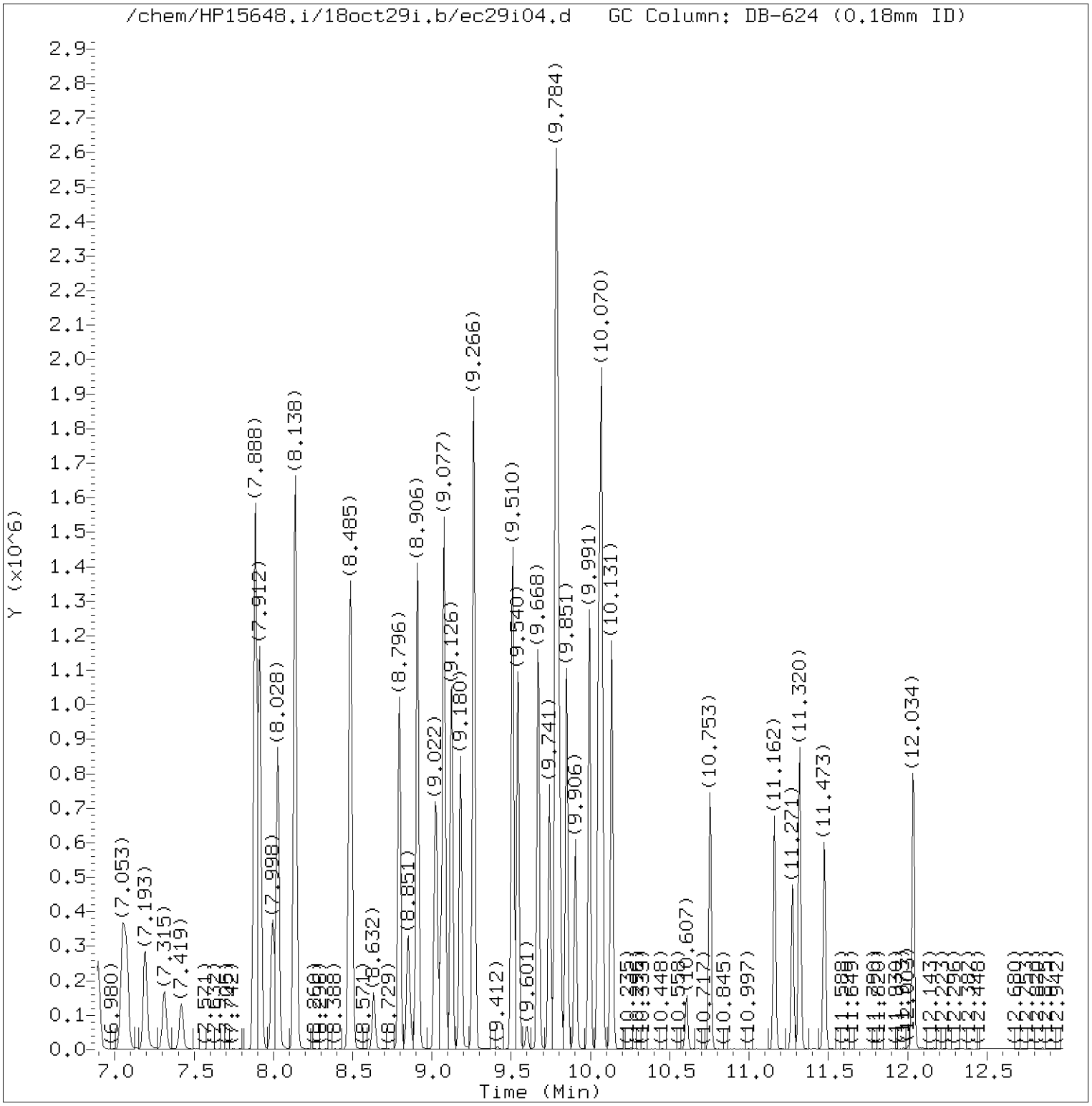
Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD020 Lab Sample ID: VSTD020

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD020 Lab Sample ID: VSTD020

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.206	85	166256	20.251
4) Chloromethane	(2)	1.316	50	165610	19.320
5) 1,3-Butadiene	(2)	1.365	39	127939	18.766
6) Vinyl Chloride	(2)	1.383	62	159466	20.197
8) Bromomethane	(2)	1.566	94	104773	19.053
9) Chloroethane	(2)	1.609	64	89911	19.836
10) Dichlorofluoromethane	(2)	1.737	67	227862	20.960
12) Trichlorofluoromethane	(2)	1.786	101	183720	20.292
11) n-Pentane	(2)	1.792	43	189845	22.290
14) Ethyl ether	(2)	1.926	59	90528A	19.868
15) Freon 123a	(2)	1.938	67	123960M	20.564
16) Acrolein	(1)	2.017	56	290885	201.544
17) 1,1-Dichloroethene	(2)	2.103	96	86409	19.879
17) 1,1-Dichloroethene	(2)	2.103	63	47300	21.196
18) Acetone	(1)	2.127	58	24659	40.813
19) Freon 113	(2)	2.133	101	93218	22.350
21) 2-Propanol	(1)	2.224	45	77653	186.823
22) Methyl Iodide	(2)	2.224	142	149190	20.110
23) Carbon Disulfide	(2)	2.285	76	310223	20.430
25) Allyl Chloride	(2)	2.377	41	186522	19.423
27) Methyl Acetate	(2)	2.383	43	95138	18.537
28) Methylene Chloride	(2)	2.481	84	98750	19.355
29)*t-Butyl alcohol-d10	(1)	2.481	65	187491M	250.000
30) t-Butyl alcohol	(1)	2.560	59	138750	195.231
31) Acrylonitrile	(2)	2.682	53	54555	19.890
32) trans-1,2-Dichloroethene	(2)	2.712	96	96126	19.904
33) Methyl Tertiary Butyl Ether	(2)	2.718	73	307838	19.980
34) n-Hexane	(2)	2.962	57	178829	21.379
36) 1,1-Dichloroethane	(2)	3.084	63	196628	20.672
38) di-Isopropyl ether	(2)	3.157	45	363201	20.489
39) 2-Chloro-1,3-butadiene	(2)	3.169	53	182033	20.208
40) Ethyl t-butyl ether	(2)	3.486	59	336783	20.323
42) cis-1,2-Dichloroethene	(2)	3.621	96	106556	19.907
44) 2-Butanone	(2)	3.633	43	130321	37.581
45) 2,2-Dichloropropane	(2)	3.633	77	161021	20.039
47) Propionitrile	(1)	3.682	54	201866	200.449
48) Methacrylonitrile	(2)	3.828	67	282896	100.450
49) Bromochloromethane	(2)	3.846	128	51385	19.865

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	3.889	71	35508	41.612
51) Chloroform	(2)	3.925	83	169313	20.178
52)$Dibromofluoromethane	(2)	4.078	113	239780	49.656
52)$Dibromofluoromethane	(2)	4.078	111	249986	50.240
53) 1,1,1-Trichloroethane	(2)	4.108	97	151710	19.785
54) Cyclohexane	(2)	4.163	56	213256	22.255
54) Cyclohexane	(2)	4.163	84	172099	21.644
54) Cyclohexane	(2)	4.169	69	63565	21.895
55) 1,1-Dichloropropene	(2)	4.261	75	154905	20.737
56) Carbon Tetrachloride	(2)	4.267	117	128852	20.396
58) Isobutyl Alcohol	(1)	4.383	41	120487	481.504
57)$1,2-Dichloroethane-d4	(2)	4.401	102	66527	50.666
57)$1,2-Dichloroethane-d4	(2)	4.401	65	317261	49.772
57)$1,2-Dichloroethane-d4	(2)	4.401	104	41655	49.861
60) Benzene	(2)	4.462	78	433999	20.030
61) 1,2-Dichloroethane	(2)	4.474	62	132411	19.220
61) 1,2-Dichloroethane	(2)	4.474	98	11995	16.117
65) t-Amyl methyl ether	(2)	4.590	73	311911	19.717
66)*Fluorobenzene	(2)	4.742	96	1102335	50.000
67) n-Heptane	(2)	4.754	43	197937	20.001
69) n-Butanol	(1)	5.053	56	201457	970.066
71) Trichloroethene	(2)	5.108	95	104741	19.898
73) Methylcyclohexane	(2)	5.315	83	215238	20.771
73) Methylcyclohexane	(2)	5.315	98	99684	21.317
74) 1,2-Dichloropropane	(2)	5.334	63	116584	20.089
75) Dibromomethane	(2)	5.449	93	59350	19.887
77) Methyl Methacrylate	(2)	5.480	69	95196	19.799
76) 1,4-Dioxane	(1)	5.480	88	25292M	507.860
79) Bromodichloromethane	(2)	5.620	83	125613	19.549
80) 2-Nitropropane	(2)	5.858	41	67982M	37.539
81) 2-Chloroethyl Vinyl Ether	(2)	5.955	63	82337	20.307
82) cis-1,3-Dichloropropene	(2)	6.096	75	175945	19.789
43) 1,2-Dichloroethene (Total)	(2)		96	202682	39.811
83) 4-Methyl-2-pentanone	(2)	6.272	43	290050	39.758
84)$Toluene-d8	(3)	6.382	98	1114518	50.361
84)$Toluene-d8	(3)	6.382	100	712847	50.125
89) Toluene	(3)	6.455	92	270782	20.115
90) trans-1,3-Dichloropropene	(3)	6.699	75	162695	19.735

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

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
92) Ethyl Methacrylate	(3)	6.833	69	173976	19.920
93) 1,1,2-Trichloroethane	(3)	6.894	97	86429	19.533
94) Tetrachloroethene	(3)	7.053	166	103322	20.582
95) 1,3-Dichloropropane	(3)	7.077	76	162747	19.708
97) 2-Hexanone	(3)	7.193	43	211923	40.311
102) 1-Chlorohexane	(3)	7.309	91	7553	18.655
98) Dibromochloromethane	(3)	7.315	129	92553	19.712
100) 1,2-Dibromoethane	(3)	7.419	107	90856	19.819
101)*Chlorobenzene-d5	(3)	7.888	117	789203	50.000
103) Chlorobenzene	(3)	7.912	112	291452	20.217
104) 1,1,1,2-Tetrachloroethane	(3)	7.998	131	95655	20.119
105) Ethylbenzene	(3)	8.028	91	541656	20.445
107) m+p-Xylene	(3)	8.138	106	414316	40.941
108) o-Xylene	(3)	8.479	106	202049	20.395
110) Styrene	(3)	8.492	104	332808	20.108
111) Bromoform	(3)	8.632	173	61075	19.977
112) Isopropylbenzene	(3)	8.796	105	543207	20.846
113) Cyclohexanone	(1)	8.851	55	116582MA	464.611
115)$4-Bromofluorobenzene	(3)	8.906	95	409687	49.737
115)$4-Bromofluorobenzene	(3)	8.912	174	288769	49.251
116) Bromobenzene	(4)	9.022	156	110091	20.211
117) 1,1,2,2-Tetrachloroethane	(4)	9.028	83	140497	20.296
118) 1,2,3-Trichloropropane	(4)	9.059	110	38485	19.722
119) trans-1,4-Dichloro-2-butene	(4)	9.077	53	226588	101.413
120) n-Propylbenzene	(4)	9.126	91	651304	21.432
121) 2-Chlorotoluene	(4)	9.180	126	119994	20.916
123) 1,3,5-Trimethylbenzene	(4)	9.266	105	467966	21.323
122) 4-Chlorotoluene	(4)	9.266	126	125197	20.970
125) tert-Butylbenzene	(4)	9.510	134	100823	21.473
126) Pentachloroethane	(4)	9.516	167	68945	19.682
127) 1,2,4-Trimethylbenzene	(4)	9.540	105	475512	21.026
128) sec-Butylbenzene	(4)	9.668	105	614590	21.761
130) 1,3-Dichlorobenzene	(4)	9.741	146	227369	20.770
131) p-Isopropyltoluene	(4)	9.778	119	533622	21.476
132)*1,4-Dichlorobenzene-d4	(4)	9.790	152	404398	50.000
134) 1,4-Dichlorobenzene	(4)	9.808	146	228482	20.682
135) 1,2,3-Trimethylbenzene	(4)	9.851	105	480666	20.223
136) Benzyl Chloride	(4)	9.906	91	326436	20.083

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

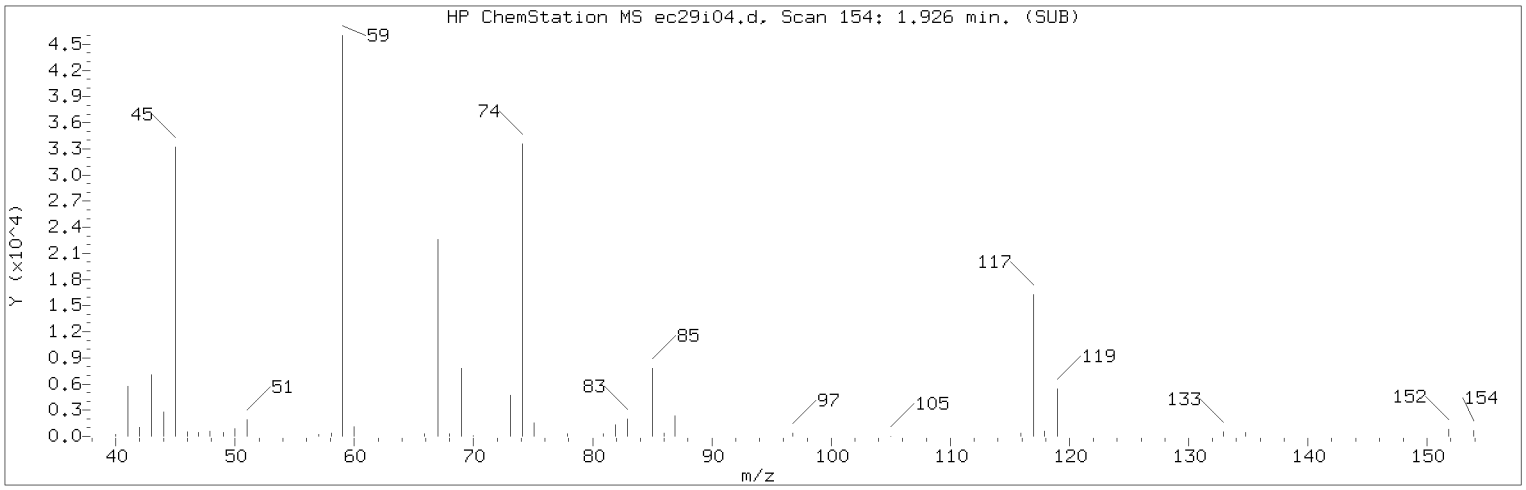
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD020 Lab Sample ID: VSTD020

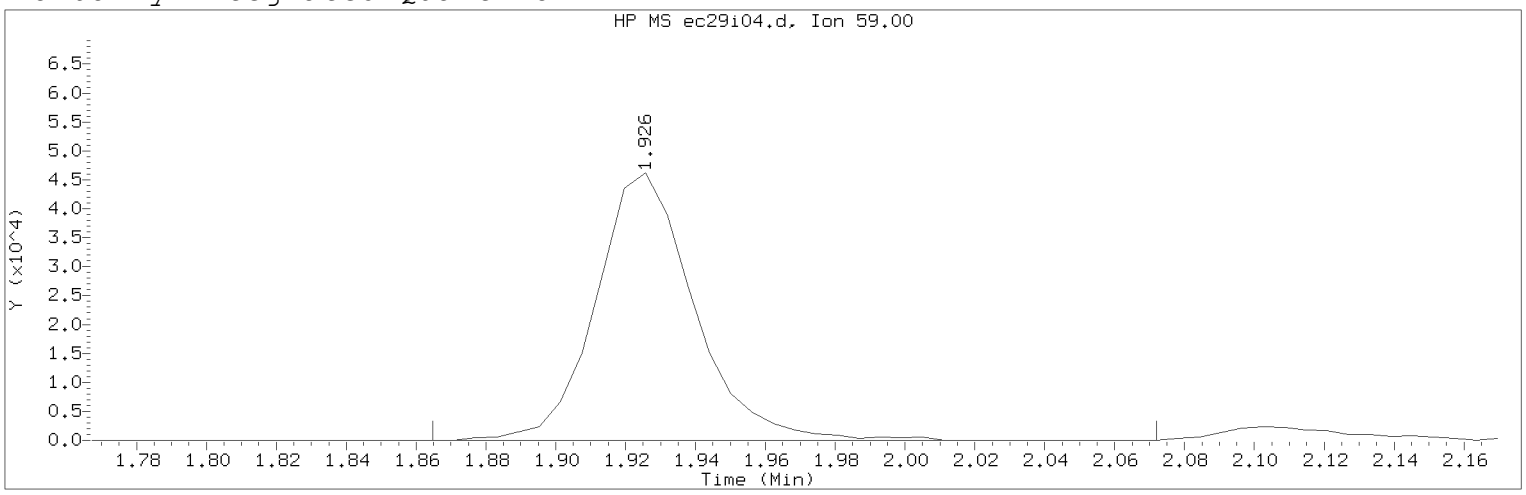
	Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137)	1,3-Diethylbenzene	(4)	9.991	119	315451	20.281
138)	1,4-Diethylbenzene	(4)	10.052	119	334639	20.203
139)	1,2-Dichlorobenzene	(4)	10.070	146	209971	20.209
140)	n-Butylbenzene	(4)	10.070	92	264838	21.637
91)	1,3-Dichloropropene (total)	(3)		100	338640	39.524
141)	1,2-Diethylbenzene	(4)	10.131	119	254559	19.839
143)	1,2-Dibromo-3-chloropropane	(4)	10.607	75	31269	19.564
145)	1,3,5-Trichlorobenzene	(4)	10.753	180	166709	20.675
147)	1,2,4-Trichlorobenzene	(4)	11.162	180	147188	20.598
148)	Hexachlorobutadiene	(4)	11.278	225	65386	20.246
149)	Naphthalene	(4)	11.320	128	473238	20.239
150)	1,2,3-Trichlorobenzene	(4)	11.479	180	139193	20.899
109)	Xylene (Total)	(3)		106	616365	61.336
151)	2-Methylnaphthalene	(4)	12.034	142	284225	19.570
142)	Diethylbenzene (total)	(4)		100	904649	60.323

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD020 Lab Sample ID: VSTD020

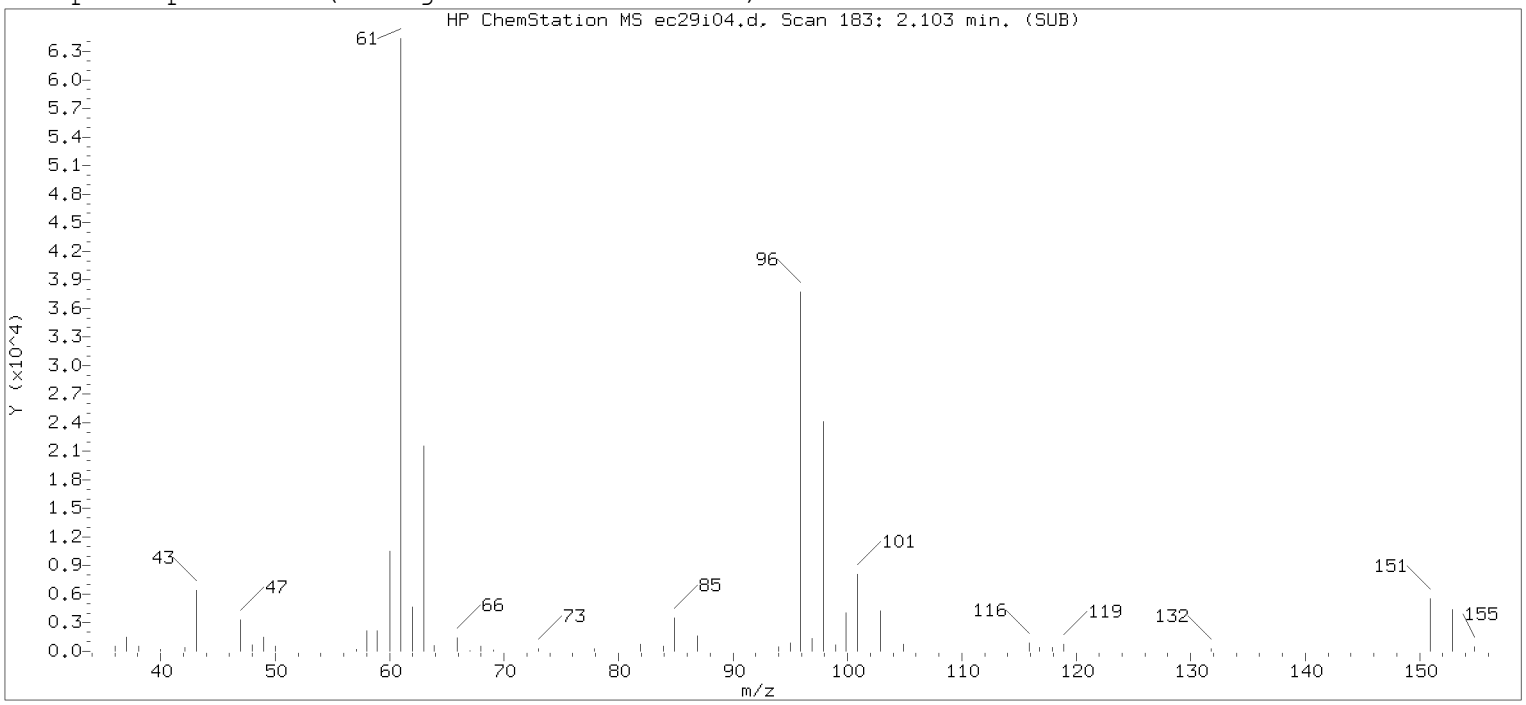
Compound Number : 14
Compound Name : Ethyl ether
Scan Number : 154
Retention Time (minutes): 1.926
Quant Ion : 59.00
Area (flag) : 90528A
On-Column Amount (ng) : 19.8682
Integration start scan : 143 Integration stop scan: 177
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

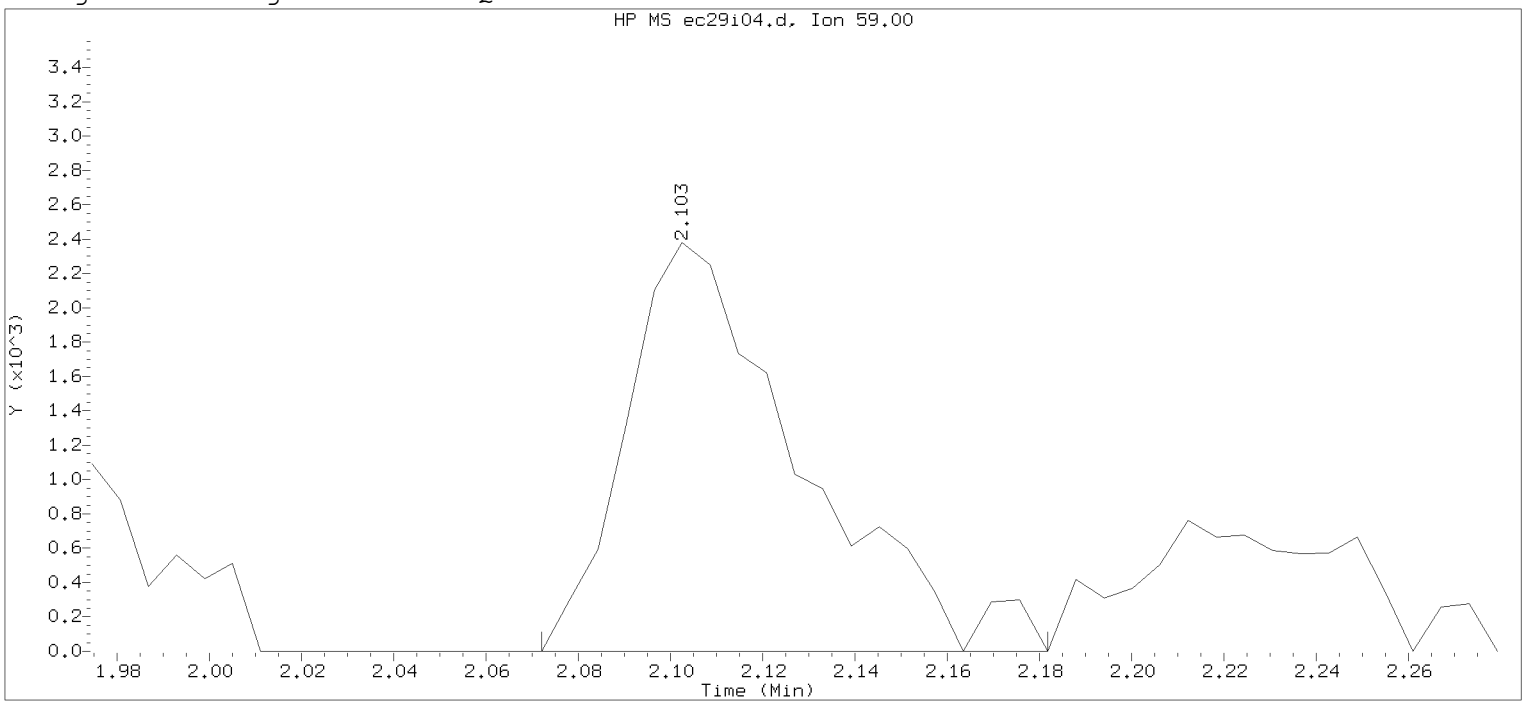
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

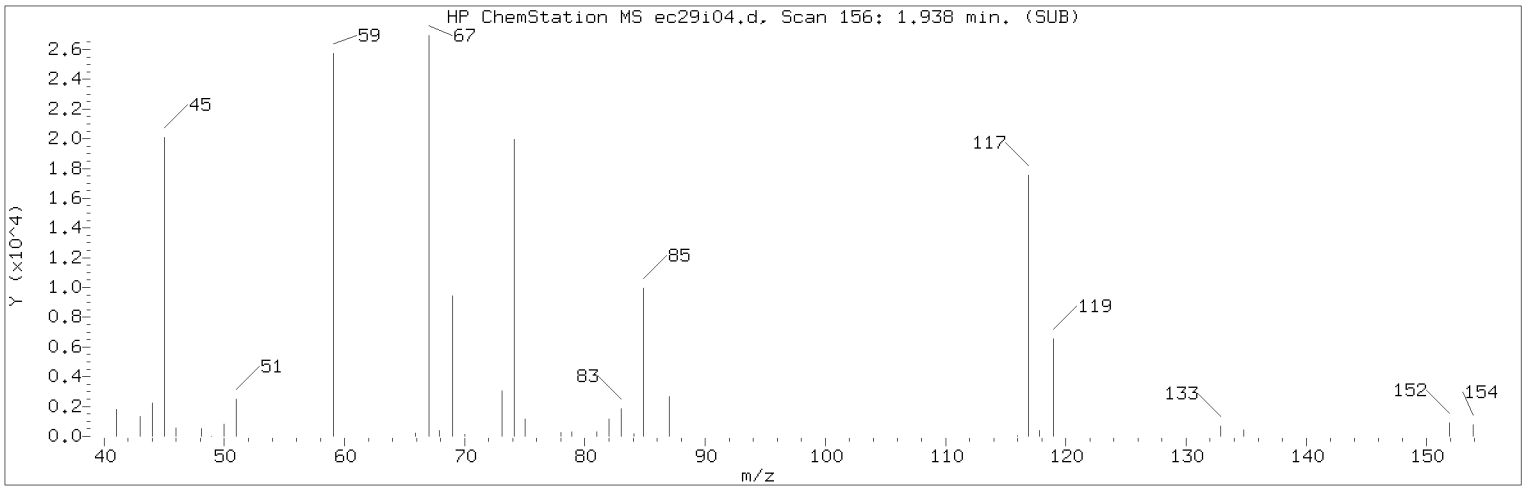
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:56
Date, time and analyst ID of latest file update: 29-Oct-2018 21:56 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

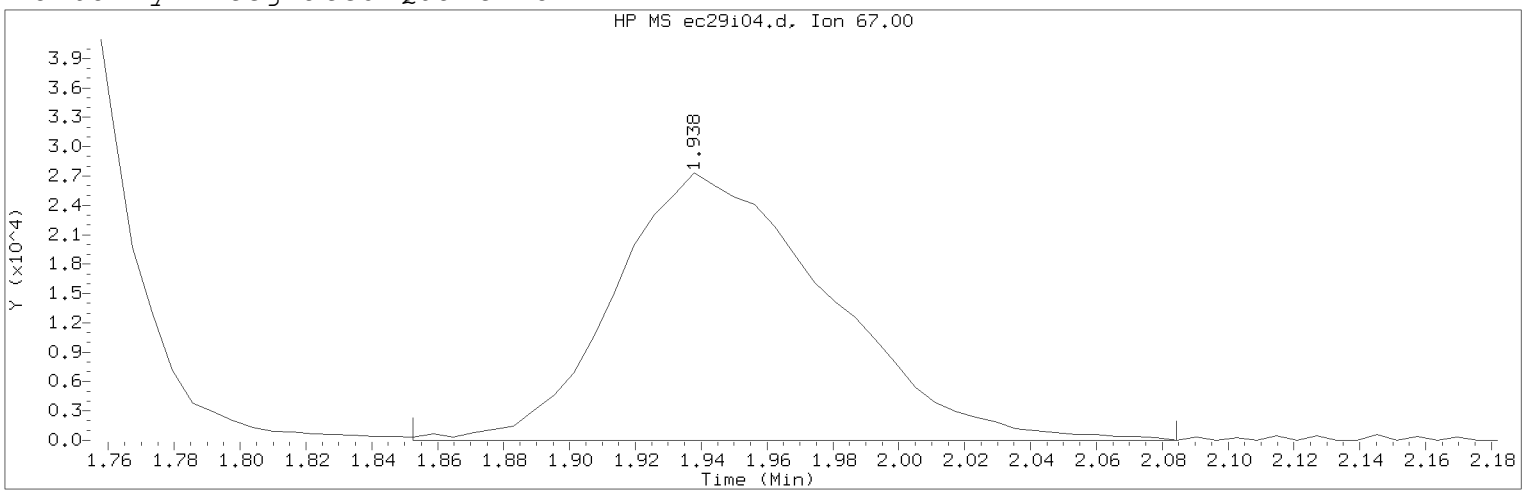
Compound Number	: 14		
Compound Name	: Ethyl ether		
Scan Number	: 183		
Retention Time (minutes)	: 2.103		
Quant Ion	: 59.00		
Area	: 6275		
On-column Amount (ng)	: 20.7326		
Integration start scan	: 177	Integration stop scan:	195
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD020 Lab Sample ID: VSTD020

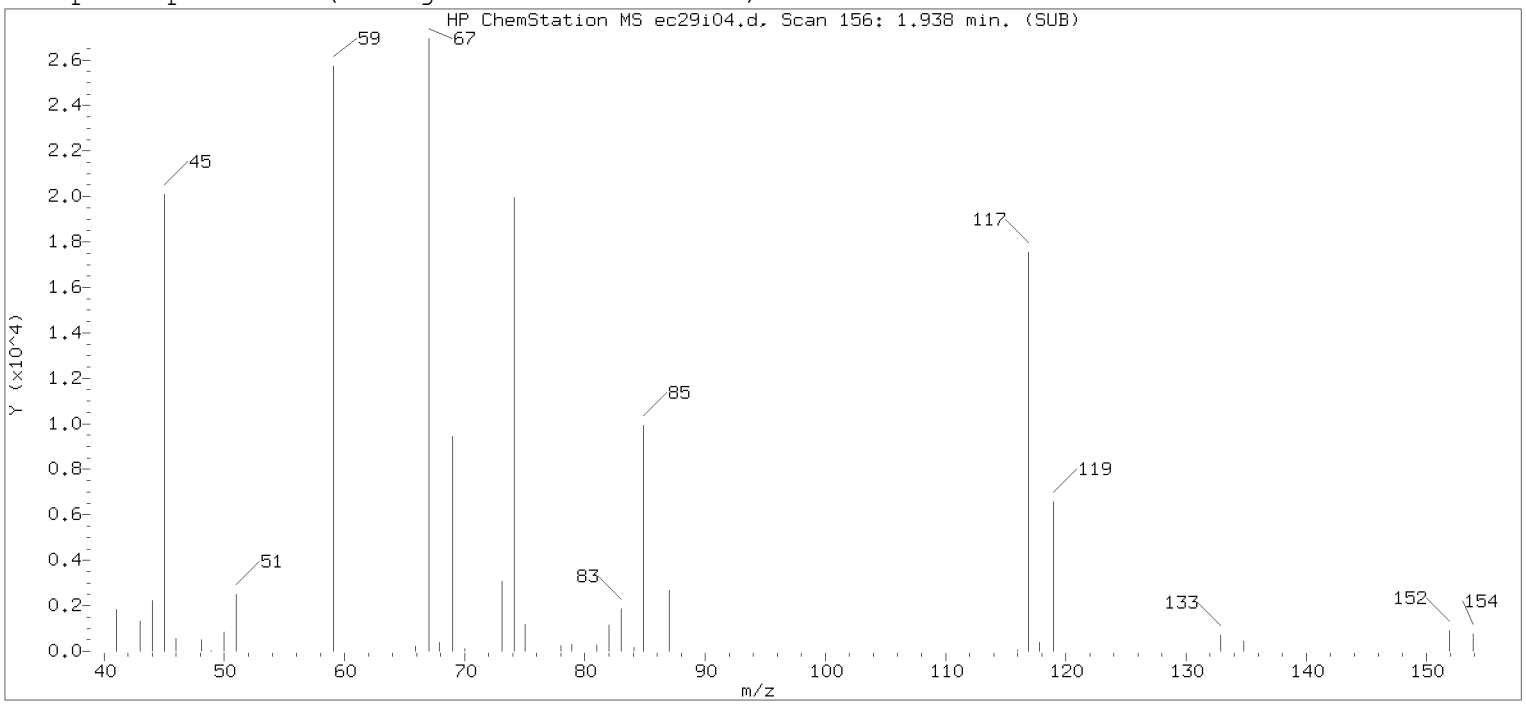
Compound Number : 15
Compound Name : Freon 123a
Scan Number : 156
Retention Time (minutes): 1.938
Quant Ion : 67.00
Area (flag) : 123960M
On-Column Amount (ng) : 20.5643
Integration start scan : 141 Integration stop scan: 179
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

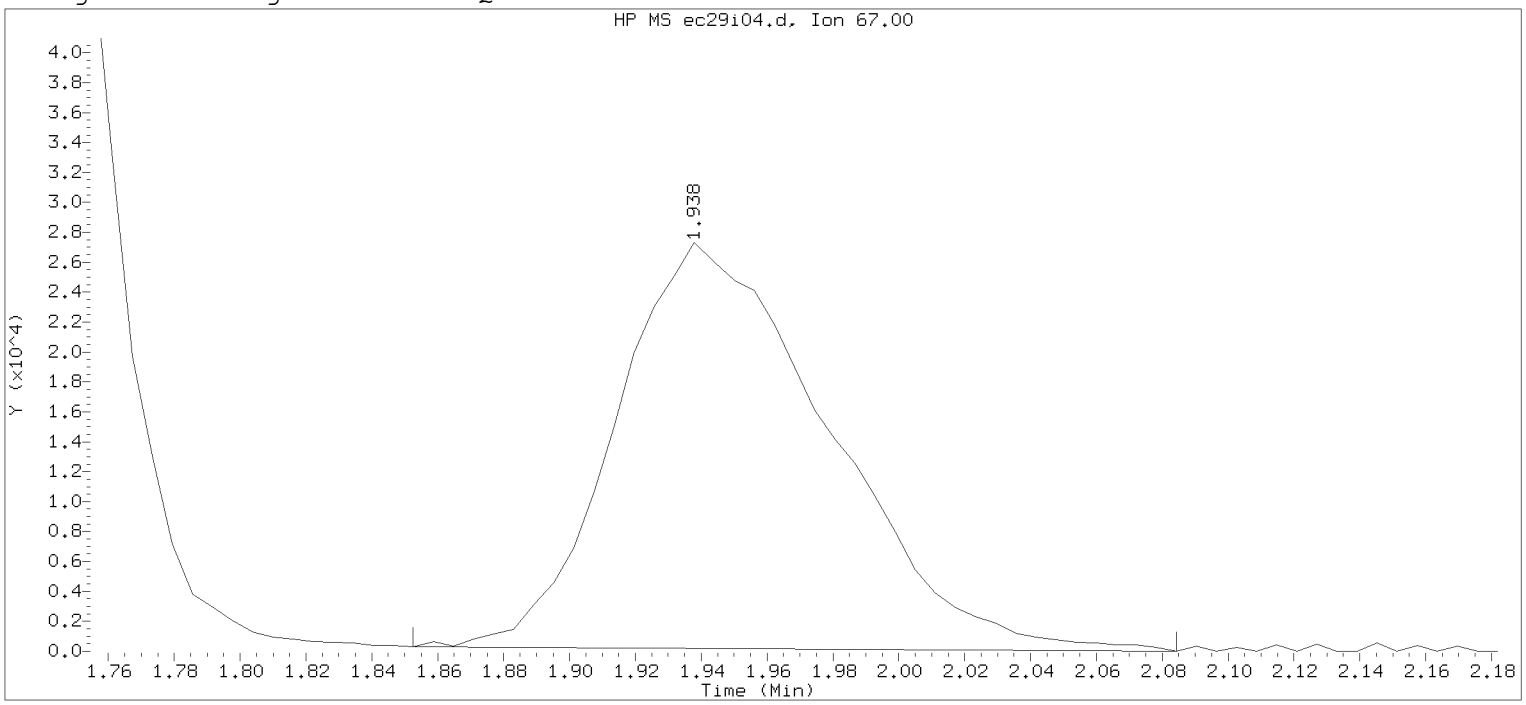
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

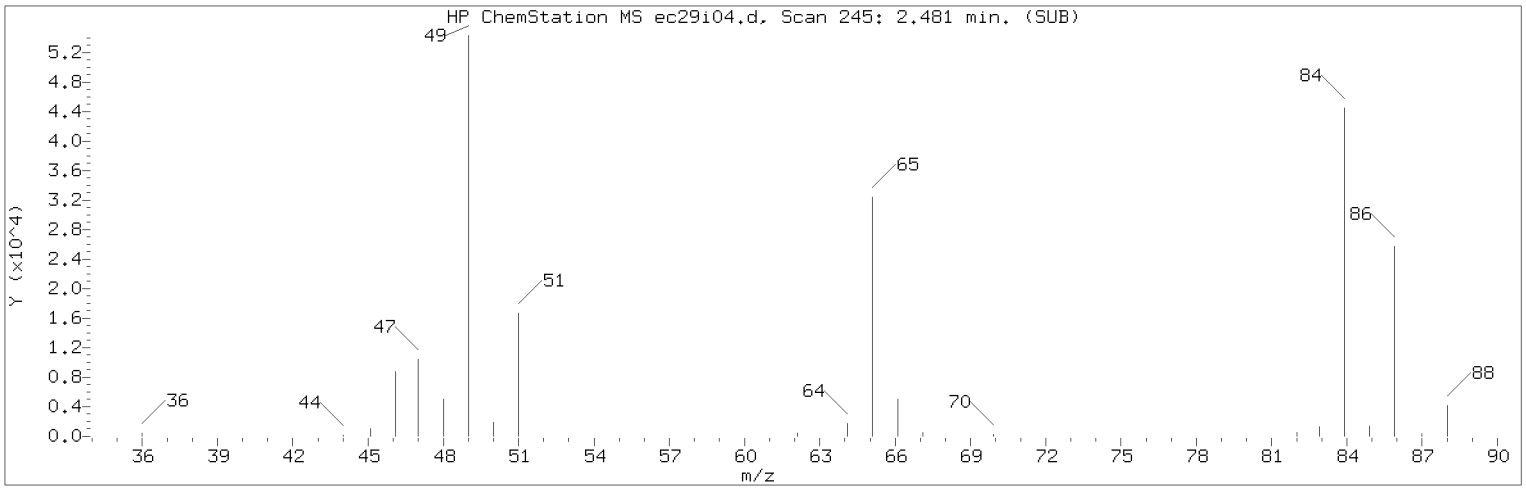
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:56
Date, time and analyst ID of latest file update: 29-Oct-2018 21:56 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

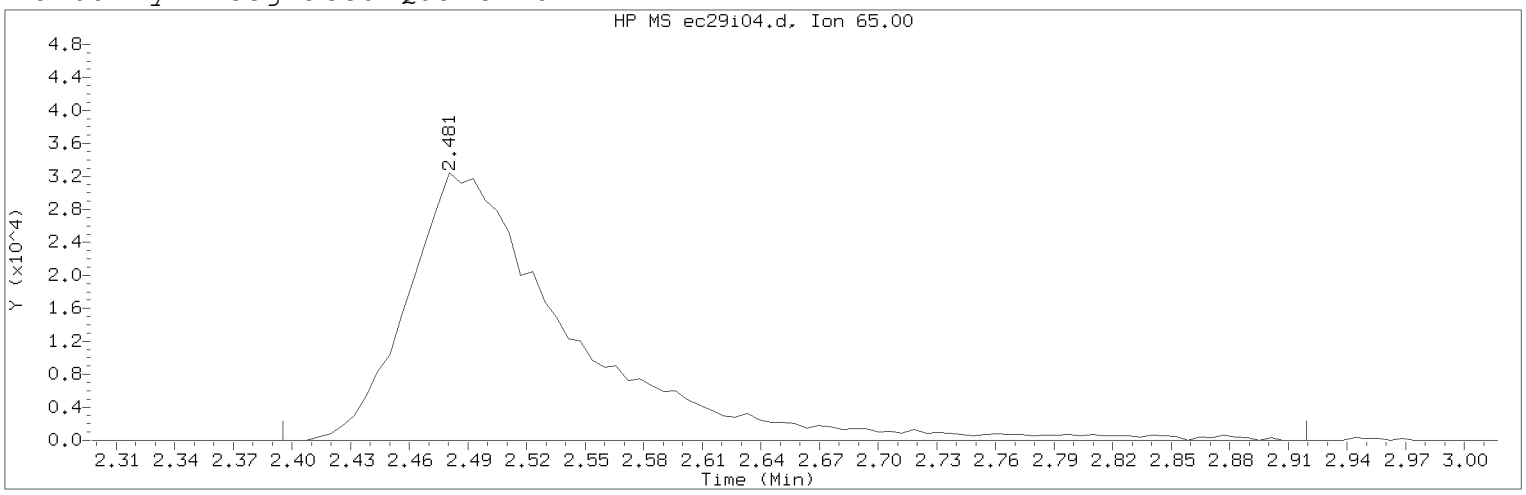
Compound Number	: 15		
Compound Name	: Freon 123a		
Scan Number	: 156		
Retention Time (minutes)	: 1.938		
Quant Ion	: 67.00		
Area	: 121792		
On-column Amount (ng)	: 20.0393		
Integration start scan	: 141	Integration stop scan:	179
Y at integration start	: 304	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD020 Lab Sample ID: VSTD020

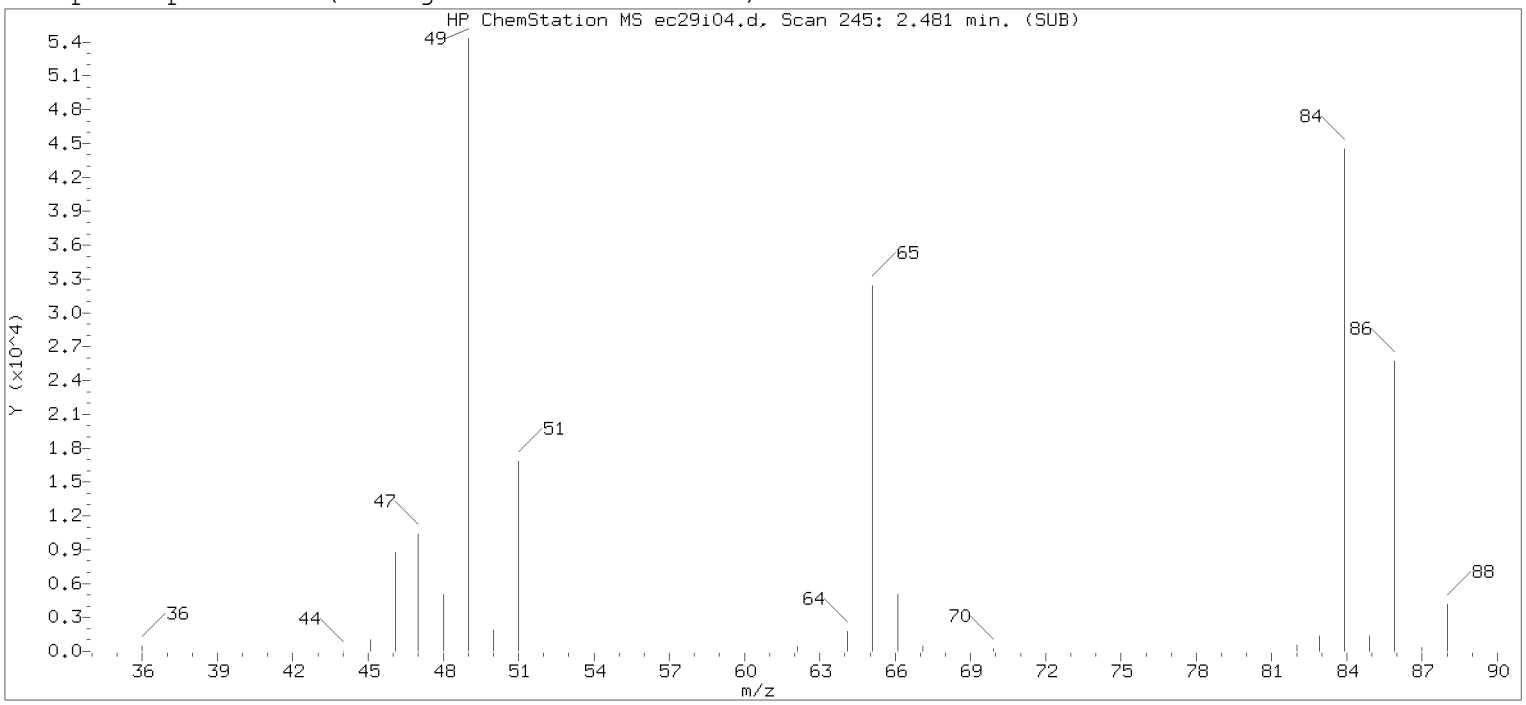
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 245
Retention Time (minutes): 2.481
Quant Ion : 65.00
Area (flag) : 187491M
On-Column Amount (ng) : 250.0000
Integration start scan : 230 Integration stop scan: 316
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

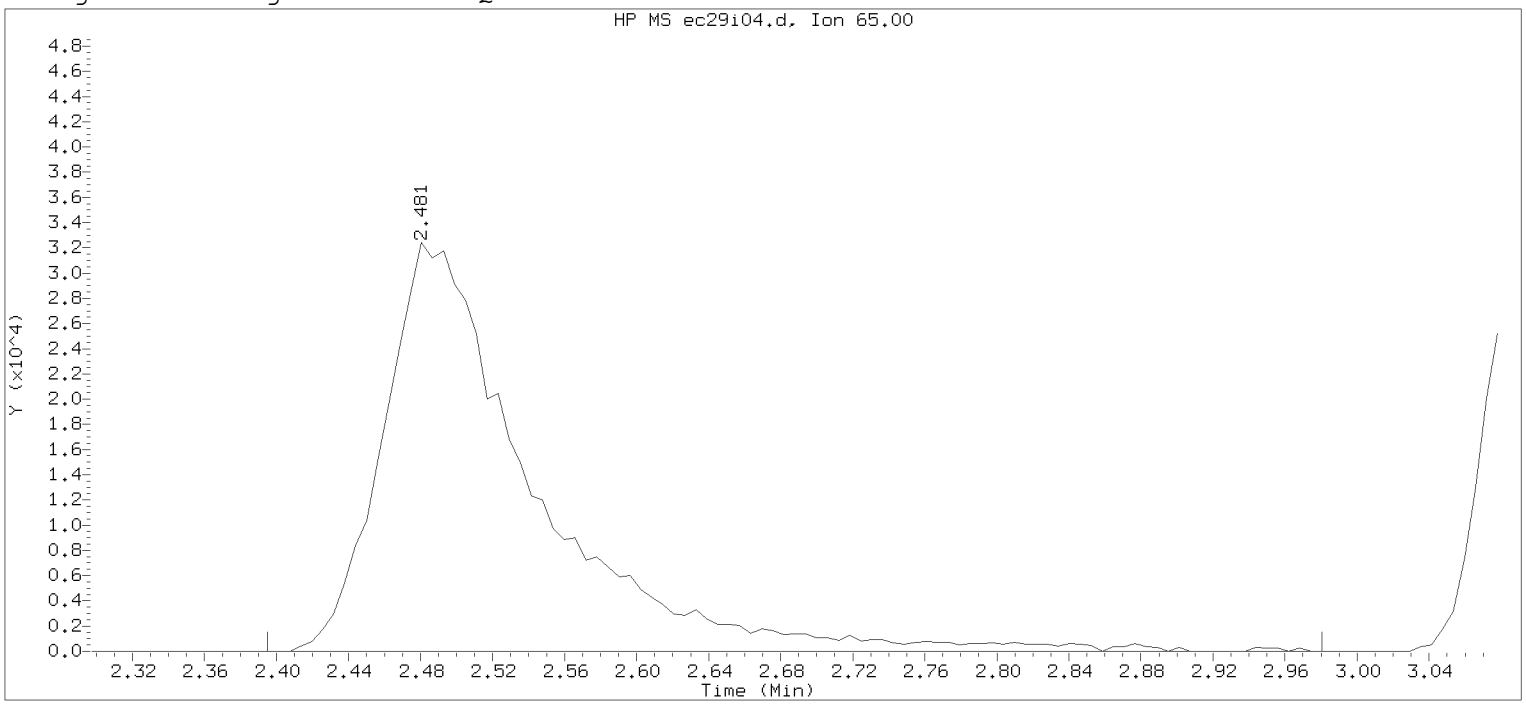
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

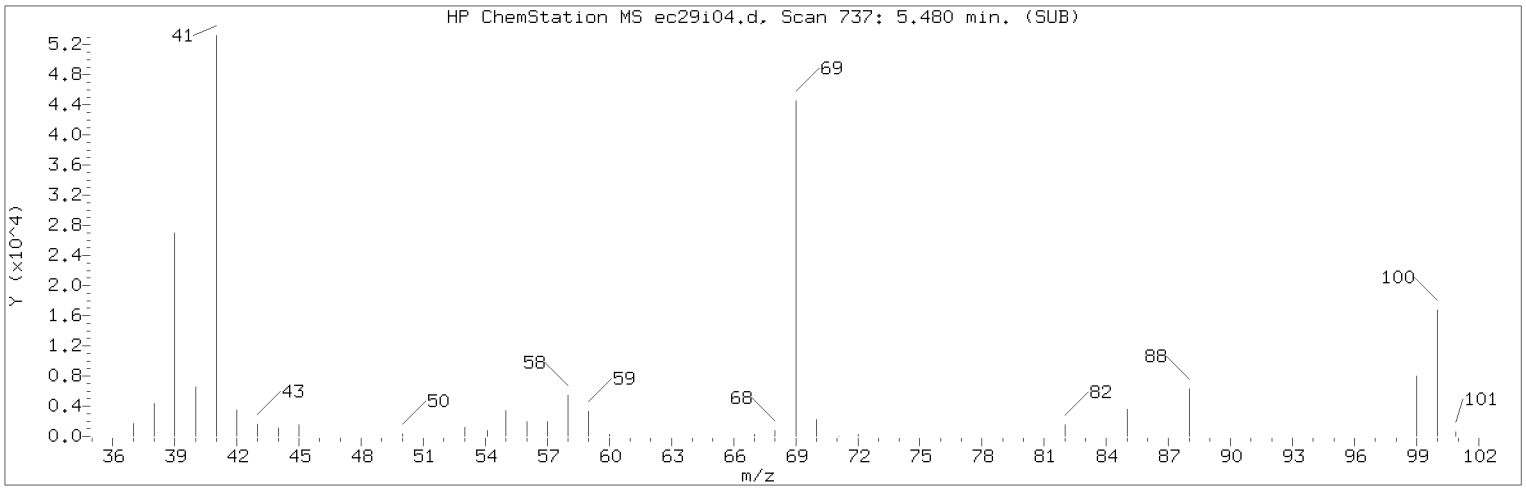
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:56
Date, time and analyst ID of latest file update: 29-Oct-2018 21:56 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

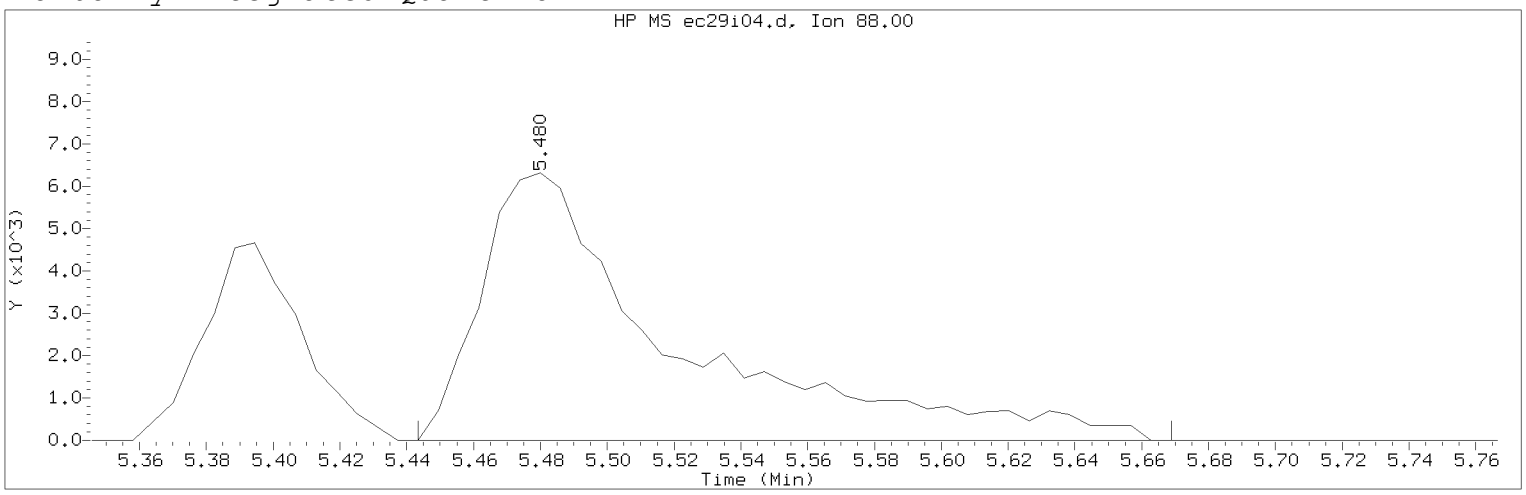
Compound Number	: 29		
Compound Name	: t-Butyl alcohol-d10		
Scan Number	: 245		
Retention Time (minutes)	: 2.481		
Quant Ion	: 65.00		
Area	: 187897		
On-column Amount (ng)	: 250.0000		
Integration start scan	: 230	Integration stop scan:	326
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD020 Lab Sample ID: VSTD020

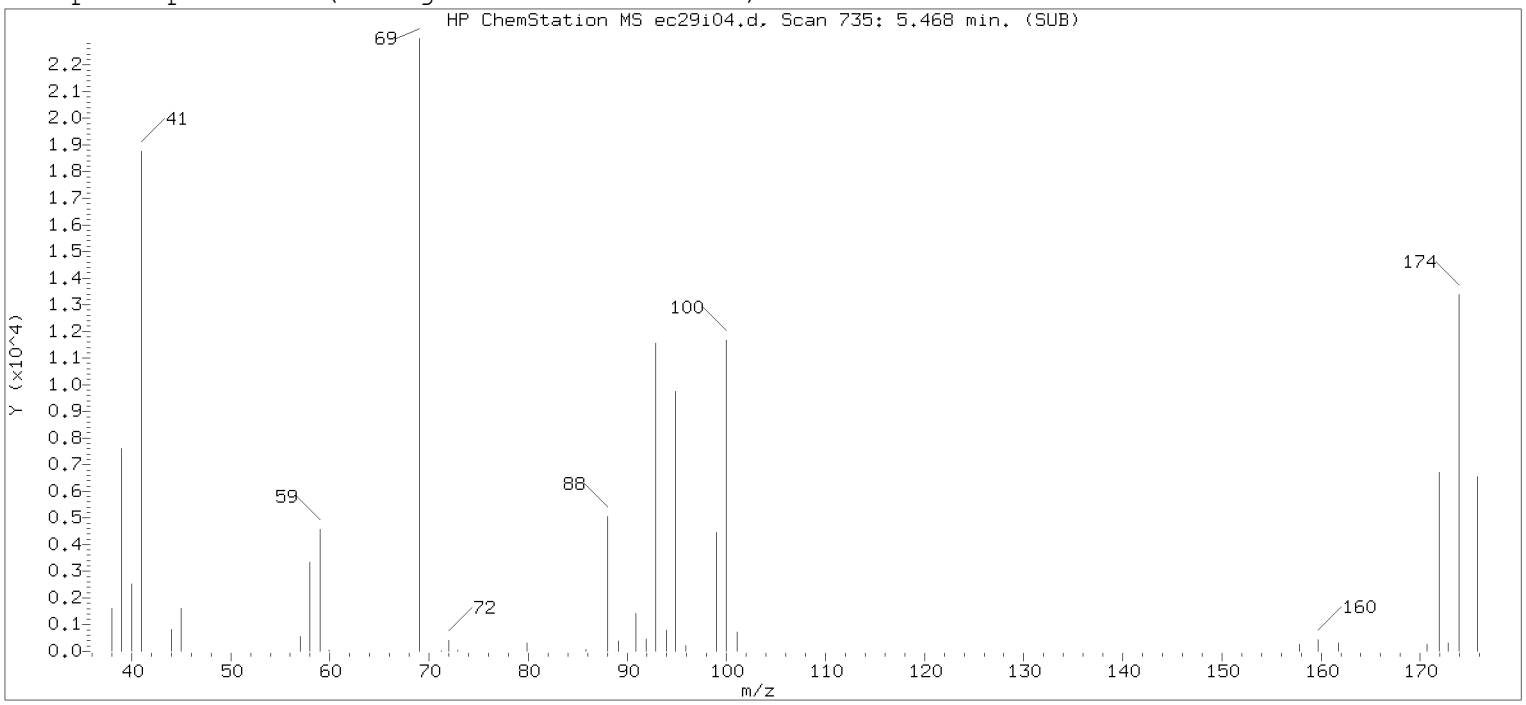
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 737
Retention Time (minutes): 5.480
Quant Ion : 88.00
Area (flag) : 25292M
On-Column Amount (ng) : 507.8604
Integration start scan : 730 Integration stop scan: 767
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

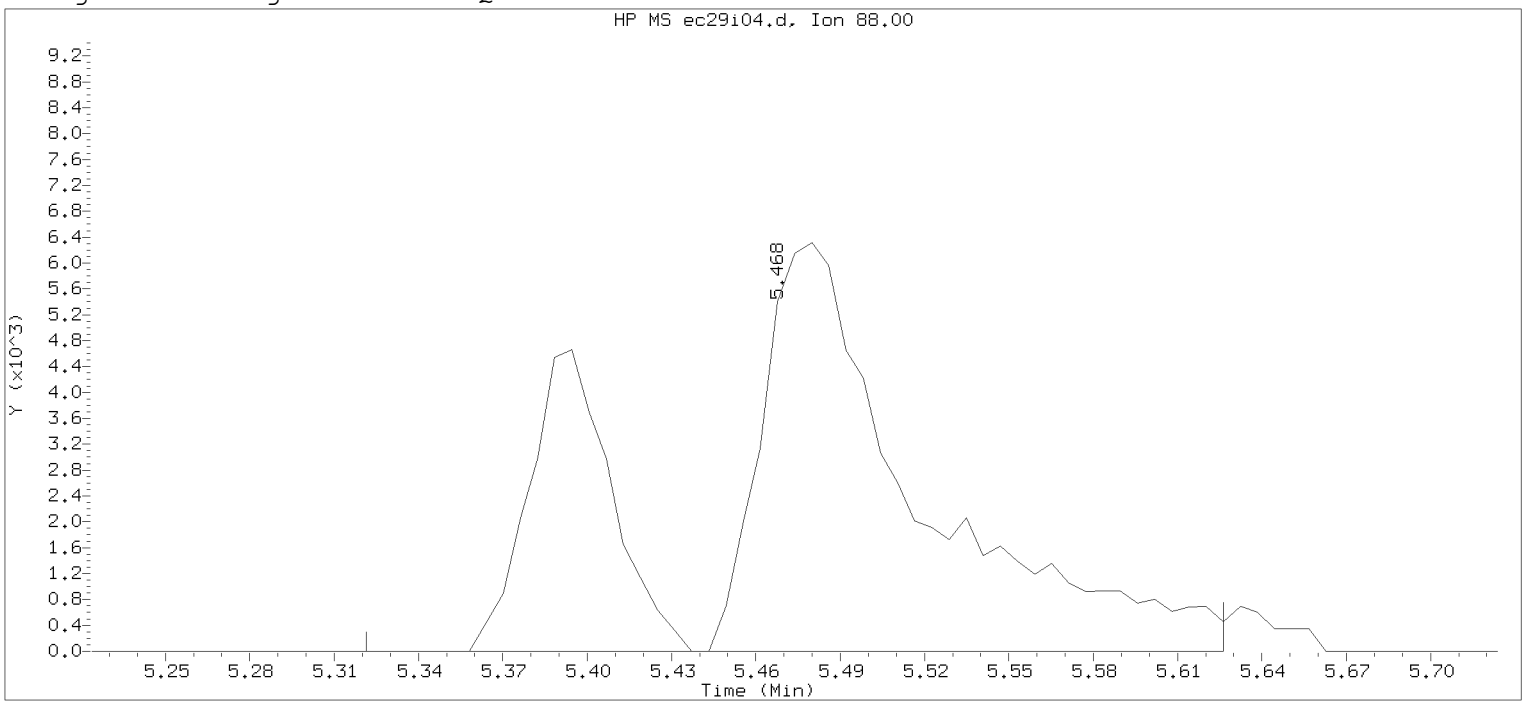
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

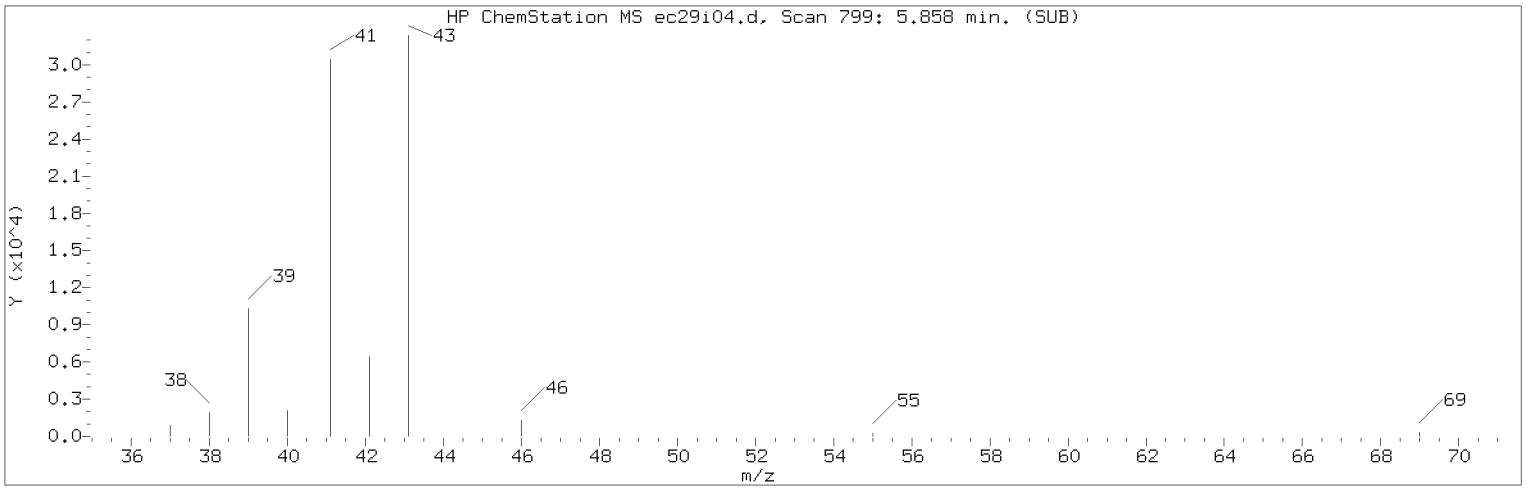
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:56
Date, time and analyst ID of latest file update: 29-Oct-2018 21:56 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

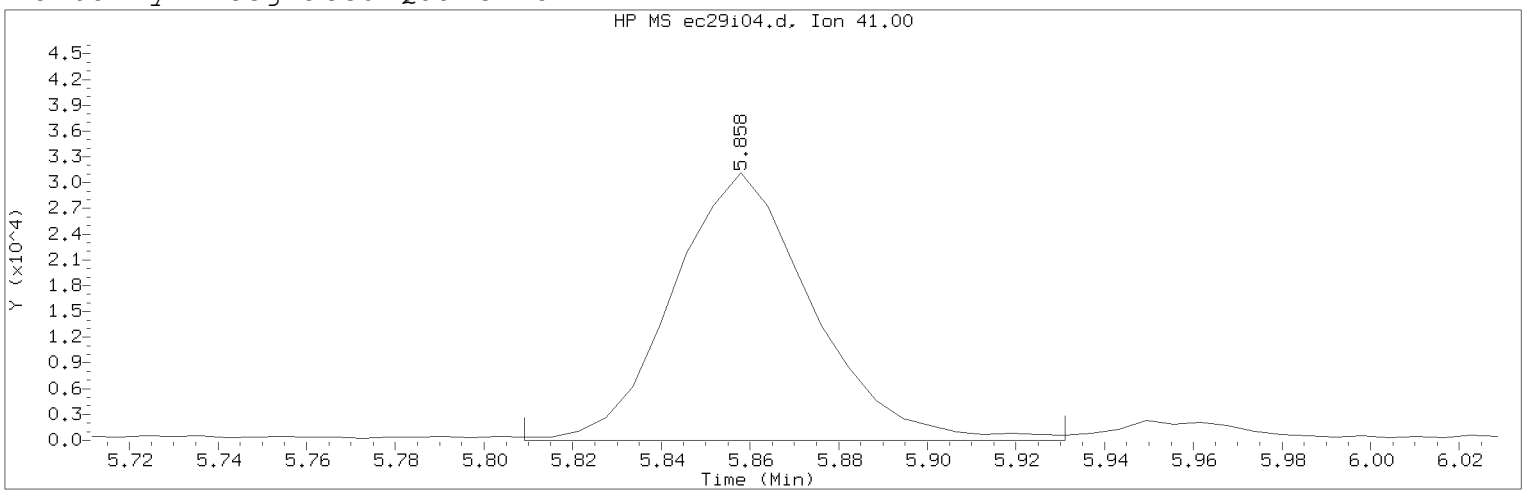
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 735
Retention Time (minutes): 5.468
Quant Ion : 88.00
Area : 33869
On-column Amount (ng) : 382.9000
Integration start scan : 710 Integration stop scan: 760
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD020 Lab Sample ID: VSTD020

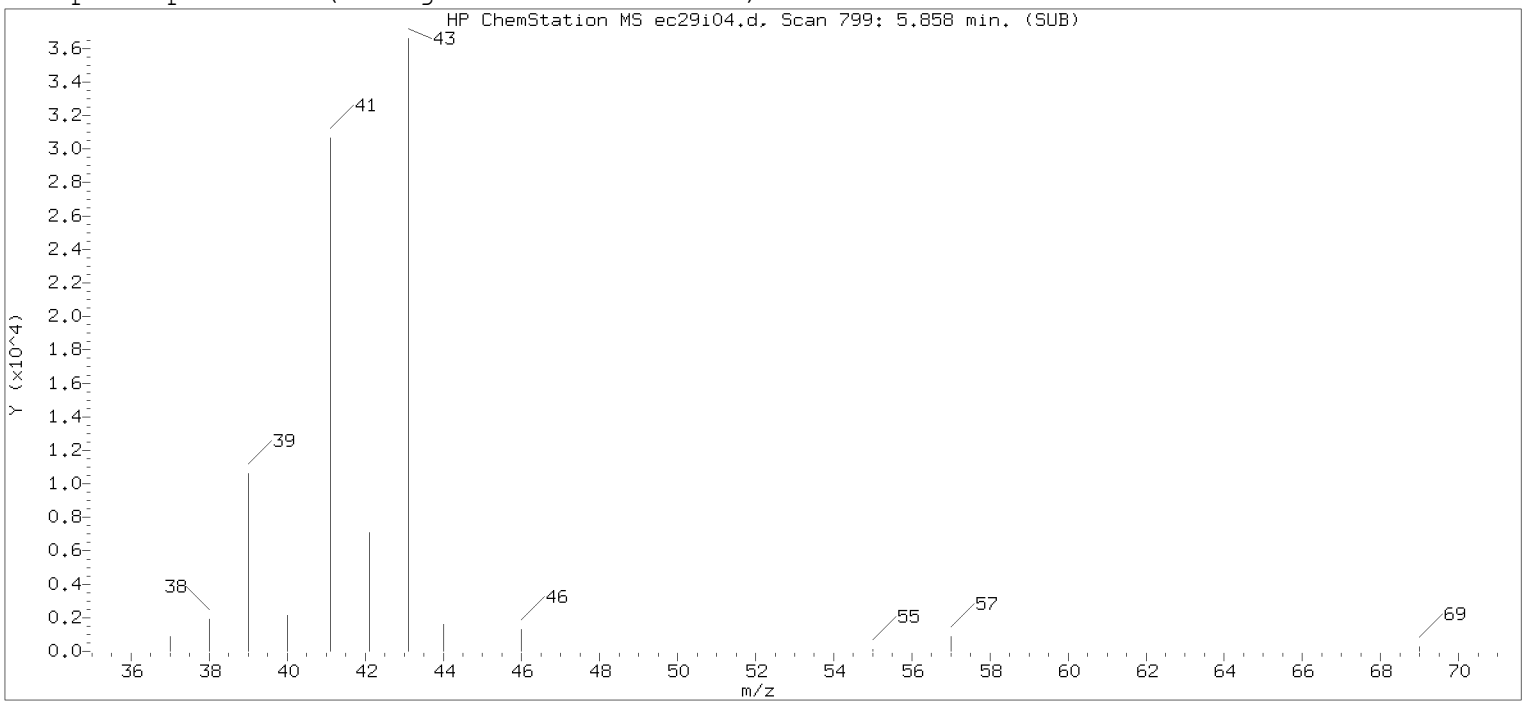
Compound Number : 80
Compound Name : 2-Nitropropane
Scan Number : 799
Retention Time (minutes): 5.858
Quant Ion : 41.00
Area (flag) : 67982M
On-Column Amount (ng) : 37.5388
Integration start scan : 790 Integration stop scan: 810
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

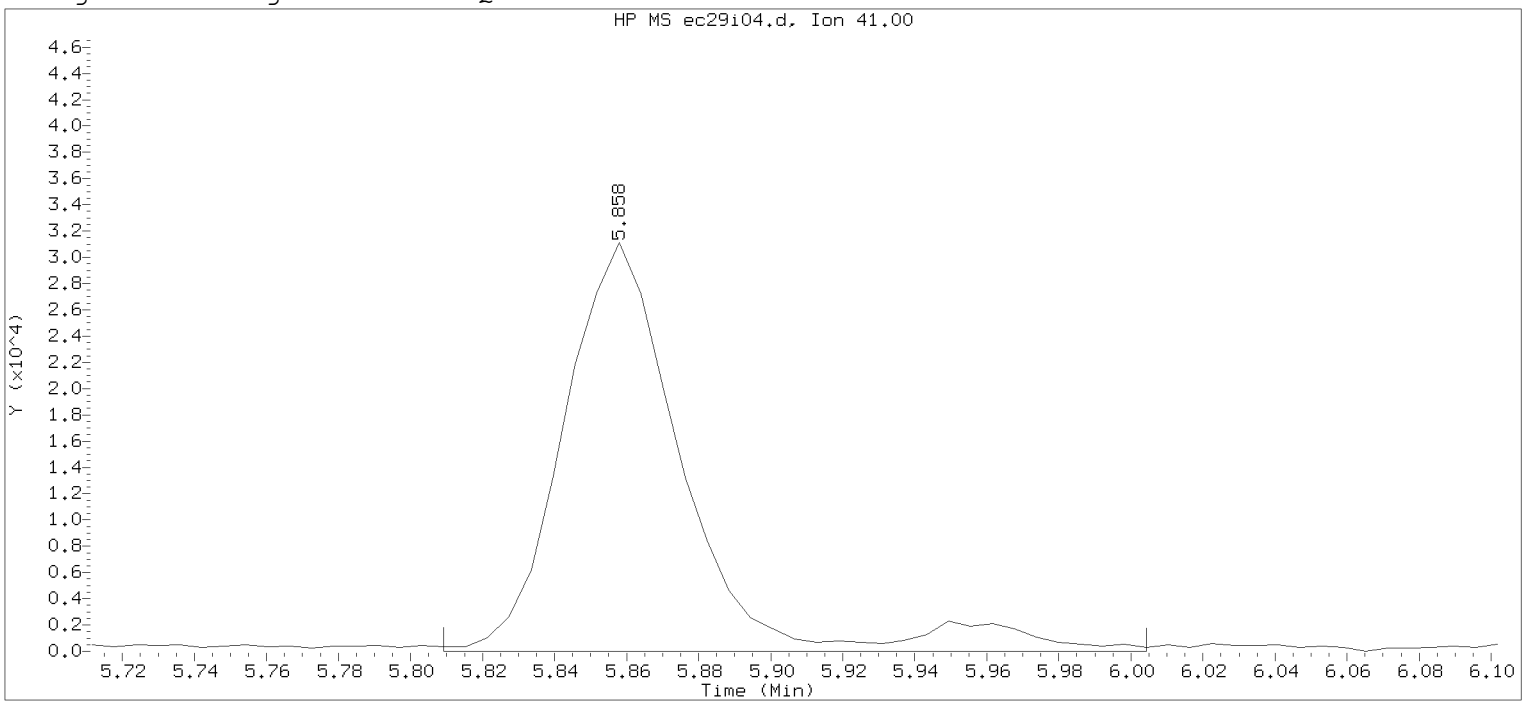
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

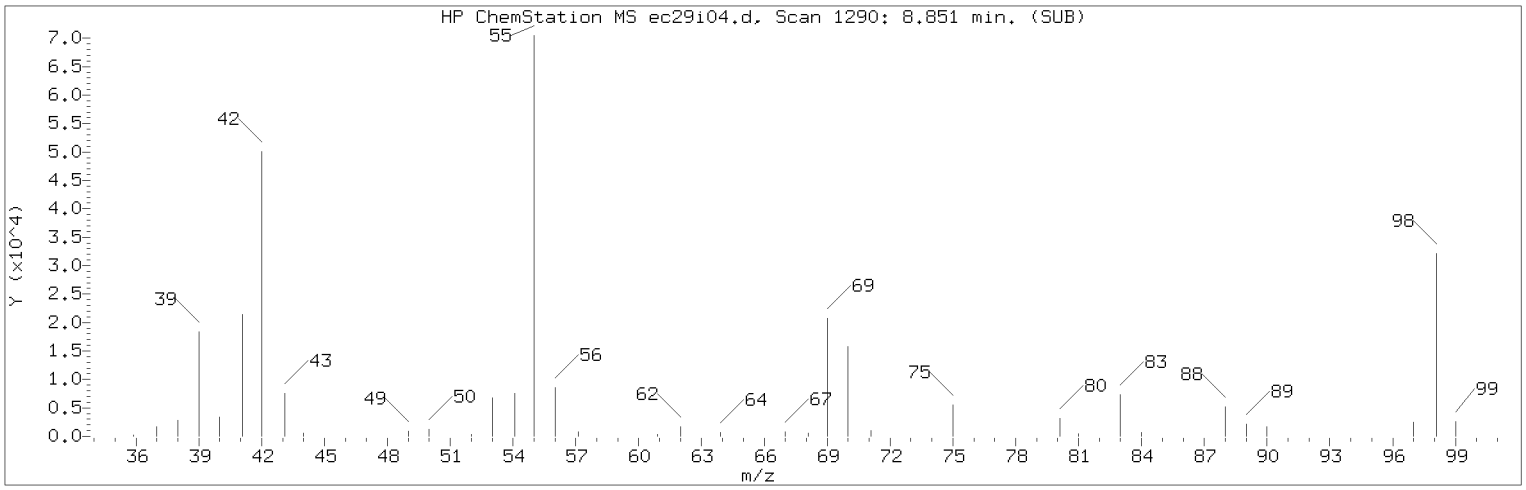
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:56
Date, time and analyst ID of latest file update: 29-Oct-2018 21:56 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

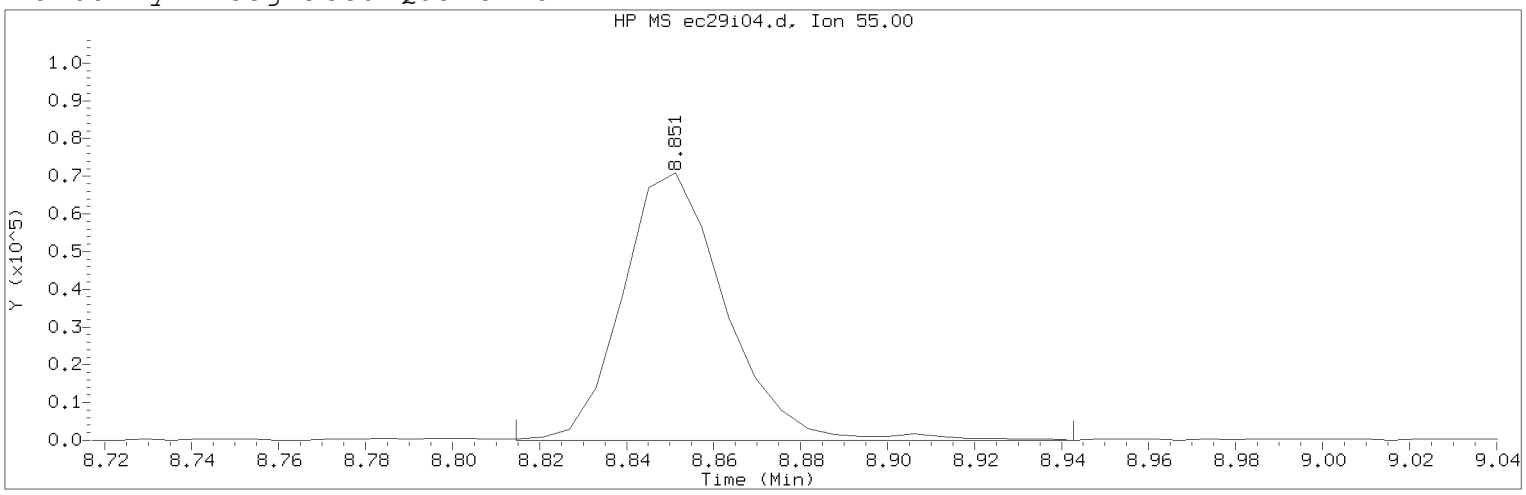
Compound Number : 80
Compound Name : 2-Nitropropane
Scan Number : 799
Retention Time (minutes): 5.858
Quant Ion : 41.00
Area : 72861
On-column Amount (ng) : 40.7388
Integration start scan : 790 Integration stop scan: 822
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD020 Lab Sample ID: VSTD020

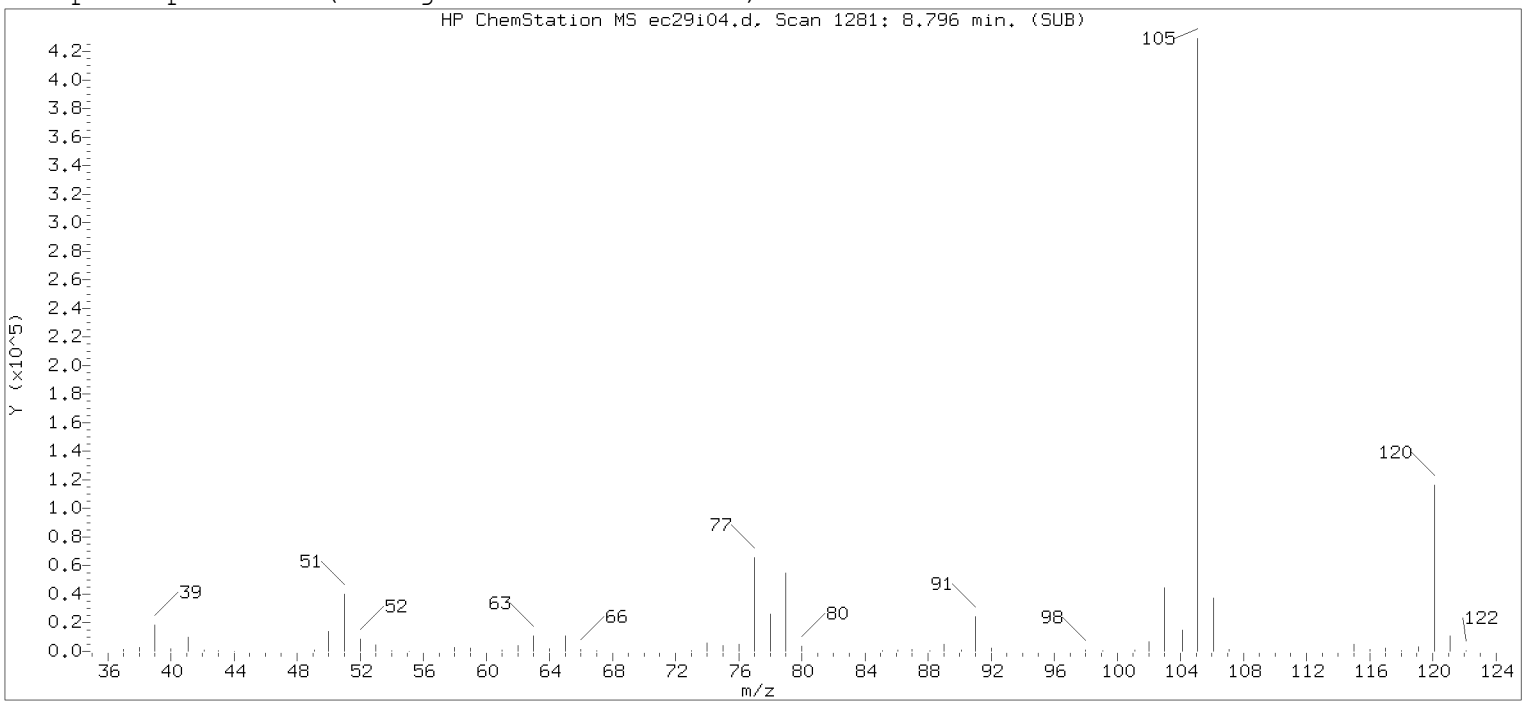
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1290
Retention Time (minutes): 8.851
Quant Ion : 55.00
Area (flag) : 116582MA
On-Column Amount (ng) : 464.6106
Integration start scan : 1283 Integration stop scan: 1304
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

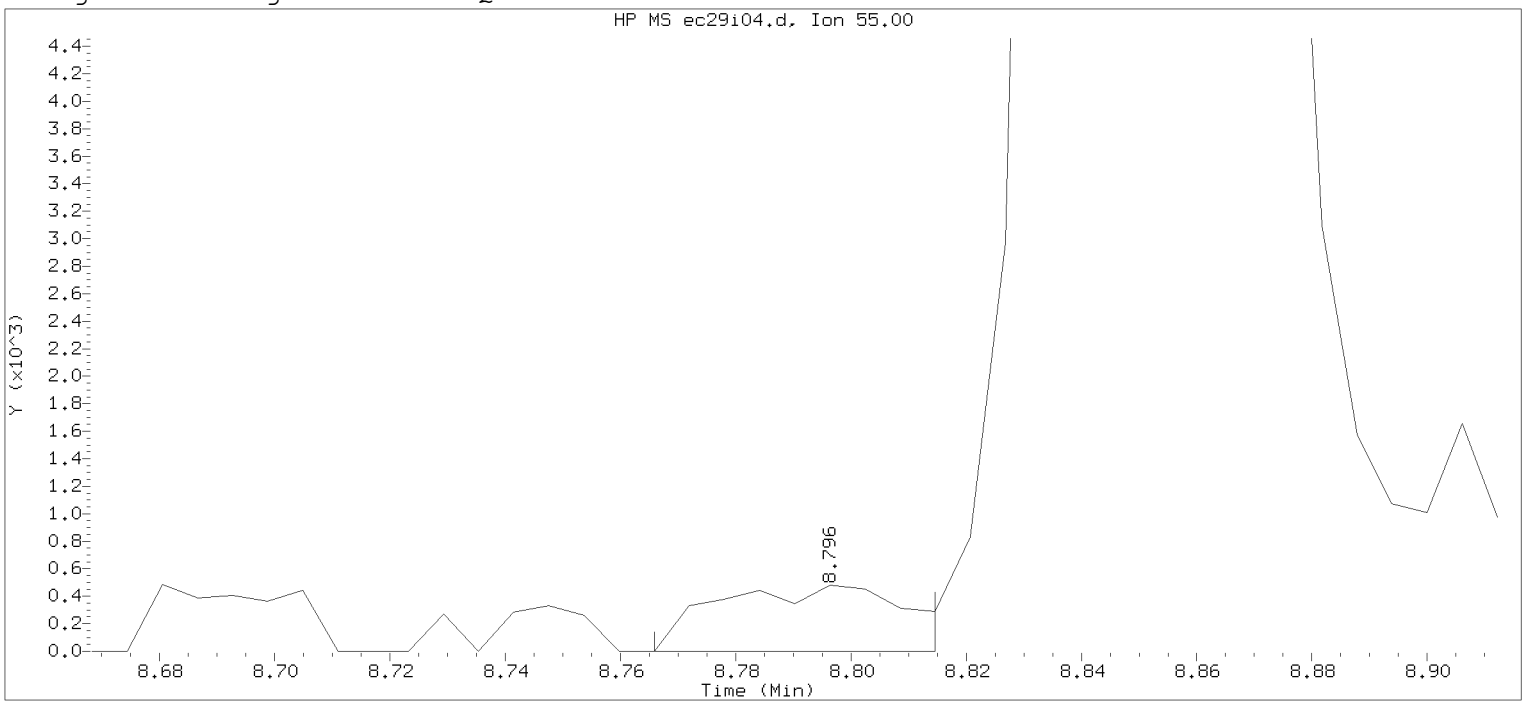
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



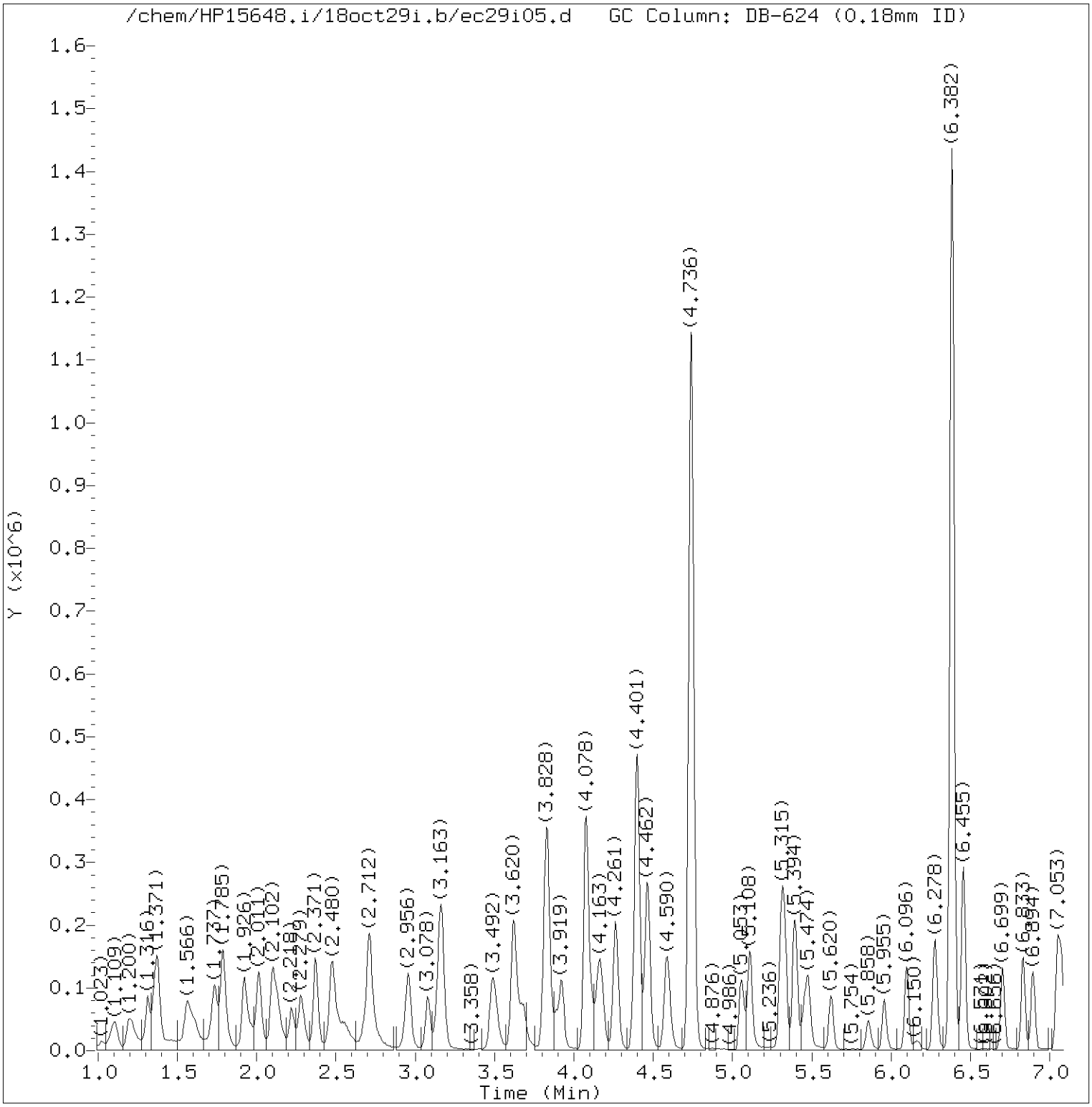
Data File: /chem/HP15648.i/18oct29i.b/ec29i04.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 21:40 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 21:56
Date, time and analyst ID of latest file update: 29-Oct-2018 21:56 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1281
Retention Time (minutes): 8.796
Quant Ion : 55.00
Area : 1057
On-column Amount (ng) : 498.5753
Integration start scan : 1275 Integration stop scan: 1283
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray.



Total Ion Chromatogram (TIC)

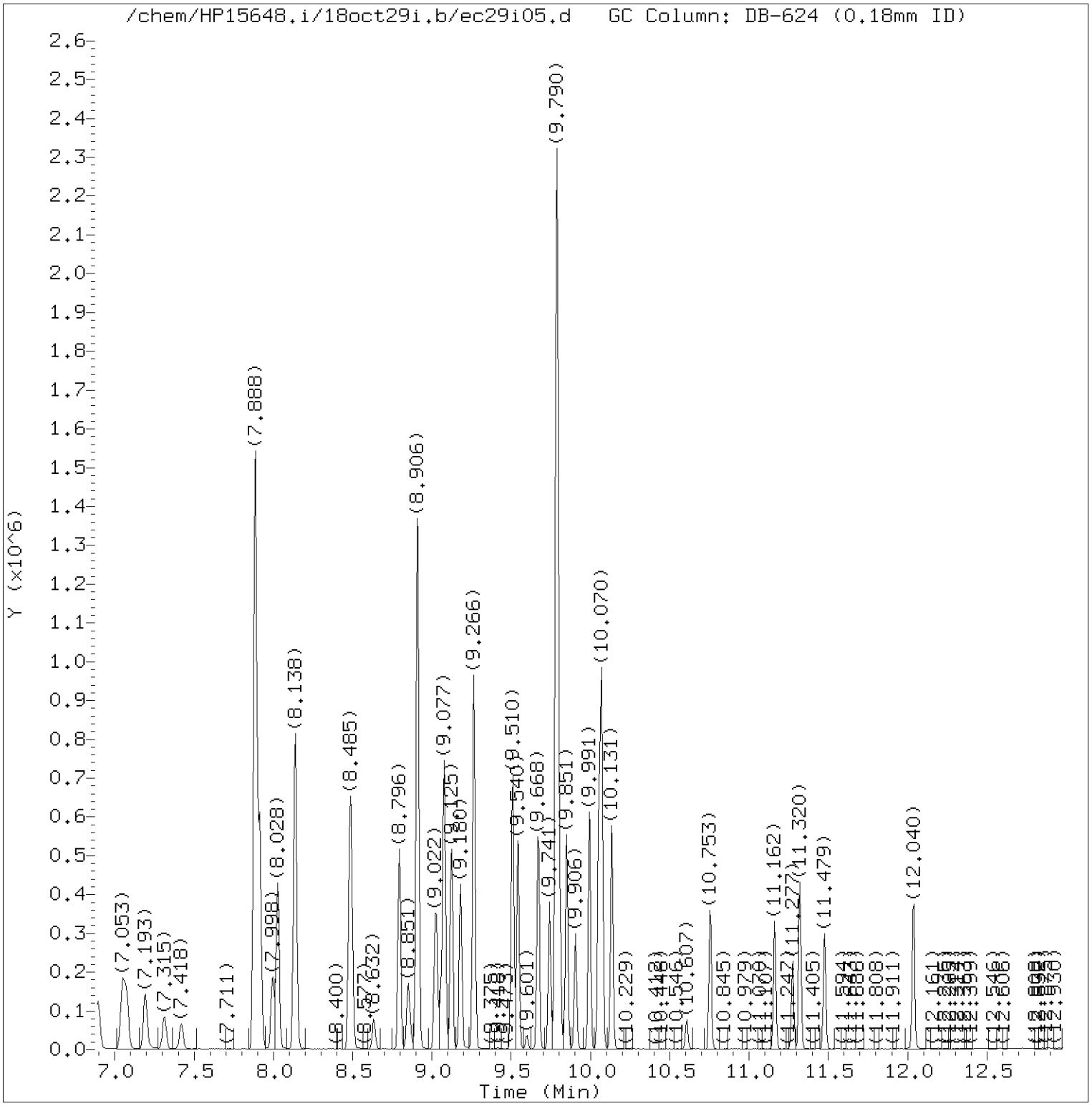
Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.194	85	87477	10.753
4) Chloromethane	(2)	1.316	50	87070	10.251
5) 1,3-Butadiene	(2)	1.365	39	68565M	10.150
6) Vinyl Chloride	(2)	1.383	62	83435	10.665
8) Bromomethane	(2)	1.560	94	56110	10.297
9) Chloroethane	(2)	1.609	64	48623	10.826
10) Dichlorofluoromethane	(2)	1.731	67	103844	9.640
11) n-Pentane	(2)	1.785	43	94461	11.193
12) Trichlorofluoromethane	(2)	1.785	101	95614M	10.658
14) Ethyl ether	(2)	1.920	59	45776	10.139
15) Freon 123a	(2)	1.938	67	63726	10.669
16) Acrolein	(1)	2.017	56	145834	99.852
17) 1,1-Dichloroethene	(2)	2.102	96	44318	10.290
17) 1,1-Dichloroethene	(2)	2.102	63	24479	11.070
18) Acetone	(1)	2.127	58	13340	21.819
19) Freon 113	(2)	2.127	101	45508	11.011
21) 2-Propanol	(1)	2.218	45	42437	100.894
22) Methyl Iodide	(2)	2.218	142	74880	10.186
23) Carbon Disulfide	(2)	2.279	76	157584	10.473
25) Allyl Chloride	(2)	2.371	41	91085	9.572
27) Methyl Acetate	(2)	2.383	43	46509	9.145
28) Methylene Chloride	(2)	2.474	84	51069	10.101
29)*t-Butyl alcohol-d10	(1)	2.480	65	189728	250.000
30) t-Butyl alcohol	(1)	2.554	59	77171	107.305
31) Acrylonitrile	(2)	2.675	53	27475	10.109
32) trans-1,2-Dichloroethene	(2)	2.712	96	49246	10.291
33) Methyl Tertiary Butyl Ether	(2)	2.718	73	152501	9.989
34) n-Hexane	(2)	2.956	57	87273	10.529
36) 1,1-Dichloroethane	(2)	3.078	63	97632	10.359
38) di-Isopropyl ether	(2)	3.151	45	180852	10.296
39) 2-Chloro-1,3-butadiene	(2)	3.169	53	92126	10.321
40) Ethyl t-butyl ether	(2)	3.486	59	171004	10.414
42) cis-1,2-Dichloroethene	(2)	3.614	96	53619	10.109
44) 2-Butanone	(2)	3.627	43	67515	19.648
45) 2,2-Dichloropropane	(2)	3.627	77	80899	10.160
47) Propionitrile	(1)	3.681	54	103334	101.399
48) Methacrylonitrile	(2)	3.828	67	141858	50.834
49) Bromochloromethane	(2)	3.846	128	24647	9.616

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

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	3.889	71	17702	20.501
51) Chloroform	(2)	3.925	83	83503	10.043
52)$Dibromofluoromethane	(2)	4.078	113	240487	50.260
52)$Dibromofluoromethane	(2)	4.072	111	244186	49.526
53) 1,1,1-Trichloroethane	(2)	4.102	97	77496	10.200
54) Cyclohexane	(2)	4.157	56	106076	11.172
54) Cyclohexane	(2)	4.163	84	85291	10.825
54) Cyclohexane	(2)	4.163	69	32589	11.329
55) 1,1-Dichloropropene	(2)	4.261	75	76675	10.359
56) Carbon Tetrachloride	(2)	4.267	117	65679	10.492
58) Isobutyl Alcohol	(1)	4.389	41	64241	253.700
57)$1,2-Dichloroethane-d4	(2)	4.401	102	64967	49.933
57)$1,2-Dichloroethane-d4	(2)	4.401	65	314178	49.741
57)$1,2-Dichloroethane-d4	(2)	4.401	104	40582	49.023
60) Benzene	(2)	4.462	78	218986	10.200
61) 1,2-Dichloroethane	(2)	4.474	62	66258	9.706
61) 1,2-Dichloroethane	(2)	4.474	98	6721	9.114
65) t-Amyl methyl ether	(2)	4.590	73	162288	10.353
66)*Fluorobenzene	(2)	4.736	96	1092296	50.000
67) n-Heptane	(2)	4.748	43	91788	10.166
69) n-Butanol	(1)	5.053	56	102325	486.911
71) Trichloroethene	(2)	5.108	95	54326	10.415
73) Methylcyclohexane	(2)	5.309	83	108068	10.525
73) Methylcyclohexane	(2)	5.309	98	47428	10.236
74) 1,2-Dichloropropane	(2)	5.333	63	56836	9.883
75) Dibromomethane	(2)	5.449	93	28773	9.730
76) 1,4-Dioxane	(1)	5.474	88	13352M	264.945
77) Methyl Methacrylate	(2)	5.480	69	46667	9.795
79) Bromodichloromethane	(2)	5.620	83	63307	9.943
80) 2-Nitropropane	(2)	5.858	41	33996M	18.945
81) 2-Chloroethyl Vinyl Ether	(2)	5.955	63	39517M	9.836
82) cis-1,3-Dichloropropene	(2)	6.096	75	86360	9.802
43) 1,2-Dichloroethene (Total)	(2)		96	102865	20.400
83) 4-Methyl-2-pentanone	(2)	6.278	43	144414	19.977
84)$Toluene-d8	(3)	6.382	98	1095951	50.199
84)$Toluene-d8	(3)	6.382	100	697815	49.738
89) Toluene	(3)	6.455	92	136212	10.257
90) trans-1,3-Dichloropropene	(3)	6.699	75	81411	10.010

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
92) Ethyl Methacrylate	(3)	6.833	69	85748	9.952
93) 1,1,2-Trichloroethane	(3)	6.894	97	44163	10.117
94) Tetrachloroethene	(3)	7.053	166	51553	10.410
95) 1,3-Dichloropropane	(3)	7.077	76	82638	10.144
97) 2-Hexanone	(3)	7.193	43	109006	21.018
98) Dibromochloromethane	(3)	7.315	129	45838	9.896
102) 1-Chlorohexane	(3)	7.315	91	4358M	10.910
100) 1,2-Dibromoethane	(3)	7.418	107	45156	9.984
101)*Chlorobenzene-d5	(3)	7.888	117	778569	50.000
103) Chlorobenzene	(3)	7.912	112	144686	10.174
104) 1,1,1,2-Tetrachloroethane	(3)	7.998	131	46550	9.924
105) Ethylbenzene	(3)	8.028	91	268313	10.266
107) m+p-Xylene	(3)	8.138	106	204612	20.495
108) o-Xylene	(3)	8.479	106	99107	10.141
110) Styrene	(3)	8.491	104	166129	10.175
111) Bromoform	(3)	8.632	173	29446	9.763
112) Isopropylbenzene	(3)	8.796	105	269116	10.469
113) Cyclohexanone	(1)	8.851	55	63024M	248.206
115)$4-Bromofluorobenzene	(3)	8.906	95	409414	50.382
115)$4-Bromofluorobenzene	(3)	8.912	174	290659	50.251
116) Bromobenzene	(4)	9.022	156	54078	9.901
117) 1,1,2,2-Tetrachloroethane	(4)	9.034	83	69066	9.950
118) 1,2,3-Trichloropropane	(4)	9.058	110	19295	9.861
119) trans-1,4-Dichloro-2-butene	(4)	9.077	53	113164	50.509
120) n-Propylbenzene	(4)	9.125	91	322573	10.585
121) 2-Chlorotoluene	(4)	9.180	126	61031	10.609
123) 1,3,5-Trimethylbenzene	(4)	9.266	105	229193	10.415
122) 4-Chlorotoluene	(4)	9.266	126	59975	10.018
125) tert-Butylbenzene	(4)	9.510	134	49560	10.526
126) Pentachloroethane	(4)	9.516	167	34668	9.870
127) 1,2,4-Trimethylbenzene	(4)	9.540	105	238560	10.520
128) sec-Butylbenzene	(4)	9.668	105	295510	10.434
130) 1,3-Dichlorobenzene	(4)	9.741	146	110574	10.073
131) p-Isopropyltoluene	(4)	9.778	119	256129	10.280
132)*1,4-Dichlorobenzene-d4	(4)	9.790	152	405510	50.000
134) 1,4-Dichlorobenzene	(4)	9.808	146	112228	10.131
135) 1,2,3-Trimethylbenzene	(4)	9.851	105	234247	9.829
136) Benzyl Chloride	(4)	9.906	91	160165	9.827

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Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

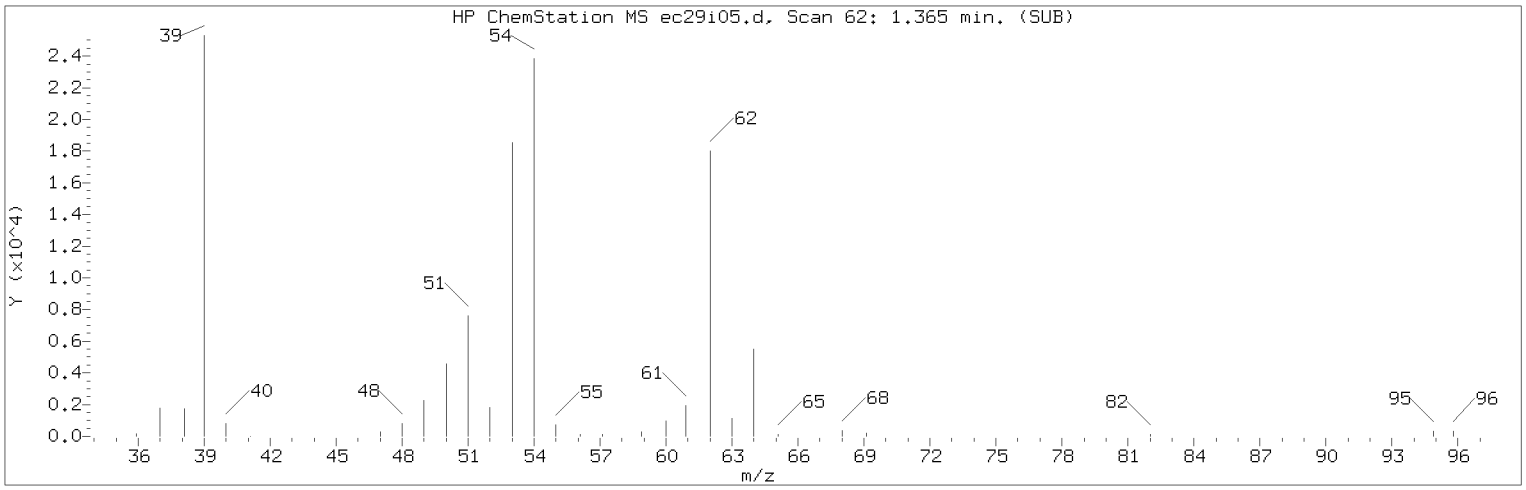
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

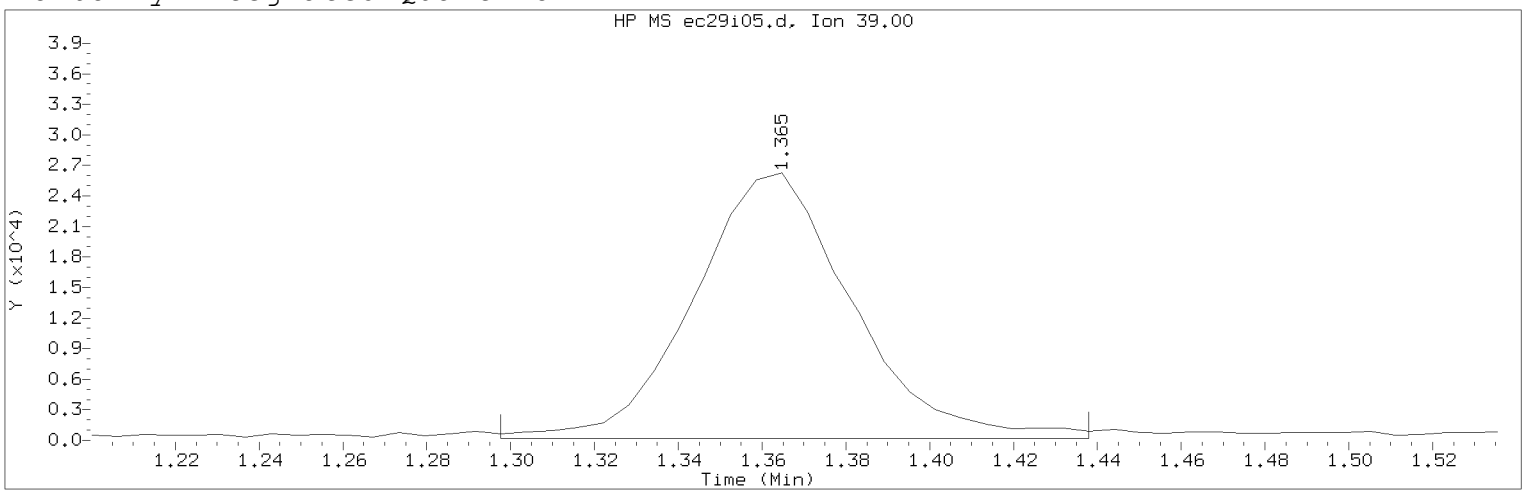
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137) 1,3-Diethylbenzene	(4)	9.991	119	151639	9.723
138) 1,4-Diethylbenzene	(4)	10.052	119	164568	9.908
139) 1,2-Dichlorobenzene	(4)	10.070	146	104861	10.065
140) n-Butylbenzene	(4)	10.070	92	129435	10.546
91) 1,3-Dichloropropene (total)	(3)		100	167771	19.812
141) 1,2-Diethylbenzene	(4)	10.131	119	122721	9.538
143) 1,2-Dibromo-3-chloropropane	(4)	10.607	75	15890	9.915
145) 1,3,5-Trichlorobenzene	(4)	10.753	180	81043	10.023
147) 1,2,4-Trichlorobenzene	(4)	11.162	180	71491	9.977
148) Hexachlorobutadiene	(4)	11.277	225	31453	9.712
149) Naphthalene	(4)	11.320	128	239469	10.213
150) 1,2,3-Trichlorobenzene	(4)	11.479	180	67094	10.046
109) Xylene (Total)	(3)		106	303719	30.635
151) 2-Methylnaphthalene	(4)	12.040	142	137248	9.424
142) Diethylbenzene (total)	(4)		100	438928	29.169

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

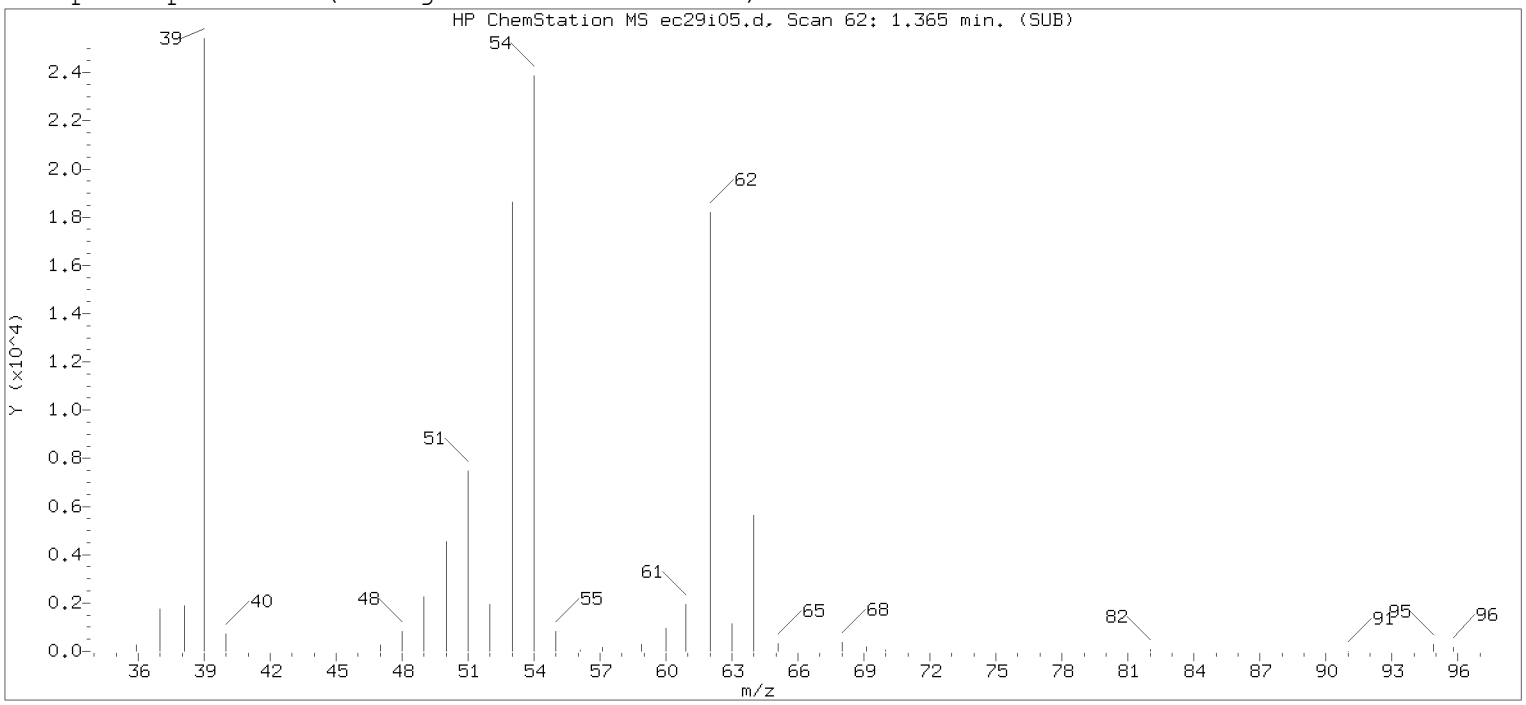
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 62
Retention Time (minutes): 1.365
Quant Ion : 39.00
Area (flag) : 68565M
On-Column Amount (ng) : 10.1496
Integration start scan : 50 Integration stop scan: 73
Y at integration start : 199 Y at integration end: 199

Reason for manual integration: improper integration

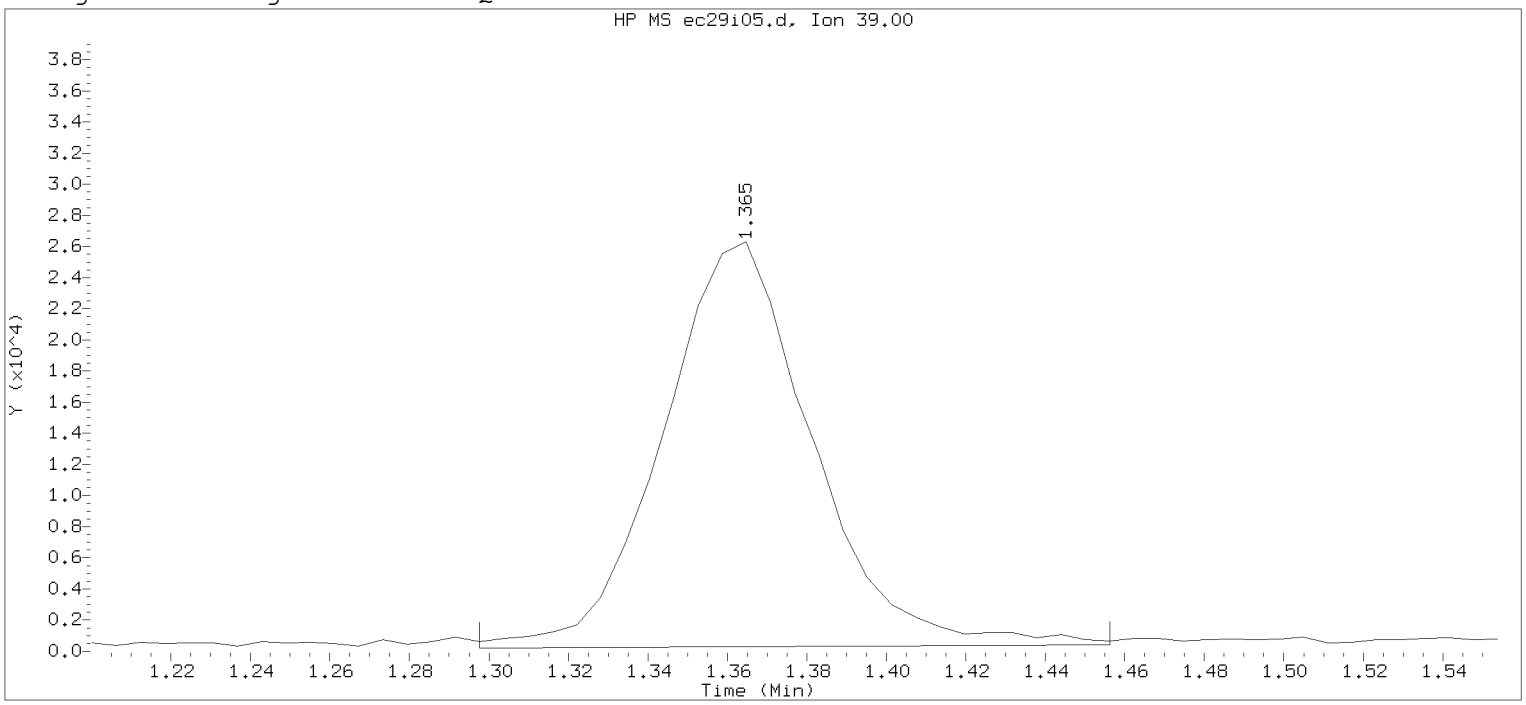
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

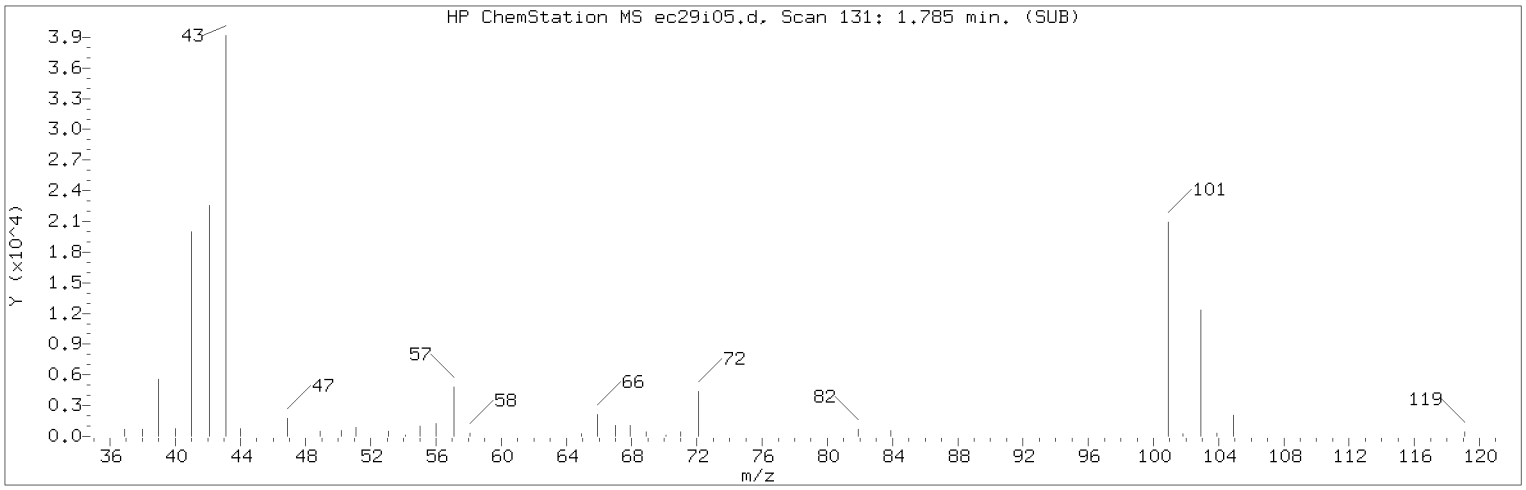
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:16
Date, time and analyst ID of latest file update: 29-Oct-2018 22:16 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

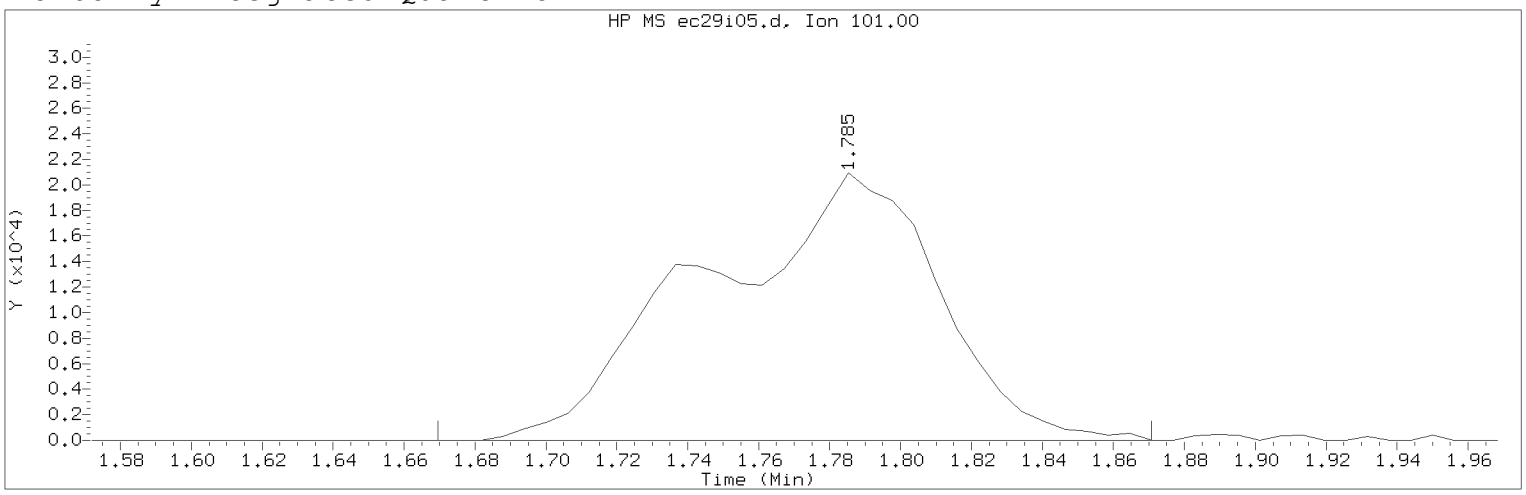
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 62
Retention Time (minutes): 1.365
Quant Ion : 39.00
Area : 68014
On-column Amount (ng) : 10.7852
Integration start scan : 50 Integration stop scan: 76
Y at integration start : 218 Y at integration end: 406

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

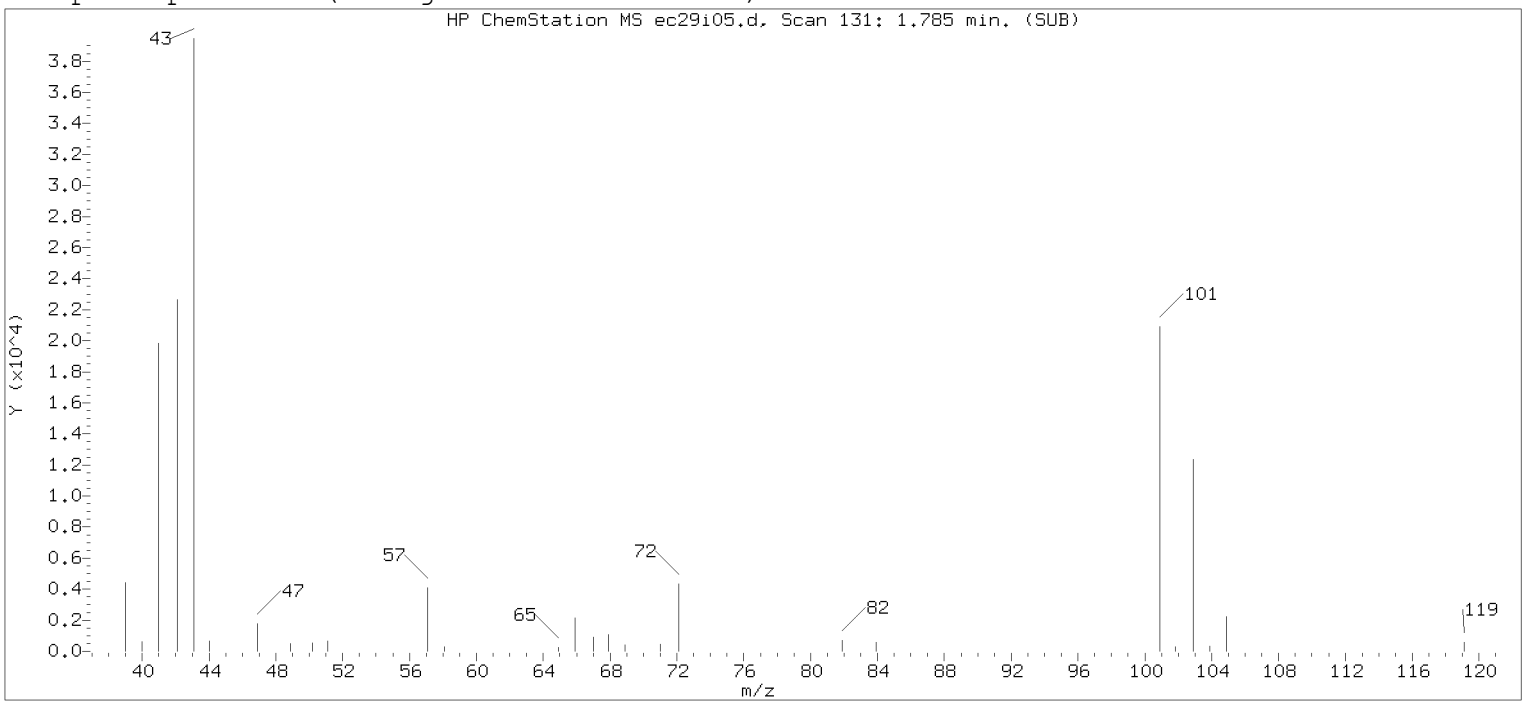
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 131
Retention Time (minutes): 1.785
Quant Ion : 101.00
Area (flag) : 95614M
On-Column Amount (ng) : 10.6577
Integration start scan : 111 Integration stop scan: 144
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

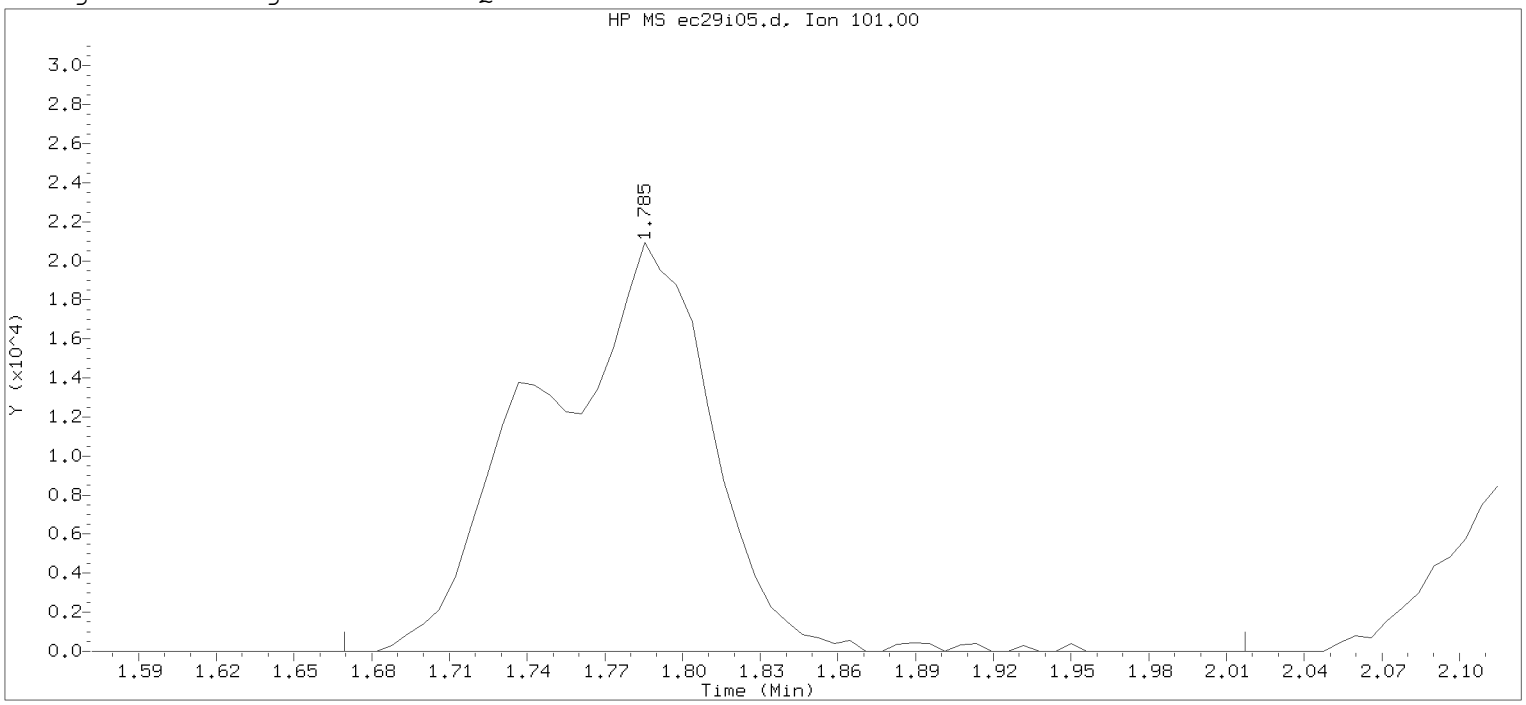
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

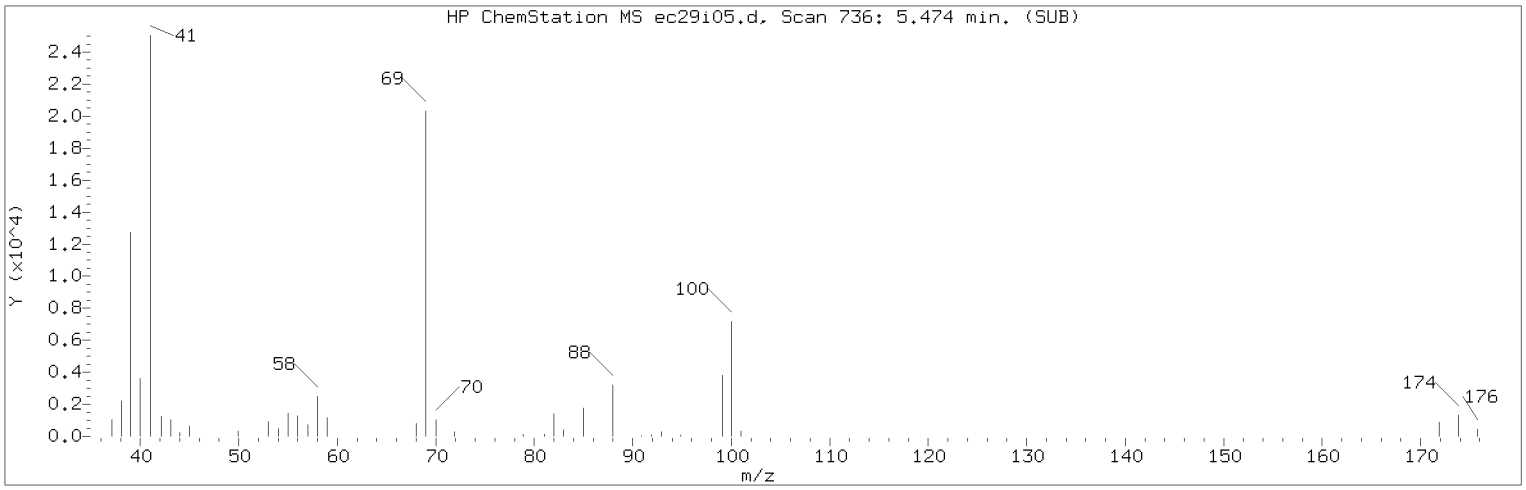
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:16
Date, time and analyst ID of latest file update: 29-Oct-2018 22:16 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

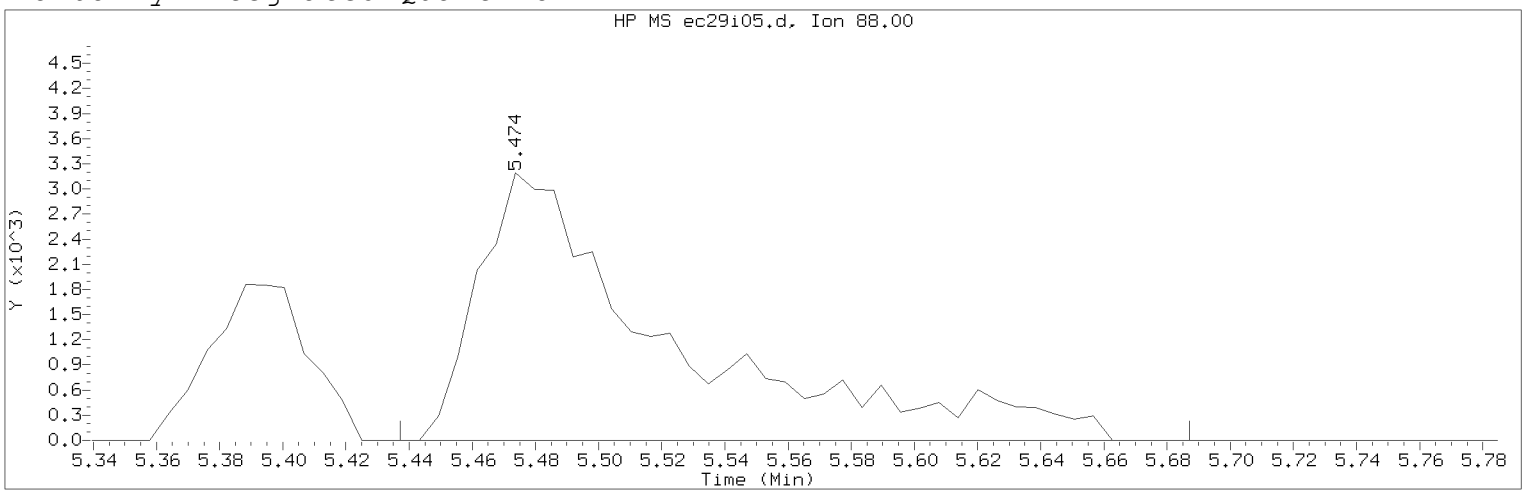
Compound Number : 12
Compound Name : Trichlorofluoromethane
Scan Number : 131
Retention Time (minutes): 1.785
Quant Ion : 101.00
Area : 96559
On-column Amount (ng) : 10.5183
Integration start scan : 111 Integration stop scan: 168
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

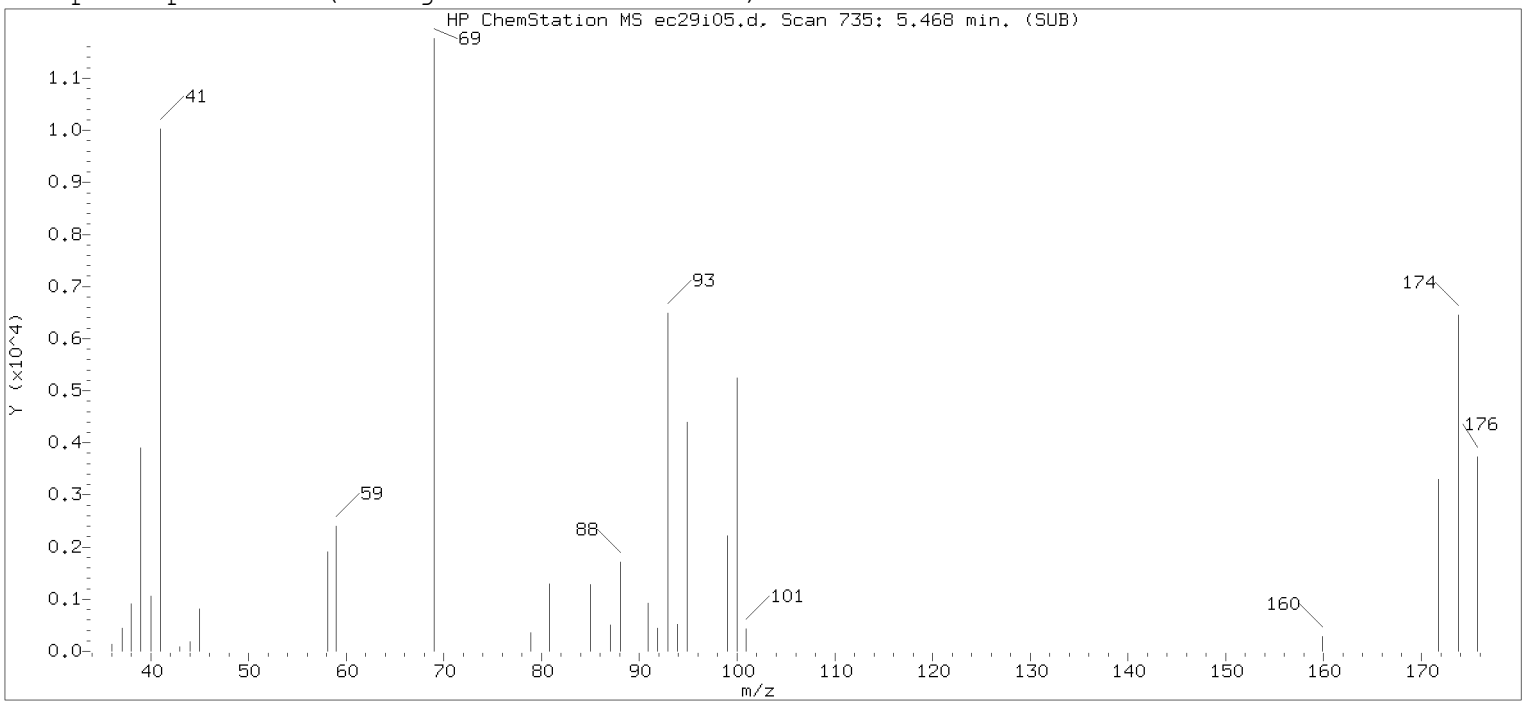
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 736
Retention Time (minutes): 5.474
Quant Ion : 88.00
Area (flag) : 13352M
On-Column Amount (ng) : 264.9455
Integration start scan : 729 Integration stop scan: 770
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

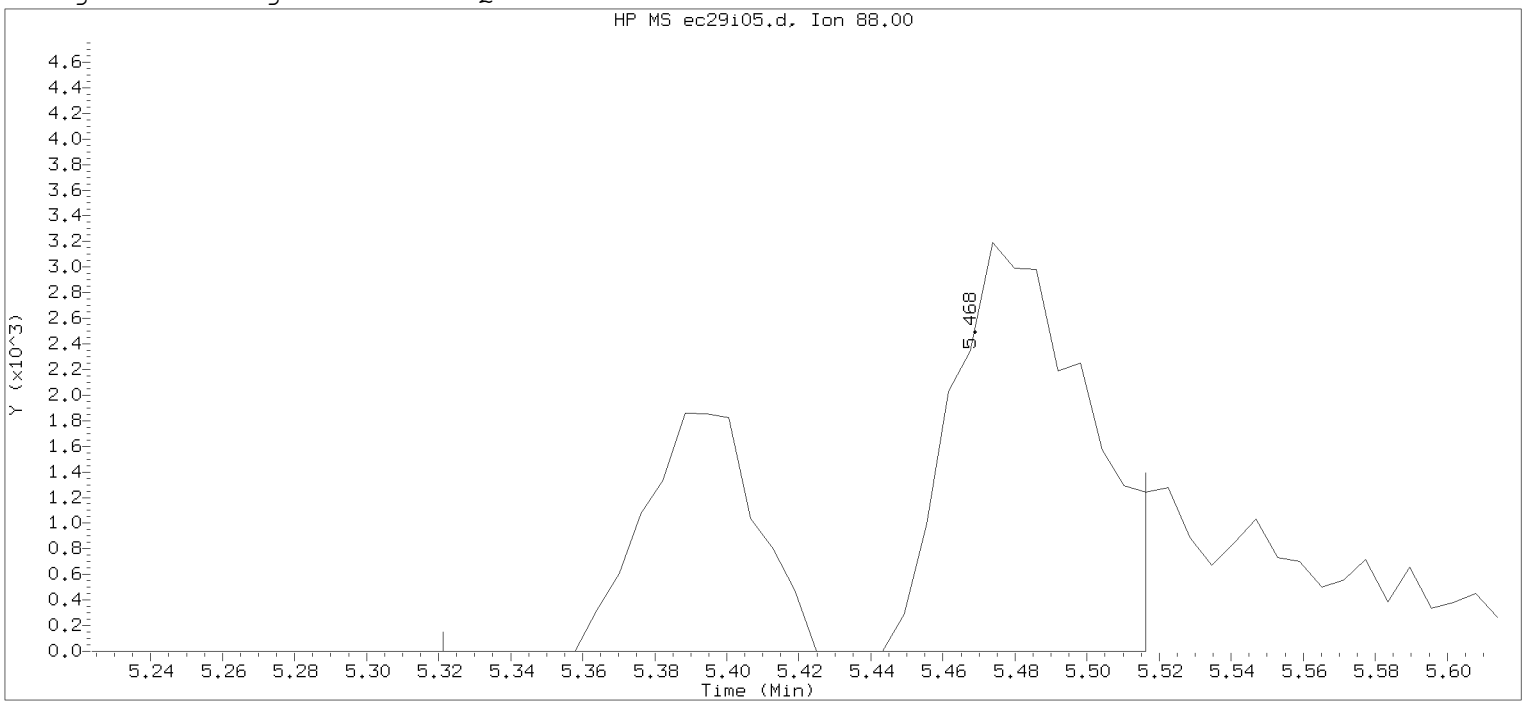
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

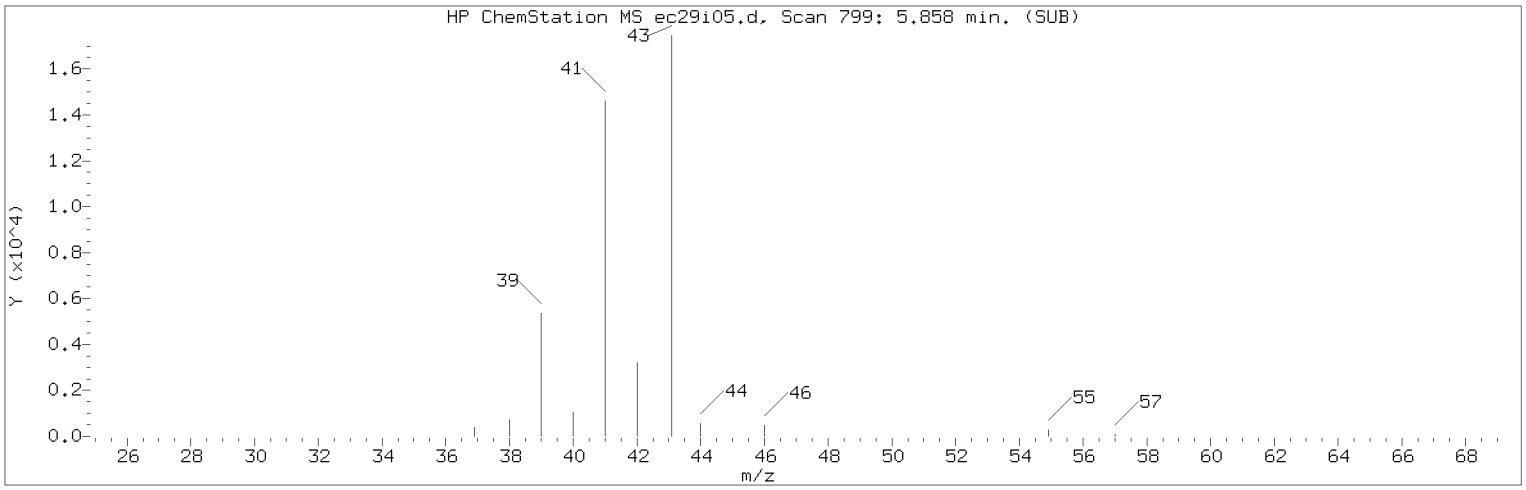
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:16
Date, time and analyst ID of latest file update: 29-Oct-2018 22:16 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

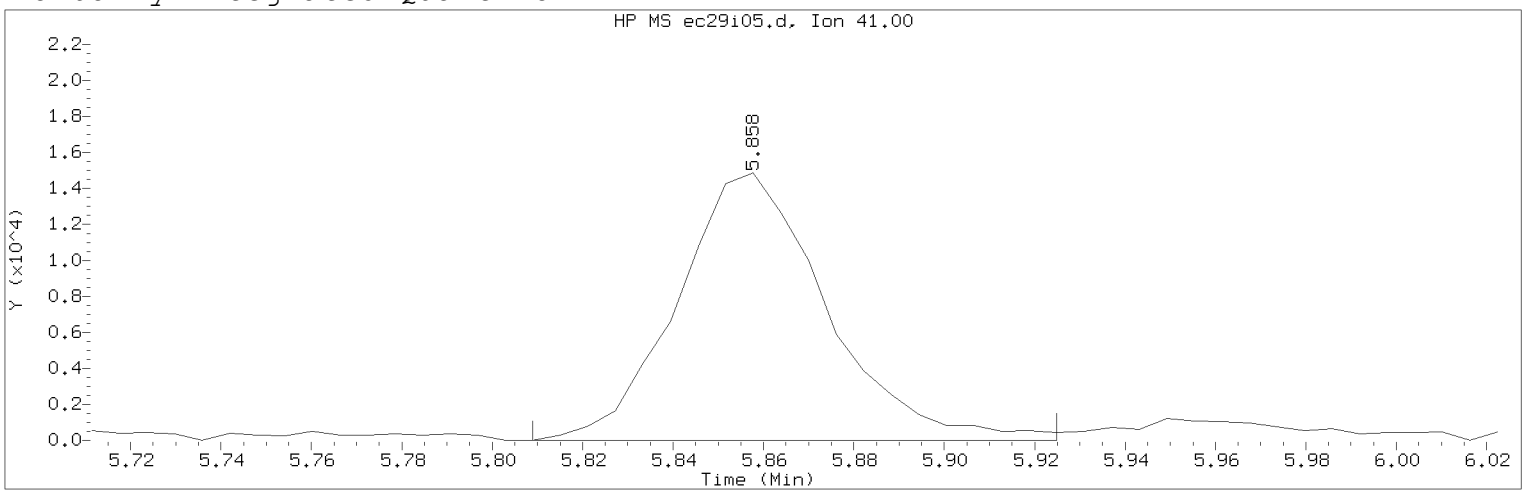
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 735
Retention Time (minutes): 5.468
Quant Ion : 88.00
Area : 12417
On-column Amount (ng) : 228.9489
Integration start scan : 710 Integration stop scan: 742
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

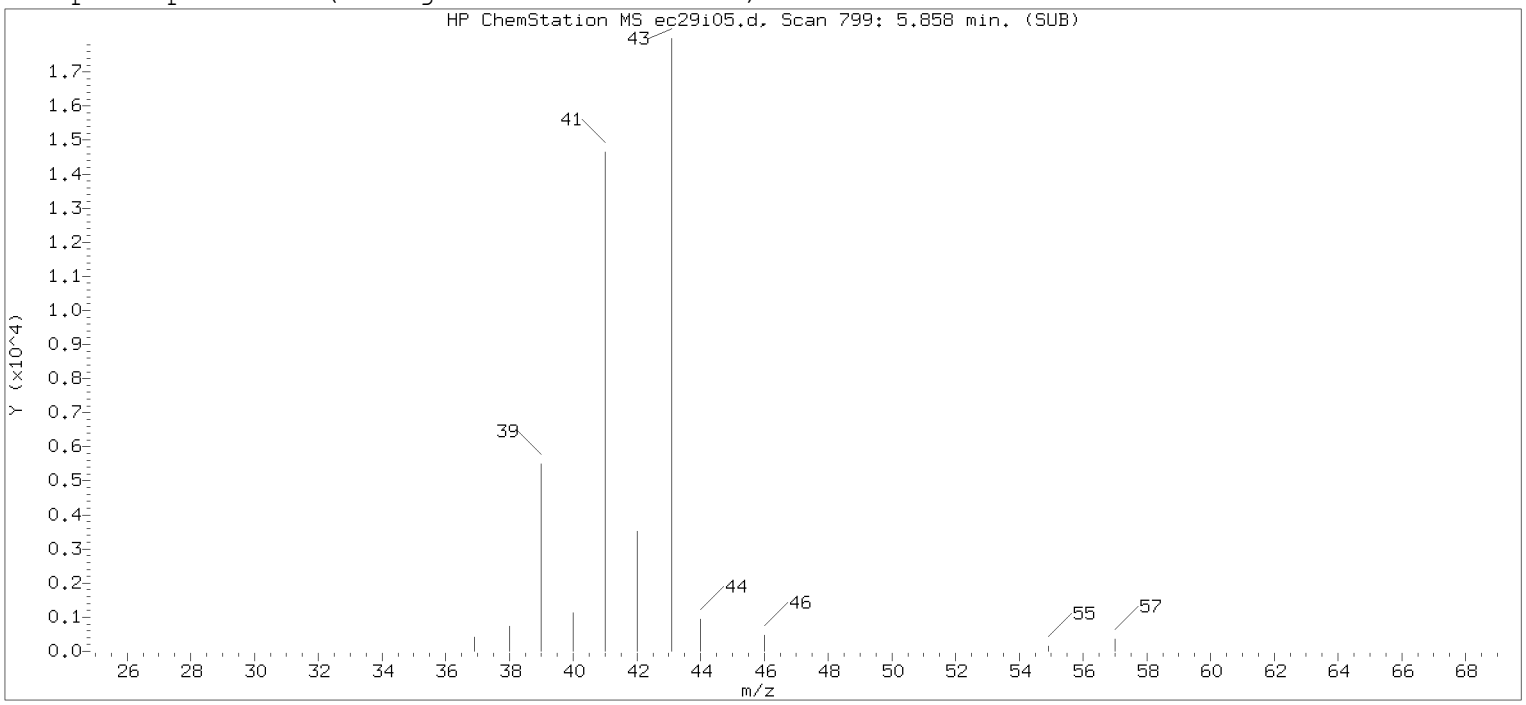
Compound Number : 80
Compound Name : 2-Nitropropane
Scan Number : 799
Retention Time (minutes): 5.858
Quant Ion : 41.00
Area (flag) : 33996M
On-Column Amount (ng) : 18.9447
Integration start scan : 790 Integration stop scan: 809
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

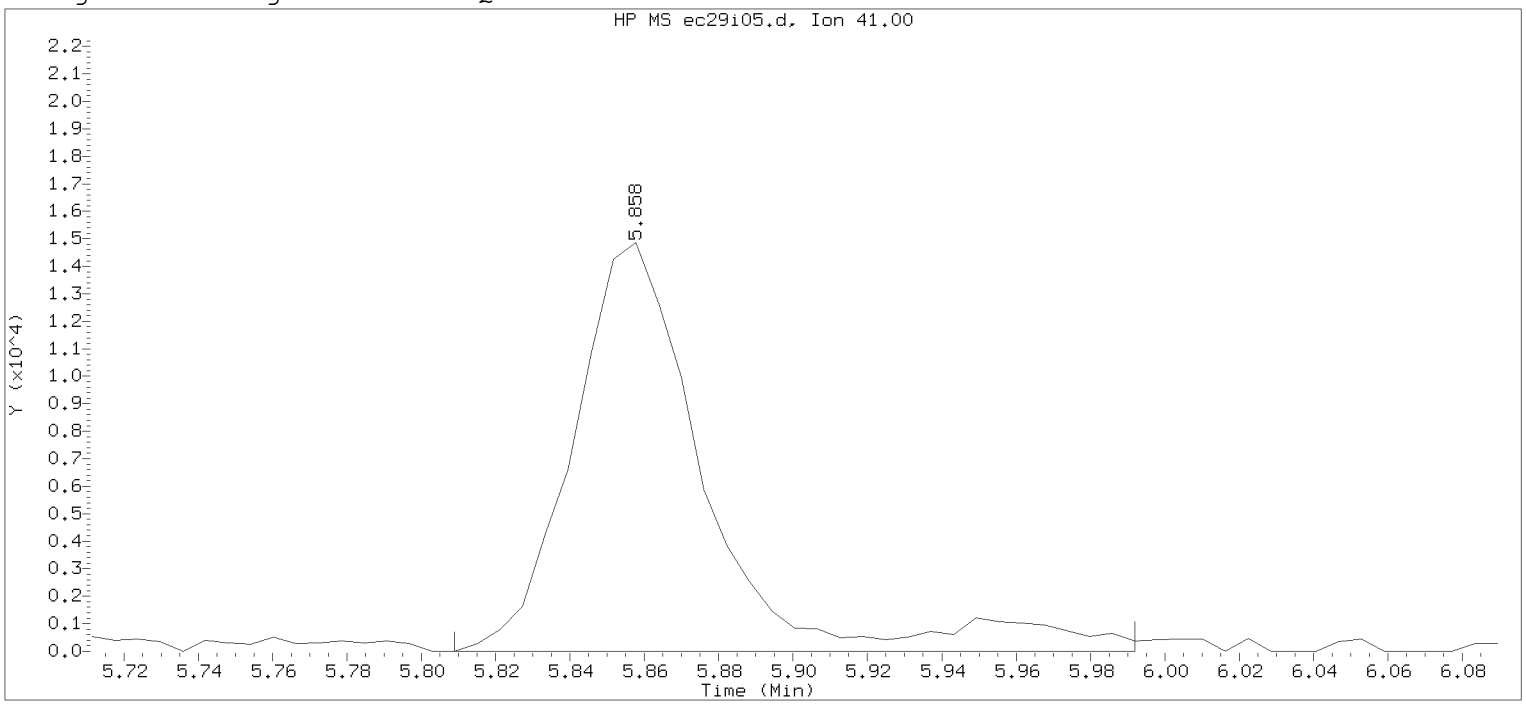
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

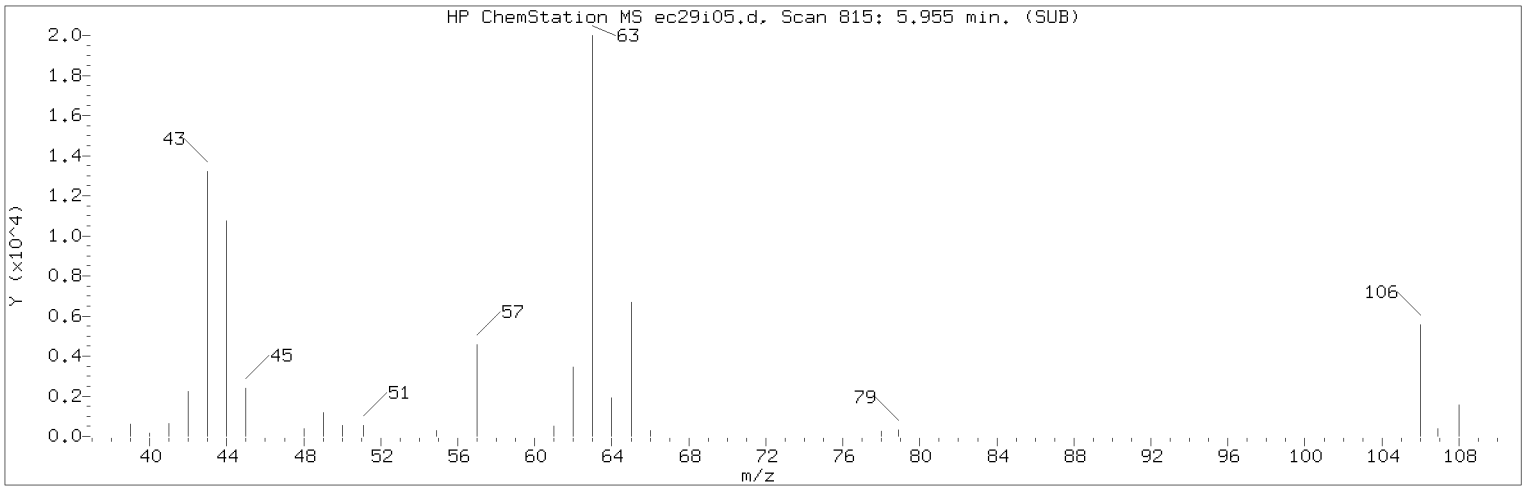
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:16
Date, time and analyst ID of latest file update: 29-Oct-2018 22:16 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

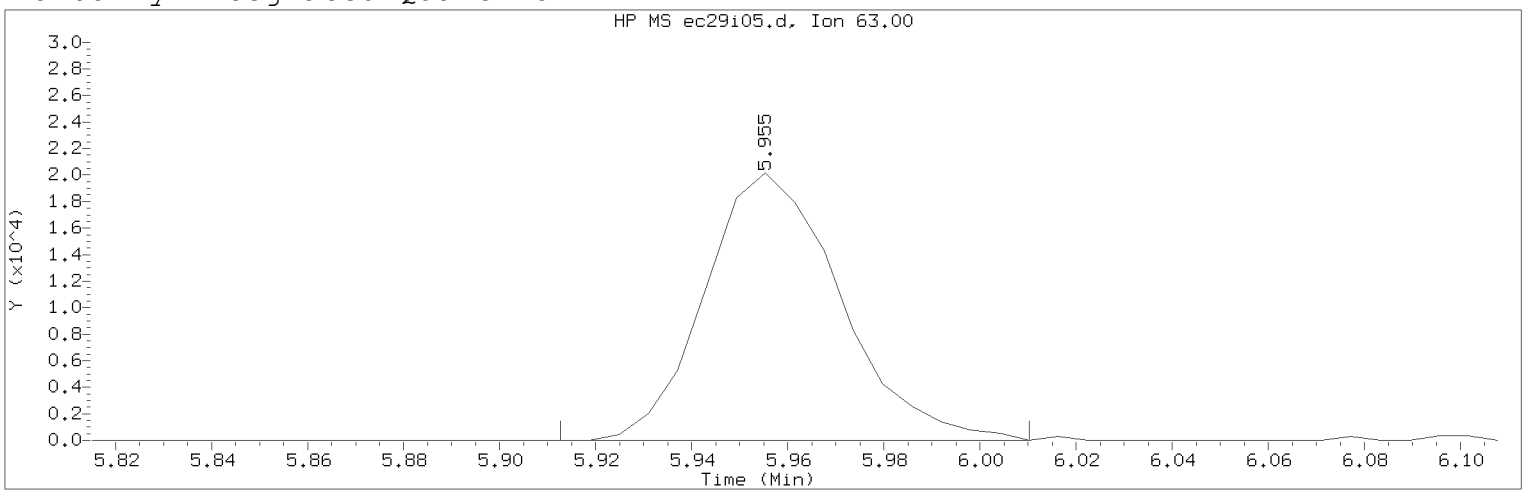
Compound Number : 80
Compound Name : 2-Nitropropane
Scan Number : 799
Retention Time (minutes): 5.858
Quant Ion : 41.00
Area : 37006
On-column Amount (ng) : 20.9826
Integration start scan : 790 Integration stop scan: 820
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

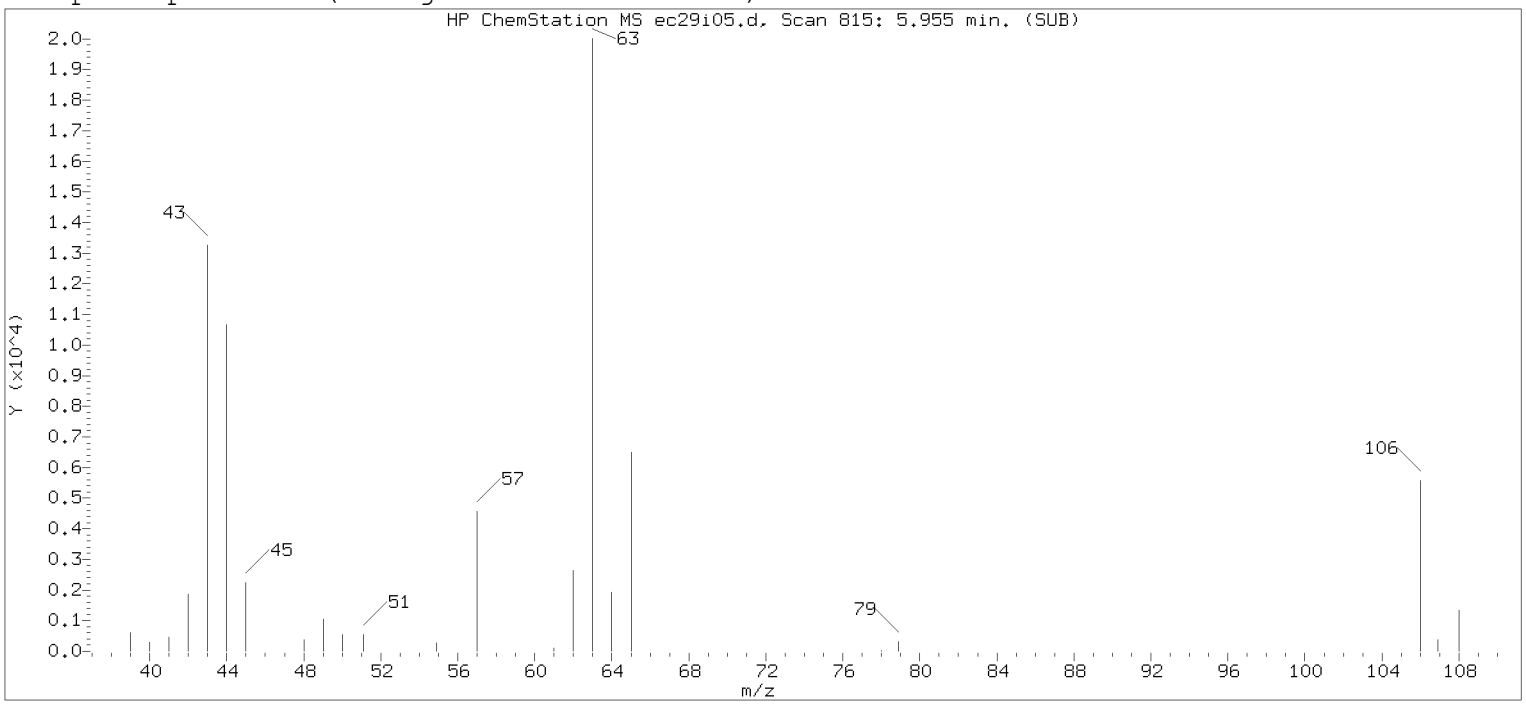
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 815
Retention Time (minutes): 5.955
Quant Ion : 63.00
Area (flag) : 39517M
On-Column Amount (ng) : 9.8356
Integration start scan : 807 Integration stop scan: 823
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

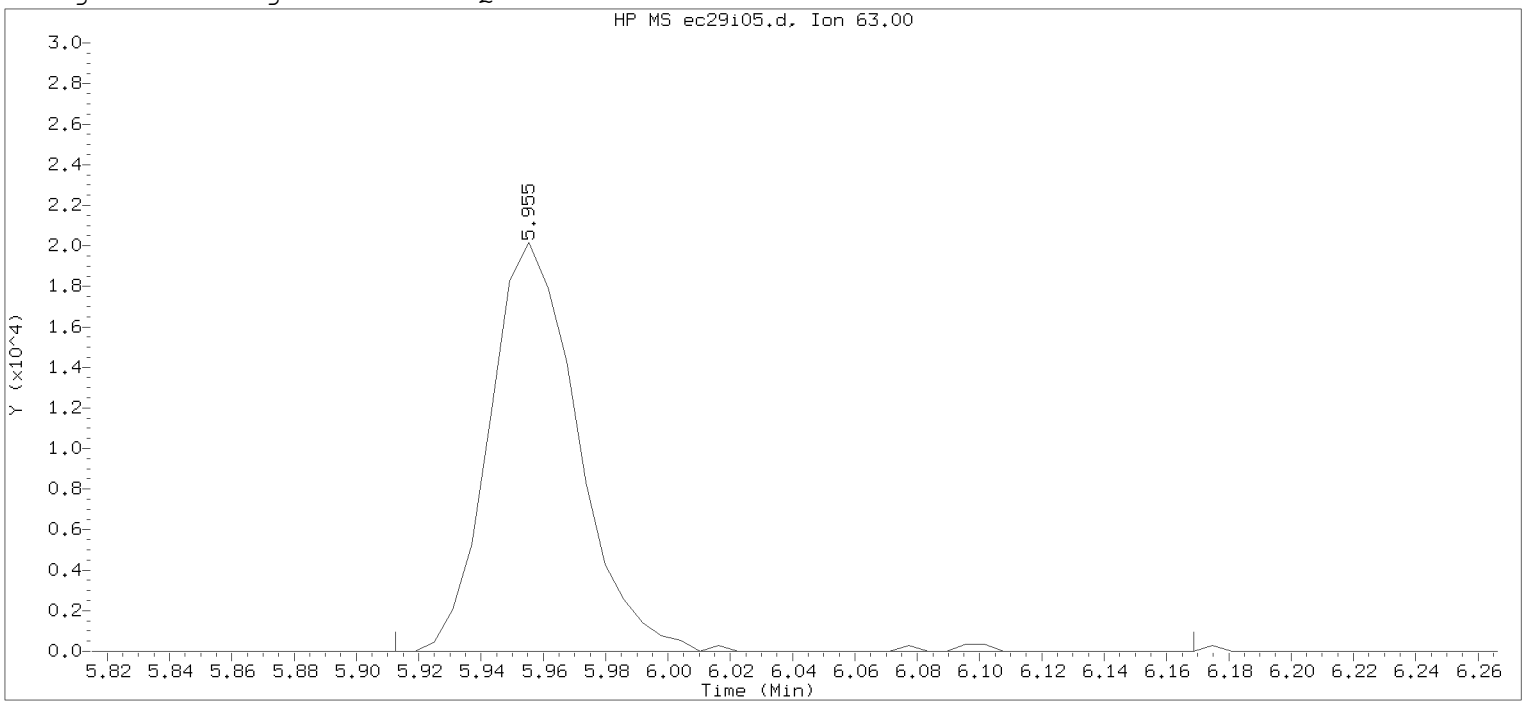
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

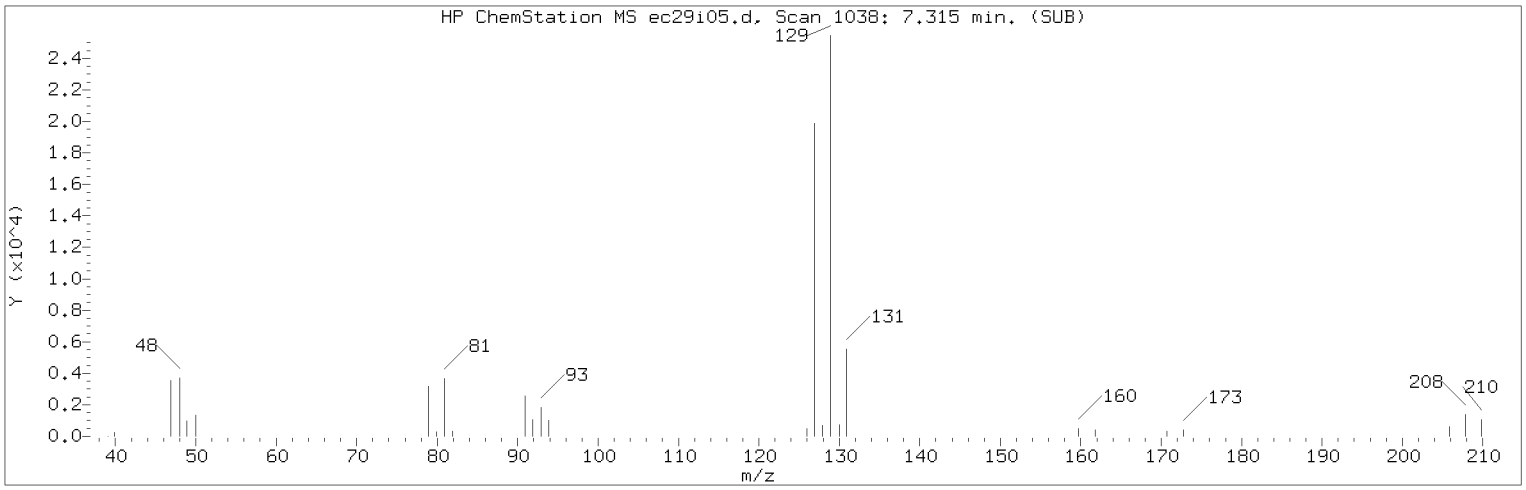
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:16
Date, time and analyst ID of latest file update: 29-Oct-2018 22:16 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

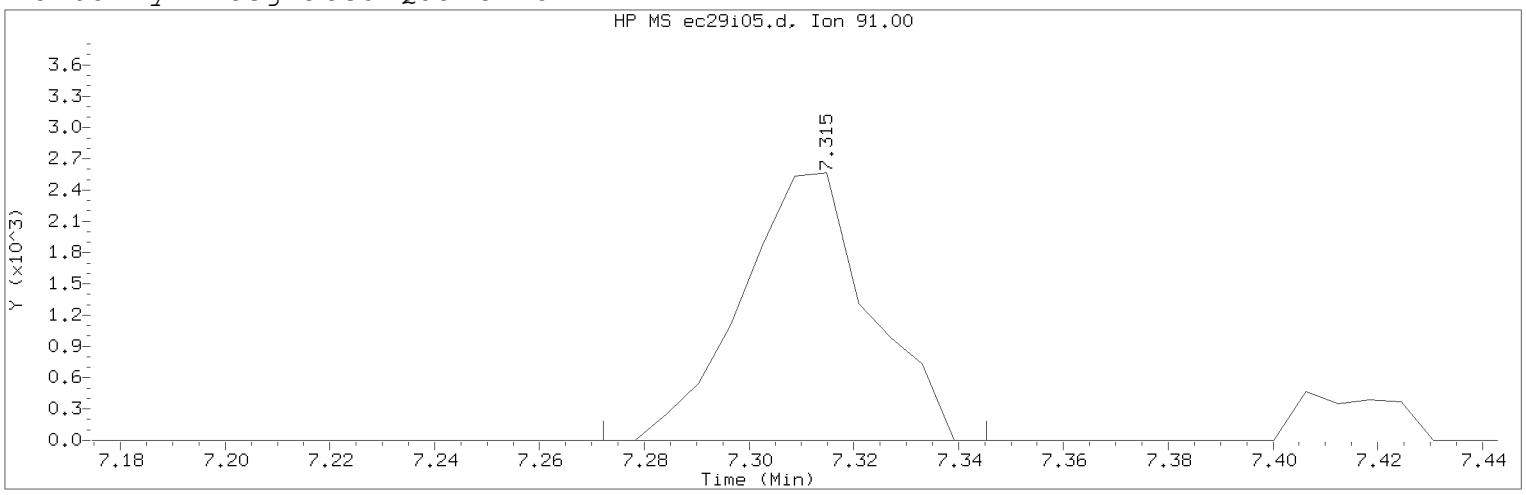
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 815
Retention Time (minutes): 5.955
Quant Ion : 63.00
Area : 39977
On-column Amount (ng) : 9.5331
Integration start scan : 807 Integration stop scan: 849
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

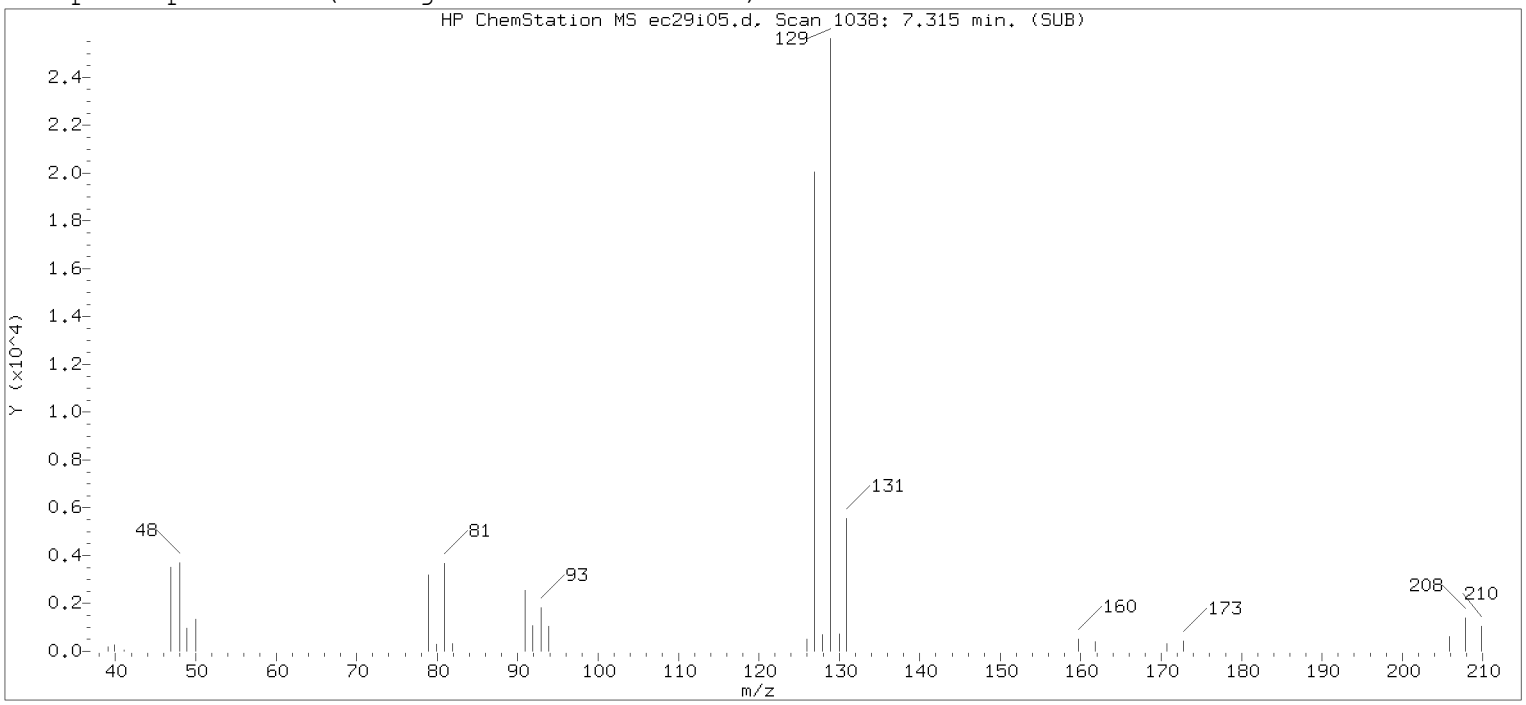
Compound Number : 102
Compound Name : 1-Chlorohexane
Scan Number : 1038
Retention Time (minutes): 7.315
Quant Ion : 91.00
Area (flag) : 4358M
On-Column Amount (ng) : 10.9105
Integration start scan : 1030 Integration stop scan: 1042
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

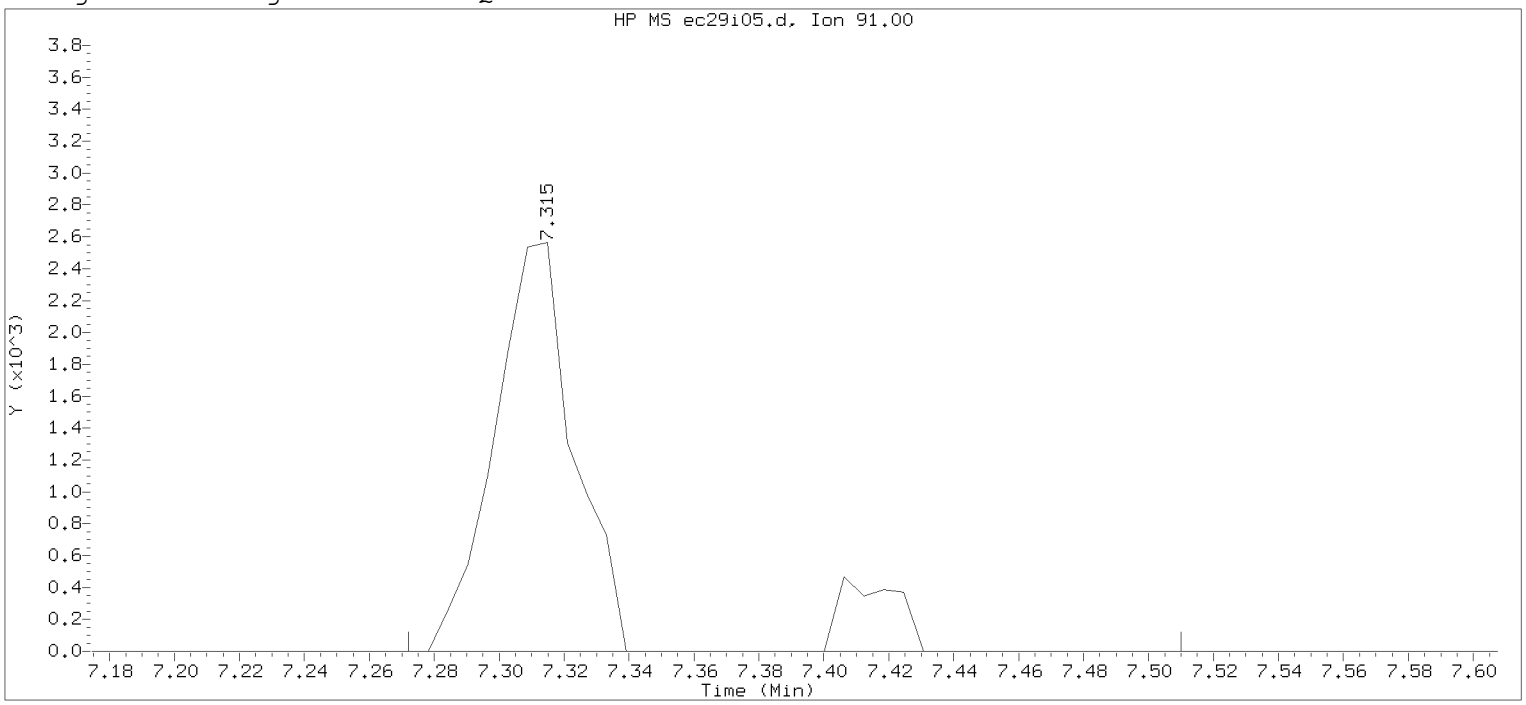
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

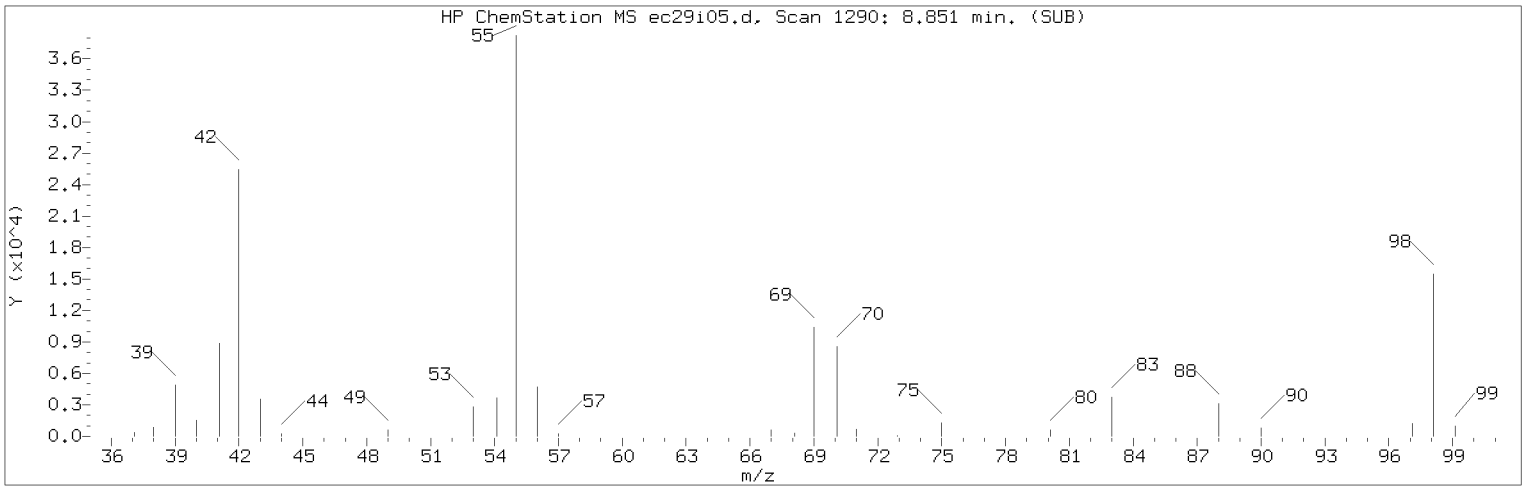
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:16
Date, time and analyst ID of latest file update: 29-Oct-2018 22:16 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

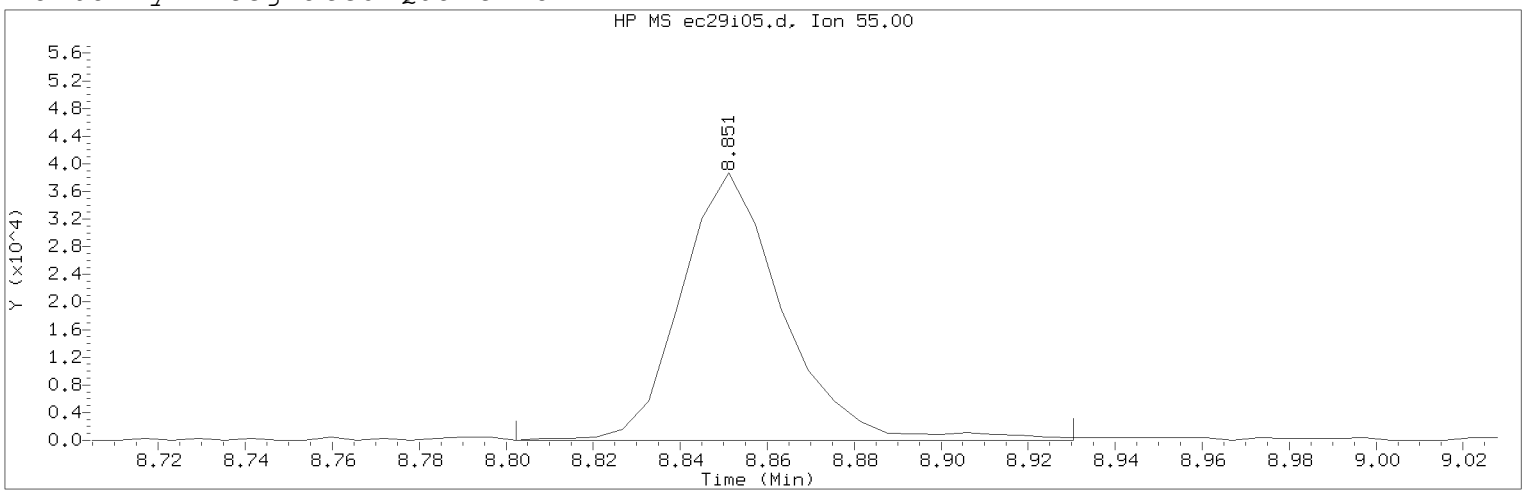
Compound Number : 102
Compound Name : 1-Chlorohexane
Scan Number : 1038
Retention Time (minutes): 7.315
Quant Ion : 91.00
Area : 4934
On-column Amount (ng) : 11.5490
Integration start scan : 1030 Integration stop scan: 1069
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD010 Lab Sample ID: VSTD010

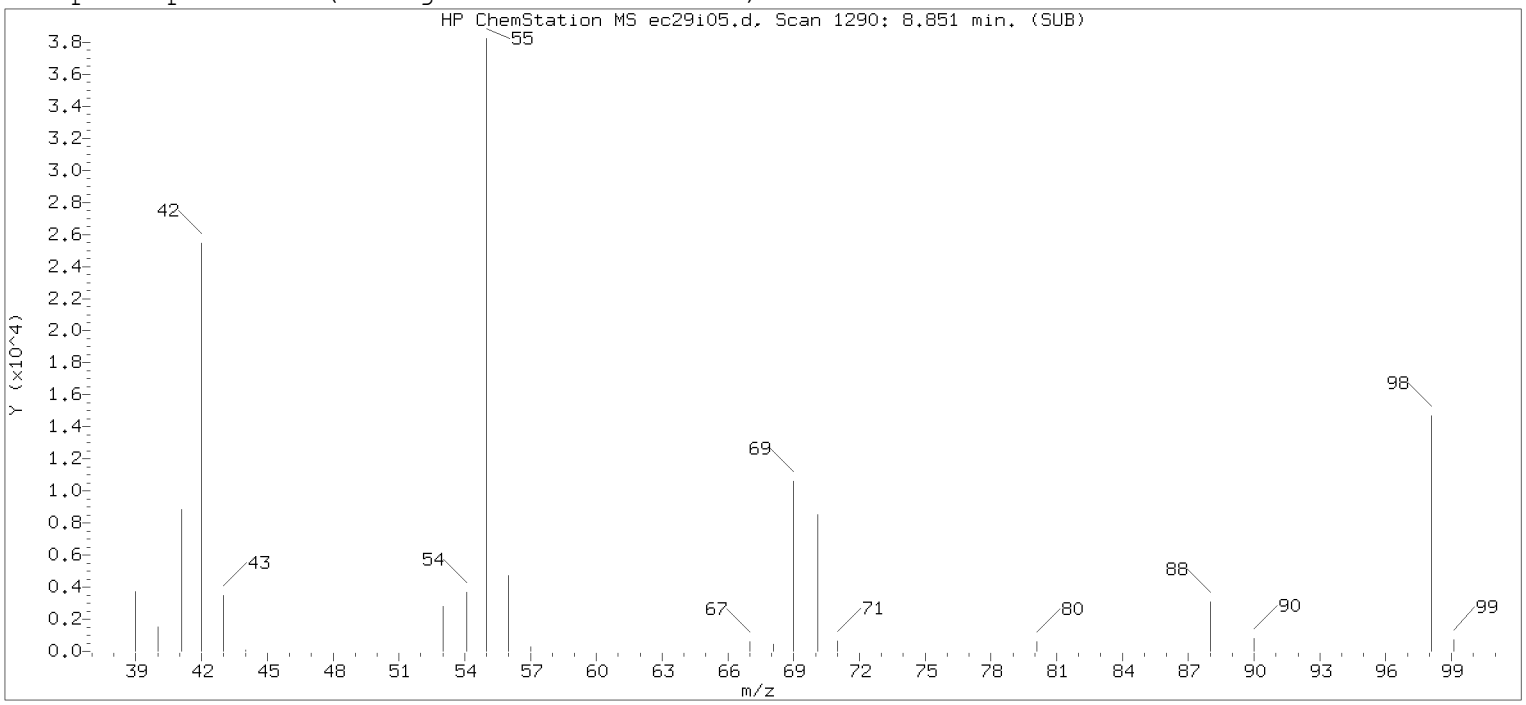
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1290
Retention Time (minutes): 8.851
Quant Ion : 55.00
Area (flag) : 63024M
On-Column Amount (ng) : 248.2062
Integration start scan : 1281 Integration stop scan: 1302
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

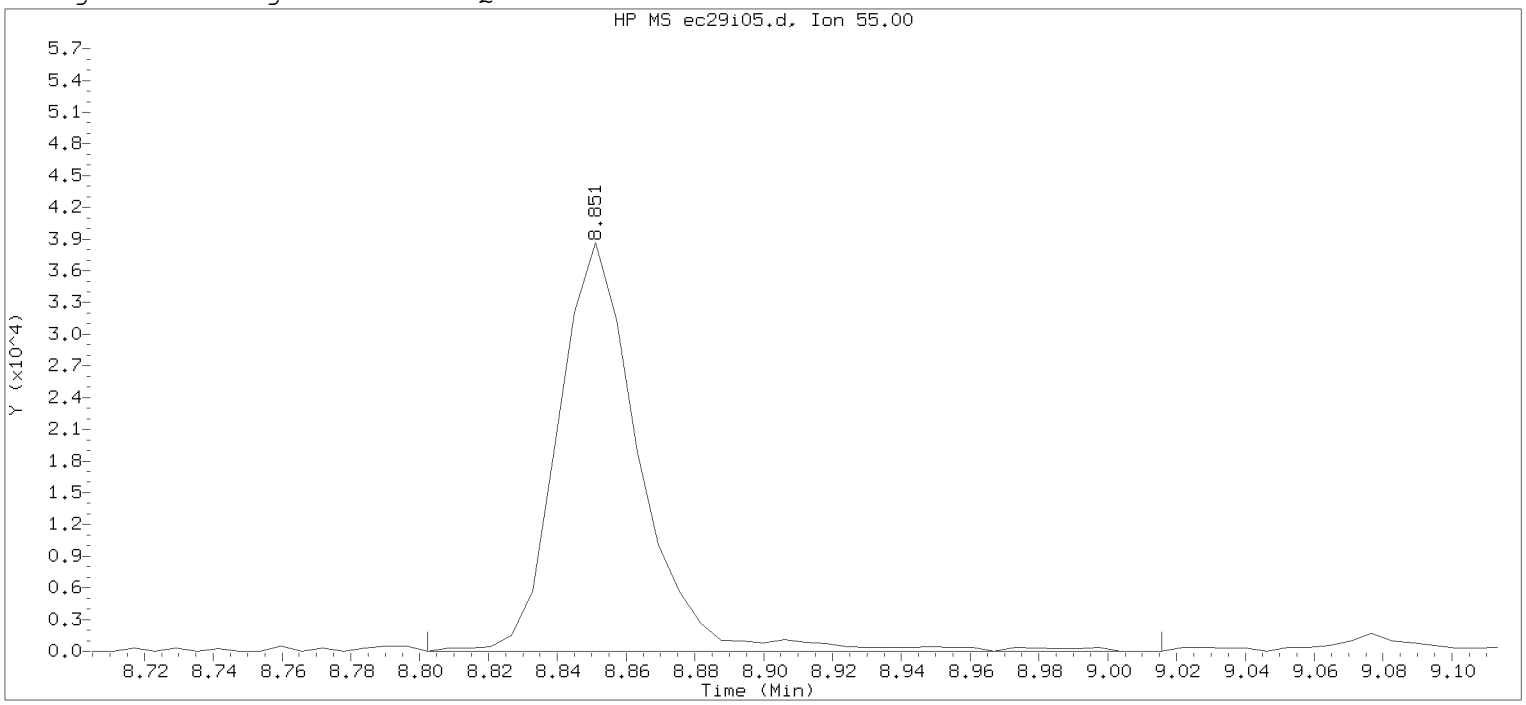
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



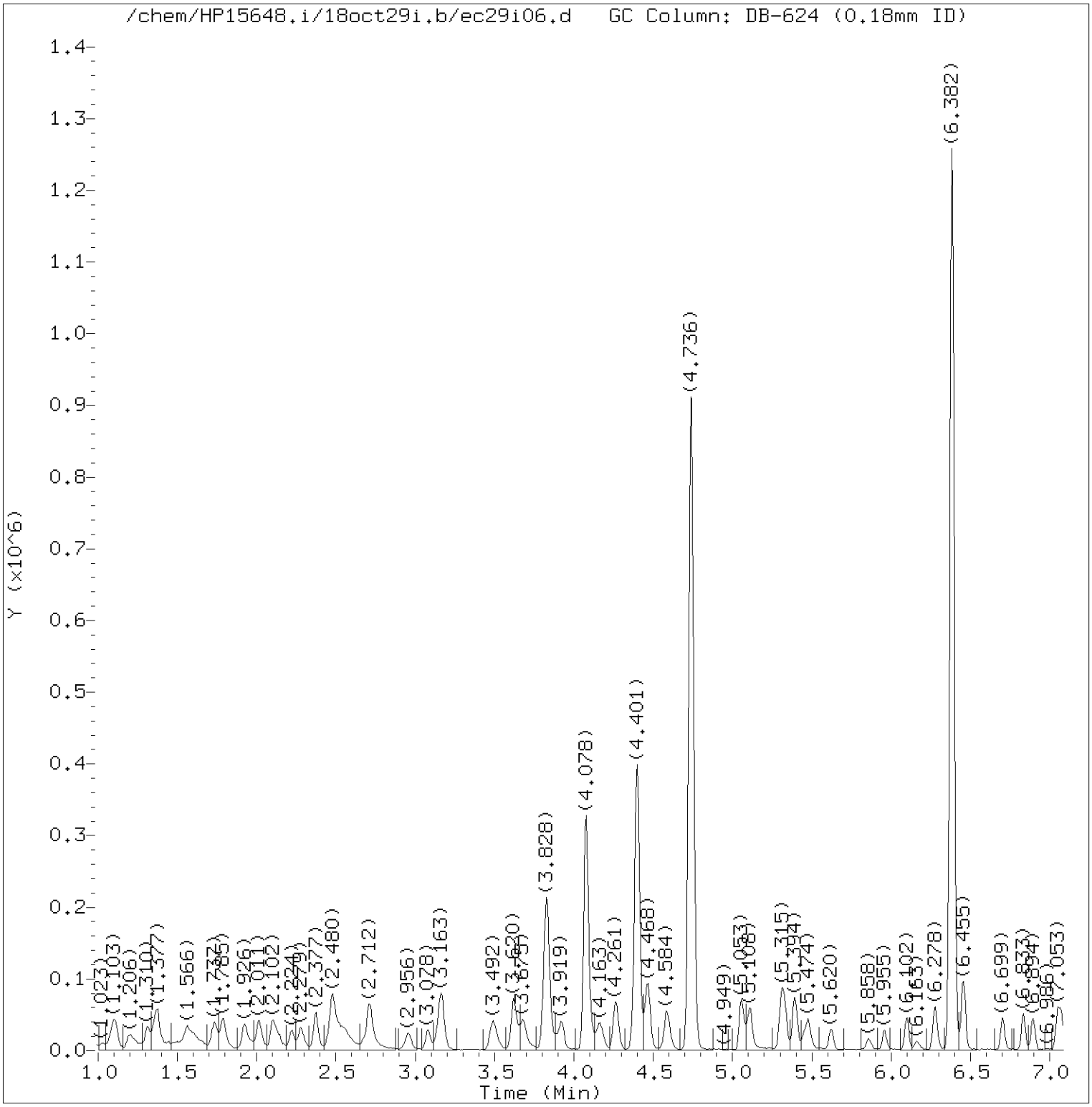
Data File: /chem/HP15648.i/18oct29i.b/ec29i05.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:00 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:16
Date, time and analyst ID of latest file update: 29-Oct-2018 22:16 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number	: 113		
Compound Name	: Cyclohexanone		
Scan Number	: 1290		
Retention Time (minutes)	: 8.851		
Quant Ion	: 55.00		
Area	: 64280		
On-column Amount (ng)	: 256.4530		
Integration start scan	: 1281	Integration stop scan:	1316
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray



Total Ion Chromatogram (TIC)

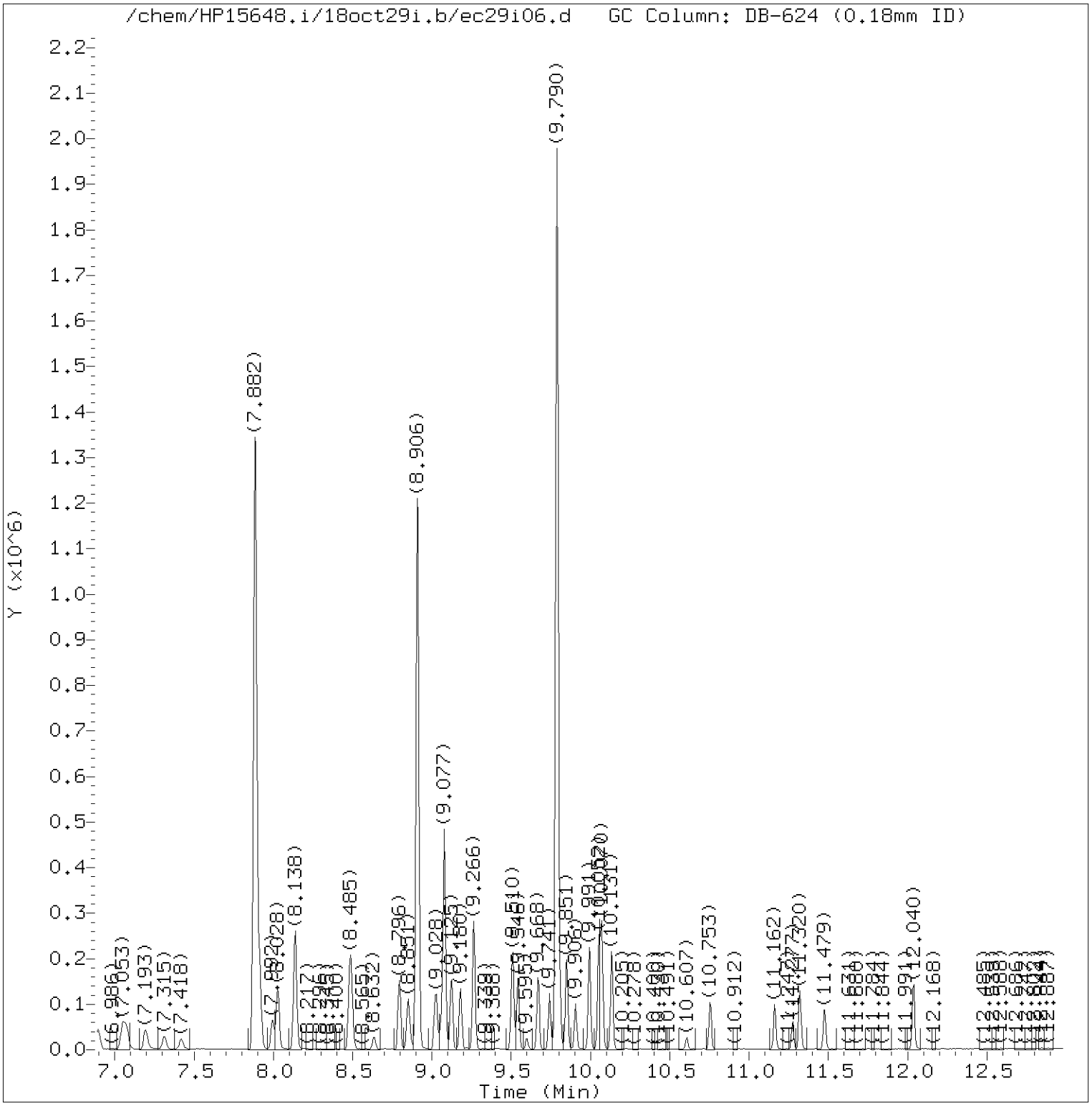
Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.206	85	29218M	4.119
4) Chloromethane	(2)	1.310	50	29050M	3.922
5) 1,3-Butadiene	(2)	1.365	39	23880M	4.054
6) Vinyl Chloride	(2)	1.377	62	29022M	4.254
8) Bromomethane	(2)	1.560	94	20260	4.264
9) Chloroethane	(2)	1.609	64	15817	4.039
10) Dichlorofluoromethane	(2)	1.731	67	37605	4.003
11) n-Pentane	(2)	1.785	43	24503	3.330
12) Trichlorofluoromethane	(2)	1.785	101	34393	4.397
14) Ethyl ether	(2)	1.920	59	15418	3.916
15) Freon 123a	(2)	1.944	67	21044	4.040
16) Acrolein	(1)	2.011	56	48907	40.727
17) 1,1-Dichloroethene	(2)	2.102	96	15199	4.047
17) 1,1-Dichloroethene	(2)	2.096	63	7702	3.995
18) Acetone	(1)	2.133	58	3481	6.925
19) Freon 113	(2)	2.133	101	12396	3.440
21) 2-Propanol	(1)	2.224	45	27544	79.646
22) Methyl Iodide	(2)	2.224	142	25537	3.984
23) Carbon Disulfide	(2)	2.279	76	51259	3.907
25) Allyl Chloride	(2)	2.377	41	33520	4.040
27) Methyl Acetate	(2)	2.377	43	16733	3.773
28) Methylene Chloride	(2)	2.474	84	17269	3.917
29)*t-Butyl alcohol-d10	(1)	2.487	65	155996	250.000
30) t-Butyl alcohol	(1)	2.560	59	48634	82.248
31) Acrylonitrile	(2)	2.688	53	8505	3.589
33) Methyl Tertiary Butyl Ether	(2)	2.712	73	53010	3.982
32) trans-1,2-Dichloroethene	(2)	2.718	96	16046M	3.845
34) n-Hexane	(2)	2.956	57	17429	2.412
36) 1,1-Dichloroethane	(2)	3.078	63	31893	3.881
38) di-Isopropyl ether	(2)	3.151	45	59020	3.853
39) 2-Chloro-1,3-butadiene	(2)	3.169	53	31074	3.992
40) Ethyl t-butyl ether	(2)	3.492	59	55243	3.858
42) cis-1,2-Dichloroethene	(2)	3.614	96	18140	3.922
45) 2,2-Dichloropropane	(2)	3.620	77	28661	4.128
44) 2-Butanone	(2)	3.633	43	22950M	7.660
47) Propionitrile	(1)	3.688	54	63707M	76.032
48) Methacrylonitrile	(2)	3.822	67	93342	38.359
49) Bromochloromethane	(2)	3.840	128	8997	4.025

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

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	3.895	71	5777M	8.137
51) Chloroform	(2)	3.925	83	28694	3.958
52)$Dibromofluoromethane	(2)	4.078	113	212297	50.883
52)$Dibromofluoromethane	(2)	4.078	111	219195	50.984
53) 1,1,1-Trichloroethane	(2)	4.102	97	27216	4.108
54) Cyclohexane	(2)	4.163	56	26533	3.205
54) Cyclohexane	(2)	4.163	84	22471	3.271
54) Cyclohexane	(2)	4.163	69	8307	3.312
55) 1,1-Dichloropropene	(2)	4.261	75	24960	3.867
56) Carbon Tetrachloride	(2)	4.267	117	22025	4.035
58) Isobutyl Alcohol	(1)	4.383	41	41595	199.787
57)$1,2-Dichloroethane-d4	(2)	4.401	102	57014	50.254
57)$1,2-Dichloroethane-d4	(2)	4.401	65	283713	51.513
57)$1,2-Dichloroethane-d4	(2)	4.401	104	37074	51.361
60) Benzene	(2)	4.462	78	73490	3.925
61) 1,2-Dichloroethane	(2)	4.474	62	23620	3.968
61) 1,2-Dichloroethane	(2)	4.474	98	2473	3.846
65) t-Amyl methyl ether	(2)	4.590	73	55195	4.038
66)*Fluorobenzene	(2)	4.736	96	952453	50.000
67) n-Heptane	(2)	4.748	43	17973	3.473
69) n-Butanol	(1)	5.059	56	64691	374.395
71) Trichloroethene	(2)	5.114	95	18516	4.071
73) Methylcyclohexane	(2)	5.309	83	34416	3.844
73) Methylcyclohexane	(2)	5.309	98	15786	3.907
74) 1,2-Dichloropropane	(2)	5.327	63	19553	3.899
75) Dibromomethane	(2)	5.449	93	10316	4.001
76) 1,4-Dioxane	(1)	5.474	88	7723M	186.386
77) Methyl Methacrylate	(2)	5.480	69	15411	3.710
79) Bromodichloromethane	(2)	5.626	83	22231	4.004
80) 2-Nitropropane	(2)	5.858	41	12912	8.252
81) 2-Chloroethyl Vinyl Ether	(2)	5.955	63	13244	3.780
82) cis-1,3-Dichloropropene	(2)	6.102	75	29548	3.846
43) 1,2-Dichloroethene (Total)	(2)		96	34186	7.768
83) 4-Methyl-2-pentanone	(2)	6.278	43	48450	7.686
84)$Toluene-d8	(3)	6.382	98	956868	49.901
84)$Toluene-d8	(3)	6.382	100	617956	50.149
89) Toluene	(3)	6.449	92	45975	3.942
90) trans-1,3-Dichloropropene	(3)	6.699	75	27535	3.855

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

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
92) Ethyl Methacrylate	(3)	6.833	69	29392	3.884
93) 1,1,2-Trichloroethane	(3)	6.900	97	15190	3.962
94) Tetrachloroethene	(3)	7.053	166	16170	3.717
95) 1,3-Dichloropropane	(3)	7.077	76	28590	3.996
97) 2-Hexanone	(3)	7.193	43	34873	7.656
98) Dibromochloromethane	(3)	7.315	129	16130	3.965
102) 1-Chlorohexane	(3)	7.315	91	1602M	4.566
100) 1,2-Dibromoethane	(3)	7.418	107	15462	3.893
101)*Chlorobenzene-d5	(3)	7.888	117	683818	50.000
103) Chlorobenzene	(3)	7.912	112	47341	3.790
104) 1,1,1,2-Tetrachloroethane	(3)	7.998	131	16415	3.985
105) Ethylbenzene	(3)	8.028	91	86899	3.786
107) m+p-Xylene	(3)	8.138	106	64823	7.393
108) o-Xylene	(3)	8.479	106	33326	3.882
110) Styrene	(3)	8.491	104	54942	3.831
111) Bromoform	(3)	8.638	173	10102	3.813
112) Isopropylbenzene	(3)	8.796	105	81465	3.608
113) Cyclohexanone	(1)	8.851	55	39185M	187.691
115)$4-Bromofluorobenzene	(3)	8.906	95	359052	50.307
115)$4-Bromofluorobenzene	(3)	8.912	174	257529	50.692
116) Bromobenzene	(4)	9.022	156	18725	3.844
117) 1,1,2,2-Tetrachloroethane	(4)	9.028	83	24521	3.961
118) 1,2,3-Trichloropropane	(4)	9.058	110	6883	3.944
119) trans-1,4-Dichloro-2-butene	(4)	9.077	53	74548	37.307
120) n-Propylbenzene	(4)	9.125	91	94371	3.472
121) 2-Chlorotoluene	(4)	9.180	126	18199	3.547
123) 1,3,5-Trimethylbenzene	(4)	9.266	105	66702	3.398
122) 4-Chlorotoluene	(4)	9.266	126	19201	3.596
125) tert-Butylbenzene	(4)	9.510	134	14262	3.396
126) Pentachloroethane	(4)	9.516	167	11707	3.737
127) 1,2,4-Trimethylbenzene	(4)	9.546	105	69880M	3.455
128) sec-Butylbenzene	(4)	9.668	105	81708	3.235
130) 1,3-Dichlorobenzene	(4)	9.741	146	35827	3.659
131) p-Isopropyltoluene	(4)	9.778	119	73221	3.295
132)*1,4-Dichlorobenzene-d4	(4)	9.790	152	361668	50.000
134) 1,4-Dichlorobenzene	(4)	9.808	146	36733	3.718
135) 1,2,3-Trimethylbenzene	(4)	9.851	105	85914	4.042
136) Benzyl Chloride	(4)	9.906	91	53745	3.697

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

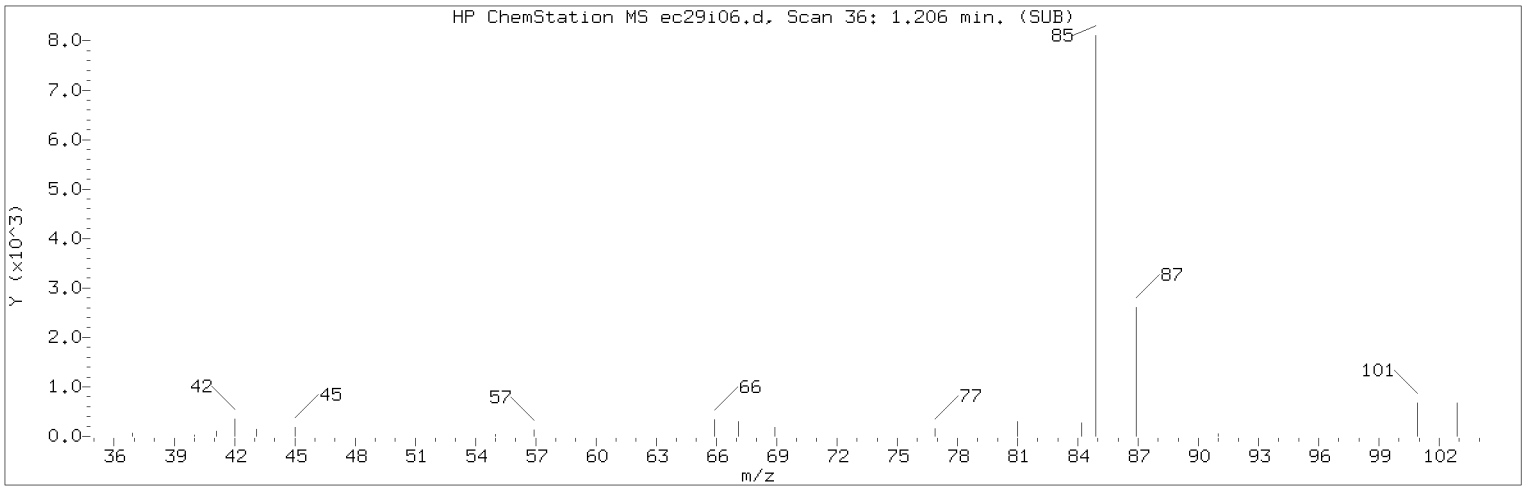
Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137) 1,3-Diethylbenzene	(4)	9.991	119	55278	3.974
138) 1,4-Diethylbenzene	(4)	10.052	119	60495	4.084
139) 1,2-Dichlorobenzene	(4)	10.070	146	35491	3.819
140) n-Butylbenzene	(4)	10.070	92	35611	3.253
91) 1,3-Dichloropropene (total)	(3)		100	57083	7.701
141) 1,2-Diethylbenzene	(4)	10.131	119	47095M	4.104
143) 1,2-Dibromo-3-chloropropane	(4)	10.607	75	5350	3.743
145) 1,3,5-Trichlorobenzene	(4)	10.753	180	24001	3.328
147) 1,2,4-Trichlorobenzene	(4)	11.162	180	21987	3.441
148) Hexachlorobutadiene	(4)	11.277	225	8392	2.905
149) Naphthalene	(4)	11.320	128	74208	3.549
150) 1,2,3-Trichlorobenzene	(4)	11.479	180	21935	3.683
109) Xylene (Total)	(3)		106	98149	11.275
151) 2-Methylnaphthalene	(4)	12.040	142	51259	3.946
142) Diethylbenzene (total)	(4)		100	162868	12.162

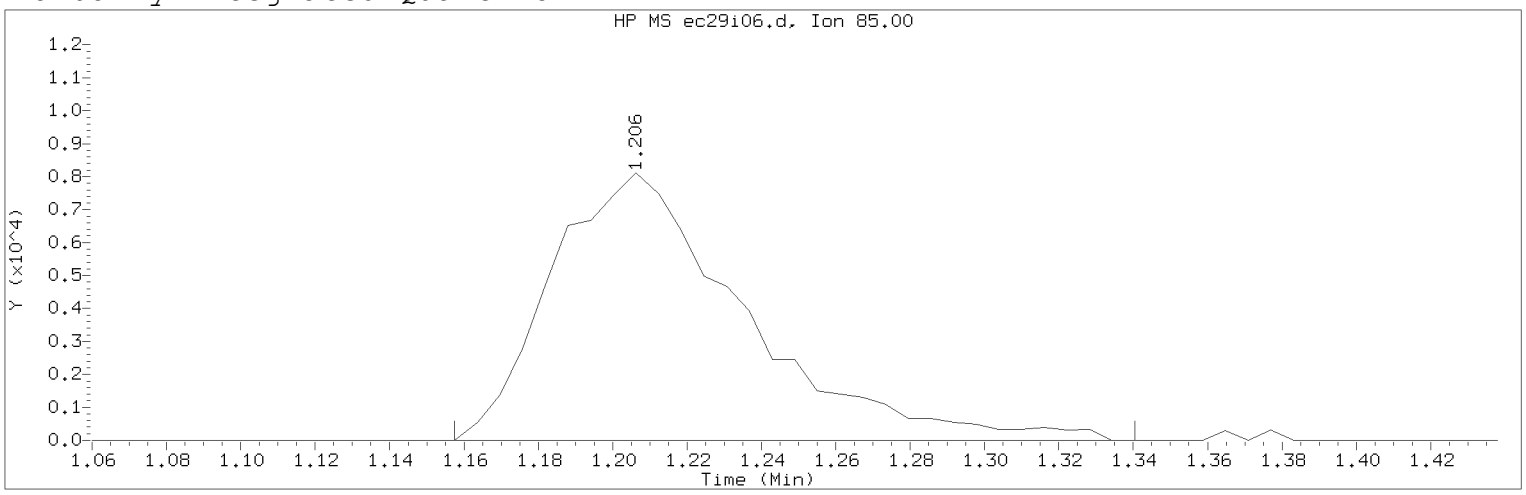
M = Compound was manually integrated.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

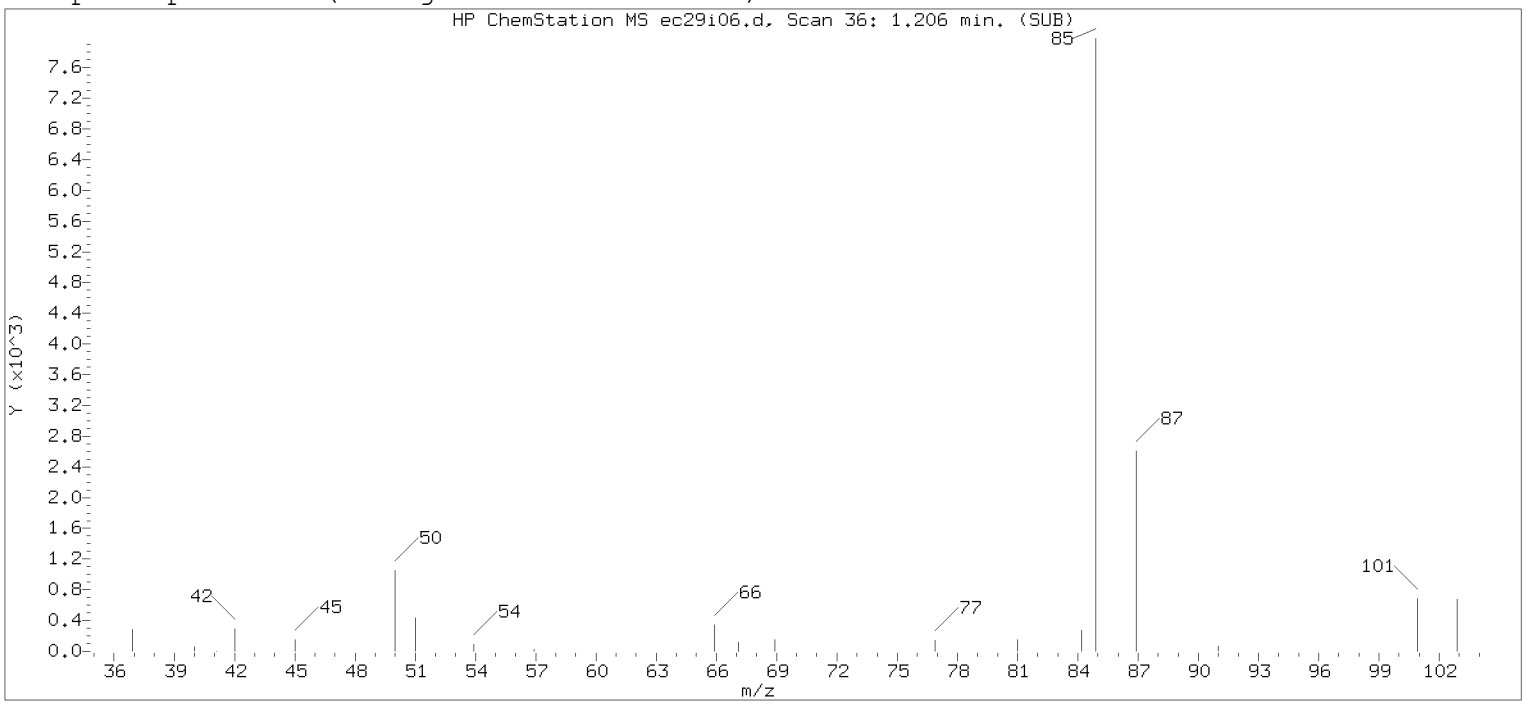
Compound Number : 3
Compound Name : Dichlorodifluoromethane
Scan Number : 36
Retention Time (minutes): 1.206
Quant Ion : 85.00
Area (flag) : 29218M
On-Column Amount (ng) : 4.1189
Integration start scan : 27 Integration stop scan: 57
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

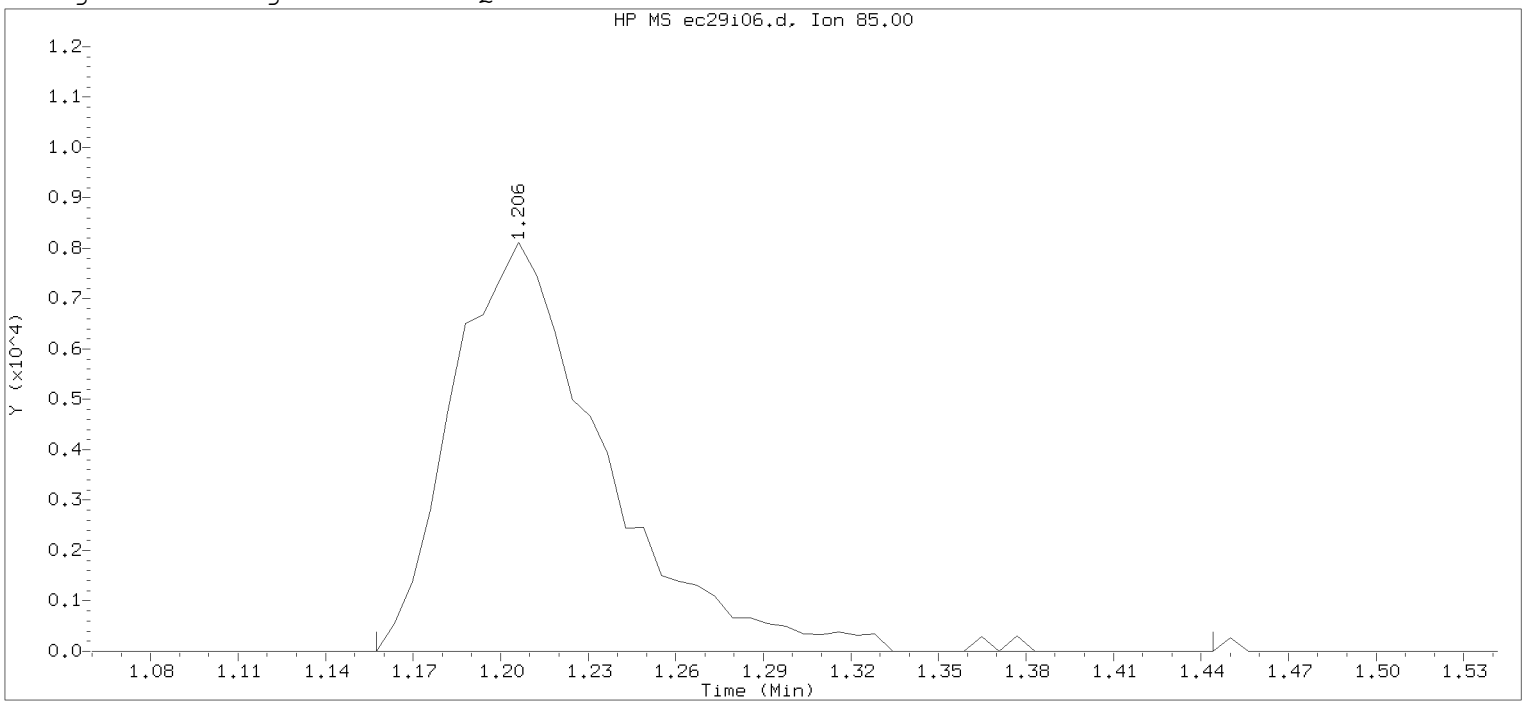
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

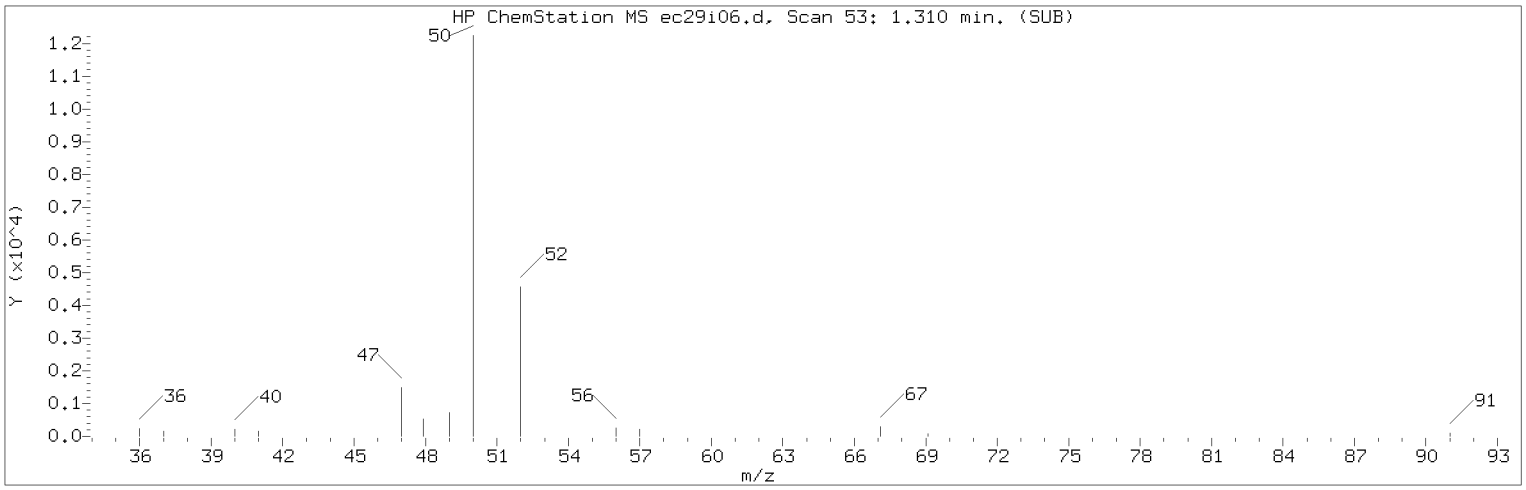
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:37
Date, time and analyst ID of latest file update: 29-Oct-2018 22:37 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

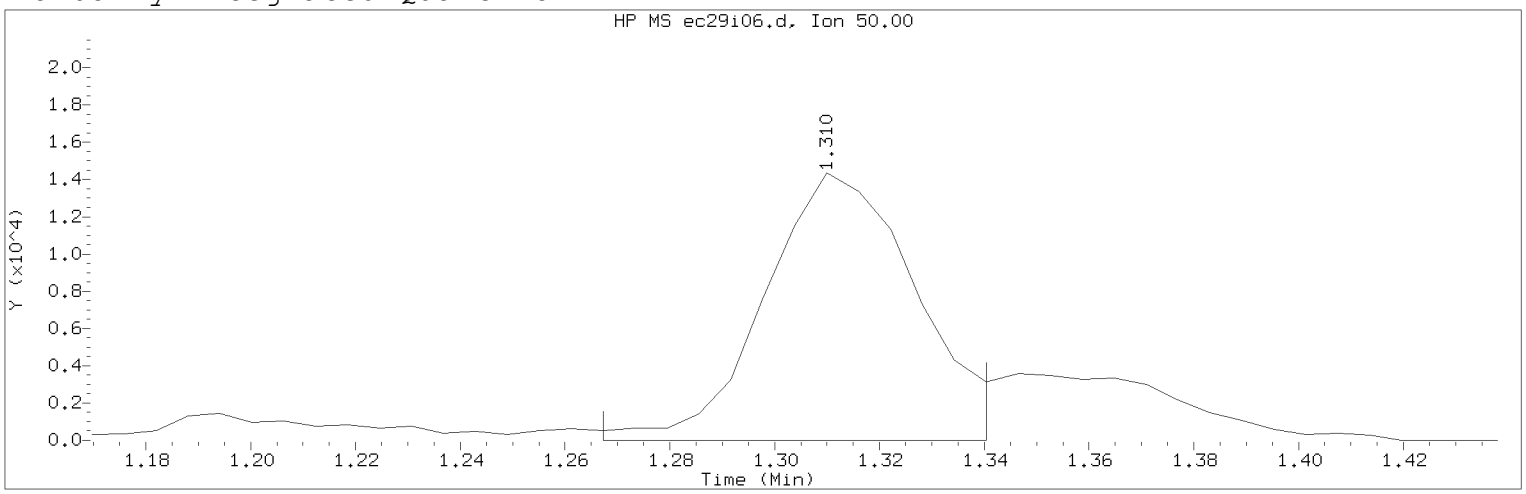
Compound Number : 3
Compound Name : Dichlorodifluoromethane
Scan Number : 36
Retention Time (minutes): 1.206
Quant Ion : 85.00
Area : 29436
On-column Amount (ng) : 4.0640
Integration start scan : 27 Integration stop scan: 74
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

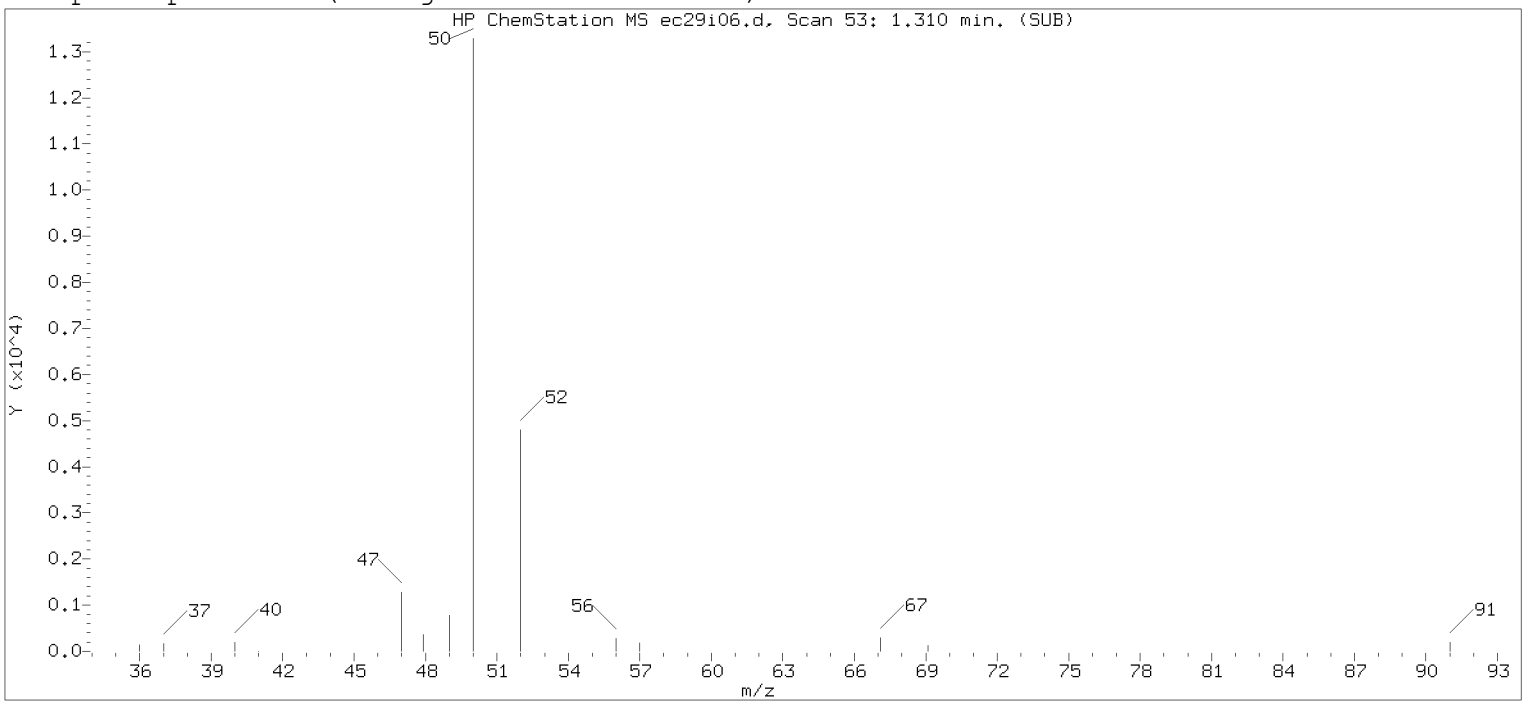
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 53
Retention Time (minutes): 1.310
Quant Ion : 50.00
Area (flag) : 29050M
On-Column Amount (ng) : 3.9223
Integration start scan : 45 Integration stop scan: 57
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

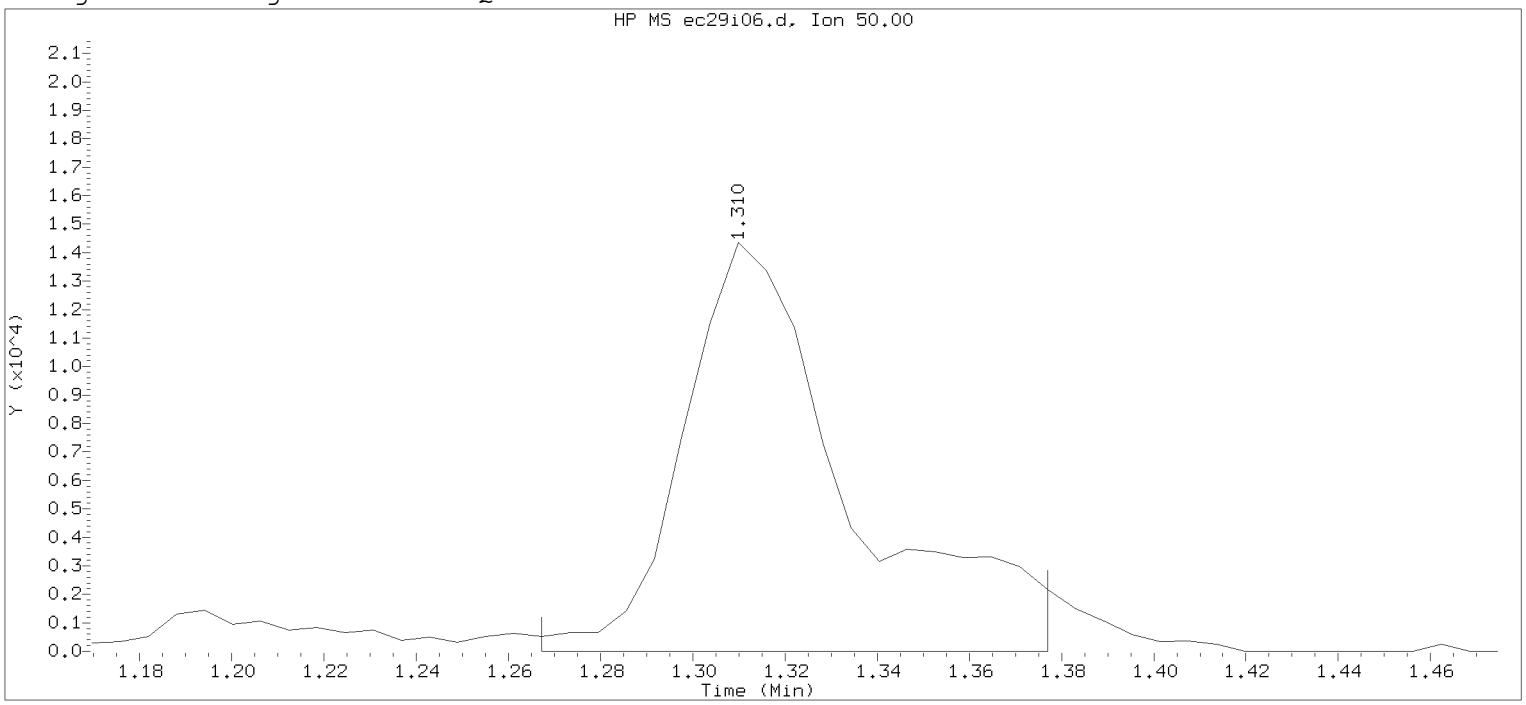
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

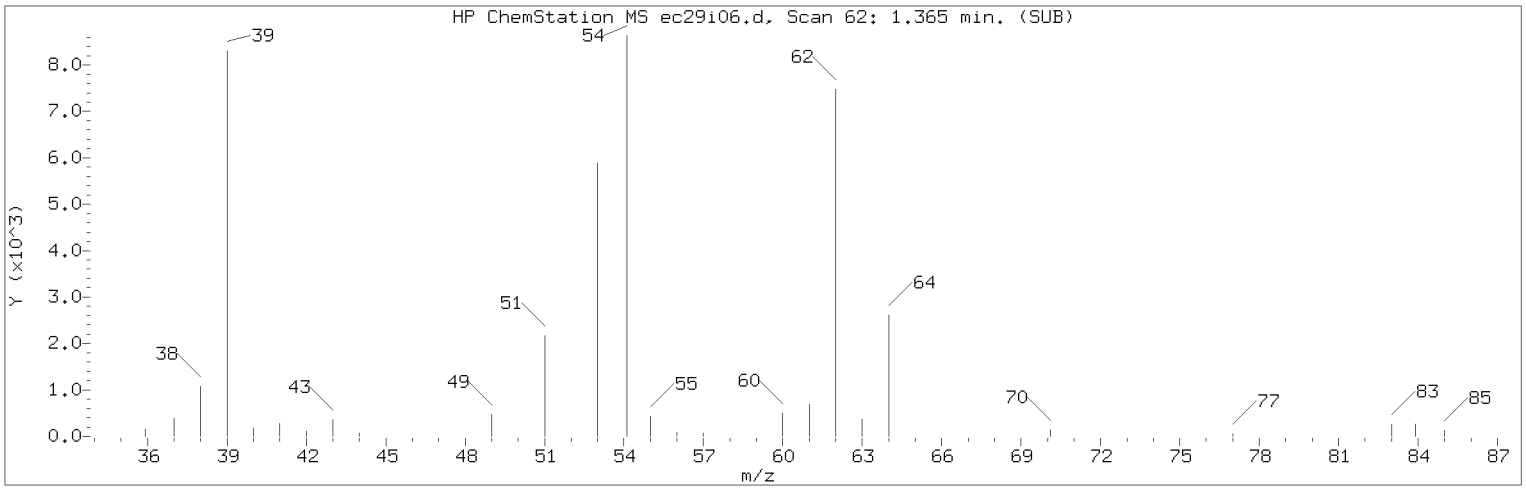
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:37
Date, time and analyst ID of latest file update: 29-Oct-2018 22:37 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

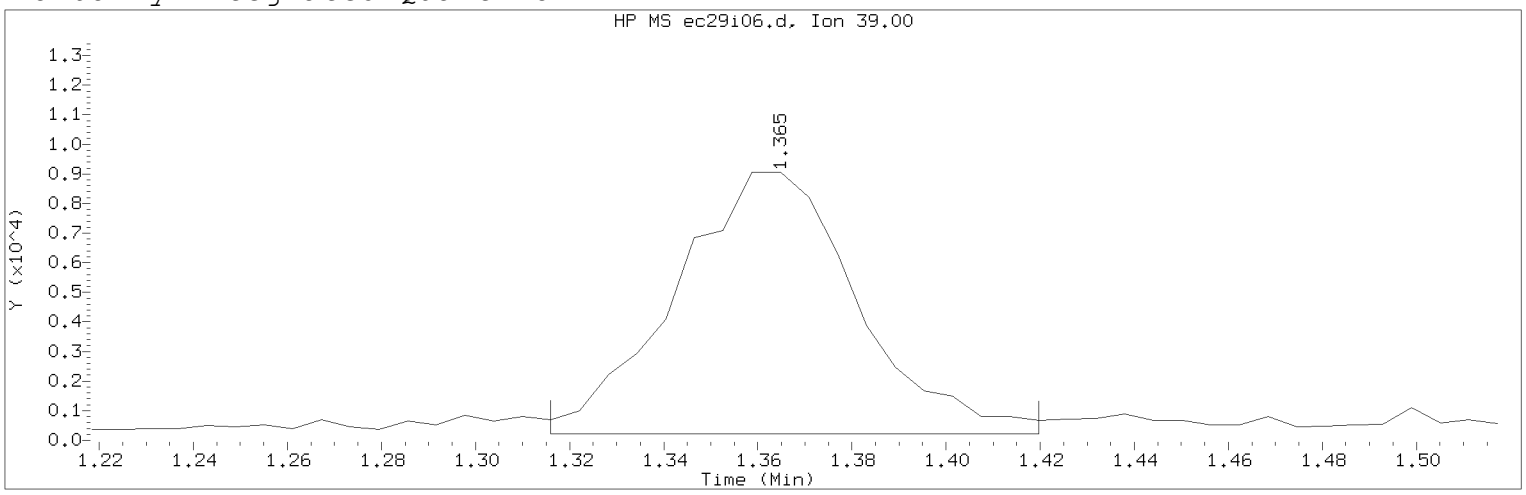
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 53
Retention Time (minutes): 1.310
Quant Ion : 50.00
Area : 35447
On-column Amount (ng) : 4.5885
Integration start scan : 45 Integration stop scan: 63
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

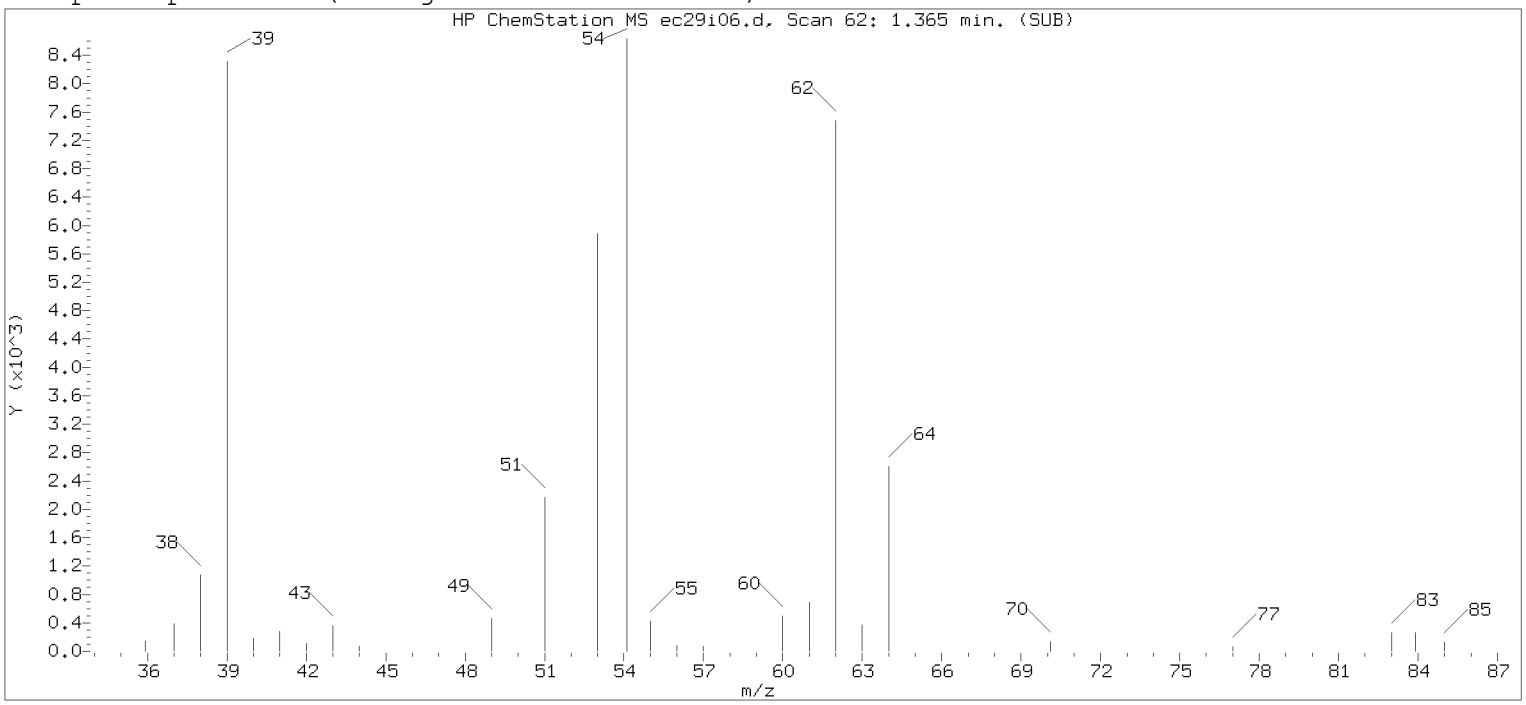
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 62
Retention Time (minutes): 1.365
Quant Ion : 39.00
Area (flag) : 23880M
On-Column Amount (ng) : 4.0539
Integration start scan : 53 Integration stop scan: 70
Y at integration start : 225 Y at integration end: 225

Reason for manual integration: improper integration

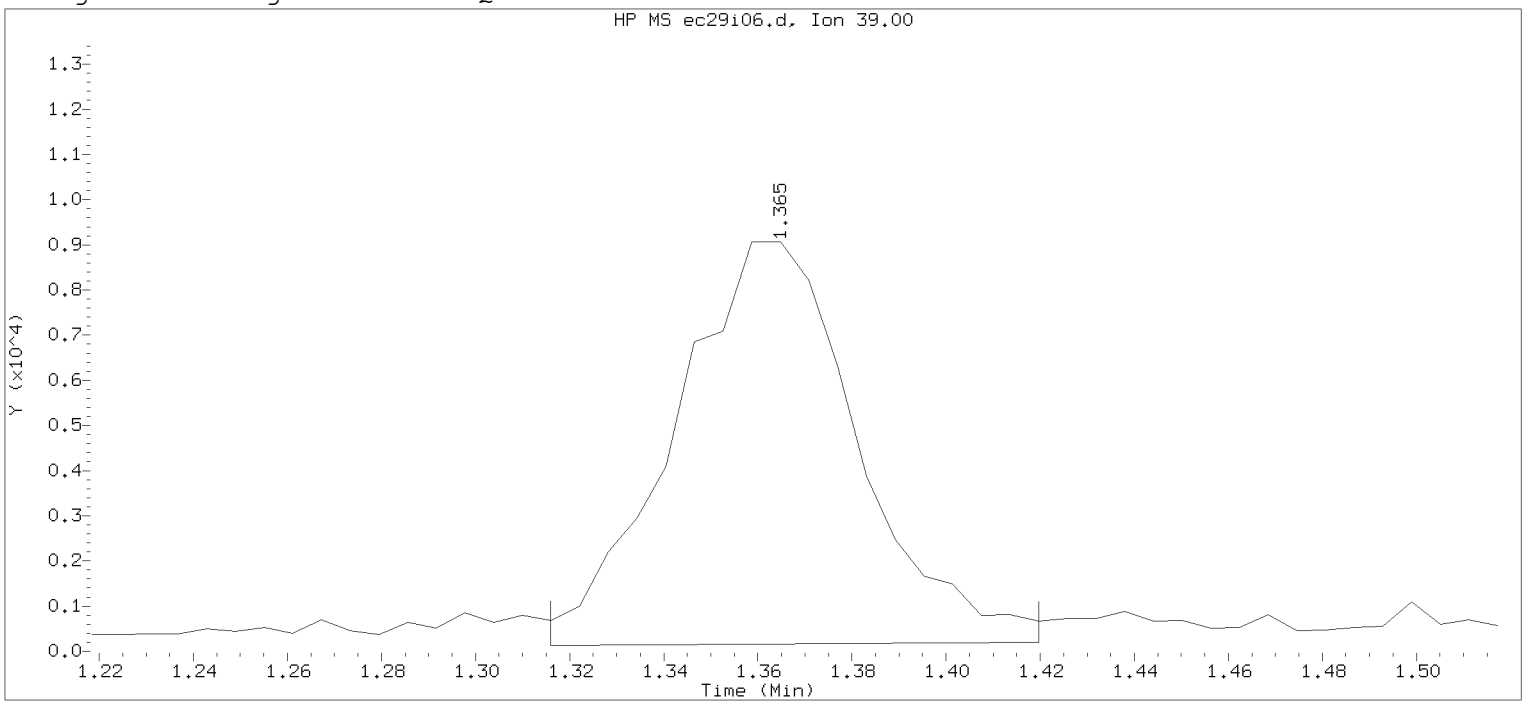
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

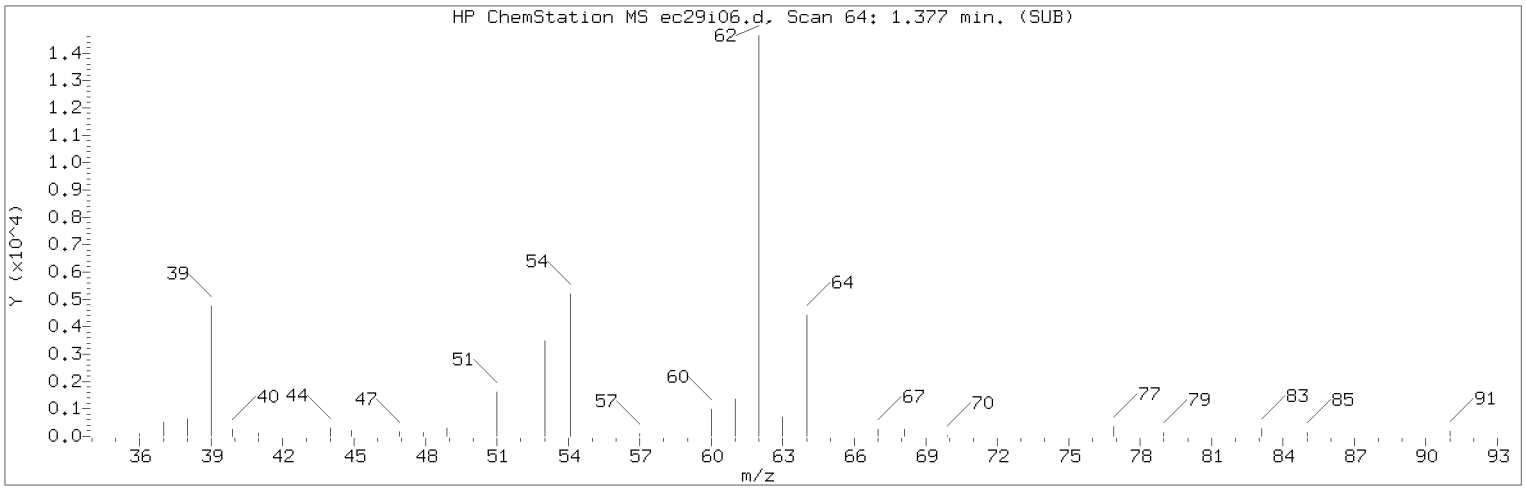
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:37
Date, time and analyst ID of latest file update: 29-Oct-2018 22:37 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

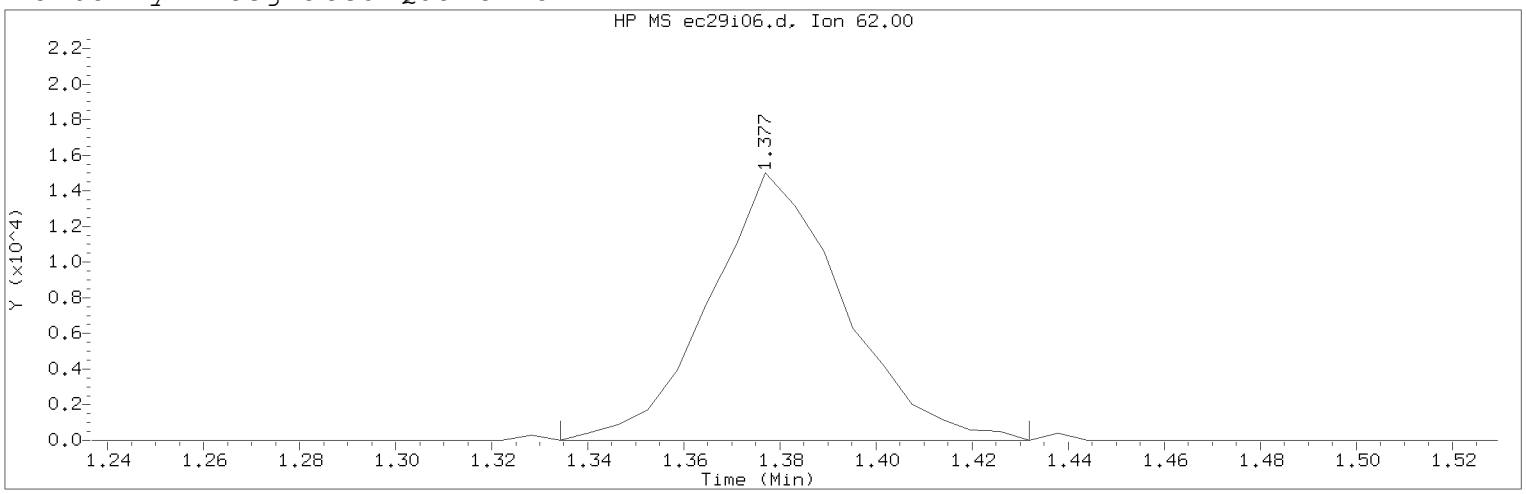
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 62
Retention Time (minutes): 1.365
Quant Ion : 39.00
Area : 24118
On-column Amount (ng) : 4.3104
Integration start scan : 53 Integration stop scan: 70
Y at integration start : 123 Y at integration end: 197

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

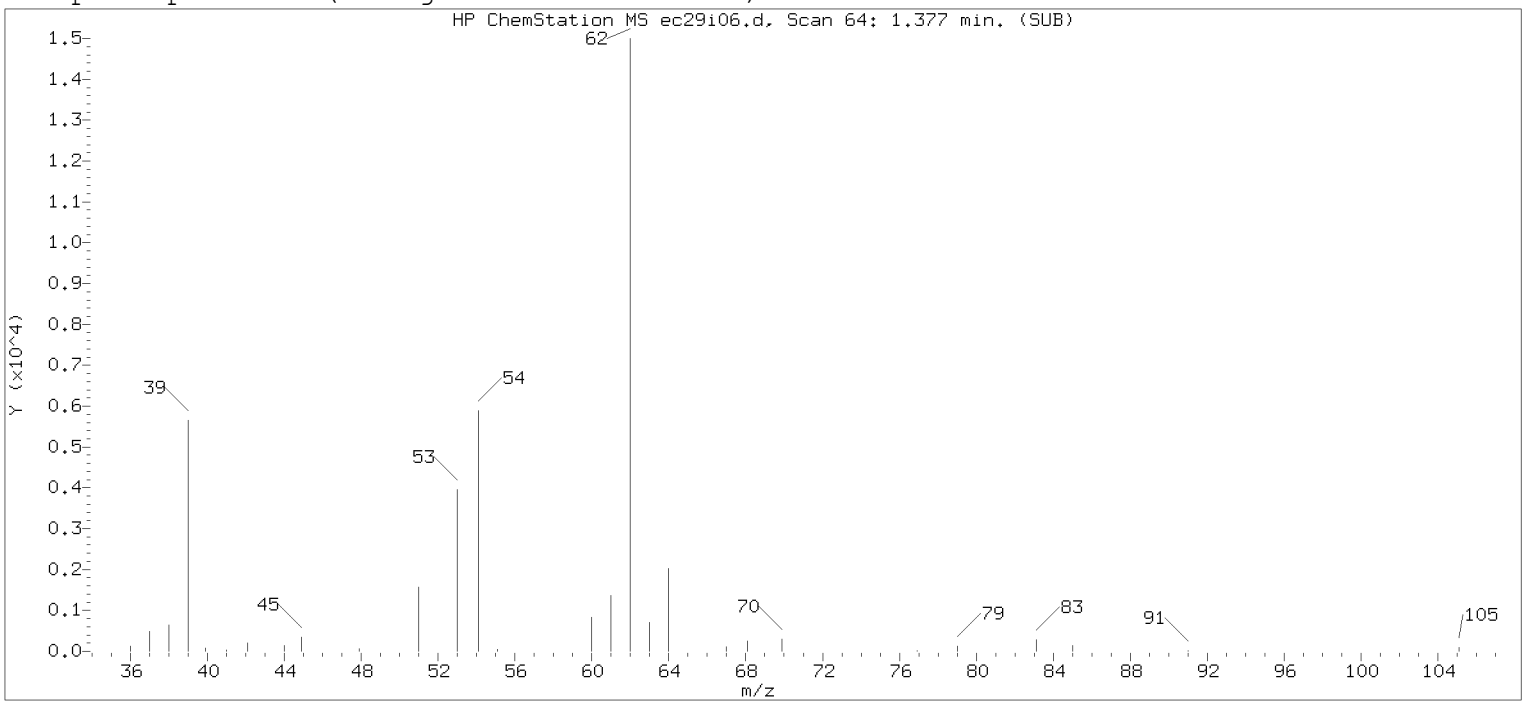
Compound Number : 6
Compound Name : Vinyl Chloride
Scan Number : 64
Retention Time (minutes): 1.377
Quant Ion : 62.00
Area (flag) : 29022M
On-Column Amount (ng) : 4.2543
Integration start scan : 56 Integration stop scan: 72
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

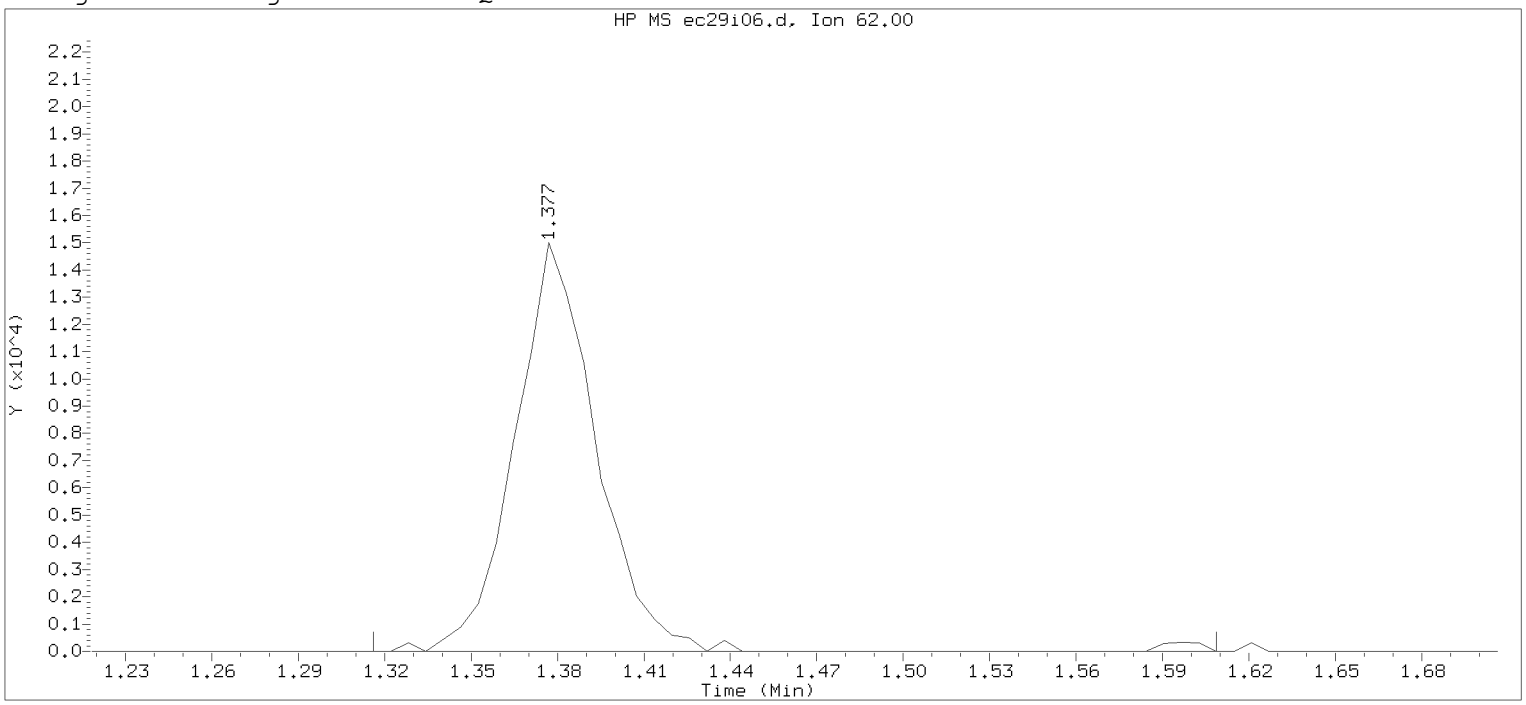
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

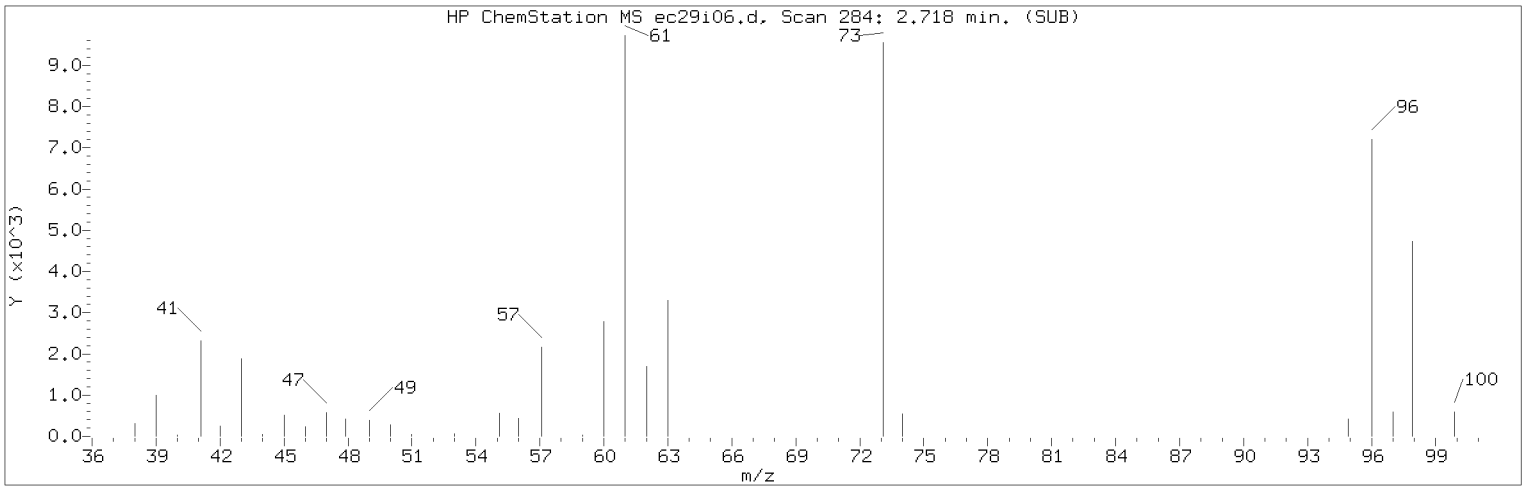
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:37
Date, time and analyst ID of latest file update: 29-Oct-2018 22:37 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

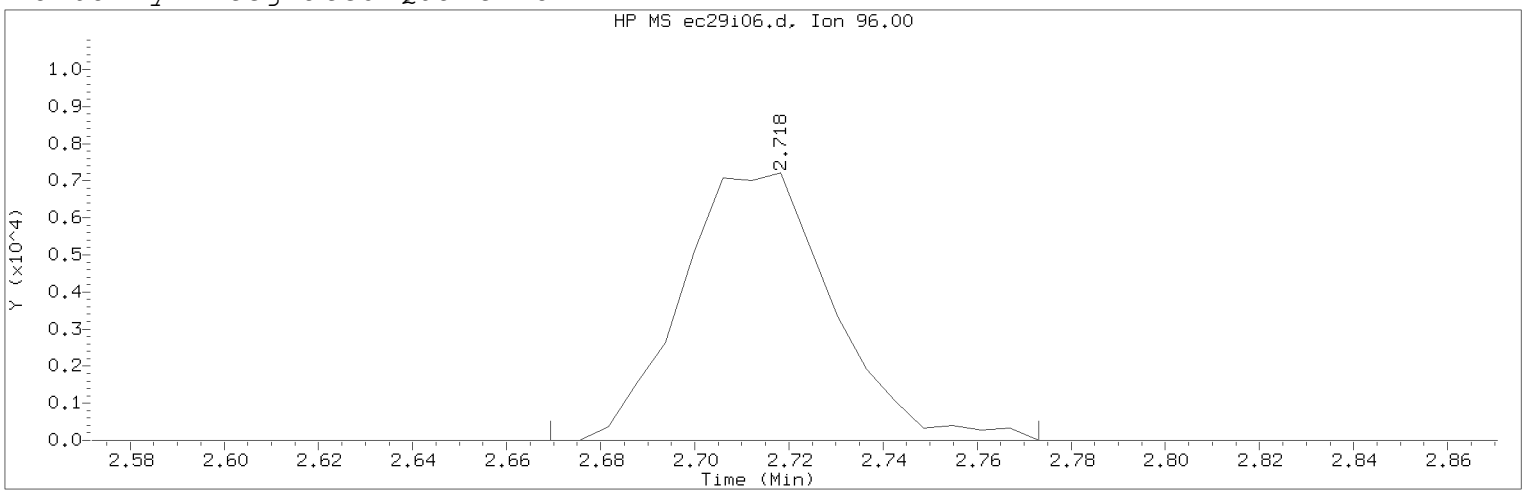
Compound Number : 6
Compound Name : Vinyl Chloride
Scan Number : 64
Retention Time (minutes): 1.377
Quant Ion : 62.00
Area : 29613
On-column Amount (ng) : 4.1988
Integration start scan : 53 Integration stop scan: 101
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

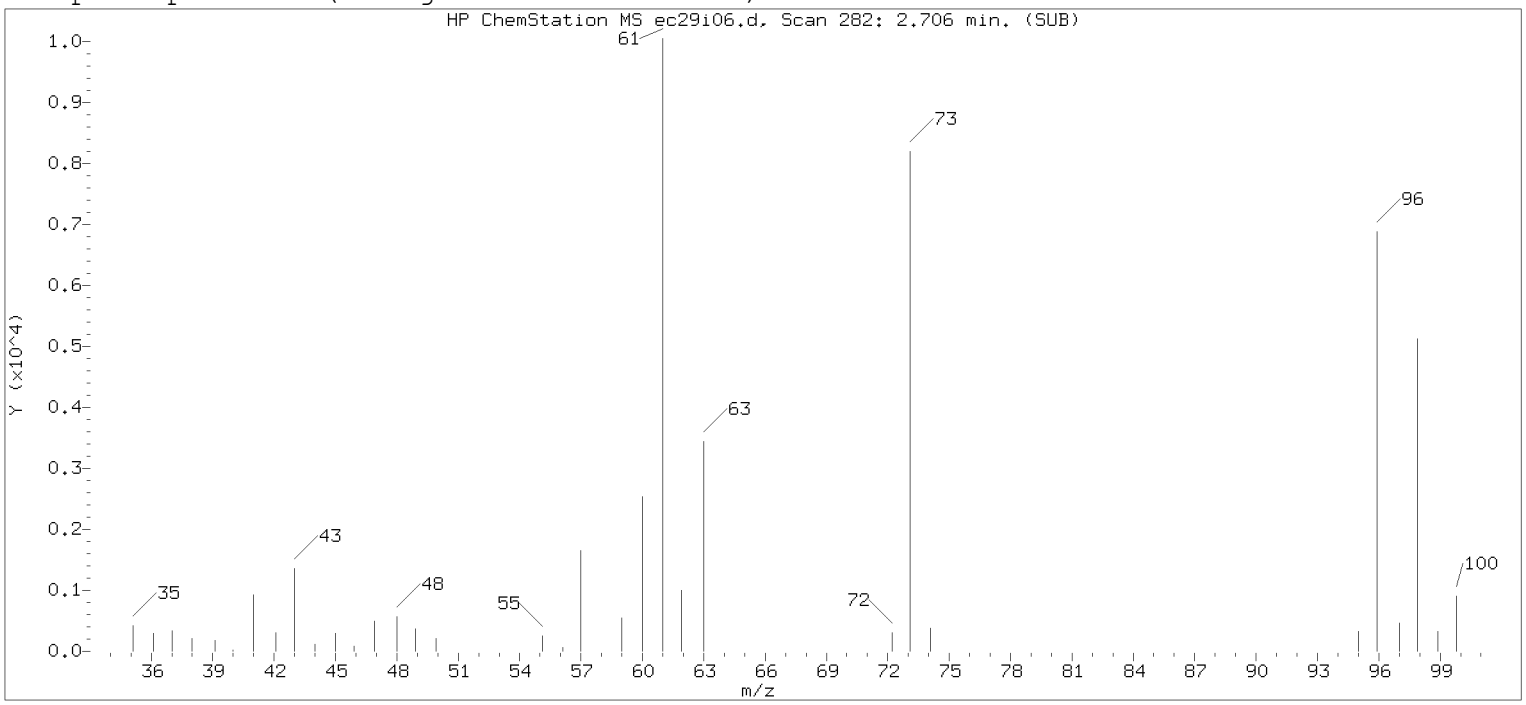
Compound Number : 32
Compound Name : trans-1,2-Dichloroethene
Scan Number : 284
Retention Time (minutes): 2.718
Quant Ion : 96.00
Area (flag) : 16046M
On-Column Amount (ng) : 3.8454
Integration start scan : 275 Integration stop scan: 292
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

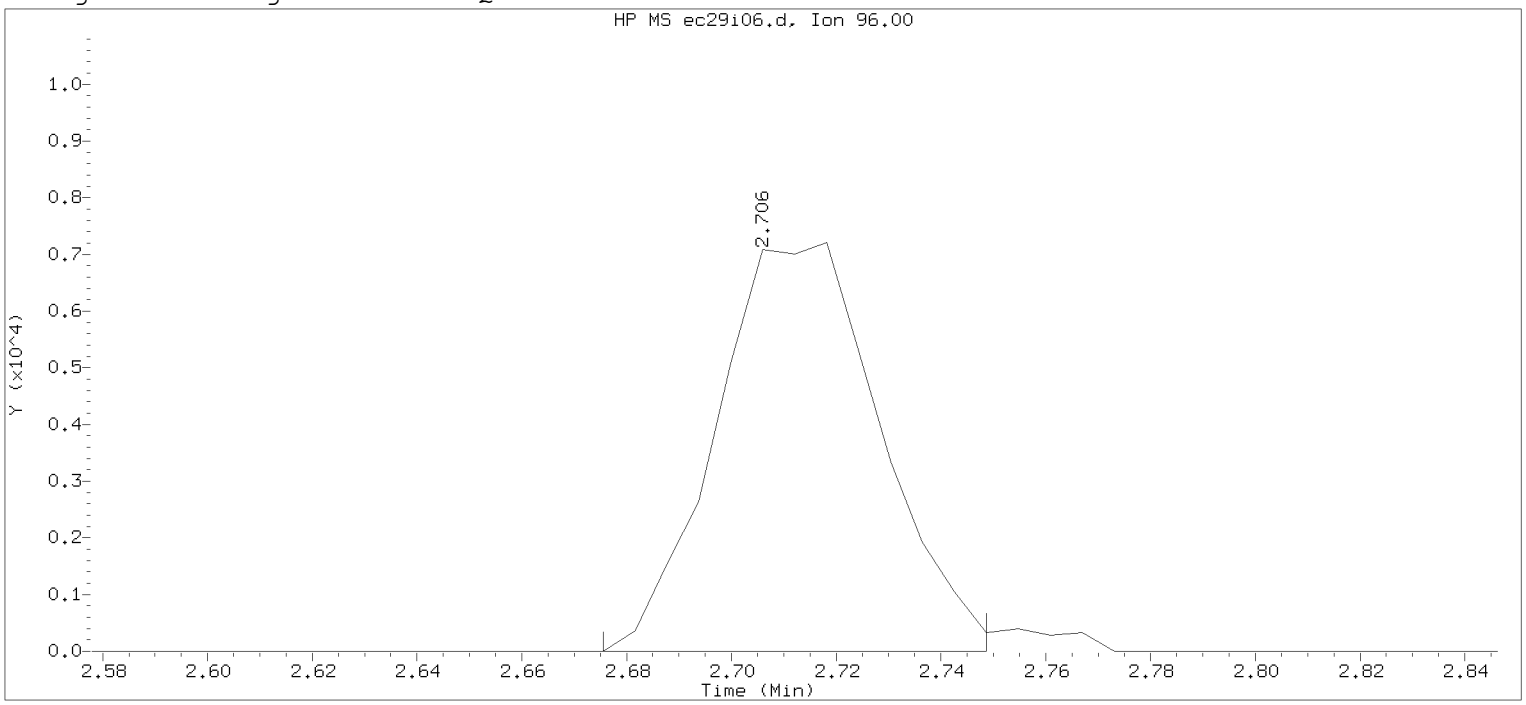
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

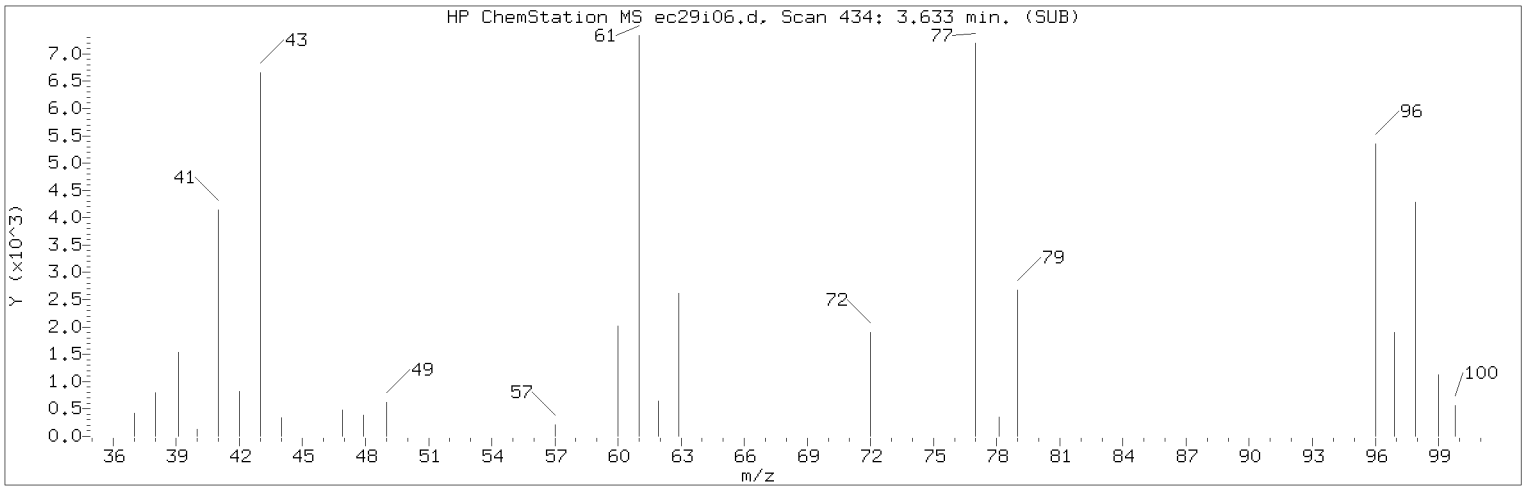
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:37
Date, time and analyst ID of latest file update: 29-Oct-2018 22:37 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

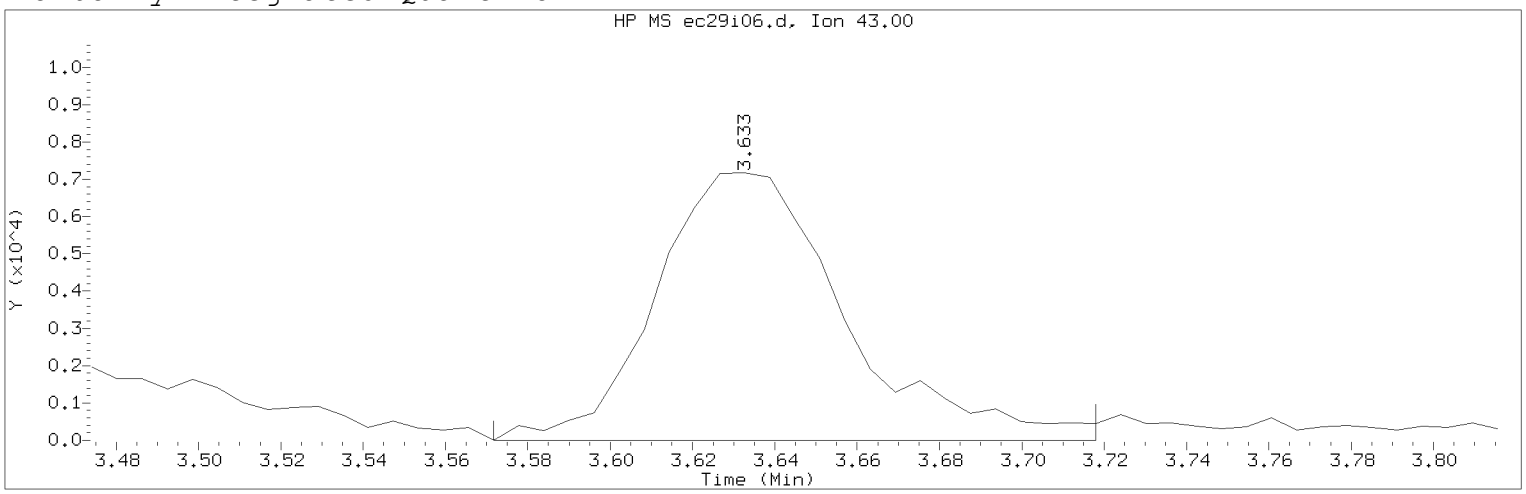
Compound Number : 32
Compound Name : trans-1,2-Dichloroethene
Scan Number : 282
Retention Time (minutes): 2.706
Quant Ion : 96.00
Area : 15616
On-column Amount (ng) : 3.7305
Integration start scan : 276 Integration stop scan: 288
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

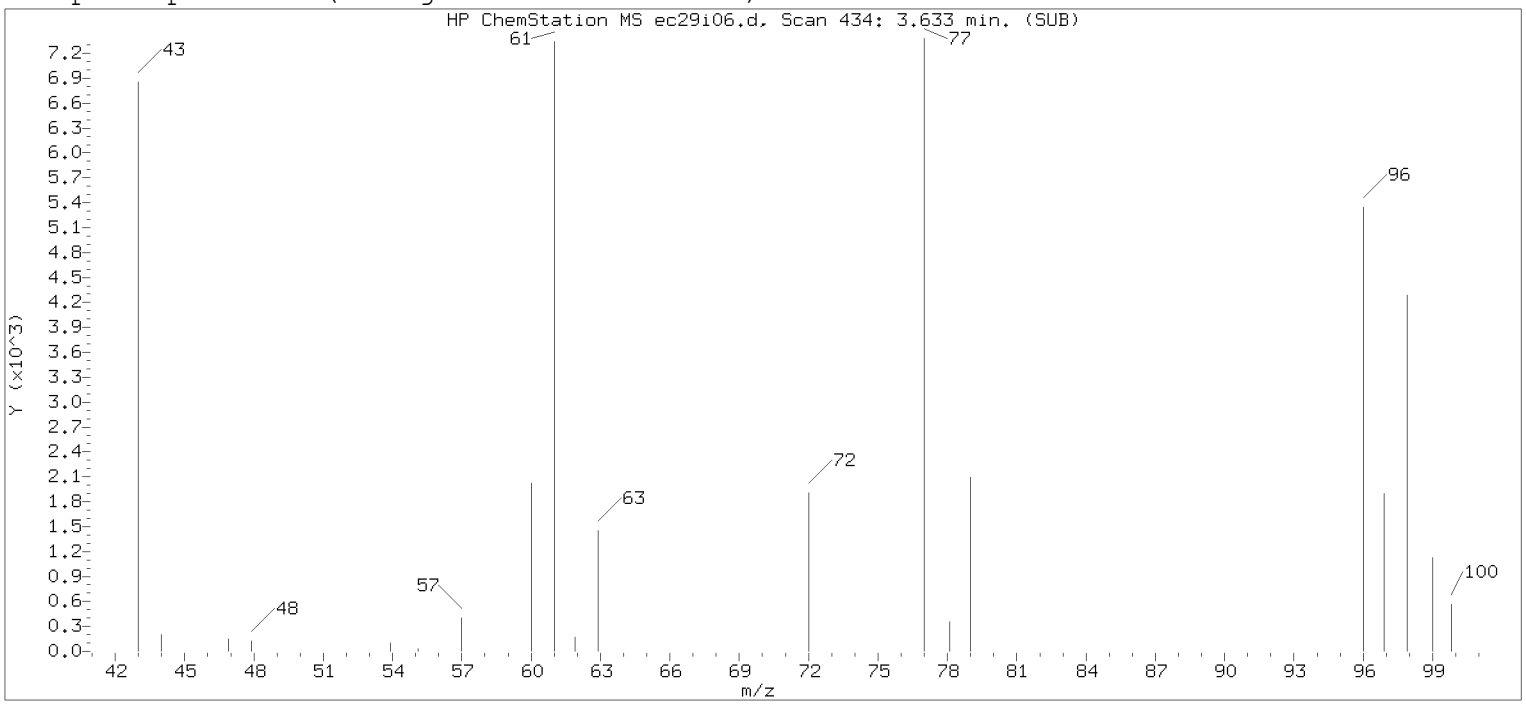
Compound Number : 44
Compound Name : 2-Butanone
Scan Number : 434
Retention Time (minutes): 3.633
Quant Ion : 43.00
Area (flag) : 22950M
On-Column Amount (ng) : 7.6596
Integration start scan : 423 Integration stop scan: 447
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

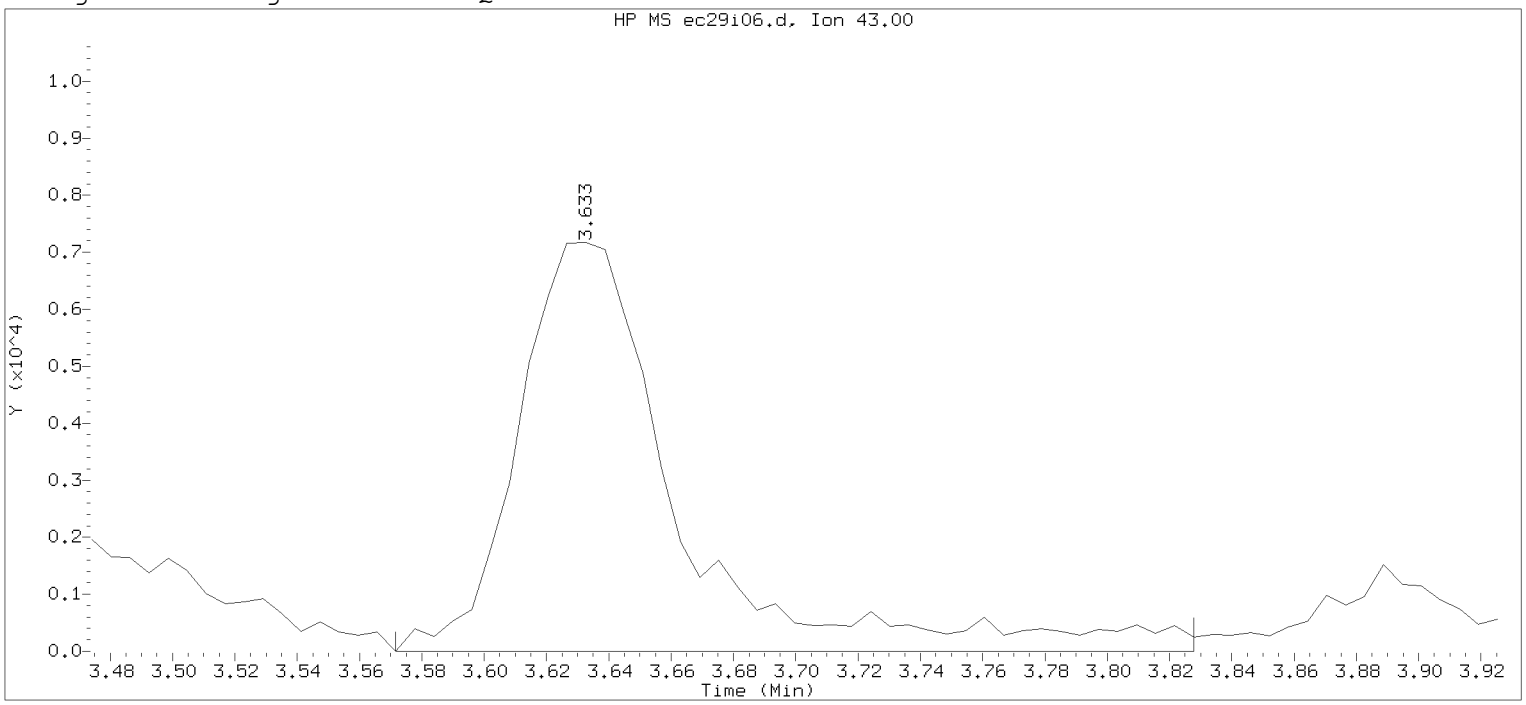
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

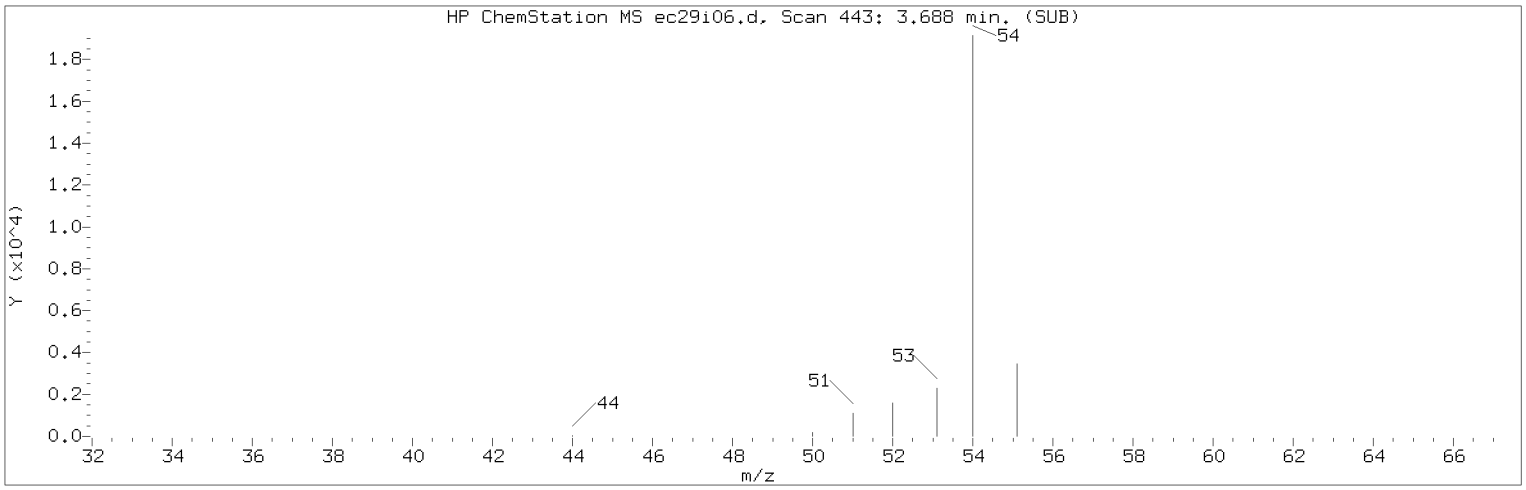
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:37
Date, time and analyst ID of latest file update: 29-Oct-2018 22:37 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

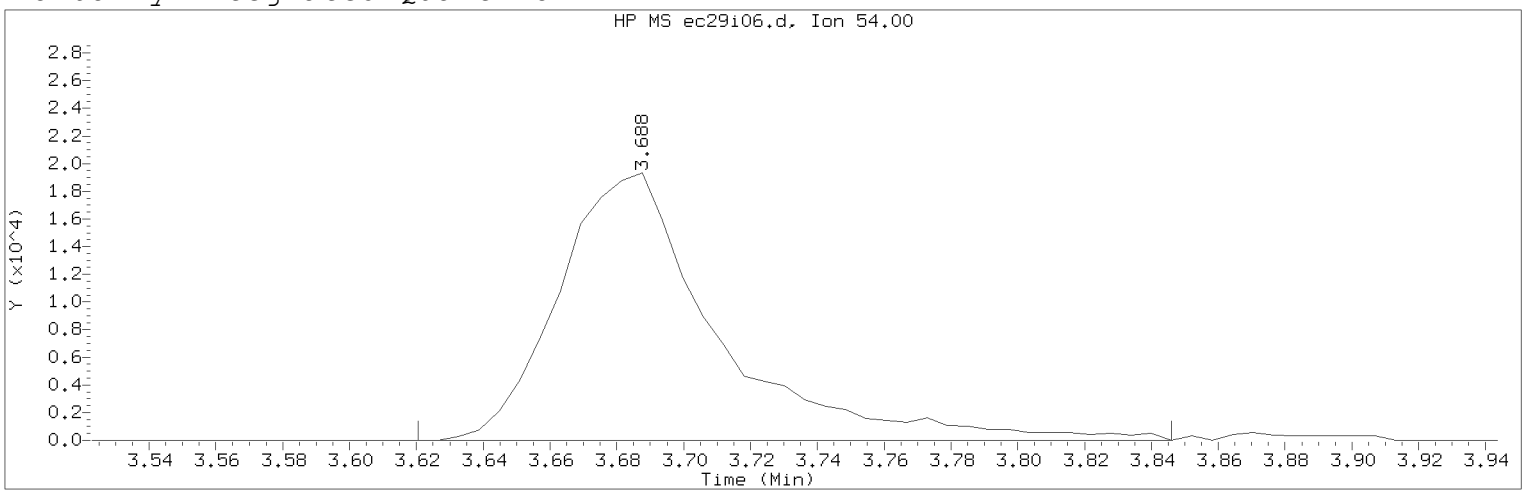
Compound Number : 44
Compound Name : 2-Butanone
Scan Number : 434
Retention Time (minutes): 3.633
Quant Ion : 43.00
Area : 25500
On-column Amount (ng) : 8.5836
Integration start scan : 423 Integration stop scan: 465
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

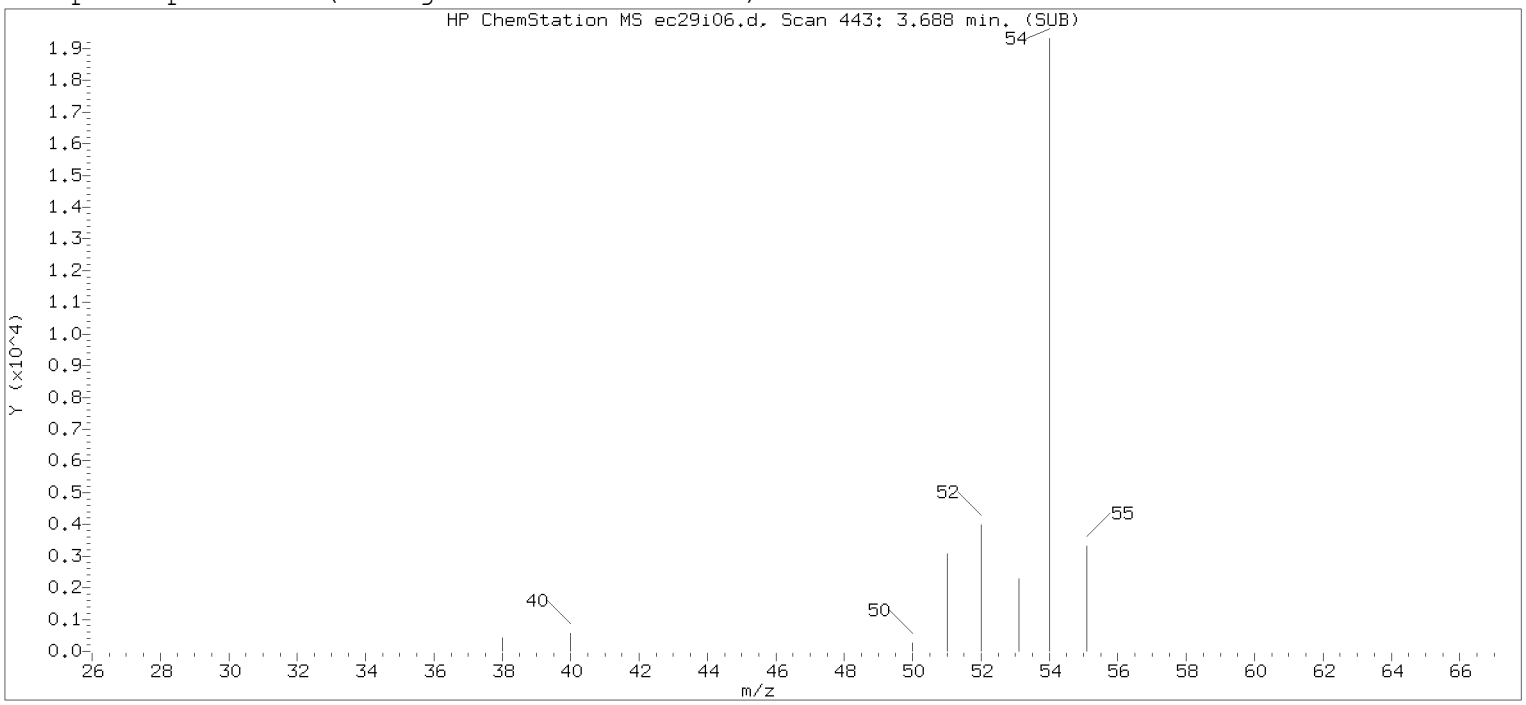
Compound Number : 47
Compound Name : Propionitrile
Scan Number : 443
Retention Time (minutes): 3.688
Quant Ion : 54.00
Area (flag) : 63707M
On-Column Amount (ng) : 76.0318
Integration start scan : 431 Integration stop scan: 468
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

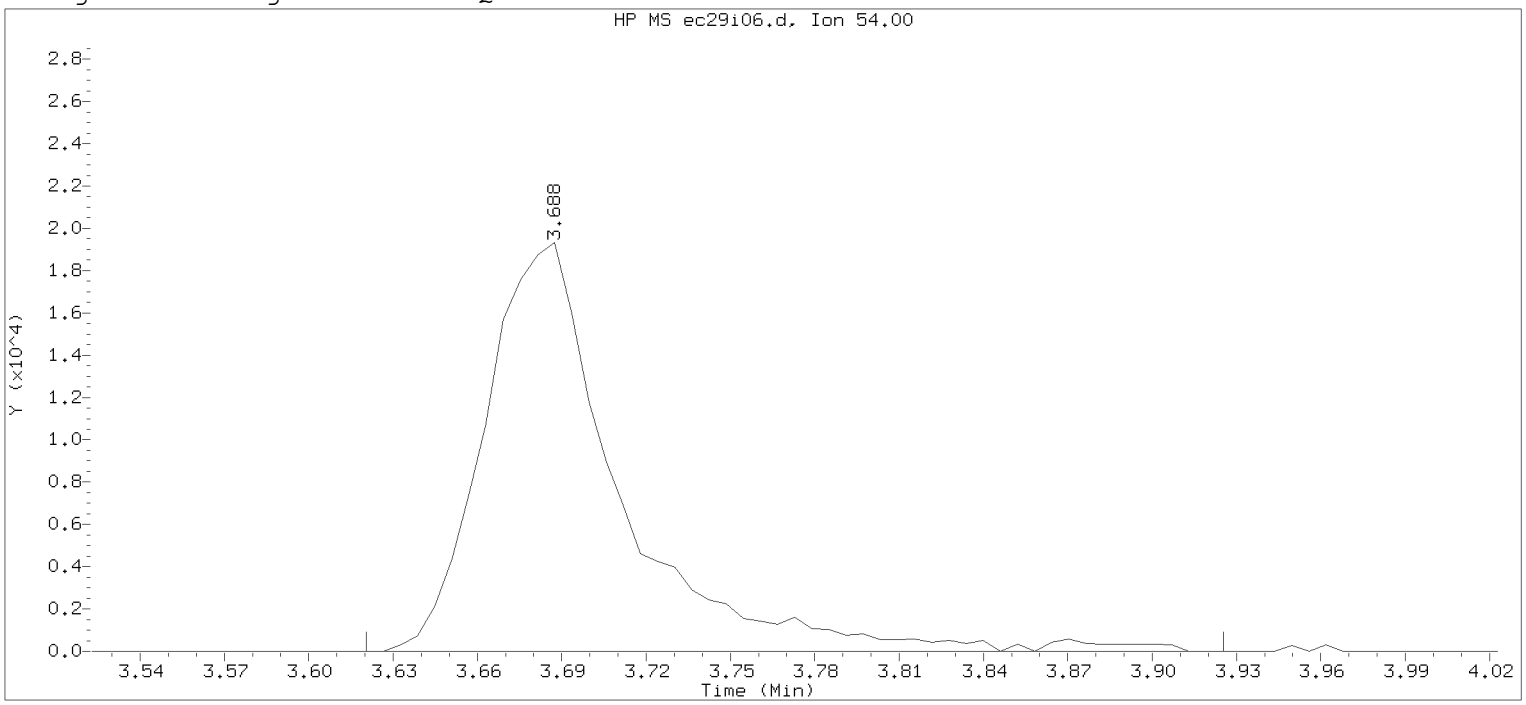
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

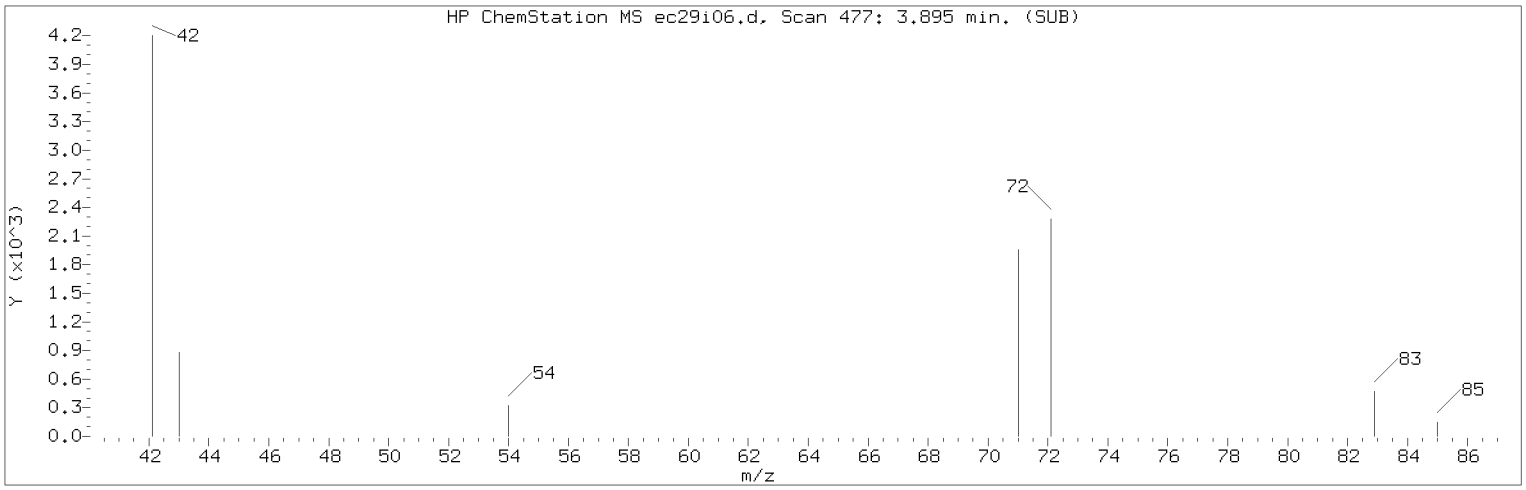
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:37
Date, time and analyst ID of latest file update: 29-Oct-2018 22:37 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

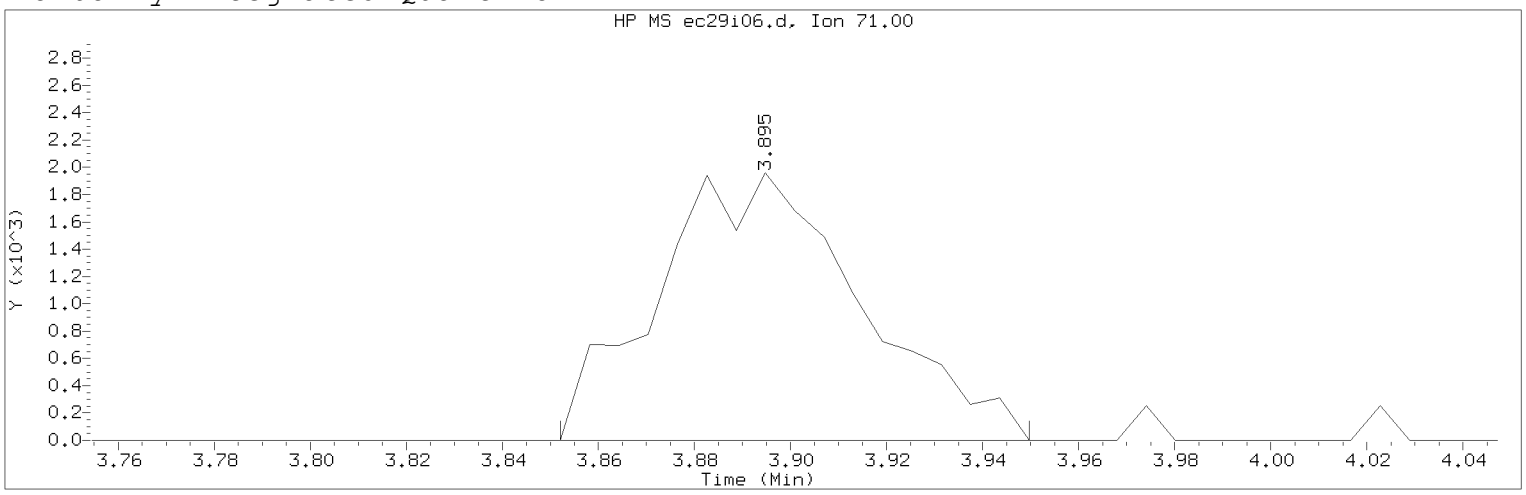
Compound Number : 47
Compound Name : Propionitrile
Scan Number : 443
Retention Time (minutes): 3.688
Quant Ion : 54.00
Area : 64920
On-column Amount (ng) : 76.3254
Integration start scan : 431 Integration stop scan: 481
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

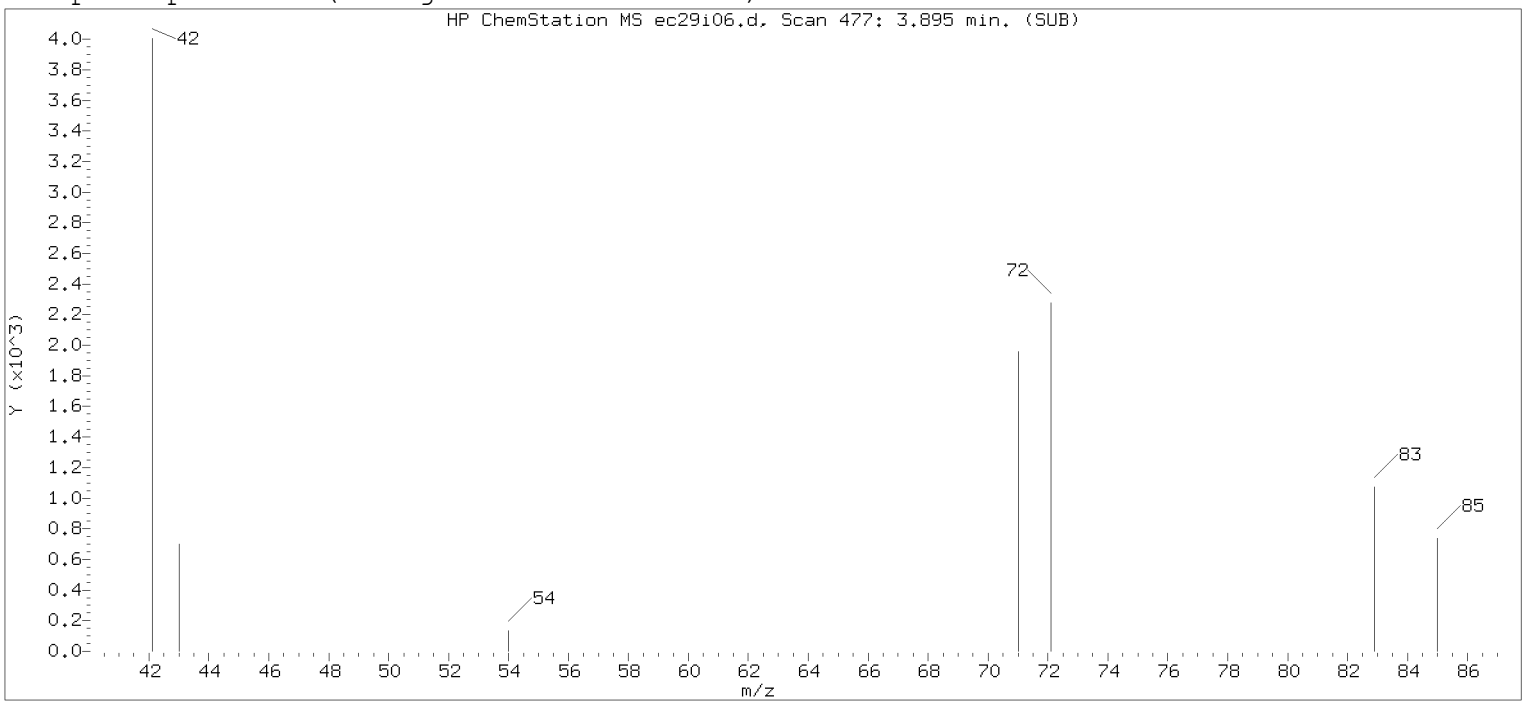
Compound Number : 50
Compound Name : Tetrahydrofuran
Scan Number : 477
Retention Time (minutes): 3.895
Quant Ion : 71.00
Area (flag) : 5777M
On-Column Amount (ng) : 8.1370
Integration start scan : 469 Integration stop scan: 485
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

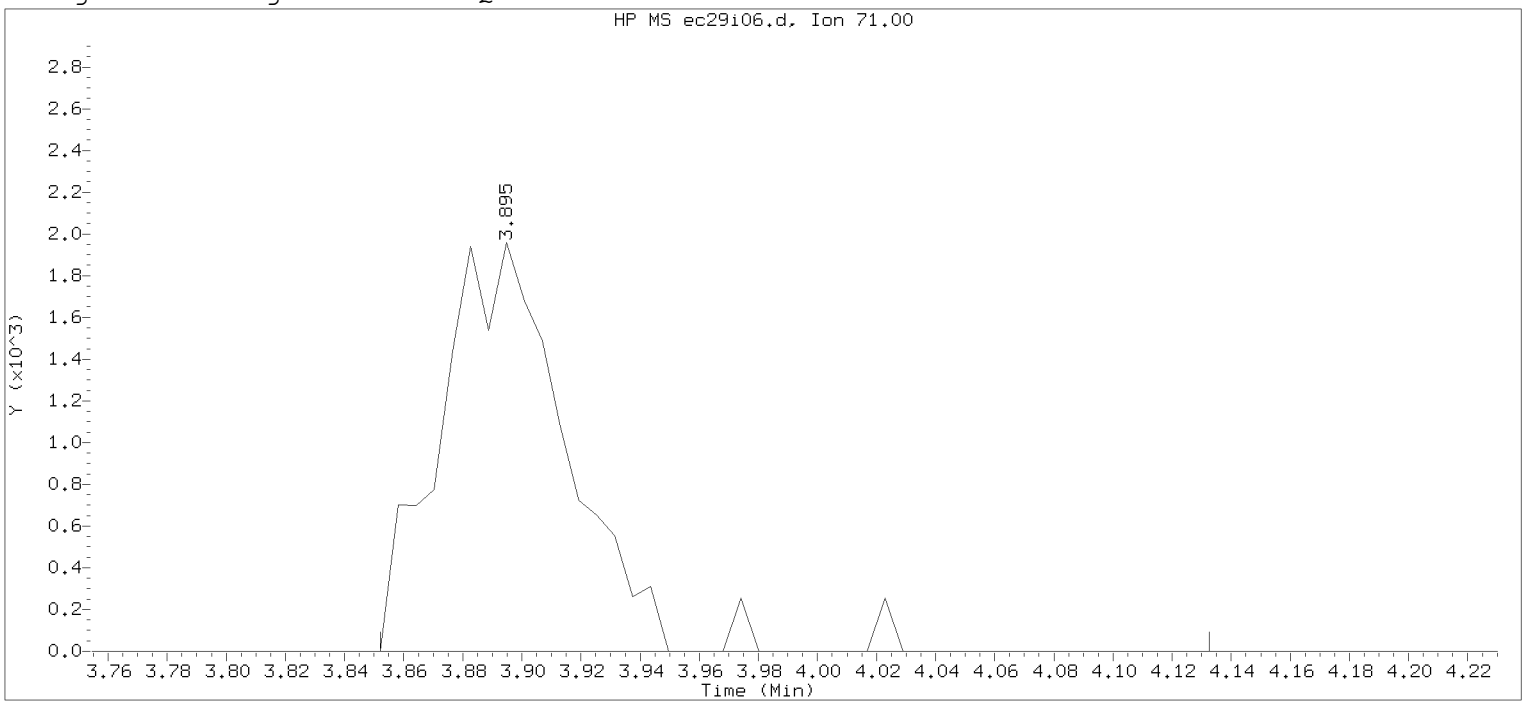
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

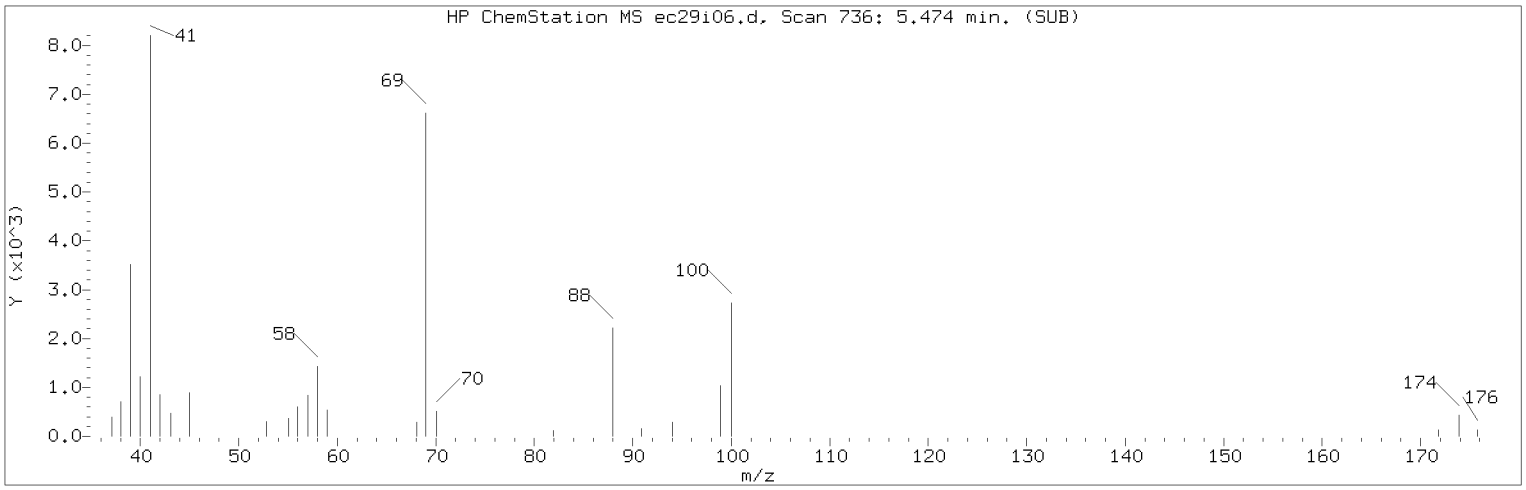
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:37
Date, time and analyst ID of latest file update: 29-Oct-2018 22:37 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

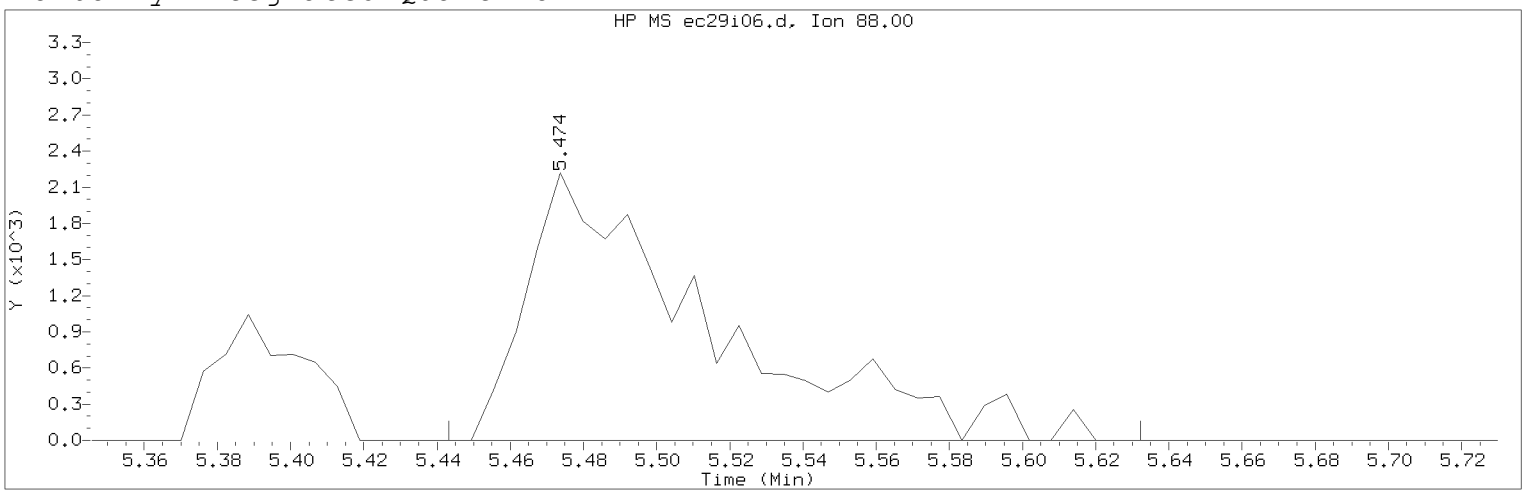
Compound Number	: 50		
Compound Name	: Tetrahydrofuran		
Scan Number	: 477		
Retention Time (minutes)	: 3.895		
Quant Ion	: 71.00		
Area	: 5964		
On-column Amount (ng)	: 8.1090		
Integration start scan	: 469	Integration stop scan:	515
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

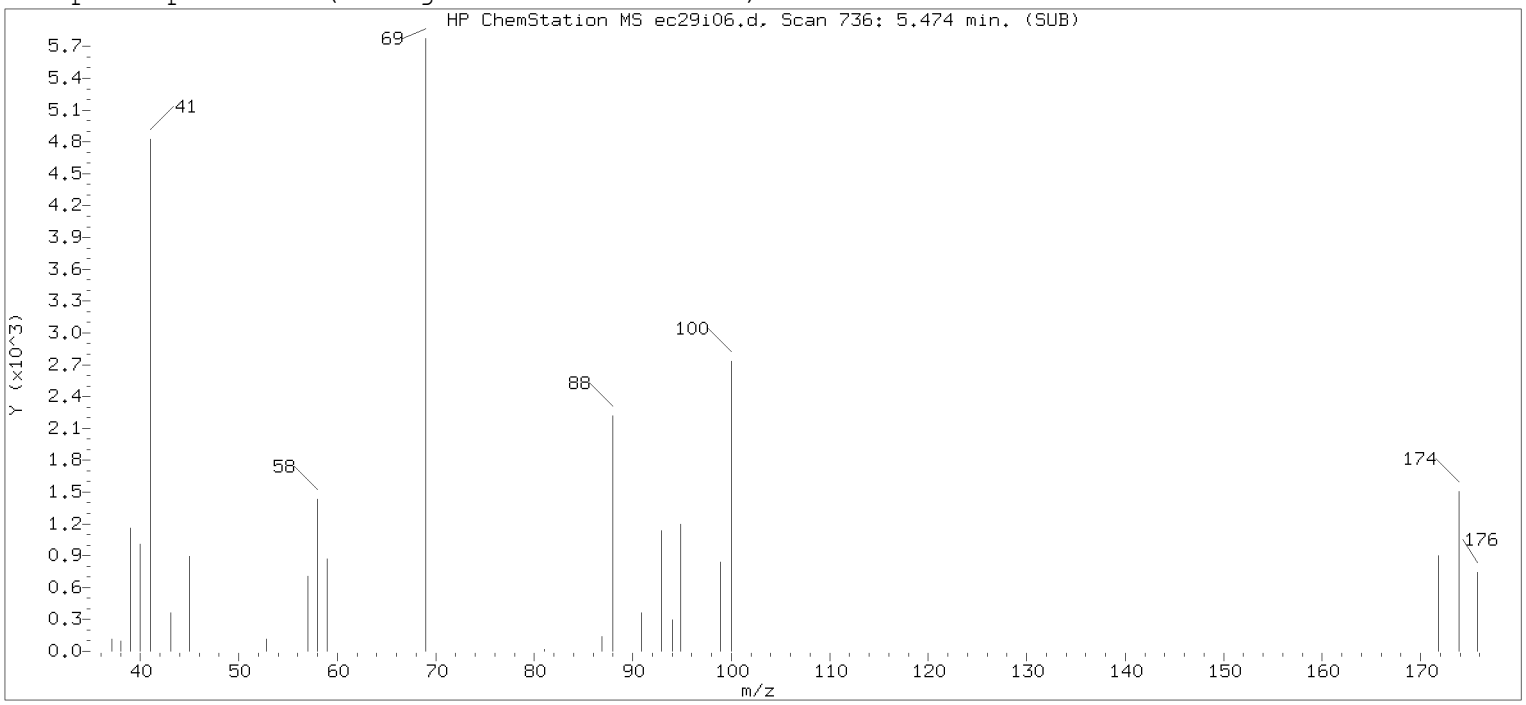
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 736
Retention Time (minutes): 5.474
Quant Ion : 88.00
Area (flag) : 7723M
On-Column Amount (ng) : 186.3864
Integration start scan : 730 Integration stop scan: 761
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

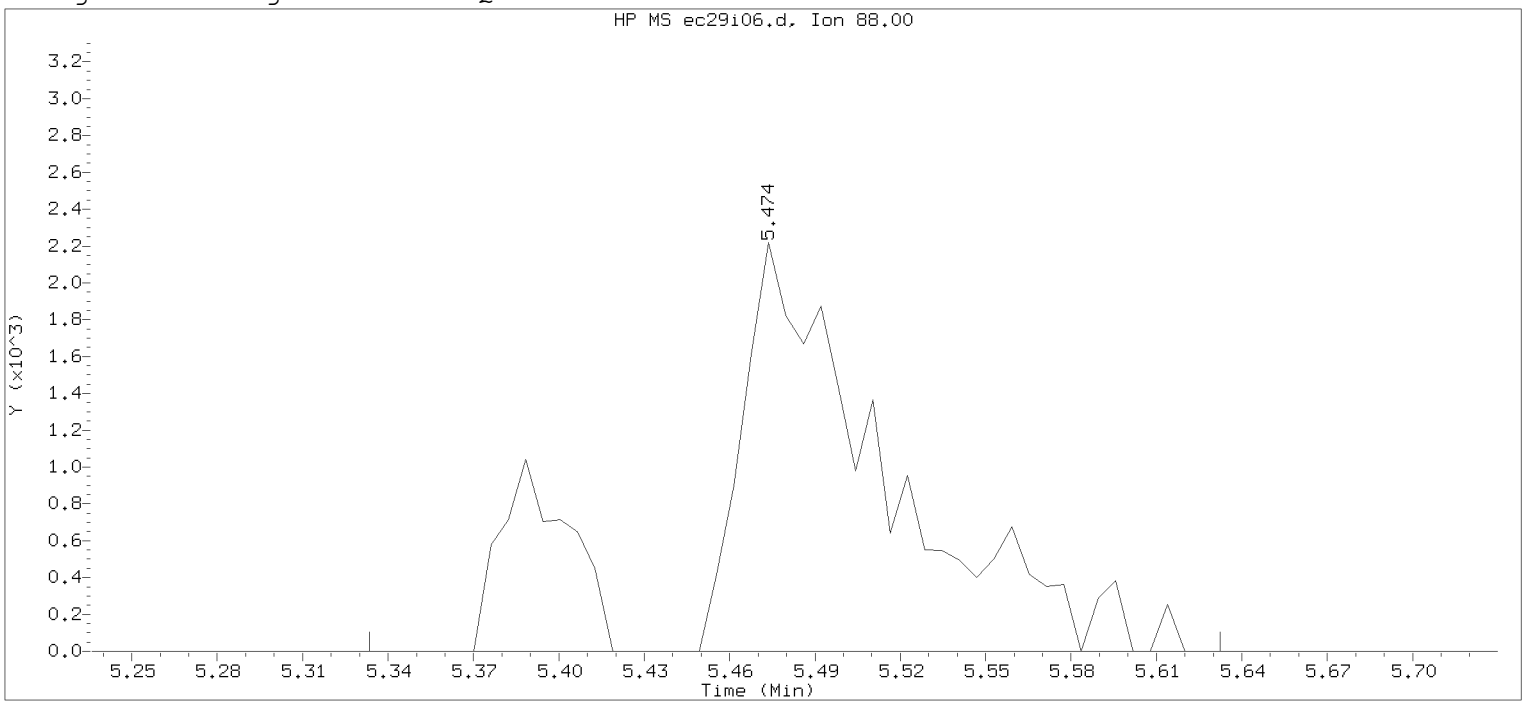
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

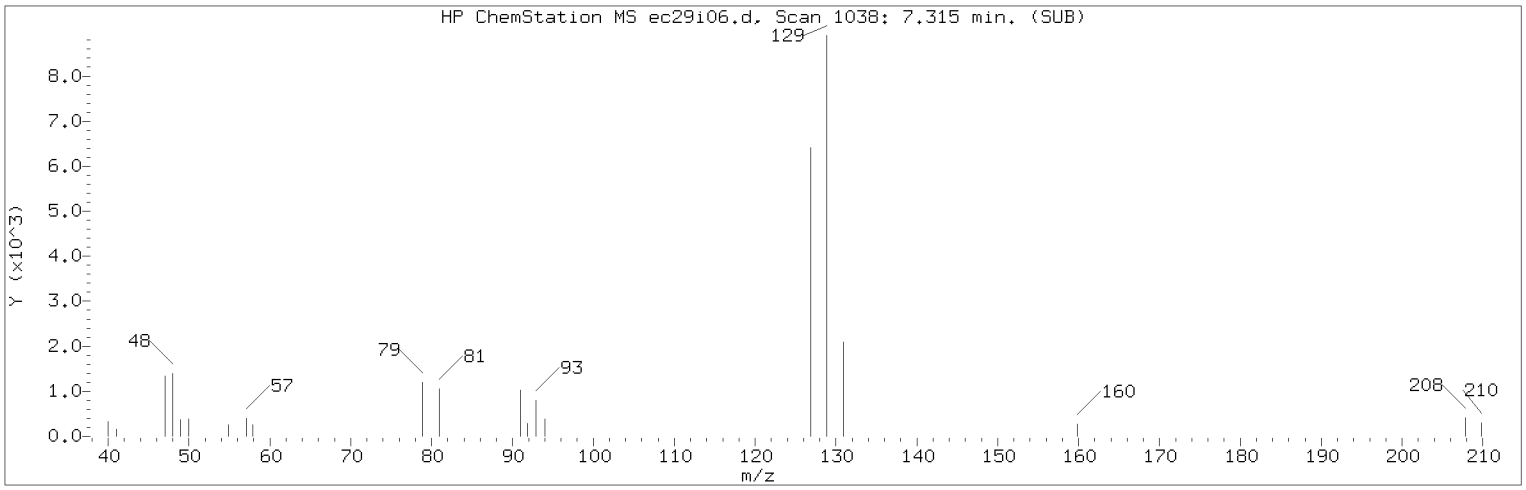
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:37
Date, time and analyst ID of latest file update: 29-Oct-2018 22:37 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

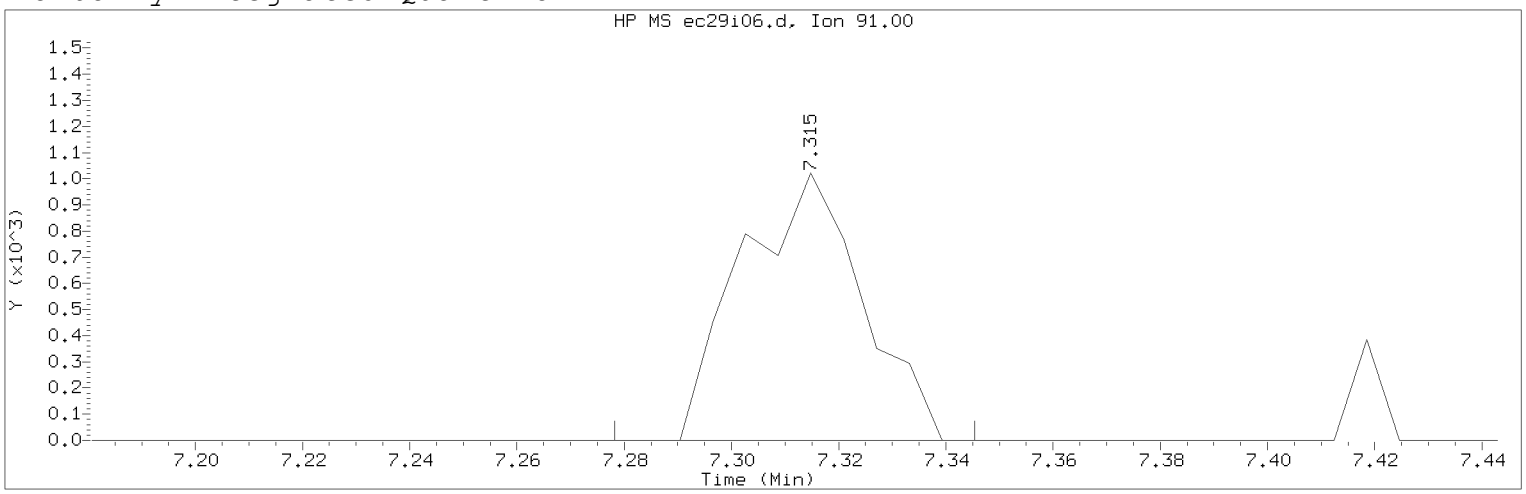
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 736
Retention Time (minutes): 5.474
Quant Ion : 88.00
Area : 9497
On-column Amount (ng) : 208.3236
Integration start scan : 712 Integration stop scan: 761
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

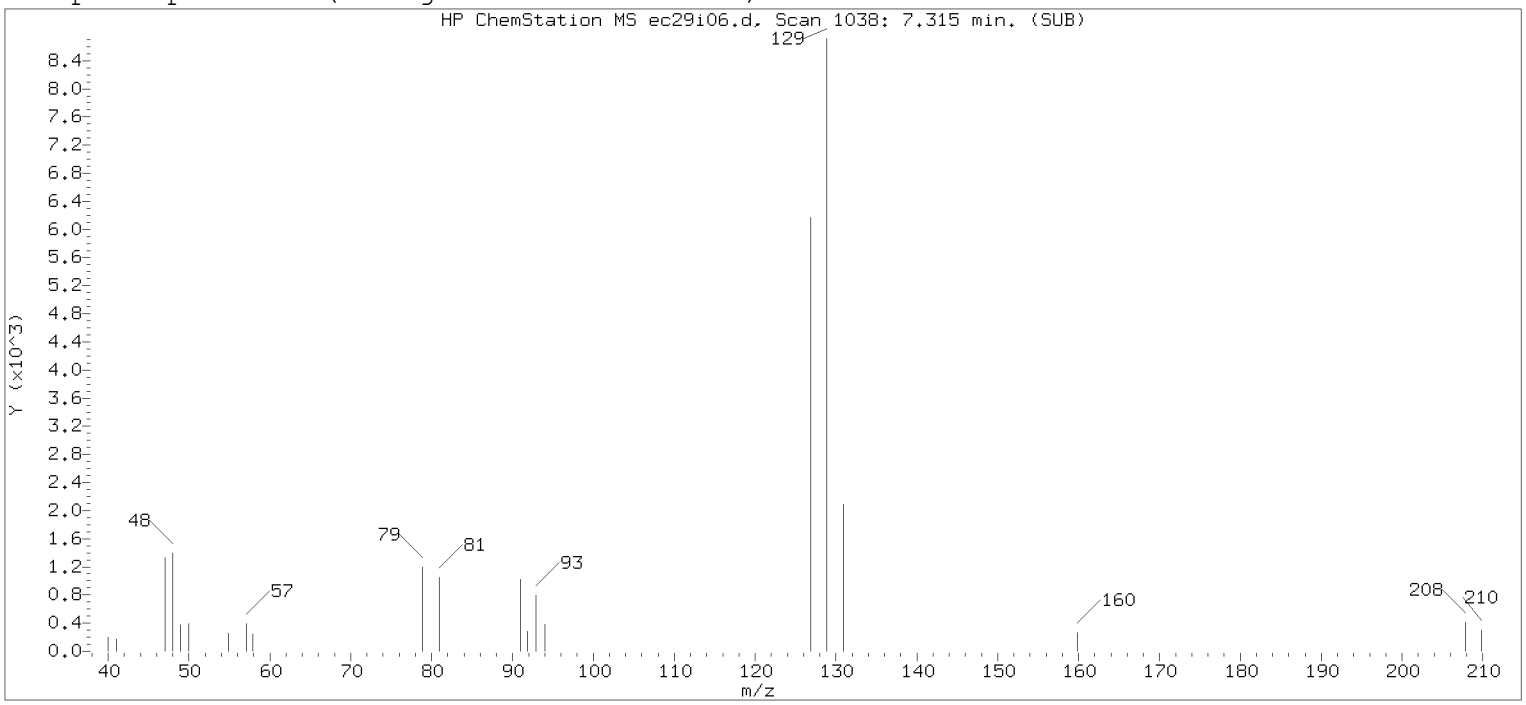
Compound Number : 102
Compound Name : 1-Chlorohexane
Scan Number : 1038
Retention Time (minutes): 7.315
Quant Ion : 91.00
Area (flag) : 1602M
On-Column Amount (ng) : 4.5664
Integration start scan : 1031 Integration stop scan: 1042
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

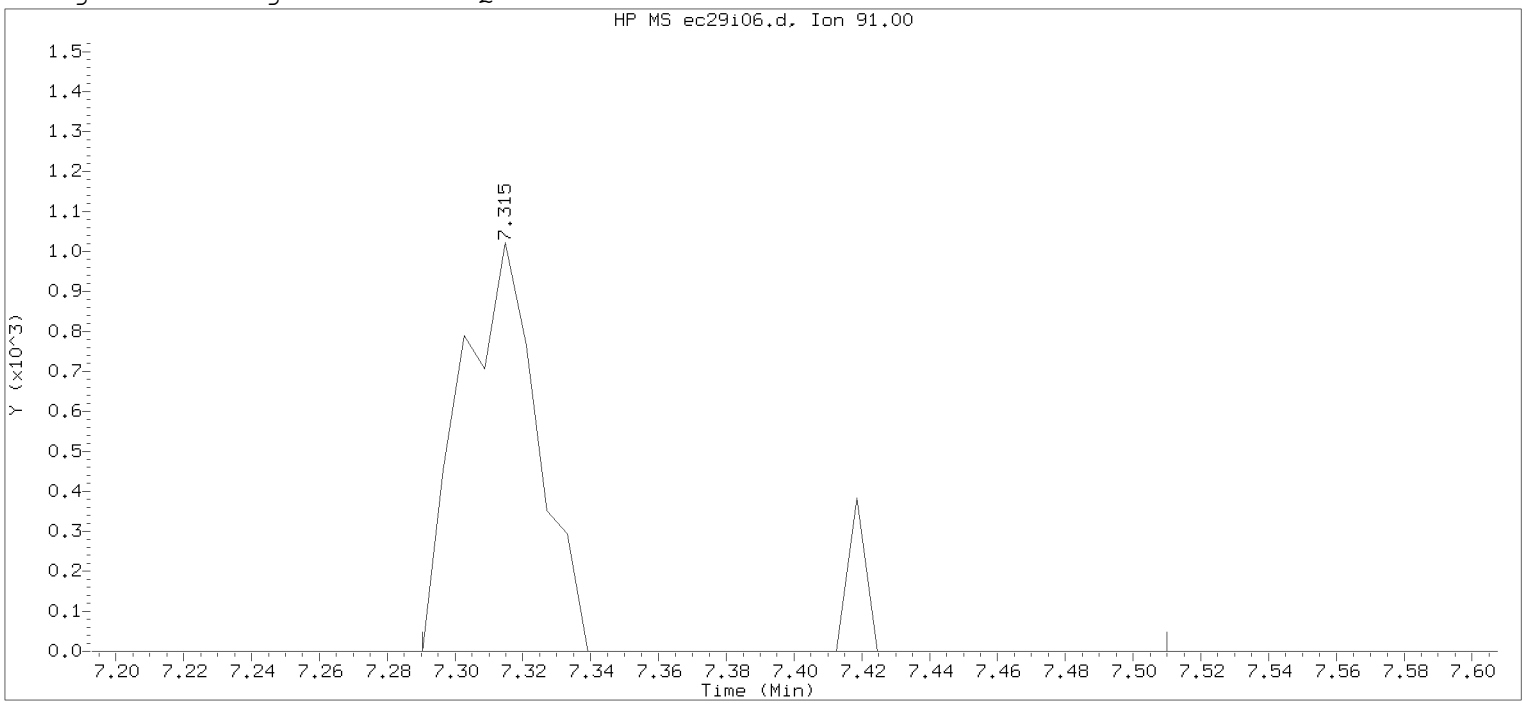
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

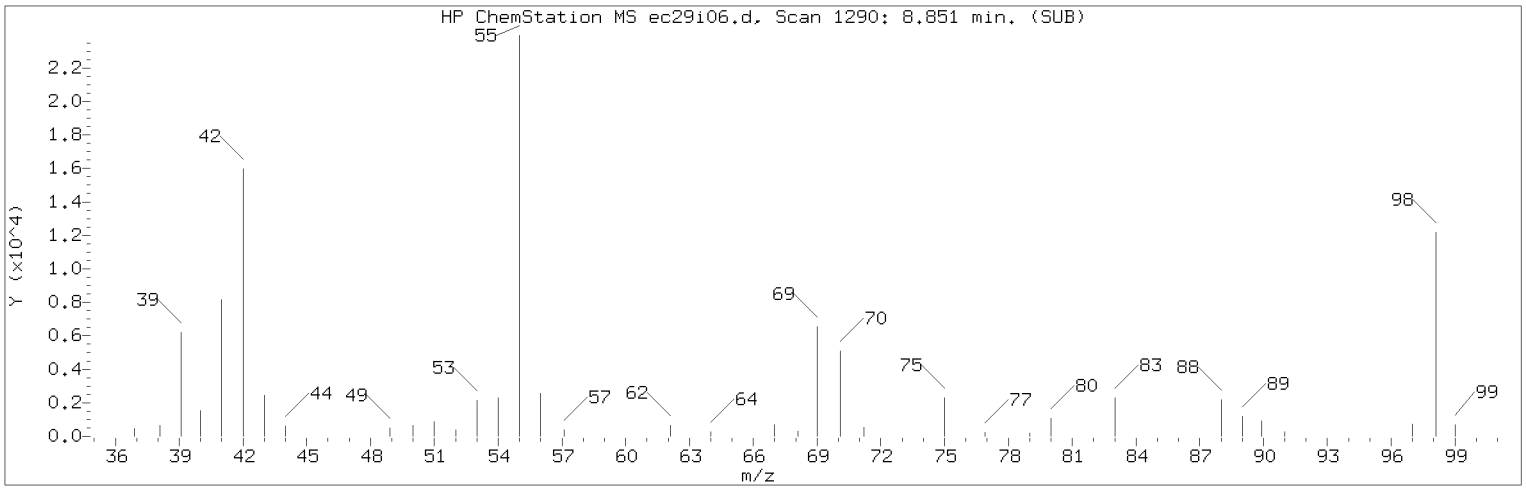
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:37
Date, time and analyst ID of latest file update: 29-Oct-2018 22:37 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

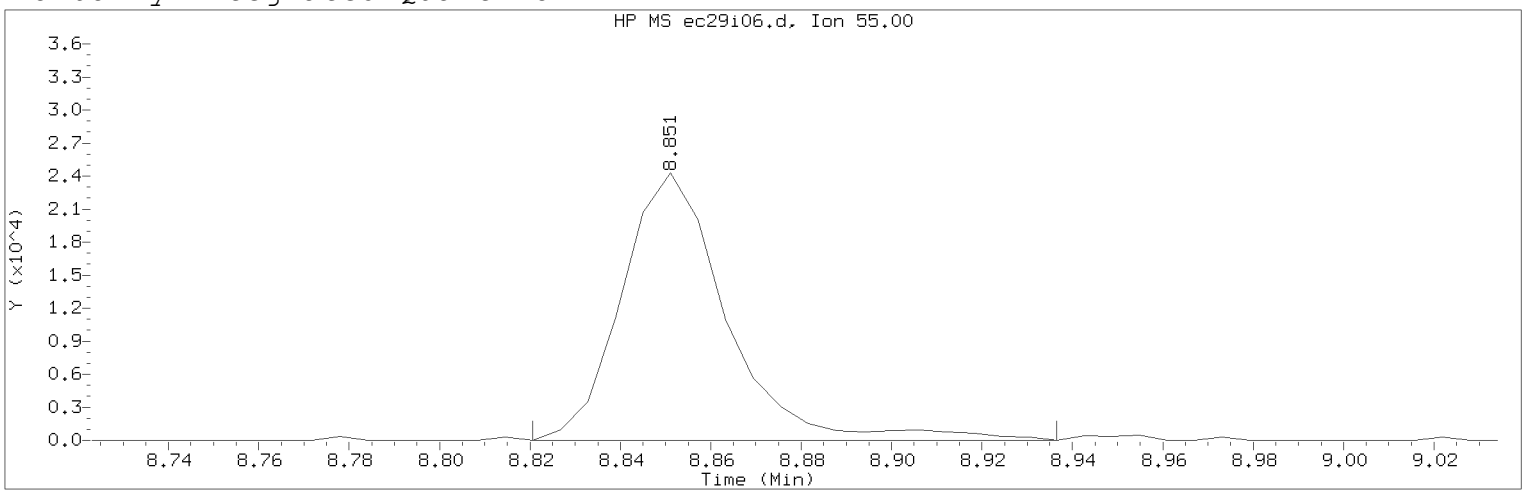
Compound Number : 102
Compound Name : 1-Chlorohexane
Scan Number : 1038
Retention Time (minutes): 7.315
Quant Ion : 91.00
Area : 1743
On-column Amount (ng) : 4.6247
Integration start scan : 1033 Integration stop scan: 1069
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

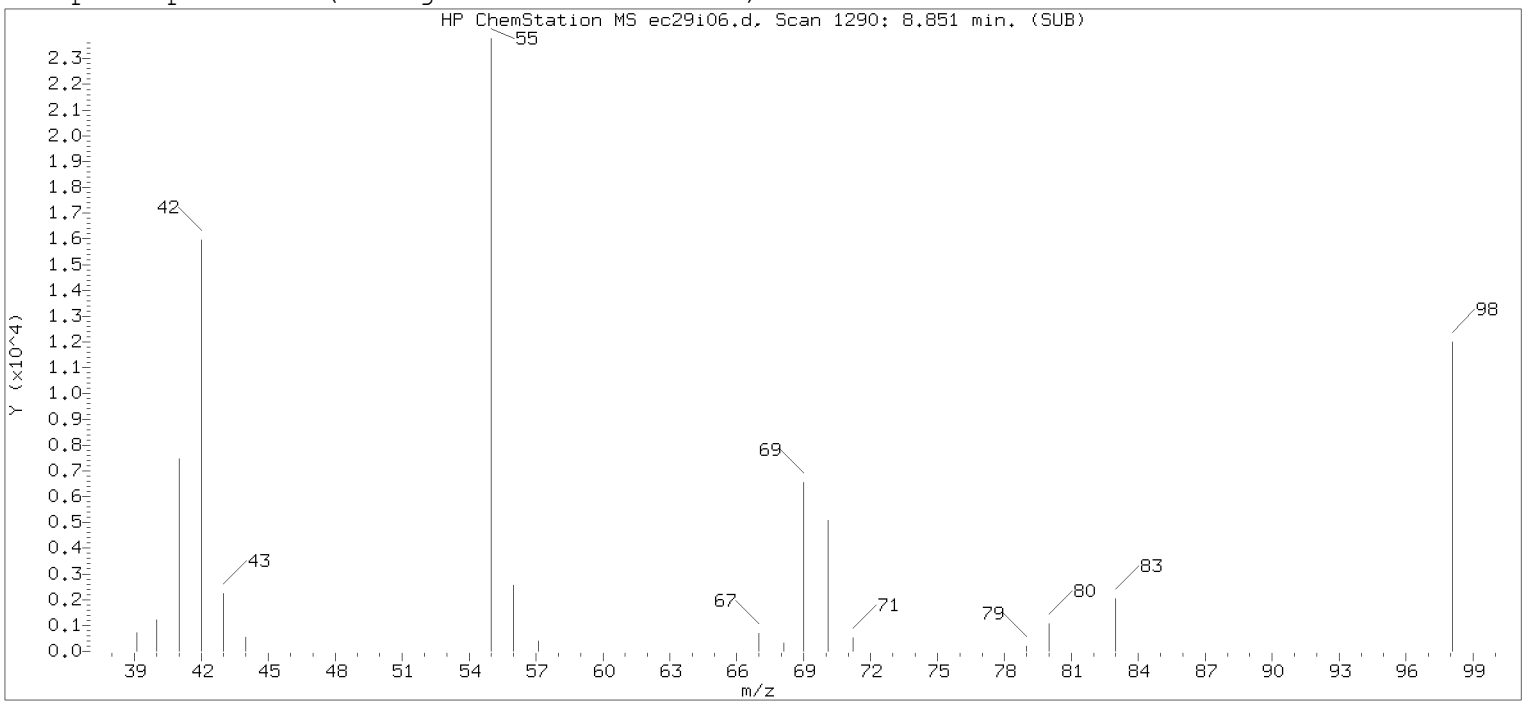
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1290
Retention Time (minutes): 8.851
Quant Ion : 55.00
Area (flag) : 39185M
On-Column Amount (ng) : 187.6914
Integration start scan : 1284 Integration stop scan: 1303
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

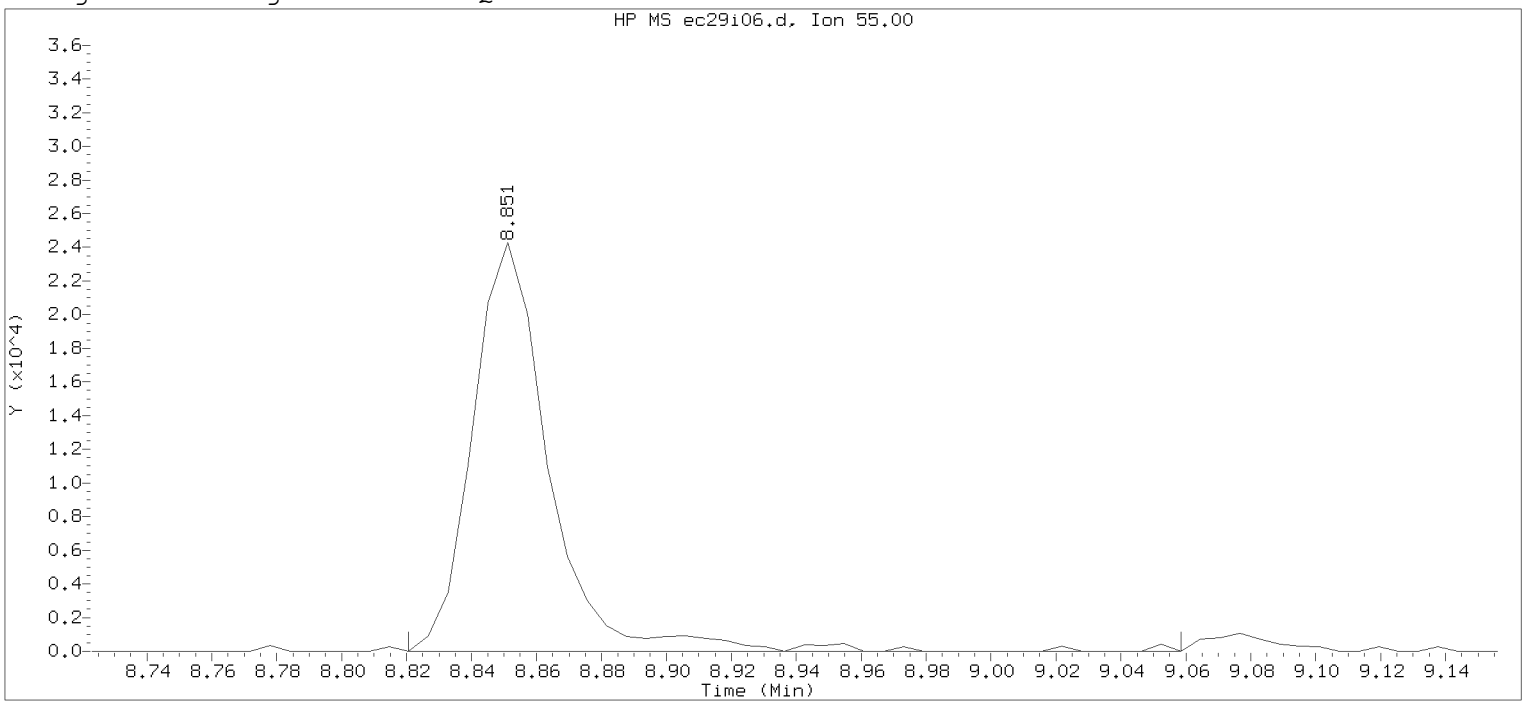
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

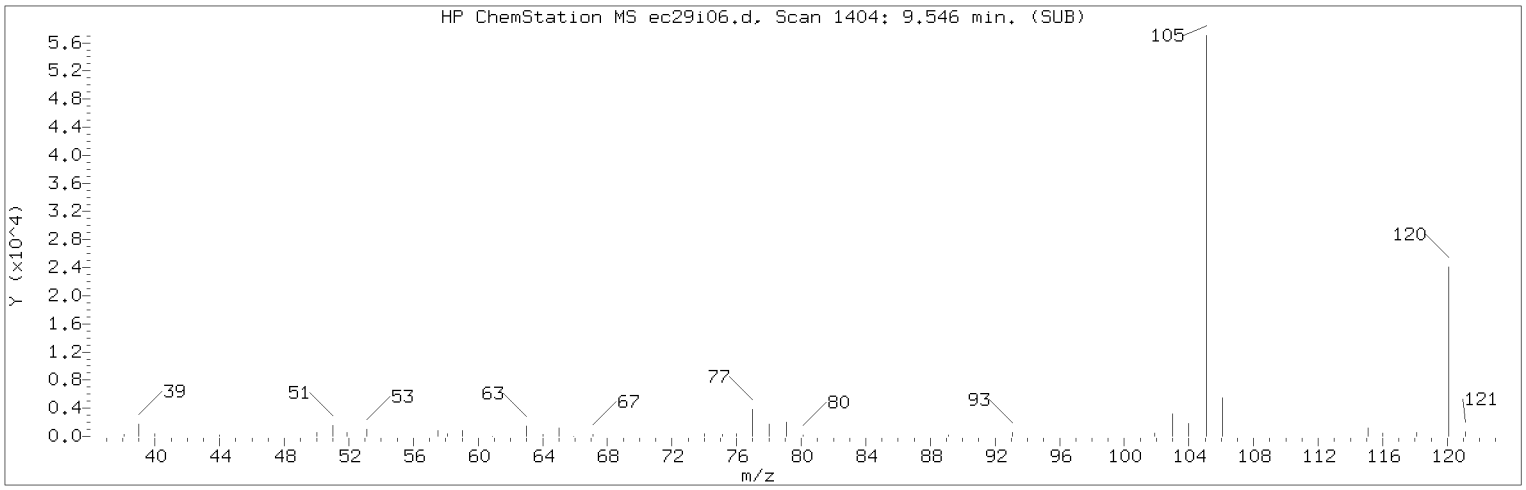
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:37
Date, time and analyst ID of latest file update: 29-Oct-2018 22:37 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

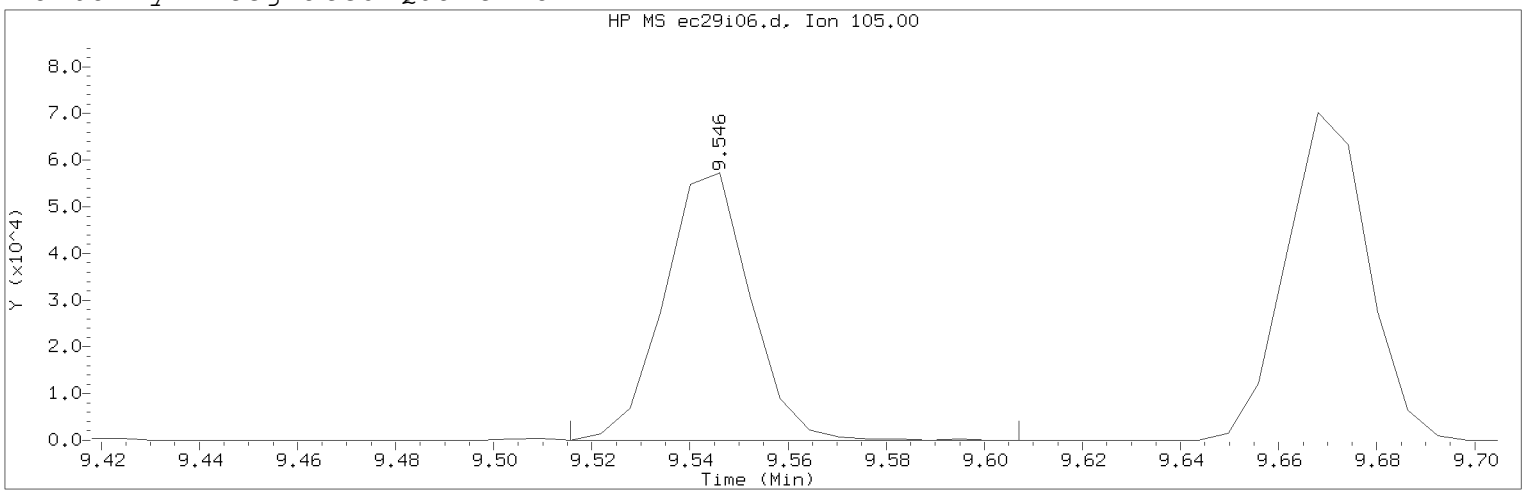
Compound Number	: 113		
Compound Name	: Cyclohexanone		
Scan Number	: 1290		
Retention Time (minutes)	: 8.851		
Quant Ion	: 55.00		
Area	: 39989		
On-column Amount (ng)	: 195.6665		
Integration start scan	: 1284	Integration stop scan:	1323
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

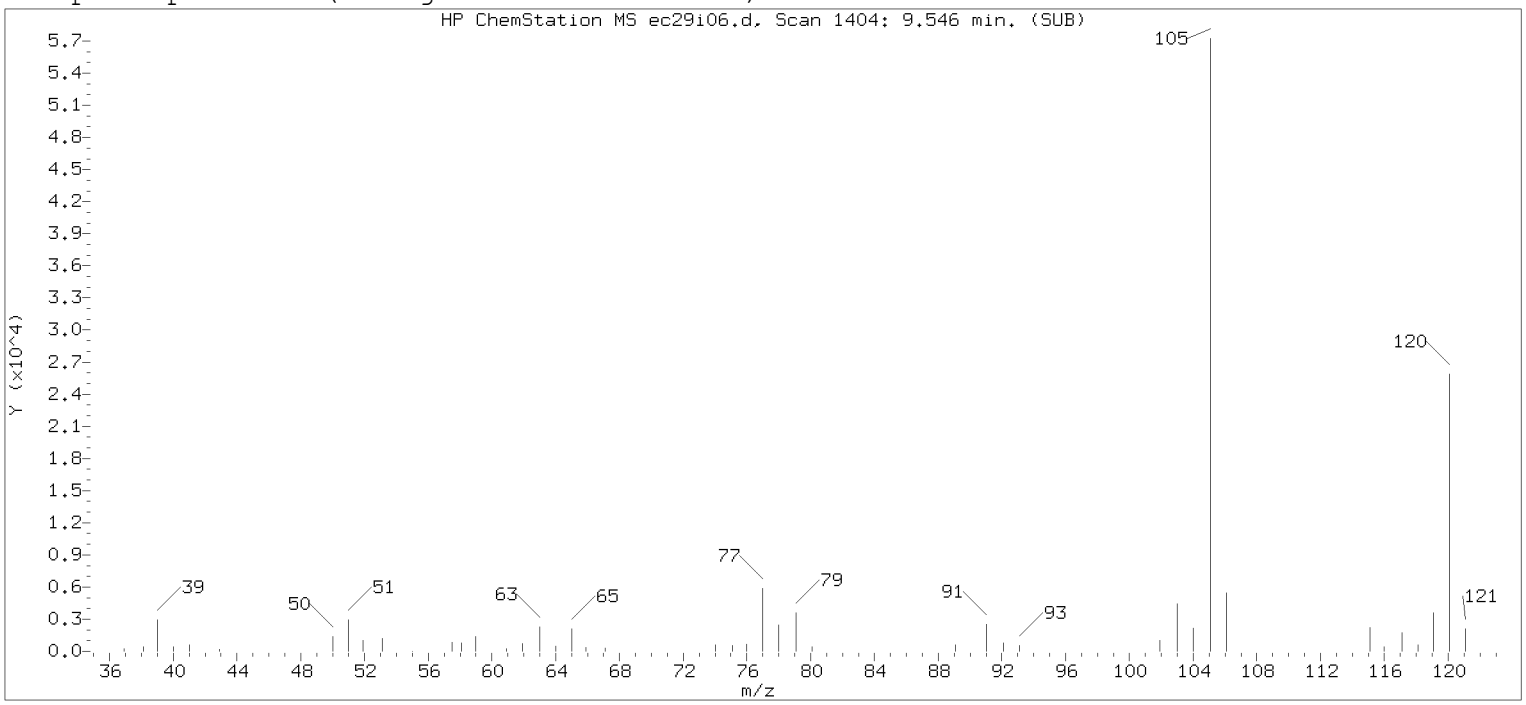
Compound Number : 127
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1404
Retention Time (minutes): 9.546
Quant Ion : 105.00
Area (flag) : 69880M
On-Column Amount (ng) : 3.4550
Integration start scan : 1398 Integration stop scan: 1413
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

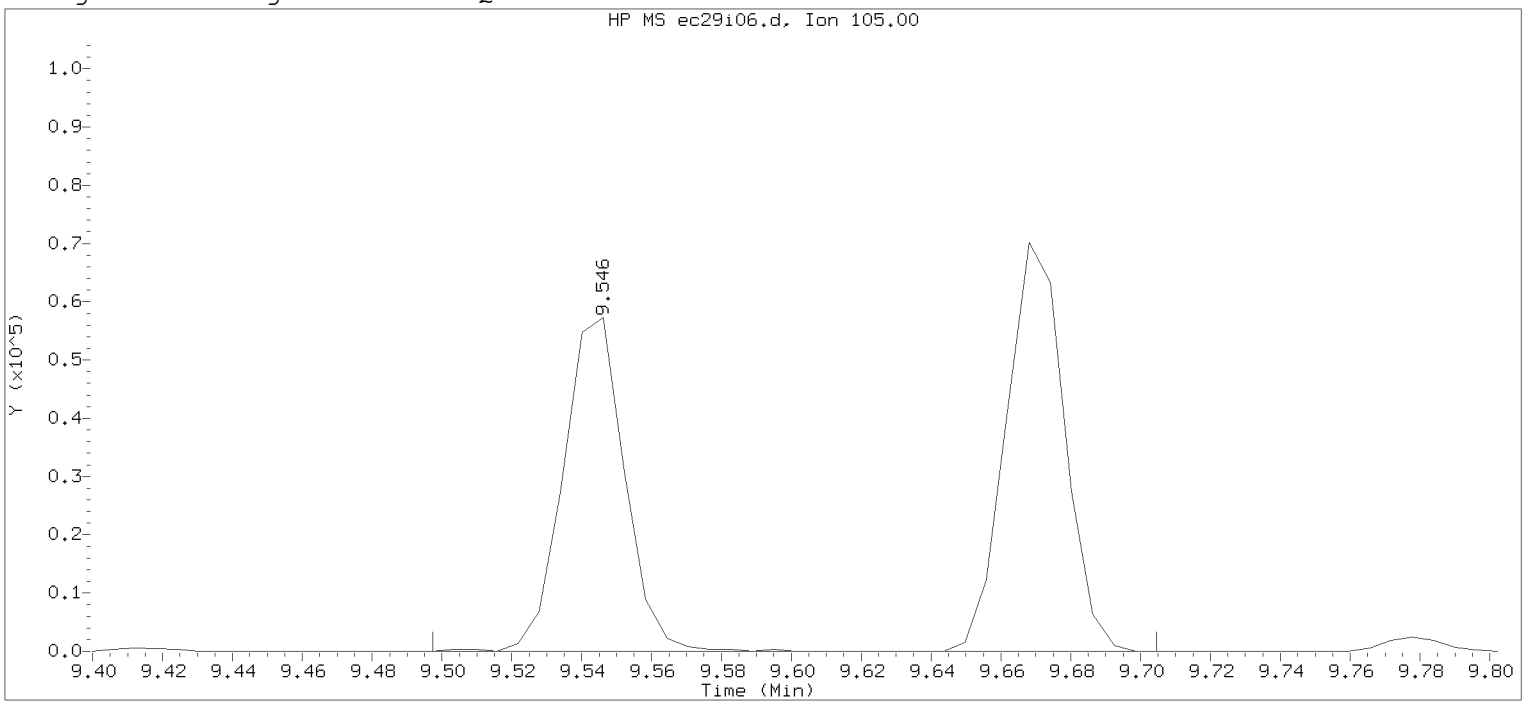
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

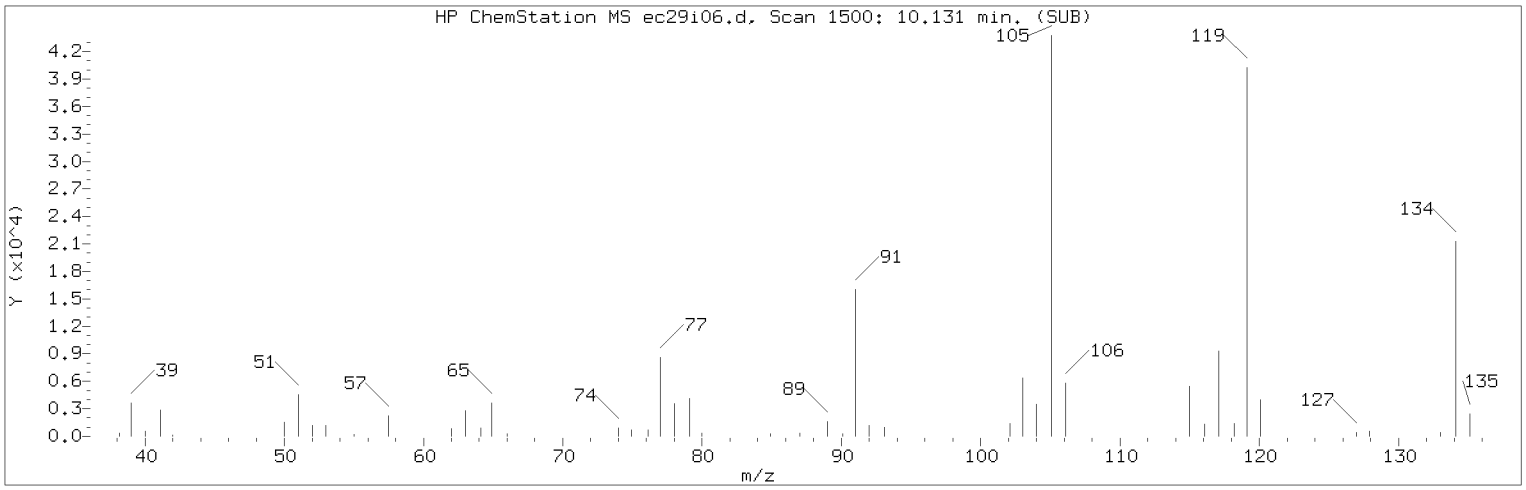
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:37
Date, time and analyst ID of latest file update: 29-Oct-2018 22:37 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

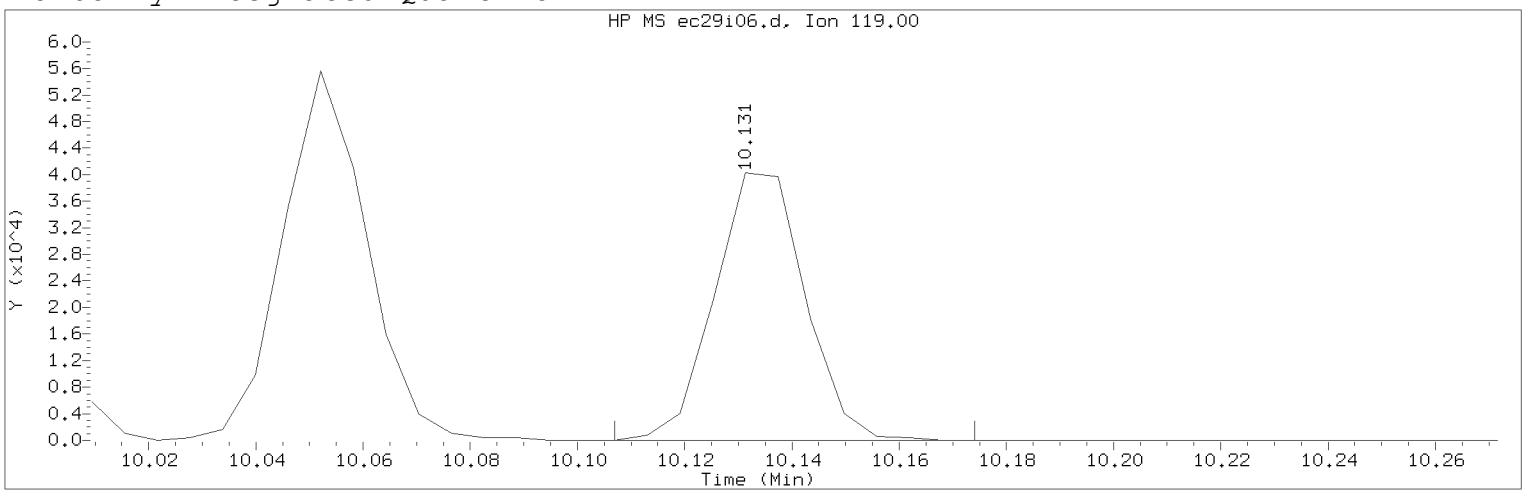
Compound Number : 127
Compound Name : 1,2,4-Trimethylbenzene
Scan Number : 1404
Retention Time (minutes): 9.546
Quant Ion : 105.00
Area : 151843
On-column Amount (ng) : 6.2428
Integration start scan : 1395 Integration stop scan: 1429
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD004 Lab Sample ID: VSTD004

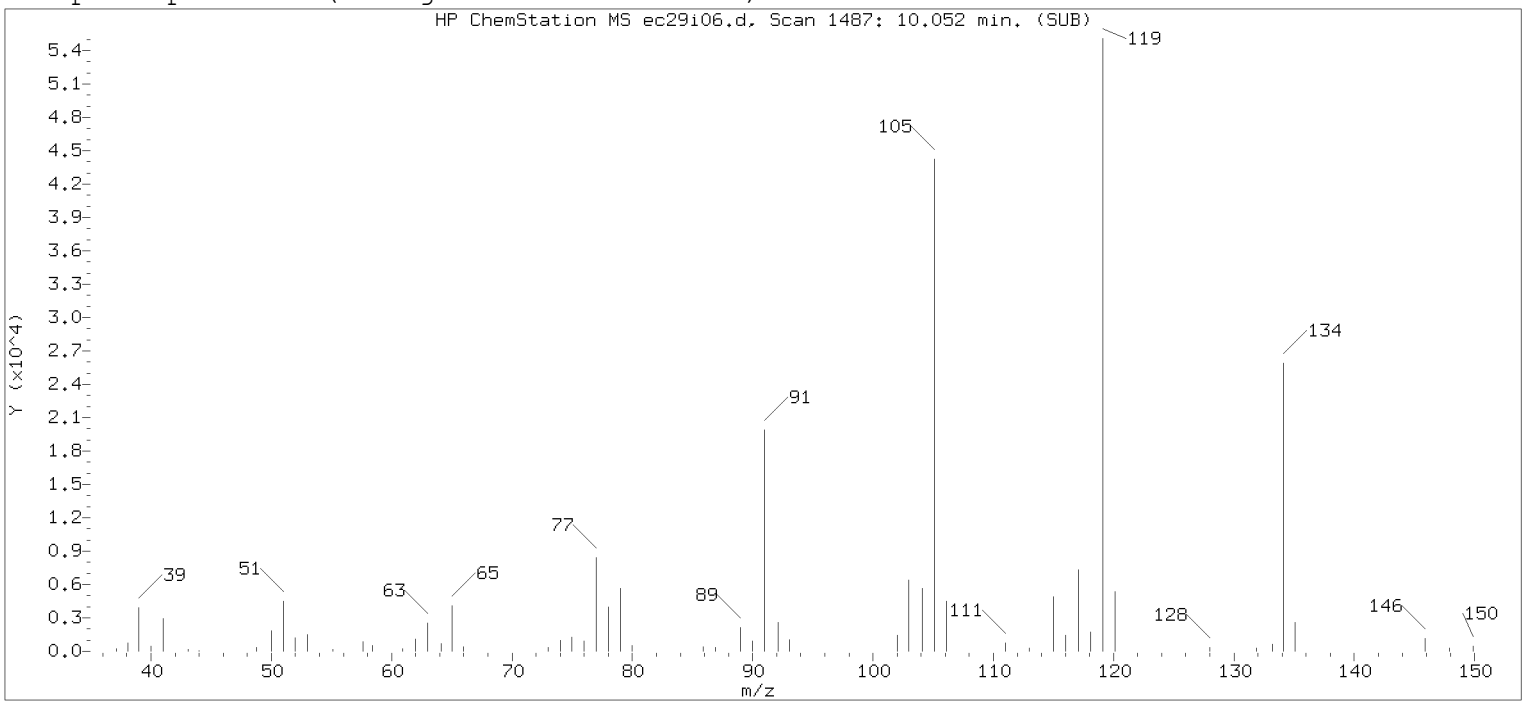
Compound Number : 141
Compound Name : 1,2-Diethylbenzene
Scan Number : 1500
Retention Time (minutes): 10.131
Quant Ion : 119.00
Area (flag) : 47095M
On-Column Amount (ng) : 4.1039
Integration start scan : 1495 Integration stop scan: 1506
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

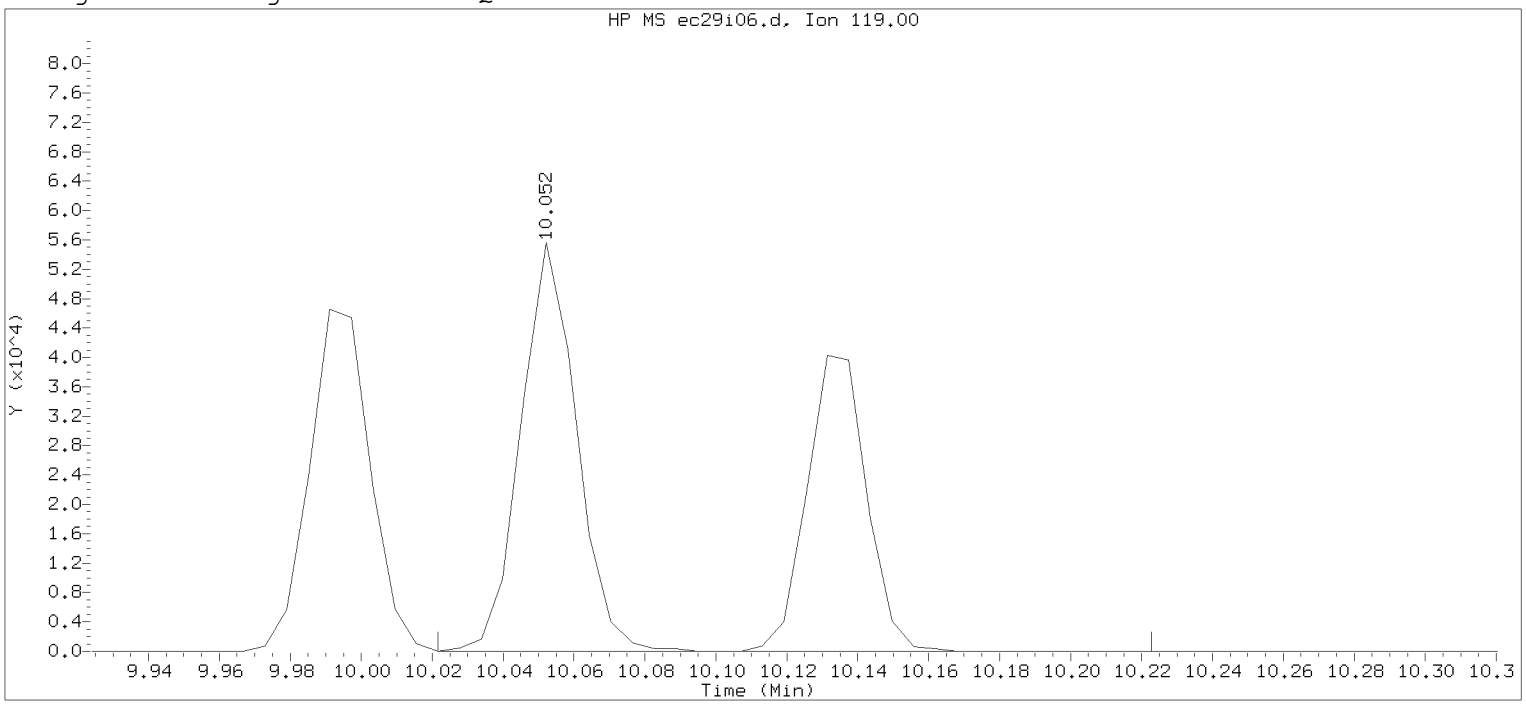
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



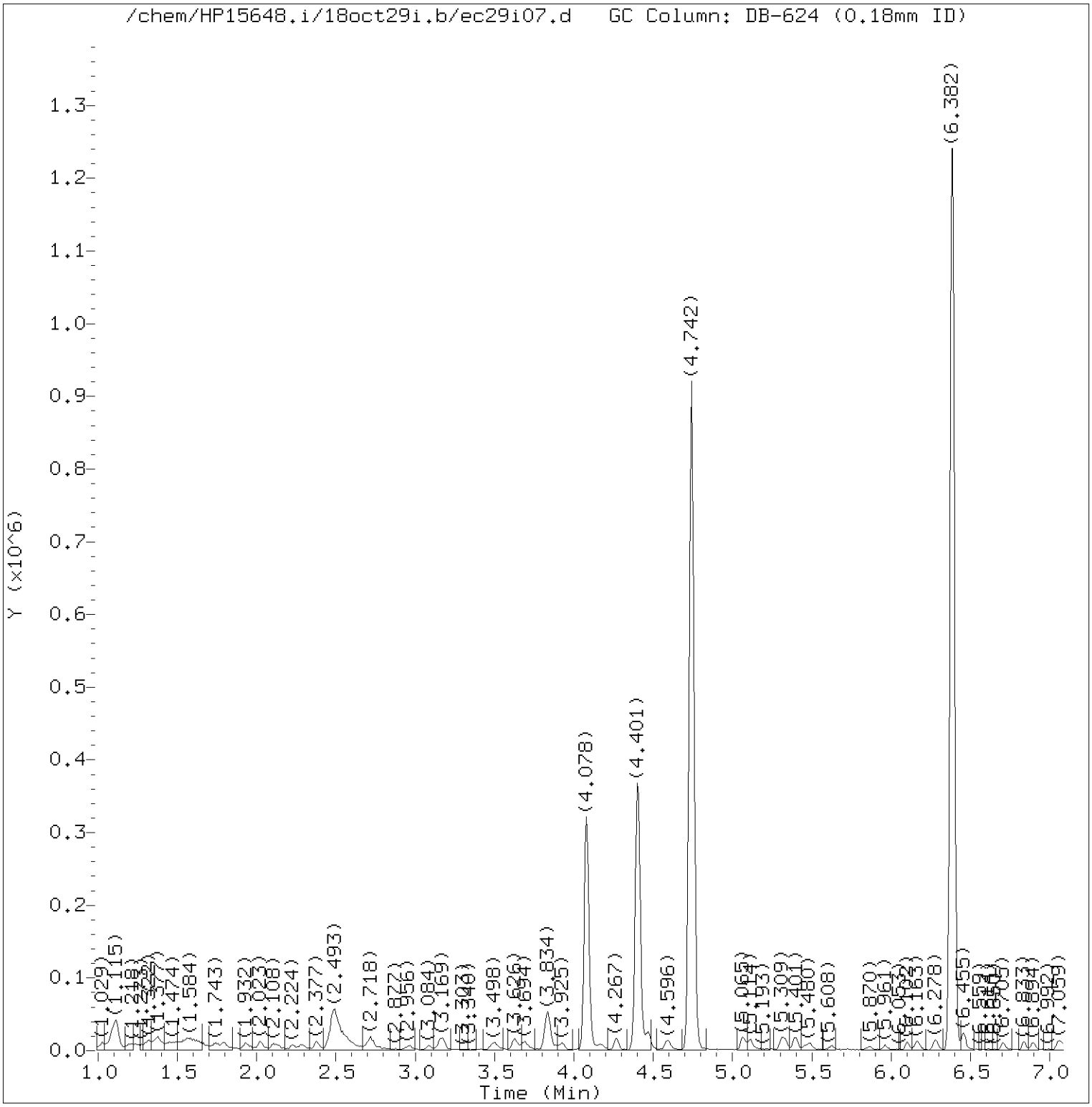
Data File: /chem/HP15648.i/18oct29i.b/ec29i06.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:20 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:37
Date, time and analyst ID of latest file update: 29-Oct-2018 22:37 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compound Number : 141
Compound Name : 1,2-Diethylbenzene
Scan Number : 1487
Retention Time (minutes): 10.052
Quant Ion : 119.00
Area : 107589
On-column Amount (ng) : 7.6175
Integration start scan : 1481 Integration stop scan: 1514
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray



Total Ion Chromatogram (TIC)

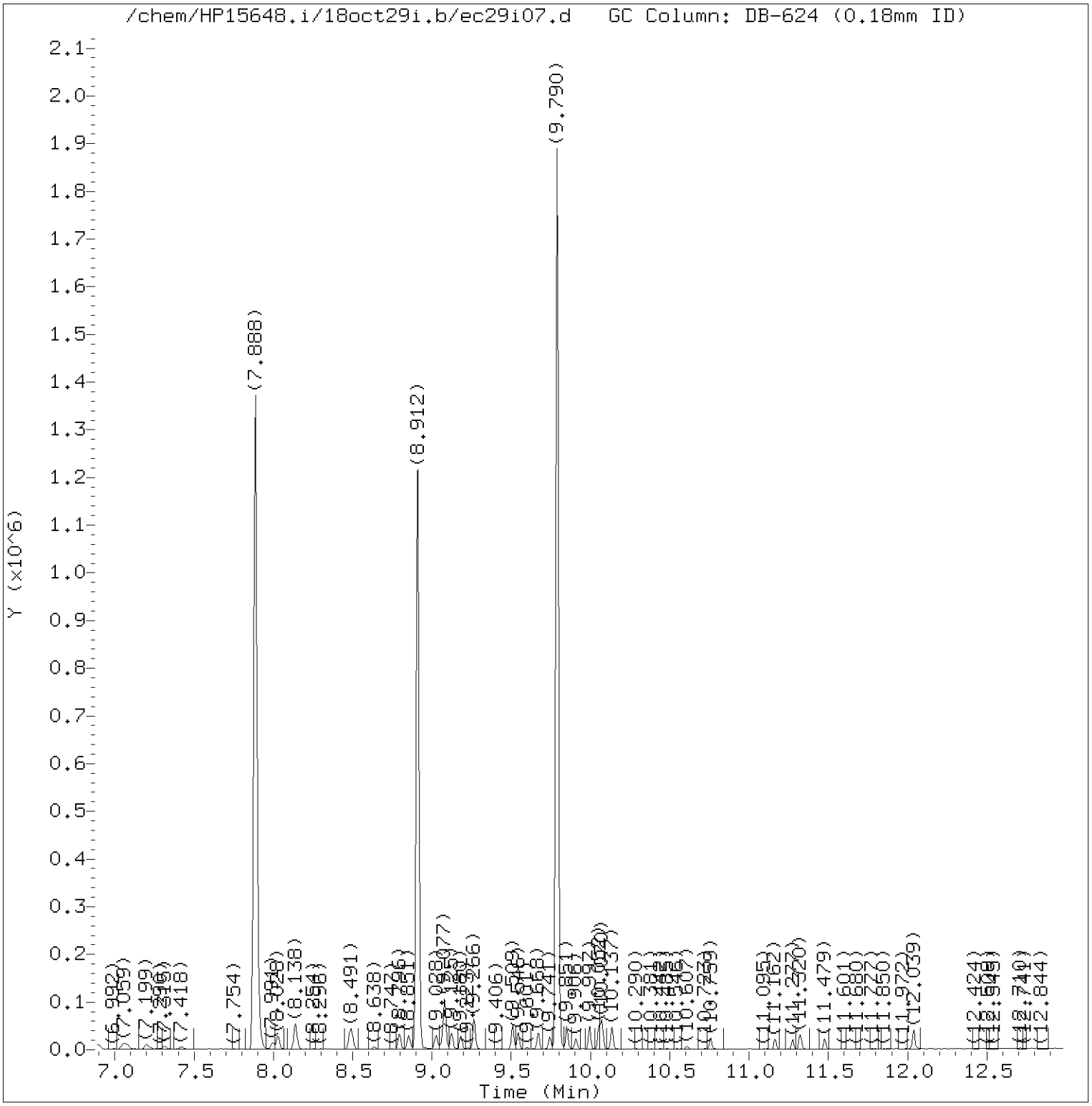
Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.206	85	6228	0.881
4) Chloromethane	(2)	1.316	50	7068M	0.958
5) 1,3-Butadiene	(2)	1.371	39	7695M	1.311
6) Vinyl Chloride	(2)	1.383	62	5564	0.818
8) Bromomethane	(2)	1.566	94	4834M	1.021
9) Chloroethane	(2)	1.609	64	3620M	0.927
10) Dichlorofluoromethane	(2)	1.743	67	8784	0.938
11) n-Pentane	(2)	1.791	43	4880M	0.665
12) Trichlorofluoromethane	(2)	1.804	101	6198	0.795
14) Ethyl ether	(2)	1.932	59	3684	0.939
15) Freon 123a	(2)	1.944	67	4526	0.872
16) Acrolein	(1)	2.023	56	11973	9.699
17) 1,1-Dichloroethene	(2)	2.108	96	3601M	0.962
17) 1,1-Dichloroethene	(2)	2.115	63	1151	0.599
18) Acetone	(1)	2.139	58	962	1.862
19) Freon 113	(2)	2.139	101	2347	0.654
21) 2-Propanol	(1)	2.224	45	7455	20.970
22) Methyl Iodide	(2)	2.224	142	5484	0.858
23) Carbon Disulfide	(2)	2.279	76	11185	0.855
25) Allyl Chloride	(2)	2.377	41	9097	1.100
27) Methyl Acetate	(2)	2.389	43	5772	1.306
28) Methylene Chloride	(2)	2.486	84	4838	1.101
29)*t-Butyl alcohol-d10	(1)	2.493	65	160364M	250.000
30) t-Butyl alcohol	(1)	2.566	59	11982M	19.711
31) Acrylonitrile	(2)	2.700	53	2567	1.087
32) trans-1,2-Dichloroethene	(2)	2.712	96	3971	0.955
33) Methyl Tertiary Butyl Ether	(2)	2.736	73	12874	0.970
34) n-Hexane	(2)	2.968	57	3897	0.541
36) 1,1-Dichloroethane	(2)	3.084	63	6561	0.801
38) di-Isopropyl ether	(2)	3.151	45	13553	0.888
39) 2-Chloro-1,3-butadiene	(2)	3.169	53	6763	0.872
40) Ethyl t-butyl ether	(2)	3.486	59	12905	0.904
42) cis-1,2-Dichloroethene	(2)	3.626	96	4255	0.923
45) 2,2-Dichloropropane	(2)	3.626	77	6312	0.912
44) 2-Butanone	(2)	3.639	43	6911M	2.315
47) Propionitrile	(1)	3.694	54	15976	18.547
48) Methacrylonitrile	(2)	3.834	67	22140	9.130
49) Bromochloromethane	(2)	3.852	128	2309	1.037

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

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	3.901	71	1193	1.635
51) Chloroform	(2)	3.925	83	6503	0.900
52)$Dibromofluoromethane	(2)	4.078	113	213115	51.256
52)$Dibromofluoromethane	(2)	4.078	111	218183	50.924
53) 1,1,1-Trichloroethane	(2)	4.108	97	6205	0.940
54) Cyclohexane	(2)	4.163	56	5237M	0.635
54) Cyclohexane	(2)	4.169	84	5081	0.742
54) Cyclohexane	(2)	4.151	69	1589	0.636
55) 1,1-Dichloropropene	(2)	4.267	75	5477	0.852
56) Carbon Tetrachloride	(2)	4.273	117	4075M	0.749
57)$1,2-Dichloroethane-d4	(2)	4.401	102	56999	50.414
57)$1,2-Dichloroethane-d4	(2)	4.401	65	282598	51.488
57)$1,2-Dichloroethane-d4	(2)	4.407	104	36578	50.848
58) Isobutyl Alcohol	(1)	4.407	41	12050M	56.301
60) Benzene	(2)	4.468	78	16272	0.872
61) 1,2-Dichloroethane	(2)	4.474	62	6753	1.138
61) 1,2-Dichloroethane	(2)	4.401	98	1149	1.793
65) t-Amyl methyl ether	(2)	4.590	73	12993	0.954
66)*Fluorobenzene	(2)	4.742	96	949176	50.000
67) n-Heptane	(2)	4.760	43	4729	2.048
69) n-Butanol	(1)	5.077	56	17388	97.891
71) Trichloroethene	(2)	5.120	95	3824	0.844
73) Methylcyclohexane	(2)	5.309	83	7119	0.798
73) Methylcyclohexane	(2)	5.309	98	3290	0.817
74) 1,2-Dichloropropane	(2)	5.333	63	4703	0.941
75) Dibromomethane	(2)	5.455	93	2444	0.951
77) Methyl Methacrylate	(2)	5.480	69	4135	0.999
76) 1,4-Dioxane	(1)	5.486	88	1305M	30.637
79) Bromodichloromethane	(2)	5.626	83	5174	0.935
80) 2-Nitropropane	(2)	5.858	41	3550M	2.277
81) 2-Chloroethyl Vinyl Ether	(2)	5.967	63	2959	0.848
82) cis-1,3-Dichloropropene	(2)	6.102	75	7084	0.925
43) 1,2-Dichloroethene (Total)	(2)		96	8226	1.878
83) 4-Methyl-2-pentanone	(2)	6.278	43	12407	1.975
84)$Toluene-d8	(3)	6.382	98	957403	50.079
84)$Toluene-d8	(3)	6.388	100	615589	50.107
89) Toluene	(3)	6.461	92	10071	0.866
90) trans-1,3-Dichloropropene	(3)	6.705	75	6689	0.939

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
92) Ethyl Methacrylate	(3)	6.833	69	7193	0.953
93) 1,1,2-Trichloroethane	(3)	6.894	97	3739	0.978
94) Tetrachloroethene	(3)	7.053	166	3358	0.774
95) 1,3-Dichloropropane	(3)	7.077	76	6443	0.903
97) 2-Hexanone	(3)	7.199	43	8413M	1.852
102) 1-Chlorohexane	(3)	7.309	91	229M	0.655
98) Dibromochloromethane	(3)	7.315	129	3601	0.888
100) 1,2-Dibromoethane	(3)	7.418	107	3665	0.925
101)*Chlorobenzene-d5	(3)	7.888	117	681764	50.000
103) Chlorobenzene	(3)	7.912	112	10914	0.876
104) 1,1,1,2-Tetrachloroethane	(3)	7.998	131	3523	0.858
105) Ethylbenzene	(3)	8.028	91	18988	0.830
107) m+p-Xylene	(3)	8.138	106	14321	1.638
108) o-Xylene	(3)	8.485	106	7102	0.830
110) Styrene	(3)	8.497	104	12071	0.844
111) Bromoform	(3)	8.638	173	2144	0.812
112) Isopropylbenzene	(3)	8.796	105	17308	0.769
113) Cyclohexanone	(1)	8.851	55	12294M	57.283
115)$4-Bromofluorobenzene	(3)	8.906	95	358924	50.441
115)$4-Bromofluorobenzene	(3)	8.912	174	257873	50.913
116) Bromobenzene	(4)	9.022	156	4335	0.898
117) 1,1,2,2-Tetrachloroethane	(4)	9.034	83	5932	0.967
118) 1,2,3-Trichloropropane	(4)	9.058	110	1759	1.017
119) trans-1,4-Dichloro-2-butene	(4)	9.077	53	18099	9.139
120) n-Propylbenzene	(4)	9.125	91	21124	0.784
121) 2-Chlorotoluene	(4)	9.180	126	4042	0.795
123) 1,3,5-Trimethylbenzene	(4)	9.266	105	14973	0.770
122) 4-Chlorotoluene	(4)	9.266	126	4573	0.864
125) tert-Butylbenzene	(4)	9.509	134	2995	0.720
126) Pentachloroethane	(4)	9.516	167	2750	0.886
127) 1,2,4-Trimethylbenzene	(4)	9.546	105	15991	0.798
128) sec-Butylbenzene	(4)	9.674	105	18708	0.747
130) 1,3-Dichlorobenzene	(4)	9.741	146	8098	0.835
131) p-Isopropyltoluene	(4)	9.778	119	16769	0.761
132)*1,4-Dichlorobenzene-d4	(4)	9.790	152	358450	50.000
134) 1,4-Dichlorobenzene	(4)	9.808	146	8349	0.853
135) 1,2,3-Trimethylbenzene	(4)	9.851	105	18353	0.871
136) Benzyl Chloride	(4)	9.906	91	13782	0.957

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Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

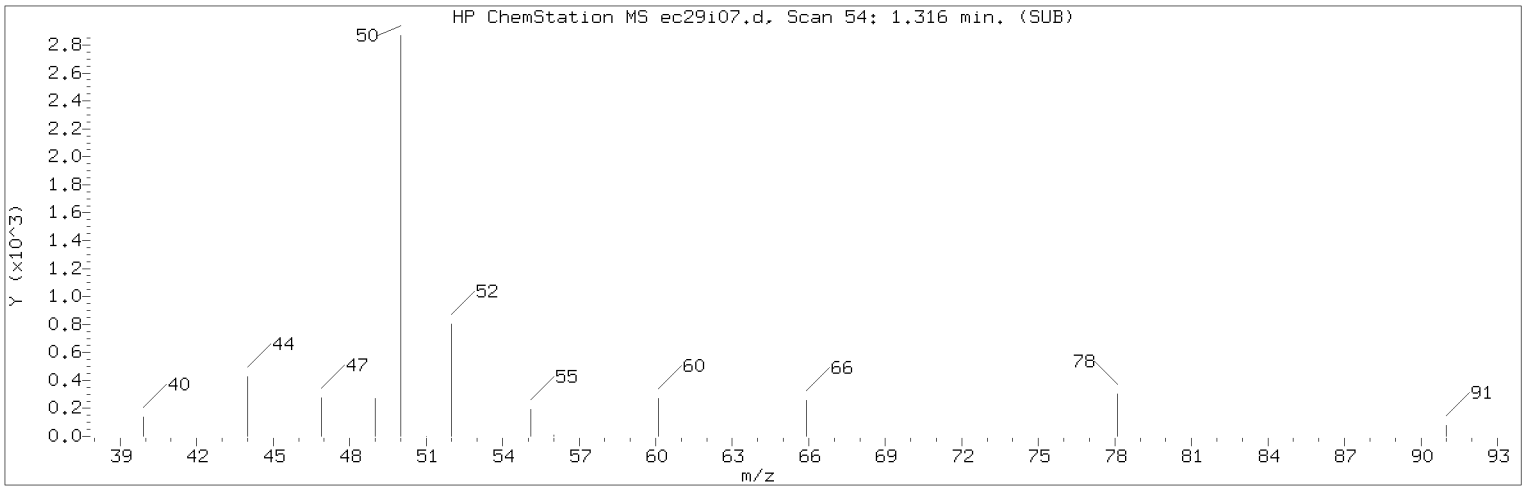
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
137) 1,3-Diethylbenzene	(4)	9.997	119	12403	0.900
138) 1,4-Diethylbenzene	(4)	10.052	119	12540	0.854
140) n-Butylbenzene	(4)	10.070	92	7543M	0.695
139) 1,2-Dichlorobenzene	(4)	10.076	146	7917	0.860
91) 1,3-Dichloropropene (total)	(3)		100	13773	1.865
141) 1,2-Diethylbenzene	(4)	10.137	119	10613	0.933
143) 1,2-Dibromo-3-chloropropane	(4)	10.607	75	1504	1.062
145) 1,3,5-Trichlorobenzene	(4)	10.759	180	6096	0.853
147) 1,2,4-Trichlorobenzene	(4)	11.168	180	5375	0.849
148) Hexachlorobutadiene	(4)	11.277	225	2948	1.030
149) Naphthalene	(4)	11.320	128	19936	0.962
150) 1,2,3-Trichlorobenzene	(4)	11.479	180	4778	0.809
109) Xylene (Total)	(3)		106	21423	2.468
151) 2-Methylnaphthalene	(4)	12.039	142	15441	1.199
142) Diethylbenzene (total)	(4)		100	35556	2.687

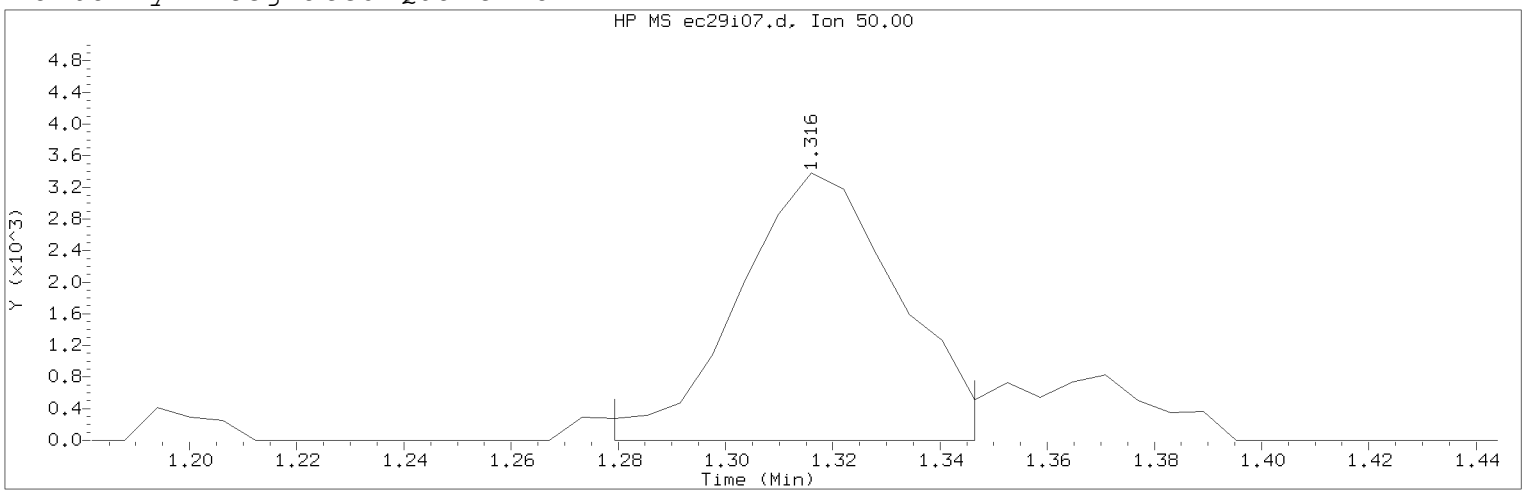
M = Compound was manually integrated.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

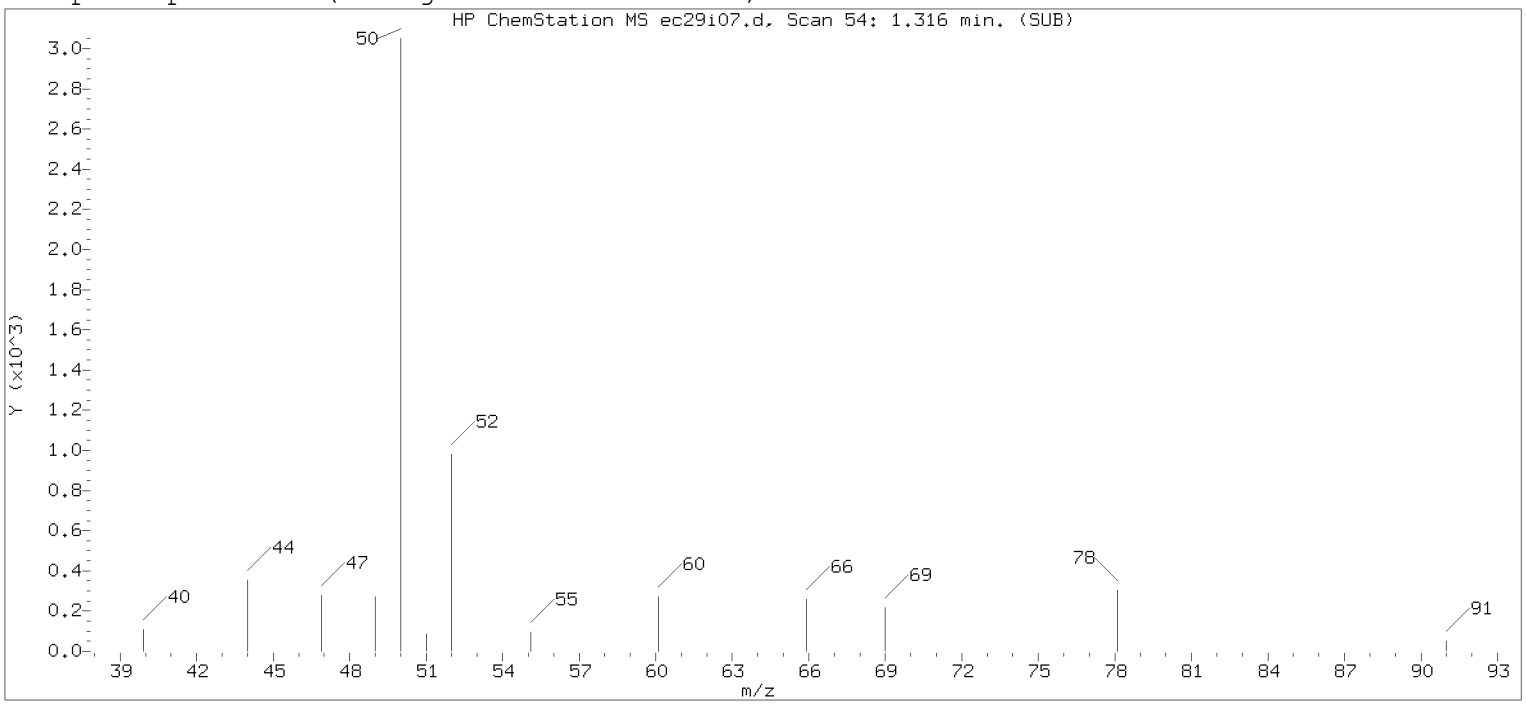
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 54
Retention Time (minutes): 1.316
Quant Ion : 50.00
Area (flag) : 7068M
On-Column Amount (ng) : 0.9576
Integration start scan : 47 Integration stop scan: 58
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

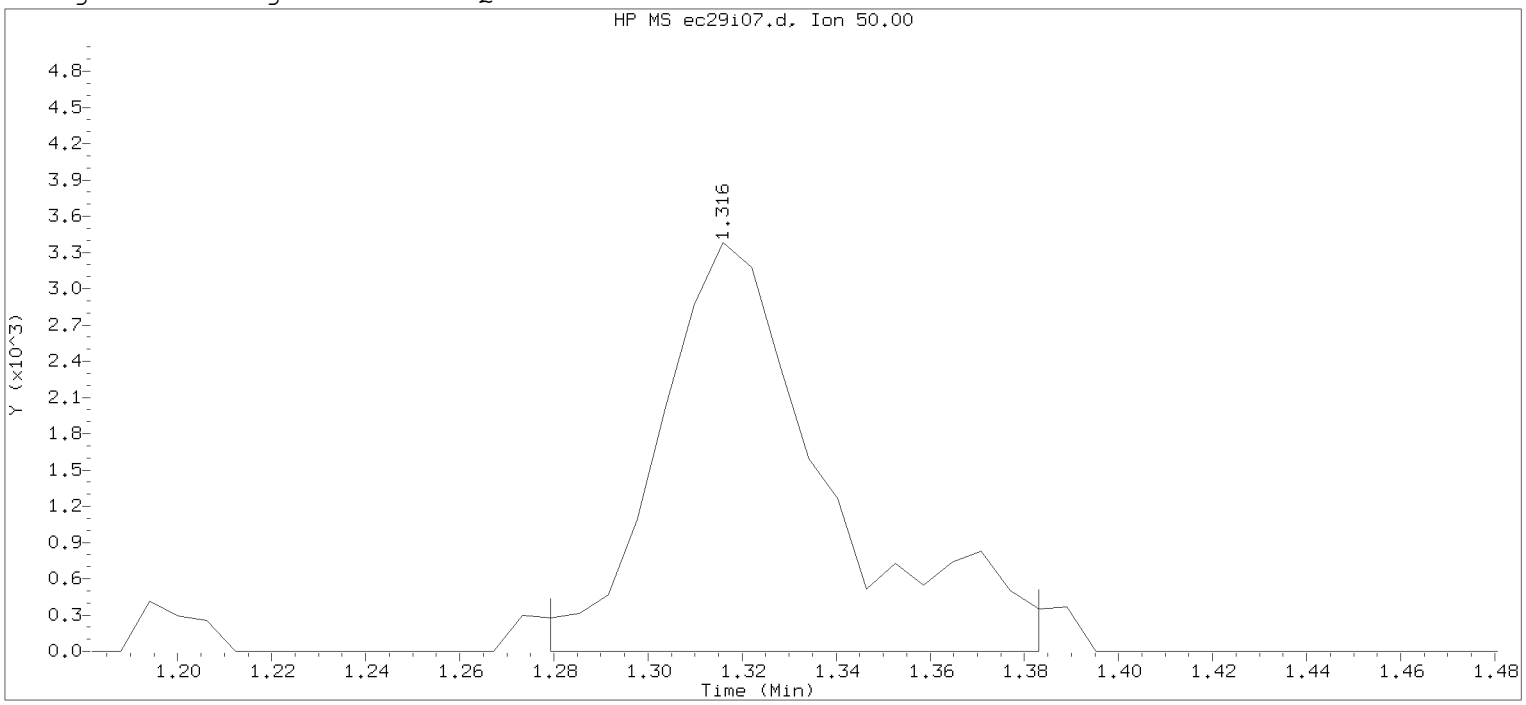
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

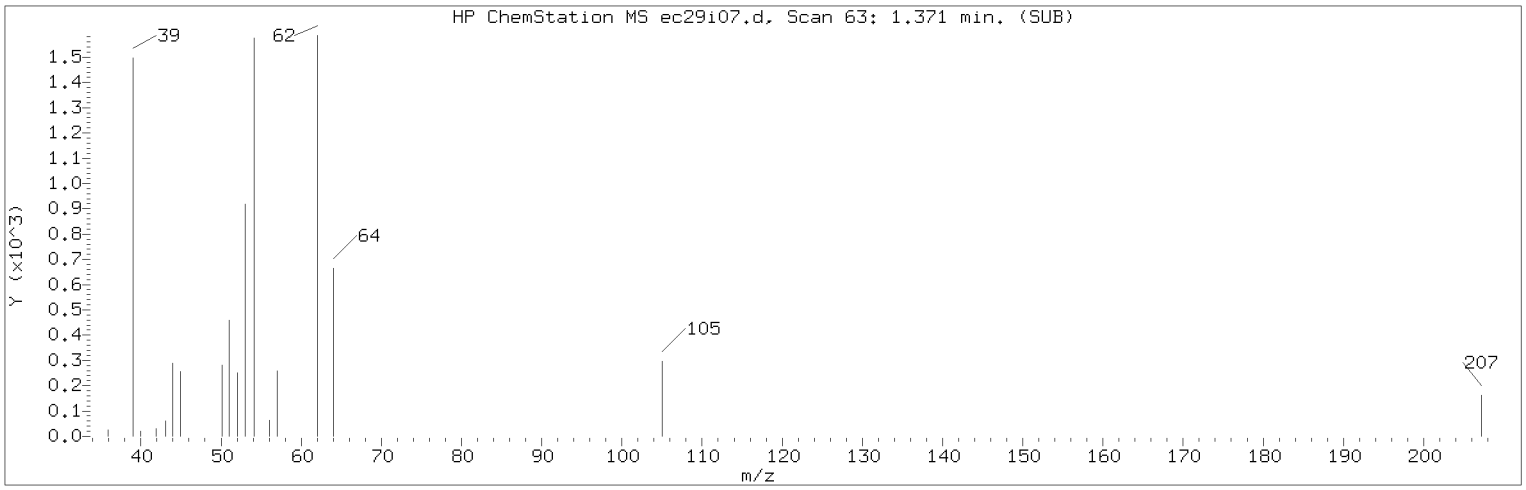
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

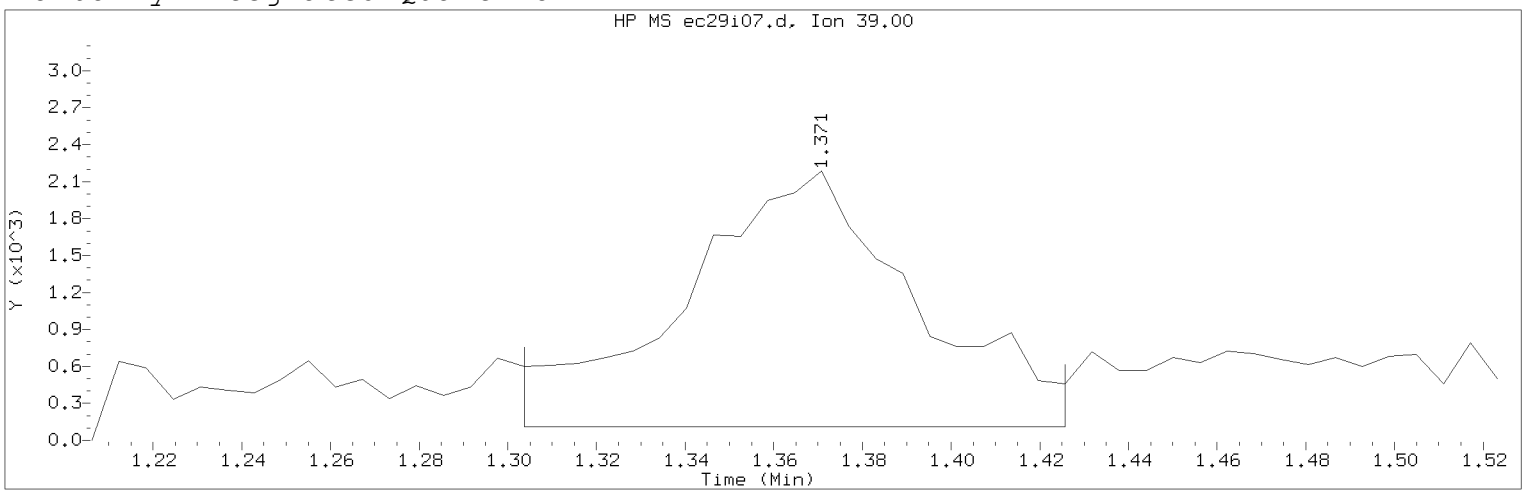
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 54
Retention Time (minutes): 1.316
Quant Ion : 50.00
Area : 8305
On-column Amount (ng) : 1.0990
Integration start scan : 47 Integration stop scan: 64
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

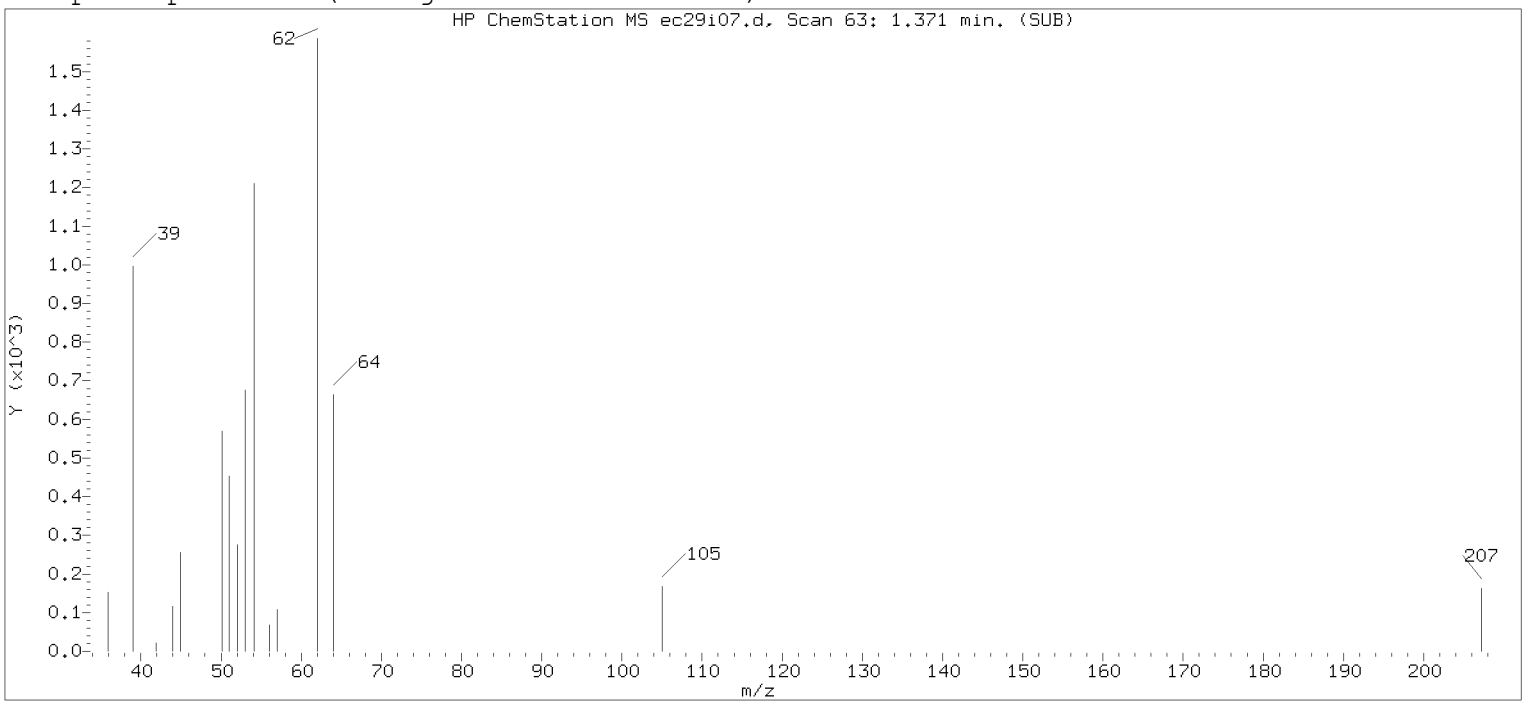
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 63
Retention Time (minutes): 1.371
Quant Ion : 39.00
Area (flag) : 7695M
On-Column Amount (ng) : 1.3108
Integration start scan : 51 Integration stop scan: 71
Y at integration start : 110 Y at integration end: 110

Reason for manual integration: improper integration

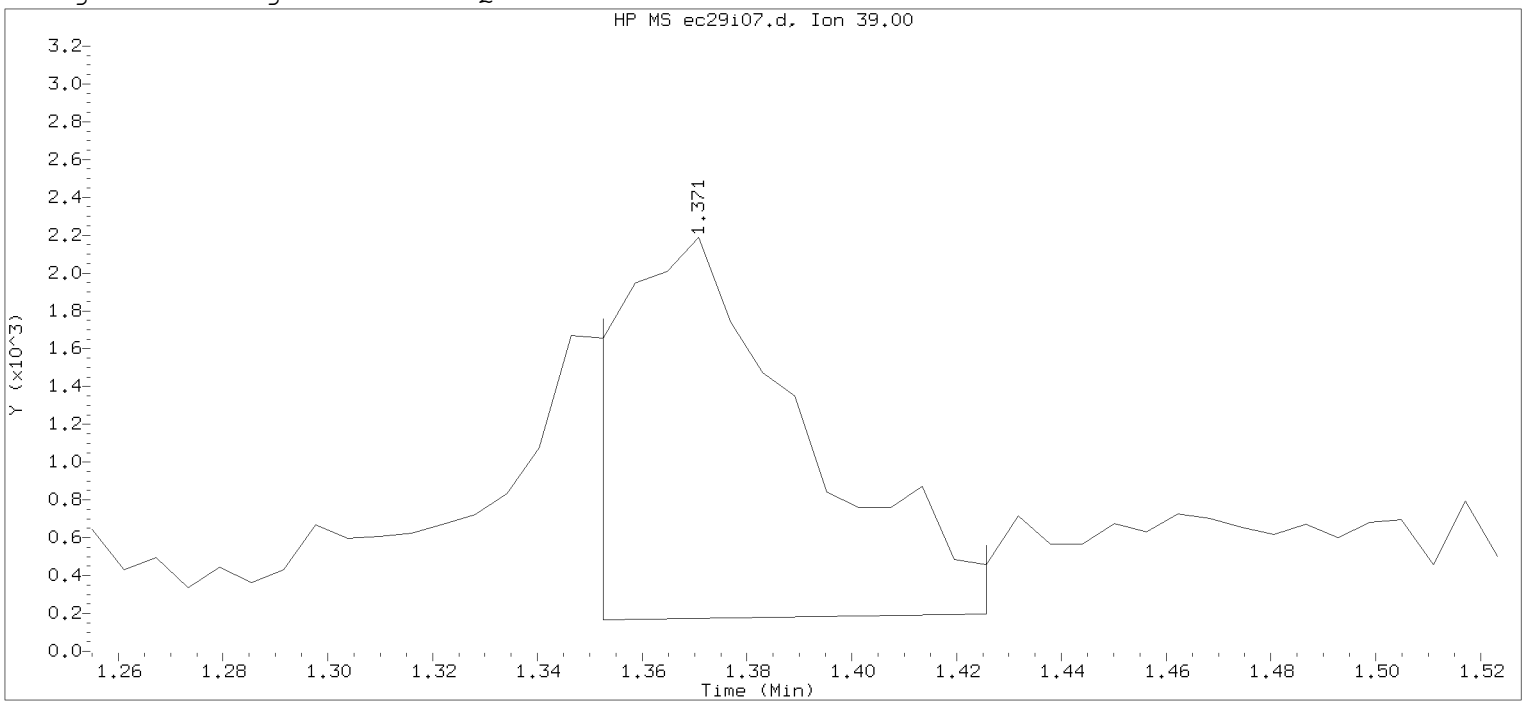
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

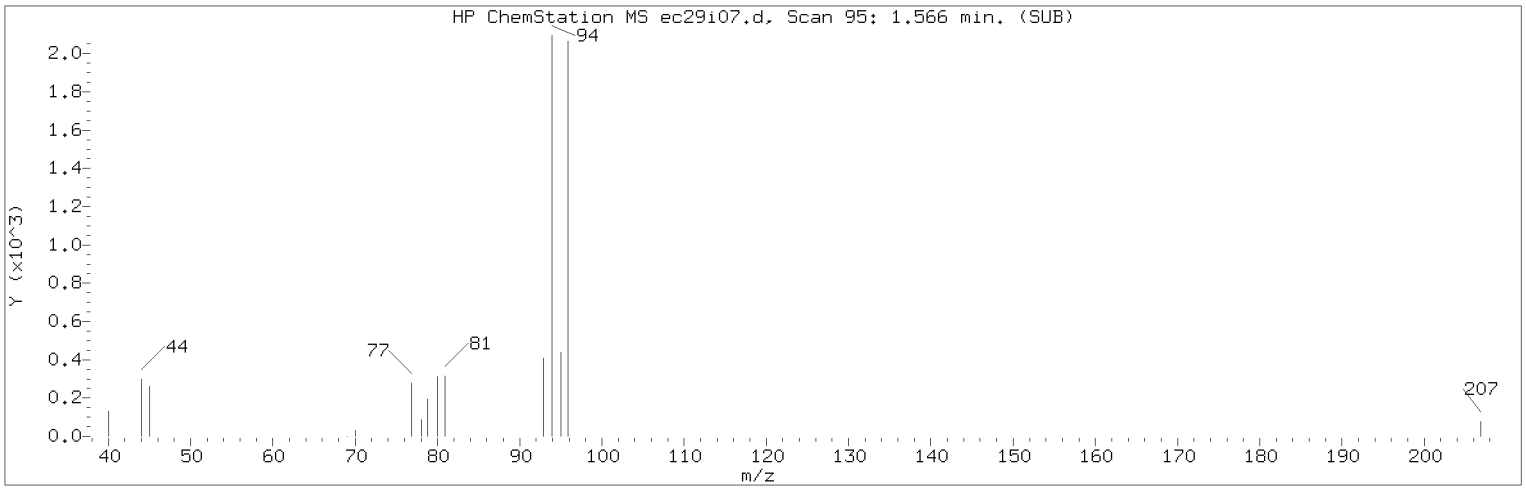
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

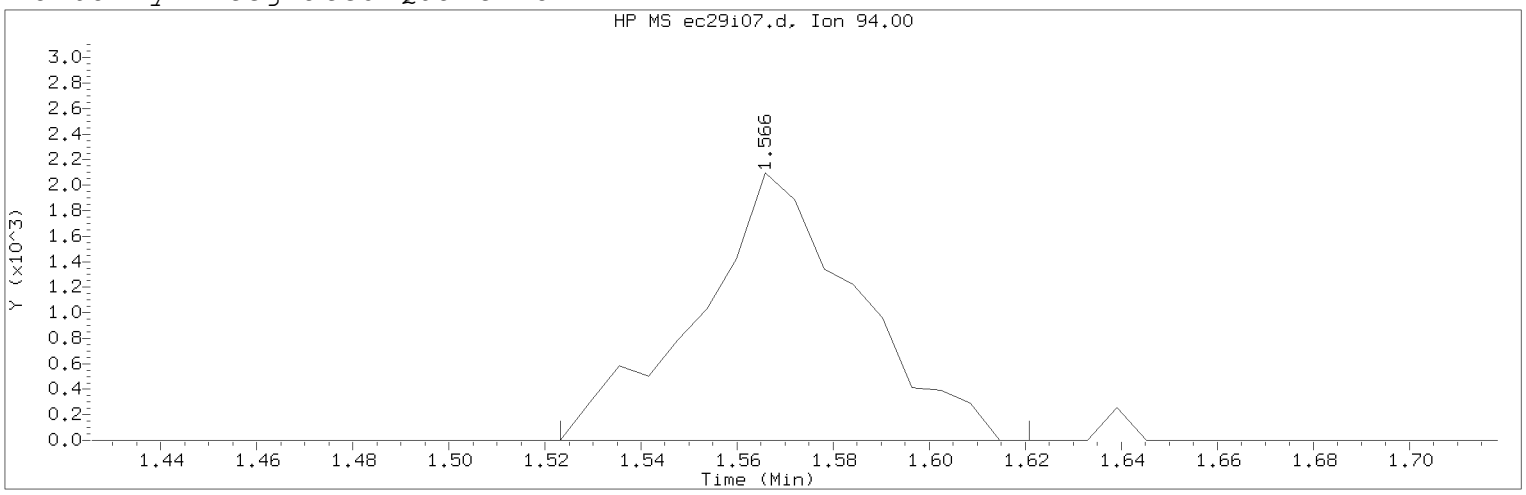
Compound Number	: 5		
Compound Name	: 1,3-Butadiene		
Scan Number	: 63		
Retention Time (minutes)	: 1.371		
Quant Ion	: 39.00		
Area	: 4870		
On-column Amount (ng)	: 0.8909		
Integration start scan	: 59	Integration stop scan:	71
Y at integration start	: 166	Y at integration end:	197

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

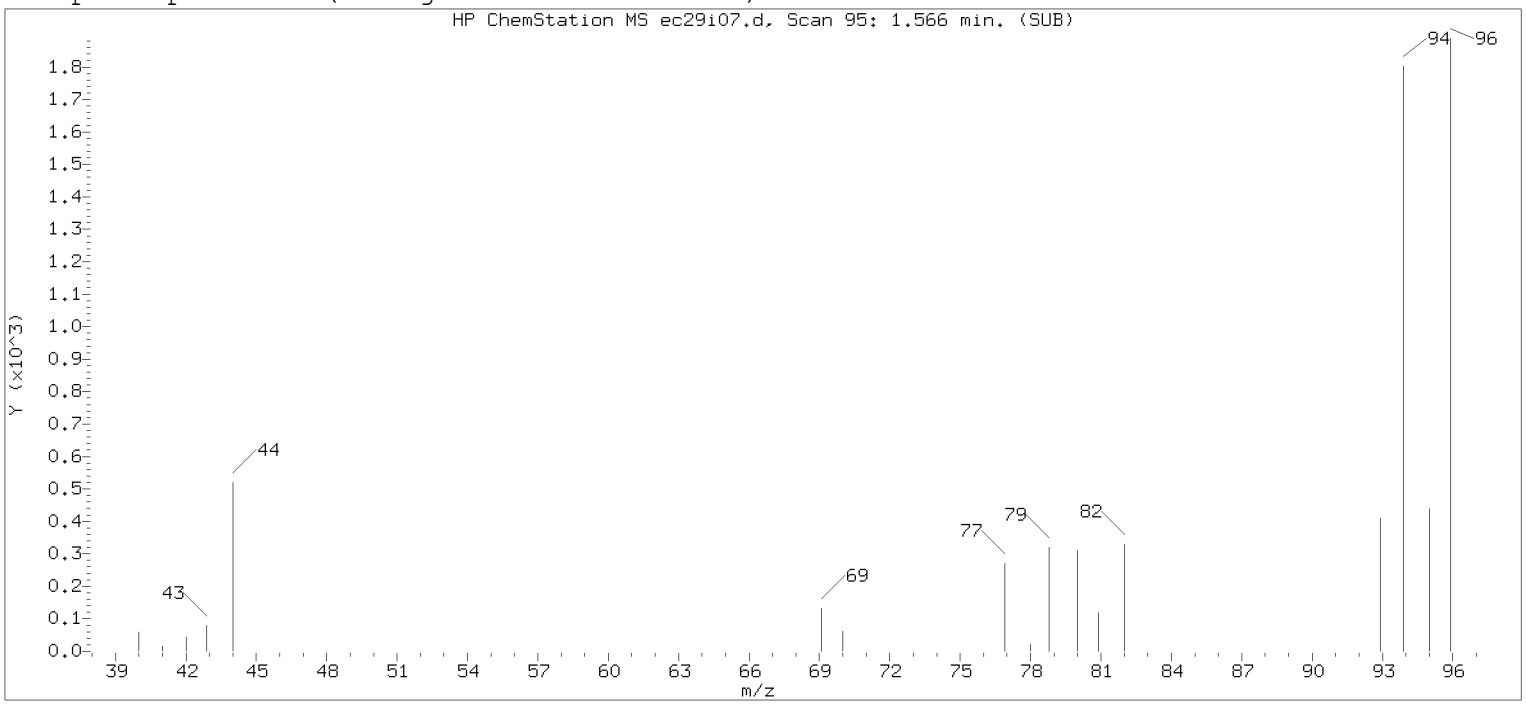
Compound Number : 8
Compound Name : Bromomethane
Scan Number : 95
Retention Time (minutes): 1.566
Quant Ion : 94.00
Area (flag) : 4834M
On-Column Amount (ng) : 1.0209
Integration start scan : 87 Integration stop scan: 103
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

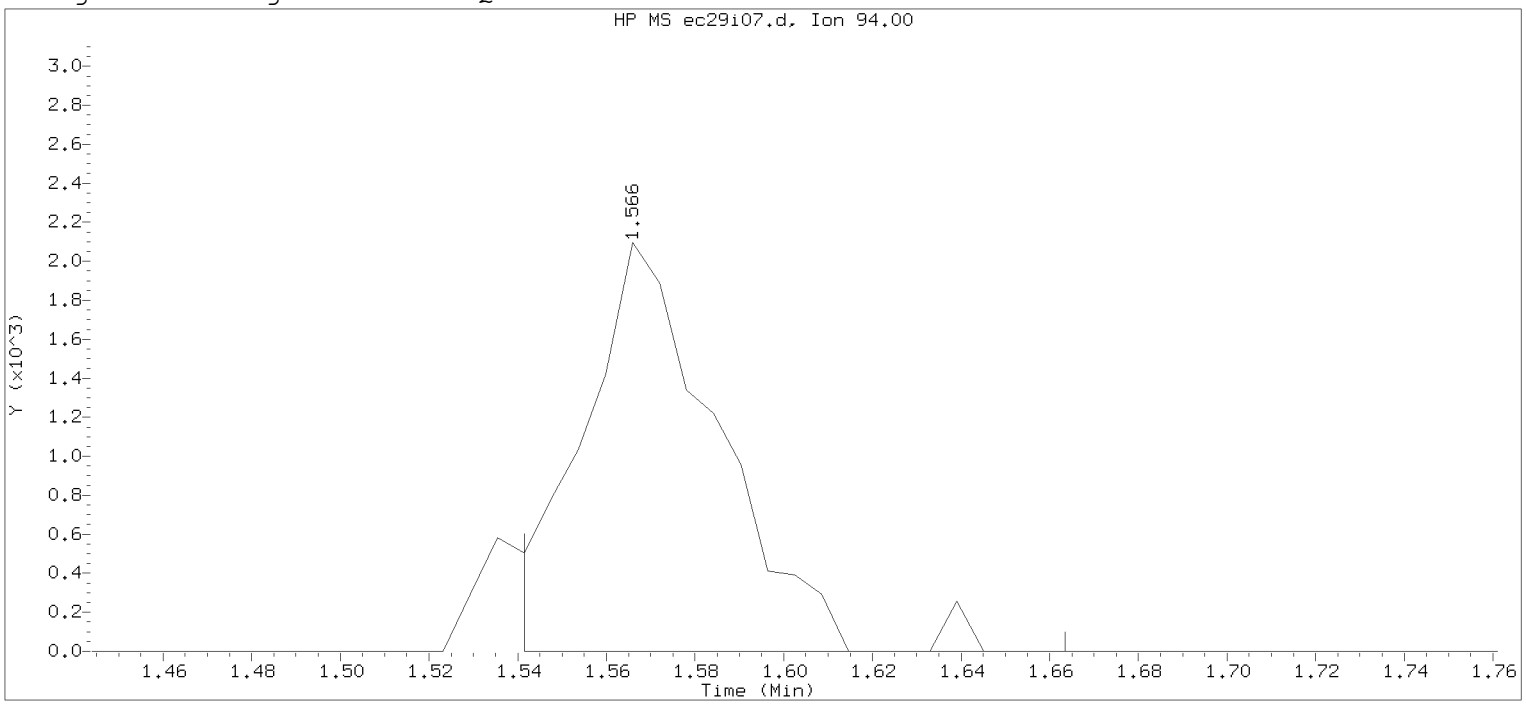
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

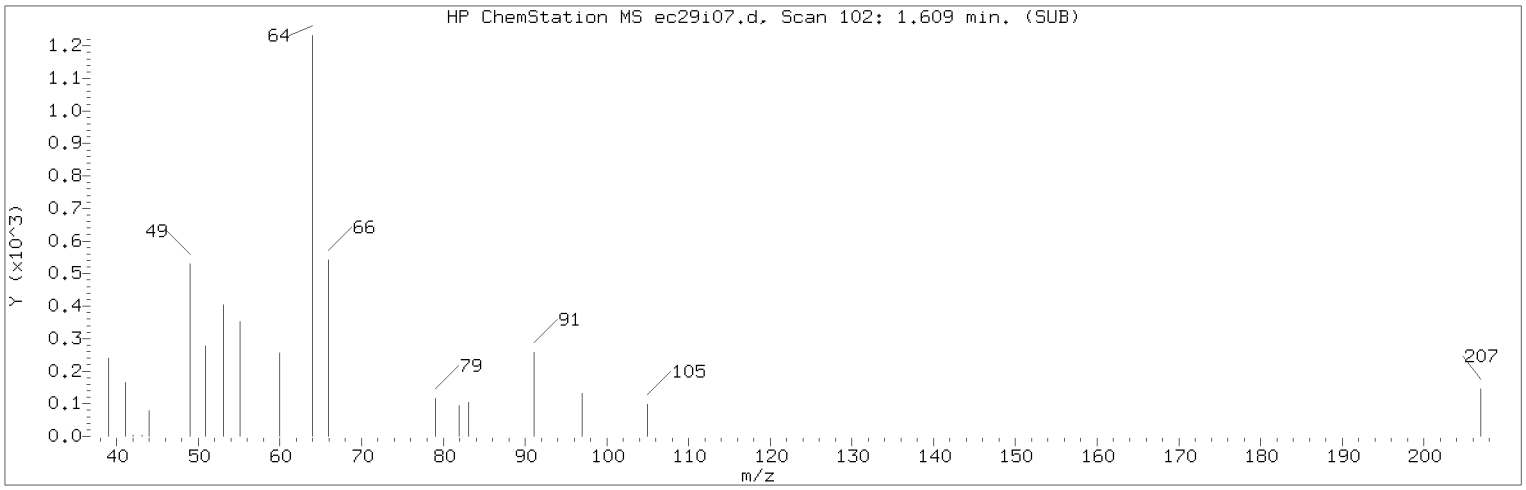
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

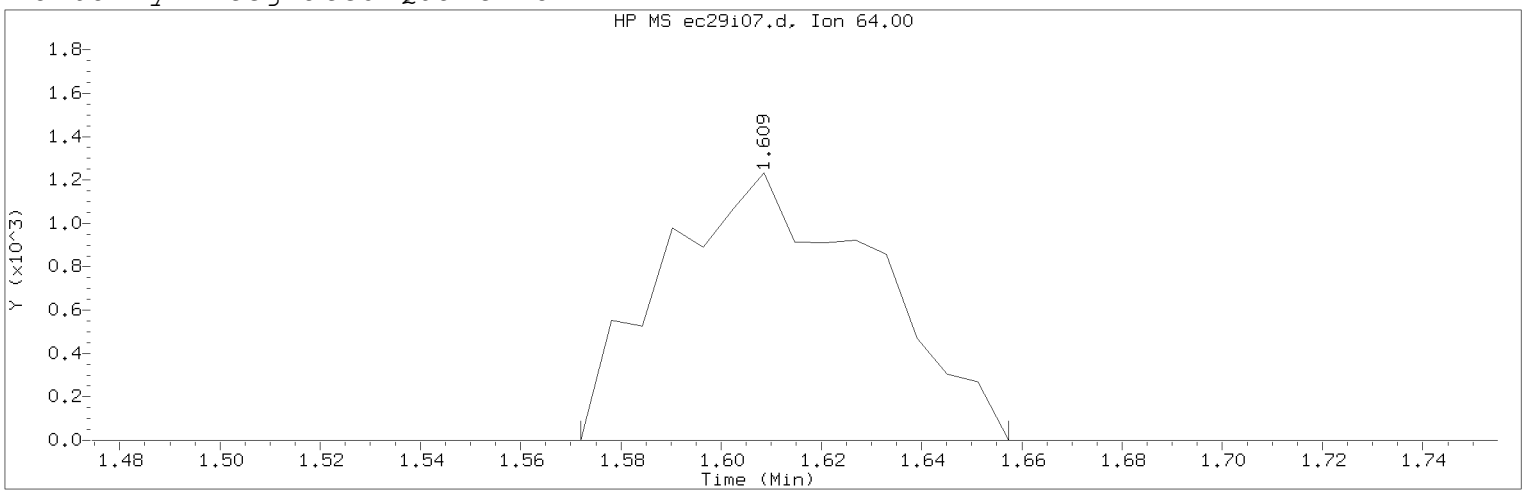
Compound Number : 8
Compound Name : Bromomethane
Scan Number : 95
Retention Time (minutes): 1.566
Quant Ion : 94.00
Area : 4514
On-column Amount (ng) : 0.9627
Integration start scan : 90 Integration stop scan: 110
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray0235

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

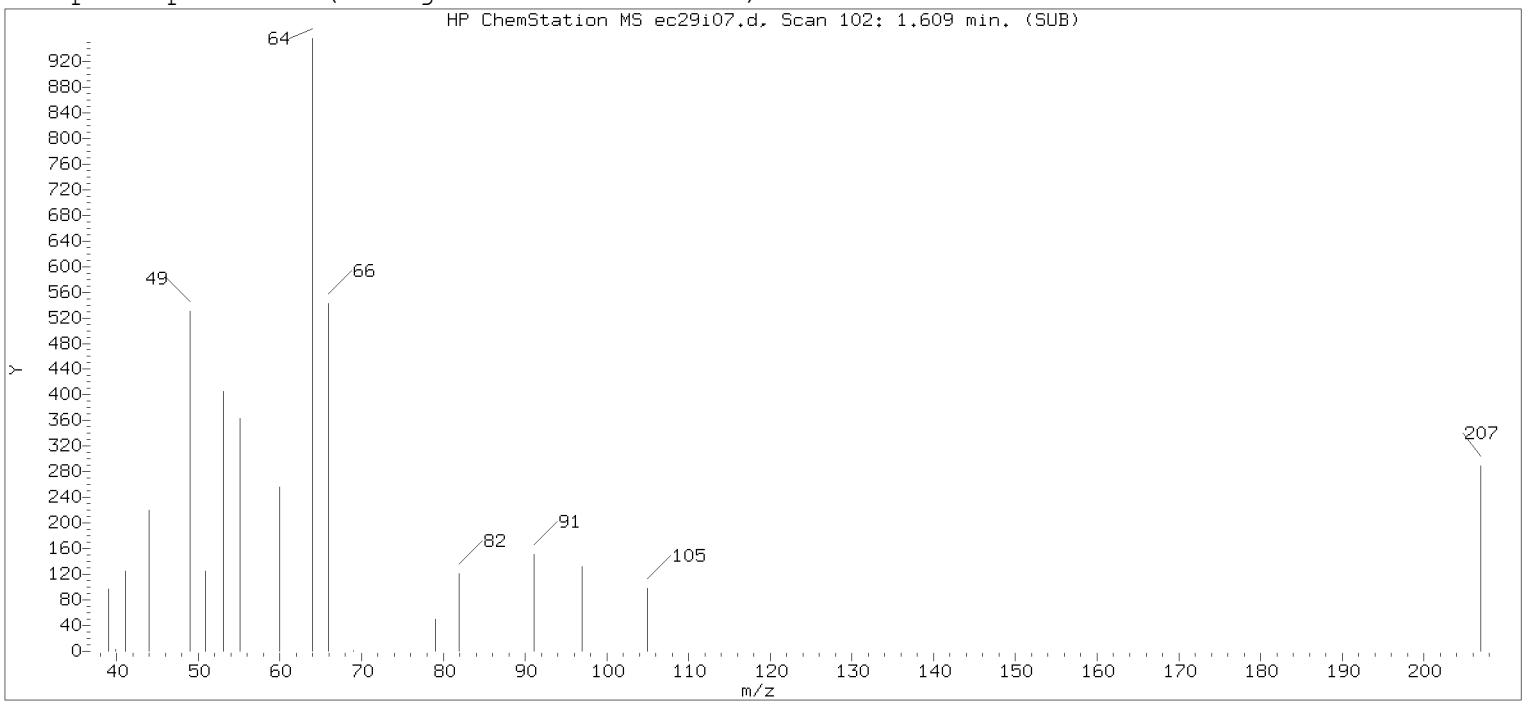
Compound Number : 9
Compound Name : Chloroethane
Scan Number : 102
Retention Time (minutes): 1.609
Quant Ion : 64.00
Area (flag) : 3620M
On-Column Amount (ng) : 0.9275
Integration start scan : 95 Integration stop scan: 109
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

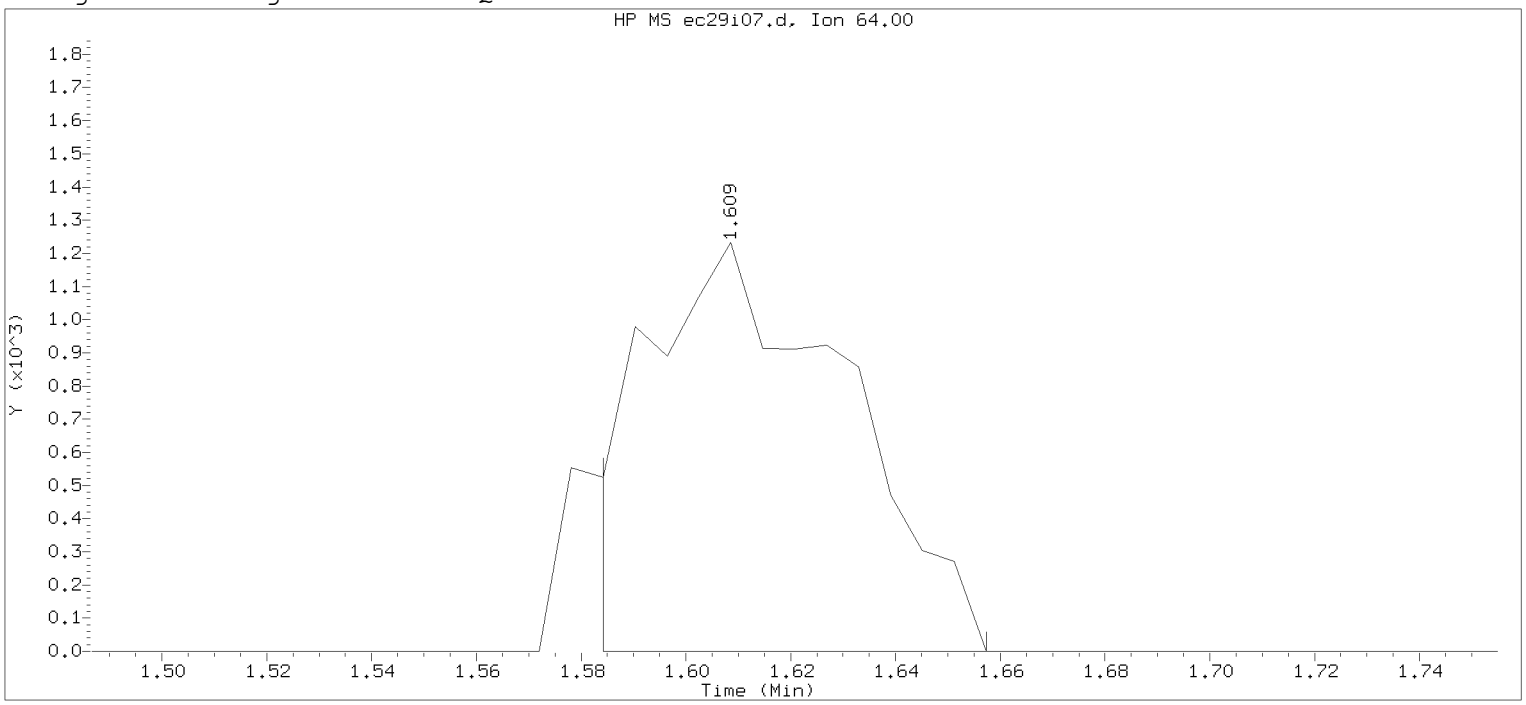
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

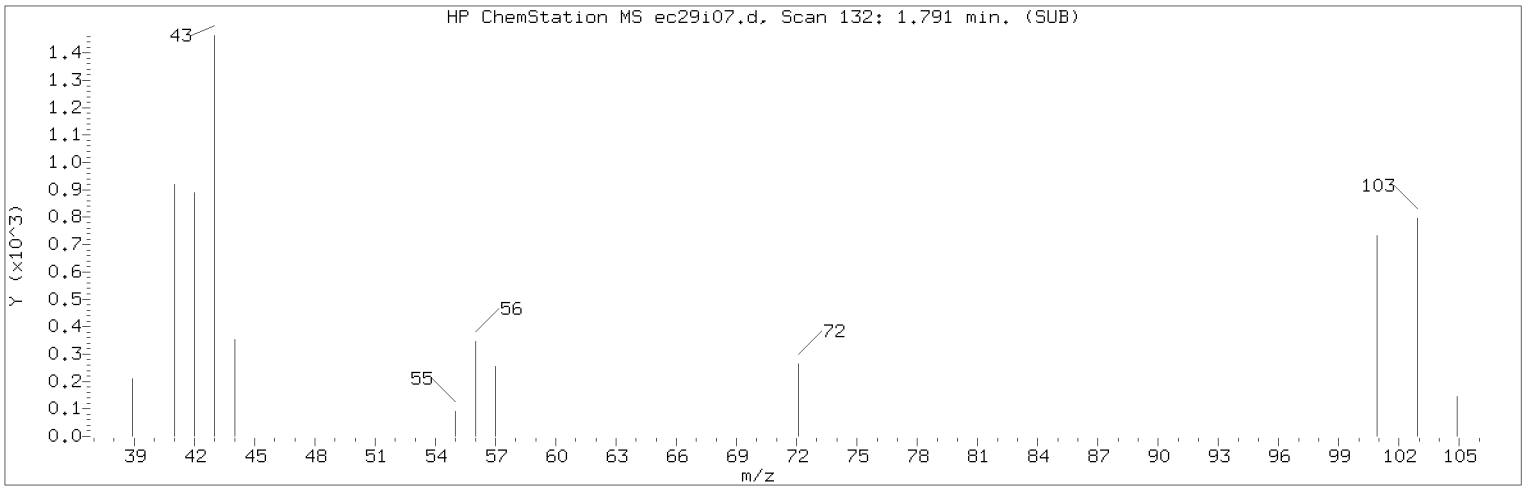
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

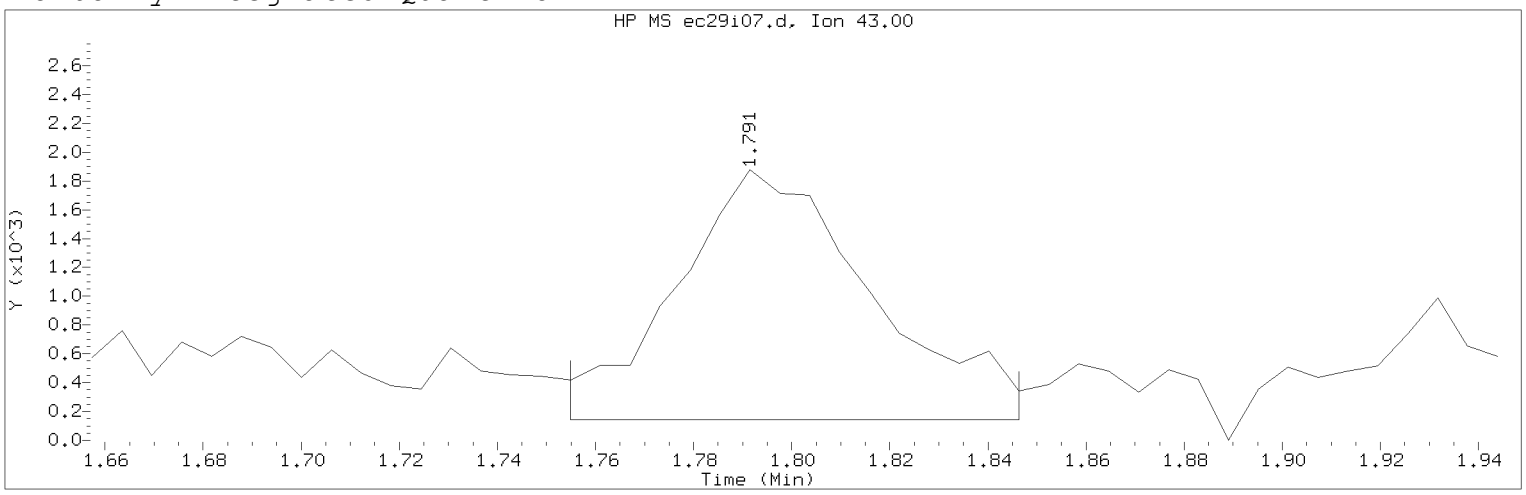
Compound Number : 9
Compound Name : Chloroethane
Scan Number : 102
Retention Time (minutes): 1.609
Quant Ion : 64.00
Area : 3322
On-column Amount (ng) : 0.8607
Integration start scan : 97 Integration stop scan: 109
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

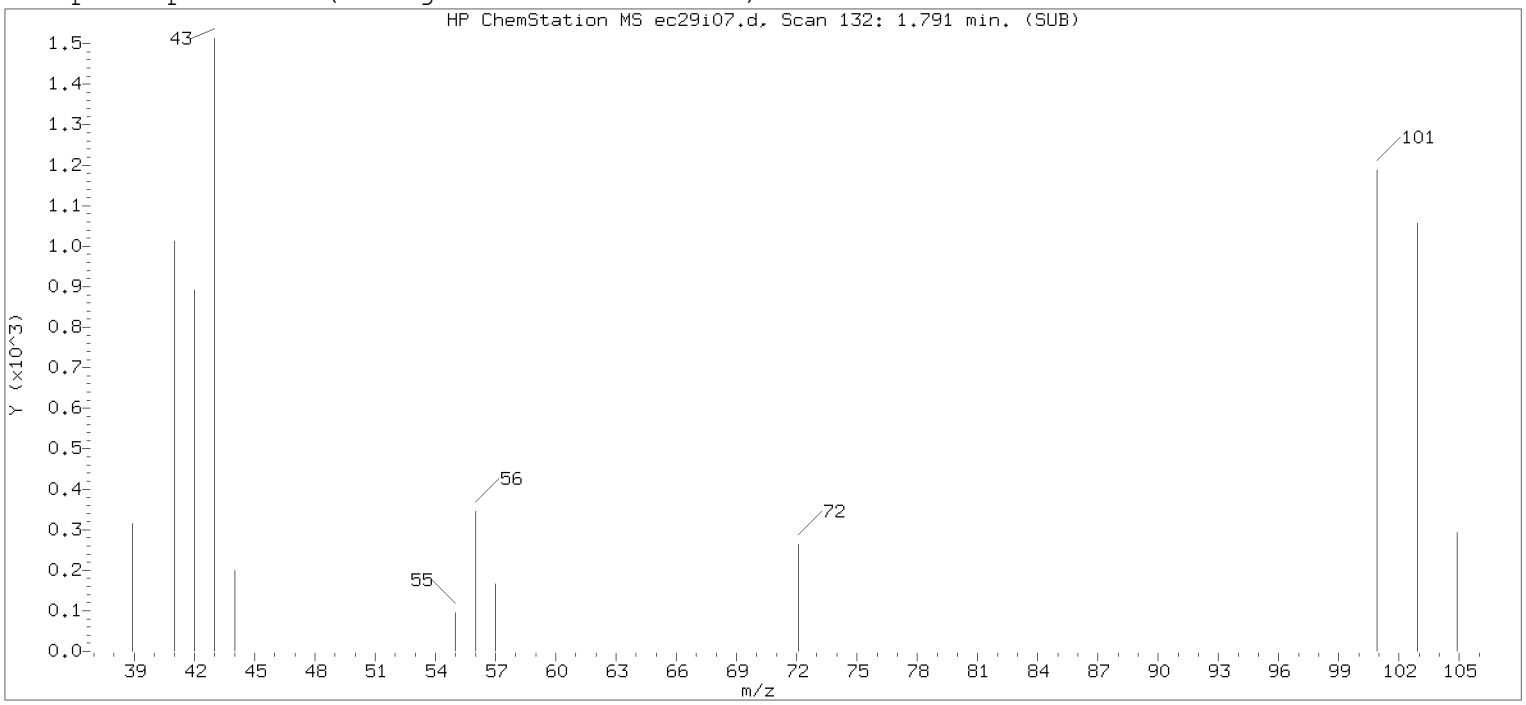
Compound Number : 11
Compound Name : n-Pentane
Scan Number : 132
Retention Time (minutes): 1.791
Quant Ion : 43.00
Area (flag) : 4880M
On-Column Amount (ng) : 0.6654
Integration start scan : 125 Integration stop scan: 140
Y at integration start : 144 Y at integration end: 144

Reason for manual integration: improper integration

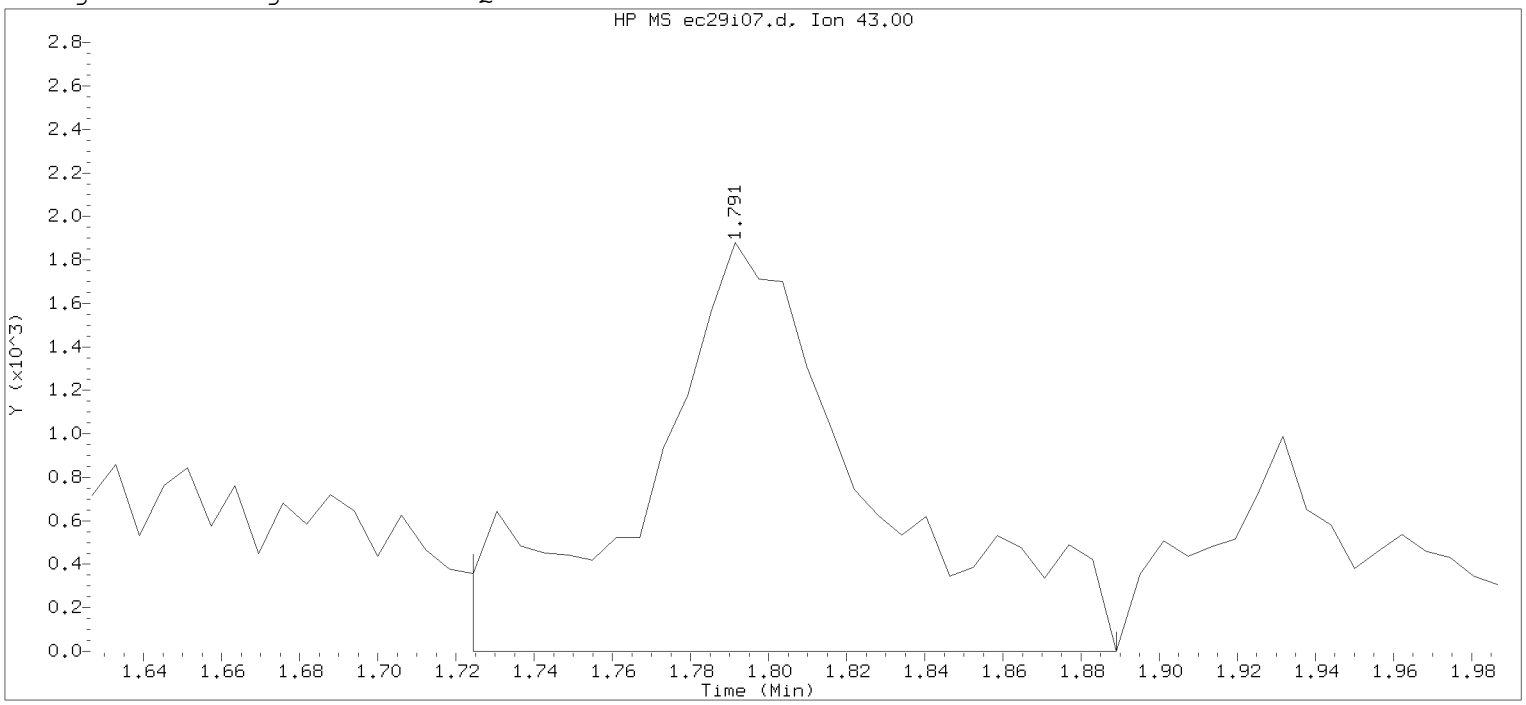
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

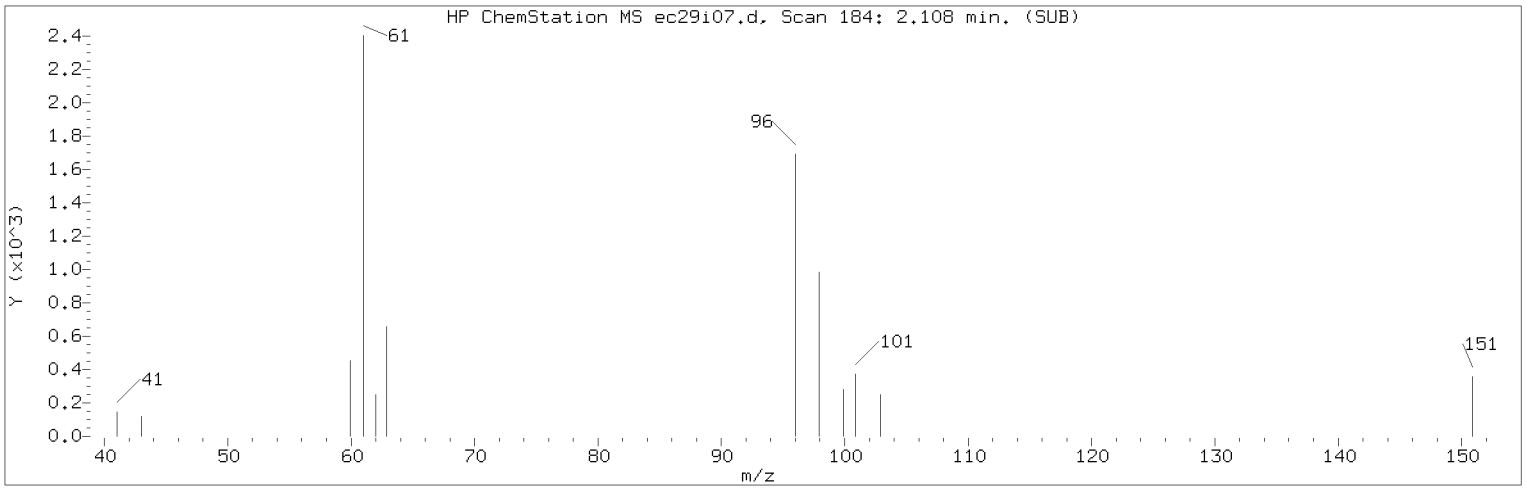
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

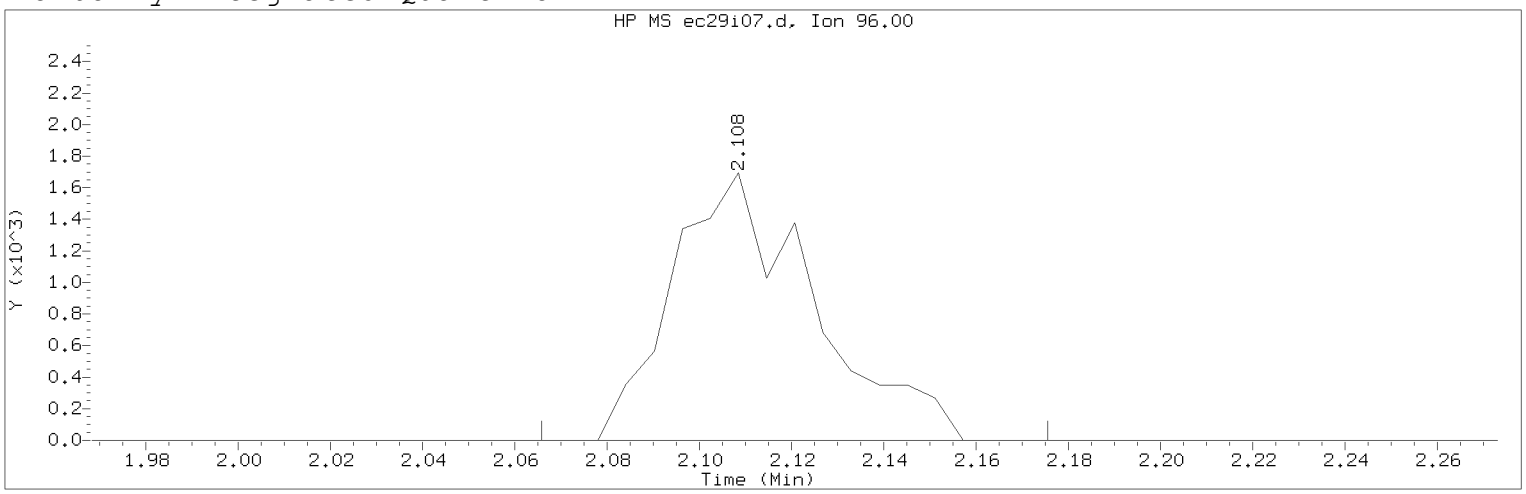
Compound Number : 11
Compound Name : n-Pentane
Scan Number : 132
Retention Time (minutes): 1.791
Quant Ion : 43.00
Area : 7494
On-column Amount (ng) : 0.9724
Integration start scan : 120 Integration stop scan: 147
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

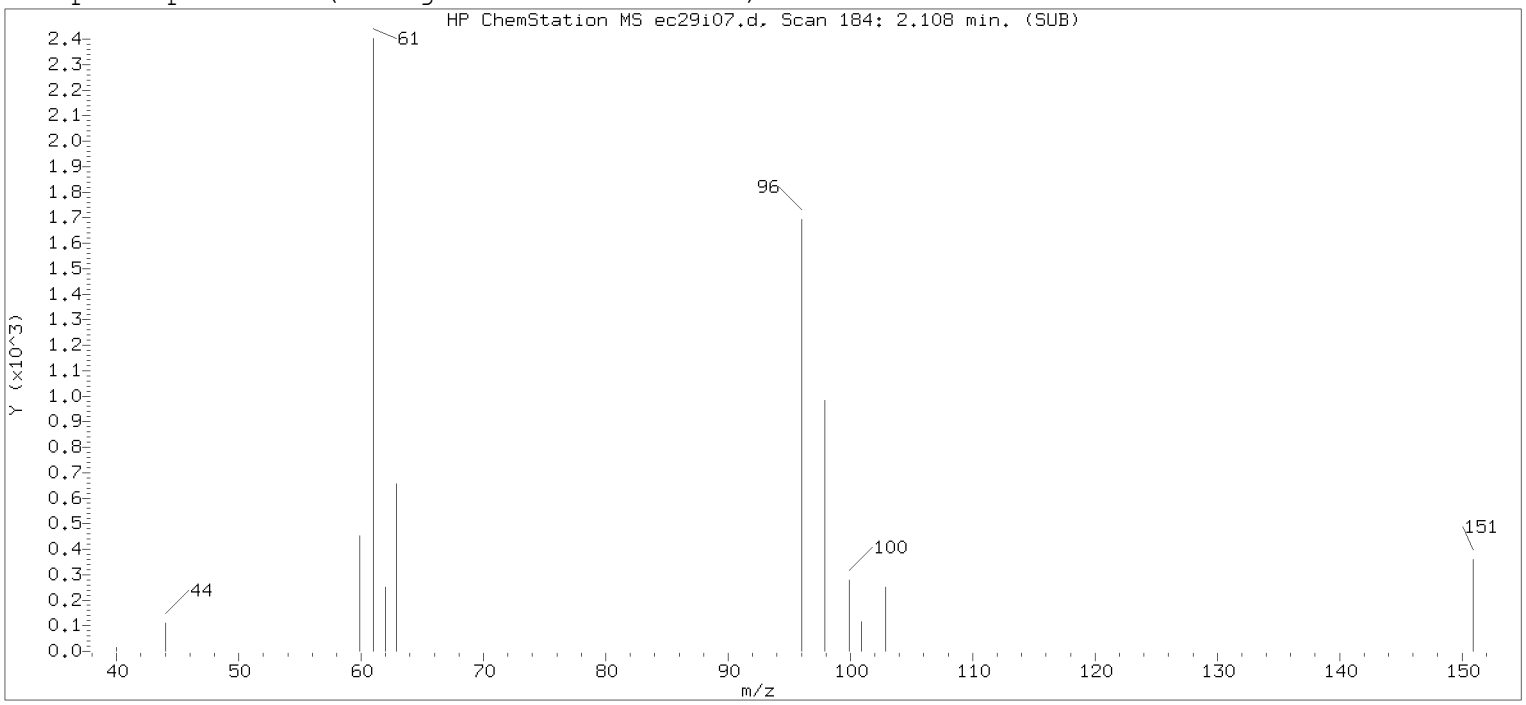
Compound Number : 17
Compound Name : 1,1-Dichloroethene
Scan Number : 184
Retention Time (minutes): 2.108
Quant Ion : 96.00
Area (flag) : 3601M
On-Column Amount (ng) : 0.9621
Integration start scan : 176 Integration stop scan: 194
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

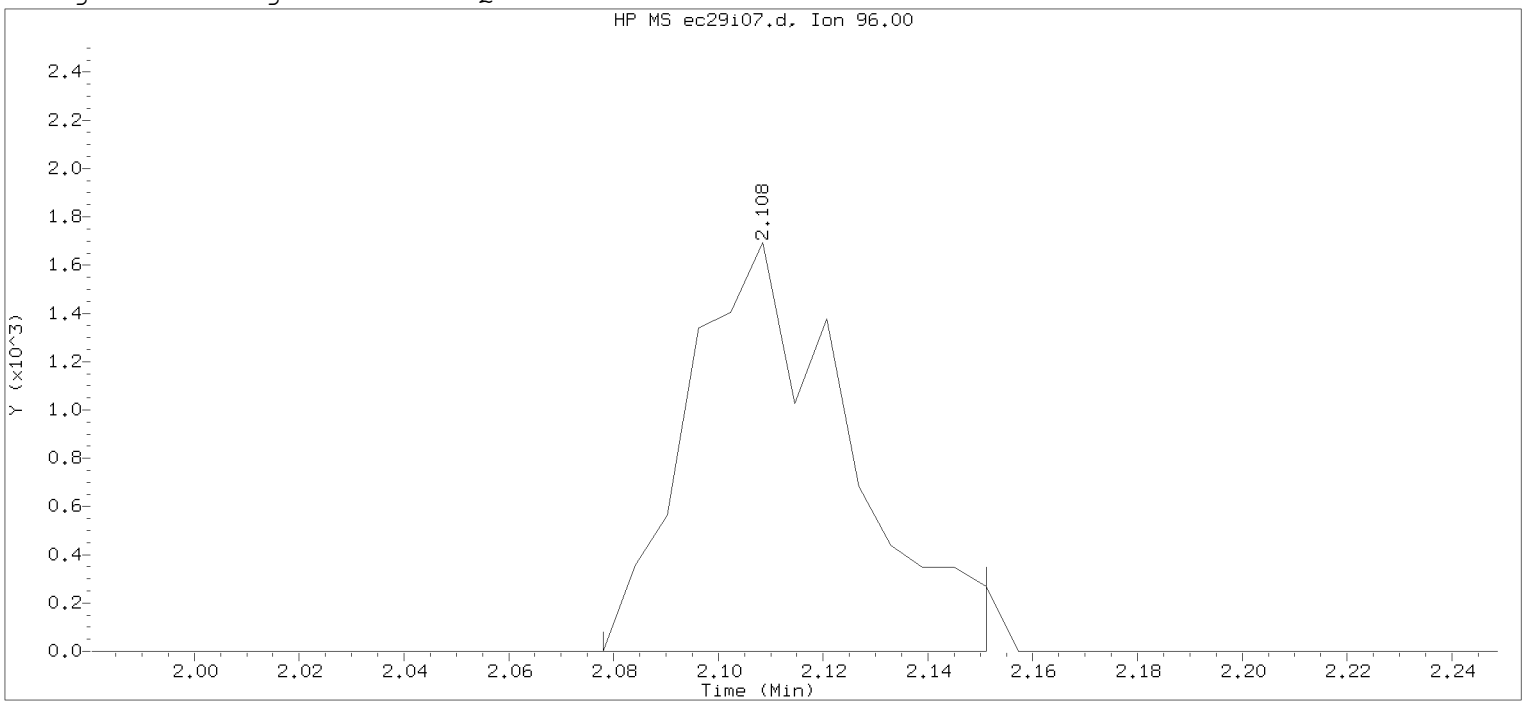
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

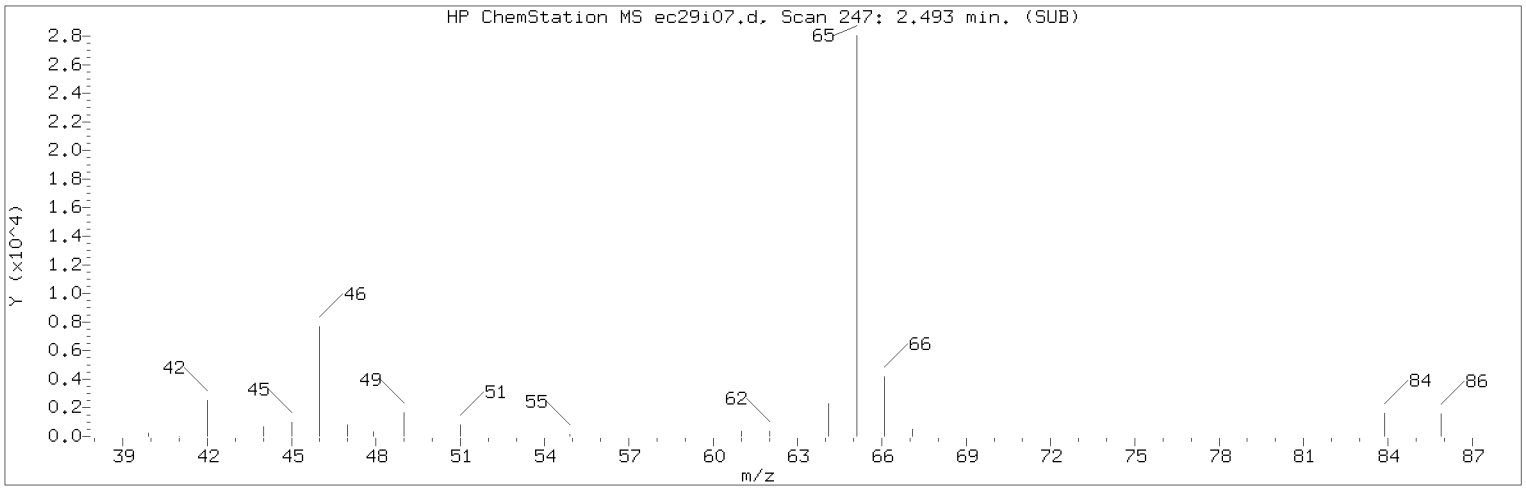
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

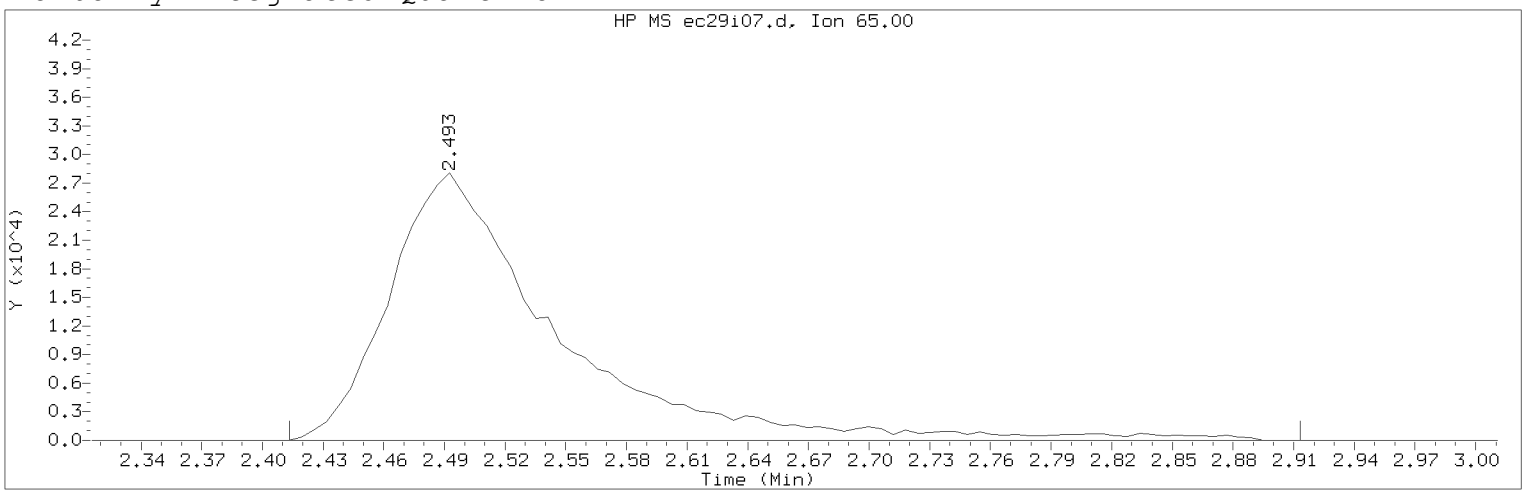
Compound Number : 17
Compound Name : 1,1-Dichloroethene
Scan Number : 184
Retention Time (minutes): 2.108
Quant Ion : 96.00
Area : 3552
On-column Amount (ng) : 0.9508
Integration start scan : 178 Integration stop scan: 190
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

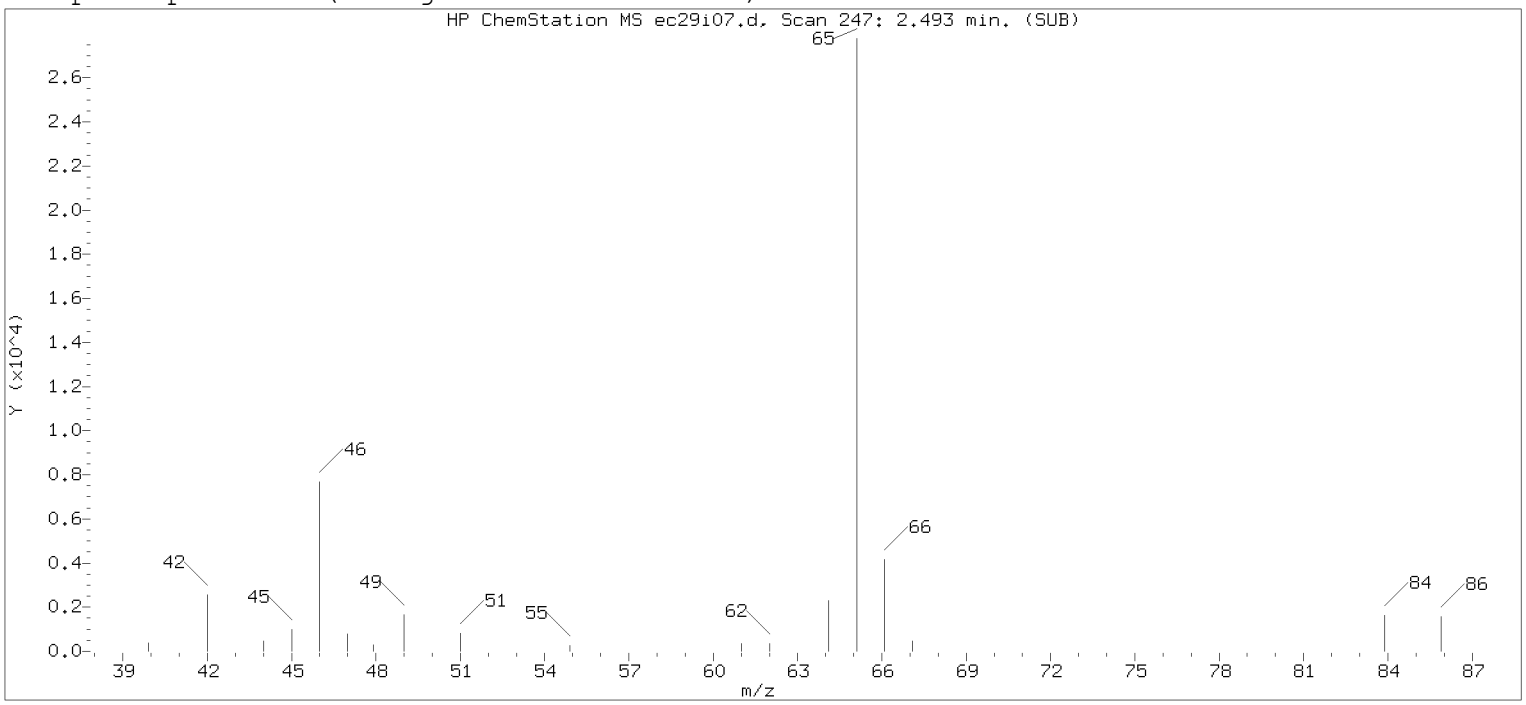
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 247
Retention Time (minutes): 2.493
Quant Ion : 65.00
Area (flag) : 160364M
On-Column Amount (ng) : 250.0000
Integration start scan : 233 Integration stop scan: 315
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

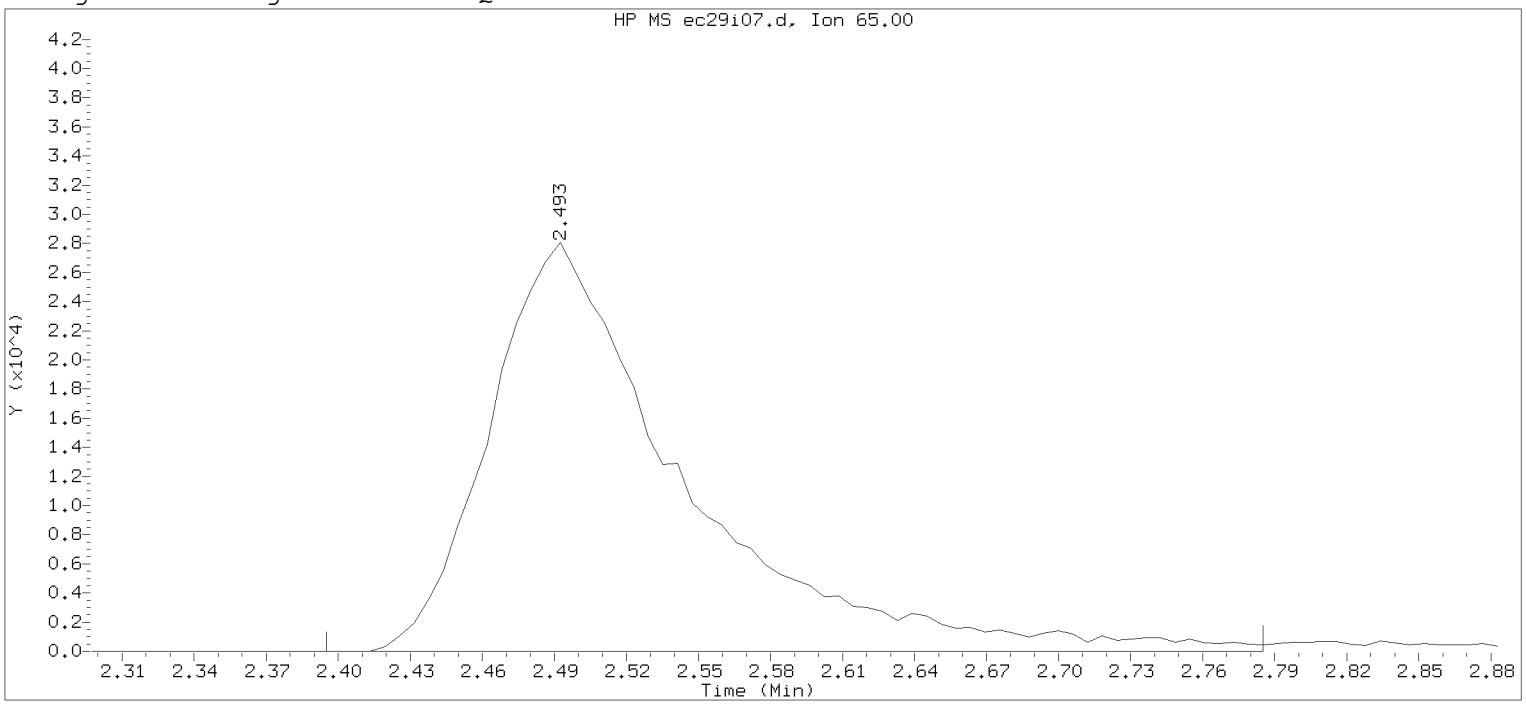
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

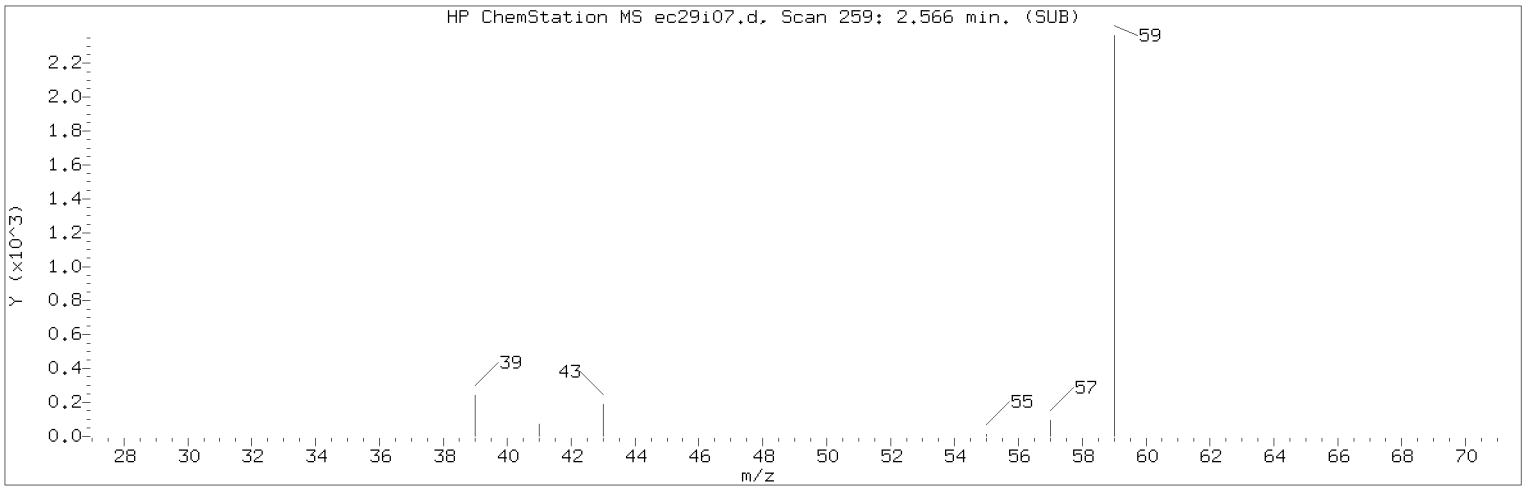
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

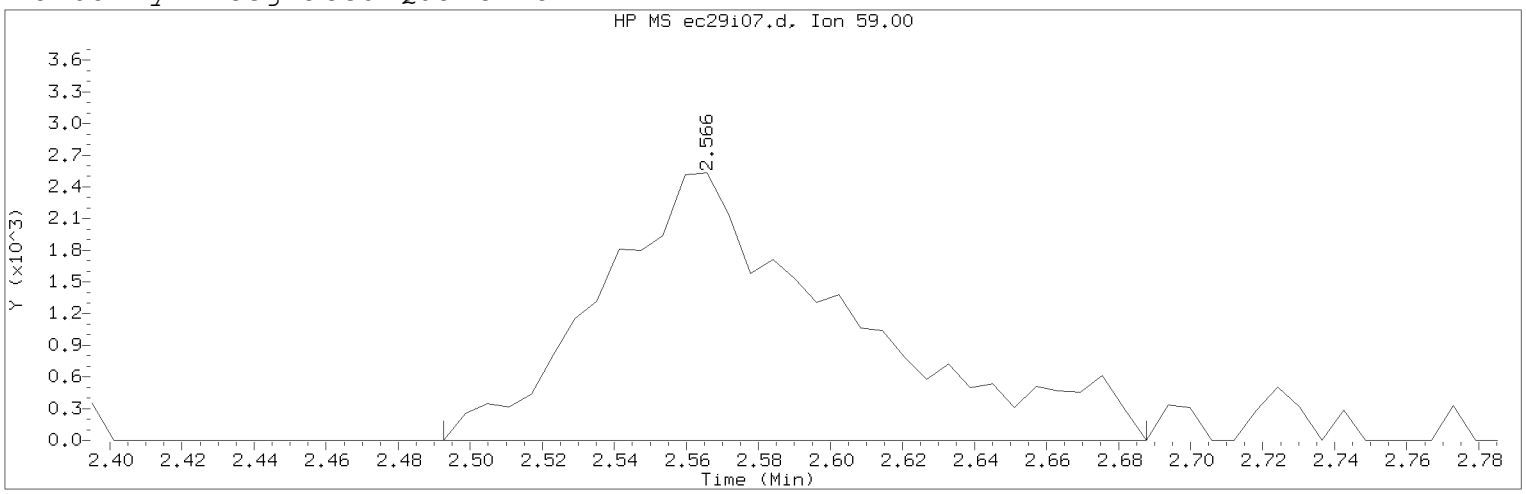
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 247
Retention Time (minutes): 2.493
Quant Ion : 65.00
Area : 157110
On-column Amount (ng) : 250.0000
Integration start scan : 230 Integration stop scan: 294
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

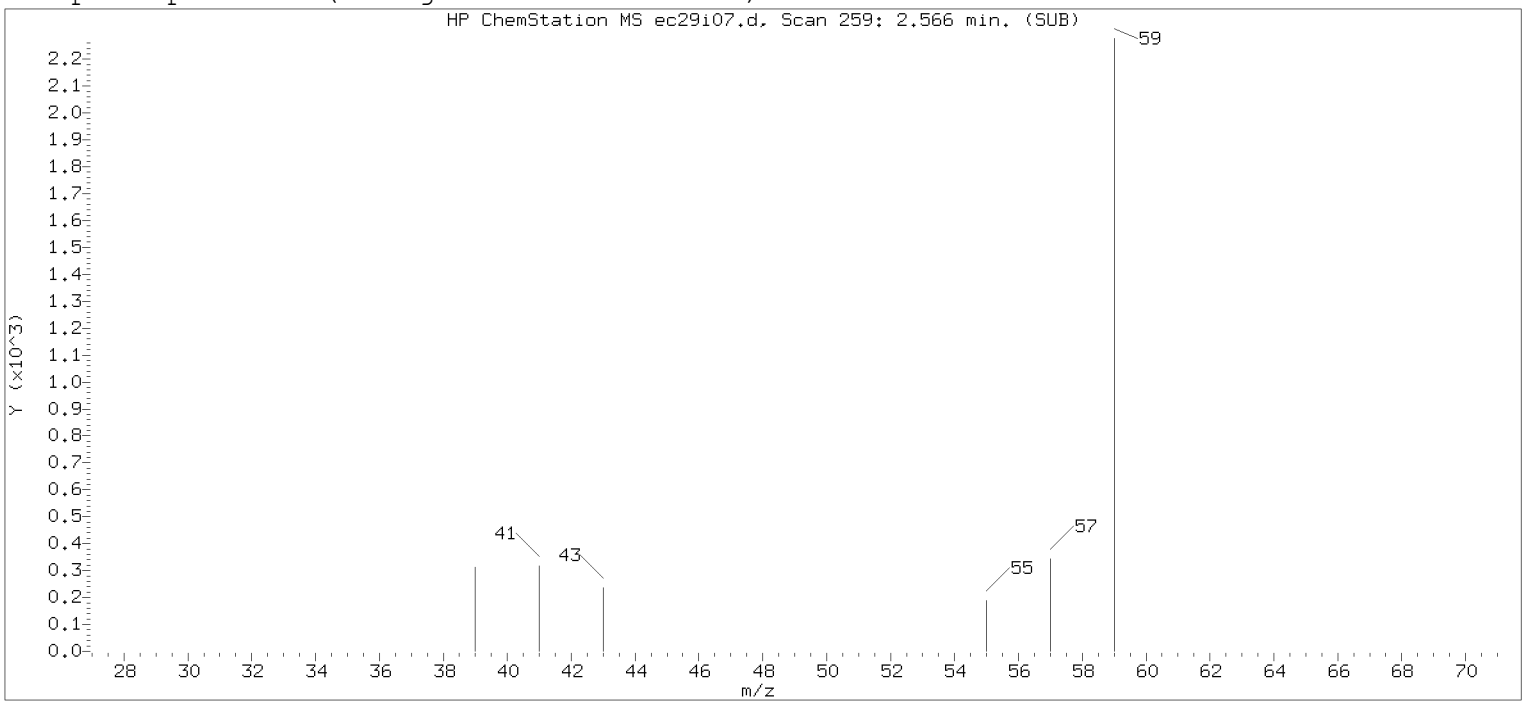
Compound Number : 30
Compound Name : t-Butyl alcohol
Scan Number : 259
Retention Time (minutes): 2.566
Quant Ion : 59.00
Area (flag) : 11982M
On-Column Amount (ng) : 19.7115
Integration start scan : 246 Integration stop scan: 278
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

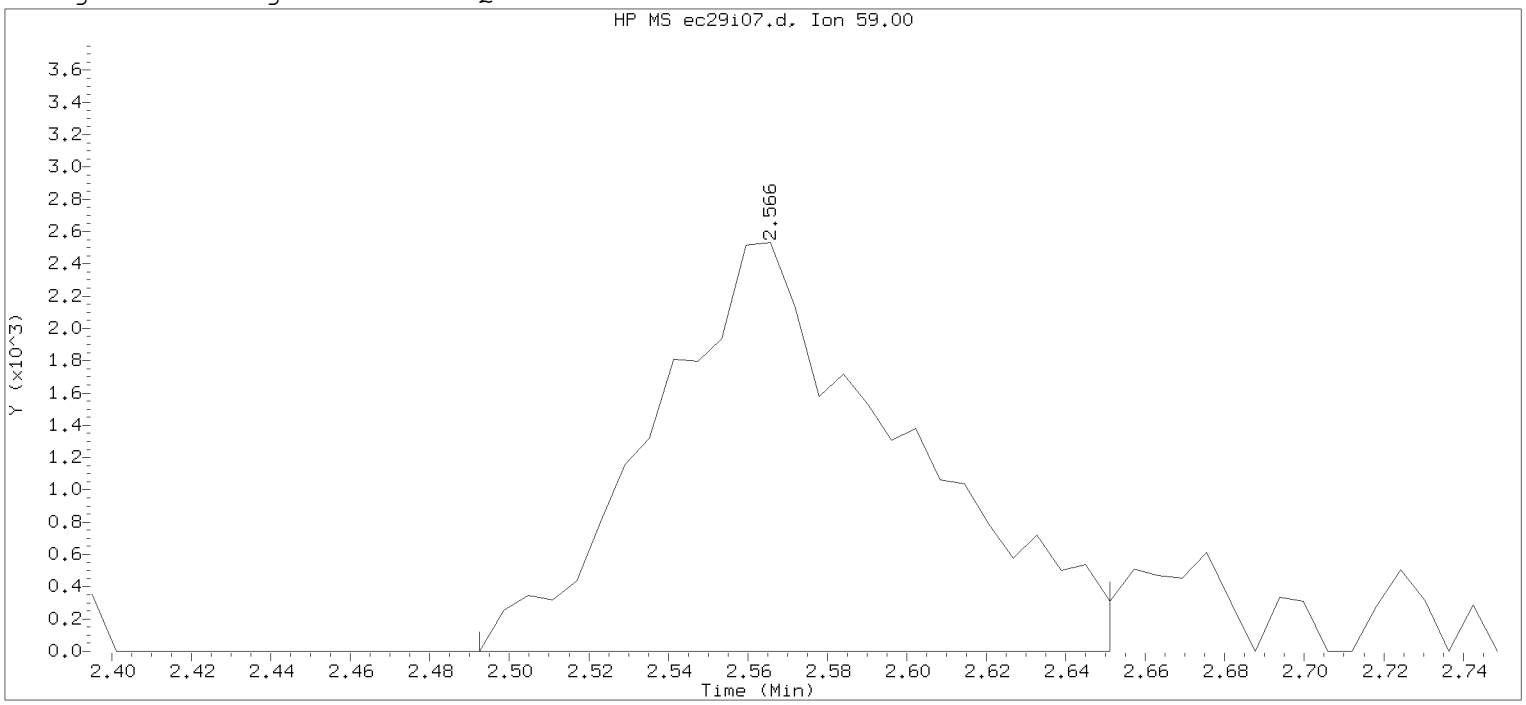
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

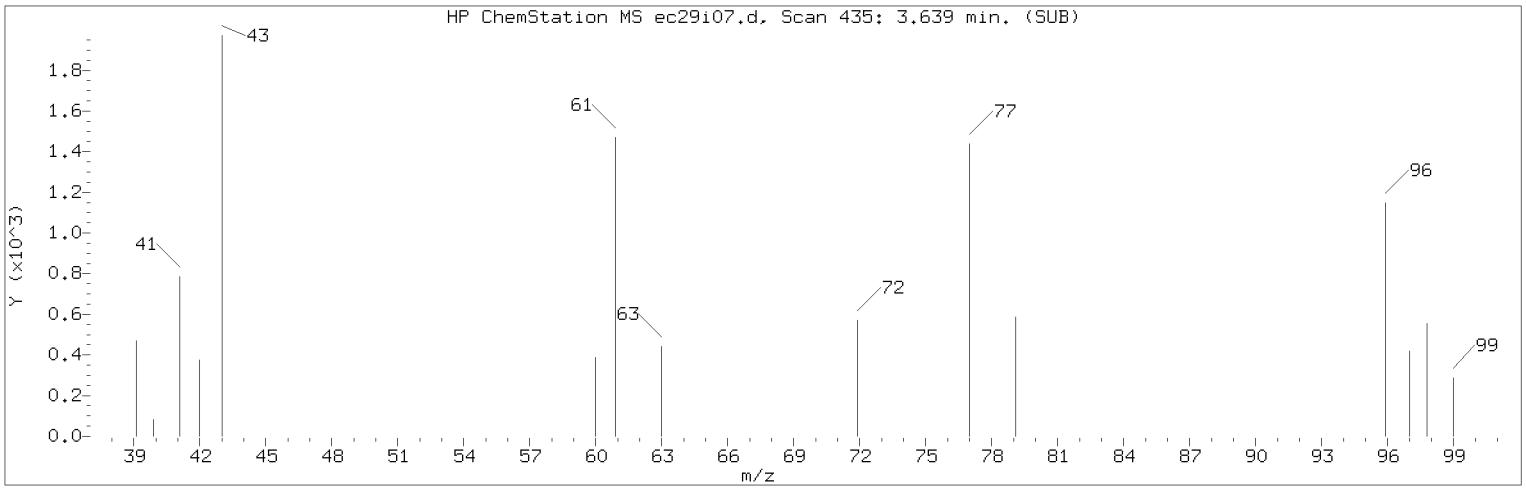
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

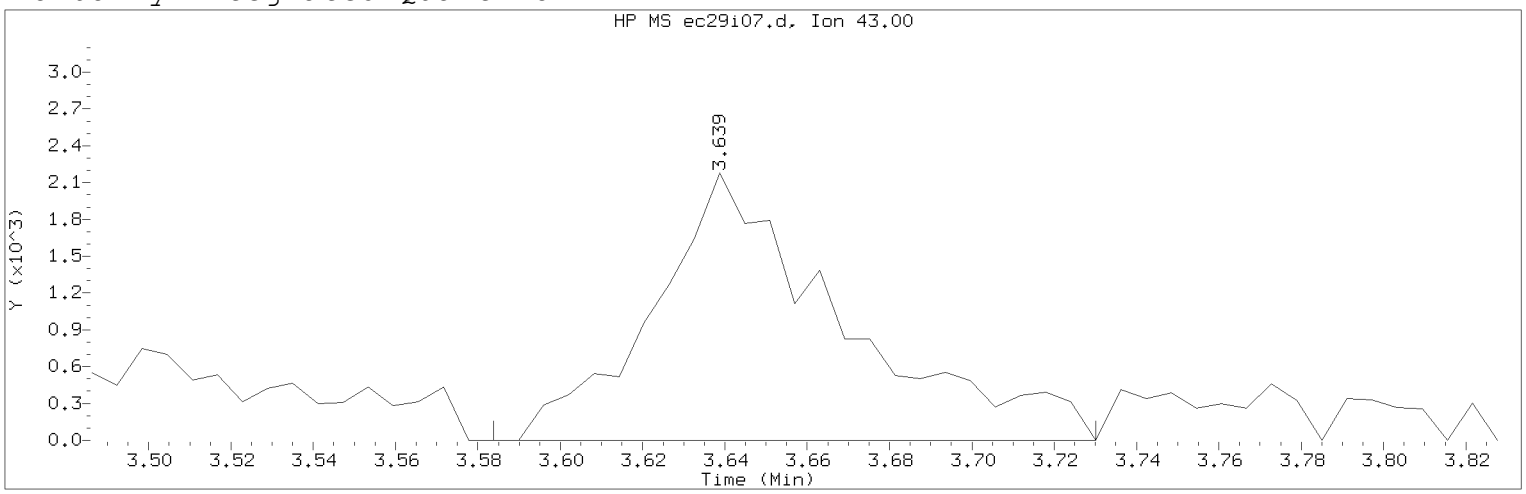
Compound Number : 30
Compound Name : t-Butyl alcohol
Scan Number : 259
Retention Time (minutes): 2.566
Quant Ion : 59.00
Area : 11066
On-column Amount (ng) : 18.7341
Integration start scan : 246 Integration stop scan: 272
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

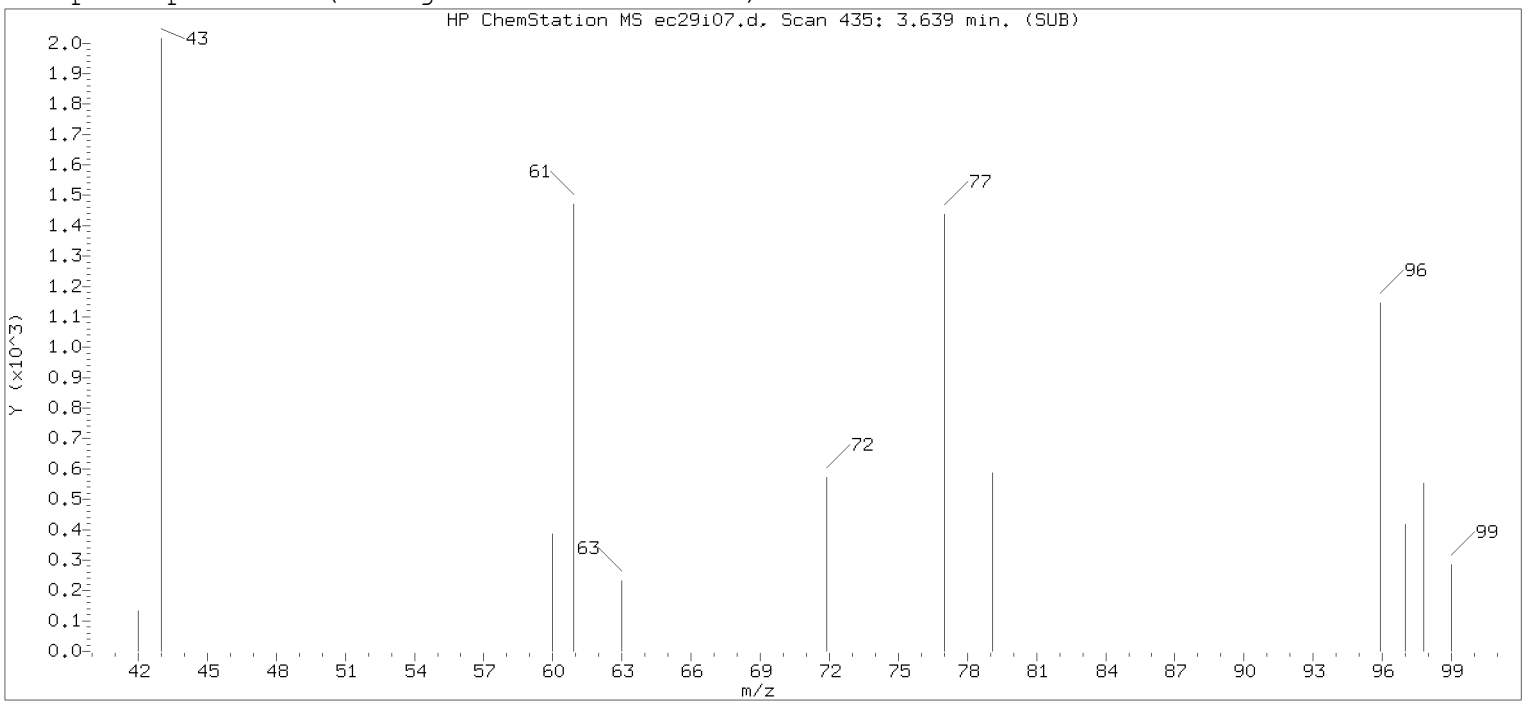
Compound Number : 44
Compound Name : 2-Butanone
Scan Number : 435
Retention Time (minutes): 3.639
Quant Ion : 43.00
Area (flag) : 6911M
On-Column Amount (ng) : 2.3145
Integration start scan : 425 Integration stop scan: 449
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

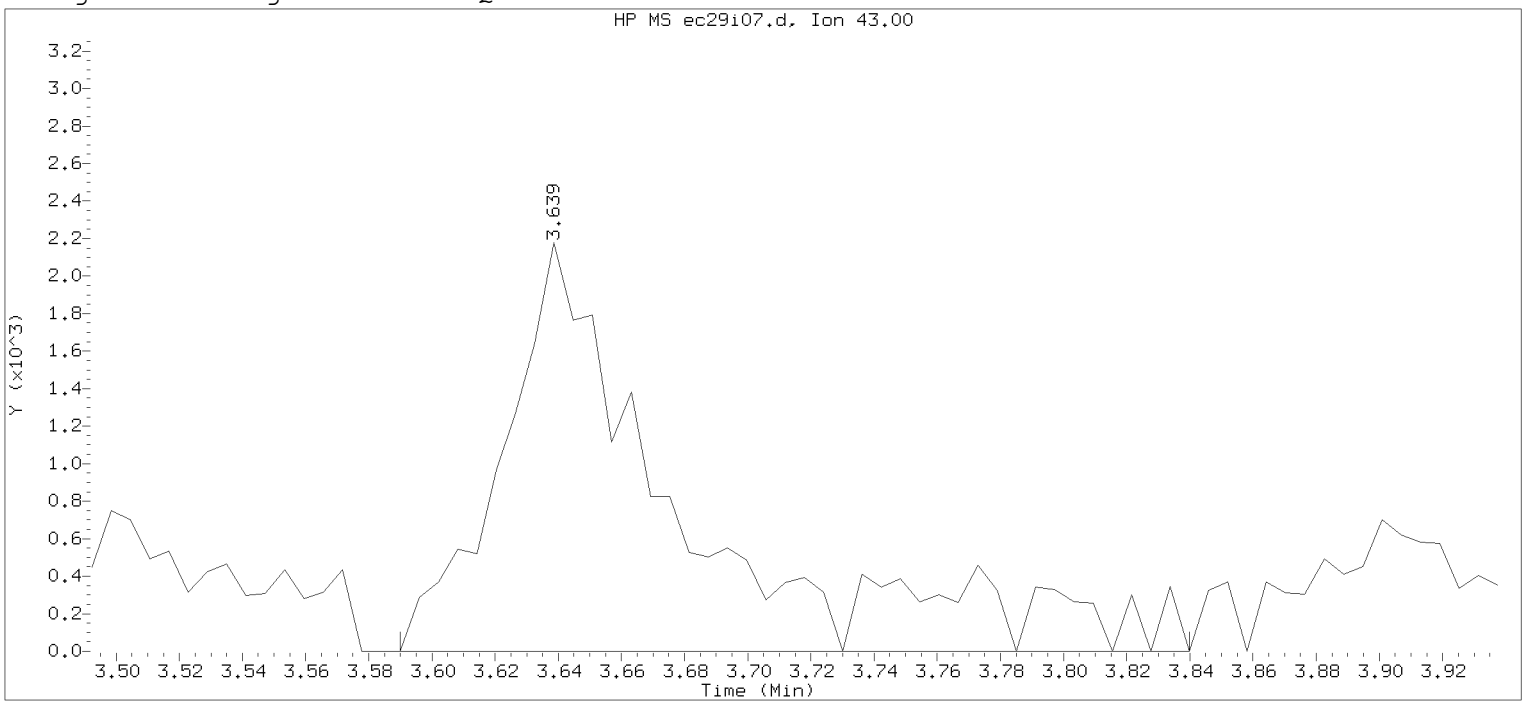
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

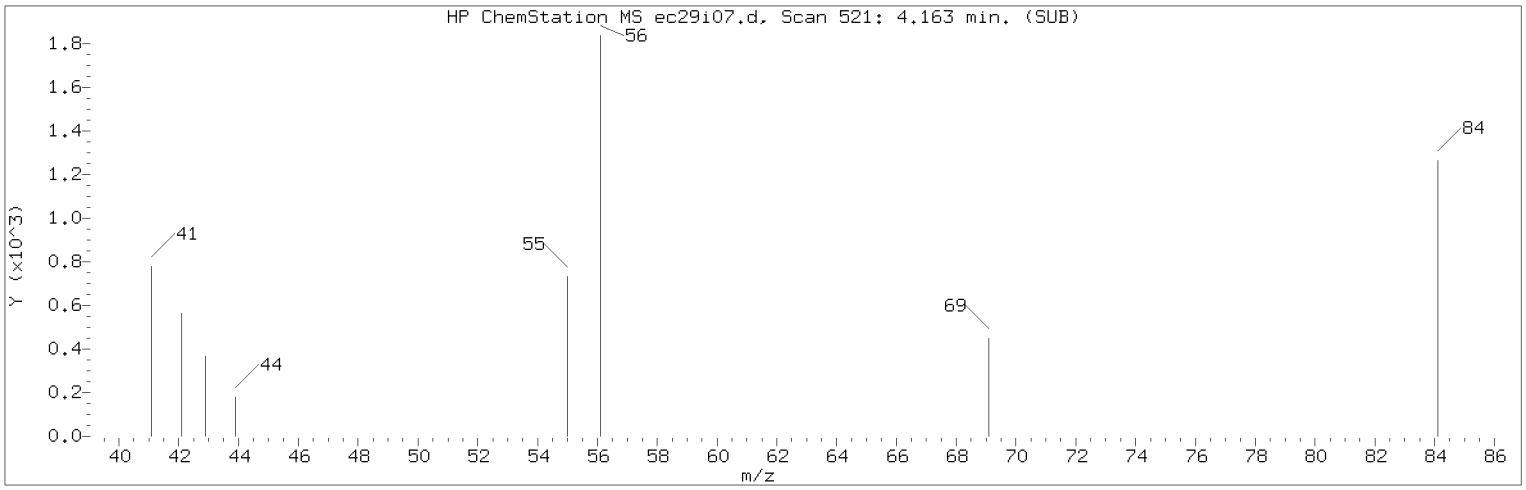
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

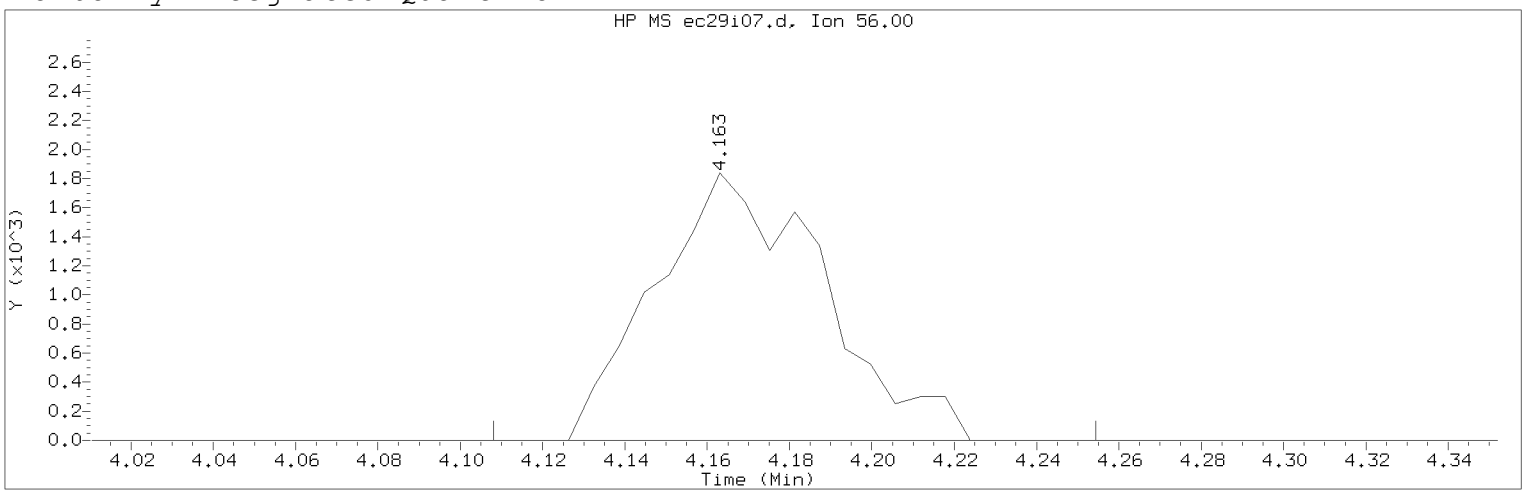
Compound Number	: 44		
Compound Name	: 2-Butanone		
Scan Number	: 435		
Retention Time (minutes)	: 3.639		
Quant Ion	: 43.00		
Area	: 8588		
On-column Amount (ng)	: 2.7653		
Integration start scan	: 426	Integration stop scan:	467
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

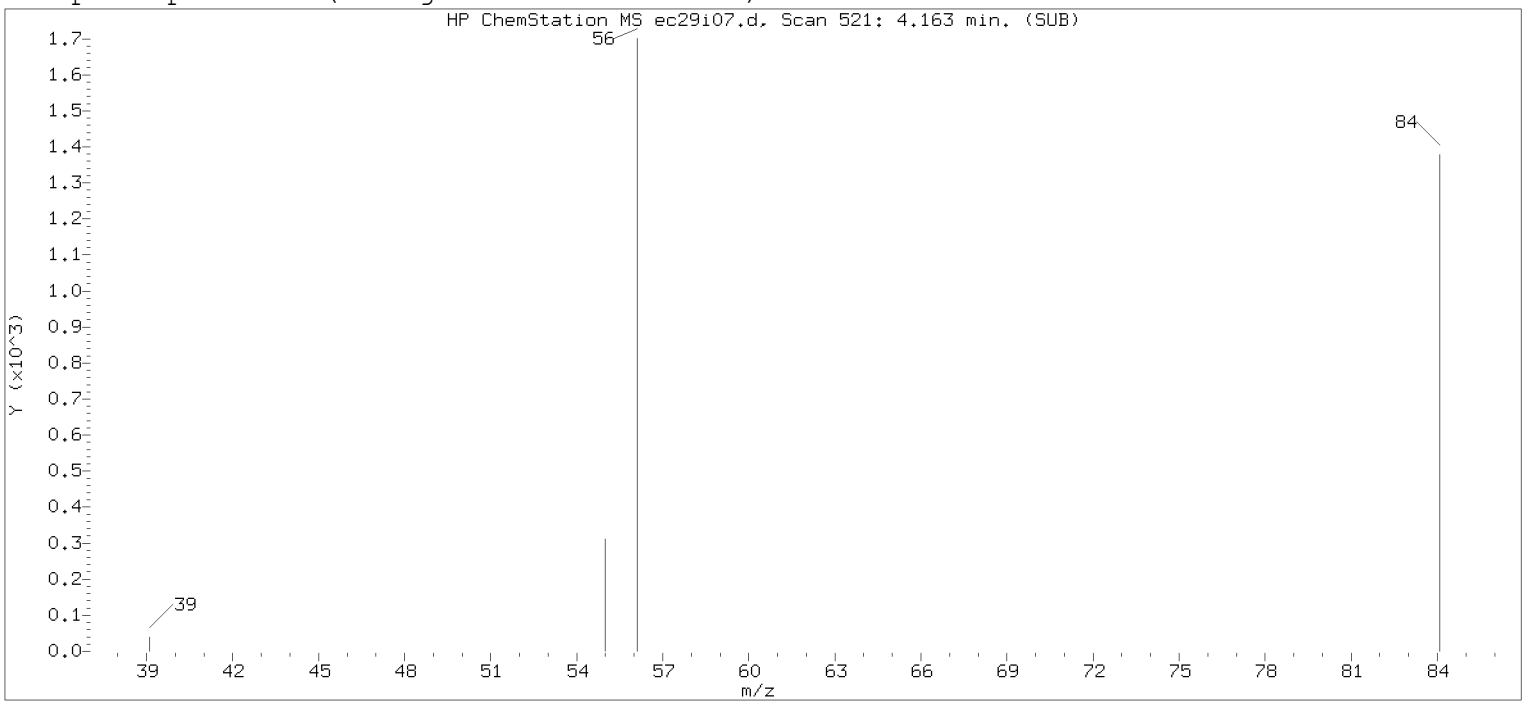
Compound Number : 54
Compound Name : Cyclohexane
Scan Number : 521
Retention Time (minutes): 4.163
Quant Ion : 56.00
Area (flag) : 5237M
On-Column Amount (ng) : 0.6347
Integration start scan : 511 Integration stop scan: 535
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

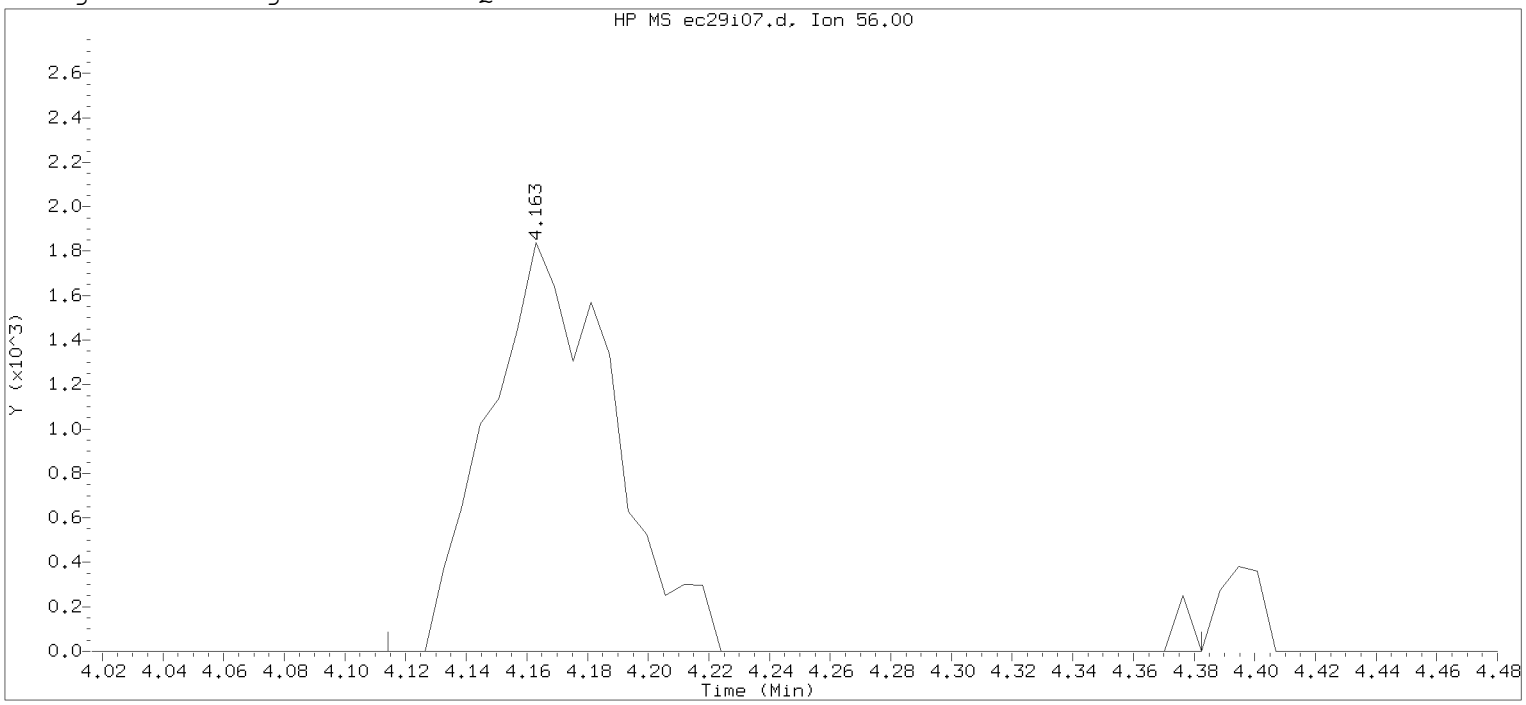
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

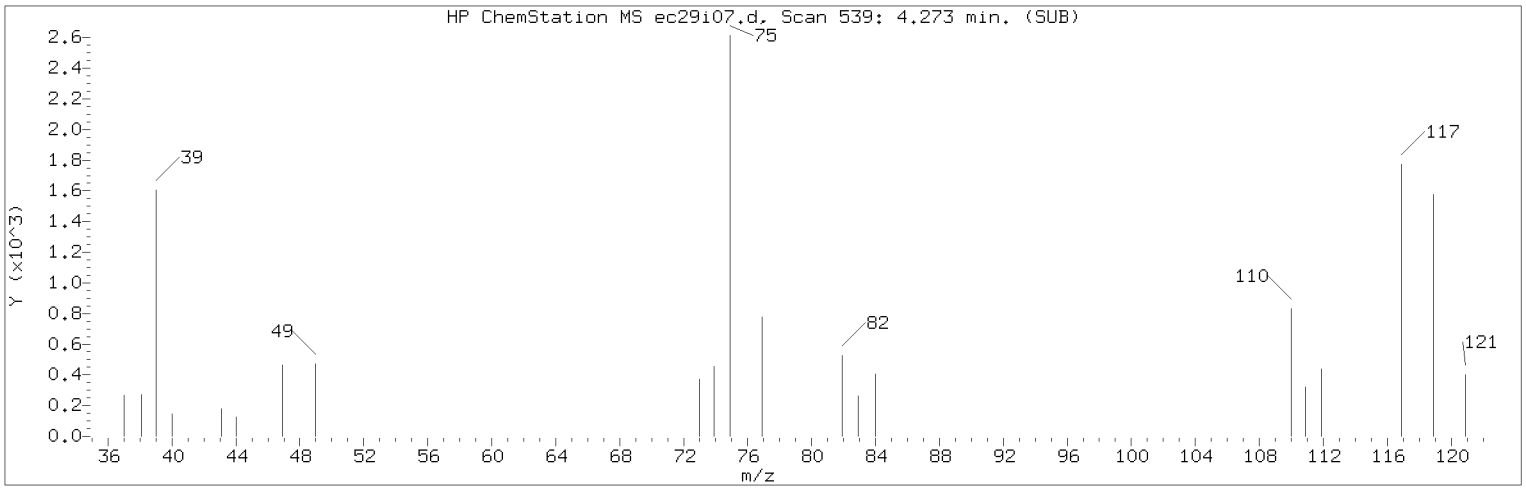
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

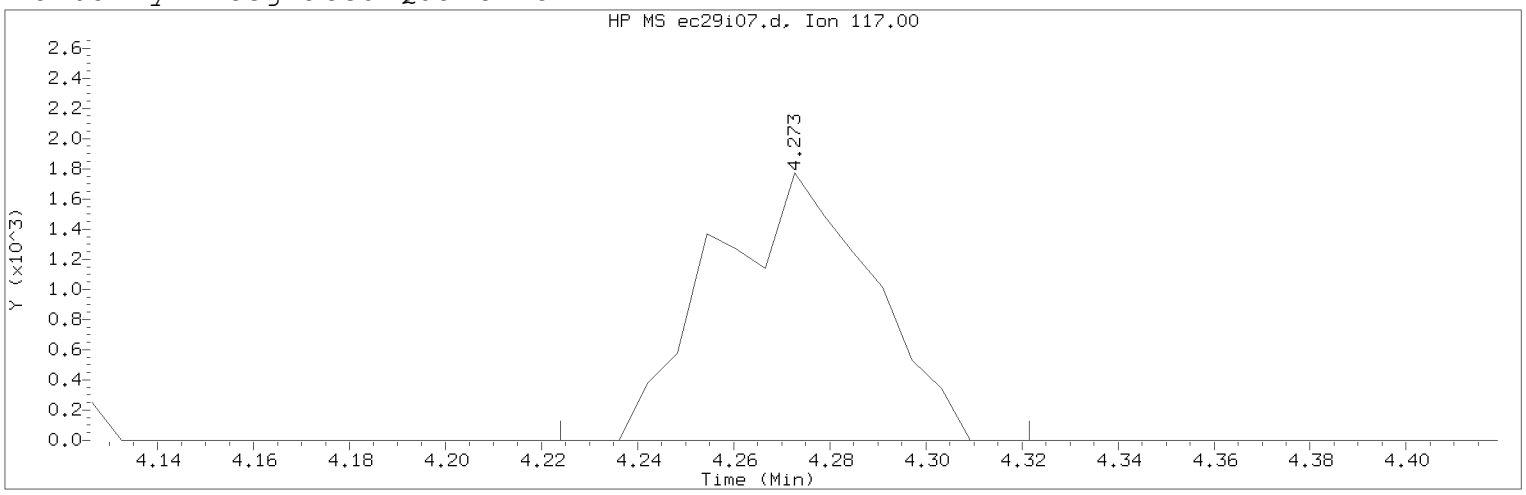
Compound Number : 54
Compound Name : Cyclohexane
Scan Number : 521
Retention Time (minutes): 4.163
Quant Ion : 56.00
Area : 5329
On-column Amount (ng) : 0.6448
Integration start scan : 512 Integration stop scan: 556
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

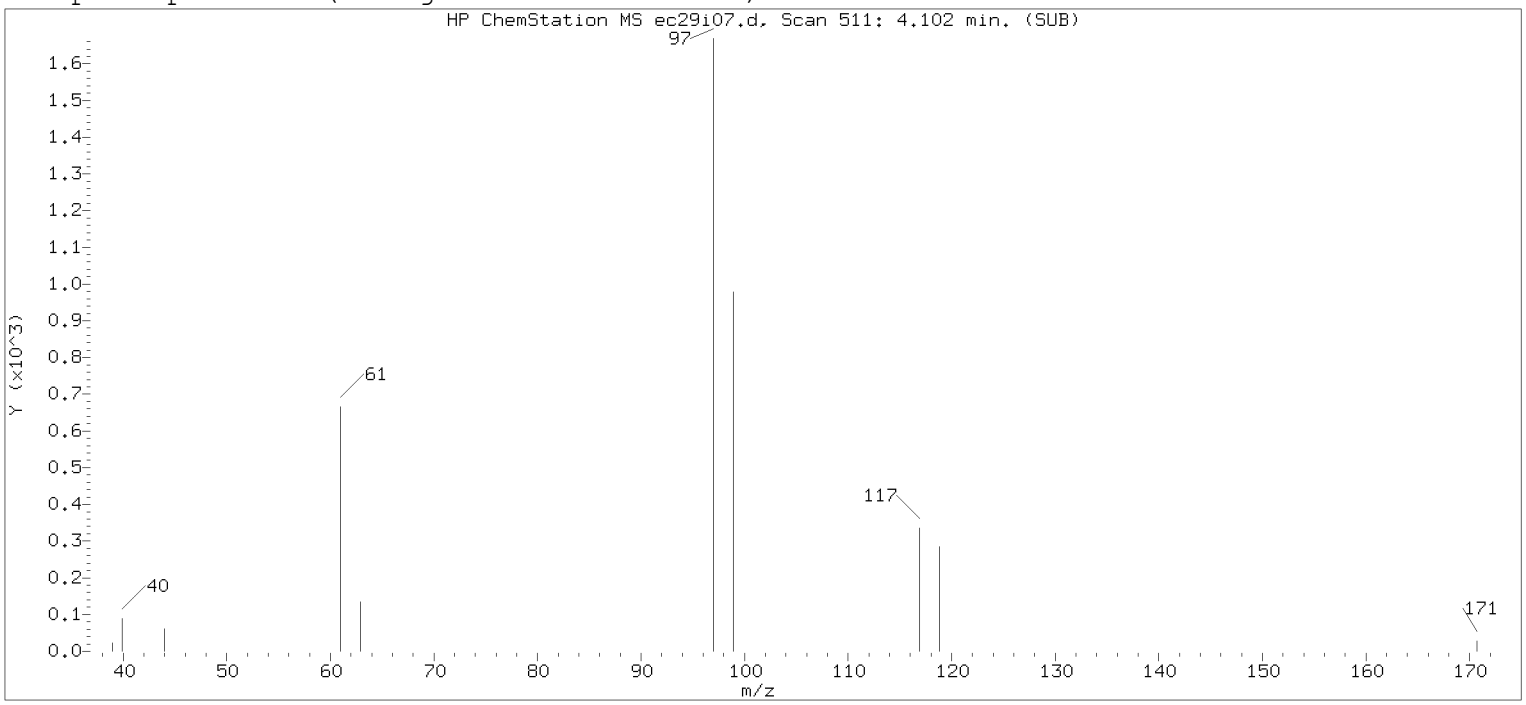
Compound Number : 56
Compound Name : Carbon Tetrachloride
Scan Number : 539
Retention Time (minutes): 4.273
Quant Ion : 117.00
Area (flag) : 4075M
On-Column Amount (ng) : 0.7491
Integration start scan : 530 Integration stop scan: 546
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

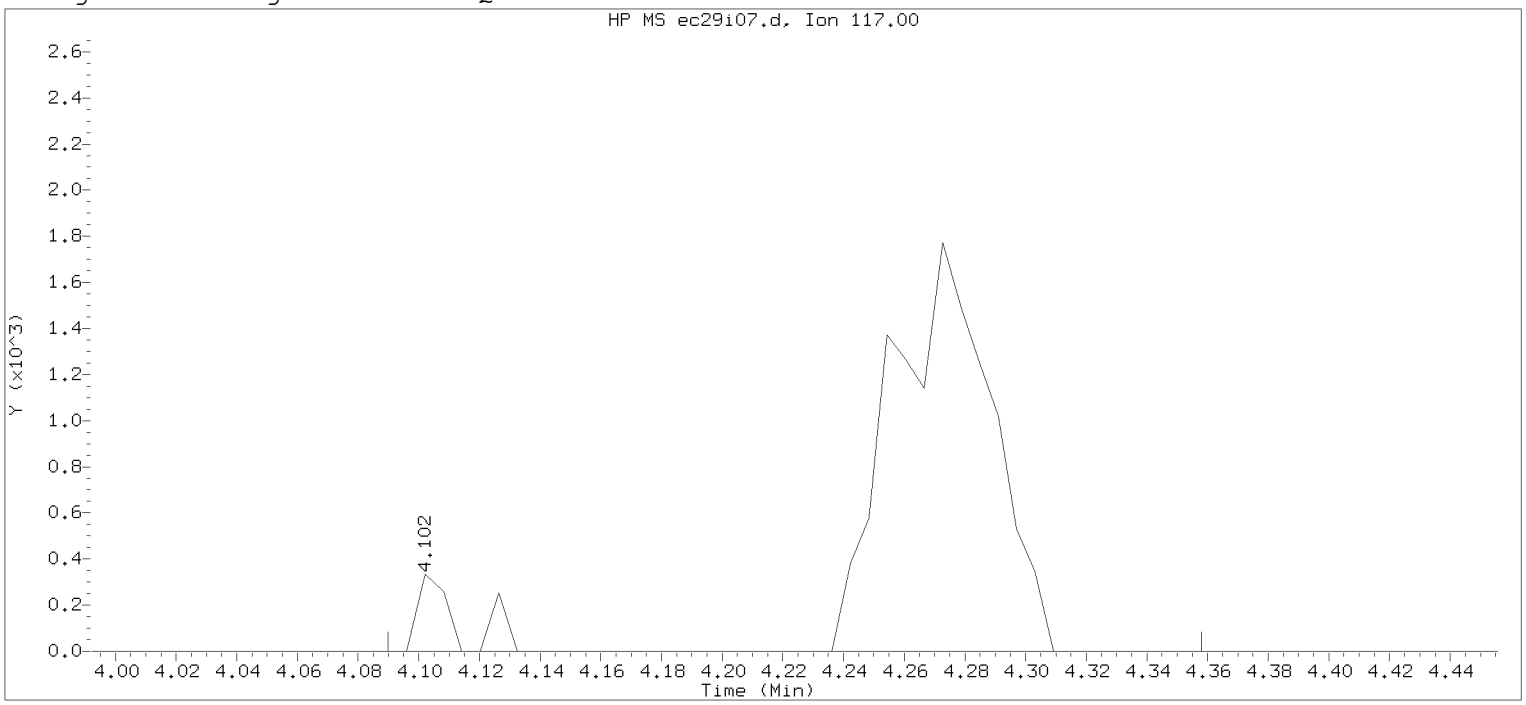
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

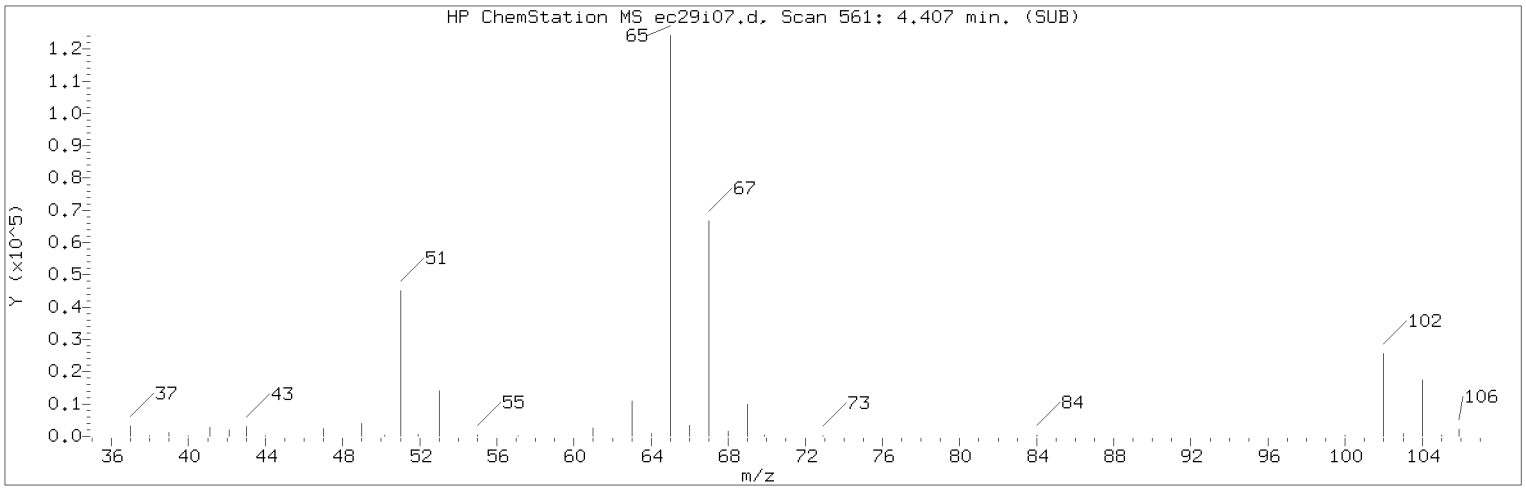
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

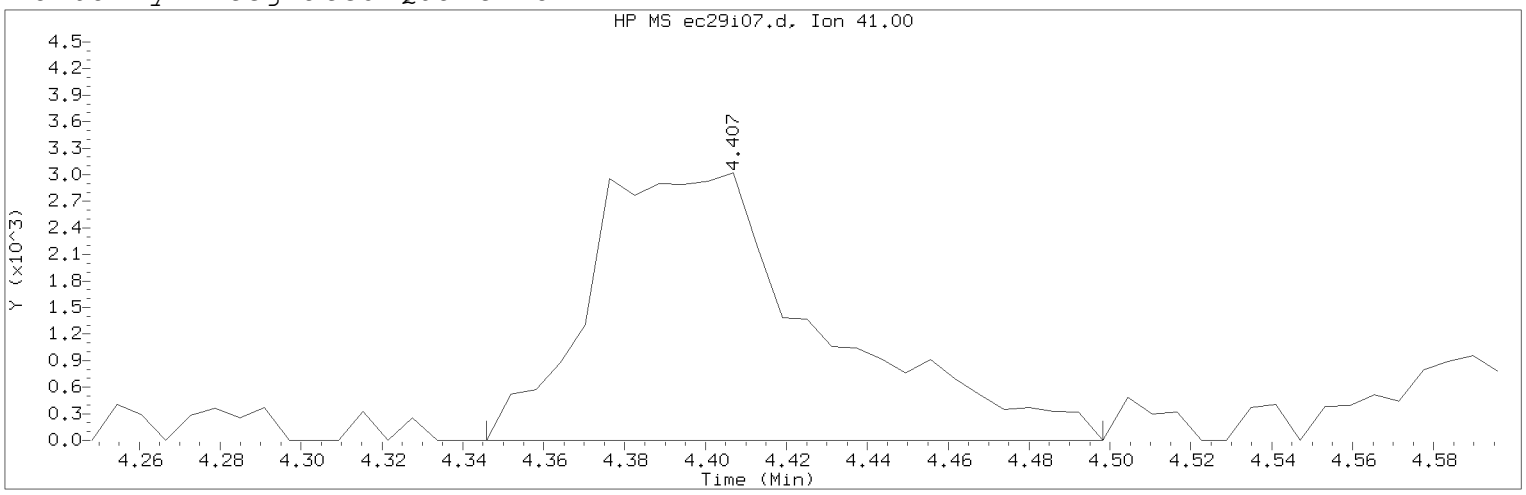
Compound Number : 56
Compound Name : Carbon Tetrachloride
Scan Number : 511
Retention Time (minutes): 4.102
Quant Ion : 117.00
Area : 4384
On-column Amount (ng) : 0.7996
Integration start scan : 508 Integration stop scan: 552
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

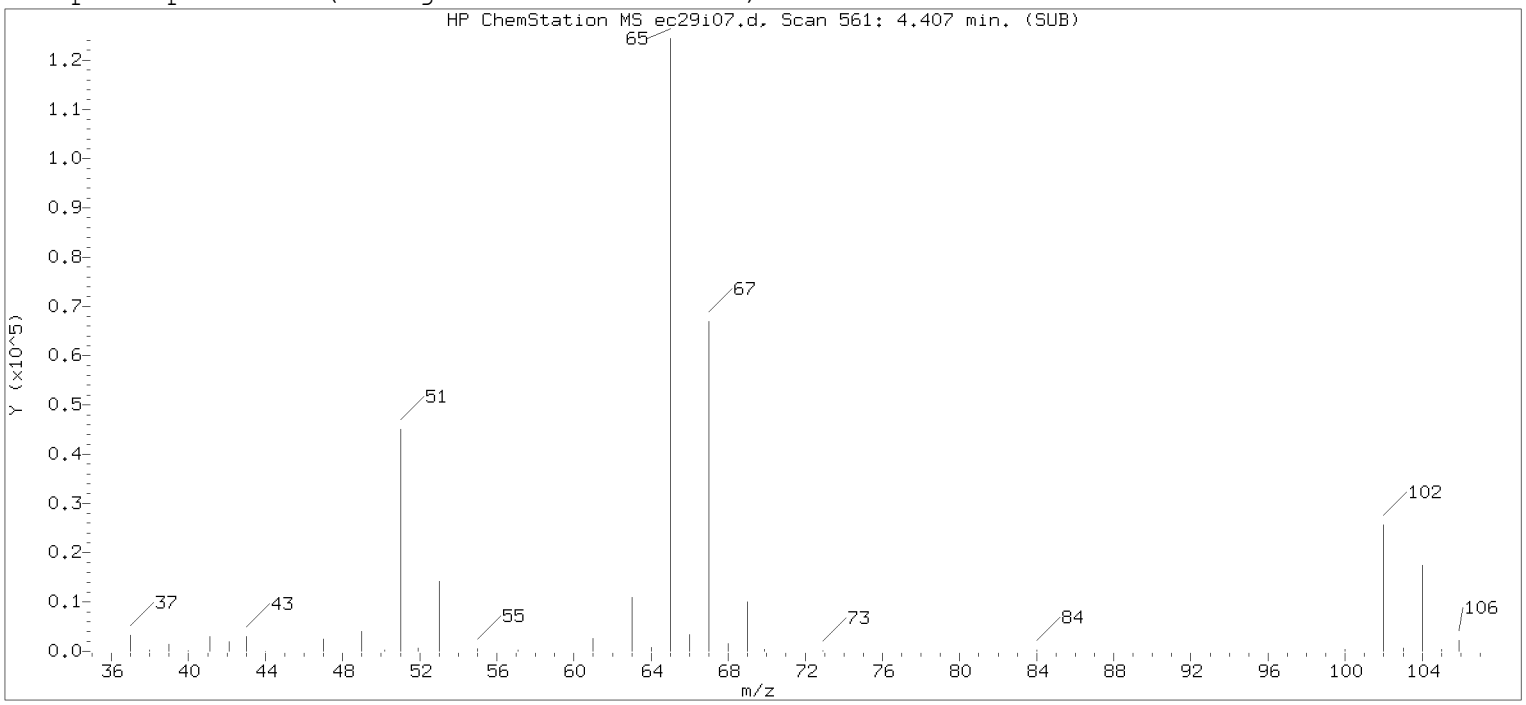
Compound Number : 58
Compound Name : Isobutyl Alcohol
Scan Number : 561
Retention Time (minutes): 4.407
Quant Ion : 41.00
Area (flag) : 12050M
On-Column Amount (ng) : 56.3015
Integration start scan : 550 Integration stop scan: 575
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

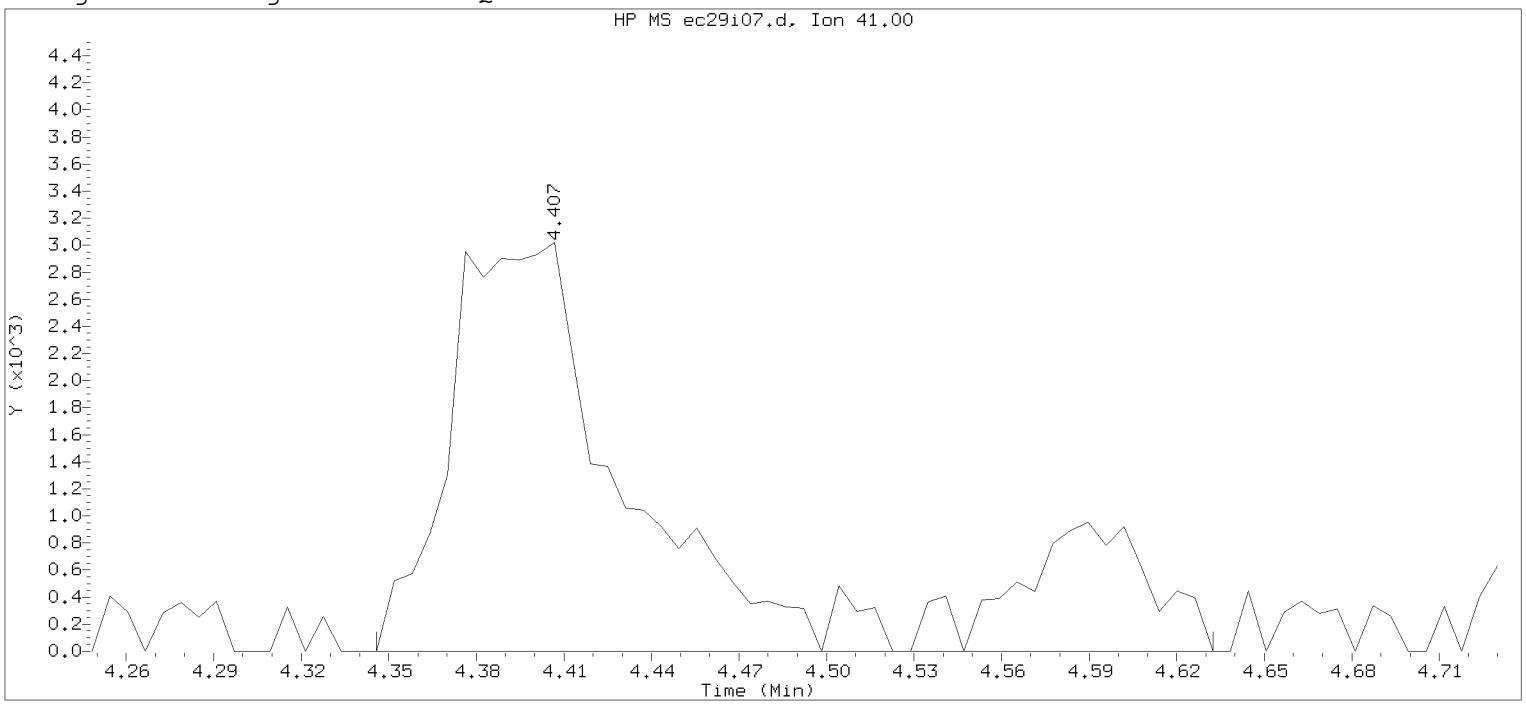
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

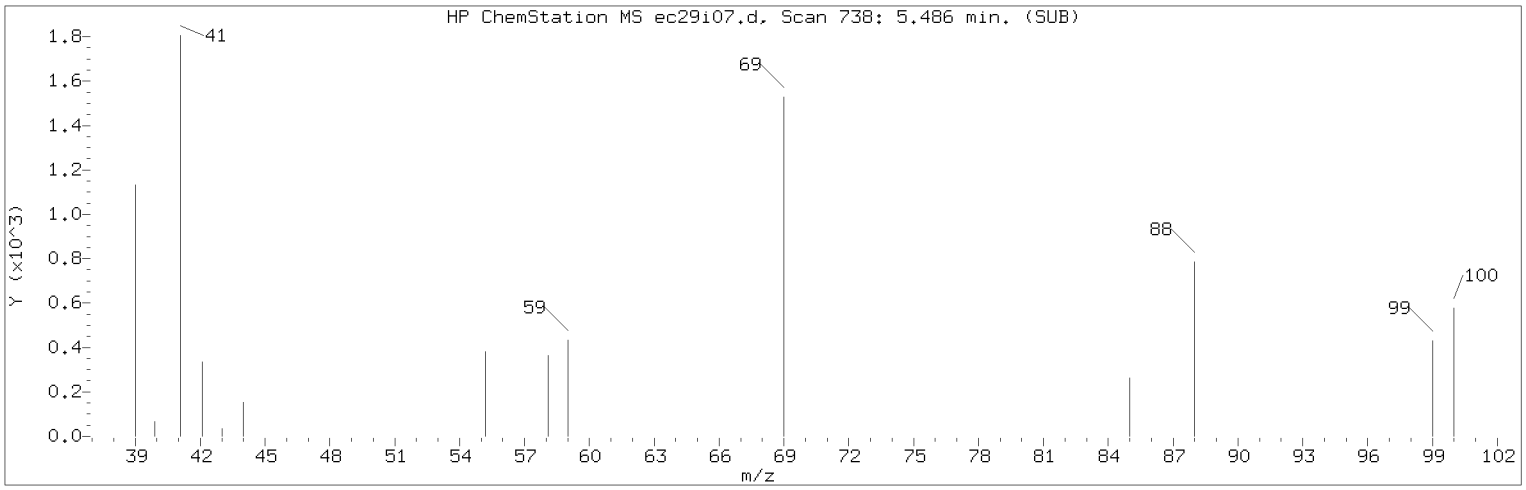
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

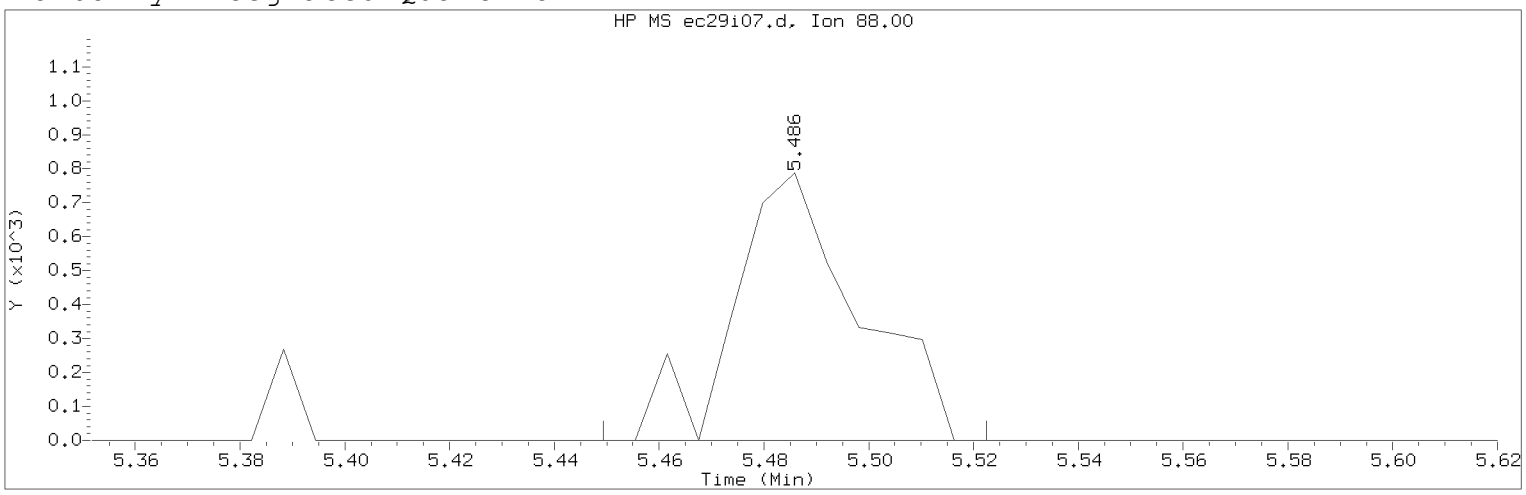
Compound Number : 58
Compound Name : Isobutyl Alcohol
Scan Number : 561
Retention Time (minutes): 4.407
Quant Ion : 41.00
Area : 15595
On-column Amount (ng) : 70.7243
Integration start scan : 550 Integration stop scan: 597
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

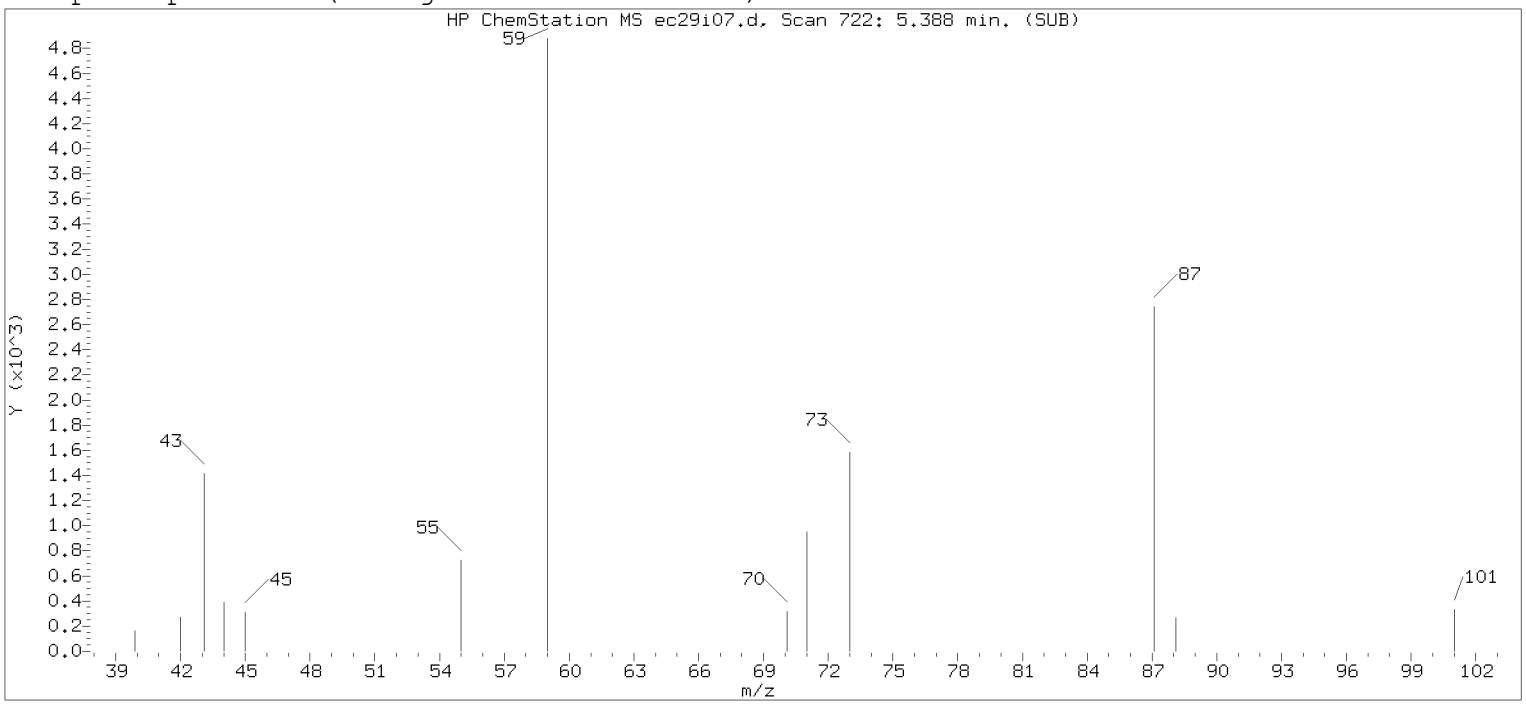
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 738
Retention Time (minutes): 5.486
Quant Ion : 88.00
Area (flag) : 1305M
On-Column Amount (ng) : 30.6369
Integration start scan : 731 Integration stop scan: 743
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

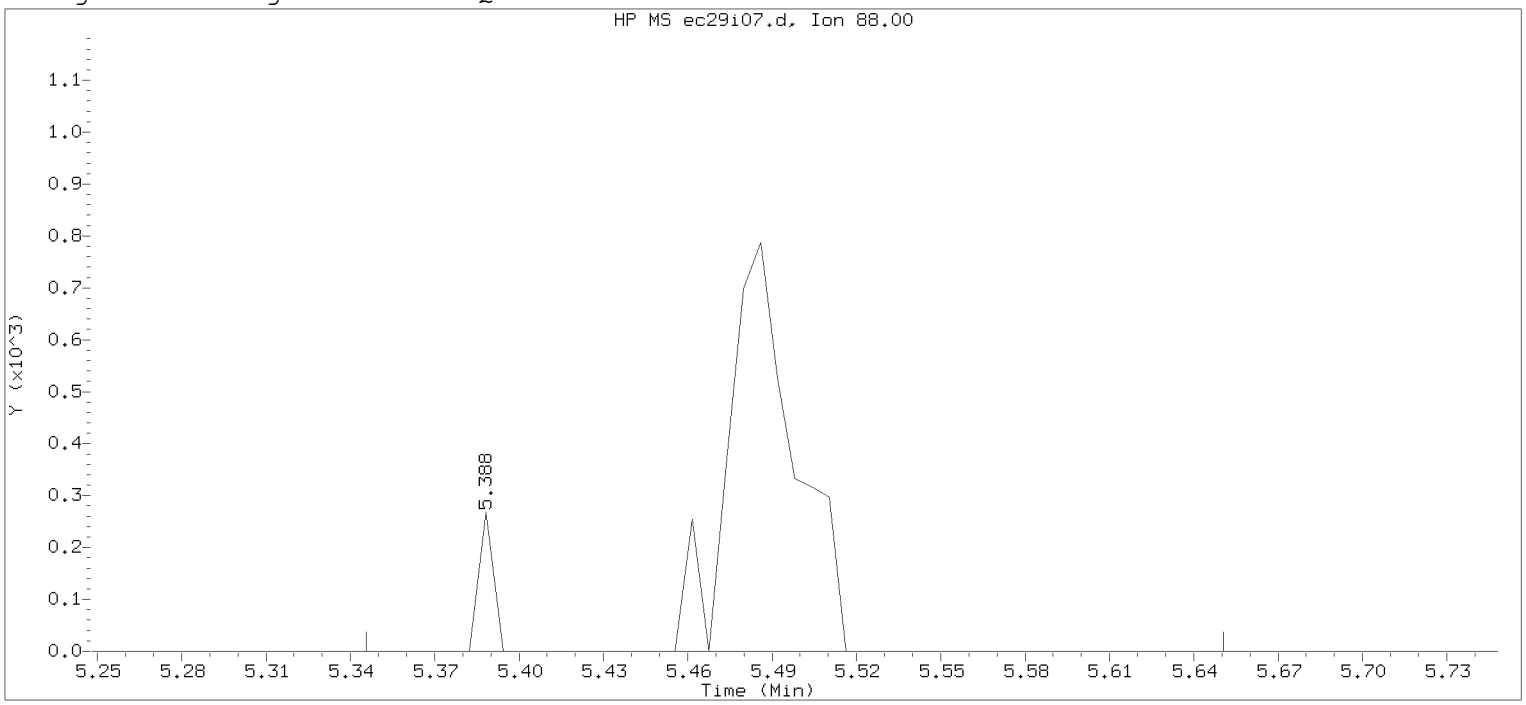
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

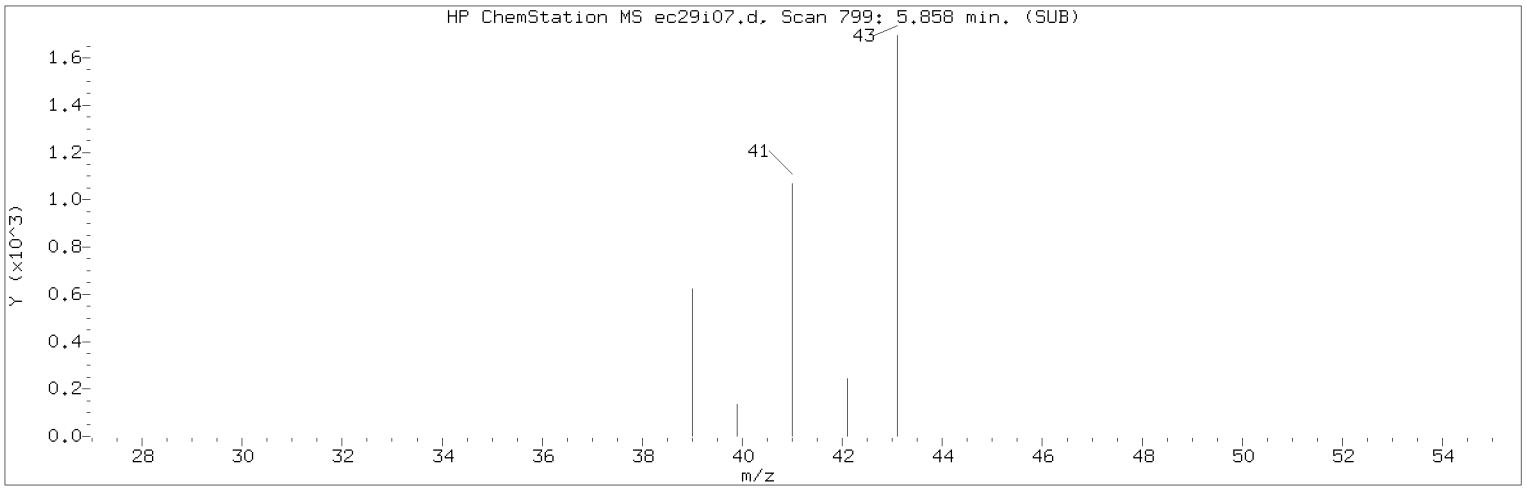
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

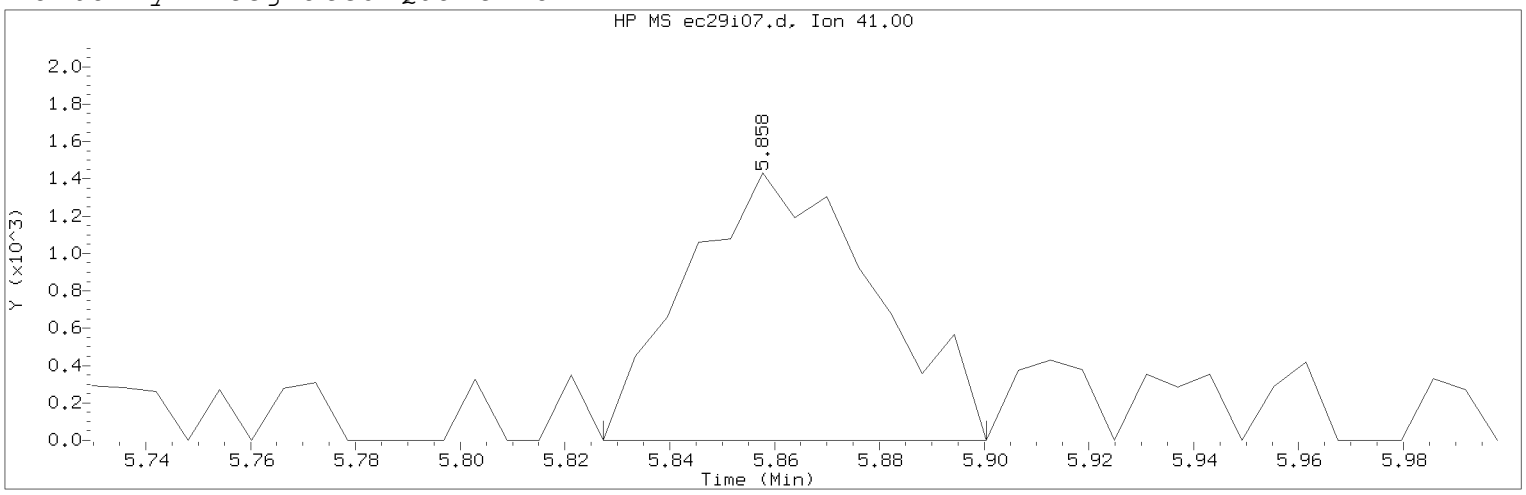
Compound Number	: 76		
Compound Name	: 1,4-Dioxane		
Scan Number	: 722		
Retention Time (minutes)	: 5.388		
Quant Ion	: 88.00		
Area	: 1403		
On-column Amount (ng)	: 33.3553		
Integration start scan	: 714	Integration stop scan:	764
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

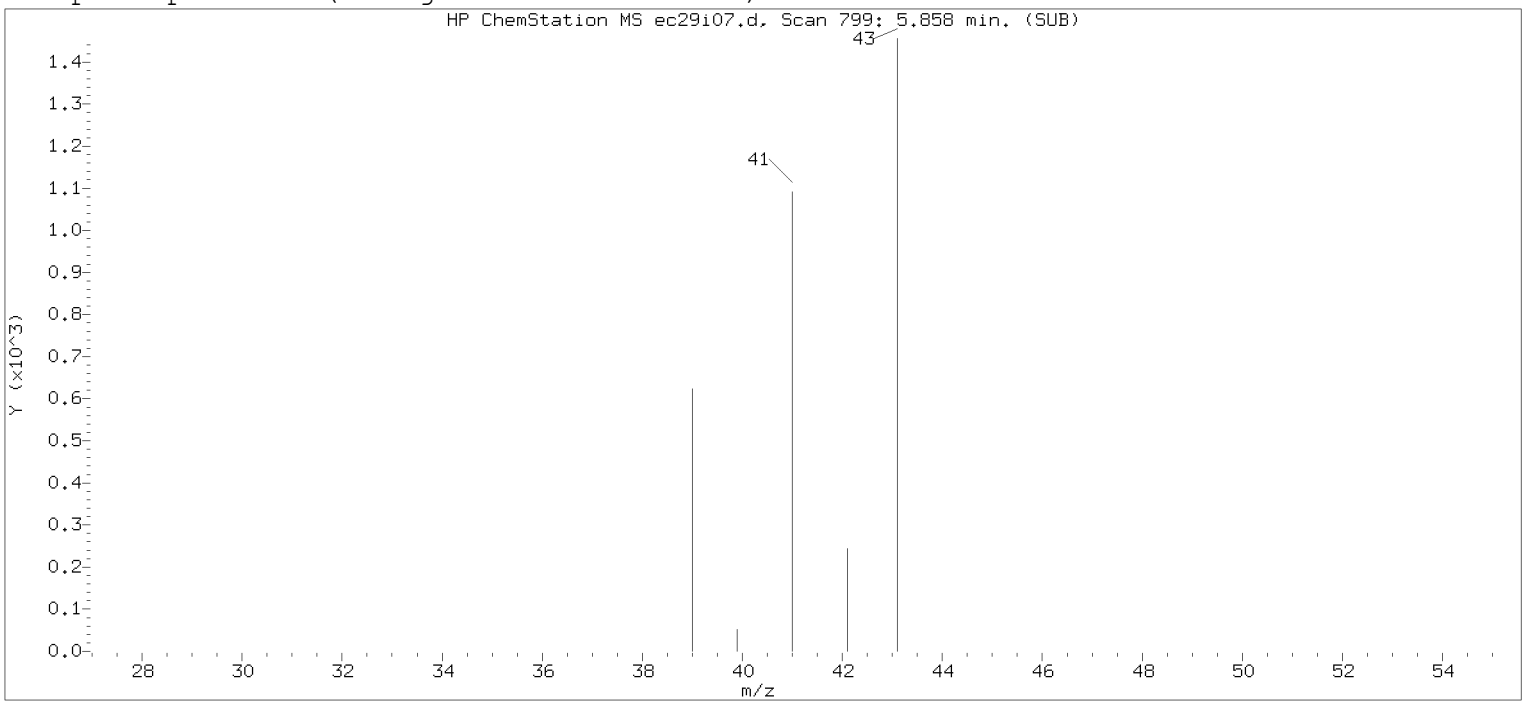
Compound Number : 80
Compound Name : 2-Nitropropane
Scan Number : 799
Retention Time (minutes): 5.858
Quant Ion : 41.00
Area (flag) : 3550M
On-Column Amount (ng) : 2.2766
Integration start scan : 793 Integration stop scan: 805
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

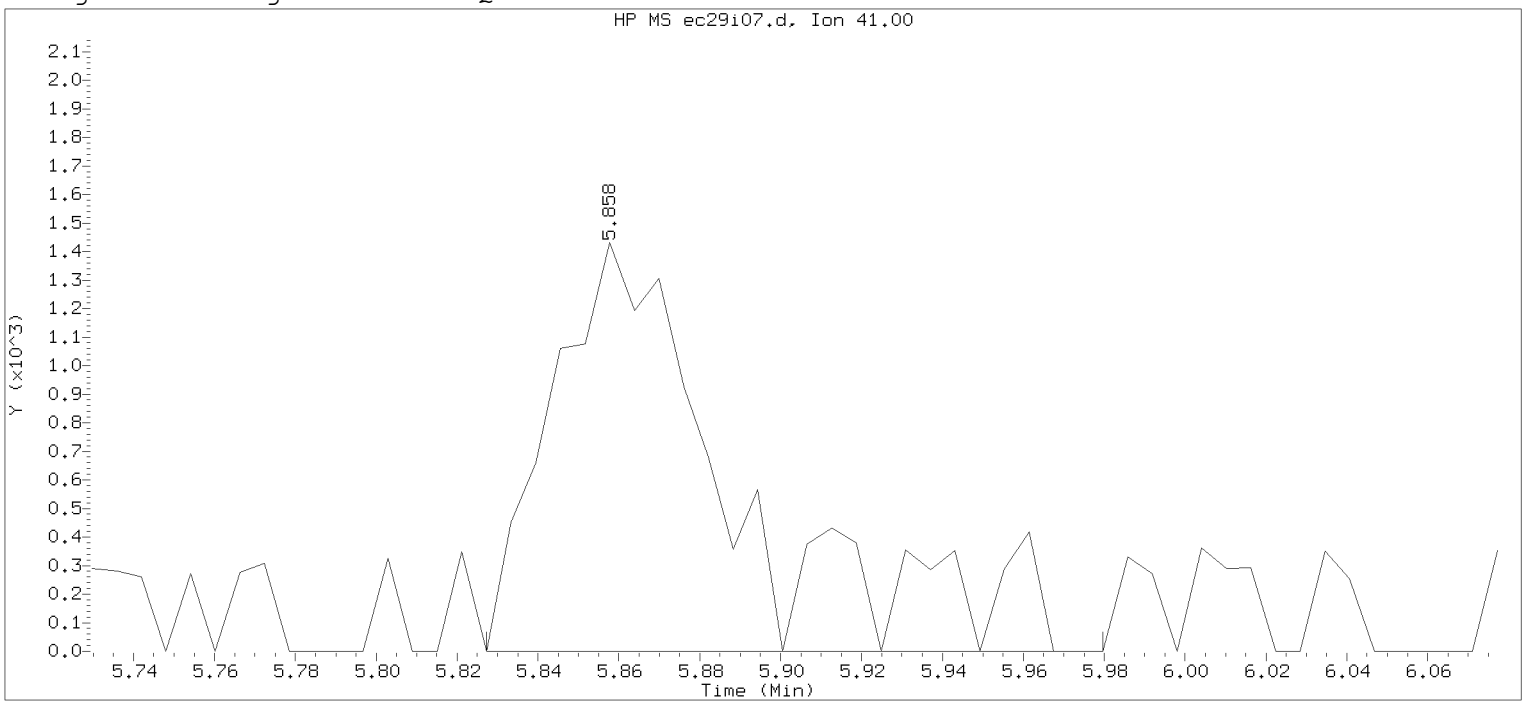
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

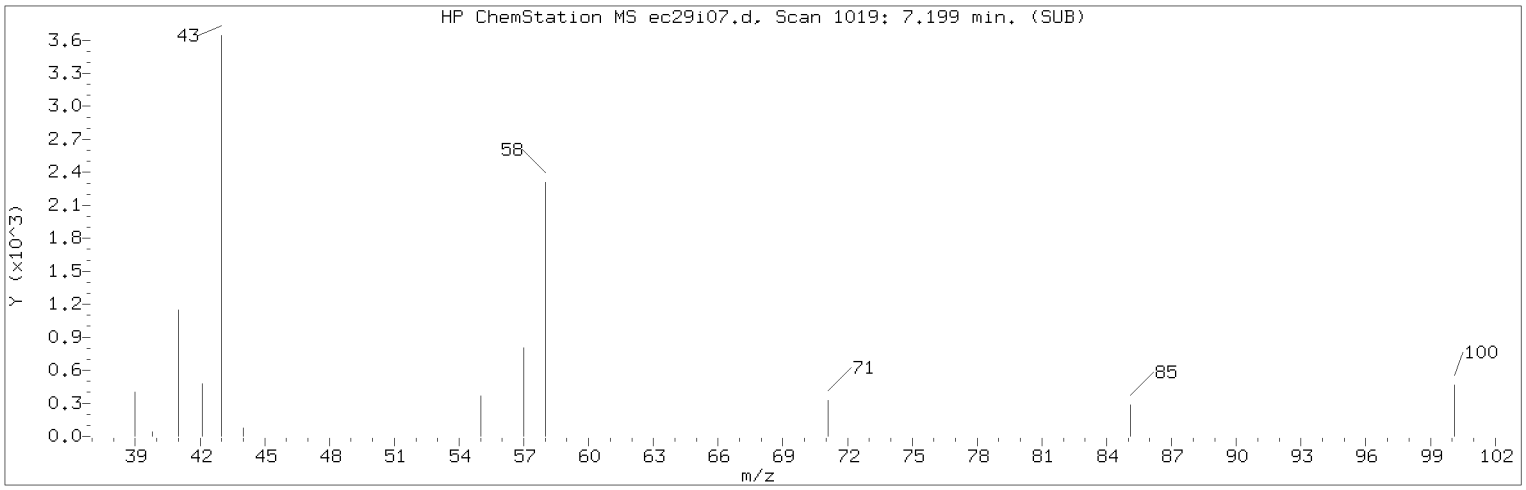
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

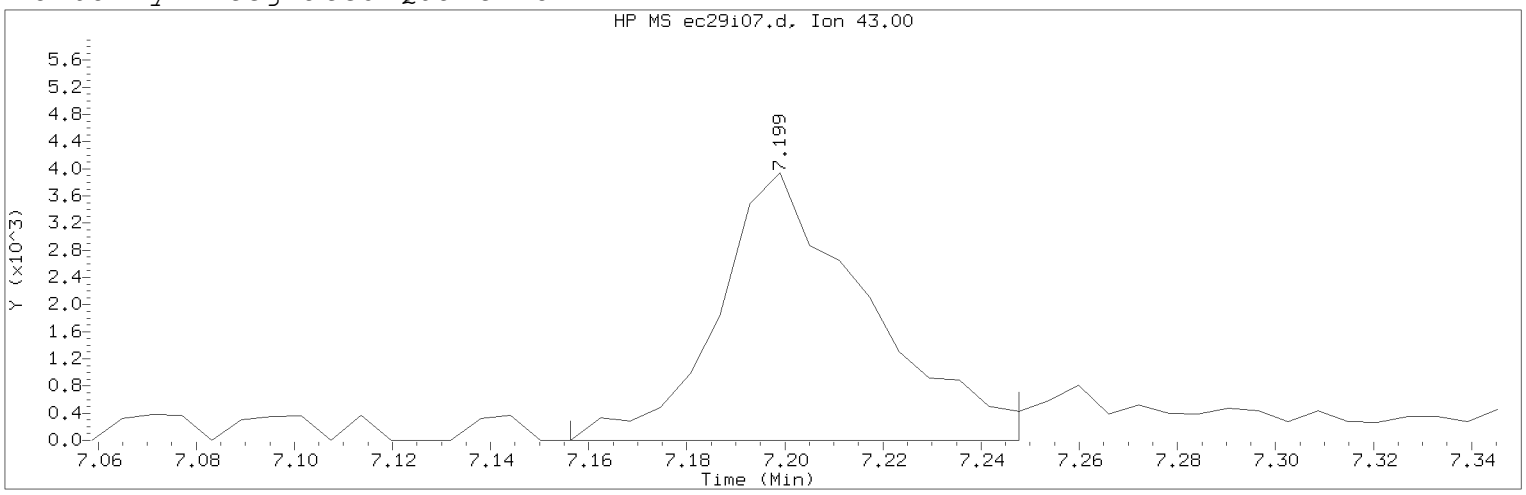
Compound Number	: 80		
Compound Name	: 2-Nitropropane		
Scan Number	: 799		
Retention Time (minutes)	: 5.858		
Quant Ion	: 41.00		
Area	: 4605		
On-column Amount (ng)	: 2.8173		
Integration start scan	: 793	Integration stop scan:	818
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

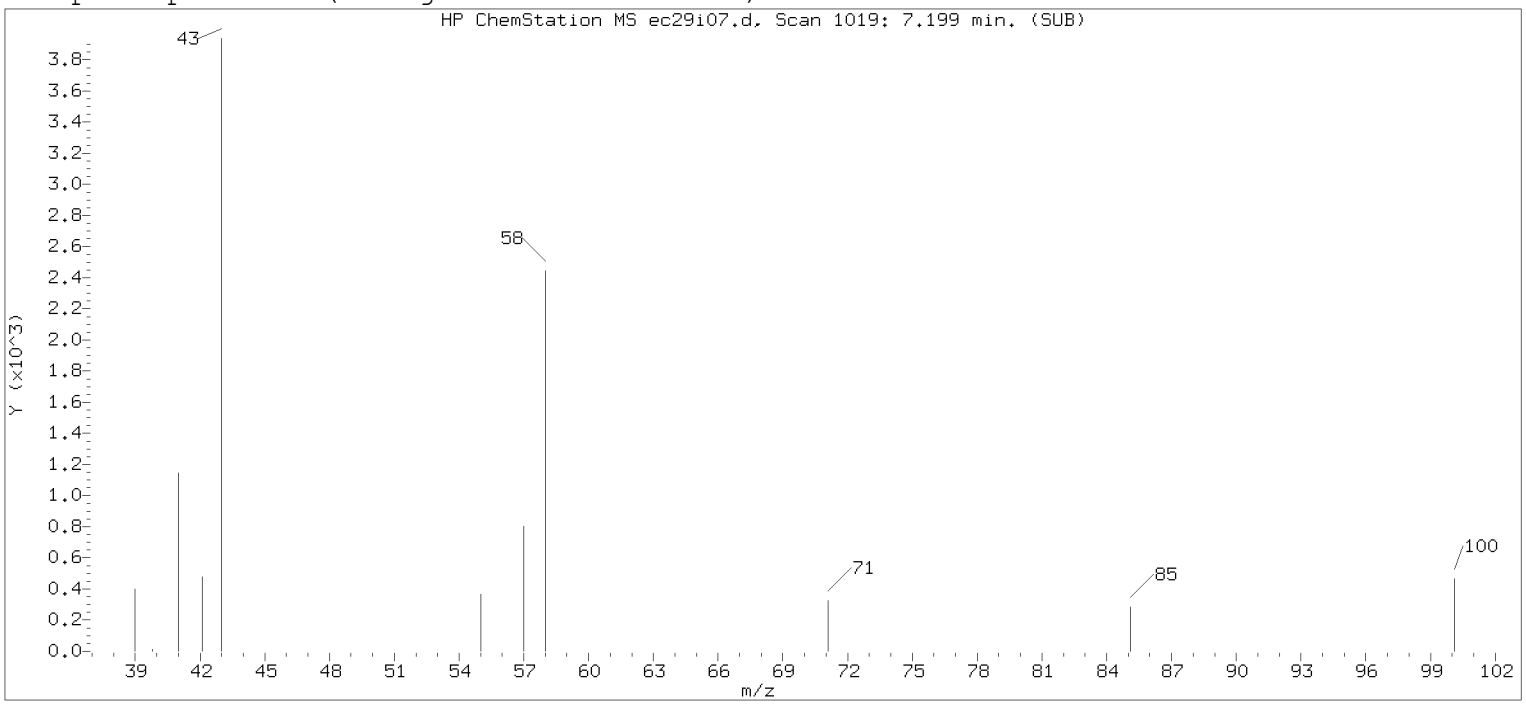
Compound Number : 97
Compound Name : 2-Hexanone
Scan Number : 1019
Retention Time (minutes): 7.199
Quant Ion : 43.00
Area (flag) : 8413M
On-Column Amount (ng) : 1.8525
Integration start scan : 1011 Integration stop scan: 1026
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

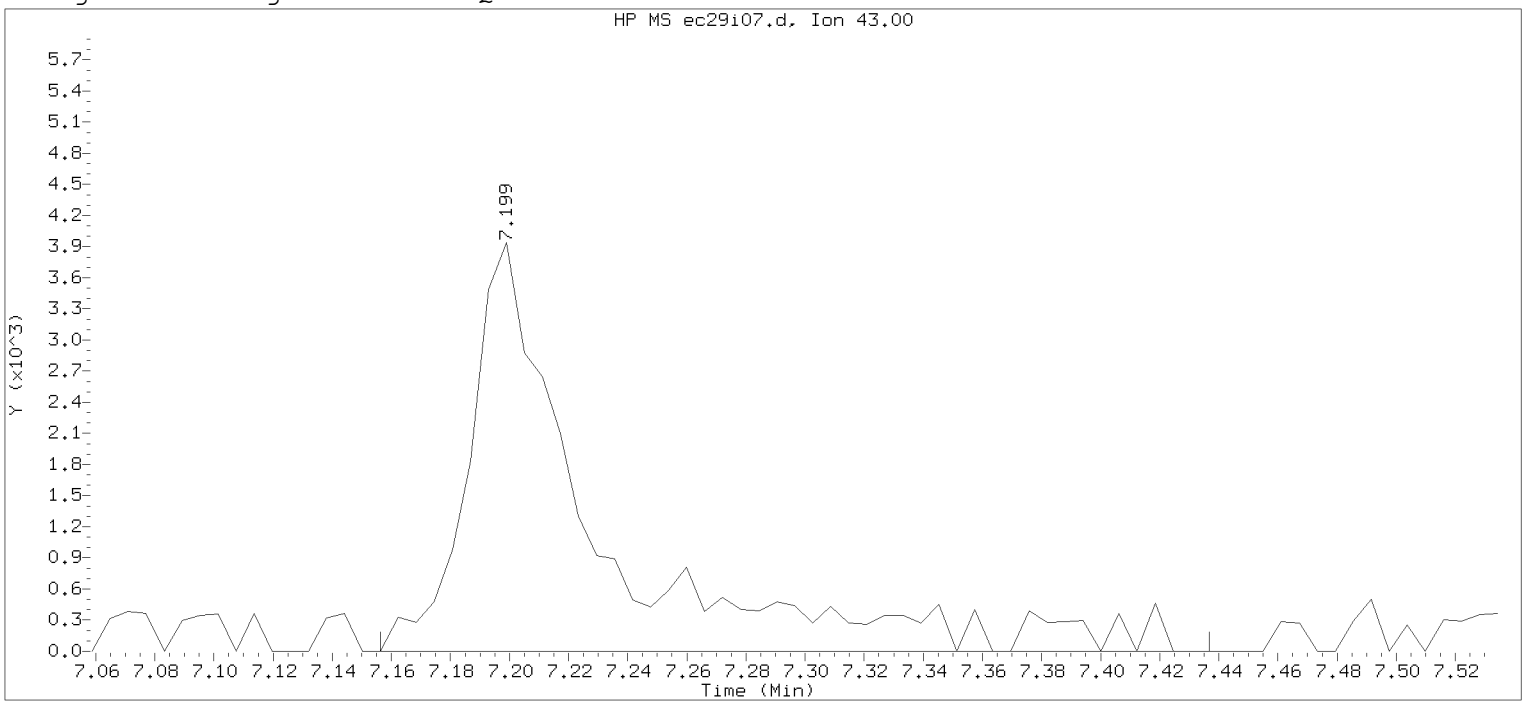
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

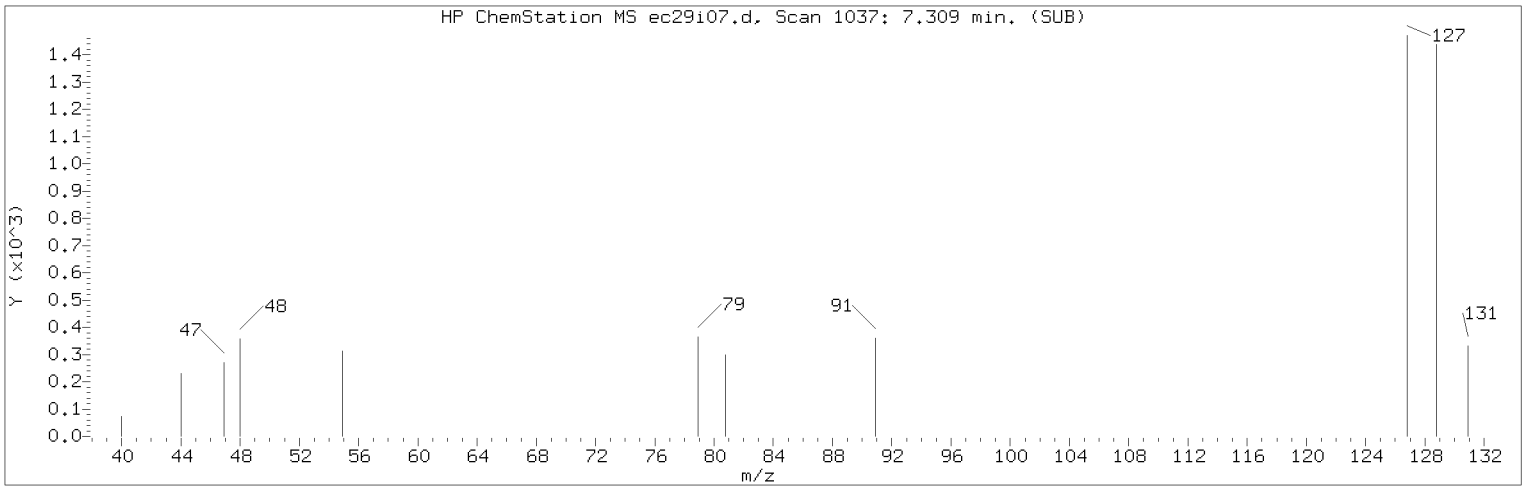
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

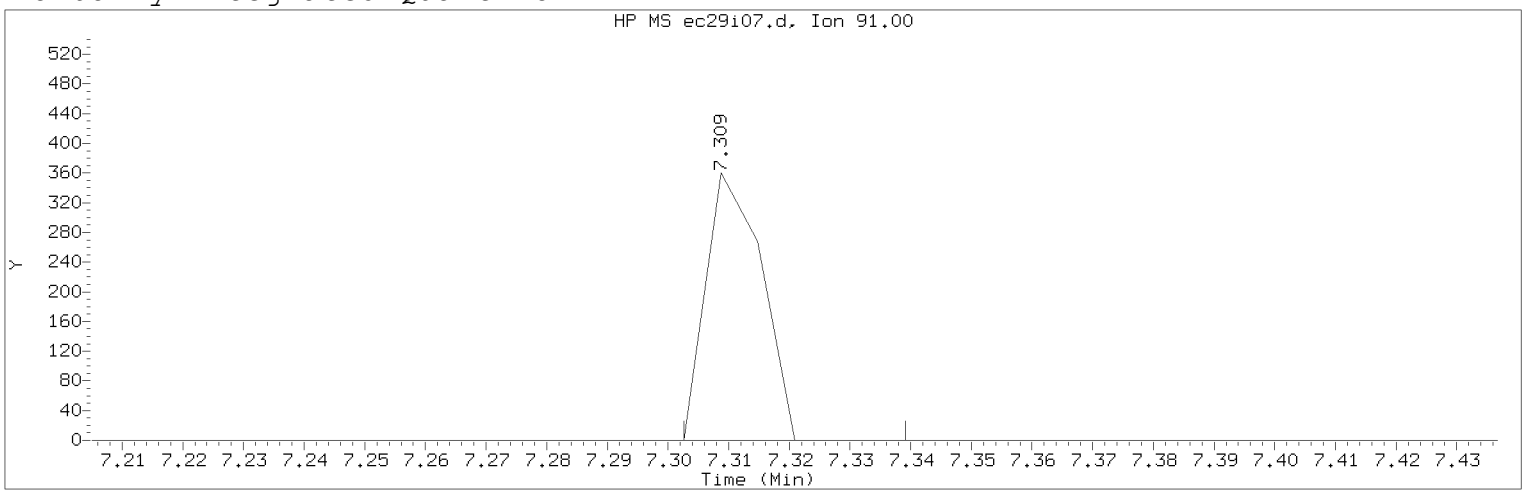
Compound Number : 97
Compound Name : 2-Hexanone
Scan Number : 1019
Retention Time (minutes): 7.199
Quant Ion : 43.00
Area : 11759
On-column Amount (ng) : 2.4599
Integration start scan : 1011 Integration stop scan: 1057
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray0259

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

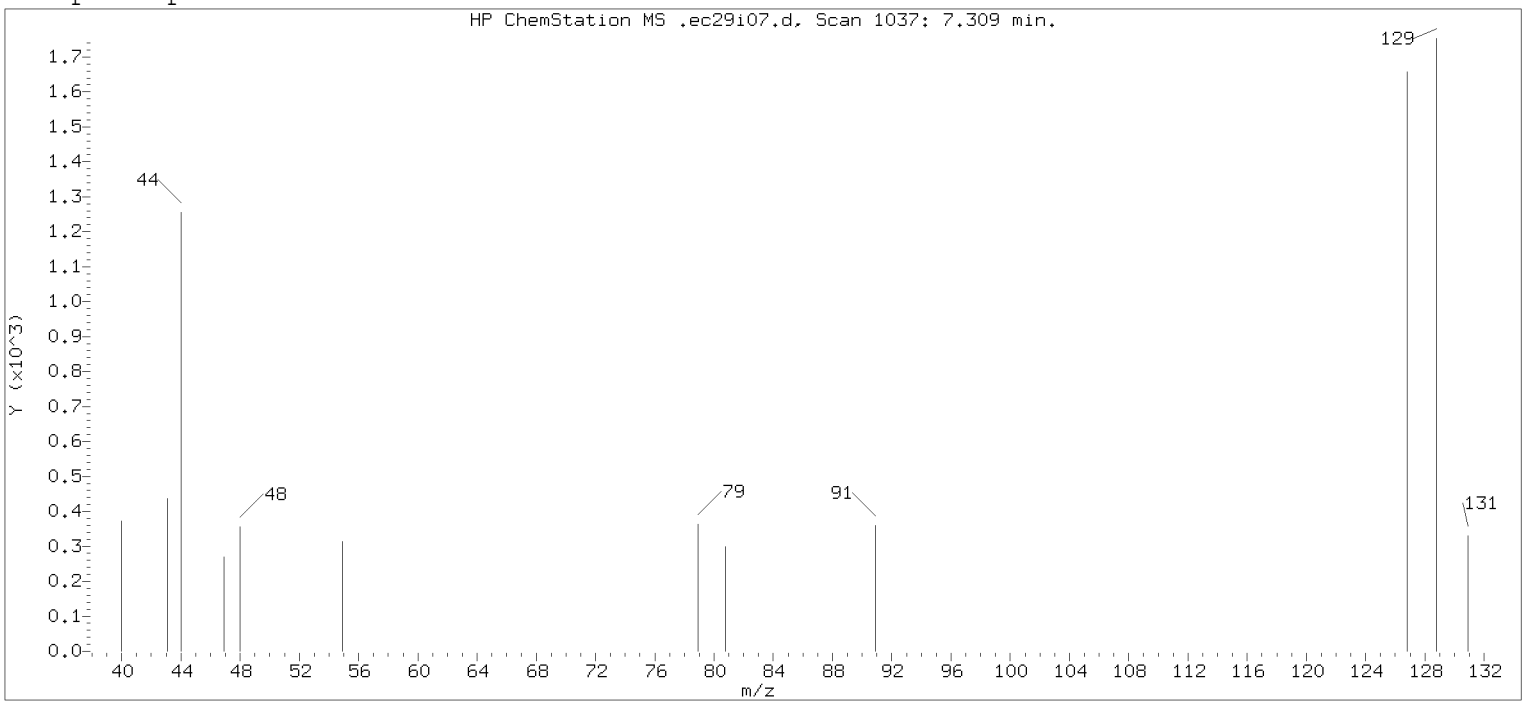
Compound Number : 102
Compound Name : 1-Chlorohexane
Scan Number : 1037
Retention Time (minutes): 7.309
Quant Ion : 91.00
Area (flag) : 229M
On-Column Amount (ng) : 0.6547
Integration start scan : 1035 Integration stop scan: 1041
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

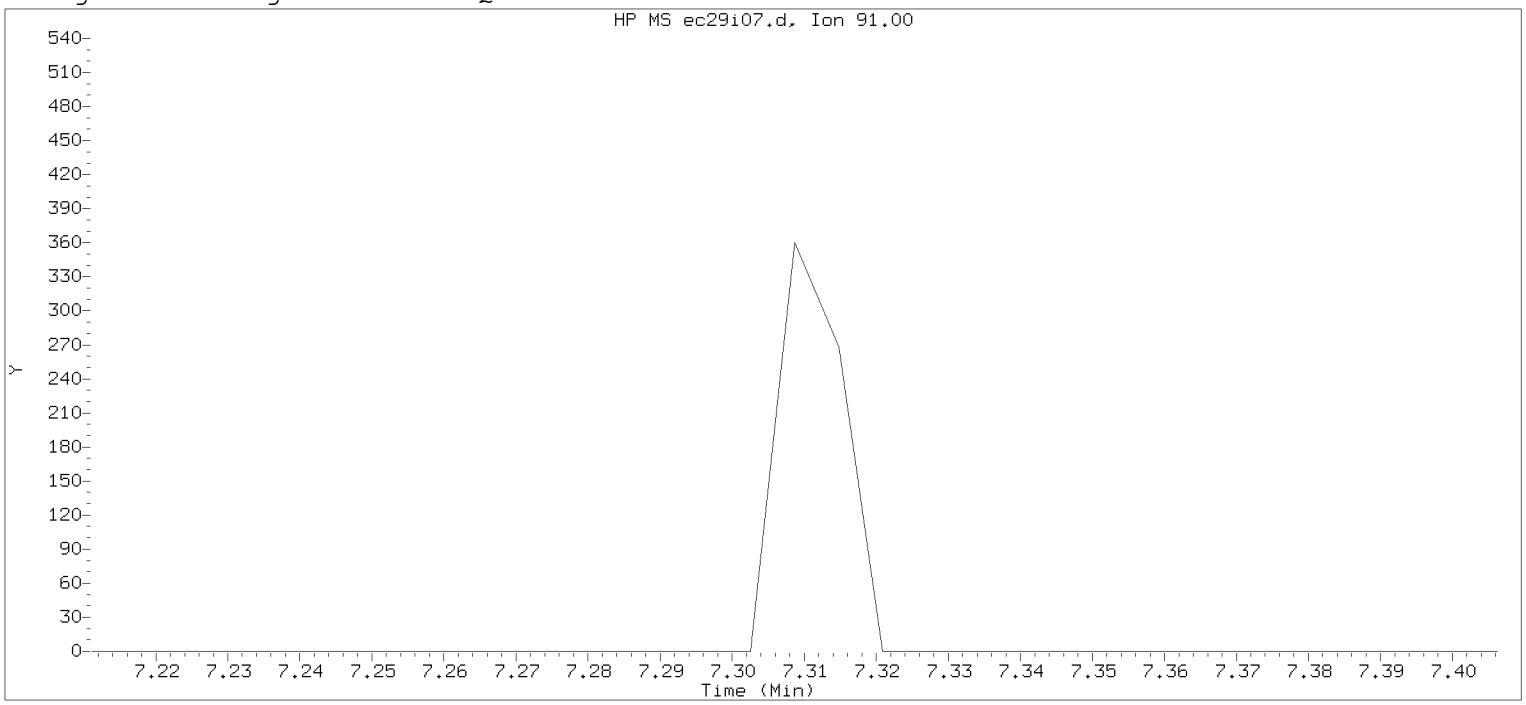
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

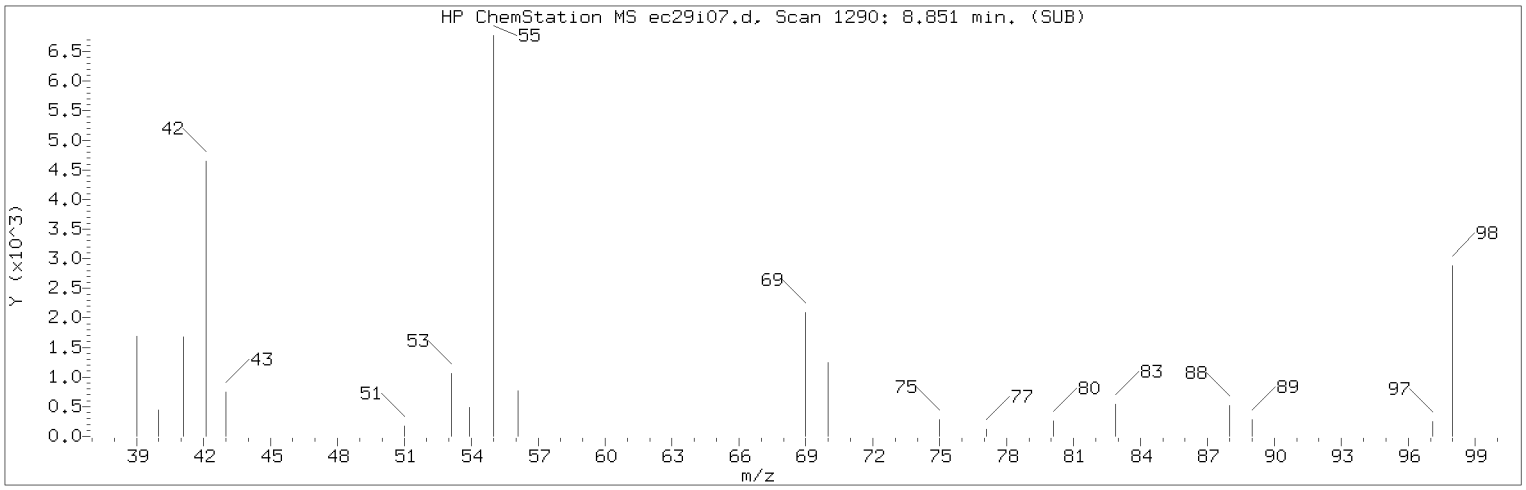
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

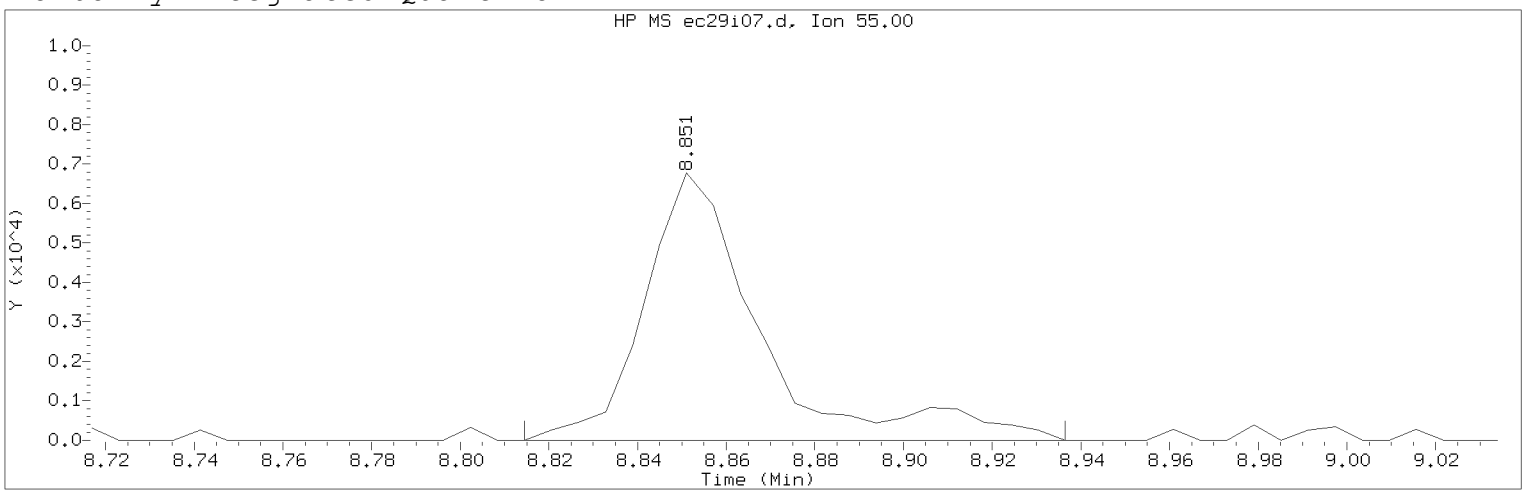
Compound Number : 102
Compound Name : 1-Chlorohexane
Expected RT (minutes) : 7.309
Quant Ion : 91.00

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

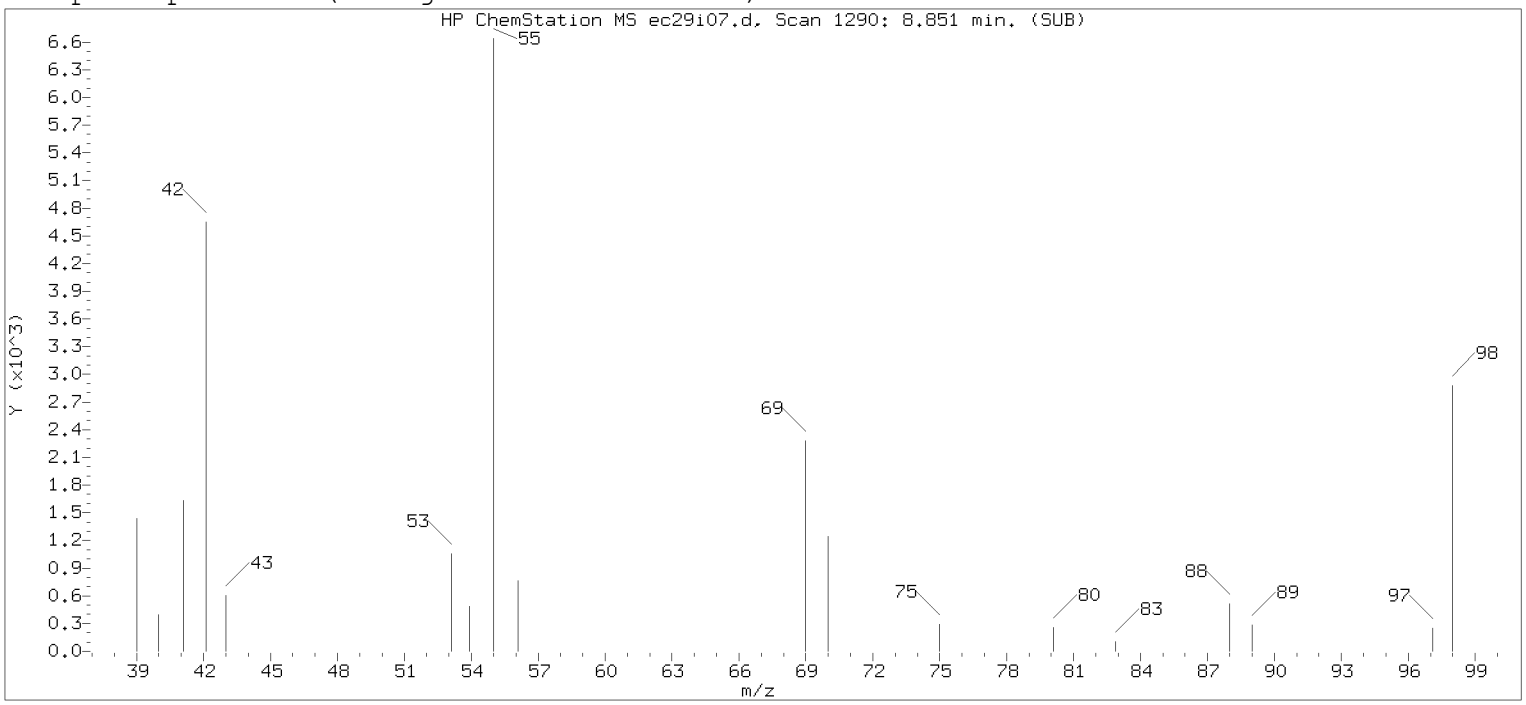
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1290
Retention Time (minutes): 8.851
Quant Ion : 55.00
Area (flag) : 12294M
On-Column Amount (ng) : 57.2828
Integration start scan : 1283 Integration stop scan: 1303
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

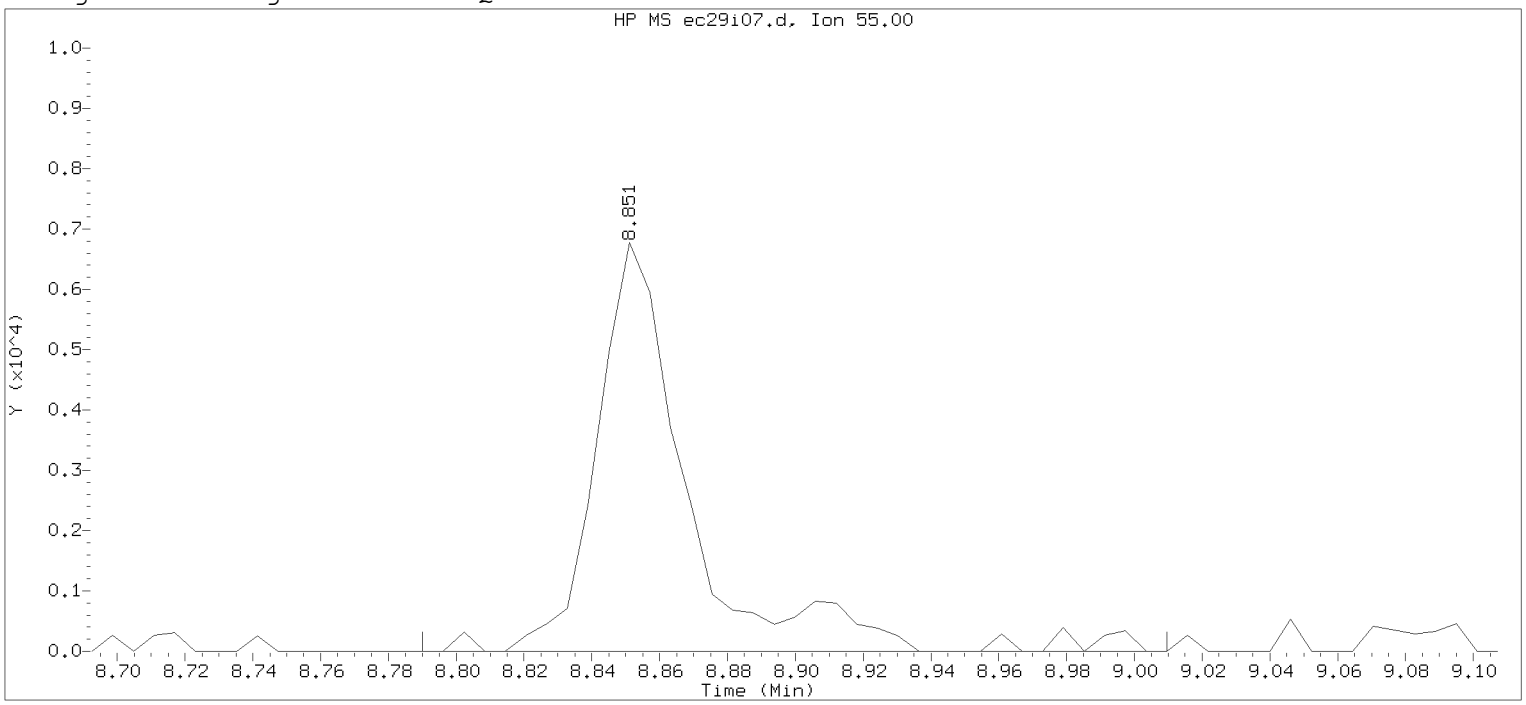
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

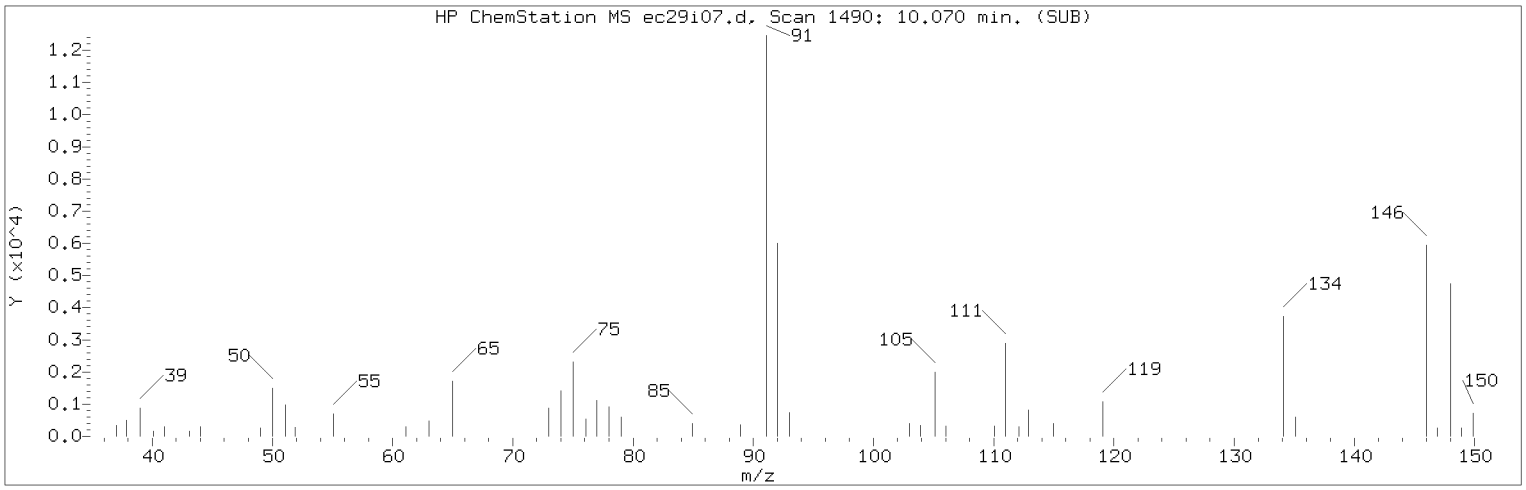
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

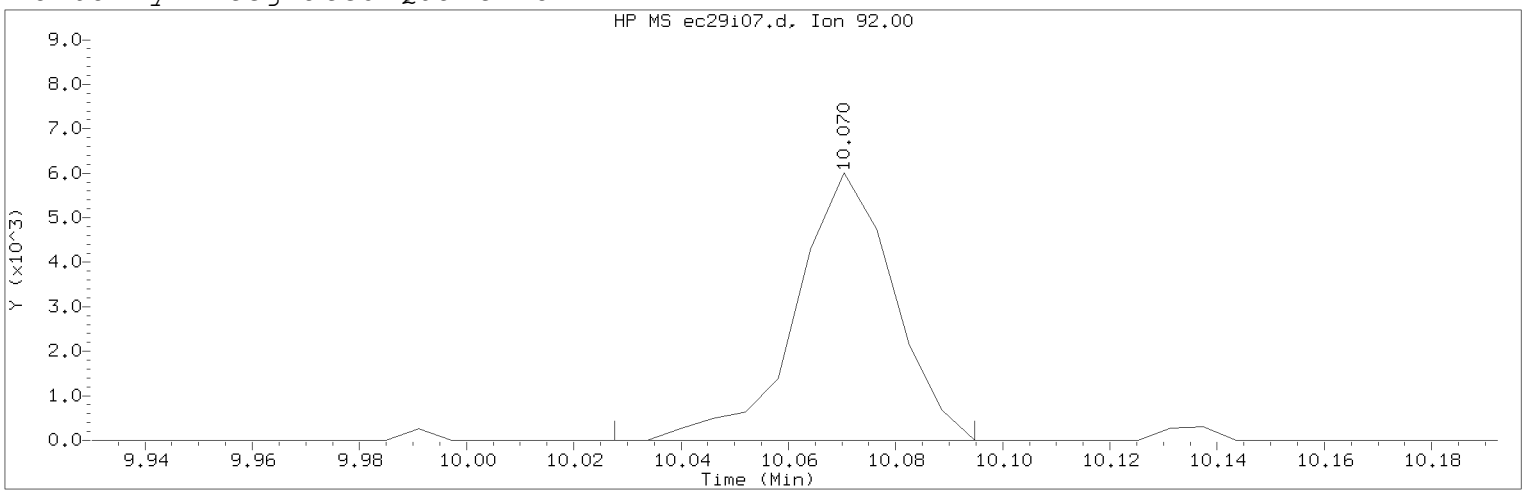
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1290
Retention Time (minutes): 8.851
Quant Ion : 55.00
Area : 12881
On-column Amount (ng) : 60.5737
Integration start scan : 1279 Integration stop scan: 1315
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: VSTD001 Lab Sample ID: VSTD001

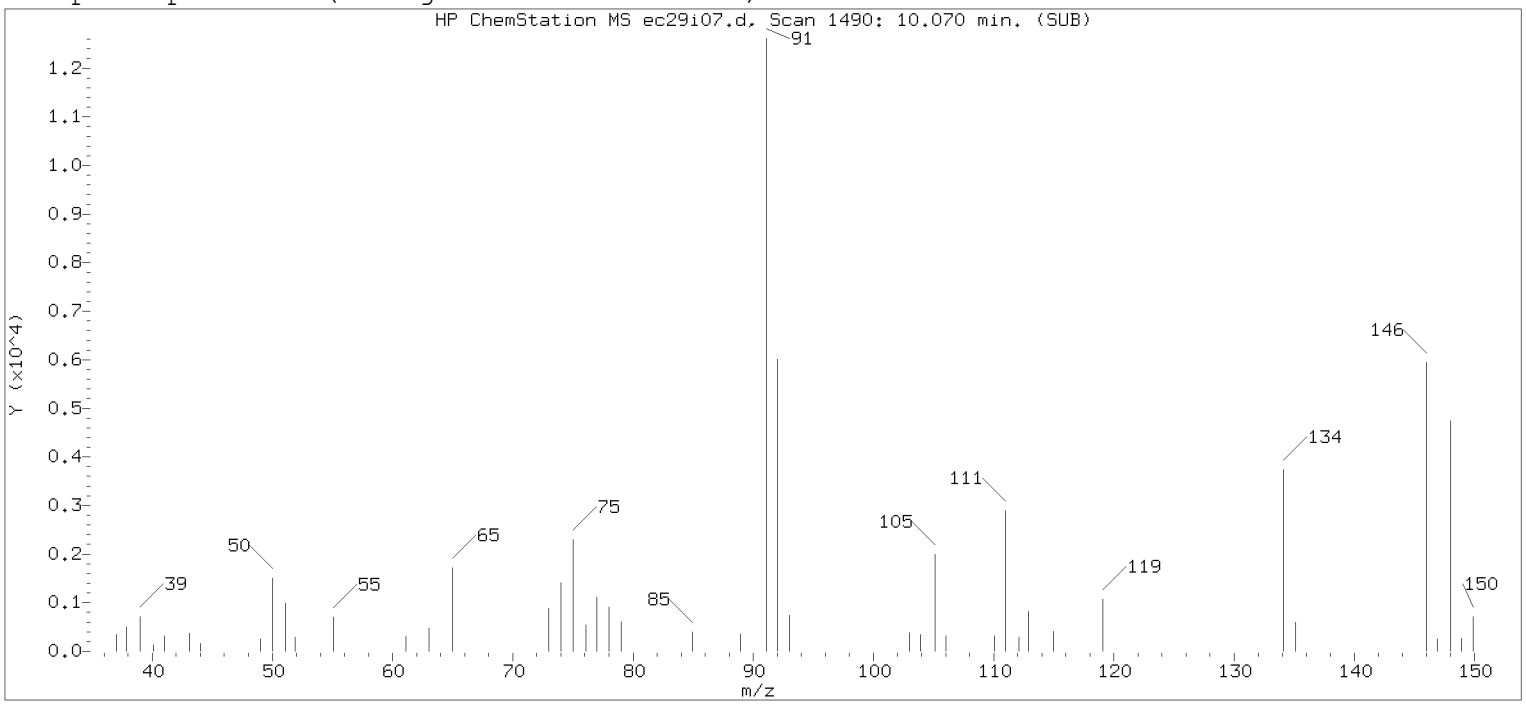
Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1490
Retention Time (minutes): 10.070
Quant Ion : 92.00
Area (flag) : 7543M
On-Column Amount (ng) : 0.6953
Integration start scan : 1482 Integration stop scan: 1493
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

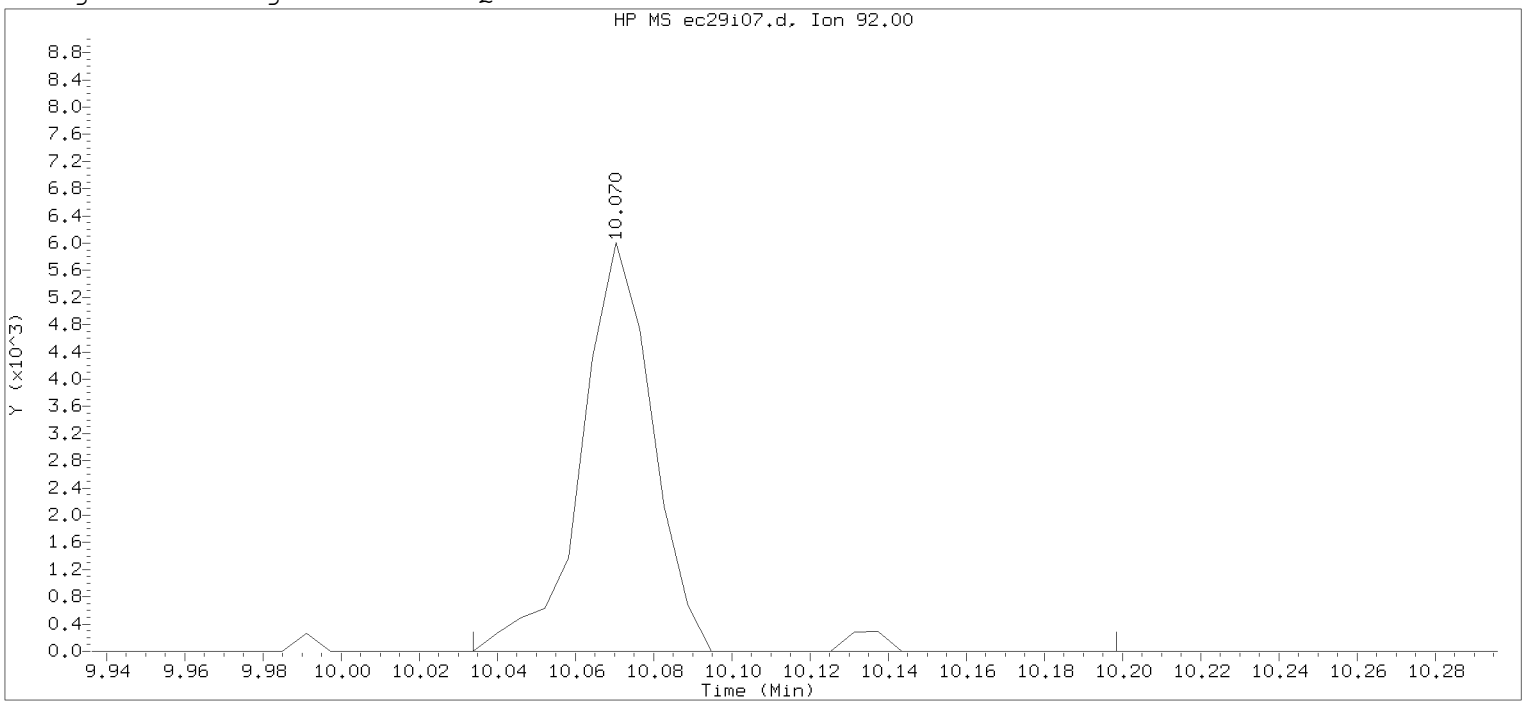
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



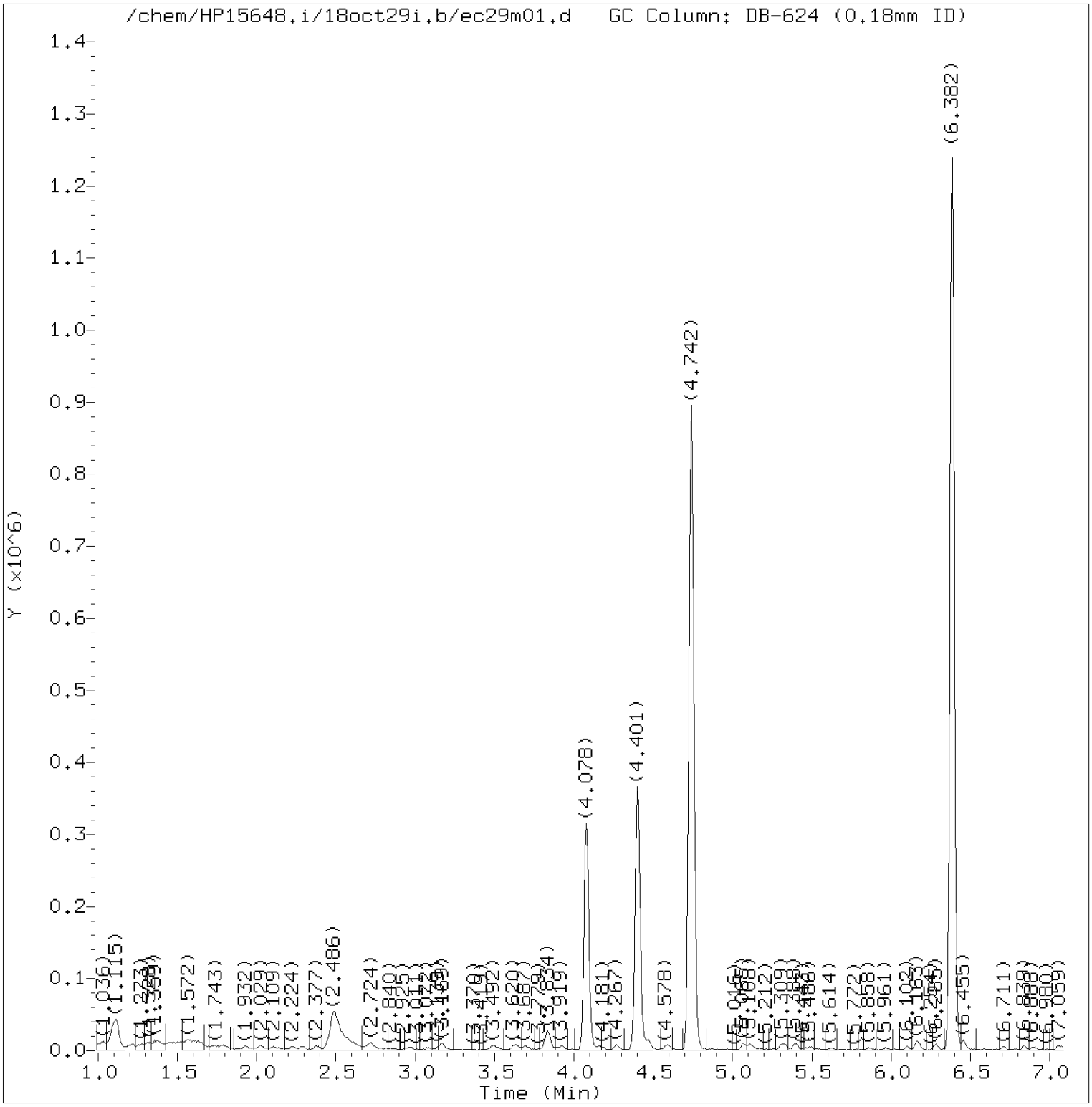
Data File: /chem/HP15648.i/18oct29i.b/ec29i07.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 22:41 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 22:57 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1490
Retention Time (minutes): 10.070
Quant Ion : 92.00
Area : 7754
On-column Amount (ng) : 0.7128
Integration start scan : 1483 Integration stop scan: 1510
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray



Total Ion Chromatogram (TIC)

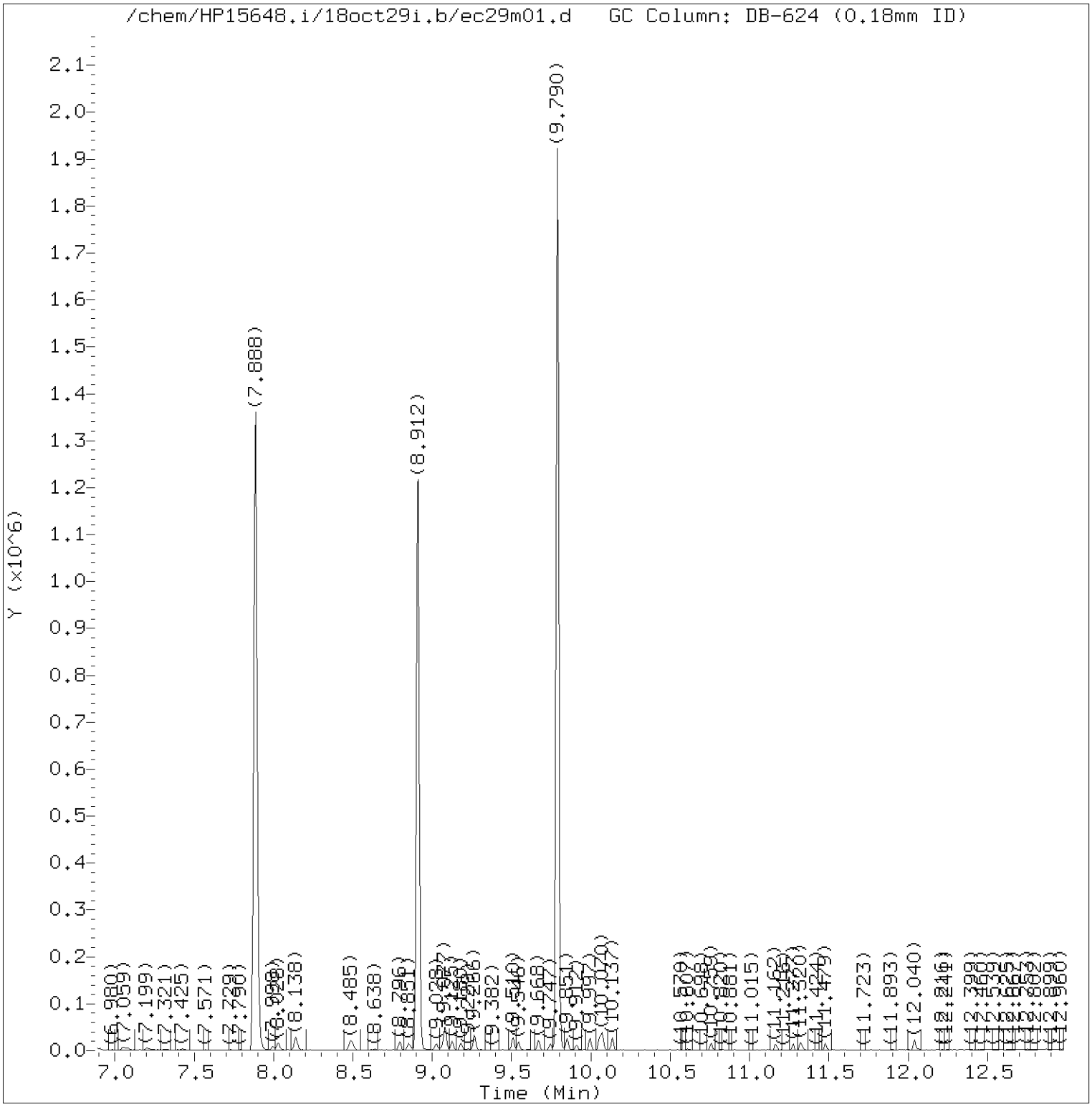
Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.212	85	3080	0.434
4) Chloromethane	(2)	1.316	50	3453	0.466
5) 1,3-Butadiene	(2)	1.359	39	3369M	0.571
6) Vinyl Chloride	(2)	1.383	62	2992	0.438
8) Bromomethane	(2)	1.566	94	2922	0.614
9) Chloroethane	(2)	1.603	64	2080M	0.530
10) Dichlorofluoromethane	(2)	1.731	67	4867M	0.518
12) Trichlorofluoromethane	(2)	1.785	101	3139	0.401
11) n-Pentane	(2)	1.792	43	4683	0.636
14) Ethyl ether	(2)	1.926	59	1762	0.447
15) Freon 123a	(2)	1.932	67	2494	0.478
16) Acrolein	(1)	2.017	56	5975M	4.544
17) 1,1-Dichloroethene	(2)	2.109	96	1335	0.355
18) Acetone	(1)	2.133	58	324	0.589
19) Freon 113	(2)	2.151	101	456M	0.126
21) 2-Propanol	(1)	2.218	45	3868	10.215
22) Methyl Iodide	(2)	2.218	142	2456	0.383
23) Carbon Disulfide	(2)	2.285	76	6330M	0.482
25) Allyl Chloride	(2)	2.371	41	5383	0.648
27) Methyl Acetate	(2)	2.395	43	5084	1.145
28) Methylene Chloride	(2)	2.474	84	2624	0.595
29)*t-Butyl alcohol-d10	(1)	2.493	65	170802M	250.000
30) t-Butyl alcohol	(1)	2.572	59	5857M	9.046
31) Acrylonitrile	(2)	2.688	53	662	0.279
33) Methyl Tertiary Butyl Ether	(2)	2.712	73	6453M	0.484
32) trans-1,2-Dichloroethene	(2)	2.718	96	1659	0.397
34) n-Hexane	(2)	2.950	57	2409M	0.333
36) 1,1-Dichloroethane	(2)	3.090	63	3351	0.407
38) di-Isopropyl ether	(2)	3.163	45	6964	0.454
39) 2-Chloro-1,3-butadiene	(2)	3.163	53	3556	0.456
40) Ethyl t-butyl ether	(2)	3.492	59	7248	0.506
42) cis-1,2-Dichloroethene	(2)	3.620	96	2203	0.476
45) 2,2-Dichloropropane	(2)	3.620	77	3352M	0.482
44) 2-Butanone	(2)	3.645	43	4919	1.640
47) Propionitrile	(1)	3.687	54	8220M	8.960
48) Methacrylonitrile	(2)	3.834	67	11723	4.812
49) Bromochloromethane	(2)	3.846	128	956	0.427
50) Tetrahydrofuran	(1)	3.907	71	476	0.612

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

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
51) Chloroform	(2)	3.931	83	3655	0.504
52)$Dibromofluoromethane	(2)	4.078	113	214258	51.296
53) 1,1,1-Trichloroethane	(2)	4.114	97	3369	0.508
54) Cyclohexane	(2)	4.163	56	2981	0.360
55) 1,1-Dichloropropene	(2)	4.261	75	2603	0.403
56) Carbon Tetrachloride	(2)	4.279	117	2210	0.404
58) Isobutyl Alcohol	(1)	4.389	41	7792M	34.182
57)$1,2-Dichloroethane-d4	(2)	4.401	102	58117	51.169
60) Benzene	(2)	4.468	78	8366	0.446
61) 1,2-Dichloroethane	(2)	4.480	62	3750	0.629
65) t-Amyl methyl ether	(2)	4.590	73	6816	0.498
66)*Fluorobenzene	(2)	4.742	96	953523	50.000
67) n-Heptane	(2)	4.748	43	4735M	2.047
69) n-Butanol	(1)	5.065	56	9077M	47.979
71) Trichloroethene	(2)	5.114	95	2139	0.470
73) Methylcyclohexane	(2)	5.315	83	3304	0.369
74) 1,2-Dichloropropane	(2)	5.333	63	2235	0.445
75) Dibromomethane	(2)	5.455	93	1193	0.462
77) Methyl Methacrylate	(2)	5.486	69	2007	0.483
76) 1,4-Dioxane	(1)	5.492	88	637	14.041
79) Bromodichloromethane	(2)	5.626	83	2341	0.421
80) 2-Nitropropane	(2)	5.858	41	2540M	1.621
81) 2-Chloroethyl Vinyl Ether	(2)	5.961	63	1262	0.360
82) cis-1,3-Dichloropropene	(2)	6.102	75	3469	0.451
43) 1,2-Dichloroethene (Total)	(2)		96	3862	0.873
83) 4-Methyl-2-pentanone	(2)	6.278	43	7242	1.148
84)$Toluene-d8	(3)	6.382	98	962016	49.747
89) Toluene	(3)	6.455	92	5088	0.433
90) trans-1,3-Dichloropropene	(3)	6.705	75	3315	0.460
92) Ethyl Methacrylate	(3)	6.833	69	3826	0.501
93) 1,1,2-Trichloroethane	(3)	6.906	97	1868	0.483
94) Tetrachloroethene	(3)	7.047	166	1798	0.410
95) 1,3-Dichloropropane	(3)	7.077	76	3177	0.440
97) 2-Hexanone	(3)	7.205	43	4616M	1.005
98) Dibromochloromethane	(3)	7.315	129	1689	0.412
100) 1,2-Dibromoethane	(3)	7.425	107	1576	0.393
101)*Chlorobenzene-d5	(3)	7.888	117	689626	50.000
103) Chlorobenzene	(3)	7.912	112	5405	0.429

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

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
104) 1,1,1,2-Tetrachloroethane	(3)	7.998	131	1943	0.468
105) Ethylbenzene	(3)	8.034	91	9644	0.417
107) m+p-Xylene	(3)	8.138	106	6817	0.771
108) o-Xylene	(3)	8.485	106	3617	0.418
110) Styrene	(3)	8.498	104	5977	0.413
111) Bromoform	(3)	8.638	173	1134	0.424
112) Isopropylbenzene	(3)	8.796	105	9437	0.414
113) Cyclohexanone	(1)	8.851	55	6360M	27.823
115)$4-Bromofluorobenzene	(3)	8.912	95	363315	50.476
116) Bromobenzene	(4)	9.028	156	2305	0.469
117) 1,1,2,2-Tetrachloroethane	(4)	9.034	83	3001	0.481
118) 1,2,3-Trichloropropane	(4)	9.058	110	755	0.429
119) trans-1,4-Dichloro-2-butene	(4)	9.077	53	8376	4.159
120) n-Propylbenzene	(4)	9.125	91	11857	0.433
121) 2-Chlorotoluene	(4)	9.180	126	2095	0.405
123) 1,3,5-Trimethylbenzene	(4)	9.266	105	8878	0.449
122) 4-Chlorotoluene	(4)	9.266	126	1745	0.324
125) tert-Butylbenzene	(4)	9.510	134	1972	0.466
126) Pentachloroethane	(4)	9.522	167	1366	0.433
127) 1,2,4-Trimethylbenzene	(4)	9.546	105	8670	0.425
128) sec-Butylbenzene	(4)	9.668	105	11435	0.449
130) 1,3-Dichlorobenzene	(4)	9.747	146	4705	0.477
131) p-Isopropyltoluene	(4)	9.778	119	10594	0.473
132)*1,4-Dichlorobenzene-d4	(4)	9.790	152	364537	50.000
134) 1,4-Dichlorobenzene	(4)	9.808	146	5068	0.509
135) 1,2,3-Trimethylbenzene	(4)	9.851	105	10564	0.493
136) Benzyl Chloride	(4)	9.912	91	6944	0.474
137) 1,3-Diethylbenzene	(4)	9.997	119	6663	0.475
138) 1,4-Diethylbenzene	(4)	10.052	119	7359	0.493
140) n-Butylbenzene	(4)	10.070	92	5012M	0.454
139) 1,2-Dichlorobenzene	(4)	10.076	146	4031	0.430
91) 1,3-Dichloropropene (total)	(3)		100	6784	0.911
141) 1,2-Diethylbenzene	(4)	10.137	119	6043	0.522
143) 1,2-Dibromo-3-chloropropane	(4)	10.607	75	627	0.435
145) 1,3,5-Trichlorobenzene	(4)	10.759	180	3648	0.502
147) 1,2,4-Trichlorobenzene	(4)	11.168	180	3435	0.533
148) Hexachlorobutadiene	(4)	11.277	225	2060	0.708
149) Naphthalene	(4)	11.320	128	11324	0.537

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Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

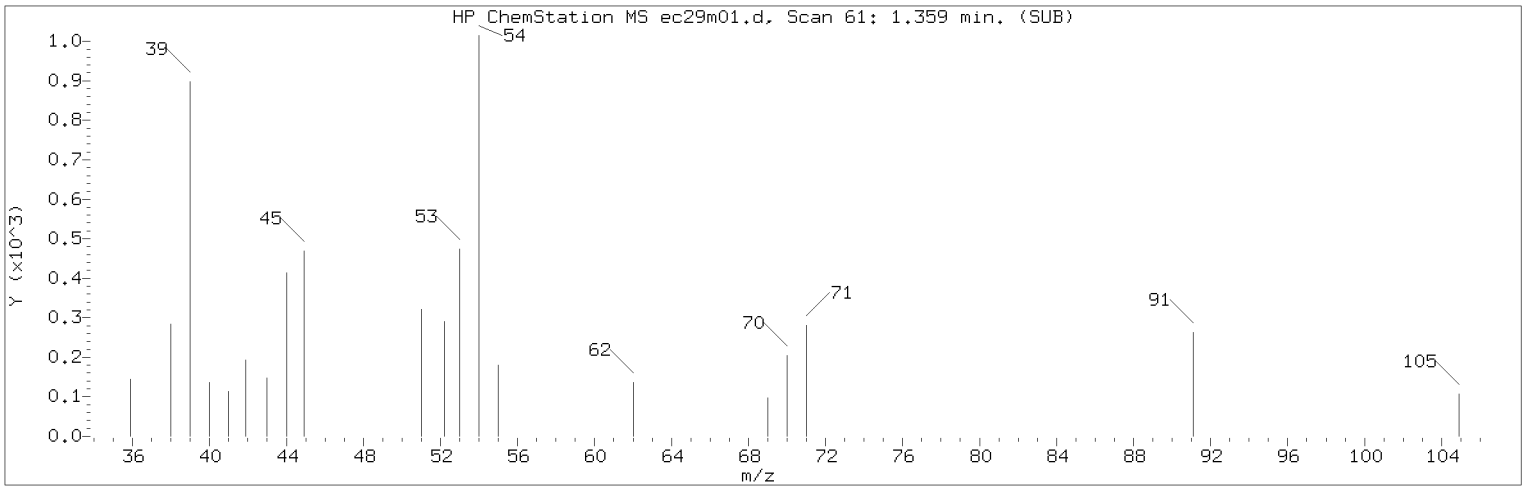
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

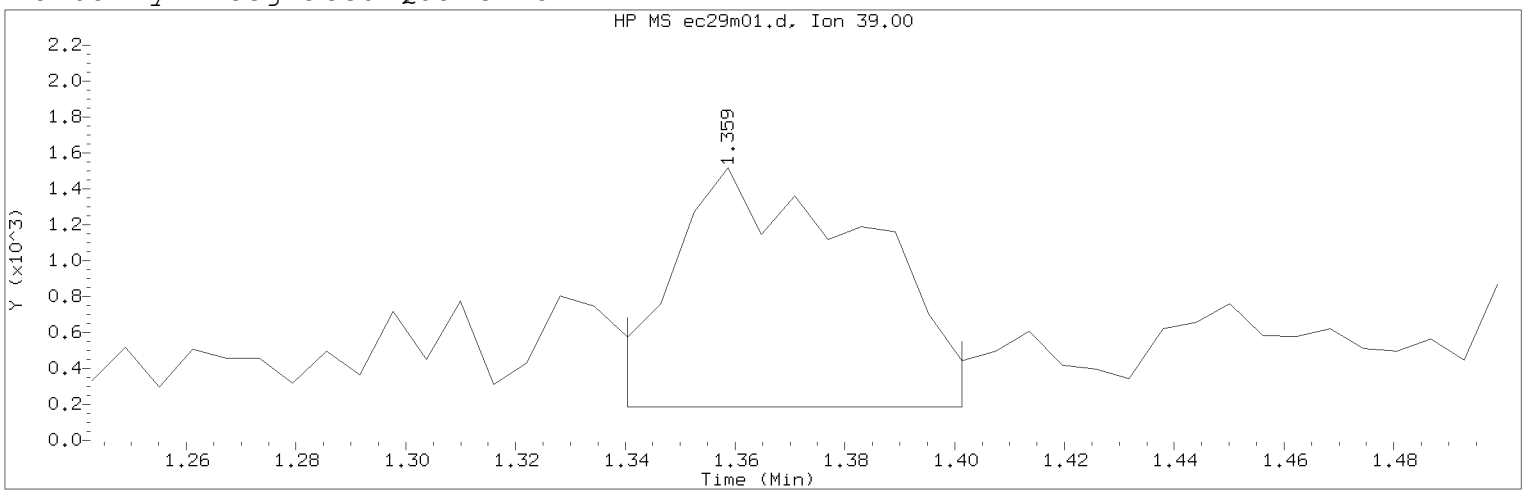
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
150) 1,2,3-Trichlorobenzene	(4)	11.479	180	3500	0.583
109) Xylene (Total)	(3)		106	10434	1.189
151) 2-Methylnaphthalene	(4)	12.040	142	8727	0.667
142) Diethylbenzene (total)	(4)		100	20065	1.491

Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

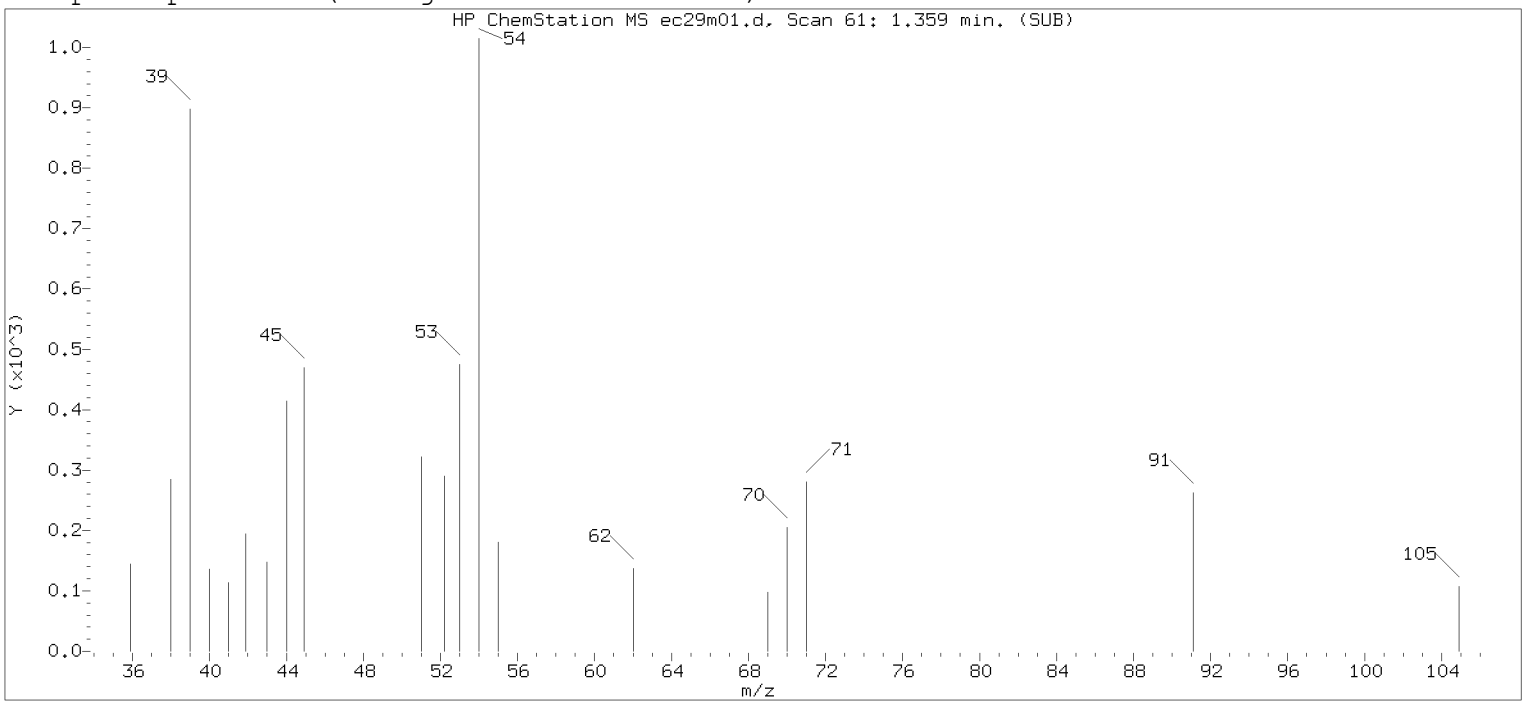
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 61
Retention Time (minutes): 1.359
Quant Ion : 39.00
Area (flag) : 3369M
On-Column Amount (ng) : 0.5713
Integration start scan : 57 Integration stop scan: 67
Y at integration start : 185 Y at integration end: 185

Reason for manual integration: improper integration

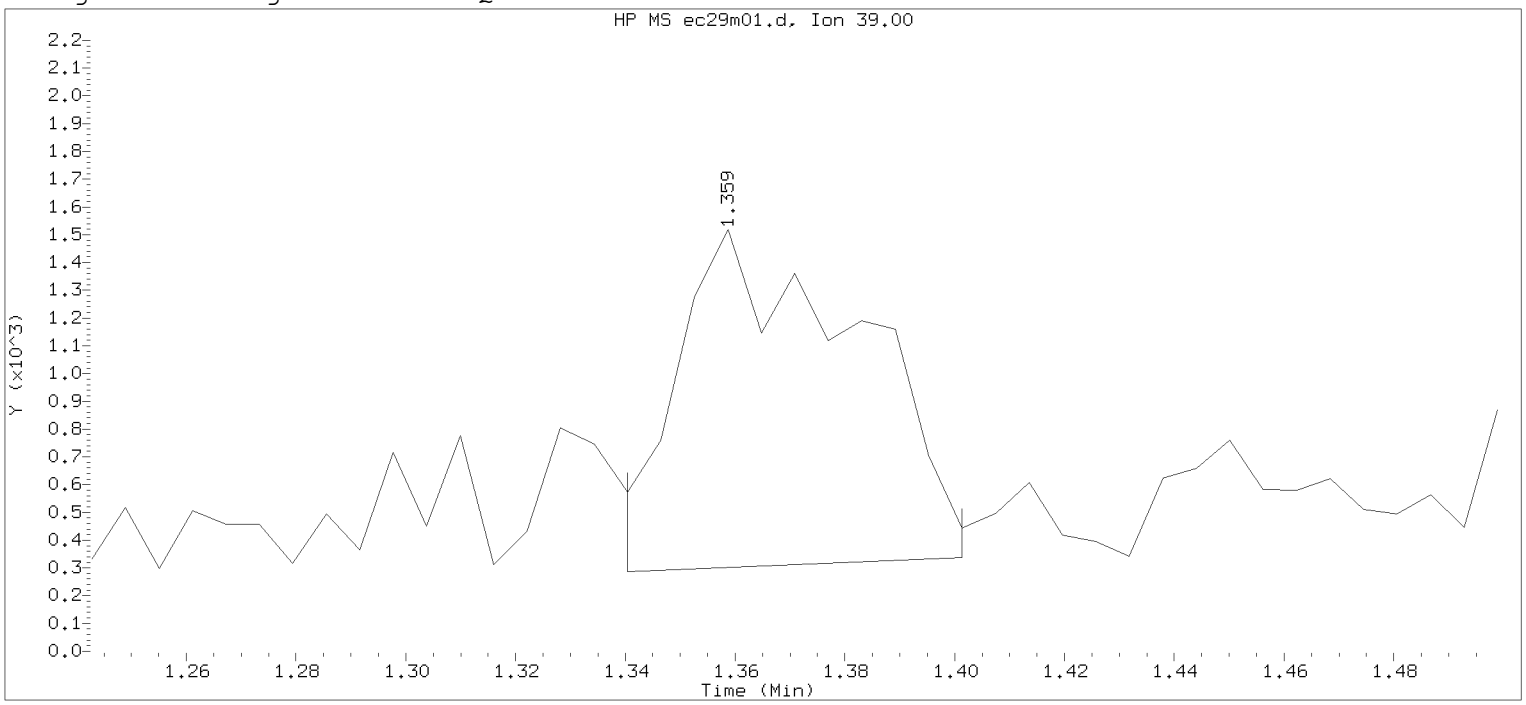
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

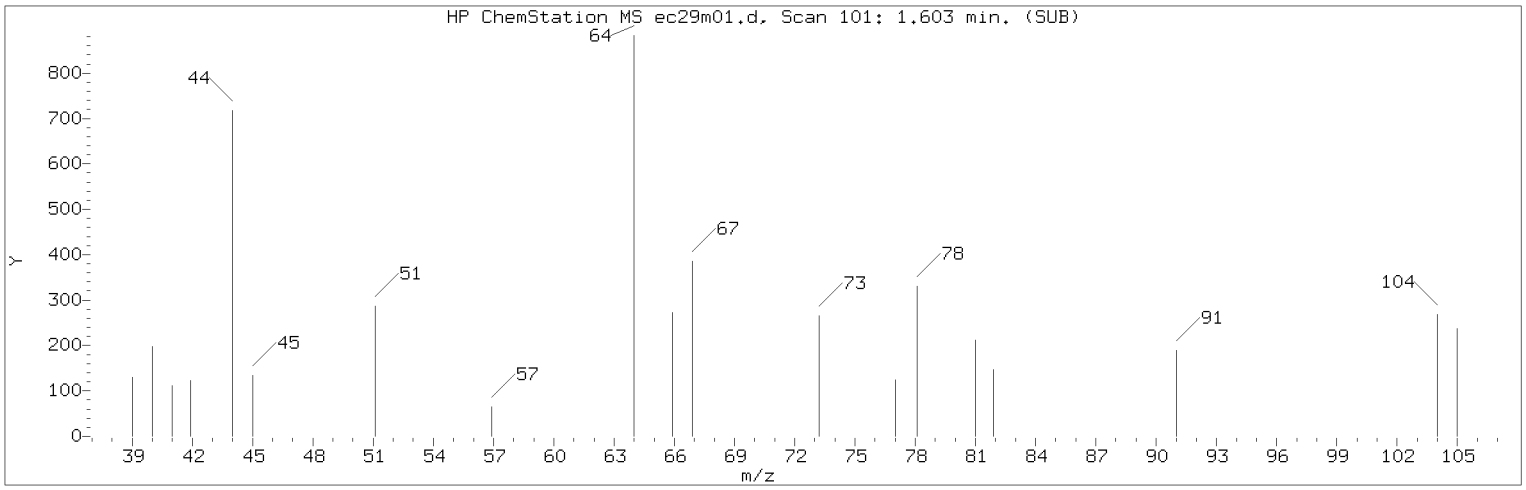
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

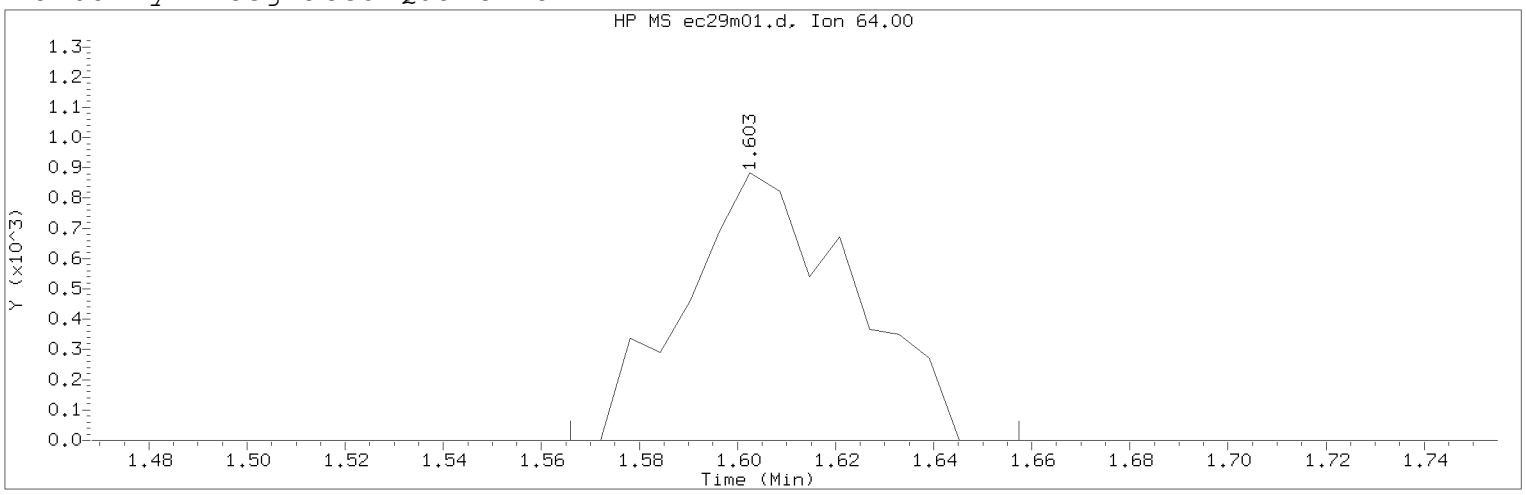
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 61
Retention Time (minutes): 1.359
Quant Ion : 39.00
Area : 2784
On-column Amount (ng) : 0.5071
Integration start scan : 57 Integration stop scan: 67
Y at integration start : 287 Y at integration end: 338

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

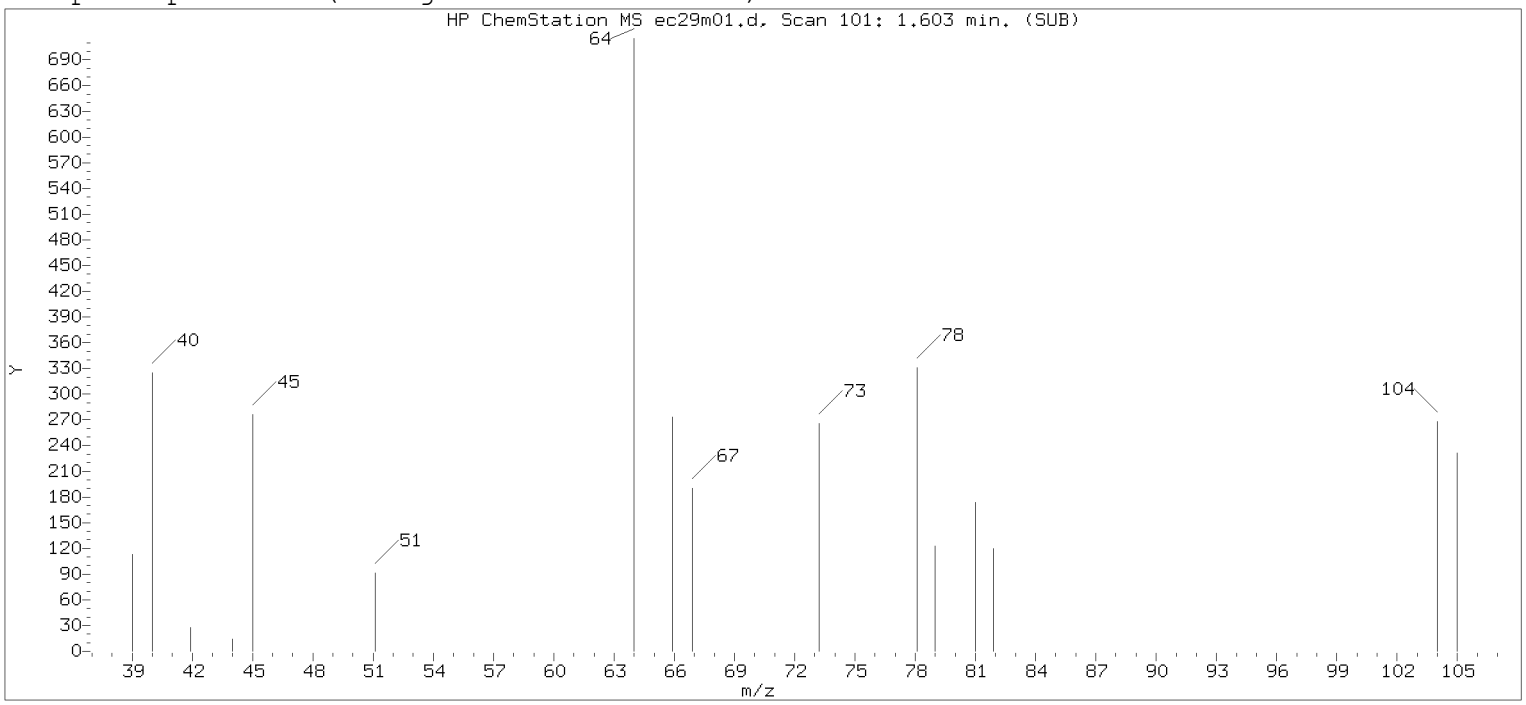
Compound Number : 9
Compound Name : Chloroethane
Scan Number : 101
Retention Time (minutes): 1.603
Quant Ion : 64.00
Area (flag) : 2080M
On-Column Amount (ng) : 0.5305
Integration start scan : 94 Integration stop scan: 109
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

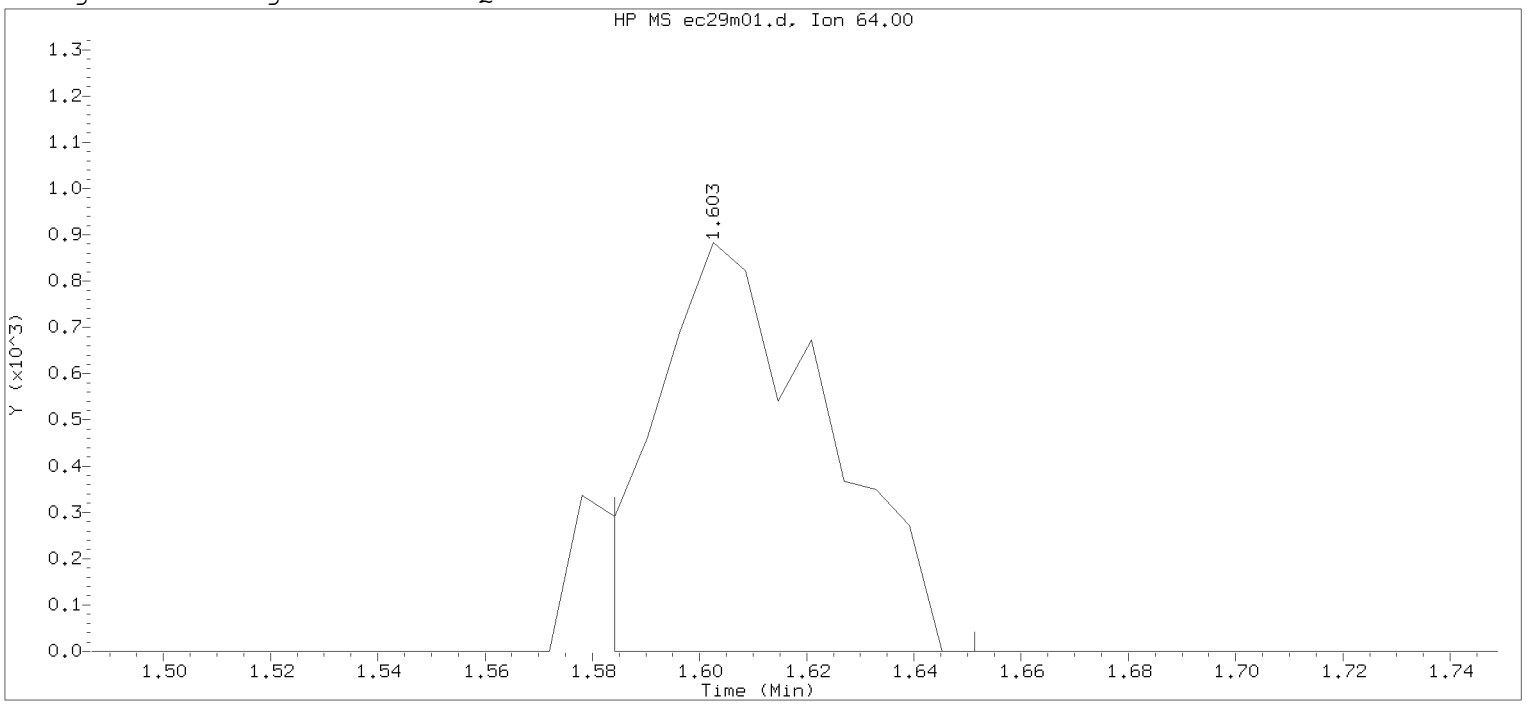
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

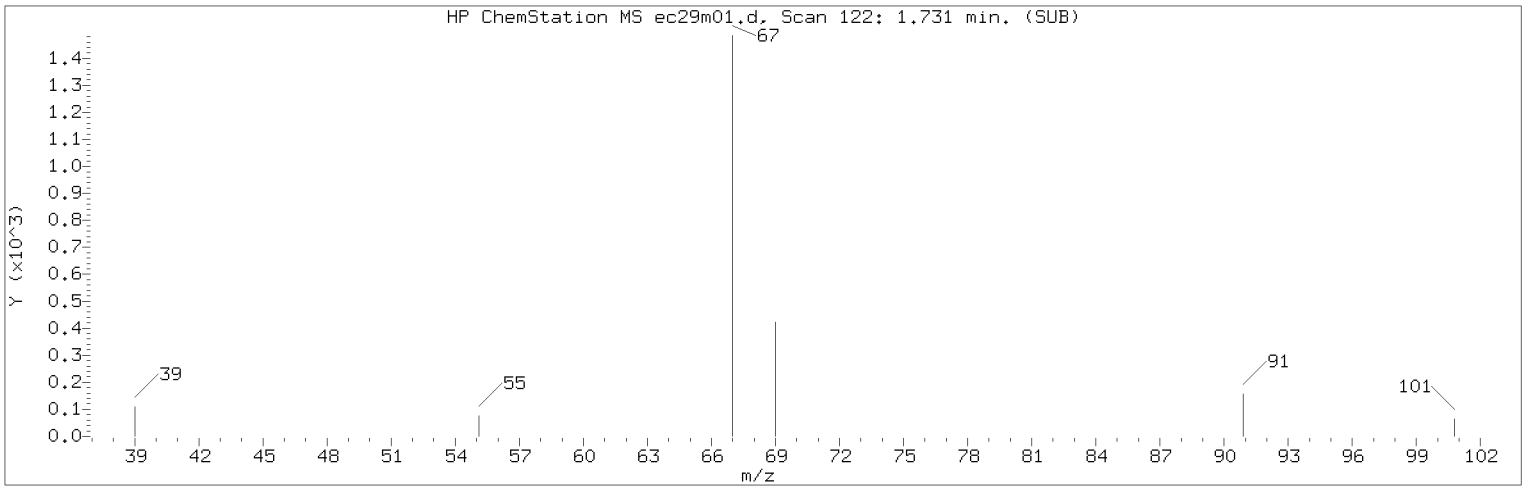
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

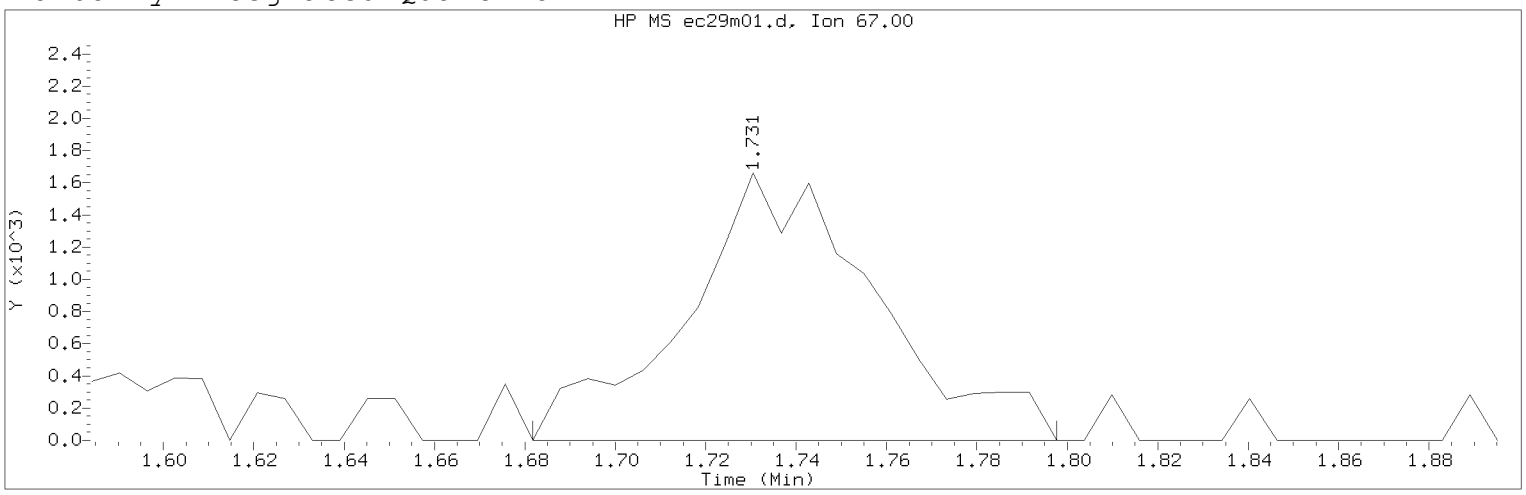
Compound Number	: 9		
Compound Name	: Chloroethane		
Scan Number	: 101		
Retention Time (minutes)	: 1.603		
Quant Ion	: 64.00		
Area	: 1904		
On-column Amount (ng)	: 0.4911		
Integration start scan	: 97	Integration stop scan:	108
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

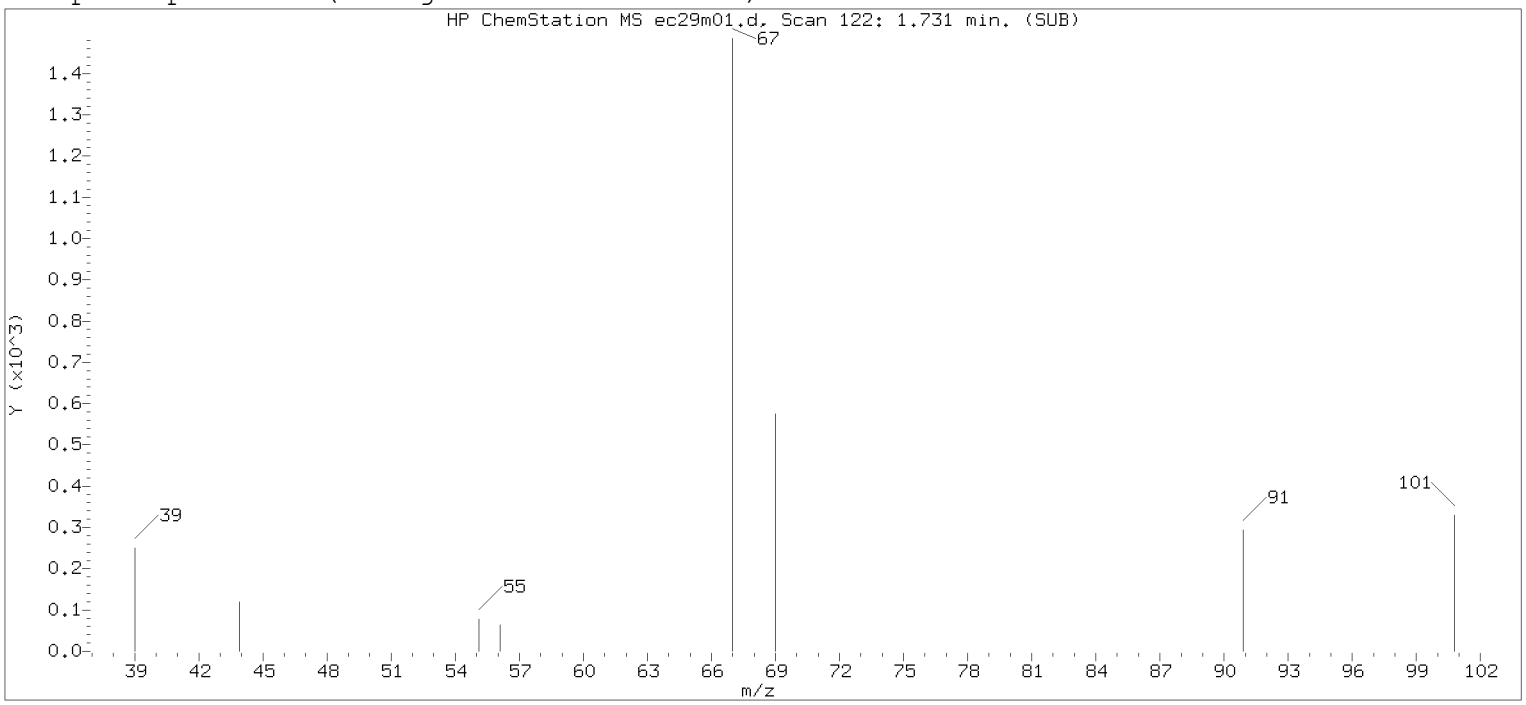
Compound Number : 10
Compound Name : Dichlorofluoromethane
Scan Number : 122
Retention Time (minutes): 1.731
Quant Ion : 67.00
Area (flag) : 4867M
On-Column Amount (ng) : 0.5176
Integration start scan : 113 Integration stop scan: 132
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

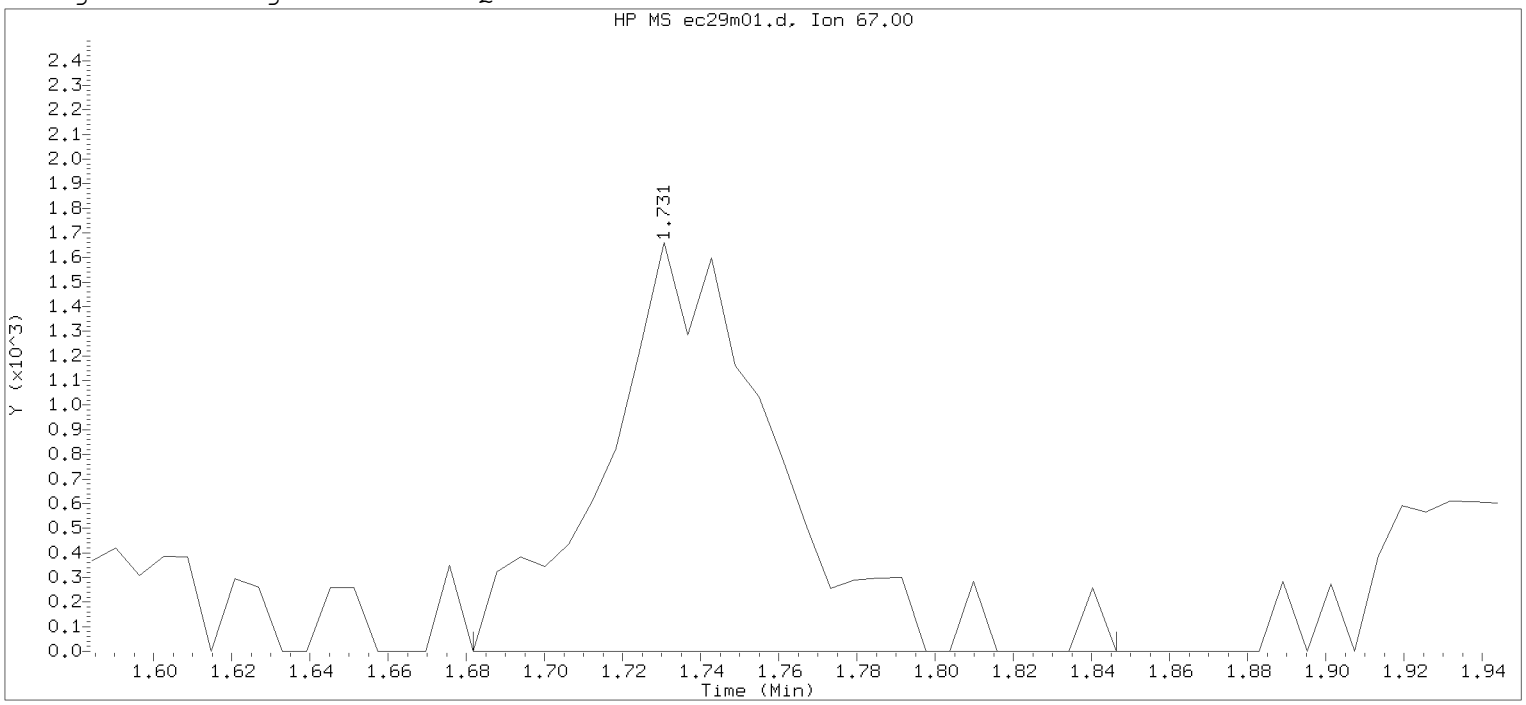
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

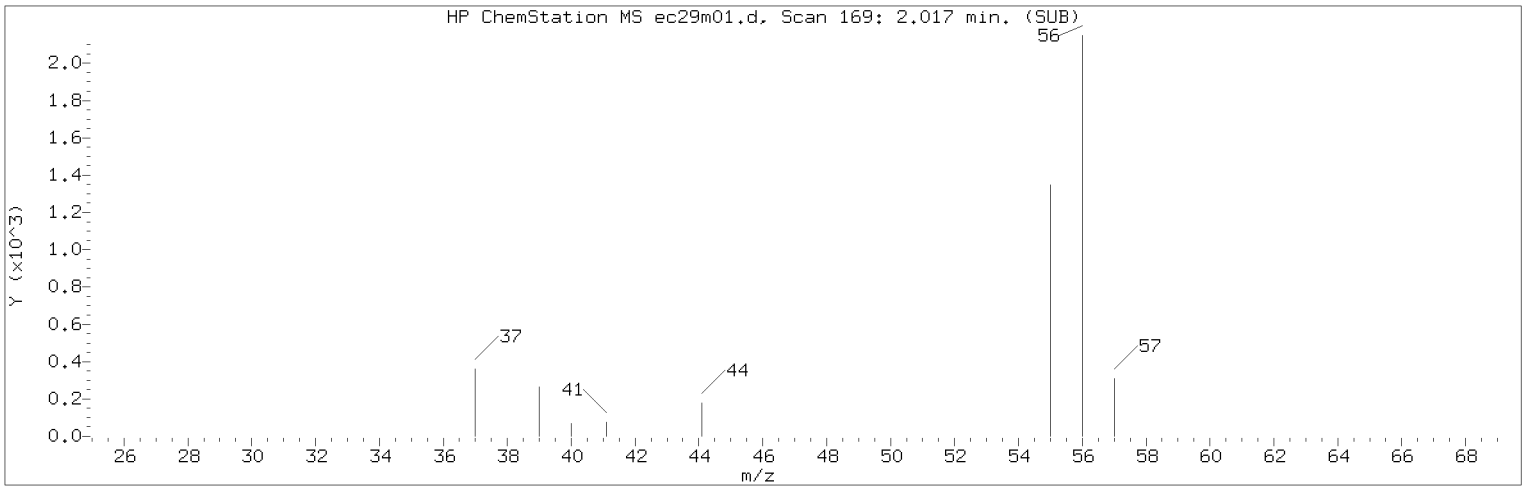
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

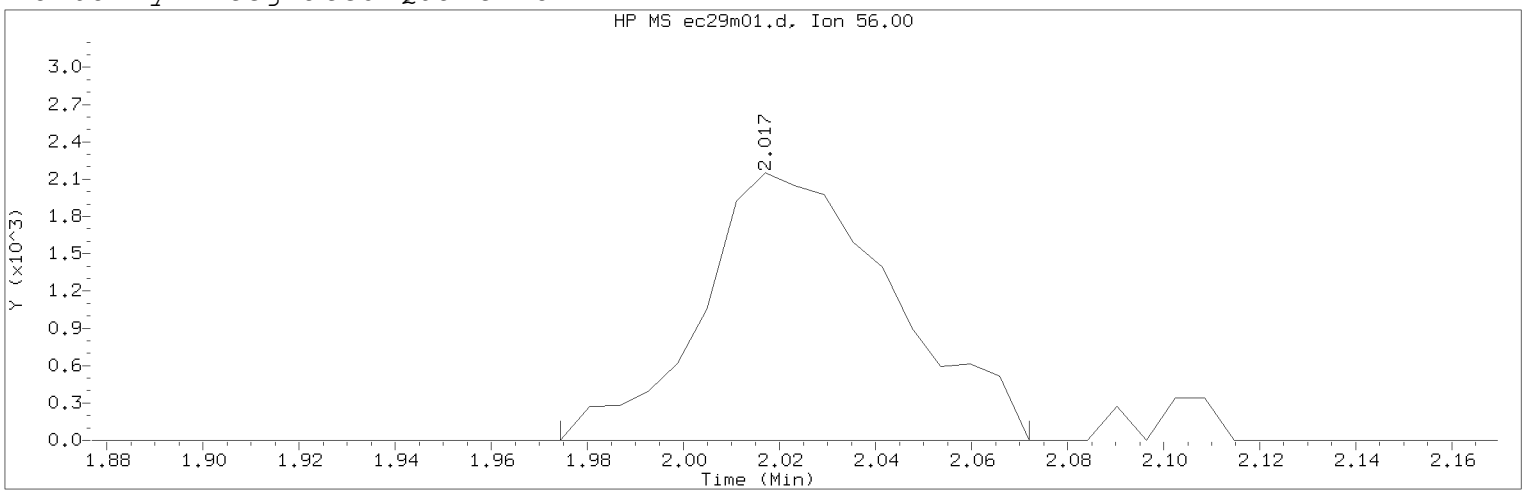
Compound Number : 10
Compound Name : Dichlorofluoromethane
Scan Number : 122
Retention Time (minutes): 1.731
Quant Ion : 67.00
Area : 5065
On-column Amount (ng) : 0.5386
Integration start scan : 113 Integration stop scan: 140
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

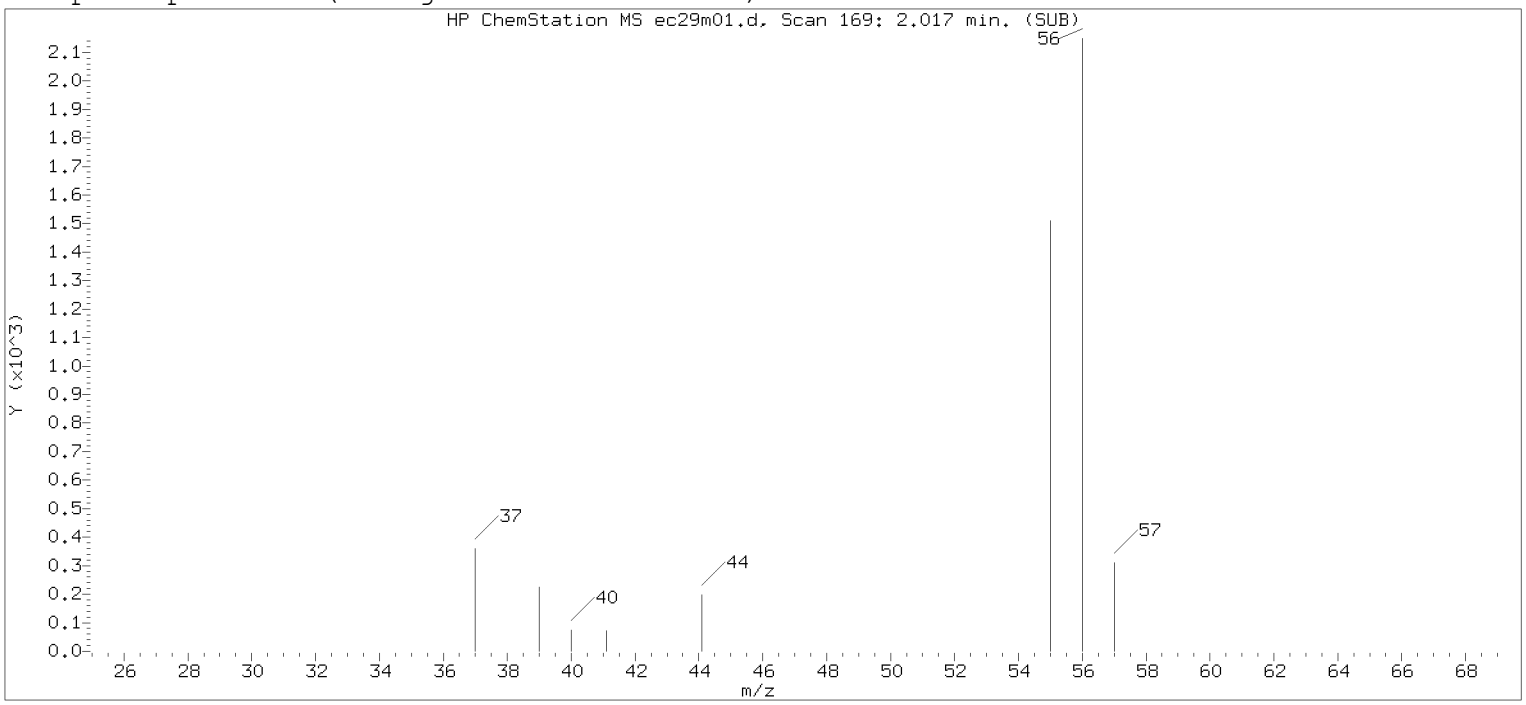
Compound Number : 16
Compound Name : Acrolein
Scan Number : 169
Retention Time (minutes): 2.017
Quant Ion : 56.00
Area (flag) : 5975M
On-Column Amount (ng) : 4.5444
Integration start scan : 161 Integration stop scan: 177
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

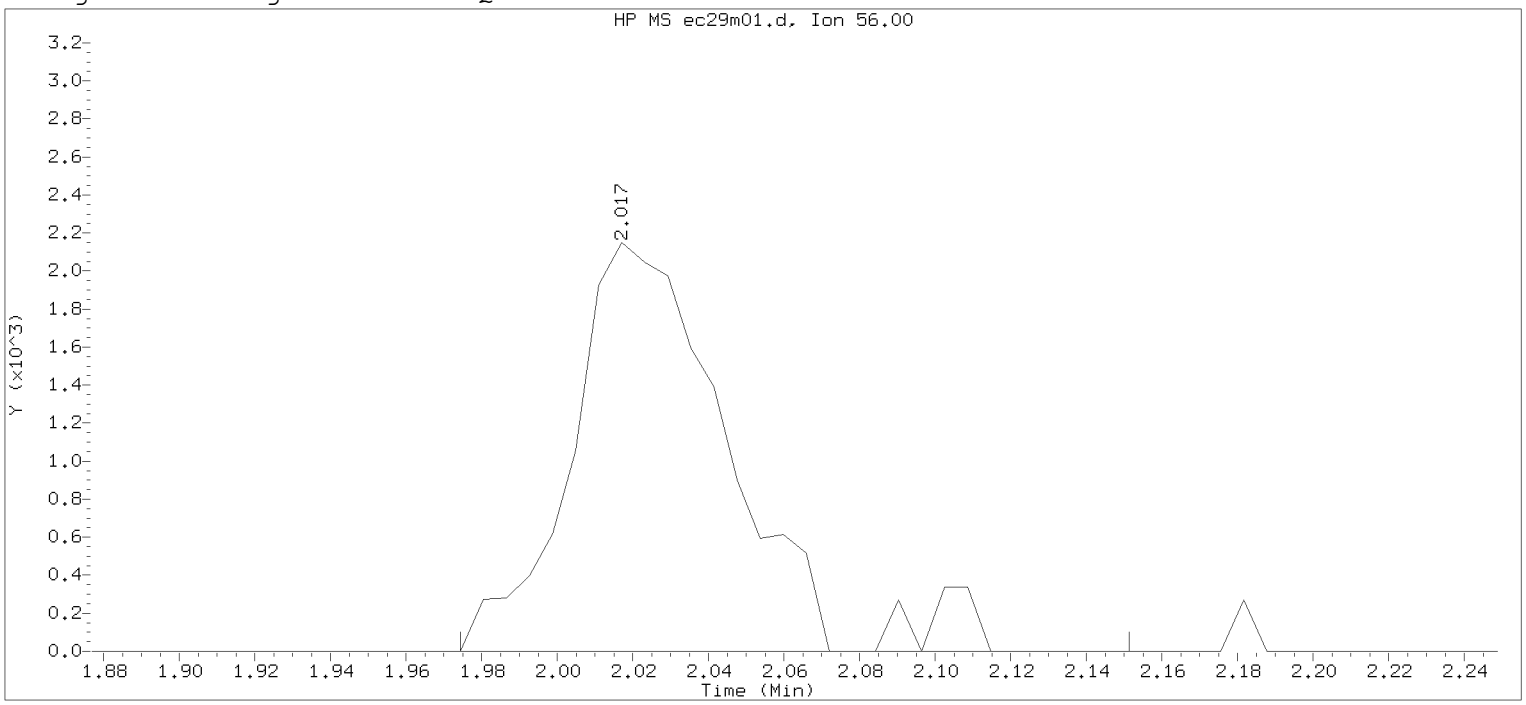
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

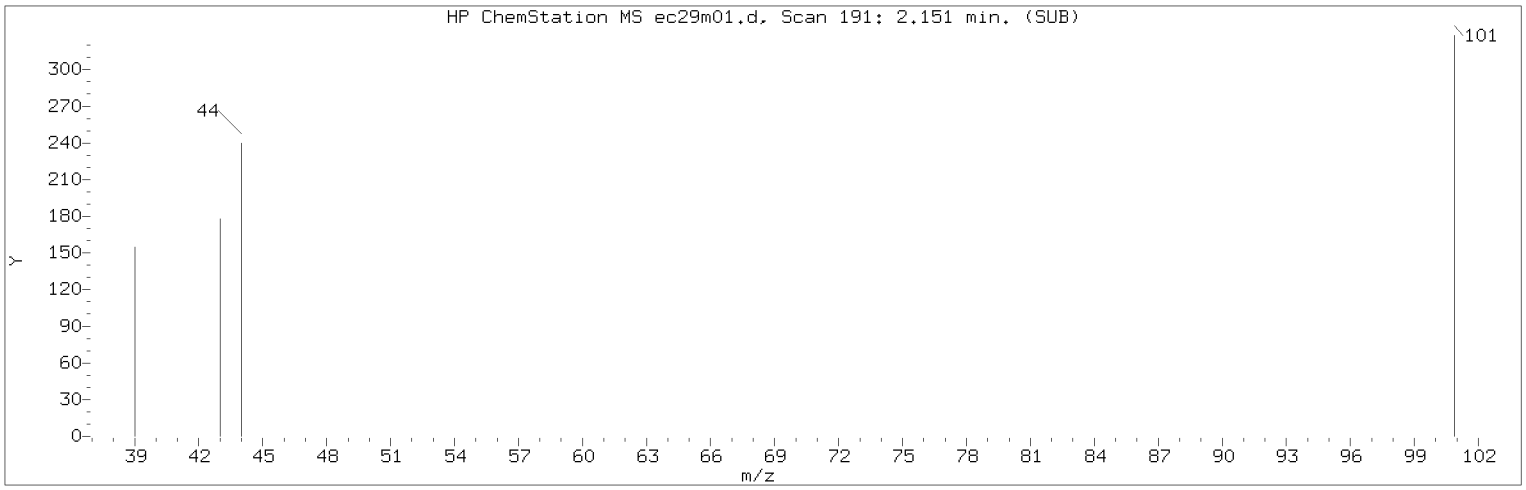
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

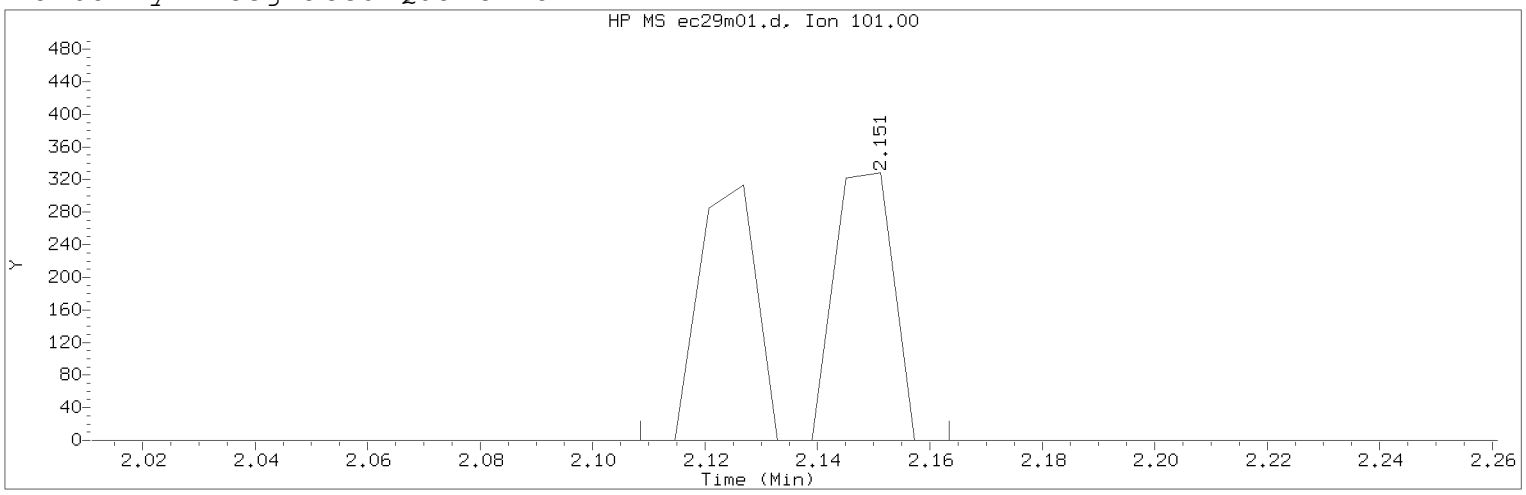
Compound Number : 16
Compound Name : Acrolein
Scan Number : 169
Retention Time (minutes): 2.017
Quant Ion : 56.00
Area : 6322
On-column Amount (ng) : 4.8488
Integration start scan : 161 Integration stop scan: 190
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

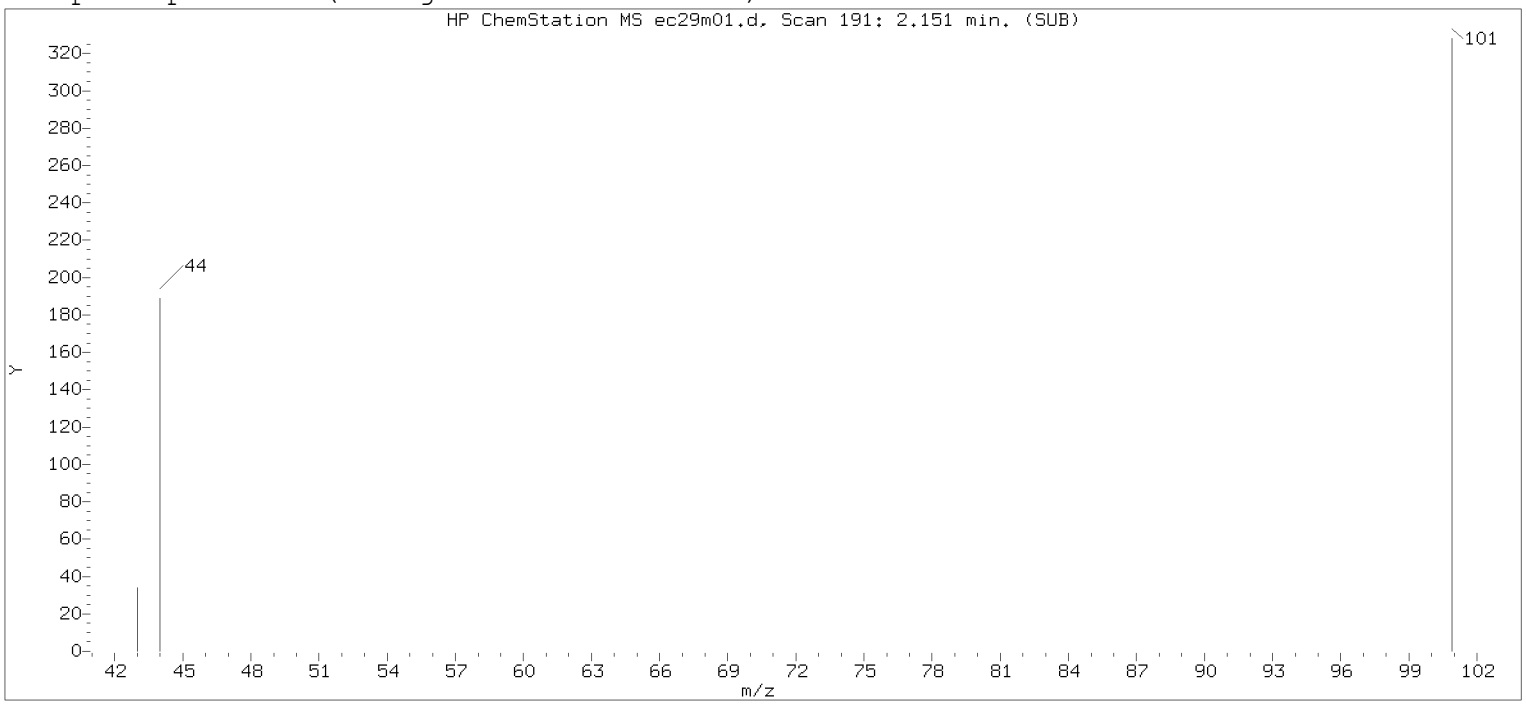
Compound Number : 19
Compound Name : Freon 113
Scan Number : 191
Retention Time (minutes): 2.151
Quant Ion : 101.00
Area (flag) : 456M
On-Column Amount (ng) : 0.1264
Integration start scan : 183 Integration stop scan: 192
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

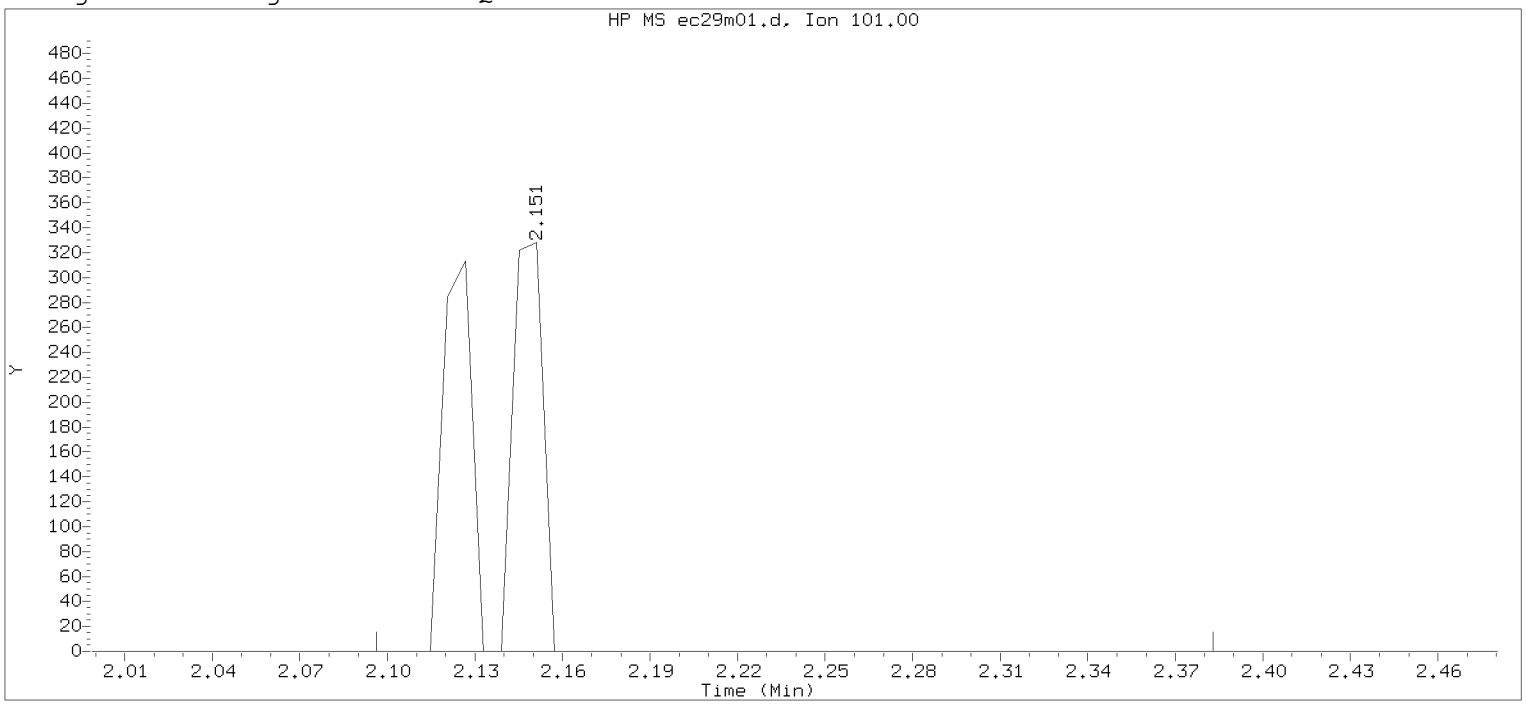
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

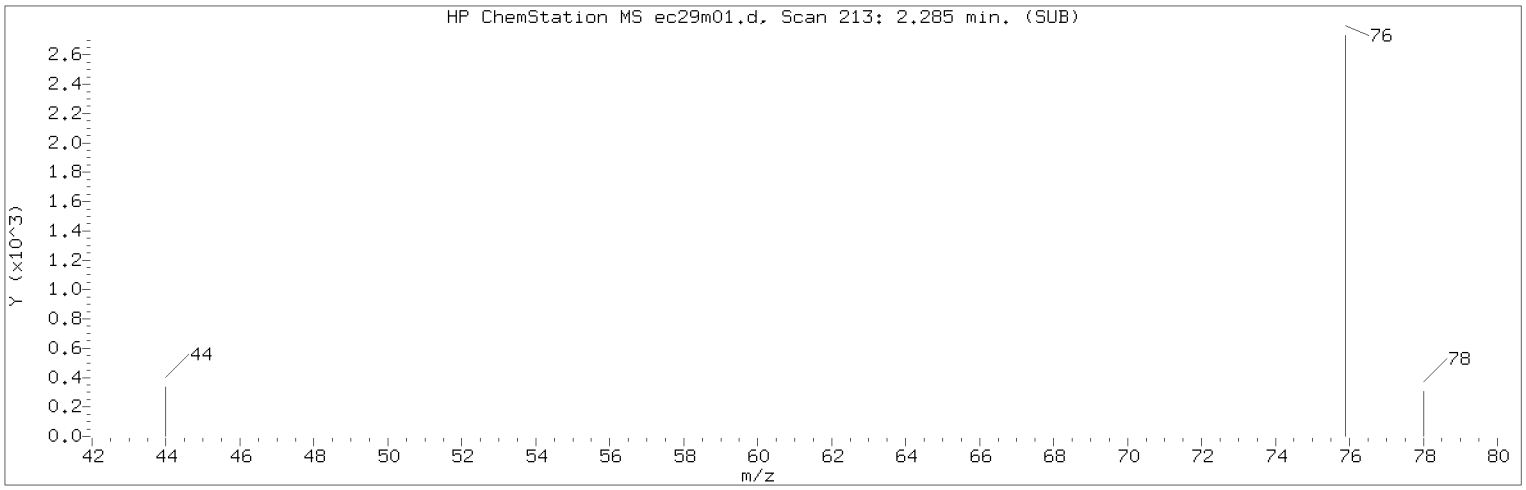
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

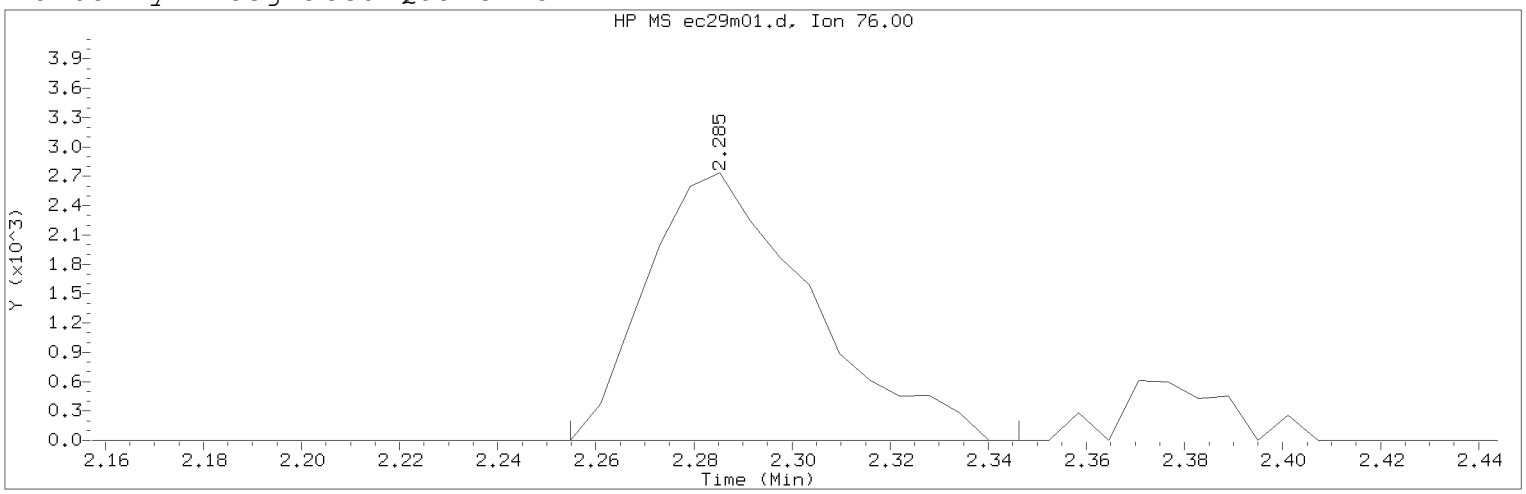
Compound Number	: 19		
Compound Name	: Freon 113		
Scan Number	: 191		
Retention Time (minutes)	: 2.151		
Quant Ion	: 101.00		
Area	: 456		
On-column Amount (ng)	: 0.1265		
Integration start scan	: 181	Integration stop scan:	228
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

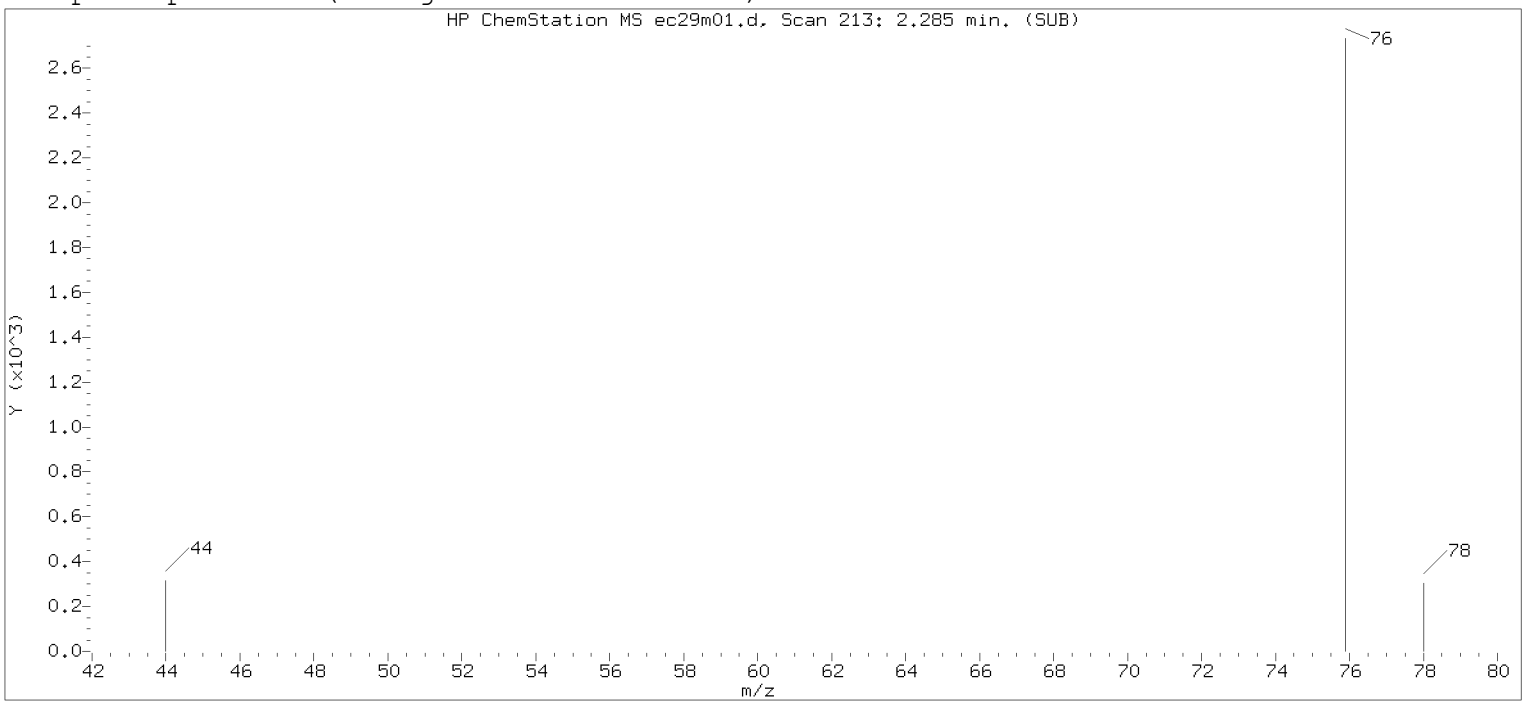
Compound Number : 23
Compound Name : Carbon Disulfide
Scan Number : 213
Retention Time (minutes): 2.285
Quant Ion : 76.00
Area (flag) : 6330M
On-Column Amount (ng) : 0.4819
Integration start scan : 207 Integration stop scan: 222
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

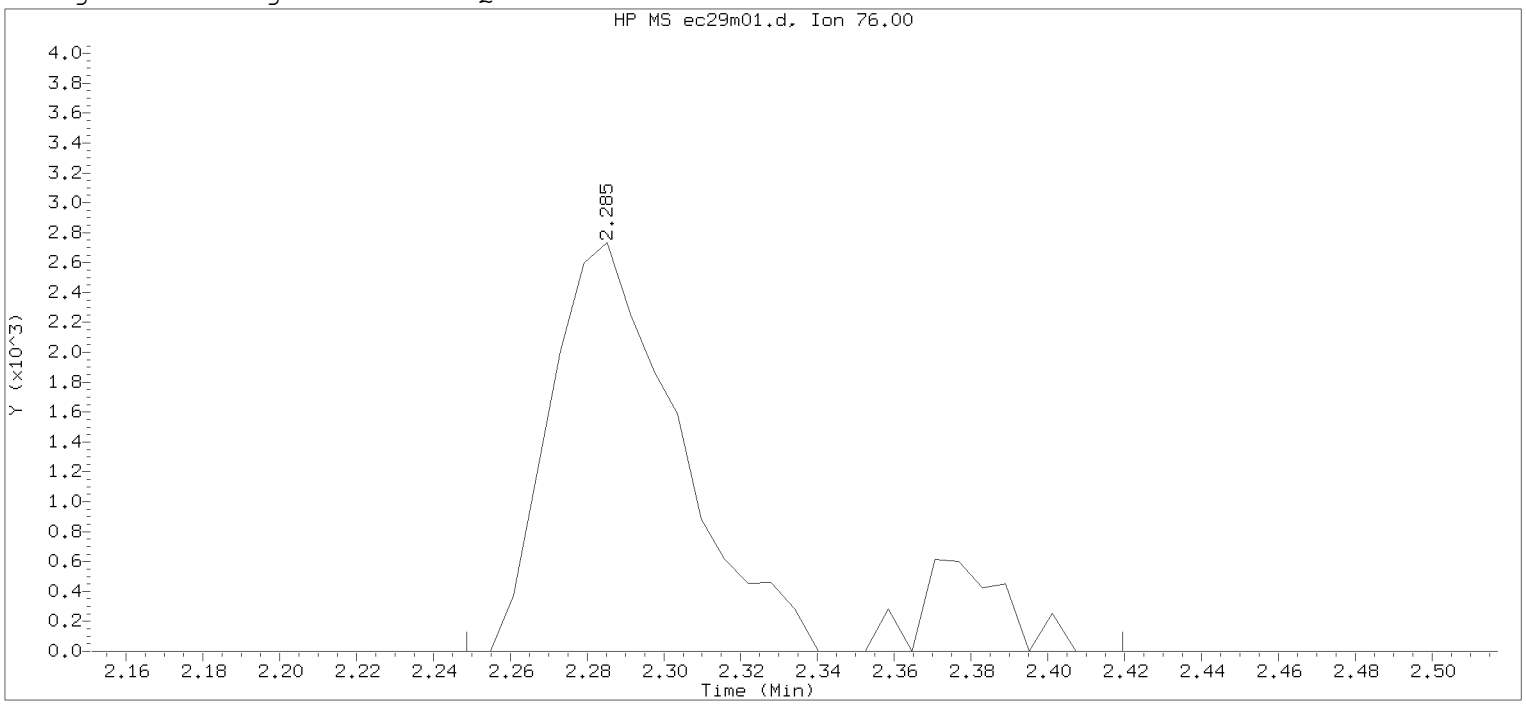
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

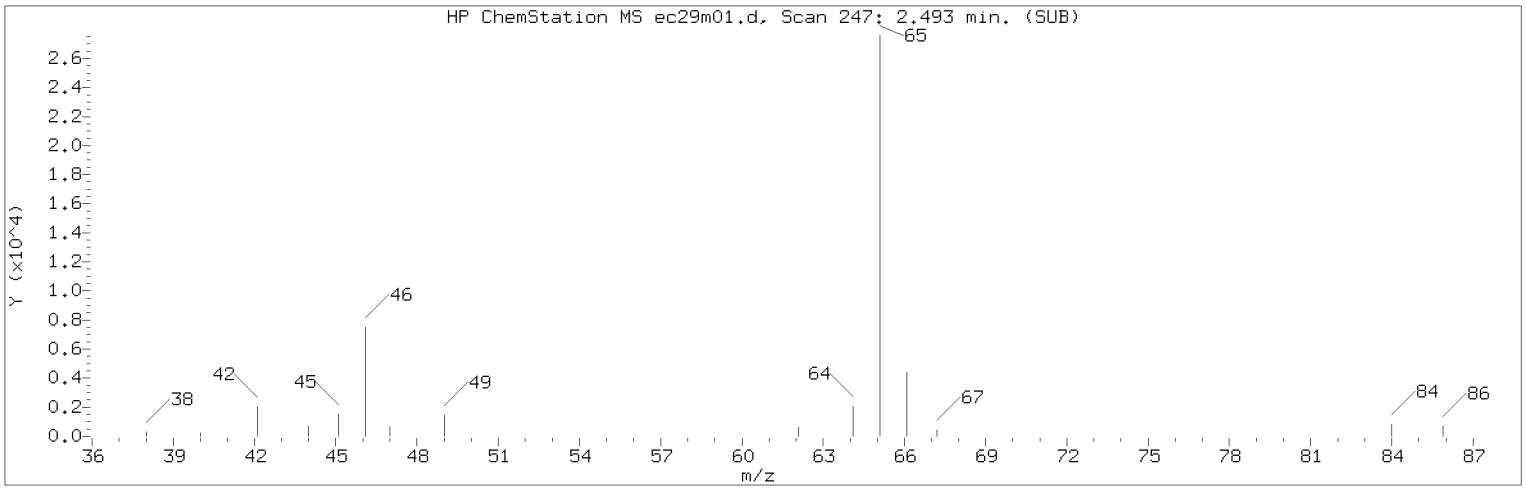
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

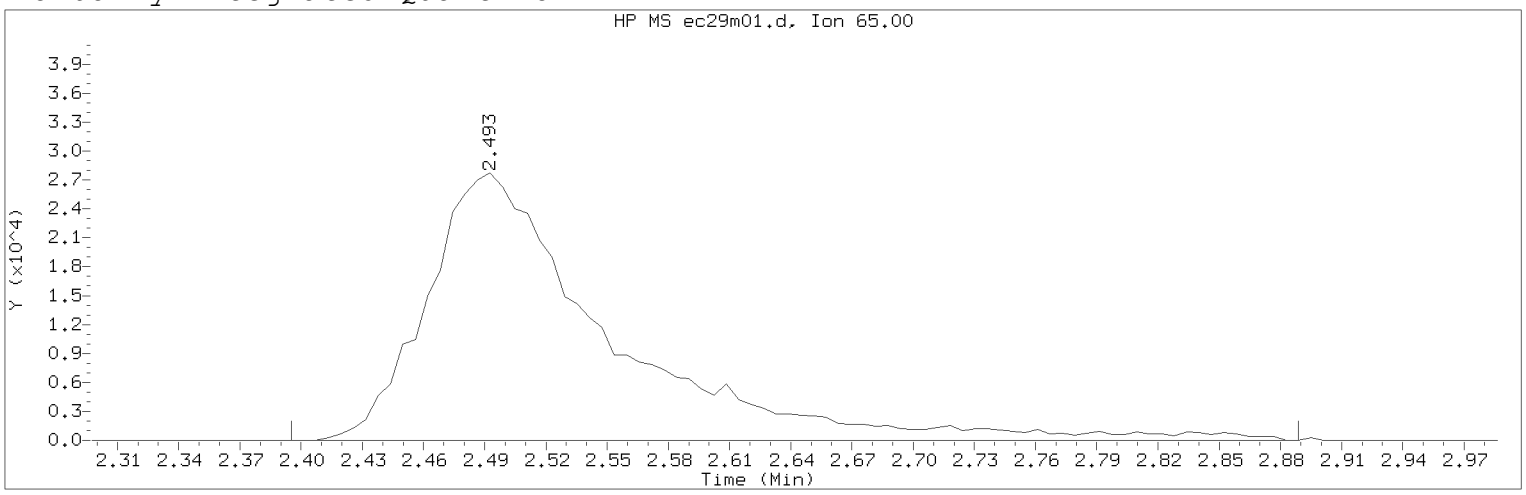
Compound Number : 23
Compound Name : Carbon Disulfide
Scan Number : 213
Retention Time (minutes): 2.285
Quant Ion : 76.00
Area : 7290
On-column Amount (ng) : 0.5550
Integration start scan : 206 Integration stop scan: 234
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

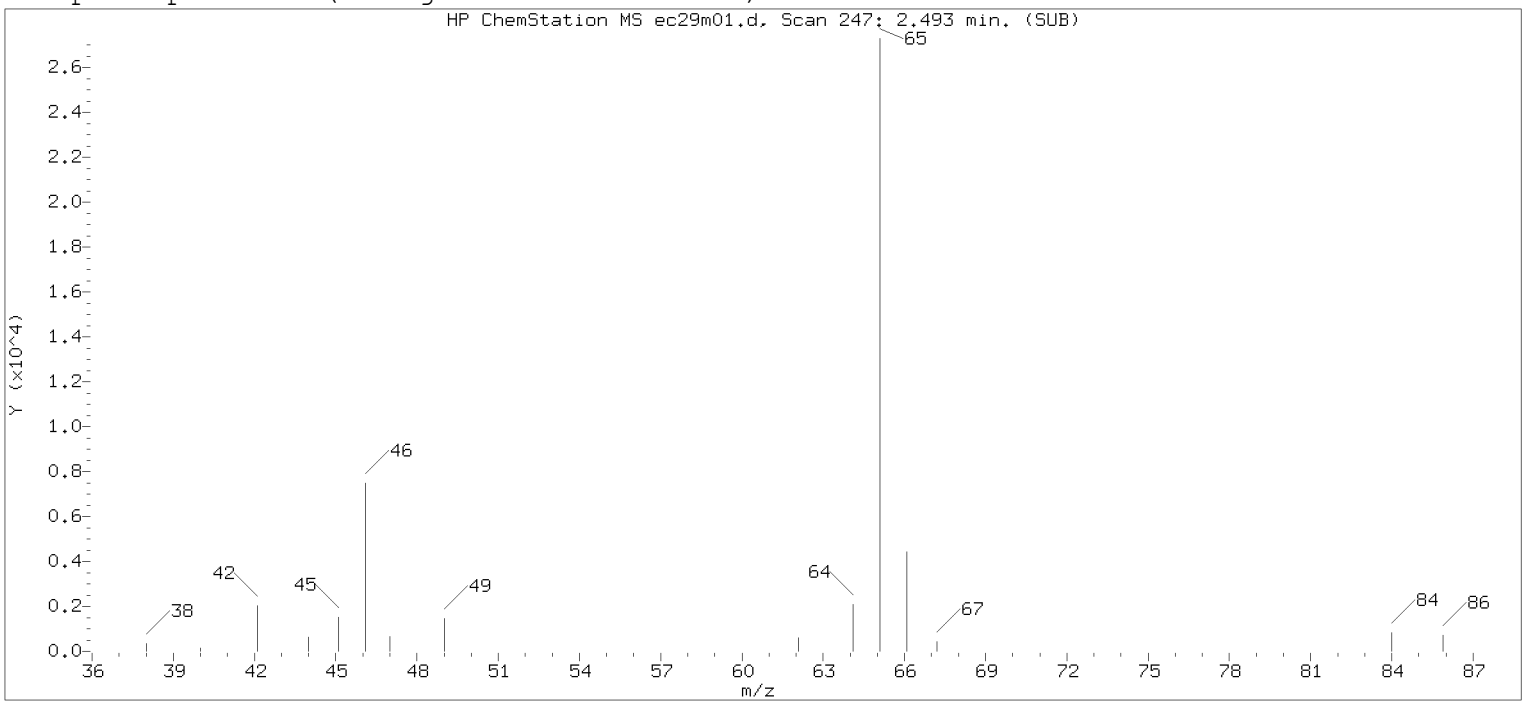
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 247
Retention Time (minutes): 2.493
Quant Ion : 65.00
Area (flag) : 170802M
On-Column Amount (ng) : 250.0000
Integration start scan : 230 Integration stop scan: 311
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

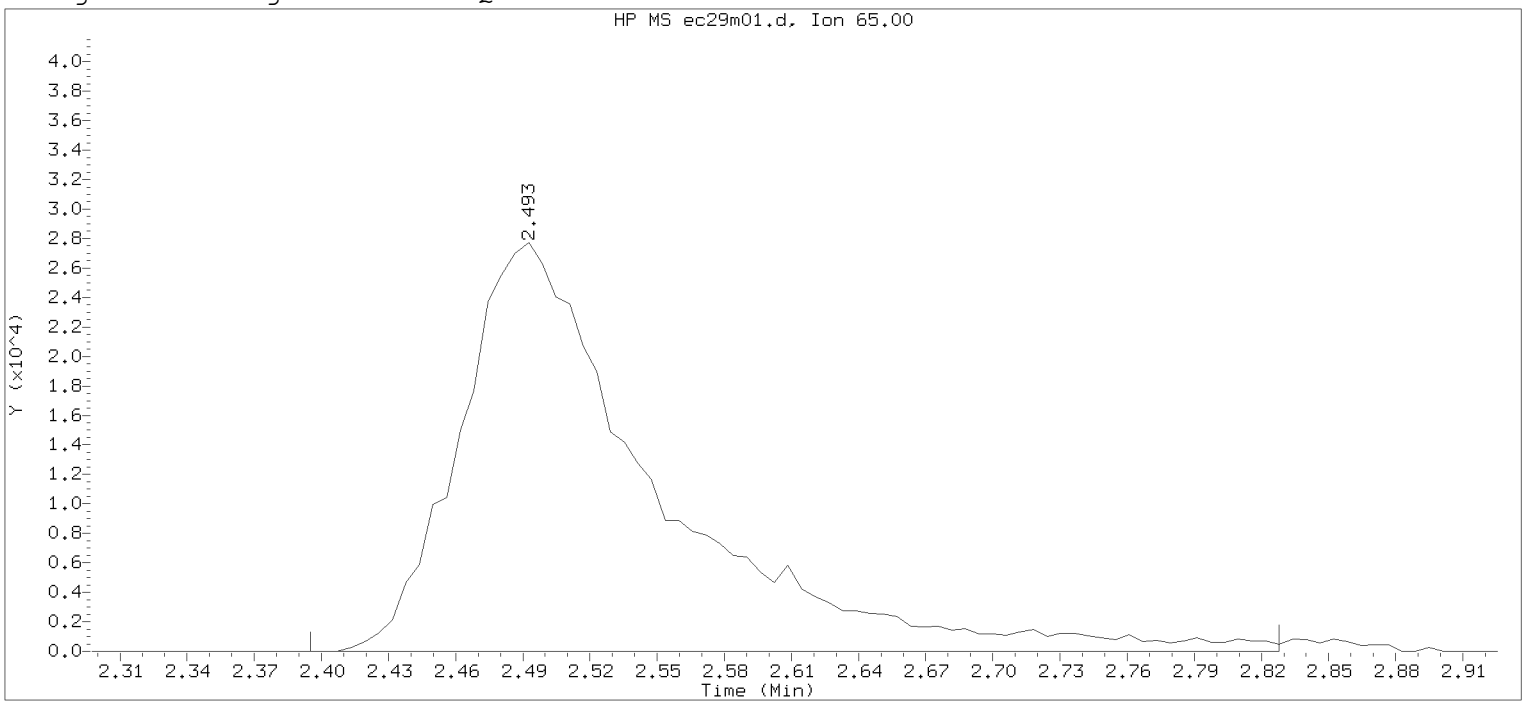
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

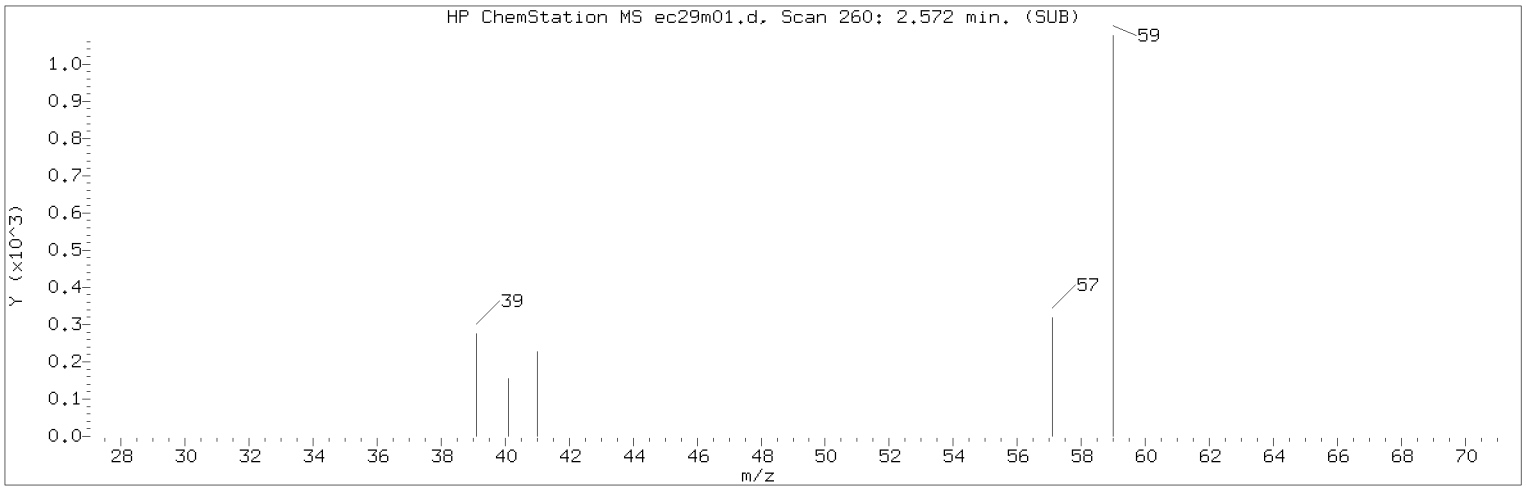
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

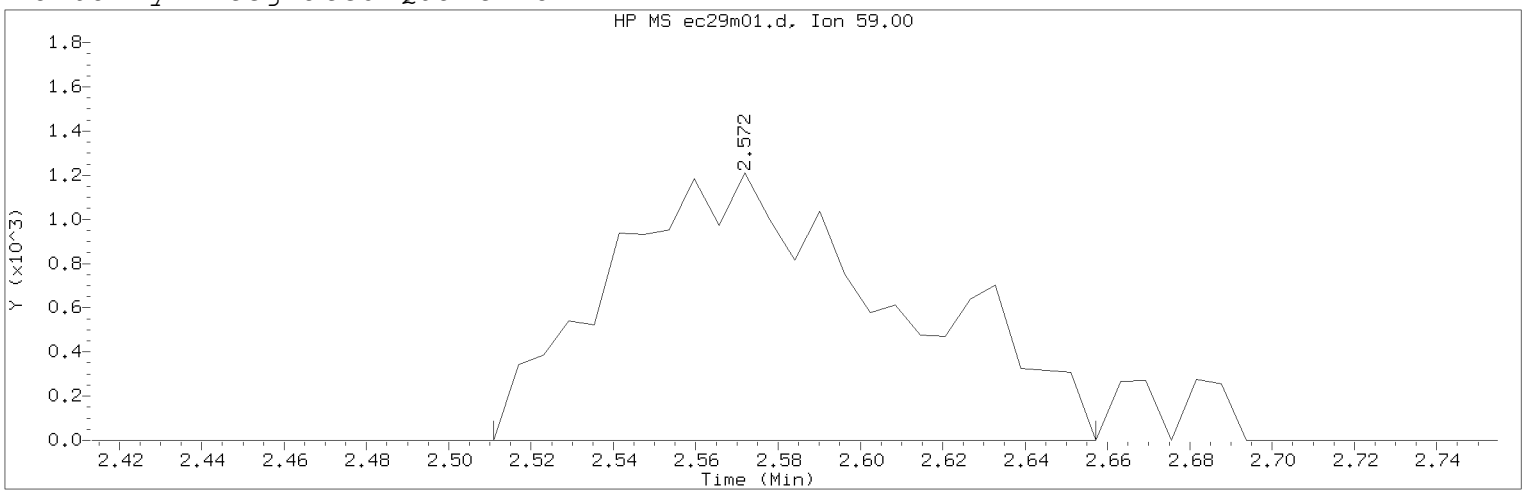
Compound Number : 29
Compound Name : t-Butyl alcohol-d10
Scan Number : 247
Retention Time (minutes): 2.493
Quant Ion : 65.00
Area : 168905
On-column Amount (ng) : 250.0000
Integration start scan : 230 Integration stop scan: 301
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

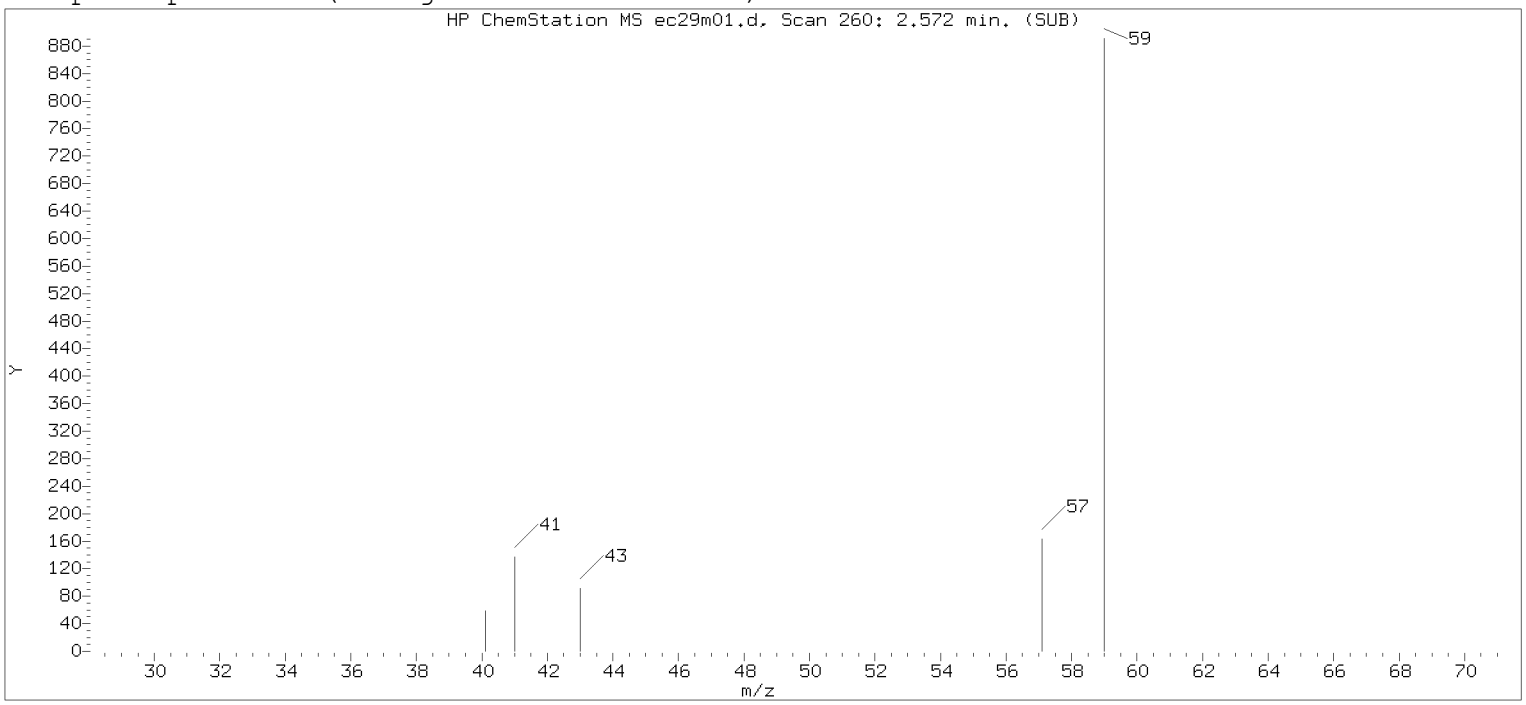
Compound Number : 30
Compound Name : t-Butyl alcohol
Scan Number : 260
Retention Time (minutes): 2.572
Quant Ion : 59.00
Area (flag) : 5857M
On-Column Amount (ng) : 9.0465
Integration start scan : 249 Integration stop scan: 273
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

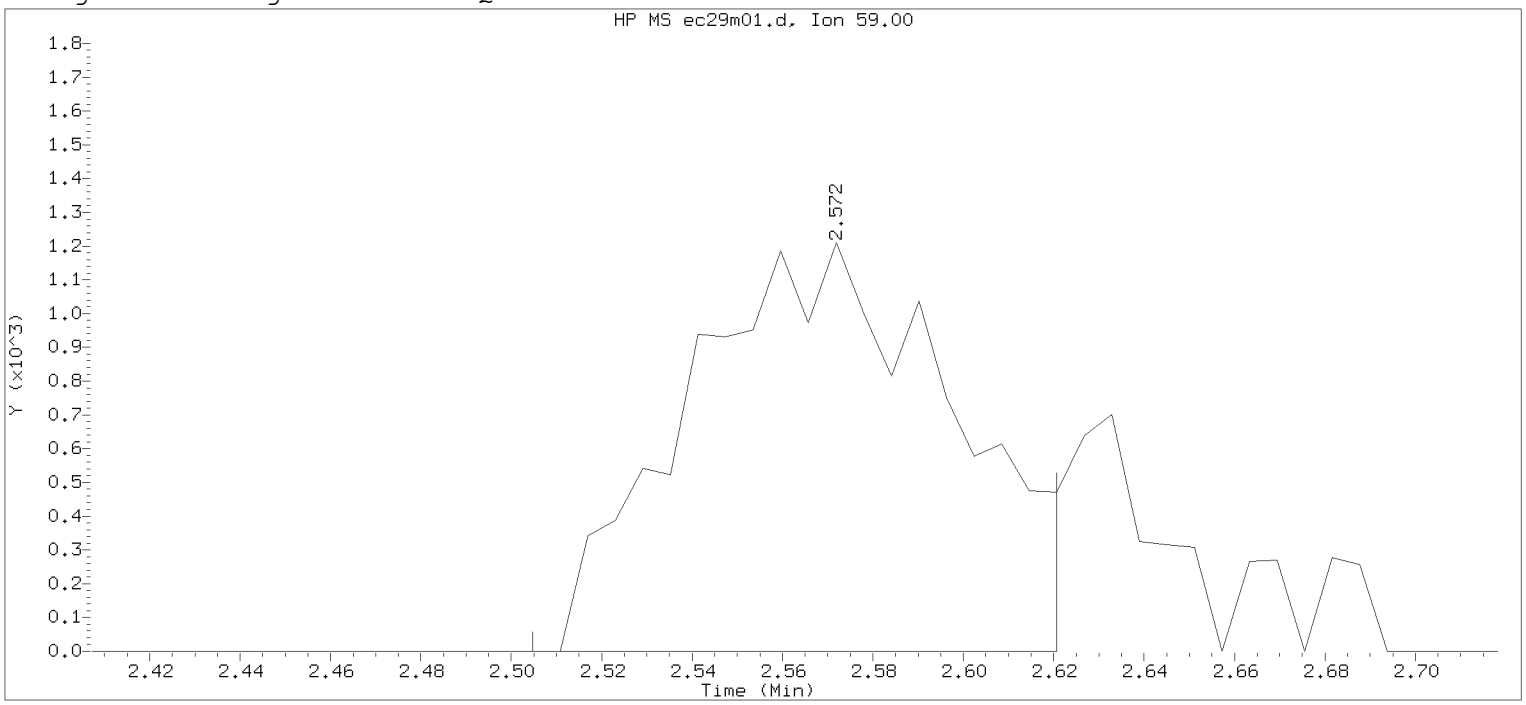
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

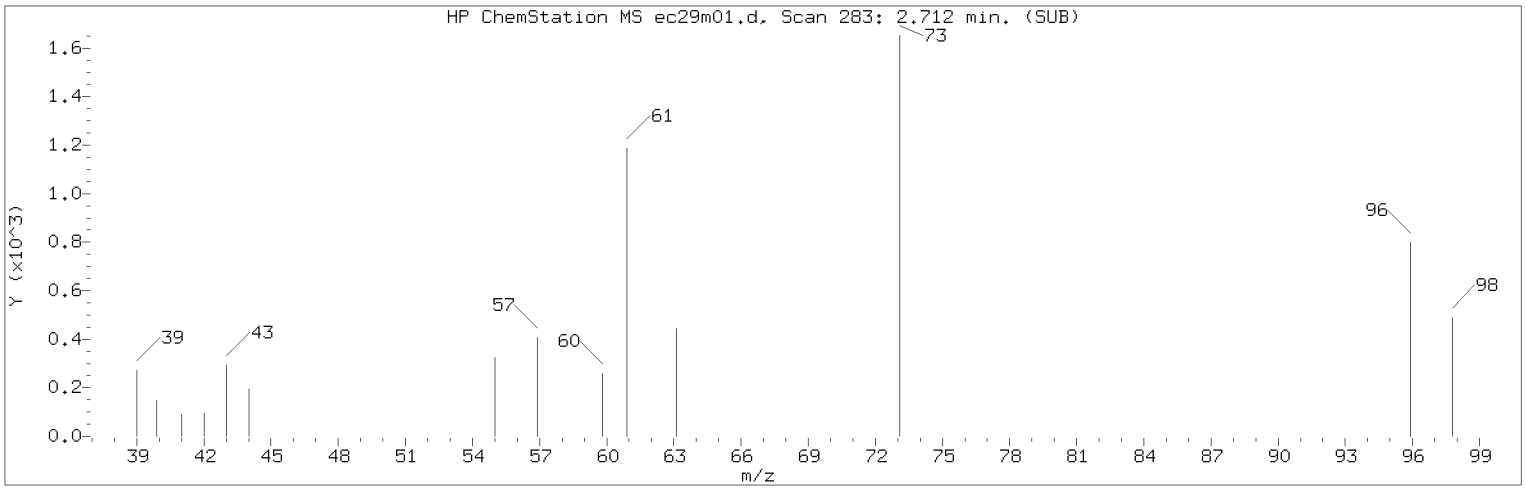
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

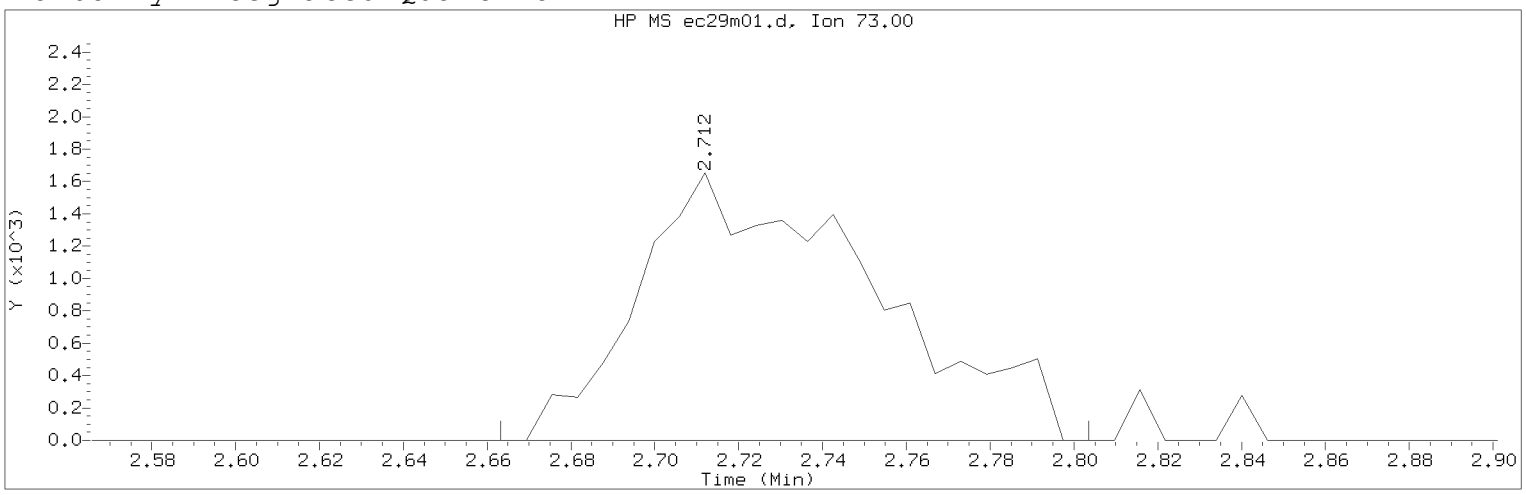
Compound Number	: 30		
Compound Name	: t-Butyl alcohol		
Scan Number	: 260		
Retention Time (minutes)	: 2.572		
Quant Ion	: 59.00		
Area	: 4934		
On-column Amount (ng)	: 7.7693		
Integration start scan	: 248	Integration stop scan:	267
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

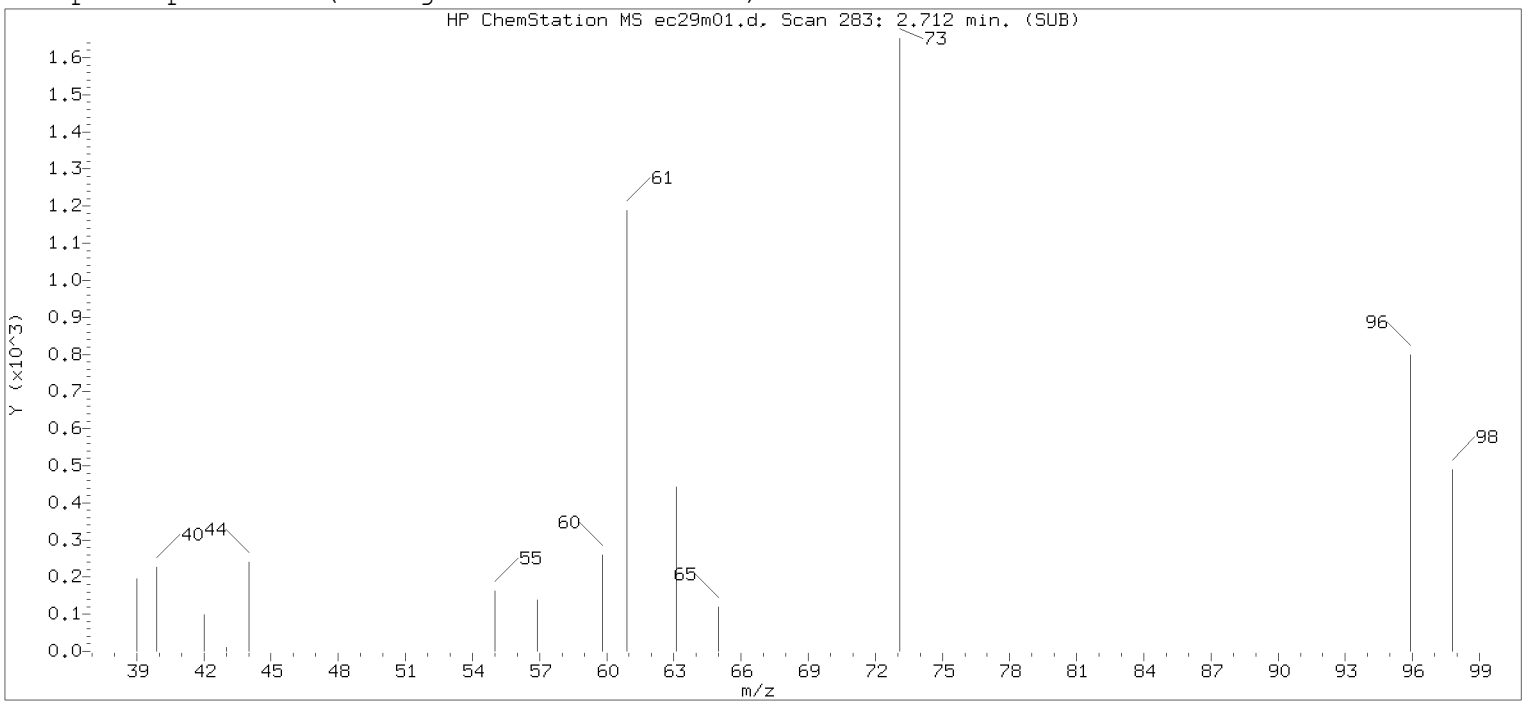
Compound Number : 33
Compound Name : Methyl Tertiary Butyl Ether
Scan Number : 283
Retention Time (minutes): 2.712
Quant Ion : 73.00
Area (flag) : 6453M
On-Column Amount (ng) : 0.4842
Integration start scan : 274 Integration stop scan: 297
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

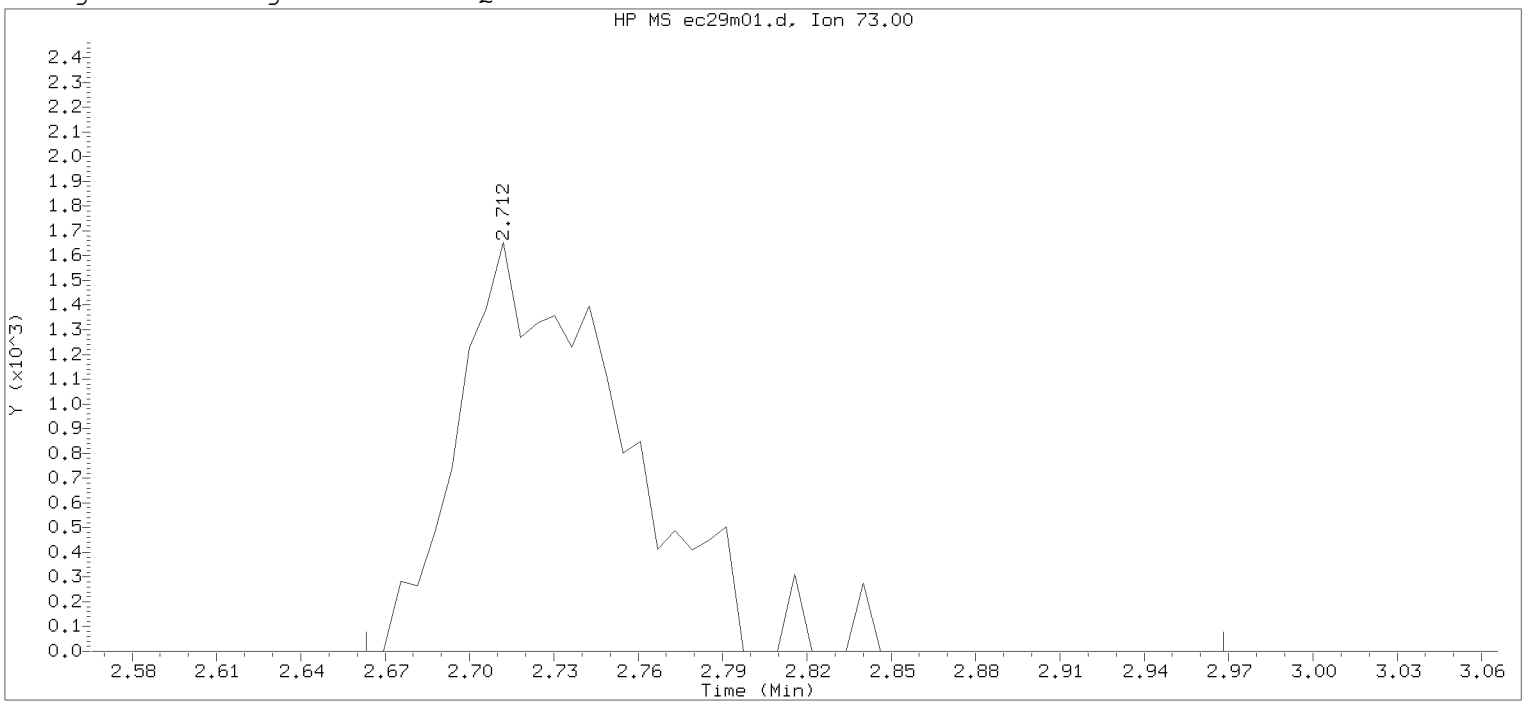
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

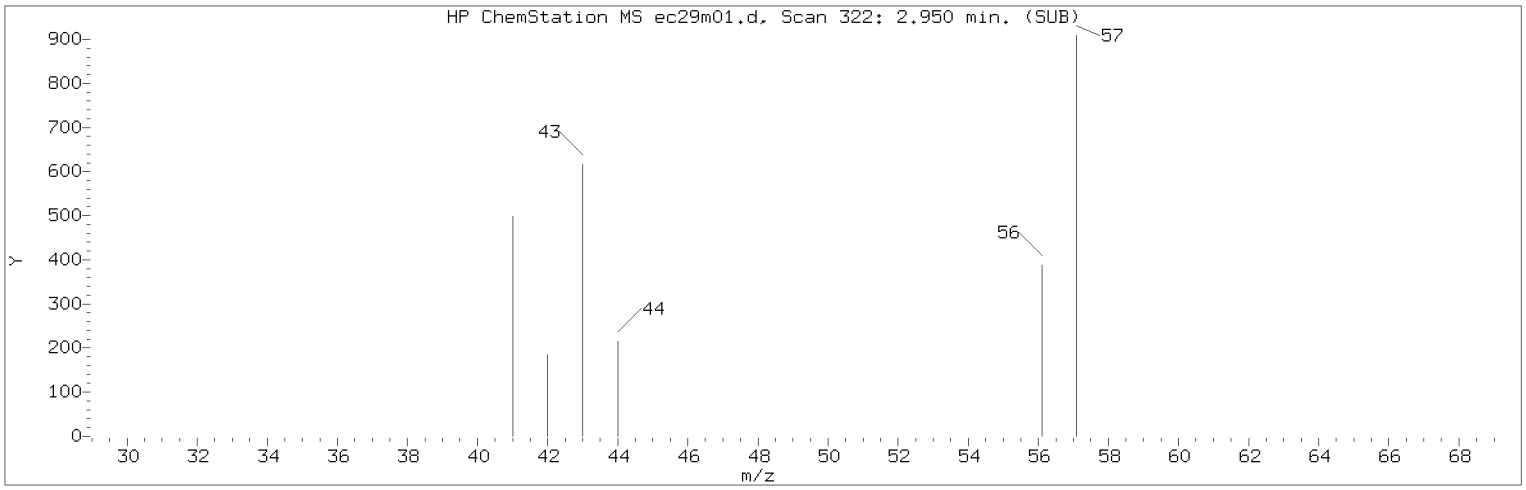
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

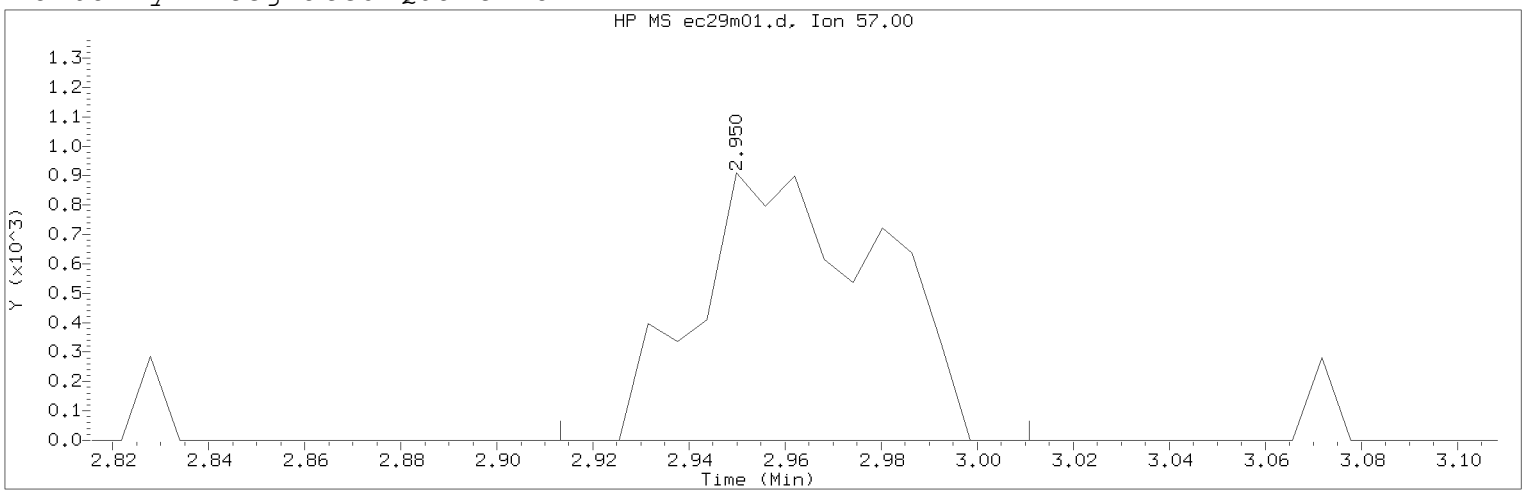
Compound Number : 33
Compound Name : Methyl Tertiary Butyl Ether
Scan Number : 283
Retention Time (minutes): 2.712
Quant Ion : 73.00
Area : 6668
On-column Amount (ng) : 0.5004
Integration start scan : 274 Integration stop scan: 324
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

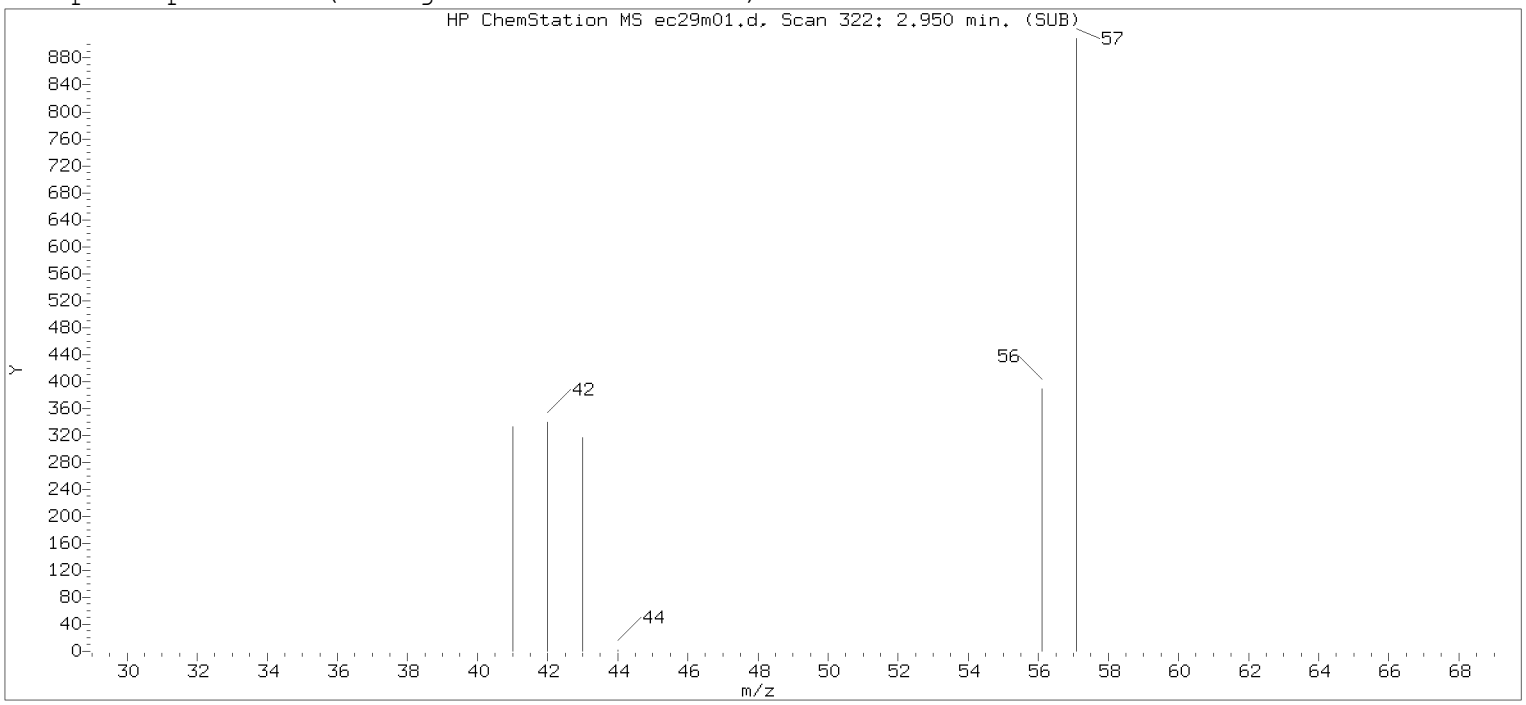
Compound Number : 34
Compound Name : n-Hexane
Scan Number : 322
Retention Time (minutes): 2.950
Quant Ion : 57.00
Area (flag) : 2409M
On-Column Amount (ng) : 0.3329
Integration start scan : 315 Integration stop scan: 331
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

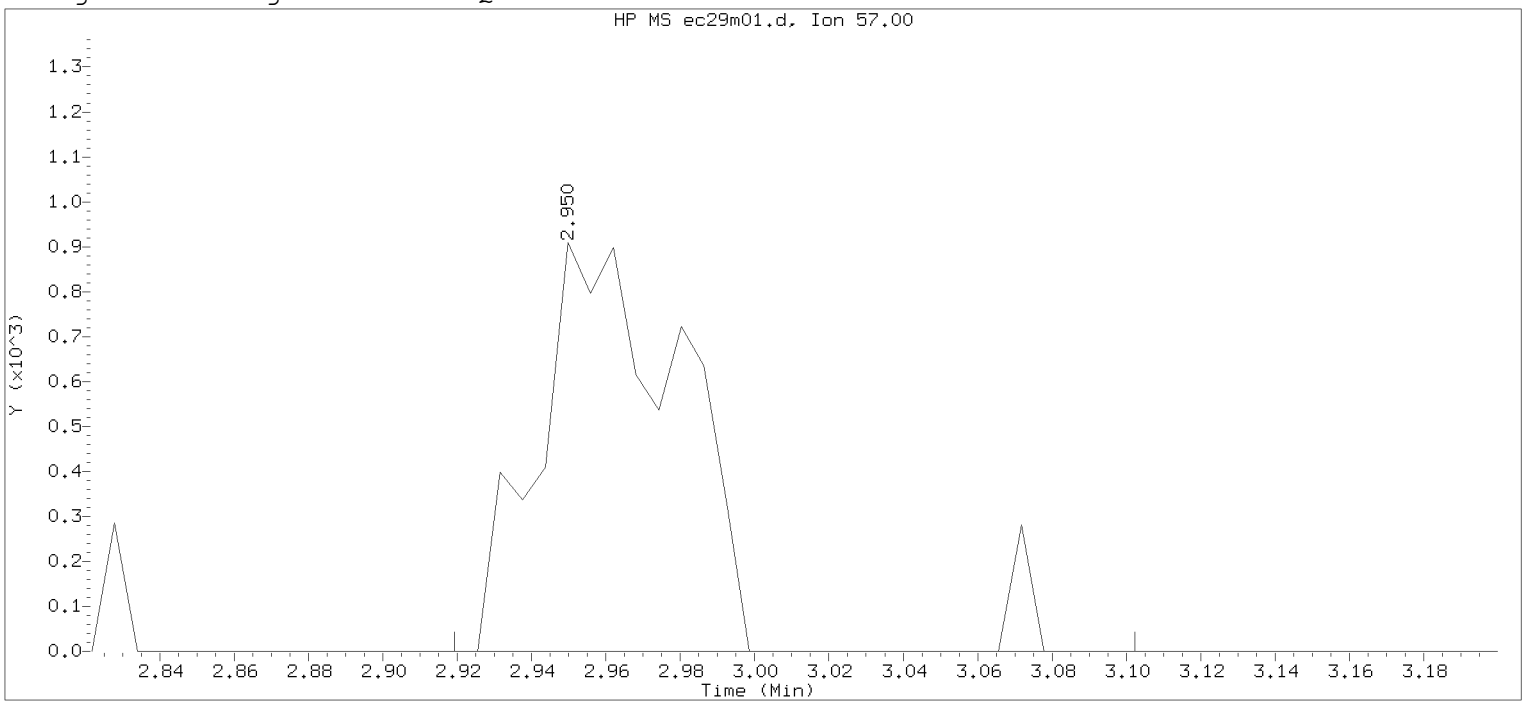
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

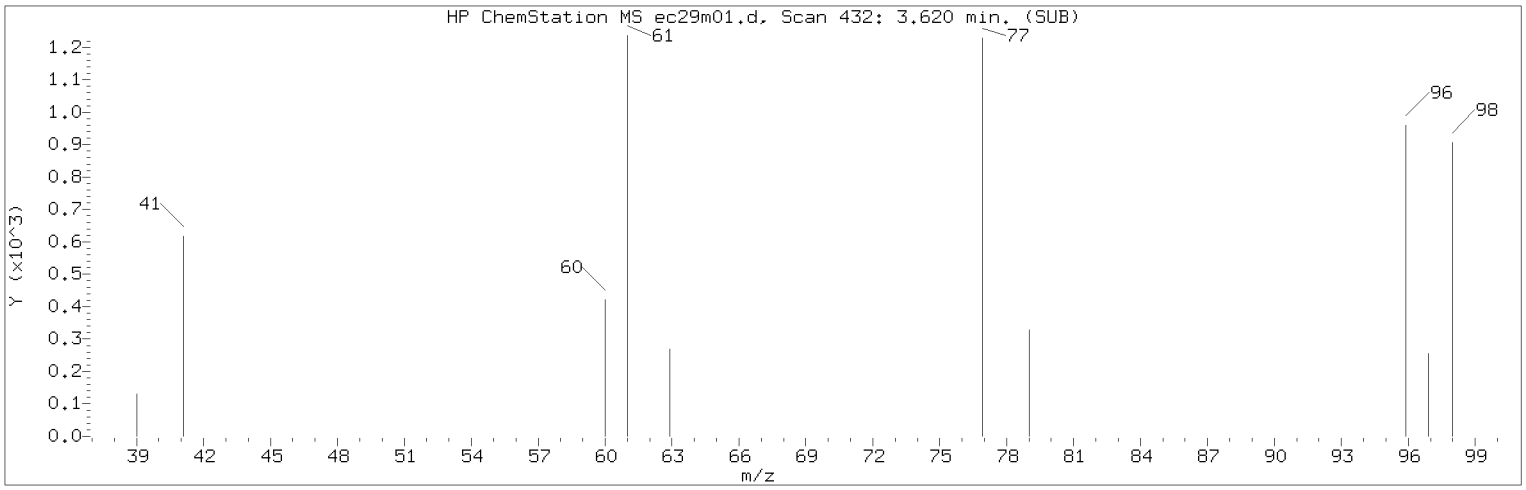
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

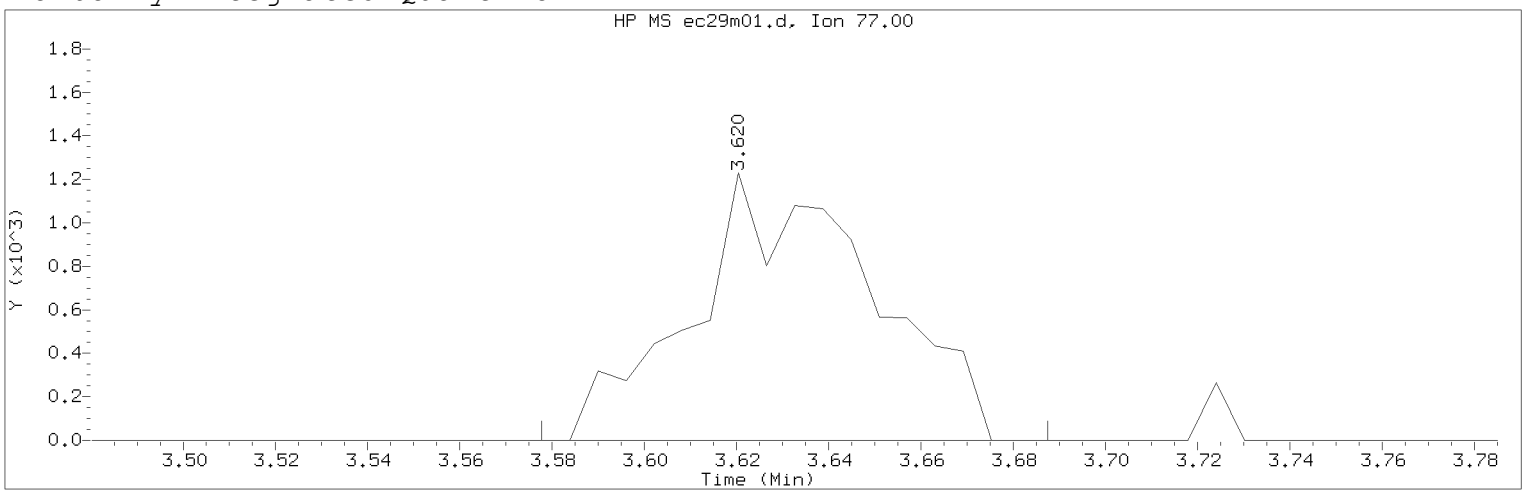
Compound Number : 34
Compound Name : n-Hexane
Scan Number : 322
Retention Time (minutes): 2.950
Quant Ion : 57.00
Area : 2512
On-column Amount (ng) : 0.3716
Integration start scan : 316 Integration stop scan: 346
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

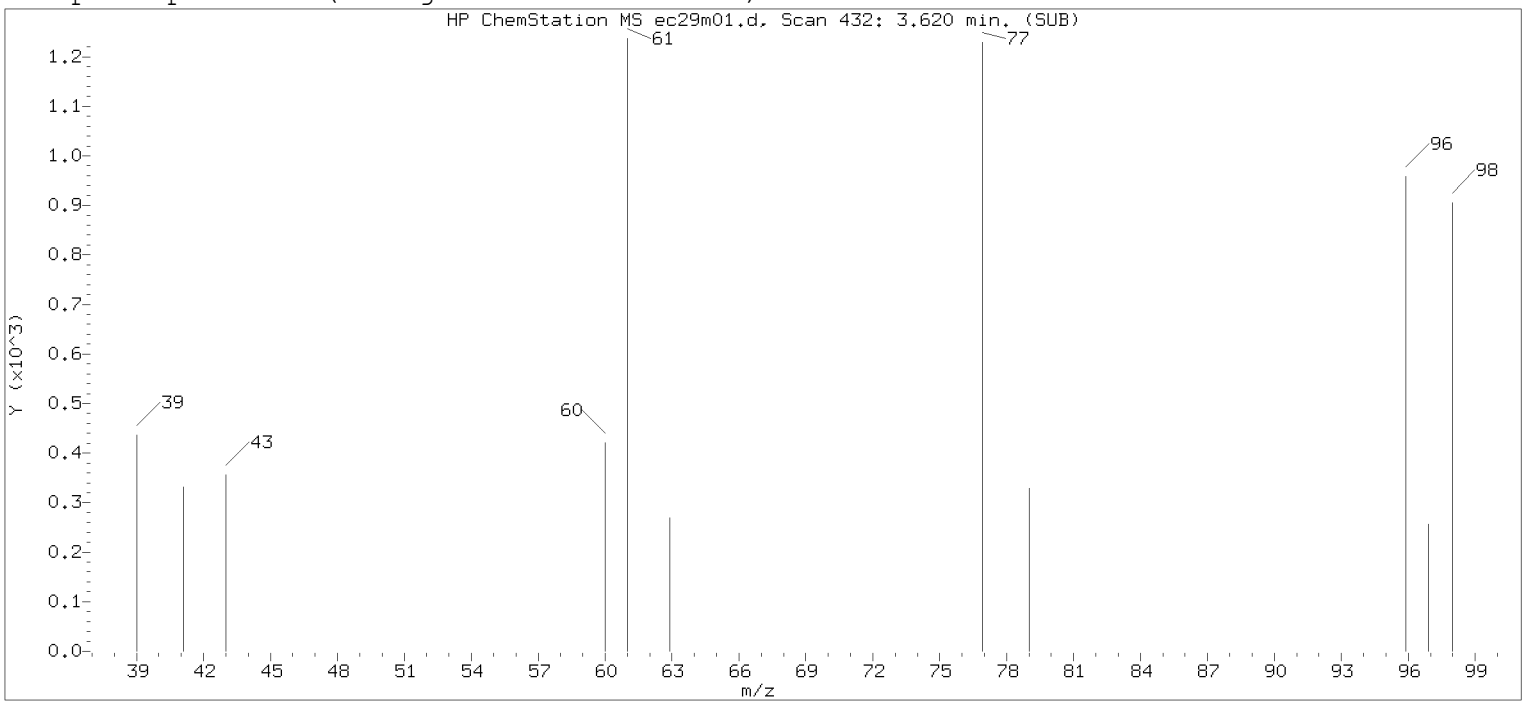
Compound Number : 45
Compound Name : 2,2-Dichloropropane
Scan Number : 432
Retention Time (minutes): 3.620
Quant Ion : 77.00
Area (flag) : 3352M
On-Column Amount (ng) : 0.4823
Integration start scan : 424 Integration stop scan: 442
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

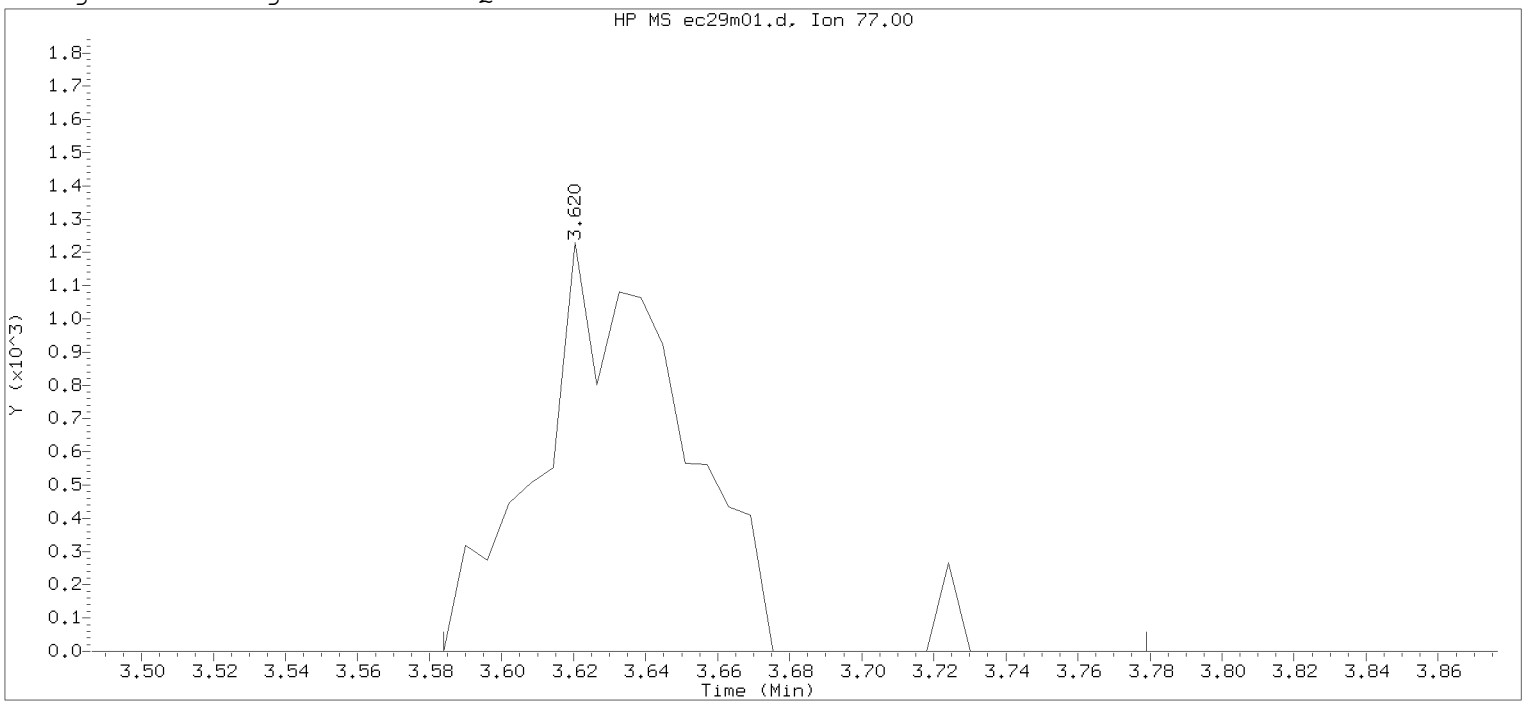
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

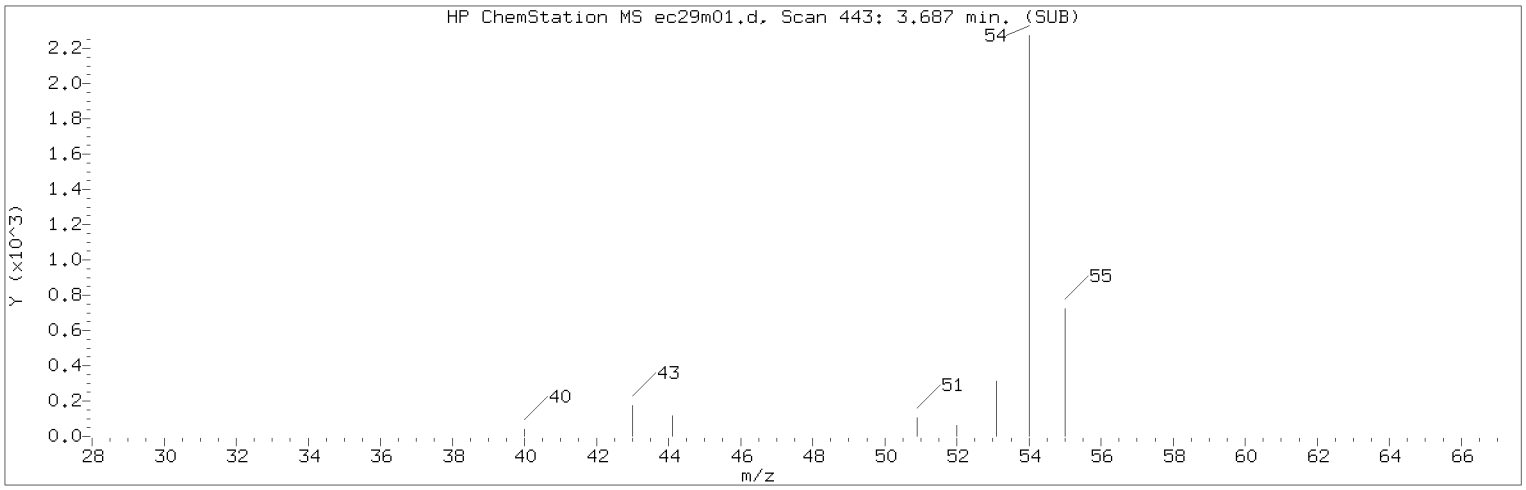
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

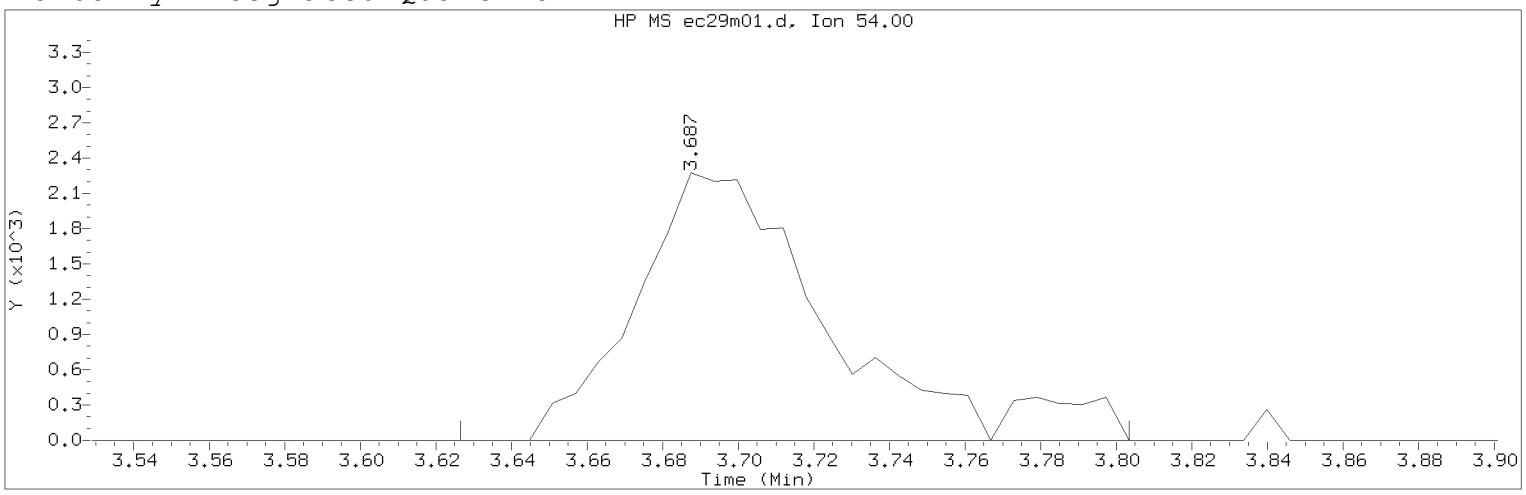
Compound Number : 45
Compound Name : 2,2-Dichloropropane
Scan Number : 432
Retention Time (minutes): 3.620
Quant Ion : 77.00
Area : 3450
On-column Amount (ng) : 0.4964
Integration start scan : 425 Integration stop scan: 457
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

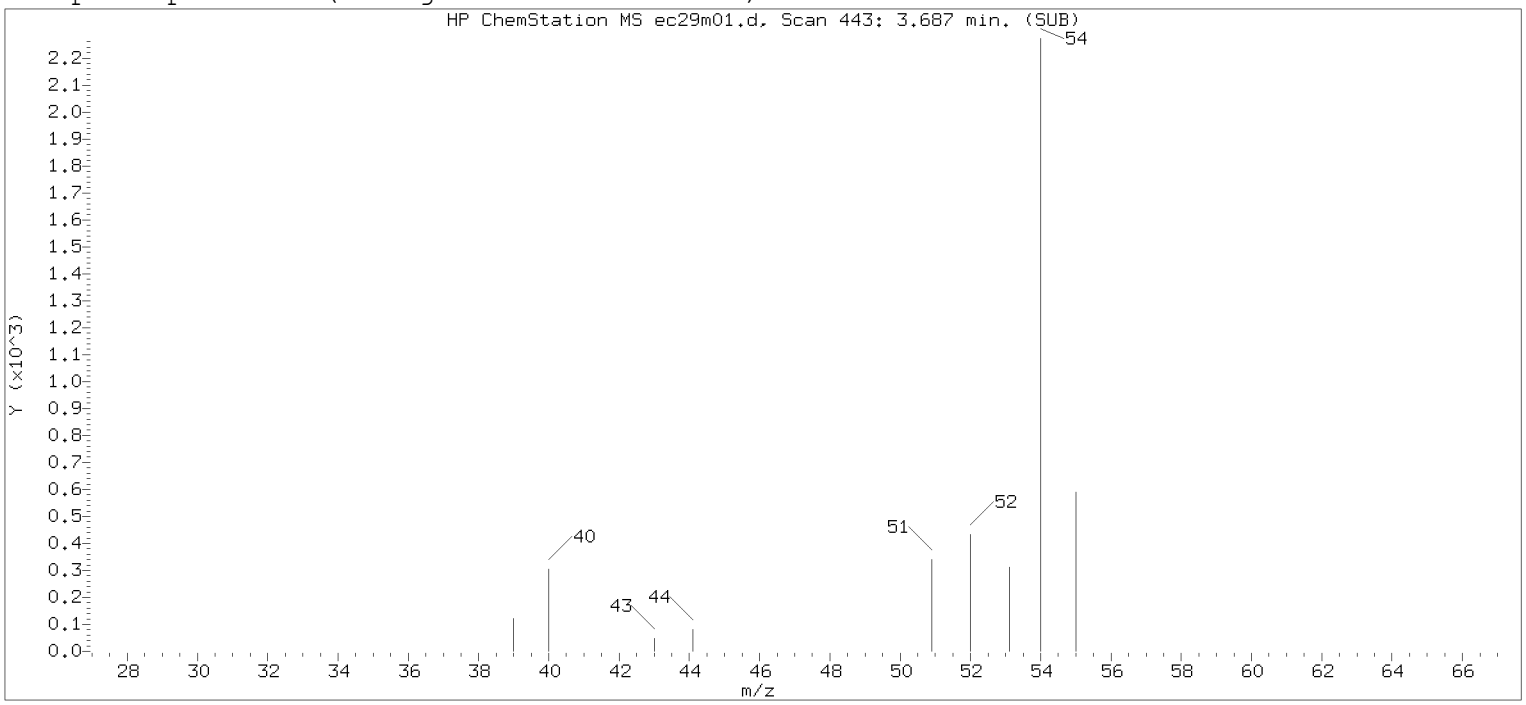
Compound Number : 47
Compound Name : Propionitrile
Scan Number : 443
Retention Time (minutes): 3.687
Quant Ion : 54.00
Area (flag) : 8220M
On-Column Amount (ng) : 8.9598
Integration start scan : 432 Integration stop scan: 461
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

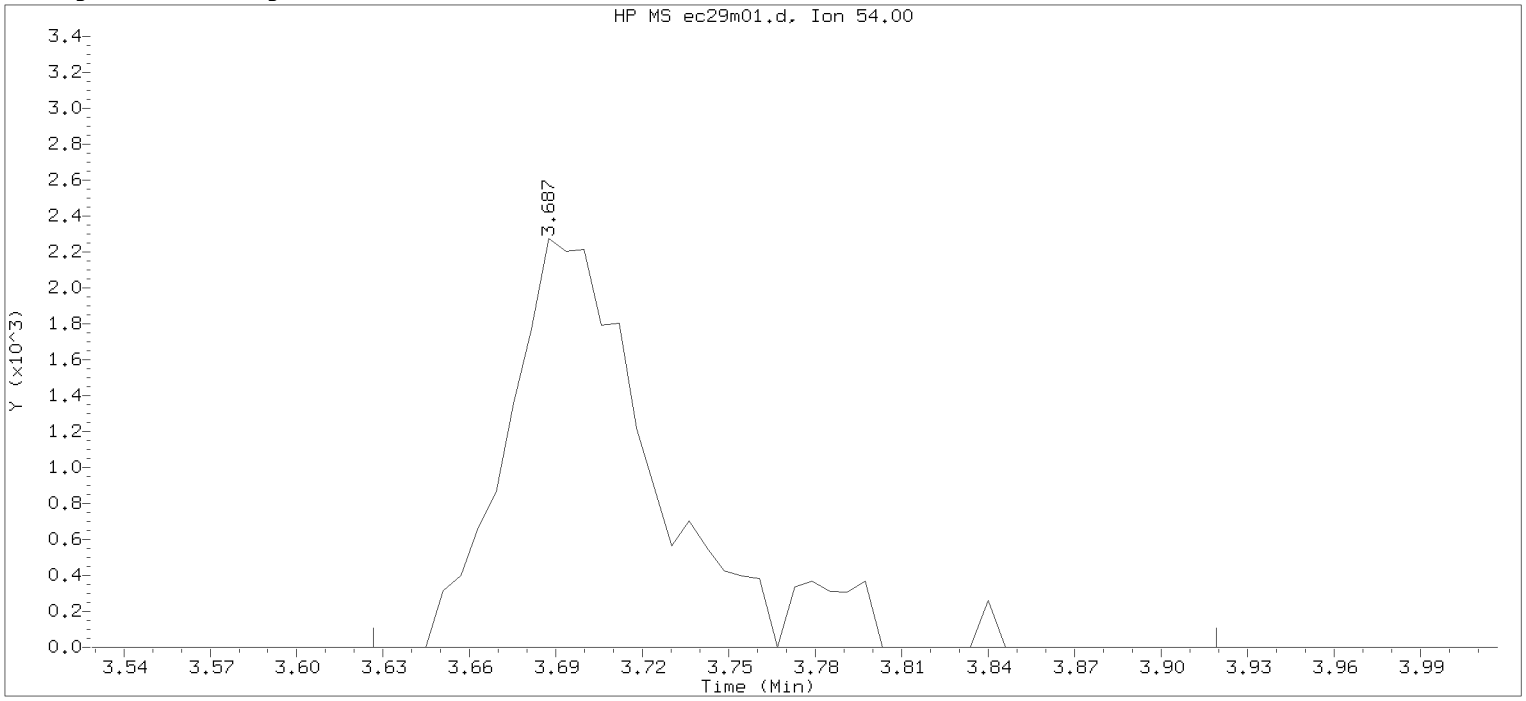
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

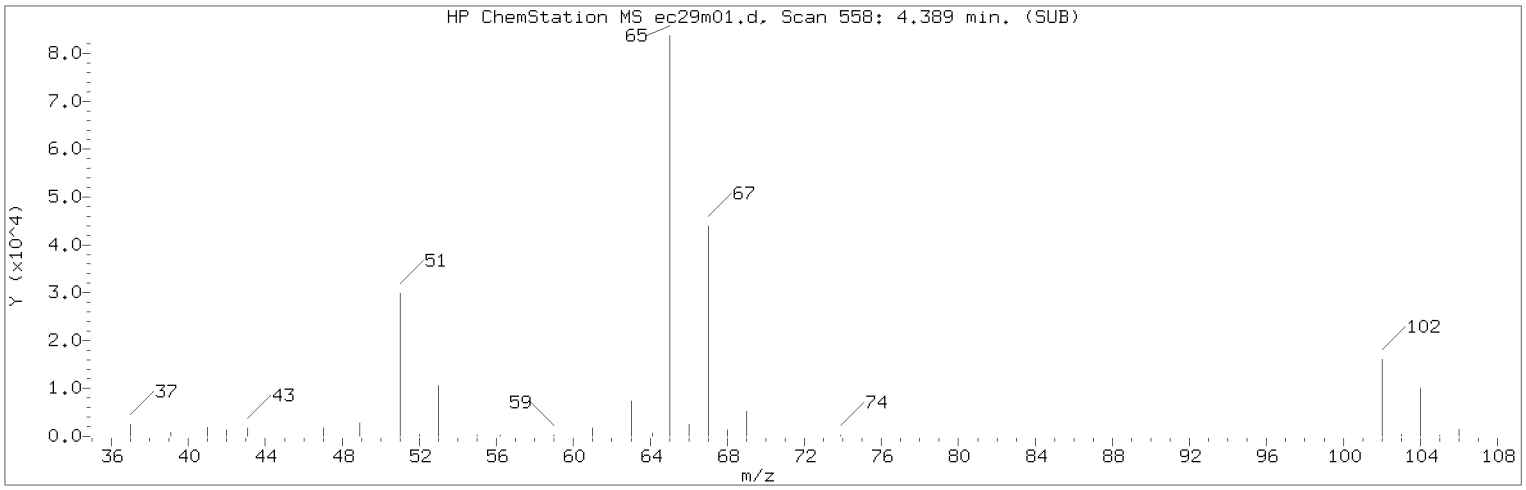
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

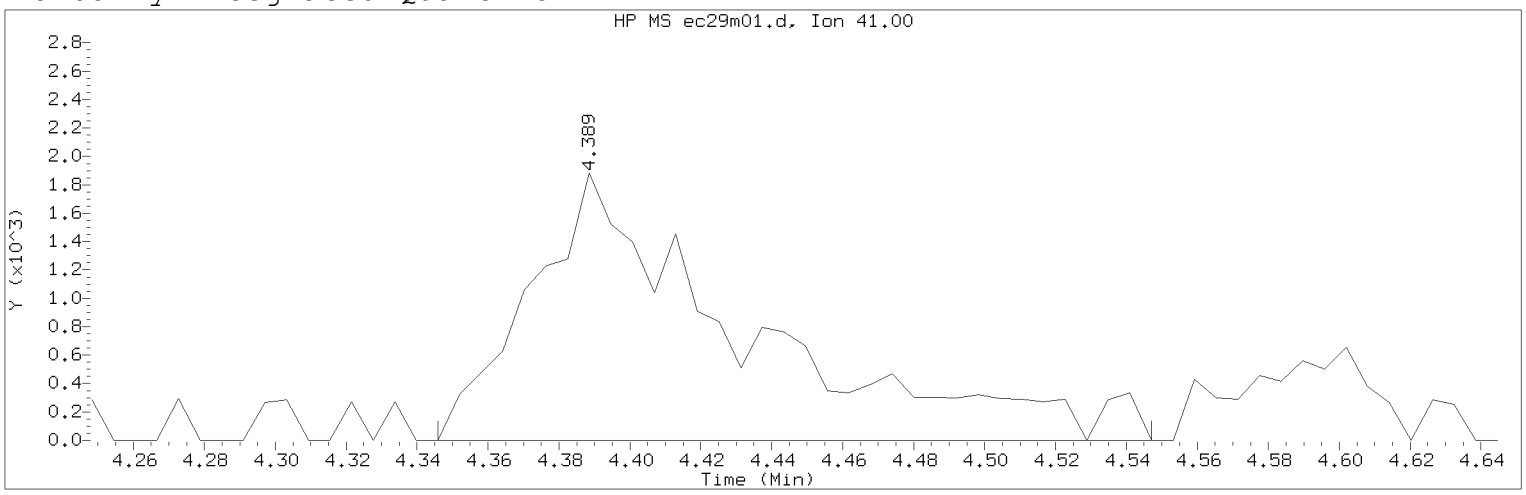
Compound Number : 47
Compound Name : Propionitrile
Scan Number : 443
Retention Time (minutes): 3.687
Quant Ion : 54.00
Area : 8316
On-column Amount (ng) : 9.1416
Integration start scan : 432 Integration stop scan: 480
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

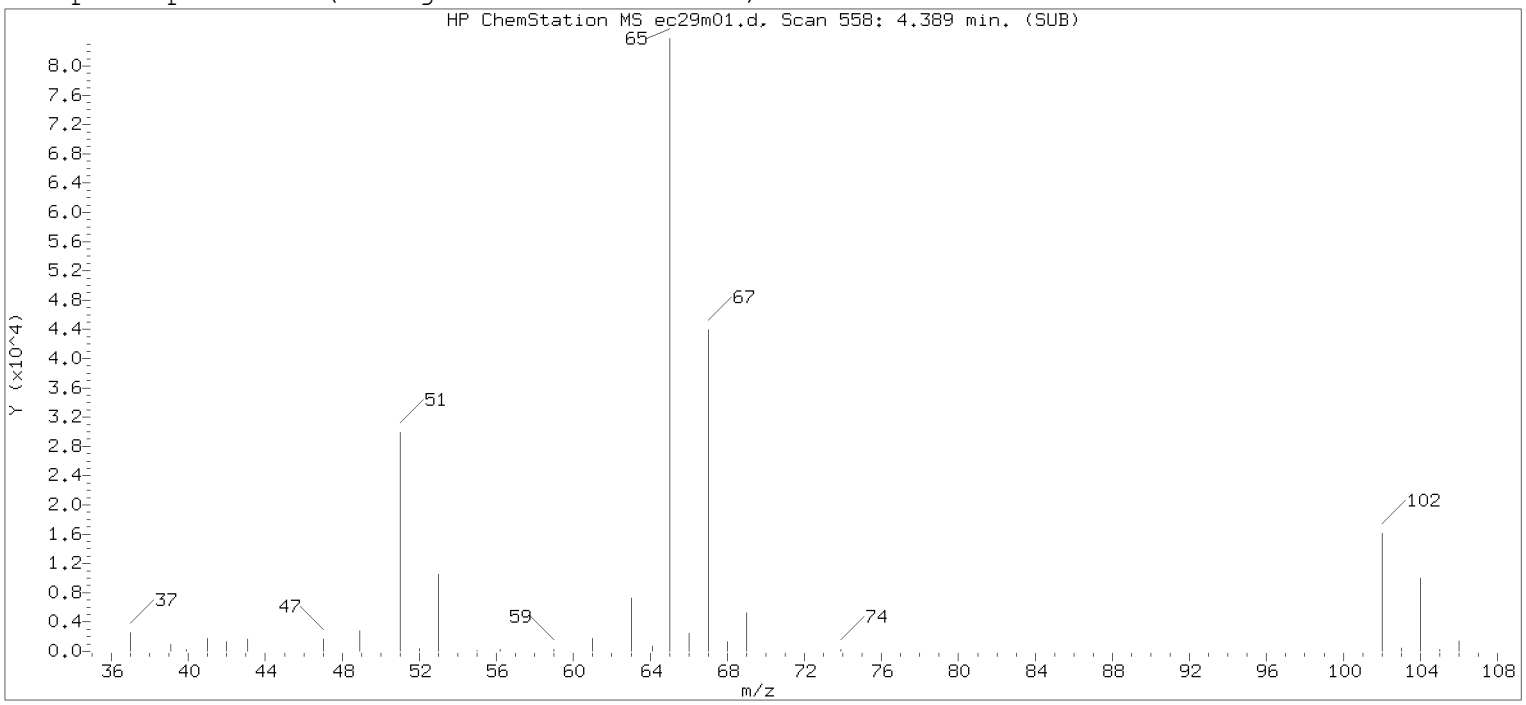
Compound Number : 58
Compound Name : Isobutyl Alcohol
Scan Number : 558
Retention Time (minutes): 4.389
Quant Ion : 41.00
Area (flag) : 7792M
On-Column Amount (ng) : 34.1819
Integration start scan : 550 Integration stop scan: 583
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

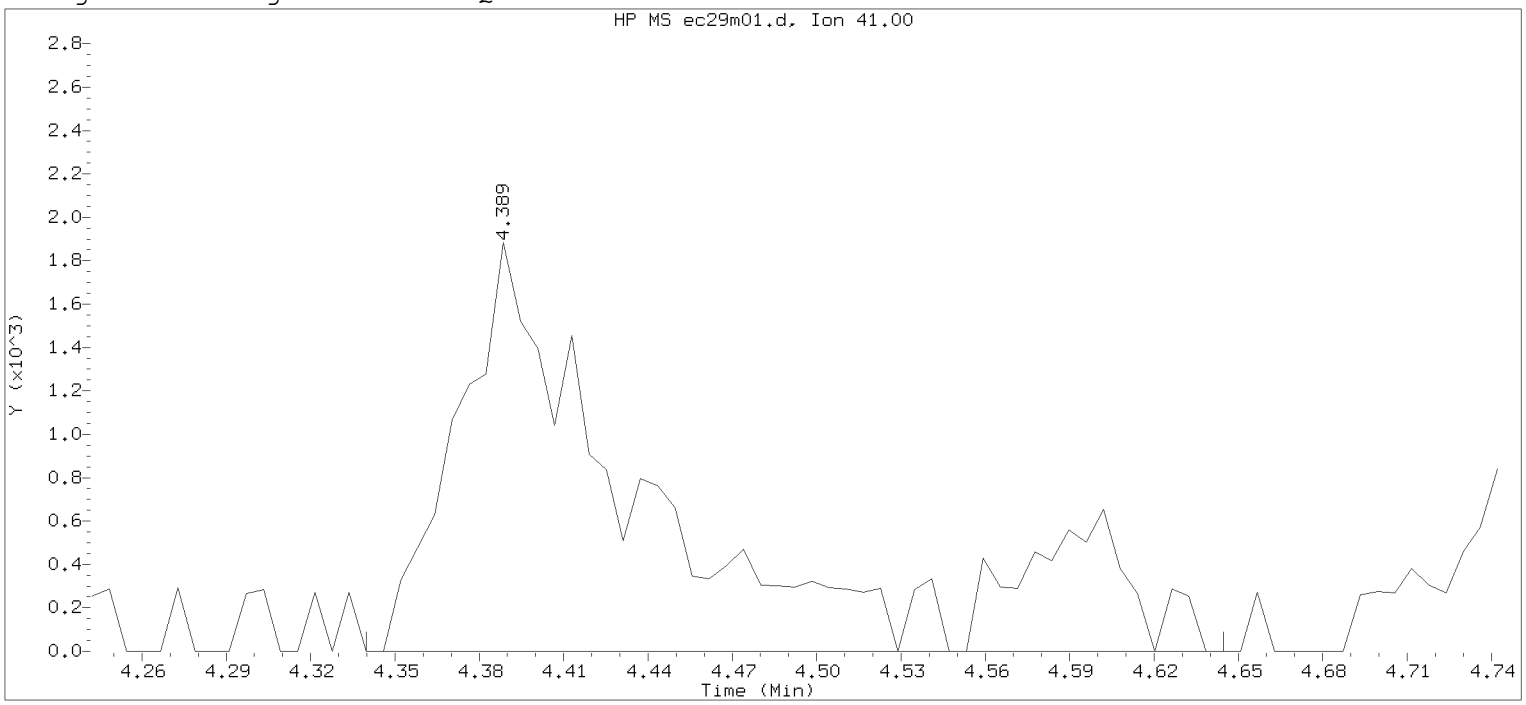
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

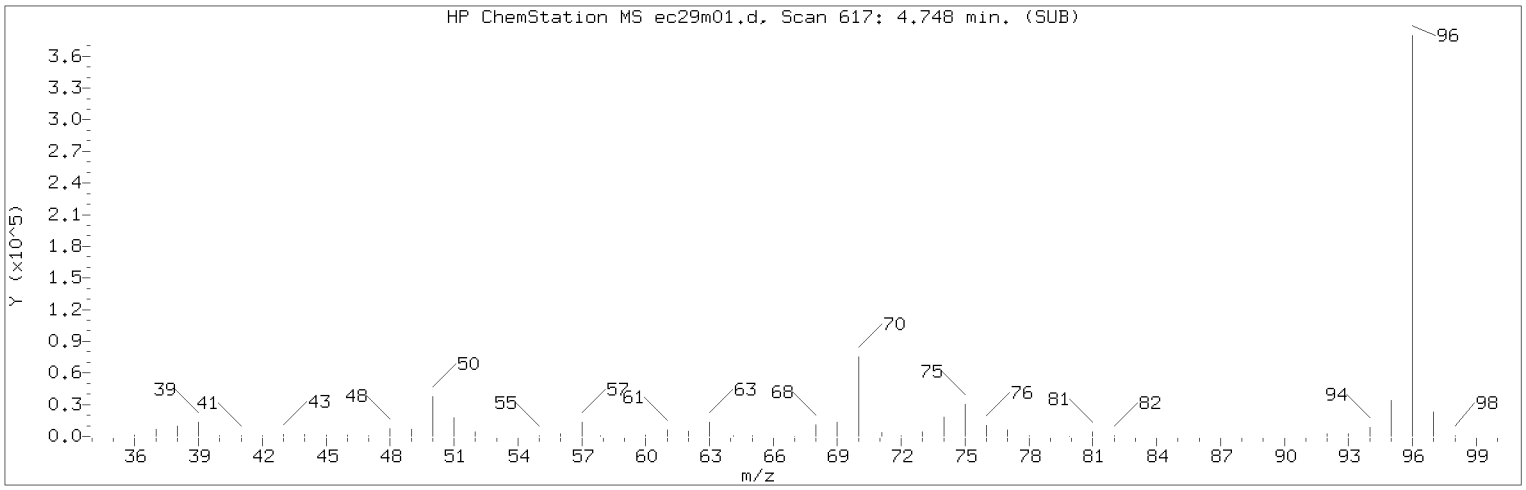
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

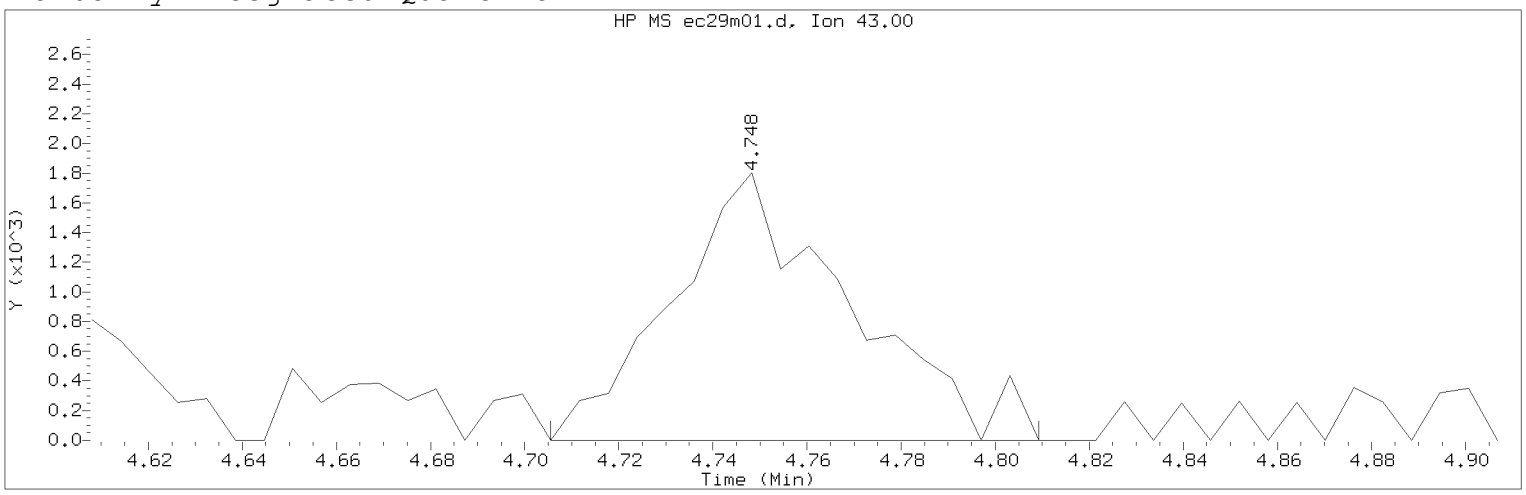
Compound Number	: 58		
Compound Name	: Isobutyl Alcohol		
Scan Number	: 558		
Retention Time (minutes)	: 4.389		
Quant Ion	: 41.00		
Area	: 9544		
On-column Amount (ng)	: 40.2614		
Integration start scan	: 549	Integration stop scan:	599
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

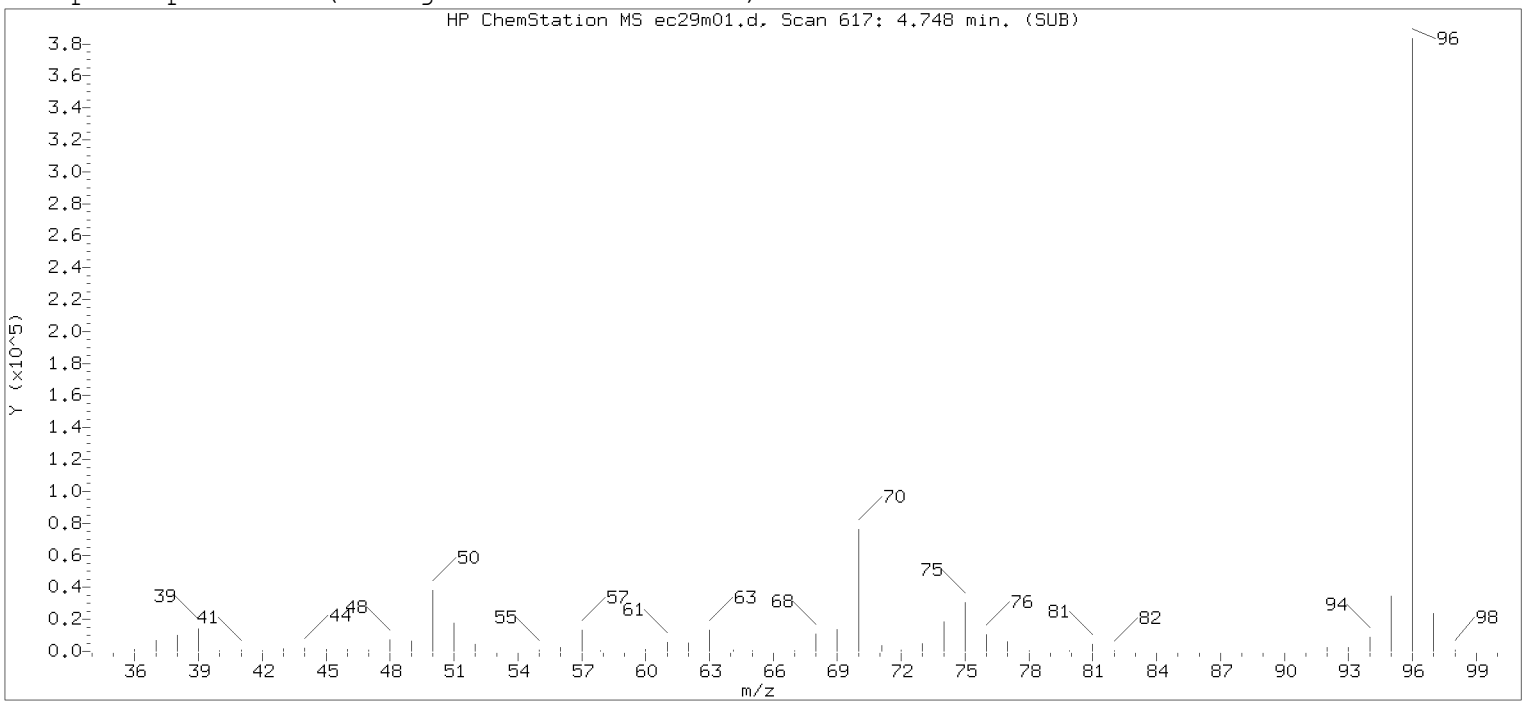
Compound Number : 67
Compound Name : n-Heptane
Scan Number : 617
Retention Time (minutes): 4.748
Quant Ion : 43.00
Area (flag) : 4735M
On-Column Amount (ng) : 2.0467
Integration start scan : 609 Integration stop scan: 626
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

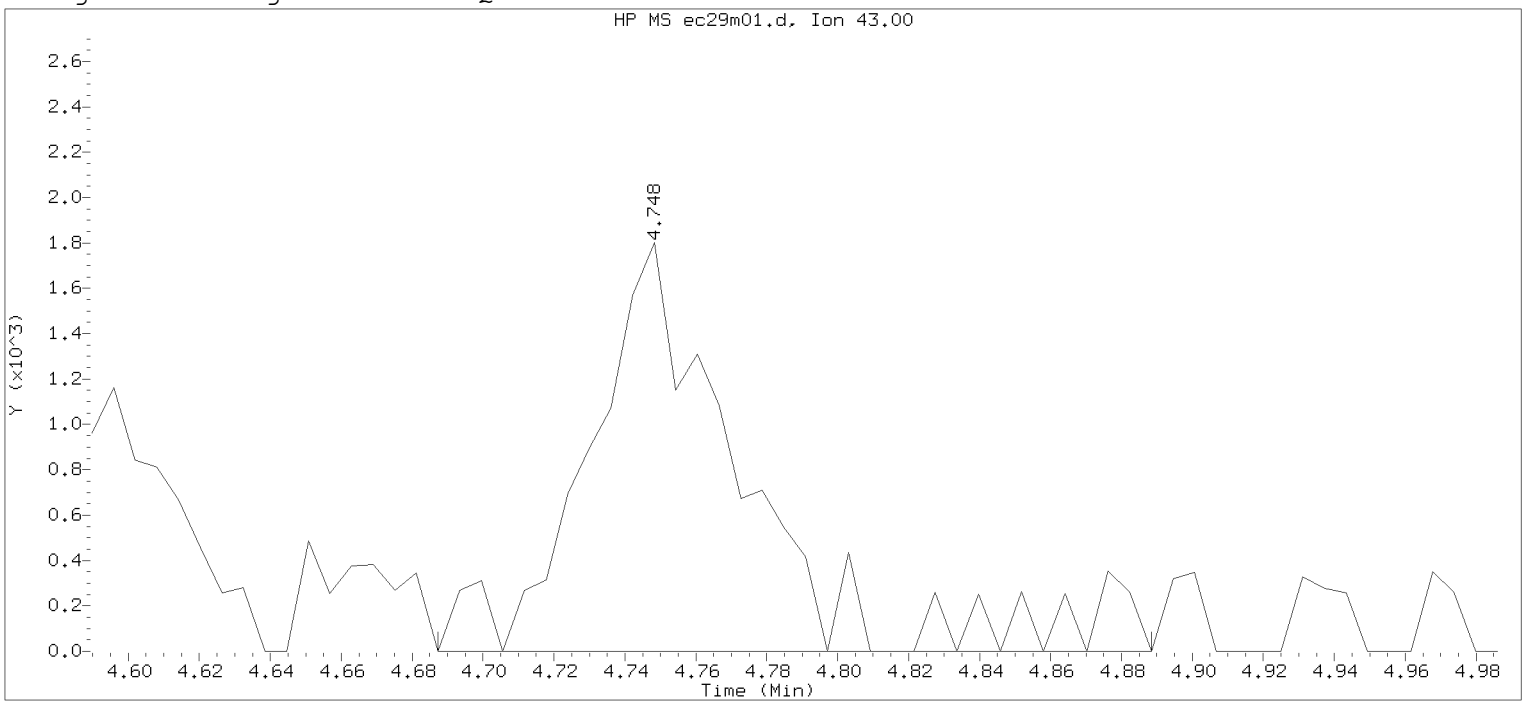
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

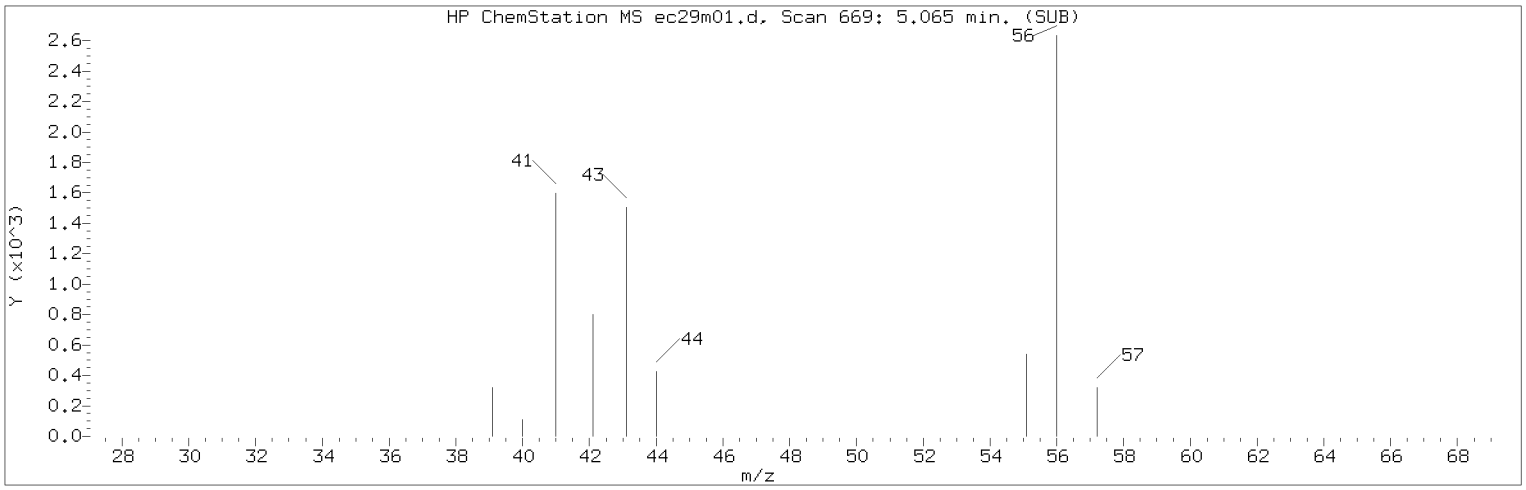
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

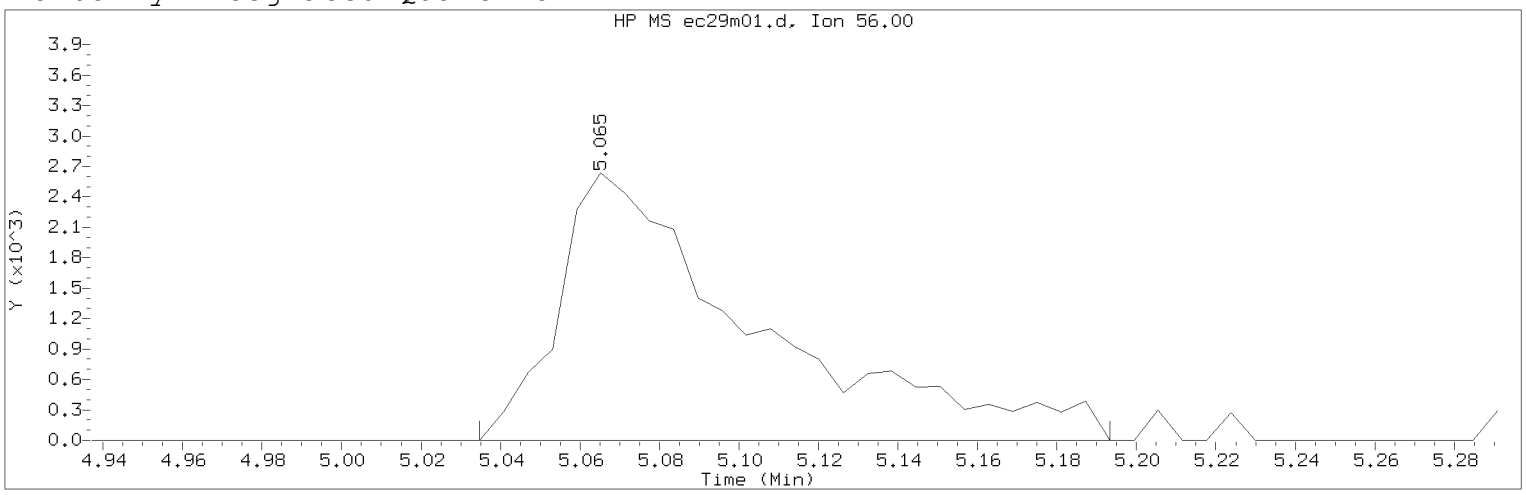
Compound Number	: 67		
Compound Name	: n-Heptane		
Scan Number	: 617		
Retention Time (minutes)	: 4.748		
Quant Ion	: 43.00		
Area	: 5548		
On-column Amount (ng)	: 0.7400		
Integration start scan	: 606	Integration stop scan:	639
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

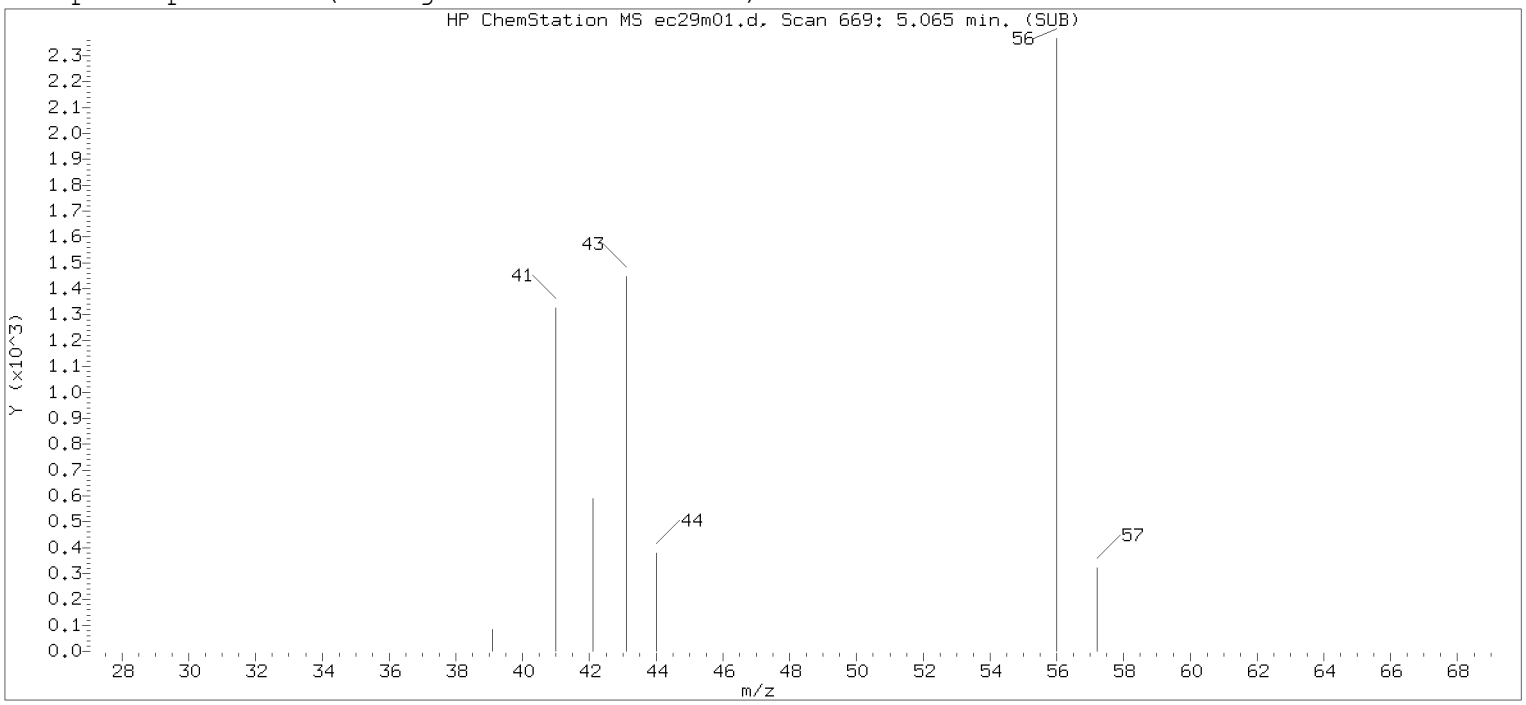
Compound Number : 69
Compound Name : n-Butanol
Scan Number : 669
Retention Time (minutes): 5.065
Quant Ion : 56.00
Area (flag) : 9077M
On-Column Amount (ng) : 47.9787
Integration start scan : 663 Integration stop scan: 689
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

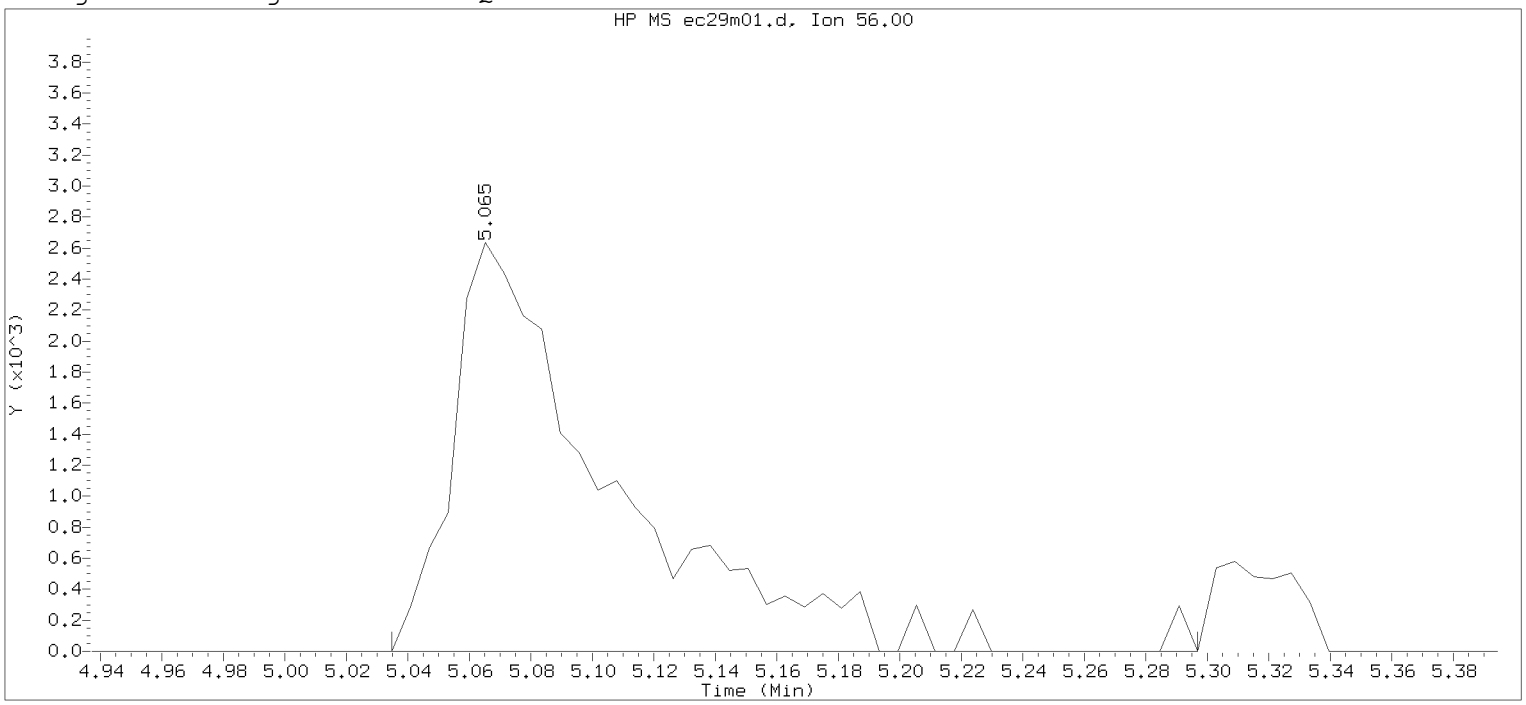
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

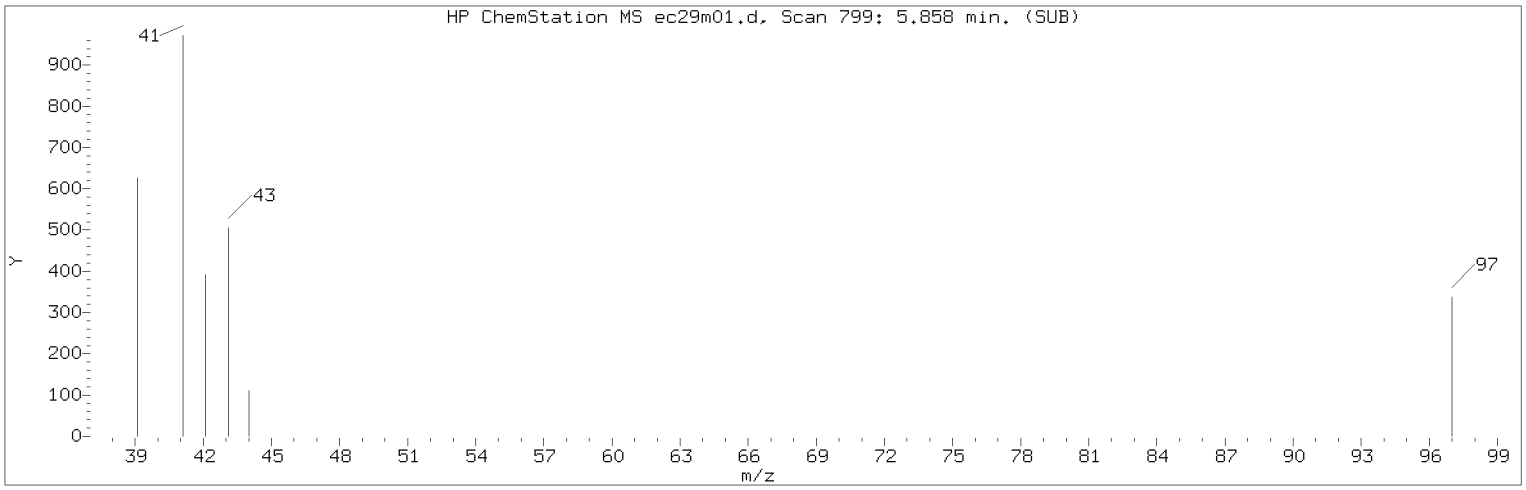
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

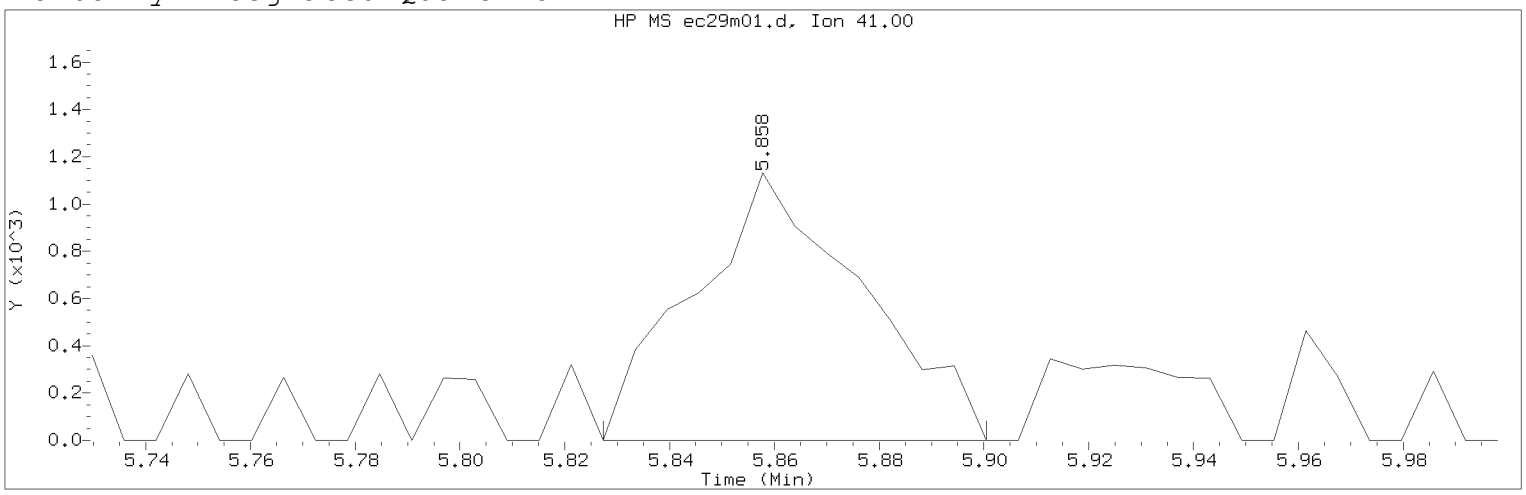
Compound Number	: 69		
Compound Name	: n-Butanol		
Scan Number	: 669		
Retention Time (minutes)	: 5.065		
Quant Ion	: 56.00		
Area	: 9392		
On-column Amount (ng)	: 50.0588		
Integration start scan	: 663	Integration stop scan:	706
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

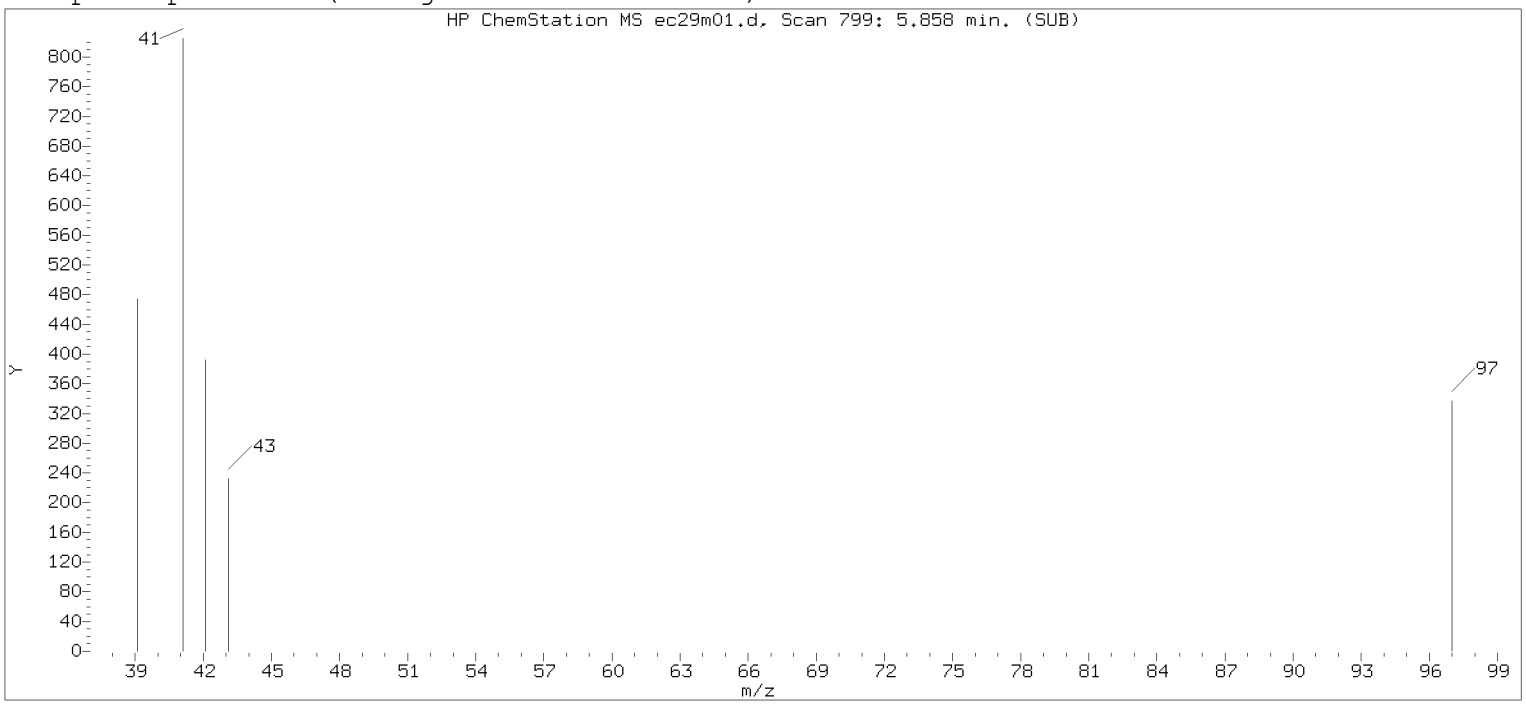
Compound Number : 80
Compound Name : 2-Nitropropane
Scan Number : 799
Retention Time (minutes): 5.858
Quant Ion : 41.00
Area (flag) : 2540M
On-Column Amount (ng) : 1.6214
Integration start scan : 793 Integration stop scan: 805
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

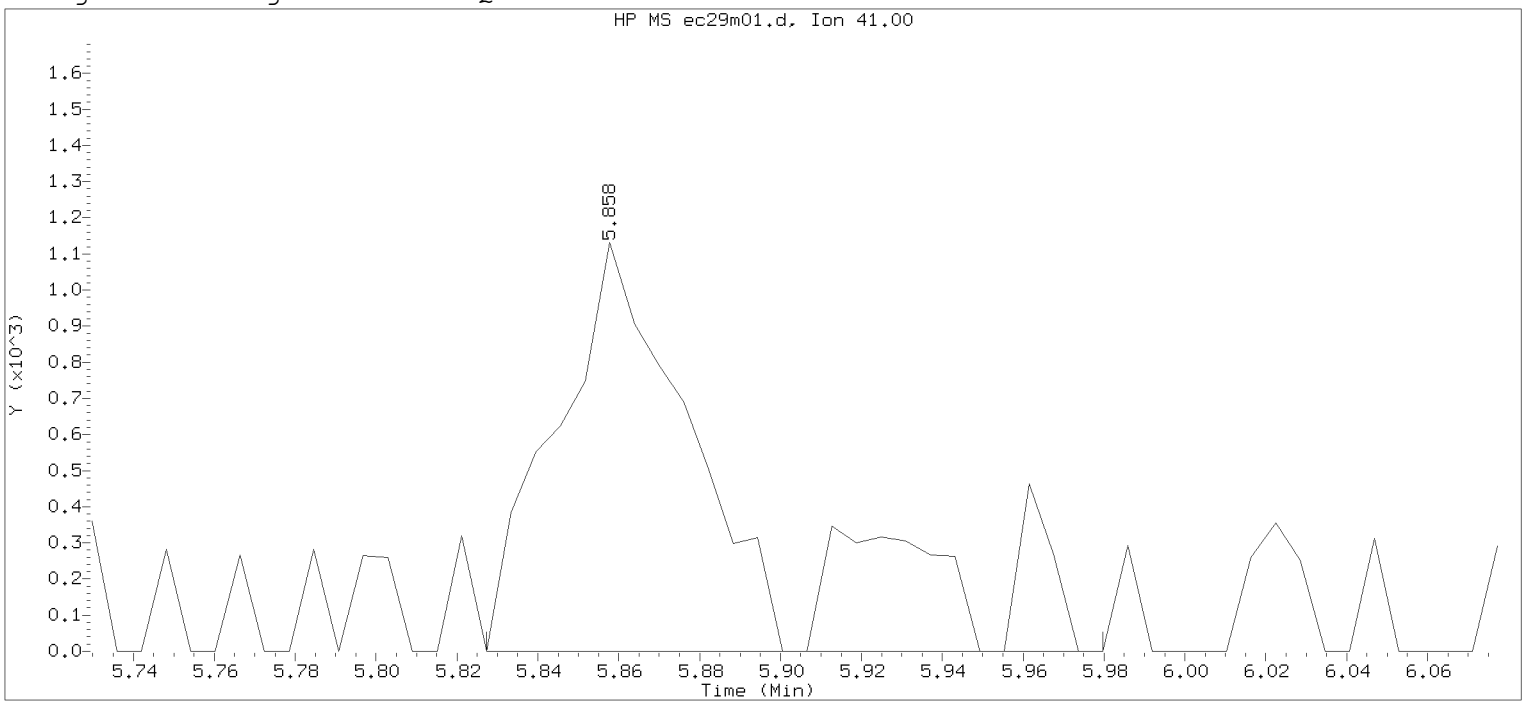
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

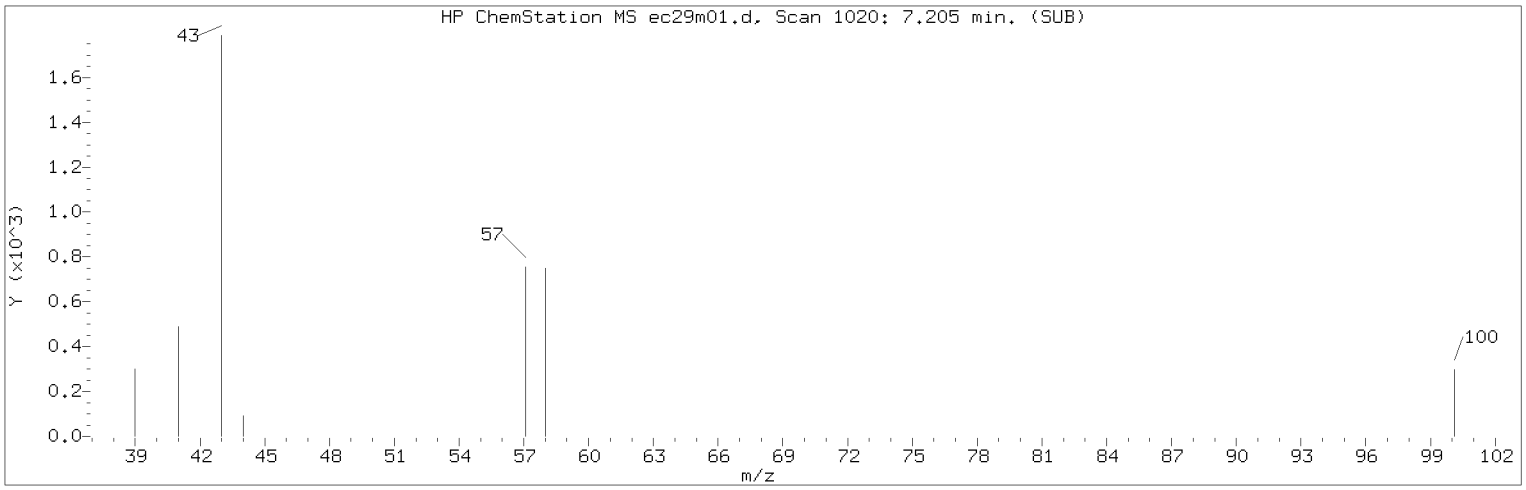
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

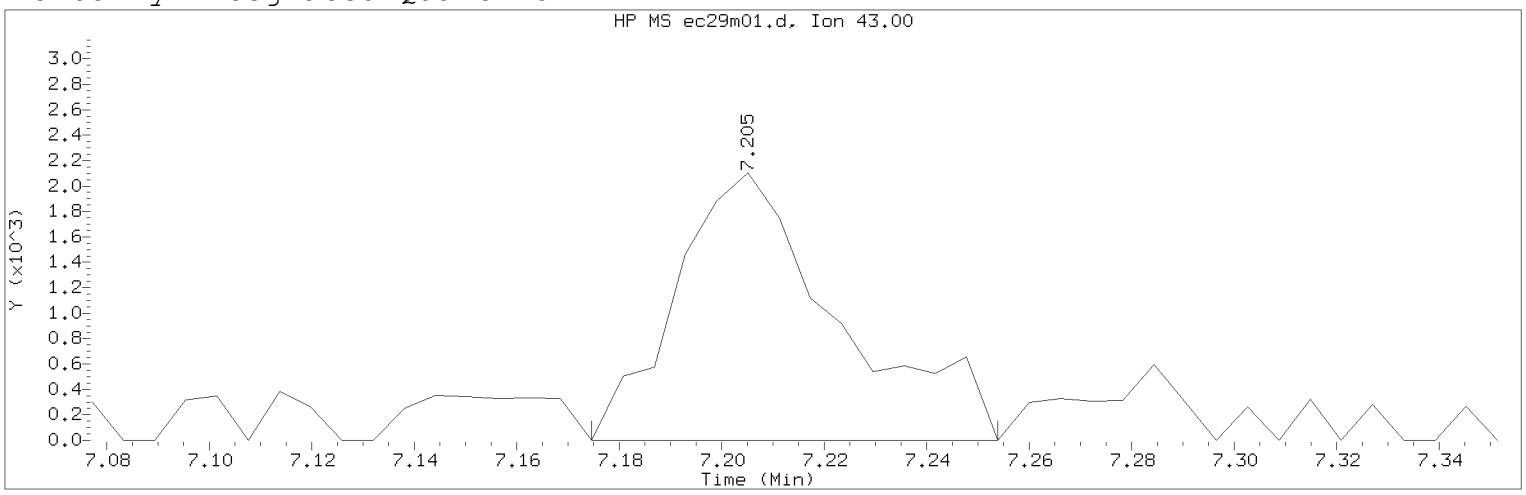
Compound Number : 80
Compound Name : 2-Nitropropane
Scan Number : 799
Retention Time (minutes): 5.858
Quant Ion : 41.00
Area : 3466
On-column Amount (ng) : 2.1108
Integration start scan : 793 Integration stop scan: 818
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

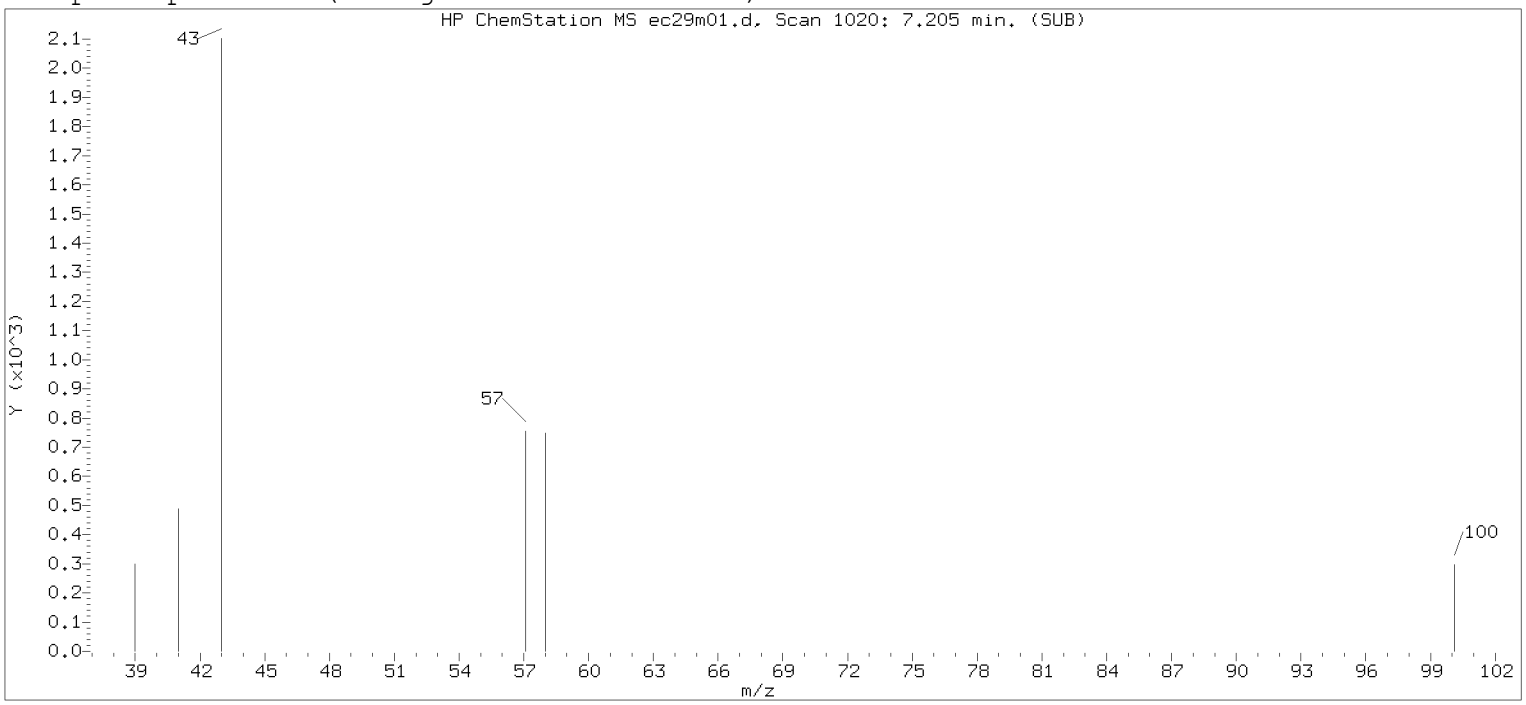
Compound Number : 97
Compound Name : 2-Hexanone
Scan Number : 1020
Retention Time (minutes): 7.205
Quant Ion : 43.00
Area (flag) : 4616M
On-Column Amount (ng) : 1.0048
Integration start scan : 1014 Integration stop scan: 1027
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

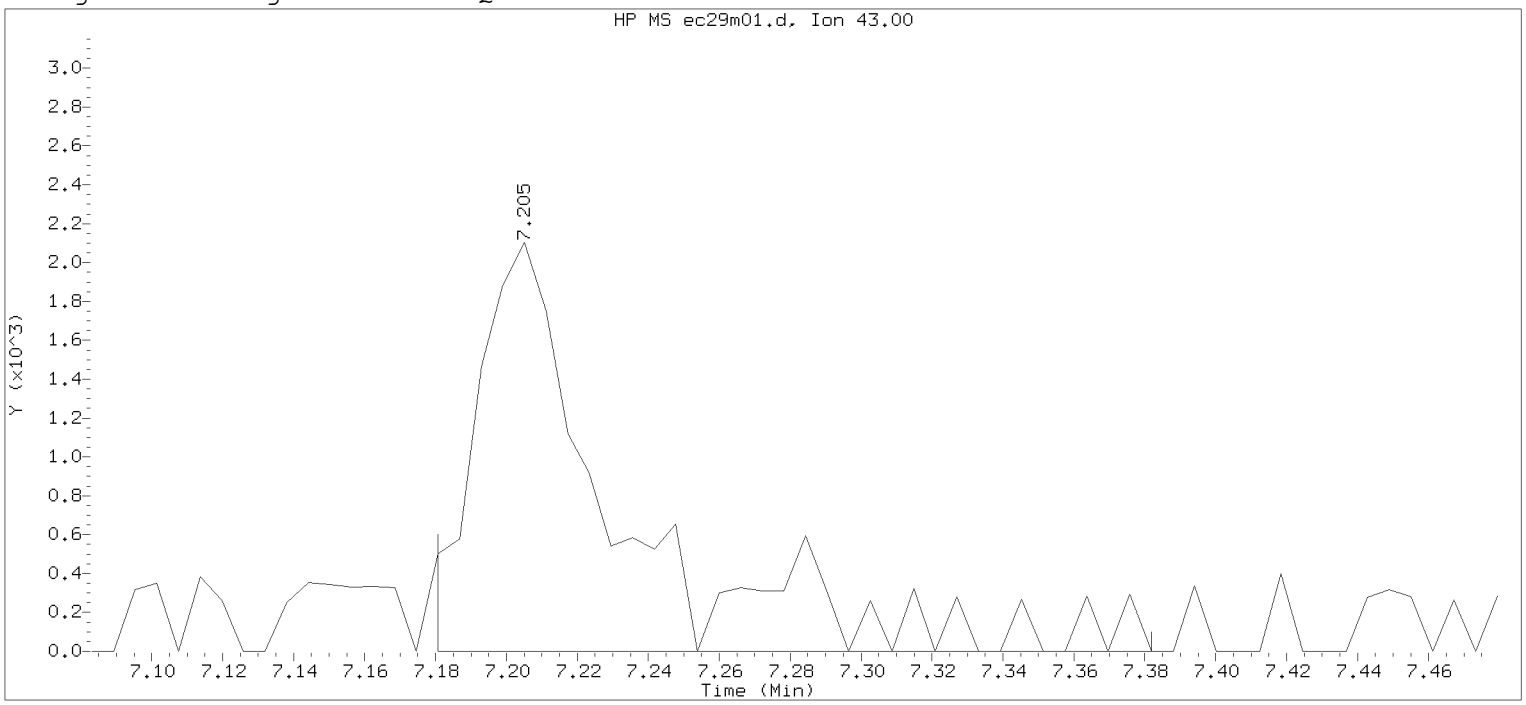
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

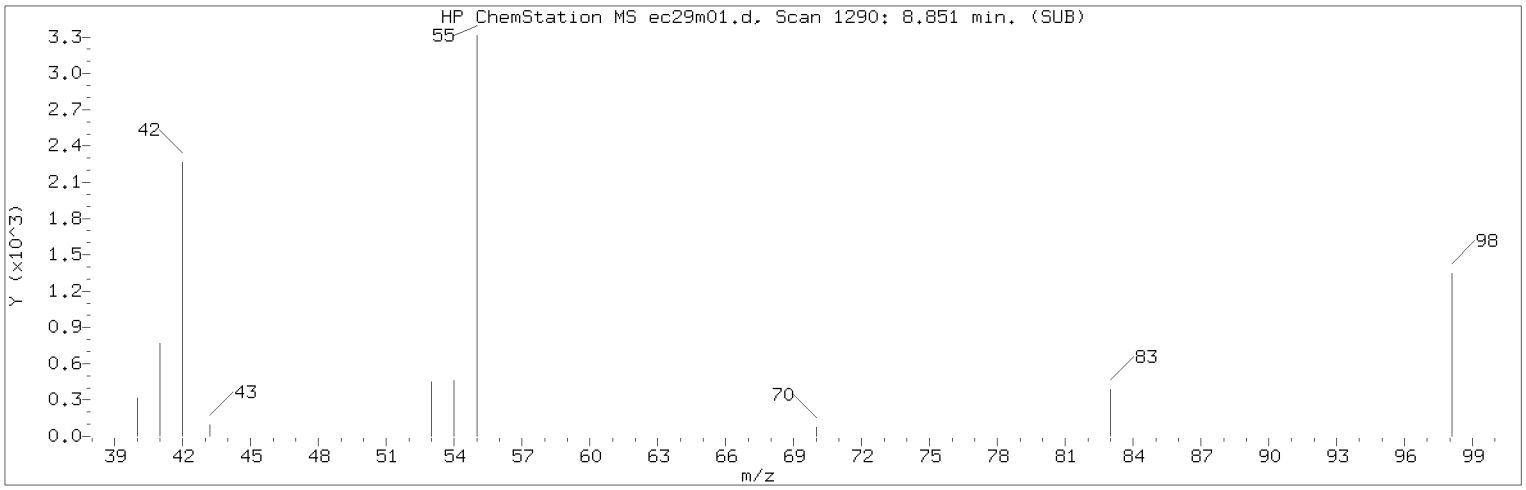
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

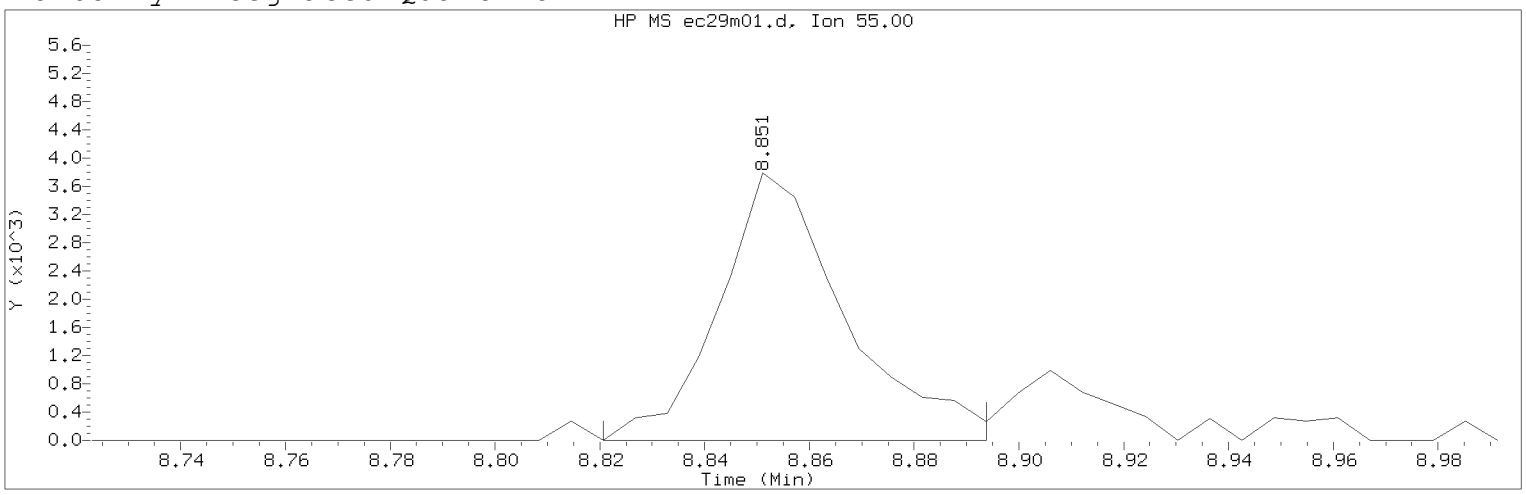
Compound Number : 97
Compound Name : 2-Hexanone
Scan Number : 1020
Retention Time (minutes): 7.205
Quant Ion : 43.00
Area : 5932
On-column Amount (ng) : 1.2268
Integration start scan : 1015 Integration stop scan: 1048
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

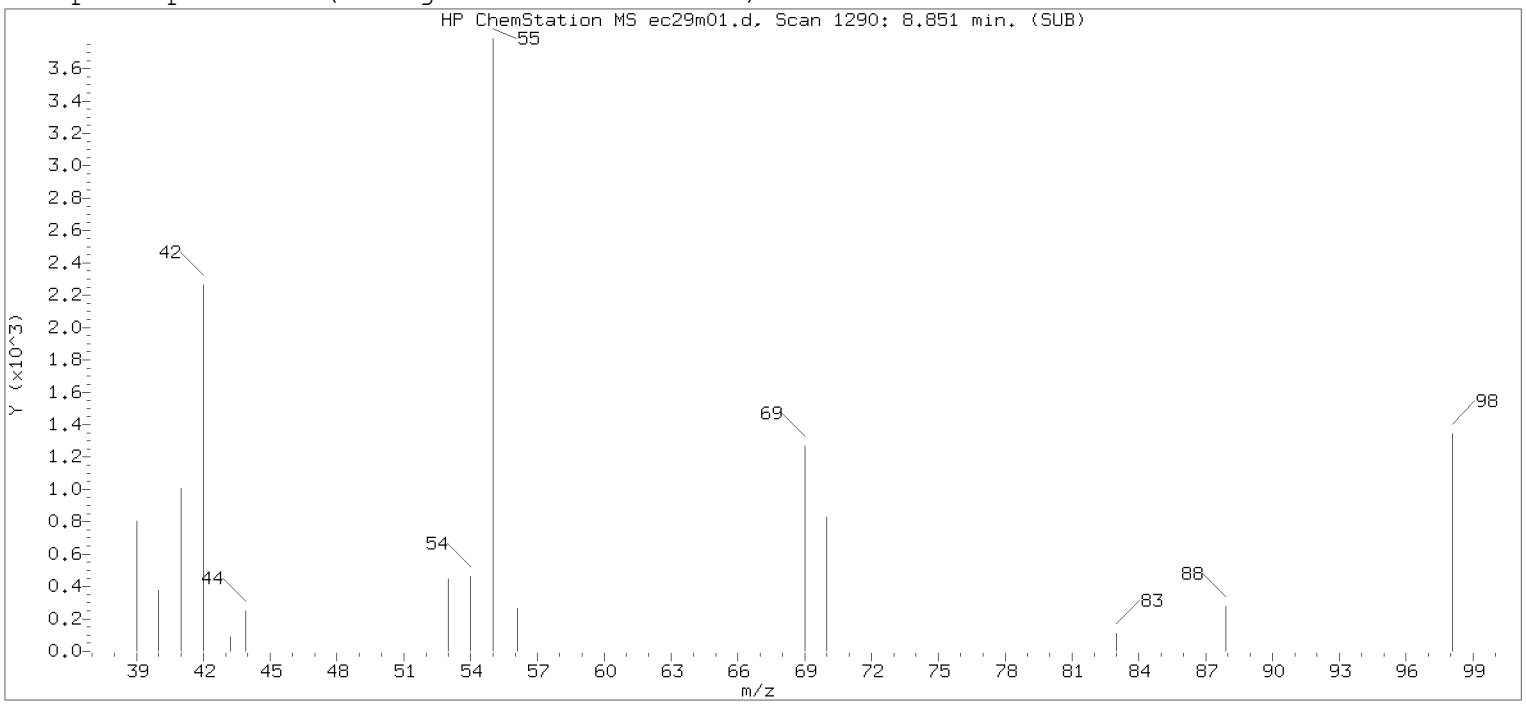
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1290
Retention Time (minutes): 8.851
Quant Ion : 55.00
Area (flag) : 6360M
On-Column Amount (ng) : 27.8229
Integration start scan : 1284 Integration stop scan: 1296
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

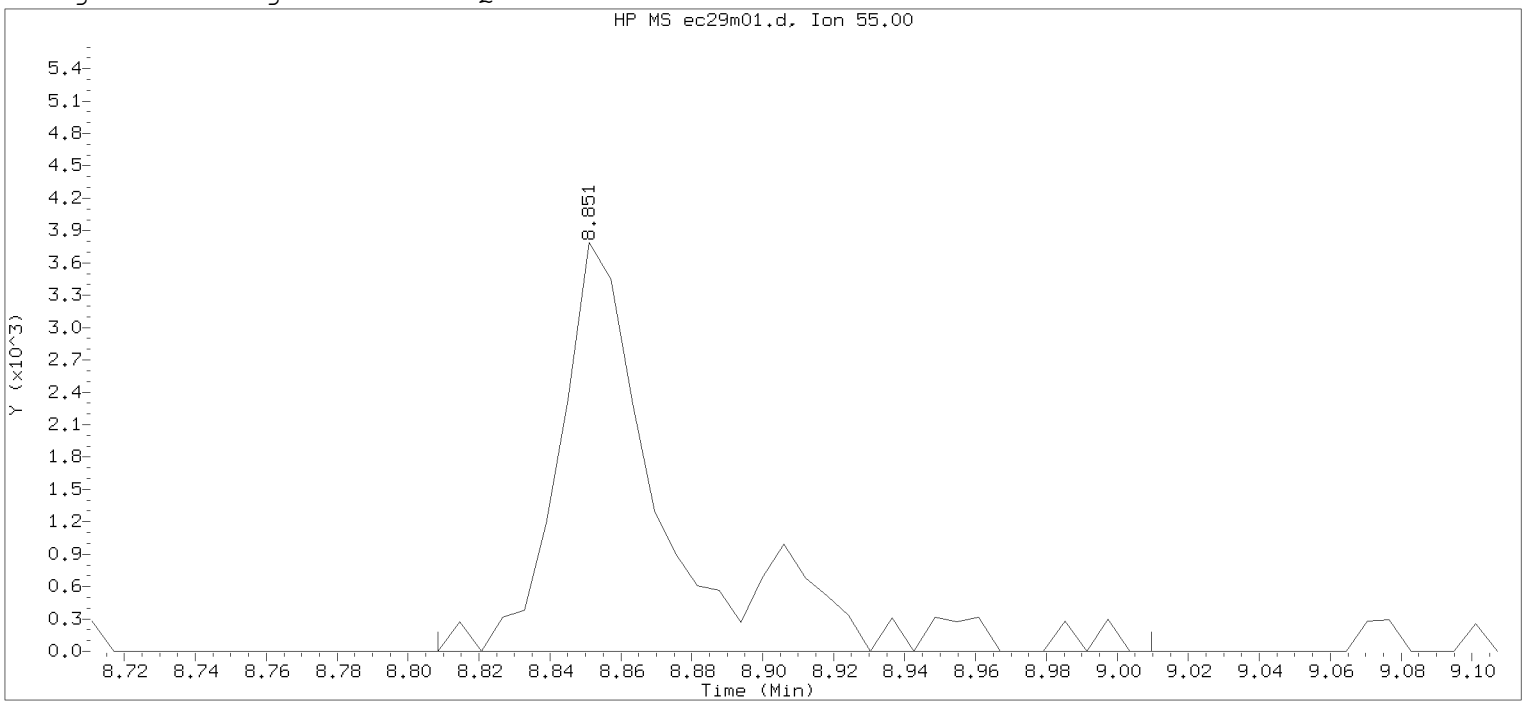
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

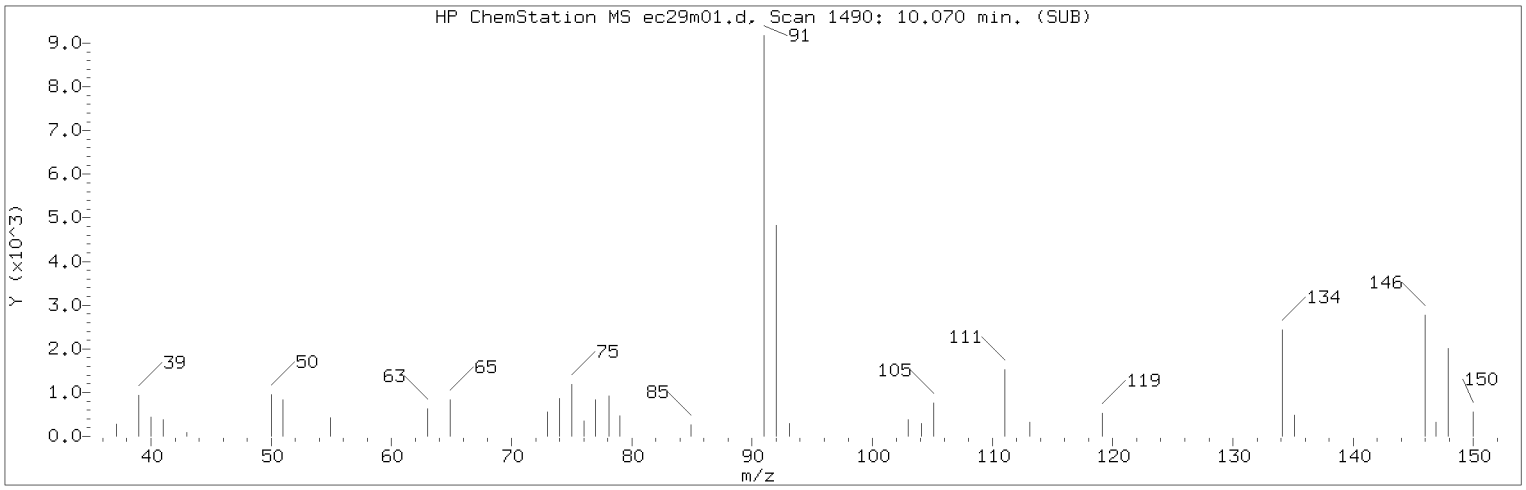
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

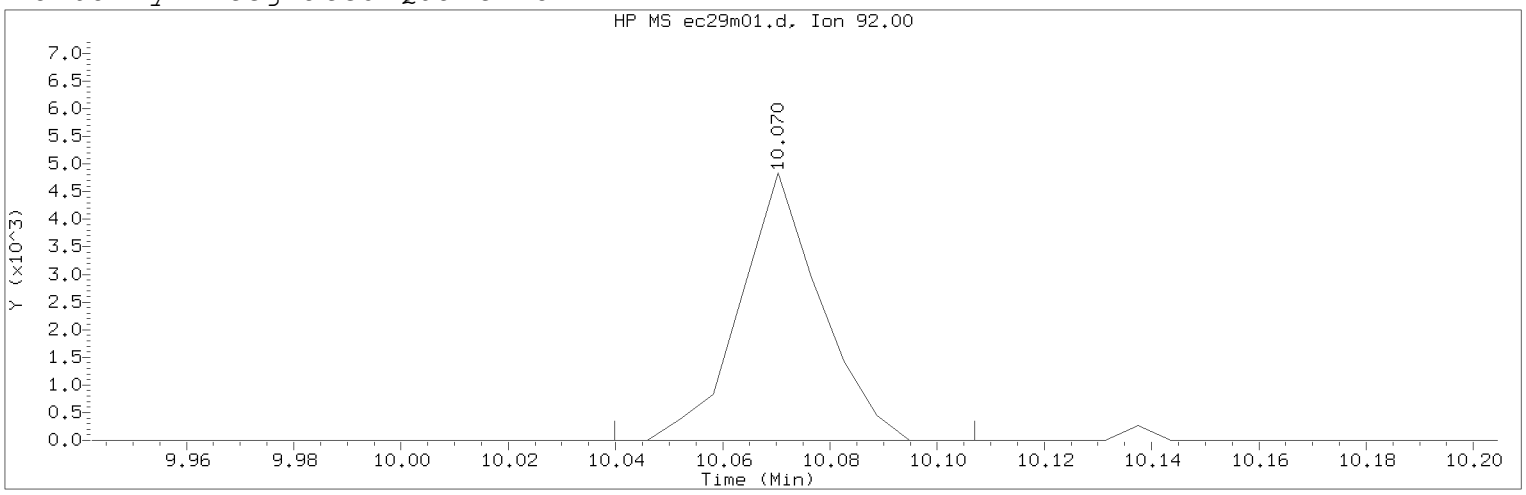
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1290
Retention Time (minutes): 8.851
Quant Ion : 55.00
Area : 8282
On-column Amount (ng) : 36.2291
Integration start scan : 1282 Integration stop scan: 1315
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

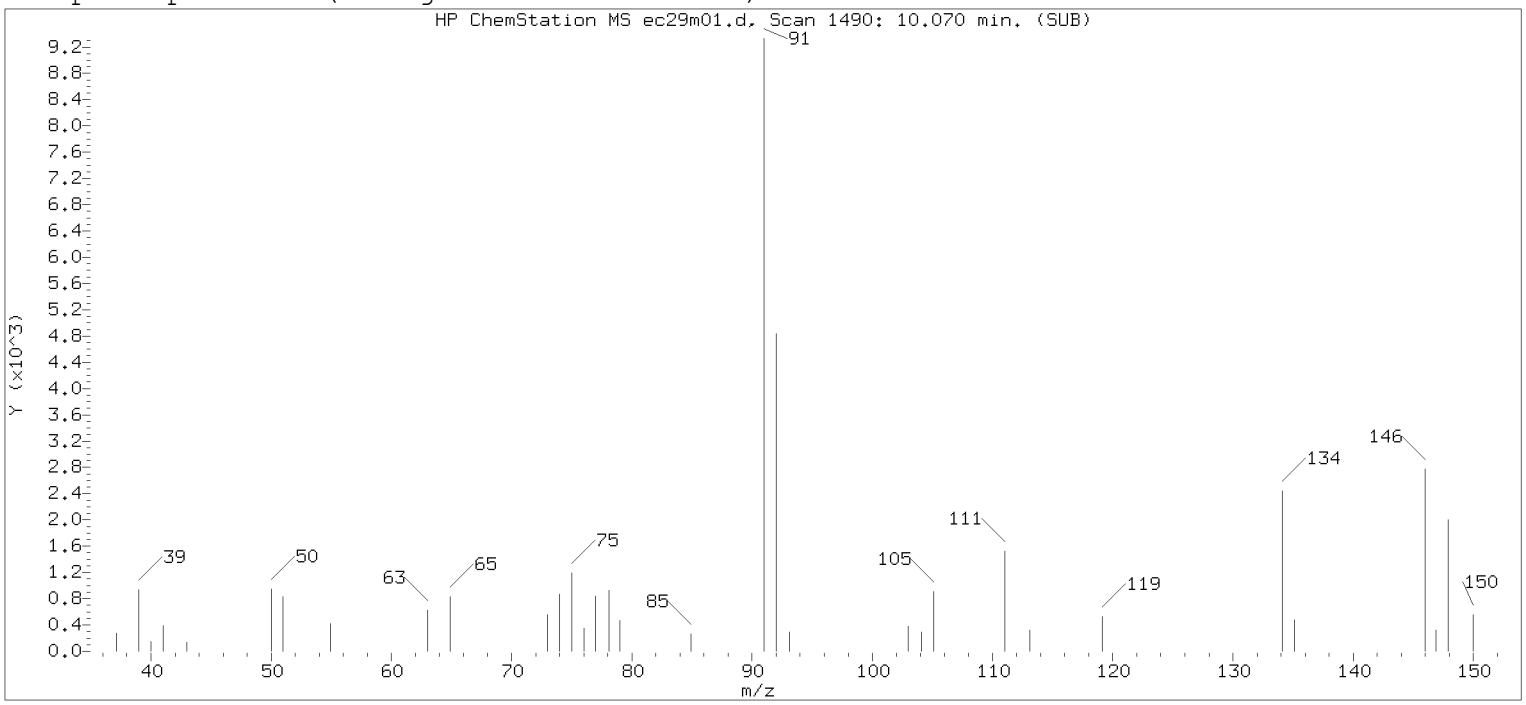
Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1490
Retention Time (minutes): 10.070
Quant Ion : 92.00
Area (flag) : 5012M
On-Column Amount (ng) : 0.4543
Integration start scan : 1484 Integration stop scan: 1495
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

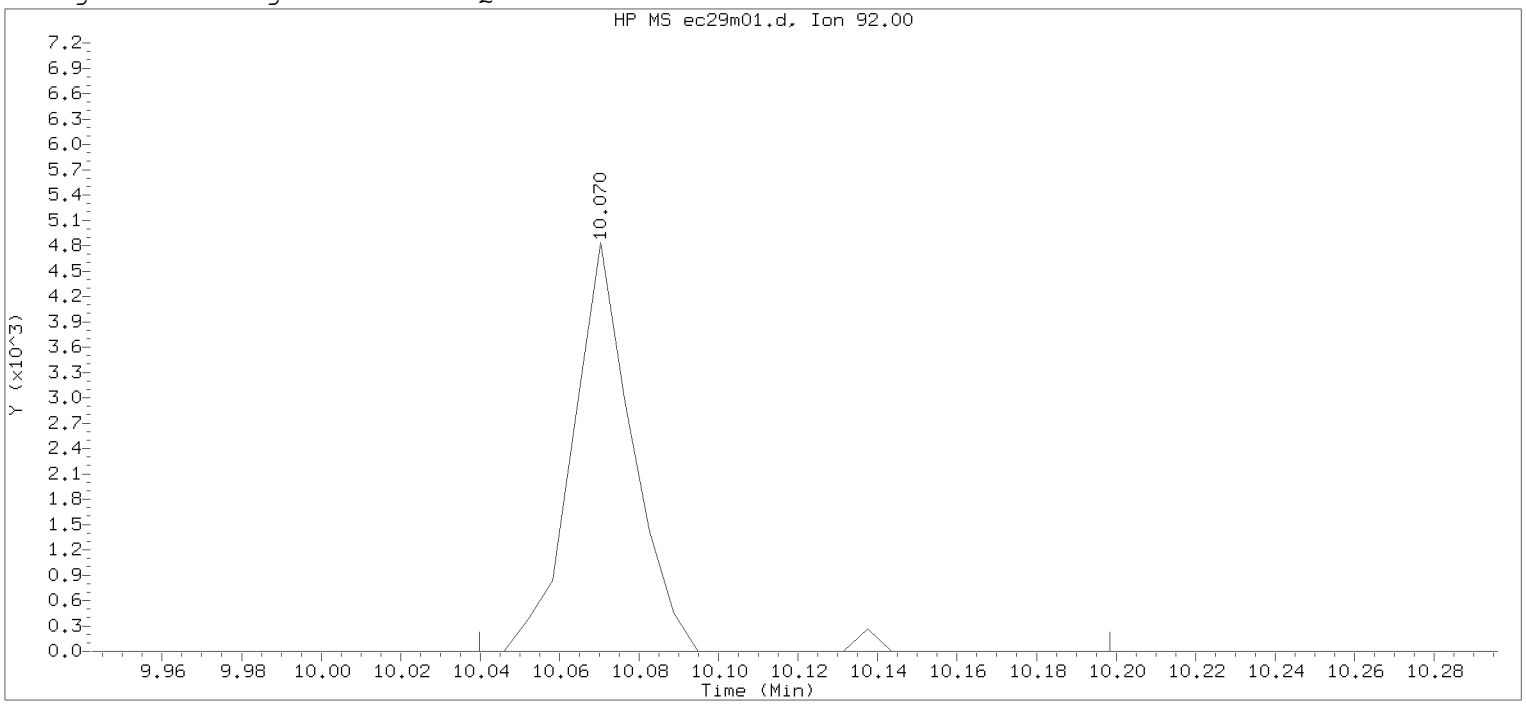
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:45.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



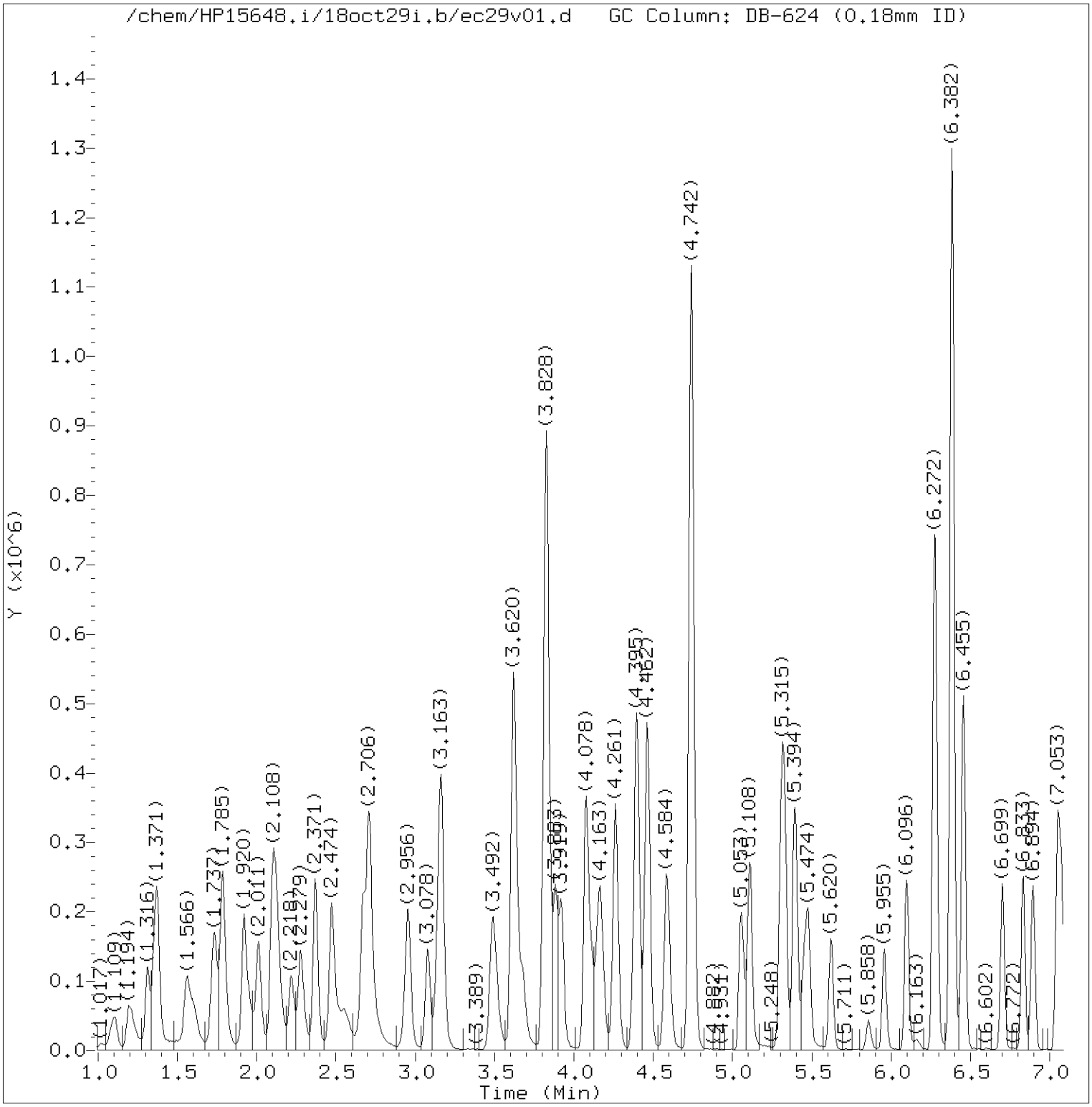
Data File: /chem/HP15648.i/18oct29i.b/ec29m01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:01 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 22:57
Date, time and analyst ID of latest file update: 29-Oct-2018 23:17 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compound Number : 140
Compound Name : n-Butylbenzene
Scan Number : 1490
Retention Time (minutes): 10.070
Quant Ion : 92.00
Area : 5109
On-column Amount (ng) : 0.4618
Integration start scan : 1484 Integration stop scan: 1510
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:45.
Target 3.5 esignature user id: DVV10203



Total Ion Chromatogram (TIC)

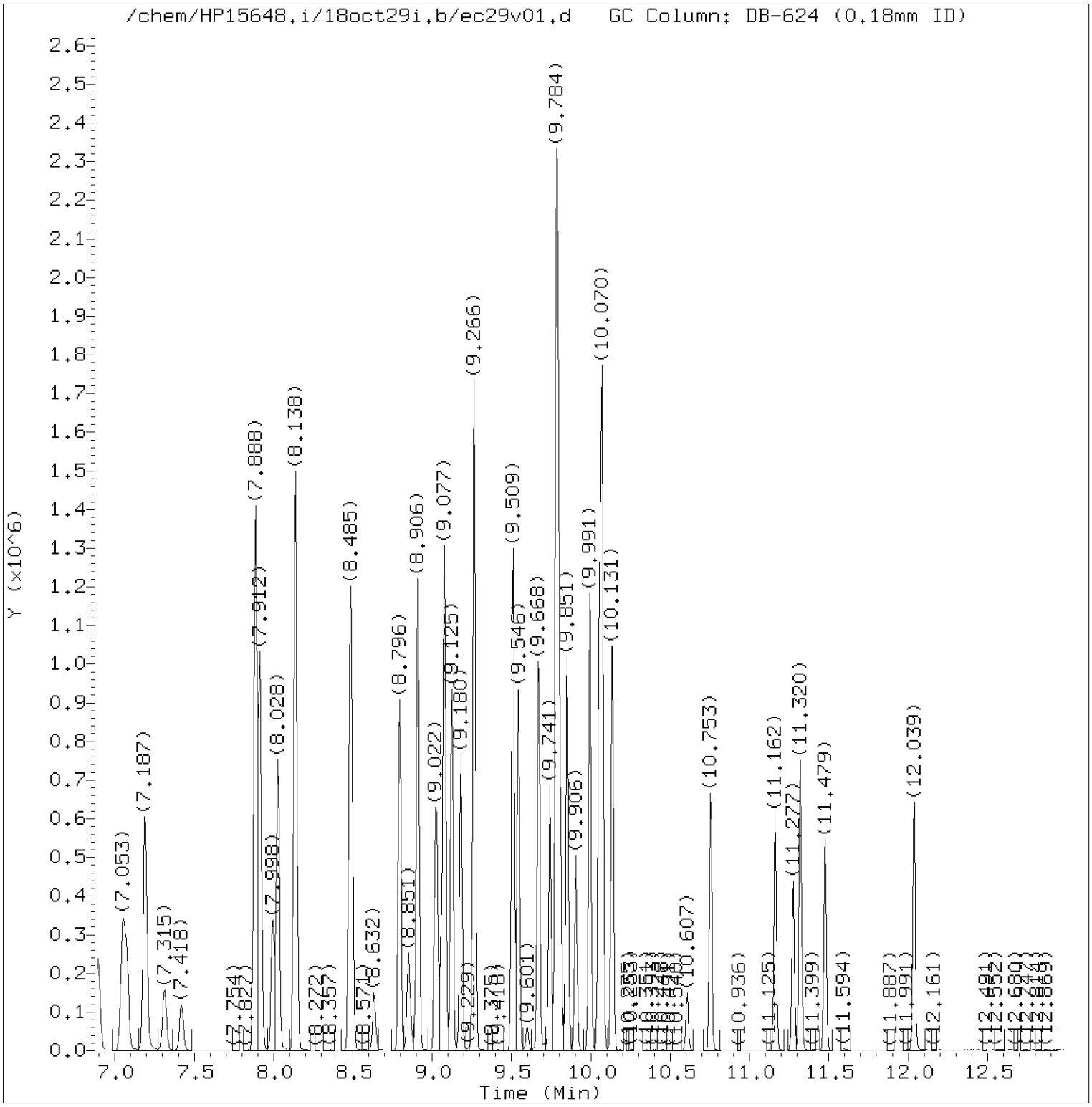
Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: ICVELG Lab Sample ID: ICVELG

Digitally signed by Don V. Viray
on 10/29/2018 at 23:46.
Target 3.5 esignature user ID: dvv10203



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: ICVELG Lab Sample ID: ICVELG

Digitally signed by Don V. Viray
on 10/29/2018 at 23:46.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: ICVELG Lab Sample ID: ICVELG

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.194	85	116285	16.073
4) Chloromethane	(2)	1.310	50	145586M	19.273
5) 1,3-Butadiene	(2)	1.365	39	104989M	17.475
6) Vinyl Chloride	(2)	1.377	62	133373	19.169
8) Bromomethane	(2)	1.566	94	83330	17.196
9) Chloroethane	(2)	1.596	64	74914M	18.755
10) Dichlorofluoromethane	(2)	1.731	67	192245	20.067
11) n-Pentane	(2)	1.785	43	153810	20.493
12) Trichlorofluoromethane	(2)	1.785	101	149018	18.677
14) Ethyl ether	(2)	1.920	59	76525	19.058
15) Freon 123a	(2)	1.932	67	105488	19.858
16) Acrolein	(1)	2.011	56	175134	130.515
17) 1,1-Dichloroethene	(2)	2.096	96	77758	20.300
18) Acetone	(1)	2.115	58	76508	136.199
19) Freon 113	(2)	2.127	101	78082	21.244
21) 2-Propanol	(1)	2.212	45	52618	136.159
22) Methyl Iodide	(2)	2.218	142	127115	19.443
23) Carbon Disulfide	(2)	2.279	76	256685	19.182
25) Allyl Chloride	(2)	2.371	41	155534	18.379
27) Methyl Acetate	(2)	2.377	43	79392	17.554
28) Methylene Chloride	(2)	2.474	84	89866	19.987
29)*t-Butyl alcohol-d10	(1)	2.486	65	174317	250.000
30) t-Butyl alcohol	(1)	2.560	59	121618M	184.058
31) Acrylonitrile	(2)	2.669	53	216476	89.562
32) trans-1,2-Dichloroethene	(2)	2.706	96	87262	20.504
33) Methyl Tertiary Butyl Ether	(2)	2.718	73	264195	19.458
34) n-Hexane	(2)	2.950	57	144144	19.555
36) 1,1-Dichloroethane	(2)	3.078	63	168482	20.100
38) di-Isopropyl ether	(2)	3.151	45	304036	19.462
39) 2-Chloro-1,3-butadiene	(2)	3.163	53	152248	19.179
40) Ethyl t-butyl ether	(2)	3.492	59	285447	19.546
42) cis-1,2-Dichloroethene	(2)	3.620	96	97218	20.610
45) 2,2-Dichloropropane	(2)	3.620	77	144213	20.366
44) 2-Butanone	(2)	3.626	43	416918	136.430
47) Propionitrile	(1)	3.675	54	131134	140.054
48) Methacrylonitrile	(2)	3.828	67	363303	146.386
49) Bromochloromethane	(2)	3.840	128	44770	19.640
50) Tetrahydrofuran	(1)	3.889	71	74613	94.048

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

Digitally signed by Don V. Viray
on 10/29/2018 at 23:46.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: ICVELG Lab Sample ID: ICVELG

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
51) Chloroform	(2)	3.919	83	154570	20.903
52)$Dibromofluoromethane	(2)	4.072	113	216253	50.820
53) 1,1,1-Trichloroethane	(2)	4.108	97	137307	20.320
54) Cyclohexane	(2)	4.163	56	170508	20.192
55) 1,1-Dichloropropene	(2)	4.261	75	130122	19.767
56) Carbon Tetrachloride	(2)	4.273	117	113979	20.474
58) Isobutyl Alcohol	(1)	4.389	41	101488	436.229
57)$1,2-Dichloroethane-d4	(2)	4.401	102	57245	49.473
60) Benzene	(2)	4.462	78	379139	19.856
61) 1,2-Dichloroethane	(2)	4.474	62	121964	20.090
65) t-Amyl methyl ether	(2)	4.584	73	272581	19.553
66)*Fluorobenzene	(2)	4.736	96	971418	50.000
67) n-Heptane	(2)	4.748	43	148430	17.242
69) n-Butanol	(1)	5.053	56	179638	930.375
71) Trichloroethene	(2)	5.108	95	93243	20.101
73) Methylcyclohexane	(2)	5.309	83	178747	19.574
74) 1,2-Dichloropropane	(2)	5.333	63	99204	19.398
75) Dibromomethane	(2)	5.449	93	54379	20.677
77) Methyl Methacrylate	(2)	5.474	69	78596	18.549
76) 1,4-Dioxane	(1)	5.474	88	22236M	480.240
79) Bromodichloromethane	(2)	5.620	83	116175	20.517
80) 2-Nitropropane	(2)	5.858	41	30266	18.965
81) 2-Chloroethyl Vinyl Ether	(2)	5.955	63	71161	19.916
82) cis-1,3-Dichloropropene	(2)	6.102	75	155059	19.790
43) 1,2-Dichloroethene (Total)	(2)		96	184480	41.114
83) 4-Methyl-2-pentanone	(2)	6.272	43	595206	92.583
84)$Toluene-d8	(3)	6.382	98	978776	50.064
89) Toluene	(3)	6.455	92	239484	20.138
90) trans-1,3-Dichloropropene	(3)	6.699	75	143538	19.709
92) Ethyl Methacrylate	(3)	6.833	69	142811	18.509
93) 1,1,2-Trichloroethane	(3)	6.894	97	80927	20.704
94) Tetrachloroethene	(3)	7.047	166	96558	21.773
95) 1,3-Dichloropropane	(3)	7.077	76	144516	19.809
97) 2-Hexanone	(3)	7.187	43	431052	92.813
102) 1-Chlorohexane	(3)	7.309	91	7969M	22.279
98) Dibromochloromethane	(3)	7.315	129	85403	20.589
100) 1,2-Dibromoethane	(3)	7.418	107	82386	20.343
101)*Chlorobenzene-d5	(3)	7.888	117	697198	50.000

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

Digitally signed by Don V. Viray
on 10/29/2018 at 23:46.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: ICVELG Lab Sample ID: ICVELG

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
103) Chlorobenzene	(3)	7.912	112	260075	20.421
104) 1,1,1,2-Tetrachloroethane	(3)	7.992	131	86413	20.573
105) Ethylbenzene	(3)	8.028	91	465372	19.884
107) m+p-Xylene	(3)	8.138	106	366803	41.029
108) o-Xylene	(3)	8.479	106	178620	20.409
110) Styrene	(3)	8.491	104	300055	20.522
111) Bromoform	(3)	8.632	173	55394	20.510
112) Isopropylbenzene	(3)	8.796	105	488964	21.240
113) Cyclohexanone	(1)	8.851	55	96280	412.700
115)$4-Bromofluorobenzene	(3)	8.906	95	364284	50.061
116) Bromobenzene	(4)	9.022	156	101361	20.827
117) 1,1,2,2-Tetrachloroethane	(4)	9.034	83	123218	19.921
118) 1,2,3-Trichloropropane	(4)	9.058	110	36613	20.999
119) trans-1,4-Dichloro-2-butene	(4)	9.077	53	198093	99.227
120) n-Propylbenzene	(4)	9.125	91	574091	21.143
121) 2-Chlorotoluene	(4)	9.180	126	107614	20.994
123) 1,3,5-Trimethylbenzene	(4)	9.266	105	414156	21.120
122) 4-Chlorotoluene	(4)	9.266	126	110746	20.760
125) tert-Butylbenzene	(4)	9.509	134	88848	21.178
126) Pentachloroethane	(4)	9.516	167	60729	19.403
127) 1,2,4-Trimethylbenzene	(4)	9.546	105	417859	20.679
128) sec-Butylbenzene	(4)	9.668	105	538836	21.353
130) 1,3-Dichlorobenzene	(4)	9.741	146	203149	20.770
131) p-Isopropyltoluene	(4)	9.778	119	472446	21.280
132)*1,4-Dichlorobenzene-d4	(4)	9.790	152	361330	50.000
134) 1,4-Dichlorobenzene	(4)	9.808	146	205829	20.852
135) 1,2,3-Trimethylbenzene	(4)	9.851	105	439400	20.691
136) Benzyl Chloride	(4)	9.906	91	266333	18.339
137) 1,3-Diethylbenzene	(4)	9.991	119	284894	20.500
138) 1,4-Diethylbenzene	(4)	10.052	119	293393	19.824
139) 1,2-Dichlorobenzene	(4)	10.070	146	194706	20.973
140) n-Butylbenzene	(4)	10.070	92	227938	20.842
91) 1,3-Dichloropropene (total)	(3)		100	298597	39.499
141) 1,2-Diethylbenzene	(4)	10.137	119	232161	20.250
143) 1,2-Dibromo-3-chloropropane	(4)	10.607	75	28451	19.923
145) 1,3,5-Trichlorobenzene	(4)	10.753	180	148238	20.575
147) 1,2,4-Trichlorobenzene	(4)	11.162	180	131981	20.672
148) Hexachlorobutadiene	(4)	11.277	225	60621	21.008

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Don V. Viray
on 10/29/2018 at 23:46.
Target 3.5 esignature user ID: dvv10203

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

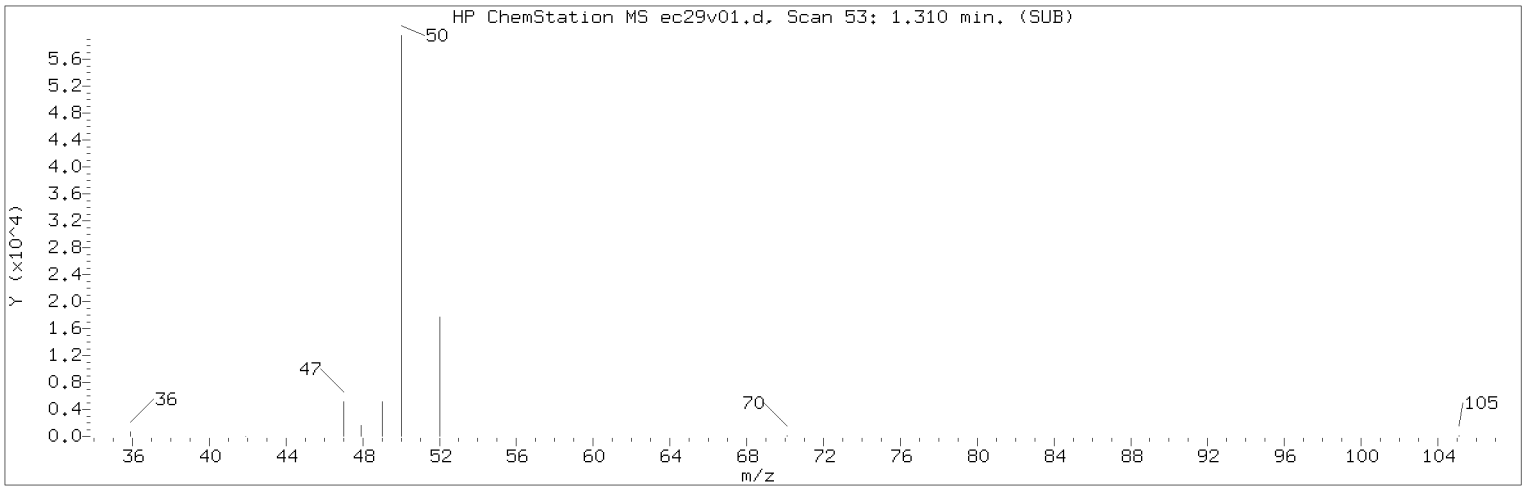
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: ICVELG Lab Sample ID: ICVELG

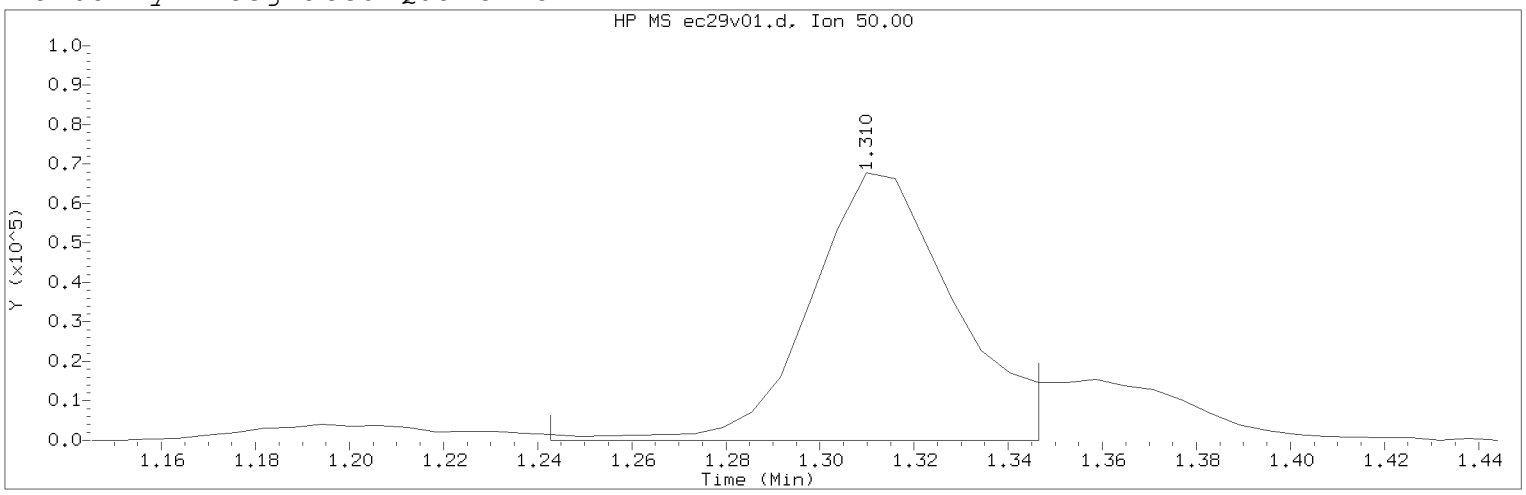
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
149) Naphthalene	(4)	11.320	128	416692	19.945
150) 1,2,3-Trichlorobenzene	(4)	11.479	180	124721	20.958
109) Xylene (Total)	(3)		106	545423	61.438
151) 2-Methylnaphthalene	(4)	12.039	142	227794	17.554
142) Diethylbenzene (total)	(4)		100	810448	60.574

Digitally signed by Don V. Viray
on 10/29/2018 at 23:46.
Target 3.5 esignature user ID: dvv10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: ICVELG Lab Sample ID: ICVELG

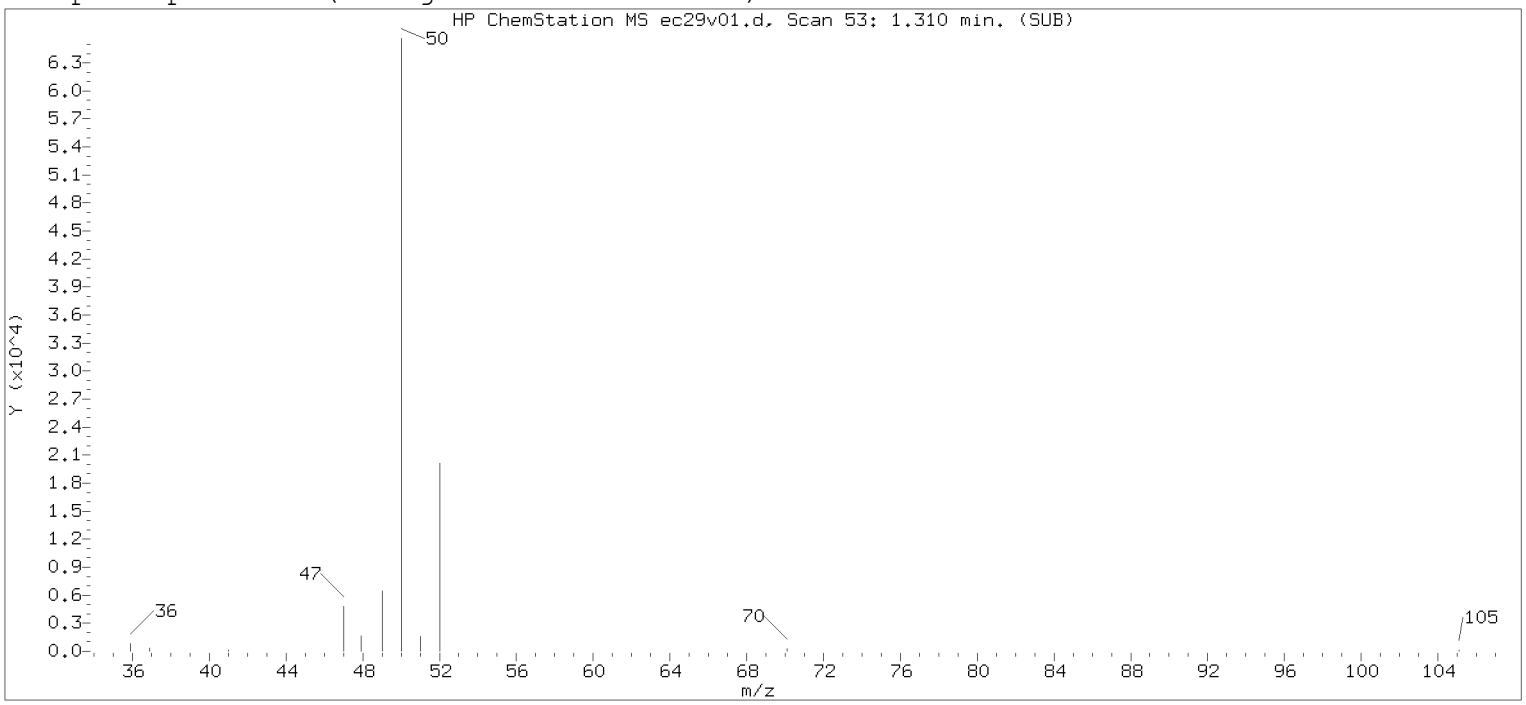
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 53
Retention Time (minutes): 1.310
Quant Ion : 50.00
Area (flag) : 145586M
On-Column Amount (ng) : 19.2733
Integration start scan : 41 Integration stop scan: 58
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

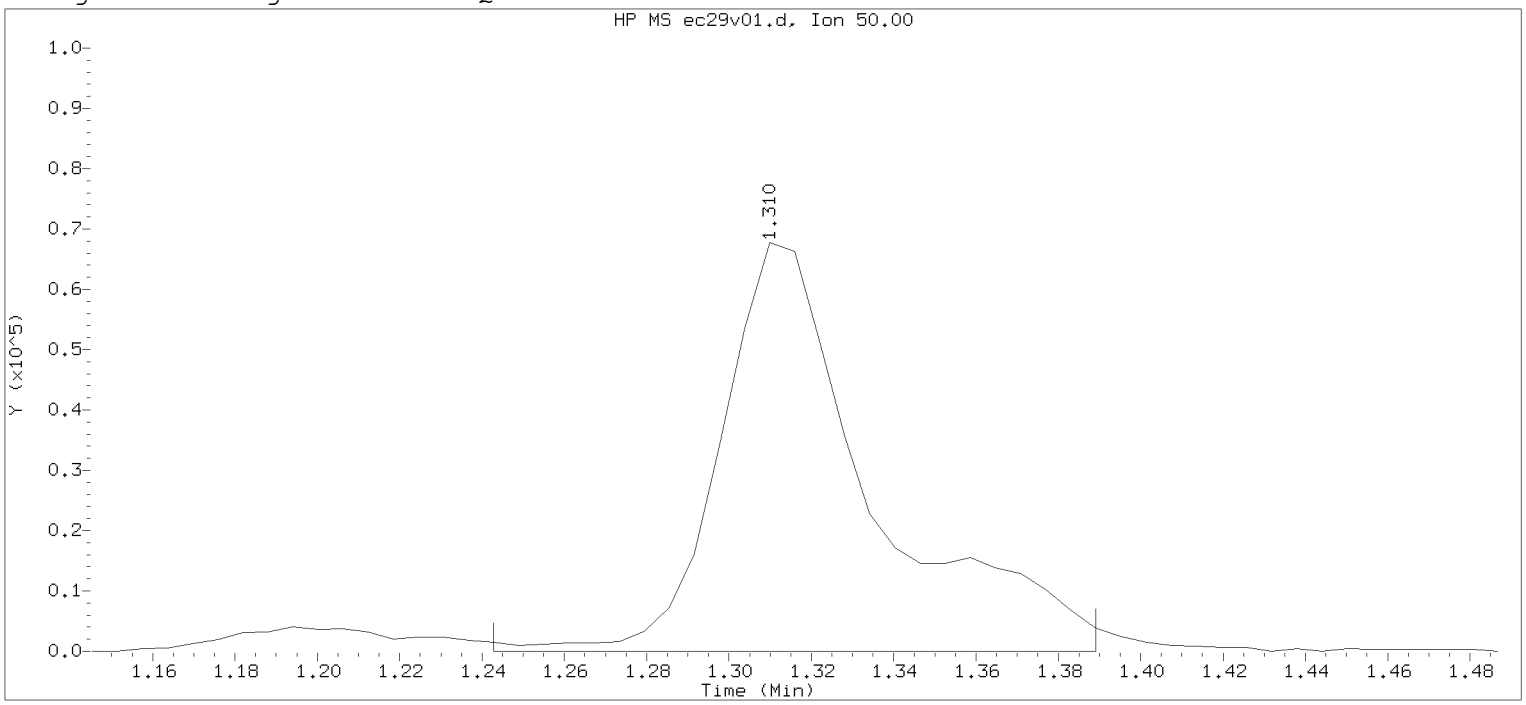
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:46.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

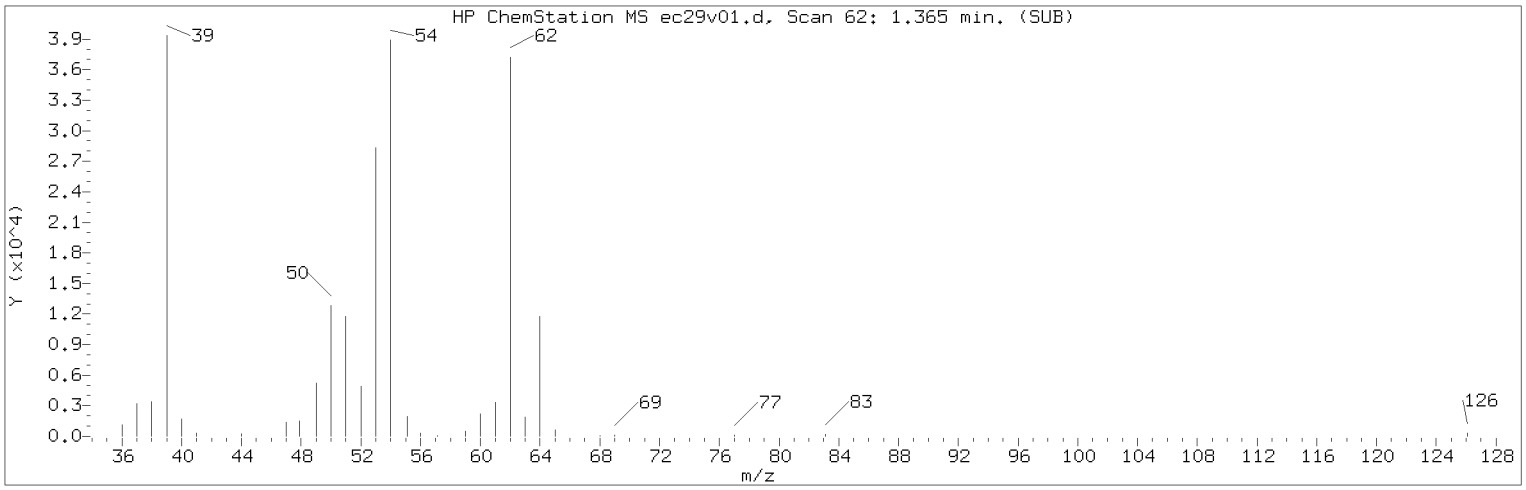
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:33
Date, time and analyst ID of latest file update: 29-Oct-2018 23:37 Automation

Sample Name: ICVELG Lab Sample ID: ICVELG

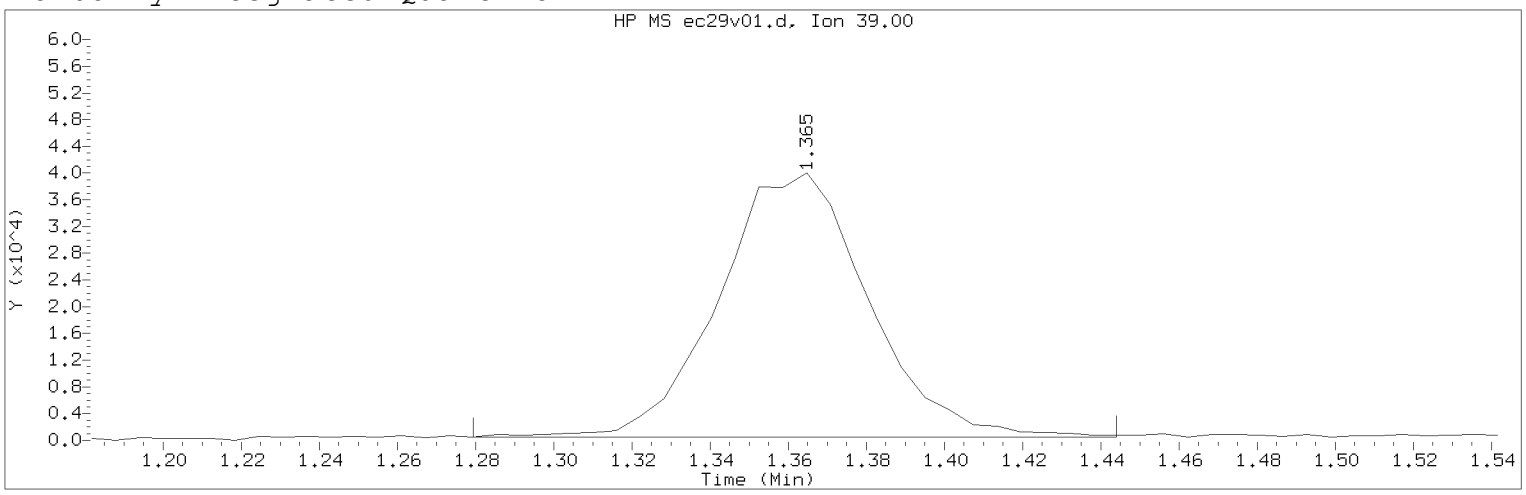
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 53
Retention Time (minutes): 1.310
Quant Ion : 50.00
Area : 173041
On-column Amount (ng) : 22.9080
Integration start scan : 41 Integration stop scan: 65
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:46.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: ICVELG Lab Sample ID: ICVELG

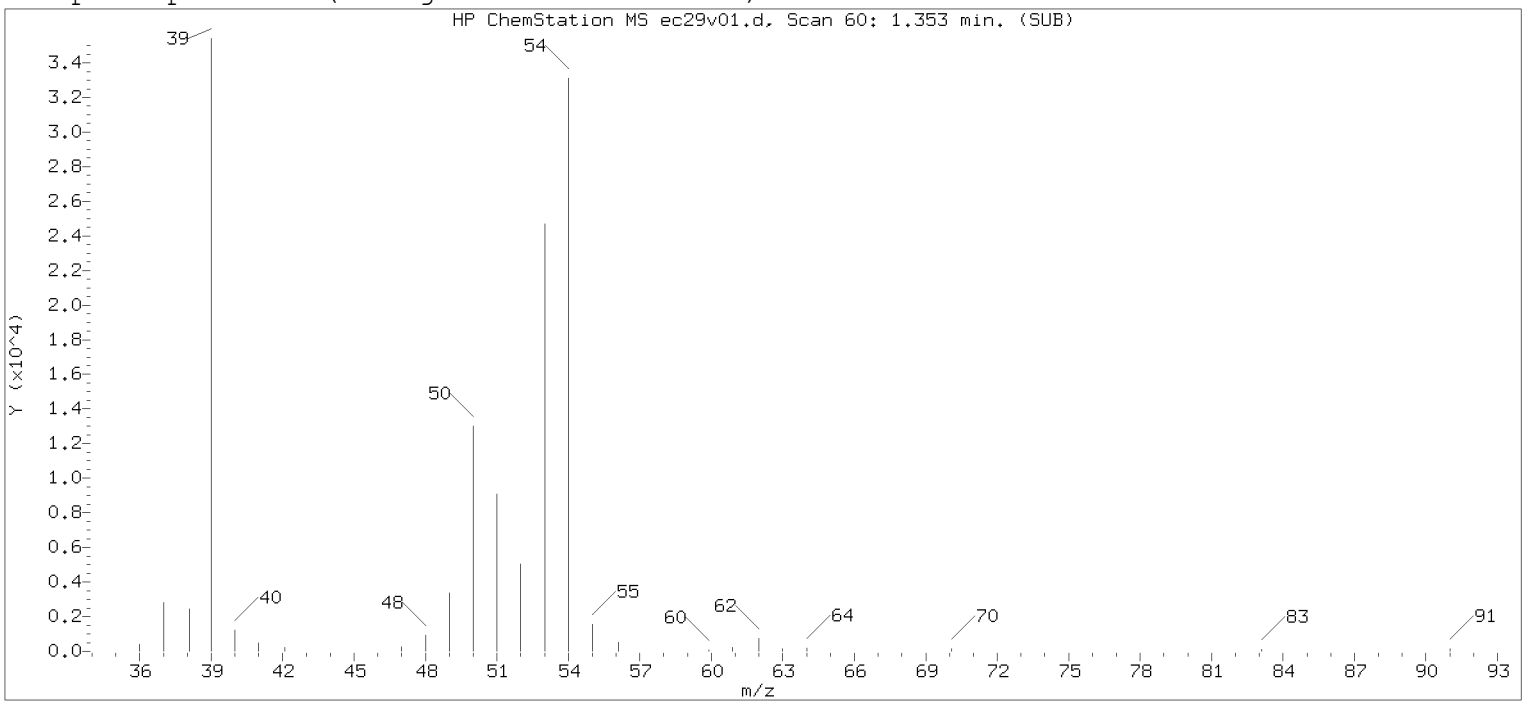
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 62
Retention Time (minutes): 1.365
Quant Ion : 39.00
Area (flag) : 104989M
On-Column Amount (ng) : 17.4752
Integration start scan : 47 Integration stop scan: 74
Y at integration start : 475 Y at integration end: 475

Reason for manual integration: improper integration

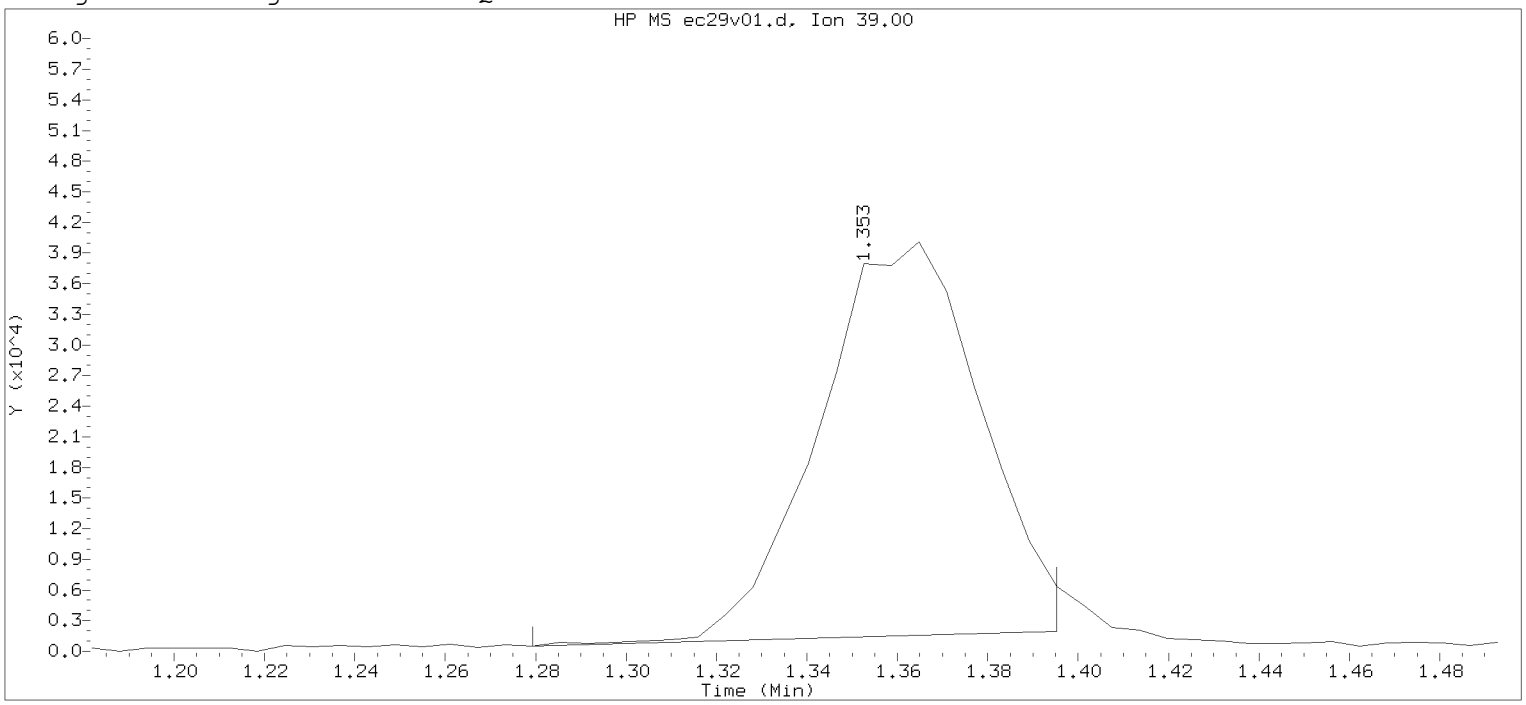
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:46.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

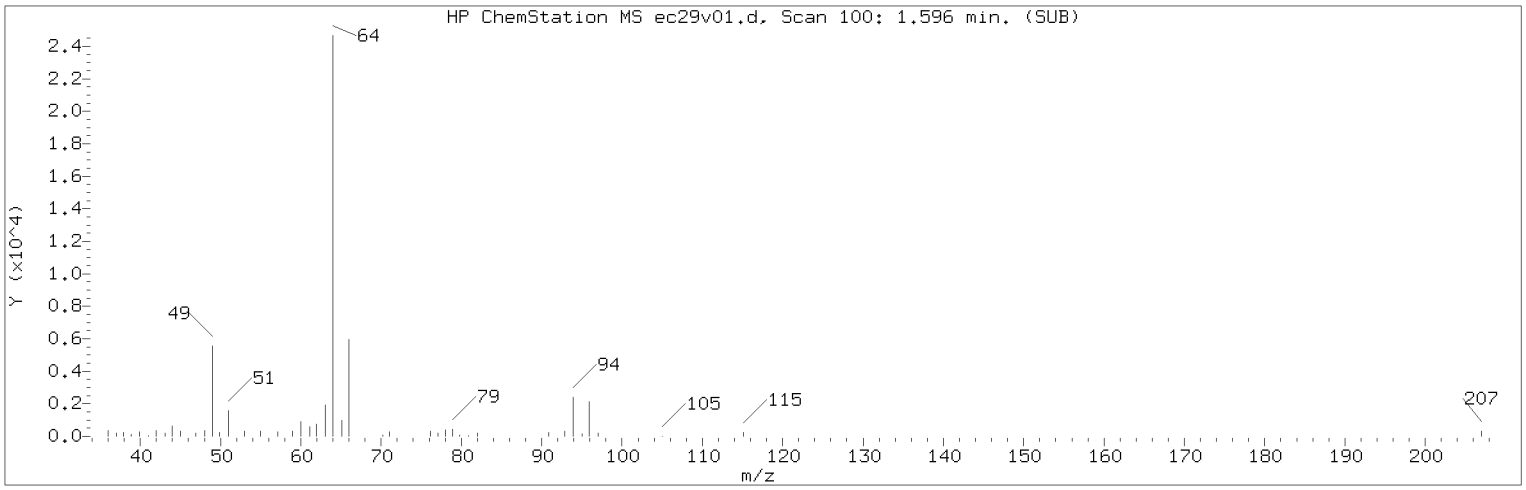
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:33
Date, time and analyst ID of latest file update: 29-Oct-2018 23:37 Automation

Sample Name: ICVELG Lab Sample ID: ICVELG

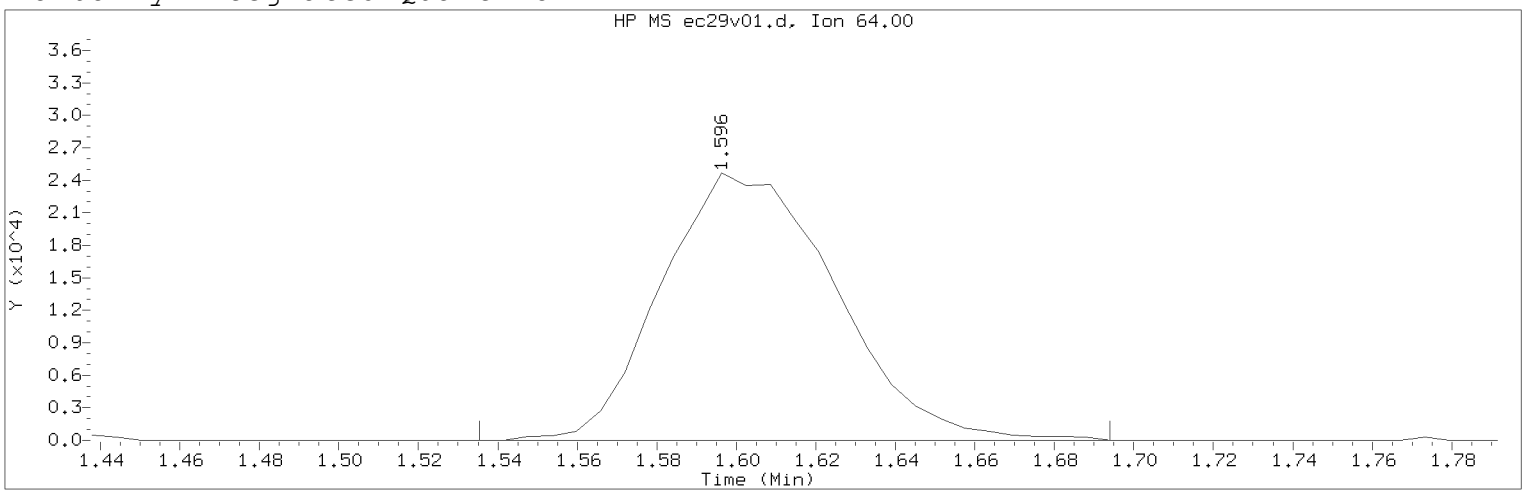
Compound Number : 5
Compound Name : 1,3-Butadiene
Scan Number : 60
Retention Time (minutes): 1.353
Quant Ion : 39.00
Area : 95055
On-column Amount (ng) : 15.8218
Integration start scan : 47 Integration stop scan: 66
Y at integration start : 511 Y at integration end: 1923

Digitally signed by Don V. Viray on 10/29/2018 at 23:46.
Target 3.5 esignature user id: dviray0203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: ICVELG Lab Sample ID: ICVELG

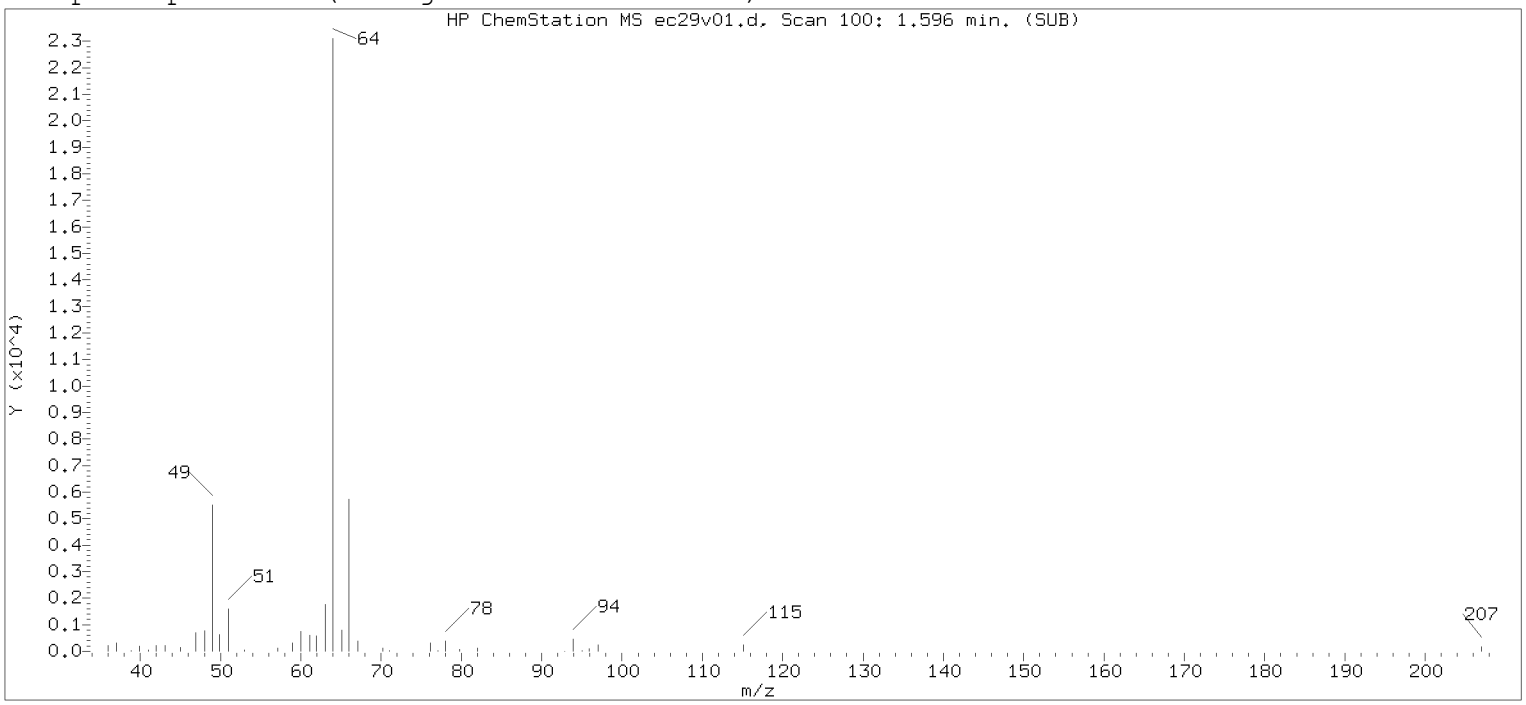
Compound Number : 9
Compound Name : Chloroethane
Scan Number : 100
Retention Time (minutes): 1.596
Quant Ion : 64.00
Area (flag) : 74914M
On-Column Amount (ng) : 18.7546
Integration start scan : 89 Integration stop scan: 115
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

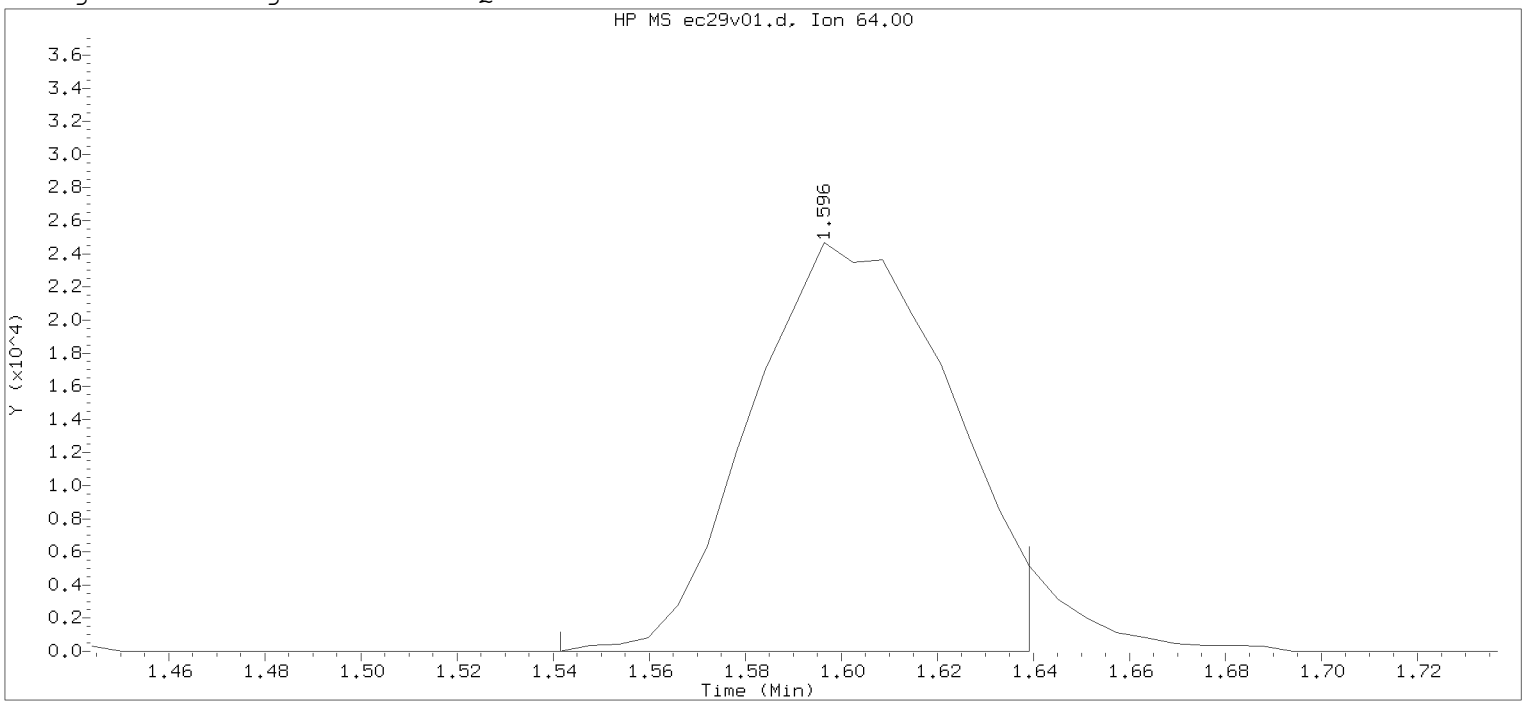
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:46.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

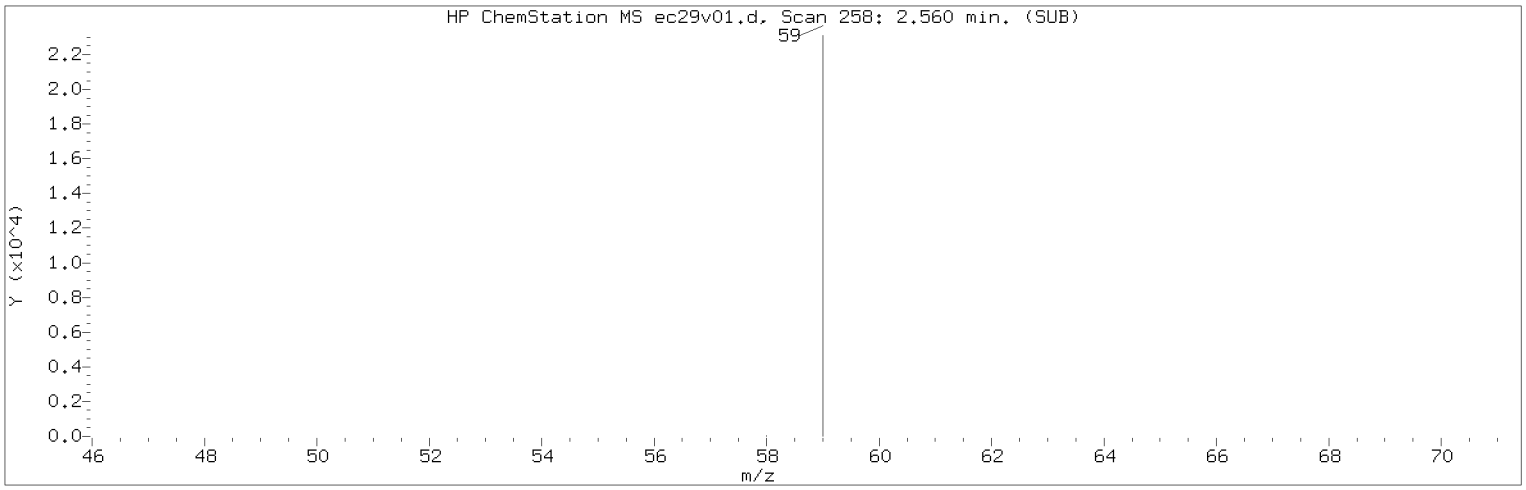
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:33
Date, time and analyst ID of latest file update: 29-Oct-2018 23:37 Automation

Sample Name: ICVELG Lab Sample ID: ICVELG

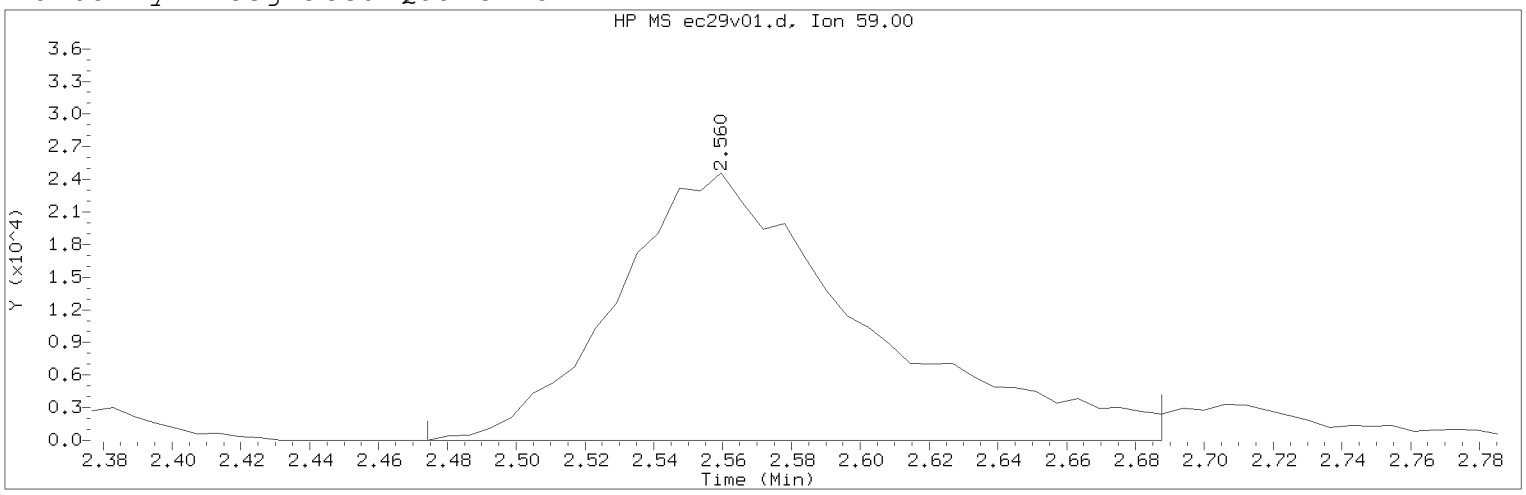
Compound Number : 9
Compound Name : Chloroethane
Scan Number : 100
Retention Time (minutes): 1.596
Quant Ion : 64.00
Area : 70861
On-column Amount (ng) : 17.7401
Integration start scan : 90 Integration stop scan: 106
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:46.
Target 3.5 esignature user id: DVV10203

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: ICVELG Lab Sample ID: ICVELG

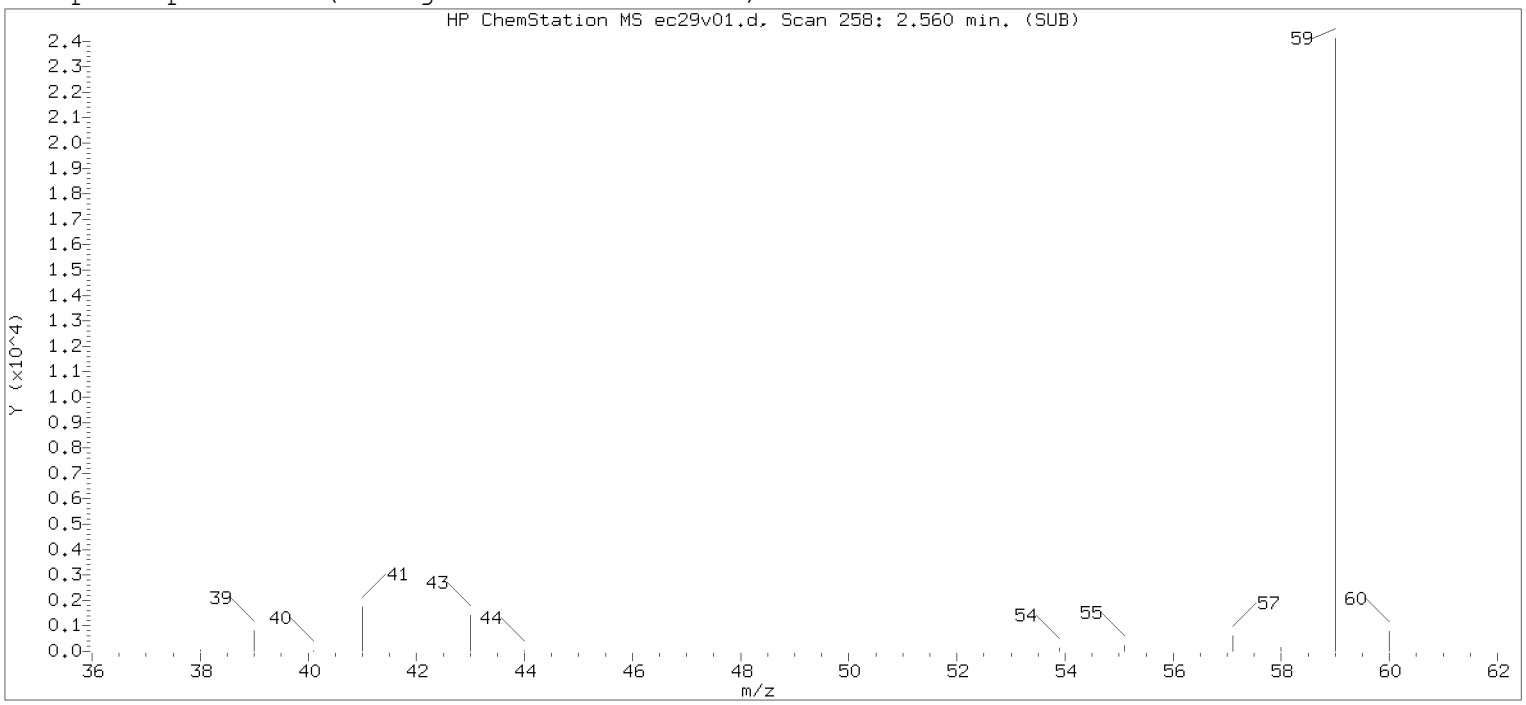
Compound Number : 30
Compound Name : t-Butyl alcohol
Scan Number : 258
Retention Time (minutes): 2.560
Quant Ion : 59.00
Area (flag) : 121618M
On-Column Amount (ng) : 184.0581
Integration start scan : 243 Integration stop scan: 278
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

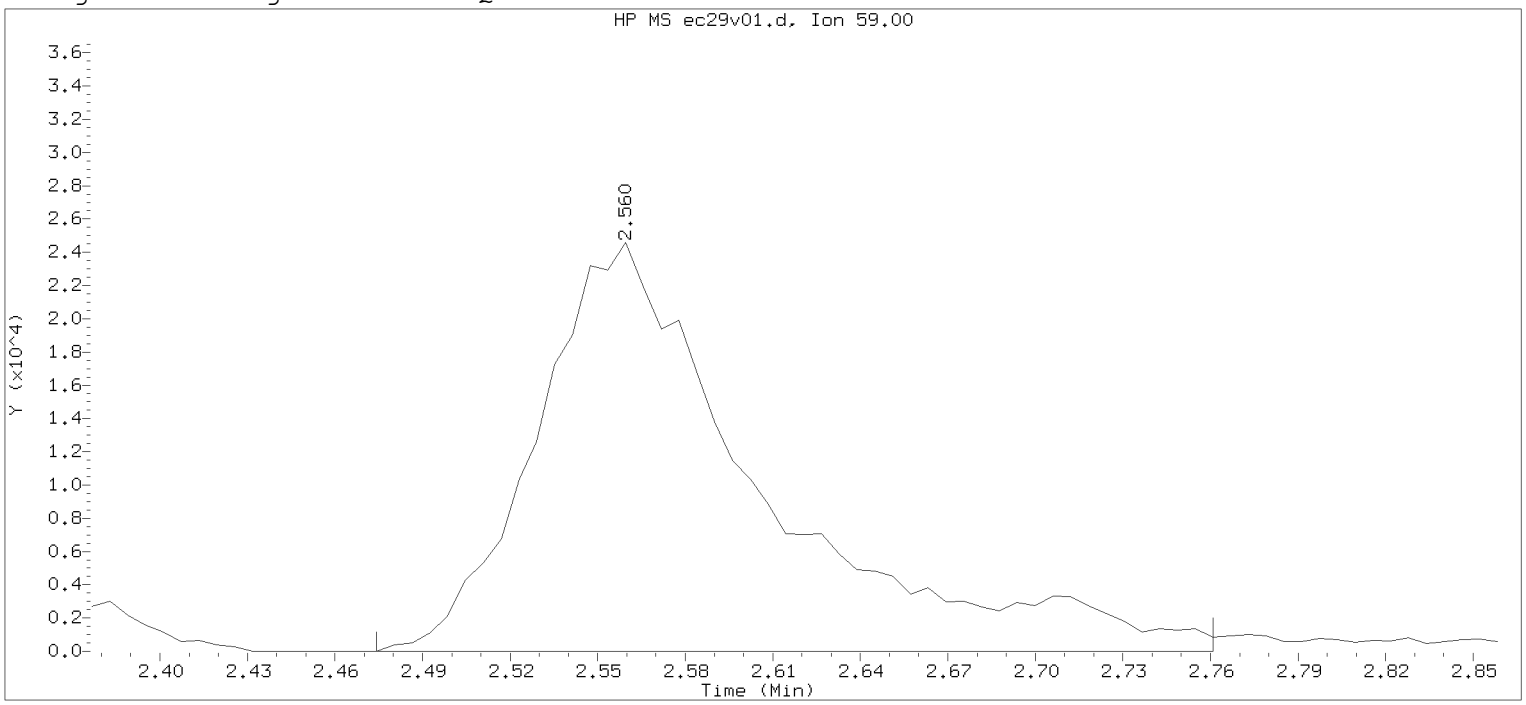
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:46.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

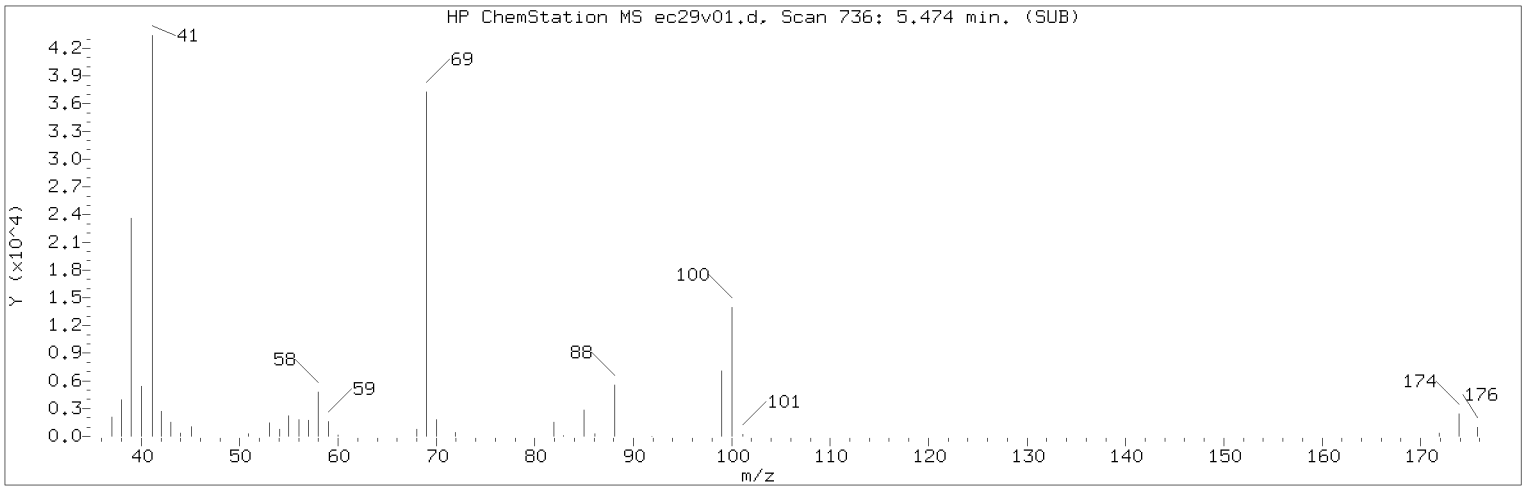
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:33
Date, time and analyst ID of latest file update: 29-Oct-2018 23:37 Automation

Sample Name: ICVELG Lab Sample ID: ICVELG

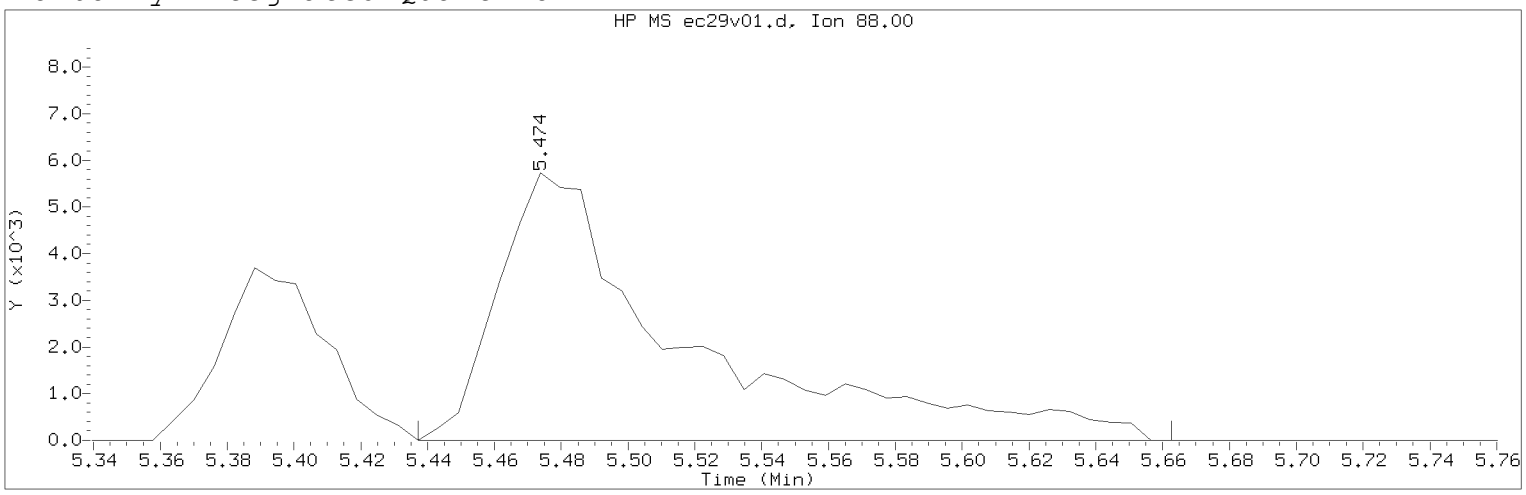
Compound Number : 30
Compound Name : t-Butyl alcohol
Scan Number : 258
Retention Time (minutes): 2.560
Quant Ion : 59.00
Area : 130654
On-column Amount (ng) : 197.7337
Integration start scan : 243 Integration stop scan: 290
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:46.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: ICVELG Lab Sample ID: ICVELG

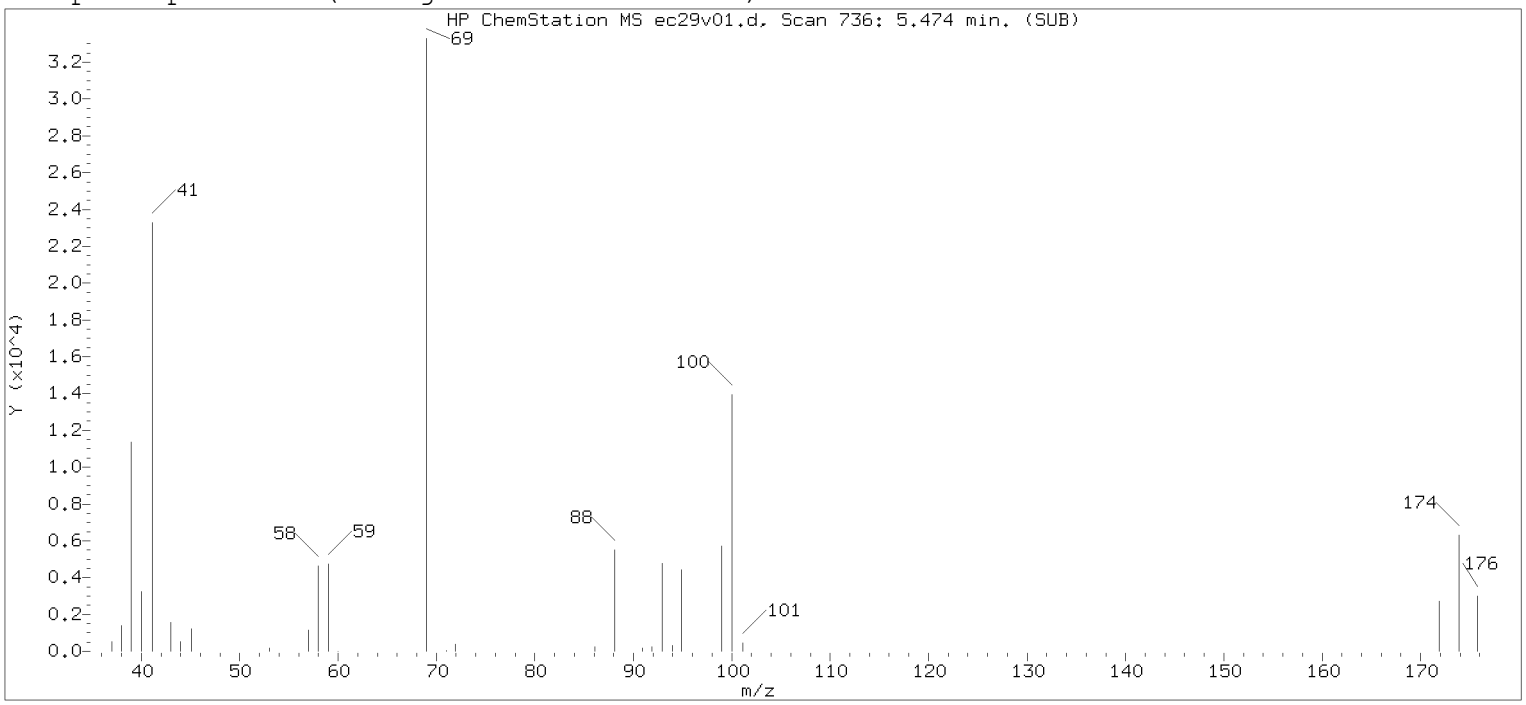
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 736
Retention Time (minutes): 5.474
Quant Ion : 88.00
Area (flag) : 22236M
On-Column Amount (ng) : 480.2402
Integration start scan : 729 Integration stop scan: 766
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

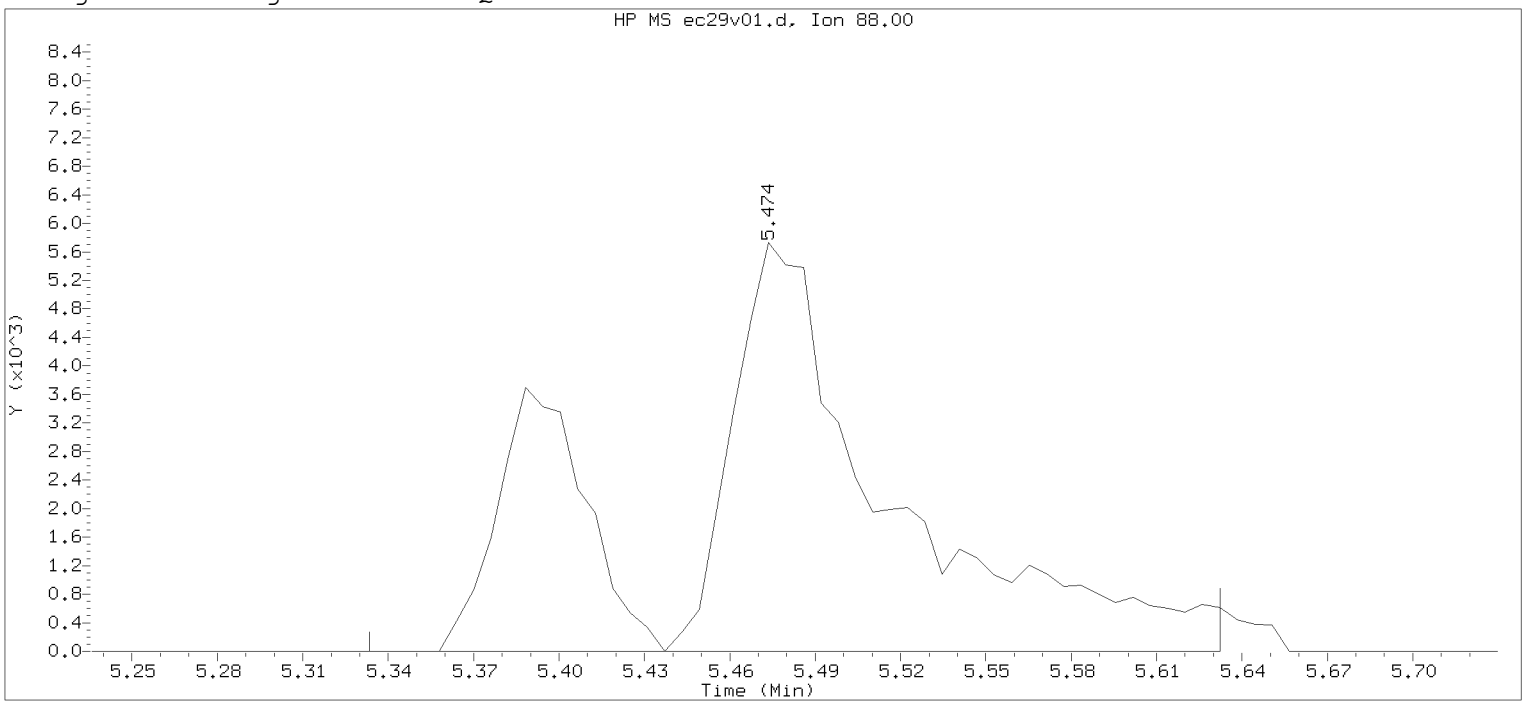
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:46.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

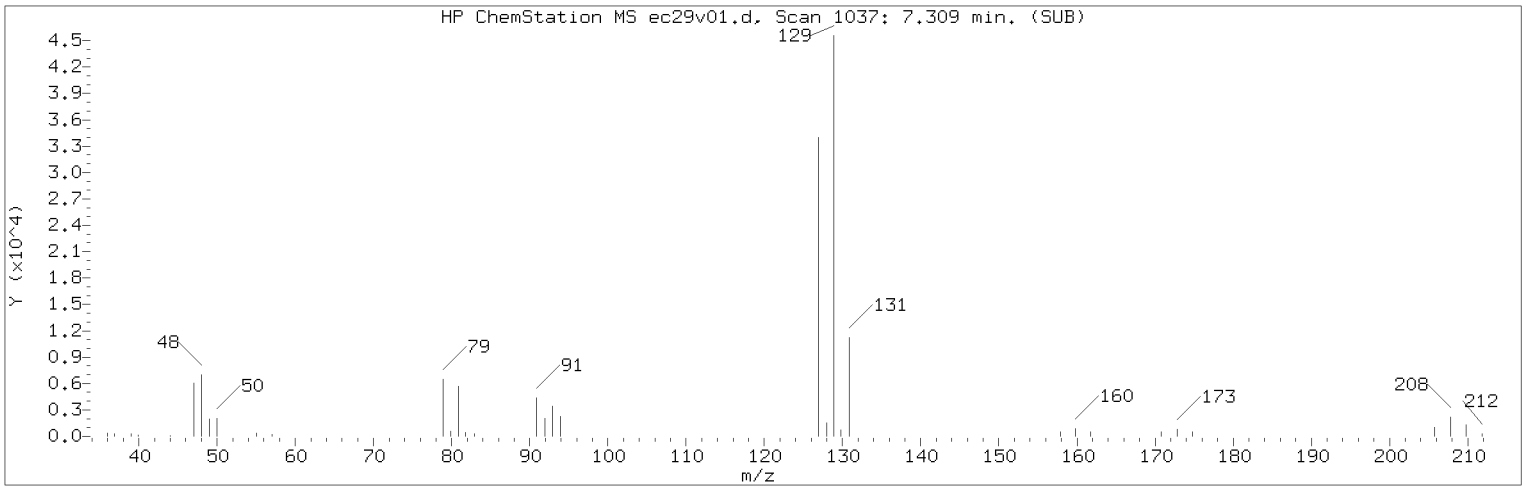
Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:33
Date, time and analyst ID of latest file update: 29-Oct-2018 23:37 Automation

Sample Name: ICVELG Lab Sample ID: ICVELG

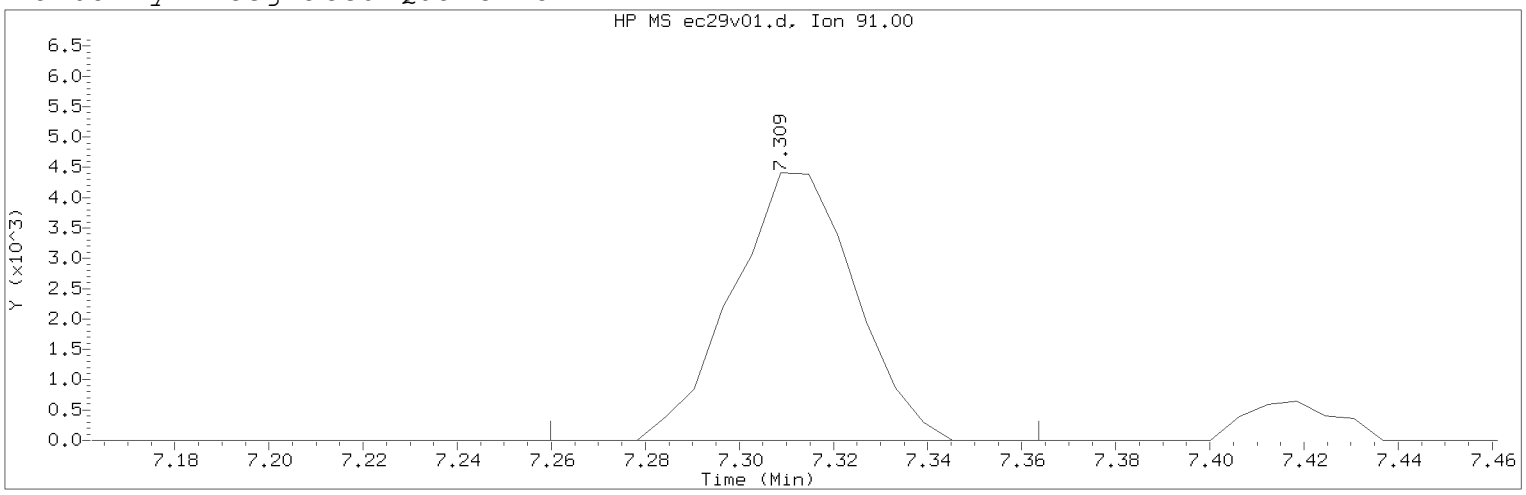
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 736
Retention Time (minutes): 5.474
Quant Ion : 88.00
Area : 29759
On-column Amount (ng) : 642.7370
Integration start scan : 712 Integration stop scan: 761
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:46.
Target 3.5 esignature user id: dviray

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:44
Date, time and analyst ID of latest file update: 29-Oct-2018 23:44 dvv10203

Sample Name: ICVELG Lab Sample ID: ICVELG

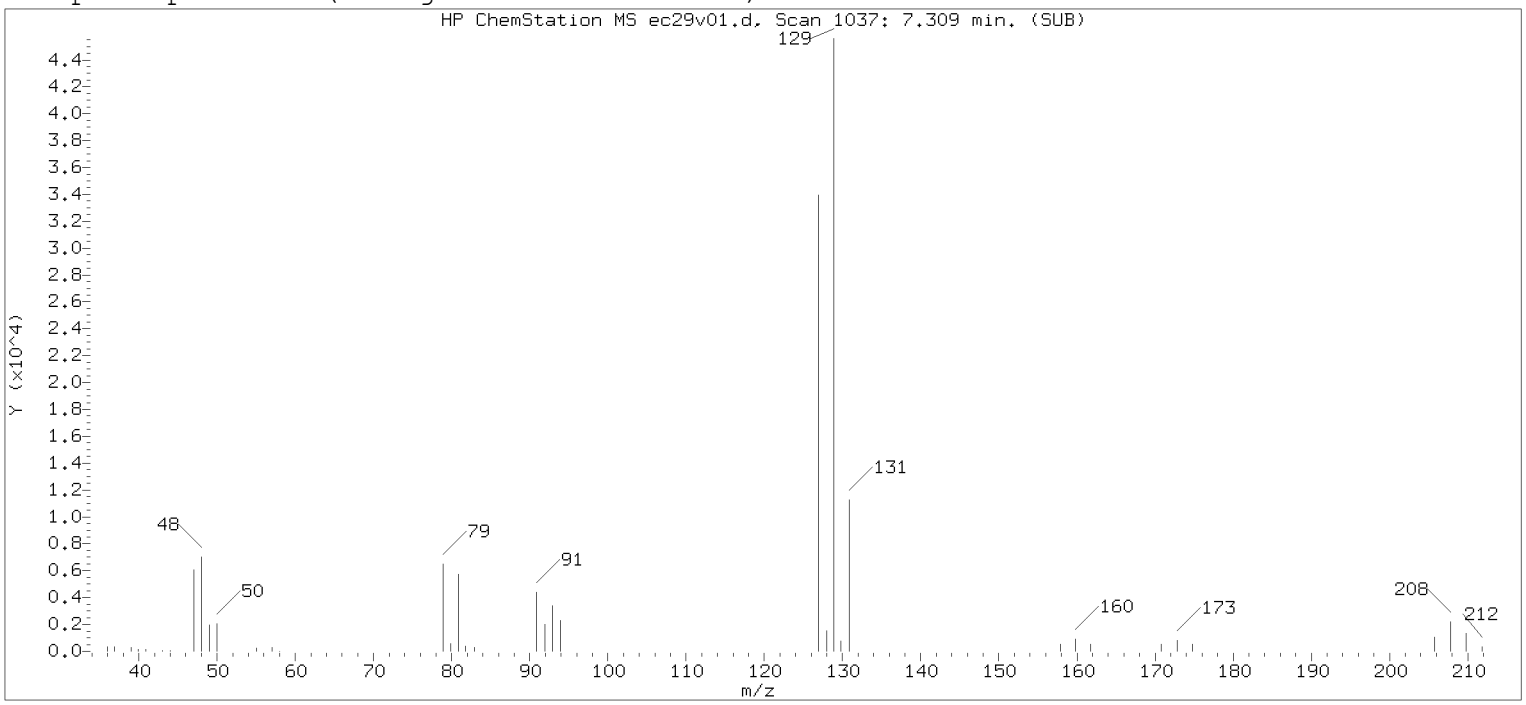
Compound Number : 102
Compound Name : 1-Chlorohexane
Scan Number : 1037
Retention Time (minutes): 7.309
Quant Ion : 91.00
Area (flag) : 7969M
On-Column Amount (ng) : 22.2793
Integration start scan : 1028 Integration stop scan: 1045
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

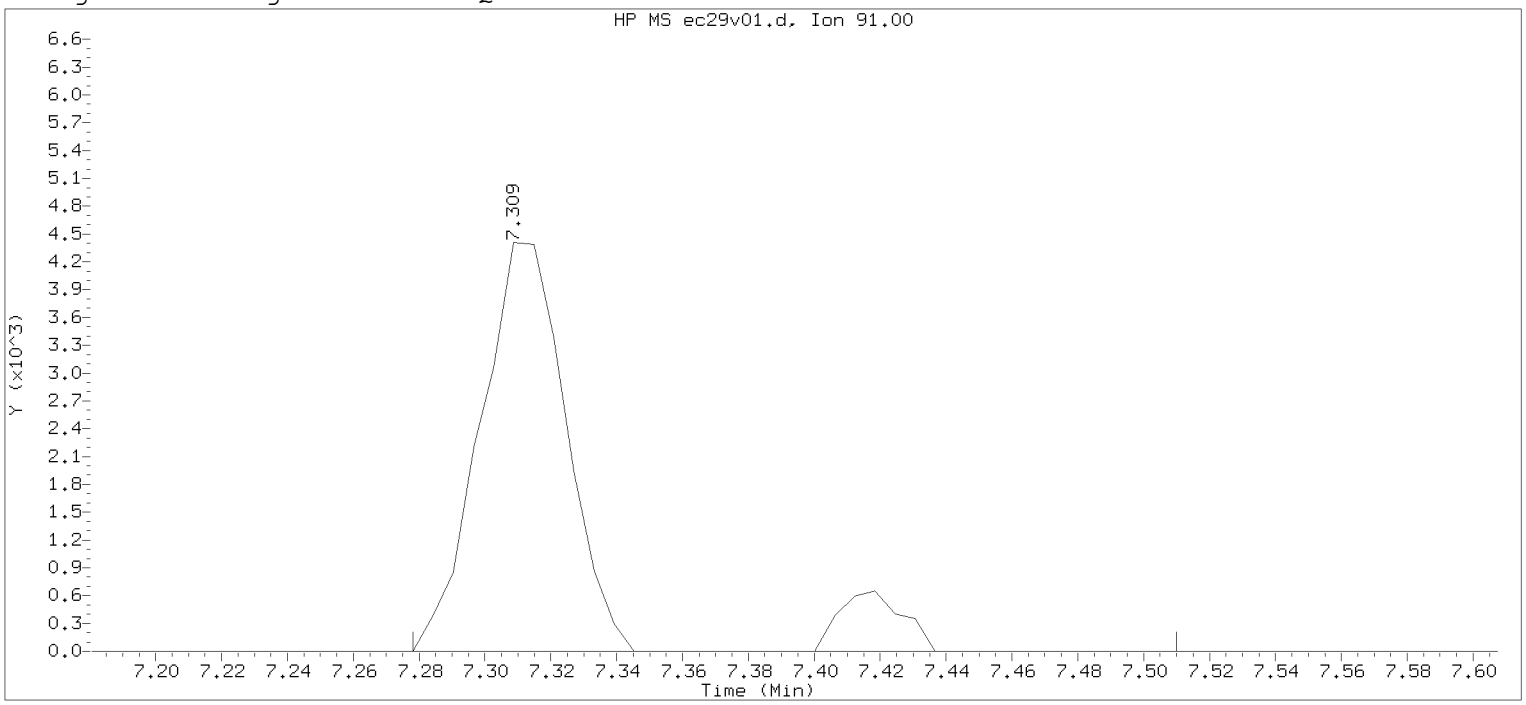
Analyst responsible for change: Digitally signed by Don V. Viray
on 10/29/2018 at 23:46.
Target 3.5 esignature user ID: dvv10203

Secondary review performed and digitally signed by Kelly E. Keller on 10/30/2018 at 12:32.
PARALLAX ID: kek01027

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18oct29i.b/ec29v01.d Instrument ID: HP15648.i
Injection date and time: 29-OCT-2018 23:21 Analyst ID: DVV10203

Method used: /chem/HP15648.i/18oct29i.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 29-OCT-2018 23:33
Date, time and analyst ID of latest file update: 29-Oct-2018 23:37 Automation

Sample Name: ICVELG Lab Sample ID: ICVELG

Compound Number : 102
Compound Name : 1-Chlorohexane
Scan Number : 1037
Retention Time (minutes): 7.309
Quant Ion : 91.00
Area : 8842
On-column Amount (ng) : 24.7220
Integration start scan : 1031 Integration stop scan: 1069
Y at integration start : 0 Y at integration end: 0

Digitally signed by Don V. Viray on 10/29/2018 at 23:46.
Target 3.5 esignature user id: DVV10203

Data File: /chem/HP15648.i/18nov09a.b/en09t01.d

Date : 09-NOV-2018 12:52

Client ID: BFB AUG07-18

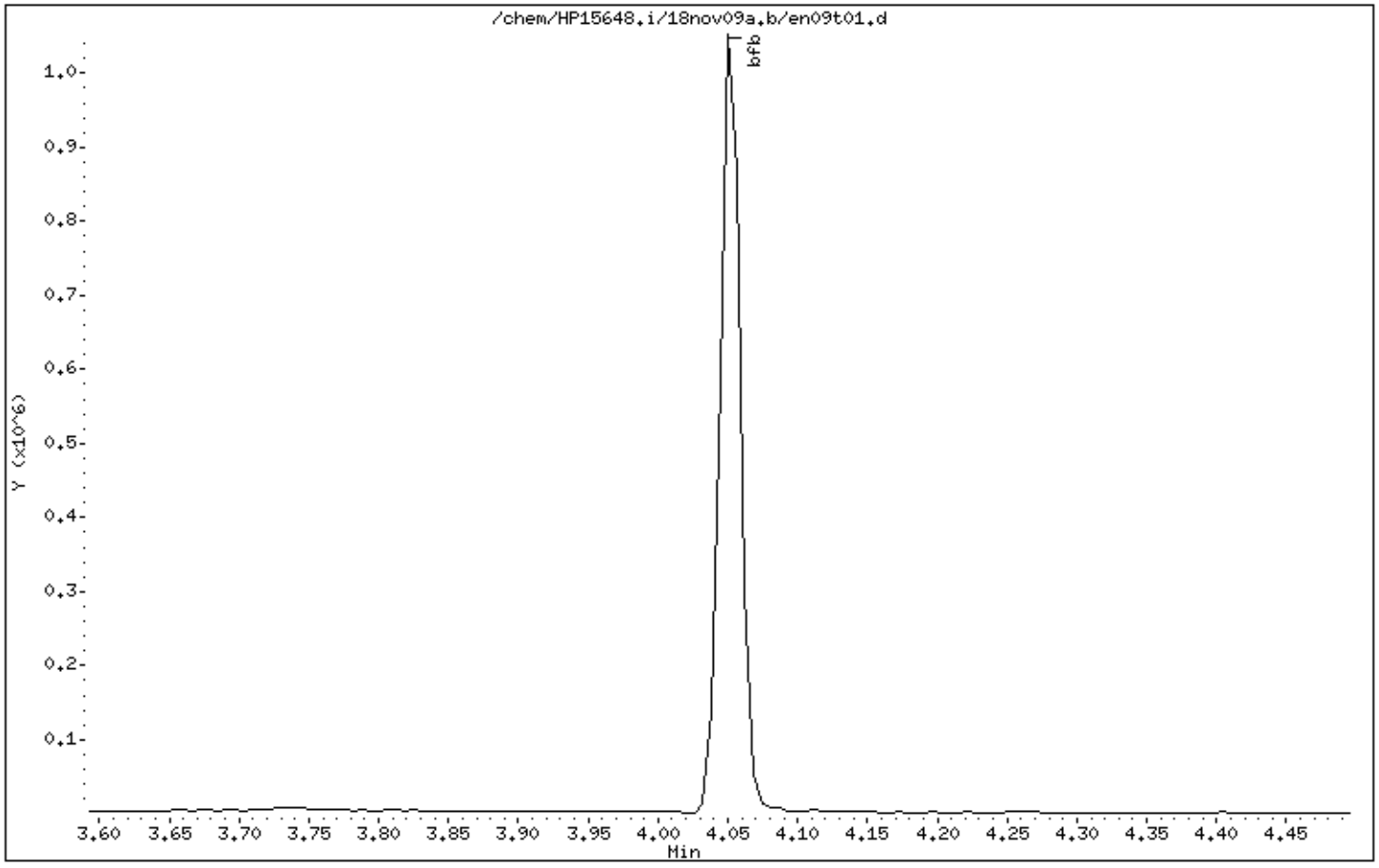
Instrument: HP15648.i

Sample Info: BFB AUG07-18;50ng BFB;1;3;;;;;;

Operator: ADS01731

Column phase: DB-624

Column diameter: 0.18



Digitally signed by Angela D. Sneeringer on 11/09/2018 at 12:53.
Target 3.5 esignature user ID: ads01731

Data File: /chem/HP15648.i/18nov09a.b/en09t01.d

Date : 09-NOV-2018 12:52

Client ID: BFB AUG07-18

Instrument: HP15648.i

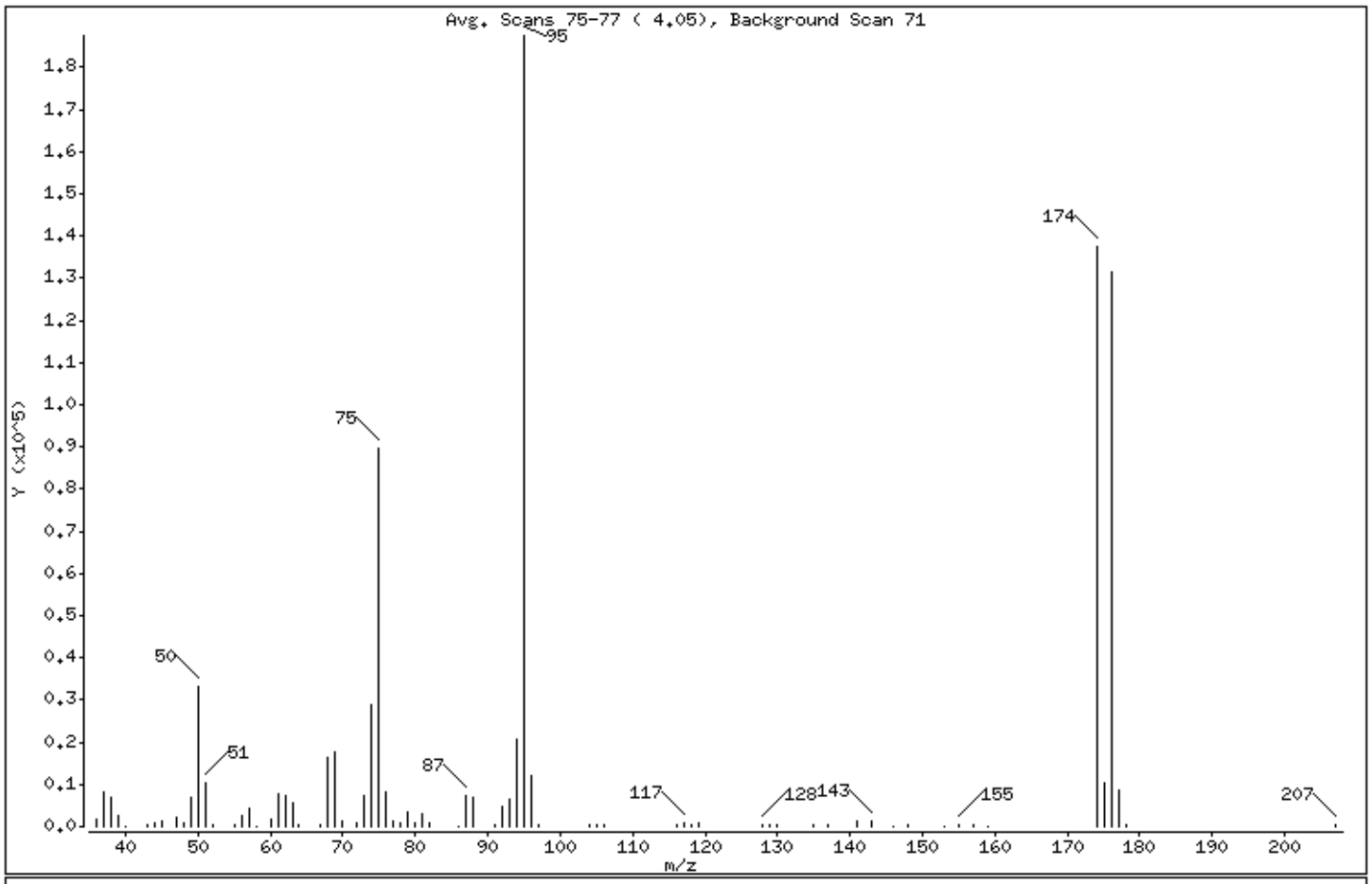
Sample Info: BFB AUG07-18;50ng BFB;1;3;;;;;;

Operator: ADS01731

Column phase: DB-624

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.67
75	30.00 - 60.00% of mass 95	47.72
96	5.00 - 9.00% of mass 95	6.47
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	73.35
175	5.00 - 9.00% of mass 174	5.61 (7.66)
176	95.00 - 101.00% of mass 174	70.14 (95.63)
177	5.00 - 9.00% of mass 176	4.61 (6.58)

Digitally signed by Angela D. Sneeringer on 11/09/2018 at 12:53.
Target 3.5 esignature user ID: ads01731

Date : 09-NOV-2018 12:52

Client ID: BFB AUG07-18 Instrument: HP15648.i

Sample Info: BFB AUG07-18;50ng BFB;1;3;;;;;;

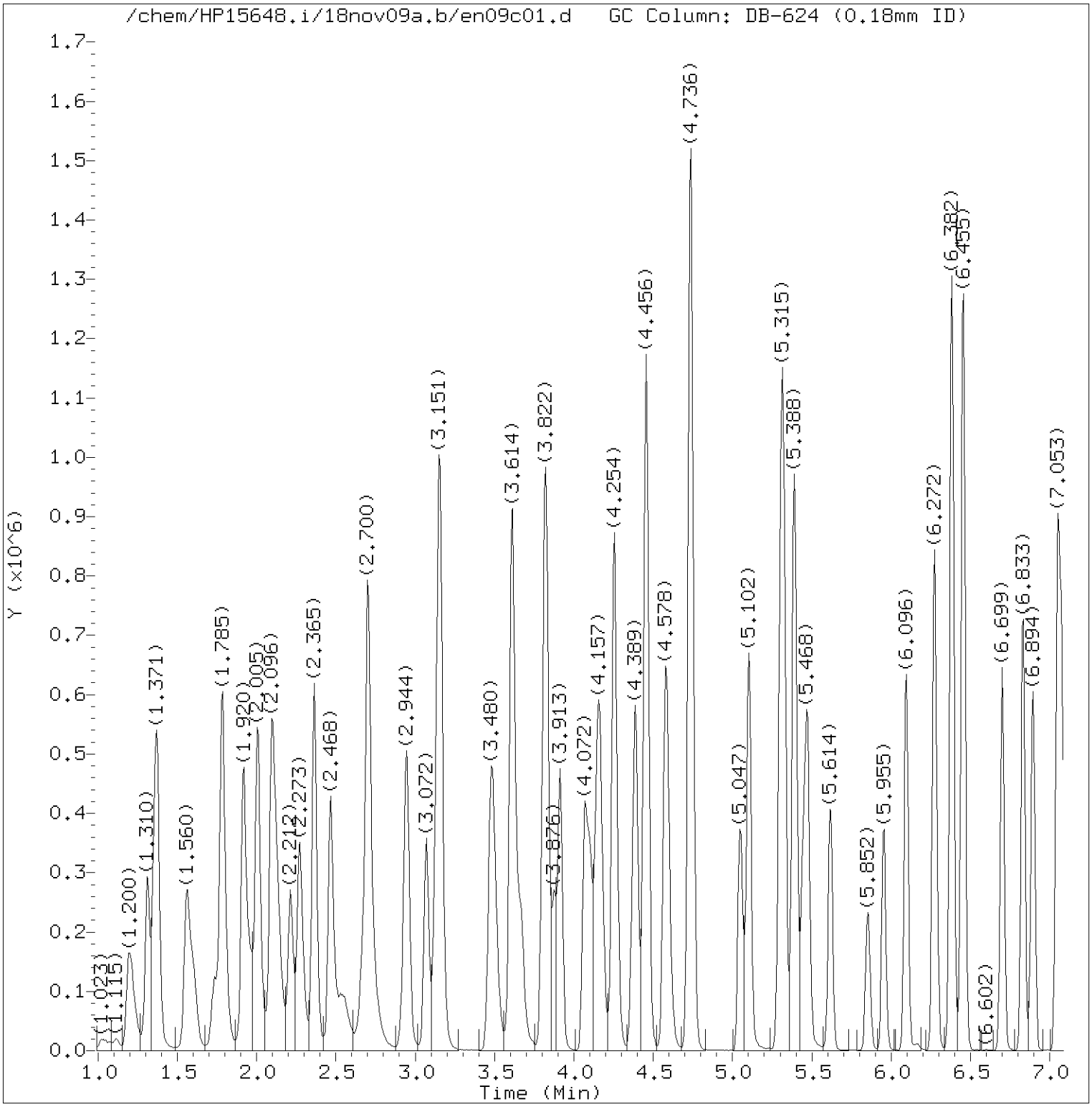
Operator: ADS01731

Column phase: DB-624 Column diameter: 0.18

Data File: en09t01.d
Spectrum: Avg. Scans 75-77 (4.05), Background Scan 71
Location of Maximum: 95.00
Number of points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1644	61.00	7589	86.00	97	130.00	525
37.00	8310	62.00	7485	87.00	7490	135.00	326
38.00	6891	63.00	5636	88.00	7089	137.00	218
39.00	2760	64.00	524	91.00	548	141.00	1299
40.00	118	67.00	489	92.00	4841	143.00	1340
43.00	222	68.00	16242	93.00	6598	146.00	123
44.00	658	69.00	17632	94.00	20552	148.00	413
45.00	1239	70.00	1208	95.00	187456	153.00	100
47.00	2347	72.00	915	96.00	12134	155.00	402
48.00	1018	73.00	7343	97.00	223	157.00	262
49.00	6869	74.00	28704	104.00	585	159.00	134
50.00	33128	75.00	89440	105.00	221	174.00	137472
51.00	10463	76.00	8327	106.00	505	175.00	10525
52.00	387	77.00	1193	116.00	466	176.00	131456
55.00	492	78.00	708	117.00	807	177.00	8651
56.00	2427	79.00	3314	118.00	484	178.00	221
57.00	4368	80.00	1040	119.00	775	207.00	268
58.00	195	81.00	2969	128.00	565		
60.00	1528	82.00	667	129.00	231		

Digitally signed by Angela D. Sneeringer on 11/09/2018 at 12:53.
Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

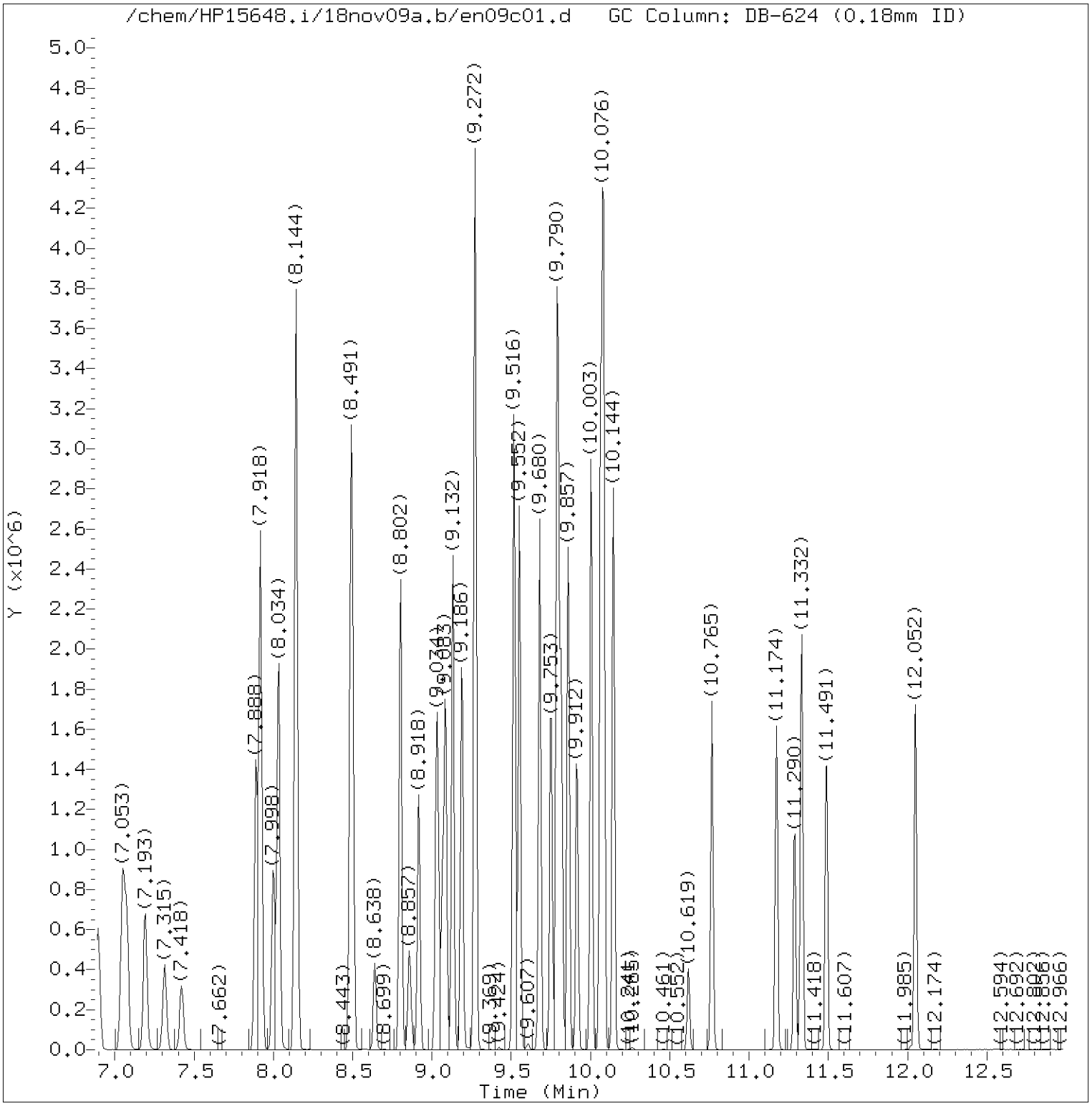
Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09c01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:35 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 15:55 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Angela D. Sneeringer
on 11/09/2018 at 16:00.
Target 3.5 esignature user ID: ads01731



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09c01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:35 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 15:55 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Angela D. Sneeringer
on 11/09/2018 at 16:00.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09c01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:35 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 15:55 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.194	85	354439	49.657
4) Chloromethane	(2)	1.310	50	384209M	51.555
5) 1,3-Butadiene	(2)	1.359	39	242607	40.931
6) Vinyl Chloride	(2)	1.377	62	330248	48.111
8) Bromomethane	(2)	1.560	94	239705	50.138
9) Chloroethane	(2)	1.603	64	190038	48.223
12) Trichlorofluoromethane	(2)	1.785	101	403230	51.227
11) n-Pentane	(2)	1.785	43	357344	48.258
14) Ethyl ether	(2)	1.913	59	191781	48.413
15) Freon 123a	(2)	1.926	67	262389	50.067
16) Acrolein	(1)	2.005	56	623083	414.400
17) 1,1-Dichloroethene	(2)	2.096	96	179704	47.553
17) 1,1-Dichloroethene	(2)	2.090	63	96081	49.523
18) Acetone	(1)	2.115	58	61370	97.501
19) Freon 113	(2)	2.121	101	200640	55.332
21) 2-Propanol	(1)	2.212	45	131164	302.908
22) Methyl Iodide	(2)	2.212	142	330455	51.234
23) Carbon Disulfide	(2)	2.273	76	633802	48.009
25) Allyl Chloride	(2)	2.365	41	370280	44.350
27) Methyl Acetate	(2)	2.371	43	214450	48.061
28) Methylene Chloride	(2)	2.468	84	210744	47.509
29)*t-Butyl alcohol-d10	(1)	2.480	65	195324	250.000
30) t-Butyl alcohol	(1)	2.554	59	215431	290.971
31) Acrylonitrile	(2)	2.663	53	122962	51.565
32) trans-1,2-Dichloroethene	(2)	2.700	96	207343	49.382
33) Methyl Tertiary Butyl Ether	(2)	2.706	73	691268	51.605
34) n-Hexane	(2)	2.944	57	356441	49.013
36) 1,1-Dichloroethane	(2)	3.072	63	416238	50.334
38) di-Isopropyl ether	(2)	3.139	45	767534	49.801
39) 2-Chloro-1,3-butadiene	(2)	3.157	53	383245	48.935
40) Ethyl t-butyl ether	(2)	3.480	59	736239	51.101
42) cis-1,2-Dichloroethene	(2)	3.608	96	232345	49.928
44) 2-Butanone	(2)	3.614	43	314421	104.289
45) 2,2-Dichloropropane	(2)	3.620	77	347666	49.765
43) 1,2-Dichloroethene (Total)	(2)		96	439688	99.309
47) Propionitrile	(1)	3.669	54	260657	248.448
48) Methacrylonitrile	(2)	3.816	67	337895	138.001
49) Bromochloromethane	(2)	3.834	128	113551	50.490

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

Digitally signed by Angela D. Sneeringer
on 11/09/2018 at 16:00.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09c01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:35 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 15:55 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50) Tetrahydrofuran	(1)	3.876	71	83500	93.930
51) Chloroform	(2)	3.913	83	372541	51.066
52)$Dibromofluoromethane	(2)	4.065	113	212890	50.710
52)$Dibromofluoromethane	(2)	4.065	111	219491	50.738
53) 1,1,1-Trichloroethane	(2)	4.102	97	329481	49.424
54) Cyclohexane	(2)	4.157	56	439714	52.781
54) Cyclohexane	(2)	4.157	84	373645	54.049
54) Cyclohexane	(2)	4.157	69	134905	53.448
55) 1,1-Dichloropropene	(2)	4.254	75	320746	49.388
56) Carbon Tetrachloride	(2)	4.261	117	279197	50.833
58) Isobutyl Alcohol	(1)	4.382	41	174841	670.699
57)$1,2-Dichloroethane-d4	(2)	4.389	102	55986	49.043
57)$1,2-Dichloroethane-d4	(2)	4.389	65	276184	49.836
57)$1,2-Dichloroethane-d4	(2)	4.395	104	36117	49.725
60) Benzene	(2)	4.456	78	945493	50.191
61) 1,2-Dichloroethane	(2)	4.468	62	298660	49.864
61) 1,2-Dichloroethane	(2)	4.468	98	26246	40.562
65) t-Amyl methyl ether	(2)	4.578	73	725221	52.729
66)*Fluorobenzene	(2)	4.730	96	958380	50.000
67) n-Heptane	(2)	4.742	43	372925	41.670
69) n-Butanol	(1)	5.047	56	320372	1480.807
71) Trichloroethene	(2)	5.108	95	232794	50.868
73) Methylcyclohexane	(2)	5.309	83	454896	50.492
73) Methylcyclohexane	(2)	5.309	98	208773	51.352
74) 1,2-Dichloropropane	(2)	5.327	63	249435	49.436
75) Dibromomethane	(2)	5.443	93	137171	52.868
77) Methyl Methacrylate	(2)	5.474	69	230228	55.075
76) 1,4-Dioxane	(1)	5.474	88	45179M	870.818
79) Bromodichloromethane	(2)	5.614	83	295382	52.875
80) 2-Nitropropane	(2)	5.852	41	167950	106.670
81) 2-Chloroethyl Vinyl Ether	(2)	5.955	63	184778	52.417
82) cis-1,3-Dichloropropene	(2)	6.096	75	403570	52.208
83) 4-Methyl-2-pentanone	(2)	6.272	43	632106	99.660
84)$Toluene-d8	(3)	6.382	98	974172	48.967
84)$Toluene-d8	(3)	6.382	100	623577	48.776
89) Toluene	(3)	6.455	92	601213	49.681
90) trans-1,3-Dichloropropene	(3)	6.699	75	376816	50.845
91) 1,3-Dichloropropene (total)	(3)		100	780386	103.053

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

Digitally signed by Angela D. Sneeringer
on 11/09/2018 at 16:00.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09c01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:35 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 15:55 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
92) Ethyl Methacrylate	(3)	6.833	69	416558	53.056
93) 1,1,2-Trichloroethane	(3)	6.894	97	208095	52.317
94) Tetrachloroethene	(3)	7.047	166	260731	57.775
95) 1,3-Dichloropropane	(3)	7.077	76	383456	51.653
97) 2-Hexanone	(3)	7.193	43	462997	97.968
102) 1-Chlorohexane	(3)	7.315	91	20125	55.292
98) Dibromochloromethane	(3)	7.315	129	232017	54.968
100) 1,2-Dibromoethane	(3)	7.418	107	221449	53.734
101)*Chlorobenzene-d5	(3)	7.888	117	709461	50.000
103) Chlorobenzene	(3)	7.918	112	682297	52.649
104) 1,1,1,2-Tetrachloroethane	(3)	7.998	131	230333	53.890
105) Ethylbenzene	(3)	8.034	91	1213805	50.966
107) m+p-Xylene	(3)	8.144	106	940954	103.431
109) Xylene (Total)	(3)		106	1407102	155.773
108) o-Xylene	(3)	8.485	106	466148	52.342
110) Styrene	(3)	8.498	104	784647	52.737
111) Bromoform	(3)	8.638	173	160879	58.536
112) Isopropylbenzene	(3)	8.802	105	1232584	52.618
113) Cyclohexanone	(1)	8.857	55	172643A	660.437
115)$4-Bromofluorobenzene	(3)	8.918	95	362984	49.020
115)$4-Bromofluorobenzene	(3)	8.918	174	269018	51.040
116) Bromobenzene	(4)	9.028	156	268999	53.675
117) 1,1,2,2-Tetrachloroethane	(4)	9.040	83	340775	53.503
118) 1,2,3-Trichloropropane	(4)	9.064	110	101302	56.421
119) trans-1,4-Dichloro-2-butene	(4)	9.083	53	264574	128.700
120) n-Propylbenzene	(4)	9.132	91	1442440	51.588
121) 2-Chlorotoluene	(4)	9.186	126	282099	53.443
123) 1,3,5-Trimethylbenzene	(4)	9.272	105	1051453	52.071
122) 4-Chlorotoluene	(4)	9.272	126	288893	52.591
125) tert-Butylbenzene	(4)	9.516	134	227898	52.753
126) Pentachloroethane	(4)	9.522	167	145811	45.242
127) 1,2,4-Trimethylbenzene	(4)	9.552	105	1096988	52.720
128) sec-Butylbenzene	(4)	9.680	105	1363773	52.482
130) 1,3-Dichlorobenzene	(4)	9.753	146	541949	53.808
131) p-Isopropyltoluene	(4)	9.790	119	1206545	52.775
132)*1,4-Dichlorobenzene-d4	(4)	9.802	152	372078	50.000
134) 1,4-Dichlorobenzene	(4)	9.814	146	547402	53.855
135) 1,2,3-Trimethylbenzene	(4)	9.857	105	1082018	49.479

A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Angela D. Sneeringer
on 11/09/2018 at 16:00.
Target 3.5 esignature user ID: ads01731

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09c01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:35 Analyst ID: ads01731

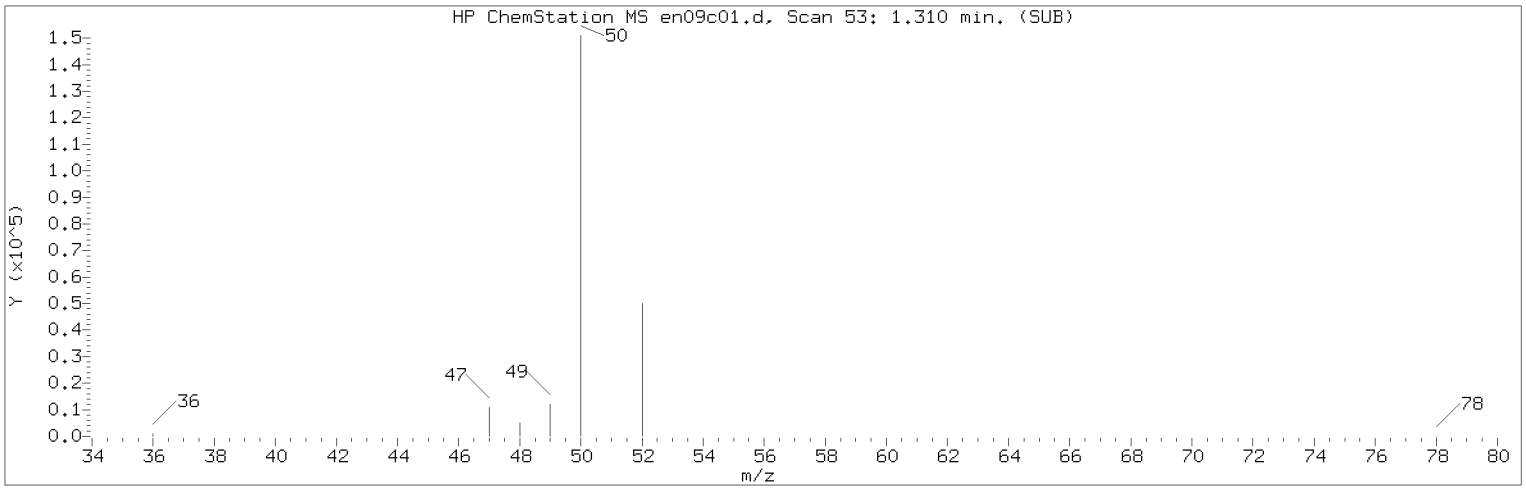
Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 15:55 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

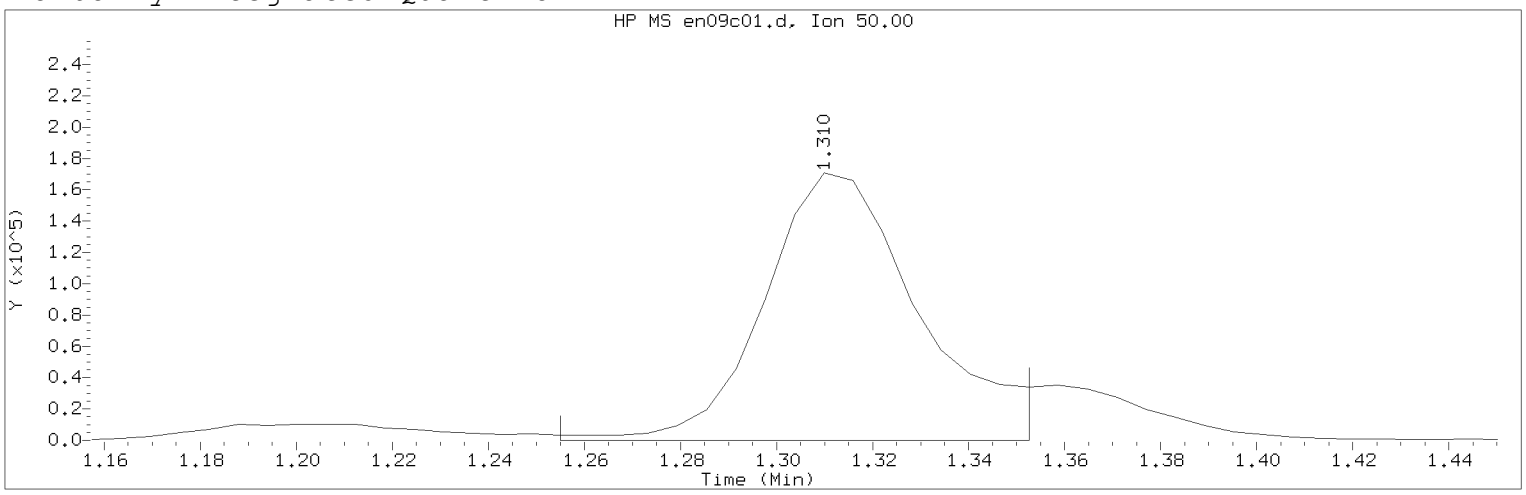
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
136) Benzyl Chloride	(4)	9.912	91	787579	52.663
137) 1,3-Diethylbenzene	(4)	10.003	119	714541	49.931
138) 1,4-Diethylbenzene	(4)	10.064	119	760007	49.869
140) n-Butylbenzene	(4)	10.083	92	579270	51.437
139) 1,2-Dichlorobenzene	(4)	10.083	146	517911	54.176
142) Diethylbenzene (total)	(4)		100	2057804	149.203
141) 1,2-Diethylbenzene	(4)	10.144	119	583256	49.404
143) 1,2-Dibromo-3-chloropropane	(4)	10.619	75	80397	54.671
145) 1,3,5-Trichlorobenzene	(4)	10.765	180	394961	53.236
147) 1,2,4-Trichlorobenzene	(4)	11.174	180	361649	55.008
148) Hexachlorobutadiene	(4)	11.290	225	150006	50.482
149) Naphthalene	(4)	11.332	128	1168699	54.324
150) 1,2,3-Trichlorobenzene	(4)	11.491	180	336631	54.934
151) 2-Methylnaphthalene	(4)	12.052	142	617396	46.203

Digitally signed by Angela D. Sneeringer
on 11/09/2018 at 16:00.
Target 3.5 esignature user ID: ads01731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18nov09a.b/en09c01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:35 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 15:55 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

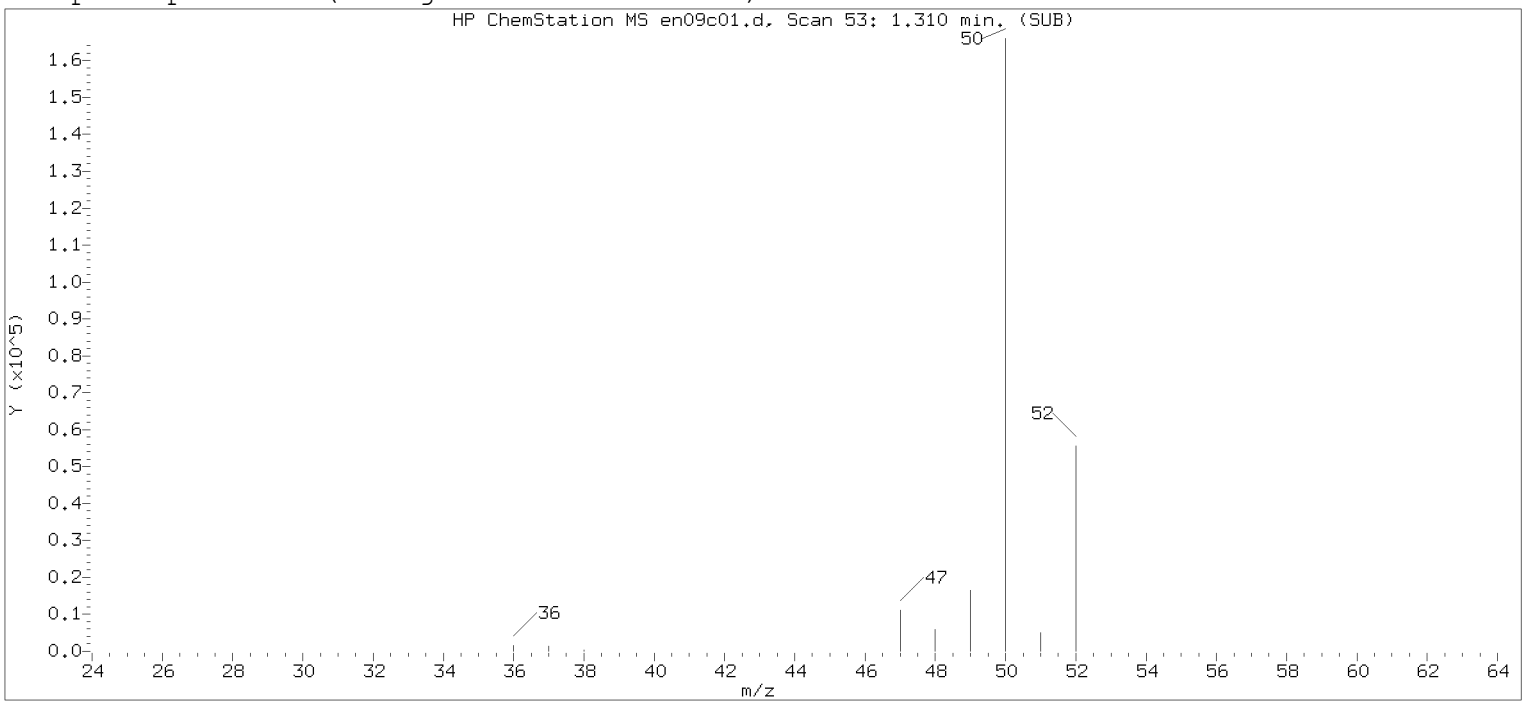
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 53
Retention Time (minutes): 1.310
Quant Ion : 50.00
Area (flag) : 384209M
On-Column Amount (ng) : 51.5552
Integration start scan : 43 Integration stop scan: 59
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

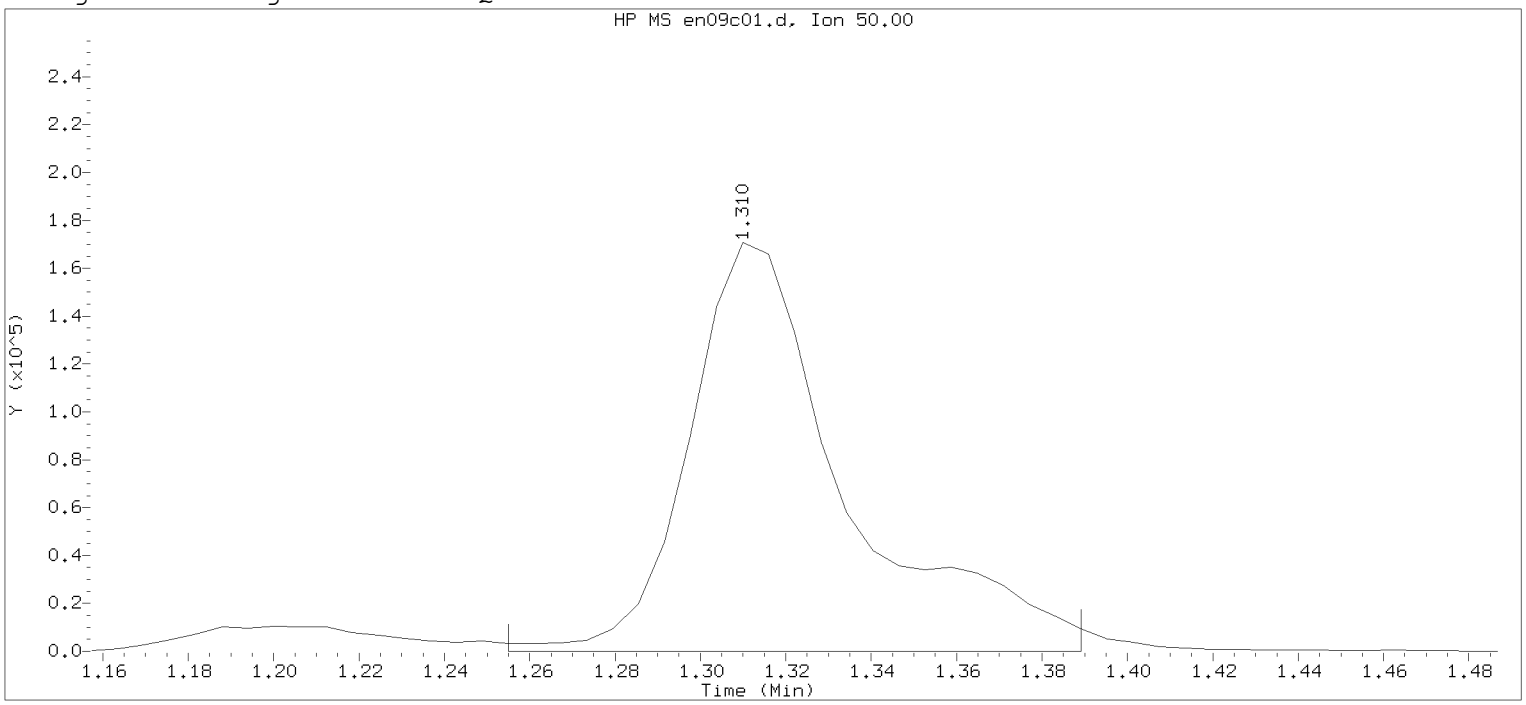
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/09/2018 at 16:00.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:24.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18nov09a.b/en09c01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:35 Analyst ID: ads01731

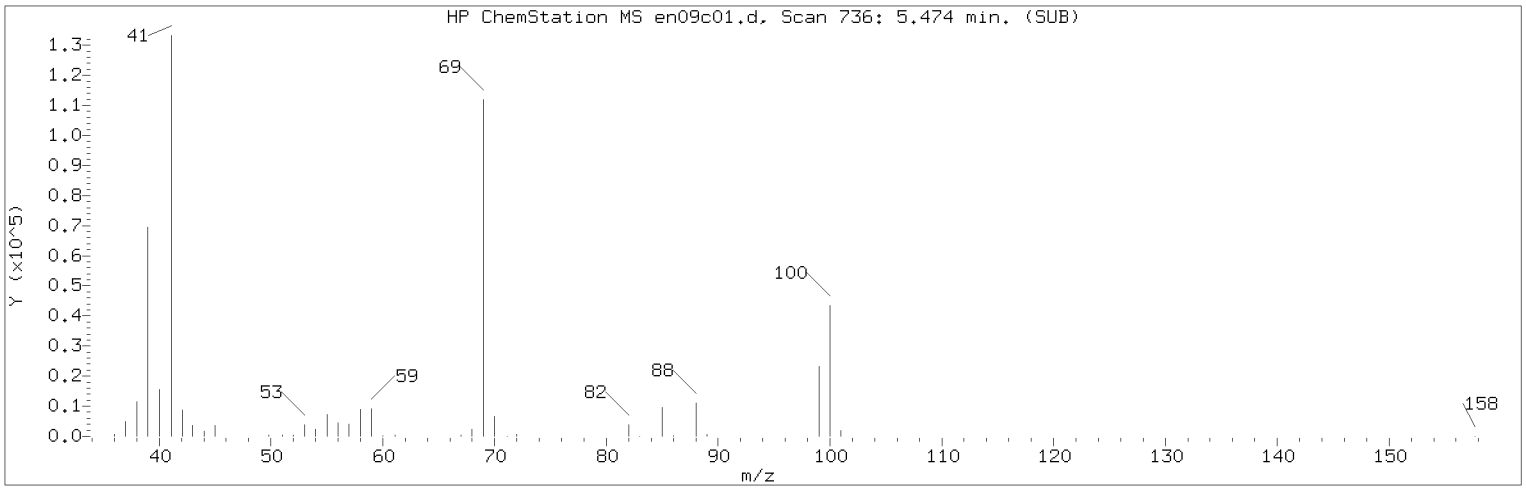
Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 13:51 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

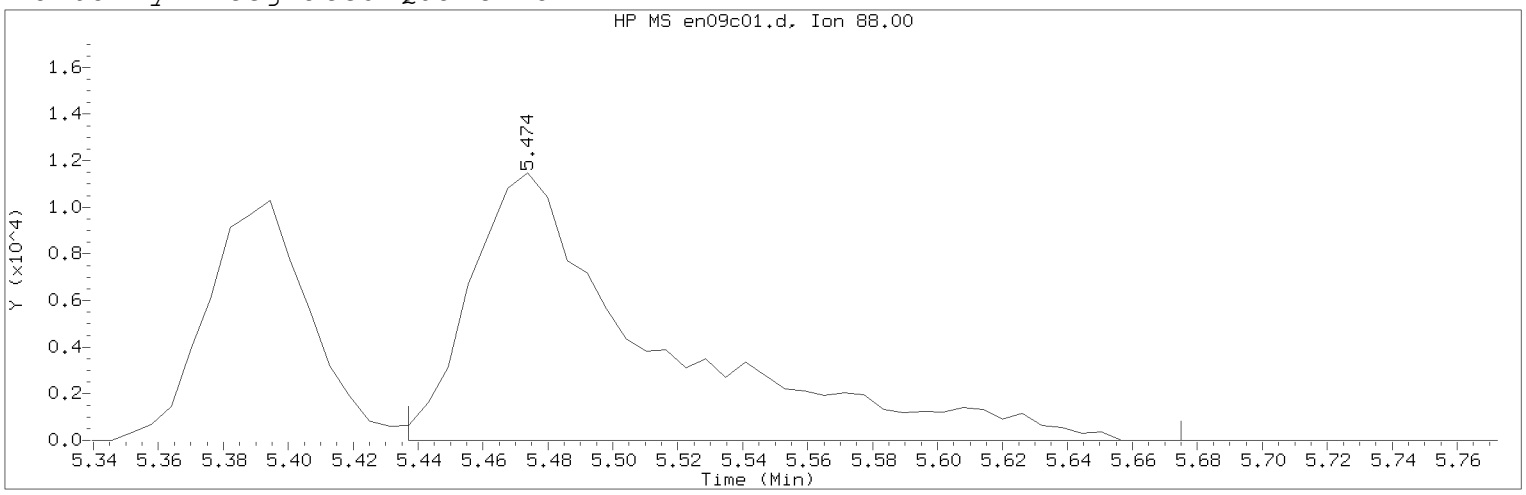
Compound Number : 4
Compound Name : Chloromethane
Scan Number : 53
Retention Time (minutes): 1.310
Quant Ion : 50.00
Area : 432873
On-column Amount (ng) : 58.0852
Integration start scan : 43 Integration stop scan: 65
Y at integration start : 0 Y at integration end: 0

Digitally signed by Angela D. Sneeringer on 11/09/2018 at 16:00.
Target 3.5 esignature user ads01731

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18nov09a.b/en09c01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:35 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 15:55 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

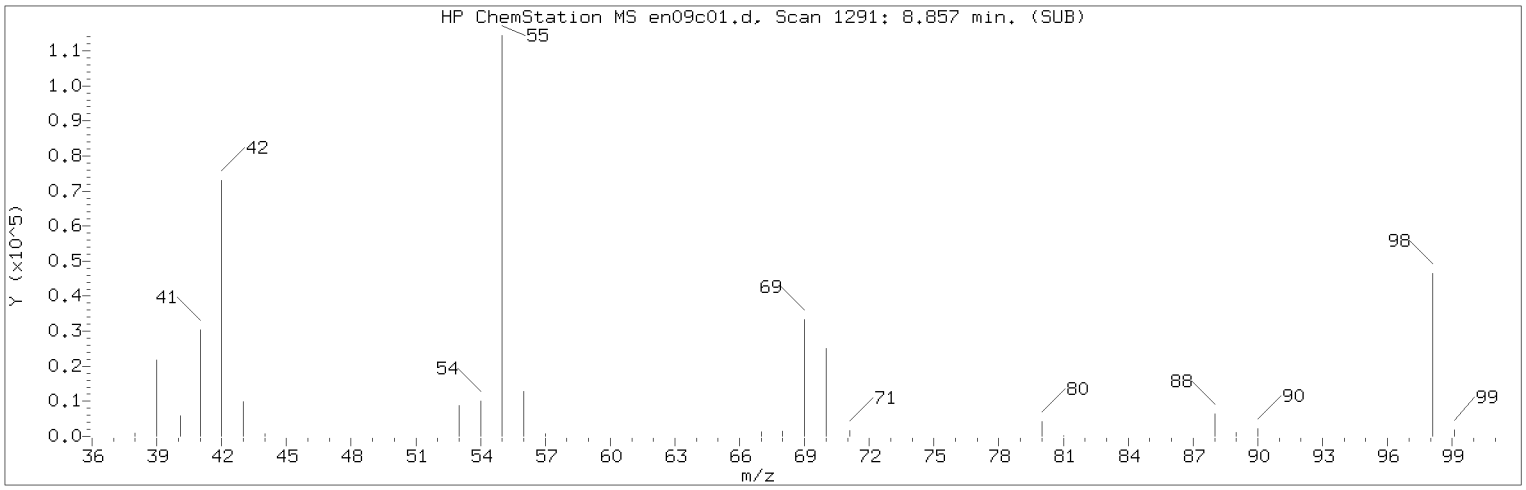
Compound Number	: 76		
Compound Name	: 1,4-Dioxane		
Scan Number	: 736		
Retention Time (minutes)	: 5.474		
Quant Ion	: 88.00		
Area (flag)	: 45179M		
On-Column Amount (ng)	: 870.8185		
Integration start scan	: 729	Integration stop scan:	768
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: compound not in processing sublist

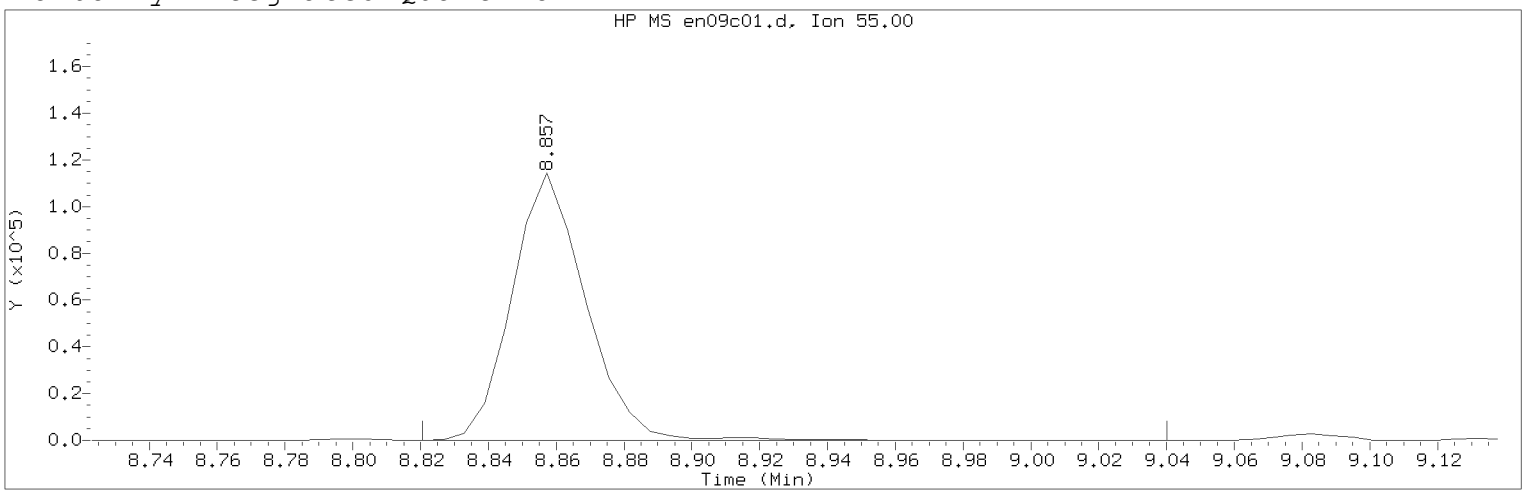
Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/09/2018 at 16:00.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:24.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18nov09a.b/en09c01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:35 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 15:55 ads01731

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1291
Retention Time (minutes): 8.857
Quant Ion : 55.00
Area (flag) : 172643A
On-Column Amount (ng) : 660.4370
Integration start scan : 1284 Integration stop scan: 1320
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: compound not in processing sublist

Analyst responsible for change: Digitally signed by Angela D. Sneeringer on 11/09/2018 at 16:00.
Target 3.5 esignature user ID: ads01731

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:24.
PARALLAX ID: cam01237

Raw QC Data

Volatiles by GC/MS

Analysis Summary for GC/MS Volatiles

Data file: /chem/HP15648.i/18nov09a.b/en09b01.d
Data file Sample Info. Line: VBLKE81;VBLKE81;1;3;;;;;;
Date, time and analyst ID of latest file update: 10-Nov-2018 06:18 jml01693

Injection date and time: **09-NOV-2018 14:14**
Instrument ID: **HP15648.i** Batch: **E183131AA**

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **8260W**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:51
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	2.480	(0.000)	245	65	186564	(-4)	250.00	
66) Fluorobenzene	4.730	(0.000)	614	96	973100	(2)	50.00	
101) Chlorobenzene-d5	7.888	(0.000)	1132	117	720296	(2)	50.00	
132) 1,4-Dichlorobenzene-d4	9.802	(0.000)	1446	152	376920	(1)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	4.072	(-0.001)	113	214129	50.233	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	4.395	(-0.001)	102	57924	49.973	100%		80 - 120
84) Toluene-d8	(3)	6.382	(0.000)	98	986136	48.823	98%		80 - 120
115) 4-Bromofluorobenzene	(3)	8.918	(0.000)	95	368159	48.971	98%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)				Not Detected					0.2	1
4) Chloromethane	(2)				Not Detected					0.2	1
5) 1,3-Butadiene	(2)				Not Detected					1	3
6) Vinyl Chloride	(2)				Not Detected					0.2	1
8) Bromomethane	(2)				Not Detected					0.3	1
9) Chloroethane	(2)				Not Detected					0.2	1
10) Dichlorofluoromethane	(2)				Not Detected					0.9	3
11) n-Pentane	(2)				Not Detected					0.4	10
12) Trichlorofluoromethane	(2)				Not Detected					0.2	1
14) Ethyl ether	(2)				Not Detected					0.2	5
15) Freon 123a	(2)				Not Detected					0.4	5
16) Acrolein	(1)				Not Detected					2	100
17) 1,1-Dichloroethene	(2)				Not Detected					0.2	1
18) Acetone	(1)				Not Detected					0.7	20
19) Freon 113	(2)				Not Detected					0.2	10
21) 2-Propanol	(1)				Not Detected					18	100
22) Methyl Iodide	(2)				Not Detected					0.2	1
23) Carbon Disulfide	(2)				Not Detected					0.2	5
25) Allyl Chloride	(2)				Not Detected					0.3	5
27) Methyl Acetate	(2)				Not Detected					0.2	5
28) Methylene Chloride	(2)				Not Detected					0.3	1
30) t-Butyl alcohol	(1)				Not Detected					12	50
31) Acrylonitrile	(2)				Not Detected					0.3	20
32) trans-1,2-Dichloroethene	(2)				Not Detected					0.2	1
33) Methyl Tertiary Butyl Ether	(2)				Not Detected					0.2	1
34) n-Hexane	(2)				Not Detected					0.2	5
36) 1,1-Dichloroethane	(2)				Not Detected					0.2	1
38) di-Isopropyl ether	(2)				Not Detected					0.2	1
39) 2-Chloro-1,3-butadiene	(2)				Not Detected					0.2	5
40) Ethyl t-butyl ether	(2)				Not Detected					0.2	1
42) cis-1,2-Dichloroethene	(2)				Not Detected					0.2	1

Analysis Summary for GC/MS Volatiles

Data file: /chem/HP15648.i/18nov09a.b/en09b01.d Injection date and time: **09-NOV-2018 14:14**
Data file Sample Info. Line: VBLKE81;VBLKE81;1;3;;;;;; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 10-Nov-2018 06:18 jml01693

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **8260W**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:51
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
43) 1,2-Dichloroethene (Total)	(2)				Not Detected					0.2	2
44) 2-Butanone	(2)				Not Detected					0.3	10
45) 2,2-Dichloropropane	(2)				Not Detected					0.3	1
47) Propionitrile	(1)				Not Detected					14	100
48) Methacrylonitrile	(2)				Not Detected					6	50
49) Bromochloromethane	(2)				Not Detected					0.2	5
50) Tetrahydrofuran	(1)				Not Detected					0.7	10
51) Chloroform	(2)				Not Detected					0.2	1
53) 1,1,1-Trichloroethane	(2)				Not Detected					0.3	1
54) Cyclohexane	(2)				Not Detected					0.2	5
55) 1,1-Dichloropropene	(2)				Not Detected					0.2	5
56) Carbon Tetrachloride	(2)				Not Detected					0.2	1
58) Isobutyl Alcohol	(1)				Not Detected					36	250
60) Benzene	(2)				Not Detected					0.2	1
61) 1,2-Dichloroethane	(2)				Not Detected					0.3	1
65) t-Amyl methyl ether	(2)				Not Detected					0.8	5
67) n-Heptane	(2)				Not Detected					0.2	5
69) n-Butanol	(1)				Not Detected					61	250
71) Trichloroethene	(2)				Not Detected					0.2	1
73) Methylcyclohexane	(2)				Not Detected					0.2	5
74) 1,2-Dichloropropane	(2)				Not Detected					0.2	1
75) Dibromomethane	(2)				Not Detected					0.2	1
76) 1,4-Dioxane	(1)				Not Detected					29	250
77) Methyl Methacrylate	(2)				Not Detected					0.2	5
79) Bromodichloromethane	(2)				Not Detected					0.2	1
80) 2-Nitropropane	(2)				Not Detected					0.8	10
81) 2-Chloroethyl Vinyl Ether	(2)				Not Detected					0.2	10
82) cis-1,3-Dichloropropene	(2)				Not Detected					0.2	1
83) 4-Methyl-2-pentanone	(2)				Not Detected					0.5	10
89) Toluene	(3)				Not Detected					0.2	1
90) trans-1,3-Dichloropropene	(3)				Not Detected					0.2	1
91) 1,3-Dichloropropene (total)	(3)				Not Detected					0.2	5
92) Ethyl Methacrylate	(3)				Not Detected					0.2	5
93) 1,1,2-Trichloroethane	(3)				Not Detected					0.2	1
94) Tetrachloroethene	(3)				Not Detected					0.2	1
95) 1,3-Dichloropropane	(3)				Not Detected					0.2	1
97) 2-Hexanone	(3)				Not Detected					0.3	10
98) Dibromochloromethane	(3)				Not Detected					0.2	1
100) 1,2-Dibromoethane	(3)				Not Detected					0.2	1
102) 1-Chlorohexane	(3)				Not Detected					0.3	5
103) Chlorobenzene	(3)				Not Detected					0.2	1
104) 1,1,1,2-Tetrachloroethane	(3)				Not Detected					0.2	1
105) Ethylbenzene	(3)				Not Detected					0.4	1
107) m+p-Xylene	(3)				Not Detected					1	5
108) o-Xylene	(3)				Not Detected					0.4	1
109) Xylene (Total)	(3)				Not Detected					1	5
110) Styrene	(3)				Not Detected					0.2	5
111) Bromoform	(3)				Not Detected					0.2	4
112) Isopropylbenzene	(3)				Not Detected					0.2	5
113) Cyclohexanone	(1)				Not Detected					25	100
116) Bromobenzene	(4)				Not Detected					0.2	5
117) 1,1,2,2-Tetrachloroethane	(4)				Not Detected					0.2	1
118) 1,2,3-Trichloropropane	(4)				Not Detected					0.2	5
119) trans-1,4-Dichloro-2-butene	(4)				Not Detected					6	50

Digitally signed by Jason M. Long on 11/10/2018 at 10:57. Target 3.5 esignature user ID: jml01693

Data file: /chem/HP15648.i/18nov09a.b/en09b01.d Injection date and time: **09-NOV-2018 14:14**
Data file Sample Info. Line: VBLKE81;VBLKE81;1;3;;;;;; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 10-Nov-2018 06:18 jml01693

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **8260W**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:51
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

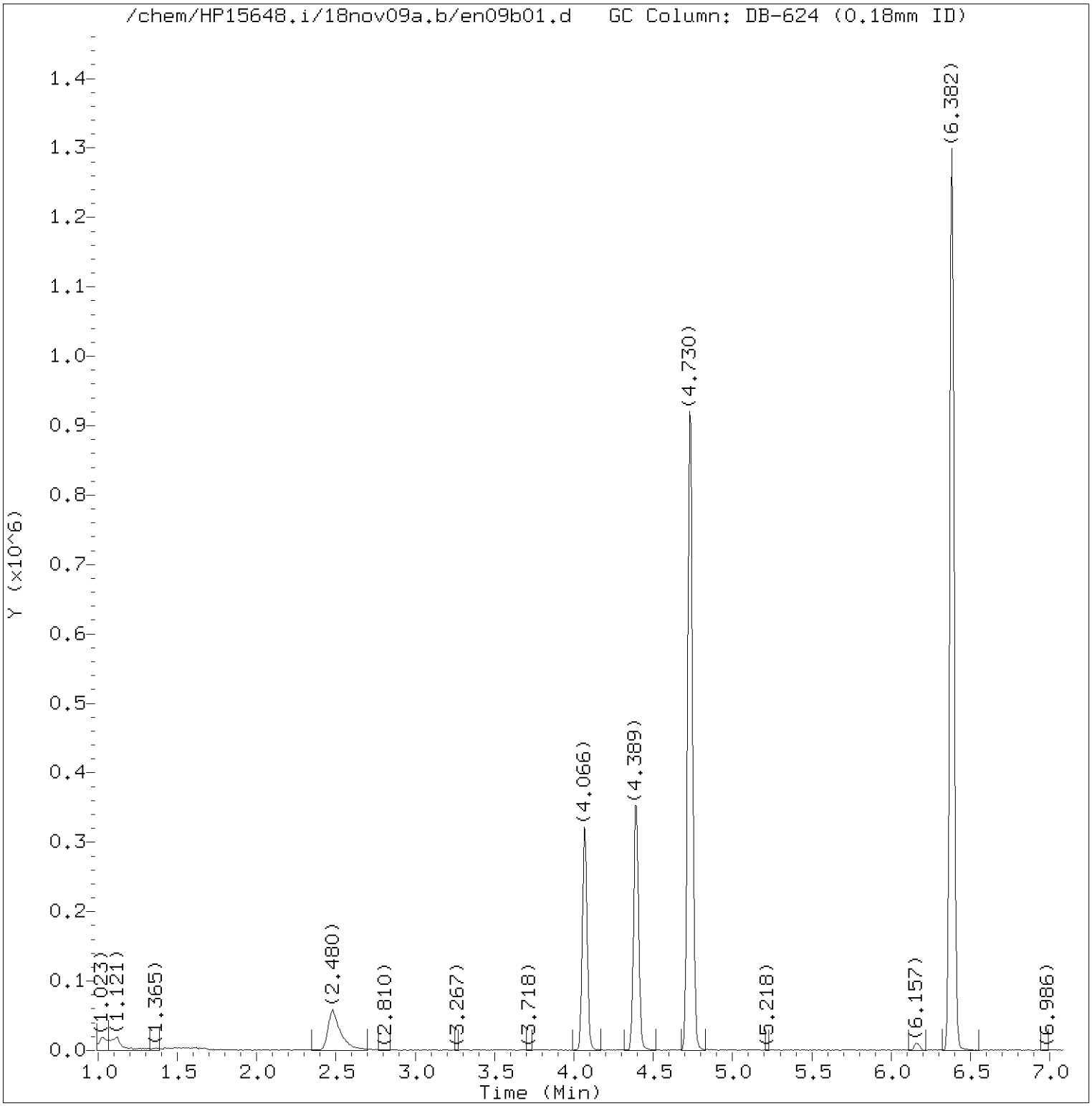
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
120) n-Propylbenzene	(4)			Not Detected					0.2	5
121) 2-Chlorotoluene	(4)			Not Detected					0.2	5
122) 4-Chlorotoluene	(4)			Not Detected					0.2	5
123) 1,3,5-Trimethylbenzene	(4)			Not Detected					0.3	5
125) tert-Butylbenzene	(4)			Not Detected					0.3	5
126) Pentachloroethane	(4)			Not Detected					0.2	5
127) 1,2,4-Trimethylbenzene	(4)			Not Detected					1	5
128) sec-Butylbenzene	(4)			Not Detected					0.2	5
130) 1,3-Dichlorobenzene	(4)			Not Detected					0.2	5
131) p-Isopropyltoluene	(4)			Not Detected					0.2	5
134) 1,4-Dichlorobenzene	(4)			Not Detected					0.2	5
135) 1,2,3-Trimethylbenzene	(4)			Not Detected					0.3	5
136) Benzyl Chloride	(4)			Not Detected					0.3	5
137) 1,3-Diethylbenzene	(4)			Not Detected					0.2	5
138) 1,4-Diethylbenzene	(4)			Not Detected					0.2	5
139) 1,2-Dichlorobenzene	(4)			Not Detected					0.2	5
140) n-Butylbenzene	(4)			Not Detected					0.2	5
141) 1,2-Diethylbenzene	(4)			Not Detected					0.2	5
142) Diethylbenzene (total)	(4)			Not Detected					0.2	5
143) 1,2-Dibromo-3-chloropropane	(4)			Not Detected					0.3	5
145) 1,3,5-Trichlorobenzene	(4)			Not Detected					0.2	5
147) 1,2,4-Trichlorobenzene	(4)			Not Detected					0.3	5
148) Hexachlorobutadiene	(4)			Not Detected					0.7	5
149) Naphthalene	(4)			Not Detected					1	5
150) 1,2,3-Trichlorobenzene	(4)			Not Detected					0.4	5
151) 2-Methylnaphthalene	(4)	12.052(0.000)	142	12355	0.913	0.91		J	0.7	5

Total number of targets = 111

Digitally signed by Jason M. Long on 11/10/2018 at 10:57. Target 3.5 esignature user ID: jml01693

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:36. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

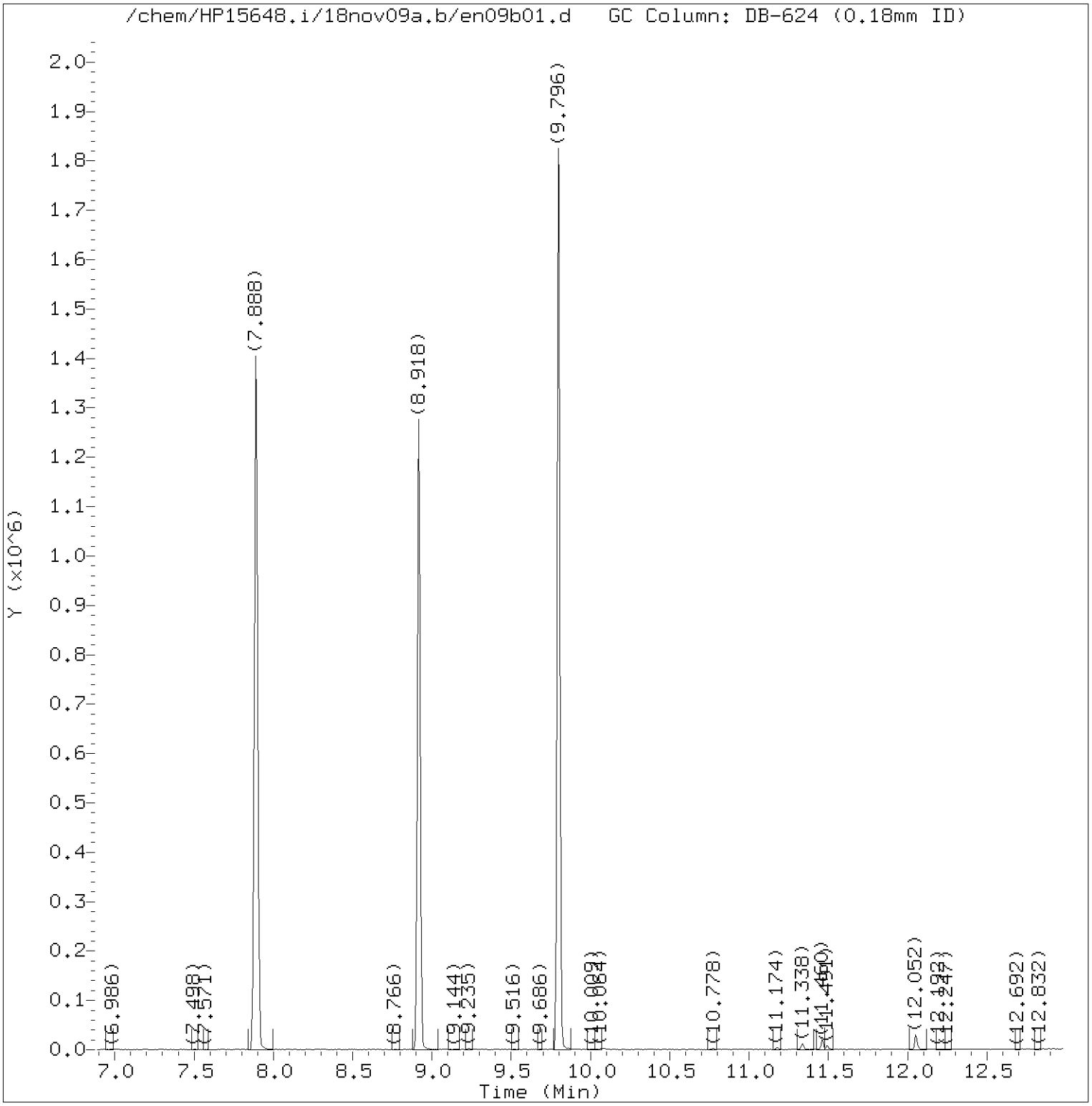
Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09b01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 14:14 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 10-Nov-2018 06:18 jml01693

Sample Name: VBLKE81 Lab Sample ID: VBLKE81

Digitally signed by Jason M. Long
on 11/10/2018 at 10:57.
Target 3.5 esignature user ID: jml01693



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09b01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 14:14 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 10-Nov-2018 06:18 jml01693

Sample Name: VBLKE81 Lab Sample ID: VBLKE81

Digitally signed by Jason M. Long
on 11/10/2018 at 10:57.
Target 3.5 esignature user ID: jml01693

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09b01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 14:14 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 10-Nov-2018 06:18 jml01693

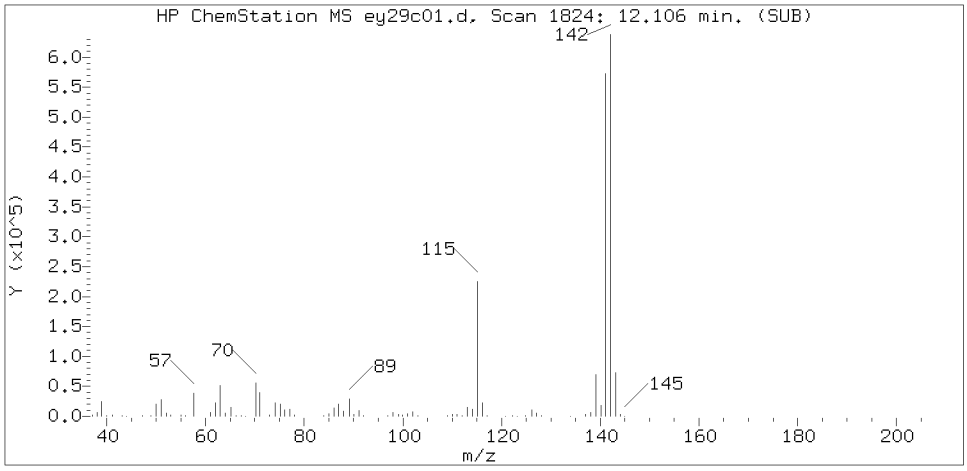
Sample Name: VBLKE81 Lab Sample ID: VBLKE81

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
29)*t-Butyl alcohol-d10	(1)	2.480	65	186564	250.000
52)$Dibromofluoromethane	(2)	4.072	113	214129	50.233
57)$1,2-Dichloroethane-d4	(2)	4.395	102	57924	49.973
66)*Fluorobenzene	(2)	4.730	96	973100	50.000
84)$Toluene-d8	(3)	6.382	98	986136	48.823
101)*Chlorobenzene-d5	(3)	7.888	117	720296	50.000
115)$4-Bromofluorobenzene	(3)	8.918	95	368159	48.971
132)*1,4-Dichlorobenzene-d4	(4)	9.802	152	376920	50.000
151) 2-Methylnaphthalene	(4)	12.052	142	12355	0.913

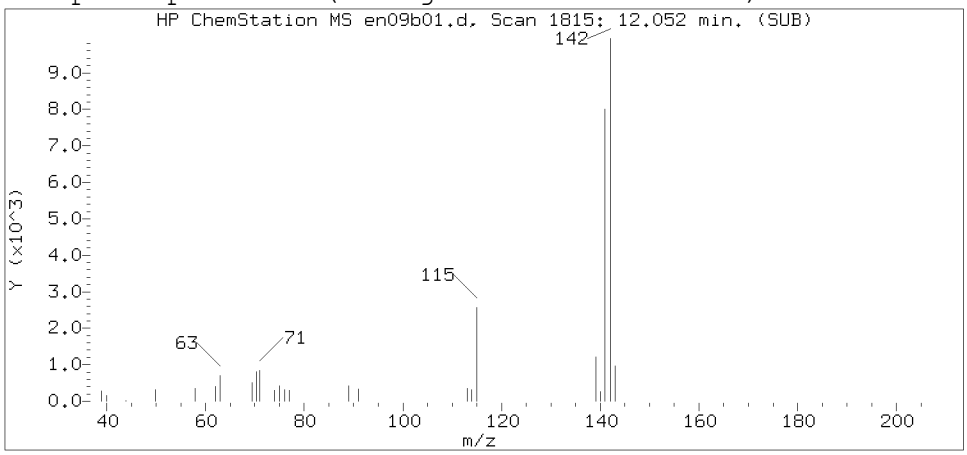
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jason M. Long
on 11/10/2018 at 10:57.
Target 3.5 esignature user ID: jml01693

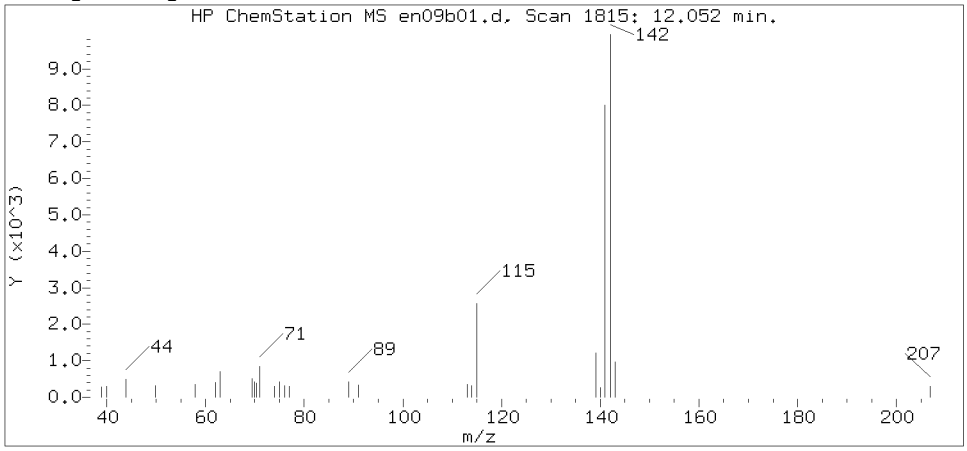
Reference Standard Spectrum for 2-Methylnaphthalene

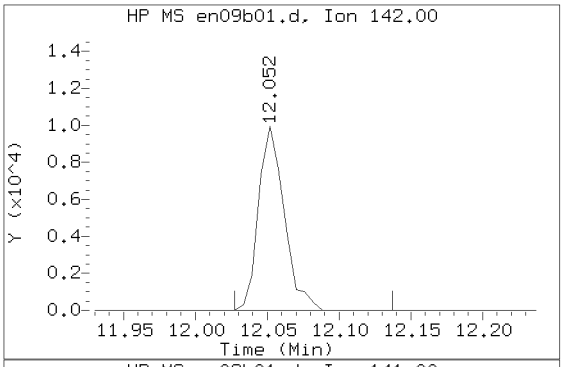


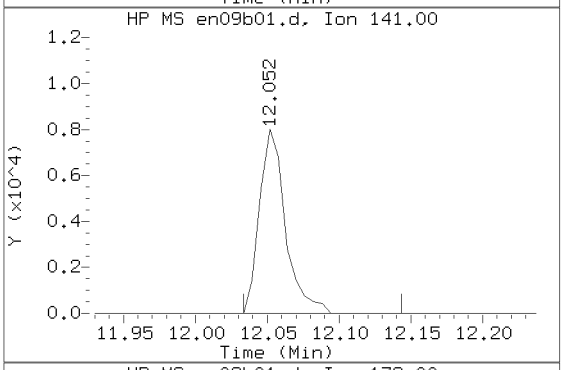
Sample Spectrum (Background Subtracted)

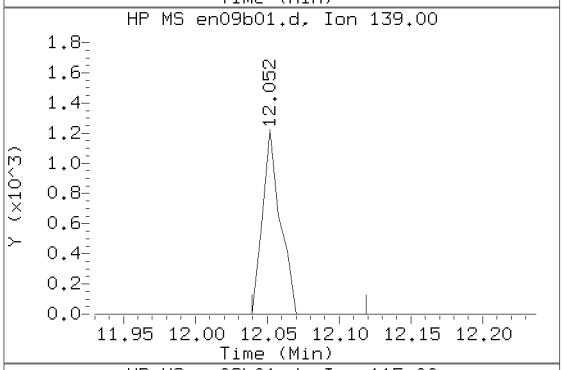


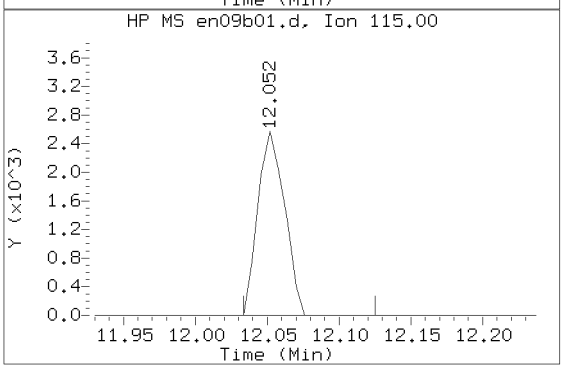
Sample Spectrum (Unaltered)











Data File: /chem/HP15648.i/18nov09a.b/en09b01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 14:14 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 10-Nov-2018 06:18 jml01693

Sample Name: VBLKE81 Lab Sample ID: VBLKE81

Compound Number : 151
Compound Name : 2-Methylnaphthalene
Scan Number : 1815
Retention Time (minutes): 12.052
Relative Retention Time : 0.00000
Quant Ion : 142.00
Area (flag) : 12355
On-Column Amount (ng) : 0.9127

Digitally signed by Jason M. Long on 11/10/2018 at 10:57.
Target 3.5 esignature user ID: jml01693

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR226MS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885682

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s09.d

Level: (low/med) LOW Date Received: 11/06/18

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	20	
75-01-4	Vinyl Chloride	21	
74-83-9	Bromomethane	18	
75-00-3	Chloroethane	19	
75-69-4	Trichlorofluoromethane	22	
75-35-4	1,1-Dichloroethene	24	
75-09-2	Methylene Chloride	22	
1634-04-4	Methyl Tertiary Butyl Ether	21	
75-34-3	1,1-Dichloroethane	23	
540-59-0	1,2-Dichloroethene (Total)	47	
67-66-3	Chloroform	23	
71-55-6	1,1,1-Trichloroethane	23	
56-23-5	Carbon Tetrachloride	24	
71-43-2	Benzene	23	
107-06-2	1,2-Dichloroethane	22	
79-01-6	Trichloroethene	23	
78-87-5	1,2-Dichloropropane	22	
75-27-4	Bromodichloromethane	22	
110-75-8	2-Chloroethyl Vinyl Ether	21	
10061-01-5	cis-1,3-Dichloropropene	22	
108-88-3	Toluene	22	
10061-02-6	trans-1,3-Dichloropropene	19	
79-00-5	1,1,2-Trichloroethane	22	
127-18-4	Tetrachloroethene	25	
124-48-1	Dibromochloromethane	21	
108-90-7	Chlorobenzene	22	
100-41-4	Ethylbenzene	22	
1330-20-7	Xylene (Total)	67	
75-25-2	Bromoform	21	
79-34-5	1,1,2,2-Tetrachloroethane	20	

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR226MS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885682

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s09.d

Level: (low/med) LOW Date Received: 11/06/18

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	23	
106-46-7	1,4-Dichlorobenzene	23	
95-50-1	1,2-Dichlorobenzene	23	

^

Data file: /chem/HP15648.i/18nov09a.b/en09s09.d Injection date and time: **09-NOV-2018 17:15**
Data file Sample Info. Line: OR226MS;9885682MS;1;3;MS;CBD54;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 10-NOV-2018 06:21
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	2.474	(0.006)	244	65	185227	(-5)	250.00	
66) Fluorobenzene	4.730	(0.000)	614	96	958550	(0)	50.00	
101) Chlorobenzene-d5	7.888	(0.000)	1132	117	716002	(1)	50.00	
132) 1,4-Dichlorobenzene-d4	9.802	(0.000)	1446	152	370623	(0)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	4.066	(0.000)	113	215698	51.370	103%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	4.395	(-0.001)	102	58593	51.317	103%		80 - 120
84) Toluene-d8	(3)	6.382	(0.000)	98	976282	48.625	97%		80 - 120
115) 4-Bromofluorobenzene	(3)	8.918	(0.000)	95	369040	49.383	99%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)	1.310	(-0.000)	50	148465	19.918	19.92			0.2	1
6) Vinyl Chloride	(2)	1.377	(-0.000)	62	145173	21.145	21.15			0.2	1
8) Bromomethane	(2)	1.554	(0.001)	94	86453	18.080	18.08			0.3	1
9) Chloroethane	(2)	1.590	(0.002)	64	76198	19.332	19.33			0.2	1
12) Trichlorofluoromethane	(2)	1.779	(0.001)	101	169990	21.592	21.59			0.2	1
17) 1,1-Dichloroethene	(2)	2.096	(-0.000)	96	89804	23.760	23.76			0.2	1
28) Methylene Chloride	(2)	2.462	(0.001)	84	99546	22.437	22.44			0.3	1
32) trans-1,2-Dichloroethene	(2)	2.700	(-0.000)	96	97153	23.134	23.13			0.2	1
33) Methyl Tertiary Butyl Ether	(2)	2.706	(-0.000)	73	278400	20.779	20.78			0.2	1
36) 1,1-Dichloroethane	(2)	3.072	(-0.000)	63	188528	22.794	22.79			0.2	1
42) cis-1,2-Dichloroethene	(2)	3.608	(-0.000)	96	110573	23.756	23.76			0.2	1
43) 1,2-Dichloroethene (Total)	(2)			96	207726	46.891	46.89			0.2	2
51) Chloroform	(2)	3.913	(-0.000)	83	168639	23.112	23.11			0.2	1
53) 1,1,1-Trichloroethane	(2)	4.096	(0.001)	97	154776	23.213	23.21			0.3	1
56) Carbon Tetrachloride	(2)	4.261	(-0.000)	117	132054	24.039	24.04			0.2	1
60) Benzene	(2)	4.450	(0.001)	78	427899	22.711	22.71			0.2	1
61) 1,2-Dichloroethane	(2)	4.462	(0.001)	62	132942	22.192	22.19			0.3	1
71) Trichloroethene	(2)	5.102	(0.001)	95	106925	23.360	23.36			0.2	1
74) 1,2-Dichloropropane	(2)	5.328	(0.000)	63	112364	22.266	22.27			0.2	1
79) Bromodichloromethane	(2)	5.614	(0.000)	83	124503	22.283	22.28			0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)	5.949	(0.001)	63	72704M	20.621	20.62			0.2	10
82) cis-1,3-Dichloropropene	(2)	6.096	(0.000)	75	168388	21.780	21.78			0.2	1
89) Toluene	(3)	6.455	(-0.000)	92	269994	22.107	22.11			0.2	1
90) trans-1,3-Dichloropropene	(3)	6.699	(-0.000)	75	145764	19.489	19.49			0.2	1
93) 1,1,2-Trichloroethane	(3)	6.894	(-0.000)	97	88117	21.951	21.95			0.2	1
94) Tetrachloroethene	(3)	7.053	(-0.000)	166	112628	24.729	24.73			0.2	1
98) Dibromochloromethane	(3)	7.315	(-0.000)	129	90188	21.172	21.17			0.2	1
103) Chlorobenzene	(3)	7.918	(0.000)	112	289014	22.098	22.10			0.2	1
105) Ethylbenzene	(3)	8.034	(0.000)	91	522563	21.741	21.74			0.4	1
107) m+p-Xylene	(3)	8.144	(0.000)	106	414495	45.146	45.15			1	5

M = Compound was manually integrated.

Digitally signed by Jason M. Long on 11/10/2018 at 07:01. Target 3.5 esignature user ID: jml01693

Data file: /chem/HP15648.i/18nov09a.b/en09s09.d Injection date and time: **09-NOV-2018 17:15**
Data file Sample Info. Line: OR226MS;9885682MS;1;3;MS;CBD54;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 10-NOV-2018 06:21
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

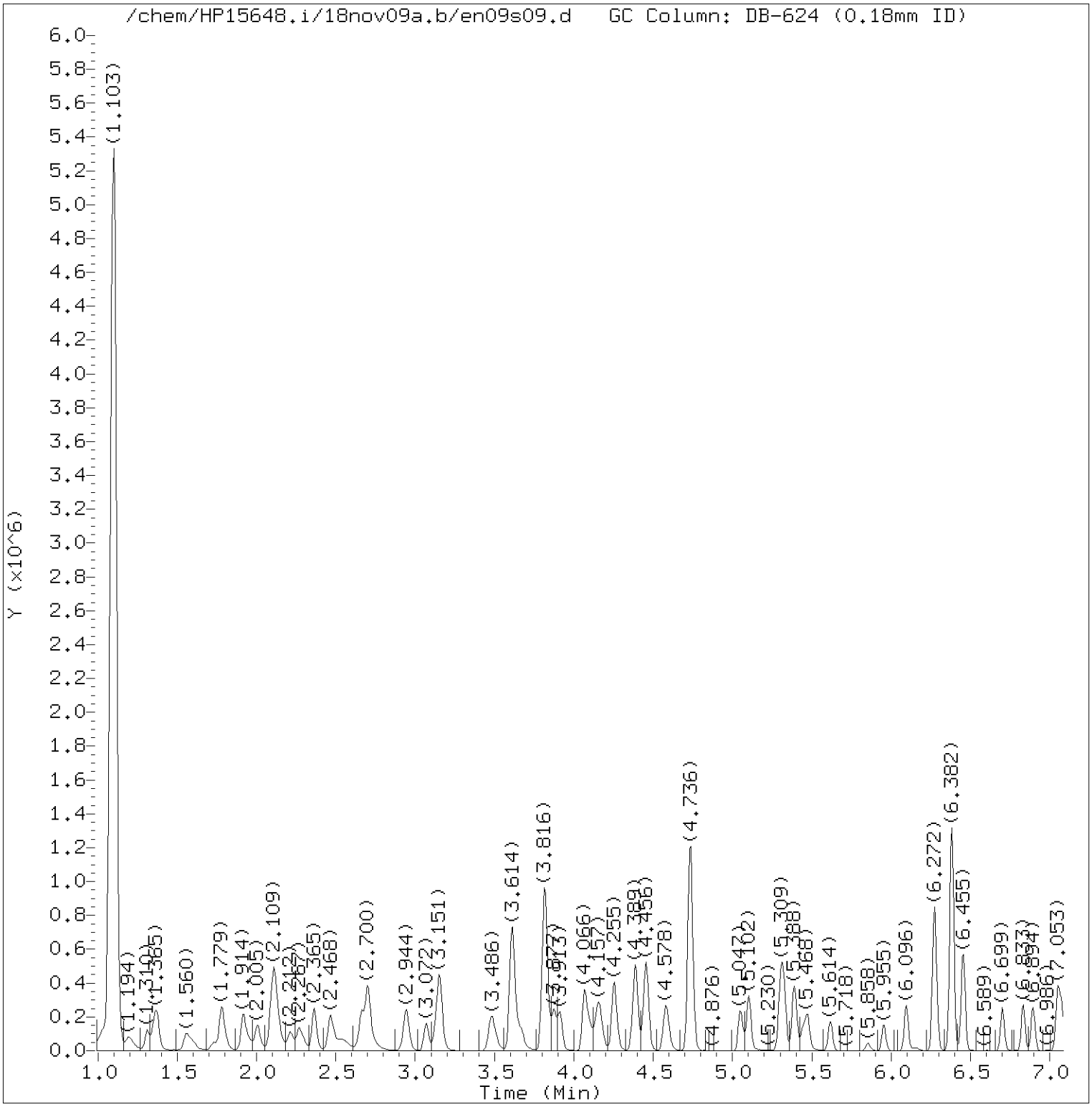
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)	8.485(0.000)	106	196880	21.905	21.91			0.4	1
109) Xylene (Total)	(3)		106	611375	67.051	67.05			1	5
111) Bromoform	(3)	8.638(0.000)	173	58441	21.070	21.07			0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)	9.040(-0.000)	83	128286	20.221	20.22			0.2	1
130) 1,3-Dichlorobenzene	(4)	9.753(-0.000)	146	227050	22.631	22.63			0.2	5
134) 1,4-Dichlorobenzene	(4)	9.814(0.000)	146	228366	22.556	22.56			0.2	5
139) 1,2-Dichlorobenzene	(4)	10.083(0.000)	146	214430	22.518	22.52			0.2	5

Total number of targets = 37

Digitally signed by Jason M. Long on 11/10/2018 at 07:01. Target 3.5 esignature user ID: jml01693

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:36. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

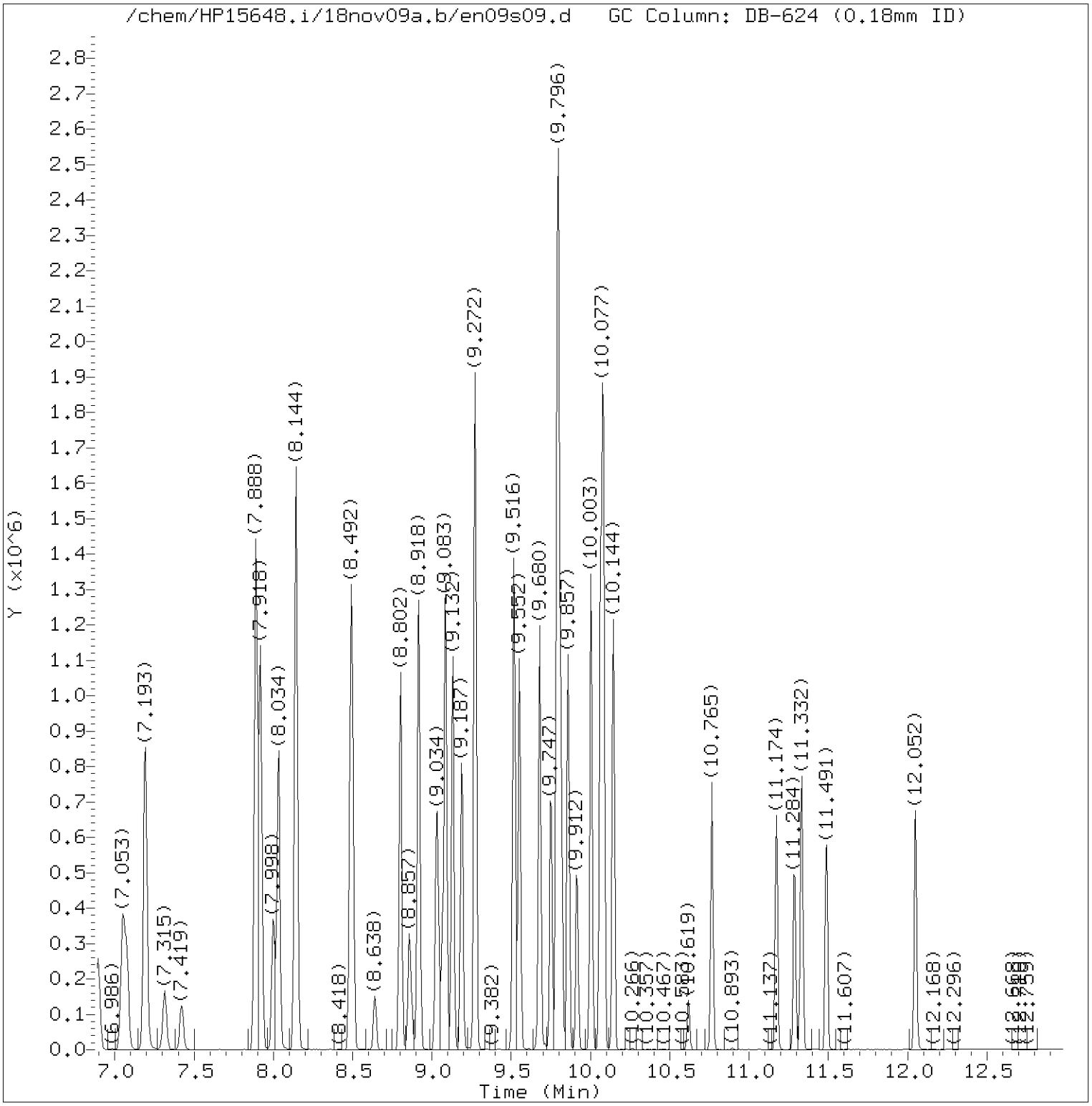
Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s09.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 17:15 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

Sample Name: OR226MS Lab Sample ID: 9885682MS

Digitally signed by Jason M. Long
on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s09.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 17:15 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

Sample Name: OR226MS Lab Sample ID: 9885682MS

Digitally signed by Jason M. Long
on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s09.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 17:15 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

Sample Name: OR226MS Lab Sample ID: 9885682MS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Chloromethane	(2)	1.310	50	148465	19.918
6) Vinyl Chloride	(2)	1.377	62	145173	21.145
8) Bromomethane	(2)	1.554	94	86453	18.080
9) Chloroethane	(2)	1.590	64	76198	19.332
12) Trichlorofluoromethane	(2)	1.779	101	169990	21.592
17) 1,1-Dichloroethene	(2)	2.096	96	89804	23.760
28) Methylene Chloride	(2)	2.462	84	99546	22.437
29)*t-Butyl alcohol-d10	(1)	2.474	65	185227	250.000
32) trans-1,2-Dichloroethene	(2)	2.700	96	97153	23.134
33) Methyl Tertiary Butyl Ether	(2)	2.706	73	278400	20.779
36) 1,1-Dichloroethane	(2)	3.072	63	188528	22.794
42) cis-1,2-Dichloroethene	(2)	3.608	96	110573	23.756
43) 1,2-Dichloroethene (Total)	(2)		96	207726	46.891
51) Chloroform	(2)	3.913	83	168639	23.112
52)$Dibromofluoromethane	(2)	4.066	113	215698	51.370
53) 1,1,1-Trichloroethane	(2)	4.096	97	154776	23.213
56) Carbon Tetrachloride	(2)	4.261	117	132054	24.039
57)$1,2-Dichloroethane-d4	(2)	4.395	102	58593	51.317
60) Benzene	(2)	4.450	78	427899	22.711
61) 1,2-Dichloroethane	(2)	4.462	62	132942	22.192
66)*Fluorobenzene	(2)	4.730	96	958550	50.000
71) Trichloroethene	(2)	5.102	95	106925	23.360
74) 1,2-Dichloropropane	(2)	5.327	63	112364	22.266
79) Bromodichloromethane	(2)	5.614	83	124503	22.283
81) 2-Chloroethyl Vinyl Ether	(2)	5.949	63	72704M	20.621
82) cis-1,3-Dichloropropene	(2)	6.096	75	168388	21.780
84)$Toluene-d8	(3)	6.382	98	976282	48.625
89) Toluene	(3)	6.455	92	269994	22.107
90) trans-1,3-Dichloropropene	(3)	6.699	75	145764	19.489
93) 1,1,2-Trichloroethane	(3)	6.894	97	88117	21.951
94) Tetrachloroethene	(3)	7.053	166	112628	24.729
98) Dibromochloromethane	(3)	7.315	129	90188	21.172
101)*Chlorobenzene-d5	(3)	7.888	117	716002	50.000
103) Chlorobenzene	(3)	7.918	112	289014	22.098
105) Ethylbenzene	(3)	8.034	91	522563	21.741
107) m+p-Xylene	(3)	8.144	106	414495	45.146
109) Xylene (Total)	(3)		106	611375	67.051
108) o-Xylene	(3)	8.485	106	196880	21.905

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

Digitally signed by Jason M. Long
on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s09.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 17:15 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

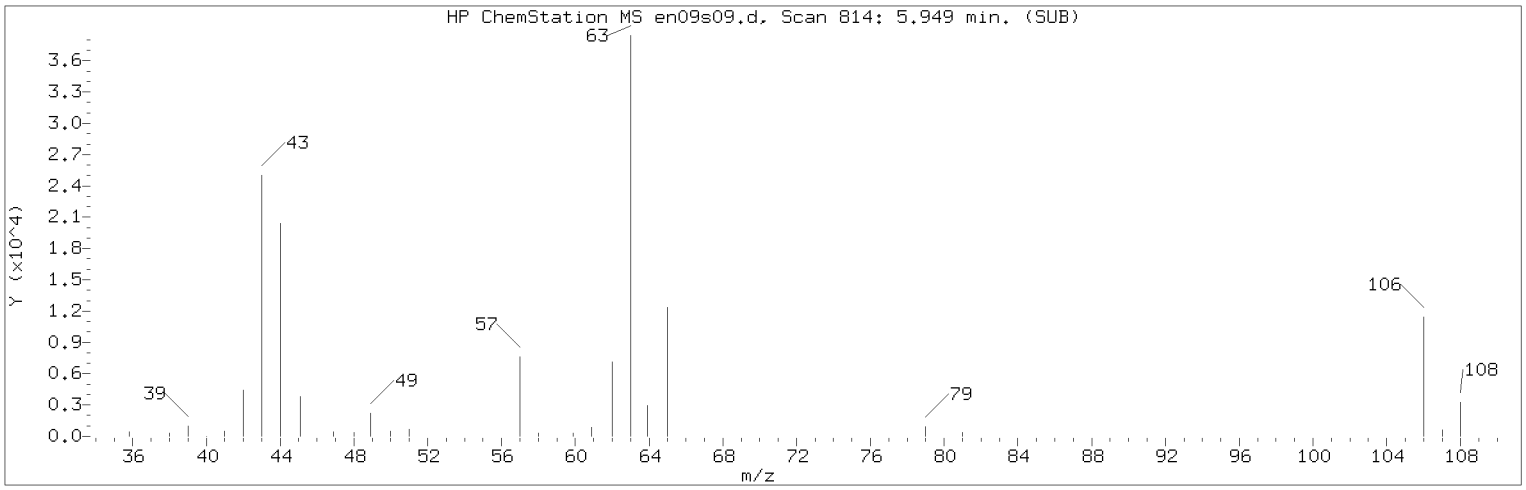
Sample Name: OR226MS Lab Sample ID: 9885682MS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
111) Bromoform	(3)	8.638	173	58441	21.070
115)$4-Bromofluorobenzene	(3)	8.918	95	369040	49.383
117) 1,1,2,2-Tetrachloroethane	(4)	9.040	83	128286	20.221
130) 1,3-Dichlorobenzene	(4)	9.753	146	227050	22.631
132)*1,4-Dichlorobenzene-d4	(4)	9.802	152	370623	50.000
134) 1,4-Dichlorobenzene	(4)	9.814	146	228366	22.556
139) 1,2-Dichlorobenzene	(4)	10.083	146	214430	22.518

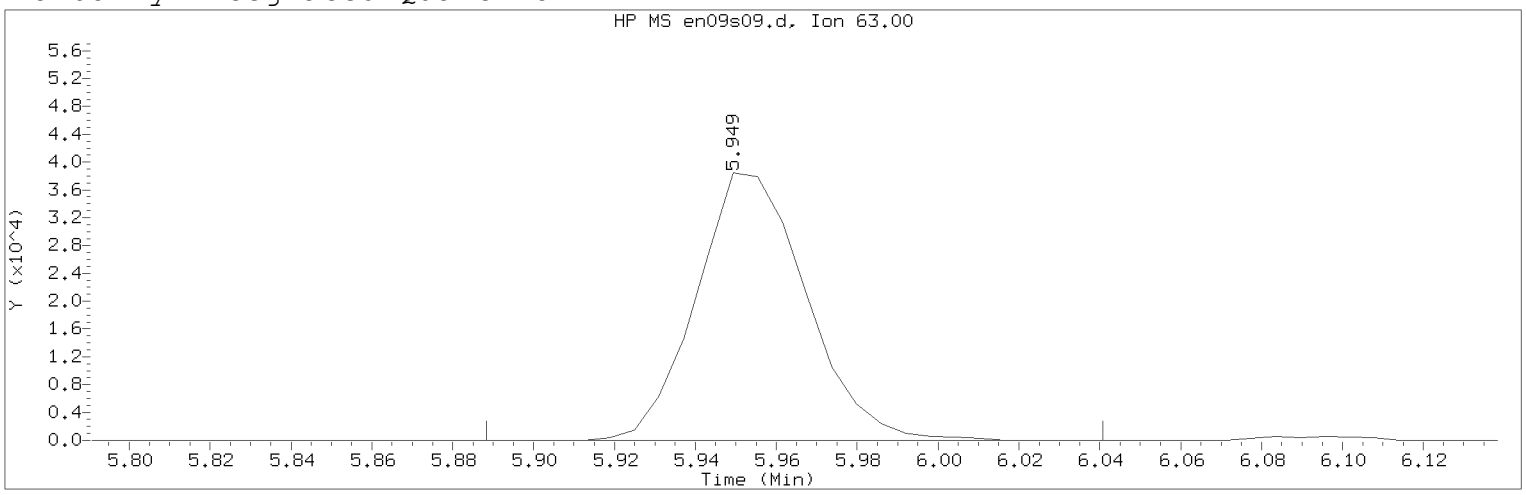
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jason M. Long
on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18nov09a.b/en09s09.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 17:15 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:55 jml01693

Sample Name: OR226MS Lab Sample ID: 9885682MS

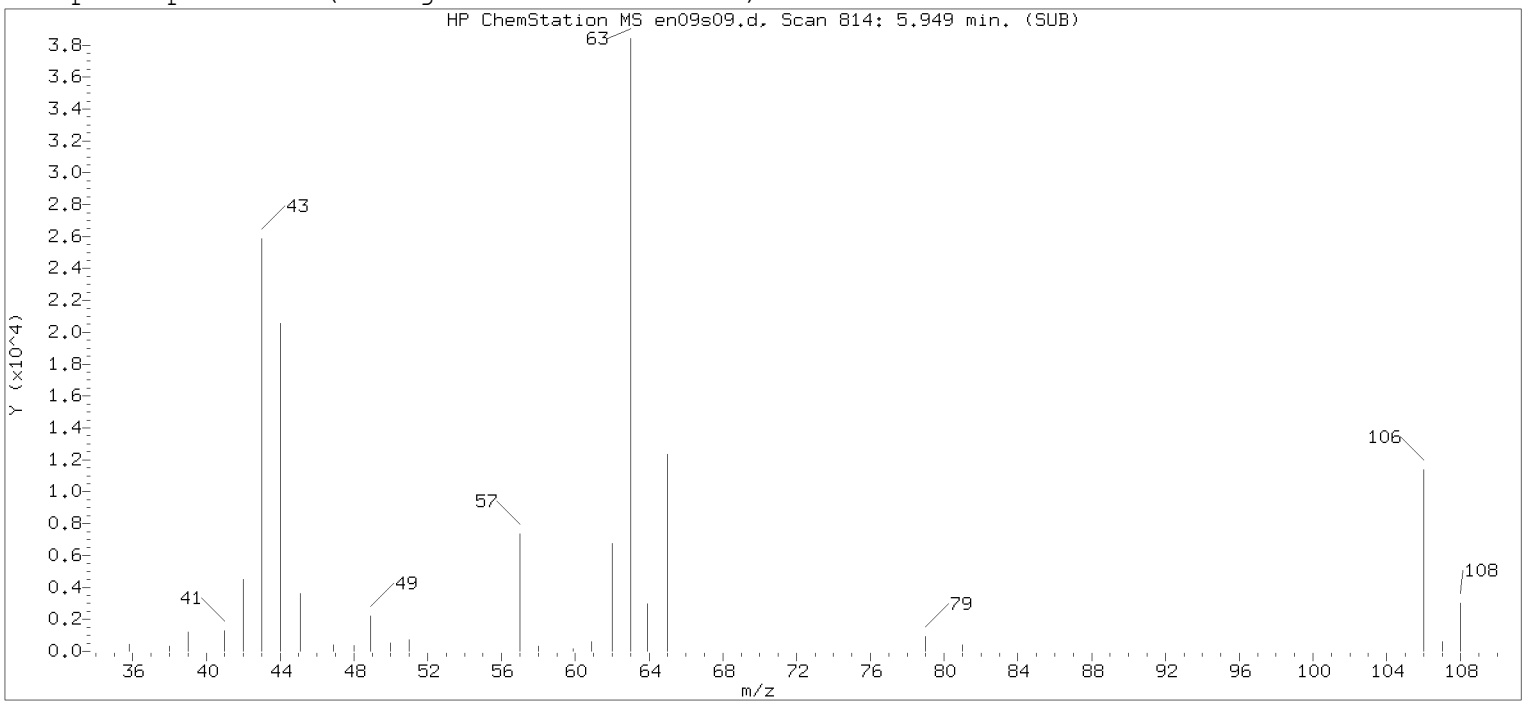
Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 814
Retention Time (minutes): 5.949
Quant Ion : 63.00
Area (flag) : 72704M
On-Column Amount (ng) : 20.6206
Integration start scan : 803 Integration stop scan: 828
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

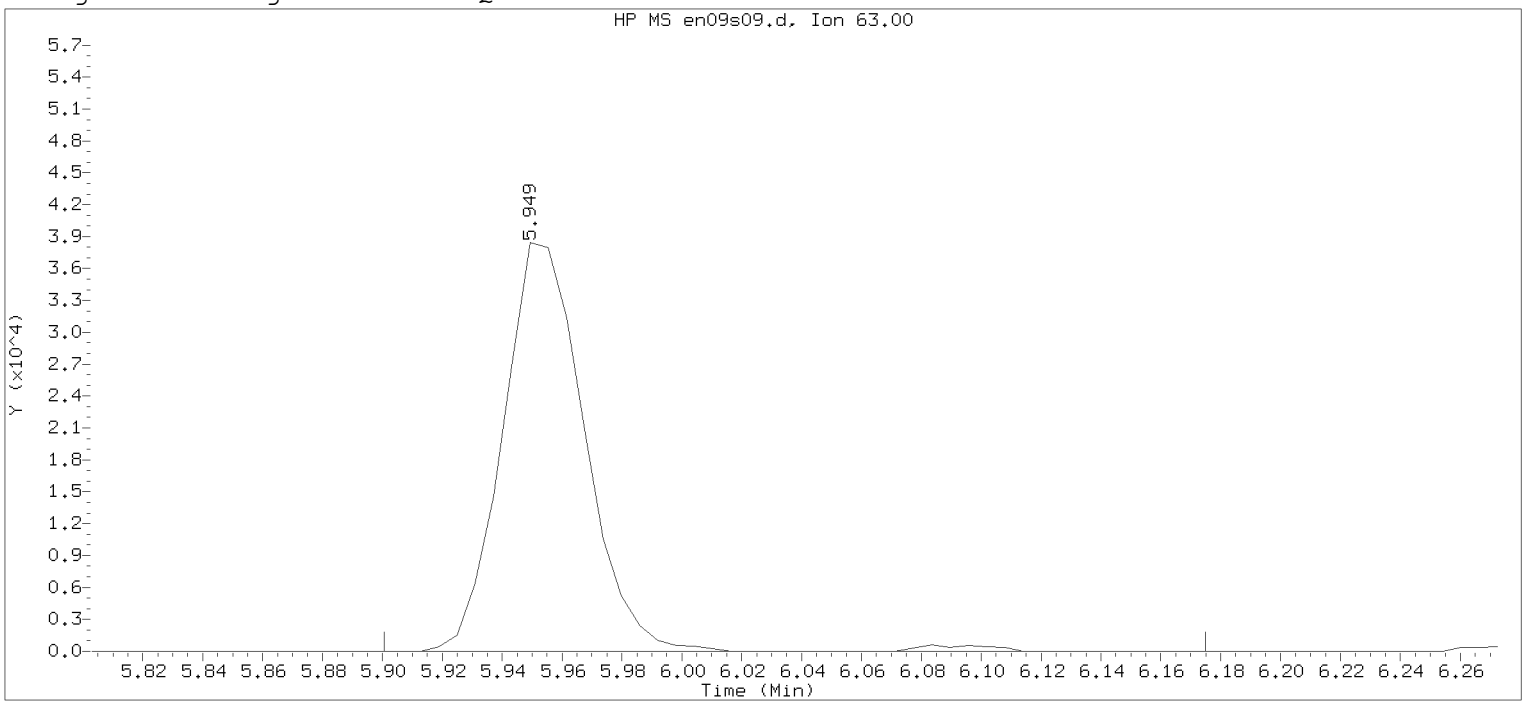
Analyst responsible for change: Digitally signed by Jason M. Long
on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:36.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18nov09a.b/en09s09.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 17:15 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 17:31 Automation

Sample Name: OR226MS Lab Sample ID: 9885682MS

Compound Number : 81
Compound Name : 2-Chloroethyl Vinyl Ether
Scan Number : 814
Retention Time (minutes): 5.949
Quant Ion : 63.00
Area : 73657
On-column Amount (ng) : 20.8910
Integration start scan : 805 Integration stop scan: 850
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jason M. Long on 11/10/2018 at 07:01.
Target 3.5 esignature user id: jmlong

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR226MSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885683

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s10.d

Level: (low/med) LOW Date Received: 11/06/18

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	20	
75-01-4	Vinyl Chloride	20	
74-83-9	Bromomethane	18	
75-00-3	Chloroethane	19	
75-69-4	Trichlorofluoromethane	21	
75-35-4	1,1-Dichloroethene	24	
75-09-2	Methylene Chloride	22	
1634-04-4	Methyl Tertiary Butyl Ether	21	
75-34-3	1,1-Dichloroethane	23	
540-59-0	1,2-Dichloroethene (Total)	47	
67-66-3	Chloroform	23	
71-55-6	1,1,1-Trichloroethane	23	
56-23-5	Carbon Tetrachloride	24	
71-43-2	Benzene	22	
107-06-2	1,2-Dichloroethane	22	
79-01-6	Trichloroethene	23	
78-87-5	1,2-Dichloropropane	22	
75-27-4	Bromodichloromethane	22	
110-75-8	2-Chloroethyl Vinyl Ether	21	
10061-01-5	cis-1,3-Dichloropropene	22	
108-88-3	Toluene	22	
10061-02-6	trans-1,3-Dichloropropene	20	
79-00-5	1,1,2-Trichloroethane	22	
127-18-4	Tetrachloroethene	24	
124-48-1	Dibromochloromethane	21	
108-90-7	Chlorobenzene	22	
100-41-4	Ethylbenzene	22	
1330-20-7	Xylene (Total)	67	
75-25-2	Bromoform	21	
79-34-5	1,1,2,2-Tetrachloroethane	20	

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR226MSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885683

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s10.d

Level: (low/med) LOW Date Received: 11/06/18

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
541-73-1	1,3-Dichlorobenzene	22	
106-46-7	1,4-Dichlorobenzene	22	
95-50-1	1,2-Dichlorobenzene	22	

Data file: /chem/HP15648.i/18nov09a.b/en09s10.d Injection date and time: **09-NOV-2018 17:36**
Data file Sample Info. Line: OR226MSD;9885683MSD;1;3;MSD;CBD54;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 10-Nov-2018 06:56 jml01693

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 10-NOV-2018 06:21
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:ph7

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	2.481	(0.000)	245	65	189218	(-3)	250.00	
66) Fluorobenzene	4.730	(0.000)	614	96	964191	(1)	50.00	
101) Chlorobenzene-d5	7.888	(0.000)	1132	117	721101	(2)	50.00	
132) 1,4-Dichlorobenzene-d4	9.802	(0.000)	1446	152	380745	(2)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	4.066	(0.000)	113	215364	50.990	102%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	4.389	(0.000)	102	57394	49.973	100%		80 - 120
84) Toluene-d8	(3)	6.382	(0.000)	98	979945	48.462	97%		80 - 120
115) 4-Bromofluorobenzene	(3)	8.918	(0.000)	95	367593	48.841	98%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
4) Chloromethane	(2)	1.310	(-0.000)	50	146386	19.524	19.52			0.2	1
6) Vinyl Chloride	(2)	1.371	(0.001)	62	140719	20.377	20.38			0.2	1
8) Bromomethane	(2)	1.554	(0.001)	94	86300	17.942	17.94			0.3	1
9) Chloroethane	(2)	1.596	(0.001)	64	73437	18.523	18.52			0.2	1
12) Trichlorofluoromethane	(2)	1.779	(0.001)	101	168562	21.285	21.29			0.2	1
17) 1,1-Dichloroethene	(2)	2.090	(0.001)	96	90579	23.824	23.82			0.2	1
28) Methylene Chloride	(2)	2.462	(0.001)	84	98674	22.111	22.11			0.3	1
32) trans-1,2-Dichloroethene	(2)	2.700	(-0.000)	96	100455	23.781	23.78			0.2	1
33) Methyl Tertiary Butyl Ether	(2)	2.706	(-0.000)	73	276865	20.544	20.54			0.2	1
36) 1,1-Dichloroethane	(2)	3.066	(0.001)	63	189500	22.777	22.78			0.2	1
42) cis-1,2-Dichloroethene	(2)	3.608	(-0.000)	96	110684	23.641	23.64			0.2	1
43) 1,2-Dichloroethene (Total)	(2)			96	211139	47.422	47.42			0.2	2
51) Chloroform	(2)	3.913	(-0.000)	83	169141	23.045	23.05			0.2	1
53) 1,1,1-Trichloroethane	(2)	4.096	(0.001)	97	153529	22.891	22.89			0.3	1
56) Carbon Tetrachloride	(2)	4.254	(0.001)	117	133994	24.249	24.25			0.2	1
60) Benzene	(2)	4.450	(0.001)	78	423198	22.330	22.33			0.2	1
61) 1,2-Dichloroethane	(2)	4.462	(0.001)	62	132001	21.906	21.91			0.3	1
71) Trichloroethene	(2)	5.102	(0.001)	95	106448	23.120	23.12			0.2	1
74) 1,2-Dichloropropane	(2)	5.328	(0.000)	63	112550	22.172	22.17			0.2	1
79) Bromodichloromethane	(2)	5.614	(0.000)	83	125339	22.301	22.30			0.2	1
81) 2-Chloroethyl Vinyl Ether	(2)	5.955	(0.000)	63	74732	21.072	21.07			0.2	10
82) cis-1,3-Dichloropropene	(2)	6.096	(0.000)	75	169070	21.740	21.74			0.2	1
89) Toluene	(3)	6.455	(-0.000)	92	270994	22.032	22.03			0.2	1
90) trans-1,3-Dichloropropene	(3)	6.705	(-0.000)	75	148011	19.649	19.65			0.2	1
93) 1,1,2-Trichloroethane	(3)	6.894	(-0.000)	97	88255	21.830	21.83			0.2	1
94) Tetrachloroethene	(3)	7.053	(-0.000)	166	112091	24.437	24.44			0.2	1
98) Dibromochloromethane	(3)	7.315	(0.000)	129	90544	21.105	21.10			0.2	1
103) Chlorobenzene	(3)	7.918	(0.000)	112	293502	22.282	22.28			0.2	1
105) Ethylbenzene	(3)	8.034	(0.000)	91	529371	21.869	21.87			0.4	1
107) m+p-Xylene	(3)	8.144	(0.000)	106	418445	45.254	45.25			1	5

Digitally signed by Jason M. Long on 11/10/2018 at 07:01. Target 3.5 esignature user ID: jml01693

Analysis Summary for GC/MS Volatiles

Data file: /chem/HP15648.i/18nov09a.b/en09s10.d Injection date and time: **09-NOV-2018 17:36**
Data file Sample Info. Line: OR226MSD;9885683MSD;1;3;MSD;CBD54;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 10-Nov-2018 06:56 jml01693

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **13001**
Calibration date and time (Last Method Edit): 10-NOV-2018 06:21
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: **040A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

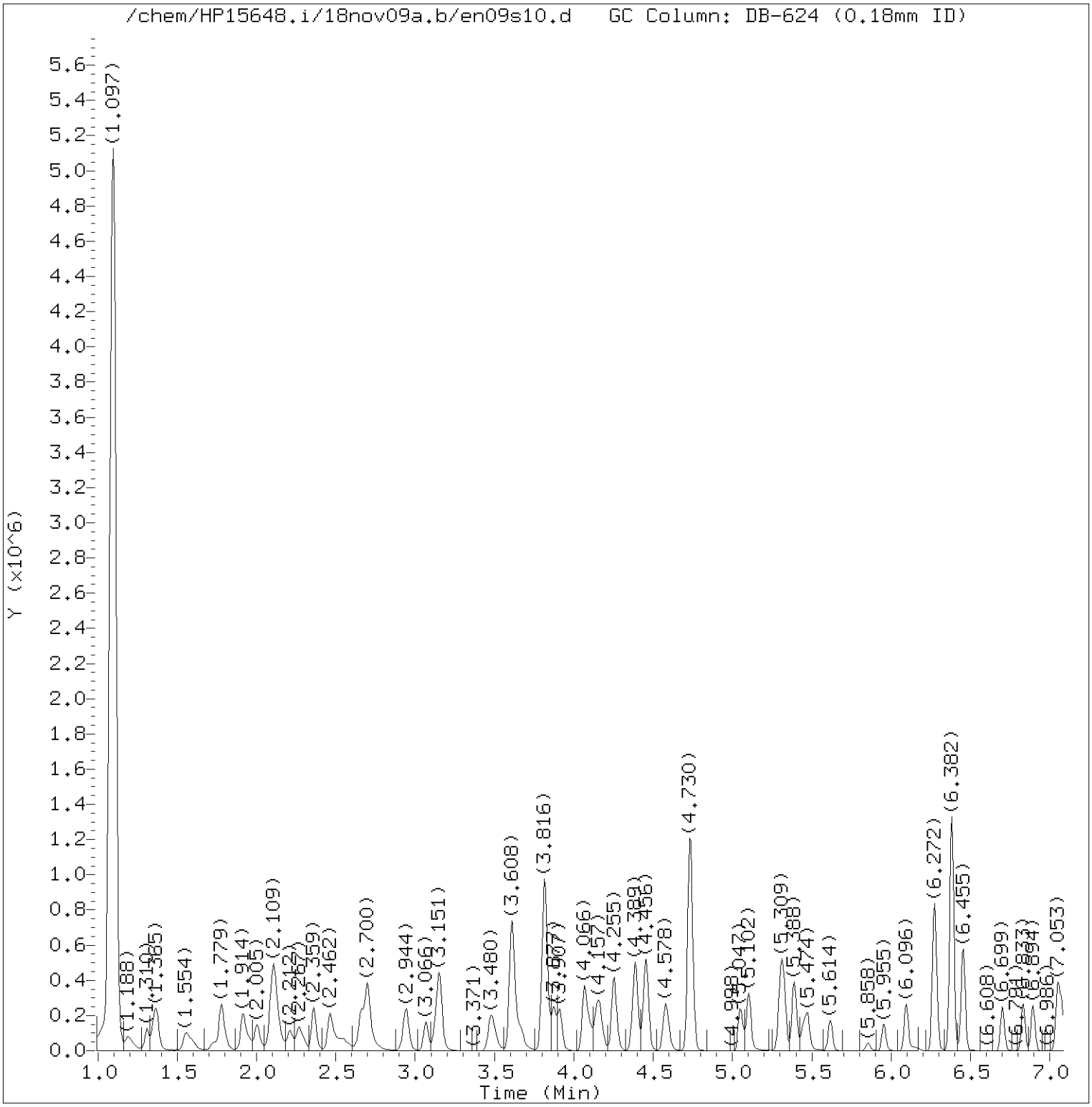
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
108) o-Xylene	(3)	8.485(0.000)	106	200858	22.190	22.19			0.4	1
109) Xylene (Total)	(3)		106	619303	67.443	67.44			1	5
111) Bromoform	(3)	8.638(0.000)	173	58437	20.919	20.92			0.2	4
117) 1,1,2,2-Tetrachloroethane	(4)	9.040(-0.000)	83	132225	20.287	20.29			0.2	1
130) 1,3-Dichlorobenzene	(4)	9.747(0.000)	146	228431	22.164	22.16			0.2	5
134) 1,4-Dichlorobenzene	(4)	9.814(0.000)	146	232514	22.355	22.35			0.2	5
139) 1,2-Dichlorobenzene	(4)	10.083(0.000)	146	214654	21.943	21.94			0.2	5

Total number of targets = 37

Digitally signed by Jason M. Long on 11/10/2018 at 07:01. Target 3.5 esignature user ID: jml01693

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:36. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

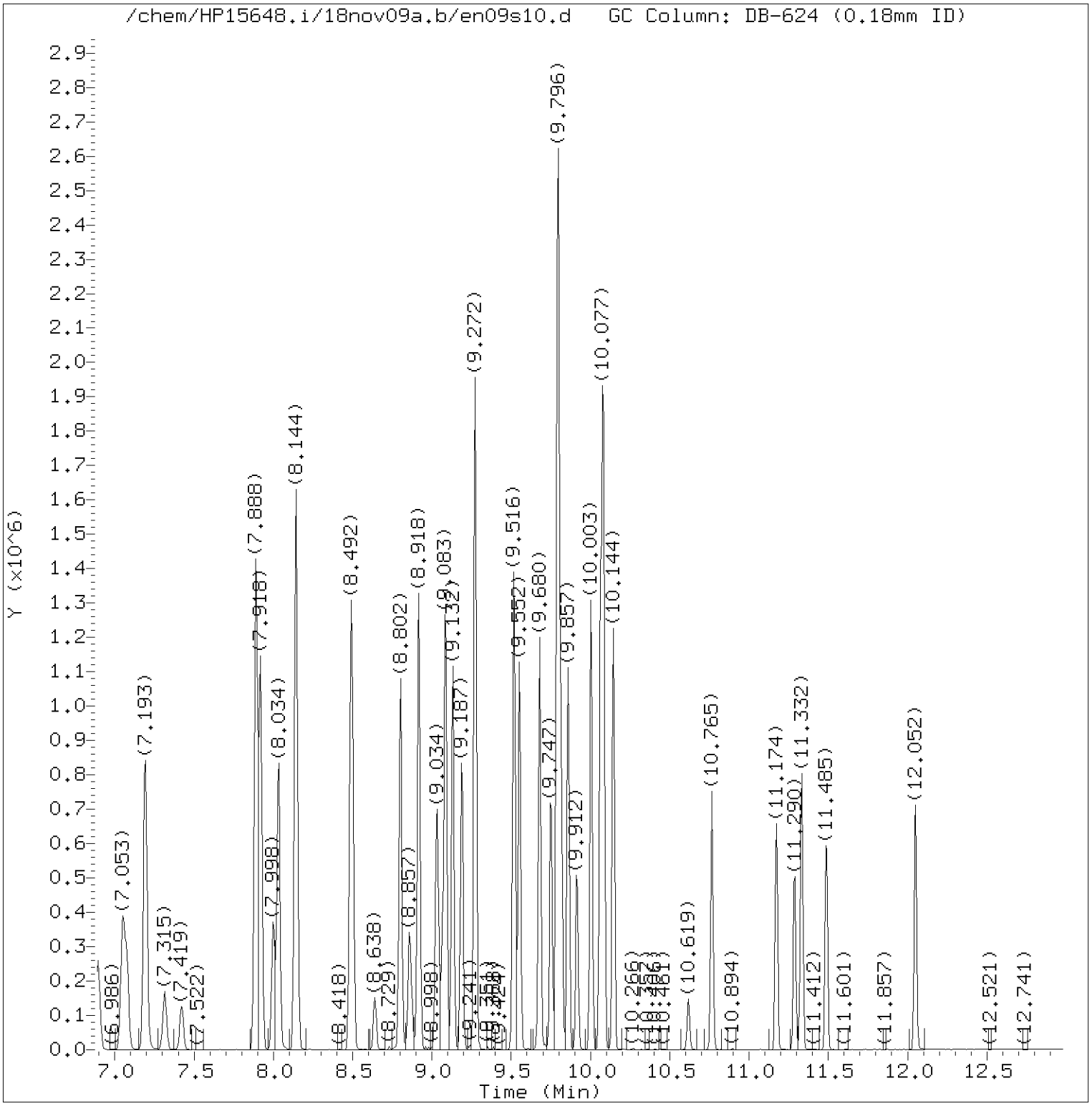
Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s10.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 17:36 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:56 jml01693

Sample Name: OR226MSD Lab Sample ID: 9885683MSD

Digitally signed by Jason M. Long
on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s10.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 17:36 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:56 jml01693

Sample Name: OR226MSD Lab Sample ID: 9885683MSD

Digitally signed by Jason M. Long
on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s10.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 17:36 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:56 jml01693

Sample Name: OR226MSD Lab Sample ID: 9885683MSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
4) Chloromethane	(2)	1.310	50	146386	19.524
6) Vinyl Chloride	(2)	1.371	62	140719	20.377
8) Bromomethane	(2)	1.554	94	86300	17.942
9) Chloroethane	(2)	1.597	64	73437	18.523
12) Trichlorofluoromethane	(2)	1.779	101	168562	21.285
17) 1,1-Dichloroethene	(2)	2.090	96	90579	23.824
28) Methylene Chloride	(2)	2.462	84	98674	22.111
29)*t-Butyl alcohol-d10	(1)	2.481	65	189218	250.000
32) trans-1,2-Dichloroethene	(2)	2.700	96	100455	23.781
33) Methyl Tertiary Butyl Ether	(2)	2.706	73	276865	20.544
36) 1,1-Dichloroethane	(2)	3.066	63	189500	22.777
42) cis-1,2-Dichloroethene	(2)	3.608	96	110684	23.641
43) 1,2-Dichloroethene (Total)	(2)		96	211139	47.422
51) Chloroform	(2)	3.913	83	169141	23.045
52)$Dibromofluoromethane	(2)	4.066	113	215364	50.990
53) 1,1,1-Trichloroethane	(2)	4.096	97	153529	22.891
56) Carbon Tetrachloride	(2)	4.255	117	133994	24.249
57)$1,2-Dichloroethane-d4	(2)	4.389	102	57394	49.973
60) Benzene	(2)	4.450	78	423198	22.330
61) 1,2-Dichloroethane	(2)	4.462	62	132001	21.906
66)*Fluorobenzene	(2)	4.730	96	964191	50.000
71) Trichloroethene	(2)	5.102	95	106448	23.120
74) 1,2-Dichloropropane	(2)	5.328	63	112550	22.172
79) Bromodichloromethane	(2)	5.614	83	125339	22.301
81) 2-Chloroethyl Vinyl Ether	(2)	5.955	63	74732	21.072
82) cis-1,3-Dichloropropene	(2)	6.096	75	169070	21.740
84)$Toluene-d8	(3)	6.382	98	979945	48.462
89) Toluene	(3)	6.455	92	270994	22.032
90) trans-1,3-Dichloropropene	(3)	6.705	75	148011	19.649
93) 1,1,2-Trichloroethane	(3)	6.894	97	88255	21.830
94) Tetrachloroethene	(3)	7.053	166	112091	24.437
98) Dibromochloromethane	(3)	7.315	129	90544	21.105
101)*Chlorobenzene-d5	(3)	7.888	117	721101	50.000
103) Chlorobenzene	(3)	7.918	112	293502	22.282
105) Ethylbenzene	(3)	8.034	91	529371	21.869
107) m+p-Xylene	(3)	8.144	106	418445	45.254
109) Xylene (Total)	(3)		106	619303	67.443
108) o-Xylene	(3)	8.485	106	200858	22.190

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jason M. Long
on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s10.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 17:36 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 13001
Calibration date and time: 10-NOV-2018 06:21
Date, time and analyst ID of latest file update: 10-Nov-2018 06:56 jml01693

Sample Name: OR226MSD Lab Sample ID: 9885683MSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
111) Bromoform	(3)	8.638	173	58437	20.919
115)$4-Bromofluorobenzene	(3)	8.918	95	367593	48.841
117) 1,1,2,2-Tetrachloroethane	(4)	9.040	83	132225	20.287
130) 1,3-Dichlorobenzene	(4)	9.747	146	228431	22.164
132)*1,4-Dichlorobenzene-d4	(4)	9.802	152	380745	50.000
134) 1,4-Dichlorobenzene	(4)	9.814	146	232514	22.355
139) 1,2-Dichlorobenzene	(4)	10.083	146	214654	21.943

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jason M. Long
on 11/10/2018 at 07:01.
Target 3.5 esignature user ID: jml01693

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSE81

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCSE81

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	15	
74-87-3	Chloromethane	17	
106-99-0	1,3-Butadiene	18	
75-01-4	Vinyl Chloride	17	
74-83-9	Bromomethane	16	
75-00-3	Chloroethane	17	
109-66-0	n-Pentane	20	
75-69-4	Trichlorofluoromethane	18	
60-29-7	Ethyl ether	20	
354-23-4	Freon 123a	20	
107-02-8	Acrolein	120	
75-35-4	1,1-Dichloroethene	21	
67-64-1	Acetone	190	
76-13-1	Freon 113	23	
67-63-0	2-Propanol	150	
74-88-4	Methyl Iodide	21	
75-15-0	Carbon Disulfide	20	
107-05-1	Allyl Chloride	17	
79-20-9	Methyl Acetate	18	
75-09-2	Methylene Chloride	21	
75-65-0	t-Butyl alcohol	200	
107-13-1	Acrylonitrile	94	
156-60-5	trans-1,2-Dichloroethene	22	
1634-04-4	Methyl Tertiary Butyl Ether	20	
110-54-3	n-Hexane	21	
75-34-3	1,1-Dichloroethane	21	
108-20-3	di-Isopropyl ether	20	
126-99-8	2-Chloro-1,3-butadiene	20	
637-92-3	Ethyl t-butyl ether	20	
156-59-2	cis-1,2-Dichloroethene	22	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSE81

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCSE81

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
540-59-0	1,2-Dichloroethene (Total)	43	
78-93-3	2-Butanone	160	
594-20-7	2,2-Dichloropropane	21	
107-12-0	Propionitrile	140	
126-98-7	Methacrylonitrile	150	
74-97-5	Bromochloromethane	19	
109-99-9	Tetrahydrofuran	91	
67-66-3	Chloroform	21	
71-55-6	1,1,1-Trichloroethane	21	
110-82-7	Cyclohexane	22	
563-58-6	1,1-Dichloropropene	21	
56-23-5	Carbon Tetrachloride	22	
78-83-1	Isobutyl Alcohol	460	
71-43-2	Benzene	21	
107-06-2	1,2-Dichloroethane	21	
994-05-8	t-Amyl methyl ether	21	
142-82-5	n-Heptane	18	
71-36-3	n-Butanol	990	
79-01-6	Trichloroethene	21	
108-87-2	Methylcyclohexane	21	
78-87-5	1,2-Dichloropropane	20	
74-95-3	Dibromomethane	21	
123-91-1	1,4-Dioxane	630	
80-62-6	Methyl Methacrylate	19	
75-27-4	Bromodichloromethane	21	
79-46-9	2-Nitropropane	20	
110-75-8	2-Chloroethyl Vinyl Ether	21	
10061-01-5	cis-1,3-Dichloropropene	21	
108-10-1	4-Methyl-2-pentanone	96	
108-88-3	Toluene	21	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSE81

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCSE81

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
10061-02-6	trans-1,3-Dichloropropene	19	
542-75-6	1,3-Dichloropropene (total)	40	
97-63-2	Ethyl Methacrylate	18	
79-00-5	1,1,2-Trichloroethane	21	
127-18-4	Tetrachloroethene	22	
142-28-9	1,3-Dichloropropane	20	
591-78-6	2-Hexanone	95	
124-48-1	Dibromochloromethane	21	
106-93-4	1,2-Dibromoethane	21	
544-10-5	1-Chlorohexane	23	
108-90-7	Chlorobenzene	21	
630-20-6	1,1,1,2-Tetrachloroethane	21	
100-41-4	Ethylbenzene	20	
179601-23-1	m+p-Xylene	42	
95-47-6	o-Xylene	21	
1330-20-7	Xylene (Total)	63	
100-42-5	Styrene	21	
75-25-2	Bromoform	21	
98-82-8	Isopropylbenzene	21	
108-94-1	Cyclohexanone	500	
108-86-1	Bromobenzene	21	
79-34-5	1,1,2,2-Tetrachloroethane	20	
96-18-4	1,2,3-Trichloropropane	21	
110-57-6	trans-1,4-Dichloro-2-butene	92	
103-65-1	n-Propylbenzene	21	
95-49-8	2-Chlorotoluene	21	
106-43-4	4-Chlorotoluene	21	
108-67-8	1,3,5-Trimethylbenzene	21	
98-06-6	tert-Butylbenzene	21	
76-01-7	Pentachloroethane	20	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSE81

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: LCSE81

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP15648.i/18nov09a.b/en09s01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 11/09/18

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
95-63-6	1,2,4-Trimethylbenzene	21	
135-98-8	sec-Butylbenzene	21	
541-73-1	1,3-Dichlorobenzene	21	
99-87-6	p-Isopropyltoluene	22	
106-46-7	1,4-Dichlorobenzene	21	
526-73-8	1,2,3-Trimethylbenzene	20	
100-44-7	Benzyl Chloride	19	
141-93-5	1,3-Diethylbenzene	20	
105-05-5	1,4-Diethylbenzene	19	
95-50-1	1,2-Dichlorobenzene	22	
104-51-8	n-Butylbenzene	21	
135-01-3	1,2-Diethylbenzene	20	
25340-17-4	Diethylbenzene (total)	59	
96-12-8	1,2-Dibromo-3-chloropropane	20	
108-70-3	1,3,5-Trichlorobenzene	21	
120-82-1	1,2,4-Trichlorobenzene	22	
87-68-3	Hexachlorobutadiene	21	
91-20-3	Naphthalene	21	
87-61-6	1,2,3-Trichlorobenzene	22	
91-57-6	2-Methylnaphthalene	19	B

Data file: /chem/HP15648.i/18nov09a.b/en09s01.d Injection date and time: **09-NOV-2018 13:54**
Data file Sample Info. Line: LCSE81;LCSE81;1;3;LCS;;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 09-Nov-2018 16:01 ads01731

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:51
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
29) t-Butyl alcohol-d10	2.486	(-0.006)	246	65	189618	(-3)	250.00	
66) Fluorobenzene	4.730	(0.000)	614	96	979321	(2)	50.00	
101) Chlorobenzene-d5	7.888	(0.000)	1132	117	726109	(2)	50.00	
132) 1,4-Dichlorobenzene-d4	9.802	(0.000)	1446	152	379260	(2)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(2)	4.065	(0.000)	113	217543	50.710	101%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	4.389	(0.000)	102	59394	50.916	102%		80 - 120
84) Toluene-d8	(3)	6.382	(0.000)	98	990565	48.649	97%		80 - 120
115) 4-Bromofluorobenzene	(3)	8.918	(0.000)	95	367590	48.504	97%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Dichlorodifluoromethane	(2)	1.194	(0.000)	85	108738	14.909	14.91			0.2	1
4) Chloromethane	(2)	1.310	(0.000)	50	125689	16.505	16.50			0.2	1
5) 1,3-Butadiene	(2)	1.359	(0.000)	39	109159	18.023	18.02			1	3
6) Vinyl Chloride	(2)	1.371	(0.001)	62	120849	17.229	17.23			0.2	1
8) Bromomethane	(2)	1.554	(0.001)	94	76482	15.655	15.66			0.3	1
9) Chloroethane	(2)	1.596	(0.001)	64	66958	16.628	16.63			0.2	1
11) n-Pentane	(2)	1.779	(0.001)	43	149766	19.793	19.79			0.4	10
12) Trichlorofluoromethane	(2)	1.779	(0.001)	101	144403	17.953	17.95			0.2	1
14) Ethyl ether	(2)	1.913	(0.000)	59	80277	19.832	19.83			0.2	5
15) Freon 123a	(2)	1.932	(-0.001)	67	107377	20.051	20.05			0.4	5
16) Acrolein	(1)	2.005	(0.001)	56	178463	122.264	122.26			2	100
17) 1,1-Dichloroethene	(2)	2.090	(0.001)	96	81377	21.073	21.07			0.2	1
18) Acetone	(1)	2.114	(0.002)	58	114353	187.144	187.14			0.7	20
19) Freon 113	(2)	2.114	(0.001)	101	87005	23.481	23.48			0.2	10
21) 2-Propanol	(1)	2.212	(0.002)	45	61812	147.043	147.04			18	100
22) Methyl Iodide	(2)	2.212	(0.000)	142	136528	20.715	20.71			0.2	1
23) Carbon Disulfide	(2)	2.273	(0.000)	76	264404	19.600	19.60			0.2	5
25) Allyl Chloride	(2)	2.358	(0.001)	41	149110	17.478	17.48			0.3	5
27) Methyl Acetate	(2)	2.364	(0.001)	43	84072	18.439	18.44			0.2	5
28) Methylene Chloride	(2)	2.468	(0.000)	84	93035	20.525	20.53			0.3	1
30) t-Butyl alcohol	(1)	2.554	(0.002)	59	145552	202.505	202.50			12	50
31) Acrylonitrile	(2)	2.657	(0.001)	53	229322	94.111	94.11			0.3	20
32) trans-1,2-Dichloroethene	(2)	2.700	(0.000)	96	92519	21.564	21.56			0.2	1
33) Methyl Tertiary Butyl Ether	(2)	2.712	(-0.001)	73	277986	20.308	20.31			0.2	1
34) n-Hexane	(2)	2.944	(0.000)	57	153402	20.643	20.64			0.2	5
36) 1,1-Dichloroethane	(2)	3.072	(0.000)	63	174740	20.679	20.68			0.2	1
38) di-Isopropyl ether	(2)	3.145	(-0.001)	45	311889	19.804	19.80			0.2	1
39) 2-Chloro-1,3-butadiene	(2)	3.157	(-0.000)	53	160251	20.024	20.02			0.2	5
40) Ethyl t-butyl ether	(2)	3.480	(0.000)	59	298943	20.305	20.31			0.2	1
42) cis-1,2-Dichloroethene	(2)	3.608	(0.000)	96	103394	21.743	21.74			0.2	1
43) 1,2-Dichloroethene (Total)	(2)			96	195913	43.306	43.31			0.2	2

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Analysis Summary for GC/MS Volatiles

Data file: /chem/HP15648.i/18nov09a.b/en09s01.d Injection date and time: **09-NOV-2018 13:54**
Data file Sample Info. Line: LCSE81;LCSE81;1;3;LCS;;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 09-Nov-2018 16:01 ads01731

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:51
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
44) 2-Butanone	(2)	3.614(0.000)	43	495449	160.819	160.82			0.3	10
45) 2,2-Dichloropropane	(2)	3.620(0.000)	77	149891	20.997	21.00			0.3	1
47) Propionitrile	(1)	3.669(0.003)	54	143839	141.227	141.23			14	100
48) Methacrylonitrile	(2)	3.815(0.000)	67	386045	154.294	154.29			6	50
49) Bromochloromethane	(2)	3.834(0.000)	128	44468	19.350	19.35			0.2	5
50) Tetrahydrofuran	(1)	3.876(0.003)	71	78893	91.418	91.42			0.7	10
51) Chloroform	(2)	3.913(-0.000)	83	158955	21.323	21.32			0.2	1
53) 1,1,1-Trichloroethane	(2)	4.096(0.001)	97	142233	20.880	20.88			0.3	1
54) Cyclohexane	(2)	4.157(0.000)	56	186238	21.877	21.88			0.2	5
55) 1,1-Dichloropropene	(2)	4.254(0.000)	75	137226	20.678	20.68			0.2	5
56) Carbon Tetrachloride	(2)	4.260(0.000)	117	121502	21.649	21.65			0.2	1
58) Isobutyl Alcohol	(1)	4.376(0.006)	41	116119	458.842	458.84			36	250
60) Benzene	(2)	4.449(0.001)	78	394927	20.516	20.52			0.2	1
61) 1,2-Dichloroethane	(2)	4.468(-0.000)	62	128677	21.024	21.02			0.3	1
65) t-Amyl methyl ether	(2)	4.578(-0.000)	73	291696	20.755	20.76			0.8	5
67) n-Heptane	(2)	4.742(-0.000)	43	159184	18.247	18.25			0.2	5
69) n-Butanol	(1)	5.047(0.004)	56	207856	989.652	989.65			61	250
71) Trichloroethene	(2)	5.102(0.001)	95	96891	20.719	20.72			0.2	1
73) Methylcyclohexane	(2)	5.309(-0.000)	83	193691	21.039	21.04			0.2	5
74) 1,2-Dichloropropane	(2)	5.327(-0.000)	63	104158	20.202	20.20			0.2	1
75) Dibromomethane	(2)	5.443(-0.000)	93	56775	21.414	21.41			0.2	1
76) 1,4-Dioxane	(1)	5.468(0.007)	88	31534M	626.096	626.10			29	250
77) Methyl Methacrylate	(2)	5.474(-0.000)	69	81380	19.052	19.05			0.2	5
79) Bromodichloromethane	(2)	5.614(-0.000)	83	121241	21.239	21.24			0.2	1
80) 2-Nitropropane	(2)	5.858(-0.001)	41	31937	19.850	19.85			0.8	10
81) 2-Chloroethyl Vinyl Ether	(2)	5.955(-0.000)	63	75010	20.823	20.82			0.2	10
82) cis-1,3-Dichloropropene	(2)	6.096(-0.000)	75	164824	20.867	20.87			0.2	1
83) 4-Methyl-2-pentanone	(2)	6.272(-0.000)	43	620340	95.714	95.71			0.5	10
89) Toluene	(3)	6.455(0.000)	92	254330	20.534	20.53			0.2	1
90) trans-1,3-Dichloropropene	(3)	6.699(0.000)	75	146189	19.273	19.27			0.2	1
91) 1,3-Dichloropropene (total)	(3)		100	311013	40.140	40.14			0.2	5
92) Ethyl Methacrylate	(3)	6.833(0.000)	69	148083	18.428	18.43			0.2	5
93) 1,1,2-Trichloroethane	(3)	6.894(0.000)	97	86002	21.126	21.13			0.2	1
94) Tetrachloroethene	(3)	7.053(-0.000)	166	100157	21.685	21.68			0.2	1
95) 1,3-Dichloropropane	(3)	7.077(0.000)	76	149851	19.723	19.72			0.2	1
97) 2-Hexanone	(3)	7.193(0.000)	43	458398	94.771	94.77			0.3	10
98) Dibromochloromethane	(3)	7.315(0.000)	129	91439	21.167	21.17			0.2	1
100) 1,2-Dibromoethane	(3)	7.418(0.000)	107	86542	20.518	20.52			0.2	1
102) 1-Chlorohexane	(3)	7.315(0.000)	91	8475	22.751	22.75			0.3	5
103) Chlorobenzene	(3)	7.918(-0.000)	112	276018	20.810	20.81			0.2	1
104) 1,1,1,2-Tetrachloroethane	(3)	7.998(-0.000)	131	89878	20.546	20.55			0.2	1
105) Ethylbenzene	(3)	8.034(0.000)	91	494911	20.304	20.30			0.4	1
107) m+p-Xylene	(3)	8.144(-0.000)	106	391555	42.053	42.05			1	5
108) o-Xylene	(3)	8.485(0.000)	106	189576	20.799	20.80			0.4	1
109) Xylene (Total)	(3)		106	581131	62.852	62.85			1	5
110) Styrene	(3)	8.497(0.000)	104	315505	20.719	20.72			0.2	5
111) Bromoform	(3)	8.638(0.000)	173	59235	21.059	21.06			0.2	4
112) Isopropylbenzene	(3)	8.802(0.000)	105	510618	21.298	21.30			0.2	5
113) Cyclohexanone	(1)	8.857(0.008)	55	127418A	502.099	502.10			25	100
116) Bromobenzene	(4)	9.028(0.000)	156	109753	21.485	21.48			0.2	5
117) 1,1,2,2-Tetrachloroethane	(4)	9.040(0.000)	83	129802	19.994	19.99			0.2	1
118) 1,2,3-Trichloropropane	(4)	9.064(-0.000)	110	38465	21.018	21.02			0.2	5
119) trans-1,4-Dichloro-2-butene	(4)	9.083(0.000)	53	193674	92.427	92.43			6	50
120) n-Propylbenzene	(4)	9.131(0.000)	91	603288	21.168	21.17			0.2	5

M = Compound was manually integrated. A = User selected an alternate peak.

Digitally signed by Jason M. Long on 11/10/2018 at 10:56. Target 3.5 esignature user ID: jml01693

Data file: /chem/HP15648.i/18nov09a.b/en09s01.d Injection date and time: **09-NOV-2018 13:54**
Data file Sample Info. Line: LCSE81;LCSE81;1;3;LCS;;;;en09b01; Instrument ID: **HP15648.i** Batch: **E183131AA**
Date, time and analyst ID of latest file update: 09-Nov-2018 16:01 ads01731

Blank Data file reference: **/chem/HP15648.i/18nov09a.b/en09b01.d**

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: **8260W-D**
Calibration date and time (Last Method Edit): 09-NOV-2018 13:51
Mid Level Daily Calibration Standard Reference: **/chem/HP15648.i/18nov09a.b/en09c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

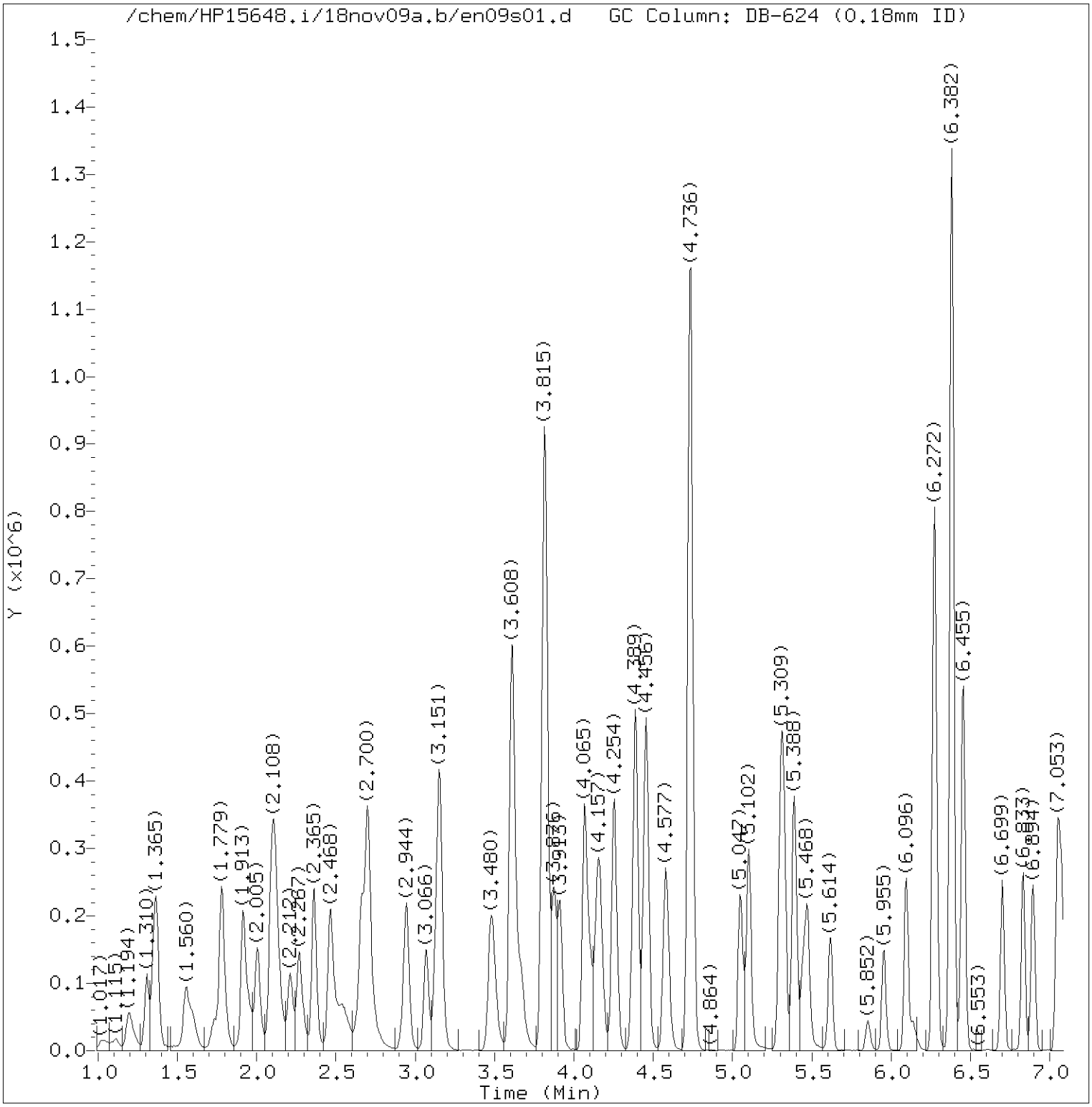
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
121) 2-Chlorotoluene	(4)	9.186(0.000)	126	113552	21.105	21.10			0.2	5
122) 4-Chlorotoluene	(4)	9.272(0.000)	126	115645	20.654	20.65			0.2	5
123) 1,3,5-Trimethylbenzene	(4)	9.272(0.000)	105	430881	20.934	20.93			0.3	5
125) tert-Butylbenzene	(4)	9.516(-0.000)	134	93552	21.245	21.24			0.3	5
126) Pentachloroethane	(4)	9.522(0.000)	167	65234	19.857	19.86			0.2	5
127) 1,2,4-Trimethylbenzene	(4)	9.552(0.000)	105	438925	20.695	20.69			1	5
128) sec-Butylbenzene	(4)	9.680(-0.000)	105	569302	21.493	21.49			0.2	5
130) 1,3-Dichlorobenzene	(4)	9.753(0.000)	146	220077	21.437	21.44			0.2	5
131) p-Isopropyltoluene	(4)	9.790(-0.000)	119	502972	21.584	21.58			0.2	5
134) 1,4-Dichlorobenzene	(4)	9.814(-0.000)	146	219519	21.188	21.19			0.2	5
135) 1,2,3-Trimethylbenzene	(4)	9.857(-0.000)	105	448538	20.122	20.12			0.3	5
136) Benzyl Chloride	(4)	9.918(-0.000)	91	283199	18.578	18.58			0.3	5
137) 1,3-Diethylbenzene	(4)	10.003(-0.000)	119	290349	19.905	19.90			0.2	5
138) 1,4-Diethylbenzene	(4)	10.064(-0.000)	119	296930	19.114	19.11			0.2	5
139) 1,2-Dichlorobenzene	(4)	10.082(-0.000)	146	211654	21.721	21.72			0.2	5
140) n-Butylbenzene	(4)	10.082(-0.000)	92	242124	21.093	21.09			0.2	5
141) 1,2-Diethylbenzene	(4)	10.143(-0.000)	119	239665	19.916	19.92			0.2	5
142) Diethylbenzene (total)	(4)		100	826944	58.935	58.94			0.2	5
143) 1,2-Dibromo-3-chloropropane	(4)	10.619(-0.000)	75	30128	20.099	20.10			0.3	5
145) 1,3,5-Trichlorobenzene	(4)	10.765(-0.000)	180	162431	21.479	21.48			0.2	5
147) 1,2,4-Trichlorobenzene	(4)	11.174(-0.000)	180	146181	21.814	21.81			0.3	5
148) Hexachlorobutadiene	(4)	11.290(-0.000)	225	64216	21.201	21.20			0.7	5
149) Naphthalene	(4)	11.332(-0.000)	128	455203	20.758	20.76			1	5
150) 1,2,3-Trichlorobenzene	(4)	11.491(-0.000)	180	135962	21.767	21.77			0.4	5
151) 2-Methylnaphthalene	(4)	12.052(-0.000)	142	256290	18.816	18.82	0.913	B	0.7	5

B = Compound detected in referenced method blank.

Total number of targets = 110

Digitally signed by Jason M. Long on 11/10/2018 at 10:56. Target 3.5 esignature user ID: jml01693

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:36. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

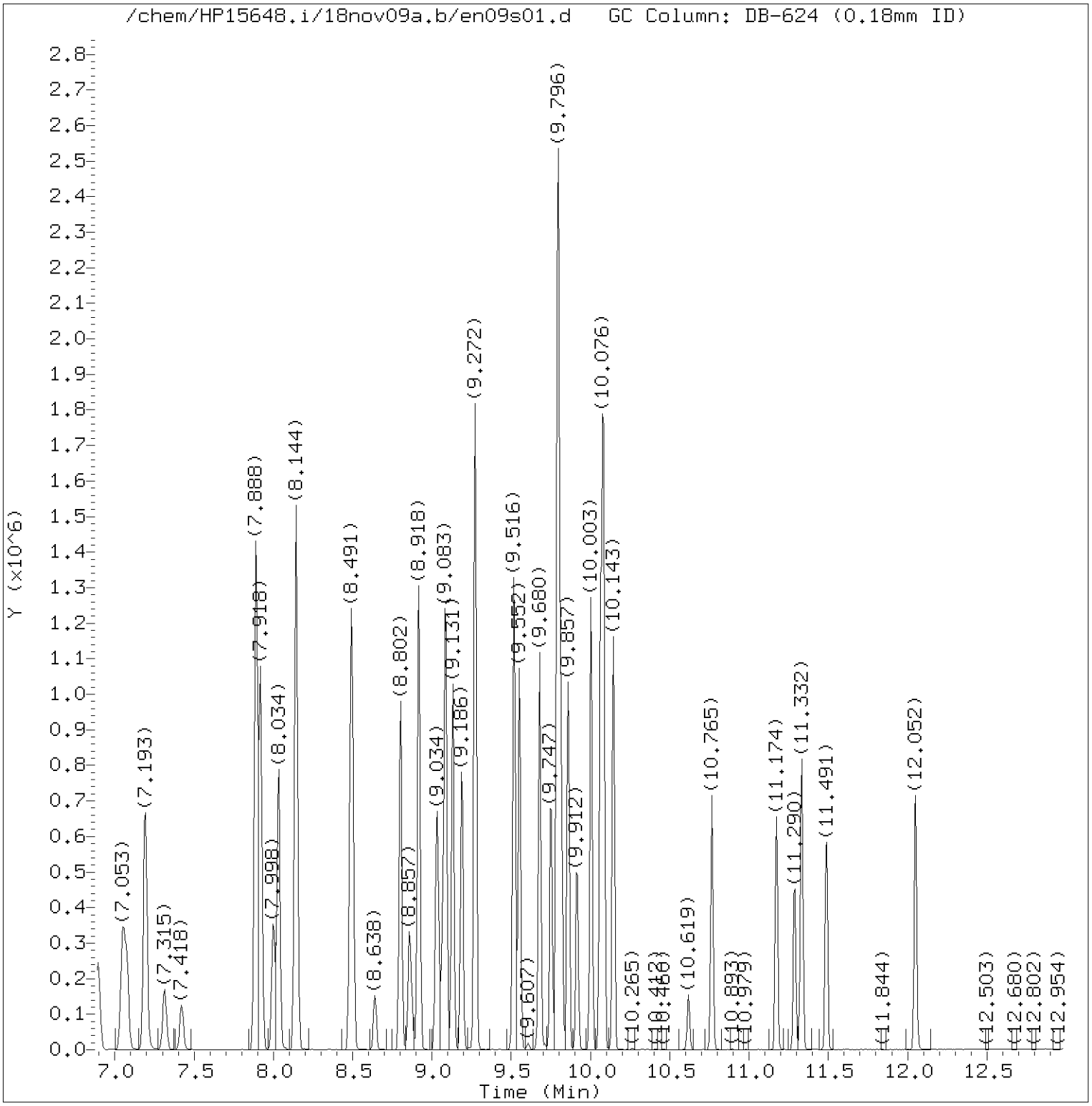
Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:54 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 16:01 ads01731

Sample Name: LCSE81 Lab Sample ID: LCSE81

Digitally signed by Jason M. Long
on 11/10/2018 at 10:56.
Target 3.5 esignature user ID: jml01693



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:54 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 16:01 ads01731

Sample Name: LCSE81 Lab Sample ID: LCSE81

Digitally signed by Jason M. Long
on 11/10/2018 at 10:56.
Target 3.5 esignature user ID: jml01693

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:54 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 16:01 ads01731

Sample Name: LCSE81 Lab Sample ID: LCSE81

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
3) Dichlorodifluoromethane	(2)	1.194	85	108738	14.909
4) Chloromethane	(2)	1.310	50	125689	16.505
5) 1,3-Butadiene	(2)	1.359	39	109159	18.023
6) Vinyl Chloride	(2)	1.371	62	120849	17.229
8) Bromomethane	(2)	1.554	94	76482	15.655
9) Chloroethane	(2)	1.596	64	66958	16.628
11) n-Pentane	(2)	1.779	43	149766	19.793
12) Trichlorofluoromethane	(2)	1.779	101	144403	17.953
14) Ethyl ether	(2)	1.913	59	80277	19.832
15) Freon 123a	(2)	1.932	67	107377	20.051
16) Acrolein	(1)	2.005	56	178463	122.264
17) 1,1-Dichloroethene	(2)	2.090	96	81377	21.073
18) Acetone	(1)	2.115	58	114353	187.144
19) Freon 113	(2)	2.115	101	87005	23.481
21) 2-Propanol	(1)	2.212	45	61812	147.043
22) Methyl Iodide	(2)	2.212	142	136528	20.715
23) Carbon Disulfide	(2)	2.273	76	264404	19.600
25) Allyl Chloride	(2)	2.358	41	149110	17.478
27) Methyl Acetate	(2)	2.365	43	84072	18.439
28) Methylene Chloride	(2)	2.468	84	93035	20.525
29)*t-Butyl alcohol-d10	(1)	2.486	65	189618	250.000
30) t-Butyl alcohol	(1)	2.554	59	145552	202.505
31) Acrylonitrile	(2)	2.657	53	229322	94.111
32) trans-1,2-Dichloroethene	(2)	2.700	96	92519	21.564
33) Methyl Tertiary Butyl Ether	(2)	2.712	73	277986	20.308
34) n-Hexane	(2)	2.944	57	153402	20.643
36) 1,1-Dichloroethane	(2)	3.072	63	174740	20.679
38) di-Isopropyl ether	(2)	3.145	45	311889	19.804
39) 2-Chloro-1,3-butadiene	(2)	3.157	53	160251	20.024
40) Ethyl t-butyl ether	(2)	3.480	59	298943	20.305
42) cis-1,2-Dichloroethene	(2)	3.608	96	103394	21.743
44) 2-Butanone	(2)	3.614	43	495449	160.819
45) 2,2-Dichloropropane	(2)	3.620	77	149891	20.997
43) 1,2-Dichloroethene (Total)	(2)		96	195913	43.306
47) Propionitrile	(1)	3.669	54	143839	141.227
48) Methacrylonitrile	(2)	3.815	67	386045	154.294
49) Bromochloromethane	(2)	3.834	128	44468	19.350
50) Tetrahydrofuran	(1)	3.876	71	78893	91.418

* = Compound is an internal standard.

Digitally signed by Jason M. Long
on 11/10/2018 at 10:56.
Target 3.5 esignature user ID: jml01693

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:54 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 16:01 ads01731

Sample Name: LCSE81 Lab Sample ID: LCSE81

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
51) Chloroform	(2)	3.913	83	158955	21.323
52)$Dibromofluoromethane	(2)	4.065	113	217543	50.710
53) 1,1,1-Trichloroethane	(2)	4.096	97	142233	20.880
54) Cyclohexane	(2)	4.157	56	186238	21.877
55) 1,1-Dichloropropene	(2)	4.254	75	137226	20.678
56) Carbon Tetrachloride	(2)	4.260	117	121502	21.649
58) Isobutyl Alcohol	(1)	4.376	41	116119	458.842
57)$1,2-Dichloroethane-d4	(2)	4.389	102	59394	50.916
60) Benzene	(2)	4.449	78	394927	20.516
61) 1,2-Dichloroethane	(2)	4.468	62	128677	21.024
65) t-Amyl methyl ether	(2)	4.577	73	291696	20.755
66)*Fluorobenzene	(2)	4.730	96	979321	50.000
67) n-Heptane	(2)	4.742	43	159184	18.247
69) n-Butanol	(1)	5.047	56	207856	989.652
71) Trichloroethene	(2)	5.102	95	96891	20.719
73) Methylcyclohexane	(2)	5.309	83	193691	21.039
74) 1,2-Dichloropropane	(2)	5.327	63	104158	20.202
75) Dibromomethane	(2)	5.443	93	56775	21.414
76) 1,4-Dioxane	(1)	5.468	88	31534M	626.096
77) Methyl Methacrylate	(2)	5.474	69	81380	19.052
79) Bromodichloromethane	(2)	5.614	83	121241	21.239
80) 2-Nitropropane	(2)	5.858	41	31937	19.850
81) 2-Chloroethyl Vinyl Ether	(2)	5.955	63	75010	20.823
82) cis-1,3-Dichloropropene	(2)	6.096	75	164824	20.867
83) 4-Methyl-2-pentanone	(2)	6.272	43	620340	95.714
84)$Toluene-d8	(3)	6.382	98	990565	48.649
89) Toluene	(3)	6.455	92	254330	20.534
90) trans-1,3-Dichloropropene	(3)	6.699	75	146189	19.273
91) 1,3-Dichloropropene (total)	(3)		100	311013	40.140
92) Ethyl Methacrylate	(3)	6.833	69	148083	18.428
93) 1,1,2-Trichloroethane	(3)	6.894	97	86002	21.126
94) Tetrachloroethene	(3)	7.053	166	100157	21.685
95) 1,3-Dichloropropane	(3)	7.077	76	149851	19.723
97) 2-Hexanone	(3)	7.193	43	458398	94.771
102) 1-Chlorohexane	(3)	7.315	91	8475	22.751
98) Dibromochloromethane	(3)	7.315	129	91439	21.167
100) 1,2-Dibromoethane	(3)	7.418	107	86542	20.518
101)*Chlorobenzene-d5	(3)	7.888	117	726109	50.000

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

Digitally signed by Jason M. Long
on 11/10/2018 at 10:56.
Target 3.5 esignature user ID: jml01693

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:54 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 16:01 ads01731

Sample Name: LCSE81 Lab Sample ID: LCSE81

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
103) Chlorobenzene	(3)	7.918	112	276018	20.810
104) 1,1,1,2-Tetrachloroethane	(3)	7.998	131	89878	20.546
105) Ethylbenzene	(3)	8.034	91	494911	20.304
107) m+p-Xylene	(3)	8.144	106	391555	42.053
109) Xylene (Total)	(3)		106	581131	62.852
108) o-Xylene	(3)	8.485	106	189576	20.799
110) Styrene	(3)	8.497	104	315505	20.719
111) Bromoform	(3)	8.638	173	59235	21.059
112) Isopropylbenzene	(3)	8.802	105	510618	21.298
113) Cyclohexanone	(1)	8.857	55	127418A	502.099
115)$4-Bromofluorobenzene	(3)	8.918	95	367590	48.504
116) Bromobenzene	(4)	9.028	156	109753	21.485
117) 1,1,2,2-Tetrachloroethane	(4)	9.040	83	129802	19.994
118) 1,2,3-Trichloropropane	(4)	9.064	110	38465	21.018
119) trans-1,4-Dichloro-2-butene	(4)	9.083	53	193674	92.427
120) n-Propylbenzene	(4)	9.131	91	603288	21.168
121) 2-Chlorotoluene	(4)	9.186	126	113552	21.105
122) 4-Chlorotoluene	(4)	9.272	126	115645	20.654
123) 1,3,5-Trimethylbenzene	(4)	9.272	105	430881	20.934
125) tert-Butylbenzene	(4)	9.516	134	93552	21.245
126) Pentachloroethane	(4)	9.522	167	65234	19.857
127) 1,2,4-Trimethylbenzene	(4)	9.552	105	438925	20.695
128) sec-Butylbenzene	(4)	9.680	105	569302	21.493
130) 1,3-Dichlorobenzene	(4)	9.753	146	220077	21.437
131) p-Isopropyltoluene	(4)	9.790	119	502972	21.584
132)*1,4-Dichlorobenzene-d4	(4)	9.802	152	379260	50.000
134) 1,4-Dichlorobenzene	(4)	9.814	146	219519	21.188
135) 1,2,3-Trimethylbenzene	(4)	9.857	105	448538	20.122
136) Benzyl Chloride	(4)	9.918	91	283199	18.578
137) 1,3-Diethylbenzene	(4)	10.003	119	290349	19.905
138) 1,4-Diethylbenzene	(4)	10.064	119	296930	19.114
140) n-Butylbenzene	(4)	10.083	92	242124	21.093
139) 1,2-Dichlorobenzene	(4)	10.083	146	211654	21.721
142) Diethylbenzene (total)	(4)		100	826944	58.935
141) 1,2-Diethylbenzene	(4)	10.143	119	239665	19.916
143) 1,2-Dibromo-3-chloropropane	(4)	10.619	75	30128	20.099
145) 1,3,5-Trichlorobenzene	(4)	10.765	180	162431	21.479
147) 1,2,4-Trichlorobenzene	(4)	11.174	180	146181	21.814

A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jason M. Long
on 11/10/2018 at 10:56.
Target 3.5 esignature user ID: jml01693

Quant Report

Target Revision 3.5

Data File: /chem/HP15648.i/18nov09a.b/en09s01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:54 Analyst ID: ads01731

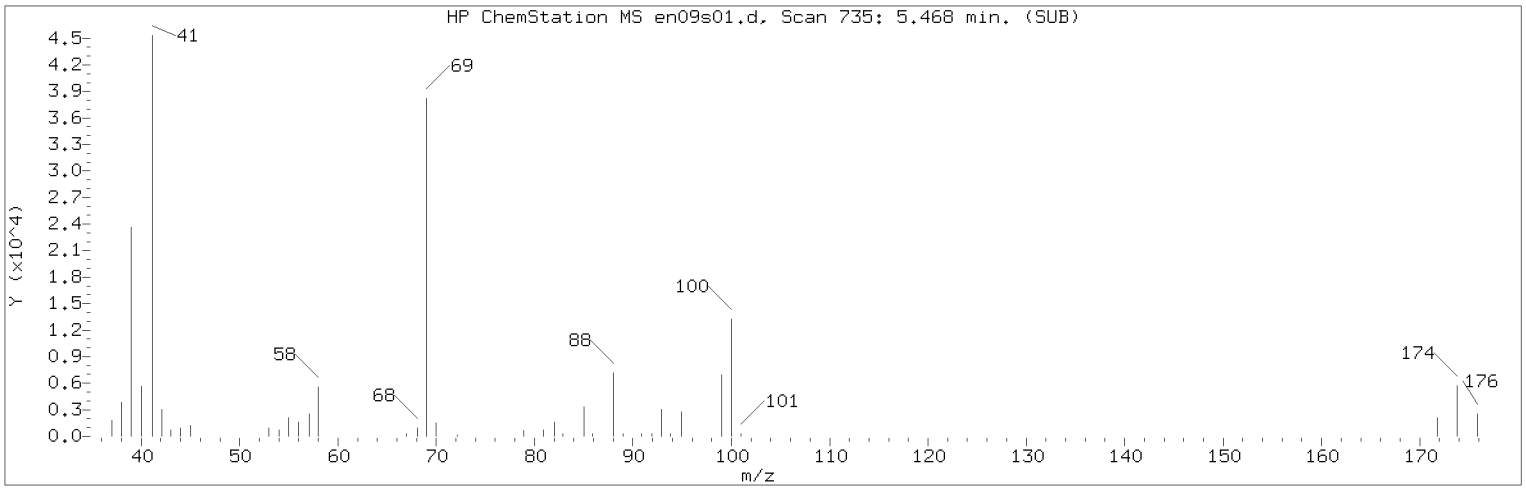
Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 16:01 ads01731

Sample Name: LCSE81 Lab Sample ID: LCSE81

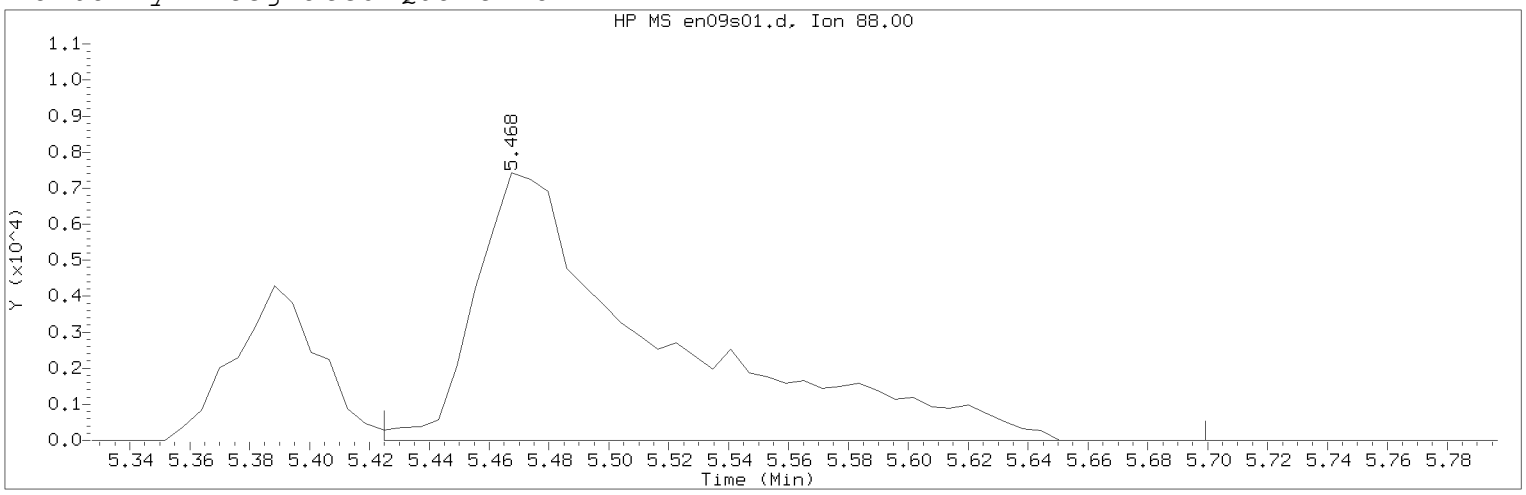
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
148) Hexachlorobutadiene	(4)	11.290	225	64216	21.201
149) Naphthalene	(4)	11.332	128	455203	20.758
150) 1,2,3-Trichlorobenzene	(4)	11.491	180	135962	21.767
151) 2-Methylnaphthalene	(4)	12.052	142	256290	18.816

Digitally signed by Jason M. Long
on 11/10/2018 at 10:56.
Target 3.5 esignature user ID: jml01693

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18nov09a.b/en09s01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:54 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 16:01 ads01731

Sample Name: LCSE81 Lab Sample ID: LCSE81

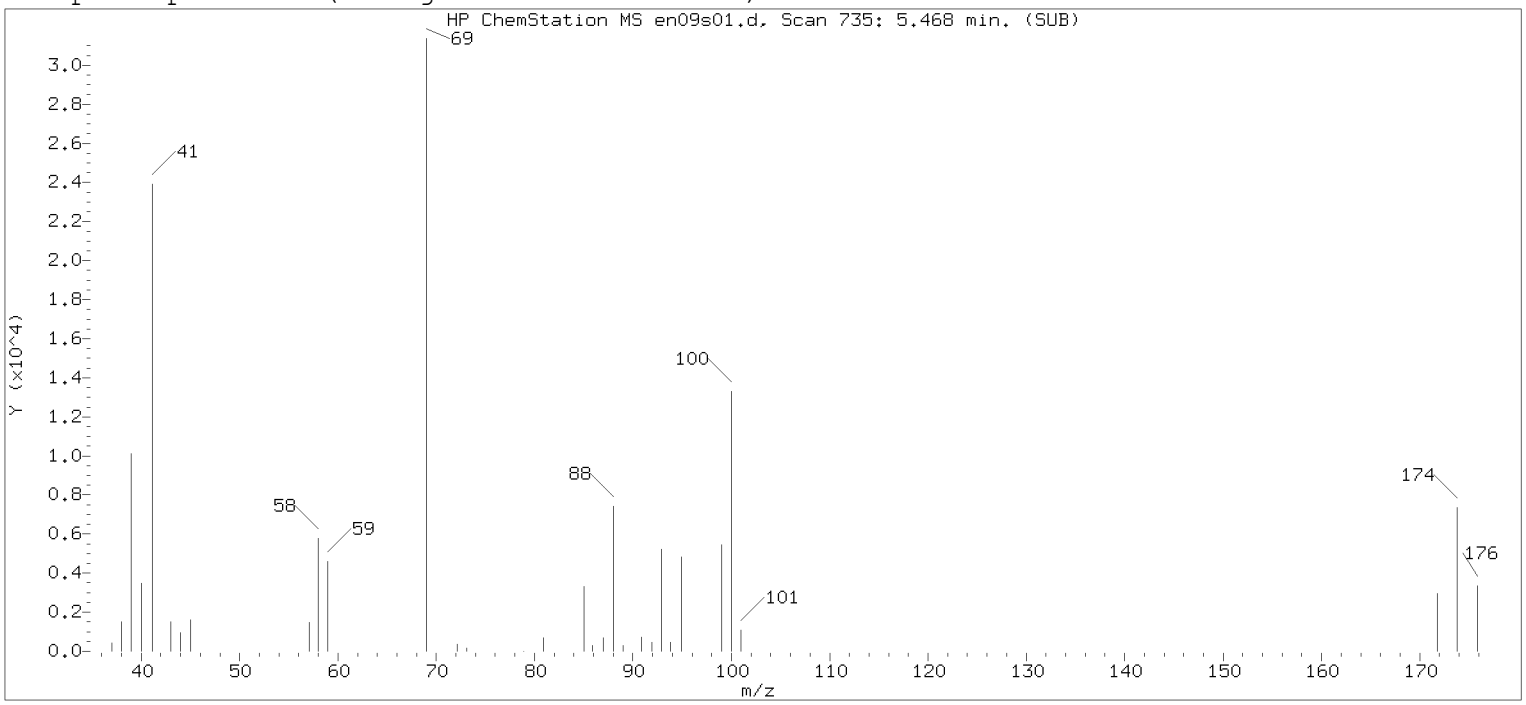
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 735
Retention Time (minutes): 5.468
Quant Ion : 88.00
Area (flag) : 31534M
On-Column Amount (ng) : 626.0962
Integration start scan : 727 Integration stop scan: 772
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

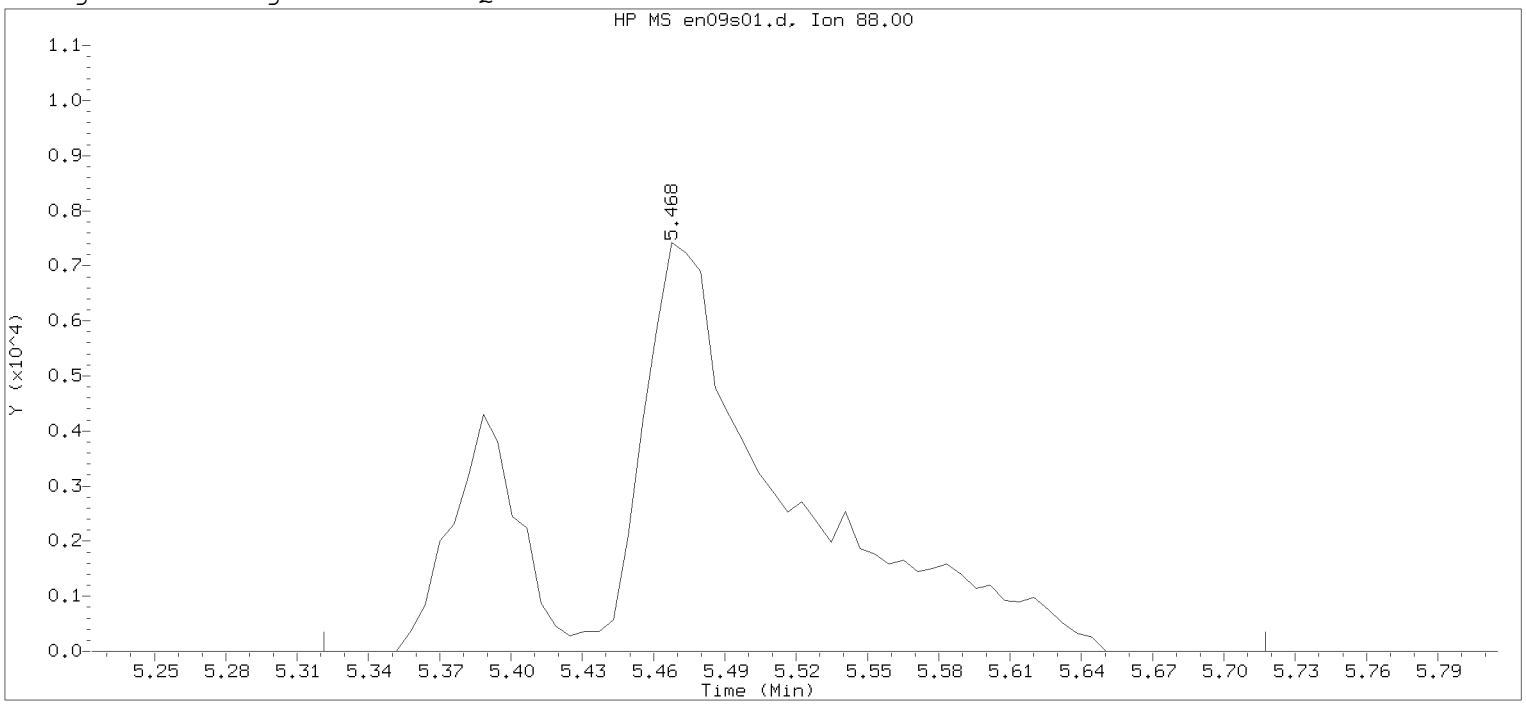
Analyst responsible for change: Digitally signed by Jason M. Long
on 11/10/2018 at 10:56.
Target 3.5 esignature user ID: jml01693

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:36.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18nov09a.b/en09s01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:54 Analyst ID: ads01731

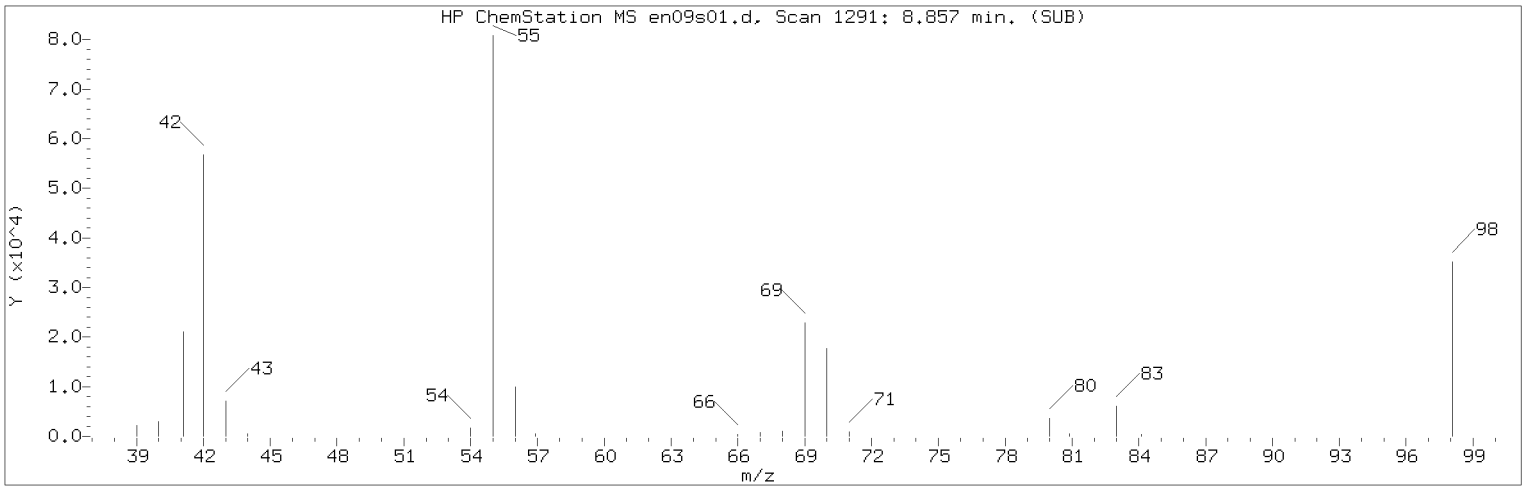
Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 14:10 Automation

Sample Name: LCSE81 Lab Sample ID: LCSE81

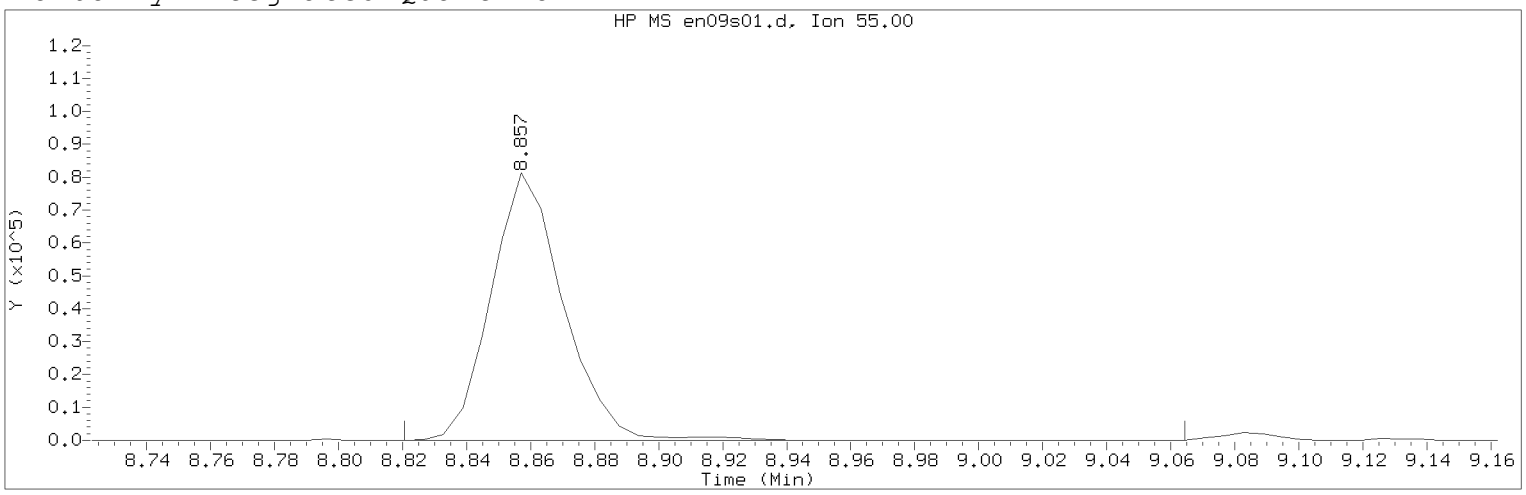
Compound Number : 76
Compound Name : 1,4-Dioxane
Scan Number : 735
Retention Time (minutes): 5.468
Quant Ion : 88.00
Area : 39890
On-column Amount (ng) : 792.0167
Integration start scan : 710 Integration stop scan: 775
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jason M. Long on 11/10/2018 at 10:56.
Target 3.5 esignature user id: jmlong

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP15648.i/18nov09a.b/en09s01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:54 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W-D
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 16:01 ads01731

Sample Name: LCSE81 Lab Sample ID: LCSE81

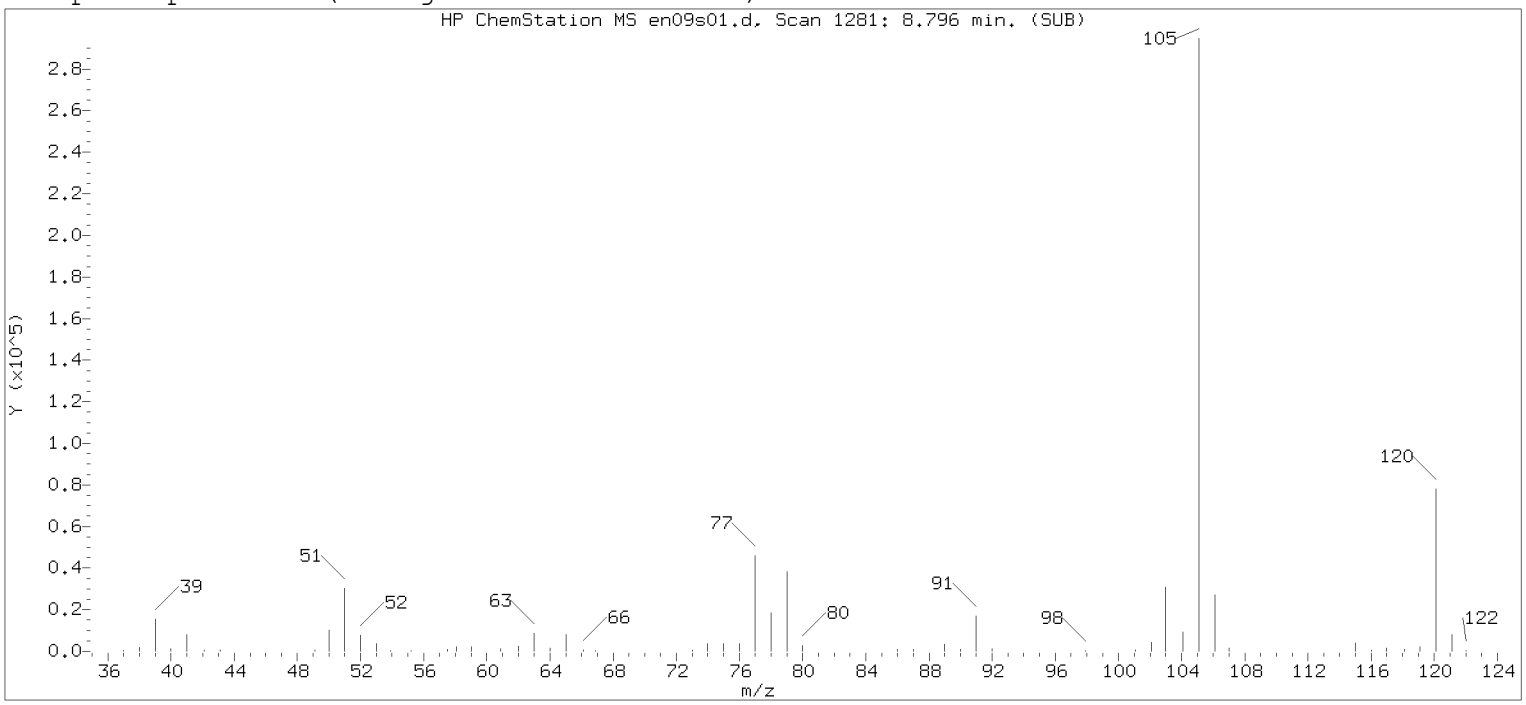
Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1291
Retention Time (minutes): 8.857
Quant Ion : 55.00
Area (flag) : 127418A
On-Column Amount (ng) : 502.0989
Integration start scan : 1284 Integration stop scan: 1324
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

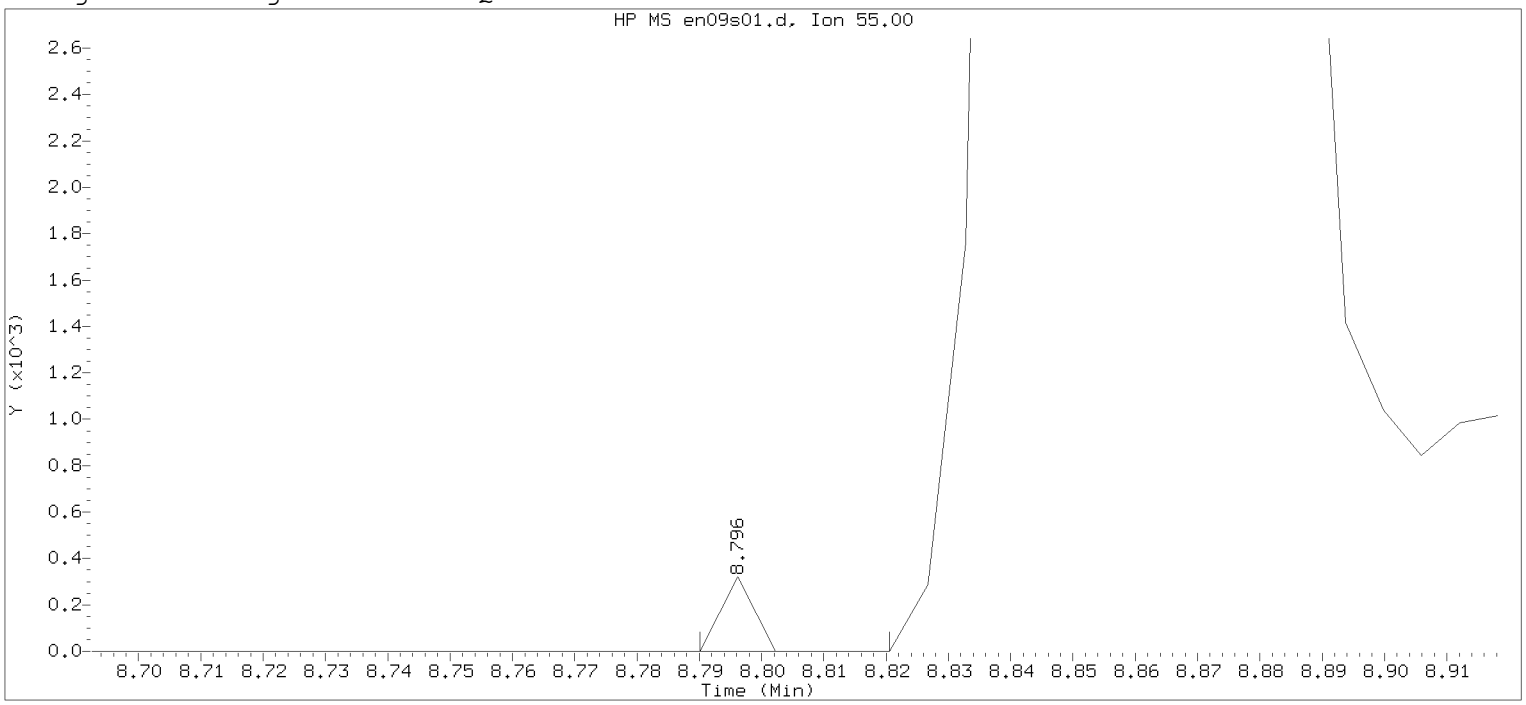
Analyst responsible for change: Digitally signed by Jason M. Long
on 11/10/2018 at 10:56.
Target 3.5 esignature user ID: jml01693

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 15:36.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP15648.i/18nov09a.b/en09s01.d Instrument ID: HP15648.i
Injection date and time: 09-NOV-2018 13:54 Analyst ID: ads01731

Method used: /chem/HP15648.i/18nov09a.b/m8260c5.m Sublist used: 8260W
Calibration date and time: 09-NOV-2018 13:51
Date, time and analyst ID of latest file update: 09-Nov-2018 14:10 Automation

Sample Name: LCSE81 Lab Sample ID: LCSE81

Compound Number : 113
Compound Name : Cyclohexanone
Scan Number : 1281
Retention Time (minutes): 8.796
Quant Ion : 55.00
Area : 117
On-column Amount (ng) : 0.4612
Integration start scan : 1279 Integration stop scan: 1284
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jason M. Long on 11/10/2018 at 10:56.
Target 3.5 esignature user id: jmlong

Semivolatiles by GC/MS Data

Case Narrative/Conformance Summary

Semivolatiles by GC/MS

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD54

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9885681	OR-2-W-26.00-181105	X		1	Unspiked
9885682	OR-2-W-26.00-181105 MS	X		1	Matrix Spike
9885683	OR-2-W-26.00-181105 MSD	X		1	Matrix Spike Duplicate
9885685	OR-3-WD-65.50-181105	X		1	Field Duplicate Sample
9885686	OR-3-W-65.50-181105	X		1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

LCS/LCSD

Batch#: 18312WAA026 (Sample number(s): 9885681-9885683, 9885685-9885686, UNSPK: 9885681)
The recovery(ies) for the following analyte(s) in the LCS were below the acceptance window: Dimethylphthalate

(Sample number(s): 9885681-9885683, 9885685-9885686: Analysis: 14241)
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the TNI/DoD Standards. The following analytes are accepted based on this allowance: Dimethylphthalate

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD54

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

MS/MSD

Batch#: 18312WAA026 (Sample number(s): 9885681-9885683, 9885685-9885686, UNSPK: 9885681)
The recovery(ies) for the following analyte(s) in the MSD were below the acceptance window: Dimethylphthalate

The recovery(ies) for the following analyte(s) in the MS and MSD were below the acceptance window: Pentachlorophenol

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

1. Relative Response Factor (RRF)

$$RRF = \frac{AX}{Ais} \times \frac{Cis}{Cx}$$

Where:

Ax = Area of the characteristic ion for the compound to be measured
Ais = Area of the characteristic ion for the specific internal standard to be measured
Cis = Concentration of the internal standard
Cx = Concentration of the compound to be measured

2. % Relative Standard Deviation (%RSD)

$$\%RSD = \frac{standard\ deviation}{Mean} \times 100$$

3. % Difference

$$\%D = \frac{RRFc - RRFi}{RRFi} \times 100$$

Where:

RRFc = Relative response factor from the continuing calibration standard

RRFi = Mean relative response factor from the initial calibration

4. Concentration

Concentration waters

$$(\mu g / L) = \frac{(Ax)(Is)(Df)(Vt)}{(Ais)(RRF)(Vo)(Vi)}$$

Where:

Ax, Ais, and RRF are as given in 1 above
Is = Amount of internal standard added in parts per billion (ng)
Df = Dilution factor
Vt = Volume of the concentrated extract (ul)
Vo = Volume of the water extracted (ml)
Vi = Volume of extract injection (ul)

Concentration soils

$$(\mu g / Kg) = \frac{(Ax)(Is)(Df)(Vt)}{(Ais)(RRF)(Ws)(Vi)}$$

Where:

Ax, Ais, and RRF are as given in 1 above
Is = Amount of internal standard added in parts per billion (ng)
Df = Dilution factor
Vt = Volume of the concentrated extract (µL)
Ws = Sample weight of the soil extracted (g)
Vi = Volume of extract injection (µL)

5. % Recovery

$$\%Rec = \frac{SSR - SR}{SA} \times 100$$

Where:

SSR = Spiked sample result
SR = Sample result
SA = Spike added

Quality Control and Calibration Summary Forms

Semivolatiles by GC/MS

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Quality Control Reference List
GC/MS Semivolatiles

CLIENT: Chevron Environmental Mgmt.
SDG: CBD54

Fraction: Semivolatiles by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
SVOAs 8270D MINI	18312WAA026	SBLKWA312	11/09/2018 11:09
		312WALCS	11/09/2018 11:38
		9885681 UNSPK	11/09/2018 19:37
		9885682 MS	11/09/2018 20:06
		9885683 MSD	11/09/2018 20:35
		9885685	11/09/2018 21:03
		9885686	11/09/2018 21:32

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Quality Control Summary
Method Blank
GC/MS Semivolatiles
SDG: CBD54
Matrix: LIQUID

Fraction: Semivolatiles by GC/MS

18312WAA026 / SBLKWA312 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Phenol	11/09/18	N.D.	ug/l	0.5	2
bis(2-Chloroethyl)ether	11/09/18	N.D.	ug/l	0.5	2
2-Chlorophenol	11/09/18	N.D.	ug/l	0.5	2
1,3-Dichlorobenzene	11/09/18	N.D.	ug/l	0.5	2
1,4-Dichlorobenzene	11/09/18	N.D.	ug/l	0.5	2
1,2-Dichlorobenzene	11/09/18	N.D.	ug/l	0.5	2
2-Methylphenol	11/09/18	N.D.	ug/l	0.5	2
2,2'-oxybis(1-Chloropropane)	11/09/18	N.D.	ug/l	0.5	2
2,4-Dichlorophenol	11/09/18	N.D.	ug/l	0.5	2
4-Methylphenol	11/09/18	N.D.	ug/l	0.5	2
N-Nitroso-di-n-propylamine	11/09/18	N.D.	ug/l	0.7	3
Hexachloroethane	11/09/18	N.D.	ug/l	1	5
Nitrobenzene	11/09/18	N.D.	ug/l	0.5	2
Isophorone	11/09/18	N.D.	ug/l	0.5	2
2-Nitrophenol	11/09/18	N.D.	ug/l	3	10
2,4-Dimethylphenol	11/09/18	N.D.	ug/l	3	10
bis(2-Chloroethoxy)methane	11/09/18	N.D.	ug/l	0.5	2
1,2,4-Trichlorobenzene	11/09/18	N.D.	ug/l	0.5	2
Naphthalene	11/09/18	N.D.	ug/l	0.1	0.5
4-Chloroaniline	11/09/18	N.D.	ug/l	4	10
Hexachlorobutadiene	11/09/18	N.D.	ug/l	0.5	2
4-Chloro-3-methylphenol	11/09/18	N.D.	ug/l	0.5	2
2-Methylnaphthalene	11/09/18	N.D.	ug/l	0.1	0.5
Hexachlorocyclopentadiene	11/09/18	N.D.	ug/l	5	11
2,4,6-Trichlorophenol	11/09/18	N.D.	ug/l	0.5	2
2,4,5-Trichlorophenol	11/09/18	N.D.	ug/l	0.5	2
2-Chloronaphthalene	11/09/18	N.D.	ug/l	0.4	1
2-Nitroaniline	11/09/18	N.D.	ug/l	2	7
Dimethylphthalate	11/09/18	N.D.	ug/l	2	5
2,6-Dinitrotoluene	11/09/18	N.D.	ug/l	0.5	2
Acenaphthylene	11/09/18	N.D.	ug/l	0.1	0.5
3-Nitroaniline	11/09/18	N.D.	ug/l	3	7
Acenaphthene	11/09/18	N.D.	ug/l	0.1	0.5
2,4-Dinitrophenol	11/09/18	N.D.	ug/l	14	30
4-Nitrophenol	11/09/18	N.D.	ug/l	10	30
2,4-Dinitrotoluene	11/09/18	N.D.	ug/l	1	5
Dibenzofuran	11/09/18	N.D.	ug/l	0.5	2
Diethylphthalate	11/09/18	N.D.	ug/l	2	5
Fluorene	11/09/18	N.D.	ug/l	0.1	0.5
4-Chlorophenyl-phenylether	11/09/18	N.D.	ug/l	0.5	2
4-Nitroaniline	11/09/18	N.D.	ug/l	0.9	3
4,6-Dinitro-2-methylphenol	11/09/18	N.D.	ug/l	8	21
N-Nitrosodiphenylamine	11/09/18	N.D.	ug/l	0.7	3
4-Bromophenyl-phenylether	11/09/18	N.D.	ug/l	0.5	2
Hexachlorobenzene	11/09/18	N.D.	ug/l	0.1	0.5

Fraction: Semivolatiles by GC/MS

18312WAA026 / SBLKWA312 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Pentachlorophenol	11/09/18	N.D.	ug/l	1	5
Phenanthrene	11/09/18	N.D.	ug/l	0.1	0.5
Anthracene	11/09/18	N.D.	ug/l	0.1	0.5
Carbazole	11/09/18	N.D.	ug/l	0.5	2
Di-n-butylphthalate	11/09/18	N.D.	ug/l	2	5
Fluoranthene	11/09/18	N.D.	ug/l	0.1	0.5
Pyrene	11/09/18	N.D.	ug/l	0.1	0.5
Butylbenzylphthalate	11/09/18	N.D.	ug/l	2	5
3,3'-Dichlorobenzidine	11/09/18	N.D.	ug/l	3	10
Benzo(a)anthracene	11/09/18	N.D.	ug/l	0.1	0.5
Chrysene	11/09/18	N.D.	ug/l	0.1	0.5
bis(2-Ethylhexyl)phthalate	11/09/18	N.D.	ug/l	5	11
Di-n-octylphthalate	11/09/18	N.D.	ug/l	5	11
Benzo(b)fluoranthene	11/09/18	N.D.	ug/l	0.1	0.5
Benzo(k)fluoranthene	11/09/18	N.D.	ug/l	0.1	0.5
Benzo(a)pyrene	11/09/18	N.D.	ug/l	0.1	0.5
Indeno(1,2,3-cd)pyrene	11/09/18	N.D.	ug/l	0.1	0.5
Dibenz(a,h)anthracene	11/09/18	N.D.	ug/l	0.1	0.5
Benzo(g,h,i)perylene	11/09/18	N.D.	ug/l	0.1	0.5

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Quality Control Summary
Surrogates
GC/MS Semivolatiles
SDG: CBD54
Matrix: LIQUID

Fraction: Semivolatiles by GC/MS

18312WAA026	2,4,6-Tribromophenol		2-Fluorobiphenyl		2-Fluorophenol		Nitrobenzene-d5		Phenol-d6		Terphenyl-d14	
	Spike Added	200 ug/l	Spike Added	100 ug/l	Spike Added	200 ug/l	Spike Added	100 ug/l	Spike Added	200 ug/l	Spike Added	100 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
SBLKWA312	98	29 - 133	49	39 - 105	43	10 - 85	66	30 - 111	31	10 - 72	89	27 - 126
312WALCS	101	29 - 133	68	39 - 105	56	10 - 85	79	30 - 111	41	10 - 72	93	27 - 126
9885681 UNSPK	79	29 - 133	65	39 - 105	43	10 - 85	66	30 - 111	31	10 - 72	80	27 - 126
9885682 MS	89	29 - 133	72	39 - 105	57	10 - 85	76	30 - 111	42	10 - 72	89	27 - 126
9885683 MSD	94	29 - 133	75	39 - 105	54	10 - 85	79	30 - 111	41	10 - 72	92	27 - 126
9885685	84	29 - 133	64	39 - 105	43	10 - 85	67	30 - 111	32	10 - 72	74	27 - 126
9885686	80	29 - 133	64	39 - 105	44	10 - 85	69	30 - 111	31	10 - 72	63	27 - 126

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

UNSPK: 9885681 MS: 9885682 MSD: 9885683 **Analyte**	Batch: **18312WAA026** (Sample number(s): 9885681-9885683, 9885685-9885686)								
	Spike Added ug/l MS/MSD	**Unspiked Conc ug/l**	**MS Conc ug/l**	**MSD Conc ug/l**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Phenol	51.87 / 52.52	N.D.	24.78	23.9	48	45	23-82	4	30
bis(2-Chloroethyl)ether	51.87 / 52.52	N.D.	39.88	39.62	77	75	60-110	1	30
2-Chlorophenol	51.87 / 52.52	N.D.	41.64	41.27	80	79	58-108	1	30
1,3-Dichlorobenzene	51.87 / 52.52	N.D.	30.66	27.51	59	52	31-110	11	30
1,4-Dichlorobenzene	51.87 / 52.52	N.D.	31.93	28.68	62	55	30-109	11	30
1,2-Dichlorobenzene	51.87 / 52.52	N.D.	32.8	29.09	63	55	43-108	12	30
2-Methylphenol	51.87 / 52.52	N.D.	39.5	38.37	76	73	59-109	3	30
2,2'-oxybis(1-Chloropropane)	51.87 / 52.52	N.D.	36.14	35.21	70	67	48-118	3	30
2,4-Dichlorophenol	51.87 / 52.52	N.D.	45.67	48.05	88	91	65-117	5	30
4-Methylphenol	51.87 / 52.52	N.D.	40.15	38.75	77	74	56-108	4	30
N-Nitroso-di-n-propylamine	51.87 / 52.52	N.D.	41.66	41.49	80	79	61-118	0	30
Hexachloroethane	51.87 / 52.52	N.D.	27.75	23.28	53	44	24-100	17	30
Nitrobenzene	51.87 / 52.52	N.D.	41.7	42.68	80	81	59-117	2	30
Isophorone	51.87 / 52.52	N.D.	43.08	44.79	83	85	65-123	4	30
2-Nitrophenol	51.87 / 52.52	N.D.	45.76	47.83	88	91	63-121	4	30
2,4-Dimethylphenol	51.87 / 52.52	N.D.	33.4	34.03	64	65	52-106	2	30
bis(2-Chloroethoxy)methane	51.87 / 52.52	N.D.	43.25	44.64	83	85	64-119	3	30
1,2,4-Trichlorobenzene	51.87 / 52.52	N.D.	32.35	31.15	62	59	38-116	4	30
Naphthalene	51.87 / 52.52	N.D.	35.99	36.57	69	70	54-107	2	30
4-Chloroaniline	51.87 / 52.52	N.D.	28.8	32.74	56	62	42-110	13	30
Hexachlorobutadiene	51.87 / 52.52	N.D.	30.87	27.31	60	52	21-114	12	30
4-Chloro-3-methylphenol	51.87 / 52.52	N.D.	44.75	47.02	86	90	65-122	5	30
2-Methylnaphthalene	51.87 / 52.52	N.D.	36.59	35.32	71	67	51-112	4	30
Hexachlorocyclopentadiene	103.73 / 105.04	N.D.	32.39	29.15	31	28	10-117	11	30
2,4,6-Trichlorophenol	51.87 / 52.52	N.D.	47.24	51.15	91	97	69-122	8	30
2,4,5-Trichlorophenol	51.87 / 52.52	N.D.	47.7	50.52	92	96	73-124	6	30
2-Chloronaphthalene	51.87 / 52.52	N.D.	35.78	35.7	69	68	51-114	0	30
2-Nitroaniline	51.87 / 52.52	N.D.	52.08	55.98	100	107	66-126	7	30
Dimethylphthalate	51.87 / 52.52	N.D.	21.6	19.12	42	36 *	37-116	12	30
2,6-Dinitrotoluene	51.87 / 52.52	N.D.	50.96	55.44	98	106	69-122	8	30
Acenaphthylene	51.87 / 52.52	N.D.	45.23	47.12	87	90	66-125	4	30
3-Nitroaniline	51.87 / 52.52	N.D.	37.46	42.4	72	81	51-120	12	30
Acenaphthene	51.87 / 52.52	N.D.	39.79	41.33	77	79	62-119	4	30
2,4-Dinitrophenol	103.73 / 105.04	N.D.	62.7	55.16	60	53	26-141	13	30
4-Nitrophenol	51.87 / 52.52	N.D.	23.88 J	26.91 J	46	51	28-88	12	30

Comments:
(2) The unspiked sample result is greater than four times the spike added.
* = Out of Specification

Results are being reported on an as received basis.

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

UNSPK: 9885681 MS: 9885682 MSD: 9885683 **Analyte**	Batch: **18312WAA026** (Sample number(s): 9885681-9885683, 9885685-9885686)								
	Spike Added ug/l MS/MSD	**Unspiked Conc ug/l**	**MS Conc ug/l**	**MSD Conc ug/l**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
2,4-Dinitrotoluene	51.87 / 52.52	N.D.	46.52	52.4	90	100	69-117	12	30
Dibenzofuran	51.87 / 52.52	N.D.	41.79	42.51	81	81	63-117	2	30
Diethylphthalate	51.87 / 52.52	N.D.	32.81	34.12	63	65	61-111	4	30
Fluorene	51.87 / 52.52	N.D.	43.37	44.18	84	84	62-116	2	30
4-Chlorophenyl-phenylether	51.87 / 52.52	N.D.	39.38	38.84	76	74	58-115	1	30
4-Nitroaniline	51.87 / 52.52	N.D.	38.96	43.56	75	83	53-111	11	30
4,6-Dinitro-2-methylphenol	51.87 / 52.52	N.D.	41.91	40.25	81	77	63-129	4	30
N-Nitrosodiphenylamine	51.87 / 52.52	N.D.	47.73	50.44	92	96	68-122	6	30
4-Bromophenyl-phenylether	51.87 / 52.52	N.D.	41.91	41.65	81	79	64-119	1	30
Hexachlorobenzene	51.87 / 52.52	N.D.	45.87	47.76	88	91	65-121	4	30
Pentachlorophenol	51.87 / 52.52	N.D.	24.02	18.46	46 *	35 *	64-130	26	30
Phenanthrene	51.87 / 52.52	N.D.	46.06	46.07	89	88	68-118	0	30
Anthracene	51.87 / 52.52	N.D.	45.74	46.11	88	88	70-118	1	30
Carbazole	51.87 / 52.52	N.D.	48.06	49.58	93	94	71-128	3	30
Di-n-butylphthalate	51.87 / 52.52	N.D.	41.26	41.16	80	78	71-113	0	30
Fluoranthene	51.87 / 52.52	N.D.	48.26	49.8	93	95	70-124	3	30
Pyrene	51.87 / 52.52	N.D.	47.75	50.3	92	96	68-118	5	30
Butylbenzylphthalate	51.87 / 52.52	N.D.	35.19	36.31	68	69	57-119	3	30
3,3'-Dichlorobenzidine	51.87 / 52.52	N.D.	41.69	45.7	80	87	36-116	9	30
Benzo(a)anthracene	51.87 / 52.52	N.D.	50.84	53.03	98	101	70-123	4	30
Chrysene	51.87 / 52.52	N.D.	50.89	52.5	98	100	71-123	3	30
bis(2-Ethylhexyl)phthalate	51.87 / 52.52	N.D.	46.93	48.54	90	92	68-120	3	30
Di-n-octylphthalate	51.87 / 52.52	N.D.	44.93	44.6	87	85	67-120	1	30
Benzo(b)fluoranthene	51.87 / 52.52	N.D.	47.25	47.56	91	91	70-120	1	30
Benzo(k)fluoranthene	51.87 / 52.52	N.D.	46.53	46.38	90	88	73-122	0	30
Benzo(a)pyrene	51.87 / 52.52	N.D.	48.98	48.66	94	93	71-122	1	30
Indeno(1,2,3-cd)pyrene	51.87 / 52.52	N.D.	47.71	47.39	92	90	61-121	1	30
Dibenz(a,h)anthracene	51.87 / 52.52	N.D.	48.96	49.44	94	94	67-123	1	30
Benzo(g,h,i)perylene	51.87 / 52.52	N.D.	46.42	46.36	89	88	64-119	0	30

Comments:
(2) The unspiked sample result is greater than four times the spike added.
* = Out of Specification

Results are being reported on an as received basis.

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Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: CBD54
Matrix: LIQUID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

LCS: 312WALCS	Batch: **18312WAA026** (Sample number(s): 9885681-9885683, 9885685-9885686)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Phenol	50	23.43	NA	47	NA	23-82	NA	NA
bis(2-Chloroethyl)ether	50	38.4	NA	77	NA	60-110	NA	NA
2-Chlorophenol	50	41.33	NA	83	NA	58-108	NA	NA
1,3-Dichlorobenzene	50	29.82	NA	60	NA	31-110	NA	NA
1,4-Dichlorobenzene	50	31.84	NA	64	NA	30-109	NA	NA
1,2-Dichlorobenzene	50	30.46	NA	61	NA	43-108	NA	NA
2-Methylphenol	50	38.14	NA	76	NA	59-109	NA	NA
2,2'-oxybis(1-Chloropropane)	50	34.17	NA	68	NA	48-118	NA	NA
2,4-Dichlorophenol	50	45.68	NA	91	NA	65-117	NA	NA
4-Methylphenol	50	40.04	NA	80	NA	56-108	NA	NA
N-Nitroso-di-n-propylamine	50	41.07	NA	82	NA	61-118	NA	NA
Hexachloroethane	50	27.22	NA	54	NA	24-100	NA	NA
Nitrobenzene	50	41.97	NA	84	NA	59-117	NA	NA
Isophorone	50	42.85	NA	86	NA	65-123	NA	NA
2-Nitrophenol	50	47.52	NA	95	NA	63-121	NA	NA
2,4-Dimethylphenol	50	36.39	NA	73	NA	52-106	NA	NA
bis(2-Chloroethoxy)methane	50	43.37	NA	87	NA	64-119	NA	NA
1,2,4-Trichlorobenzene	50	33.89	NA	68	NA	38-116	NA	NA
Naphthalene	50	36.18	NA	72	NA	54-107	NA	NA
4-Chloroaniline	50	27.37	NA	55	NA	42-110	NA	NA
Hexachlorobutadiene	50	33.66	NA	67	NA	21-114	NA	NA
4-Chloro-3-methylphenol	50	46.2	NA	92	NA	65-122	NA	NA
2-Methylnaphthalene	50	37.57	NA	75	NA	51-112	NA	NA
Hexachlorocyclopentadiene	100	10.12 J	NA	10	NA	10-117	NA	NA
2,4,6-Trichlorophenol	50	50.86	NA	102	NA	69-122	NA	NA
2,4,5-Trichlorophenol	50	48.8	NA	98	NA	73-124	NA	NA
2-Chloronaphthalene	50	37.14	NA	74	NA	51-114	NA	NA
2-Nitroaniline	50	50.53	NA	101	NA	66-126	NA	NA
Dimethylphthalate	50	18.07	NA	36 *	NA	37-116	NA	NA
2,6-Dinitrotoluene	50	50.09	NA	100	NA	69-122	NA	NA
Acenaphthylene	50	42.81	NA	86	NA	66-125	NA	NA
3-Nitroaniline	50	36.23	NA	72	NA	51-120	NA	NA
Acenaphthene	50	38.25	NA	76	NA	62-119	NA	NA
2,4-Dinitrophenol	100	102.91	NA	103	NA	26-141	NA	NA
4-Nitrophenol	50	25.81 J	NA	52	NA	28-88	NA	NA
2,4-Dinitrotoluene	50	43.16	NA	86	NA	69-117	NA	NA
Dibenzofuran	50	40.79	NA	82	NA	63-117	NA	NA
Diethylphthalate	50	31.58	NA	63	NA	61-111	NA	NA
Fluorene	50	41.2	NA	82	NA	62-116	NA	NA
4-Chlorophenyl-phenylether	50	37.34	NA	75	NA	58-115	NA	NA
4-Nitroaniline	50	41.03	NA	82	NA	53-111	NA	NA
4,6-Dinitro-2-methylphenol	50	49.61	NA	99	NA	63-129	NA	NA

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: CBD54
Matrix: LIQUID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

LCS: 312WALCS	Batch: **18312WAA026** (Sample number(s): 9885681-9885683, 9885685-9885686)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
N-Nitrosodiphenylamine	50	47.28	NA	95	NA	68-122	NA	NA
4-Bromophenyl-phenylether	50	40.46	NA	81	NA	64-119	NA	NA
Hexachlorobenzene	50	42.3	NA	85	NA	65-121	NA	NA
Pentachlorophenol	50	47.5	NA	95	NA	64-130	NA	NA
Phenanthrene	50	42.62	NA	85	NA	68-118	NA	NA
Anthracene	50	42.46	NA	85	NA	70-118	NA	NA
Carbazole	50	47.79	NA	96	NA	71-128	NA	NA
Di-n-butylphthalate	50	39.09	NA	78	NA	71-113	NA	NA
Fluoranthene	50	50.1	NA	100	NA	70-124	NA	NA
Pyrene	50	46.56	NA	93	NA	68-118	NA	NA
Butylbenzylphthalate	50	31.29	NA	63	NA	57-119	NA	NA
3,3'-Dichlorobenzidine	50	37.21	NA	74	NA	36-116	NA	NA
Benzo(a)anthracene	50	51.32	NA	103	NA	70-123	NA	NA
Chrysene	50	50.44	NA	101	NA	71-123	NA	NA
bis(2-Ethylhexyl)phthalate	50	46.08	NA	92	NA	68-120	NA	NA
Di-n-octylphthalate	50	44.51	NA	89	NA	67-120	NA	NA
Benzo(b)fluoranthene	50	47.33	NA	95	NA	70-120	NA	NA
Benzo(k)fluoranthene	50	46.62	NA	93	NA	73-122	NA	NA
Benzo(a)pyrene	50	47.01	NA	94	NA	71-122	NA	NA
Indeno(1,2,3-cd)pyrene	50	37.67	NA	75	NA	61-121	NA	NA
Dibenz(a,h)anthracene	50	39.57	NA	79	NA	67-123	NA	NA
Benzo(g,h,i)perylene	50	34.78	NA	70	NA	64-119	NA	NA

Fraction: Semivolatiles by GC/MS

14241: SVOAs 8270D MINI Analyte Name	Default MDL	Default LOQ	Units
Phenol	0.5	2	ug/l
bis(2-Chloroethyl)ether	0.5	2	ug/l
2-Chlorophenol	0.5	2	ug/l
1,3-Dichlorobenzene	0.5	2	ug/l
1,4-Dichlorobenzene	0.5	2	ug/l
1,2-Dichlorobenzene	0.5	2	ug/l
2-Methylphenol	0.5	2	ug/l
2,2'-oxybis(1-Chloropropane)	0.5	2	ug/l
2,4-Dichlorophenol	0.5	2	ug/l
4-Methylphenol	0.5	2	ug/l
N-Nitroso-di-n-propylamine	0.7	3	ug/l
Hexachloroethane	1	5	ug/l
Nitrobenzene	0.5	2	ug/l
Isophorone	0.5	2	ug/l
2-Nitrophenol	3	10	ug/l
2,4-Dimethylphenol	3	10	ug/l
bis(2-Chloroethoxy)methane	0.5	2	ug/l
1,2,4-Trichlorobenzene	0.5	2	ug/l
Naphthalene	0.1	0.5	ug/l
4-Chloroaniline	4	10	ug/l
Hexachlorobutadiene	0.5	2	ug/l
4-Chloro-3-methylphenol	0.5	2	ug/l
2-Methylnaphthalene	0.1	0.5	ug/l
Hexachlorocyclopentadiene	5	11	ug/l
2,4,6-Trichlorophenol	0.5	2	ug/l
2,4,5-Trichlorophenol	0.5	2	ug/l
2-Chloronaphthalene	0.4	1	ug/l
2-Nitroaniline	2	7	ug/l
Dimethylphthalate	2	5	ug/l
2,6-Dinitrotoluene	0.5	2	ug/l
Acenaphthylene	0.1	0.5	ug/l
3-Nitroaniline	3	7	ug/l
Acenaphthene	0.1	0.5	ug/l
2,4-Dinitrophenol	14	30	ug/l
4-Nitrophenol	10	30	ug/l
2,4-Dinitrotoluene	1	5	ug/l
Dibenzofuran	0.5	2	ug/l
Diethylphthalate	2	5	ug/l
Fluorene	0.1	0.5	ug/l
4-Chlorophenyl-phenylether	0.5	2	ug/l
4-Nitroaniline	0.9	3	ug/l
4,6-Dinitro-2-methylphenol	8	21	ug/l
N-Nitrosodiphenylamine	0.7	3	ug/l
4-Bromophenyl-phenylether	0.5	2	ug/l
Hexachlorobenzene	0.1	0.5	ug/l
Pentachlorophenol	1	5	ug/l
Phenanthrene	0.1	0.5	ug/l

Fraction: Semivolatiles by GC/MS

14241: SVOAs 8270D MINI Analyte Name	Default MDL	Default LOQ	Units
Anthracene	0.1	0.5	ug/l
Carbazole	0.5	2	ug/l
Di-n-butylphthalate	2	5	ug/l
Fluoranthene	0.1	0.5	ug/l
Pyrene	0.1	0.5	ug/l
Butylbenzylphthalate	2	5	ug/l
3,3'-Dichlorobenzidine	3	10	ug/l
Benzo(a)anthracene	0.1	0.5	ug/l
Chrysene	0.1	0.5	ug/l
bis(2-Ethylhexyl)phthalate	5	11	ug/l
Di-n-octylphthalate	5	11	ug/l
Benzo(b)fluoranthene	0.1	0.5	ug/l
Benzo(k)fluoranthene	0.1	0.5	ug/l
Benzo(a)pyrene	0.1	0.5	ug/l
Indeno(1,2,3-cd)pyrene	0.1	0.5	ug/l
Dibenz(a,h)anthracene	0.1	0.5	ug/l
Benzo(g,h,i)perylene	0.1	0.5	ug/l

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: lj1740b.d DFTPP Injection Date: 10/29/18

Instrument ID: HP20296 DFTPP Injection Time: 00:09

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	50.5
68	Less than 2.0% of mass 69	0.79 (1.36)1
69	Mass 69 relative abundance	57.9
70	Less than 2.0% of mass 69	0.3 (0.53)1
127	10.0 - 80.00% of mass 198	46.6
197	Less than 2.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	7.24
275	10.0 - 60.0% of mass 198	20.8
365	Greater than 1.00% of mass 198	2.25
441	Present, and less than mass 443	11.2
442	Greater than 50.00% of mass 198	71.1
443	15.00 - 24.00% of mass 442	14.4 (20.3)2

1-Value is % mass 69 2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RVSTD2648 - SSTD7.5	lj1741.d	10/29/18	00:23
02	RVSTD2648 - SSTD.125	lj1742.d	10/29/18	00:56
03	RVSTD2648 - SSTD30	lj1743.d	10/29/18	01:25
04	RVSTD2648 - SSTD20	lj1744.d	10/29/18	01:53
05	RVSTD2648 - SSTD12.5	lj1745.d	10/29/18	02:22
06	RVSTD2648 - SSTD3.75	lj1746.d	10/29/18	02:51
07	RVSTD2648 - SSTD1.25	lj1747.d	10/29/18	03:20
08	RVSTD2648 - SSTD.25	lj1748.d	10/29/18	03:49
09	RVSTD2648 - SSTD0.125	lj1749.d	10/29/18	04:18
10	PAHMDL2648 - SSTD0.025	lj1750.d	10/29/18	04:47
11	RVICV2628 - SSTD12.5	lj1751.d	10/29/18	05:15

FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: lk0630.d DFTPP Injection Date: 11/09/18

Instrument ID: HP20296 DFTPP Injection Time: 06:56

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	41.5
68	Less than 2.0% of mass 69	0.78 (1.57)1
69	Mass 69 relative abundance	49.8
70	Less than 2.0% of mass 69	0.24 (0.48)1
127	10.0 - 80.00% of mass 198	45.7
197	Less than 2.0% of mass 198	0.16
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.37
275	10.0 - 60.0% of mass 198	22.6
365	Greater than 1.00% of mass 198	2.81
441	Present, and less than mass 443	12.9
442	Greater than 50.00% of mass 198	80.5
443	15.00 - 24.00% of mass 442	15.1 (18.8)2

1-Value is % mass 69 2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RVSTD2648 - SSTD7.5	lk0631.d	11/09/18	07:11
02	SBLKWF312	lk0632.d	11/09/18	08:17
03	312WFLCS	lk0633.d	11/09/18	08:45
04	312WFLCSD	lk0634.d	11/09/18	09:14
05	SBLKWG312	lk0635.d	11/09/18	09:43
06	312WGLCS	lk0636.d	11/09/18	10:11
07	312WGLCSD	lk0637.d	11/09/18	10:40
08	SBLKWA312	lk0638.d	11/09/18	11:09
09	312WALCS	lk0639.d	11/09/18	11:38
10	9875116	lk0642.d	11/09/18	13:04
11	9884648	lk0643.d	11/09/18	13:32
12	9884650	lk0644.d	11/09/18	14:01
13	9884652	lk0645.d	11/09/18	14:30
14	rvSTD2648	lk0651.d	11/09/18	14:59

FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: lk0700a.d DFTPP Injection Date: 11/09/18

Instrument ID: HP20296 DFTPP Injection Time: 17:21

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	43.7
68	Less than 2.0% of mass 69	0.89 (1.64)1
69	Mass 69 relative abundance	54.0
70	Less than 2.0% of mass 69	0.44 (0.81)1
127	10.0 - 80.00% of mass 198	45.7
197	Less than 2.0% of mass 198	0.12
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	7.04
275	10.0 - 60.0% of mass 198	20.5
365	Greater than 1.00% of mass 198	2.31
441	Present, and less than mass 443	10.7
442	Greater than 50.00% of mass 198	71.5
443	15.00 - 24.00% of mass 442	14.2 (19.8)2

1-Value is % mass 69 2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	RVSTD2648 - SSTD7.5	lk0701.d	11/09/18	17:43
02	SBLKWX310	lk0702.d	11/09/18	18:40
03	9882463	lk0703.d	11/09/18	19:08
04	9885681	lk0704.d	11/09/18	19:37
05	9885682MS	lk0705.d	11/09/18	20:06
06	9885683MSD	lk0706.d	11/09/18	20:35
07	9885685	lk0707.d	11/09/18	21:03
08	9885686	lk0708.d	11/09/18	21:32

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date(s): 10/29/18 10/29/18

Calibration Times: 00:23 03:49

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = lj1742.d RRF0.25 = lj1748.d RRF1.25 = lj1747.d RRF3.75 = lj1746.d
RRF7.5 = lj1741.d RRF12.5 = lj1745.d RRF20 = lj1744.d RRF30 = lj1743.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. METHOD
1,4-Dioxane			0.773	0.780	0.716	0.742	0.727	0.751	0.748	3	AVG
N-Nitrosodimethylamine			1.060	1.068	1.115	1.144	1.150	1.208	1.124	5	AVG
Pyridine			1.711	1.907	1.944	1.974	1.929	2.013	1.913	6	AVG
2-Picoline			1.981	2.002	1.956	1.972	2.004	2.067	1.997	2	AVG
N-Nitrosomethylethylamine			0.800	0.785	0.828	0.811	0.842	0.827	0.816	3	AVG
Methyl methanesulfonate			1.073	0.975	1.046	1.055	1.050	1.058	1.043	3	AVG
N-Nitrosodiethylamine		0.510	0.616	0.717	0.757	0.773	0.786	0.774	0.705	15	AVG
Ethyl methanesulfonate		0.715	0.810	0.816	0.822	0.813	0.817	0.809	0.800	5	AVG
Benzaldehyde			1.530	1.601	1.574	1.472	1.299	1.121	1.433	13	AVG
Phenol		2.299	2.451	2.426	2.549	2.497	2.485	2.442	2.450	3	AVG
Aniline		2.614	2.829	2.902	2.979	2.991	2.938	2.902	2.879	4	AVG
a-methylstyrene			0.139	0.142	0.153	0.161	0.155	0.155	0.151	6	AVG
bis(2-Chloroethyl)ether		1.748	1.848	1.821	1.908	1.903	1.851	1.824	1.843	3	AVG
2-Chlorophenol		1.232	1.455	1.471	1.496	1.489	1.498	1.460	1.443	7	AVG
1,3-Dichlorobenzene		1.571	1.617	1.585	1.662	1.665	1.629	1.598	1.618	2	AVG
1,4-Dichlorobenzene		1.655	1.603	1.614	1.664	1.643	1.622	1.580	1.626	2	AVG
Benzyl alcohol			0.903	0.934	0.988	1.044	1.030	1.043	0.990	6	AVG
1,2-Dichlorobenzene		1.704	1.521	1.575	1.574	1.595	1.569	1.522	1.580	4	AVG
Indene			1.754	1.652	1.751	1.756	1.769	1.739	1.737	2	AVG
2-Methylphenol		1.396	1.507	1.509	1.589	1.572	1.529	1.523	1.518	4	AVG
2,2'-oxybis(1-Chloropropane)		2.227	2.263	2.262	2.424	2.401	2.334	2.362	2.325	3	AVG
bis(2-Chloroisopropyl)ether		2.227	2.263	2.262	2.424	2.401	2.334	2.362	2.325	3	AVG
N-Nitrosopyrrolidine		0.677	0.695	0.763	0.819	0.832	0.817	0.823	0.775	8	AVG
Acetophenone		2.173	2.327	2.381	2.431	2.418	2.316	2.327	2.339	4	AVG
4-Methylphenol		1.617	1.541	1.573	1.637	1.578	1.572	1.573	1.584	2	AVG
Total Cresols		1.507	1.524	1.541	1.613	1.575	1.551	1.548	1.551	2	AVG
N-Nitroso-di-n-propylamine		1.371	1.376	1.390	1.484	1.455	1.410	1.413	1.414	3	AVG
N-Nitrosomorpholine			1.003	1.027	1.059	1.037	1.029	1.007	1.027	2	AVG
o-Toluidine		2.392	2.609	2.691	2.793	2.719	2.680	2.646	2.647	5	AVG
Hexachloroethane			0.719	0.759	0.737	0.758	0.736	0.721	0.738	2	AVG
Nitrobenzene		0.492	0.543	0.564	0.576	0.576	0.577	0.576	0.558	6	AVG
N-Nitrosopiperidine		0.172	0.187	0.191	0.202	0.206	0.205	0.207	0.196	7	AVG
Isophorone		0.816	0.895	0.955	0.961	0.977	0.990	0.996	0.941	7	AVG
2-Nitrophenol		0.157	0.166	0.179	0.187	0.197	0.202	0.196	0.183	9	AVG
2,4-Dimethylphenol		0.400	0.426	0.447	0.472	0.466	0.467	0.460	0.448	6	AVG
O,O,O-Triethylphosphorothioat			0.181	0.187	0.195	0.193	0.200	0.198	0.192	4	AVG
bis(2-Chloroethoxy)methane		0.567	0.602	0.612	0.605	0.609	0.620	0.588	0.600	3	AVG
Benzoic acid			0.229	0.275	0.292	0.317	0.317	0.323	0.292	12	AVG
2,4-Dichlorophenol		0.296	0.293	0.332	0.331	0.327	0.336	0.336	0.322	6	AVG
1,2,4-Trichlorobenzene		0.396	0.357	0.364	0.365	0.374	0.374	0.368	0.371	3	AVG
Naphthalene	1.097	1.109	1.115	1.129	1.136	1.154	1.148	1.146	1.129	2	AVG
4-Chloroaniline		0.413	0.455	0.457	0.460	0.465	0.471	0.466	0.455	4	AVG
2,6-Dichlorophenol		0.298	0.307	0.300	0.320	0.323	0.320	0.320	0.313	3	AVG
Hexachloropropene			0.219	0.231	0.240	0.249	0.250	0.247	0.239	5	AVG
Hexachlorobutadiene		0.208	0.218	0.223	0.212	0.222	0.224	0.224	0.219	3	AVG
Quinoline			0.656	0.672	0.672	0.679	0.672	0.682	0.672	1	AVG
Caprolactam			0.076	0.103	0.102	0.107	0.105	0.101	0.099	12	AVG
N-Nitrosodi-n-butylamine			0.322	0.346	0.351	0.356	0.433	0.436	0.374	13	AVG
4-Chloro-3-methylphenol		0.333	0.349	0.392	0.395	0.393	0.408	0.401	0.382	8	AVG
Safrole			0.278	0.273	0.282	0.289	0.291	0.293	0.284	3	AVG
2-Methylnaphthalene	0.674	0.724	0.702	0.728	0.743	0.735	0.748	0.742	0.725	3	AVG
1-Methylnaphthalene	0.655	0.687	0.666	0.696	0.700	0.703	0.720	0.721	0.693	3	AVG

4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date(s): 10/29/18 10/29/18

Calibration Times: 00:23 03:49

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = lj1742.d RRF0.25 = lj1748.d RRF1.25 = lj1747.d RRF3.75 = lj1746.d
RRF7.5 = lj1741.d RRF12.5 = lj1745.d RRF20 = lj1744.d RRF30 = lj1743.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. METHOD
Hexachlorocyclopentadiene			0.409	0.431	0.447	0.449	0.483	0.452	0.445	6	AVG
1,2,4,5-Tetrachlorobenzene		0.798	0.742	0.760	0.804	0.749	0.789	0.766	0.772	3	AVG
cis-Isosafrole			0.622	0.632	0.654	0.611	0.677	0.639	0.639	4	AVG
2,4,6-Trichlorophenol		0.287	0.400	0.470	0.495	0.488	0.515	0.510	0.452	18	AVG
2,4,5-Trichlorophenol		0.427	0.482	0.508	0.526	0.510	0.537	0.499	0.498	7	AVG
trans-Isosafrole			0.577	0.631	0.644	0.650	0.689	0.663	0.642	6	AVG
Isosafrole			0.585	0.631	0.646	0.643	0.687	0.659	0.642	5	AVG
1,1'-Biphenyl		1.549	1.699	1.770	1.773	1.746	1.767	1.710	1.716	5	AVG
2-Chloronaphthalene		1.557	1.432	1.446	1.528	1.476	1.592	1.649	1.526	5	AVG
1-Chloronaphthalene		1.427	1.295	1.388	1.355	1.325	1.305	1.149	1.320	7	AVG
Diphenyl ether		0.897	0.903	0.956	0.999	0.963	1.011	0.972	0.957	5	AVG
2-Nitroaniline		0.312	0.302	0.376	0.393	0.422	0.439	0.442	0.384	15	AVG
1,4-Naphthoquinone			0.459	0.555	0.593	0.567	0.594	0.580	0.558	9	AVG
1,4-Dinitrobenzene			0.155	0.188	0.204	0.220	0.232	0.229	0.205	14	AVG
Dimethylphthalate			1.583	1.564	1.642	1.574	1.661	1.489	1.585	4	AVG
1,3-Dinitrobenzene			0.164	0.233	0.252	0.241	0.258	0.250	0.233	15	AVG
2,6-Dinitrotoluene		0.211	0.293	0.337	0.338	0.347	0.370	0.354	0.321	17	AVG
Acenaphthylene	1.542	1.730	1.898	1.931	2.030	1.983	2.075	2.030	1.902	10	AVG
3-Nitroaniline			0.311	0.357	0.373	0.365	0.403	0.402	0.368	9	AVG
Acenaphthene	1.552	1.356	1.457	1.441	1.498	1.460	1.516	1.467	1.468	4	AVG
2,4-Dinitrophenol				0.151	0.183	0.189	0.220	0.226	0.194	16	AVG
4-Nitrophenol				0.270	0.282	0.328	0.336	0.327	0.308	10	AVG
Pentachlorobenzene		0.569	0.614	0.632	0.623	0.630	0.634	0.611	0.616	4	AVG
2,4-Dinitrotoluene			0.399	0.439	0.477	0.483	0.497	0.474	0.461	8	AVG
2,4_2,6-Dinitrotoluenes		0.225	0.346	0.388	0.408	0.415	0.434	0.414	0.375	19	AVG
Dibenzofuran		1.896	1.987	1.986	2.032	1.981	2.066	1.979	1.990	3	AVG
1-Naphthylamine				1.359	1.431	1.397	1.512	1.476	1.435	4	AVG
2,3,4,6-Tetrachlorophenol		0.380	0.345	0.363	0.399	0.412	0.424	0.418	0.391	8	AVG
2-Naphthylamine				1.336	1.439	1.399	1.501	1.464	1.428	4	AVG
Diethylphthalate			1.538	1.515	1.580	1.574	1.600	1.555	1.560	2	AVG
Thionazin			0.277	0.305	0.313	0.313	0.320	0.308	0.306	5	AVG
Fluorene	1.563	1.626	1.539	1.570	1.589	1.529	1.614	1.577	1.576	2	AVG
4-Chlorophenyl-phenylether		0.792	0.816	0.775	0.827	0.809	0.831	0.802	0.807	2	AVG
5-Nitro-o-toluidine		0.254	0.388	0.402	0.437	0.438	0.456	0.433	0.401	17	AVG
4-Nitroaniline		0.211	0.320	0.378	0.397	0.390	0.400	0.373	0.353	19	AVG
4,6-Dinitro-2-methylphenol				0.118	0.125	0.133	0.141	0.141	0.132	8	AVG
N-Nitrosodiphenylamine (1)		0.640	0.606	0.645	0.638	0.636	0.660	0.654	0.640	3	AVG
NDPA as diphenylamine		0.640	0.606	0.645	0.638	0.636	0.660	0.654	0.640	3	AVG
1,2-Diphenylhydrazine		1.079	1.107	1.186	1.157	1.118	1.140	1.137	1.132	3	AVG
Tetraethyldithiopyrophosphate			0.151	0.176	0.175	0.167	0.174	0.170	0.169	6	AVG
1,3,5-Trinitrobenzene				0.068	0.075	0.079	0.086	0.090	0.080	11	AVG
Diallate (peak 1)			0.438	0.471	0.463	0.460	0.446	0.454	0.455	3	AVG
Phorate	0.468	0.467	0.573	0.680	0.655	0.656	0.641		0.591	15	AVG
Phenacetin		0.295	0.416	0.483	0.477	0.482	0.481	0.504	0.448	16	AVG
4-Bromophenyl-phenylether		0.215	0.229	0.225	0.215	0.220	0.223	0.234	0.223	3	AVG
Diallate (peak 2)			0.353	0.381	0.393	0.361	0.368	0.380	0.373	4	AVG
Diallate trans/cis			0.424	0.456	0.451	0.443	0.433	0.441	0.441	3	AVG
Hexachlorobenzene	0.222	0.224	0.220	0.236	0.224	0.228	0.227	0.238	0.227	3	AVG
Dimethoate			0.323	0.388	0.375	0.387	0.384	0.393	0.375	7	AVG
Atrazine			0.199	0.222	0.203	0.202	0.197	0.195	0.203	5	AVG
Pentachlorophenol			0.109	0.138	0.143	0.149	0.160	0.166	0.144	14	AVG
4-Aminobiphenyl		0.489	0.511	0.573	0.566	0.592	0.569	0.594	0.556	7	AVG

(1) Cannot be separated from Diphenylamine
4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date(s): 10/29/18 10/29/18

Calibration Times: 00:23 03:49

Min $\overline{\text{RRF}}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

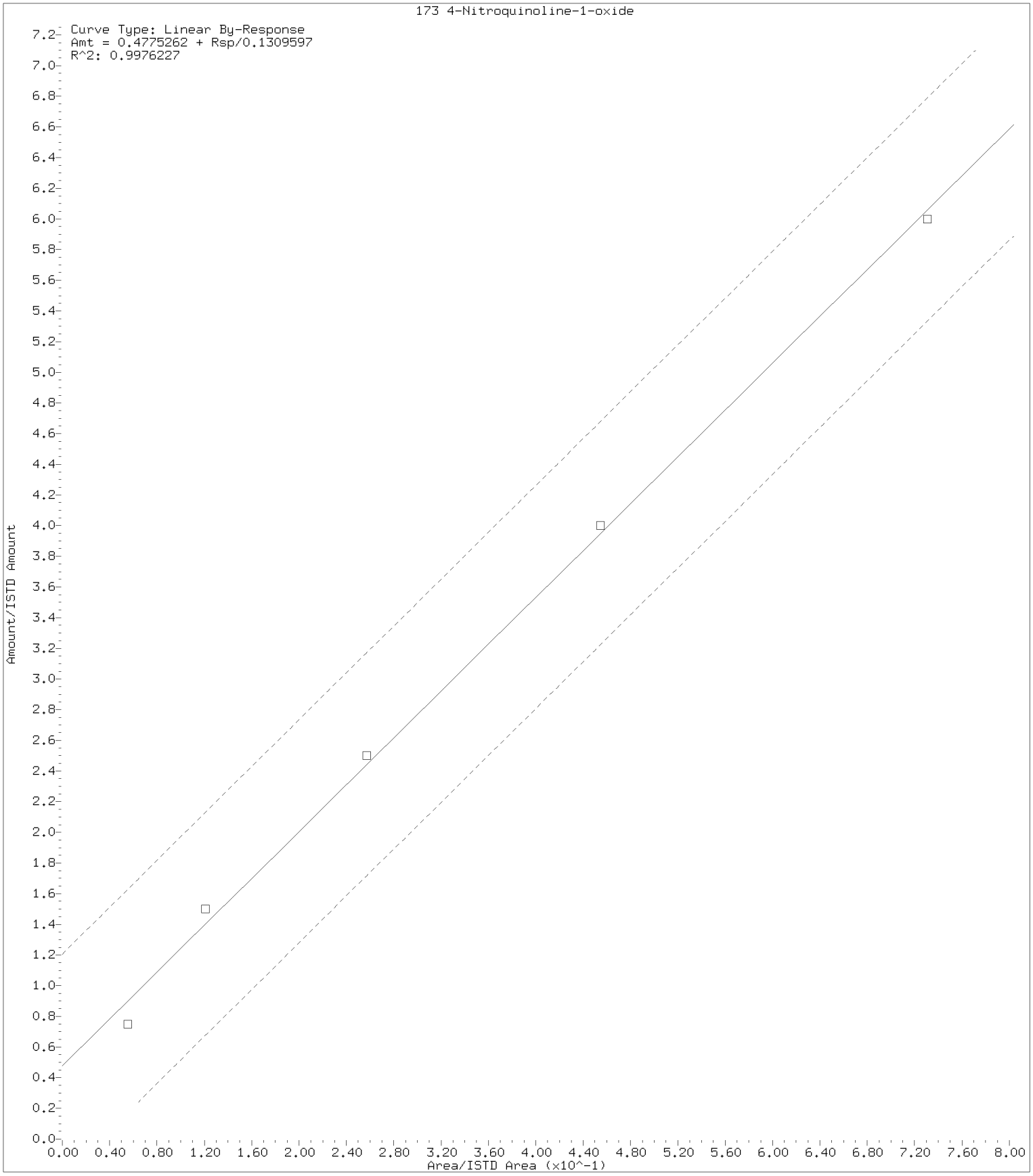
LAB FILE ID:RRF0.125 = lj1742.d RRF0.25 = lj1748.d RRF1.25 = lj1747.d RRF3.75 = lj1746.d
RRF7.5 = lj1741.d RRF12.5 = lj1745.d RRF20 = lj1744.d RRF30 = lj1743.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{\text{RRF}}$	% RSD	CAL. METHOD
Pentachloronitrobenzene			0.097	0.113	0.109	0.107	0.110	0.110	0.108	5	AVG
Pronamide		0.254	0.307	0.360	0.362	0.379	0.380	0.385	0.347	14	AVG
Dinoseb				0.169	0.185	0.201	0.221	0.224	0.200	12	AVG
Phenanthrene	1.288	1.063	1.179	1.218	1.173	1.182	1.215	1.258	1.197	6	AVG
Anthracene	1.131	1.052	1.138	1.223	1.196	1.193	1.218	1.242	1.174	5	AVG
Carbazole		0.968	0.975	1.096	1.074	1.076	1.063	1.113	1.052	5	AVG
Methyl parathion			0.218	0.279	0.286	0.296	0.304	0.308	0.282	12	AVG
Di-n-butylphthalate			1.147	1.374	1.372	1.385	1.417	1.470	1.361	8	AVG
Parathion			0.114	0.165	0.182	0.192	0.198	0.213	0.177	20	AVG +
4-Nitroquinoline-1-oxide				0.074	0.081	0.103	0.114	0.122	0.099	21	1STDEG
Octachlorostyrene			0.074	0.084	0.084	0.082	0.090	0.091	0.084	7	AVG
Isodrin		0.124	0.128	0.147	0.148	0.144	0.146	0.150	0.141	7	AVG
Fluoranthene	1.222	1.184	1.235	1.357	1.329	1.342	1.388	1.439	1.312	7	AVG
Benzidine			0.686	0.793	0.836	0.806	0.839	0.820	0.797	7	AVG
Pyrene	1.252	1.320	1.299	1.335	1.334	1.319	1.344	1.347	1.319	2	AVG
p-Dimethylaminoazobenzene			0.139	0.193	0.212	0.216	0.229	0.231	0.203	17	AVG
Chlorobenzilate			0.336	0.368	0.399	0.404	0.416	0.415	0.390	8	AVG
3,3'-Dimethylbenzidine			0.592	0.720	0.819	0.794	0.836	0.819	0.763	12	AVG
Butylbenzylphthalate			0.460	0.562	0.621	0.613	0.633	0.624	0.586	11	AVG
2-Acetylaminofluorene			0.332	0.439	0.503	0.508	0.550	0.565	0.483	18	AVG
3,3'-Dichlorobenzidine			0.344	0.414	0.448	0.457	0.489	0.495	0.441	13	AVG
4,4'-Methylenebis(2-chloroani			0.191	0.234	0.262	0.254	0.265	0.275	0.247	12	AVG
Benzo(a)anthracene	0.983	1.000	1.130	1.205	1.286	1.297	1.337	1.363	1.200	12	AVG
Chrysene	1.136	1.068	1.134	1.196	1.225	1.206	1.258	1.264	1.186	6	AVG
bis(2-Ethylhexyl)phthalate			0.645	0.801	0.869	0.885	0.932	0.931	0.844	13	AVG
6-Methylchrysene			0.688	0.768	0.807	0.807	0.843	0.885	0.800	8	AVG
Di-n-octylphthalate			1.135	1.518	1.663	1.753	1.770	1.756	1.599	15	AVG
Benzo(b)fluoranthene	1.150	1.201	1.231	1.353	1.331	1.374	1.385	1.392	1.302	7	AVG
7,12-Dimethylbenz[a]anthracen		0.357	0.449	0.543	0.555	0.597	0.615	0.618	0.534	18	AVG
Benzo(k)fluoranthene	1.332	1.208	1.244	1.356	1.303	1.388	1.339	1.328	1.312	5	AVG
Benzo(a)pyrene	0.981	0.889	1.057	1.213	1.249	1.305	1.316	1.300	1.164	14	AVG
3-Methylcholanthrene		0.386	0.452	0.525	0.577	0.584	0.602	0.589	0.531	16	AVG
Dibenz(a,h)acridine			0.783	0.965	0.982	1.020	1.036	1.010	0.966	10	AVG
Dibenz(a,j)acridine			0.904	1.009	1.036	1.071	1.059	1.028	1.018	6	AVG
Indeno(1,2,3-cd)pyrene	0.960	1.068	0.986	1.139	1.156	1.250	1.258	1.216	1.129	10	AVG
Dibenz(a,h)anthracene	1.000	1.085	1.125	1.249	1.220	1.257	1.254	1.210	1.175	8	AVG
Benzo(g,h,i)perylene	1.108	1.068	1.148	1.248	1.257	1.288	1.257	1.201	1.197	7	AVG
Total PAHs	1.144	1.126	1.150	1.215	1.164	1.206	1.165	1.121	1.162	3	AVG
2-Fluorophenol		1.488	1.507	1.539	1.571	1.586	1.570	1.575	1.548	2	AVG
Phenol-d6		1.897	2.083	2.054	2.133	2.181	2.143	2.131	2.089	5	AVG
Nitrobenzene-d5		0.472	0.482	0.535	0.537	0.548	0.545	0.546	0.524	6	AVG
2-Fluorobiphenyl		1.605	1.646	1.650	1.709	1.662	1.735	1.690	1.671	3	AVG
2,4,6-Tribromophenol		0.149	0.173	0.191	0.206	0.207	0.223	0.222	0.196	14	AVG
Terphenyl-d14		0.737	0.763	0.805	0.820	0.806	0.839	0.849	0.803	5	AVG

Average %RSD 7

+ %RSD is less than or equal to 20%; however, value rounds to 20.

4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.
Benzidine Levels in the 5,15,30,50,80,120 standards are 15,45,90,150,240,360 ng/ul, respectively.
Benzoic acid and 2,4-Dinitrophenol are at 15 ng/ul, 30 ng/ul,40 ng/ul in the 5,15,30 standards.



Digitally signed by Ashley R. Transue on 10/29/2018 at 19:13.
Target 3.5 esignature user ID: art12405

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP20296.i/18oct28.b/lj1741.d SSTD7.5
/chem/HP20296.i/18oct28.b/lj1742.d SSTD0.125
/chem/HP20296.i/18oct28.b/lj1743.d SSTD30
/chem/HP20296.i/18oct28.b/lj1744.d SSTD20
/chem/HP20296.i/18oct28.b/lj1745.d SSTD12.5
/chem/HP20296.i/18oct28.b/lj1746.d SSTD3.75
/chem/HP20296.i/18oct28.b/lj1747.d SSTD1.25
/chem/HP20296.i/18oct28.b/lj1748.d SSTD0.25

Area Summary

File ID:

Internal Standard Name	lj1741.d	lj1742.d	lj1743.d	lj1744.d	lj1745.d	lj1746.d	lj1747.d	lj1748.d	Avg. Area	%RSD	In Spec
1,4-Dichlorobenzene-d4	174707	184726	186449	188588	173232	193679	184537	182074	183499	4	Yes
Naphthalene-d8	672447	691705	689757	701835	655608	720165	715804	688999	692040	3	Yes
Acenaphthene-d10	328644	336467	346220	343637	330289	360034	352099	330385	340972	3	Yes
Phenanthrene-d10	678703	660540	677310	707104	666537	688668	703648	644470	678372	3	Yes
Pyrene-d10	704349	666010	741906	743637	694893	742847	731230	667178	711506	5	Yes
Perylene-d12	642558	561301	732007	702921	612320	629203	618576	558380	632158	10	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

File ID:

Internal Standard Name	lj1741.d	lj1742.d	lj1743.d	lj1744.d	lj1745.d	lj1746.d	lj1747.d	lj1748.d	Avg. RT
1,4-Dichlorobenzene-d4	6.951	6.951	6.956	6.951	6.951	6.950	6.950	6.951	6.951
Naphthalene-d8	8.935	8.935	8.940	8.935	8.935	8.935	8.935	8.935	8.936
Acenaphthene-d10	11.770	11.764	11.770	11.770	11.764	11.764	11.764	11.764	11.766
Phenanthrene-d10	13.701	13.695	13.701	13.701	13.695	13.695	13.695	13.695	13.697
Pyrene-d10	15.738	15.733	15.744	15.738	15.738	15.733	15.733	15.733	15.736
Perylene-d12	20.322	20.322	20.328	20.322	20.322	20.317	20.322	20.317	20.321

Comments:_____

_____

Report generated on 10/29/2018 at 18:54

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS | LAB CODE: LANCAS | INSTRUMENT: HP20296

Method: SW-846 8270D MINI | File ID: lj1751.d

ICV SAMPLE ID: RVICV2628 | BATCH: 18OCT28026 | Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,4-Dioxane	12.50	11.13	-11	30	YES
N-Nitrosodimethylamine	12.50	13.81	10	30	YES
Pyridine	12.50	13.36	7	30	YES
2-Picoline	12.50	13.10	5	30	YES
N-Nitrosomethylethylamine	12.50	11.79	-6	30	YES
Methyl methanesulfonate	12.50	12.70	2	30	YES
N-Nitrosodiethylamine	12.50	13.39	7	30	YES
Ethyl methanesulfonate	12.50	12.07	-3	30	YES
Phenol	12.50	13.64	9	30	YES
Aniline	12.50	12.88	3	30	YES
bis(2-Chloroethyl)ether	12.50	13.46	8	30	YES
2-Chlorophenol	12.50	13.97	12	30	YES
1,3-Dichlorobenzene	12.50	13.77	10	30	YES
1,4-Dichlorobenzene	12.50	14.16	13	30	YES
Benzyl alcohol	12.50	15.13	21	30	YES
1,2-Dichlorobenzene	12.50	13.60	9	30	YES
Indene	12.50	19.72	58	30	NO*
2-Methylphenol	12.50	13.51	8	30	YES
2,2'-oxybis(1-Chloropropane	12.50	13.33	7	30	YES
bis(2-Chloroisopropyl)ether	12.50	13.33	7	30	YES
N-Nitrosopyrrolidine	12.50	12.50	0	30	YES
Acetophenone	12.50	14.34	15	30	YES
4-Methylphenol	12.50	13.70	10	30	YES
N-Nitroso-di-n-propylamine	12.50	13.92	11	30	YES
N-Nitrosomorpholine	12.50	12.39	-1	30	YES
o-Toluidine	12.50	13.73	10	30	YES
Total Cresols	25.00	27.21	9	30	YES
Hexachloroethane	12.50	13.31	6	30	YES
Nitrobenzene	12.50	13.30	6	30	YES
N-Nitrosopiperidine	12.50	11.93	-5	30	YES
Isophorone	12.50	14.02	12	30	YES
2-Nitrophenol	12.50	13.79	10	30	YES
2,4-Dimethylphenol	12.50	11.46	-8	30	YES
bis(2-Chloroethoxy)methane	12.50	13.99	12	30	YES
Benzoic acid	25.00	25.87	3	30	YES
O,O,O-Triethylphosphorothio	12.50	12.70	2	30	YES
2,4-Dichlorophenol	12.50	13.56	8	30	YES

NC = Could not calculate

Comments: ____*Compounds fail High _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP20296

Method: SW-846 8270D MINI File ID: lj1751.d

ICV SAMPLE ID: RVICV2628 BATCH: 18OCT28026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,2,4-Trichlorobenzene	12.50	13.41	7	30	YES
Naphthalene	12.50	13.33	7	30	YES
4-Chloroaniline	12.50	14.07	13	30	YES
2,6-Dichlorophenol	12.50	12.10	-3	30	YES
Hexachloropropene	12.50	13.18	5	30	YES
Hexachlorobutadiene	12.50	13.66	9	30	YES
Quinoline	12.50	12.38	-1	30	YES
N-Nitrosodi-n-butylamine	12.50	10.77	-14	30	YES
4-Chloro-3-methylphenol	12.50	14.06	13	30	YES
Safrole	12.50	11.90	-5	30	YES
2-Methylnaphthalene	12.50	13.56	9	30	YES
1-Methylnaphthalene	12.50	13.14	5	30	YES
Hexachlorocyclopentadiene	25.00	27.59	10	30	YES
1,2,4,5-Tetrachlorobenzene	12.50	13.67	9	30	YES
cis-Isosafrole	1.50	1.53	2	30	YES
2,4,6-Trichlorophenol	12.50	15.19	21	30	YES
2,4,5-Trichlorophenol	12.50	14.87	19	30	YES
trans-Isosafrole	11.00	11.76	7	30	YES
1,1'-Biphenyl	12.50	14.78	18	30	YES
2-Chloronaphthalene	12.50	13.94	12	30	YES
Isosafrole	12.50	13.29	6	30	YES
1-Chloronaphthalene	12.50	12.19	-2	30	YES
Diphenyl ether	12.50	12.30	-2	30	YES
2-Nitroaniline	12.50	15.42	23	30	YES
1,4-Naphthoquinone	15.63	16.25	4	30	YES
1,4-Dinitrobenzene	12.50	14.62	17	30	YES
Dimethylphthalate	12.50	13.99	12	30	YES
1,3-Dinitrobenzene	12.50	14.30	14	30	YES
2,6-Dinitrotoluene	12.50	15.30	22	30	YES
Acenaphthylene	12.50	16.12	29	30	YES
3-Nitroaniline	12.50	14.31	14	30	YES
Acenaphthene	12.50	13.95	12	30	YES
2,4-Dinitrophenol	25.00	29.49	18	30	YES
4-Nitrophenol	12.50	14.18	13	30	YES
Pentachlorobenzene	12.50	12.48	0	30	YES
2,4-Dinitrotoluene	12.50	14.26	14	30	YES
Dibenzofuran	12.50	14.10	13	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP20296

Method: SW-846 8270D MINI File ID: lj1751.d

ICV SAMPLE ID: RVICV2628 BATCH: 18OCT28026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
2,4_2,6-Dinitrotoluenes	25.00	29.55	18	30	YES
1-Naphthylamine	25.00	26.20	5	30	YES
2,3,4,6-Tetrachlorophenol	12.50	13.18	5	30	YES
2-Naphthylamine	25.00	26.00	4	30	YES
Diethylphthalate	12.50	13.79	10	30	YES
Thionazin	12.50	13.86	11	30	YES
Fluorene	12.50	13.86	11	30	YES
4-Chlorophenyl-phenylether	12.50	13.53	8	30	YES
5-Nitro-o-toluidine	12.50	13.46	8	30	YES
4-Nitroaniline	12.50	14.70	18	30	YES
4,6-Dinitro-2-methylphenol	12.50	13.54	8	30	YES
N-Nitrosodiphenylamine	12.50	14.24	14	30	YES
NDPA as diphenylamine	12.50	14.24	14	30	YES
1,2-Diphenylhydrazine	12.50	13.78	10	30	YES
Tetraethyldithiopyrophospha	12.50	12.28	-2	30	YES
1,3,5-Trinitrobenzene	12.50	12.37	-1	30	YES
Diallate (peak 1)	9.38	8.48	-10	30	YES
Phorate	12.50	13.66	9	30	YES
Phenacetin	12.50	12.43	-1	30	YES
4-Bromophenyl-phenylether	12.50	12.73	2	30	YES
Diallate (peak 2)	3.13	3.45	10	30	YES
Hexachlorobenzene	12.50	13.30	6	30	YES
Diallate trans/cis	12.50	11.93	-5	30	YES
Dimethoate	12.50	13.32	7	30	YES
Pentachlorophenol	12.50	14.96	20	30	YES
4-Aminobiphenyl	12.50	17.80	42	30	NO*
Pentachloronitrobenzene	12.50	11.71	-6	30	YES
Pronamide	12.50	13.12	5	30	YES
Dinoseb	12.50	11.16	-11	30	YES
Phenanthrene	12.50	13.55	8	30	YES
Anthracene	12.50	13.78	10	30	YES
Carbazole	12.50	14.23	14	30	YES
Methyl parathion	12.50	13.71	10	30	YES
Di-n-butylphthalate	12.50	13.75	10	30	YES
Parathion	12.50	14.12	13	30	YES
4-Nitroquinoline-1-oxide	150.00	176.14	17	30	YES
Isodrin	12.50	12.89	3	30	YES

NC = Could not calculate

Comments: _____*Compounds Fail High_____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP20296

Method: SW-846 8270D MINI File ID: lj1751.d

ICV SAMPLE ID: RVICV2628 BATCH: 18OCT28026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
Fluoranthene	12.50	14.08	13	30	YES
Benzidine	62.50	60.72	-3	30	YES
Pyrene	12.50	14.01	12	30	YES
p-Dimethylaminoazobenzene	12.50	15.62	25	30	YES
Chlorobenzilate	12.50	13.39	7	30	YES
3,3'-Dimethylbenzidine	25.00	28.89	16	30	YES
Butylbenzylphthalate	12.50	15.34	23	30	YES
2-Acetylaminofluorene	12.50	13.93	11	30	YES
3,3'-Dichlorobenzidine	12.50	13.62	9	30	YES
Benzo(a)anthracene	12.50	15.23	22	30	YES
Chrysene	12.50	14.95	20	30	YES
4,4'-Methylenebis(2-chloroa	12.50	13.61	9	30	YES
bis(2-Ethylhexyl)phthalate	12.50	14.78	18	30	YES
6-Methylchrysene	12.50	13.25	6	30	YES
Di-n-octylphthalate	12.50	14.24	14	30	YES
Benzo(b)fluoranthene	12.50	14.17	13	30	YES
7,12-Dimethylbenz[a]anthrac	12.50	15.20	22	30	YES
Benzo(k)fluoranthene	12.50	13.67	9	30	YES
Benzo(a)pyrene	12.50	14.48	16	30	YES
3-Methylcholanthrene	12.50	14.31	14	30	YES
Dibenz(a,h)acridine	12.50	12.01	-4	30	YES
Dibenz(a,j)acridine	12.50	12.19	-2	30	YES
Indeno(1,2,3-cd)pyrene	12.50	13.68	9	30	YES
Dibenz(a,h)anthracene	12.50	14.15	13	30	YES
Benzo(g,h,i)perylene	12.50	13.36	7	30	YES
Total PAHs	225.00	253.08	12	30	YES

NC = Could not calculate

Comments: _____

^

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 11/09/18 Time: 07:11

Lab File ID: lk0631.d Init. Calib. Date(s): 10/29/18 10/29/18

Init. Calib. Times(s): 00:23 03:49

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
1,4-Dioxane	0.748	0.739	7.410	7.5	-1
N-Nitrosodimethylamine	1.124	1.175	7.840	7.5	5
Pyridine	1.913	1.900	7.450	7.5	-1
2-Picoline	1.997	1.998	7.500	7.5	0
N-Nitrosomethylethylamine	0.816	0.836	7.690	7.5	2
Methyl methanesulfonate	1.043	1.042	7.500	7.5	0
N-Nitrosodiethylamine	0.705	0.791	8.420	7.5	12
Ethyl methanesulfonate	0.800	0.820	7.680	7.5	2
Benzaldehyde	1.433	1.561	8.170	7.5	9
Phenol	2.450	2.493	7.630	7.5	2
Aniline	2.879	2.954	7.700	7.5	3
a-methylstyrene	0.151	0.157	7.820	7.5	4
bis(2-Chloroethyl)ether	1.843	1.865	7.590	7.5	1
2-Chlorophenol	1.443	1.525	7.930	7.5	6
1,3-Dichlorobenzene	1.618	1.712	7.940	7.5	6
1,4-Dichlorobenzene	1.626	1.712	7.900	7.5	5
Benzyl alcohol	0.990	1.053	7.970	7.5	6
1,2-Dichlorobenzene	1.580	1.632	7.750	7.5	3
Indene	1.737	1.834	7.920	7.5	6
2-Methylphenol	1.518	1.604	7.920	7.5	6
2,2'-oxybis(1-Chloropropane)	2.325	2.295	7.410	7.5	-1
bis(2-Chloroisopropyl)ether	2.325	2.295	7.410	7.5	-1
N-Nitrosopyrrolidine	0.775	0.875	8.460	7.5	13
Acetophenone	2.339	2.345	7.520	7.5	0
4-Methylphenol	1.584	1.805	8.550	7.5	14
Total Cresols	1.551	1.705	16.470	15.0	10
N-Nitroso-di-n-propylamine	1.414	1.485	7.880	7.5	5
N-Nitrosomorpholine	1.027	1.060	7.740	7.5	3
o-Toluidine	2.647	2.790	7.900	7.5	5
Hexachloroethane	0.738	0.780	7.920	7.5	6
Nitrobenzene	0.558	0.576	7.740	7.5	3
N-Nitrosopiperidine	0.196	0.208	7.960	7.5	6
Isophorone	0.941	0.947	7.550	7.5	1
2-Nitrophenol	0.183	0.199	8.160	7.5	9
2,4-Dimethylphenol	0.448	0.472	7.900	7.5	5
O,O,O-Triethylphosphorothioate	0.192	0.213	8.310	7.5	11

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 11/09/18 Time: 07:11

Lab File ID: lk0631.d Init. Calib. Date(s): 10/29/18 10/29/18

Init. Calib. Times(s): 00:23 03:49

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
bis(2-Chloroethoxy)methane	0.600	0.610	7.630	7.5	2
Benzoic acid	0.292	0.207	7.100	10.0	-29
2,4-Dichlorophenol	0.322	0.343	7.990	7.5	7
1,2,4-Trichlorobenzene	0.371	0.389	7.870	7.5	5
Naphthalene	1.129	1.175	7.800	7.5	4
4-Chloroaniline	0.455	0.470	7.740	7.5	3
2,6-Dichlorophenol	0.313	0.334	8.000	7.5	7
Hexachloropropene	0.239	0.256	8.010	7.5	7
Hexachlorobutadiene	0.219	0.237	8.130	7.5	8
Quinoline	0.672	0.688	7.680	7.5	2
Caprolactam	0.099	0.111	8.420	7.5	12
N-Nitrosodi-n-butylamine	0.374	0.354	7.090	7.5	-5
4-Chloro-3-methylphenol	0.382	0.413	8.110	7.5	8
Safrole	0.284	0.292	7.690	7.5	3
2-Methylnaphthalene	0.725	0.761	7.880	7.5	5
1-Methylnaphthalene	0.693	0.723	7.820	7.5	4
Hexachlorocyclopentadiene	0.445	0.413	6.960	7.5	-7
1,2,4,5-Tetrachlorobenzene	0.772	0.791	7.680	7.5	2
cis-Isosafrole	0.639	0.604	1.200	1.3	-6
2,4,6-Trichlorophenol	0.452	0.500	8.300	7.5	11
2,4,5-Trichlorophenol	0.498	0.521	7.840	7.5	5
trans-Isosafrole	0.642	0.666	6.450	6.2	4
Isosafrole	0.642	0.655	7.660	7.5	2
1,1'-Biphenyl	1.716	1.738	7.590	7.5	1
2-Chloronaphthalene	1.526	1.503	7.390	7.5	-1
1-Chloronaphthalene	1.320	1.338	7.600	7.5	1
Diphenyl ether	0.957	0.985	7.710	7.5	3
2-Nitroaniline	0.384	0.436	8.530	7.5	14
1,4-Naphthoquinone	0.558	0.530	7.130	7.5	-5
1,4-Dinitrobenzene	0.205	0.231	8.450	7.5	13
Dimethylphthalate	1.585	1.634	7.730	7.5	3
1,3-Dinitrobenzene	0.233	0.256	8.240	7.5	10
2,6-Dinitrotoluene	0.321	0.366	8.540	7.5	14
Acenaphthylene	1.902	2.001	7.890	7.5	5
3-Nitroaniline	0.368	0.375	7.630	7.5	2
Acenaphthene	1.468	1.467	7.490	7.5	0

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 11/09/18 Time: 07:11

Lab File ID: lk0631.d Init. Calib. Date(s): 10/29/18 10/29/18

Init. Calib. Times(s): 00:23 03:49

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
2,4-Dinitrophenol	0.194	0.189	9.750	10.0	-2
4-Nitrophenol	0.308	0.305	7.430	7.5	-1
Pentachlorobenzene	0.616	0.644	7.840	7.5	4
2,4-Dinitrotoluene	0.461	0.493	8.010	7.5	7
2,4_2,6-Dinitrotoluenes	0.375	0.429	16.550	15.0	10
Dibenzofuran	1.990	2.061	7.770	7.5	4
1-Naphthylamine	1.435	1.406	7.350	7.5	-2
2,3,4,6-Tetrachlorophenol	0.391	0.425	8.140	7.5	8
2-Naphthylamine	1.428	1.427	7.500	7.5	0
Diethylphthalate	1.560	1.573	7.560	7.5	1
Thionazin	0.306	0.314	7.700	7.5	3
Fluorene	1.576	1.648	7.840	7.5	5
4-Chlorophenyl-phenylether	0.807	0.858	7.970	7.5	6
5-Nitro-o-toluidine	0.401	0.442	8.250	7.5	10
4-Nitroaniline	0.353	0.390	8.300	7.5	11
4,6-Dinitro-2-methylphenol	0.132	0.135	7.720	7.5	3
N-Nitrosodiphenylamine (1)	0.640	0.633	7.420	7.5	-1
NDPA as diphenylamine	0.640	0.633	7.420	7.5	-1
1,2-Diphenylhydrazine	1.132	1.054	6.980	7.5	-7
Tetraethyldithiopyrophosphate	0.169	0.160	7.100	7.5	-5
1,3,5-Trinitrobenzene	0.080	0.083	7.780	7.5	4
Diallate (peak 1)	0.455	0.435	5.950	6.2	-4
Phorate	0.591	0.661	8.390	7.5	12
Phenacetin	0.448	0.455	7.610	7.5	1
4-Bromophenyl-phenylether	0.223	0.231	7.770	7.5	4
Diallate (peak 2)	0.373	0.370	1.270	1.3	-1
Diallate trans/cis	0.441	0.424	7.220	7.5	-4
Hexachlorobenzene	0.227	0.230	7.590	7.5	1
Dimethoate	0.375	0.391	7.830	7.5	4
Atrazine	0.203	0.214	7.890	7.5	5
Pentachlorophenol	0.144	0.147	7.640	7.5	2
4-Aminobiphenyl	0.556	0.565	7.620	7.5	2
Pentachloronitrobenzene	0.108	0.107	7.450	7.5	-1
Pronamide	0.347	0.374	8.090	7.5	8
Dinoseb	0.200	0.208	7.790	7.5	4
Phenanthrene	1.197	1.194	7.480	7.5	0

(1) Cannot be Separated from Diphenylamine

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 11/09/18 Time: 07:11

Lab File ID: lk0631.d Init. Calib. Date(s): 10/29/18 10/29/18

Init. Calib. Times(s): 00:23 03:49

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Anthracene	1.174	1.216	7.770	7.5	4
Carbazole	1.052	1.089	7.760	7.5	4
Methyl parathion	0.282	0.292	7.760	7.5	4
Di-n-butylphthalate	1.361	1.375	7.580	7.5	1
Parathion	0.177	0.184	7.800	7.5	4
4-Nitroquinoline-1-oxide	0.099	0.071	5.430	7.5	-28
Octachlorostyrene	0.084	0.089	7.940	7.5	6
Isodrin	0.141	0.147	7.800	7.5	4
Fluoranthene	1.312	1.408	8.050	7.5	7
Benzidine	0.797	0.823	23.230	22.5	3
Pyrene	1.319	1.367	7.780	7.5	4
p-Dimethylaminoazobenzene	0.203	0.210	7.760	7.5	3
Chlorobenzilate	0.390	0.400	7.690	7.5	3
3,3'-Dimethylbenzidine	0.763	0.855	8.400	7.5	12
Butylbenzylphthalate	0.586	0.620	7.930	7.5	6
2-Acetylaminofluorene	0.483	0.520	8.090	7.5	8
3,3'-Dichlorobenzidine	0.441	0.493	8.380	7.5	12
4,4'-Methylenebis(2-chloroanil	0.247	0.275	8.350	7.5	11
Benzo(a)anthracene	1.200	1.377	8.600	7.5	15
Chrysene	1.186	1.333	8.430	7.5	12
bis(2-Ethylhexyl)phthalate	0.844	0.886	7.880	7.5	5
6-Methylchrysene	0.800	0.882	8.280	7.5	10
Di-n-octylphthalate	1.599	1.600	7.500	7.5	0
Benzo(b)fluoranthene	1.302	1.374	7.910	7.5	6
7,12-Dimethylbenz[a]anthracene	0.534	0.592	8.320	7.5	11
Benzo(k)fluoranthene	1.312	1.384	7.910	7.5	5
Benzo(a)pyrene	1.164	1.295	8.340	7.5	11
3-Methylcholanthrene	0.531	0.537	7.590	7.5	1
Dibenz(a,h)acridine	0.966	0.879	6.830	7.5	-9
Dibenz(a,j)acridine	1.018	0.870	6.410	7.5	-14
Indeno(1,2,3-cd)pyrene	1.129	0.975	6.480	7.5	-14
Dibenz(a,h)anthracene	1.175	1.058	6.750	7.5	-10
Benzo(g,h,i)perylene	1.197	0.960	6.020	7.5	-20
Total PAHs	1.161	1.087	138.240	135.0	2
2-Fluorophenol	1.548	1.602	15.520	15.0	3

FORM VII SV-1

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 11/09/18 Time: 07:11

Lab File ID: lk0631.d Init. Calib. Date(s): 10/29/18 10/29/18

Init. Calib. Times(s): 00:23 03:49

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Phenol-d6	2.089	2.150	15.440	15.0	3
Nitrobenzene-d5	0.524	0.544	15.580	15.0	4
2-Fluorobiphenyl	1.671	1.701	15.270	15.0	2
2,4,6-Tribromophenol	0.196	0.220	16.870	15.0	12
Terphenyl-d14	0.803	0.851	15.910	15.0	6
			Average %Drift:		6

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP20296.i/18oct28.b/lj1741.d **
/chem/HP20296.i/18oct28.b/lj1742.d
/chem/HP20296.i/18oct28.b/lj1743.d
/chem/HP20296.i/18oct28.b/lj1744.d
/chem/HP20296.i/18oct28.b/lj1745.d
/chem/HP20296.i/18oct28.b/lj1746.d
/chem/HP20296.i/18oct28.b/lj1747.d
/chem/HP20296.i/18oct28.b/lj1748.d

** indicates the Mid Level Calibration Standard.

Mid Level Calibration Standard is used for comparison.

Current Continuing Calibration Standard:

/chem/HP20296.i/18nov09.b/lk0631.d

Area Summary

File ID:

Internal Standard Name	lk0631.d	ICAL Area	Low Limit	High Limit	In Spec
1,4-Dichlorobenzene-d4	168088	174707	87354	349414	Yes
Naphthalene-d8	638793	672447	336224	1344894	Yes
Acenaphthene-d10	330056	328644	164322	657288	Yes
Phenanthrene-d10	678546	678703	339352	1357406	Yes
Pyrene-d10	730583	704349	352174	1408698	Yes
Perylene-d12	715742	642558	321279	1285116	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

File ID:

Internal Standard Name	lk0631.d	ICAL RT	In Spec
1,4-Dichlorobenzene-d4	6.758	6.951	No
Naphthalene-d8	8.742	8.935	No
Acenaphthene-d10	11.588	11.770	No
Phenanthrene-d10	13.519	13.701	No
Pyrene-d10	15.530	15.738	No
Perylene-d12	20.087	20.322	No

A "No" indicates the retention time is greater than 10 seconds from the RT of the referenced standard.

Comments: Unless otherwise documented, the shift in retention time is due to routine injection port maintenance, which involves the removal of a length of the analytical column.

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 11/09/18 Time: 17:43

Lab File ID: lk0701.d Init. Calib. Date(s): 10/29/18 10/29/18

Init. Calib. Times(s): 00:23 03:49

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
1,4-Dioxane	0.748	0.726	7.280	7.5	-3
N-Nitrosodimethylamine	1.124	1.123	7.490	7.5	0
Pyridine	1.913	1.856	7.280	7.5	-3
2-Picoline	1.997	1.843	6.920	7.5	-8
N-Nitrosomethylethylamine	0.816	0.759	6.980	7.5	-7
Methyl methanesulfonate	1.043	0.955	6.870	7.5	-8
N-Nitrosodiethylamine	0.705	0.732	7.790	7.5	4
Ethyl methanesulfonate	0.800	0.777	7.280	7.5	-3
Benzaldehyde	1.433	1.362	7.130	7.5	-5
Phenol	2.450	2.394	7.330	7.5	-2
Aniline	2.879	2.795	7.280	7.5	-3
a-methylstyrene	0.151	0.147	7.320	7.5	-2
bis(2-Chloroethyl)ether	1.843	1.811	7.370	7.5	-2
2-Chlorophenol	1.443	1.461	7.590	7.5	1
1,3-Dichlorobenzene	1.618	1.684	7.810	7.5	4
1,4-Dichlorobenzene	1.626	1.632	7.530	7.5	0
Benzyl alcohol	0.990	0.963	7.290	7.5	-3
1,2-Dichlorobenzene	1.580	1.564	7.430	7.5	-1
Indene	1.737	1.699	7.340	7.5	-2
2-Methylphenol	1.518	1.485	7.340	7.5	-2
2,2'-oxybis(1-Chloropropane)	2.325	2.125	6.860	7.5	-9
bis(2-Chloroisopropyl)ether	2.325	2.125	6.860	7.5	-9
N-Nitrosopyrrolidine	0.775	0.802	7.760	7.5	4
Acetophenone	2.339	2.221	7.120	7.5	-5
4-Methylphenol	1.584	1.688	7.990	7.5	7
Total Cresols	1.551	1.587	15.330	15.0	2
N-Nitroso-di-n-propylamine	1.414	1.347	7.140	7.5	-5
N-Nitrosomorpholine	1.027	0.967	7.060	7.5	-6
o-Toluidine	2.647	2.624	7.430	7.5	-1
Hexachloroethane	0.738	0.720	7.320	7.5	-2
Nitrobenzene	0.558	0.563	7.570	7.5	1
N-Nitrosopiperidine	0.196	0.206	7.890	7.5	5
Isophorone	0.941	0.894	7.120	7.5	-5
2-Nitrophenol	0.183	0.197	8.060	7.5	7
2,4-Dimethylphenol	0.448	0.438	7.340	7.5	-2
O,O,O-Triethylphosphorothioate	0.192	0.213	8.310	7.5	11

FORM VII SV-1

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 11/09/18 Time: 17:43

Lab File ID: lk0701.d Init. Calib. Date(s): 10/29/18 10/29/18

Init. Calib. Times(s): 00:23 03:49

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
bis(2-Chloroethoxy)methane	0.600	0.592	7.400	7.5	-1
Benzoic acid	0.292	0.210	7.180	10.0	-28
2,4-Dichlorophenol	0.322	0.342	7.980	7.5	6
1,2,4-Trichlorobenzene	0.371	0.388	7.840	7.5	4
Naphthalene	1.129	1.152	7.650	7.5	2
4-Chloroaniline	0.455	0.459	7.560	7.5	1
2,6-Dichlorophenol	0.313	0.327	7.840	7.5	5
Hexachloropropene	0.239	0.263	8.250	7.5	10
Hexachlorobutadiene	0.219	0.240	8.220	7.5	10
Quinoline	0.672	0.659	7.350	7.5	-2
Caprolactam	0.099	0.108	8.170	7.5	9
N-Nitrosodi-n-butylamine	0.374	0.319	6.400	7.5	-15
4-Chloro-3-methylphenol	0.382	0.379	7.450	7.5	-1
Safrole	0.284	0.291	7.680	7.5	2
2-Methylnaphthalene	0.725	0.736	7.610	7.5	2
1-Methylnaphthalene	0.693	0.723	7.810	7.5	4
Hexachlorocyclopentadiene	0.445	0.496	8.350	7.5	11
1,2,4,5-Tetrachlorobenzene	0.772	0.815	7.910	7.5	6
cis-Isosafrole	0.639	0.654	1.300	1.3	2
2,4,6-Trichlorophenol	0.452	0.513	8.510	7.5	13
2,4,5-Trichlorophenol	0.498	0.530	7.980	7.5	6
trans-Isosafrole	0.642	0.648	6.280	6.2	1
Isosafrole	0.642	0.649	7.590	7.5	1
1,1'-Biphenyl	1.716	1.746	7.630	7.5	2
2-Chloronaphthalene	1.526	1.571	7.720	7.5	3
1-Chloronaphthalene	1.320	1.298	7.370	7.5	-2
Diphenyl ether	0.957	0.994	7.790	7.5	4
2-Nitroaniline	0.384	0.422	8.250	7.5	10
1,4-Naphthoquinone	0.558	0.527	7.090	7.5	-5
1,4-Dinitrobenzene	0.205	0.221	8.090	7.5	8
Dimethylphthalate	1.585	1.567	7.410	7.5	-1
1,3-Dinitrobenzene	0.233	0.252	8.120	7.5	8
2,6-Dinitrotoluene	0.321	0.365	8.530	7.5	14
Acenaphthylene	1.902	1.974	7.780	7.5	4
3-Nitroaniline	0.368	0.359	7.300	7.5	-3
Acenaphthene	1.468	1.477	7.540	7.5	1

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 11/09/18 Time: 17:43

Lab File ID: lk0701.d Init. Calib. Date(s): 10/29/18 10/29/18

Init. Calib. Times(s): 00:23 03:49

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
2,4-Dinitrophenol	0.194	0.203	10.450	10.0	4
4-Nitrophenol	0.308	0.285	6.930	7.5	-8
Pentachlorobenzene	0.616	0.642	7.810	7.5	4
2,4-Dinitrotoluene	0.461	0.489	7.950	7.5	6
2,4_2,6-Dinitrotoluenes	0.375	0.427	16.480	15.0	10
Dibenzofuran	1.990	2.054	7.740	7.5	3
1-Naphthylamine	1.435	1.414	7.390	7.5	-1
2,3,4,6-Tetrachlorophenol	0.391	0.424	8.120	7.5	8
2-Naphthylamine	1.428	1.362	7.150	7.5	-5
Diethylphthalate	1.560	1.425	6.850	7.5	-9
Thionazin	0.306	0.282	6.920	7.5	-8
Fluorene	1.576	1.608	7.650	7.5	2
4-Chlorophenyl-phenylether	0.807	0.845	7.850	7.5	5
5-Nitro-o-toluidine	0.401	0.439	8.200	7.5	9
4-Nitroaniline	0.353	0.383	8.140	7.5	8
4,6-Dinitro-2-methylphenol	0.132	0.138	7.860	7.5	5
N-Nitrosodiphenylamine (1)	0.640	0.658	7.720	7.5	3
NDPA as diphenylamine	0.640	0.658	7.720	7.5	3
1,2-Diphenylhydrazine	1.132	1.057	7.000	7.5	-7
Tetraethyldithiopyrophosphate	0.169	0.158	7.020	7.5	-6
1,3,5-Trinitrobenzene	0.080	0.088	8.260	7.5	10
Diallate (peak 1)	0.455	0.431	5.900	6.2	-5
Phorate	0.591	0.642	8.140	7.5	9
Phenacetin	0.448	0.460	7.690	7.5	3
4-Bromophenyl-phenylether	0.223	0.242	8.160	7.5	9
Diallate (peak 2)	0.373	0.351	1.200	1.3	-6
Diallate trans/cis	0.441	0.418	7.100	7.5	-5
Hexachlorobenzene	0.227	0.259	8.550	7.5	14
Dimethoate	0.375	0.379	7.570	7.5	1
Atrazine	0.203	0.212	7.840	7.5	5
Pentachlorophenol	0.144	0.155	8.070	7.5	8
4-Aminobiphenyl	0.556	0.581	7.840	7.5	4
Pentachloronitrobenzene	0.108	0.116	8.060	7.5	7
Pronamide	0.347	0.382	8.260	7.5	10
Dinoseb	0.200	0.225	8.430	7.5	12
Phenanthrene	1.197	1.261	7.900	7.5	5

(1) Cannot be Separated from Diphenylamine

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 11/09/18 Time: 17:43

Lab File ID: lk0701.d Init. Calib. Date(s): 10/29/18 10/29/18

Init. Calib. Times(s): 00:23 03:49

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Anthracene	1.174	1.236	7.900	7.5	5
Carbazole	1.052	1.083	7.720	7.5	3
Methyl parathion	0.282	0.294	7.840	7.5	5
Di-n-butylphthalate	1.361	1.347	7.420	7.5	-1
Parathion	0.177	0.183	7.740	7.5	3
4-Nitroquinoline-1-oxide	0.099	0.094	7.150	7.5	-5
Octachlorostyrene	0.084	0.095	8.460	7.5	13
Isodrin	0.141	0.153	8.130	7.5	8
Fluoranthene	1.312	1.428	8.160	7.5	9
Benzidine	0.797	0.868	24.510	22.5	9
Pyrene	1.319	1.351	7.680	7.5	2
p-Dimethylaminoazobenzene	0.203	0.208	7.670	7.5	2
Chlorobenzilate	0.390	0.383	7.370	7.5	-2
3,3'-Dimethylbenzidine	0.763	0.856	8.420	7.5	12
Butylbenzylphthalate	0.586	0.592	7.580	7.5	1
2-Acetylaminofluorene	0.483	0.496	7.710	7.5	3
3,3'-Dichlorobenzidine	0.441	0.486	8.260	7.5	10
4,4'-Methylenebis(2-chloroanil	0.247	0.280	8.530	7.5	14
Benzo(a)anthracene	1.200	1.304	8.150	7.5	9
Chrysene	1.186	1.290	8.160	7.5	9
bis(2-Ethylhexyl)phthalate	0.844	0.833	7.400	7.5	-1
6-Methylchrysene	0.800	0.854	8.010	7.5	7
Di-n-octylphthalate	1.599	1.492	7.000	7.5	-7
Benzo(b)fluoranthene	1.302	1.326	7.640	7.5	2
7,12-Dimethylbenz[a]anthracene	0.534	0.580	8.150	7.5	9
Benzo(k)fluoranthene	1.312	1.287	7.350	7.5	-2
Benzo(a)pyrene	1.164	1.237	7.970	7.5	6
3-Methylcholanthrene	0.531	0.555	7.840	7.5	5
Dibenz(a,h)acridine	0.966	0.984	7.640	7.5	2
Dibenz(a,j)acridine	1.018	1.037	7.640	7.5	2
Indeno(1,2,3-cd)pyrene	1.129	1.189	7.900	7.5	5
Dibenz(a,h)anthracene	1.175	1.227	7.830	7.5	4
Benzo(g,h,i)perylene	1.197	1.255	7.860	7.5	5
Total PAHs	1.161	1.107	140.560	135.0	4
2-Fluorophenol	1.548	1.513	14.660	15.0	-2

FORM VII SV-1

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 11/09/18 Time: 17:43

Lab File ID: lk0701.d Init. Calib. Date(s): 10/29/18 10/29/18

Init. Calib. Times(s): 00:23 03:49

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Phenol-d6	2.089	2.057	14.770	15.0	-2
Nitrobenzene-d5	0.524	0.533	15.280	15.0	2
2-Fluorobiphenyl	1.671	1.727	15.500	15.0	3
2,4,6-Tribromophenol	0.196	0.219	16.790	15.0	12
Terphenyl-d14	0.803	0.844	15.770	15.0	5
			Average %Drift:		5

Continuing Calibration
Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP20296.i/18oct28.b/lj1741.d **
/chem/HP20296.i/18oct28.b/lj1742.d
/chem/HP20296.i/18oct28.b/lj1743.d
/chem/HP20296.i/18oct28.b/lj1744.d
/chem/HP20296.i/18oct28.b/lj1745.d
/chem/HP20296.i/18oct28.b/lj1746.d
/chem/HP20296.i/18oct28.b/lj1747.d
/chem/HP20296.i/18oct28.b/lj1748.d

** indicates the Mid Level Calibration Standard.

Mid Level Calibration Standard is used for comparison.

Current Continuing Calibration Standard:

/chem/HP20296.i/18nov09a.b/lk0701.d

Area Summary

Internal Standard Name	File ID: lk0701.d	ICAL Area	Low Limit	High Limit	In Spec
1,4-Dichlorobenzene-d4	155823	174707	87354	349414	Yes
Naphthalene-d8	560467	672447	336224	1344894	Yes
Acenaphthene-d10	283727	328644	164322	657288	Yes
Phenanthrene-d10	544843	678703	339352	1357406	Yes
Pyrene-d10	596778	704349	352174	1408698	Yes
Perylene-d12	595502	642558	321279	1285116	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

Internal Standard Name	File ID: lk0701.d	ICAL RT	In Spec
1,4-Dichlorobenzene-d4	6.742	6.951	No
Naphthalene-d8	8.732	8.935	No
Acenaphthene-d10	11.577	11.770	No
Phenanthrene-d10	13.508	13.701	No
Pyrene-d10	15.514	15.738	No
Perylene-d12	20.066	20.322	No

A "No" indicates the retention time is greater than 10 seconds from the RT of the referenced standard.

Comments: Unless otherwise documented, the shift in retention time is due to routine injection port maintenance, which involves the removal of a length of the analytical column.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): lk0631.d Date Analyzed: 11/09/18

Instrument ID: HP20296 Time Analyzed: 07:11

	IS1(DCB)		IS2(NPT)		IS3(ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	168088	6.758	638793	8.742	330056	11.588
UPPER LIMIT	336176	7.258	1277586	9.242	660112	12.088
LOWER LIMIT	84044	6.258	319397	8.242	165028	11.088
LLI SAMPLE NO.						
01 SBLKWF312	148920	6.758	541605	8.742	266324	11.588
02 312WFLCS	153416	6.758	552434	8.742	279914	11.588
03 312WFLCSD	149276	6.758	568989	8.742	280401	11.588
04 SBLKWG312	157369	6.758	587261	8.742	282146	11.588
05 312WGLCS	150591	6.758	545569	8.742	279258	11.588
06 312WGLCSD	144251	6.758	554198	8.742	281855	11.588
07 SBLKWA312	154416	6.758	546399	8.742	269202	11.588
08 312WALCS	152039	6.764	548685	8.742	288344	11.593
09 9875116	155291	6.764	567205	8.743	282361	11.588
10 9884648	156755	6.763	592763	8.748	286319	11.593
11 9884650	143799	6.763	543403	8.748	272288	11.593
12 9884652	148572	6.763	544203	8.748	262524	11.593
13 rvSTD2648	167773	6.763	619375	8.748	318930	11.593

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): lk0631.d Date Analyzed: 11/09/18

Instrument ID: HP20296 Time Analyzed: 07:11

	IS4(PHN)		IS5(PYR)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	678546	13.519	730583	15.530	715742	20.087
UPPER LIMIT	1357092	14.019	1461166	16.030	1431484	20.587
LOWER LIMIT	339273	13.019	365292	15.030	357871	19.587
LLI SAMPLE NO.						
01 SBLKWF312	532653	13.519	559098	15.530	518896	20.087
02 312WFLCS	575957	13.519	627877	15.530	630140	20.087
03 312WFLCSD	569002	13.519	652474	15.530	633682	20.087
04 SBLKWG312	574301	13.519	621846	15.530	556574	20.081
05 312WGLCS	555392	13.519	613779	15.530	596676	20.087
06 312WGLCSD	555473	13.519	619052	15.530	601864	20.087
07 SBLKWA312	559891	13.519	586889	15.530	540020	20.087
08 312WALCS	570592	13.524	640684	15.535	637965	20.087
09 9875116	576873	13.519	602357	15.535	635994	20.092
10 9884648	598953	13.524	637684	15.535	579337	20.092
11 9884650	565013	13.524	603806	15.535	516744	20.087
12 9884652	557709	13.524	618595	15.530	534614	20.092
13 rvSTD2648	664538	13.524	745386	15.535	727756	20.092

IS4 (PHN) = Phenanthrene-d10
IS5 (PYR) = Pyrene-d10
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): lk0701.d Date Analyzed: 11/09/18

Instrument ID: HP20296 Time Analyzed: 17:43

	IS1(DCB)		IS2(NPT)		IS3(ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	155823	6.742	560467	8.732	283727	11.577
UPPER LIMIT	311646	7.242	1120934	9.232	567454	12.077
LOWER LIMIT	77912	6.242	280234	8.232	141864	11.077
LLI SAMPLE NO.						
01 SBLKWX310	140504	6.747	500575	8.732	243684	11.572
02 9882463	272636	6.747	992678	8.732	491886	11.577
03 9885681	149780	6.747	558447	8.732	279115	11.572
04 9885682MS	147662	6.753	554468	8.732	281911	11.577
05 9885683MSD	146428	6.753	520290	8.732	259268	11.577
06 9885685	149810	6.747	545656	8.732	281578	11.577
07 9885686	159756	6.747	572880	8.732	295368	11.577

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): lk0701.d Date Analyzed: 11/09/18

Instrument ID: HP20296 Time Analyzed: 17:43

	IS4(PHN)		IS5(PYR)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	544843	13.508	596778	15.514	595502	20.066
UPPER LIMIT	1089686	14.008	1193556	16.014	1191004	20.566
LOWER LIMIT	272422	13.008	298389	15.014	297751	19.566
LLI SAMPLE NO.						
01 SBLKWX310	486682	13.508	487732	15.514	450067	20.065
02 9882463	1004904	13.508	1029512	15.514	965703	20.065
03 9885681	544645	13.508	573205	15.514	514808	20.066
04 9885682MS	538697	13.508	567837	15.514	555301	20.065
05 9885683MSD	518173	13.508	534495	15.514	547911	20.065
06 9885685	547959	13.508	574378	15.514	516561	20.065
07 9885686	574197	13.508	594386	15.514	539256	20.065

IS4 (PHN) = Phenanthrene-d10
IS5 (PYR) = Pyrene-d10
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

Sample Data

Semivolatiles by GC/MS

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

OR226

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885681

Sample wt/vol: 238 (g/mL)ML Lab File ID: lk0704.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR226

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885681

Sample wt/vol: 238 (g/mL)ML Lab File ID: lk0704.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		15	U	
100-02-7	4-Nitrophenol		11	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.1	U	
129-00-0	Pyrene		0.1	U	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	U	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.1	U	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR226

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885681

Sample wt/vol: 238 (g/mL)ML Lab File ID: lk0704.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.1	U	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	U	

FORM I SV-3

OR226 Lancaster Laboratories, Inc. 9885681
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov09a.b/lk0704.d Injection date and time: **09-NOV-2018 19:37**
Data file Sample Info. Line: OR226;9885681;1;0;SAMPLE;;; Instrument ID: **HP20296.i** Batch: **18312WAA**
Date, time and analyst ID of latest file update: 10-Nov-2018 09:19 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 18:18
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09a.b/lk0701.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 238 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.747	(-0.005)	1077	152	149780	(-4)	5.00	
68) Naphthalene-d8	8.732	(0.000)	1448	136	558447	(0)	5.00	
118) Acenaphthene-d10	11.572	(0.006)	1979	164	279115	(-2)	5.00	
158) Phenanthrene-d10	13.508	(0.000)	2341	188	544645	(0)	5.00	
180) Pyrene-d10	15.514	(0.000)	2716	212	573205	(-4)	5.00	
218) Perylene-d12	20.066	(0.000)	3567	264	514808	(-14)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.811	(0.001)	112	1006129	21.700	43%		10 - 85
18) Phenol-d6	(1)	6.229	(0.001)	99	979283	15.650	31%		10 - 72
45) Nitrobenzene-d5	(2)	7.603	(0.000)	82	960786	16.433	66%		30 - 111
96) 2-Fluorobiphenyl	(3)	10.513	(0.000)	172	1508881	16.175	65%		39 - 105
140) 2,4,6-Tribromophenol	(3)	12.636	(-0.001)	330	432958	39.588	79%		29 - 133
184) Terphenyl-d14	(5)	15.829	(0.000)	244	1845043	20.052	80%		27 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
19) Phenol	(1)				Not Detected					0.1
23) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
24) 2-Chlorophenol	(1)				Not Detected					0.1
25) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
27) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
29) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
32) 2-Methylphenol	(1)				Not Detected					0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
38) 4-Methylphenol	(1)				Not Detected					0.1
39) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
44) Hexachloroethane	(1)				Not Detected					0.3
46) Nitrobenzene	(2)				Not Detected					0.1
52) Isophorone	(2)				Not Detected					0.1
53) 2-Nitrophenol	(2)				Not Detected					0.8
55) 2,4-Dimethylphenol	(2)				Not Detected					0.8
57) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
62) 2,4-Dichlorophenol	(2)				Not Detected					0.1
65) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
69) Naphthalene	(2)				Not Detected					0.03
70) 4-Chloroaniline	(2)				Not Detected					1
74) Hexachlorobutadiene	(2)				Not Detected					0.1
83) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
86) 2-Methylnaphthalene	(2)				Not Detected					0.03
88) Hexachlorocyclopentadiene	(3)				Not Detected					1
93) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
95) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
99) 2-Chloronaphthalene	(3)				Not Detected					0.1

Digitally signed by Kira N. Beck on 11/10/2018 at 09:23. Target 3.5 esignature user ID: knb25316

Data file: /chem/HP20296.i/18nov09a.b/lk0704.d Injection date and time: **09-NOV-2018 19:37**
Data file Sample Info. Line: OR226;9885681;1;0;SAMPLE;;; Instrument ID: **HP20296.i** Batch: **18312WAA**
Date, time and analyst ID of latest file update: 10-Nov-2018 09:19 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 18:18
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09a.b/lk0701.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 238 ml Volume Injected (Vi): 1 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
104) 2-Nitroaniline	(3)				Not Detected					0.5
110) Dimethylphthalate	(3)				Not Detected					0.5
113) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
114) Acenaphthylene	(3)				Not Detected					0.03
117) 3-Nitroaniline	(3)				Not Detected					0.8
119) Acenaphthene	(3)				Not Detected					0.03
120) 2,4-Dinitrophenol	(3)				Not Detected					4
121) 4-Nitrophenol	(3)				Not Detected					3
123) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
124) Dibenzofuran	(3)				Not Detected					0.1
129) Diethylphthalate	(3)				Not Detected					0.5
131) Fluorene	(3)				Not Detected					0.03
132) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
134) 4-Nitroaniline	(3)				Not Detected					0.2
135) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
136) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
148) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
150) Hexachlorobenzene	(4)				Not Detected					0.03
154) Pentachlorophenol	(4)				Not Detected					0.3
160) Phenanthrene	(4)				Not Detected					0.03
162) Anthracene	(4)				Not Detected					0.03
168) Carbazole	(4)				Not Detected					0.1
170) Di-n-butylphthalate	(4)				Not Detected					0.5
178) Fluoranthene	(4)				Not Detected					0.03
182) Pyrene	(5)				Not Detected					0.03
193) Butylbenzylphthalate	(5)				Not Detected					0.5
198) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
200) Benzo(a)anthracene	(5)				Not Detected					0.03
201) Chrysene	(5)				Not Detected					0.03
204) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
210) Di-n-octylphthalate	(6)				Not Detected					1
211) Benzo(b)fluoranthene	(6)				Not Detected					0.03
213) Benzo(k)fluoranthene	(6)				Not Detected					0.03
216) Benzo(a)pyrene	(6)				Not Detected					0.03
224) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
225) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
226) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

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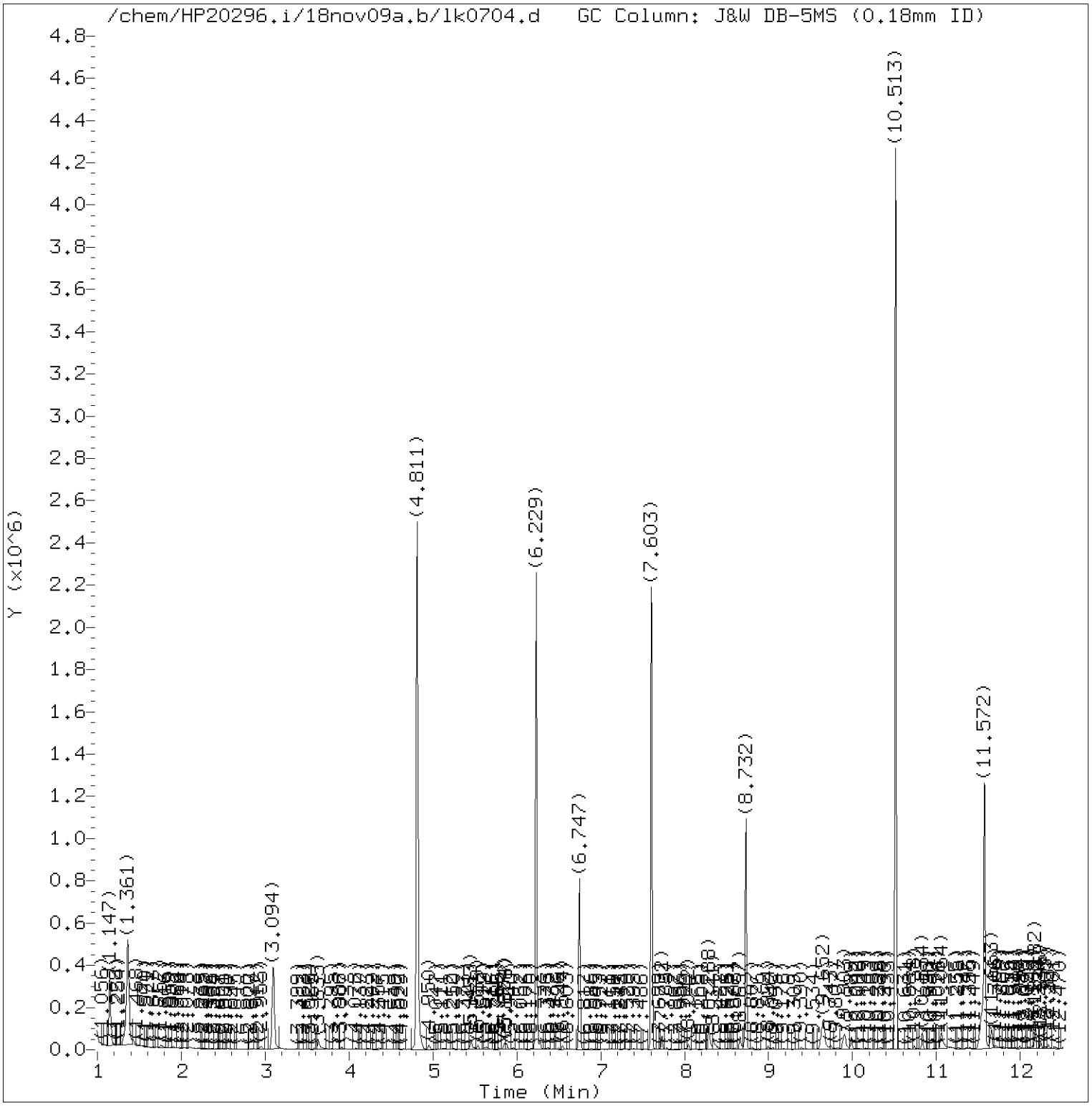
Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:06. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

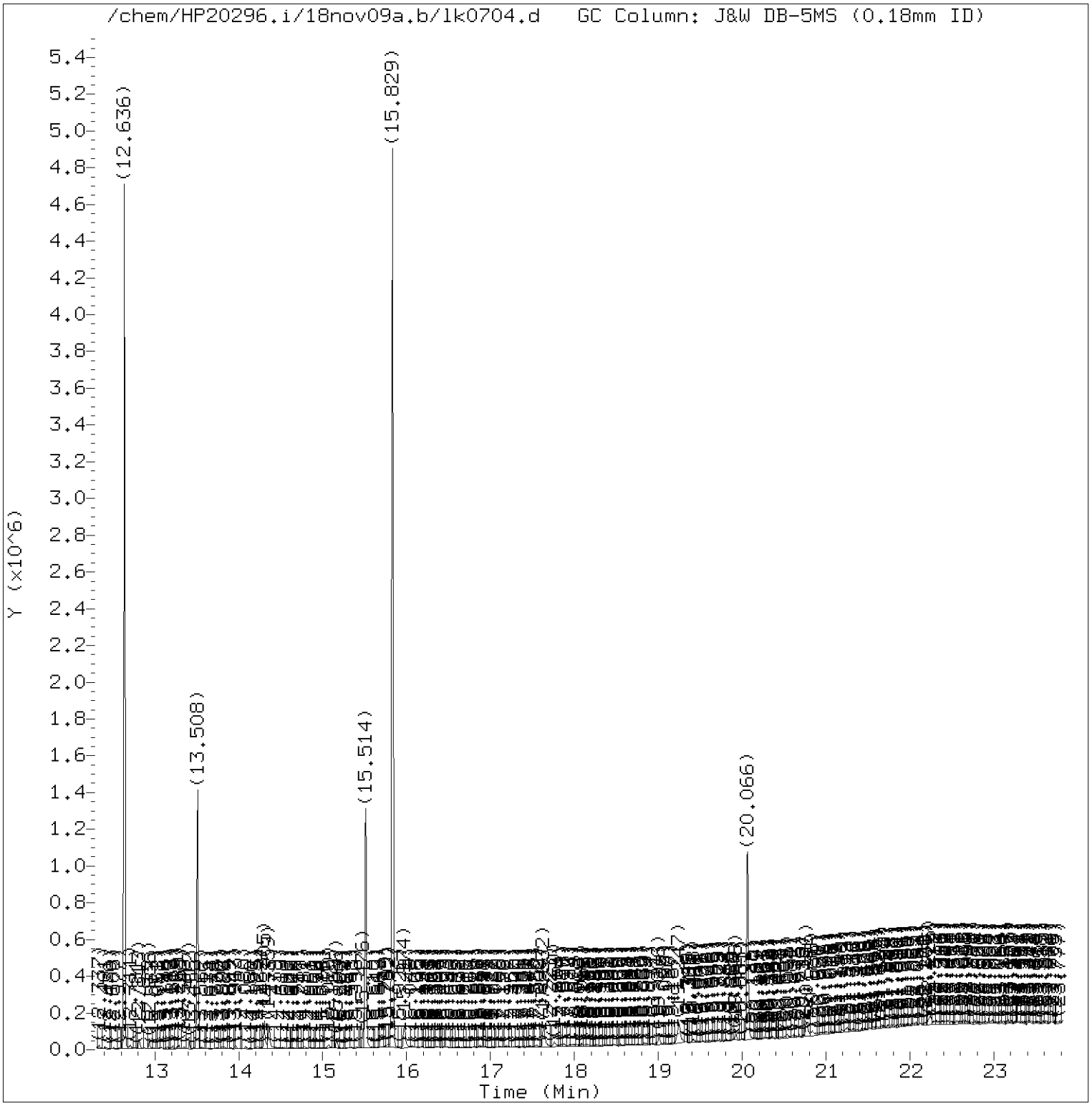
Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0704.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 19:37 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 18:18
Date, time and analyst ID of latest file update: 10-Nov-2018 09:19 knb25316

Sample Name: OR226 Lab Sample ID: 9885681

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:23.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0704.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 19:37 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 18:18
Date, time and analyst ID of latest file update: 10-Nov-2018 09:19 knb25316

Sample Name: OR226 Lab Sample ID: 9885681

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:23.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0704.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 19:37 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 18:18
Date, time and analyst ID of latest file update: 10-Nov-2018 09:19 knb25316

Sample Name: OR226 Lab Sample ID: 9885681

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.811	112	1006129	21.700
18)$Phenol-d6	(1)	6.229	99	979283	15.650
26)*1,4-Dichlorobenzene-d4	(1)	6.747	152	149780	5.000
45)$Nitrobenzene-d5	(2)	7.603	82	960786	16.433
68)*Naphthalene-d8	(2)	8.732	136	558447	5.000
96)$2-Fluorobiphenyl	(3)	10.513	172	1508881	16.175
118)*Acenaphthene-d10	(3)	11.572	164	279115	5.000
140)$2,4,6-Tribromophenol	(3)	12.636	330	432958	39.588
158)*Phenanthrene-d10	(4)	13.508	188	544645	5.000
180)*Pyrene-d10	(5)	15.514	212	573205	5.000
184)$Terphenyl-d14	(5)	15.829	244	1845043	20.052
218)*Perylene-d12	(6)	20.066	264	514808	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:23.
Target 3.5 esignature user ID: knb25316

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

OR3WD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885685

Sample wt/vol: 247 (g/mL)ML Lab File ID: lk0707.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR3WD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885685

Sample wt/vol: 247 (g/mL)ML Lab File ID: lk0707.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		14	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	J	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.3	J	
129-00-0	Pyrene		0.2	J	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.2	J	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.3	J	
207-08-9	Benzo(k)fluoranthene		0.1	J	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR3WD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885685

Sample wt/vol: 247 (g/mL)ML Lab File ID: lk0707.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.2	J	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	U	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.2	J	

FORM I SV-3

OR3WD

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

9885685

Data file: /chem/HP20296.i/18nov09a.b/lk0707.d
Data file Sample Info. Line: OR3WD;9885685;1;0;SAMPLE;;;
Injection date and time: **09-NOV-2018 21:03**
Instrument ID: **HP20296.i** Batch: **18312WAA**
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 20:35
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09a.b/lk0701.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 247 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.747	(-0.005)	1077	152	149810	(-4)	5.00	
68) Naphthalene-d8	8.732	(0.000)	1448	136	545656	(-3)	5.00	
118) Acenaphthene-d10	11.577	(0.000)	1980	164	281578	(-1)	5.00	
158) Phenanthrene-d10	13.508	(0.000)	2341	188	547959	(1)	5.00	
180) Pyrene-d10	15.514	(0.000)	2716	212	574378	(-4)	5.00	
218) Perylene-d12	20.065	(0.000)	3567	264	516561	(-13)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.811	(0.001)	112	997388	21.507	43%		10 - 85
18) Phenol-d6	(1)	6.228	(0.001)	99	997149	15.933	32%		10 - 72
45) Nitrobenzene-d5	(2)	7.608	(-0.001)	82	953802	16.696	67%		30 - 111
96) 2-Fluorobiphenyl	(3)	10.513	(0.000)	172	1497049	15.908	64%		39 - 105
140) 2,4,6-Tribromophenol	(3)	12.636	(0.000)	330	466094	42.245	84%		29 - 133
184) Terphenyl-d14	(5)	15.829	(0.000)	244	1694759	18.381	74%		27 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
19) Phenol	(1)				Not Detected					0.1
23) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
24) 2-Chlorophenol	(1)				Not Detected					0.1
25) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
27) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
29) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
32) 2-Methylphenol	(1)				Not Detected					0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
38) 4-Methylphenol	(1)				Not Detected					0.1
39) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
44) Hexachloroethane	(1)				Not Detected					0.3
46) Nitrobenzene	(2)				Not Detected					0.1
52) Isophorone	(2)				Not Detected					0.1
53) 2-Nitrophenol	(2)				Not Detected					0.8
55) 2,4-Dimethylphenol	(2)				Not Detected					0.8
57) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
62) 2,4-Dichlorophenol	(2)				Not Detected					0.1
65) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
69) Naphthalene	(2)				Not Detected					0.03
70) 4-Chloroaniline	(2)				Not Detected					1
74) Hexachlorobutadiene	(2)				Not Detected					0.1
83) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
86) 2-Methylnaphthalene	(2)				Not Detected					0.03
88) Hexachlorocyclopentadiene	(3)				Not Detected					1
93) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
95) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
99) 2-Chloronaphthalene	(3)				Not Detected					0.1

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Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov09a.b/lk0707.d
Injection date and time: **09-NOV-2018 21:03**
Data file Sample Info. Line: OR3WD;9885685;1;0;SAMPLE;;;
Instrument ID: **HP20296.i** Batch: **18312WAA**
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 20:35
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09a.b/lk0701.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

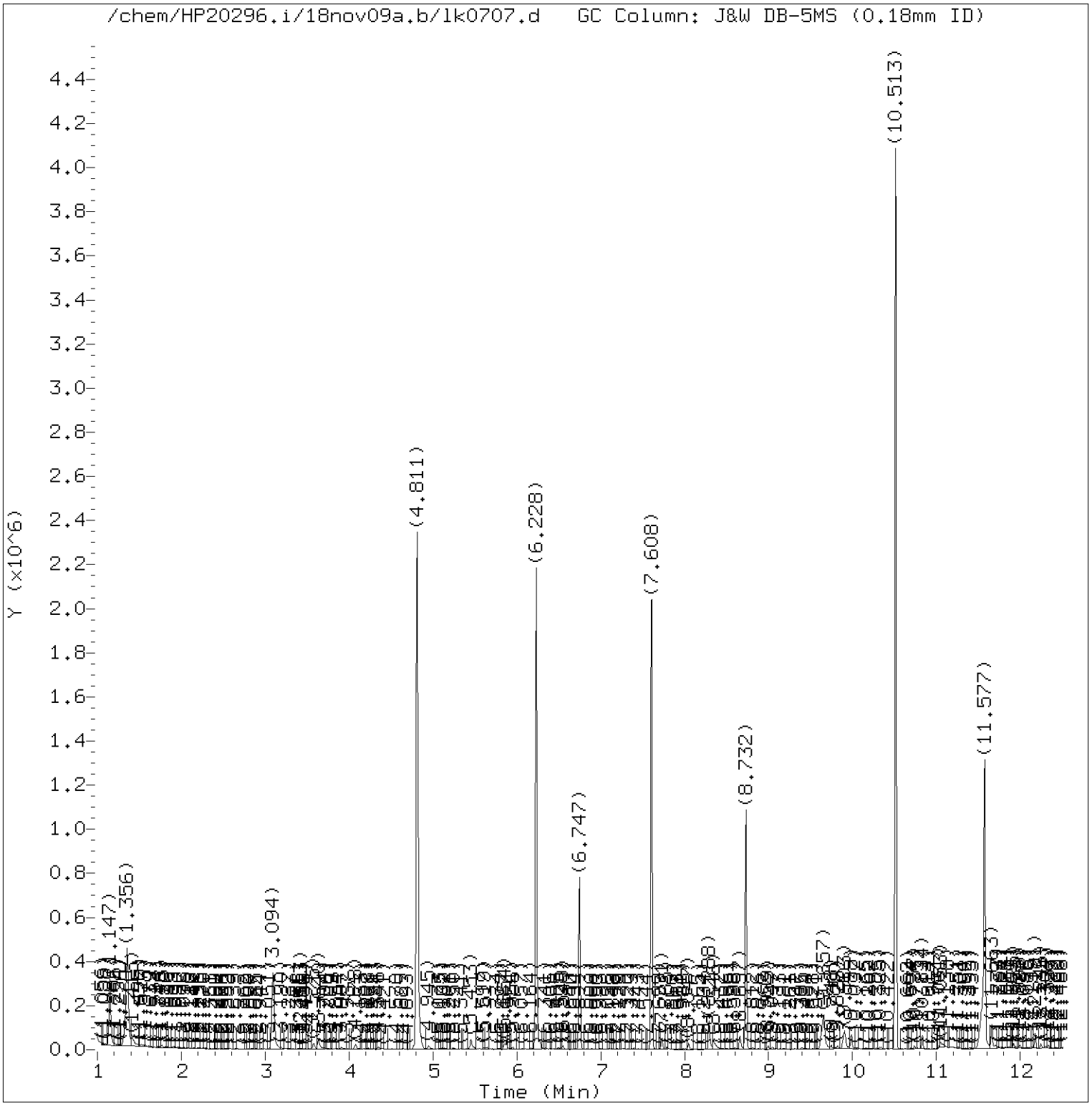
Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 247 ml Volume Injected (Vi): 1 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
104) 2-Nitroaniline	(3)			Not Detected					0.5
110) Dimethylphthalate	(3)			Not Detected					0.5
113) 2,6-Dinitrotoluene	(3)			Not Detected					0.1
114) Acenaphthylene	(3)			Not Detected					0.03
117) 3-Nitroaniline	(3)			Not Detected					0.8
119) Acenaphthene	(3)			Not Detected					0.03
120) 2,4-Dinitrophenol	(3)			Not Detected					4
121) 4-Nitrophenol	(3)			Not Detected					3
123) 2,4-Dinitrotoluene	(3)			Not Detected					0.3
124) Dibenzofuran	(3)			Not Detected					0.1
129) Diethylphthalate	(3)			Not Detected					0.5
131) Fluorene	(3)			Not Detected					0.03
132) 4-Chlorophenyl-phenylether	(3)			Not Detected					0.1
134) 4-Nitroaniline	(3)			Not Detected					0.2
135) 4,6-Dinitro-2-methylphenol	(4)			Not Detected					2
136) N-Nitrosodiphenylamine	(4)			Not Detected					0.2
148) 4-Bromophenyl-phenylether	(4)			Not Detected					0.1
150) Hexachlorobenzene	(4)			Not Detected					0.03
154) Pentachlorophenol	(4)			Not Detected					0.3
160) Phenanthrene	(4)	13.529(0.000)	178	4216	0.032	0.13		J	0.03
162) Anthracene	(4)			Not Detected					0.03
168) Carbazole	(4)			Not Detected					0.1
170) Di-n-butylphthalate	(4)			Not Detected					0.5
178) Fluoranthene	(4)	15.198(-0.000)	202	9501	0.066	0.27		J	0.03
182) Pyrene	(5)	15.540(-0.000)	202	8485	0.056	0.23		J	0.03
193) Butylbenzylphthalate	(5)			Not Detected					0.5
198) 3,3'-Dichlorobenzidine	(5)			Not Detected					0.8
200) Benzo(a)anthracene	(5)			Not Detected					0.03
201) Chrysene	(5)	17.621(0.000)	228	5665	0.042	0.17		J	0.03
204) bis(2-Ethylhexyl)phthalate	(5)			Not Detected					1
210) Di-n-octylphthalate	(6)			Not Detected					1
211) Benzo(b)fluoranthene	(6)	19.434(0.000)	252	8426	0.063	0.25		J	0.03
213) Benzo(k)fluoranthene	(6)	19.482(0.000)	252	3908	0.029	0.12		J	0.03
216) Benzo(a)pyrene	(6)	19.969(0.000)	252	5418	0.045	0.18		J	0.03
224) Indeno(1,2,3-cd)pyrene	(6)			Not Detected					0.03
225) Dibenz(a,h)anthracene	(6)			Not Detected					0.03
226) Benzo(g,h,i)perylene	(6)	22.066(0.000)	276	5869	0.047	0.19		J	0.03

Total number of targets = 64

Digitally signed by Kira N. Beck on 11/10/2018 at 09:24. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:06. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

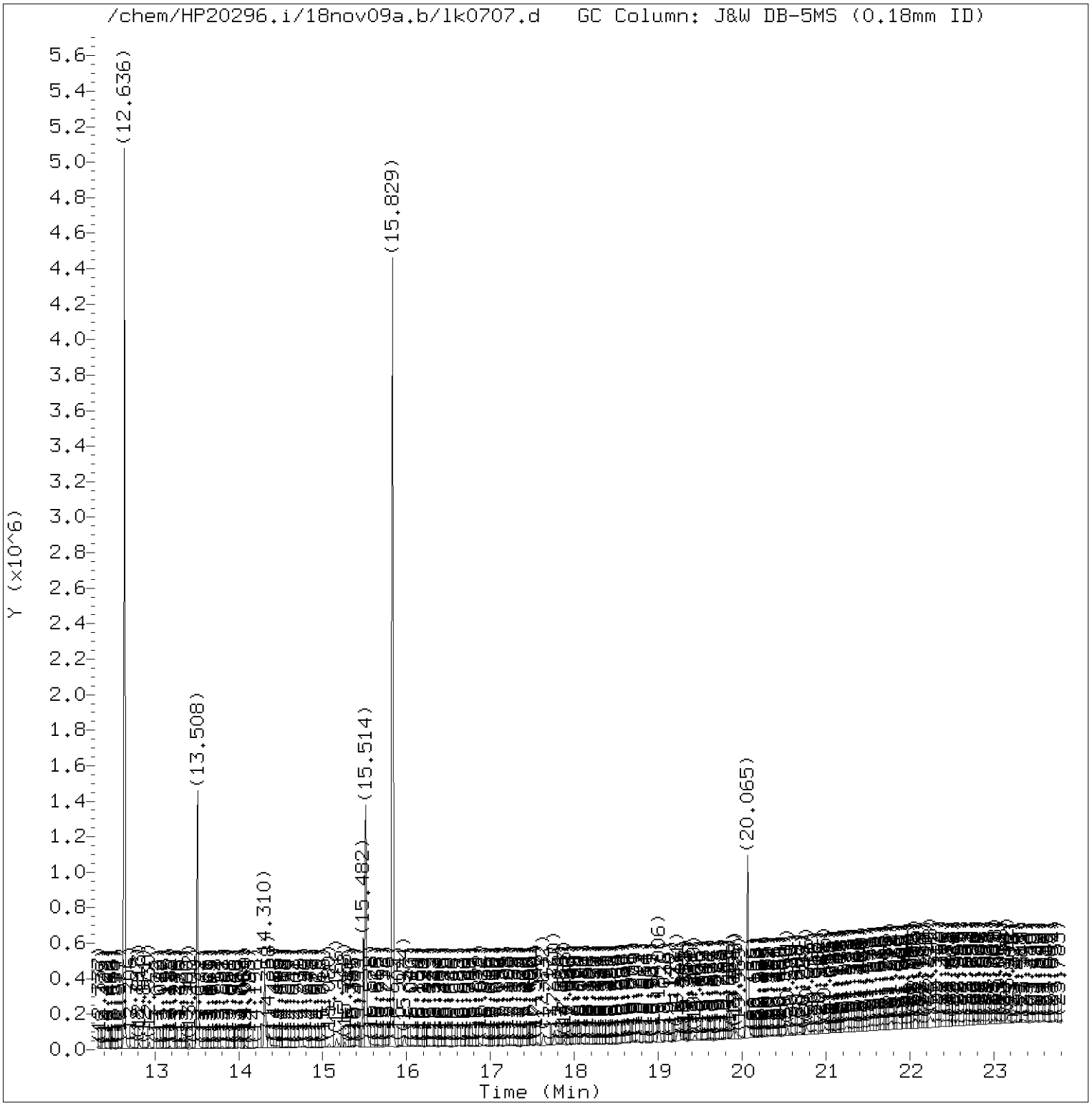
Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0707.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:03 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Sample Name: OR3WD Lab Sample ID: 9885685

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0707.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:03 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Sample Name: OR3WD Lab Sample ID: 9885685

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0707.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:03 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

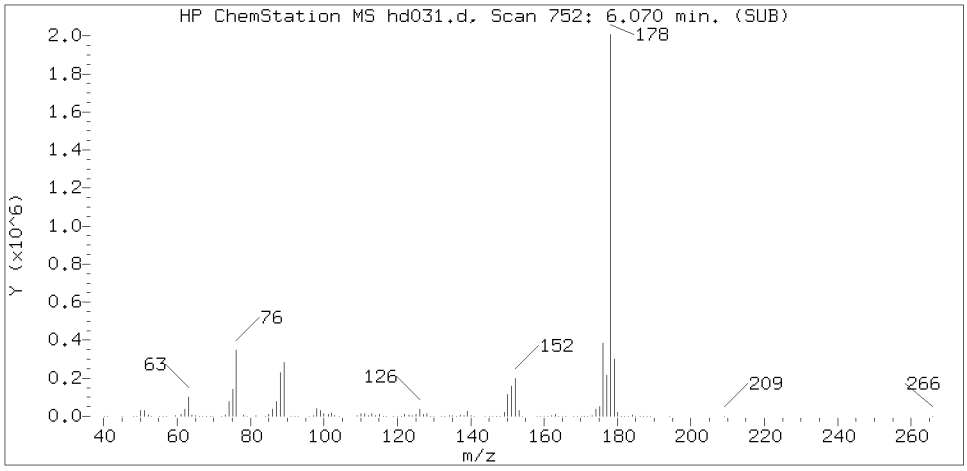
Sample Name: OR3WD Lab Sample ID: 9885685

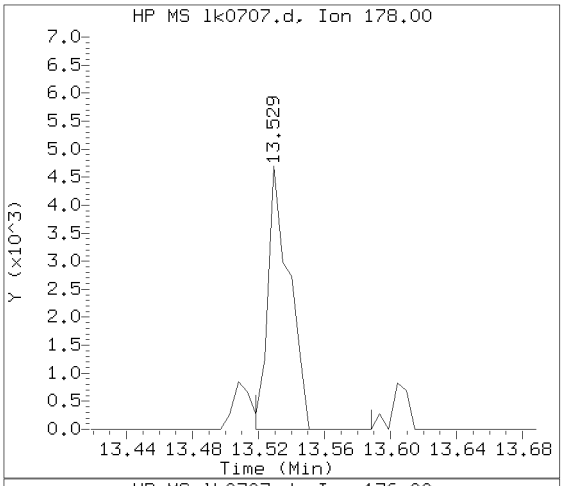
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.811	112	997388	21.507
18)$Phenol-d6	(1)	6.228	99	997149	15.933
26)*1,4-Dichlorobenzene-d4	(1)	6.747	152	149810	5.000
45)$Nitrobenzene-d5	(2)	7.608	82	953802	16.696
68)*Naphthalene-d8	(2)	8.732	136	545656	5.000
96)$2-Fluorobiphenyl	(3)	10.513	172	1497049	15.908
118)*Acenaphthene-d10	(3)	11.577	164	281578	5.000
140)$2,4,6-Tribromophenol	(3)	12.636	330	466094	42.245
158)*Phenanthrene-d10	(4)	13.508	188	547959	5.000
160) Phenanthrene	(4)	13.529	178	4216	0.032
178) Fluoranthene	(4)	15.198	202	9501	0.066
180)*Pyrene-d10	(5)	15.514	212	574378	5.000
182) Pyrene	(5)	15.540	202	8485	0.056
184)$Terphenyl-d14	(5)	15.829	244	1694759	18.381
201) Chrysene	(5)	17.621	228	5665	0.042
211) Benzo(b)fluoranthene	(6)	19.434	252	8426	0.063
213) Benzo(k)fluoranthene	(6)	19.482	252	3908	0.029
216) Benzo(a)pyrene	(6)	19.969	252	5418	0.045
218)*Perylene-d12	(6)	20.065	264	516561	5.000
226) Benzo(g,h,i)perylene	(6)	22.066	276	5869	0.047

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

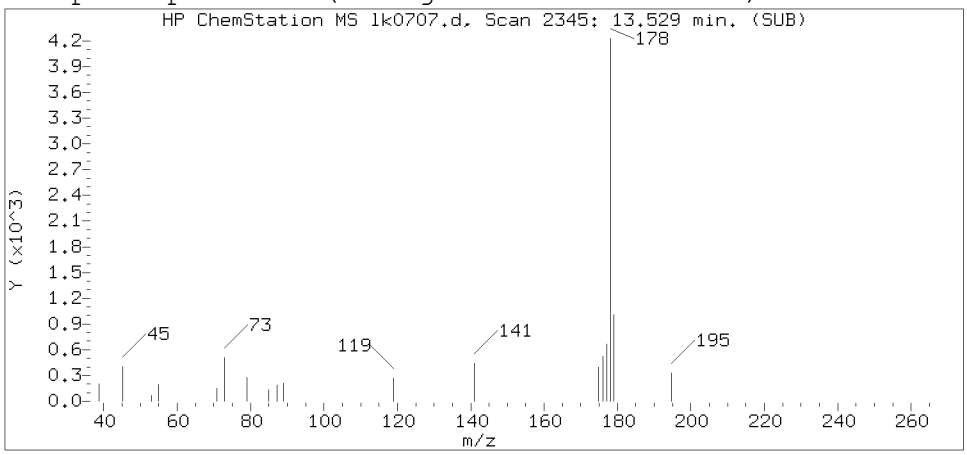
Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

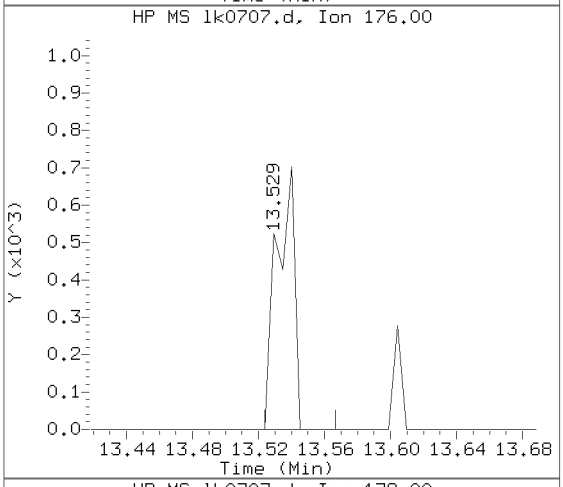
Reference Standard Spectrum for Phenanthrene



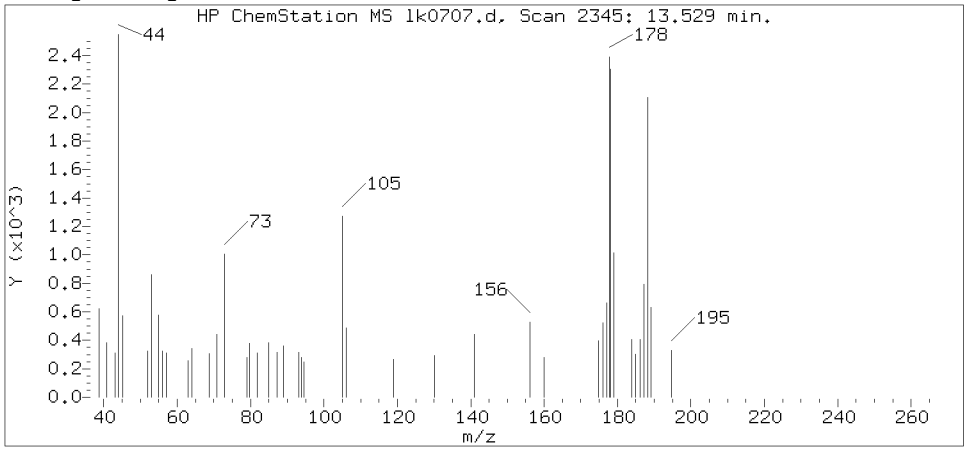


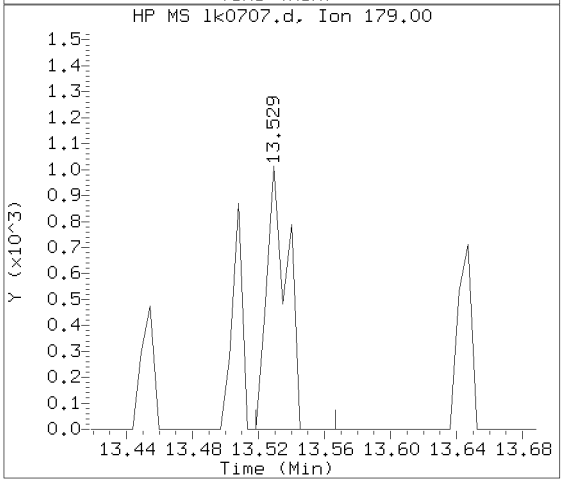
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0707.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:03 Analyst ID: art12405

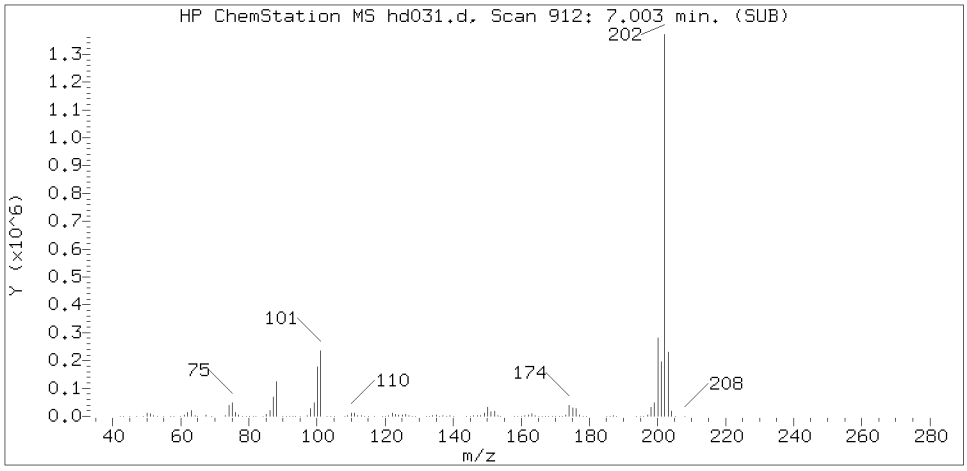
Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

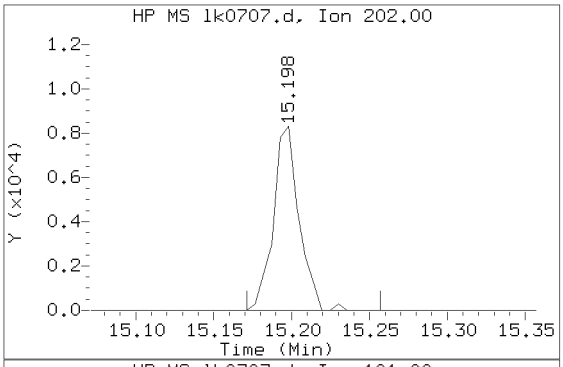
Sample Name: OR3WD Lab Sample ID: 9885685

Compound Number	: 160
Compound Name	: Phenanthrene
Scan Number	: 2345
Retention Time (minutes)	: 13.529
Relative Retention Time	: 0.00040
Quant Ion	: 178.00
Area (flag)	: 4216
On-column Amount (ng/ul)	: 0.0321

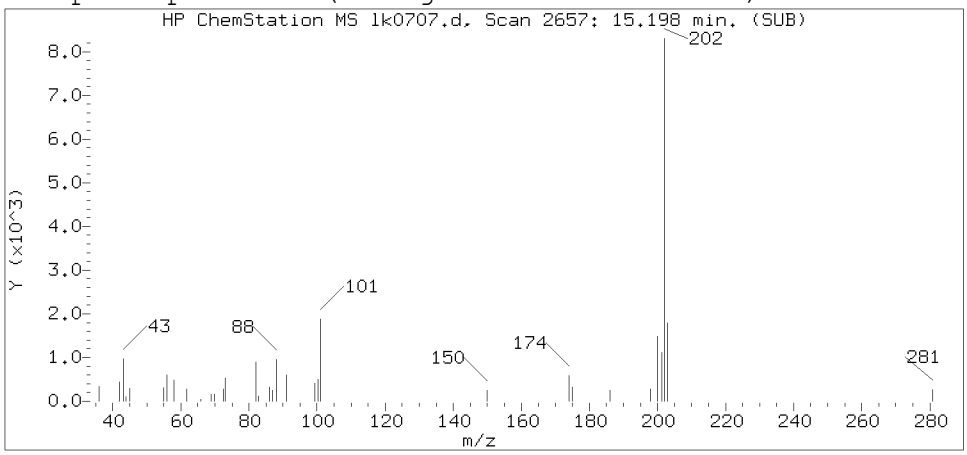
Digitally signed by Kira N. Beck on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

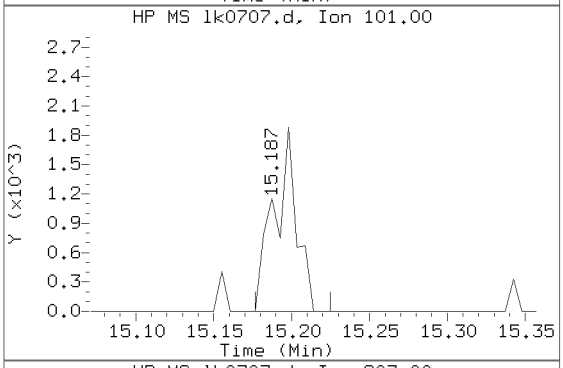
Reference Standard Spectrum for Fluoranthene

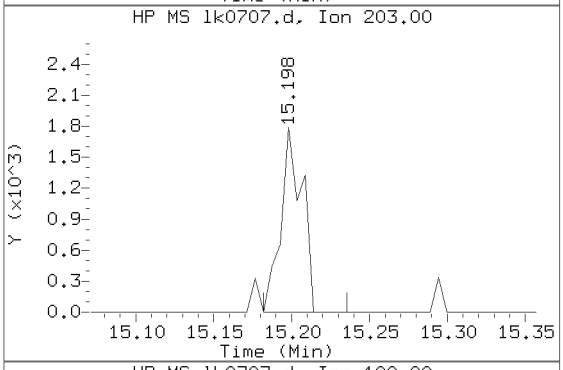




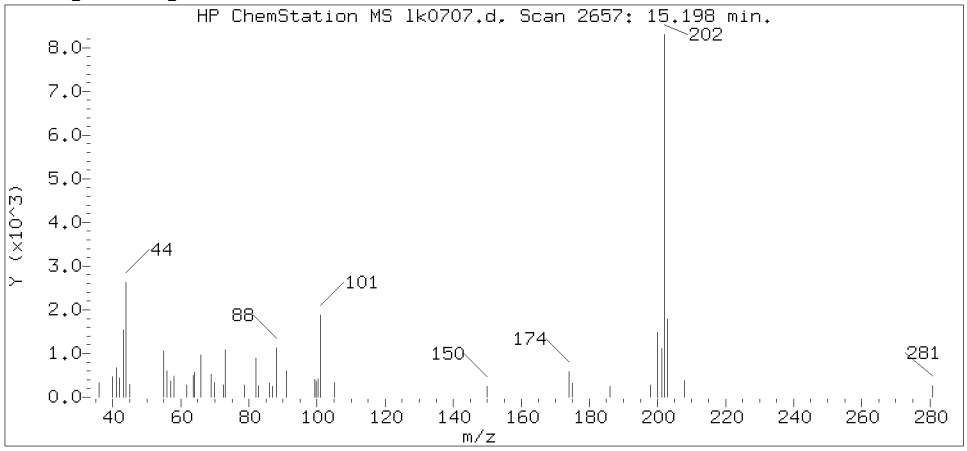
Sample Spectrum (Background Subtracted)

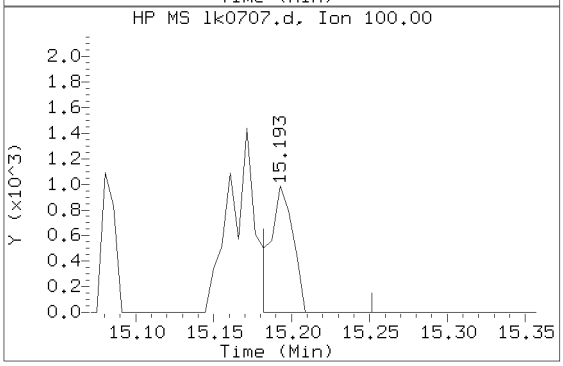






Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0707.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:03 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Sample Name: OR3WD Lab Sample ID: 9885685

Compound Number : 178
Compound Name : Fluoranthene
Scan Number : 2657
Retention Time (minutes) : 15.198
Relative Retention Time :-0.00000
Quant Ion : 202.00
Area (flag) : 9501
On-column Amount (ng/ul) : 0.0661

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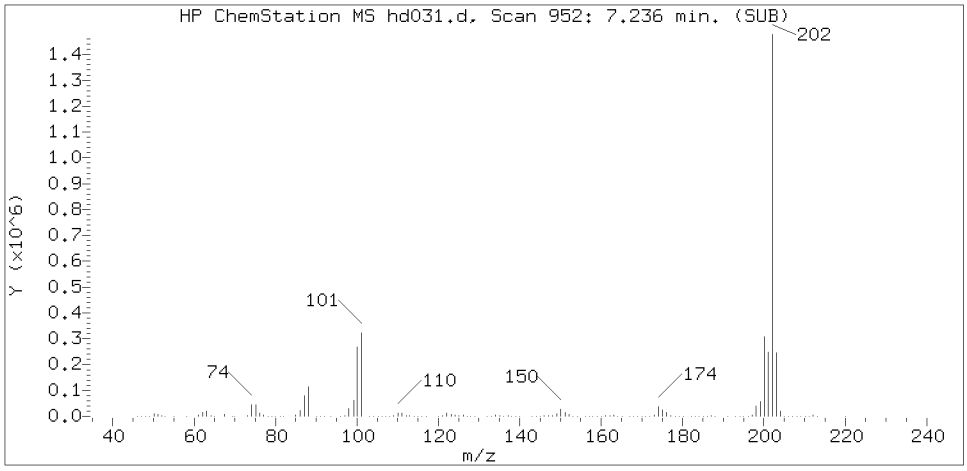
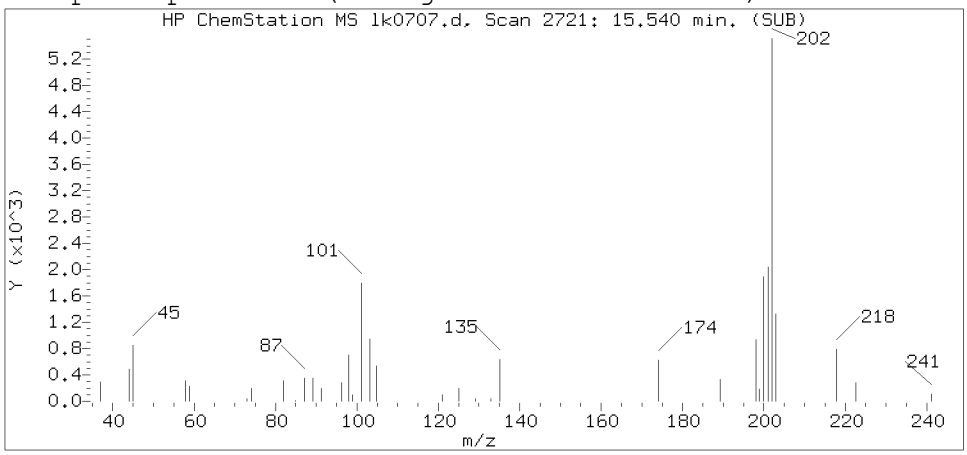
Target 3.5 esignature user ID: knb25316

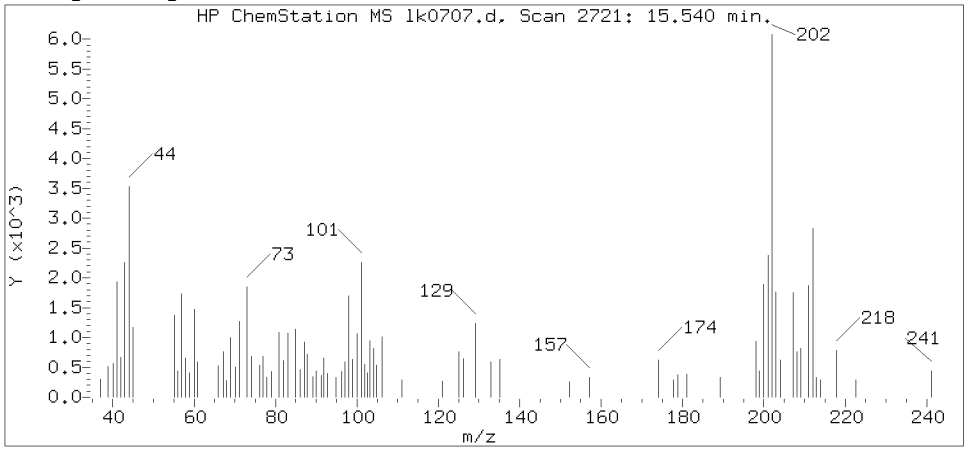
Reference Standard Spectrum for Pyrene

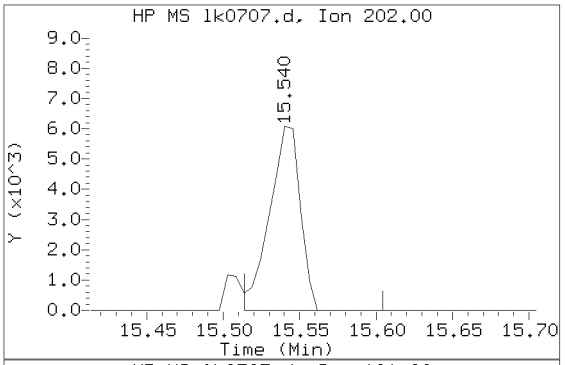


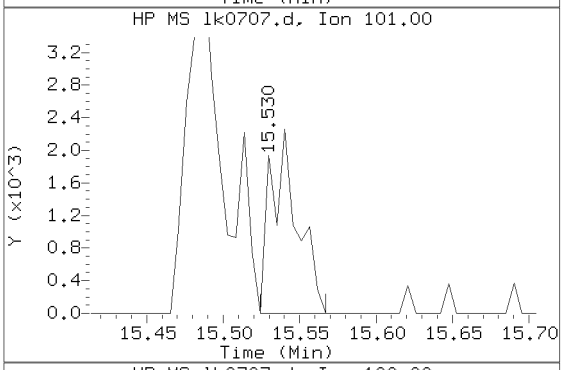
Sample Spectrum (Background Subtracted)

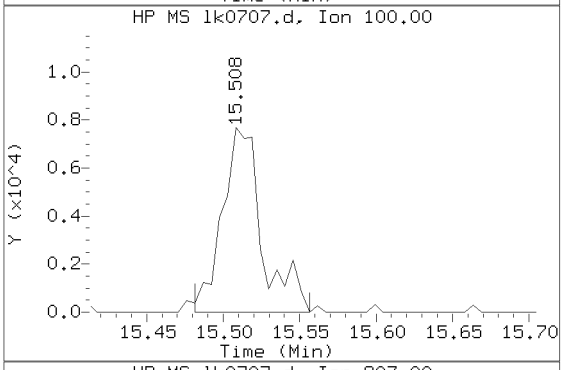


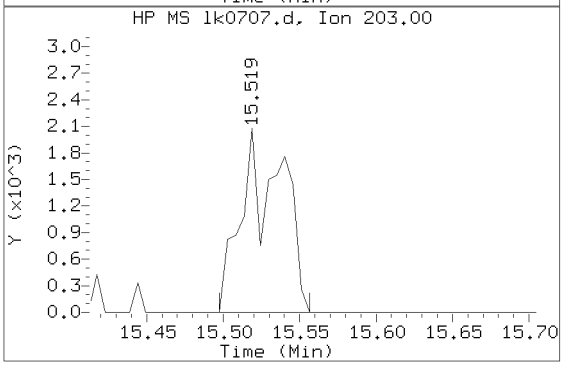
Sample Spectrum (Unaltered)











Data File: /chem/HP20296.i/18nov09a.b/lk0707.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:03 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Sample Name: OR3WD Lab Sample ID: 9885685

Compound Number	: 182
Compound Name	: Pyrene
Scan Number	: 2721
Retention Time (minutes)	: 15.540
Relative Retention Time	:-0.00000
Quant Ion	: 202.00
Area (flag)	: 8485
On-column Amount (ng/ul)	: 0.0560

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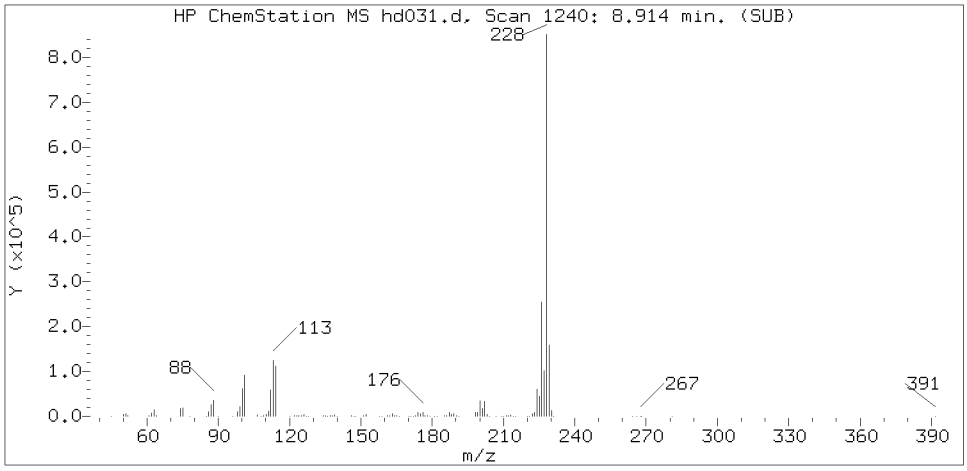
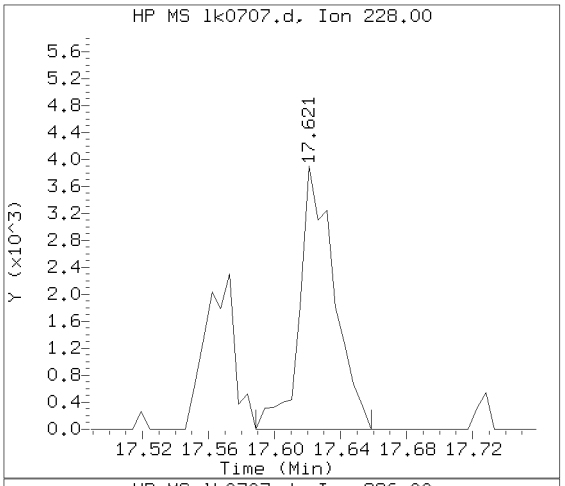
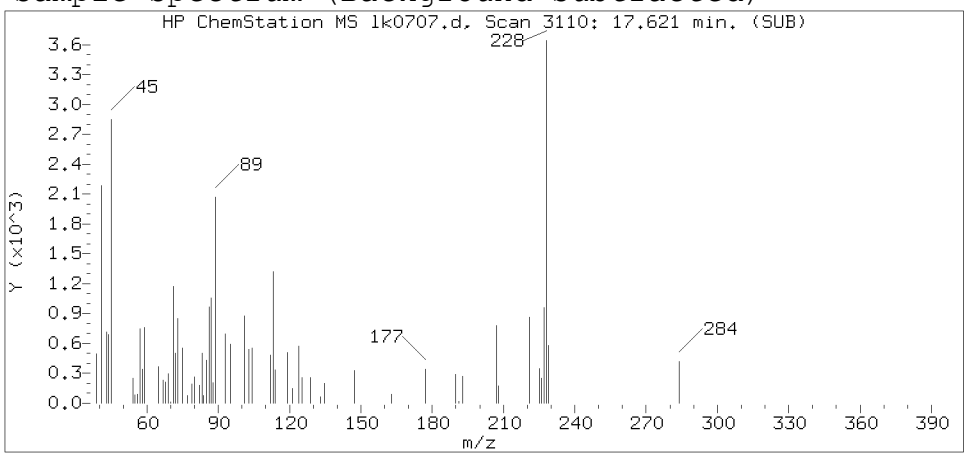
Target 3.5 esignature user ID: knb25316

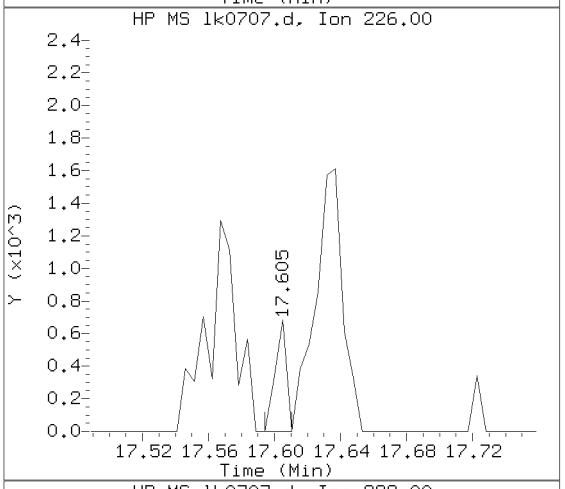
Reference Standard Spectrum for Chrysene



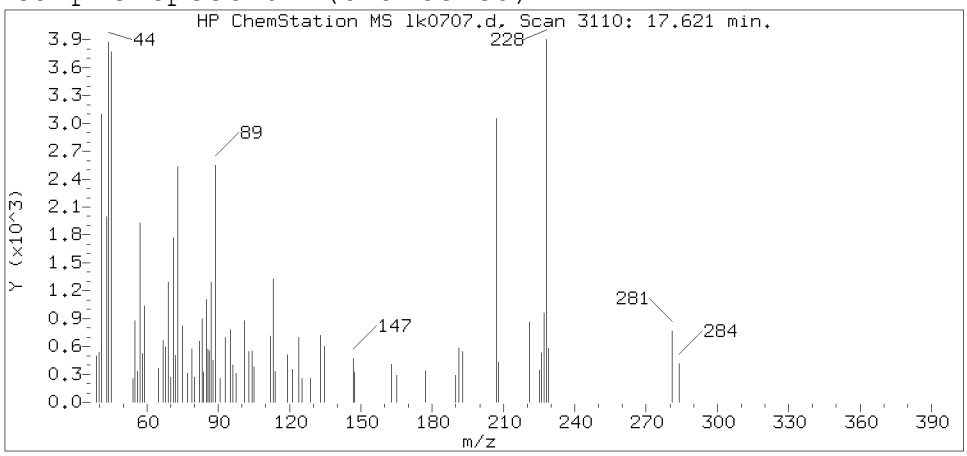


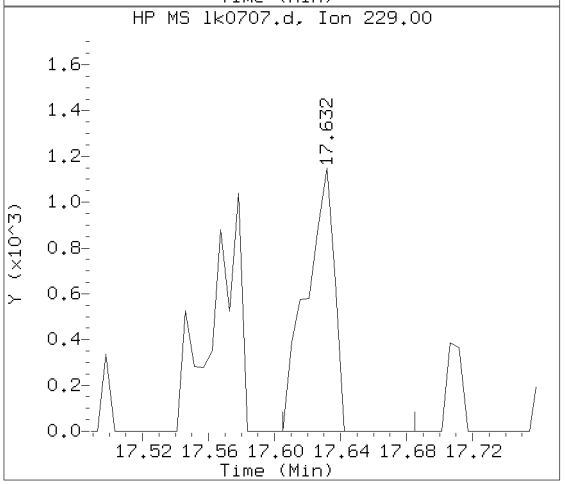
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0707.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:03 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Sample Name: OR3WD Lab Sample ID: 9885685

Compound Number	: 201
Compound Name	: Chrysene
Scan Number	: 3110
Retention Time (minutes)	: 17.621
Relative Retention Time	: 0.00068
Quant Ion	: 228.00
Area (flag)	: 5665
On-column Amount (ng/ul)	: 0.0416

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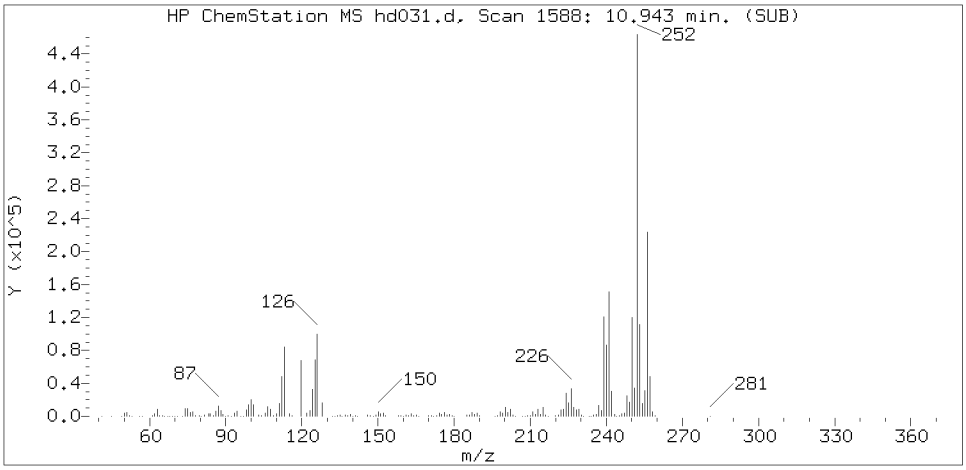
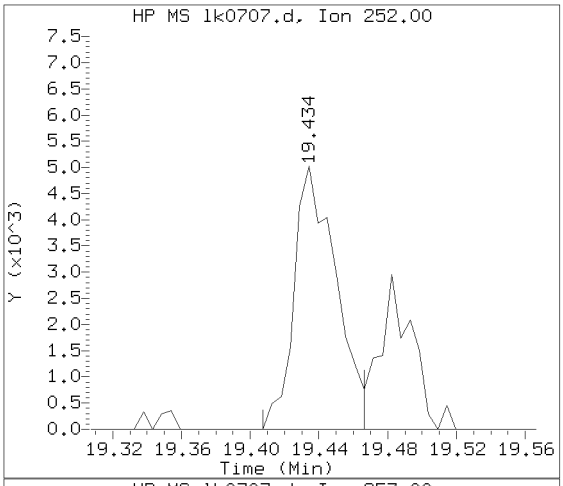
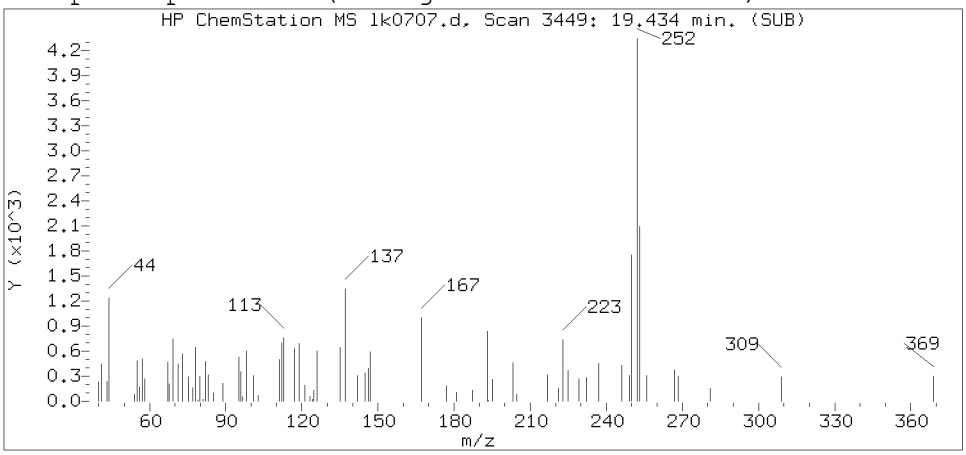
Target 3.5 esignature user ID: knb25316

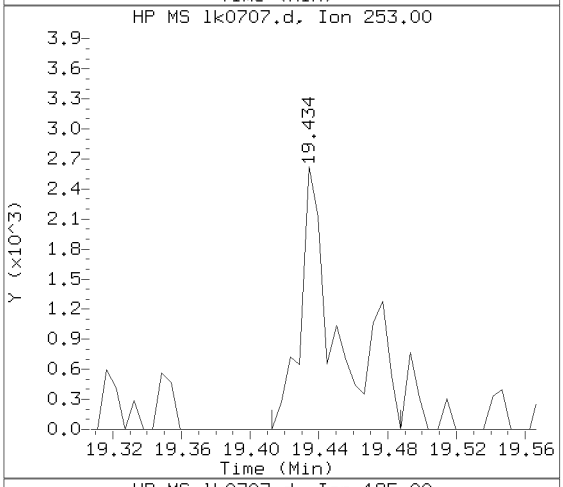
Reference Standard Spectrum for Benzo(b)fluoranthene



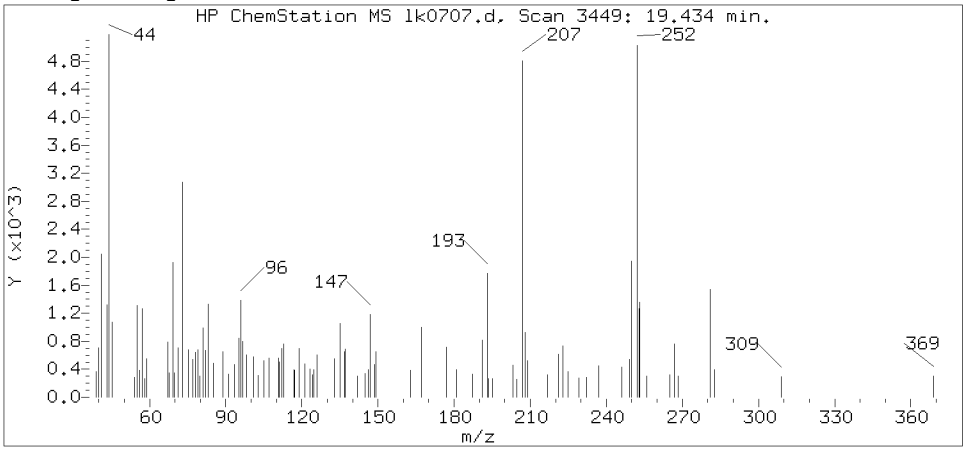


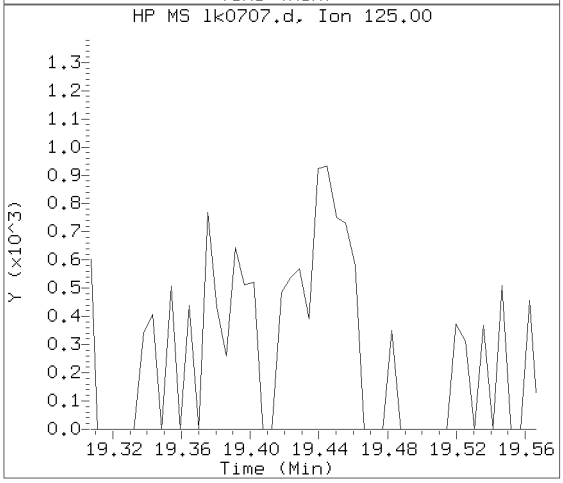
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0707.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:03 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Sample Name: OR3WD Lab Sample ID: 9885685

Compound Number	: 211
Compound Name	: Benzo(b)fluoranthene
Scan Number	: 3449
Retention Time (minutes)	: 19.434
Relative Retention Time	: 0.00053
Quant Ion	: 252.00
Area (flag)	: 8426
On-column Amount (ng/ul)	: 0.0626

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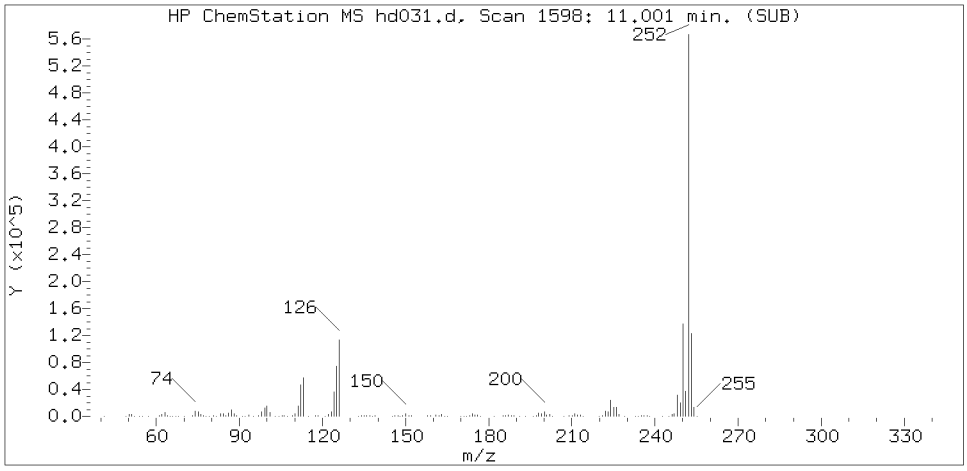
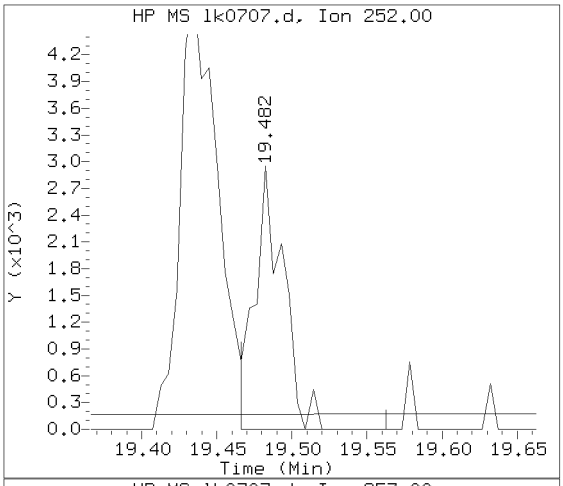
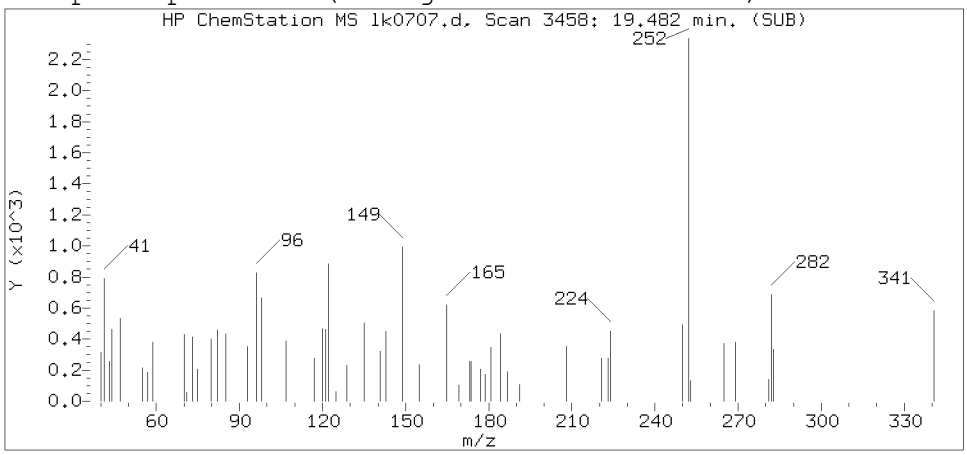
Target 3.5 esignature user ID: knb25316

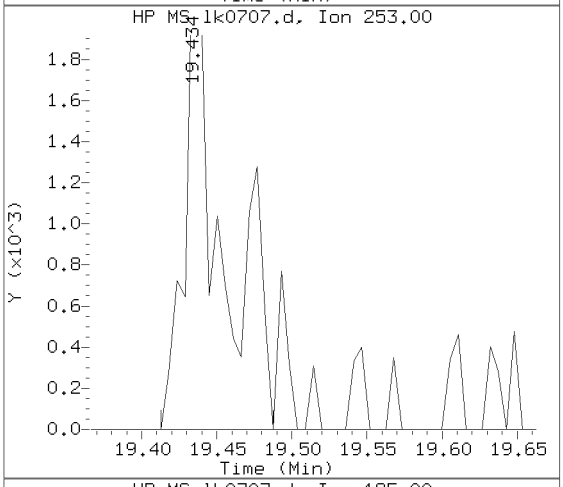
Reference Standard Spectrum for Benzo(k)fluoranthene



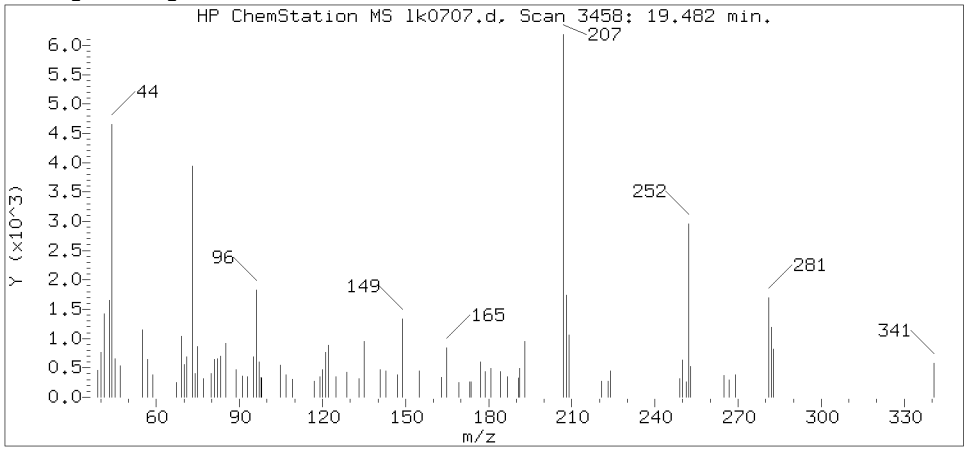


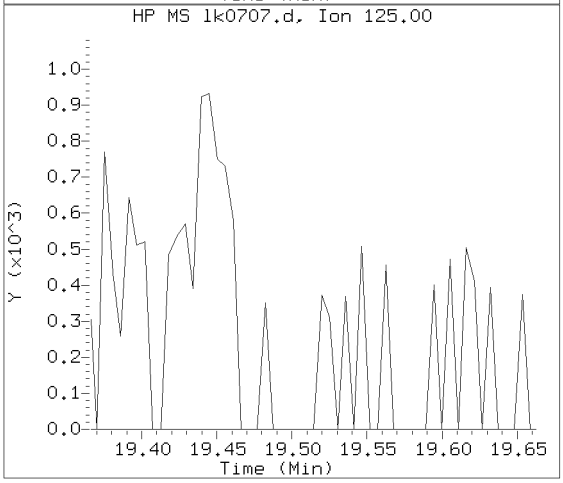
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0707.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:03 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Sample Name: OR3WD Lab Sample ID: 9885685

Compound Number	: 213
Compound Name	: Benzo(k)fluoranthene
Scan Number	: 3458
Retention Time (minutes)	: 19.482
Relative Retention Time	: 0.00053
Quant Ion	: 252.00
Area (flag)	: 3908
On-column Amount (ng/ul)	: 0.0288

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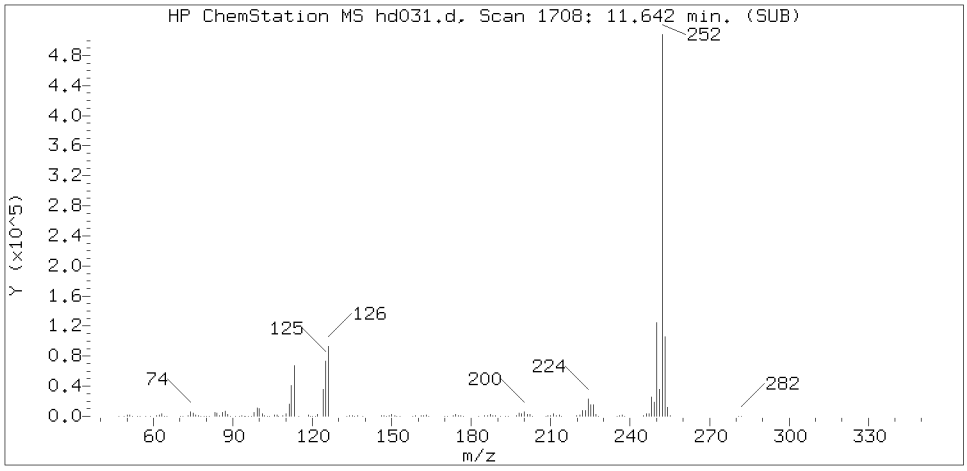
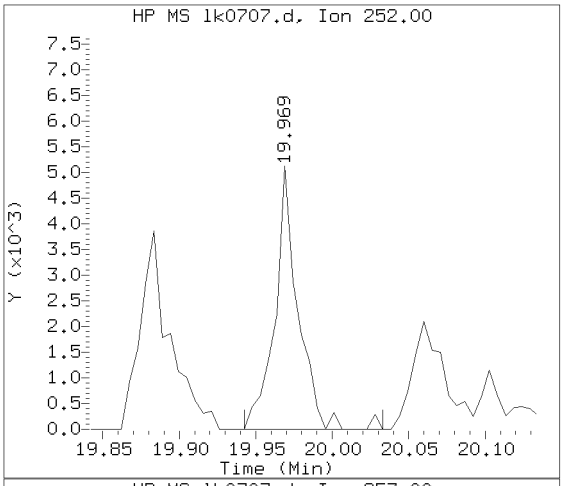
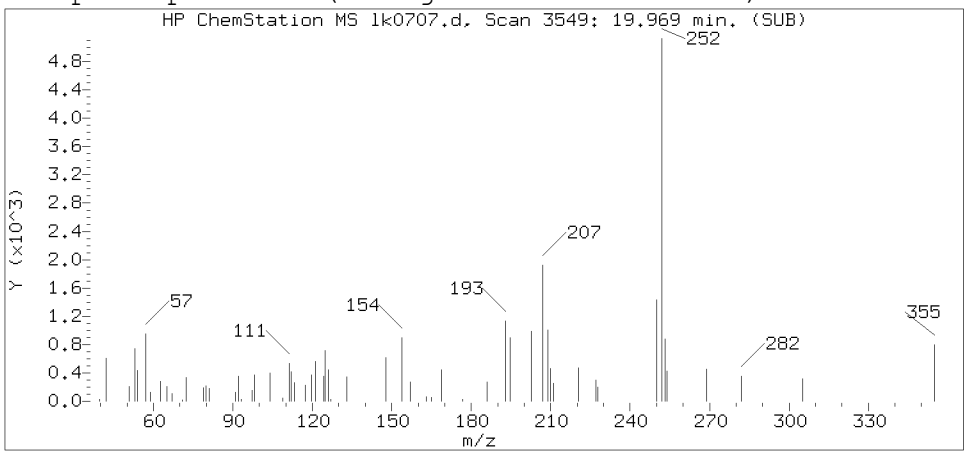
Target 3.5 esignature user ID: knb25316

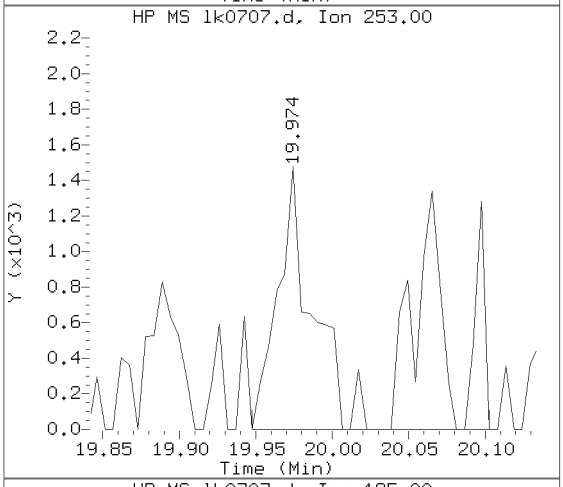
Reference Standard Spectrum for Benzo(a)pyrene



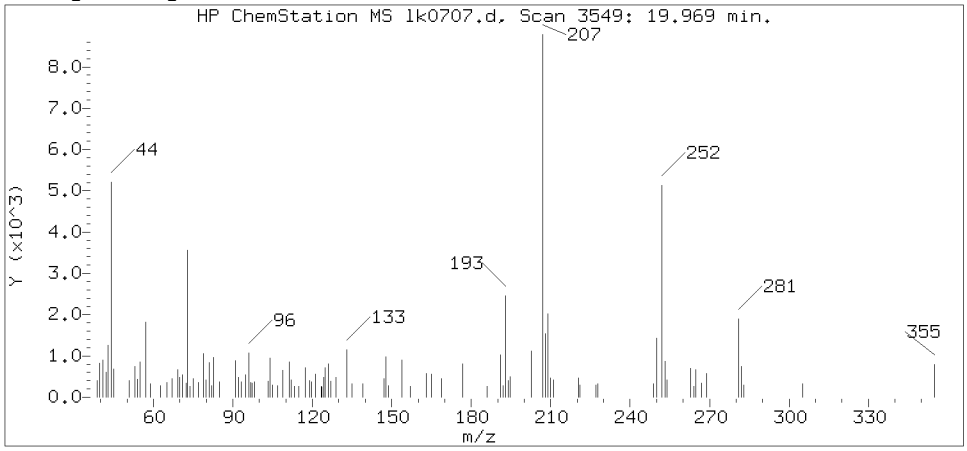


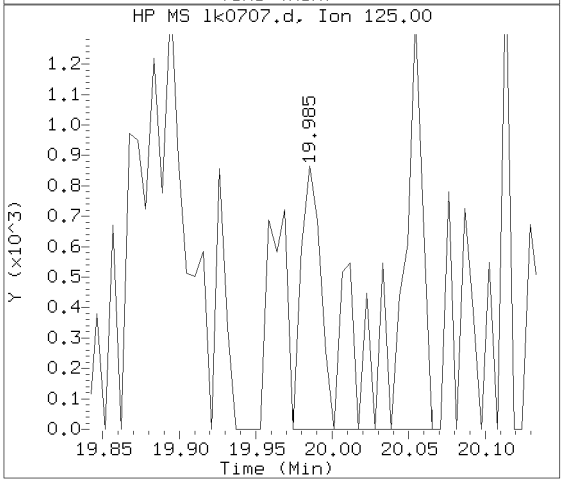
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0707.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:03 Analyst ID: art12405

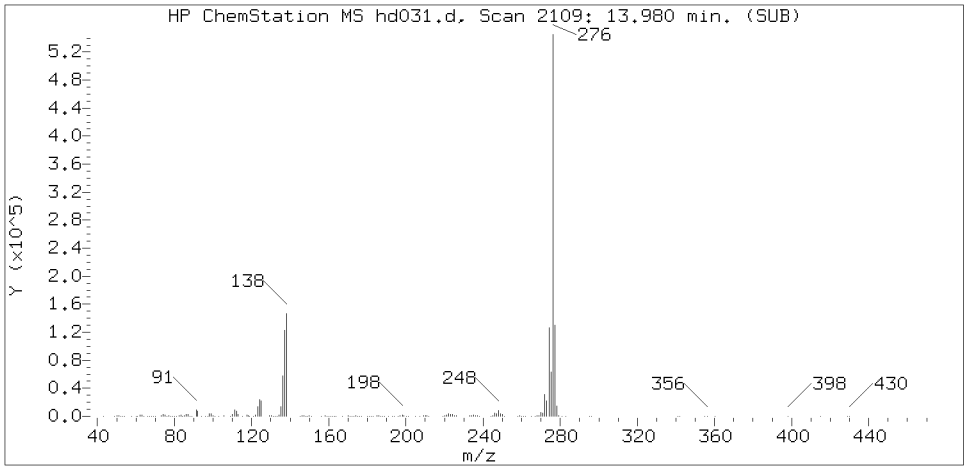
Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

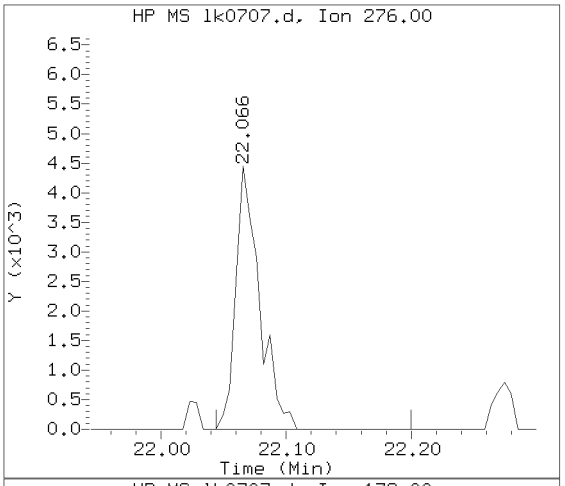
Sample Name: OR3WD Lab Sample ID: 9885685

Compound Number	: 216
Compound Name	: Benzo(a)pyrene
Scan Number	: 3549
Retention Time (minutes)	: 19.969
Relative Retention Time	: 0.00000
Quant Ion	: 252.00
Area (flag)	: 5418
On-column Amount (ng/ul)	: 0.0451

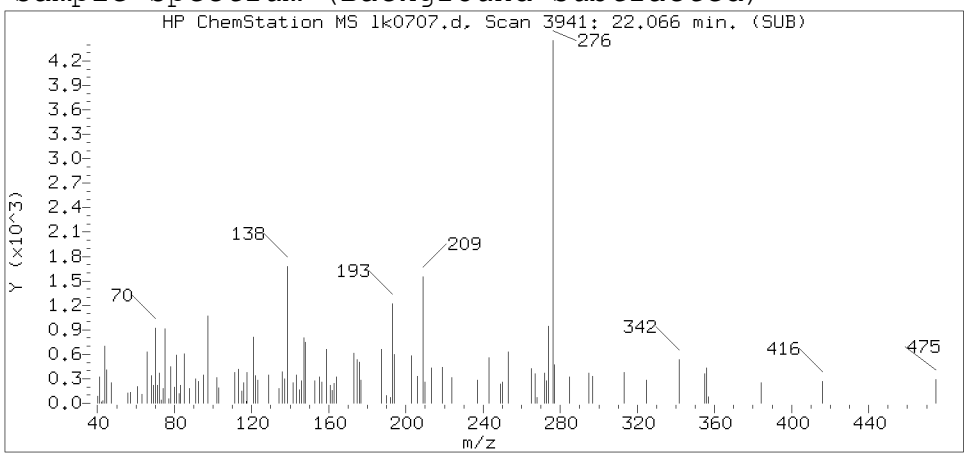
Digitally signed by Kira N. Beck on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

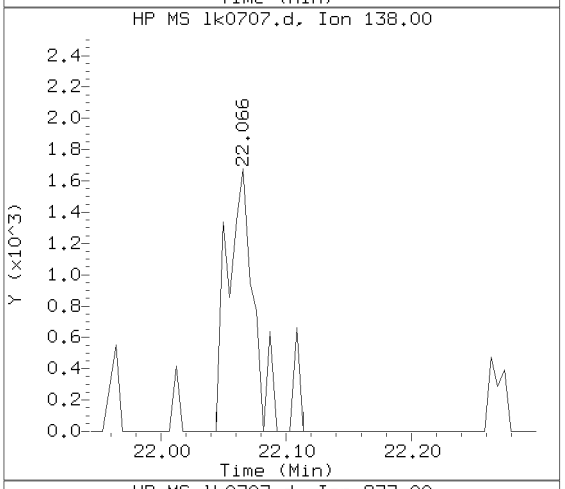
Reference Standard Spectrum for Benzo(g,h,i)perylene



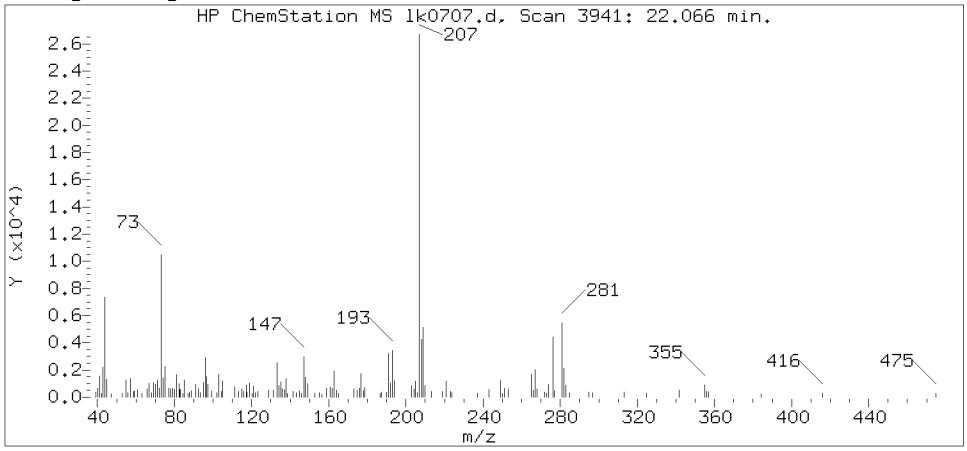


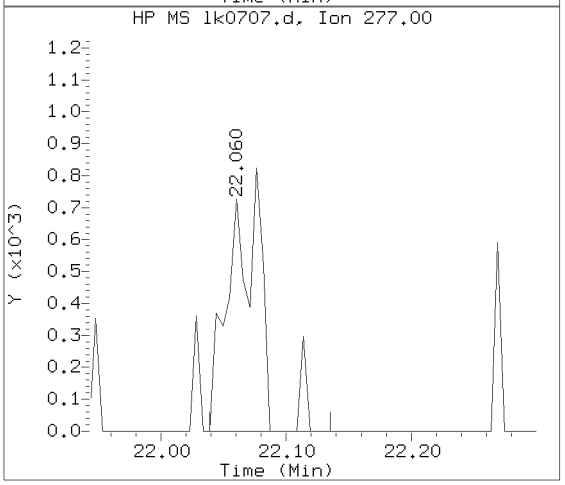
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0707.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:03 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Sample Name: OR3WD Lab Sample ID: 9885685

Compound Number : 226
Compound Name : Benzo(g,h,i)perylene
Scan Number : 3941
Retention Time (minutes) : 22.066
Relative Retention Time : 0.00080
Quant Ion : 276.00
Area (flag) : 5869
On-column Amount (ng/ul) : 0.0475

Digitally signed by Kira N. Beck on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR365

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885686

Sample wt/vol: 239 (g/mL)ML Lab File ID: lk0708.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			0.5	U
111-44-4	bis(2-Chloroethyl)ether			0.5	U
95-57-8	2-Chlorophenol			0.5	U
541-73-1	1,3-Dichlorobenzene			0.5	U
106-46-7	1,4-Dichlorobenzene			0.5	U
95-50-1	1,2-Dichlorobenzene			0.5	U
95-48-7	2-Methylphenol			0.5	U
108-60-1	2,2'-oxybis(1-Chloropropane)			0.5	U
106-44-5	4-Methylphenol			0.5	U
621-64-7	N-Nitroso-di-n-propylamine			0.7	U
67-72-1	Hexachloroethane			1	U
98-95-3	Nitrobenzene			0.5	U
78-59-1	Isophorone			0.5	U
88-75-5	2-Nitrophenol			3	U
105-67-9	2,4-Dimethylphenol			3	U
111-91-1	bis(2-Chloroethoxy)methane			0.5	U
120-83-2	2,4-Dichlorophenol			0.5	U
120-82-1	1,2,4-Trichlorobenzene			0.5	U
91-20-3	Naphthalene			0.1	U
106-47-8	4-Chloroaniline			4	U
87-68-3	Hexachlorobutadiene			0.5	U
59-50-7	4-Chloro-3-methylphenol			0.5	U
91-57-6	2-Methylnaphthalene			0.1	U
77-47-4	Hexachlorocyclopentadiene			5	U
88-06-2	2,4,6-Trichlorophenol			0.5	U
95-95-4	2,4,5-Trichlorophenol			0.5	U
91-58-7	2-Chloronaphthalene			0.4	U
88-74-4	2-Nitroaniline			2	U
131-11-3	Dimethylphthalate			2	U
606-20-2	2,6-Dinitrotoluene			0.5	U

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR365

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885686

Sample wt/vol: 239 (g/mL)ML Lab File ID: lk0708.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene		0.1	U	
99-09-2	3-Nitroaniline		3	U	
83-32-9	Acenaphthene		0.1	U	
51-28-5	2,4-Dinitrophenol		15	U	
100-02-7	4-Nitrophenol		10	U	
121-14-2	2,4-Dinitrotoluene		1	U	
132-64-9	Dibenzofuran		0.5	U	
84-66-2	Diethylphthalate		2	U	
86-73-7	Fluorene		0.1	U	
7005-72-3	4-Chlorophenyl-phenylether		0.5	U	
100-01-6	4-Nitroaniline		0.9	U	
534-52-1	4,6-Dinitro-2-methylphenol		8	U	
86-30-6	N-Nitrosodiphenylamine		0.7	U	
101-55-3	4-Bromophenyl-phenylether		0.5	U	
118-74-1	Hexachlorobenzene		0.1	U	
87-86-5	Pentachlorophenol		1	U	
85-01-8	Phenanthrene		0.1	U	
120-12-7	Anthracene		0.1	U	
86-74-8	Carbazole		0.5	U	
84-74-2	Di-n-butylphthalate		2	U	
206-44-0	Fluoranthene		0.3	J	
129-00-0	Pyrene		0.3	J	
85-68-7	Butylbenzylphthalate		2	U	
91-94-1	3,3'-Dichlorobenzidine		3	U	
56-55-3	Benzo(a)anthracene		0.1	U	
218-01-9	Chrysene		0.1	J	
117-81-7	bis(2-Ethylhexyl)phthalate		5	U	
117-84-0	Di-n-octylphthalate		5	U	
205-99-2	Benzo(b)fluoranthene		0.2	J	
207-08-9	Benzo(k)fluoranthene		0.1	U	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR365

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885686

Sample wt/vol: 239 (g/mL)ML Lab File ID: lk0708.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		0.2	J	
193-39-5	Indeno(1,2,3-cd)pyrene		0.1	J	
53-70-3	Dibenz(a,h)anthracene		0.1	U	
191-24-2	Benzo(g,h,i)perylene		0.1	J	

FORM I SV-3

OR365 Lancaster Laboratories, Inc. 9885686
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/18nov09a.b/lk0708.d Injection date and time: **09-NOV-2018 21:32**
Data file Sample Info. Line: OR365;9885686;1;0;SAMPLE;;; Instrument ID: **HP20296.i** Batch: **18312WAA**
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 20:35
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09a.b/lk0701.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 239 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.747	(-0.005)	1077	152	159756	(3)	5.00	
68) Naphthalene-d8	8.732	(0.000)	1448	136	572880	(2)	5.00	
118) Acenaphthene-d10	11.577	(0.000)	1980	164	295368	(4)	5.00	
158) Phenanthrene-d10	13.508	(0.000)	2341	188	574197	(5)	5.00	
180) Pyrene-d10	15.514	(0.000)	2716	212	594386	(0)	5.00	
218) Perylene-d12	20.065	(0.000)	3567	264	539256	(-9)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.811	(0.001)	112	1093455	22.110	44%		10 - 85
18) Phenol-d6	(1)	6.234	(0.000)	99	1041349	15.603	31%		10 - 72
45) Nitrobenzene-d5	(2)	7.609	(-0.001)	82	1032397	17.213	69%		30 - 111
96) 2-Fluorobiphenyl	(3)	10.518	(0.000)	172	1588513	16.092	64%		39 - 105
140) 2,4,6-Tribromophenol	(3)	12.636	(0.000)	330	460425	39.783	80%		29 - 133
184) Terphenyl-d14	(5)	15.829	(0.000)	244	1512249	15.850	63%		27 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
19) Phenol	(1)				Not Detected					0.1
23) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
24) 2-Chlorophenol	(1)				Not Detected					0.1
25) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
27) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
29) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
32) 2-Methylphenol	(1)				Not Detected					0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
38) 4-Methylphenol	(1)				Not Detected					0.1
39) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
44) Hexachloroethane	(1)				Not Detected					0.3
46) Nitrobenzene	(2)				Not Detected					0.1
52) Isophorone	(2)				Not Detected					0.1
53) 2-Nitrophenol	(2)				Not Detected					0.8
55) 2,4-Dimethylphenol	(2)				Not Detected					0.8
57) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
62) 2,4-Dichlorophenol	(2)				Not Detected					0.1
65) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
69) Naphthalene	(2)				Not Detected					0.03
70) 4-Chloroaniline	(2)				Not Detected					1
74) Hexachlorobutadiene	(2)				Not Detected					0.1
83) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
86) 2-Methylnaphthalene	(2)				Not Detected					0.03
88) Hexachlorocyclopentadiene	(3)				Not Detected					1
93) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
95) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
99) 2-Chloronaphthalene	(3)				Not Detected					0.1

Digitally signed by Kira N. Beck on 11/10/2018 at 09:24. Target 3.5 esignature user ID: knb25316

Data file: /chem/HP20296.i/18nov09a.b/lk0708.d Injection date and time: **09-NOV-2018 21:32**
Data file Sample Info. Line: OR365;9885686;1;0;SAMPLE;;; Instrument ID: **HP20296.i** Batch: **18312WAA**
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 20:35
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09a.b/lk0701.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 239 ml Volume Injected (Vi): 1 ul

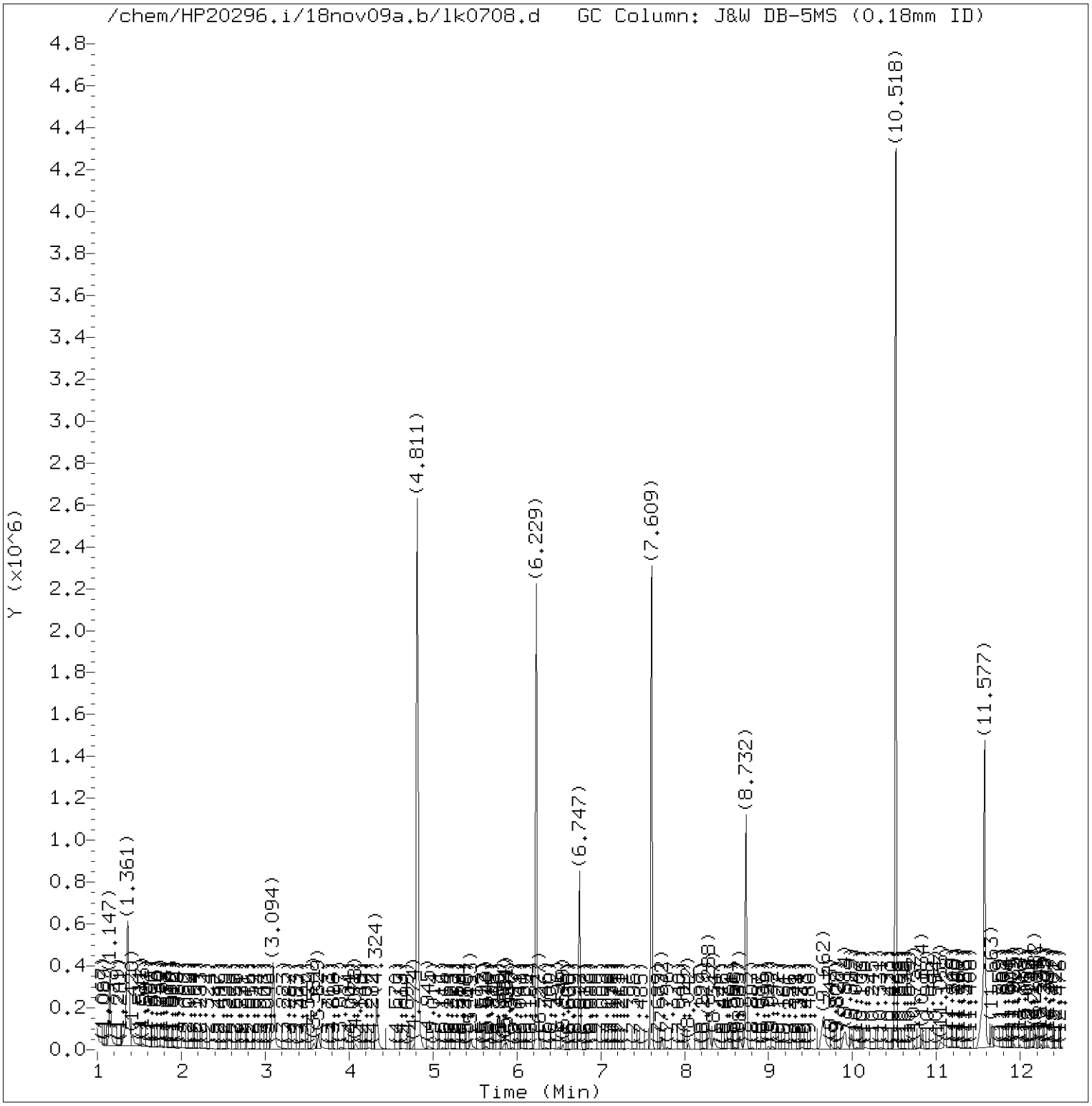
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
104) 2-Nitroaniline	(3)			Not Detected					0.5
110) Dimethylphthalate	(3)			Not Detected					0.5
113) 2,6-Dinitrotoluene	(3)			Not Detected					0.1
114) Acenaphthylene	(3)			Not Detected					0.03
117) 3-Nitroaniline	(3)			Not Detected					0.8
119) Acenaphthene	(3)			Not Detected					0.03
120) 2,4-Dinitrophenol	(3)			Not Detected					4
121) 4-Nitrophenol	(3)			Not Detected					3
123) 2,4-Dinitrotoluene	(3)			Not Detected					0.3
124) Dibenzofuran	(3)			Not Detected					0.1
129) Diethylphthalate	(3)			Not Detected					0.5
131) Fluorene	(3)			Not Detected					0.03
132) 4-Chlorophenyl-phenylether	(3)			Not Detected					0.1
134) 4-Nitroaniline	(3)			Not Detected					0.2
135) 4,6-Dinitro-2-methylphenol	(4)			Not Detected					2
136) N-Nitrosodiphenylamine	(4)			Not Detected					0.2
148) 4-Bromophenyl-phenylether	(4)			Not Detected					0.1
150) Hexachlorobenzene	(4)			Not Detected					0.03
154) Pentachlorophenol	(4)			Not Detected					0.3
160) Phenanthrene	(4)			Not Detected					0.03
162) Anthracene	(4)			Not Detected					0.03
168) Carbazole	(4)			Not Detected					0.1
170) Di-n-butylphthalate	(4)			Not Detected					0.5
178) Fluoranthene	(4)	15.193(0.000)	202	9682	0.064	0.27		J	0.03
182) Pyrene	(5)	15.540(-0.000)	202	9446	0.060	0.25		J	0.03
193) Butylbenzylphthalate	(5)			Not Detected					0.5
198) 3,3'-Dichlorobenzidine	(5)			Not Detected					0.8
200) Benzo(a)anthracene	(5)			Not Detected					0.03
201) Chrysene	(5)	17.632(-0.000)	228	4894	0.035	0.15		J	0.03
204) bis(2-Ethylhexyl)phthalate	(5)			Not Detected					1
210) Di-n-octylphthalate	(6)			Not Detected					1
211) Benzo(b)fluoranthene	(6)	19.429(0.000)	252	6604	0.047	0.20		J	0.03
213) Benzo(k)fluoranthene	(6)			Not Detected					0.03
216) Benzo(a)pyrene	(6)	19.969(0.000)	252	4508M	0.036	0.15		J	0.03
224) Indeno(1,2,3-cd)pyrene	(6)	21.675(0.000)	276	3857M	0.032	0.13		J	0.03
225) Dibenz(a,h)anthracene	(6)			Not Detected					0.03
226) Benzo(g,h,i)perylene	(6)	22.066(0.000)	276	4522M	0.035	0.15		J	0.03

M = Compound was manually integrated.

Total number of targets = 64

Digitally signed by Kira N. Beck on 11/10/2018 at 09:24. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:06. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

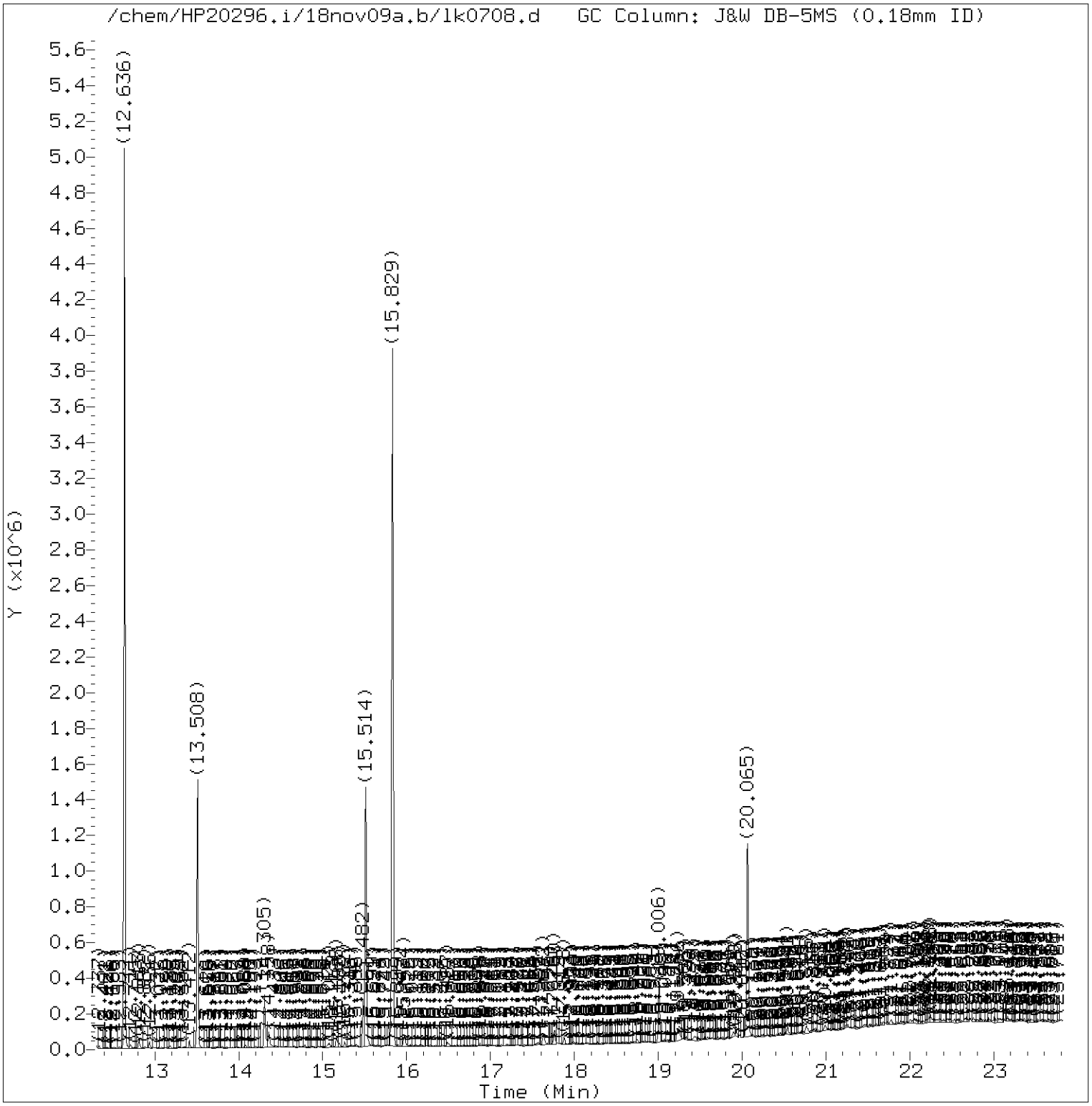
Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

Sample Name: OR365 Lab Sample ID: 9885686

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

Sample Name: OR365 Lab Sample ID: 9885686

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

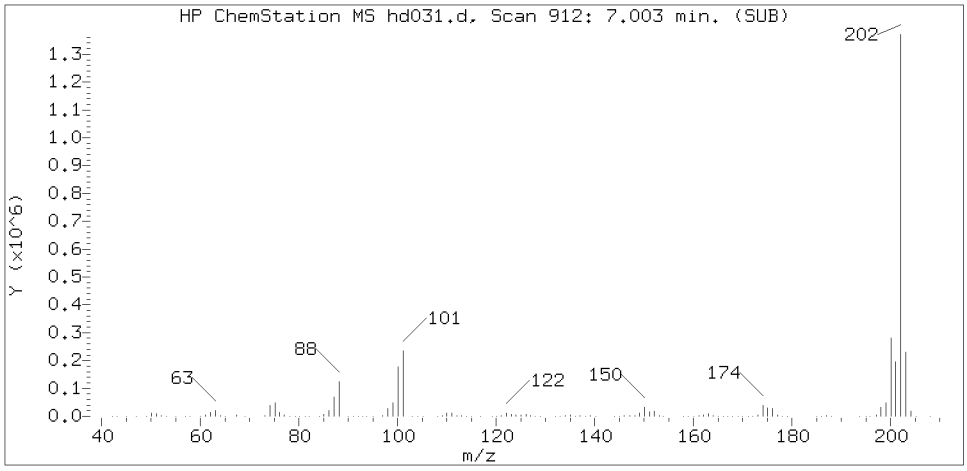
Sample Name: OR365 Lab Sample ID: 9885686

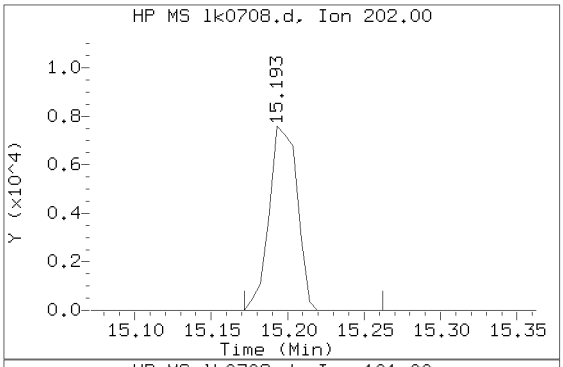
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.811	112	1093455	22.110
18)$Phenol-d6	(1)	6.234	99	1041349	15.603
26)*1,4-Dichlorobenzene-d4	(1)	6.747	152	159756	5.000
45)$Nitrobenzene-d5	(2)	7.609	82	1032397	17.213
68)*Naphthalene-d8	(2)	8.732	136	572880	5.000
96)$2-Fluorobiphenyl	(3)	10.518	172	1588513	16.092
118)*Acenaphthene-d10	(3)	11.577	164	295368	5.000
140)$2,4,6-Tribromophenol	(3)	12.636	330	460425	39.783
158)*Phenanthrene-d10	(4)	13.508	188	574197	5.000
178) Fluoranthene	(4)	15.193	202	9682	0.064
180)*Pyrene-d10	(5)	15.514	212	594386	5.000
182) Pyrene	(5)	15.541	202	9446	0.060
184)$Terphenyl-d14	(5)	15.829	244	1512249	15.850
201) Chrysene	(5)	17.632	228	4894	0.035
211) Benzo(b)fluoranthene	(6)	19.429	252	6604	0.047
216) Benzo(a)pyrene	(6)	19.969	252	4508M	0.036
218)*Perylene-d12	(6)	20.065	264	539256	5.000
224) Indeno(1,2,3-cd)pyrene	(6)	21.675	276	3857M	0.032
226) Benzo(g,h,i)perylene	(6)	22.066	276	4522M	0.035

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

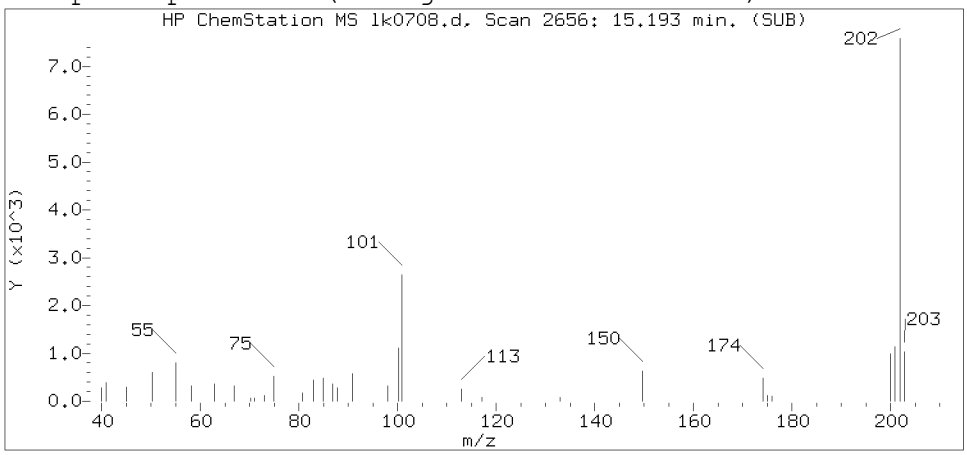
Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

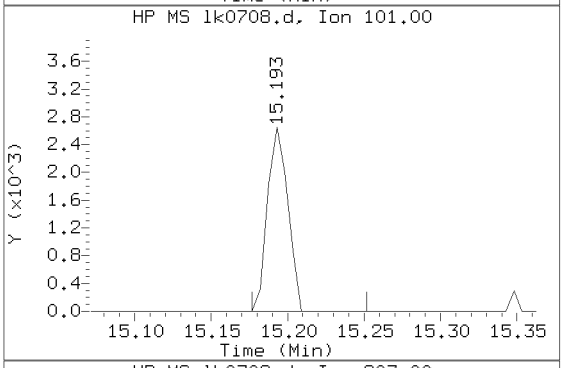
Reference Standard Spectrum for Fluoranthene

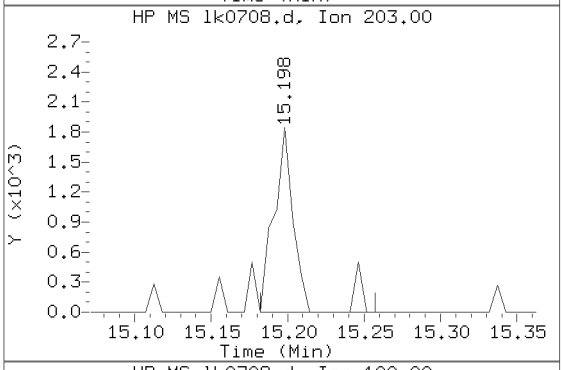




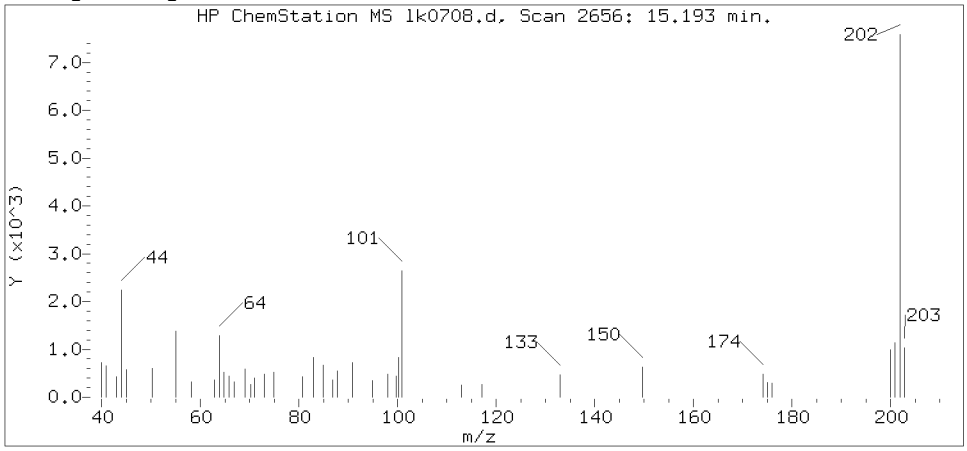
Sample Spectrum (Background Subtracted)

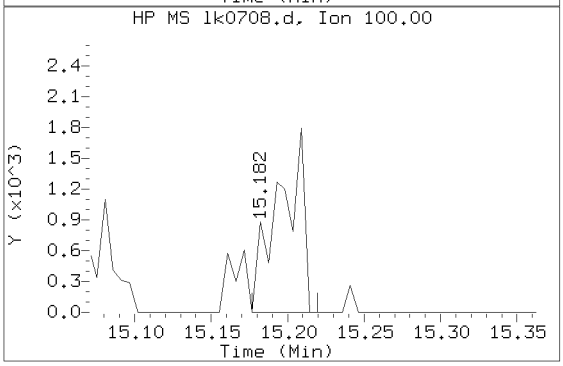






Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

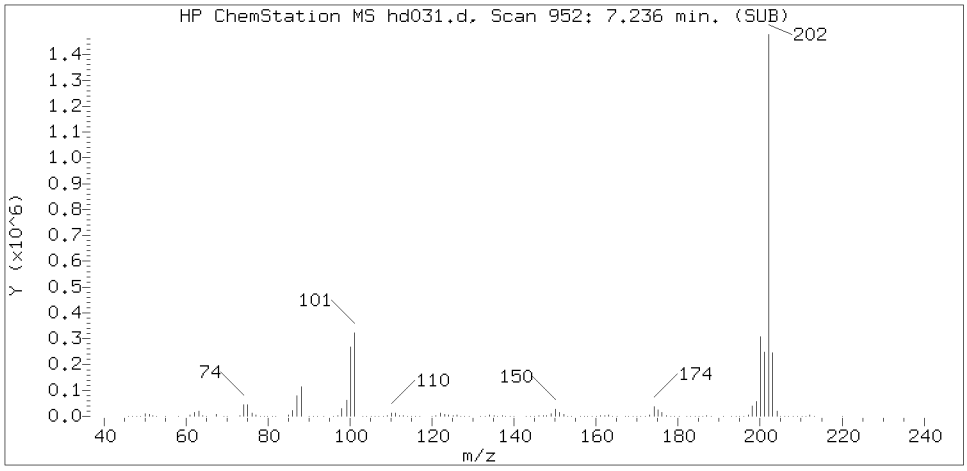
Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

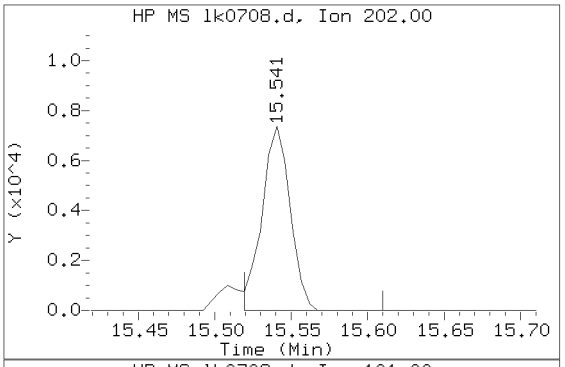
Sample Name: OR365 Lab Sample ID: 9885686

Compound Number	: 178
Compound Name	: Fluoranthene
Scan Number	: 2656
Retention Time (minutes)	: 15.193
Relative Retention Time	: 0.00039
Quant Ion	: 202.00
Area (flag)	: 9682
On-column Amount (ng/ul)	: 0.0643

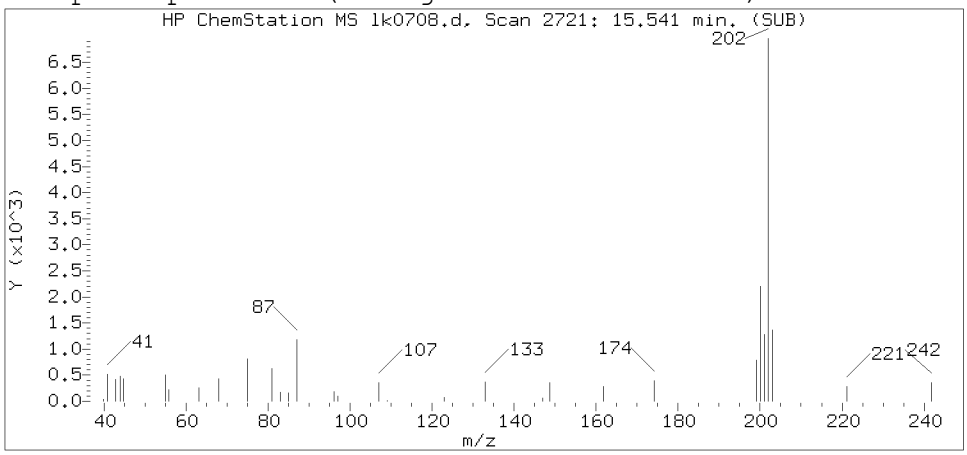
Digitally signed by Kira N. Beck on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

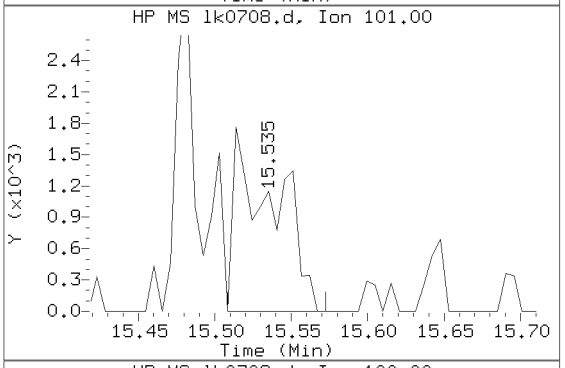
Reference Standard Spectrum for Pyrene

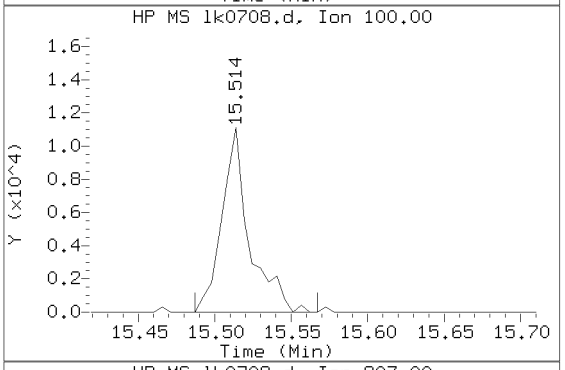




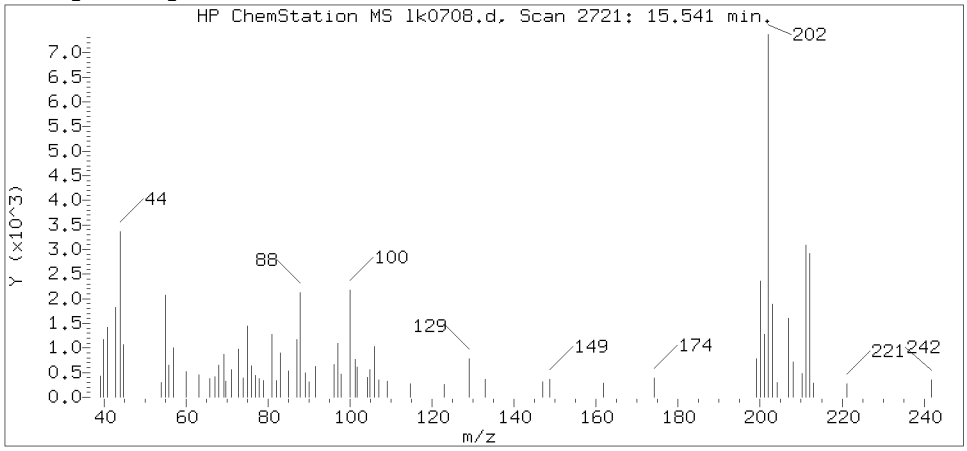
Sample Spectrum (Background Subtracted)

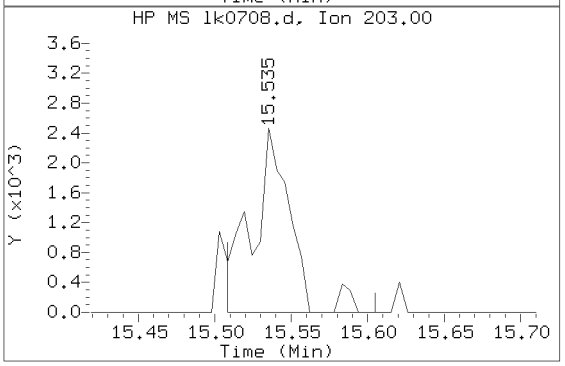






Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

Sample Name: OR365 Lab Sample ID: 9885686

Compound Number : 182
Compound Name : Pyrene
Scan Number : 2721
Retention Time (minutes) : 15.541
Relative Retention Time :-0.00000
Quant Ion : 202.00
Area (flag) : 9446
On-column Amount (ng/ul) : 0.0602

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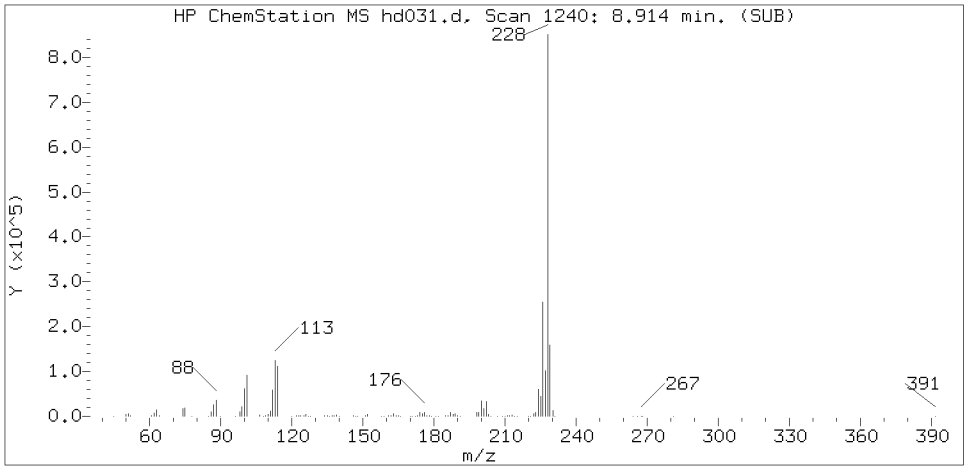
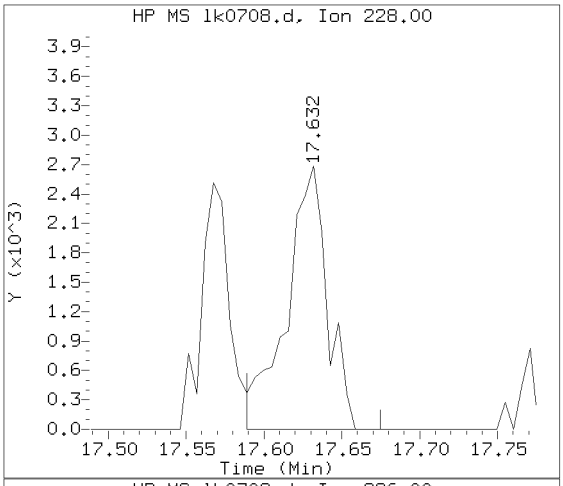
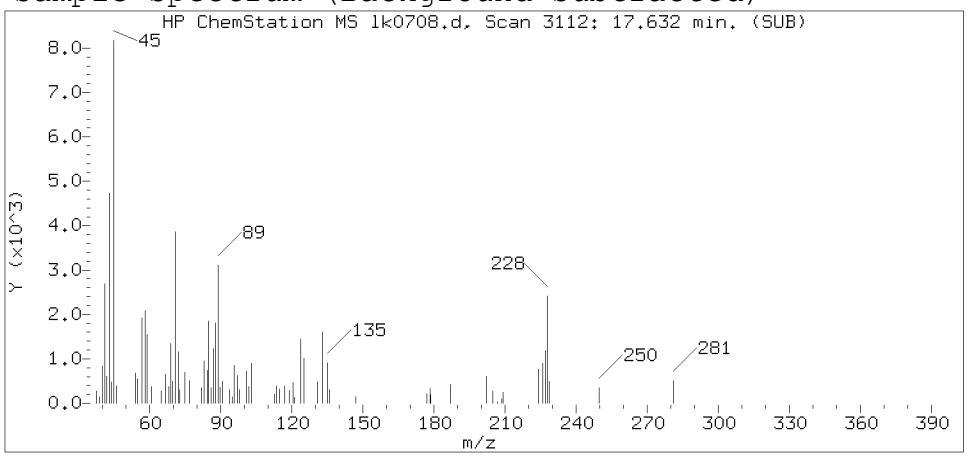
Target 3.5 esignature user ID: knb25316

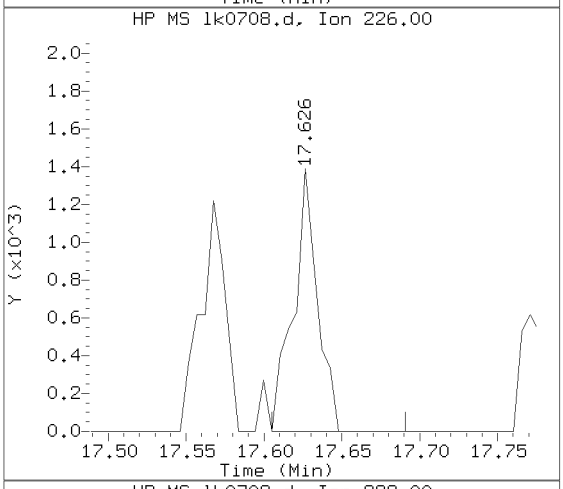
Reference Standard Spectrum for Chrysene



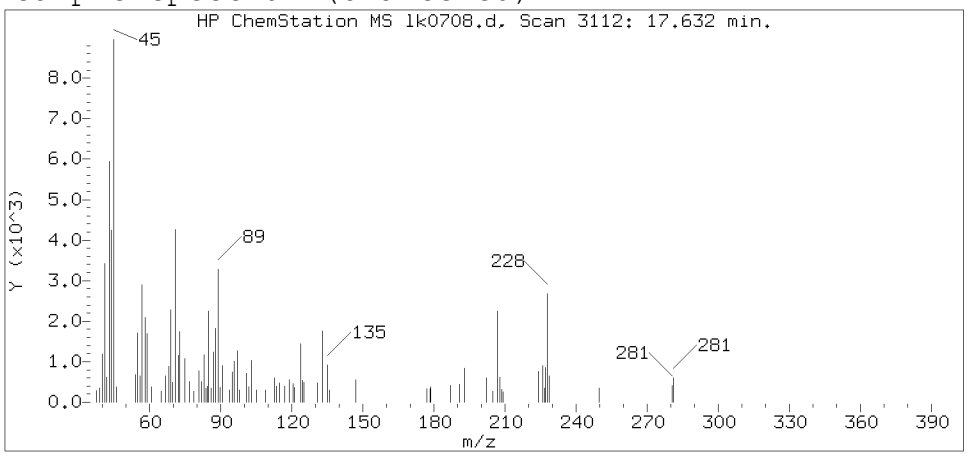


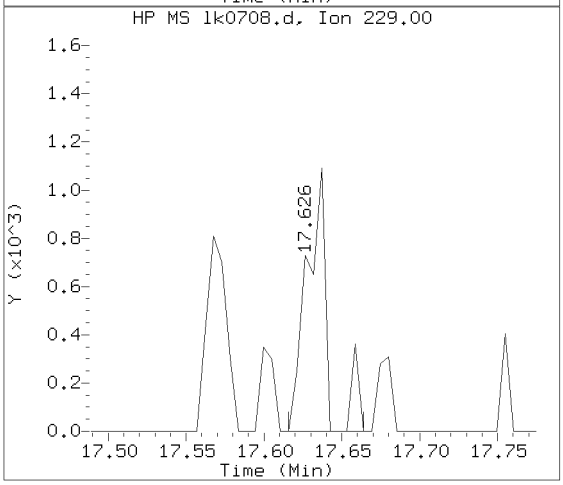
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

Sample Name: OR365 Lab Sample ID: 9885686

Compound Number : 201
Compound Name : Chrysene
Scan Number : 3112
Retention Time (minutes) : 17.632
Relative Retention Time :-0.00000
Quant Ion : 228.00
Area (flag) : 4894
On-column Amount (ng/ul) : 0.0347

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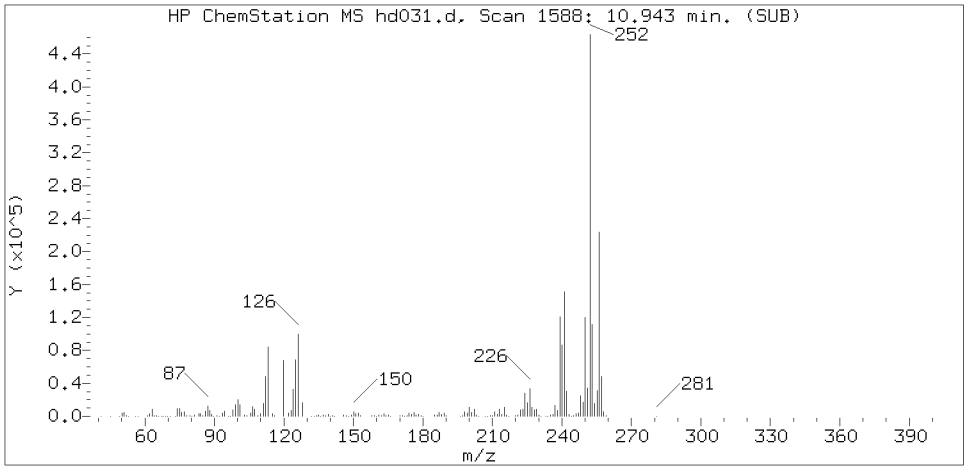
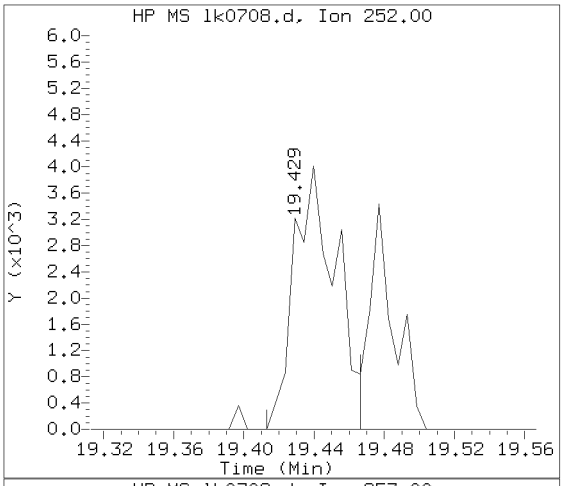
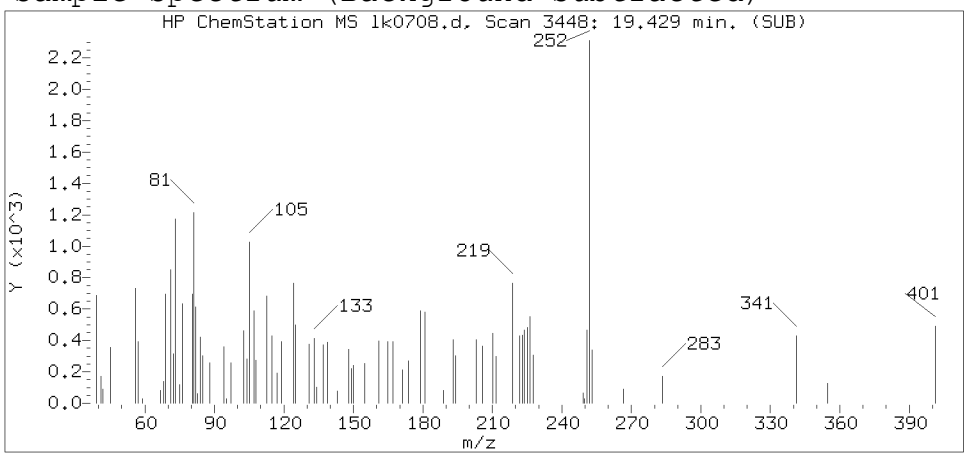
Target 3.5 esignature user ID: knb25316

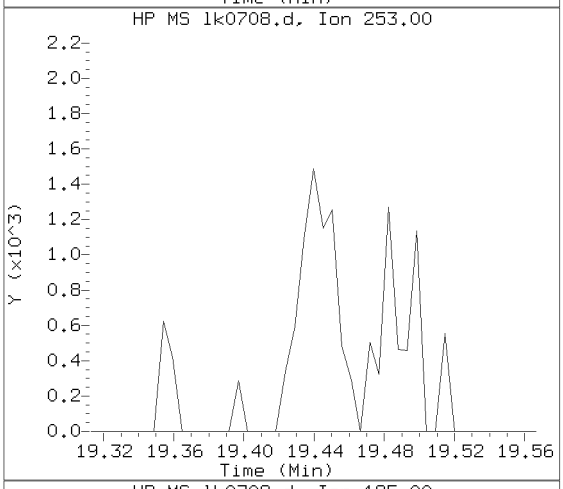
Reference Standard Spectrum for Benzo(b)fluoranthene



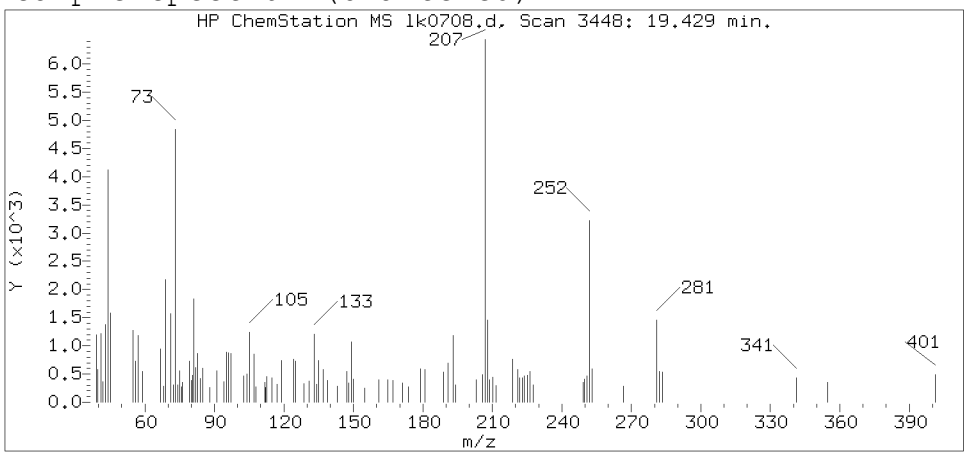


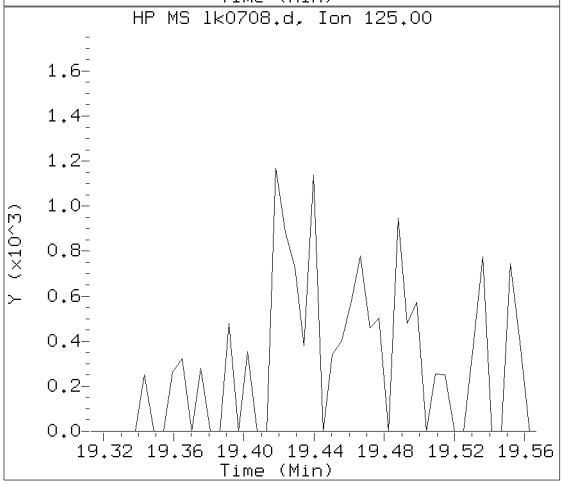
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

Sample Name: OR365 Lab Sample ID: 9885686

Compound Number	: 211
Compound Name	: Benzo(b)fluoranthene
Scan Number	: 3448
Retention Time (minutes)	: 19.429
Relative Retention Time	: 0.00080
Quant Ion	: 252.00
Area (flag)	: 6604
On-column Amount (ng/ul)	: 0.0470

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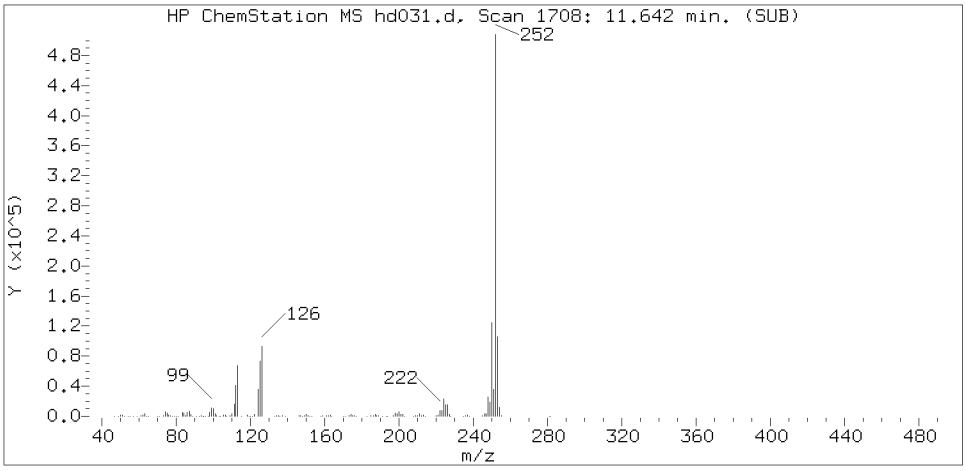
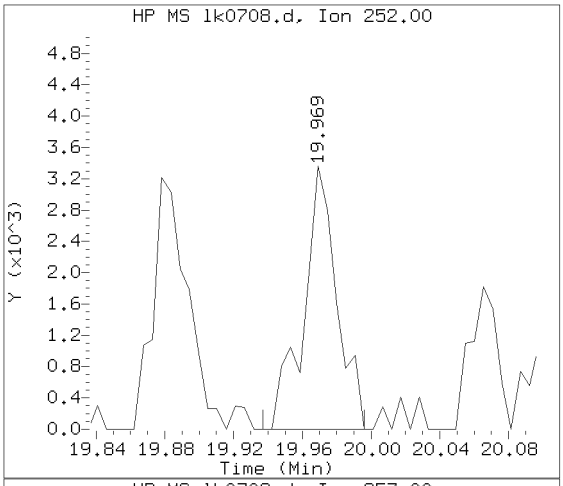
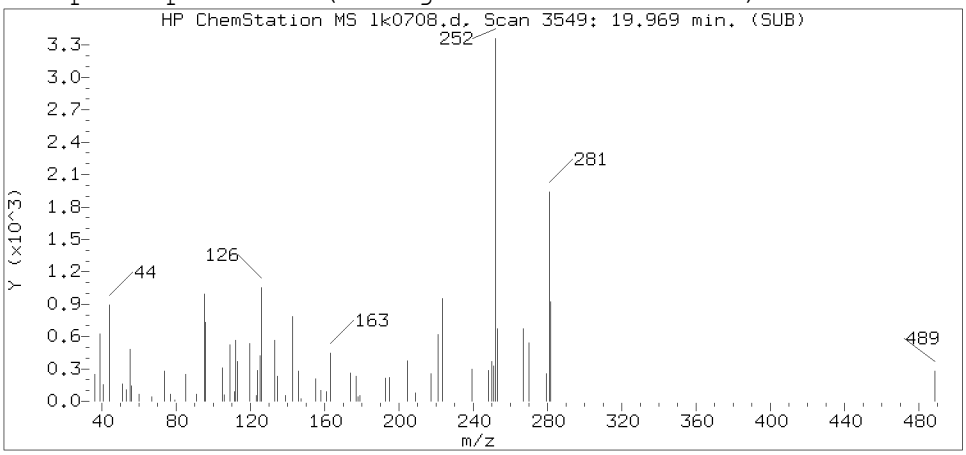
Target 3.5 esignature user ID: knb25316

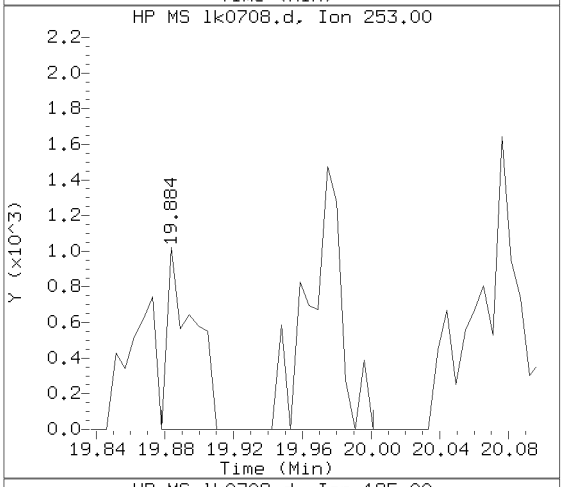
Reference Standard Spectrum for Benzo(a)pyrene



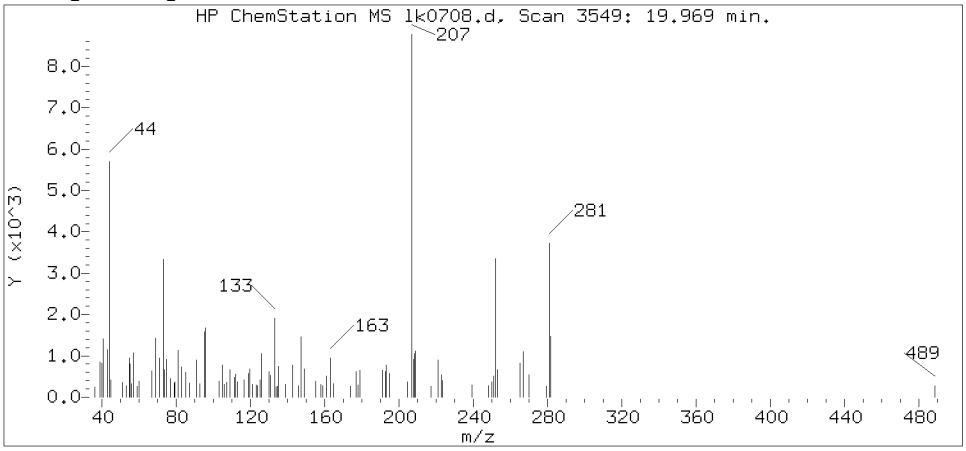


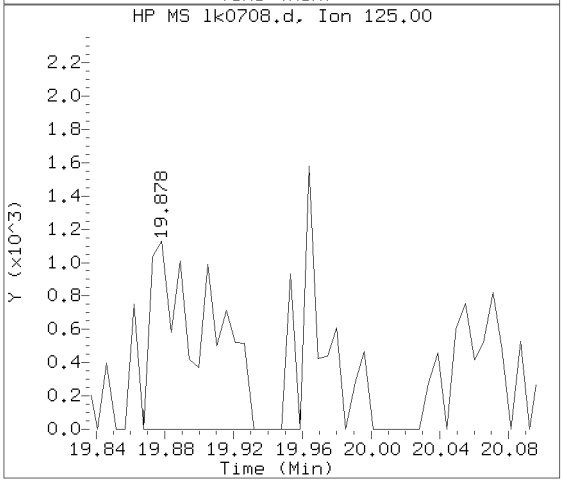
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

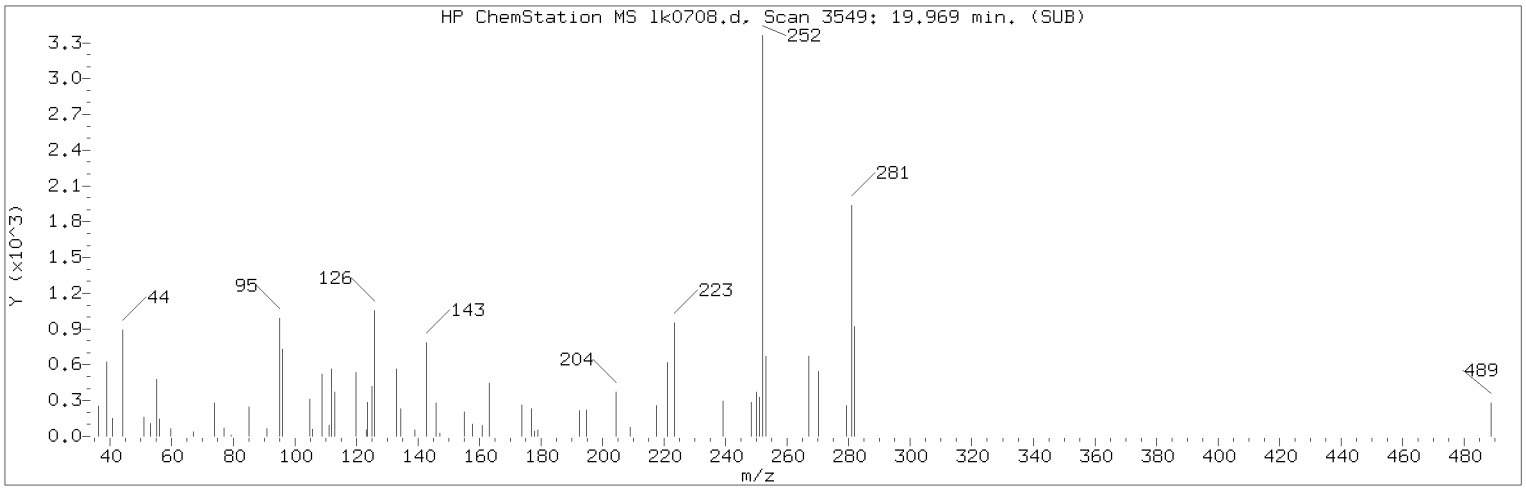
Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

Sample Name: OR365 Lab Sample ID: 9885686

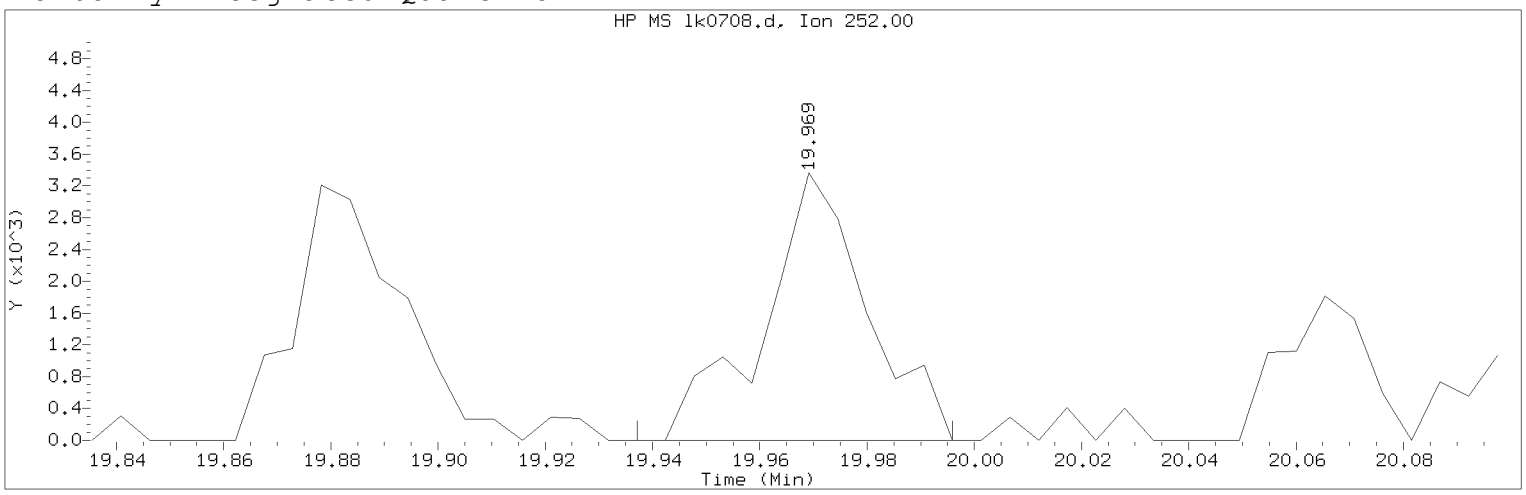
Compound Number	: 216
Compound Name	: Benzo(a)pyrene
Scan Number	: 3549
Retention Time (minutes)	: 19.969
Relative Retention Time	: 0.00000
Quant Ion	: 252.00
Area (flag)	: 4508M
On-column Amount (ng/ul)	: 0.0359

Digitally signed by Kira N. Beck on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

Sample Name: OR365 Lab Sample ID: 9885686

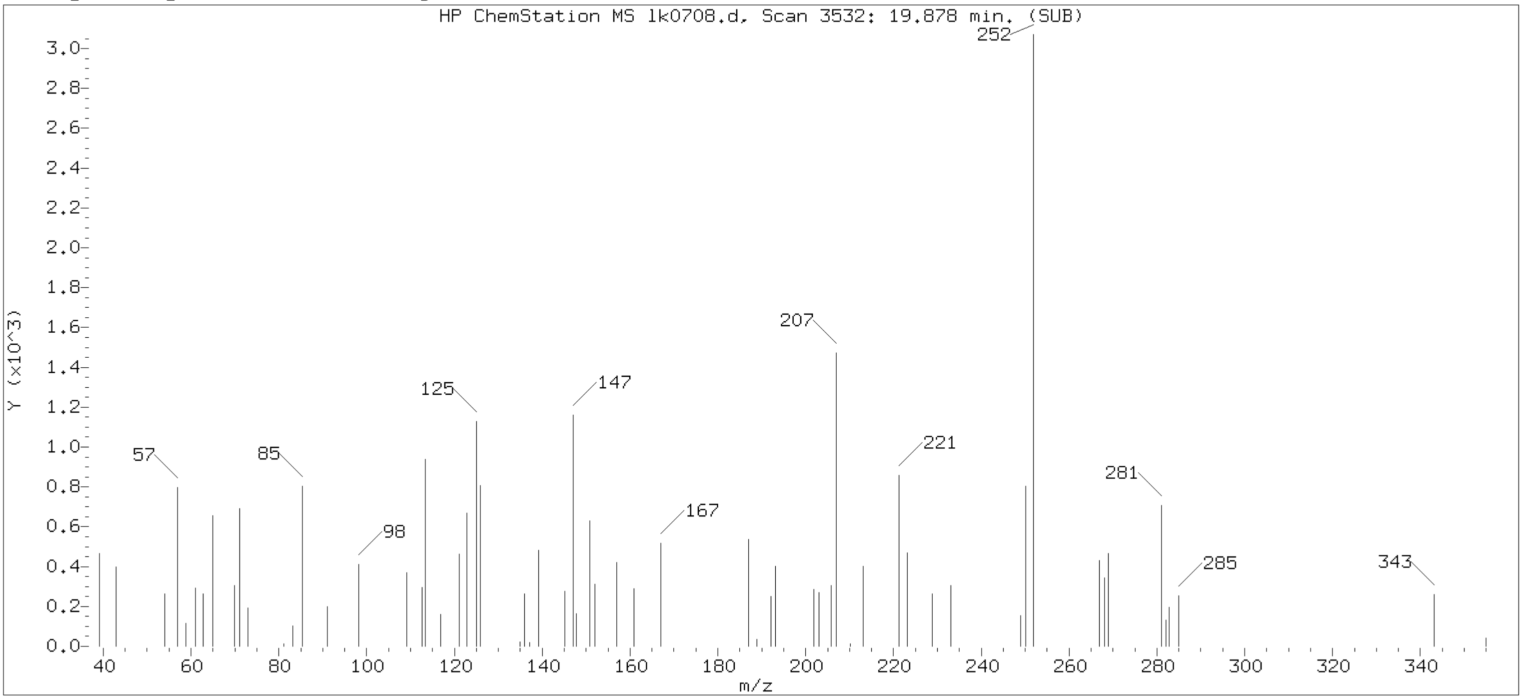
Compound Number : 216
Compound Name : Benzo(a)pyrene
Scan Number : 3549
Retention Time (minutes) : 19.969
Quant Ion : 252.00
Area (flag) : 4508M
On-column Amount (ng/ul) : 0.0359
Integration start scan : 3542 Integration stop scan: 3553
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

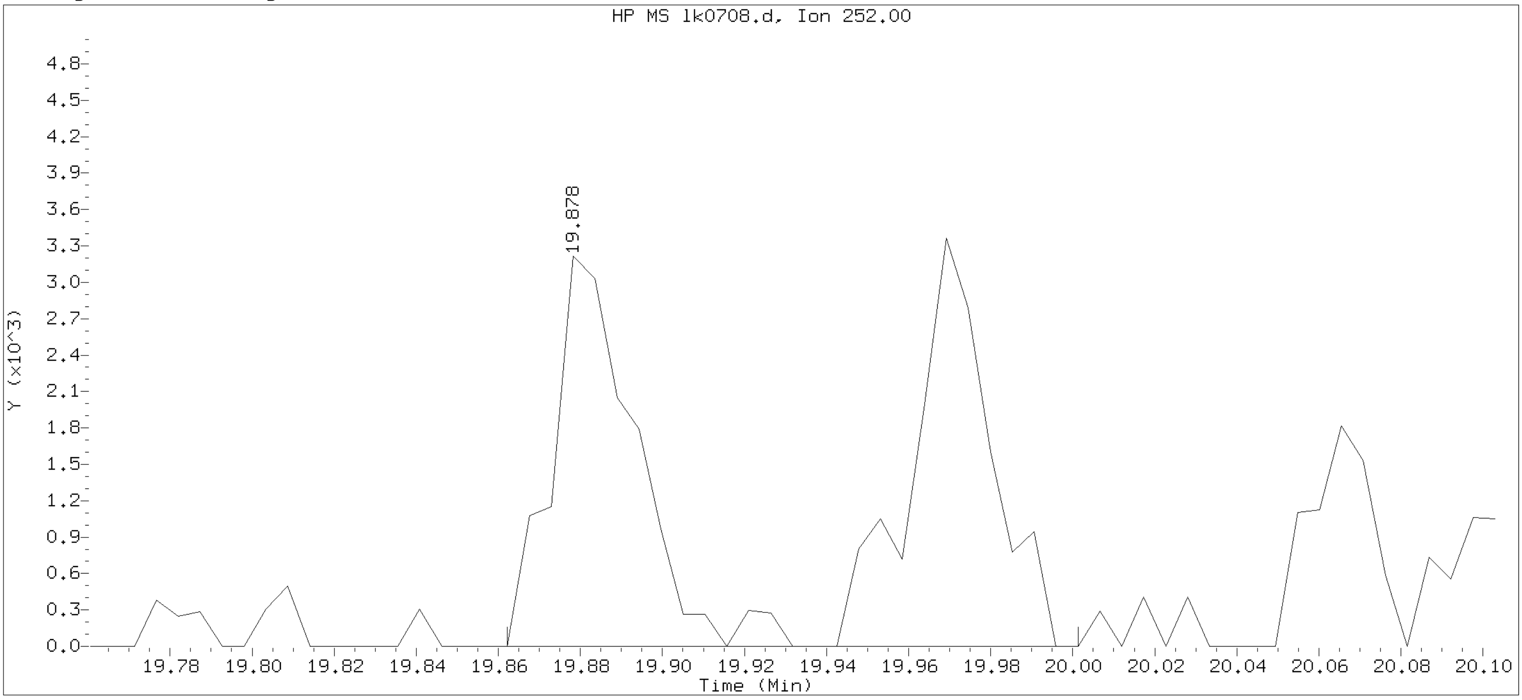
Analyst responsible for change: Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:06.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0708.d   Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32   Analyst ID: art12405

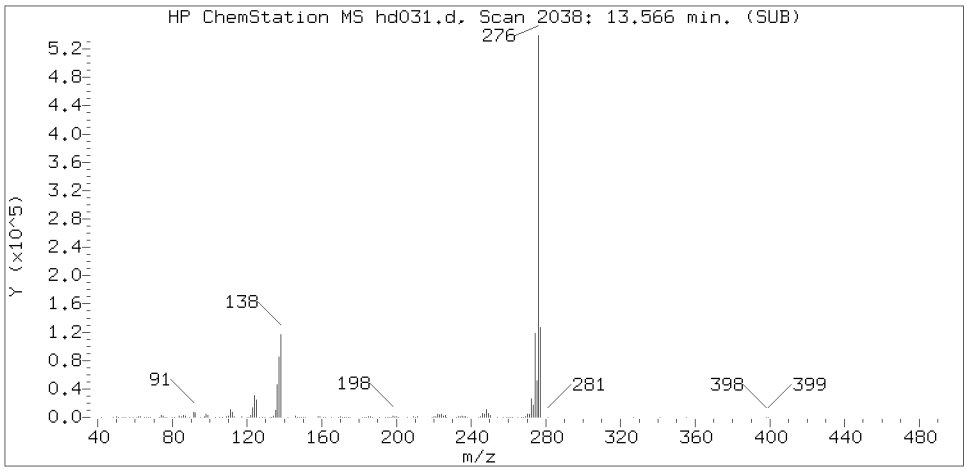
Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m   Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 09-Nov-2018 22:01 Unknown

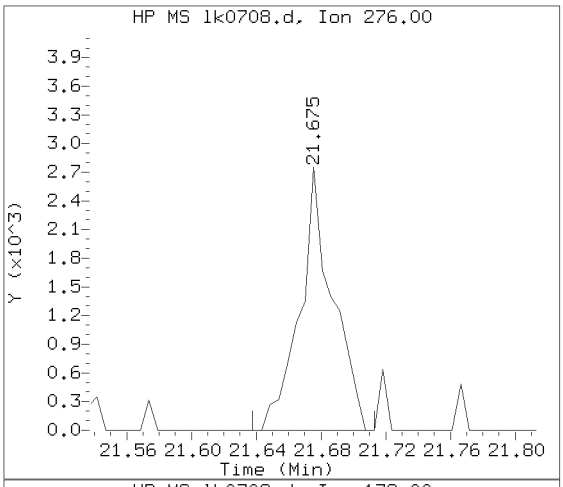
Sample Name: OR365   Lab Sample ID: 9885686

Compound Number : 216
Compound Name : Benzo(a)pyrene
Scan Number : 3532
Retention Time (minutes) : 19.878
Quant Ion : 252.00
Area : 9122
On-column Amount (ng/ul) : 0.0727
Integration start scan : 3528   Integration stop scan: 3554
Y at integration start : 0   Y at integration end: 0

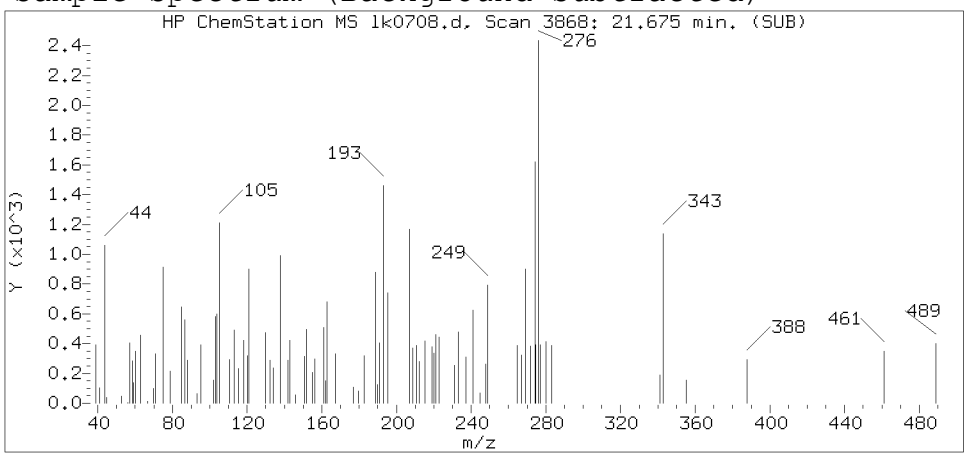
Digitally signed by Kira N. Beck on 11/10/2018 at 09:24.
Target 3.5 esignature user

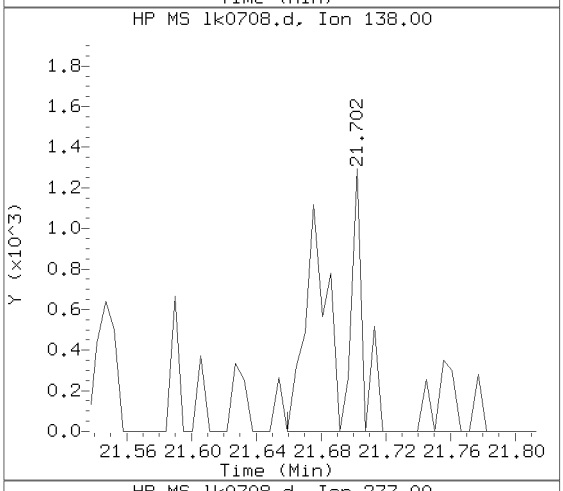
Reference Standard Spectrum for Indeno(1,2,3-cd)pyrene



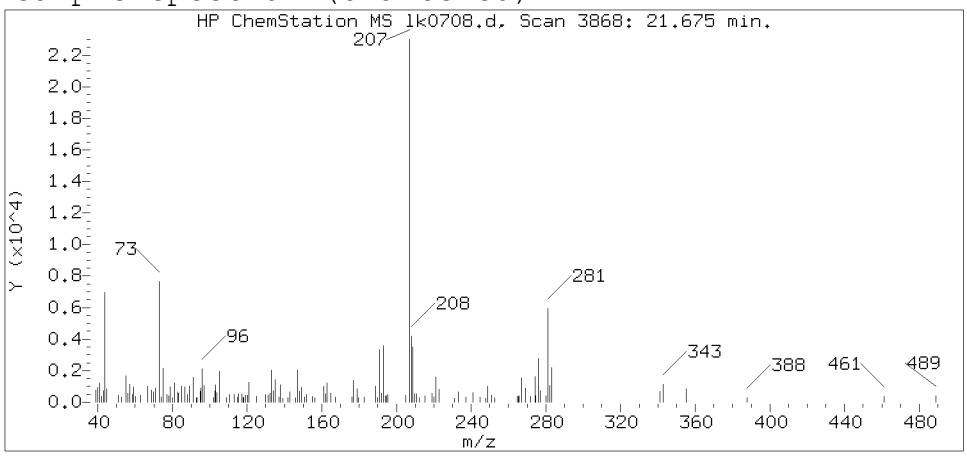


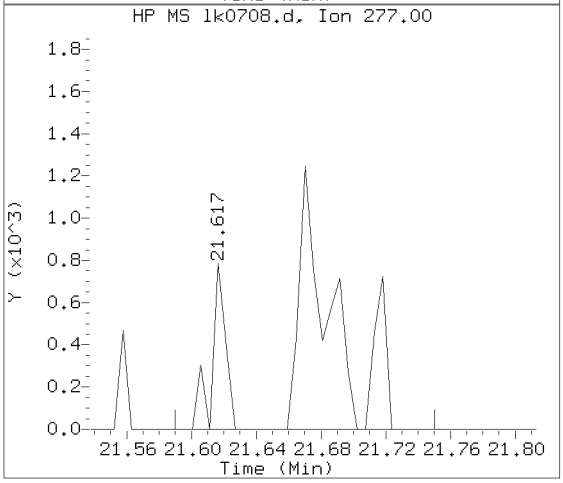
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

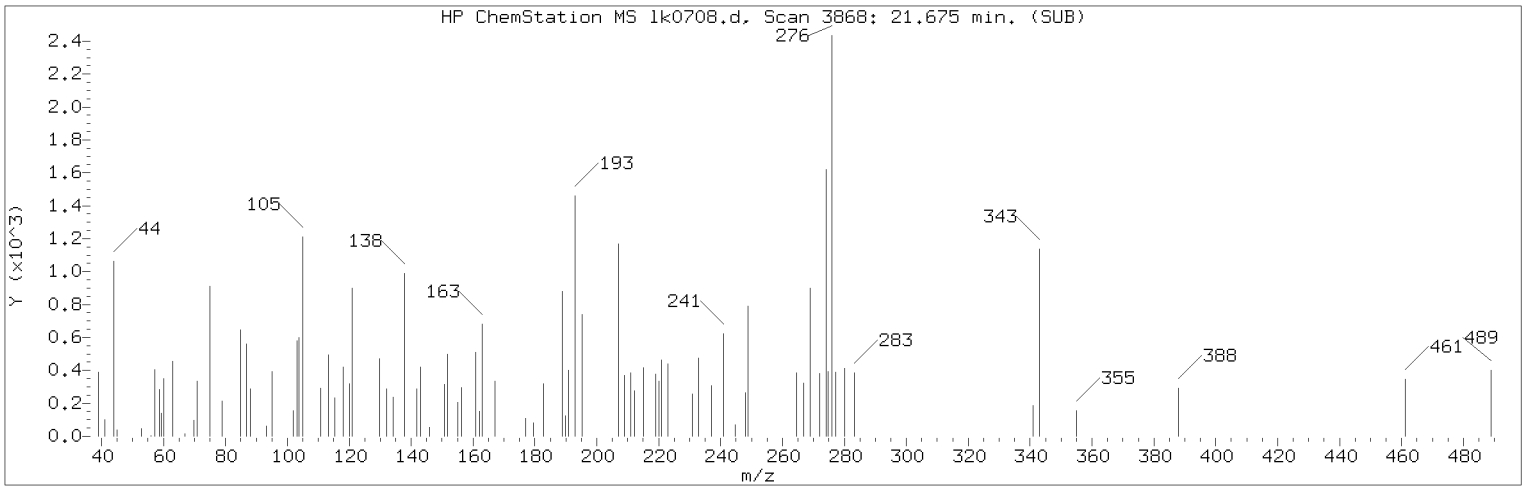
Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

Sample Name: OR365 Lab Sample ID: 9885686

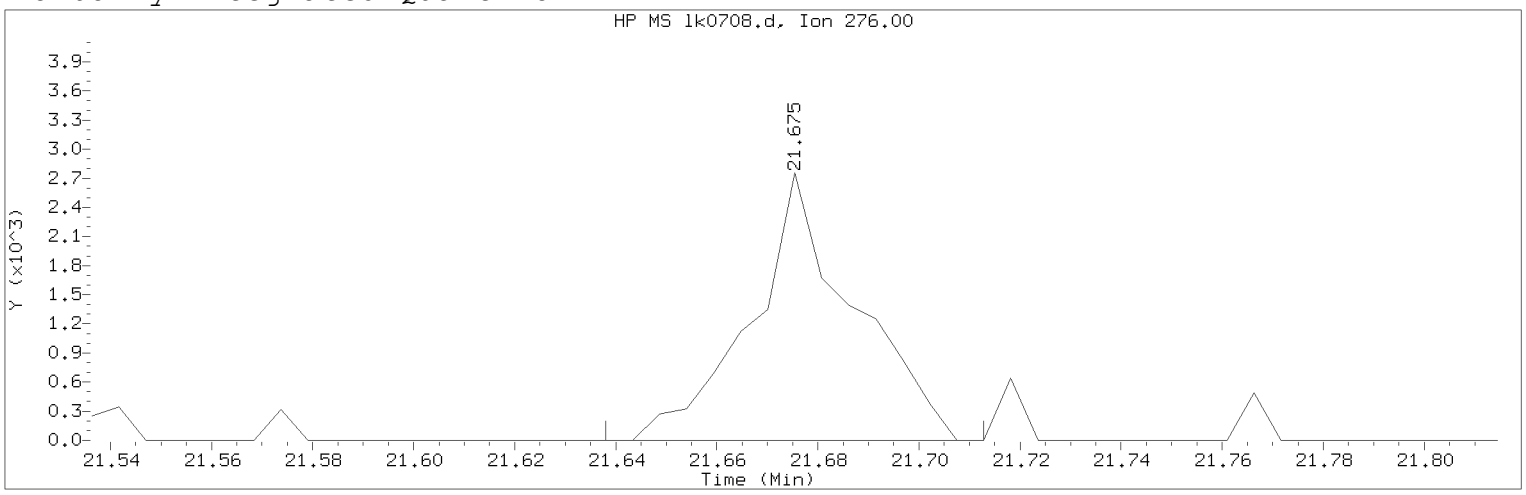
Compound Number	: 224
Compound Name	: Indeno(1,2,3-cd)pyrene
Scan Number	: 3868
Retention Time (minutes)	: 21.675
Relative Retention Time	: 0.00053
Quant Ion	: 276.00
Area (flag)	: 3857M
On-column Amount (ng/ul)	: 0.0317

Digitally signed by Kira N. Beck on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

Sample Name: OR365 Lab Sample ID: 9885686

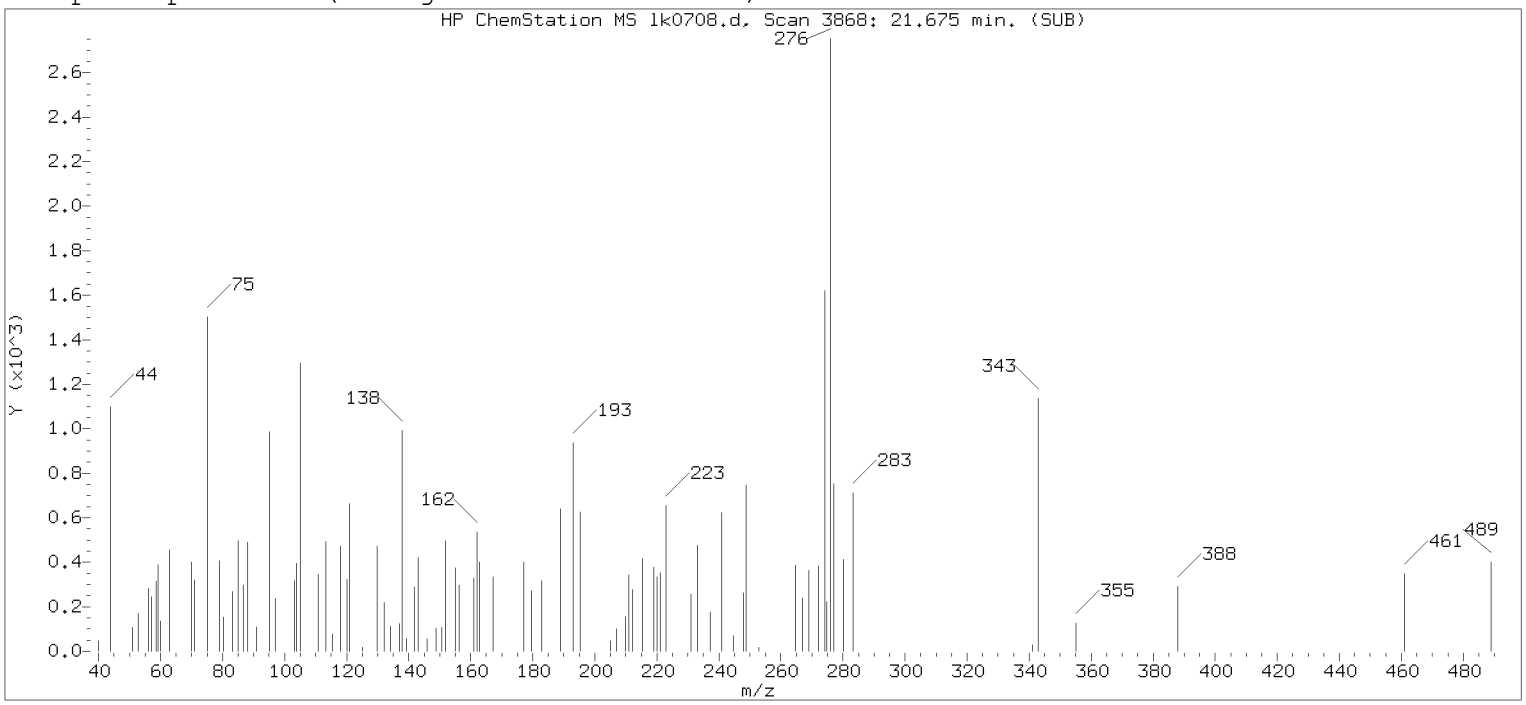
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3868
Retention Time (minutes) : 21.675
Quant Ion : 276.00
Area (flag) : 3857M
On-column Amount (ng/ul) : 0.0317
Integration start scan : 3860 Integration stop scan: 3874
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

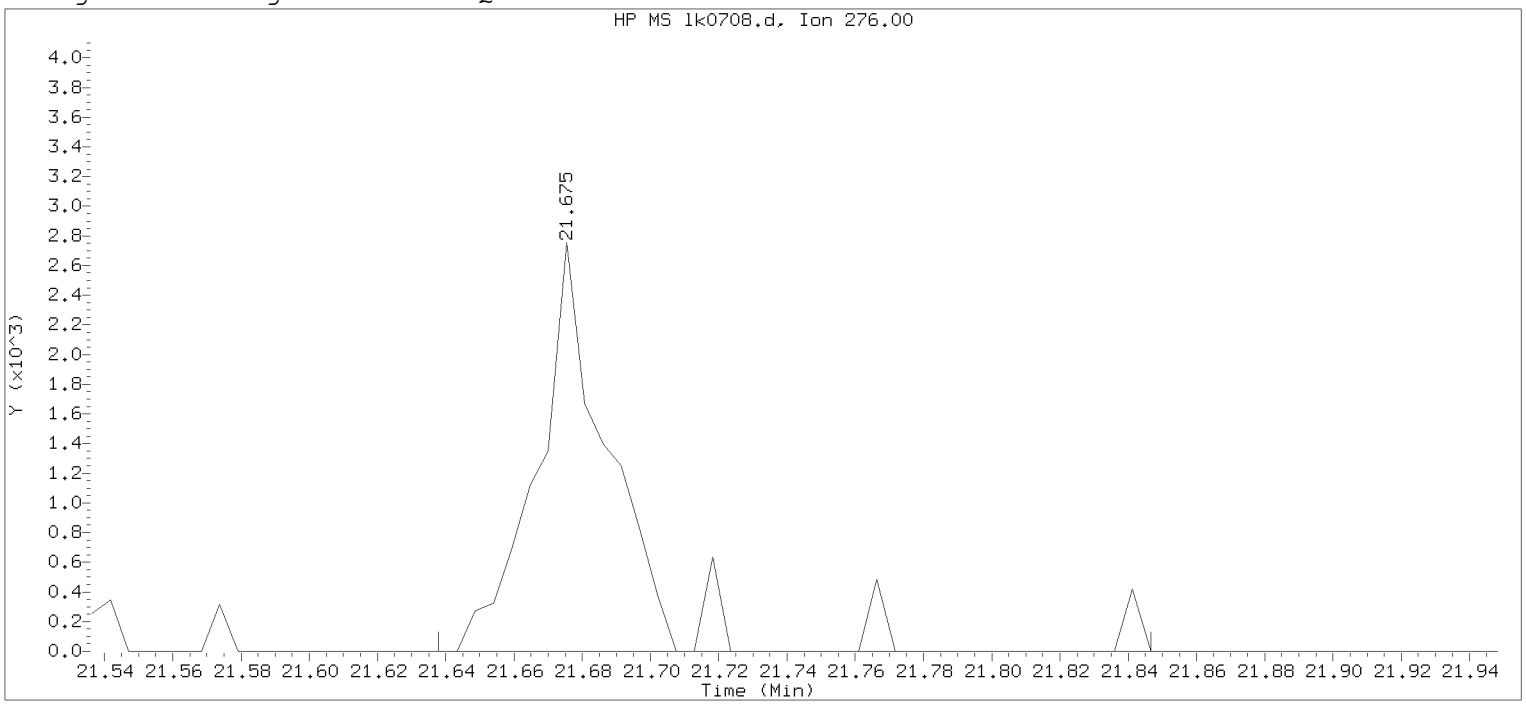
Analyst responsible for change: Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:06.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

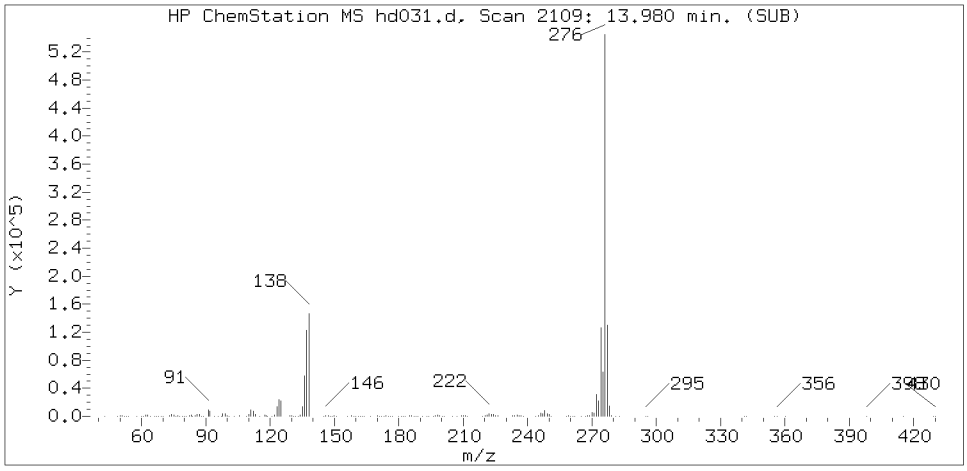
Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 09-Nov-2018 22:01 Unknown

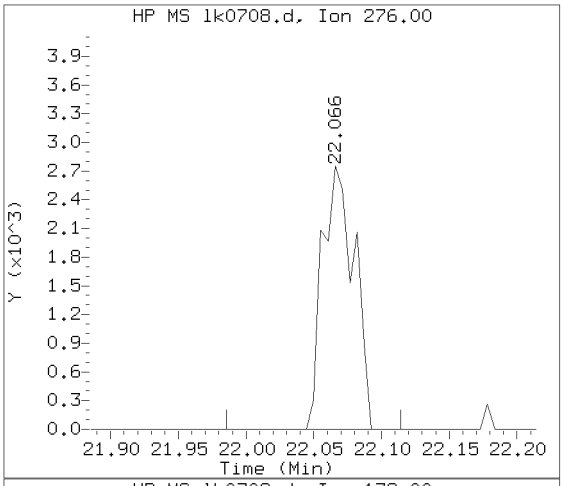
Sample Name: OR365 Lab Sample ID: 9885686

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3868		
Retention Time (minutes)	: 21.675		
Quant Ion	: 276.00		
Area	: 4352		
On-column Amount (ng/ul)	: 0.0357		
Integration start scan	: 3860	Integration stop scan:	3899
Y at integration start	: 0	Y at integration end:	0

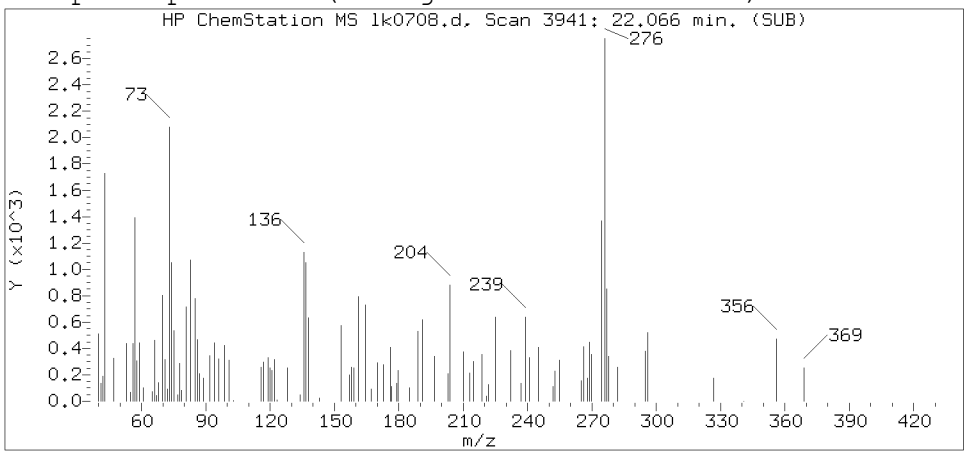
Digitally signed by Kira N. Beck on 11/10/2018 at 09:24.
Target 3.5 esignature user kbeck 5271

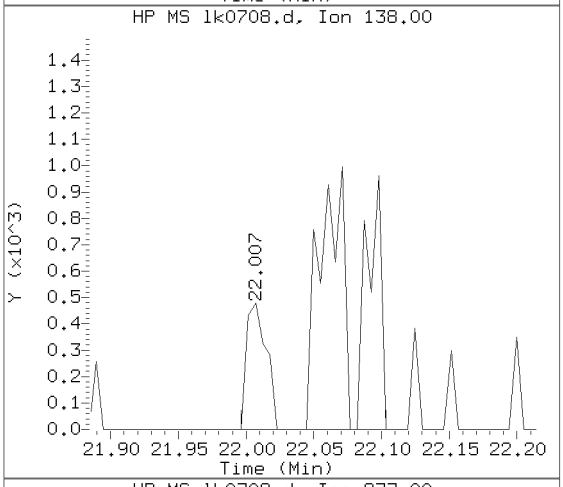
Reference Standard Spectrum for Benzo(g,h,i)perylene



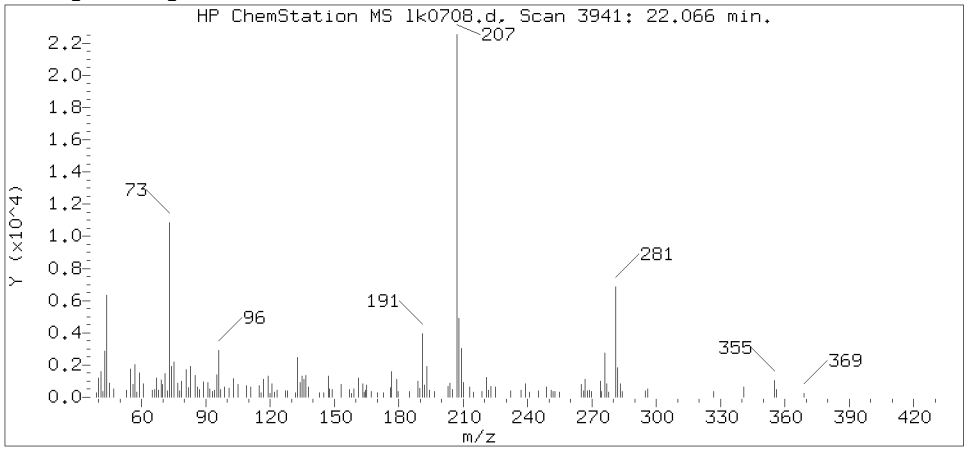


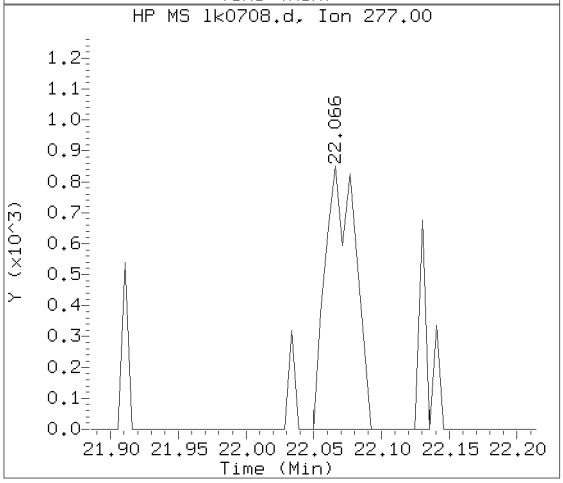
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

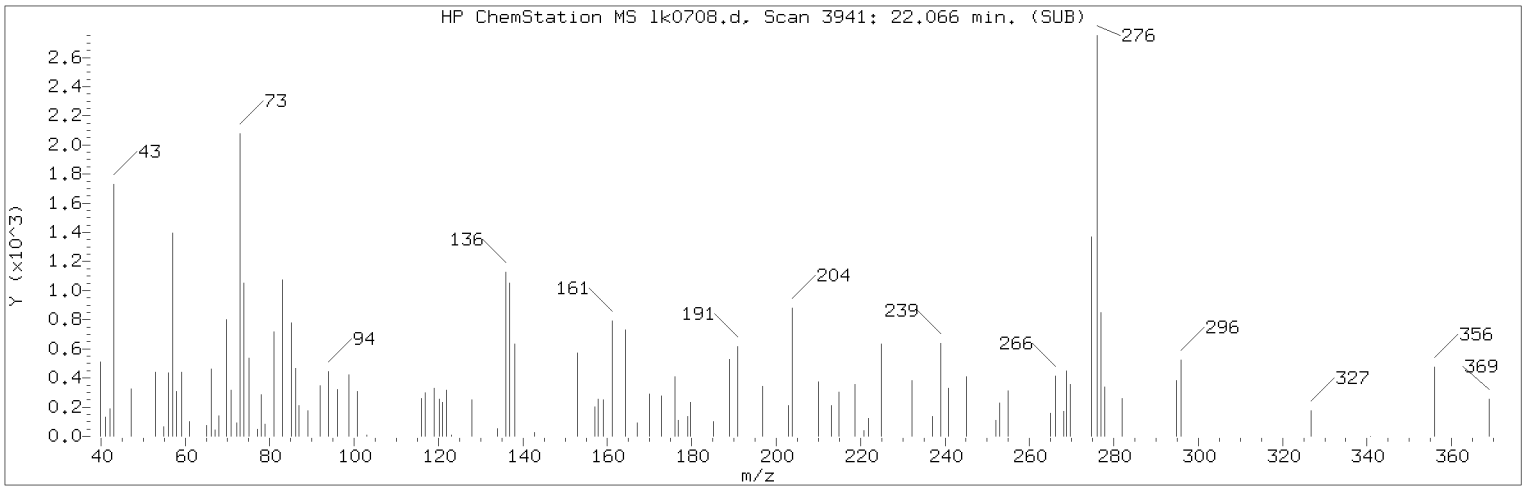
Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

Sample Name: OR365 Lab Sample ID: 9885686

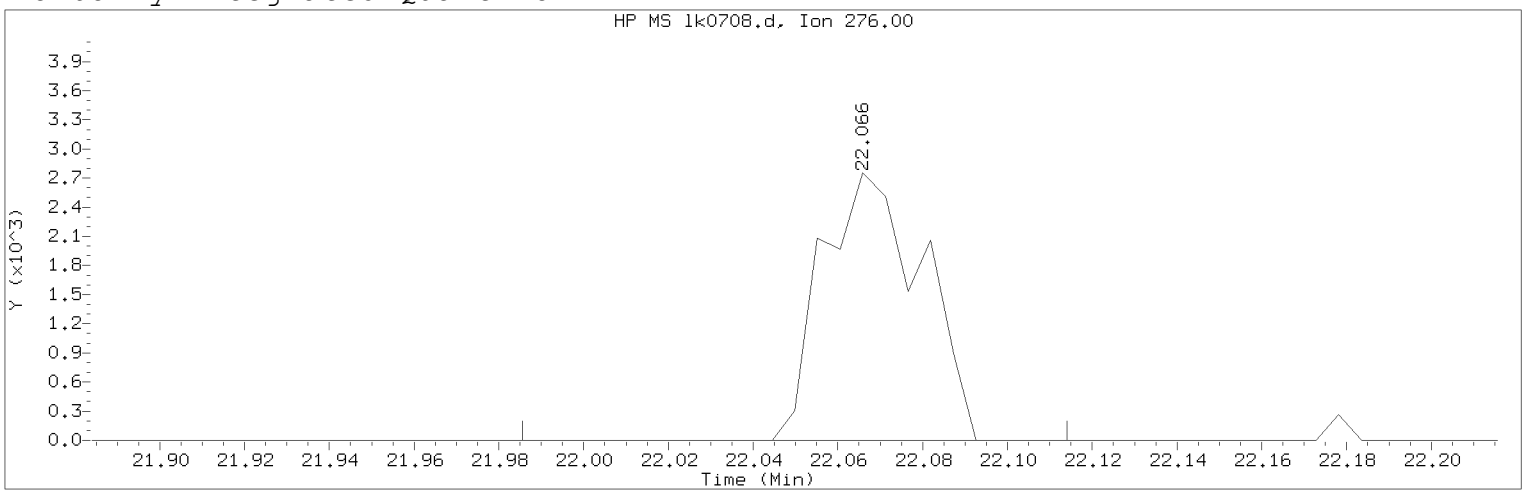
Compound Number	: 226
Compound Name	: Benzo(g,h,i)perylene
Scan Number	: 3941
Retention Time (minutes)	: 22.066
Relative Retention Time	: 0.00080
Quant Ion	: 276.00
Area (flag)	: 4522M
On-column Amount (ng/ul)	: 0.0350

Digitally signed by Kira N. Beck on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:23 knb25316

Sample Name: OR365 Lab Sample ID: 9885686

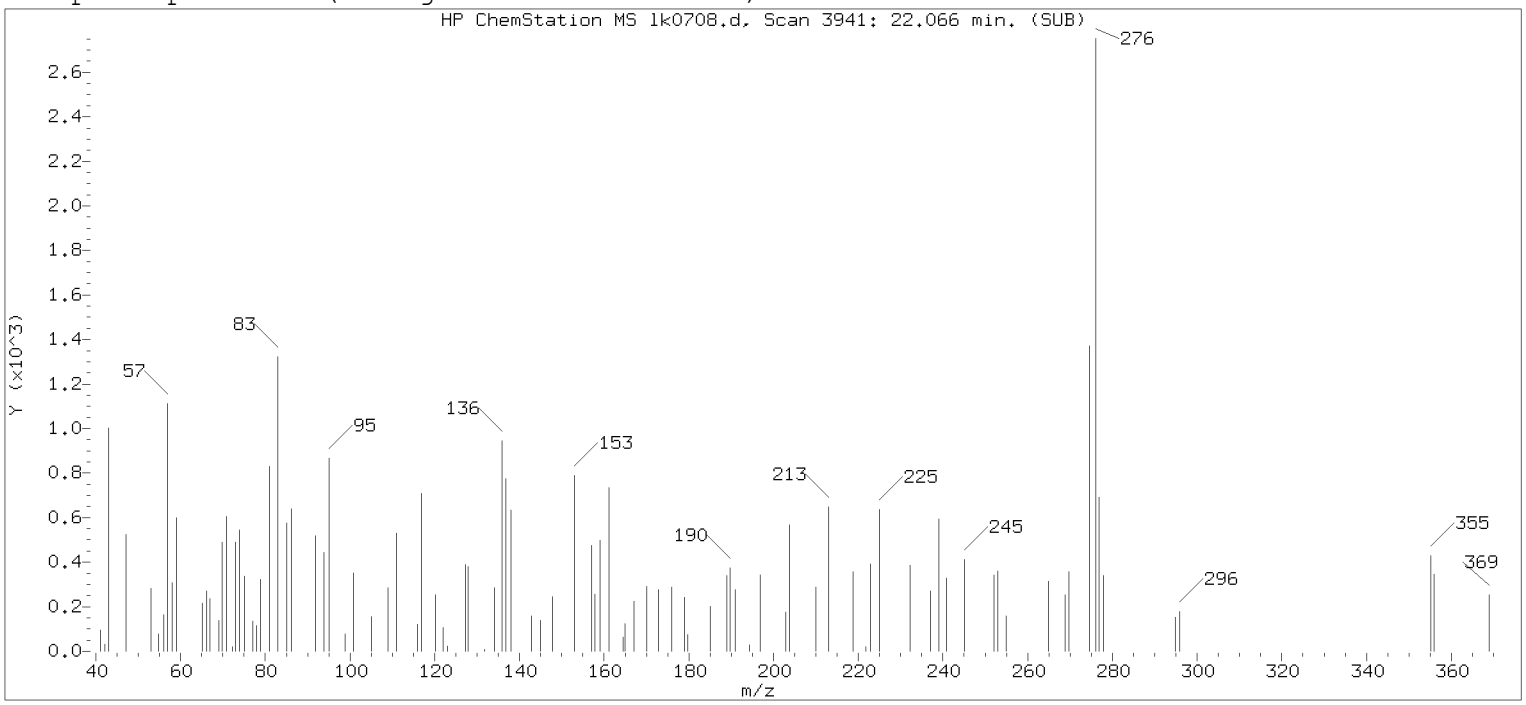
Compound Number : 226
Compound Name : Benzo(g,h,i)perylene
Scan Number : 3941
Retention Time (minutes) : 22.066
Quant Ion : 276.00
Area (flag) : 4522M
On-column Amount (ng/ul) : 0.0350
Integration start scan : 3925 Integration stop scan: 3949
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

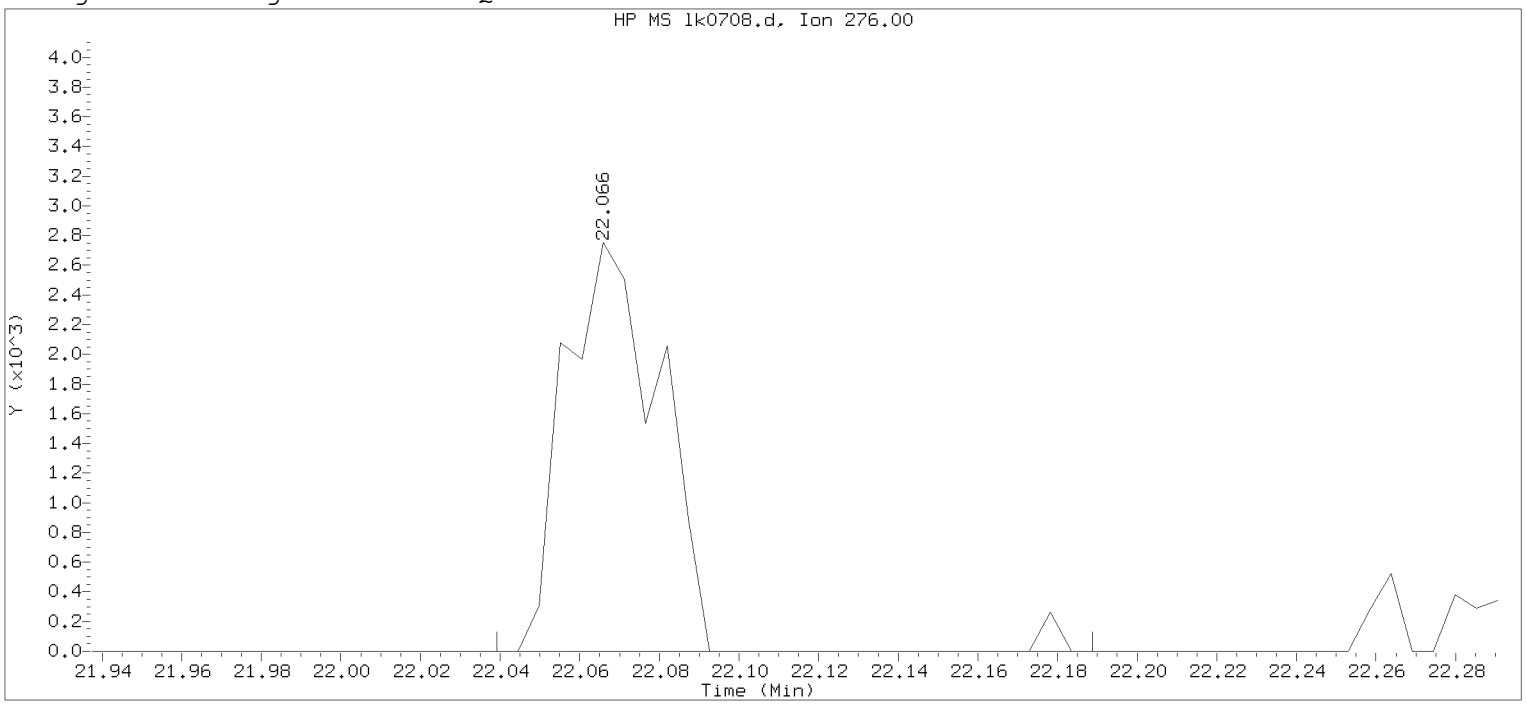
Analyst responsible for change: Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:06.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0708.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 21:32 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 09-Nov-2018 22:01 Unknown

Sample Name: OR365 Lab Sample ID: 9885686

Compound Number	: 226		
Compound Name	: Benzo(g,h,i)perylene		
Scan Number	: 3941		
Retention Time (minutes)	: 22.066		
Quant Ion	: 276.00		
Area	: 4606		
On-column Amount (ng/ul)	: 0.0357		
Integration start scan	: 3935	Integration stop scan:	3963
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 11/10/2018 at 09:24.
Target 3.5 esignature user: kbeck

Standards Data

Semivolatiles by GC/MS

Lancaster Laboratories
Semi-Volatiles
Runlog for Agilent GC/MS System HP20296 **HP #12**

Data Directory Path is - D:\data\18oct28\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
whs02991	LJ1740b.D	RVDFTPP2388	10/29/2018	00:09		
whs02991	LJ1741.D	RVSTD2648	10/29/2018	00:23		
whs02991	LJ1742.D	RVSTD2648	10/29/2018	00:56		
whs02991	LJ1743.D	RVSTD2648	10/29/2018	01:25		
whs02991	LJ1744.D	RVSTD2648	10/29/2018	01:53		
whs02991	LJ1745.D	RVSTD2648	10/29/2018	02:22		
whs02991	LJ1746.D	RVSTD2648	10/29/2018	02:51		
whs02991	LJ1747.D	RVSTD2648	10/29/2018	03:20		
whs02991	LJ1748.D	RVSTD2648	10/29/2018	03:49		
whs02991	LJ1749.D	RVSTD2648	10/29/2018	04:18		
whs02991	LJ1750.D	PAHMDL2648	10/29/2018	04:47		
whs02991	LJ1751.D	RVICV2628	10/29/2018	05:15		
whs02991	LJ1752.D	RVBASICV2578	10/29/2018	05:44		

Lancaster Laboratories
Semi-Volatiles
Runlog for Agilent GC/MS System HP20296 **HP #12**

Data Directory Path is - D:\data\18nov09\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
knb25316	LK0630.D	RVDFTPP2878	11/09/2018	06:56		
knb25316	LK0631.D	RVSTD2648	11/09/2018	07:11		
knb25316	LK0632.D	SBLKWF312	11/09/2018	08:17	18312WAF	
knb25316	LK0633.D	312WFLCS	11/09/2018	08:45	18312WAF	
knb25316	LK0634.D	312WFLCSD	11/09/2018	09:14	18312WAF	
knb25316	LK0635.D	SBLKWG312	11/09/2018	09:43	18312WAG	
knb25316	LK0636.D	312WGLCS	11/09/2018	10:11	18312WAG	
knb25316	LK0637.D	312WGLCSD	11/09/2018	10:40	18312WAG	
knb25316	LK0638.D	SBLKWA312	11/09/2018	11:09	18312WAA	
knb25316	LK0639.D	312WALCS	11/09/2018	11:38	18312WAA	
knb25316	LK0640.D	312WALCS1	11/09/2018	12:06	18312WAA	
knb25316	LK0641.D	312WALCSD1	11/09/2018	12:35	18312WAA	
knb25316	LK0642.D	9875116	11/09/2018	13:04	18312WAF	
knb25316	LK0643.D	9884648	11/09/2018	13:32	18312WAG	
knb25316	LK0644.D	9884650	11/09/2018	14:01	18312WAG	
knb25316	LK0645.D	9884652	11/09/2018	14:30	18312WAG	
knb25316	LK0651.D	rvSTD2648	11/09/2018	14:59		

Lancaster Laboratories
Semi-Volatiles
Runlog for Agilent GC/MS System HP20296 **HP #12**

Data Directory Path is - D:\data\18nov09a\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
art12405	LK0700.D	RVDFTPP2878	11/09/2018	17:08		
art12405	LK0700a.D	RVDFTPP2878	11/09/2018	17:21		
art12405	LK0701.D	RVSTD2648	11/09/2018	17:43		
art12405	LK0702.D	SBLKWX310	11/09/2018	18:40	18310WAX	
art12405	LK0703.D	9882463	11/09/2018	19:08	18310WAX	
art12405	LK0704.D	9885681	11/09/2018	19:37	18312WAA	
art12405	LK0705.D	9885682	11/09/2018	20:06	18312WAA	
art12405	LK0706.D	9885683	11/09/2018	20:35	18312WAA	
art12405	LK0707.D	9885685	11/09/2018	21:03	18312WAA	
art12405	LK0708.D	9885686	11/09/2018	21:32	18312WAA	

Data File: /chem/HP20296.i/18oct28.b/lj1740b.d

Date : 29-OCT-2018 00:09

Client ID: DFTPP12.5

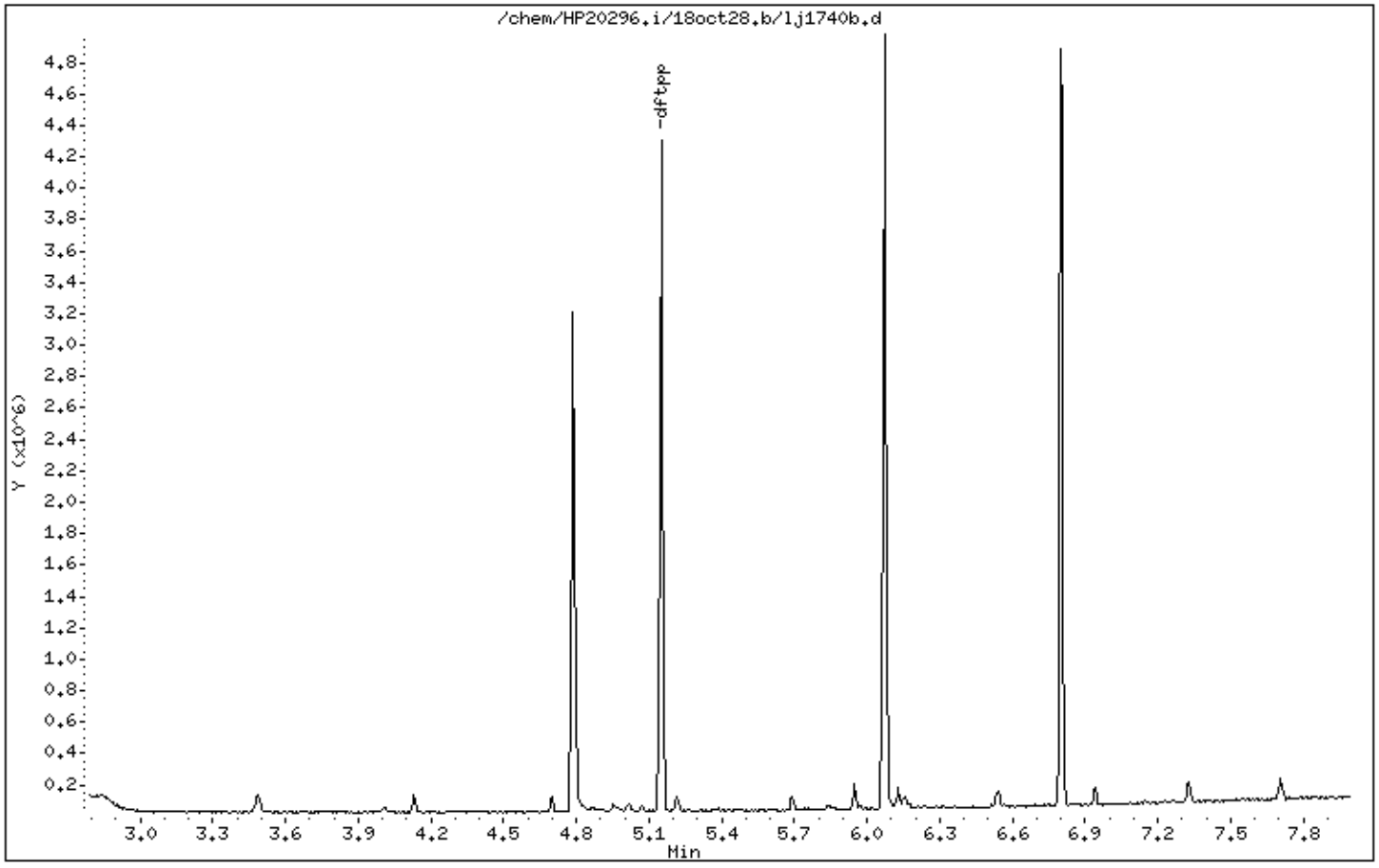
Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2388;1;3;DFTPP;

Operator: whs02991

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Ashley R. Transue on 10/30/2018 at 17:14.
Target 3.5 esignature user ID: art12405

Data File: /chem/HP20296.i/18oct28.b/lj1740b.d

Date : 29-OCT-2018 00:09

Client ID: DFTPP12.5

Instrument: HP20296.i

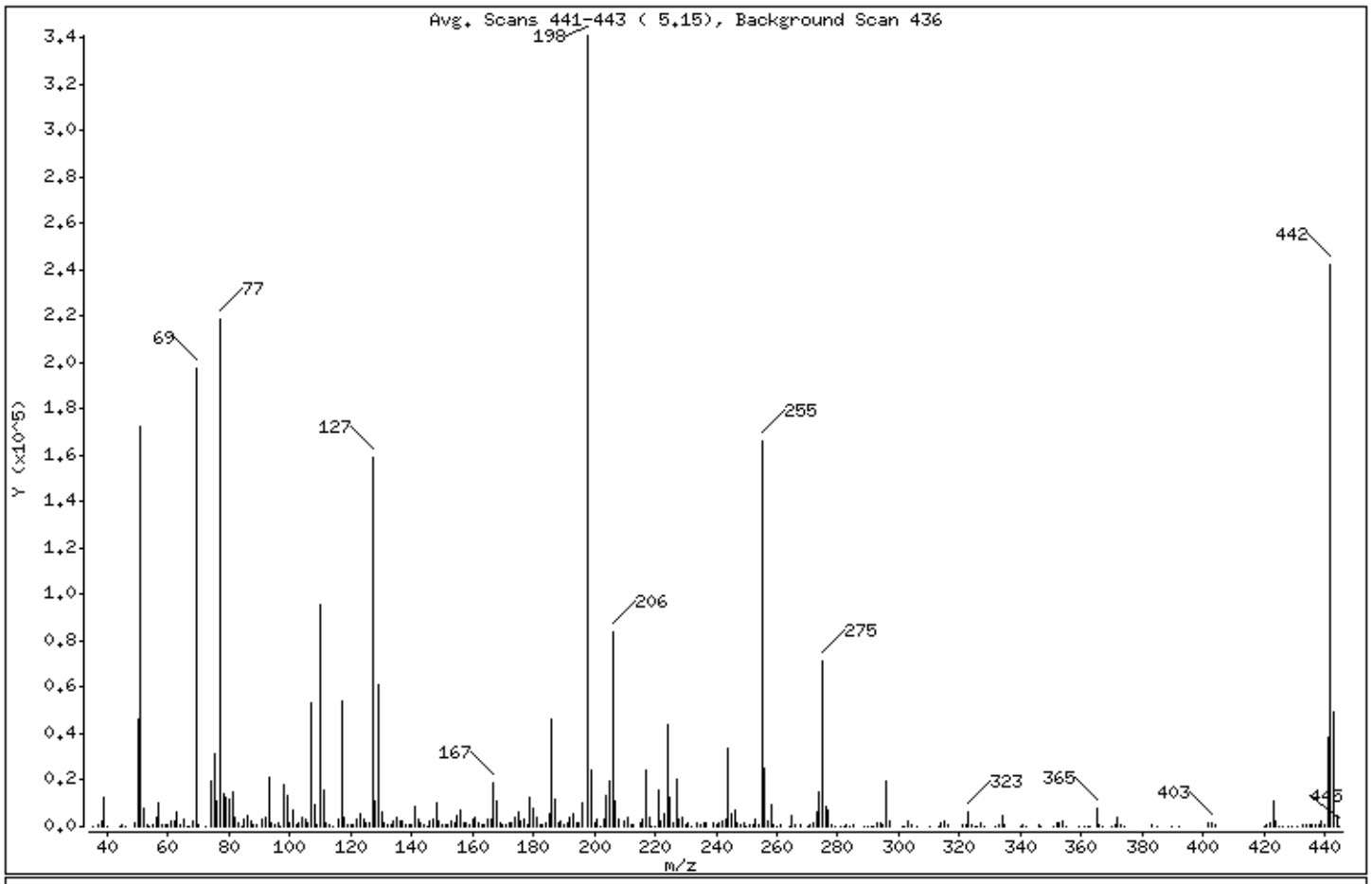
Sample Info: DFTPP12.5;RVDFTPP2388;1;3;DFTPP;

Operator: whs02991

Column phase: DB-5MS

Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	50.48
68	Less than 2.00% of mass 69	0.79 (1.36)
69	Mass 69 relative abundance	57.92
70	Less than 2.00% of mass 69	0.30 (0.53)
127	10.00 - 80.00% of mass 198	46.57
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.24
275	10.00 - 60.00% of mass 198	20.81
365	Greater than 1.00% of mass 198	2.25
441	0.01 - 24.00% of mass 442	11.24 (15.83)
442	50.00 - 99.99% of mass 198	71.05
443	15.00 - 24.00% of mass 442	14.44 (20.32)

Digitally signed by Ashley R. Transue on 10/30/2018 at 17:14.
Target 3.5 esignature user ID: art12405

Date : 29-OCT-2018 00:09

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2388;1;3;DFTPP;

Operator: whs02991

Column phase: DB-5MS Column diameter: 0.18

Data File: lj1740b.d
Spectrum: Avg. Scans 441-443 (5,15), Background Scan 436
Location of Maximum: 198.00
Number of points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	160	124.00	2808	204.00	12945	295.00	629
37.00	769	125.00	1492	205.00	19720	296.00	19840
38.00	2583	126.00	1202	206.00	83728	297.00	2588
39.00	12379	127.00	158784	207.00	10767	301.00	199
40.00	358	128.00	11160	208.00	3248	302.00	102
44.00	38	129.00	61496	210.00	2047	303.00	2053
45.00	726	130.00	6093	211.00	3865	304.00	420
46.00	98	131.00	1301	212.00	729	306.00	109
49.00	1792	132.00	1127	213.00	454	310.00	209
50.00	46392	133.00	603	215.00	1434	313.00	200
51.00	172096	134.00	2079	216.00	2865	314.00	1397
52.00	7947	135.00	3776	217.00	24064	315.00	2619
53.00	619	136.00	2344	218.00	3556	316.00	1099
54.00	98	137.00	2199	219.00	336	321.00	618
55.00	1117	138.00	669	220.00	104	322.00	439
56.00	3979	139.00	668	221.00	15391	323.00	6532
57.00	10481	140.00	1135	222.00	2269	324.00	719
58.00	822	141.00	8723	223.00	5643	325.00	89
59.00	585	142.00	2811	224.00	44008	326.00	120
60.00	591	143.00	1924	225.00	12569	327.00	1411
61.00	2078	144.00	480	226.00	1491	328.00	221
62.00	2120	145.00	383	227.00	20016	332.00	379
63.00	6565	146.00	2256	228.00	3236	333.00	1016
64.00	1154	147.00	3186	229.00	3551	334.00	4615
65.00	3521	148.00	9835	230.00	587	335.00	778
66.00	302	149.00	2616	231.00	1518	340.00	166
67.00	308	150.00	846	232.00	283	341.00	602
68.00	2679	151.00	983	234.00	1560	342.00	249
69.00	197440	152.00	454	235.00	1041	346.00	1028
70.00	1039	153.00	2231	236.00	1416	347.00	255
72.00	138	154.00	1754	237.00	1376	351.00	139
74.00	19528	155.00	4633	239.00	1207	352.00	1748
75.00	31496	156.00	6725	240.00	987	353.00	1334
76.00	11334	157.00	1602	241.00	1267	354.00	2338
77.00	218624	158.00	1716	242.00	2466	355.00	340

Date : 29-OCT-2018 00:09

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2388;1;3;DFTPP;

Operator: whs02991

Column phase: DB-5MS Column diameter: 0.18

Data File: lj1740b.d
Spectrum: Avg. Scans 441-443 (5.15), Background Scan 436
Location of Maximum: 198.00
Number of points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	14288	159.00	1059	243.00	3399	359.00	114
79.00	12651	160.00	2780	244.00	33872	361.00	216
80.00	11666	161.00	3566	245.00	5230	362.00	89
81.00	14763	162.00	1195	246.00	7274	363.00	335
82.00	3690	163.00	791	247.00	1447	365.00	7688
83.00	1920	164.00	966	248.00	696	366.00	1015
84.00	372	165.00	3288	249.00	1768	367.00	221
85.00	2903	166.00	2919	250.00	277	370.00	364
86.00	4796	167.00	18464	251.00	530	371.00	961
87.00	2059	168.00	10621	252.00	999	372.00	3534
88.00	780	169.00	1817	253.00	2850	373.00	745
89.00	594	170.00	735	254.00	808	374.00	193
91.00	3365	171.00	915	255.00	166400	383.00	984
92.00	3599	172.00	1198	256.00	24704	385.00	172
93.00	21480	173.00	1939	257.00	2391	390.00	129
94.00	1674	174.00	3919	258.00	9235	392.00	106
95.00	546	175.00	6042	259.00	1001	402.00	1292
96.00	1315	176.00	2456	260.00	276	403.00	1892
97.00	288	177.00	2871	261.00	427	404.00	593
98.00	17872	178.00	987	264.00	187	420.00	188
99.00	13453	179.00	12843	265.00	4689	421.00	1078
100.00	1194	180.00	8037	266.00	1050	422.00	1773
101.00	7366	181.00	4072	268.00	622	423.00	11042
102.00	460	182.00	843	270.00	332	424.00	2685
103.00	1873	183.00	595	271.00	781	425.00	286
104.00	3944	184.00	1355	272.00	1201	426.00	107
105.00	3461	185.00	5337	273.00	6519	428.00	88
106.00	1764	186.00	46600	274.00	14665	429.00	117
107.00	53528	187.00	11731	275.00	70936	431.00	198
108.00	9694	188.00	1435	276.00	8615	433.00	782
109.00	1099	189.00	1994	277.00	6832	434.00	556
110.00	95264	190.00	632	278.00	926	435.00	742
111.00	15320	191.00	1842	279.00	125	436.00	635
112.00	1869	192.00	3879	281.00	71	437.00	877
113.00	673	193.00	5275	282.00	106	438.00	893

Date : 29-OCT-2018 00:09

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2388;1;3;DFTPP;

Operator: whs02991

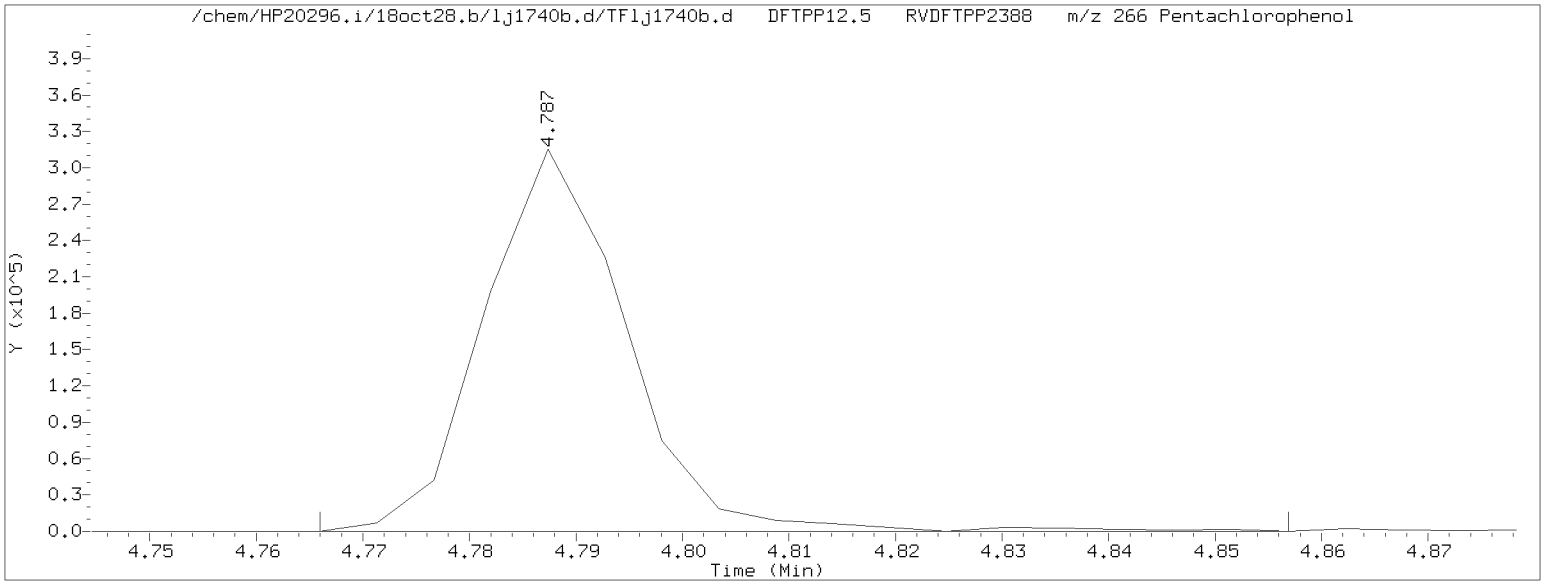
Column phase: DB-5MS Column diameter: 0.18

Data File: lj1740b.d
Spectrum: Avg. Scans 441-443 (5.15), Background Scan 436
Location of Maximum: 198.00
Number of points: 314

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	99	194.00	1620	283.00	668	439.00	2369
116.00	3166	195.00	1422	284.00	228	440.00	1127
117.00	54096	196.00	10118	285.00	1163	441.00	38336
118.00	3735	198.00	340928	289.00	365	442.00	242240
119.00	667	199.00	24680	290.00	168	443.00	49216
120.00	665	200.00	1646	291.00	268	444.00	4698
121.00	620	201.00	3002	292.00	294	445.00	241
122.00	3422	202.00	269	293.00	1768		
123.00	5231	203.00	3299	294.00	1228		

Assessment of GC Column Performance and Injection Port Inertness for

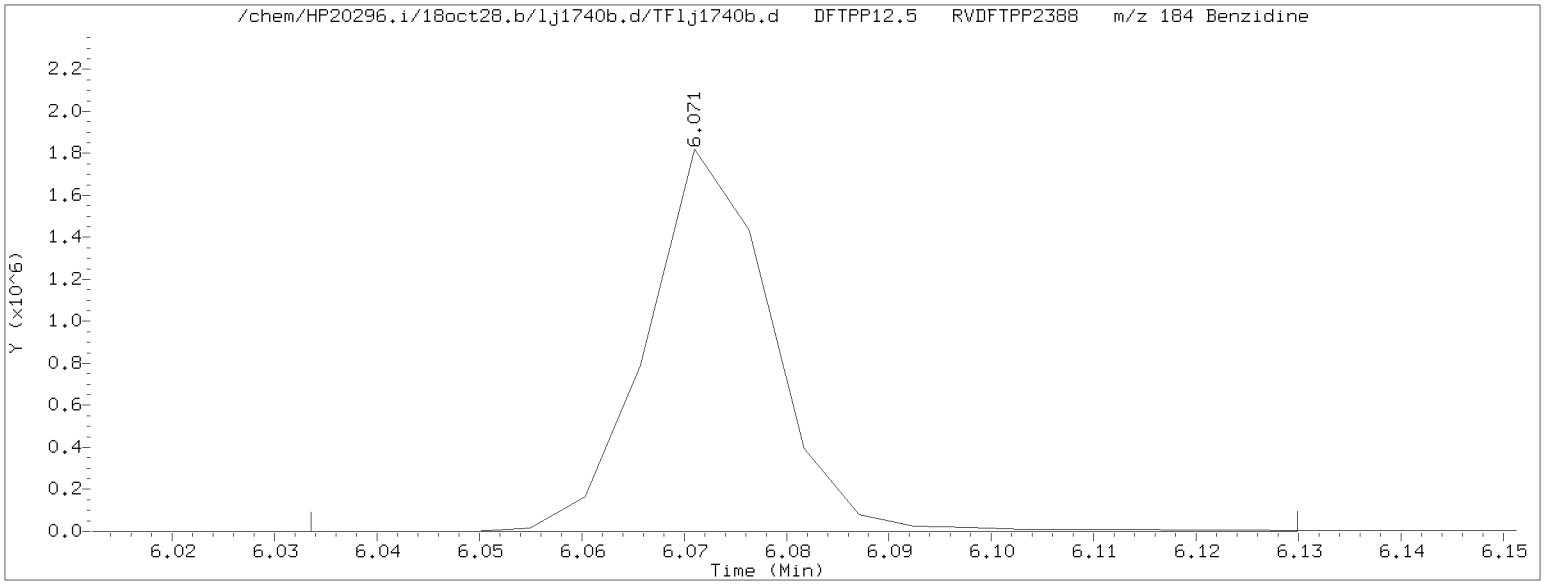
Instrument ID: HP20296.i Injection Date: 29-OCT-2018 00:09 Operator: whs02991



Pentachlorophenol EICP peak height = 315392 EICP peak height at 10% = 31539 Pentachlorophenol EICP area = 292799

Pentachlorophenol EICP peak apex (min.) = 4.787
RT at 10% of front half of EICP (min.) = 4.775 'Front' peak width (min.) = 0.0123166667
RT at 10% of back half of EICP (min.) = 4.802 'Tailing' peak width (min.) = 0.0148000000

PCP tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0148000000}{0.0123166667} = 1.202$



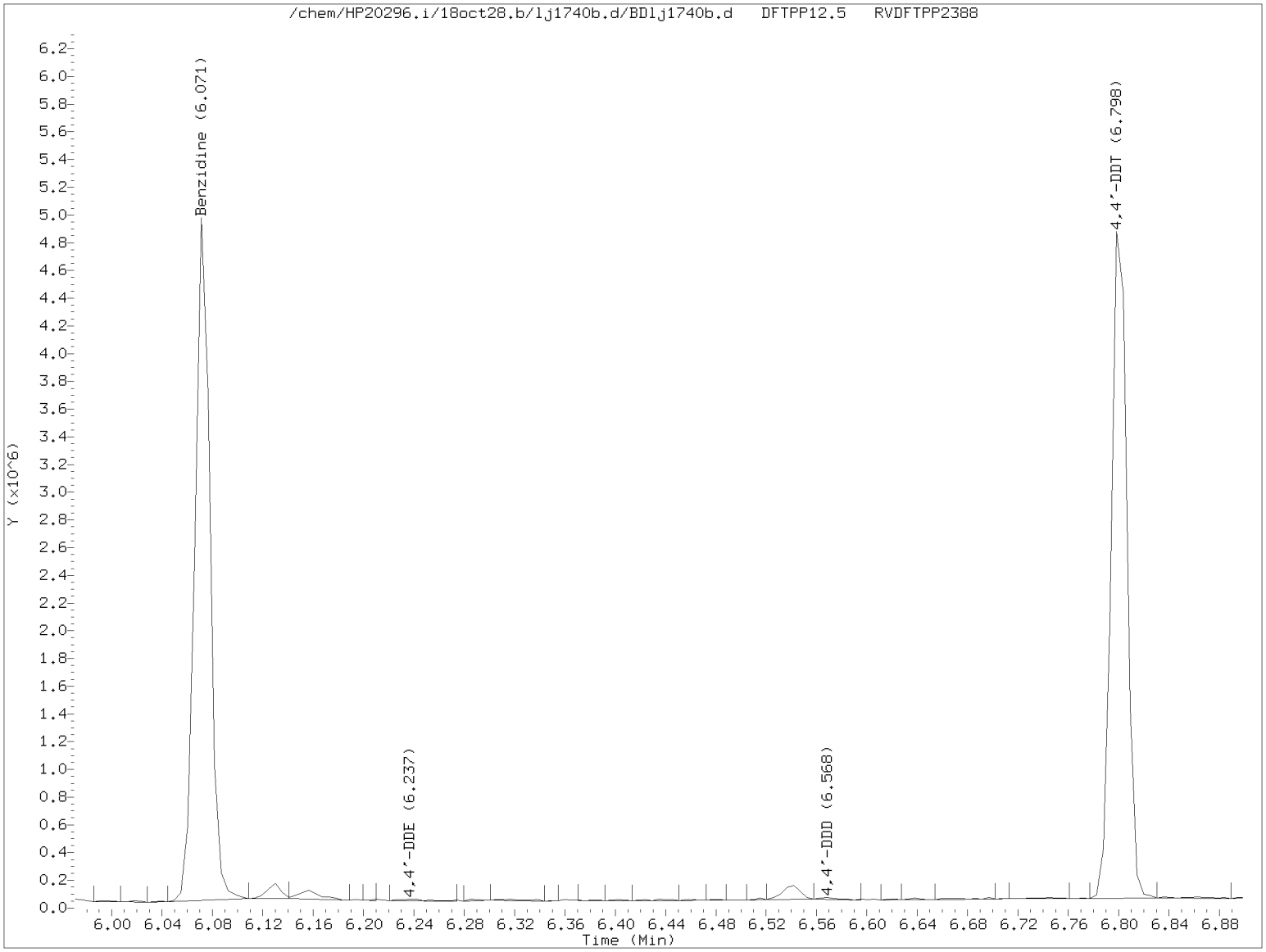
Benzidine EICP peak height = 1820059 EICP peak height at 10% = 182006 Benzidine EICP area = 1535800

Benzidine EICP peak apex (min.) = 6.071
RT at 10% of front half of EICP (min.) = 6.061 'Front' peak width (min.) = 0.0105166667
RT at 10% of back half of EICP (min.) = 6.085 'Tailing' peak width (min.) = 0.0142666667

Benzidine tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0142666667}{0.0105166667} = 1.357$

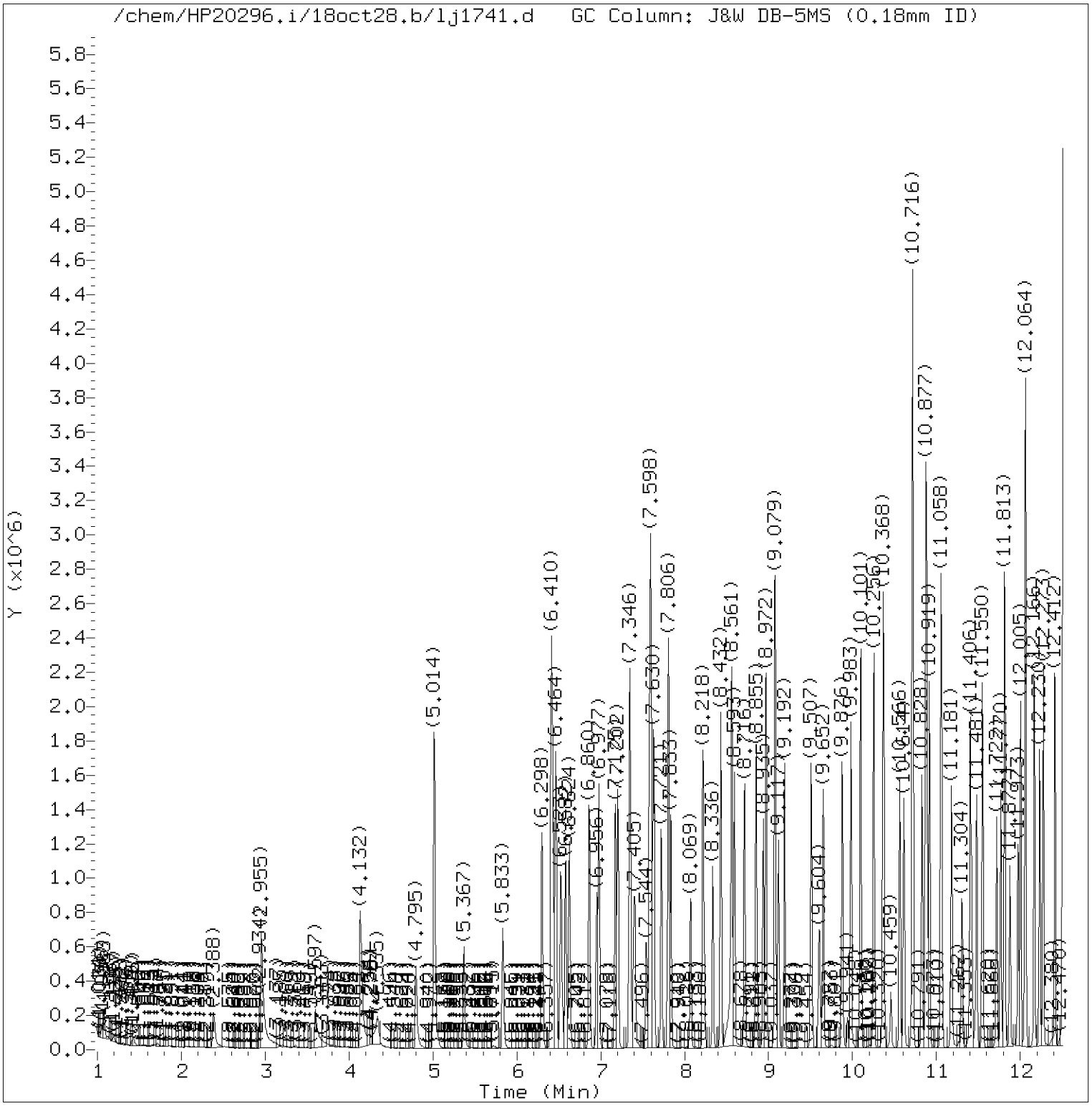
Assessment of GC Column Performance and Injection Port Inertness for

Instrument ID: HP20296.i Injection Date: 29-OCT-2018 00:09 Operator: whs02991



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{18519 + 12285}{18519 + 12285 + 4209519} \times 100 = 0.7$$



Total Ion Chromatogram (TIC)

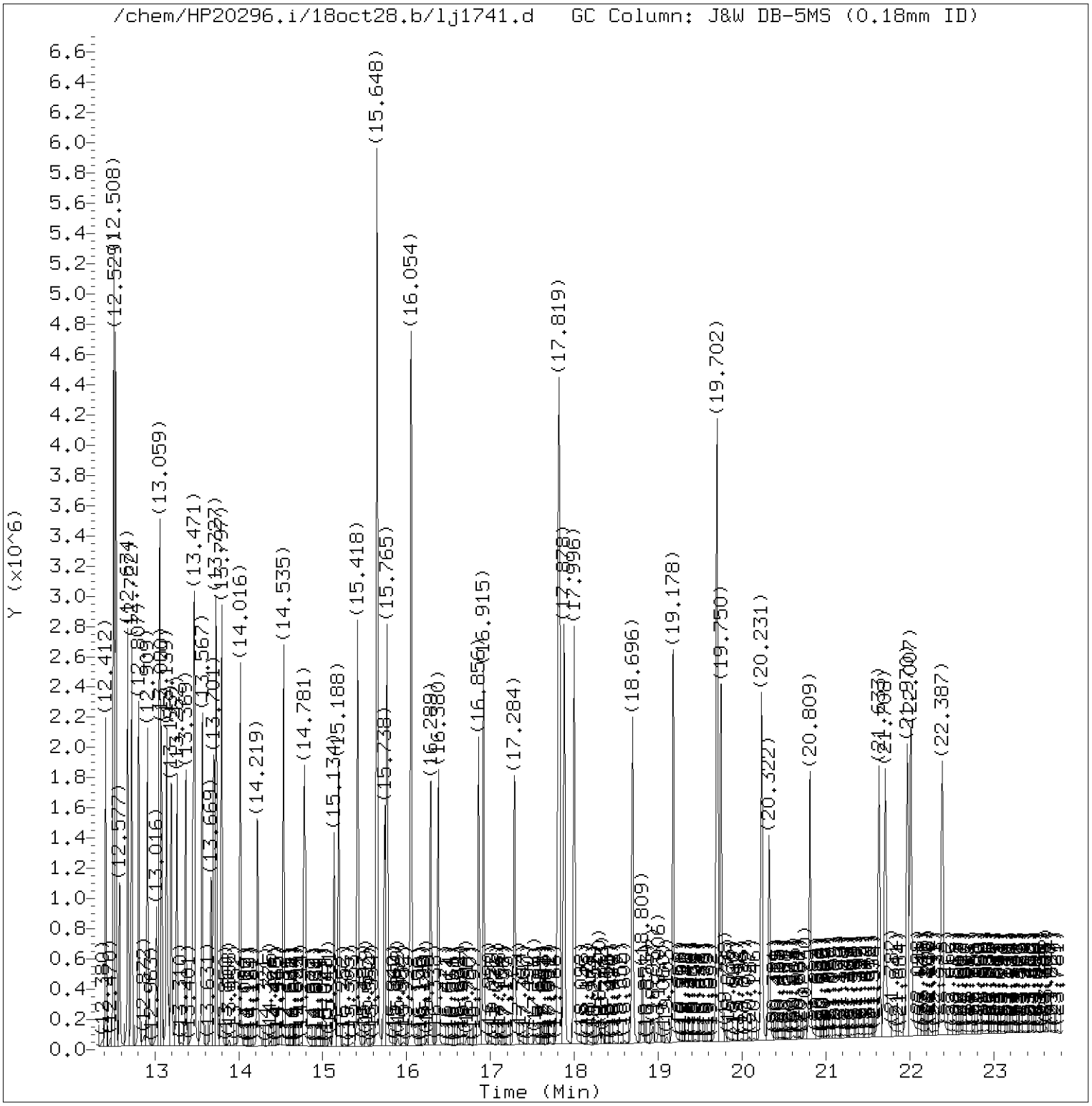
Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1741.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:23 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1741.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:23 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1741.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:23 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.388	88	187521	7.500
5) N-Nitrosodimethylamine	(1)	2.934	74	292206	7.500
6) Pyridine	(1)	2.955	79	509519	7.500
8) 2-Picoline	(1)	4.132	93	512481	7.500
9) N-Nitrosomethylethylamine	(1)	4.346	88	216893	7.500
10) Methyl methanesulfonate	(1)	4.795	80	273991	7.500
12)$2-Fluorophenol	(1)	5.020	112	823587	15.000
14) N-Nitrosodiethylamine	(1)	5.367	102	198437	7.500
43) Total Cresols	(1)			845219	15.000
16) Ethyl methanesulfonate	(1)	5.833	109	215405	7.500
17) Benzaldehyde	(1)	6.298	77	412505	7.500
18)$Phenol-d6	(1)	6.410	99	1117901	15.000
19) Phenol	(1)	6.432	94	667896	7.500
20) Aniline	(1)	6.459	93	780551	7.500
21) a-methylstyrene	(1)	6.539	118	40069	7.500
23) bis(2-Chloroethyl)ether	(1)	6.582	93	500042	7.500
24) 2-Chlorophenol	(1)	6.624	128	391957	7.500
25) 1,3-Dichlorobenzene	(1)	6.865	146	435465	7.500
26)*1,4-Dichlorobenzene-d4	(1)	6.951	152	174707	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	436112	7.500
28) Benzyl alcohol	(1)	7.175	108	258975	7.500
29) 1,2-Dichlorobenzene	(1)	7.202	146	412508	7.500
31) Indene	(1)	7.341	115	458829	7.500
32) 2-Methylphenol	(1)	7.352	108	416320	7.500
100) Isosafrole	(3)			318471	7.500
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.405	45	635177	7.500
35) bis(2-Chloroisopropyl)ether	(1)	7.405	45	635177	7.500
36) N-Nitrosopyrrolidine	(1)	7.544	100	214609	7.500
37) Acetophenone	(1)	7.582	105	637015	7.500
39) N-Nitroso-di-n-propylamine	(1)	7.598	70	388810	7.500
38) 4-Methylphenol	(1)	7.598	108	428899	7.500
40) N-Nitrosomorpholine	(1)	7.614	56	277642	7.500
41) o-Toluidine	(1)	7.630	106	732052	7.500
44) Hexachloroethane	(1)	7.721	117	193254	7.500
45)$Nitrobenzene-d5	(2)	7.806	82	1083798	15.000
46) Nitrobenzene	(2)	7.833	77	581274	7.500
125) 2,4_2,6-Dinitrotoluenes	(3)			401823	15.000
50) N-Nitrosopiperidine	(2)	8.074	114	203270	7.500
52) Isophorone	(2)	8.218	82	969544	7.500
53) 2-Nitrophenol	(2)	8.336	139	188188	7.500

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1741.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:23 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.432	107	476141	7.500
59) O,O,O-Triethylphosphorothioate	(2)	8.561	198	196654	7.500
58) Benzoic acid	(2)	8.566	105	392743	10.000
57) bis(2-Chloroethoxy)methane	(2)	8.593	93	609863	7.500
62) 2,4-Dichlorophenol	(2)	8.716	162	333420	7.500
151) Diallate trans/cis	(4)			458919	7.500
65) 1,2,4-Trichlorobenzene	(2)	8.855	180	367986	7.500
68)*Naphthalene-d8	(2)	8.935	136	672447	5.000
69) Naphthalene	(2)	8.972	128	1146265	7.500
70) 4-Chloroaniline	(2)	9.074	127	464300	7.500
71) 2,6-Dichlorophenol	(2)	9.079	162	322782	7.500
72) Hexachloropropene	(2)	9.117	213	242252	7.500
74) Hexachlorobutadiene	(2)	9.192	225	213888	7.500
78) Quinoline	(2)	9.507	129	677710	7.500
79) Caprolactam	(2)	9.609	113	103364	7.500
80) N-Nitrosodi-n-butylamine	(2)	9.652	84	353671	7.500
83) 4-Chloro-3-methylphenol	(2)	9.876	107	398489	7.500
85) Safrole	(2)	9.983	162	284085	7.500
86) 2-Methylnaphthalene	(2)	10.101	142	749417	7.500
87) 1-Methylnaphthalene	(2)	10.256	142	706494	7.500
88) Hexachlorocyclopentadiene	(3)	10.363	237	220396	7.500
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.374	216	396512	7.500
91) cis-Isosafrole	(3)	10.459	162	54785	1.275
93) 2,4,6-Trichlorophenol	(3)	10.566	196	243999	7.500
95) 2,4,5-Trichlorophenol	(3)	10.614	196	259156	7.500
96)$2-Fluorobiphenyl	(3)	10.721	172	1685371	15.000
97) trans-Isosafrole	(3)	10.828	162	263686	6.225
98) 1,1'-Biphenyl	(3)	10.877	154	874019	7.500
99) 2-Chloronaphthalene	(3)	10.887	162	753138	7.500
101) 1-Chloronaphthalene	(3)	10.919	162	667838	7.500
103) Diphenyl ether	(3)	11.058	170	492340	7.500
104) 2-Nitroaniline	(3)	11.064	138	193520	7.500
108) 1,4-Naphthoquinone	(3)	11.181	158	292461	7.500
109) 1,4-Dinitrobenzene	(3)	11.310	168	100747	7.500
110) Dimethylphthalate	(3)	11.406	163	809664	7.500
111) 1,3-Dinitrobenzene	(3)	11.422	168	123988	7.500
113) 2,6-Dinitrotoluene	(3)	11.481	165	166717	7.500
114) Acenaphthylene	(3)	11.550	152	1000608	7.500
117) 3-Nitroaniline	(3)	11.722	138	183809	7.500
118)*Acenaphthene-d10	(3)	11.770	164	328644	5.000

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$ = Compound is a surrogate standard.

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on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1741.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:23 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.813	153	738590	7.500
120) 2,4-Dinitrophenol	(3)	11.877	184	120054	10.000
121) 4-Nitrophenol	(3)	11.978	109	139020	7.500
122) Pentachlorobenzene	(3)	12.005	250	307115	7.500
123) 2,4-Dinitrotoluene	(3)	12.064	165	235106	7.500
124) Dibenzofuran	(3)	12.064	168	1001807	7.500
126) 1-Naphthylamine	(3)	12.166	143	705315	7.500
127) 2,3,4,6-Tetrachlorophenol	(3)	12.230	232	196768	7.500
128) 2-Naphthylamine	(3)	12.273	143	709506	7.500
129) Diethylphthalate	(3)	12.417	149	778653	7.500
130) Thionazin	(3)	12.508	107	154103	7.500
131) Fluorene	(3)	12.508	166	783531	7.500
133) 5-Nitro-o-toluidine	(3)	12.529	152	215656	7.500
132) 4-Chlorophenyl-phenylether	(3)	12.529	204	407480	7.500
134) 4-Nitroaniline	(3)	12.540	138	195725	7.500
135) 4,6-Dinitro-2-methylphenol	(4)	12.583	198	126753	7.500
136) N-Nitrosodiphenylamine	(4)	12.674	169	649790	7.500
137) NDPA as diphenylamine	(4)	12.674	169	649790	7.500
139) 1,2-Diphenylhydrazine	(4)	12.722	77	1178091	7.500
140)$2,4,6-Tribromophenol	(3)	12.807	330	203388	15.000
142) Tetraethyldithiopyrophosphate	(4)	12.909	97	177913	7.500
144) 1,3,5-Trinitrobenzene	(4)	13.021	213	75897	7.500
145) Diallate (peak 1)	(4)	13.053	86	390897	6.225
146) Phorate	(4)	13.064	75	666573	7.500
147) Phenacetin	(4)	13.080	108	485876	7.500
148) 4-Bromophenyl-phenylether	(4)	13.139	248	218802	7.500
149) Diallate (peak 2)	(4)	13.160	86	68022M	1.275
150) Hexachlorobenzene	(4)	13.198	284	227756	7.500
152) Dimethoate	(4)	13.262	87	382026	7.500
153) Atrazine	(4)	13.369	200	206734	7.500
154) Pentachlorophenol	(4)	13.455	266	145813	7.500
155) 4-Aminobiphenyl	(4)	13.465	169	576524	7.500
156) Pentachloronitrobenzene	(4)	13.471	237	111129	7.500
157) Pronamide	(4)	13.567	173	368534	7.500
158)*Phenanthrene-d10	(4)	13.701	188	678703	5.000
159) Dinoseb	(4)	13.711	211	188799	7.500
160) Phenanthrene	(4)	13.727	178	1194595	7.500
162) Anthracene	(4)	13.797	178	1218074	7.500
168) Carbazole	(4)	14.016	167	1092967	7.500
169) Methyl parathion	(4)	14.225	109	290668	7.500

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

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1741.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:23 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.535	149	1397137	7.500
172) Parathion	(4)	14.776	109	184831	7.500
173) 4-Nitroquinoline-1-oxide	(4)	14.797	190	82082	7.500
227) Total PAHs	(6)			20198266	135.000
174) Octachlorostyrene	(4)	15.139	308	85266	7.500
176) Isodrin	(4)	15.188	193	151145	7.500
178) Fluoranthene	(4)	15.418	202	1353341	7.500
179) Benzidine	(5)	15.648	184	2649030	22.500
180)*Pyrene-d10	(5)	15.738	212	704349	5.000
182) Pyrene	(5)	15.765	202	1409642	7.500
184)$Terphenyl-d14	(5)	16.054	244	1732226	15.000
187) p-Dimethylaminoazobenzene	(5)	16.289	225	223535	7.500
190) Chlorobenzilate	(5)	16.380	139	421506	7.500
192) 3,3'-Dimethylbenzidine	(5)	16.856	212	865074	7.500
193) Butylbenzylphthalate	(5)	16.915	149	656002	7.500
196) 2-Acetylaminofluorene	(5)	17.284	181	531064	7.500
198) 3,3'-Dichlorobenzidine	(5)	17.803	252	473677	7.500
200) Benzo(a)anthracene	(5)	17.819	228	1358768	7.500
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.824	231	276419	7.500
201) Chrysene	(5)	17.878	228	1294287	7.500
204) bis(2-Ethylhexyl)phthalate	(5)	17.996	149	918226	7.500
208) 6-Methylchrysene	(5)	18.696	242	852251	7.500
210) Di-n-octylphthalate	(6)	19.178	149	1603024	7.500
211) Benzo(b)fluoranthene	(6)	19.696	252	1282462	7.500
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.702	256	535222	7.500
213) Benzo(k)fluoranthene	(6)	19.750	252	1256295	7.500
216) Benzo(a)pyrene	(6)	20.231	252	1204059	7.500
218)*Perylene-d12	(6)	20.322	264	642558	5.000
220) 3-Methylcholanthrene	(6)	20.809	268	555684	7.500
222) Dibenz(a,h)acridine	(6)	21.633	279	946103	7.500
223) Dibenz(a,j)acridine	(6)	21.708	279	999006	7.500
224) Indeno(1,2,3-cd)pyrene	(6)	21.970	276	1113820M	7.500
225) Dibenz(a,h)anthracene	(6)	22.012	278	1176190	7.500
226) Benzo(g,h,i)perylene	(6)	22.387	276	1211828	7.500

M = Compound was manually integrated.
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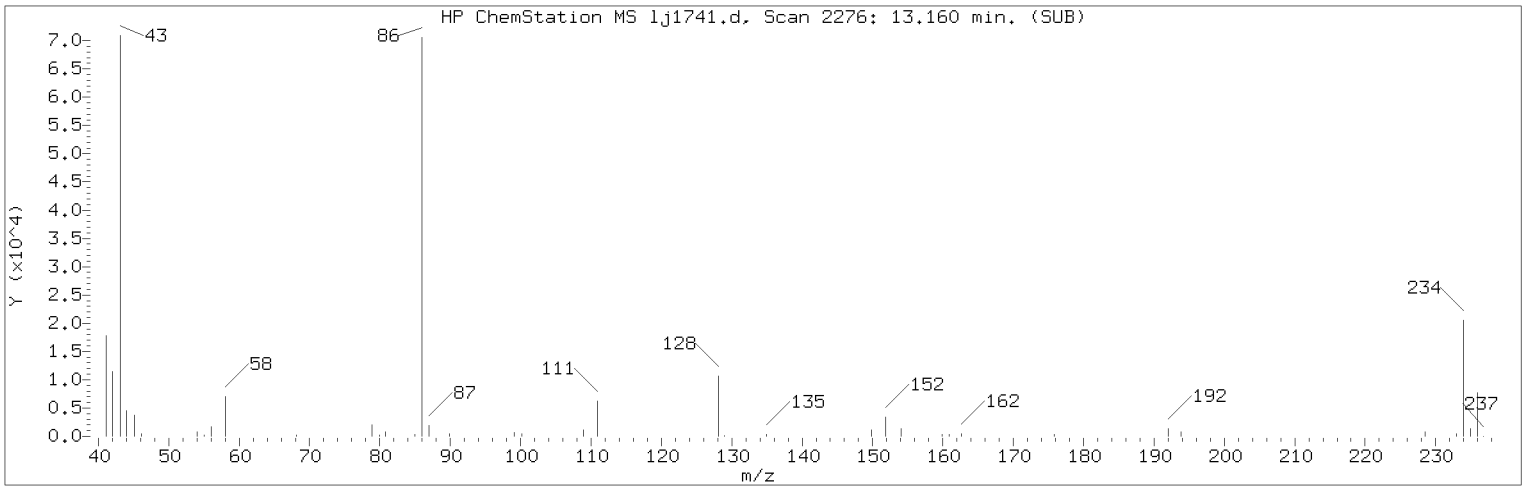
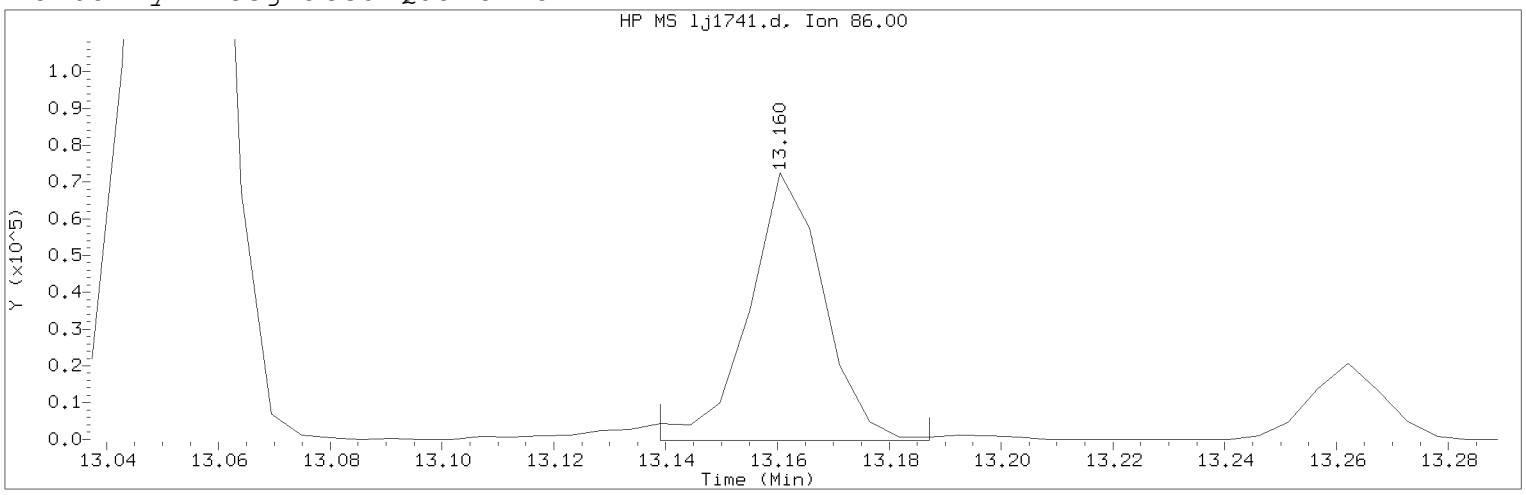
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1741.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:23 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

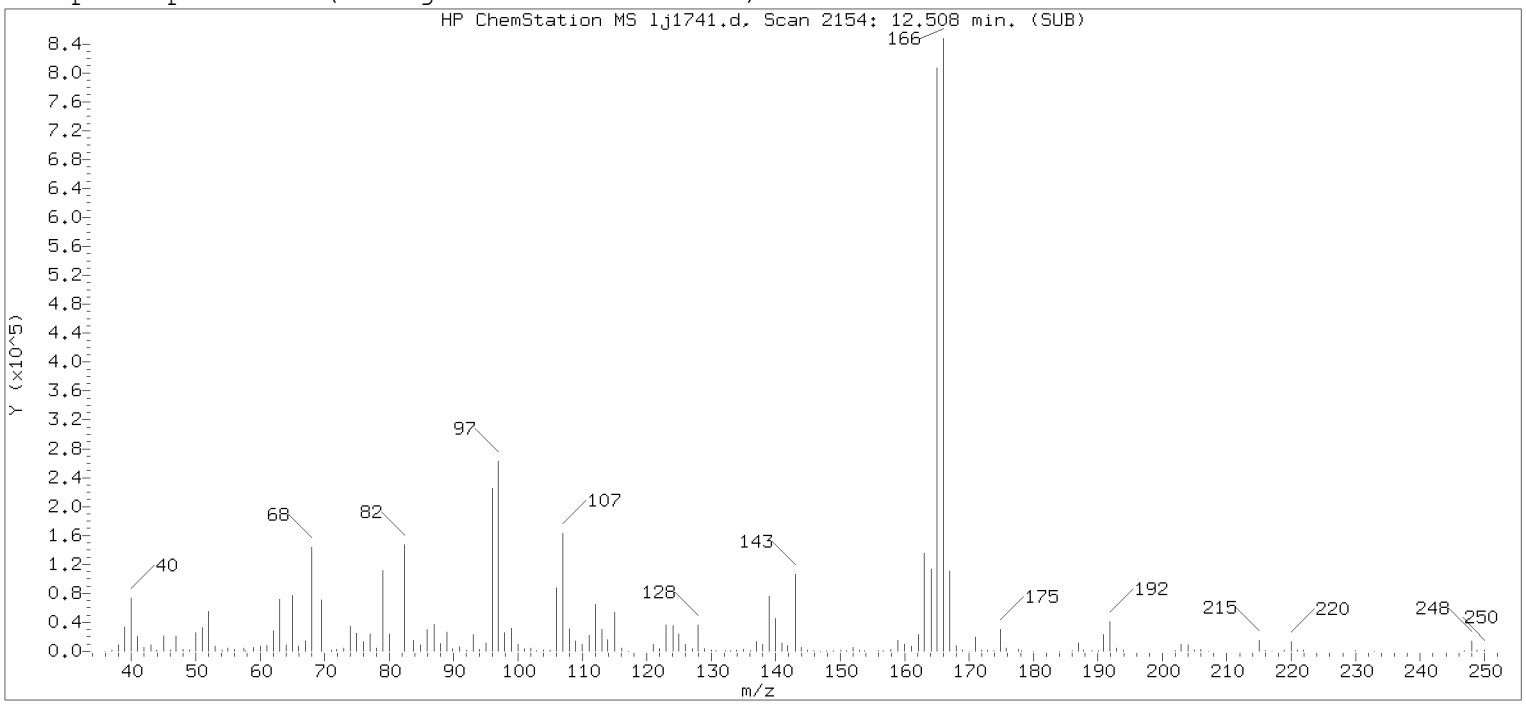
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2276		
Retention Time (minutes)	: 13.160		
Quant Ion	: 86.00		
Area (flag)	: 68022M		
On-Column Amount (ng/ul)	: 1.2750		
Integration start scan	: 2271	Integration stop scan:	2280
Y at integration start	: -230	Y at integration end:	-230

Reason for manual integration: improper integration

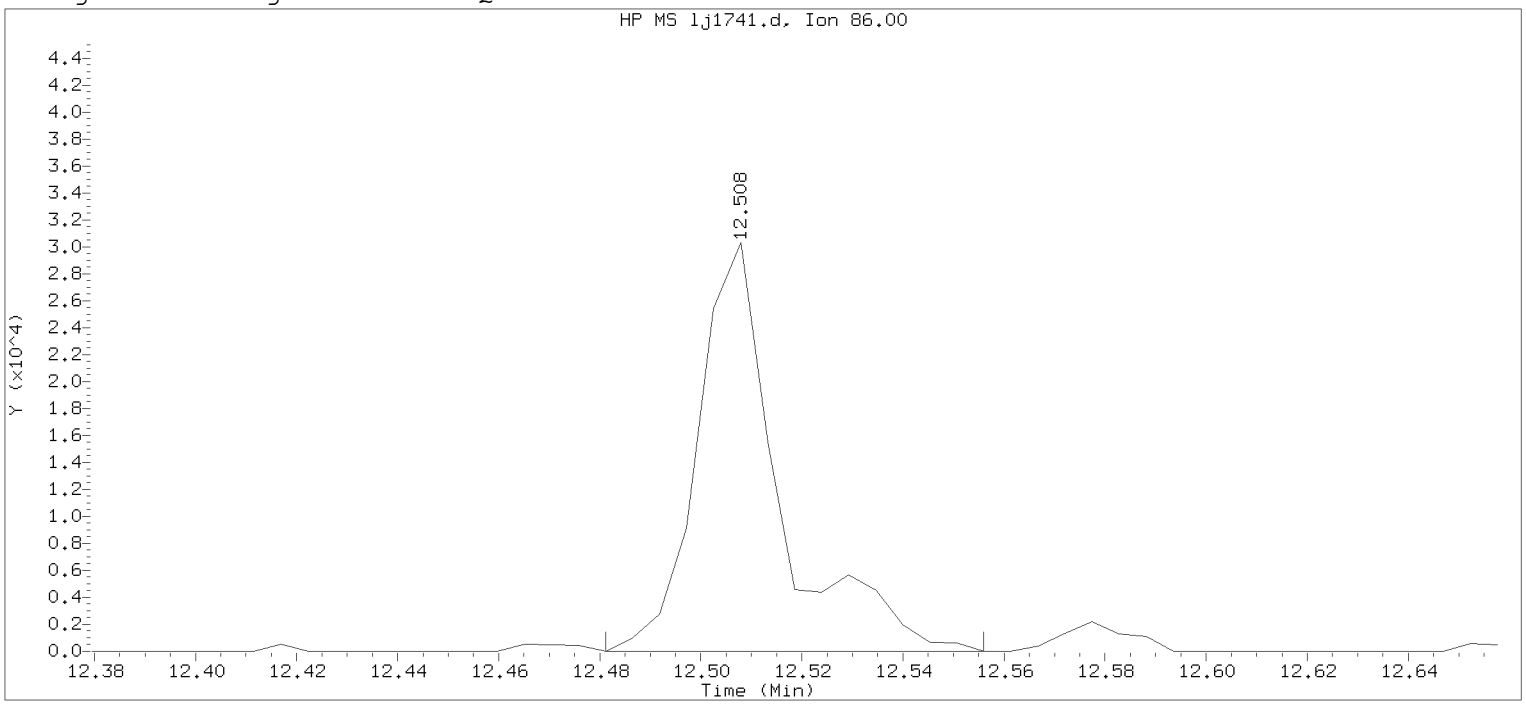
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1741.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:23 Analyst ID: whs02991

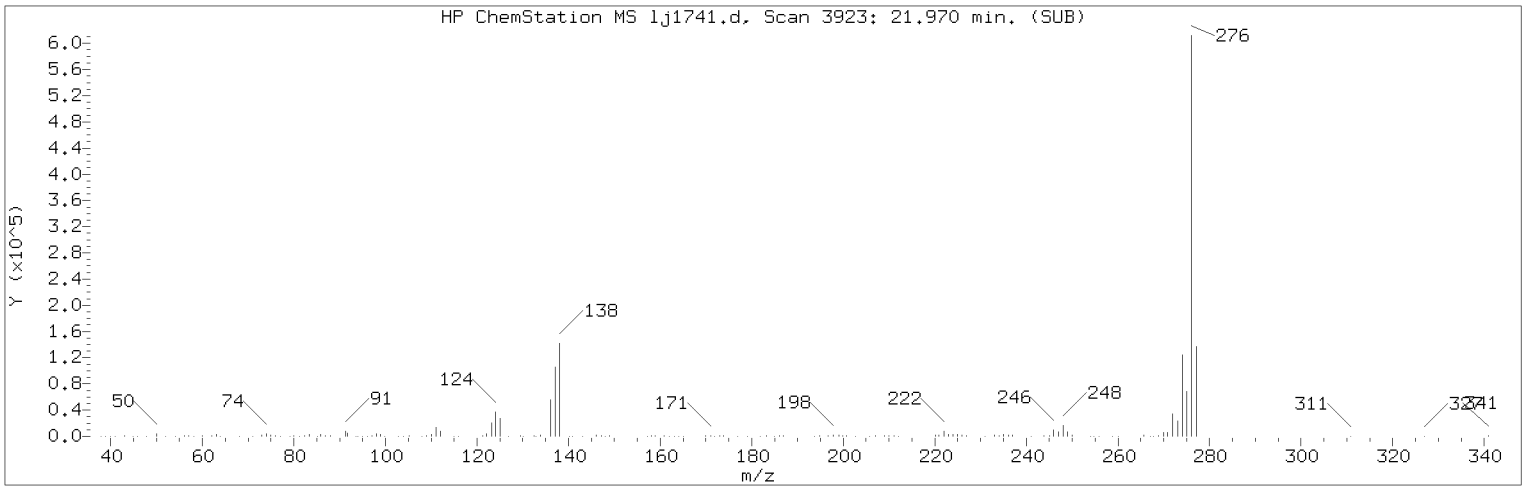
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 00:52
Date, time and analyst ID of latest file update: 29-Oct-2018 00:52 Unknown

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

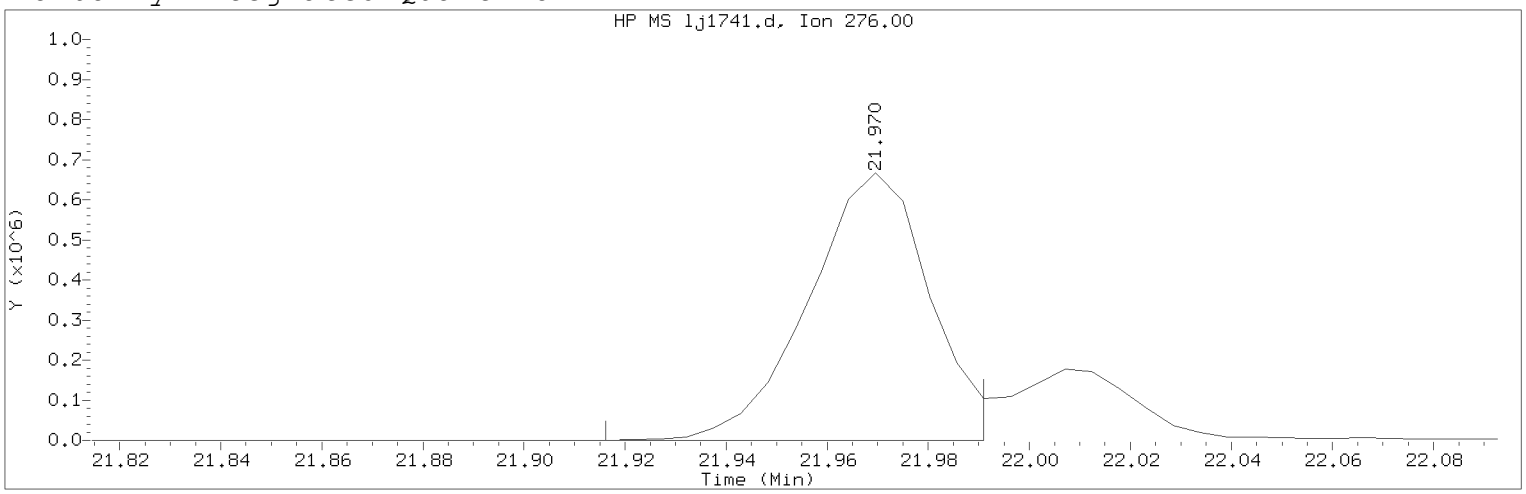
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2154		
Retention Time (minutes)	: 12.508		
Quant Ion	: 86.00		
Area	: 34206		
On-column Amount (ng/ul)	: 353.5652		
Integration start scan	: 2148	Integration stop scan:	2162
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1741.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:23 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

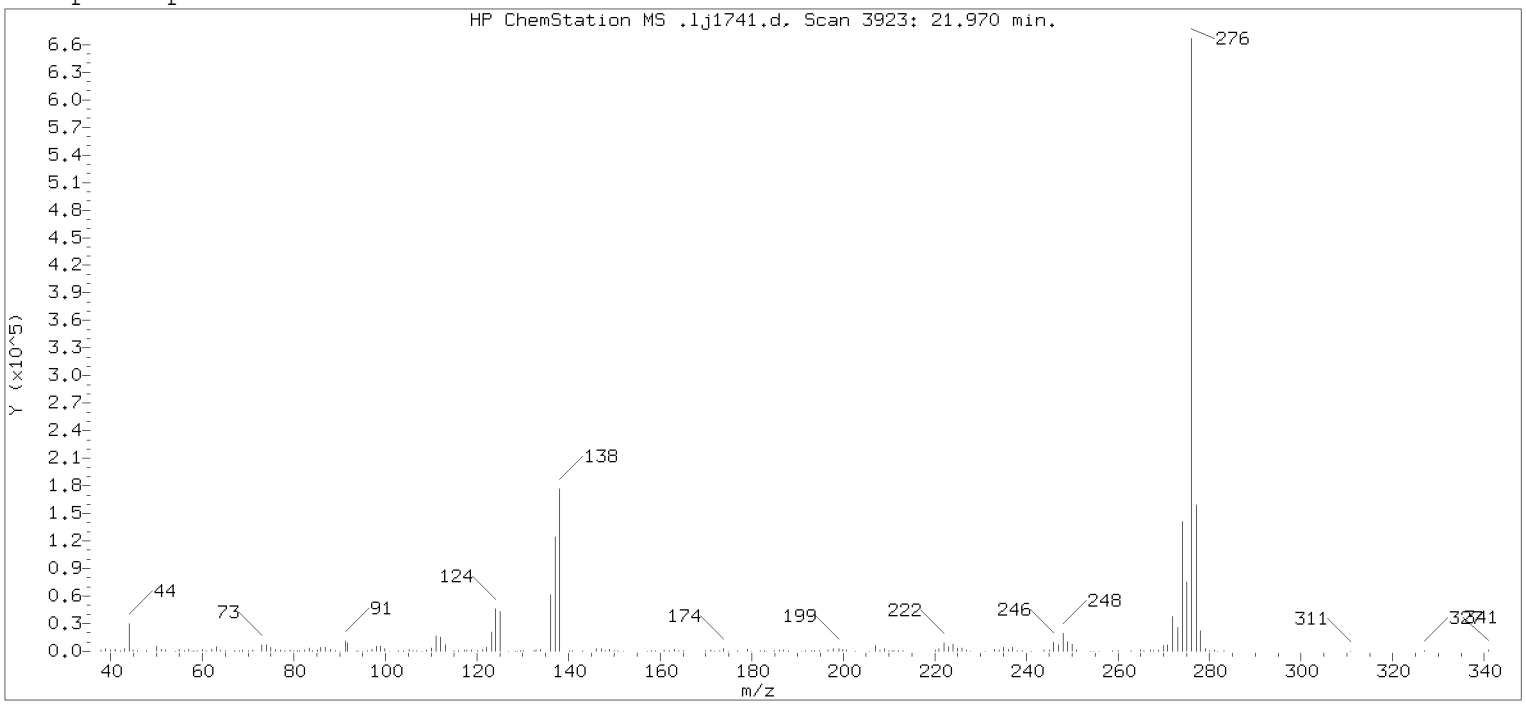
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3923
Retention Time (minutes) : 21.970
Quant Ion : 276.00
Area (flag) : 1113820M
On-Column Amount (ng/ul) : 7.5000
Integration start scan : 3912 Integration stop scan: 3926
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

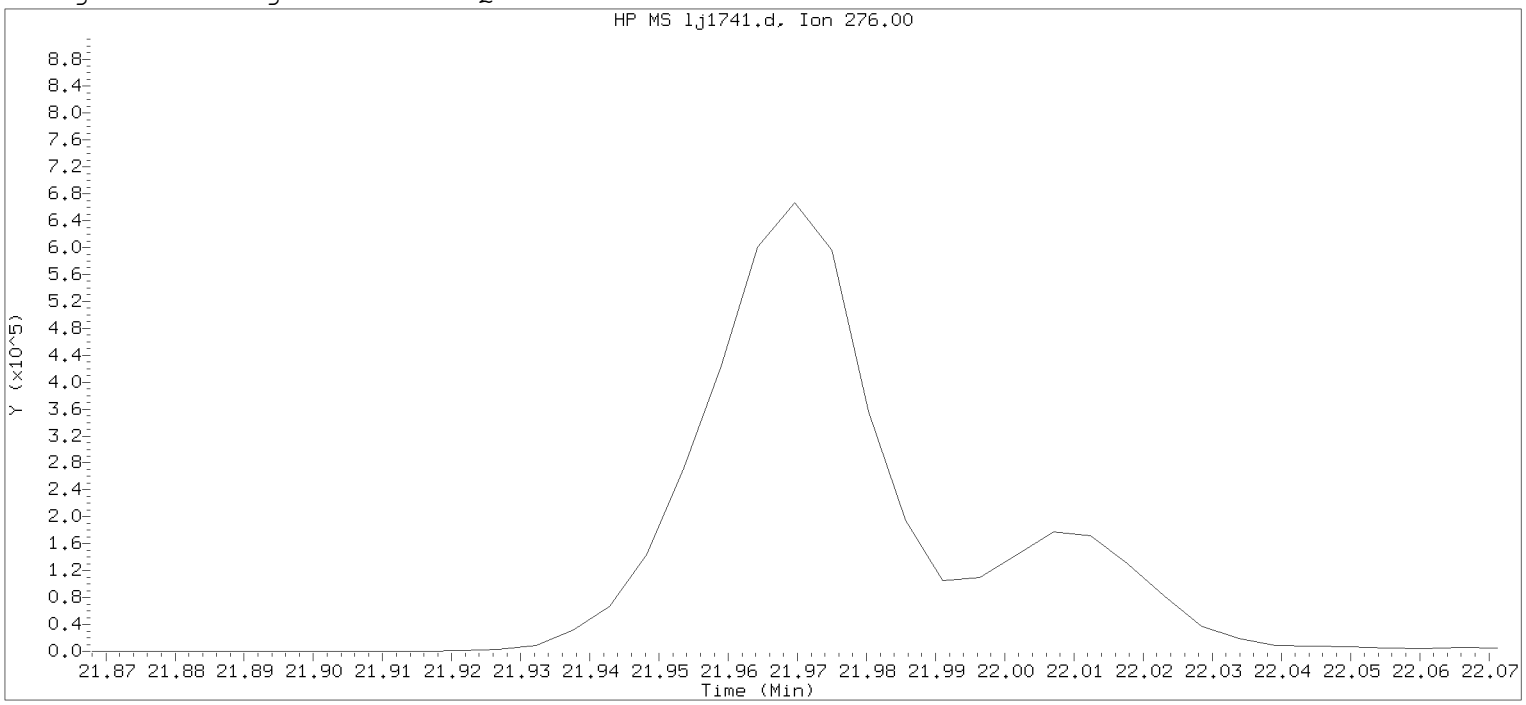
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



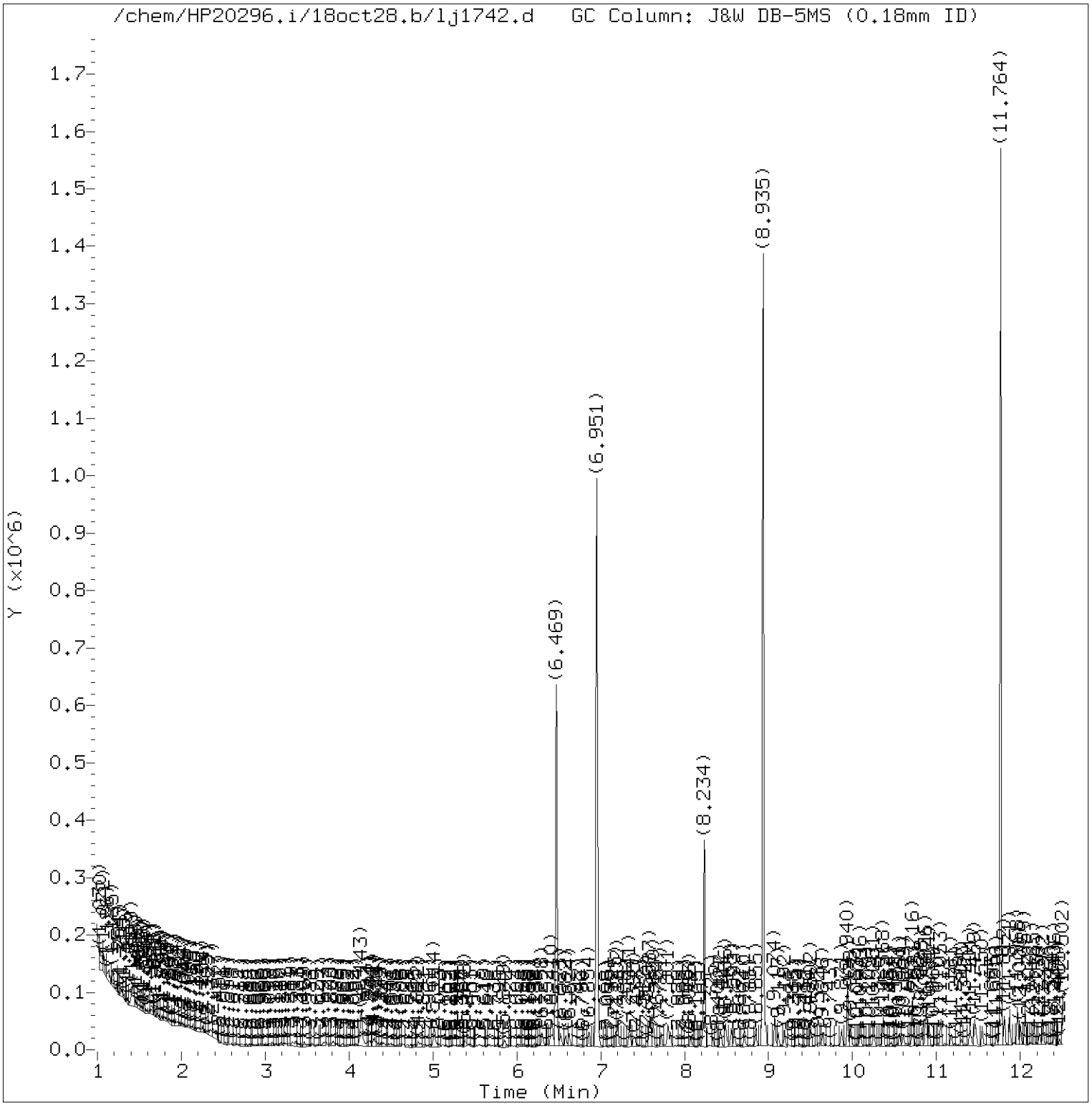
Data File: /chem/HP20296.i/18oct28.b/lj1741.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:23 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 00:52
Date, time and analyst ID of latest file update: 29-Oct-2018 00:52 Unknown

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Expected RT (minutes) : 21.970
Quant Ion : 276.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: ashley.transue



Total Ion Chromatogram (TIC)

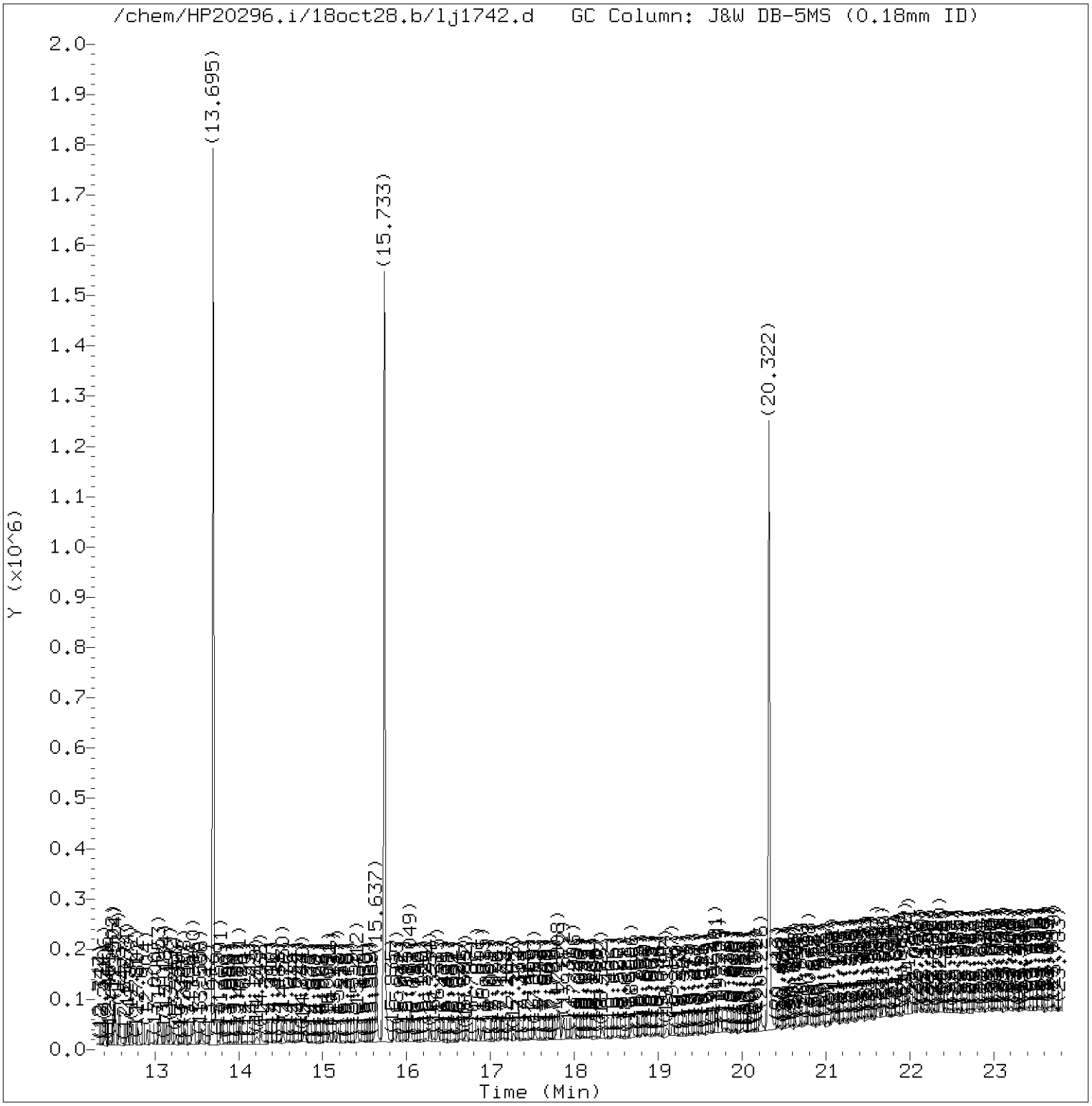
Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.415	88	6046M	0.229
5) N-Nitrosodimethylamine	(1)	3.105	74	3925M	0.095
6) Pyridine	(1)	3.196	79	2153M	0.030
8) 2-Picoline	(1)	4.239	93	10800M	0.149
9) N-Nitrosomethylethylamine	(1)	4.367	88	3454M	0.113
10) Methyl methanesulfonate	(1)	4.838	80	5410M	0.140
12)$2-Fluorophenol	(1)	5.009	112	12958	0.223
14) N-Nitrosodiethylamine	(1)	5.378	102	3020M	0.108
43) Total Cresols	(1)			14452	0.242
16) Ethyl methanesulfonate	(1)	5.849	109	2769M	0.091
17) Benzaldehyde	(1)	6.298	77	8290	0.143
18)$Phenol-d6	(1)	6.410	99	19761	0.251
19) Phenol	(1)	6.426	94	11543	0.123
20) Aniline	(1)	6.464	93	12708	0.115
21) a-methylstyrene	(1)	6.533	118	1066M	0.189
23) bis(2-Chloroethyl)ether	(1)	6.582	93	7681	0.109
24) 2-Chlorophenol	(1)	6.624	128	6955M	0.126
25) 1,3-Dichlorobenzene	(1)	6.854	146	6898	0.112
26)*1,4-Dichlorobenzene-d4	(1)	6.951	152	184726	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	8475M	0.138
28) Benzyl alcohol	(1)	7.181	108	6002	0.164
29) 1,2-Dichlorobenzene	(1)	7.202	146	7119	0.122
31) Indene	(1)	7.336	115	8708	0.135
32) 2-Methylphenol	(1)	7.346	108	6583	0.112
100) Isosafrole	(3)			4007	0.092
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.395	45	9937	0.111
35) bis(2-Chloroisopropyl)ether	(1)	7.395	45	9937	0.111
36) N-Nitrosopyrrolidine	(1)	7.550	100	3064	0.101
37) Acetophenone	(1)	7.576	105	9732	0.108
39) N-Nitroso-di-n-propylamine	(1)	7.587	70	6259	0.114
38) 4-Methylphenol	(1)	7.592	108	7869	0.130
40) N-Nitrosomorpholine	(1)	7.619	56	4569	0.117
41) o-Toluidine	(1)	7.625	106	10990	0.106
44) Hexachloroethane	(1)	7.726	117	2873	0.105
45)$Nitrobenzene-d5	(2)	7.801	82	15591	0.210
46) Nitrobenzene	(2)	7.828	77	8352	0.105
125) 2,4_2,6-Dinitrotoluenes	(3)			4520	0.166
50) N-Nitrosopiperidine	(2)	8.074	114	3137	0.113
52) Isophorone	(2)	8.218	82	15309	0.115
53) 2-Nitrophenol	(2)	8.331	139	2548	0.099

M = Compound was manually integrated.
* = Compound is an internal standard.
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Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.432	107	6781	0.104
58) Benzoic acid	(2)	8.486	105	15488M	0.383
59) O,O,O-Triethylphosphorothioate	(2)	8.555	198	2948	0.109
57) bis(2-Chloroethoxy)methane	(2)	8.593	93	11615	0.139
62) 2,4-Dichlorophenol	(2)	8.700	162	5175	0.113
151) Diallate trans/cis	(4)			6505	0.108
65) 1,2,4-Trichlorobenzene	(2)	8.855	180	6649	0.132
68)*Naphthalene-d8	(2)	8.935	136	691705	5.000
69) Naphthalene	(2)	8.967	128	18976	0.123
70) 4-Chloroaniline	(2)	9.074	127	7594	0.119
71) 2,6-Dichlorophenol	(2)	9.074	162	5554	0.125
72) Hexachloropropene	(2)	9.117	213	4367	0.131
74) Hexachlorobutadiene	(2)	9.186	225	3977	0.136
78) Quinoline	(2)	9.507	129	11342	0.122
79) Caprolactam	(2)	9.620	113	1580M	0.111
80) N-Nitrosodi-n-butylamine	(2)	9.646	84	6676	0.138
83) 4-Chloro-3-methylphenol	(2)	9.876	107	6479	0.119
85) Safrole	(2)	9.978	162	4984	0.128
86) 2-Methylnaphthalene	(2)	10.096	142	11654	0.119
87) 1-Methylnaphthalene	(2)	10.251	142	11323	0.121
88) Hexachlorocyclopentadiene	(3)	10.358	237	2613	0.087
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.368	216	6427	0.119
91) cis-Isosafrole	(3)	10.459	162	445M	0.010
93) 2,4,6-Trichlorophenol	(3)	10.561	196	3656	0.110
95) 2,4,5-Trichlorophenol	(3)	10.609	196	4086	0.115
96)$2-Fluorobiphenyl	(3)	10.716	172	27796	0.242
97) trans-Isosafrole	(3)	10.828	162	3562	0.082
98) 1,1'-Biphenyl	(3)	10.866	154	14787	0.124
99) 2-Chloronaphthalene	(3)	10.887	162	11865	0.115
101) 1-Chloronaphthalene	(3)	10.914	162	9883	0.108
103) Diphenyl ether	(3)	11.053	170	8213	0.122
104) 2-Nitroaniline	(3)	11.058	138	2224	0.084
108) 1,4-Naphthoquinone	(3)	11.181	158	3935	0.099
109) 1,4-Dinitrobenzene	(3)	11.304	168	1102M	0.080
110) Dimethylphthalate	(3)	11.401	163	12307	0.111
111) 1,3-Dinitrobenzene	(3)	11.422	168	1687M	0.100
113) 2,6-Dinitrotoluene	(3)	11.470	165	1939	0.085
114) Acenaphthylene	(3)	11.550	152	12969	0.108
117) 3-Nitroaniline	(3)	11.711	138	2210	0.088
118)*Acenaphthene-d10	(3)	11.764	164	336467	5.000

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Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.812	153	13056	0.127
120) 2,4-Dinitrophenol	(3)	11.871	184	4224	0.344
121) 4-Nitrophenol	(3)	11.968	109	6354	0.335
122) Pentachlorobenzene	(3)	12.005	250	4537	0.108
124) Dibenzofuran	(3)	12.059	168	17240	0.126
123) 2,4-Dinitrotoluene	(3)	12.059	165	2581	0.080
126) 1-Naphthylamine	(3)	12.165	143	12953	0.135
127) 2,3,4,6-Tetrachlorophenol	(3)	12.224	232	2597	0.097
128) 2-Naphthylamine	(3)	12.272	143	12217	0.126
129) Diethylphthalate	(3)	12.406	149	13320	0.125
131) Fluorene	(3)	12.502	166	13148	0.124
130) Thionazin	(3)	12.502	107	2126	0.101
134) 4-Nitroaniline	(3)	12.524	138	1737	0.065
133) 5-Nitro-o-toluidine	(3)	12.524	152	2190	0.074
132) 4-Chlorophenyl-phenylether	(3)	12.524	204	6312	0.113
135) 4,6-Dinitro-2-methylphenol	(4)	12.572	198	3879	0.236
136) N-Nitrosodiphenylamine	(4)	12.674	169	10848	0.129
137) NDPA as diphenylamine	(4)	12.674	169	10848	0.129
139) 1,2-Diphenylhydrazine	(4)	12.722	77	16335	0.107
140)$2,4,6-Tribromophenol	(3)	12.807	330	2868	0.207
142) Tetraethyldithiopyrophosphate	(4)	12.909	97	2360	0.102
144) 1,3,5-Trinitrobenzene	(4)	13.005	213	767M	0.078
145) Diallate (peak 1)	(4)	13.053	86	5987	0.098
146) Phorate	(4)	13.059	75	7721	0.104
147) Phenacetin	(4)	13.064	108	5331	0.085
148) 4-Bromophenyl-phenylether	(4)	13.134	248	3740	0.132
149) Diallate (peak 2)	(4)	13.160	86	518M	0.010
150) Hexachlorobenzene	(4)	13.192	284	3664	0.124
152) Dimethoate	(4)	13.251	87	3891	0.078
153) Atrazine	(4)	13.358	200	3465	0.129
154) Pentachlorophenol	(4)	13.455	266	1412M	0.075
156) Pentachloronitrobenzene	(4)	13.465	237	1038M	0.072
155) 4-Aminobiphenyl	(4)	13.471	169	8595	0.115
157) Pronamide	(4)	13.562	173	3824	0.080
158)*Phenanthrene-d10	(4)	13.695	188	660540	5.000
159) Dinoseb	(4)	13.706	211	529M	0.022
160) Phenanthrene	(4)	13.722	178	21273	0.131
162) Anthracene	(4)	13.791	178	18683	0.122
168) Carbazole	(4)	14.016	167	15492	0.109
169) Methyl parathion	(4)	14.219	109	2601	0.069

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Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.530	149	19035	0.105
172) Parathion	(4)	14.781	109	1441M	0.060
173) 4-Nitroquinoline-1-oxide	(4)	14.792	190	909M	0.085
227) Total PAHs	(6)			289010	2.139
174) Octachlorostyrene	(4)	15.129	308	1543M	0.139
176) Isodrin	(4)	15.193	193	2959	0.151
178) Fluoranthene	(4)	15.412	202	20172	0.120
179) Benzidine	(5)	15.637	184	77096	0.693
180)*Pyrene-d10	(5)	15.733	212	666010	5.000
182) Pyrene	(5)	15.760	202	20848	0.121
184)$Terphenyl-d14	(5)	16.043	244	26005	0.238
187) p-Dimethylaminoazobenzene	(5)	16.284	225	2093M	0.074
190) Chlorobenzilate	(5)	16.375	139	5147	0.097
192) 3,3'-Dimethylbenzidine	(5)	16.851	212	9397	0.086
193) Butylbenzylphthalate	(5)	16.910	149	6497	0.079
196) 2-Acetylaminofluorene	(5)	17.279	181	5587	0.083
198) 3,3'-Dichlorobenzidine	(5)	17.798	252	5202	0.087
200) Benzo(a)anthracene	(5)	17.808	228	16361	0.108
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.819	231	3131	0.090
201) Chrysene	(5)	17.872	228	18911	0.120
204) bis(2-Ethylhexyl)phthalate	(5)	17.990	149	7555	0.065
208) 6-Methylchrysene	(5)	18.686	242	10619	0.099
210) Di-n-octylphthalate	(6)	19.167	149	11616	0.062
211) Benzo(b)fluoranthene	(6)	19.691	252	16141	0.116
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.696	256	5240	0.084
213) Benzo(k)fluoranthene	(6)	19.739	252	18689	0.126
216) Benzo(a)pyrene	(6)	20.226	252	13764	0.110
218)*Perylene-d12	(6)	20.322	264	561301	5.000
220) 3-Methylcholanthrene	(6)	20.798	268	6186	0.096
222) Dibenz(a,h)acridine	(6)	21.617	279	11153	0.101
223) Dibenz(a,j)acridine	(6)	21.697	279	12898	0.111
224) Indeno(1,2,3-cd)pyrene	(6)	21.948	276	13468M	0.113
225) Dibenz(a,h)anthracene	(6)	21.996	278	14032	0.113
226) Benzo(g,h,i)perylene	(6)	22.365	276	15542	0.117

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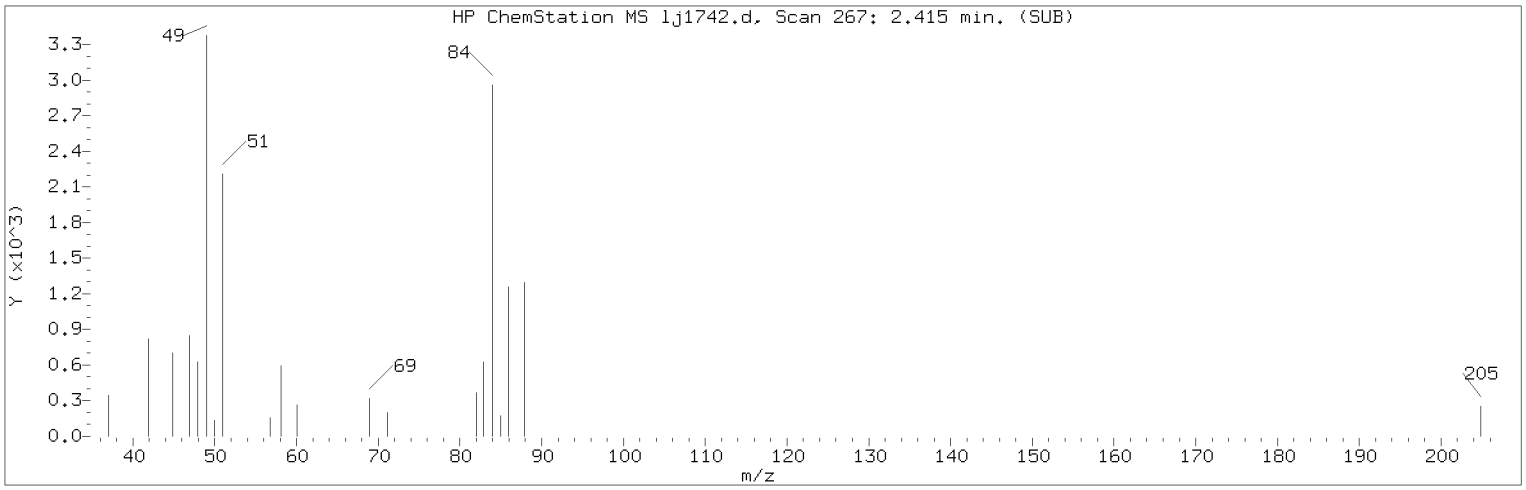
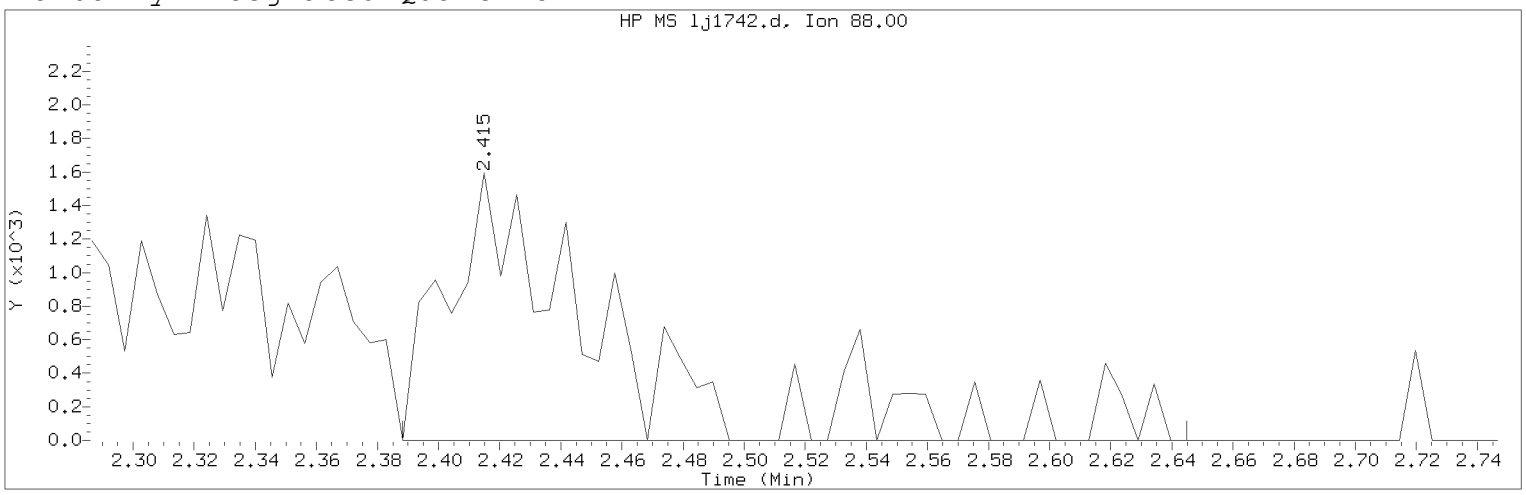
Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

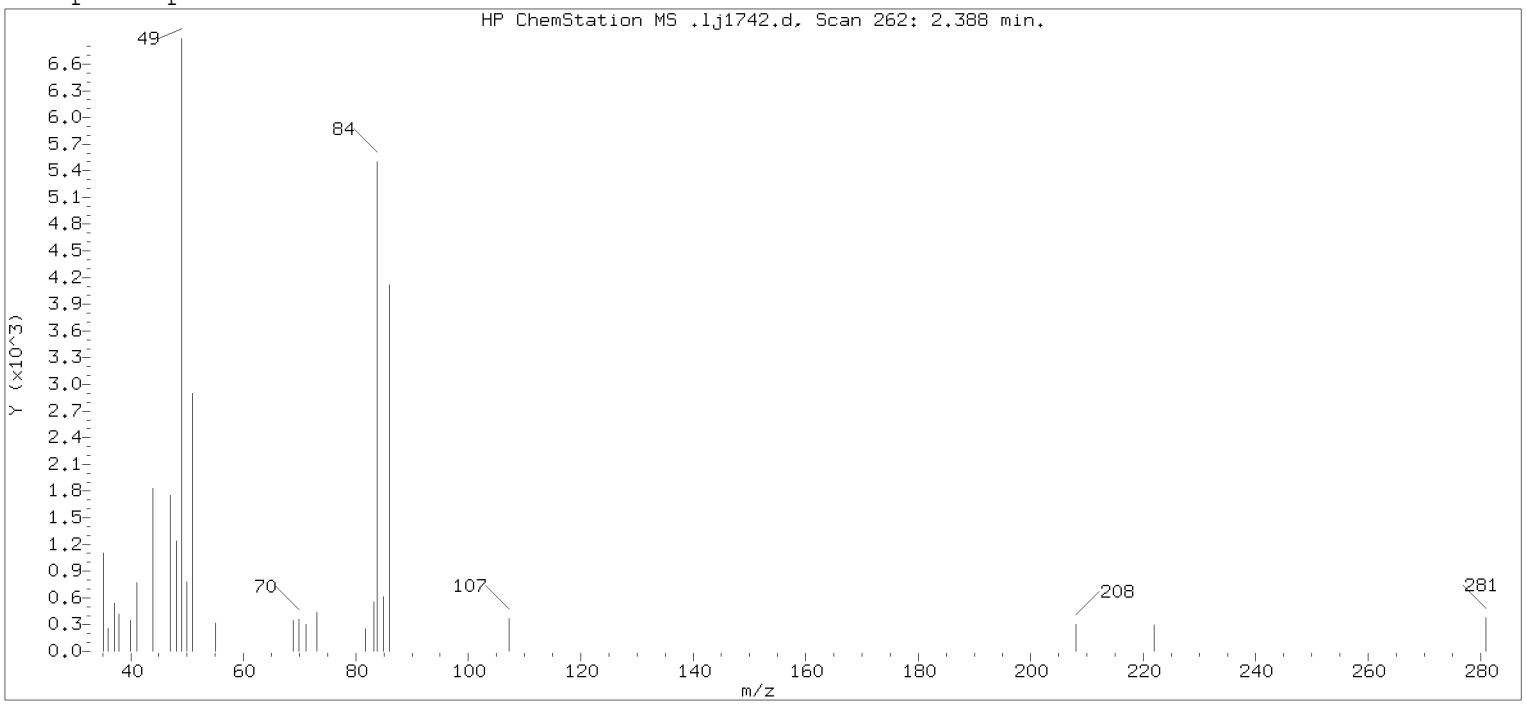
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 267		
Retention Time (minutes)	: 2.415		
Quant Ion	: 88.00		
Area (flag)	: 6046M		
On-Column Amount (ng/ul)	: 0.2287		
Integration start scan	: 261	Integration stop scan:	309
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: missed peak

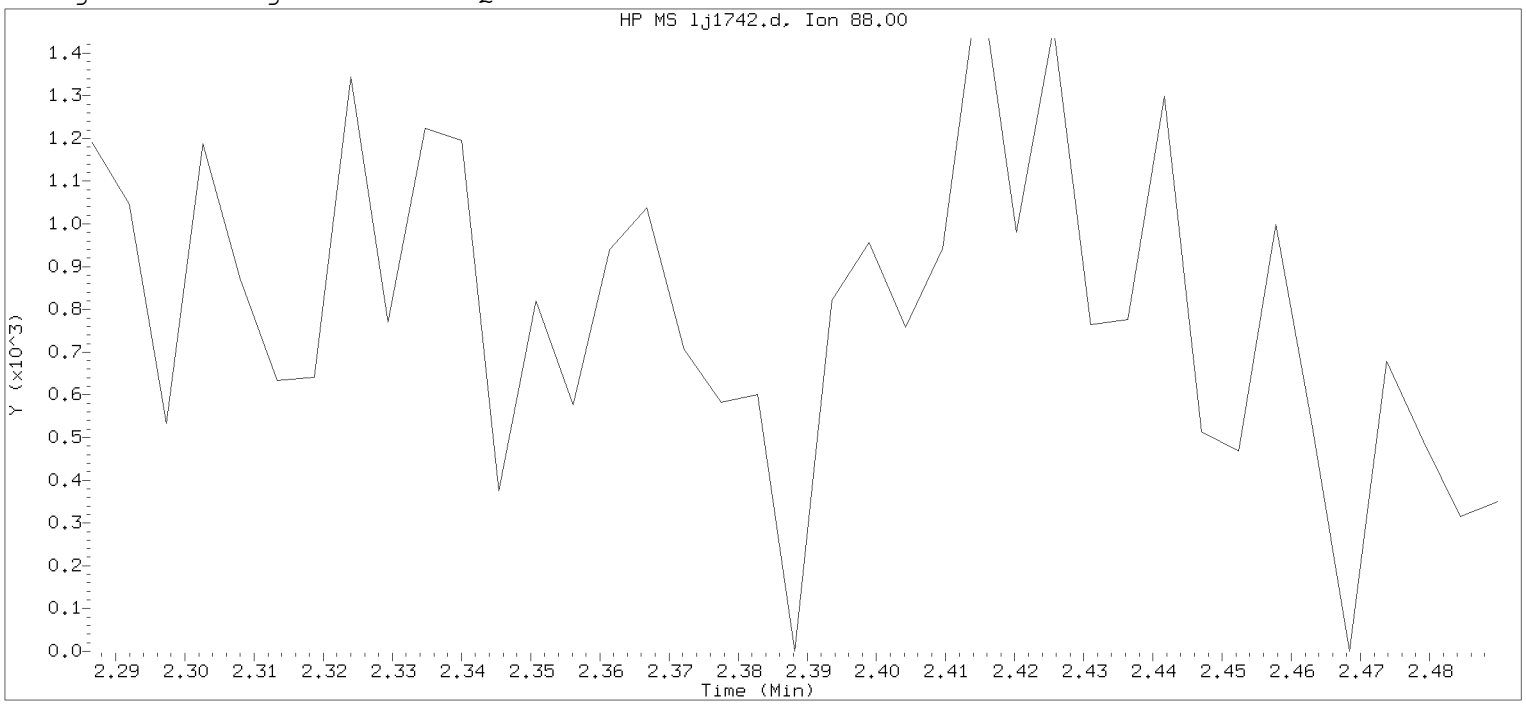
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

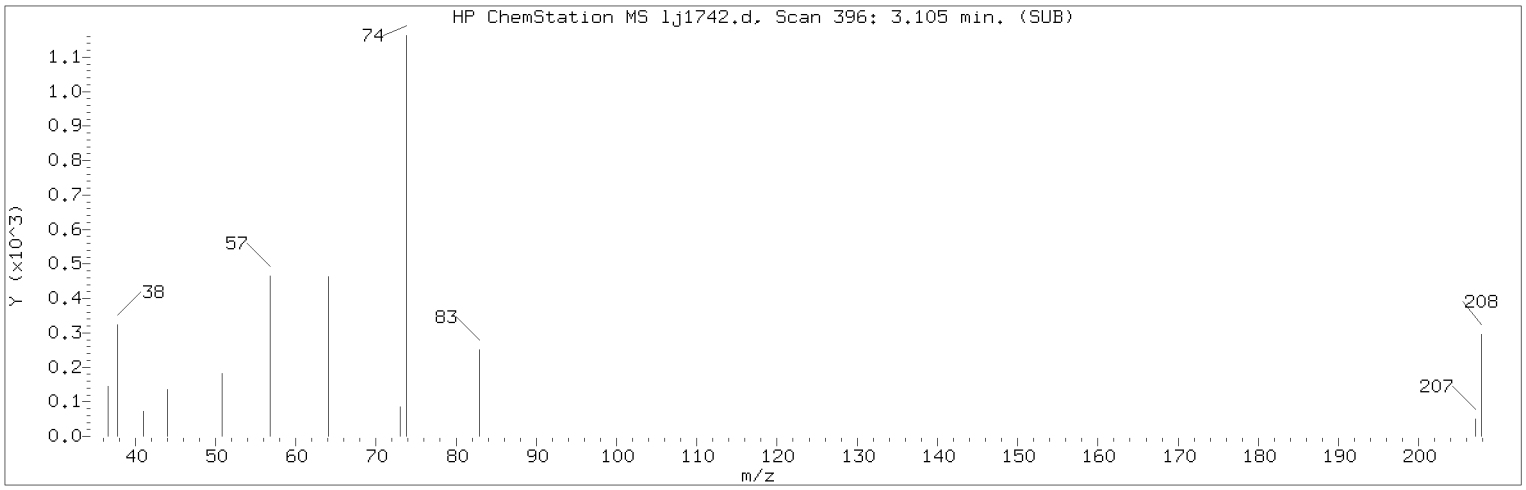
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

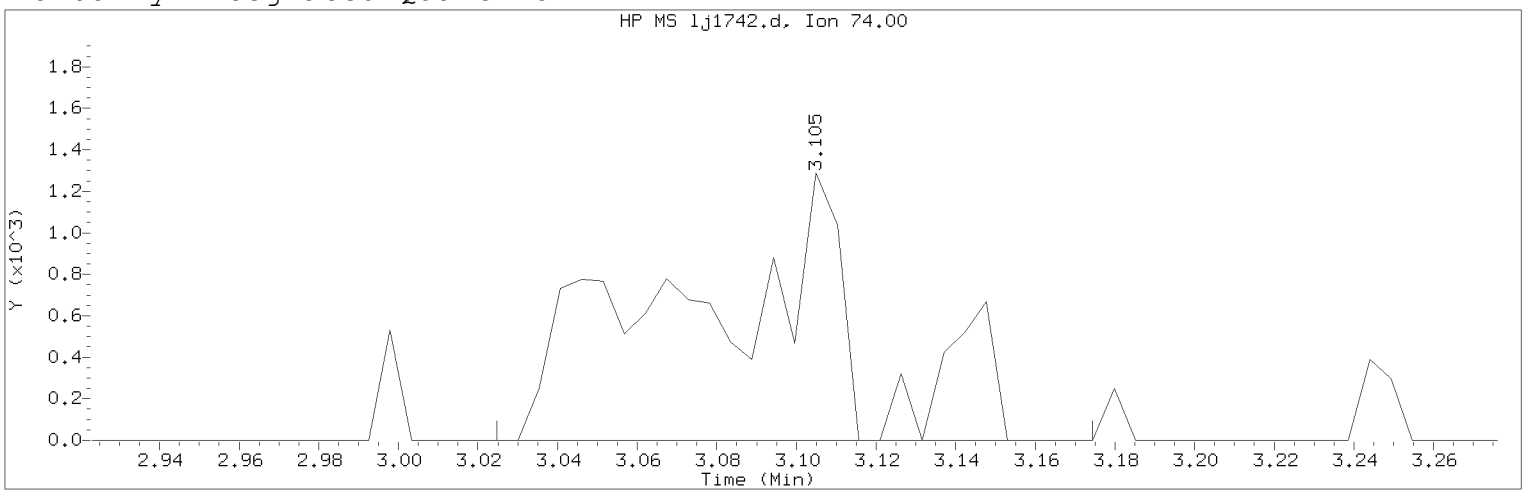
Compound Number : 1
Compound Name : 1,4-Dioxane
Expected RT (minutes) : 2.388
Quant Ion : 88.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ARTRANSUE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

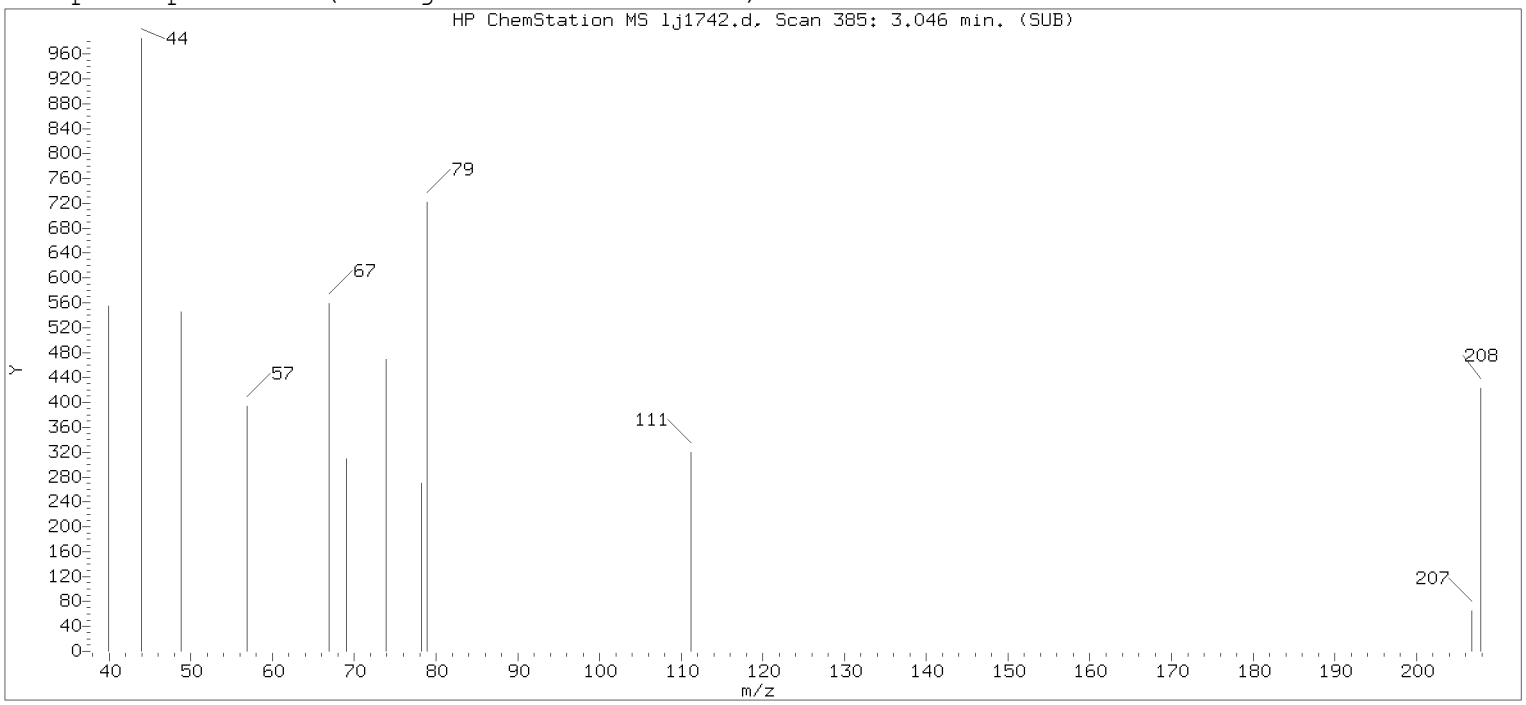
Compound Number : 5
Compound Name : N-Nitrosodimethylamine
Scan Number : 396
Retention Time (minutes) : 3.105
Quant Ion : 74.00
Area (flag) : 3925M
On-Column Amount (ng/ul) : 0.0953
Integration start scan : 380 Integration stop scan: 408
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

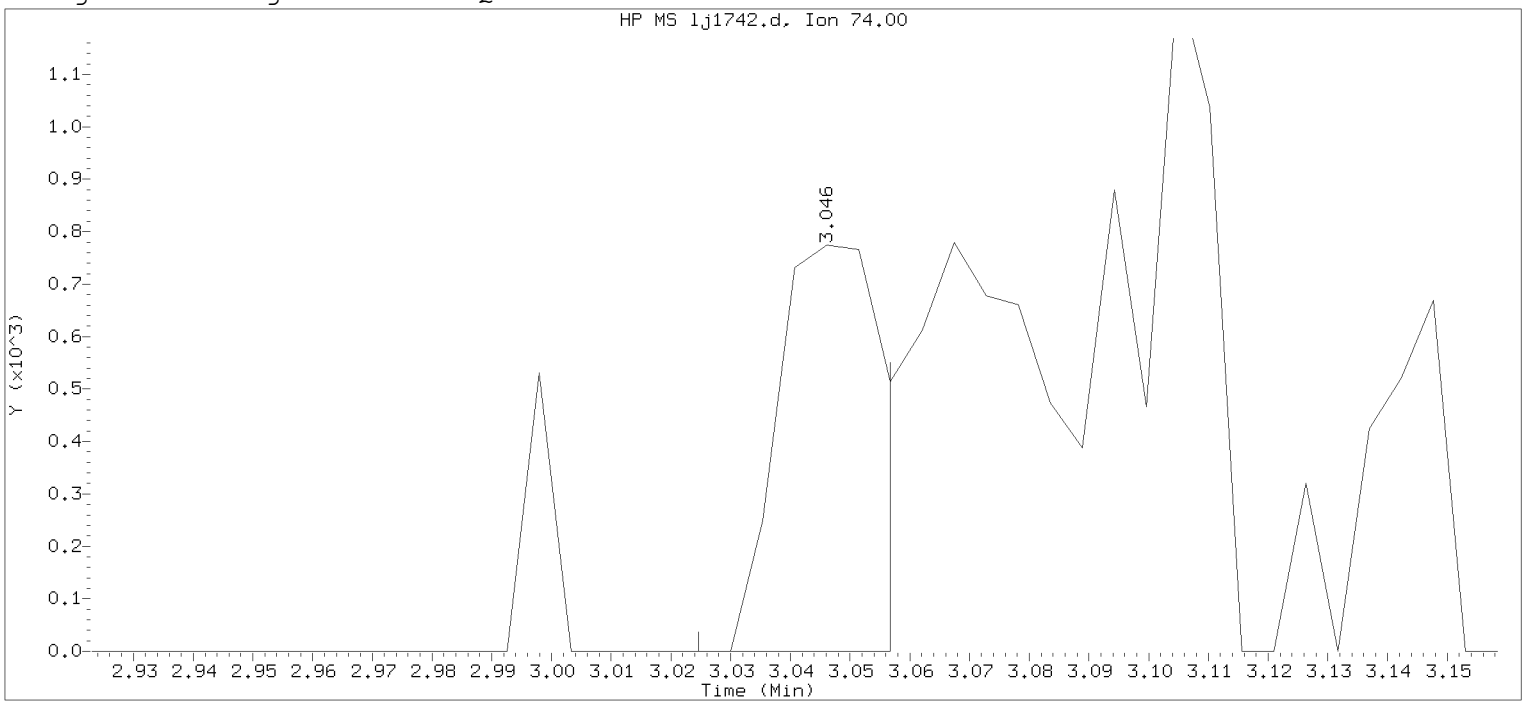
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

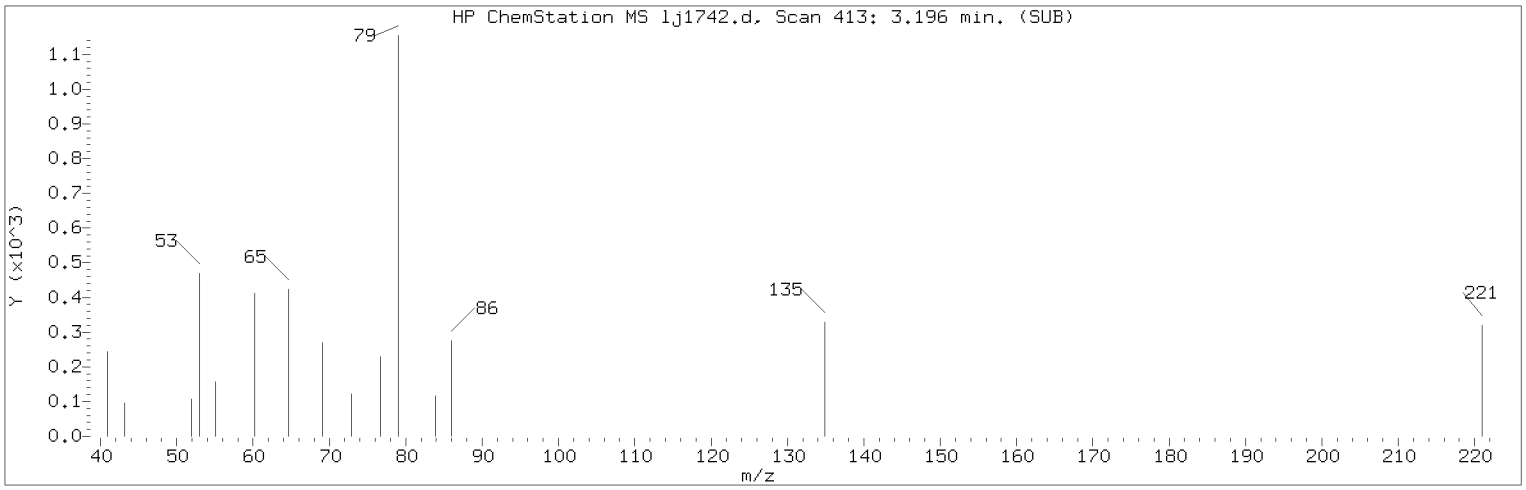
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

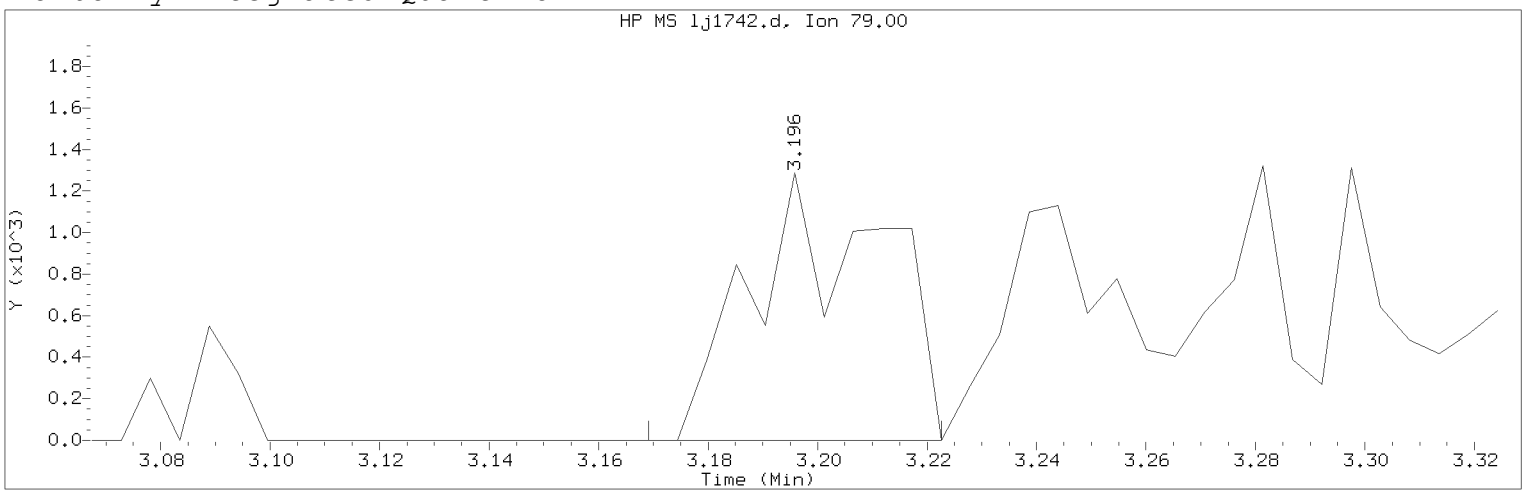
Compound Number	: 5		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 385		
Retention Time (minutes)	: 3.046		
Quant Ion	: 74.00		
Area	: 892		
On-column Amount (ng/ul)	: 0.0221		
Integration start scan	: 380	Integration stop scan:	386
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ARTransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

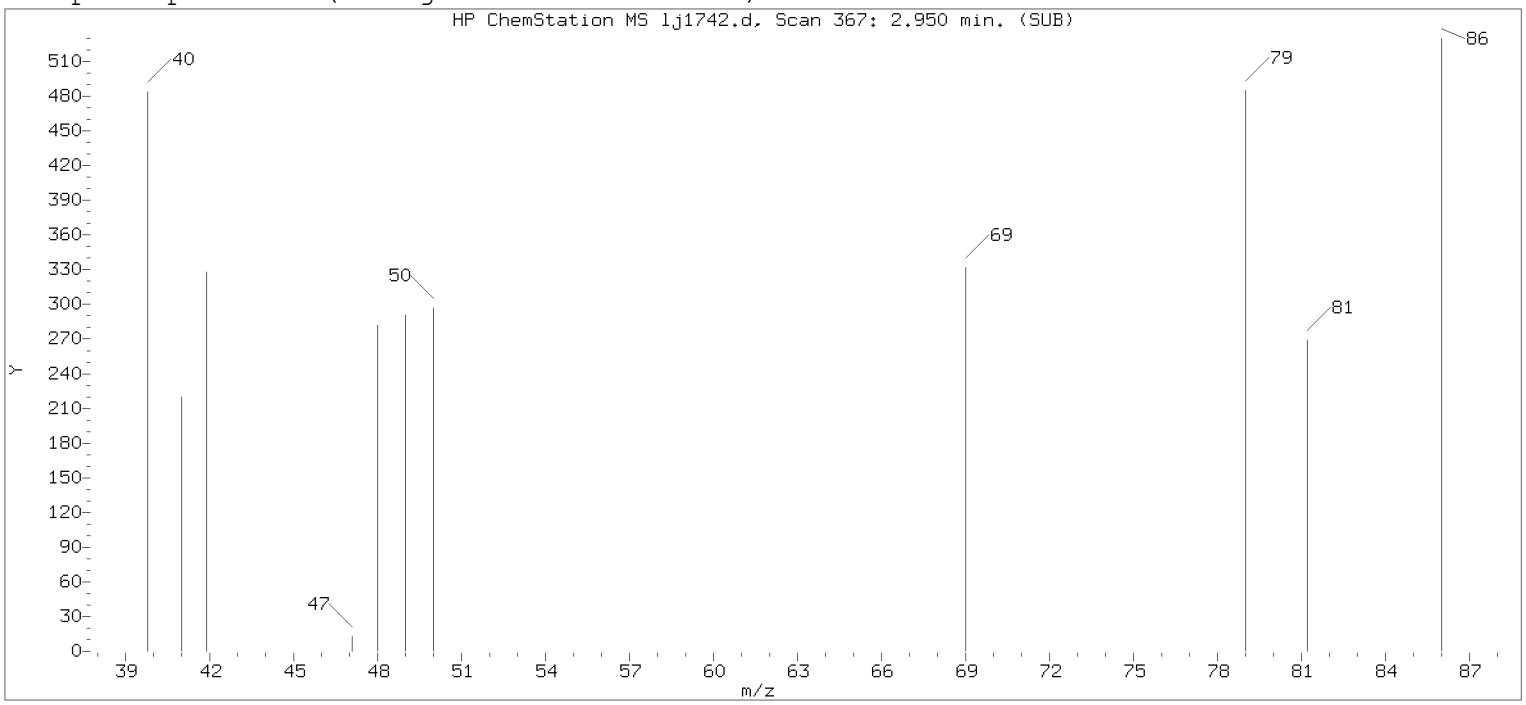
Compound Number : 6
Compound Name : Pyridine
Scan Number : 413
Retention Time (minutes) : 3.196
Quant Ion : 79.00
Area (flag) : 2153M
On-Column Amount (ng/ul) : 0.0300
Integration start scan : 407 Integration stop scan: 417
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

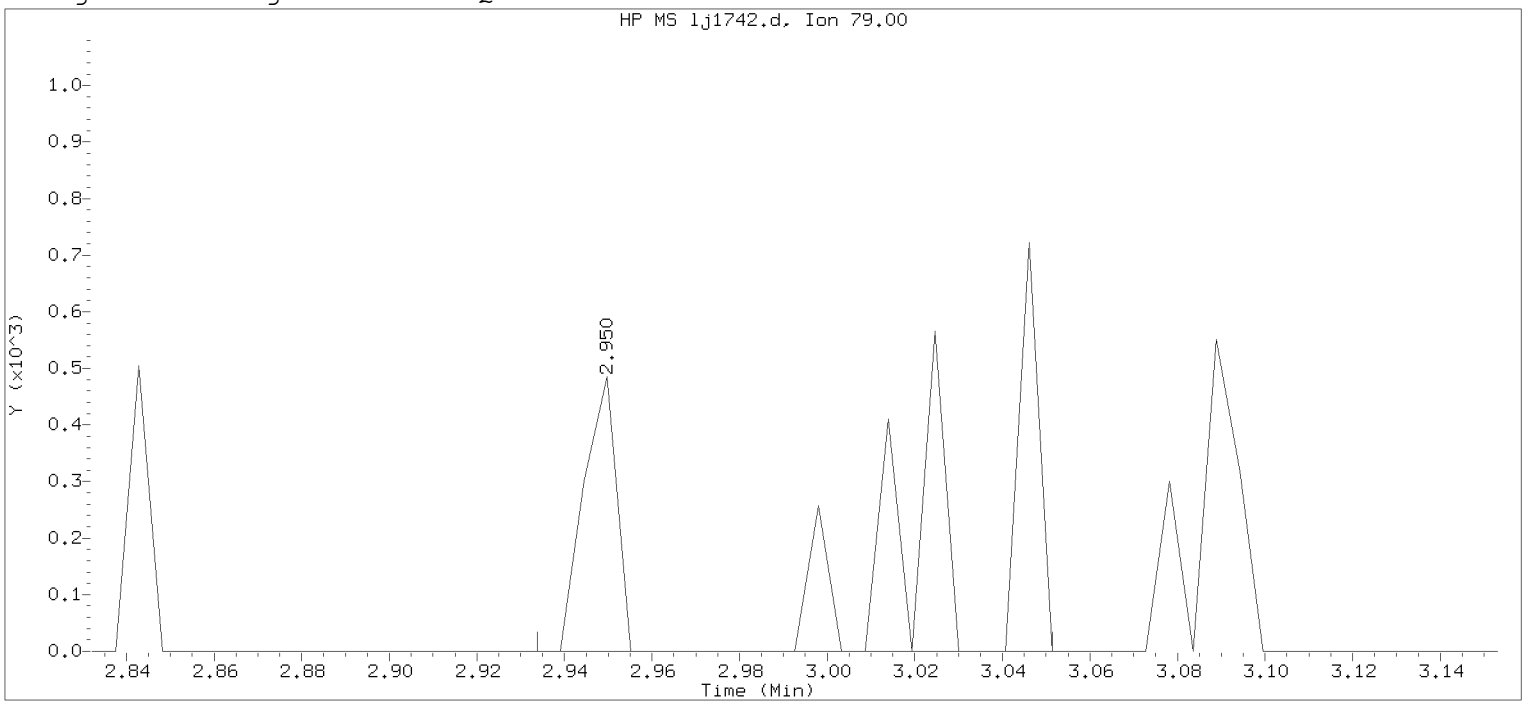
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

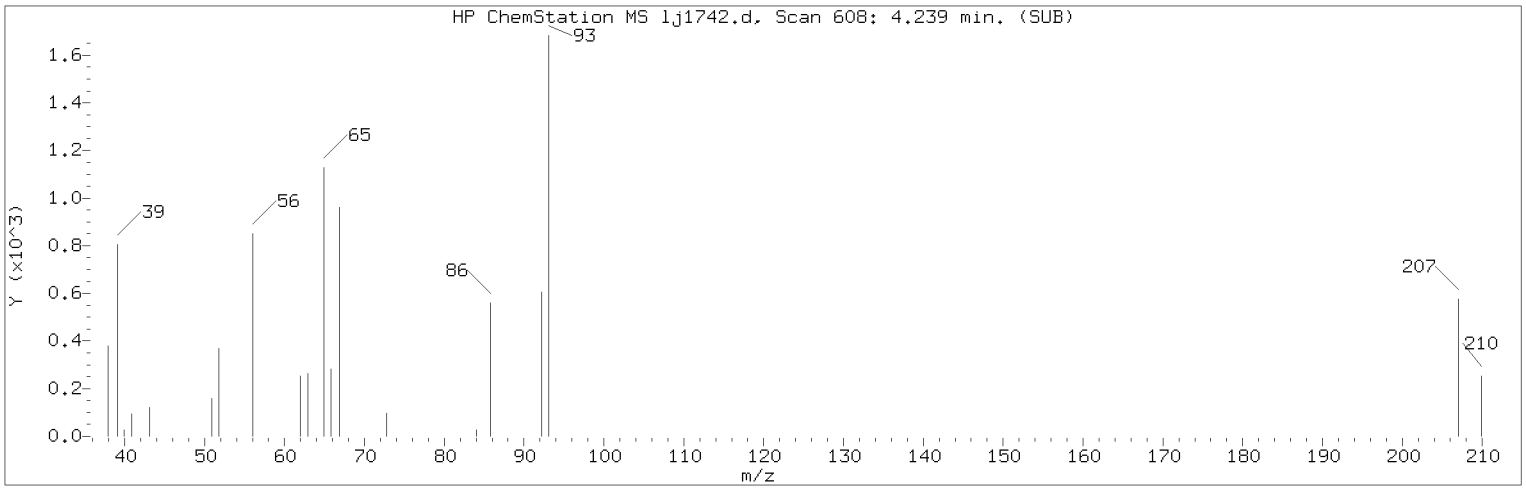
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

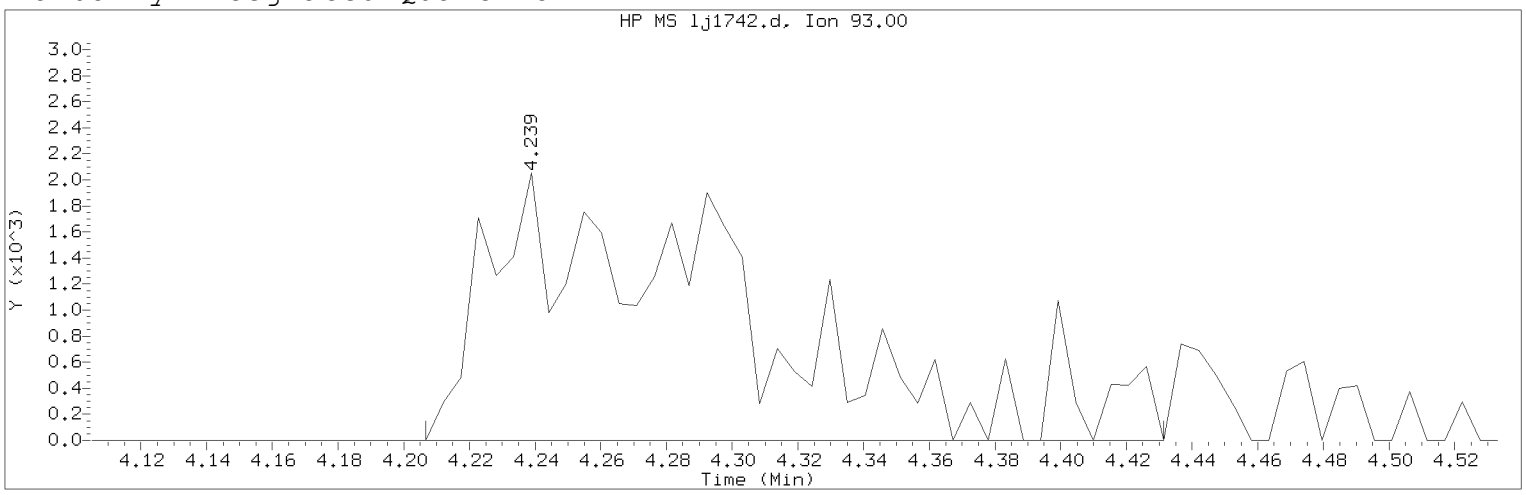
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 367		
Retention Time (minutes)	: 2.950		
Quant Ion	: 79.00		
Area	: 879		
On-column Amount (ng/ul)	: 0.0124		
Integration start scan	: 363	Integration stop scan:	385
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ART

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

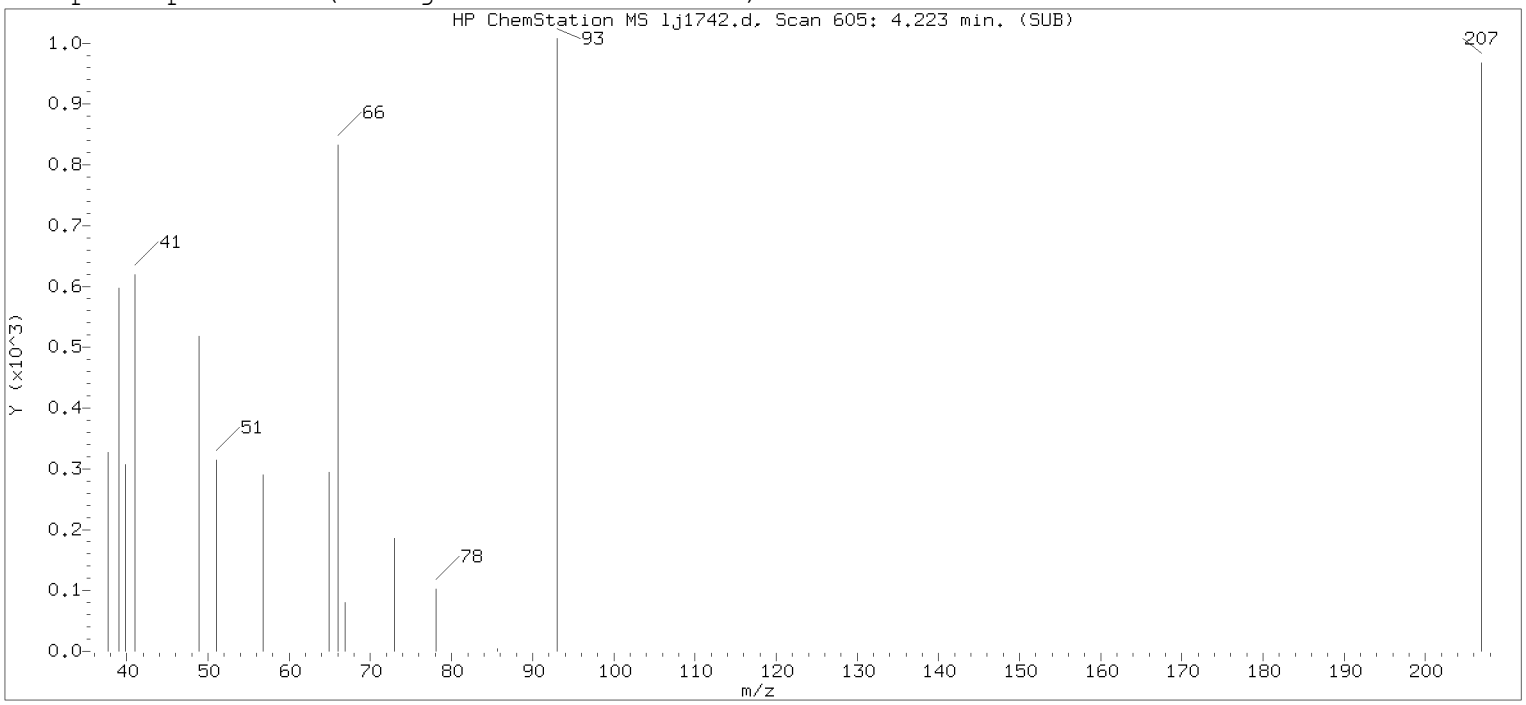
Compound Number : 8
Compound Name : 2-Picoline
Scan Number : 608
Retention Time (minutes) : 4.239
Quant Ion : 93.00
Area (flag) : 10800M
On-Column Amount (ng/ul) : 0.1495
Integration start scan : 601 Integration stop scan: 643
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

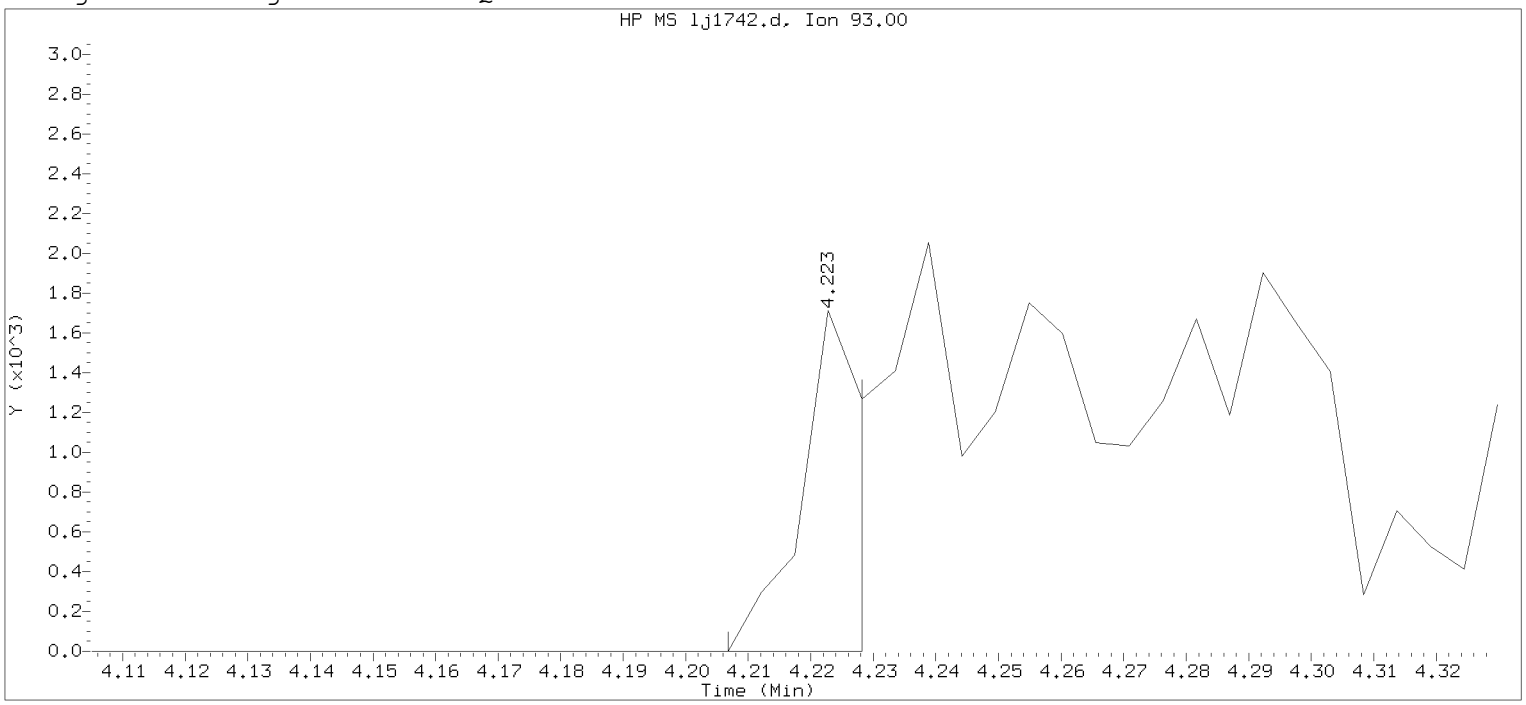
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

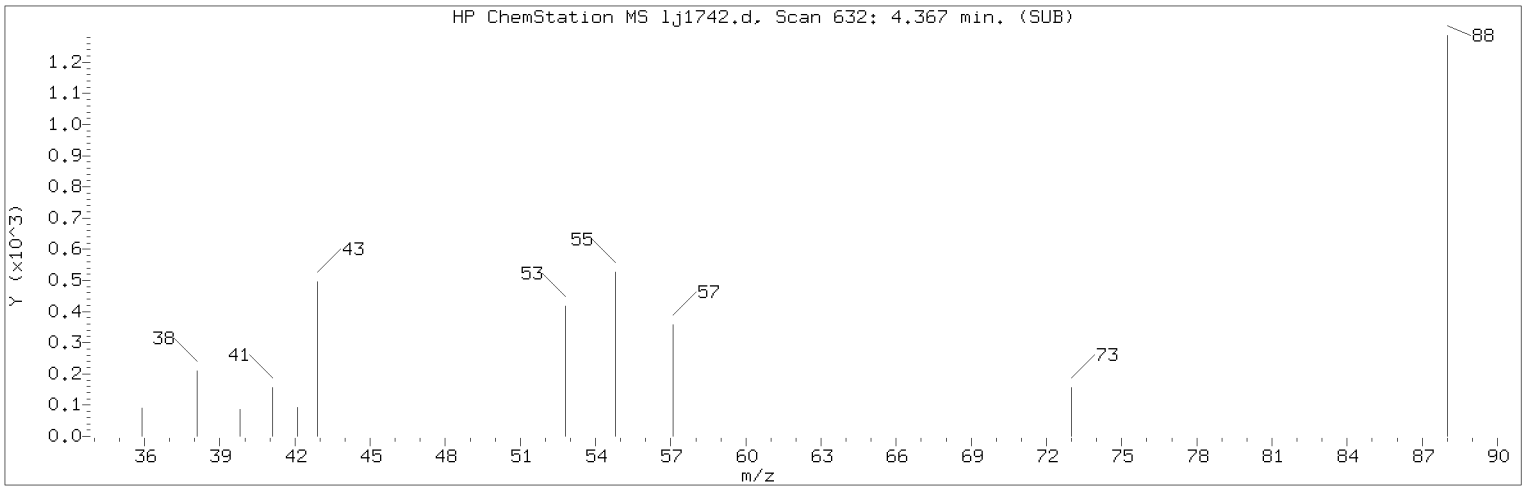
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

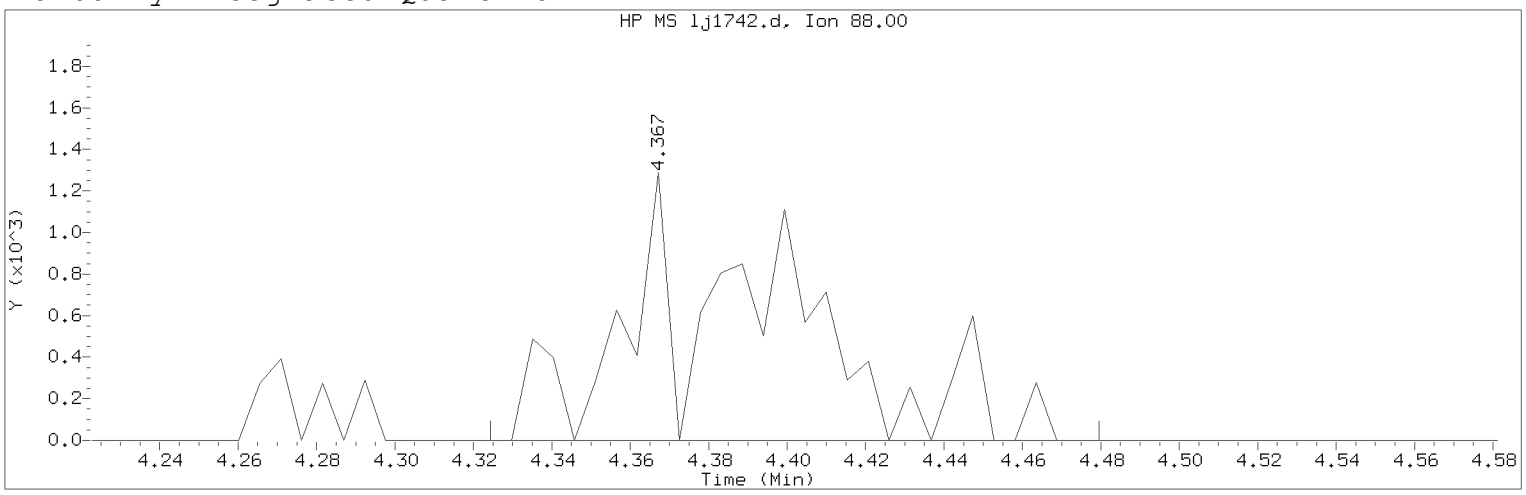
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 605		
Retention Time (minutes)	: 4.223		
Quant Ion	: 93.00		
Area	: 1002		
On-column Amount (ng/ul)	: 0.0141		
Integration start scan	: 601	Integration stop scan:	605
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

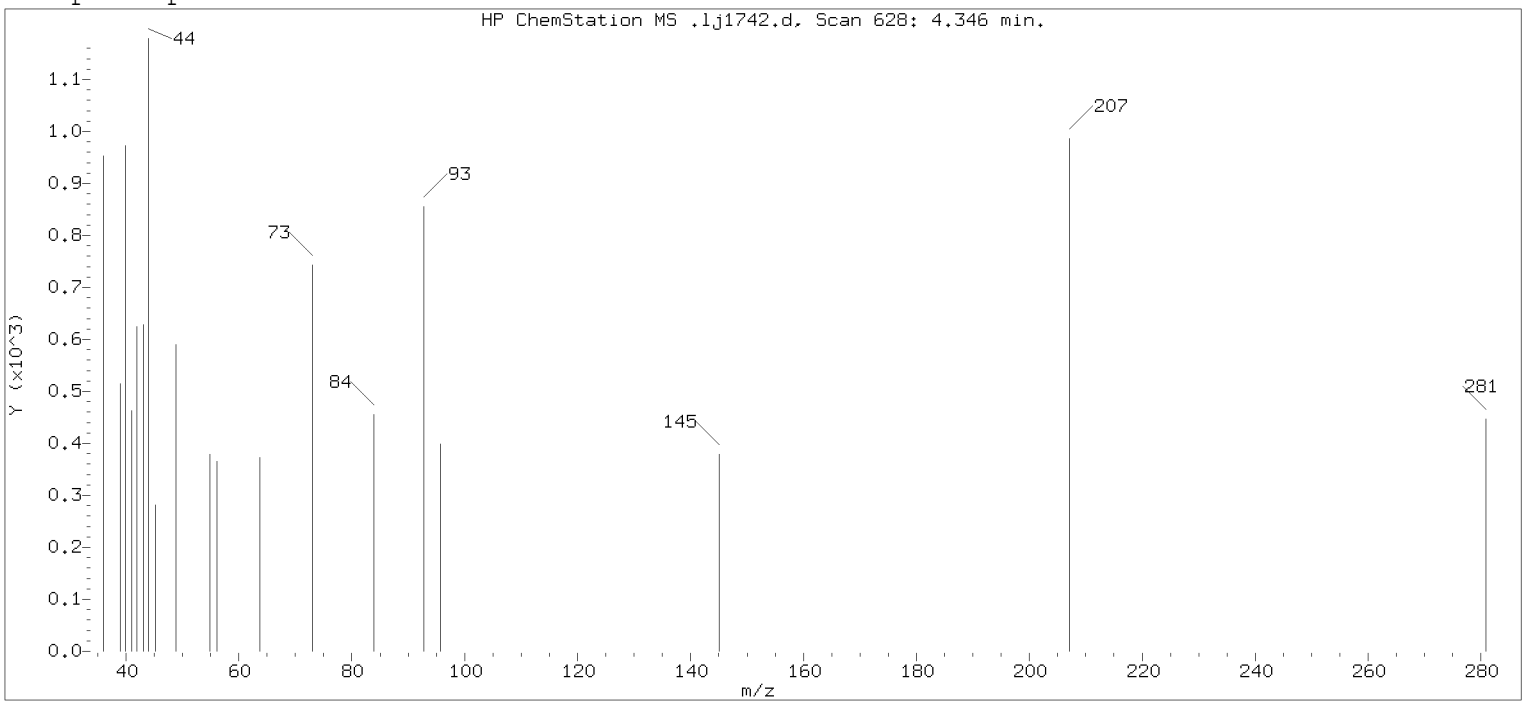
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Scan Number : 632
Retention Time (minutes) : 4.367
Quant Ion : 88.00
Area (flag) : 3454M
On-Column Amount (ng/ul) : 0.1130
Integration start scan : 623 Integration stop scan: 652
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

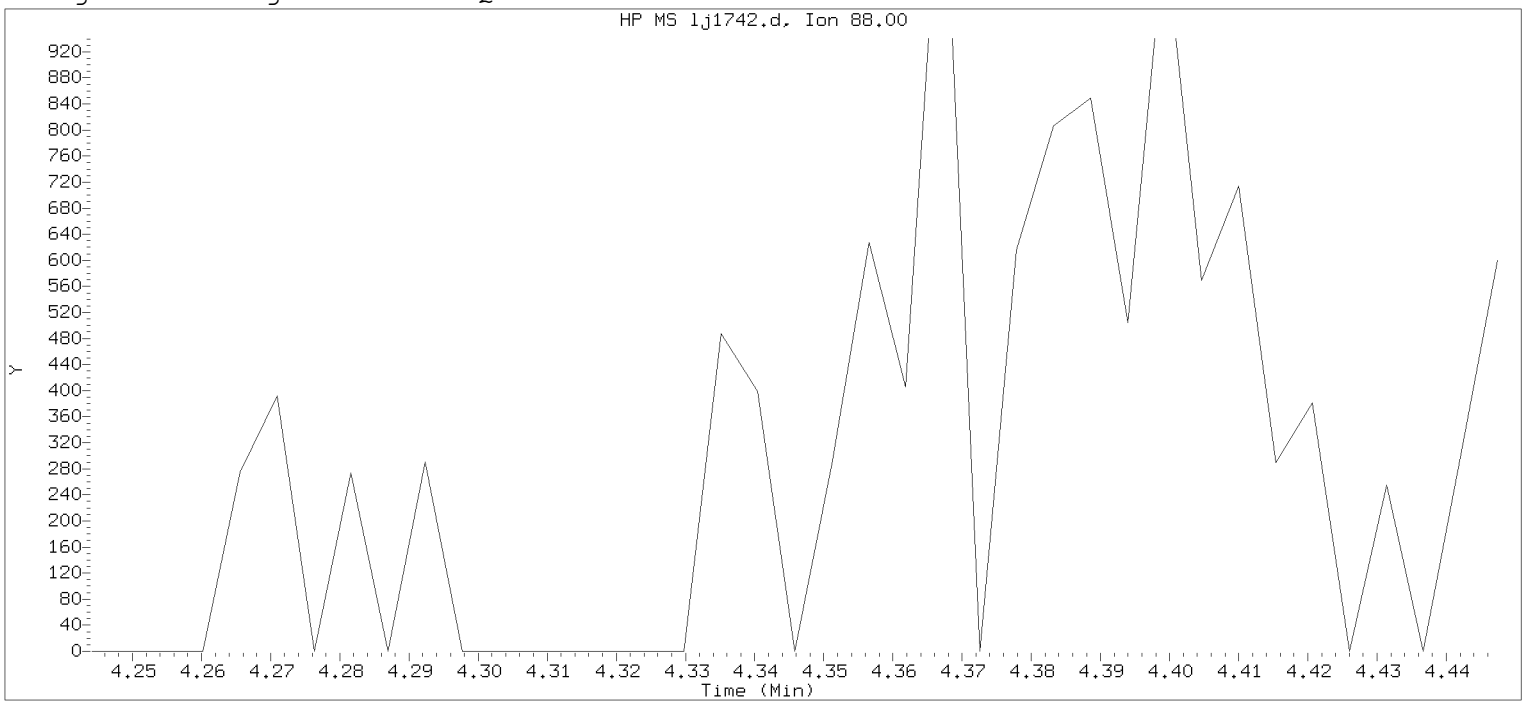
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

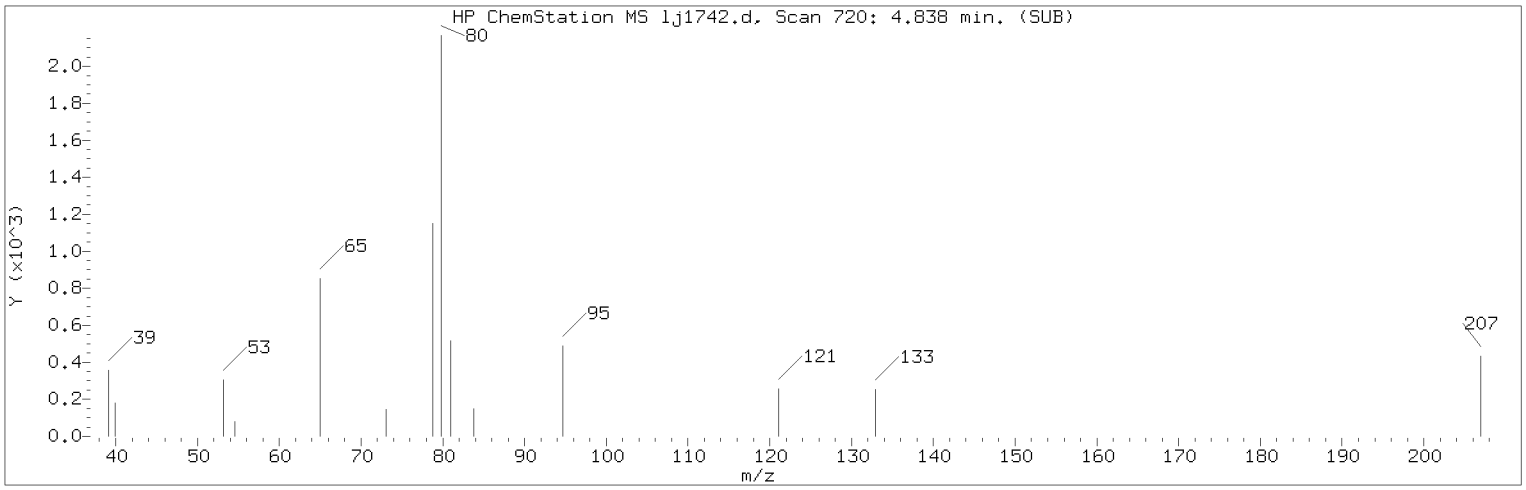
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

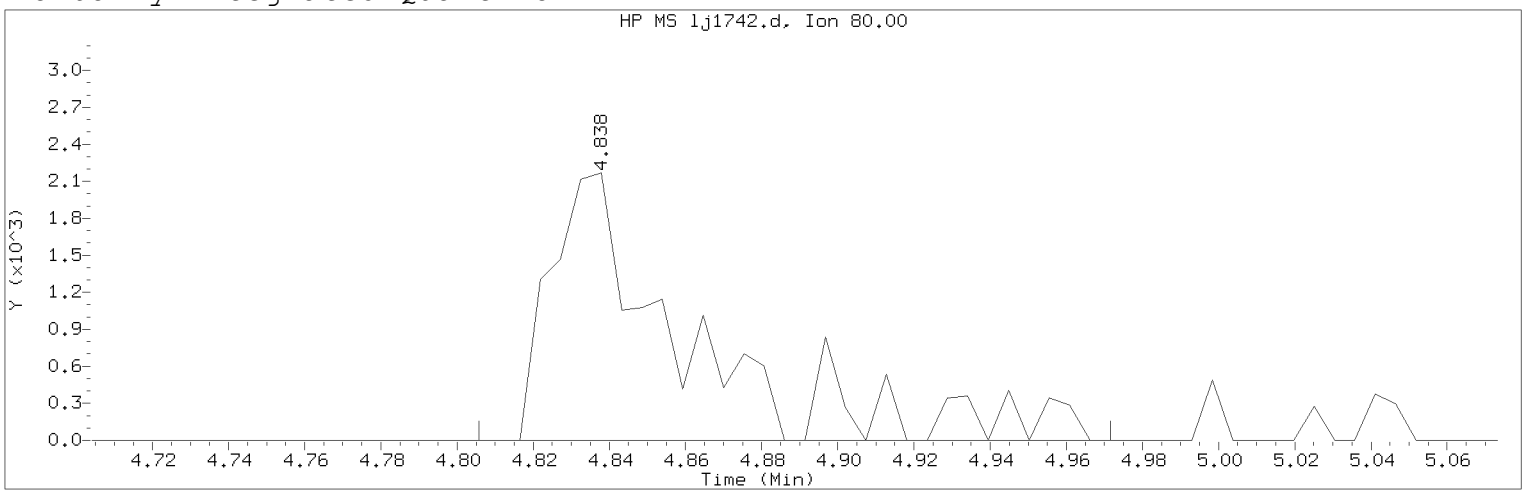
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.346
Quant Ion : 88.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

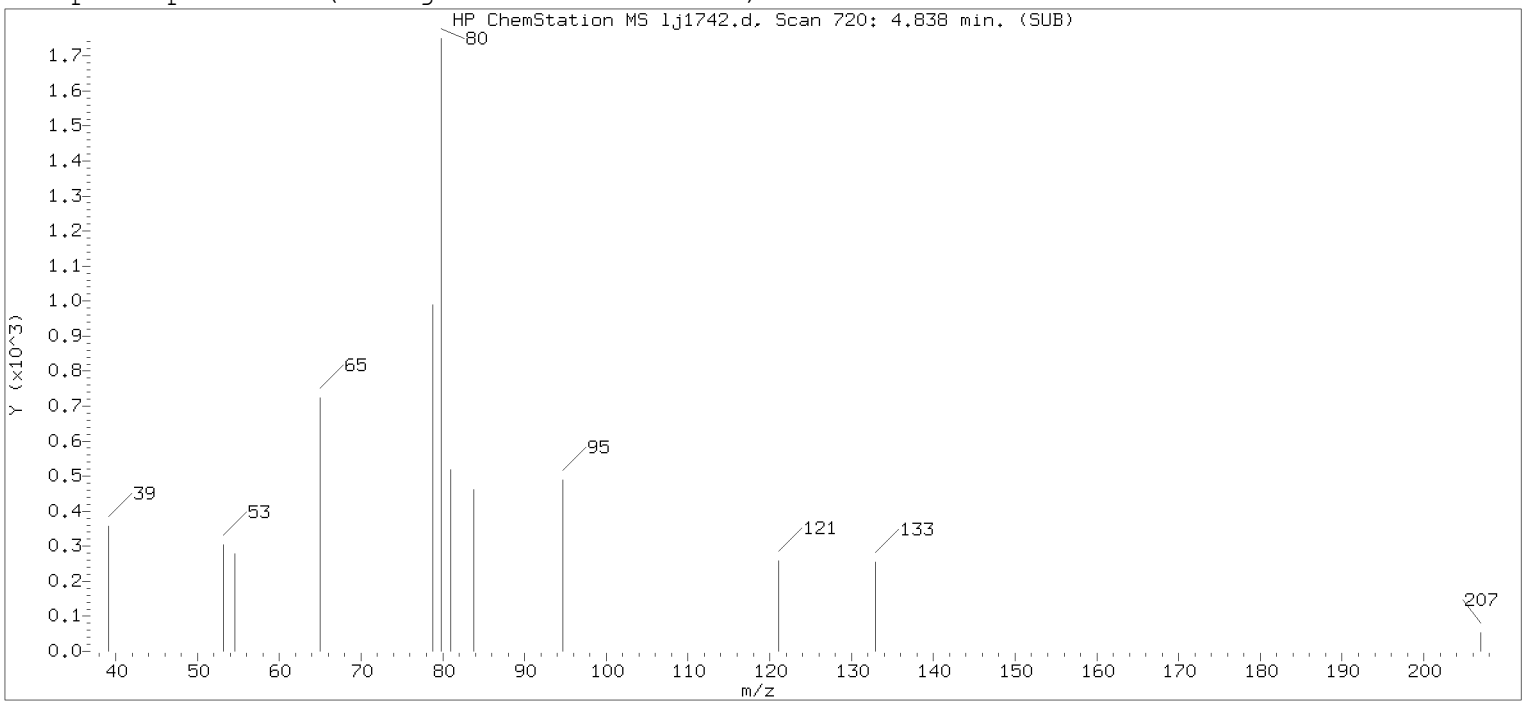
Compound Number : 10
Compound Name : Methyl methanesulfonate
Scan Number : 720
Retention Time (minutes) : 4.838
Quant Ion : 80.00
Area (flag) : 5410M
On-Column Amount (ng/ul) : 0.1401
Integration start scan : 713 Integration stop scan: 744
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

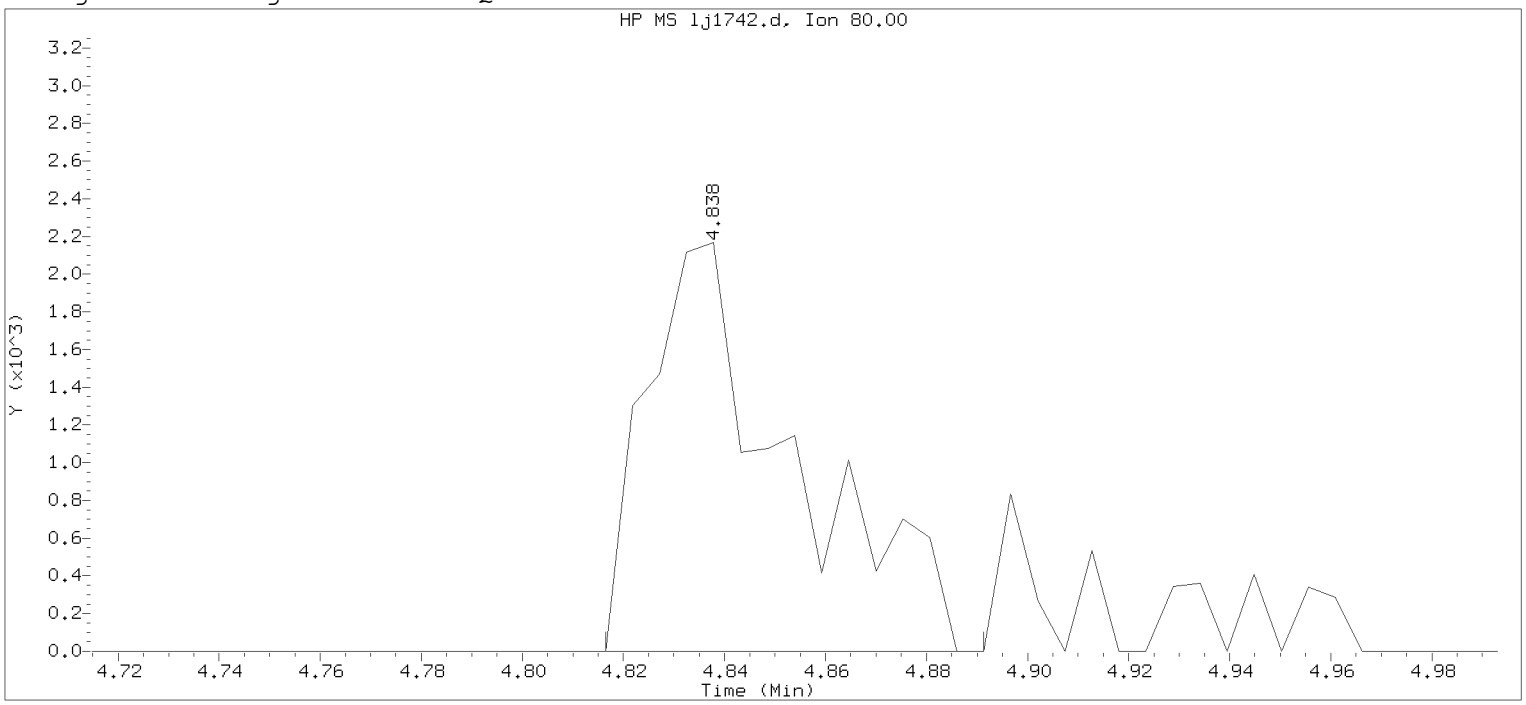
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

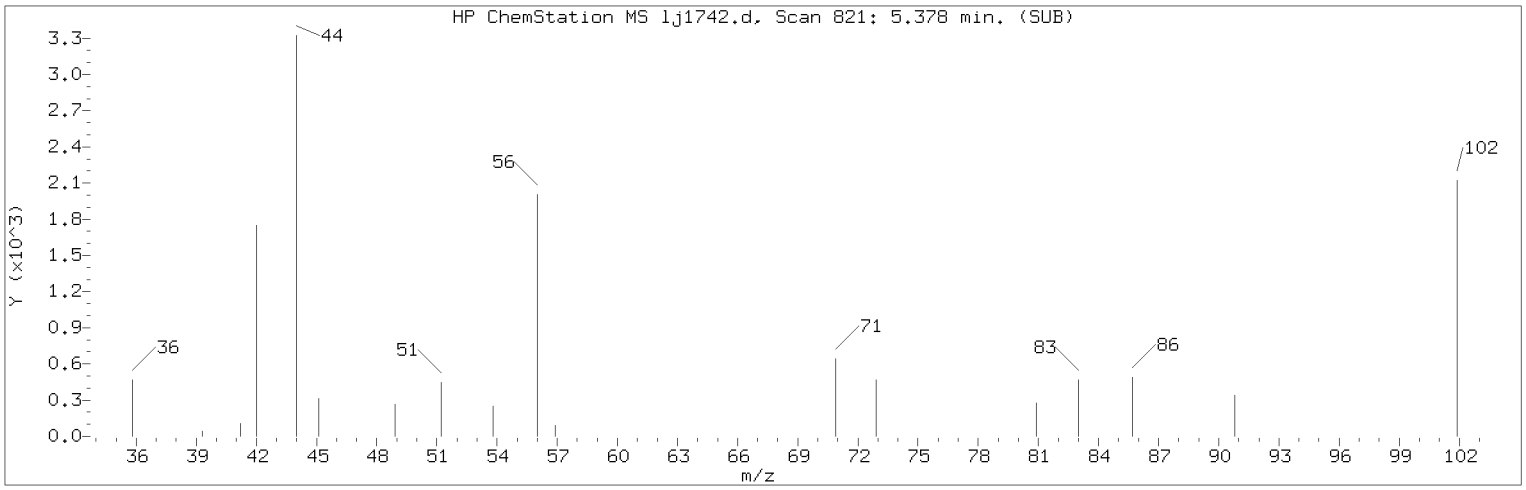
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

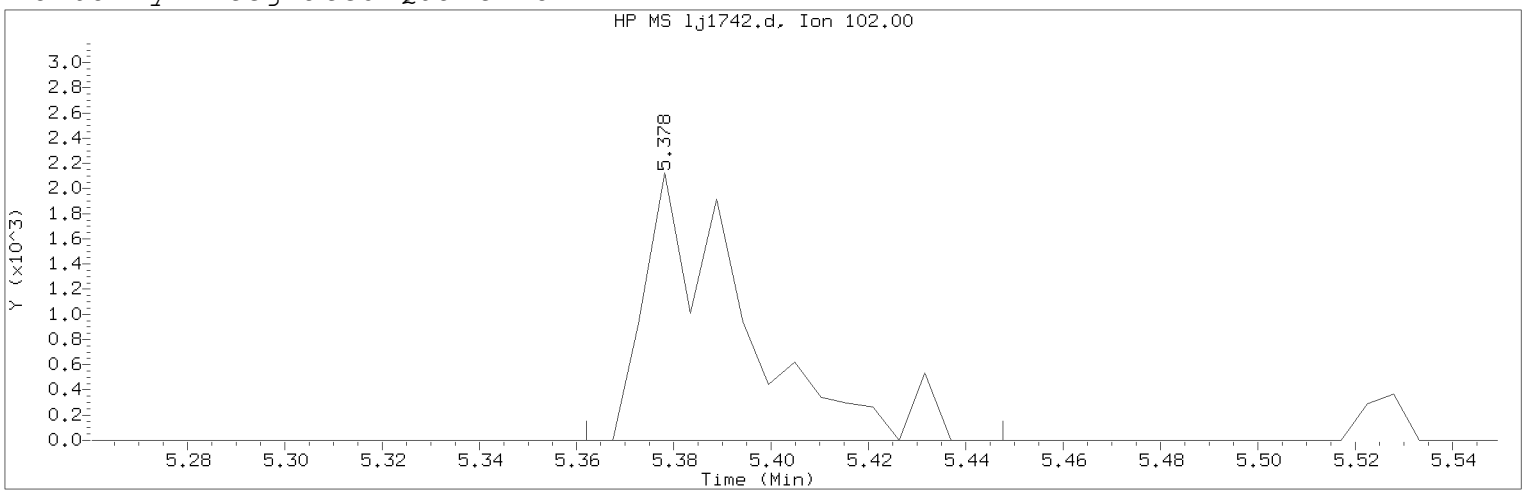
Compound Number	: 10		
Compound Name	: Methyl methanesulfonate		
Scan Number	: 720		
Retention Time (minutes)	: 4.838		
Quant Ion	: 80.00		
Area	: 4327		
On-column Amount (ng/ul)	: 0.1151		
Integration start scan	: 715	Integration stop scan:	729
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ARTransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

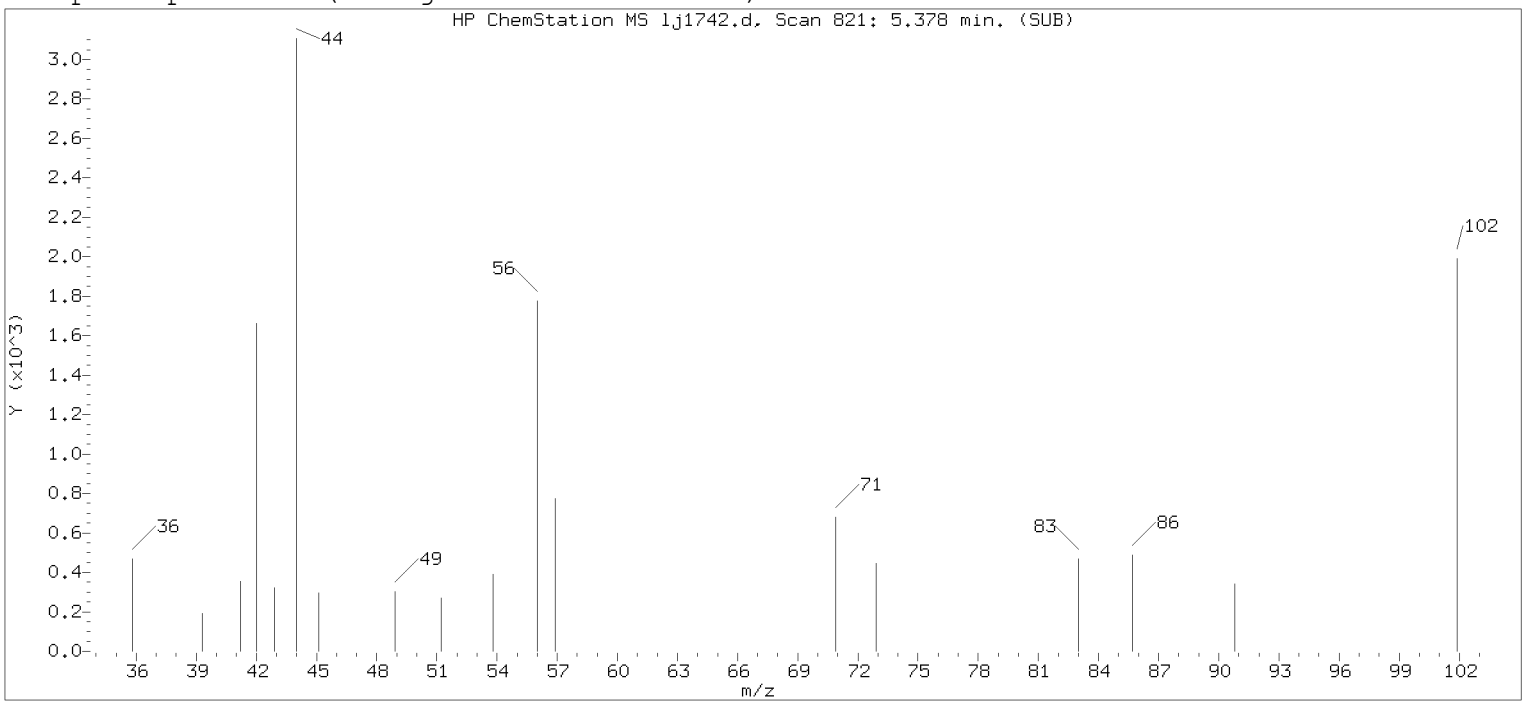
Compound Number : 14
Compound Name : N-Nitrosodiethylamine
Scan Number : 821
Retention Time (minutes) : 5.378
Quant Ion : 102.00
Area (flag) : 3020M
On-Column Amount (ng/ul) : 0.1080
Integration start scan : 817 Integration stop scan: 833
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

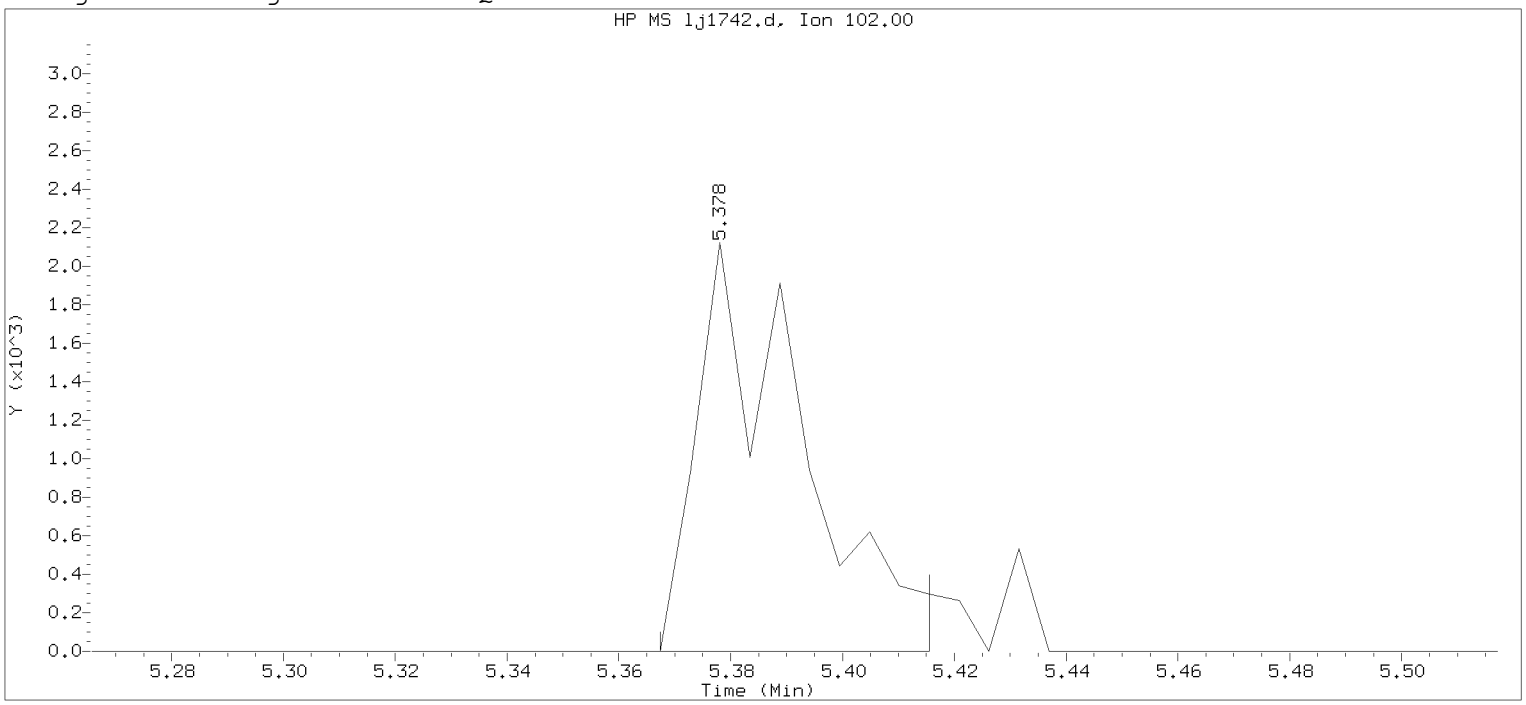
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

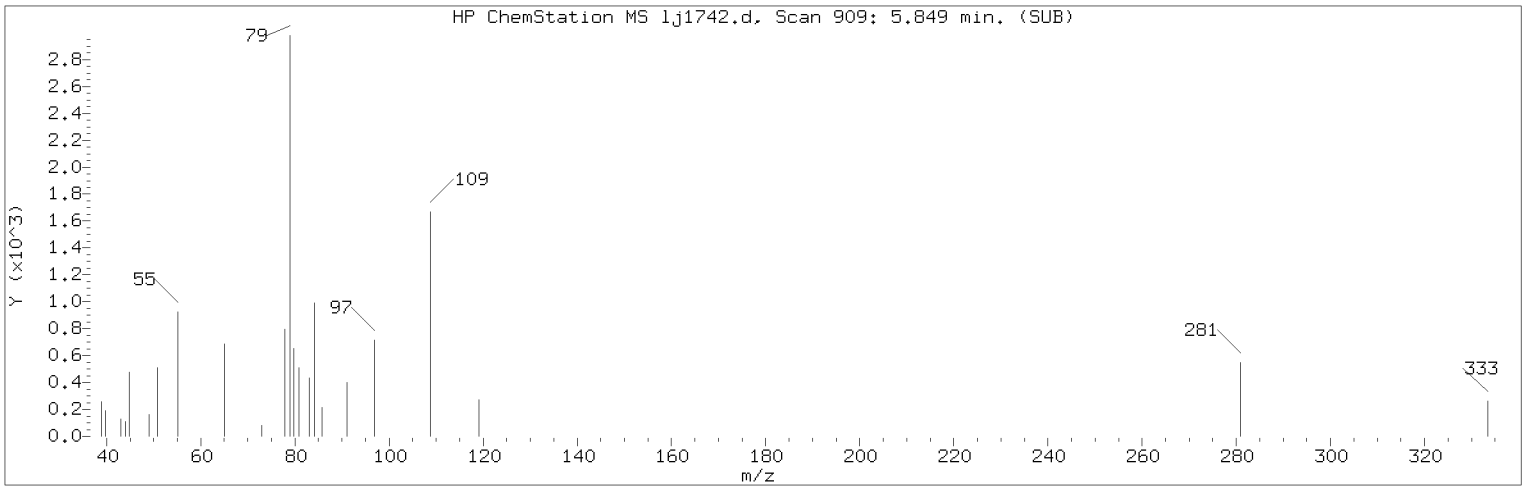
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

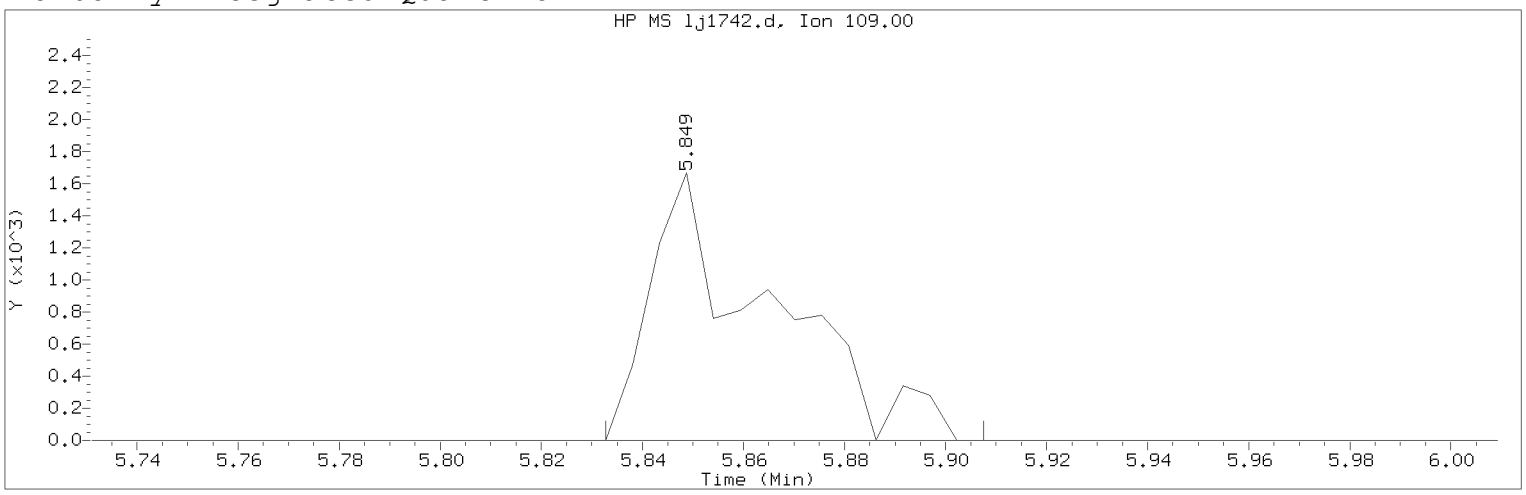
Compound Number	: 14		
Compound Name	: N-Nitrosodiethylamine		
Scan Number	: 821		
Retention Time (minutes)	: 5.378		
Quant Ion	: 102.00		
Area	: 2716		
On-column Amount (ng/ul)	: 0.0978		
Integration start scan	: 818	Integration stop scan:	827
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ART0451

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

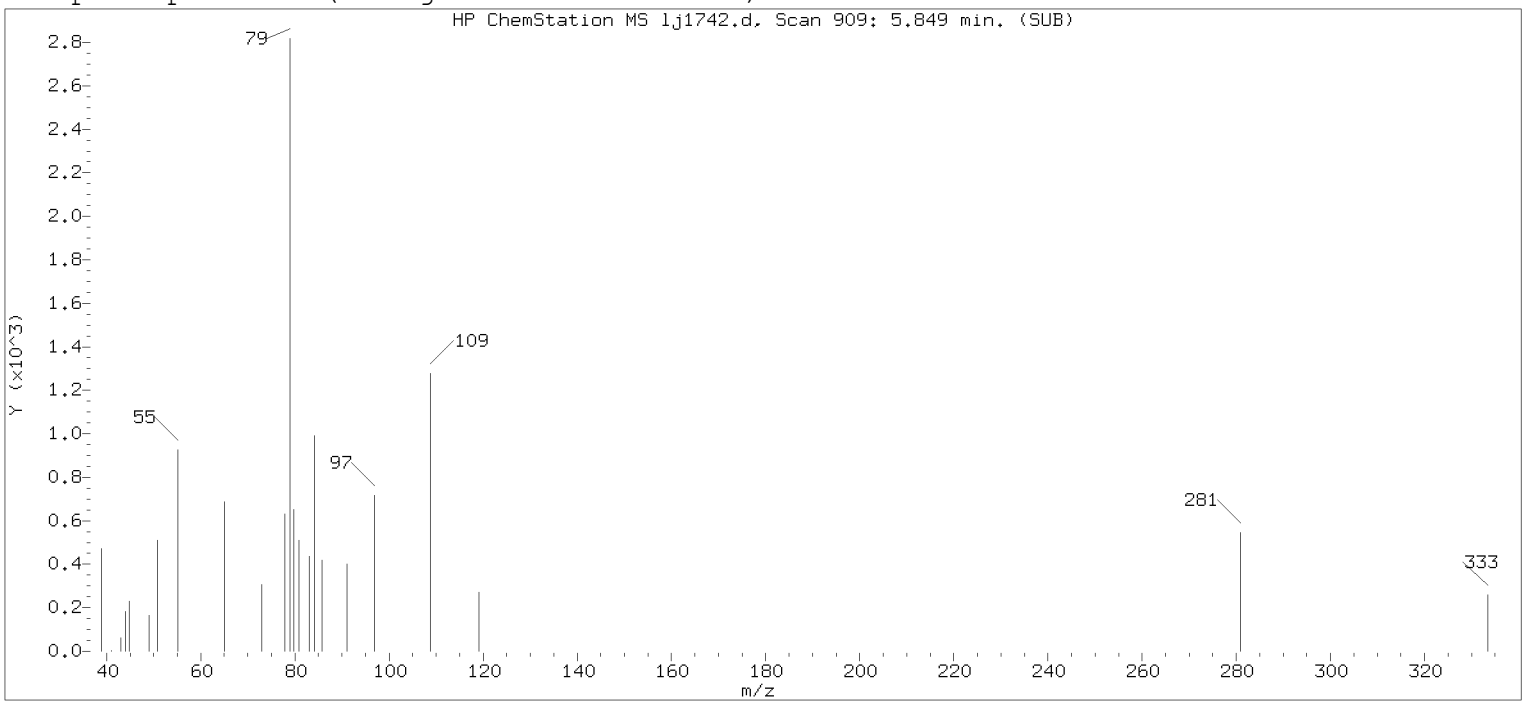
Compound Number : 16
Compound Name : Ethyl methanesulfonate
Scan Number : 909
Retention Time (minutes) : 5.849
Quant Ion : 109.00
Area (flag) : 2769M
On-Column Amount (ng/ul) : 0.0912
Integration start scan : 905 Integration stop scan: 919
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

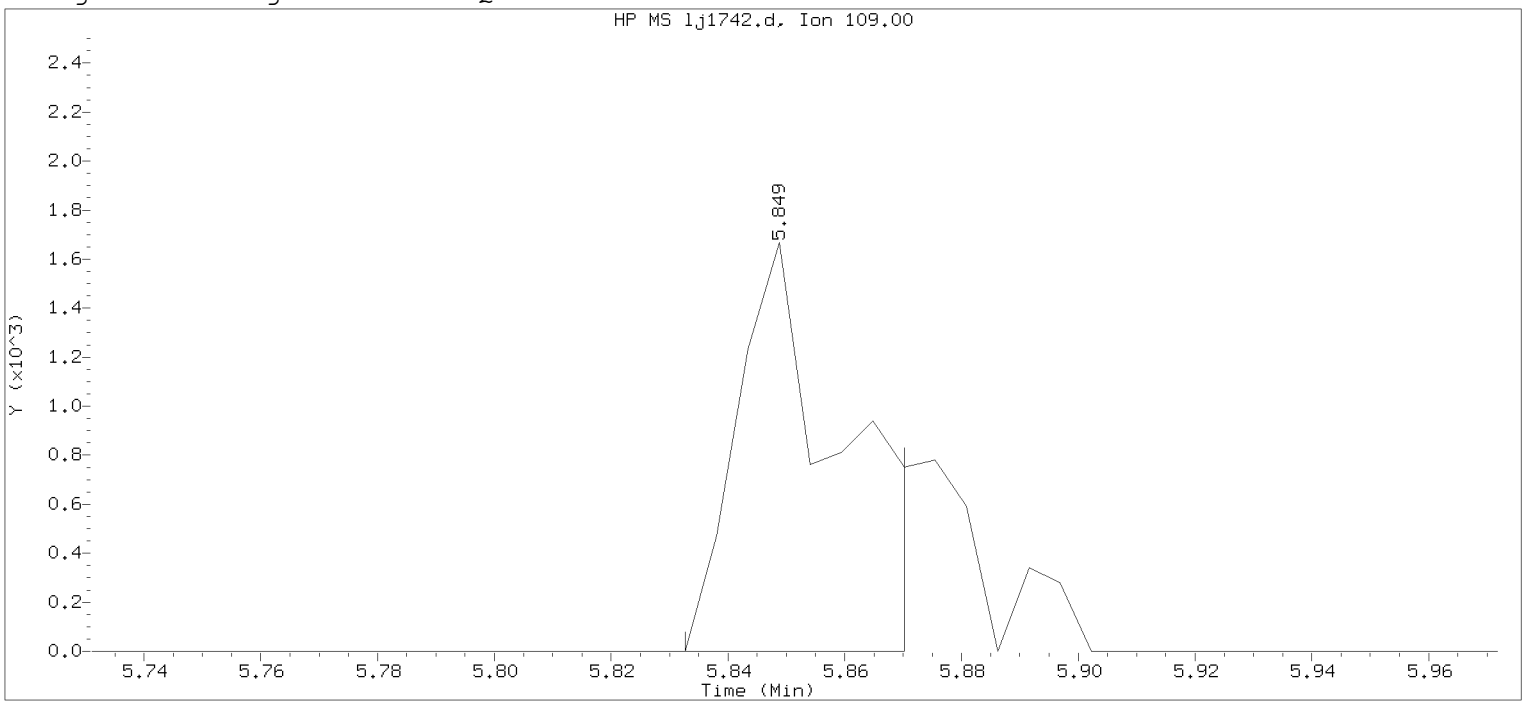
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

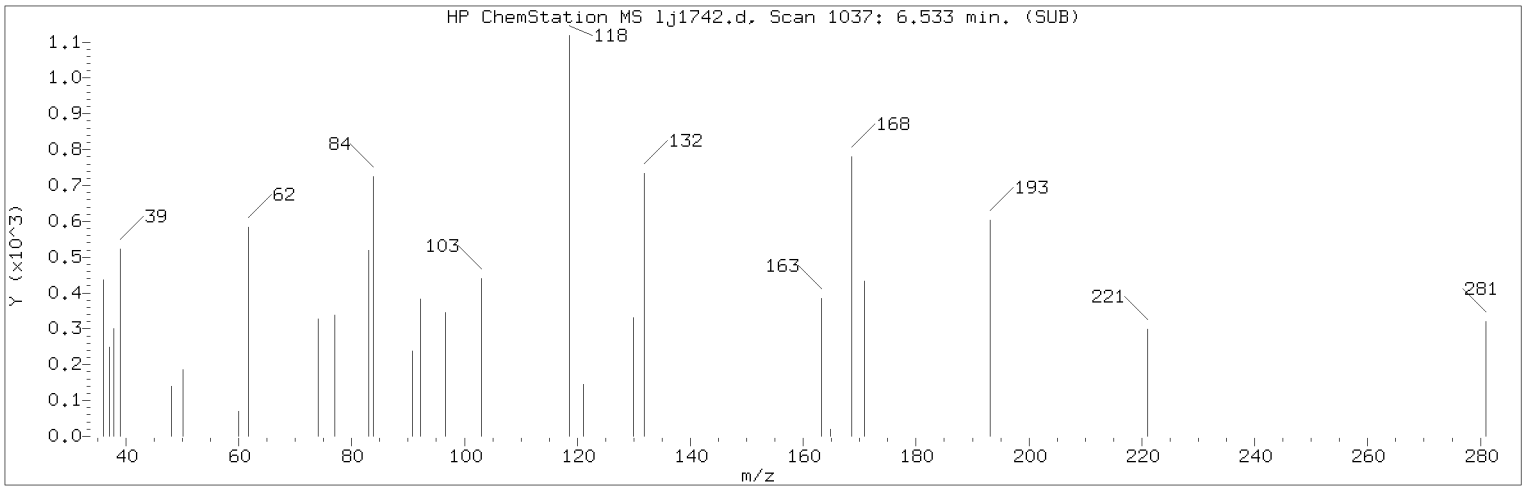
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

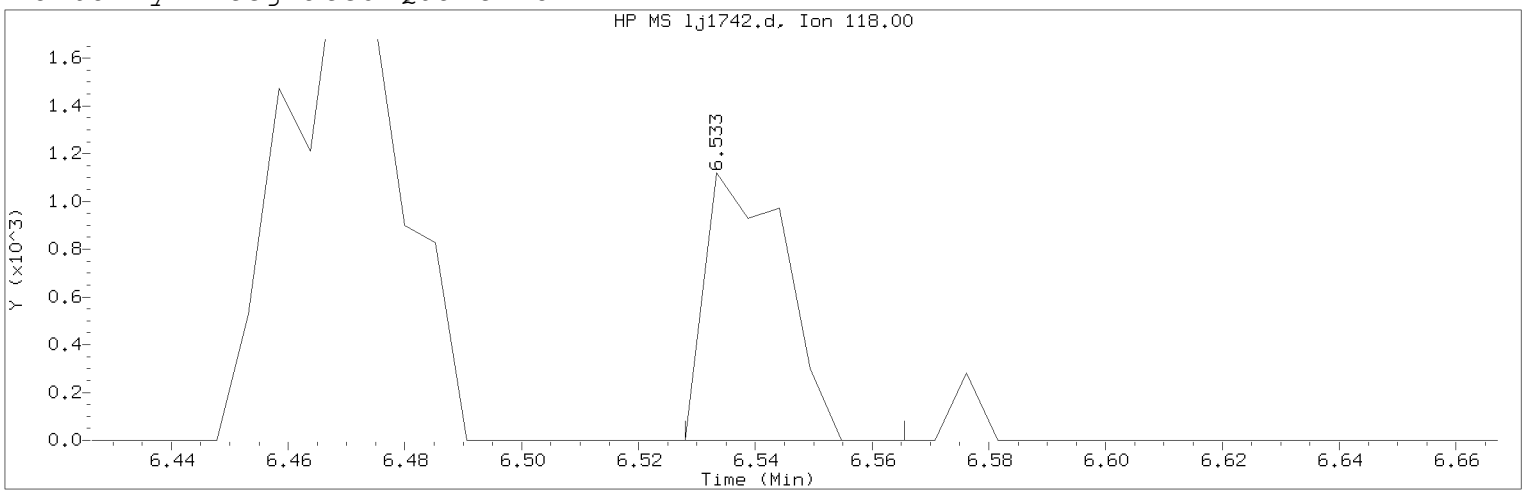
Compound Number	: 16		
Compound Name	: Ethyl methanesulfonate		
Scan Number	: 909		
Retention Time (minutes)	: 5.849		
Quant Ion	: 109.00		
Area	: 2008		
On-column Amount (ng/ul)	: 0.0695		
Integration start scan	: 905	Integration stop scan:	912
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ART

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

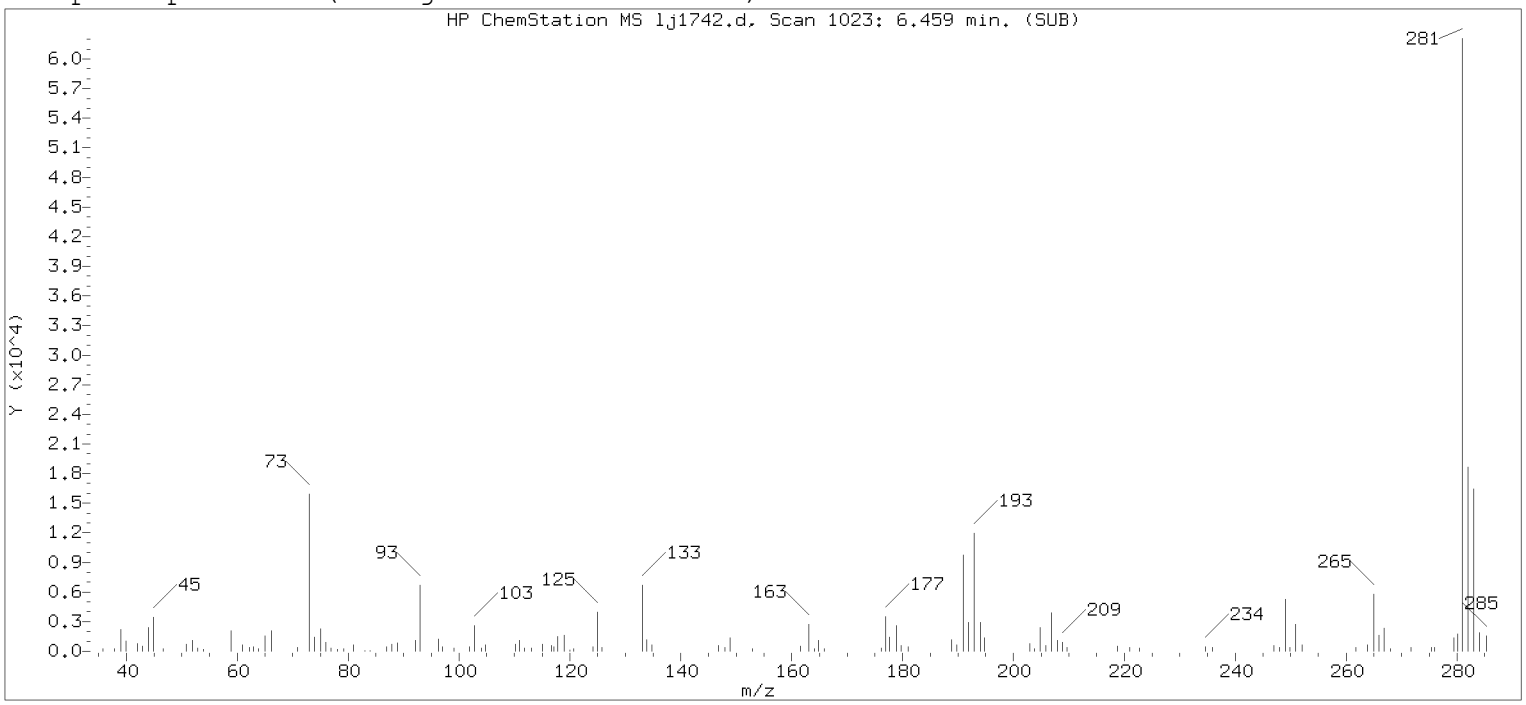
Compound Number : 21
Compound Name : a-methylstyrene
Scan Number : 1037
Retention Time (minutes) : 6.533
Quant Ion : 118.00
Area (flag) : 1066M
On-Column Amount (ng/ul) : 0.1887
Integration start scan : 1035 Integration stop scan: 1042
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

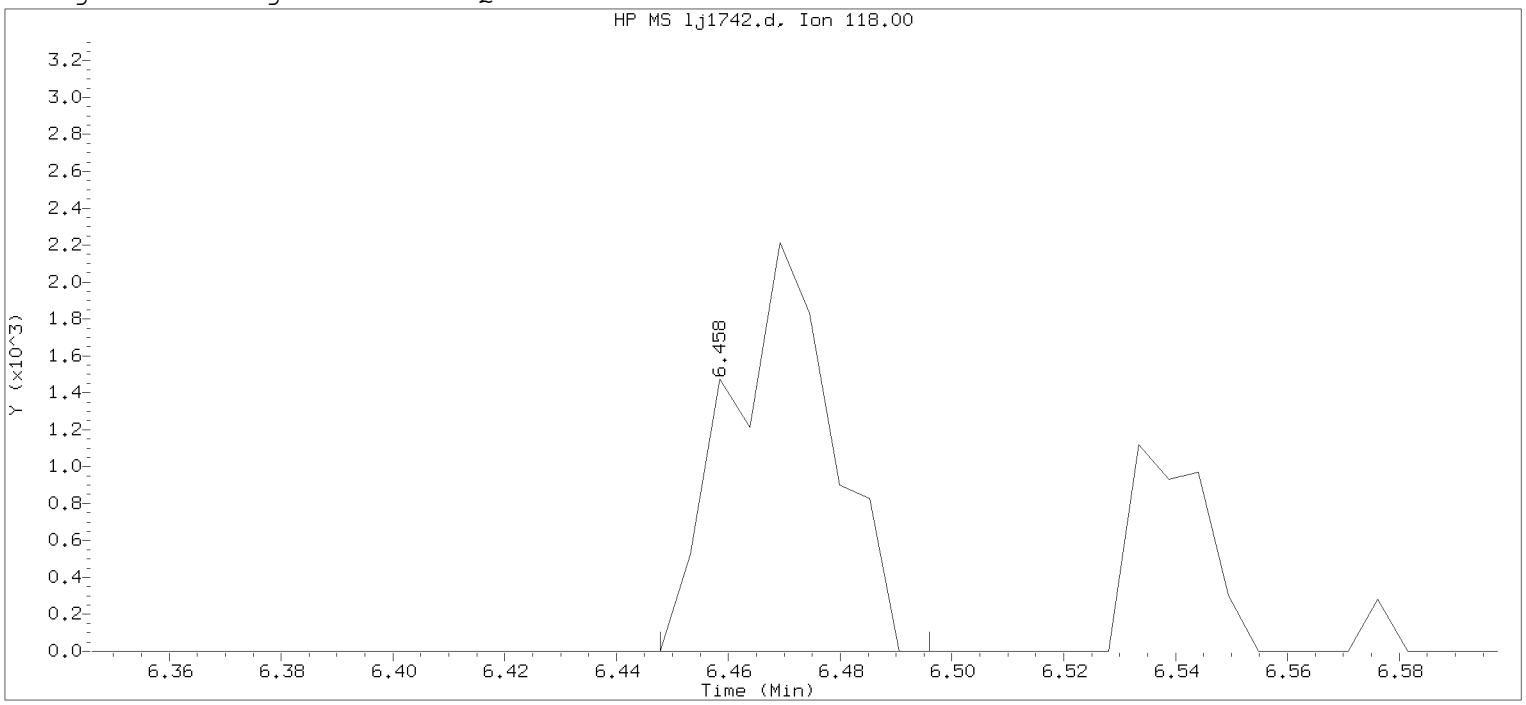
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

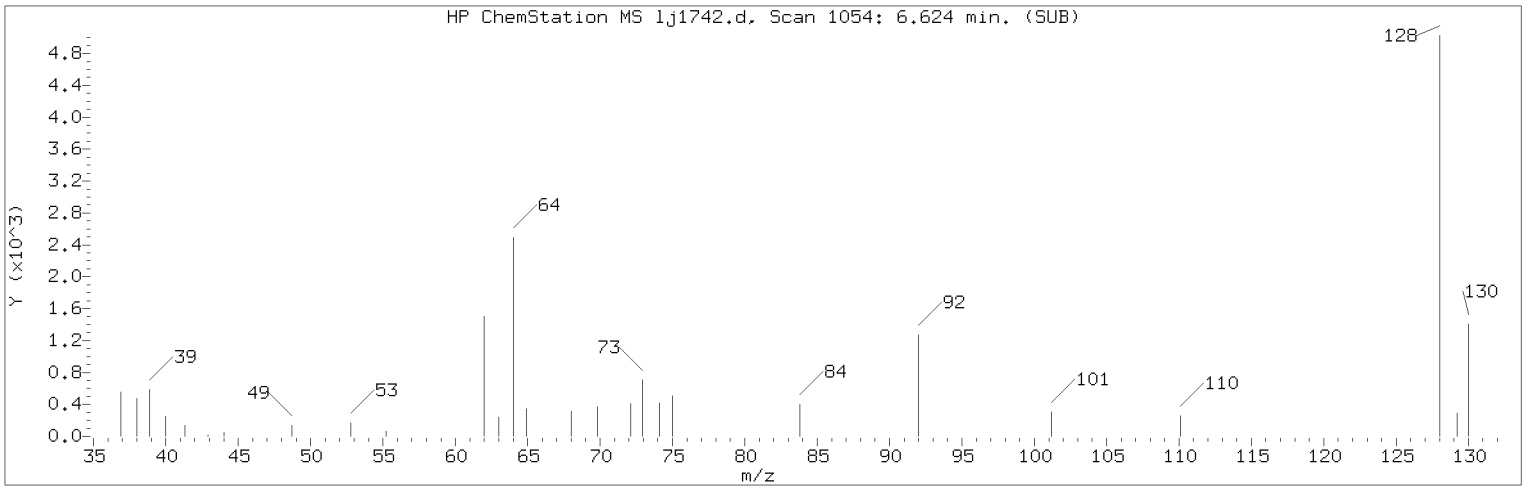
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

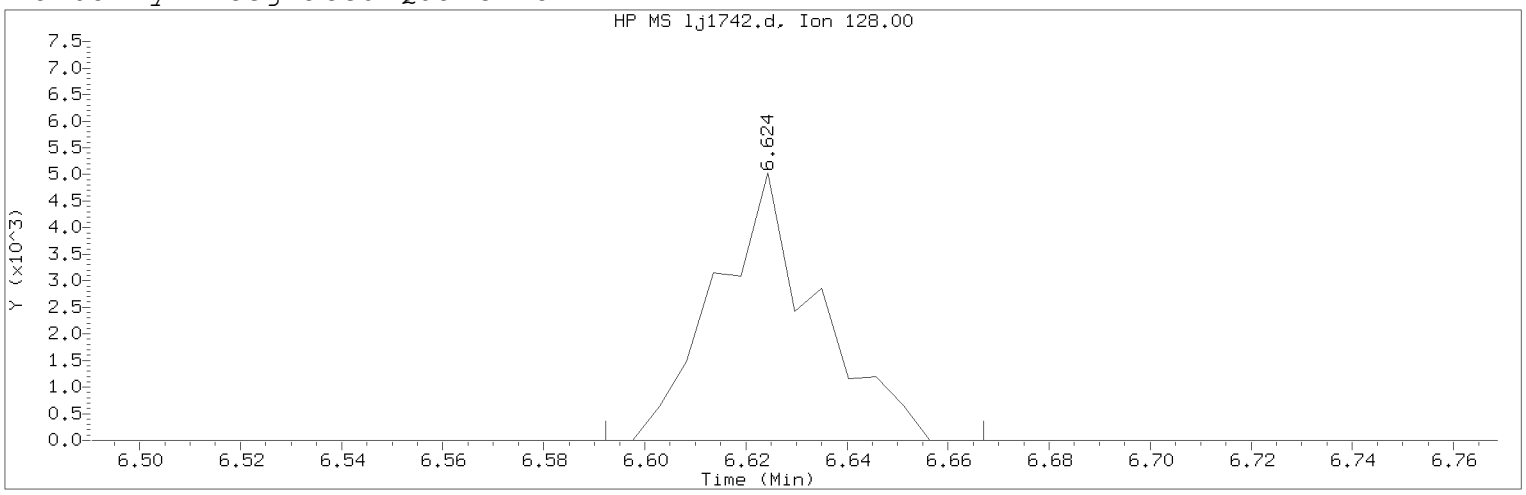
Compound Number	: 21		
Compound Name	: a-methylstyrene		
Scan Number	: 1023		
Retention Time (minutes)	: 6.458		
Quant Ion	: 118.00		
Area	: 2883		
On-column Amount (ng/ul)	: 0.5107		
Integration start scan	: 1020	Integration stop scan:	1029
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: [illegible]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

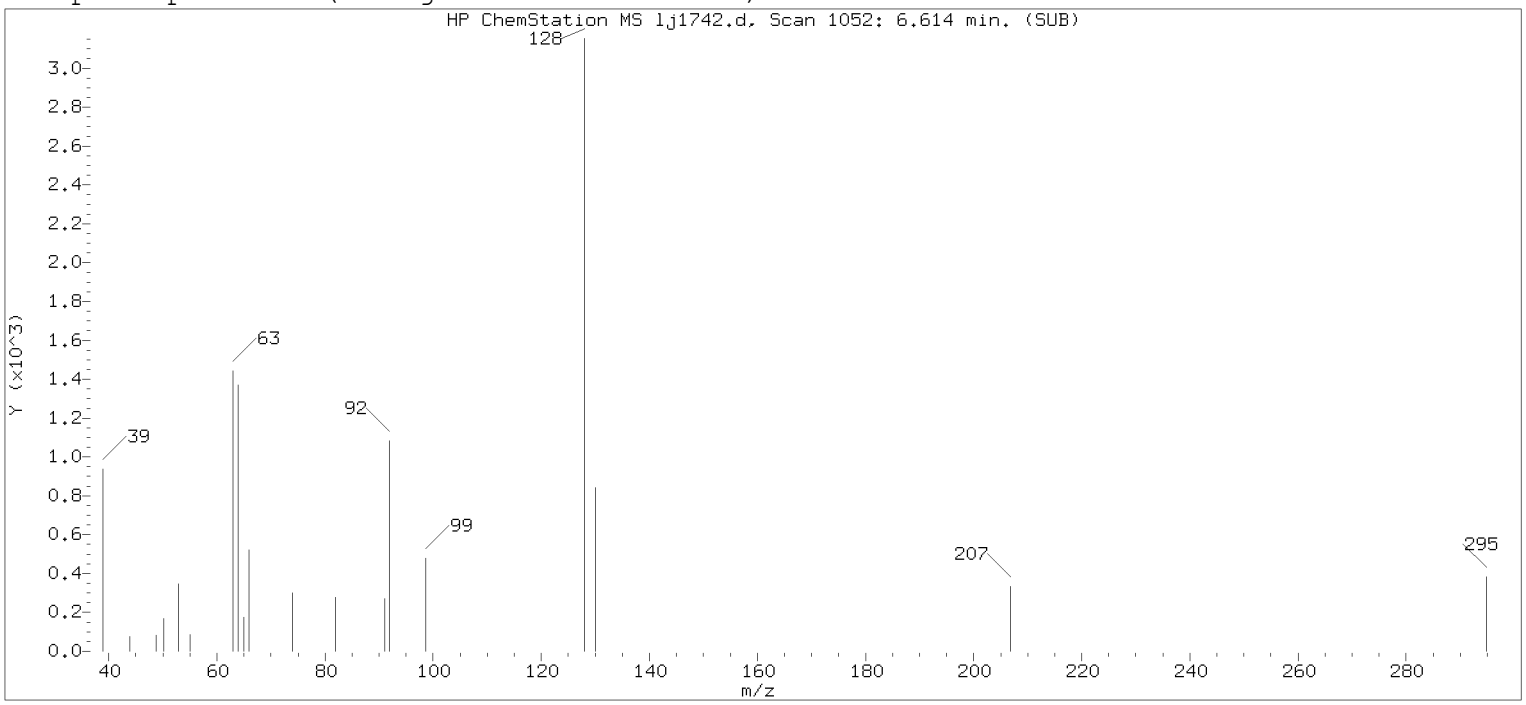
Compound Number : 24
Compound Name : 2-Chlorophenol
Scan Number : 1054
Retention Time (minutes) : 6.624
Quant Ion : 128.00
Area (flag) : 6955M
On-Column Amount (ng/ul) : 0.1259
Integration start scan : 1047 Integration stop scan: 1061
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

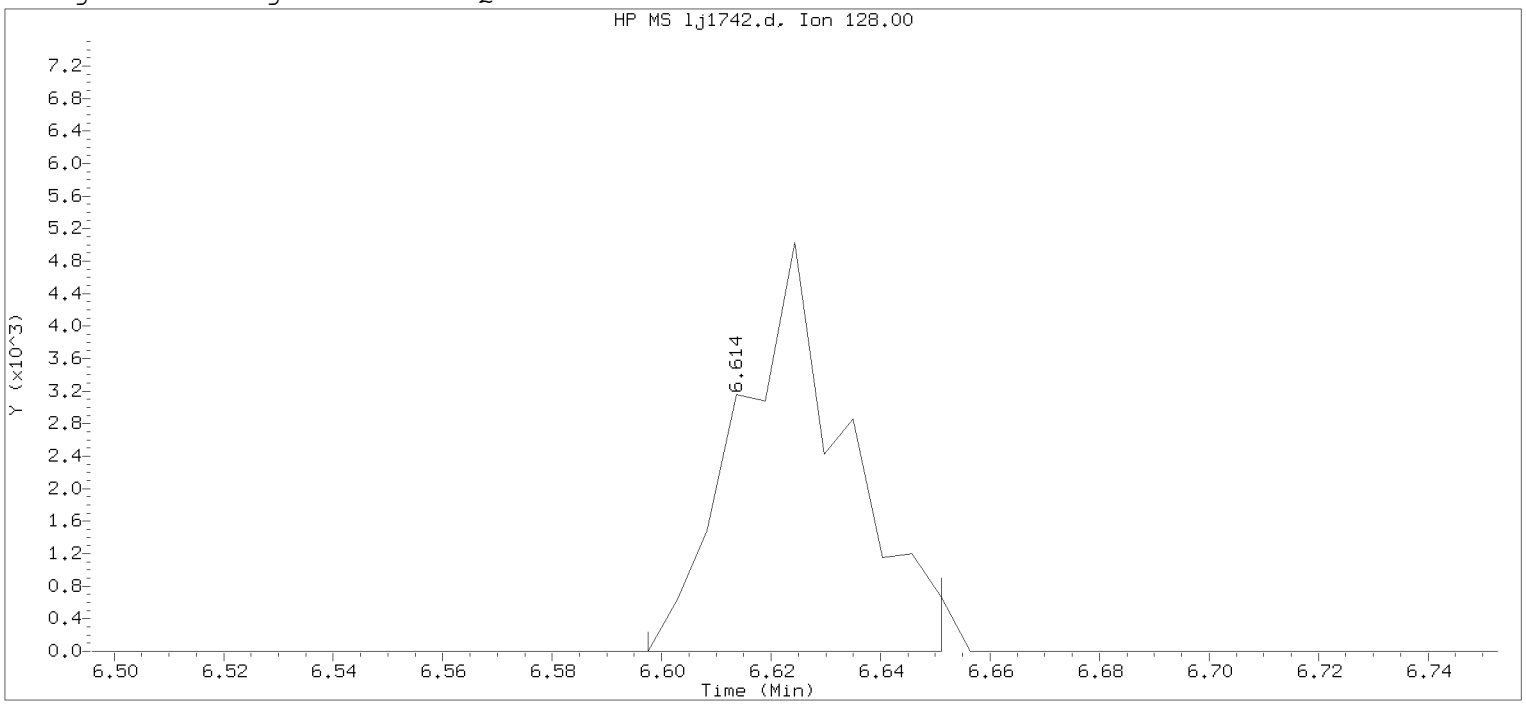
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

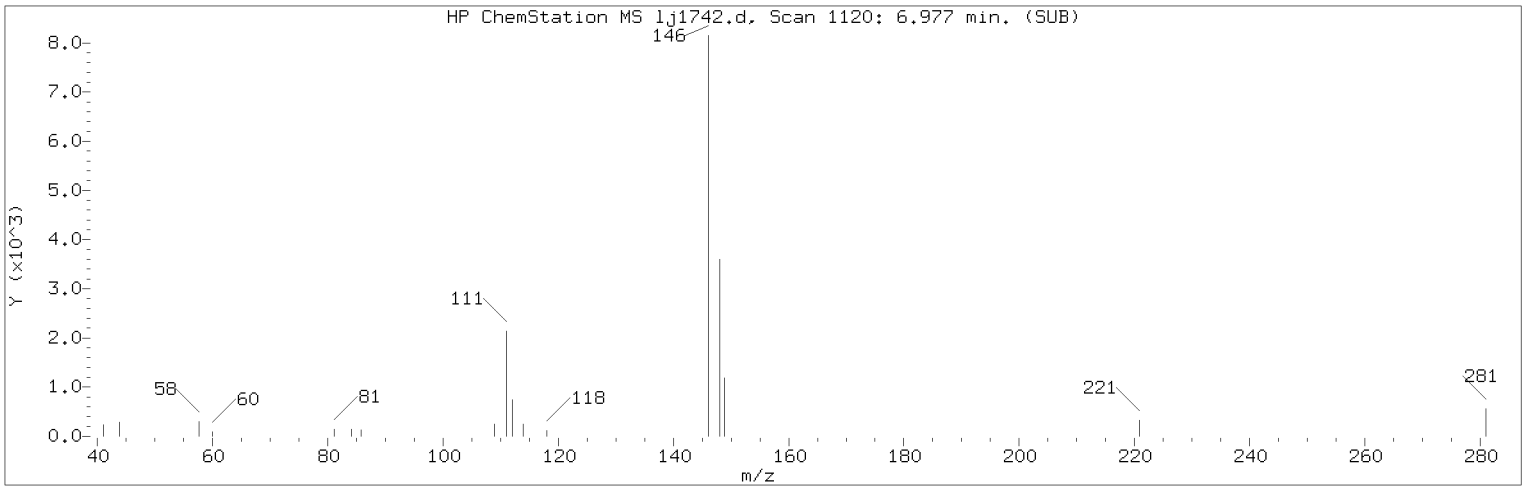
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

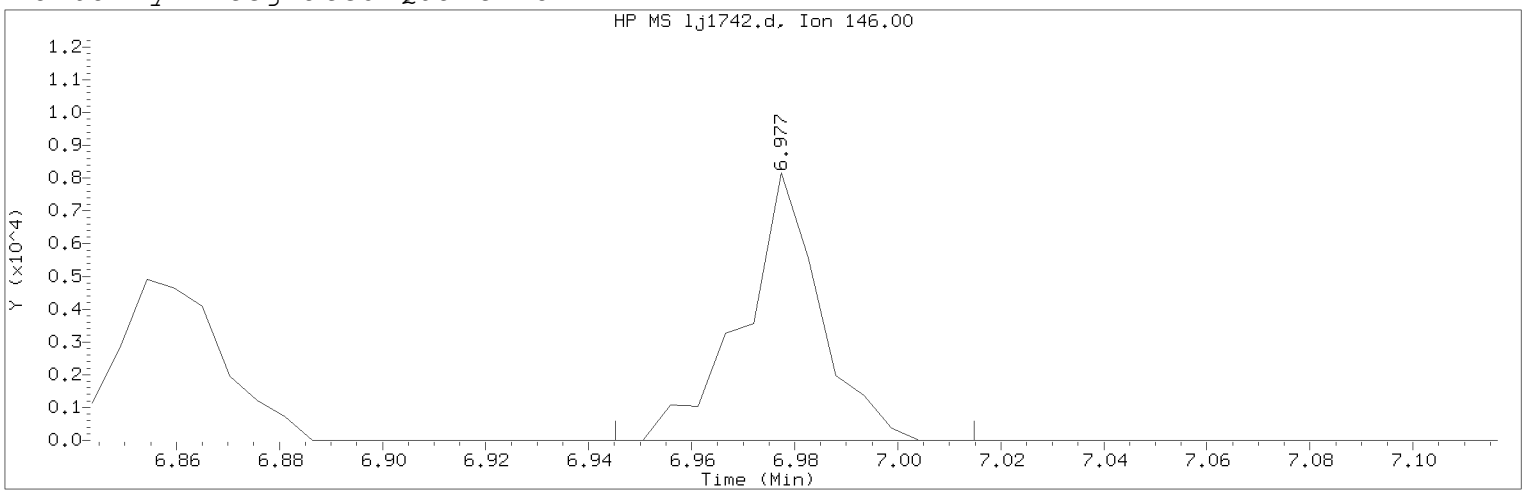
Compound Number	: 24		
Compound Name	: 2-Chlorophenol		
Scan Number	: 1052		
Retention Time (minutes)	: 6.614		
Quant Ion	: 128.00		
Area	: 6848		
On-column Amount (ng/ul)	: 0.1267		
Integration start scan	: 1048	Integration stop scan:	1058
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: Ashley R. Transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

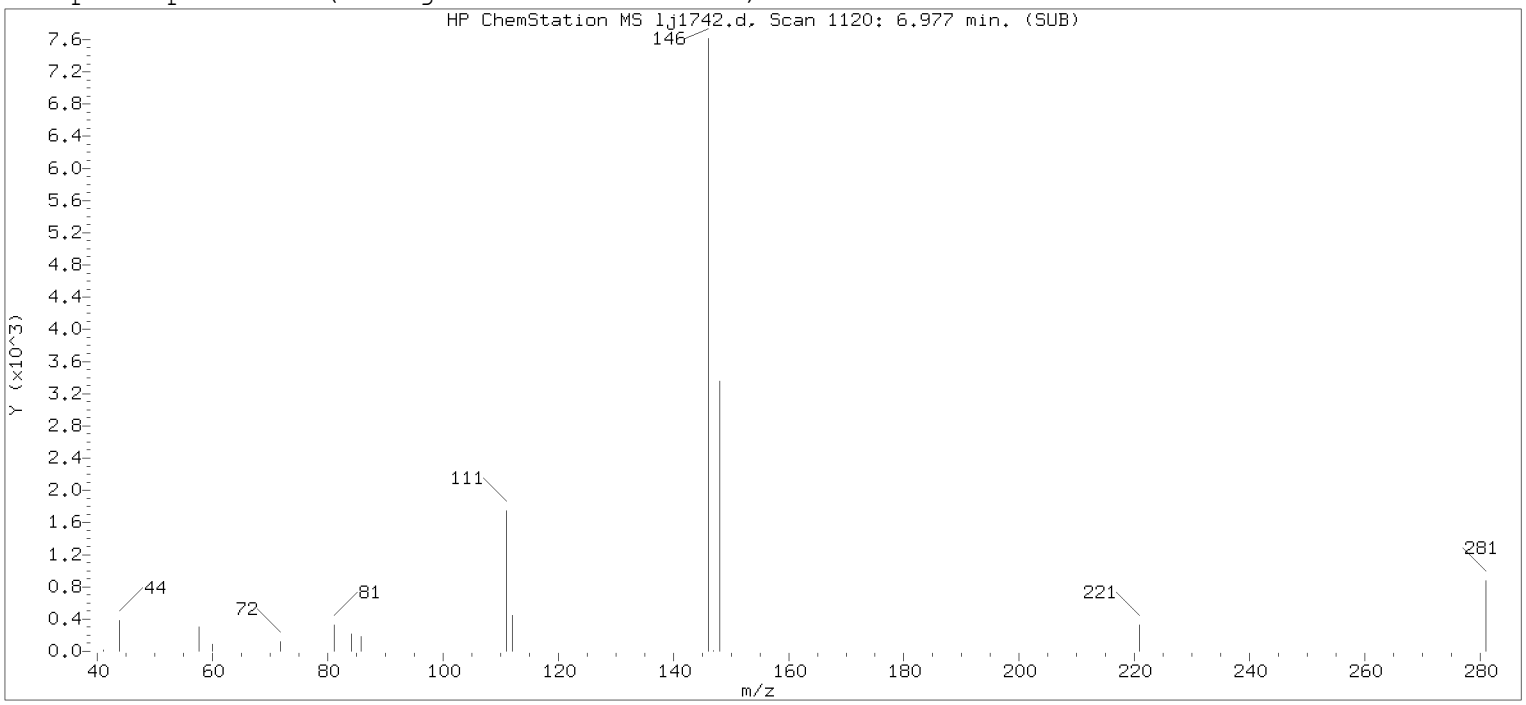
Compound Number : 27
Compound Name : 1,4-Dichlorobenzene
Scan Number : 1120
Retention Time (minutes) : 6.977
Quant Ion : 146.00
Area (flag) : 8475M
On-Column Amount (ng/ul) : 0.1378
Integration start scan : 1113 Integration stop scan: 1126
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

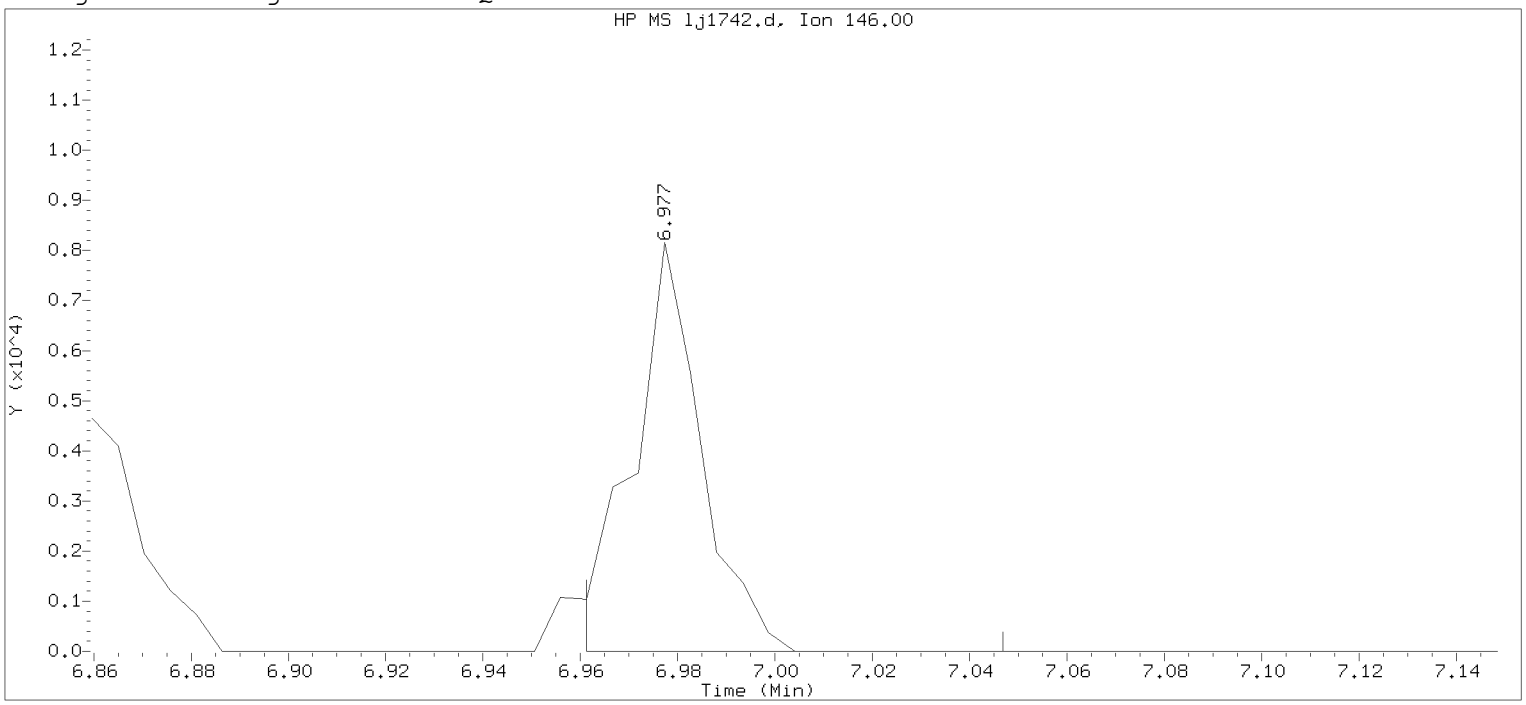
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

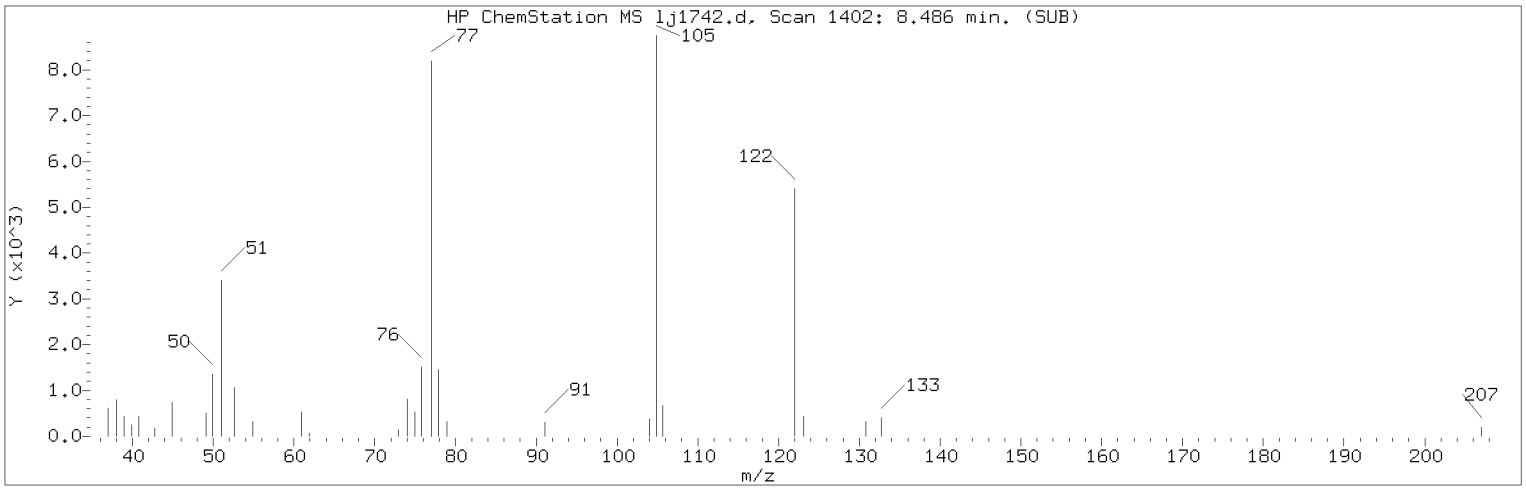
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

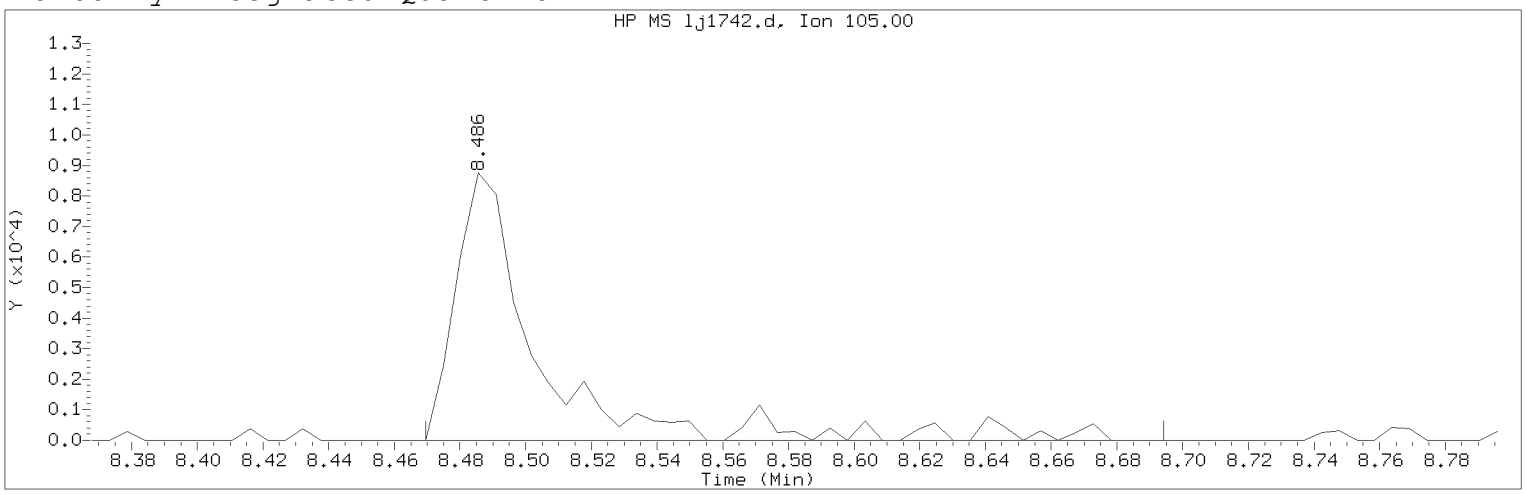
Compound Number	: 27		
Compound Name	: 1,4-Dichlorobenzene		
Scan Number	: 1120		
Retention Time (minutes)	: 6.977		
Quant Ion	: 146.00		
Area	: 7962		
On-column Amount (ng/ul)	: 0.1338		
Integration start scan	: 1116	Integration stop scan:	1132
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: Transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

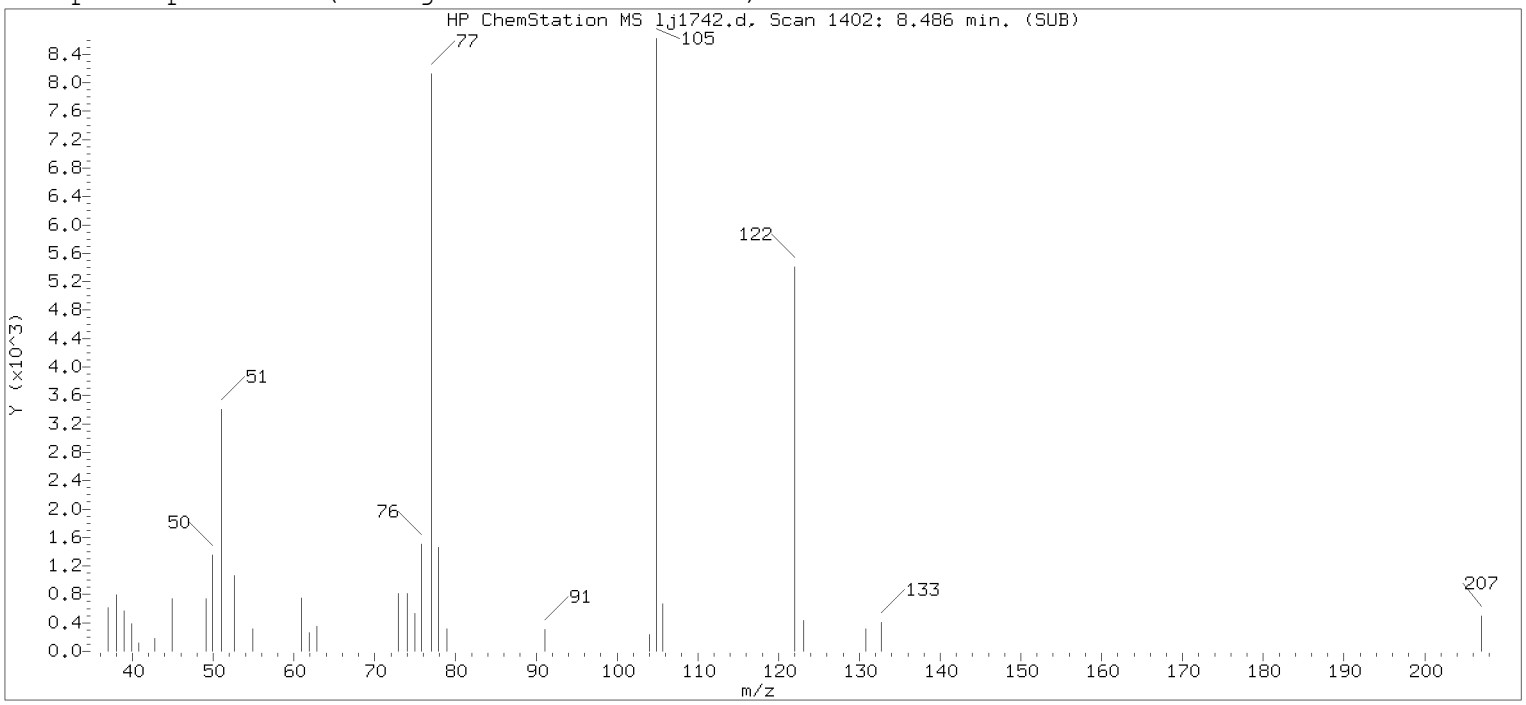
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1402
Retention Time (minutes) : 8.486
Quant Ion : 105.00
Area (flag) : 15488M
On-Column Amount (ng/ul) : 0.3834
Integration start scan : 1398 Integration stop scan: 1440
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

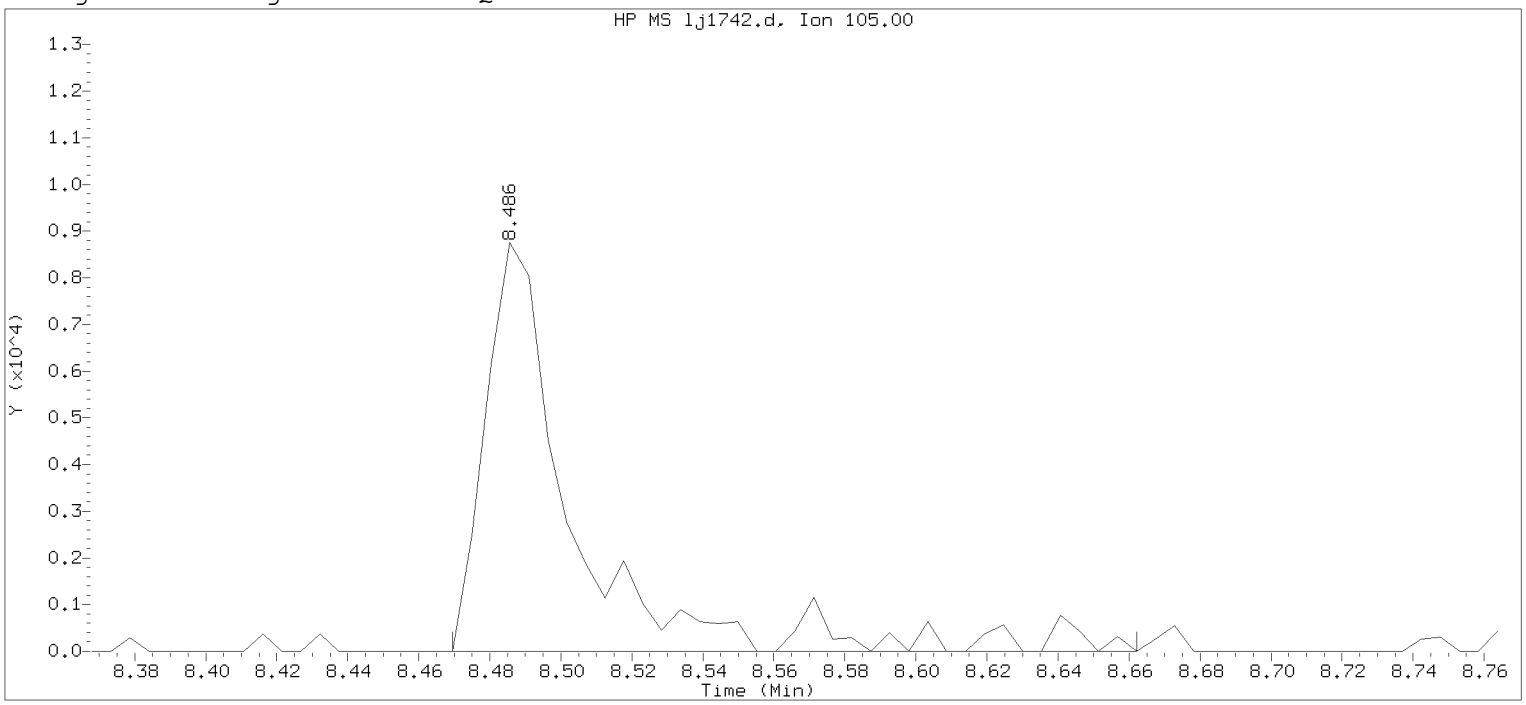
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

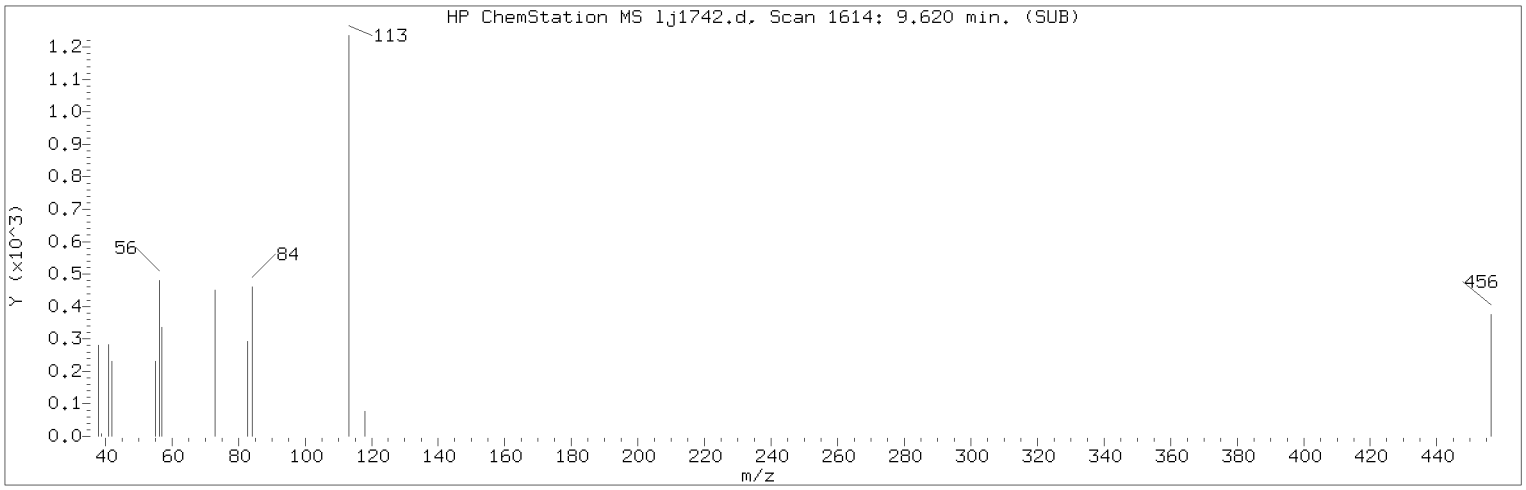
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

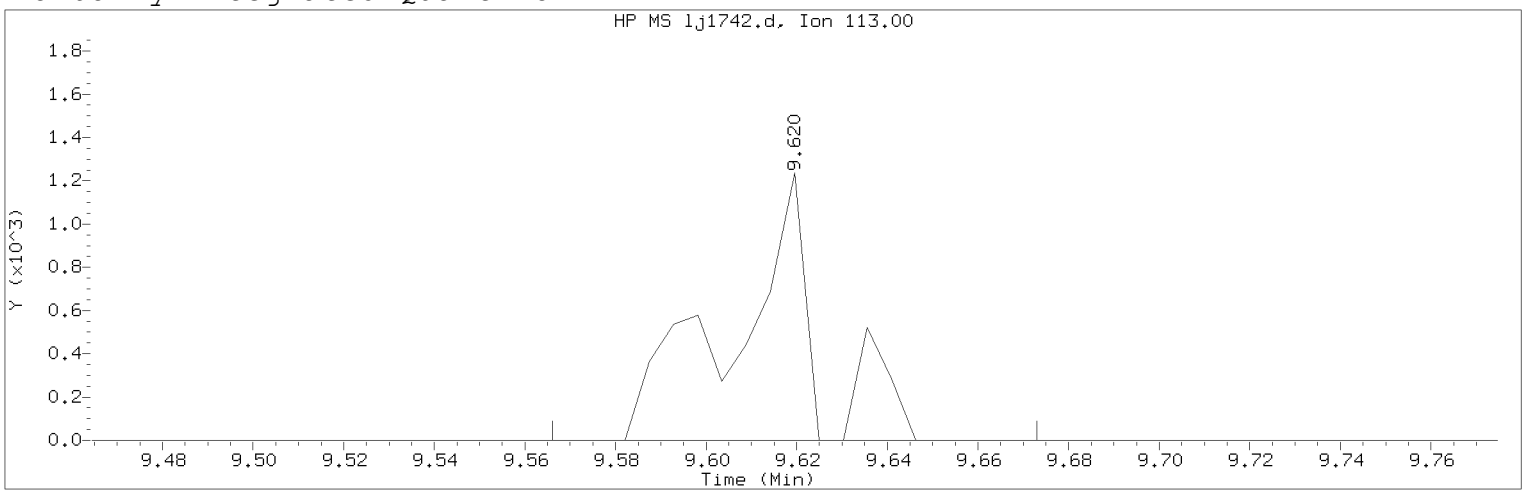
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1402		
Retention Time (minutes)	: 8.486		
Quant Ion	: 105.00		
Area	: 15230		
On-column Amount (ng/ul)	: 0.4039		
Integration start scan	: 1398	Integration stop scan:	1434
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: Ashley R. Transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

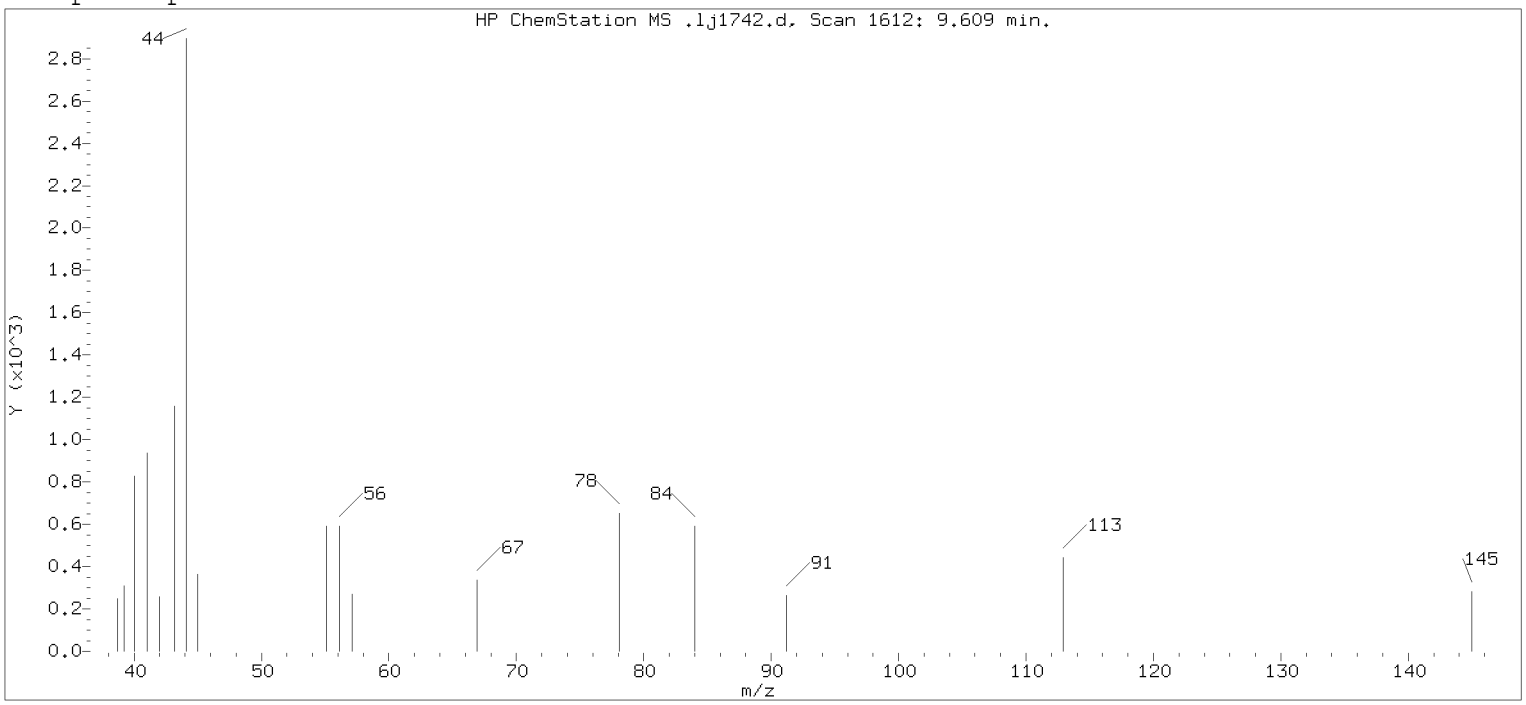
Compound Number : 79
Compound Name : Caprolactam
Scan Number : 1614
Retention Time (minutes) : 9.620
Quant Ion : 113.00
Area (flag) : 1580M
On-Column Amount (ng/ul) : 0.1115
Integration start scan : 1603 Integration stop scan: 1623
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

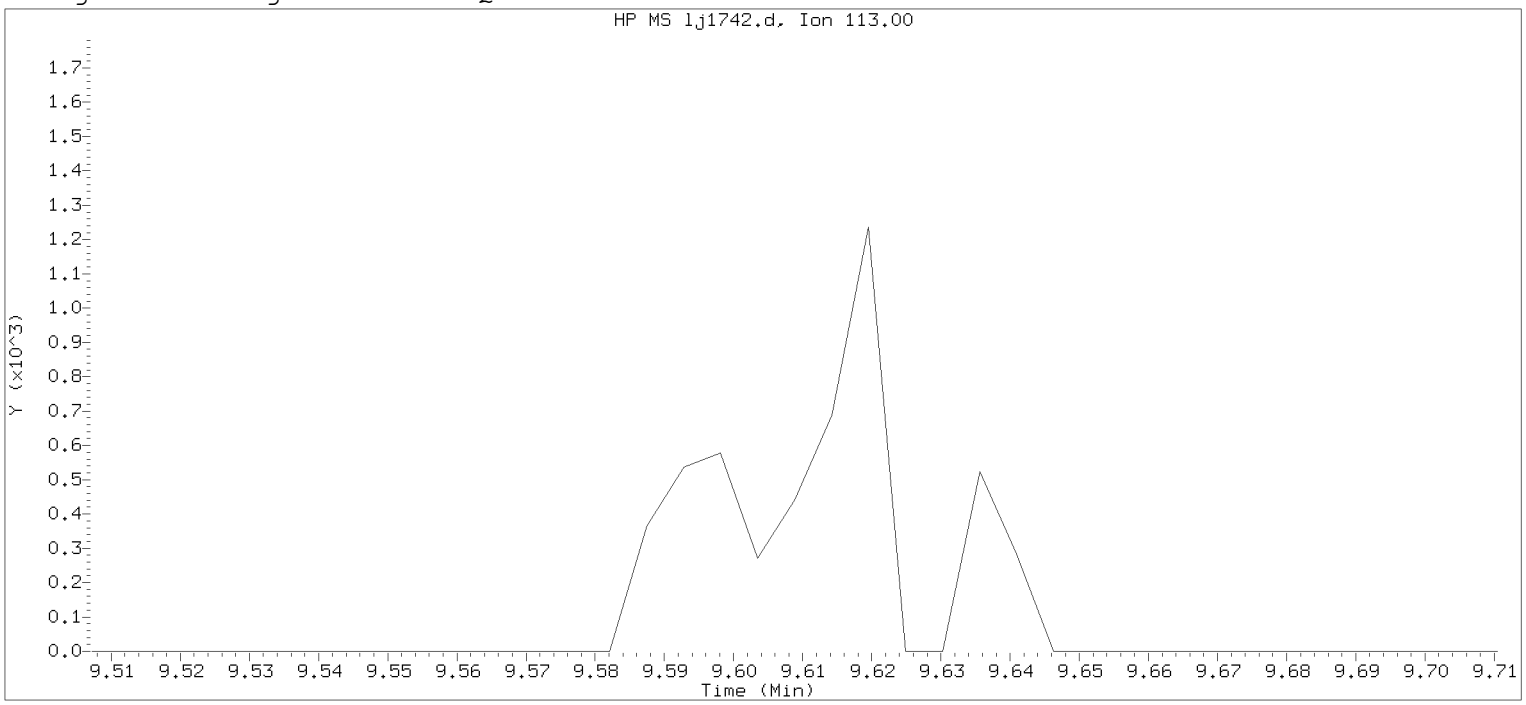
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

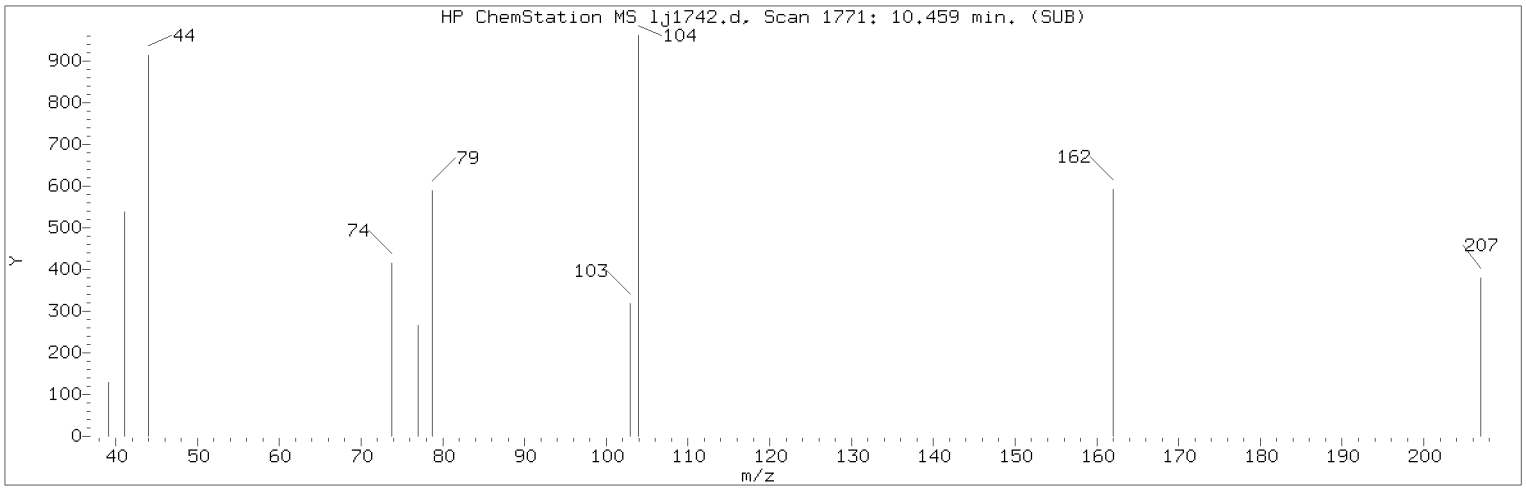
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

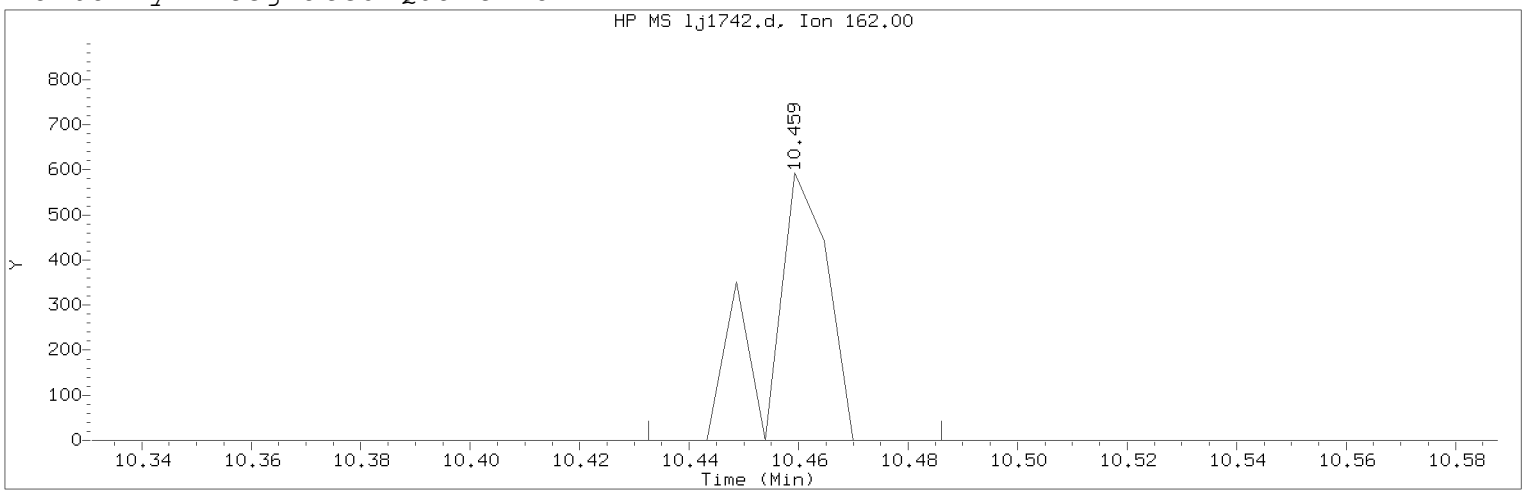
Compound Number : 79
Compound Name : Caprolactam
Expected RT (minutes) : 9.609
Quant Ion : 113.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ART

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

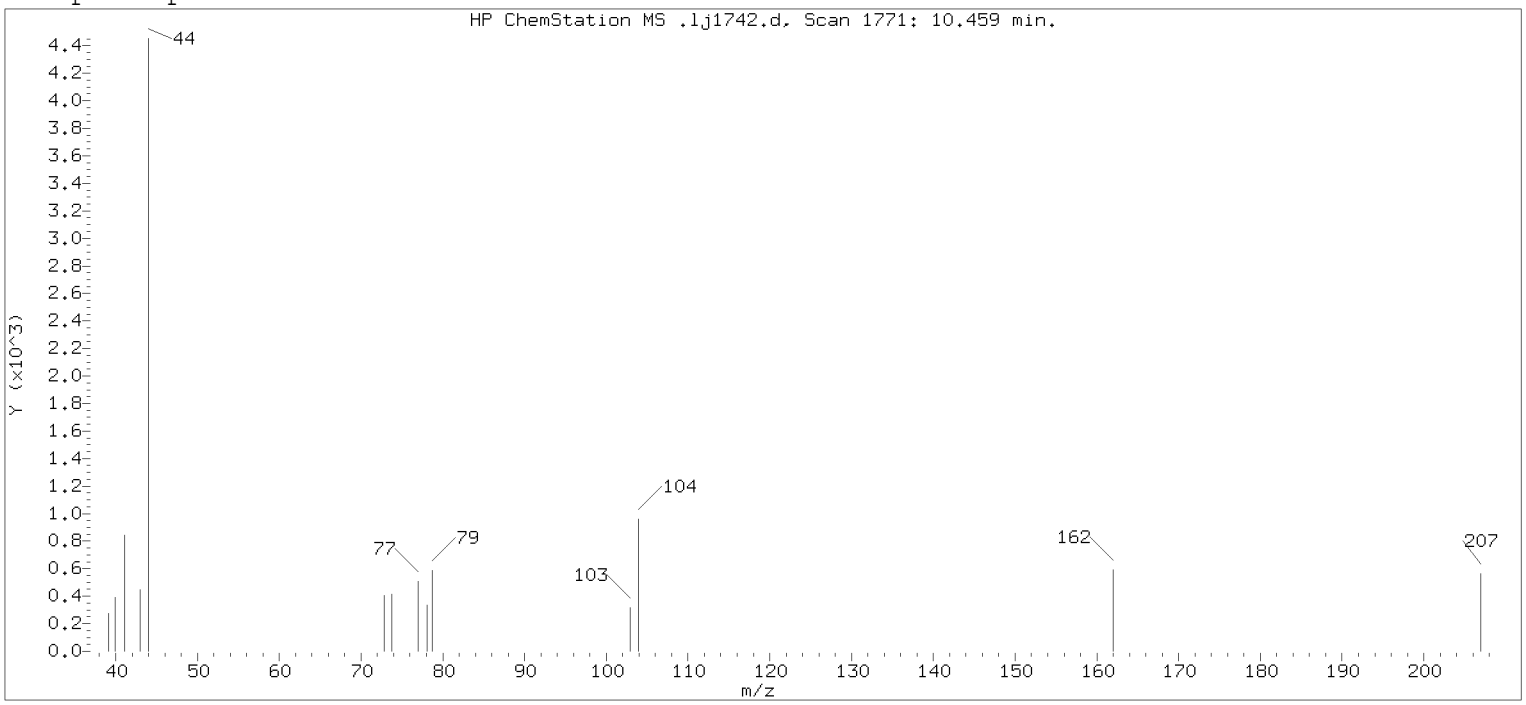
Compound Number : 91
Compound Name : cis-Isosafrole
Scan Number : 1771
Retention Time (minutes) : 10.459
Quant Ion : 162.00
Area (flag) : 445M
On-Column Amount (ng/ul) : 0.0101
Integration start scan : 1765 Integration stop scan: 1775
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

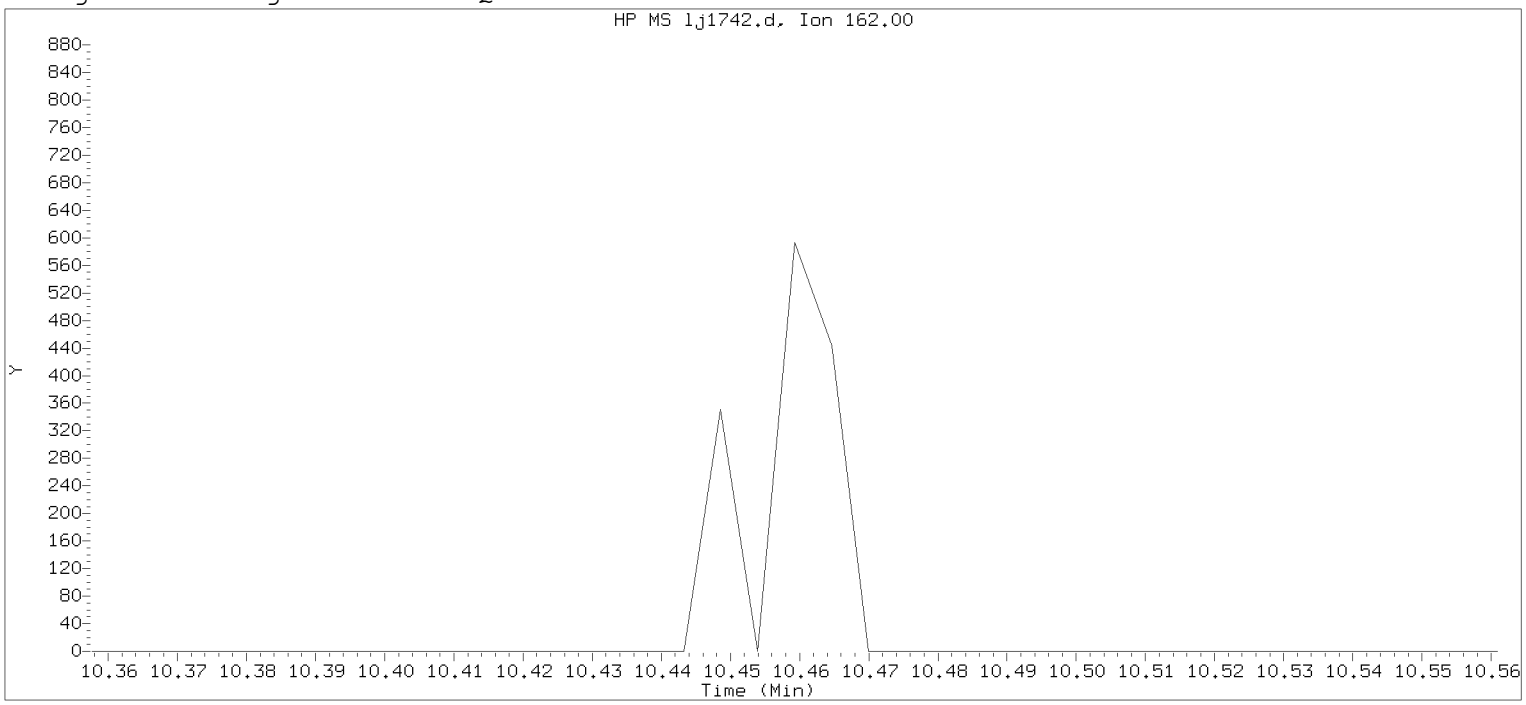
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

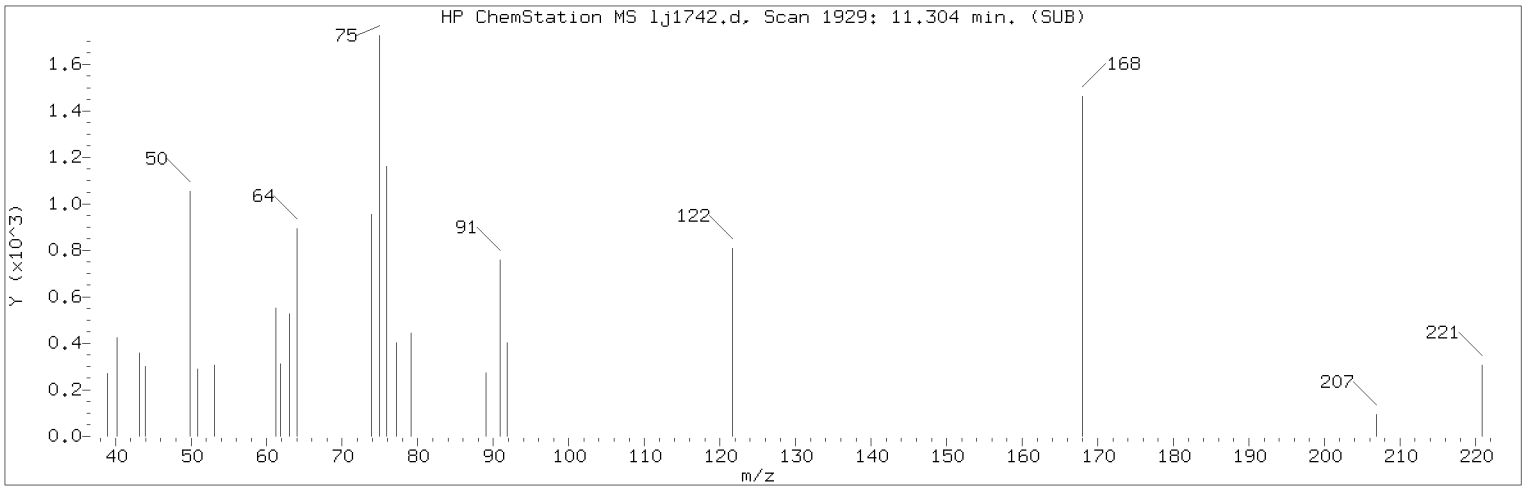
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

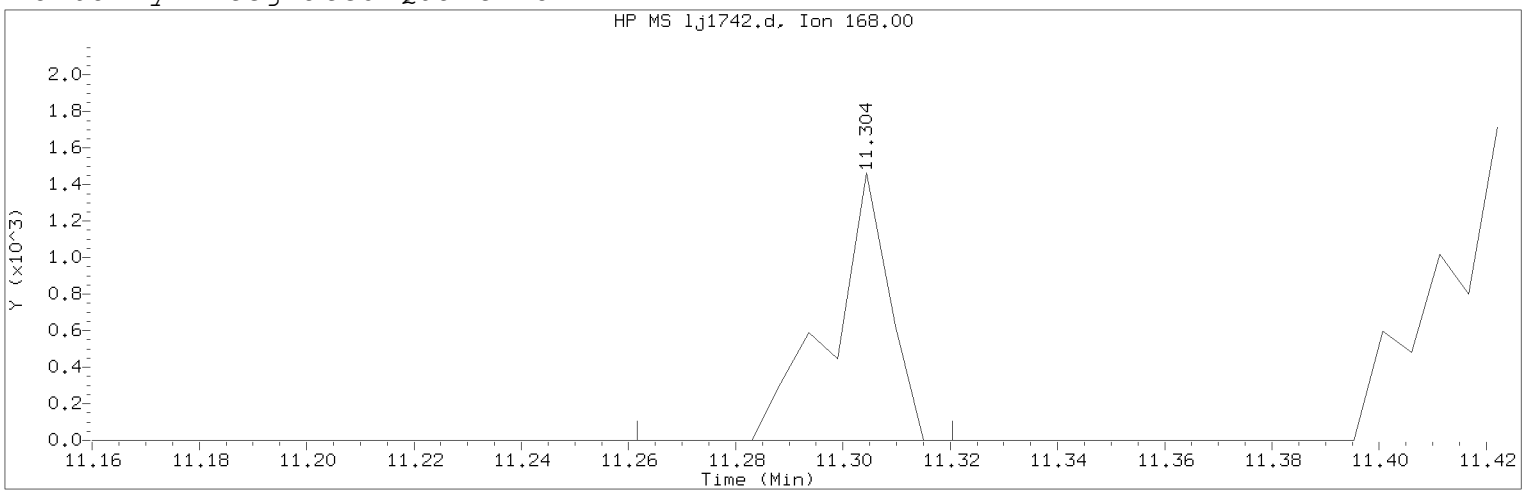
Compound Number : 91
Compound Name : cis-Isosafrole
Expected RT (minutes) : 10.459
Quant Ion : 162.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

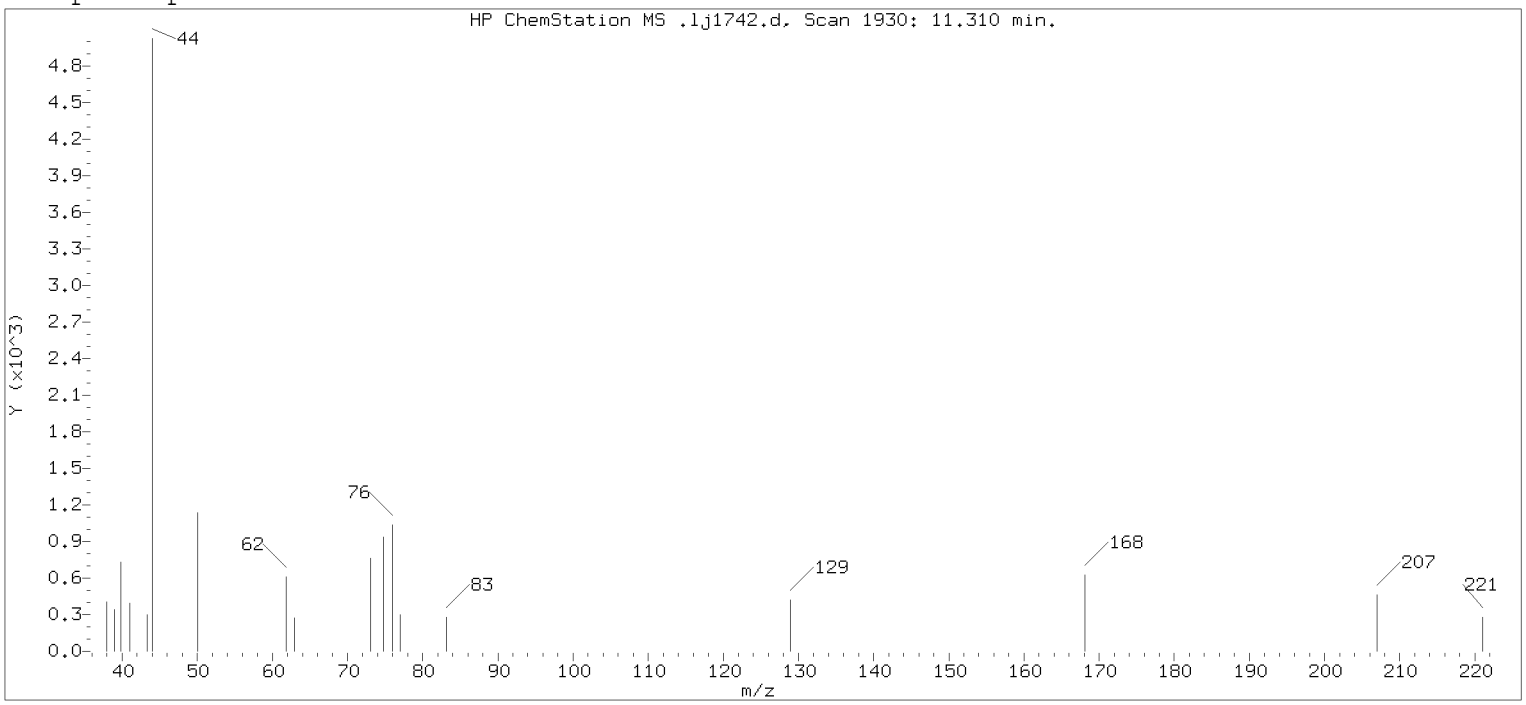
Compound Number : 109
Compound Name : 1,4-Dinitrobenzene
Scan Number : 1929
Retention Time (minutes) : 11.304
Quant Ion : 168.00
Area (flag) : 1102M
On-Column Amount (ng/ul) : 0.0801
Integration start scan : 1920 Integration stop scan: 1931
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

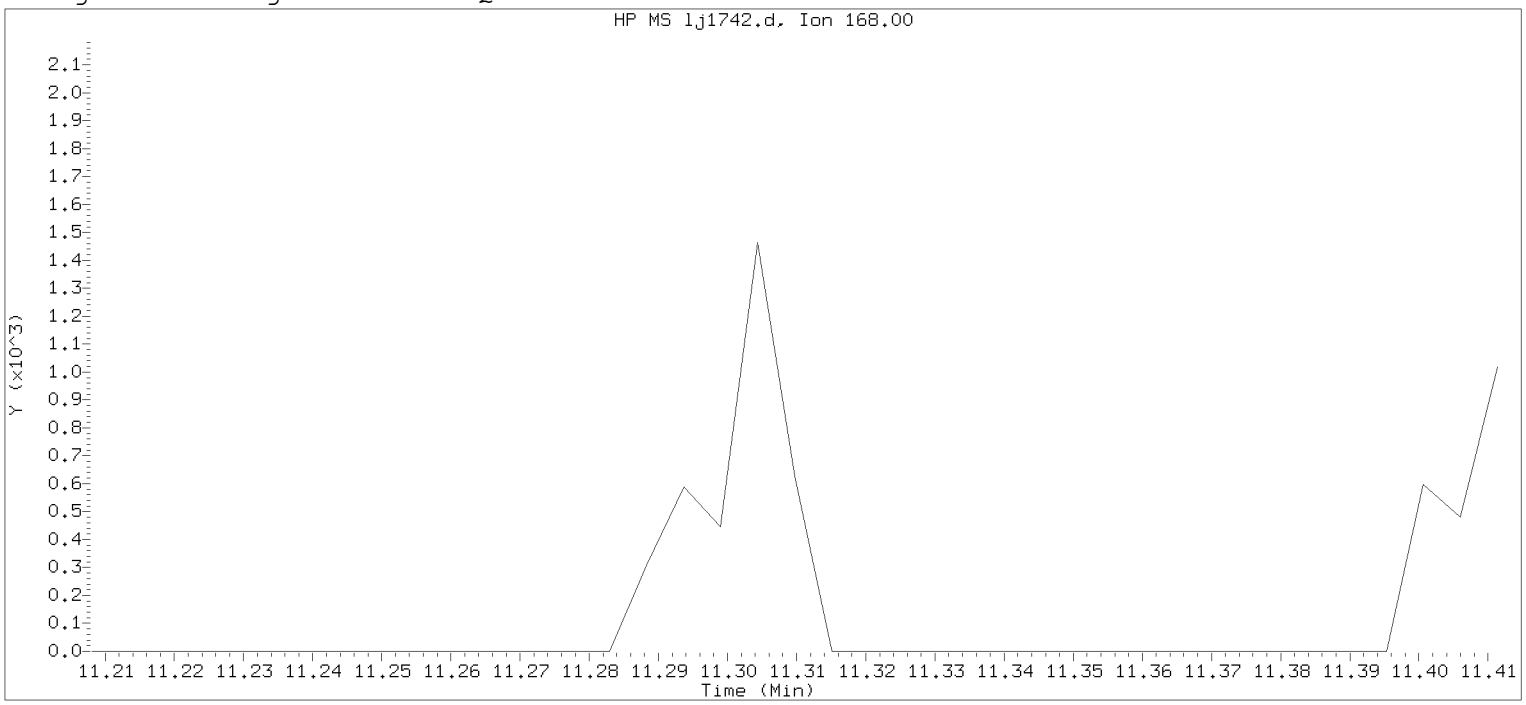
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

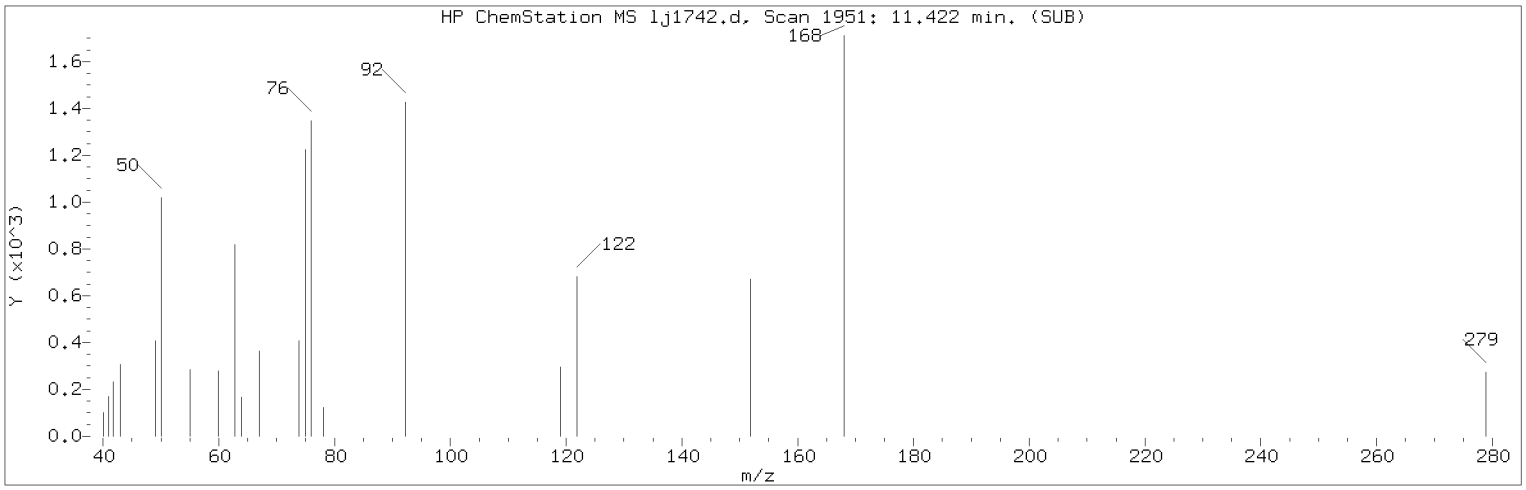
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

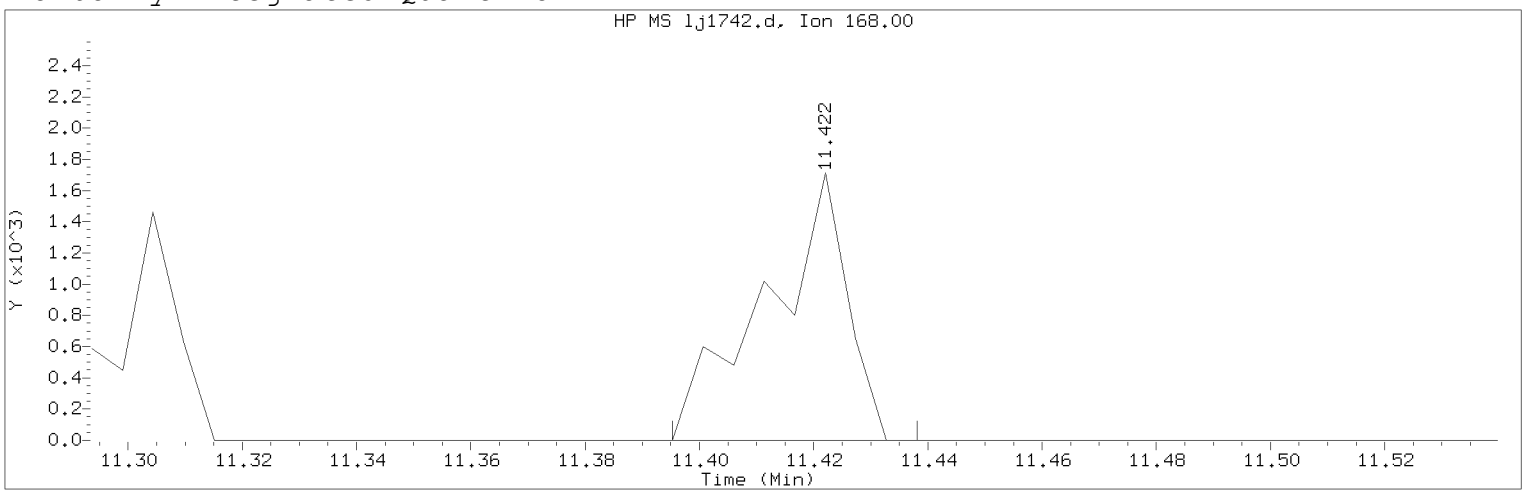
Compound Number : 109
Compound Name : 1,4-Dinitrobenzene
Expected RT (minutes) : 11.310
Quant Ion : 168.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: ART0531

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

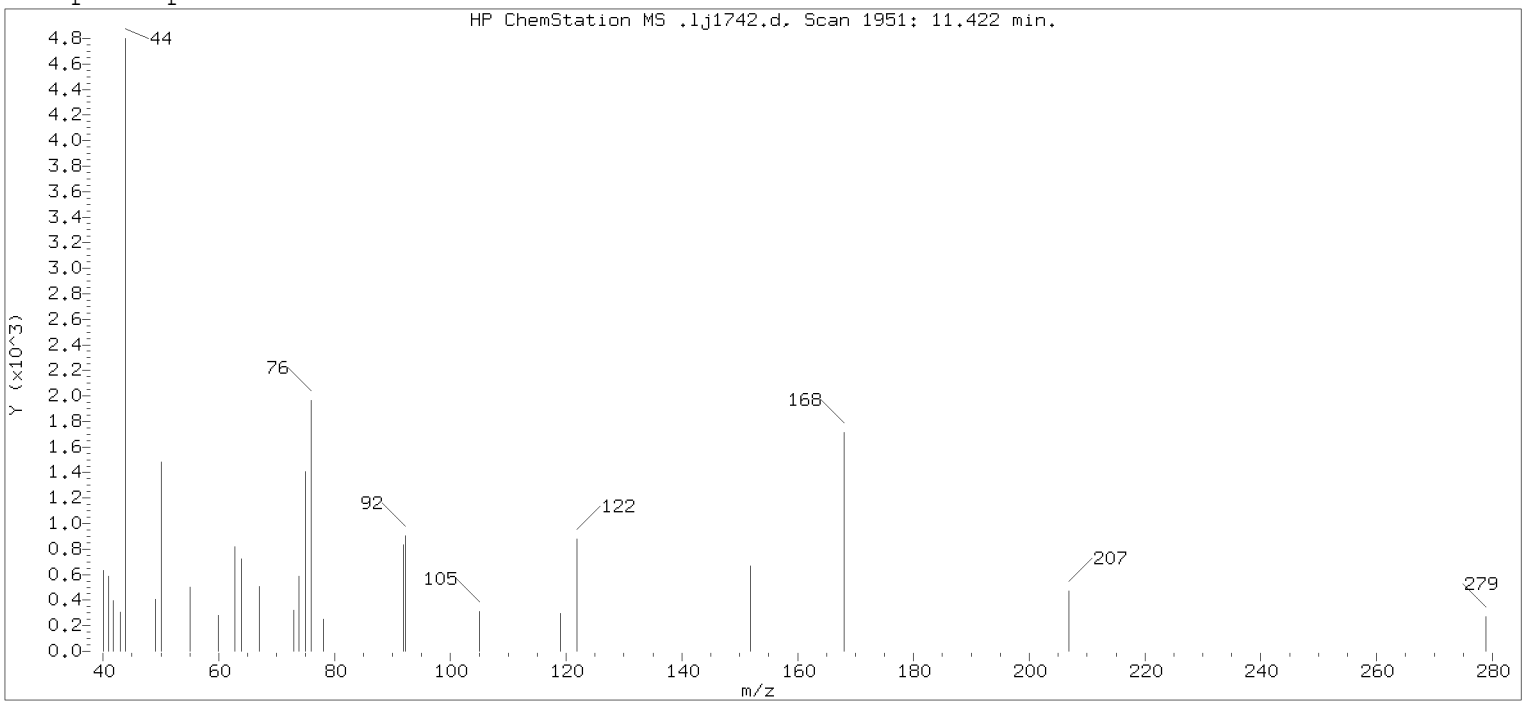
Compound Number : 111
Compound Name : 1,3-Dinitrobenzene
Scan Number : 1951
Retention Time (minutes) : 11.422
Quant Ion : 168.00
Area (flag) : 1687M
On-Column Amount (ng/ul) : 0.0997
Integration start scan : 1945 Integration stop scan: 1953
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

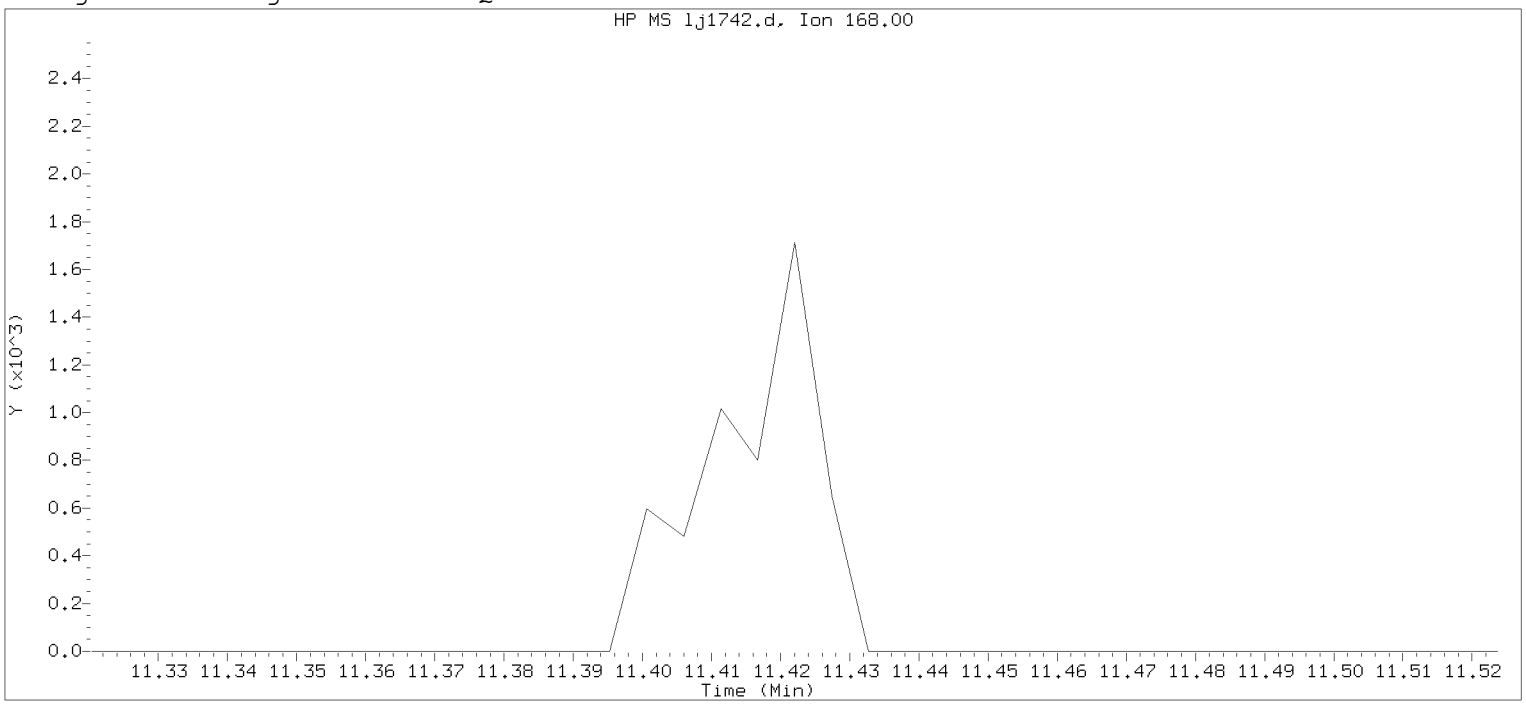
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

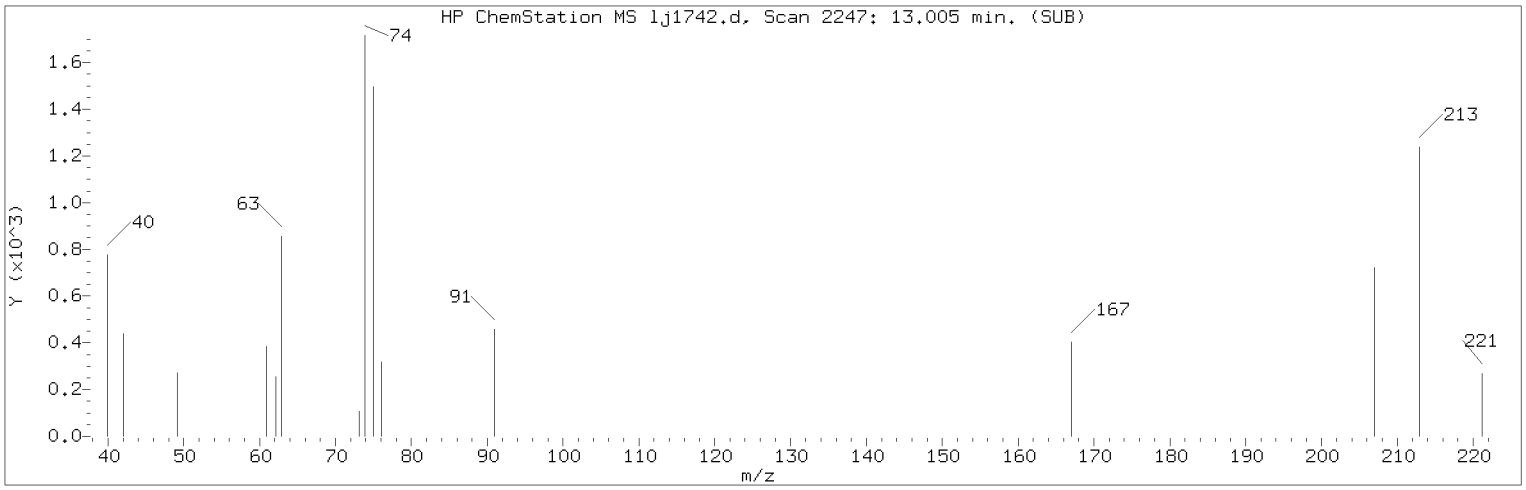
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

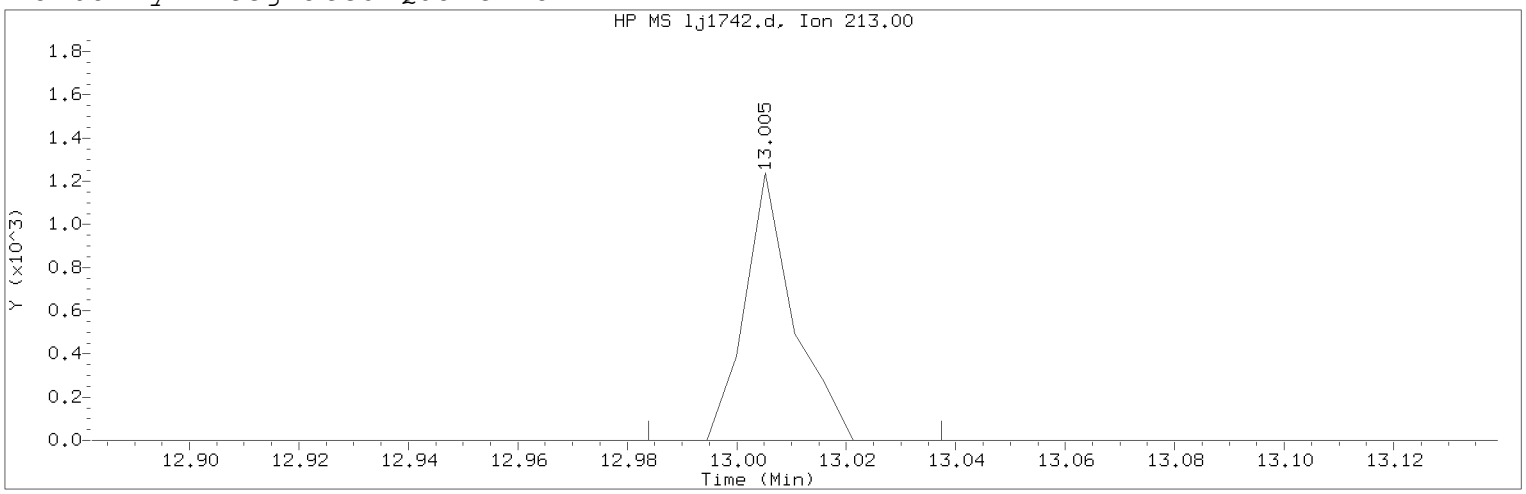
Compound Number : 111
Compound Name : 1,3-Dinitrobenzene
Expected RT (minutes) : 11.422
Quant Ion : 168.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: ART0533

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

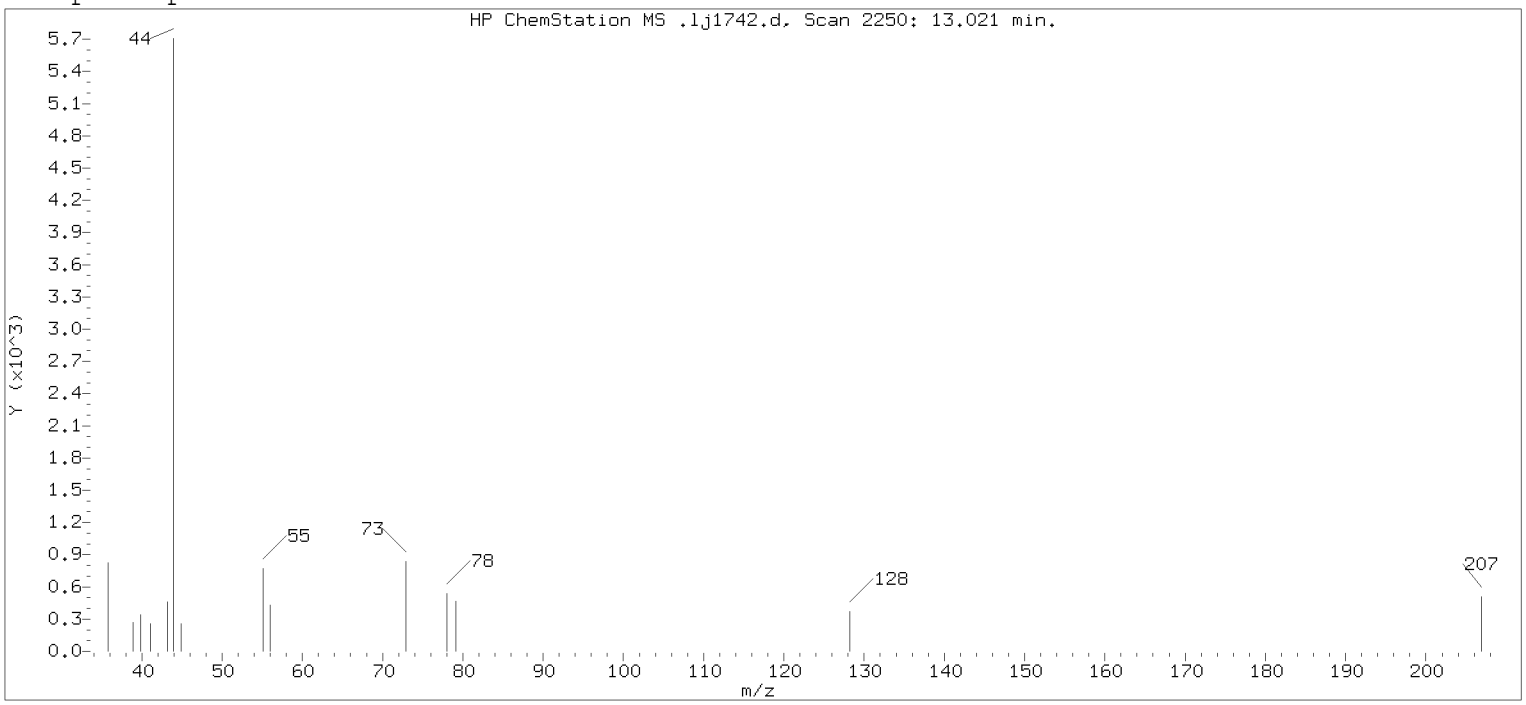
Compound Number : 144
Compound Name : 1,3,5-Trinitrobenzene
Scan Number : 2247
Retention Time (minutes) : 13.005
Quant Ion : 213.00
Area (flag) : 767M
On-Column Amount (ng/ul) : 0.0779
Integration start scan : 2242 Integration stop scan: 2252
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

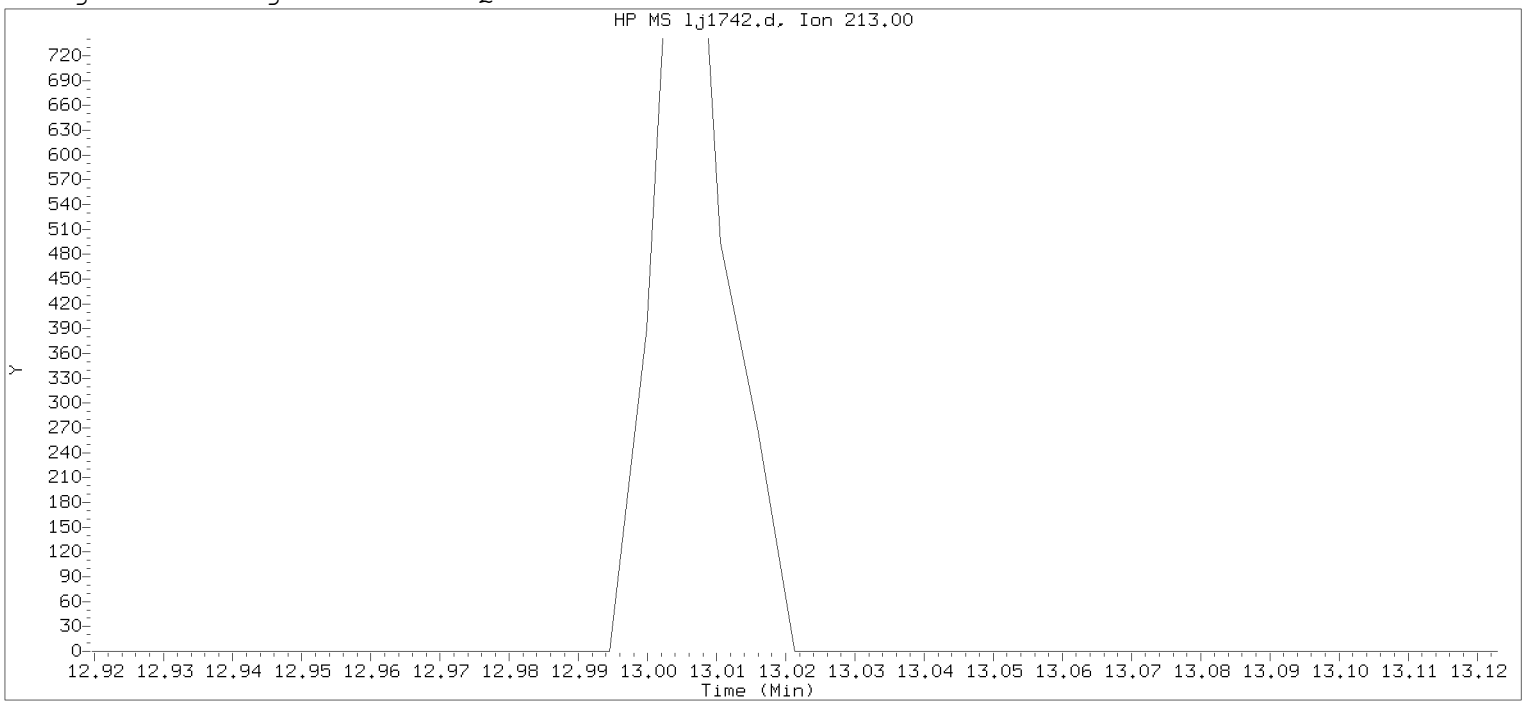
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

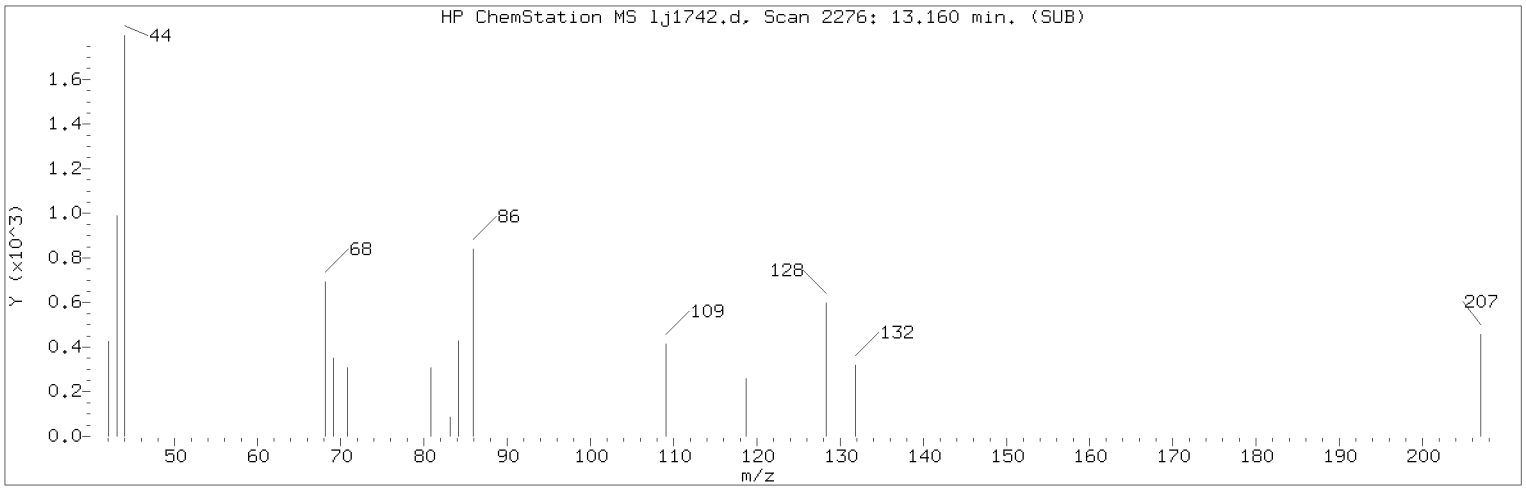
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

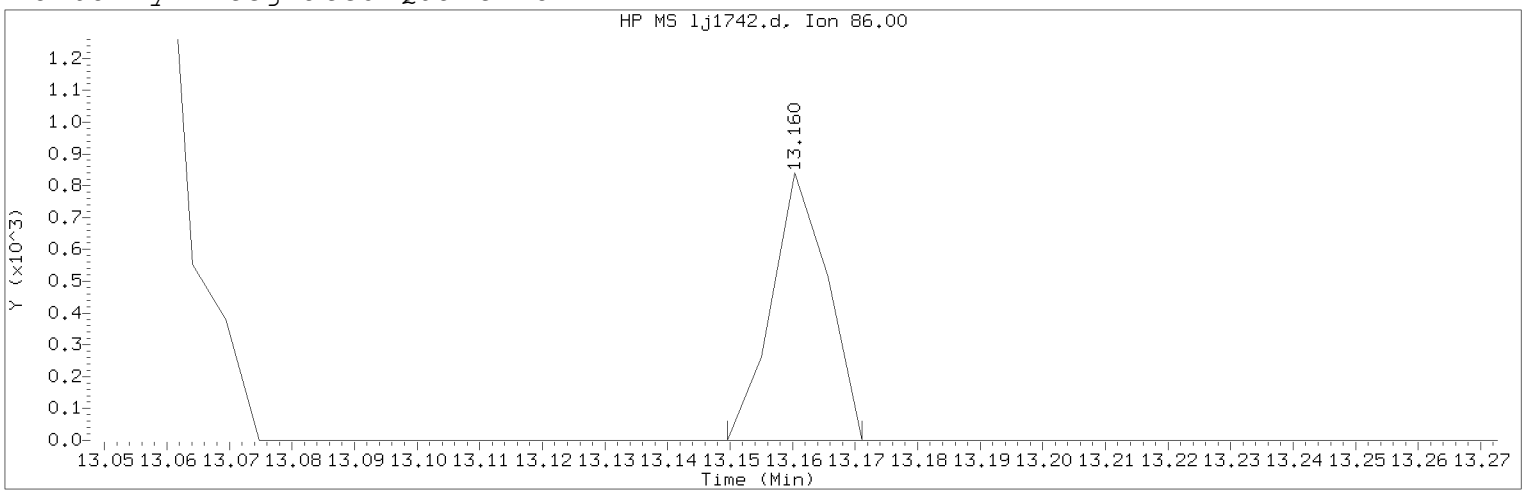
Compound Number : 144
Compound Name : 1,3,5-Trinitrobenzene
Expected RT (minutes) : 13.021
Quant Ion : 213.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ARTRANSUE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

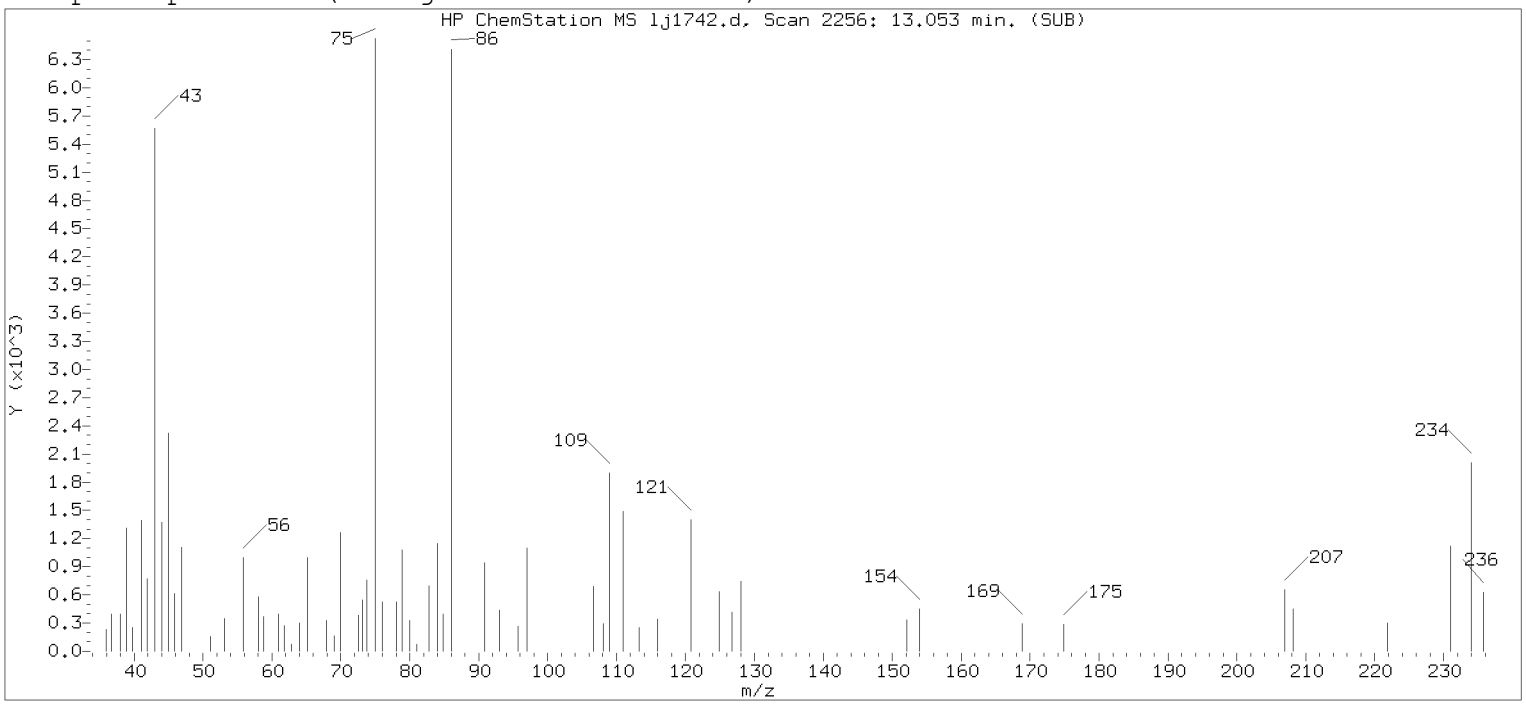
Compound Number : 149
Compound Name : Diallate (peak 2)
Scan Number : 2276
Retention Time (minutes) : 13.160
Quant Ion : 86.00
Area (flag) : 518M
On-Column Amount (ng/ul) : 0.0100
Integration start scan : 2273 Integration stop scan: 2277
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

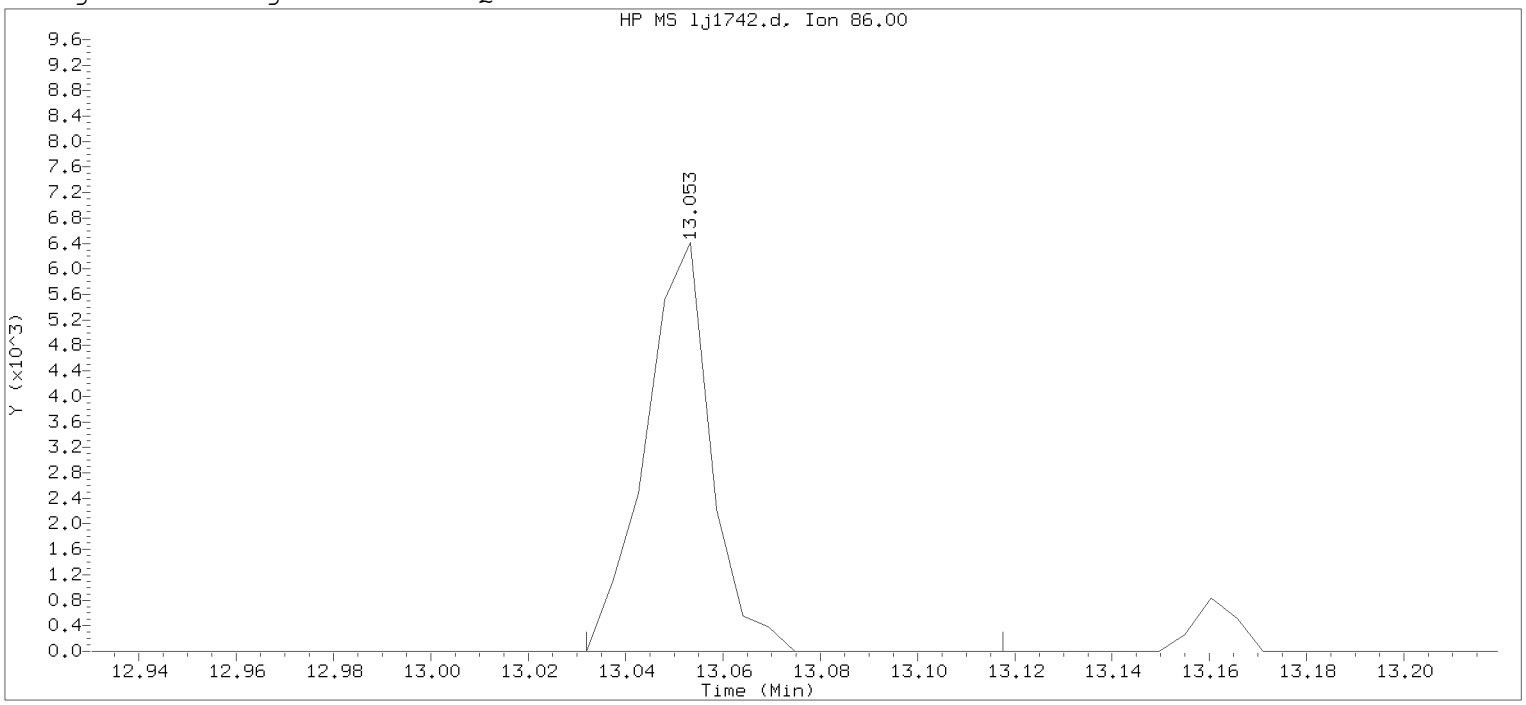
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

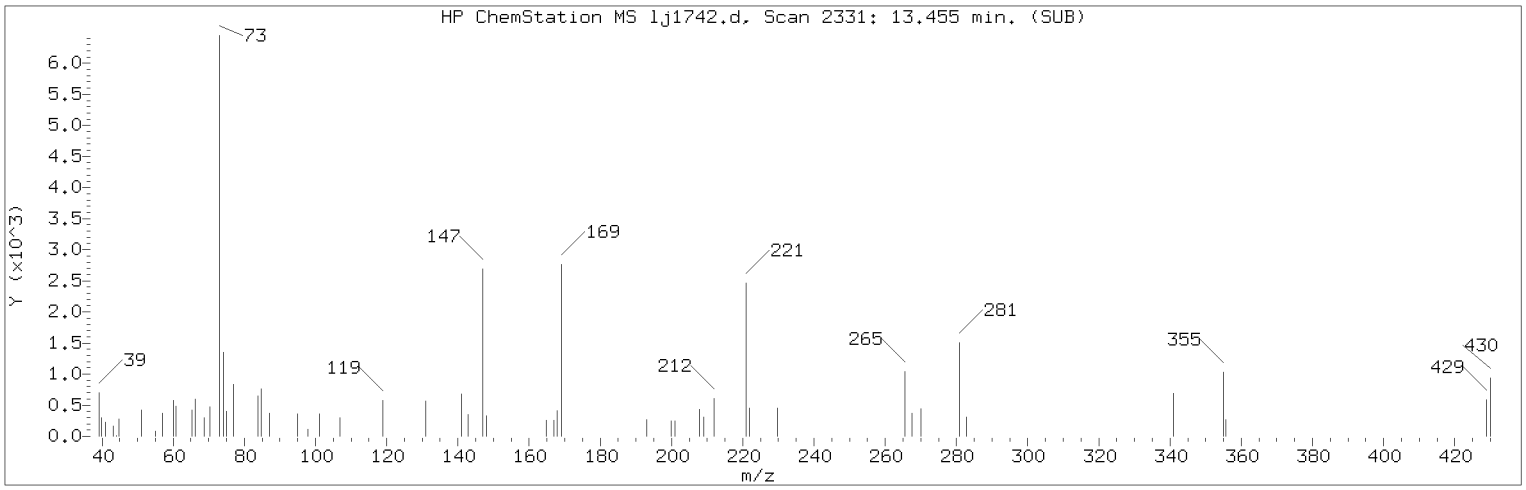
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

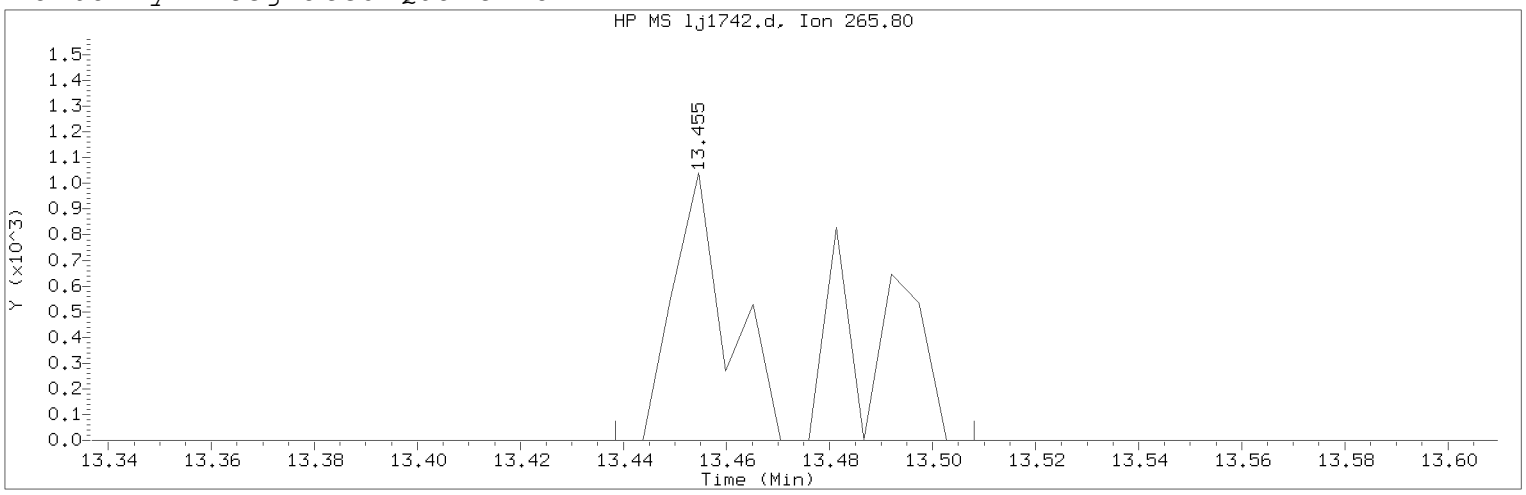
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2256		
Retention Time (minutes)	: 13.053		
Quant Ion	: 86.00		
Area	: 5987		
On-column Amount (ng/ul)	: 0.1208		
Integration start scan	: 2251	Integration stop scan:	2267
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: Transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

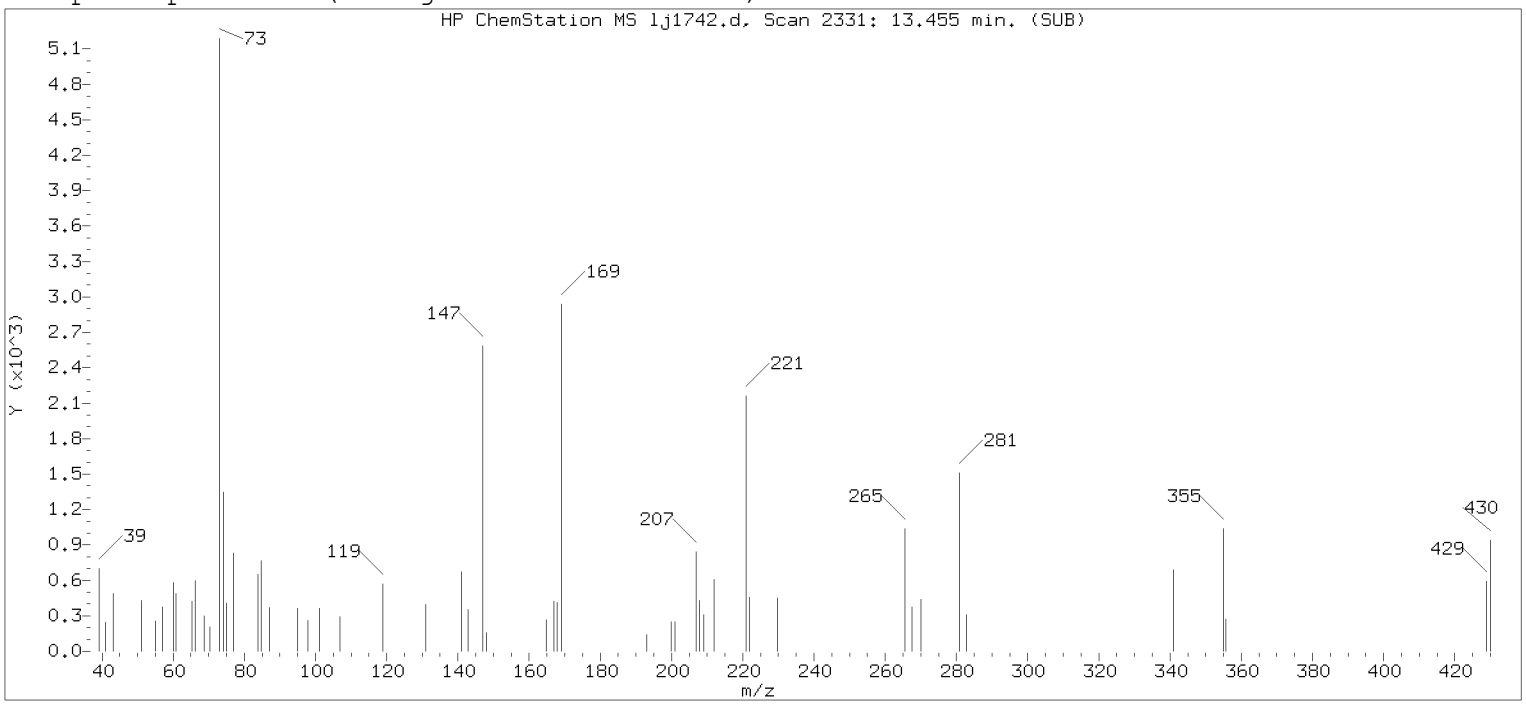
Compound Number : 154
Compound Name : Pentachlorophenol
Scan Number : 2331
Retention Time (minutes) : 13.455
Quant Ion : 266.00
Area (flag) : 1412M
On-Column Amount (ng/ul) : 0.0746
Integration start scan : 2327 Integration stop scan: 2340
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

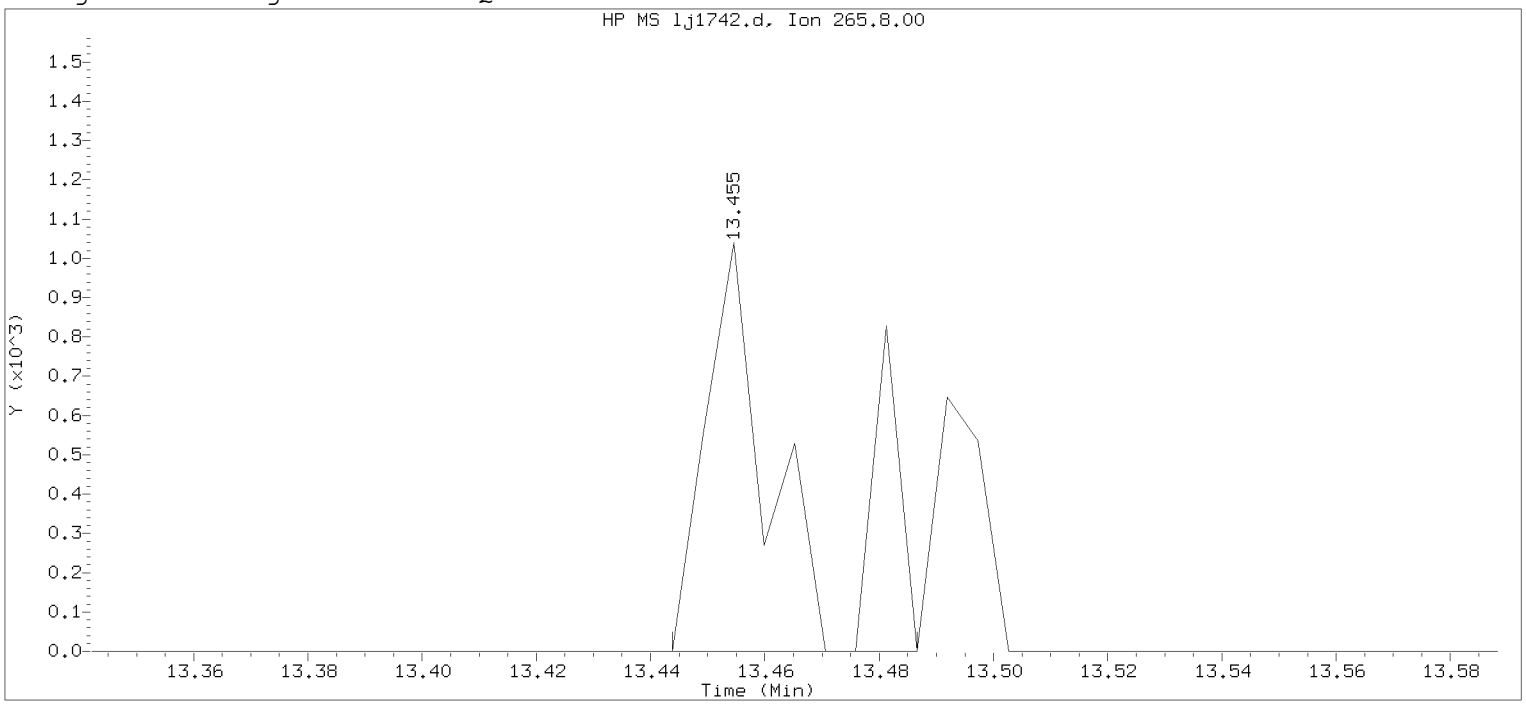
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

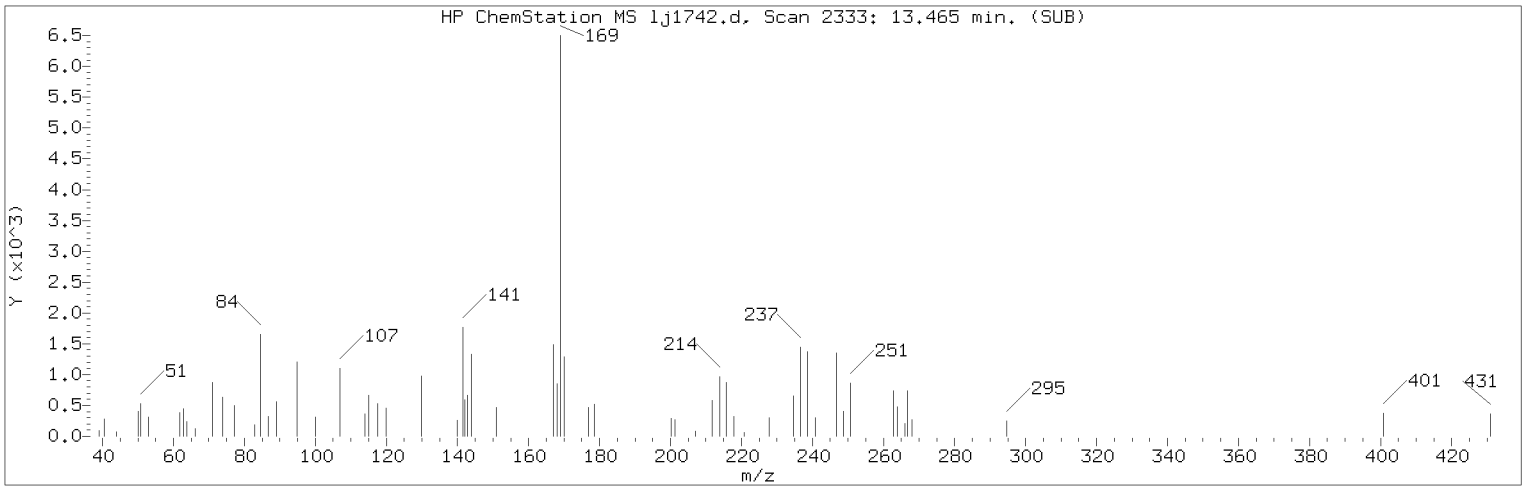
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

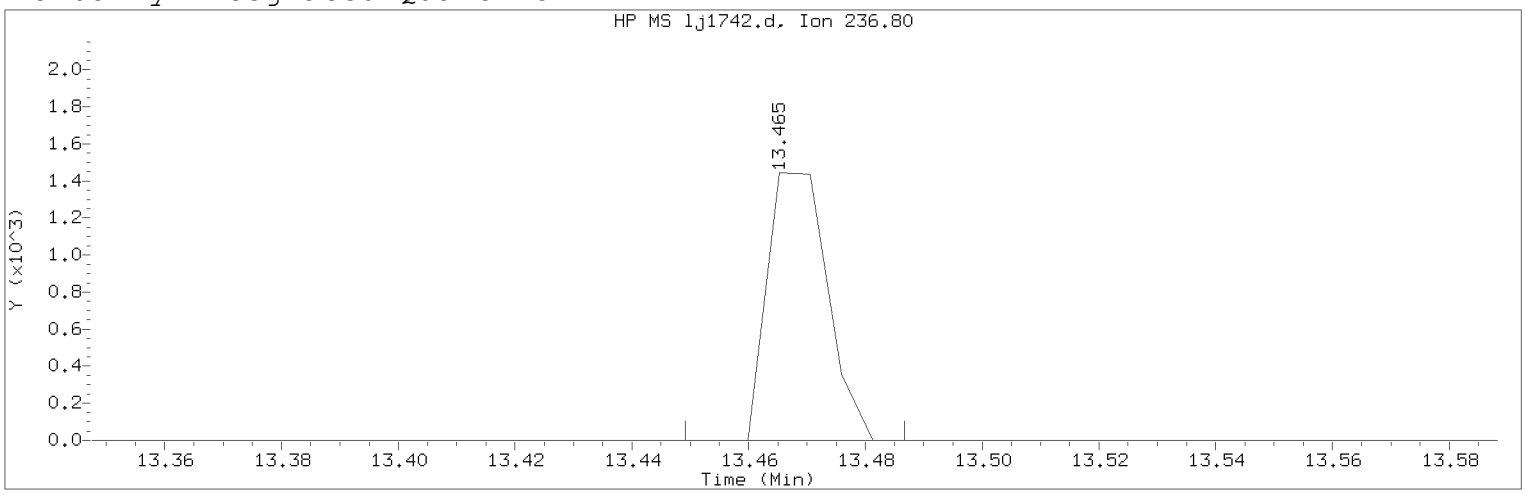
Compound Number	: 154		
Compound Name	: Pentachlorophenol		
Scan Number	: 2331		
Retention Time (minutes)	: 13.455		
Quant Ion	: 266.00		
Area	: 1033		
On-column Amount (ng/ul)	: 0.0581		
Integration start scan	: 2328	Integration stop scan:	2336
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: Ashley R. Transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

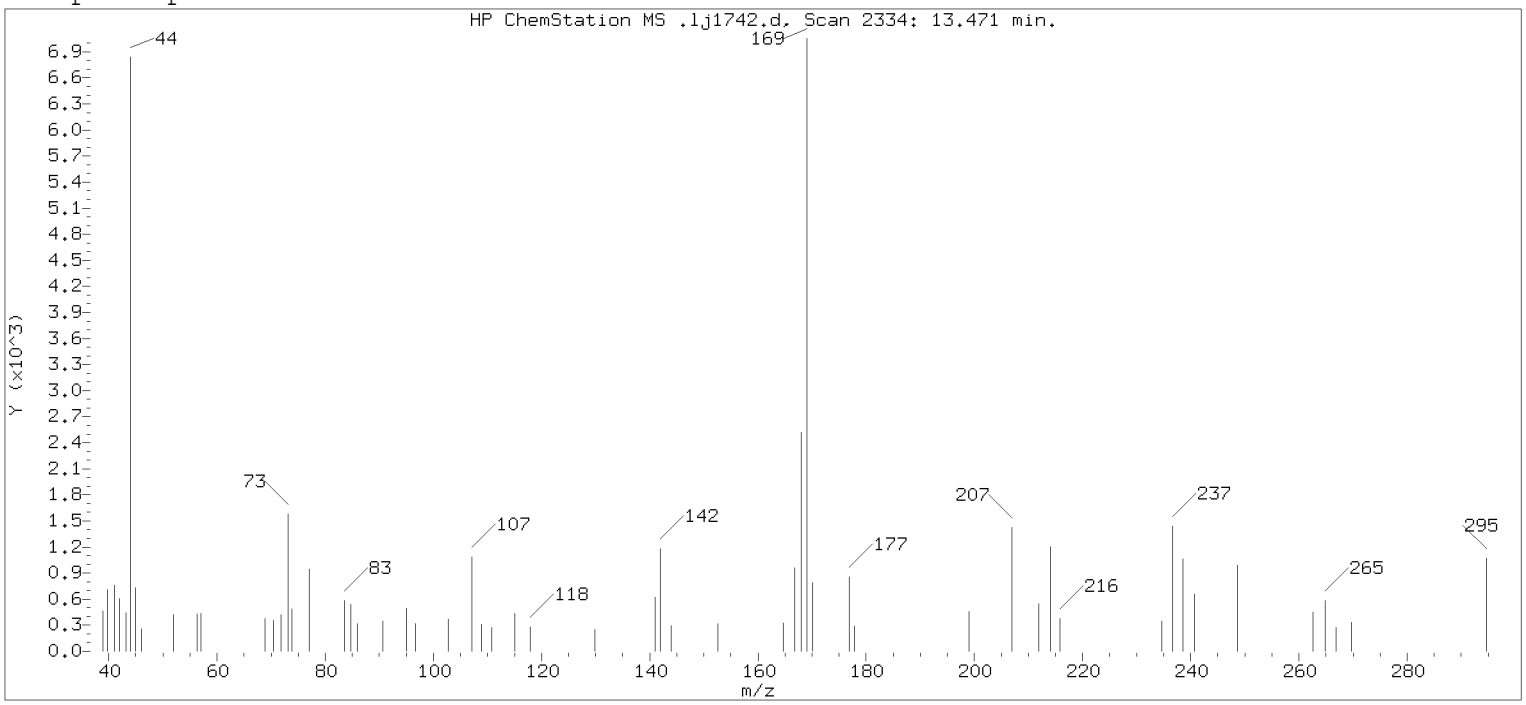
Compound Number : 156
Compound Name : Pentachloronitrobenzene
Scan Number : 2333
Retention Time (minutes) : 13.465
Quant Ion : 237.00
Area (flag) : 1038M
On-Column Amount (ng/ul) : 0.0720
Integration start scan : 2329 Integration stop scan: 2336
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

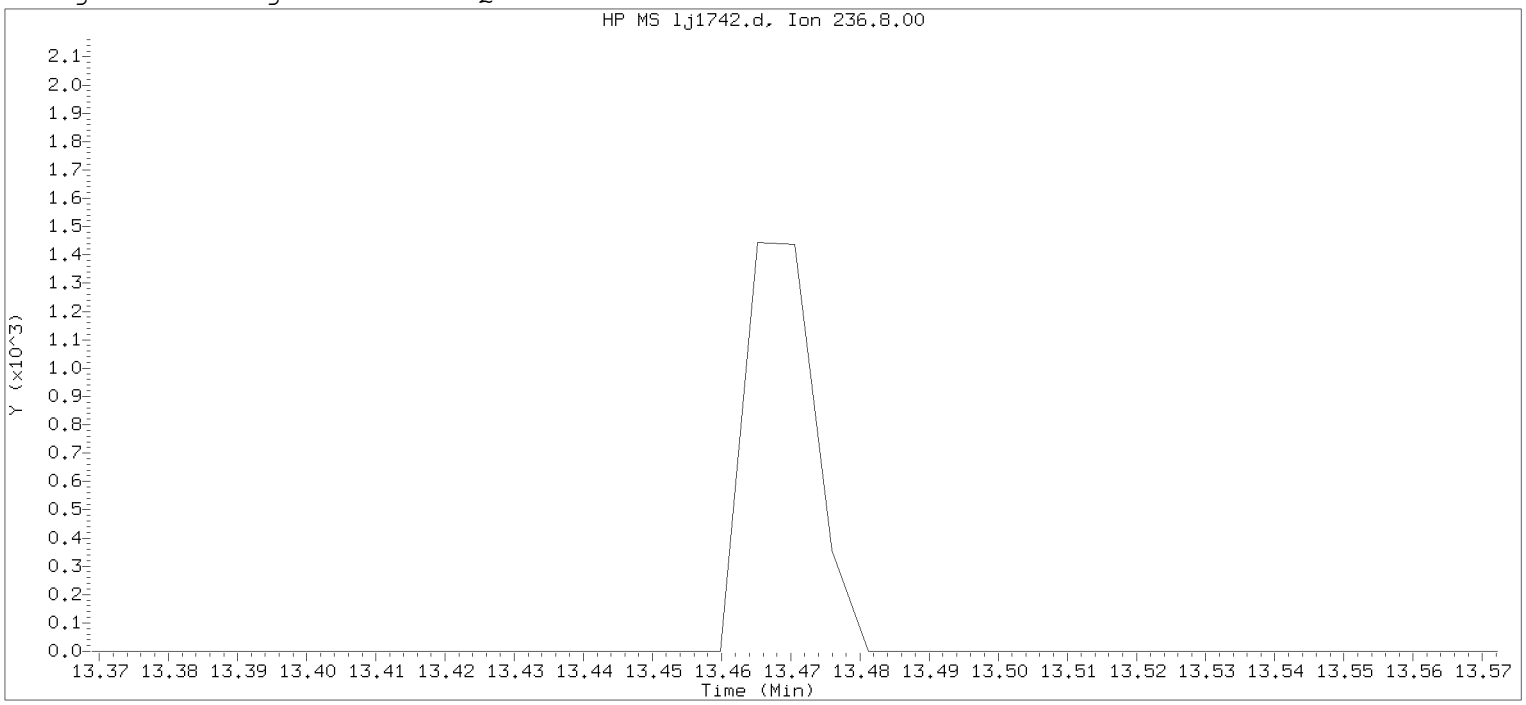
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

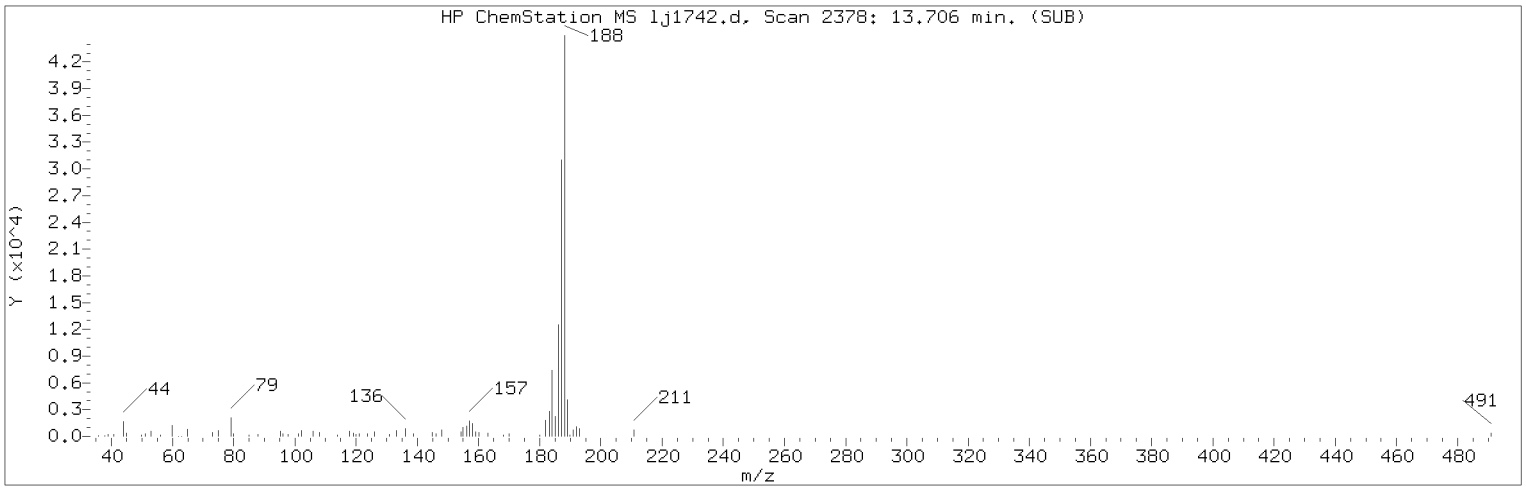
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

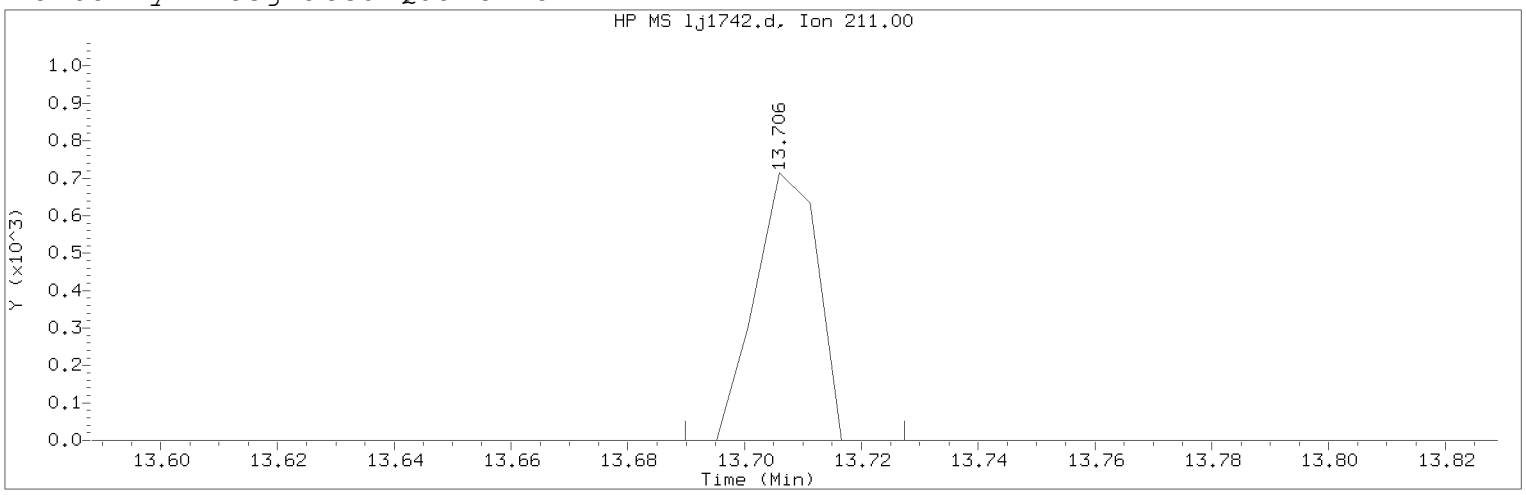
Compound Number : 156
Compound Name : Pentachloronitrobenzene
Expected RT (minutes) : 13.471
Quant Ion : 237.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

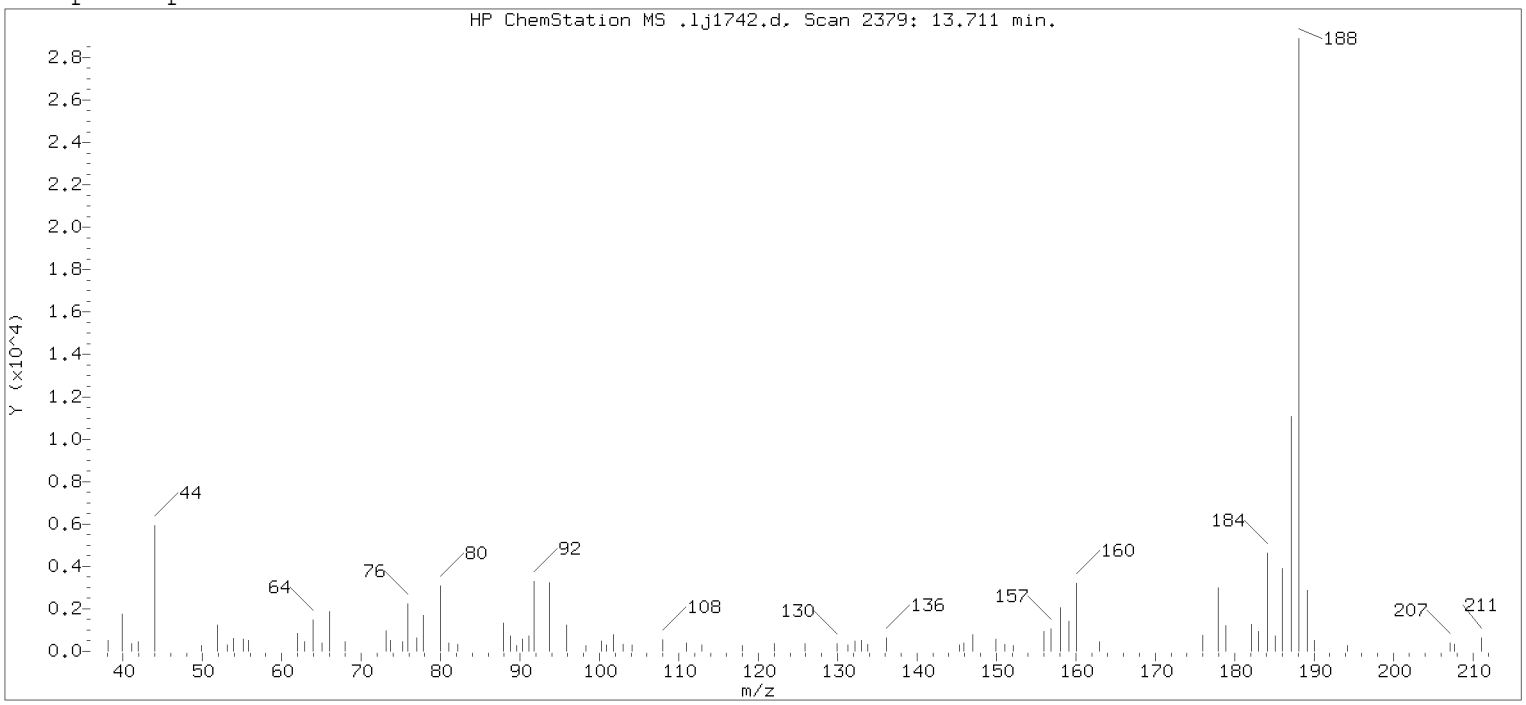
Compound Number : 159
Compound Name : Dinoseb
Scan Number : 2378
Retention Time (minutes) : 13.706
Quant Ion : 211.00
Area (flag) : 529M
On-Column Amount (ng/ul) : 0.0216
Integration start scan : 2374 Integration stop scan: 2381
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

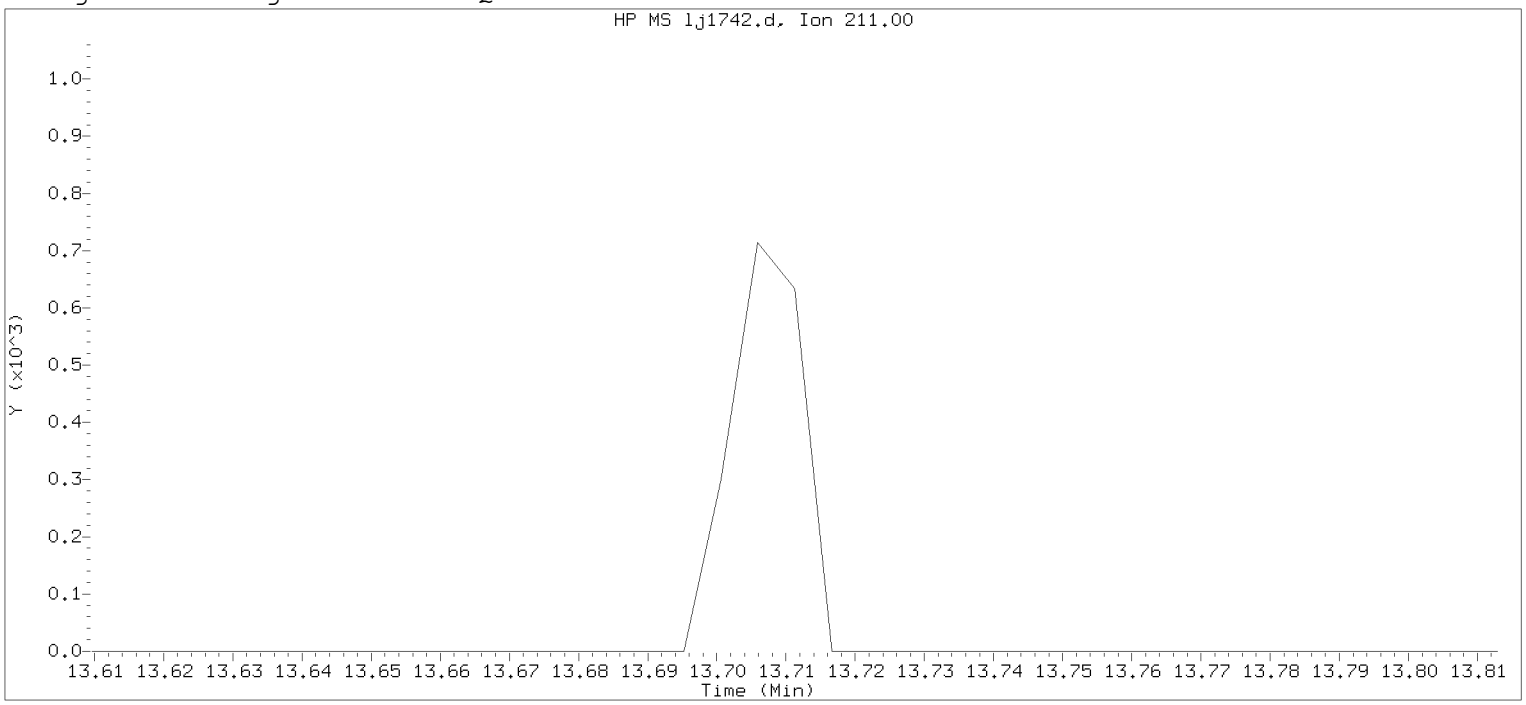
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

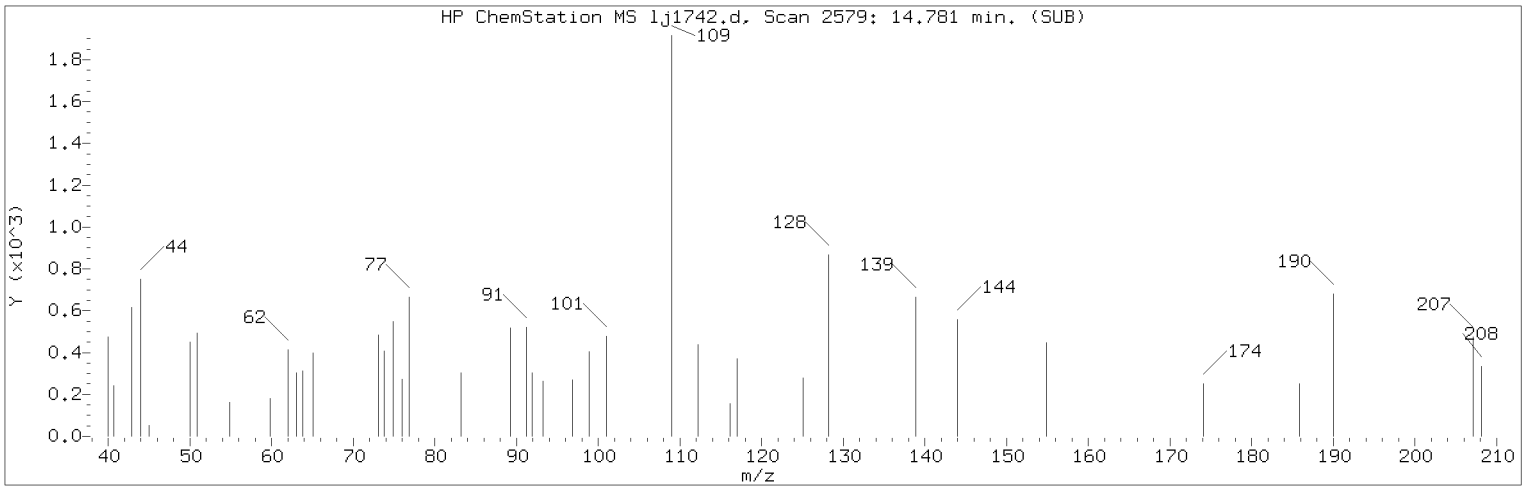
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

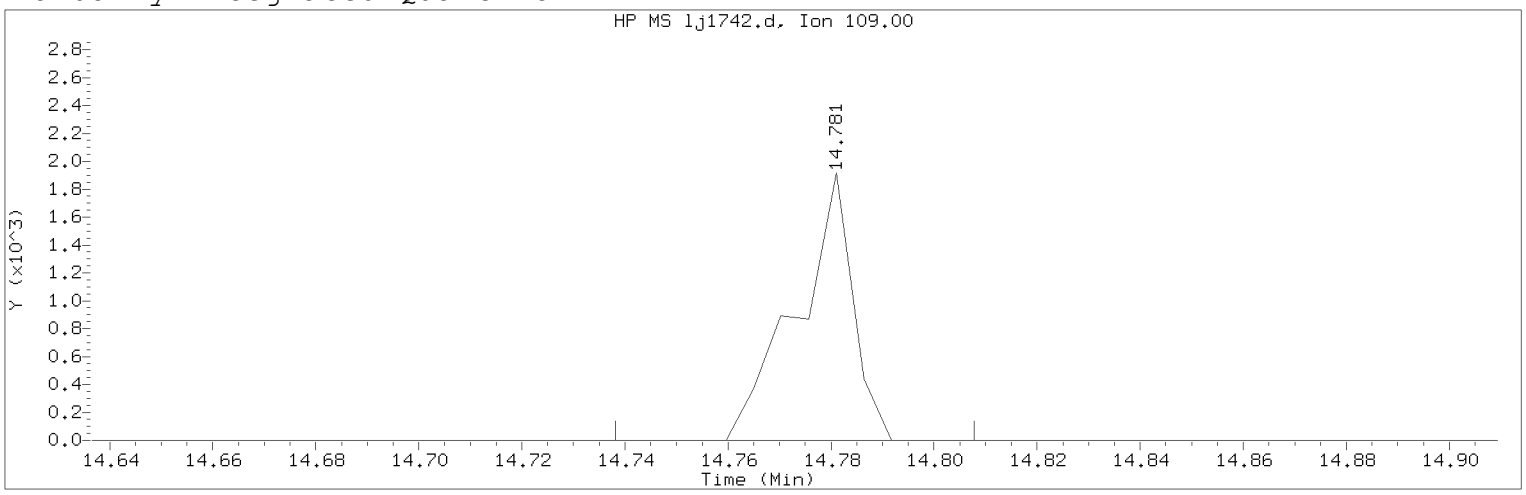
Compound Number : 159
Compound Name : Dinoseb
Expected RT (minutes) : 13.711
Quant Ion : 211.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: 25363

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

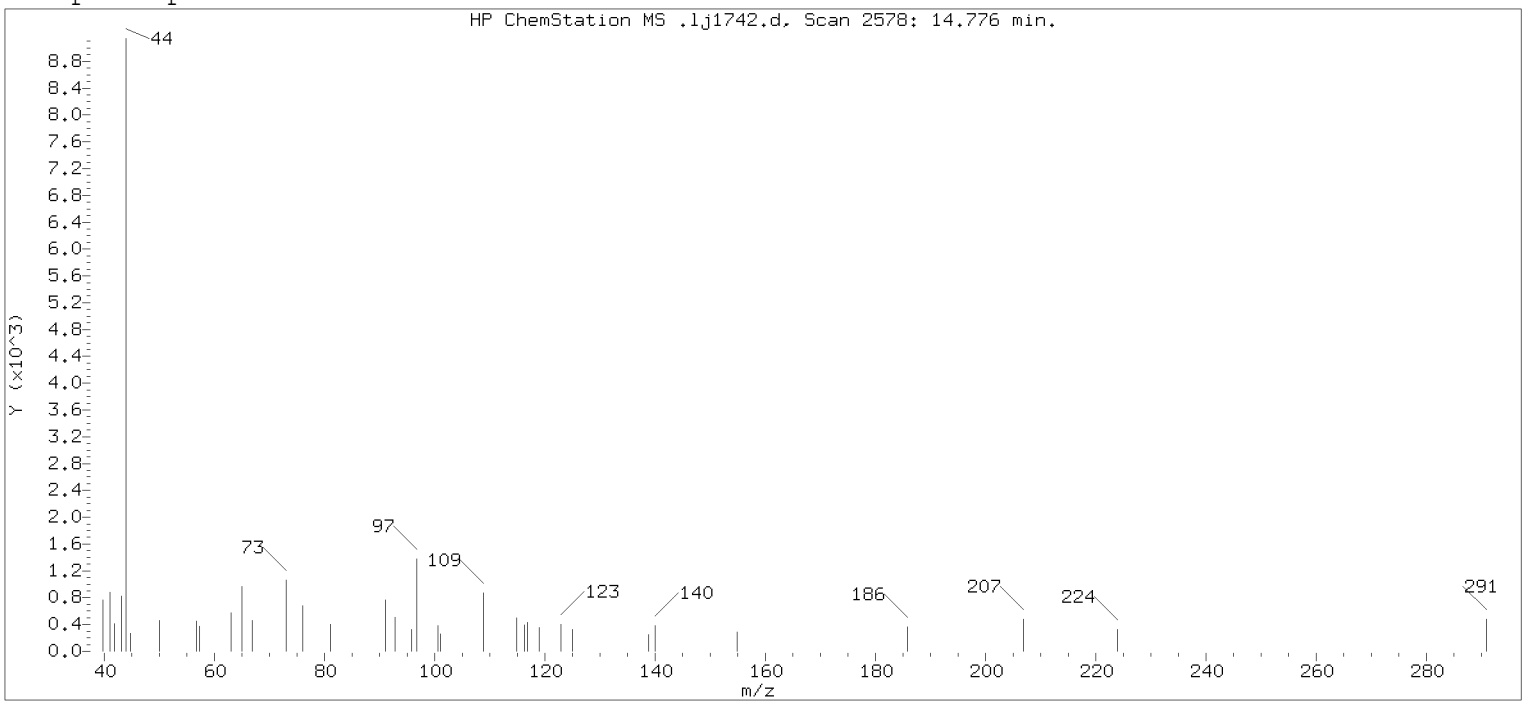
Compound Number : 172
Compound Name : Parathion
Scan Number : 2579
Retention Time (minutes) : 14.781
Quant Ion : 109.00
Area (flag) : 1441M
On-Column Amount (ng/ul) : 0.0601
Integration start scan : 2570 Integration stop scan: 2583
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

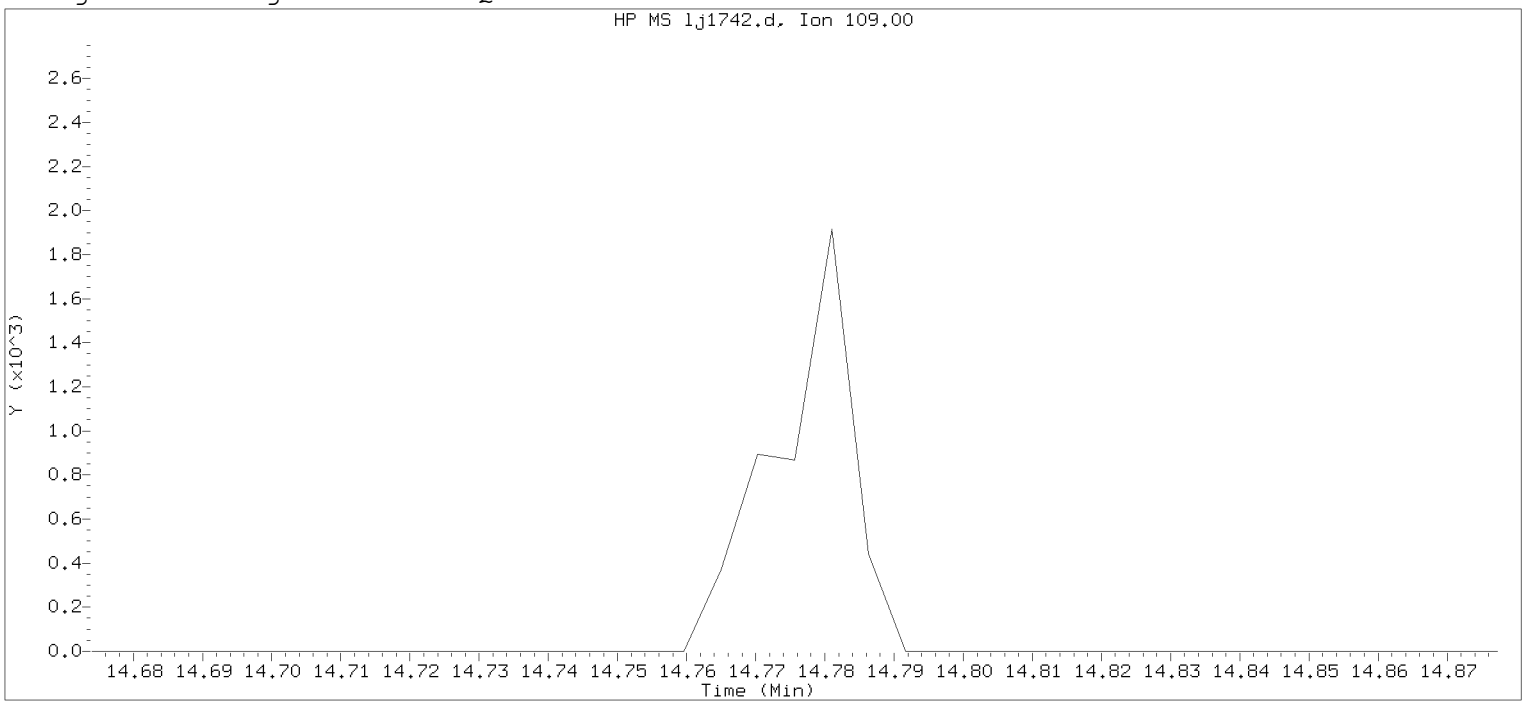
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

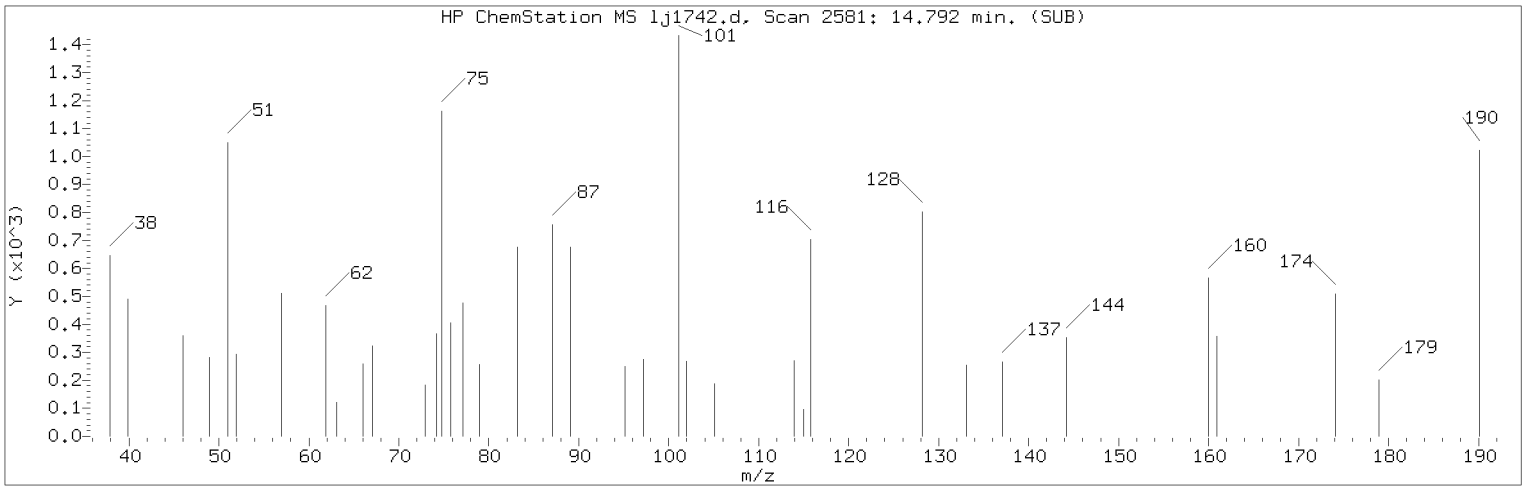
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

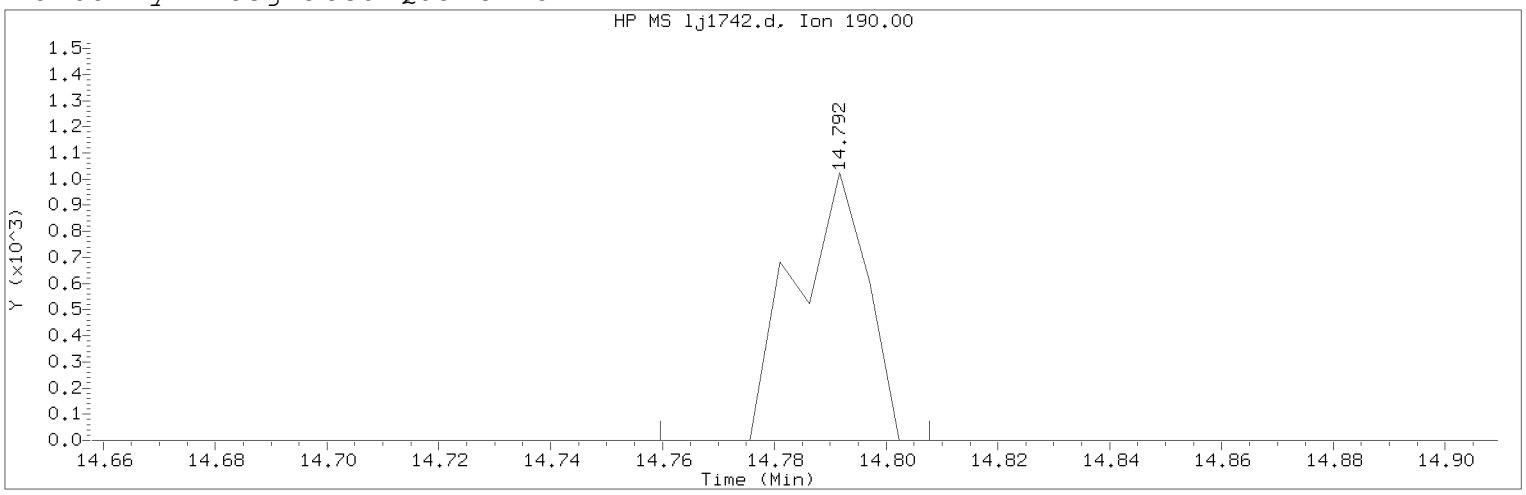
Compound Number : 172
Compound Name : Parathion
Expected RT (minutes) : 14.776
Quant Ion : 109.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ART

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

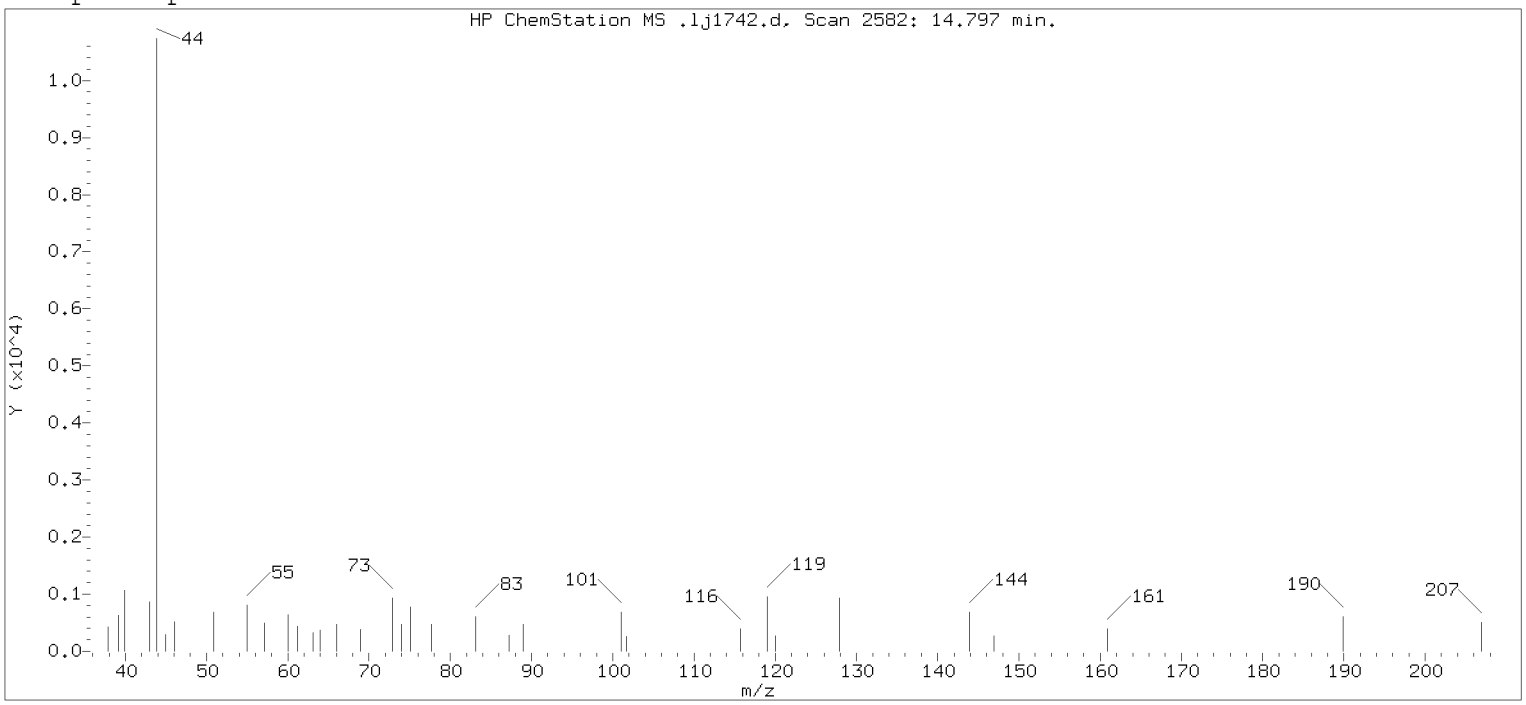
Compound Number : 173
Compound Name : 4-Nitroquinoline-1-oxide
Scan Number : 2581
Retention Time (minutes) : 14.792
Quant Ion : 190.00
Area (flag) : 909M
On-Column Amount (ng/ul) : 0.0853
Integration start scan : 2574 Integration stop scan: 2583
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

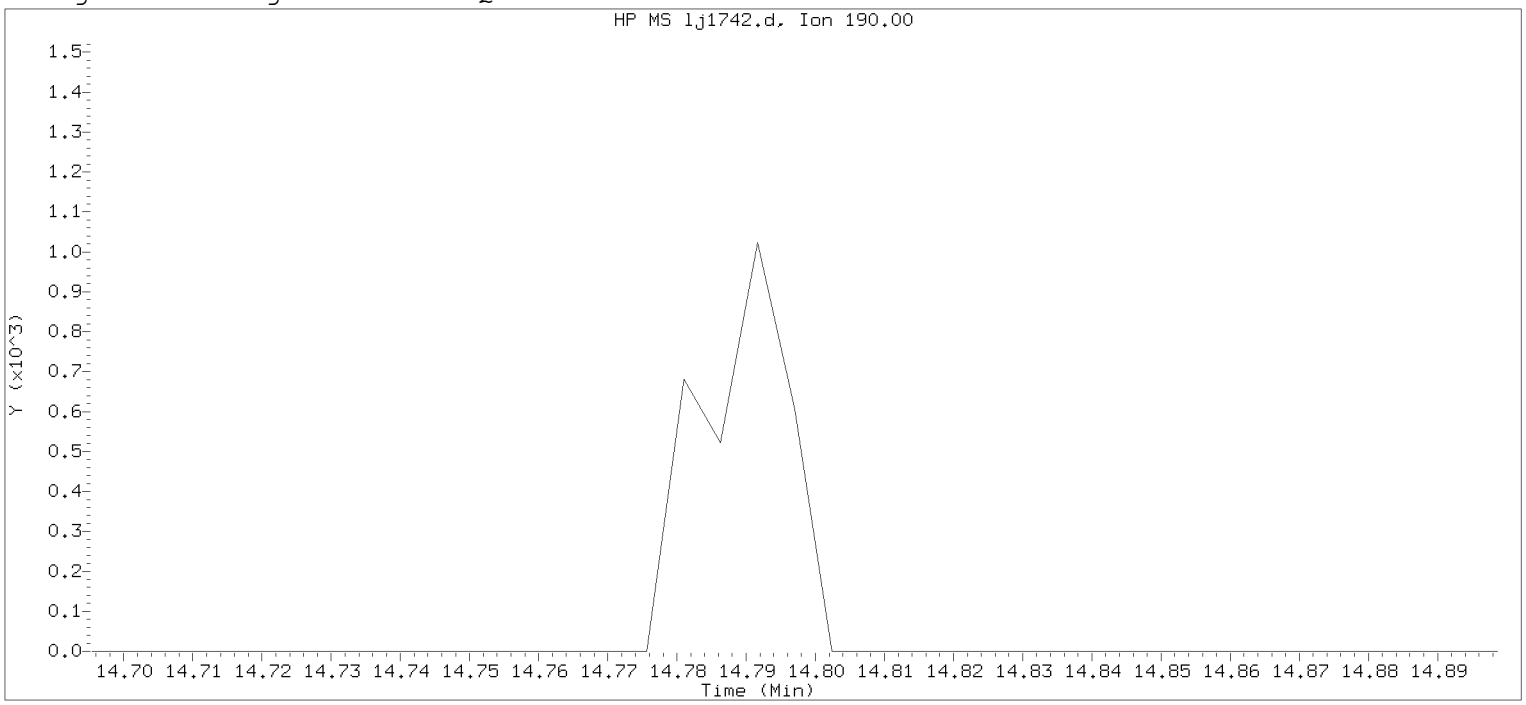
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

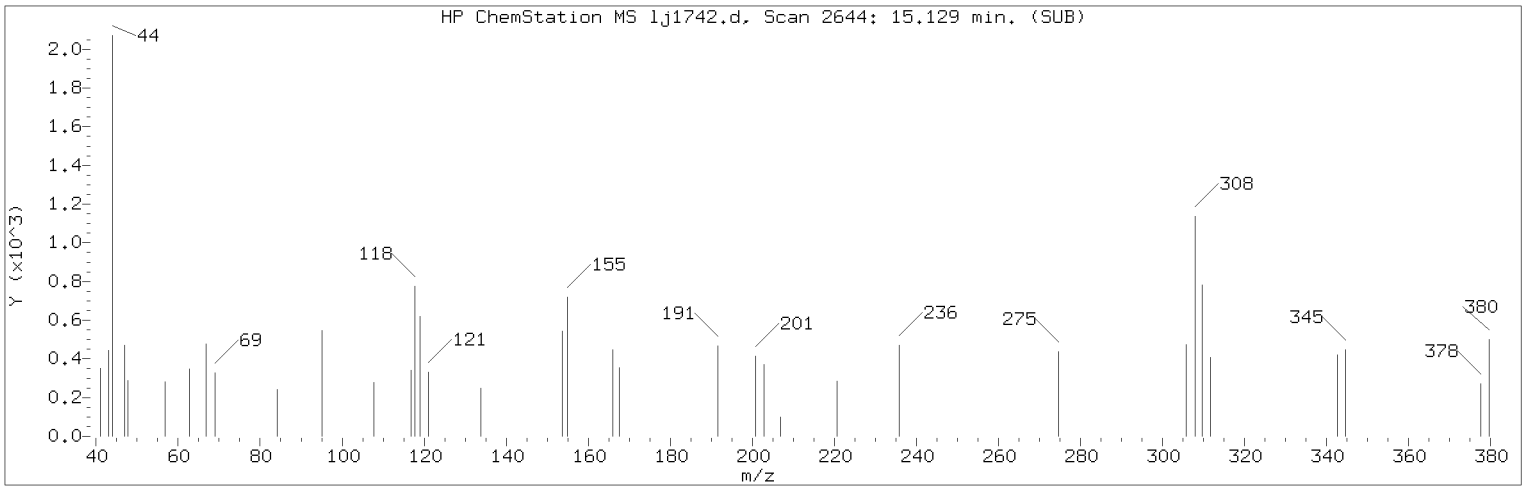
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

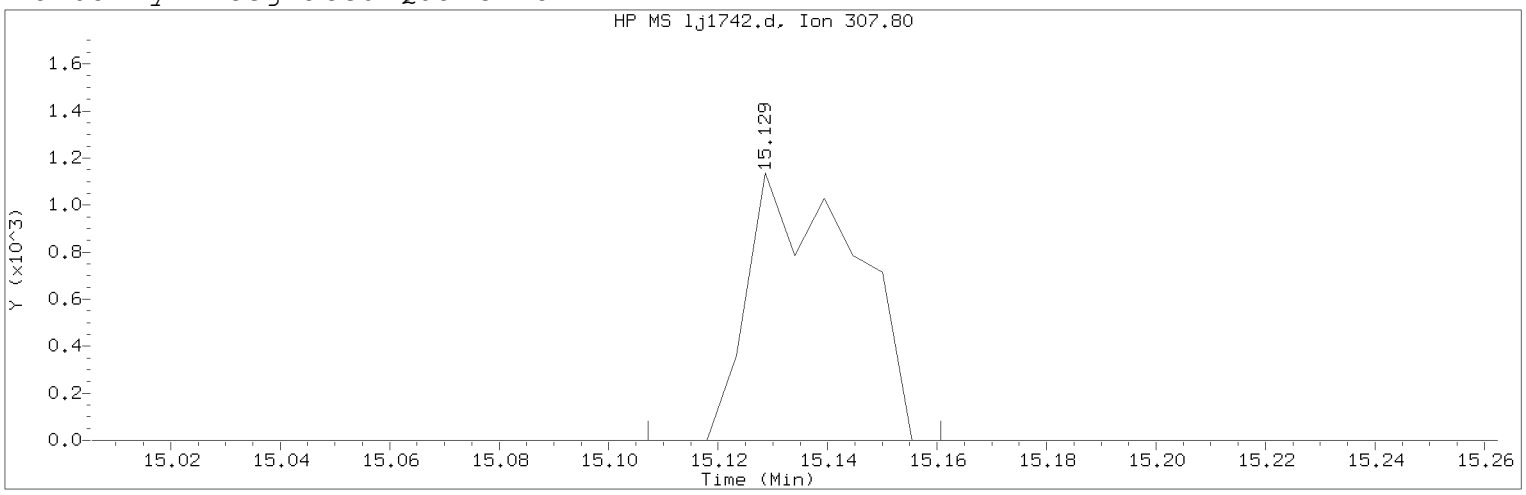
Compound Number : 173
Compound Name : 4-Nitroquinoline-1-oxide
Expected RT (minutes) : 14.797
Quant Ion : 190.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ART

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

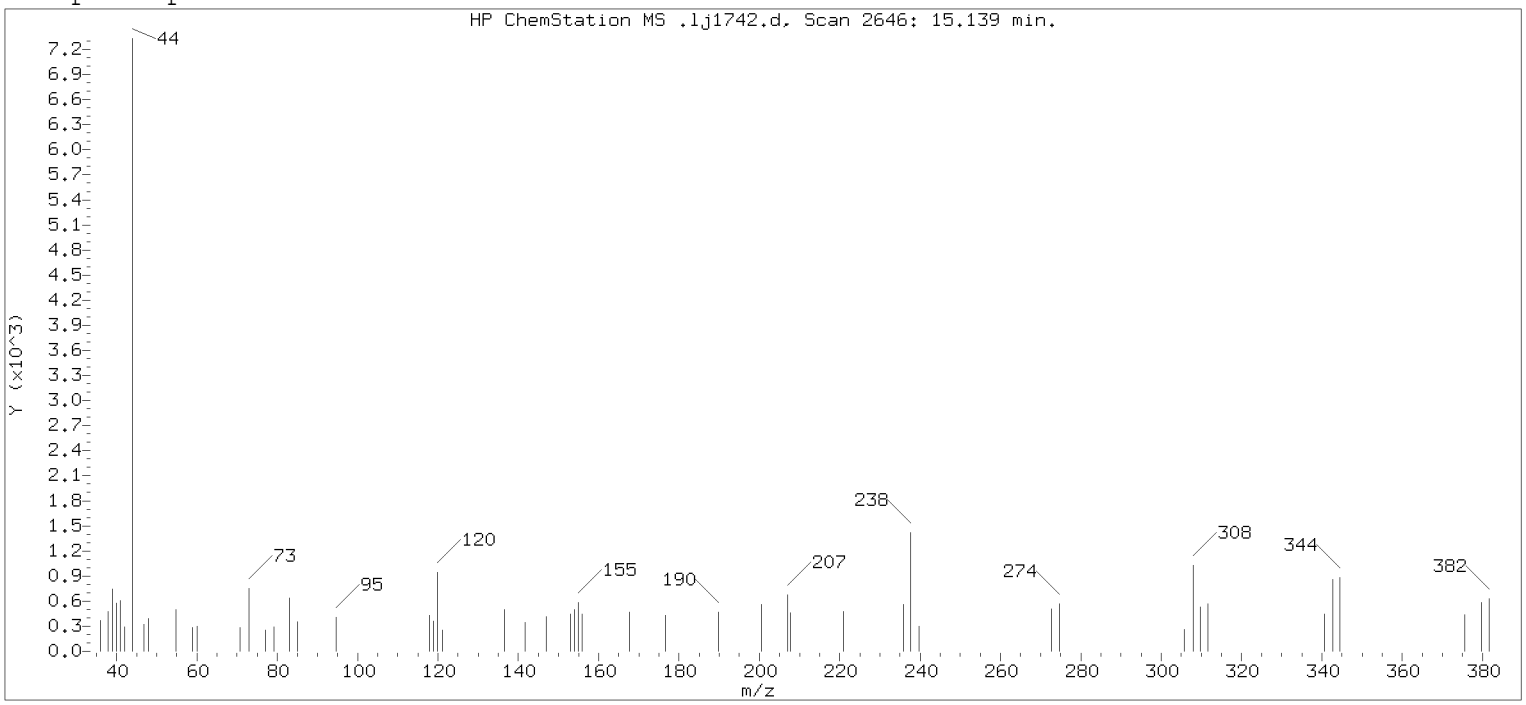
Compound Number : 174
Compound Name : Octachlorostyrene
Scan Number : 2644
Retention Time (minutes) : 15.129
Quant Ion : 308.00
Area (flag) : 1543M
On-Column Amount (ng/ul) : 0.1395
Integration start scan : 2639 Integration stop scan: 2649
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

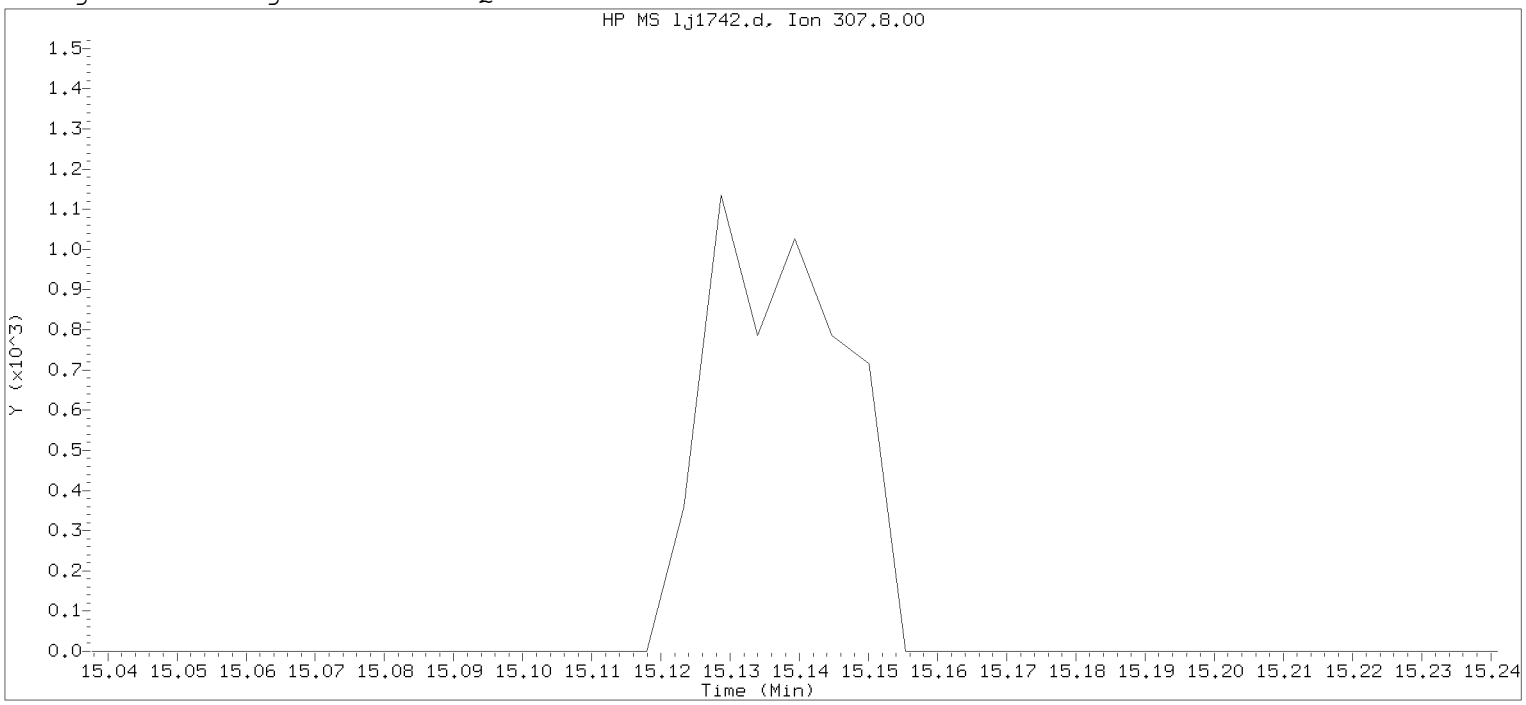
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

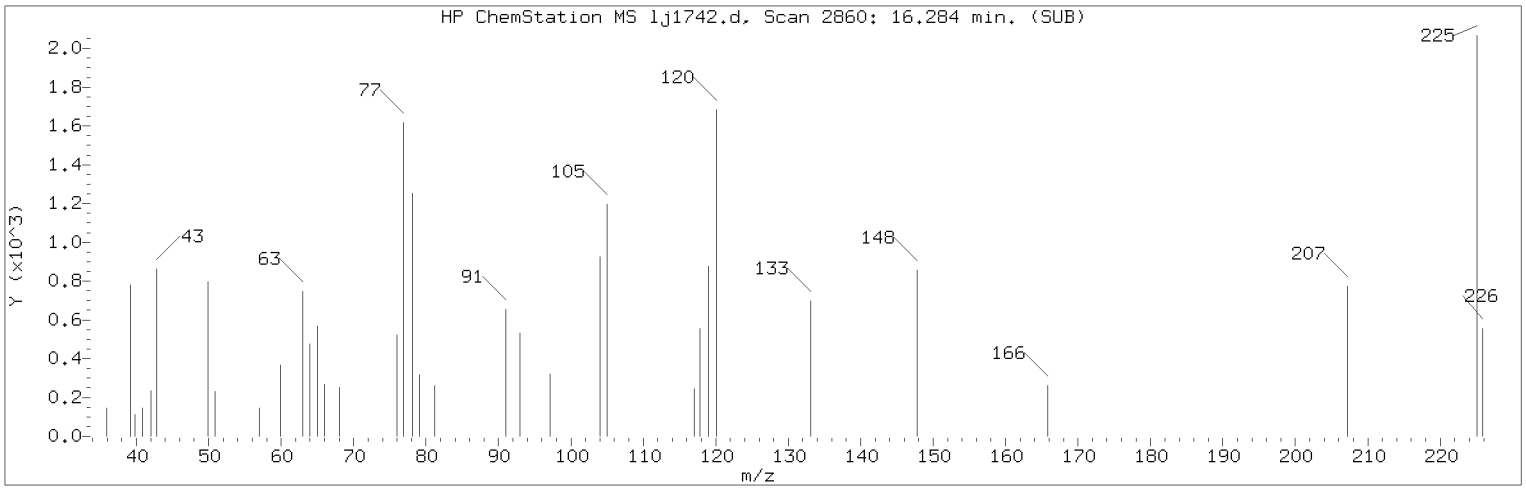
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

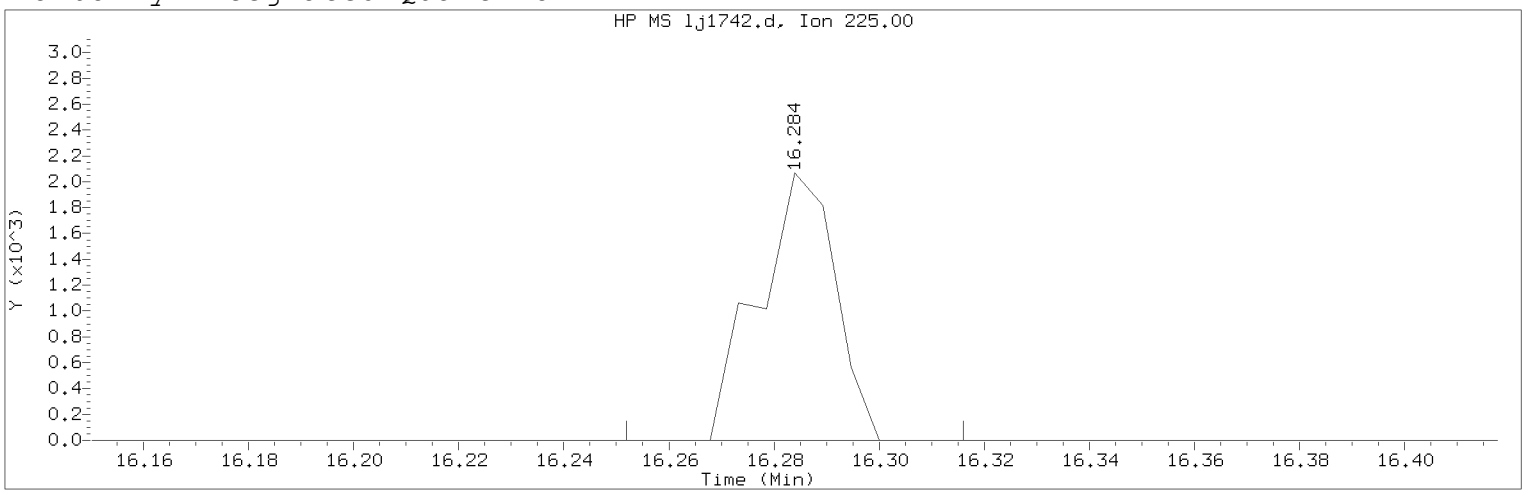
Compound Number : 174
Compound Name : Octachlorostyrene
Expected RT (minutes) : 15.139
Quant Ion : 308.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ARTransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

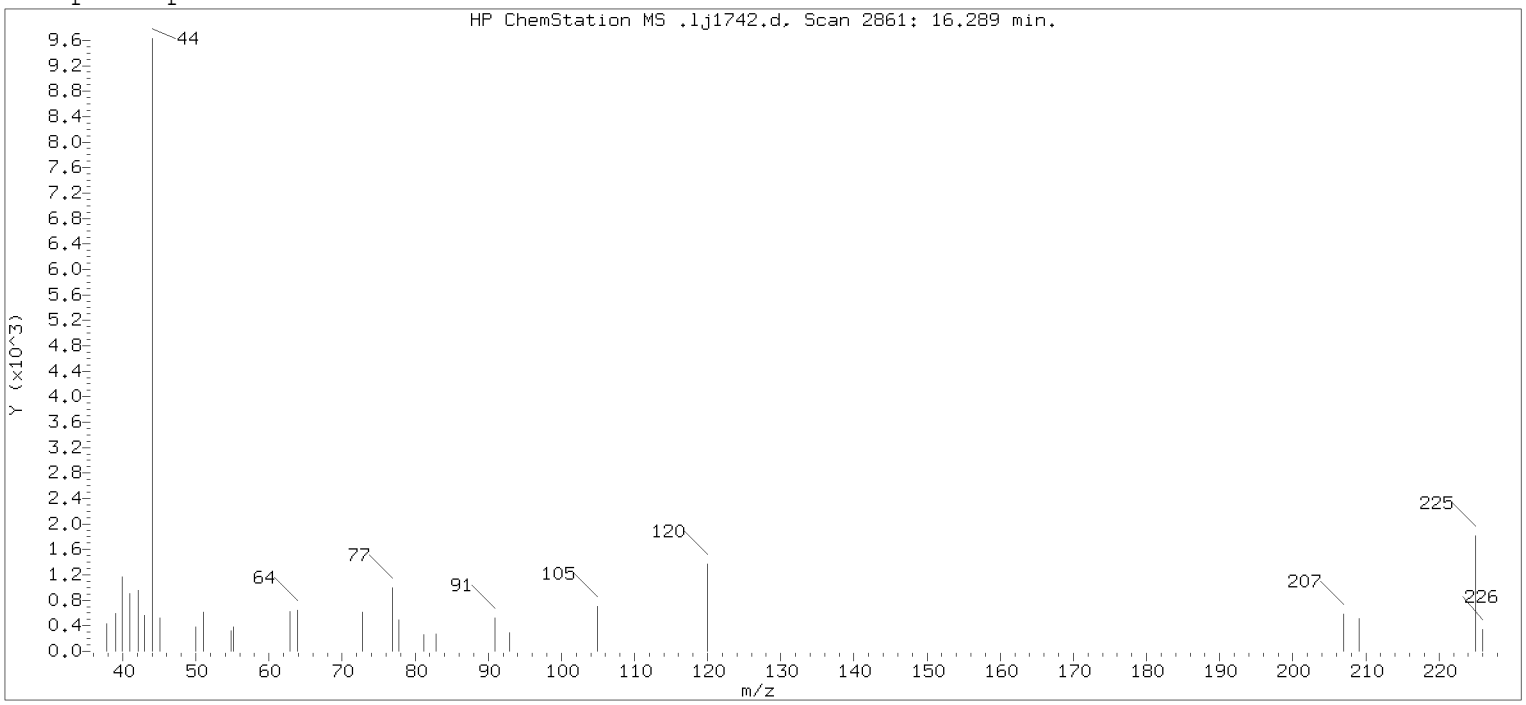
Compound Number : 187
Compound Name : p-Dimethylaminoazobenzene
Scan Number : 2860
Retention Time (minutes) : 16.284
Quant Ion : 225.00
Area (flag) : 2093M
On-Column Amount (ng/ul) : 0.0743
Integration start scan : 2853 Integration stop scan: 2865
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

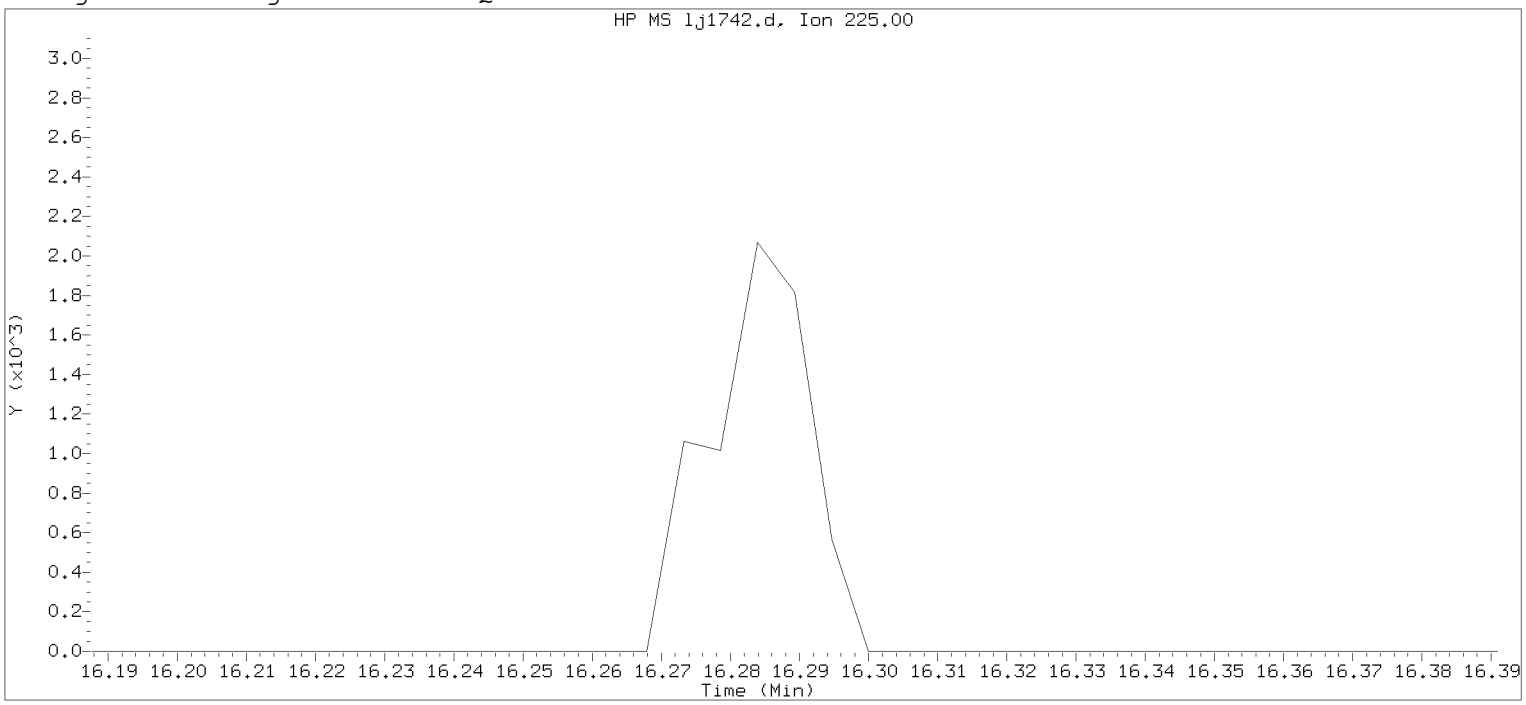
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

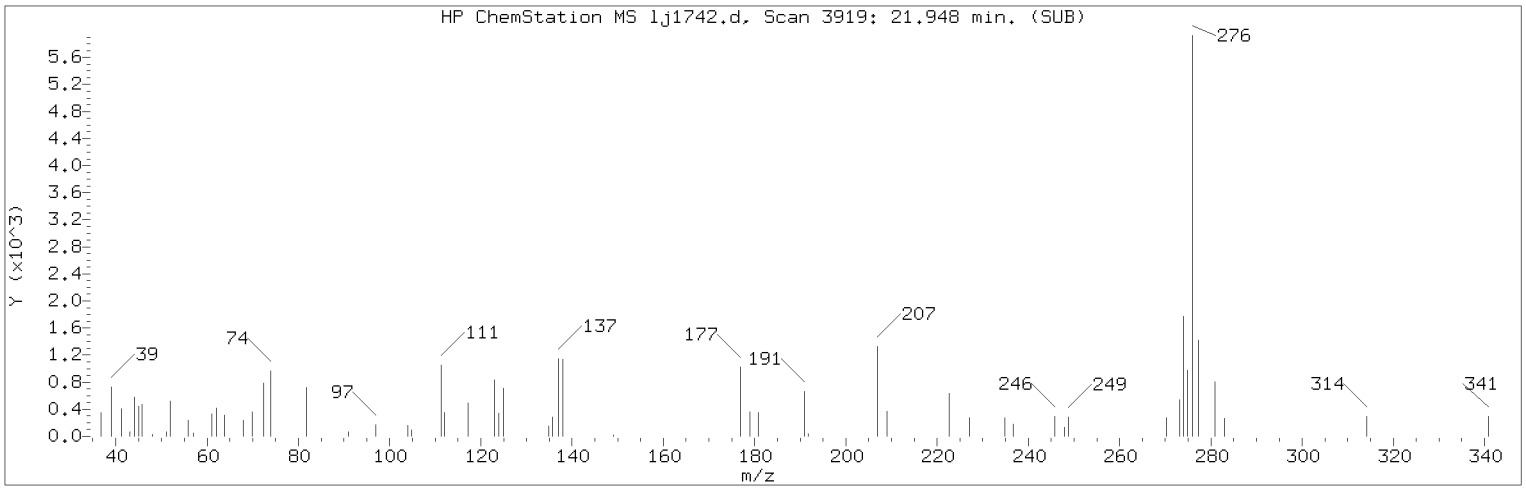
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

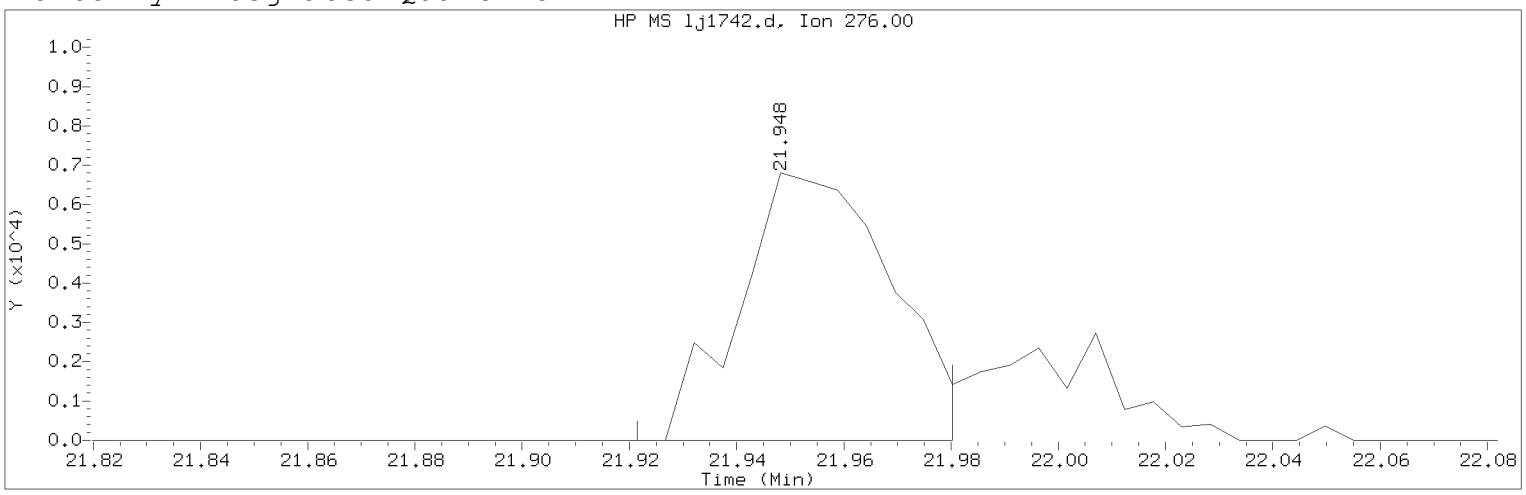
Compound Number : 187
Compound Name : p-Dimethylaminoazobenzene
Expected RT (minutes) : 16.289
Quant Ion : 225.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: ART551

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

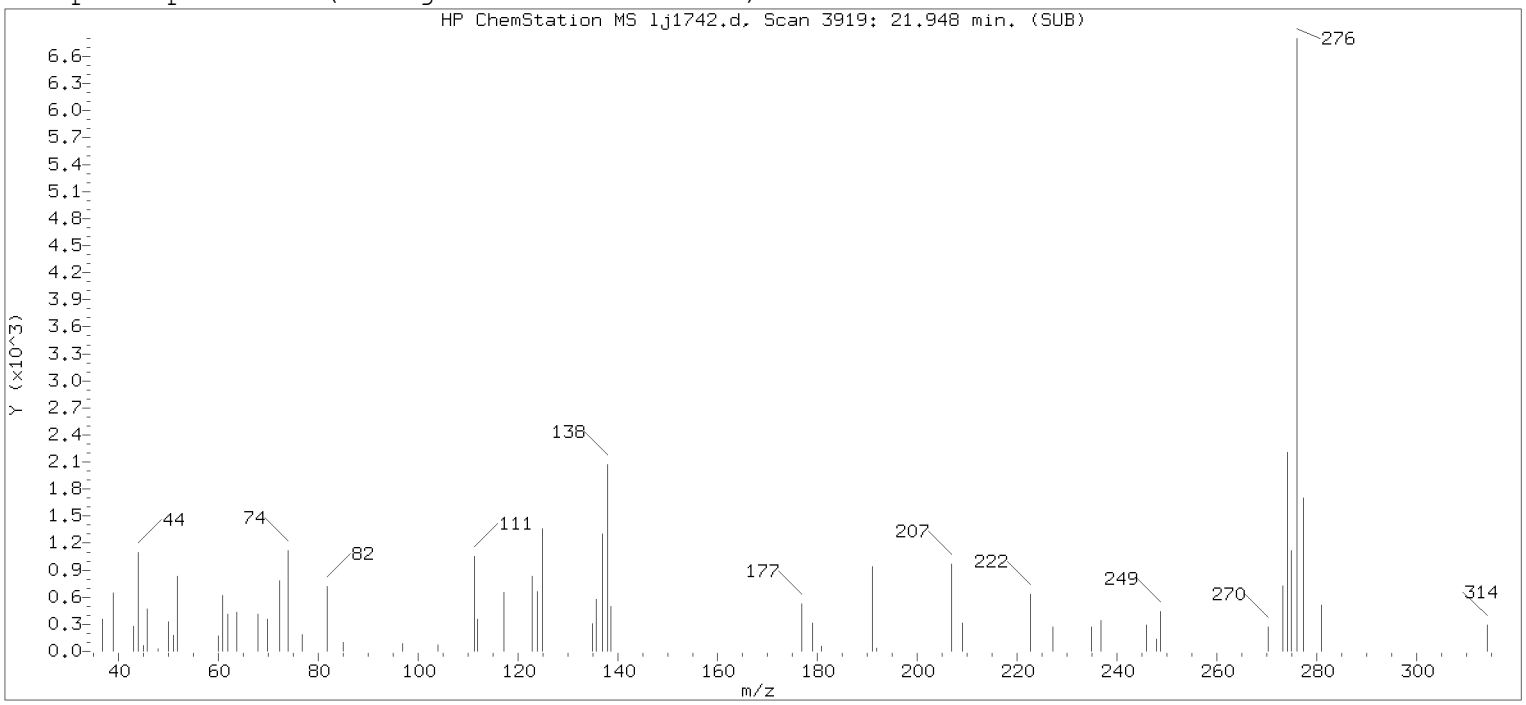
Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3919		
Retention Time (minutes)	: 21.948		
Quant Ion	: 276.00		
Area (flag)	: 13468M		
On-Column Amount (ng/ul)	: 0.1134		
Integration start scan	: 3913	Integration stop scan:	3924
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

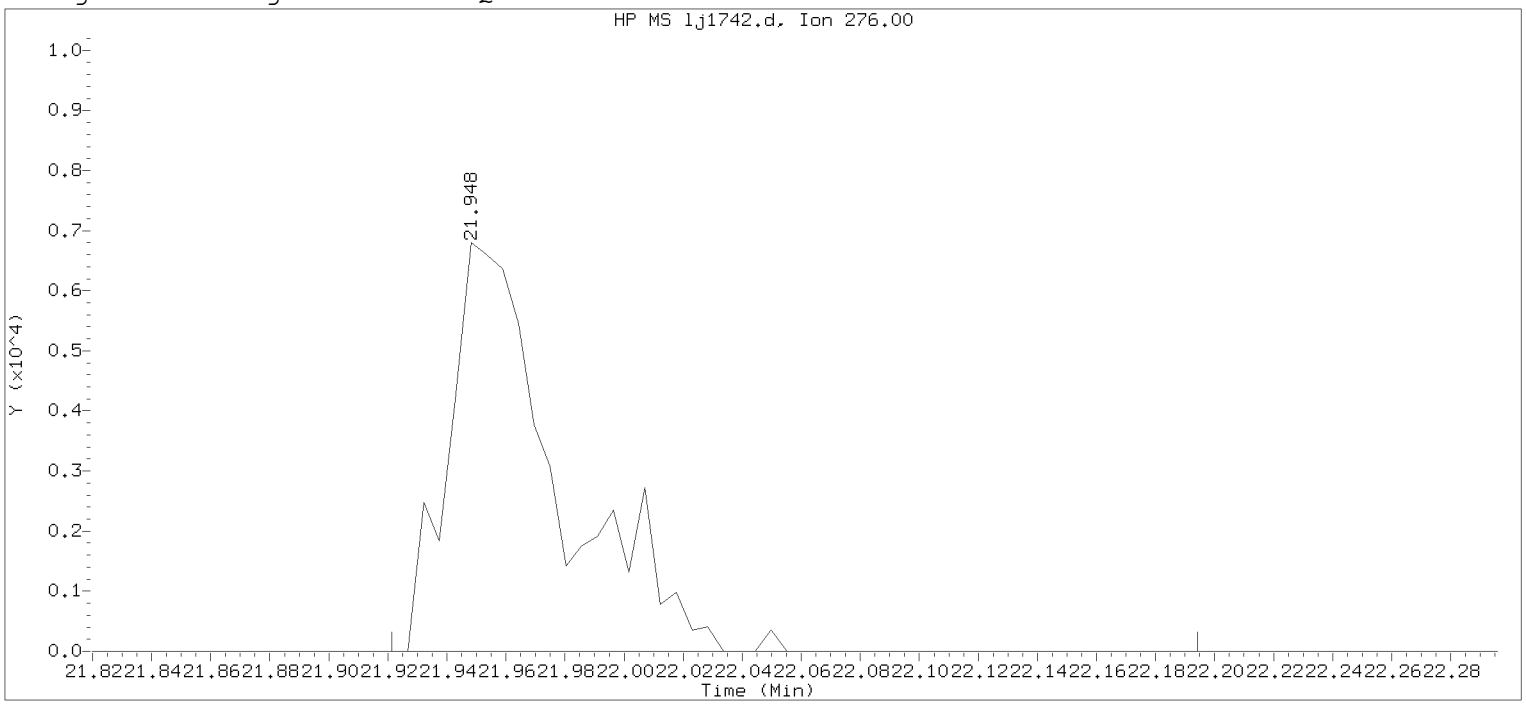
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:00.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



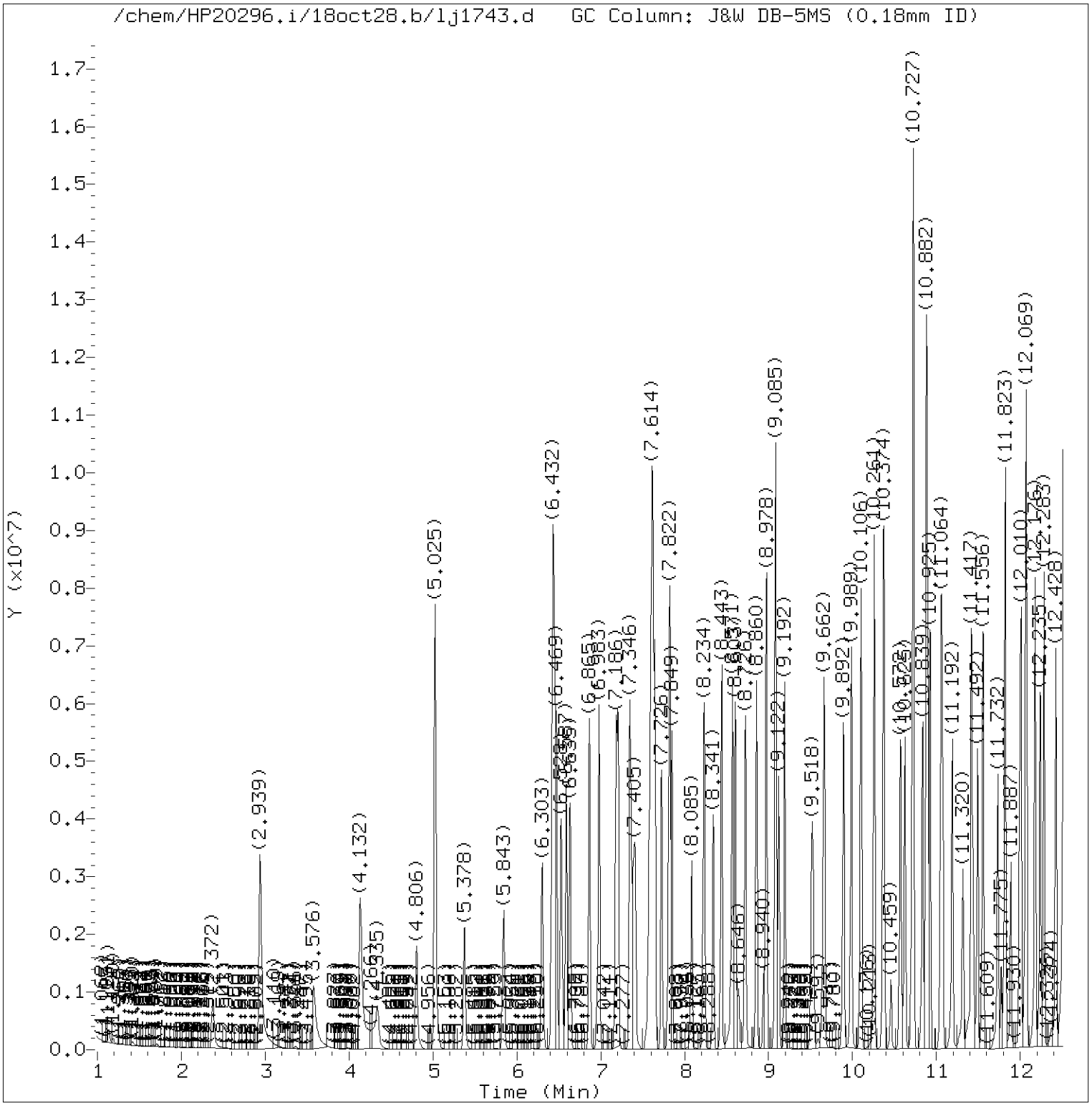
Data File: /chem/HP20296.i/18oct28.b/lj1742.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 00:56 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3919		
Retention Time (minutes)	: 21.948		
Quant Ion	: 276.00		
Area	: 17619		
On-column Amount (ng/ul)	: 0.1462		
Integration start scan	: 3913	Integration stop scan:	3964
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:00.
Target 3.5 esignature user name: atransue



Total Ion Chromatogram (TIC)

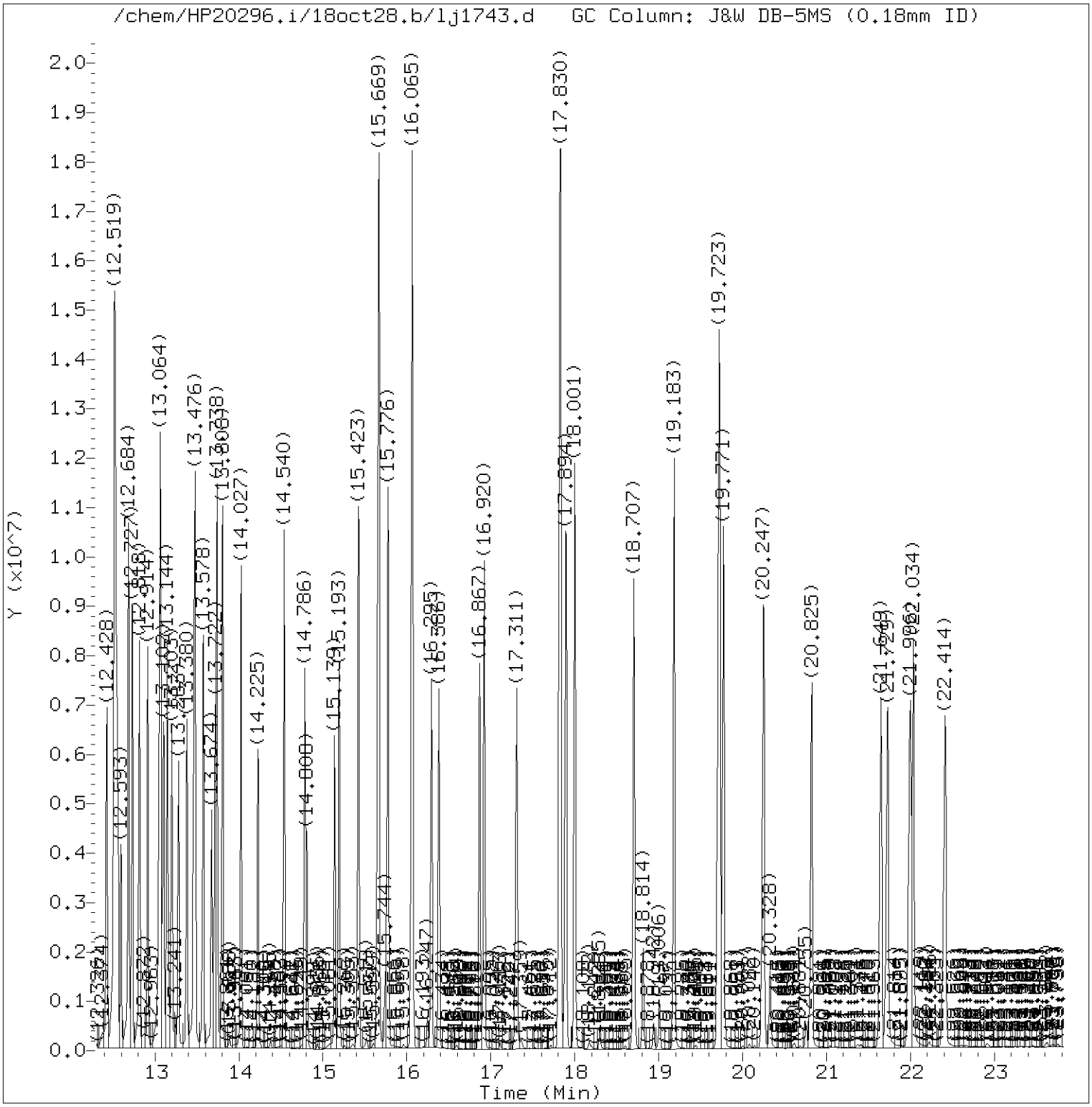
Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.372	88	840180	30.726
5) N-Nitrosodimethylamine	(1)	2.934	74	1351060	31.197
6) Pyridine	(1)	2.945	79	2252407	30.524
8) 2-Picoline	(1)	4.132	93	2311965	30.829
9) N-Nitrosomethylethylamine	(1)	4.340	88	925066	29.987
10) Methyl methanesulfonate	(1)	4.806	80	1183717	30.180
12)$2-Fluorophenol	(1)	5.025	112	3523450	60.066
14) N-Nitrosodiethylamine	(1)	5.378	102	865546	30.323
43) Total Cresols	(1)			3463259	58.771
16) Ethyl methanesulfonate	(1)	5.843	109	905175	29.764
17) Benzaldehyde	(1)	6.303	77	1254480	24.961
18)$Phenol-d6	(1)	6.432	99	4767709	59.972
19) Phenol	(1)	6.448	94	2731528	29.357
20) Aniline	(1)	6.469	93	3246949	29.612
21) a-methylstyrene	(1)	6.544	118	173547	30.218
23) bis(2-Chloroethyl)ether	(1)	6.587	93	2040096	29.321
24) 2-Chlorophenol	(1)	6.635	128	1632992	29.635
25) 1,3-Dichlorobenzene	(1)	6.865	146	1787878	29.416
26)*1,4-Dichlorobenzene-d4	(1)	6.956	152	186449	5.000
27) 1,4-Dichlorobenzene	(1)	6.983	146	1767829	29.224
28) Benzyl alcohol	(1)	7.186	108	1167080	30.813
29) 1,2-Dichlorobenzene	(1)	7.207	146	1702983	29.498
31) Indene	(1)	7.346	115	1945957	29.902
32) 2-Methylphenol	(1)	7.362	108	1704096	29.370
100) Isosafrole	(3)			1368722	30.294
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.405	45	2642647	29.614
35) bis(2-Chloroisopropyl)ether	(1)	7.405	45	2642647	29.614
36) N-Nitrosopyrrolidine	(1)	7.571	100	920744	30.075
37) Acetophenone	(1)	7.592	105	2603154	29.345
38) 4-Methylphenol	(1)	7.614	108	1759163	29.401
39) N-Nitroso-di-n-propylamine	(1)	7.625	70	1581179	29.273
40) N-Nitrosomorpholine	(1)	7.635	56	1126566	29.239
41) o-Toluidine	(1)	7.646	106	2960366	29.188
44) Hexachloroethane	(1)	7.726	117	806184	29.654
45)$Nitrobenzene-d5	(2)	7.822	82	4523184	60.511
46) Nitrobenzene	(2)	7.849	77	2385326	30.002
125) 2,4_2,6-Dinitrotoluenes	(3)			1719481	60.580
50) N-Nitrosopiperidine	(2)	8.085	114	858122	30.427
52) Isophorone	(2)	8.234	82	4119988	30.526
53) 2-Nitrophenol	(2)	8.341	139	811958	30.754

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.443	107	1903214	29.608
59) O,O,O-Triethylphosphorothioate	(2)	8.571	198	818256	30.210
57) bis(2-Chloroethoxy)methane	(2)	8.603	93	2431883	29.572
58) Benzoic acid	(2)	8.646	105	1336058M	31.503
62) 2,4-Dichlorophenol	(2)	8.726	162	1392542	30.267
151) Diallate trans/cis	(4)			1792606	29.669
65) 1,2,4-Trichlorobenzene	(2)	8.860	180	1522462	30.125
68)*Naphthalene-d8	(2)	8.940	136	689757	5.000
69) Naphthalene	(2)	8.978	128	4743330	30.519
70) 4-Chloroaniline	(2)	9.085	127	1930481	30.199
71) 2,6-Dichlorophenol	(2)	9.090	162	1325487	30.013
72) Hexachloropropene	(2)	9.122	213	1020696	30.398
74) Hexachlorobutadiene	(2)	9.192	225	926450	30.813
78) Quinoline	(2)	9.518	129	2820787	30.215
80) N-Nitrosodi-n-butylamine	(2)	9.662	84	1802529	33.240
79) Caprolactam	(2)	9.673	113	417472M	29.764
83) 4-Chloro-3-methylphenol	(2)	9.892	107	1657517	30.205
85) Safrole	(2)	9.989	162	1212330	30.590
86) 2-Methylnaphthalene	(2)	10.106	142	3070535	30.931
87) 1-Methylnaphthalene	(2)	10.261	142	2983802	31.253
88) Hexachlorocyclopentadiene	(3)	10.368	237	938573	30.158
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.379	216	1591545	29.271
91) cis-Isosafrole	(3)	10.459	162	225499	5.040
93) 2,4,6-Trichlorophenol	(3)	10.577	196	1058764	30.439
95) 2,4,5-Trichlorophenol	(3)	10.625	196	1036053	29.210
96)$2-Fluorobiphenyl	(3)	10.727	172	7020590	59.654
97) trans-Isosafrole	(3)	10.839	162	1143223	25.254
98) 1,1'-Biphenyl	(3)	10.882	154	3551723	29.455
99) 2-Chloronaphthalene	(3)	10.898	162	3426188	31.148
101) 1-Chloronaphthalene	(3)	10.930	162	2386133	27.530
103) Diphenyl ether	(3)	11.058	170	2019026	29.592
104) 2-Nitroaniline	(3)	11.080	138	918009	31.774
108) 1,4-Naphthoquinone	(3)	11.192	158	1204195	29.653
109) 1,4-Dinitrobenzene	(3)	11.320	168	475615	31.702
110) Dimethylphthalate	(3)	11.417	163	3092816	28.529
111) 1,3-Dinitrobenzene	(3)	11.438	168	519183	29.905
113) 2,6-Dinitrotoluene	(3)	11.492	165	734507	30.668
114) Acenaphthylene	(3)	11.561	152	4216787	32.615
117) 3-Nitroaniline	(3)	11.732	138	835799	31.141
118)*Acenaphthene-d10	(3)	11.770	164	346220	5.000

M = Compound was manually integrated.
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Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.823	153	3047574	29.228
120) 2,4-Dinitrophenol	(3)	11.887	184	470419	33.212
121) 4-Nitrophenol	(3)	11.994	109	678395	32.197
122) Pentachlorobenzene	(3)	12.010	250	1270270	29.721
124) Dibenzofuran	(3)	12.069	168	4112023	29.606
123) 2,4-Dinitrotoluene	(3)	12.080	165	984974	29.913
126) 1-Naphthylamine	(3)	12.176	143	3066800	30.470
127) 2,3,4,6-Tetrachlorophenol	(3)	12.240	232	867577	30.679
128) 2-Naphthylamine	(3)	12.283	143	3041402	30.257
129) Diethylphthalate	(3)	12.428	149	3229407	29.761
131) Fluorene	(3)	12.513	166	3275579	30.007
130) Thionazin	(3)	12.524	107	639932	29.780
132) 4-Chlorophenyl-phenylether	(3)	12.535	204	1665885	29.546
133) 5-Nitro-o-toluidine	(3)	12.545	152	900294	29.860
134) 4-Nitroaniline	(3)	12.561	138	774795	29.063
135) 4,6-Dinitro-2-methylphenol	(4)	12.599	198	572192	31.843
136) N-Nitrosodiphenylamine	(4)	12.684	169	2656548	30.358
137) NDPA as diphenylamine	(4)	12.684	169	2656548	30.358
139) 1,2-Diphenylhydrazine	(4)	12.727	77	4618778	29.730
140)$2,4,6-Tribromophenol	(3)	12.818	330	922218	62.197
142) Tetraethyldithiopyrophosphate	(4)	12.914	97	692089	29.613
144) 1,3,5-Trinitrobenzene	(4)	13.043	213	367282	32.879
145) Diallate (peak 1)	(4)	13.059	86	1530356	24.658
146) Phorate	(4)	13.069	75	2620984	34.480
147) Phenacetin	(4)	13.102	108	2048428	30.819
148) 4-Bromophenyl-phenylether	(4)	13.144	248	952420	31.298
149) Diallate (peak 2)	(4)	13.166	86	262250M	5.011
150) Hexachlorobenzene	(4)	13.203	284	966195	31.313
152) Dimethoate	(4)	13.278	87	1595953	30.682
153) Atrazine	(4)	13.380	200	793371	29.409
154) Pentachlorophenol	(4)	13.460	266	673461	32.184
155) 4-Aminobiphenyl	(4)	13.476	169	2415465	30.726
156) Pentachloronitrobenzene	(4)	13.481	237	446957	30.113
157) Pronamide	(4)	13.578	173	1566506	30.942
158)*Phenanthrene-d10	(4)	13.701	188	677310	5.000
159) Dinoseb	(4)	13.717	211	911005	32.836
160) Phenanthrene	(4)	13.738	178	5110416	30.431
162) Anthracene	(4)	13.808	178	5045656	31.306
168) Carbazole	(4)	14.027	167	4522513	30.539
169) Methyl parathion	(4)	14.225	109	1253232	31.155

M = Compound was manually integrated.
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Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.540	149	5974889	31.033
172) Parathion	(4)	14.786	109	863673	32.358
173) 4-Nitroquinoline-1-oxide	(4)	14.808	190	494874	36.099
227) Total PAHs	(6)			88614202	565.280
174) Octachlorostyrene	(4)	15.139	308	368219	31.179
176) Isodrin	(4)	15.193	193	607893	30.113
178) Fluoranthene	(4)	15.423	202	5847160	32.457
179) Benzidine	(5)	15.669	184	10947522	89.130
180)*Pyrene-d10	(5)	15.744	212	741906	5.000
182) Pyrene	(5)	15.776	202	5997044	30.824
184)$Terphenyl-d14	(5)	16.065	244	7558395	61.050
187) p-Dimethylaminoazobenzene	(5)	16.295	225	1027372	31.303
190) Chlorobenzilate	(5)	16.386	139	1849083	30.605
192) 3,3'-Dimethylbenzidine	(5)	16.867	212	3645048	30.001
193) Butylbenzylphthalate	(5)	16.920	149	2779834	30.086
196) 2-Acetylaminofluorene	(5)	17.311	181	2515070	31.752
198) 3,3'-Dichlorobenzidine	(5)	17.814	252	2204065	31.488
200) Benzo(a)anthracene	(5)	17.830	228	6065140	33.770
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.835	231	1222229	30.724
201) Chrysene	(5)	17.899	228	5628094	31.389
204) bis(2-Ethylhexyl)phthalate	(5)	18.001	149	4142845	31.026
208) 6-Methylchrysene	(5)	18.707	242	3937820	31.383
210) Di-n-octylphthalate	(6)	19.183	149	7712829	30.815
211) Benzo(b)fluoranthene	(6)	19.723	252	6112027	32.343
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.723	256	2712912	31.596
213) Benzo(k)fluoranthene	(6)	19.771	252	5832735	30.157
216) Benzo(a)pyrene	(6)	20.247	252	5708231	33.138
218)*Perylene-d12	(6)	20.328	264	732007	5.000
220) 3-Methylcholanthrene	(6)	20.825	268	2588739	30.331
222) Dibenz(a,h)acridine	(6)	21.649	279	4434851	30.424
223) Dibenz(a,j)acridine	(6)	21.729	279	4513018	29.870
224) Indeno(1,2,3-cd)pyrene	(6)	21.996	276	5340507M	32.850
225) Dibenz(a,h)anthracene	(6)	22.034	278	5316439	31.755
226) Benzo(g,h,i)perylene	(6)	22.414	276	5273146	30.306

M = Compound was manually integrated.
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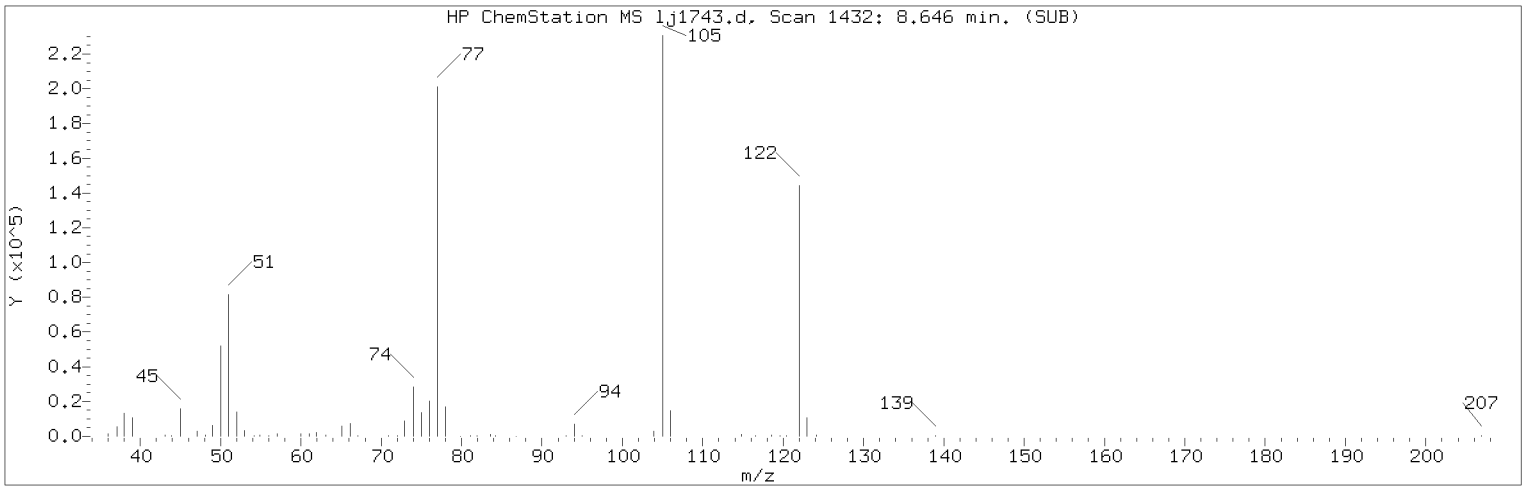
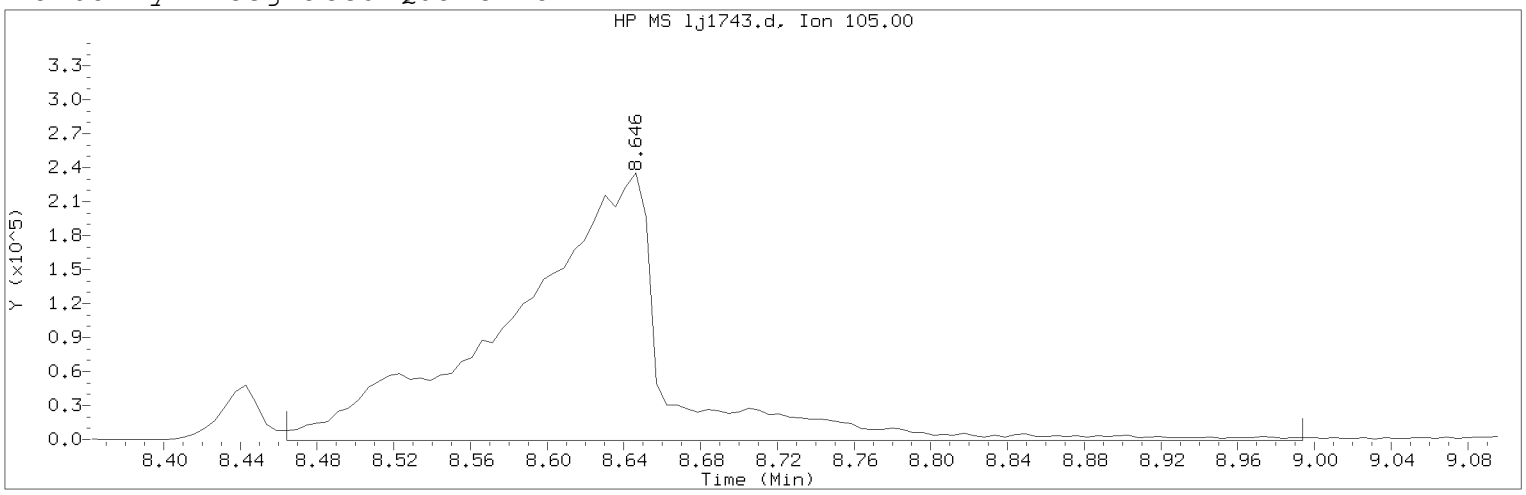
Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

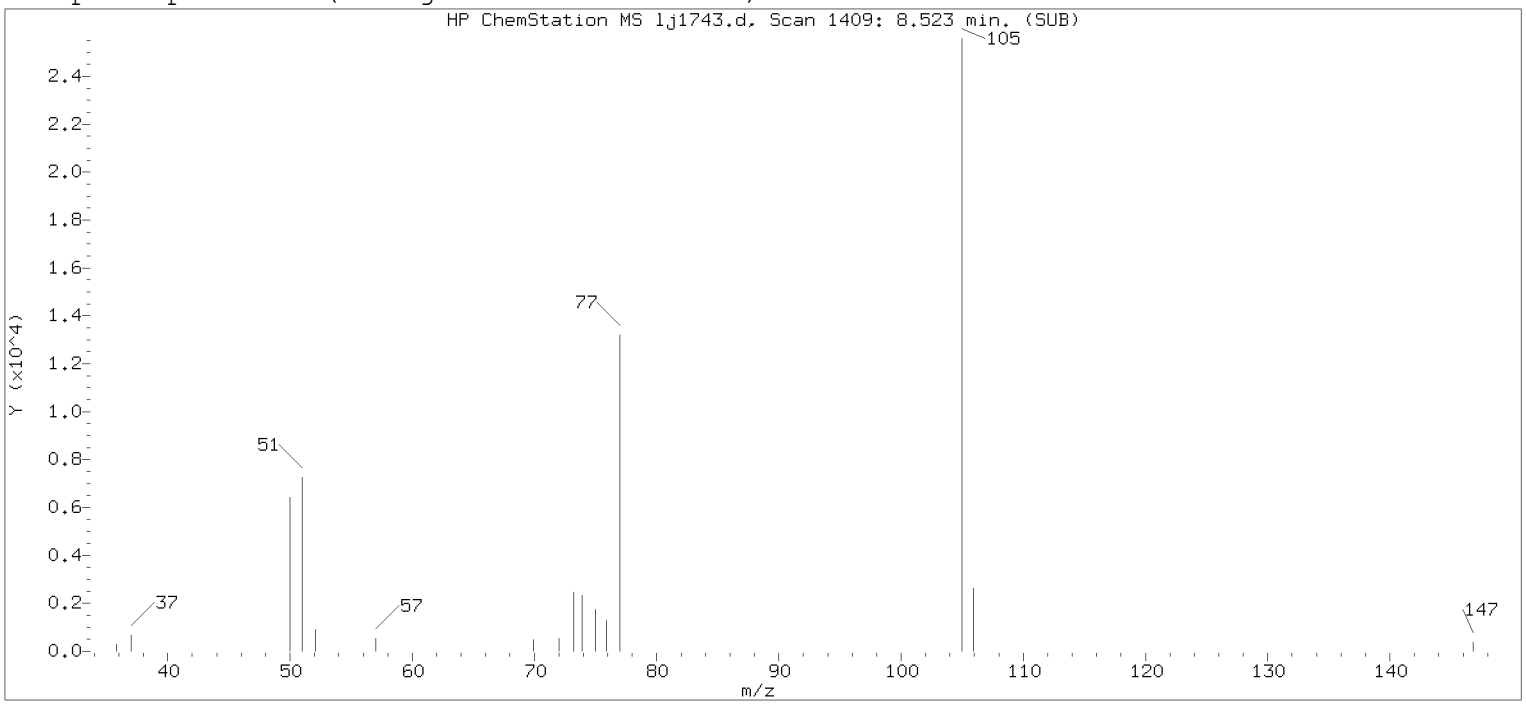
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1432
Retention Time (minutes) : 8.646
Quant Ion : 105.00
Area (flag) : 1336058M
On-Column Amount (ng/ul) : 31.5032
Integration start scan : 1397 Integration stop scan: 1496
Y at integration start : -627 Y at integration end: -627

Reason for manual integration: improper integration

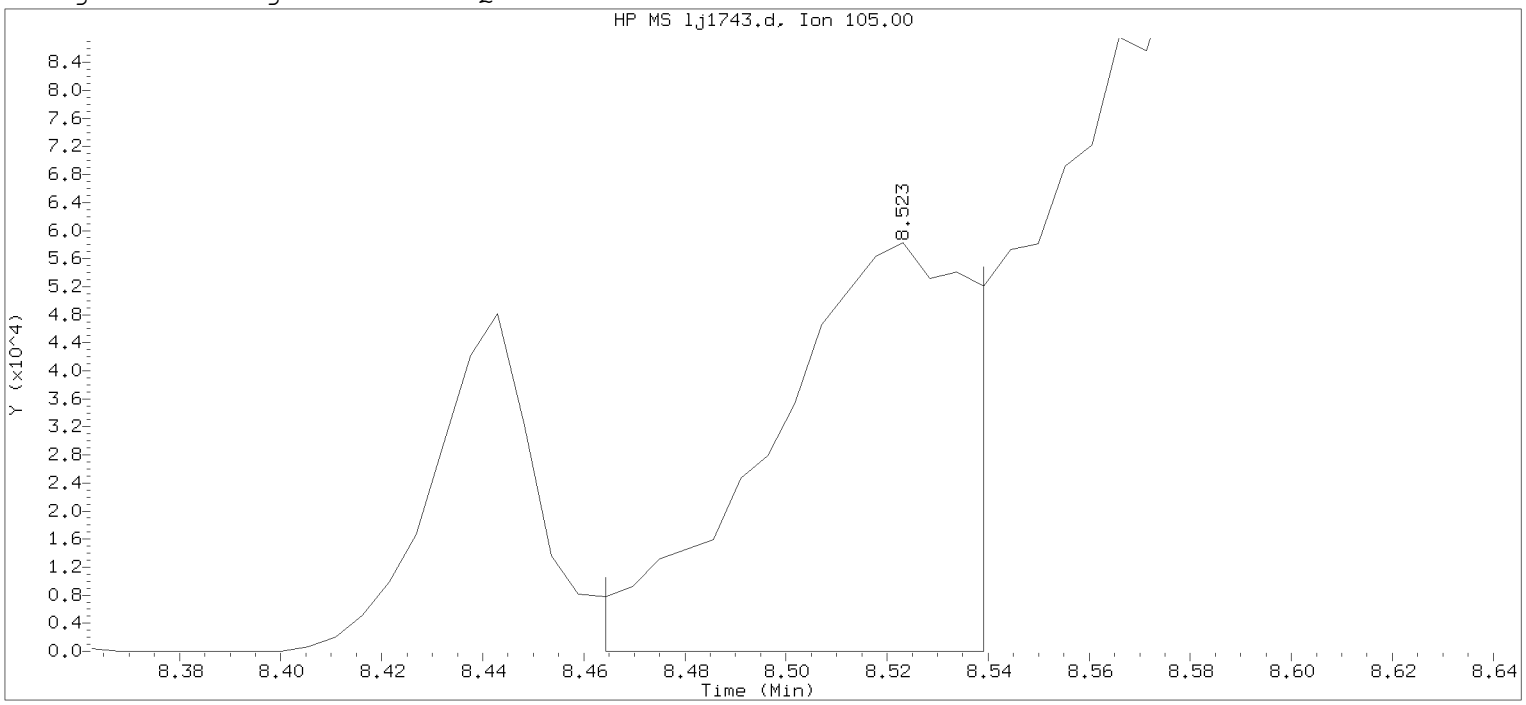
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

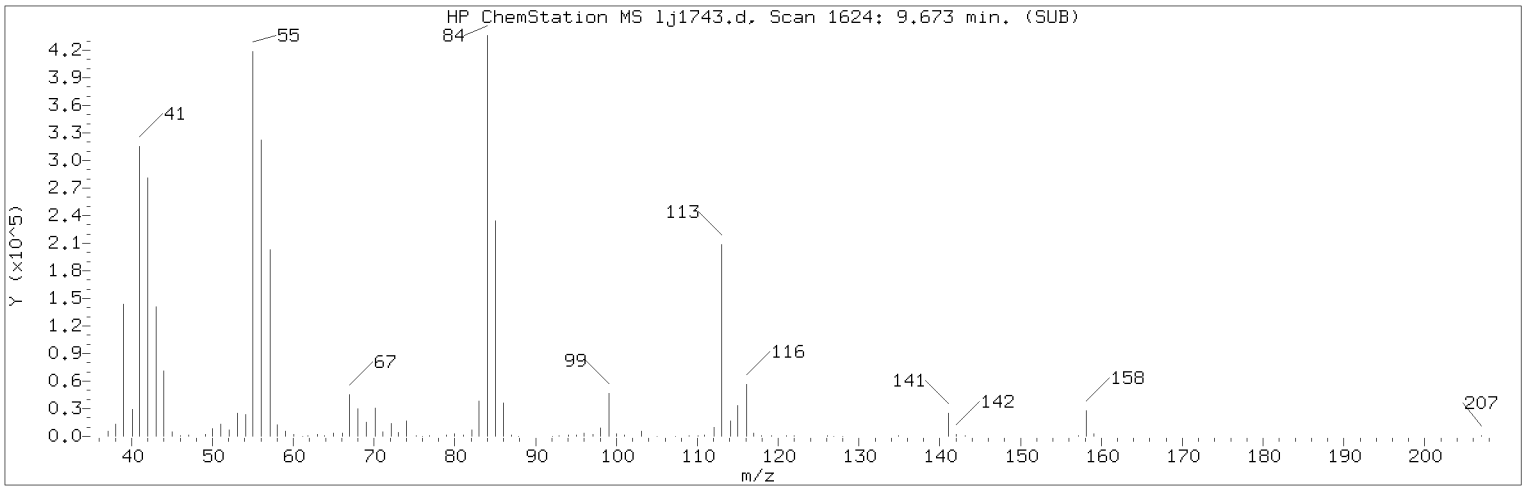
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

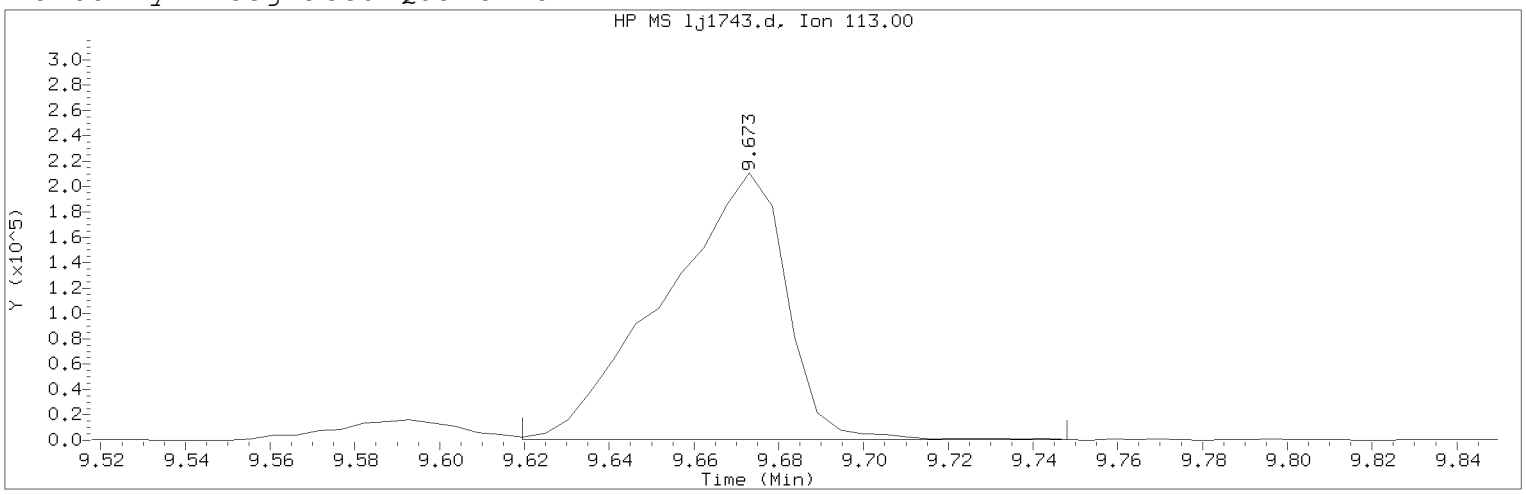
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1409
Retention Time (minutes) : 8.523
Quant Ion : 105.00
Area : 157495
On-column Amount (ng/ul) : 5.0013
Integration start scan : 1397 Integration stop scan: 1411
Y at integration start : 0 Y at integration end: 0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

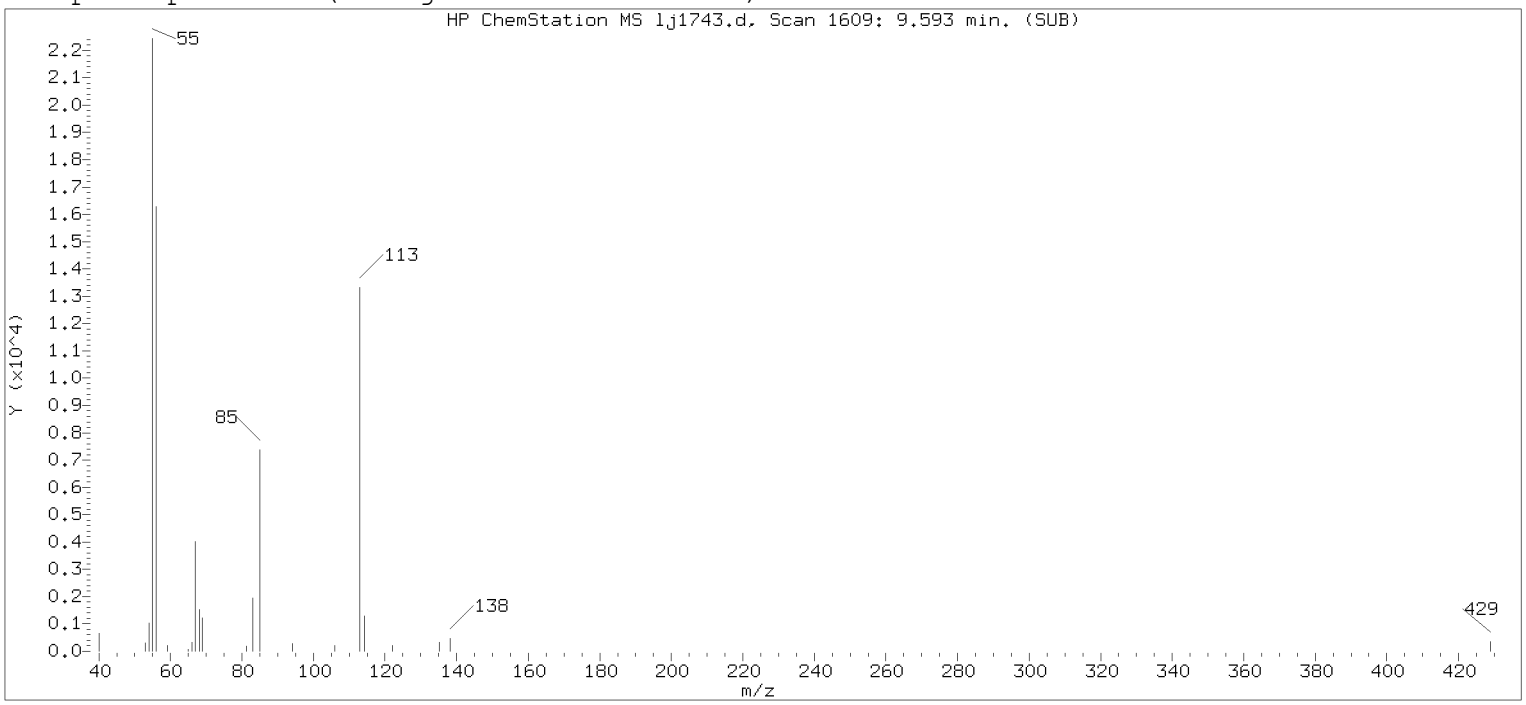
Compound Number : 79
Compound Name : Caprolactam
Scan Number : 1624
Retention Time (minutes) : 9.673
Quant Ion : 113.00
Area (flag) : 417472M
On-Column Amount (ng/ul) : 29.7638
Integration start scan : 1613 Integration stop scan: 1637
Y at integration start : 712 Y at integration end: 712

Reason for manual integration: improper integration

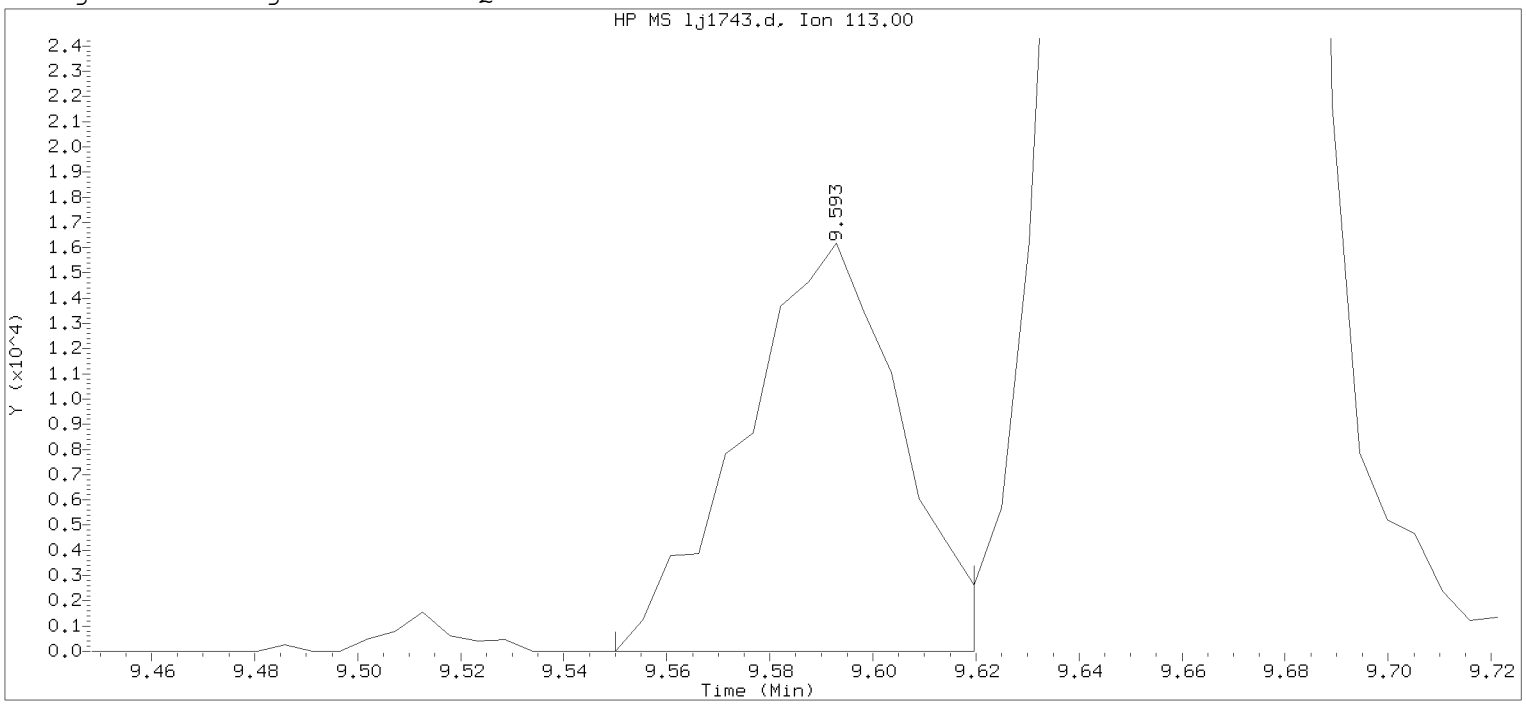
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

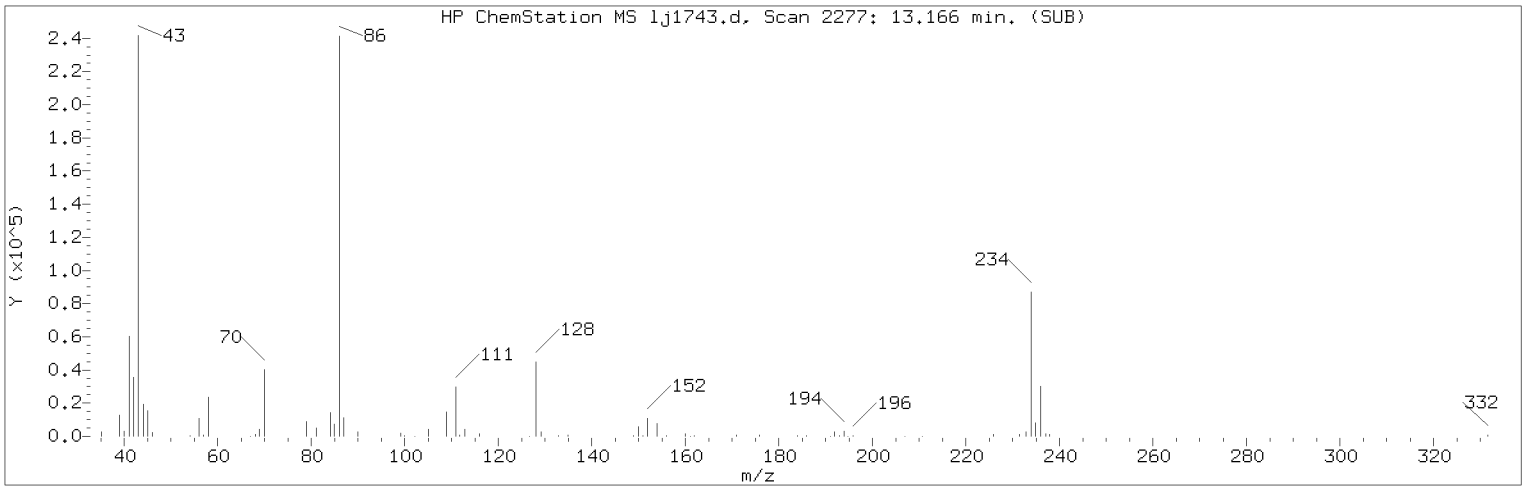
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

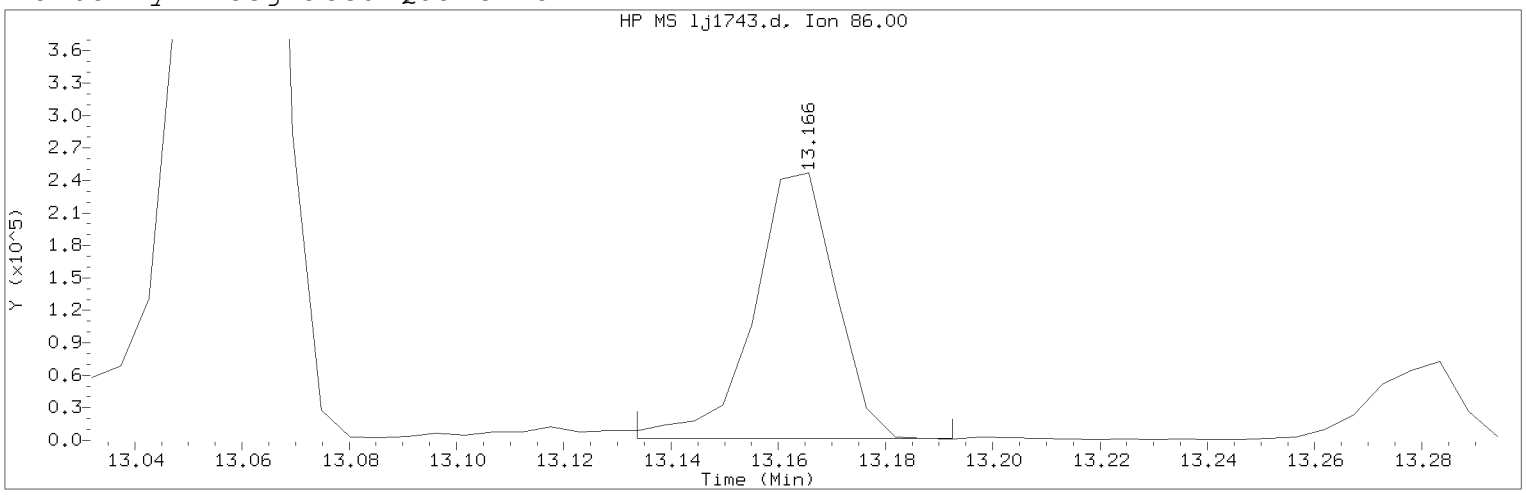
Compound Number : 79
Compound Name : Caprolactam
Scan Number : 1609
Retention Time (minutes) : 9.593
Quant Ion : 113.00
Area : 34053
On-column Amount (ng/ul) : 2.8772
Integration start scan : 1600 Integration stop scan: 1613
Y at integration start : 0 Y at integration end: 0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: Ashley R. Transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

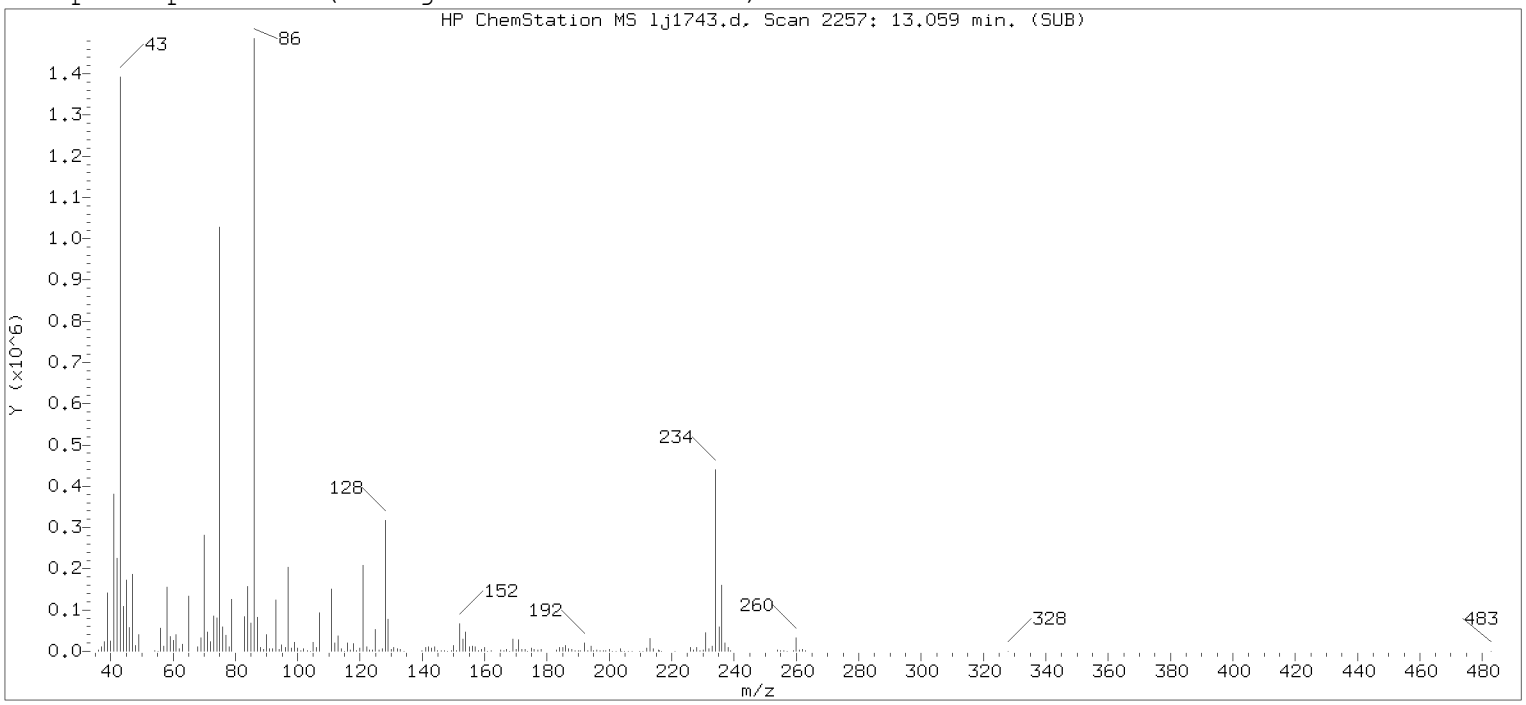
Compound Number : 149
Compound Name : Diallate (peak 2)
Scan Number : 2277
Retention Time (minutes) : 13.166
Quant Ion : 86.00
Area (flag) : 262250M
On-Column Amount (ng/ul) : 5.0113
Integration start scan : 2270 Integration stop scan: 2281
Y at integration start : 1580 Y at integration end: 1580

Reason for manual integration: improper integration

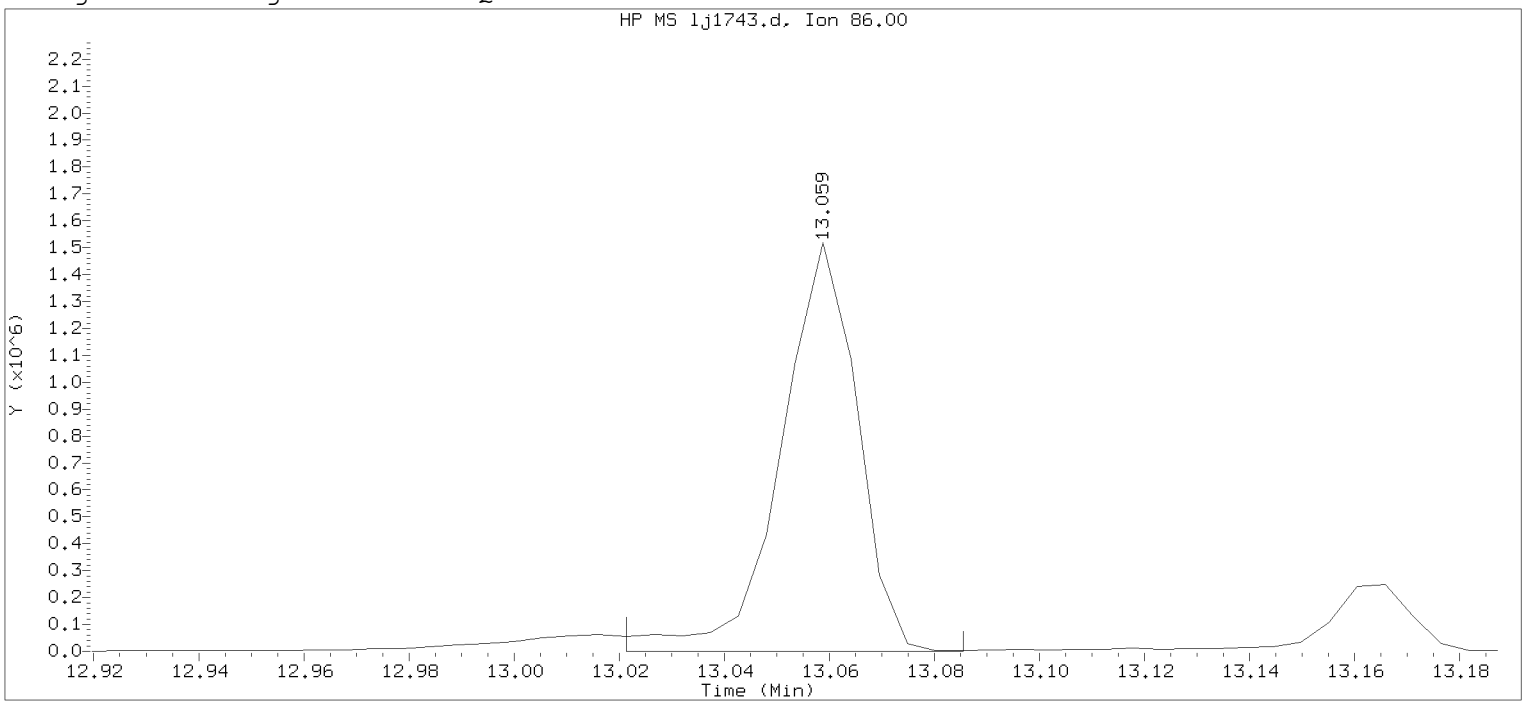
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

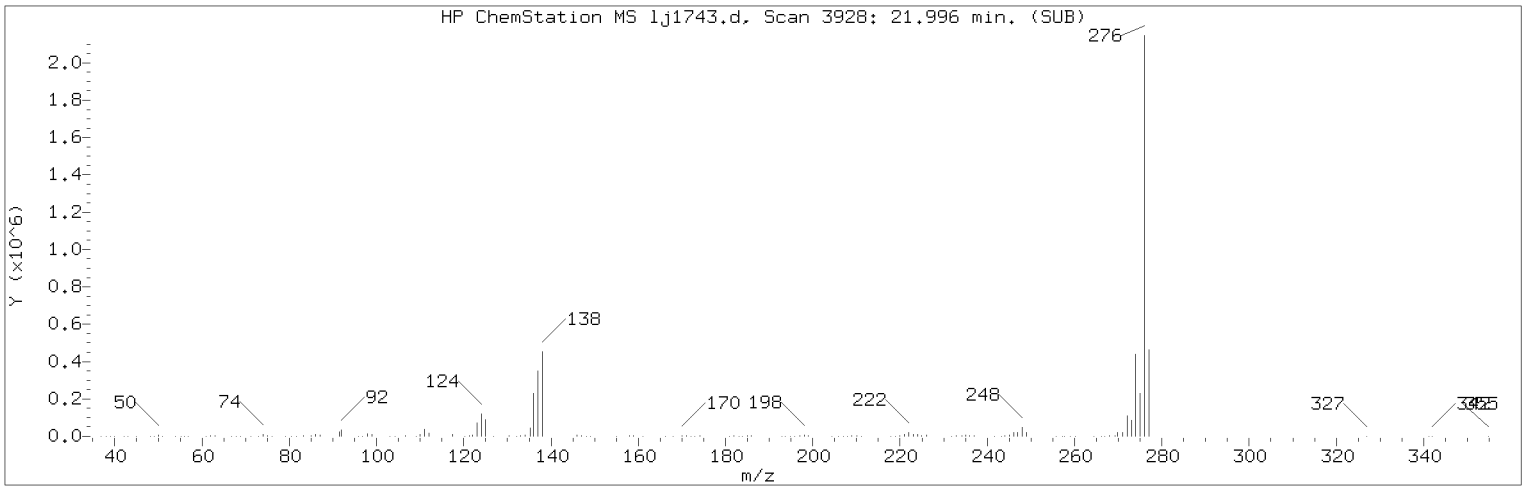
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

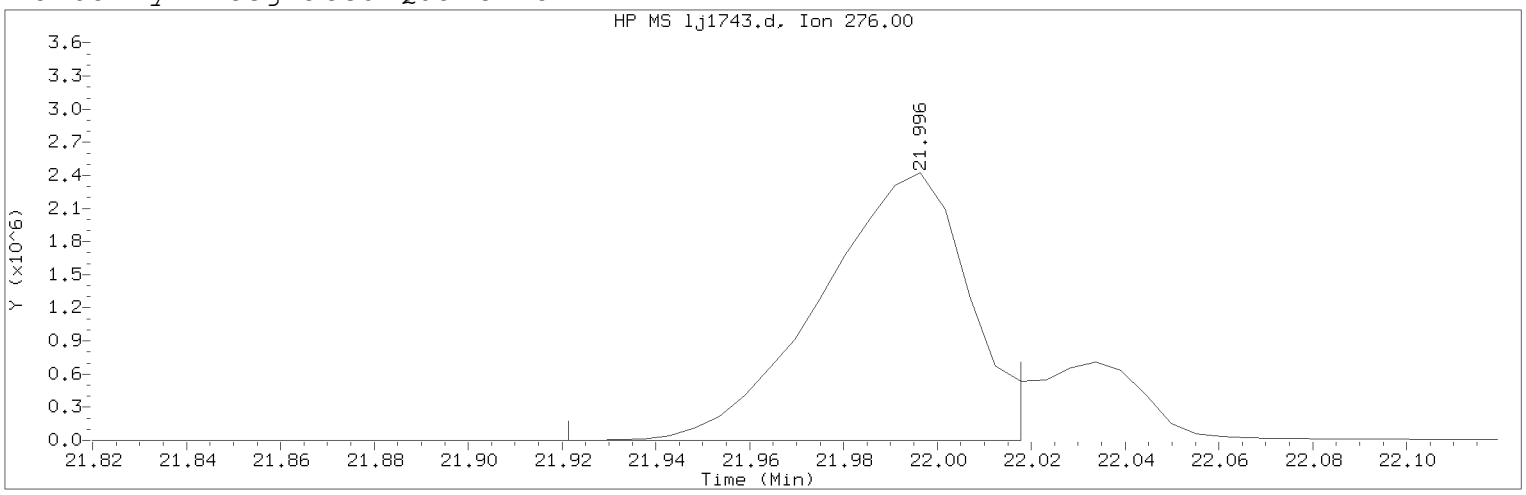
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2257		
Retention Time (minutes)	: 13.059		
Quant Ion	: 86.00		
Area	: 1530356		
On-column Amount (ng/ul)	: 16.4889		
Integration start scan	: 2249	Integration stop scan:	2261
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: ARTransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

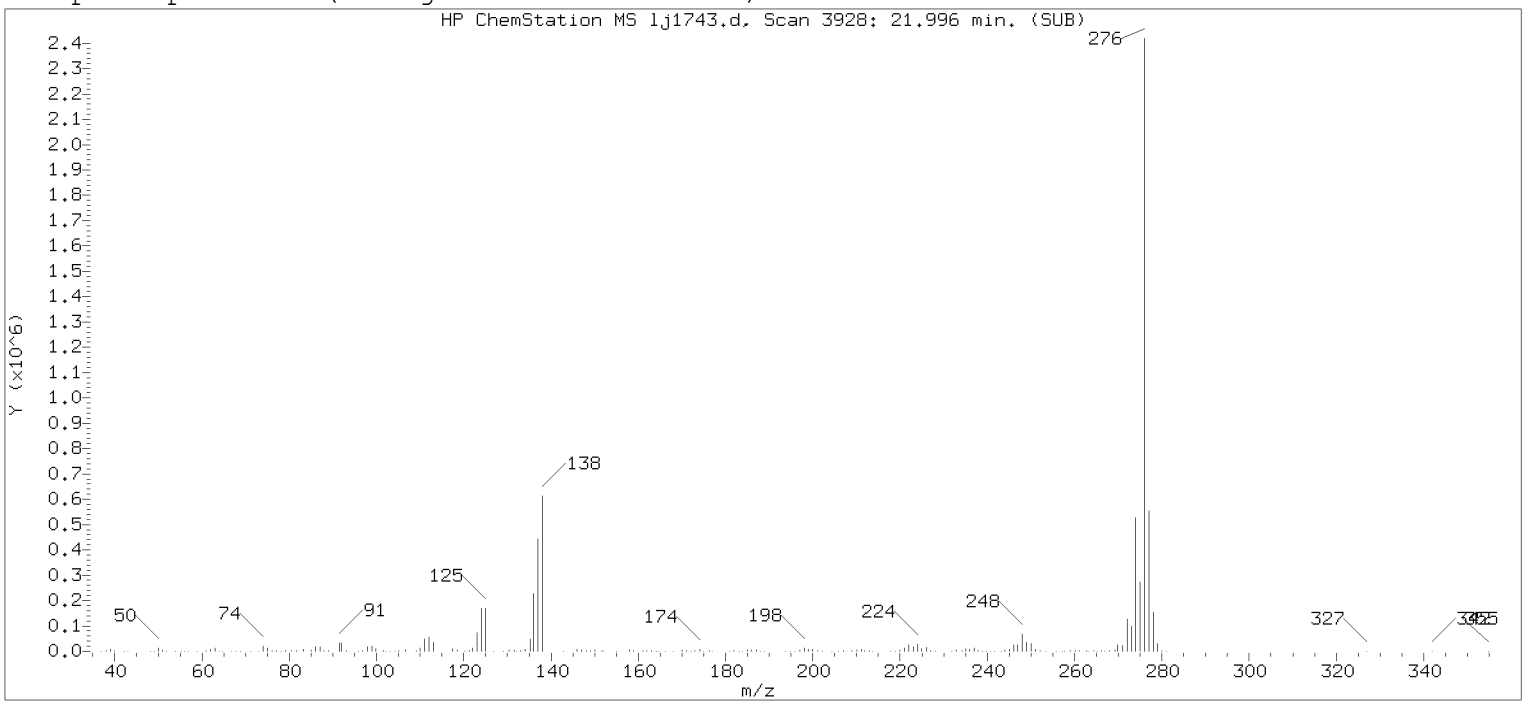
Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3928		
Retention Time (minutes)	: 21.996		
Quant Ion	: 276.00		
Area (flag)	: 5340507M		
On-Column Amount (ng/ul)	: 32.8504		
Integration start scan	: 3913	Integration stop scan:	3931
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

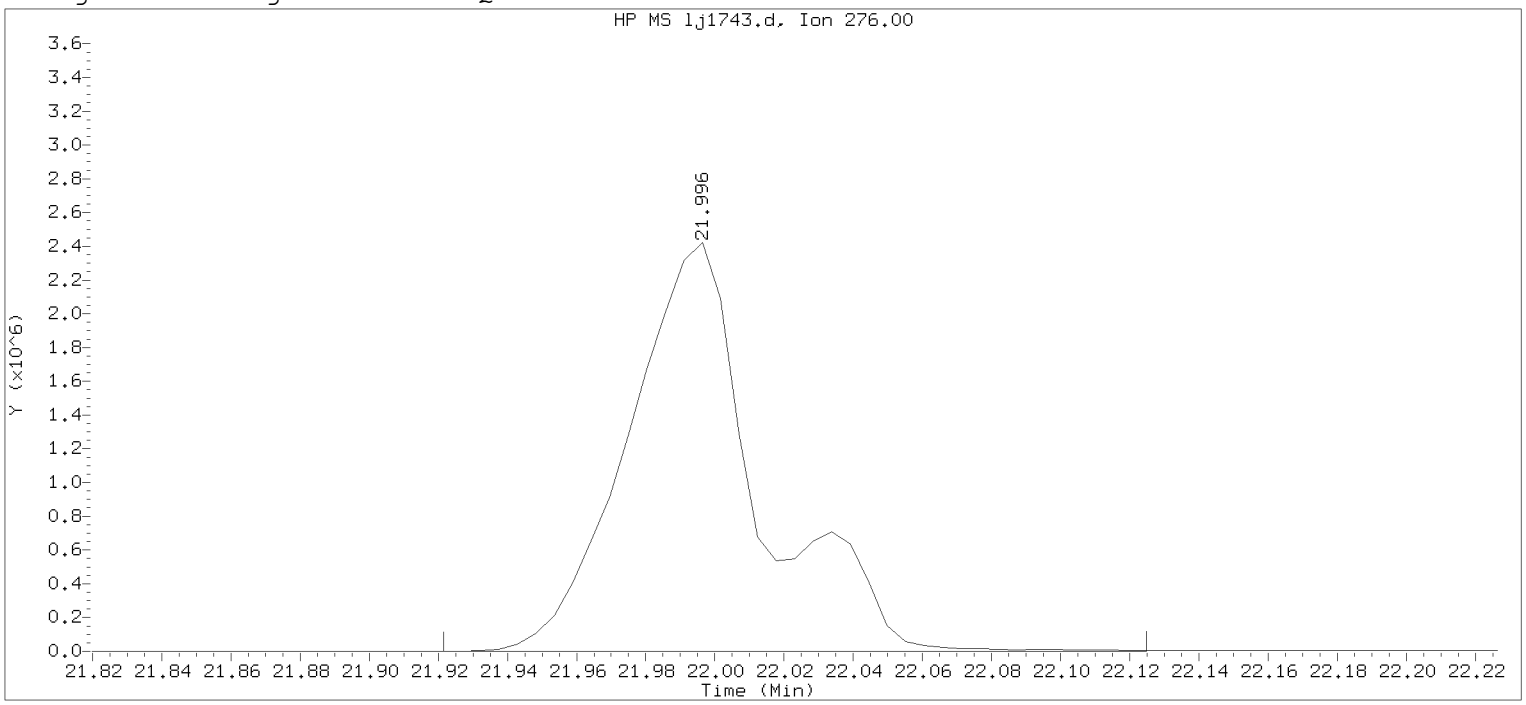
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



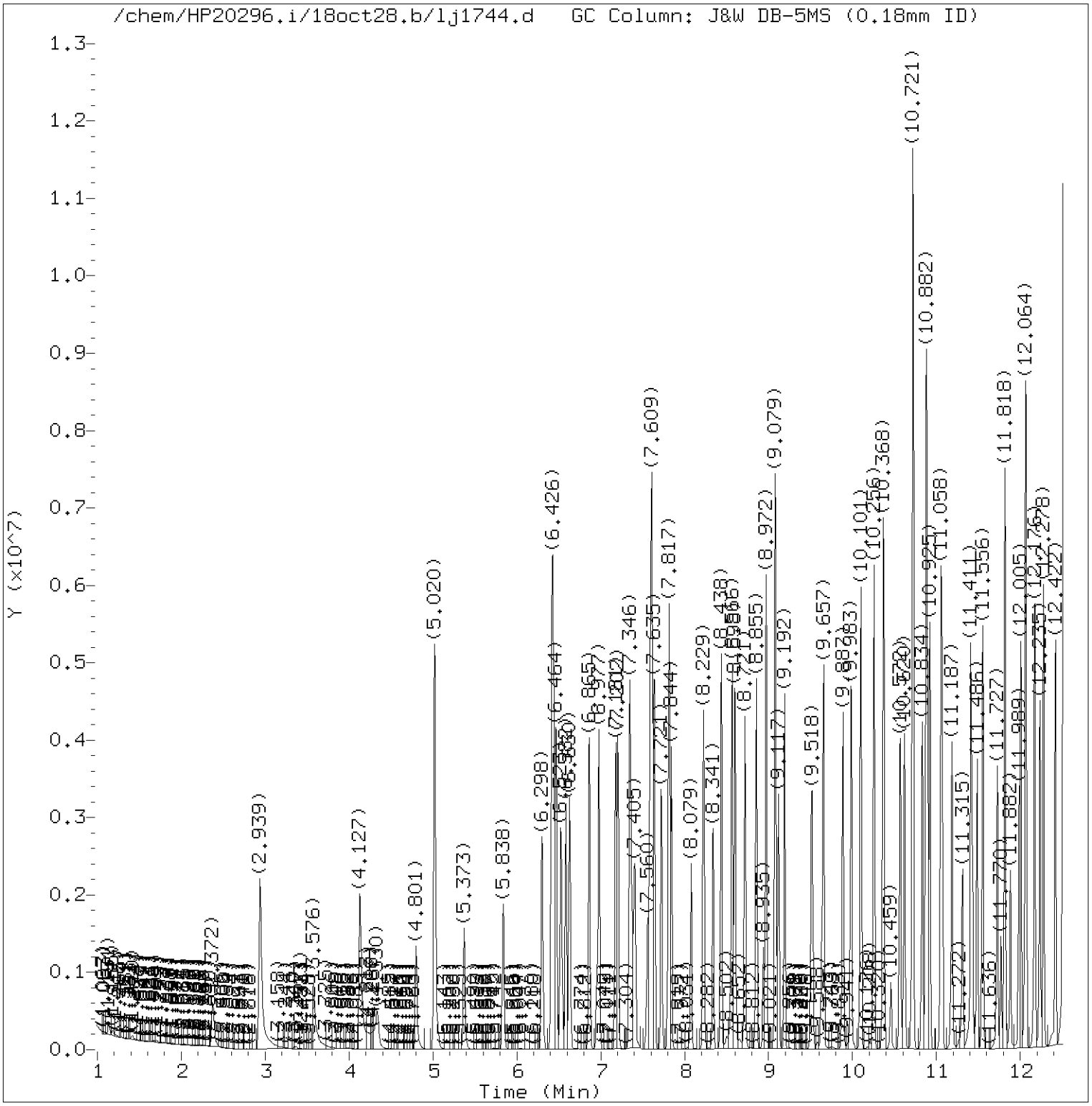
Data File: /chem/HP20296.i/18oct28.b/lj1743.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:25 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD30 Lab Sample ID: RVSTD2648

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3928		
Retention Time (minutes)	: 21.996		
Quant Ion	: 276.00		
Area	: 6407161		
On-column Amount (ng/ul)	: 39.1977		
Integration start scan	: 3913	Integration stop scan:	3951
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: ARTransue



Total Ion Chromatogram (TIC)

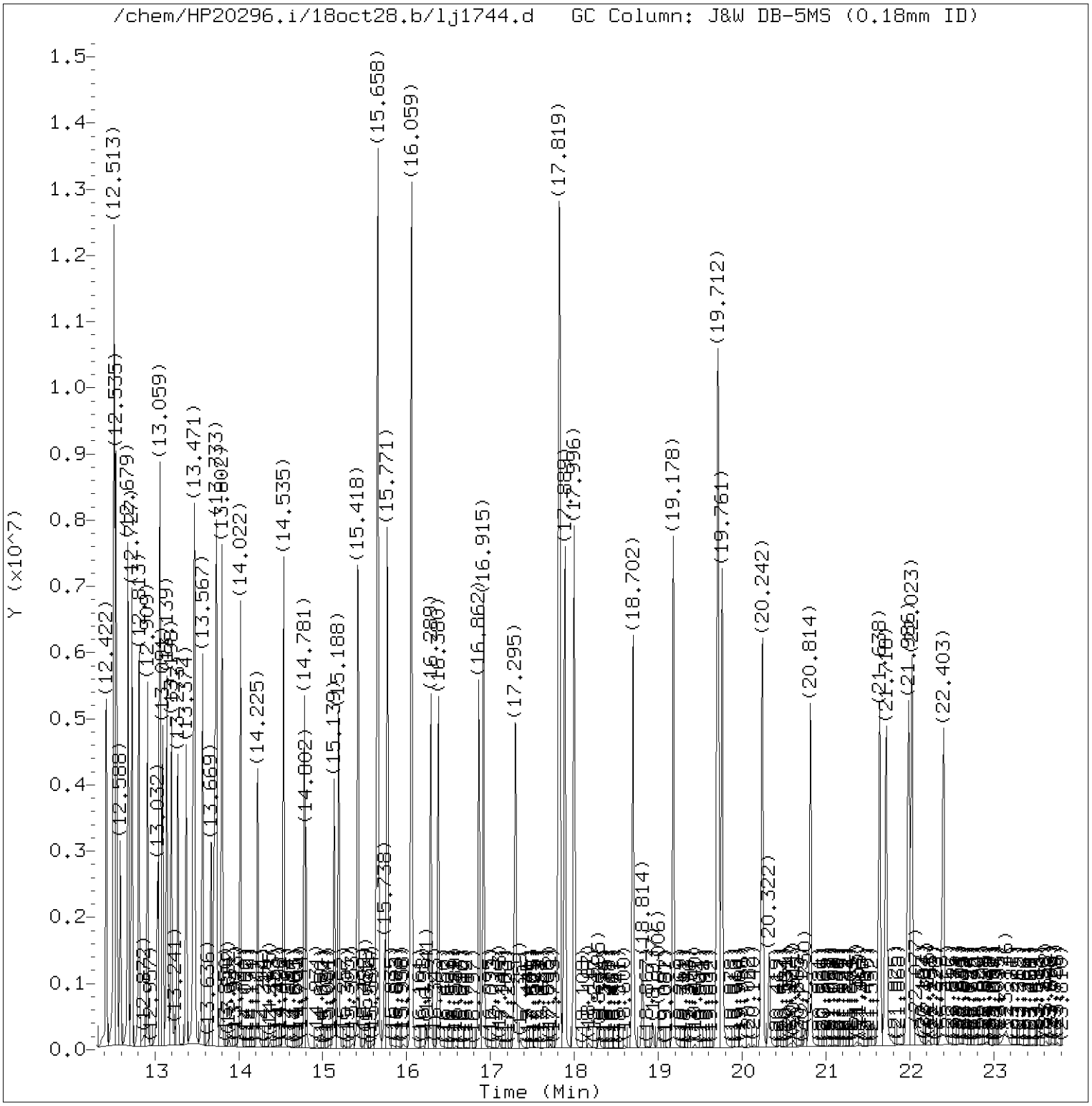
Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.372	88	548473M	19.887
5) N-Nitrosodimethylamine	(1)	2.928	74	867741	19.873
6) Pyridine	(1)	2.945	79	1455223	19.662
8) 2-Picoline	(1)	4.127	93	1511960	19.955
9) N-Nitrosomethylethylamine	(1)	4.330	88	635427	20.241
10) Methyl methanesulfonate	(1)	4.801	80	792292	19.981
12)$2-Fluorophenol	(1)	5.020	112	2368587	39.947
14) N-Nitrosodiethylamine	(1)	5.373	102	593186	20.361
43) Total Cresols	(1)			2339381	39.497
16) Ethyl methanesulfonate	(1)	5.838	109	616445	20.027
17) Benzaldehyde	(1)	6.298	77	979712	19.509
18)$Phenol-d6	(1)	6.421	99	3233570	40.142
19) Phenol	(1)	6.443	94	1874889	19.948
20) Aniline	(1)	6.464	93	2216180	19.988
21) a-methylstyrene	(1)	6.539	118	117083	20.103
23) bis(2-Chloroethyl)ether	(1)	6.582	93	1396640	19.897
24) 2-Chlorophenol	(1)	6.630	128	1129722	20.179
25) 1,3-Dichlorobenzene	(1)	6.865	146	1229193	19.996
26)*1,4-Dichlorobenzene-d4	(1)	6.951	152	188588	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	1223378	19.996
28) Benzyl alcohol	(1)	7.181	108	776674	20.181
29) 1,2-Dichlorobenzene	(1)	7.202	146	1183950	20.183
31) Indene	(1)	7.341	115	1334610	20.183
32) 2-Methylphenol	(1)	7.357	108	1153548	19.769
100) Isosafrole	(3)			944572	20.697
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.400	45	1760829	19.670
35) bis(2-Chloroisopropyl)ether	(1)	7.400	45	1760829	19.670
36) N-Nitrosopyrrolidine	(1)	7.560	100	616414	19.937
37) Acetophenone	(1)	7.587	105	1747180	19.645
38) 4-Methylphenol	(1)	7.609	108	1185833	19.727
39) N-Nitroso-di-n-propylamine	(1)	7.614	70	1063897	19.645
40) N-Nitrosomorpholine	(1)	7.625	56	775986	19.941
41) o-Toluidine	(1)	7.641	106	2021905	19.805
44) Hexachloroethane	(1)	7.721	117	555066	20.124
45)$Nitrobenzene-d5	(2)	7.817	82	3061233	40.165
46) Nitrobenzene	(2)	7.844	77	1619153	20.010
125) 2,4_2,6-Dinitrotoluenes	(3)			1192175	41.512
50) N-Nitrosopiperidine	(2)	8.079	114	576902	20.069
52) Isophorone	(2)	8.224	82	2779795	20.161
53) 2-Nitrophenol	(2)	8.341	139	566125	20.703

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

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.438	107	1310101	20.020
59) O,O,O-Triethylphosphorothioate	(2)	8.566	198	560260	20.218
57) bis(2-Chloroethoxy)methane	(2)	8.603	93	1739837	20.522
58) Benzoic acid	(2)	8.614	105	889205M	20.400
62) 2,4-Dichlorophenol	(2)	8.721	162	943497	20.102
151) Diallate trans/cis	(4)			1224090	19.596
65) 1,2,4-Trichlorobenzene	(2)	8.855	180	1049975	20.277
68)*Naphthalene-d8	(2)	8.935	136	701835	5.000
69) Naphthalene	(2)	8.972	128	3221471	20.277
70) 4-Chloroaniline	(2)	9.079	127	1321054	20.206
71) 2,6-Dichlorophenol	(2)	9.085	162	898266	19.993
72) Hexachloropropene	(2)	9.122	213	700789	20.338
74) Hexachlorobutadiene	(2)	9.192	225	629999	20.391
78) Quinoline	(2)	9.518	129	1885601	19.900
79) Caprolactam	(2)	9.652	113	295113M	20.447
80) N-Nitrosodi-n-butylamine	(2)	9.657	84	1216409	21.319
83) 4-Chloro-3-methylphenol	(2)	9.887	107	1146684	20.355
85) Safrole	(2)	9.989	162	818061	20.190
86) 2-Methylnaphthalene	(2)	10.101	142	2099669	20.584
87) 1-Methylnaphthalene	(2)	10.256	142	2021541	20.601
88) Hexachlorocyclopentadiene	(3)	10.363	237	664315	20.980
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.374	216	1084121	20.059
91) cis-Isosafrole	(3)	10.459	162	158103	3.505
93) 2,4,6-Trichlorophenol	(3)	10.572	196	707510	20.327
95) 2,4,5-Trichlorophenol	(3)	10.620	196	737499	20.623
96)$2-Fluorobiphenyl	(3)	10.721	172	4769605	40.551
97) trans-Isosafrole	(3)	10.834	162	786469	17.192
98) 1,1'-Biphenyl	(3)	10.877	154	2429151	20.197
99) 2-Chloronaphthalene	(3)	10.893	162	2188288	20.029
101) 1-Chloronaphthalene	(3)	10.925	162	1793611	20.559
103) Diphenyl ether	(3)	11.058	170	1389830	20.346
104) 2-Nitroaniline	(3)	11.074	138	603818	20.692
108) 1,4-Naphthoquinone	(3)	11.187	158	816582	20.172
109) 1,4-Dinitrobenzene	(3)	11.315	168	318293	20.896
110) Dimethylphthalate	(3)	11.411	163	2282788	20.794
111) 1,3-Dinitrobenzene	(3)	11.433	168	354554	20.380
113) 2,6-Dinitrotoluene	(3)	11.486	165	508870	20.916
114) Acenaphthylene	(3)	11.556	152	2851889	21.623
117) 3-Nitroaniline	(3)	11.727	138	553839	20.520
118)*Acenaphthene-d10	(3)	11.770	164	343637	5.000

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

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.818	153	2083456	20.099
120) 2,4-Dinitrophenol	(3)	11.882	184	301839	20.957
121) 4-Nitrophenol	(3)	11.989	109	461567	21.334
122) Pentachlorobenzene	(3)	12.005	250	871379	20.357
124) Dibenzofuran	(3)	12.064	168	2839631	20.395
123) 2,4-Dinitrotoluene	(3)	12.075	165	683305	20.596
126) 1-Naphthylamine	(3)	12.176	143	2078307	20.529
127) 2,3,4,6-Tetrachlorophenol	(3)	12.235	232	583123	20.510
128) 2-Naphthylamine	(3)	12.278	143	2063721	20.451
129) Diethylphthalate	(3)	12.422	149	2198722	20.275
131) Fluorene	(3)	12.508	166	2218778	20.357
130) Thionazin	(3)	12.513	107	440245	20.423
132) 4-Chlorophenyl-phenylether	(3)	12.529	204	1141621	20.265
133) 5-Nitro-o-toluidine	(3)	12.540	152	626867	20.622
134) 4-Nitroaniline	(3)	12.551	138	549400	20.502
135) 4,6-Dinitro-2-methylphenol	(4)	12.588	198	399982	20.862
136) N-Nitrosodiphenylamine	(4)	12.679	169	1866199	20.283
137) NDPA as diphenylamine	(4)	12.679	169	1866199	20.283
139) 1,2-Diphenylhydrazine	(4)	12.727	77	3224815	19.922
140)$2,4,6-Tribromophenol	(3)	12.813	330	613125	41.093
142) Tetraethyldithiopyrophosphate	(4)	12.909	97	492782	20.131
144) 1,3,5-Trinitrobenzene	(4)	13.032	213	243421	20.573
145) Diallate (peak 1)	(4)	13.053	86	1047189	16.305
146) Phorate	(4)	13.064	75	1812392	21.807
147) Phenacetin	(4)	13.091	108	1359967	19.731
148) 4-Bromophenyl-phenylether	(4)	13.139	248	629728	19.881
149) Diallate (peak 2)	(4)	13.160	86	176901M	3.290
150) Hexachlorobenzene	(4)	13.198	284	642219	19.952
152) Dimethoate	(4)	13.273	87	1085955	19.999
153) Atrazine	(4)	13.374	200	558209	19.880
154) Pentachlorophenol	(4)	13.455	266	452593	20.473
155) 4-Aminobiphenyl	(4)	13.471	169	1609022	19.735
156) Pentachloronitrobenzene	(4)	13.476	237	310954	20.045
157) Pronamide	(4)	13.567	173	1075070	20.226
158)*Phenanthrene-d10	(4)	13.701	188	707104	5.000
159) Dinoseb	(4)	13.717	211	624140	21.006
160) Phenanthrene	(4)	13.733	178	3436114	19.698
162) Anthracene	(4)	13.802	178	3445234	20.354
168) Carbazole	(4)	14.022	167	3007888	19.634
169) Methyl parathion	(4)	14.225	109	859570	20.310

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

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

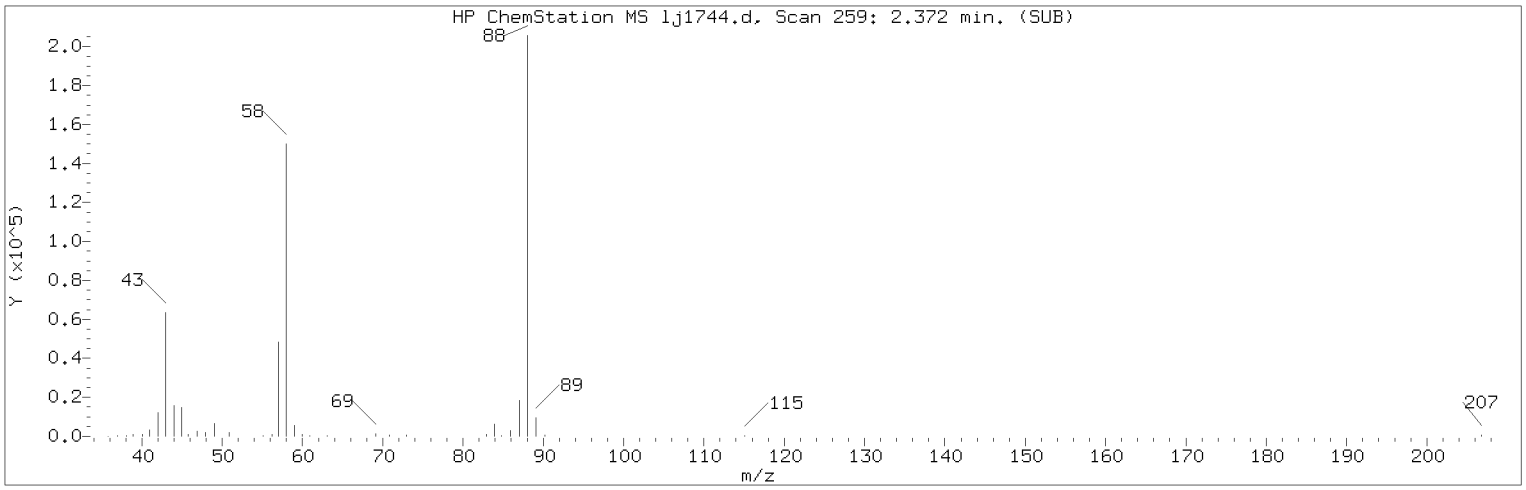
Sample Name: SSTD20 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.535	149	4007893	19.960
172) Parathion	(4)	14.781	109	560488	20.076
173) 4-Nitroquinoline-1-oxide	(4)	14.802	190	321555	21.580
227) Total PAHs	(6)			58977411	373.953
174) Octachlorostyrene	(4)	15.139	308	254324	20.414
176) Isodrin	(4)	15.188	193	411737	19.689
178) Fluoranthene	(4)	15.423	202	3924477	20.643
179) Benzidine	(5)	15.658	184	7489283	60.553
180)*Pyrene-d10	(5)	15.738	212	743637	5.000
182) Pyrene	(5)	15.771	202	3999162	20.378
184)$Terphenyl-d14	(5)	16.059	244	4989750	40.139
187) p-Dimethylaminoazobenzene	(5)	16.289	225	680295	20.448
190) Chlorobenzilate	(5)	16.380	139	1238149	20.295
192) 3,3'-Dimethylbenzidine	(5)	16.862	212	2485341	20.270
193) Butylbenzylphthalate	(5)	16.915	149	1883048	20.221
196) 2-Acetylaminofluorene	(5)	17.300	181	1636907	20.407
198) 3,3'-Dichlorobenzidine	(5)	17.808	252	1454491	20.482
200) Benzo(a)anthracene	(5)	17.824	228	3978095	21.533
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.830	231	788376	19.847
201) Chrysene	(5)	17.889	228	3740533	20.604
204) bis(2-Ethylhexyl)phthalate	(5)	17.996	149	2771678	20.467
208) 6-Methylchrysene	(5)	18.702	242	2508773	19.965
210) Di-n-octylphthalate	(6)	19.178	149	4975819	20.463
211) Benzo(b)fluoranthene	(6)	19.707	252	3893280	21.071
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.712	256	1729416	20.639
213) Benzo(k)fluoranthene	(6)	19.761	252	3765788	20.206
216) Benzo(a)pyrene	(6)	20.242	252	3700672	21.728
218)*Perylene-d12	(6)	20.322	264	702921	5.000
220) 3-Methylcholanthrene	(6)	20.814	268	1692930	20.433
222) Dibenz(a,h)acridine	(6)	21.638	279	2913086	20.534
223) Dibenz(a,j)acridine	(6)	21.718	279	2978686	20.351
224) Indeno(1,2,3-cd)pyrene	(6)	21.986	276	3537840M	21.932
225) Dibenz(a,h)anthracene	(6)	22.023	278	3525620	21.413
226) Benzo(g,h,i)perylene	(6)	22.403	276	3533792	20.850

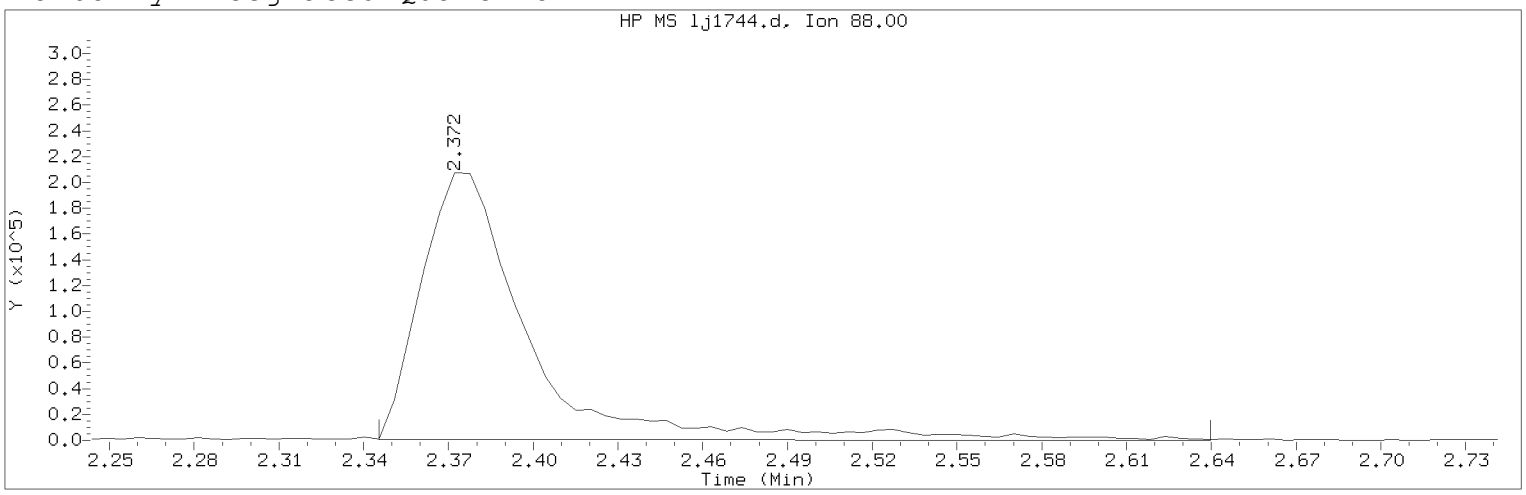
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

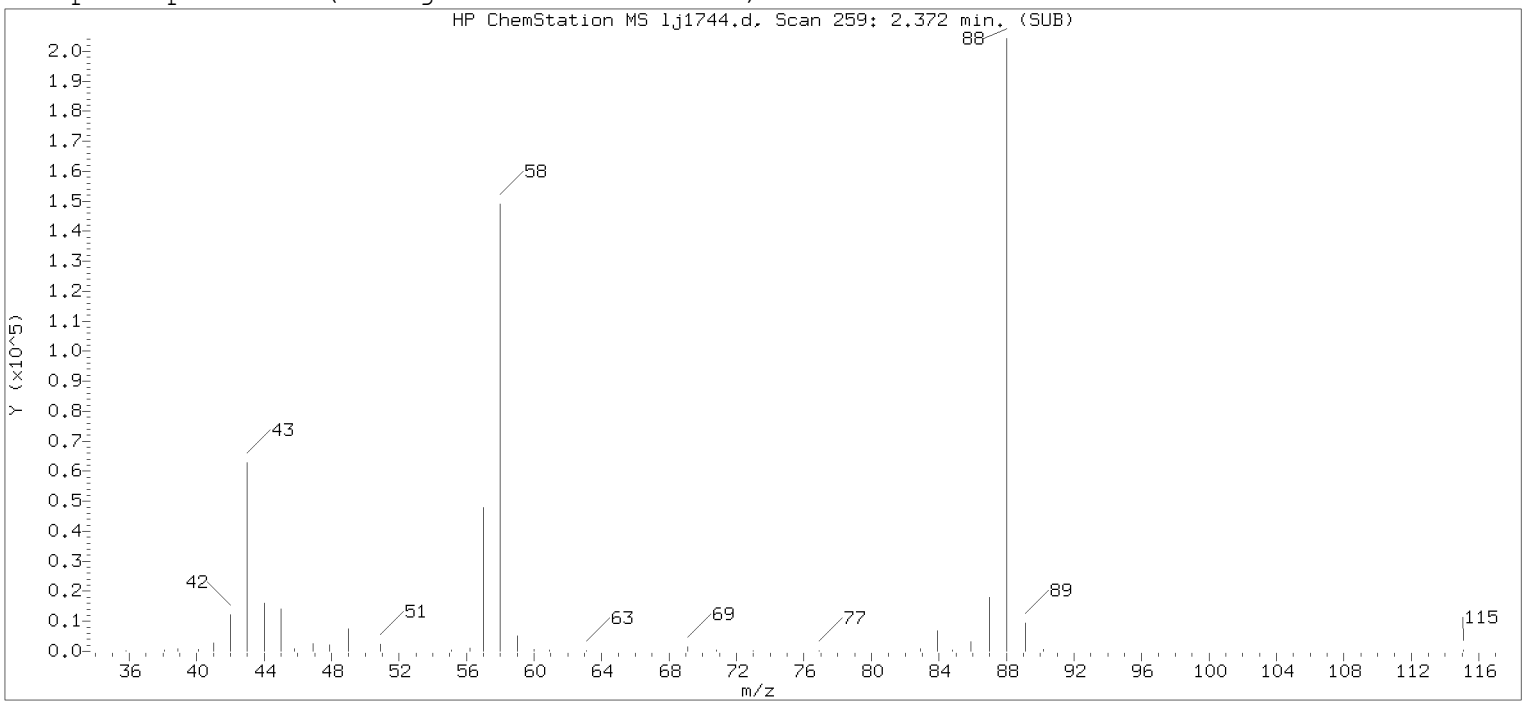
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 259
Retention Time (minutes) : 2.372
Quant Ion : 88.00
Area (flag) : 548473M
On-Column Amount (ng/ul) : 19.8866
Integration start scan : 253 Integration stop scan: 308
Y at integration start : 323 Y at integration end: 138

Reason for manual integration: improper integration

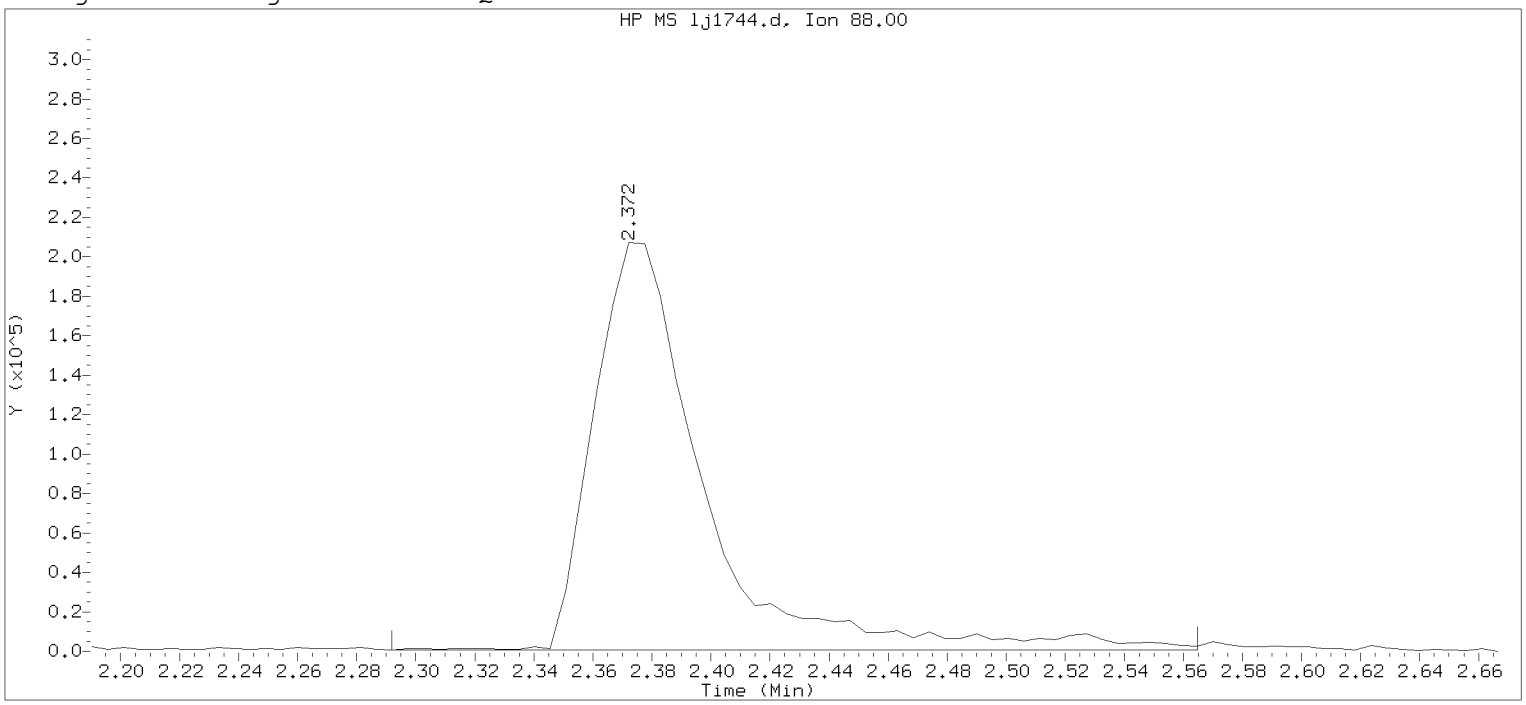
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

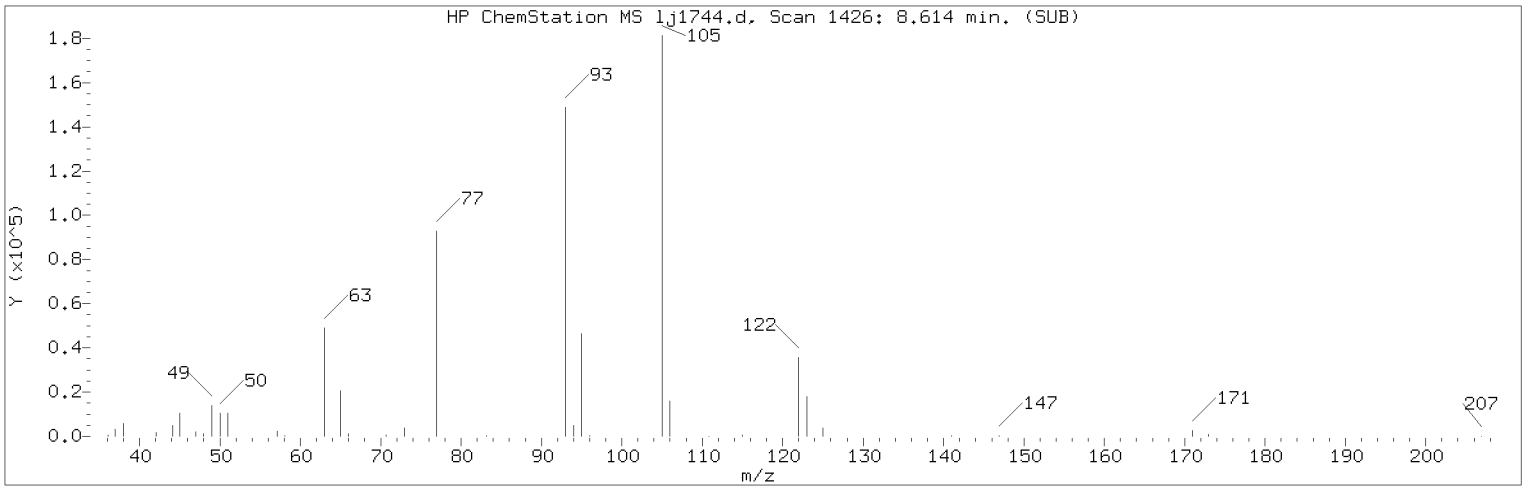
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

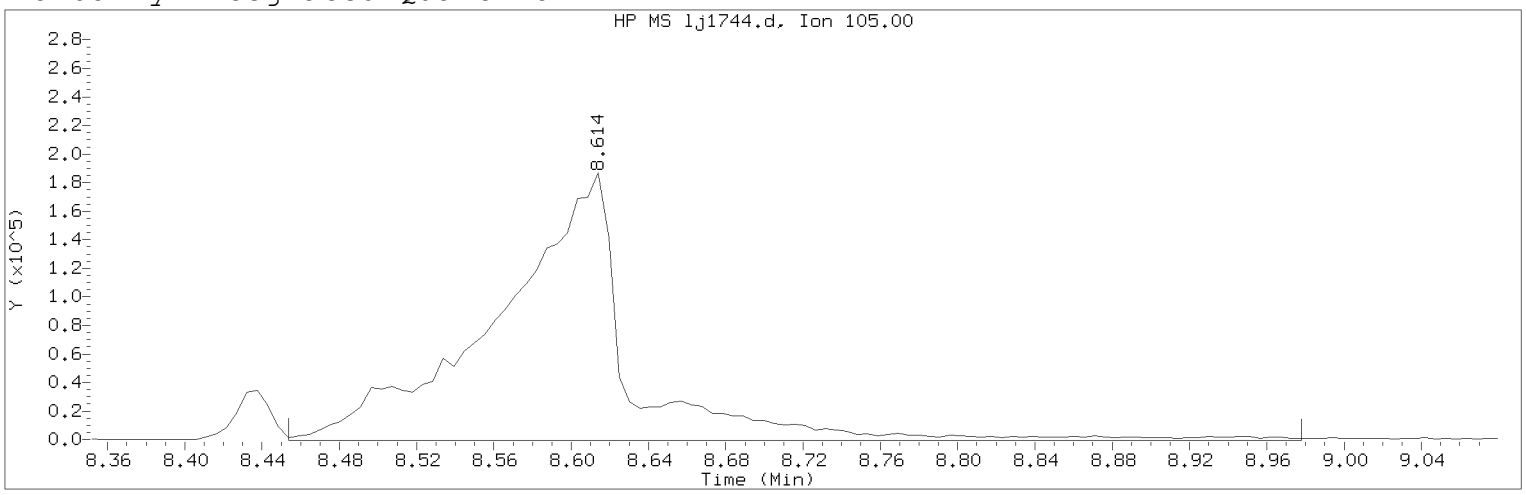
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 259
Retention Time (minutes) : 2.372
Quant Ion : 88.00
Area : 535077
On-column Amount (ng/ul) : 18.9031
Integration start scan : 243 Integration stop scan: 294
Y at integration start : 727 Y at integration end: 727

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

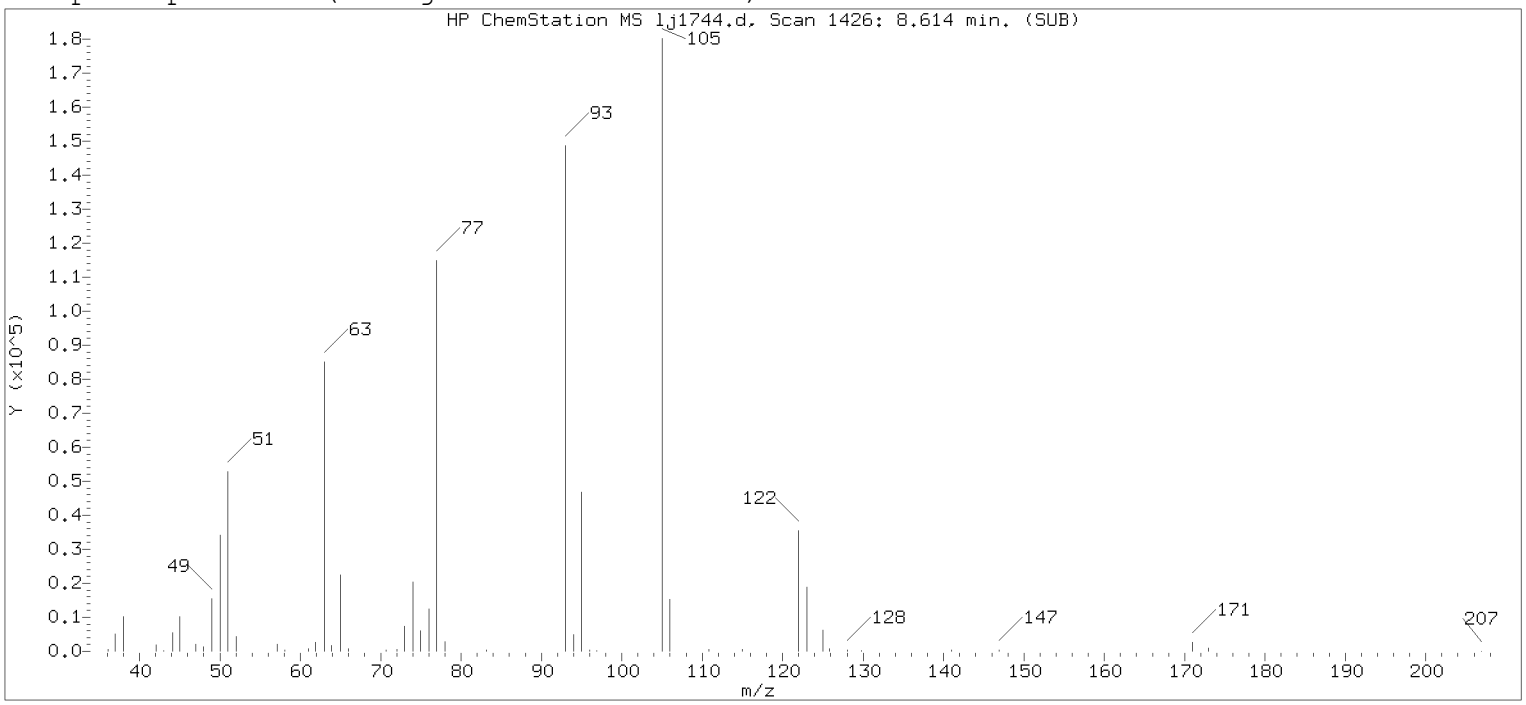
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1426
Retention Time (minutes) : 8.614
Quant Ion : 105.00
Area (flag) : 889205M
On-Column Amount (ng/ul) : 20.3999
Integration start scan : 1395 Integration stop scan: 1493
Y at integration start : -376 Y at integration end: -376

Reason for manual integration: improper integration

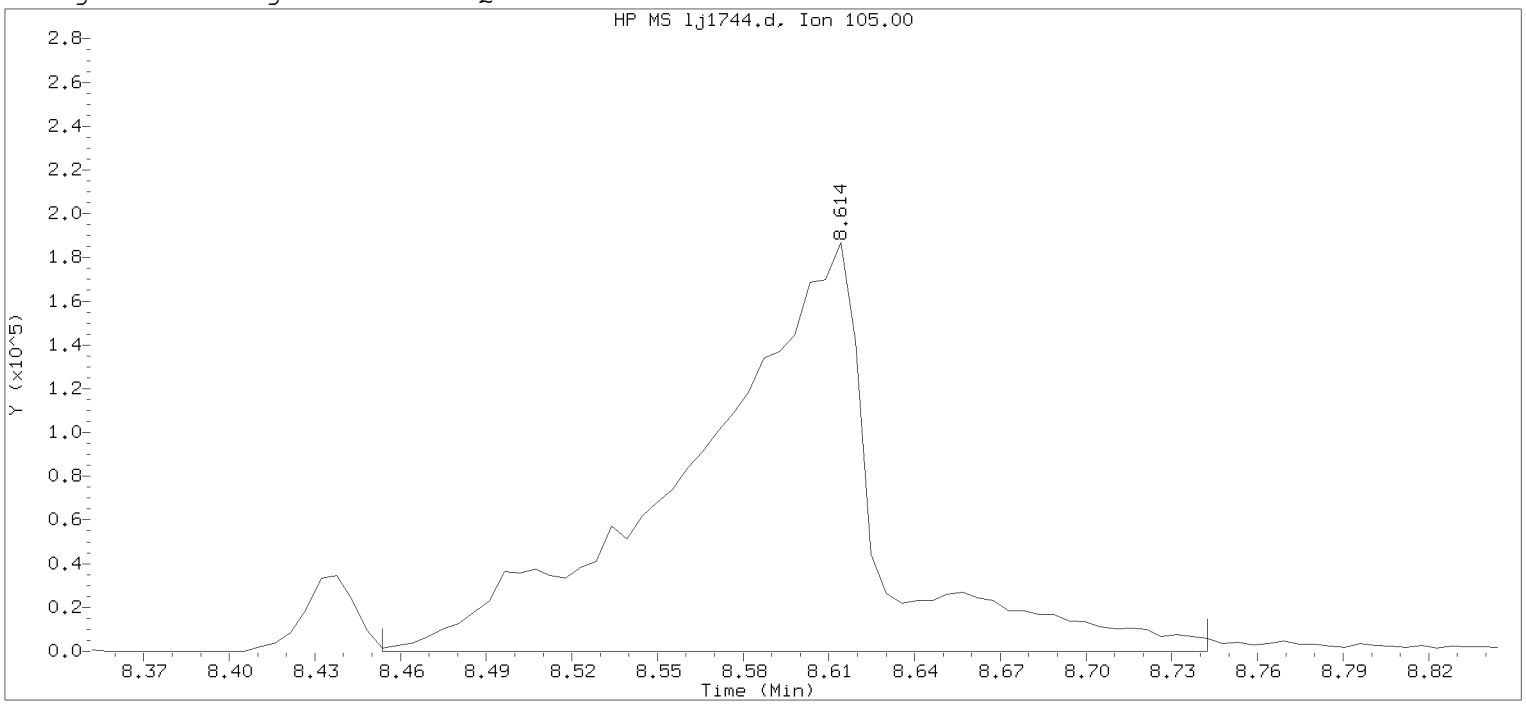
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

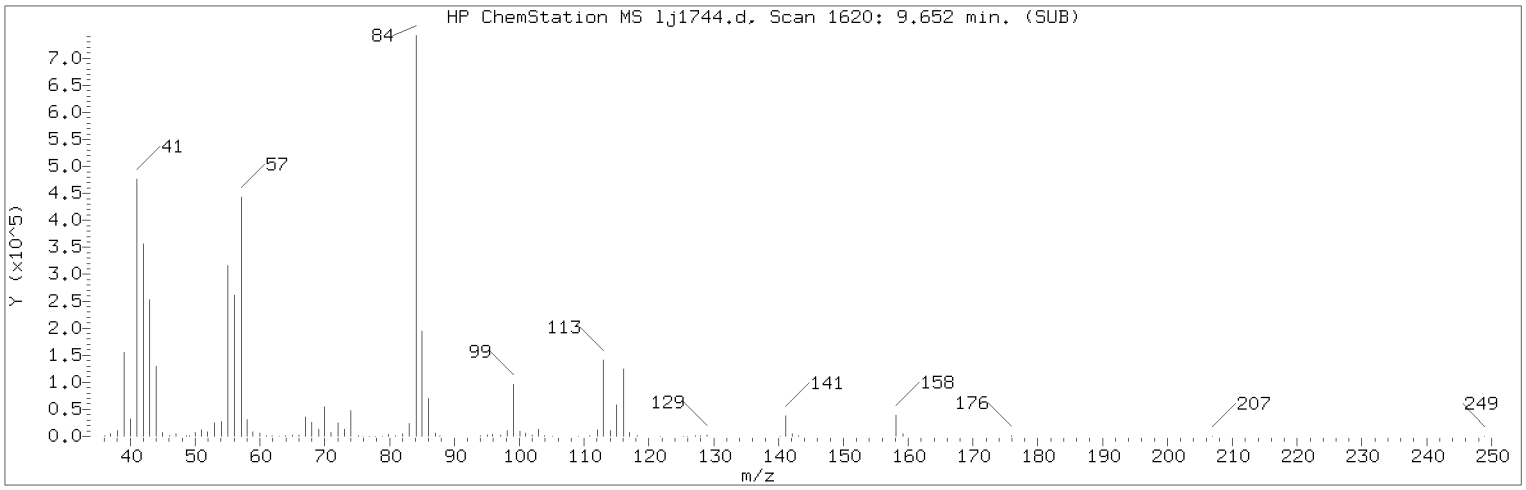
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

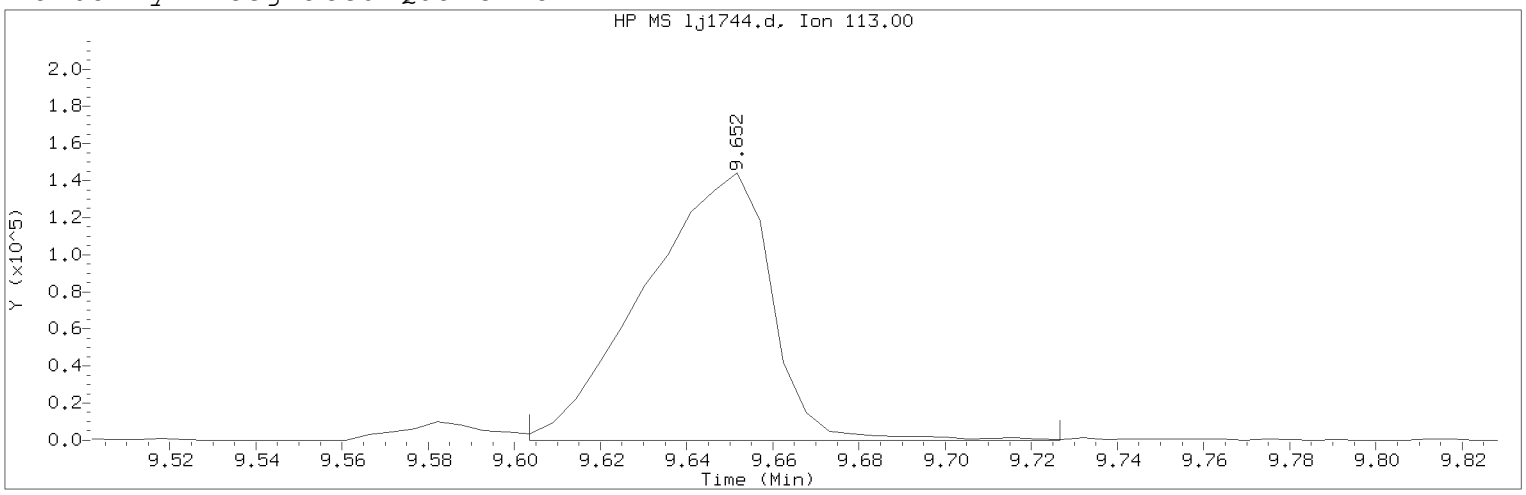
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1426
Retention Time (minutes) : 8.614
Quant Ion : 105.00
Area : 845993
On-column Amount (ng/ul) : 26.4675
Integration start scan : 1395 Integration stop scan: 1449
Y at integration start : 0 Y at integration end: 0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: ART

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

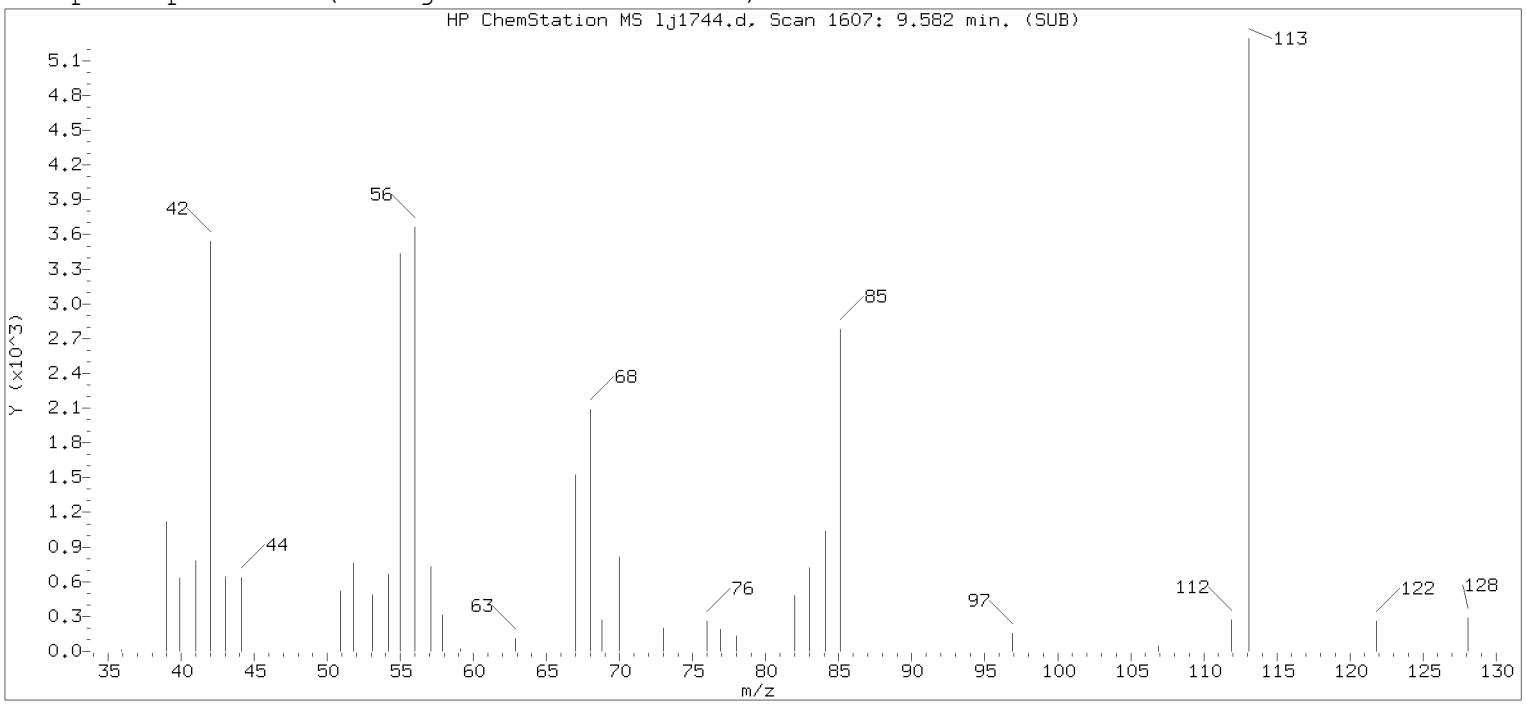
Compound Number : 79
Compound Name : Caprolactam
Scan Number : 1620
Retention Time (minutes) : 9.652
Quant Ion : 113.00
Area (flag) : 295113M
On-Column Amount (ng/ul) : 20.4470
Integration start scan : 1610 Integration stop scan: 1633
Y at integration start : -74 Y at integration end: -74

Reason for manual integration: improper integration

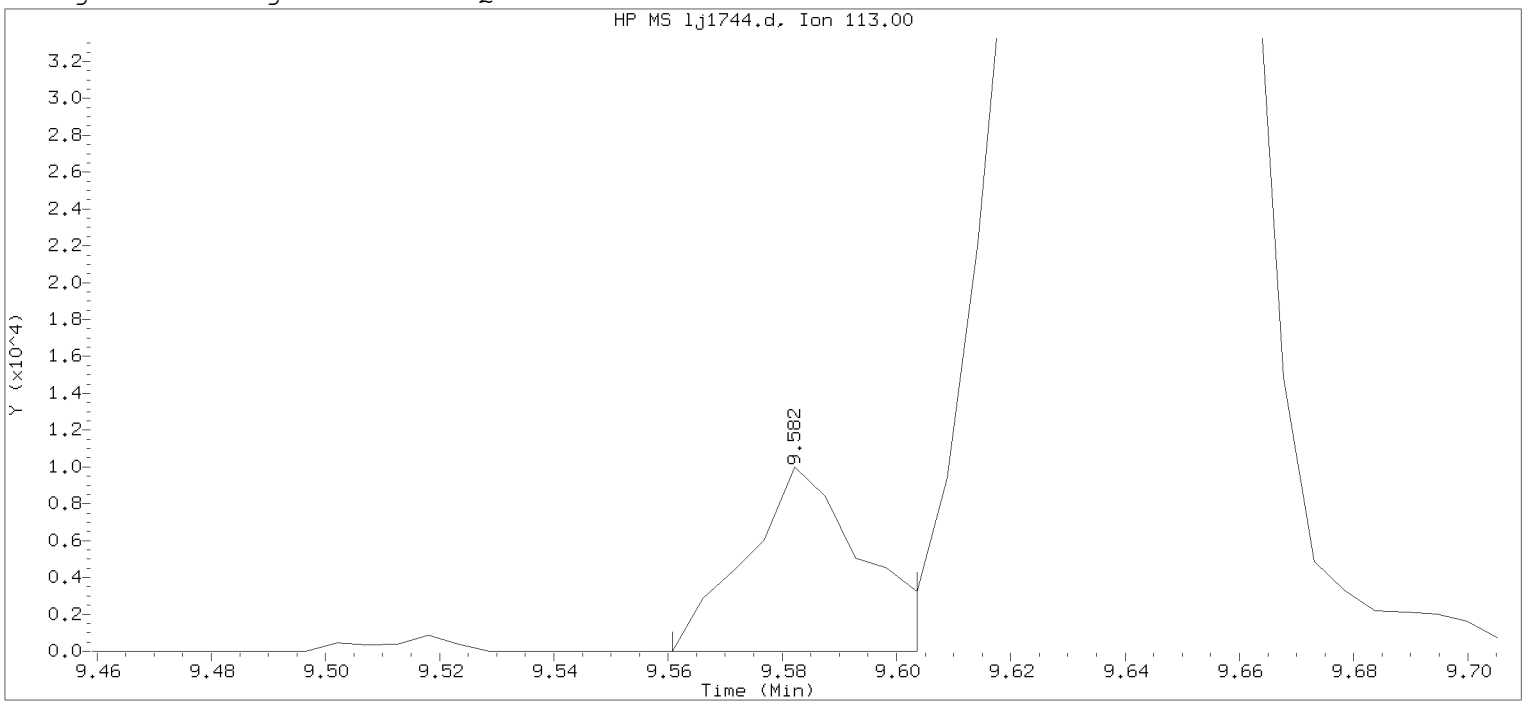
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

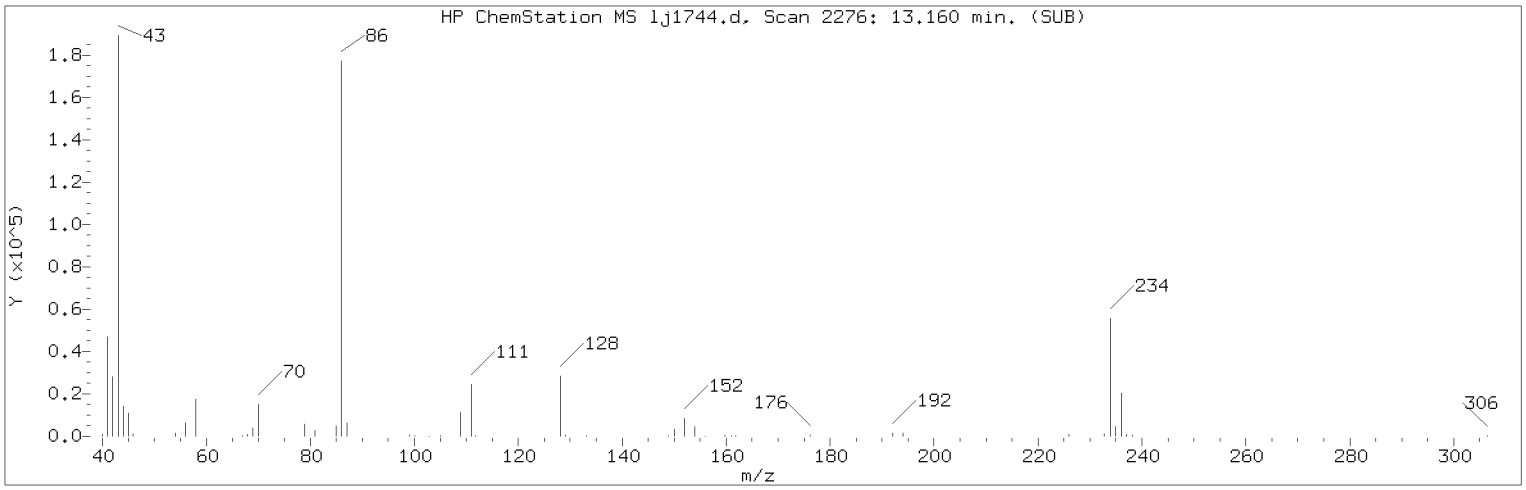
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

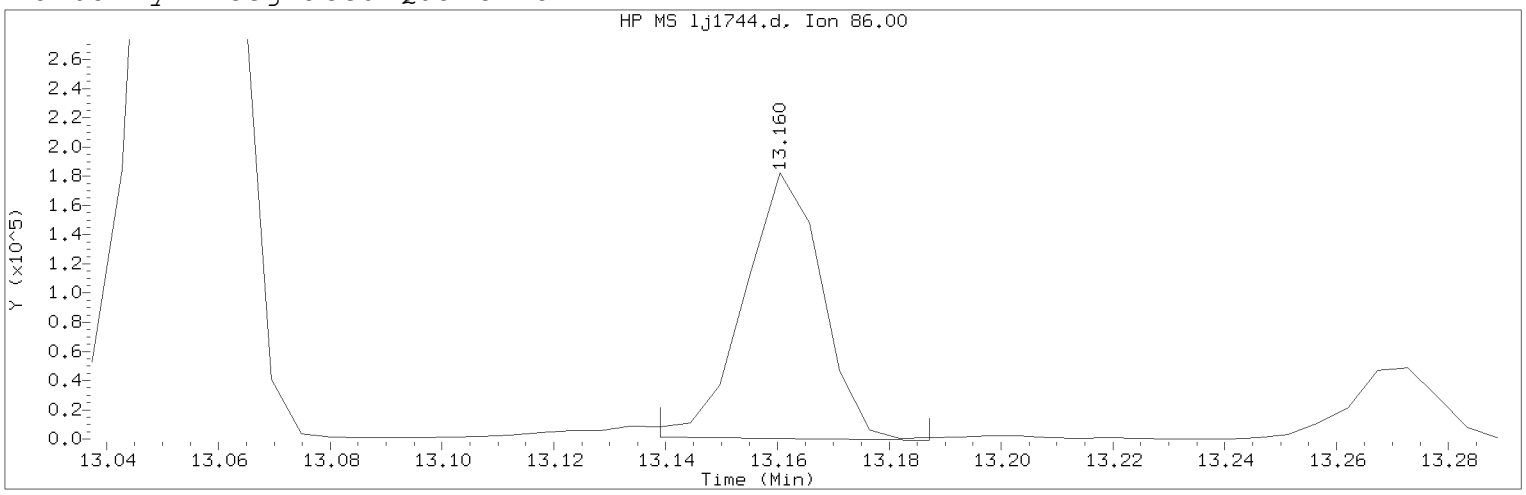
Compound Number	: 79		
Compound Name	: Caprolactam		
Scan Number	: 1607		
Retention Time (minutes)	: 9.582		
Quant Ion	: 113.00		
Area	: 13759		
On-column Amount (ng/ul)	: 1.4465		
Integration start scan	: 1602	Integration stop scan:	1610
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: ARTransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

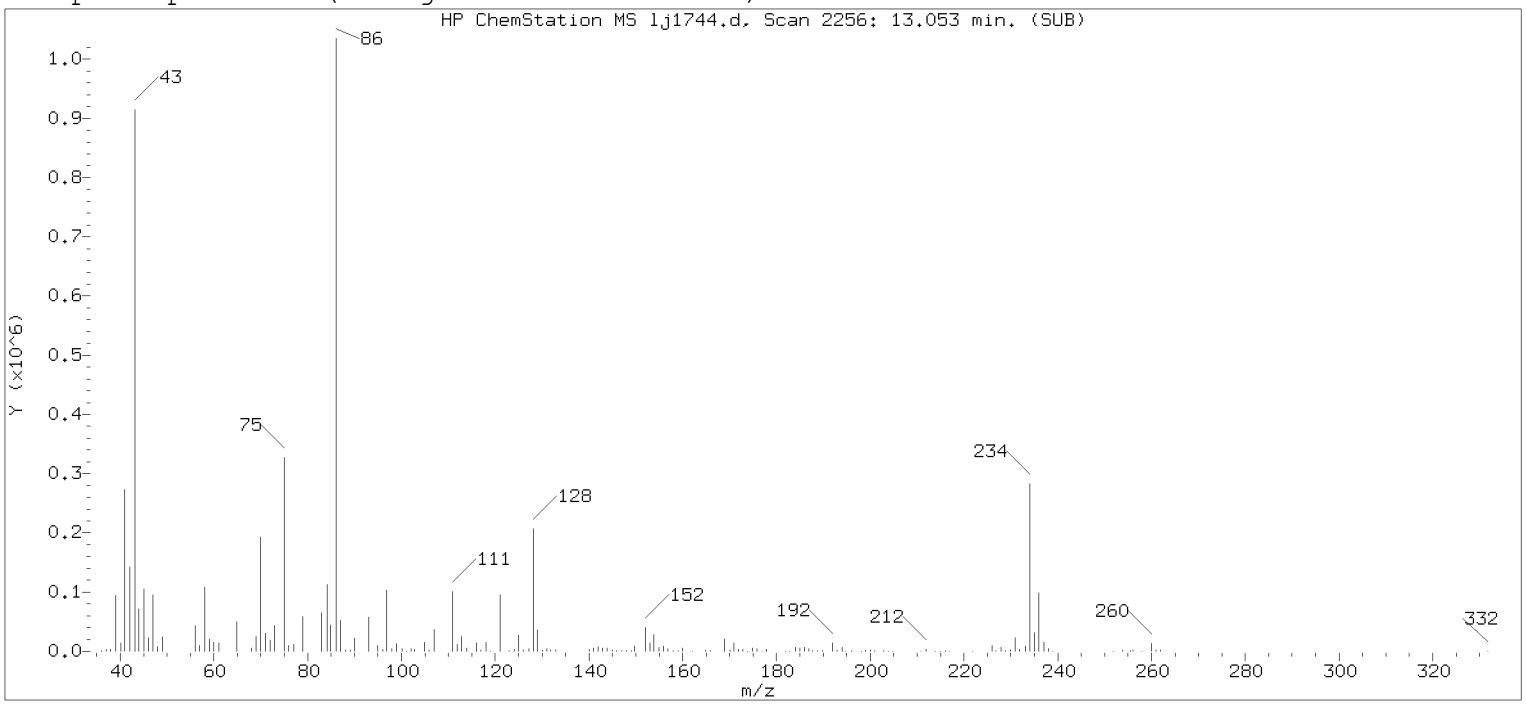
Compound Number : 149
Compound Name : Diallate (peak 2)
Scan Number : 2276
Retention Time (minutes) : 13.160
Quant Ion : 86.00
Area (flag) : 176901M
On-Column Amount (ng/ul) : 3.2902
Integration start scan : 2271 Integration stop scan: 2280
Y at integration start : 1232 Y at integration end: -821

Reason for manual integration: improper integration

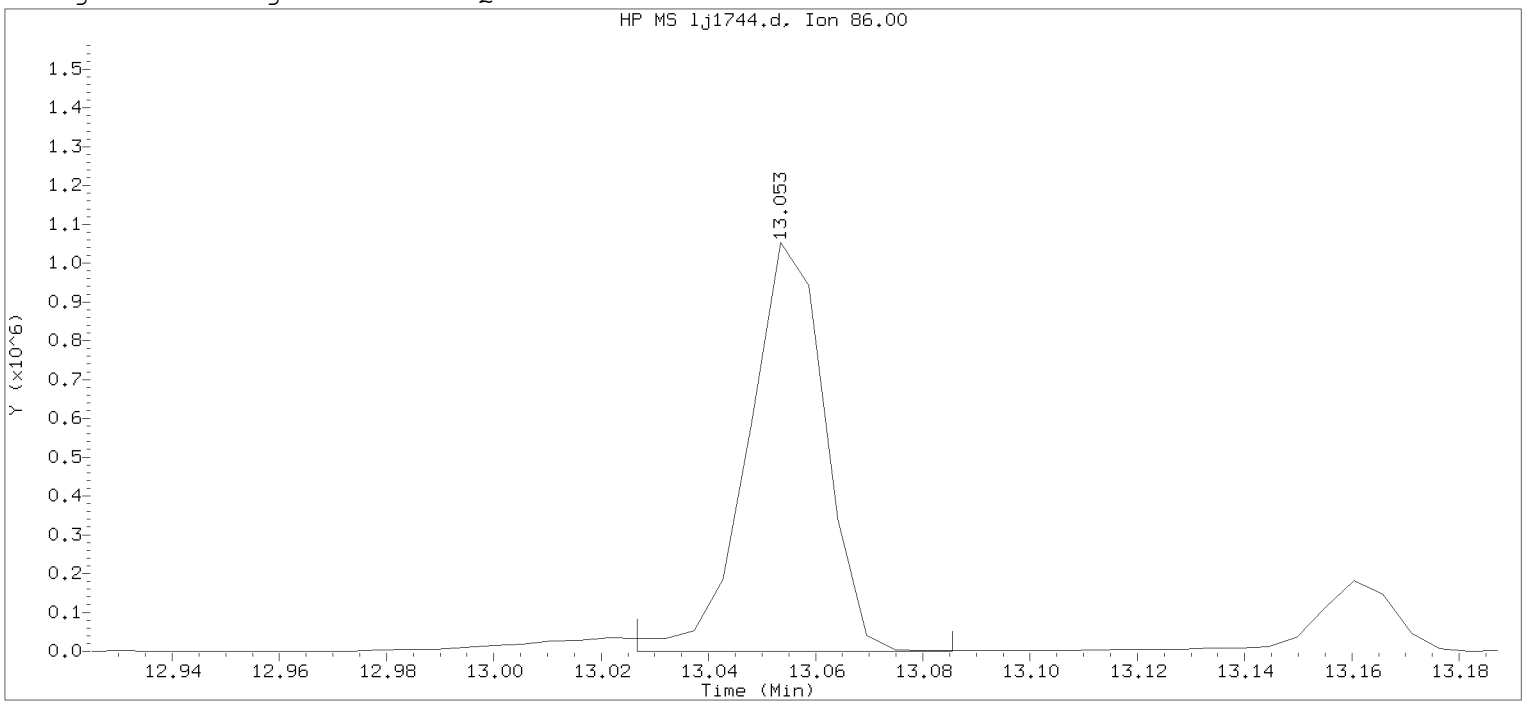
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

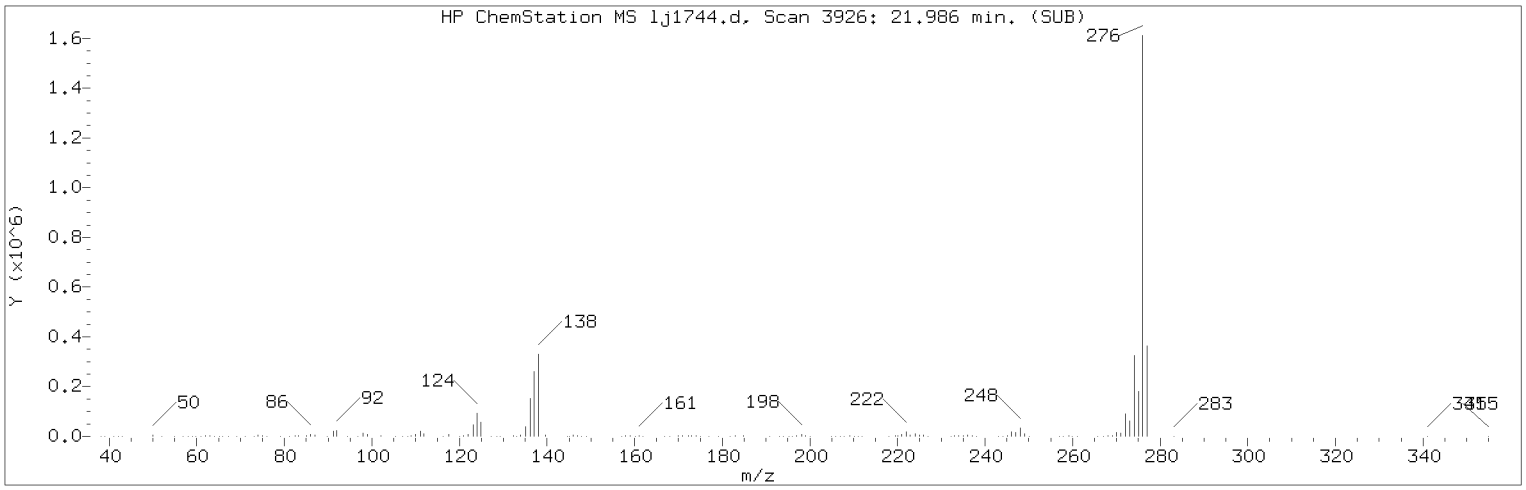
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

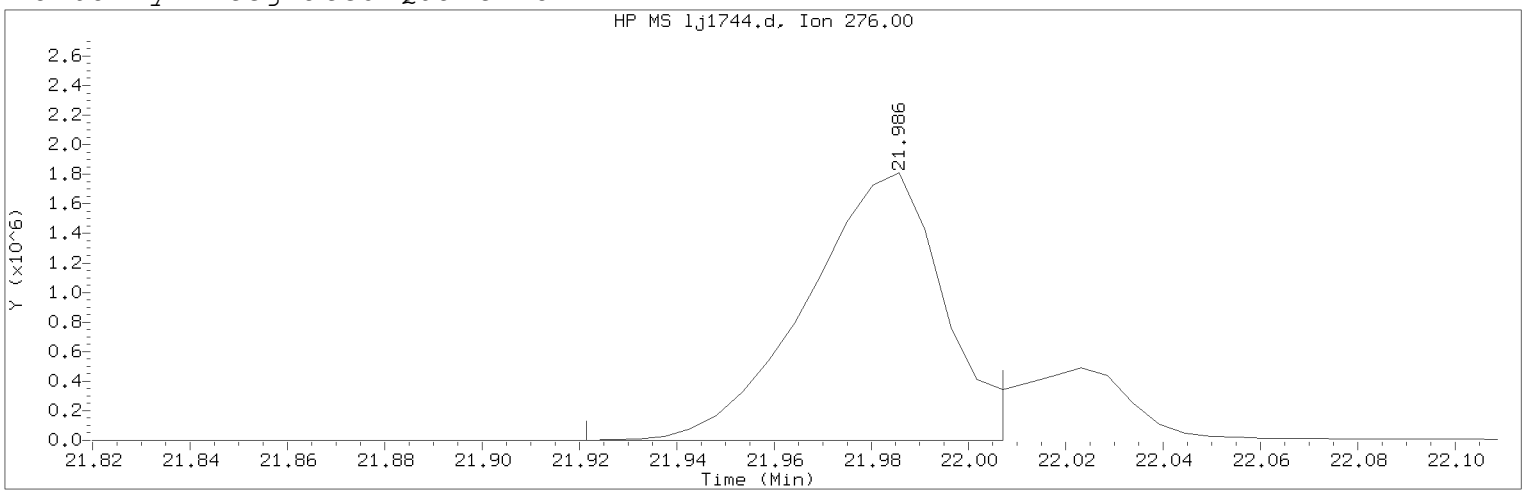
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2256		
Retention Time (minutes)	: 13.053		
Quant Ion	: 86.00		
Area	: 1047189		
On-column Amount (ng/ul)	: 7.5001		
Integration start scan	: 2250	Integration stop scan:	2261
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

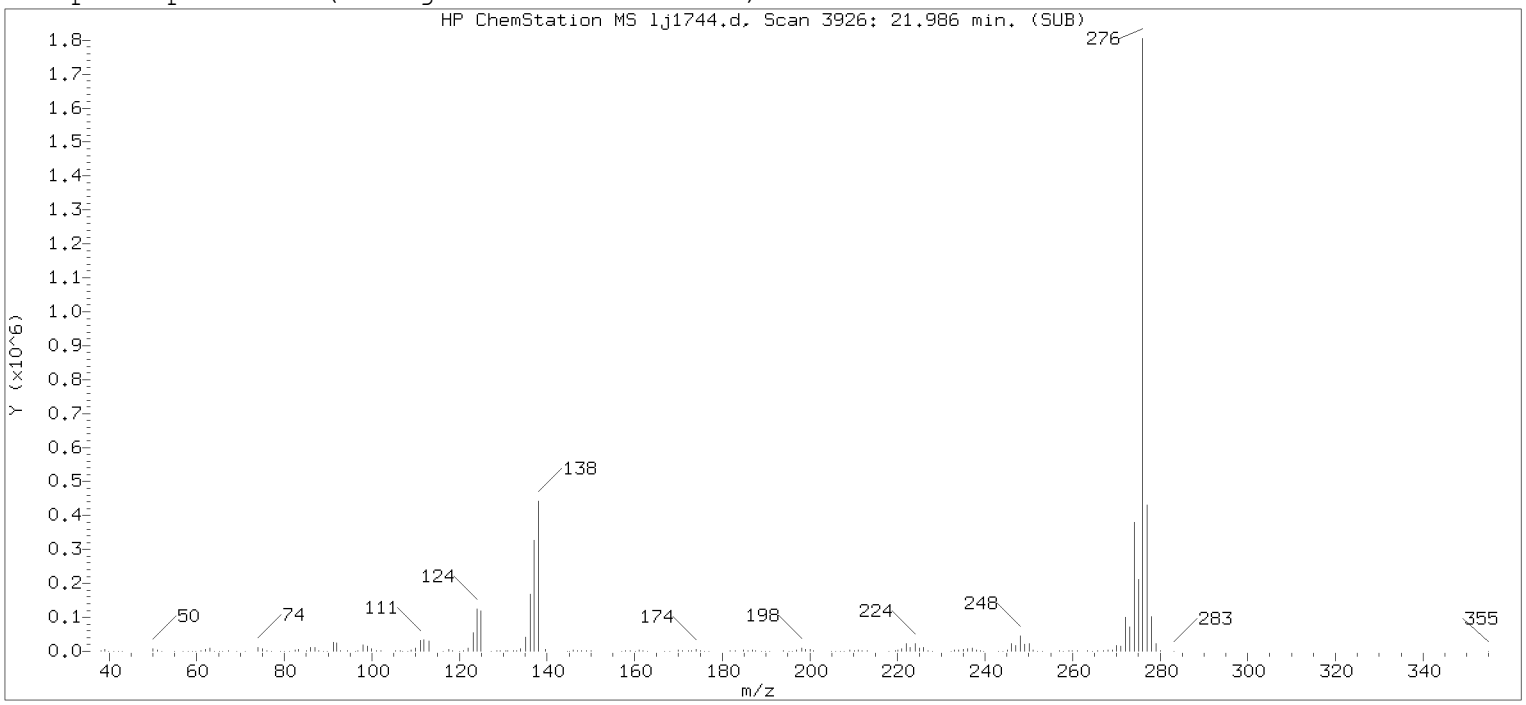
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3926
Retention Time (minutes) : 21.986
Quant Ion : 276.00
Area (flag) : 3537840M
On-Column Amount (ng/ul) : 21.9325
Integration start scan : 3913 Integration stop scan: 3929
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

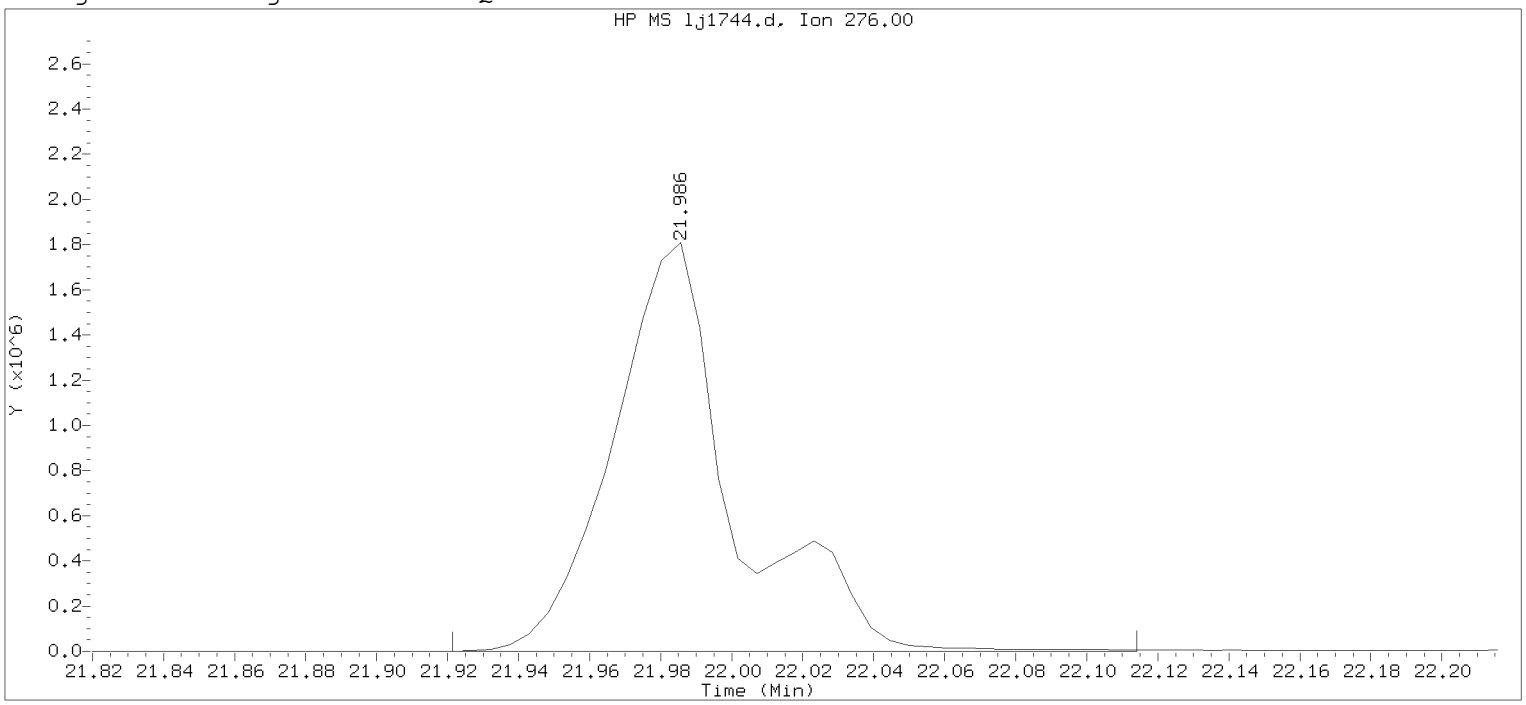
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



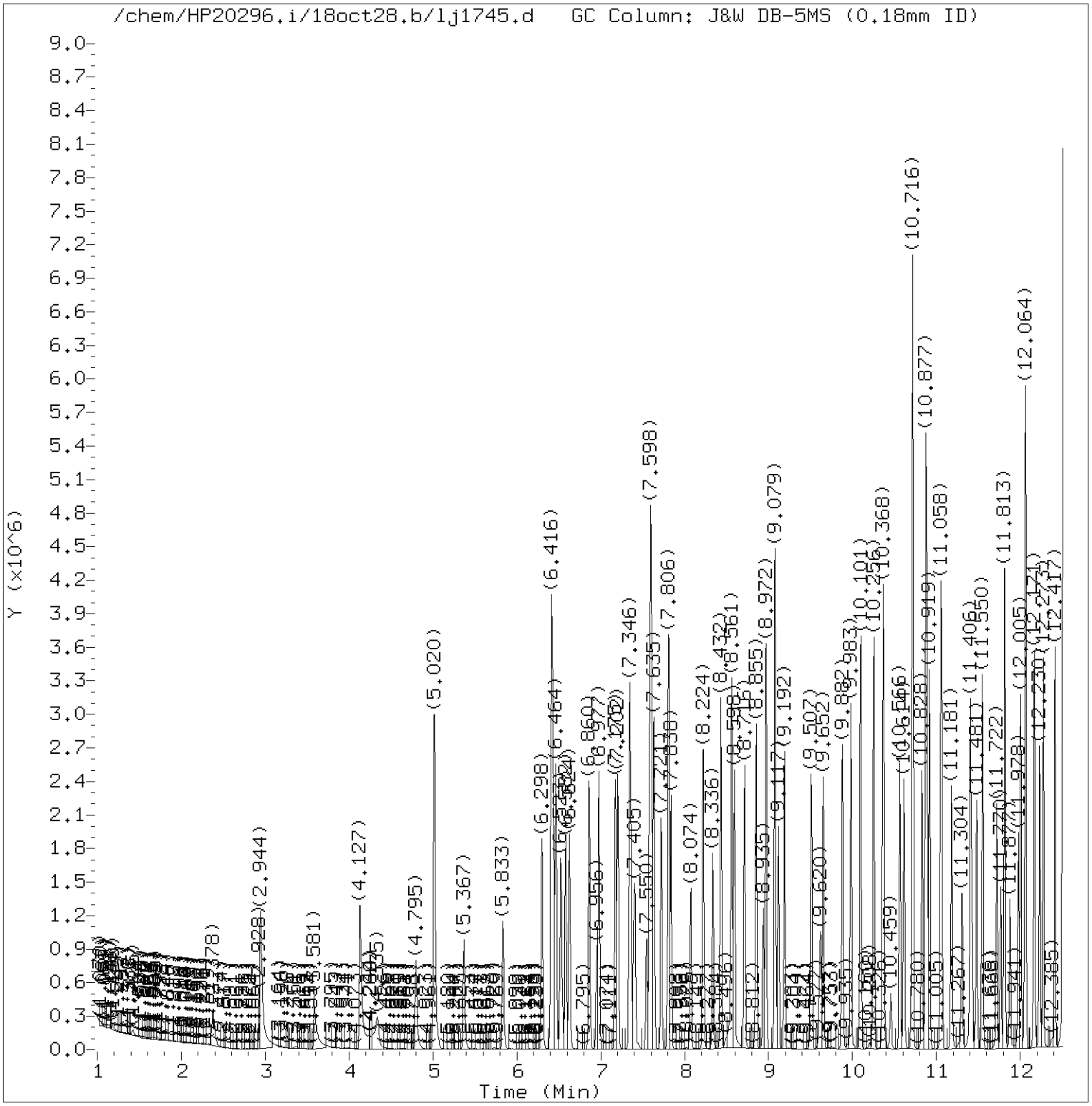
Data File: /chem/HP20296.i/18oct28.b/lj1744.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 01:53 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD20 Lab Sample ID: RVSTD2648

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3926		
Retention Time (minutes)	: 21.986		
Quant Ion	: 276.00		
Area	: 4276282		
On-column Amount (ng/ul)	: 26.1700		
Integration start scan	: 3913	Integration stop scan:	3949
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: atransue



Total Ion Chromatogram (TIC)

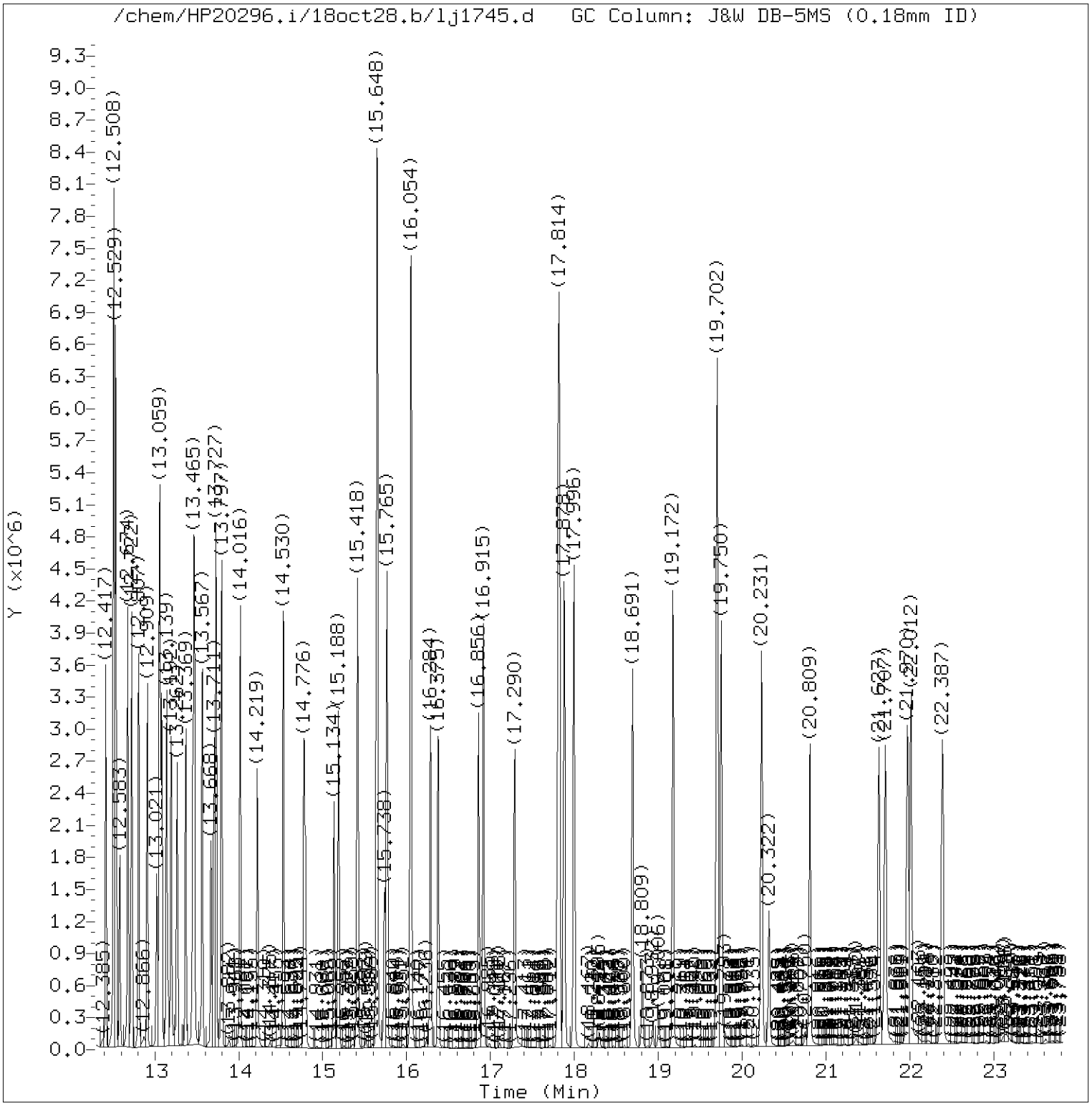
Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.378	88	321162M	12.632
5) N-Nitrosodimethylamine	(1)	2.928	74	495481	12.390
6) Pyridine	(1)	2.950	79	854771	12.555
8) 2-Picoline	(1)	4.132	93	853903	12.326
9) N-Nitrosomethylethylamine	(1)	4.335	88	351280	12.260
10) Methyl methanesulfonate	(1)	4.795	80	457089	12.537
12)$2-Fluorophenol	(1)	5.020	112	1373587	25.164
14) N-Nitrosodiethylamine	(1)	5.367	102	334877	12.510
43) Total Cresols	(1)			1364155	25.057
16) Ethyl methanesulfonate	(1)	5.833	109	351954	12.461
17) Benzaldehyde	(1)	6.298	77	637480	13.464
18)$Phenol-d6	(1)	6.416	99	1889497	25.400
19) Phenol	(1)	6.432	94	1081349	12.519
20) Aniline	(1)	6.464	93	1295318	12.663
21) a-methylstyrene	(1)	6.539	118	69798	12.906
23) bis(2-Chloroethyl)ether	(1)	6.582	93	824306	12.712
24) 2-Chlorophenol	(1)	6.624	128	644921	12.530
25) 1,3-Dichlorobenzene	(1)	6.865	146	720957	12.700
26)*1,4-Dichlorobenzene-d4	(1)	6.951	152	173232	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	711342	12.618
28) Benzyl alcohol	(1)	7.175	108	452013	12.713
29) 1,2-Dichlorobenzene	(1)	7.202	146	690679	12.737
31) Indene	(1)	7.341	115	760573	12.516
32) 2-Methylphenol	(1)	7.352	108	680821	12.651
100) Isosafrole	(3)			531245	12.204
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.405	45	1039624	12.607
35) bis(2-Chloroisopropyl)ether	(1)	7.405	45	1039624	12.607
36) N-Nitrosopyrrolidine	(1)	7.550	100	360291	12.639
37) Acetophenone	(1)	7.582	105	1047077	12.736
38) 4-Methylphenol	(1)	7.598	108	683334	12.406
39) N-Nitroso-di-n-propylamine	(1)	7.603	70	630058	12.624
40) N-Nitrosomorpholine	(1)	7.619	56	449253	12.551
41) o-Toluidine	(1)	7.635	106	1177383	12.541
44) Hexachloroethane	(1)	7.721	117	328352	12.841
45)$Nitrobenzene-d5	(2)	7.806	82	1794769	25.156
46) Nitrobenzene	(2)	7.838	77	943929	12.491
125) 2,4_2,6-Dinitrotoluenes	(3)			685128	24.815
50) N-Nitrosopiperidine	(2)	8.074	114	338368	12.576
52) Isophorone	(2)	8.224	82	1600823	12.446
53) 2-Nitrophenol	(2)	8.336	139	322230	12.586

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

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.432	107	763482	12.492
59) O,O,O-Triethylphosphorothioate	(2)	8.561	198	316674	12.299
58) Benzoic acid	(2)	8.582	105	520132M	12.704
57) bis(2-Chloroethoxy)methane	(2)	8.598	93	997376	12.570
62) 2,4-Dichlorophenol	(2)	8.716	162	535515	12.284
151) Diallate trans/cis	(4)			738166	12.515
65) 1,2,4-Trichlorobenzene	(2)	8.855	180	613802	12.642
68)*Naphthalene-d8	(2)	8.935	136	655608	5.000
69) Naphthalene	(2)	8.972	128	1892176	12.699
70) 4-Chloroaniline	(2)	9.074	127	761567	12.477
71) 2,6-Dichlorophenol	(2)	9.079	162	529318	12.584
72) Hexachloropropene	(2)	9.117	213	408716	12.648
74) Hexachlorobutadiene	(2)	9.192	225	363390	12.568
78) Quinoline	(2)	9.507	129	1113166	12.557
79) Caprolactam	(2)	9.620	113	175420	12.879
80) N-Nitrosodi-n-butylamine	(2)	9.652	84	582837	11.288
83) 4-Chloro-3-methylphenol	(2)	9.882	107	643925	12.301
85) Safrole	(2)	9.983	162	474359	12.525
86) 2-Methylnaphthalene	(2)	10.101	142	1205213	12.619
87) 1-Methylnaphthalene	(2)	10.256	142	1152959	12.562
88) Hexachlorocyclopentadiene	(3)	10.363	237	370364	12.250
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.374	216	618255	12.046
91) cis-Isosafrole	(3)	10.459	162	85779	2.013
93) 2,4,6-Trichlorophenol	(3)	10.566	196	402773	12.151
95) 2,4,5-Trichlorophenol	(3)	10.614	196	421239	12.316
96)$2-Fluorobiphenyl	(3)	10.721	172	2745062	24.457
97) trans-Isosafrole	(3)	10.828	162	445466	10.191
98) 1,1'-Biphenyl	(3)	10.877	154	1441485	12.477
99) 2-Chloronaphthalene	(3)	10.887	162	1218585	11.816
101) 1-Chloronaphthalene	(3)	10.919	162	1093740	12.903
103) Diphenyl ether	(3)	11.058	170	794959	12.204
104) 2-Nitroaniline	(3)	11.069	138	348760	12.451
108) 1,4-Naphthoquinone	(3)	11.181	158	468140	12.146
109) 1,4-Dinitrobenzene	(3)	11.310	168	181968	12.447
110) Dimethylphthalate	(3)	11.406	163	1299493	12.361
111) 1,3-Dinitrobenzene	(3)	11.422	168	199220	12.055
113) 2,6-Dinitrotoluene	(3)	11.481	165	286675	12.319
114) Acenaphthylene	(3)	11.550	152	1637539	12.832
117) 3-Nitroaniline	(3)	11.722	138	301188	11.821
118)*Acenaphthene-d10	(3)	11.764	164	330289	5.000

M = Compound was manually integrated.
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Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.818	153	1205470	12.177
120) 2,4-Dinitrophenol	(3)	11.877	184	156239	11.567
121) 4-Nitrophenol	(3)	11.978	109	271133	12.900
122) Pentachlorobenzene	(3)	12.005	250	519926	12.603
124) Dibenzofuran	(3)	12.064	168	1635669	12.291
123) 2,4-Dinitrotoluene	(3)	12.069	165	398453	12.497
126) 1-Naphthylamine	(3)	12.171	143	1153230	12.007
127) 2,3,4,6-Tetrachlorophenol	(3)	12.230	232	339788	12.451
128) 2-Naphthylamine	(3)	12.273	143	1154976	12.051
129) Diethylphthalate	(3)	12.417	149	1299901	12.478
130) Thionazin	(3)	12.508	107	258125	12.469
131) Fluorene	(3)	12.508	166	1262144	12.136
133) 5-Nitro-o-toluidine	(3)	12.529	152	361669	12.409
132) 4-Chlorophenyl-phenylether	(3)	12.529	204	667634	12.372
134) 4-Nitroaniline	(3)	12.540	138	322052	12.503
135) 4,6-Dinitro-2-methylphenol	(4)	12.583	198	220985	12.294
136) N-Nitrosodiphenylamine	(4)	12.679	169	1059063	12.282
137) NDPA as diphenylamine	(4)	12.679	169	1059063	12.282
139) 1,2-Diphenylhydrazine	(4)	12.722	77	1862569	12.279
140)$2,4,6-Tribromophenol	(3)	12.807	330	341227	24.084
142) Tetraethyldithiopyrophosphate	(4)	12.909	97	277636	12.146
144) 1,3,5-Trinitrobenzene	(4)	13.021	213	132010	11.996
145) Diallate (peak 1)	(4)	13.053	86	635871	10.471
146) Phorate	(4)	13.059	75	1093663	13.564
147) Phenacetin	(4)	13.080	108	802554	12.389
148) 4-Bromophenyl-phenylether	(4)	13.139	248	365896	12.315
149) Diallate (peak 2)	(4)	13.160	86	102295M	2.044
150) Hexachlorobenzene	(4)	13.198	284	379743	12.513
152) Dimethoate	(4)	13.262	87	645283	12.580
153) Atrazine	(4)	13.369	200	337051	12.675
154) Pentachlorophenol	(4)	13.455	266	247536	12.028
155) 4-Aminobiphenyl	(4)	13.465	169	987006	12.755
156) Pentachloronitrobenzene	(4)	13.471	237	178609	12.284
157) Pronamide	(4)	13.567	173	630774	12.567
158)*Phenanthrene-d10	(4)	13.695	188	666537	5.000
159) Dinoseb	(4)	13.711	211	335008	12.092
160) Phenanthrene	(4)	13.727	178	1969376	12.078
162) Anthracene	(4)	13.797	178	1988372	12.470
168) Carbazole	(4)	14.016	167	1793030	12.437
169) Methyl parathion	(4)	14.219	109	492761	12.388

M = Compound was manually integrated.
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Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

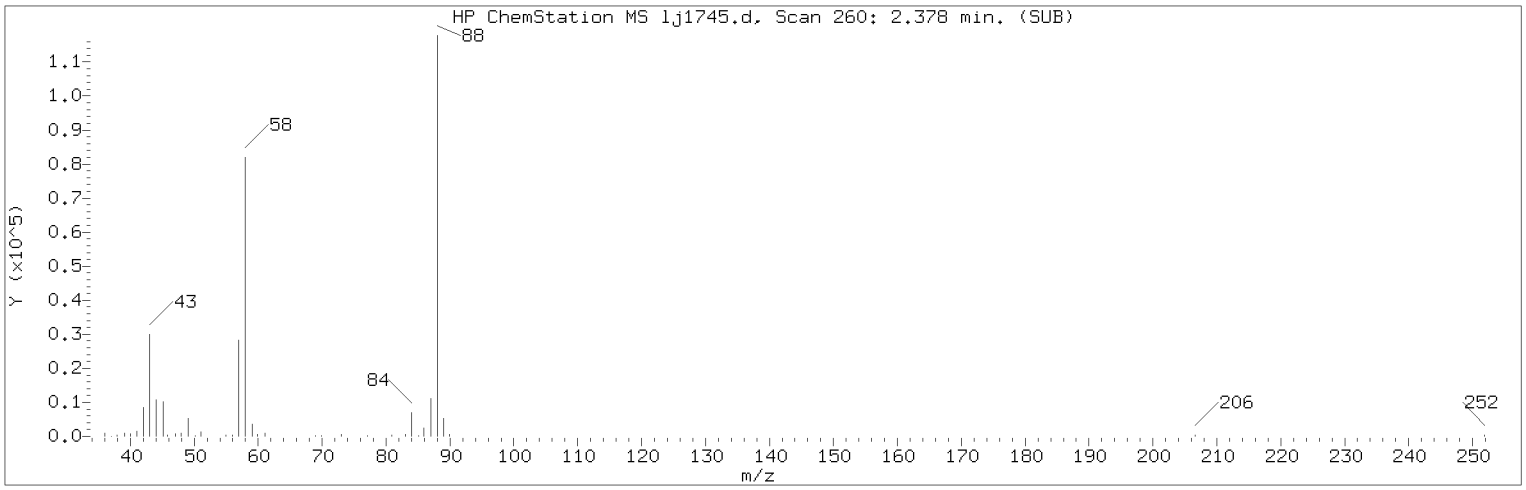
Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.530	149	2307624	12.267
172) Parathion	(4)	14.776	109	320006	12.243
173) 4-Nitroquinoline-1-oxide	(4)	14.797	190	171427	12.277
227) Total PAHs	(6)			33224607	228.821
174) Octachlorostyrene	(4)	15.139	308	137056	11.868
176) Isodrin	(4)	15.188	193	239658	12.241
178) Fluoranthene	(4)	15.418	202	2236540	12.484
179) Benzidine	(5)	15.653	184	4201102M	36.631
180)*Pyrene-d10	(5)	15.738	212	694893	5.000
182) Pyrene	(5)	15.765	202	2291438	12.496
184)$Terphenyl-d14	(5)	16.054	244	2799009	24.315
187) p-Dimethylaminoazobenzene	(5)	16.284	225	375780	12.188
190) Chlorobenzilate	(5)	16.375	139	702405	12.365
192) 3,3'-Dimethylbenzidine	(5)	16.856	212	1379326	12.151
193) Butylbenzylphthalate	(5)	16.915	149	1065474	12.307
196) 2-Acetylaminofluorene	(5)	17.290	181	881978	11.942
198) 3,3'-Dichlorobenzidine	(5)	17.803	252	793992	12.094
200) Benzo(a)anthracene	(5)	17.814	228	2253908	12.941
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.819	231	440781	12.025
201) Chrysene	(5)	17.878	228	2095718	12.382
204) bis(2-Ethylhexyl)phthalate	(5)	17.996	149	1537540	12.236
208) 6-Methylchrysene	(5)	18.696	242	1401511	12.072
210) Di-n-octylphthalate	(6)	19.172	149	2683955	12.628
211) Benzo(b)fluoranthene	(6)	19.702	252	2102556	12.947
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.707	256	913557	12.512
213) Benzo(k)fluoranthene	(6)	19.750	252	2124384	12.964
216) Benzo(a)pyrene	(6)	20.231	252	1997549	13.259
218)*Perylene-d12	(6)	20.322	264	612320	5.000
220) 3-Methylcholanthrene	(6)	20.809	268	894016	12.415
222) Dibenz(a,h)acridine	(6)	21.627	279	1562077	12.605
223) Dibenz(a,j)acridine	(6)	21.707	279	1639526	12.767
224) Indeno(1,2,3-cd)pyrene	(6)	21.970	276	1913057M	13.376
225) Dibenz(a,h)anthracene	(6)	22.012	278	1924711	13.225
226) Benzo(g,h,i)perylene	(6)	22.387	276	1971497	13.174

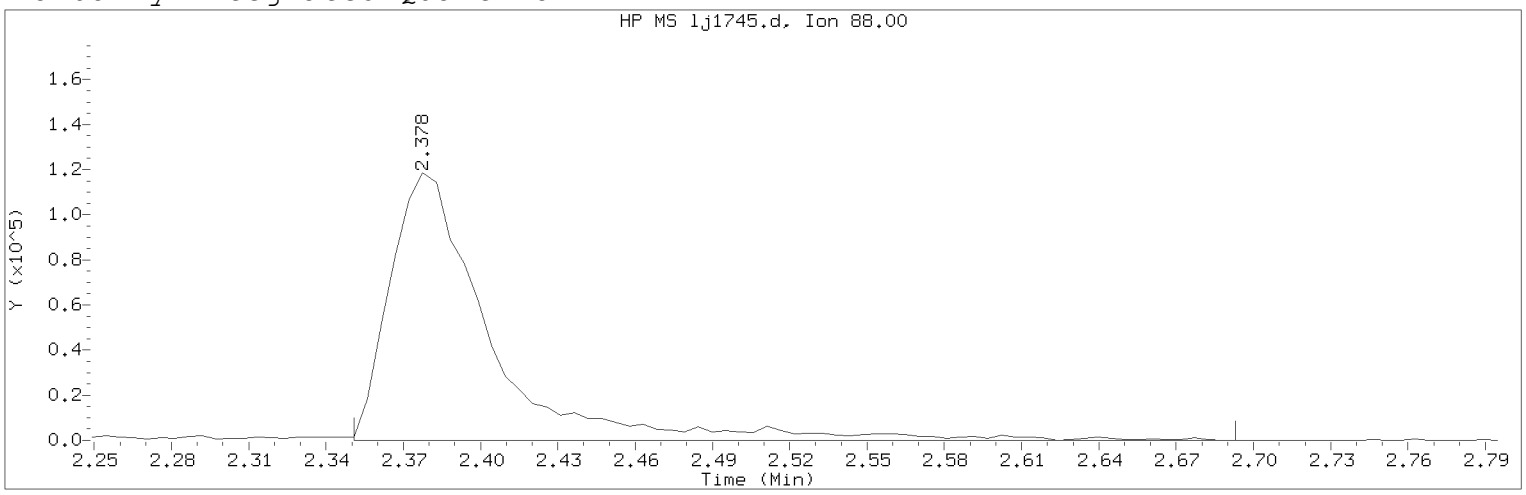
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

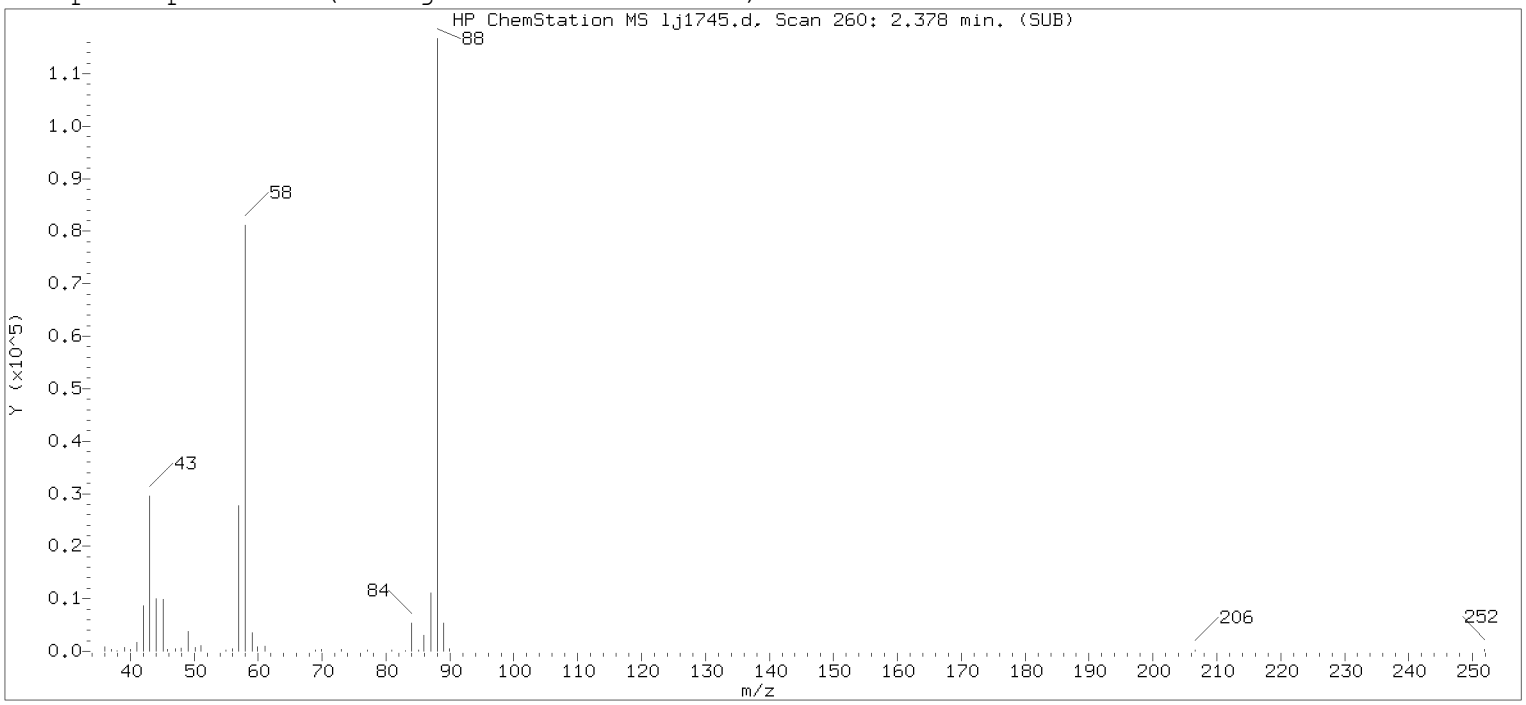
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 260
Retention Time (minutes) : 2.378
Quant Ion : 88.00
Area (flag) : 321162M
On-Column Amount (ng/ul) : 12.6322
Integration start scan : 254 Integration stop scan: 318
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

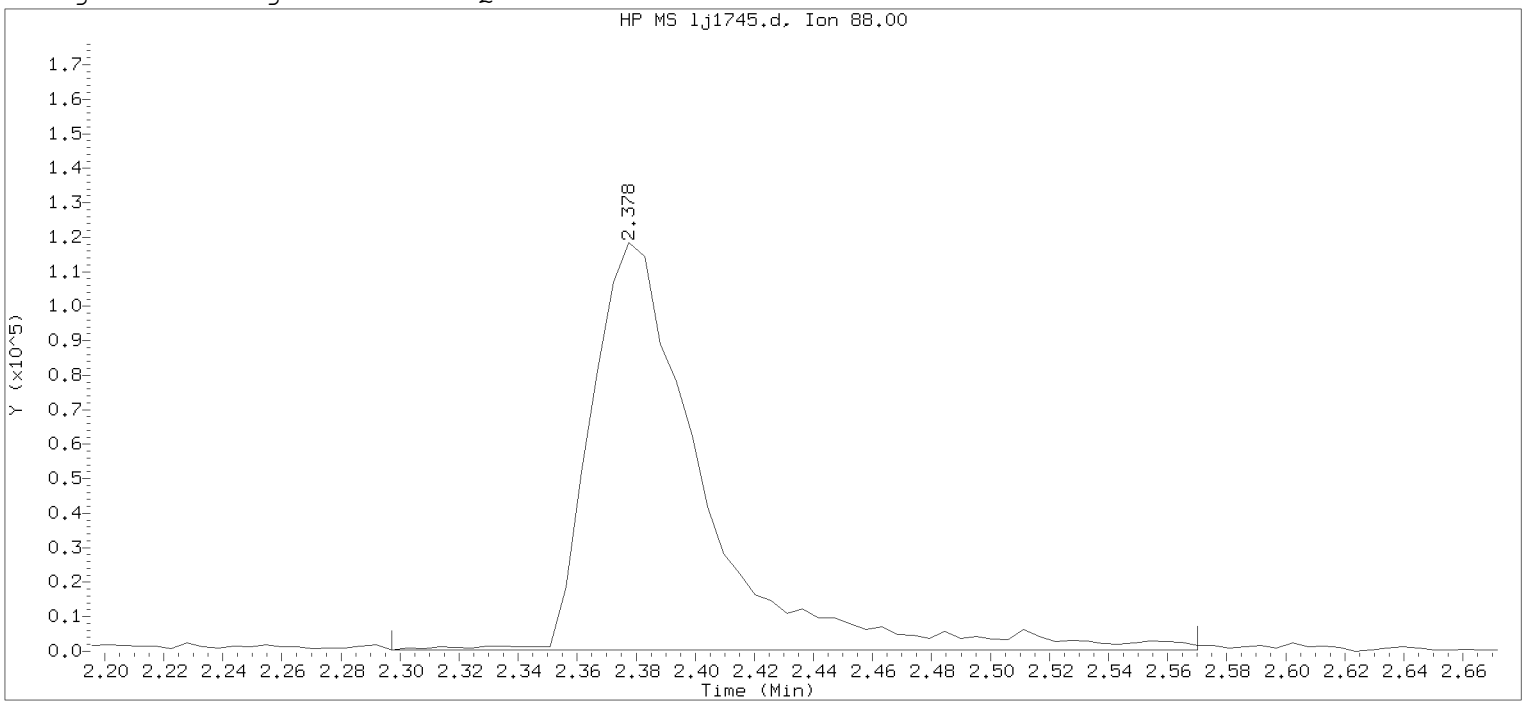
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

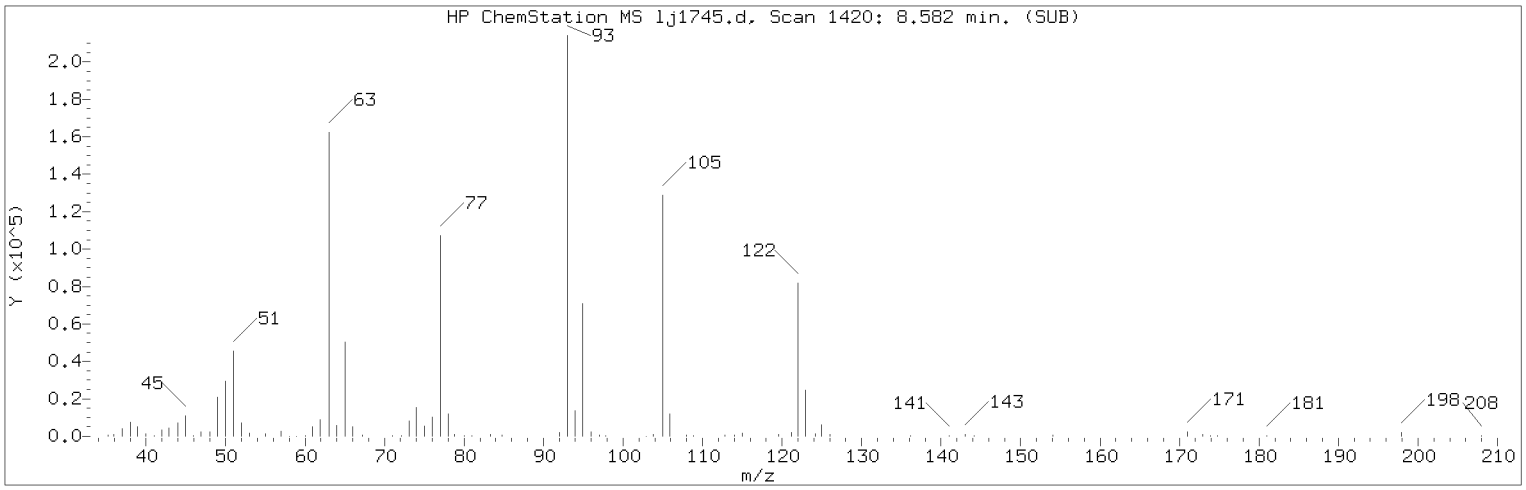
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

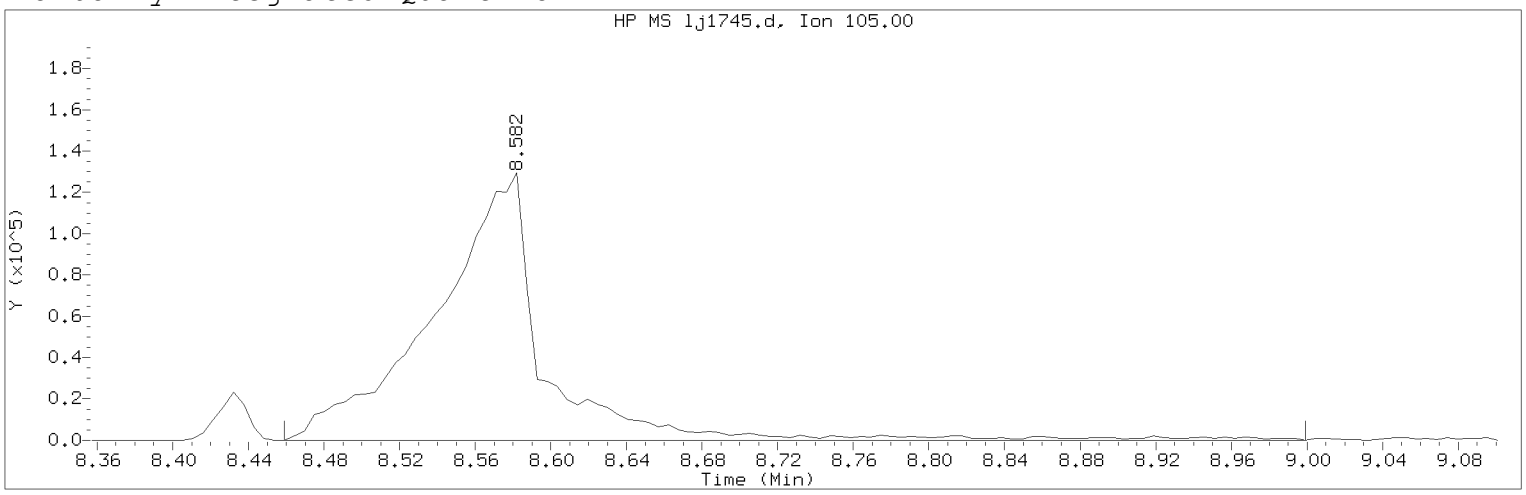
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 260		
Retention Time (minutes)	: 2.378		
Quant Ion	: 88.00		
Area	: 311071		
On-column Amount (ng/ul)	: 12.1750		
Integration start scan	: 244	Integration stop scan:	295
Y at integration start	: 433	Y at integration end:	433

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

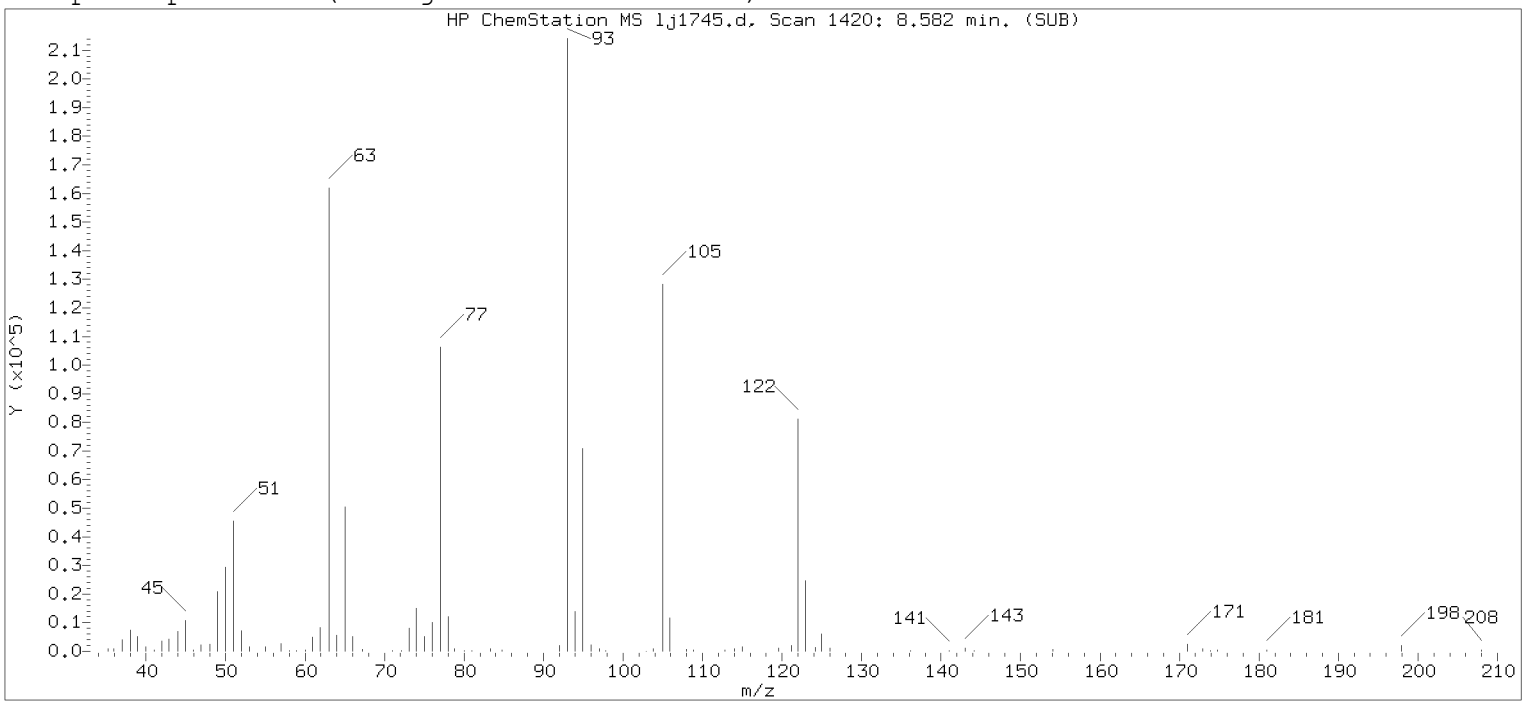
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1420
Retention Time (minutes) : 8.582
Quant Ion : 105.00
Area (flag) : 520132M
On-Column Amount (ng/ul) : 12.7045
Integration start scan : 1396 Integration stop scan: 1497
Y at integration start : -11 Y at integration end: -37

Reason for manual integration: improper integration

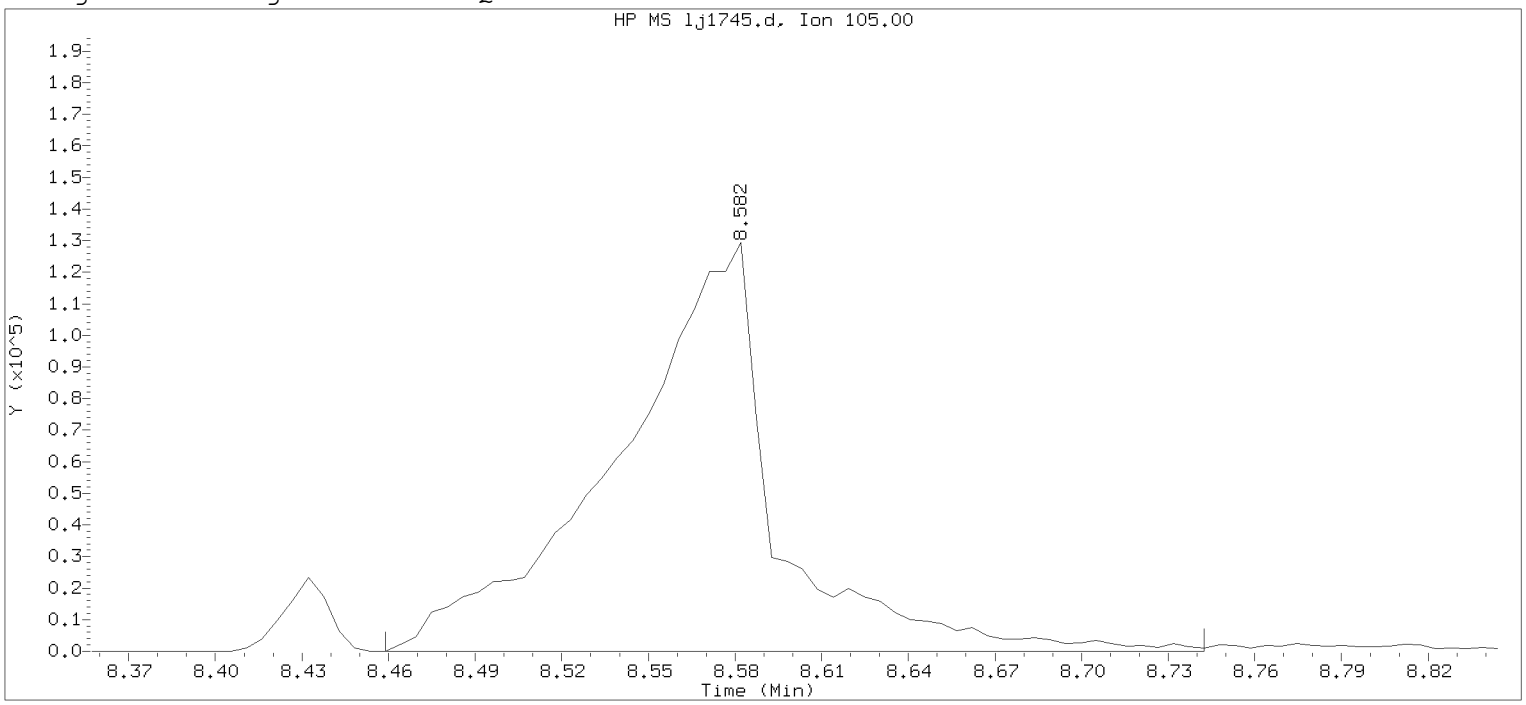
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

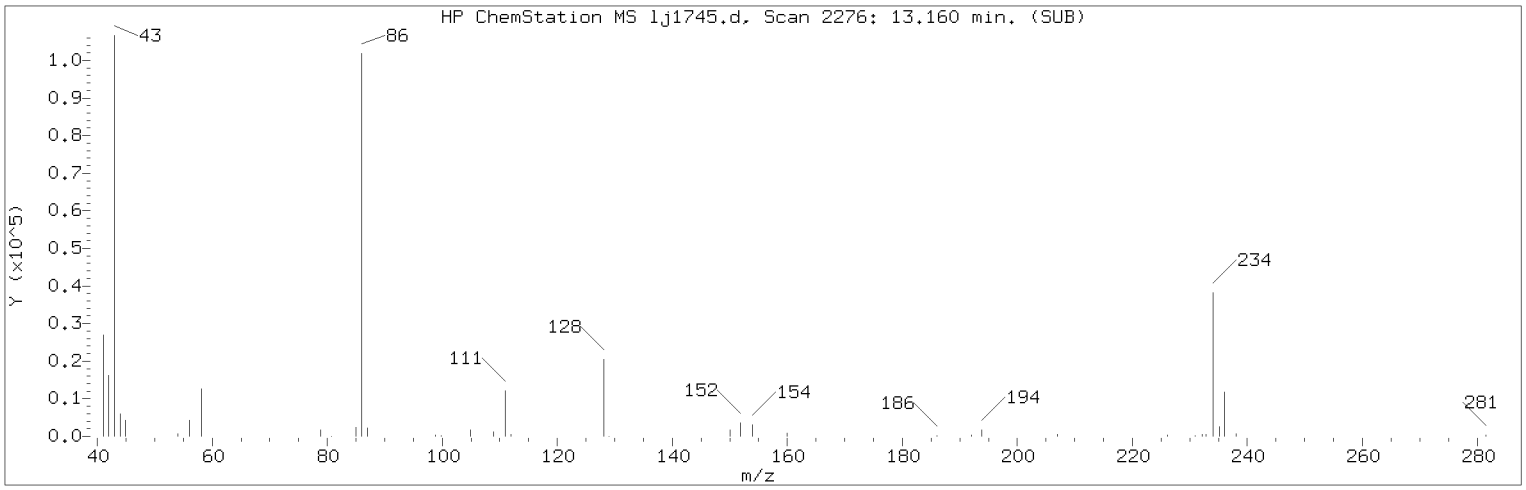
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

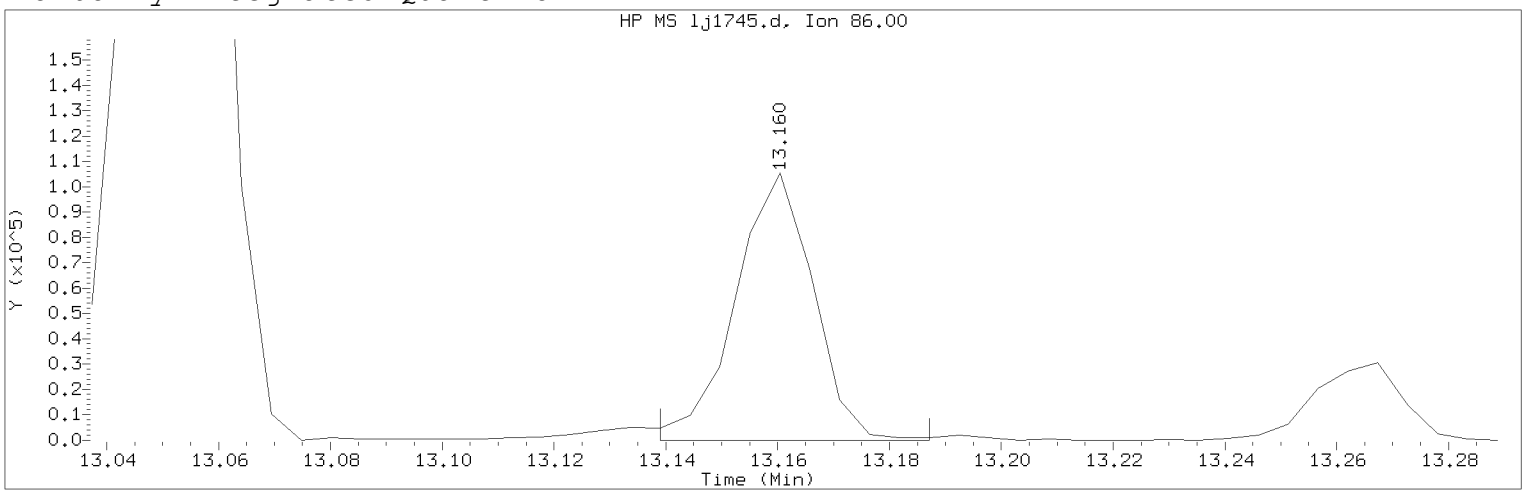
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1420
Retention Time (minutes) : 8.582
Quant Ion : 105.00
Area : 499879
On-column Amount (ng/ul) : 16.4370
Integration start scan : 1396 Integration stop scan: 1449
Y at integration start : 0 Y at integration end: 0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: Ashley R. Transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

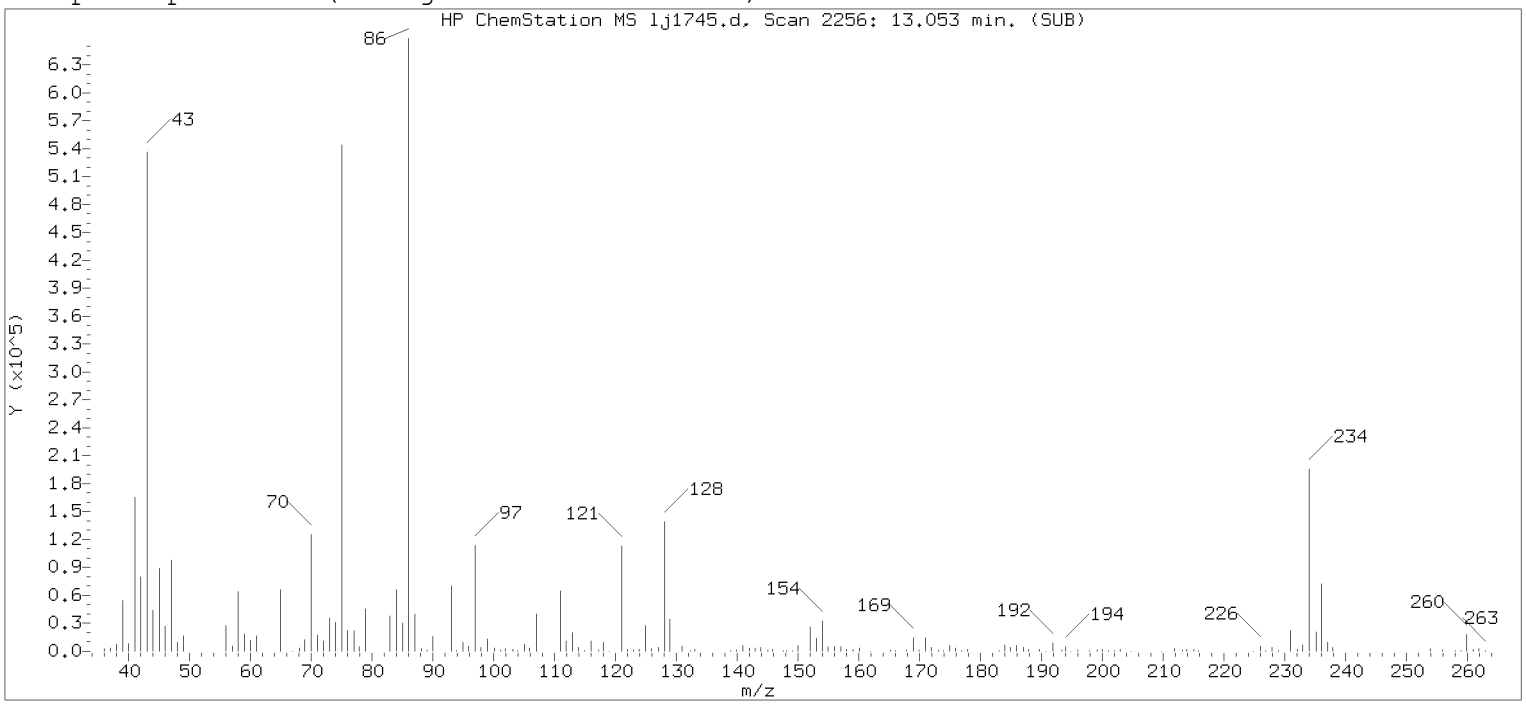
Compound Number : 149
Compound Name : Diallate (peak 2)
Scan Number : 2276
Retention Time (minutes) : 13.160
Quant Ion : 86.00
Area (flag) : 102295M
On-Column Amount (ng/ul) : 2.0440
Integration start scan : 2271 Integration stop scan: 2280
Y at integration start : -121 Y at integration end: -121

Reason for manual integration: improper integration

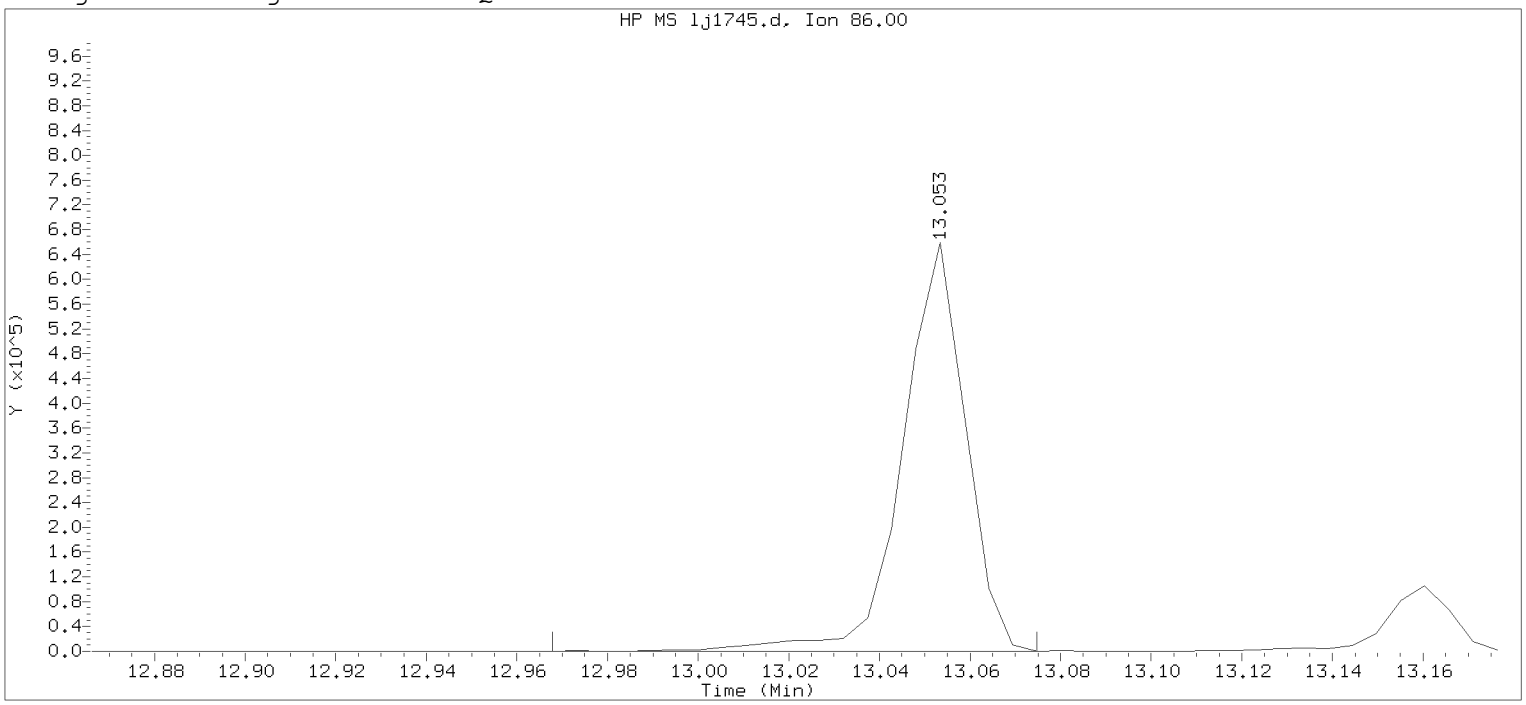
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

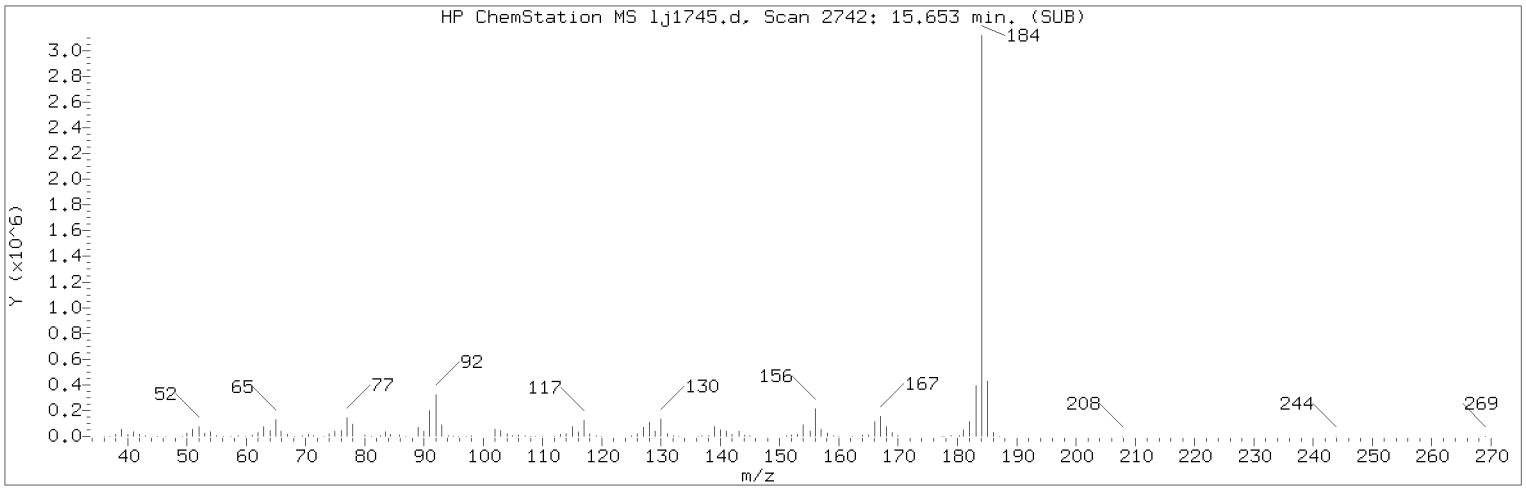
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

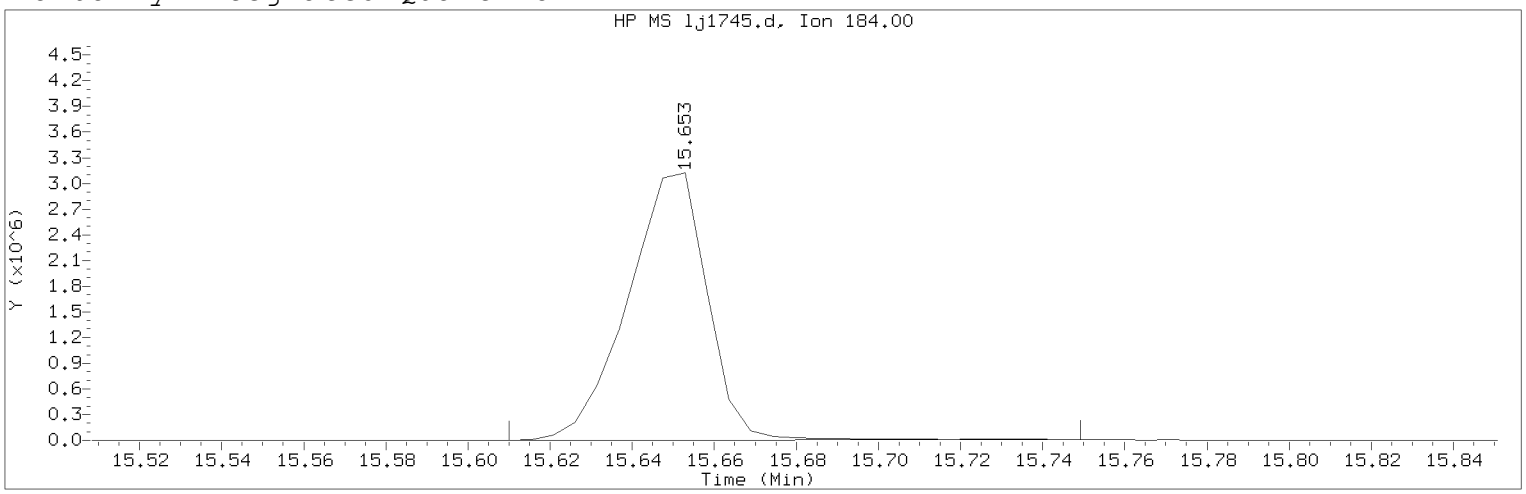
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2256		
Retention Time (minutes)	: 13.053		
Quant Ion	: 86.00		
Area	: 635871		
On-column Amount (ng/ul)	: 3.6712		
Integration start scan	: 2239	Integration stop scan:	2259
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

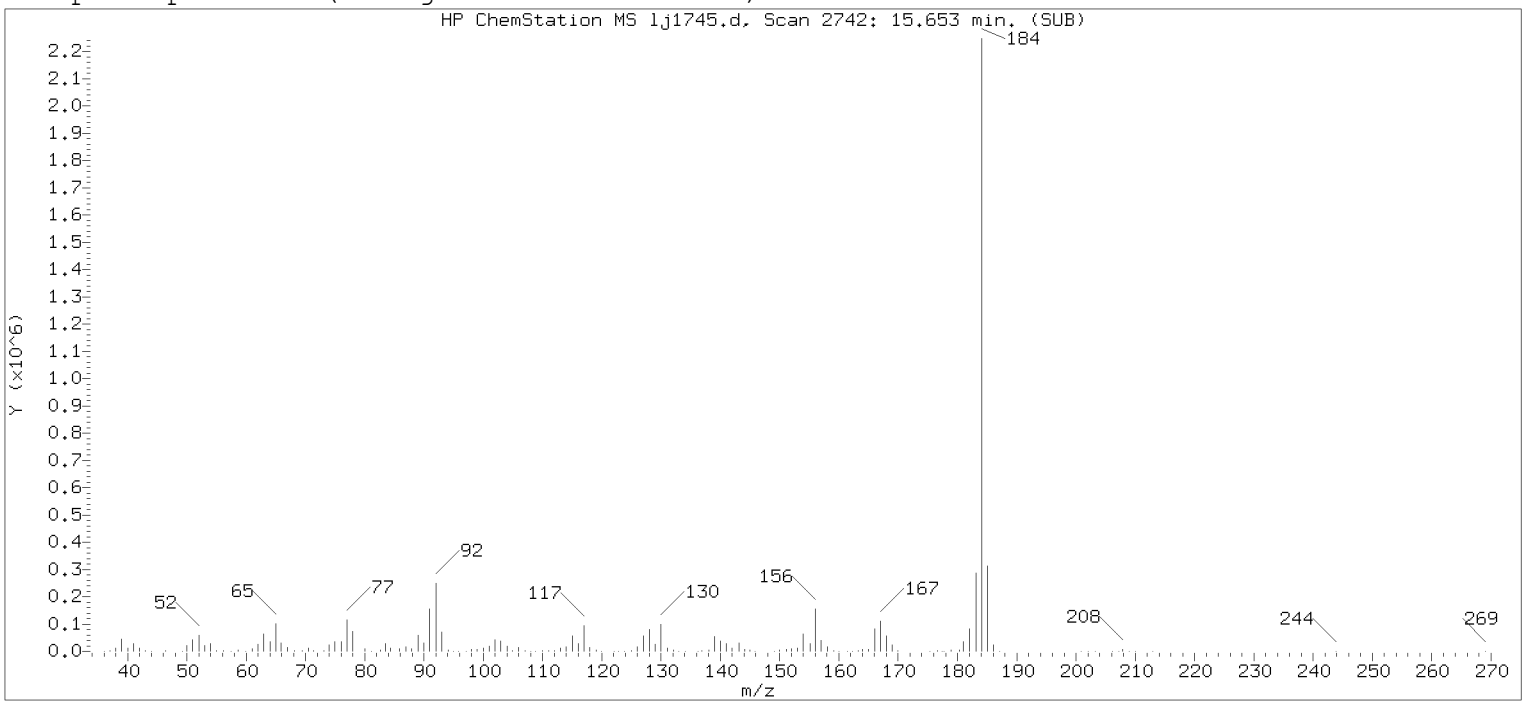
Compound Number : 179
Compound Name : Benzidine
Scan Number : 2742
Retention Time (minutes) : 15.653
Quant Ion : 184.00
Area (flag) : 4201102M
On-Column Amount (ng/ul) : 36.6305
Integration start scan : 2733 Integration stop scan: 2759
Y at integration start : 1753 Y at integration end: 6173

Reason for manual integration: improper integration

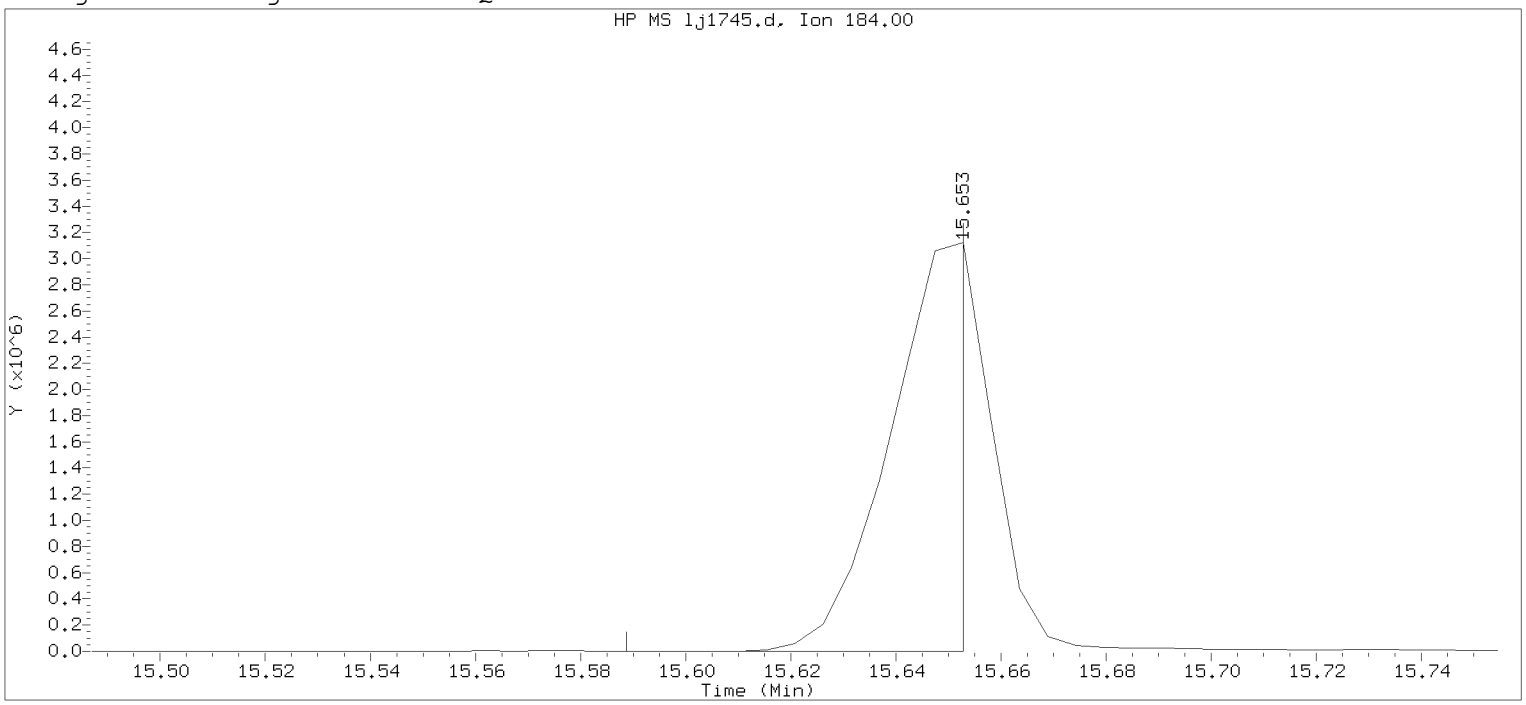
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

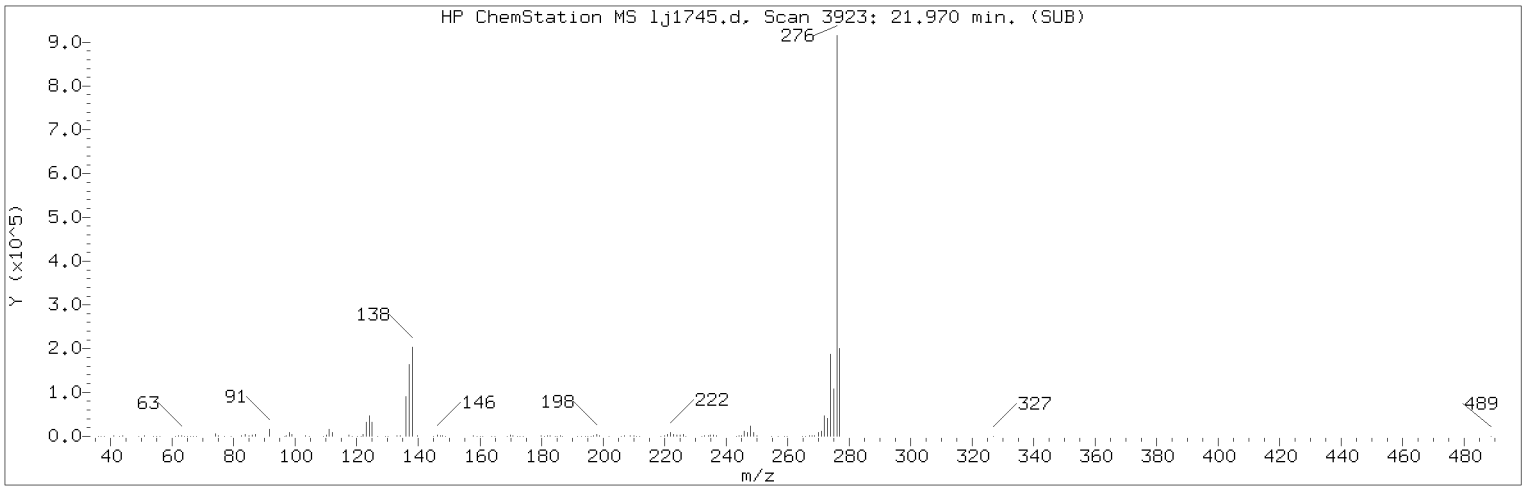
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

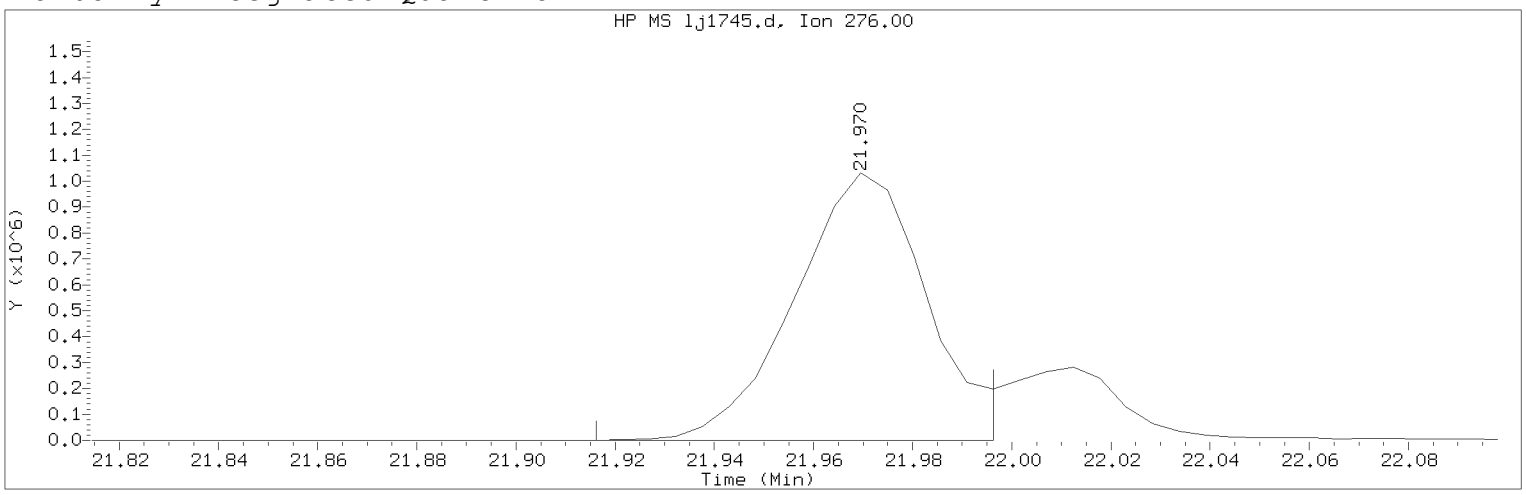
Compound Number	: 179		
Compound Name	: Benzidine		
Scan Number	: 2742		
Retention Time (minutes)	: 15.653		
Quant Ion	: 184.00		
Area	: 2898529		
On-column Amount (ng/ul)	: 26.0571		
Integration start scan	: 2729	Integration stop scan	: 2741
Y at integration start	: 640	Y at integration end	: 640

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: ART

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

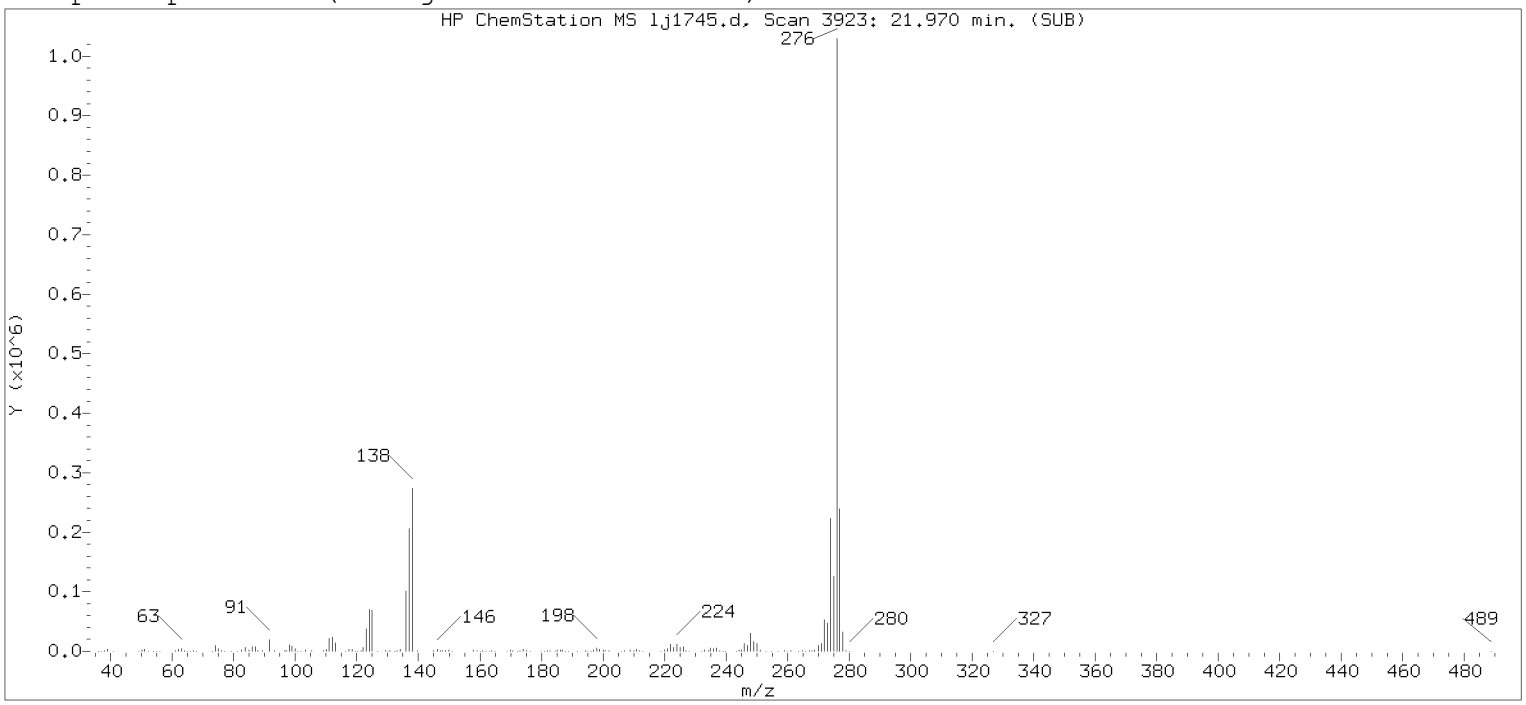
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3923
Retention Time (minutes) : 21.970
Quant Ion : 276.00
Area (flag) : 1913057M
On-Column Amount (ng/ul) : 13.3761
Integration start scan : 3912 Integration stop scan: 3927
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

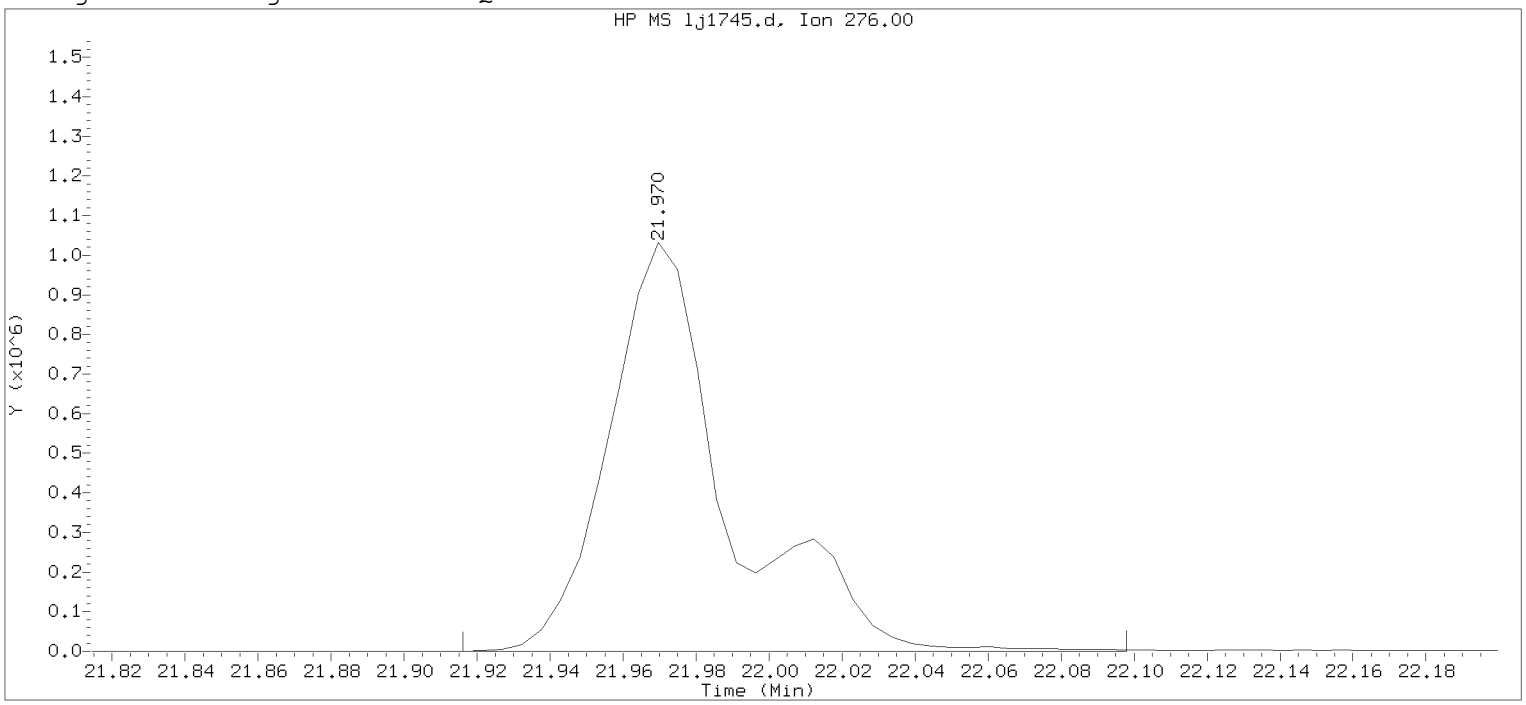
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:01.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



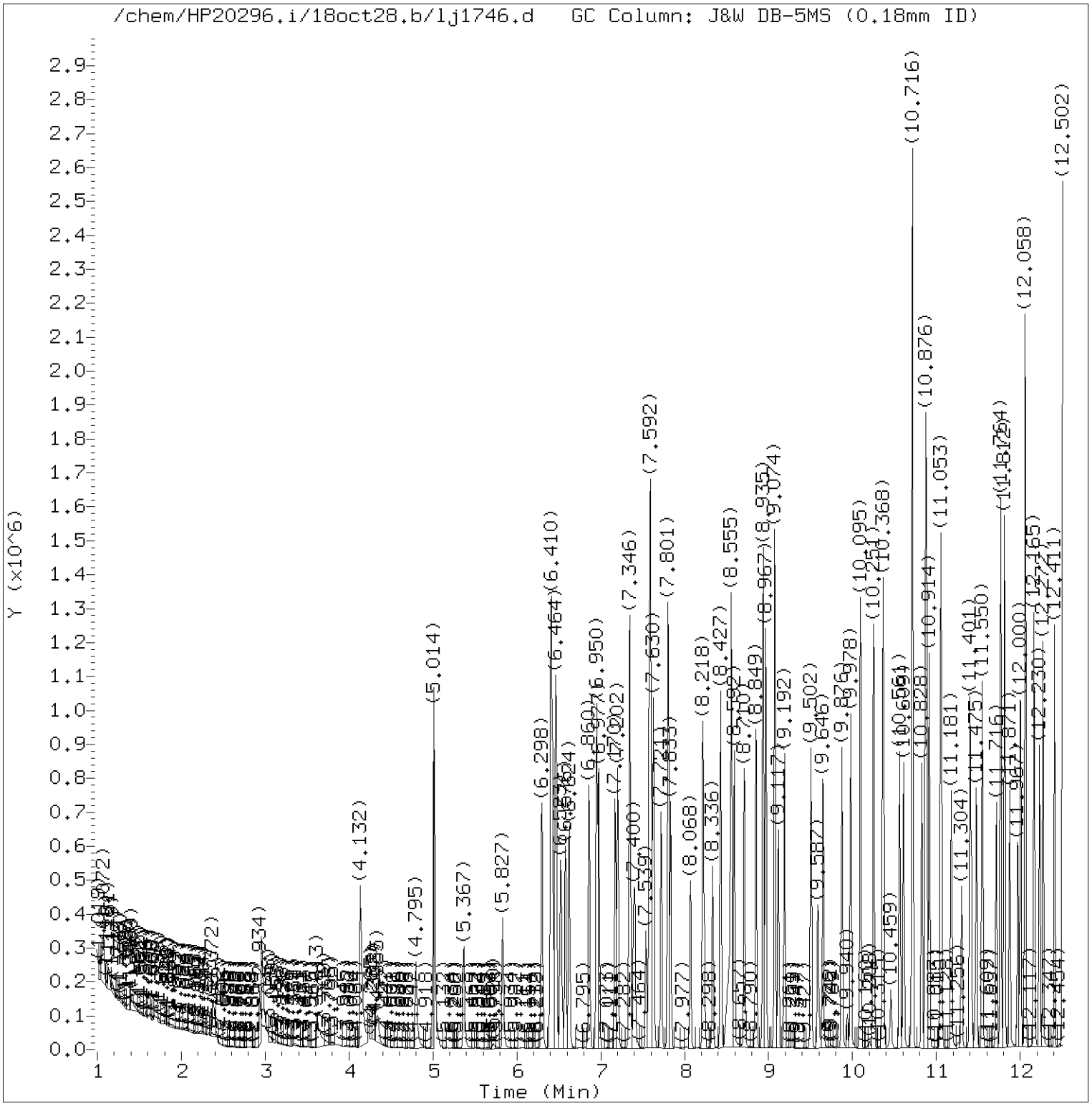
Data File: /chem/HP20296.i/18oct28.b/lj1745.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:22 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVSTD2648

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3923		
Retention Time (minutes)	: 21.970		
Quant Ion	: 276.00		
Area	: 2345681		
On-column Amount (ng/ul)	: 15.7991		
Integration start scan	: 3912	Integration stop scan:	3946
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:01.
Target 3.5 esignature user name: Ashley R. Transue



Total Ion Chromatogram (TIC)

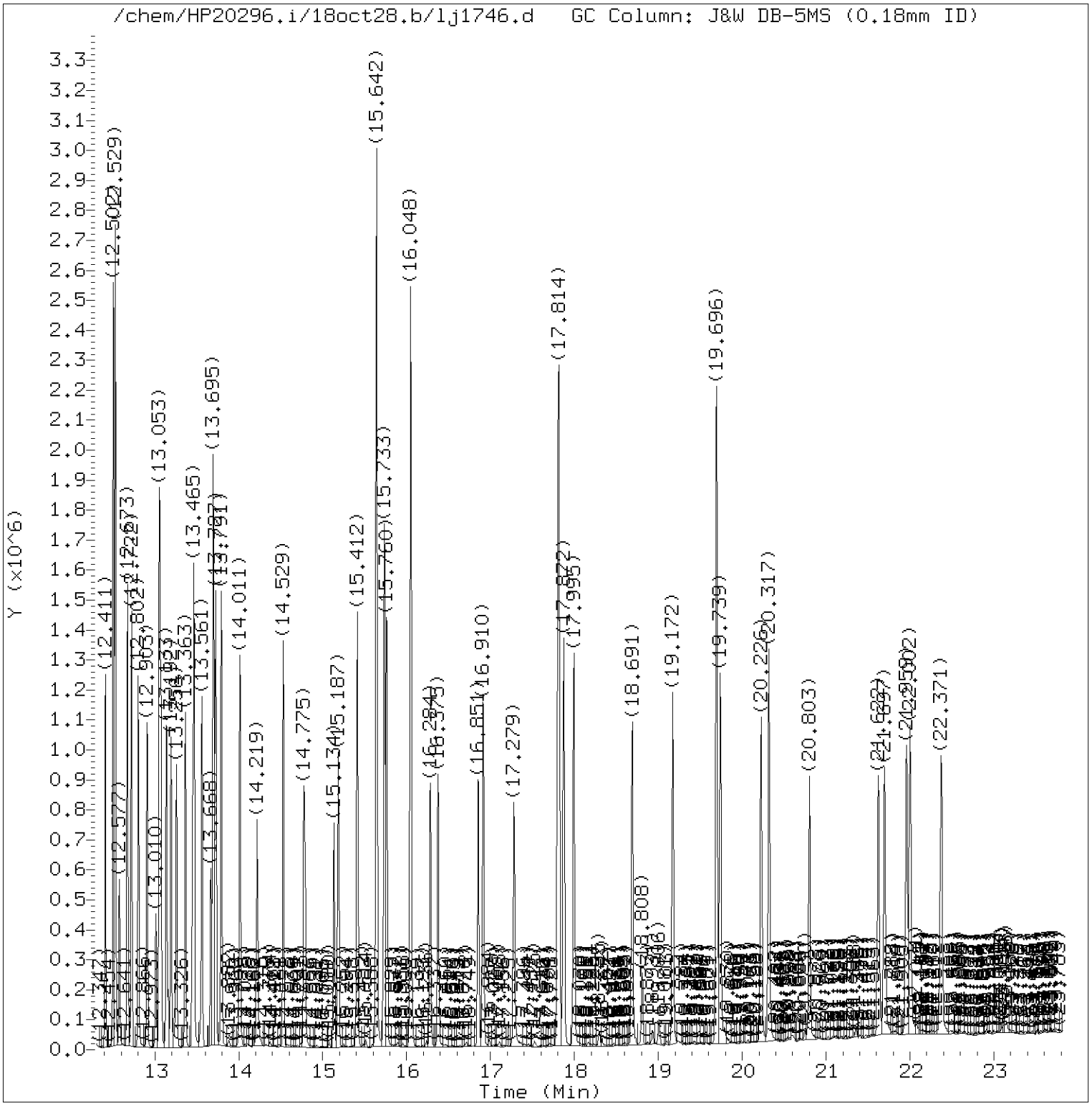
Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.377	88	113234	3.935
5) N-Nitrosodimethylamine	(1)	2.934	74	155201M	3.524
6) Pyridine	(1)	2.955	79	276989M	3.661
8) 2-Picoline	(1)	4.132	93	290870M	3.754
9) N-Nitrosomethylethylamine	(1)	4.335	88	114015	3.596
10) Methyl methanesulfonate	(1)	4.795	80	141676	3.527
12)$2-Fluorophenol	(1)	5.014	112	446971	7.359
14) N-Nitrosodiethylamine	(1)	5.367	102	104200	3.532
43) Total Cresols	(1)			447701	7.382
16) Ethyl methanesulfonate	(1)	5.827	109	118564	3.754
17) Benzaldehyde	(1)	6.298	77	232602	4.248
18)$Phenol-d6	(1)	6.405	99	596641	7.237
19) Phenol	(1)	6.426	94	352447	3.669
20) Aniline	(1)	6.458	93	421507	3.698
21) a-methylstyrene	(1)	6.539	118	20570	3.466
23) bis(2-Chloroethyl)ether	(1)	6.576	93	264478	3.668
24) 2-Chlorophenol	(1)	6.624	128	213707	3.721
25) 1,3-Dichlorobenzene	(1)	6.860	146	230173	3.651
26)*1,4-Dichlorobenzene-d4	(1)	6.950	152	193679	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	234488	3.726
28) Benzyl alcohol	(1)	7.170	108	135702	3.476
29) 1,2-Dichlorobenzene	(1)	7.202	146	228738	3.768
31) Indene	(1)	7.341	115	240017	3.574
32) 2-Methylphenol	(1)	7.352	108	219152	3.663
100) Isosafrole	(3)			170362	3.622
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.400	45	328638	3.600
35) bis(2-Chloroisopropyl)ether	(1)	7.400	45	328638	3.600
36) N-Nitrosopyrrolidine	(1)	7.539	100	110787	3.528
37) Acetophenone	(1)	7.576	105	345866	3.760
39) N-Nitroso-di-n-propylamine	(1)	7.592	70	201966	3.645
38) 4-Methylphenol	(1)	7.592	108	228549	3.719
40) N-Nitrosomorpholine	(1)	7.608	56	149227	3.733
41) o-Toluidine	(1)	7.630	106	390941	3.730
44) Hexachloroethane	(1)	7.726	117	110285	3.836
45)$Nitrobenzene-d5	(2)	7.801	82	577685	7.397
46) Nitrobenzene	(2)	7.833	77	304579	3.685
125) 2,4_2,6-Dinitrotoluenes	(3)			209543	7.093
50) N-Nitrosopiperidine	(2)	8.068	114	102904	3.532
52) Isophorone	(2)	8.218	82	515822	3.670
53) 2-Nitrophenol	(2)	8.336	139	96428	3.489

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

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.427	107	241286	3.624
58) Benzoic acid	(2)	8.550	105	296626M	6.759
59) O,O,O-Triethylphosphorothioate	(2)	8.560	198	100929	3.603
57) bis(2-Chloroethoxy)methane	(2)	8.592	93	330757	3.786
62) 2,4-Dichlorophenol	(2)	8.710	162	179420	3.747
151) Diallate trans/cis	(4)			235274	3.840
65) 1,2,4-Trichlorobenzene	(2)	8.849	180	196507	3.697
68)*Naphthalene-d8	(2)	8.935	136	720165	5.000
69) Naphthalene	(2)	8.967	128	609866	3.730
70) 4-Chloroaniline	(2)	9.074	127	247052	3.698
71) 2,6-Dichlorophenol	(2)	9.079	162	161933	3.551
72) Hexachloropropene	(2)	9.117	213	124809	3.560
74) Hexachlorobutadiene	(2)	9.192	225	120711	3.790
78) Quinoline	(2)	9.507	129	362800	3.731
79) Caprolactam	(2)	9.587	113	55773	3.732
80) N-Nitrosodi-n-butylamine	(2)	9.652	84	187147	3.381
83) 4-Chloro-3-methylphenol	(2)	9.876	107	211938	3.698
85) Safrole	(2)	9.978	162	147537	3.585
86) 2-Methylnaphthalene	(2)	10.095	142	393337	3.749
87) 1-Methylnaphthalene	(2)	10.251	142	375837	3.732
88) Hexachlorocyclopentadiene	(3)	10.363	237	116260	3.570
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.368	216	205313	3.685
91) cis-Isosafrole	(3)	10.454	162	29003	0.627
93) 2,4,6-Trichlorophenol	(3)	10.561	196	126848	3.556
95) 2,4,5-Trichlorophenol	(3)	10.609	196	137115	3.692
96)$2-Fluorobiphenyl	(3)	10.716	172	891031	7.325
97) trans-Isosafrole	(3)	10.828	162	141359	2.995
98) 1,1'-Biphenyl	(3)	10.871	154	478002	3.786
99) 2-Chloronaphthalene	(3)	10.882	162	390360	3.525
101) 1-Chloronaphthalene	(3)	10.914	162	374773	3.991
103) Diphenyl ether	(3)	11.053	170	258183	3.658
104) 2-Nitroaniline	(3)	11.064	138	101523	3.402
108) 1,4-Naphthoquinone	(3)	11.181	158	149827	3.601
109) 1,4-Dinitrobenzene	(3)	11.304	168	50821	3.287
110) Dimethylphthalate	(3)	11.401	163	422237	3.697
111) 1,3-Dinitrobenzene	(3)	11.417	168	63039	3.547
113) 2,6-Dinitrotoluene	(3)	11.475	165	91044	3.620
114) Acenaphthylene	(3)	11.550	152	521313	3.748
117) 3-Nitroaniline	(3)	11.716	138	96425	3.524
118)*Acenaphthene-d10	(3)	11.764	164	360034	5.000

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.812	153	389106	3.629
120) 2,4-Dinitrophenol	(3)	11.877	184	81577	5.846
121) 4-Nitrophenol	(3)	11.967	109	72873	3.280
122) Pentachlorobenzene	(3)	12.005	250	170648	3.786
124) Dibenzofuran	(3)	12.058	168	536348	3.708
123) 2,4-Dinitrotoluene	(3)	12.064	165	118499	3.472
126) 1-Naphthylamine	(3)	12.165	143	366859	3.551
127) 2,3,4,6-Tetrachlorophenol	(3)	12.230	232	97986	3.376
128) 2-Naphthylamine	(3)	12.272	143	360782	3.509
129) Diethylphthalate	(3)	12.411	149	408994	3.630
130) Thionazin	(3)	12.502	107	82257	3.666
131) Fluorene	(3)	12.508	166	423929	3.741
133) 5-Nitro-o-toluidine	(3)	12.524	152	108482	3.477
132) 4-Chlorophenyl-phenylether	(3)	12.529	204	209369	3.596
134) 4-Nitroaniline	(3)	12.534	138	102049	3.657
135) 4,6-Dinitro-2-methylphenol	(4)	12.577	198	61176	3.376
136) N-Nitrosodiphenylamine	(4)	12.673	169	333174	3.742
137) NDPA as diphenylamine	(4)	12.673	169	333174	3.742
139) 1,2-Diphenylhydrazine	(4)	12.722	77	612505	3.875
140)$2,4,6-Tribromophenol	(3)	12.802	330	103247	6.834
142) Tetraethyldithiopyrophosphate	(4)	12.903	97	90768	3.824
144) 1,3,5-Trinitrobenzene	(4)	13.016	213	35265	3.213
145) Diallate (peak 1)	(4)	13.048	86	201792	3.195
146) Phorate	(4)	13.059	75	351272	4.114
147) Phenacetin	(4)	13.075	108	249631	3.734
148) 4-Bromophenyl-phenylether	(4)	13.139	248	116331	3.782
149) Diallate (peak 2)	(4)	13.160	86	33482M	0.646
150) Hexachlorobenzene	(4)	13.192	284	122012	3.867
152) Dimethoate	(4)	13.256	87	200166	3.771
153) Atrazine	(4)	13.363	200	114722	4.083
154) Pentachlorophenol	(4)	13.449	266	71075	3.417
155) 4-Aminobiphenyl	(4)	13.465	169	295914	3.711
156) Pentachloronitrobenzene	(4)	13.470	237	58406	3.860
157) Pronamide	(4)	13.561	173	185746	3.614
158)*Phenanthrene-d10	(4)	13.695	188	688668	5.000
159) Dinoseb	(4)	13.706	211	87155	3.164
160) Phenanthrene	(4)	13.727	178	629278	3.738
162) Anthracene	(4)	13.791	178	631635	3.820
168) Carbazole	(4)	14.011	167	566226	3.791
169) Methyl parathion	(4)	14.219	109	143915	3.549

M = Compound was manually integrated.
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Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.529	149	709866	3.671
172) Parathion	(4)	14.775	109	85425	3.265
173) 4-Nitroquinoline-1-oxide	(4)	14.792	190	38184	2.812
227) Total PAHs	(6)			10323667	67.486
174) Octachlorostyrene	(4)	15.139	308	43247	3.649
176) Isodrin	(4)	15.187	193	76165	3.762
178) Fluoranthene	(4)	15.412	202	700998	3.781
179) Benzidine	(5)	15.642	184	1325957	10.899
180)*Pyrene-d10	(5)	15.733	212	742847	5.000
182) Pyrene	(5)	15.765	202	744016	3.788
184)$Terphenyl-d14	(5)	16.048	244	897461	7.334
187) p-Dimethylaminoazobenzene	(5)	16.284	225	107289	3.343
190) Chlorobenzilate	(5)	16.375	139	205033	3.445
192) 3,3'-Dimethylbenzidine	(5)	16.851	212	400910	3.384
193) Butylbenzylphthalate	(5)	16.915	149	313219	3.452
196) 2-Acetylaminofluorene	(5)	17.279	181	244762	3.211
198) 3,3'-Dichlorobenzidine	(5)	17.797	252	230782	3.371
200) Benzo(a)anthracene	(5)	17.814	228	671311	3.629
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.819	231	130238	3.401
201) Chrysene	(5)	17.872	228	666554	3.695
204) bis(2-Ethylhexyl)phthalate	(5)	17.995	149	446344	3.400
208) 6-Methylchrysene	(5)	18.691	242	428073	3.505
210) Di-n-octylphthalate	(6)	19.172	149	716307	3.364
211) Benzo(b)fluoranthene	(6)	19.696	252	638645	3.814
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.696	256	256203	3.477
213) Benzo(k)fluoranthene	(6)	19.739	252	639704	3.791
216) Benzo(a)pyrene	(6)	20.226	252	572347	3.706
218)*Perylene-d12	(6)	20.317	264	629203	5.000
220) 3-Methylcholanthrene	(6)	20.803	268	247812	3.422
222) Dibenz(a,h)acridine	(6)	21.622	279	455460	3.610
223) Dibenz(a,j)acridine	(6)	21.697	279	475952	3.635
224) Indeno(1,2,3-cd)pyrene	(6)	21.959	276	537390M	3.672
225) Dibenz(a,h)anthracene	(6)	22.002	278	589323	3.908
226) Benzo(g,h,i)perylene	(6)	22.371	276	589078	3.817

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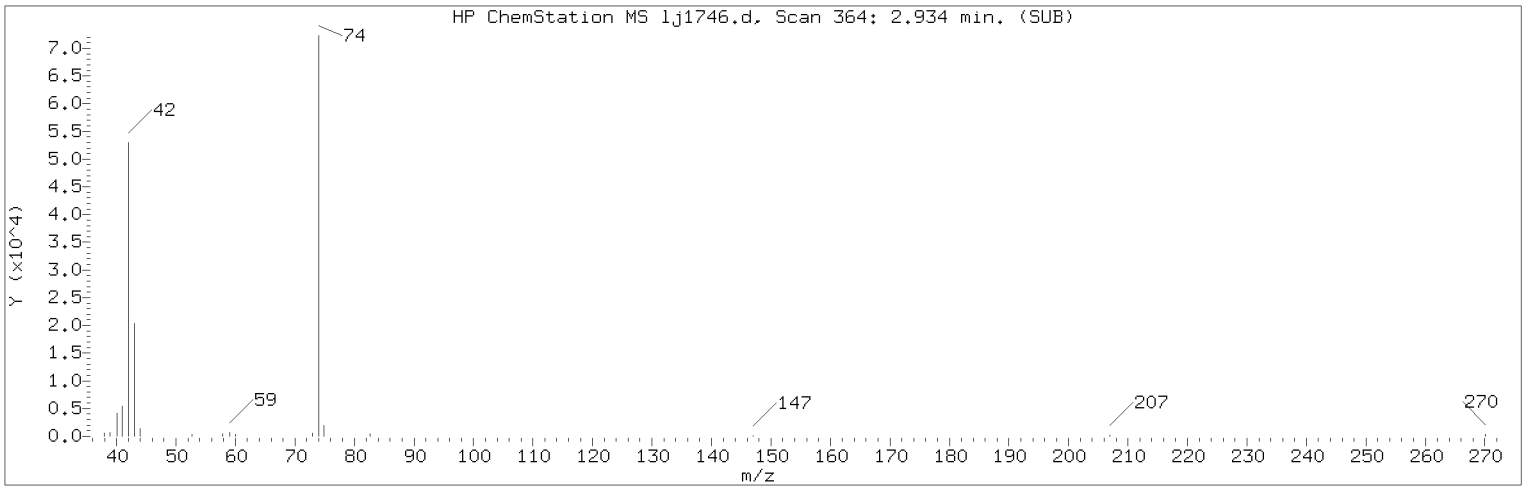
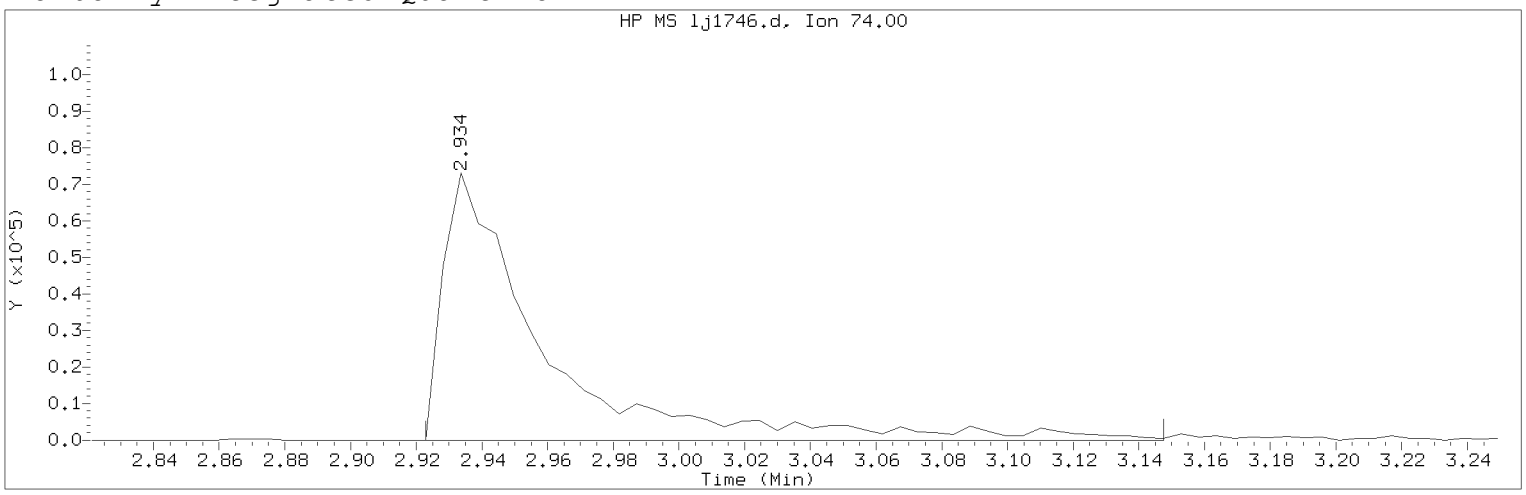
Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

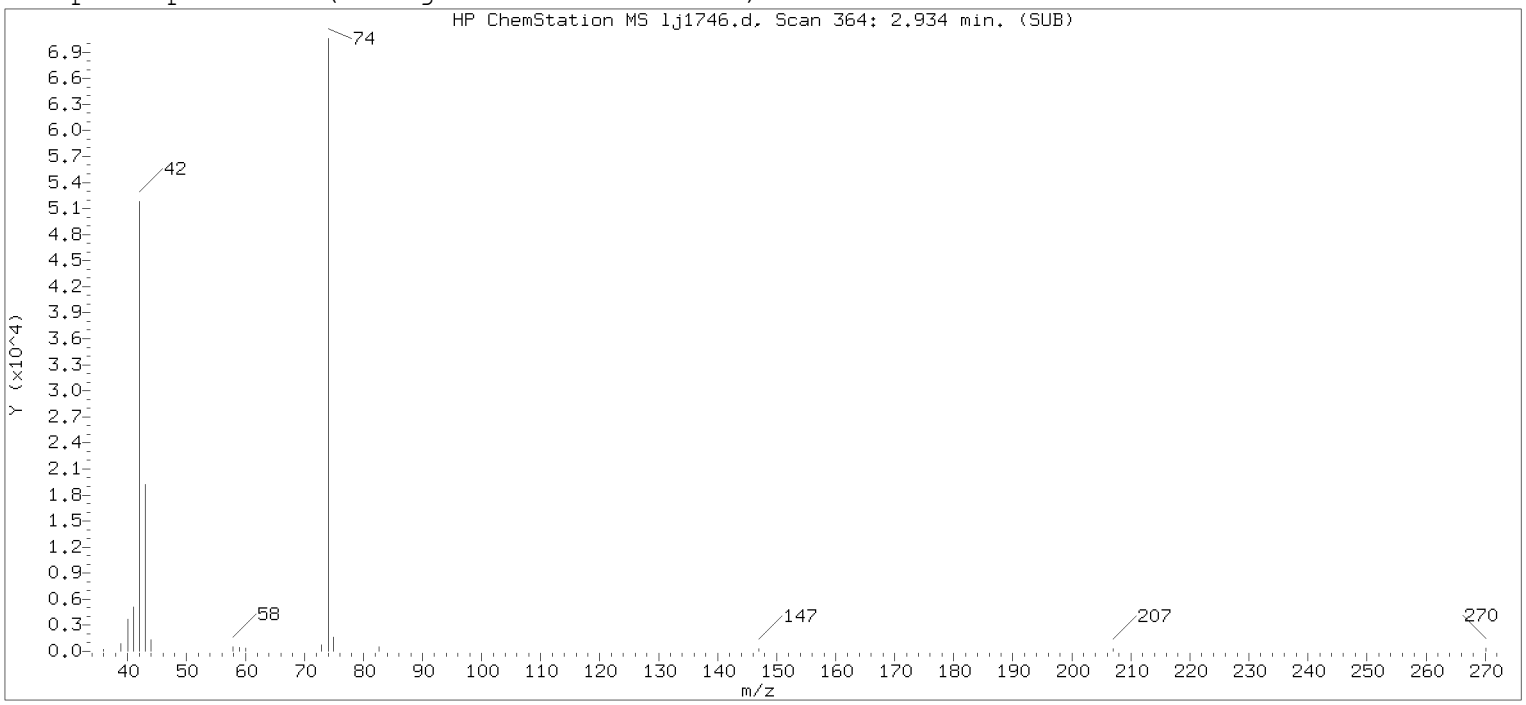
Compound Number : 5
Compound Name : N-Nitrosodimethylamine
Scan Number : 364
Retention Time (minutes) : 2.934
Quant Ion : 74.00
Area (flag) : 155201M
On-Column Amount (ng/ul) : 3.5235
Integration start scan : 361 Integration stop scan: 403
Y at integration start : -71 Y at integration end: -71

Reason for manual integration: improper integration

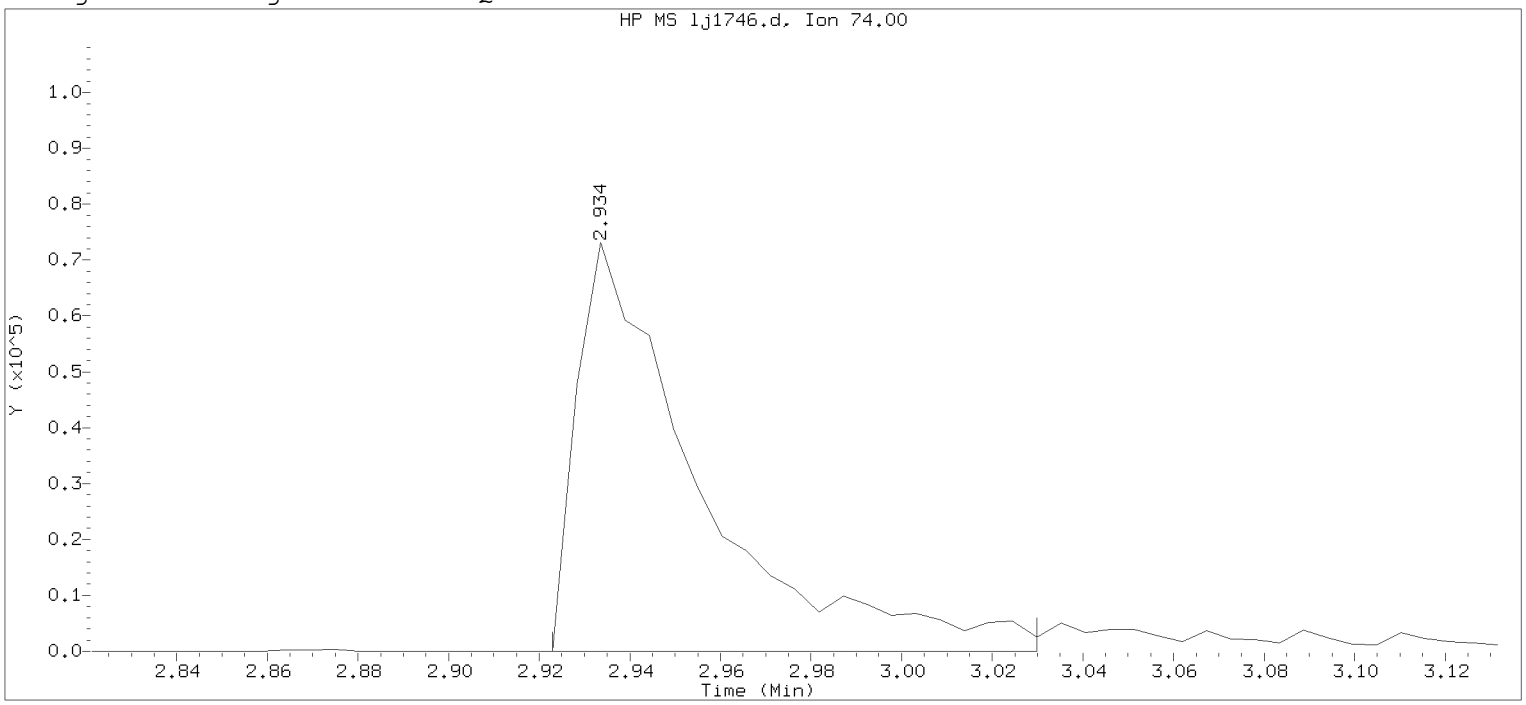
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

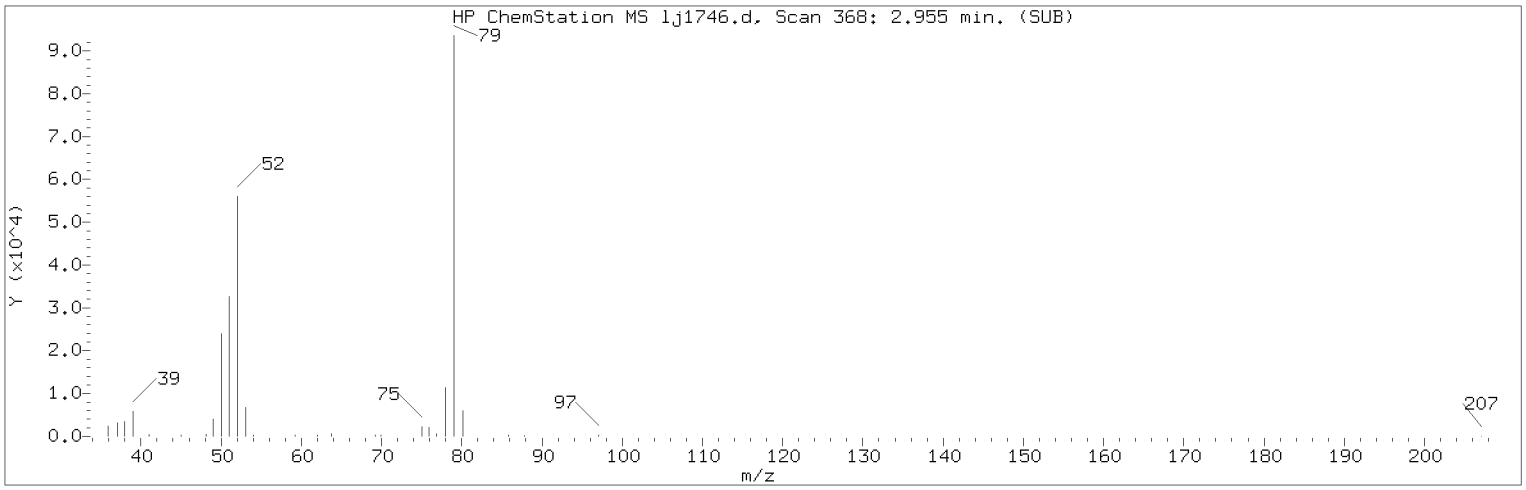
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

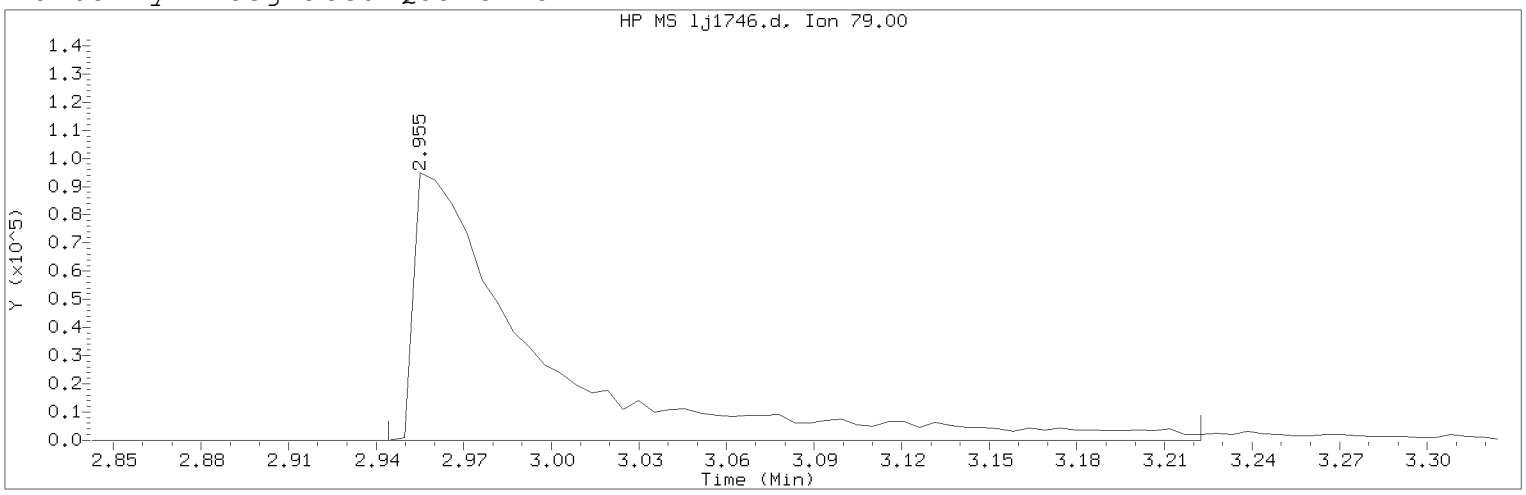
Compound Number : 5
Compound Name : N-Nitrosodimethylamine
Scan Number : 364
Retention Time (minutes) : 2.934
Quant Ion : 74.00
Area : 137494
On-column Amount (ng/ul) : 3.2648
Integration start scan : 361 Integration stop scan: 381
Y at integration start : 0 Y at integration end: 0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: ART

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

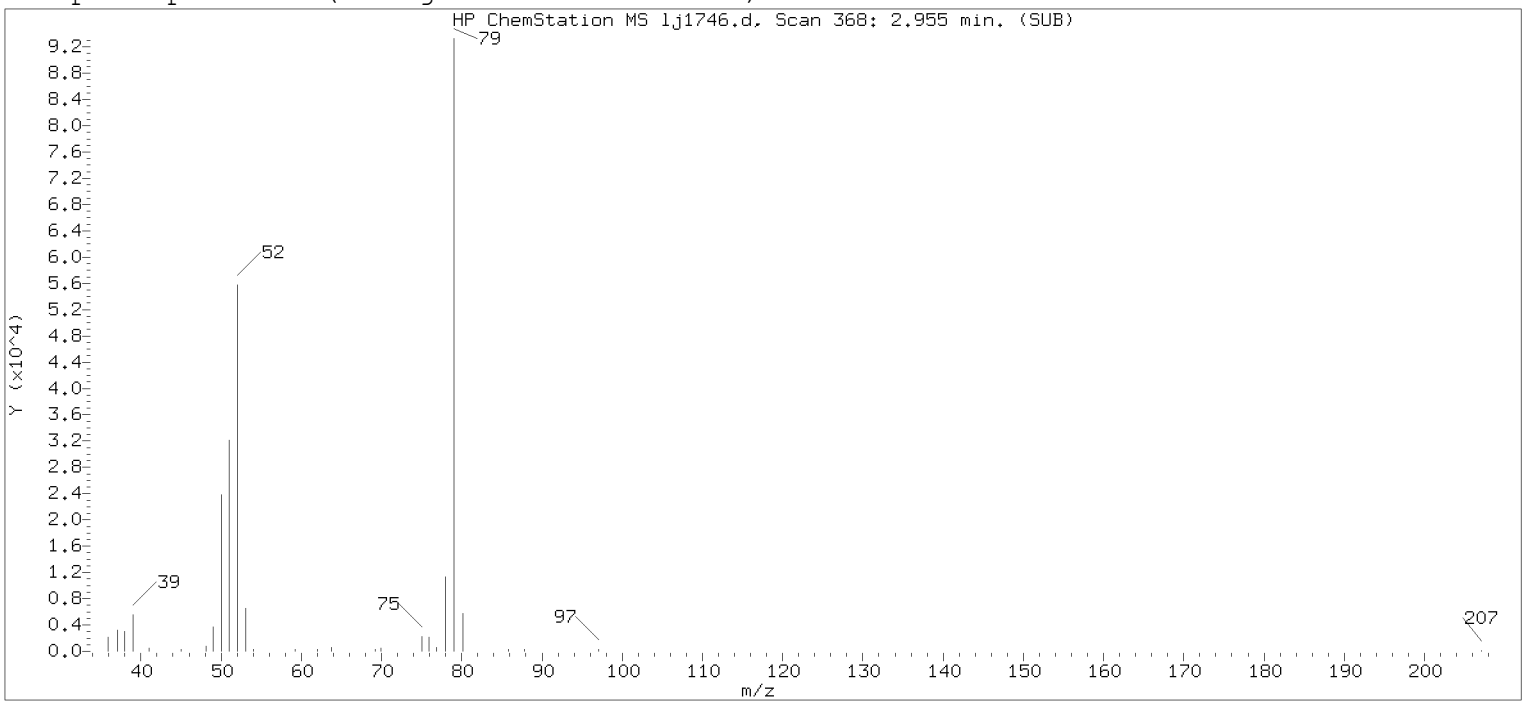
Compound Number : 6
Compound Name : Pyridine
Scan Number : 368
Retention Time (minutes) : 2.955
Quant Ion : 79.00
Area (flag) : 276989M
On-Column Amount (ng/ul) : 3.6605
Integration start scan : 365 Integration stop scan: 417
Y at integration start : -49 Y at integration end: -49

Reason for manual integration: improper integration

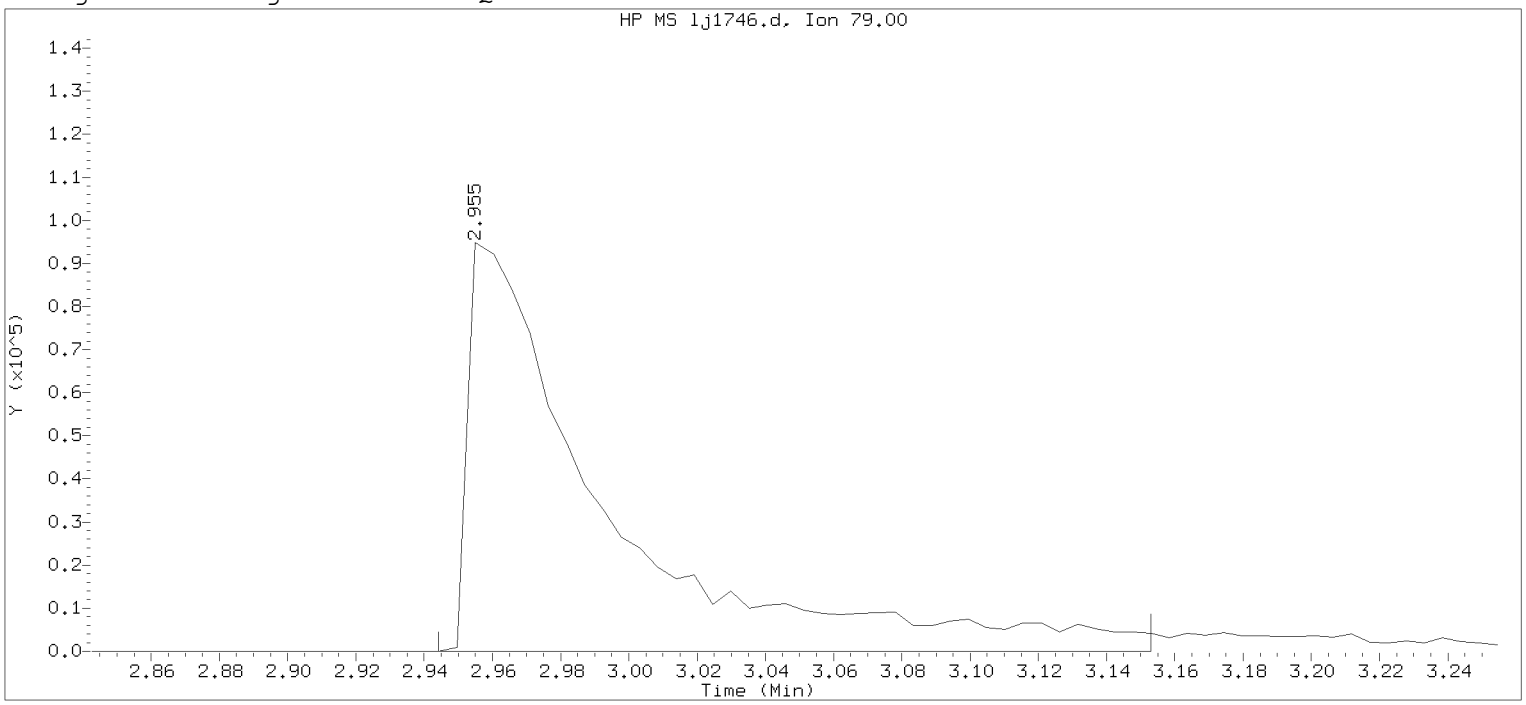
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

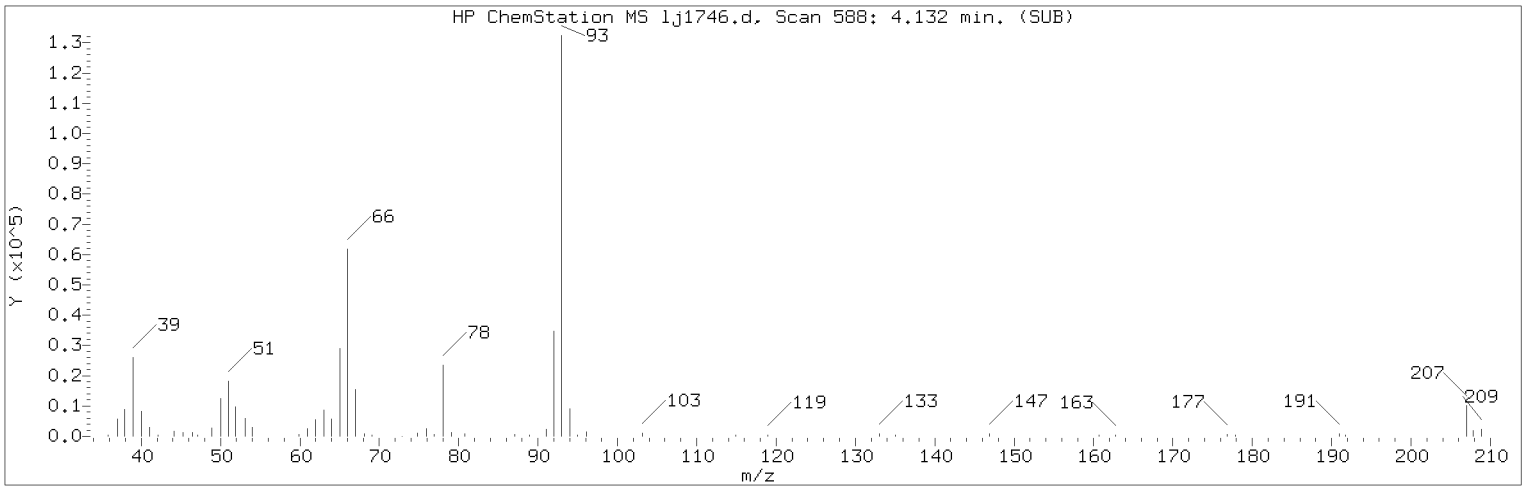
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

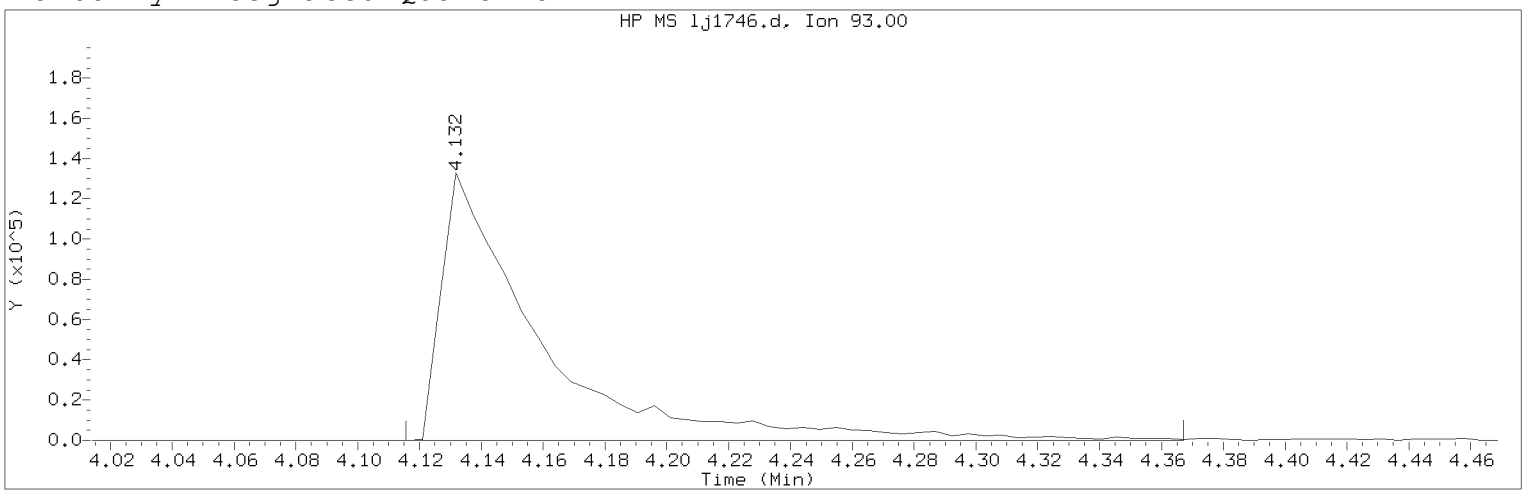
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 368		
Retention Time (minutes)	: 2.955		
Quant Ion	: 79.00		
Area	: 261269		
On-column Amount (ng/ul)	: 3.5075		
Integration start scan	: 365	Integration stop scan:	404
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: ART2409

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

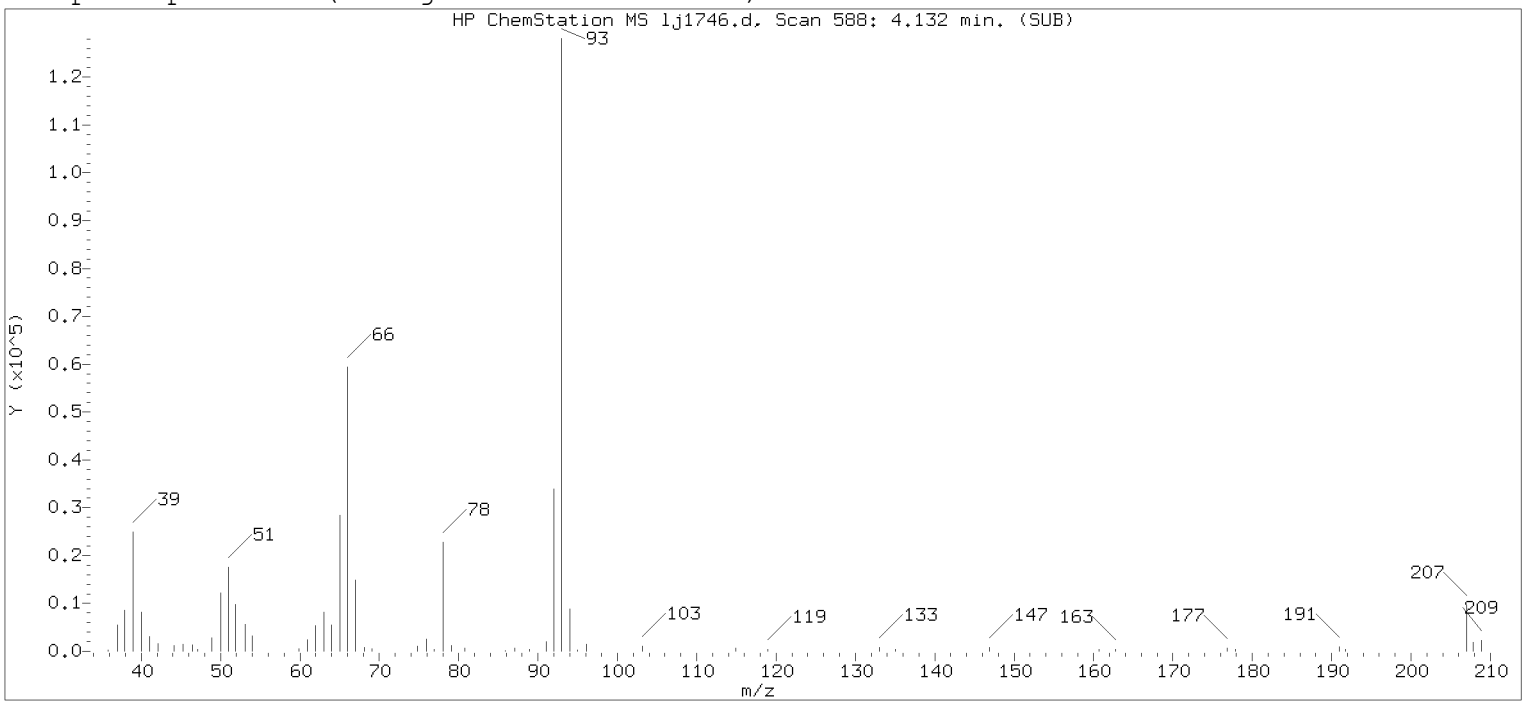
Compound Number : 8
Compound Name : 2-Picoline
Scan Number : 588
Retention Time (minutes) : 4.132
Quant Ion : 93.00
Area (flag) : 290870M
On-Column Amount (ng/ul) : 3.7543
Integration start scan : 584 Integration stop scan: 631
Y at integration start : 8 Y at integration end: 8

Reason for manual integration: improper integration

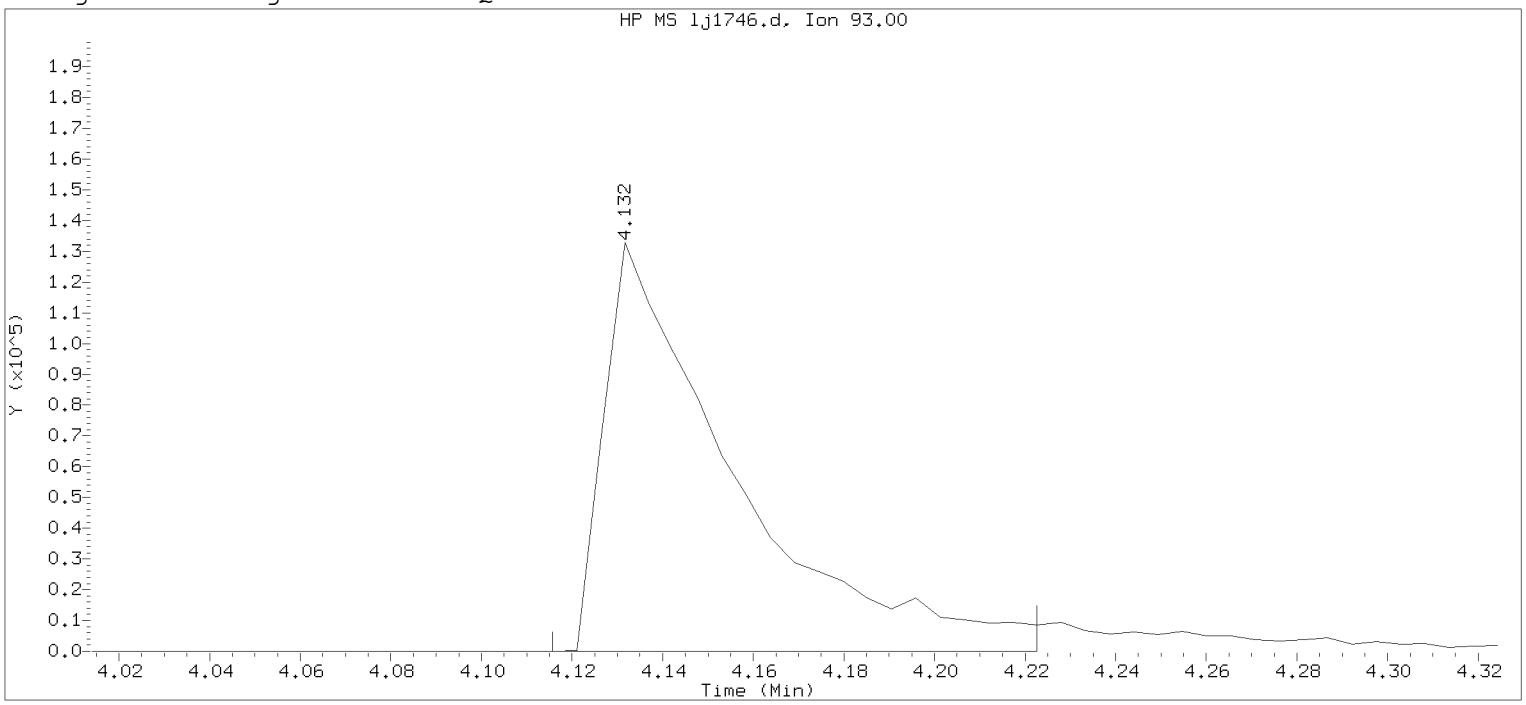
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

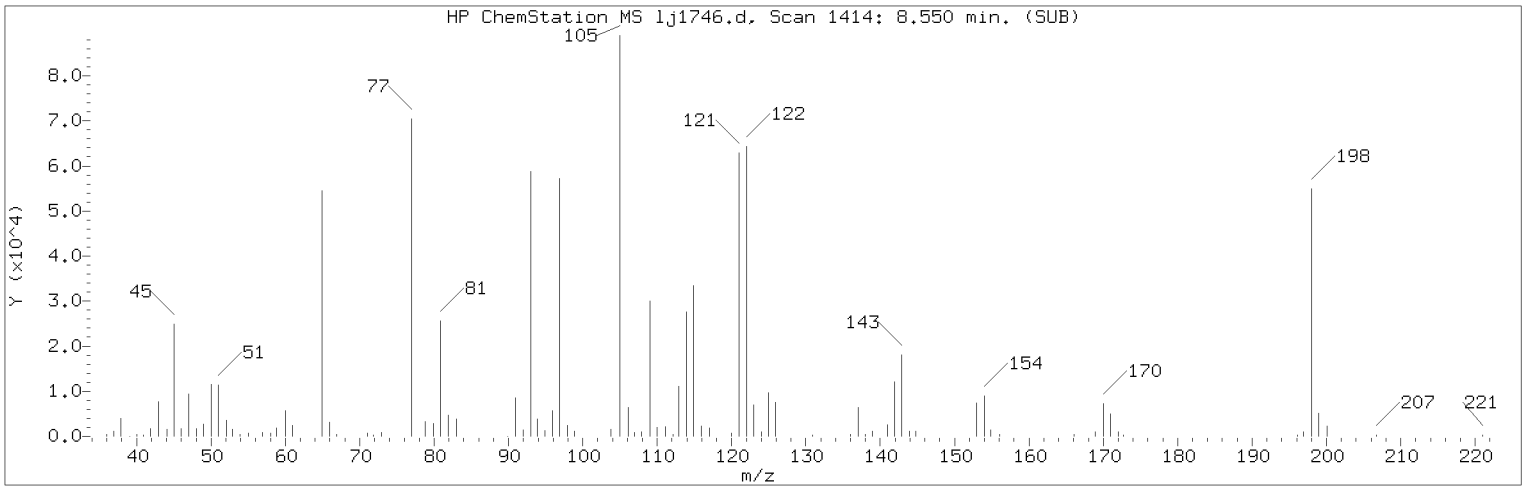
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

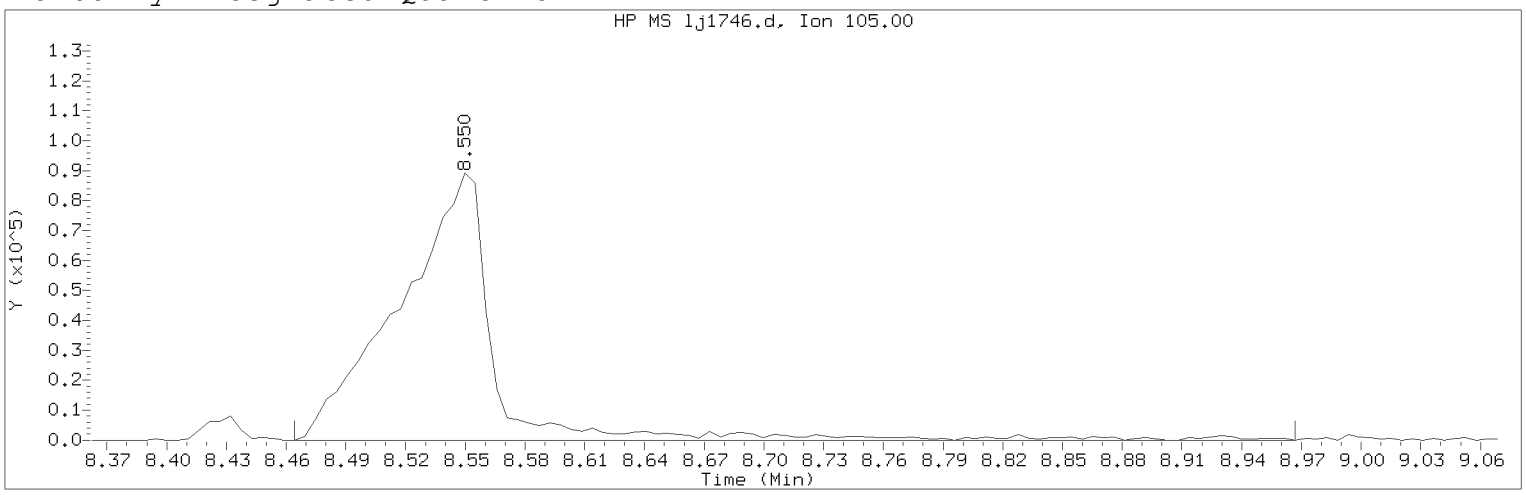
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 588		
Retention Time (minutes)	: 4.132		
Quant Ion	: 93.00		
Area	: 261397		
On-column Amount (ng/ul)	: 3.4597		
Integration start scan	: 584	Integration stop scan:	604
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: 24611

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

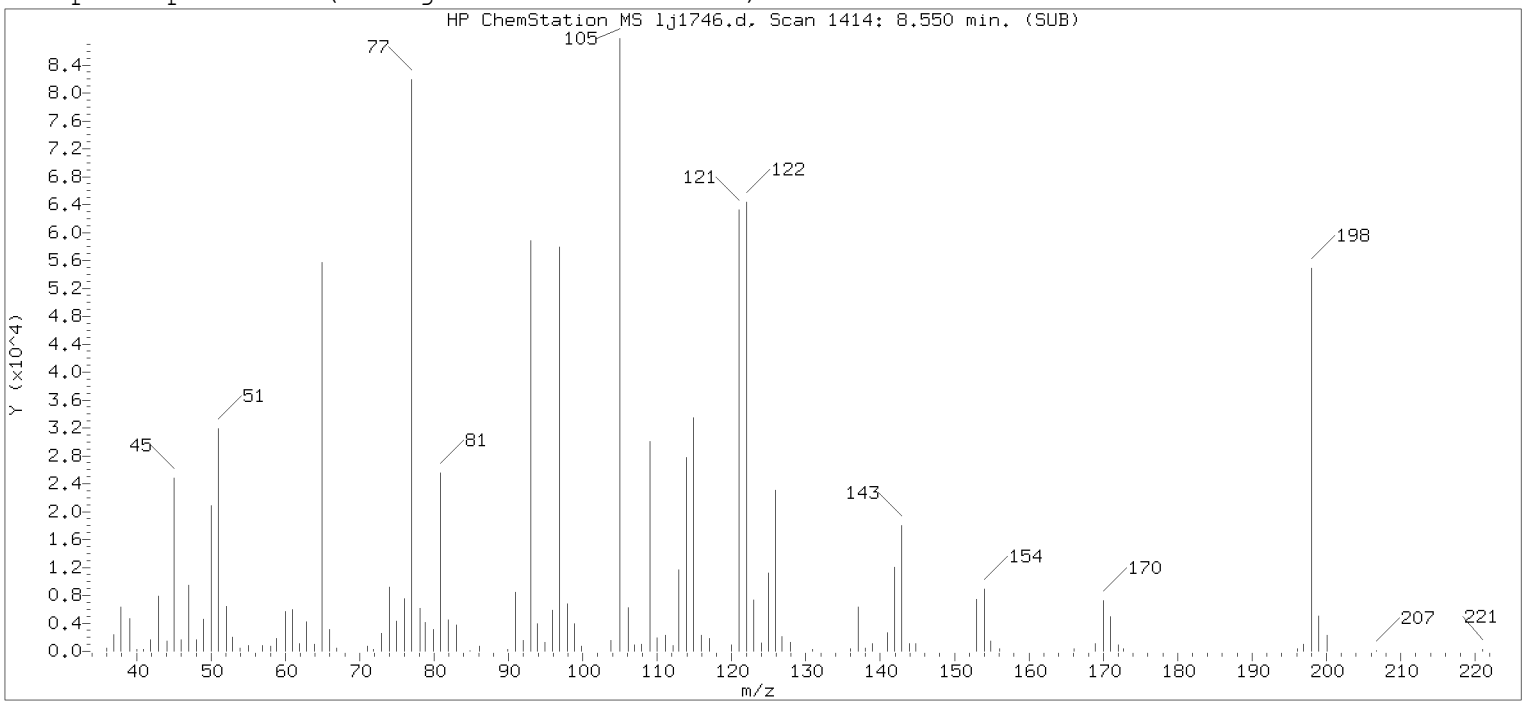
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1414
Retention Time (minutes) : 8.550
Quant Ion : 105.00
Area (flag) : 296626M
On-Column Amount (ng/ul) : 6.7587
Integration start scan : 1397 Integration stop scan: 1491
Y at integration start : -69 Y at integration end: -69

Reason for manual integration: improper integration

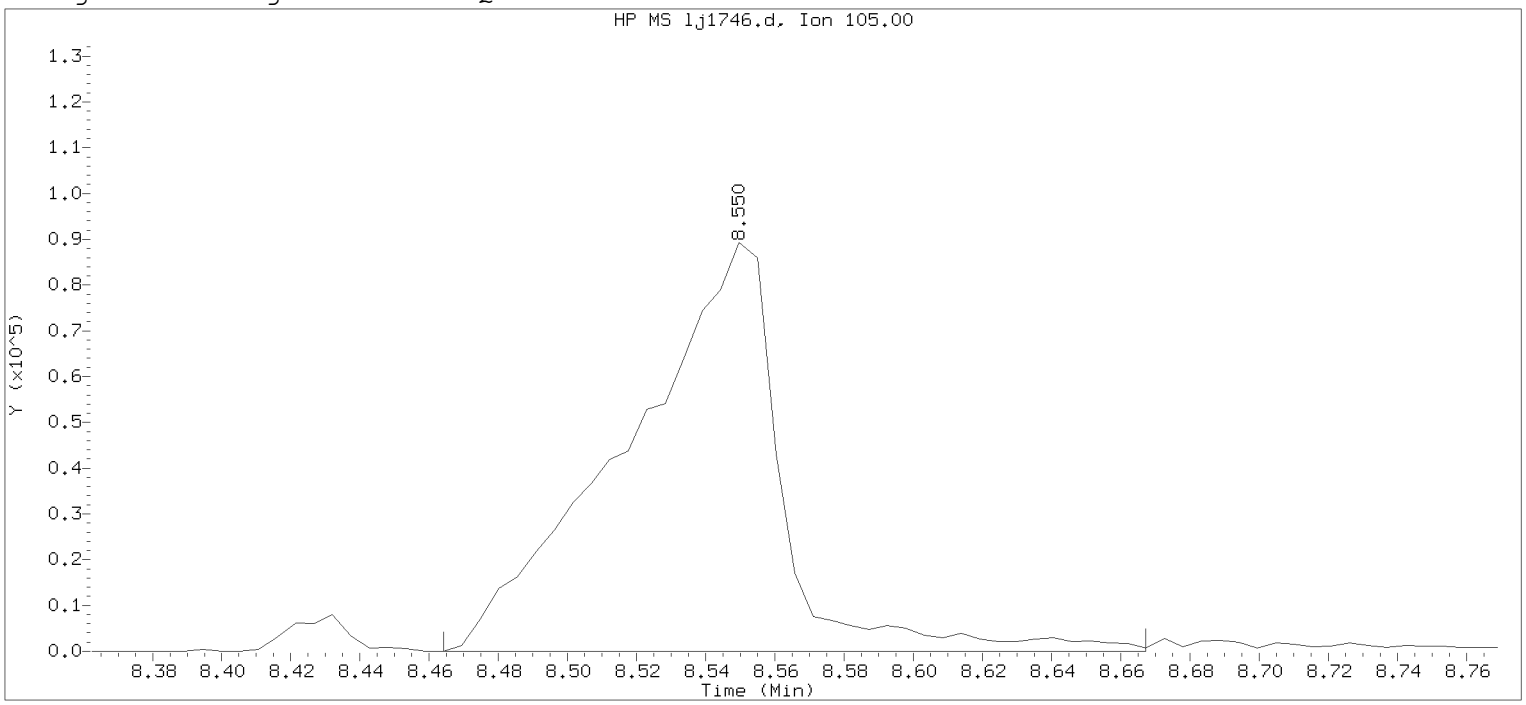
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

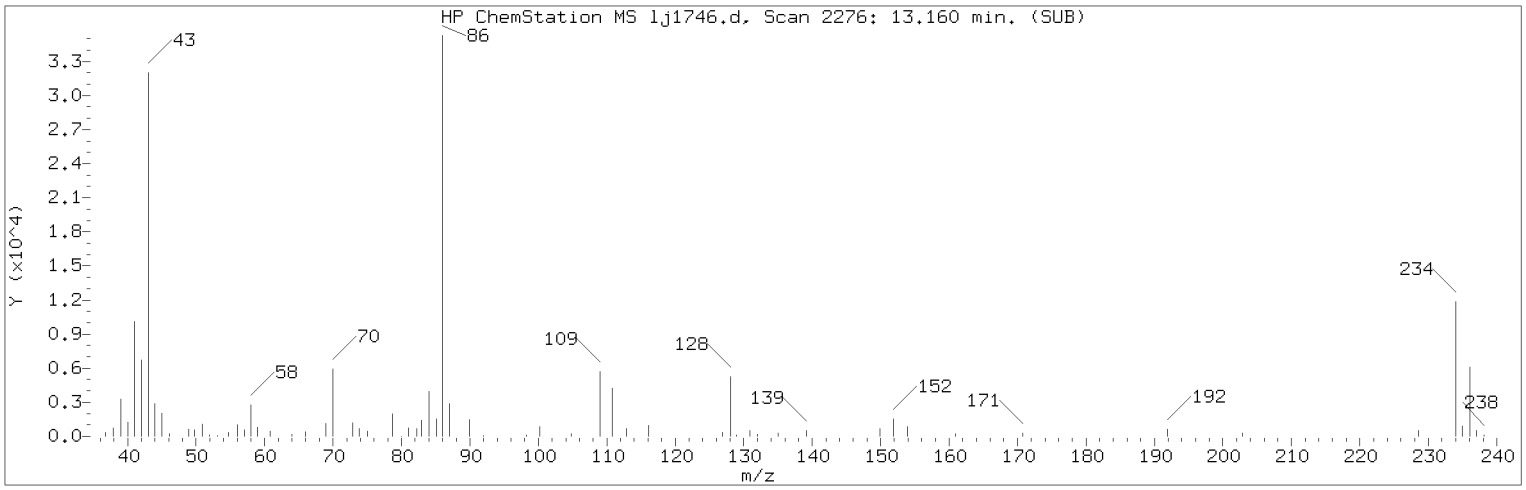
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

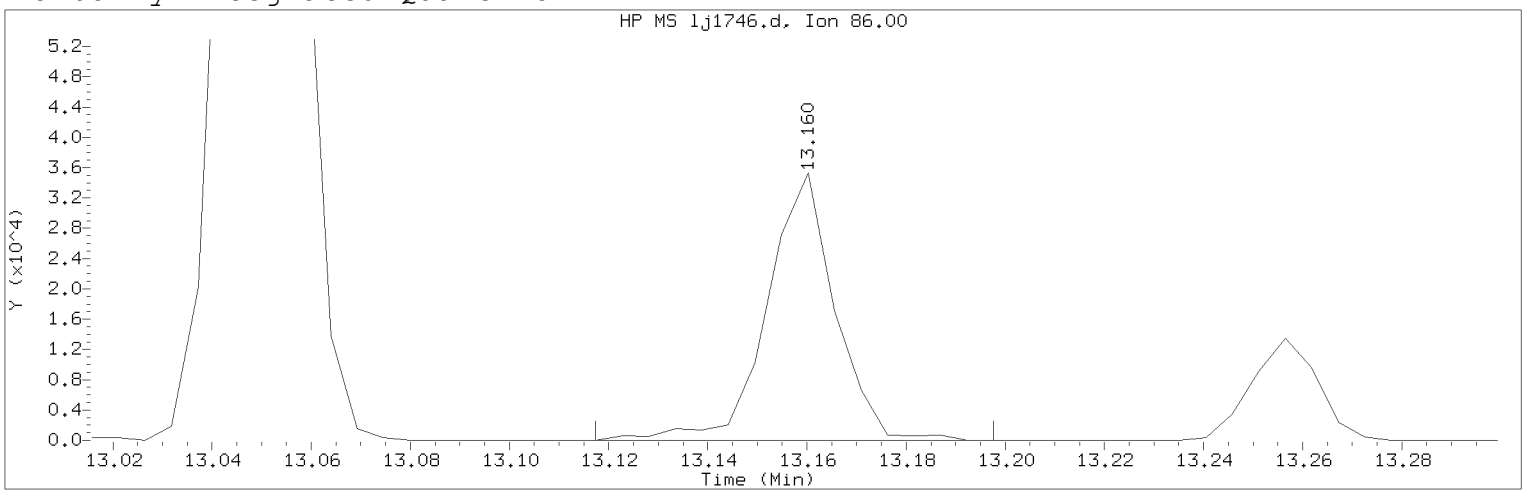
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1414		
Retention Time (minutes)	: 8.550		
Quant Ion	: 105.00		
Area	: 278360		
On-column Amount (ng/ul)	: 8.2455		
Integration start scan	: 1397	Integration stop scan:	1435
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: ART0613

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

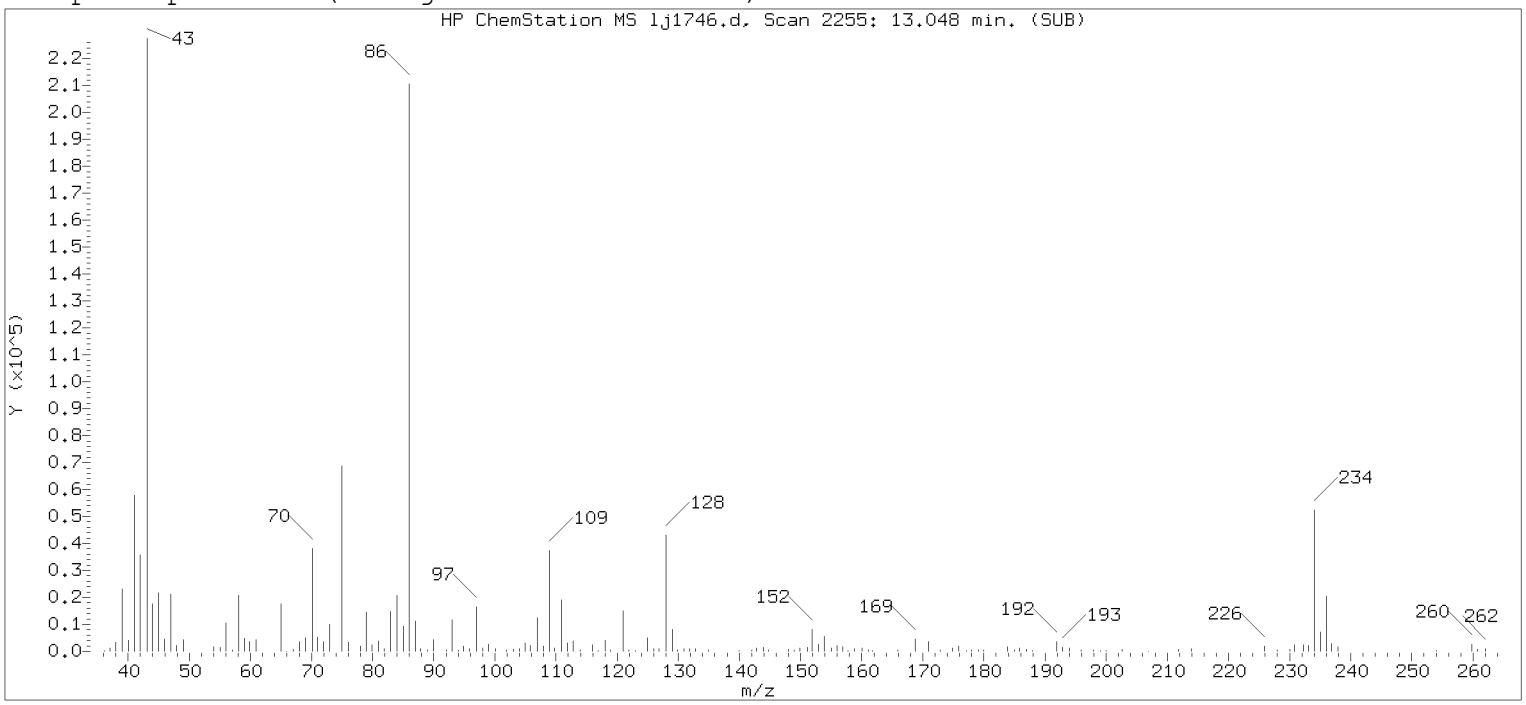
Compound Number : 149
Compound Name : Diallate (peak 2)
Scan Number : 2276
Retention Time (minutes) : 13.160
Quant Ion : 86.00
Area (flag) : 33482M
On-Column Amount (ng/ul) : 0.6455
Integration start scan : 2267 Integration stop scan: 2282
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

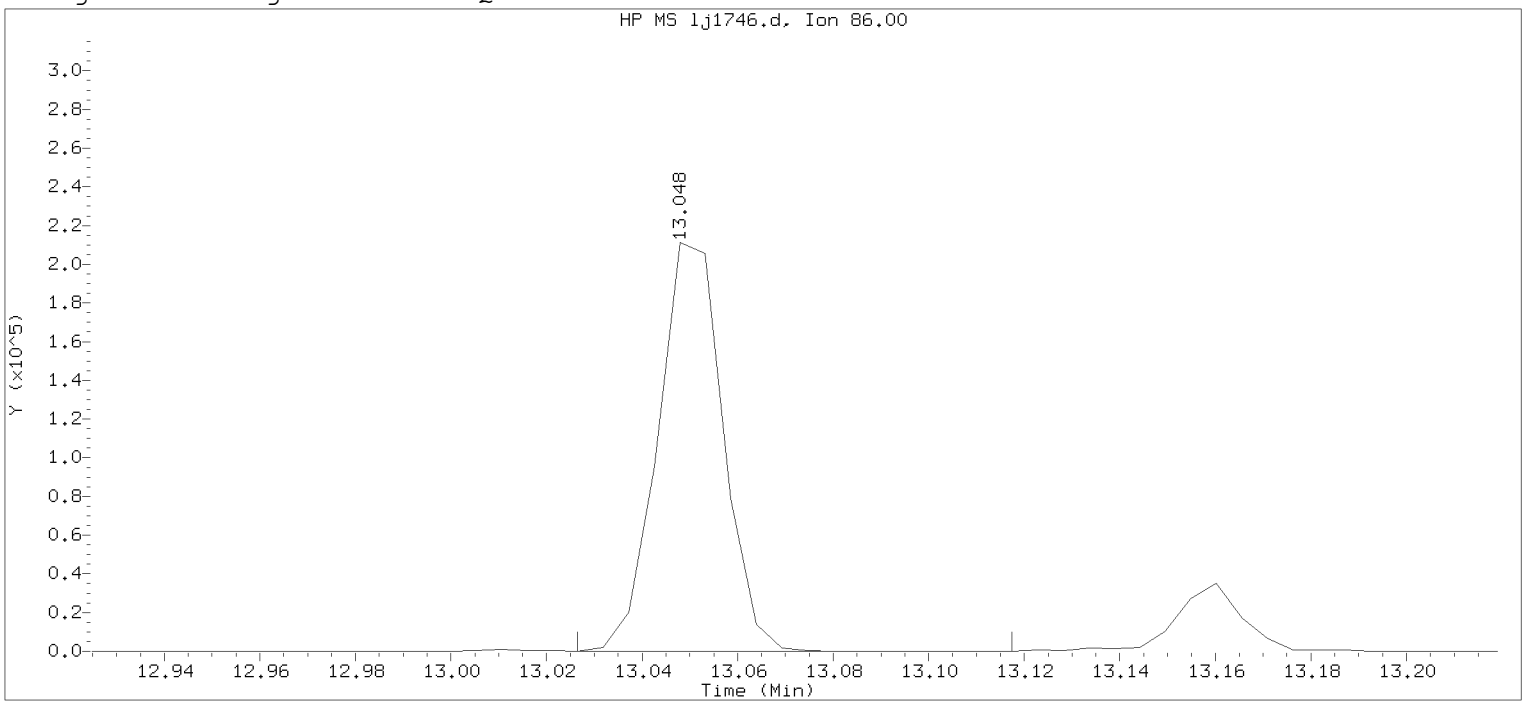
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

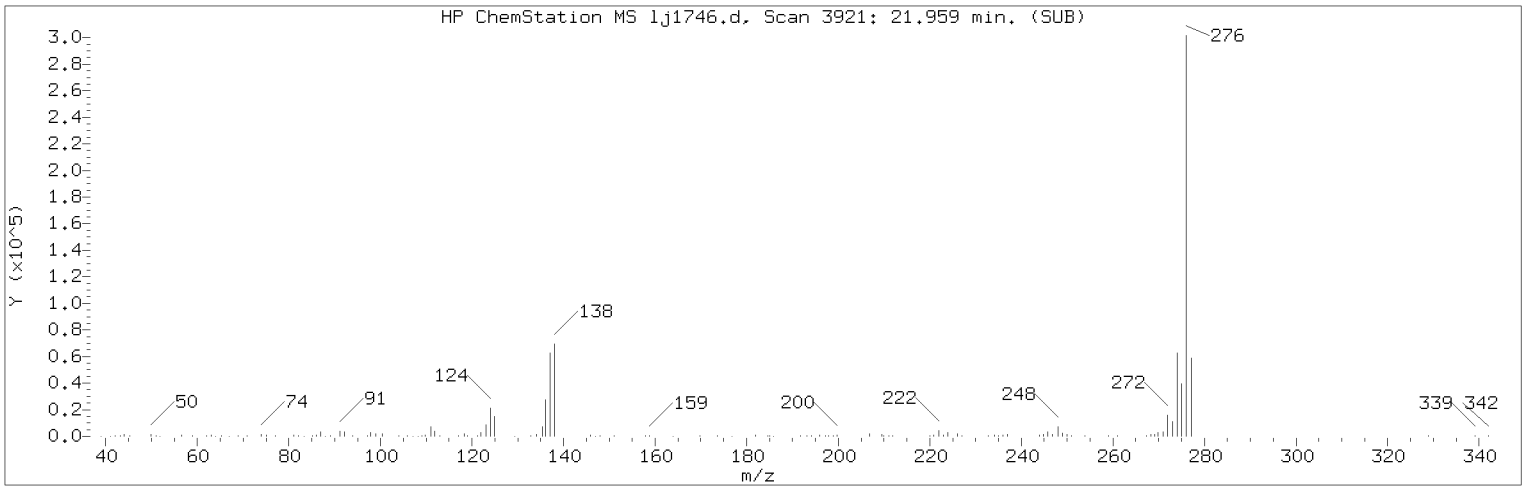
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

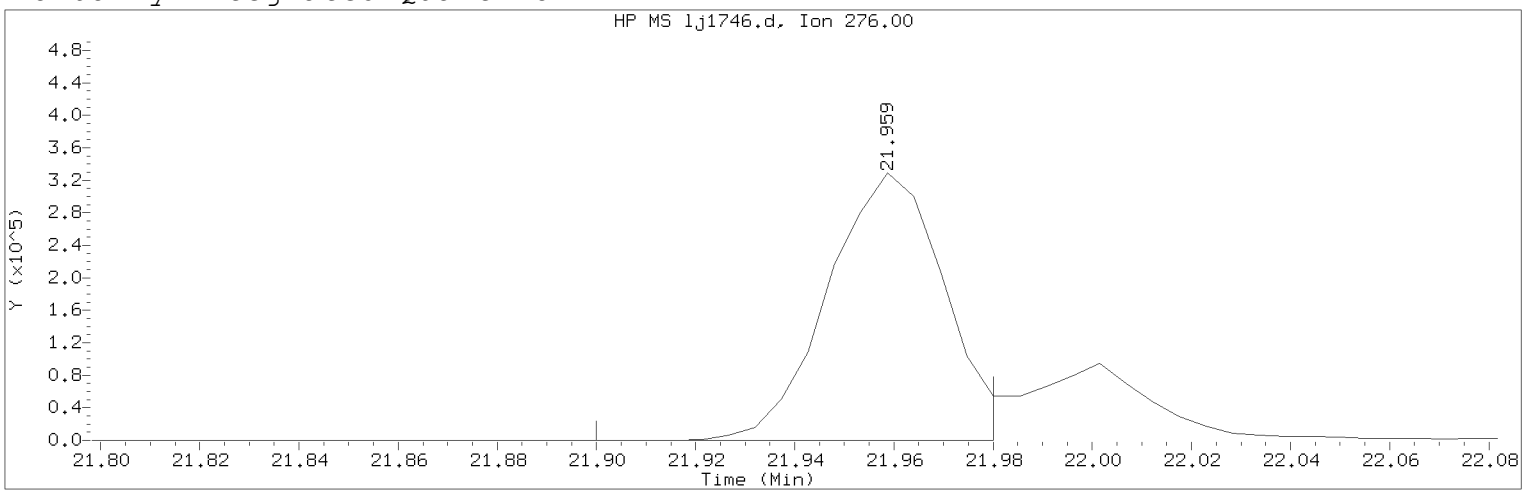
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2255		
Retention Time (minutes)	: 13.048		
Quant Ion	: 86.00		
Area	: 201792		
On-column Amount (ng/ul)	: 0.9026		
Integration start scan	: 2250	Integration stop scan:	2267
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: ART

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

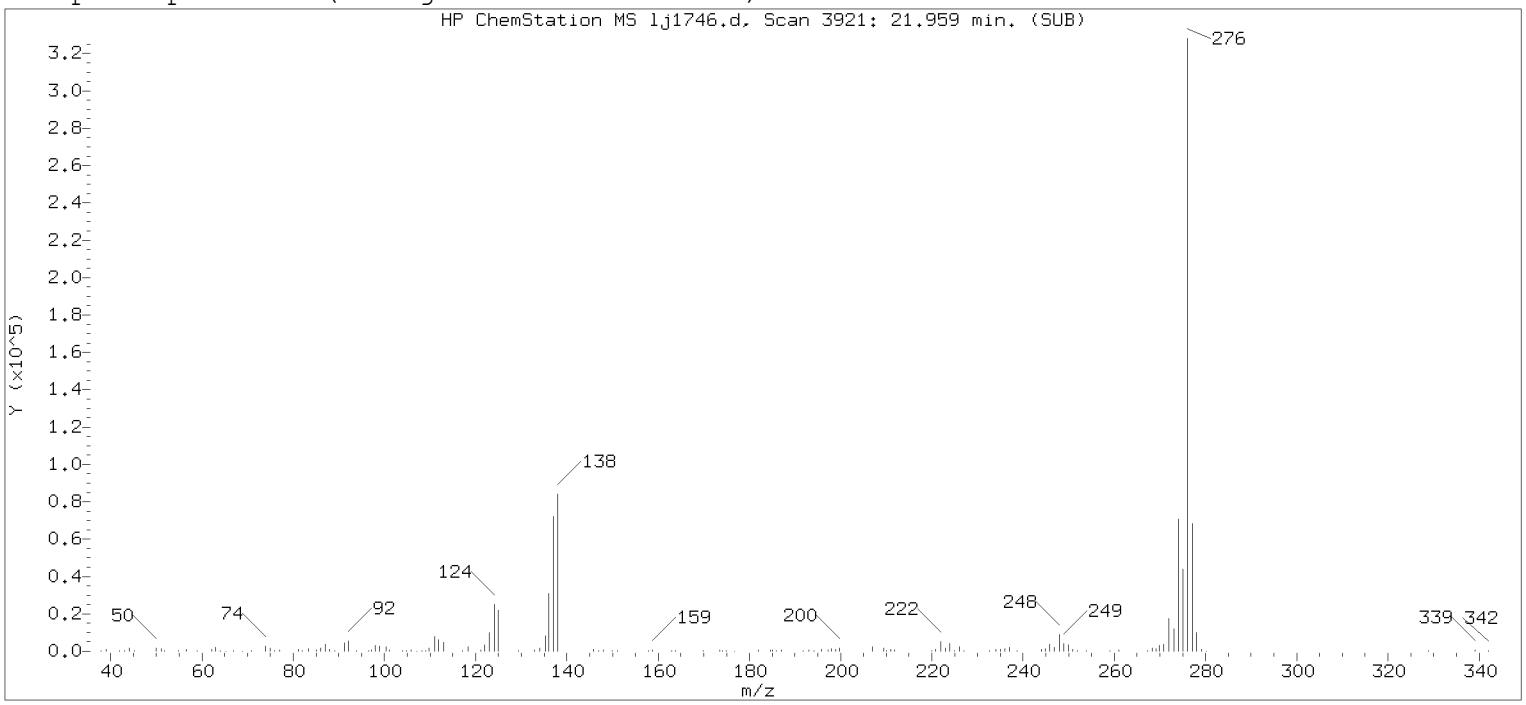
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3921
Retention Time (minutes) : 21.959
Quant Ion : 276.00
Area (flag) : 537390M
On-Column Amount (ng/ul) : 3.6718
Integration start scan : 3909 Integration stop scan: 3924
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

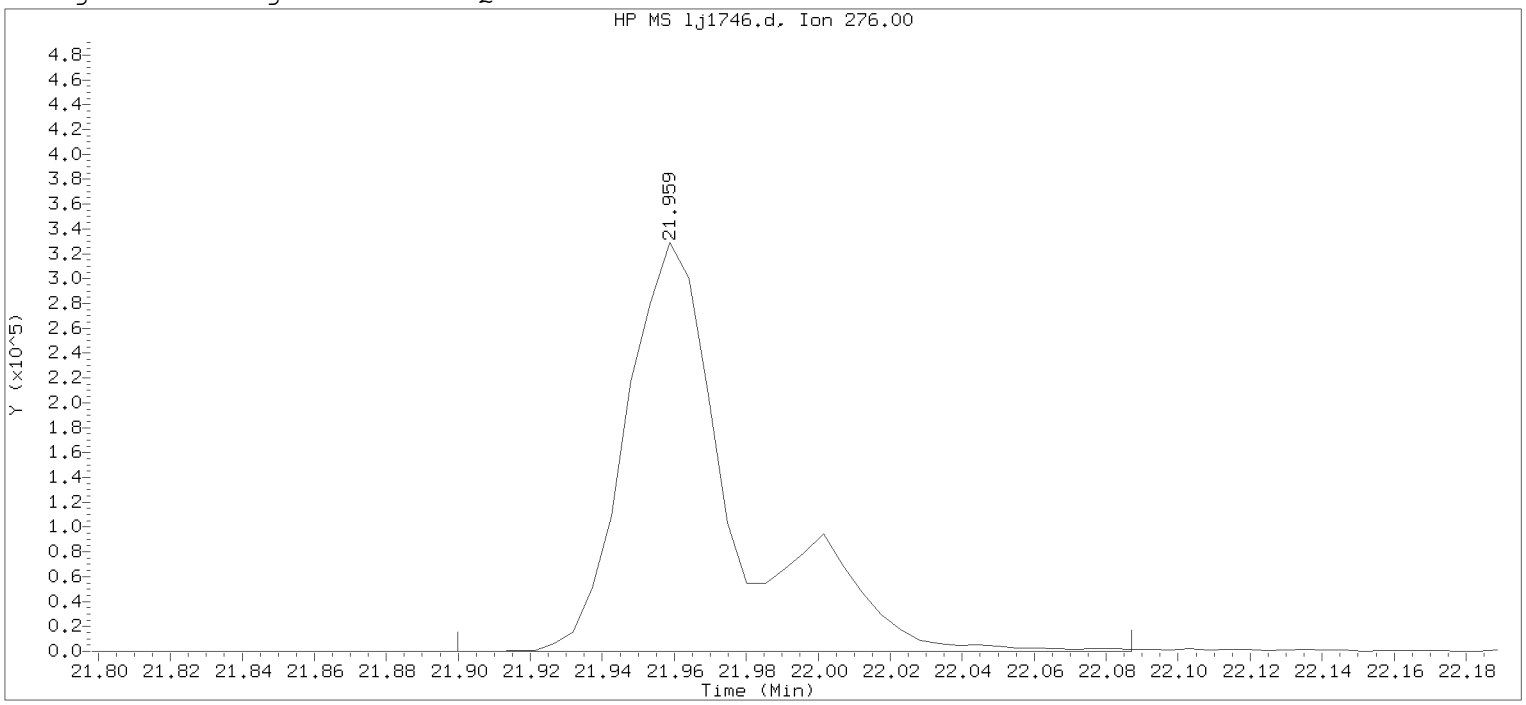
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



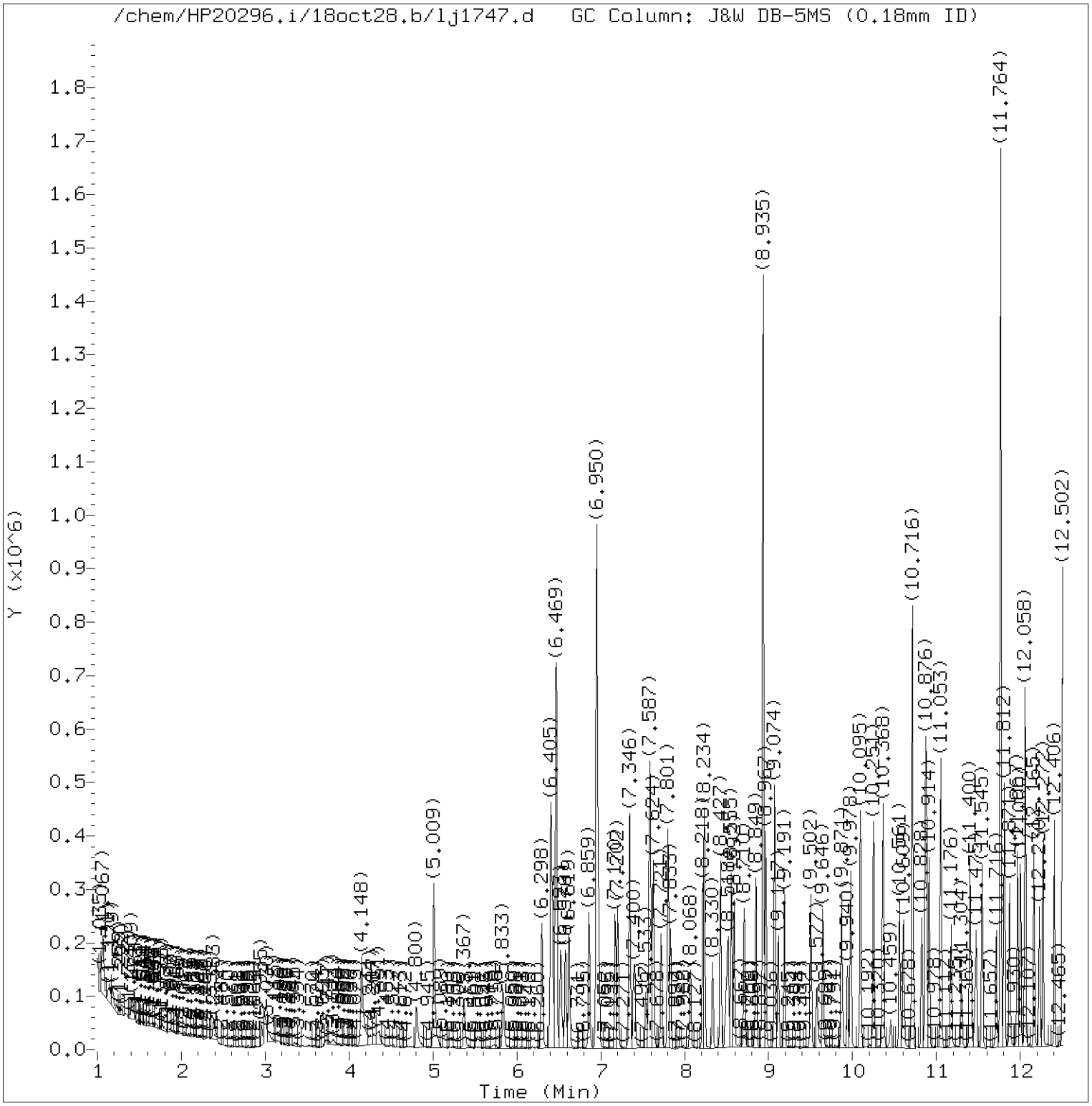
Data File: /chem/HP20296.i/18oct28.b/lj1746.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 02:51 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD3.75 Lab Sample ID: RVSTD2648

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3921		
Retention Time (minutes)	: 21.959		
Quant Ion	: 276.00		
Area	: 698492		
On-column Amount (ng/ul)	: 4.3721		
Integration start scan	: 3909	Integration stop scan:	3944
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: ART2617



Total Ion Chromatogram (TIC)

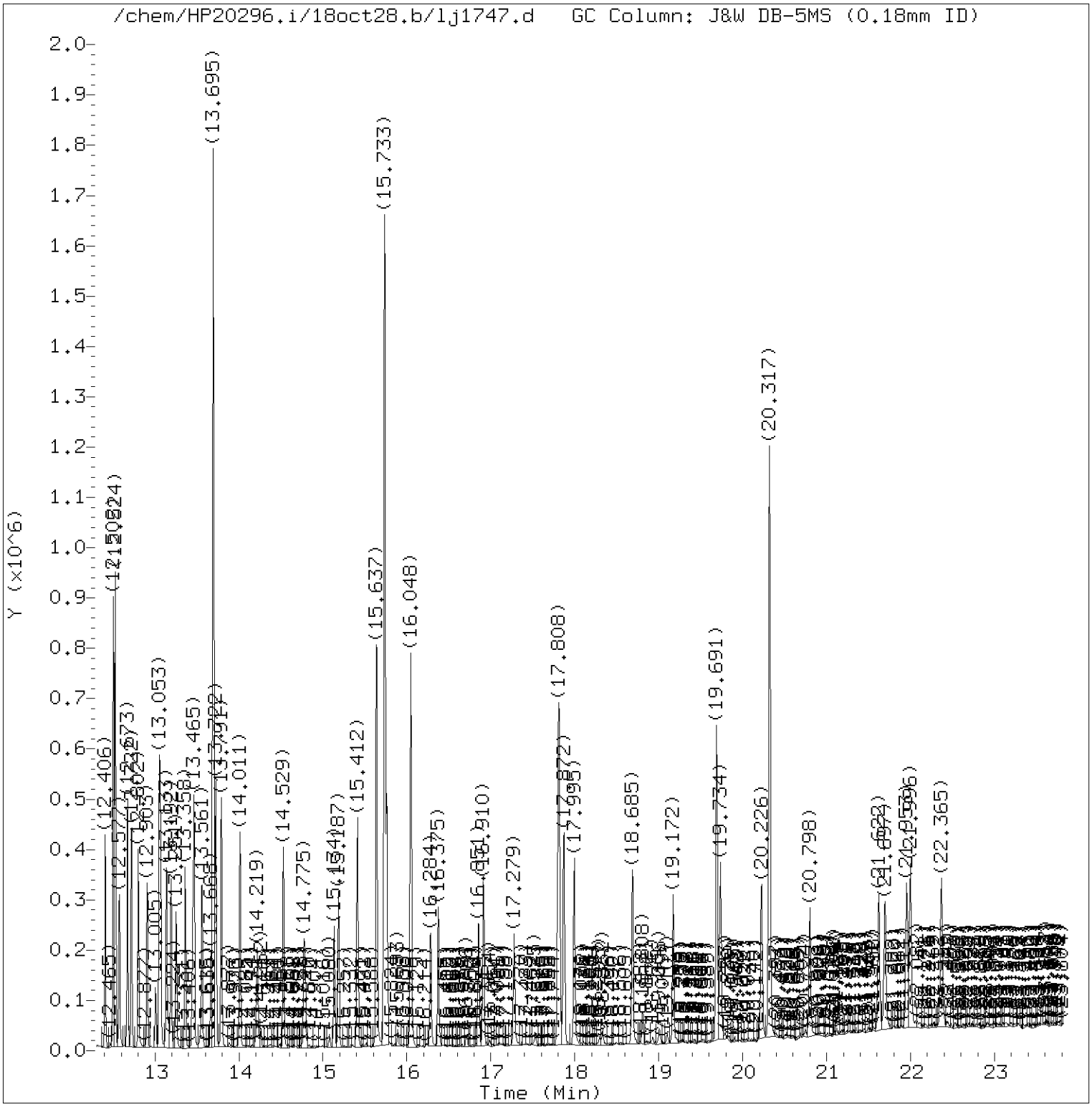
Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.383	88	35662M	1.292
5) N-Nitrosodimethylamine	(1)	2.950	74	48925M	1.179
6) Pyridine	(1)	2.987	79	78922	1.118
8) 2-Picoline	(1)	4.153	93	91395M	1.240
9) N-Nitrosomethylethylamine	(1)	4.362	88	36907M	1.226
10) Methyl methanesulfonate	(1)	4.800	80	49485M	1.286
12)$2-Fluorophenol	(1)	5.009	112	139019	2.418
14) N-Nitrosodiethylamine	(1)	5.373	102	28404	1.044
43) Total Cresols	(1)			140617	2.445
16) Ethyl methanesulfonate	(1)	5.833	109	37359	1.243
17) Benzaldehyde	(1)	6.298	77	70590	1.335
18)$Phenol-d6	(1)	6.405	99	192176	2.455
19) Phenol	(1)	6.421	94	113097	1.238
20) Aniline	(1)	6.458	93	130520	1.210
21) a-methylstyrene	(1)	6.544	118	6405	1.151
23) bis(2-Chloroethyl)ether	(1)	6.576	93	85246	1.242
24) 2-Chlorophenol	(1)	6.619	128	67145	1.231
25) 1,3-Dichlorobenzene	(1)	6.859	146	74600	1.243
26)*1,4-Dichlorobenzene-d4	(1)	6.950	152	184537	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	73955	1.236
28) Benzyl alcohol	(1)	7.175	108	41669	1.140
29) 1,2-Dichlorobenzene	(1)	7.202	146	70174	1.219
31) Indene	(1)	7.341	115	80915	1.262
32) 2-Methylphenol	(1)	7.346	108	69538	1.225
100) Isosafrole	(3)			51457	1.139
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.394	45	104393	1.208
35) bis(2-Chloroisopropyl)ether	(1)	7.394	45	104393	1.208
36) N-Nitrosopyrrolidine	(1)	7.533	100	32072	1.098
37) Acetophenone	(1)	7.576	105	107340	1.229
38) 4-Methylphenol	(1)	7.587	108	71079	1.220
39) N-Nitroso-di-n-propylamine	(1)	7.592	70	63479	1.210
40) N-Nitrosomorpholine	(1)	7.608	56	46267	1.220
41) o-Toluidine	(1)	7.624	106	120365	1.212
44) Hexachloroethane	(1)	7.721	117	33164	1.217
45)$Nitrobenzene-d5	(2)	7.801	82	172349	2.262
46) Nitrobenzene	(2)	7.833	77	97253	1.194
125) 2,4_2,6-Dinitrotoluenes	(3)			60843	2.156
50) N-Nitrosopiperidine	(2)	8.068	114	33380	1.168
52) Isophorone	(2)	8.213	82	160210	1.163
53) 2-Nitrophenol	(2)	8.336	139	29644	1.104

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

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.427	107	76146	1.166
58) Benzoic acid	(2)	8.518	105	123190M	2.945
59) O,O,O-Triethylphosphorothioate	(2)	8.555	198	32340	1.175
57) bis(2-Chloroethoxy)methane	(2)	8.592	93	107689	1.242
62) 2,4-Dichlorophenol	(2)	8.710	162	52440	1.124
151) Diallate trans/cis	(4)			74586	1.201
65) 1,2,4-Trichlorobenzene	(2)	8.855	180	63840	1.215
68)*Naphthalene-d8	(2)	8.935	136	715804	5.000
69) Naphthalene	(2)	8.967	128	199449	1.230
70) 4-Chloroaniline	(2)	9.074	127	81347	1.229
71) 2,6-Dichlorophenol	(2)	9.079	162	54957	1.219
72) Hexachloropropene	(2)	9.117	213	39138	1.143
74) Hexachlorobutadiene	(2)	9.191	225	38923	1.233
78) Quinoline	(2)	9.502	129	117403	1.220
79) Caprolactam	(2)	9.577	113	13613	0.959
80) N-Nitrosodi-n-butylamine	(2)	9.646	84	57644	1.077
83) 4-Chloro-3-methylphenol	(2)	9.871	107	62538	1.121
85) Safrole	(2)	9.983	162	49727	1.221
86) 2-Methylnaphthalene	(2)	10.095	142	125645	1.211
87) 1-Methylnaphthalene	(2)	10.251	142	119100	1.198
88) Hexachlorocyclopentadiene	(3)	10.357	237	36006	1.149
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.368	216	65280	1.207
91) cis-Isosafrole	(3)	10.459	162	9310	0.207
93) 2,4,6-Trichlorophenol	(3)	10.561	196	35207	1.043
95) 2,4,5-Trichlorophenol	(3)	10.609	196	42435	1.181
96)$2-Fluorobiphenyl	(3)	10.716	172	289819	2.447
97) trans-Isosafrole	(3)	10.828	162	42147	0.932
98) 1,1'-Biphenyl	(3)	10.871	154	149533	1.217
99) 2-Chloronaphthalene	(3)	10.882	162	126062	1.177
101) 1-Chloronaphthalene	(3)	10.914	162	113972	1.242
103) Diphenyl ether	(3)	11.053	170	79488	1.167
104) 2-Nitroaniline	(3)	11.058	138	26602	0.955
108) 1,4-Naphthoquinone	(3)	11.176	158	40381	1.028
109) 1,4-Dinitrobenzene	(3)	11.304	168	13684	0.949
110) Dimethylphthalate	(3)	11.400	163	139314	1.248
111) 1,3-Dinitrobenzene	(3)	11.417	168	14450	0.881
113) 2,6-Dinitrotoluene	(3)	11.475	165	25756	1.076
114) Acenaphthylene	(3)	11.550	152	167097	1.231
117) 3-Nitroaniline	(3)	11.716	138	27345	1.054
118)*Acenaphthene-d10	(3)	11.764	164	352099	5.000

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Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.812	153	128228	1.227
120) 2,4-Dinitrophenol	(3)	11.871	184	33728	2.471
121) 4-Nitrophenol	(3)	11.967	109	39807	1.832
122) Pentachlorobenzene	(3)	12.000	250	54084	1.231
123) 2,4-Dinitrotoluene	(3)	12.058	165	35087	1.080
124) Dibenzofuran	(3)	12.058	168	174923	1.239
126) 1-Naphthylamine	(3)	12.165	143	115631	1.144
127) 2,3,4,6-Tetrachlorophenol	(3)	12.230	232	30331	1.095
128) 2-Naphthylamine	(3)	12.272	143	120261	1.196
129) Diethylphthalate	(3)	12.406	149	135385	1.232
130) Thionazin	(3)	12.502	107	24378	1.132
131) Fluorene	(3)	12.502	166	135441	1.226
133) 5-Nitro-o-toluidine	(3)	12.524	152	34191	1.140
132) 4-Chlorophenyl-phenylether	(3)	12.524	204	71821	1.259
134) 4-Nitroaniline	(3)	12.529	138	28174	1.063
135) 4,6-Dinitro-2-methylphenol	(4)	12.577	198	30823	1.665
136) N-Nitrosodiphenylamine	(4)	12.673	169	106530	1.183
137) NDPA as diphenylamine	(4)	12.673	169	106530	1.183
139) 1,2-Diphenylhydrazine	(4)	12.722	77	194701	1.213
140)$2,4,6-Tribromophenol	(3)	12.802	330	30520	2.127
142) Tetraethyldithiopyrophosphate	(4)	12.903	97	26553	1.118
144) 1,3,5-Trinitrobenzene	(4)	13.005	213	8055	0.718
145) Diallate (peak 1)	(4)	13.048	86	64021	0.999
146) Phorate	(4)	13.059	75	100745	1.170
147) Phenacetin	(4)	13.069	108	73115	1.097
148) 4-Bromophenyl-phenylether	(4)	13.139	248	40297	1.277
149) Diallate (peak 2)	(4)	13.160	86	10565M	0.201
150) Hexachlorobenzene	(4)	13.192	284	38628	1.205
152) Dimethoate	(4)	13.251	87	56765	1.076
153) Atrazine	(4)	13.358	200	34985	1.224
154) Pentachlorophenol	(4)	13.444	266	19167	0.946
155) 4-Aminobiphenyl	(4)	13.465	169	89903	1.125
156) Pentachloronitrobenzene	(4)	13.465	237	17102	1.128
157) Pronamide	(4)	13.561	173	54033	1.060
158)*Phenanthrene-d10	(4)	13.695	188	703648	5.000
159) Dinoseb	(4)	13.706	211	19003	0.675
160) Phenanthrene	(4)	13.722	178	207328	1.211
162) Anthracene	(4)	13.791	178	200223	1.194
168) Carbazole	(4)	14.011	167	171559	1.143
169) Methyl parathion	(4)	14.219	109	38274	0.966

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Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

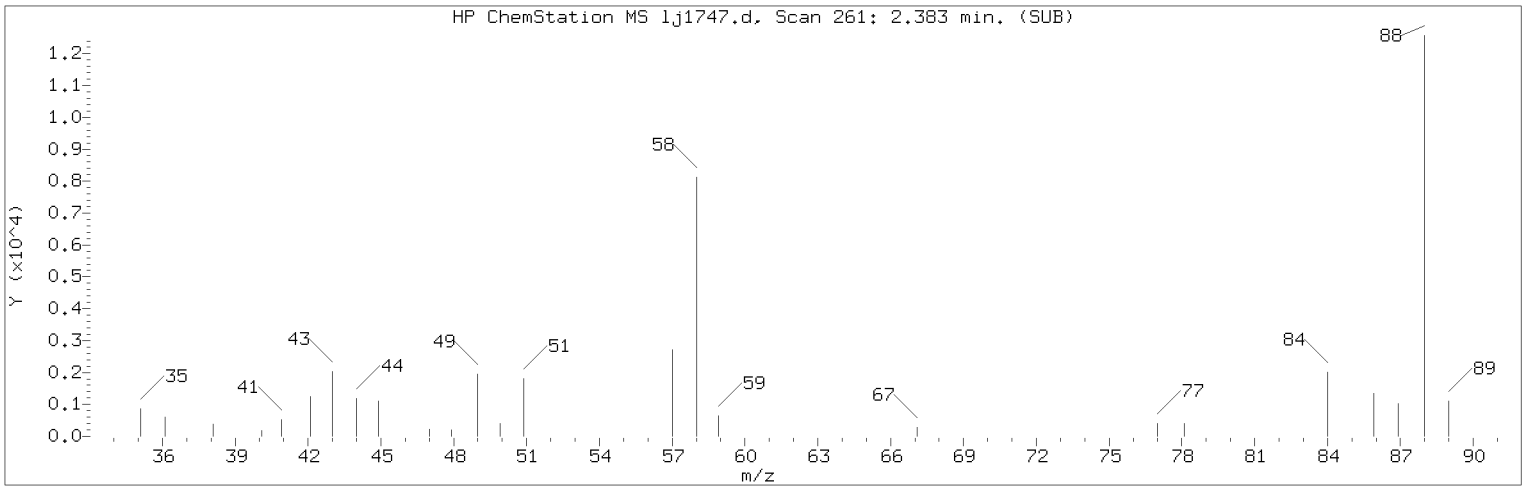
Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.529	149	201773	1.053
172) Parathion	(4)	14.770	109	20078	0.805
173) 4-Nitroquinoline-1-oxide	(4)	14.792	190	6940	0.500
227) Total PAHs	(6)			3201168	21.335
174) Octachlorostyrene	(4)	15.139	308	13086	1.106
176) Isodrin	(4)	15.187	193	22466	1.110
178) Fluoranthene	(4)	15.412	202	217278	1.161
179) Benzidine	(5)	15.642	184	376104	3.228
180)*Pyrene-d10	(5)	15.733	212	731230	5.000
182) Pyrene	(5)	15.760	202	237519	1.231
184)$Terphenyl-d14	(5)	16.048	244	278952	2.344
187) p-Dimethylaminoazobenzene	(5)	16.278	225	25456	0.857
190) Chlorobenzilate	(5)	16.375	139	61420	1.077
192) 3,3'-Dimethylbenzidine	(5)	16.856	212	108187	0.969
193) Butylbenzylphthalate	(5)	16.915	149	84141	0.982
196) 2-Acetylaminofluorene	(5)	17.279	181	60612	0.859
198) 3,3'-Dichlorobenzidine	(5)	17.797	252	62851	0.974
200) Benzo(a)anthracene	(5)	17.808	228	206633	1.150
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.819	231	34959	0.969
201) Chrysene	(5)	17.872	228	207280	1.178
204) bis(2-Ethylhexyl)phthalate	(5)	17.995	149	117857	0.955
208) 6-Methylchrysene	(5)	18.685	242	125689	1.075
210) Di-n-octylphthalate	(6)	19.172	149	175583	0.887
211) Benzo(b)fluoranthene	(6)	19.691	252	190311	1.169
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.691	256	69501	0.998
213) Benzo(k)fluoranthene	(6)	19.734	252	192358	1.172
216) Benzo(a)pyrene	(6)	20.226	252	163384	1.098
218)*Perylene-d12	(6)	20.322	264	618576	5.000
220) 3-Methylcholanthrene	(6)	20.798	268	69928	1.019
222) Dibenz(a,h)acridine	(6)	21.622	279	121154	1.014
223) Dibenz(a,j)acridine	(6)	21.697	279	139786	1.110
224) Indeno(1,2,3-cd)pyrene	(6)	21.953	276	152452M	1.083
225) Dibenz(a,h)anthracene	(6)	21.996	278	173900	1.183
226) Benzo(g,h,i)perylene	(6)	22.365	276	177542	1.181

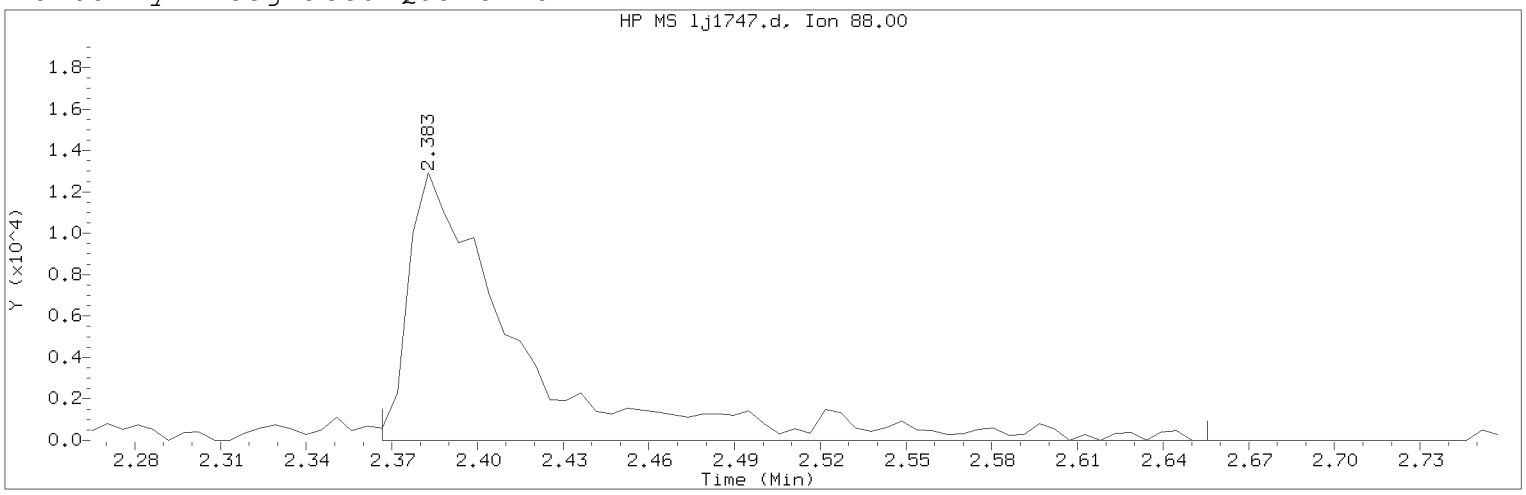
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

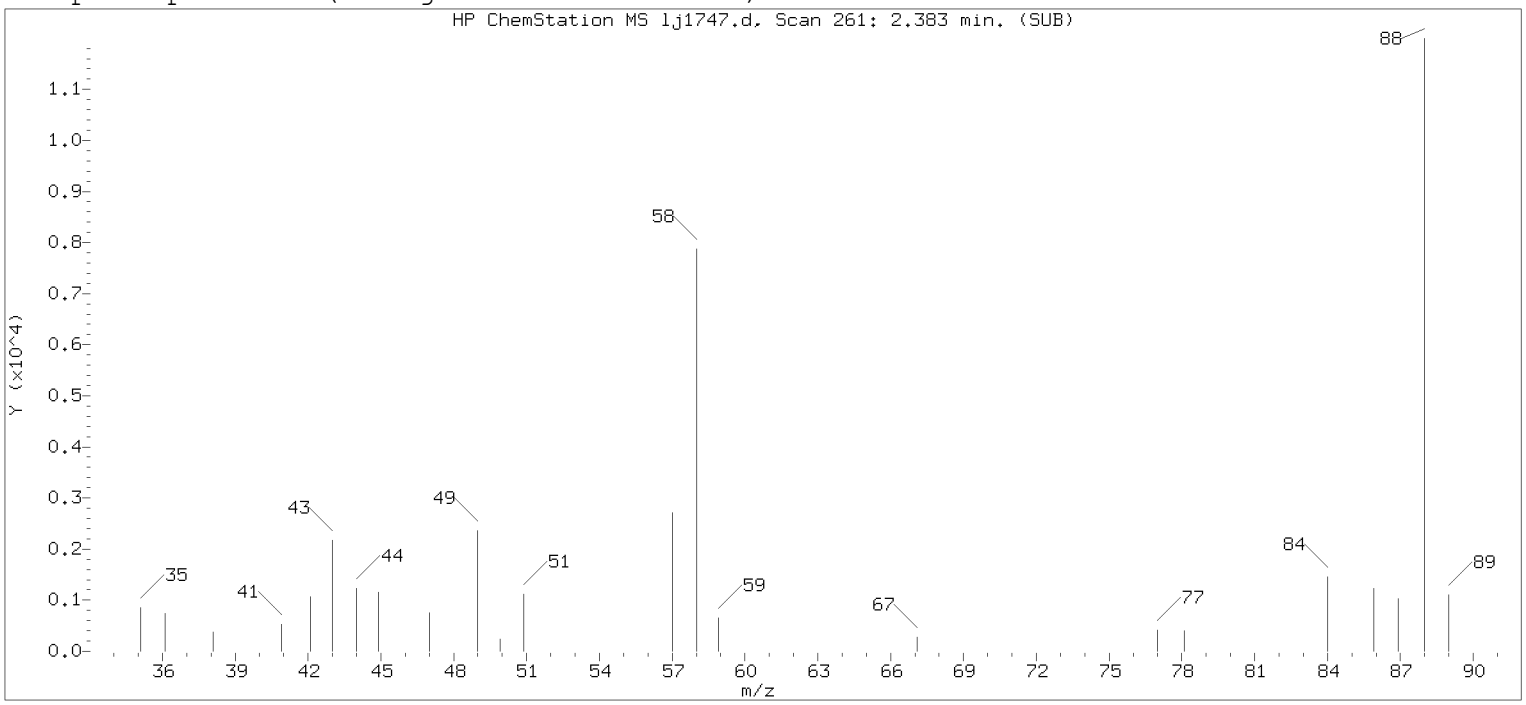
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 261
Retention Time (minutes) : 2.383
Quant Ion : 88.00
Area (flag) : 35662M
On-Column Amount (ng/ul) : 1.2918
Integration start scan : 257 Integration stop scan: 311
Y at integration start : 5 Y at integration end: 5

Reason for manual integration: improper integration

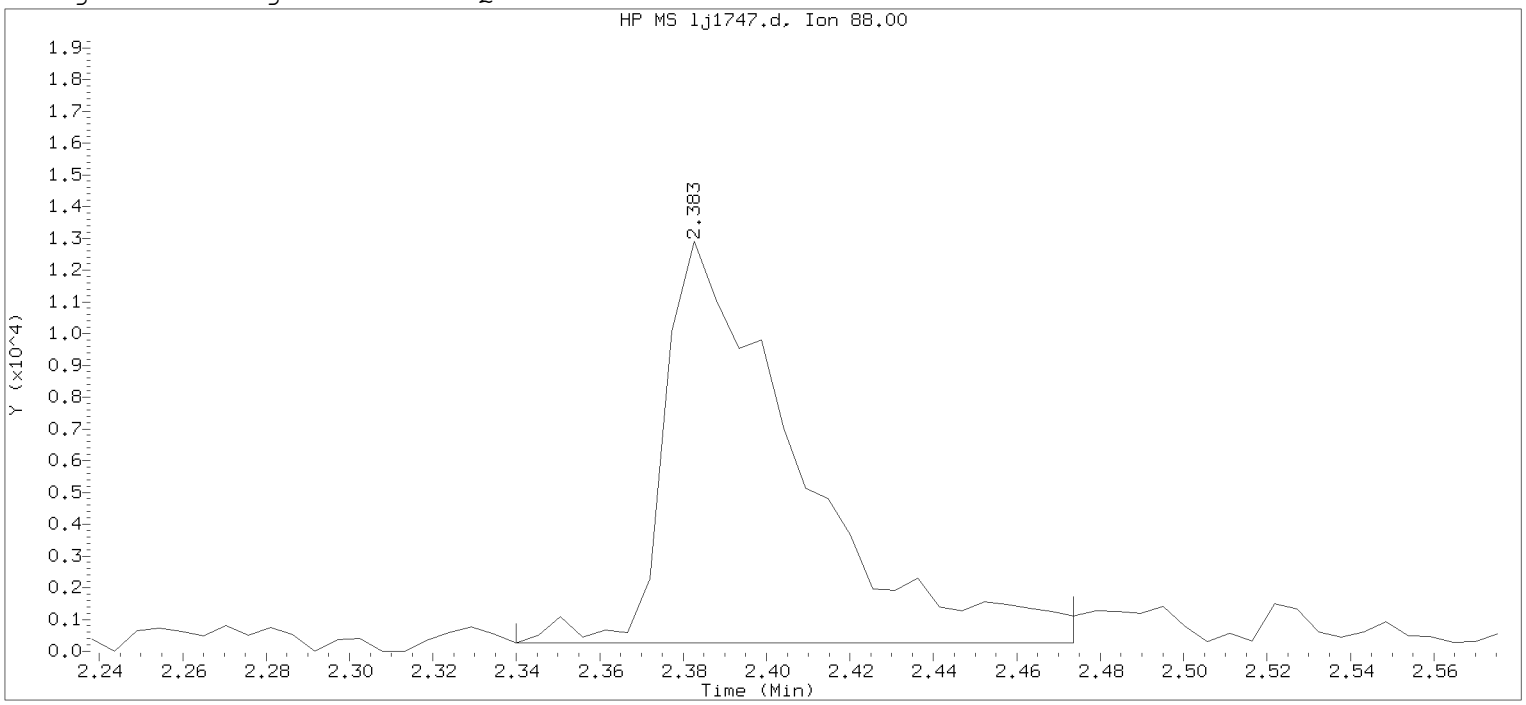
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

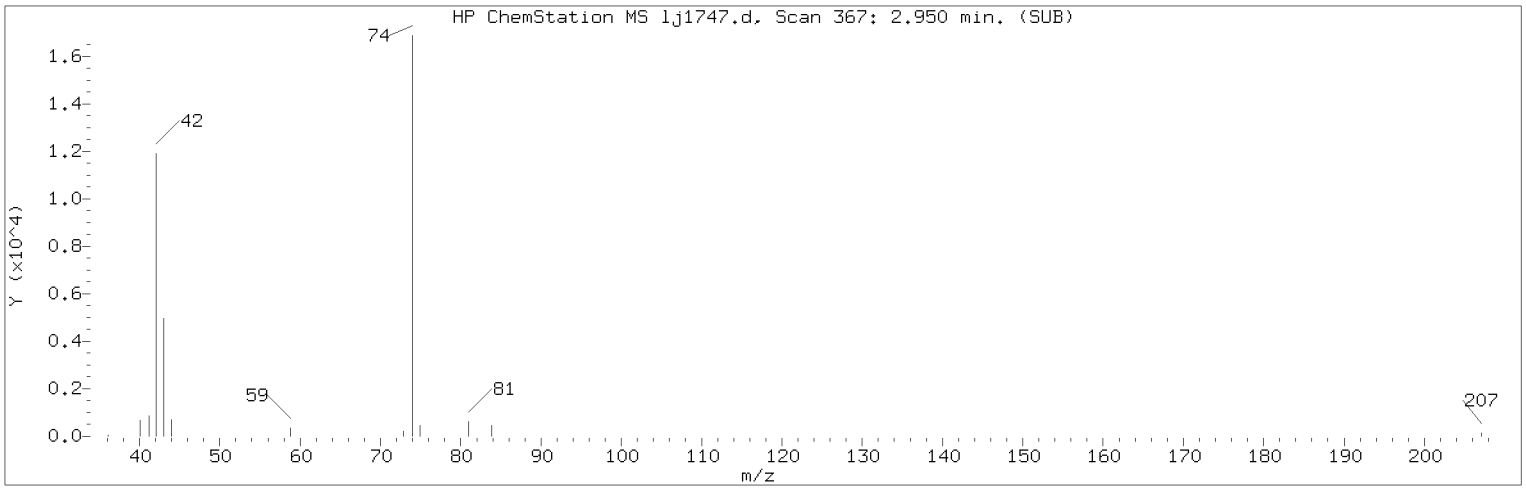
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

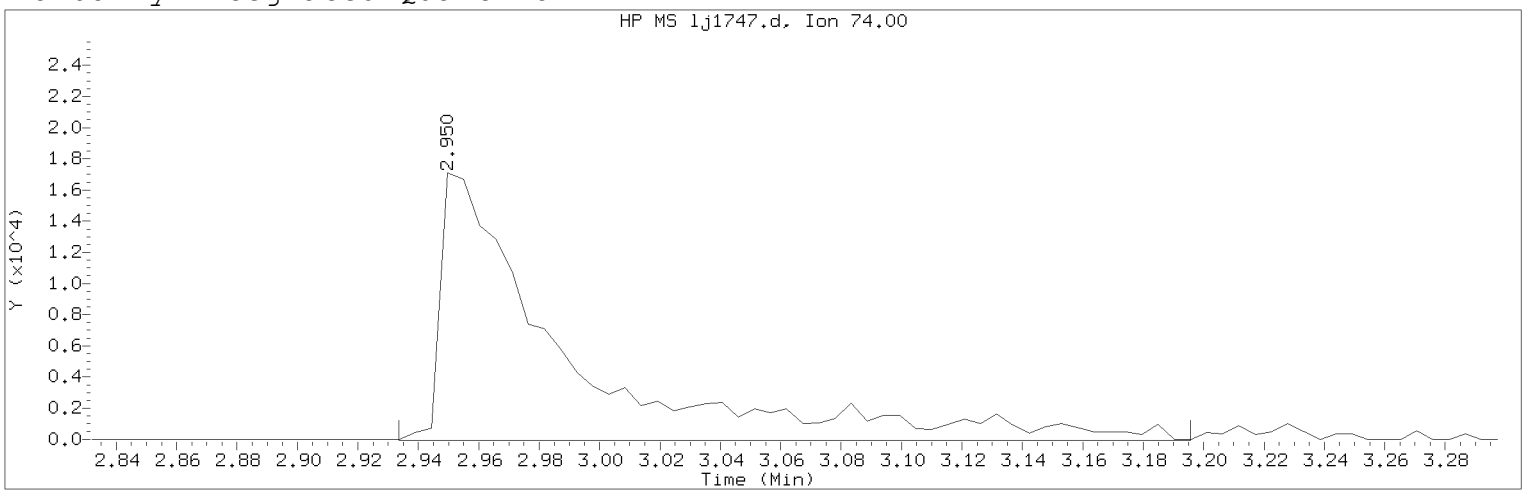
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 261		
Retention Time (minutes)	: 2.383		
Quant Ion	: 88.00		
Area	: 28206		
On-column Amount (ng/ul)	: 1.0589		
Integration start scan	: 252	Integration stop scan:	277
Y at integration start	: 272	Y at integration end:	272

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

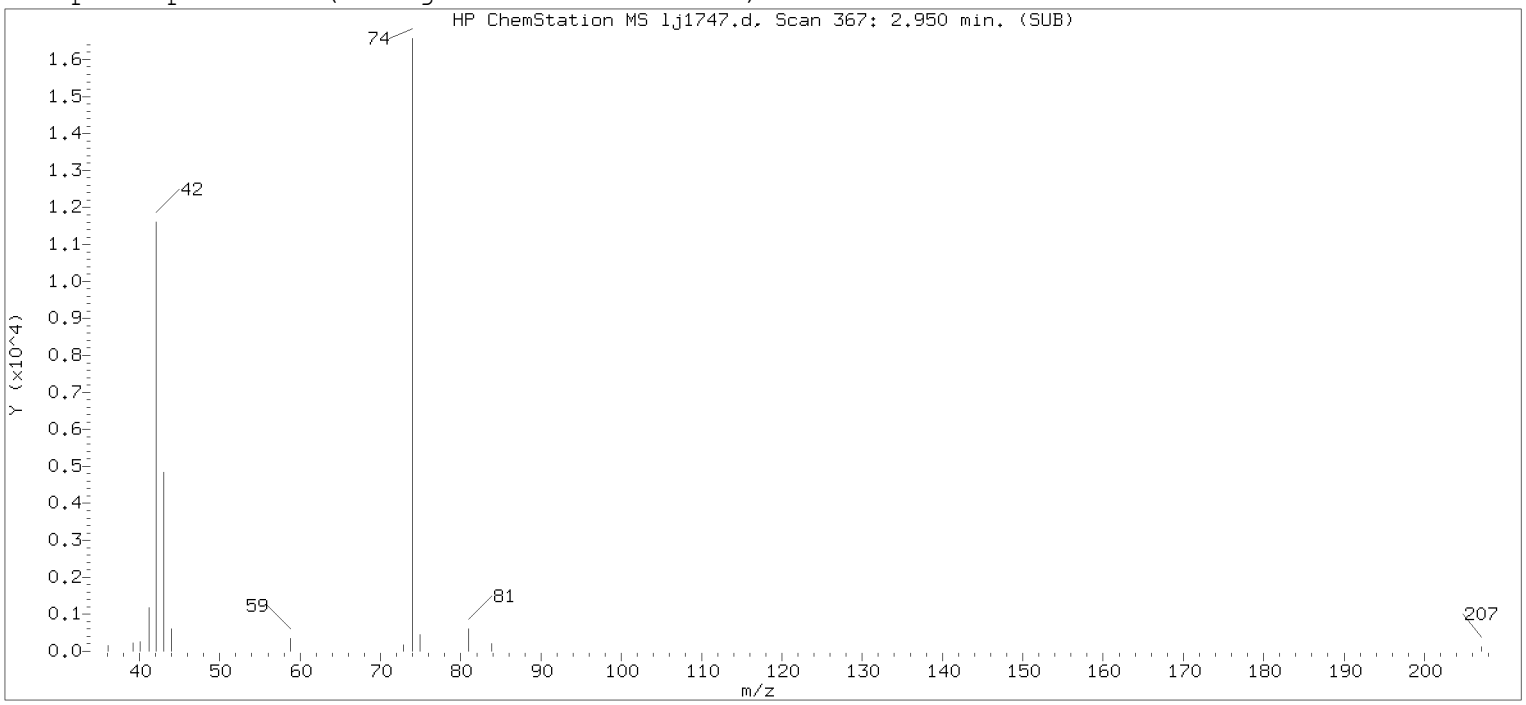
Compound Number : 5
Compound Name : N-Nitrosodimethylamine
Scan Number : 367
Retention Time (minutes) : 2.950
Quant Ion : 74.00
Area (flag) : 48925M
On-Column Amount (ng/ul) : 1.1790
Integration start scan : 363 Integration stop scan: 412
Y at integration start : -57 Y at integration end: -57

Reason for manual integration: improper integration

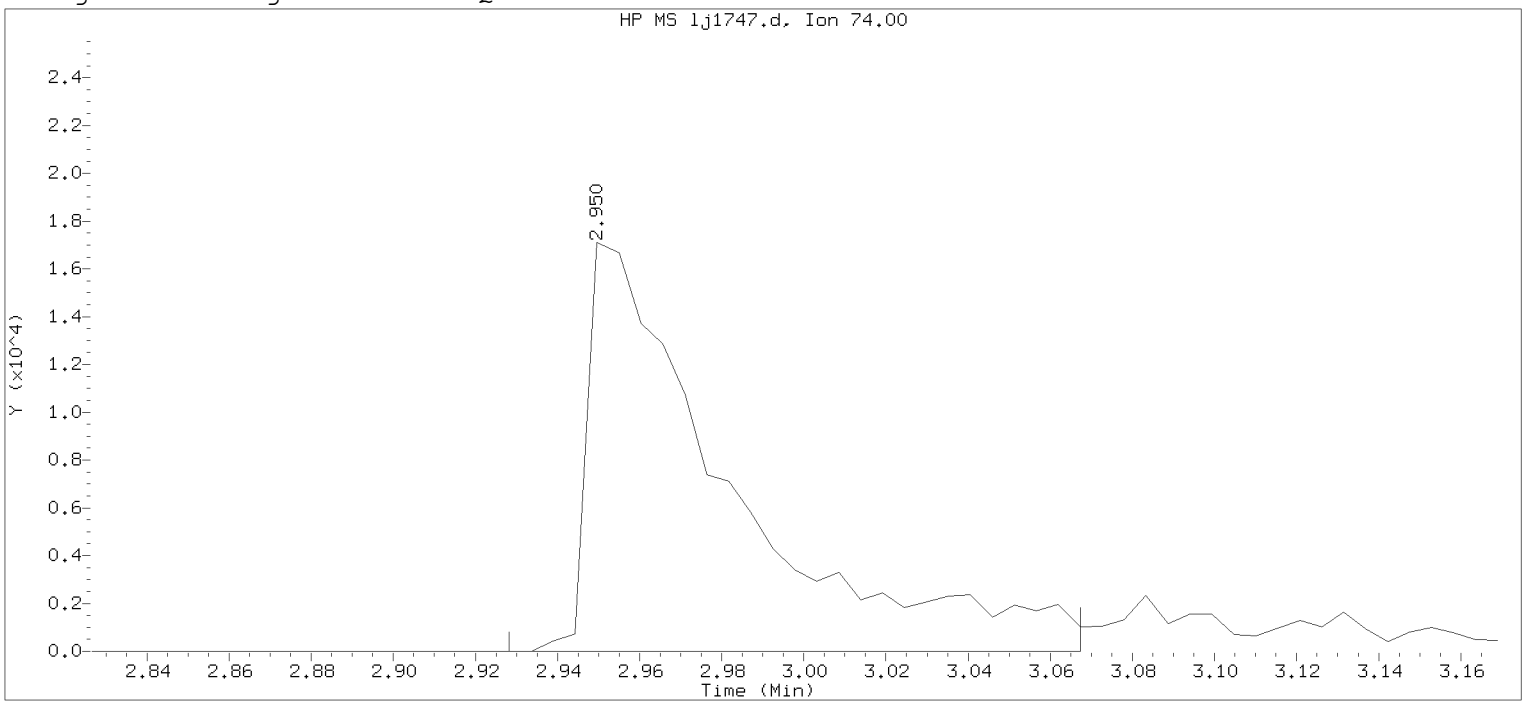
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

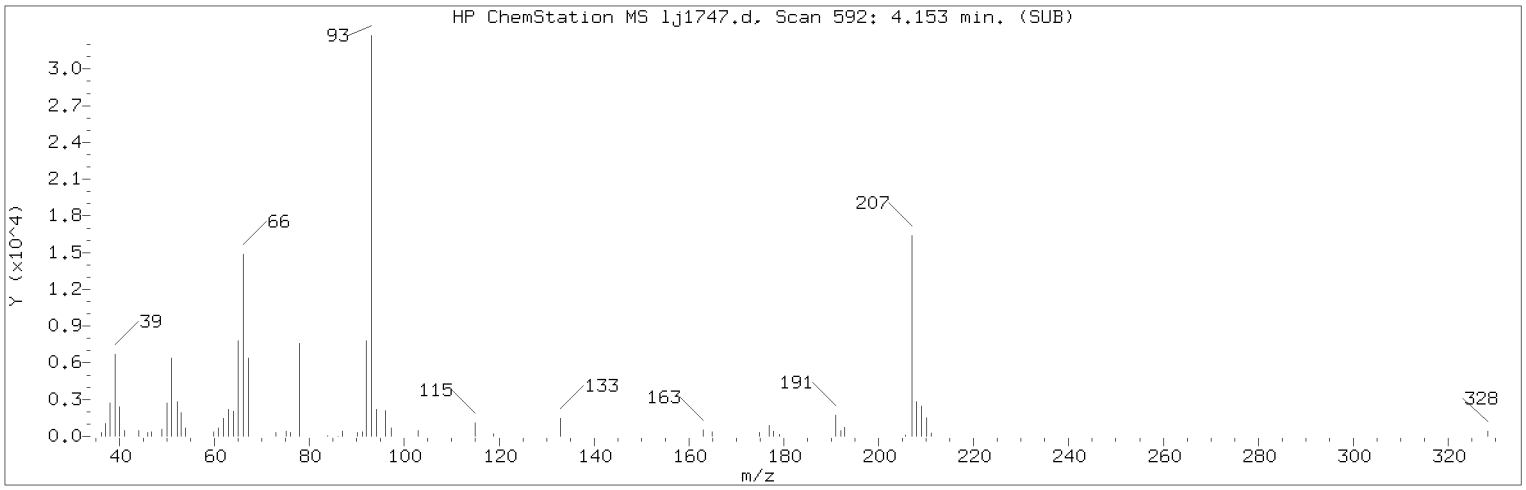
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

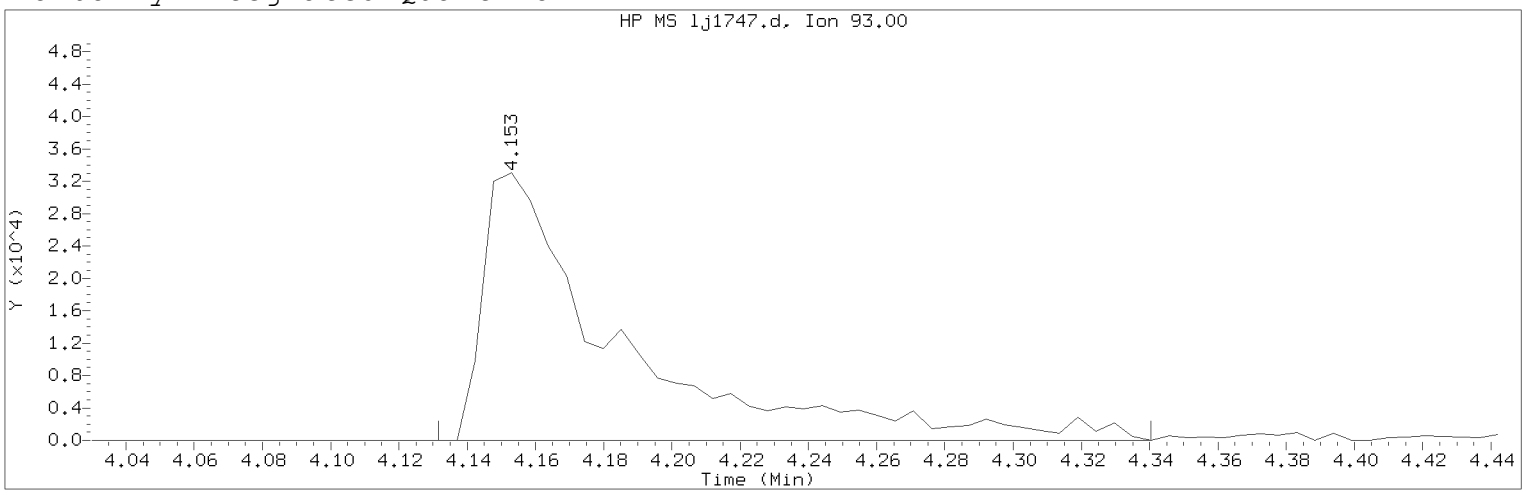
Compound Number	: 5		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 367		
Retention Time (minutes)	: 2.950		
Quant Ion	: 74.00		
Area	: 40821		
On-column Amount (ng/ul)	: 1.0312		
Integration start scan	: 362	Integration stop scan:	388
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

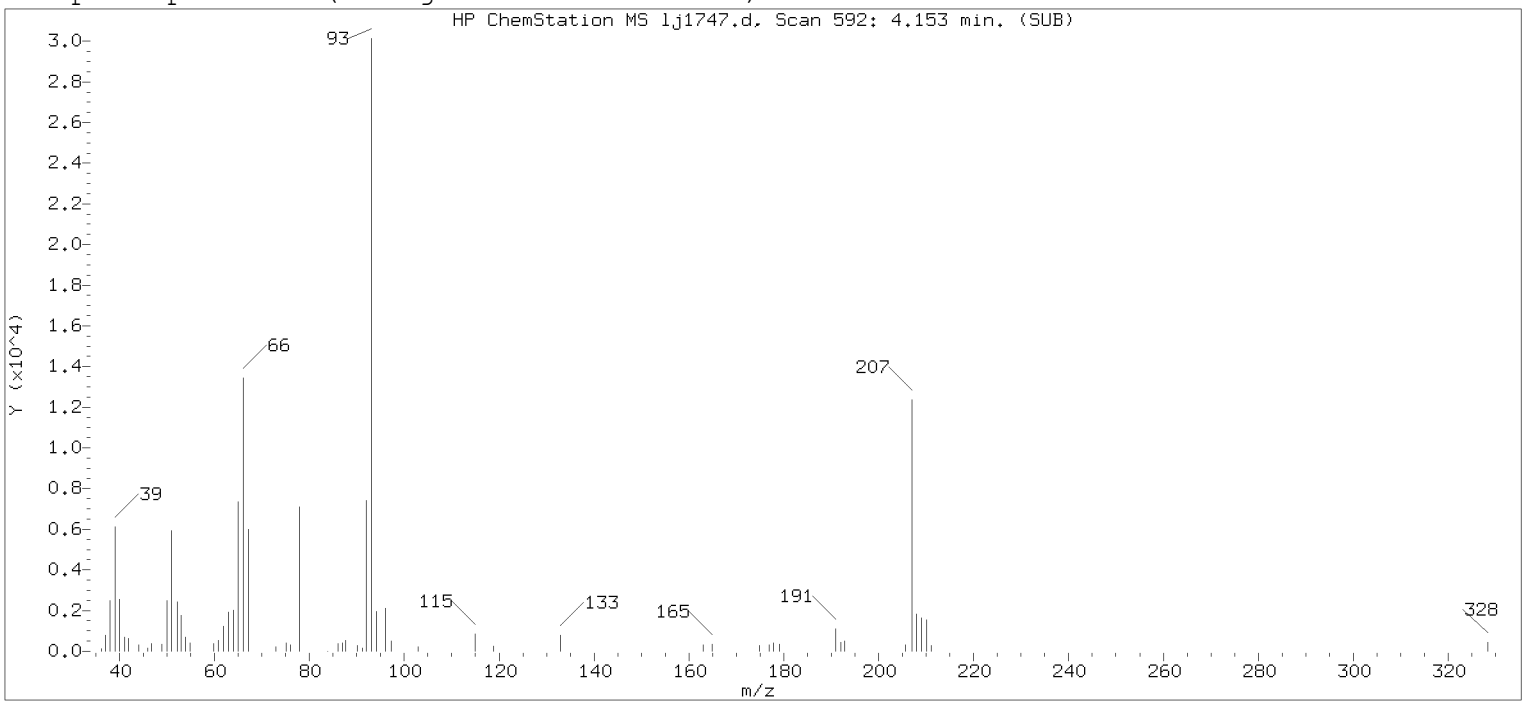
Compound Number : 8
Compound Name : 2-Picoline
Scan Number : 592
Retention Time (minutes) : 4.153
Quant Ion : 93.00
Area (flag) : 91395M
On-Column Amount (ng/ul) : 1.2401
Integration start scan : 587 Integration stop scan: 626
Y at integration start : 0 Y at integration end: 12

Reason for manual integration: improper integration

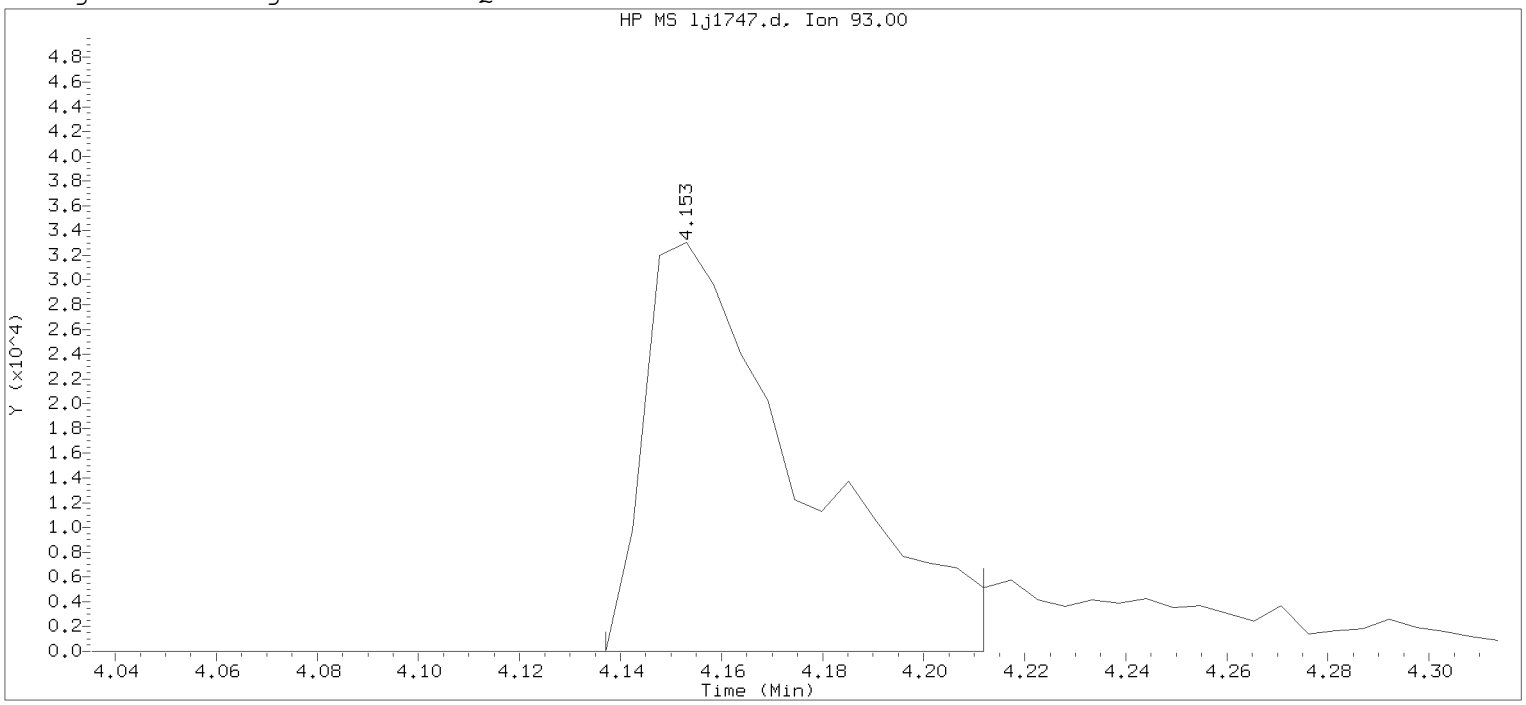
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

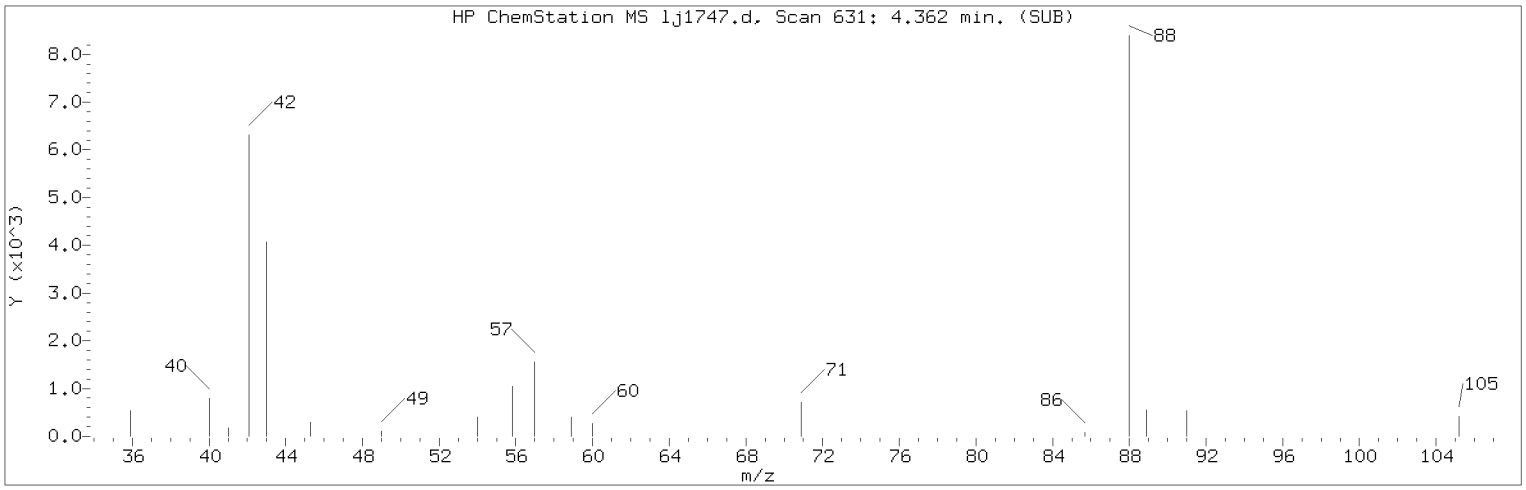
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

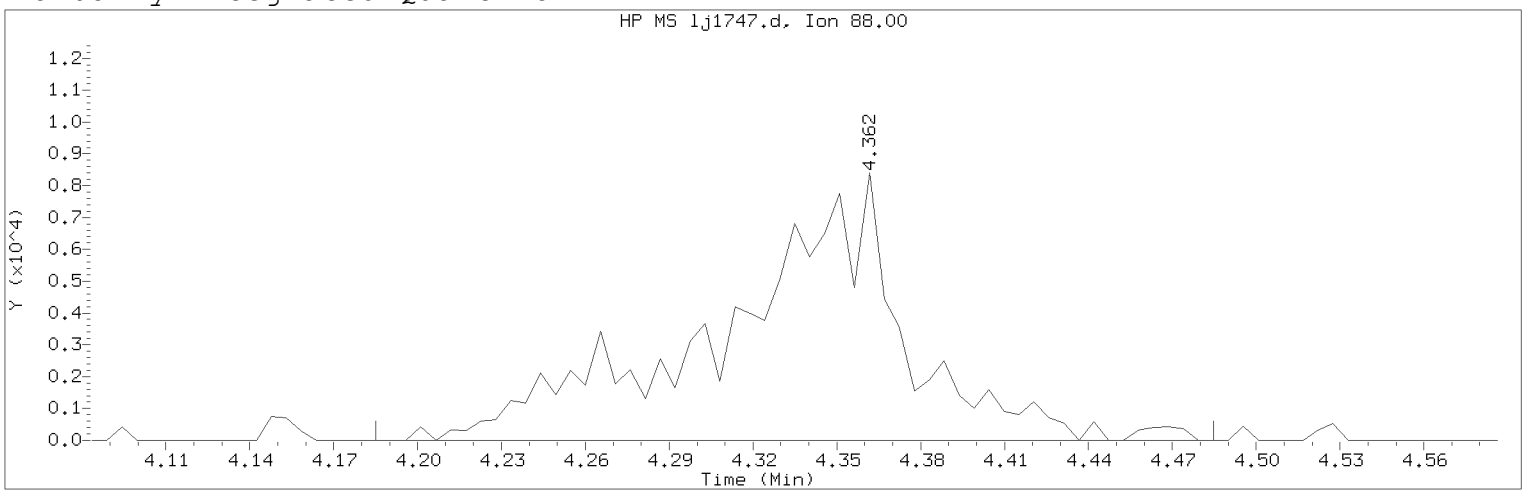
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 592		
Retention Time (minutes)	: 4.153		
Quant Ion	: 93.00		
Area	: 70810		
On-column Amount (ng/ul)	: 1.0181		
Integration start scan	: 588	Integration stop scan:	602
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: ARTransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

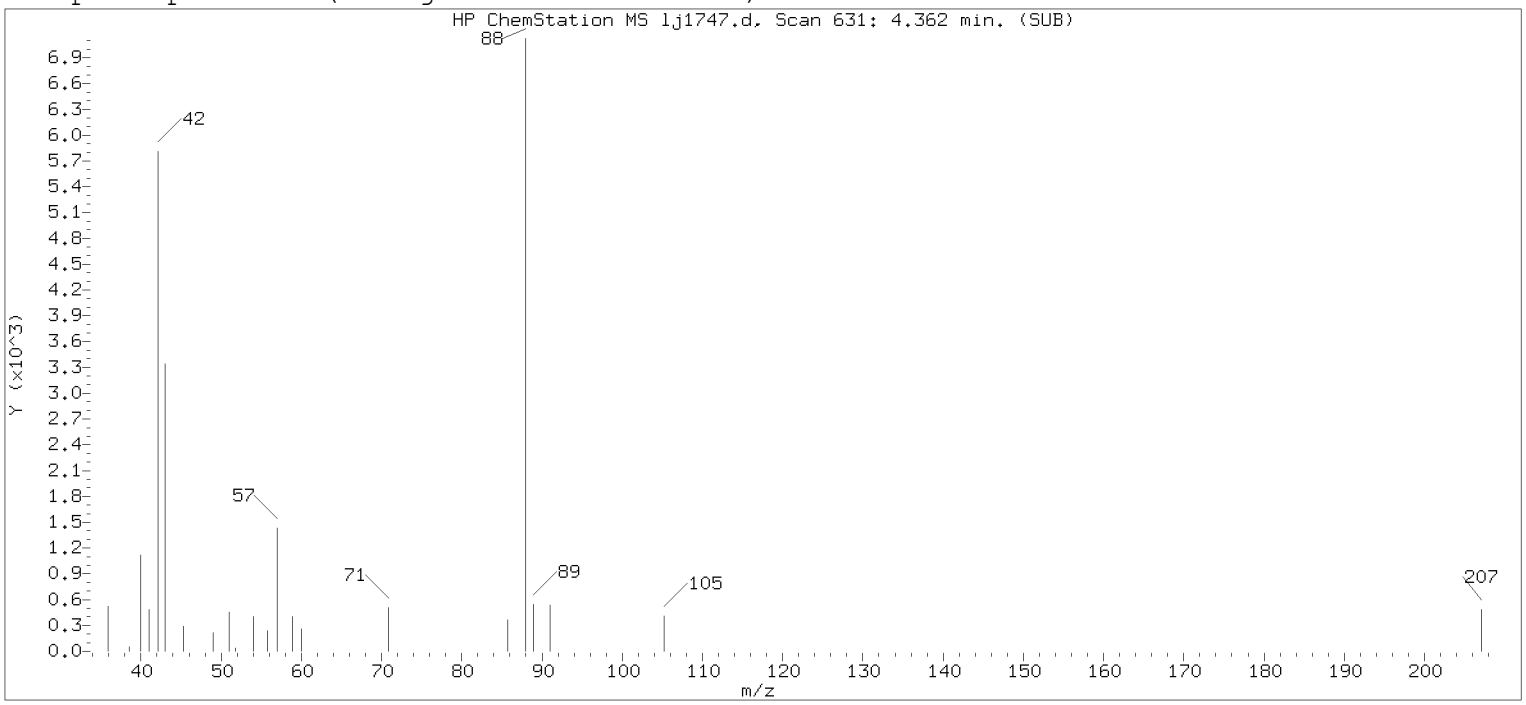
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Scan Number : 631
Retention Time (minutes) : 4.362
Quant Ion : 88.00
Area (flag) : 36907M
On-Column Amount (ng/ul) : 1.2262
Integration start scan : 597 Integration stop scan: 653
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

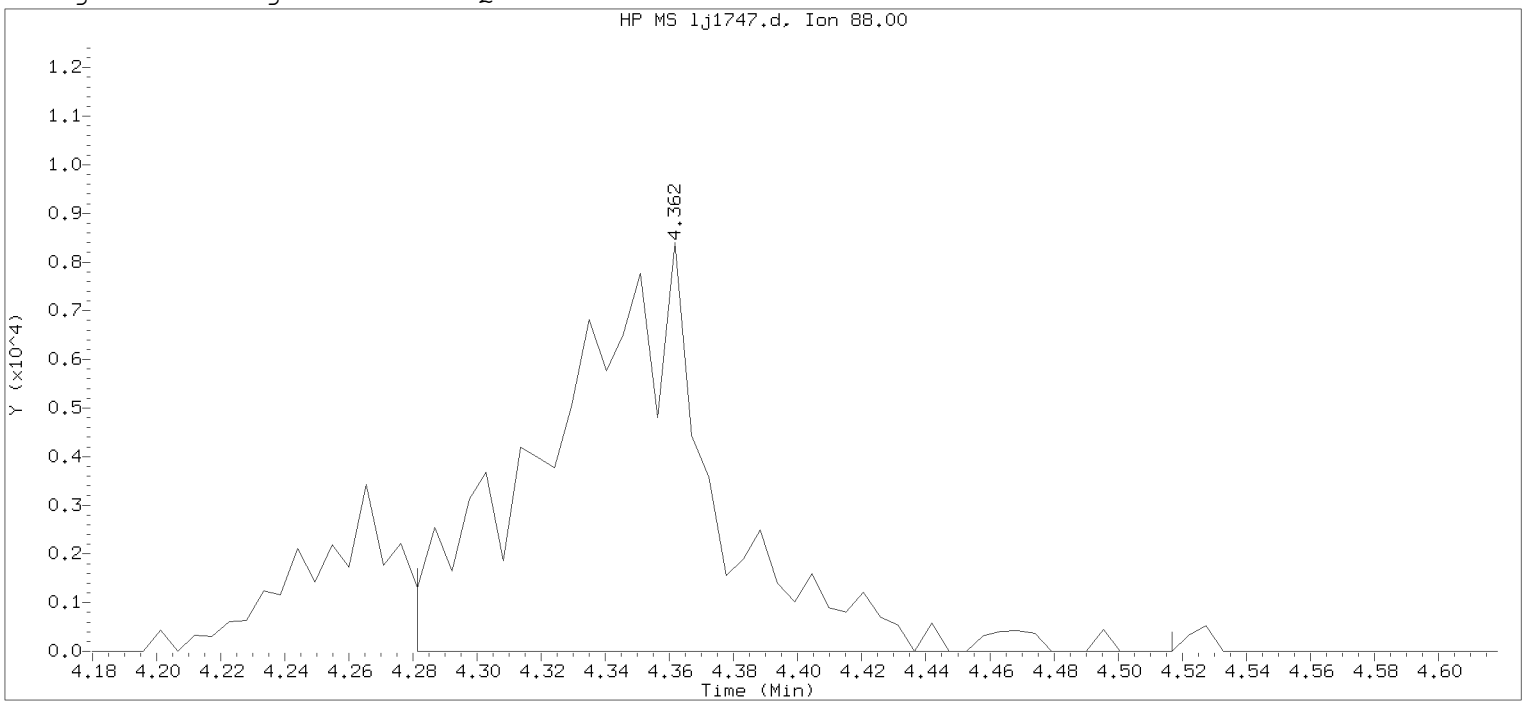
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

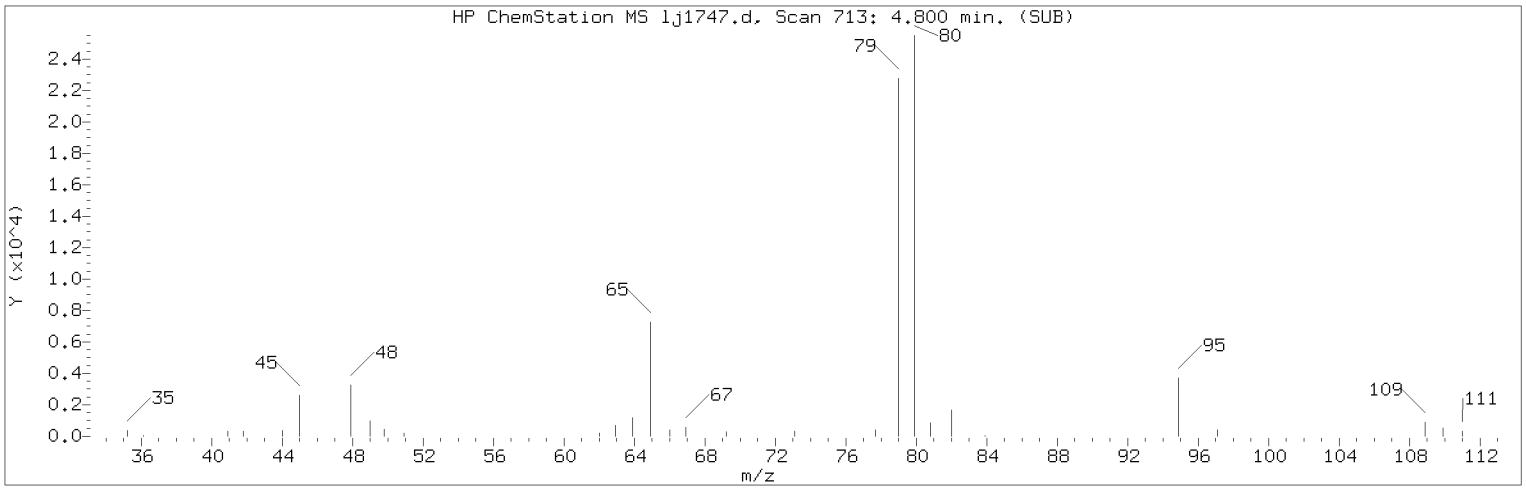
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

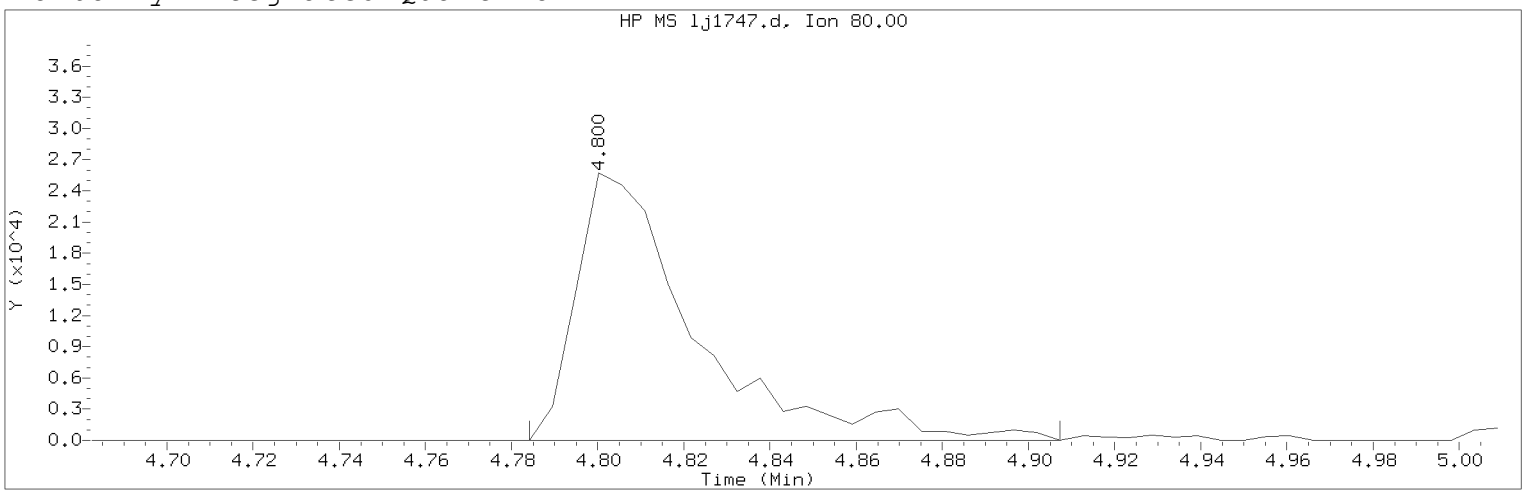
Compound Number	: 9		
Compound Name	: N-Nitrosomethylethylamine		
Scan Number	: 631		
Retention Time (minutes)	: 4.362		
Quant Ion	: 88.00		
Area	: 30559		
On-column Amount (ng/ul)	: 1.0413		
Integration start scan	: 615	Integration stop scan:	659
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

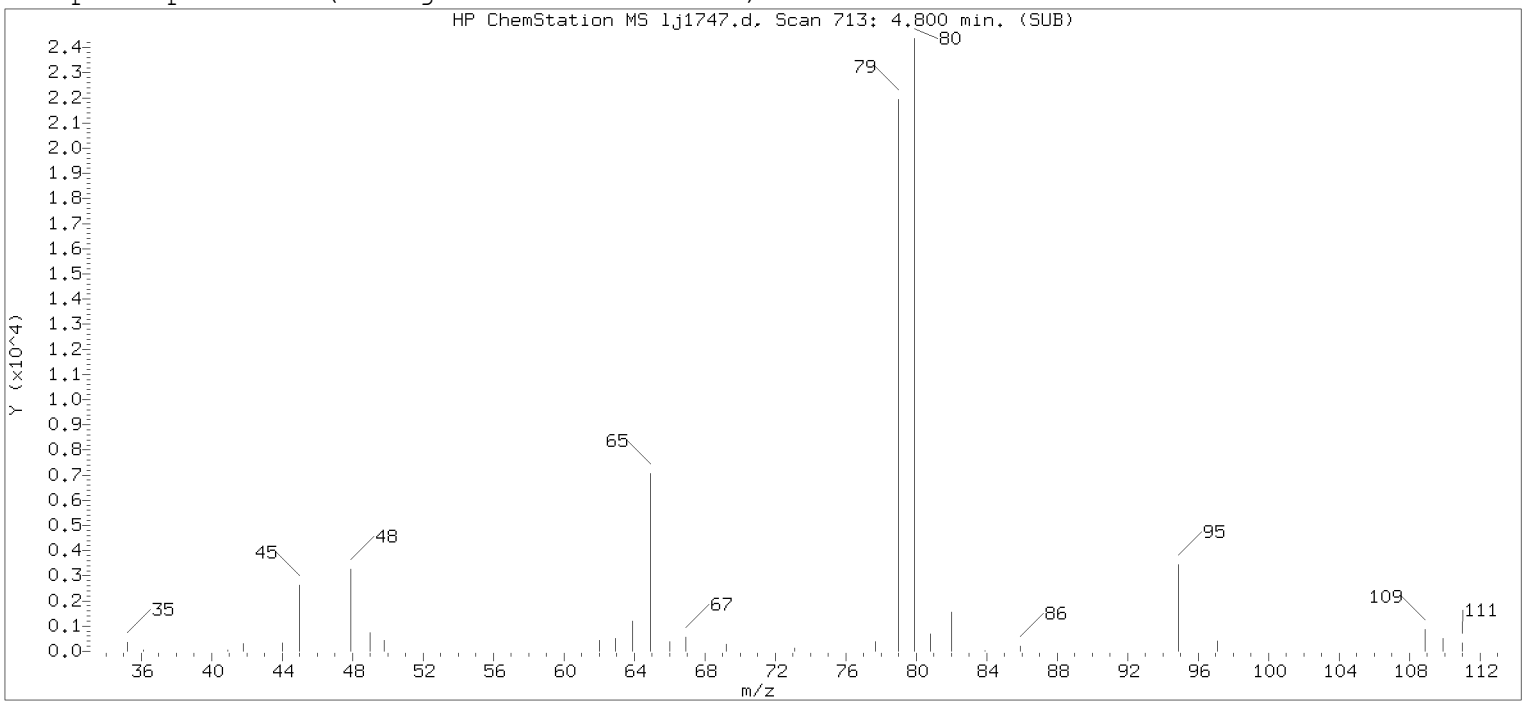
Compound Number : 10
Compound Name : Methyl methanesulfonate
Scan Number : 713
Retention Time (minutes) : 4.800
Quant Ion : 80.00
Area (flag) : 49485M
On-Column Amount (ng/ul) : 1.2856
Integration start scan : 709 Integration stop scan: 732
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

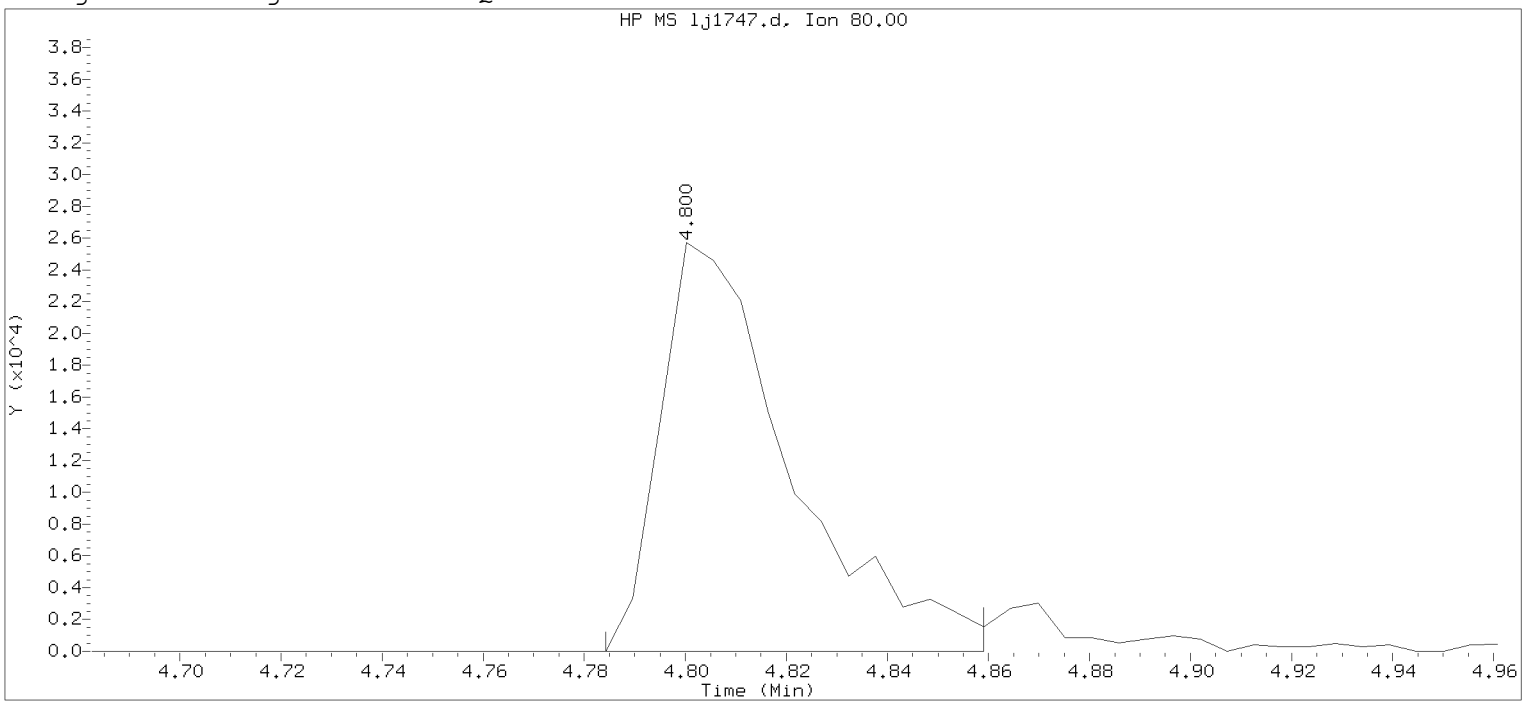
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

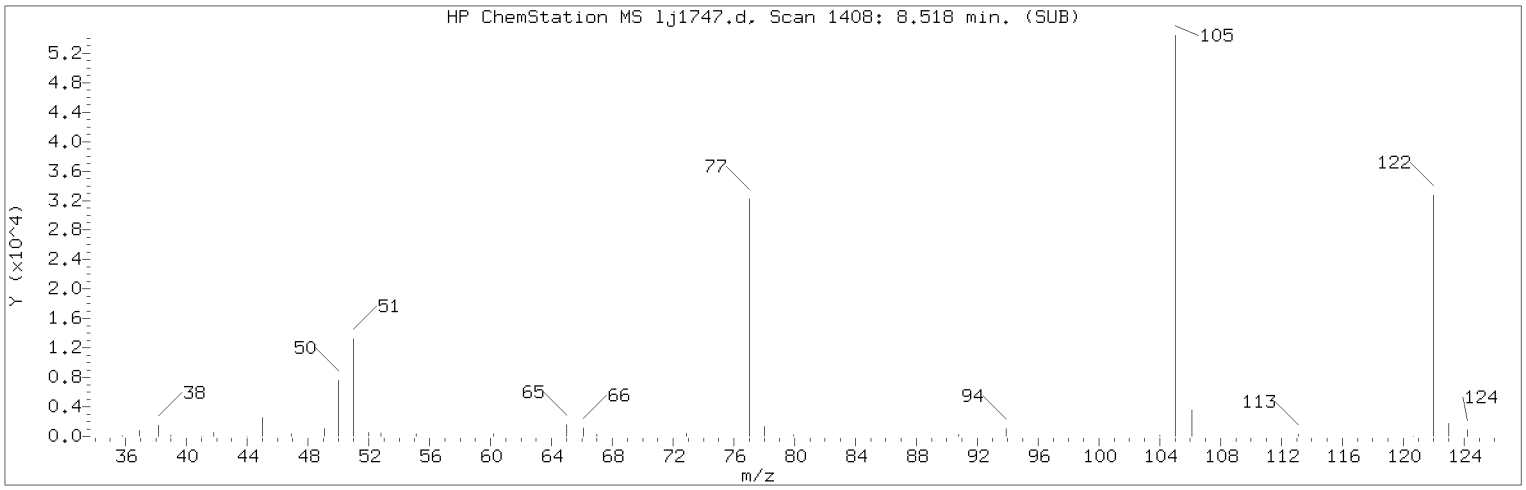
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

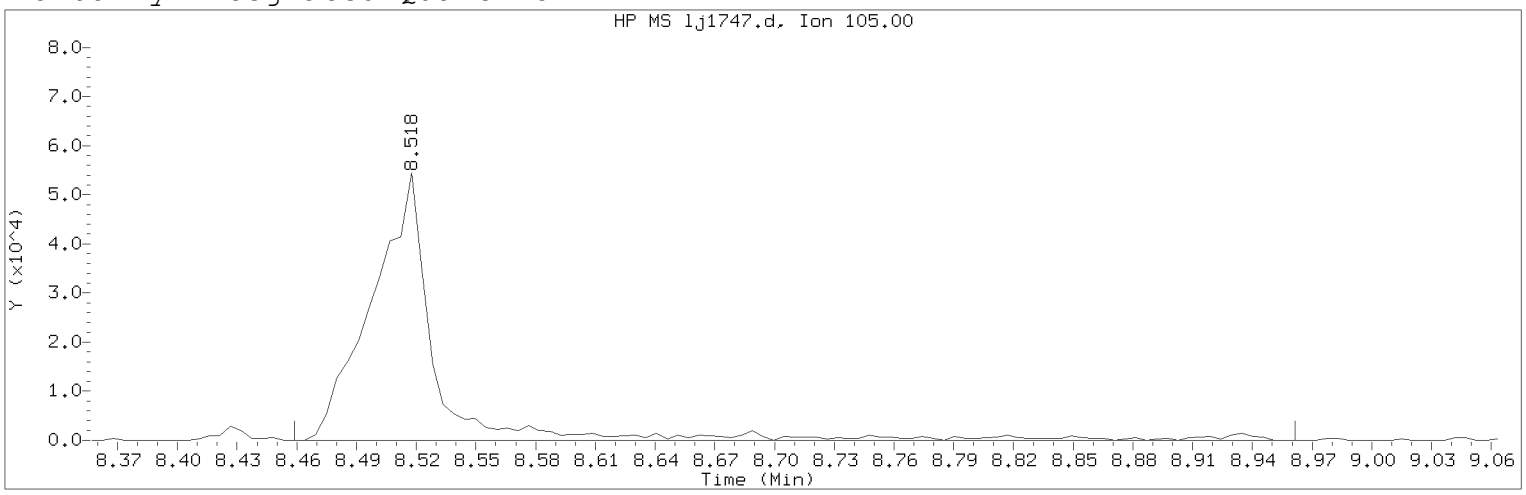
Compound Number	: 10		
Compound Name	: Methyl methanesulfonate		
Scan Number	: 713		
Retention Time (minutes)	: 4.800		
Quant Ion	: 80.00		
Area	: 45876		
On-column Amount (ng/ul)	: 1.2127		
Integration start scan	: 709	Integration stop scan:	723
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: Ashley R. Transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

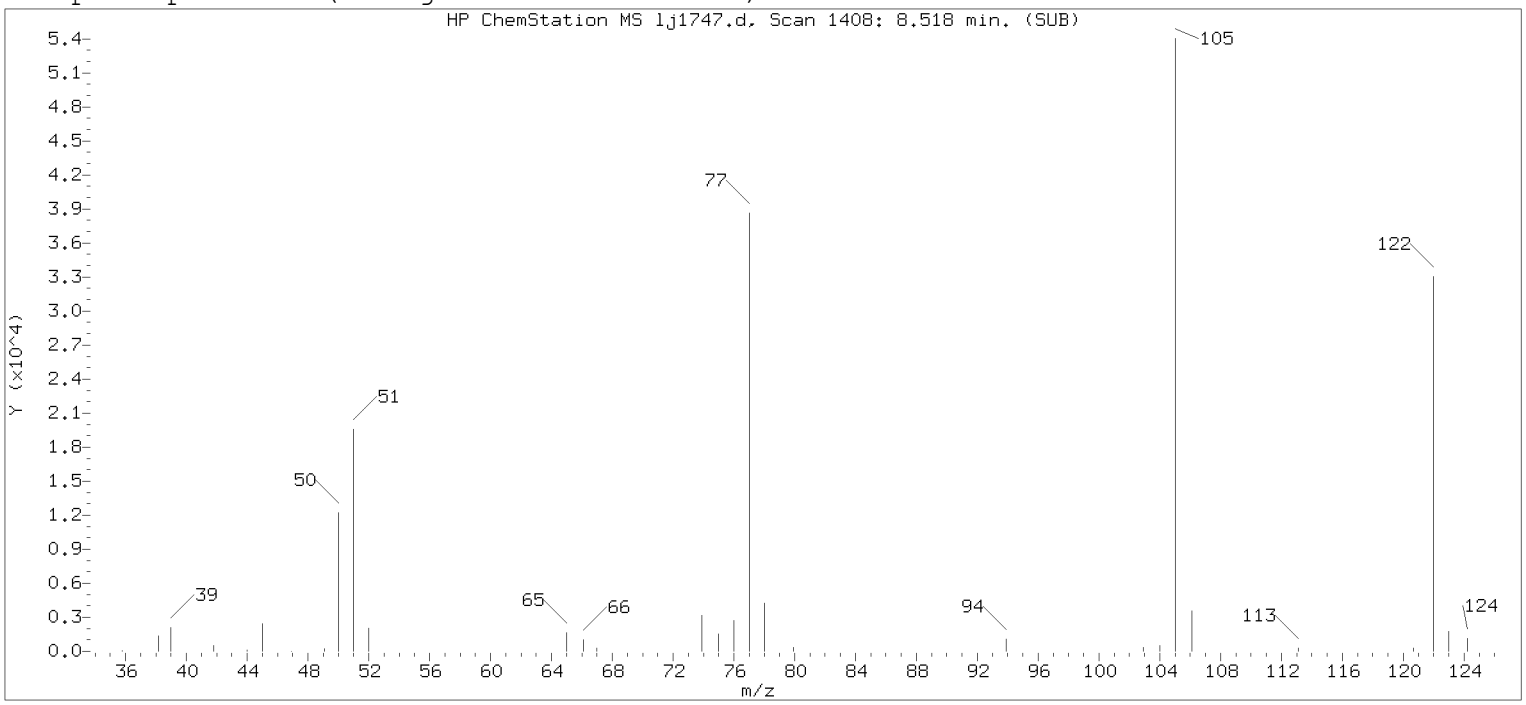
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1408
Retention Time (minutes) : 8.518
Quant Ion : 105.00
Area (flag) : 123190M
On-Column Amount (ng/ul) : 2.9452
Integration start scan : 1396 Integration stop scan: 1490
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

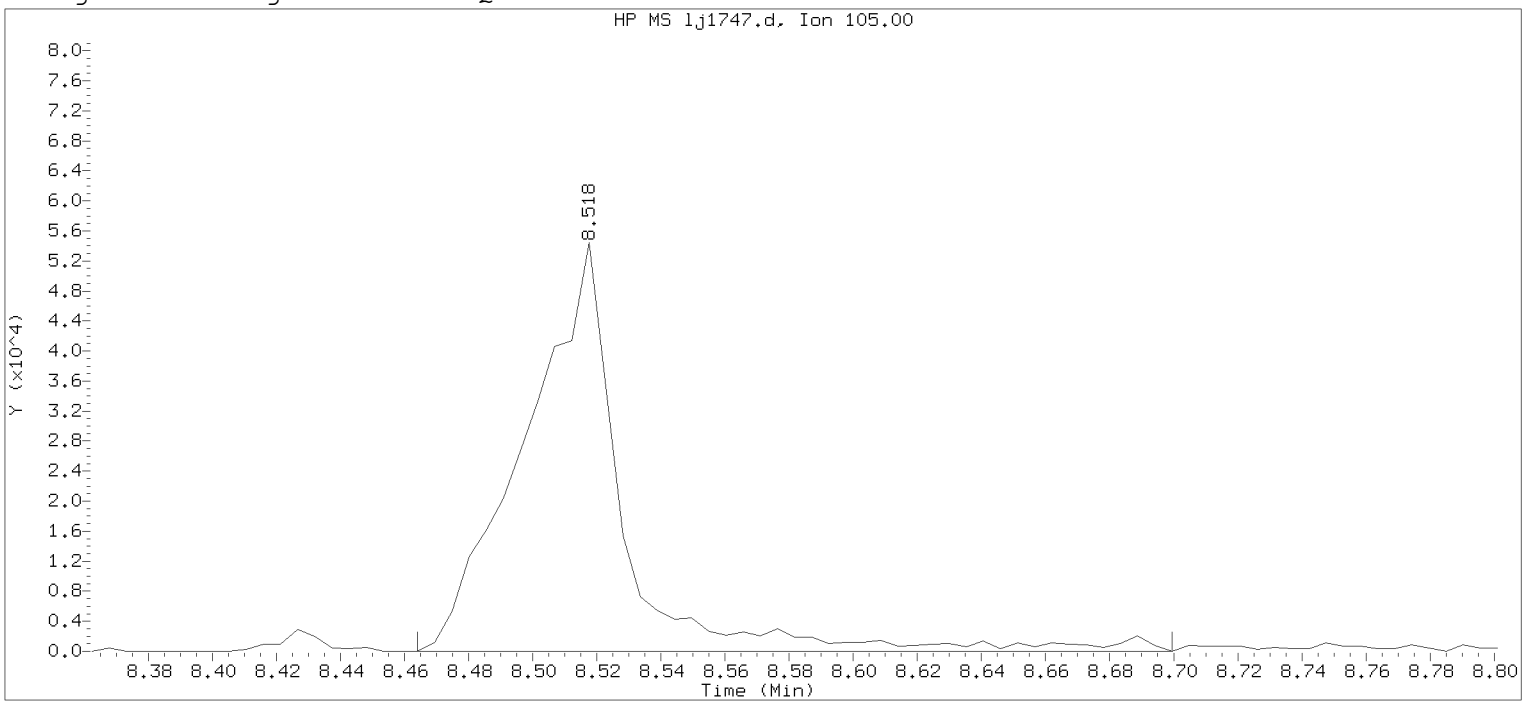
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

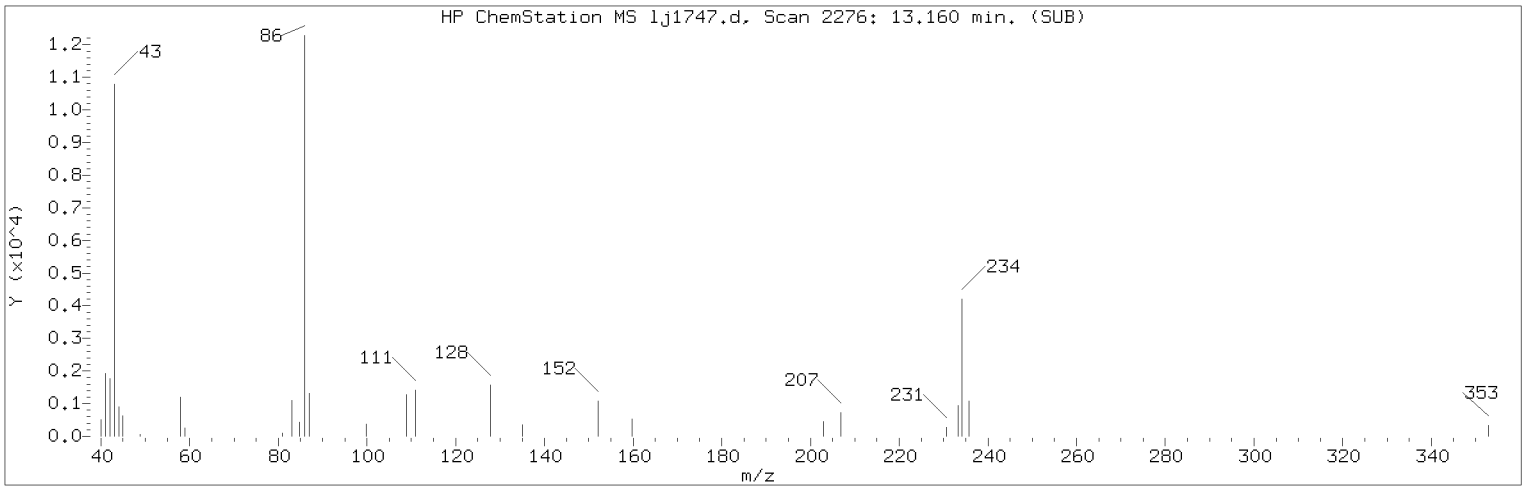
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

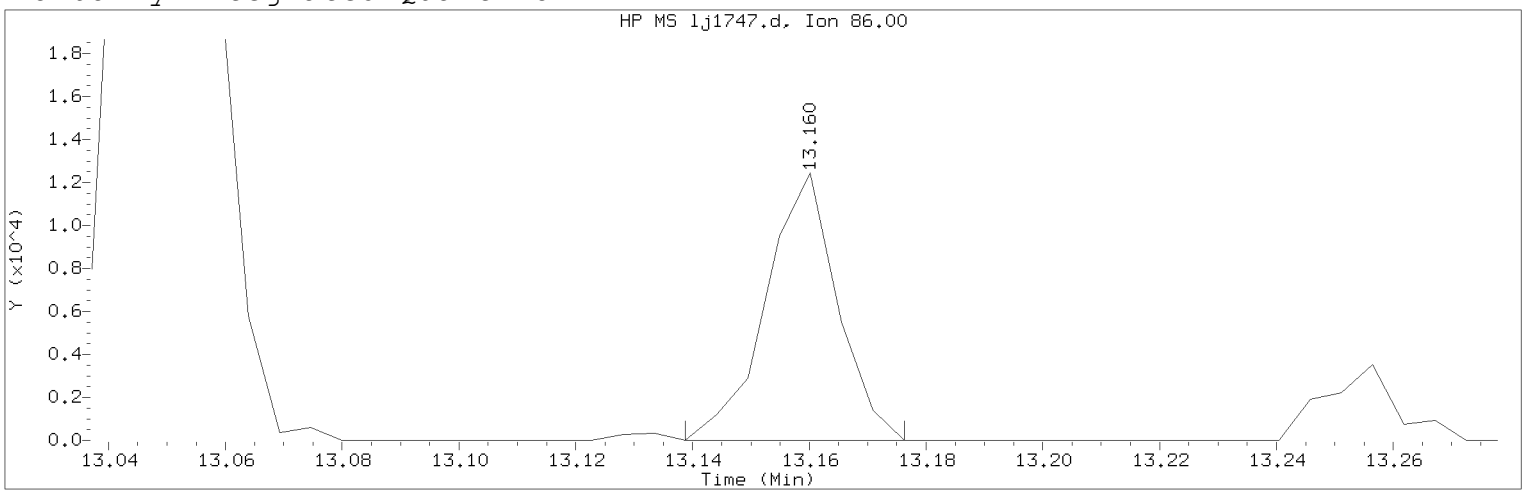
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1408		
Retention Time (minutes)	: 8.518		
Quant Ion	: 105.00		
Area	: 115244		
On-column Amount (ng/ul)	: 3.4519		
Integration start scan	: 1397	Integration stop scan:	1441
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

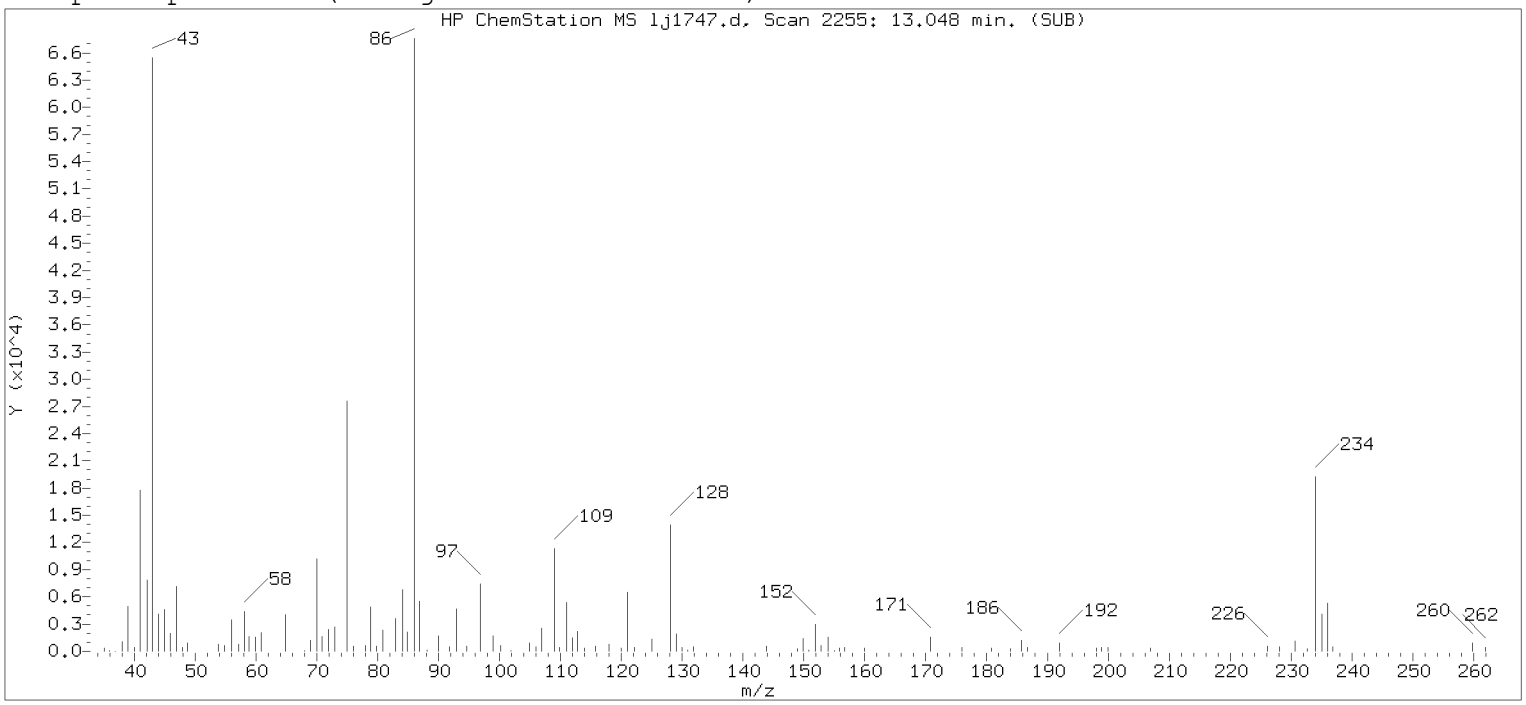
Compound Number : 149
Compound Name : Diallate (peak 2)
Scan Number : 2276
Retention Time (minutes) : 13.160
Quant Ion : 86.00
Area (flag) : 10565M
On-Column Amount (ng/ul) : 0.2014
Integration start scan : 2271 Integration stop scan: 2278
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

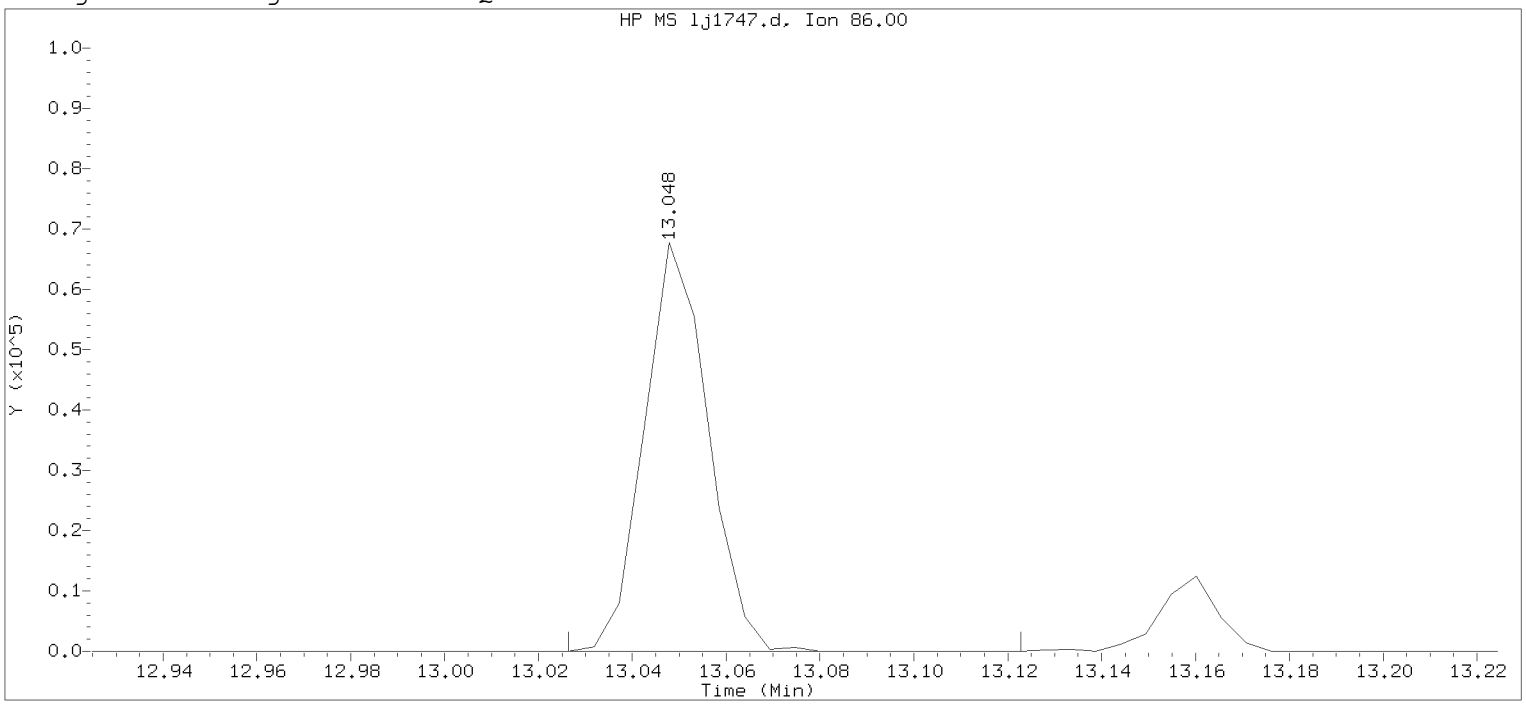
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

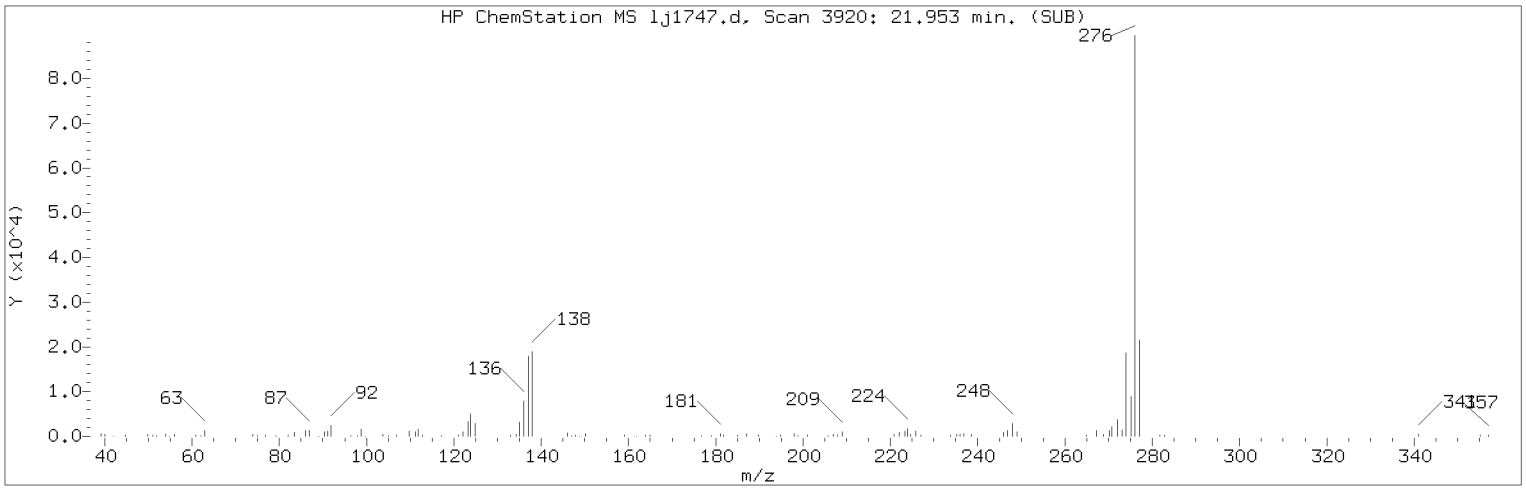
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

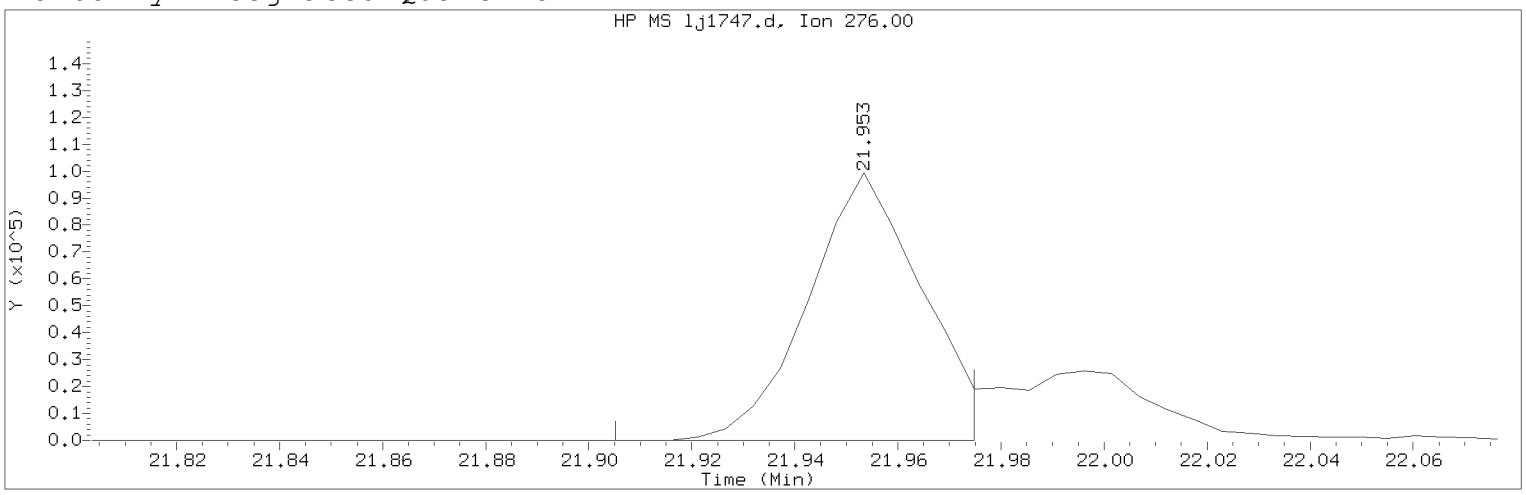
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2255		
Retention Time (minutes)	: 13.048		
Quant Ion	: 86.00		
Area	: 64021		
On-column Amount (ng/ul)	: 0.2382		
Integration start scan	: 2250	Integration stop scan:	2268
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

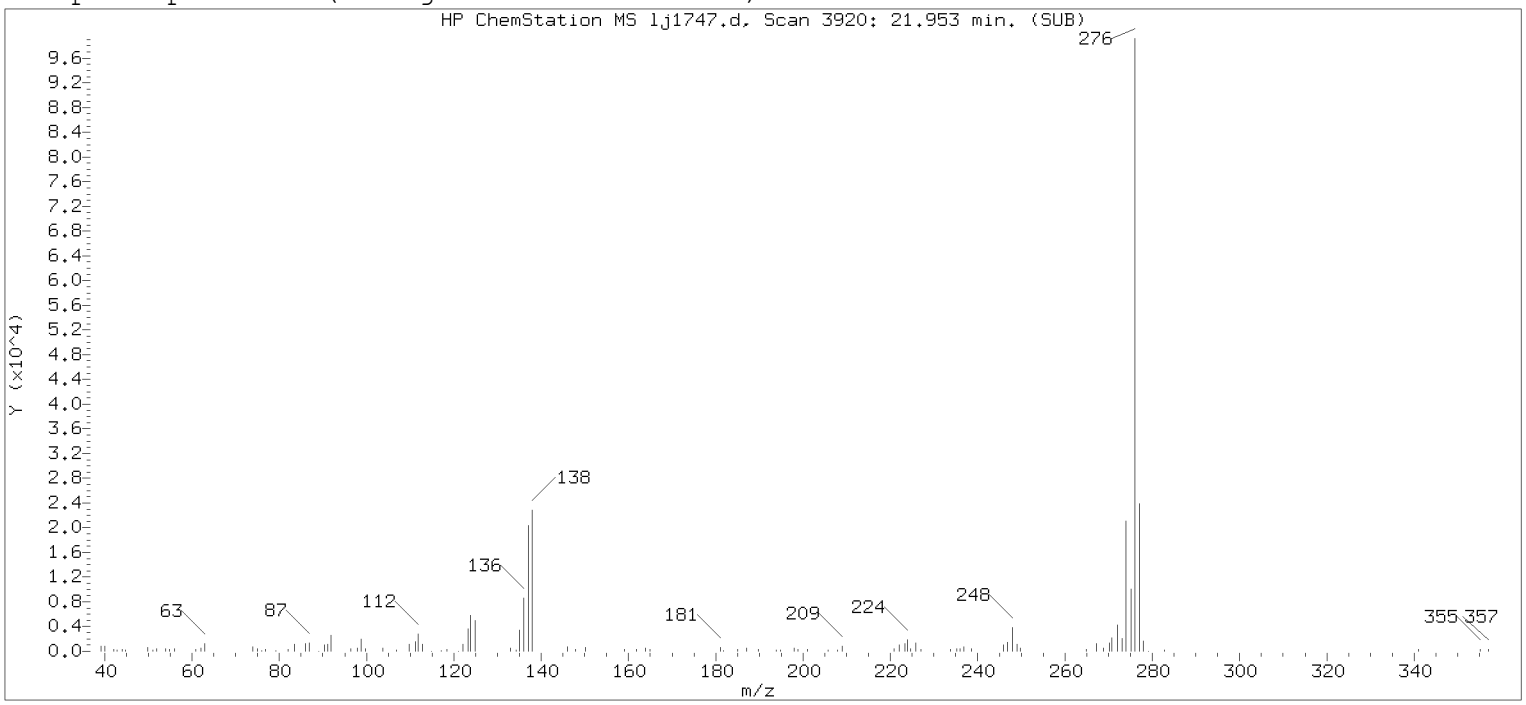
Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3920		
Retention Time (minutes)	: 21.953		
Quant Ion	: 276.00		
Area (flag)	: 152452M		
On-Column Amount (ng/ul)	: 1.0831		
Integration start scan	: 3910	Integration stop scan:	3923
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

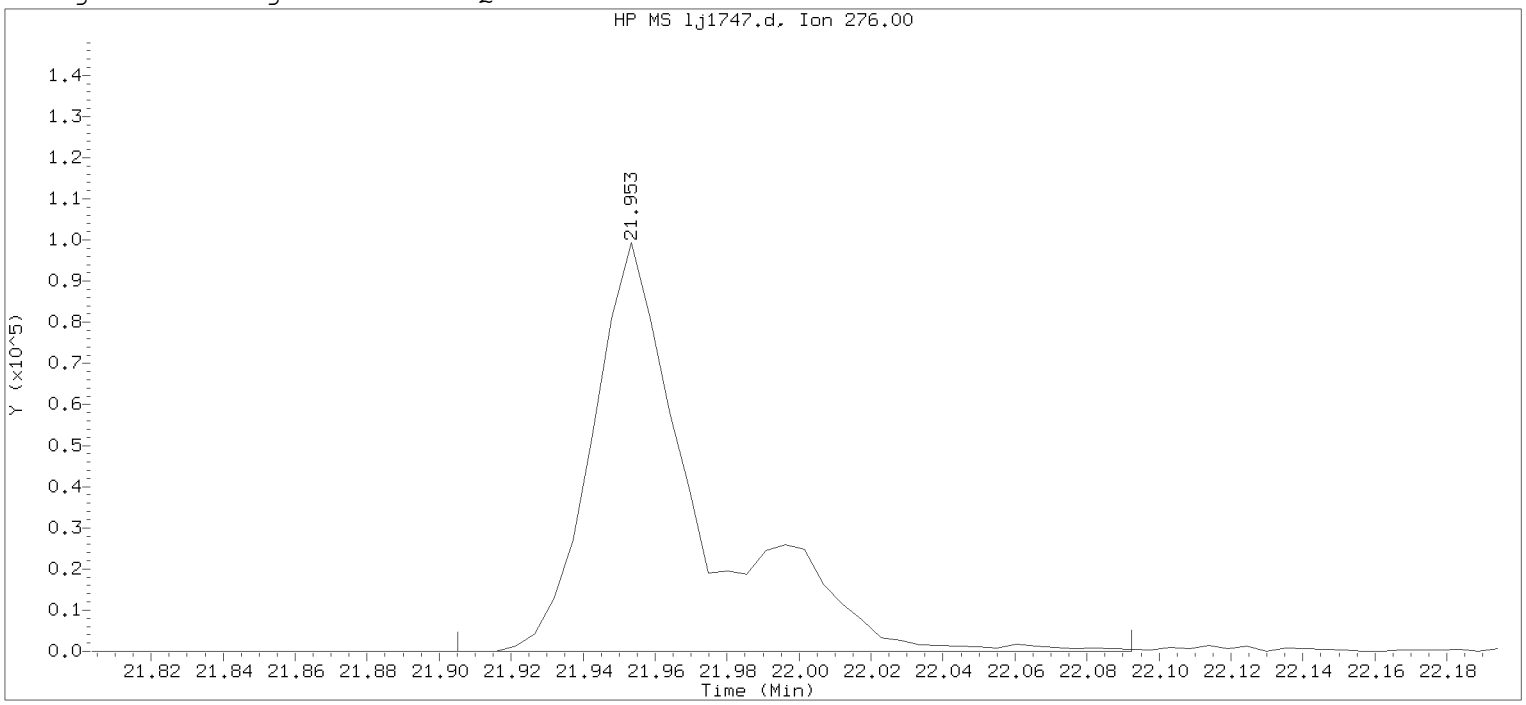
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



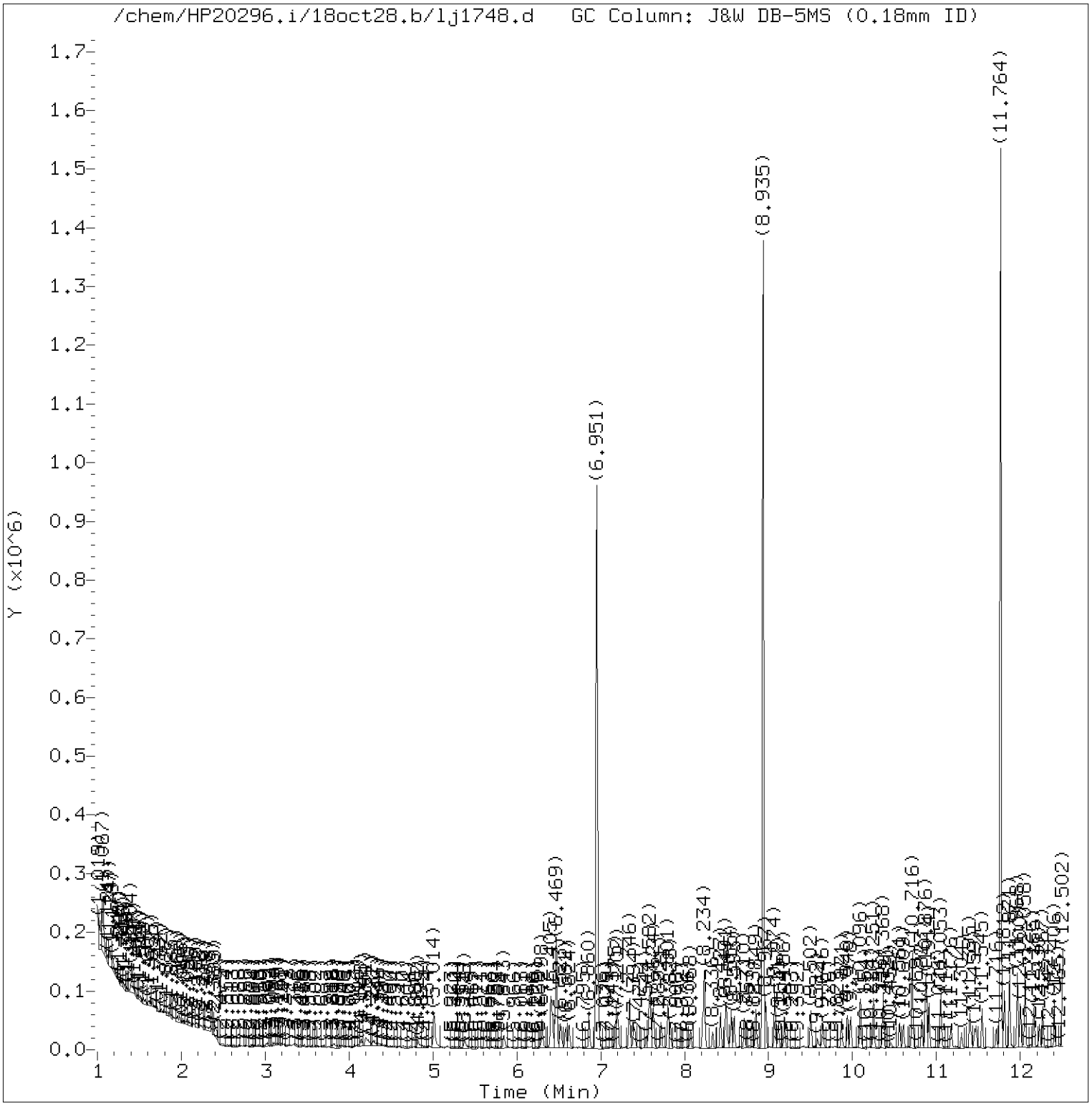
Data File: /chem/HP20296.i/18oct28.b/lj1747.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:20 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD1.25 Lab Sample ID: RVSTD2648

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3920		
Retention Time (minutes)	: 21.953		
Quant Ion	: 276.00		
Area	: 205945		
On-column Amount (ng/ul)	: 1.2587		
Integration start scan	: 3910	Integration stop scan:	3945
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: Ashley R. Transue



Total Ion Chromatogram (TIC)

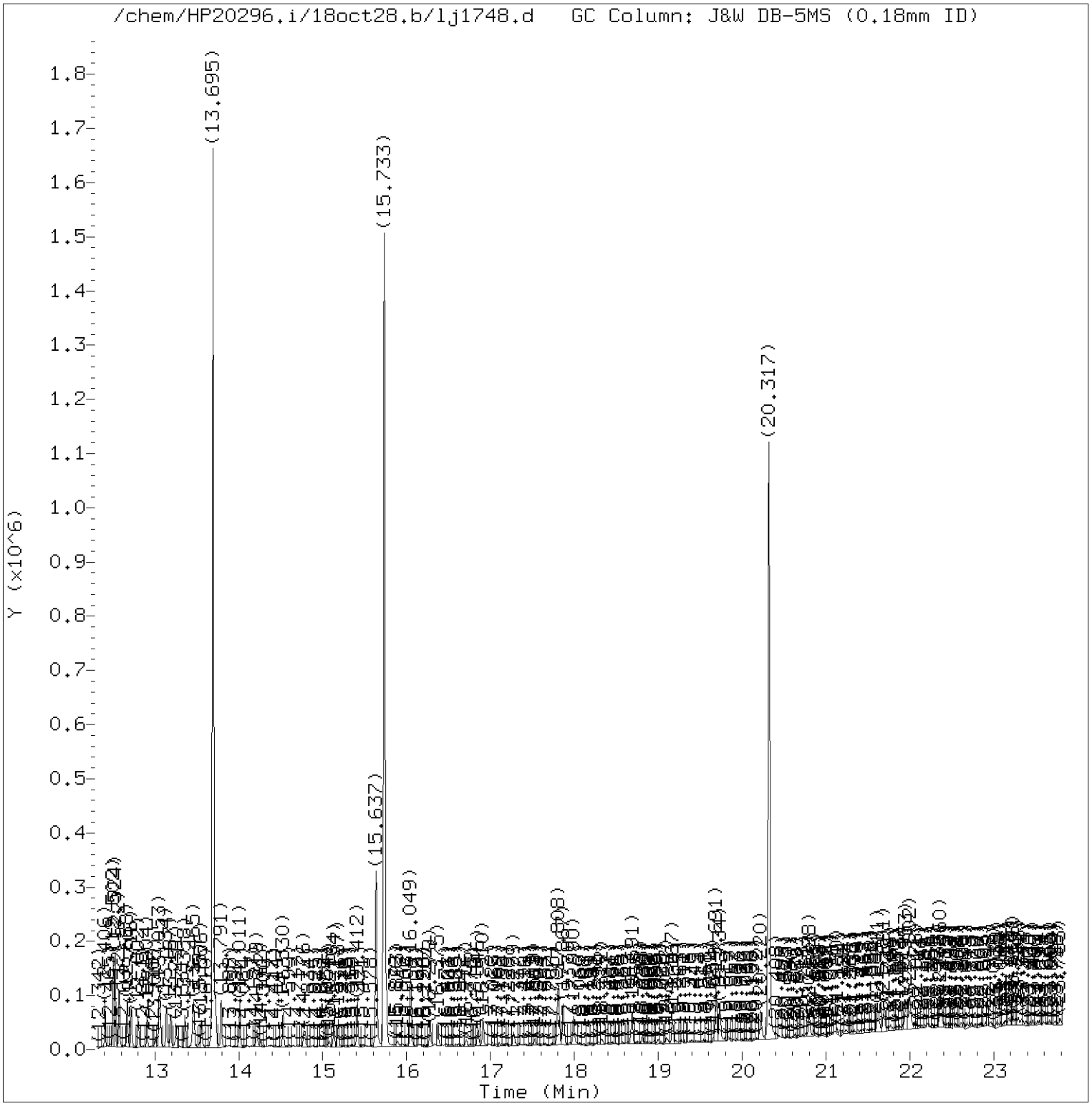
Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.410	88	11035M	0.405
5) N-Nitrosodimethylamine	(1)	3.009	74	8786M	0.215
6) Pyridine	(1)	3.132	79	18321M	0.263
8) 2-Picoline	(1)	4.196	93	17988M	0.247
9) N-Nitrosomethylethylamine	(1)	4.362	88	6960M	0.234
10) Methyl methanesulfonate	(1)	4.827	80	8428M	0.222
12)$2-Fluorophenol	(1)	5.014	112	27084	0.481
14) N-Nitrosodiethylamine	(1)	5.373	102	4641	0.181
43) Total Cresols	(1)			27434	0.485
16) Ethyl methanesulfonate	(1)	5.843	109	6513	0.223
17) Benzaldehyde	(1)	6.298	77	14704	0.282
18)$Phenol-d6	(1)	6.405	99	34533	0.454
19) Phenol	(1)	6.426	94	20933	0.235
20) Aniline	(1)	6.464	93	23793	0.227
21) a-methylstyrene	(1)	6.533	118	1295	0.236
23) bis(2-Chloroethyl)ether	(1)	6.581	93	15913	0.237
24) 2-Chlorophenol	(1)	6.619	128	11220	0.214
25) 1,3-Dichlorobenzene	(1)	6.860	146	14298	0.243
26)*1,4-Dichlorobenzene-d4	(1)	6.951	152	182074	5.000
27) 1,4-Dichlorobenzene	(1)	6.972	146	15065	0.254
28) Benzyl alcohol	(1)	7.175	108	8641	0.240
29) 1,2-Dichlorobenzene	(1)	7.202	146	15511	0.270
31) Indene	(1)	7.341	115	15946	0.252
32) 2-Methylphenol	(1)	7.346	108	12709	0.230
100) Isosafrole	(3)			9871	0.233
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.394	45	20274	0.239
35) bis(2-Chloroisopropyl)ether	(1)	7.394	45	20274	0.239
36) N-Nitrosopyrrolidine	(1)	7.539	100	6163	0.218
37) Acetophenone	(1)	7.576	105	19786	0.232
38) 4-Methylphenol	(1)	7.587	108	14725	0.255
39) N-Nitroso-di-n-propylamine	(1)	7.592	70	12477	0.242
40) N-Nitrosomorpholine	(1)	7.614	56	8892	0.238
41) o-Toluidine	(1)	7.624	106	21776	0.226
44) Hexachloroethane	(1)	7.721	117	7430	0.276
45)$Nitrobenzene-d5	(2)	7.801	82	32494	0.450
46) Nitrobenzene	(2)	7.828	77	16962	0.221
125) 2,4_2,6-Dinitrotoluenes	(3)			7439	0.294
50) N-Nitrosopiperidine	(2)	8.074	114	5910	0.219
52) Isophorone	(2)	8.218	82	28112	0.217
53) 2-Nitrophenol	(2)	8.336	139	5422	0.215

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.427	107	13786	0.223
58) Benzoic acid	(2)	8.491	105	35392M	0.879
59) O,O,O-Triethylphosphorothioate	(2)	8.555	198	5322	0.201
57) bis(2-Chloroethoxy)methane	(2)	8.593	93	19525	0.236
62) 2,4-Dichlorophenol	(2)	8.716	162	10185	0.230
151) Diallate trans/cis	(4)			13478	0.237
65) 1,2,4-Trichlorobenzene	(2)	8.849	180	13628	0.267
68)*Naphthalene-d8	(2)	8.935	136	688999	5.000
69) Naphthalene	(2)	8.967	128	38221	0.246
70) 4-Chloroaniline	(2)	9.074	127	14242	0.227
71) 2,6-Dichlorophenol	(2)	9.079	162	10265	0.238
72) Hexachloropropene	(2)	9.106	213	6250	0.190
74) Hexachlorobutadiene	(2)	9.192	225	7160	0.238
78) Quinoline	(2)	9.502	129	23558	0.254
79) Caprolactam	(2)	9.577	113	3036M	0.222
80) N-Nitrosodi-n-butylamine	(2)	9.646	84	9610	0.186
83) 4-Chloro-3-methylphenol	(2)	9.866	107	11463	0.218
85) Safrole	(2)	9.983	162	8201	0.209
86) 2-Methylnaphthalene	(2)	10.096	142	24946	0.250
87) 1-Methylnaphthalene	(2)	10.251	142	23663	0.248
88) Hexachlorocyclopentadiene	(3)	10.358	237	6444	0.219
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.368	216	13175	0.258
91) cis-Isosafrole	(3)	10.449	162	1908	0.045
93) 2,4,6-Trichlorophenol	(3)	10.561	196	4739	0.159
95) 2,4,5-Trichlorophenol	(3)	10.598	196	7057	0.214
96)$2-Fluorobiphenyl	(3)	10.716	172	53028	0.480
97) trans-Isosafrole	(3)	10.828	162	7963	0.188
98) 1,1'-Biphenyl	(3)	10.871	154	25592	0.226
99) 2-Chloronaphthalene	(3)	10.882	162	25725	0.255
101) 1-Chloronaphthalene	(3)	10.914	162	23580	0.270
103) Diphenyl ether	(3)	11.053	170	14818	0.234
104) 2-Nitroaniline	(3)	11.058	138	5153	0.203
108) 1,4-Naphthoquinone	(3)	11.176	158	6160	0.167
109) 1,4-Dinitrobenzene	(3)	11.294	168	2323	0.172
110) Dimethylphthalate	(3)	11.395	163	24604	0.235
111) 1,3-Dinitrobenzene	(3)	11.417	168	1806	0.117
113) 2,6-Dinitrotoluene	(3)	11.465	165	3482	0.164
114) Acenaphthylene	(3)	11.545	152	28578	0.227
117) 3-Nitroaniline	(3)	11.716	138	3192	0.141
118)*Acenaphthene-d10	(3)	11.764	164	330385	5.000

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Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.812	153	22405	0.231
120) 2,4-Dinitrophenol	(3)	11.871	184	12157	0.949
121) 4-Nitrophenol	(3)	11.968	109	15573	0.764
122) Pentachlorobenzene	(3)	12.000	250	9404	0.231
123) 2,4-Dinitrotoluene	(3)	12.053	165	3957	0.130
124) Dibenzofuran	(3)	12.058	168	31320	0.238
126) 1-Naphthylamine	(3)	12.165	143	21748	0.229
127) 2,3,4,6-Tetrachlorophenol	(3)	12.230	232	6275	0.243
128) 2-Naphthylamine	(3)	12.267	143	21544	0.228
129) Diethylphthalate	(3)	12.406	149	22855	0.222
130) Thionazin	(3)	12.502	107	4374	0.216
131) Fluorene	(3)	12.502	166	26865	0.258
134) 4-Nitroaniline	(3)	12.524	138	3490	0.150
133) 5-Nitro-o-toluidine	(3)	12.524	152	4201	0.158
132) 4-Chlorophenyl-phenylether	(3)	12.524	204	13083	0.245
135) 4,6-Dinitro-2-methylphenol	(4)	12.577	198	9831	0.580
136) N-Nitrosodiphenylamine	(4)	12.668	169	20609	0.250
137) NDPA as diphenylamine	(4)	12.668	169	20609	0.250
139) 1,2-Diphenylhydrazine	(4)	12.722	77	34785	0.238
140)$2,4,6-Tribromophenol	(3)	12.802	330	4921	0.380
142) Tetraethyldithiopyrophosphate	(4)	12.904	97	5321	0.245
144) 1,3,5-Trinitrobenzene	(4)	13.005	213	1120	0.109
145) Diallate (peak 1)	(4)	13.048	86	11548	0.197
146) Phorate	(4)	13.059	75	15063	0.198
147) Phenacetin	(4)	13.069	108	9506	0.165
148) 4-Bromophenyl-phenylether	(4)	13.139	248	6927	0.241
149) Diallate (peak 2)	(4)	13.155	86	1930M	0.040
150) Hexachlorobenzene	(4)	13.192	284	7233	0.247
152) Dimethoate	(4)	13.257	87	8340	0.173
153) Atrazine	(4)	13.358	200	6160	0.235
154) Pentachlorophenol	(4)	13.449	266	2785	0.150
155) 4-Aminobiphenyl	(4)	13.465	169	15762	0.220
156) Pentachloronitrobenzene	(4)	13.465	237	1901	0.137
157) Pronamide	(4)	13.556	173	8185	0.183
158)*Phenanthrene-d10	(4)	13.695	188	644470	5.000
159) Dinoseb	(4)	13.711	211	2441	0.095
160) Phenanthrene	(4)	13.722	178	34256	0.222
162) Anthracene	(4)	13.791	178	33893	0.224
168) Carbazole	(4)	14.011	167	31188	0.230
169) Methyl parathion	(4)	14.214	109	5786	0.159

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$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

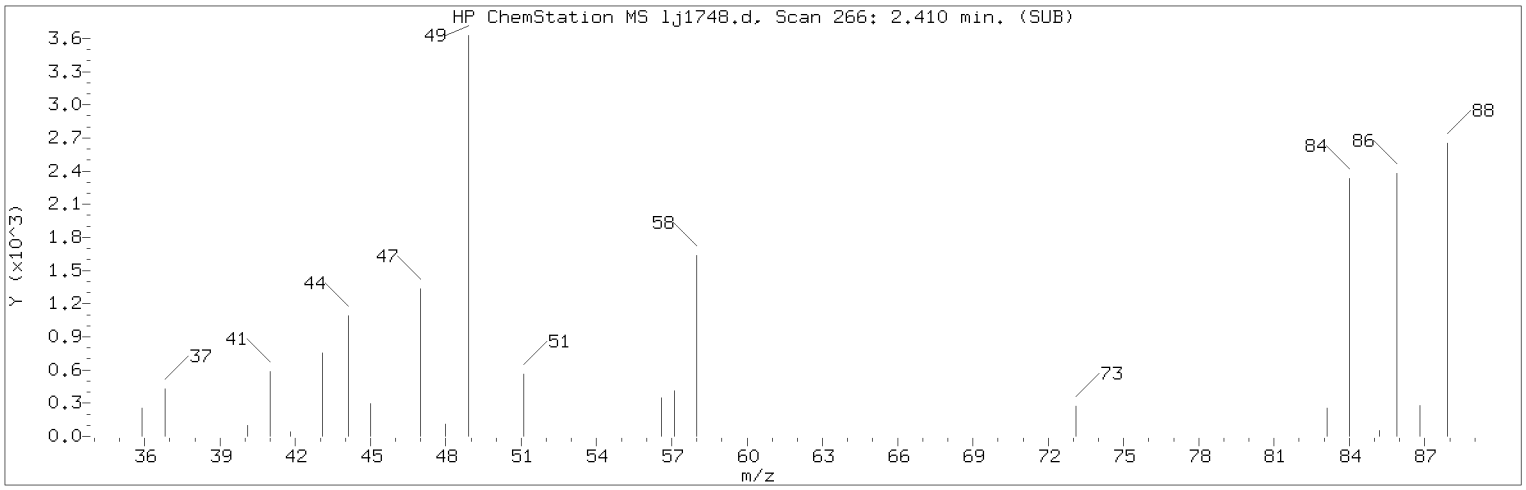
Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.530	149	31355	0.179
172) Parathion	(4)	14.770	109	2378	0.104
173) 4-Nitroquinoline-1-oxide	(4)	14.792	190	1653	0.130
227) Total PAHs	(6)			566031	4.157
174) Octachlorostyrene	(4)	15.134	308	2396	0.221
176) Isodrin	(4)	15.182	193	3999	0.220
178) Fluoranthene	(4)	15.412	202	38145	0.226
179) Benzidine	(5)	15.637	184	147610	1.389
180)*Pyrene-d10	(5)	15.733	212	667178	5.000
182) Pyrene	(5)	15.760	202	44044	0.250
184)$Terphenyl-d14	(5)	16.049	244	49154	0.459
187) p-Dimethylaminoazobenzene	(5)	16.284	225	3944	0.145
190) Chlorobenzilate	(5)	16.375	139	9573	0.184
192) 3,3'-Dimethylbenzidine	(5)	16.851	212	16009	0.157
193) Butylbenzylphthalate	(5)	16.910	149	11370	0.145
196) 2-Acetylaminofluorene	(5)	17.279	181	7486	0.116
198) 3,3'-Dichlorobenzidine	(5)	17.798	252	9184	0.156
200) Benzo(a)anthracene	(5)	17.808	228	33372	0.208
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.819	231	4995	0.152
201) Chrysene	(5)	17.872	228	35624	0.225
204) bis(2-Ethylhexyl)phthalate	(5)	17.990	149	14451	0.128
208) 6-Methylchrysene	(5)	18.691	242	21918	0.205
210) Di-n-octylphthalate	(6)	19.172	149	22598	0.127
211) Benzo(b)fluoranthene	(6)	19.686	252	33538	0.231
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.691	256	9975	0.167
213) Benzo(k)fluoranthene	(6)	19.734	252	33739	0.230
216) Benzo(a)pyrene	(6)	20.220	252	24815	0.191
218)*Perylene-d12	(6)	20.317	264	558380	5.000
220) 3-Methylcholanthrene	(6)	20.798	268	10767	0.182
222) Dibenz(a,h)acridine	(6)	21.622	279	21738	0.201
223) Dibenz(a,j)acridine	(6)	21.691	279	20218	0.178
224) Indeno(1,2,3-cd)pyrene	(6)	21.959	276	29821M	0.237
225) Dibenz(a,h)anthracene	(6)	22.002	278	30301	0.231
226) Benzo(g,h,i)perylene	(6)	22.371	276	29805	0.223

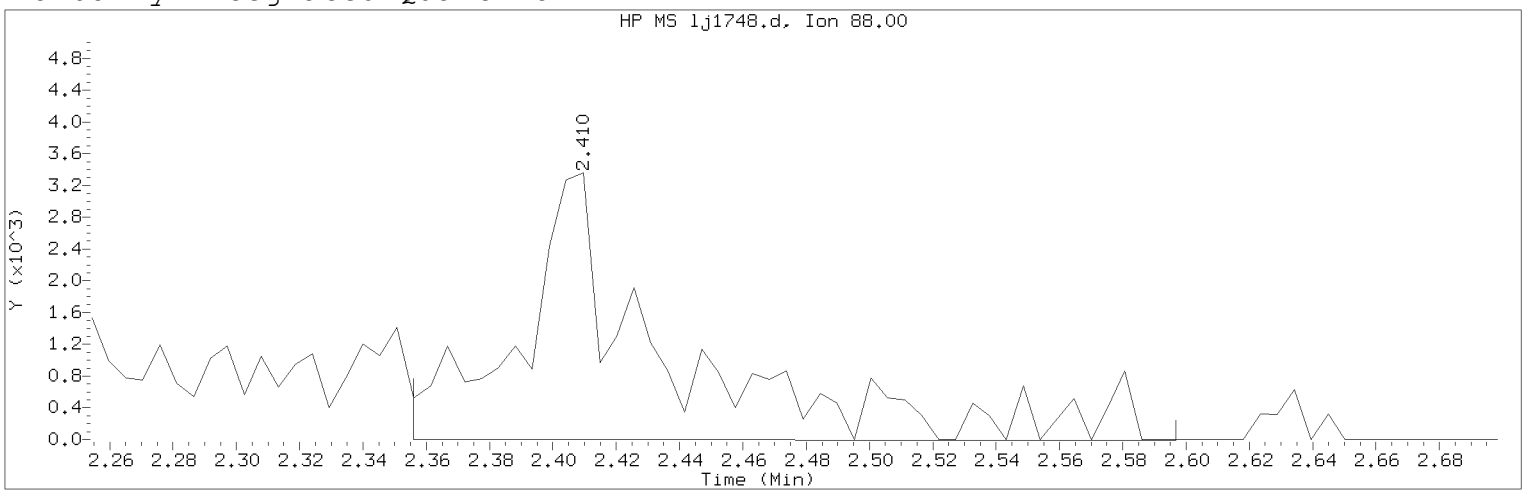
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

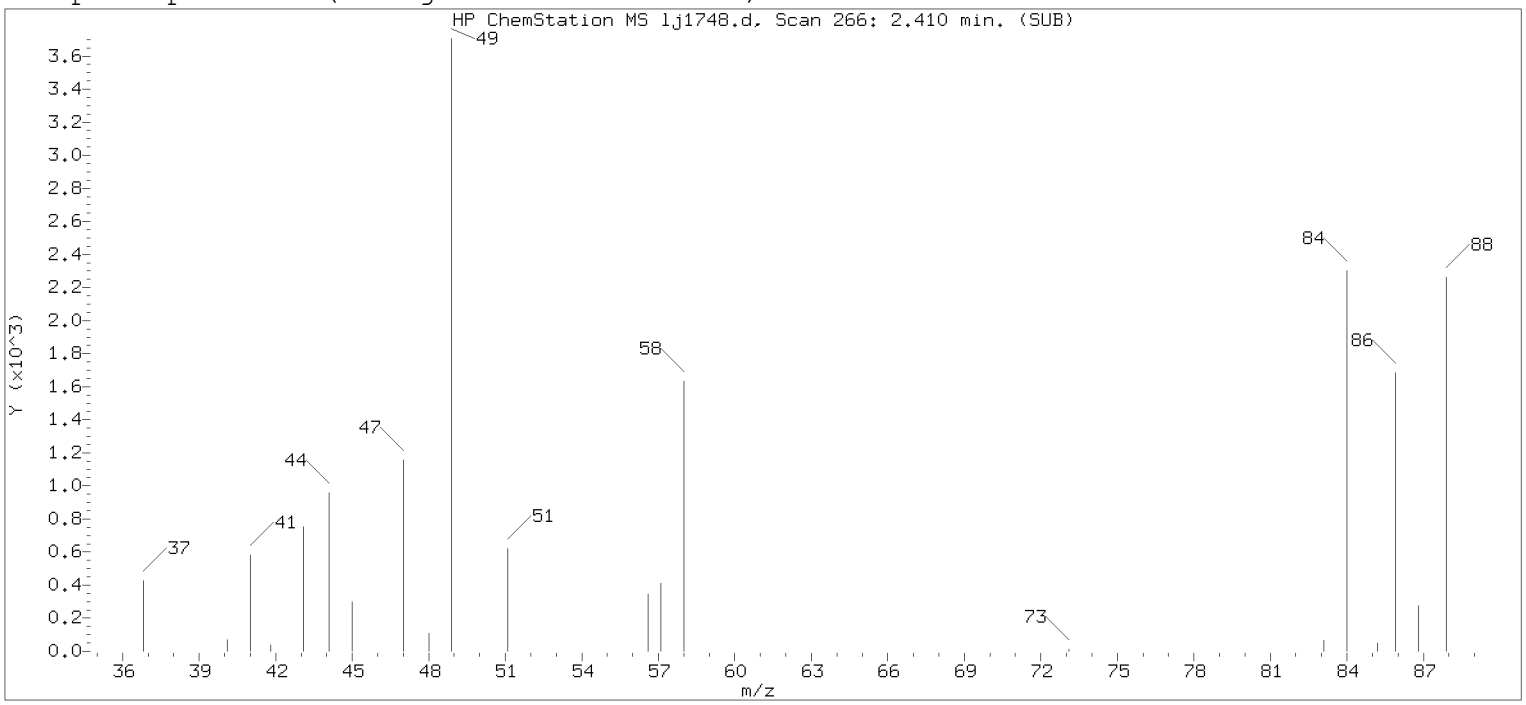
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 266
Retention Time (minutes) : 2.410
Quant Ion : 88.00
Area (flag) : 11035M
On-Column Amount (ng/ul) : 0.4051
Integration start scan : 255 Integration stop scan: 300
Y at integration start : 3 Y at integration end: -8

Reason for manual integration: improper integration

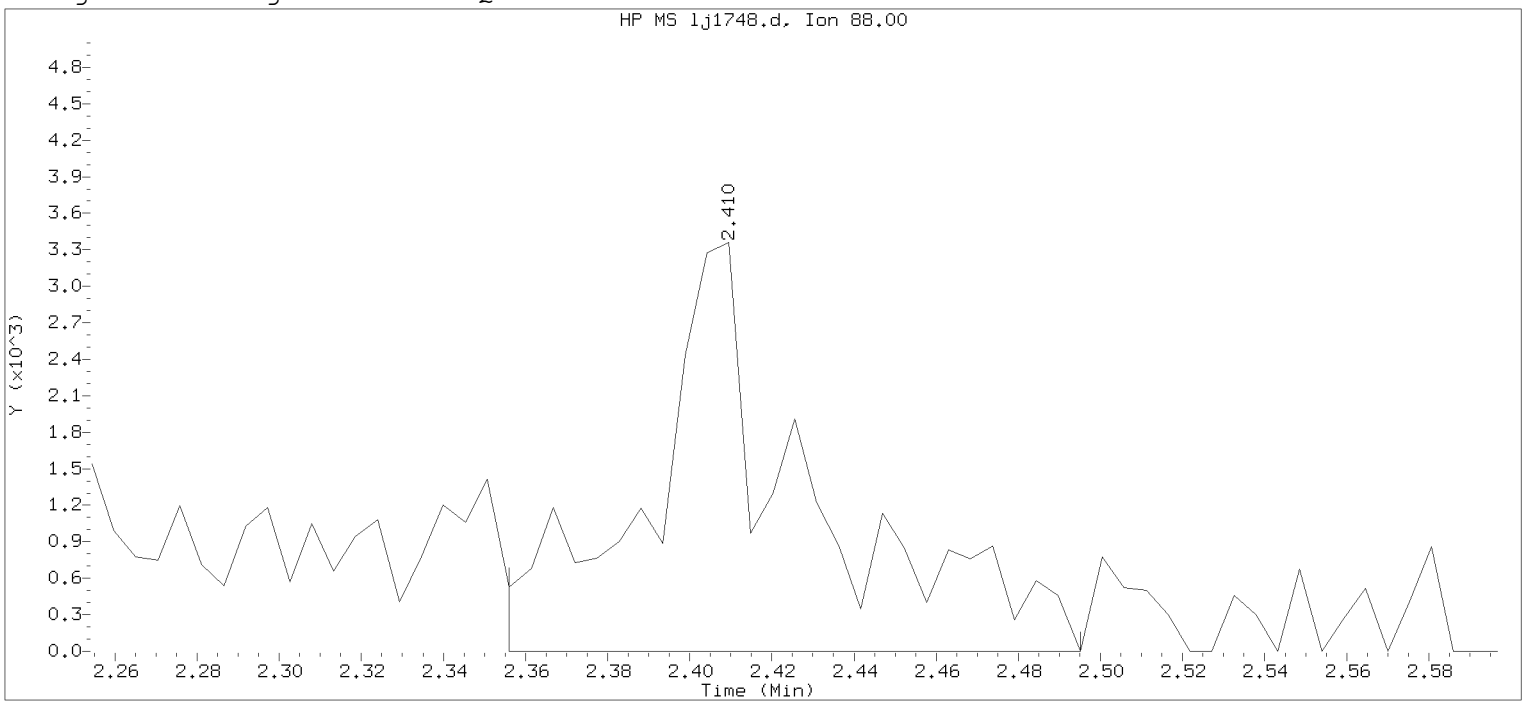
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

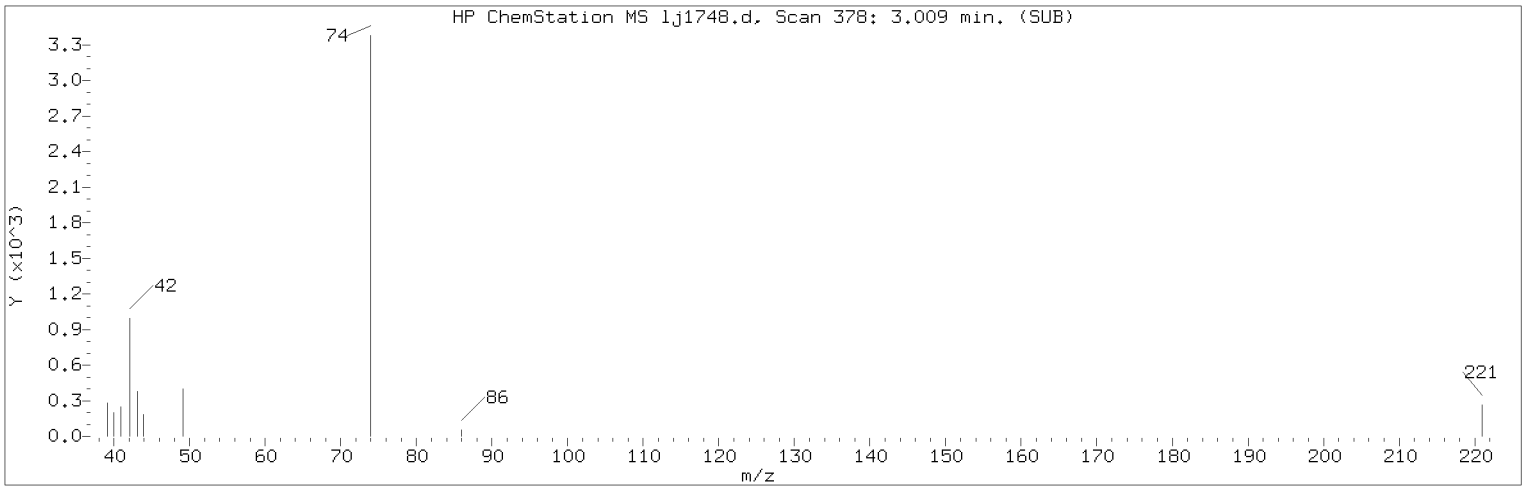
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

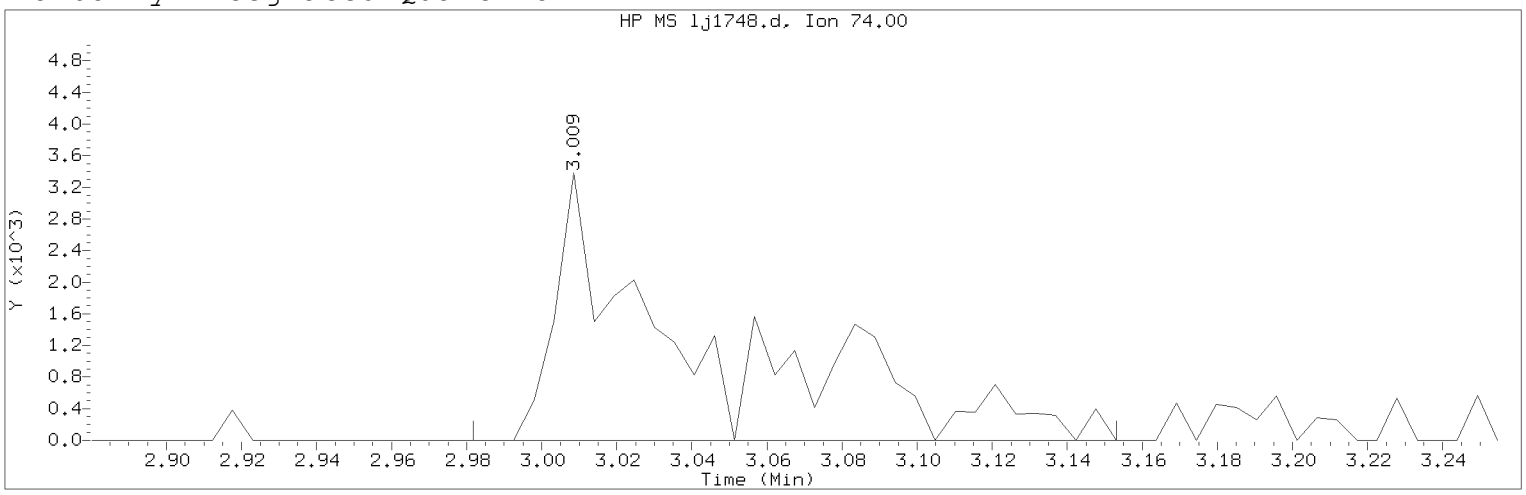
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 266		
Retention Time (minutes)	: 2.410		
Quant Ion	: 88.00		
Area	: 9117		
On-column Amount (ng/ul)	: 0.3469		
Integration start scan	: 255	Integration stop scan:	281
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: ashley.transue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

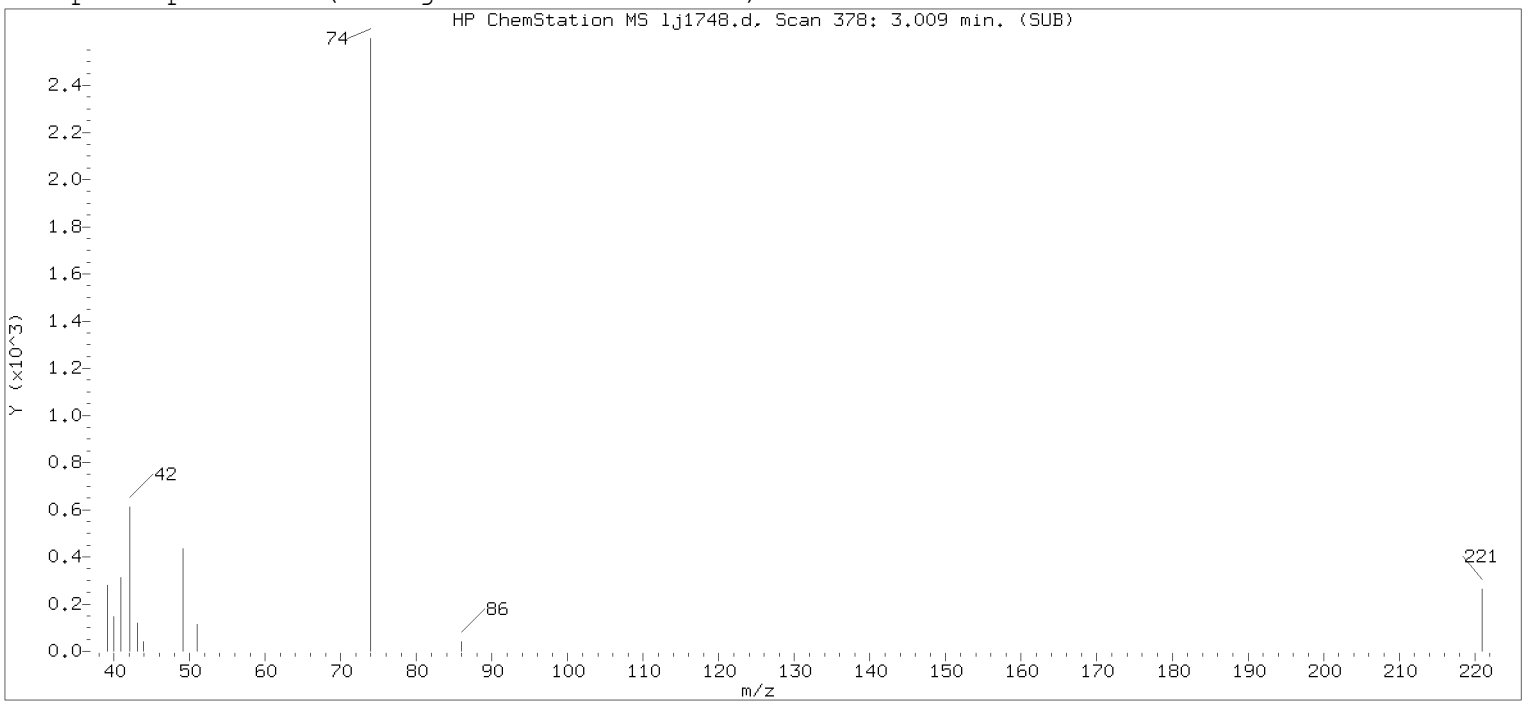
Compound Number : 5
Compound Name : N-Nitrosodimethylamine
Scan Number : 378
Retention Time (minutes) : 3.009
Quant Ion : 74.00
Area (flag) : 8786M
On-Column Amount (ng/ul) : 0.2146
Integration start scan : 372 Integration stop scan: 404
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

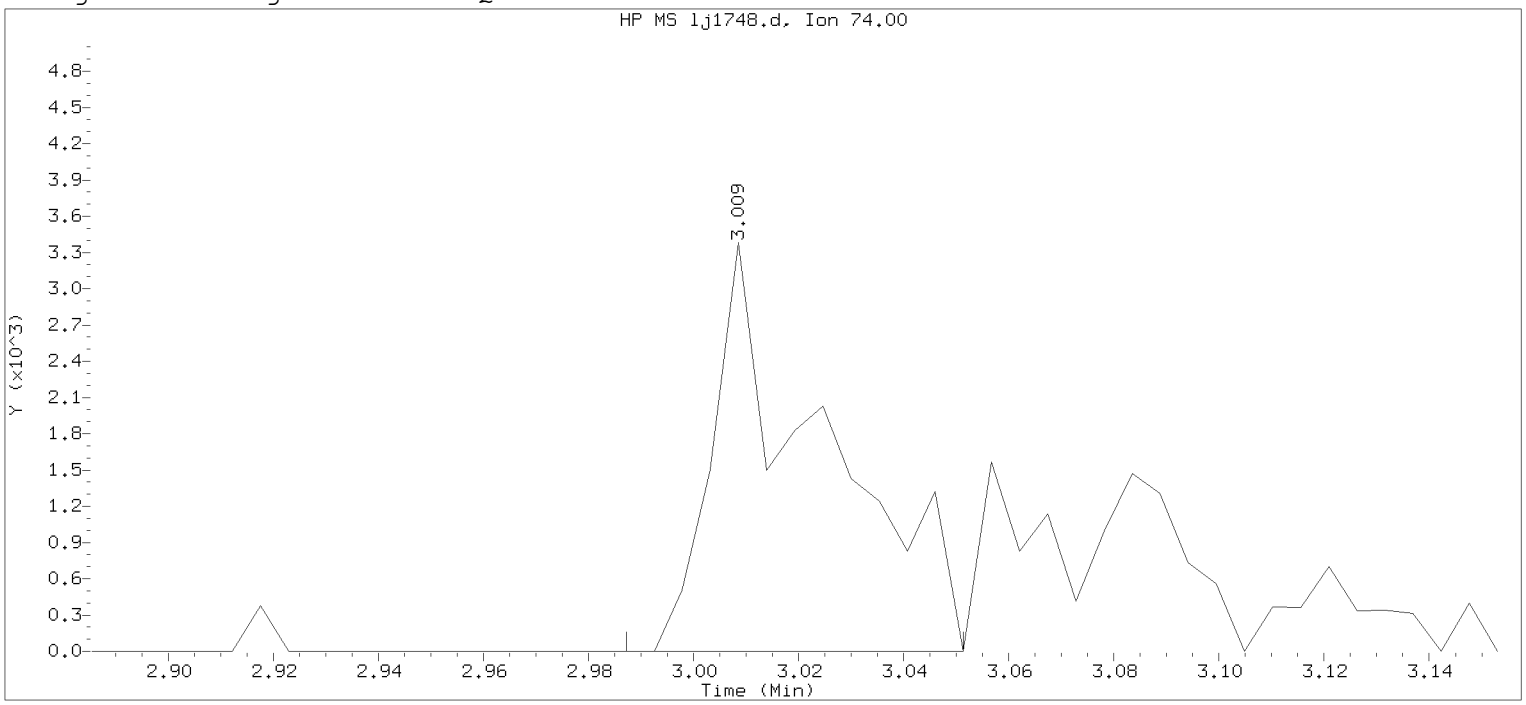
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

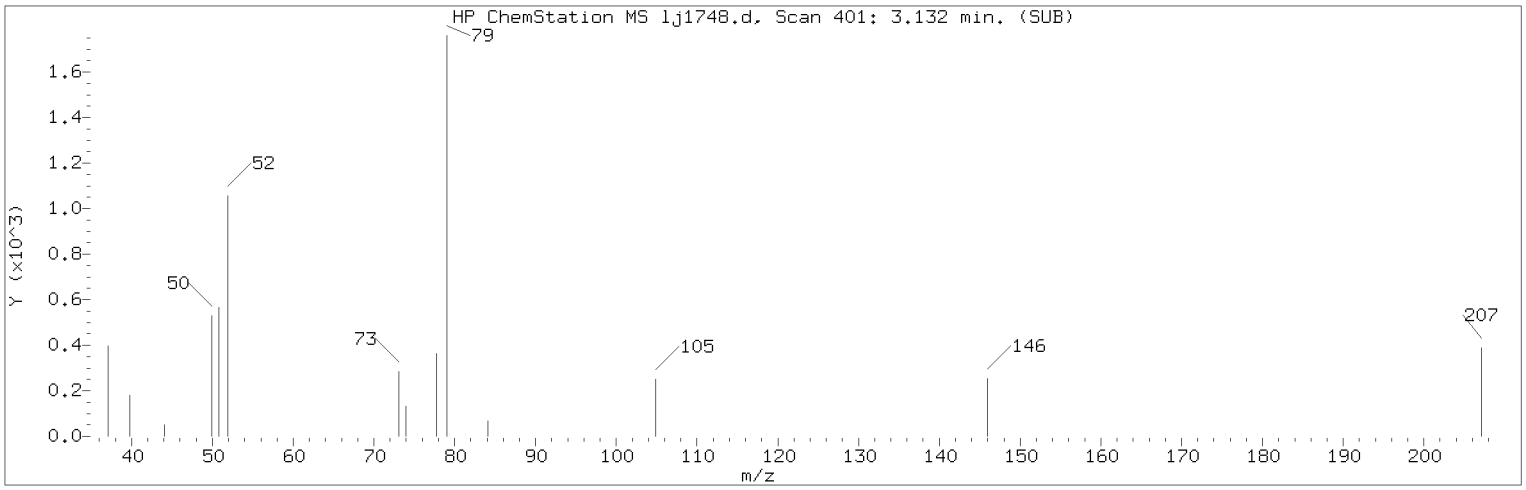
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

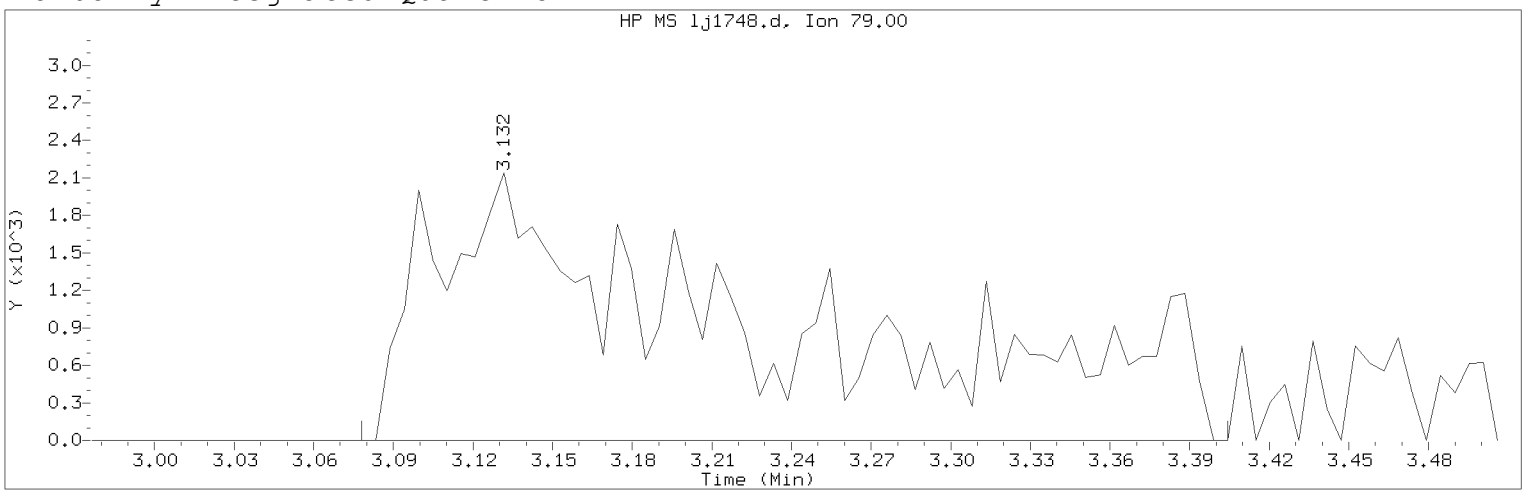
Compound Number	: 5		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 378		
Retention Time (minutes)	: 3.009		
Quant Ion	: 74.00		
Area	: 4996		
On-column Amount (ng/ul)	: 0.1279		
Integration start scan	: 373	Integration stop scan:	385
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: ART2649

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

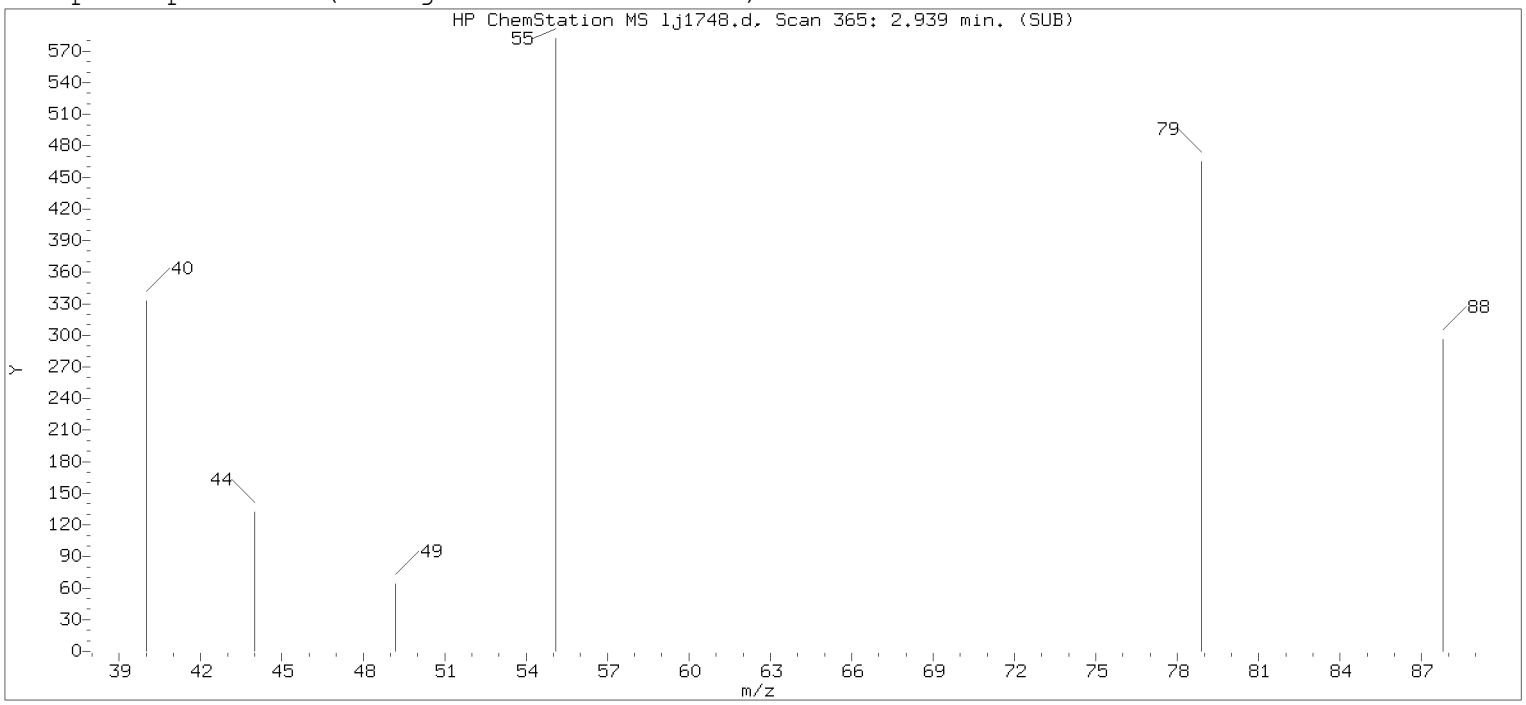
Compound Number : 6
Compound Name : Pyridine
Scan Number : 401
Retention Time (minutes) : 3.132
Quant Ion : 79.00
Area (flag) : 18321M
On-Column Amount (ng/ul) : 0.2630
Integration start scan : 390 Integration stop scan: 451
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

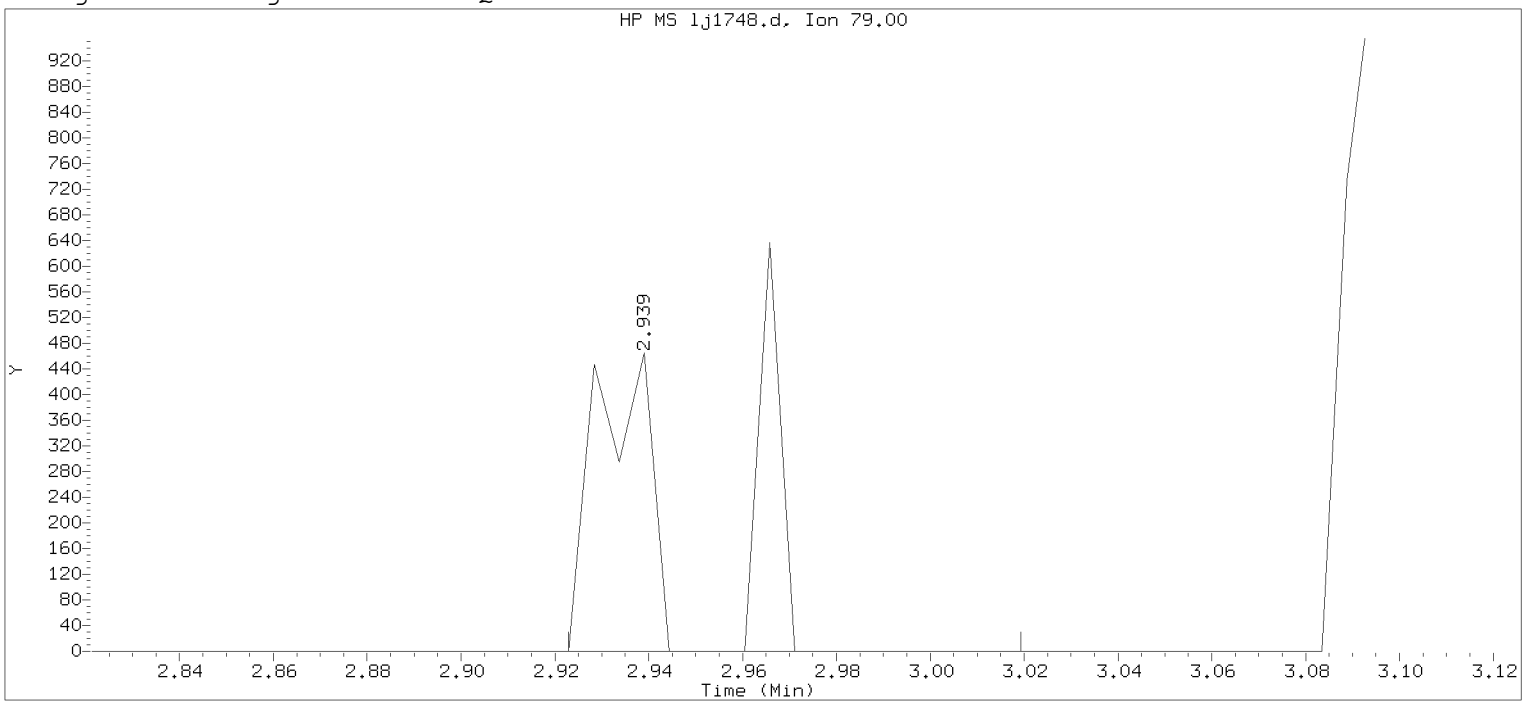
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

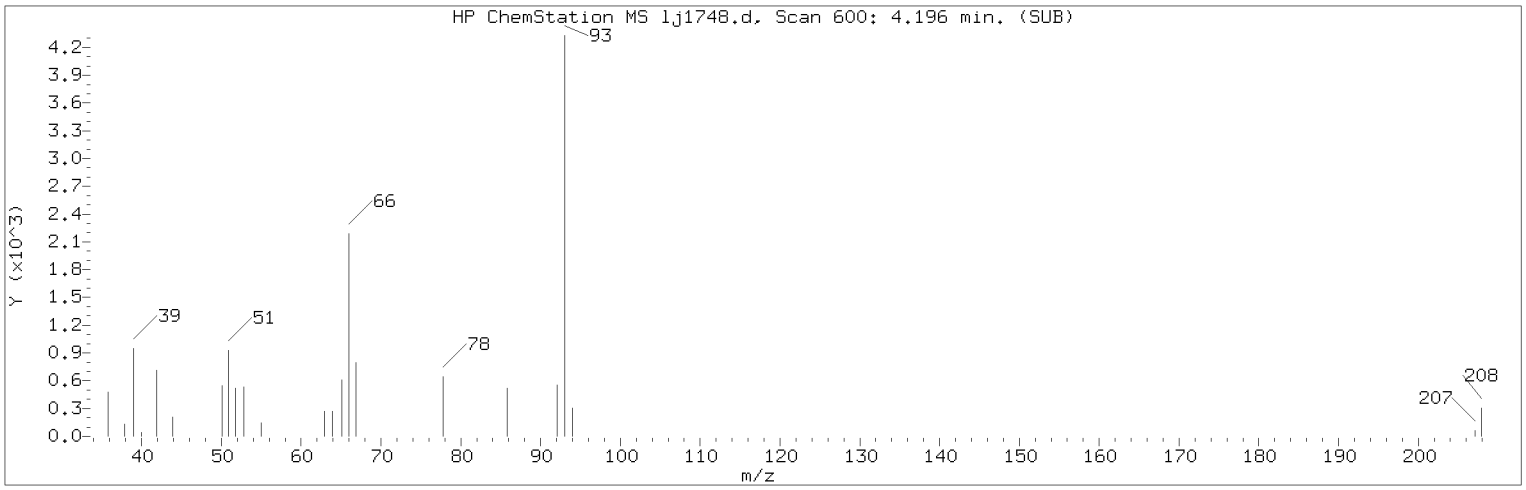
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

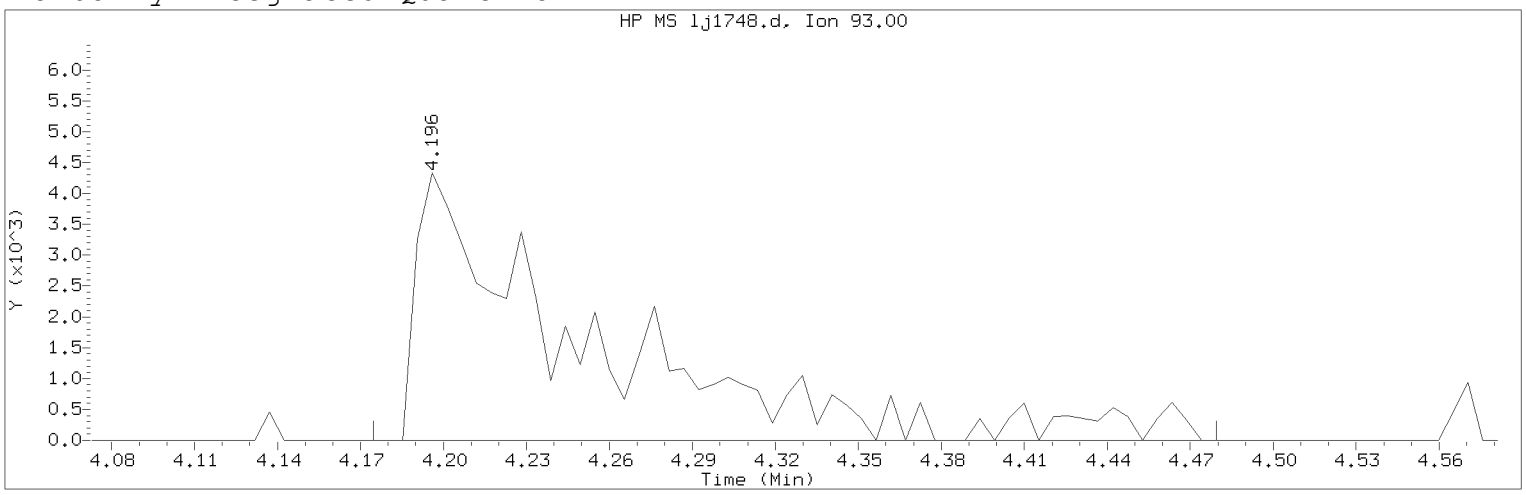
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 365		
Retention Time (minutes)	: 2.939		
Quant Ion	: 79.00		
Area	: 591		
On-column Amount (ng/ul)	: 0.0085		
Integration start scan	: 361	Integration stop scan:	379
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

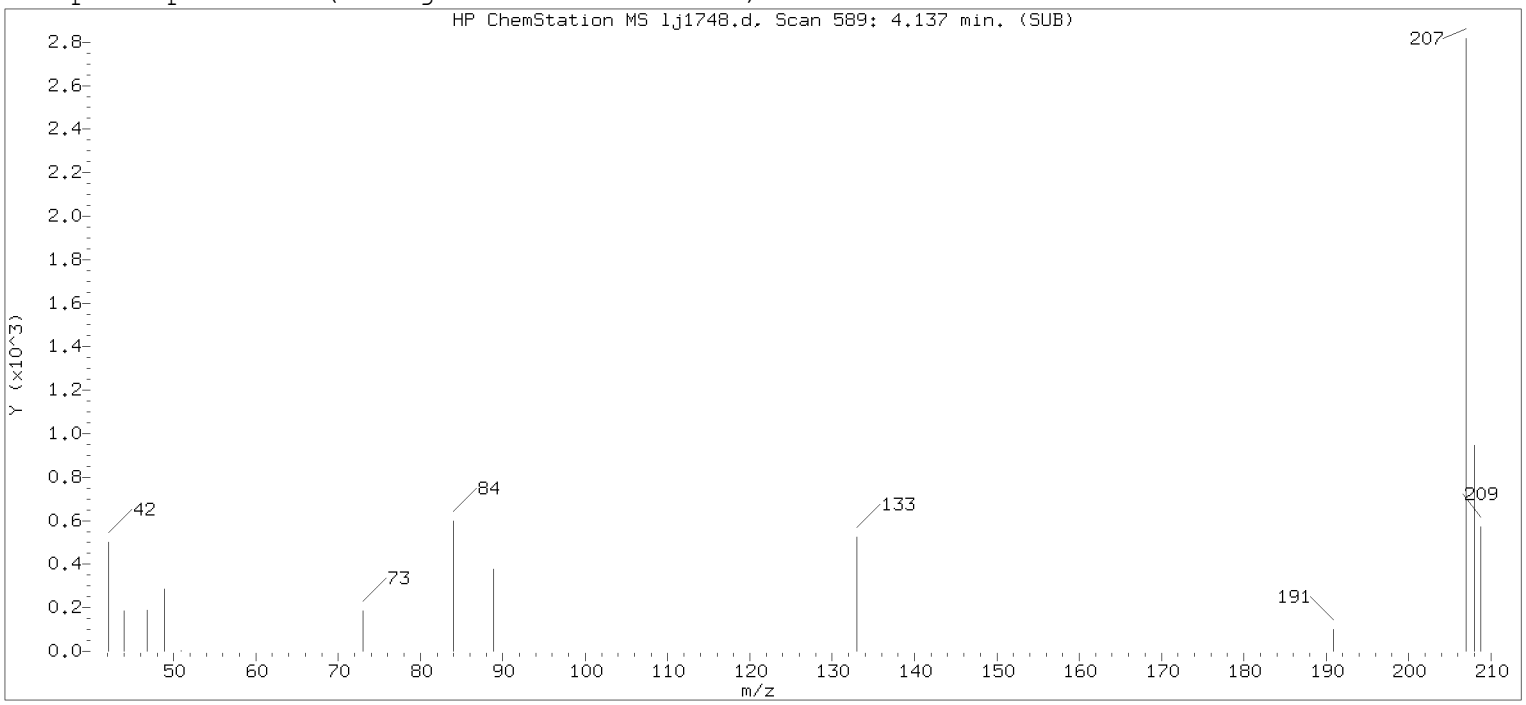
Compound Number : 8
Compound Name : 2-Picoline
Scan Number : 600
Retention Time (minutes) : 4.196
Quant Ion : 93.00
Area (flag) : 17988M
On-Column Amount (ng/ul) : 0.2474
Integration start scan : 595 Integration stop scan: 652
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

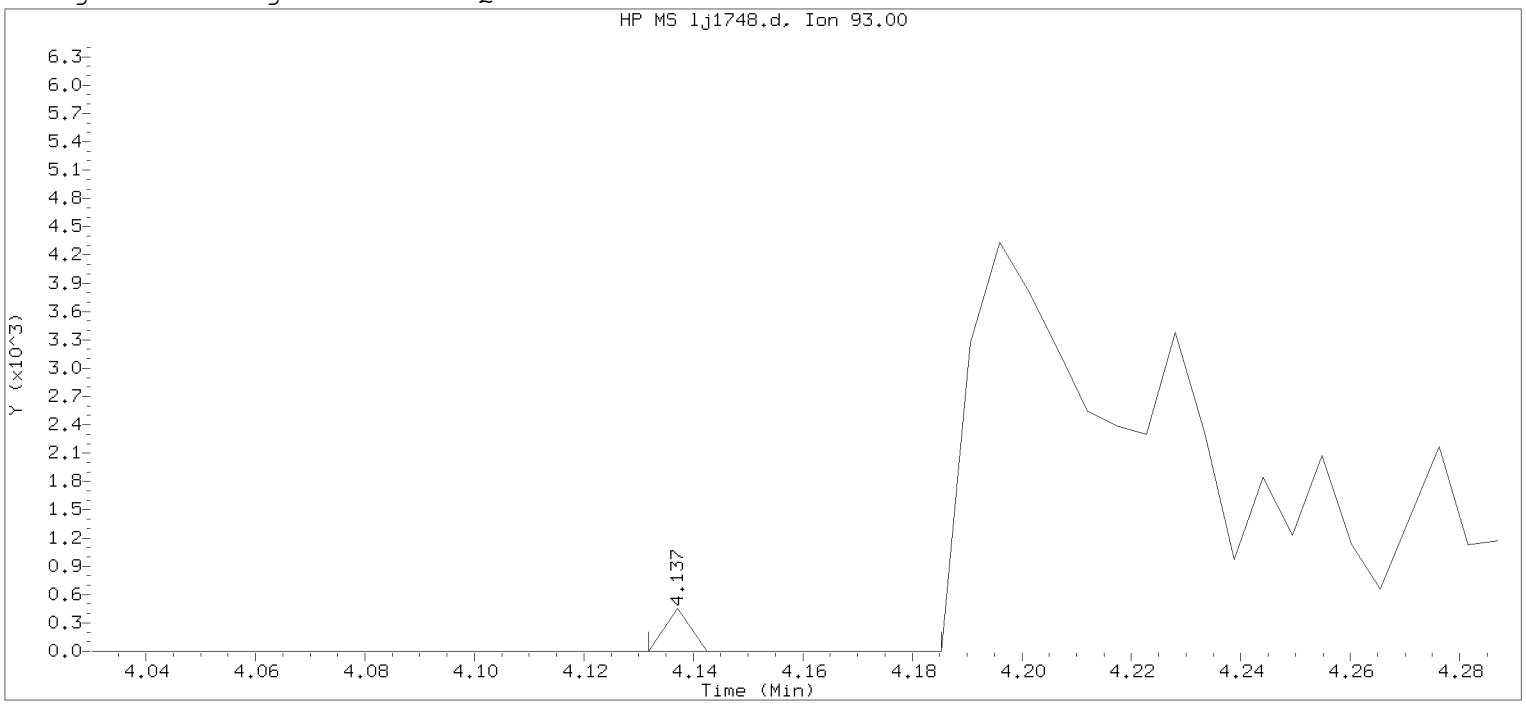
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

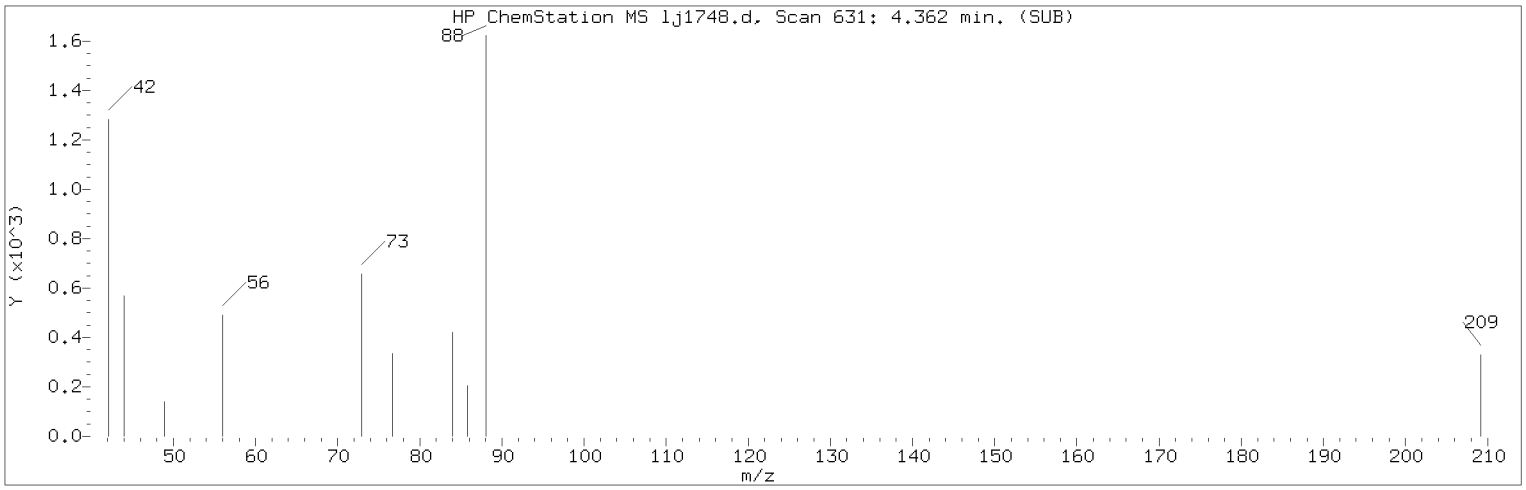
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

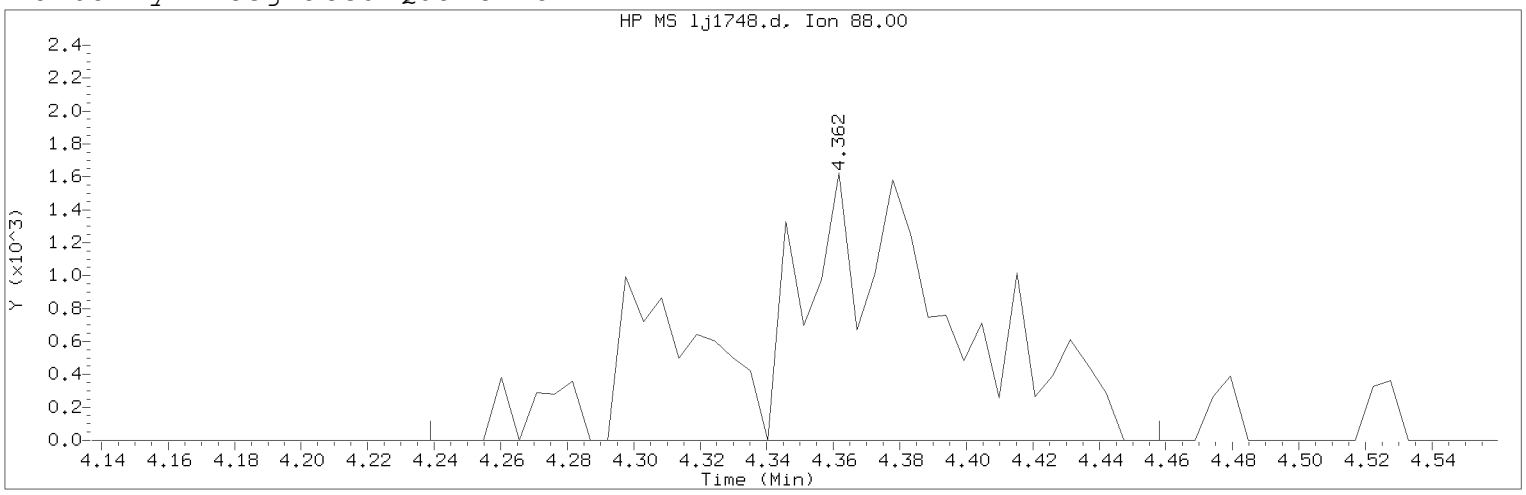
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 589		
Retention Time (minutes)	: 4.137		
Quant Ion	: 93.00		
Area	: 147		
On-column Amount (ng/ul)	: 0.0021		
Integration start scan	: 587	Integration stop scan:	597
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

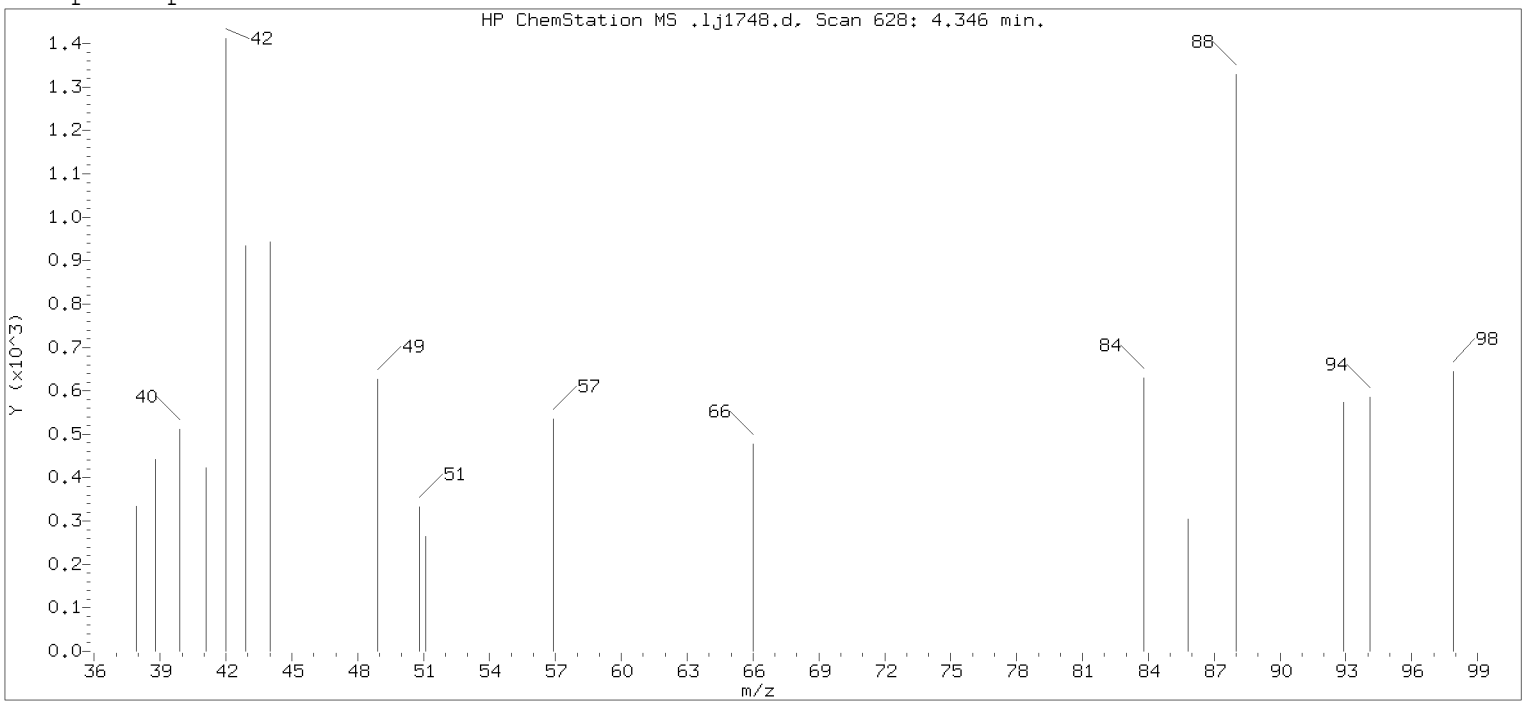
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Scan Number : 631
Retention Time (minutes) : 4.362
Quant Ion : 88.00
Area (flag) : 6960M
On-Column Amount (ng/ul) : 0.2344
Integration start scan : 607 Integration stop scan: 648
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

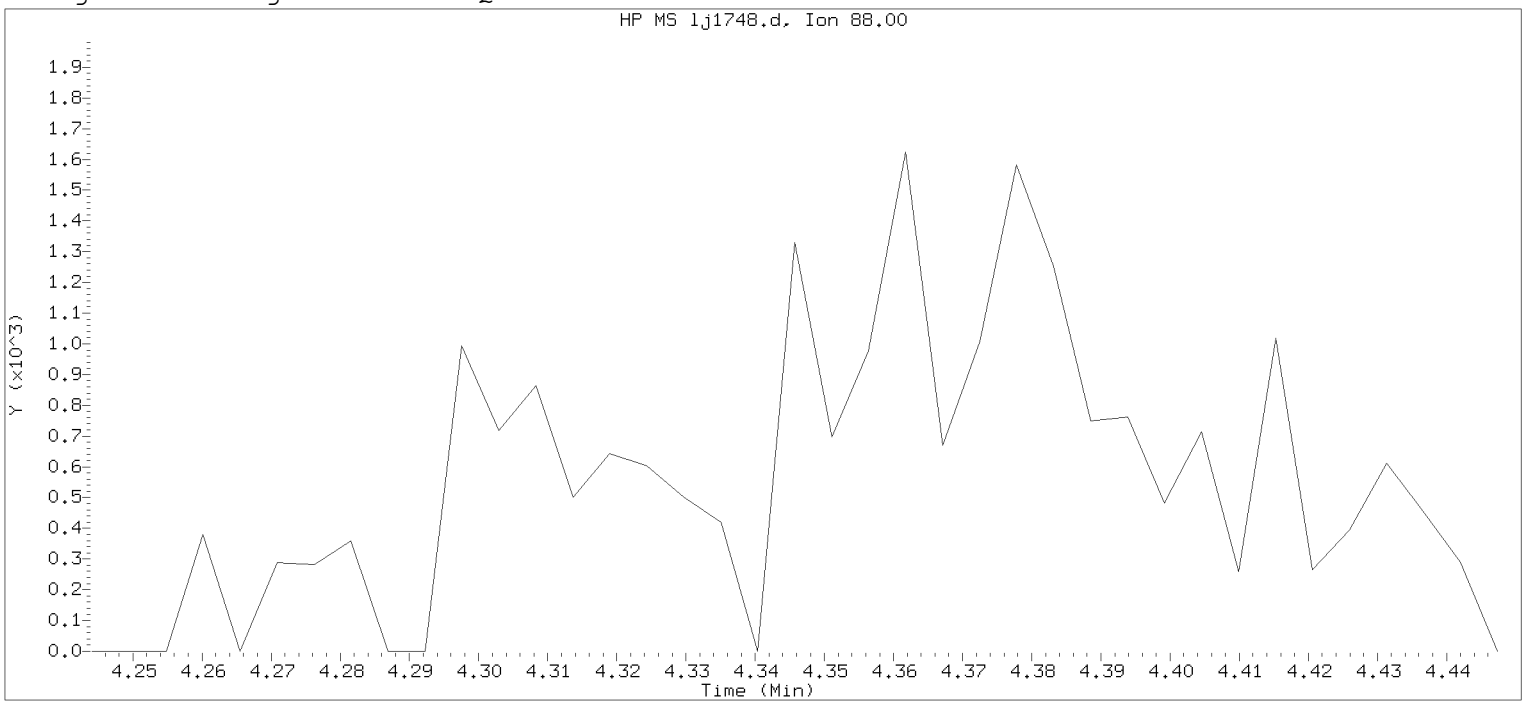
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

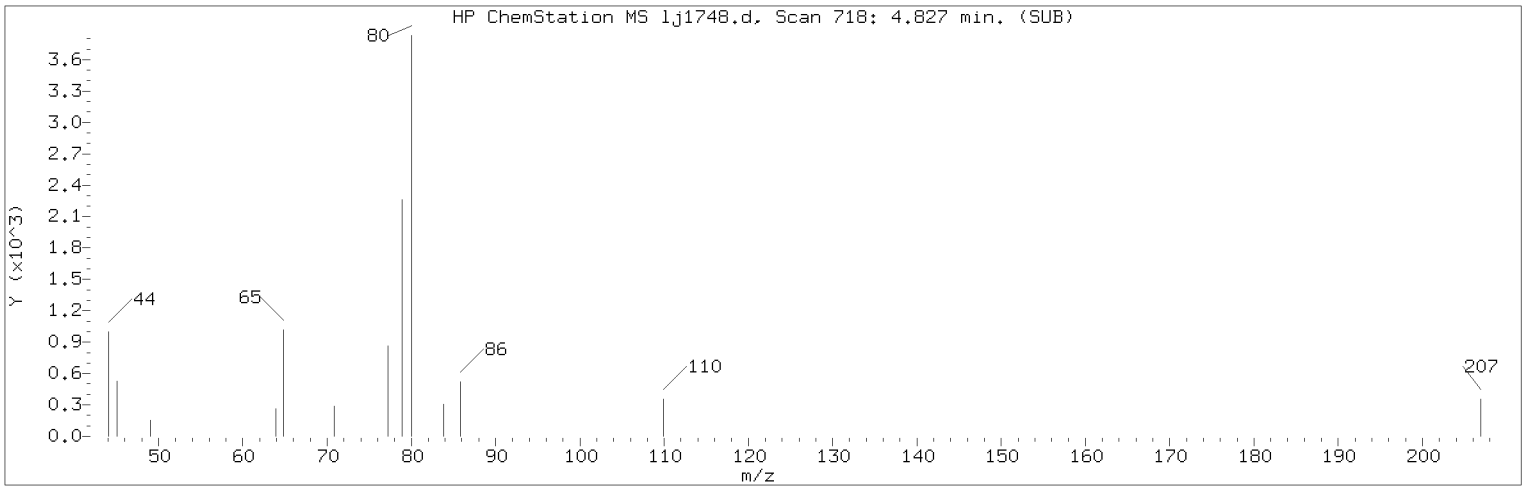
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

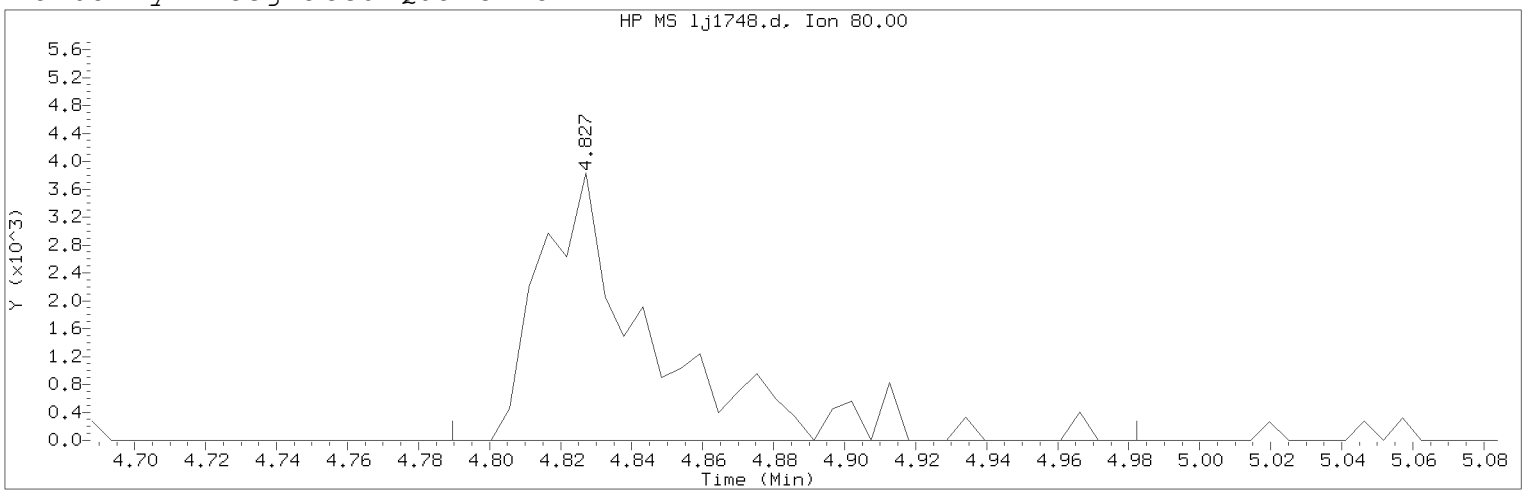
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.346
Quant Ion : 88.00

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: ARTRANSUE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

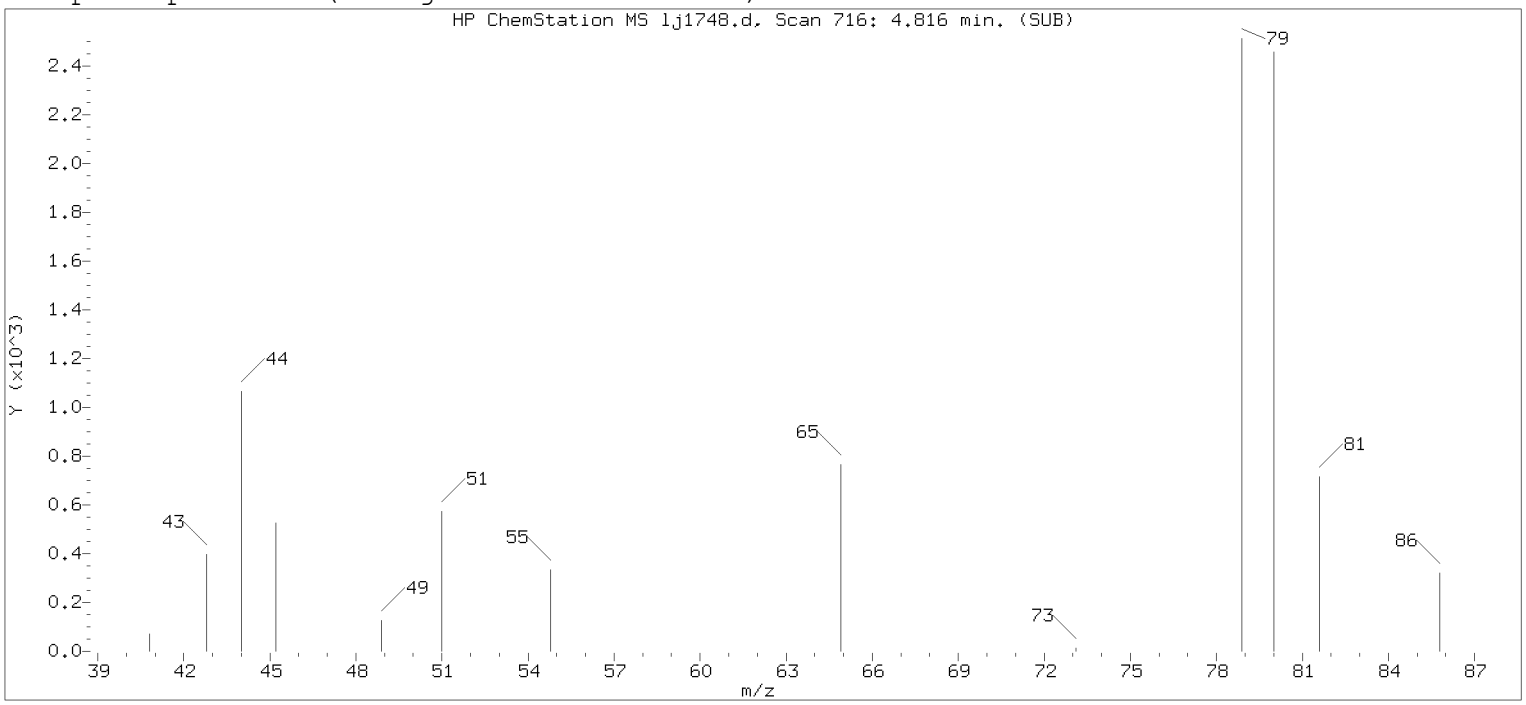
Compound Number : 10
Compound Name : Methyl methanesulfonate
Scan Number : 718
Retention Time (minutes) : 4.827
Quant Ion : 80.00
Area (flag) : 8428M
On-Column Amount (ng/ul) : 0.2219
Integration start scan : 710 Integration stop scan: 746
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

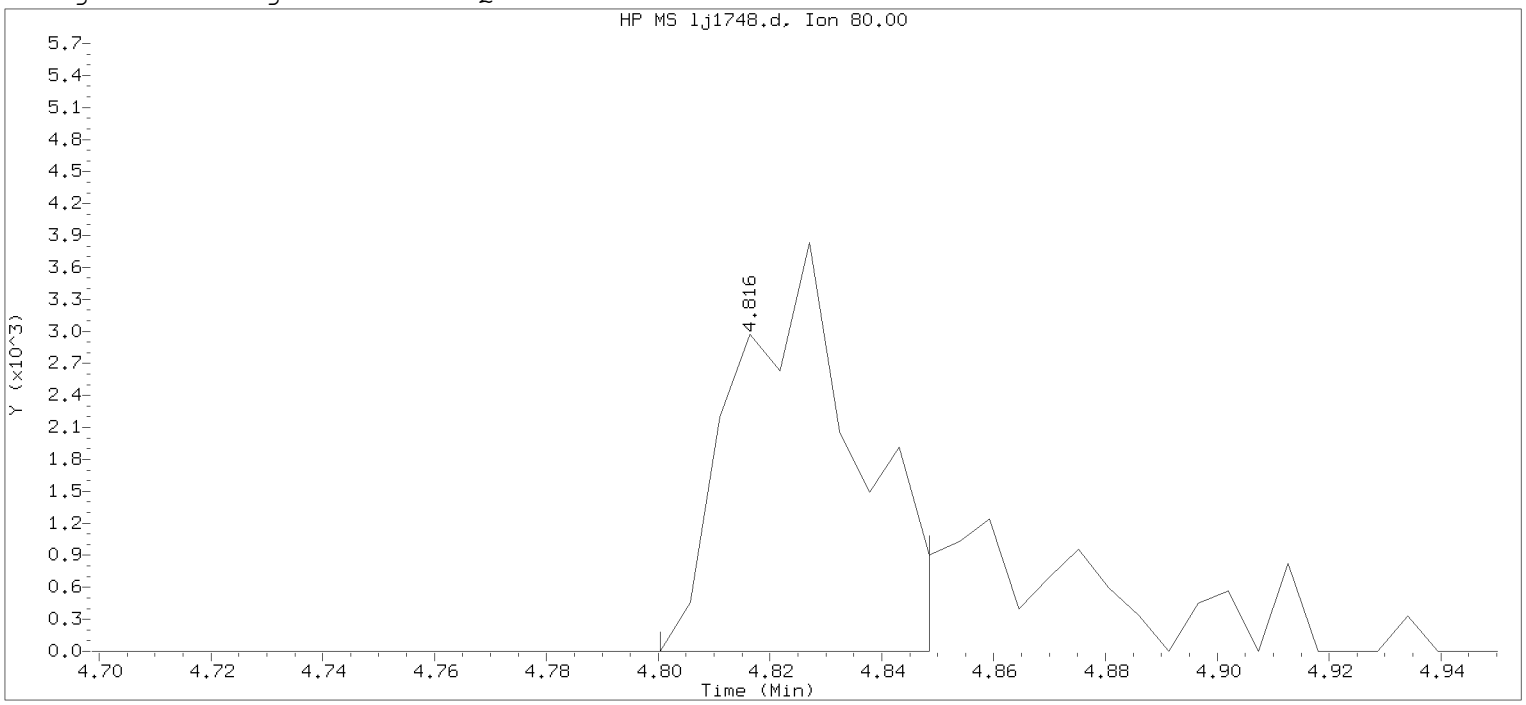
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

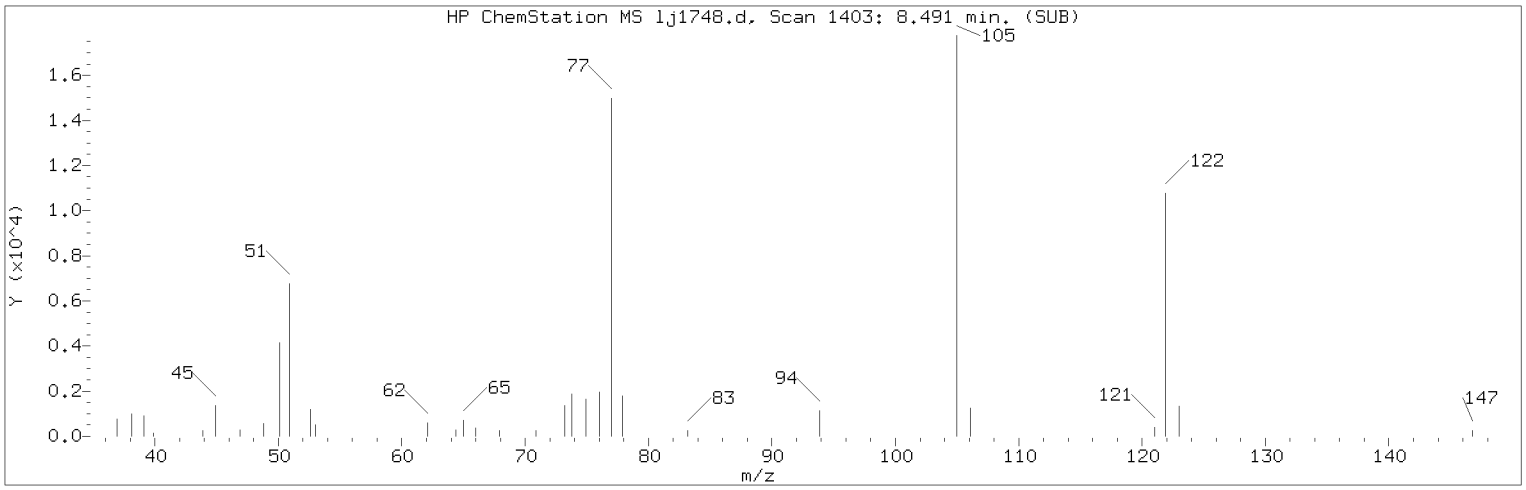
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

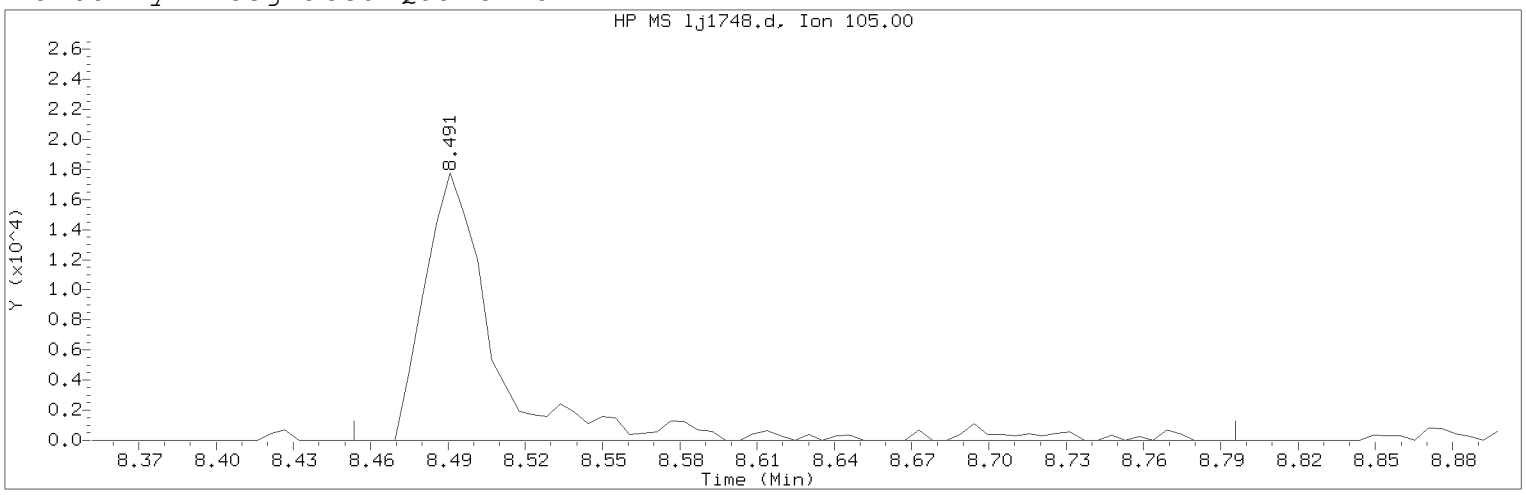
Compound Number	: 10		
Compound Name	: Methyl methanesulfonate		
Scan Number	: 716		
Retention Time (minutes)	: 4.816		
Quant Ion	: 80.00		
Area	: 5776		
On-column Amount (ng/ul)	: 0.1547		
Integration start scan	: 712	Integration stop scan:	721
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: ARTRANSUE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

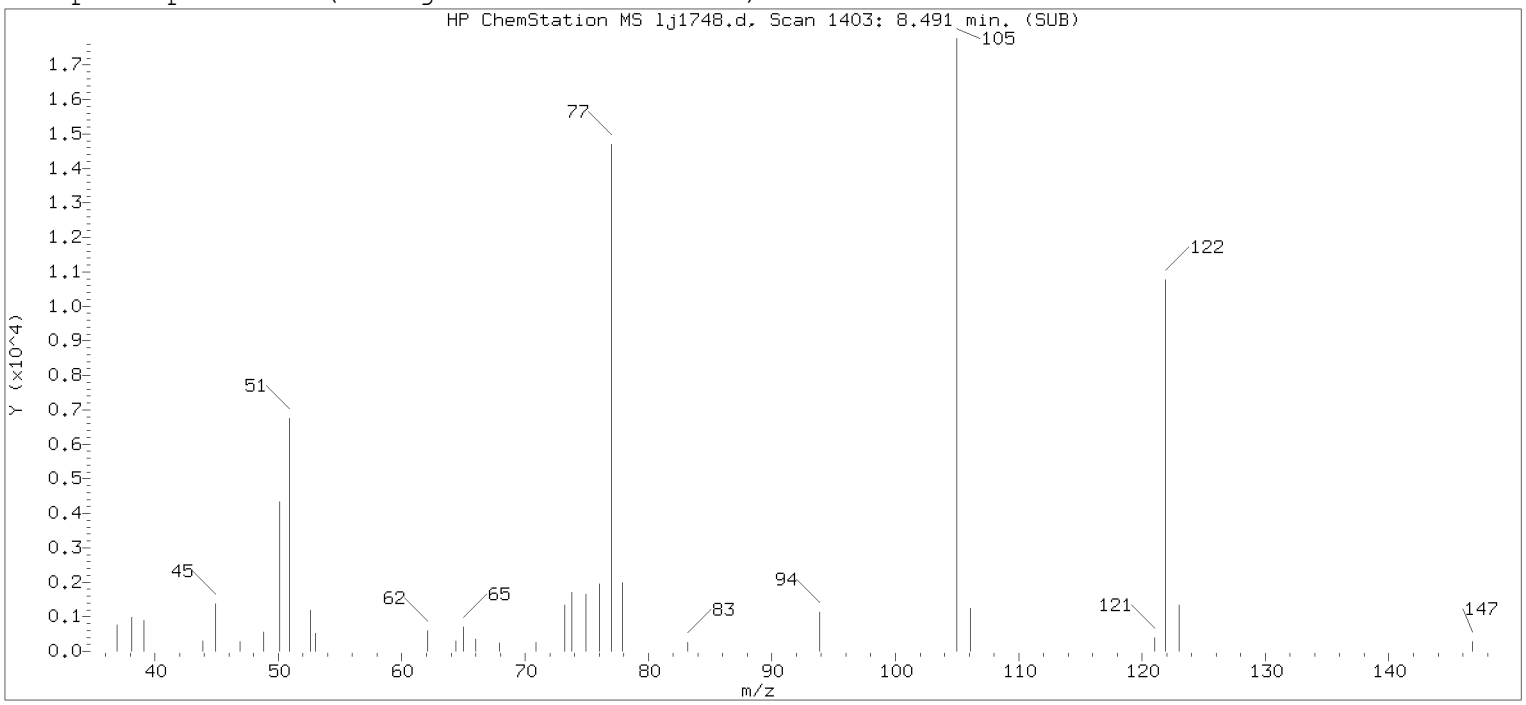
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1403
Retention Time (minutes) : 8.491
Quant Ion : 105.00
Area (flag) : 35392M
On-Column Amount (ng/ul) : 0.8791
Integration start scan : 1395 Integration stop scan: 1459
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

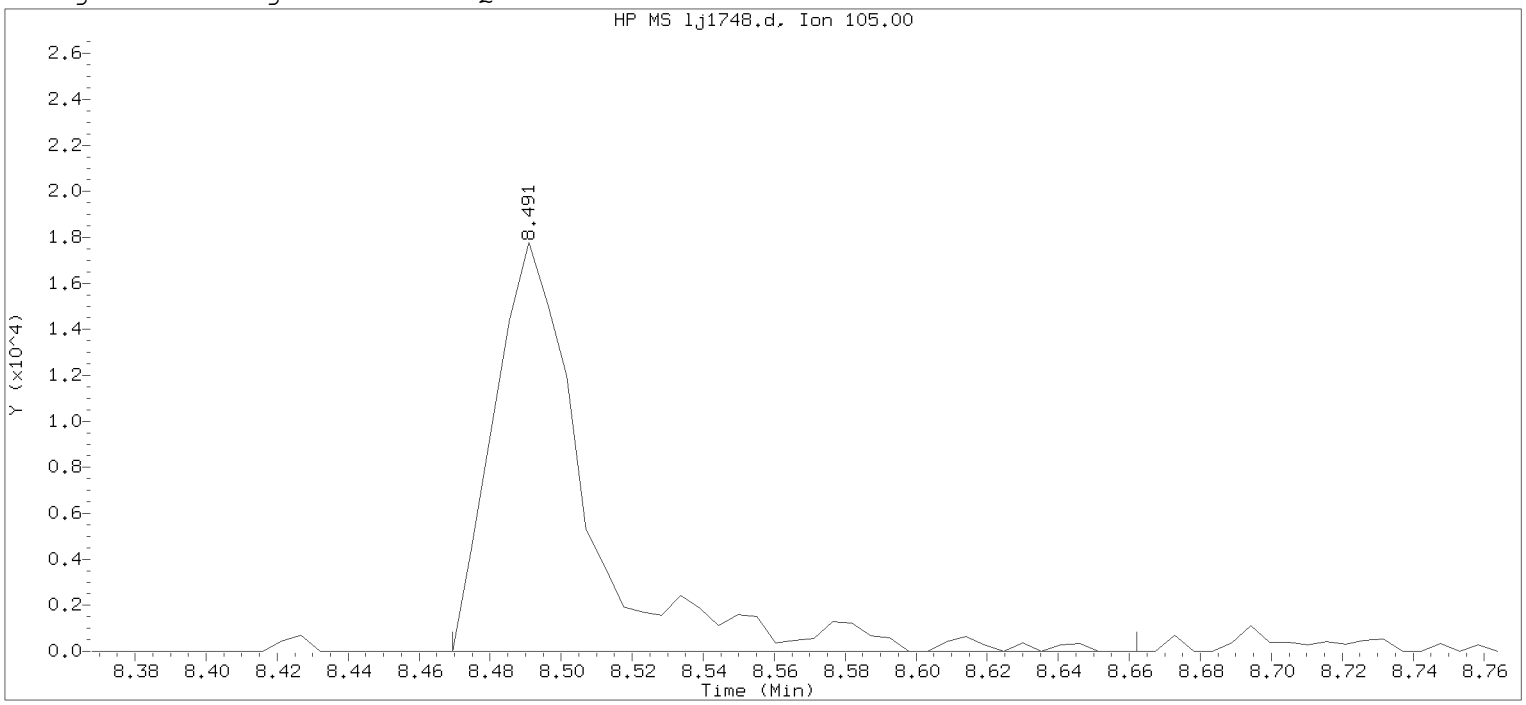
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

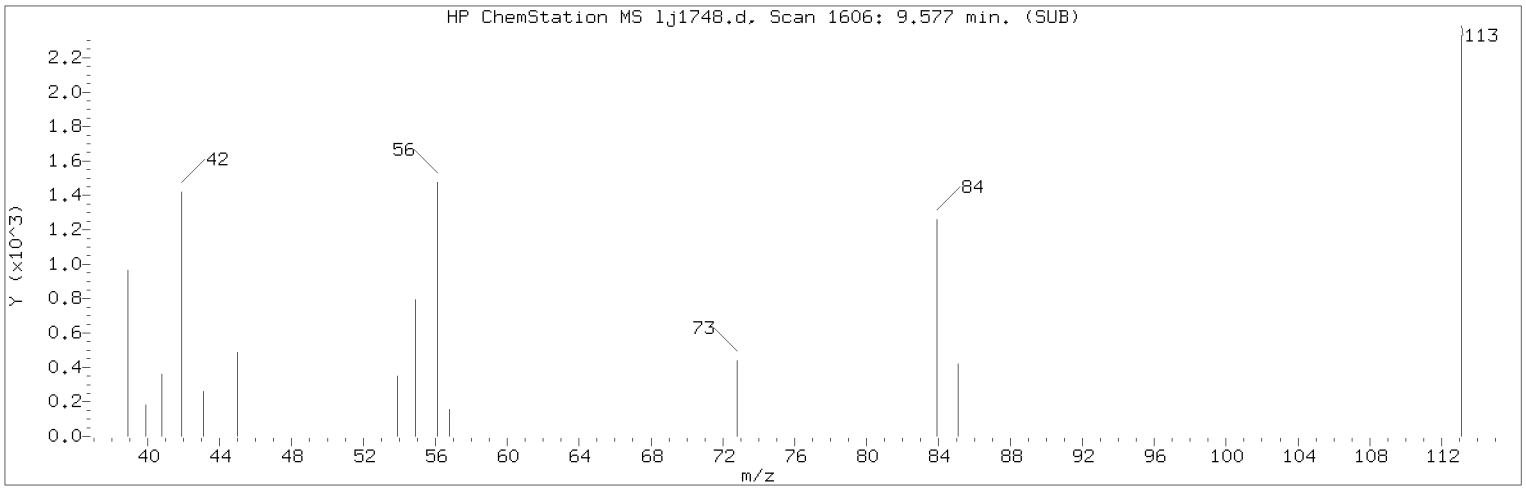
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

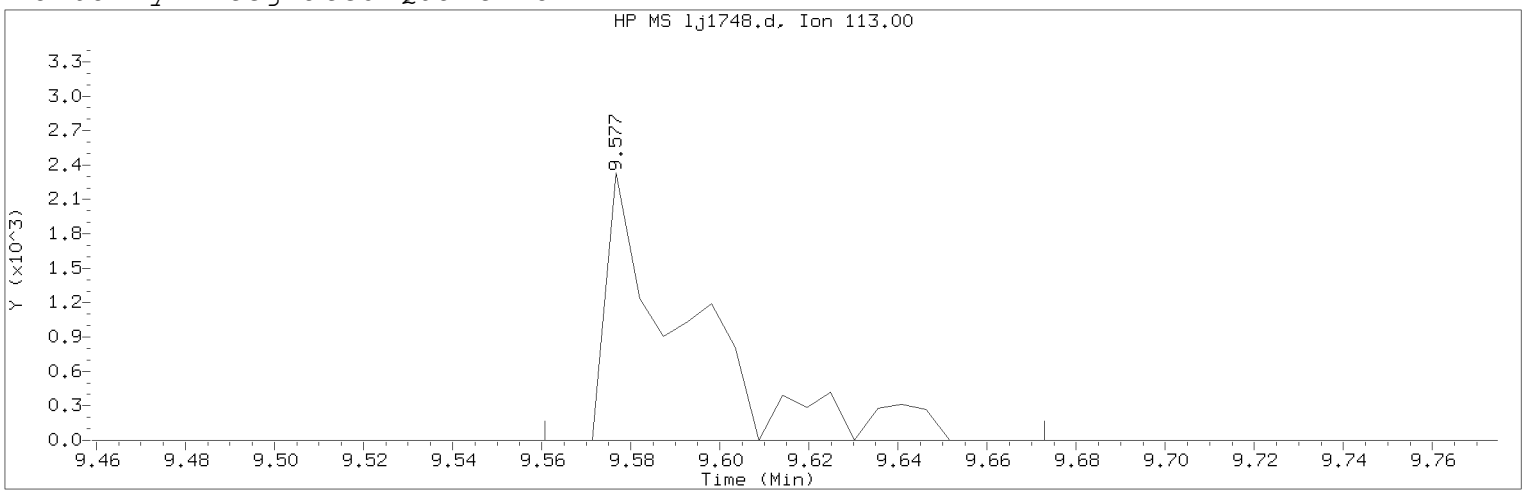
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1403		
Retention Time (minutes)	: 8.491		
Quant Ion	: 105.00		
Area	: 33241		
On-column Amount (ng/ul)	: 1.0344		
Integration start scan	: 1398	Integration stop scan:	1434
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: artransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

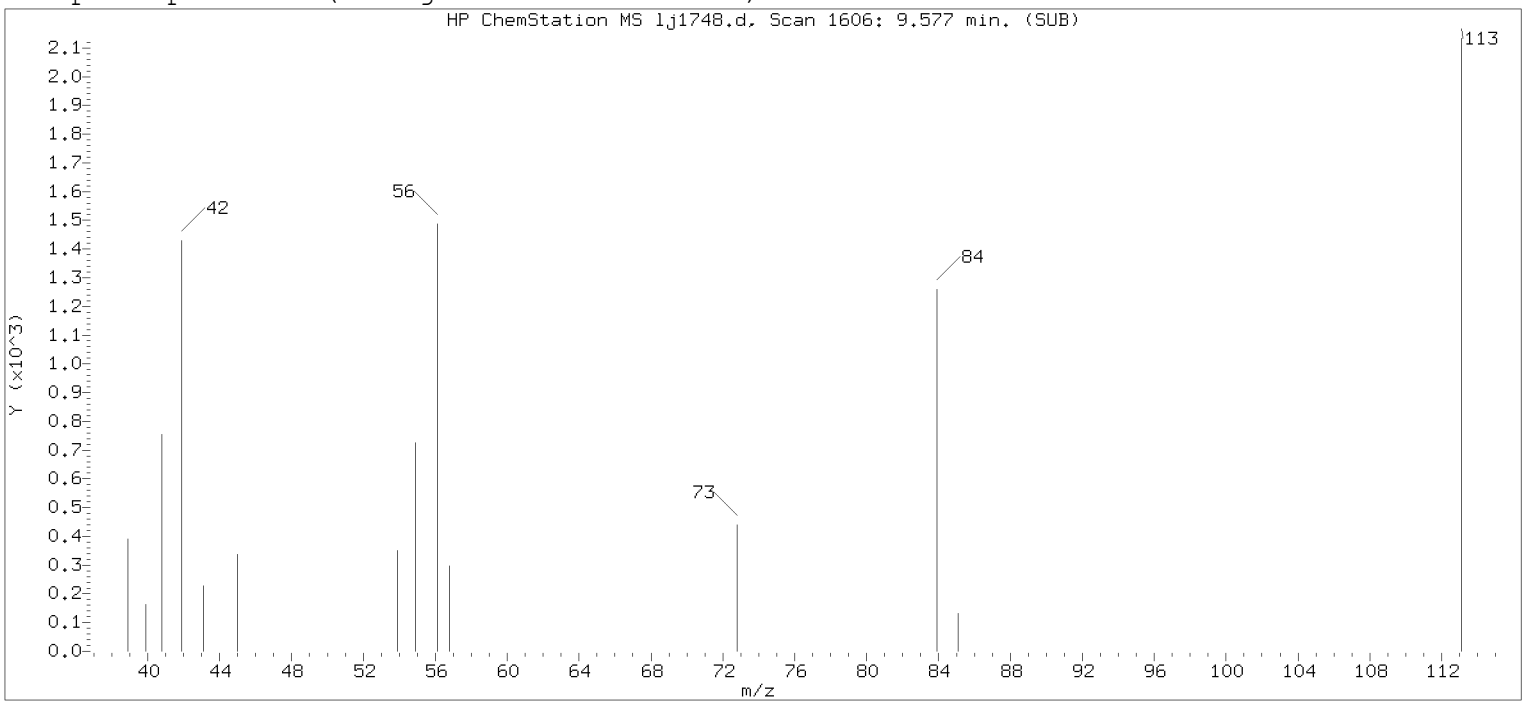
Compound Number : 79
Compound Name : Caprolactam
Scan Number : 1606
Retention Time (minutes) : 9.577
Quant Ion : 113.00
Area (flag) : 3036M
On-Column Amount (ng/ul) : 0.2222
Integration start scan : 1602 Integration stop scan: 1623
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

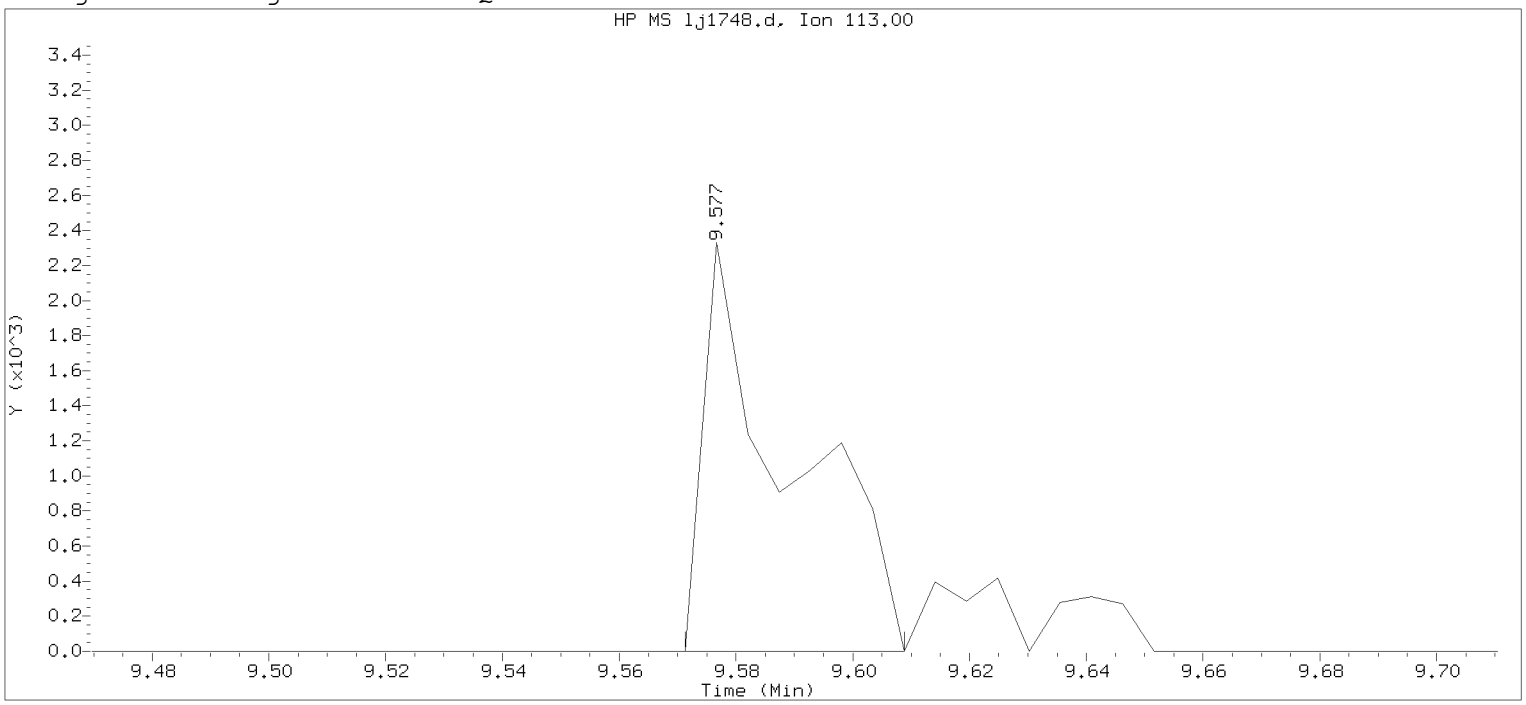
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

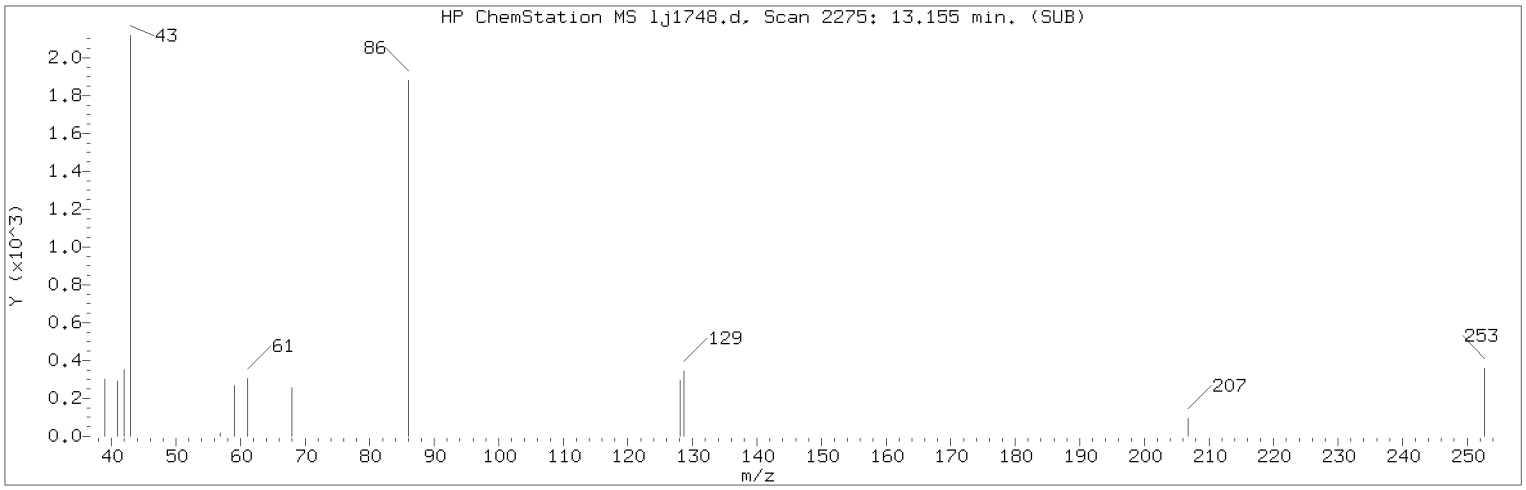
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

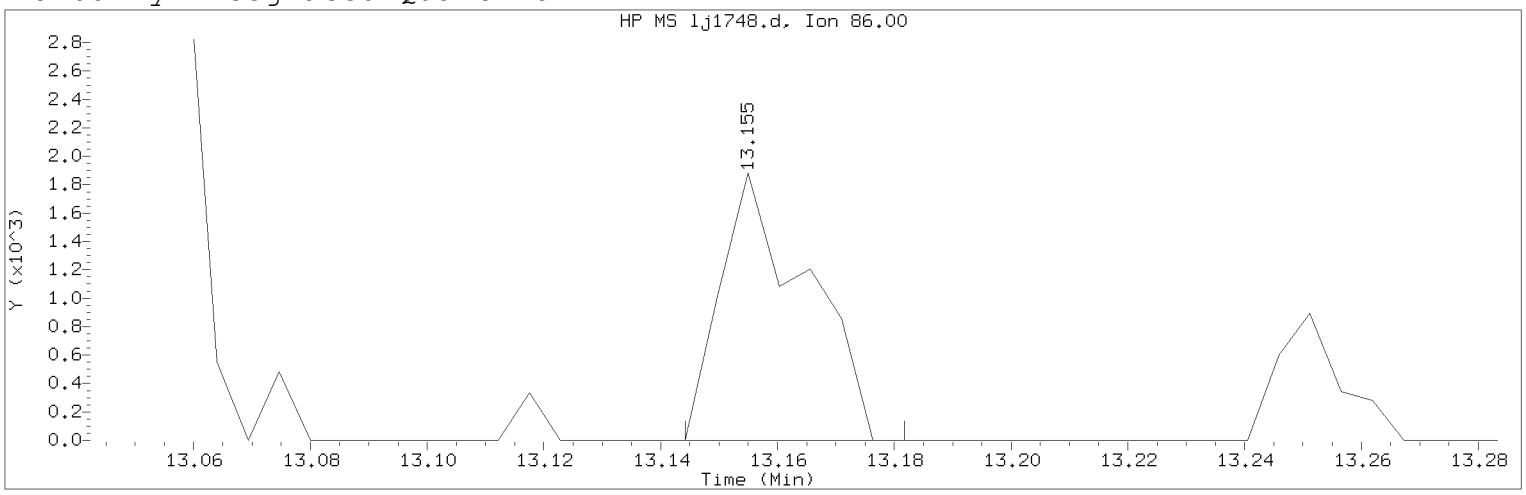
Compound Number	: 79		
Compound Name	: Caprolactam		
Scan Number	: 1606		
Retention Time (minutes)	: 9.577		
Quant Ion	: 113.00		
Area	: 2409		
On-column Amount (ng/ul)	: 0.2631		
Integration start scan	: 1604	Integration stop scan:	1611
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

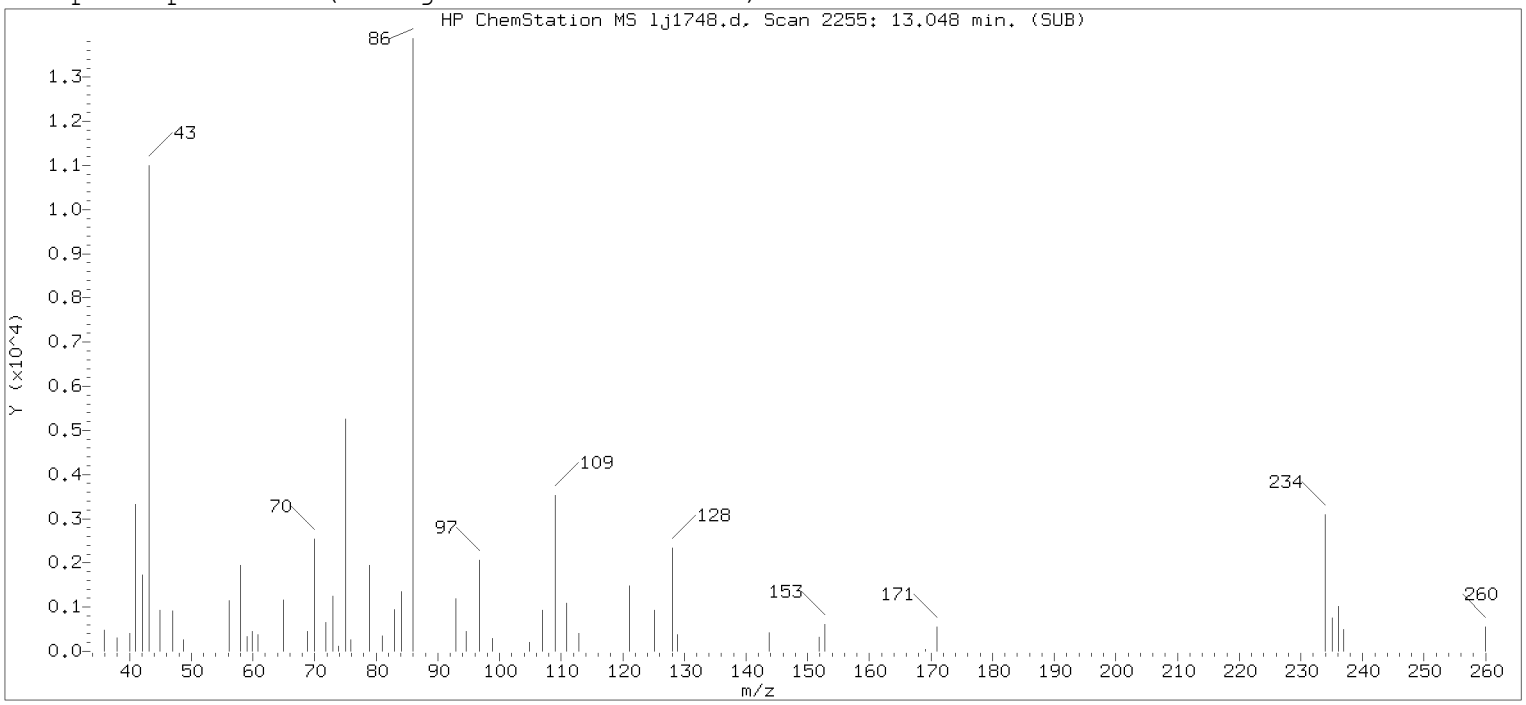
Compound Number : 149
Compound Name : Diallate (peak 2)
Scan Number : 2275
Retention Time (minutes) : 13.155
Quant Ion : 86.00
Area (flag) : 1930M
On-Column Amount (ng/ul) : 0.0402
Integration start scan : 2272 Integration stop scan: 2279
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

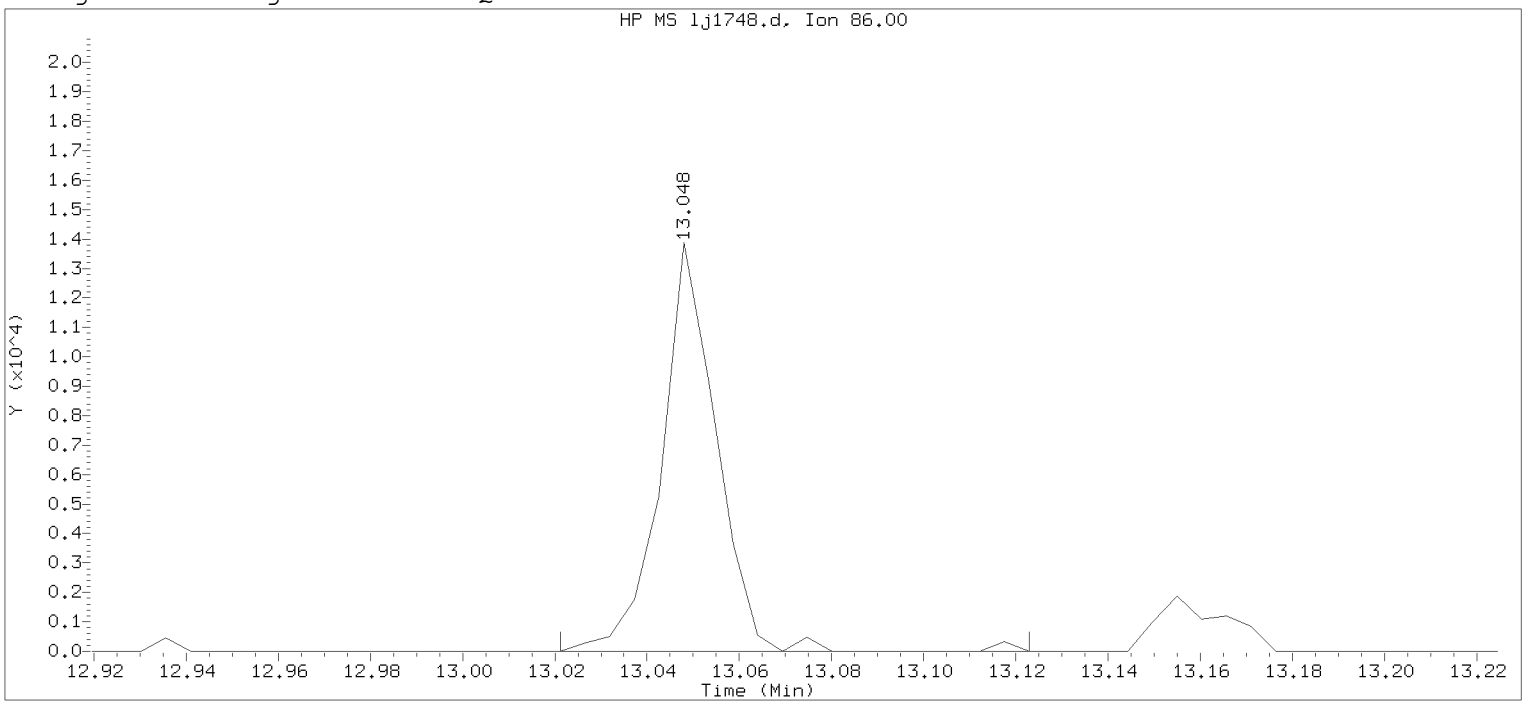
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

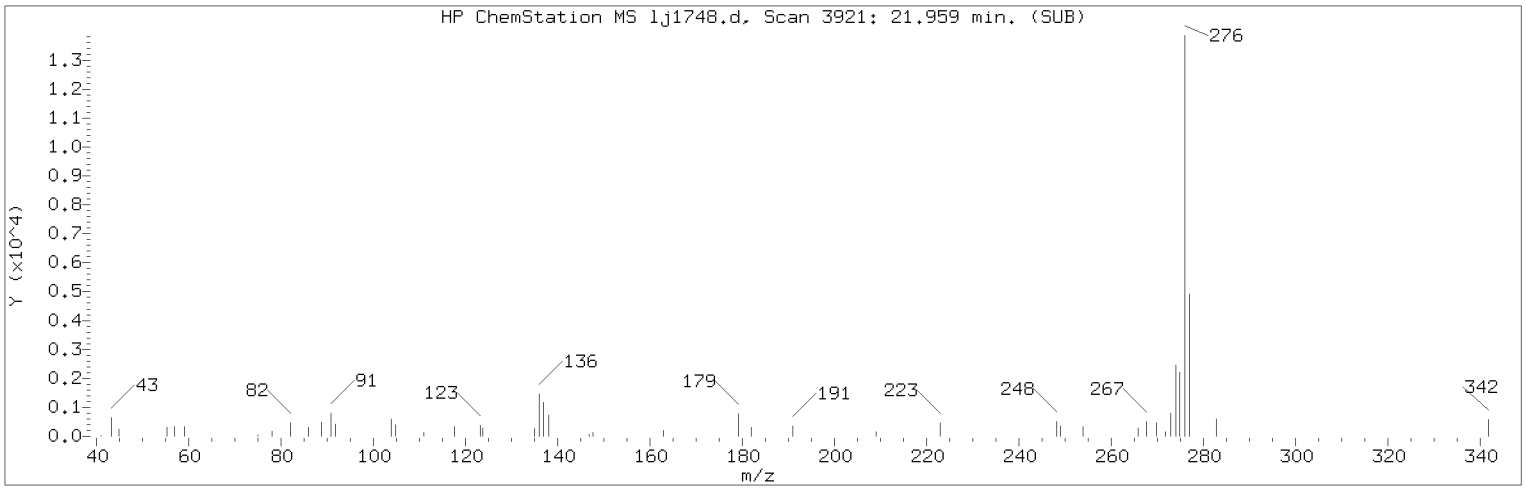
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

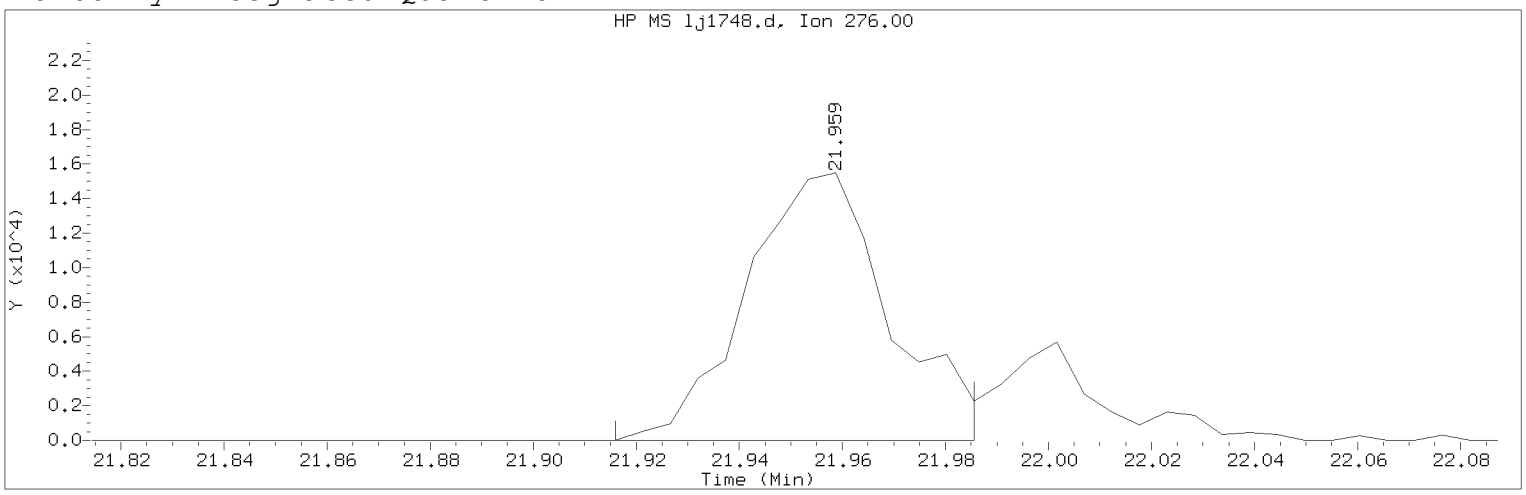
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2255		
Retention Time (minutes)	: 13.048		
Quant Ion	: 86.00		
Area	: 11548		
On-column Amount (ng/ul)	: 0.0469		
Integration start scan	: 2249	Integration stop scan:	2268
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: atransue

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 17:41
Date, time and analyst ID of latest file update: 29-Oct-2018 17:41 art12405

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

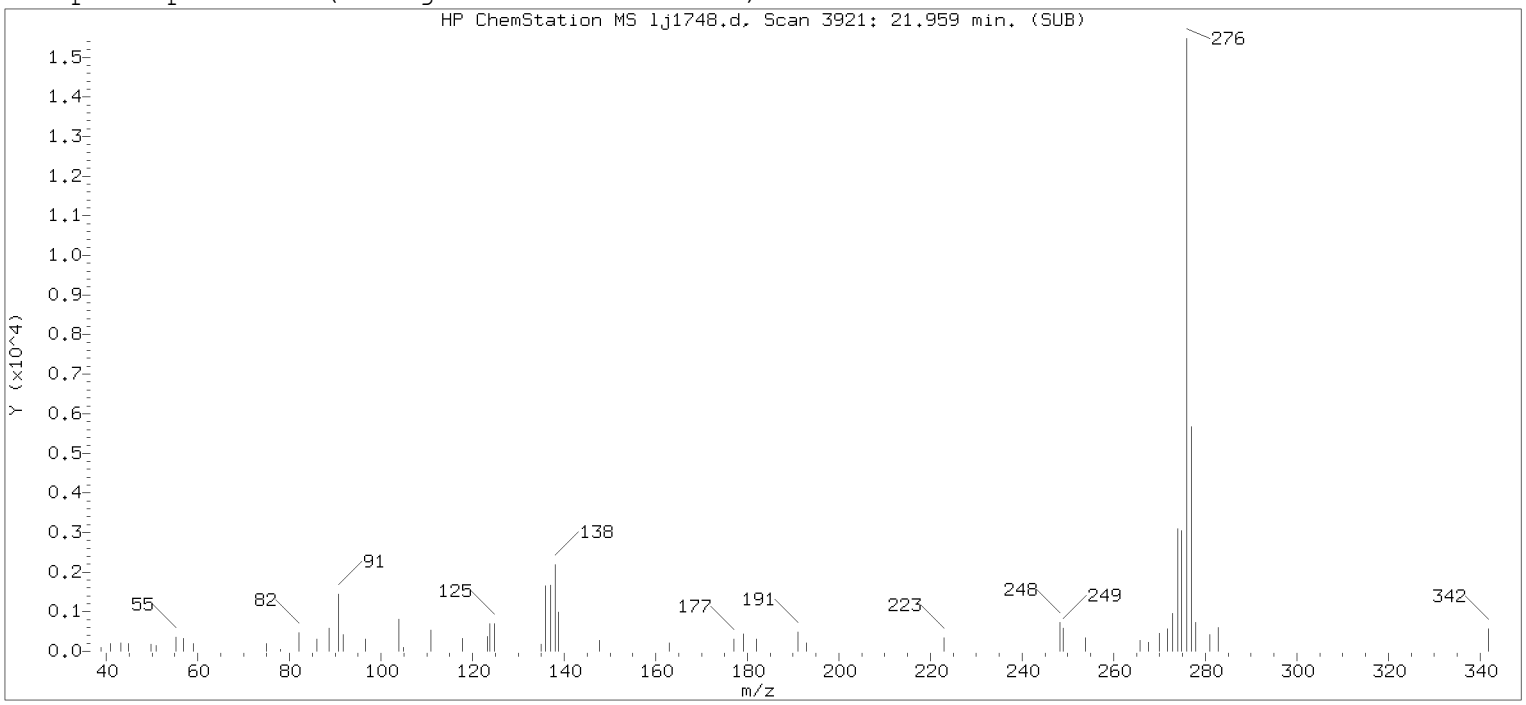
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3921
Retention Time (minutes) : 21.959
Quant Ion : 276.00
Area (flag) : 29821M
On-Column Amount (ng/ul) : 0.2365
Integration start scan : 3912 Integration stop scan: 3925
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

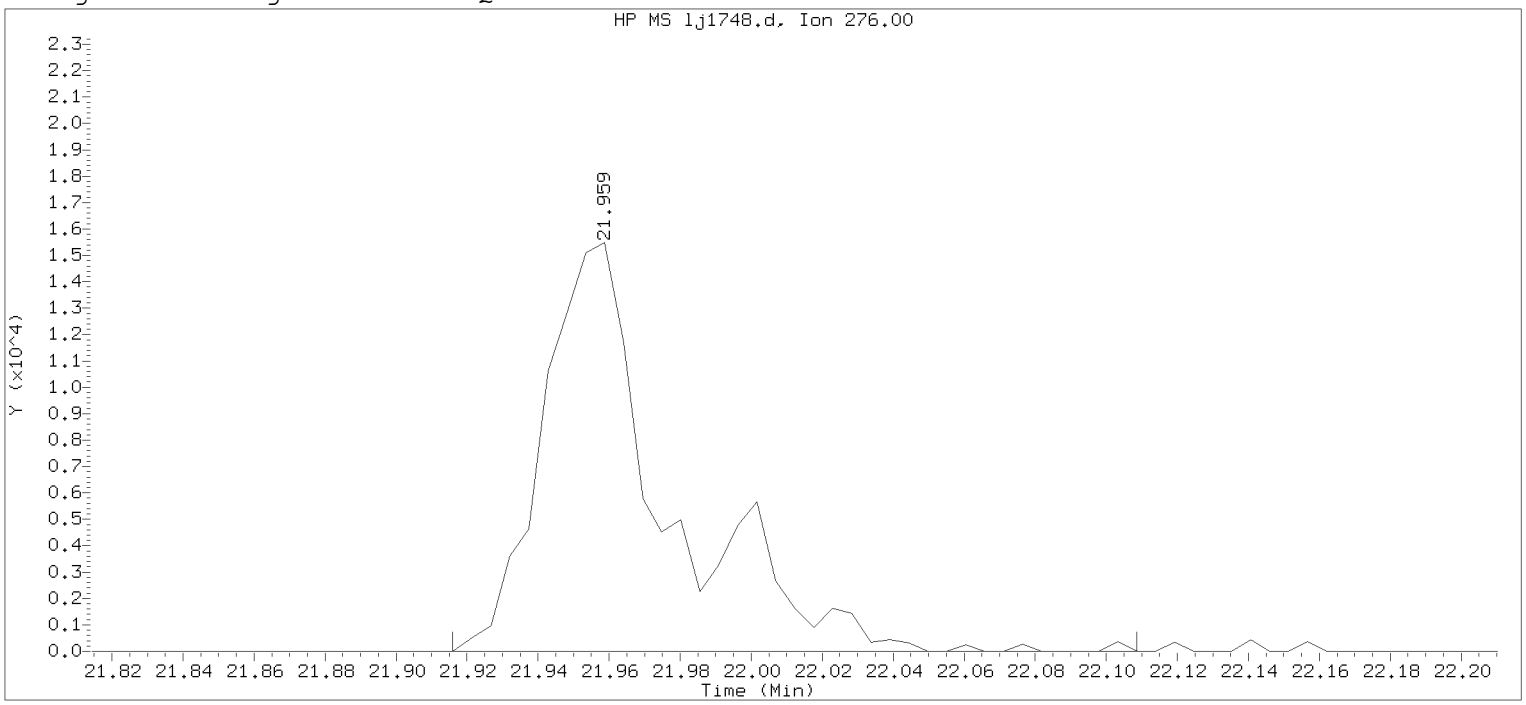
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:02.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



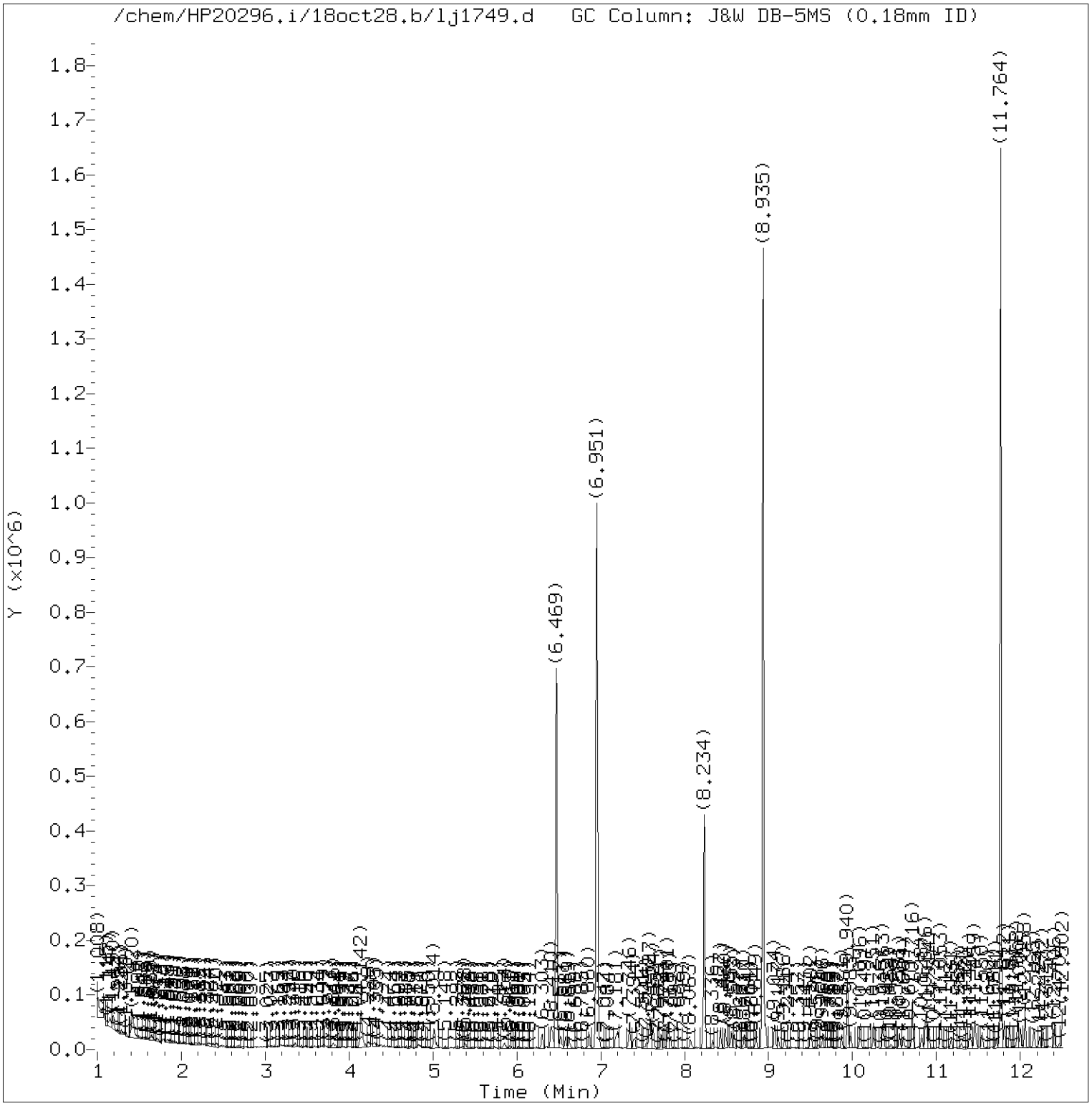
Data File: /chem/HP20296.i/18oct28.b/lj1748.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 03:49 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: all1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.25 Lab Sample ID: RVSTD2648

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3921		
Retention Time (minutes)	: 21.959		
Quant Ion	: 276.00		
Area	: 37508		
On-column Amount (ng/ul)	: 0.2436		
Integration start scan	: 3912	Integration stop scan:	3948
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:02.
Target 3.5 esignature user name: atransue



Total Ion Chromatogram (TIC)

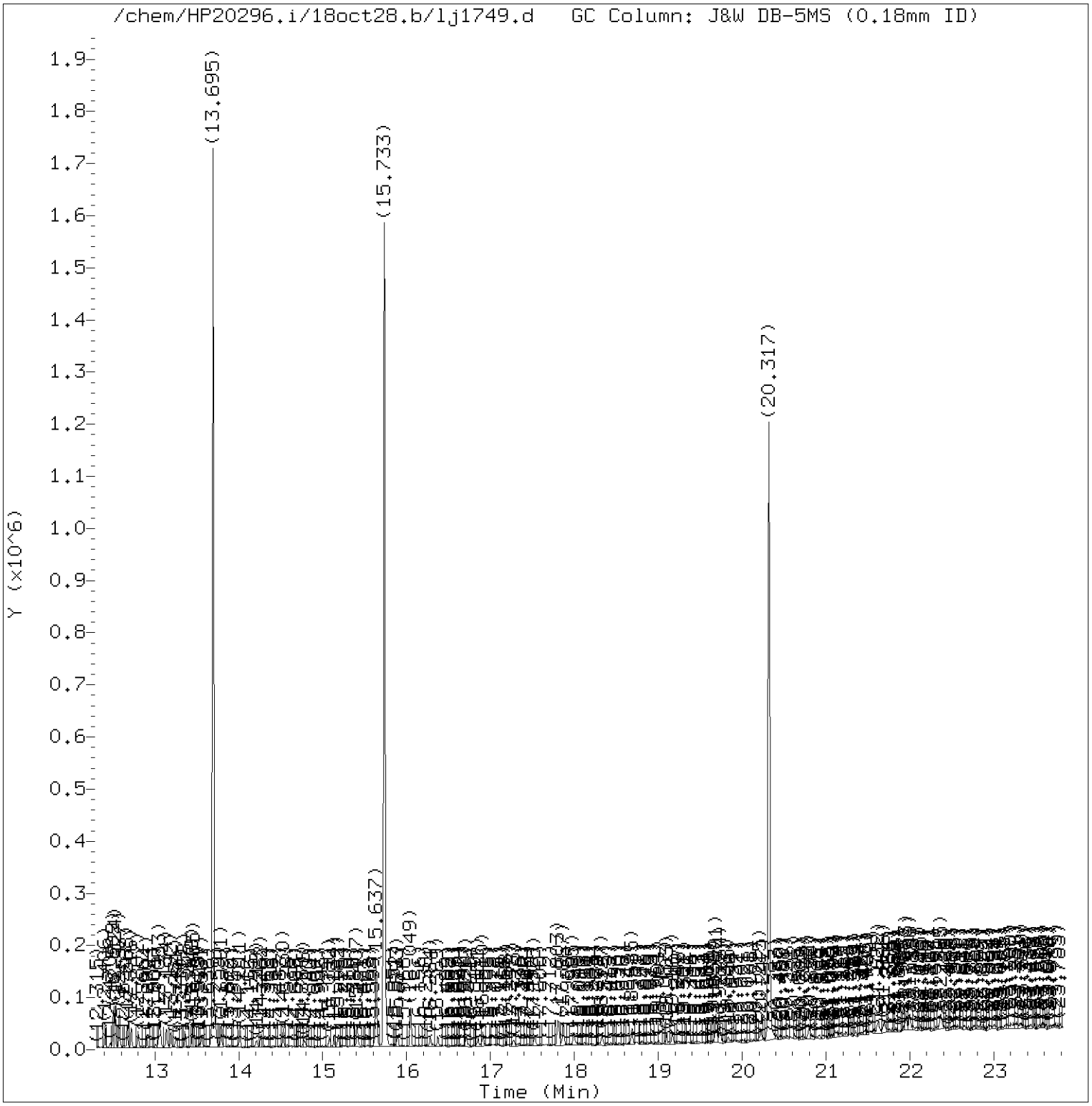
Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.420	88	3687M	0.133
5) N-Nitrosodimethylamine	(1)	3.051	74	4751	0.114
6) Pyridine	(1)	3.249	79	7175M	0.101
8) 2-Picoline	(1)	4.233	93	8043M	0.108
9) N-Nitrosomethylethylamine	(1)	4.378	88	3534M	0.117
10) Methyl methanesulfonate	(1)	4.838	80	5681M	0.146
12)$2-Fluorophenol	(1)	5.020	112	13482	0.234
14) N-Nitrosodiethylamine	(1)	5.383	102	3060	0.117
43) Total Cresols	(1)			14374	0.250
16) Ethyl methanesulfonate	(1)	5.854	109	3413	0.115
17) Benzaldehyde	(1)	6.303	77	7055	0.132
18)$Phenol-d6	(1)	6.410	99	18331	0.236
19) Phenol	(1)	6.421	94	10363	0.114
20) Aniline	(1)	6.464	93	13884	0.130
21) a-methylstyrene	(1)	6.539	118	991M	0.177
23) bis(2-Chloroethyl)ether	(1)	6.576	93	8163	0.119
24) 2-Chlorophenol	(1)	6.624	128	6472	0.121
25) 1,3-Dichlorobenzene	(1)	6.860	146	8191	0.136
26)*1,4-Dichlorobenzene-d4	(1)	6.951	152	185956	5.000
27) 1,4-Dichlorobenzene	(1)	6.983	146	7501	0.124
28) Benzyl alcohol	(1)	7.181	108	4136	0.112
29) 1,2-Dichlorobenzene	(1)	7.202	146	7319	0.125
31) Indene	(1)	7.336	115	8262	0.128
32) 2-Methylphenol	(1)	7.346	108	8120	0.144
100) Isosafrole	(3)			5052	0.112
35) bis(2-Chloroisopropyl)ether	(1)	7.389	45	11172	0.129
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.389	45	11172	0.129
36) N-Nitrosopyrrolidine	(1)	7.544	100	2842	0.099
37) Acetophenone	(1)	7.576	105	9718	0.112
38) 4-Methylphenol	(1)	7.587	108	6254	0.106
39) N-Nitroso-di-n-propylamine	(1)	7.598	70	5907	0.112
40) N-Nitrosomorpholine	(1)	7.614	56	5362	0.140
41) o-Toluidine	(1)	7.630	106	12155	0.123
44) Hexachloroethane	(1)	7.721	117	3789	0.138
45)$Nitrobenzene-d5	(2)	7.801	82	17915	0.241
46) Nitrobenzene	(2)	7.828	77	7984	0.101
125) 2,4_2,6-Dinitrotoluenes	(3)			2726	0.104
50) N-Nitrosopiperidine	(2)	8.068	114	3553	0.128
52) Isophorone	(2)	8.218	82	14789	0.110
53) 2-Nitrophenol	(2)	8.336	139	2705	0.104

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

Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.427	107	7557	0.119
58) Benzoic acid	(2)	8.480	105	16027M	0.386
59) O,O,O-Triethylphosphorothioate	(2)	8.550	198	2586M	0.095
57) bis(2-Chloroethoxy)methane	(2)	8.587	93	11090	0.130
62) 2,4-Dichlorophenol	(2)	8.716	162	4975	0.109
151) Diallate trans/cis	(4)			6646	0.113
65) 1,2,4-Trichlorobenzene	(2)	8.849	180	7004	0.133
68)*Naphthalene-d8	(2)	8.935	136	710989	5.000
70) 4-Chloroaniline	(2)	9.074	127	6750	0.104
71) 2,6-Dichlorophenol	(2)	9.079	162	5092	0.115
72) Hexachloropropene	(2)	9.117	213	3487	0.102
74) Hexachlorobutadiene	(2)	9.192	225	4230	0.136
78) Quinoline	(2)	9.502	129	9814	0.103
79) Caprolactam	(2)	9.598	113	973	0.069
80) N-Nitrosodi-n-butylamine	(2)	9.646	84	5152	0.097
83) 4-Chloro-3-methylphenol	(2)	9.866	107	5419	0.100
85) Safrole	(2)	9.983	162	4240	0.105
88) Hexachlorocyclopentadiene	(3)	10.363	237	3421	0.110
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.363	216	6311	0.117
91) cis-Isosafrole	(3)	10.459	162	633M	0.014
93) 2,4,6-Trichlorophenol	(3)	10.561	196	2654	0.084
95) 2,4,5-Trichlorophenol	(3)	10.604	196	3958	0.114
96)$2-Fluorobiphenyl	(3)	10.716	172	28529	0.244
97) trans-Isosafrole	(3)	10.823	162	4419	0.098
98) 1,1'-Biphenyl	(3)	10.871	154	15630	0.130
101) 1-Chloronaphthalene	(3)	10.909	162	10568	0.114
103) Diphenyl ether	(3)	11.053	170	8619	0.129
104) 2-Nitroaniline	(3)	11.058	138	1886	0.070
108) 1,4-Naphthoquinone	(3)	11.171	158	3922	0.100
109) 1,4-Dinitrobenzene	(3)	11.299	168	552M	0.039
110) Dimethylphthalate	(3)	11.401	163	12996	0.117
111) 1,3-Dinitrobenzene	(3)	11.417	168	732	0.045
113) 2,6-Dinitrotoluene	(3)	11.475	165	1423	0.063
117) 3-Nitroaniline	(3)	11.716	138	1857	0.072
118)*Acenaphthene-d10	(3)	11.764	164	349799	5.000
120) 2,4-Dinitrophenol	(3)	11.871	184	4487	0.331
121) 4-Nitrophenol	(3)	11.968	109	6391	0.296
122) Pentachlorobenzene	(3)	12.005	250	3581	0.083
123) 2,4-Dinitrotoluene	(3)	12.058	165	1303	0.040
124) Dibenzofuran	(3)	12.058	168	18369	0.132

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

Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
126) 1-Naphthylamine	(3)	12.160	143	10026	0.100
127) 2,3,4,6-Tetrachlorophenol	(3)	12.224	232	2185	0.080
128) 2-Naphthylamine	(3)	12.272	143	11497	0.115
129) Diethylphthalate	(3)	12.406	149	14420	0.132
130) Thionazin	(3)	12.508	107	2469	0.115
133) 5-Nitro-o-toluidine	(3)	12.518	152	1394	0.050
132) 4-Chlorophenyl-phenylether	(3)	12.524	204	5707	0.101
134) 4-Nitroaniline	(3)	12.529	138	2271	0.092
135) 4,6-Dinitro-2-methylphenol	(4)	12.572	198	3680	0.210
136) N-Nitrosodiphenylamine	(4)	12.674	169	9547	0.112
137) NDPA as diphenylamine	(4)	12.674	169	9547	0.112
139) 1,2-Diphenylhydrazine	(4)	12.716	77	16724	0.111
140)$2,4,6-Tribromophenol	(3)	12.802	330	1445	0.105
142) Tetraethyldithiopyrophosphate	(4)	12.898	97	2370	0.105
144) 1,3,5-Trinitrobenzene	(4)	13.000	213	123M	0.012
145) Diallate (peak 1)	(4)	13.048	86	5785	0.095
146) Phorate	(4)	13.059	75	7754	0.098
147) Phenacetin	(4)	13.064	108	5224	0.088
148) 4-Bromophenyl-phenylether	(4)	13.139	248	4095	0.138
149) Diallate (peak 2)	(4)	13.166	86	861M	0.017
152) Dimethoate	(4)	13.251	87	3277	0.066
153) Atrazine	(4)	13.358	200	3259	0.120
154) Pentachlorophenol	(4)	13.444	266	917	0.048
156) Pentachloronitrobenzene	(4)	13.465	237	1677	0.117
155) 4-Aminobiphenyl	(4)	13.465	169	6898	0.093
157) Pronamide	(4)	13.561	173	4365	0.095
158)*Phenanthrene-d10	(4)	13.695	188	665836	5.000
159) Dinoseb	(4)	13.711	211	506M	0.019
168) Carbazole	(4)	14.011	167	15886	0.113
169) Methyl parathion	(4)	14.219	109	1782	0.048
170) Di-n-butylphthalate	(4)	14.530	149	16610	0.092
172) Parathion	(4)	14.770	109	868M	0.037
173) 4-Nitroquinoline-1-oxide	(4)	14.792	190	229M	2.401
174) Octachlorostyrene	(4)	15.139	308	1803	0.161
176) Isodrin	(4)	15.187	193	2514	0.134
179) Benzidine	(5)	15.637	184	67306	0.612
180)*Pyrene-d10	(5)	15.733	212	690158	5.000
184)$Terphenyl-d14	(5)	16.049	244	26750	0.241
187) p-Dimethylaminoazobenzene	(5)	16.289	225	1153	0.041
190) Chlorobenzilate	(5)	16.375	139	4407	0.082

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

Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
192) 3,3'-Dimethylbenzidine	(5)	16.851	212	6898	0.065
193) Butylbenzylphthalate	(5)	16.904	149	5613	0.069
196) 2-Acetylaminofluorene	(5)	17.263	181	4436	0.067
198) 3,3'-Dichlorobenzidine	(5)	17.798	252	3766	0.062
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.819	231	2449	0.072
204) bis(2-Ethylhexyl)phthalate	(5)	17.985	149	7866	0.068
208) 6-Methylchrysene	(5)	18.685	242	10696	0.097
210) Di-n-octylphthalate	(6)	19.161	149	9360	0.050
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.691	256	5978	0.096
218)*Perylene-d12	(6)	20.317	264	581399	5.000
220) 3-Methylcholanthrene	(6)	20.803	268	4058	0.066
222) Dibenz(a,h)acridine	(6)	21.622	279	10141	0.090
223) Dibenz(a,j)acridine	(6)	21.691	279	8983	0.076

* = Compound is an internal standard.

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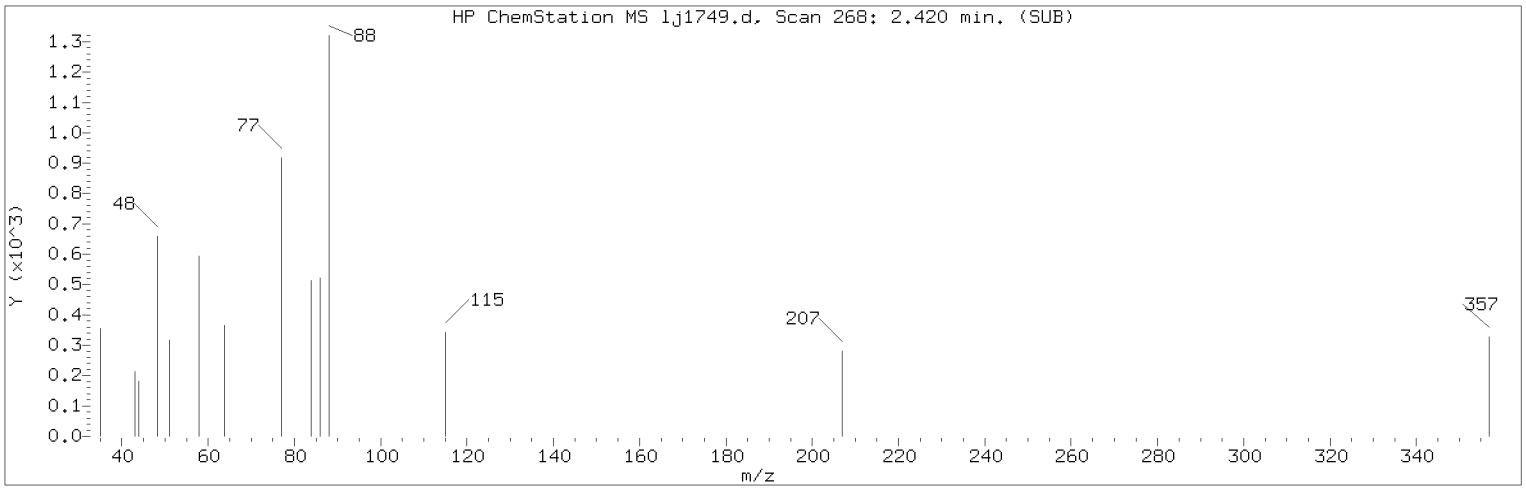
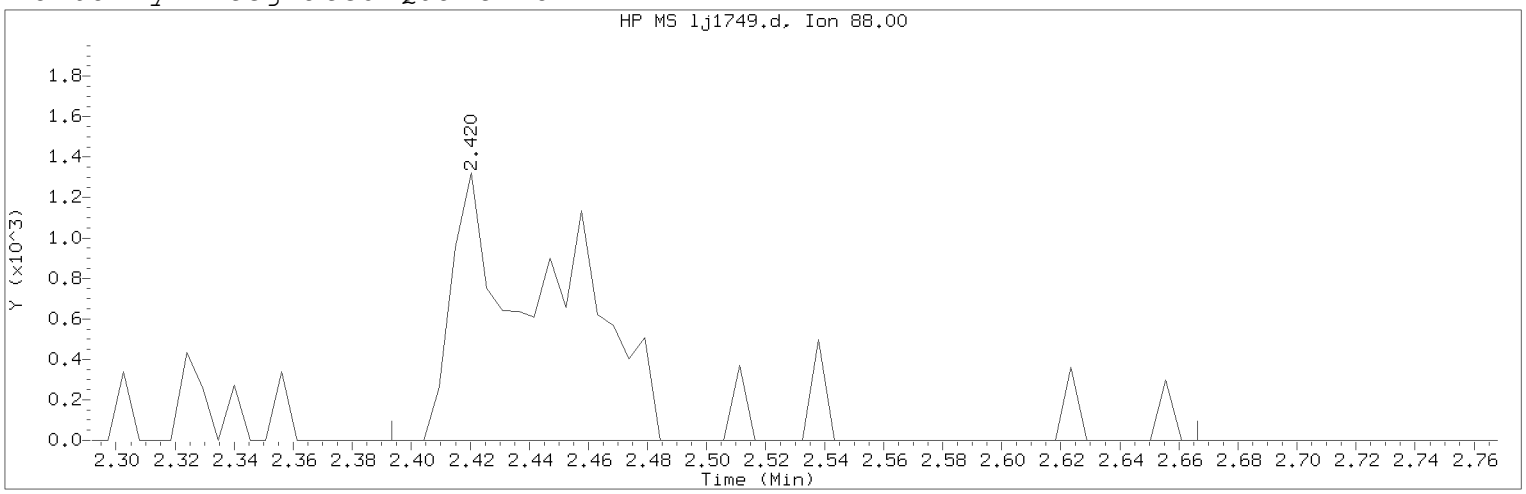
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

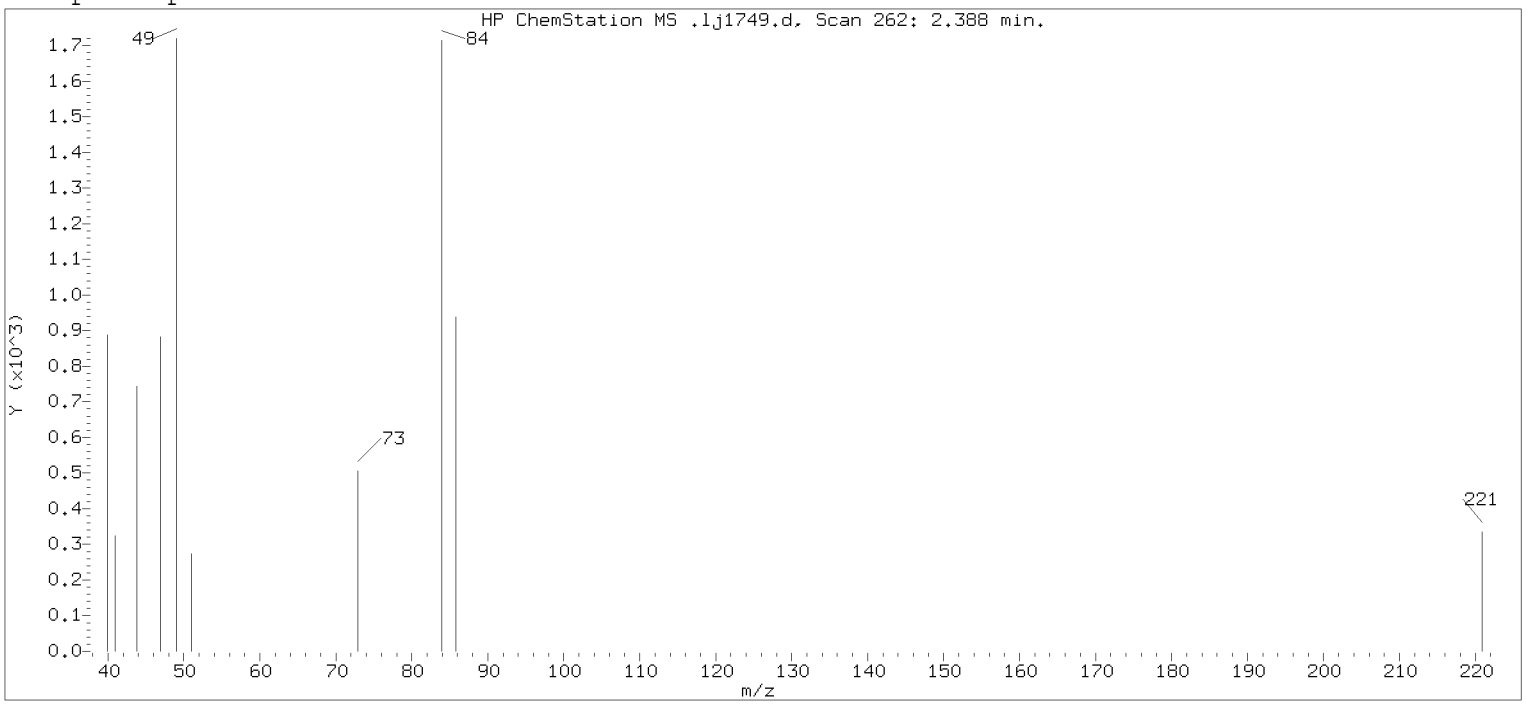
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 268
Retention Time (minutes) : 2.420
Quant Ion : 88.00
Area (flag) : 3687M
On-Column Amount (ng/ul) : 0.1325
Integration start scan : 262 Integration stop scan: 313
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

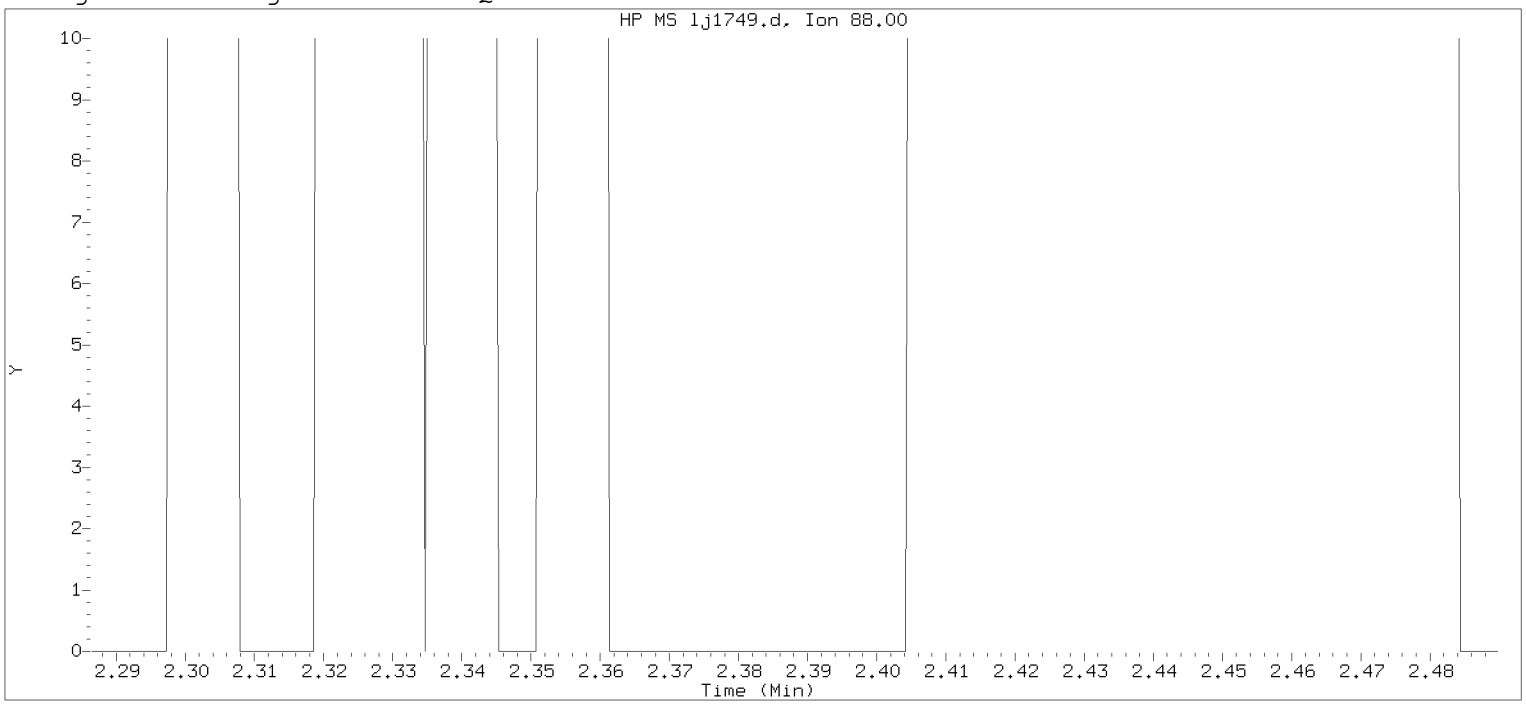
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compound Number : 1
Compound Name : 1,4-Dioxane
Expected RT (minutes) : 2.388
Quant Ion : 88.00

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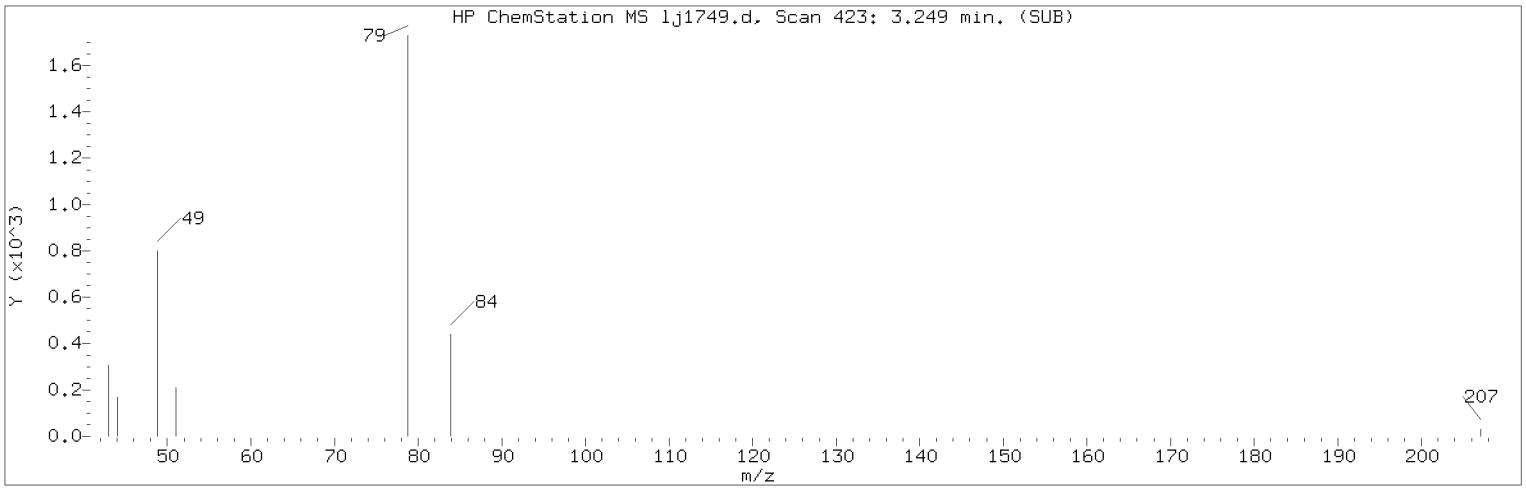
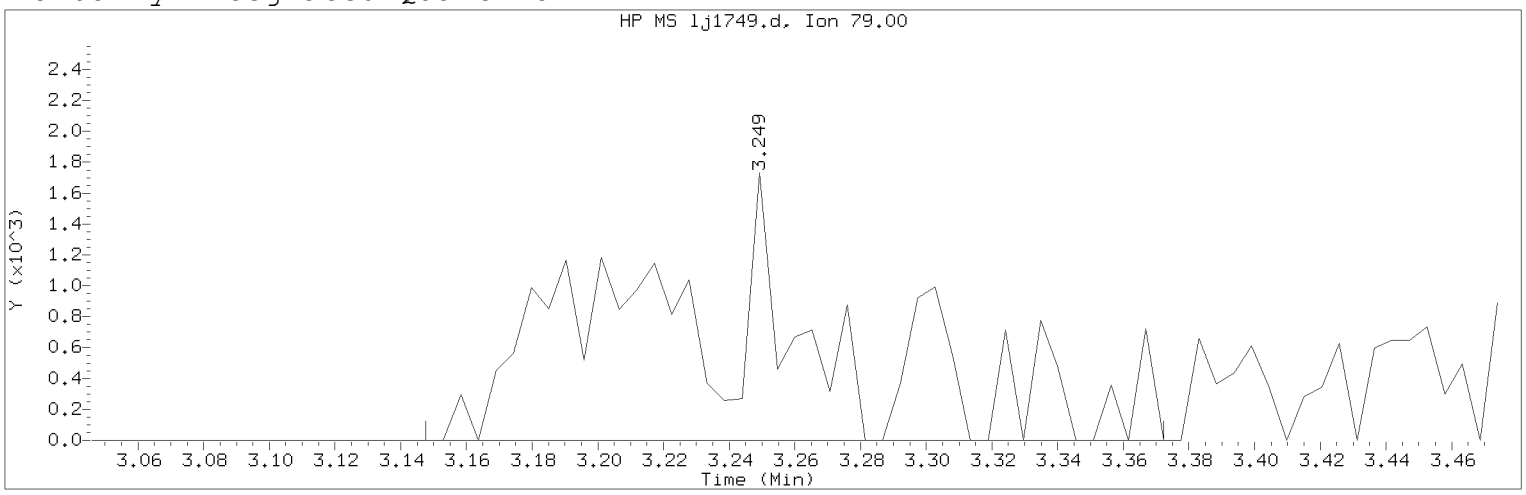
Target 3.5 esignature user kbeck Page 573

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

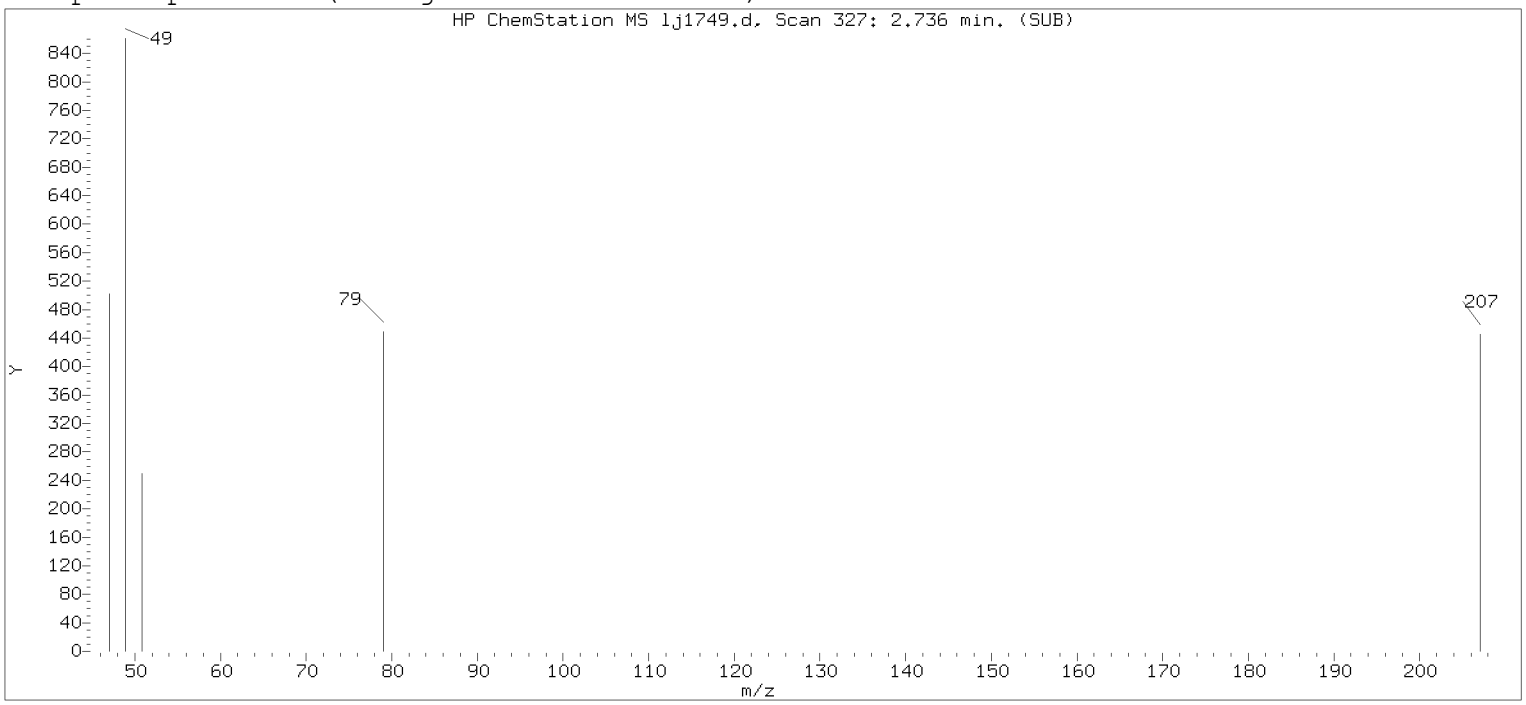
Compound Number : 6
Compound Name : Pyridine
Scan Number : 423
Retention Time (minutes) : 3.249
Quant Ion : 79.00
Area (flag) : 7175M
On-Column Amount (ng/ul) : 0.1008
Integration start scan : 403 Integration stop scan: 445
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

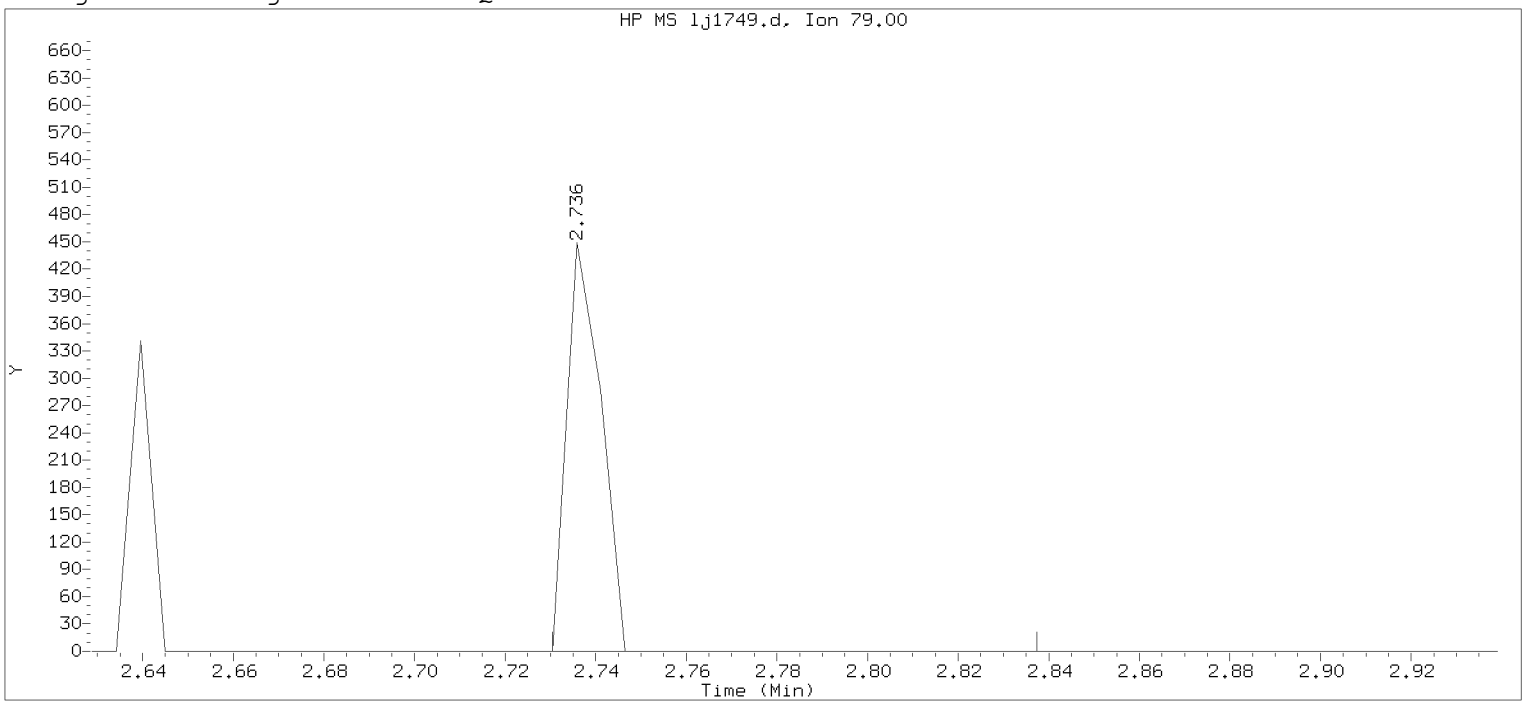
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 327		
Retention Time (minutes)	: 2.736		
Quant Ion	: 79.00		
Area	: 235		
On-column Amount (ng/ul)	: 0.0033		
Integration start scan	: 325	Integration stop scan:	345
Y at integration start	: 0	Y at integration end:	0

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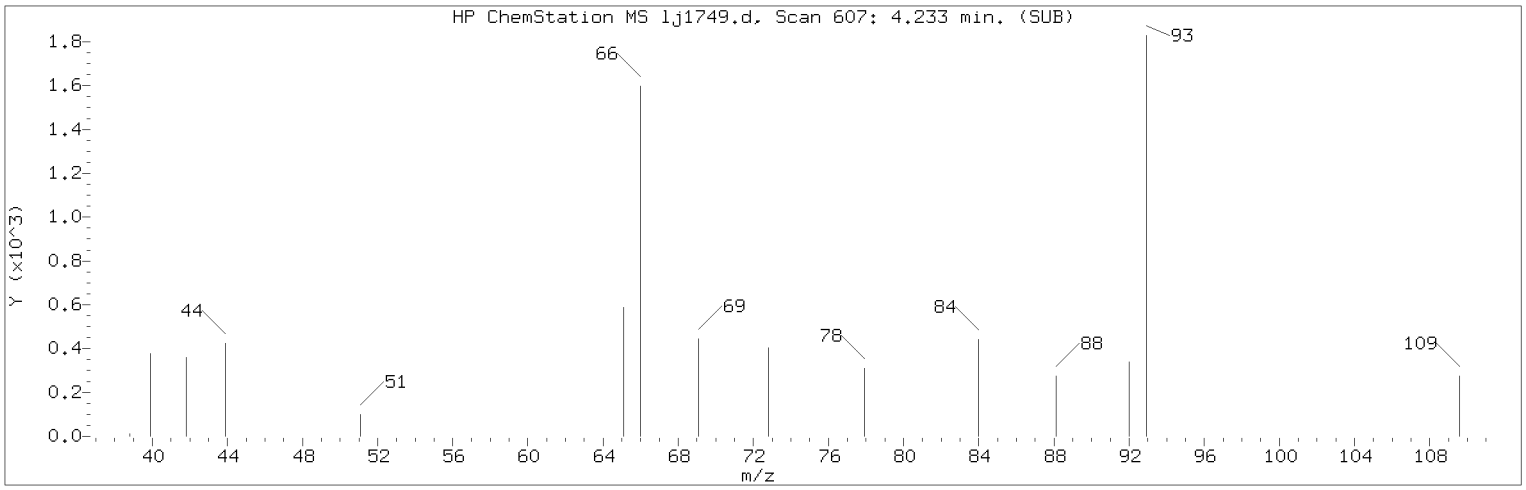
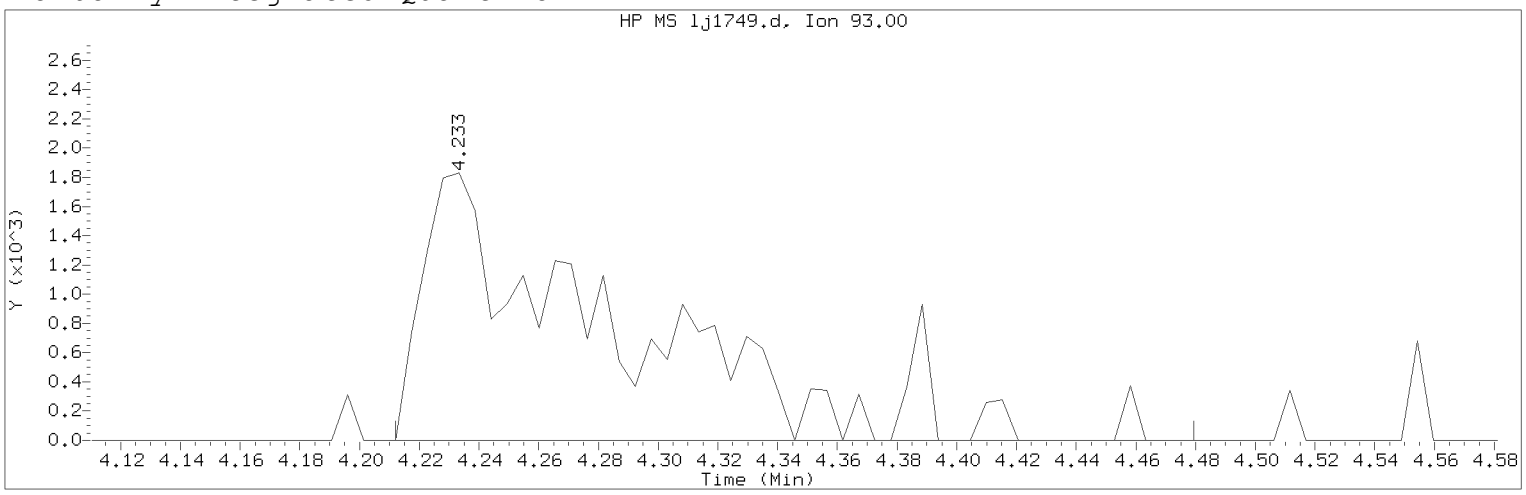
Target 3.5 esignature user kbeck 5675

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

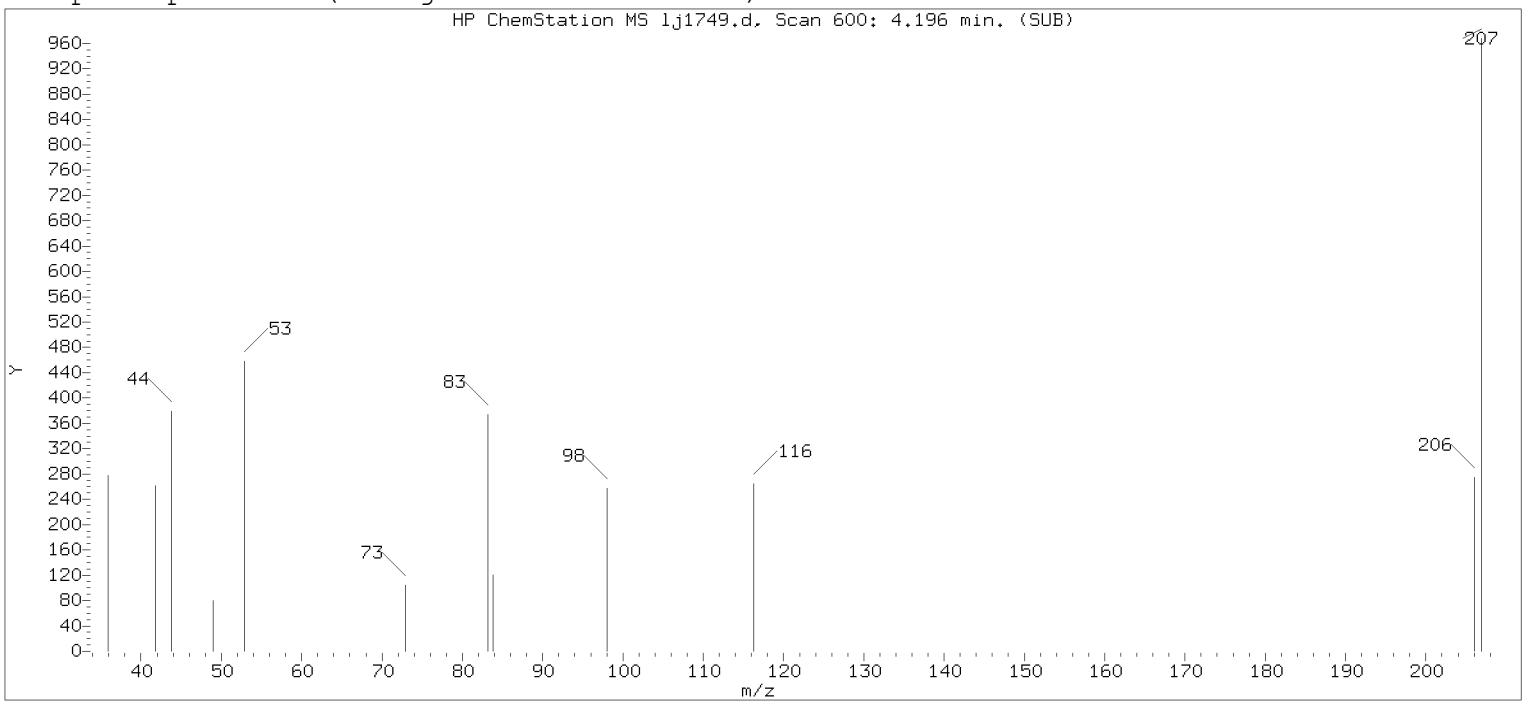
Compound Number : 8
Compound Name : 2-Picoline
Scan Number : 607
Retention Time (minutes) : 4.233
Quant Ion : 93.00
Area (flag) : 8043M
On-Column Amount (ng/ul) : 0.1083
Integration start scan : 602 Integration stop scan: 652
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

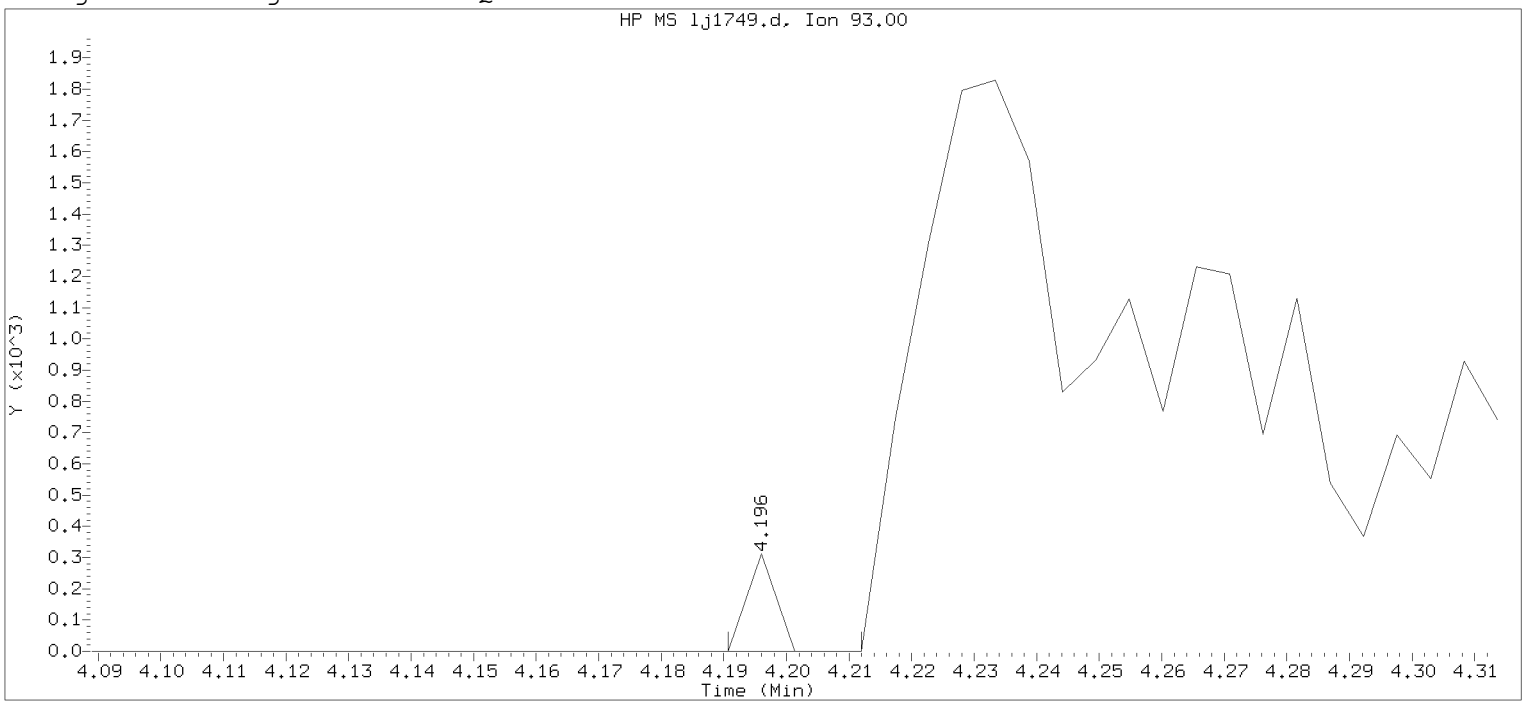
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

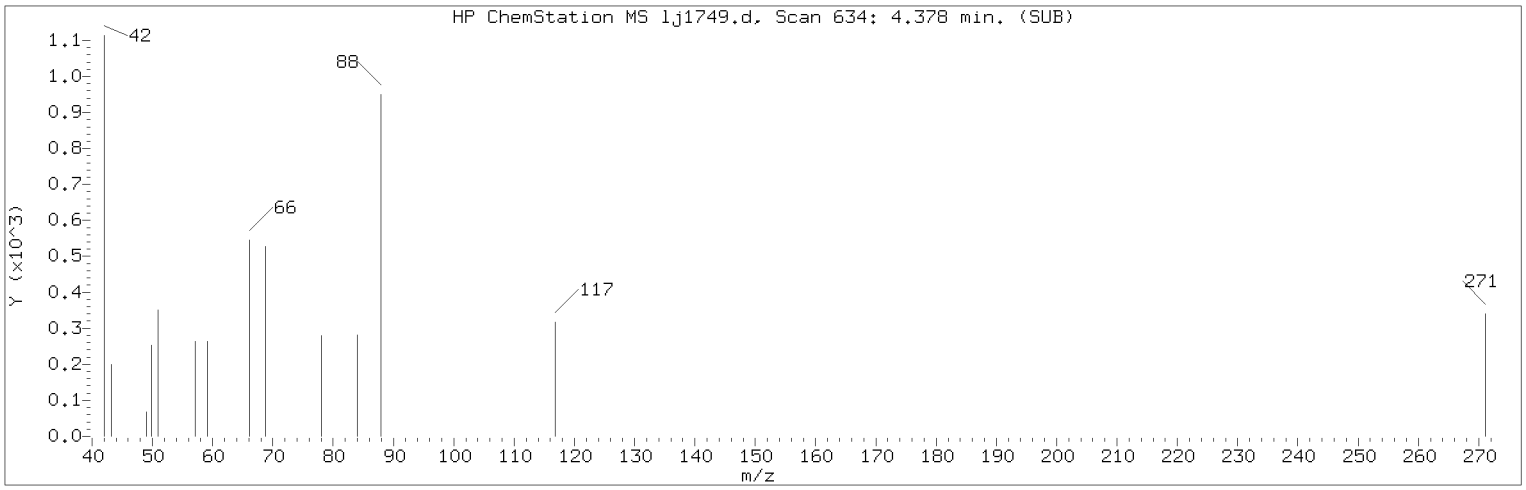
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

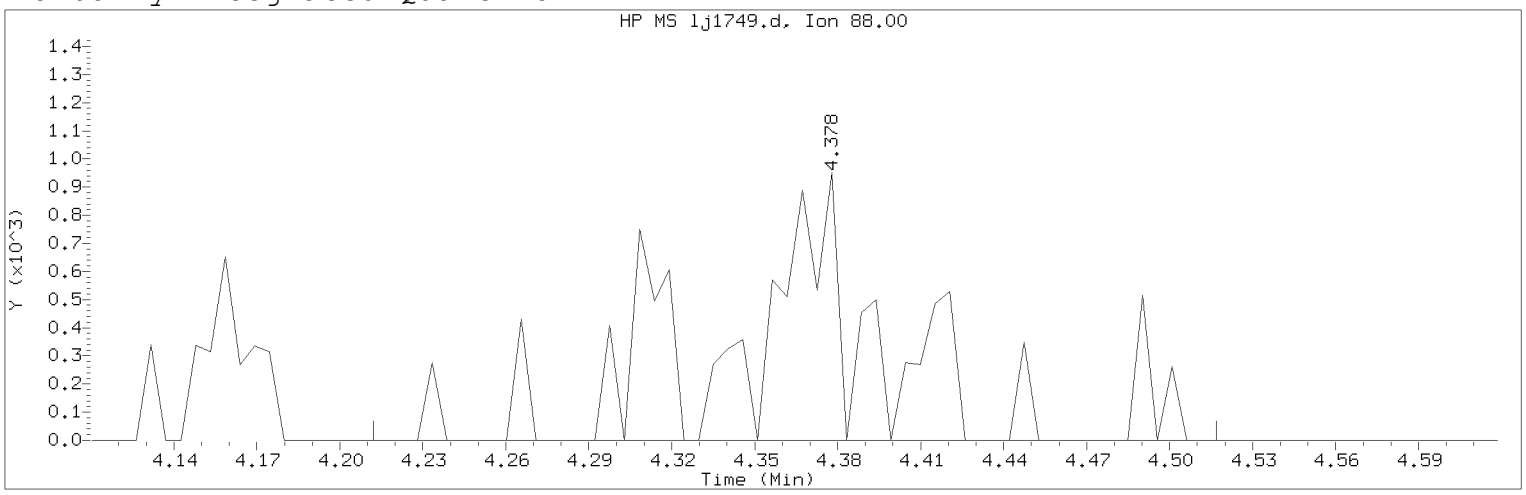
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 600		
Retention Time (minutes)	: 4.196		
Quant Ion	: 93.00		
Area	: 100		
On-column Amount (ng/ul)	: 0.0014		
Integration start scan	: 598	Integration stop scan:	602
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature user kbeck

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

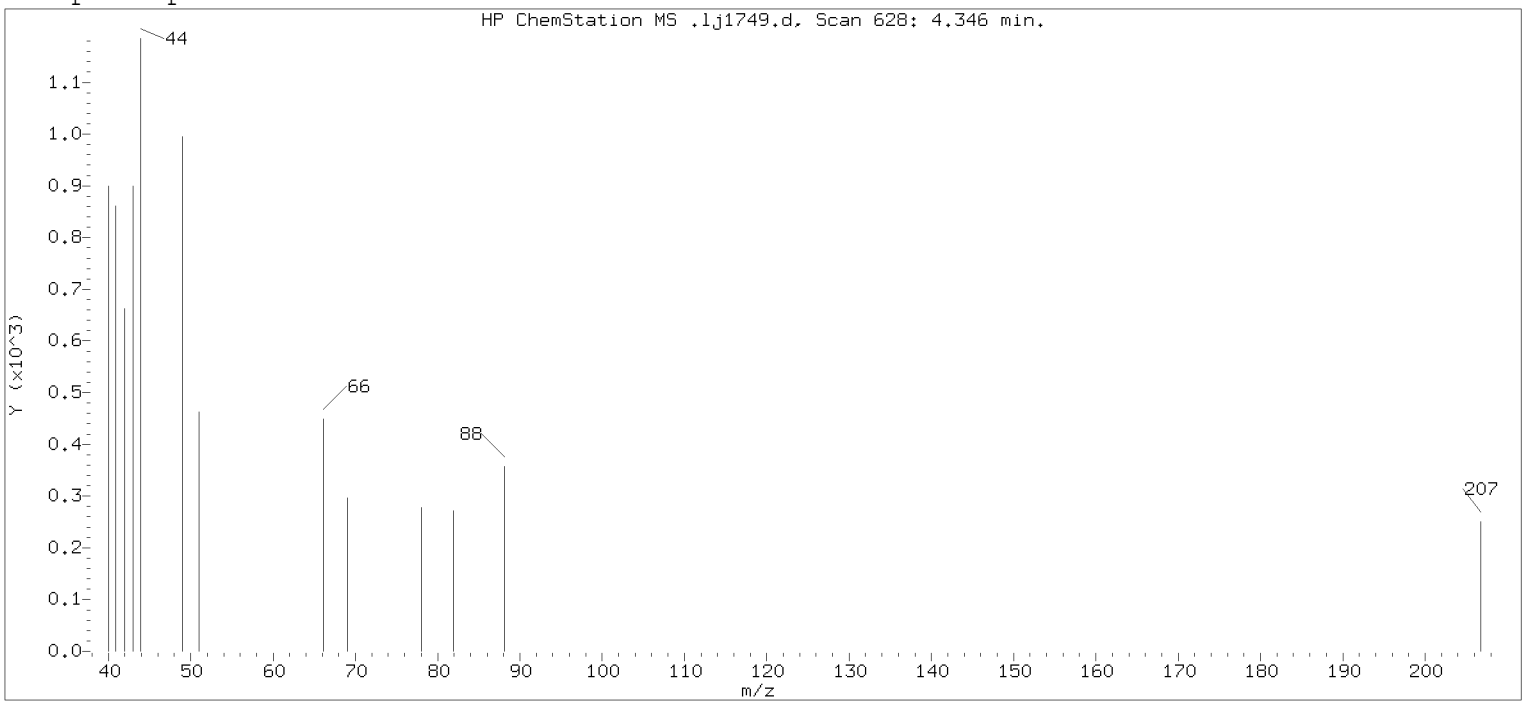
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Scan Number : 634
Retention Time (minutes) : 4.378
Quant Ion : 88.00
Area (flag) : 3534M
On-Column Amount (ng/ul) : 0.1165
Integration start scan : 602 Integration stop scan: 659
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

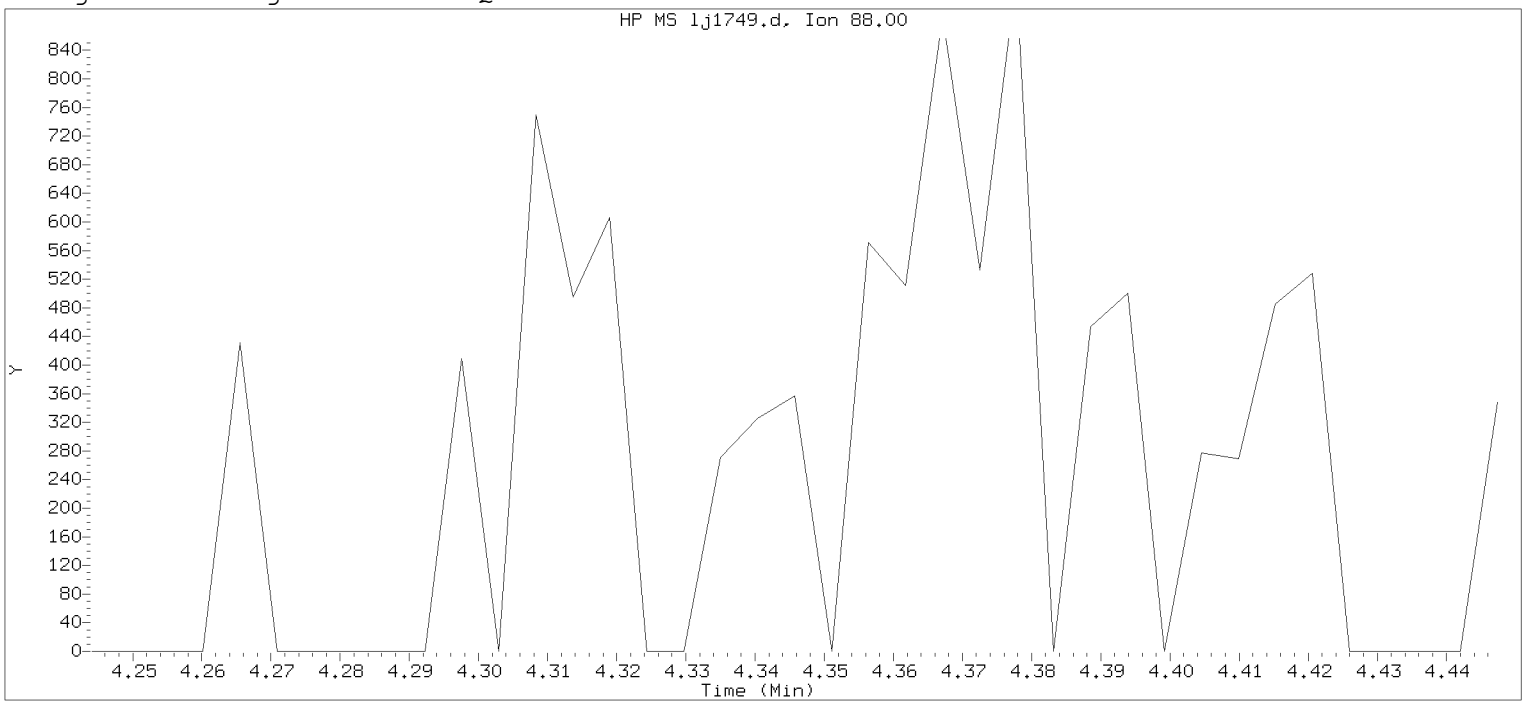
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.346
Quant Ion : 88.00

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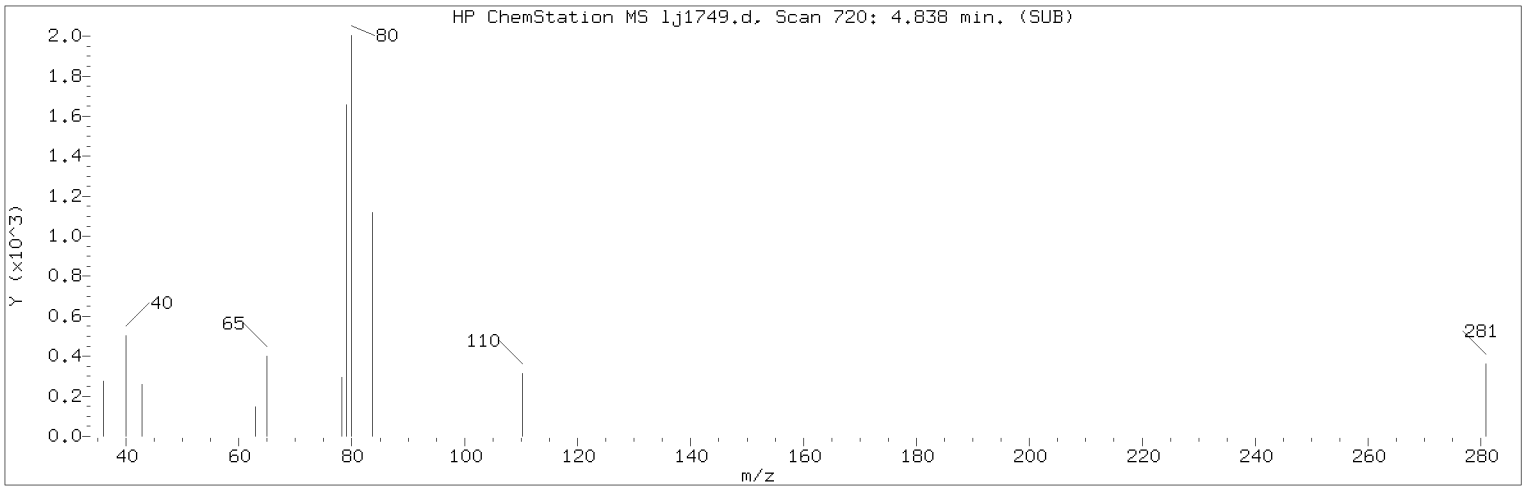
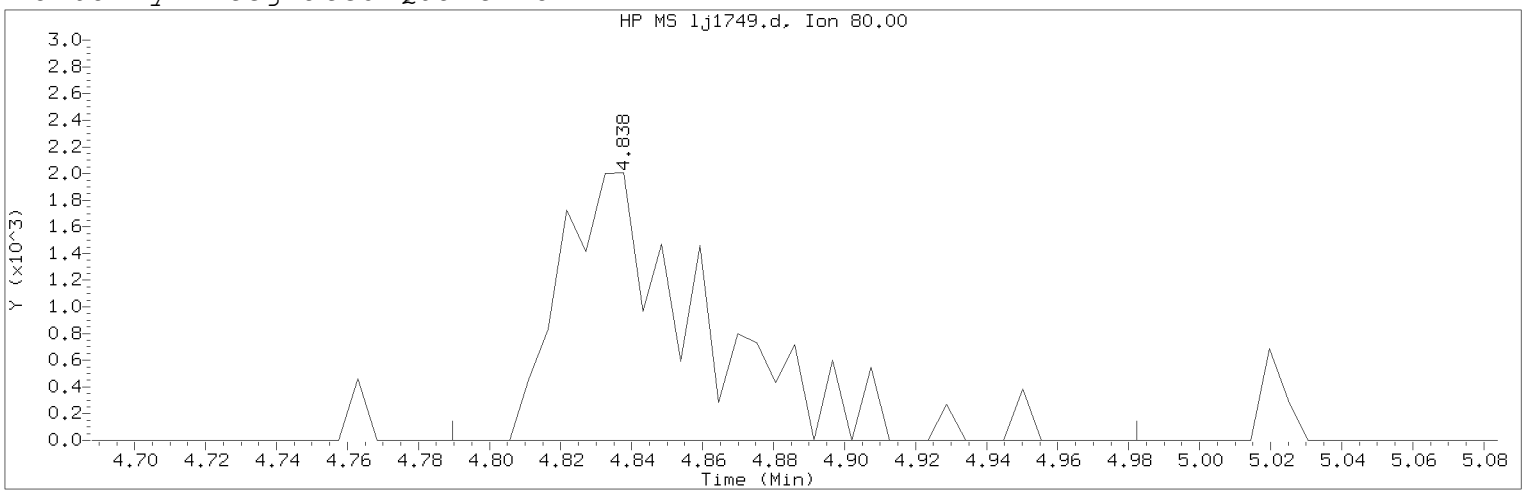
Target 3.5 esignature user kbeck Page 679

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

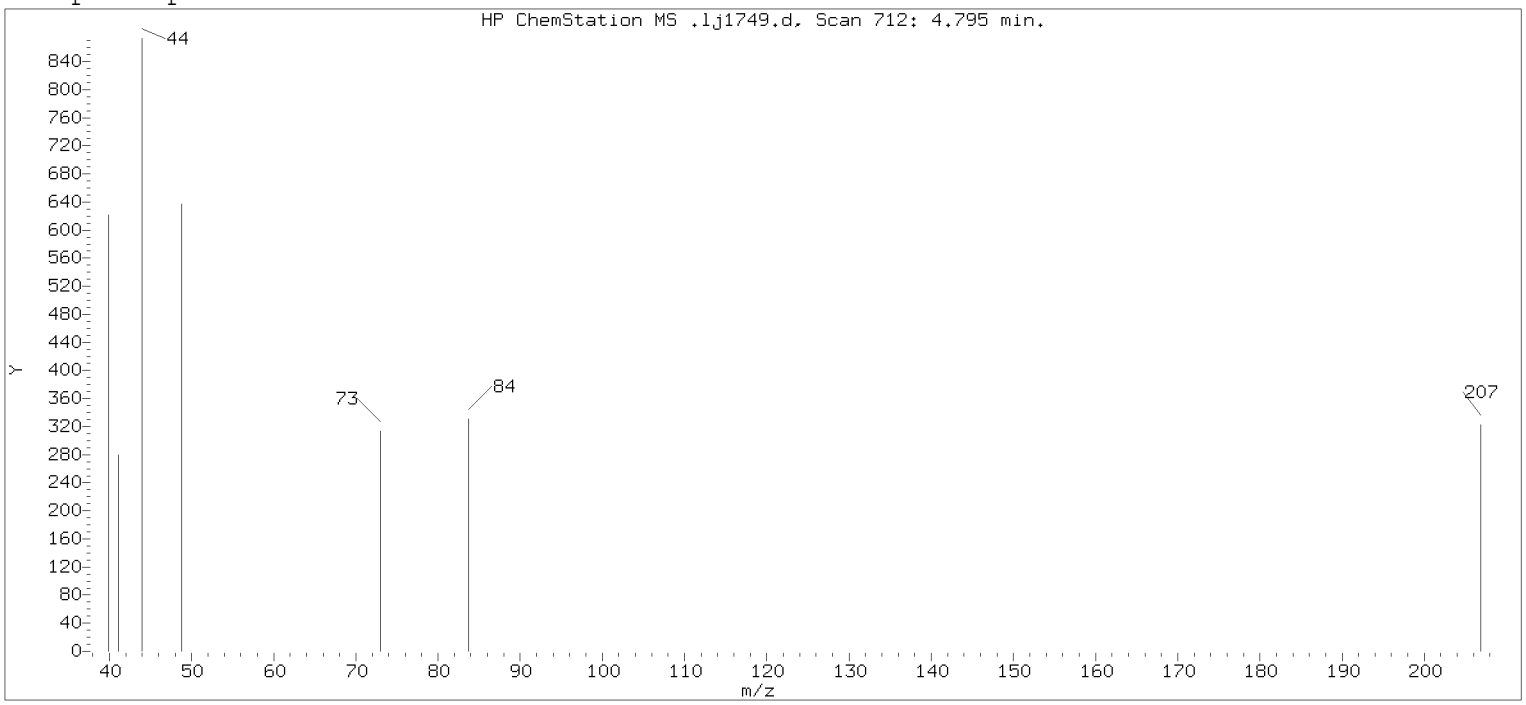
Compound Number : 10
Compound Name : Methyl methanesulfonate
Scan Number : 720
Retention Time (minutes) : 4.838
Quant Ion : 80.00
Area (flag) : 5681M
On-Column Amount (ng/ul) : 0.1465
Integration start scan : 710 Integration stop scan: 746
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

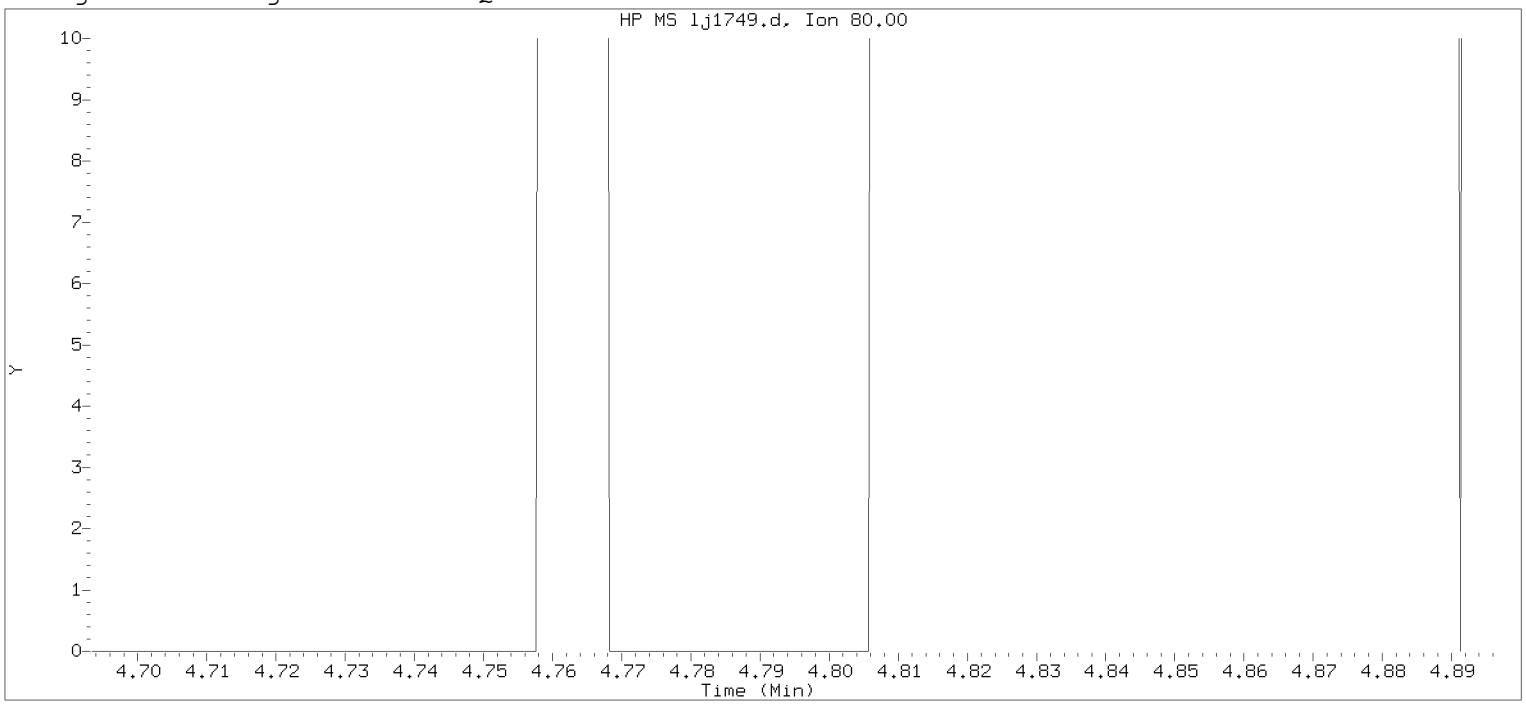
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

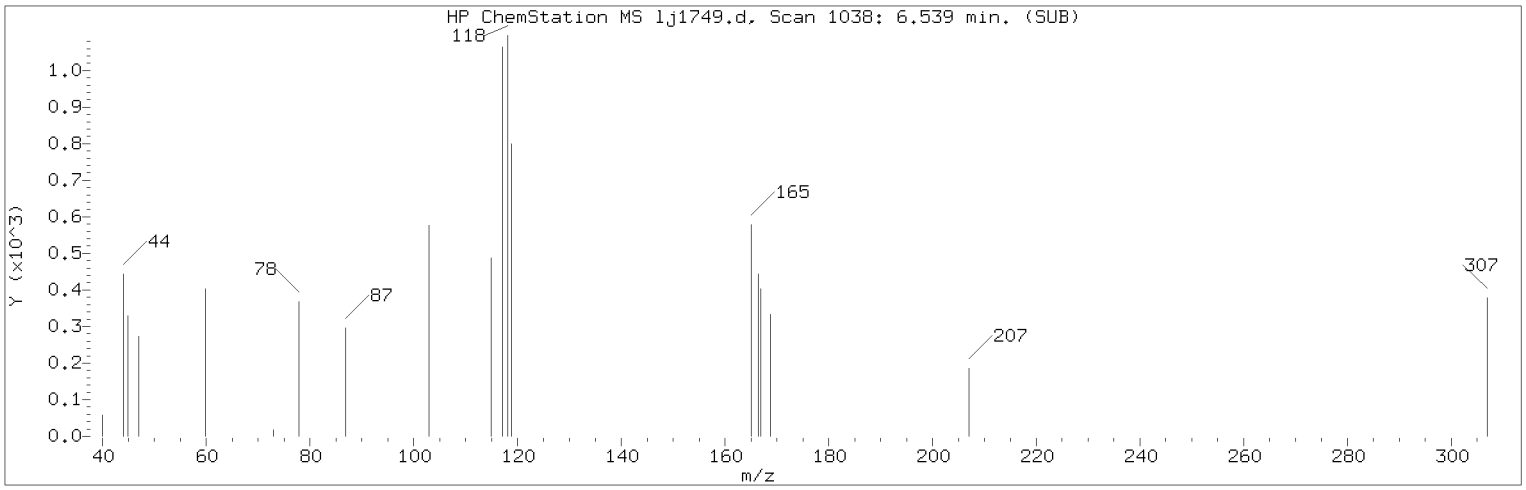
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

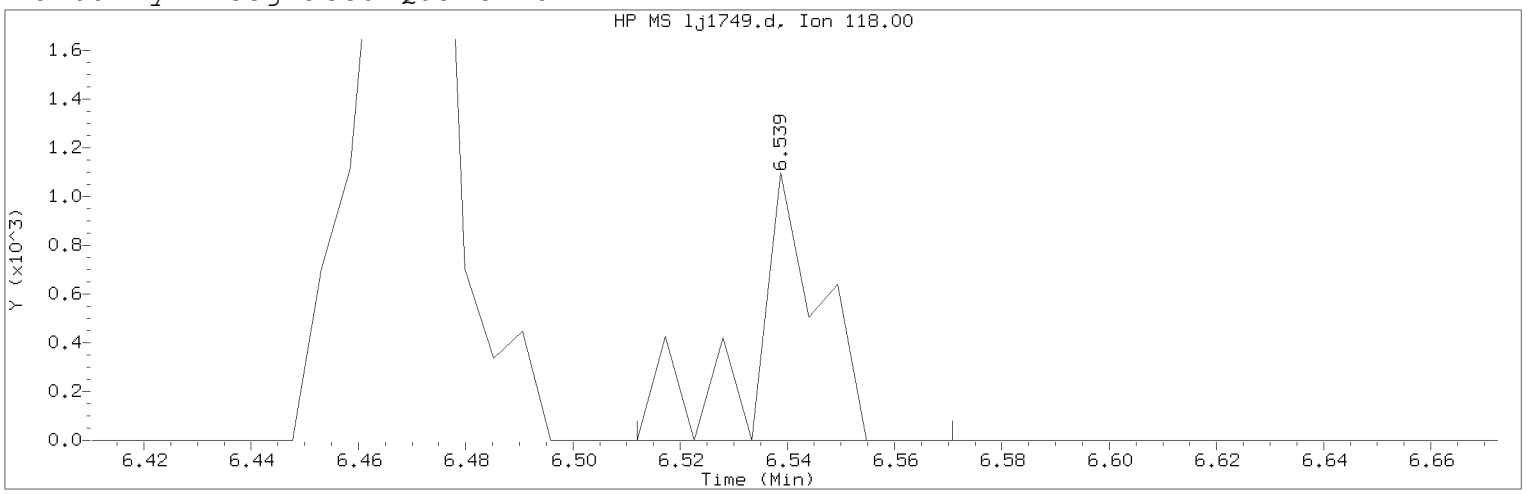
Compound Number : 10
Compound Name : Methyl methanesulfonate
Expected RT (minutes) : 4.795
Quant Ion : 80.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature user kbeck Page 581

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

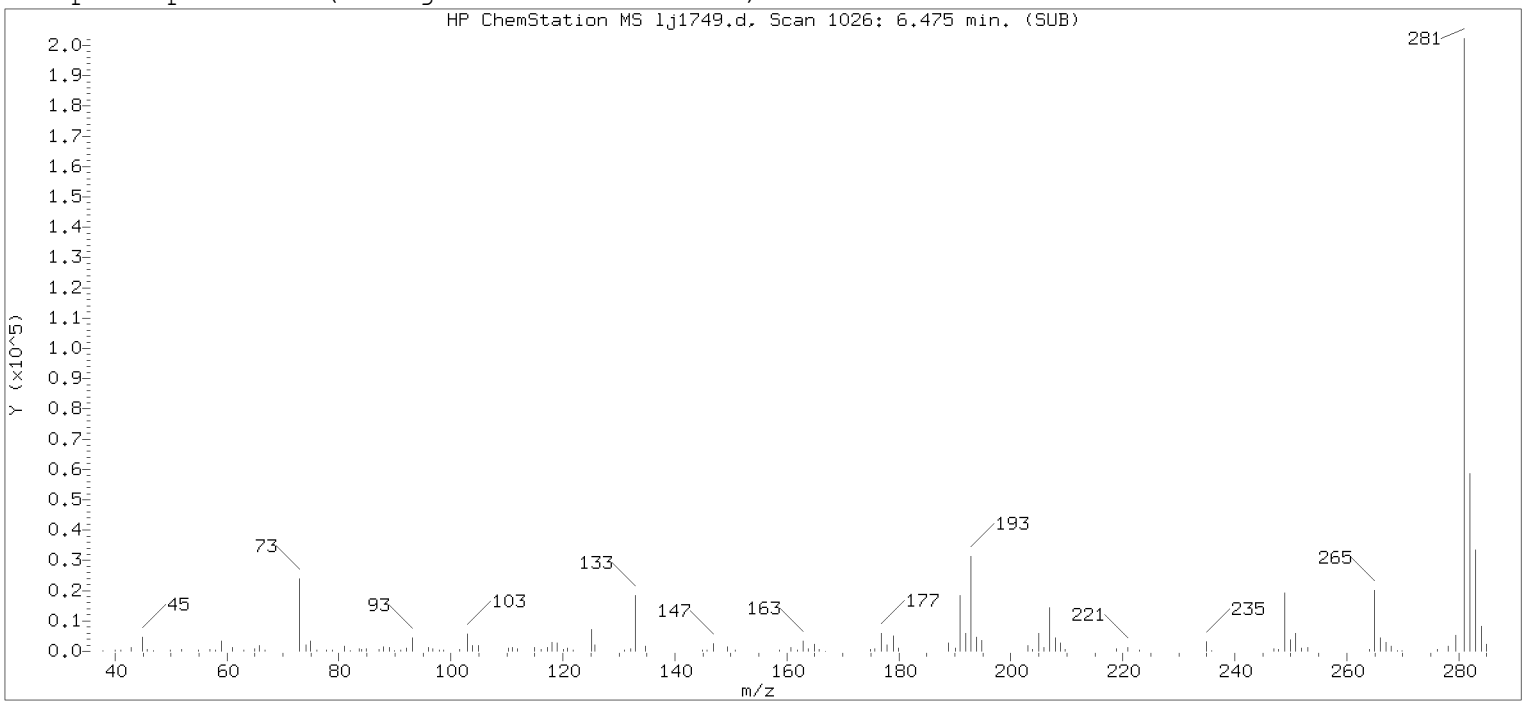
Compound Number : 21
Compound Name : a-methylstyrene
Scan Number : 1038
Retention Time (minutes) : 6.539
Quant Ion : 118.00
Area (flag) : 991M
On-Column Amount (ng/ul) : 0.1767
Integration start scan : 1032 Integration stop scan: 1043
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

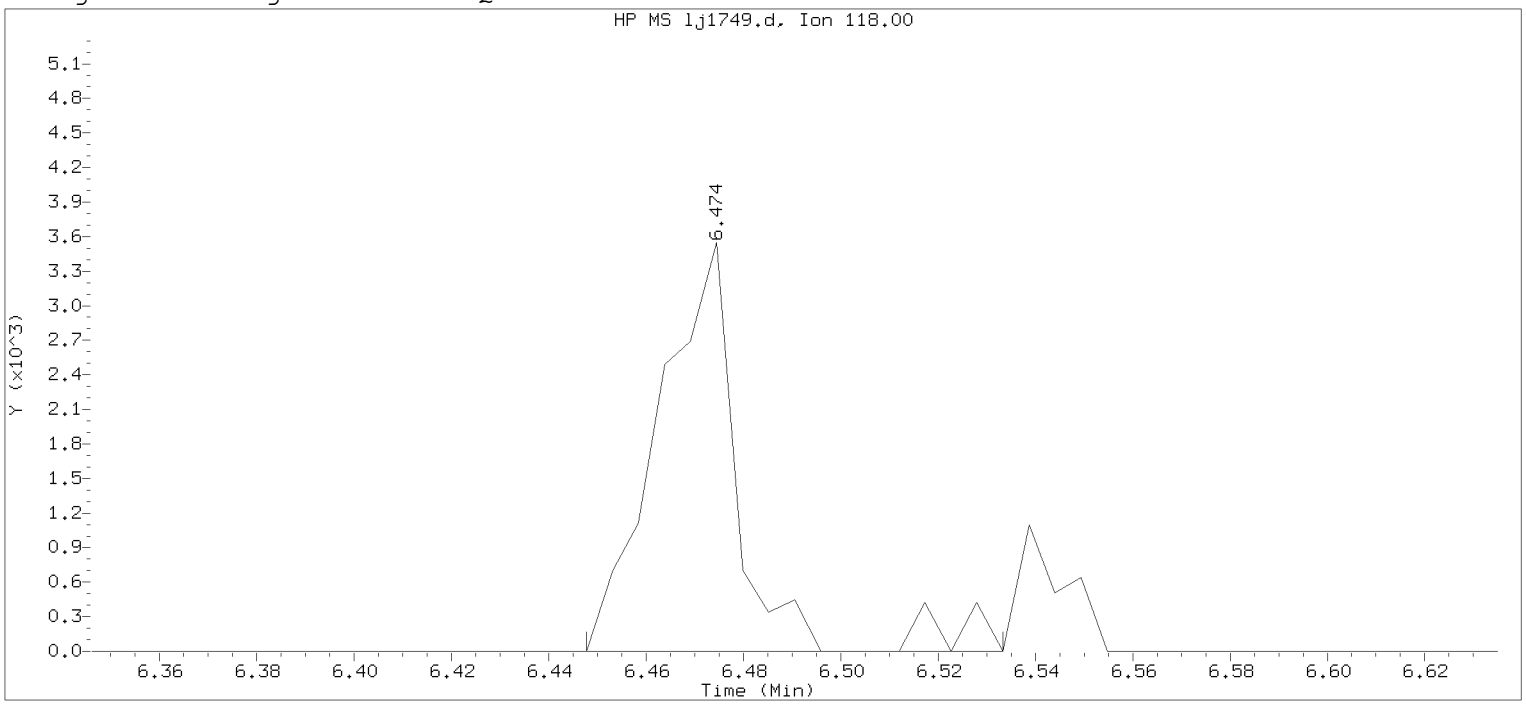
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compound Number	: 21		
Compound Name	: a-methylstyrene		
Scan Number	: 1026		
Retention Time (minutes)	: 6.474		
Quant Ion	: 118.00		
Area	: 4131		
On-column Amount (ng/ul)	: 0.7330		
Integration start scan	: 1020	Integration stop scan:	1036
Y at integration start	: 0	Y at integration end:	0

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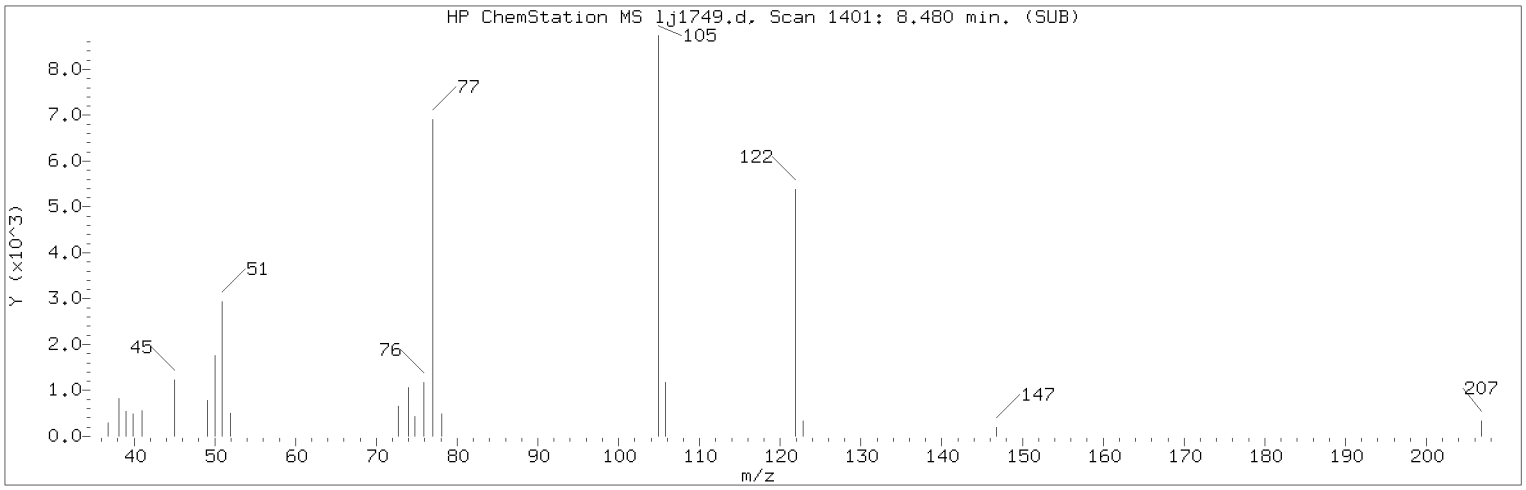
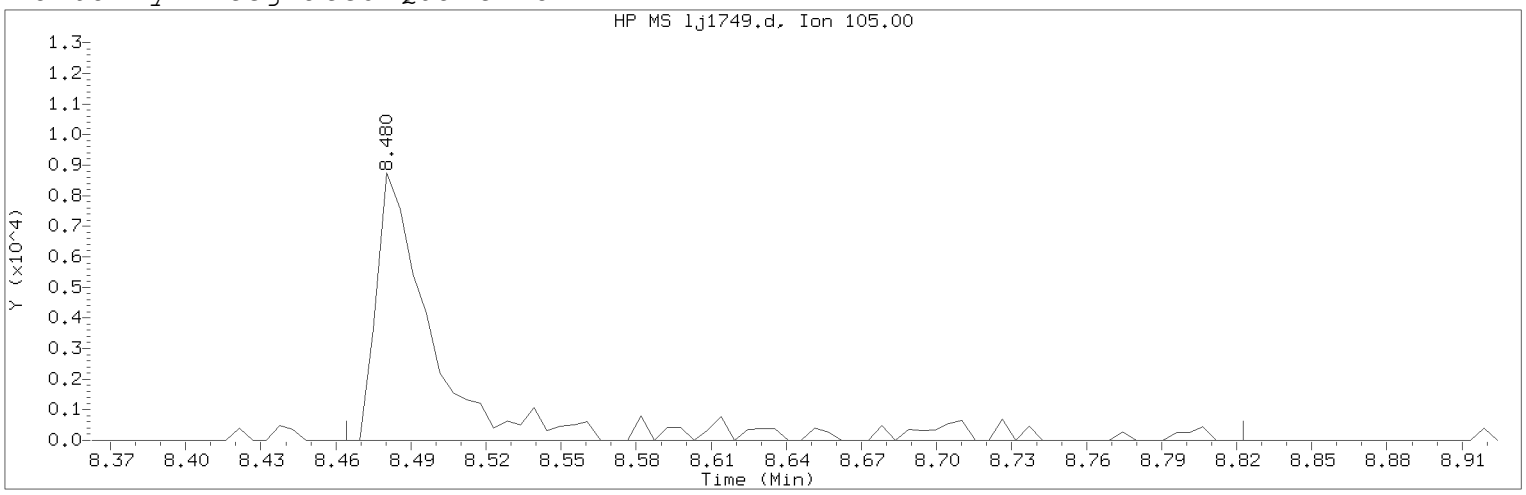
Target 3.5 esignature user kbeck 5363

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

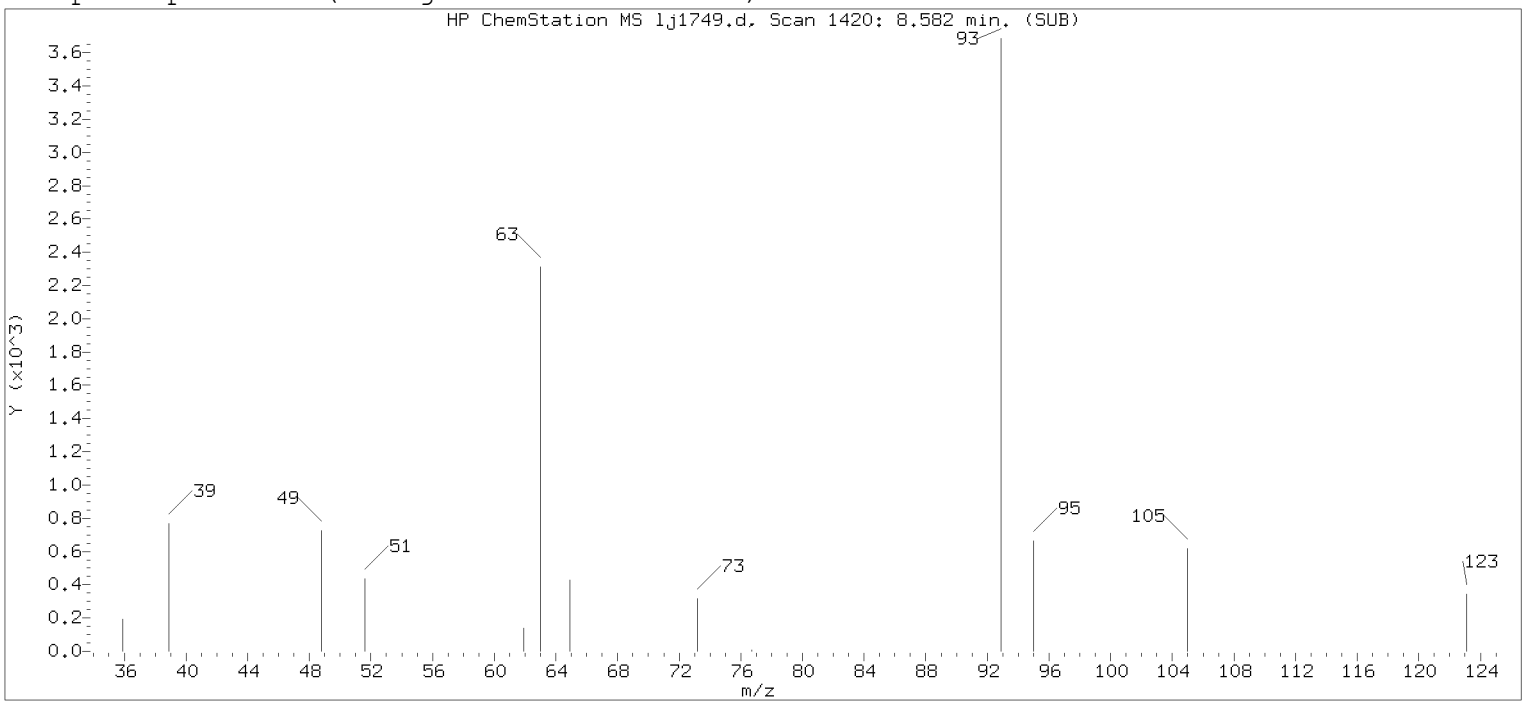
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1401
Retention Time (minutes) : 8.480
Quant Ion : 105.00
Area (flag) : 16027M
On-Column Amount (ng/ul) : 0.3858
Integration start scan : 1397 Integration stop scan: 1464
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

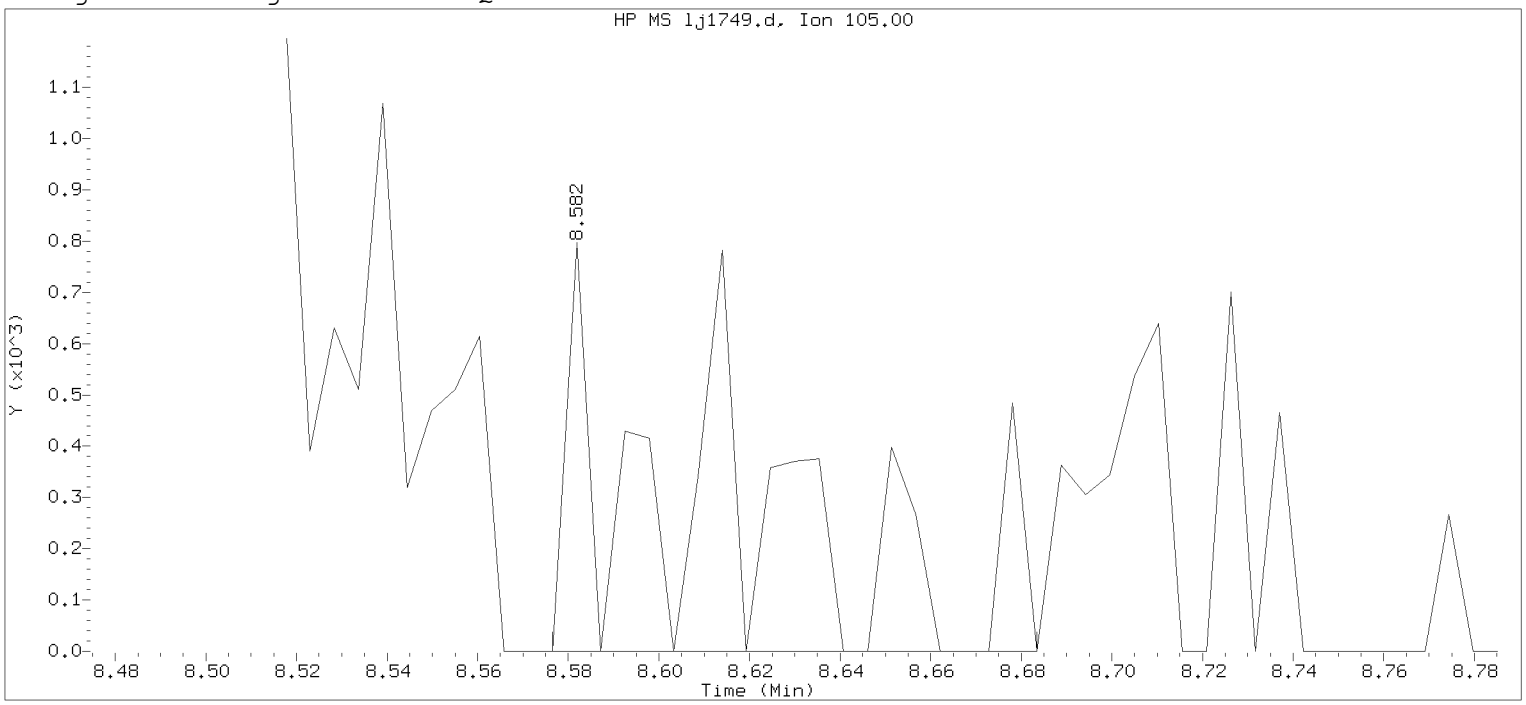
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1420
Retention Time (minutes) : 8.582
Quant Ion : 105.00
Area : 1610
On-column Amount (ng/ul) : 0.0486
Integration start scan : 1418 Integration stop scan: 1438
Y at integration start : 0 Y at integration end: 0

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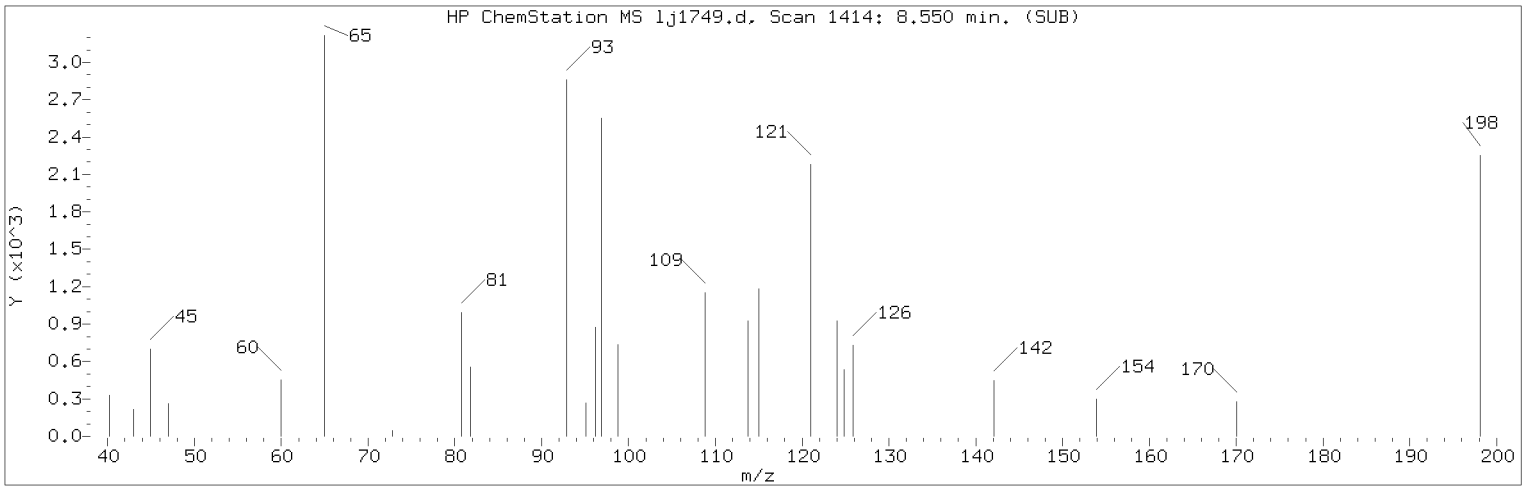
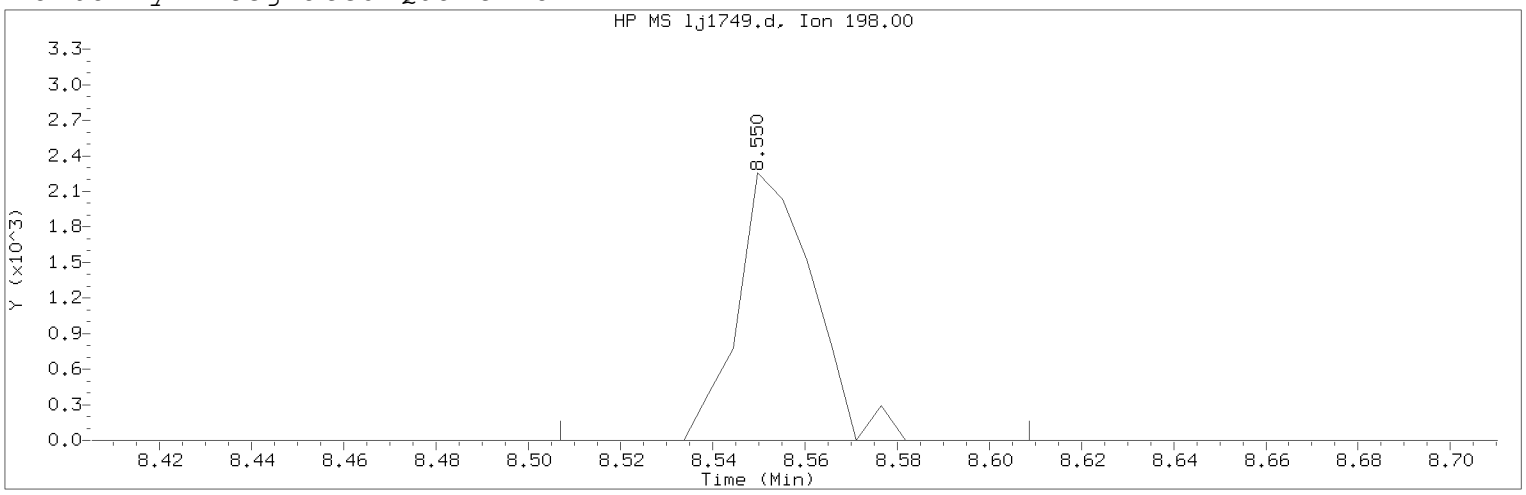
Target 3.5 esignature user kbeck 5363

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

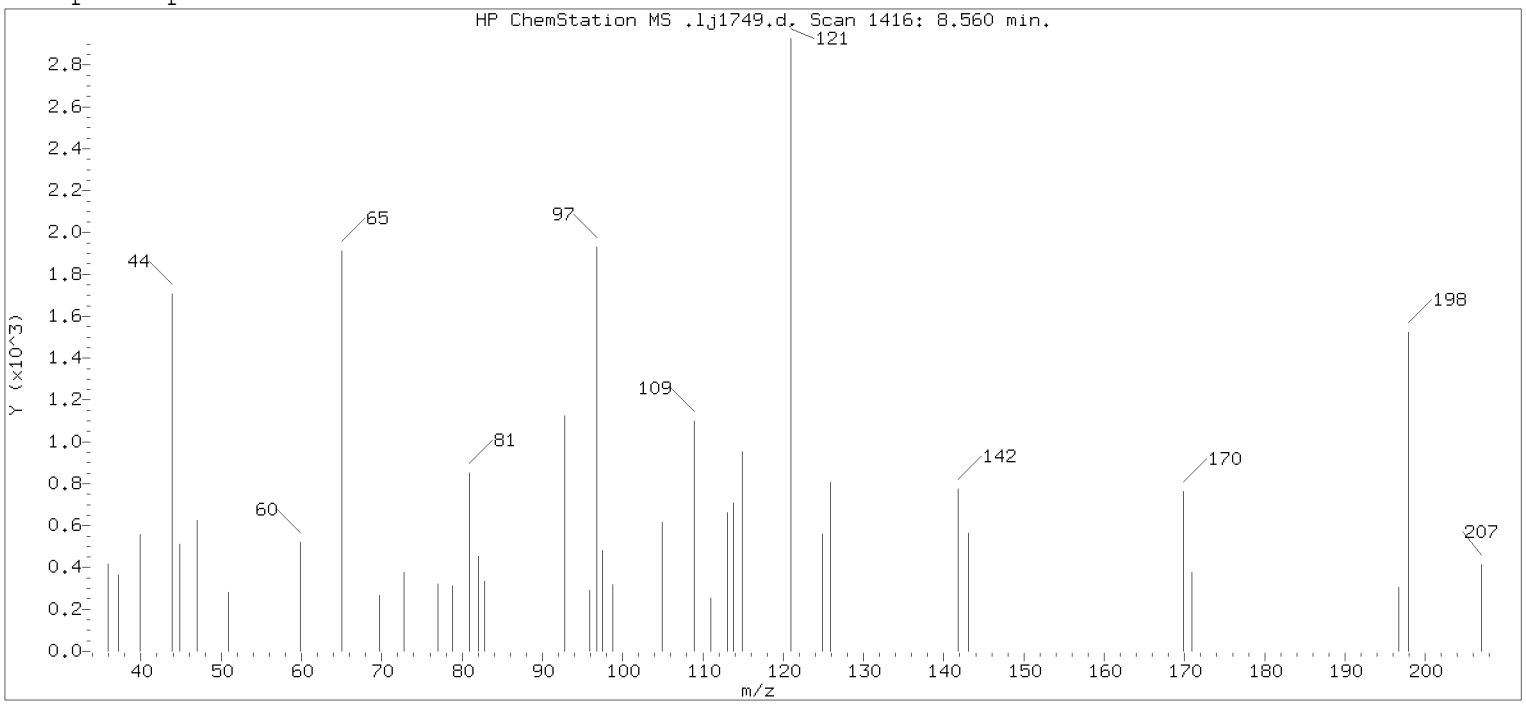
Compound Number : 59
Compound Name : O,O,O-Triethylphosphorothioate
Scan Number : 1414
Retention Time (minutes) : 8.550
Quant Ion : 198.00
Area (flag) : 2586M
On-Column Amount (ng/ul) : 0.0946
Integration start scan : 1405 Integration stop scan: 1424
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

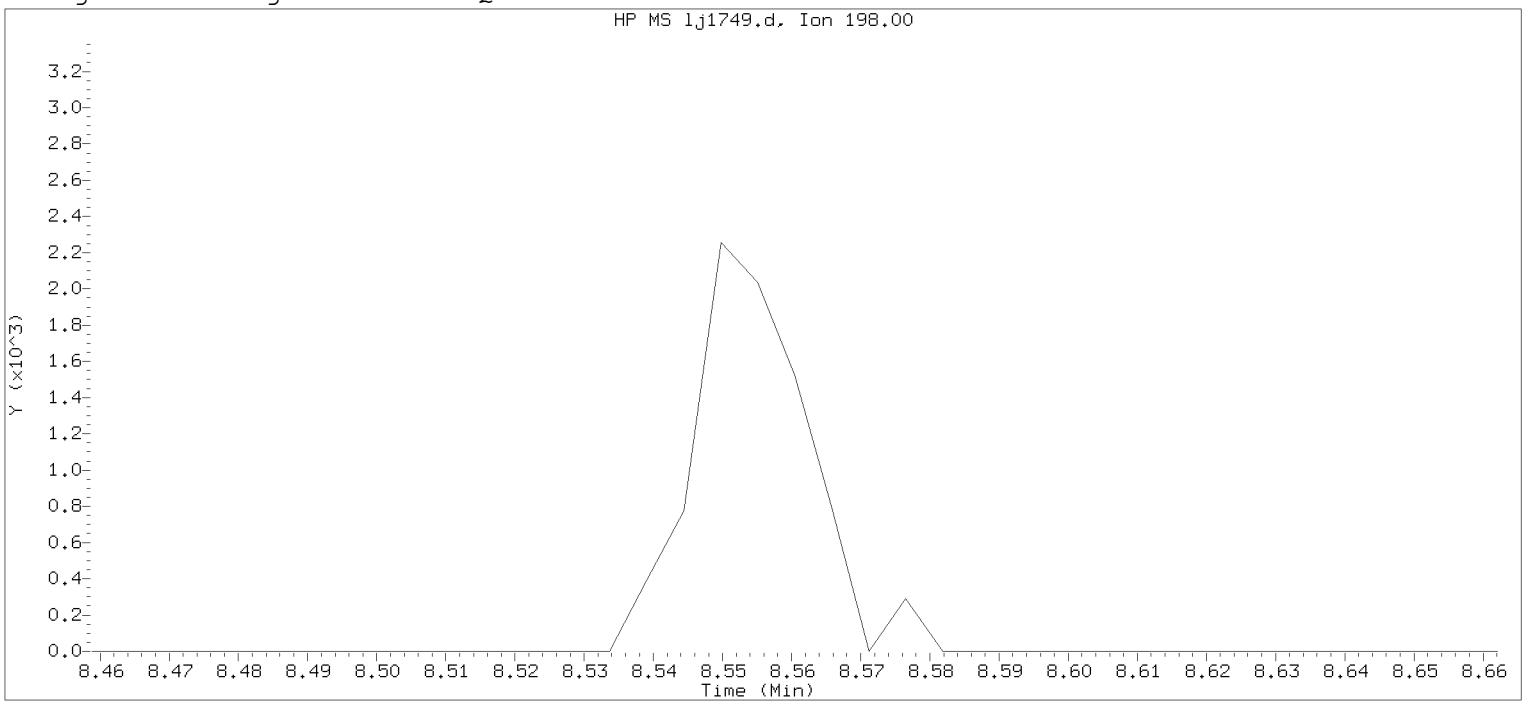
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compound Number : 59
Compound Name : O,O,O-Triethylphosphorothioate
Expected RT (minutes) : 8.561
Quant Ion : 198.00

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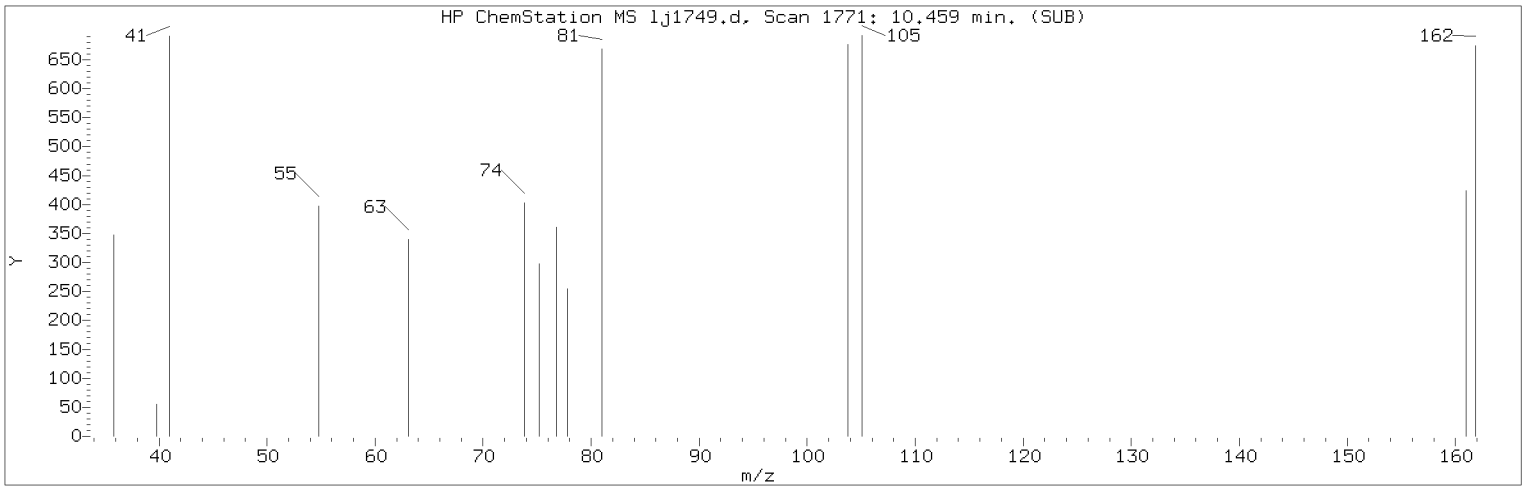
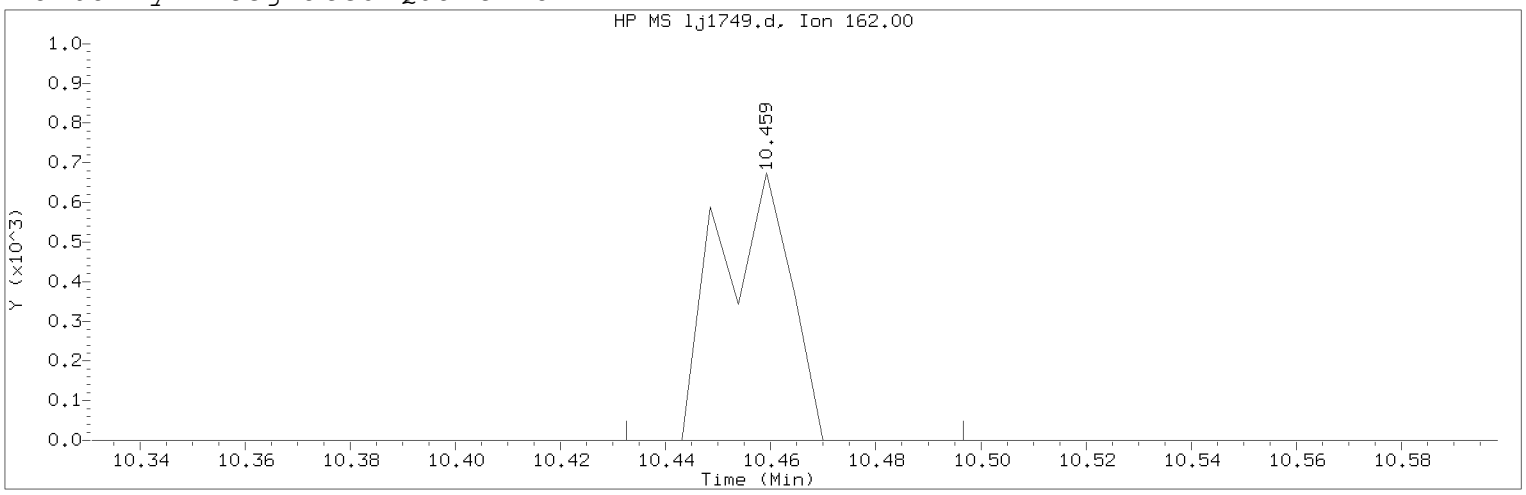
Target 3.5 esignature user kbeck Page 587

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

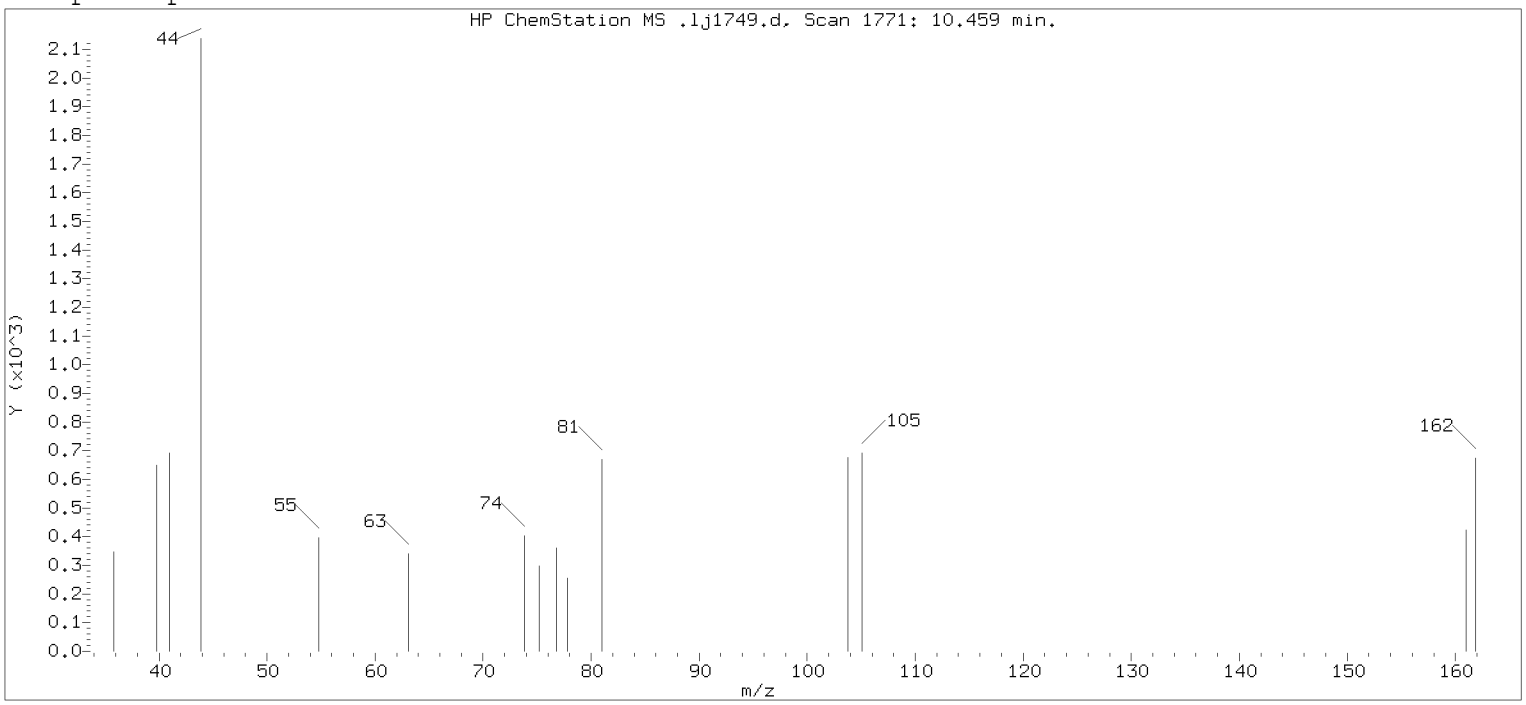
Compound Number : 91
Compound Name : cis-Isosafrole
Scan Number : 1771
Retention Time (minutes) : 10.459
Quant Ion : 162.00
Area (flag) : 633M
On-Column Amount (ng/ul) : 0.0142
Integration start scan : 1765 Integration stop scan: 1777
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

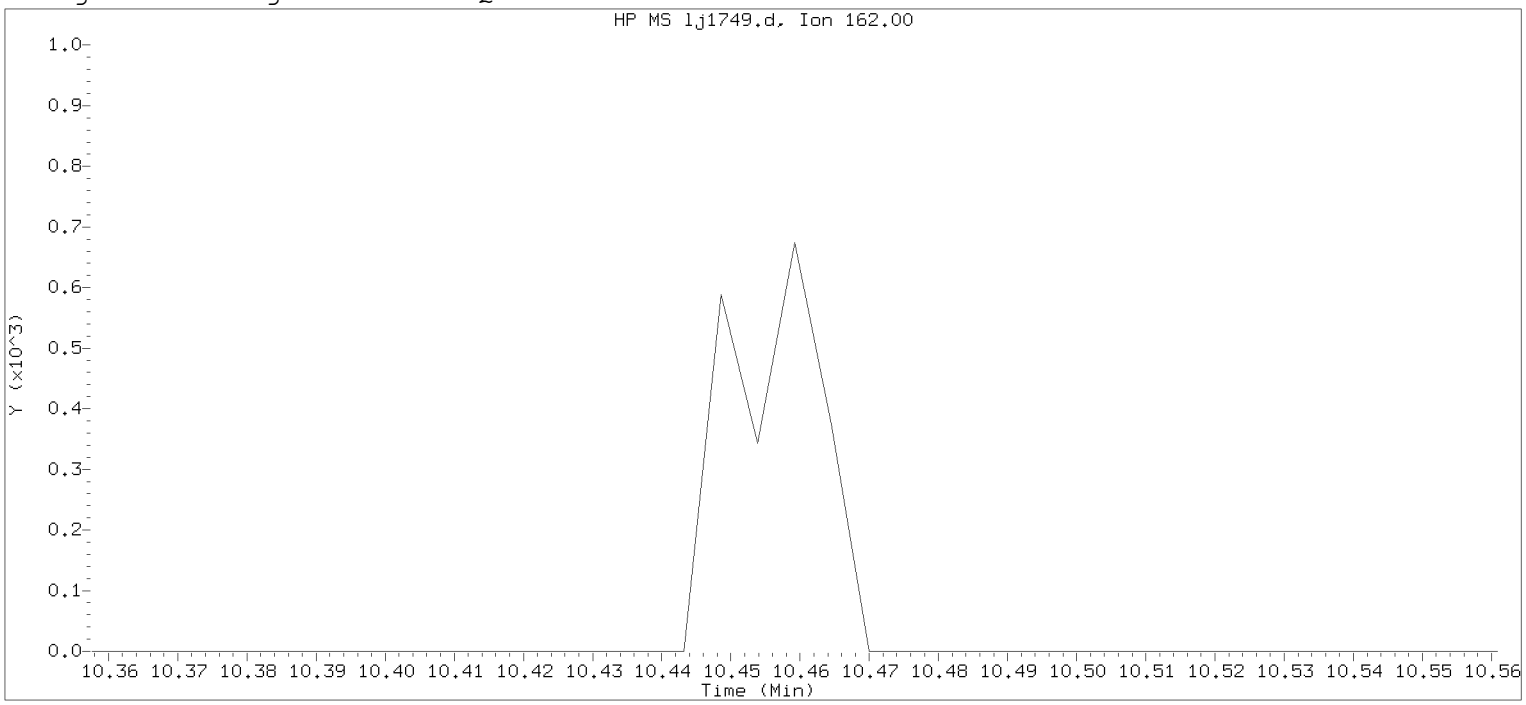
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

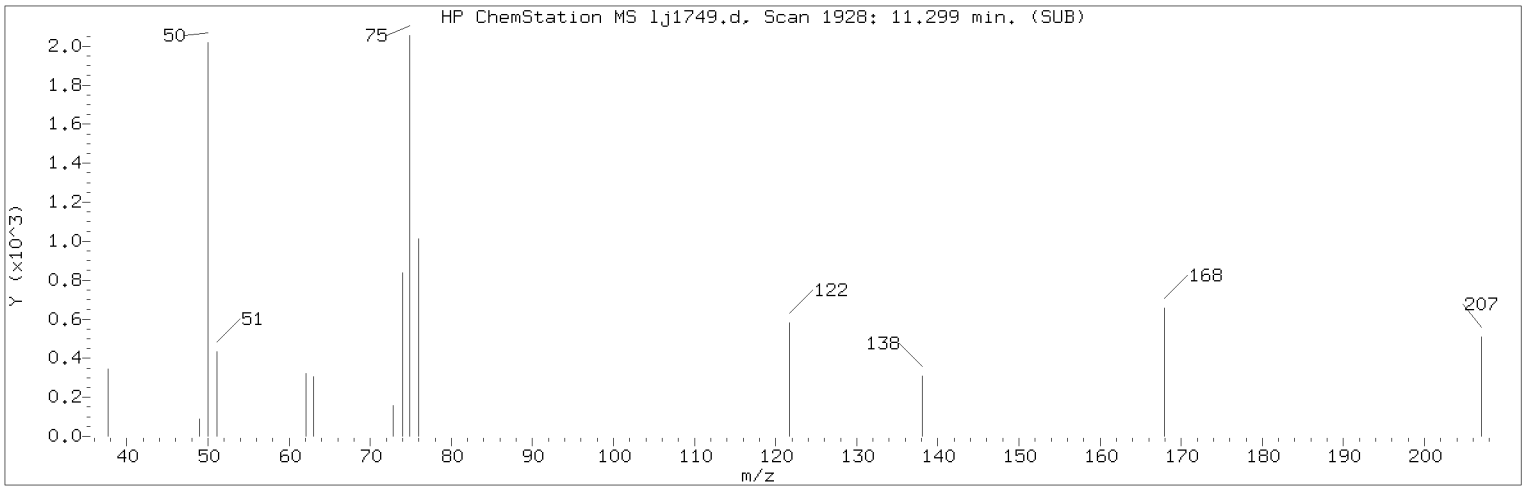
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

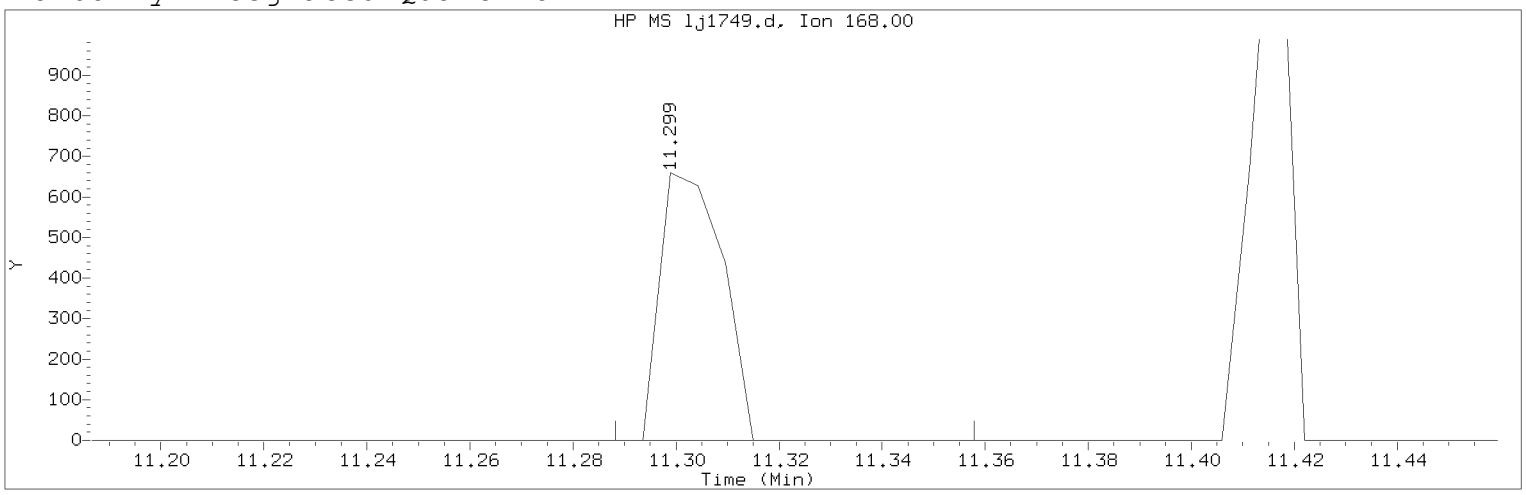
Compound Number : 91
Compound Name : cis-Isosafrole
Expected RT (minutes) : 10.459
Quant Ion : 162.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature user kbeck Page 589

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

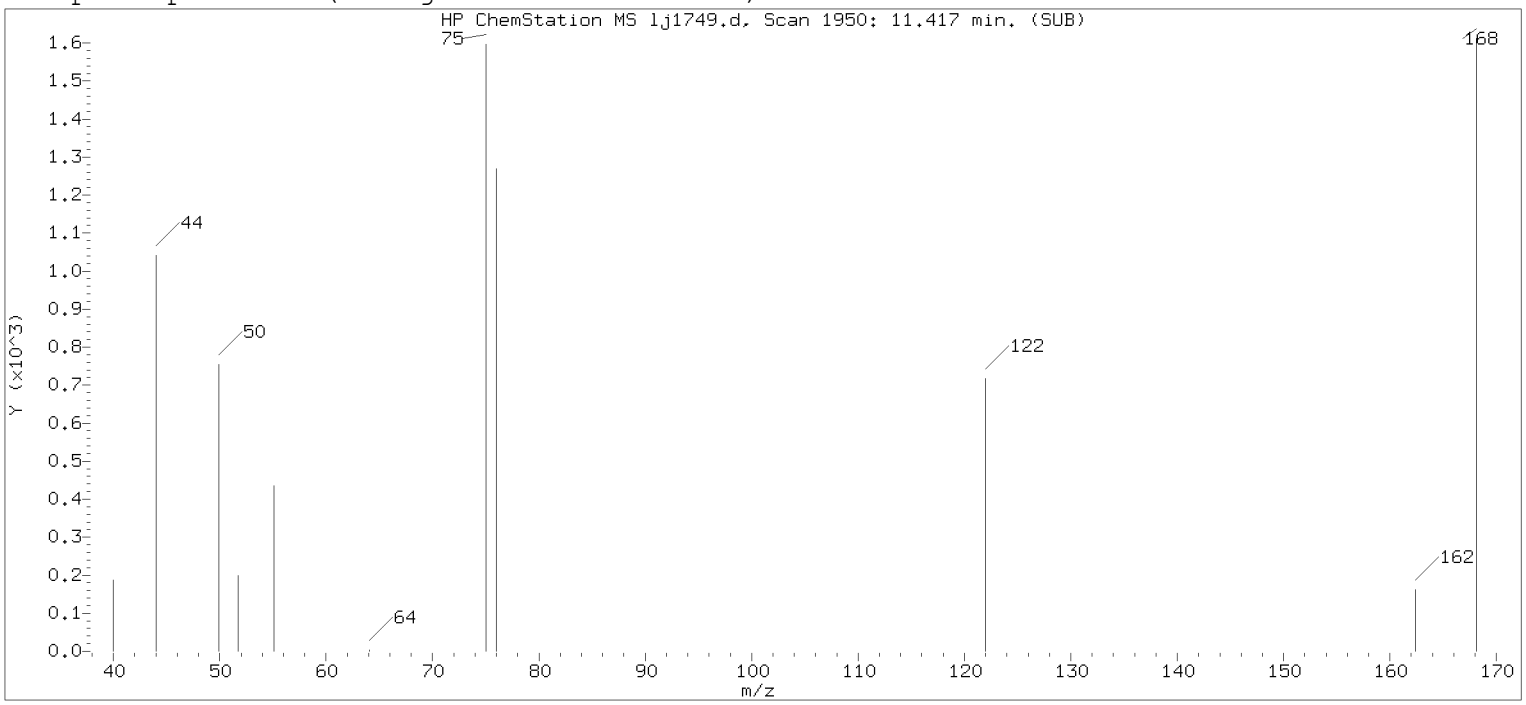
Compound Number : 109
Compound Name : 1,4-Dinitrobenzene
Scan Number : 1928
Retention Time (minutes) : 11.299
Quant Ion : 168.00
Area (flag) : 552M
On-Column Amount (ng/ul) : 0.0385
Integration start scan : 1925 Integration stop scan: 1938
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

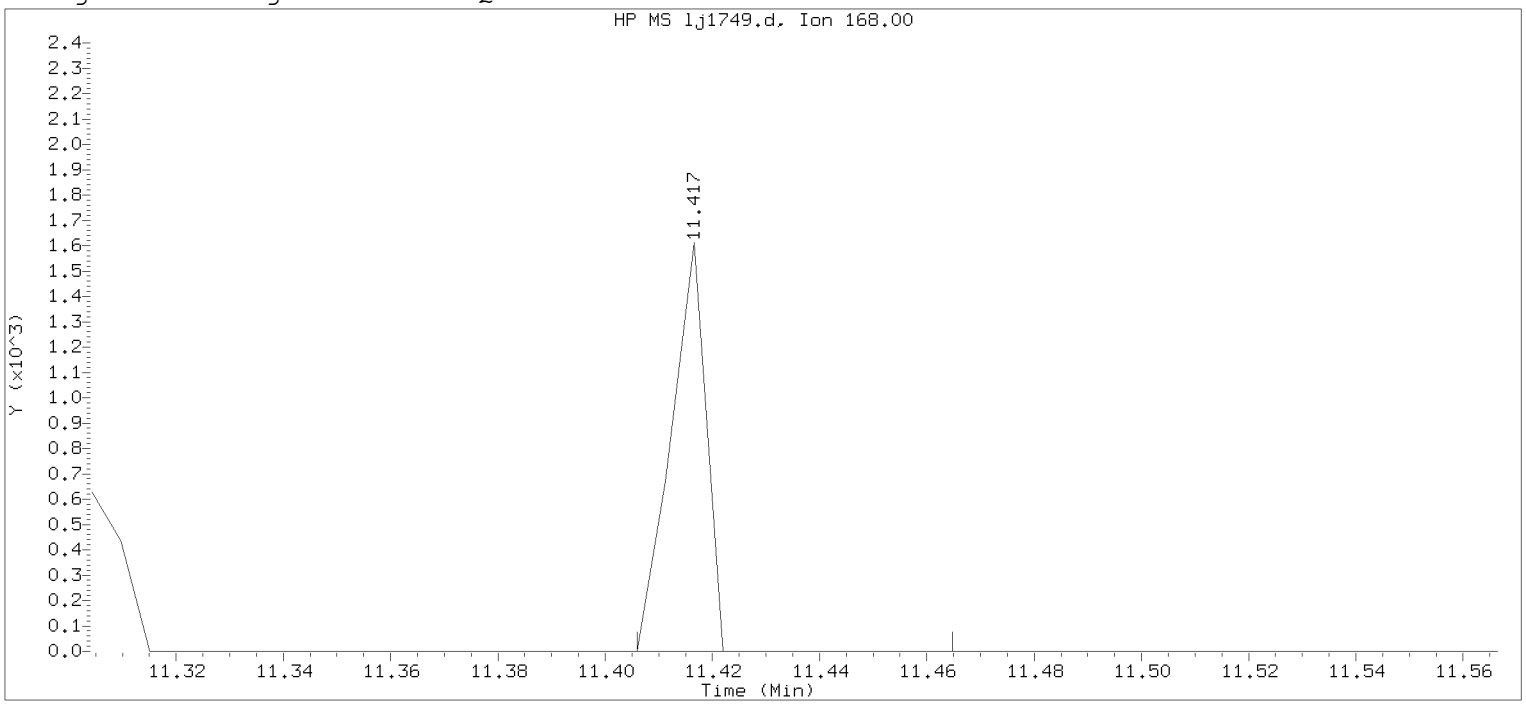
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compound Number : 109
Compound Name : 1,4-Dinitrobenzene
Scan Number : 1950
Retention Time (minutes) : 11.417
Quant Ion : 168.00
Area : 732
On-column Amount (ng/ul) : 0.0503
Integration start scan : 1947 Integration stop scan: 1958
Y at integration start : 0 Y at integration end: 0

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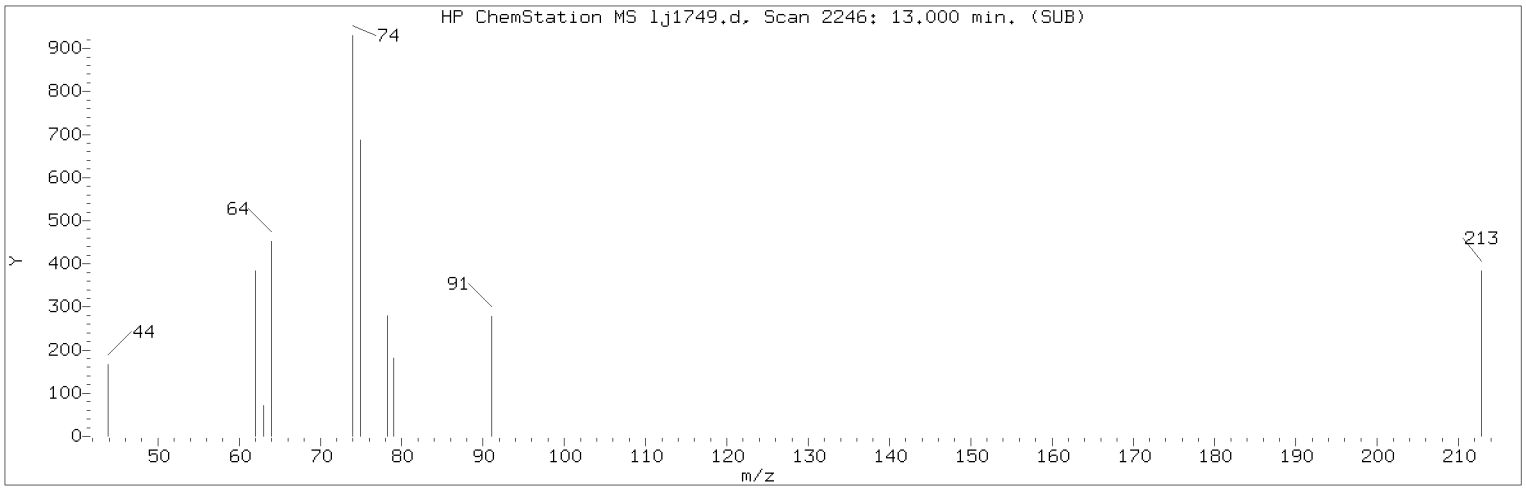
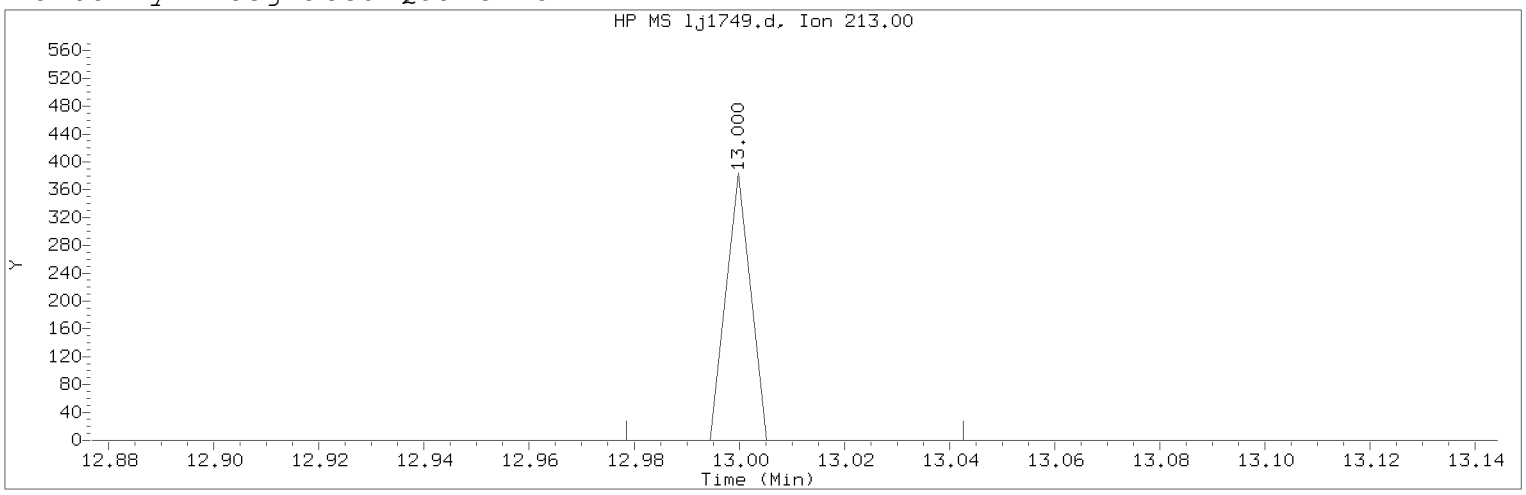
Target 3.5 esignature user: kbeck Page 591

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

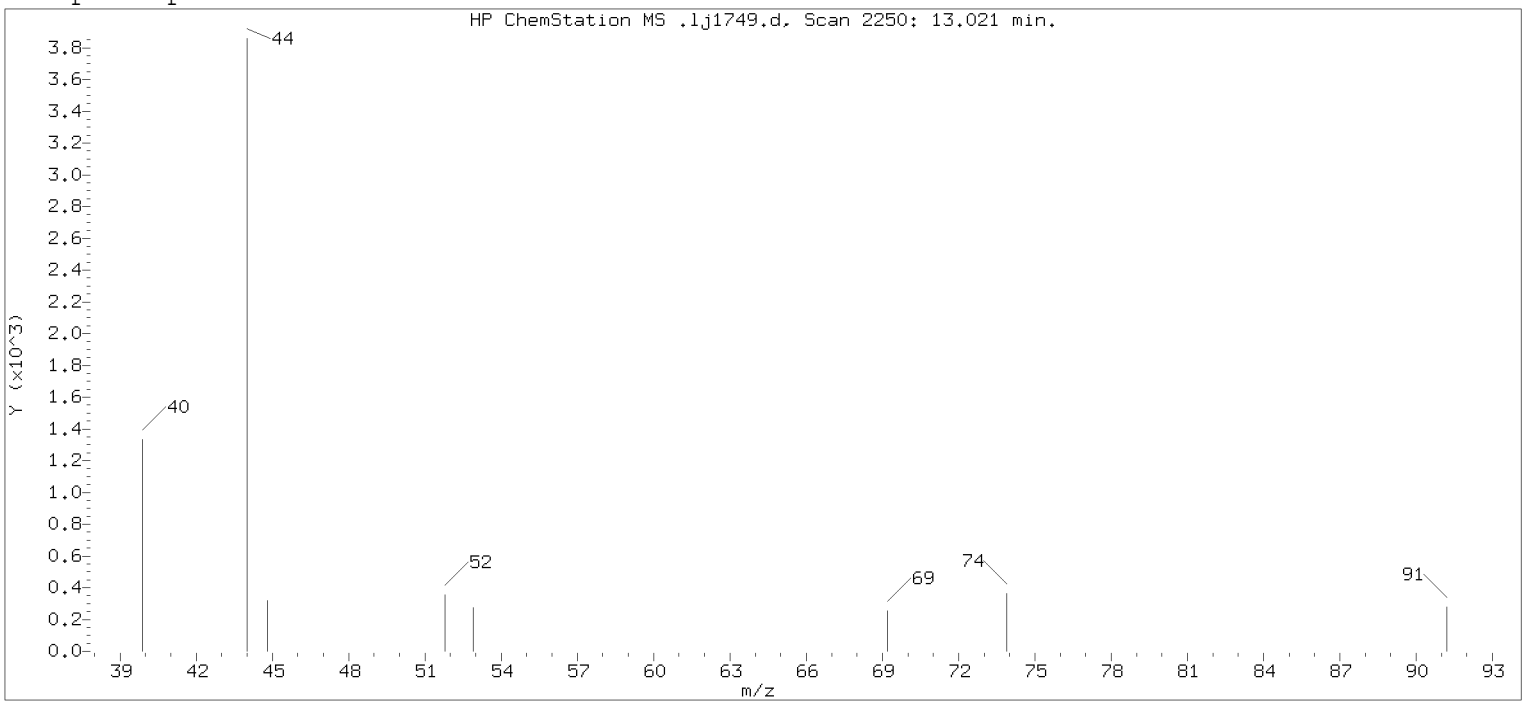
Compound Number : 144
Compound Name : 1,3,5-Trinitrobenzene
Scan Number : 2246
Retention Time (minutes) : 13.000
Quant Ion : 213.00
Area (flag) : 123M
On-Column Amount (ng/ul) : 0.0116
Integration start scan : 2241 Integration stop scan: 2253
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

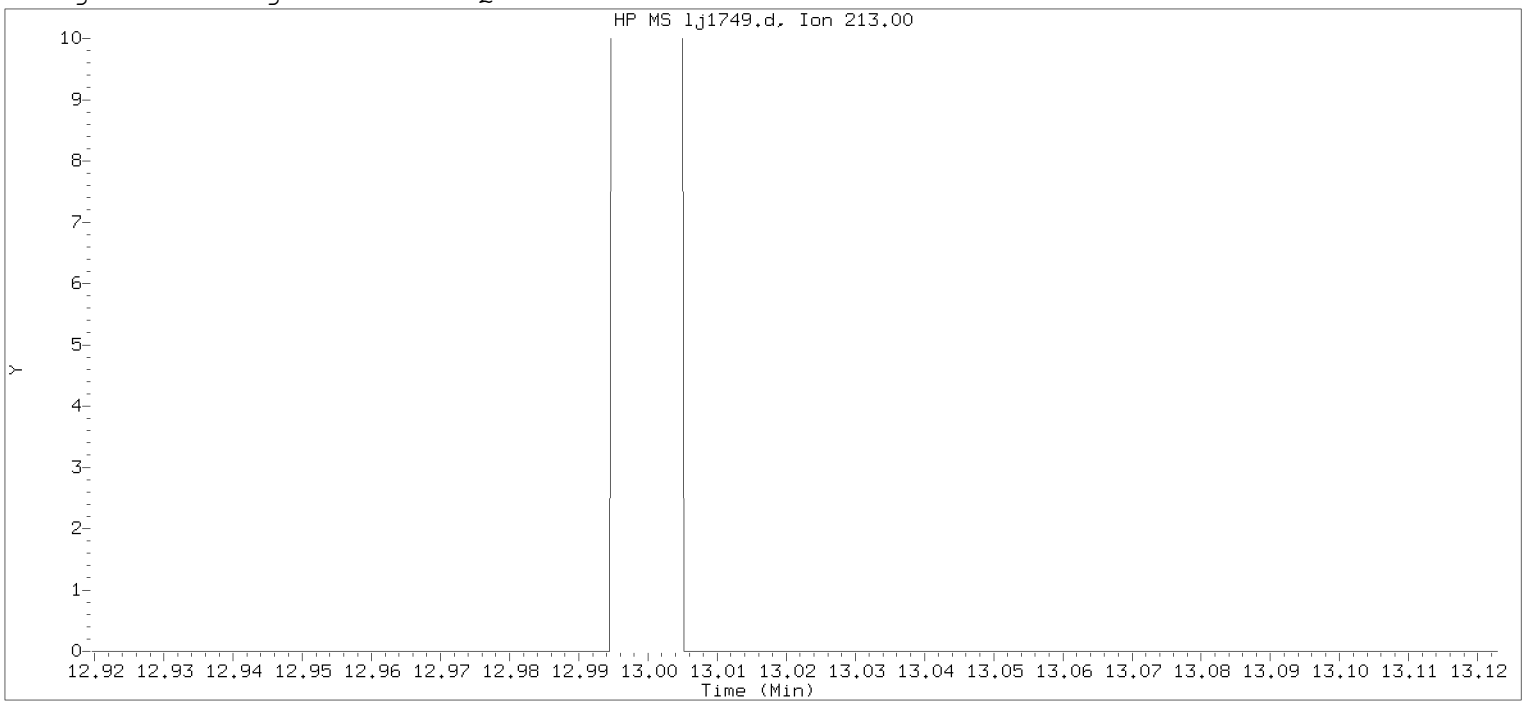
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

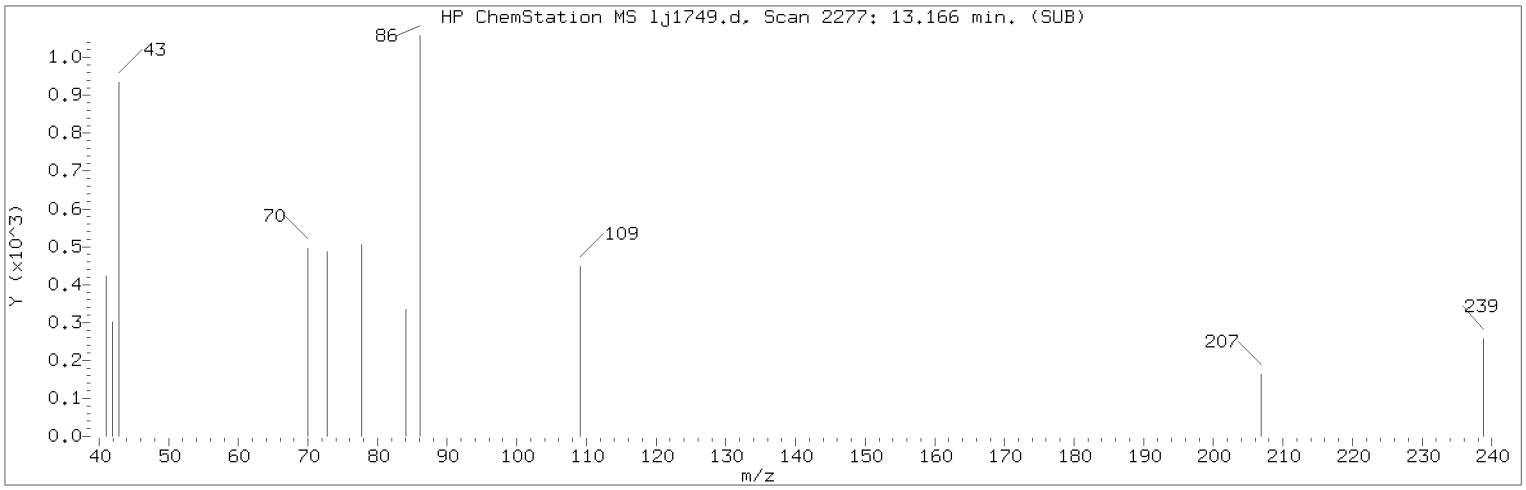
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

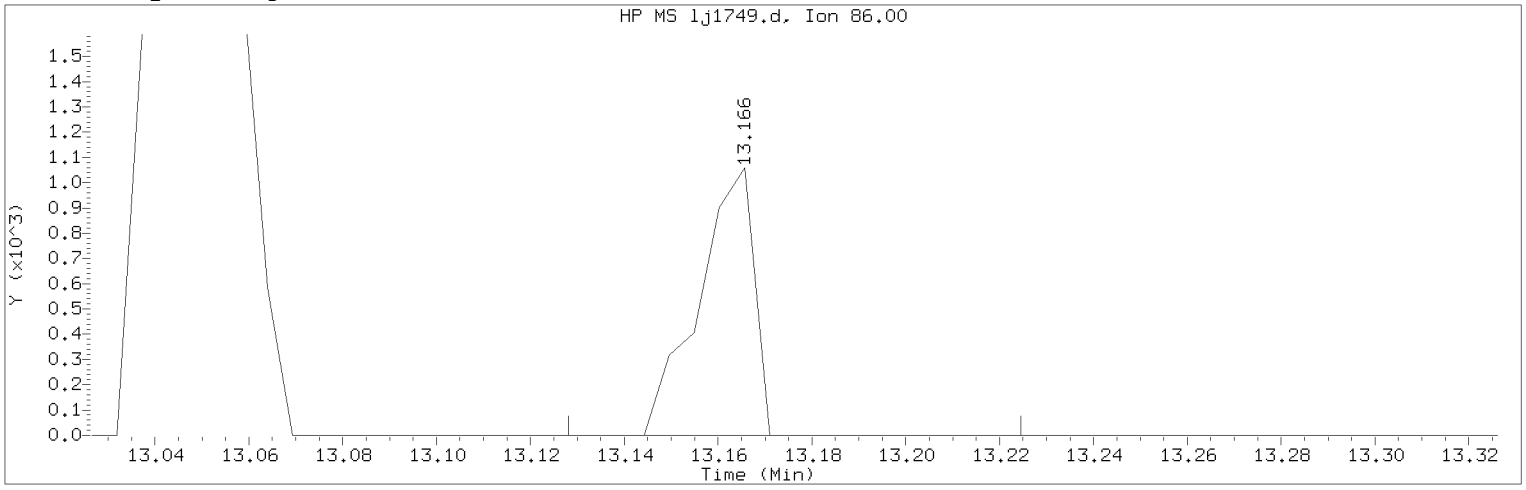
Compound Number : 144
Compound Name : 1,3,5-Trinitrobenzene
Expected RT (minutes) : 13.021
Quant Ion : 213.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature user kbeck Page 593

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

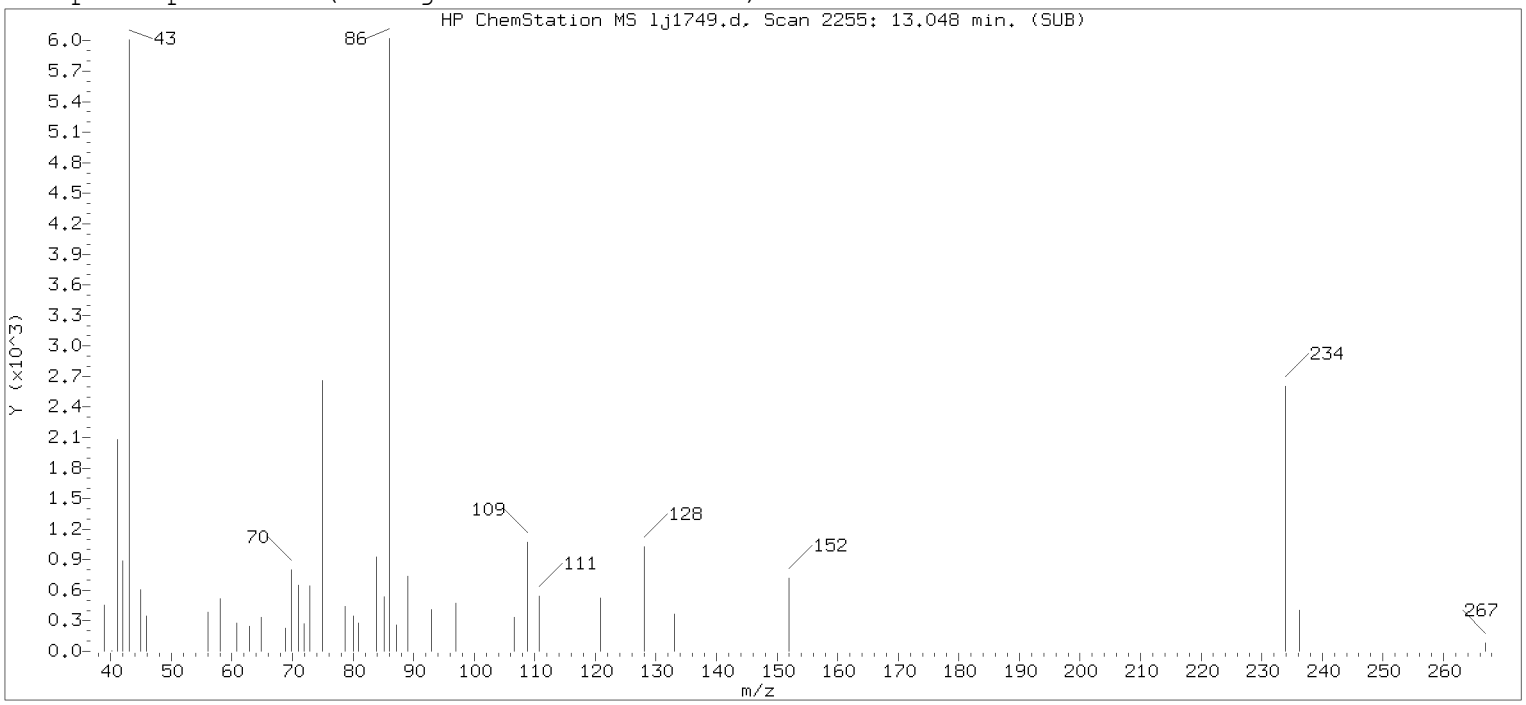
Compound Number : 149
Compound Name : Diallate (peak 2)
Scan Number : 2277
Retention Time (minutes) : 13.166
Quant Ion : 86.00
Area (flag) : 861M
On-Column Amount (ng/ul) : 0.0173
Integration start scan : 2269 Integration stop scan: 2287
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

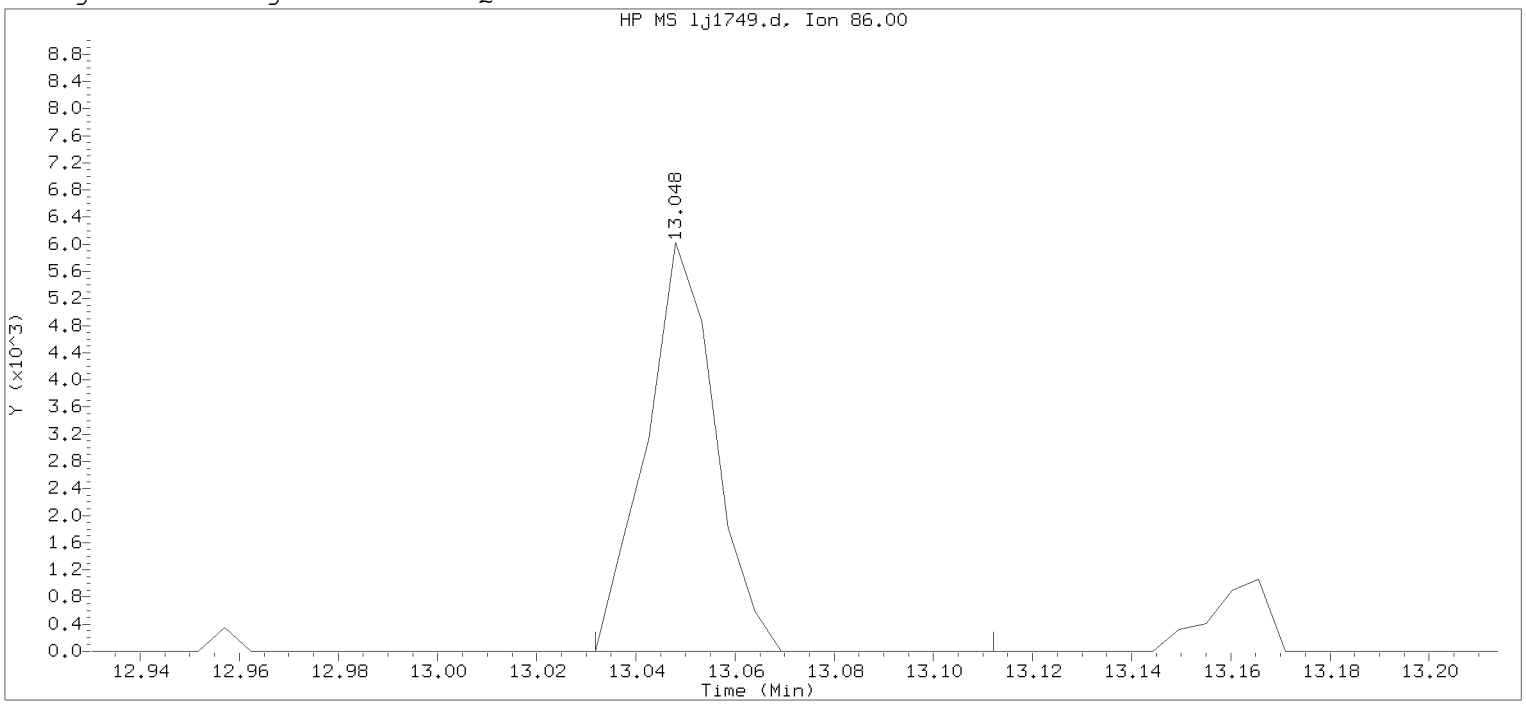
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2255		
Retention Time (minutes)	: 13.048		
Quant Ion	: 86.00		
Area	: 5785		
On-column Amount (ng/ul)	: 0.0228		
Integration start scan	: 2251	Integration stop scan:	2266
Y at integration start	: 0	Y at integration end:	0

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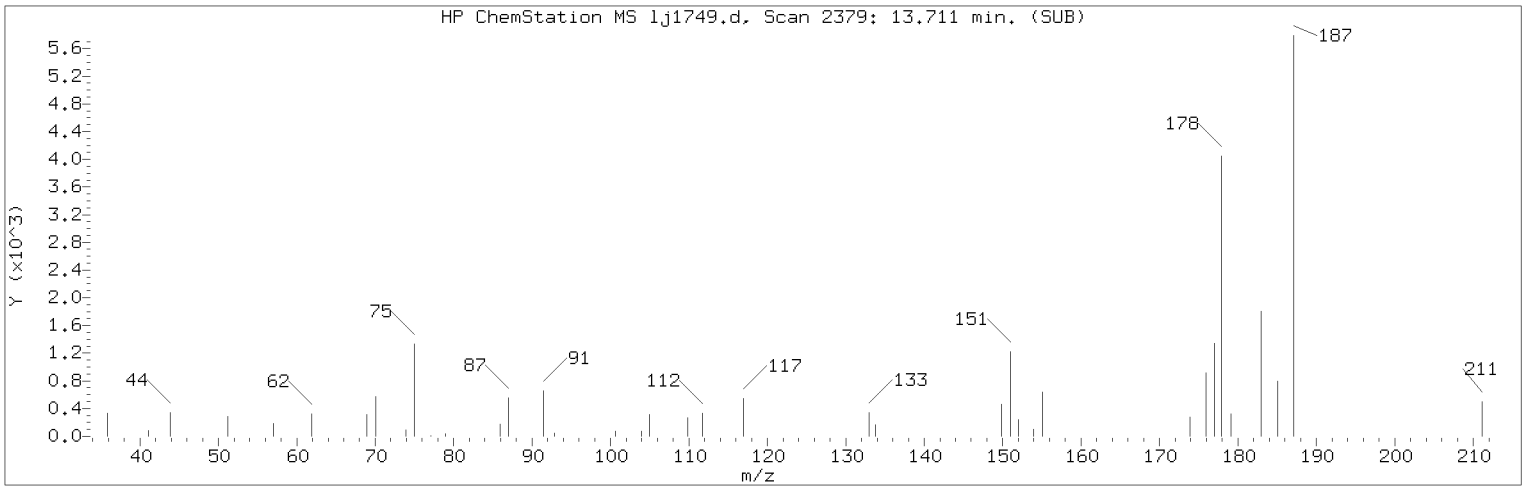
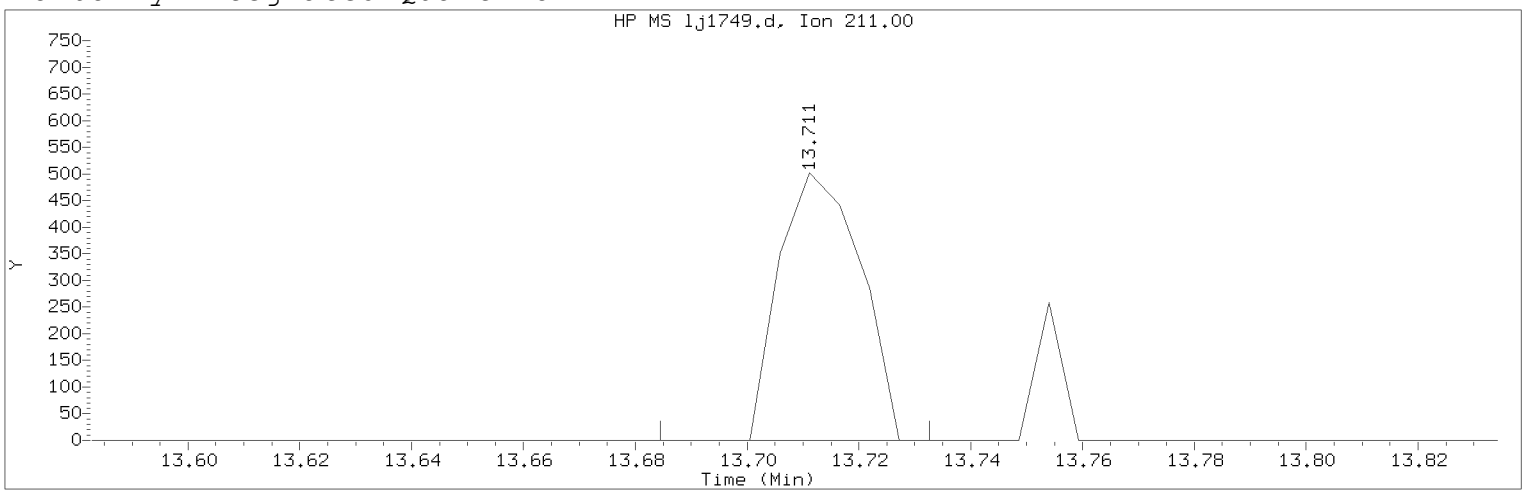
Target 3.5 esignature user kbeck 5695

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

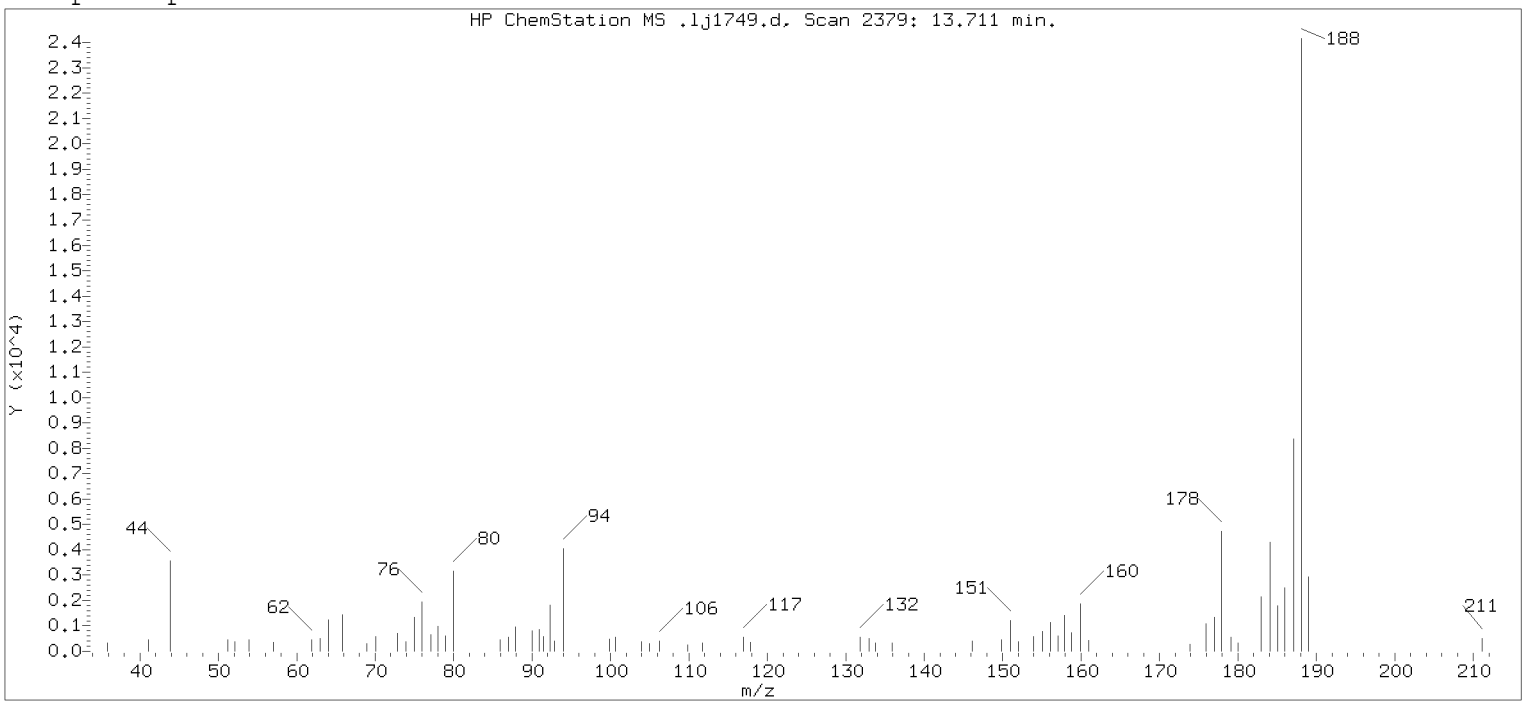
Compound Number : 159
Compound Name : Dinoseb
Scan Number : 2379
Retention Time (minutes) : 13.711
Quant Ion : 211.00
Area (flag) : 506M
On-Column Amount (ng/ul) : 0.0190
Integration start scan : 2373 Integration stop scan: 2382
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

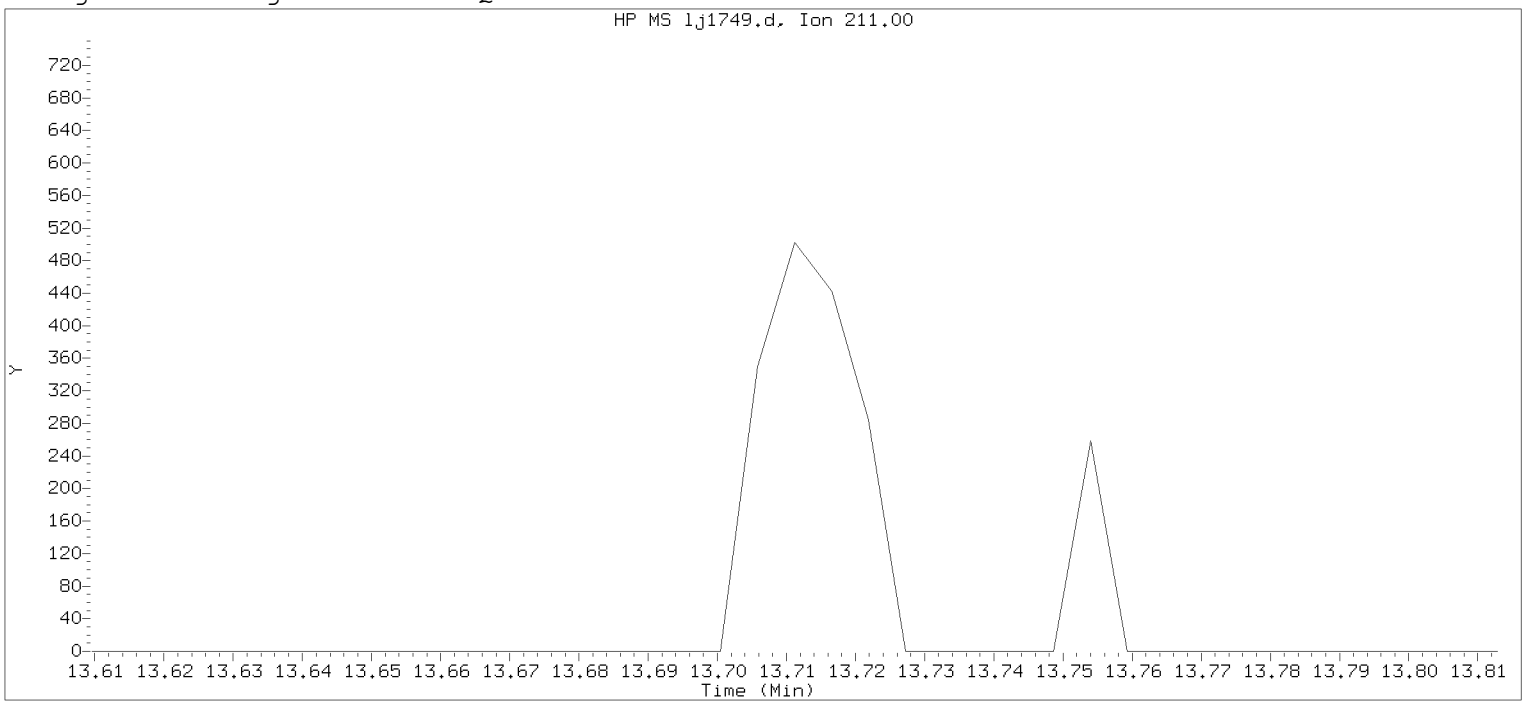
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

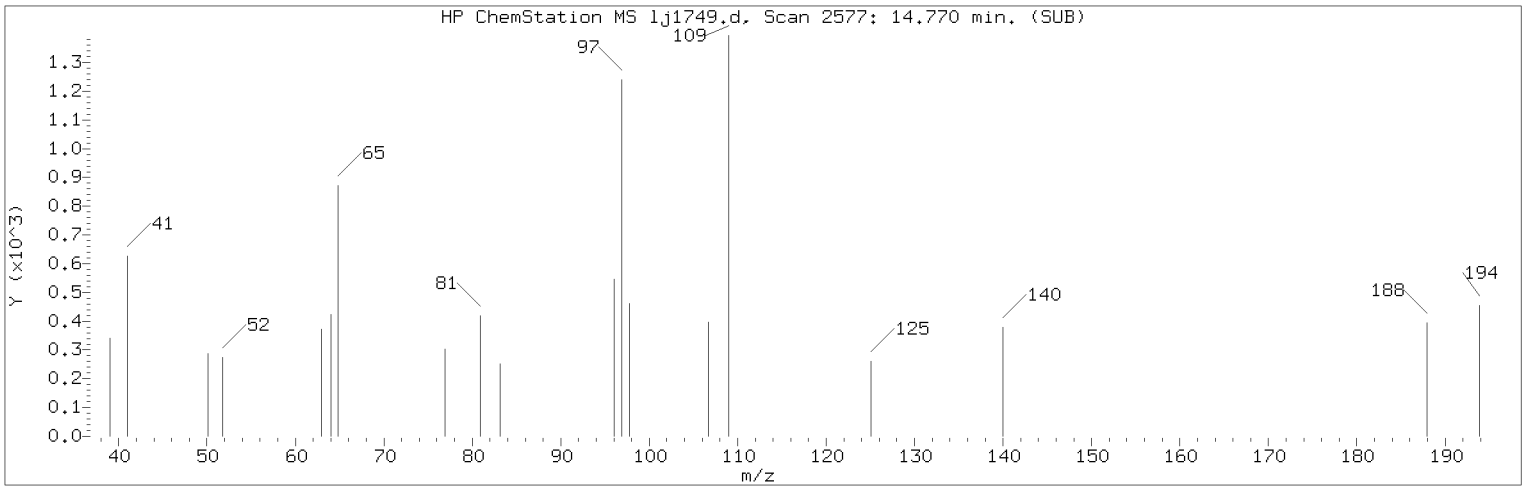
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

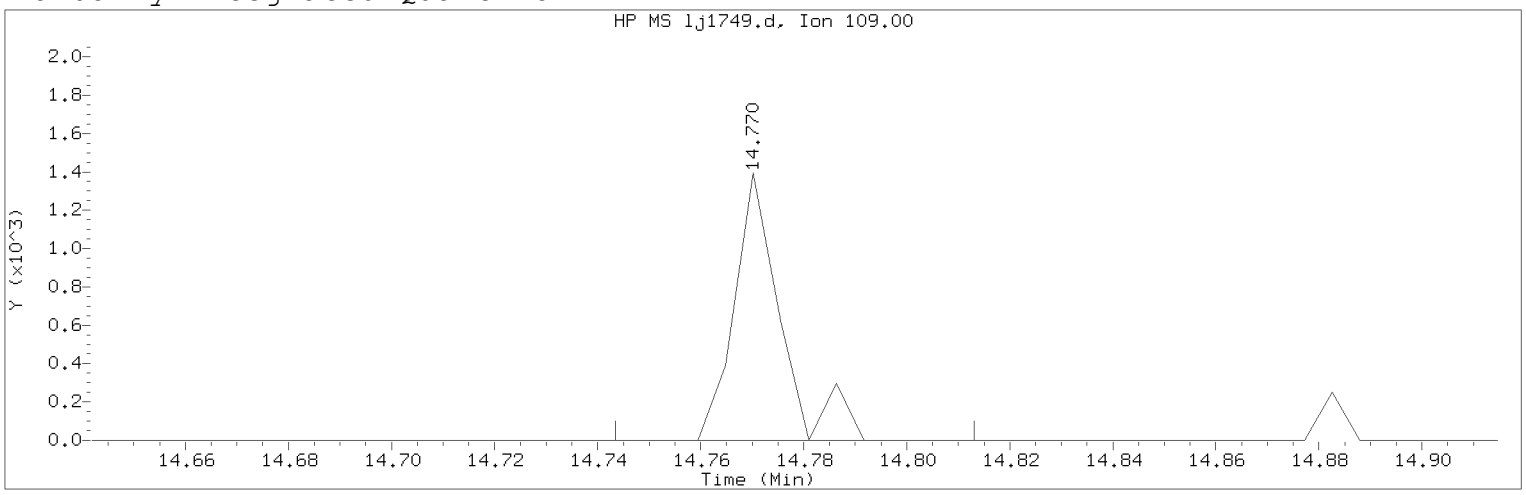
Compound Number : 159
Compound Name : Dinoseb
Expected RT (minutes) : 13.711
Quant Ion : 211.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature user kbeck Page 597

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

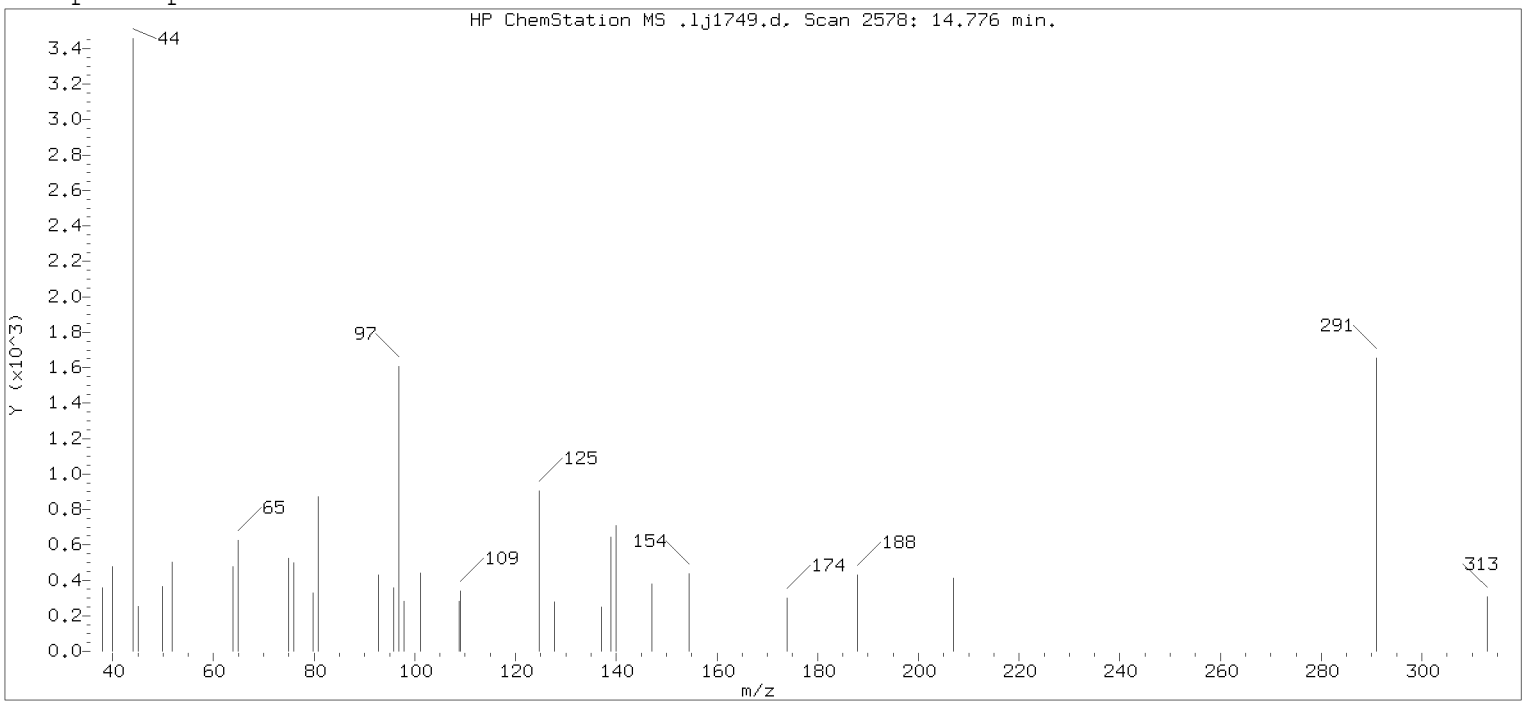
Compound Number : 172
Compound Name : Parathion
Scan Number : 2577
Retention Time (minutes) : 14.770
Quant Ion : 109.00
Area (flag) : 868M
On-Column Amount (ng/ul) : 0.0368
Integration start scan : 2571 Integration stop scan: 2584
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

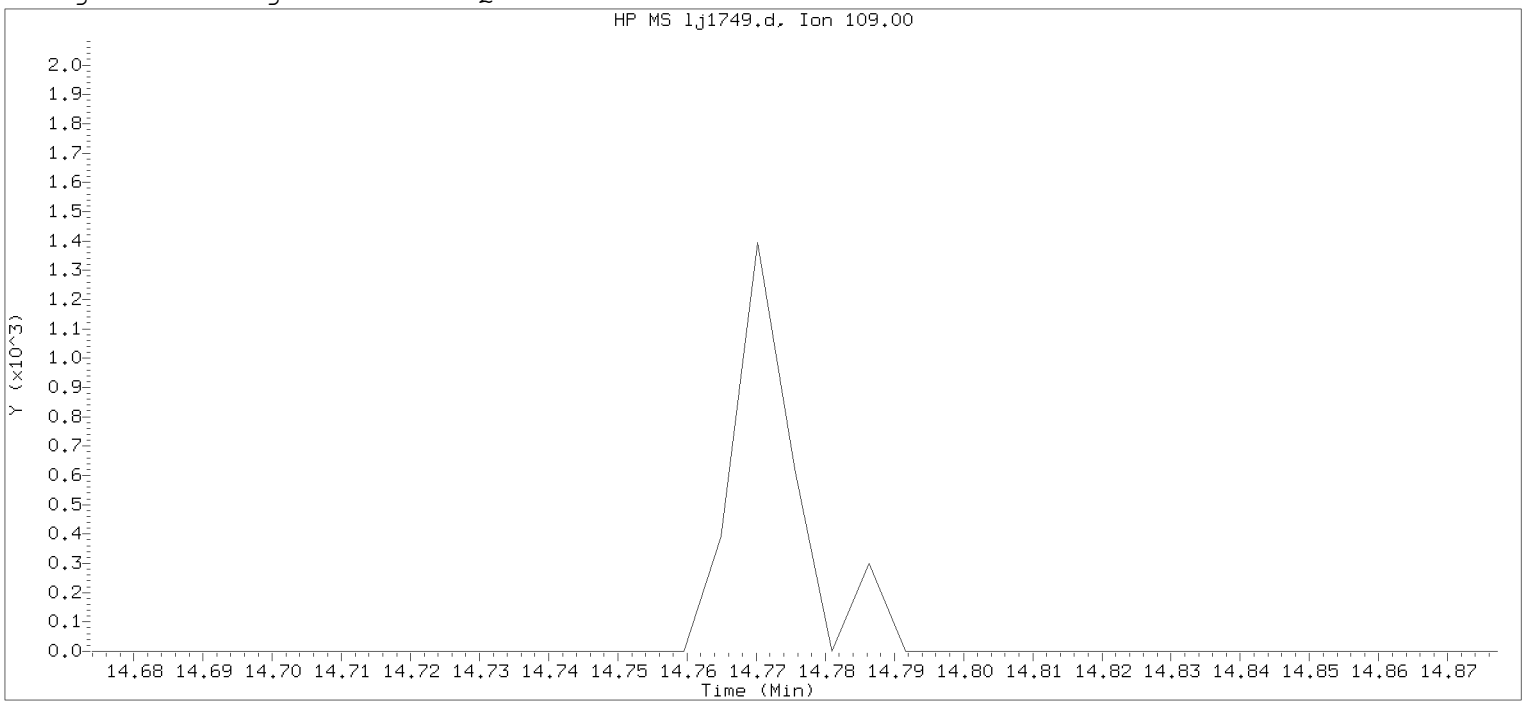
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

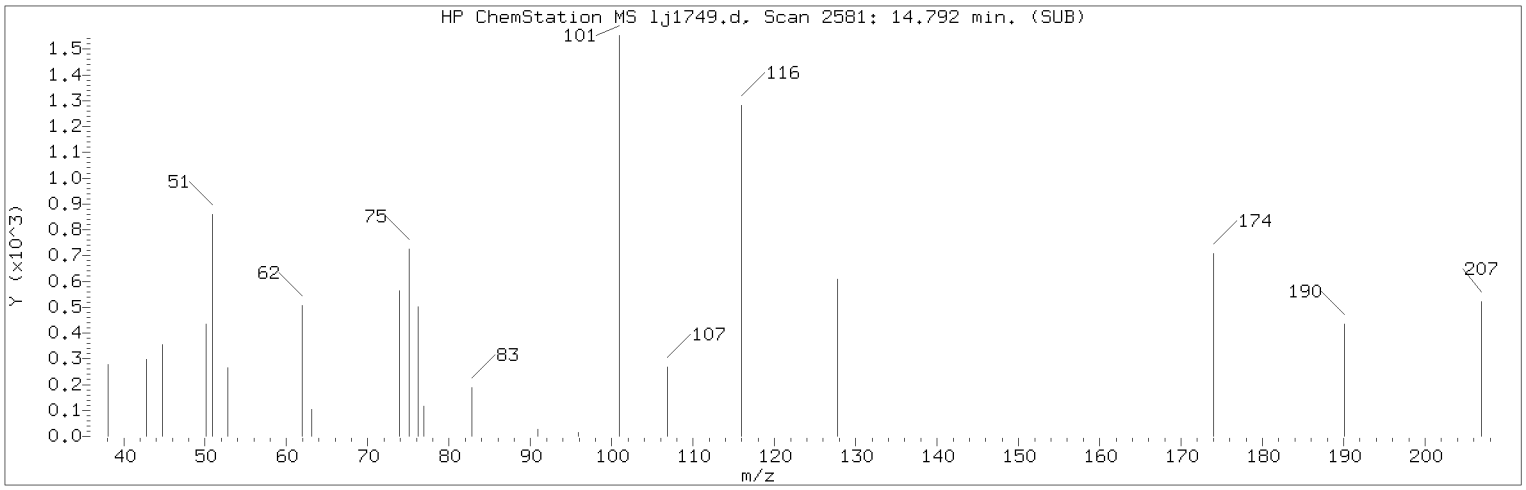
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

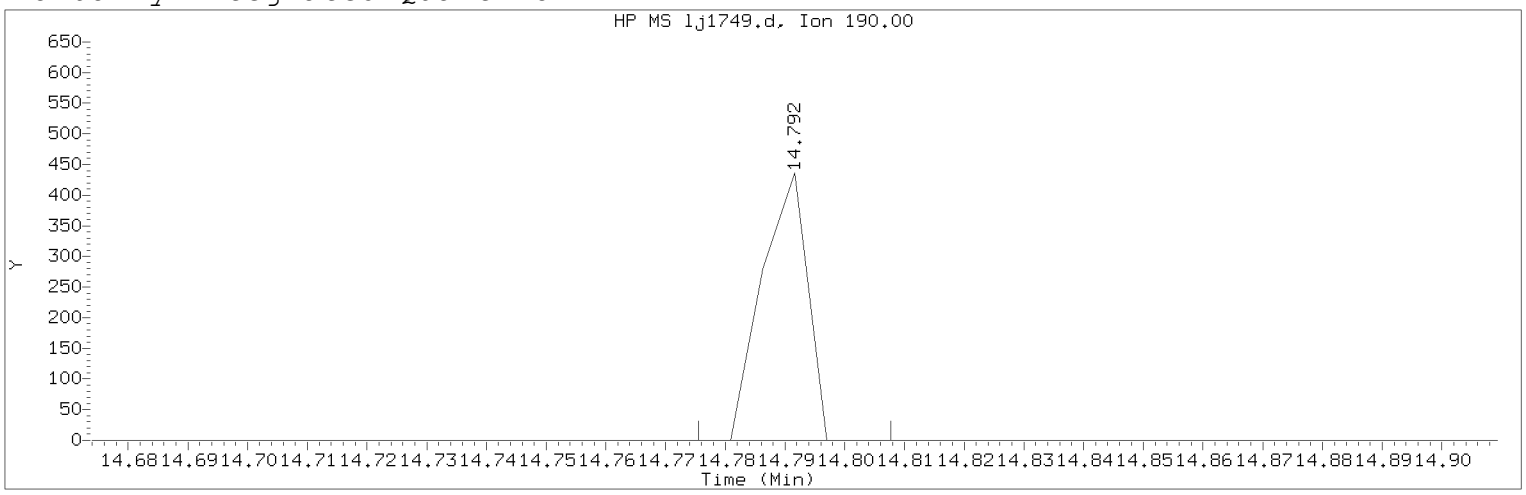
Compound Number : 172
Compound Name : Parathion
Expected RT (minutes) : 14.776
Quant Ion : 109.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature user kbeck Page 599

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

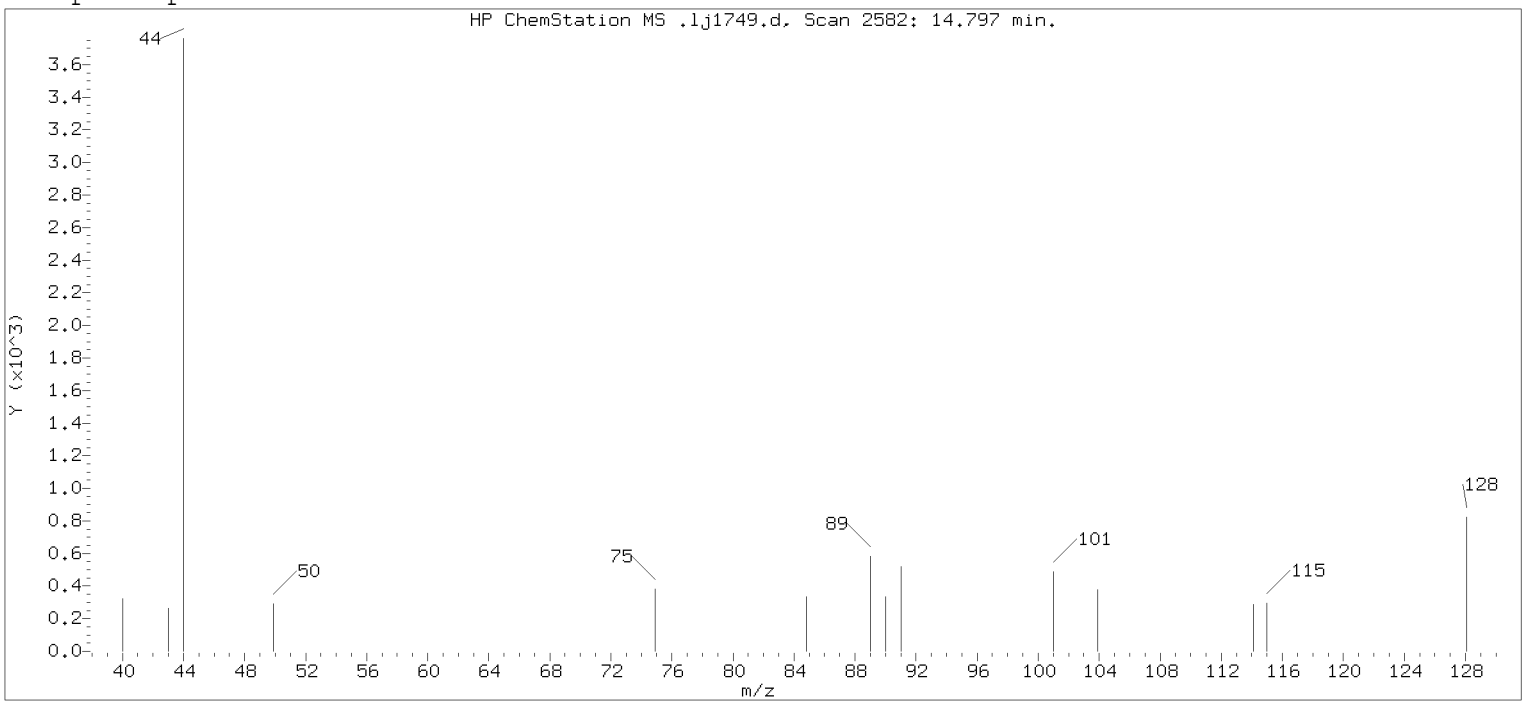
Compound Number : 173
Compound Name : 4-Nitroquinoline-1-oxide
Scan Number : 2581
Retention Time (minutes) : 14.792
Quant Ion : 190.00
Area (flag) : 229M
On-Column Amount (ng/ul) : 2.4008
Integration start scan : 2577 Integration stop scan: 2583
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

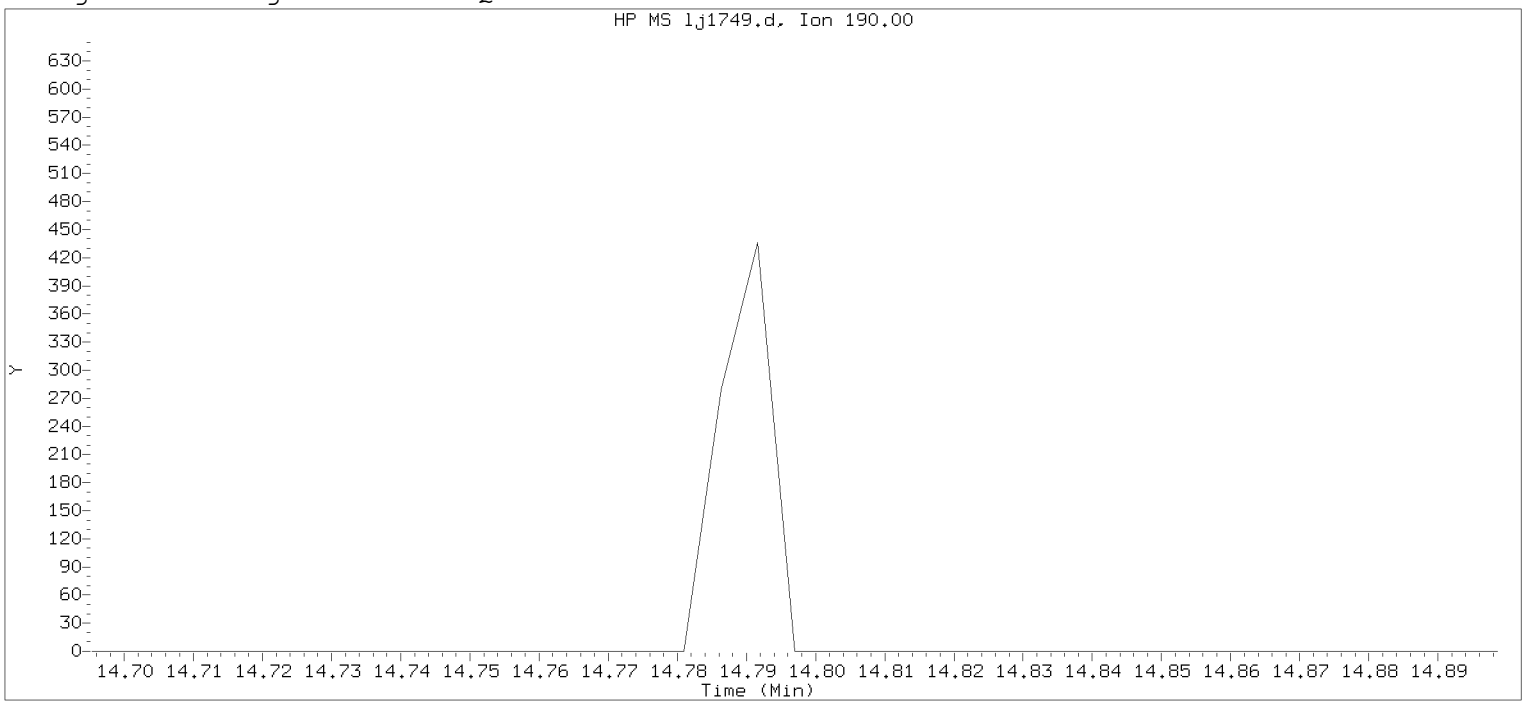
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



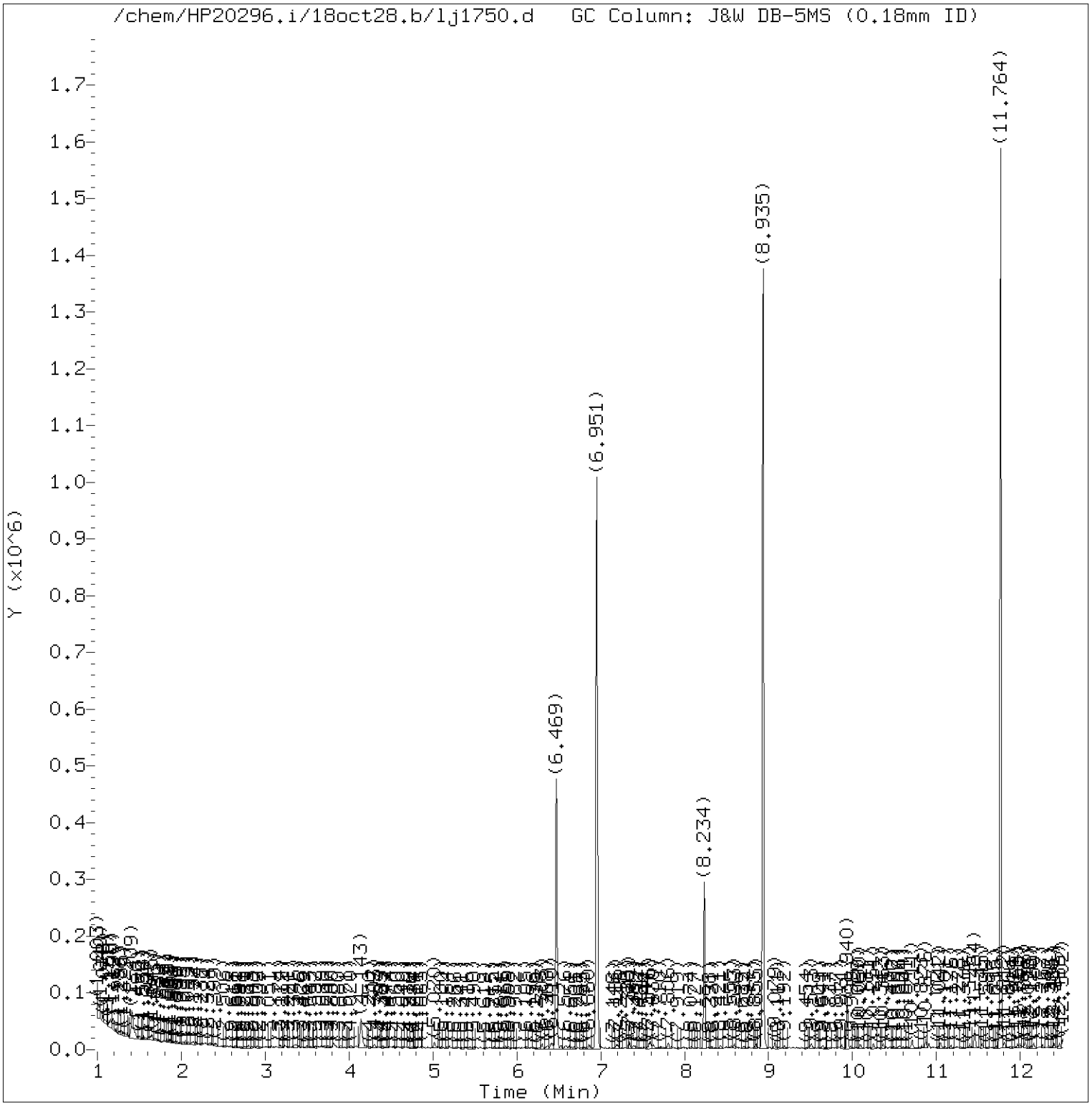
Data File: /chem/HP20296.i/18oct28.b/lj1749.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:18 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:37 bkc25363

Sample Name: SSTD0.125 Lab Sample ID: RVSTD2648

Compound Number : 173
Compound Name : 4-Nitroquinoline-1-oxide
Expected RT (minutes) : 14.797
Quant Ion : 190.00

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature user kbeck Page 701



Total Ion Chromatogram (TIC)

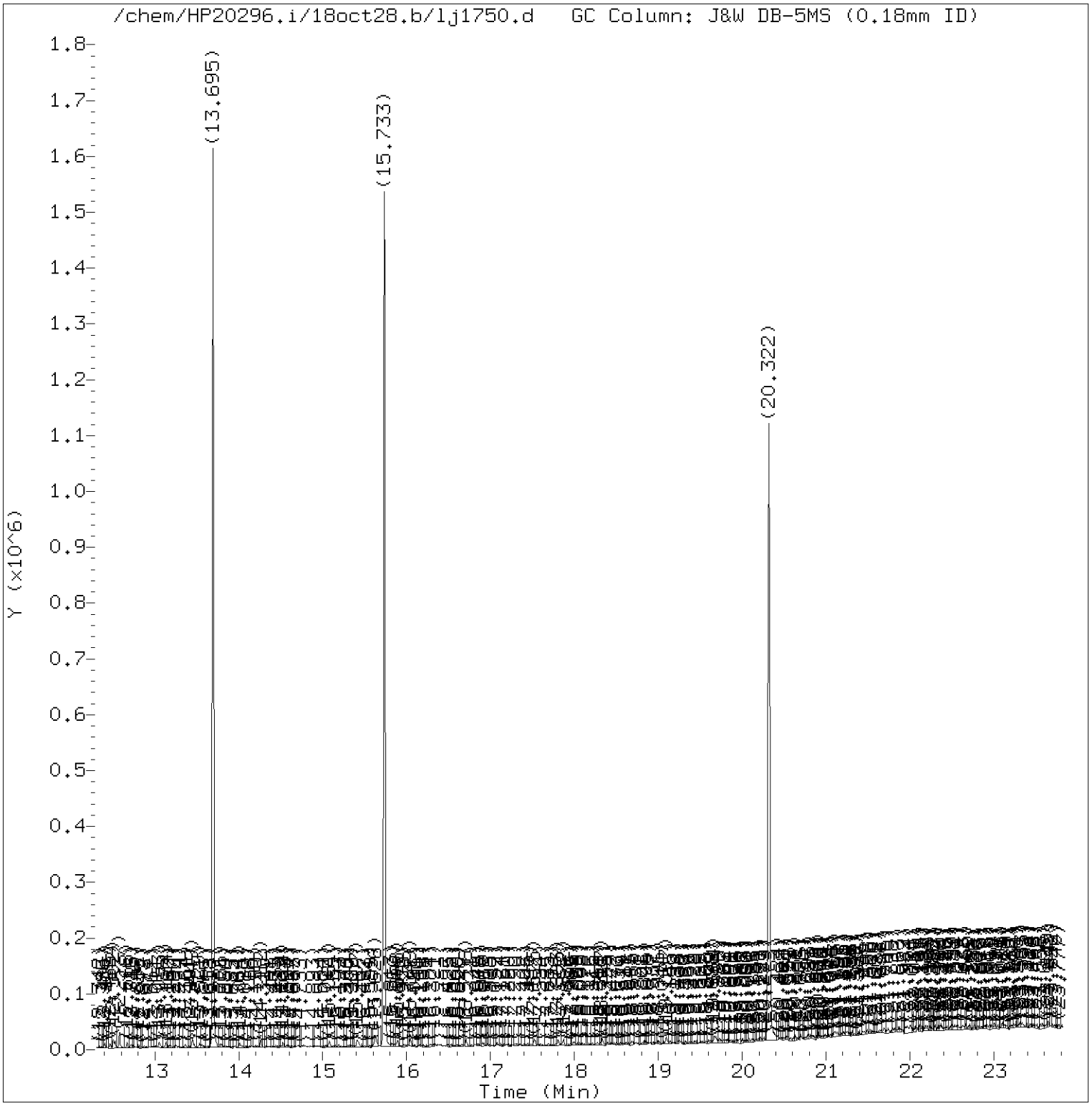
Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1750.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:47 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1750.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:47 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1750.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:47 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

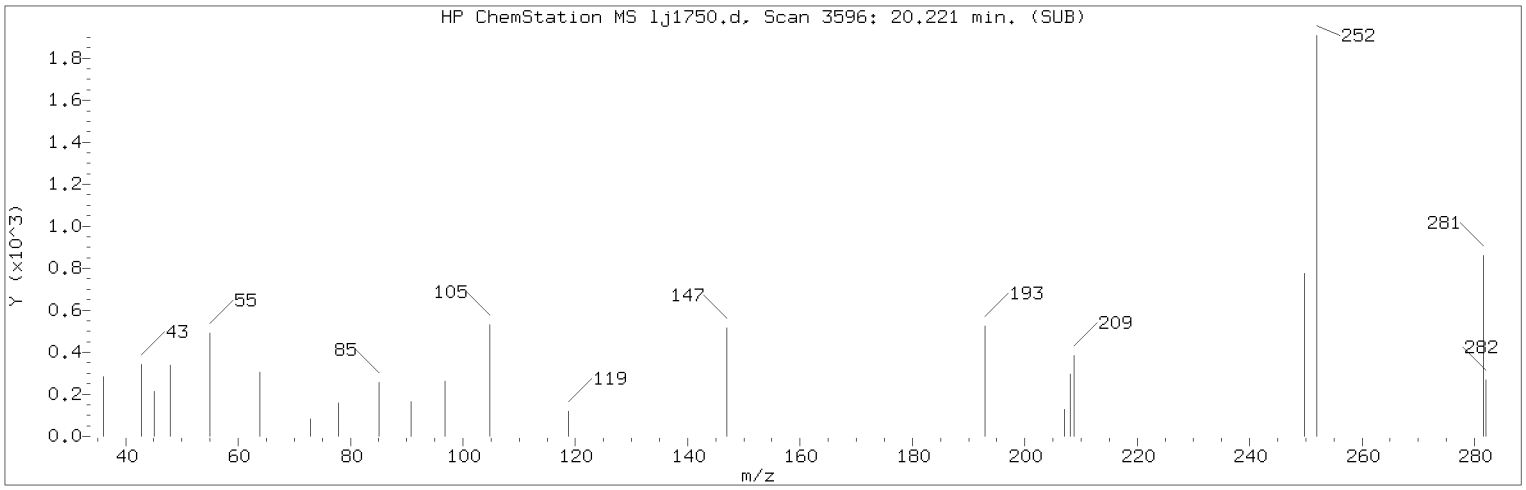
Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26)*1,4-Dichlorobenzene-d4	(1)	6.951	152	182280	5.000
45)$Nitrobenzene-d5	(2)	7.796	82	3307	0.046
68)*Naphthalene-d8	(2)	8.935	136	691536	5.000
69) Naphthalene	(2)	8.967	128	4148	0.027
86) 2-Methylnaphthalene	(2)	10.090	142	2192	0.022
87) 1-Methylnaphthalene	(2)	10.235	142	2374	0.025
96)$2-Fluorobiphenyl	(3)	10.711	172	5993	0.052
99) 2-Chloronaphthalene	(3)	10.876	162	2814	0.027
114) Acenaphthylene	(3)	11.545	152	4181	0.032
118)*Acenaphthene-d10	(3)	11.764	164	343775	5.000
119) Acenaphthene	(3)	11.818	153	2459	0.024
131) Fluorene	(3)	12.502	166	1959	0.018
150) Hexachlorobenzene	(4)	13.187	284	960	0.032
158)*Phenanthrene-d10	(4)	13.695	188	660807	5.000
160) Phenanthrene	(4)	13.722	178	5187	0.033
162) Anthracene	(4)	13.786	178	3128	0.020
227) Total PAHs	(6)			59160	0.425
178) Fluoranthene	(4)	15.407	202	4172	0.024
180)*Pyrene-d10	(5)	15.733	212	667585	5.000
182) Pyrene	(5)	15.760	202	4988	0.028
184)$Terphenyl-d14	(5)	16.043	244	5736	0.054
200) Benzo(a)anthracene	(5)	17.808	228	2873	0.018
201) Chrysene	(5)	17.872	228	4101	0.026
211) Benzo(b)fluoranthene	(6)	19.686	252	3538	0.024
213) Benzo(k)fluoranthene	(6)	19.728	252	2551	0.017
216) Benzo(a)pyrene	(6)	20.221	252	2465M	0.019
218)*Perylene-d12	(6)	20.322	264	559237	5.000
224) Indeno(1,2,3-cd)pyrene	(6)	21.959	276	3186	0.025
225) Dibenz(a,h)anthracene	(6)	21.996	278	2687	0.020
226) Benzo(g,h,i)perylene	(6)	22.365	276	2971	0.022

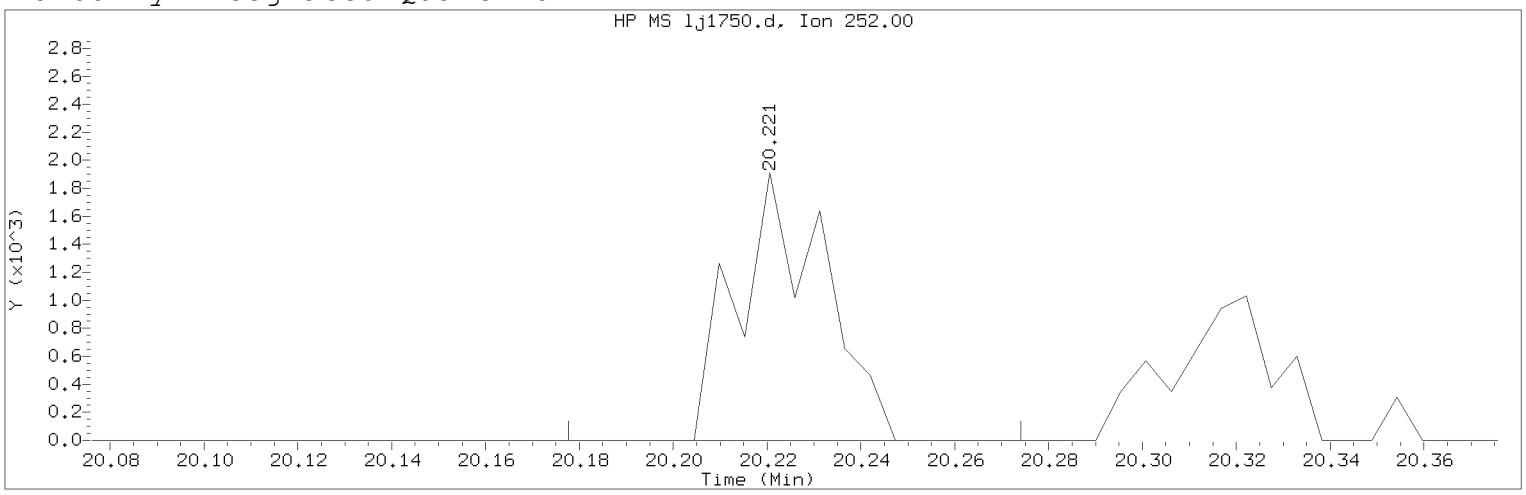
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1750.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:47 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 30-Oct-2018 13:31 knb25316

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

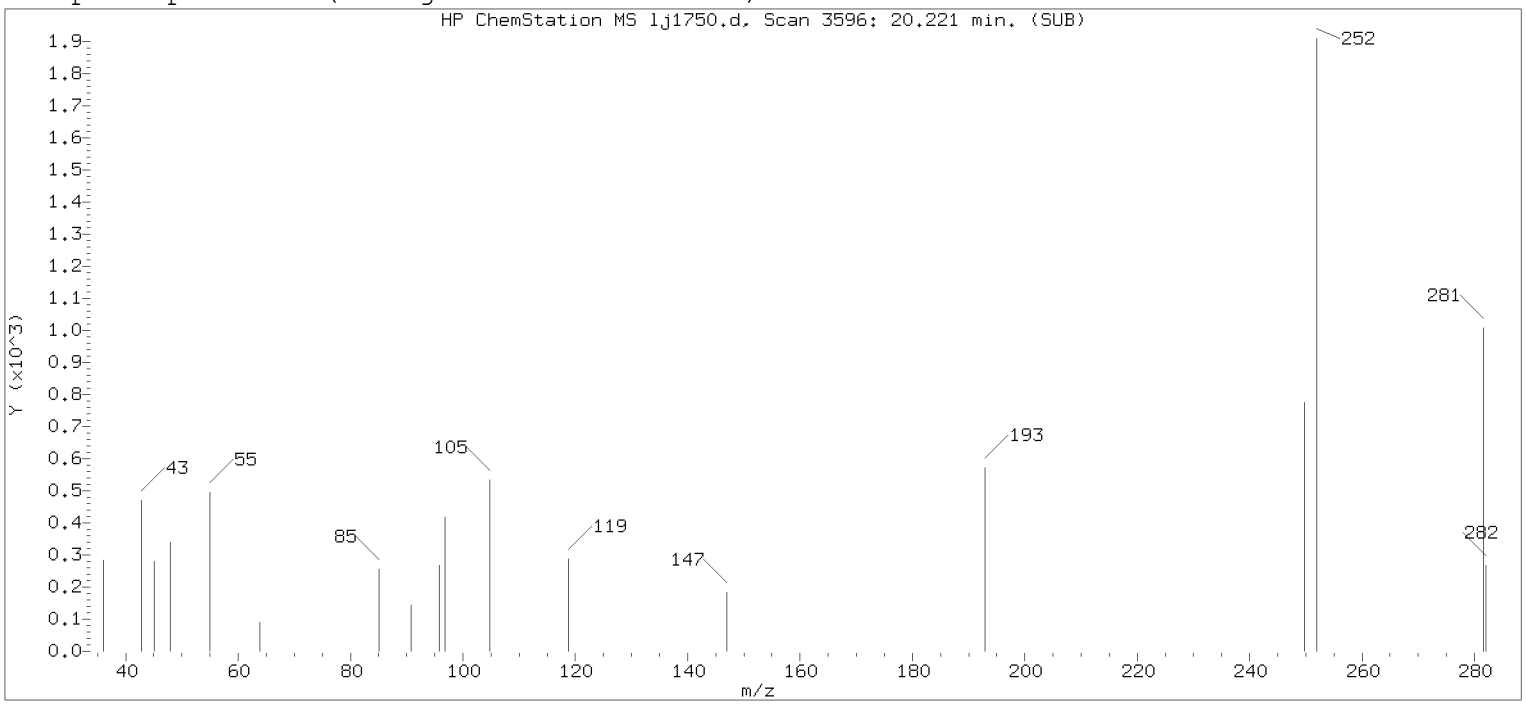
Compound Number : 216
Compound Name : Benzo(a)pyrene
Scan Number : 3596
Retention Time (minutes) : 20.221
Quant Ion : 252.00
Area (flag) : 2465M
On-Column Amount (ng/ul) : 0.0189
Integration start scan : 3587 Integration stop scan: 3605
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

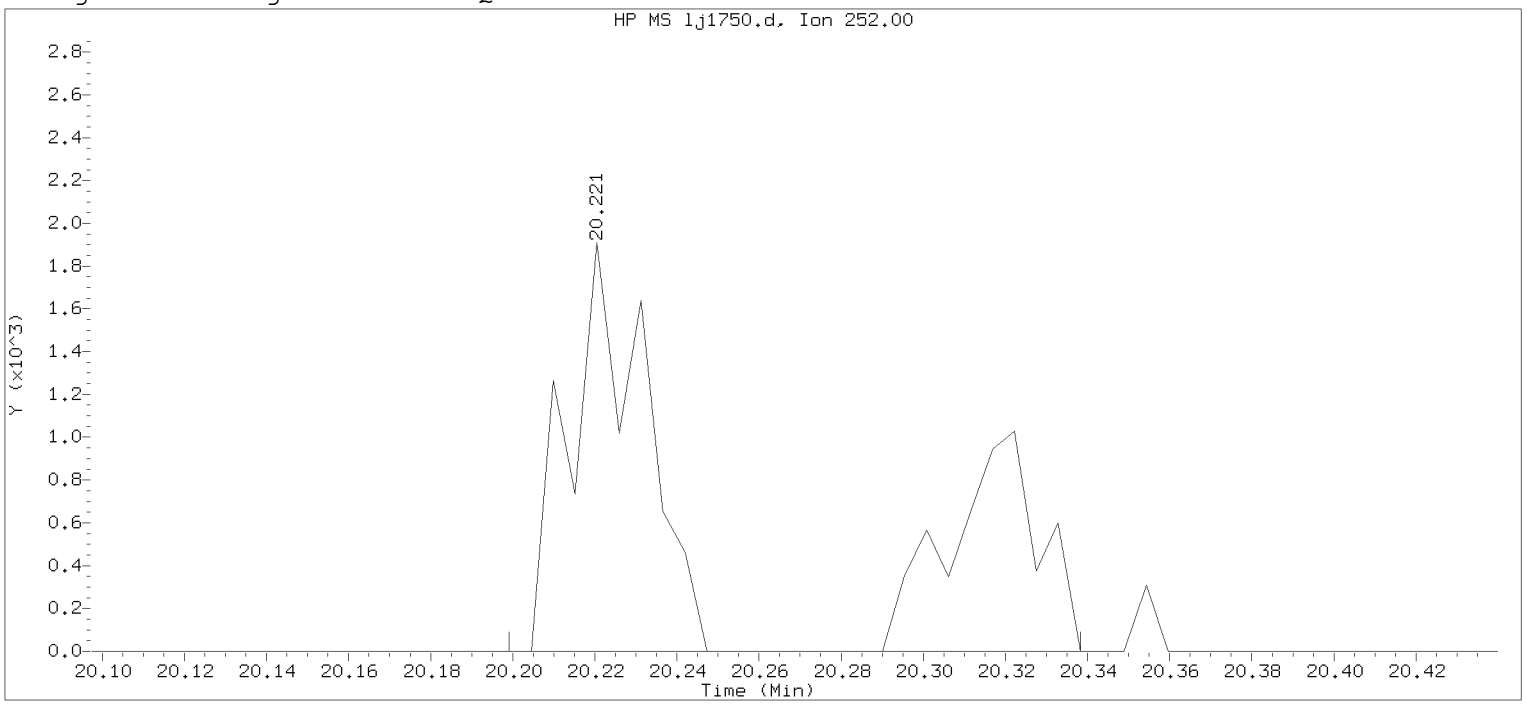
Analyst responsible for change: Digitally signed by Kira N. Beck
on 10/30/2018 at 13:32.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:29.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



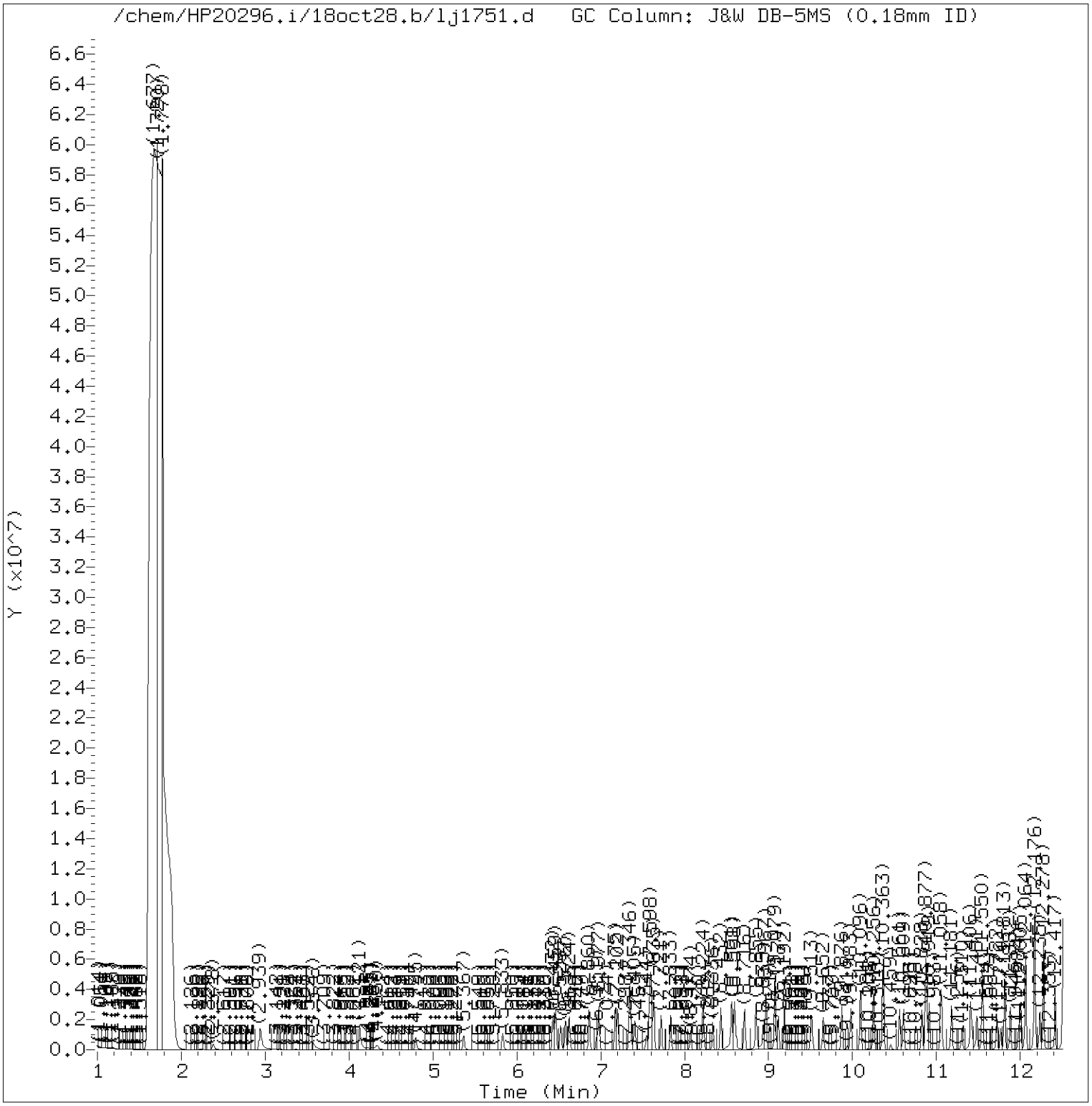
Data File: /chem/HP20296.i/18oct28.b/lj1750.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 04:47 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

Sample Name: SSTD0.025 Lab Sample ID: PAHMDL2648

Compound Number	: 216		
Compound Name	: Benzo(a)pyrene		
Scan Number	: 3596		
Retention Time (minutes)	: 20.221		
Quant Ion	: 252.00		
Area	: 4026		
On-column Amount (ng/ul)	: 0.0308		
Integration start scan	: 3591	Integration stop scan:	3617
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 10/30/2018 at 13:32.
Target 3.5 esignature user: bkc25363



Total Ion Chromatogram (TIC)

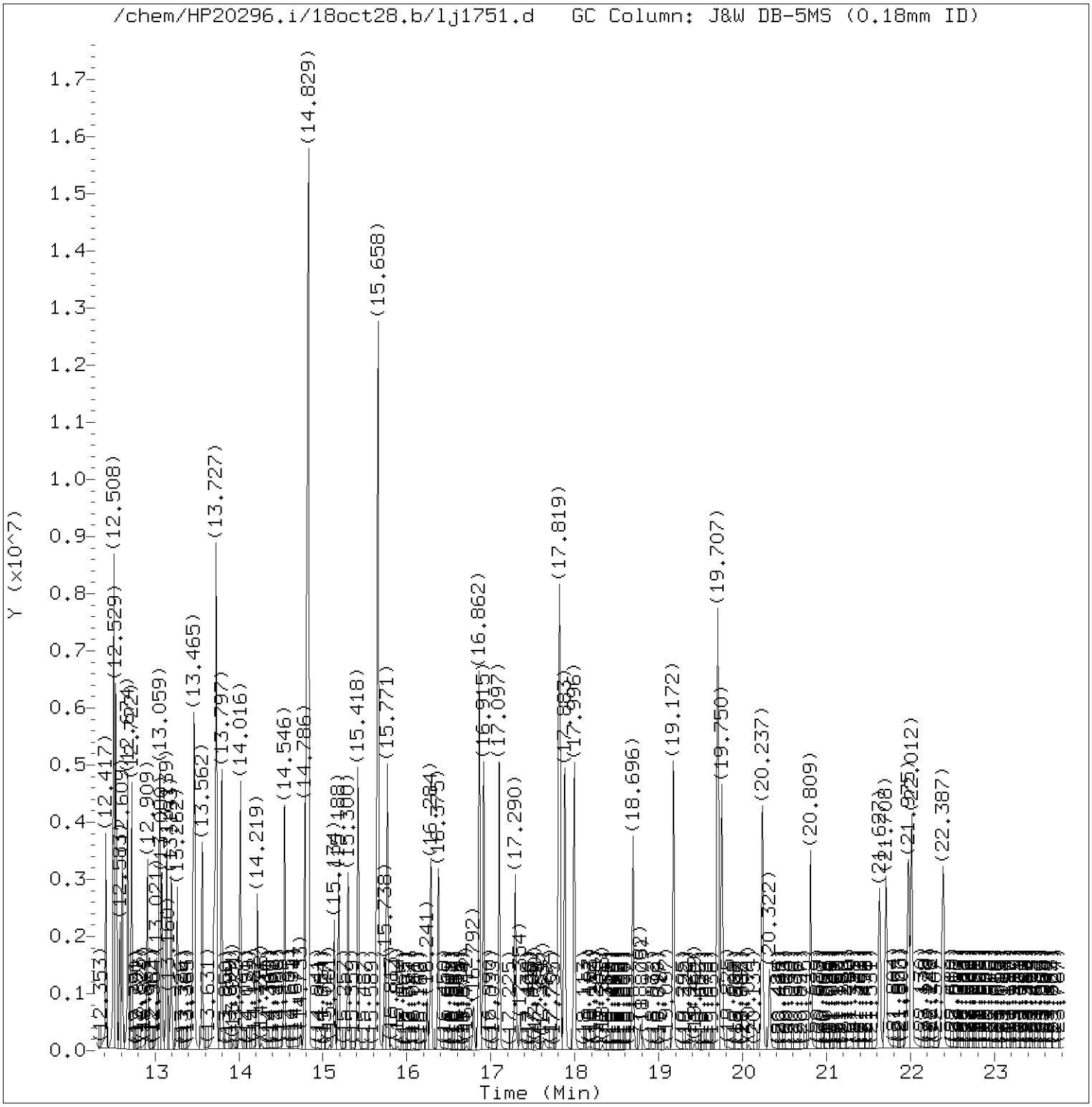
Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.378	88	293624	11.130
5) N-Nitrosodimethylamine	(1)	2.928	74	547489	13.805
6) Pyridine	(1)	2.945	79	901533	13.361
8) 2-Picoline	(1)	4.121	93	922941	13.103
9) N-Nitrosomethylethylamine	(1)	4.335	88	339171	11.791
10) Methyl methanesulfonate	(1)	4.795	80	467324	12.704
14) N-Nitrosodiethylamine	(1)	5.367	102	332953	13.394
43) Total Cresols	(1)	5.660	100	1489090	27.213
16) Ethyl methanesulfonate	(1)	5.833	109	340677	12.068
19) Phenol	(1)	6.432	94	1178920	13.642
20) Aniline	(1)	6.459	93	1308234	12.882
23) bis(2-Chloroethyl)ether	(1)	6.576	93	875330	13.463
24) 2-Chlorophenol	(1)	6.624	128	711106	13.971
25) 1,3-Dichlorobenzene	(1)	6.860	146	786034	13.773
26)*1,4-Dichlorobenzene-d4	(1)	6.951	152	176361	5.000
27) 1,4-Dichlorobenzene	(1)	6.977	146	812231	14.164
28) Benzyl alcohol	(1)	7.175	108	528363	15.125
29) 1,2-Dichlorobenzene	(1)	7.202	146	758169	13.604
31) Indene	(1)	7.341	115	1208135	19.719
32) 2-Methylphenol	(1)	7.352	108	723417	13.512
100) Isosafrole	(3)	7.383	162	551235	13.288
35) bis(2-Chloroisopropyl)ether	(1)	7.405	45	1093012	13.330
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.405	45	1093012	13.330
36) N-Nitrosopyrrolidine	(1)	7.544	100	341721	12.499
37) Acetophenone	(1)	7.582	105	1182959	14.339
38) 4-Methylphenol	(1)	7.598	108	765673	13.701
39) N-Nitroso-di-n-propylamine	(1)	7.603	70	694501	13.923
40) N-Nitrosomorpholine	(1)	7.614	56	448951	12.392
41) o-Toluidine	(1)	7.635	106	1281642	13.726
44) Hexachloroethane	(1)	7.721	117	346656	13.311
46) Nitrobenzene	(2)	7.833	77	993978	13.303
125) 2,4_2,6-Dinitrotoluenes	(3)	8.050	165	742653	29.553
50) N-Nitrosopiperidine	(2)	8.074	114	312665	11.933
52) Isophorone	(2)	8.224	82	1767967	14.022
53) 2-Nitrophenol	(2)	8.336	139	338495	13.794
55) 2,4-Dimethylphenol	(2)	8.432	107	687933	11.462
59) O,O,O-Triethylphosphorothioate	(2)	8.561	198	326776	12.696
57) bis(2-Chloroethoxy)methane	(2)	8.598	93	1124702	13.991
58) Benzoic acid	(2)	8.619	105	1012431M	25.873
62) 2,4-Dichlorophenol	(2)	8.716	162	583920	13.560

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

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
151) Diallate trans/cis	(4)	8.775	86	694091	11.933
65) 1,2,4-Trichlorobenzene	(2)	8.855	180	666652	13.415
68)*Naphthalene-d8	(2)	8.935	136	669662	5.000
69) Naphthalene	(2)	8.967	128	2015877	13.327
70) 4-Chloroaniline	(2)	9.074	127	857974	14.069
71) 2,6-Dichlorophenol	(2)	9.079	162	506725	12.104
72) Hexachloropropene	(2)	9.117	213	422500	13.185
74) Hexachlorobutadiene	(2)	9.192	225	400221	13.664
78) Quinoline	(2)	9.513	129	1114651	12.384
80) N-Nitrosodi-n-butylamine	(2)	9.652	84	539413	10.770
83) 4-Chloro-3-methylphenol	(2)	9.876	107	718920	14.065
85) Safrole	(2)	9.983	162	453117	11.896
86) 2-Methylnaphthalene	(2)	10.096	142	1316352	13.565
87) 1-Methylnaphthalene	(2)	10.256	142	1220065	13.136
88) Hexachlorocyclopentadiene	(3)	10.363	237	793412	27.590
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.374	216	682546	13.674
91) cis-Isosafrole	(3)	10.459	162	63092	1.528
93) 2,4,6-Trichlorophenol	(3)	10.561	196	443497	15.187
95) 2,4,5-Trichlorophenol	(3)	10.609	196	478718	14.868
97) trans-Isosafrole	(3)	10.828	162	488143	11.760
98) 1,1'-Biphenyl	(3)	10.871	154	1639156	14.781
99) 2-Chloronaphthalene	(3)	10.887	162	1374049	13.938
101) 1-Chloronaphthalene	(3)	10.919	162	1040142	12.191
103) Diphenyl ether	(3)	11.053	170	760692	12.299
104) 2-Nitroaniline	(3)	11.069	138	382415	15.423
108) 1,4-Naphthoquinone	(3)	11.181	158	585979	16.255
109) 1,4-Dinitrobenzene	(3)	11.310	168	193530	14.623
110) Dimethylphthalate	(3)	11.406	163	1433198	13.991
111) 1,3-Dinitrobenzene	(3)	11.427	168	215330	14.300
113) 2,6-Dinitrotoluene	(3)	11.481	165	317629	15.295
114) Acenaphthylene	(3)	11.550	152	1981155	16.118
117) 3-Nitroaniline	(3)	11.722	138	340570	14.306
118)*Acenaphthene-d10	(3)	11.770	164	323070	5.000
119) Acenaphthene	(3)	11.813	153	1323881	13.953
120) 2,4-Dinitrophenol	(3)	11.882	184	369328	29.495
121) 4-Nitrophenol	(3)	11.984	109	282696	14.181
122) Pentachlorobenzene	(3)	12.005	250	496841	12.478
124) Dibenzofuran	(3)	12.064	168	1812458	14.098
123) 2,4-Dinitrotoluene	(3)	12.069	165	425024	14.257
126) 1-Naphthylamine	(3)	12.171	143	2428925	26.199

* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
127) 2,3,4,6-Tetrachlorophenol	(3)	12.235	232	333415	13.184
128) 2-Naphthylamine	(3)	12.278	143	2399151	26.003
129) Diethylphthalate	(3)	12.417	149	1390146	13.790
131) Fluorene	(3)	12.508	166	1411764	13.865
130) Thionazin	(3)	12.508	107	273845	13.857
132) 4-Chlorophenyl-phenylether	(3)	12.529	204	705972	13.535
133) 5-Nitro-o-toluidine	(3)	12.535	152	349146	13.464
134) 4-Nitroaniline	(3)	12.545	138	335013	14.700
135) 4,6-Dinitro-2-methylphenol	(4)	12.583	198	240242	13.543
136) N-Nitrosodiphenylamine	(4)	12.674	169	1228662	14.245
137) NDPA as diphenylamine	(4)	12.674	169	1228662	14.245
139) 1,2-Diphenylhydrazine	(4)	12.722	77	2103464	13.781
142) Tetraethyldithiopyrophosphate	(4)	12.909	97	279389	12.277
144) 1,3,5-Trinitrobenzene	(4)	13.021	213	132930	12.369
145) Diallate (peak 1)	(4)	13.053	86	520633	8.482
146) Phorate	(4)	13.059	75	1088953	13.656
147) Phenacetin	(4)	13.080	108	751058	12.426
148) 4-Bromophenyl-phenylether	(4)	13.139	248	382595	12.725
149) Diallate (peak 2)	(4)	13.160	86	173458M	3.451
150) Hexachlorobenzene	(4)	13.198	284	407766	13.303
152) Dimethoate	(4)	13.262	87	673233	13.317
154) Pentachlorophenol	(4)	13.455	266	290602	14.965
155) 4-Aminobiphenyl	(4)	13.465	169	1335825	17.804
156) Pentachloronitrobenzene	(4)	13.471	237	170207	11.713
157) Pronamide	(4)	13.562	173	613175	13.116
158)*Phenanthrene-d10	(4)	13.695	188	674219	5.000
159) Dinoseb	(4)	13.711	211	301106	11.164
160) Phenanthrene	(4)	13.727	178	2186897	13.549
162) Anthracene	(4)	13.797	178	2182440	13.784
168) Carbazole	(4)	14.016	167	2018398	14.226
169) Methyl parathion	(4)	14.219	109	520548	13.708
170) Di-n-butylphthalate	(4)	14.546	149	2524277	13.755
172) Parathion	(4)	14.781	109	337602	14.121
173) 4-Nitroquinoline-1-oxide	(4)	14.829	190	3068282	176.138
227) Total PAHs	(6)	15.000	100	37977528	253.079
176) Isodrin	(4)	15.188	193	244969	12.888
178) Fluoranthene	(4)	15.418	202	2491292	14.082
179) Benzidine	(5)	15.658	184	6819970	60.723
180)*Pyrene-d10	(5)	15.738	212	704886	5.000
182) Pyrene	(5)	15.771	202	2604448	14.006

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

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icval11
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

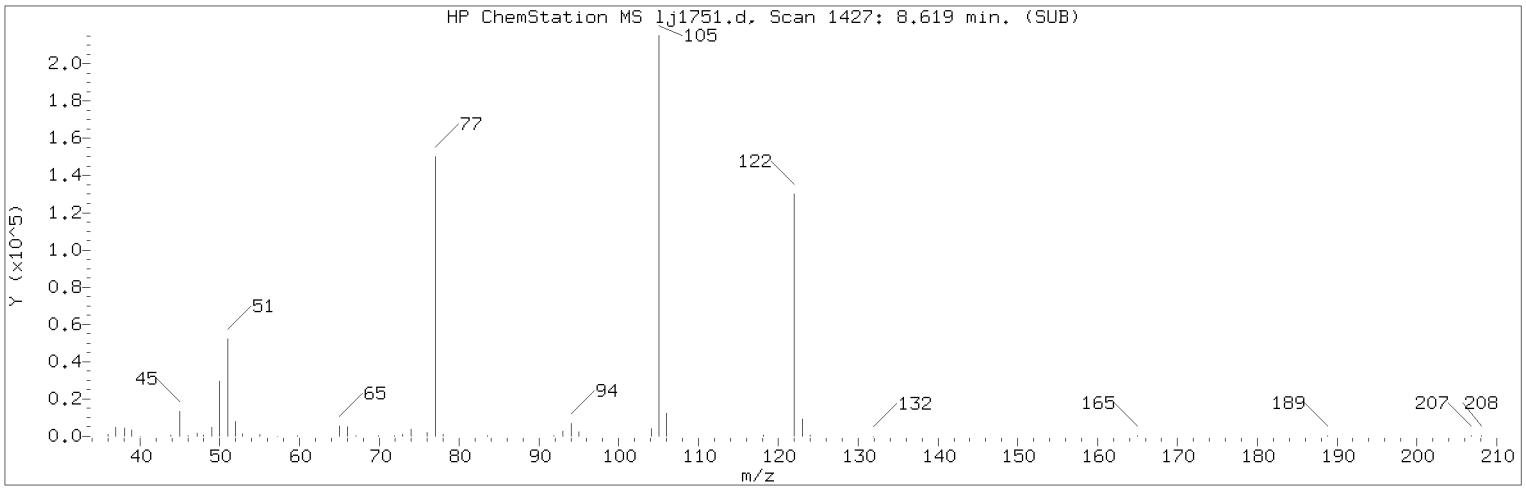
Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
187) p-Dimethylaminoazobenzene	(5)	16.284	225	447598	15.625
190) Chlorobenzilate	(5)	16.375	139	736114	13.395
192) 3,3'-Dimethylbenzidine	(5)	16.862	212	3107740	28.888
193) Butylbenzylphthalate	(5)	16.915	149	1266997	15.344
196) 2-Acetylaminofluorene	(5)	17.290	181	948061	13.930
198) 3,3'-Dichlorobenzidine	(5)	17.803	252	847055	13.617
200) Benzo(a)anthracene	(5)	17.819	228	2576389	15.227
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.824	231	473371	13.613
201) Chrysene	(5)	17.883	228	2500058	14.954
204) bis(2-Ethylhexyl)phthalate	(5)	17.996	149	1757646	14.776
208) 6-Methylchrysene	(5)	18.696	242	1493751	13.252
210) Di-n-octylphthalate	(6)	19.172	149	3185542	14.243
211) Benzo(b)fluoranthene	(6)	19.702	252	2580835	14.174
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.707	256	1133864	15.198
213) Benzo(k)fluoranthene	(6)	19.750	252	2509313	13.673
216) Benzo(a)pyrene	(6)	20.237	252	2355675M	14.476
218)*Perylene-d12	(6)	20.322	264	699232	5.000
220) 3-Methylcholanthrene	(6)	20.809	268	1062077	14.310
222) Dibenz(a,h)acridine	(6)	21.633	279	1622609	12.010
223) Dibenz(a,j)acridine	(6)	21.708	279	1735055	12.190
224) Indeno(1,2,3-cd)pyrene	(6)	21.975	276	2159768M	13.679
225) Dibenz(a,h)anthracene	(6)	22.012	278	2325143	14.149
226) Benzo(g,h,i)perylene	(6)	22.387	276	2236176	13.361

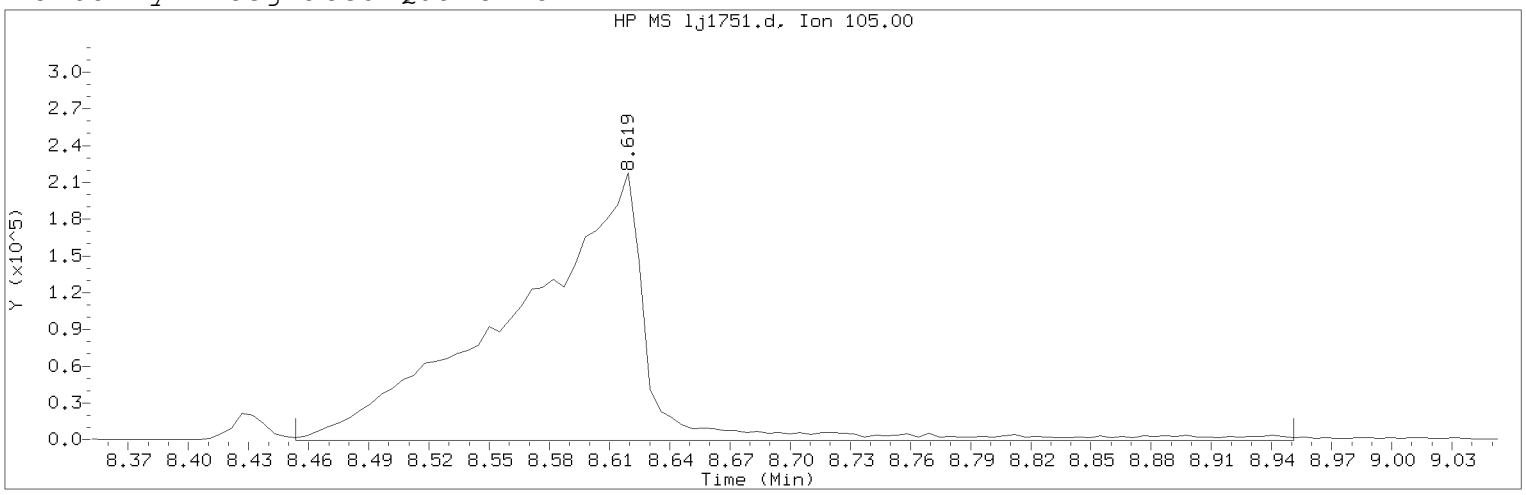
M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

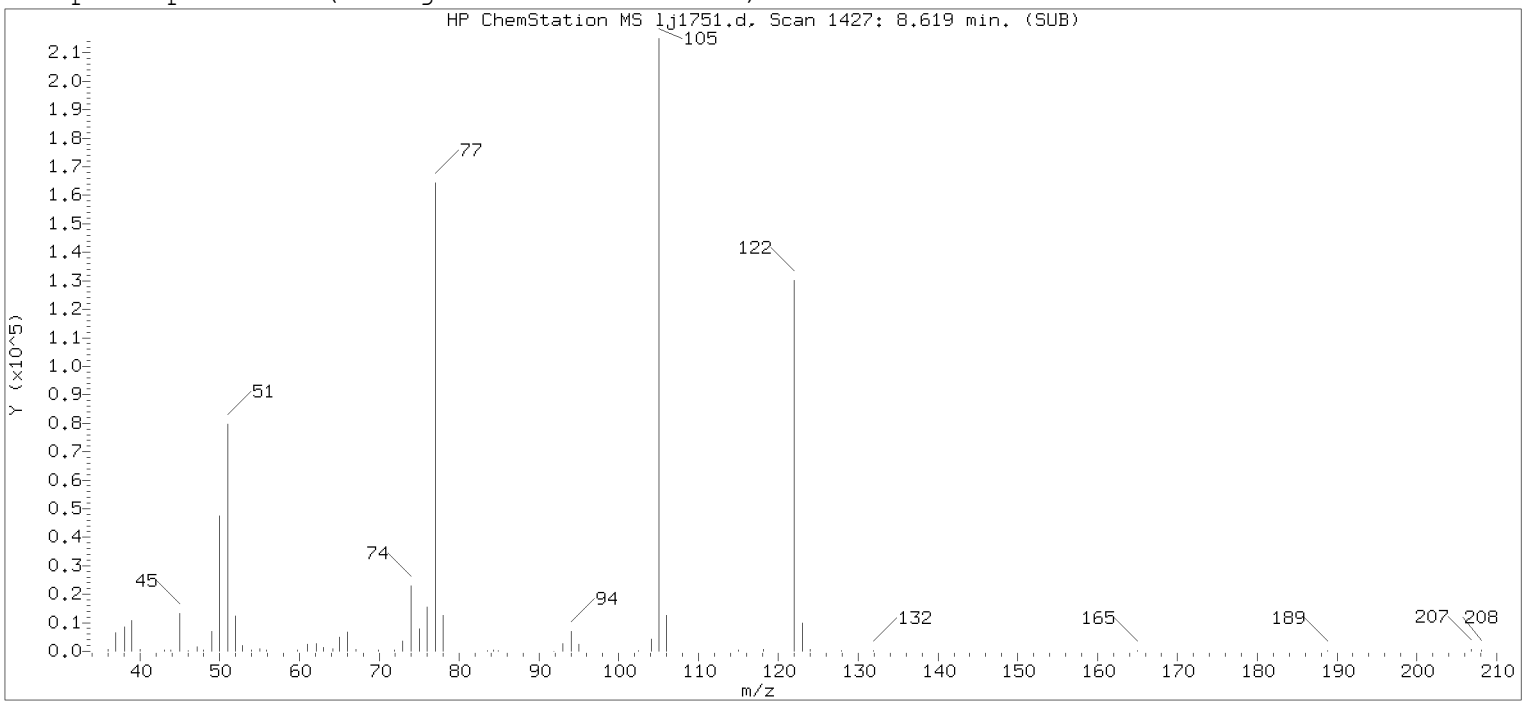
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1427
Retention Time (minutes) : 8.619
Quant Ion : 105.00
Area (flag) : 1012431M
On-Column Amount (ng/ul) : 25.8731
Integration start scan : 1395 Integration stop scan: 1488
Y at integration start : -396 Y at integration end: -396

Reason for manual integration: improper integration

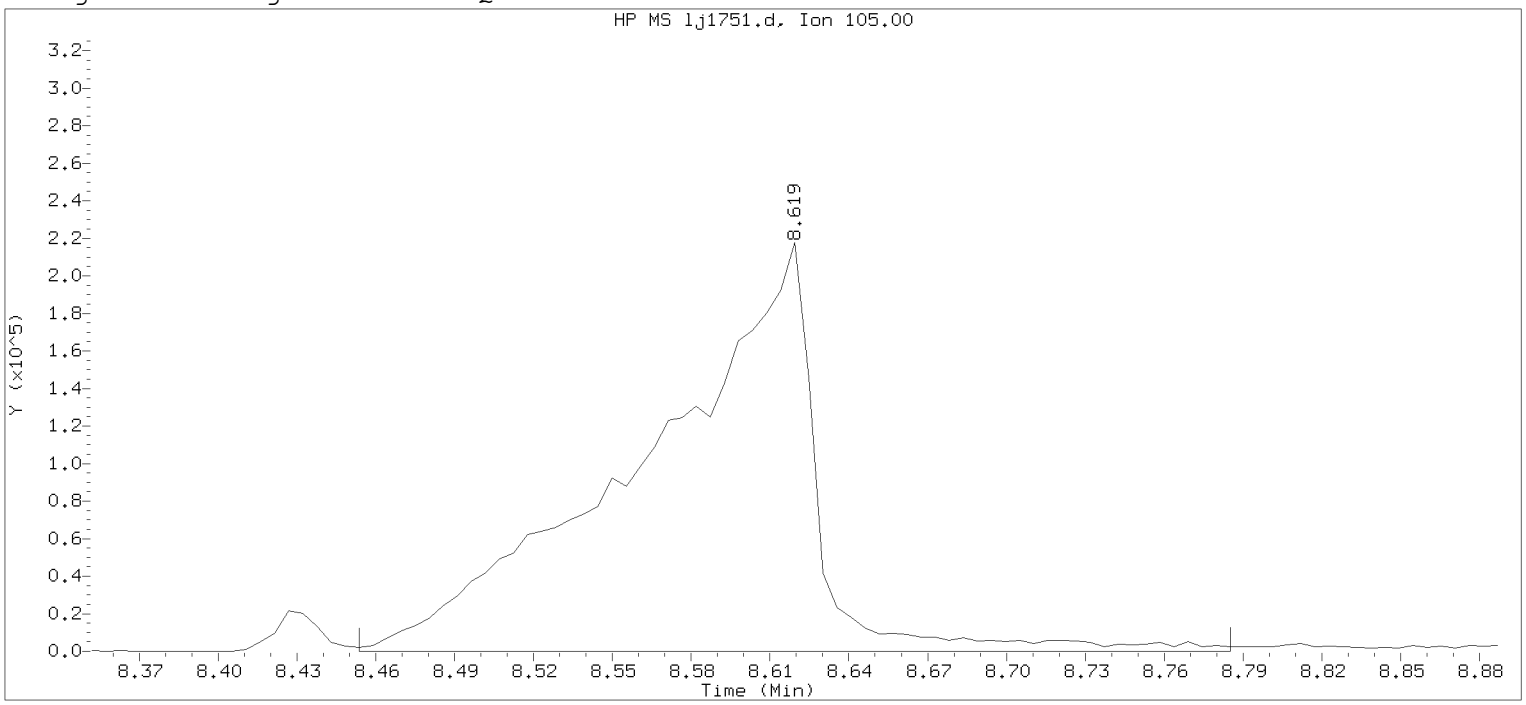
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

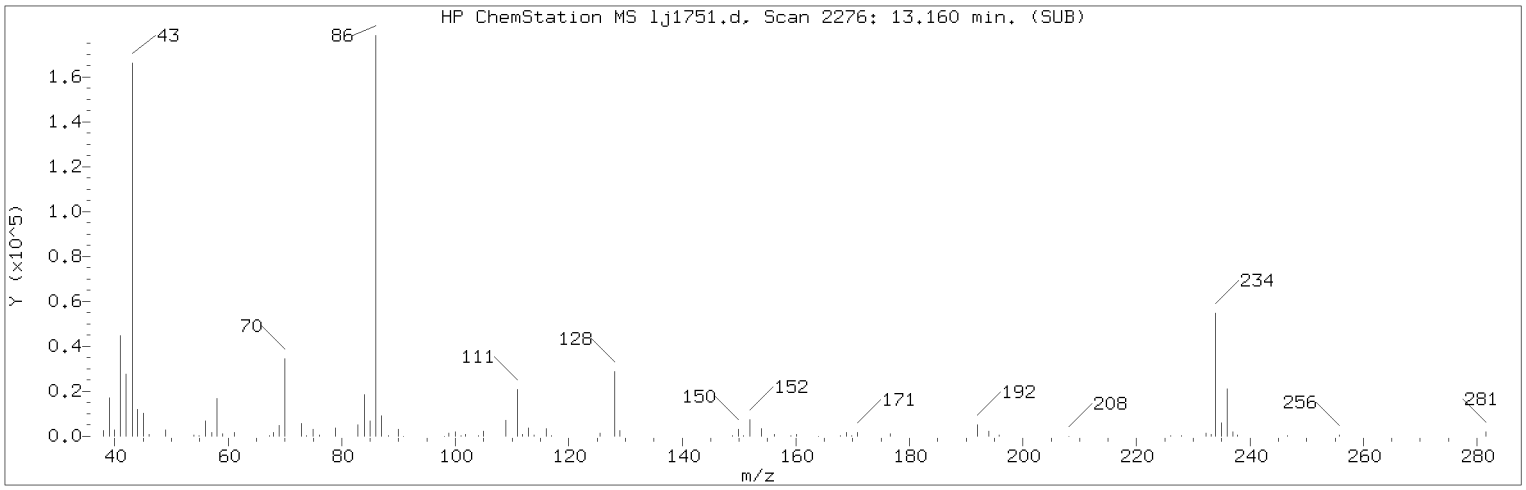
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

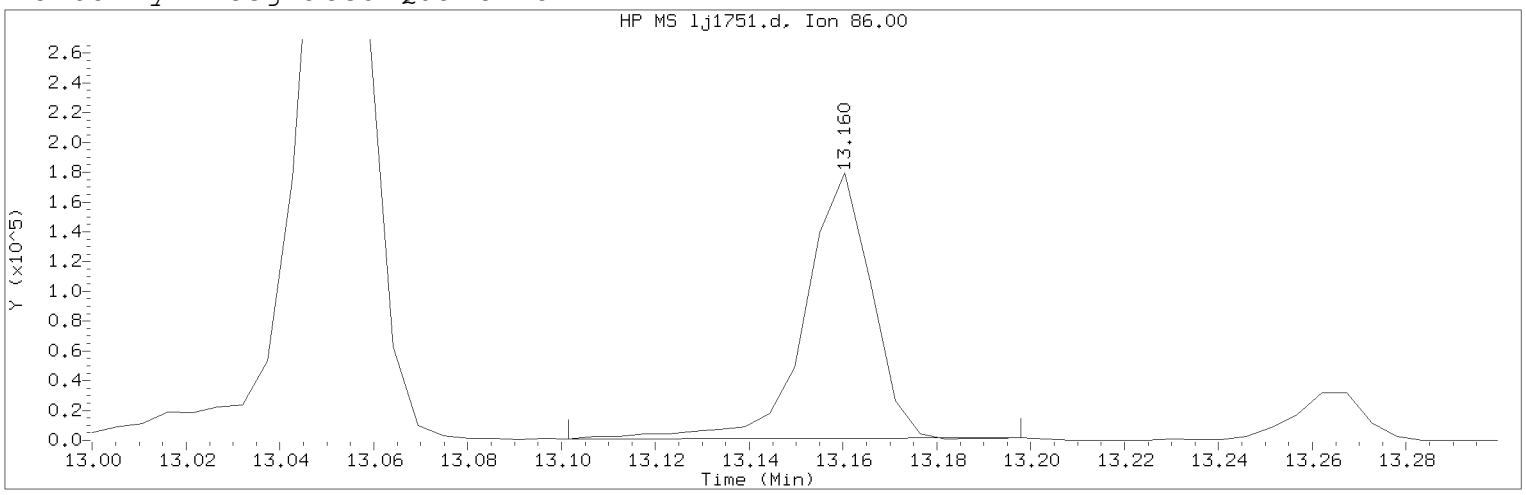
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1427		
Retention Time (minutes)	: 8.619		
Quant Ion	: 105.00		
Area	: 974265		
On-column Amount (ng/ul)	: 31.1927		
Integration start scan	: 1395	Integration stop scan:	1457
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:55.
Target 3.5 esignature user name: ART

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

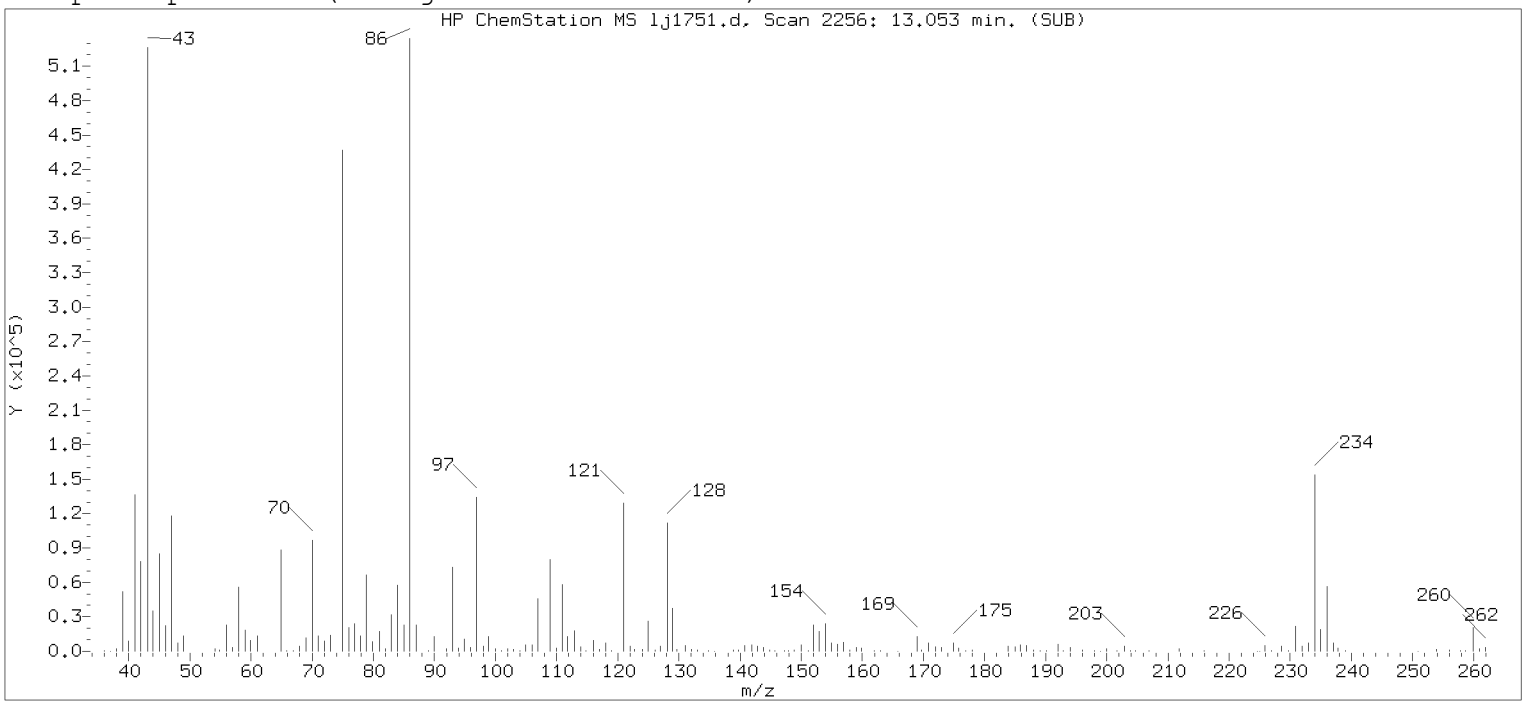
Compound Number : 149
Compound Name : Diallate (peak 2)
Scan Number : 2276
Retention Time (minutes) : 13.160
Quant Ion : 86.00
Area (flag) : 173458M
On-Column Amount (ng/ul) : 3.4514
Integration start scan : 2264 Integration stop scan: 2282
Y at integration start : 1026 Y at integration end: 1557

Reason for manual integration: improper integration

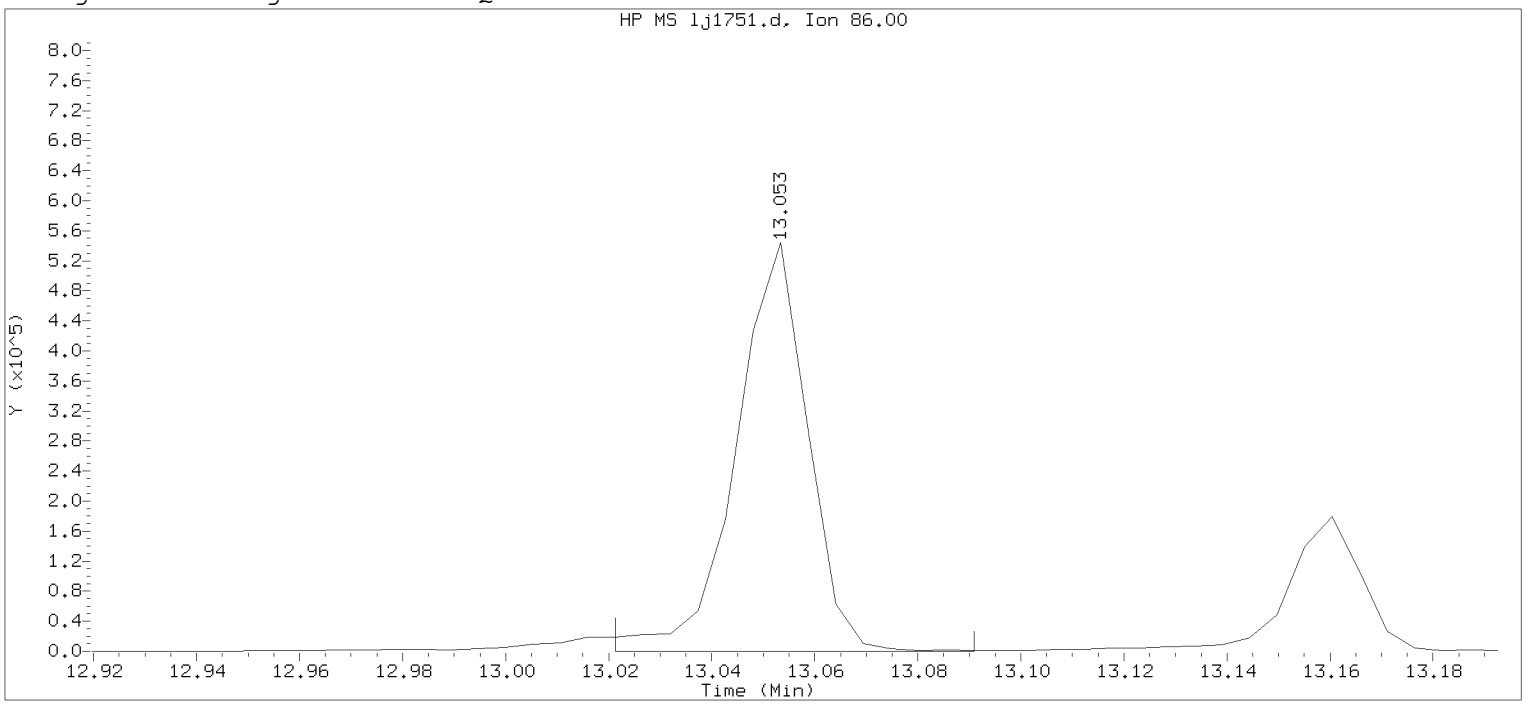
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

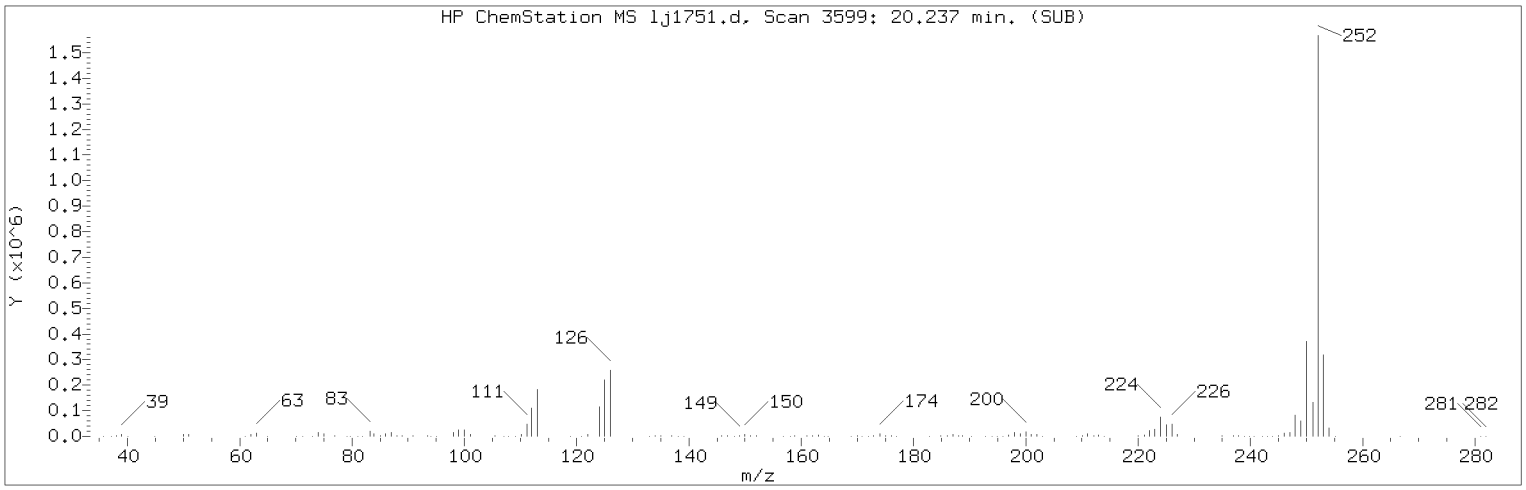
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

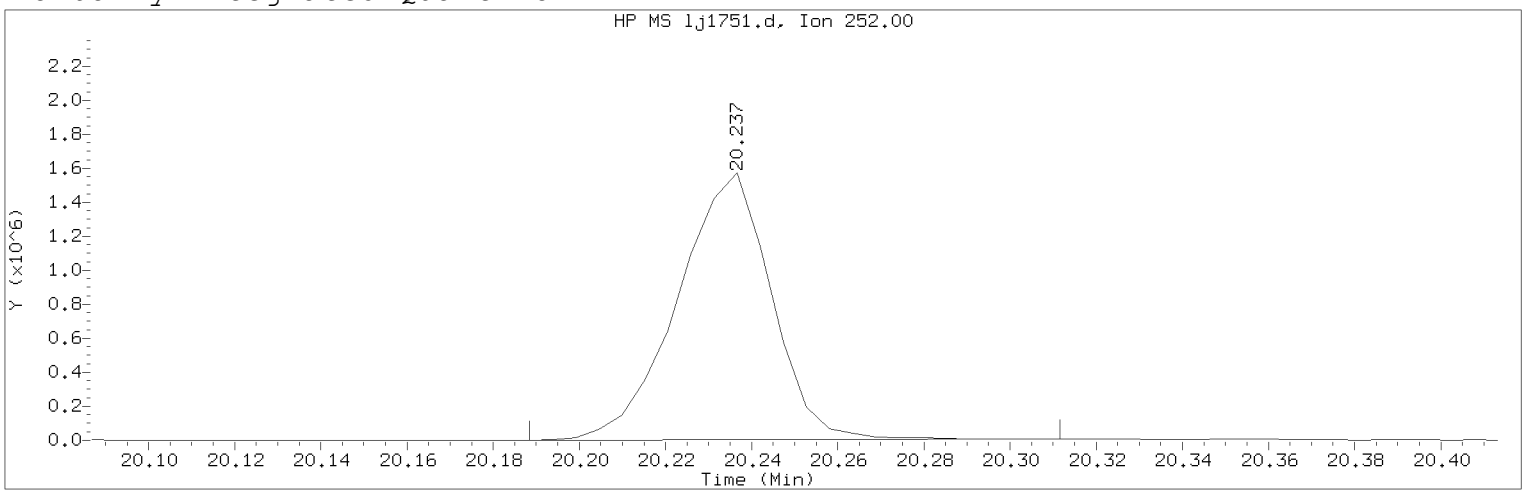
Compound Number	: 149		
Compound Name	: Diallate (peak 2)		
Scan Number	: 2256		
Retention Time (minutes)	: 13.053		
Quant Ion	: 86.00		
Area	: 520633		
On-column Amount (ng/ul)	: 2.0220		
Integration start scan	: 2249	Integration stop scan:	2262
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:55.
Target 3.5 esignature user name: ART

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

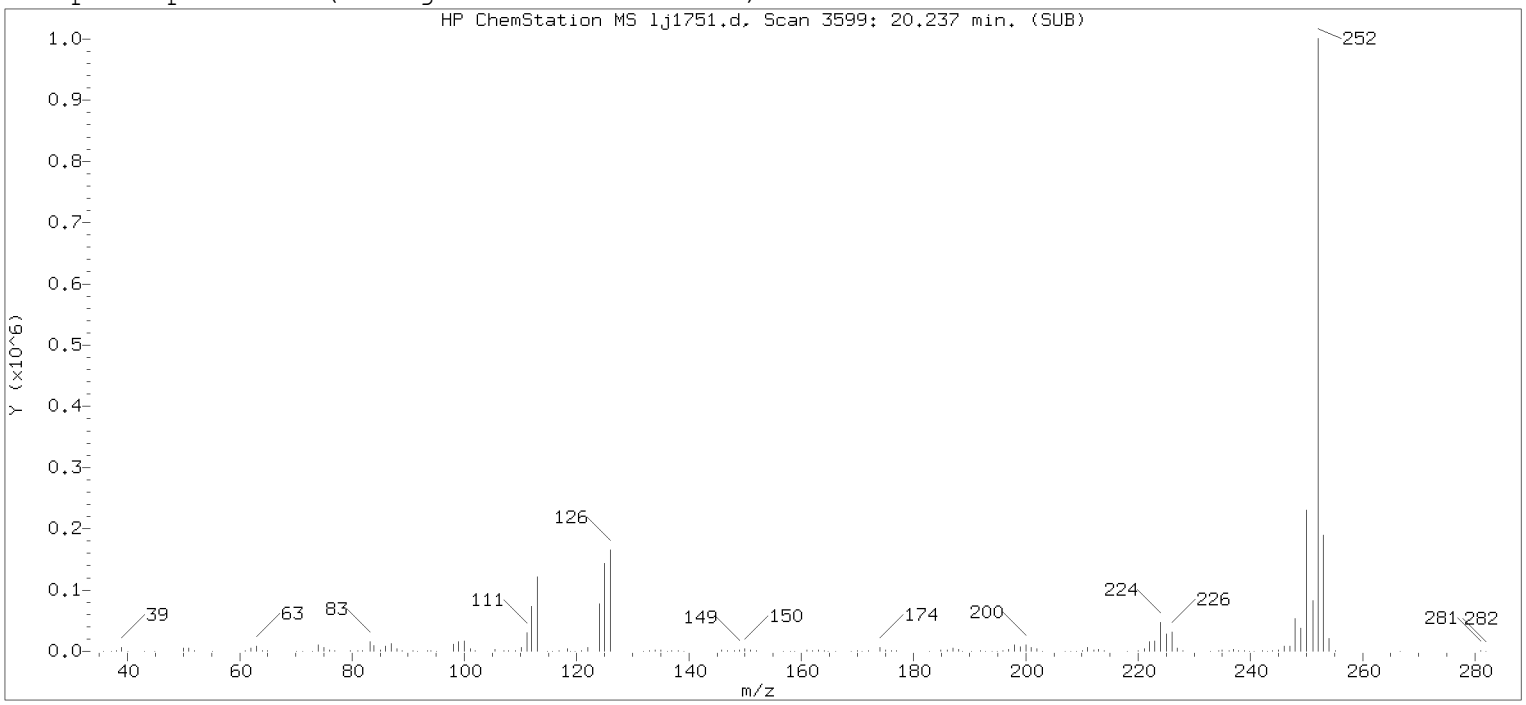
Compound Number : 216
Compound Name : Benzo(a)pyrene
Scan Number : 3599
Retention Time (minutes) : 20.237
Quant Ion : 252.00
Area (flag) : 2355675M
On-Column Amount (ng/ul) : 14.4760
Integration start scan : 3589 Integration stop scan: 3612
Y at integration start : 1527 Y at integration end: 7196

Reason for manual integration: improper integration

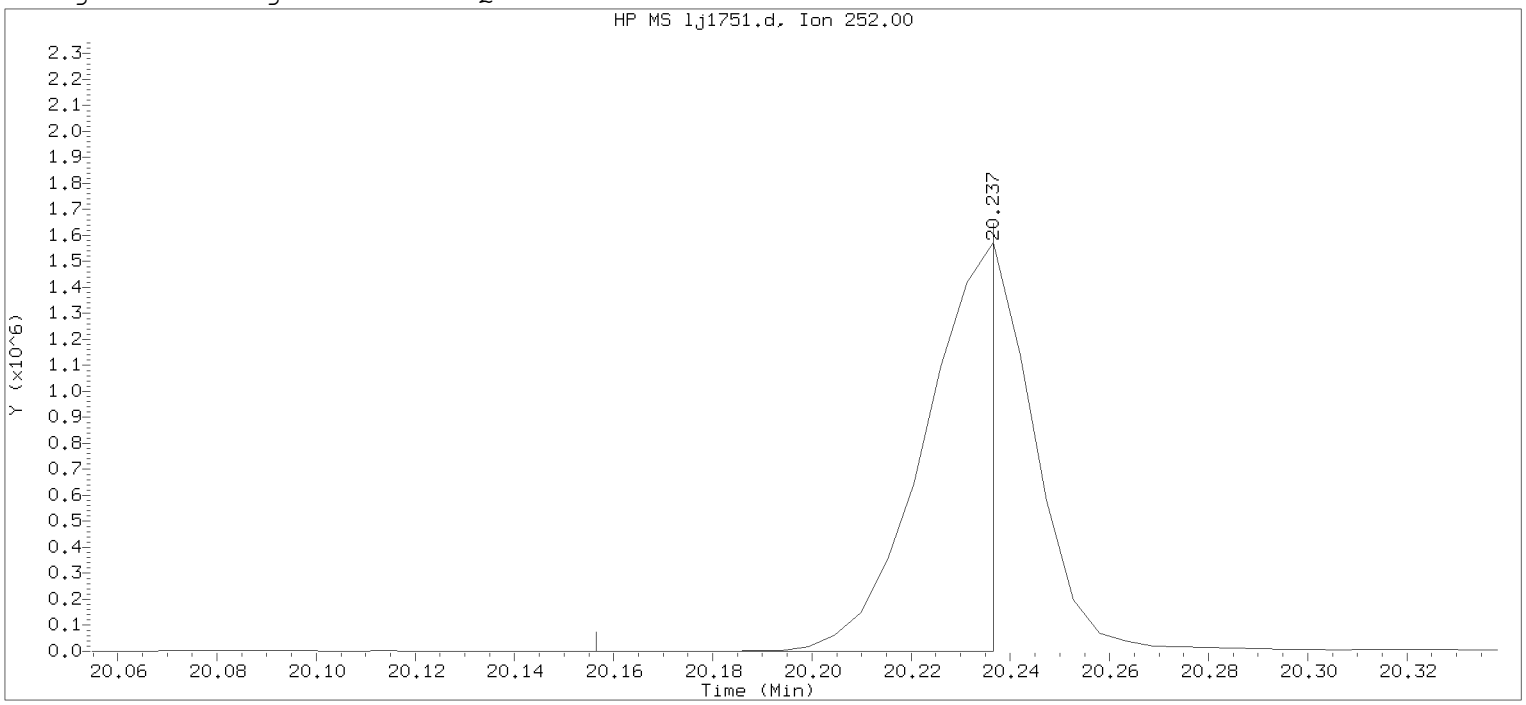
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

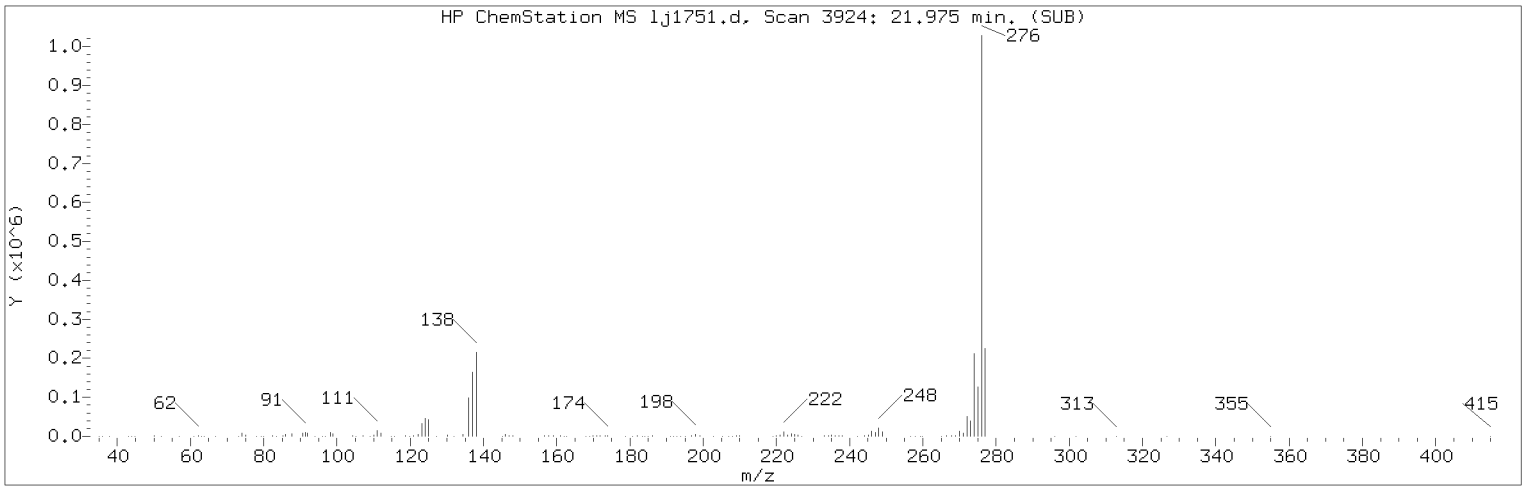
Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

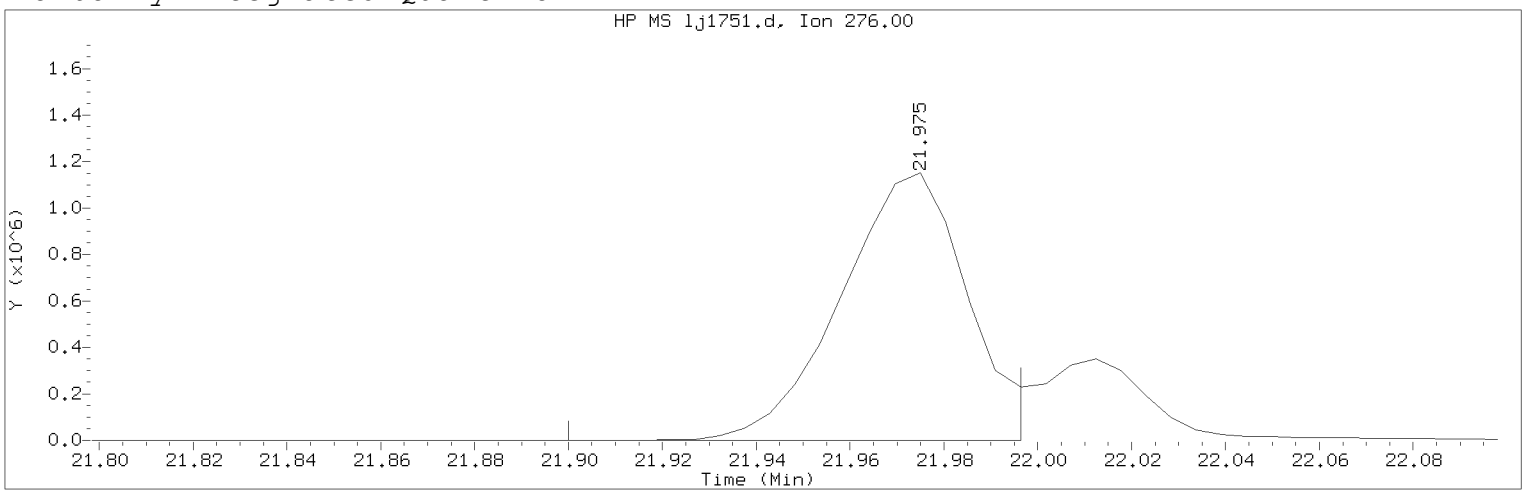
Compound Number	: 216		
Compound Name	: Benzo(a)pyrene		
Scan Number	: 3599		
Retention Time (minutes)	: 20.237		
Quant Ion	: 252.00		
Area	: 1454195		
On-column Amount (ng/ul)	: 8.9073		
Integration start scan	: 3583	Integration stop scan:	3598
Y at integration start	: 276	Y at integration end:	276

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:55.
Target 3.5 esignature user name: 2710

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 19:11
Date, time and analyst ID of latest file update: 29-Oct-2018 19:55 art12405

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

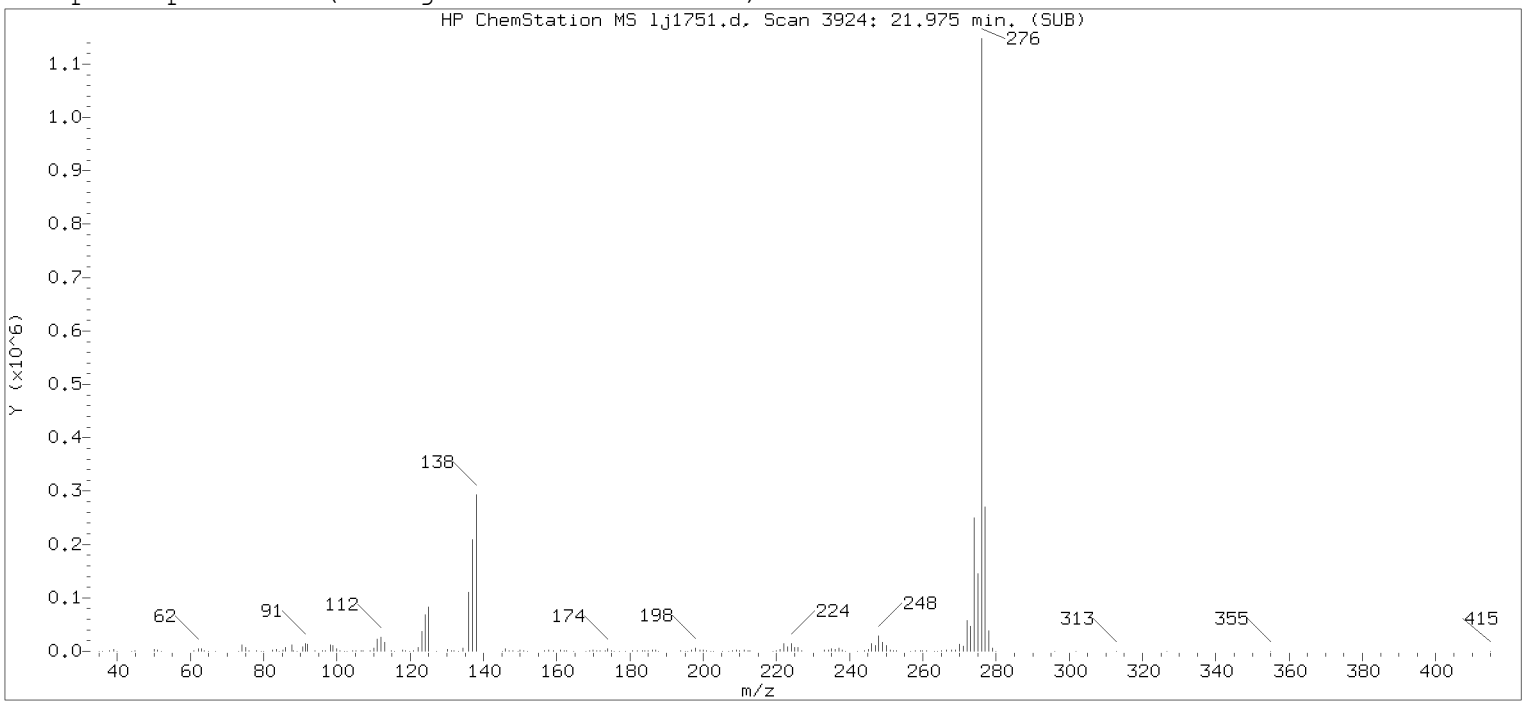
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3924
Retention Time (minutes) : 21.975
Quant Ion : 276.00
Area (flag) : 2159768M
On-Column Amount (ng/ul) : 13.6792
Integration start scan : 3909 Integration stop scan: 3927
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

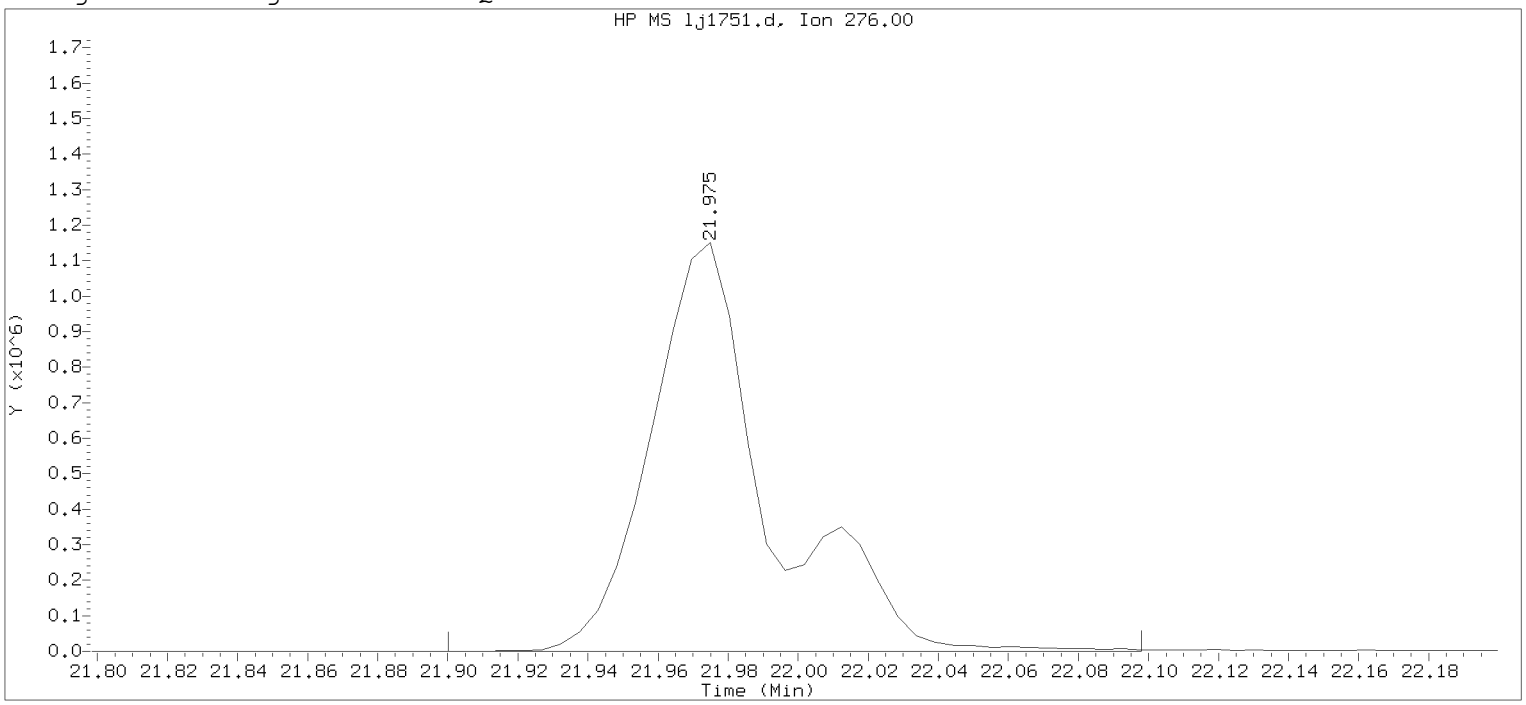
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 10/29/2018 at 19:55.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 10/30/2018 at 13:24.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18oct28.b/lj1751.d Instrument ID: HP20296.i
Injection date and time: 29-OCT-2018 05:15 Analyst ID: whs02991

Method used: /chem/HP20296.i/18oct28.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 29-OCT-2018 15:37
Date, time and analyst ID of latest file update: 29-Oct-2018 15:38 bkc25363

Sample Name: SSTD12.5 Lab Sample ID: RVICV2628

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3924		
Retention Time (minutes)	: 21.975		
Quant Ion	: 276.00		
Area	: 2698988		
On-column Amount (ng/ul)	: 13.9994		
Integration start scan	: 3909	Integration stop scan:	3946
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 10/29/2018 at 19:55.
Target 3.5 esignature user name: ART

Data File: /chem/HP20296.i/18nov09.b/lk0630.d

Page 1

Date : 09-NOV-2018 06:56

Client ID: DFTPP12.5

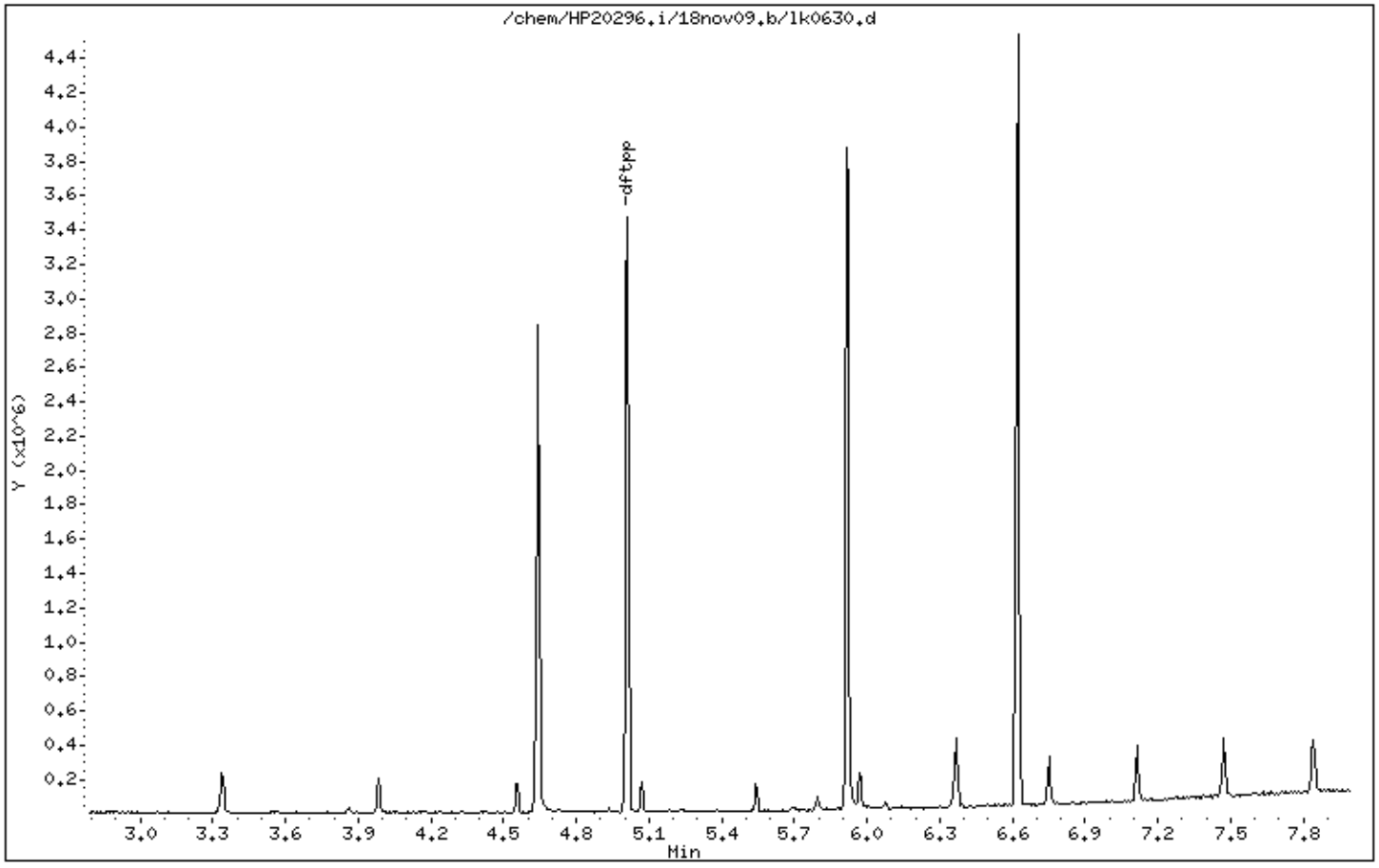
Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: knb25316

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Kira N. Beck on 11/12/2018 at 11:17.
Target 3.5 esignature user ID: knb25316

Data File: /chem/HP20296.i/18nov09.b/lk0630.d

Date : 09-NOV-2018 06:56

Client ID: DFTPP12.5

Instrument: HP20296.i

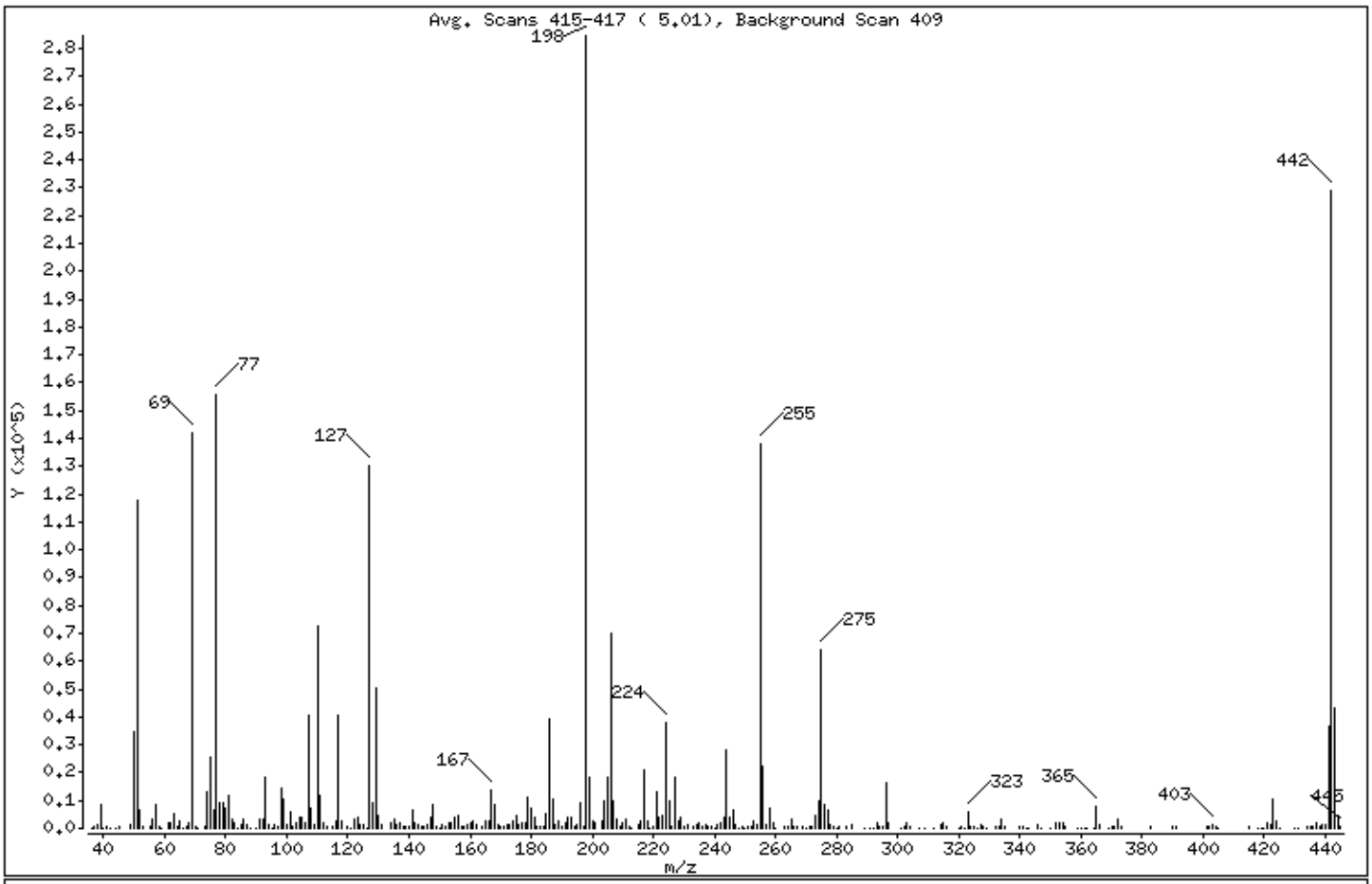
Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: knb25316

Column phase: DB-5MS

Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	41.45
68	Less than 2.00% of mass 69	0.78 (1.57)
69	Mass 69 relative abundance	49.82
70	Less than 2.00% of mass 69	0.24 (0.48)
127	10.00 - 80.00% of mass 198	45.65
197	Less than 2.00% of mass 198	0.16
199	5.00 - 9.00% of mass 198	6.37
275	10.00 - 60.00% of mass 198	22.62
365	Greater than 1.00% of mass 198	2.81
441	0.01 - 24.00% of mass 442	12.88 (16.00)
442	50.00 - 99.99% of mass 198	80.48
443	15.00 - 24.00% of mass 442	15.15 (18.83)

Digitally signed by Kira N. Beck on 11/12/2018 at 11:17.
Target 3.5 esignature user ID: knb25316

Date : 09-NOV-2018 06:56

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: knb25316

Column phase: DB-5MS Column diameter: 0.18

Data File: lk0630.d
Spectrum: Avg. Scans 415-417 (5.01), Background Scan 409
Location of Maximum: 198.00
Number of points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	13	125.00	1294	208.00	2989	301.00	167
37.00	504	126.00	257	209.00	824	302.00	628
38.00	1297	127.00	129904	210.00	1935	303.00	1969
39.00	8224	128.00	9129	211.00	2948	304.00	554
40.00	211	129.00	50440	212.00	818	307.00	113
41.00	564	130.00	4594	213.00	86	309.00	105
42.00	151	131.00	1105	215.00	1383	312.00	101
44.00	250	134.00	1671	216.00	2379	314.00	1211
45.00	338	135.00	3419	217.00	20744	315.00	1834
49.00	1060	136.00	1501	218.00	2407	316.00	934
50.00	34992	137.00	2026	219.00	216	320.00	121
51.00	117952	138.00	519	220.00	663	321.00	716
52.00	6792	139.00	330	221.00	13054	322.00	173
53.00	355	140.00	914	222.00	3927	323.00	5661
55.00	563	141.00	6776	223.00	4809	324.00	847
56.00	3567	142.00	1816	224.00	38264	325.00	391
57.00	8379	143.00	1249	225.00	9767	326.00	265
58.00	531	144.00	387	226.00	849	327.00	1235
59.00	228	145.00	345	227.00	18448	328.00	640
61.00	2197	146.00	1526	228.00	2554	329.00	142
62.00	2247	147.00	4094	229.00	3609	332.00	649
63.00	5326	148.00	8541	230.00	598	333.00	616
64.00	640	149.00	841	231.00	1119	334.00	3351
65.00	2296	150.00	260	233.00	468	335.00	774
66.00	265	151.00	1375	234.00	1209	340.00	417
67.00	623	152.00	776	235.00	1719	341.00	472
68.00	2231	153.00	1762	236.00	533	342.00	141
69.00	141760	154.00	2094	237.00	1342	343.00	113
70.00	685	155.00	3910	238.00	338	346.00	982
71.00	304	156.00	4544	239.00	502	347.00	113
73.00	848	157.00	876	240.00	297	350.00	118
74.00	13103	158.00	904	241.00	1353	352.00	1816
75.00	25496	159.00	1256	242.00	2019	353.00	1780
76.00	6832	160.00	1954	243.00	3898	354.00	1730
77.00	155712	161.00	2714	244.00	28200	355.00	793

Date : 09-NOV-2018 06:56

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: knb25316

Column phase: DB-5MS Column diameter: 0.18

Data File: lk0630.d
Spectrum: Avg. Scans 415-417 (5.01), Background Scan 409
Location of Maximum: 198.00
Number of points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	9234	162.00	1271	245.00	3675	359.00	253
79.00	9202	164.00	777	246.00	6622	360.00	155
80.00	7043	165.00	2780	247.00	1570	361.00	253
81.00	11792	166.00	2373	248.00	247	362.00	178
82.00	3131	167.00	14031	249.00	816	364.00	299
83.00	2102	168.00	8289	250.00	187	365.00	8011
84.00	148	169.00	1385	251.00	507	366.00	1502
85.00	1515	170.00	550	252.00	615	369.00	174
86.00	3196	171.00	578	253.00	2347	370.00	415
87.00	1596	172.00	1252	254.00	1334	371.00	701
88.00	260	173.00	1286	255.00	137728	372.00	2995
90.00	116	174.00	2870	256.00	22448	373.00	532
91.00	3467	175.00	4459	257.00	1214	383.00	522
92.00	3020	176.00	1319	258.00	7463	390.00	814
93.00	18536	177.00	2151	259.00	1639	391.00	459
94.00	1547	178.00	1685	260.00	139	401.00	339
95.00	257	179.00	11388	263.00	347	402.00	745
96.00	984	180.00	6951	264.00	359	403.00	1496
97.00	761	181.00	3942	265.00	3397	404.00	556
98.00	14315	182.00	840	266.00	528	405.00	146
99.00	10746	183.00	799	267.00	334	415.00	330
100.00	1026	184.00	666	269.00	472	418.00	99
101.00	5614	185.00	4975	270.00	261	419.00	94
102.00	393	186.00	39536	271.00	583	420.00	155
103.00	1795	187.00	10170	272.00	763	421.00	2131
104.00	3732	188.00	1499	273.00	4748	422.00	1104
105.00	3754	189.00	2497	274.00	10064	423.00	10785
106.00	1642	190.00	631	275.00	64384	424.00	2670
107.00	40416	191.00	1941	276.00	8588	425.00	304
108.00	7413	192.00	3852	277.00	6827	430.00	92
109.00	1472	193.00	3668	278.00	1297	431.00	117
110.00	72600	194.00	689	279.00	356	434.00	543
111.00	11521	195.00	983	280.00	220	435.00	798
112.00	1668	196.00	9268	281.00	685	436.00	731
113.00	653	197.00	459	283.00	850	437.00	1944

Date : 09-NOV-2018 06:56

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP; Operator: knb25316

Column phase: DB-5MS Column diameter: 0.18

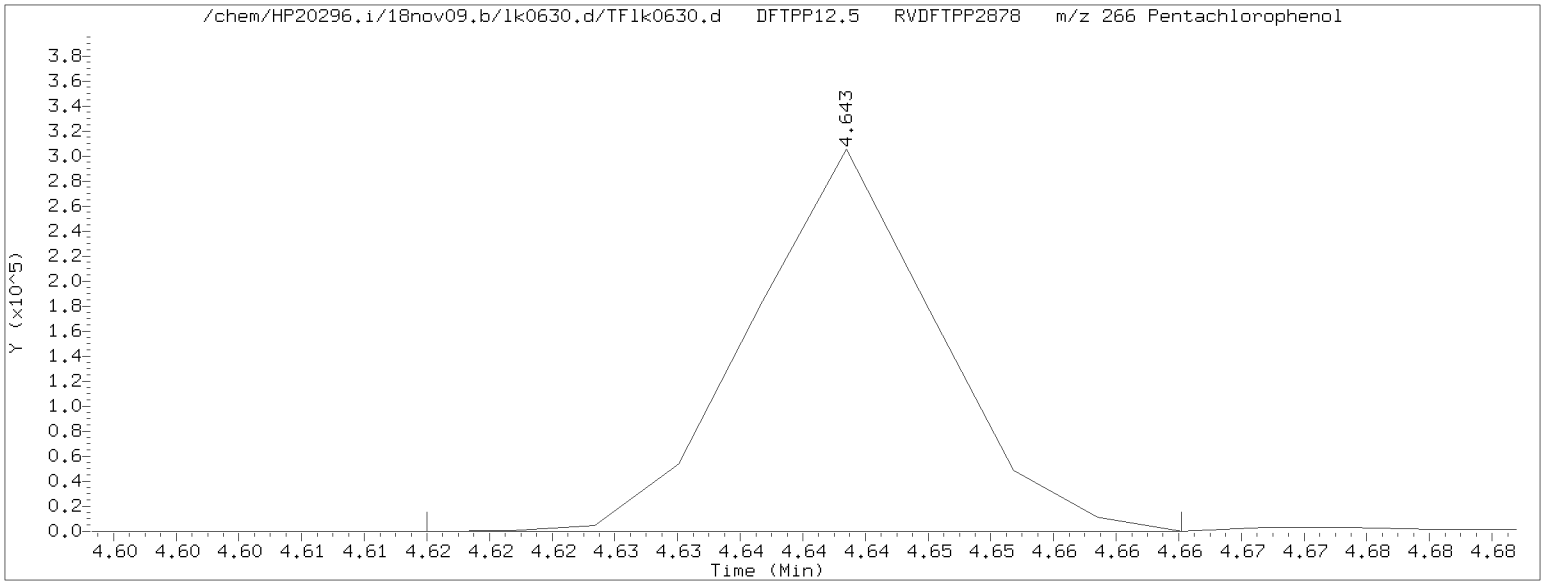
Data File: lk0630.d
Spectrum: Avg. Scans 415-417 (5.01), Background Scan 409
Location of Maximum: 198.00
Number of points: 315

m/z	Y	m/z	Y	m/z	Y	m/z	Y
115.00	400	198.00	284544	285.00	1198	438.00	824
116.00	2290	199.00	18128	289.00	113	439.00	1301
117.00	40752	200.00	2310	291.00	101	440.00	1041
118.00	2840	201.00	2207	292.00	167	441.00	36640
120.00	605	203.00	2299	293.00	1928	442.00	228992
121.00	297	204.00	10084	294.00	817	443.00	43128
122.00	3299	205.00	18496	295.00	862	444.00	4812
123.00	3776	206.00	70088	296.00	16656	445.00	365
124.00	1573	207.00	9686	297.00	1934		

Digitally signed by Kira N. Beck on 11/12/2018 at 11:17.
Target 3.5 esignature user ID: knb25316

Assessment of GC Column Performance and Injection Port Inertness for

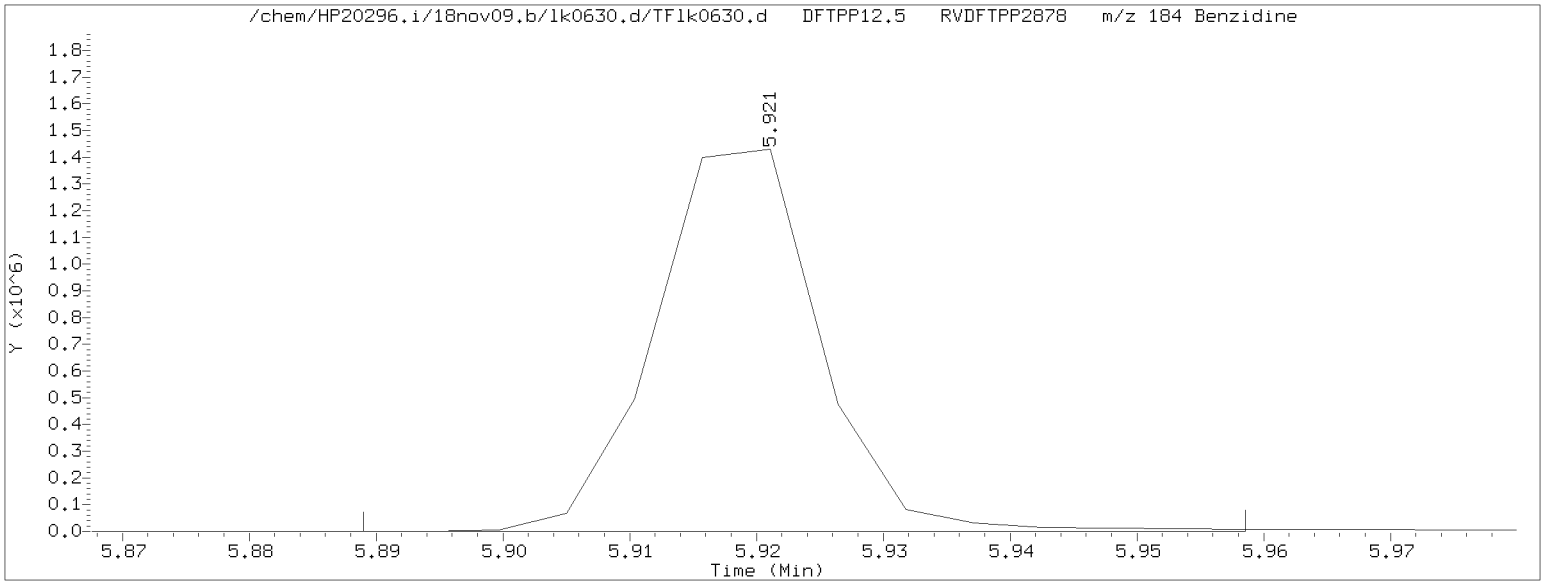
Instrument ID: HP20296.i Injection Date: 09-NOV-2018 06:56 Operator: knb25316



Pentachlorophenol EICP peak height = 305536 EICP peak height at 10% = 30554 Pentachlorophenol EICP area = 251853

Pentachlorophenol EICP peak apex (min.) = 4.643
RT at 10% of front half of EICP (min.) = 4.630 'Front' peak width (min.) = 0.0132166667
RT at 10% of back half of EICP (min.) = 4.656 'Tailing' peak width (min.) = 0.0132833333

PCP tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0132833333}{0.0132166667} = 1.005$



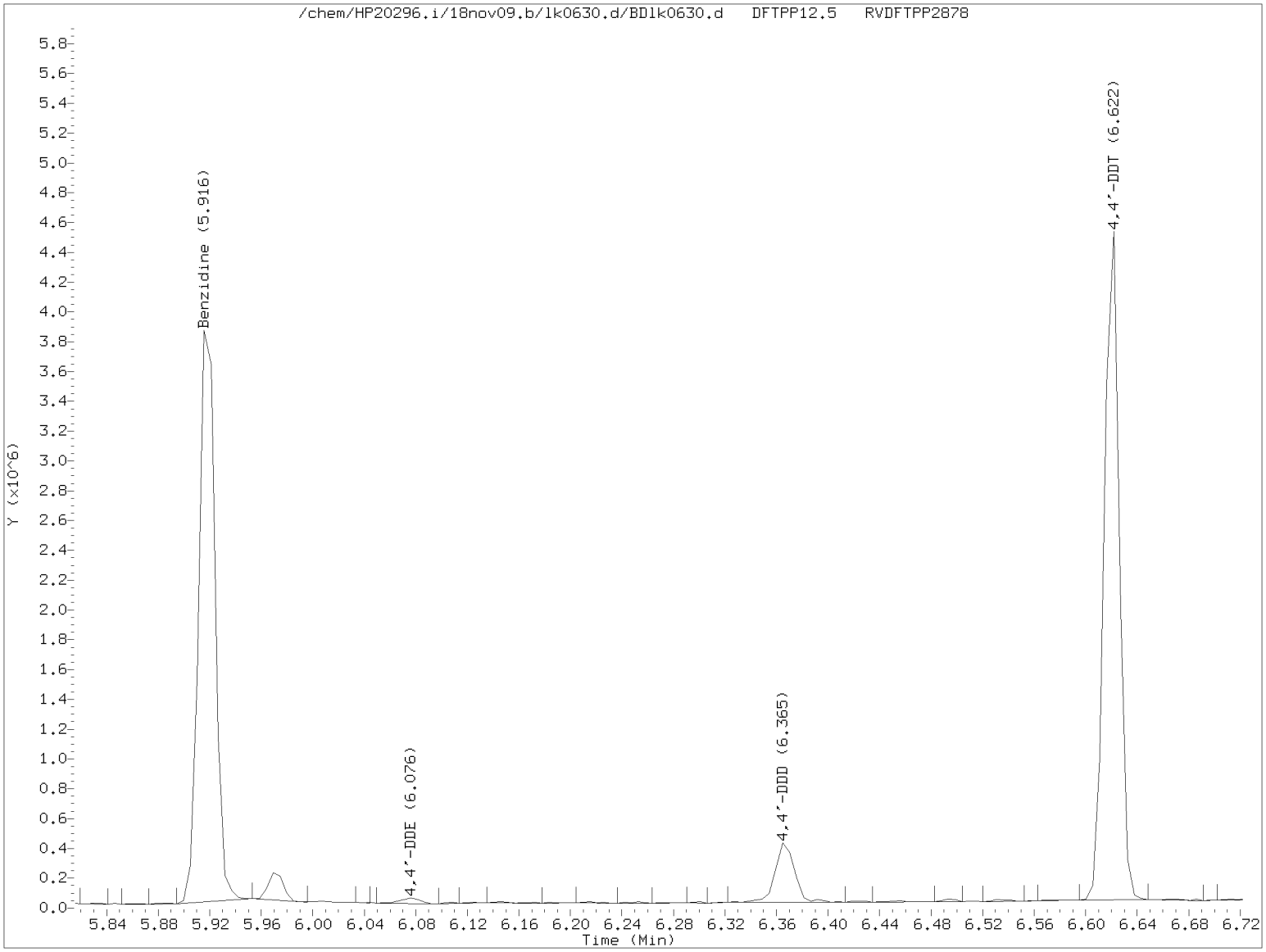
Benzidine EICP peak height = 1431040 EICP peak height at 10% = 143104 Benzidine EICP area = 1292852

Benzidine EICP peak apex (min.) = 5.921
RT at 10% of front half of EICP (min.) = 5.906 'Front' peak width (min.) = 0.0150500000
RT at 10% of back half of EICP (min.) = 5.931 'Tailing' peak width (min.) = 0.0098000000

Benzidine tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0098000000}{0.0150500000} = 0.651$

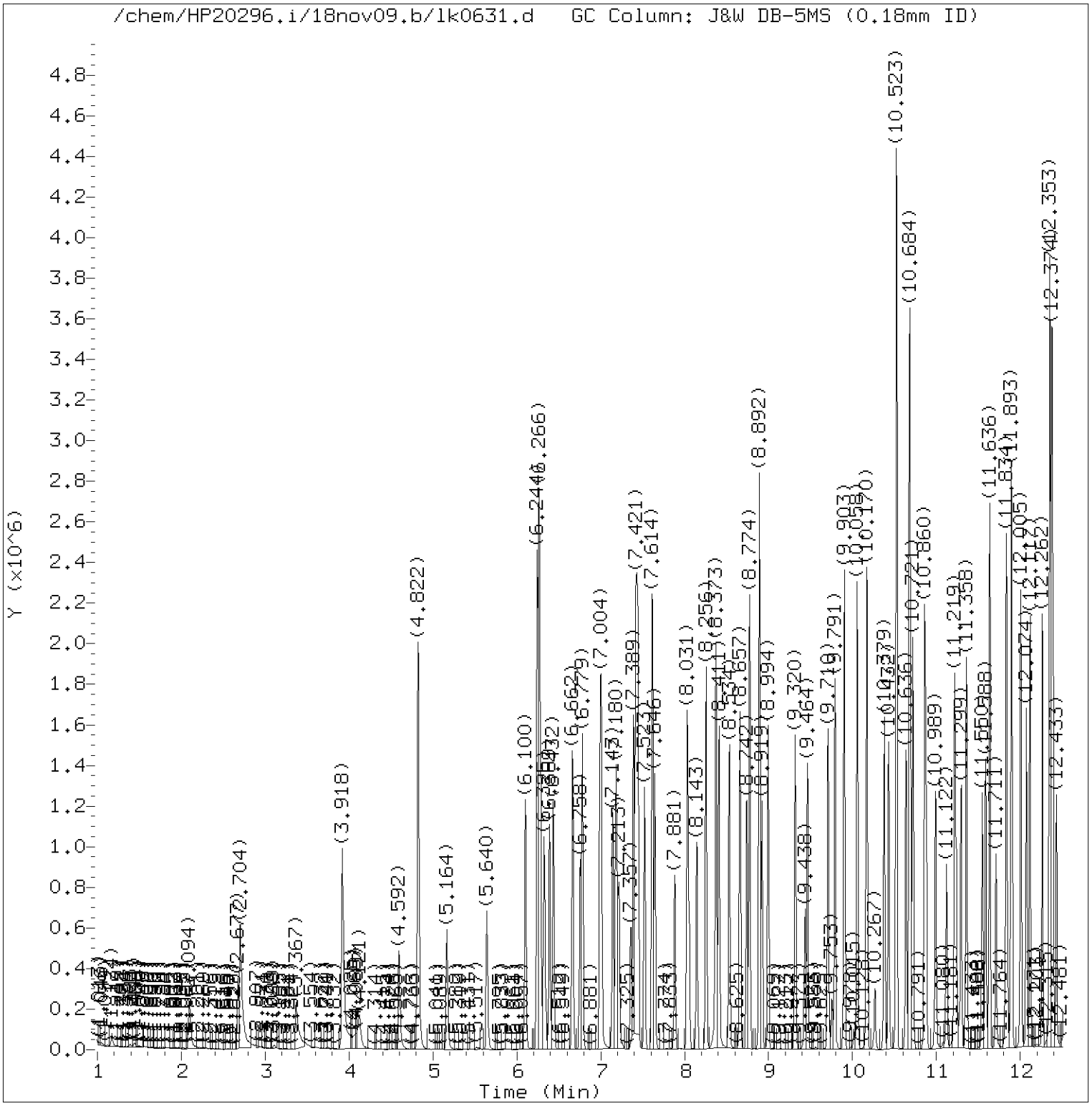
Assessment of GC Column Performance and Injection Port Inertness for

Instrument ID: HP20296.i Injection Date: 09-NOV-2018 06:56 Operator: knb25316



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{35683 + 421012}{35683 + 421012 + 3620005} \times 100 = 11.2$$



Total Ion Chromatogram (TIC)

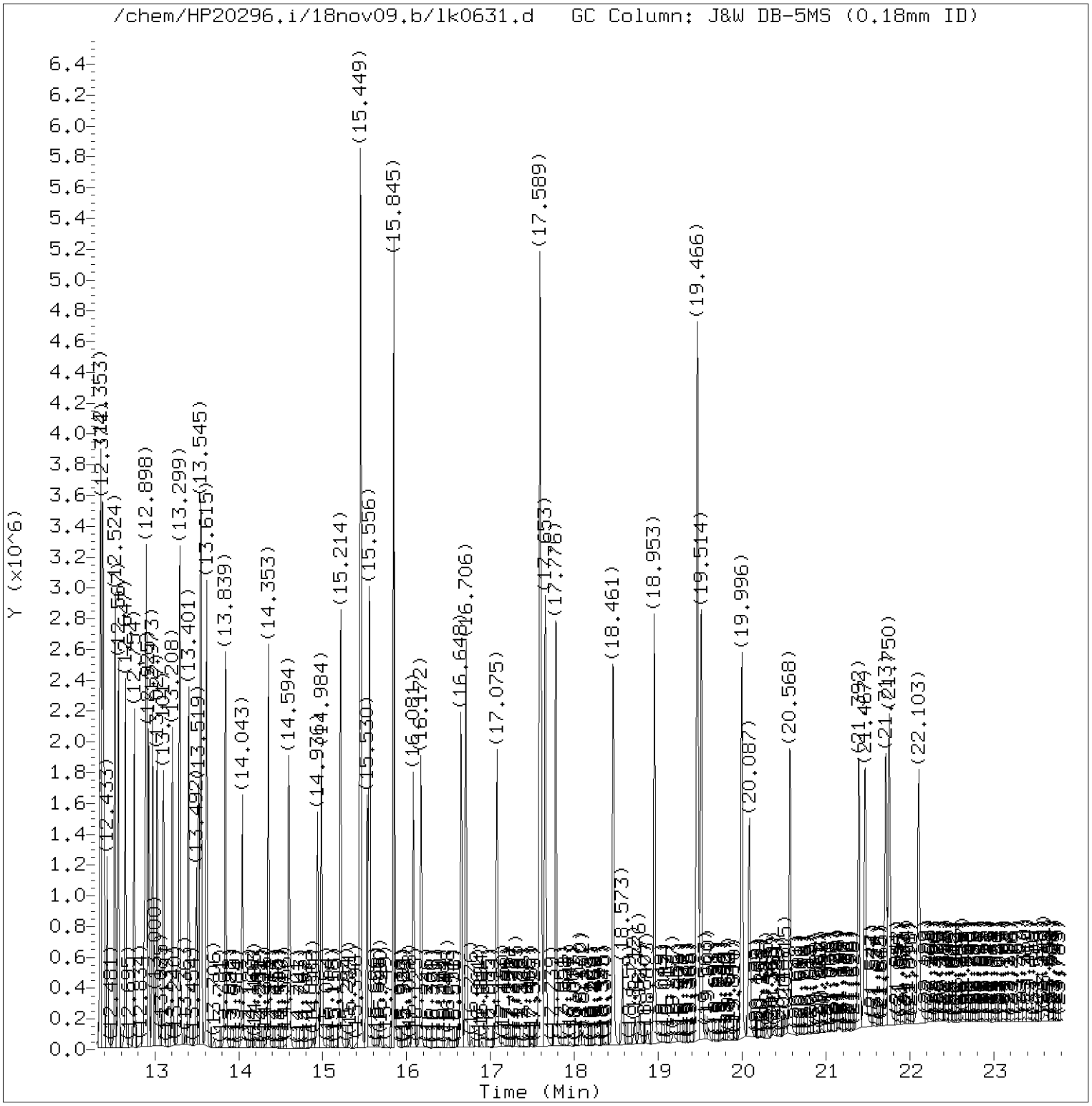
Target Revision 3.5

Data File: /chem/HP20296.i/18nov09.b/lk0631.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 07:11 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 07:52
Date, time and analyst ID of latest file update: 09-Nov-2018 07:52 knb25316

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Digitally signed by Kira N. Beck
on 11/09/2018 at 07:53.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09.b/lk0631.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 07:11 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 07:52
Date, time and analyst ID of latest file update: 09-Nov-2018 07:52 knb25316

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Digitally signed by Kira N. Beck
on 11/09/2018 at 07:53.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09.b/lk0631.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 07:11 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 07:52
Date, time and analyst ID of latest file update: 09-Nov-2018 07:52 knb25316

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.094	88	186322	7.410
5) N-Nitrosodimethylamine	(1)	2.677	74	296323	7.840
6) Pyridine	(1)	2.704	79	478978	7.448
8) 2-Picoline	(1)	3.918	93	503637	7.502
9) N-Nitrosomethylethylamine	(1)	4.121	88	210710M	7.686
10) Methyl methanesulfonate	(1)	4.592	80	262799	7.496
12)$2-Fluorophenol	(1)	4.822	112	807740	15.523
14) N-Nitrosodiethylamine	(1)	5.164	102	199415	8.417
16) Ethyl methanesulfonate	(1)	5.640	109	206645	7.680
43) Total Cresols	(1)			859562	16.471
17) Benzaldehyde	(1)	6.100	77	393553	8.170
18)$Phenol-d6	(1)	6.244	99	1084404	15.443
19) Phenol	(1)	6.260	94	628511	7.631
20) Aniline	(1)	6.266	93	744922	7.696
21) a-methylstyrene	(1)	6.346	118	39669	7.825
23) bis(2-Chloroethyl)ether	(1)	6.389	93	470327	7.590
24) 2-Chlorophenol	(1)	6.432	128	384483	7.926
25) 1,3-Dichlorobenzene	(1)	6.667	146	431756	7.938
26)*1,4-Dichlorobenzene-d4	(1)	6.758	152	168088	5.000
27) 1,4-Dichlorobenzene	(1)	6.779	146	431586	7.896
28) Benzyl alcohol	(1)	6.988	108	265369	7.971
29) 1,2-Dichlorobenzene	(1)	7.004	146	411583	7.749
31) Indene	(1)	7.143	115	462359	7.918
32) 2-Methylphenol	(1)	7.186	108	404361	7.924
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.213	45	578715	7.405
35) bis(2-Chloroisopropyl)ether	(1)	7.213	45	578715	7.405
36) N-Nitrosopyrrolidine	(1)	7.362	100	220543	8.464
100) Isosafrole	(3)			324401	7.656
37) Acetophenone	(1)	7.389	105	591137	7.518
39) N-Nitroso-di-n-propylamine	(1)	7.410	70	374501	7.877
40) N-Nitrosomorpholine	(1)	7.426	56	267273	7.740
38) 4-Methylphenol	(1)	7.426	108	455201	8.546
41) o-Toluidine	(1)	7.443	106	703503	7.905
44) Hexachloroethane	(1)	7.523	117	196629	7.922
45)$Nitrobenzene-d5	(2)	7.614	82	1042184	15.583
46) Nitrobenzene	(2)	7.646	77	551704	7.741
50) N-Nitrosopiperidine	(2)	7.881	114	198963	7.961
52) Isophorone	(2)	8.031	82	907767	7.547
125) 2,4_2,6-Dinitrotoluenes	(3)			425153	16.552
53) 2-Nitrophenol	(2)	8.149	139	190904	8.155

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

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on 11/09/2018 at 07:53.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09.b/lk0631.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 07:11 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 07:52
Date, time and analyst ID of latest file update: 09-Nov-2018 07:52 knb25316

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.256	107	452320	7.901
59) O,O,O-Triethylphosphorothioate	(2)	8.373	198	203982	8.308
58) Benzoic acid	(2)	8.400	105	264911	7.097
57) bis(2-Chloroethoxy)methane	(2)	8.411	93	584825	7.627
62) 2,4-Dichlorophenol	(2)	8.534	162	328256	7.991
65) 1,2,4-Trichlorobenzene	(2)	8.657	180	372978	7.868
68)*Naphthalene-d8	(2)	8.742	136	638793	5.000
69) Naphthalene	(2)	8.774	128	1125417	7.800
151) Diallate trans/cis	(4)			431780	7.219
70) 4-Chloroaniline	(2)	8.887	127	450453	7.743
71) 2,6-Dichlorophenol	(2)	8.892	162	319603	8.003
72) Hexachloropropene	(2)	8.919	213	244922	8.012
74) Hexachlorobutadiene	(2)	8.999	225	227103	8.128
78) Quinoline	(2)	9.320	129	659209	7.678
79) Caprolactam	(2)	9.438	113	106641	8.420
80) N-Nitrosodi-n-butylamine	(2)	9.464	84	338850	7.093
83) 4-Chloro-3-methylphenol	(2)	9.710	107	395478	8.111
85) Safrole	(2)	9.791	162	279505	7.692
86) 2-Methylnaphthalene	(2)	9.903	142	729200	7.877
87) 1-Methylnaphthalene	(2)	10.058	142	693082	7.823
88) Hexachlorocyclopentadiene	(3)	10.165	237	204596	6.964
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.176	216	391700	7.681
91) cis-Isosafrole	(3)	10.272	162	50801	1.204
93) 2,4,6-Trichlorophenol	(3)	10.379	196	247654	8.301
95) 2,4,5-Trichlorophenol	(3)	10.432	196	257943	7.842
96)$2-Fluorobiphenyl	(3)	10.523	172	1683904	15.265
97) trans-Isosafrole	(3)	10.641	162	273600	6.452
98) 1,1'-Biphenyl	(3)	10.678	154	860440	7.595
99) 2-Chloronaphthalene	(3)	10.689	162	744248	7.390
101) 1-Chloronaphthalene	(3)	10.721	162	662386	7.599
103) Diphenyl ether	(3)	10.860	170	487494	7.715
104) 2-Nitroaniline	(3)	10.882	138	215976	8.526
108) 1,4-Naphthoquinone	(3)	10.989	158	262450	7.126
109) 1,4-Dinitrobenzene	(3)	11.122	168	114260	8.451
110) Dimethylphthalate	(3)	11.219	163	809196	7.732
111) 1,3-Dinitrobenzene	(3)	11.240	168	126784	8.242
113) 2,6-Dinitrotoluene	(3)	11.299	165	181230	8.542
114) Acenaphthylene	(3)	11.358	152	990476	7.888
117) 3-Nitroaniline	(3)	11.550	138	185578	7.630
118)*Acenaphthene-d10	(3)	11.588	164	330056	5.000

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$ = Compound is a surrogate standard.

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on 11/09/2018 at 07:53.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09.b/lk0631.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 07:11 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 07:52
Date, time and analyst ID of latest file update: 09-Nov-2018 07:52 knb25316

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.636	153	726342	7.493
120) 2,4-Dinitrophenol	(3)	11.711	184	124748	9.752
122) Pentachlorobenzene	(3)	11.834	250	318778	7.836
121) 4-Nitrophenol	(3)	11.839	109	151240	7.426
124) Dibenzofuran	(3)	11.893	168	1020351	7.769
123) 2,4-Dinitrotoluene	(3)	11.903	165	243923	8.009
126) 1-Naphthylamine	(3)	12.005	143	696087	7.349
127) 2,3,4,6-Tetrachlorophenol	(3)	12.074	232	210215	8.136
128) 2-Naphthylamine	(3)	12.117	143	706544	7.496
129) Diethylphthalate	(3)	12.262	149	778933	7.564
131) Fluorene	(3)	12.347	166	815973	7.844
130) Thionazin	(3)	12.358	107	155376	7.696
132) 4-Chlorophenyl-phenylether	(3)	12.374	204	424553	7.967
133) 5-Nitro-o-toluidine	(3)	12.379	152	218612	8.252
134) 4-Nitroaniline	(3)	12.390	138	193173	8.297
135) 4,6-Dinitro-2-methylphenol	(4)	12.433	198	137853	7.721
137) NDPA as diphenylamine	(4)	12.524	169	644170	7.421
136) N-Nitrosodiphenylamine	(4)	12.524	169	644170	7.421
139) 1,2-Diphenylhydrazine	(4)	12.567	77	1072598	6.982
140)$2,4,6-Tribromophenol	(3)	12.647	330	218132	16.867
142) Tetraethyldithiopyrophosphate	(4)	12.754	97	162504	7.095
144) 1,3,5-Trinitrobenzene	(4)	12.877	213	84148	7.780
145) Diallate (peak 1)	(4)	12.893	86	367792	5.953
146) Phorate	(4)	12.898	75	673101	8.387
147) Phenacetin	(4)	12.925	108	462828	7.608
148) 4-Bromophenyl-phenylether	(4)	12.973	248	235094	7.769
149) Diallate (peak 2)	(4)	12.994	86	63988	1.265
150) Hexachlorobenzene	(4)	13.027	284	234105	7.589
152) Dimethoate	(4)	13.101	87	398272	7.828
153) Atrazine	(4)	13.208	200	217478	7.888
154) Pentachlorophenol	(4)	13.283	266	149265	7.637
155) 4-Aminobiphenyl	(4)	13.299	169	575328	7.619
156) Pentachloronitrobenzene	(4)	13.299	237	108931	7.449
157) Pronamide	(4)	13.401	173	380863	8.095
158)*Phenanthrene-d10	(4)	13.519	188	678546	5.000
159) Dinoseb	(4)	13.540	211	211518	7.792
160) Phenanthrene	(4)	13.551	178	1214923	7.479
162) Anthracene	(4)	13.615	178	1237554	7.766
168) Carbazole	(4)	13.839	167	1108429	7.763
169) Methyl parathion	(4)	14.043	109	296749	7.765

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on 11/09/2018 at 07:53.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09.b/lk0631.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 07:11 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 07:52
Date, time and analyst ID of latest file update: 09-Nov-2018 07:52 knb25316

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.353	149	1399777	7.579
172) Parathion	(4)	14.594	109	187594	7.796
173) 4-Nitroquinoline-1-oxide	(4)	14.610	190	72690	5.434
174) Octachlorostyrene	(4)	14.941	308	90591	7.937
176) Isodrin	(4)	14.984	193	149244	7.802
227) Total PAHs	(6)			20998231	138.242
178) Fluoranthene	(4)	15.214	202	1433447	8.051
179) Benzidine	(5)	15.449	184	2704651	23.235
180)*Pyrene-d10	(5)	15.530	212	730583	5.000
182) Pyrene	(5)	15.556	202	1498545	7.775
184)$Terphenyl-d14	(5)	15.845	244	1865334	15.906
187) p-Dimethylaminoazobenzene	(5)	16.081	225	230458	7.762
190) Chlorobenzilate	(5)	16.172	139	438000	7.690
192) 3,3'-Dimethylbenzidine	(5)	16.648	212	937154	8.405
193) Butylbenzylphthalate	(5)	16.706	149	679029	7.934
196) 2-Acetylaminofluorene	(5)	17.075	181	570385	8.086
198) 3,3'-Dichlorobenzidine	(5)	17.584	252	540118	8.377
200) Benzo(a)anthracene	(5)	17.589	228	1508557	8.602
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.605	231	301068	8.353
201) Chrysene	(5)	17.653	228	1460589	8.429
204) bis(2-Ethylhexyl)phthalate	(5)	17.781	149	971419	7.879
208) 6-Methylchrysene	(5)	18.466	242	967008	8.277
210) Di-n-octylphthalate	(6)	18.953	149	1718026	7.505
211) Benzo(b)fluoranthene	(6)	19.466	252	1474833	7.913
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.472	256	635243	8.318
213) Benzo(k)fluoranthene	(6)	19.514	252	1485667	7.909
216) Benzo(a)pyrene	(6)	19.996	252	1389940	8.344
218)*Perylene-d12	(6)	20.087	264	715742	5.000
220) 3-Methylcholanthrene	(6)	20.573	268	576561	7.589
222) Dibenz(a,h)acridine	(6)	21.392	279	944051	6.827
223) Dibenz(a,j)acridine	(6)	21.467	279	934331	6.413
224) Indeno(1,2,3-cd)pyrene	(6)	21.713	276	1047153M	6.479
225) Dibenz(a,h)anthracene	(6)	21.750	278	1135526	6.751
226) Benzo(g,h,i)perylene	(6)	22.103	276	1031007	6.018

M = Compound was manually integrated.
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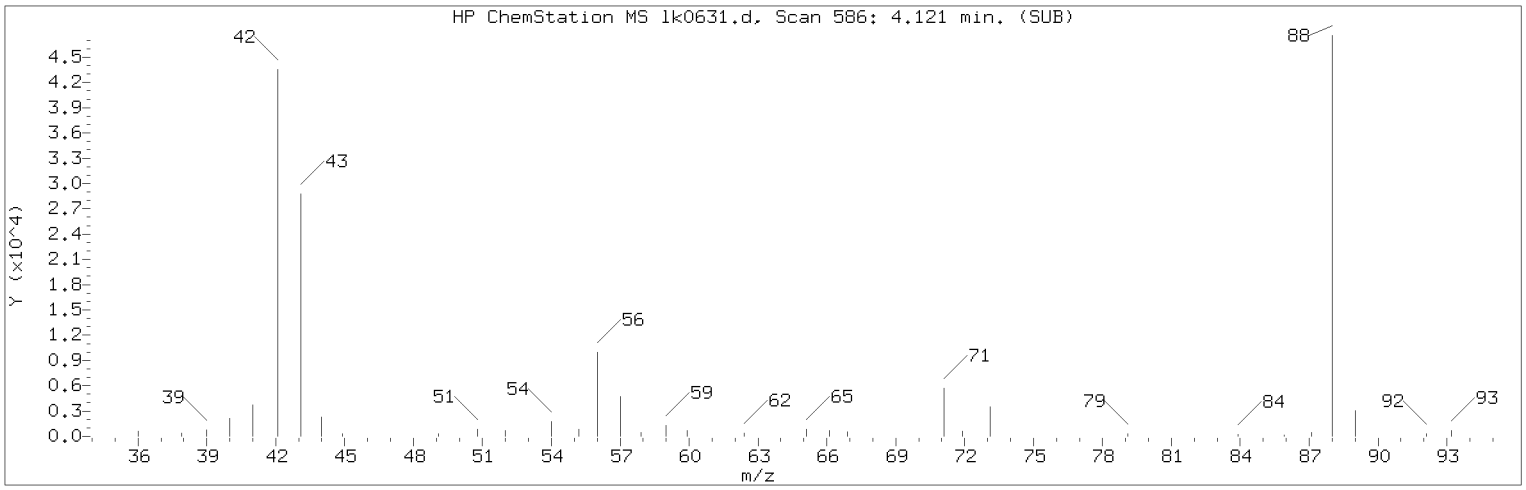
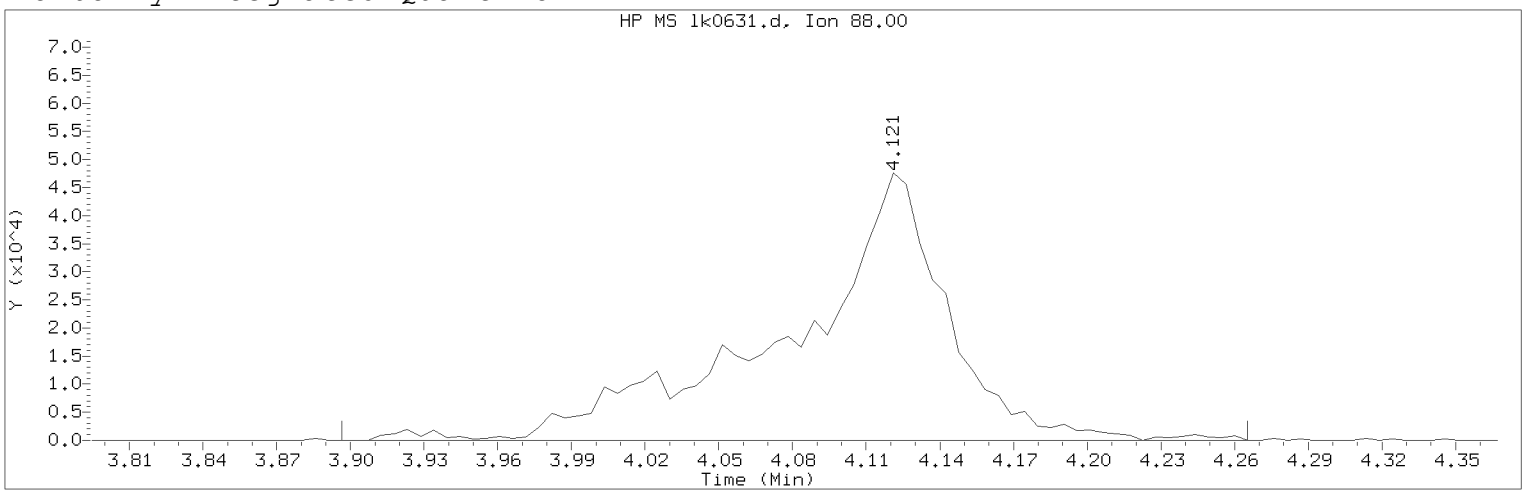
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/09/2018 at 07:53.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov09.b/lk0631.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 07:11 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 07:52
Date, time and analyst ID of latest file update: 09-Nov-2018 07:52 knb25316

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

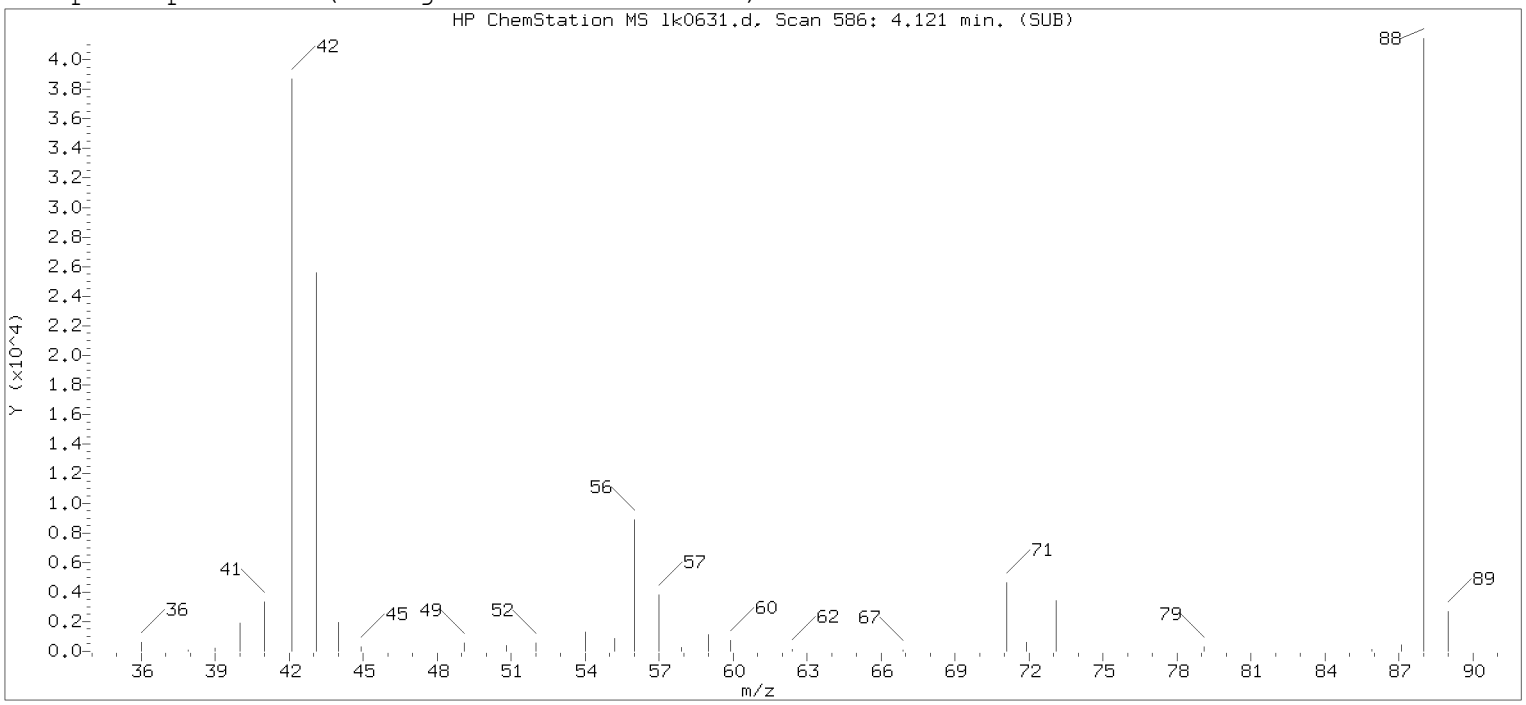
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Scan Number : 586
Retention Time (minutes) : 4.121
Quant Ion : 88.00
Area (flag) : 210710M
On-Column Amount (ng/ul) : 7.6860
Integration start scan : 543 Integration stop scan: 612
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

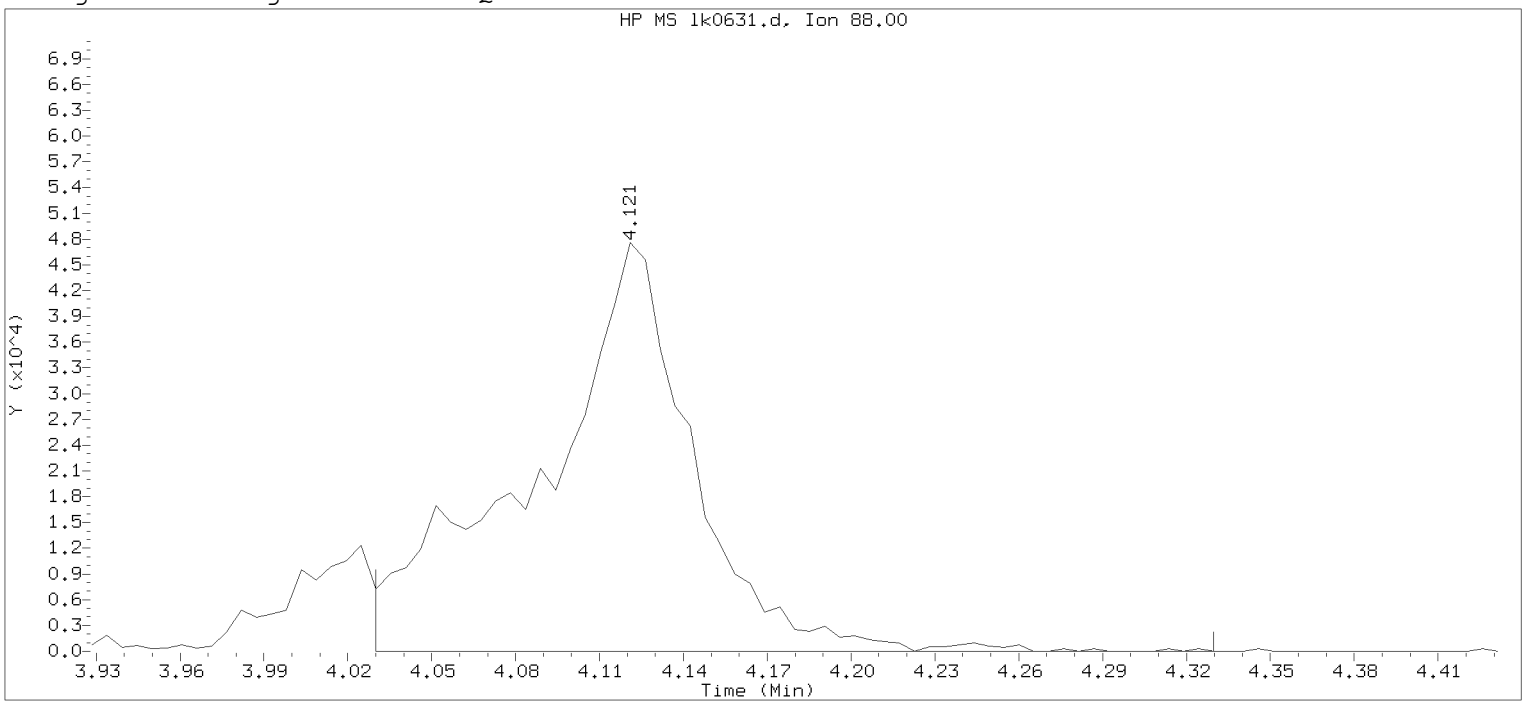
Analyst responsible for change: Digitally signed by Kira N. Beck
on 11/09/2018 at 07:53.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/12/2018 at 08:34.
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18nov09.b/lk0631.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 07:11 Analyst ID: knb25316

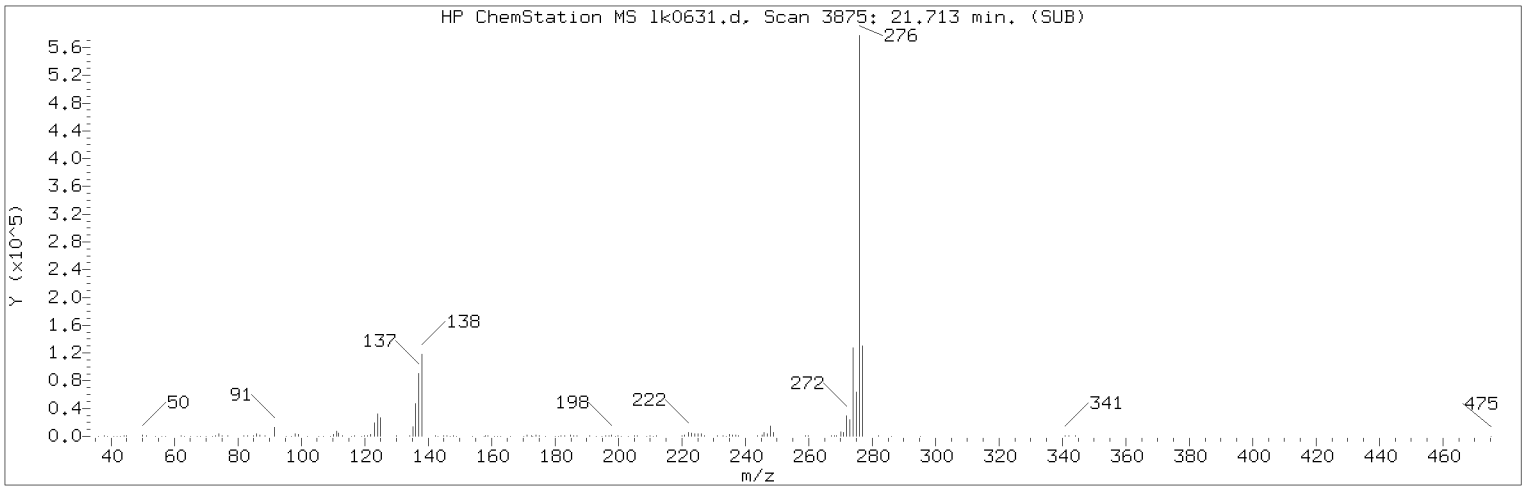
Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 07:48
Date, time and analyst ID of latest file update: 09-Nov-2018 07:48 knb25316

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

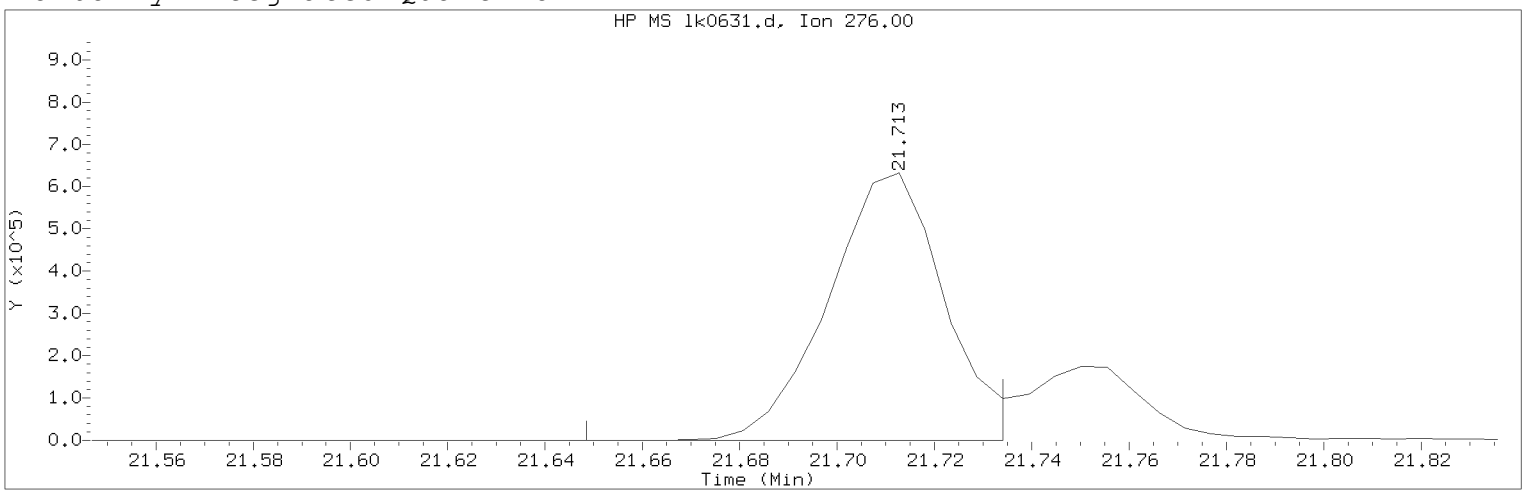
Compound Number	: 9		
Compound Name	: N-Nitrosomethylethylamine		
Scan Number	: 586		
Retention Time (minutes)	: 4.121		
Quant Ion	: 88.00		
Area	: 184025		
On-column Amount (ng/ul)	: 6.7126		
Integration start scan	: 568	Integration stop scan:	624
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 11/09/2018 at 07:53.
Target 3.5 esignature user knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov09.b/lk0631.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 07:11 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 07:52
Date, time and analyst ID of latest file update: 09-Nov-2018 07:52 knb25316

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

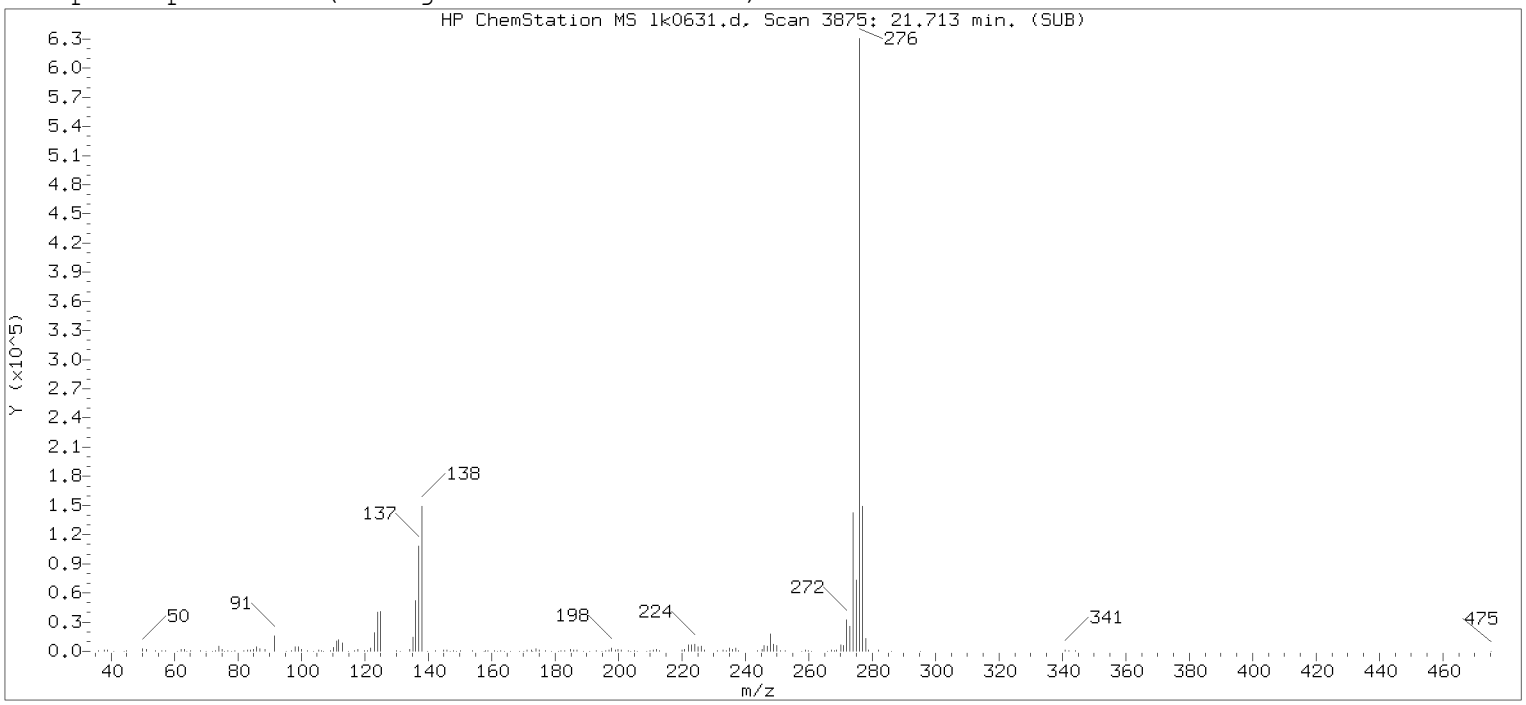
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3875
Retention Time (minutes) : 21.713
Quant Ion : 276.00
Area (flag) : 1047153M
On-Column Amount (ng/ul) : 6.4793
Integration start scan : 3862 Integration stop scan: 3878
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

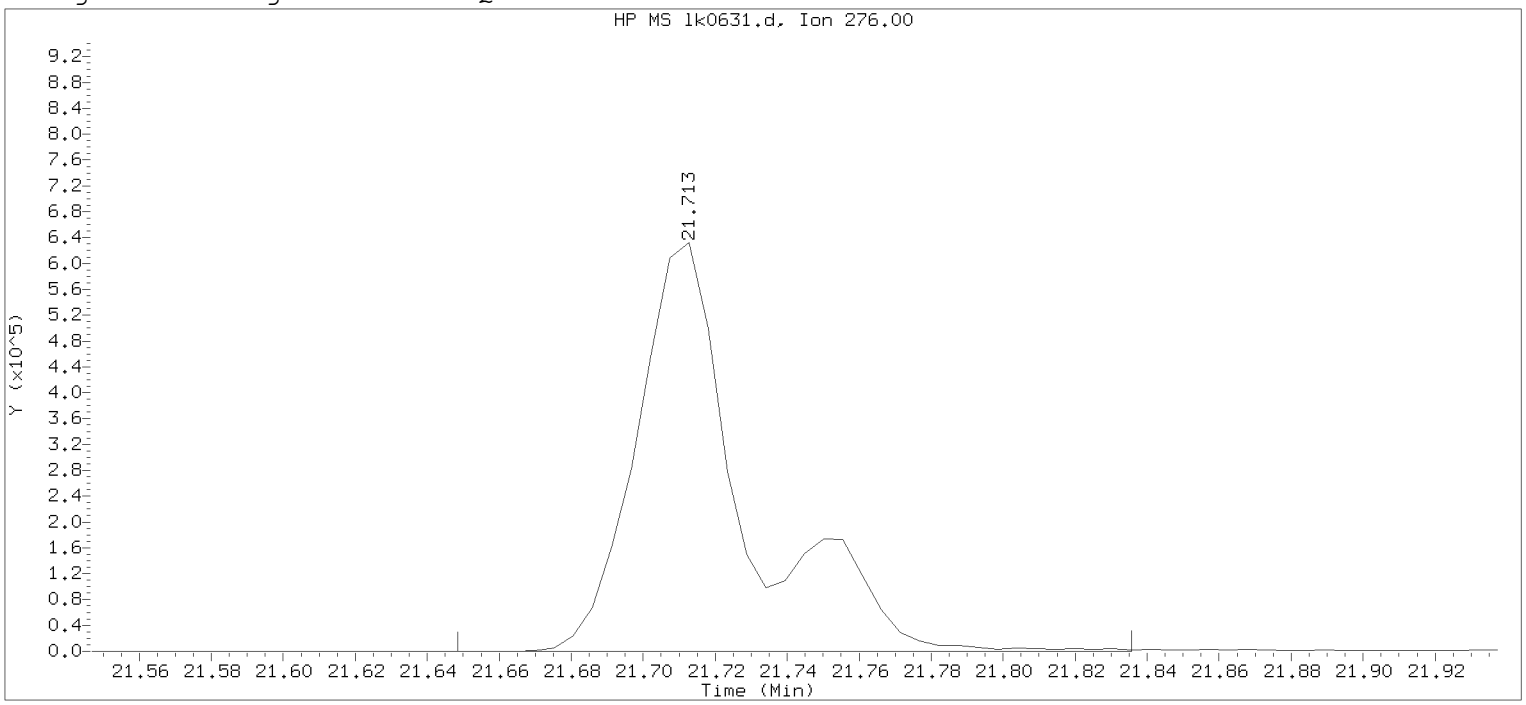
Analyst responsible for change: Digitally signed by Kira N. Beck
on 11/09/2018 at 07:53.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 11/12/2018 at 08:34.
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18nov09.b/lk0631.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 07:11 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 07:48
Date, time and analyst ID of latest file update: 09-Nov-2018 07:48 knb25316

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3875		
Retention Time (minutes)	: 21.713		
Quant Ion	: 276.00		
Area	: 1330817		
On-column Amount (ng/ul)	: 8.2345		
Integration start scan	: 3862	Integration stop scan:	3897
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 11/09/2018 at 07:53.
Target 3.5 esignature user knb25316

Data File: /chem/HP20296.i/18nov09a.b/lk0700a.d

Date : 09-NOV-2018 17:21

Client ID: DFTPP12.5

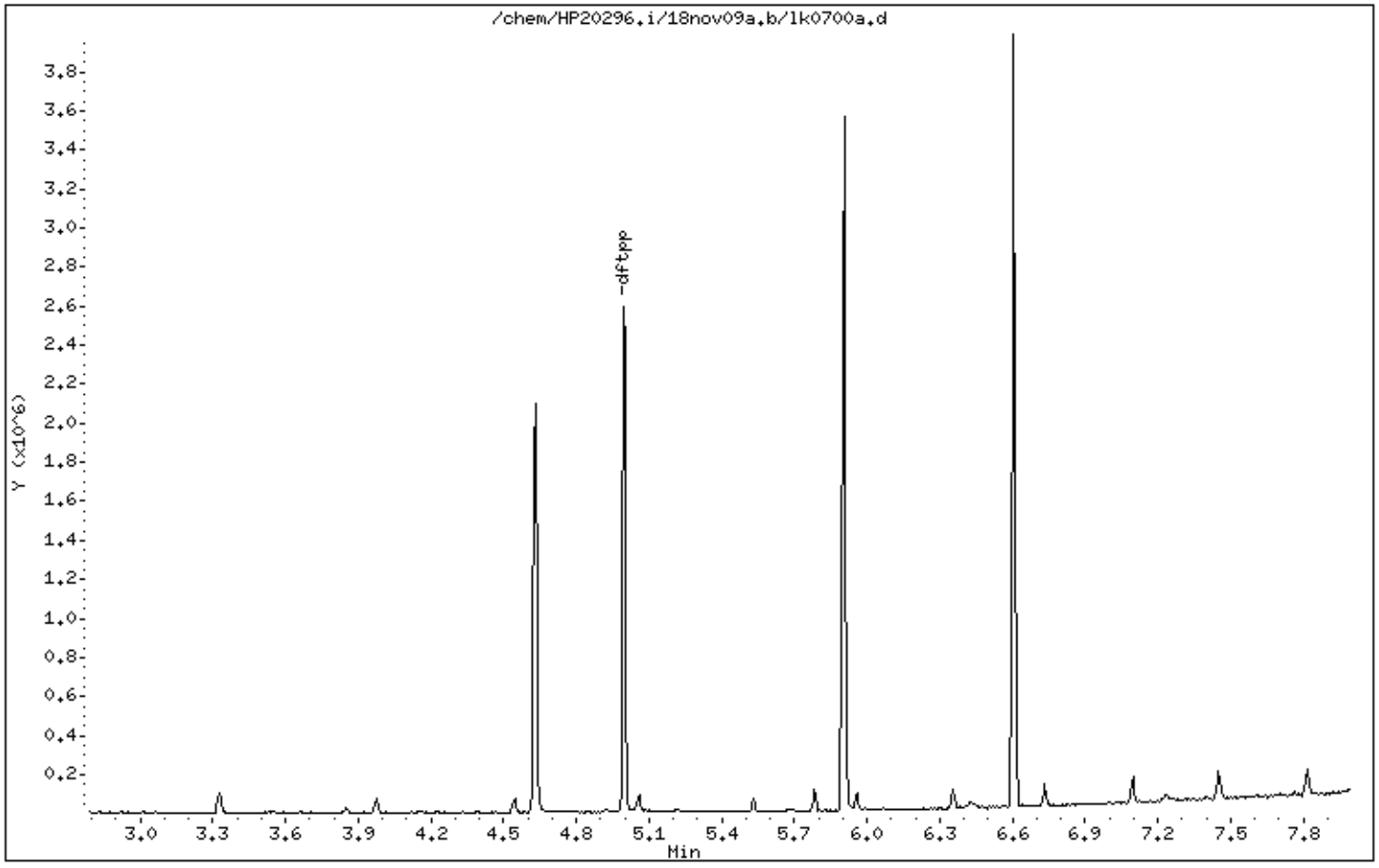
Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Ashley R. Transue on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405

Data File: /chem/HP20296.i/18nov09a.b/1k0700a.d

Date : 09-NOV-2018 17:21

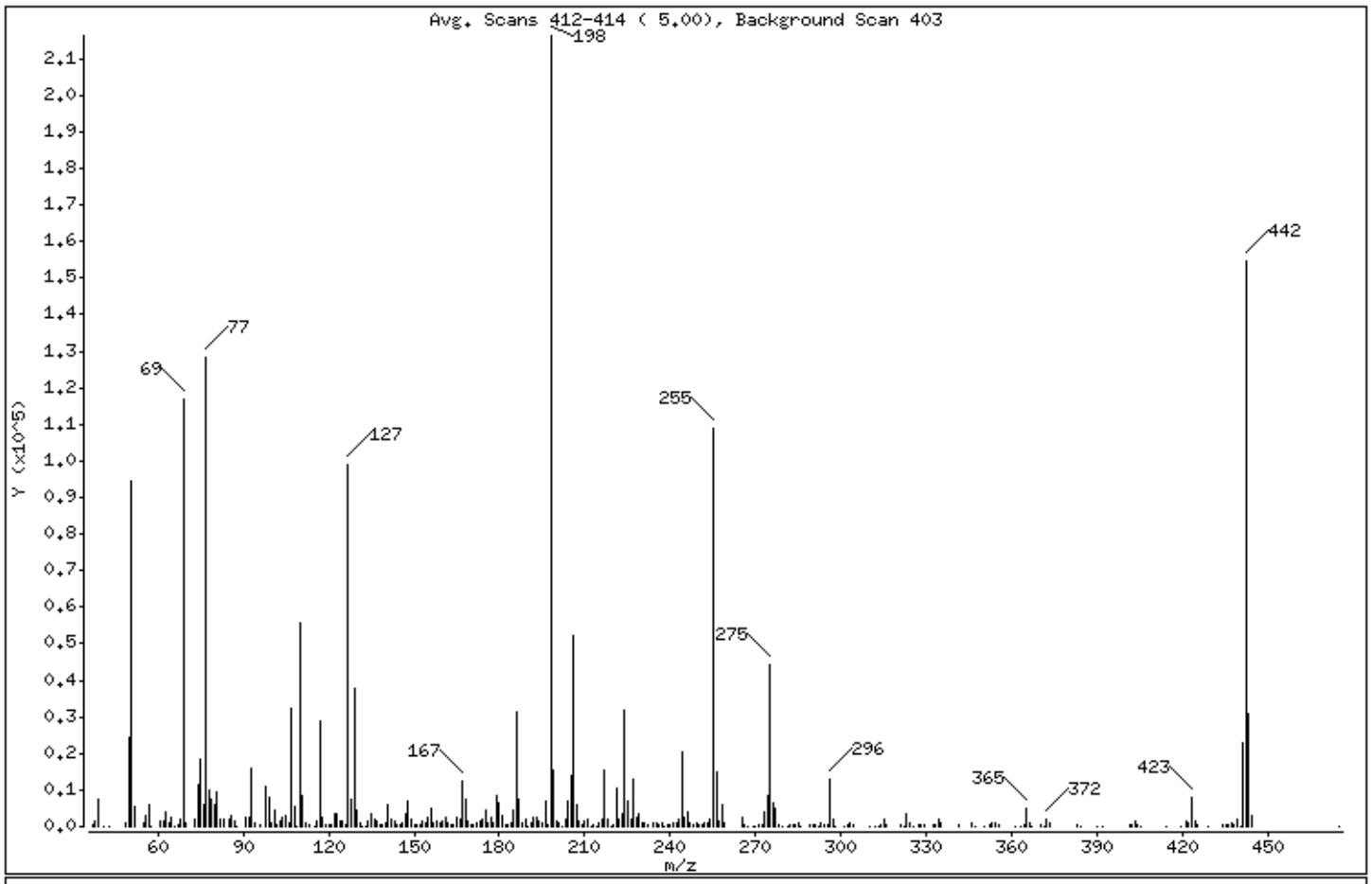
Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	43.66
68	Less than 2.00% of mass 69	0.89 (1.64)
69	Mass 69 relative abundance	54.05
70	Less than 2.00% of mass 69	0.44 (0.81)
127	10.00 - 80.00% of mass 198	45.65
197	Less than 2.00% of mass 198	0.12
199	5.00 - 9.00% of mass 198	7.04
275	10.00 - 60.00% of mass 198	20.55
365	Greater than 1.00% of mass 198	2.31
441	0.01 - 24.00% of mass 442	10.66 (14.90)
442	50.00 - 99.99% of mass 198	71.53
443	15.00 - 24.00% of mass 442	14.17 (19.80)

Digitally signed by Ashley R. Transue on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405

Date : 09-NOV-2018 17:21

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

Data File: lk0700a.d
Spectrum: Avg. Scans 412-414 (5.00), Background Scan 403
Location of Maximum: 198.00
Number of points: 302

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	671	132.00	178	208.00	1353	294.00	563
38.00	1421	133.00	248	209.00	546	295.00	432
39.00	7271	134.00	1413	210.00	1466	296.00	12808
41.00	136	135.00	3575	211.00	2045	297.00	2083
43.00	101	136.00	1746	212.00	117	298.00	224
49.00	897	137.00	1709	213.00	361	301.00	89
50.00	24360	138.00	251	214.00	209	302.00	350
51.00	94440	139.00	269	215.00	930	303.00	1063
52.00	5603	140.00	808	216.00	1827	304.00	290
55.00	774	141.00	5880	217.00	15569	310.00	121
56.00	3157	142.00	2175	218.00	1878	312.00	113
57.00	6064	143.00	1701	219.00	94	313.00	200
58.00	208	144.00	580	220.00	491	314.00	671
61.00	1362	145.00	440	221.00	10513	315.00	1986
62.00	1691	146.00	1114	222.00	2116	316.00	650
63.00	4078	147.00	3688	223.00	3385	321.00	341
64.00	763	148.00	7142	224.00	31976	322.00	152
65.00	2418	149.00	1753	225.00	7081	323.00	3415
66.00	83	150.00	547	226.00	1929	324.00	961
67.00	382	151.00	645	227.00	12791	325.00	247
68.00	1922	152.00	532	228.00	2674	327.00	735
69.00	116904	153.00	1243	229.00	3373	328.00	437
70.00	951	154.00	1057	230.00	909	329.00	501
73.00	2048	155.00	2399	231.00	1138	332.00	407
74.00	11255	156.00	4741	232.00	389	333.00	408
75.00	18224	157.00	1020	234.00	1073	334.00	2167
76.00	5988	158.00	1362	235.00	1080	335.00	840
77.00	128256	159.00	1119	236.00	611	341.00	707
78.00	9803	160.00	1663	237.00	809	346.00	972
79.00	7298	161.00	2720	238.00	127	347.00	93
80.00	6205	162.00	832	239.00	603	350.00	105
81.00	9250	163.00	552	240.00	349	352.00	683
82.00	1917	164.00	463	241.00	1075	353.00	917
83.00	1946	165.00	2595	242.00	1231	354.00	900
85.00	1759	166.00	2140	243.00	2088	355.00	387

Date : 09-NOV-2018 17:21

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

Data File: lk0700a.d
Spectrum: Avg. Scans 412-414 (5.00), Background Scan 403
Location of Maximum: 198.00
Number of points: 302

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	2849	167.00	12541	244.00	20240	361.00	104
87.00	1274	168.00	7440	245.00	2711	363.00	192
88.00	238	169.00	1397	246.00	3871	364.00	251
91.00	2252	170.00	401	247.00	1085	365.00	4989
92.00	2443	171.00	516	248.00	285	366.00	891
93.00	15835	172.00	824	249.00	840	367.00	112
94.00	1067	173.00	1353	250.00	716	370.00	447
96.00	701	174.00	2222	251.00	263	371.00	88
98.00	11024	175.00	4519	252.00	790	372.00	1929
99.00	7726	176.00	992	253.00	974	373.00	1085
100.00	864	177.00	2387	254.00	2147	383.00	411
101.00	4538	178.00	1220	255.00	108672	384.00	229
102.00	273	179.00	8538	256.00	14835	390.00	193
103.00	1687	180.00	6620	257.00	1525	392.00	84
104.00	2689	181.00	3075	258.00	6022	401.00	295
105.00	3069	182.00	292	259.00	1085	402.00	609
106.00	1104	183.00	465	265.00	2290	403.00	1517
107.00	32168	184.00	751	266.00	339	404.00	380
108.00	5503	185.00	4239	267.00	245	405.00	93
109.00	245	186.00	31368	269.00	89	414.00	130
110.00	55480	187.00	7339	270.00	201	419.00	173
111.00	8260	188.00	1121	271.00	416	421.00	1437
112.00	1124	189.00	2019	272.00	743	422.00	1014
113.00	523	190.00	198	273.00	4036	423.00	8000
115.00	192	191.00	998	274.00	8320	424.00	1683
116.00	1387	192.00	2355	275.00	44440	425.00	476
117.00	28632	193.00	2580	276.00	6490	429.00	161
118.00	2266	194.00	1272	277.00	4742	434.00	435
119.00	513	195.00	827	278.00	445	435.00	567
120.00	339	196.00	7164	279.00	120	436.00	629
121.00	307	197.00	254	281.00	234	437.00	771
122.00	3357	198.00	216256	282.00	376	438.00	636
123.00	3507	199.00	15227	283.00	570	439.00	2069
124.00	1641	200.00	1269	284.00	662	440.00	114
125.00	1673	201.00	974	285.00	760	441.00	23048

Digitally signed by Ashley R. Transue on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405

Date : 09-NOV-2018 17:21

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;RVDFTPP2878;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

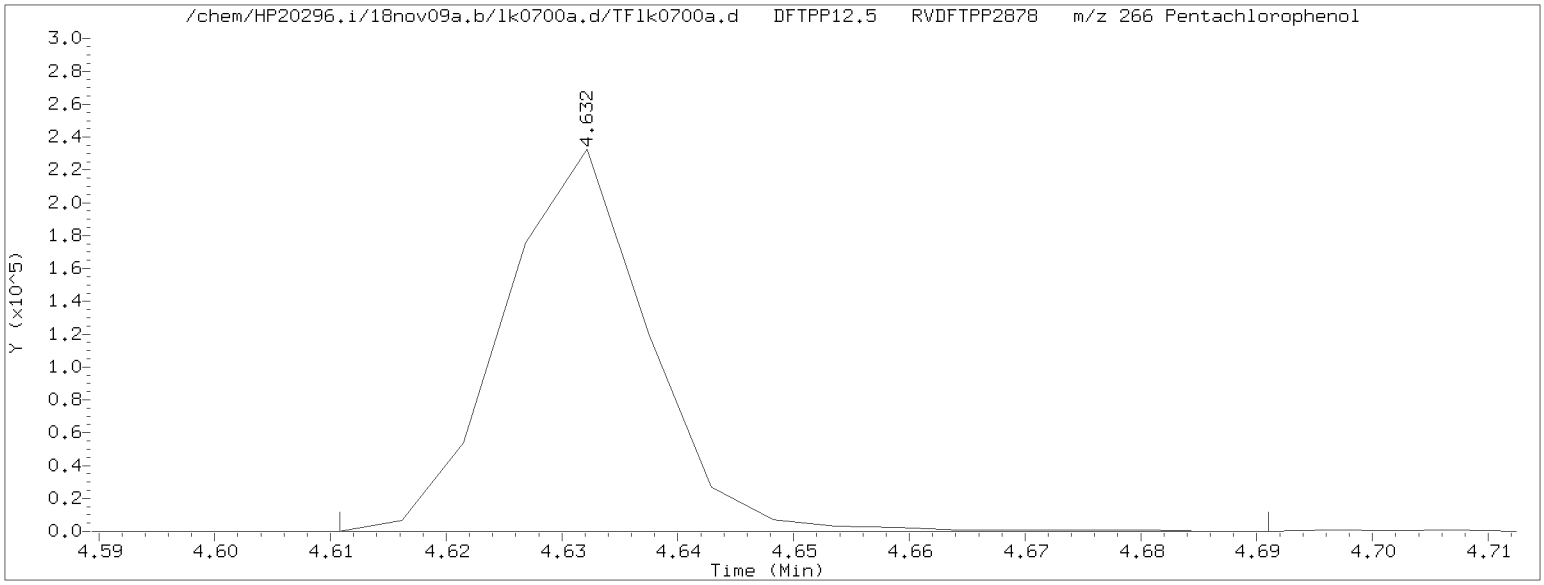
Data File: lk0700a.d
Spectrum: Avg. Scans 412-414 (5.00), Background Scan 403
Location of Maximum: 198.00
Number of points: 302

m/z	Y	m/z	Y	m/z	Y	m/z	Y
126.00	530	202.00	235	286.00	201	442.00	154688
127.00	98736	203.00	2108	289.00	260	443.00	30640
128.00	7641	204.00	7008	290.00	371	444.00	2893
129.00	37896	205.00	13894	291.00	324	475.00	99
130.00	4232	206.00	52328	292.00	156		
131.00	753	207.00	6138	293.00	1127		

Digitally signed by Ashley R. Transue on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405

Assessment of GC Column Performance and Injection Port Inertness for

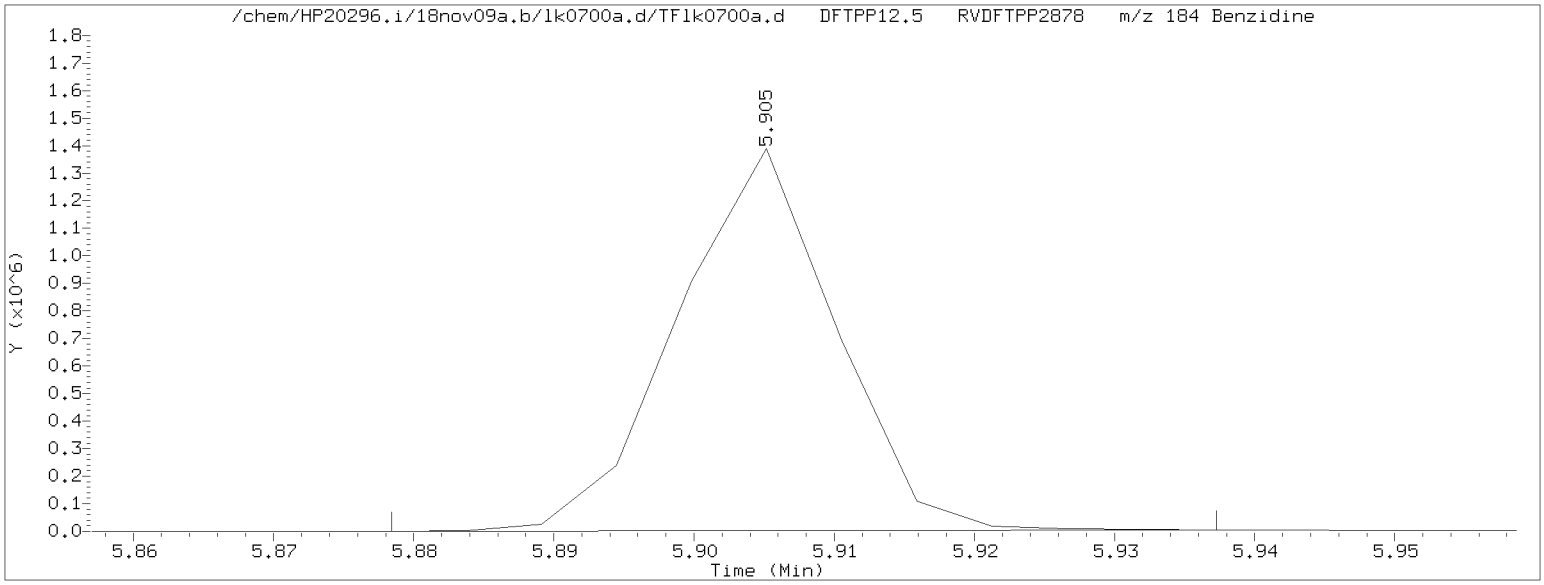
Instrument ID: HP20296.i Injection Date: 09-NOV-2018 17:21 Operator: art12405



Pentachlorophenol EICP peak height = 232704 EICP peak height at 10% = 23270 Pentachlorophenol EICP area = 202159

Pentachlorophenol EICP peak apex (min.) = 4.632
RT at 10% of front half of EICP (min.) = 4.618 'Front' peak width (min.) = 0.0141500000
RT at 10% of back half of EICP (min.) = 4.644 'Tailing' peak width (min.) = 0.0116333333

PCP tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0116333333}{0.0141500000} = 0.822$



Benzidine EICP peak height = 1387735 EICP peak height at 10% = 138774 Benzidine EICP area = 1083144

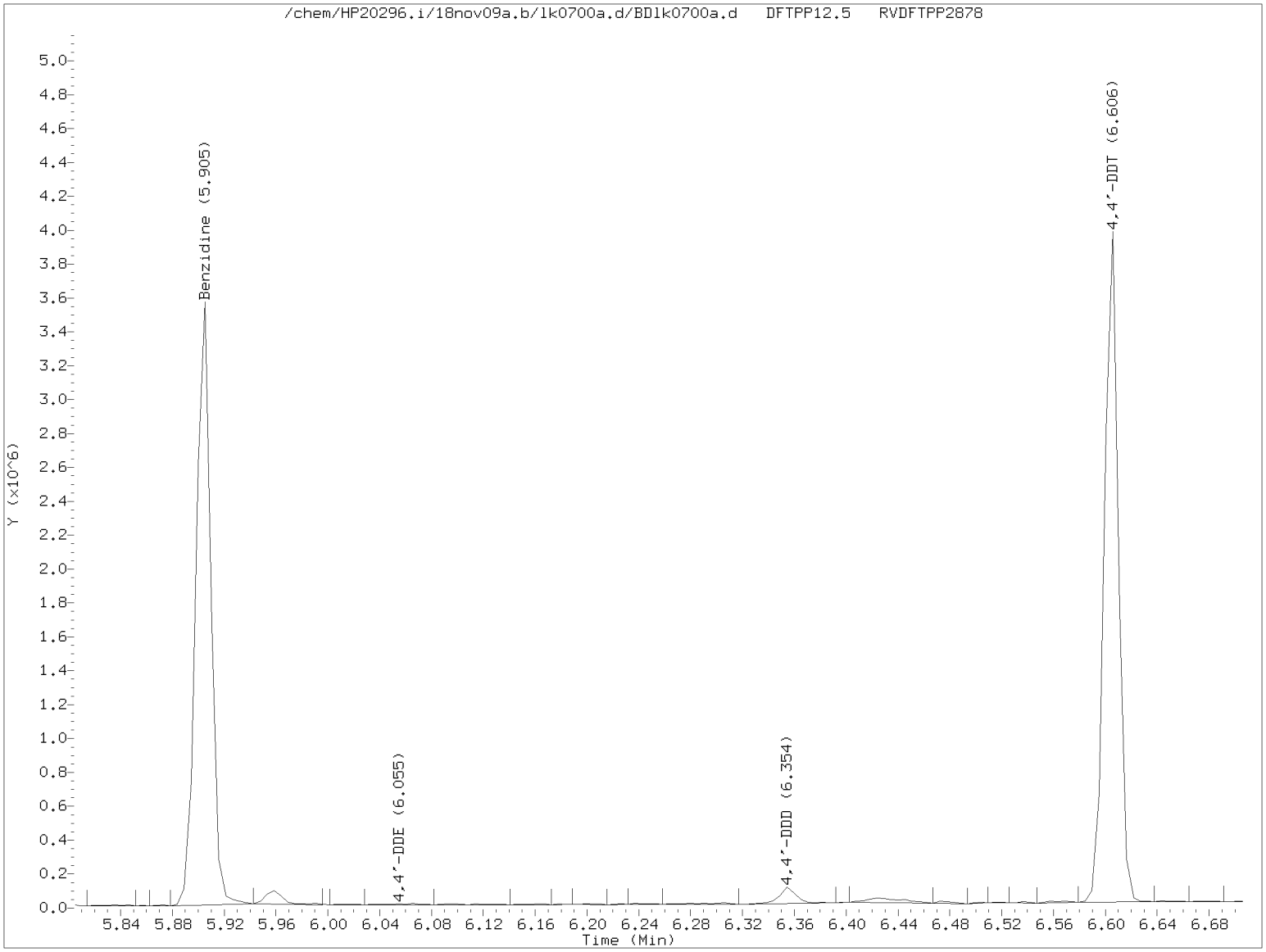
Benzidine EICP peak apex (min.) = 5.905
RT at 10% of front half of EICP (min.) = 5.892 'Front' peak width (min.) = 0.0131500000
RT at 10% of back half of EICP (min.) = 5.916 'Tailing' peak width (min.) = 0.0104000000

Benzidine tailing factor = $\frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0104000000}{0.0131500000} = 0.791$

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:00. PARALLAX ID: cam01237

Assessment of GC Column Performance and Injection Port Inertness for

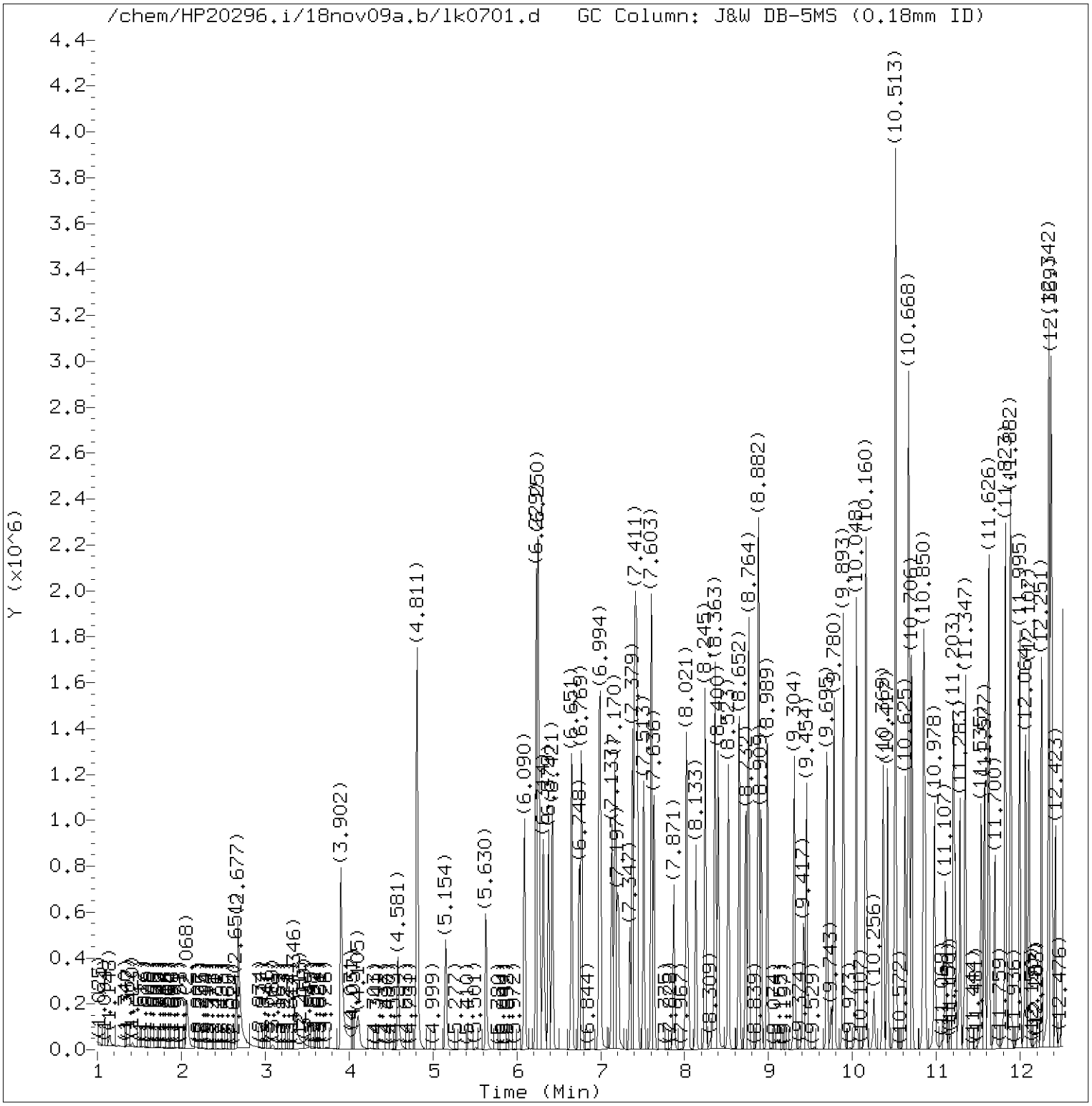
Instrument ID: HP20296.i Injection Date: 09-NOV-2018 17:21 Operator: art12405



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{10471 + 91677}{10471 + 91677 + 3035052} \times 100 = 3.3$$

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:00. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

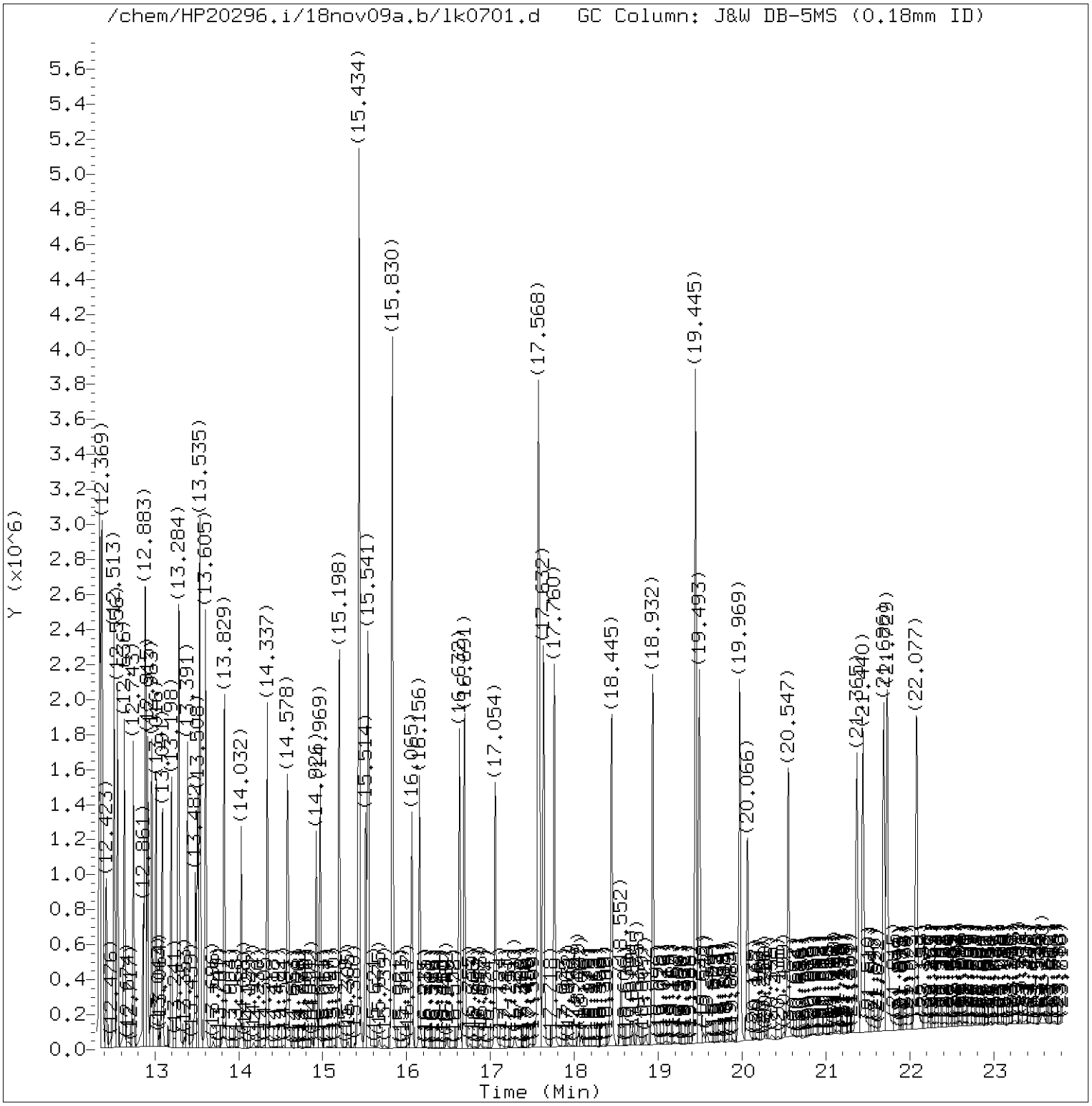
Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0701.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 18:18
Date, time and analyst ID of latest file update: 09-Nov-2018 18:18 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0701.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 18:18
Date, time and analyst ID of latest file update: 09-Nov-2018 18:18 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Digitally signed by Ashley R. Transue
on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0701.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 18:18
Date, time and analyst ID of latest file update: 09-Nov-2018 18:18 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.073	88	169746	7.282
5) N-Nitrosodimethylamine	(1)	2.651	74	262563	7.493
6) Pyridine	(1)	2.677	79	433860	7.277
8) 2-Picoline	(1)	3.902	93	430661	6.920
9) N-Nitrosomethylethylamine	(1)	4.105	88	177294	6.976
10) Methyl methanesulfonate	(1)	4.581	80	223146	6.866
12)$2-Fluorophenol	(1)	4.811	112	707253	14.662
14) N-Nitrosodiethylamine	(1)	5.154	102	171169	7.793
16) Ethyl methanesulfonate	(1)	5.630	109	181571	7.280
43) Total Cresols	(1)			741763	15.331
17) Benzaldehyde	(1)	6.090	77	318347	7.129
18)$Phenol-d6	(1)	6.229	99	961436	14.769
19) Phenol	(1)	6.250	94	559550	7.328
20) Aniline	(1)	6.256	93	653218	7.280
21) a-methylstyrene	(1)	6.330	118	34423	7.324
23) bis(2-Chloroethyl)ether	(1)	6.379	93	423348	7.370
24) 2-Chlorophenol	(1)	6.421	128	341409	7.592
25) 1,3-Dichlorobenzene	(1)	6.651	146	393597	7.806
26)*1,4-Dichlorobenzene-d4	(1)	6.742	152	155823	5.000
27) 1,4-Dichlorobenzene	(1)	6.769	146	381564	7.531
28) Benzyl alcohol	(1)	6.978	108	225056	7.292
29) 1,2-Dichlorobenzene	(1)	6.994	146	365628	7.425
31) Indene	(1)	7.133	115	397117	7.336
32) 2-Methylphenol	(1)	7.170	108	347183	7.339
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.202	45	496743	6.856
35) bis(2-Chloroisopropyl)ether	(1)	7.202	45	496743	6.856
36) N-Nitrosopyrrolidine	(1)	7.347	100	187521	7.763
37) Acetophenone	(1)	7.379	105	519230	7.123
100) Isosafrole	(3)			276263	7.585
39) N-Nitroso-di-n-propylamine	(1)	7.400	70	314860	7.144
40) N-Nitrosomorpholine	(1)	7.416	56	226034	7.061
38) 4-Methylphenol	(1)	7.416	108	394580	7.991
41) o-Toluidine	(1)	7.432	106	613246	7.433
44) Hexachloroethane	(1)	7.513	117	168363	7.317
45)$Nitrobenzene-d5	(2)	7.603	82	896438	15.277
46) Nitrobenzene	(2)	7.636	77	473359	7.570
50) N-Nitrosopiperidine	(2)	7.871	114	172962	7.887
52) Isophorone	(2)	8.021	82	751175	7.118
125) 2,4_2,6-Dinitrotoluenes	(3)			363695	16.479
53) 2-Nitrophenol	(2)	8.133	139	165585	8.062

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0701.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 18:18
Date, time and analyst ID of latest file update: 09-Nov-2018 18:18 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.245	107	368567	7.337
59) O,O,O-Triethylphosphorothioate	(2)	8.363	198	179014	8.310
58) Benzoic acid	(2)	8.379	105	235209M	7.182
57) bis(2-Chloroethoxy)methane	(2)	8.400	93	497729	7.398
62) 2,4-Dichlorophenol	(2)	8.523	162	287609	7.980
65) 1,2,4-Trichlorobenzene	(2)	8.652	180	325942	7.837
68)*Naphthalene-d8	(2)	8.732	136	560467	5.000
69) Naphthalene	(2)	8.764	128	968195	7.648
151) Diallate trans/cis	(4)			341212	7.096
70) 4-Chloroaniline	(2)	8.876	127	385896	7.561
71) 2,6-Dichlorophenol	(2)	8.882	162	274720	7.841
72) Hexachloropropene	(2)	8.909	213	221247	8.249
74) Hexachlorobutadiene	(2)	8.989	225	201552	8.222
78) Quinoline	(2)	9.304	129	553753	7.351
79) Caprolactam	(2)	9.422	113	90783	8.169
80) N-Nitrosodi-n-butylamine	(2)	9.454	84	268244	6.399
83) 4-Chloro-3-methylphenol	(2)	9.695	107	318883	7.454
85) Safrole	(2)	9.780	162	244857	7.681
86) 2-Methylnaphthalene	(2)	9.893	142	618342	7.613
87) 1-Methylnaphthalene	(2)	10.048	142	607502	7.815
88) Hexachlorocyclopentadiene	(3)	10.155	237	210957	8.353
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.165	216	346917	7.914
91) cis-Isosafrole	(3)	10.256	162	47312	1.305
93) 2,4,6-Trichlorophenol	(3)	10.369	196	218299	8.512
95) 2,4,5-Trichlorophenol	(3)	10.417	196	225622	7.979
96)$2-Fluorobiphenyl	(3)	10.513	172	1469626	15.498
97) trans-Isosafrole	(3)	10.625	162	228951	6.281
98) 1,1'-Biphenyl	(3)	10.668	154	743049	7.630
99) 2-Chloronaphthalene	(3)	10.679	162	668805	7.725
101) 1-Chloronaphthalene	(3)	10.706	162	552562	7.375
103) Diphenyl ether	(3)	10.850	170	422898	7.785
104) 2-Nitroaniline	(3)	10.866	138	179672	8.251
108) 1,4-Naphthoquinone	(3)	10.978	158	224451	7.089
109) 1,4-Dinitrobenzene	(3)	11.112	168	93976	8.086
110) Dimethylphthalate	(3)	11.203	163	667055	7.415
111) 1,3-Dinitrobenzene	(3)	11.224	168	107356	8.118
113) 2,6-Dinitrotoluene	(3)	11.283	165	155525	8.528
114) Acenaphthylene	(3)	11.347	152	840054	7.782
117) 3-Nitroaniline	(3)	11.535	138	152712	7.304
118)*Acenaphthene-d10	(3)	11.577	164	283727	5.000

M = Compound was manually integrated.
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Digitally signed by Ashley R. Transue
on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0701.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 18:18
Date, time and analyst ID of latest file update: 09-Nov-2018 18:18 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.626	153	628678	7.545
120) 2,4-Dinitrophenol	(3)	11.700	184	114915	10.450
121) 4-Nitrophenol	(3)	11.823	109	121392	6.934
122) Pentachlorobenzene	(3)	11.823	250	273252	7.814
124) Dibenzofuran	(3)	11.882	168	874328	7.744
123) 2,4-Dinitrotoluene	(3)	11.893	165	208170	7.951
126) 1-Naphthylamine	(3)	11.995	143	601732	7.390
127) 2,3,4,6-Tetrachlorophenol	(3)	12.064	232	180443	8.124
128) 2-Naphthylamine	(3)	12.107	143	579713	7.154
129) Diethylphthalate	(3)	12.251	149	606344	6.849
131) Fluorene	(3)	12.337	166	684535	7.655
130) Thionazin	(3)	12.348	107	120170	6.924
132) 4-Chlorophenyl-phenylether	(3)	12.364	204	359418	7.846
133) 5-Nitro-o-toluidine	(3)	12.369	152	186785	8.202
134) 4-Nitroaniline	(3)	12.380	138	162824	8.135
135) 4,6-Dinitro-2-methylphenol	(4)	12.423	198	112705	7.862
136) N-Nitrosodiphenylamine	(4)	12.513	169	538129	7.720
137) NDPA as diphenylamine	(4)	12.513	169	538129	7.720
139) 1,2-Diphenylhydrazine	(4)	12.556	77	863949	7.004
140)$2,4,6-Tribromophenol	(3)	12.636	330	186626	16.787
142) Tetraethyldithiopyrophosphate	(4)	12.743	97	129103	7.020
144) 1,3,5-Trinitrobenzene	(4)	12.861	213	71760	8.263
145) Diallate (peak 1)	(4)	12.883	86	292482	5.896
146) Phorate	(4)	12.888	75	524470	8.139
147) Phenacetin	(4)	12.915	108	375826	7.694
148) 4-Bromophenyl-phenylether	(4)	12.963	248	198148	8.155
149) Diallate (peak 2)	(4)	12.984	86	48730	1.200
150) Hexachlorobenzene	(4)	13.016	284	211723	8.547
152) Dimethoate	(4)	13.091	87	309352	7.572
153) Atrazine	(4)	13.198	200	173539	7.839
154) Pentachlorophenol	(4)	13.273	266	126588	8.067
156) Pentachloronitrobenzene	(4)	13.284	237	94659	8.061
155) 4-Aminobiphenyl	(4)	13.289	169	475095	7.836
157) Pronamide	(4)	13.391	173	312019	8.259
158)*Phenanthrene-d10	(4)	13.508	188	544843	5.000
159) Dinoseb	(4)	13.530	211	183805	8.433
160) Phenanthrene	(4)	13.535	178	1030488	7.900
162) Anthracene	(4)	13.605	178	1010428	7.897
168) Carbazole	(4)	13.829	167	884805	7.717
169) Methyl parathion	(4)	14.032	109	240540	7.838

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$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0701.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 18:18
Date, time and analyst ID of latest file update: 09-Nov-2018 18:18 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.337	149	1100823	7.423
172) Parathion	(4)	14.578	109	149523	7.739
173) 4-Nitroquinoline-1-oxide	(4)	14.594	190	76797	7.149
174) Octachlorostyrene	(4)	14.920	308	77553	8.462
176) Isodrin	(4)	14.969	193	124833	8.127
227) Total PAHs	(6)			17803296	140.558
178) Fluoranthene	(4)	15.198	202	1166874	8.162
179) Benzidine	(5)	15.434	184	2330362	24.508
180)*Pyrene-d10	(5)	15.514	212	596778	5.000
182) Pyrene	(5)	15.541	202	1209745	7.684
184)$Terphenyl-d14	(5)	15.830	244	1510348	15.766
187) p-Dimethylaminoazobenzene	(5)	16.060	225	185928	7.666
190) Chlorobenzilate	(5)	16.156	139	343078	7.374
192) 3,3'-Dimethylbenzidine	(5)	16.632	212	766639	8.417
193) Butylbenzylphthalate	(5)	16.691	149	529602	7.576
196) 2-Acetylaminofluorene	(5)	17.054	181	444094	7.707
198) 3,3'-Dichlorobenzidine	(5)	17.568	252	435269	8.265
200) Benzo(a)anthracene	(5)	17.573	228	1167235	8.148
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.584	231	251032	8.527
201) Chrysene	(5)	17.632	228	1154445	8.156
204) bis(2-Ethylhexyl)phthalate	(5)	17.760	149	745455	7.402
208) 6-Methylchrysene	(5)	18.445	242	764680	8.013
210) Di-n-octylphthalate	(6)	18.932	149	1332523	6.996
211) Benzo(b)fluoranthene	(6)	19.445	252	1184492	7.639
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.445	256	518097	8.154
213) Benzo(k)fluoranthene	(6)	19.493	252	1149305	7.353
216) Benzo(a)pyrene	(6)	19.969	252	1104563	7.970
218)*Perylene-d12	(6)	20.066	264	595502	5.000
220) 3-Methylcholanthrene	(6)	20.552	268	495720	7.843
222) Dibenz(a,h)acridine	(6)	21.365	279	878539	7.636
223) Dibenz(a,j)acridine	(6)	21.440	279	926050	7.639
224) Indeno(1,2,3-cd)pyrene	(6)	21.686	276	1061748M	7.896
225) Dibenz(a,h)anthracene	(6)	21.729	278	1095751	7.829
226) Benzo(g,h,i)perylene	(6)	22.082	276	1120916	7.864

M = Compound was manually integrated.
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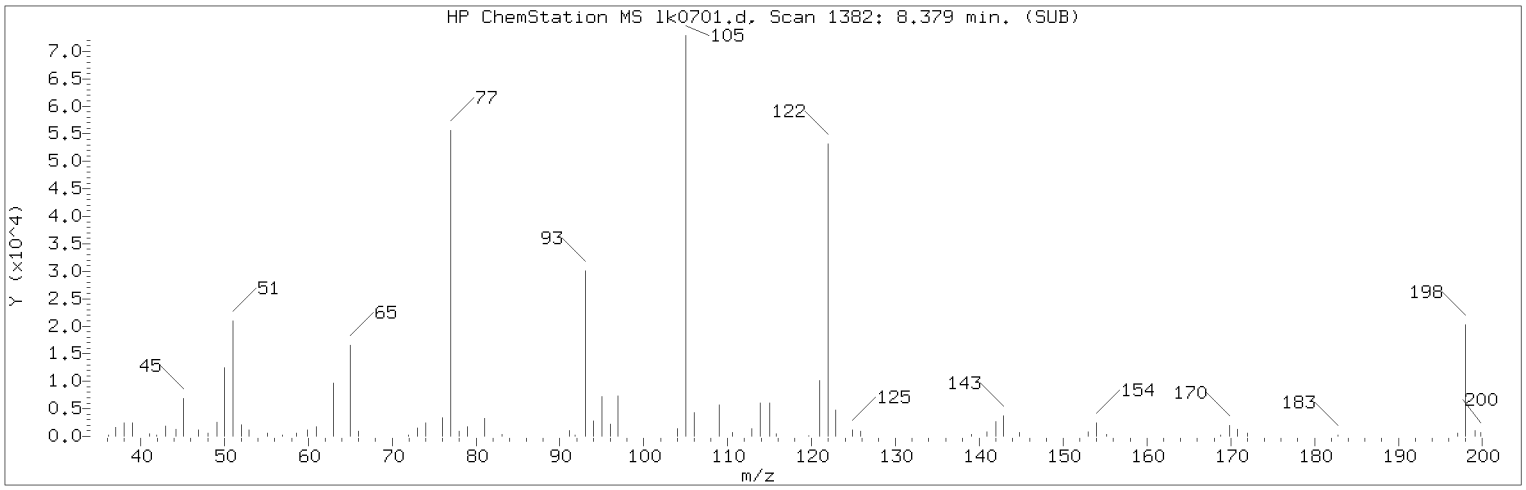
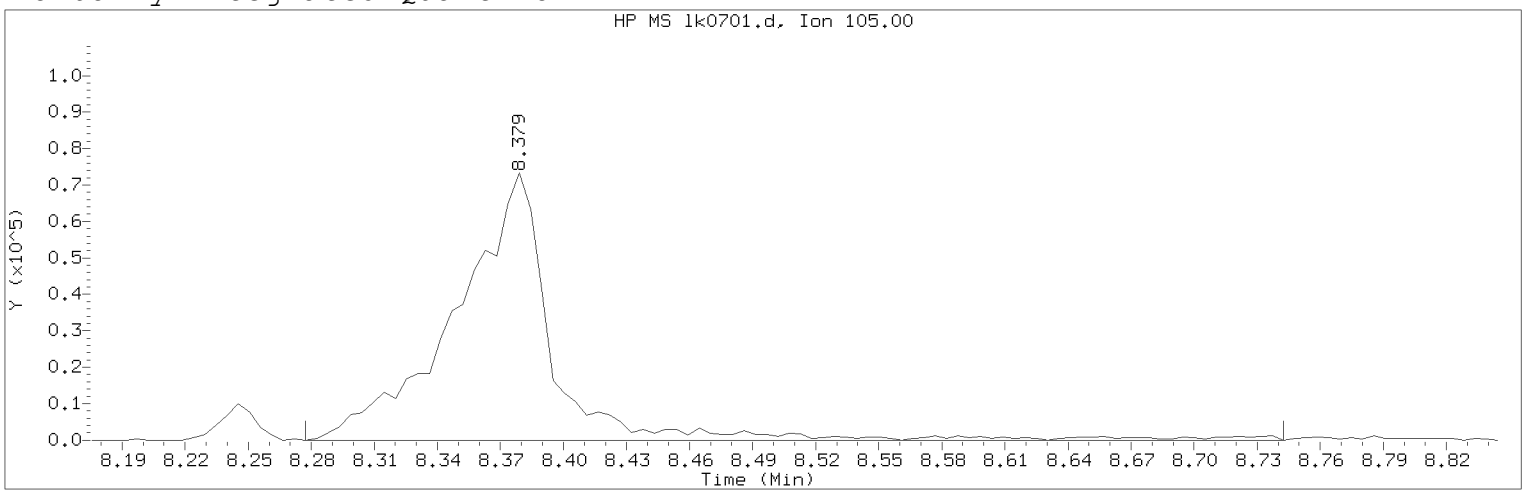
Digitally signed by Ashley R. Transue
on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0701.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 18:18
Date, time and analyst ID of latest file update: 09-Nov-2018 18:18 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

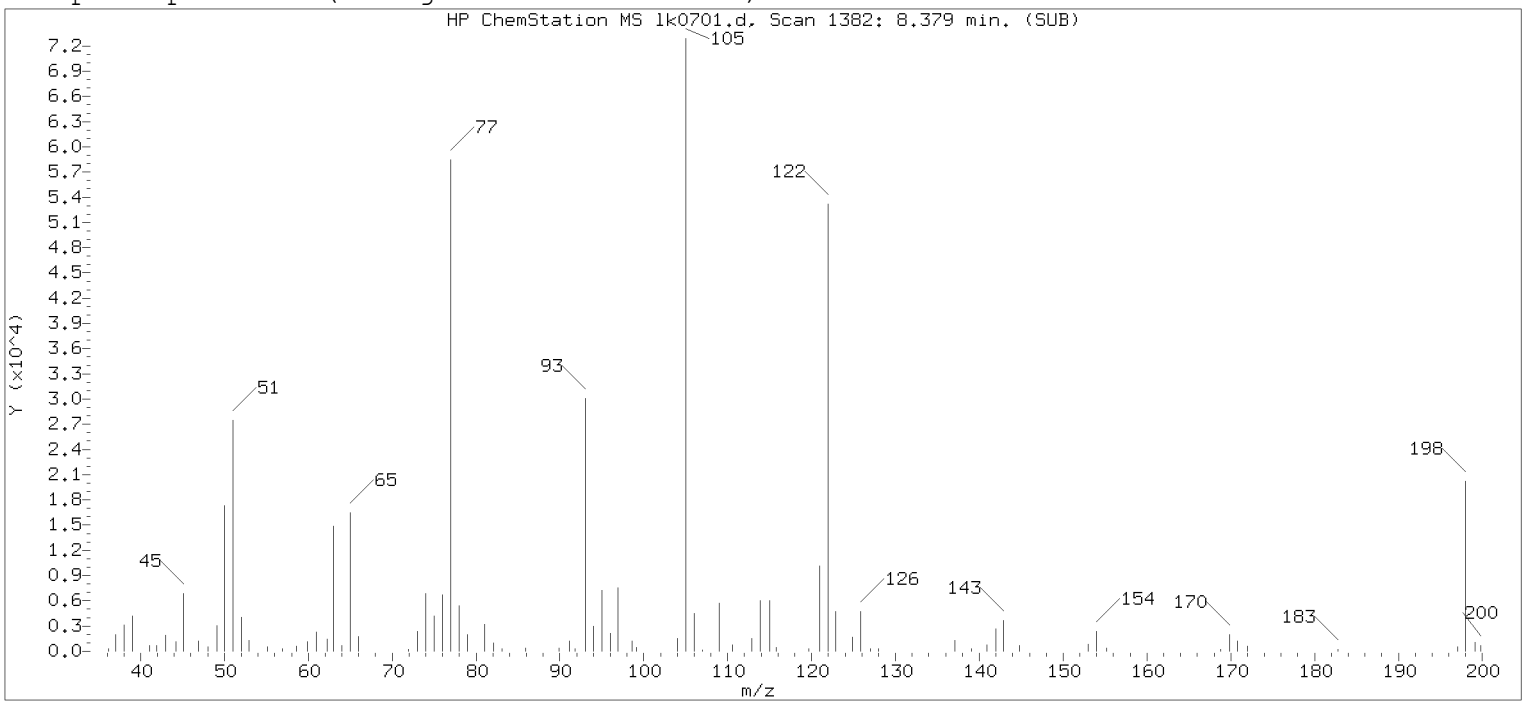
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1382
Retention Time (minutes) : 8.379
Quant Ion : 105.00
Area (flag) : 235209M
On-Column Amount (ng/ul) : 7.1820
Integration start scan : 1362 Integration stop scan: 1449
Y at integration start : -47 Y at integration end: -47

Reason for manual integration: improper integration

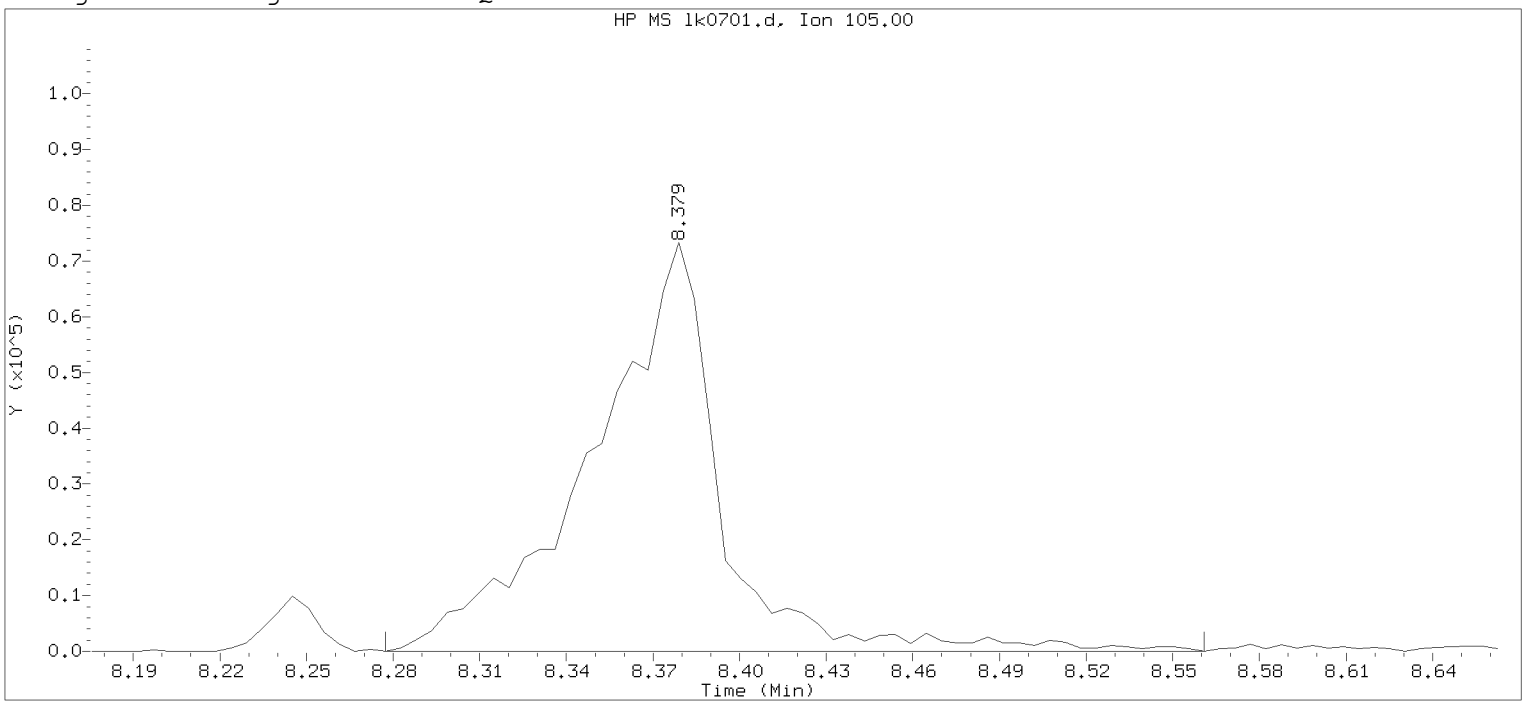
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:00.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0701.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: art12405

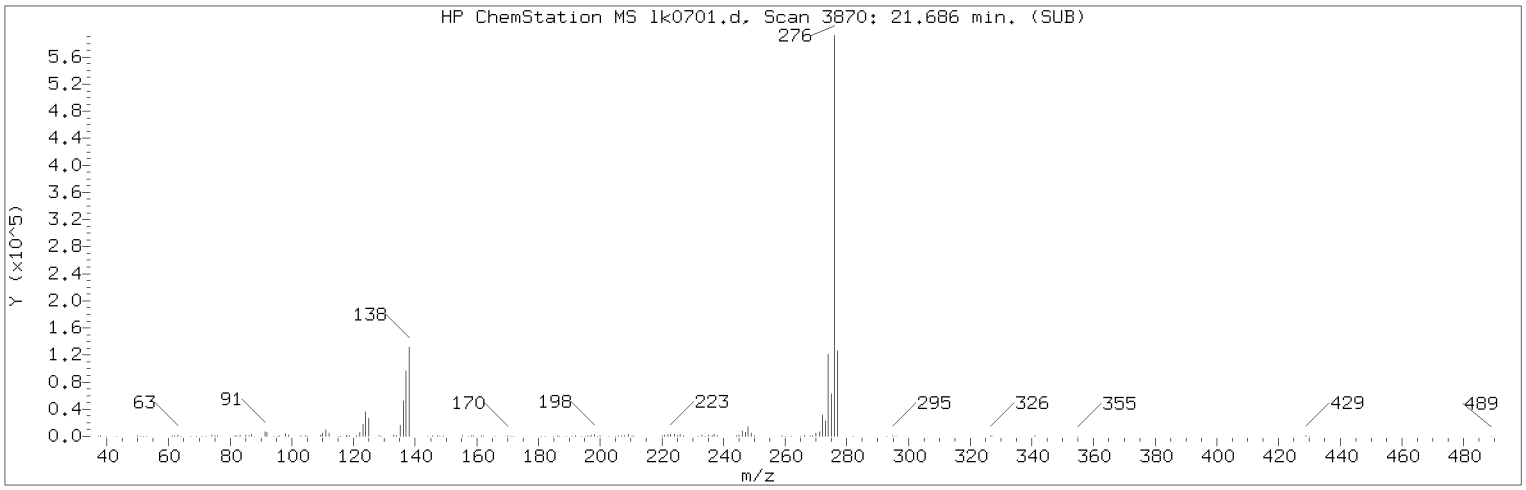
Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 18:15
Date, time and analyst ID of latest file update: 09-Nov-2018 18:15 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

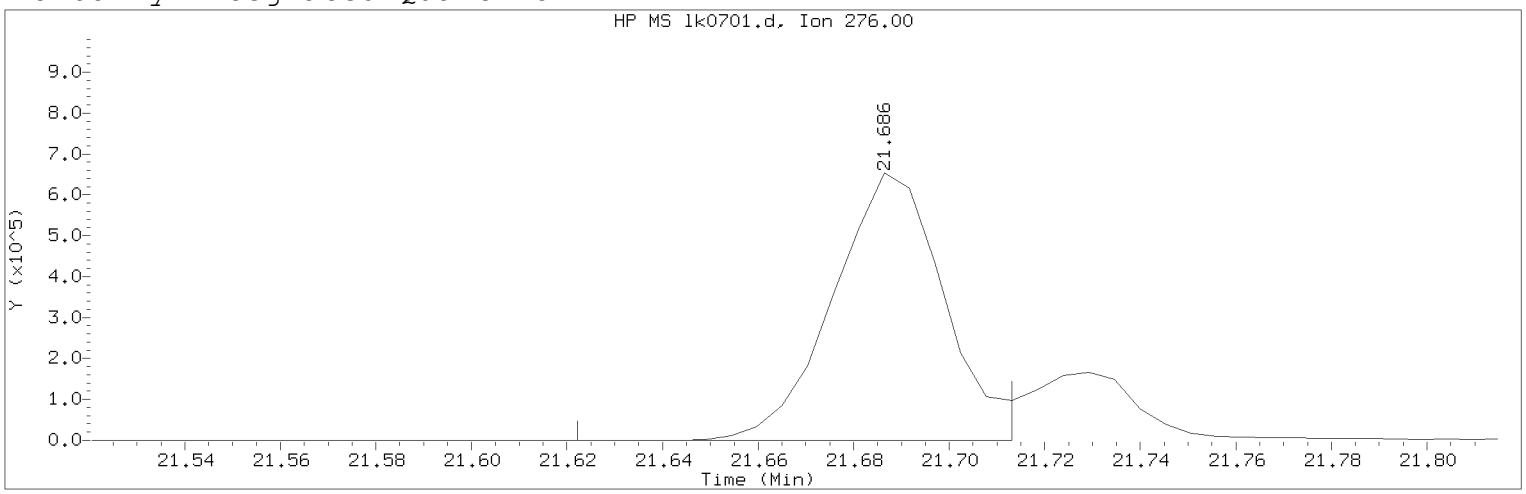
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1382		
Retention Time (minutes)	: 8.379		
Quant Ion	: 105.00		
Area	: 226481		
On-column Amount (ng/ul)	: 6.9155		
Integration start scan	: 1362	Integration stop scan:	1415
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0701.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 18:18
Date, time and analyst ID of latest file update: 09-Nov-2018 18:18 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

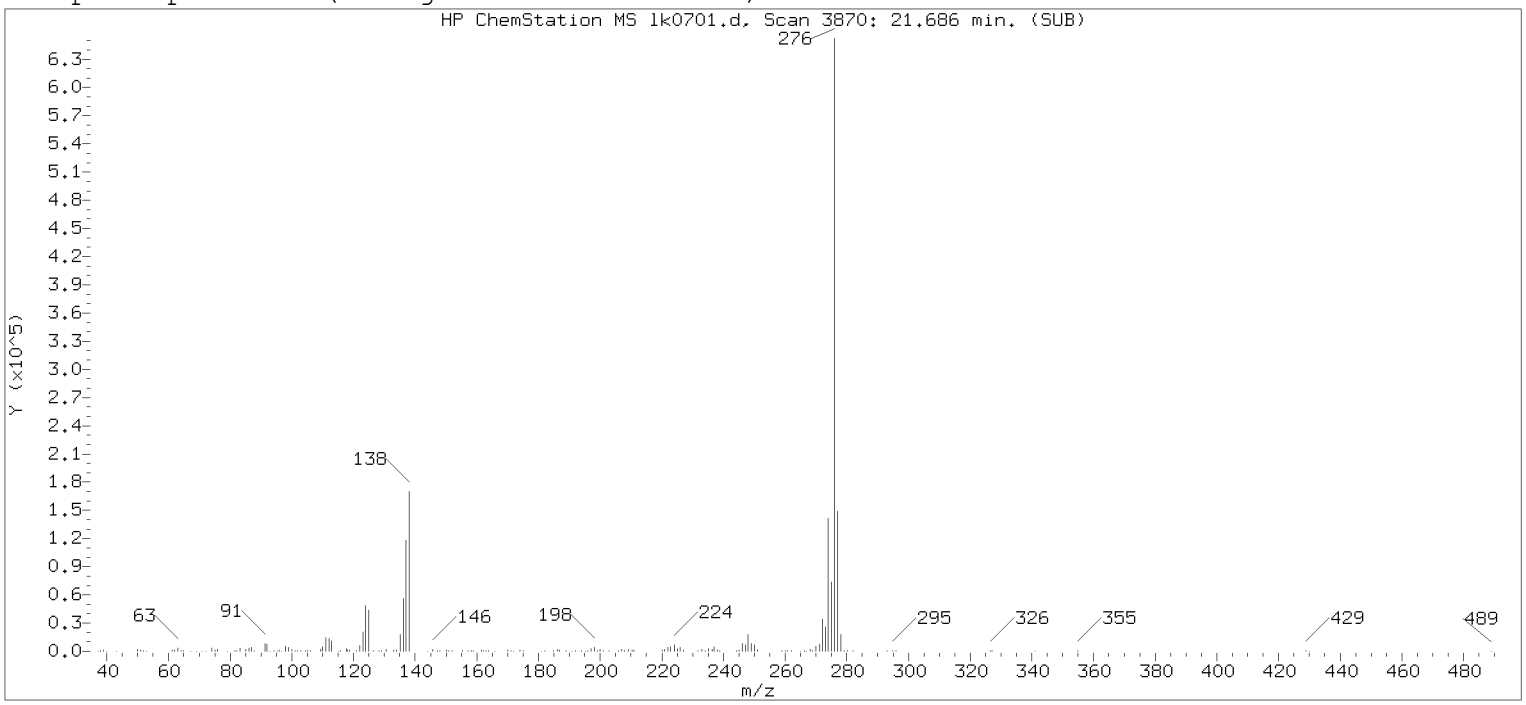
Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3870		
Retention Time (minutes)	: 21.686		
Quant Ion	: 276.00		
Area (flag)	: 1061748M		
On-Column Amount (ng/ul)	: 7.8961		
Integration start scan	: 3857	Integration stop scan:	3874
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

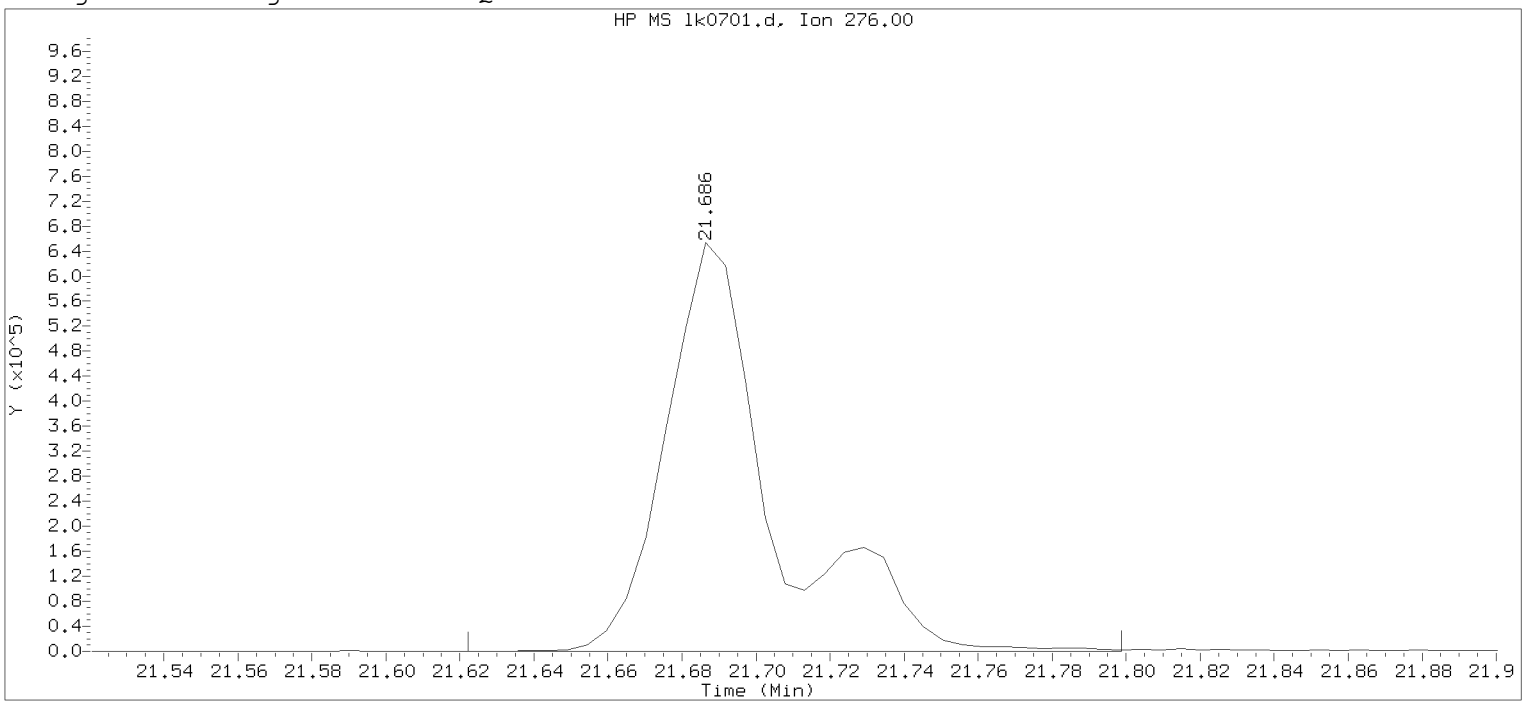
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:00.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0701.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 17:43 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: all1
Calibration date and time: 09-NOV-2018 18:15
Date, time and analyst ID of latest file update: 09-Nov-2018 18:15 art12405

Sample Name: SSTD7.5 Lab Sample ID: RVSTD2648

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3870		
Retention Time (minutes)	: 21.686		
Quant Ion	: 276.00		
Area	: 1312386		
On-column Amount (ng/ul)	: 9.7601		
Integration start scan	: 3857	Integration stop scan:	3890
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 11/09/2018 at 18:31.
Target 3.5 esignature user ID: art12405

Raw QC Data

Semivolatiles by GC/MS

Data file: /chem/HP20296.i/18nov09.b/lk0638.d Injection date and time: **09-NOV-2018 11:09**
Data file Sample Info. Line: SBLKWA312;SBLKWA312;1;3;BLANK;;; Instrument ID: **HP20296.i** Batch: **18312WAA**
Date, time and analyst ID of latest file update: 09-Nov-2018 15:44 art12405

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 07:56
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09.b/lk0631.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.758	(0.000)	1079	152	154416	(-8)	5.00	
68) Naphthalene-d8	8.742	(0.000)	1450	136	546399	(-14)	5.00	
118) Acenaphthene-d10	11.588	(0.000)	1982	164	269202	(-18)	5.00	
158) Phenanthrene-d10	13.519	(0.000)	2343	188	559891	(-17)	5.00	
180) Pyrene-d10	15.530	(0.000)	2719	212	586889	(-20)	5.00	
218) Perylene-d12	20.087	(0.000)	3571	264	540020	(-25)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
12) 2-Fluorophenol	(1)	4.822	(0.000)	112	1036389	21.681	43%
18) Phenol-d6	(1)	6.239	(0.001)	99	1008092	15.627	31%
45) Nitrobenzene-d5	(2)	7.619	(-0.001)	82	937689	16.391	66%
96) 2-Fluorobiphenyl	(3)	10.529	(0.000)	172	1097143	12.194	49%
140) 2,4,6-Tribromophenol	(3)	12.652	(0.000)	330	516595	48.975	98%
184) Terphenyl-d14	(5)	15.845	(0.000)	244	2106747	22.363	89%

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
19) Phenol	(1)				Not Detected					0.1
23) bis(2-Chloroethyl)ether	(1)				Not Detected					0.1
24) 2-Chlorophenol	(1)				Not Detected					0.1
25) 1,3-Dichlorobenzene	(1)				Not Detected					0.1
27) 1,4-Dichlorobenzene	(1)				Not Detected					0.1
29) 1,2-Dichlorobenzene	(1)				Not Detected					0.1
32) 2-Methylphenol	(1)				Not Detected					0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)				Not Detected					0.1
38) 4-Methylphenol	(1)				Not Detected					0.1
39) N-Nitroso-di-n-propylamine	(1)				Not Detected					0.2
44) Hexachloroethane	(1)				Not Detected					0.3
46) Nitrobenzene	(2)				Not Detected					0.1
52) Isophorone	(2)				Not Detected					0.1
53) 2-Nitrophenol	(2)				Not Detected					0.8
55) 2,4-Dimethylphenol	(2)				Not Detected					0.8
57) bis(2-Chloroethoxy)methane	(2)				Not Detected					0.1
62) 2,4-Dichlorophenol	(2)				Not Detected					0.1
65) 1,2,4-Trichlorobenzene	(2)				Not Detected					0.1
69) Naphthalene	(2)				Not Detected					0.03
70) 4-Chloroaniline	(2)				Not Detected					1
74) Hexachlorobutadiene	(2)				Not Detected					0.1
83) 4-Chloro-3-methylphenol	(2)				Not Detected					0.1
86) 2-Methylnaphthalene	(2)				Not Detected					0.03
88) Hexachlorocyclopentadiene	(3)				Not Detected					1
93) 2,4,6-Trichlorophenol	(3)				Not Detected					0.1
95) 2,4,5-Trichlorophenol	(3)				Not Detected					0.1
99) 2-Chloronaphthalene	(3)				Not Detected					0.1

Digitally signed by Ashley R. Transue on 11/09/2018 at 15:46. Target 3.5 esignature user ID: art12405

Data file: /chem/HP20296.i/18nov09.b/lk0638.d Injection date and time: **09-NOV-2018 11:09**
Data file Sample Info. Line: SBLKWA312;SBLKWA312;1;3;BLANK;;; Instrument ID: **HP20296.i** Batch: **18312WAA**
Date, time and analyst ID of latest file update: 09-Nov-2018 15:44 art12405

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 07:56
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09.b/lk0631.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
104) 2-Nitroaniline	(3)				Not Detected					0.5
110) Dimethylphthalate	(3)				Not Detected					0.5
113) 2,6-Dinitrotoluene	(3)				Not Detected					0.1
114) Acenaphthylene	(3)				Not Detected					0.03
117) 3-Nitroaniline	(3)				Not Detected					0.8
119) Acenaphthene	(3)				Not Detected					0.03
120) 2,4-Dinitrophenol	(3)				Not Detected					4
121) 4-Nitrophenol	(3)				Not Detected					3
123) 2,4-Dinitrotoluene	(3)				Not Detected					0.3
124) Dibenzofuran	(3)				Not Detected					0.1
129) Diethylphthalate	(3)				Not Detected					0.5
131) Fluorene	(3)				Not Detected					0.03
132) 4-Chlorophenyl-phenylether	(3)				Not Detected					0.1
134) 4-Nitroaniline	(3)				Not Detected					0.2
135) 4,6-Dinitro-2-methylphenol	(4)				Not Detected					2
136) N-Nitrosodiphenylamine	(4)				Not Detected					0.2
148) 4-Bromophenyl-phenylether	(4)				Not Detected					0.1
150) Hexachlorobenzene	(4)				Not Detected					0.03
154) Pentachlorophenol	(4)				Not Detected					0.3
160) Phenanthrene	(4)				Not Detected					0.03
162) Anthracene	(4)				Not Detected					0.03
168) Carbazole	(4)				Not Detected					0.1
170) Di-n-butylphthalate	(4)				Not Detected					0.5
178) Fluoranthene	(4)				Not Detected					0.03
182) Pyrene	(5)				Not Detected					0.03
193) Butylbenzylphthalate	(5)				Not Detected					0.5
198) 3,3'-Dichlorobenzidine	(5)				Not Detected					0.8
200) Benzo(a)anthracene	(5)				Not Detected					0.03
201) Chrysene	(5)				Not Detected					0.03
204) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					1
210) Di-n-octylphthalate	(6)				Not Detected					1
211) Benzo(b)fluoranthene	(6)				Not Detected					0.03
213) Benzo(k)fluoranthene	(6)				Not Detected					0.03
216) Benzo(a)pyrene	(6)				Not Detected					0.03
224) Indeno(1,2,3-cd)pyrene	(6)				Not Detected					0.03
225) Dibenz(a,h)anthracene	(6)				Not Detected					0.03
226) Benzo(g,h,i)perylene	(6)				Not Detected					0.03

Total number of targets = 64

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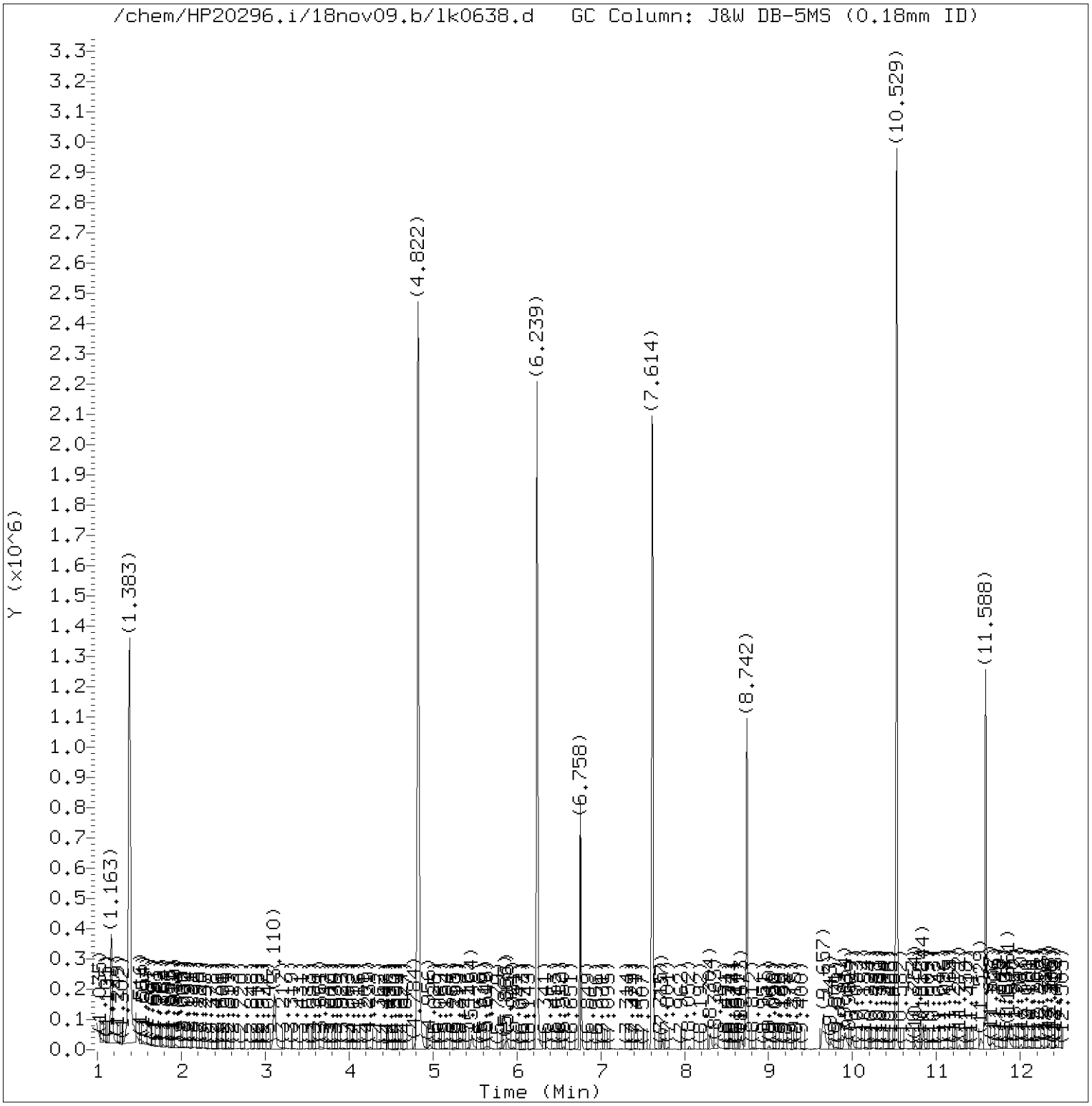
Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:06. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

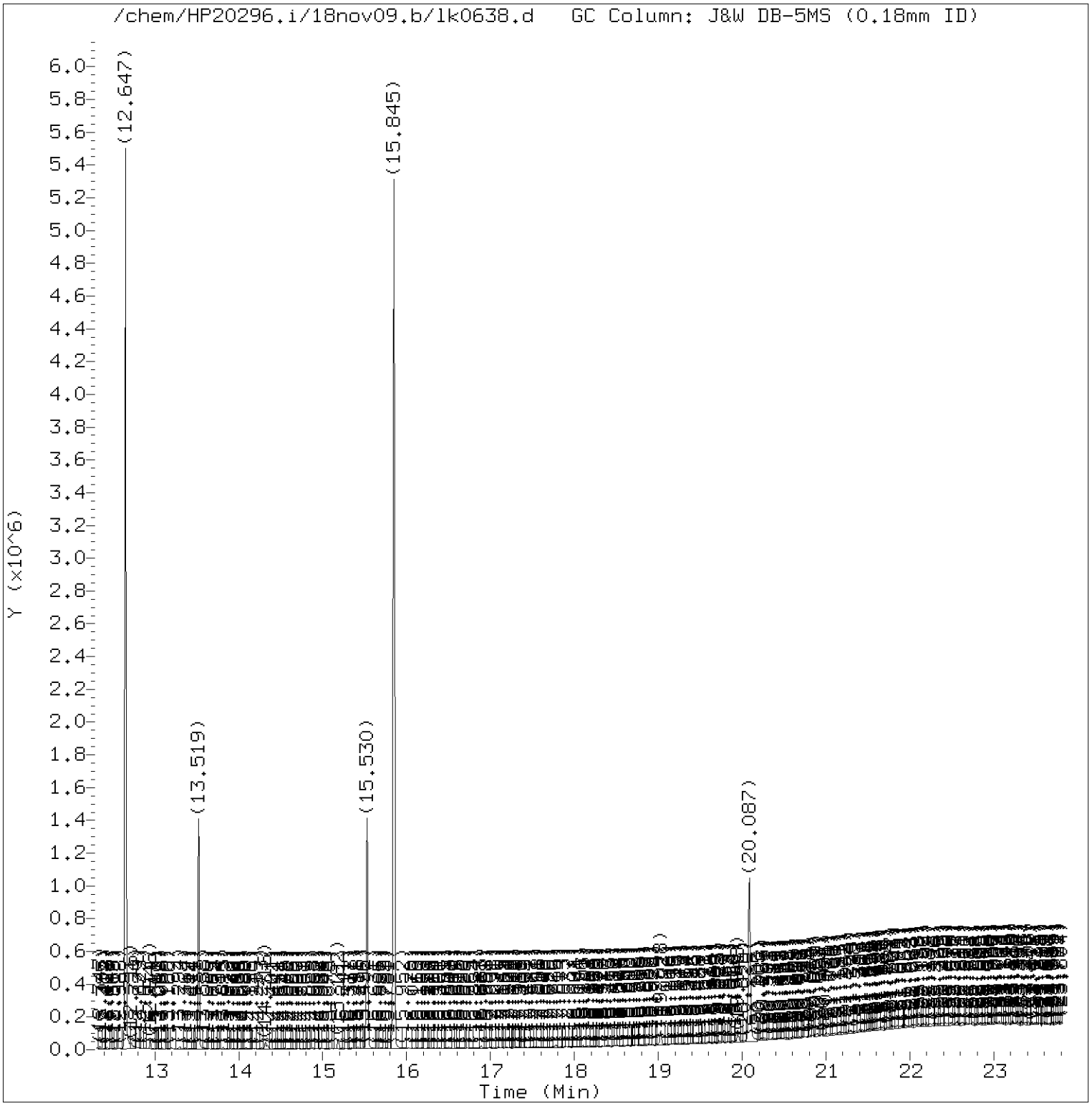
Target Revision 3.5

Data File: /chem/HP20296.i/18nov09.b/lk0638.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 11:09 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 07:56
Date, time and analyst ID of latest file update: 09-Nov-2018 15:44 art12405

Sample Name: SBLKWA312 Lab Sample ID: SBLKWA312

Digitally signed by Ashley R. Transue
on 11/09/2018 at 15:46.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09.b/lk0638.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 11:09 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 07:56
Date, time and analyst ID of latest file update: 09-Nov-2018 15:44 art12405

Sample Name: SBLKWA312 Lab Sample ID: SBLKWA312

Digitally signed by Ashley R. Transue
on 11/09/2018 at 15:46.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09.b/lk0638.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 11:09 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 07:56
Date, time and analyst ID of latest file update: 09-Nov-2018 15:44 art12405

Sample Name: SBLKWA312 Lab Sample ID: SBLKWA312

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.822	112	1036389	21.681
18)$Phenol-d6	(1)	6.239	99	1008092	15.627
26)*1,4-Dichlorobenzene-d4	(1)	6.758	152	154416	5.000
45)$Nitrobenzene-d5	(2)	7.619	82	937689	16.391
68)*Naphthalene-d8	(2)	8.742	136	546399	5.000
96)$2-Fluorobiphenyl	(3)	10.529	172	1097143	12.194
118)*Acenaphthene-d10	(3)	11.588	164	269202	5.000
140)$2,4,6-Tribromophenol	(3)	12.652	330	516595	48.975
158)*Phenanthrene-d10	(4)	13.519	188	559891	5.000
180)*Pyrene-d10	(5)	15.530	212	586889	5.000
184)$Terphenyl-d14	(5)	15.845	244	2106747	22.363
218)*Perylene-d12	(6)	20.087	264	540020	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/09/2018 at 15:46.
Target 3.5 esignature user ID: art12405

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR226MS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885682

Sample wt/vol: 241 (g/mL)ML Lab File ID: lk0705.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			25	
111-44-4	bis(2-Chloroethyl)ether			40	
95-57-8	2-Chlorophenol			42	
541-73-1	1,3-Dichlorobenzene			31	
106-46-7	1,4-Dichlorobenzene			32	
95-50-1	1,2-Dichlorobenzene			33	
95-48-7	2-Methylphenol			39	
108-60-1	2,2'-oxybis(1-Chloropropane)			36	
106-44-5	4-Methylphenol			40	
621-64-7	N-Nitroso-di-n-propylamine			42	
67-72-1	Hexachloroethane			28	
98-95-3	Nitrobenzene			42	
78-59-1	Isophorone			43	
88-75-5	2-Nitrophenol			46	
105-67-9	2,4-Dimethylphenol			33	
111-91-1	bis(2-Chloroethoxy)methane			43	
120-83-2	2,4-Dichlorophenol			46	
120-82-1	1,2,4-Trichlorobenzene			32	
91-20-3	Naphthalene			36	
106-47-8	4-Chloroaniline			29	
87-68-3	Hexachlorobutadiene			31	
59-50-7	4-Chloro-3-methylphenol			45	
91-57-6	2-Methylnaphthalene			37	
77-47-4	Hexachlorocyclopentadiene			32	
88-06-2	2,4,6-Trichlorophenol			47	
95-95-4	2,4,5-Trichlorophenol			48	
91-58-7	2-Chloronaphthalene			36	
88-74-4	2-Nitroaniline			52	
131-11-3	Dimethylphthalate			22	
606-20-2	2,6-Dinitrotoluene			51	

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR226MS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885682

Sample wt/vol: 241 (g/mL)ML Lab File ID: lk0705.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene			45	
99-09-2	3-Nitroaniline			37	
83-32-9	Acenaphthene			40	
51-28-5	2,4-Dinitrophenol			63	
100-02-7	4-Nitrophenol			24	J
121-14-2	2,4-Dinitrotoluene			47	
132-64-9	Dibenzofuran			42	
84-66-2	Diethylphthalate			33	
86-73-7	Fluorene			43	
7005-72-3	4-Chlorophenyl-phenylether			39	
100-01-6	4-Nitroaniline			39	
534-52-1	4,6-Dinitro-2-methylphenol			42	
86-30-6	N-Nitrosodiphenylamine			48	
101-55-3	4-Bromophenyl-phenylether			42	
118-74-1	Hexachlorobenzene			46	
87-86-5	Pentachlorophenol			24	
85-01-8	Phenanthrene			46	
120-12-7	Anthracene			46	
86-74-8	Carbazole			48	
84-74-2	Di-n-butylphthalate			41	
206-44-0	Fluoranthene			48	
129-00-0	Pyrene			48	
85-68-7	Butylbenzylphthalate			35	
91-94-1	3,3'-Dichlorobenzidine			42	
56-55-3	Benzo(a)anthracene			51	
218-01-9	Chrysene			51	
117-81-7	bis(2-Ethylhexyl)phthalate			47	
117-84-0	Di-n-octylphthalate			45	
205-99-2	Benzo(b)fluoranthene			47	
207-08-9	Benzo(k)fluoranthene			47	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR226MS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885682

Sample wt/vol: 241 (g/mL)ML Lab File ID: lk0705.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		49		
193-39-5	Indeno(1,2,3-cd)pyrene		48		
53-70-3	Dibenz(a,h)anthracene		49		
191-24-2	Benzo(g,h,i)perylene		46		

FORM I SV-3

OR226MS

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

9885682

Data file: /chem/HP20296.i/18nov09a.b/lk0705.d
Data file Sample Info. Line: OR226MS;9885682;1;3;MS;;;
Date, time and analyst ID of latest file update: 10-Nov-2018 09:19 knb25316

Injection date and time: **09-NOV-2018 20:06**
Instrument ID: **HP20296.i** Batch: **18312WAA**

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 20:35
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09a.b/lk0701.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 241 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.753(-0.010)	1078	152	147662 (-5)	5.00	
68) Naphthalene-d8	8.732(0.000)	1448	136	554468 (-1)	5.00	
118) Acenaphthene-d10	11.577(0.000)	1980	164	281911 (-1)	5.00	
158) Phenanthrene-d10	13.508(0.000)	2341	188	538697 (-1)	5.00	
180) Pyrene-d10	15.514(0.000)	2716	212	567837 (-5)	5.00	
218) Perylene-d12	20.065(0.000)	3567	264	555301 (-7)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.838(-0.003)	112	1309061	28.638	57%		10 - 85
18) Phenol-d6	(1)	6.239(0.000)	99	1300487	21.082	42%		10 - 72
45) Nitrobenzene-d5	(2)	7.608(-0.001)	82	1108537	19.096	76%		30 - 111
96) 2-Fluorobiphenyl	(3)	10.513(0.000)	172	1696705	18.008	72%		39 - 105
140) 2,4,6-Tribromophenol	(3)	12.641(0.000)	330	491540	44.499	89%		29 - 133
184) Terphenyl-d14	(5)	15.835(0.000)	244	2034526	22.321	89%		27 - 126

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
19) Phenol	(1)	6.260(-0.000)	94	432161	5.973	24.78			0.1
23) bis(2-Chloroethyl)ether	(1)	6.384(0.000)	93	523233	9.612	39.88			0.1
24) 2-Chlorophenol	(1)	6.432(-0.000)	128	427661	10.035	41.64			0.1
25) 1,3-Dichlorobenzene	(1)	6.662(-0.000)	146	353063	7.389	30.66			0.1
27) 1,4-Dichlorobenzene	(1)	6.779(0.000)	146	369525	7.696	31.93			0.1
29) 1,2-Dichlorobenzene	(1)	6.999(0.000)	146	368856	7.905	32.80			0.1
32) 2-Methylphenol	(1)	7.175(0.000)	108	426715	9.519	39.50			0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.213(0.000)	45	597915	8.709	36.14			0.1
38) 4-Methylphenol	(1)	7.416(0.001)	108	452737	9.676	40.15			0.1
39) N-Nitroso-di-n-propylamine	(1)	7.405(0.000)	70	419283	10.039	41.66			0.2
44) Hexachloroethane	(1)	7.517(0.000)	117	145813	6.687	27.75			0.3
46) Nitrobenzene	(2)	7.635(0.000)	77	621745	10.050	41.70			0.1
52) Isophorone	(2)	8.026(-0.000)	82	1084000	10.383	43.08			0.1
53) 2-Nitrophenol	(2)	8.138(-0.000)	139	224067	11.028	45.76			0.8
55) 2,4-Dimethylphenol	(2)	8.250(-0.000)	107	400024	8.050	33.40			0.8
57) bis(2-Chloroethoxy)methane	(2)	8.400(0.000)	93	693823	10.424	43.25			0.1
62) 2,4-Dichlorophenol	(2)	8.528(-0.000)	162	392483	11.008	45.67			0.1
65) 1,2,4-Trichlorobenzene	(2)	8.651(0.000)	180	320784	7.796	32.35			0.1
69) Naphthalene	(2)	8.764(0.000)	128	1086340	8.674	35.99			0.03
70) 4-Chloroaniline	(2)	8.881(-0.000)	127	350513	6.942	28.80			1
74) Hexachlorobutadiene	(2)	8.988(0.000)	225	180408	7.439	30.87			0.1
83) 4-Chloro-3-methylphenol	(2)	9.694(-0.000)	107	456381	10.784	44.75			0.1
86) 2-Methylnaphthalene	(2)	9.892(-0.000)	142	708559	8.818	36.59			0.03
88) Hexachlorocyclopentadiene	(3)	10.154(0.000)	237	195858	7.805	32.39			1
93) 2,4,6-Trichlorophenol	(3)	10.368(0.000)	196	290095	11.384	47.24			0.1
95) 2,4,5-Trichlorophenol	(3)	10.422(-0.000)	196	322970	11.495	47.70			0.1
99) 2-Chloronaphthalene	(3)	10.678(0.000)	162	741740	8.623	35.78			0.1

Digitally signed by Kira N. Beck on 11/10/2018 at 09:23. Target 3.5 esignature user ID: knb25316

Data file: /chem/HP20296.i/18nov09a.b/lk0705.d Injection date and time: **09-NOV-2018 20:06**
Data file Sample Info. Line: OR226MS;9885682;1;3;MS;;; Instrument ID: **HP20296.i** Batch: **18312WAA**
Date, time and analyst ID of latest file update: 10-Nov-2018 09:19 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 20:35
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09a.b/lk0701.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 241 ml Volume Injected (Vi): 1 ul

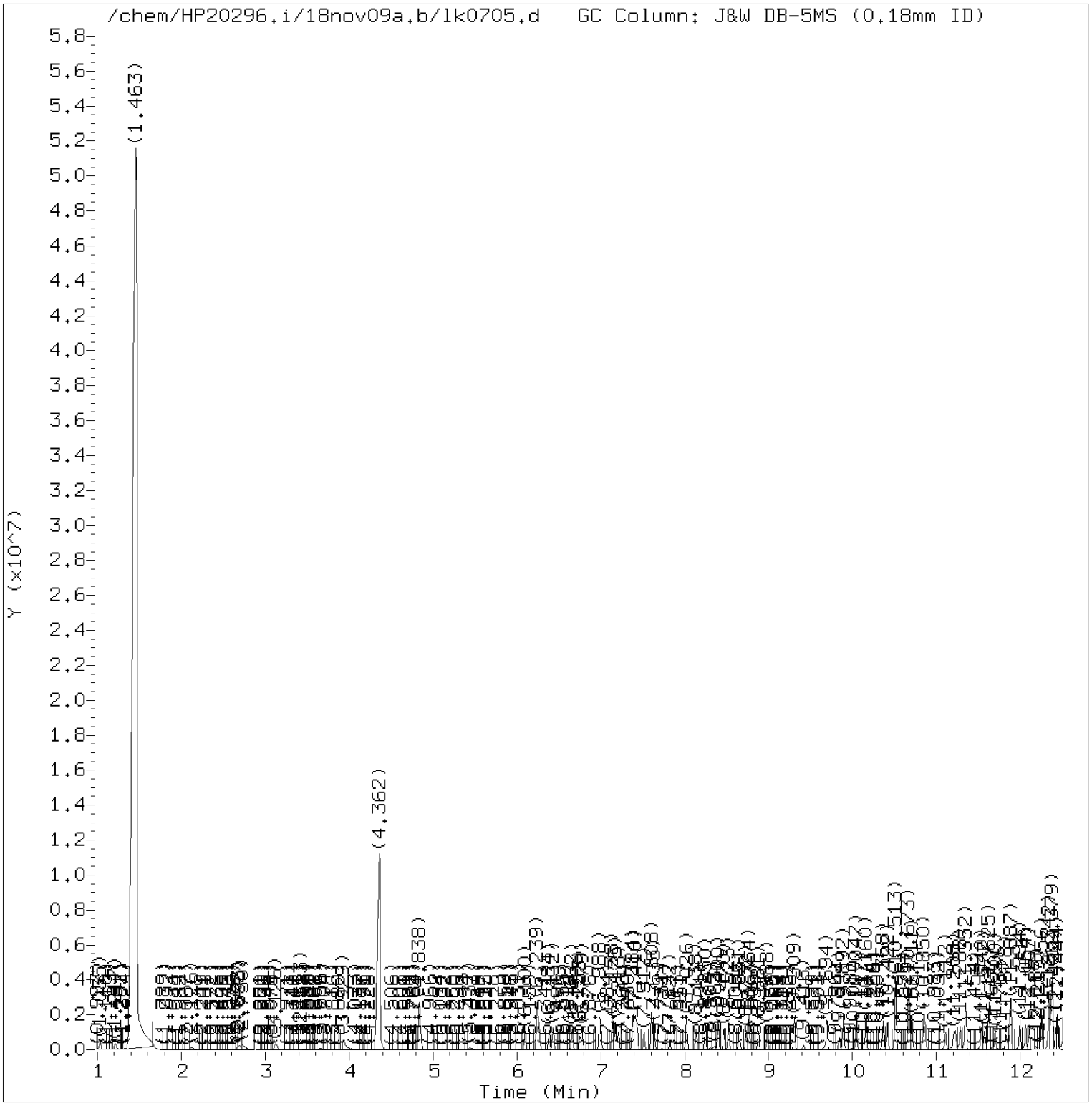
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
104) 2-Nitroaniline	(3)	10.871(-0.000)	138	271580	12.552	52.08			0.5
110) Dimethylphthalate	(3)	11.208(-0.000)	163	465406	5.207	21.60			0.5
113) 2,6-Dinitrotoluene	(3)	11.288(-0.000)	165	222552	12.282	50.96			0.1
114) Acenaphthylene	(3)	11.347(-0.000)	152	1169214	10.901	45.23			0.03
117) 3-Nitroaniline	(3)	11.540(-0.000)	138	187524	9.027	37.46			0.8
119) Acenaphthene	(3)	11.625(-0.000)	153	793882	9.589	39.79			0.03
120) 2,4-Dinitrophenol	(3)	11.700(-0.000)	184	165120	15.112	62.70			4
121) 4-Nitrophenol	(3)	11.828(-0.000)	109	100100	5.754	23.88		J	3
123) 2,4-Dinitrotoluene	(3)	11.898(-0.000)	165	291637	11.211	46.52			0.3
124) Dibenzofuran	(3)	11.882(-0.000)	168	1129731	10.070	41.79			0.1
129) Diethylphthalate	(3)	12.256(-0.000)	149	695573	7.908	32.81			0.5
131) Fluorene	(3)	12.342(-0.000)	166	928600	10.451	43.37			0.03
132) 4-Chlorophenyl-phenylether	(3)	12.369(-0.000)	204	432010	9.491	39.38			0.1
134) 4-Nitroaniline	(3)	12.385(-0.000)	138	186703	9.388	38.96			0.2
135) 4,6-Dinitro-2-methylphenol	(4)	12.428(-0.000)	198	143176	10.101	41.91			2
136) N-Nitrosodiphenylamine	(4)	12.513(0.000)	169	792712	11.503	47.73			0.2
148) 4-Bromophenyl-phenylether	(4)	12.962(0.000)	248	242650	10.101	41.91			0.1
150) Hexachlorobenzene	(4)	13.016(0.000)	284	270724	11.054	45.87			0.03
154) Pentachlorophenol	(4)	13.273(0.000)	266	89820	5.789	24.02			0.3
160) Phenanthrene	(4)	13.540(-0.000)	178	1431476	11.100	46.06			0.03
162) Anthracene	(4)	13.604(0.000)	178	1394478	11.023	45.74			0.03
168) Carbazole	(4)	13.829(0.000)	167	1312917	11.582	48.06			0.1
170) Di-n-butylphthalate	(4)	14.342(-0.000)	149	1457931	9.943	41.26			0.5
178) Fluoranthene	(4)	15.198(-0.000)	202	1643980	11.631	48.26			0.03
182) Pyrene	(5)	15.546(-0.000)	202	1723678	11.507	47.75			0.03
193) Butylbenzylphthalate	(5)	16.690(-0.000)	149	564175	8.482	35.19			0.5
198) 3,3'-Dichlorobenzidine	(5)	17.568(-0.000)	252	503440	10.046	41.69			0.8
200) Benzo(a)anthracene	(5)	17.578(-0.000)	228	1670201	12.253	50.84			0.03
201) Chrysene	(5)	17.637(-0.000)	228	1651753	12.264	50.89			0.03
204) bis(2-Ethylhexyl)phthalate	(5)	17.765(-0.000)	149	1083837	11.311	46.93			1
210) Di-n-octylphthalate	(6)	18.937(-0.000)	149	1923378	10.829	44.93			1
211) Benzo(b)fluoranthene	(6)	19.450(-0.000)	252	1646505	11.387	47.25			0.03
213) Benzo(k)fluoranthene	(6)	19.498(-0.000)	252	1634463	11.215	46.53			0.03
216) Benzo(a)pyrene	(6)	19.980(-0.000)	252	1525450	11.804	48.98			0.03
224) Indeno(1,2,3-cd)pyrene	(6)	21.691(-0.000)	276	1441681M	11.498	47.71			0.03
225) Dibenz(a,h)anthracene	(6)	21.734(-0.000)	278	1539952	11.800	48.96			0.03
226) Benzo(g,h,i)perylene	(6)	22.087(-0.000)	276	1486833	11.187	46.42			0.03

M = Compound was manually integrated.

Total number of targets = 64

Digitally signed by Kira N. Beck on 11/10/2018 at 09:23. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:06. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

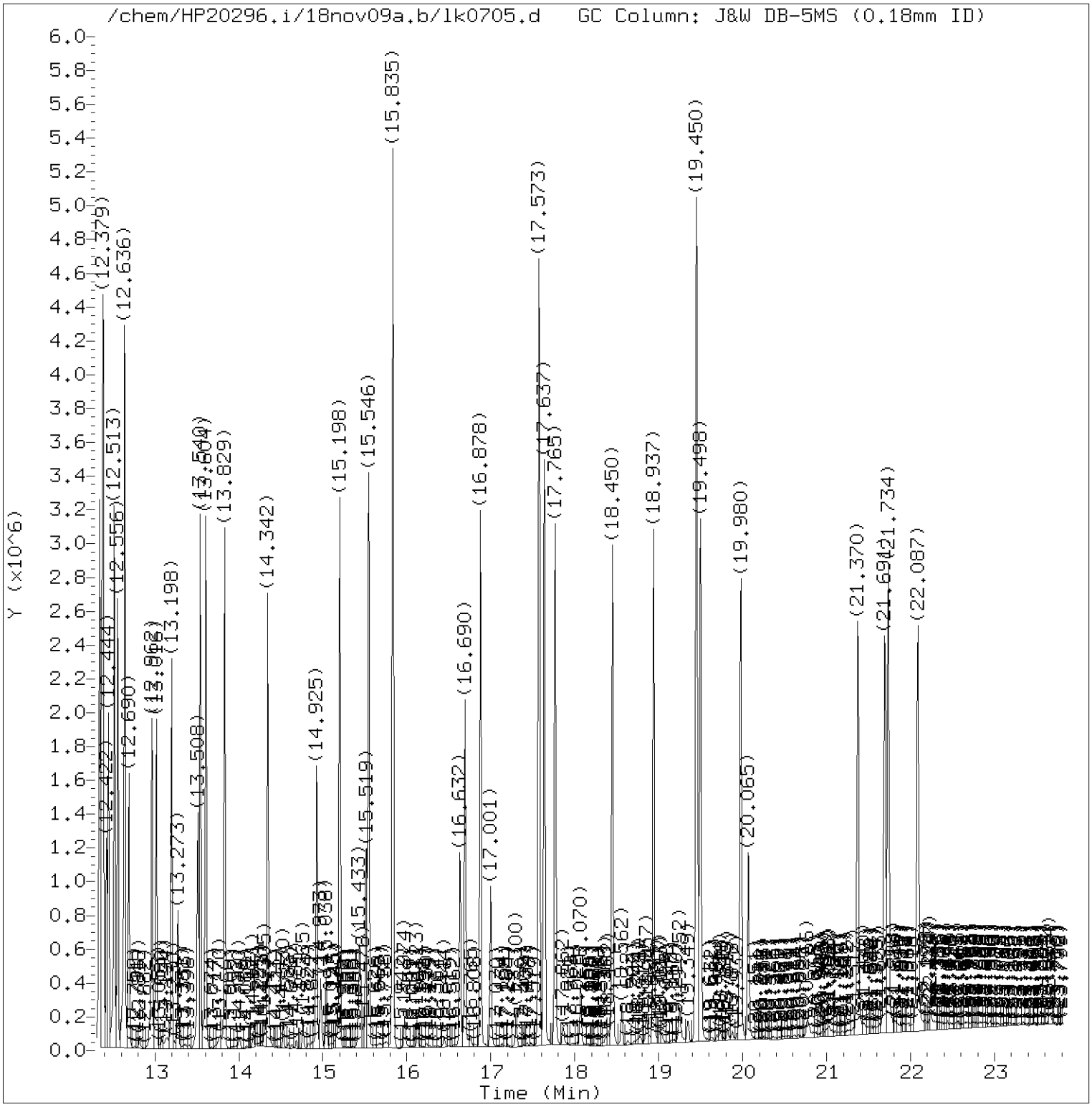
Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0705.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 20:06 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:19 knb25316

Sample Name: OR226MS Lab Sample ID: 9885682

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:23.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0705.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 20:06 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:19 knb25316

Sample Name: OR226MS Lab Sample ID: 9885682

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:23.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0705.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 20:06 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:19 knb25316

Sample Name: OR226MS Lab Sample ID: 9885682

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.838	112	1309061	28.638
18)$Phenol-d6	(1)	6.239	99	1300487	21.082
19) Phenol	(1)	6.261	94	432161	5.973
23) bis(2-Chloroethyl)ether	(1)	6.384	93	523233	9.612
24) 2-Chlorophenol	(1)	6.432	128	427661	10.035
25) 1,3-Dichlorobenzene	(1)	6.662	146	353063	7.389
26)*1,4-Dichlorobenzene-d4	(1)	6.753	152	147662	5.000
27) 1,4-Dichlorobenzene	(1)	6.779	146	369525	7.696
29) 1,2-Dichlorobenzene	(1)	6.999	146	368856	7.905
32) 2-Methylphenol	(1)	7.175	108	426715	9.519
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.213	45	597915	8.709
39) N-Nitroso-di-n-propylamine	(1)	7.405	70	419283	10.039
38) 4-Methylphenol	(1)	7.416	108	452737	9.676
44) Hexachloroethane	(1)	7.517	117	145813	6.687
45)$Nitrobenzene-d5	(2)	7.608	82	1108537	19.096
46) Nitrobenzene	(2)	7.635	77	621745	10.050
52) Isophorone	(2)	8.026	82	1084000	10.383
53) 2-Nitrophenol	(2)	8.138	139	224067	11.028
55) 2,4-Dimethylphenol	(2)	8.250	107	400024	8.050
57) bis(2-Chloroethoxy)methane	(2)	8.400	93	693823	10.424
62) 2,4-Dichlorophenol	(2)	8.528	162	392483	11.008
65) 1,2,4-Trichlorobenzene	(2)	8.651	180	320784	7.796
68)*Naphthalene-d8	(2)	8.732	136	554468	5.000
69) Naphthalene	(2)	8.764	128	1086340	8.674
70) 4-Chloroaniline	(2)	8.881	127	350513	6.942
74) Hexachlorobutadiene	(2)	8.988	225	180408	7.439
83) 4-Chloro-3-methylphenol	(2)	9.694	107	456381	10.784
86) 2-Methylnaphthalene	(2)	9.892	142	708559	8.818
88) Hexachlorocyclopentadiene	(3)	10.154	237	195858	7.805
93) 2,4,6-Trichlorophenol	(3)	10.368	196	290095	11.384
95) 2,4,5-Trichlorophenol	(3)	10.422	196	322970	11.495
96)$2-Fluorobiphenyl	(3)	10.513	172	1696705	18.008
99) 2-Chloronaphthalene	(3)	10.679	162	741740	8.623
104) 2-Nitroaniline	(3)	10.871	138	271580	12.552
110) Dimethylphthalate	(3)	11.208	163	465406	5.207
113) 2,6-Dinitrotoluene	(3)	11.288	165	222552	12.282
114) Acenaphthylene	(3)	11.347	152	1169214	10.901
117) 3-Nitroaniline	(3)	11.540	138	187524	9.027
118)*Acenaphthene-d10	(3)	11.577	164	281911	5.000
119) Acenaphthene	(3)	11.625	153	793882	9.589

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:23.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0705.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 20:06 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:19 knb25316

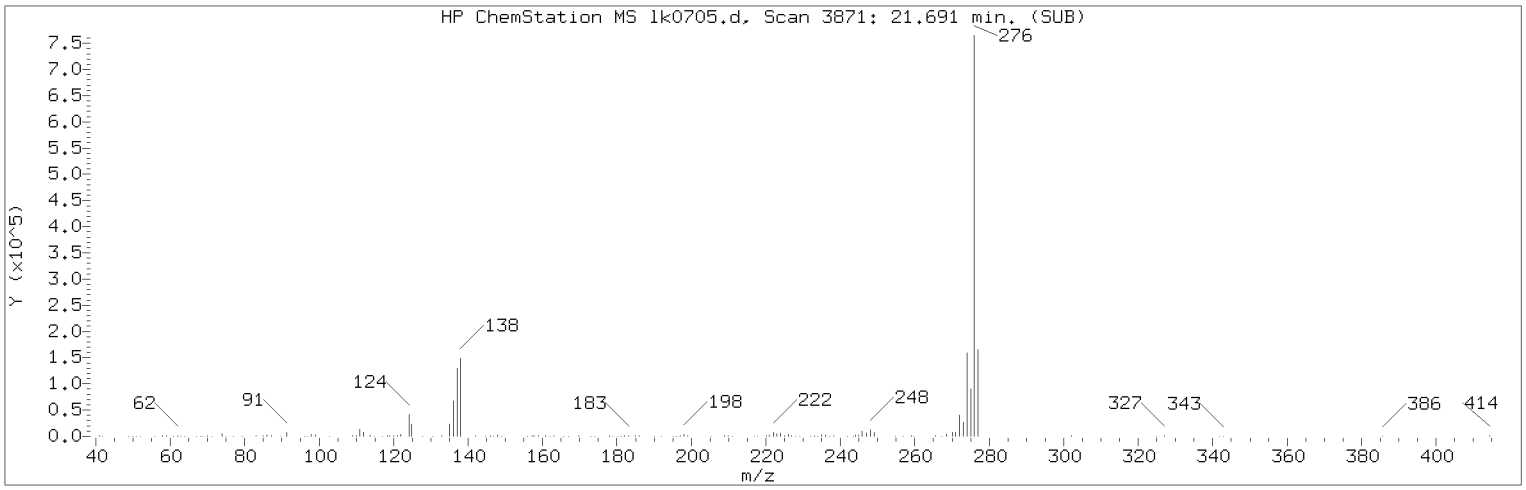
Sample Name: OR226MS Lab Sample ID: 9885682

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
120) 2,4-Dinitrophenol	(3)	11.700	184	165120	15.112
121) 4-Nitrophenol	(3)	11.828	109	100100	5.754
124) Dibenzofuran	(3)	11.882	168	1129731	10.070
123) 2,4-Dinitrotoluene	(3)	11.898	165	291637	11.211
129) Diethylphthalate	(3)	12.256	149	695573	7.908
131) Fluorene	(3)	12.342	166	928600	10.451
132) 4-Chlorophenyl-phenylether	(3)	12.369	204	432010	9.491
134) 4-Nitroaniline	(3)	12.385	138	186703	9.388
135) 4,6-Dinitro-2-methylphenol	(4)	12.428	198	143176	10.101
136) N-Nitrosodiphenylamine	(4)	12.513	169	792712	11.503
140)$2,4,6-Tribromophenol	(3)	12.641	330	491540	44.499
148) 4-Bromophenyl-phenylether	(4)	12.962	248	242650	10.101
150) Hexachlorobenzene	(4)	13.016	284	270724	11.054
154) Pentachlorophenol	(4)	13.273	266	89820	5.789
158)*Phenanthrene-d10	(4)	13.508	188	538697	5.000
160) Phenanthrene	(4)	13.540	178	1431476	11.100
162) Anthracene	(4)	13.604	178	1394478	11.023
168) Carbazole	(4)	13.829	167	1312917	11.582
170) Di-n-butylphthalate	(4)	14.342	149	1457931	9.943
178) Fluoranthene	(4)	15.198	202	1643980	11.631
180)*Pyrene-d10	(5)	15.514	212	567837	5.000
182) Pyrene	(5)	15.546	202	1723678	11.507
184)$Terphenyl-d14	(5)	15.835	244	2034526	22.321
193) Butylbenzylphthalate	(5)	16.690	149	564175	8.482
198) 3,3'-Dichlorobenzidine	(5)	17.568	252	503440	10.046
200) Benzo(a)anthracene	(5)	17.578	228	1670201	12.253
201) Chrysene	(5)	17.637	228	1651753	12.264
204) bis(2-Ethylhexyl)phthalate	(5)	17.765	149	1083837	11.311
210) Di-n-octylphthalate	(6)	18.937	149	1923378	10.829
211) Benzo(b)fluoranthene	(6)	19.450	252	1646505	11.387
213) Benzo(k)fluoranthene	(6)	19.498	252	1634463	11.215
216) Benzo(a)pyrene	(6)	19.980	252	1525450	11.804
218)*Perylene-d12	(6)	20.065	264	555301	5.000
224) Indeno(1,2,3-cd)pyrene	(6)	21.691	276	1441681M	11.498
225) Dibenz(a,h)anthracene	(6)	21.734	278	1539952	11.800
226) Benzo(g,h,i)perylene	(6)	22.087	276	1486833	11.187

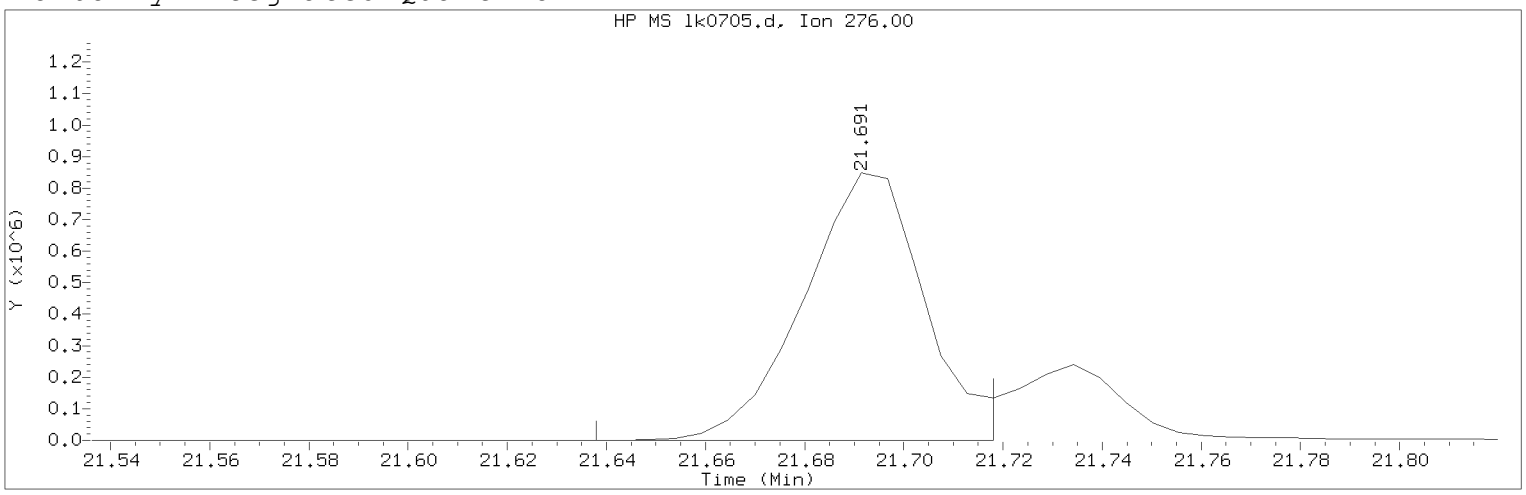
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:23.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0705.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 20:06 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:19 knb25316

Sample Name: OR226MS Lab Sample ID: 9885682

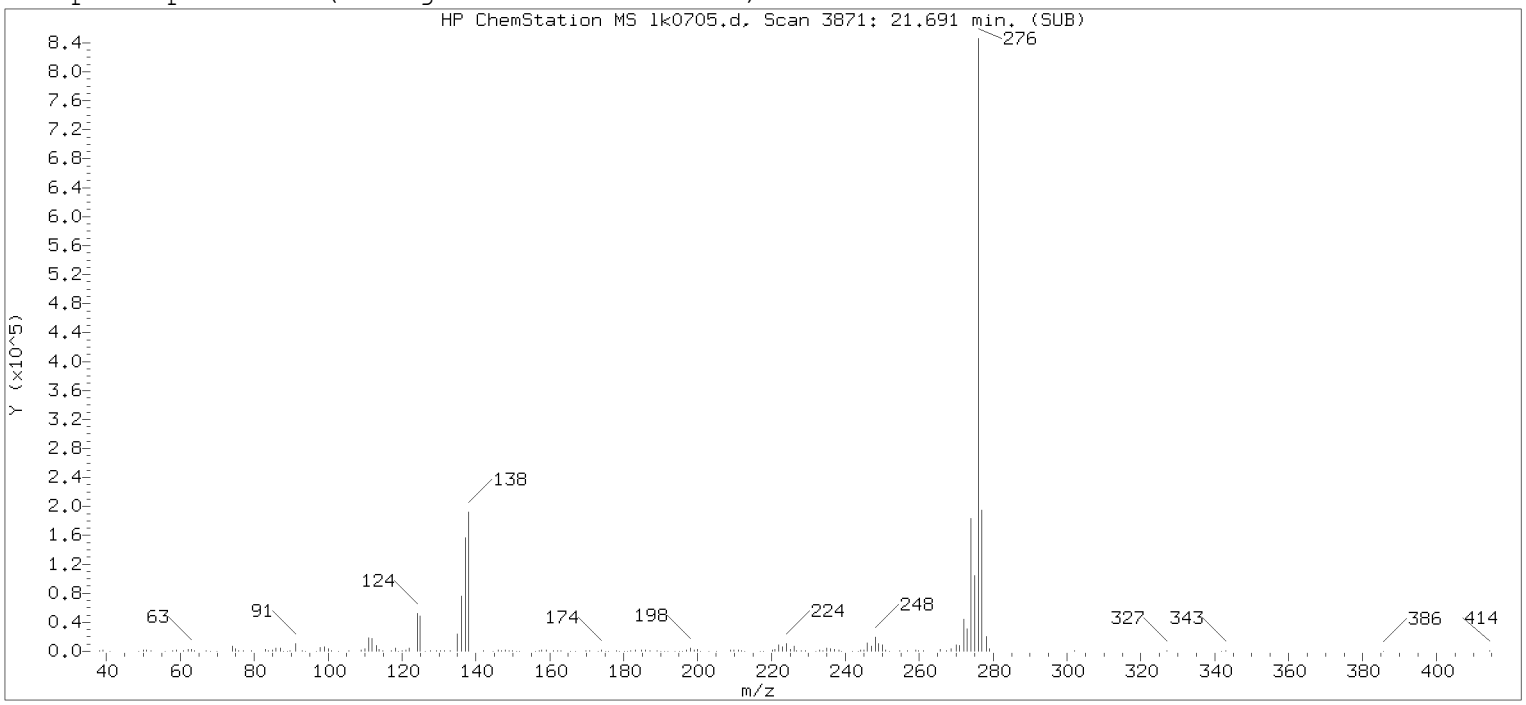
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3871
Retention Time (minutes) : 21.691
Quant Ion : 276.00
Area (flag) : 1441681M
On-Column Amount (ng/ul) : 11.4978
Integration start scan : 3860 Integration stop scan: 3875
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

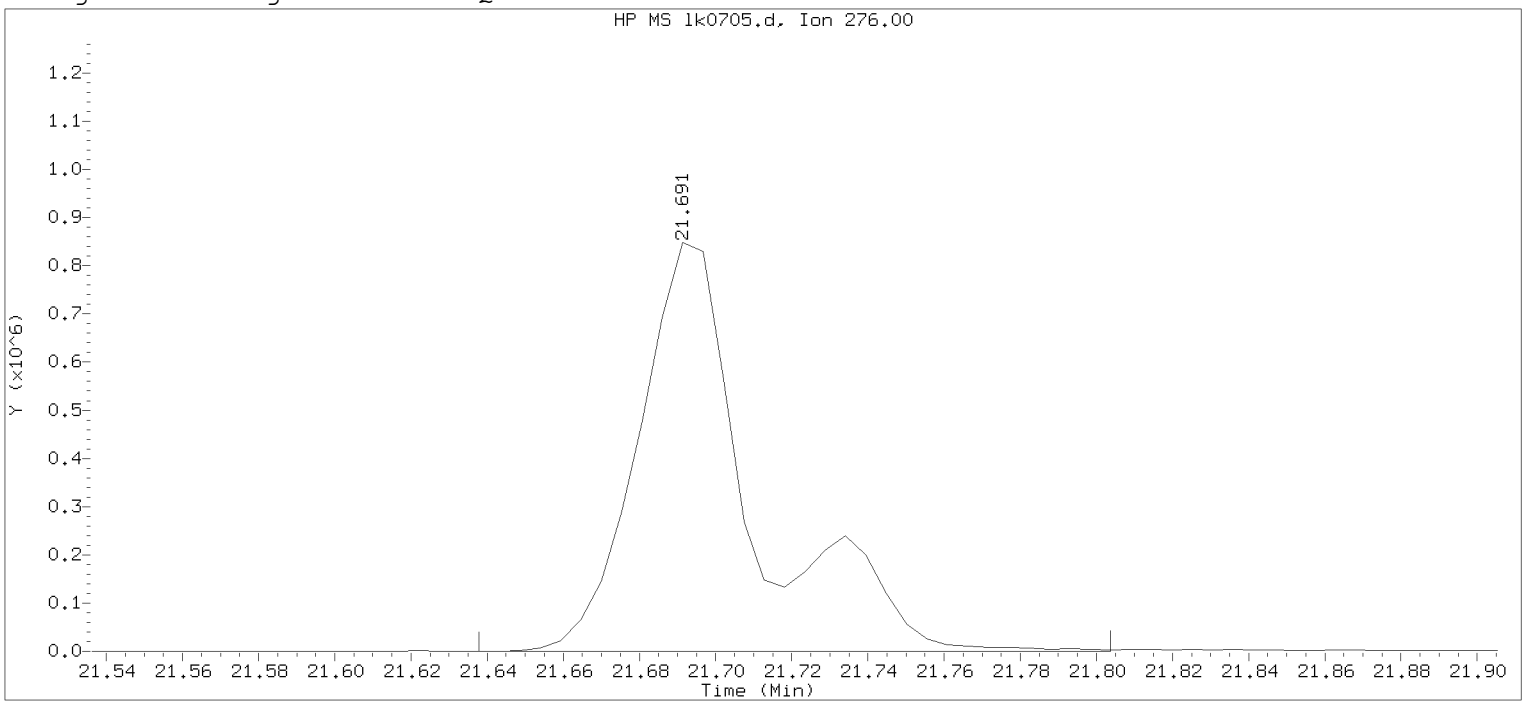
Analyst responsible for change: Digitally signed by Kira N. Beck
on 11/10/2018 at 09:23.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:06.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0705.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 20:06 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 09-Nov-2018 20:36 Unknown

Sample Name: OR226MS Lab Sample ID: 9885682

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3871		
Retention Time (minutes)	: 21.691		
Quant Ion	: 276.00		
Area	: 1787194		
On-column Amount (ng/ul)	: 14.2534		
Integration start scan	: 3860	Integration stop scan:	3891
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 11/10/2018 at 09:23.
Target 3.5 esignature user kbeck

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

OR226MSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885683

Sample wt/vol: 238 (g/mL)ML Lab File ID: lk0706.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			24	
111-44-4	bis(2-Chloroethyl)ether			40	
95-57-8	2-Chlorophenol			41	
541-73-1	1,3-Dichlorobenzene			28	
106-46-7	1,4-Dichlorobenzene			29	
95-50-1	1,2-Dichlorobenzene			29	
95-48-7	2-Methylphenol			38	
108-60-1	2,2'-oxybis(1-Chloropropane)			35	
106-44-5	4-Methylphenol			39	
621-64-7	N-Nitroso-di-n-propylamine			41	
67-72-1	Hexachloroethane			23	
98-95-3	Nitrobenzene			43	
78-59-1	Isophorone			45	
88-75-5	2-Nitrophenol			48	
105-67-9	2,4-Dimethylphenol			34	
111-91-1	bis(2-Chloroethoxy)methane			45	
120-83-2	2,4-Dichlorophenol			48	
120-82-1	1,2,4-Trichlorobenzene			31	
91-20-3	Naphthalene			37	
106-47-8	4-Chloroaniline			33	
87-68-3	Hexachlorobutadiene			27	
59-50-7	4-Chloro-3-methylphenol			47	
91-57-6	2-Methylnaphthalene			35	
77-47-4	Hexachlorocyclopentadiene			29	
88-06-2	2,4,6-Trichlorophenol			51	
95-95-4	2,4,5-Trichlorophenol			51	
91-58-7	2-Chloronaphthalene			36	
88-74-4	2-Nitroaniline			56	
131-11-3	Dimethylphthalate			19	
606-20-2	2,6-Dinitrotoluene			55	

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR226MSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885683

Sample wt/vol: 238 (g/mL)ML Lab File ID: lk0706.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene			47	
99-09-2	3-Nitroaniline			42	
83-32-9	Acenaphthene			41	
51-28-5	2,4-Dinitrophenol			55	
100-02-7	4-Nitrophenol			27	J
121-14-2	2,4-Dinitrotoluene			52	
132-64-9	Dibenzofuran			43	
84-66-2	Diethylphthalate			34	
86-73-7	Fluorene			44	
7005-72-3	4-Chlorophenyl-phenylether			39	
100-01-6	4-Nitroaniline			44	
534-52-1	4,6-Dinitro-2-methylphenol			40	
86-30-6	N-Nitrosodiphenylamine			50	
101-55-3	4-Bromophenyl-phenylether			42	
118-74-1	Hexachlorobenzene			48	
87-86-5	Pentachlorophenol			18	
85-01-8	Phenanthrene			46	
120-12-7	Anthracene			46	
86-74-8	Carbazole			50	
84-74-2	Di-n-butylphthalate			41	
206-44-0	Fluoranthene			50	
129-00-0	Pyrene			50	
85-68-7	Butylbenzylphthalate			36	
91-94-1	3,3'-Dichlorobenzidine			46	
56-55-3	Benzo(a)anthracene			53	
218-01-9	Chrysene			52	
117-81-7	bis(2-Ethylhexyl)phthalate			49	
117-84-0	Di-n-octylphthalate			45	
205-99-2	Benzo(b)fluoranthene			48	
207-08-9	Benzo(k)fluoranthene			46	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

OR226MSD

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 9885683

Sample wt/vol: 238 (g/mL)ML Lab File ID: lk0706.d

Level: (low/med) LOW Date Received: 11/06/18

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene			49	
193-39-5	Indeno(1,2,3-cd)pyrene			47	
53-70-3	Dibenz(a,h)anthracene			49	
191-24-2	Benzo(g,h,i)perylene			46	

FORM I SV-3

OR226MSD

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

9885683

Data file: /chem/HP20296.i/18nov09a.b/lk0706.d
Data file Sample Info. Line: OR226MSD;9885683;1;3;MSD;;;
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Injection date and time: **09-NOV-2018 20:35**
Instrument ID: **HP20296.i** Batch: **18312WAA**

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 20:35
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09a.b/lk0701.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 238 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.753	(-0.010)	1078	152	146428	(-6)	5.00	
68) Naphthalene-d8	8.732	(0.000)	1448	136	520290	(-7)	5.00	
118) Acenaphthene-d10	11.577	(0.000)	1980	164	259268	(-9)	5.00	
158) Phenanthrene-d10	13.508	(0.000)	2341	188	518173	(-5)	5.00	
180) Pyrene-d10	15.514	(0.000)	2716	212	534495	(-10)	5.00	
218) Perylene-d12	20.065	(0.000)	3567	264	547911	(-8)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
12) 2-Fluorophenol	(1)	4.838	(-0.003)	112	1234752	27.240	54%		10 - 85
18) Phenol-d6	(1)	6.239	(0.000)	99	1252308	20.472	41%		10 - 72
45) Nitrobenzene-d5	(2)	7.608	(-0.001)	82	1078370	19.797	79%		30 - 111
96) 2-Fluorobiphenyl	(3)	10.518	(0.000)	172	1634354	18.861	75%		39 - 105
140) 2,4,6-Tribromophenol	(3)	12.642	(0.000)	330	479512	47.201	94%		29 - 133
184) Terphenyl-d14	(5)	15.829	(0.000)	244	1965942	22.914	92%		27 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
19) Phenol	(1)	6.261	(-0.000)	94	408056	5.687	23.90			0.1
23) bis(2-Chloroethyl)ether	(1)	6.384	(0.000)	93	509059	9.430	39.62			0.1
24) 2-Chlorophenol	(1)	6.432	(-0.000)	128	415067	9.822	41.27			0.1
25) 1,3-Dichlorobenzene	(1)	6.662	(-0.000)	146	310202	6.546	27.51			0.1
27) 1,4-Dichlorobenzene	(1)	6.774	(0.000)	146	324959	6.825	28.68			0.1
29) 1,2-Dichlorobenzene	(1)	6.999	(0.000)	146	320390	6.924	29.09			0.1
32) 2-Methylphenol	(1)	7.170	(0.001)	108	405921	9.132	38.37			0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.213	(0.000)	45	570464	8.379	35.21			0.1
38) 4-Methylphenol	(1)	7.416	(0.001)	108	427895	9.222	38.75			0.1
39) N-Nitroso-di-n-propylamine	(1)	7.405	(0.000)	70	408938	9.874	41.49			0.2
44) Hexachloroethane	(1)	7.518	(0.000)	117	119823	5.541	23.28			0.3
46) Nitrobenzene	(2)	7.635	(0.000)	77	589663	10.158	42.68			0.1
52) Isophorone	(2)	8.020	(0.000)	82	1044290	10.660	44.79			0.1
53) 2-Nitrophenol	(2)	8.138	(-0.000)	139	217061	11.385	47.83			0.8
55) 2,4-Dimethylphenol	(2)	8.245	(0.000)	107	377646	8.099	34.03			0.8
57) bis(2-Chloroethoxy)methane	(2)	8.400	(0.000)	93	663519	10.624	44.64			0.1
62) 2,4-Dichlorophenol	(2)	8.523	(0.000)	162	382588	11.435	48.05			0.1
65) 1,2,4-Trichlorobenzene	(2)	8.651	(0.000)	180	286268	7.414	31.15			0.1
69) Naphthalene	(2)	8.764	(-0.000)	128	1022853	8.704	36.57			0.03
70) 4-Chloroaniline	(2)	8.881	(-0.000)	127	369201	7.792	32.74			1
74) Hexachlorobutadiene	(2)	8.988	(0.000)	225	147900	6.499	27.31			0.1
83) 4-Chloro-3-methylphenol	(2)	9.694	(-0.000)	107	444416	11.191	47.02			0.1
86) 2-Methylnaphthalene	(2)	9.892	(-0.000)	142	633825	8.406	35.32			0.03
88) Hexachlorocyclopentadiene	(3)	10.154	(0.000)	237	160098	6.937	29.15			1
93) 2,4,6-Trichlorophenol	(3)	10.368	(0.000)	196	285289	12.173	51.15			0.1
95) 2,4,5-Trichlorophenol	(3)	10.422	(-0.000)	196	310705	12.024	50.52			0.1
99) 2-Chloronaphthalene	(3)	10.678	(0.000)	162	672107	8.496	35.70			0.1

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Data file: /chem/HP20296.i/18nov09a.b/lk0706.d Injection date and time: **09-NOV-2018 20:35**
Data file Sample Info. Line: OR226MSD;9885683;1;3;MSD;;; Instrument ID: **HP20296.i** Batch: **18312WAA**
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 20:35
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09a.b/lk0701.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 238 ml Volume Injected (Vi): 1 ul

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
104) 2-Nitroaniline	(3)	10.871(-0.000)	138	265097	13.322	55.98			0.5
110) Dimethylphthalate	(3)	11.208(-0.000)	163	374048	4.550	19.12			0.5
113) 2,6-Dinitrotoluene	(3)	11.288(-0.000)	165	219877	13.194	55.44			0.1
114) Acenaphthylene	(3)	11.347(0.000)	152	1106320	11.216	47.12			0.03
117) 3-Nitroaniline	(3)	11.540(-0.000)	138	192800	10.092	42.40			0.8
119) Acenaphthene	(3)	11.625(-0.000)	153	749051	9.838	41.33			0.03
120) 2,4-Dinitrophenol	(3)	11.700(-0.000)	184	131913	13.127	55.16			4
121) 4-Nitrophenol	(3)	11.828(-0.000)	109	102457	6.404	26.91		J	3
123) 2,4-Dinitrotoluene	(3)	11.898(-0.000)	165	298334	12.470	52.40			0.3
124) Dibenzofuran	(3)	11.882(-0.000)	168	1043781	10.117	42.51			0.1
129) Diethylphthalate	(3)	12.256(-0.000)	149	656847	8.120	34.12			0.5
131) Fluorene	(3)	12.342(-0.000)	166	859290	10.516	44.18			0.03
132) 4-Chlorophenyl-phenylether	(3)	12.369(-0.000)	204	386995	9.245	38.84			0.1
134) 4-Nitroaniline	(3)	12.385(-0.000)	138	189616	10.367	43.56			0.2
135) 4,6-Dinitro-2-methylphenol	(4)	12.428(-0.000)	198	130597	9.579	40.25			2
136) N-Nitrosodiphenylamine	(4)	12.513(0.000)	169	795822	12.005	50.44			0.2
148) 4-Bromophenyl-phenylether	(4)	12.962(0.000)	248	229055	9.913	41.65			0.1
150) Hexachlorobenzene	(4)	13.016(0.000)	284	267789	11.367	47.76			0.03
154) Pentachlorophenol	(4)	13.273(0.000)	266	65561	4.393	18.46			0.3
160) Phenanthrene	(4)	13.540(-0.000)	178	1360150	10.965	46.07			0.03
162) Anthracene	(4)	13.604(-0.000)	178	1335456	10.974	46.11			0.03
168) Carbazole	(4)	13.829(0.000)	167	1286763	11.800	49.58			0.1
170) Di-n-butylphthalate	(4)	14.342(-0.000)	149	1381590	9.795	41.16			0.5
178) Fluoranthene	(4)	15.198(-0.000)	202	1611565	11.853	49.80			0.03
182) Pyrene	(5)	15.546(-0.000)	202	1687859	11.971	50.30			0.03
193) Butylbenzylphthalate	(5)	16.690(-0.000)	149	541029	8.641	36.31			0.5
198) 3,3'-Dichlorobenzidine	(5)	17.568(-0.000)	252	513088	10.877	45.70			0.8
200) Benzo(a)anthracene	(5)	17.573(-0.000)	228	1619171	12.620	53.03			0.03
201) Chrysene	(5)	17.637(-0.000)	228	1583930	12.494	52.50			0.03
204) bis(2-Ethylhexyl)phthalate	(5)	17.766(-0.000)	149	1042034	11.553	48.54			1
210) Di-n-octylphthalate	(6)	18.937(-0.000)	149	1860265	10.615	44.60			1
211) Benzo(b)fluoranthene	(6)	19.450(-0.000)	252	1614987	11.319	47.56			0.03
213) Benzo(k)fluoranthene	(6)	19.498(-0.000)	252	1587384	11.039	46.38			0.03
216) Benzo(a)pyrene	(6)	19.974(-0.000)	252	1476850	11.582	48.66			0.03
224) Indeno(1,2,3-cd)pyrene	(6)	21.691(-0.000)	276	1395496M	11.280	47.39			0.03
225) Dibenz(a,h)anthracene	(6)	21.734(-0.000)	278	1515156	11.767	49.44			0.03
226) Benzo(g,h,i)perylene	(6)	22.082(-0.000)	276	1447089	11.034	46.36			0.03

M = Compound was manually integrated.

Total number of targets = 64

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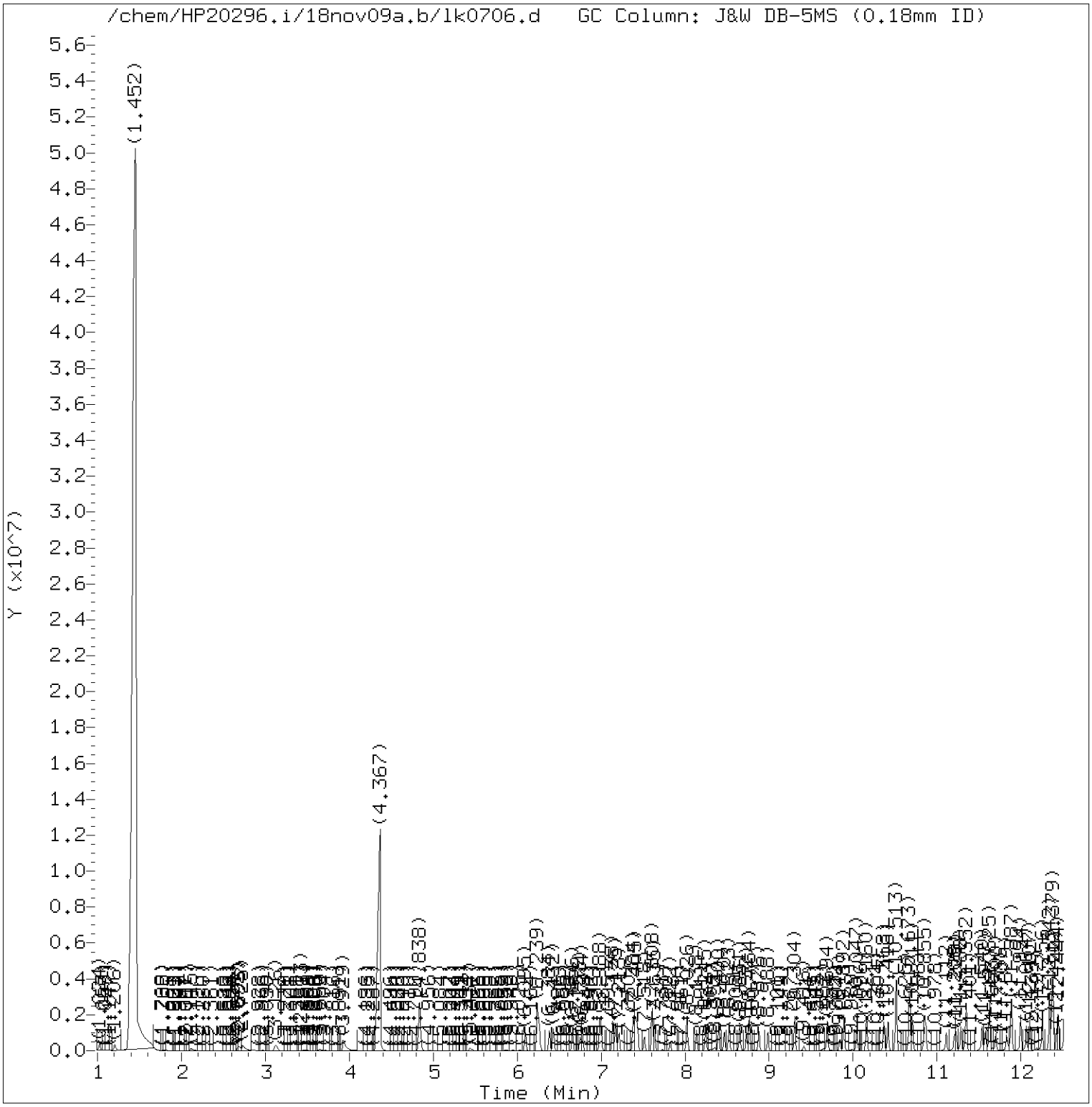
Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:06. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

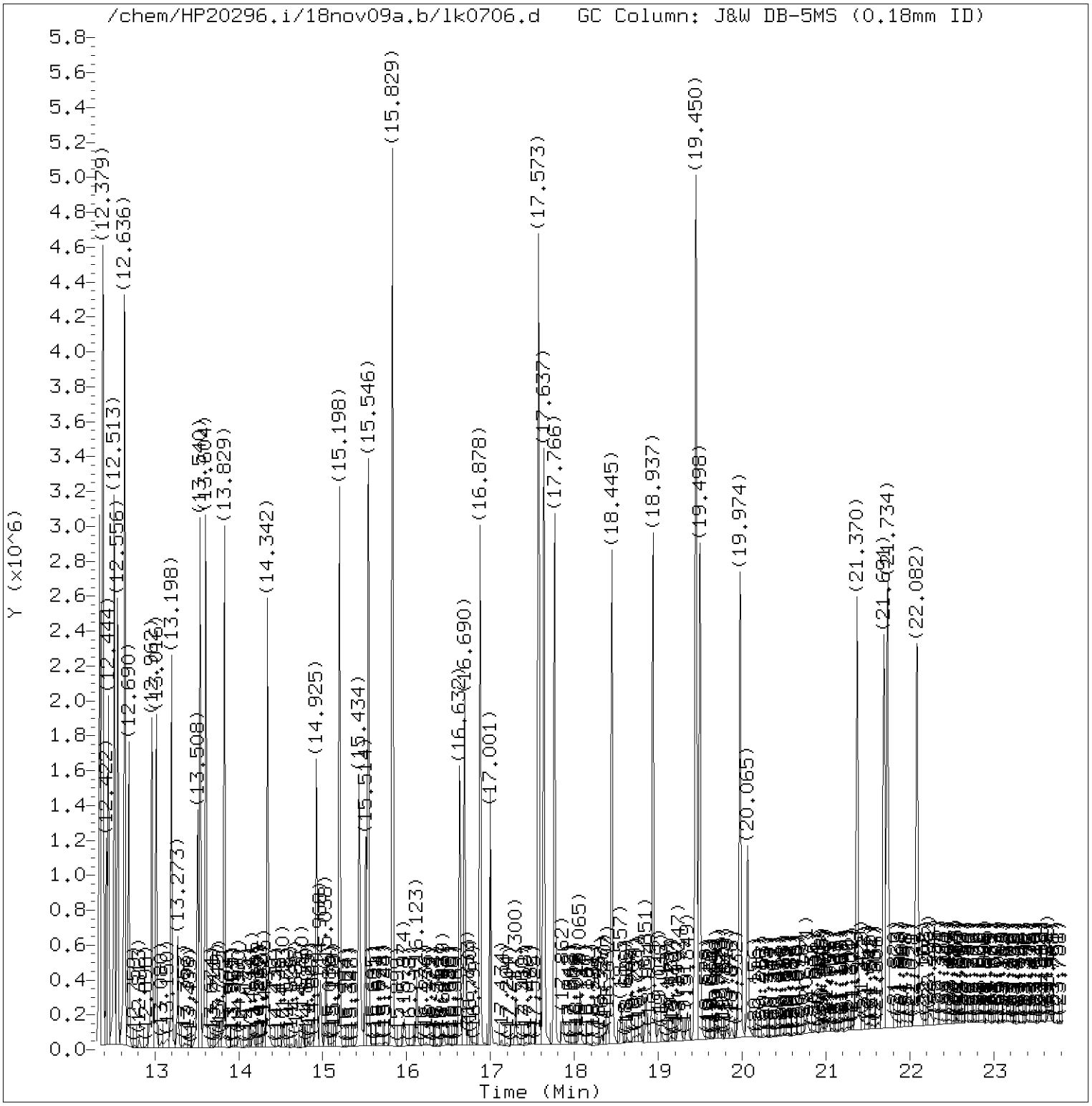
Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0706.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 20:35 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Sample Name: OR226MSD Lab Sample ID: 9885683

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0706.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 20:35 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Sample Name: OR226MSD Lab Sample ID: 9885683

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0706.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 20:35 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Sample Name: OR226MSD Lab Sample ID: 9885683

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.838	112	1234752	27.240
18)$Phenol-d6	(1)	6.239	99	1252308	20.472
19) Phenol	(1)	6.261	94	408056	5.687
23) bis(2-Chloroethyl)ether	(1)	6.384	93	509059	9.430
24) 2-Chlorophenol	(1)	6.432	128	415067	9.822
25) 1,3-Dichlorobenzene	(1)	6.662	146	310202	6.546
26)*1,4-Dichlorobenzene-d4	(1)	6.753	152	146428	5.000
27) 1,4-Dichlorobenzene	(1)	6.774	146	324959	6.825
29) 1,2-Dichlorobenzene	(1)	6.999	146	320390	6.924
32) 2-Methylphenol	(1)	7.170	108	405921	9.132
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.213	45	570464	8.379
39) N-Nitroso-di-n-propylamine	(1)	7.405	70	408938	9.874
38) 4-Methylphenol	(1)	7.416	108	427895	9.222
44) Hexachloroethane	(1)	7.518	117	119823	5.541
45)$Nitrobenzene-d5	(2)	7.608	82	1078370	19.797
46) Nitrobenzene	(2)	7.635	77	589663	10.158
52) Isophorone	(2)	8.020	82	1044290	10.660
53) 2-Nitrophenol	(2)	8.138	139	217061	11.385
55) 2,4-Dimethylphenol	(2)	8.245	107	377646	8.099
57) bis(2-Chloroethoxy)methane	(2)	8.400	93	663519	10.624
62) 2,4-Dichlorophenol	(2)	8.523	162	382588	11.435
65) 1,2,4-Trichlorobenzene	(2)	8.651	180	286268	7.414
68)*Naphthalene-d8	(2)	8.732	136	520290	5.000
69) Naphthalene	(2)	8.764	128	1022853	8.704
70) 4-Chloroaniline	(2)	8.881	127	369201	7.792
74) Hexachlorobutadiene	(2)	8.988	225	147900	6.499
83) 4-Chloro-3-methylphenol	(2)	9.694	107	444416	11.191
86) 2-Methylnaphthalene	(2)	9.892	142	633825	8.406
88) Hexachlorocyclopentadiene	(3)	10.154	237	160098	6.937
93) 2,4,6-Trichlorophenol	(3)	10.368	196	285289	12.173
95) 2,4,5-Trichlorophenol	(3)	10.422	196	310705	12.024
96)$2-Fluorobiphenyl	(3)	10.518	172	1634354	18.861
99) 2-Chloronaphthalene	(3)	10.679	162	672107	8.496
104) 2-Nitroaniline	(3)	10.871	138	265097	13.322
110) Dimethylphthalate	(3)	11.208	163	374048	4.550
113) 2,6-Dinitrotoluene	(3)	11.288	165	219877	13.194
114) Acenaphthylene	(3)	11.347	152	1106320	11.216
117) 3-Nitroaniline	(3)	11.540	138	192800	10.092
118)*Acenaphthene-d10	(3)	11.577	164	259268	5.000
119) Acenaphthene	(3)	11.625	153	749051	9.838

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09a.b/lk0706.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 20:35 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

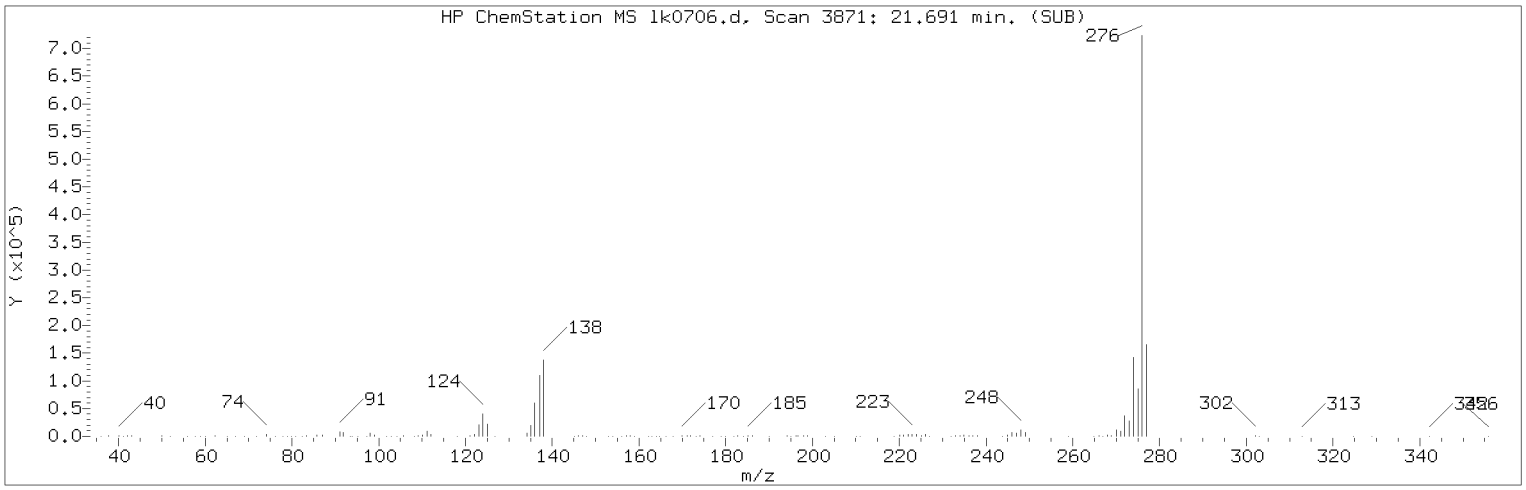
Sample Name: OR226MSD Lab Sample ID: 9885683

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
120) 2,4-Dinitrophenol	(3)	11.700	184	131913	13.127
121) 4-Nitrophenol	(3)	11.829	109	102457	6.404
124) Dibenzofuran	(3)	11.882	168	1043781	10.117
123) 2,4-Dinitrotoluene	(3)	11.898	165	298334	12.470
129) Diethylphthalate	(3)	12.256	149	656847	8.120
131) Fluorene	(3)	12.342	166	859290	10.516
132) 4-Chlorophenyl-phenylether	(3)	12.369	204	386995	9.245
134) 4-Nitroaniline	(3)	12.385	138	189616	10.367
135) 4,6-Dinitro-2-methylphenol	(4)	12.428	198	130597	9.579
136) N-Nitrosodiphenylamine	(4)	12.513	169	795822	12.005
140)$2,4,6-Tribromophenol	(3)	12.642	330	479512	47.201
148) 4-Bromophenyl-phenylether	(4)	12.962	248	229055	9.913
150) Hexachlorobenzene	(4)	13.016	284	267789	11.367
154) Pentachlorophenol	(4)	13.273	266	65561	4.393
158)*Phenanthrene-d10	(4)	13.508	188	518173	5.000
160) Phenanthrene	(4)	13.540	178	1360150	10.965
162) Anthracene	(4)	13.604	178	1335456	10.974
168) Carbazole	(4)	13.829	167	1286763	11.800
170) Di-n-butylphthalate	(4)	14.342	149	1381590	9.795
178) Fluoranthene	(4)	15.198	202	1611565	11.853
180)*Pyrene-d10	(5)	15.514	212	534495	5.000
182) Pyrene	(5)	15.546	202	1687859	11.971
184)$Terphenyl-d14	(5)	15.829	244	1965942	22.914
193) Butylbenzylphthalate	(5)	16.690	149	541029	8.641
198) 3,3'-Dichlorobenzidine	(5)	17.568	252	513088	10.877
200) Benzo(a)anthracene	(5)	17.573	228	1619171	12.620
201) Chrysene	(5)	17.637	228	1583930	12.494
204) bis(2-Ethylhexyl)phthalate	(5)	17.766	149	1042034	11.553
210) Di-n-octylphthalate	(6)	18.937	149	1860265	10.615
211) Benzo(b)fluoranthene	(6)	19.450	252	1614987	11.319
213) Benzo(k)fluoranthene	(6)	19.498	252	1587384	11.039
216) Benzo(a)pyrene	(6)	19.974	252	1476850	11.582
218)*Perylene-d12	(6)	20.065	264	547911	5.000
224) Indeno(1,2,3-cd)pyrene	(6)	21.691	276	1395496M	11.280
225) Dibenz(a,h)anthracene	(6)	21.734	278	1515156	11.767
226) Benzo(g,h,i)perylene	(6)	22.082	276	1447089	11.034

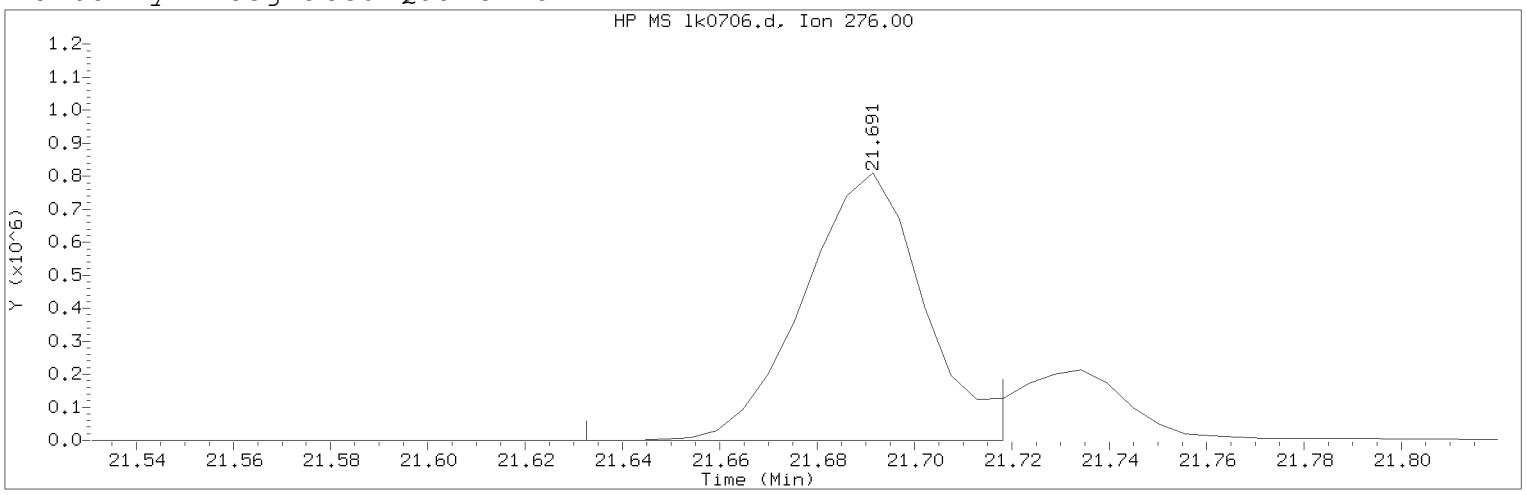
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0706.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 20:35 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 10-Nov-2018 09:21 knb25316

Sample Name: OR226MSD Lab Sample ID: 9885683

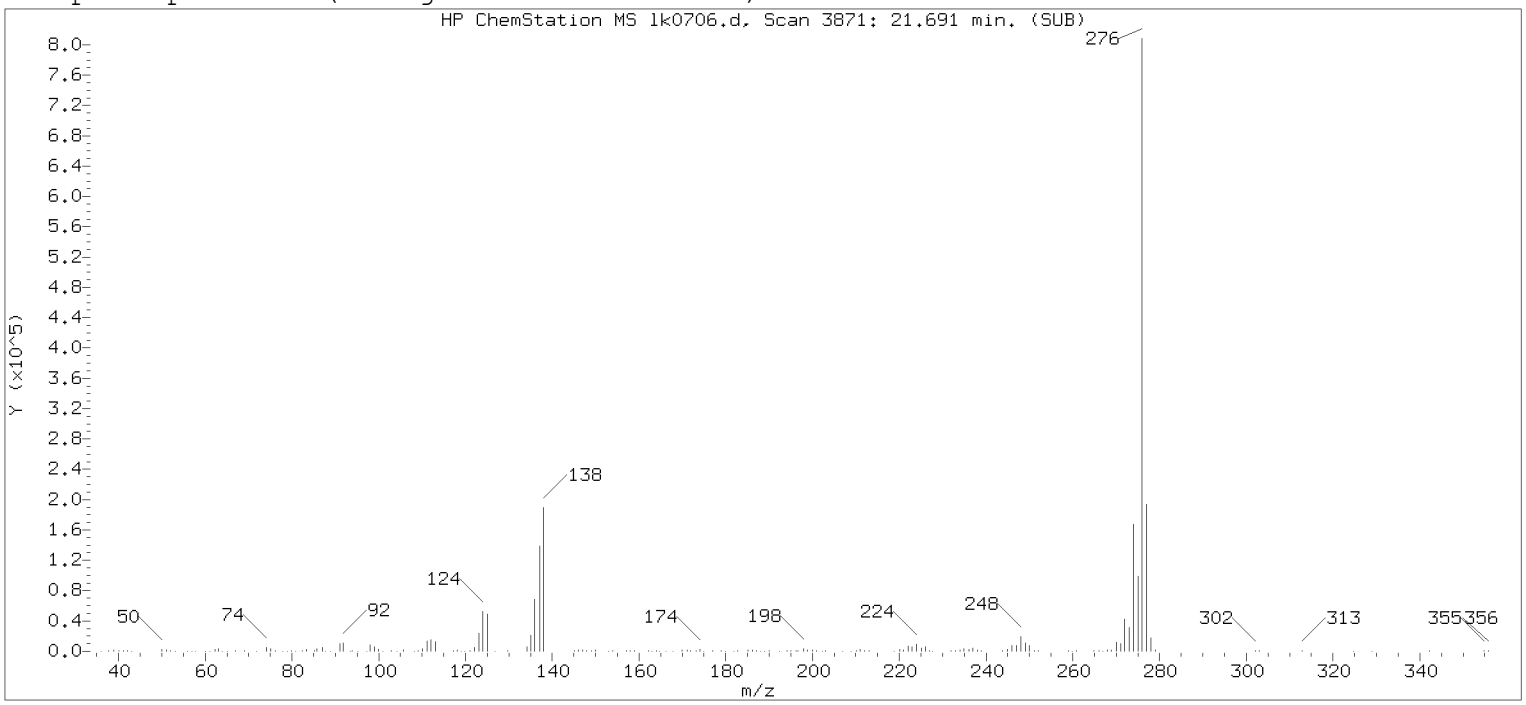
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3871
Retention Time (minutes) : 21.691
Quant Ion : 276.00
Area (flag) : 1395496M
On-Column Amount (ng/ul) : 11.2796
Integration start scan : 3859 Integration stop scan: 3875
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

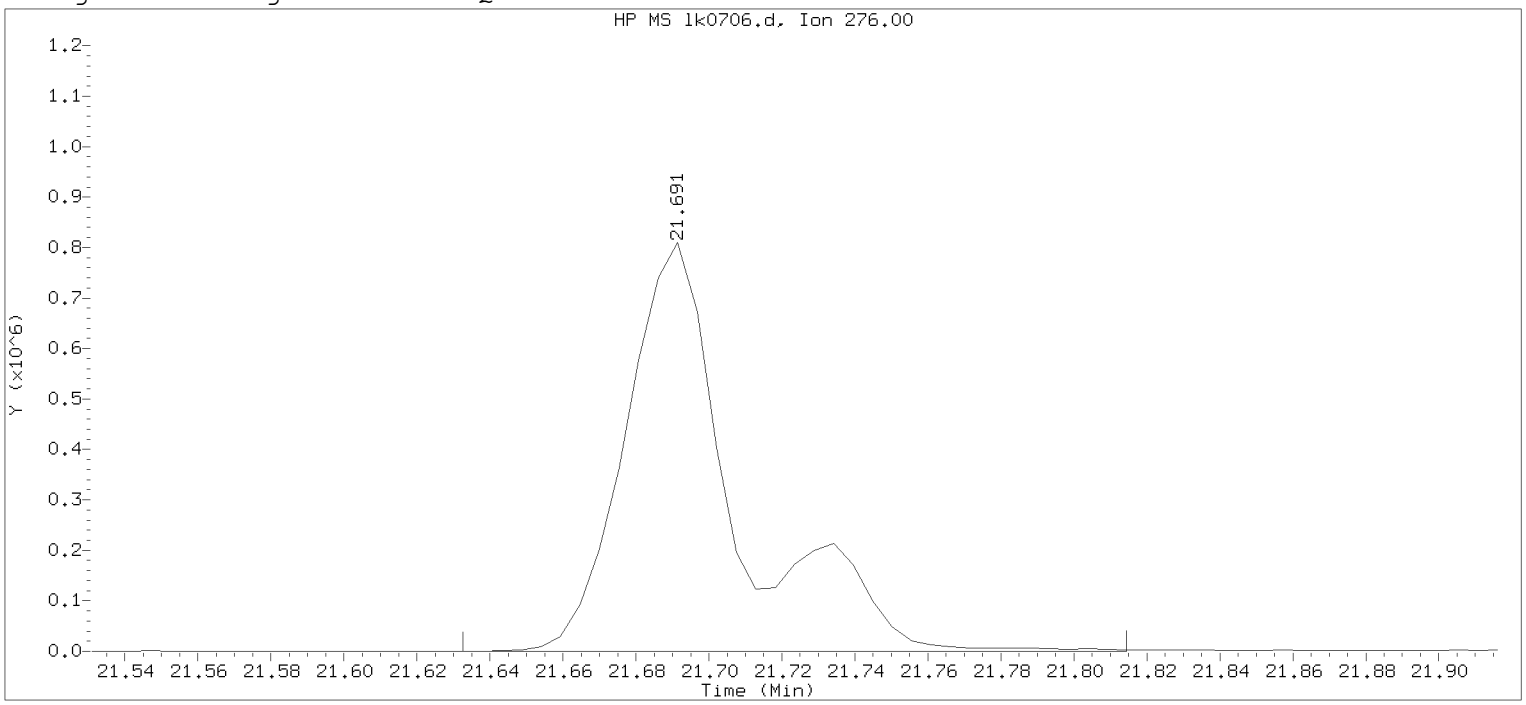
Analyst responsible for change: Digitally signed by Kira N. Beck
on 11/10/2018 at 09:24.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:06.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18nov09a.b/lk0706.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 20:35 Analyst ID: art12405

Method used: /chem/HP20296.i/18nov09a.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 20:35
Date, time and analyst ID of latest file update: 09-Nov-2018 21:04 Unknown

Sample Name: OR226MSD Lab Sample ID: 9885683

Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3871
Retention Time (minutes) : 21.691
Quant Ion : 276.00
Area : 1713394
On-column Amount (ng/ul) : 13.8491
Integration start scan : 3859 Integration stop scan: 3893
Y at integration start : 0 Y at integration end: 0

Digitally signed by Kira N. Beck on 11/10/2018 at 09:24.
Target 3.5 esignature user kbeck Page 782

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

312WALCS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 312WALCS

Sample wt/vol: 250 (g/mL)ML Lab File ID: lk0639.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
108-95-2	Phenol			23	
111-44-4	bis(2-Chloroethyl)ether			38	
95-57-8	2-Chlorophenol			41	
541-73-1	1,3-Dichlorobenzene			30	
106-46-7	1,4-Dichlorobenzene			32	
95-50-1	1,2-Dichlorobenzene			30	
95-48-7	2-Methylphenol			38	
108-60-1	2,2'-oxybis(1-Chloropropane)			34	
106-44-5	4-Methylphenol			40	
621-64-7	N-Nitroso-di-n-propylamine			41	
67-72-1	Hexachloroethane			27	
98-95-3	Nitrobenzene			42	
78-59-1	Isophorone			43	
88-75-5	2-Nitrophenol			48	
105-67-9	2,4-Dimethylphenol			36	
111-91-1	bis(2-Chloroethoxy)methane			43	
120-83-2	2,4-Dichlorophenol			46	
120-82-1	1,2,4-Trichlorobenzene			34	
91-20-3	Naphthalene			36	
106-47-8	4-Chloroaniline			27	
87-68-3	Hexachlorobutadiene			34	
59-50-7	4-Chloro-3-methylphenol			46	
91-57-6	2-Methylnaphthalene			38	
77-47-4	Hexachlorocyclopentadiene			10	J
88-06-2	2,4,6-Trichlorophenol			51	
95-95-4	2,4,5-Trichlorophenol			49	
91-58-7	2-Chloronaphthalene			37	
88-74-4	2-Nitroaniline			51	
131-11-3	Dimethylphthalate			18	
606-20-2	2,6-Dinitrotoluene			50	

FORM I SV-1

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

312WALCS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 312WALCS

Sample wt/vol: 250 (g/mL)ML Lab File ID: lk0639.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
208-96-8	Acenaphthylene			43	
99-09-2	3-Nitroaniline			36	
83-32-9	Acenaphthene			38	
51-28-5	2,4-Dinitrophenol			100	
100-02-7	4-Nitrophenol			26	J
121-14-2	2,4-Dinitrotoluene			43	
132-64-9	Dibenzofuran			41	
84-66-2	Diethylphthalate			32	
86-73-7	Fluorene			41	
7005-72-3	4-Chlorophenyl-phenylether			37	
100-01-6	4-Nitroaniline			41	
534-52-1	4,6-Dinitro-2-methylphenol			50	
86-30-6	N-Nitrosodiphenylamine			47	
101-55-3	4-Bromophenyl-phenylether			40	
118-74-1	Hexachlorobenzene			42	
87-86-5	Pentachlorophenol			48	
85-01-8	Phenanthrene			43	
120-12-7	Anthracene			42	
86-74-8	Carbazole			48	
84-74-2	Di-n-butylphthalate			39	
206-44-0	Fluoranthene			50	
129-00-0	Pyrene			47	
85-68-7	Butylbenzylphthalate			31	
91-94-1	3,3'-Dichlorobenzidine			37	
56-55-3	Benzo(a)anthracene			51	
218-01-9	Chrysene			50	
117-81-7	bis(2-Ethylhexyl)phthalate			46	
117-84-0	Di-n-octylphthalate			45	
205-99-2	Benzo(b)fluoranthene			47	
207-08-9	Benzo(k)fluoranthene			47	

FORM I SV-2

1C cont

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

312WALCS

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water) WATER Lab Sample ID: 312WALCS

Sample wt/vol: 250 (g/mL)ML Lab File ID: lk0639.d

Level: (low/med) LOW Date Received:

% Moisture: not dec: dec: Date Extracted: 11/08/18

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/18

Injection Volume: 1 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: Extraction: Sepf

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL	UG/L	Q
50-32-8	Benzo(a)pyrene		47		
193-39-5	Indeno(1,2,3-cd)pyrene		38		
53-70-3	Dibenz(a,h)anthracene		40		
191-24-2	Benzo(g,h,i)perylene		35		

FORM I SV-3

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

312WALCS

Data file: /chem/HP20296.i/18nov09.b/lk0639.d
Injection date and time: **09-NOV-2018 11:38**
Data file Sample Info. Line: 312WALCS;312WALCS;1;3;LCS;;;
Instrument ID: **HP20296.i** Batch: **18312WAA**
Date, time and analyst ID of latest file update: 09-Nov-2018 15:45 art12405

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 07:56
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09.b/lk0631.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.763(-0.006)	1080	152	152039 (-10)	5.00	
68) Naphthalene-d8	8.742(0.000)	1450	136	548685 (-14)	5.00	
118) Acenaphthene-d10	11.593(-0.006)	1983	164	288344 (-13)	5.00	
158) Phenanthrene-d10	13.524(-0.006)	2344	188	570592 (-16)	5.00	
180) Pyrene-d10	15.535(-0.006)	2720	212	640684 (-12)	5.00	
218) Perylene-d12	20.087(0.000)	3571	264	637965 (-11)	5.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
12) 2-Fluorophenol	(1)	4.849(-0.003)	112	1323845	28.128	56%
18) Phenol-d6	(1)	6.250(0.000)	99	1308147	20.595	41%
45) Nitrobenzene-d5	(2)	7.619(-0.001)	82	1138877	19.825	79%
96) 2-Fluorobiphenyl	(3)	10.529(0.000)	172	1627738	16.891	68%
140) 2,4,6-Tribromophenol	(3)	12.652(0.000)	330	570589	50.503	101%
184) Terphenyl-d14	(5)	15.851(0.000)	244	2396652	23.304	93%

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
19) Phenol	(1)	6.271(-0.000)	94	436335	5.857	23.43			0.1
23) bis(2-Chloroethyl)ether	(1)	6.394(-0.000)	93	538103	9.600	38.40			0.1
24) 2-Chlorophenol	(1)	6.442(-0.000)	128	453407	10.333	41.33			0.1
25) 1,3-Dichlorobenzene	(1)	6.672(-0.000)	146	366750	7.454	29.82			0.1
27) 1,4-Dichlorobenzene	(1)	6.790(-0.000)	146	393467	7.959	31.84			0.1
29) 1,2-Dichlorobenzene	(1)	7.015(-0.000)	146	365808	7.614	30.46			0.1
32) 2-Methylphenol	(1)	7.186(0.000)	108	440078	9.535	38.14			0.1
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.223(-0.000)	45	603871	8.543	34.17			0.1
38) 4-Methylphenol	(1)	7.432(0.000)	108	482230	10.010	40.04			0.1
39) N-Nitroso-di-n-propylamine	(1)	7.416(0.000)	70	441475	10.266	41.07			0.2
44) Hexachloroethane	(1)	7.528(0.000)	117	152799	6.806	27.22			0.3
46) Nitrobenzene	(2)	7.651(-0.000)	77	642360	10.493	41.97			0.1
52) Isophorone	(2)	8.036(-0.000)	82	1106648	10.712	42.85			0.1
53) 2-Nitrophenol	(2)	8.149(-0.000)	139	238890	11.881	47.52			0.8
55) 2,4-Dimethylphenol	(2)	8.256(-0.000)	107	447359	9.097	36.39			0.8
57) bis(2-Chloroethoxy)methane	(2)	8.411(-0.000)	93	714077	10.842	43.37			0.1
62) 2,4-Dichlorophenol	(2)	8.539(-0.000)	162	402934	11.420	45.68			0.1
65) 1,2,4-Trichlorobenzene	(2)	8.662(-0.000)	180	344974	8.472	33.89			0.1
69) Naphthalene	(2)	8.774(0.000)	128	1121002	9.045	36.18			0.03
70) 4-Chloroaniline	(2)	8.892(-0.000)	127	341847	6.841	27.37			1
74) Hexachlorobutadiene	(2)	8.999(0.000)	225	201942	8.415	33.66			0.1
83) 4-Chloro-3-methylphenol	(2)	9.711(0.000)	107	483701	11.550	46.20			0.1
86) 2-Methylnaphthalene	(2)	9.908(-0.000)	142	746878	9.393	37.57			0.03
88) Hexachlorocyclopentadiene	(3)	10.170(-0.000)	237	64922	2.530	10.12		J	1
93) 2,4,6-Trichlorophenol	(3)	10.384(-0.000)	196	331429	12.716	50.86			0.1
95) 2,4,5-Trichlorophenol	(3)	10.433(0.000)	196	350578	12.199	48.80			0.1
99) 2-Chloronaphthalene	(3)	10.695(-0.000)	162	816882	9.284	37.14			0.1

Data file: /chem/HP20296.i/18nov09.b/lk0639.d Injection date and time: **09-NOV-2018 11:38**
Data file Sample Info. Line: 312WALCS;312WALCS;1;3;LCS;;; Instrument ID: **HP20296.i** Batch: **18312WAA**
Date, time and analyst ID of latest file update: 09-Nov-2018 15:45 art12405

Blank Data file reference: **/chem/HP20296.i/18nov09.b/lk0638.d**

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: **22143M**
Calibration date and time (Last Method Edit): 09-NOV-2018 07:56
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/18nov09.b/lk0631.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

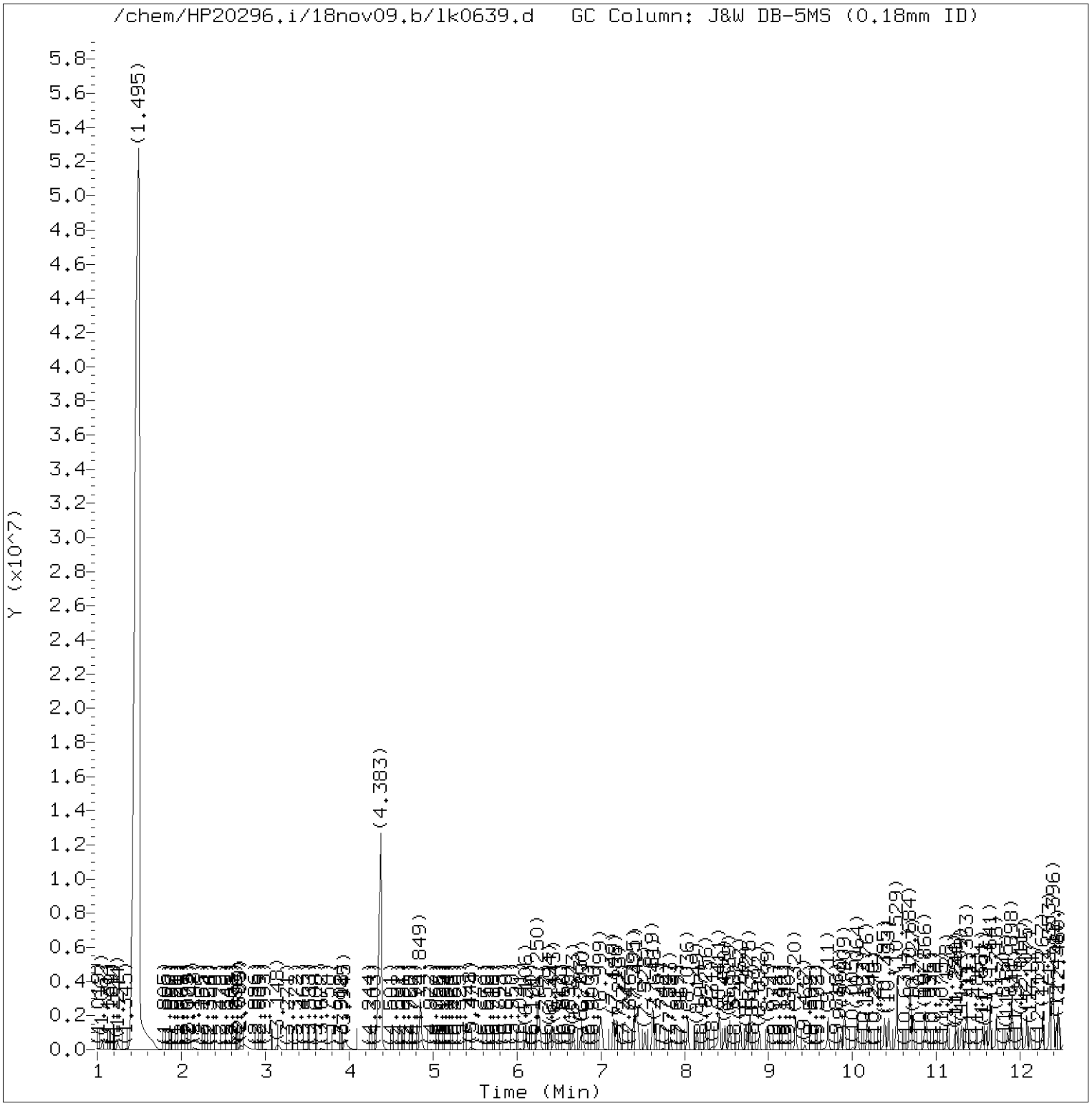
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
104) 2-Nitroaniline	(3)	10.882(0.000)	138	279583	12.633	50.53			0.5
110) Dimethylphthalate	(3)	11.224(-0.000)	163	413108	4.519	18.07			0.5
113) 2,6-Dinitrotoluene	(3)	11.304(-0.000)	165	232072	12.521	50.09			0.1
114) Acenaphthylene	(3)	11.363(-0.000)	152	1174094	10.703	42.81			0.03
117) 3-Nitroaniline	(3)	11.556(-0.000)	138	192472	9.059	36.23			0.8
119) Acenaphthene	(3)	11.641(0.000)	153	809734	9.562	38.25			0.03
120) 2,4-Dinitrophenol	(3)	11.716(0.000)	184	287531	25.728	102.91			4
121) 4-Nitrophenol	(3)	11.845(0.000)	109	114791	6.452	25.81		J	3
123) 2,4-Dinitrotoluene	(3)	11.909(0.000)	165	287065	10.789	43.16			0.3
124) Dibenzofuran	(3)	11.898(0.000)	168	1169981	10.196	40.79			0.1
129) Diethylphthalate	(3)	12.267(0.000)	149	710403	7.896	31.58			0.5
131) Fluorene	(3)	12.353(0.000)	166	936126	10.301	41.20			0.03
132) 4-Chlorophenyl-phenylether	(3)	12.380(0.000)	204	434638	9.336	37.34			0.1
134) 4-Nitroaniline	(3)	12.396(0.000)	138	208665	10.259	41.03			0.2
135) 4,6-Dinitro-2-methylphenol	(4)	12.438(-0.000)	198	186195	12.402	49.61			2
136) N-Nitrosodiphenylamine	(4)	12.529(-0.000)	169	862871	11.821	47.28			0.2
148) 4-Bromophenyl-phenylether	(4)	12.979(-0.000)	248	257363	10.115	40.46			0.1
150) Hexachlorobenzene	(4)	13.032(-0.000)	284	274348	10.576	42.30			0.03
154) Pentachlorophenol	(4)	13.289(-0.000)	266	195162	11.875	47.50			0.3
160) Phenanthrene	(4)	13.551(0.000)	178	1455301	10.654	42.62			0.03
162) Anthracene	(4)	13.620(0.000)	178	1422238	10.614	42.46			0.03
168) Carbazole	(4)	13.845(0.000)	167	1434544	11.947	47.79			0.1
170) Di-n-butylphthalate	(4)	14.358(0.000)	149	1517797	9.773	39.09			0.5
178) Fluoranthene	(4)	15.214(0.000)	202	1875307	12.526	50.10			0.03
182) Pyrene	(5)	15.562(0.000)	202	1967393	11.640	46.56			0.03
193) Butylbenzylphthalate	(5)	16.707(0.000)	149	587045	7.822	31.29			0.5
198) 3,3'-Dichlorobenzidine	(5)	17.589(0.000)	252	526008	9.303	37.21			0.8
200) Benzo(a)anthracene	(5)	17.594(0.000)	228	1973200	12.830	51.32			0.03
201) Chrysene	(5)	17.659(0.000)	228	1916020	12.609	50.44			0.03
204) bis(2-Ethylhexyl)phthalate	(5)	17.782(0.000)	149	1245421	11.519	46.08			1
210) Di-n-octylphthalate	(6)	18.958(-0.000)	149	2270553	11.127	44.51			1
211) Benzo(b)fluoranthene	(6)	19.472(-0.000)	252	1965658	11.832	47.33			0.03
213) Benzo(k)fluoranthene	(6)	19.520(-0.000)	252	1951665	11.656	46.62			0.03
216) Benzo(a)pyrene	(6)	20.001(-0.000)	252	1744974	11.753	47.01			0.03
224) Indeno(1,2,3-cd)pyrene	(6)	21.713(0.000)	276	1356499M	9.417	37.67			0.03
225) Dibenz(a,h)anthracene	(6)	21.756(-0.000)	278	1483116	9.892	39.57			0.03
226) Benzo(g,h,i)perylene	(6)	22.109(-0.000)	276	1327809	8.696	34.78			0.03

M = Compound was manually integrated.

Total number of targets = 64

Digitally signed by Ashley R. Transue on 11/09/2018 at 15:46. Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:06. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

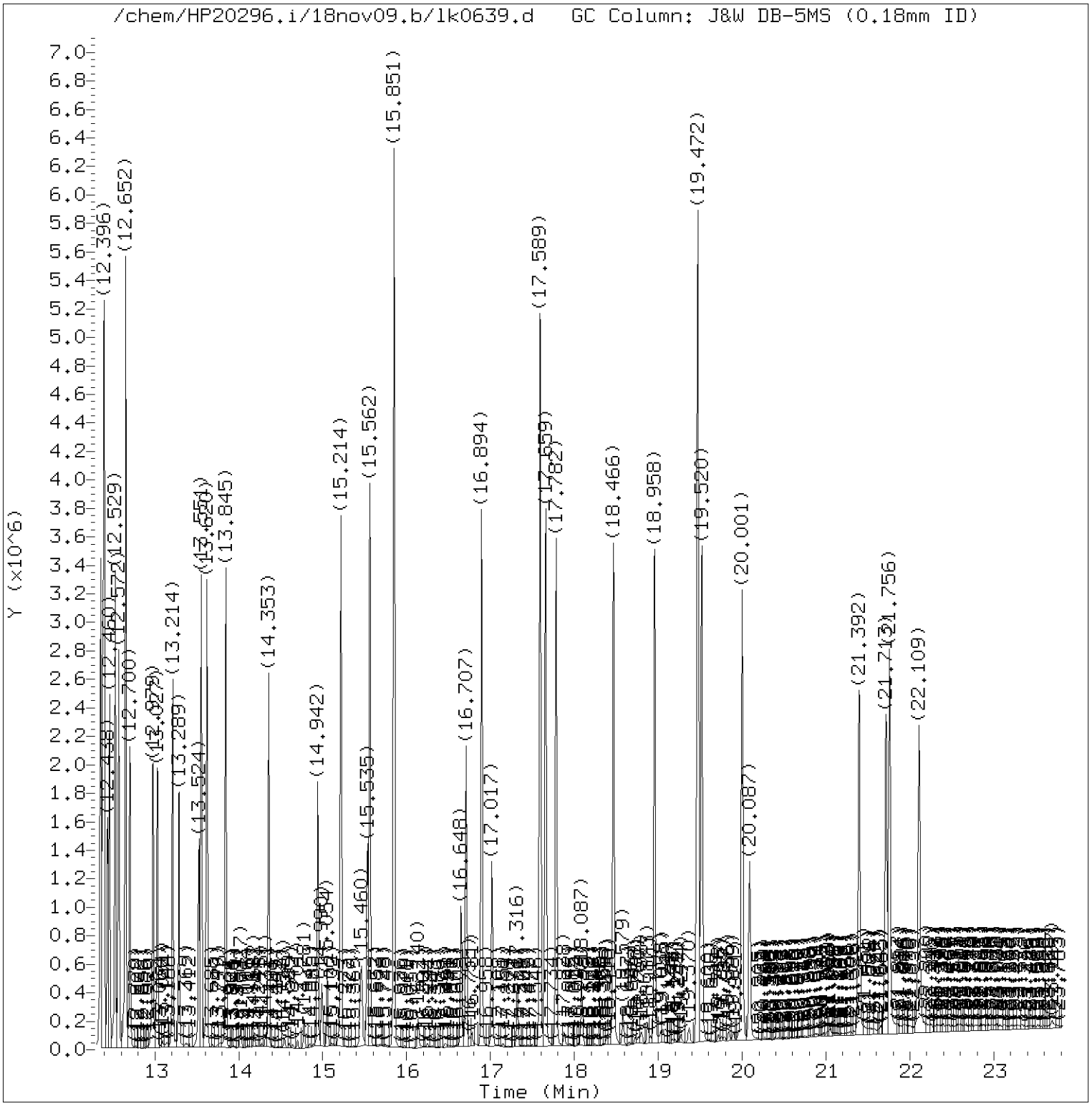
Target Revision 3.5

Data File: /chem/HP20296.i/18nov09.b/lk0639.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 11:38 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 07:56
Date, time and analyst ID of latest file update: 09-Nov-2018 15:45 art12405

Sample Name: 312WALCS Lab Sample ID: 312WALCS

Digitally signed by Ashley R. Transue
on 11/09/2018 at 15:46.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09.b/lk0639.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 11:38 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 07:56
Date, time and analyst ID of latest file update: 09-Nov-2018 15:45 art12405

Sample Name: 312WALCS Lab Sample ID: 312WALCS

Digitally signed by Ashley R. Transue
on 11/09/2018 at 15:46.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09.b/lk0639.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 11:38 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 07:56
Date, time and analyst ID of latest file update: 09-Nov-2018 15:45 art12405

Sample Name: 312WALCS Lab Sample ID: 312WALCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
12)$2-Fluorophenol	(1)	4.849	112	1323845	28.128
18)$Phenol-d6	(1)	6.250	99	1308147	20.595
19) Phenol	(1)	6.271	94	436335	5.857
23) bis(2-Chloroethyl)ether	(1)	6.394	93	538103	9.600
24) 2-Chlorophenol	(1)	6.443	128	453407	10.333
25) 1,3-Dichlorobenzene	(1)	6.673	146	366750	7.454
26)*1,4-Dichlorobenzene-d4	(1)	6.763	152	152039	5.000
27) 1,4-Dichlorobenzene	(1)	6.790	146	393467	7.959
29) 1,2-Dichlorobenzene	(1)	7.015	146	365808	7.614
32) 2-Methylphenol	(1)	7.186	108	440078	9.535
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.223	45	603871	8.543
39) N-Nitroso-di-n-propylamine	(1)	7.416	70	441475	10.266
38) 4-Methylphenol	(1)	7.432	108	482230	10.010
44) Hexachloroethane	(1)	7.528	117	152799	6.806
45)$Nitrobenzene-d5	(2)	7.619	82	1138877	19.825
46) Nitrobenzene	(2)	7.651	77	642360	10.493
52) Isophorone	(2)	8.036	82	1106648	10.712
53) 2-Nitrophenol	(2)	8.149	139	238890	11.881
55) 2,4-Dimethylphenol	(2)	8.256	107	447359	9.097
57) bis(2-Chloroethoxy)methane	(2)	8.411	93	714077	10.842
62) 2,4-Dichlorophenol	(2)	8.539	162	402934	11.420
65) 1,2,4-Trichlorobenzene	(2)	8.662	180	344974	8.472
68)*Naphthalene-d8	(2)	8.742	136	548685	5.000
69) Naphthalene	(2)	8.775	128	1121002	9.045
70) 4-Chloroaniline	(2)	8.892	127	341847	6.841
74) Hexachlorobutadiene	(2)	8.999	225	201942	8.415
83) 4-Chloro-3-methylphenol	(2)	9.711	107	483701	11.550
86) 2-Methylnaphthalene	(2)	9.909	142	746878	9.393
88) Hexachlorocyclopentadiene	(3)	10.171	237	64922	2.530
93) 2,4,6-Trichlorophenol	(3)	10.385	196	331429	12.716
95) 2,4,5-Trichlorophenol	(3)	10.433	196	350578	12.199
96)$2-Fluorobiphenyl	(3)	10.529	172	1627738	16.891
99) 2-Chloronaphthalene	(3)	10.695	162	816882	9.284
104) 2-Nitroaniline	(3)	10.882	138	279583	12.633
110) Dimethylphthalate	(3)	11.224	163	413108	4.519
113) 2,6-Dinitrotoluene	(3)	11.304	165	232072	12.521
114) Acenaphthylene	(3)	11.363	152	1174094	10.703
117) 3-Nitroaniline	(3)	11.556	138	192472	9.059
118)*Acenaphthene-d10	(3)	11.593	164	288344	5.000
119) Acenaphthene	(3)	11.641	153	809734	9.562

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/09/2018 at 15:46.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/18nov09.b/lk0639.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 11:38 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 07:56
Date, time and analyst ID of latest file update: 09-Nov-2018 15:45 art12405

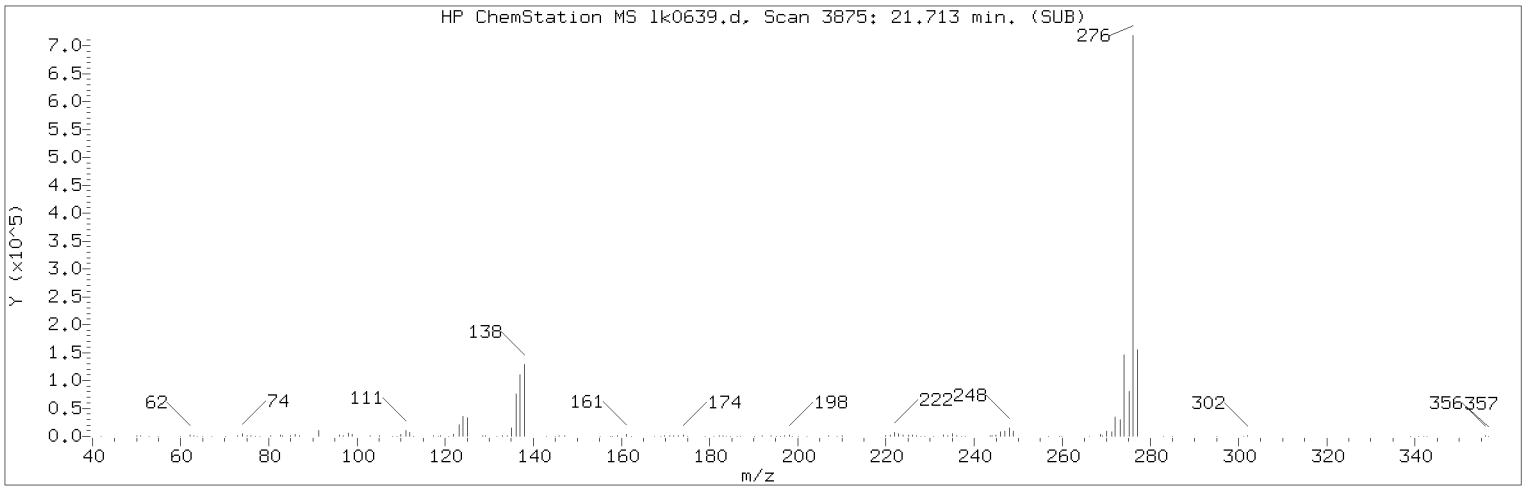
Sample Name: 312WALCS Lab Sample ID: 312WALCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
120) 2,4-Dinitrophenol	(3)	11.716	184	287531	25.728
121) 4-Nitrophenol	(3)	11.845	109	114791	6.452
124) Dibenzofuran	(3)	11.898	168	1169981	10.196
123) 2,4-Dinitrotoluene	(3)	11.909	165	287065	10.789
129) Diethylphthalate	(3)	12.267	149	710403	7.896
131) Fluorene	(3)	12.353	166	936126	10.301
132) 4-Chlorophenyl-phenylether	(3)	12.380	204	434638	9.336
134) 4-Nitroaniline	(3)	12.396	138	208665	10.259
135) 4,6-Dinitro-2-methylphenol	(4)	12.438	198	186195	12.402
136) N-Nitrosodiphenylamine	(4)	12.529	169	862871	11.821
140)$2,4,6-Tribromophenol	(3)	12.652	330	570589	50.503
148) 4-Bromophenyl-phenylether	(4)	12.979	248	257363	10.115
150) Hexachlorobenzene	(4)	13.032	284	274348	10.576
154) Pentachlorophenol	(4)	13.289	266	195162	11.875
158)*Phenanthrene-d10	(4)	13.524	188	570592	5.000
160) Phenanthrene	(4)	13.551	178	1455301	10.654
162) Anthracene	(4)	13.620	178	1422238	10.614
168) Carbazole	(4)	13.845	167	1434544	11.947
170) Di-n-butylphthalate	(4)	14.359	149	1517797	9.773
178) Fluoranthene	(4)	15.214	202	1875307	12.526
180)*Pyrene-d10	(5)	15.535	212	640684	5.000
182) Pyrene	(5)	15.562	202	1967393	11.640
184)$Terphenyl-d14	(5)	15.851	244	2396652	23.304
193) Butylbenzylphthalate	(5)	16.707	149	587045	7.822
198) 3,3'-Dichlorobenzidine	(5)	17.589	252	526008	9.303
200) Benzo(a)anthracene	(5)	17.594	228	1973200	12.830
201) Chrysene	(5)	17.659	228	1916020	12.609
204) bis(2-Ethylhexyl)phthalate	(5)	17.782	149	1245421	11.519
210) Di-n-octylphthalate	(6)	18.958	149	2270553	11.127
211) Benzo(b)fluoranthene	(6)	19.472	252	1965658	11.832
213) Benzo(k)fluoranthene	(6)	19.520	252	1951665	11.656
216) Benzo(a)pyrene	(6)	20.001	252	1744974	11.753
218)*Perylene-d12	(6)	20.087	264	637965	5.000
224) Indeno(1,2,3-cd)pyrene	(6)	21.713	276	1356499M	9.417
225) Dibenz(a,h)anthracene	(6)	21.756	278	1483116	9.892
226) Benzo(g,h,i)perylene	(6)	22.109	276	1327809	8.696

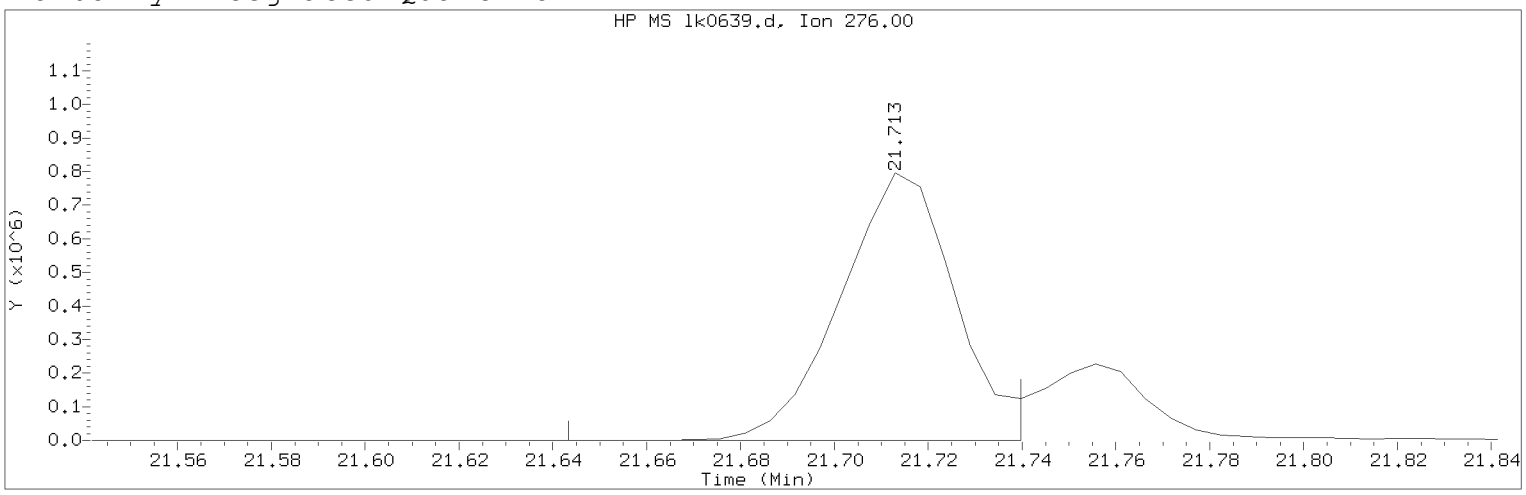
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 11/09/2018 at 15:46.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/18nov09.b/lk0639.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 11:38 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 07:56
Date, time and analyst ID of latest file update: 09-Nov-2018 15:45 art12405

Sample Name: 312WALCS Lab Sample ID: 312WALCS

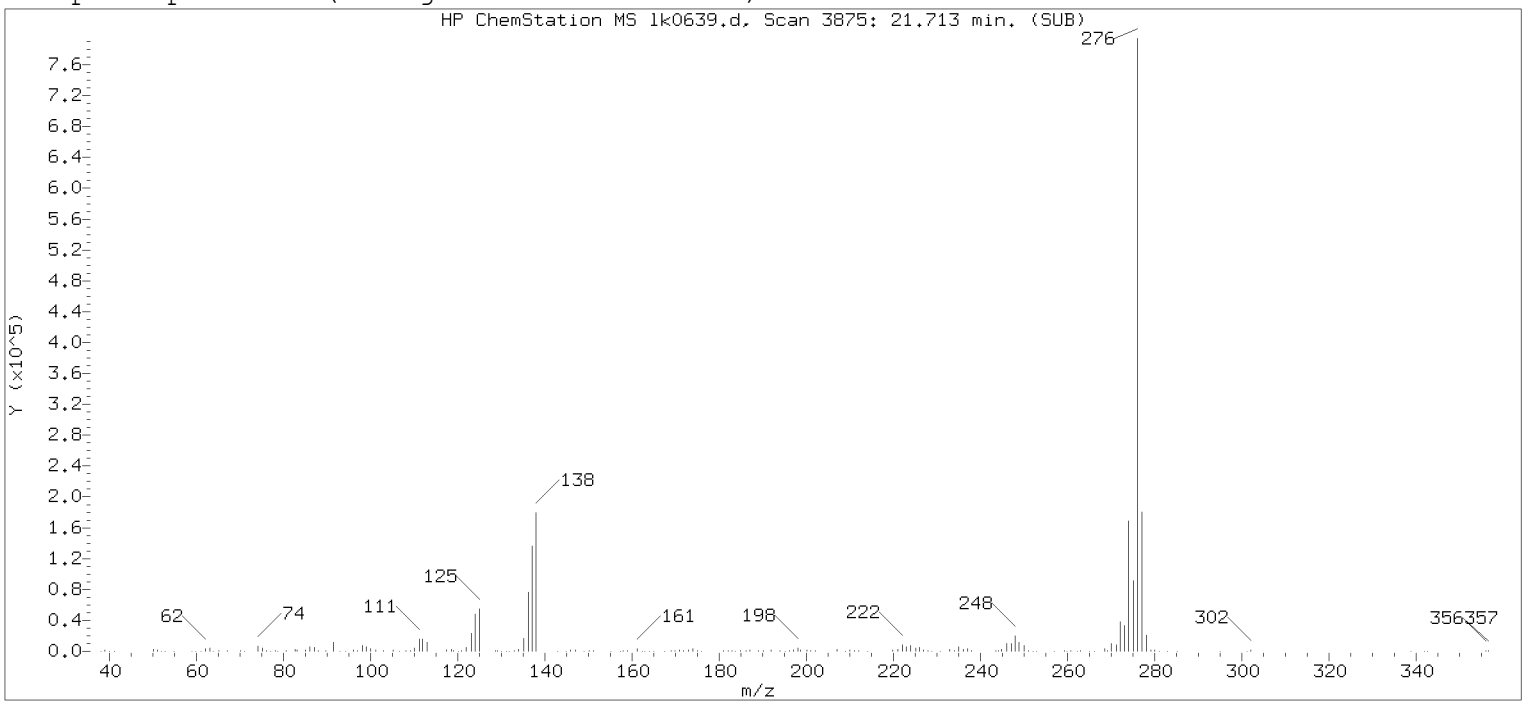
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3875
Retention Time (minutes) : 21.713
Quant Ion : 276.00
Area (flag) : 1356499M
On-Column Amount (ng/ul) : 9.4167
Integration start scan : 3861 Integration stop scan: 3879
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

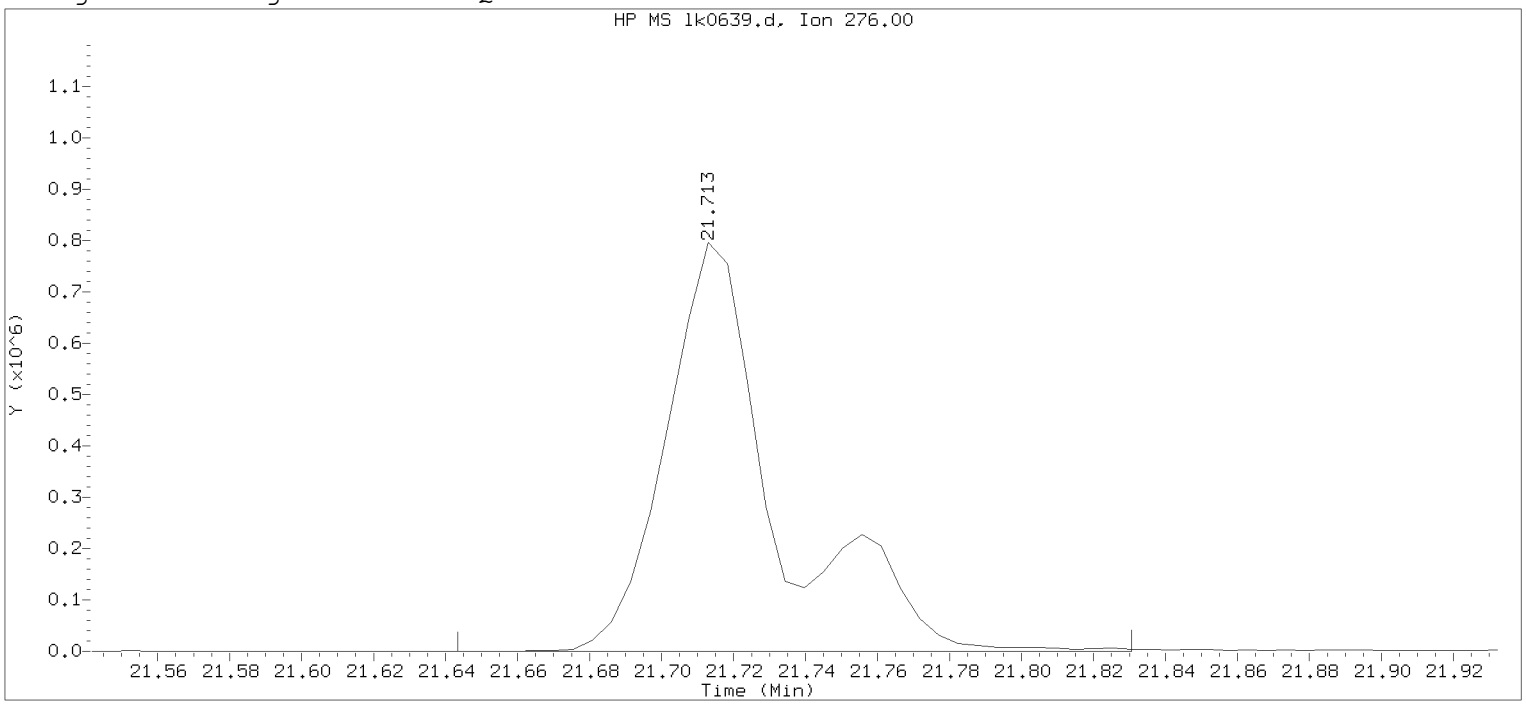
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 11/09/2018 at 15:46.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Chad A. Moline on 11/13/2018 at 13:06.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/18nov09.b/lk0639.d Instrument ID: HP20296.i
Injection date and time: 09-NOV-2018 11:38 Analyst ID: knb25316

Method used: /chem/HP20296.i/18nov09.b/rv8270d.m Sublist used: 22143M
Calibration date and time: 09-NOV-2018 07:56
Date, time and analyst ID of latest file update: 09-Nov-2018 15:44 art12405

Sample Name: 312WALCS Lab Sample ID: 312WALCS

Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3875
Retention Time (minutes) : 21.713
Quant Ion : 276.00
Area : 1701876
On-column Amount (ng/ul) : 11.8142
Integration start scan : 3861 Integration stop scan: 3896
Y at integration start : 0 Y at integration end: 0

Digitally signed by Ashley R. Transue on 11/09/2018 at 15:46.
Target 3.5 esignature user art12405

Extraction/Distillation/Digestion Logs

Semivolatiles by GC/MS

Organic Extraction Batchlog Assigned to: 10217 Kate Lutte

Reviewed by: KB 11.9.18 Start Date: 11/8/18 Start time: 16:50

18312WAA026

Tech 1: KMO Tech 2: MO13836

Dept: 26 Prep Analysis: 11010 8270D BNA Extraction SVOAs 8270D MINI

QC	Sample Code	Amt (ml)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments
9885682MS	OR226	241	SS1830626A	1.0	MS1830526B MS1831026A	1.0 1.0	1	✓	✓	153A	light yellow
9885683MSD	OR226	238	SS1830626A		MS1830526B MS1831026A	1.0 1.0	1	✓	✓	153A	light yellow
BLANKA	SBLKWA312	250	SS1830626A			—	1	✓	✓		Tap H_2O
LCSA	312WALCS	250	SS1830626A		MS1830526B MS1831026A	1.0 1.0	1	✓	✓		Tap H_2O
LCSAP	312WALCS	250	SS1830626A		MS1830526C	1.0	1	✓	✓		Tap H_2O
LCSDAP	312WALCSD	250	SS1830626A		MS1830526C	1.0	1	✓	✓		Tap H_2O

Solvent Used	Lot No.
10N NaOH	471IFS1
Methylene Chloride	187001
Sodium Sulfate	183108
Sulfuric Acid	184517
—	—

N/A MO13836

Spike Solutions: Witness: N/A

MS1830526C APPIX #1 MINI SPIKE
MS1831026A MINI SEP. LCS SPIKE #1
MS1830526B MINI SEP. LCS SPIKE #2
SS1830626A MINI SEP. BNA SURROGATE

Sample #	Sample Code	Amt (ml)	SS/IS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments	Analyses	List	Due Date	Prio
1 9885681BKG	OR226	238	SS1830626A	1.0	1	✓	✓	153A	light yellow	14241	22143	11/15/2018	N
2 9885685	OR3WD	247	SS1830626A		1	✓	✓	153A	light yellow	14241	22143	11/15/2018	N
3 9885686	OR365	239	SS1830626A		1	✓	✓	153A	light yellow	14241	22143	11/15/2018	N
~~4 9887870~~	~~UEVT2~~		SS1830626A					153A	dark brown (8)	14241	25778	11/14/2018	S

(8) Technical decision required. SM7964 11/8/18

CBD54 Page 795 of 882

Bench# 7	Bench# 6	Bench# —	
Rack ID: —	Work Station	tumble	Micro Temp 100?
Internal Standard WIS1d2978	Balance #	25996	

R-VAP ID 6	90° C	R-VAP ID 4	90° C	R-VAP ID —	C		
S-bath ID —	C	S-bath ID —	C	N-Evap —	C	M-vap —	C

18312WAA026

DF = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

Metals in Liquid Data

Case Narrative/Conformance Summary

Metals in Liquid

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD54

ICP Metals

Fraction: Metals in Liquid

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
9885681	OR-2-W-26.00-181105	X		1	Background/Unspiked
9885682	OR-2-W-26.00-181105 MS	X		1	Matrix Spike
9885683	OR-2-W-26.00-181105 MSD	X		1	Matrix Spike Duplicate
9885684	OR-2-W-26.00-181105 DUP	X		1	Duplicate
9885685	OR-3-WD-65.50-181105	X		1	Field Duplicate Sample
9885686	OR-3-W-65.50-181105	X		1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

All QC is within specification.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

The instrument detection limits (IDLs) are used for determining the U flags on the initial and continuing calibration blanks. The highest IDL is selected when multiple instruments are used for an analysis. The method detection limits (MDLs) are used for determining all other U flags.

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Case Narrative/Conformance Summary

CLIENT: Chevron Environmental Mgmt.
SDG: CBD54

ICP Metals

Fraction: Metals in Liquid

The final concentration (ug/l) is obtained using the following calculation:

$$\text{Instrument reading (ug/l)} \times \frac{\text{final volume}}{\text{initial volume}} \times \text{dilution factor}$$

Abbreviation Key

BKG – Background	AF - Cold Vapor Atomic Fluorescence
DUP – Duplicate	U - Below MDL
MS - Matrix Spike	B - Below LOQ
MSD - Matrix Spike Dup	N - Matrix Spike out of specifications
B – Blank	* - Duplicate out of specifications
Q - Laboratory Control Sample	E - Matrix Effects exist as proven by Serial Dilution or Spiked Dilution
Y - Laboratory Control Sample Duplicate	A - Post Digestion Spike
P - ICP Atomic Emission Spectrometer	L - Serial Dilution
MS - ICP Mass Spectrometry	R - Internal Standard Relative Intensity OOS
CV - Cold Vapor	NR - Not Required

Sample Data

Metals in Liquid

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD54
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9885681BKG % Solids: 0.0
Concentration Units: UG/L Date Received: 11/06/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	7.1	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD54
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9885682MS % Solids: 0.0
Concentration Units: UG/L Date Received: 11/06/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	150			P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD54
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9885683MSD % Solids: 0.0
Concentration Units: UG/L Date Received: 11/06/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	145			P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD54
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9885684DUP % Solids: 0.0
Concentration Units: UG/L Date Received: 11/06/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	7.1	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD54
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9885685 % Solids: 0.0
Concentration Units: UG/L Date Received: 11/06/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	7.1	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 1
INORGANIC ANALYSIS DATA SHEET
SDG No.: CBD54
Matrix: WATER Level (low/med): LOW

Lab Sample ID: 9885686 % Solids: 0.0
Concentration Units: UG/L Date Received: 11/06/2018

CAS No.	Analyte	Concentration	C	Q	M
7439-92-1	Lead	7.1	U		P

Comments:

_____
_____
_____
_____

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence NR = Not Required	U = Below MDL, B = Below LOQ

Quality Control and Calibration Summary Forms

Metals in Liquid

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QUALITY CONTROL REFERENCE LIST

SDG No.: CBD54
Matrix: WATER

Analyte	Batch Number	Lab Sample ID
Lead	183151063504	9885681BKG
		9885682MS
		9885683MSD
		9885684DUP
		9885685
		9885686
		P31563DB
		P31563DQ

LEGEND:

BKG = Background	B = Blank
DUP = Duplicate	Q = Laboratory Control Sample
MS = Matrix Spike	Y = Laboratory Control Sample Duplicate
MSD = Matrix Spike Duplicate	

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QUALITY ASSURANCE SUMMARY
FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
SDG No.: CBD54

Method: P
Run Name: 1832001T75
Calibration Date(s): 11/16/2018
Concentration Units: UG/L

Analyte	Mass	Initial Calibration			Continuing Calibration					
		True	Found	%R(1)	True	Found	%R(2)	True	Found	%R(2)
Lead		600.0	586.08	97.7	500.0	491.61	98.3	500.0	491.62	98.3

(1) Control Limits: 90 - 110
(2) Control Limits: 90 - 110
* Outside Limits. If Continuing Calibration is outside limits, high, only ND samples are accepted.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

QUALITY ASSURANCE SUMMARY
FORM 2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION
SDG No.: CBD54

Method: P
Run Name: 1832001T75
Calibration Date(s): 11/16/2018
Concentration Units: UG/L

Analyte	Mass	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(2)	True	Found	%R(2)
Lead					500.0	486.33	97.3	500.0	492.76	98.6

(1) Control Limits: 90 - 110
(2) Control Limits: 90 - 110
* Outside Limits. If Continuing Calibration is outside limits, high, only ND samples are accepted.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 2B
LOW LEVEL CHECK STANDARD
SDG No.: CBD54

Method: P
Run Name: 1832001T75
Calibration Date(s): 11/16/2018
Concentration Units: UG/L

Analyte	Mass	Initial True	Initial Found	Initial %R	Final Found	Final %R
Lead		15.0	14.68	97.9	14.90	99.3

Control limits: 70% - 130%

For 6010B - Control limits apply to values up to 10 times the true value of the low level check standard. If LLC is out of specification, high, results < RL are acceptable.
For 6010C - If Low Level Check (LLC) is out of specification, results > CCV are acceptable. If LLC is out of specification, high, results < RL are acceptable.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 3
BLANKS
SDG No.: CBD54

Method: P
Run Name: 1832001T75
Calibration Date(s): 11/16/2018
Preparation Blank Matrix: WATER

		Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank (UG/L)			
Analyte	Mass		C	1	C	2	C	3	C	Mass		C	Batch Number
Lead		3.7	U	3.7	U	3.7	U	3.7	U		7.100	U	183151063504

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below IDL/MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	
AF = Cold Vapor Atomic Fluorescence	

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QUALITY ASSURANCE SUMMARY
FORM 3
BLANKS
SDG No.: CBD54

Method: P
Run Name: 1832001T75
Calibration Date(s): 11/16/2018

		Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank (UG/L)			
Analyte	Mass		C	1	C	2	C	3	C	Mass		C	Batch Number
Lead				3.7	U								

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence	U= Below IDL/MDL B= Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 4A
ICP-AES INTERFERENCE CHECK SAMPLE
SDG No.: CBD54

Instrument ID: 23290
Run Name: 1832001T75
Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	500000	500000	493026	98.6	503930.0	100.8	493915	98.8	511192.4	102.2
Calcium	500000	500000	493950	98.8	504198.8	100.8	489019	97.8	506854.3	101.4
Iron	200000	200000	193815	96.9	197583.6	98.8	190290	95.1	197442.6	98.7
Lead	0	550	18		526.5	95.7	11		515.3	93.7
Magnesium	500000	500000	504241	100.8	515429.6	103.1	494030	98.8	513974.2	102.8

Control Limits: All Metals 80%-120%

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QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: CBD54
Matrix: WATER Level (low/med): LOW

Background Lab Sample ID: 9885681BKG Matrix Spike Lab Sample ID: 9885682MS Matrix Spike Duplicate Lab Sample ID: 9885683MSD
Batch Number(s): 183151063504

		BKG Sample		MS Sample		MSD Sample		MS Spike	MSD Spike		MS		MSD				Control Limit		
Analyte	Mass	Result	C	Result	C	Result	C	Added	Added	Units	%R	Q	%R	Q	RPD	Q	%R	RPD	M
Lead		7.1000	U	149.8700		145.0800		150.0000	150.0000	UG/L	100		97		3		75 - 125	20	P

Note: Results shown are reported on an as-received basis.
If Matrix Spike/ Matrix Spike Duplicate were out of specification, see Post Digestion Spike form.

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

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QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: CBD54
Matrix: WATER Level (low/med): LOW

Background Lab Sample ID: 9885681BKG Duplicate Lab Sample ID: 9885684DUP
Batch Number(s): 183151063504
Concentration Units: UG/L

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Lead			7.1000	U	7.1000	U			P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

Note: Results shown are reported on an as-received basis.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
* = Duplicate Out of Spec

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QUALITY ASSURANCE SUMMARY
FORM 7
LABORATORY CONTROL SAMPLE
SDG No.: CBD54
Matrix: WATER

Analyte	Mass	Batch Number	Units	True	Found	C	Control Limits (%)	%R	M	In Spec
Lead		183151063504	UG/L	150.000	152.580		87 - 113	102	P	Yes

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer MS = ICP Mass Spectrometry CV = Cold Vapor AF = Cold Vapor Atomic Fluorescence	U= Below MDL B= Below LOQ

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QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: CBD54
Matrix: WATER Level (low/med): LOW

Background Lab Sample ID: 9885681BKG Serial Dilution Lab Sample ID: 9885681L
Batch Number(s): 183151063504
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Lead		7.1000	U	35.5000	U			P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
	FLAGS:
	E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

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QUALITY ASSURANCE SUMMARY
FORM 10
INSTRUMENT DETECTION LIMITS (QUARTERLY)
SDG No.: CBD54

Method: P
Instrument ID: 23290
Date: 07/2018

Analyte	Wavelength (nm)	Background	IDL (UG/L)
Lead	220.35		3.7

Comments:

_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 10 MDL
METHOD DETECTION LIMITS (ANNUALLY)
SDG No.: CBD54
Matrix: WATER

Method: P
Date: 09/2018

Analyte	Wavelength (nm)	Background	LOQ (UG/L)	MDL (UG/L)
Lead	220.35		15.0	7.1

The LOQ/MDL must be adjusted for % Solids and Sample Weight for samples reporting in mg/kg and ug/L.

Comments:

_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

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QUALITY ASSURANCE SUMMARY
FORM 11
ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)
SDG No.: CBD54

Instrument ID: 23290
Date: 08/2018

Analyte	Wavelength (nm)	Interelement Correction Factor for: AL	CA	FE	MG	CU
Lead	220.35	0.0002270	0.0000000	0.0000320	0.0000000	0.0016200

Comments:
_____
_____
_____
_____

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QUALITY ASSURANCE SUMMARY
FORM 11
ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)
SDG No.: CBD54

Instrument ID: 23290
Date: 08/2018

Analyte	Wavelength (nm)	Interelement Correction Factor for: MO	SI	--	--	--
Lead	220.35	-0.0010730	0.0004780			

Comments:
_____
_____
_____
_____

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QUALITY ASSURANCE SUMMARY
FORM 12
LINEAR RANGES
SDG No.: CBD54

Method: P
Instrument ID: 23290
Date: 10/2018

Analyte	Wavelength (nm)	Integration Time (Sec.)	Concentration (ug/L)
Lead	220.35	10.00	20000.0

Comments:
_____
_____
_____
_____

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

Method: P
Batch Number: 183151063504

Lab Sample ID	Date	Initial Volume(ml)	Final Volume(ml)
9885685	11/12/2018	50.00	50
9885686	11/12/2018	50.00	50
9885681BKG	11/12/2018	50.00	50
9885684DUP	11/12/2018	50.00	50
9885683MSD	11/12/2018	50.00	50
9885682MS	11/12/2018	50.00	50
P31563DB	11/12/2018	50.00	50
P31563DQ	11/12/2018	1.00	1

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

LEGEND:
BKG = Background
DUP = Duplicate
MS = Matrix Spike
MSD = Matrix Spike Duplicate
B = Blank
Q = Laboratory Control Sample
Y = Laboratory Control Sample Duplicate

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QUALITY ASSURANCE SUMMARY
FORM 14
ANALYSIS RUN LOG
SDG No.: CBD54

Method: P
Instrument ID: 23290
Run Name: 1832001T75

Run Start Date: 11/16/2018
Run End Date: 11/16/2018

Lab Sample ID	D/F	Time	Analytes
			P B
S0	1.00	06:38	X
S	1.00	06:41	
S	1.00	06:44	X
S	1.00	06:46	
ICV	1.00	06:49	X
ICB	1.00	06:52	X
LLC	1.00	06:54	X
ICSA	1.00	06:57	X
ICSAB	1.00	07:00	X
CCV	1.00	07:03	X
CCB	1.00	07:05	X
P31563DB	1.00	07:08	X
P31563DQ	1.00	07:11	X
9885681BKG	1.00	07:14	X
9885681A	1.00	07:17	
9885684DUP	1.00	07:19	X
9885682MS	1.00	07:22	X
9885683MSD	1.00	07:25	X
9885681L	5.00	07:28	X
ZZZZZZ	1.00	07:31	
ZZZZZZ	1.00	07:34	
CCV	1.00	07:37	X
CCB	1.00	07:40	X
ZZZZZZ	1.00	07:42	
ZZZZZZ	1.00	07:45	
ZZZZZZ	1.00	07:49	
ZZZZZZ	1.00	07:52	
ZZZZZZ	1.00	07:55	
ZZZZZZ	1.00	07:58	
ZZZZZZ	1.00	08:01	
ZZZZZZ	1.00	08:04	
ZZZZZZ	1.00	08:06	
ZZZZZZ	1.00	08:09	
CCV	1.00	08:12	X
CCB	1.00	08:14	X
ZZZZZZ	1.00	08:17	
ZZZZZZ	1.00	08:20	
ZZZZZZ	1.00	08:23	

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

LEGEND:
BKG = Background
DUP = Duplicate
MS = Matrix Spike
MSD = Matrix Spike Duplicate
A = Post Digest Spike
L = Serial Dilution
B = Blank
Q = Laboratory Control Sample
Y = Laboratory Control Sample Duplicate

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QUALITY ASSURANCE SUMMARY
FORM 14
ANALYSIS RUN LOG
SDG No.: CBD54

Method: P
Instrument ID: 23290
Run Name: 1832001T75

Run Start Date: 11/16/2018
Run End Date: 11/16/2018

Lab Sample ID	D/F	Time	Analytes																																			
			P B																																					
ZZZZZZ	1.00	08:26																																					
ZZZZZZ	1.00	08:29																																					
9885685	1.00	08:32	X																																				
9885686	1.00	08:34	X																																				
LLC	1.00	08:37	X																																				
ICSA	1.00	08:40	X																																				
ICSAB	1.00	08:43	X																																				
CCV	1.00	08:45	X																																				
CCB	1.00	08:48	X																																				

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

LEGEND:
BKG = Background
DUP = Duplicate
MS = Matrix Spike
MSD = Matrix Spike Duplicate
A = Post Digest Spike
L = Serial Dilution
B = Blank
Q = Laboratory Control Sample
Y = Laboratory Control Sample Duplicate

Raw Data

Metals in Liquid

ICP Data

Metals in Liquid

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ICP-AES Run Data Report

Reviewed By	Reviewed Date
Lisa J Cooke	11/16/2018 10:05AM
Parker D Lindstrom	11/16/2018 4:17PM

Verified By:	Verified Date
Parker D Lindstrom	11/16/2018 4:18PM

Data File Name 1832001T75.TXT
Run Name: 1832001T75

Method Reference Name(s):

Analyst Employee: 943

Instrument Parameters:

Individual Integration Time: 10.00 sec Total Integration Time: 30.00 sec Rinse Time: 15.00 sec

Element	Analyte Name	Wavelength Value
AG	Silver	328.06
AL	Aluminum	308.21
AS	Arsenic	189.04
AU	Gold	242.80
B	Boron	249.67
BA	Barium	455.40
BE	Beryllium	313.04
CA	Calcium	317.93
CD	Cadmium	226.50
CO	Cobalt	228.62
CR	Chromium	267.72
CU	Copper	327.40
FE	Iron	261.19
K	Potassium	766.49
LI	Lithium	670.78
MG	Magnesium	285.21
MN	Manganese	257.61
MO	Molybdenum	202.03
NA	Sodium	589.59
NI	Nickel	231.60
P	Phosphorus	177.49
PB	Lead	220.35
S	Sulfur	182.00
SB	Antimony	206.83
SE	Selenium	196.09
SI	Silicon	251.60
SN	Tin	189.99
SR	Strontium	421.55
TE	Tellurium	214.28
TH	Thorium	401.91
TI	Titanium	334.94
TL	Thallium	190.86
V	Vanadium	292.40
W	Tungsten	207.91
Y1	Yttrium	224.31
Y2	Yttrium	371.03
ZN	Zinc	213.86
ZR	Zirconium	339.19

The TRACE ICP utilizes Yttrium as an internal standard to compensate for fluctuations in nebulization and plasma conditions. All Yttrium readings are expressed in counts.

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 1 Date/Time: 11/16/2018 06:38

Sample Number: **S0**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AG	0.000	-15.26502	72.922	-0.00481	-0.00414	-0.01420
AL	0.000	9.03333	14.679	0.09329	0.11419	0.12537
AS	0.000	-0.41663	92.644	-0.00393	-0.01162	-0.00152
B	0.000	0.31629	752.123	0.00001	0.00002	-0.00002
BA	0.000	239.27953	8.840	0.00265	0.00236	0.00224
BE	0.000	-3.72886	123.957	0.00038	-0.00429	-0.00174
CA	0.000	6.21667	41.716	0.00225	0.00116	0.00115
CD	0.000	-2.74639	23.331	-0.04055	-0.04442	-0.02769
CO	0.000	1.22321	67.557	0.00936	0.01121	0.02990
CR	0.000	-4.86083	21.877	-0.00004	-0.00006	-0.00005
CU	0.000	2.94646	324.529	0.00561	-0.00381	0.00265
FE	0.000	2.80000	25.858	0.00088	0.00054	0.00063
K	0.000	45.68333	29.489	0.69360	0.37530	0.61019
LI	0.000	11.48333	135.519	0.00486	0.00514	-0.00158
MG	0.000	2.20000	25.653	0.00069	0.00051	0.00042
MN	0.000	8.70622	41.912	0.00413	0.00636	0.00270
MO	0.000	0.81625	45.340	0.01161	0.01596	0.00588
NA	0.000	-84.65000	17.527	-0.01919	-0.02495	-0.01821
NI	0.000	1.66317	48.436	0.02549	0.01066	0.03225
P	0.000	0.12665	588.999	0.00014	0.00016	-0.00019
PB	0.000	-3.06081	106.123	0.00881	-0.06037	-0.07498
S	0.000	1.36320	34.003	0.00044	0.00023	0.00045
SB	0.000	0.42329	95.845	-0.00001	0.00015	0.00021
SE	0.000	-0.67327	56.668	-0.00759	-0.01504	-0.00498
SI	0.000	1.23333	105.801	0.00000	0.00064	0.00027
SN	0.000	0.52661	73.487	0.01302	0.00574	0.00277
SR	0.000	-71.93867	16.893	-0.00065	-0.00066	-0.00087
TH	0.000	1.90000	142.117	0.00034	0.00119	-0.00012
TI	0.000	9.00586	29.482	0.00393	0.00363	0.00609
TL	0.000	-1.27987	71.793	-0.01112	-0.03198	-0.00941
V	0.000	4.69437	109.843	0.00335	-0.00058	0.00435
W	0.000	0.43829	252.842	-0.00015	0.00006	0.00046
Y1	0.000	3652.08979	1.038	3686.88131	3657.72923	3611.65883
Y2A	0.000	98979.44134	0.205	99202.90651	98929.28486	98806.13264
Y2R	0.000	4075.00833	1.105	4127.00000	4050.10000	4047.92500
ZN	0.000	7.67257	26.163	0.08516	0.13641	0.09358
ZR	0.000	-3.58333	86.980	-0.00048	-0.00040	-0.00177

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 2 Date/Time: 11/16/2018 06:41

Sample Number: **S1**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AL	50.000	1520.20178	0.869	19.38402	19.13131	19.06911
CA	50.000	9769.81825	0.684	2.47547	2.47819	2.44769
FE	50.000	4444.14901	0.722	1.12991	1.12311	1.11377
K	50.000	5524.85228	0.571	70.14640	69.77934	69.35045
MG	50.000	21467.71894	0.876	5.45021	5.44685	5.36630
NA	50.000	25501.42772	0.673	6.48800	6.42757	6.40395
S	50.000	4379.18218	0.326	1.24314	1.23964	1.24773
SI	50.000	2629.15232	0.726	0.66948	0.66163	0.66070
Y1	50.000	3521.64589	0.073	3522.01697	3518.90311	3524.01760
Y2R	50.000	3959.98154	0.474	3945.92570	3981.30000	3952.71891

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 3 Date/Time: 11/16/2018 06:44

Sample Number: **S2**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
AG	1.000	5290.74837	0.088	2.77502	2.77122	2.77578
AS	1.000	192.02183	0.212	2.68136	2.68459	2.67354
B	1.000	3244.41897	0.688	0.03376	0.03411	0.03420
BA	1.000	396771.90949	0.115	4.15536	4.16474	4.16181
BE	1.000	141095.23507	0.606	73.48704	74.08099	74.36585
CD	1.000	4987.31896	0.610	69.11473	69.86353	69.83490
CO	1.000	2916.91972	0.832	40.31915	40.92327	40.88682
CU	1.000	3955.61438	0.686	2.05930	2.07496	2.08769
LI	1.000	2360.77754	0.364	0.58912	0.58861	0.58518
MN	1.000	20365.37786	0.442	10.63145	10.72583	10.67594
NI	1.000	1395.39047	0.637	19.33707	19.57824	19.50804
P	1.000	169.20551	0.367	0.04718	0.04742	0.04708
PB	1.000	526.71838	0.786	7.30520	7.41595	7.33185
SE	1.000	172.90254	1.592	2.36940	2.42884	2.44131
SR	1.000	424296.91993	0.047	4.45155	4.44881	4.44745
TH	1.000	35.83233	8.661	0.00947	0.00925	0.00804
TL	1.000	261.12679	0.467	3.62469	3.65475	3.65356
W	1.000	581.12701	0.552	0.16129	0.16308	0.16225
Y1	1.000	3582.71991	0.699	3611.64151	3568.93932	3567.57891
Y2A	1.000	95363.18551	0.281	95310.81755	95653.63908	95125.09990
Y2R	1.000	4017.42355	0.384	4025.66473	3999.62605	4026.97985
ZN	1.000	3883.26322	0.717	53.74752	54.40923	54.43172

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 4 Date/Time: 11/16/2018 06:46

Sample Number: **S3**

ELEMENT	CONC (ppm)	AVERAGE INTENSITY	% RSD	INTEGRATIONS #1	#2	#3
CR	1.000	3801.03678	0.834	0.03908	0.03911	0.03854
MO	1.000	1731.79015	0.756	23.93731	23.62968	23.62382
SB	1.000	232.89671	1.250	0.06451	0.06402	0.06295
SN	1.000	670.28630	0.532	9.24106	9.15511	9.15795
TI	1.000	14722.44025	0.796	7.55493	7.58381	7.46857
V	1.000	6466.47417	1.256	3.34322	3.32327	3.26333
Y1	1.000	3648.98344	0.532	3630.76692	3669.38806	3646.79532
Y2A	1.000	97688.80644	1.015	97643.19589	96720.96388	98702.25955
Y2R	1.000	3969.66667	1.638	4027.75000	3981.82500	3899.42500
ZR	1.000	752.05000	1.376	0.18672	0.18981	0.19190

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 5

Date/Time: 11/16/2018 06:49

Sample Number: **ICV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.60788	3,204.57	1.227	0.59927	0.61224	0.61212
____ AL	31.33220	957.48	2.748	30.86400	30.80669	32.32592
____ AS	0.61218	115.05	1.837	0.60461	0.62510	0.60682
____ B	0.67217	2,229.34	0.437	0.67535	0.67160	0.66956
____ BA	0.61142	241,498.80	0.398	0.60897	0.61384	0.61144
____ BE	0.58535	82,154.92	0.863	0.58547	0.59034	0.58024
____ CA	30.92187	6,037.55	1.759	30.66647	30.55259	31.54655
____ CD	0.60622	3,001.54	1.035	0.60261	0.61346	0.60259
____ CO	0.60126	1,736.91	1.040	0.59661	0.60837	0.59879
____ CR	0.58434	2,158.05	0.777	0.58281	0.58945	0.58077
____ CU	0.60175	2,374.47	0.636	0.60144	0.60572	0.59808
____ FE	30.74633	2,743.01	1.986	30.45856	30.33271	31.44772
____ K	30.44852	3,375.96	1.839	30.16414	30.08781	31.09360
____ LI	0.62092	1,454.77	2.676	0.61165	0.61099	0.64010
____ MG	30.76167	13,219.04	1.556	30.60833	30.37858	31.29809
____ MN	0.61368	12,436.91	0.681	0.60888	0.61653	0.61563
____ MO	0.59743	1,005.59	1.079	0.59322	0.60485	0.59422
____ NA	29.97120	15,225.94	2.249	29.66990	29.50041	30.74329
____ NI	0.60586	833.41	0.928	0.60013	0.61137	0.60607
____ P	0.61927	103.74	0.875	0.61837	0.62508	0.61436
____ PB	0.58608	315.00	1.795	0.57396	0.59282	0.59147
____ S	31.31759	2,760.66	1.260	31.14637	31.76896	31.03743
____ SB	0.60737	137.78	1.564	0.60153	0.61833	0.60224
____ SE	0.59533	101.76	2.441	0.58298	0.61134	0.59167
____ SI	32.10373	1,686.77	1.733	31.79747	31.76778	32.74593
____ SN	0.57619	375.61	0.569	0.57427	0.57998	0.57432
____ SR	0.61335	259,246.94	0.379	0.61076	0.61524	0.61404
____ TH	0.59452	21.73	15.396	0.49818	0.60505	0.68033
____ TI	0.60728	8,686.55	0.972	0.60868	0.61236	0.60081
____ TL	0.60732	147.36	0.995	0.60456	0.61425	0.60315
____ V	0.59476	3,739.85	0.386	0.59244	0.59703	0.59480
____ W	0.61412	353.25	1.120	0.60988	0.62206	0.61043
____ Y1	3546.87864	3,546.88	1.462	3605.38446	3506.63934	3528.61214
____ Y2A	94873.50409	94,873.50	0.623	95044.55544	94215.73908	95360.21774
____ Y2R	3954.09876	3,954.10	2.034	3999.27774	4001.77429	3861.24426
____ ZN	0.60466	2,330.36	1.169	0.59985	0.61278	0.60136
____ ZR	0.55289	469.89	1.055	0.55197	0.54758	0.55913

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 6

Date/Time: 11/16/2018 06:52

Sample Number: **ICB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00089	-6.70	109.934	0.00016	0.00200	0.00050
____ AL	0.05531	10.90	37.196	0.06974	0.03175	0.06444
____ AS	0.00135	-0.73	509.898	-0.00185	-0.00334	0.00923
____ B	0.00443	16.05	22.561	0.00540	0.00450	0.00340
____ BA	0.00116	734.62	75.229	0.00164	0.00170	0.00015
____ BE	0.00122	160.51	73.521	0.00175	0.00171	0.00018
____ CA	0.09304	25.20	105.279	0.20596	0.04230	0.03087
____ CD	0.00049	-1.18	26.986	0.00059	0.00034	0.00054
____ CO	0.00080	2.16	85.702	0.00077	0.00013	0.00150
____ CR	0.00042	2.52	353.912	-0.00008	0.00207	-0.00074
____ CU	0.00156	7.24	186.263	0.00194	0.00426	-0.00152
____ FE	0.12025	14.10	100.346	0.25941	0.05670	0.04465
____ K	0.18635	67.18	61.798	0.31241	0.15998	0.08666
____ LI	0.00352	19.98	31.655	0.00417	0.00416	0.00223
____ MG	0.10694	50.40	90.981	0.21921	0.04730	0.05431
____ MN	0.00121	34.97	69.381	0.00167	0.00171	0.00024
____ MO	-0.00023	0.41	228.219	-0.00084	0.00016	-0.00003
____ NA	0.12305	-19.87	89.141	0.24778	0.04164	0.07972
____ NI	0.00115	3.33	49.534	0.00164	0.00053	0.00127
____ P	-0.00057	-0.09	1156.421	-0.00637	-0.00202	0.00666
____ PB	0.00119	-2.24	247.210	-0.00158	0.00427	0.00088
____ S	0.00976	2.28	8.604	0.00966	0.00898	0.01065
____ SB	-0.00034	0.35	486.547	-0.00206	0.00126	-0.00023
____ SE	0.00436	-0.11	38.603	0.00624	0.00385	0.00299
____ SI	0.09513	6.48	124.432	0.23181	0.02520	0.02839
____ SN	0.00114	1.30	227.583	-0.00006	0.00412	-0.00064
____ SR	0.00127	452.07	69.325	0.00178	0.00177	0.00025
____ TH	0.01487	0.67	142.794	0.01162	-0.00455	0.03755
____ TI	0.00168	34.90	16.990	0.00170	0.00196	0.00139
____ TL	0.00095	-1.42	215.329	0.00328	0.00004	-0.00048
____ V	0.00076	10.15	225.908	0.00176	0.00174	-0.00122
____ W	0.00059	0.34	221.978	-0.00013	0.00208	-0.00020
____ Y1	3700.45829	3,700.46	0.436	3708.10419	3681.91181	3711.35886
____ Y2A	101222.03347	101,222.03	0.682	101758.72209	101464.41423	100442.96407
____ Y2R	4106.61667	4,106.62	1.693	4147.90000	4026.35000	4145.60000
____ ZN	-0.00019	7.06	177.625	0.00009	-0.00056	-0.00010
____ ZR	-0.01177	-1.85	26.170	-0.01533	-0.00987	-0.01012

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 7

Date/Time: 11/16/2018 06:54

Sample Number: **LLC**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00740	-8.22	18.327	0.00883	0.00612	0.00726
____ AL	0.27875	19.22	35.336	0.29601	0.17276	0.36748
____ AS	0.05138	9.29	10.822	0.04498	0.05414	0.05502
____ B	0.05070	174.74	1.583	0.04980	0.05136	0.05092
____ BA	0.00533	2,468.05	0.696	0.00536	0.00534	0.00529
____ BE	0.00508	732.84	1.289	0.00507	0.00515	0.00502
____ CA	0.49910	106.43	1.204	0.50572	0.49758	0.49400
____ CD	0.00528	23.67	3.063	0.00513	0.00545	0.00527
____ CO	0.00564	16.85	4.109	0.00539	0.00567	0.00585
____ CR	0.01381	54.84	2.426	0.01365	0.01420	0.01359
____ CU	0.02536	149.42	0.452	0.02548	0.02536	0.02525
____ FE	0.20837	22.22	8.103	0.20436	0.19385	0.22689
____ K	0.48988	101.40	24.941	0.46262	0.38362	0.62338
____ LI	0.04987	131.17	4.578	0.05062	0.04730	0.05167
____ MG	0.10166	47.68	2.265	0.10020	0.10431	0.10046
____ MN	0.01028	225.40	1.209	0.01025	0.01042	0.01017
____ MO	0.01025	18.90	3.040	0.00995	0.01057	0.01021
____ NA	0.97711	432.17	2.116	1.00033	0.96067	0.97033
____ NI	0.01147	18.26	13.294	0.00978	0.01190	0.01273
____ P	0.09781	17.11	4.329	0.10215	0.09760	0.09369
____ PB	0.01468	5.31	16.861	0.01707	0.01213	0.01484
____ S	0.52760	50.10	1.433	0.53413	0.51932	0.52935
____ SB	0.04893	12.03	7.021	0.04549	0.05236	0.04895
____ SE	0.05471	8.94	5.491	0.05797	0.05408	0.05206
____ SI	0.52689	29.95	3.989	0.51732	0.55099	0.51237
____ SN	0.05016	34.81	2.526	0.05115	0.05060	0.04873
____ SR	0.00535	2,276.24	1.294	0.00533	0.00543	0.00529
____ TH	0.44198	16.23	10.250	0.48992	0.39988	0.43614
____ TI	0.01051	168.09	3.123	0.01087	0.01044	0.01022
____ TL	0.03606	8.01	5.126	0.03767	0.03648	0.03404
____ V	0.00999	73.09	13.937	0.00887	0.01155	0.00955
____ W	0.03030	18.25	3.859	0.02983	0.03163	0.02944
____ Y1	3722.39276	3,722.39	0.163	3729.32707	3718.00320	3719.84802
____ Y2A	100415.69934	100,415.70	0.849	100239.54173	99665.11175	101342.44453
____ Y2R	4099.41667	4,099.42	0.922	4127.22500	4114.62500	4056.40000
____ ZN	0.02164	94.77	0.946	0.02161	0.02144	0.02185
____ ZR	0.00622	51.72	48.441	0.00326	0.00929	0.00612

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 8 Date/Time: 11/16/2018 06:57

Sample Number: **ICSA**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00298	-24.62	40.665	-0.00398	-0.00331	-0.00163
____ AL	493.02567	15,340.45	1.203	486.40281	494.83162	497.84258
____ AS	0.01038	-4.53	17.577	0.01249	0.00935	0.00931
____ B	-0.02556	355.33	12.063	-0.02201	-0.02761	-0.02705
____ BA	0.00091	535.61	3.212	0.00094	0.00089	0.00090
____ BE	-0.00019	-43.82	60.340	-0.00011	-0.00033	-0.00014
____ CA	493.94996	95,729.70	1.553	485.12643	497.67635	499.04709
____ CD	-0.00301	40.52	20.329	-0.00363	-0.00241	-0.00298
____ CO	0.00099	2.39	64.781	0.00026	0.00146	0.00125
____ CR	-0.00191	-5.69	83.377	-0.00069	-0.00133	-0.00372
____ CU	-0.00090	104.50	295.959	0.00118	0.00002	-0.00391
____ FE	193.81491	16,752.33	1.183	191.17872	194.91520	195.35080
____ K	0.17788	64.62	63.450	0.30426	0.14225	0.08713
____ LI	-0.04370	43.90	3.632	-0.04391	-0.04517	-0.04201
____ MG	504.24135	206,015.36	1.506	495.47405	508.59022	508.65979
____ MN	0.00500	99.91	5.427	0.00514	0.00518	0.00469
____ MO	-0.00091	-0.69	53.463	-0.00145	-0.00081	-0.00049
____ NA	0.09017	-36.66	62.293	0.15433	0.04983	0.06636
____ NI	-0.00059	-10.36	117.192	-0.00057	0.00009	-0.00130
____ P	0.01151	1.79	48.360	0.01022	0.01762	0.00671
____ PB	0.01775	43.35	20.881	0.01485	0.02192	0.01647
____ S	-0.10051	1.30	42.392	-0.13159	-0.05194	-0.11798
____ SB	0.00347	1.10	262.363	-0.00700	0.00944	0.00795
____ SE	-0.00119	-0.97	1145.957	0.01217	-0.01509	-0.00065
____ SI	0.04041	3.38	92.243	0.07091	-0.00114	0.05147
____ SN	0.00375	2.72	14.683	0.00318	0.00381	0.00428
____ SR	-0.00044	5,372.43	55.261	-0.00016	-0.00056	-0.00060
____ TH	0.01558	5.46	70.479	0.02223	0.00291	0.02159
____ TI	-0.00145	-10.99	27.791	-0.00099	-0.00162	-0.00173
____ TL	-0.00665	-3.09	83.906	-0.00456	-0.00242	-0.01297
____ V	0.00269	19.97	24.037	0.00195	0.00297	0.00315
____ W	0.00111	0.64	223.289	-0.00061	0.00000	0.00394
____ Y1	3267.25827	3,267.26	0.258	3261.05889	3276.86231	3263.85361
____ Y2A	86483.01075	86,483.01	0.514	86241.38103	86996.03214	86211.61909
____ Y2R	4005.64608	4,005.65	0.817	4041.68328	3977.72945	3997.52549
____ ZN	0.01389	72.78	3.906	0.01332	0.01439	0.01397
____ ZR	-0.00760	1.41	45.022	-0.00521	-0.00606	-0.01151

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 9

Date/Time: 11/16/2018 07:00

Sample Number: **ICSAB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.21659	1,032.15	0.586	0.21731	0.21512	0.21734
____ AL	503.92999	15,147.08	0.268	505.10619	502.45354	504.23025
____ AS	0.11349	13.30	3.623	0.10883	0.11503	0.11662
____ B	-0.02641	353.66	9.839	-0.02839	-0.02347	-0.02737
____ BA	0.51761	182,577.69	0.273	0.51634	0.51913	0.51735
____ BE	0.50221	62,950.31	0.613	0.49988	0.50570	0.50103
____ CA	504.19878	94,314.07	0.634	505.65889	500.53091	506.40655
____ CD	0.93794	4,261.14	0.305	0.93749	0.94100	0.93533
____ CO	0.47154	1,235.89	0.217	0.47137	0.47263	0.47061
____ CR	0.48255	1,591.35	1.269	0.47686	0.48904	0.48174
____ CU	0.52981	1,915.91	1.589	0.52360	0.53939	0.52643
____ FE	197.58364	16,473.22	0.338	198.11343	196.83325	197.80424
____ K	0.10577	54.61	170.673	0.31411	-0.00455	0.00776
____ LI	-0.04635	39.10	3.373	-0.04803	-0.04609	-0.04493
____ MG	515.42955	203,030.57	0.596	517.11722	511.88379	517.28765
____ MN	0.50766	9,194.33	0.449	0.50561	0.51012	0.50726
____ MO	-0.00056	-0.14	144.427	-0.00148	-0.00006	-0.00013
____ NA	0.03980	-60.72	14.943	0.03888	0.04615	0.03437
____ NI	0.92934	1,154.68	0.607	0.92352	0.93479	0.92972
____ P	0.01575	2.42	12.273	0.01365	0.01616	0.01745
____ PB	0.52651	285.63	0.451	0.52437	0.52906	0.52611
____ S	-0.11440	0.32	14.617	-0.10287	-0.10674	-0.13357
____ SB	0.62014	127.81	2.762	0.62102	0.60259	0.63682
____ SE	0.52465	80.29	1.381	0.52343	0.51809	0.53243
____ SI	0.02738	2.59	68.171	0.04808	0.02222	0.01184
____ SN	0.00270	2.06	4.570	0.00276	0.00278	0.00256
____ SR	-0.00049	5,361.79	25.701	-0.00057	-0.00034	-0.00055
____ TH	-0.05332	2.99	244.454	0.06427	-0.19349	-0.03075
____ TI	0.00058	15.12	33.908	0.00036	0.00073	0.00065
____ TL	0.09279	13.88	12.109	0.10029	0.09822	0.07987
____ V	0.50768	2,904.44	0.710	0.50610	0.51181	0.50514
____ W	0.00621	7.31	50.903	0.00811	0.00796	0.00256
____ Y1	3219.42139	3,219.42	0.333	3231.68683	3211.73883	3214.83852
____ Y2A	84733.44831	84,733.45	0.377	85038.13898	84400.91707	84761.28888
____ Y2R	3867.55928	3,867.56	0.305	3864.46264	3857.63750	3880.57769
____ ZN	1.02090	3,577.97	0.266	1.01935	1.02403	1.01932
____ ZR	0.00140	1.86	1024.001	-0.01258	0.01608	0.00070

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 10

Date/Time: 11/16/2018 07:03

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.50300	2,684.35	0.495	0.50587	0.50172	0.50140
____ AL	25.19849	784.19	1.445	24.99519	24.98139	25.61889
____ AS	0.51252	97.23	1.563	0.52157	0.50637	0.50961
____ B	0.50210	1,685.96	0.314	0.50337	0.50258	0.50033
____ BA	0.51189	204,512.95	0.558	0.51335	0.51372	0.50860
____ BE	0.48848	69,332.33	0.504	0.49122	0.48777	0.48645
____ CA	25.13740	4,990.48	1.214	24.98850	24.93521	25.48850
____ CD	0.50457	2,524.63	0.819	0.50902	0.50383	0.50086
____ CO	0.50486	1,474.45	0.842	0.50968	0.50329	0.50162
____ CR	0.48708	1,819.35	0.493	0.48929	0.48453	0.48743
____ CU	0.51178	2,035.14	0.938	0.51115	0.51686	0.50732
____ FE	24.92998	2,264.41	0.858	24.83806	24.77752	25.17435
____ K	24.70984	2,792.75	1.451	24.48185	24.52457	25.12308
____ LI	0.49649	1,184.73	1.507	0.49675	0.48889	0.50384
____ MG	25.06074	10,952.70	1.464	24.95956	24.75493	25.46772
____ MN	0.51137	10,482.51	0.401	0.51367	0.51069	0.50975
____ MO	0.49368	840.16	1.049	0.49882	0.49377	0.48846
____ NA	24.81665	12,799.27	0.695	24.70062	24.73462	25.01471
____ NI	0.50912	708.41	1.461	0.51677	0.50866	0.50192
____ P	0.51264	86.82	2.050	0.52210	0.51449	0.50132
____ PB	0.49161	266.16	0.679	0.49546	0.48958	0.48978
____ S	25.24666	2,250.03	0.229	25.30381	25.24792	25.18826
____ SB	0.49001	112.46	1.183	0.49602	0.48955	0.48445
____ SE	0.50609	87.29	0.258	0.50546	0.50521	0.50759
____ SI	25.25089	1,348.56	1.716	24.84984	25.19212	25.71069
____ SN	0.47973	316.21	1.043	0.48527	0.47838	0.47553
____ SR	0.50816	217,191.76	0.691	0.51031	0.51007	0.50411
____ TH	0.44055	16.46	5.997	0.42404	0.42658	0.47102
____ TI	0.50775	7,346.66	0.453	0.51040	0.50623	0.50663
____ TL	0.50671	123.98	0.113	0.50607	0.50689	0.50717
____ V	0.49924	3,176.15	0.694	0.50214	0.50017	0.49540
____ W	0.50708	294.90	0.842	0.51187	0.50568	0.50369
____ Y1	3585.38146	3,585.38	0.708	3556.68433	3604.84952	3594.61054
____ Y2A	95946.45338	95,946.45	0.392	95525.52343	96249.82510	96064.01159
____ Y2R	4017.72109	4,017.72	0.847	4054.22739	4012.02019	3986.91570
____ ZN	0.50768	1,979.04	1.038	0.51344	0.50648	0.50311
____ ZR	0.45211	387.41	0.958	0.44853	0.45692	0.45087

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 11 Date/Time: 11/16/2018 07:05

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00033	-11.95	324.686	0.00124	-0.00083	0.00057
____ AL	0.11692	12.62	36.198	0.07414	0.15877	0.11786
____ AS	0.00400	-0.20	69.160	0.00638	0.00466	0.00096
____ B	0.00386	13.44	26.550	0.00444	0.00268	0.00447
____ BA	0.00011	280.83	13.656	0.00010	0.00010	0.00012
____ BE	0.00020	7.17	9.180	0.00021	0.00020	0.00018
____ CA	0.02645	11.28	36.545	0.01734	0.03659	0.02543
____ CD	0.00017	-2.83	63.941	0.00025	0.00005	0.00021
____ CO	0.00063	1.59	29.938	0.00058	0.00083	0.00046
____ CR	-0.00192	-6.54	40.029	-0.00280	-0.00159	-0.00138
____ CU	-0.00082	0.08	129.696	0.00010	-0.00198	-0.00057
____ FE	0.02116	4.68	47.347	0.02102	0.01121	0.03124
____ K	0.07692	53.52	105.465	-0.00840	0.08611	0.15307
____ LI	0.00078	13.10	1026.113	-0.00454	-0.00313	0.01001
____ MG	0.02763	14.27	23.307	0.03485	0.02557	0.02248
____ MN	0.00006	9.60	71.213	0.00001	0.00007	0.00010
____ MO	0.00007	0.92	1098.563	-0.00053	-0.00020	0.00094
____ NA	0.02022	-73.22	62.429	0.01807	0.00880	0.03377
____ NI	0.00122	3.37	70.090	0.00068	0.00077	0.00220
____ P	0.00142	0.24	123.353	-0.00053	0.00285	0.00194
____ PB	-0.00058	-3.16	183.340	-0.00139	-0.00097	0.00062
____ S	-0.00019	1.33	3294.738	-0.00722	0.00233	0.00433
____ SB	-0.00538	-0.82	45.725	-0.00528	-0.00789	-0.00297
____ SE	0.00529	0.05	58.512	0.00273	0.00873	0.00441
____ SI	0.02135	2.37	135.503	-0.01117	0.04420	0.03101
____ SN	0.00164	1.61	18.841	0.00195	0.00163	0.00133
____ SR	0.00015	-53.10	23.748	0.00017	0.00017	0.00011
____ TH	0.03977	1.53	32.281	0.02501	0.04838	0.04592
____ TI	0.00051	16.52	46.164	0.00042	0.00033	0.00077
____ TL	0.00085	-1.41	275.520	0.00273	-0.00176	0.00157
____ V	0.00044	7.75	224.109	-0.00005	-0.00021	0.00158
____ W	0.00112	0.66	137.937	0.00182	-0.00065	0.00220
____ Y1	3630.75359	3,630.75	1.560	3694.33057	3585.72143	3612.20878
____ Y2A	98824.49606	98,824.50	1.479	98479.92409	100427.66181	97565.90229
____ Y2R	4015.70000	4,015.70	0.555	3995.87500	4039.80000	4011.42500
____ ZN	-0.00035	6.27	44.344	-0.00049	-0.00039	-0.00018
____ ZR	-0.01006	1.75	46.096	-0.00521	-0.01052	-0.01444

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 12 Date/Time: 11/16/2018 07:08

Sample Number: **PBW** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00076	-17.02	65.644	-0.00058	-0.00037	-0.00132
____ AL	-0.08603	6.52	99.684	0.01299	-0.13649	-0.13459
____ AS	0.00177	-0.64	160.968	-0.00047	0.00081	0.00497
____ B	0.00188	6.72	37.111	0.00117	0.00256	0.00189
____ BA	0.00008	272.08	44.706	0.00007	0.00012	0.00005
____ BE	0.00013	-2.86	19.120	0.00012	0.00011	0.00016
____ CA	0.01368	8.90	108.507	-0.00079	0.01296	0.02887
____ CD	0.00043	-1.52	167.931	-0.00025	0.00035	0.00119
____ CO	0.00031	0.66	216.875	-0.00039	0.00037	0.00095
____ CR	-0.00144	-4.69	55.835	-0.00228	-0.00134	-0.00068
____ CU	-0.00059	-0.12	380.538	-0.00008	-0.00303	0.00135
____ FE	0.00971	3.72	115.653	0.01945	-0.00258	0.01227
____ K	0.08128	55.05	44.224	0.12189	0.06839	0.05355
____ LI	0.00174	15.52	296.495	-0.00422	0.00454	0.00491
____ MG	0.00429	4.10	111.439	-0.00032	0.00397	0.00923
____ MN	0.00035	15.84	38.985	0.00033	0.00049	0.00022
____ MO	0.00020	1.16	366.351	-0.00010	0.00104	-0.00034
____ NA	0.02993	-69.40	31.713	0.04029	0.02784	0.02165
____ NI	0.00146	3.73	40.581	0.00142	0.00089	0.00207
____ P	-0.00073	-0.12	361.473	-0.00282	-0.00157	0.00222
____ PB	0.00179	-1.92	23.148	0.00221	0.00138	0.00178
____ S	0.00634	1.94	73.001	0.01093	0.00168	0.00639
____ SB	-0.00519	-0.78	57.731	-0.00632	-0.00179	-0.00746
____ SE	0.00024	-0.83	1265.417	-0.00197	0.00376	-0.00105
____ SI	0.02087	2.38	51.177	0.01276	0.01688	0.03296
____ SN	0.00035	0.76	91.598	-0.00002	0.00053	0.00055
____ SR	0.00016	-48.05	7.858	0.00016	0.00017	0.00015
____ TH	0.02859	1.15	113.653	0.01172	0.06605	0.00800
____ TI	0.00051	16.64	18.138	0.00046	0.00062	0.00045
____ TL	0.00355	-0.70	60.277	0.00108	0.00471	0.00485
____ V	0.00044	7.77	185.305	0.00138	0.00004	-0.00010
____ W	0.00027	0.16	204.081	0.00091	-0.00001	-0.00009
____ Y1	3649.75002	3,649.75	0.239	3647.19528	3659.47905	3642.57574
____ Y2A	99181.58589	99,181.59	0.779	99813.62365	98320.79005	99410.34397
____ Y2R	4091.60833	4,091.61	1.613	4166.72500	4065.12500	4042.97500
____ ZN	0.00145	13.41	33.526	0.00116	0.00119	0.00202
____ ZR	-0.01168	-0.50	14.926	-0.00982	-0.01195	-0.01328

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 13 Date/Time: 11/16/2018 07:11

Sample Number: **LCSW** Class: **** Batch: 183151063504

Initial Vol: 1.00 Final Vol: 1.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.05141	285.98	1.540	0.05051	0.05174	0.05199
____ AL	2.04817	73.57	4.404	2.07928	1.94653	2.11869
____ AS	0.15448	29.50	1.075	0.15626	0.15297	0.15422
____ B	1.93245	6,460.87	1.057	1.92924	1.95428	1.91383
____ BA	2.05153	826,213.85	2.324	2.02322	2.10658	2.02479
____ BE	0.04943	7,060.40	1.390	0.04918	0.05021	0.04890
____ CA	4.15435	818.32	0.196	4.16241	4.15449	4.14615
____ CD	0.05070	255.78	0.956	0.05095	0.05101	0.05014
____ CO	0.51158	1,534.59	1.054	0.51637	0.51264	0.50574
____ CR	0.19679	742.03	1.308	0.19605	0.19965	0.19466
____ CU	0.25598	986.39	2.108	0.25303	0.26221	0.25270
____ FE	1.01196	93.72	1.188	1.02461	1.01060	1.00068
____ K	10.02820	1,142.80	0.908	10.07020	10.09064	9.92374
____ LI	1.01286	2,356.38	0.511	1.00971	1.01883	1.01003
____ MG	2.05308	888.47	0.860	2.07346	2.04224	2.04354
____ MN	0.52300	10,823.25	1.197	0.52321	0.52915	0.51663
____ MO	1.97310	3,435.38	1.246	1.99222	1.98173	1.94536
____ NA	10.05855	5,060.93	0.115	10.06845	10.04583	10.06138
____ NI	0.52050	744.57	1.227	0.52589	0.52218	0.51345
____ P	0.99517	172.79	1.114	1.00509	0.99720	0.98320
____ PB	0.15258	79.27	1.961	0.15571	0.15230	0.14974
____ S	1.00939	93.50	1.594	1.01495	1.02196	0.99125
____ SB	0.50579	117.49	2.217	0.51523	0.50875	0.49340
____ SE	0.15220	25.93	4.082	0.15083	0.15899	0.14679
____ SI	1.10549	61.58	5.616	1.10336	1.16861	1.04449
____ SN	3.81218	2,568.10	1.211	3.84445	3.83281	3.75928
____ SR	1.02401	441,164.59	1.775	1.00523	1.04153	1.02529
____ TH	-0.00761	-0.13	56.931	-0.00382	-0.01233	-0.00666
____ TI	1.00193	14,619.56	1.692	0.99669	1.02089	0.98822
____ TL	0.16269	33.92	1.916	0.15915	0.16387	0.16504
____ V	0.50464	3,053.04	1.184	0.50139	0.51153	0.50099
____ W	0.00454	4.95	12.939	0.00433	0.00520	0.00408
____ Y1	3669.62637	3,669.63	0.819	3653.11969	3651.43486	3704.32457
____ Y2A	96825.43491	96,825.43	1.033	97247.20056	95683.38832	97545.71586
____ Y2R	3957.37500	3,957.38	0.438	3971.95000	3961.97500	3938.20000
____ ZN	0.49762	1,983.62	1.101	0.50216	0.49916	0.49154
____ ZR	0.99081	742.32	0.493	0.99090	0.99565	0.98589

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 14 Date/Time: 11/16/2018 07:14

Sample Number: **9885681** Class: U*** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00191	-16.74	73.350	-0.00035	-0.00233	-0.00306
____ AL	0.01129	9.16	267.153	0.03423	0.02249	-0.02286
____ AS	0.00286	-0.42	68.302	0.00091	0.00285	0.00482
____ B	0.05867	193.62	3.064	0.06064	0.05711	0.05827
____ BA	0.03554	14,485.73	0.258	0.03559	0.03560	0.03544
____ BE	0.00011	-5.26	21.887	0.00013	0.00008	0.00012
____ CA	45.97073	9,141.32	1.411	46.48080	46.19098	45.24042
____ CD	0.00028	-2.28	39.615	0.00038	0.00016	0.00028
____ CO	0.00081	1.80	29.859	0.00109	0.00068	0.00066
____ CR	-0.00043	-0.78	153.926	-0.00115	-0.00027	0.00014
____ CU	0.00348	12.84	53.694	0.00562	0.00266	0.00216
____ FE	0.01404	4.06	155.143	0.02883	-0.01098	0.02427
____ K	1.54011	216.82	7.892	1.65762	1.54784	1.41489
____ LI	0.00132	27.05	362.249	0.00662	-0.00268	0.00002
____ MG	23.90218	10,478.01	1.466	24.08579	24.12269	23.49807
____ MN	0.01118	239.17	1.719	0.01134	0.01097	0.01124
____ MO	0.00122	2.89	29.584	0.00081	0.00148	0.00137
____ NA	29.78187	15,421.28	0.809	29.91448	29.92724	29.50389
____ NI	0.00263	5.09	43.368	0.00345	0.00133	0.00311
____ P	0.00345	0.61	28.915	0.00459	0.00306	0.00271
____ PB	-0.00104	-2.48	296.219	-0.00122	0.00212	-0.00401
____ S	5.10878	460.08	0.393	5.11009	5.12816	5.08809
____ SB	-0.00272	-0.20	69.134	-0.00423	-0.00332	-0.00061
____ SE	-0.00346	-1.45	241.494	-0.00768	0.00616	-0.00886
____ SI	3.57403	192.34	2.871	3.62609	3.64018	3.45583
____ SN	0.00007	0.57	228.799	-0.00007	0.00003	0.00026
____ SR	0.23961	103,310.26	0.250	0.24012	0.23976	0.23895
____ TH	-0.04008	-1.33	95.132	-0.06039	0.00390	-0.06376
____ TI	0.00178	34.63	14.398	0.00170	0.00207	0.00157
____ TL	0.00303	-0.83	56.074	0.00132	0.00471	0.00305
____ V	0.00063	8.32	66.289	0.00045	0.00033	0.00110
____ W	-0.00009	-0.04	774.086	-0.00083	-0.00005	0.00060
____ Y1	3605.66277	3,605.66	0.107	3609.36906	3601.69483	3605.92441
____ Y2A	96440.01424	96,440.01	0.106	96498.52853	96322.28825	96499.22593
____ Y2R	4029.37493	4,029.37	0.819	4015.75903	4005.36856	4066.99721
____ ZN	0.00380	22.38	8.251	0.00397	0.00399	0.00344
____ ZR	-0.00386	-0.85	77.687	-0.00202	-0.00732	-0.00224

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 15 Date/Time: 11/16/2018 07:17

Sample Number: **9885681** Class: UP** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.01215	69.19	21.872	0.00948	0.01479	0.01218
____ AL	1.03998	40.45	14.326	1.21168	0.96348	0.94478
____ AS	0.51437	99.20	1.896	0.51983	0.50311	0.52017
____ B	0.24741	834.29	0.468	0.24824	0.24609	0.24791
____ BA	0.08819	36,255.68	4.817	0.08519	0.09305	0.08632
____ BE	0.02112	3,039.88	8.240	0.02008	0.02313	0.02015
____ CA	46.84943	9,098.03	0.571	47.15365	46.65163	46.74302
____ CD	0.05071	252.08	2.078	0.05180	0.04970	0.05063
____ CO	0.10104	297.63	1.230	0.10172	0.09961	0.10180
____ CR	0.18991	723.12	2.821	0.19470	0.18413	0.19090
____ CU	0.49008	1,938.91	3.028	0.50301	0.47388	0.49335
____ FE	0.55243	52.12	12.748	0.63270	0.50103	0.52356
____ K	3.53634	429.21	0.681	3.52135	3.56413	3.52354
____ LI	1.00419	2,334.57	0.757	1.00821	0.99542	1.00893
____ MG	24.91845	10,667.24	0.818	25.14609	24.75279	24.85646
____ MN	0.07306	1,535.09	1.208	0.07253	0.07408	0.07258
____ MO	0.20109	345.93	1.676	0.20188	0.19740	0.20400
____ NA	31.56368	15,966.14	0.775	31.33153	31.54027	31.81923
____ NI	0.15436	218.61	1.001	0.15528	0.15257	0.15521
____ P	1.04175	178.33	1.128	1.04543	1.02860	1.05122
____ PB	0.49603	263.55	1.146	0.50019	0.48955	0.49833
____ S	6.08596	549.57	0.719	6.09935	6.03708	6.12146
____ SB	0.39942	92.21	2.961	0.40947	0.38638	0.40240
____ SE	0.78811	136.00	0.868	0.79595	0.78335	0.78503
____ SI	4.60214	241.79	0.893	4.61456	4.63557	4.55629
____ SN	0.57718	383.79	1.724	0.58203	0.56573	0.58377
____ SR	0.25273	110,476.36	1.715	0.25548	0.24774	0.25498
____ TH	0.02475	0.98	205.376	-0.02482	0.02232	0.07674
____ TI	0.10256	1,519.78	1.089	0.10363	0.10264	0.10140
____ TL	0.99707	261.24	1.163	1.00056	0.98412	1.00651
____ V	0.10009	639.52	0.389	0.10039	0.10021	0.09965
____ W	0.00184	1.62	74.325	0.00063	0.00156	0.00333
____ Y1	3618.41649	3,618.42	1.492	3589.45605	3680.69693	3585.09649
____ Y2A	97814.95675	97,814.96	2.838	95062.89968	100613.32801	97768.64254
____ Y2R	3934.95888	3,934.96	0.604	3962.41259	3921.64403	3920.82002
____ ZN	0.12321	490.49	1.535	0.12431	0.12103	0.12430
____ ZR	0.97924	732.40	0.578	0.97533	0.98573	0.97667

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 16 Date/Time: 11/16/2018 07:19

Sample Number: **9885684** Class: D*** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00162	-17.54	62.676	-0.00057	-0.00259	-0.00170
____ AL	-0.00260	8.76	3773.059	-0.01228	-0.09551	0.09999
____ AS	0.00181	-0.62	139.926	0.00425	-0.00080	0.00198
____ B	0.05551	183.29	2.008	0.05616	0.05615	0.05422
____ BA	0.03591	14,651.87	0.381	0.03589	0.03605	0.03578
____ BE	0.00014	-1.74	33.657	0.00019	0.00010	0.00012
____ CA	46.82686	9,272.50	0.795	46.69920	46.53523	47.24615
____ CD	0.00040	-1.65	49.081	0.00019	0.00058	0.00042
____ CO	0.00077	1.68	12.202	0.00084	0.00081	0.00067
____ CR	0.00007	1.10	2014.396	0.00144	0.00022	-0.00144
____ CU	0.00351	15.84	49.400	0.00162	0.00388	0.00503
____ FE	0.03370	5.84	35.752	0.03996	0.04132	0.01981
____ K	1.61118	223.84	5.249	1.67505	1.51528	1.64322
____ LI	0.00419	33.93	34.724	0.00476	0.00527	0.00253
____ MG	24.36726	10,637.12	0.804	24.37451	24.16788	24.55939
____ MN	0.01107	236.80	2.186	0.01084	0.01103	0.01132
____ MO	0.00152	3.40	15.259	0.00174	0.00155	0.00128
____ NA	30.23317	15,590.94	1.043	30.32632	29.88161	30.49157
____ NI	0.00246	4.83	36.038	0.00257	0.00153	0.00329
____ P	0.00210	0.37	148.009	-0.00009	0.00073	0.00565
____ PB	-0.00145	-2.67	299.892	0.00353	-0.00452	-0.00337
____ S	5.21393	468.45	0.288	5.21283	5.22946	5.19950
____ SB	0.00447	1.44	135.147	0.01144	0.00135	0.00062
____ SE	0.00268	-0.38	75.098	0.00361	0.00406	0.00037
____ SI	3.67564	196.97	1.047	3.65681	3.65021	3.71990
____ SN	0.00002	0.53	2619.742	-0.00036	-0.00006	0.00046
____ SR	0.24247	104,688.53	0.304	0.24268	0.24308	0.24165
____ TH	-0.01307	-0.35	204.083	0.01631	-0.01976	-0.03578
____ TI	0.00135	28.39	11.903	0.00117	0.00140	0.00147
____ TL	0.00235	-1.00	149.075	0.00116	-0.00040	0.00629
____ V	0.00016	5.36	606.237	-0.00077	0.00114	0.00010
____ W	0.00054	0.33	187.693	0.00027	0.00167	-0.00031
____ Y1	3597.47359	3,597.47	0.075	3598.24518	3599.70003	3594.47555
____ Y2A	96566.55880	96,566.56	0.274	96872.02619	96424.34079	96403.30941
____ Y2R	4012.69132	4,012.69	1.362	4038.22355	4049.91025	3949.94017
____ ZN	0.00423	24.00	4.436	0.00426	0.00441	0.00403
____ ZR	-0.00508	0.70	106.460	-0.01132	-0.00166	-0.00226

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 17 Date/Time: 11/16/2018 07:22

Sample Number: **9885682** Class: R*** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.05208	286.16	2.876	0.05207	0.05359	0.05059
____ AL	1.96777	73.94	2.834	1.91845	1.95658	2.02828
____ AS	0.16253	30.74	3.714	0.16582	0.16621	0.15557
____ B	1.98610	6,685.33	0.552	1.99453	1.99007	1.97371
____ BA	2.02196	820,185.52	0.175	2.01791	2.02355	2.02441
____ BE	0.04933	7,096.31	0.502	0.04960	0.04928	0.04911
____ CA	50.11602	10,143.65	0.862	50.07489	50.56689	49.70629
____ CD	0.05019	250.34	0.741	0.04976	0.05041	0.05040
____ CO	0.49659	1,472.81	0.397	0.49434	0.49803	0.49739
____ CR	0.19325	733.92	0.637	0.19467	0.19247	0.19262
____ CU	0.24992	980.06	0.605	0.24964	0.24856	0.25155
____ FE	1.01196	97.14	2.394	1.03993	0.99861	0.99735
____ K	11.53197	1,355.31	0.480	11.47529	11.53483	11.58580
____ LI	1.00394	2,434.03	0.557	0.99993	1.01033	1.00157
____ MG	25.94562	11,576.74	0.609	25.92502	26.11287	25.79896
____ MN	0.51649	10,764.33	0.410	0.51670	0.51849	0.51427
____ MO	1.98619	3,419.64	0.338	1.97981	1.99321	1.98555
____ NA	39.44527	20,822.46	0.084	39.40929	39.47444	39.45208
____ NI	0.50489	713.98	0.361	0.50317	0.50680	0.50470
____ P	1.03504	177.69	0.918	1.03002	1.04599	1.02910
____ PB	0.14987	77.81	2.606	0.14778	0.14745	0.15438
____ S	6.12105	554.36	0.752	6.06848	6.14065	6.15401
____ SB	0.50587	116.20	2.048	0.49494	0.50714	0.51554
____ SE	0.15527	26.20	3.460	0.16012	0.15621	0.14949
____ SI	4.59666	253.91	0.567	4.56954	4.59895	4.62148
____ SN	3.77901	2,517.40	0.382	3.76280	3.79051	3.78371
____ SR	1.23549	536,679.95	0.806	1.24009	1.24232	1.22407
____ TH	0.05177	2.03	52.610	0.04256	0.08241	0.03033
____ TI	0.99706	14,652.90	0.411	0.99995	0.99887	0.99237
____ TL	0.15660	31.95	3.109	0.15154	0.16126	0.15699
____ V	0.50193	3,055.65	0.618	0.50547	0.49971	0.50061
____ W	0.00307	4.03	32.272	0.00197	0.00389	0.00335
____ Y1	3628.53715	3,628.54	0.271	3639.20108	3619.81302	3626.59734
____ Y2A	97509.10351	97,509.10	0.178	97412.61724	97404.78808	97709.90519
____ Y2R	4102.12483	4,102.12	0.247	4112.50000	4092.28088	4101.59363
____ ZN	0.49587	1,954.38	0.409	0.49372	0.49775	0.49614
____ ZR	0.97049	759.30	0.384	0.96631	0.97344	0.97173

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 18 Date/Time: 11/16/2018 07:25

Sample Number: **9885683** Class: M*** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.05268	287.57	3.286	0.05099	0.05260	0.05445
____ AL	2.08524	77.88	5.682	2.04461	2.21870	1.99242
____ AS	0.15836	29.84	4.017	0.16397	0.15965	0.15145
____ B	2.03067	6,706.88	1.011	2.01514	2.02290	2.05395
____ BA	2.06724	822,816.37	0.396	2.06382	2.06130	2.07658
____ BE	0.05014	7,077.43	0.755	0.04997	0.04987	0.05057
____ CA	51.72858	10,520.36	0.808	51.24633	51.97728	51.96214
____ CD	0.04988	248.11	2.301	0.05115	0.04956	0.04892
____ CO	0.49384	1,460.86	1.480	0.50153	0.49300	0.48699
____ CR	0.19755	736.15	0.928	0.19795	0.19556	0.19916
____ CU	0.25327	970.69	1.320	0.25167	0.25102	0.25711
____ FE	1.03187	99.48	1.463	1.04484	1.01529	1.03546
____ K	11.54900	1,363.86	1.141	11.39737	11.63581	11.61382
____ LI	1.00607	2,451.52	0.632	1.00157	1.00329	1.01334
____ MG	26.77076	12,002.15	0.354	26.69248	26.87606	26.74373
____ MN	0.52277	10,690.92	0.937	0.51925	0.52070	0.52837
____ MO	1.97653	3,393.85	1.594	2.00826	1.97605	1.94527
____ NA	40.01198	21,226.21	0.426	39.84260	40.01023	40.18311
____ NI	0.50499	712.21	1.498	0.51155	0.50670	0.49672
____ P	1.03507	177.23	1.373	1.03954	1.04651	1.01916
____ PB	0.14508	75.08	3.868	0.15156	0.14178	0.14190
____ S	6.22090	561.88	1.620	6.31920	6.22567	6.11785
____ SB	0.50665	116.07	2.568	0.52053	0.50467	0.49474
____ SE	0.15530	26.14	3.528	0.15084	0.15365	0.16141
____ SI	4.68099	259.77	0.564	4.65474	4.70755	4.68067
____ SN	3.76005	2,498.01	1.906	3.83327	3.75686	3.69002
____ SR	1.26038	537,207.37	1.554	1.27062	1.23780	1.27272
____ TH	0.01352	0.63	305.410	-0.03090	0.02073	0.05074
____ TI	1.01559	14,644.75	0.825	1.01049	1.01102	1.02526
____ TL	0.15415	31.12	3.172	0.15852	0.15507	0.14887
____ V	0.50782	3,037.34	0.642	0.50820	0.50439	0.51087
____ W	0.00445	4.82	8.190	0.00467	0.00464	0.00403
____ Y1	3618.93311	3,618.93	0.495	3598.59514	3625.77242	3632.43176
____ Y2A	95682.46186	95,682.46	0.991	95908.69326	96497.05059	94641.64172
____ Y2R	4122.25213	4,122.25	0.530	4146.83134	4114.87026	4105.05478
____ ZN	0.49612	1,950.10	1.543	0.50412	0.49538	0.48886
____ ZR	0.98858	773.47	0.579	0.98907	0.99404	0.98263

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 19 Date/Time: 11/16/2018 07:28

Sample Number: **9885681** Class: UL** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 5.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00064	-11.95	132.937	-0.00027	-0.00004	-0.00160
____ AL	-0.03588	7.90	310.297	-0.08175	-0.11694	0.09105
____ AS	0.00556	0.11	67.264	0.00834	0.00131	0.00705
____ B	0.01843	62.96	1.140	0.01862	0.01847	0.01821
____ BA	0.00749	3,321.75	1.356	0.00749	0.00739	0.00759
____ BE	0.00012	-3.72	14.672	0.00014	0.00012	0.00010
____ CA	9.33007	1,893.83	1.132	9.40404	9.20907	9.37711
____ CD	0.00043	-1.53	18.667	0.00047	0.00048	0.00034
____ CO	0.00029	0.54	210.265	-0.00016	0.00098	0.00005
____ CR	-0.00099	-2.96	11.141	-0.00100	-0.00087	-0.00109
____ CU	0.00156	4.19	220.298	-0.00236	0.00406	0.00297
____ FE	0.00645	3.43	438.883	-0.01766	0.03763	-0.00062
____ K	0.35345	85.78	41.569	0.45150	0.18452	0.42433
____ LI	0.00616	29.00	115.760	-0.00185	0.01181	0.00852
____ MG	4.87167	2,177.97	1.109	4.92335	4.81554	4.87613
____ MN	0.00228	57.09	2.533	0.00234	0.00223	0.00227
____ MO	0.00008	0.95	989.590	0.00092	-0.00064	-0.00004
____ NA	6.01971	3,100.20	1.404	6.10683	5.93806	6.01423
____ NI	0.00138	3.58	29.888	0.00113	0.00186	0.00116
____ P	0.00353	0.62	90.399	0.00512	0.00561	-0.00014
____ PB	0.00042	-2.47	240.785	0.00111	-0.00075	0.00091
____ S	1.02999	94.98	0.385	1.02950	1.02629	1.03418
____ SB	-0.00039	0.33	964.564	-0.00129	0.00378	-0.00367
____ SE	0.00660	0.28	93.967	0.01360	0.00179	0.00441
____ SI	0.71288	40.00	2.236	0.71062	0.69820	0.72984
____ SN	-0.00049	0.19	221.537	-0.00167	0.00050	-0.00032
____ SR	0.04823	21,254.15	1.116	0.04777	0.04808	0.04882
____ TH	-0.01977	-0.63	444.784	0.08037	-0.08437	-0.05531
____ TI	0.00117	26.48	42.887	0.00094	0.00175	0.00083
____ TL	0.00075	-1.44	306.637	-0.00060	0.00342	-0.00056
____ V	0.00030	6.60	222.953	-0.00023	0.00106	0.00007
____ W	-0.00083	-0.48	216.288	-0.00250	-0.00105	0.00106
____ Y1	3649.58504	3,649.59	0.431	3637.95120	3643.34567	3667.45825
____ Y2A	99017.68033	99,017.68	0.656	99726.72965	98452.10909	98874.20223
____ Y2R	4095.98333	4,095.98	1.362	4041.55000	4153.00000	4093.40000
____ ZN	0.00067	10.32	63.786	0.00067	0.00024	0.00109
____ ZR	-0.00733	-1.60	235.473	-0.02701	0.00528	-0.00027

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 20 Date/Time: 11/16/2018 07:31

Sample Number: **9885543** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00088	-13.42	174.608	-0.00048	0.00042	-0.00259
____ AL	0.07878	11.51	174.236	0.19450	-0.07287	0.11471
____ AS	0.07952	13.15	2.256	0.07843	0.08159	0.07853
____ B	7.64991	23,160.40	0.116	7.64741	7.65976	7.64255
____ BA	1.56498	570,739.40	0.691	1.55982	1.57741	1.55770
____ BE	0.00016	2.05	7.876	0.00015	0.00018	0.00016
____ CA	106.32793	21,088.95	1.179	106.57199	104.97055	107.44124
____ CD	-0.00006	-1.92	814.226	0.00020	0.00021	-0.00057
____ CO	0.01577	41.76	1.365	0.01602	0.01564	0.01565
____ CR	0.07733	264.51	1.478	0.07865	0.07672	0.07662
____ CU	0.00824	39.49	12.538	0.00719	0.00926	0.00827
____ FE	5.66998	521.43	1.122	5.65108	5.61795	5.74092
____ K	337.42425	37,690.17	0.976	337.57857	334.05581	340.63836
____ LI	0.01037	65.03	13.455	0.01084	0.01147	0.00880
____ MG	82.72935	35,997.93	1.062	82.75340	81.83933	83.59533
____ MN	0.43755	8,200.79	0.293	0.43607	0.43825	0.43833
____ MO	0.00049	1.51	5.834	0.00048	0.00047	0.00053
____ NA	900.56885	468,939.39	1.123	902.08592	889.78142	909.83921
____ NI	0.06837	88.74	3.305	0.06576	0.06955	0.06979
____ P	2.16866	340.43	0.969	2.19074	2.16635	2.14889
____ PB	-0.00648	-3.03	50.802	-0.00427	-0.00491	-0.01026
____ S	29.16031	2,407.89	1.183	29.41959	29.29266	28.76866
____ SB	0.00799	2.15	86.455	0.00838	0.00089	0.01469
____ SE	0.00973	0.81	54.927	0.01393	0.01153	0.00371
____ SI	11.35668	608.78	1.459	11.24115	11.28234	11.54654
____ SN	0.00341	2.56	52.301	0.00429	0.00136	0.00459
____ SR	0.93521	366,016.80	1.411	0.92313	0.94929	0.93321
____ TH	0.00709	0.52	684.383	-0.01120	0.06209	-0.02962
____ TI	0.06255	834.06	0.237	0.06270	0.06241	0.06255
____ TL	0.00448	-1.05	58.950	0.00146	0.00634	0.00565
____ V	0.04548	273.13	1.338	0.04487	0.04548	0.04609
____ W	0.00315	1.83	47.743	0.00145	0.00369	0.00431
____ Y1	3317.78656	3,317.79	0.302	3316.81832	3308.28917	3328.25217
____ Y2A	87673.62627	87,673.63	0.529	87991.80614	87141.49531	87887.57736
____ Y2R	4030.85353	4,030.85	1.013	4050.61963	4058.04907	3983.89188
____ ZN	0.03560	135.83	1.681	0.03574	0.03612	0.03495
____ ZR	0.03187	30.54	26.179	0.03516	0.02238	0.03806

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 21 Date/Time: 11/16/2018 07:34

Sample Number: **9885544** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00199	-15.53	26.157	-0.00245	-0.00210	-0.00142
____ AL	0.05390	10.62	152.433	0.01211	0.14855	0.00103
____ AS	0.25386	44.42	3.504	0.24811	0.24935	0.26410
____ B	13.89353	42,193.44	0.906	13.96578	13.74817	13.96665
____ BA	0.78951	289,086.72	0.716	0.78641	0.79603	0.78609
____ BE	0.00016	1.82	14.981	0.00016	0.00014	0.00019
____ CA	93.09739	18,279.25	0.196	93.30527	92.96418	93.02271
____ CD	-0.00001	-2.76	1026.732	0.00010	-0.00011	-0.00002
____ CO	0.02437	64.51	3.354	0.02518	0.02355	0.02439
____ CR	0.12498	428.51	1.963	0.12718	0.12233	0.12542
____ CU	0.00176	10.10	131.245	0.00264	0.00349	-0.00086
____ FE	2.20609	202.56	2.010	2.24028	2.22200	2.15598
____ K	450.61169	49,781.66	0.155	451.33400	450.55961	449.94145
____ LI	0.02726	100.12	19.655	0.02107	0.03018	0.03052
____ MG	84.30541	36,285.23	0.273	84.52492	84.32569	84.06563
____ MN	0.17634	3,321.64	0.486	0.17663	0.17537	0.17701
____ MO	0.00124	2.69	33.269	0.00163	0.00081	0.00127
____ NA	1274.35981	656,511.73	1.593	1282.72972	1289.13972	1251.20999
____ NI	0.08635	111.61	2.137	0.08639	0.08818	0.08449
____ P	4.47257	702.51	0.489	4.48375	4.48660	4.44737
____ PB	-0.00665	-0.92	29.822	-0.00866	-0.00469	-0.00661
____ S	28.41753	2,347.78	0.676	28.54278	28.51342	28.19640
____ SB	-0.00069	0.37	725.991	-0.00480	-0.00212	0.00486
____ SE	0.00501	0.11	156.825	-0.00226	0.01334	0.00394
____ SI	20.99391	1,112.40	0.113	21.00232	21.01228	20.96712
____ SN	0.00759	5.10	12.694	0.00686	0.00722	0.00868
____ SR	1.20944	474,557.09	1.095	1.22357	1.19730	1.20745
____ TH	-0.03421	-1.05	115.814	0.00381	-0.07527	-0.03118
____ TI	0.11585	1,543.34	1.176	0.11736	0.11470	0.11550
____ TL	0.00419	-1.64	57.660	0.00410	0.00182	0.00665
____ V	0.08114	485.55	0.617	0.08126	0.08060	0.08158
____ W	0.00264	1.45	50.119	0.00397	0.00263	0.00132
____ Y1	3319.69470	3,319.69	0.305	3308.76912	3321.55784	3328.75712
____ Y2A	87987.52750	87,987.53	0.758	87629.07419	88756.59868	87576.90962
____ Y2R	3987.67264	3,987.67	0.530	3970.86410	3980.77884	4011.37498
____ ZN	0.00939	42.23	5.117	0.00911	0.00994	0.00912
____ ZR	0.04302	34.85	7.818	0.04354	0.04610	0.03943

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 22

Date/Time: 11/16/2018 07:37

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.50048	2,670.19	0.421	0.49817	0.50229	0.50099
____ AL	25.53150	791.75	0.724	25.59243	25.67807	25.32400
____ AS	0.50895	97.36	1.428	0.51611	0.50917	0.50158
____ B	0.55015	1,845.13	0.517	0.55188	0.55171	0.54687
____ BA	0.51117	204,394.93	0.182	0.51223	0.51050	0.51077
____ BE	0.49119	69,775.60	0.328	0.49002	0.49303	0.49050
____ CA	25.22360	4,989.97	0.765	25.00069	25.33769	25.33244
____ CD	0.50325	2,539.34	0.690	0.50526	0.50525	0.49924
____ CO	0.50209	1,478.43	0.833	0.50402	0.50497	0.49729
____ CR	0.48862	1,826.66	0.397	0.48748	0.49086	0.48753
____ CU	0.51497	2,052.61	0.725	0.51085	0.51590	0.51814
____ FE	25.06866	2,268.95	0.336	25.03835	25.00367	25.16395
____ K	27.34066	3,074.57	0.596	27.15526	27.46138	27.40533
____ LI	0.52668	1,251.27	0.402	0.52449	0.52871	0.52682
____ MG	25.07003	10,918.47	0.519	24.92151	25.12516	25.16343
____ MN	0.51021	10,467.37	0.252	0.51108	0.51082	0.50873
____ MO	0.48908	839.35	0.934	0.49091	0.49245	0.48388
____ NA	26.23430	13,487.89	0.322	26.22308	26.32378	26.15603
____ NI	0.50818	712.84	0.500	0.51016	0.50906	0.50532
____ P	0.50836	86.82	0.424	0.50957	0.50588	0.50964
____ PB	0.49162	269.32	1.316	0.49836	0.49106	0.48546
____ S	25.14980	2,260.28	0.374	25.25276	25.12822	25.06842
____ SB	0.48346	111.91	0.525	0.48616	0.48112	0.48309
____ SE	0.50284	87.48	0.509	0.50511	0.50333	0.50007
____ SI	28.67733	1,526.14	4.050	29.82412	28.70623	27.50166
____ SN	0.47858	318.12	0.512	0.48018	0.47980	0.47576
____ SR	0.50727	216,995.40	0.307	0.50904	0.50610	0.50667
____ TH	0.47317	17.57	11.926	0.42034	0.46655	0.53262
____ TI	0.50996	7,384.79	0.765	0.50621	0.51399	0.50968
____ TL	0.50632	124.92	0.310	0.50760	0.50457	0.50680
____ V	0.49942	3,180.73	0.383	0.50040	0.50063	0.49721
____ W	0.50569	296.56	0.753	0.50654	0.50900	0.50153
____ Y1	3615.55844	3,615.56	0.349	3616.80832	3602.35476	3627.51225
____ Y2A	96026.91965	96,026.92	0.047	96043.95604	95975.93944	96060.86348
____ Y2R	4003.55024	4,003.55	0.427	4023.28309	3993.07777	3994.28985
____ ZN	0.50562	1,987.74	0.690	0.50685	0.50833	0.50169
____ ZR	0.45253	389.34	1.831	0.45828	0.45628	0.44304

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 23

Date/Time: 11/16/2018 07:40

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00149	-14.96	78.885	-0.00064	-0.00283	-0.00100
____ AL	-0.04251	7.52	287.716	-0.07371	0.09237	-0.14619
____ AS	0.00418	-0.17	87.407	0.00224	0.00839	0.00191
____ B	0.02140	73.78	2.248	0.02161	0.02085	0.02174
____ BA	0.00011	285.66	62.162	0.00019	0.00007	0.00007
____ BE	0.00017	3.18	22.172	0.00013	0.00018	0.00020
____ CA	0.01699	9.60	16.259	0.01381	0.01834	0.01882
____ CD	0.00042	-1.56	52.917	0.00051	0.00058	0.00017
____ CO	0.00064	1.64	59.883	0.00020	0.00088	0.00084
____ CR	-0.00113	-3.51	50.413	-0.00052	-0.00164	-0.00123
____ CU	0.00083	-1.65	269.212	-0.00085	0.00336	-0.00002
____ FE	0.02711	5.25	27.874	0.02015	0.03515	0.02604
____ K	0.74267	128.07	17.705	0.62823	0.71348	0.88630
____ LI	0.00321	18.82	272.369	-0.00597	0.00418	0.01141
____ MG	0.00722	5.35	70.204	0.00938	0.01084	0.00143
____ MN	0.00011	11.31	233.393	0.00024	-0.00018	0.00026
____ MO	-0.00010	0.64	408.719	-0.00016	-0.00048	0.00034
____ NA	0.60253	230.03	4.768	0.62247	0.61552	0.56960
____ NI	0.00124	3.41	80.843	0.00088	0.00046	0.00236
____ P	0.00108	0.20	696.061	-0.00743	0.00677	0.00390
____ PB	-0.00193	-3.89	95.823	-0.00091	-0.00081	-0.00406
____ S	0.00558	1.87	97.576	0.00908	-0.00069	0.00836
____ SB	-0.00378	-0.45	104.593	-0.00051	-0.00817	-0.00265
____ SE	0.00655	0.27	140.613	0.00078	0.00170	0.01716
____ SI	0.07022	4.99	14.246	0.07897	0.05931	0.07237
____ SN	0.00001	0.53	3966.507	0.00039	-0.00032	-0.00005
____ SR	0.00023	-17.52	9.664	0.00026	0.00022	0.00022
____ TH	-0.03912	-1.28	114.993	0.00379	-0.08592	-0.03522
____ TI	0.00047	16.13	128.937	0.00037	0.00113	-0.00008
____ TL	0.00209	-1.09	76.092	0.00312	0.00289	0.00026
____ V	0.00055	8.23	105.107	0.00009	0.00036	0.00120
____ W	0.00057	0.33	192.317	0.00163	-0.00055	0.00062
____ Y1	3646.72699	3,646.73	0.444	3664.45355	3643.04570	3632.68173
____ Y2A	99438.79525	99,438.80	0.361	99806.43228	99421.29445	99088.65902
____ Y2R	4034.45000	4,034.45	0.723	4065.32500	4007.40000	4030.62500
____ ZN	-0.00048	5.82	71.435	-0.00072	-0.00009	-0.00062
____ ZR	-0.00214	0.55	301.381	-0.00745	0.00503	-0.00400

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 24 Date/Time: 11/16/2018 07:42

Sample Number: **9885545** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00223	-17.54	29.360	-0.00149	-0.00246	-0.00274
____ AL	0.10359	12.43	24.423	0.08660	0.09151	0.13267
____ AS	0.07185	12.04	11.734	0.06611	0.08153	0.06792
____ B	7.20462	22,373.79	0.204	7.18931	7.21860	7.20596
____ BA	0.47252	176,950.00	0.169	0.47249	0.47333	0.47174
____ BE	0.00018	4.13	17.535	0.00015	0.00021	0.00018
____ CA	122.68503	24,710.64	0.108	122.66438	122.56422	122.82648
____ CD	-0.00019	-2.82	213.780	0.00021	-0.00018	-0.00059
____ CO	0.01485	39.75	4.240	0.01520	0.01521	0.01412
____ CR	0.04451	156.51	0.849	0.04489	0.04413	0.04451
____ CU	0.00207	15.68	64.639	0.00119	0.00360	0.00141
____ FE	4.89246	457.72	0.276	4.88407	4.88529	4.90801
____ K	337.73885	38,337.49	0.597	335.50124	338.29931	339.41601
____ LI	0.01058	71.15	25.573	0.01224	0.00746	0.01206
____ MG	62.57952	27,746.19	0.086	62.63503	62.52787	62.57566
____ MN	0.25009	4,812.28	0.550	0.25166	0.24949	0.24911
____ MO	0.00061	1.72	85.825	0.00081	0.00100	0.00002
____ NA	1003.63332	531,101.52	1.142	999.09129	995.13627	1016.67240
____ NI	0.06781	89.60	1.858	0.06910	0.06773	0.06659
____ P	4.10435	657.60	0.743	4.11317	4.12946	4.07041
____ PB	-0.00500	-1.35	76.534	-0.00229	-0.00938	-0.00333
____ S	18.10475	1,527.31	1.027	18.20100	18.22282	17.89042
____ SB	-0.00012	0.41	2622.894	-0.00370	0.00240	0.00093
____ SE	0.00610	0.27	83.521	0.00038	0.01013	0.00778
____ SI	15.62521	850.74	0.821	15.47745	15.68946	15.70871
____ SN	0.00453	3.30	19.722	0.00386	0.00418	0.00554
____ SR	1.05058	421,886.39	0.877	1.06033	1.04203	1.04938
____ TH	-0.02891	-0.82	50.109	-0.02829	-0.01474	-0.04369
____ TI	0.07297	996.72	0.774	0.07337	0.07232	0.07321
____ TL	0.00325	-1.65	28.056	0.00394	0.00222	0.00359
____ V	0.06476	396.99	1.540	0.06589	0.06438	0.06401
____ W	0.00365	2.01	46.928	0.00494	0.00430	0.00171
____ Y1	3386.37636	3,386.38	0.650	3368.94811	3379.06209	3411.11889
____ Y2A	89944.80228	89,944.80	0.287	89686.86339	90202.56641	89944.97703
____ Y2R	4096.10506	4,096.11	0.481	4118.66647	4087.24815	4082.40056
____ ZN	0.00595	30.45	4.938	0.00629	0.00583	0.00574
____ ZR	0.04356	36.71	1.867	0.04425	0.04266	0.04377

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 25 Date/Time: 11/16/2018 07:45

Sample Number: **9885546** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00137	-10.58	112.234	-0.00163	-0.00277	0.00028
____ AL	-0.08790	6.26	139.065	-0.07440	-0.21632	0.02703
____ AS	0.04296	6.76	4.385	0.04371	0.04435	0.04082
____ B	6.81497	21,013.39	0.492	6.77695	6.84026	6.82769
____ BA	0.74563	277,174.91	0.683	0.74692	0.74996	0.74002
____ BE	0.00014	-0.59	36.577	0.00010	0.00013	0.00020
____ CA	111.38214	22,461.45	2.457	110.79551	108.98674	114.36419
____ CD	0.00020	-1.78	42.692	0.00011	0.00029	0.00021
____ CO	0.01327	34.97	2.431	0.01301	0.01316	0.01363
____ CR	0.03066	107.30	2.005	0.03060	0.03130	0.03007
____ CU	0.00336	15.72	96.797	0.00573	0.00470	-0.00035
____ FE	2.19616	207.30	2.591	2.19126	2.14187	2.25534
____ K	354.13524	40,226.76	2.232	352.38005	347.25479	362.77088
____ LI	0.01187	71.27	48.782	0.01318	0.01689	0.00554
____ MG	88.07036	38,944.01	2.669	87.46631	86.08050	90.66426
____ MN	0.15951	3,051.24	1.510	0.15678	0.16037	0.16136
____ MO	0.00052	1.57	52.731	0.00082	0.00027	0.00047
____ NA	922.79778	488,789.87	0.762	927.73206	914.74489	925.91640
____ NI	0.04345	57.09	1.039	0.04298	0.04388	0.04349
____ P	1.98974	314.46	1.059	2.00063	2.00313	1.96546
____ PB	-0.00595	-2.67	56.435	-0.00619	-0.00919	-0.00248
____ S	12.40945	1,033.43	0.419	12.43698	12.44192	12.34945
____ SB	-0.00334	-0.30	278.632	0.00586	-0.00312	-0.01277
____ SE	0.00746	0.46	51.160	0.01057	0.00862	0.00320
____ SI	12.17438	663.62	2.263	12.12583	11.92642	12.47089
____ SN	0.00079	0.97	157.457	0.00133	-0.00063	0.00168
____ SR	1.08678	433,240.90	0.151	1.08519	1.08848	1.08668
____ TH	-0.05880	-2.00	114.538	-0.05754	-0.12676	0.00791
____ TI	0.02911	399.80	2.624	0.02831	0.02920	0.02983
____ TL	0.00152	-1.74	226.347	-0.00238	0.00281	0.00413
____ V	0.04403	269.17	1.213	0.04379	0.04464	0.04366
____ W	0.00225	1.22	45.329	0.00221	0.00125	0.00328
____ Y1	3340.03933	3,340.04	0.283	3347.19028	3329.32207	3343.60564
____ Y2A	89324.01453	89,324.01	0.340	89478.15000	89519.63181	88974.26177
____ Y2R	4100.12577	4,100.13	1.768	4143.82124	4140.09095	4016.46512
____ ZN	0.00224	16.03	7.699	0.00210	0.00218	0.00243
____ ZR	0.04939	38.48	17.876	0.05376	0.05519	0.03923

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 26 Date/Time: 11/16/2018 07:49

Sample Number: **9885547** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00109	-11.58	36.770	-0.00064	-0.00141	-0.00121
____ AL	0.04335	10.39	63.915	0.07105	0.04338	0.01563
____ AS	0.07146	11.86	5.826	0.07212	0.06700	0.07525
____ B	8.22600	25,519.28	0.215	8.22023	8.21189	8.24587
____ BA	0.78356	292,873.03	1.053	0.78805	0.77404	0.78860
____ BE	0.00023	11.09	10.491	0.00025	0.00024	0.00020
____ CA	107.23257	21,437.70	0.375	106.77636	107.38693	107.53441
____ CD	0.00010	-0.49	406.535	-0.00034	0.00022	0.00041
____ CO	0.01427	38.29	1.485	0.01444	0.01403	0.01434
____ CR	0.06240	218.83	2.448	0.06123	0.06186	0.06413
____ CU	0.00328	19.54	49.988	0.00285	0.00190	0.00510
____ FE	8.11637	750.70	0.419	8.15507	8.10280	8.09125
____ K	298.22113	33,582.58	0.450	296.77959	298.44911	299.43469
____ LI	0.01772	83.22	11.986	0.01606	0.01698	0.02012
____ MG	71.97727	31,614.42	0.195	71.84470	71.96286	72.12425
____ MN	0.89936	17,261.36	0.214	0.90079	0.89717	0.90011
____ MO	0.00082	2.06	68.562	0.00107	0.00121	0.00018
____ NA	770.31864	404,311.39	0.103	769.57865	770.21479	771.16247
____ NI	0.05470	72.18	1.672	0.05423	0.05575	0.05412
____ P	2.08624	333.65	0.392	2.09563	2.08248	2.08062
____ PB	-0.00469	-1.82	36.220	-0.00308	-0.00646	-0.00451
____ S	26.80692	2,255.39	0.486	26.85578	26.90560	26.65936
____ SB	0.00815	2.21	62.952	0.01405	0.00566	0.00474
____ SE	0.01281	1.33	50.677	0.01928	0.01284	0.00630
____ SI	12.77317	690.04	0.359	12.77478	12.72651	12.81822
____ SN	0.00218	1.84	54.724	0.00179	0.00124	0.00352
____ SR	0.84631	339,480.45	0.111	0.84676	0.84695	0.84524
____ TH	-0.03369	-0.90	69.511	-0.01570	-0.02521	-0.06017
____ TI	0.06175	843.60	1.538	0.06102	0.06141	0.06282
____ TL	0.00374	-1.24	70.289	0.00132	0.00337	0.00654
____ V	0.04442	273.17	1.981	0.04537	0.04425	0.04363
____ W	0.00211	1.17	46.774	0.00171	0.00323	0.00138
____ Y1	3380.05866	3,380.06	0.299	3373.14769	3375.35246	3391.67583
____ Y2A	89822.18064	89,822.18	0.361	89595.13473	90193.58782	89677.81936
____ Y2R	4062.83232	4,062.83	0.568	4059.28943	4087.45759	4041.74995
____ ZN	0.00681	33.57	1.342	0.00680	0.00690	0.00672
____ ZR	0.02344	20.59	43.926	0.01238	0.02518	0.03274

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 27 Date/Time: 11/16/2018 07:52

Sample Number: **9885548** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00126	-15.35	67.098	-0.00175	-0.00175	-0.00028
____ AL	0.04307	10.62	148.917	-0.03072	0.07448	0.08544
____ AS	0.04448	7.20	7.310	0.04404	0.04147	0.04793
____ B	7.88423	25,100.80	0.456	7.92189	7.88061	7.85019
____ BA	0.59343	227,747.18	0.521	0.59505	0.59538	0.58987
____ BE	0.00022	10.08	8.202	0.00022	0.00021	0.00024
____ CA	142.25007	28,792.07	0.503	141.98037	141.70788	143.06195
____ CD	-0.00014	-2.58	208.615	-0.00006	-0.00046	0.00010
____ CO	0.01064	29.28	7.607	0.00994	0.01045	0.01153
____ CR	0.09395	337.80	0.401	0.09421	0.09412	0.09352
____ CU	0.00125	16.99	105.650	0.00034	0.00277	0.00065
____ FE	5.06407	476.40	0.468	5.07839	5.03671	5.07711
____ K	228.10066	26,057.55	0.323	227.54733	227.81627	228.93837
____ LI	0.00377	60.60	152.146	-0.00137	0.00273	0.00995
____ MG	52.87621	23,609.68	0.572	52.70086	52.70205	53.22573
____ MN	0.48744	9,607.08	0.662	0.48970	0.48888	0.48374
____ MO	0.00053	1.63	46.890	0.00080	0.00033	0.00045
____ NA	600.08172	319,360.48	0.278	598.17569	600.80234	601.26711
____ NI	0.03158	42.94	2.355	0.03243	0.03104	0.03128
____ P	1.88179	307.94	0.905	1.86435	1.88265	1.89836
____ PB	-0.00505	-2.12	44.902	-0.00498	-0.00735	-0.00282
____ S	27.85292	2,398.31	0.803	27.60831	27.90378	28.04667
____ SB	0.00046	0.61	776.207	0.00387	0.00082	-0.00330
____ SE	0.00925	0.77	101.722	-0.00151	0.01595	0.01331
____ SI	12.69660	695.56	0.714	12.68818	12.61040	12.79121
____ SN	0.00189	1.70	75.577	0.00354	0.00121	0.00093
____ SR	1.05829	435,885.48	1.020	1.07068	1.05094	1.05324
____ TH	-0.00516	0.05	1202.988	0.01373	-0.07446	0.04525
____ TI	0.11725	1,636.80	1.123	0.11842	0.11751	0.11583
____ TL	0.00261	-1.62	106.301	0.00080	0.00123	0.00581
____ V	0.04565	288.36	0.834	0.04521	0.04589	0.04584
____ W	0.00207	1.17	38.804	0.00257	0.00248	0.00114
____ Y1	3458.68580	3,458.69	0.919	3495.14049	3444.07559	3436.84132
____ Y2A	92204.14577	92,204.15	0.314	91910.82119	92210.94374	92490.67239
____ Y2R	4119.83760	4,119.84	0.278	4124.12831	4128.51236	4106.87213
____ ZN	0.00455	25.24	2.700	0.00442	0.00455	0.00467
____ ZR	0.01000	13.14	68.427	0.00656	0.01789	0.00556

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 28 Date/Time: 11/16/2018 07:55

Sample Number: **9885549** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00264	-19.69	24.232	-0.00192	-0.00287	-0.00313
____ AL	0.92462	38.33	10.431	0.98575	0.81343	0.97466
____ AS	0.14866	20.96	1.112	0.14979	0.14942	0.14676
____ B	5.40257	17,393.74	0.165	5.39955	5.41261	5.39556
____ BA	3.21482	1,216,385.67	0.532	3.23395	3.20098	3.20954
____ BE	0.00037	30.12	6.734	0.00037	0.00040	0.00035
____ CA	81.80016	16,654.54	0.869	81.16078	81.67456	82.56515
____ CD	-0.00176	45.13	5.478	-0.00174	-0.00187	-0.00168
____ CO	0.07841	217.14	0.644	0.07887	0.07848	0.07787
____ CR	0.08907	316.03	1.010	0.08818	0.08998	0.08905
____ CU	0.02467	159.57	7.180	0.02365	0.02365	0.02672
____ FE	183.89756	16,445.90	1.032	182.34645	183.33281	186.01343
____ K	334.57742	38,320.62	1.014	331.08332	334.79044	337.85849
____ LI	0.02049	84.26	31.580	0.02263	0.02562	0.01322
____ MG	87.18096	38,874.99	0.871	86.51444	87.02041	88.00803
____ MN	0.48060	9,345.89	0.294	0.48004	0.48221	0.47956
____ MO	0.00367	6.70	16.471	0.00371	0.00305	0.00426
____ NA	762.47154	407,092.23	0.927	756.83506	760.17339	770.40616
____ NI	0.09788	119.92	1.162	0.09718	0.09727	0.09920
____ P	2.68941	433.98	0.713	2.70219	2.69868	2.66735
____ PB	0.00605	5.39	44.009	0.00913	0.00445	0.00458
____ S	66.94737	5,678.48	0.340	67.01659	67.13252	66.69302
____ SB	0.01648	4.06	5.491	0.01672	0.01724	0.01548
____ SE	0.00225	-0.40	372.285	0.00993	0.00346	-0.00665
____ SI	8.16219	449.02	1.136	8.07559	8.15090	8.26009
____ SN	0.00982	6.64	9.055	0.01067	0.00890	0.00990
____ SR	0.69774	283,378.47	0.682	0.70208	0.69850	0.69265
____ TH	-0.03354	3.58	123.014	0.01346	-0.05029	-0.06378
____ TI	0.06026	833.96	0.542	0.06006	0.06063	0.06007
____ TL	0.00473	-1.03	23.440	0.00376	0.00449	0.00594
____ V	0.04718	293.26	1.638	0.04739	0.04782	0.04632
____ W	0.00561	4.86	12.781	0.00630	0.00565	0.00487
____ Y1	3410.65042	3,410.65	0.160	3414.49065	3404.39868	3413.06194
____ Y2A	90976.03536	90,976.04	0.181	90978.92500	90810.28386	91138.89721
____ Y2R	4133.08003	4,133.08	0.793	4161.71032	4140.19392	4097.33586
____ ZN	0.41934	1,565.58	0.559	0.42124	0.42006	0.41672
____ ZR	0.02527	22.40	14.421	0.02113	0.02801	0.02665

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 29 Date/Time: 11/16/2018 07:58

Sample Number: **9885590** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00151	-15.84	102.753	-0.00046	-0.00329	-0.00077
____ AL	0.06275	10.79	120.889	0.05808	0.14084	-0.01066
____ AS	0.00847	-0.02	42.815	0.00440	0.01136	0.00964
____ B	0.67571	2,271.28	0.161	0.67676	0.67458	0.67579
____ BA	0.20420	80,980.54	0.426	0.20509	0.20335	0.20415
____ BE	0.00013	-2.73	15.456	0.00015	0.00011	0.00013
____ CA	35.21837	6,996.06	0.522	35.40690	35.20838	35.03983
____ CD	-0.00028	2.21	130.420	0.00009	-0.00028	-0.00063
____ CO	0.00342	9.44	3.677	0.00334	0.00335	0.00356
____ CR	-0.00003	0.70	6354.103	0.00127	0.00079	-0.00214
____ CU	0.00100	12.20	181.730	0.00023	0.00306	-0.00030
____ FE	22.20457	2,021.00	1.028	22.41261	22.24081	21.96030
____ K	62.53334	7,007.29	0.697	63.03310	62.33467	62.23226
____ LI	0.00315	28.34	68.373	0.00362	0.00080	0.00502
____ MG	16.56200	7,255.76	0.767	16.70122	16.53219	16.45259
____ MN	0.42524	8,646.18	0.318	0.42513	0.42395	0.42665
____ MO	-0.00031	0.27	235.670	-0.00110	0.00036	-0.00020
____ NA	160.28382	83,222.53	0.567	161.17142	160.32529	159.35474
____ NI	0.01291	18.02	5.406	0.01356	0.01218	0.01300
____ P	0.27289	46.27	2.339	0.27971	0.26705	0.27191
____ PB	0.00172	-0.73	199.955	0.00566	0.00015	-0.00066
____ S	2.30272	207.05	1.980	2.34696	2.25589	2.30531
____ SB	-0.00194	-0.02	226.449	-0.00164	0.00229	-0.00647
____ SE	0.00086	-0.69	738.365	-0.00621	0.00271	0.00607
____ SI	3.19787	171.95	0.979	3.23401	3.17926	3.18035
____ SN	0.00005	0.54	2531.740	0.00140	-0.00116	-0.00009
____ SR	0.18871	80,202.51	0.636	0.19000	0.18762	0.18851
____ TH	-0.02307	-0.17	387.207	0.04964	-0.12279	0.00394
____ TI	0.00441	71.76	3.108	0.00440	0.00427	0.00454
____ TL	0.00345	-0.77	79.563	0.00087	0.00314	0.00633
____ V	0.00409	30.69	7.630	0.00439	0.00377	0.00412
____ W	0.00055	0.33	52.503	0.00023	0.00063	0.00078
____ Y1	3582.97337	3,582.97	0.979	3564.21358	3623.44766	3561.25887
____ Y2A	95104.54935	95,104.55	0.180	94907.49152	95195.41376	95210.74277
____ Y2R	4022.35557	4,022.36	0.175	4017.13147	4030.33473	4019.60052
____ ZN	0.00384	24.72	7.564	0.00371	0.00364	0.00417
____ ZR	-0.00586	-0.80	244.110	-0.01897	0.00939	-0.00799

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 30 Date/Time: 11/16/2018 08:01

Sample Number: **9885591** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00133	-14.44	134.518	-0.00340	-0.00016	-0.00045
____ AL	0.45139	23.04	19.790	0.52644	0.35258	0.47516
____ AS	0.01204	0.84	17.711	0.01276	0.00964	0.01371
____ B	3.31462	10,377.28	1.323	3.26414	3.33626	3.34347
____ BA	0.70022	263,490.32	0.371	0.70227	0.69729	0.70109
____ BE	0.00013	-2.99	25.127	0.00012	0.00010	0.00016
____ CA	68.84918	13,818.84	0.704	68.44394	68.71739	69.38621
____ CD	-0.00018	0.25	143.564	0.00008	-0.00018	-0.00043
____ CO	0.01842	49.89	2.694	0.01852	0.01788	0.01886
____ CR	0.00391	14.55	20.666	0.00478	0.00377	0.00318
____ CU	0.00100	12.28	230.034	0.00310	-0.00147	0.00137
____ FE	14.70218	1,358.19	0.388	14.66307	14.67579	14.76767
____ K	310.28172	35,015.32	0.562	308.48501	310.39538	311.96477
____ LI	0.01001	54.36	28.322	0.01057	0.00693	0.01252
____ MG	75.80762	33,352.45	0.830	75.29743	75.61449	76.51093
____ MN	0.12875	2,494.35	0.813	0.12756	0.12918	0.12952
____ MO	-0.00030	0.27	149.996	-0.00074	0.00016	-0.00032
____ NA	713.22122	375,163.12	0.219	712.07075	715.00327	712.58965
____ NI	0.07184	94.45	1.080	0.07243	0.07213	0.07096
____ P	0.38654	61.56	1.694	0.38802	0.39222	0.37937
____ PB	-0.00248	-2.46	130.801	-0.00147	0.00014	-0.00610
____ S	8.74914	734.28	0.136	8.76198	8.73844	8.74701
____ SB	-0.00699	-1.10	98.235	-0.00128	-0.00508	-0.01461
____ SE	-0.00040	-0.85	984.875	-0.00403	-0.00087	0.00371
____ SI	4.86544	264.18	1.643	4.77915	4.88019	4.93698
____ SN	0.00110	1.16	216.013	0.00049	0.00372	-0.00091
____ SR	0.57998	234,098.95	0.793	0.57506	0.58417	0.58071
____ TH	-0.01725	-0.15	498.100	-0.11201	0.05557	0.00469
____ TI	0.01256	179.26	3.180	0.01229	0.01238	0.01302
____ TL	-0.00079	-1.94	268.133	0.00088	-0.00009	-0.00315
____ V	0.01713	108.68	1.380	0.01714	0.01688	0.01735
____ W	0.00158	0.87	56.306	0.00078	0.00253	0.00142
____ Y1	3365.08516	3,365.09	0.456	3379.17208	3367.32827	3348.75512
____ Y2A	90420.04902	90,420.05	1.423	91417.86212	90874.47699	88967.80795
____ Y2R	4071.78823	4,071.79	0.586	4090.53960	4079.87707	4044.94803
____ ZN	0.00573	30.41	4.561	0.00556	0.00603	0.00560
____ ZR	0.01108	12.69	78.934	0.01927	0.00187	0.01209

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 31 Date/Time: 11/16/2018 08:04

Sample Number: **9885592** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00182	-17.51	62.487	-0.00079	-0.00304	-0.00162
____ AL	0.01977	9.32	308.947	-0.01566	0.09028	-0.01533
____ AS	0.01295	0.75	35.678	0.00764	0.01603	0.01518
____ B	2.04467	6,670.94	0.496	2.03303	2.05154	2.04943
____ BA	0.27133	105,979.02	1.629	0.26669	0.27550	0.27178
____ BE	0.00024	13.26	64.300	0.00011	0.00041	0.00020
____ CA	70.28254	13,636.96	0.262	70.31128	70.45038	70.08594
____ CD	0.00002	4.35	554.849	0.00011	-0.00013	0.00009
____ CO	0.00645	17.53	8.160	0.00701	0.00596	0.00638
____ CR	0.00603	22.77	9.722	0.00656	0.00612	0.00540
____ CU	0.00167	19.03	142.317	-0.00098	0.00360	0.00238
____ FE	24.53492	2,183.77	0.054	24.54478	24.54002	24.51995
____ K	181.75389	19,847.70	0.185	181.94043	181.95505	181.36619
____ LI	0.01255	58.80	18.789	0.01182	0.01064	0.01518
____ MG	34.86898	14,911.87	0.320	34.95497	34.90904	34.74293
____ MN	0.40588	8,131.06	1.230	0.40978	0.40025	0.40759
____ MO	-0.00006	0.68	862.060	0.00045	-0.00060	-0.00004
____ NA	367.44196	186,813.20	0.570	368.57215	368.72897	365.02475
____ NI	0.02178	29.21	5.553	0.02311	0.02149	0.02074
____ P	0.59018	97.42	0.480	0.59305	0.59009	0.58740
____ PB	-0.00283	-2.13	32.244	-0.00375	-0.00280	-0.00193
____ S	17.11745	1,486.83	0.357	17.18729	17.09129	17.07378
____ SB	0.00105	0.64	254.556	-0.00196	0.00201	0.00309
____ SE	0.00705	0.38	49.192	0.01070	0.00663	0.00381
____ SI	6.76040	354.41	0.851	6.79889	6.69423	6.78806
____ SN	0.00019	0.63	402.676	0.00108	-0.00039	-0.00011
____ SR	0.43085	180,447.00	0.604	0.43151	0.42798	0.43306
____ TH	-0.01822	0.07	334.456	0.02841	-0.08716	0.00410
____ TI	0.00884	133.37	8.931	0.00844	0.00975	0.00832
____ TL	0.00535	-0.43	18.143	0.00647	0.00485	0.00473
____ V	0.01633	107.62	5.133	0.01646	0.01710	0.01544
____ W	0.00080	0.47	406.910	0.00280	-0.00294	0.00253
____ Y1	3488.32117	3,488.32	0.563	3506.38436	3467.41826	3491.16088
____ Y2A	93715.41413	93,715.41	1.727	92022.56633	95247.20224	93876.47382
____ Y2R	3936.41749	3,936.42	0.049	3934.33940	3938.16157	3936.75150
____ ZN	0.00532	29.99	7.132	0.00553	0.00554	0.00488
____ ZR	0.00493	7.64	257.688	-0.00709	0.01823	0.00365

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 32 Date/Time: 11/16/2018 08:06

Sample Number: **9885593** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00083	-12.09	232.662	-0.00001	-0.00302	0.00056
____ AL	-0.07168	6.93	164.192	-0.08131	-0.18426	0.05053
____ AS	0.02287	1.88	7.409	0.02113	0.02451	0.02298
____ B	1.81048	6,030.80	0.225	1.81218	1.81342	1.80584
____ BA	0.17178	67,810.72	0.456	0.17196	0.17247	0.17093
____ BE	0.00013	-2.57	62.464	0.00022	0.00009	0.00008
____ CA	62.36693	12,785.40	0.415	62.13192	62.64400	62.32486
____ CD	-0.00046	10.17	57.723	-0.00015	-0.00058	-0.00063
____ CO	0.00837	23.29	7.978	0.00900	0.00844	0.00767
____ CR	0.00450	17.36	26.500	0.00328	0.00566	0.00456
____ CU	0.00490	40.13	31.699	0.00445	0.00664	0.00363
____ FE	49.76892	4,644.45	0.450	49.73855	50.00670	49.56151
____ K	119.84124	13,837.31	0.396	119.58505	120.38858	119.55009
____ LI	0.00850	50.02	15.316	0.00773	0.01001	0.00777
____ MG	25.85810	11,693.37	0.517	25.72372	25.99084	25.85974
____ MN	0.36087	7,300.15	0.348	0.36181	0.36136	0.35944
____ MO	0.00133	3.02	42.121	0.00159	0.00069	0.00171
____ NA	323.43231	173,659.74	0.170	322.94496	324.02658	323.32538
____ NI	0.02452	31.85	4.950	0.02404	0.02361	0.02590
____ P	1.08640	182.03	0.323	1.08243	1.08768	1.08908
____ PB	-0.00226	-1.45	81.610	-0.00022	-0.00275	-0.00381
____ S	5.92174	523.71	0.253	5.91263	5.91356	5.93904
____ SB	-0.00036	0.33	209.910	-0.00091	0.00051	-0.00069
____ SE	0.01112	1.07	93.194	0.01124	0.00070	0.02143
____ SI	6.75345	373.93	0.191	6.76836	6.74628	6.74571
____ SN	0.00178	1.66	35.604	0.00105	0.00213	0.00215
____ SR	0.34169	144,536.28	0.450	0.34127	0.34339	0.34041
____ TH	-0.01976	0.66	209.234	-0.03495	-0.05137	0.02703
____ TI	0.00431	70.03	4.444	0.00410	0.00434	0.00448
____ TL	0.00288	-0.97	84.572	0.00409	0.00448	0.00008
____ V	0.00908	62.17	13.860	0.01038	0.00898	0.00787
____ W	0.00042	0.27	401.763	0.00153	-0.00154	0.00128
____ Y1	3541.19088	3,541.19	0.292	3545.17048	3548.95010	3529.45205
____ Y2A	94609.20885	94,609.21	0.057	94555.66913	94608.86291	94663.09452
____ Y2R	4157.43093	4,157.43	0.258	4161.85706	4145.18866	4165.24706
____ ZN	0.00702	39.40	3.496	0.00729	0.00697	0.00680
____ ZR	0.01557	16.24	31.533	0.01707	0.01955	0.01008

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 33 Date/Time: 11/16/2018 08:09

Sample Number: **9885594** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00026	-10.40	136.679	-0.00066	-0.00016	0.00003
____ AL	0.87629	36.10	10.905	0.76902	0.90752	0.95232
____ AS	0.04081	5.67	5.271	0.04254	0.04149	0.03840
____ B	4.96887	15,299.18	0.380	4.98587	4.94857	4.97217
____ BA	0.14996	55,628.59	0.488	0.15022	0.14913	0.15052
____ BE	0.00013	-2.33	26.810	0.00010	0.00017	0.00012
____ CA	103.35640	20,532.28	0.507	103.95628	103.12314	102.98979
____ CD	0.00004	5.36	114.402	0.00006	-0.00001	0.00006
____ CO	0.01772	47.72	3.805	0.01696	0.01796	0.01824
____ CR	0.03449	119.97	1.362	0.03478	0.03395	0.03475
____ CU	0.00135	24.51	165.300	0.00185	-0.00109	0.00329
____ FE	28.14781	2,566.19	0.332	28.23275	28.04781	28.16285
____ K	346.58890	38,769.18	0.414	348.18919	346.16158	345.41594
____ LI	0.01981	86.52	29.869	0.02059	0.01354	0.02529
____ MG	86.24890	37,566.87	0.531	86.77219	86.05197	85.92253
____ MN	0.35287	6,703.19	0.672	0.35473	0.35020	0.35369
____ MO	0.00480	8.41	12.450	0.00545	0.00464	0.00429
____ NA	985.53463	513,930.66	0.945	995.86786	977.78737	982.94868
____ NI	0.09851	128.39	2.855	0.09690	0.10176	0.09687
____ P	1.87153	298.17	0.378	1.87820	1.87229	1.86411
____ PB	-0.00317	-1.53	194.107	-0.01019	0.00124	-0.00055
____ S	14.03411	1,177.73	0.365	14.02205	14.09032	13.98996
____ SB	-0.00323	-0.29	134.328	-0.00569	0.00178	-0.00578
____ SE	0.00320	-0.24	74.666	0.00591	0.00232	0.00138
____ SI	9.19749	494.01	0.327	9.17222	9.18957	9.23070
____ SN	0.00295	2.31	54.783	0.00296	0.00133	0.00456
____ SR	0.66159	262,692.55	0.442	0.66219	0.65841	0.66417
____ TH	0.02493	1.71	311.034	0.02907	0.10033	-0.05460
____ TI	0.02759	377.21	2.320	0.02809	0.02686	0.02780
____ TL	0.00306	-1.23	131.158	0.00770	0.00081	0.00068
____ V	0.03346	204.29	1.860	0.03384	0.03274	0.03381
____ W	0.00230	1.51	88.997	0.00353	0.00343	-0.00006
____ Y1	3367.35660	3,367.36	0.311	3366.49335	3357.35426	3378.22218
____ Y2A	88843.33777	88,843.34	0.528	88937.92381	89257.86556	88334.22393
____ Y2R	4036.54944	4,036.55	0.563	4013.63636	4059.04786	4036.96411
____ ZN	0.06349	241.52	0.499	0.06346	0.06382	0.06319
____ ZR	0.14997	121.85	7.277	0.16078	0.13896	0.15016

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 34

Date/Time: 11/16/2018 08:12

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.49778	2,675.87	0.204	0.49859	0.49812	0.49664
____ AL	25.55291	792.20	0.340	25.57308	25.45765	25.62799
____ AS	0.50990	98.51	0.488	0.50977	0.51245	0.50748
____ B	0.52522	1,779.63	0.792	0.52824	0.52048	0.52695
____ BA	0.50701	204,639.82	0.453	0.50962	0.50532	0.50608
____ BE	0.48416	69,423.99	0.350	0.48594	0.48256	0.48397
____ CA	25.30708	5,004.33	0.675	25.48720	25.14736	25.28669
____ CD	0.49788	2,537.15	0.562	0.50048	0.49824	0.49491
____ CO	0.49739	1,479.15	0.462	0.49861	0.49881	0.49473
____ CR	0.48610	1,834.32	0.405	0.48762	0.48387	0.48681
____ CU	0.50822	2,050.90	0.373	0.50914	0.50604	0.50949
____ FE	25.03344	2,264.81	1.056	25.33588	24.84625	24.91818
____ K	27.48658	3,089.42	1.171	27.83326	27.42939	27.19710
____ LI	0.51777	1,229.91	1.520	0.52642	0.51586	0.51104
____ MG	25.07205	10,914.74	0.991	25.35541	24.96916	24.89157
____ MN	0.50596	10,477.28	0.309	0.50737	0.50428	0.50621
____ MO	0.48340	837.84	0.678	0.48615	0.48429	0.47978
____ NA	25.93928	13,329.41	0.992	26.21337	25.90132	25.70314
____ NI	0.50387	713.84	0.682	0.50756	0.50329	0.50076
____ P	0.50729	87.48	0.735	0.50945	0.50944	0.50299
____ PB	0.48633	268.91	0.597	0.48604	0.48936	0.48357
____ S	24.98702	2,267.89	0.605	25.10664	25.03725	24.81717
____ SB	0.48203	112.69	0.574	0.48521	0.48064	0.48024
____ SE	0.50771	89.19	0.758	0.50585	0.50515	0.51214
____ SI	27.78412	1,477.82	3.311	28.77237	27.62719	26.95280
____ SN	0.46988	315.44	0.546	0.47033	0.47218	0.46711
____ SR	0.50244	216,951.83	0.452	0.50505	0.50090	0.50137
____ TH	0.52478	19.40	5.906	0.51140	0.56021	0.50272
____ TI	0.50497	7,381.48	0.534	0.50630	0.50187	0.50675
____ TL	0.49664	123.67	0.438	0.49604	0.49905	0.49482
____ V	0.49211	3,163.82	0.559	0.49527	0.49080	0.49026
____ W	0.50288	297.83	0.718	0.50452	0.50538	0.49874
____ Y1	3651.39486	3,651.39	0.326	3644.00060	3645.07049	3665.11349
____ Y2A	96930.29745	96,930.30	0.180	96736.28871	96981.79733	97072.80632
____ Y2R	4001.83896	4,001.84	0.351	3997.75404	3990.27334	4017.48951
____ ZN	0.50026	1,986.27	0.523	0.50201	0.50151	0.49725
____ ZR	0.44460	387.88	1.429	0.45041	0.44558	0.43781

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 35

Date/Time: 11/16/2018 08:14

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00020	-10.54	319.393	0.00008	0.00026	-0.00093
____ AL	-0.01681	8.35	497.826	0.04671	0.01447	-0.11160
____ AS	0.00430	-0.15	88.313	0.00835	0.00372	0.00082
____ B	0.01594	54.78	11.782	0.01811	0.01472	0.01500
____ BA	0.00020	319.62	95.476	0.00041	0.00014	0.00005
____ BE	0.00018	5.30	6.730	0.00019	0.00017	0.00020
____ CA	0.03583	13.20	14.857	0.03150	0.03420	0.04177
____ CD	0.00041	-1.64	75.245	0.00034	0.00075	0.00014
____ CO	0.00101	2.76	28.961	0.00069	0.00127	0.00105
____ CR	-0.00054	-1.25	60.375	-0.00069	-0.00017	-0.00078
____ CU	-0.00166	-8.28	56.731	-0.00175	-0.00254	-0.00067
____ FE	0.01467	4.08	102.903	-0.00269	0.02474	0.02194
____ K	1.04169	160.33	4.679	1.06961	1.07005	0.98541
____ LI	0.01075	36.42	19.314	0.01238	0.00841	0.01145
____ MG	0.02537	13.25	36.205	0.01877	0.02148	0.03586
____ MN	0.00014	11.73	176.420	0.00034	0.00021	-0.00013
____ MO	-0.00012	0.62	187.003	0.00009	-0.00010	-0.00034
____ NA	0.87217	367.95	6.035	0.85297	0.83183	0.93170
____ NI	0.00125	3.47	62.013	0.00111	0.00208	0.00055
____ P	0.00195	0.35	42.734	0.00125	0.00287	0.00172
____ PB	-0.00075	-3.30	291.770	-0.00273	-0.00113	0.00161
____ S	0.00835	2.15	117.845	0.01195	-0.00278	0.01589
____ SB	-0.00087	0.23	117.668	-0.00073	0.00008	-0.00196
____ SE	0.00501	0.00	147.325	0.01348	0.00161	-0.00006
____ SI	0.09507	6.28	7.412	0.09849	0.09976	0.08697
____ SN	0.00101	1.22	196.946	-0.00096	0.00097	0.00300
____ SR	0.00031	19.69	57.626	0.00052	0.00025	0.00017
____ TH	-0.00777	-0.17	626.247	0.03202	0.00669	-0.06203
____ TI	0.00059	17.87	60.148	0.00100	0.00035	0.00043
____ TL	0.00161	-1.22	74.943	0.00052	0.00140	0.00290
____ V	-0.00005	4.33	1456.609	-0.00033	-0.00065	0.00083
____ W	0.00097	0.57	28.814	0.00068	0.00100	0.00124
____ Y1	3697.25694	3,697.26	0.397	3686.59134	3691.16088	3714.01860
____ Y2A	99098.70194	99,098.70	0.293	98767.31958	99311.35367	99217.43257
____ Y2R	4005.65833	4,005.66	0.106	4001.20000	4006.12500	4009.65000
____ ZN	-0.00043	6.10	75.694	-0.00012	-0.00076	-0.00040
____ ZR	-0.00569	0.72	105.649	-0.01144	-0.00620	0.00056

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 36 Date/Time: 11/16/2018 08:17

Sample Number: **9885595** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00055	-11.20	463.527	0.00063	-0.00347	0.00119
____ AL	0.13023	12.89	54.479	0.07074	0.11118	0.20875
____ AS	0.12085	21.04	1.539	0.11933	0.12292	0.12029
____ B	3.86278	12,120.56	0.557	3.88435	3.86268	3.84131
____ BA	0.40483	152,852.14	0.564	0.40715	0.40477	0.40259
____ BE	0.00013	-2.03	31.909	0.00009	0.00017	0.00015
____ CA	48.82695	9,634.54	0.296	48.98499	48.70151	48.79433
____ CD	-0.00010	0.63	320.500	0.00023	-0.00012	-0.00041
____ CO	0.01815	50.11	1.739	0.01851	0.01798	0.01795
____ CR	0.03466	123.02	3.785	0.03595	0.03471	0.03332
____ CU	0.00025	9.18	842.710	0.00007	0.00246	-0.00177
____ FE	14.70368	1,333.99	0.528	14.76939	14.61795	14.72370
____ K	269.89651	29,917.72	0.390	269.05692	269.55666	271.07594
____ LI	0.01203	52.65	94.093	0.00493	0.00608	0.02508
____ MG	51.90587	22,498.33	0.321	51.98341	51.71473	52.01948
____ MN	0.36549	7,085.42	0.711	0.36821	0.36523	0.36303
____ MO	0.00272	5.21	16.166	0.00233	0.00320	0.00262
____ NA	843.31953	435,654.12	0.571	846.14180	846.05385	837.76295
____ NI	0.09259	124.28	0.565	0.09203	0.09266	0.09307
____ P	3.21753	524.26	0.814	3.21349	3.19359	3.24551
____ PB	-0.00237	-1.77	150.159	-0.00629	0.00063	-0.00144
____ S	45.76893	3,920.09	0.924	45.79386	45.33424	46.17869
____ SB	0.02585	6.08	17.956	0.02789	0.02053	0.02911
____ SE	0.00850	0.62	68.692	0.00543	0.00484	0.01524
____ SI	7.81129	415.81	0.769	7.80533	7.75444	7.87410
____ SN	0.00332	2.59	48.711	0.00184	0.00307	0.00504
____ SR	0.34356	139,103.93	0.584	0.34545	0.34375	0.34146
____ TH	-0.00169	0.42	1142.047	0.01881	-0.07947	0.05560
____ TI	0.02517	351.95	1.852	0.02548	0.02539	0.02463
____ TL	-0.00028	-1.88	1023.823	-0.00304	-0.00043	0.00264
____ V	0.01769	112.17	2.337	0.01805	0.01724	0.01777
____ W	0.00412	2.33	9.831	0.00458	0.00396	0.00381
____ Y1	3443.96291	3,443.96	1.007	3452.56872	3473.53617	3405.78384
____ Y2A	90669.06271	90,669.06	0.689	90113.90606	90547.99641	91345.28566
____ Y2R	3998.73540	3,998.74	0.267	4010.92596	3991.00180	3994.27843
____ ZN	0.01193	54.49	1.347	0.01211	0.01183	0.01185
____ ZR	0.04956	42.81	18.953	0.04320	0.06035	0.04512

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 37 Date/Time: 11/16/2018 08:20

Sample Number: **9885596** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00104	-15.45	228.663	-0.00340	-0.00109	0.00136
____ AL	2.58526	88.38	2.135	2.53293	2.64291	2.57995
____ AS	0.01568	1.00	20.748	0.01606	0.01872	0.01225
____ B	1.09769	3,566.45	0.525	1.09431	1.10434	1.09441
____ BA	0.72696	278,838.81	0.452	0.72779	0.72975	0.72333
____ BE	0.00019	5.23	18.639	0.00023	0.00017	0.00016
____ CA	106.83820	21,182.69	0.420	106.56837	106.59048	107.35577
____ CD	-0.00047	4.47	4.417	-0.00045	-0.00049	-0.00049
____ CO	0.00394	10.34	12.272	0.00399	0.00439	0.00343
____ CR	0.01236	45.10	10.280	0.01379	0.01190	0.01138
____ CU	0.00039	22.54	160.561	0.00099	-0.00027	0.00046
____ FE	32.71850	2,973.41	0.664	32.56154	32.96625	32.62772
____ K	126.22562	14,122.74	0.510	125.57359	126.24157	126.86169
____ LI	0.00065	42.18	345.762	0.00002	0.00313	-0.00121
____ MG	85.27545	37,080.80	0.270	85.02470	85.32436	85.47728
____ MN	0.61607	12,135.63	0.230	0.61466	0.61749	0.61606
____ MO	0.00125	2.81	46.152	0.00086	0.00098	0.00191
____ NA	346.98078	180,559.91	0.692	345.33505	349.73668	345.87061
____ NI	0.05243	69.57	2.658	0.05387	0.05234	0.05109
____ P	0.63150	103.17	1.328	0.64114	0.62753	0.62584
____ PB	-0.00138	-0.86	417.652	-0.00743	0.00406	-0.00077
____ S	3.89958	337.88	0.591	3.92564	3.89123	3.88186
____ SB	0.00192	0.84	137.449	0.00343	0.00344	-0.00112
____ SE	0.00034	-0.73	1562.028	0.00633	-0.00334	-0.00198
____ SI	7.55514	405.27	0.824	7.54263	7.62266	7.50012
____ SN	0.00089	1.06	23.216	0.00113	0.00080	0.00075
____ SR	0.45837	189,214.98	0.179	0.45856	0.45747	0.45908
____ TH	0.00751	1.20	769.979	-0.04655	0.00062	0.06845
____ TI	0.03132	443.19	2.685	0.03035	0.03179	0.03181
____ TL	0.00159	-1.43	163.328	0.00457	0.00027	-0.00008
____ V	0.01850	119.29	2.273	0.01895	0.01843	0.01812
____ W	0.00044	0.34	129.539	0.00076	0.00077	-0.00022
____ Y1	3452.93137	3,452.93	0.165	3452.60974	3447.41526	3458.76912
____ Y2A	92170.10877	92,170.11	0.211	91983.76494	92371.30739	92155.25398
____ Y2R	4029.23335	4,029.23	0.653	4044.44666	3998.85435	4044.39904
____ ZN	0.02248	94.79	1.195	0.02257	0.02217	0.02268
____ ZR	-0.00481	2.79	189.639	0.00479	-0.00587	-0.01334

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 38 Date/Time: 11/16/2018 08:23

Sample Number: **9885597** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00277	-20.59	71.072	-0.00278	-0.00473	-0.00080
____ AL	0.16578	13.88	27.045	0.13767	0.21748	0.14218
____ AS	0.02479	2.58	18.619	0.02911	0.02534	0.01993
____ B	2.07672	6,477.93	0.730	2.08882	2.08162	2.05971
____ BA	1.32858	493,549.88	0.118	1.32997	1.32890	1.32688
____ BE	0.00006	-12.08	54.836	0.00008	0.00002	0.00007
____ CA	179.76011	35,226.48	0.668	181.10433	179.38253	178.79347
____ CD	-0.00024	5.89	92.852	-0.00048	-0.00004	-0.00021
____ CO	0.00956	25.43	6.658	0.00883	0.00994	0.00991
____ CR	0.01376	48.57	3.845	0.01436	0.01335	0.01358
____ CU	0.00064	26.13	269.200	0.00166	0.00160	-0.00134
____ FE	34.25956	3,085.89	0.096	34.29483	34.25425	34.22960
____ K	222.13999	24,610.32	0.172	222.35138	222.36975	221.69885
____ LI	0.00576	73.72	87.994	0.01149	0.00184	0.00395
____ MG	117.53769	50,464.60	0.641	118.40810	117.08921	117.11576
____ MN	0.83942	16,017.67	0.147	0.83819	0.84066	0.83942
____ MO	0.00128	2.79	43.220	0.00192	0.00092	0.00101
____ NA	591.42327	305,226.75	0.403	590.22171	594.16531	589.88279
____ NI	0.09521	123.39	0.817	0.09435	0.09586	0.09542
____ P	1.29906	206.06	0.805	1.30525	1.30495	1.28699
____ PB	-0.00460	-3.01	119.144	-0.00305	-0.01070	-0.00006
____ S	5.01954	422.61	0.464	5.00921	5.04620	5.00322
____ SB	0.00661	1.81	20.823	0.00502	0.00751	0.00729
____ SE	0.00548	0.11	15.239	0.00480	0.00522	0.00641
____ SI	5.69131	303.01	0.837	5.67428	5.74512	5.65454
____ SN	0.00162	1.48	49.445	0.00194	0.00222	0.00071
____ SR	0.82253	328,908.09	1.077	0.81391	0.83161	0.82207
____ TH	-0.02801	-0.03	180.620	-0.05775	-0.05669	0.03041
____ TI	0.01066	151.55	7.385	0.01093	0.00978	0.01129
____ TL	0.00322	-1.01	37.263	0.00460	0.00241	0.00265
____ V	0.02157	133.89	1.954	0.02164	0.02112	0.02196
____ W	0.00129	0.76	223.363	0.00266	-0.00202	0.00322
____ Y1	3352.44809	3,352.45	0.508	3367.94821	3334.23158	3355.16448
____ Y2A	89298.62650	89,298.63	0.181	89250.17455	89478.80511	89166.89986
____ Y2R	3995.23825	3,995.24	0.727	4008.99281	3961.85763	4014.86433
____ ZN	0.01419	63.00	0.222	0.01416	0.01419	0.01422
____ ZR	0.01326	13.12	55.655	0.01734	0.01770	0.00474

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 39 Date/Time: 11/16/2018 08:26

Sample Number: **9885599** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00089	-15.29	128.623	-0.00217	0.00002	-0.00052
____ AL	-0.07296	6.65	41.994	-0.04074	-0.07641	-0.10173
____ AS	0.00417	-0.17	95.785	0.00487	-0.00013	0.00778
____ B	0.02296	80.15	6.851	0.02124	0.02332	0.02432
____ BA	0.00144	845.12	34.902	0.00087	0.00162	0.00182
____ BE	0.00024	13.95	31.833	0.00017	0.00023	0.00032
____ CA	0.10048	25.95	10.116	0.10796	0.10457	0.08891
____ CD	0.00046	-1.38	47.600	0.00037	0.00030	0.00071
____ CO	0.00044	1.05	39.043	0.00035	0.00033	0.00064
____ CR	-0.00056	-1.31	34.235	-0.00050	-0.00077	-0.00040
____ CU	0.00291	10.94	36.483	0.00188	0.00400	0.00286
____ FE	0.02475	5.00	35.286	0.01467	0.02997	0.02961
____ K	1.34206	193.37	13.347	1.39630	1.48779	1.14209
____ LI	0.00789	29.77	49.828	0.00339	0.00963	0.01066
____ MG	0.05563	26.43	15.132	0.05653	0.06357	0.04680
____ MN	0.00145	40.14	23.058	0.00116	0.00138	0.00182
____ MO	-0.00005	0.74	652.106	-0.00041	0.00016	0.00010
____ NA	1.54175	713.65	5.534	1.62197	1.55116	1.45211
____ NI	0.00119	3.37	103.251	0.00223	0.00150	-0.00016
____ P	0.00528	0.93	49.878	0.00810	0.00288	0.00485
____ PB	0.00042	-2.63	595.305	0.00319	-0.00166	-0.00027
____ S	0.03573	4.65	13.694	0.04012	0.03045	0.03661
____ SB	-0.00292	-0.25	66.190	-0.00231	-0.00509	-0.00137
____ SE	0.00270	-0.41	189.379	0.00829	-0.00171	0.00151
____ SI	0.18701	11.15	10.186	0.18468	0.20712	0.16924
____ SN	0.00174	1.71	75.827	0.00027	0.00212	0.00283
____ SR	0.00122	427.12	38.725	0.00068	0.00143	0.00155
____ TH	-0.00108	0.07	2474.645	0.02093	0.00674	-0.03092
____ TI	0.00095	23.64	17.759	0.00084	0.00087	0.00115
____ TL	0.00274	-0.93	15.159	0.00228	0.00308	0.00285
____ V	0.00094	11.21	39.627	0.00096	0.00131	0.00056
____ W	0.00139	0.82	63.083	0.00047	0.00221	0.00149
____ Y1	3685.48479	3,685.48	0.609	3669.11809	3676.25237	3711.08389
____ Y2A	100867.54301	100,867.54	0.106	100906.13763	100949.51156	100746.97983
____ Y2R	4002.45000	4,002.45	0.984	3973.47500	3986.60000	4047.27500
____ ZN	0.00035	9.17	26.336	0.00045	0.00027	0.00034
____ ZR	-0.00667	0.58	52.053	-0.00642	-0.01026	-0.00333

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 40 Date/Time: 11/16/2018 08:29

Sample Number: **9885600** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00201	-16.08	14.099	-0.00216	-0.00218	-0.00168
____ AL	-0.07237	6.55	119.076	-0.17091	-0.03508	-0.01112
____ AS	0.00454	-0.10	8.586	0.00422	0.00498	0.00442
____ B	0.01656	57.48	19.727	0.01493	0.01443	0.02032
____ BA	0.00060	490.79	142.820	0.00010	0.00011	0.00158
____ BE	0.00020	8.32	41.220	0.00016	0.00015	0.00030
____ CA	0.02596	11.52	70.711	0.02811	0.04314	0.00662
____ CD	0.00037	-1.85	46.224	0.00045	0.00048	0.00017
____ CO	0.00066	1.73	63.032	0.00055	0.00111	0.00030
____ CR	-0.00142	-4.62	103.212	-0.00011	-0.00299	-0.00115
____ CU	0.00145	-1.36	74.682	0.00250	0.00034	0.00149
____ FE	0.02297	4.90	84.180	0.01497	0.04502	0.00892
____ K	0.67956	121.92	20.029	0.82973	0.56433	0.64462
____ LI	0.00487	22.80	102.845	-0.00069	0.00628	0.00903
____ MG	0.02782	14.53	32.537	0.03079	0.03502	0.01766
____ MN	0.00047	19.35	169.003	0.00006	-0.00003	0.00137
____ MO	-0.00015	0.56	287.088	-0.00033	-0.00048	0.00035
____ NA	0.79129	330.88	11.046	0.87538	0.79756	0.70091
____ NI	0.00235	5.09	25.009	0.00298	0.00181	0.00227
____ P	0.00199	0.38	59.853	0.00311	0.00074	0.00212
____ PB	0.00087	-2.44	399.806	0.00484	-0.00158	-0.00066
____ S	1.03991	97.45	0.847	1.04581	1.04414	1.02979
____ SB	-0.00348	-0.39	195.483	-0.00061	-0.01124	0.00142
____ SE	0.00715	0.39	61.411	0.00208	0.00969	0.00969
____ SI	0.06759	4.88	19.551	0.07344	0.07687	0.05246
____ SN	0.00073	1.03	185.959	-0.00084	0.00157	0.00147
____ SR	0.00062	159.00	121.671	0.00017	0.00020	0.00150
____ TH	-0.06005	-2.05	24.333	-0.04656	-0.07557	-0.05801
____ TI	0.00062	18.50	47.261	0.00096	0.00048	0.00043
____ TL	0.00200	-1.13	96.743	0.00415	0.00040	0.00145
____ V	0.00059	8.46	147.039	-0.00001	0.00159	0.00019
____ W	0.00236	1.41	52.672	0.00124	0.00370	0.00214
____ Y1	3716.55168	3,716.55	0.223	3719.60804	3707.18928	3722.85771
____ Y2A	100078.26245	100,078.26	0.926	100385.04286	99036.70754	100813.03696
____ Y2R	4058.05000	4,058.05	1.869	4142.20000	4037.00000	3994.95000
____ ZN	0.00031	9.08	78.178	0.00058	0.00019	0.00015
____ ZR	-0.00233	-1.52	119.699	-0.00454	0.00080	-0.00325

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 41 Date/Time: 11/16/2018 08:32

Sample Number: **9885685** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00053	-10.49	261.653	-0.00104	0.00107	0.00155
____ AL	0.01517	9.26	209.635	0.03575	-0.02146	0.03123
____ AS	0.00295	-0.39	200.437	-0.00363	0.00467	0.00783
____ B	0.02198	70.72	5.815	0.02345	0.02140	0.02110
____ BA	0.01375	5,670.90	0.407	0.01368	0.01377	0.01378
____ BE	0.00013	-2.61	24.942	0.00011	0.00011	0.00017
____ CA	38.82134	7,496.97	0.895	38.54350	38.70966	39.21086
____ CD	0.00125	2.62	9.345	0.00113	0.00136	0.00127
____ CO	0.00064	1.32	34.179	0.00071	0.00081	0.00039
____ CR	-0.00145	-4.56	67.207	-0.00033	-0.00209	-0.00193
____ CU	0.00177	13.78	108.111	0.00398	0.00058	0.00075
____ FE	0.03996	6.23	25.951	0.02862	0.04896	0.04229
____ K	2.35624	298.89	4.128	2.46474	2.32714	2.27685
____ LI	0.00508	32.95	98.651	0.00901	-0.00057	0.00681
____ MG	17.28044	7,360.63	1.286	17.12477	17.18154	17.53502
____ MN	0.01754	364.62	0.648	0.01742	0.01756	0.01764
____ MO	0.00077	2.09	83.520	0.00126	0.00100	0.00004
____ NA	41.88256	21,085.58	0.491	41.78081	41.74765	42.11923
____ NI	0.00355	6.32	15.469	0.00367	0.00295	0.00403
____ P	0.00803	1.35	21.322	0.00747	0.00667	0.00995
____ PB	-0.00392	-4.06	46.581	-0.00581	-0.00216	-0.00381
____ S	5.10544	454.22	0.450	5.13139	5.09710	5.08782
____ SB	-0.00010	0.39	5330.163	0.00257	-0.00640	0.00353
____ SE	0.00496	0.01	51.152	0.00206	0.00675	0.00606
____ SI	3.20733	167.70	0.155	3.20559	3.20347	3.21294
____ SN	0.00013	0.60	419.563	-0.00041	0.00013	0.00067
____ SR	0.15442	65,790.73	0.265	0.15476	0.15396	0.15454
____ TH	0.04183	1.56	108.631	0.00259	0.03128	0.09162
____ TI	0.00167	32.55	19.828	0.00162	0.00136	0.00202
____ TL	0.00191	-1.11	71.081	0.00130	0.00347	0.00097
____ V	0.00061	8.50	157.438	0.00119	-0.00050	0.00113
____ W	0.00162	0.97	29.287	0.00210	0.00159	0.00116
____ Y1	3563.16368	3,563.16	0.604	3538.31617	3575.57244	3575.60244
____ Y2A	95187.24588	95,187.25	0.321	94841.68832	95422.09349	95297.95582
____ Y2R	3911.31452	3,911.31	0.228	3913.75274	3918.76625	3901.42459
____ ZN	0.01097	49.62	3.699	0.01130	0.01108	0.01052
____ ZR	-0.00729	3.92	96.101	-0.00174	-0.00498	-0.01516

LANCASTER LABORATORIES

Run Name: 1832001T75 Instrument ID: 23290

Tube: 42 Date/Time: 11/16/2018 08:34

Sample Number: **9885686** Class: **** Batch: 183151063504

Initial Vol: 50.00 Final Vol: 50.00 DF: 1.00 Protocol Symbol: U4

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00074	-11.44	216.190	0.00030	0.00007	-0.00260
____ AL	-0.06218	6.76	25.058	-0.07725	-0.06314	-0.04613
____ AS	0.00684	0.36	61.513	0.00951	0.00902	0.00199
____ B	0.02199	71.97	4.031	0.02127	0.02298	0.02172
____ BA	0.01355	5,685.30	0.204	0.01357	0.01351	0.01355
____ BE	0.00007	-11.37	30.309	0.00007	0.00009	0.00005
____ CA	38.12719	7,384.53	0.276	38.20628	38.00764	38.16765
____ CD	0.00141	3.46	18.327	0.00157	0.00111	0.00155
____ CO	0.00051	0.96	29.086	0.00050	0.00036	0.00066
____ CR	-0.00057	-1.32	35.166	-0.00038	-0.00055	-0.00078
____ CU	0.00347	13.32	75.316	0.00049	0.00537	0.00455
____ FE	0.02721	5.12	24.161	0.02152	0.03441	0.02570
____ K	2.12128	274.21	4.494	2.18113	2.01135	2.17137
____ LI	0.00758	38.60	46.481	0.00507	0.01161	0.00606
____ MG	17.01847	7,270.20	0.168	17.04079	16.98623	17.02839
____ MN	0.01646	349.12	0.996	0.01633	0.01665	0.01641
____ MO	0.00103	2.58	42.627	0.00080	0.00154	0.00076
____ NA	41.58940	20,997.30	0.242	41.56030	41.50636	41.70153
____ NI	0.00307	5.76	27.151	0.00266	0.00403	0.00252
____ P	0.00660	1.15	12.448	0.00754	0.00600	0.00627
____ PB	-0.00010	-2.12	1195.491	-0.00065	-0.00088	0.00124
____ S	4.97357	450.14	0.384	4.95155	4.98580	4.98335
____ SB	-0.00241	-0.13	195.212	0.00295	-0.00432	-0.00587
____ SE	0.00704	0.37	39.214	0.00752	0.00407	0.00952
____ SI	3.11582	163.42	1.282	3.15854	3.10951	3.07941
____ SN	0.00138	1.44	129.155	0.00046	0.00343	0.00024
____ SR	0.15283	66,210.24	0.244	0.15295	0.15241	0.15313
____ TH	-0.02878	-0.88	256.574	0.03097	-0.00598	-0.11132
____ TI	0.00148	30.44	22.159	0.00132	0.00127	0.00186
____ TL	0.00226	-1.04	144.521	0.00215	-0.00095	0.00557
____ V	0.00066	8.64	88.535	0.00117	0.00002	0.00078
____ W	0.00186	1.13	78.361	0.00155	0.00344	0.00058
____ Y1	3624.43756	3,624.44	0.412	3639.99600	3623.05769	3610.25897
____ Y2A	96799.27611	96,799.28	0.288	96850.90964	97048.76648	96498.15222
____ Y2R	3922.51609	3,922.52	0.723	3942.16975	3935.35857	3890.01996
____ ZN	0.01029	47.82	0.492	0.01024	0.01027	0.01034
____ ZR	-0.00629	-1.61	171.777	-0.01407	-0.01083	0.00604

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 43

Date/Time: 11/16/2018 08:37

Sample Number: **LLC**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.00893	-7.16	11.200	0.00797	0.00884	0.00997
____ AL	0.23787	17.98	61.848	0.09439	0.23084	0.38837
____ AS	0.05487	10.03	8.152	0.04971	0.05772	0.05717
____ B	0.05692	200.17	2.103	0.05761	0.05761	0.05553
____ BA	0.00573	2,685.19	2.023	0.00581	0.00579	0.00560
____ BE	0.00498	730.77	1.794	0.00500	0.00505	0.00488
____ CA	0.67257	139.80	0.372	0.66968	0.67409	0.67394
____ CD	0.00544	24.62	6.466	0.00569	0.00504	0.00559
____ CO	0.00582	17.47	2.893	0.00563	0.00593	0.00590
____ CR	0.01261	51.07	7.558	0.01334	0.01296	0.01153
____ CU	0.02263	149.86	6.954	0.02248	0.02114	0.02428
____ FE	0.27613	28.22	0.622	0.27705	0.27720	0.27415
____ K	1.24229	184.73	14.611	1.18395	1.44580	1.09712
____ LI	0.05303	137.27	17.873	0.05730	0.04217	0.05962
____ MG	0.23009	103.97	6.788	0.24396	0.23314	0.21317
____ MN	0.01065	236.95	1.645	0.01075	0.01074	0.01044
____ MO	0.00999	18.54	2.475	0.01025	0.00976	0.00996
____ NA	2.21763	1,077.08	4.312	2.28245	2.26264	2.10780
____ NI	0.01229	19.53	7.352	0.01186	0.01168	0.01332
____ P	0.10273	18.04	3.023	0.10595	0.10247	0.09976
____ PB	0.01490	5.46	13.676	0.01255	0.01608	0.01607
____ S	0.55289	52.70	1.491	0.54712	0.56233	0.54922
____ SB	0.05258	12.96	10.279	0.05692	0.05429	0.04652
____ SE	0.05781	9.54	2.295	0.05679	0.05734	0.05931
____ SI	0.55916	31.34	2.635	0.54689	0.57550	0.55508
____ SN	0.04810	33.56	3.088	0.04827	0.04948	0.04653
____ SR	0.00572	2,488.25	1.930	0.00582	0.00573	0.00560
____ TH	0.52282	18.97	7.523	0.54911	0.54175	0.47761
____ TI	0.01052	171.42	2.430	0.01074	0.01058	0.01024
____ TL	0.03213	6.97	3.709	0.03341	0.03105	0.03193
____ V	0.01026	76.78	6.319	0.01098	0.00972	0.01007
____ W	0.02998	18.15	4.212	0.02944	0.03142	0.02908
____ Y1	3740.30097	3,740.30	0.067	3742.32577	3741.06089	3737.51625
____ Y2A	102310.56361	102,310.56	0.878	101842.67928	101742.51945	103346.49210
____ Y2R	4053.08333	4,053.08	0.623	4081.62500	4043.87500	4033.75000
____ ZN	0.02132	93.97	1.541	0.02169	0.02116	0.02110
____ ZR	-0.00490	50.08	33.971	-0.00537	-0.00305	-0.00629

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 44

Date/Time: 11/16/2018 08:40

Sample Number: **ICSA**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00101	-16.09	57.967	-0.00069	-0.00066	-0.00169
____ AL	493.91517	15,293.74	1.024	496.29305	497.34452	488.10794
____ AS	0.00987	-4.58	53.817	0.01586	0.00801	0.00574
____ B	-0.01582	378.78	7.836	-0.01611	-0.01689	-0.01446
____ BA	0.00112	614.04	6.880	0.00120	0.00111	0.00105
____ BE	-0.00024	-50.33	16.380	-0.00029	-0.00021	-0.00023
____ CA	489.01911	94,333.03	1.366	490.51659	494.82206	481.71868
____ CD	-0.00289	40.54	22.484	-0.00332	-0.00320	-0.00214
____ CO	0.00019	0.28	165.841	0.00055	-0.00006	0.00008
____ CR	-0.00232	-7.10	56.805	-0.00311	-0.00080	-0.00304
____ CU	-0.00045	106.23	623.435	-0.00315	-0.00063	0.00244
____ FE	190.28989	16,383.35	1.199	191.03420	192.10599	187.72947
____ K	0.68862	120.70	52.502	0.42669	0.53806	1.10111
____ LI	-0.03824	55.07	3.336	-0.03711	-0.03963	-0.03799
____ MG	494.03049	201,145.12	1.332	494.86534	500.15601	487.07012
____ MN	0.00483	97.25	2.650	0.00496	0.00483	0.00471
____ MO	-0.00170	-1.94	16.330	-0.00181	-0.00139	-0.00191
____ NA	1.10893	489.42	79.391	0.58674	0.61465	2.12540
____ NI	0.00057	-8.79	209.413	0.00009	0.00194	-0.00031
____ P	0.01437	2.25	15.357	0.01687	0.01352	0.01271
____ PB	0.01051	40.40	21.339	0.00916	0.01310	0.00927
____ S	-0.10545	0.82	7.854	-0.11286	-0.10698	-0.09651
____ SB	0.00143	0.69	643.655	0.01112	0.00034	-0.00718
____ SE	-0.00261	-1.21	140.275	-0.00002	-0.00101	-0.00679
____ SI	0.03275	2.95	48.565	0.02466	0.02251	0.05107
____ SN	0.00181	1.58	105.459	0.00022	0.00394	0.00129
____ SR	-0.00040	5,361.63	66.734	-0.00054	-0.00058	-0.00009
____ TH	0.02829	5.80	222.493	0.10048	-0.01500	-0.00062
____ TI	-0.00130	-9.13	39.486	-0.00074	-0.00142	-0.00175
____ TL	0.00107	-1.27	272.190	-0.00204	0.00376	0.00149
____ V	0.00337	24.21	27.872	0.00432	0.00334	0.00244
____ W	0.00094	0.55	175.339	-0.00001	-0.00001	0.00285
____ Y1	3310.95224	3,310.95	0.481	3313.66863	3325.33247	3293.85561
____ Y2A	86988.62567	86,988.63	0.836	87827.90036	86599.24636	86538.73029
____ Y2R	3986.02772	3,986.03	0.522	3986.44338	3965.01494	4006.62483
____ ZN	0.01402	73.89	1.522	0.01419	0.01378	0.01408
____ ZR	-0.00561	4.04	69.362	-0.00979	-0.00210	-0.00493

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 45

Date/Time: 11/16/2018 08:43

Sample Number: **ICSAB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.21474	1,054.91	0.879	0.21690	0.21345	0.21385
____ AL	511.19239	15,543.47	0.800	506.48810	513.21559	513.87348
____ AS	0.11037	13.21	0.362	0.11019	0.11083	0.11010
____ B	-0.02025	384.51	7.060	-0.01889	-0.02012	-0.02174
____ BA	0.51283	187,324.51	0.566	0.51152	0.51081	0.51615
____ BE	0.49907	64,782.50	0.552	0.49836	0.49675	0.50211
____ CA	506.85425	95,870.12	0.995	501.38584	511.32921	507.84769
____ CD	0.92369	4,342.60	0.463	0.92644	0.92587	0.91876
____ CO	0.45948	1,246.00	0.377	0.46065	0.46029	0.45749
____ CR	0.47903	1,635.95	0.706	0.47828	0.47608	0.48272
____ CU	0.53620	2,012.47	0.598	0.53288	0.53644	0.53928
____ FE	197.44257	16,648.22	0.994	195.21929	198.93027	198.17814
____ K	0.44744	92.20	12.931	0.41676	0.51417	0.41137
____ LI	-0.04644	39.98	9.930	-0.04182	-0.04645	-0.05105
____ MG	513.97415	204,781.68	1.123	508.18723	519.72920	514.00602
____ MN	0.50614	9,492.81	0.401	0.50445	0.50559	0.50839
____ MO	-0.00100	-0.85	127.650	-0.00144	0.00044	-0.00201
____ NA	0.45657	149.30	5.867	0.46370	0.42694	0.47907
____ NI	0.92401	1,187.80	0.248	0.92650	0.92352	0.92199
____ P	0.02422	3.83	29.879	0.03096	0.01657	0.02514
____ PB	0.51532	290.54	0.345	0.51333	0.51676	0.51585
____ S	-0.10272	1.33	13.627	-0.11807	-0.09943	-0.09066
____ SB	0.62088	132.40	1.175	0.62434	0.61250	0.62580
____ SE	0.53129	84.14	2.595	0.54610	0.52892	0.51884
____ SI	0.00792	1.60	153.619	0.02189	0.00209	-0.00024
____ SN	0.00198	1.69	98.889	0.00113	0.00422	0.00059
____ SR	-0.00080	5,460.83	20.832	-0.00066	-0.00098	-0.00075
____ TH	0.00566	5.07	464.228	0.02139	0.02028	-0.02469
____ TI	0.00053	14.94	32.866	0.00070	0.00052	0.00036
____ TL	0.08886	13.52	5.025	0.08414	0.09302	0.08941
____ V	0.49849	2,953.39	1.180	0.49635	0.49398	0.50515
____ W	0.00836	8.65	20.901	0.01032	0.00696	0.00781
____ Y1	3330.94690	3,330.95	0.194	3335.65643	3323.57764	3333.60664
____ Y2A	87747.79575	87,747.80	0.745	88096.57049	88153.53369	86993.28306
____ Y2R	3911.22960	3,911.23	1.089	3887.73425	3885.56198	3960.39259
____ ZN	1.00543	3,646.36	0.569	1.01007	1.00719	0.99904
____ ZR	-0.00798	0.20	31.510	-0.01071	-0.00750	-0.00574

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 46

Date/Time: 11/16/2018 08:45

Sample Number: **CCV**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	0.49747	2,652.26	0.204	0.49735	0.49652	0.49855
____ AL	25.84722	793.92	0.931	25.58243	26.05273	25.90650
____ AS	0.51252	97.83	1.401	0.51180	0.50573	0.52004
____ B	0.50663	1,701.08	0.314	0.50845	0.50594	0.50550
____ BA	0.50655	202,402.51	0.038	0.50676	0.50638	0.50651
____ BE	0.48462	68,792.31	0.172	0.48557	0.48423	0.48405
____ CA	25.41313	4,980.79	0.807	25.27887	25.64906	25.31145
____ CD	0.50307	2,532.51	0.921	0.50316	0.49839	0.50766
____ CO	0.49933	1,467.16	0.649	0.50022	0.49574	0.50203
____ CR	0.48627	1,816.59	0.427	0.48734	0.48759	0.48388
____ CU	0.51124	2,036.24	0.710	0.51363	0.51302	0.50706
____ FE	25.00158	2,241.86	1.057	24.83639	25.30636	24.86198
____ K	25.48013	2,841.83	0.780	25.46185	25.68743	25.29111
____ LI	0.51204	1,205.76	0.921	0.50659	0.51494	0.51457
____ MG	25.10665	10,832.83	0.917	24.91484	25.36183	25.04327
____ MN	0.51214	10,499.24	0.199	0.51331	0.51156	0.51153
____ MO	0.48588	831.94	0.732	0.48625	0.48216	0.48924
____ NA	25.01191	12,736.11	0.795	24.82650	25.22184	24.98740
____ NI	0.51108	715.46	0.909	0.51144	0.50626	0.51553
____ P	0.51644	88.00	1.730	0.52469	0.50696	0.51766
____ PB	0.49276	268.56	1.430	0.48988	0.48760	0.50079
____ S	25.41939	2,279.13	1.479	25.56113	24.99308	25.70396
____ SB	0.48606	112.24	1.645	0.48542	0.47840	0.49435
____ SE	0.51444	89.27	2.475	0.52840	0.50347	0.51145
____ SI	25.71266	1,355.80	0.580	25.78216	25.81438	25.54145
____ SN	0.47575	315.51	0.837	0.47574	0.47177	0.47974
____ SR	0.50140	214,327.86	0.270	0.50058	0.50065	0.50296
____ TH	0.46822	17.24	7.305	0.50769	0.44723	0.44975
____ TI	0.50671	7,332.51	0.508	0.50929	0.50670	0.50413
____ TL	0.49969	122.95	0.642	0.50151	0.49599	0.50158
____ V	0.49454	3,147.24	0.127	0.49446	0.49521	0.49396
____ W	0.50733	296.83	1.386	0.50577	0.50121	0.51501
____ Y1	3607.26427	3,607.26	0.706	3612.15878	3629.92201	3579.71203
____ Y2A	95956.38049	95,956.38	0.714	96506.06893	96173.74825	95189.32427
____ Y2R	3966.57443	3,966.57	1.066	4000.82220	3919.33473	3979.56635
____ ZN	0.50691	1,988.20	0.838	0.50689	0.50268	0.51117
____ ZR	0.44834	382.16	1.272	0.44486	0.45492	0.44524

LANCASTER LABORATORIES

Run Name: 1832001T75

Instrument ID: 23290

Tube: 47

Date/Time: 11/16/2018 08:48

Sample Number: **CCB**

ELEMENT	AVERAGE CONC (ppm)	AVERAGE INTENSITY	%RSD	INTEGRATIONS #1	#2	#3
____ AG	-0.00093	-12.77	154.798	-0.00260	-0.00004	-0.00016
____ AL	0.00768	9.02	348.015	0.00648	-0.01843	0.03500
____ AS	0.00325	-0.35	112.437	0.00528	-0.00097	0.00543
____ B	0.00529	18.46	19.279	0.00613	0.00559	0.00415
____ BA	0.00006	262.75	87.480	0.00012	0.00003	0.00003
____ BE	0.00014	-1.90	40.554	0.00020	0.00011	0.00009
____ CA	0.02292	10.67	31.012	0.03031	0.01613	0.02231
____ CD	0.00043	-1.52	45.983	0.00038	0.00027	0.00065
____ CO	0.00026	0.53	116.303	0.00059	0.00020	0.00000
____ CR	-0.00191	-6.53	22.510	-0.00232	-0.00146	-0.00196
____ CU	0.00051	-1.76	321.734	-0.00094	0.00229	0.00018
____ FE	0.02406	4.93	69.971	0.04350	0.01417	0.01451
____ K	0.28330	76.07	28.209	0.26776	0.21230	0.36985
____ LI	0.00527	23.58	101.340	0.01107	0.00421	0.00054
____ MG	0.03583	17.78	19.370	0.04246	0.03639	0.02862
____ MN	-0.00002	8.62	1001.310	-0.00021	0.00002	0.00014
____ MO	0.00009	0.98	33.487	0.00006	0.00011	0.00011
____ NA	0.15524	-3.12	4.674	0.15822	0.14696	0.16052
____ NI	0.00164	4.02	54.772	0.00060	0.00217	0.00214
____ P	0.00198	0.36	194.499	0.00462	0.00374	-0.00243
____ PB	-0.00224	-4.11	195.481	-0.00621	-0.00298	0.00247
____ S	0.00101	1.47	1536.973	0.01766	-0.00163	-0.01300
____ SB	0.00071	0.60	891.588	-0.00512	-0.00015	0.00739
____ SE	0.00417	-0.15	72.376	0.00194	0.00296	0.00761
____ SI	0.01515	2.02	129.483	0.00320	0.03780	0.00446
____ SN	-0.00005	0.50	2916.197	0.00130	-0.00132	-0.00012
____ SR	0.00018	-40.63	14.130	0.00016	0.00021	0.00016
____ TH	-0.02854	-0.90	65.189	-0.01570	-0.04988	-0.02005
____ TI	0.00054	17.07	54.689	0.00049	0.00086	0.00027
____ TL	0.00048	-1.53	274.002	-0.00094	0.00072	0.00167
____ V	0.00070	9.19	97.249	0.00142	0.00060	0.00007
____ W	-0.00015	-0.09	721.615	0.00111	-0.00069	-0.00087
____ Y1	3680.91524	3,680.92	0.596	3684.91151	3657.24928	3700.58494
____ Y2A	99168.03501	99,168.04	1.195	97902.11746	99350.76454	100251.22304
____ Y2R	3995.70833	3,995.71	0.800	4031.07500	3968.87500	3987.17500
____ ZN	-0.00039	6.21	54.880	-0.00015	-0.00046	-0.00056
____ ZR	-0.00762	-2.62	41.116	-0.01064	-0.00438	-0.00783

Extraction/Distillation/Digestion Logs

Metals in Liquid

LLENS Worksheet for SW846 Water

Batch# 18 315 10635 04

Start Time: 11/12/18 15:50 **End Time:** 11/12/18 19:50 **Hot Block:** Deena 1

Pipette ID: I43551C /1000

Spike/Reagent	Lot#	Volume Added(mL)
1:1 HCL	P18-295D	5.00
1:1 HNO3	P18-285B	2.00
ICP Spike 1A	1824912#16	1.00
ICP Spike 1B	1824913#16	1.00
LCS A1	1824912#16	1.00
LCS B1	1824913#16	1.00

Method Ref:

	SampleID	Date Due	ST	P	H	Method	PH<2	BC	Vessel Lot#	Location ID	Comments
1)	PBW	.							1807160		Filtered Reagent lot# P18-311B
2)	LCSW	.							1807160		Filtered Reagent lot# P18-311B
3)	9885543	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET35/A9	
4)	9885544	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET35/B8	
5)	9885545	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET35/E8	
6)	9885546	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET35/C8	
7)	9885547	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET35/D8	
8)	9885548	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET35/E9	
9)	9885549	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET35/B7	
10)	9885590	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET03/A2	
11)	9885591	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET35/A8	
12)	9885592	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET03/C2	
13)	9885593	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET03/C3	
14)	9885594	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET35/C10	
15)	9885595	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET14/A7	
16)	9885596	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET03/B1	
17)	9885597	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET35/B10	
18)	9885599	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET03/F2	
19)	9885600	11/15/18 18:03	WW	N7		SW-846 6010C	Y	800A	1807160	WMET03/A3	
20)	**9885681U**	11/15/18 10:35	WW	N7		SW-846 6010C	Y	800A	1807160	WMET1/D10	
21)	**9885682R**	11/15/18 10:35	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/A7	
22)	**9885683M**	11/15/18 10:35	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/D9	

Prep Employee:1364 D/I _____

11/12/2018

	SampleID	Date Due	ST	P	H	Method	PH<2	BC	Vessel Lot#	Location ID	Comments
23)	**9885684D**	11/15/18 10:35	WW	N7		SW-846 6010C		015A	1807160		
24)	9885685FD	11/15/18 10:35	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/C7	
25)	9885686	11/15/18 10:35	WW	N7		SW-846 6010C	Y	800A	1807160	WMET01/B9	

Batch# 18 315 1063 504

LLENS Batch Chronology and Change Log - SW846 Water

	Operation	Instrument	Operation Date	ANALYST
1)	Batch Creation		11/11/18 11:53	1364
2)	Sample Vol		11/12/18 17:13	1364
3)	Final Vol	CLEAR	11/12/18 17:13	1364
4)	Trial		11/12/18 17:13	1364
5)	Upload Prep	US19PCC0669	11/12/18 19:51	1364

Sample ID	Analysis	D	Operation	Measurement	Original Entry				Data Changed		
					Date/Time	Data	Units	Analyst	Date/Time	Analyst	Reason

Analysis: 0635 SW846 Water

Batch# 18 315 1063 504

Sample ID	Due Date	P	EPA#	SDG#	Initial Volume	Final Volume	Trial
PBW					50.0000	50.0000	1
LCSW					1.0000	1.0000	1
9885543	11/15/18	N7			50.0000	50.0000	1
9885544	11/15/18	N7			50.0000	50.0000	1
9885545	11/15/18	N7			50.0000	50.0000	1
9885546	11/15/18	N7			50.0000	50.0000	1
9885547	11/15/18	N7			50.0000	50.0000	1
9885548	11/15/18	N7			50.0000	50.0000	1
9885549	11/15/18	N7			50.0000	50.0000	1
9885590	11/15/18	N7			50.0000	50.0000	1
9885591	11/15/18	N7			50.0000	50.0000	1
9885592	11/15/18	N7			50.0000	50.0000	1
9885593	11/15/18	N7			50.0000	50.0000	1
9885594	11/15/18	N7			50.0000	50.0000	1
9885595	11/15/18	N7			50.0000	50.0000	1
9885596	11/15/18	N7			50.0000	50.0000	1
9885597	11/15/18	N7			50.0000	50.0000	1
9885599	11/15/18	N7		EB	50.0000	50.0000	1
9885600	11/15/18	N7		TB	50.0000	50.0000	1
9885681U	11/15/18	N7	OR226	CBD54-02BKG	50.0000	50.0000	1
9885682R	11/15/18	N7	OR226	CBD54-02MS	50.0000	50.0000	1
9885683M	11/15/18	N7	OR226	CBD54-02MSD	50.0000	50.0000	1
9885684D	11/15/18	N7	OR226	CBD54-02DUP	50.0000	50.0000	1
9885685FD	11/15/18	N7	OR3WD	CBD54-03FD	50.0000	50.0000	1
9885686	11/15/18	N7	OR365	CBD54-04	50.0000	50.0000	1