Reliance Environmental, Inc

130 E. Chestnut Street, Lancaster, PA 17602 (717) 735-9508
Lancaster, PA – Sarasota, FL

February 22, 2013

Mr. Jamie Ascher
NYSDEC – Region 1
SUNY at Stony Brook
50 Circle Road
Stony Brook, NY 11790-3409

RE: Remedial Investigation Report Addendum – Data Update
Oceanside Plaza
Site ID No. C130158
3131-3221 Long Beach Road, Oceanside, NY 11572
Nassau County

Dear Mr. Ascher:

The following provides a summary of post-remediation ground water monitoring well sampling and indoor air quality/sub-slab vapor sampling conducted at the above referenced location since the submittal of the Remedial Investigation Report (December 2010, Revised August 2012). The activities are associated with tetrachloroethene contaminated soils identified in the direct vicinity of the former Jef-El Dry Cleaner facility located within the Oceanside Plaza.

POST-REMEDIATION GROUND WATER SAMPLING

October 18, 2012 Sampling Event

On October 18, 2012, Reliance Environmental, Inc. (REI) performed the final planned ground water sampling event. REI sampled ground water monitoring wells MW-4 (source area well) and MW-5 (downgradient well) (Figure 1). These wells have been sampled on a quarterly basis since July 2009. All ground water monitoring well sampling protocol followed the approved procedures presented in the Quality Assurance Project Plan (Appendix C of the Remedial Investigation Workplan, May 2007). Groundwater samples were submitted for Priority Pollutant List Volatile Organic Compounds + Xylene (total) using EPA Method SW-846 8260.

Laboratory analysis reported all analyzed parameters as non-detect in ground water monitoring well MW-4 and duplicate sample BKO-DUP (collected from well MW-4). As such all concentrations were reported below the NYSDEC Water Quality Standards Surface Waters and Ground Water (Table 1, 6NYCRR Part 703.5).

Laboratory analysis reported the presence of tetrachloroethene (10 µg/l) and cis-1, 2-dichloroethene (11 µg/l) in ground water monitoring well MW-5. Both contaminant concentrations were reported in exceedance of the NYSDEC Water Quality Standards Surface Waters and Ground Water (Table 1, 6NYCRR Part 703.5). All remaining analyzed parameters were reported as non-detect in these two samples.

Laboratory analytical results for all ground water sampling events are summarized in Table 2 and displayed in Figures A-1 through A-2, Appendix A. All laboratory analytical data sheets (electronic copies) are provided in Appendix B.

Ground Water Gradient

During each ground water monitoring event, depth to ground water readings were collected from the site wells for determining ground water flow direction. Ground water has been calculated to flow in a south/southeastern direction beneath the subject property at an average gradient of approximately 0.00080 ft/ft (Figure 2). All ground water gradient data is summarized in Table 3.

Data Usability

Following receipt of data for the ground water sampling event, a Data Usability Summary Report (DUSR) was prepared by Data Validation Services (an independent data validator). A copy of the DUSR is provided in Appendix C.

GROUND WATER CONTAMINANT ANALYSIS TRENDS

MW-4 - Tetrachloroethene

A review of the laboratory data indicates decreasing tetrachloroethene concentrations in well MW-4 prior to the exterior contaminated soil excavation activities (July 2009) - from a high of 360 µg/l in November 2005 to 77 µg/l in July 2009. Concentrations continued to decrease immediately following the excavation activities, to non-detectable levels (January, April and October 2010). Tetrachloroethene concentrations rebounded slightly, from January 2011 and through April 2012; however, laboratory analysis has reported tetrachloroethene as non-detect in the well during the July 2012 and October 2012 sampling events.

MW-5 - Tetrachloroethene

A review of the laboratory data indicates decreasing tetrachloroethene concentrations in well MW-5, from July 2009 through July 2010. Laboratory analysis reported tetrachloroethene as non-detect during the January 2011 and July 2011 sampling events, with concentrations rebounding slightly in October 2011. Concentrations have since remained relatively constant in the well since October 2011, ranging from 8 µg/l to 14 µg/l.

Trend analysis indicates a decreasing environment (Figure 3), with concentrations leveling out in 2011 and slightly increasing thereafter. This increase mirrors those seen in MW-4 during the same timeframe, and have subsequently declined to non-detect levels.

MW-5 - cis-1,2-Dichloroethene

Cis-1,2-Dichloroethene has only ever been reported in well MW-5, with a high concentration of 80 µg/l being reported in January 2012. Contaminant concentrations have since decreased, with concentrations ranging from 9 µg/l to 11 µg/l in the April 2012, July 2012 and October 2012 sampling events.

Trend analysis indicates a relatively steady-state environment (Figure 4). However, based on the fact that the compound was most likely the result of tetrachloroethene degradation and that the compound readily degrades at a rate faster than tetrachloroethene, the decreasing trend is anticipated to continue.

Sitewide

The 7 years (3 years – MW-5) of ground water monitoring data clearly indicate:

- A 99% reduction of tetrachloroethene concentrations in MW-4 (source area well).
  - Tetrachloroethene concentrations have been reported as non-detect (<5.0 µg/l) during the previous two sampling events.
  - No other parameters have ever been reported in the well.
- A 94% reduction of tetrachloroethene concentrations in MW-5 (downgradient well).
  - Tetrachloroethene appears to have obtained asymptotic levels/trends, as concentrations have remained consistent (between 8 µg/l and 14 µg/l) for the previous five consecutive quarters.
  - Cis-1,2-dichloroethene and vinyl chloride, tetrachloroethene degradation products, are the other parameters to have been reported in the well at concentrations exceeding the NYSDEC Water Quality Standards.
  - Cis-1,2-dichloroethene appears to have obtained asymptotic levels/trends, as concentrations have remained consistent (between 9 µg/l and 11 µg/l) for the previous three consecutive quarters.
  - Vinyl chloride concentrations have been reported as non-detect (<5.0 µg/l) during the previous three sampling events.

No further action/monitoring is recommended for the identified ground water contamination beyond the October 2012 sampling event. Additionally, upon approval of this Report, the five on-site ground water monitoring wells will thereafter be abandoned in accordance with NYSDEC regulations. It is anticipated that a groundwater use restriction may be utilized, however, this will be assessed and detailed in the FER.

INDOOR AIR QUALITY AND SUB-SLAB VAPOR SAMPLING

On January 13, 2012, March 1, 2012 and December 18, 2012, Roux Associates, Inc. collected indoor air quality samples, sub-slab vapor samples and an outdoor (ambient) air sample from the following locations (Figure 5):

Indoor Air Quality	Sub-Slab Vapor	Ambient
Chapter One Books, Inc. (IAQ-Book)	Chapter One Books, Inc. (VS-Book)	Protass Luggage Store (rear)
Vino 100 (IAQ-Vac)	Vino 100 (VS-Vac)	
	Jef-El Dry Cleaners (DCF)	
	Jef-El Dry Cleaners (DCR)	
	Jef-El Dry Cleaners (MRE)	
	Jef-El Dry Cleaners (Fence)	

Sample Collection Procedures

As an initial step to collecting sub-slab vapor samples, three volumes of air were purged from the Teflon™ sampling tube using a low flow air pump at a rate of 100 ml/m. During purging activities a tracer gas (i.e., helium) was used to verify that the ambient air from inside the retail spaces would not dilute the sub-slab or soil vapor sample that will be collected. An enclosure (i.e., clean empty five-gallon bucket) was inverted over the sub-slab sampling point. Ultra-high purity (laboratory grade) helium was then

introduced into the bucket, creating a helium-enriched environment immediately over the borehole. A tedlar sampling bag was attached to the low-flow air pump and filled with the purge vapor as the helium was added to the enclosure over the top of the borehole. The purge volume in the tedlar bag was then screened for the tracer gas (helium) using a direct read field meter. The atmosphere in the enclosure was also screened for helium using a direct read field meter. The helium concentration in the tedlar bag was compared to the concentration in the enclosure. If the helium concentration in the tedlar bag was greater than 20 percent of the helium concentration in the enclosure, the seals of the sampling equipment would have been verified and the tubing would have been purged again until the helium concentration in the tedlar bag is less than 20 percent of the concentration in the enclosure. Note that at both sampling locations, the seals passed the helium tracer test on the first attempt, assuring that a true, representative sub-slab vapor sample that has not been influenced by ambient air was collected.

Following purging activities, a laboratory cleaned and evacuated six-liter SUMMA canister was then attached to the top of the Teflon™ tubing above land surface. The SUMMA canister was equipped with a laboratory provided flow regulator that was pre-calibrated to collect samples over a continuous 8-hour time period. The valve on the SUMMA canister was opened, allowing for the collection of a sub-slab vapor sample.

Following sample collection (but prior to sealing the temporary monitoring points), the soil vapor extraction (SVE) system was restarted and allowed to operate for a period of 30 minutes to allow conditions to equilibrate. Following this 30 minute period, vacuum response measurements were collected at each temporary point. There was no vacuum response detected at either sub-slab vapor point, indicating that these locations are outside the Radius of Influence (ROI) of the SVE system. Following the collection of vacuum response measurements, the tubing and screens were removed, and the temporary boreholes were sealed with cement. The SVE system was left on following the completion of this sampling event.

Indoor air quality and outdoor (ambient) air samples were collected concurrently with the sub-slab vapor samples described above. The samples were collected using a 6-liter SUMMA canister equipped with a pre-calibrated flow regulator set to collect the sample over an 8-hour period.

Indoor air quality, sub-slab vapor and ambient air samples were submitted to TestAmerica Laboratories, Inc. of Burlington, Vermont under chain-of-custody procedures for analysis. All samples were submitted for analysis for select VOCs (vinyl chloride, 1,1-dichloroethene, trans-1,2-dichloroethene, cis-1,2-dichloroethene, trichloroethene, and tetrachloroethene using United States Environmental Protection Agency Method TO-15. Laboratory analytical results are summarized in Table 4.

Sample Results – Indoor Air Quality

Laboratory analysis reported the presence of tetrachloroethene in the indoor air quality samples collected from the Chapter One Books, Inc. and Vino 100 stores during all three sample events. Concentrations in the Chapter One Books, Inc. store ranged from 2.3 µg/m^3 (January 13, 2012) to 32 µg/m^3 (March 1, 2012). Concentrations in the Vino 100 store ranged from 5.2 µg/m^3 (January 13, 2012) to 28 µg/m^3 (March 1, 2012). All concentrations were reported below the Air Guideline Value of 100 µg/m^3 for tetrachloroethene, as set forth in the New York State Department of Health “Guidance for Evaluating Soil Vapor Intrusion in the State of New York”, dated October 2006.

Trichloroethene was also detected in the Chapter One Books, Inc. store on December 18, 2012, at a concentration of 0.33 µg/m^3. All concentrations were reported below the Air Guideline Value of 5 µg/m^3 for trichloroethene, as set forth in the New York State Department of Health "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", dated October 2006.

Sample Results – Sub-Slab Vapor

Tetrachloroethene - Laboratory analysis reported the presence of tetrachloroethene at each sub-slab vapor sample location. Concentrations ranged from a low of non-detect at location VS-Fence (December 18, 2012) to a high of 21,100 µg/m^3 (March 1, 2012) at sample location VS-Vac.

Trichloroethene - Laboratory analysis reported the presence of trichloroethene at each sub-slab vapor sample location. Concentrations ranged from a low of non-detect at multiple locations to a high of 97.8 µg/m^3 (March 1, 2012) at sample location VS-Vac.

A review of the laboratory analytical data indicates a steady reduction of both tetrachloroethene and trichloroethene concentrations beneath Chapter One Books, Inc. and the center/rear of the Jef-El Dry Cleaners (DRC and MRE) during the three sampling events. Conversely, parameter concentrations beneath Vino 100 and front/exterior of the Jef-El Dry Cleaners (DCF and Fence) showed and initial increase in concentrations (between January and March 2012) followed by a decrease in concentrations (between March and December 2012). It should be noted that the State of New York does not have any standards, criteria or guidance values for concentrations of volatile chemicals in subsurface vapors (either soil vapor or sub-slab vapor).

Sample Results – Ambient

Laboratory analysis reported the presence of tetrachloroethene in the ambient samples collected in all events since 2010. Concentrations ranged from a low of 0.57 µg/m^3 (March 1, 2012) to a high of 1.2 µg/m^3 (December 18, 2012).

Data Usability

Following receipt of data for the ground water sampling event, a Data Usability Summary Report (DUSR) was prepared by Data Validation Services (an independent data validator). A copy of the DUSR and laboratory analytical data sheets are provided in Appendix D.

INDOOR AIR QUALITY AND SUB-SLAB VAPOR CONTAMINANT ANALYSIS TRENDS

Contaminant Analysis

A review of the data indicates that tetrachloroethene concentrations at a majority of the indoor air quality and sub-slab vapor sample locations showed a spike during the March 2012 sampling event, followed by a significant decrease in the December 2012 sampling event. A review of remedial operations indicated that the SVE system was deactivated by the new proprietor of the Jef-El Dry Cleaners between the January 2012 and March 2012 sampling events. As such, the system was subsequently modified to eliminate the possibility of tenants deactivating SVE operation.

Even with the system being deactivated, neither tetrachloroethene nor trichloroethene were reported above the air guideline values (100 µg/m3 – tetrachloroethene and 5 µg/m3 – trichloroethene), as presented in the New York State Department of Health Final Guidance for Evaluating Soil Vapor in the State of New York (October 2006). Essentially, the findings of the indoor air quality and sub-slab vapor sampling indicate that the existing system is protective of the IAQ.

If you have any questions and/or comments regarding this submission, please feel free to contact me at (717) 735-9508.

Sincerely,
RELIANCE ENVIRONMENTAL, INC.

Mark E. Zunich
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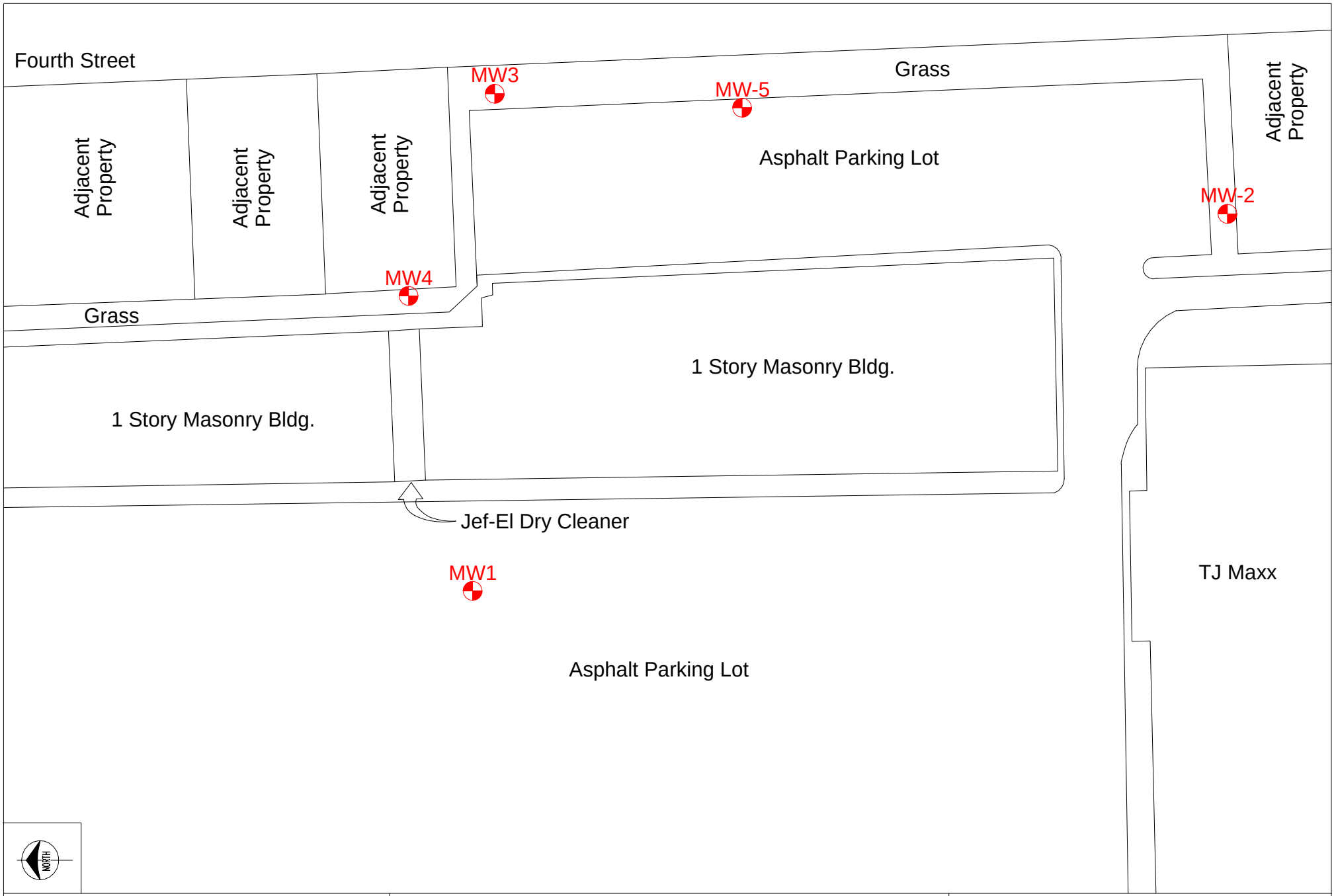
Michael P. Raffoni, P.G.
Principal Geologist
mpr@relianceenv.com

cc: M. Kemp
J. Brooks, Esq.

FIGURES



Reliance Environmental, Inc
130 East Chestnut Street, Lancaster, PA 17602
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www.relianceenv.com

Figure 1:
Ground Water Monitoring Well Location Map

Oceanside Plaza
3131-3221 Long Beach Road
Town of Hemnpstead, Nassau County, NY
Scale: 1" ~ 60'

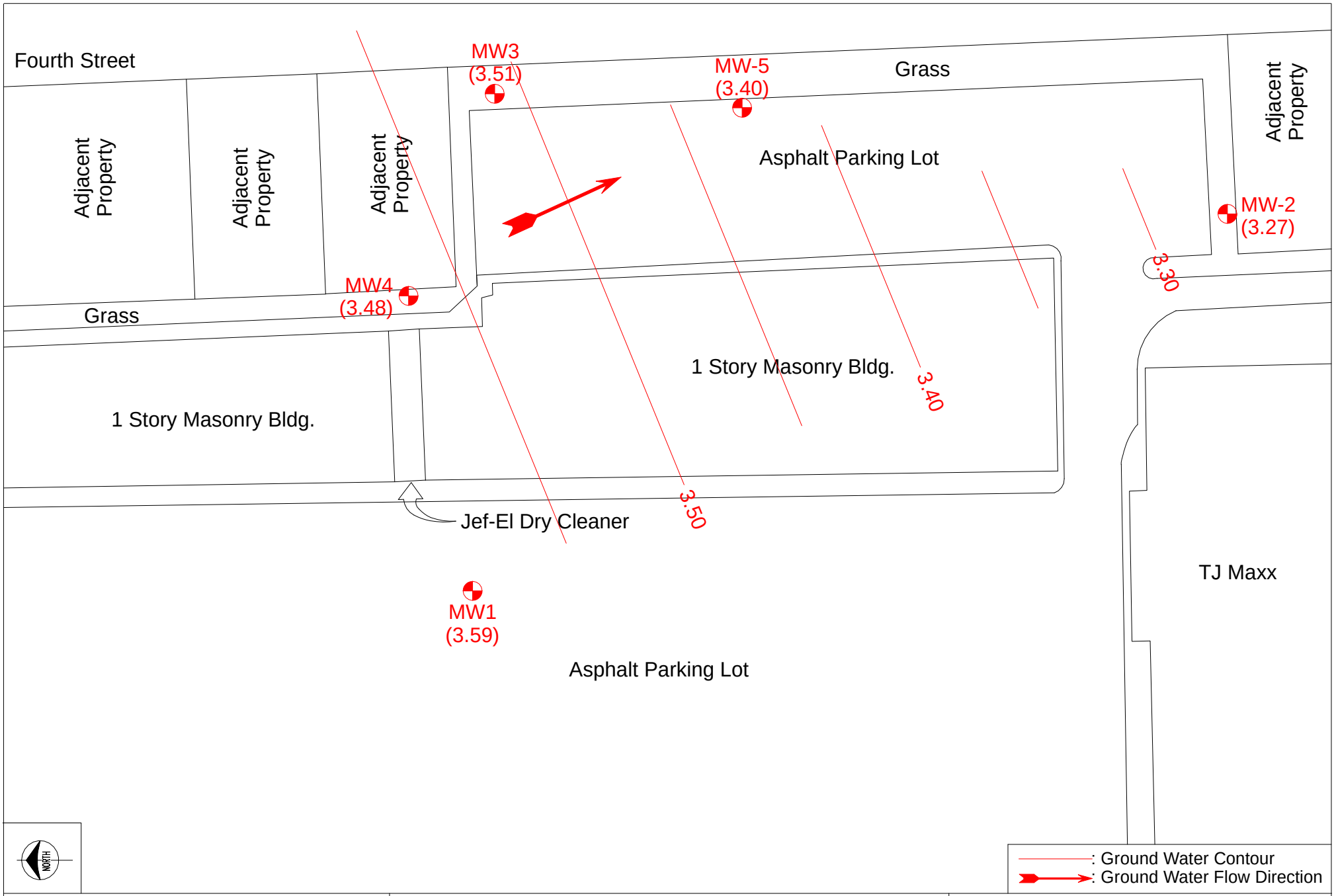

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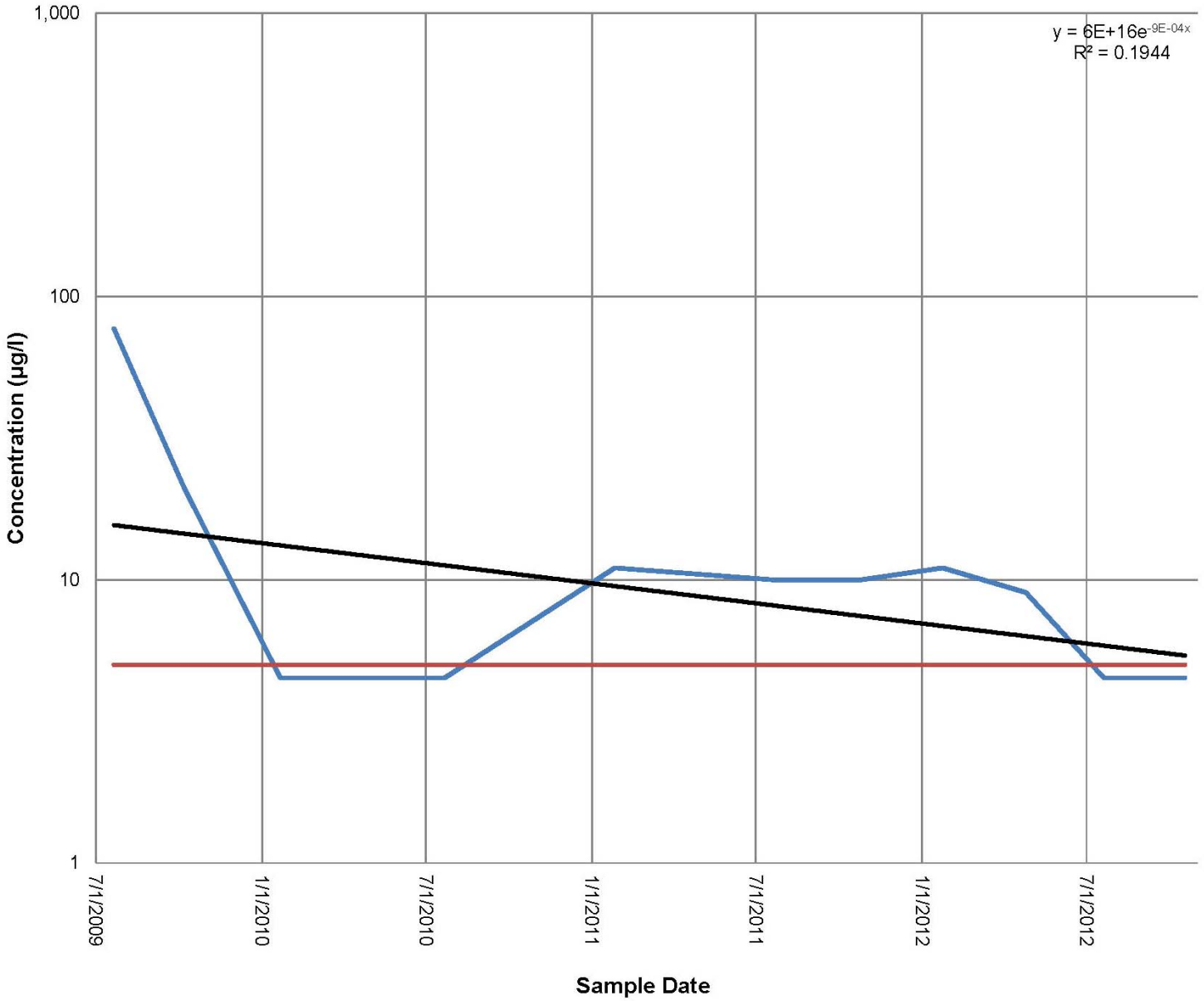
Figure 2:
Ground Water Gradient Map
October 18, 2012

Oceanside Plaza
3131-3221 Long Beach Road
Town of Hemnpstead, Nassau County, NY
Scale: 1" ~ 60'



: Tetrachloroethene
: Ground Water Standard/Criteria
: Trend/Regression Analysis

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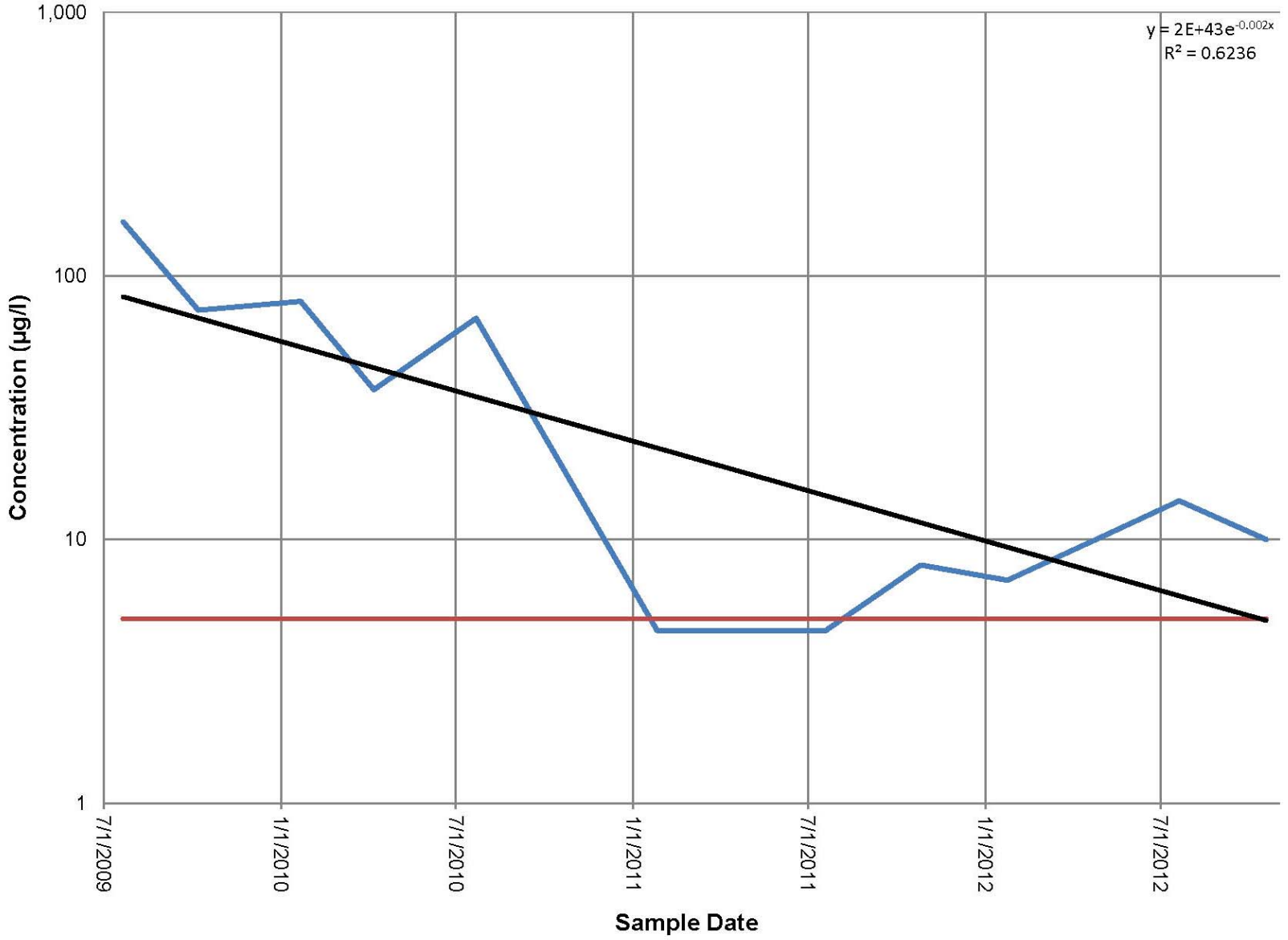
Figure 3:
Tetrachloroethene Concentrations in MW-4

Oceanside Plaza
3131-3221 Long Beach Road
Town of Hemnpstead, Nassau County, NY



: Tetrachloroethene
: Ground Water Standard/Criteria
: Trend/Regression Analysis

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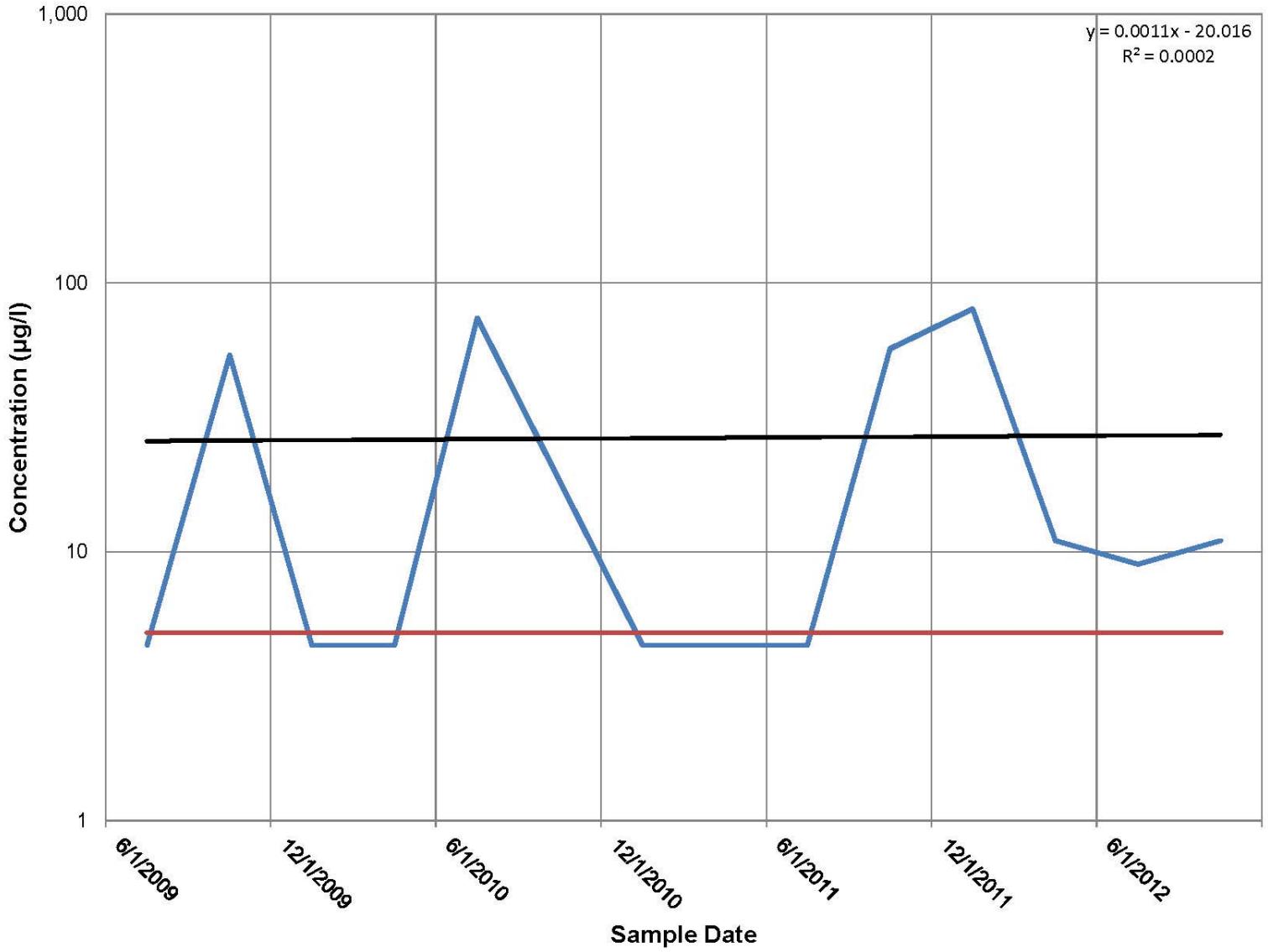
Figure 4:
Tetrachloroethene Concentrations in MW-5

Oceanside Plaza
3131-3221 Long Beach Road
Town of Hemnpstead, Nassau County, NY



: cis-1,2-Dichloroethene
: Ground Water Standard/Criteria
: Trend/Regression Analysis

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Figure 5:
cis-1,2-Dichloroethene Concentrations in MW-5

Oceanside Plaza
3131-3221 Long Beach Road
Town of Hemnpstead, Nassau County, NY

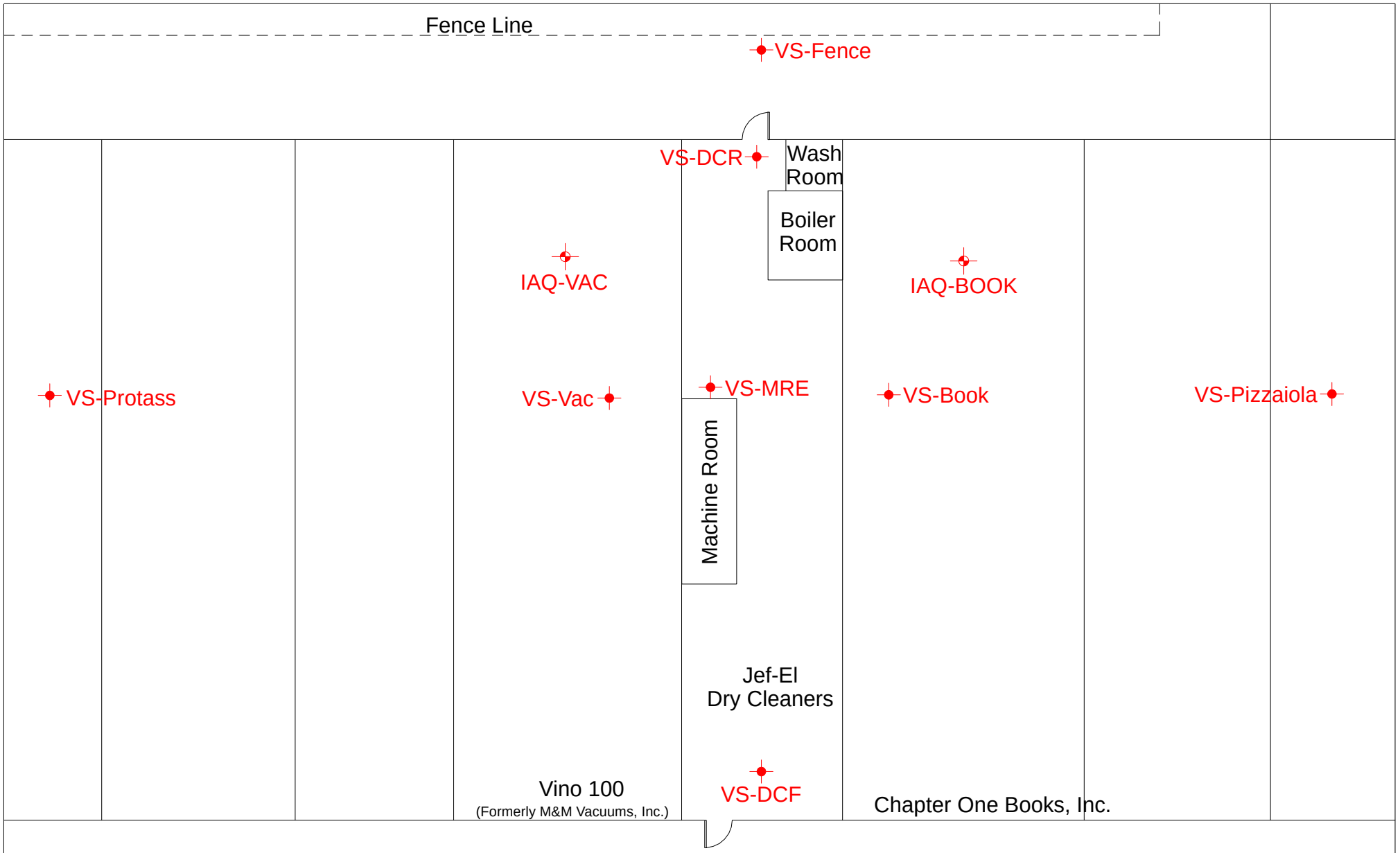

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Figure 6:
Indoor Air Quality and Sub-Slab Vapor Sample Location Map

Oceanside Plaza
3131-3221 Long Beach Road
Town of Hemnpstead, Nassau County, NY
Not to Scale

TABLES

TABLE 1 Ground Water Monitoring Well Sampling - Field Parameters (October 18, 2012) Oceanside Plaza, 3131-3221 Long Beach Road, Town of Hempstead, Nassau County, New York							
Monitoring Well	Purge Time (minutes)	Purge Rate (gal./min.)	pH (S.U.)	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/l)	Temperature (Celsius)	ORP (mV)
MW-4	0	0.30	6.28	0.191	3.89	18.0	78
	5		6.13	0.189	2.45	18.4	94
	10		6.11	0.190	2.14	18.5	100
	15		6.09	0.189	2.03	18.5	105
MW-5	0	0.30	6.58	0.422	0.46	21.6	28
	5		6.38	0.483	0.28	21.9	44
	10		6.42	0.492	0.14	21.8	32
	15		6.52	0.490	0.04	21.8	1

TABLE 2
Ground Water Monitoring Well Sampling - Laboratory Analytical Results
Oceanside Plaza, 3131-3221 Long Beach Road, Town of Hempstead, Nassau County

Sample Location	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene (µg/l)	cis-1,2-Dichloroethene (µg/l)	Tetrachloroethene (µg/l)	trans-1,2-Dichloroethene (µg/l)	Trichloroethene (µg/l)	Vinyl Chloride (µg/l)	MTBE (µg/l)
Ground Water Standards/Criteria*	na	na	5.0	5.0	5.0	5.0	5.0	2.0	10**
MW-1	11/16/2005	5.54	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	2/22/2006	5.77	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	5.79	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	10/1/2007	6.51	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
MW-2	11/16/2005	6.06	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	**12**
	2/22/2006	6.28	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	6.23	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	**13**
	10/1/2007	6.99	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
MW-3	11/16/2005	6.53	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	2/22/2006	6.74	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	6.78	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	10/1/2007	7.48	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA

TABLE 2
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Oceanside Plaza, 3131-3221 Long Beach Road, Town of Hempstead, Nassau County

Sample Location	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene (µg/l)	cis-1,2-Dichloroethene (µg/l)	Tetrachloroethene (µg/l)	trans-1,2-Dichloroethene (µg/l)	Trichloroethene (µg/l)	Vinyl Chloride (µg/l)	MTBE (µg/l)
Ground Water Standards/Criteria*	na	na	5.0	5.0	5.0	5.0	5.0	2.0	10**
MW-4	11/16/2005	6.60	<2.0	<2.0	**360**	<2.0	<1.0	<2.0	<2.0
	2/22/2006	6.82	<2.0	<2.0	**230**	<2.0	<1.0	<2.0	<2.0
	5/17/2006	6.84	<2.0	<2.0	**100**	<2.0	<1.0	<2.0	<2.0
	10/1/2007	7.57	<5.0	<5.0	**110**	<5.0	<5.0	<5.0	NA
	7/21/2009	6.90	<0.8	<0.8	**77**	<0.8	<1.0	<1.0	NA
	10/7/2009	7.33	<5.0	<5.0	**21**	<5.0	<5.0	<5.0	NA
	1/21/2010	7.09	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/7/2010	5.95	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/22/2010	7.53	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/26/2011	7.05	<5.0	<5.0	**11**	<5.0	<5.0	<5.0	NA
	7/19/2011	7.49	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	NA
	10/26/2011	7.00	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	NA
	1/24/2012	7.13	<5.0	<5.0	**11**	<5.0	<5.0	<5.0	NA
	4/25/2012	7.23	<5.0	<5.0	**9**	<5.0	<5.0	<5.0	NA
	7/20/2012	7.21	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/18/2012	7.46	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA

TABLE 2
Ground Water Monitoring Well Sampling - Laboratory Analytical Results
Oceanside Plaza, 3131-3221 Long Beach Road, Town of Hempstead, Nassau County

Sample Location	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene (µg/l)	cis-1,2-Dichloroethene (µg/l)	Tetrachloroethene (µg/l)	trans-1,2-Dichloroethene (µg/l)	Trichloroethene (µg/l)	Vinyl Chloride (µg/l)	MTBE (µg/l)
Ground Water Standards/Criteria*	na	na	5.0	5.0	5.0	5.0	5.0	2.0	10**
MW-5	7/21/2009	6.44	<0.8	<0.8	**160**	<0.8	1.00	<1.0	NA
	10/7/2009	6.88	<5.0	**54**	**74**	<5.0	<5.0	**17**	NA
	1/21/2010	6.64	<5.0	<5.0	**80**	<5.0	<5.0	<5.0	NA
	4/7/2010	5.49	<5.0	<5.0	**37**	<5.0	<5.0	<5.0	NA
	7/22/2010	7.06	<5.0	**74**	**69**	<5.0	<5.0	<5.0	NA
	1/26/2011	6.56	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/19/2011	7.03	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/26/2011	6.55	<5.0	**57**	**8**	<5.0	<5.0	**13**	NA
	1/24/2012	6.67	<5.0	**80**	**7**	<5.0	<5.0	**10**	NA
	4/25/2012	6.76	<5.0	**11**	**10**	<5.0	<5.0	<5.0	NA
	7/20/2012	6.75	<5.0	**9**	**14**	<5.0	<5.0	<5.0	NA
	10/18/2012	6.99	<5.0	**11**	**10**	<5.0	<5.0	<5.0	NA

TABLE 2
Ground Water Monitoring Well Sampling - Laboratory Analytical Results
Oceanside Plaza, 3131-3221 Long Beach Road, Town of Hempstead, Nassau County

Sample Location	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene (µg/l)	cis-1,2-Dichloroethene (µg/l)	Tetrachloroethene (µg/l)	trans-1,2-Dichloroethene (µg/l)	Trichloroethene (µg/l)	Vinyl Chloride (µg/l)	MTBE (µg/l)
Ground Water Standards/Criteria*	na	na	5.0	5.0	5.0	5.0	5.0	2.0	10**
Duplicate (MW-4)	10/1/2007***	na	<5.0	<5.0	**160**	<5.0	<5.0	<5.0	NA
	7/21/2009***	na	<0.8	<0.8	**75**	<0.8	<1.0	<1.0	NA
	10/7/2009***	na	<5.0	<5.0	**20**	<5.0	<5.0	<5.0	NA
	1/21/2010***	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/7/2010***	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/22/2010***	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/26/2011***	na	<5.0	<5.0	**13**	<5.0	<5.0	<5.0	NA
	7/19/2011***	na	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	NA
	10/26/2011***	na	<5.0	<5.0	**10**	<5.0	<5.0	<5.0	NA
	1/24/2012***	na	<5.0	<5.0	**12**	<5.0	<5.0	<5.0	NA
	4/25/2012***	na	<5.0	<5.0	**9**	<5.0	<5.0	<5.0	NA
	7/20/2012***	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/18/2012***	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA

TABLE 2
Ground Water Monitoring Well Sampling - Laboratory Analytical Results
Oceanside Plaza, 3131-3221 Long Beach Road, Town of Hempstead, Nassau County

Sample Location	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene (µg/l)	cis-1,2-Dichloroethene (µg/l)	Tetrachloroethene (µg/l)	trans-1,2-Dichloroethene (µg/l)	Trichloroethene (µg/l)	Vinyl Chloride (µg/l)	MTBE (µg/l)
Ground Water Standards/Criteria*	na	na	5.0	5.0	5.0	5.0	5.0	2.0	10**
Field Blank	11/16/2005	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	2/22/2006	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	10/1/2007	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/21/2009	na	<0.8	<0.8	<0.8	<0.8	<1.0	<1.0	NA
	10/7/2009	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/21/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/7/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/22/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/26/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/19/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/26/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/24/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/25/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/20/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/18/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA

TABLE 2
Ground Water Monitoring Well Sampling - Laboratory Analytical Results
Oceanside Plaza, 3131-3221 Long Beach Road, Town of Hempstead, Nassau County

Sample Location	Sample Date	Depth-to Water (feet)	1,1-Dichloroethene (µg/l)	cis-1,2-Dichloroethene (µg/l)	Tetrachloroethene (µg/l)	trans-1,2-Dichloroethene (µg/l)	Trichloroethene (µg/l)	Vinyl Chloride (µg/l)	MTBE (µg/l)
Ground Water Standards/Criteria*	na	na	5.0	5.0	5.0	5.0	5.0	2.0	10**
Trip Blank	11/16/2005	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	2/22/2006	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	5/17/2006	na	<2.0	<2.0	<1.0	<2.0	<1.0	<2.0	<2.0
	10/1/2007	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/21/2009	na	<0.8	<0.8	<0.8	<0.8	<1.0	<1.0	NA
	10/7/2009	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/21/2020	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/7/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/22/2010	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/26/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/19/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/26/2011	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	1/24/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	4/25/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	7/20/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
	10/18/2012	na	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA

BOLD = Exceeds the TAGM regulated levels.

na = Not applicable.

NA = Not Analyzed.

* = Levels referenced in TAGM 4046.

** = STARS Memo #1: Petroleum Contaminated Soil Guidance Policy (Ground Water Standards/Criteria).

*** = Duplicate of ground water monitoring well MW-4.

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TABLE 3
Ground Water Gradient Data
Oceanside Plaza, 3131-3221 Long Beach Road, Town of Hempstead, Nassau County

Monitoring Well	Sample Date	Top-of-Casing Elevation (feet)	Depth-to-Water (feet)	Ground Water Elevation (feet)
MW-1	11/16/2005	9.98	5.54	4.44
	2/22/2006		5.77	4.21
	5/17/2006		5.79	4.19
	10/1/2007		6.51	3.47
	7/21/2009		5.82	4.16
	1/21/2010		6.00	3.98
	4/7/2010		4.89	5.09
	7/22/2010		6.46	3.52
	1/26/2011		5.96	4.02
	7/19/2011		6.41	3.57
	10/26/2011		5.89	4.09
	1/24/2012		6.04	3.94
	4/25/2012		6.17	3.81
	7/20/2012		6.13	3.85
	10/18/2013		6.39	3.59
MW-2	11/16/2005	10.14	6.06	4.08
	2/22/2006		6.28	3.86
	5/17/2006		6.23	3.91
	10/1/2007		6.99	3.15
	7/21/2009		6.34	3.80
	10/7/2009		6.75	3.39
	1/21/2010		6.52	3.62
	4/7/2010		5.40	4.74
	7/22/2010		6.95	3.19
	7/19/2011		6.93	3.21
	10/26/2011		6.44	3.70
	1/24/2012		6.61	3.53
	4/25/2012		6.60	3.54
	7/20/2012		6.65	3.49
	10/18/2013		6.87	3.27

TABLE 3
Ground Water Gradient Data
Oceanside Plaza, 3131-3221 Long Beach Road, Town of Hempstead, Nassau County

Monitoring Well	Sample Date	Top-of-Casing Elevation (feet)	Depth-to-Water (feet)	Ground Water Elevation (feet)
MW-3	11/16/2005	10.83	6.53	4.30
	2/22/2006		6.74	4.09
	5/17/2006		6.78	4.05
	10/1/2007		7.48	3.35
	7/21/2009		6.82	4.01
	10/7/2009		7.26	3.57
	1/21/2010		6.99	3.84
	4/7/2010		5.87	4.96
	7/22/2010		7.44	3.39
	7/19/2011		7.39	3.44
	10/26/2011		6.90	3.93
	1/24/2012		7.10	3.73
	4/25/2012		7.13	3.70
	7/20/2012		7.11	3.72
	10/18/2013		7.32	3.51
MW-4	11/16/2005	10.94	6.60	4.34
	2/22/2006		6.82	4.12
	5/17/2006		6.84	4.10
	10/1/2007		7.57	3.37
	7/21/2009		6.90	4.04
	10/7/2009		7.33	3.61
	1/21/2010		7.09	3.85
	4/7/2010		5.95	4.99
	7/22/2010		7.53	3.41
	1/26/2011		7.05	3.89
	7/19/2011		7.49	3.45
	10/26/2011		7.00	3.94
	1/24/2012		7.13	3.81
	4/25/2012		7.23	3.71
	7/20/2012		7.21	3.73
	10/18/2013		7.46	3.48

TABLE 3
Ground Water Gradient Data
Oceanside Plaza, 3131-3221 Long Beach Road, Town of Hempstead, Nassau County

Monitoring Well	Sample Date	Top-of-Casing Elevation (feet)	Depth-to-Water (feet)	Ground Water Elevation (feet)
MW-5	7/21/2009	10.39	6.44	3.95
	10/7/2009		6.88	3.51
	1/21/2010		6.64	3.75
	4/7/2010		5.49	4.90
	7/22/2010		7.06	3.33
	1/26/2011		6.56	3.83
	7/19/2011		7.03	3.36
	10/26/2011		6.55	3.84
	1/24/2012		6.67	3.72
	4/25/2012		6.76	3.63
	7/20/2012		6.75	3.64
	10/18/2013		6.99	3.40

TABLE 4

Indoor Air Quality and Sub-Slab Vapor Sampling - Laboratory Analytical Results

Oceanside Plaza, 3131-3221Long Beach Road, Town of Hempstead, Nassau County

Sample Location	Sample Date	1,1-Dichloroethene ($\mu g/m^3$)	1,2-Dichloroethene ($\mu g/m^3$)	cis-1,2-Dichloroethene ($\mu g/m^3$)	Tetrachloroethene ($\mu g/m^3$)	trans-1,2-Dichloroethene ($\mu g/m^3$)	Trichloroethene ($\mu g/m^3$)	Vinyl Chloride ($\mu g/m^3$)
Indoor Air Quality								
Air Gudeline Value*		DNE	DNE	DNE	100	DNE	5	DNE
Chapter One Books, Inc.	12/6/2007	0.63U	0.63U	0.63U	88	0.63U	**5.9**	0.41U
	9/2/2009	2U	2U	2U	**500**	2U	2.7U	1.3U
	10/28/2009	0.63U	0.63U	0.63U	11	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	2.3	0.79U	0.21U	0.51U
	3/1/2012	0.79U	0.79U	0.79U	32	0.79U	0.21U	0.51U
	12/18/2012	0.79U	0.79U	0.79U	8.1	0.79U	0.33	0.51U
Vino 100	12/6/2007	0.63U	0.63U	0.63U	2.6	0.63U	0.86U	0.41U
	9/2/2009	4U	4U	4U	**880**	4U	5.4U	2.6U
	10/28/2009	0.63U	0.63U	0.63U	7.5	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	5.2	0.79U	0.21U	0.51U
	3/1/2012	0.79U	0.79U	0.79U	28	0.79U	0.21U	0.51U
	12/18/2012	0.79U	0.79U	0.79U	13	0.79U	0.21U	0.51U
Sub-Slab Vapor								
Chapter One Books, Inc.	12/6/2007	48U	48U	48U	8,100	48U	64U	31U
	10/28/2009	0.63U	0.63U	0.63U	2.5	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	467	0.79U	7	0.51U
	3/1/2012	3.2U	3.1U	3.2U	232	3.2U	1.2	2U
	12/18/2012	3.2U	3.1U	3.2U	131	3.2U	0.86U	2U

TABLE 4
Indoor Air Quality and Sub-Slab Vapor Sampling - Laboratory Analytical Results
Oceanside Plaza, 3131-3221Long Beach Road, Town of Hempstead, Nassau County

Sample Location	Sample Date	1,1-Dichloroethene ($\mu g/m^3$)	1,2-Dichloroethene ($\mu g/m^3$)	cis-1,2-Dichloroethene ($\mu g/m^3$)	Tetrachloroethene ($\mu g/m^3$)	trans-1,2-Dichloroethene ($\mu g/m^3$)	Trichloroethene ($\mu g/m^3$)	Vinyl Chloride ($\mu g/m^3$)
Sub-Slab Vapor								
Vino 100	12/6/2007	120U	120U	120U	18,000	120U	160U	77U
	10/28/2009	0.63U	0.63U	0.63U	2.4	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	4,180	0.79U	78.5	0.51U
	3/1/2012	44U	43U	44U	21,100	44U	97.8	28U
	12/18/2012	13U	13U	13U	9,830	13U	36U	8.2U
Jef-El Dry Cleaners (DCF)	12/6/2007	1.2U	1.2U	1.2U	350	1.2U	2.5	0.77U
	10/28/2009	0.63U	0.63U	0.63U	2.2	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	150	0.79U	2.6	0.51U
	3/1/2012	3.2U	3.1U	3.2U	766	3.2U	3.7	2U
	12/18/2012	3.2U	3.1U	3.2U	11	3.2U	0.86U	2U
Jef-El Dry Cleaners (DCR)	12/6/2007	320U	320U	320U	81,000	320U	430U	200U
	10/28/2009	0.63U	0.63U	0.63U	2.9	0.63U	0.86U	0.41U
	1/13/2012	0.79U	0.79U	0.79U	3,480	0.79U	21	0.51U
	3/1/2012	3.2U	3.1U	3.2U	1,990	3.2U	2.2	2U
	12/18/2012	3.2U	3.1U	3.2U	164	3.2U	0.86U	2U

TABLE 4

Indoor Air Quality and Sub-Slab Vapor Sampling - Laboratory Analytical Results

Oceanside Plaza, 3131-3221Long Beach Road, Town of Hempstead, Nassau County

Sample Location	Sample Date	1,1-Dichloroethene ($\mu g/m^3$)	1,2-Dichloroethene ($\mu g/m^3$)	cis-1,2-Dichloroethene ($\mu g/m^3$)	Tetrachloroethene ($\mu g/m^3$)	trans-1,2-Dichloroethene ($\mu g/m^3$)	Trichloroethene ($\mu g/m^3$)	Vinyl Chloride ($\mu g/m^3$)
Sub-Slab Vapor								
Jef-El Dry Cleaners (MRE)	12/6/2007	280U	280U	280U	50,000	280U	380	180U
	9/4/2009	3.2U	3.2U	3.2U	37	3.2U	51	2U
	10/28/2009	0.63U	0.63U	0.63U	2.5	0.63U	15	0.41U
	1/13/2012	0.79U	0.79U	0.79U	1,080	0.79U	56.4	0.51U
	3/1/2012	3.2U	3.1U	3.2U	902	3.2U	3.5	2U
	12/18/2012	3.2U	3.1U	3.2U	205	3.2U	0.86U	2U
Jef-El Dry Cleaners (Fence)	12/6/2007	1.2U	1.2U	1.2U	240	1.2U	1.6U	0.77U
	1/13/2012	0.79U	0.79U	0.79U	46	0.79U	0.39	0.51U
	3/1/2012	3.2U	3.1U	3.2U	224	3.2U	0.86U	2U
	12/18/2012	3.2U	3.1U	3.2U	1.1U	3.2U	0.86U	2U
Pizzaiola	6/14/2010	0.63U	0.63U	0.63U	5	0.63U	0.86U	0.41U
Protass	6/14/2010	0.63U	0.63U	0.63U	17	0.63U	0.86U	0.41U

TABLE 4 Indoor Air Quality and Sub-Slab Vapor Sampling - Laboratory Analytical Results Oceanside Plaza, 3131-3221Long Beach Road, Town of Hempstead, Nassau County								
Sample Location	Sample Date	1,1-Dichloroethene ($\mu g/m^3$)	1,2-Dichloroethene ($\mu g/m^3$)	cis-1,2-Dichloroethene ($\mu g/m^3$)	Tetrachloroethene ($\mu g/m^3$)	trans-1,2-Dichloroethene ($\mu g/m^3$)	Trichloroethene ($\mu g/m^3$)	Vinyl Chloride ($\mu g/m^3$)
Ambient								
AMB**	12/6/2007	0.63U	0.63U	0.63U	1.1U	0.63U	0.86U	0.41U
	9/2/2009	0.63U	0.63U	0.63U	1.1U	0.63U	0.86U	0.41U
	6/14/2010	0.63U	0.63U	0.63U	13	0.63U	1.40	0.41U
	1/13/2012	0.79U	0.79U	0.79U	0.6	0.79U	0.21U	0.51U
	3/1/2012	0.79U	0.79U	0.79U	0.57	0.79U	0.21U	0.51U
	12/18/2012	0.79U	0.79U	0.79U	1.2	0.79U	0.21U	0.51U

* = NYSDOH “Guidance for Evaluating Soil Vapor Intrusion in the State of New York” (Indoor Air Quality Only).

** = Ambient air quality sample.

BOLD = Exceeds the Air Guideline Value.

DNE = Does Not Exist.

APPENDIX A
GROUND WATER MONITORING WELL SAMPLING
LABORATORY ANALYTICAL RESULTS FIGURES

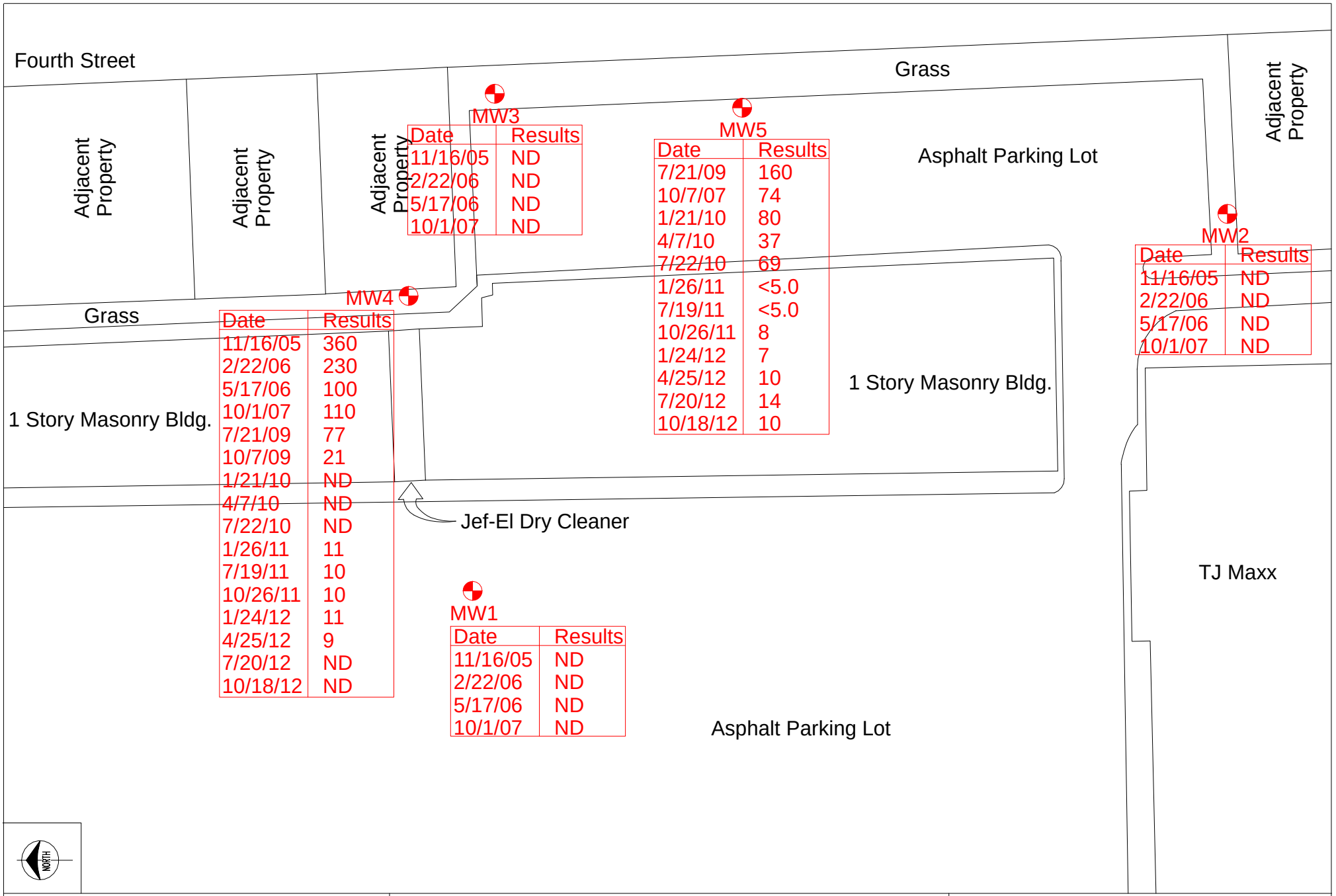

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Figure A1:
Laboratory Analytical Results - Tetrachloroethene in Ground Water

Oceanside Plaza
3131-3221 Long Beach Road
Town of Hemnpstead, Nassau County, NY
Scale: 1" ~ 60'

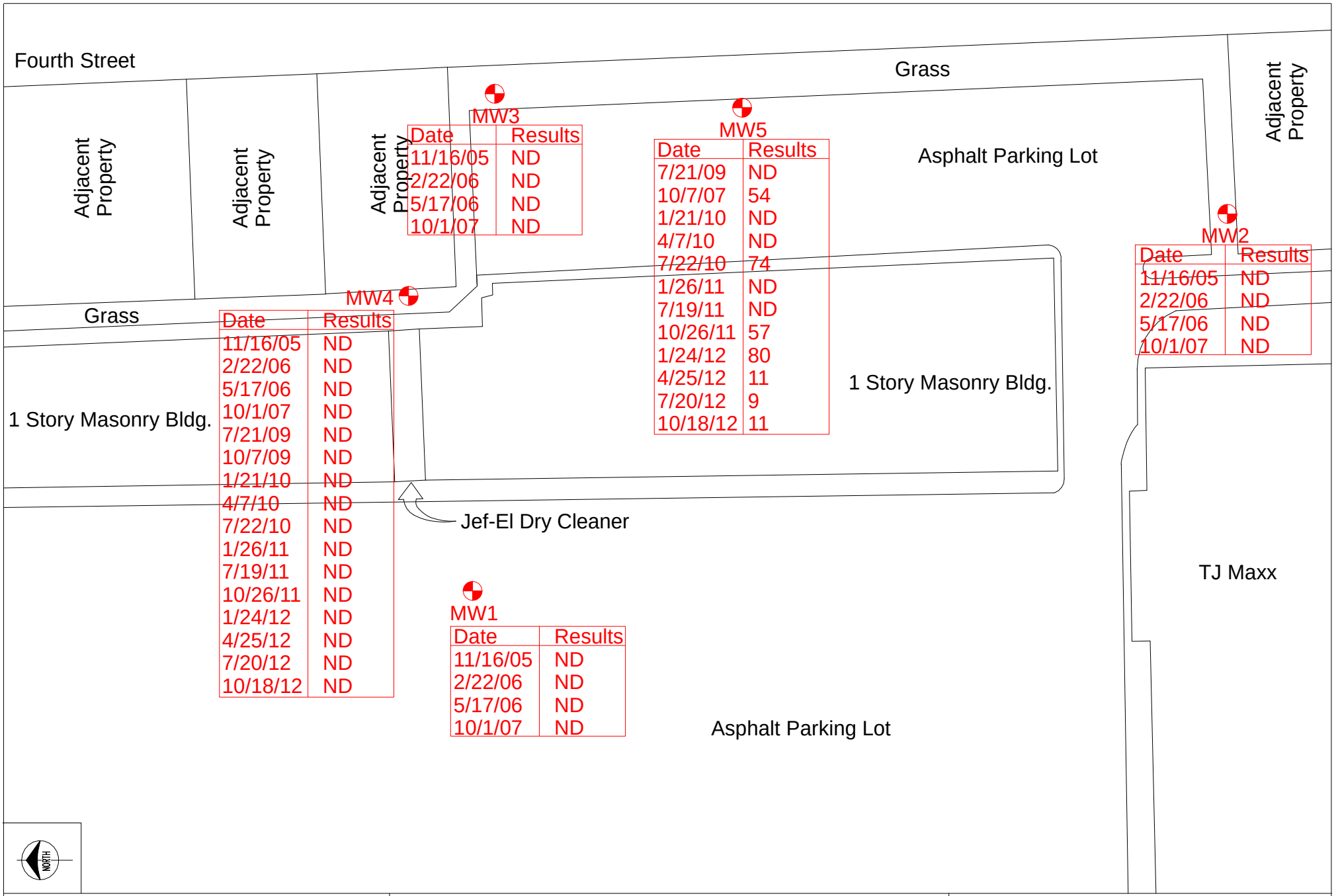

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Figure A2:
Laboratory Analytical Results - cis-1,2-Dichloroethene in Ground Water

Oceanside Plaza
3131-3221 Long Beach Road
Town of Hemnpstead, Nassau County, NY
Scale: 1" ~ 60'

APPENDIX B
OCTOBER 18, 2012
GROUND WATER MONITORING WELL SAMPLING
LABORATORY ANALYTICAL DATA SHEETS

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NYSDEC ASP Category B Data Package

Prepared for:

Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster PA 17602

Project: Oceanside Plaza
Water Samples
Collected on 10/18/12

SDG# OSP14

GROUP	SAMPLE NUMBERS
1343222	6828481-6828485

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

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

Authorized by: Dana M Kauffman **Date:** **10/30/2012**

Dana M. Kauffman
Manager

Any questions or concerns you might have regarding this data package should be directed to Environmental Client Services at (717) 656-2300.

Total Number of Pages ___308_

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Table of Contents for SDG# OSP14

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Sample Reference List for SDG Number OSP14 with a Data Package Type of NYSDEC B

12577 - Reliance Environmental, Inc.

Project: Oceanside Plaza

Lab Sample Number	Lab Sample Code	Client Sample Description
6828481	M4---	BKO-MW4 Grab Water Sample
6828482	-5---	BKO-MW5 Grab Water Sample
6828483	FD4--	BKO-DUP Grab Water Sample
6828484	FBOC-	BKO-FB Grab Water Sample
6828485	TBOC-	BKO-TB Water Sample

Environmental Analysis Request/Chain of Custody

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Acct. # 12577 For Eurofins Lancaster Laboratories use only Group # 134322 Sample # 602948-05

Instructions on reverse side correspond with circled numbers.

COC # 315090

JMM 10/19/12

1 Client Information

Client: Reliance Env, Inc.	Acct. #:
Project Name/#: Oceanside Plaza	PWSID #:
Project Manager: Mark Zunich	P.O. #:
Sampler: Mark & Zunich	Quote #:

Name of state where samples were collected: NY

4 Matrix

Sediment ☐ Soil ☐ | Ground ☒ Potable ☐ Water | Surface ☐ NPDES ☐ | Other: ☐

5 Analysis Requested

Preservation Codes

2 Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	Total # of Containers	VOC's (8260)
BKD-MW4	10/18/12	0935	X		3	X
BKD-MW5		0900				X
BKD-Dup		0825				X
BKD-EB		0730				X
BKD-TB					2	X

For Lab Use Only

FSC:

SCR#: 129672

Preservation Codes

H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

6 Remarks

7 Turnaround Time (TAT) Requested (please circle)

Standard Rush

(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)

Date results are needed: _____

E-mail address: _____

8 Data Package Options (circle if required)

Type I (Validation/non-CLP) Type VI (Raw Data Only)

Type III (Reduced non-CLP) TX TRRP-13

Type IV (CLP SOW) MA MCP CT RCP

Relinquished by	Date	Time	Received by	Date	Time
	10-16-12	0724			
	10/18/12	1215			
			Dylan Sherf	10-18-12	1215

9

EDD Required? Yes No

If yes, format: _____

Site-Specific QC (MS/MSD/Dup)? Yes No

(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:

UPS _____ FedEx _____ Other _____

Temperature upon receipt 19-10.7 °C

NYASP Category B

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G-1343222

Environmental Sample Administration Receipt Documentation Log

Client/Project: Reliance Env. Trac

Date of Receipt: 10/18/12

Time of Receipt: 1215

Source Code: 70

Shipping Container Sealed: YES (NO)

Custody Seal Present * : YES (NO)

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

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	1396 2737	>10	ST TB	WI	Y	B	10.7 9.6 10.5 7.9 8.3
2							
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: Ø

Paperwork Discrepancy/Unpacking Problems:

Collected on date of receipt.

Unpacker Signature/Emp#: Pat Gal 3472 **Date/Time:** 10/18/12 1220

Issued by Dept. 6042 Management

2174.06

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Sample pH Log

SDG: OSP14

LLI Sample Number	Bottle Code	Actual pH	Exp. pH	pH Check Code	Adj. pH	Adjusted Date	Adjusted Time	Preservative Added	Preservative Lot #	LLI Supplied Bottle?	Sulfide Present?	Corrective Substance	CS Lot #	Res. Cl. Present?	Corrective Substance	CS Lot #
6828481	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA
6828482	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA
6828483	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA
6828484	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA
6828485	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA

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

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

01163 GC/MS VOA Water Prep

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

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 5030B, December 1996.

10903 8260 Std. Water Master

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

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8260B, December 1996

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster PA 17602

October 24, 2012

Project: Oceanside Plaza

Submittal Date: 10/18/2012
Group Number: 1343222
SDG: OSP14
PO Number: BK-001-02
State of Sample Origin: NY

Client Sample Description	Lancaster Labs (LLI) #
BKO-MW4 Grab Water Sample	6828481
BKO-MW5 Grab Water Sample	6828482
BKO-DUP Grab Water Sample	6828483
BKO-FB Grab Water Sample	6828484
BKO-TB Water Sample	6828485

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

ELECTRONIC COPY TO	Reliance Environmental, Inc.	Attn: Mark Zunich
1 COPY TO	Data Package Group	

Respectfully Submitted,

Angela M. Miller
Specialist

(717) 556-7260

Eurofins Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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Explanation of Symbols and Abbreviations

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

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

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

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

Inorganic Qualifiers

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

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

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

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

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

Sample Description: BKO-MW4 Grab Water Sample
Oceanside Plaza

LLI Sample # WW 6828481
LLI Group # 1343222
Account # 12577

Project Name: Oceanside Plaza

Collected: 10/18/2012 08:35 by MEZ

Submitted: 10/18/2012 12:15
Reported: 10/24/2012 17:20

Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster PA 17602

M4--- SDG#: OSP14-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1

General Sample Comments

State of New York Certification No. 10670

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Std. Water Master	SW-846 8260B	1	Y122951AA	10/21/2012 09:26	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y122951AA	10/21/2012 09:26	Stephanie A Selis	1

Sample Description: BKO-MW5 Grab Water Sample
Oceanside Plaza

LLI Sample # WW 6828482
LLI Group # 1343222
Account # 12577

Project Name: Oceanside Plaza

Collected: 10/18/2012 08:00 by MEZ

Submitted: 10/18/2012 12:15
Reported: 10/24/2012 17:20

Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster PA 17602

-5--- SDG#: OSP14-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	11	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	10	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1

General Sample Comments

State of New York Certification No. 10670

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Std. Water Master	SW-846 8260B	1	Y122951AA	10/21/2012 09:46	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y122951AA	10/21/2012 09:46	Stephanie A Selis	1

Sample Description: BKO-DUP Grab Water Sample
Oceanside Plaza

LLI Sample # WW 6828483
LLI Group # 1343222
Account # 12577

Project Name: Oceanside Plaza

Collected: 10/18/2012 08:35 by MEZ

Submitted: 10/18/2012 12:15
Reported: 10/24/2012 17:20

Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster PA 17602

FD4-- SDG#: OSP14-03FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1

General Sample Comments

State of New York Certification No. 10670

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Std. Water Master	SW-846 8260B	1	Y122951AA	10/21/2012 10:07	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y122951AA	10/21/2012 10:07	Stephanie A Selis	1

Sample Description: BKO-FB Grab Water Sample
Oceanside Plaza

LLI Sample # WW 6828484
LLI Group # 1343222
Account # 12577

Project Name: Oceanside Plaza

Collected: 10/18/2012 07:30 by MEZ

Submitted: 10/18/2012 12:15
Reported: 10/24/2012 17:20

Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster PA 17602

FBOC- SDG#: OSP14-04FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1

General Sample Comments

State of New York Certification No. 10670

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Std. Water Master	SW-846 8260B	1	Y122951AA	10/21/2012 10:28	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y122951AA	10/21/2012 10:28	Stephanie A Selis	1

Eurofins Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Sample Description: BKO-TB Water Sample
Oceanside Plaza

LLI Sample # WW 6828485
LLI Group # 1343222
Account # 12577

Project Name: Oceanside Plaza

Collected: 10/18/2012

Submitted: 10/18/2012 12:15
Reported: 10/24/2012 17:20

Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster PA 17602

TBOC- SDG#: OSP14-05TB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	< 10	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1

General Sample Comments

State of New York Certification No. 10670

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Std. Water Master	SW-846 8260B	1	Y122951AA	10/21/2012 10:49	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y122951AA	10/21/2012 10:49	Stephanie A Selis	1

Eurofins Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Volatiles by GC/MS Data

Case Narrative/Conformance Summary

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Case Narrative/Conformance Summary

CLIENT: Reliance Environmental, Inc.
SDG: OSP14

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6828481	BKO-MW4	X		1	
6828482	BKO-MW5	X		1	
6828483	BKO-DUP	X		1	Field Duplicate Sample
6828484	BKO-FB	X		1	Field Blank
6828485	BKO-TB	X		1	Trip Blank

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

(Sample number(s): 6828481-6828485: Analysis: 10903)
2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

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Case Narrative/Conformance Summary

CLIENT: Reliance Environmental, Inc.
SDG: OSP14

GC/MS Volatiles

Fraction: Volatiles by GC/MS

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

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

Narrative Reviewed and Approved 10/30/12 (Date) by

GC/MS VOLATILES CALCULATIONS:

1. Relative response factor (RRF)

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

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

2. % Relative Standard Deviation (%RSD)

$$\%RSD = \frac{\text{Standard deviation}}{\text{mean}} \times 100$$

3. % Difference (%D)

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

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

4. Concentration

$$\text{Concentration (ug/l)} = \frac{(Ax)\ (Is)\ (Df)}{(Ais)\ (RRF)}$$

Where:
Ax , Ais, RRF are as given in 1. above.
Is = Concentration of internal standard added in parts per billion (ug/l)
Df = Dilution factor

5. % Recovery (%Rec)

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

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

6. Relative Percent Difference (RPD)

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

Where:
MSR = Matrix spike recovery
MSDR = Matrix spike duplicate recovery

Quality Control and Calibration Summary Forms

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Quality Control Reference List
GC/MS Volatiles

CLIENT: Reliance Environmental, Inc.
SDG: OSP14

Fraction: Volatiles by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
8260 Std. Water Master	Y122951AA	VBLKY78	10/21/2012 02:05:00
		LCSY78	10/21/2012 03:10:00
		6828481	10/21/2012 09:26:00
		6828482	10/21/2012 09:46:00
		6828483	10/21/2012 10:07:00
		6828484	10/21/2012 10:28:00
		6828485	10/21/2012 10:49:00

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Quality Control Summary
Method Blank
GC/MS Volatiles
SDG: OSP14
Matrix: LIQUID

Fraction: Volatiles by GC/MS

Y122951AA / VBLKY78 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Chloromethane	10/21/12	N.D.	ug/l	1	5
Vinyl Chloride	10/21/12	N.D.	ug/l	1	5
Bromomethane	10/21/12	N.D.	ug/l	1	5
Chloroethane	10/21/12	N.D.	ug/l	1	5
Trichlorofluoromethane	10/21/12	N.D.	ug/l	2	5
Acrolein	10/21/12	N.D.	ug/l	40	100
1,1-Dichloroethene	10/21/12	N.D.	ug/l	0.8	5
Methylene Chloride	10/21/12	N.D.	ug/l	2	5
Acrylonitrile	10/21/12	N.D.	ug/l	4	20
trans-1,2-Dichloroethene	10/21/12	N.D.	ug/l	0.8	5
1,1-Dichloroethane	10/21/12	N.D.	ug/l	1	5
cis-1,2-Dichloroethene	10/21/12	N.D.	ug/l	0.8	5
Chloroform	10/21/12	N.D.	ug/l	0.8	5
1,1,1-Trichloroethane	10/21/12	N.D.	ug/l	0.8	5
Carbon Tetrachloride	10/21/12	N.D.	ug/l	1	5
Benzene	10/21/12	N.D.	ug/l	0.5	5
1,2-Dichloroethane	10/21/12	N.D.	ug/l	1	5
Trichloroethene	10/21/12	N.D.	ug/l	1	5
1,2-Dichloropropane	10/21/12	N.D.	ug/l	1	5
Bromodichloromethane	10/21/12	N.D.	ug/l	1	5
2-Chloroethyl Vinyl Ether	10/21/12	N.D.	ug/l	2	10
cis-1,3-Dichloropropene	10/21/12	N.D.	ug/l	1	5
Toluene	10/21/12	N.D.	ug/l	0.7	5
trans-1,3-Dichloropropene	10/21/12	N.D.	ug/l	1	5
1,1,2-Trichloroethane	10/21/12	N.D.	ug/l	0.8	5
Tetrachloroethene	10/21/12	N.D.	ug/l	0.8	5
Dibromochloromethane	10/21/12	N.D.	ug/l	1	5
Chlorobenzene	10/21/12	N.D.	ug/l	0.8	5
Ethylbenzene	10/21/12	N.D.	ug/l	0.8	5
Xylene (Total)	10/21/12	N.D.	ug/l	0.8	5
Bromoform	10/21/12	N.D.	ug/l	1	5
1,1,2,2-Tetrachloroethane	10/21/12	N.D.	ug/l	1	5

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Quality Control Summary
Surrogates
GC/MS Volatiles
SDG: OSP14
Matrix: LIQUID

Fraction: Volatiles by GC/MS

Y122951AA	Dibromofluoromethane		1,2-Dichloroethane-d4		Toluene-d8		4-Bromofluorobenzene	
	Spike Added	50 ug/l	Spike Added	50 ug/l	Spike Added	50 ug/l	Spike Added	50 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
VBLKY78	96	80 - 116	96	77 - 113	101	80 - 113	101	78 - 113
LCSY78	97	80 - 116	100	77 - 113	101	80 - 113	101	78 - 113
6828481	96	80 - 116	95	77 - 113	102	80 - 113	101	78 - 113
6828482	95	80 - 116	97	77 - 113	102	80 - 113	101	78 - 113
6828483	96	80 - 116	96	77 - 113	102	80 - 113	101	78 - 113
6828484	96	80 - 116	97	77 - 113	101	80 - 113	101	78 - 113
6828485	97	80 - 116	98	77 - 113	101	80 - 113	99	78 - 113

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

SDG: OSP14
Matrix: LIQUID

GC/MS Volatiles

Fraction: Volatiles by GC/MS

LCS: LCSY78	Batch: **Y122951AA** (Sample number(s): 6828481-6828485)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Chloromethane	20	17.88		89		60-129		
Vinyl Chloride	20	16.35		82		56-123		
Bromomethane	20	13.35		67		44-120		
Chloroethane	20	14.96		75		49-129		
Trichlorofluoromethane	20	18.87		94		65-130		
Acrolein	150	107.01		71		30-171		
1,1-Dichloroethene	20	22.68		113		76-124		
Methylene Chloride	20	21.59		108		84-118		
Acrylonitrile	100	101.99		102		61-130		
trans-1,2-Dichloroethene	20	22.12		111		80-120		
1,1-Dichloroethane	20	22.43		112		79-120		
cis-1,2-Dichloroethene	20	22.14		111		80-120		
Chloroform	20	20.82		104		77-122		
1,1,1-Trichloroethane	20	19.82		99		66-126		
Carbon Tetrachloride	20	21.06		105		67-122		
Benzene	20	21.98		110		77-121		
1,2-Dichloroethane	20	22.06		110		64-130		
Trichloroethene	20	21.61		108		80-120		
1,2-Dichloropropane	20	22.22		111		80-120		
Bromodichloromethane	20	20.59		103		73-120		
2-Chloroethyl Vinyl Ether	20	19.55		98		29-151		
cis-1,3-Dichloropropene	20	22.03		110		78-120		
Toluene	20	21.81		109		79-120		
trans-1,3-Dichloropropene	20	20.05		100		73-120		
1,1,2-Trichloroethane	20	21.1		105		80-120		
Tetrachloroethene	20	20.54		103		79-120		
Dibromochloromethane	20	20.41		102		72-120		
Chlorobenzene	20	21.31		107		80-120		
Ethylbenzene	20	21.73		109		79-120		
Xylene (Total)	60	63.61		106		77-120		
Bromoform	20	16.88		84		61-120		
1,1,2,2-Tetrachloroethane	20	21.25		106		75-123		

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:

Lab Code: LANCAS Case No.: SAS No.: SDG No.: OSP14

Lab File ID: yc15t01.d BFB Injection Date: 10/15/12

Instrument ID: HP09355 BFB Injection Time: 13:13

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.56
75	30.0 - 60.0% of mass 95	44.73
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	7.02
173	Less than 2.0% of mass 174	0.00 (0.00)1
174	Greater than 50.0% of mass 95	87.39
175	5.0 - 9.0% of mass 174	6.05 (6.92)1
176	Greater than 95.0%, but less than 101.0% of mass 174	85.29 (97.59)1
177	5.0 - 9.0% of mass 176	5.48 (6.42)2

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

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

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD300	yc15i01.d	10/15/12	13:52
02	VSTD100	yc15i02.d	10/15/12	14:13
03	VSTD50	yc15i03.d	10/15/12	14:33
04	VSTD20	yc15i04.d	10/15/12	14:54
05	VSTD10	yc15i05.d	10/15/12	15:15
06	VSTD4	yc15i06.d	10/15/12	15:35
07	VSTD1	yc15i07.d	10/15/12	15:56
08	MDL0.5 - MDL0.5	yc15m01.d	10/15/12	16:17
09	YLGICV	yc15v02.d	10/15/12	18:26

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:

Lab Code: LANCAS Case No.: SAS No.: SDG No.: OSP14

Lab File ID: yc21t01.d BFB Injection Date: I0/21/12

Instrument ID: HP09355 BFB Injection Time: 00:41

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.91
75	30.0 - 60.0% of mass 95	47.19
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.74
173	Less than 2.0% of mass 174	0.00 (0.00)1
174	Greater than 50.0% of mass 95	81.14
175	5.0 - 9.0% of mass 174	5.74 (7.08)1
176	Greater than 95.0%, but less than 101.0% of mass 174	77.94 (96.07)1
177	5.0 - 9.0% of mass 176	5.06 (6.49)2

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

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

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	yc21c01.d	10/21/12	01:24
02	VBLKY78	yc21b01.d	10/21/12	02:05
03	LCSY78	yc21l02.d	10/21/12	03:10
04	6829250	yc21s01.d	10/21/12	03:59
05	6829251	yc21s02.d	10/21/12	04:20
06	6828401	yc21s03.d	10/21/12	04:40
07	6828402	yc21s04.d	10/21/12	05:01
08	6828403	yc21s05.d	10/21/12	05:21
09	6828404	yc21s06.d	10/21/12	05:42
10	6828405	yc21s07.d	10/21/12	06:02
11	6828406	yc21s08.d	10/21/12	06:23
12	6828407	yc21s09.d	10/21/12	06:43
13	6828408	yc21s10.d	10/21/12	07:03
14	6828409MS	yc21s11.d	10/21/12	07:24
15	6828410MSD	yc21s12.d	10/21/12	07:44
16	6828412	yc21s13.d	10/21/12	08:05
17	6828413	yc21s14.d	10/21/12	08:25
18	6828414	yc21s15.d	10/21/12	08:45
19	6828415	yc21s16.d	10/21/12	09:05
20	6828481	yc21s17.d	10/21/12	09:26
21	6828482	yc21s18.d	10/21/12	09:46
22	6828483	yc21s19.d	10/21/12	10:07

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:

Lab Code: LANCAS Case No.: SAS No.: SDG No.: OSP14

Lab File ID: yc21t01.d BFB Injection Date: 10/21/12

Instrument ID: HP09355 BFB Injection Time: 00:41

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.91
75	30.0 - 60.0% of mass 95	47.19
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.74
173	Less than 2.0% of mass 174	0.00 (0.00)1
174	Greater than 50.0% of mass 95	81.14
175	5.0 - 9.0% of mass 174	5.74 (7.08)1
176	Greater than 95.0%, but less than 101.0% of mass 174	77.94 (96.07)1
177	5.0 - 9.0% of mass 176	5.06 (6.49)2

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

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

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
23	6828484	yc21s20.d	10/21/12	10:28
24	6828485	yc21s21.d	10/21/12	10:49

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP09355 Calibration Date(s): 10/15/12 10/15/12

Heated Purge: (Y/N) Y Calibration Times: 13:52 15:56

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

LAB FILE ID: RRF 1 = yc15i07.d RRF 4 = yc15i06.d RRF 10= yc15i05.d
RRF 20= yc15i04.d RRF 50= yc15i03.d RRF100= yc15i02.d RRF300= yc15i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	$\overline{RRF}$	% RSD	CAL. METHOD	
Dichlorodifluoromethane	0.2904	0.3790	0.3718	0.3828	0.3144	0.3312	0.2995	0.3384	12	AVG	
Chloromethane	#0.3589	0.3946	0.3970	0.3692	0.3280	0.3385	0.3260	0.3589	8	AVG	#
Vinyl Chloride	*0.3602	0.3916	0.3982	0.3702	0.3260	0.3313	0.2834	0.3516	12	AVG	*
1,3-Butadiene	0.1476	0.1794	0.1351	0.1550	0.1518	0.1588	0.1295	0.1510	11	AVG	
Bromomethane	0.2533	0.2560	0.2687	0.2434	0.2116	0.2077	0.1678	0.2298	15	AVG	
Chloroethane	0.1881	0.2062	0.2193	0.1978	0.1684	0.1633		0.1905	11	AVG	
Dichlorofluoromethane	0.4553	0.4533	0.4357	0.4487	0.4265	0.3716	0.3372	0.4183	11	AVG	
Trichlorofluoromethane	0.3419	0.4251	0.4293	0.4169	0.3546	0.3572	0.3219	0.3781	12	AVG	
n-Pentane		0.3620	0.3707	0.3982	0.3617	0.3004	0.2738	0.3445	14	AVG	
Freon 123a		0.3034	0.2835	0.2925	0.2711	0.2340	0.2197	0.2674	13	AVG	
Acrolein		1.8078	1.7744	1.7154	1.7075	1.5887	1.4112	1.6675	9	AVG	
1,1-Dichloroethene	*0.2025	0.2219	0.2120	0.2156	0.1961	0.1940	0.1804	0.2032	7	AVG	*
Freon 113		0.2184	0.2159	0.2248	0.1999	0.2041	0.1893	0.2087	6	AVG	
Acetone		0.0675	0.0628	0.0558	0.0559	0.0529	0.0457	0.0568	13	AVG	
Methyl Iodide	0.3660	0.4049	0.4021	0.4149	0.3783	0.3813	0.3597	0.3867	5	AVG	
2-Propanol		0.6699	0.8074	0.7289	0.6627	0.7072	0.6304	0.7011	9	AVG	
Carbon Disulfide		0.6434	0.6329	0.6652	0.6166	0.6199	0.5789	0.6262	5	AVG	
Allyl Chloride		0.4392	0.3790	0.3878	0.3648	0.3555	0.3231	0.3749	10	AVG	
Methyl Acetate		0.3139	0.3263	0.3406	0.3028	0.3029	0.2702	0.3094	8	AVG	
Methylene Chloride	0.2796	0.2677	0.2599	0.2595	0.2402	0.2395	0.2234	0.2528	8	AVG	
t-Butyl Alcohol	1.2483	1.3032	1.5155	1.3066	1.1525	1.1269	1.0264	1.2399	13	AVG	
Acrylonitrile		0.2438	0.2269	0.2241	0.2108	0.1957	0.1769	0.2130	11	AVG	
trans-1,2-Dichloroethene	0.2373	0.2544	0.2502	0.2594	0.2404	0.2390	0.2222	0.2433	5	AVG	
Methyl Tertiary Butyl Ether	0.7915	0.8268	0.9075	0.9088	0.8600	0.8350	0.7602	0.8414	7	AVG	
n-Hexane		0.3879	0.3762	0.3943	0.3211	0.3656	0.3402	0.3642	8	AVG	
1,2-Dichloroethene (total)	0.2431	0.2657	0.2655	0.2746	0.2561	0.2565	0.2426	0.2577	5	AVG	
1,1-Dichloroethane	#0.4068	0.4579	0.4582	0.4718	0.4360	0.4397	0.4211	0.4416	5	AVG	#
di-Isopropyl Ether	0.8737	0.9285	0.9515	0.9409	0.8585	0.8523	0.7923	0.8854	7	AVG	
2-Chloro-1,3-Butadiene		0.3886	0.3866	0.3992	0.3602	0.3660	0.3484	0.3749	5	AVG	
Ethyl t-Butyl Ether	0.7966	0.8579	0.9246	0.9175	0.8480	0.8401	0.7830	0.8526	6	AVG	
cis-1,2-Dichloroethene	0.2490	0.2771	0.2809	0.2898	0.2717	0.2739	0.2630	0.2722	5	AVG	
2-Butanone		0.3287	0.3298	0.3025	0.3103	0.3061	0.2704	0.3080	7	AVG	
2,2-Dichloropropane	0.3174	0.3394	0.3412	0.3512	0.3254	0.3292	0.3183	0.3318	4	AVG	
Propionitrile		1.4674	1.7316	1.6040	1.5161	1.4727	1.4795	1.5452	7	AVG	
Methacrylonitrile		0.2021	0.2361	0.2206	0.2085	0.2032	0.1944	0.2108	7	AVG	
Bromochloromethane		0.1540	0.1467	0.1581	0.1442	0.1437	0.1392	0.1477	5	AVG	
Tetrahydrofuran		1.4825	1.4521	1.4390	1.4616	1.4549	1.3898	1.4466	2	AVG	
Chloroform	*0.4736	0.4592	0.4570	0.4582	0.4224	0.4301	0.4080	0.4441	5	AVG	*
1,1,1-Trichloroethane	0.3648	0.4127	0.3910	0.4012	0.3596	0.3673	0.3529	0.3785	6	AVG	
Cyclohexane		0.4708	0.4556	0.4733	0.4126	0.4379	0.4135	0.4439	6	AVG	
Cyclohexane(mz 84)		0.3835	0.3725	0.3876	0.3429	0.3620	0.3434	0.3653	5	AVG	
Cyclohexane(mz 69)		0.1433	0.1411	0.1436	0.1271	0.1357	0.1291	0.1366	5	AVG	
1,1-Dichloropropene	0.2953	0.3447	0.3402	0.3521	0.3211	0.3285	0.3189	0.3287	6	AVG	
Carbon Tetrachloride	0.2370	0.2841	0.2878	0.2999	0.2797	0.2911	0.2895	0.2813	7	AVG	
Isobutyl Alcohol		0.4146	0.5156	0.4501	0.3989	0.3943	0.3892	0.4271	11	AVG	
Benzene	0.9950	1.0779	1.0913	1.1066	1.0279	1.0455	0.9919	1.0480	4	AVG	
1,2-Dichloroethane	0.3341	0.3442	0.3668	0.3621	0.3445	0.3432	0.3281	0.3461	4	AVG	
1,2-Dichloroethane(mz 98)	0.0150	0.0330	0.0357	0.0357	0.0344	0.0353	0.0338	0.0318	24	2NDDEG	
t-Amyl Methyl Ether	0.7802	0.8220	0.9187	0.8880	0.8272	0.8336	0.7959	0.8379	6	AVG	
n-Heptane		0.5063	0.4387	0.4636	0.3483	0.4139	0.3634	0.4224	14	AVG	
n-Butanol		0.3756	0.4831	0.4220	0.3754	0.3692	0.3513	0.3961	12	AVG	
Trichloroethene	0.2436	0.2660	0.2715	0.2760	0.2538	0.2602	0.2535	0.2607	4	AVG	

Minimum RRF for SPCC(#) = 0.10
(0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %RSD for CCC(*) = 30%

FORM VI VOA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP09355 Calibration Date(s): 10/15/12 10/15/12

Heated Purge: (Y/N) Y Calibration Times: 13:52 15:56

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

LAB FILE ID: RRF 1 = yc15i07.d RRF 4 = yc15i06.d RRF 10= yc15i05.d
RRF 20= yc15i04.d RRF 50= yc15i03.d RRF100= yc15i02.d RRF300= yc15i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	$\overline{RRF}$	% RSD	CAL. METHOD	
1,2-Dichloropropane	*0.2481	0.2726	0.2915	0.2931	0.2752	0.2787	0.2670	0.2752	6	AVG	*
Methylcyclohexane(mz98)		0.2330	0.1913	0.2122	0.2016	0.2060	0.2017	0.2077	7	AVG	
Methylcyclohexane		0.5335	0.4365	0.4869	0.4559	0.4669	0.4542	0.4723	7	AVG	
Methyl Methacrylate		0.2985	0.3686	0.3427	0.3195	0.3160	0.3071	0.3254	8	AVG	
Dibromomethane	0.1595	0.1801	0.1973	0.1943	0.1829	0.1833	0.1789	0.1823	7	AVG	
1,4-Dioxane		0.1044	0.1343	0.1076	0.1070	0.1127	0.0950	0.1102	12	AVG	
Bromodichloromethane	0.2525	0.2858	0.3262	0.3318	0.3160	0.3261	0.3205	0.3084	9	AVG	
2-Nitropropane		0.1242	0.1252	0.1225	0.1327	0.1364	0.1249	0.1276	4	AVG	
2-Chloroethyl Vinyl Ether		0.2270	0.2917	0.2501	0.2417	0.2377	0.2281	0.2461	10	AVG	
cis-1,3-Dichloropropene	0.3194	0.3620	0.4246	0.4277	0.4055	0.4155	0.4080	0.3947	10	AVG	
4-Methyl-2-Pentanone		0.5711	0.6541	0.5890	0.5837	0.5842	0.5125	0.5824	8	AVG	
Toluene	*0.8786	0.9552	0.9754	0.9972	0.9043	0.9245	0.8802	0.9308	5	AVG	*
trans-1,3-Dichloropropene	0.4074	0.4850	0.5787	0.5821	0.5502	0.5686	0.5534	0.5322	12	AVG	
Ethyl Methacrylate		0.6441	0.7975	0.7493	0.6916	0.6884	0.6550	0.7043	8	AVG	
1,1,2-Trichloroethane	0.3373	0.3588	0.4309	0.4068	0.3712	0.3709	0.3568	0.3761	9	AVG	
Tetrachloroethene	0.3637	0.4090	0.4198	0.4333	0.3870	0.4019	0.3957	0.4015	6	AVG	
1,3-Dichloropropane	0.5697	0.6035	0.7050	0.6797	0.6250	0.6286	0.6026	0.6306	7	AVG	
2-Hexanone		0.6456	0.7654	0.6694	0.6459	0.6518	0.5524	0.6551	10	AVG	
Dibromochloromethane	0.2619	0.2952	0.3734	0.3744	0.3623	0.3774	0.3788	0.3462	14	AVG	
1,2-Dibromoethane	0.3406	0.3797	0.4610	0.4438	0.4115	0.4159	0.4046	0.4082	10	AVG	
Chlorobenzene	#0.9455	1.0524	1.1233	1.1157	1.0062	1.0297	0.9814	1.0363	6	AVG	#
1,1,1,2-Tetrachloroethane	0.2605	0.3163	0.3646	0.3678	0.3445	0.3566	0.3537	0.3377	11	AVG	
Ethylbenzene	*	1.8241	1.9309	1.9311	1.7277	1.7919	1.6422	1.8080	6	AVG	*
m+p-Xylene		0.7050	0.7611	0.7674	0.6844	0.7121	0.6487	0.7131	6	AVG	
Xylene (Total)		0.7033	0.7665	0.7670	0.6864	0.7136	0.6561	0.7155	6	AVG	
o-Xylene		0.7000	0.7771	0.7664	0.6904	0.7167	0.6709	0.7202	6	AVG	
Styrene		1.1438	1.2817	1.2881	1.1753	1.2038	1.1230	1.2026	6	AVG	
Bromoform	#	0.2220	0.2955	0.2989	0.2990	0.3169	0.3311	0.2939	13	AVG	#
Isopropylbenzene		1.8193	1.9464	1.9654	1.7168	1.8106	1.5848	1.8072	8	AVG	
Cyclohexanone	0.4434	0.4499	0.5056	0.4755	0.4975	0.5406	0.5019	0.4878	7	AVG	
1,1,2,2-Tetrachloroethane	#1.0428	1.1475	1.3983	1.2839	1.1581	1.1348	1.0956	1.1801	10	AVG	#
trans-1,4-Dichloro-2-Butene		0.3137	0.3960	0.3691	0.3396	0.3332	0.3159	0.3446	9	AVG	
Bromobenzene		0.7981	0.9012	0.8875	0.7961	0.8052	0.7964	0.8307	6	AVG	
1,2,3-Trichloropropane		0.3458	0.4216	0.3894	0.3580	0.3479	0.3393	0.3670	9	AVG	
n-Propylbenzene		3.7477	3.9986	4.0818	3.4761	3.5900	2.9288	3.6372	11	AVG	
2-Chlorotoluene		0.7804	0.8185	0.8316	0.7217	0.7505	0.7325	0.7725	6	AVG	
1,3,5-Trimethylbenzene		2.6911	2.9448	2.9857	2.5828	2.7110	2.3373	2.7088	9	AVG	
4-Chlorotoluene		0.7835	0.8634	0.8573	0.7590	0.7842	0.7454	0.7988	6	AVG	
tert-Butylbenzene		0.6022	0.6453	0.6661	0.5697	0.6105	0.5562	0.6083	7	AVG	
Pentachloroethane		0.4740	0.4788	0.5355	0.4917	0.5257	0.5011	0.5011	5	AVG	
1,2,4-Trimethylbenzene		2.7813	3.0466	3.0532	2.6788	2.7827	2.4258	2.7947	8	AVG	
sec-Butylbenzene		3.4160	3.6306	3.7323	3.1400	3.3728	2.6932	3.3308	11	AVG	
p-Isopropyltoluene		2.9679	3.2024	3.2886	2.7959	2.9794	2.4168	2.9418	11	AVG	
1,3-Dichlorobenzene		1.5317	1.6893	1.6803	1.4910	1.5458	1.4714	1.5682	6	AVG	
1,4-Dichlorobenzene		1.6843	1.8419	1.7988	1.5864	1.6339	1.4978	1.6738	8	AVG	
1,2,3-Trimethylbenzene		3.3477	3.0954	3.3221	2.8920	2.9202	2.4493	3.0045	11	AVG	
Benzyl Chloride		1.8808	2.3991	2.4027	2.3183	2.3607	2.1902	2.2586	9	AVG	
1,3-Diethylbenzene		2.0056	1.8523	2.0449	1.7995	1.7973	1.6285	1.8547	8	AVG	
1,4-Diethylbenzene		2.0815	1.9099	2.1265	1.8684	1.8473	1.5991	1.9054	10	AVG	
n-Butylbenzene		1.4668	1.5621	1.6108	1.3707	1.4653	1.2713	1.4578	9	AVG	
1,2-Dichlorobenzene		1.5758	1.7681	1.7260	1.5296	1.5559	1.3571	1.5854	9	AVG	
1,2-Diethylbenzene		1.8171	1.6060	1.7575	1.5188	1.5052	1.3635	1.5947	11	AVG	

Minimum RRF for SPCC(#) = 0.10
(0.30 for Chlorobenzene; 1,1,2,2-Tetrachloroethane)
Maximum %RSD for CCC(*) = 30%

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP09355 Calibration Date(s): 10/15/12 10/15/12

Heated Purge: (Y/N) Y Calibration Times: 13:52 15:56

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

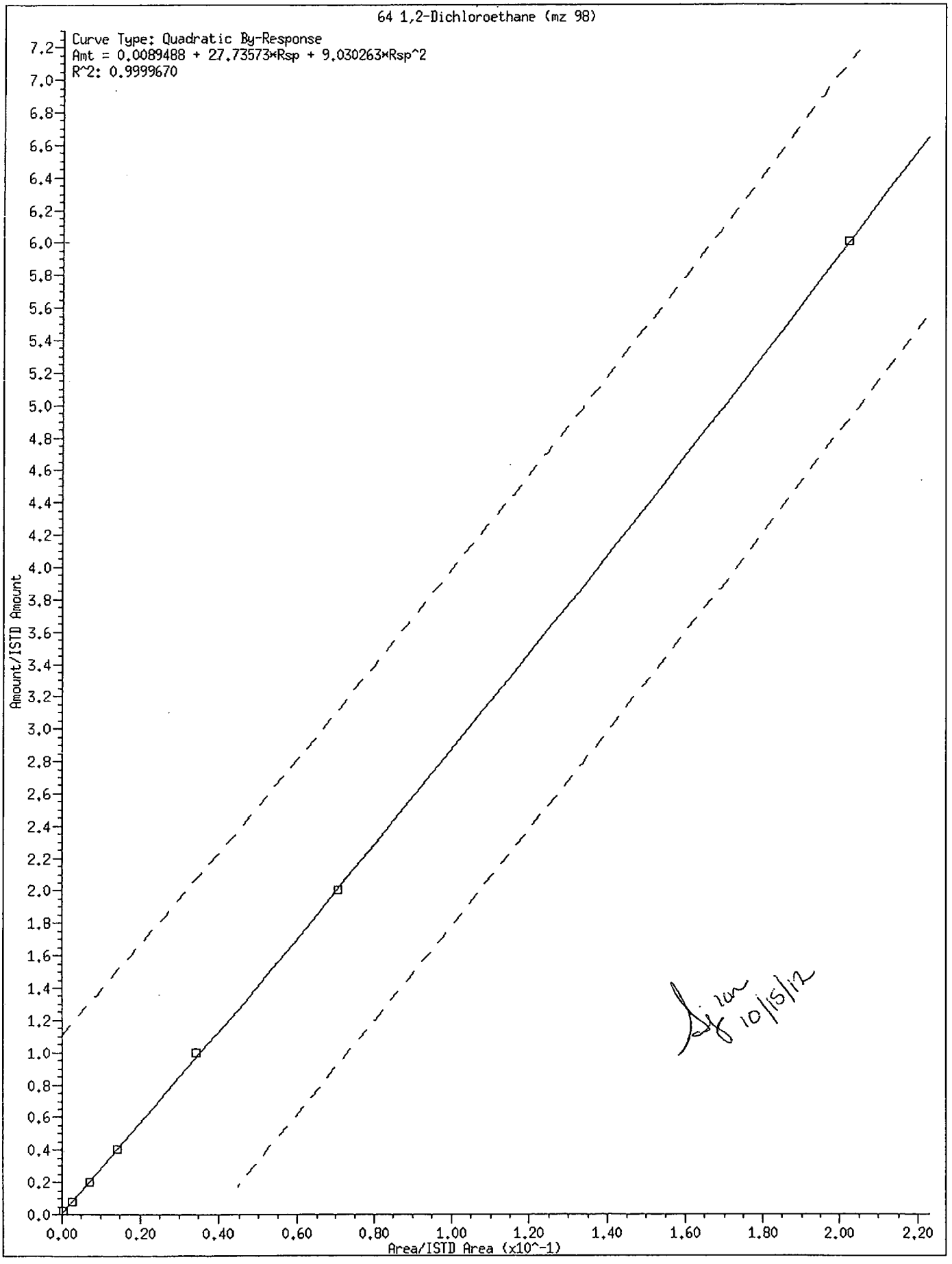
LAB FILE ID: RRF 1 = yc15i07.d RRF 4 = yc15i06.d RRF 10= yc15i05.d
RRF 20= yc15i04.d RRF 50= yc15i03.d RRF100= yc15i02.d RRF300= yc15i01.d

COMPOUND	RRF 1	RRF 4	RRF 10	RRF 20	RRF 50	RRF100	RRF300	$\overline{RRF}$	% RSD	CAL. METHOD
1,2-Dibromo-3-Chloropropane		0.2586	0.3389	0.3138	0.3030	0.2996	0.2868	0.3001	9	AVG
1,3,5-Trichlorobenzene		1.2088	1.3171	1.3110	1.1311	1.1932	1.0571	1.2031	8	AVG
1,2,4-Trichlorobenzene		1.1250	1.2552	1.2485	1.0716	1.1156	0.9687	1.1308	10	AVG
Hexachlorobutadiene		0.5451	0.5655	0.5929	0.4845	0.5214	0.4372	0.5244	11	AVG
Naphthalene		4.2845	4.9056	4.5899	4.0881	4.0529		4.3842	8	AVG
1,2,3-Trichlorobenzene		1.1465	1.2494	1.2247	1.0512	1.0754	0.9085	1.1093	11	AVG
2-Methylnaphthalene		2.5675	2.5014	2.6440	2.2220	2.2580		2.4386	8	AVG
Dibromofluoromethane	0.2210	0.2210	0.2242	0.2202	0.2229	0.2222	0.2232	0.2221	1	AVG
Dibromofluoromethane(mz111)	0.2266	0.2259	0.2269	0.2280	0.2275	0.2268	0.2285	0.2271	0	AVG
1,2-Dichloroethane-d4	0.0586	0.0591	0.0592	0.0603	0.0626	0.0588	0.0591	0.0597	2	AVG
1,2-Dichloroethane-d4(mz104)	0.0375	0.0372	0.0371	0.0373	0.0375	0.0377	0.0381	0.0375	1	AVG
1,2-Dichloroethane-d4(mz65)	0.2702	0.2717	0.2738	0.2779	0.2866	0.2713	0.2613	0.2732	3	AVG
Toluene-d8(mz100)	0.8582	0.8684	0.8596	0.8652	0.8701	0.8778	0.9091	0.8726	2	AVG
4-Bromofluorobenzene(mz174)	0.4298	0.4317	0.4290	0.4243	0.4270	0.4264	0.4333	0.4288	1	AVG
Toluene-d8	1.3403	1.3417	1.3368	1.3347	1.3336	1.3315	1.3211	1.3342	1	AVG
4-Bromofluorobenzene	0.5008	0.5039	0.4995	0.5016	0.5034	0.5040	0.5078	0.5030	1	AVG

Average %RSD 8

Minimum RRF for SPCC(#) = 0.10
(0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %RSD for CCC(*) = 30%

FORM VI VOA


64 1,2-Dichloroethane (mz 98)
Curve Type: Quadratic By-Response
Amt = 0.0089488 + 27.73573*Rsp + 9.030263*Rsp^2
R^2: 0.9999670
Amount/ISTD Amount
Area/ISTD Area (x10^-1)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8
4.0
4.2
4.4
4.6
4.8
5.0
5.2
5.4
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5.8
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6.4
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0.00
0.20
0.40
0.60
0.80
1.00
1.20
1.40
1.60
1.80
2.00
2.20

10/15/12

Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem2/HP09355.i/12oct15a.b/yc15i01.d VSTD300
/chem2/HP09355.i/12oct15a.b/yc15i02.d VSTD100
/chem2/HP09355.i/12oct15a.b/yc15i03.d VSTD050
/chem2/HP09355.i/12oct15a.b/yc15i04.d VSTD020
/chem2/HP09355.i/12oct15a.b/yc15i05.d VSTD010
/chem2/HP09355.i/12oct15a.b/yc15i06.d VSTD004
/chem2/HP09355.i/12oct15a.b/yc15i07.d VSTD001

Area Summary

File ID:

Internal Standard Name	yc15i01.d	yc15i02.d	yc15i03.d	yc15i04.d	yc15i05.d	yc15i06.d	yc15i07.d	Avg. Area	%RS
t-Butyl Alcohol-d10	406726	403352	412834	401859	440407	421996	433320	417213	4
Fluorobenzene	1437215	1360921	1383029	1333428	1392369	1394885	1388390	1384320	2
Chlorobenzene-d5	1046648	978073	994041	954756	995614	984797	977849	990254	3
1,4-Dichlorobenzene-d4	607964	571243	572625	541980	567514	566053	561154	569790	3

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

File ID:

Internal Standard Name	yc15i01.d	yc15i02.d	yc15i03.d	yc15i04.d	yc15i05.d	yc15i06.d	yc15i07.d	Avg. RT
t-Butyl Alcohol-d10	2.060	2.054	2.054	2.042	2.048	2.048	2.042	2.050
Fluorobenzene	4.153	4.147	4.147	4.147	4.141	4.141	4.141	4.145
Chlorobenzene-d5	7.328	7.328	7.323	7.323	7.322	7.316	7.322	7.323
1,4-Dichlorobenzene-d4	9.354	9.348	9.348	9.348	9.348	9.348	9.348	9.349

* indicates the retention time is greater than 30 seconds from the average RT.

Report generated on 10/15/2012 at 16:41.

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP09355 ICV Date: 10/15/12 Time: 18:26

Lab File ID: yc15v02.d Init. Calib. Date(s): 10/15/12 10/15/12

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

	COMPOUND	RRF	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT	
	Dichlorodifluoromethane	0.3384	0.3240	19.15	20	-4	
#	Chloromethane	0.3589	0.3552	19.79	20	-1	#
*	Vinyl Chloride	0.3516	0.3269	18.60	20	-7	*
	1,3-Butadiene	0.1510	0.1643	21.75	20	9	
	Bromomethane	0.2298	0.1631	14.19	20	-29	
	Chloroethane	0.1905	0.1193	12.52	20	-37	
	Dichlorofluoromethane	0.4183	0.4337	20.74	20	4	
	Trichlorofluoromethane	0.3781	0.3649	19.30	20	-4	
	n-Pentane	0.3445	0.2819	16.37	20	-18	
	Freon 123a	0.2674	0.2812	21.03	20	5	
	Acrolein	1.6675	1.2915	116.18	150	-23	
*	1,1-Dichloroethene	0.2032	0.2290	22.53	20	13	*
	Freon 113	0.2087	0.2392	22.92	20	15	
	Acetone	0.0568	0.0494	130.43	150	-13	
	Methyl Iodide	0.3867	0.4182	21.63	20	8	
	2-Propanol	0.7011	0.5562	119.00	150	-21	
	Carbon Disulfide	0.6262	0.6737	21.52	20	8	
	Allyl Chloride	0.3749	0.3553	18.95	20	-5	
	Methyl Acetate	0.3094	0.3140	20.29	20	1	
	Methylene Chloride	0.2528	0.2701	21.37	20	7	
	t-Butyl Alcohol	1.2399	1.0274	165.72	200	-17	
	Acrylonitrile	0.2130	0.2082	97.73	100	-2	
	trans-1,2-Dichloroethene	0.2433	0.2788	22.92	20	15	
	Methyl Tertiary Butyl Ether	0.8414	0.9084	21.59	20	8	
	n-Hexane	0.3642	0.4613	25.33	20	27	
	1,2-Dichloroethene (total)	0.2577	0.2957	45.89	40	15	
#	1,1-Dichloroethane	0.4416	0.5008	22.68	20	13	#
	di-Isopropyl Ether	0.8854	0.9477	21.41	20	7	
	2-Chloro-1,3-Butadiene	0.3749	0.4443	23.70	20	19	
	Ethyl t-Butyl Ether	0.8526	0.9271	21.75	20	9	
	cis-1,2-Dichloroethene	0.2722	0.3126	22.97	20	15	
	2-Butanone	0.3080	0.3169	154.37	150	3	
	2,2-Dichloropropane	0.3318	0.3766	22.70	20	14	
	Propionitrile	1.5452	1.5441	149.89	150	0	
	Methacrylonitrile	0.2108	0.2197	156.31	150	4	
	Bromochloromethane	0.1477	0.1516	20.54	20	3	

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP09355 ICV Date: 10/15/12 Time: 18:26

Lab File ID: yc15v02.d Init. Calib. Date(s): 10/15/12 10/15/12

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

	COMPOUND	RRF	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT	
	Tetrahydrofuran	1.4466	1.4202	98.17	100	-2	
*	Chloroform	0.4441	0.4667	21.02	20	5	*
	1,1,1-Trichloroethane	0.3785	0.4345	22.96	20	15	
	Cyclohexane	0.4439	0.5358	24.14	20	21	
	1,1-Dichloropropene	0.3287	0.3714	22.60	20	13	
	Carbon Tetrachloride	0.2813	0.3264	23.21	20	16	
	Isobutyl Alcohol	0.4271	0.3871	453.20	500	-9	
	Benzene	1.0480	1.1894	22.70	20	13	
	1,2-Dichloroethane	0.3461	0.3761	21.73	20	9	
	t-Amyl Methyl Ether	0.8379	0.8874	21.18	20	6	
	n-Heptane	0.4224	0.5336	25.26	20	26	
	n-Butanol	0.3961	0.3647	920.78	1000	-8	
	Trichloroethene	0.2607	0.2982	22.88	20	14	
*	1,2-Dichloropropane	0.2752	0.3059	22.24	20	11	*
	Methylcyclohexane	0.4723	0.5607	23.74	20	19	
	Methyl Methacrylate	0.3254	0.3296	20.26	20	1	
	Dibromomethane	0.1823	0.1955	21.44	20	7	
	1,4-Dioxane	0.1102	0.1073	486.92	500	-3	
	Bromodichloromethane	0.3084	0.3333	21.62	20	8	
	2-Nitropropane	0.1276	0.1116	17.49	20	-13	
	2-Chloroethyl Vinyl Ether	0.2461	0.2492	20.25	20	1	
	cis-1,3-Dichloropropene	0.3947	0.4654	23.58	20	18	
	4-Methyl-2-Pentanone	0.5824	0.5904	101.37	100	1	
*	Toluene	0.9308	1.0404	22.36	20	12	*
	trans-1,3-Dichloropropene	0.5322	0.5648	21.22	20	6	
	Ethyl Methacrylate	0.7043	0.7238	20.55	20	3	
	1,1,2-Trichloroethane	0.3761	0.3999	21.26	20	6	
	Tetrachloroethene	0.4015	0.4586	22.85	20	14	
	1,3-Dichloropropane	0.6306	0.6672	21.16	20	6	
	2-Hexanone	0.6551	0.6585	100.52	100	1	
	Dibromochloromethane	0.3462	0.3725	21.52	20	8	
	1,2-Dibromoethane	0.4082	0.4334	21.24	20	6	
#	Chlorobenzene	1.0363	1.1307	21.82	20	9	#
	1,1,1,2-Tetrachloroethane	0.3377	0.3622	21.45	20	7	
*	Ethylbenzene	1.8080	1.9897	22.01	20	10	*
	m+p-Xylene	0.7131	0.7931	44.48	40	11	

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP09355 ICV Date: 10/15/12 Time: 18:26

Lab File ID: yc15v02.d Init. Calib. Date(s): 10/15/12 10/15/12

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

	COMPOUND	RRF	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT	
	Xylene (Total)	0.7155	0.5683	66.27	60	10	
	o-Xylene	0.7202	0.7846	21.79	20	9	
	Styrene	1.2026	1.3150	21.87	20	9	
#	Bromoform	0.2939	0.2795	19.02	20	-5	#
	Isopropylbenzene	1.8072	2.0462	22.65	20	13	
	Cyclohexanone	0.4878	0.5318	545.15	500	9	
#	1,1,2,2-Tetrachloroethane	1.1801	1.2013	20.36	20	2	#
	trans-1,4-Dichloro-2-Butene	0.3446	0.3779	109.68	100	10	
	Bromobenzene	0.8307	0.8761	21.09	20	5	
	1,2,3-Trichloropropane	0.3670	0.3666	19.98	20	0	
	n-Propylbenzene	3.6372	4.1231	22.67	20	13	
	2-Chlorotoluene	0.7725	0.8317	21.53	20	8	
	1,3,5-Trimethylbenzene	2.7088	3.0451	22.48	20	12	
	4-Chlorotoluene	0.7988	0.8579	21.48	20	7	
	tert-Butylbenzene	0.6083	0.6799	22.35	20	12	
	Pentachloroethane	0.5011	0.4887	19.50	20	-2	
	1,2,4-Trimethylbenzene	2.7947	3.0832	22.06	20	10	
	sec-Butylbenzene	3.3308	3.9044	23.44	20	17	
	p-Isopropyltoluene	2.9418	3.4140	23.21	20	16	
	1,3-Dichlorobenzene	1.5682	1.6978	21.65	20	8	
	1,4-Dichlorobenzene	1.6738	1.7868	21.35	20	7	
	1,2,3-Trimethylbenzene	3.0045	3.1754	21.14	20	6	
	Benzyl Chloride	2.2586	2.1396	18.95	20	-5	
	1,3-Diethylbenzene	1.8547	2.0069	21.64	20	8	
	1,4-Diethylbenzene	1.9054	2.1123	22.17	20	11	
	n-Butylbenzene	1.4578	1.7019	23.35	20	17	
	1,2-Dichlorobenzene	1.5854	1.7078	21.54	20	8	
	1,2-Diethylbenzene	1.5947	1.7151	21.51	20	8	
	1,2-Dibromo-3-Chloropropane	0.3001	0.2909	19.38	20	-3	
	1,3,5-Trichlorobenzene	1.2031	1.3545	22.52	20	13	
	1,2,4-Trichlorobenzene	1.1308	1.2818	22.67	20	13	
	Hexachlorobutadiene	0.5244	0.5882	22.43	20	12	
	Naphthalene	4.3842	4.3601	19.89	20	-1	
	1,2,3-Trichlorobenzene	1.1093	1.1935	21.52	20	8	
	2-Methylnaphthalene	2.4386	2.2662	18.59	20	-7	

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP09355 ICV Date: 10/15/12 Time: 18:26

Lab File ID: yc15v02.d Init. Calib. Date(s): 10/15/12 10/15/12

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

COMPOUND	RRF	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT

Average %Drift 10

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP09355 Calibration Date: 10/21/12 Time: 01:24

Lab File ID: yc21c01.d Init. Calib. Date(s): 10/15/12 10/15/12

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

	COMPOUND	RRF	RRF50	ACTUAL CONC.	TRUE CONC.	% DRIFT	
	Dichlorodifluoromethane	0.3384	0.3070	45.36	50	-9	
#	Chloromethane	0.3589	0.3862	53.80	50	8	#
*	Vinyl Chloride	0.3516	0.3330	47.36	50	-5	*
	Bromomethane	0.2298	0.2138	46.53	50	-7	
	Chloroethane	0.1905	0.1789	46.96	50	-6	
	Dichlorofluoromethane	0.4183	0.4402	52.61	50	5	
	Trichlorofluoromethane	0.3781	0.3648	48.24	50	-4	
	Freon 123a	0.2674	0.2796	52.29	50	5	
	Acrolein	1.6675	1.3338	399.95	500	-20	
*	1,1-Dichloroethene	0.2032	0.2176	53.53	50	7	*
	Freon 113	0.2087	0.2160	51.74	50	3	
	Acetone	0.0568	0.0641	112.84	100	13	
	Methyl Iodide	0.3867	0.4114	53.19	50	6	
	2-Propanol	0.7011	0.7479	266.72	250	7	
	Carbon Disulfide	0.6262	0.6704	53.53	50	7	
	Allyl Chloride	0.3749	0.3310	44.14	50	-12	
	Methyl Acetate	0.3094	0.3803	61.44	50	23	
	Methylene Chloride	0.2528	0.2547	50.37	50	1	
	t-Butyl Alcohol	1.2399	1.4170	285.70	250	14	
	Acrylonitrile	0.2130	0.2331	54.70	50	9	
	trans-1,2-Dichloroethene	0.2433	0.2470	50.76	50	2	
	Methyl Tertiary Butyl Ether	0.8414	0.8300	49.32	50	-1	
	n-Hexane	0.3642	0.3419	46.93	50	-6	
	1,2-Dichloroethene (total)	0.2577	0.2592	100.63	100	1	
#	1,1-Dichloroethane	0.4416	0.4613	52.23	50	4	#
	di-Isopropyl Ether	0.8854	0.9025	50.97	50	2	
	2-Chloro-1,3-Butadiene	0.3749	0.4038	53.86	50	8	
	Ethyl t-Butyl Ether	0.8526	0.8343	48.93	50	-2	
	cis-1,2-Dichloroethene	0.2722	0.2715	49.87	50	0	
	2-Butanone	0.3080	0.3741	121.48	100	21	
	2,2-Dichloropropane	0.3318	0.3250	48.98	50	-2	
	Propionitrile	1.5452	1.3312	215.37	250	-14	
	Methacrylonitrile	0.2108	0.2054	121.77	125	-3	
	Bromochloromethane	0.1477	0.1304	44.17	50	-12	
	Tetrahydrofuran	1.4466	1.2324	85.19	100	-15	
*	Chloroform	0.4441	0.4347	48.94	50	-2	*

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP09355 Calibration Date: 10/21/12 Time: 01:24

Lab File ID: yc21c01.d Init. Calib. Date(s): 10/15/12 10/15/12

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

	COMPOUND	RRF	RRF50	ACTUAL CONC.	TRUE CONC.	% DRIFT	
	1,1,1-Trichloroethane	0.3785	0.3554	46.94	50	-6	
	Cyclohexane	0.4439	0.4419	49.77	50	0	
	Cyclohexane(mz 84)	0.3653	0.3477	47.59	50	-5	
	Cyclohexane(mz 69)	0.1366	0.1312	48.02	50	-4	
	1,1-Dichloropropene	0.3287	0.3426	52.12	50	4	
	Carbon Tetrachloride	0.2813	0.2840	50.48	50	1	
	Isobutyl Alcohol	0.4271	0.4377	640.46	625	2	
	Benzene	1.0480	1.0656	50.84	50	2	
	1,2-Dichloroethane	0.3461	0.3506	50.64	50	1	
	1,2-Dichloroethane(mz 98)	0.0318	0.0327	46.32	50	-7	
	t-Amyl Methyl Ether	0.8379	0.7807	46.59	50	-7	
	n-Heptane	0.4224	0.3553	42.06	50	-16	
	n-Butanol	0.3961	0.3652	1152.31	1250	-8	
	Trichloroethene	0.2607	0.2620	50.26	50	1	
*	1,2-Dichloropropane	0.2752	0.2825	51.33	50	3	*
	Methylcyclohexane(mz98)	0.2077	0.1712	41.22	50	-18	
	Methylcyclohexane	0.4723	0.3946	41.77	50	-16	
	Methyl Methacrylate	0.3254	0.3040	46.71	50	-7	
	Dibromomethane	0.1823	0.1755	48.14	50	-4	
	1,4-Dioxane	0.1102	0.0866	491.52	625	-21	
	Bromodichloromethane	0.3084	0.3038	49.25	50	-2	
	2-Nitropropane	0.1276	0.1553	121.70	100	22	
	2-Chloroethyl Vinyl Ether	0.2461	0.2322	47.19	50	-6	
	cis-1,3-Dichloropropene	0.3947	0.3799	48.12	50	-4	
	4-Methyl-2-Pentanone	0.5824	0.7552	129.66	100	30	
*	Toluene	0.9308	0.9422	50.61	50	1	*
	trans-1,3-Dichloropropene	0.5322	0.5197	48.83	50	-2	
	Ethyl Methacrylate	0.7043	0.6753	47.94	50	-4	
	1,1,2-Trichloroethane	0.3761	0.3661	48.66	50	-3	
	Tetrachloroethene	0.4015	0.3823	47.62	50	-5	
	1,3-Dichloropropane	0.6306	0.6280	49.80	50	0	
	2-Hexanone	0.6551	0.8920	136.17	100	36	
	Dibromochloromethane	0.3462	0.3357	48.49	50	-3	
	1,2-Dibromoethane	0.4082	0.4005	49.06	50	-2	
#	Chlorobenzene	1.0363	1.0180	49.12	50	-2	#
	1,1,1,2-Tetrachloroethane	0.3377	0.3314	49.07	50	-2	

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP09355 Calibration Date: 10/21/12 Time: 01:24

Lab File ID: yc21c01.d Init. Calib. Date(s): 10/15/12 10/15/12

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

	COMPOUND	RRF	RRF50	ACTUAL CONC.	TRUE CONC.	% DRIFT	
*	Ethylbenzene	1.8080	1.8125	50.12	50	0	*
	m+p-Xylene	0.7131	0.7048	98.83	100	-1	
	Xylene (Total)	0.7155	0.7044	147.68	150	-2	
	o-Xylene	0.7202	0.7037	48.85	50	-2	
	Styrene	1.2026	1.1798	49.05	50	-2	
#	Bromoform	0.2939	0.2585	43.98	50	-12	#
	Isopropylbenzene	1.8072	1.8013	49.84	50	0	
	Cyclohexanone	0.4878	0.3151	403.68	625	-35	
#	1,1,2,2-Tetrachloroethane	1.1801	1.1728	49.69	50	-1	#
	trans-1,4-Dichloro-2-Butene	0.3446	0.2664	96.62	125	-23	
	Bromobenzene	0.8307	0.7665	46.13	50	-8	
	1,2,3-Trichloropropane	0.3670	0.3525	48.03	50	-4	
	n-Propylbenzene	3.6372	3.6563	50.26	50	1	
	2-Chlorotoluene	0.7725	0.7317	47.35	50	-5	
	1,3,5-Trimethylbenzene	2.7088	2.6589	49.08	50	-2	
	4-Chlorotoluene	0.7988	0.7655	47.91	50	-4	
	tert-Butylbenzene	0.6083	0.5862	48.18	50	-4	
	Pentachloroethane	0.5011	0.4718	47.08	50	-6	
	1,2,4-Trimethylbenzene	2.7947	2.7323	48.88	50	-2	
	sec-Butylbenzene	3.3308	3.2821	49.27	50	-1	
	p-Isopropyltoluene	2.9418	2.8925	49.16	50	-2	
	1,3-Dichlorobenzene	1.5682	1.4653	46.72	50	-7	
	1,4-Dichlorobenzene	1.6738	1.5718	46.95	50	-6	
	1,2,3-Trimethylbenzene	3.0045	2.8719	47.79	50	-4	
	Benzyl Chloride	2.2586	2.0314	44.97	50	-10	
	1,3-Diethylbenzene	1.8547	1.7315	46.68	50	-7	
	1,4-Diethylbenzene	1.9054	1.8125	47.56	50	-5	
	n-Butylbenzene	1.4578	1.4344	49.20	50	-2	
	1,2-Dichlorobenzene	1.5854	1.5200	47.94	50	-4	
	1,2-Diethylbenzene	1.5947	1.4695	46.07	50	-8	
	1,2-Dibromo-3-Chloropropane	0.3001	0.3068	51.11	50	2	
	1,3,5-Trichlorobenzene	1.2031	1.0756	44.70	50	-11	
	1,2,4-Trichlorobenzene	1.1308	0.9895	43.75	50	-12	
	Hexachlorobutadiene	0.5244	0.4364	41.61	50	-17	
	Naphthalene	4.3842	3.8355	43.74	50	-13	
	1,2,3-Trichlorobenzene	1.1093	0.9340	42.10	50	-16	

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP09355 Calibration Date: 10/21/12 Time: 01:24

Lab File ID: yc21c01.d Init. Calib. Date(s): 10/15/12 10/15/12

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: DB-624 ID: .18

COMPOUND	RRF	RRF50	ACTUAL CONC.	TRUE CONC.	% DRIFT
2-Methylnaphthalene	2.4386	1.9620	40.23	50	-20
Dibromofluoromethane	0.2221	0.2181	49.10	50	-2
Dibromofluoromethane(mz111)	0.2271	0.2246	49.44	50	-1
1,2-Dichloroethane-d4	0.0597	0.0610	51.10	50	2
1,2-Dichloroethane-d4(mz104)	0.0375	0.0362	48.29	50	-3
Toluene-d8(mz100)	0.8726	0.8859	50.76	50	2
1,2-Dichloroethane-d4(mz65)	0.2732	0.2973	54.40	50	9
4-Bromofluorobenzene(mz174)	0.4288	0.4162	48.53	50	-3
Toluene-d8	1.3342	1.3685	51.28	50	3
4-Bromofluorobenzene	0.5030	0.5098	50.67	50	1

Average %Drift 7

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

Lancaster Laboratories
Continuing Calibration Internal Standard Check

Initial Calibration Standards:

/chem2/HP09355.i/12oct15a.b/yc15i07.d
/chem2/HP09355.i/12oct15a.b/yc15i06.d
/chem2/HP09355.i/12oct15a.b/yc15i05.d
/chem2/HP09355.i/12oct15a.b/yc15i04.d
/chem2/HP09355.i/12oct15a.b/yc15i03.d
/chem2/HP09355.i/12oct15a.b/yc15i02.d
/chem2/HP09355.i/12oct15a.b/yc15i01.d

File /chem2/HP09355.i/12oct15a.b/yc15i03.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem2/HP09355.i/12oct21a.b/yc21c01.d

RT Summary

Internal Standard Name	File ID: yc21c01.d	ICAL RT	In Spec
t-Butyl Alcohol-d10	2.048	2.054	Yes
Fluorobenzene	4.141	4.147	Yes
Chlorobenzene-d5	7.323	7.323	Yes
1,4-Dichlorobenzene-d4	9.348	9.348	Yes

A "No" indicates the retention time is greater than 30 seconds from the referenced ICAL standard.

Area Summary

Internal Standard Name	File ID: yc21c01.d	ICAL Area	Low Limit	High Limit	In Spec
t-Butyl Alcohol-d10	467310	412834	206417	825668	Yes
Fluorobenzene	1251569	1383029	691514	2766058	Yes
Chlorobenzene-d5	870330	994041	497020	1988082	Yes
1,4-Dichlorobenzene-d4	503266	572625	286312	1145250	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

Comments: _____

report generated on 10/21/2012 at 02:14

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: LANCAS Case No.: SAS No.: SDG No.: OSP14

Lab File ID (Standard): yc21c01.d Date Analyzed: 10/21/12

Instrument ID: HP09355 Time Analyzed: 01:24

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

		IS1(FBZ) AREA #	RT #	IS2(CBZ) AREA #	RT #	IS3(DCB) AREA #	RT #	IS4(TBA) AREA #	RT #
	12 HOUR STD	1251569	4.141	870330	7.322	503266	9.348	467310	2.048
	UPPER LIMIT	2503138	4.641	1740660	7.822	1006532	9.848	934620	2.548
	LOWER LIMIT	625784	3.641	435165	6.822	251633	8.848	233655	1.548
	LAB SAMPLE ID								
01	VBLKY78	1219483	4.128	846223	7.316	466979	9.342	441161	2.036
02	LCSY78	1275024	4.134	894322	7.316	508588	9.348	463237	2.054
03	6829250	1268396	4.135	883686	7.322	484637	9.348		
04	6829251	1181490	4.141	817102	7.322	447762	9.348		
05	6828401	1157354	4.135	802261	7.322	437161	9.348	557463	2.036
06	6828402	1200495	4.141	838996	7.322	463741	9.348	444487	2.048
07	6828403	1193342	4.134	829440	7.316	450209	9.348	397165	2.042
08	6828404	1231990	4.135	849150	7.316	465129	9.348	427355	2.042
09	6828405	1212829	4.135	834367	7.316	461698	9.348	423802	2.048
10	6828406	1204346	4.134	826674	7.316	458601	9.348	407537	2.048
11	6828407	1215340	4.128	839314	7.316	458781	9.342	413357	2.042
12	6828408	1181403	4.135	813131	7.316	449195	9.348	413973	2.048
13	6828409MS	1223501	4.135	846928	7.316	481978	9.342	433061	2.048
14	6828410MSD	1082460	4.134	747311	7.316	428197	9.342	368435	2.036
15	6828412	1194299	4.128	827633	7.316	448351	9.342	423766	2.036
16	6828413	1176128	4.135	810884	7.316	443398	9.342	399069	2.048
17	6828414	1067267	4.129	736328	7.316	400473	9.342	359842	2.042
18	6828415	1195724	4.135	828099	7.316	450377	9.342	421628	2.048
19	6828481	1194989	4.135	822595	7.316	453996	9.348	425268	2.042
20	6828482	1223160	4.129	844041	7.316	464917	9.342	436836	2.036
21	6828483	1250459	4.135	862220	7.316	474698	9.348	447185	2.042
22	6828484	1165615	4.135	813631	7.316	441115	9.342	427118	2.048

IS1 (FBZ)=Fluorobenzene
IS2 (CBZ)=Chlorobenzene-d5
IS3 (DCB)=1,4-Dichlorobenzene-d4
IS4 (TBA)=t-Butyl Alcohol-d10

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM VIII VOA

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:

Lab Code: LANCAS Case No.: SAS No.: SDG No.: OSP14

Lab File ID (Standard): yc21c01.d Date Analyzed: 10/21/12

Instrument ID: HP09355 Time Analyzed: 01:24

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

		IS1(FBZ) AREA #	RT #	IS2(CBZ) AREA #	RT #	IS3(DCB) AREA #	RT #	IS4(TBA) AREA #	RT #
	12 HOUR STD	1251569	4.141	870330	7.322	503266	9.348	467310	2.048
	UPPER LIMIT	2503138	4.641	1740660	7.822	1006532	9.848	934620	2.548
	LOWER LIMIT	625784	3.641	435165	6.822	251633	8.848	233655	1.548
	LAB SAMPLE ID								
23	6828485	1200728	4.135	833665	7.316	462045	9.348	421956	2.048

IS1 (FBZ)=Fluorobenzene
IS2 (CBZ)=Chlorobenzene-d5
IS3 (DCB)=1,4-Dichlorobenzene-d4
IS4 (TBA)=t-Butyl Alcohol-d10

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM VIII VOA

Sample Data

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LOQ/MDL Summary
GC/MS Volatiles

SDG: OSP14

Fraction: Volatiles by GC/MS

10903: 8260 Std. Water Master Analyte Name	Default MDL	Default LOQ	Units
Chloromethane	1	5	ug/l
Vinyl Chloride	1	5	ug/l
Bromomethane	1	5	ug/l
Chloroethane	1	5	ug/l
Trichlorofluoromethane	2	5	ug/l
Acrolein	40	100	ug/l
1,1-Dichloroethene	0.8	5	ug/l
Methylene Chloride	2	5	ug/l
Acrylonitrile	4	20	ug/l
trans-1,2-Dichloroethene	0.8	5	ug/l
1,1-Dichloroethane	1	5	ug/l
cis-1,2-Dichloroethene	0.8	5	ug/l
Chloroform	0.8	5	ug/l
1,1,1-Trichloroethane	0.8	5	ug/l
Carbon Tetrachloride	1	5	ug/l
Benzene	0.5	5	ug/l
1,2-Dichloroethane	1	5	ug/l
Trichloroethene	1	5	ug/l
1,2-Dichloropropane	1	5	ug/l
Bromodichloromethane	1	5	ug/l
2-Chloroethyl Vinyl Ether	2	10	ug/l
cis-1,3-Dichloropropene	1	5	ug/l
Toluene	0.7	5	ug/l
trans-1,3-Dichloropropene	1	5	ug/l
1,1,2-Trichloroethane	0.8	5	ug/l
Tetrachloroethene	0.8	5	ug/l
Dibromochloromethane	1	5	ug/l
Chlorobenzene	0.8	5	ug/l
Ethylbenzene	0.8	5	ug/l
Xylene (Total)	0.8	5	ug/l
Bromoform	1	5	ug/l
1,1,2,2-Tetrachloroethane	1	5	ug/l

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

M4---

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: 6828481

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct21a.b/yc21s17.d

Level: (low/med) LOW Date Received: 10/18/12

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
107-02-8	Acrolein	100	U
75-35-4	1,1-Dichloroethene	5	U
75-09-2	Methylene Chloride	5	U
107-13-1	Acrylonitrile	20	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	1	J
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	2	J
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (Total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

M4---

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: 6828481

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct21a.b/yc21s17.d

Level: (low/med) LOW Date Received: 10/18/12

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

M4---

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 6828481

Data file: /chem2/HP09355.i/12oct21a.b/yc21s17.d
Injection date and time: **21-OCT-2012 09:26**
Data file Sample Info. Line: M4---;6828481;1;0;;OSP14;;;yc21b01;
Instrument ID: **HP09355.i** Batch: **Y122951AA**
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **82**
Calibration date and time (Last Method Edit): 21-OCT-2012 03:56
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
28) t-Butyl Alcohol-d10	2.042	(0.006)	199	65	425268	(-9)	250.00	
71) Fluorobenzene	4.135	(0.006)	543	96	1194989	(-5)	50.00	
106) Chlorobenzene-d5	7.316	(0.006)	1066	117	822595	(-5)	50.00	
136) 1,4-Dichlorobenzene-d4	9.348	(0.000)	1400	152	453996	(-10)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(1)	3.496	(-0.001)	113	254527	47.951	96%		80 - 116
62) 1,2-Dichloroethane-d4	(1)	3.800	(0.000)	102	67966	47.654	95%		77 - 113
93) Toluene-d8	(2)	5.753	(0.000)	98	1115997	50.841	102%		80 - 113
119) 4-Bromofluorobenzene	(2)	8.430	(-0.001)	95	419562	50.700	101%		78 - 113

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Chloromethane	(1)				Not Detected					1	5
5) Vinyl Chloride	(1)				Not Detected					1	5
7) Bromomethane	(1)				Not Detected					1	5
8) Chloroethane	(1)				Not Detected					1	5
10) Trichlorofluoromethane	(1)				Not Detected					2	5
15) Acrolein	(4)				Not Detected					40	100
16) 1,1-Dichloroethene	(1)				Not Detected					0.8	5
26) Methylene Chloride	(1)				Not Detected					2	5
30) Acrylonitrile	(1)				Not Detected					4	20
31) trans-1,2-Dichloroethene	(1)				Not Detected					0.8	5
34) 1,1-Dichloroethane	(1)				Not Detected					1	5
40) cis-1,2-Dichloroethene	(1)				Not Detected					0.8	5
50) Chloroform	(1)				Not Detected					0.8	5
53) 1,1,1-Trichloroethane	(1)				Not Detected					0.8	5
58) Carbon Tetrachloride	(1)				Not Detected					1	5
63) Benzene	(1)	3.867	(-0.001)	78	37178	1.484	1.48		J	0.5	5
65) 1,2-Dichloroethane	(1)				Not Detected					1	5
74) Trichloroethene	(1)				Not Detected					1	5
77) 1,2-Dichloropropane	(1)				Not Detected					1	5
83) Bromodichloromethane	(1)				Not Detected					1	5
86) 2-Chloroethyl Vinyl Ether	(1)				Not Detected					2	10
87) cis-1,3-Dichloropropene	(1)				Not Detected					1	5
94) Toluene	(2)				Not Detected					0.7	5
95) trans-1,3-Dichloropropene	(2)				Not Detected					1	5
97) 1,1,2-Trichloroethane	(2)				Not Detected					0.8	5
98) Tetrachloroethene	(2)	6.410	(0.000)	166	10938	1.656	1.66		J	0.8	5
102) Dibromochloromethane	(2)				Not Detected					1	5
107) Chlorobenzene	(2)				Not Detected					0.8	5
109) Ethylbenzene	(2)				Not Detected					0.8	5
110) m+p-Xylene	(2)				Not Detected					0.8	5
112) Xylene (Total)	(2)				Not Detected					0.8	5

Digitally signed by Lauren C. Temple on 10/22/2012 at 10:15. Target 3.5 esignature user ID: lct01518

OSP14 0047

M4---

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

6828481

Data file: /chem2/HP09355.i/12oct21a.b/yc21s17.d
Data file Sample Info. Line: M4---;6828481;1;0;;OSP14;;;yc21b01;
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

Injection date and time: **21-OCT-2012 09:26**
Instrument ID: **HP09355.i** Batch: **Y122951AA**

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **82**
Calibration date and time (Last Method Edit): 21-OCT-2012 03:56
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

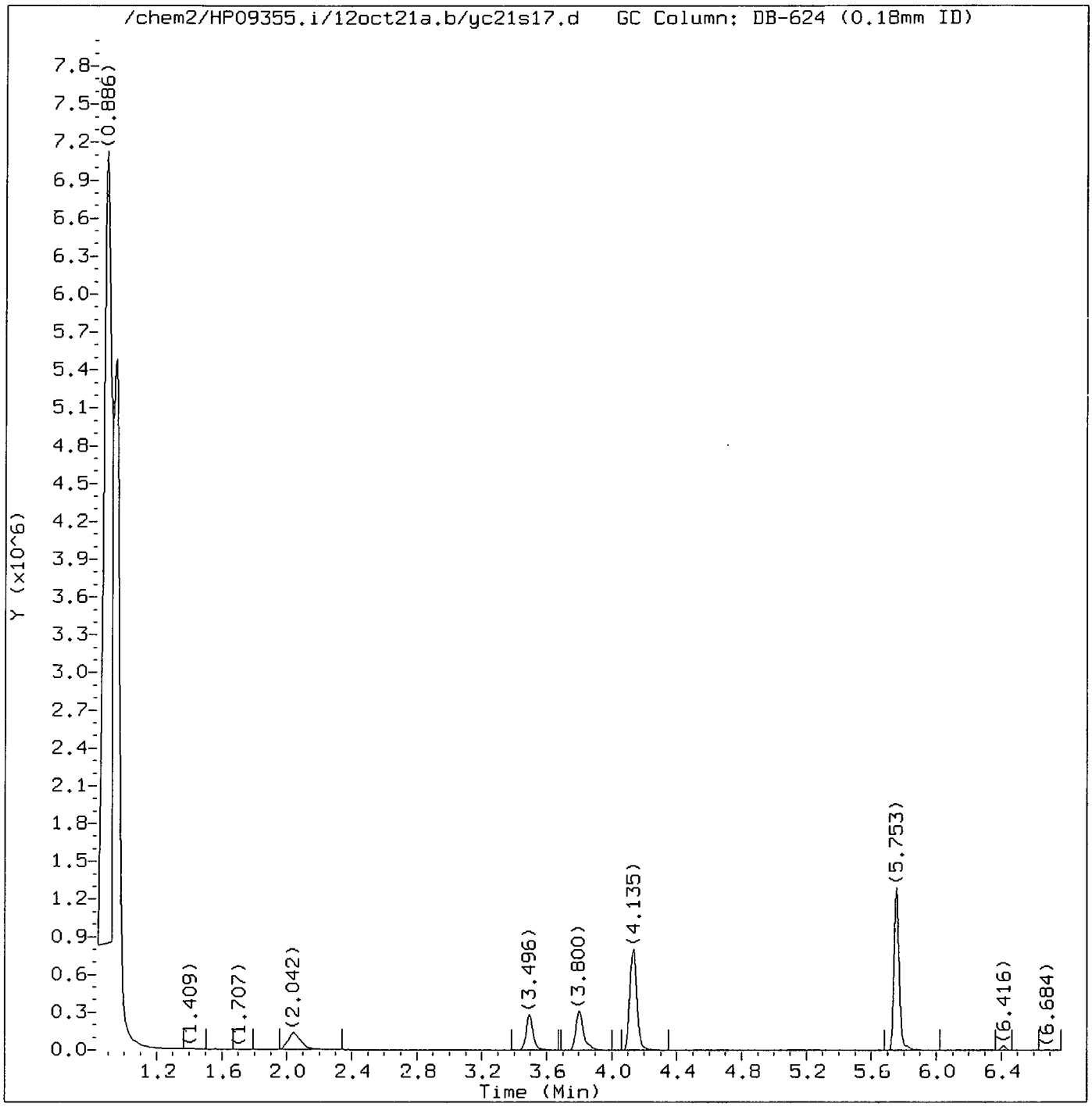
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
113) o-Xylene	(2)				Not Detected					0.8	5
115) Bromoform	(2)				Not Detected					1	5
122) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					1	5

Total number of targets = 34

Digitally signed by Lauren C. Temple on 10/22/2012 at 10:15. Target 3.5 esignature user ID: lct01518

Secondary review performed and digitally signed by Christine M. Dulaney on 10/24/2012 at 15:38. Parallax ID: cmd00448



Total Ion Chromatogram (TIC)

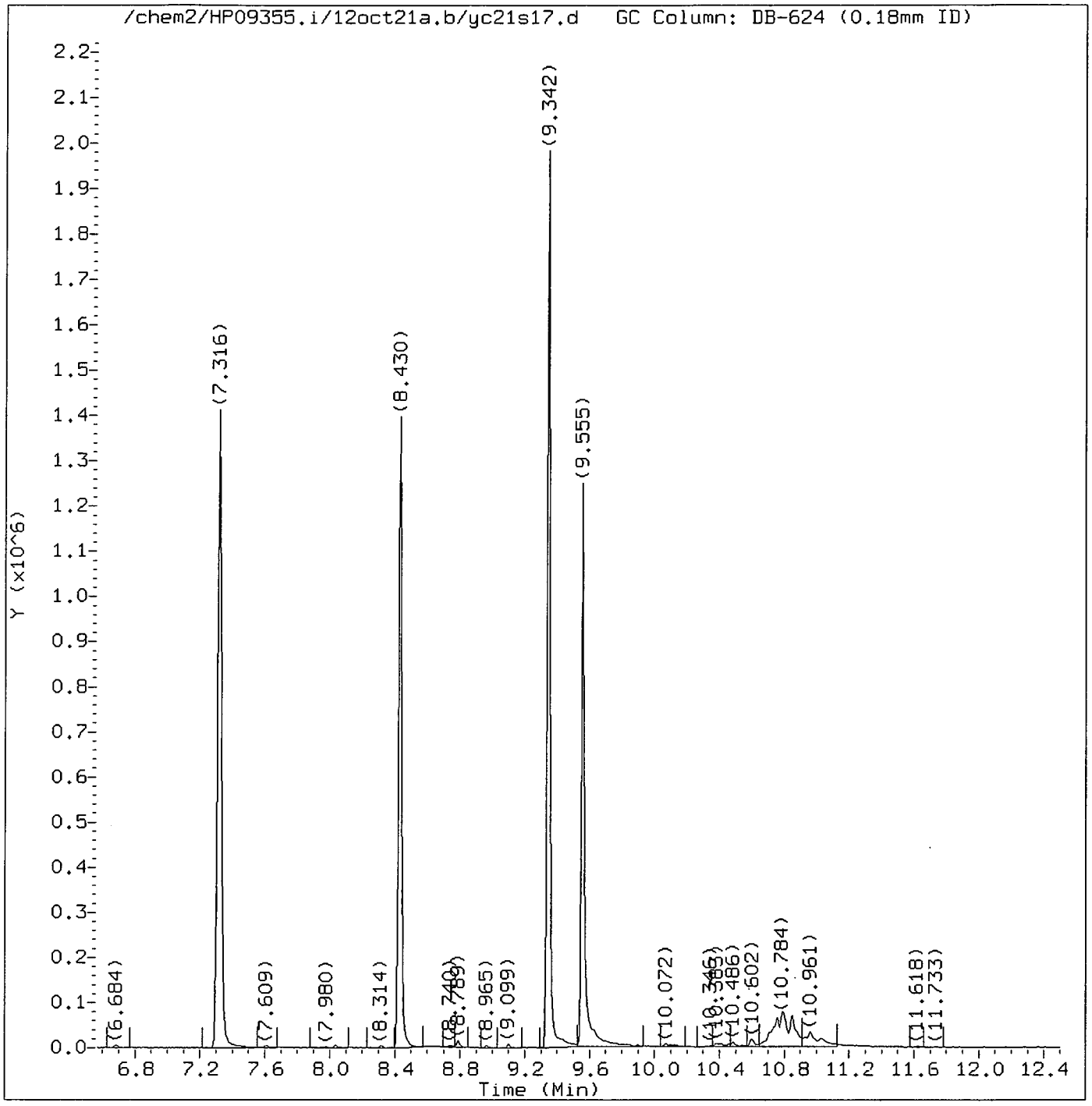
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s17.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 09:26 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

Sample Name: M4--- Lab Sample ID: 6828481

Digitally signed by Lauren C. Temple
on 10/22/2012 at 10:15.
Target 3.5 esignature user ID: lct01518



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s17.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 09:26 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

Sample Name: M4--- Lab Sample ID: 6828481

Digitally signed by Lauren C. Temple
on 10/22/2012 at 10:15.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s17.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 09:26 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

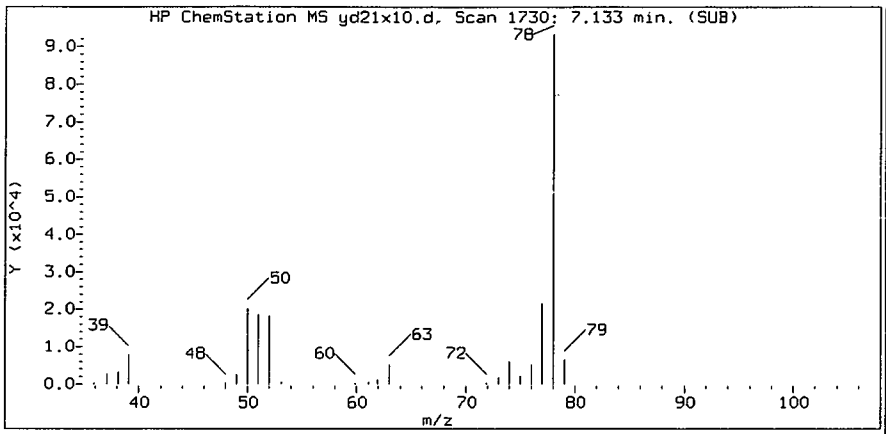
Sample Name: M4--- Lab Sample ID: 6828481

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
28)*t-Butyl Alcohol-d10	(4)	2.042	65	425268	250.000
52)$Dibromofluoromethane	(1)	3.496	113	254527	47.951
62)$1,2-Dichloroethane-d4	(1)	3.800	102	67966	47.654
63) Benzene	(1)	3.867	78	37178	1.484
71)*Fluorobenzene	(1)	4.135	96	1194989	50.000
93)$Toluene-d8	(2)	5.753	98	1115997	50.841
98) Tetrachloroethene	(2)	6.410	166	10938	1.656
106)*Chlorobenzene-d5	(2)	7.316	117	822595	50.000
119)$4-Bromofluorobenzene	(2)	8.430	95	419562	50.700
136)*1,4-Dichlorobenzene-d4	(3)	9.348	152	453996	50.000

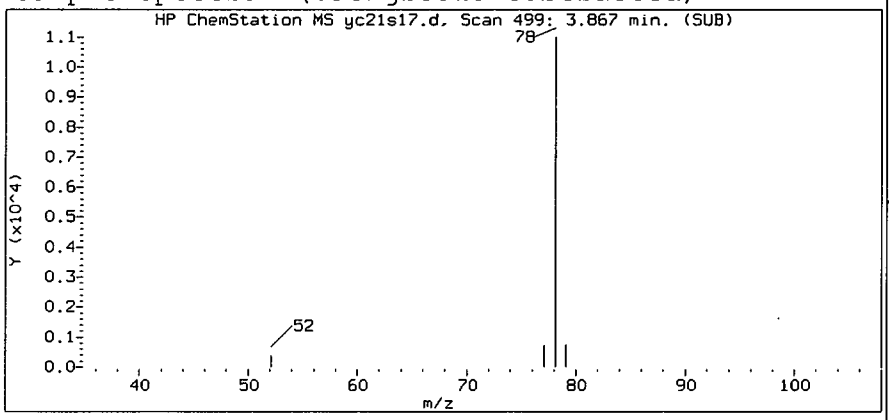
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Lauren C. Temple
on 10/22/2012 at 10:15.
Target 3.5 esignature user ID: lct01518

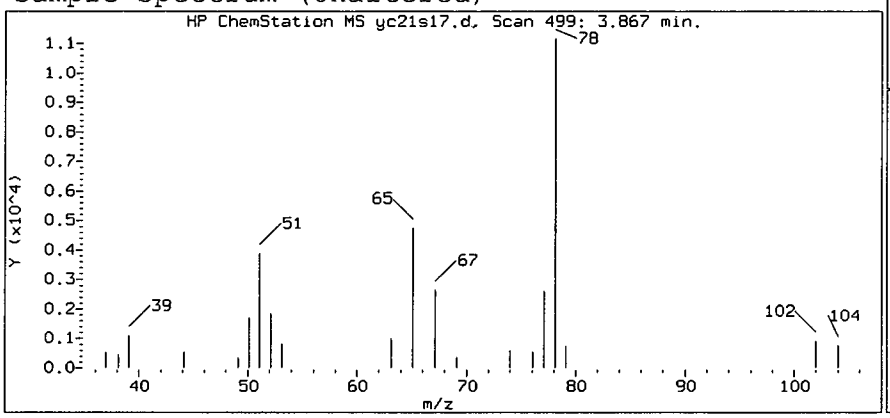
Reference Standard Spectrum for Benzene

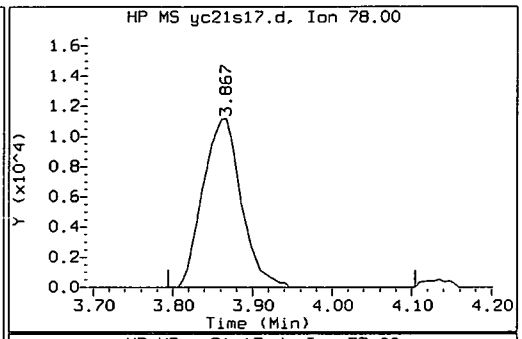


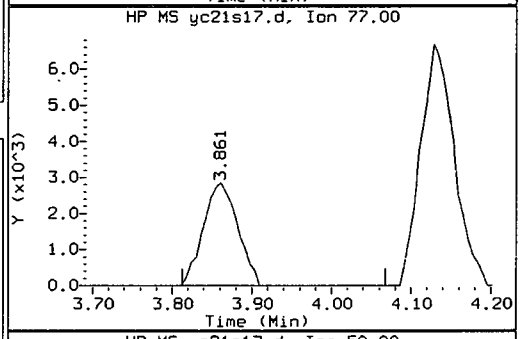
Sample Spectrum (Background Subtracted)

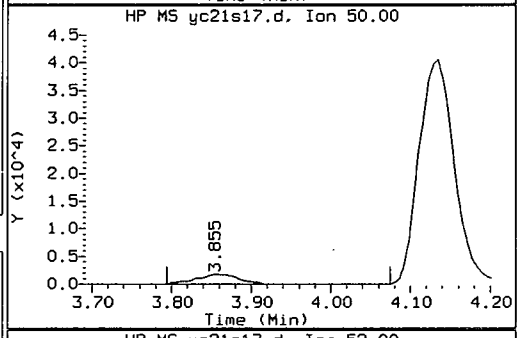


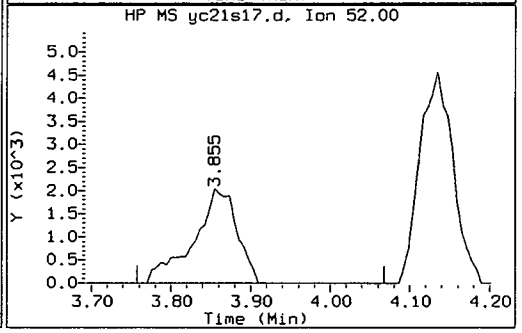
Sample Spectrum (Unaltered)











Data File: /chem2/HP09355.i/12oct21a.b/yc21s17.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 09:26 Analyst ID: SAS00403

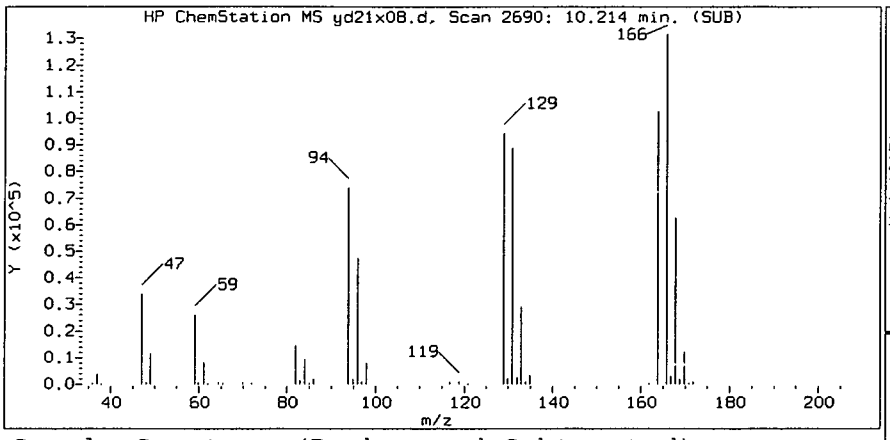
Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

Sample Name: M4--- Lab Sample ID: 6828481

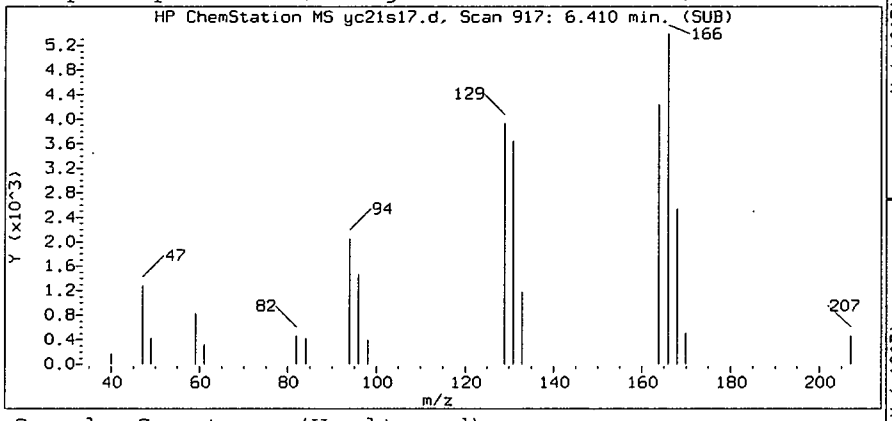
Compound Number : 63
Compound Name : Benzene
Scan Number : 499
Retention Time (minutes): 3.867
Relative Retention Time :-0.00138
Quant Ion : 78.00
Area (flag) : 37178
On-Column Amount (ng) : 1.4843

Digitally signed by Lauren C. Temple on 10/22/2012 at 10:15.
Target 3.5 esignature user ID: lct01518

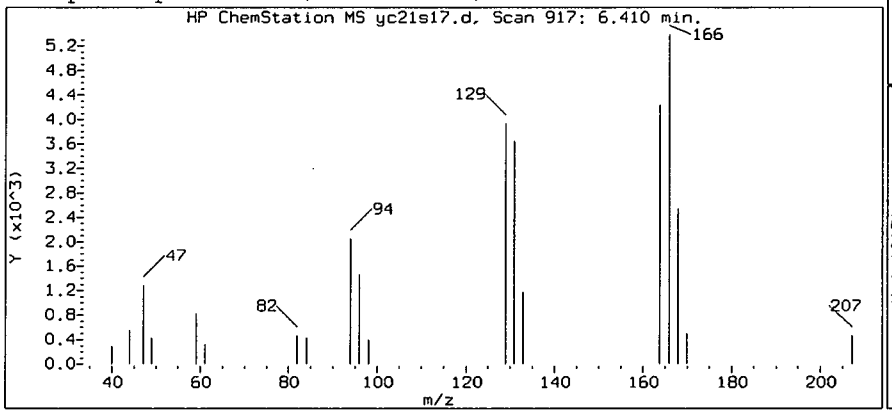
Reference Standard Spectrum for Tetrachloroethene

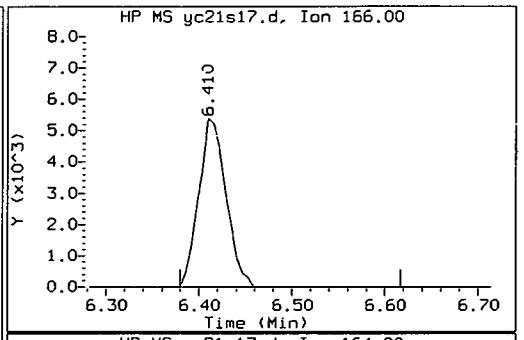


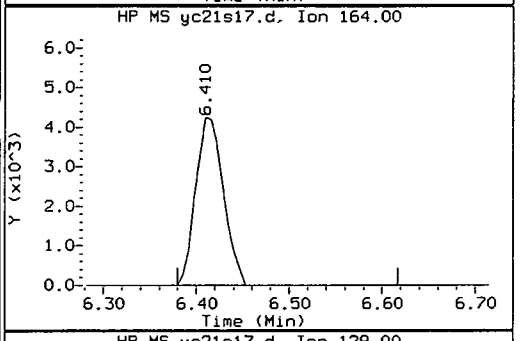
Sample Spectrum (Background Subtracted)

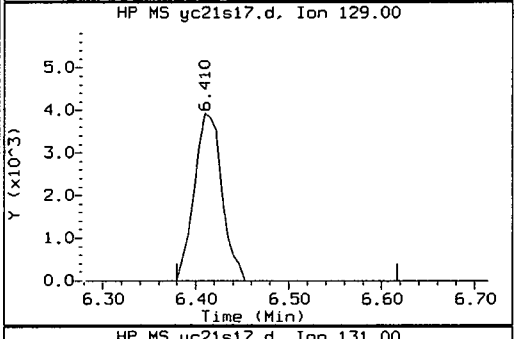


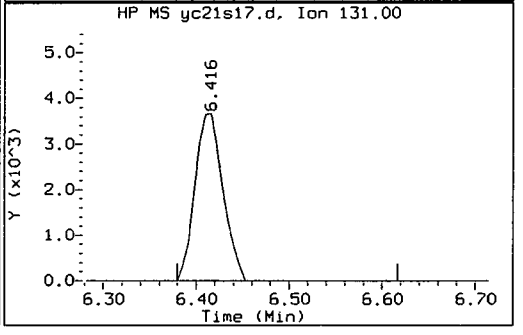
Sample Spectrum (Unaltered)











Data File: /chem2/HP09355.i/12oct21a.b/yc21s17.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 09:26 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

Sample Name: M4--- Lab Sample ID: 6828481

Compound Number : 98
Compound Name : Tetrachloroethene
Scan Number : 917
Retention Time (minutes): 6.410
Relative Retention Time : 0.00010
Quant Ion : 166.00
Area (flag) : 10938
On-Column Amount (ng) : 1.6560

Digitally signed by Lauren C. Temple on 10/22/2012 at 10:15.
Target 3.5 esignature user ID: lct01518

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

-5---

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: 6828482

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct21a.b/yc21s18.d

Level: (low/med) LOW Date Received: 10/18/12

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	4	J
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
107-02-8	Acrolein	100	U
75-35-4	1,1-Dichloroethene	5	U
75-09-2	Methylene Chloride	5	U
107-13-1	Acrylonitrile	20	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	11	
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	10	
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (Total)	5	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

-5---

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: 6828482

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct21a.b/yc21s18.d

Level: (low/med) LOW Date Received: 10/18/12

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

FORM I VOA

-5---

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 6828482

Data file: /chem2/HP09355.i/12oct21a.b/yc21s18.d
Injection date and time: **21-OCT-2012 09:46**
Data file Sample Info. Line: -5---;6828482;1;0;;OSP14;;;yc21b01;
Instrument ID: **HP09355.i** Batch: **Y122951AA**
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **82**
Calibration date and time (Last Method Edit): 21-OCT-2012 03:56
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
28) t-Butyl Alcohol-d10	2.036	(0.012)	198	65	436836	(-7)	250.00	
71) Fluorobenzene	4.129	(0.012)	542	96	1223160	(-2)	50.00	
106) Chlorobenzene-d5	7.316	(0.006)	1066	117	844041	(-3)	50.00	
136) 1,4-Dichlorobenzene-d4	9.342	(0.006)	1399	152	464917	(-8)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(1)	3.490	(-0.001)	113	259135	47.695	95%		80 - 116
62) 1,2-Dichloroethane-d4	(1)	3.800	(-0.001)	102	70443	48.254	97%		77 - 113
93) Toluene-d8	(2)	5.753	(0.000)	98	1146178	50.889	102%		80 - 113
119) 4-Bromofluorobenzene	(2)	8.430	(-0.001)	95	427219	50.314	101%		78 - 113

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
3) Chloromethane	(1)				Not Detected					1	5
5) Vinyl Chloride	(1)	1.105	(0.005)	62	38334	4.457	4.46		J	1	5
7) Bromomethane	(1)				Not Detected					1	5
8) Chloroethane	(1)				Not Detected					1	5
10) Trichlorofluoromethane	(1)				Not Detected					2	5
15) Acrolein	(4)				Not Detected					40	100
16) 1,1-Dichloroethene	(1)				Not Detected					0.8	5
26) Methylene Chloride	(1)				Not Detected					2	5
30) Acrylonitrile	(1)				Not Detected					4	20
31) trans-1,2-Dichloroethene	(1)				Not Detected					0.8	5
34) 1,1-Dichloroethane	(1)				Not Detected					1	5
40) cis-1,2-Dichloroethene	(1)	3.052	(-0.000)	96	72616	10.905	10.90			0.8	5
50) Chloroform	(1)				Not Detected					0.8	5
53) 1,1,1-Trichloroethane	(1)				Not Detected					0.8	5
58) Carbon Tetrachloride	(1)				Not Detected					1	5
63) Benzene	(1)				Not Detected					0.5	5
65) 1,2-Dichloroethane	(1)				Not Detected					1	5
74) Trichloroethene	(1)				Not Detected					1	5
77) 1,2-Dichloropropane	(1)				Not Detected					1	5
83) Bromodichloromethane	(1)				Not Detected					1	5
86) 2-Chloroethyl Vinyl Ether	(1)				Not Detected					2	10
87) cis-1,3-Dichloropropene	(1)				Not Detected					1	5
94) Toluene	(2)				Not Detected					0.7	5
95) trans-1,3-Dichloropropene	(2)				Not Detected					1	5
97) 1,1,2-Trichloroethane	(2)				Not Detected					0.8	5
98) Tetrachloroethene	(2)	6.410	(0.000)	166	69468	10.250	10.25			0.8	5
102) Dibromochloromethane	(2)				Not Detected					1	5
107) Chlorobenzene	(2)				Not Detected					0.8	5
109) Ethylbenzene	(2)				Not Detected					0.8	5
110) m+p-Xylene	(2)				Not Detected					0.8	5
112) Xylene (Total)	(2)				Not Detected					0.8	5

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-5---

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 6828482

Data file: /chem2/HP09355.i/12oct21a.b/yc21s18.d Injection date and time: **21-OCT-2012 09:46**
Data file Sample Info. Line: -5---;6828482;1;0;;OSP14;;;yc21b01; Instrument ID: **HP09355.i** Batch: **Y122951AA**
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **82**
Calibration date and time (Last Method Edit): 21-OCT-2012 03:56
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
113) o-Xylene	(2)				Not Detected					0.8	5
115) Bromoform	(2)				Not Detected					1	5
122) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					1	5

Total number of targets = 34

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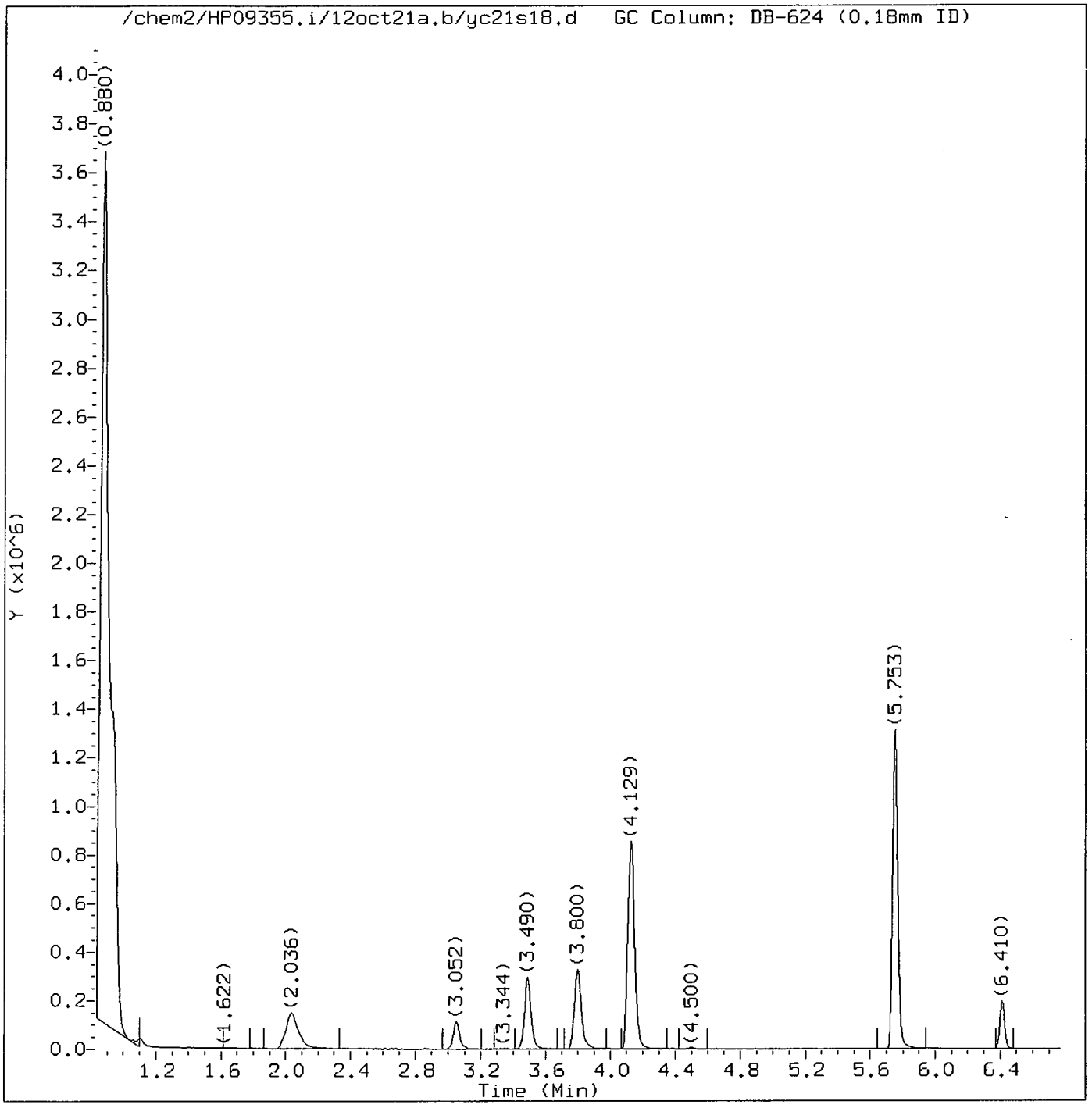
Secondary review performed and digitally signed by Christine M. Dulaney on 10/24/2012 at 15:38. Parallax ID: cmd00448

OSP14 0057



Total Ion Chromatogram (TIC)

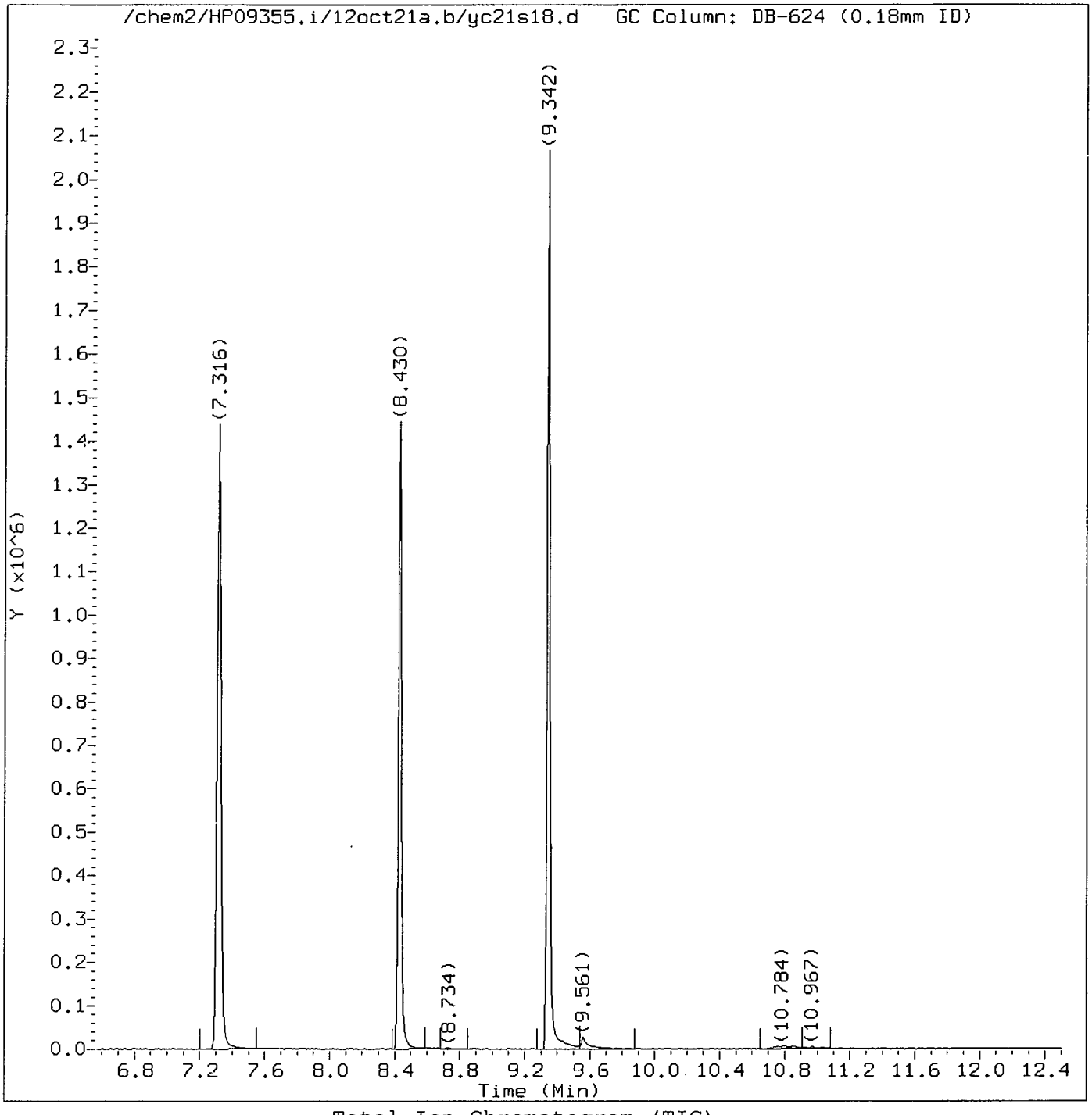
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s18.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 09:46 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

Sample Name: -5--- Lab Sample ID: 6828482

Digitally signed by Lauren C. Temple
on 10/22/2012 at 10:15.
Target 3.5 esignature user ID: lct01518



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s18.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 09:46 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

Sample Name: -5--- Lab Sample ID: 6828482

Digitally signed by Lauren C. Temple
on 10/22/2012 at 10:15.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s18.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 09:46 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

Sample Name: -5--- Lab Sample ID: 6828482

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
5) Vinyl Chloride	(1)	1.105	62	38334	4.457
28)*t-Butyl Alcohol-d10	(4)	2.036	65	436836	250.000
40) cis-1,2-Dichloroethene	(1)	3.052	96	72616	10.905
52)$Dibromofluoromethane	(1)	3.490	113	259135	47.695
62)$1,2-Dichloroethane-d4	(1)	3.800	102	70443	48.254
71)*Fluorobenzene	(1)	4.129	96	1223160	50.000
93)$Toluene-d8	(2)	5.753	98	1146178	50.889
98) Tetrachloroethene	(2)	6.410	166	69468	10.250
106)*Chlorobenzene-d5	(2)	7.316	117	844041	50.000
119)$4-Bromofluorobenzene	(2)	8.430	95	427219	50.314
136)*1,4-Dichlorobenzene-d4	(3)	9.342	152	464917	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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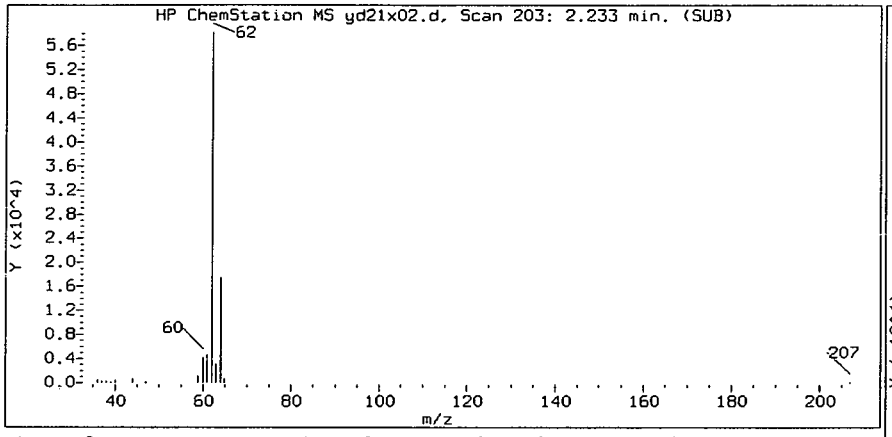
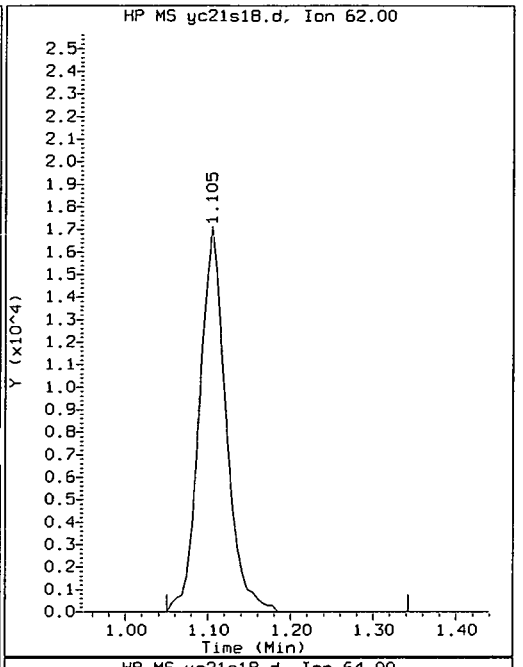
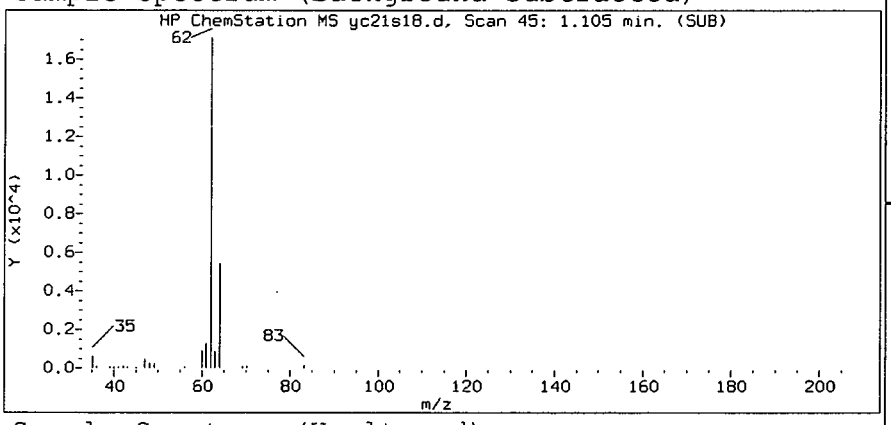
on 10/22/2012 at 10:15.
Target 3.5 esignature user ID: lct01518

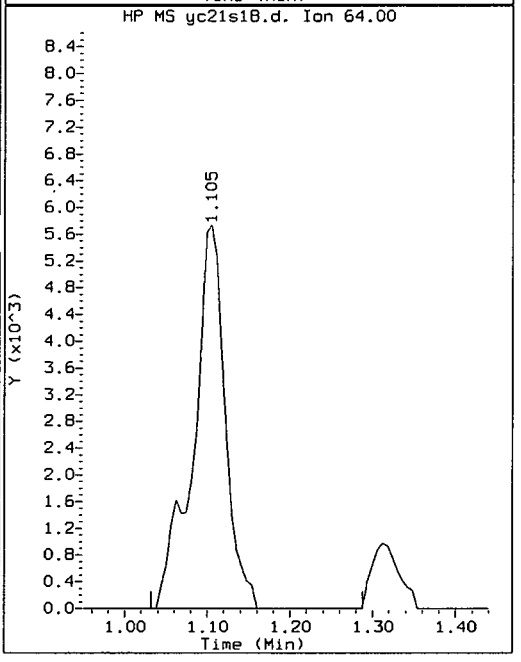
Reference Standard Spectrum for Vinyl Chloride



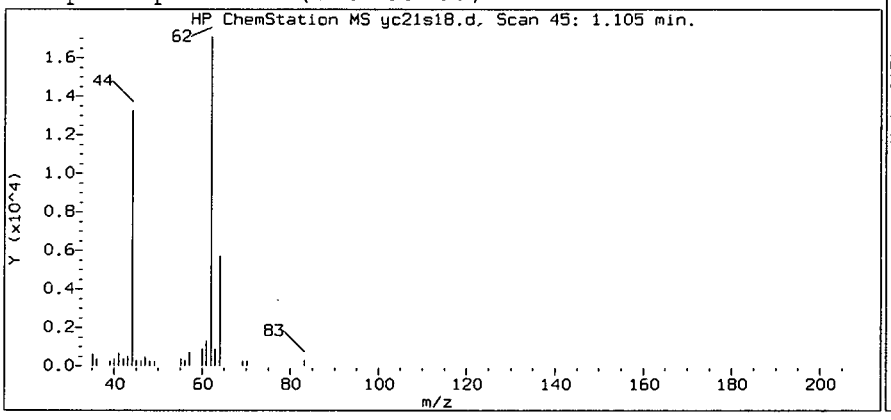


Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)



Data File: /chem2/HP09355.i/12oct21a.b/yc21s18.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 09:46 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

Sample Name: -5--- Lab Sample ID: 6828482

Compound Number	: 5
Compound Name	: Vinyl Chloride
Scan Number	: 45
Retention Time (minutes)	: 1.105
Relative Retention Time	: 0.00510
Quant Ion	: 62.00
Area (flag)	: 38334
On-Column Amount (ng)	: 4.4573

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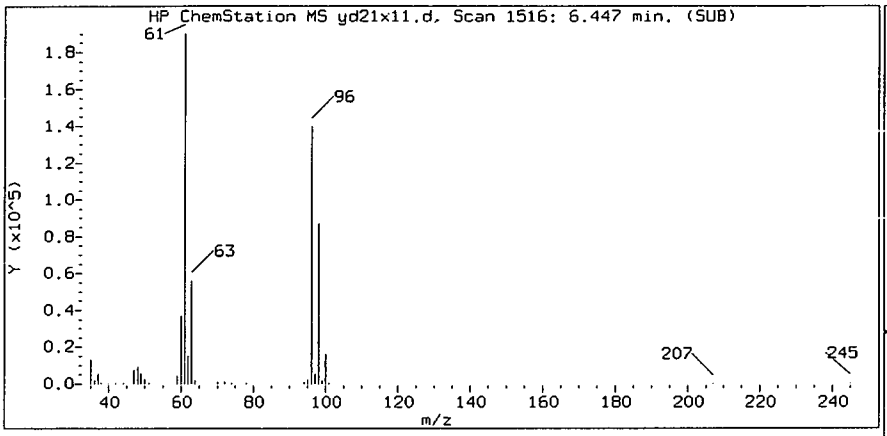
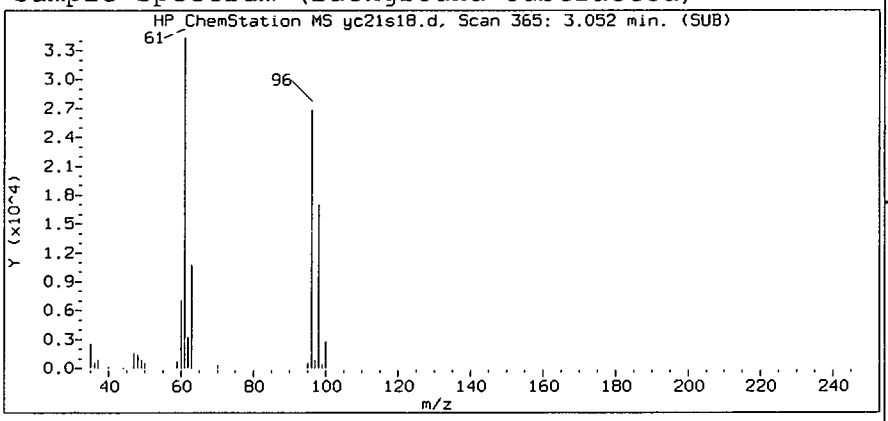
Target 3.5 esignature user ID: lct01518

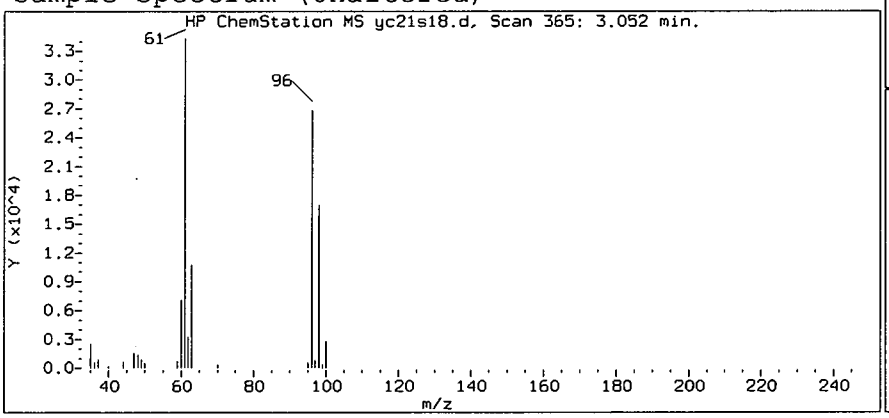
Reference Standard Spectrum for cis-1,2-Dichloroethene

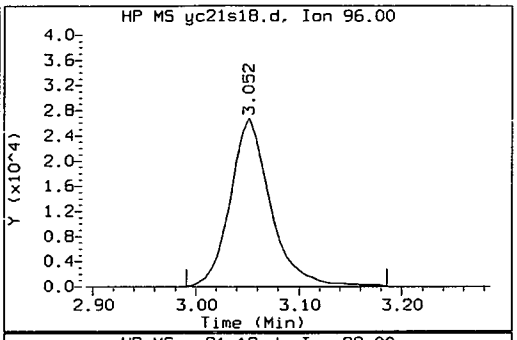


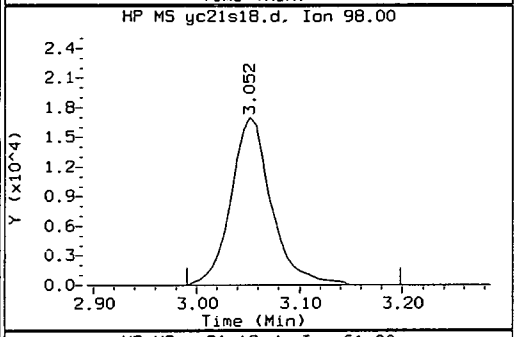
Sample Spectrum (Background Subtracted)

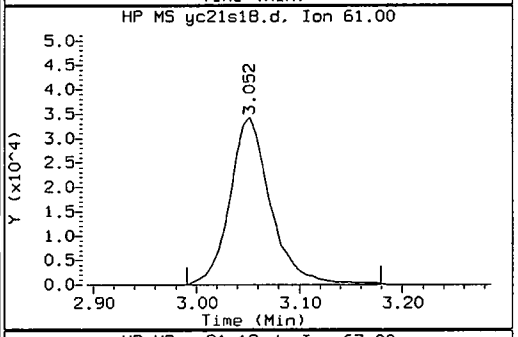


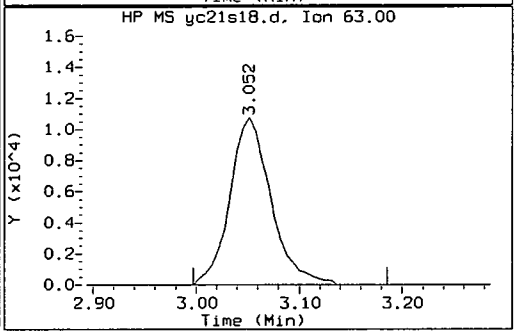
Sample Spectrum (Unaltered)











Data File: /chem2/HP09355.i/12oct21a.b/yc21s18.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 09:46 Analyst ID: SAS00403

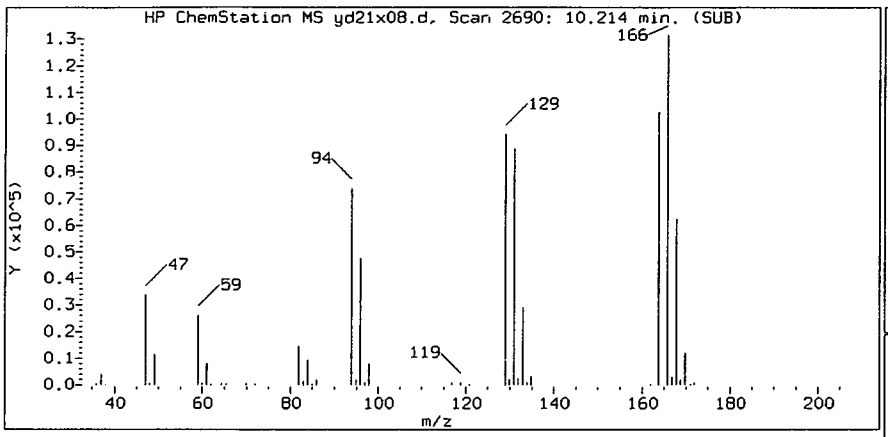
Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

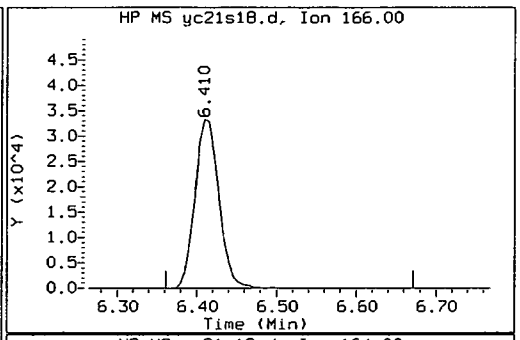
Sample Name: -5--- Lab Sample ID: 6828482

Compound Number : 40
Compound Name : cis-1,2-Dichloroethene
Scan Number : 365
Retention Time (minutes): 3.052
Relative Retention Time :-0.00070
Quant Ion : 96.00
Area (flag) : 72616
On-Column Amount (ng) : 10.9049

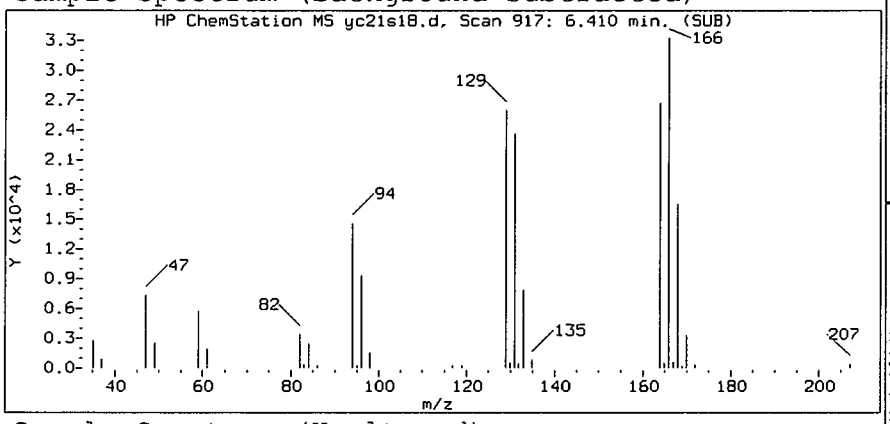
Digitally signed by Lauren C. Temple on 10/22/2012 at 10:15.
Target 3.5 esignature user ID: lct01518

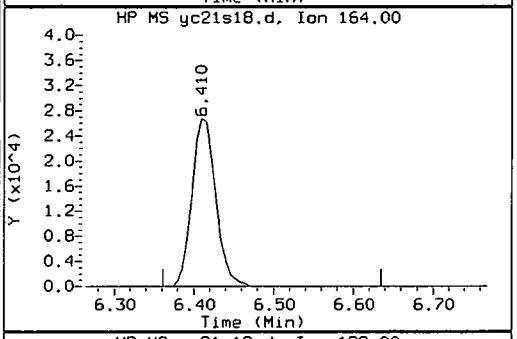
Reference Standard Spectrum for Tetrachloroethene

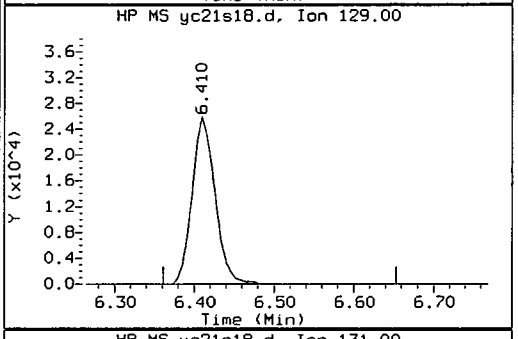




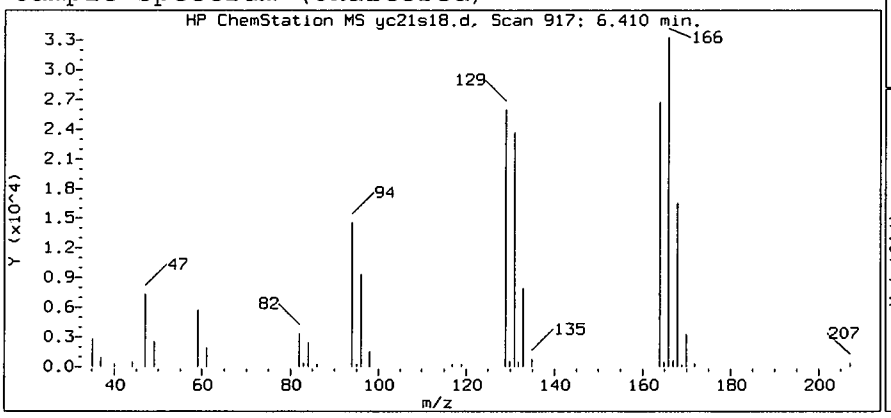
Sample Spectrum (Background Subtracted)

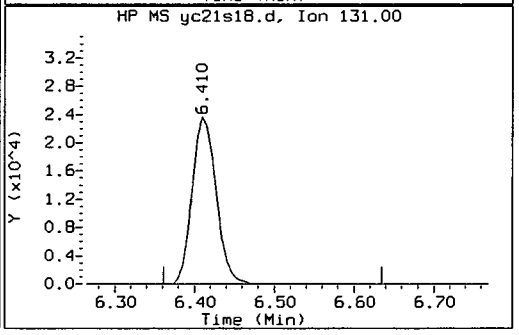






Sample Spectrum (Unaltered)





Data File: /chem2/HP09355.i/12oct21a.b/yc21s18.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 09:46 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:10 lct01518

Sample Name: -5--- Lab Sample ID: 6828482

Compound Number	: 98
Compound Name	: Tetrachloroethene
Scan Number	: 917
Retention Time (minutes)	: 6.410
Relative Retention Time	: 0.00010
Quant Ion	: 166.00
Area (flag)	: 69468
On-Column Amount (ng)	: 10.2504

Digitally signed by Lauren C. Temple on 10/22/2012 at 10:15.
Target 3.5 esignature user ID: lct01518

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

FD4--

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: 6828483

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct21a.b/yc21s19.d

Level: (low/med) LOW Date Received: 10/18/12

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
107-02-8	Acrolein	100	U
75-35-4	1,1-Dichloroethene	5	U
75-09-2	Methylene Chloride	5	U
107-13-1	Acrylonitrile	20	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	1	J
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	2	J
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (Total)	5	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD4--

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: 6828483

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct2Ia.b/yc21s19.d

Level: (low/med) LOW Date Received: 10/18/12

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

FD4--

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

6828483

Data file: /chem2/HP09355.i/12oct21a.b/yc21s19.d
Injection date and time: **21-OCT-2012 10:07**
Data file Sample Info. Line: FD4--;6828483;1;0;;OSP14;;;yc21b01;
Instrument ID: **HP09355.i** Batch: **Y122951AA**
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **82**
Calibration date and time (Last Method Edit): 21-OCT-2012 03:56
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
28) t-Butyl Alcohol-d10	2.042	(0.006)	199	65	447185	(-4)	250.00	
71) Fluorobenzene	4.135	(0.006)	543	96	1250459	(0)	50.00	
106) Chlorobenzene-d5	7.316	(0.006)	1066	117	862220	(-1)	50.00	
136) 1,4-Dichlorobenzene-d4	9.348	(0.000)	1400	152	474698	(-6)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(1)	3.496	(-0.001)	113	267945	48.240	96%		80 - 116
62) 1,2-Dichloroethane-d4	(1)	3.806	(-0.001)	102	71969	48.223	96%		77 - 113
93) Toluene-d8	(2)	5.753	(0.000)	98	1172277	50.950	102%		80 - 113
119) 4-Bromofluorobenzene	(2)	8.430	(-0.001)	95	437008	50.382	101%		78 - 113

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
3) Chloromethane	(1)				Not Detected					1	5
5) Vinyl Chloride	(1)				Not Detected					1	5
7) Bromomethane	(1)				Not Detected					1	5
8) Chloroethane	(1)				Not Detected					1	5
10) Trichlorofluoromethane	(1)				Not Detected					2	5
15) Acrolein	(4)				Not Detected					40	100
16) 1,1-Dichloroethene	(1)				Not Detected					0.8	5
26) Methylene Chloride	(1)				Not Detected					2	5
30) Acrylonitrile	(1)				Not Detected					4	20
31) trans-1,2-Dichloroethene	(1)				Not Detected					0.8	5
34) 1,1-Dichloroethane	(1)				Not Detected					1	5
40) cis-1,2-Dichloroethene	(1)				Not Detected					0.8	5
50) Chloroform	(1)				Not Detected					0.8	5
53) 1,1,1-Trichloroethane	(1)				Not Detected					0.8	5
58) Carbon Tetrachloride	(1)				Not Detected					1	5
63) Benzene	(1)	3.867	(-0.001)	78	33921	1.294	1.29		J	0.5	5
65) 1,2-Dichloroethane	(1)				Not Detected					1	5
74) Trichloroethene	(1)				Not Detected					1	5
77) 1,2-Dichloropropane	(1)				Not Detected					1	5
83) Bromodichloromethane	(1)				Not Detected					1	5
86) 2-Chloroethyl Vinyl Ether	(1)				Not Detected					2	10
87) cis-1,3-Dichloropropene	(1)				Not Detected					1	5
94) Toluene	(2)				Not Detected					0.7	5
95) trans-1,3-Dichloropropene	(2)				Not Detected					1	5
97) 1,1,2-Trichloroethane	(2)				Not Detected					0.8	5
98) Tetrachloroethene	(2)	6.416	(-0.000)	166	11395	1.646	1.65		J	0.8	5
102) Dibromochloromethane	(2)				Not Detected					1	5
107) Chlorobenzene	(2)				Not Detected					0.8	5
109) Ethylbenzene	(2)				Not Detected					0.8	5
110) m+p-Xylene	(2)				Not Detected					0.8	5
112) Xylene (Total)	(2)				Not Detected					0.8	5

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FD4--

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

6828483

Data file: /chem2/HP09355.i/12oct21a.b/yc21s19.d
Data file Sample Info. Line: FD4--;6828483;1;0;;OSP14;;;yc21b01;
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Injection date and time: **21-OCT-2012 10:07**
Instrument ID: **HP09355.i** Batch: **Y122951AA**

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **82**
Calibration date and time (Last Method Edit): 21-OCT-2012 03:56
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
113) o-Xylene	(2)				Not Detected					0.8	5
115) Bromoform	(2)				Not Detected					1	5
122) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					1	5

Total number of targets = 34

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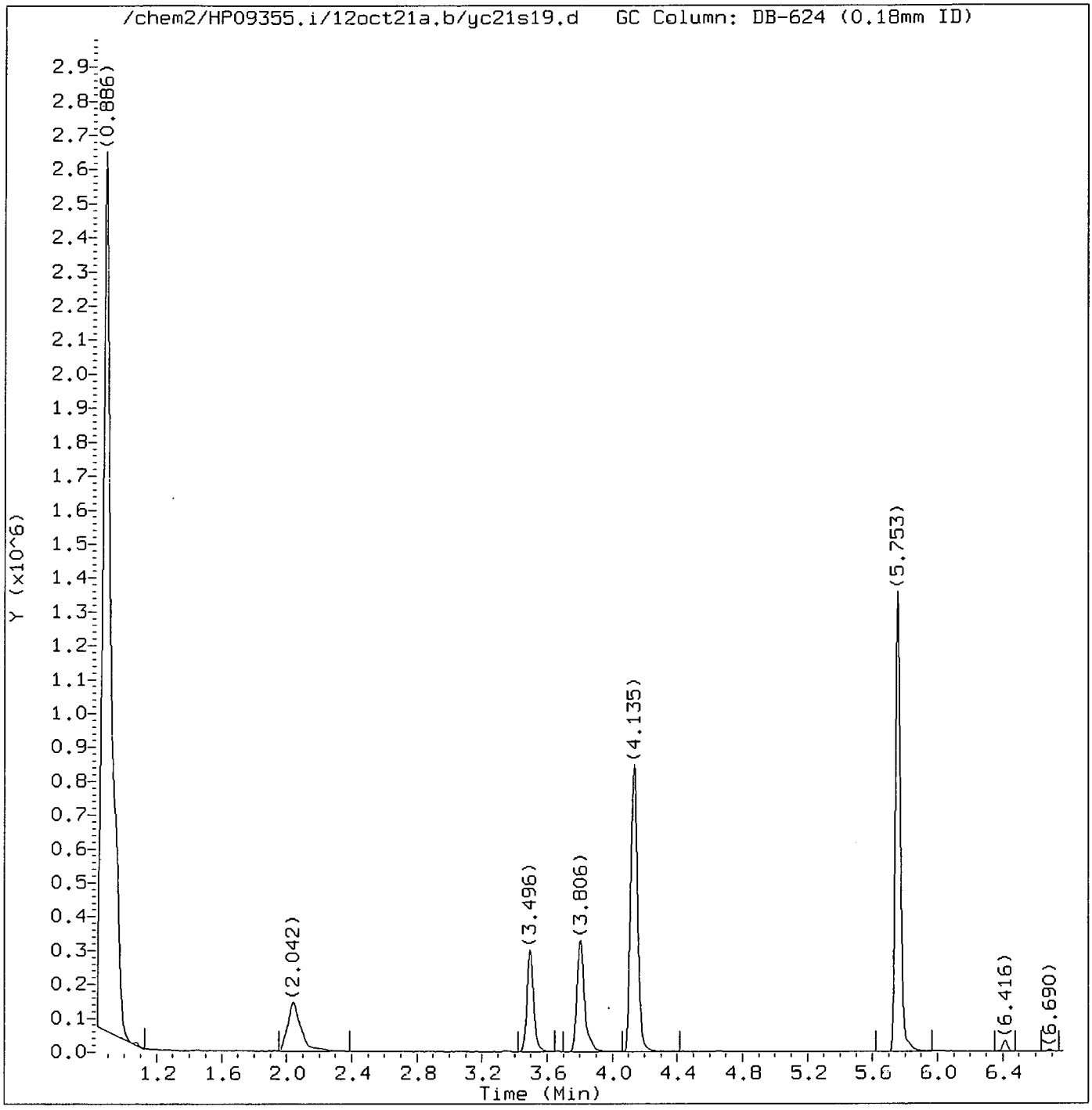
Secondary review performed and digitally signed by Christine M. Dulaney on 10/24/2012 at 15:38. Parallax ID: cmd00448



Total Ion Chromatogram (TIC)

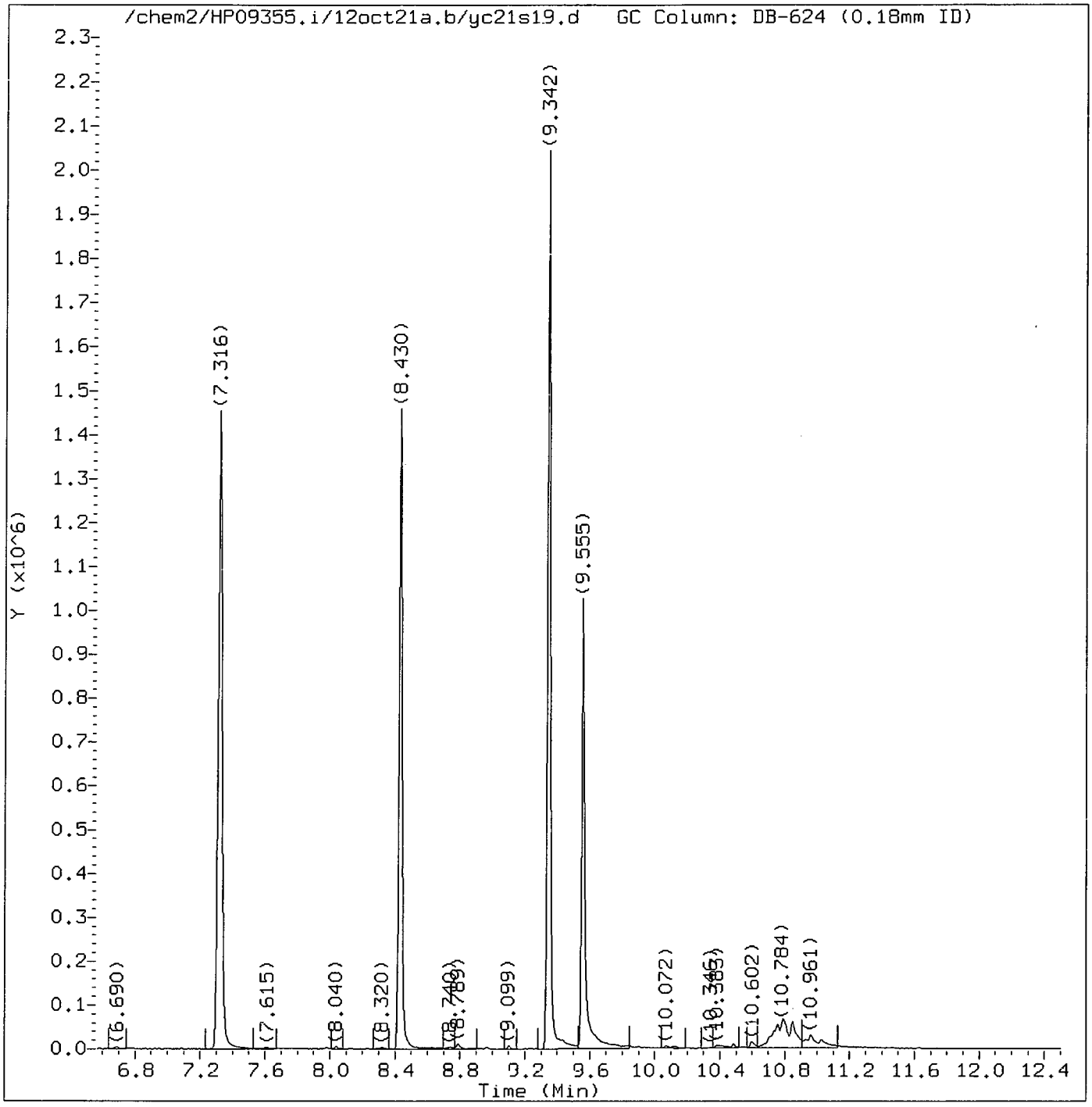
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s19.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 10:07 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Sample Name: FD4-- Lab Sample ID: 6828483

Digitally signed by Lauren C. Temple
on 10/22/2012 at 10:16.
Target 3.5 esignature user ID: lct01518



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s19.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 10:07 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Sample Name: FD4-- Lab Sample ID: 6828483

Digitally signed by Lauren C. Temple
on 10/22/2012 at 10:16.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s19.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 10:07 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Sample Name: FD4-- Lab Sample ID: 6828483

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
28)*t-Butyl Alcohol-d10	(4)	2.042	65	447185	250.000
52)$Dibromofluoromethane	(1)	3.496	113	267945	48.240
62)$1,2-Dichloroethane-d4	(1)	3.806	102	71969	48.223
63) Benzene	(1)	3.867	78	33921	1.294
71)*Fluorobenzene	(1)	4.135	96	1250459	50.000
93)$Toluene-d8	(2)	5.753	98	1172277	50.950
98) Tetrachloroethene	(2)	6.416	166	11395	1.646
106)*Chlorobenzene-d5	(2)	7.316	117	862220	50.000
119)$4-Bromofluorobenzene	(2)	8.430	95	437008	50.382
136)*1,4-Dichlorobenzene-d4	(3)	9.348	152	474698	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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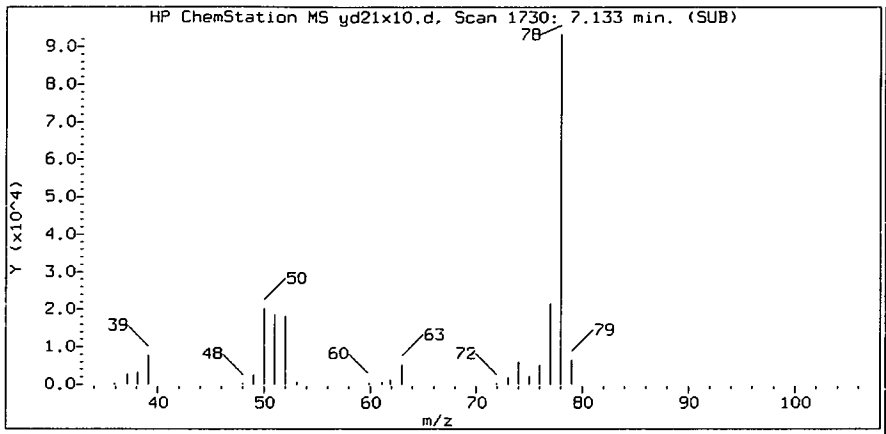
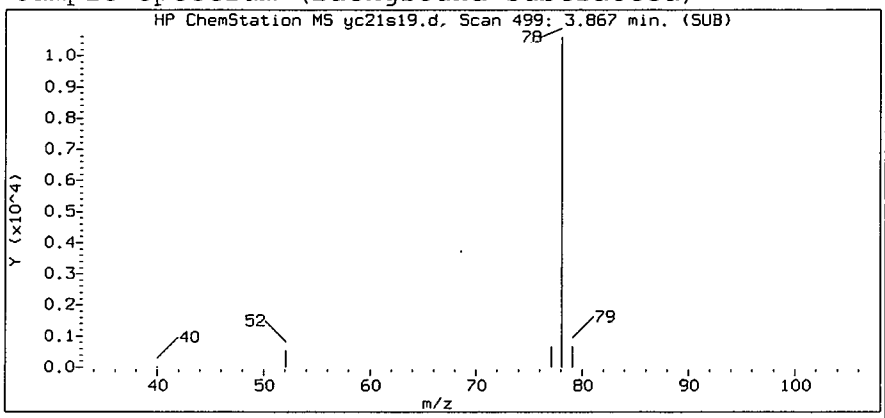
on 10/22/2012 at 10:16.
Target 3.5 esignature user ID: lct01518

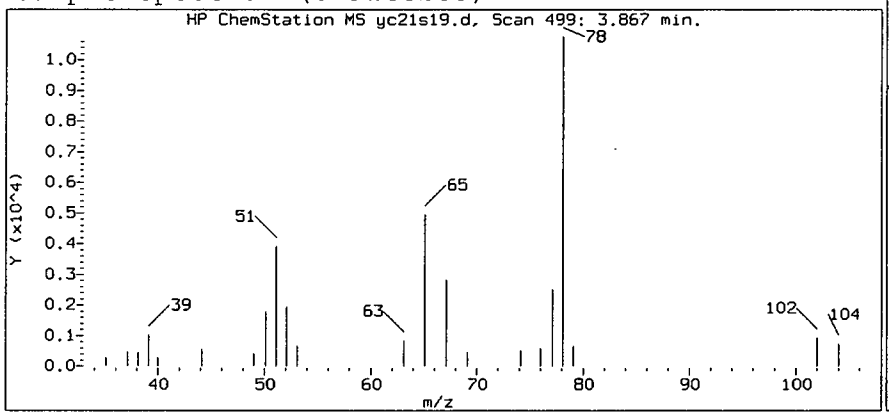
Reference Standard Spectrum for Benzene

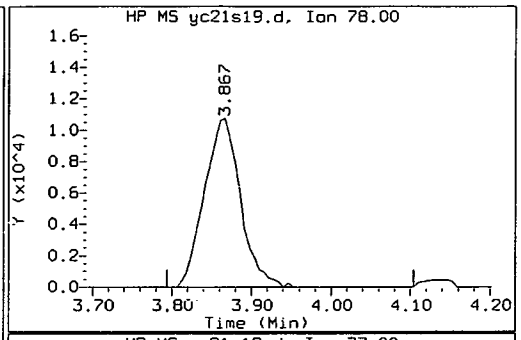


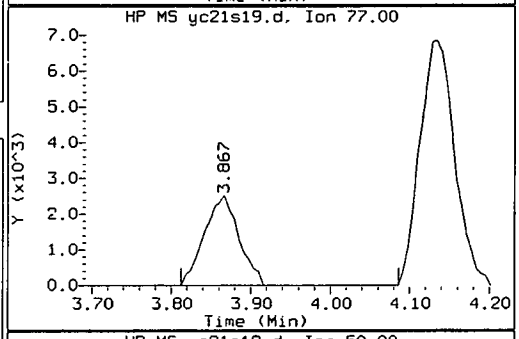
Sample Spectrum (Background Subtracted)

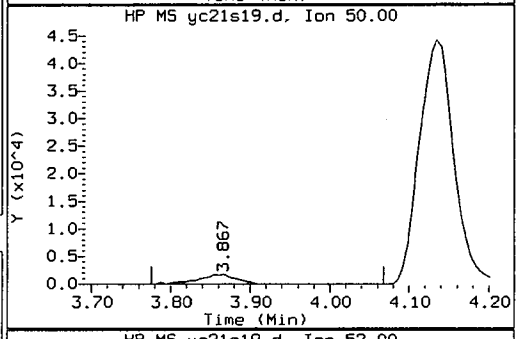


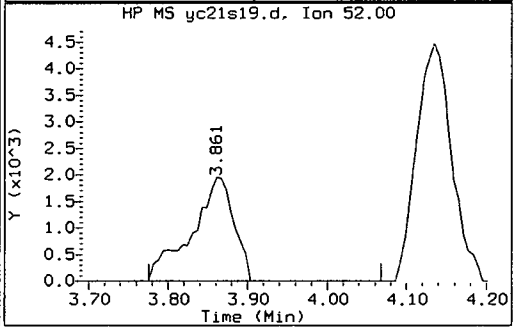
Sample Spectrum (Unaltered)











Data File: /chem2/HP09355.i/12oct21a.b/yc21s19.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 10:07 Analyst ID: SAS00403

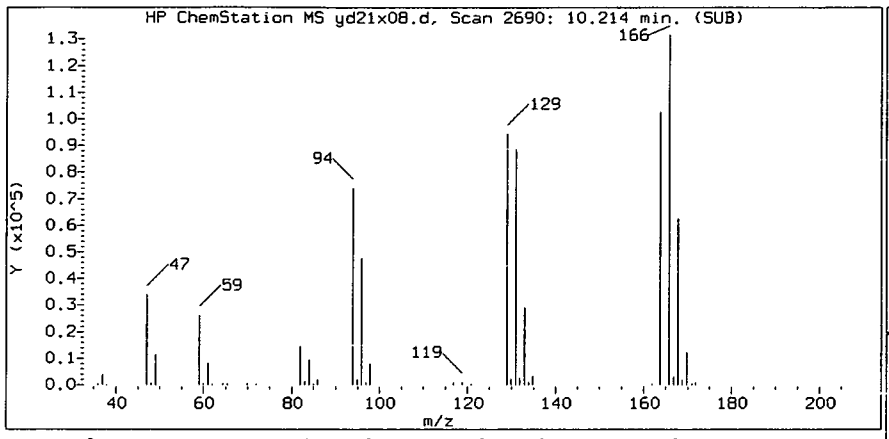
Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Sample Name: FD4-- Lab Sample ID: 6828483

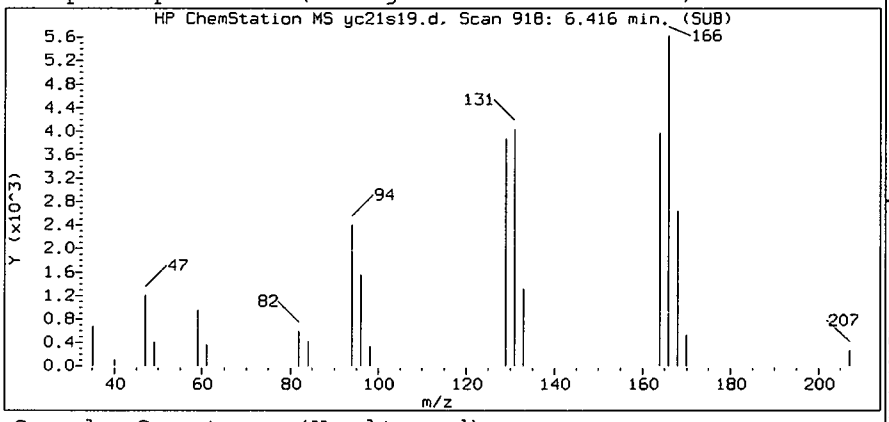
Compound Number : 63
Compound Name : Benzene
Scan Number : 499
Retention Time (minutes): 3.867
Relative Retention Time :-0.00137
Quant Ion : 78.00
Area (flag) : 33921
On-Column Amount (ng) : 1.2942

Digitally signed by Lauren C. Temple on 10/22/2012 at 10:16.
Target 3.5 esignature user ID: lct01518

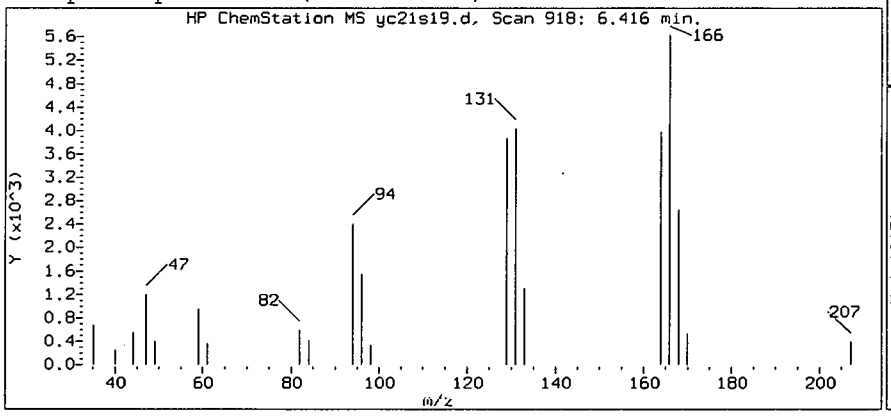
Reference Standard Spectrum for Tetrachloroethene

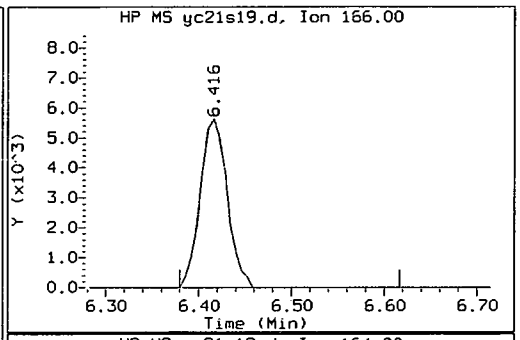


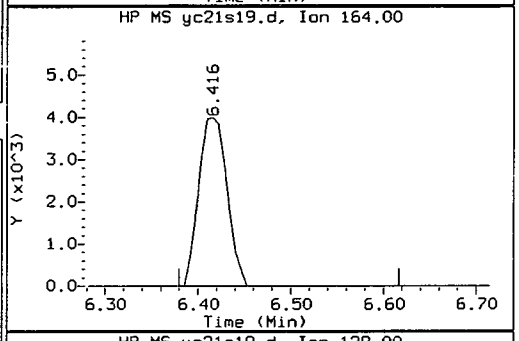
Sample Spectrum (Background Subtracted)

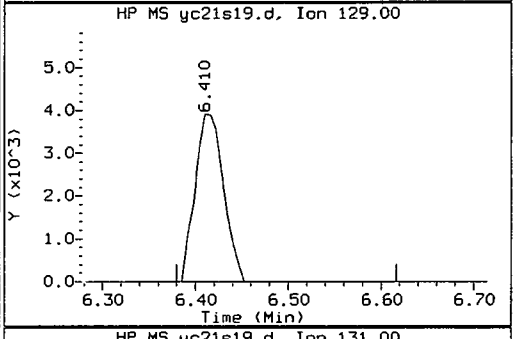


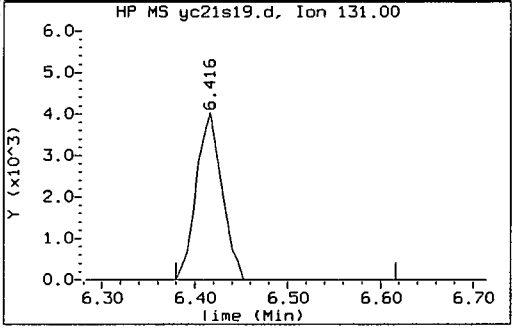
Sample Spectrum (Unaltered)











Data File: /chem2/HP09355.i/12oct21a.b/yc21s19.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 10:07 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Sample Name: FD4-- Lab Sample ID: 6828483

Compound Number : 98
Compound Name : Tetrachloroethene
Scan Number : 918
Retention Time (minutes): 6.416
Relative Retention Time :-0.00073
Quant Ion : 166.00
Area (flag) : 11395
On-Column Amount (ng) : 1.6459

Digitally signed by Lauren C. Temple on 10/22/2012 at 10:16.
Target 3.5 esignature user ID: lct01518

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FBOC-

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: 6828484

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct21a.b/yc21s20.d

Level: (low/med) LOW Date Received: 10/18/12

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
107-02-8	Acrolein	100	U
75-35-4	1,1-Dichloroethene	5	U
75-09-2	Methylene Chloride	5	U
107-13-1	Acrylonitrile	20	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (Total)	5	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FBOC-

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: 6828484

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct21a.b/yc21s20.d

Level: (low/med) LOW Date Received: 10/18/12

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

FBOC- Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 6828484

Data file: /chem2/HP09355.i/12oct21a.b/yc21s20.d Injection date and time: **21-OCT-2012 10:28**
Data file Sample Info. Line: FBOC-;6828484;1;0;;OSP14;;;yc21b01; Instrument ID: **HP09355.i** Batch: **Y122951AA**
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **82**
Calibration date and time (Last Method Edit): 21-OCT-2012 03:56
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
28) t-Butyl Alcohol-d10	2.048	(0.000)	200	65	427118	(-9)	250.00	
71) Fluorobenzene	4.135	(0.006)	543	96	1165615	(-7)	50.00	
106) Chlorobenzene-d5	7.316	(0.006)	1066	117	813631	(-7)	50.00	
136) 1,4-Dichlorobenzene-d4	9.342	(0.006)	1399	152	441115	(-12)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(1)	3.496	(-0.001)	113	249275	48.145	96%		80 - 116
62) 1,2-Dichloroethane-d4	(1)	3.806	(-0.001)	102	67779	48.721	97%		77 - 113
93) Toluene-d8	(2)	5.753	(0.000)	98	1100514	50.688	101%		80 - 113
119) 4-Bromofluorobenzene	(2)	8.430	(-0.001)	95	411866	50.319	101%		78 - 113

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Chloromethane	(1)				Not Detected					1	5
5) Vinyl Chloride	(1)				Not Detected					1	5
7) Bromomethane	(1)				Not Detected					1	5
8) Chloroethane	(1)				Not Detected					1	5
10) Trichlorofluoromethane	(1)				Not Detected					2	5
15) Acrolein	(4)				Not Detected					40	100
16) 1,1-Dichloroethene	(1)				Not Detected					0.8	5
26) Methylene Chloride	(1)				Not Detected					2	5
30) Acrylonitrile	(1)				Not Detected					4	20
31) trans-1,2-Dichloroethene	(1)				Not Detected					0.8	5
34) 1,1-Dichloroethane	(1)				Not Detected					1	5
40) cis-1,2-Dichloroethene	(1)				Not Detected					0.8	5
50) Chloroform	(1)				Not Detected					0.8	5
53) 1,1,1-Trichloroethane	(1)				Not Detected					0.8	5
58) Carbon Tetrachloride	(1)				Not Detected					1	5
63) Benzene	(1)				Not Detected					0.5	5
65) 1,2-Dichloroethane	(1)				Not Detected					1	5
74) Trichloroethene	(1)				Not Detected					1	5
77) 1,2-Dichloropropane	(1)				Not Detected					1	5
83) Bromodichloromethane	(1)				Not Detected					1	5
86) 2-Chloroethyl Vinyl Ether	(1)				Not Detected					2	10
87) cis-1,3-Dichloropropene	(1)				Not Detected					1	5
94) Toluene	(2)				Not Detected					0.7	5
95) trans-1,3-Dichloropropene	(2)				Not Detected					1	5
97) 1,1,2-Trichloroethane	(2)				Not Detected					0.8	5
98) Tetrachloroethene	(2)				Not Detected					0.8	5
102) Dibromochloromethane	(2)				Not Detected					1	5
107) Chlorobenzene	(2)				Not Detected					0.8	5
109) Ethylbenzene	(2)				Not Detected					0.8	5
110) m+p-Xylene	(2)				Not Detected					0.8	5
112) Xylene (Total)	(2)				Not Detected					0.8	5

Digitally signed by Lauren C. Temple on 10/22/2012 at 10:16. Target 3.5 esignature user ID: lct01518

FBOC-

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

6828484

Data file: /chem2/HP09355.i/12oct21a.b/yc21s20.d
Injection date and time: **21-OCT-2012 10:28**
Data file Sample Info. Line: FBOC-;6828484;1;0;;OSP14;;;yc21b01;
Instrument ID: **HP09355.i** Batch: **Y122951AA**
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **82**
Calibration date and time (Last Method Edit): 21-OCT-2012 03:56
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

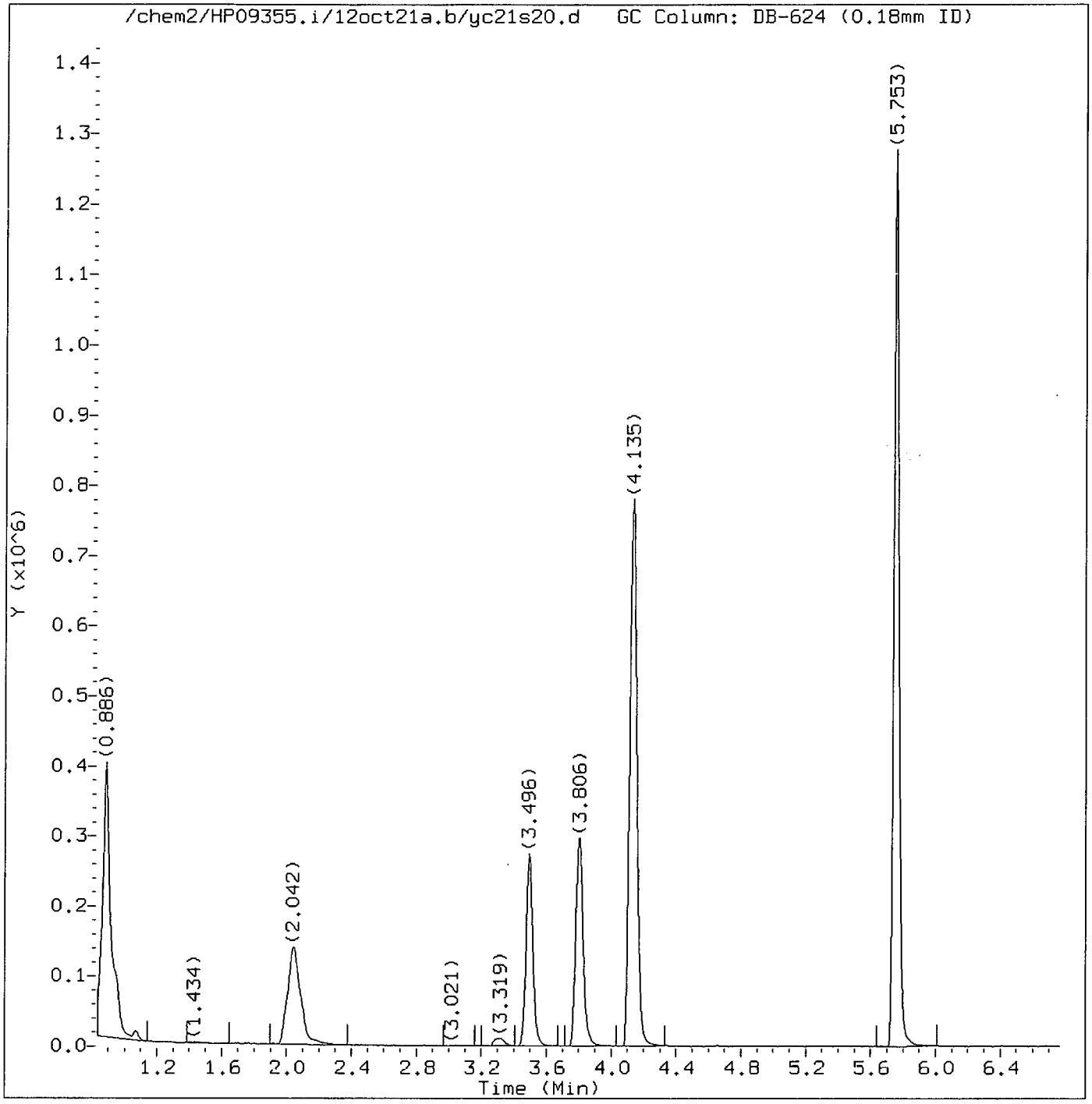
Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
113) o-Xylene	(2)				Not Detected					0.8	5
115) Bromoform	(2)				Not Detected					1	5
122) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					1	5

Total number of targets = 34

Digitally signed by Lauren C. Temple on 10/22/2012 at 10:16. Target 3.5 esignature user ID: lct01518

Secondary review performed and digitally signed by Christine M. Dulaney on 10/24/2012 at 15:38. Parallax ID: cmd00448

OSP14 0076



Total Ion Chromatogram (TIC)

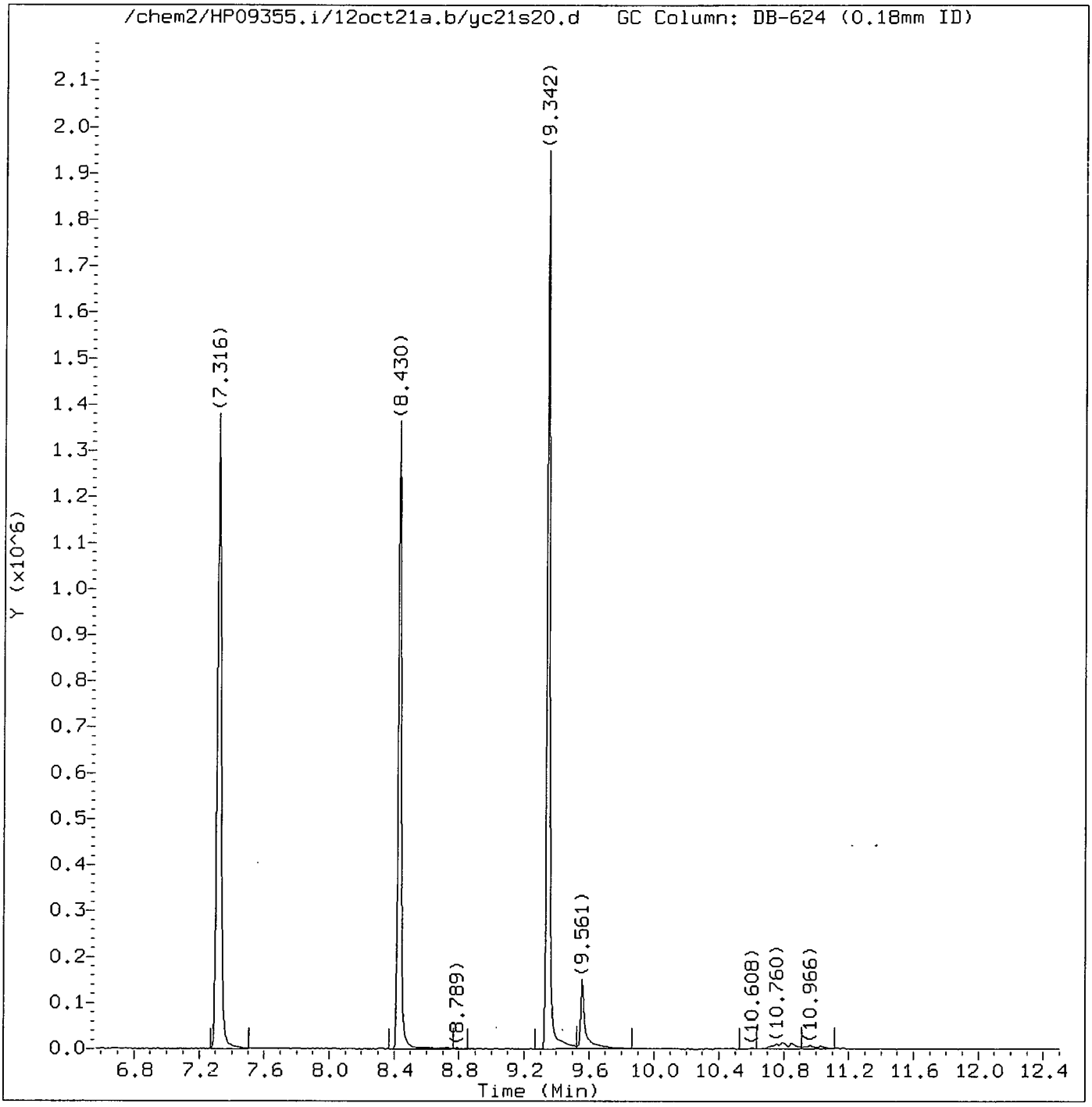
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s20.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 10:28 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Sample Name: FBOC- Lab Sample ID: 6828484

Digitally signed by Lauren C. Temple
on 10/22/2012 at 10:16.
Target 3.5 esignature user ID: lct01518



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s20.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 10:28 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Sample Name: FBOC- Lab Sample ID: 6828484

Digitally signed by Lauren C. Temple
on 10/22/2012 at 10:16.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s20.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 10:28 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Sample Name: FBOC- Lab Sample ID: 6828484

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
28)*t-Butyl Alcohol-d10	(4)	2.048	65	427118	250.000
52)$Dibromofluoromethane	(1)	3.496	113	249275	48.145
62)$1,2-Dichloroethane-d4	(1)	3.806	102	67779	48.721
71)*Fluorobenzene	(1)	4.135	96	1165615	50.000
93)$Toluene-d8	(2)	5.753	98	1100514	50.688
106)*Chlorobenzene-d5	(2)	7.316	117	813631	50.000
119)$4-Bromofluorobenzene	(2)	8.430	95	411866	50.319
136)*1,4-Dichlorobenzene-d4	(3)	9.342	152	441115	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Lauren C. Temple
on 10/22/2012 at 10:16.
Target 3.5 esignature user ID: lct01518

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TBOC-

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: 5828485

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct21a.b/yc21s21.d

Level: (low/med) LOW Date Received: 10/18/12

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
107-02-8	Acrolein	100	U
75-35-4	1,1-Dichloroethene	5	U
75-09-2	Methylene Chloride	5	U
107-13-1	Acrylonitrile	20	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
110-75-8	2-Chloroethyl Vinyl Ether	10	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (Total)	5	U

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TBOC-

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: 6828485

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct21a.b/yc21s21.d

Level: (low/med) LOW Date Received: 10/18/12

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

TBOC-

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

6828485

Data file: /chem2/HP09355.i/12oct21a.b/yc21s21.d
Injection date and time: **21-OCT-2012 10:49**
Data file Sample Info. Line: TBOC-;6828485;1;0;;OSP14;;;yc21b01;
Instrument ID: **HP09355.i** Batch: **Y122951AA**
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **82**
Calibration date and time (Last Method Edit): 21-OCT-2012 03:56
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
28) t-Butyl Alcohol-d10	2.048(0.000)	200	65	421956	(-10)	250.00	
71) Fluorobenzene	4.135(0.006)	543	96	1200728	(-4)	50.00	
106) Chlorobenzene-d5	7.316(0.006)	1066	117	833665	(-4)	50.00	
136) 1,4-Dichlorobenzene-d4	9.348(0.000)	1400	152	462045	(-8)	50.00	

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(1)	3.496(-0.001)	113	257359	48.253	97%		80 - 116
62) 1,2-Dichloroethane-d4	(1)	3.806(-0.001)	102	70079	48.901	98%		77 - 113
93) Toluene-d8	(2)	5.753(0.000)	98	1128868	50.744	101%		80 - 113
119) 4-Bromofluorobenzene	(2)	8.430(-0.001)	95	415947	49.596	99%		78 - 113

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
3) Chloromethane	(1)			Not Detected					1	5
5) Vinyl Chloride	(1)			Not Detected					1	5
7) Bromomethane	(1)			Not Detected					1	5
8) Chloroethane	(1)			Not Detected					1	5
10) Trichlorofluoromethane	(1)			Not Detected					2	5
15) Acrolein	(4)			Not Detected					40	100
16) 1,1-Dichloroethene	(1)			Not Detected					0.8	5
26) Methylene Chloride	(1)			Not Detected					2	5
30) Acrylonitrile	(1)			Not Detected					4	20
31) trans-1,2-Dichloroethene	(1)			Not Detected					0.8	5
34) 1,1-Dichloroethane	(1)			Not Detected					1	5
40) cis-1,2-Dichloroethene	(1)			Not Detected					0.8	5
50) Chloroform	(1)			Not Detected					0.8	5
53) 1,1,1-Trichloroethane	(1)			Not Detected					0.8	5
58) Carbon Tetrachloride	(1)			Not Detected					1	5
63) Benzene	(1)			Not Detected					0.5	5
65) 1,2-Dichloroethane	(1)			Not Detected					1	5
74) Trichloroethene	(1)			Not Detected					1	5
77) 1,2-Dichloropropane	(1)			Not Detected					1	5
83) Bromodichloromethane	(1)			Not Detected					1	5
86) 2-Chloroethyl Vinyl Ether	(1)			Not Detected					2	10
87) cis-1,3-Dichloropropene	(1)			Not Detected					1	5
94) Toluene	(2)			Not Detected					0.7	5
95) trans-1,3-Dichloropropene	(2)			Not Detected					1	5
97) 1,1,2-Trichloroethane	(2)			Not Detected					0.8	5
98) Tetrachloroethene	(2)			Not Detected					0.8	5
102) Dibromochloromethane	(2)			Not Detected					1	5
107) Chlorobenzene	(2)			Not Detected					0.8	5
109) Ethylbenzene	(2)			Not Detected					0.8	5
110) m+p-Xylene	(2)			Not Detected					0.8	5
112) Xylene (Total)	(2)			Not Detected					0.8	5

Digitally signed by Lauren C. Temple on 10/22/2012 at 10:16. Target 3.5 esignature user ID: lct01518

TBOC-

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles 6828485

Data file: /chem2/HP09355.i/12oct21a.b/yc21s21.d Injection date and time: **21-OCT-2012 10:49**
Data file Sample Info. Line: TBOC-;6828485;1;0;;OSP14;;;yc21b01; Instrument ID: **HP09355.i** Batch: **Y122951AA**
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **82**
Calibration date and time (Last Method Edit): 21-OCT-2012 03:56
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

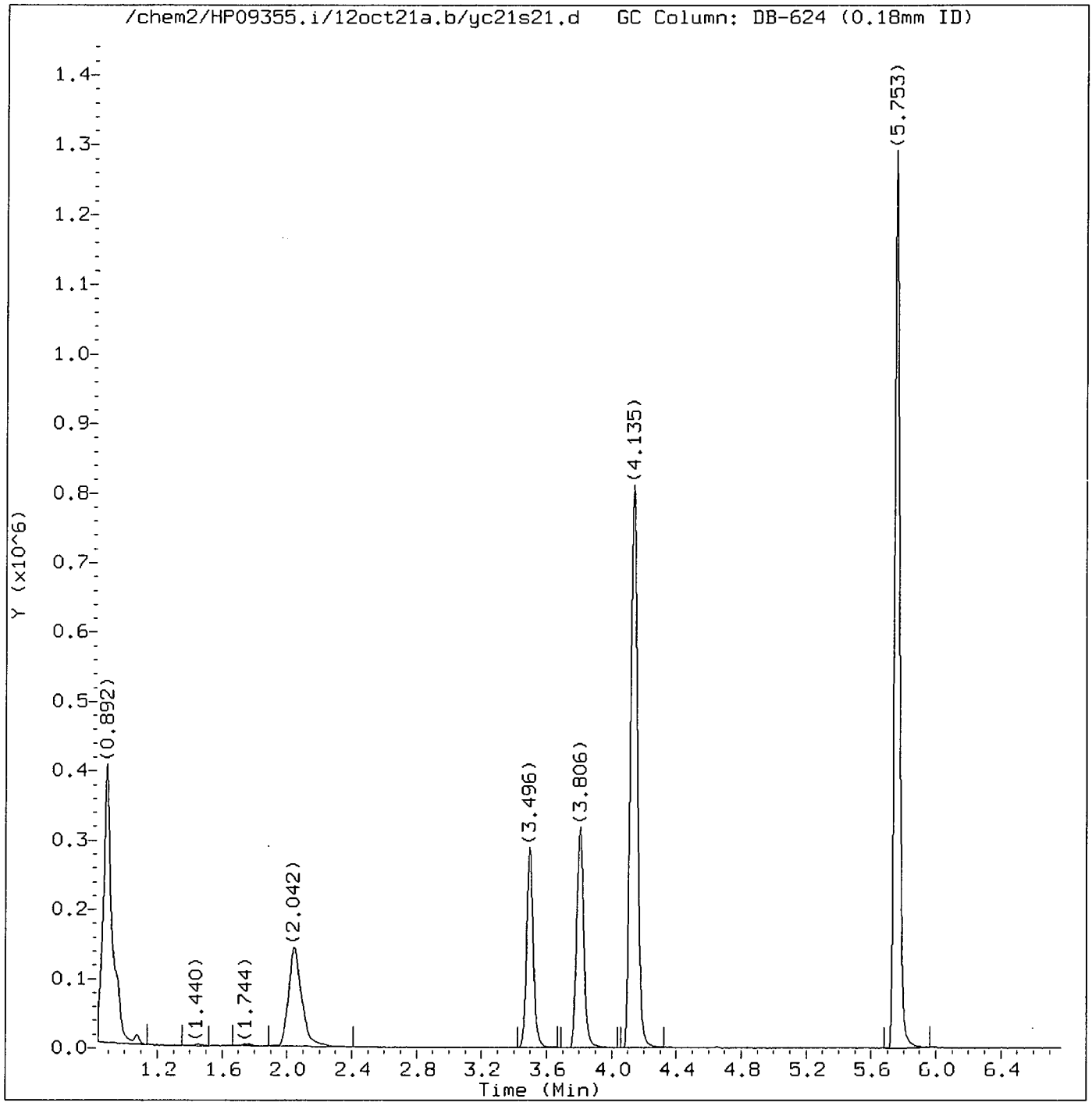
Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
113) o-Xylene	(2)				Not Detected					0.8	5
115) Bromoform	(2)				Not Detected					1	5
122) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					1	5

Total number of targets = 34

Digitally signed by Lauren C. Temple on 10/22/2012 at 10:16. Target 3.5 esignature user ID: lct01518

Secondary review performed and digitally signed by Christine M. Dulaney on 10/24/2012 at 15:38. Parallax ID: cmd00448

OSP14 0063



Total Ion Chromatogram (TIC)

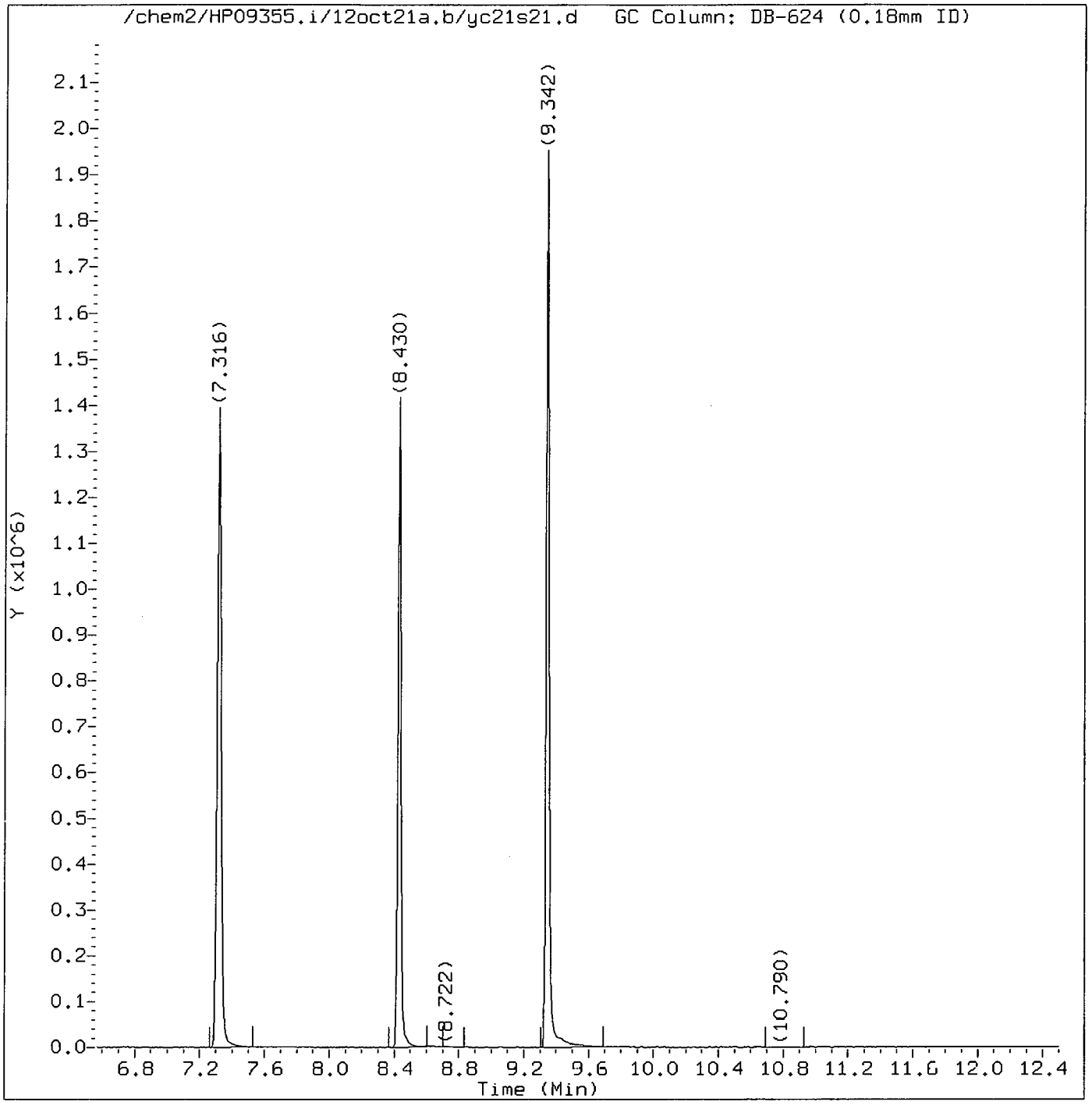
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s21.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 10:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Sample Name: TBOC- Lab Sample ID: 6828485

Digitally signed by Lauren C. Temple
on 10/22/2012 at 10:16.
Target 3.5 esignature user ID: lct01518



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s21.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 10:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Sample Name: TBOC- Lab Sample ID: 6828485

Digitally signed by Lauren C. Temple
on 10/22/2012 at 10:16.
Target 3.5 esignature user ID: lct01518

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21s21.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 10:49 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 82
Calibration date and time: 21-OCT-2012 03:56
Date, time and analyst ID of latest file update: 22-Oct-2012 10:11 lct01518

Sample Name: TBOC- Lab Sample ID: 6828485

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
28)*t-Butyl Alcohol-d10	(4)	2.048	65	421956	250.000
52)$Dibromofluoromethane	(1)	3.496	113	257359	48.253
62)$1,2-Dichloroethane-d4	(1)	3.806	102	70079	48.901
71)*Fluorobenzene	(1)	4.135	96	1200728	50.000
93)$Toluene-d8	(2)	5.753	98	1128868	50.744
106)*Chlorobenzene-d5	(2)	7.316	117	833665	50.000
119)$4-Bromofluorobenzene	(2)	8.430	95	415947	49.596
136)*1,4-Dichlorobenzene-d4	(3)	9.348	152	462045	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Lauren C. Temple
on 10/22/2012 at 10:16.
Target 3.5 esignature user ID: lct01518

Standards Data

Lancaster Laboratories
Runlog for Hewelet Packard GC/MS System HP09355 **HP #20**

** Shift #1 Analyst: ADS ** Shift #2 Analyst: SEJ ** Shift #3 Analyst: _____ *

Comment Code:

R =	Reinjection necessary	X =	Sample sent to be reextracted
S =	Surrogate problem	I =	Internal Standard problem
NU =	Not used	F =	Further dilution required
MR =	Meets requirements	IUO =	Internal use only
Cz =	Confirms z, (z = S, I or X)	T =	Injected outside valid tune period

Other problems or comments are as follows:

* 8260B WATERS *

*

*

*

Data Directory Path is - C:\msdchem\1\12OCT15A\

FILE	SAMPLE	LLI#	DATE	TIME	BATCH	D.F.	NOTES
YC15T01.D	50NG BFB SEP25-12		15 Oct 2012	13:13			MR
YC15X01.D	CLBLK	CLBLK	15 Oct 2012	13:32			NU
YC15I01.D	VSTD300	VSTD300	15 Oct 2012	13:52			MR
YC15I02.D	VSTD100	VSTD100	15 Oct 2012	14:13			MR
YC15I03.D	VSTD050	VSTD050	15 Oct 2012	14:33			MR
YC15I04.D	VSTD020	VSTD020	15 Oct 2012	14:54			MR
YC15I05.D	VSTD010	VSTD010	15 Oct 2012	15:15			MR
YC15I06.D	VSTD004	VSTD004	15 Oct 2012	15:35			MR
YC15I07.D	VSTD001	VSTD001	15 Oct 2012	15:56			MR
YC15M01.D	MDL0.5	MDL0.5	15 Oct 2012	16:17			MR
YC15V01.D	YLGICV	YLGICV	15 Oct 2012	16:38			NU
YC15V02.D	YLGICV	YLGICV	15 Oct 2012	18:26			MR

Lancaster Laboratories
Runlog for Hewelet Packard GC/MS System HP09355 **HP #20**

** Shift #1 Analyst:_____** Shift #2 Analyst:_____** Shift #3 Analyst:_____*

Comment Code:

R =	Reinjection necessary	X =	Sample sent to be reextracted
S =	Surrogate problem	I =	Internal Standard problem
NU =	Not used	F =	Further dilution required
MR =	Meets requirements	IUO =	Internal use only
Cz =	Confirms z, (z = S, I or X)	T =	Injected outside valid tune period

Other problems or comments are as follows:

_____

_____

_____

_____

Data Directory Path is - C:\msdchem\1\12OCT21A\

FILE	SAMPLE	LLI#	DATE	TIME	BATCH	D.F.	NOTES
YC21T01.D	50NG BFB SEP25-12		21 Oct 2012	00:41			MR
YC21X01.D	VBLKY78	VBLKY78	21 Oct 2012	01:03	Y122951AA		NU
YC21C01.D	VSTD050	VSTD050	21 Oct 2012	01:24	Y122951AA		MR
YC21C02.D	VSTD050	VSTD050	21 Oct 2012	01:45	Y122951AA		MR
YC21B01.D	VBLKY78	VBLKY78	21 Oct 2012	02:05	Y122951AA		MR
YC21L01.D	LCSY78	LCSY78	21 Oct 2012	02:25	Y122951AA		~~MR~~ NU (3)
YC21L02.D	LCSY78	LCSY78	21 Oct 2012	03:10	Y122951AA		MR
YC21S01.D	2708T	6829250	21 Oct 2012	03:59	Y122951AA		MR
YC21S02.D	2708F	6829251	21 Oct 2012	04:20	Y122951AA		MR
YC21S03.D	BCTB3	6828401	21 Oct 2012	04:40	Y122951AA		MR
YC21S04.D	BC012	6828402	21 Oct 2012	05:01	Y122951AA		MR
YC21S05.D	BCEB3	6828403	21 Oct 2012	05:21	Y122951AA		MR
YC21S06.D	B-119	6828404	21 Oct 2012	05:42	Y122951AA		MR
YC21S07.D	BC109	6828405	21 Oct 2012	06:02	Y122951AA		MR
YC21S08.D	BC122	6828406	21 Oct 2012	06:23	Y122951AA		MR
YC21S09.D	B1122	6828407	21 Oct 2012	06:43	Y122951AA		MR
YC21S10.D	BC110	6828408	21 Oct 2012	07:03	Y122951AA		MR
YC21S11.D	BC110MS	6828409MS	21 Oct 2012	07:24	Y122951AA		MR
YC21S12.D	BC110MSD	6828410MSD	21 Oct 2012	07:44	Y122951AA		MR
YC21S13.D	BC113	6828412	21 Oct 2012	08:05	Y122951AA		MR
YC21S14.D	BCIT2	6828413	21 Oct 2012	08:25	Y122951AA		MR
YC21S15.D	BC117	6828414	21 Oct 2012	08:45	Y122951AA		MR
YC21S16.D	BC114	6828415	21 Oct 2012	09:05	Y122951AA		F
YC21S17.D	M4---	6826481	21 Oct 2012	09:26	Y122951AA		MR
YC21S18.D	-5---	6828482	21 Oct 2012	09:46	Y122951AA		MR
YC21S19.D	FD4--	6828483	21 Oct 2012	10:07	Y122951AA		MR
YC21S20.D	FBOC-	6828484	21 Oct 2012	10:28	Y122951AA		MR
YC21S21.D	TBOC-	6828485	21 Oct 2012	10:49	Y122951AA		MR

(3) 10/24/12

Data File: /chem2/HP09355.i/12oct15a.b/yc15t01.d

Date : 15-OCT-2012 13:13

Client ID: 50NG BFB SEP25-12

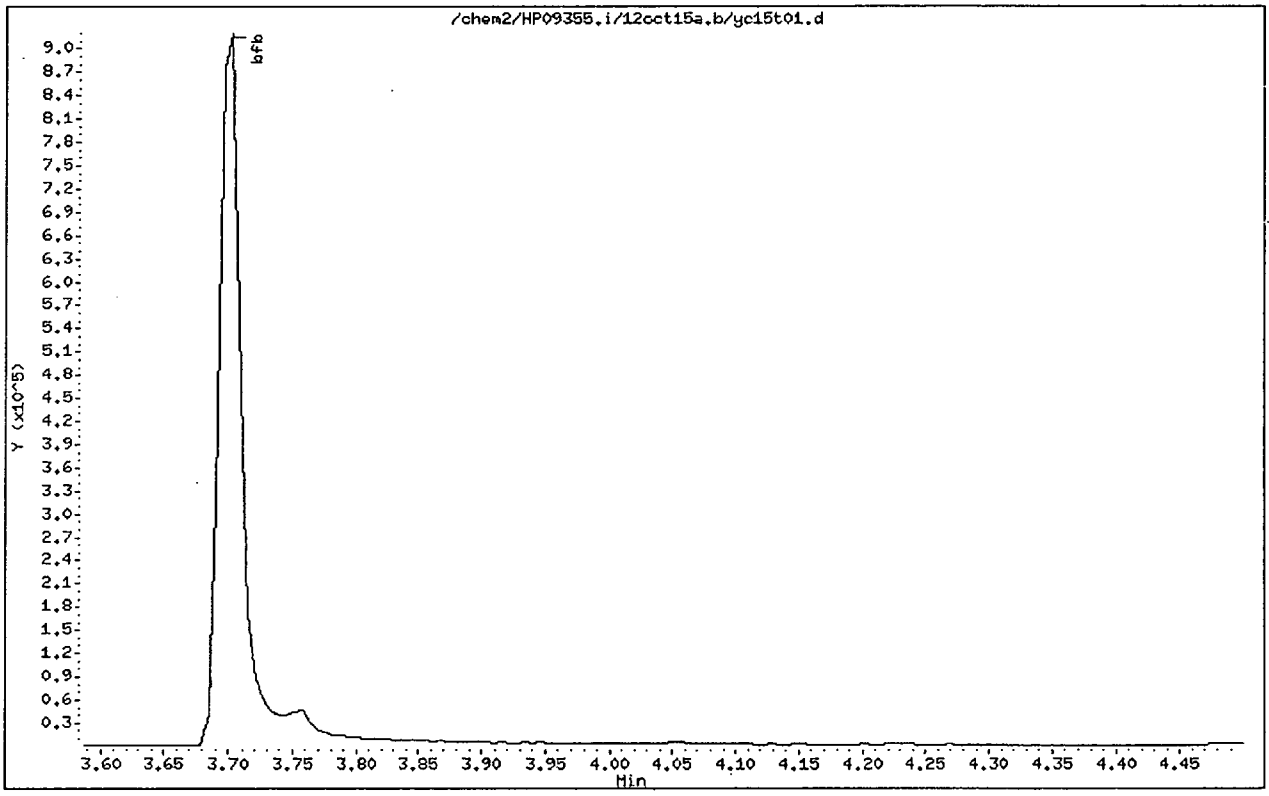
Instrument: HP09355.i

Sample Info: 50NG BFB SEP25-12

Operator: ADS01731

Column phase: DB-624

Column diameter: 0.18



Digitally signed by Sara E. Johnson on 10/15/2012 at 16:43.
Target 3.5 esignature user ID: sej02002

Data File: /chem2/HP09355.i/12oct15a.b/yc15t01.d

Page 2

Date : 15-OCT-2012 13:13

Client ID: 50NG BFB SEP25-12

Instrument: HP09355.i

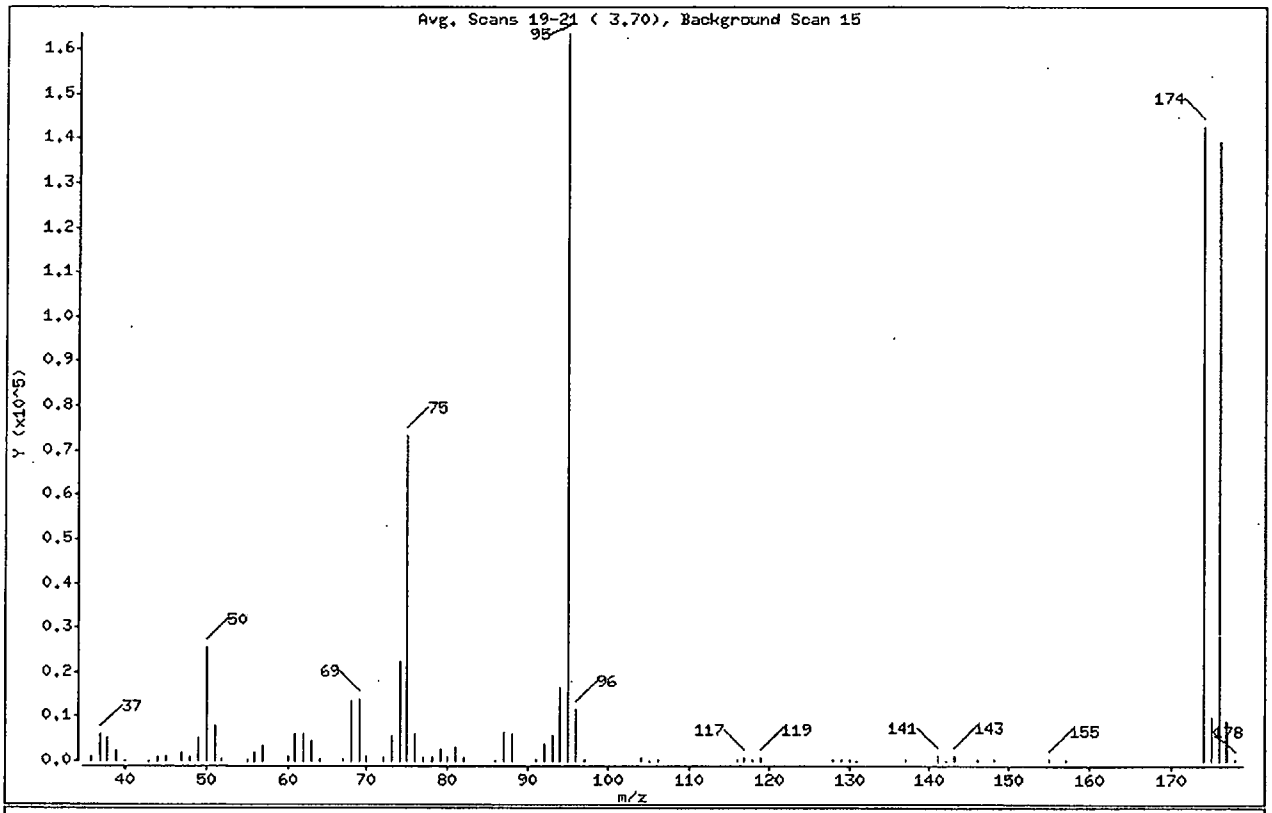
Sample Info: 50NG BFB SEP25-12

Operator: ABS01731

Column phase: DB-624

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.56
75	30.00 - 60.00% of mass 95	44.73
96	5.00 - 9.00% of mass 95	7.02
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	87.39
175	5.00 - 9.00% of mass 174	6.05 (6.92)
176	95.00 - 101.00% of mass 174	85.29 (97.59)
177	5.00 - 9.00% of mass 176	5.48 (6.42)

Digitally signed by Sara E. Johnson on 10/15/2012 at 16:43.
Target 3.5 esignature user ID: sej02002

Data File: /chem2/HP09355.i/12oct15a.b/yc15t01.d

Date : 15-OCT-2012 13:13

Client ID: 50NG BFB SEP25-12

Instrument: HP09355.i

Sample Info: 50NG BFB SEP25-12

Operator: ADS01731

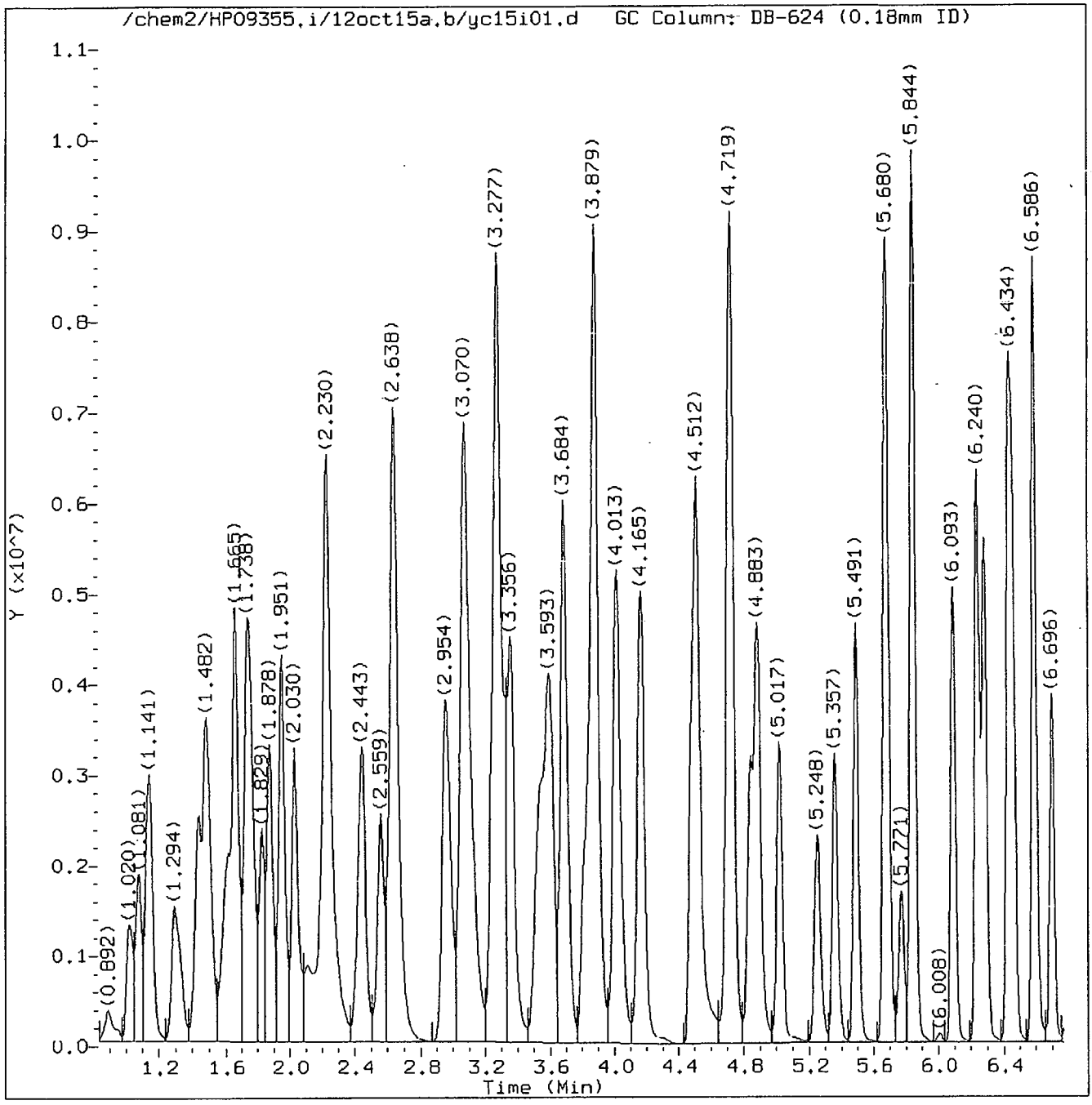
Column phase: DB-624

Column diameter: 0.18

Data File: yc15t01.d
Spectrum: Avg. Scans 19-21 (3,70), Background Scan 15
Location of Maximum: 95.00
Number of points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1163	61.00	5994	82.00	575	128.00	478
37.00	5908	62.00	6048	86.00	176	129.00	198
38.00	5322	63.00	4374	87.00	6330	130.00	532
39.00	2345	64.00	470	88.00	6190	131.00	85
40.00	16	67.00	322	91.00	478	137.00	208
43.00	7	68.00	13365	92.00	3730	141.00	1209
44.00	567	69.00	13748	93.00	5743	142.00	94
45.00	1233	70.00	1203	94.00	16560	143.00	1224
47.00	1982	72.00	702	95.00	163392	146.00	205
48.00	823	73.00	5748	96.00	11466	148.00	395
49.00	5250	74.00	22296	97.00	329	155.00	387
50.00	25432	75.00	73088	104.00	579	157.00	219
51.00	7938	76.00	5900	105.00	88	174.00	142784
52.00	335	77.00	928	106.00	531	175.00	9883
55.00	500	78.00	602	116.00	450	176.00	139328
56.00	1797	79.00	2648	117.00	747	177.00	8950
57.00	3363	80.00	824	118.00	458	178.00	225
60.00	1041	81.00	2972	119.00	745		

Digitally signed by Sara E. Johnson on 10/15/2012 at 16:43.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

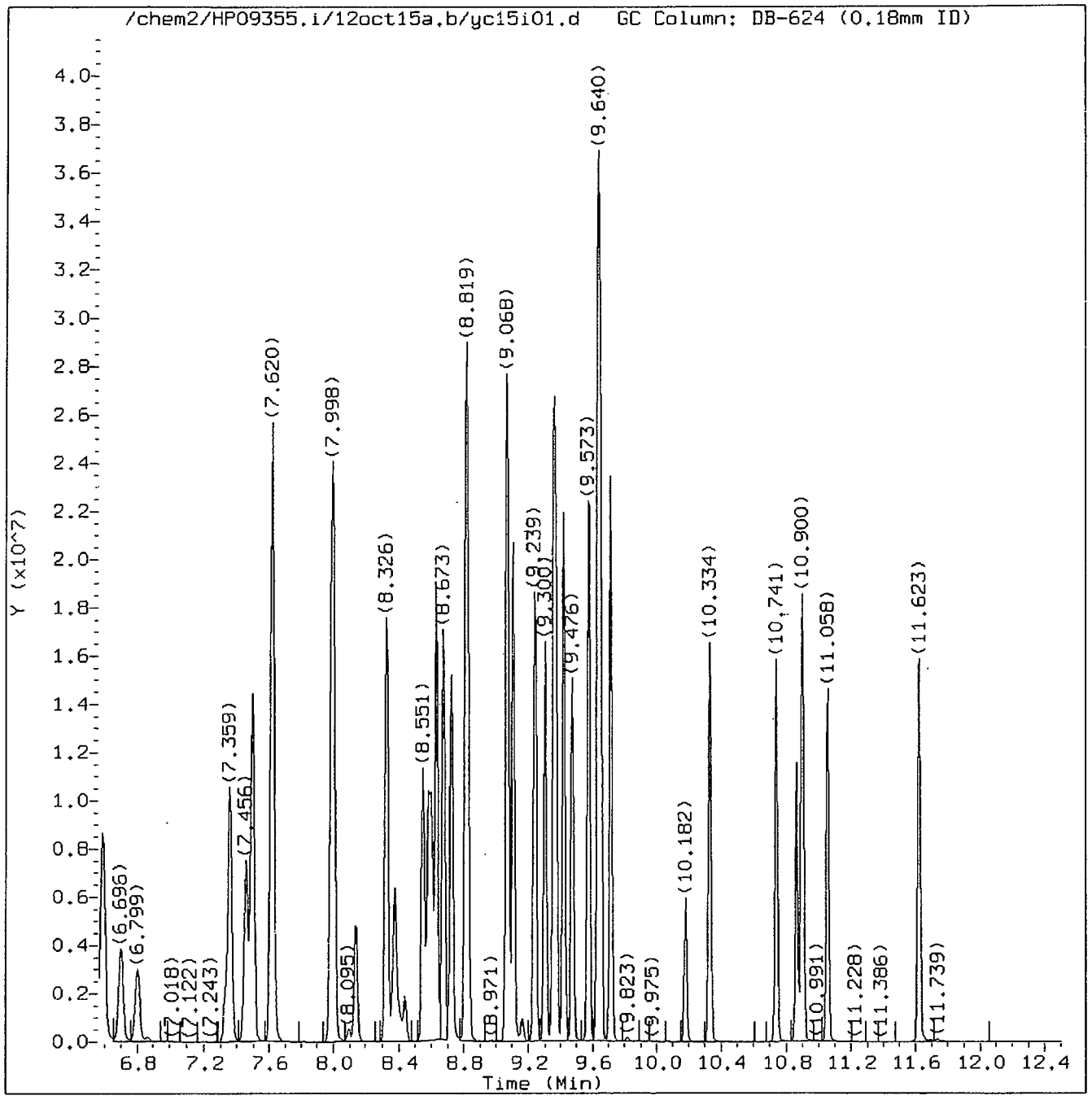
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD300 Lab Sample ID: VSTD300

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD300 Lab Sample ID: VSTD300

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Dichlorodifluoromethane	(1)	1.020	85	2582738	265.500
3) Chloromethane	(1)	1.081	50	2811597M	272.547
4) 1,3-Butadiene	(1)	1.129	39	1116965	257.302
5) Vinyl Chloride	(1)	1.148	62	2443799	241.832
7) Bromomethane	(1)	1.294	94	1446895	219.065
8) Chloroethane	(1)	1.330	64	1105389	201.849
9) Dichlorofluoromethane	(1)	1.433	67	2907766	241.820
11) n-Pentane	(1)	1.482	43	2361460	238.498
10) Trichlorofluoromethane	(1)	1.494	101	2775972	255.408
14) Freon 123a	(1)	1.604	67	1894412	246.498
15) Acrolein	(4)	1.665	56	6887499	2538.846
16) 1,1-Dichloroethene	(1)	1.732	96	1555211	266.233
17) Acetone	(1)	1.750	58	787811	482.792
18) Freon 113	(1)	1.756	101	1632194	272.037
20) Methyl Iodide	(1)	1.829	142	3101473	279.005
21) 2-Propanol	(4)	1.835	45	1538345	1348.759
22) Carbon Disulfide	(1)	1.878	76	4992428	277.378
24) Allyl Chloride	(1)	1.951	41	2786602	258.591
25) Methyl Acetate	(1)	1.957	43	2329967M	261.949
26) Methylene Chloride	(1)	2.030	84	1926216	265.072
28)*t-Butyl Alcohol-d10	(4)	2.060	65	406726	250.000
29) t-Butyl Alcohol	(4)	2.115	59	2504801M	1241.709
30) Acrylonitrile	(1)	2.194	53	1525209M	249.085
31) trans-1,2-Dichloroethene	(1)	2.230	96	1916316	274.042
32) Methyl Tertiary Butyl Ether	(1)	2.237	73	6555197	271.042
33) n-Hexane	(1)	2.443	57	2934041	280.248
34) 1,1-Dichloroethane	(1)	2.559	63	3631609	286.073
36) di-Isopropyl Ether	(1)	2.638	45	6831825	268.450
37) 2-Chloro-1,3-Butadiene	(1)	2.644	53	3004100	278.809
39) Ethyl t-Butyl Ether	(1)	2.954	59	6752137	275.529
40) cis-1,2-Dichloroethene	(1)	3.070	96	2267743	289.830
41) 2-Butanone	(1)	3.076	43	4663113	526.779
42) 2,2-Dichloropropane	(1)	3.082	77	2745114	287.867
43) Propionitrile	(4)	3.125	54	3610541	1436.217
46) Methacrylonitrile	(1)	3.271	67	4191083	691.641
47) Bromochloromethane	(1)	3.283	128	1200254	282.794
48) Tetrahydrofuran	(4)	3.325	71	1356598	576.413
50) Chloroform	(1)	3.362	83	3518489	275.643

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
52)$Dibromofluoromethane	(1)	3.508	113	320743	50.242
51)$Dibromofluoromethane(mz111)	(1)	3.508	111	328406	50.296
53) 1,1,1-Trichloroethane	(1)	3.538	97	3043250	279.703
56) Cyclohexane	(1)	3.593	56	3566081	279.448
55) Cyclohexane (mz 69)	(1)	3.593	69	1113289	283.441
54) Cyclohexane (mz 84)	(1)	3.599	84	2960885	281.976
45) 1,2-Dichloroethene (total)	(1)		96	4184059	563.872
57) 1,1-Dichloropropene	(1)	3.684	75	2749600	291.051
58) Carbon Tetrachloride	(1)	3.691	117	2496184	308.716
62)$1,2-Dichloroethane-d4	(1)	3.818	102	84905	49.498
61)$1,2-Dichloroethane-d4(mz65)	(1)	3.818	65	375594	47.820
60)$1,2-Dichloroethane-d4(mz104)	(1)	3.818	104	54771	50.837
59) Isobutyl Alcohol	(4)	3.836	41	2374743	3417.560
63) Benzene	(1)	3.879	78	8553567	283.943
64) 1,2-Dichloroethane (mz 98)	(1)	3.891	98	291193	299.958
65) 1,2-Dichloroethane	(1)	3.891	62	2829390	284.367
69) t-Amyl Methyl Ether	(1)	4.013	73	6863215	284.948
71)*Fluorobenzene	(1)	4.153	96	1437215	50.000
72) n-Heptane	(1)	4.171	43	3134130	258.151
73) n-Butanol	(4)	4.481	56	4286249	6651.249
74) Trichloroethene	(1)	4.512	95	2185653	291.721
75) Methylcyclohexane (mz98)	(1)	4.713	98	1739269	291.391
76) Methylcyclohexane	(1)	4.713	83	3916423	288.462
77) 1,2-Dichloropropane	(1)	4.725	63	2302168	291.074
78) Dibromomethane	(1)	4.840	93	1543098	294.433
79) 1,4-Dioxane	(4)	4.865	88	579346	3232.272
80) Methyl Methacrylate	(1)	4.889	69	2648152	283.117
83) Bromodichloromethane	(1)	5.017	83	2763852	311.755
85) 2-Nitropropane	(1)	5.248	41	2154595	587.268
86) 2-Chloroethyl Vinyl Ether	(1)	5.357	63	1967113	278.118
87) cis-1,3-Dichloropropene	(1)	5.491	75	3518181	310.126
89) 4-Methyl-2-Pentanone	(1)	5.680	43	8838201	527.946
92)$Toluene-d8(mz100)	(2)	5.771	100	951523	52.091
93)$Toluene-d8	(2)	5.771	98	1382770	49.509
94) Toluene	(2)	5.844	92	5527753	283.708
95) trans-1,3-Dichloropropene	(2)	6.093	75	3475188	311.936
96) Ethyl Methacrylate	(2)	6.240	69	4113577	279.010
97) 1,1,2-Trichloroethane	(2)	6.282	97	2240377	284.565

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
98) Tetrachloroethene	(2)	6.428	166	2484892	295.682
99) 1,3-Dichloropropane	(2)	6.459	76	3784419	286.698
101) 2-Hexanone	(2)	6.586	43	6937419	505.916
102) Dibromochloromethane	(2)	6.696	129	2378723	328.241
104) 1,2-Dibromoethane	(2)	6.799	107	2540735	297.358
106)*Chlorobenzene-d5	(2)	7.328	117	1046648	50.000
107) Chlorobenzene	(2)	7.359	112	6163211	284.110
108) 1,1,1,2-Tetrachloroethane	(2)	7.456	131	2220968	314.178
109) Ethylbenzene	(2)	7.499	91	10312771	272.492
110) m+p-Xylene	(2)	7.620	106	8147770	545.809
113) o-Xylene	(2)	7.992	106	4213250	279.453
114) Styrene	(2)	8.004	104	7052279	280.139
115) Bromoform	(2)	8.144	173	2079214	337.962
112) Xylene (Total)	(2)		106	12361020	825.261
116) Isopropylbenzene	(2)	8.326	105	9952361	263.081
118) Cyclohexanone	(4)	8.375	55	3062188	3858.700
119)$4-Bromofluorobenzene	(2)	8.436	95	531496	50.478
120)$4-Bromofluorobenzene(mz174)	(2)	8.442	174	453507	50.525
121) Bromobenzene	(3)	8.551	156	2905257	287.611
122) 1,1,2,2-Tetrachloroethane	(3)	8.582	83	3996466	278.509
123) 1,2,3-Trichloropropane	(3)	8.600	110	1237752	277.379
124) trans-1,4-Dichloro-2-Butene	(3)	8.630	53	2881107	687.624
125) n-Propylbenzene	(3)	8.673	91	10683765	241.576
126) 2-Chlorotoluene	(3)	8.728	126	2672115	284.468
128) 4-Chlorotoluene	(3)	8.813	126	2719212	279.961
127) 1,3,5-Trimethylbenzene	(3)	8.825	105	8525865	258.855
131) Pentachloroethane	(3)	9.068	167	1827957	299.992
130) tert-Butylbenzene	(3)	9.074	134	2028777	274.277
132) 1,2,4-Trimethylbenzene	(3)	9.111	105	8848767	260.396
133) sec-Butylbenzene	(3)	9.239	105	9824040	242.566
134) 1,3-Dichlorobenzene	(3)	9.300	146	5367334	281.475
135) p-Isopropyltoluene	(3)	9.354	119	8816092	246.462
136)*1,4-Dichlorobenzene-d4	(3)	9.354	152	607964	50.000
138) 1,4-Dichlorobenzene	(3)	9.373	146	5463553	268.447
139) 1,2,3-Trimethylbenzene	(3)	9.421	105	8934476	244.566
141) Benzyl Chloride	(3)	9.476	91	7989345	290.911
142) 1,3-Diethylbenzene	(3)	9.579	119	5940458	263.413
143) 1,4-Diethylbenzene	(3)	9.634	119	5833148	251.768

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
144) 1,2-Dichlorobenzene	(3)	9.640	146	4950314	256.795
145) n-Butylbenzene	(3)	9.652	92	4637316	261.605
146) 1,2-Diethylbenzene	(3)	9.713	119	4973858	256.514
148) 1,2-Dibromo-3-Chloropropane	(3)	10.182	75	1046265	286.717
149) 1,3,5-Trichlorobenzene	(3)	10.334	180	3856029	263.600
150) 1,2,4-Trichlorobenzene	(3)	10.741	180	3533576	256.999
151) Hexachlorobutadiene	(3)	10.863	225	1594853	250.105
152) Naphthalene	(3)	10.900	128	10331050	193.797
153) 1,2,3-Trichlorobenzene	(3)	11.058	180	3313959	245.697
154) 2-Methylnaphthalene	(3)	11.623	142	6001872	202.414

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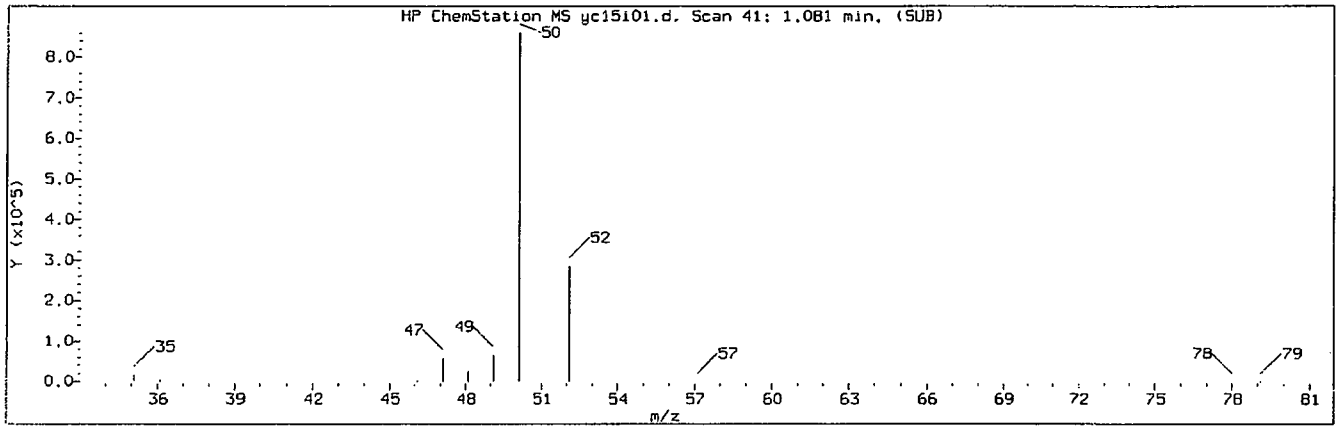
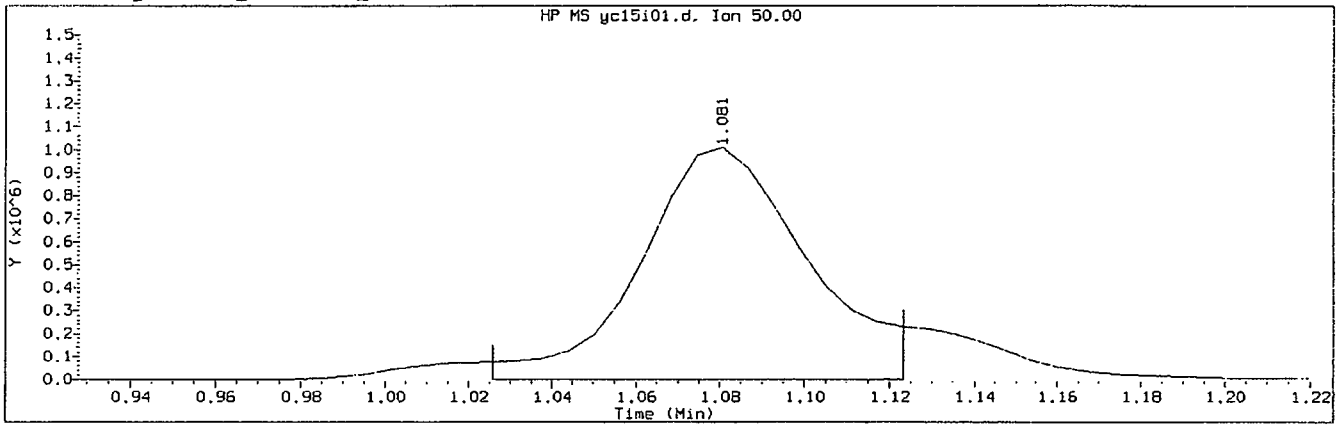
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD300 Lab Sample ID: VSTD300

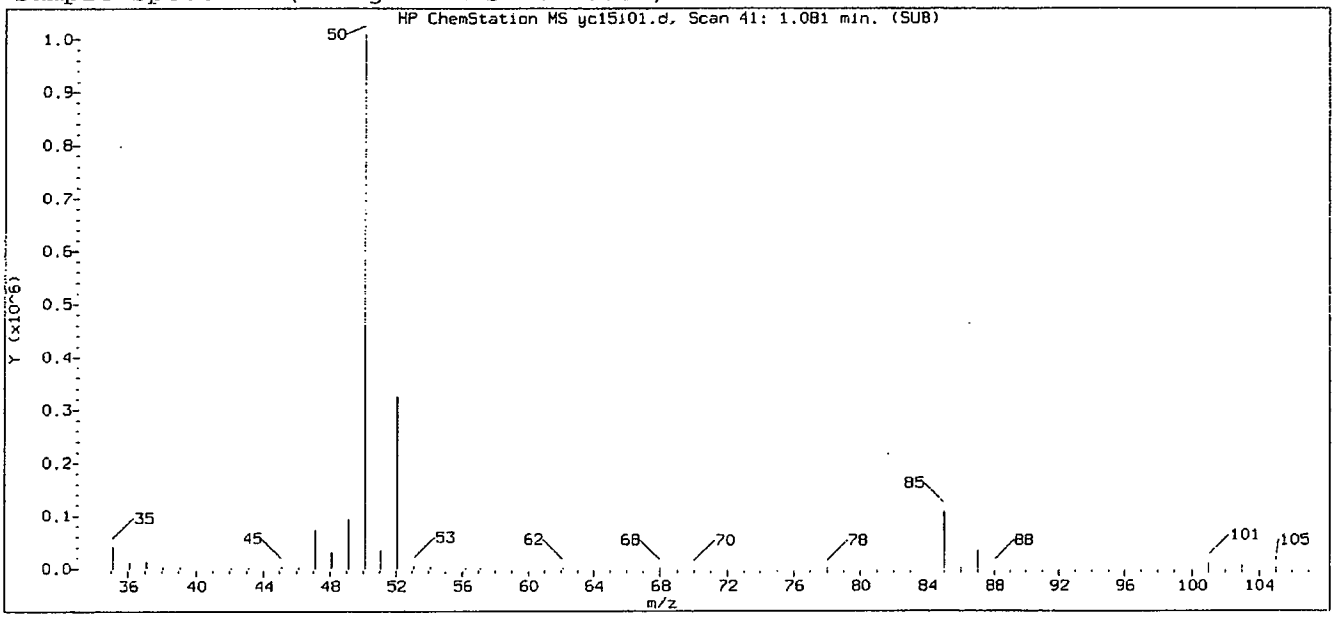
Compound Number : 3
Compound Name : Chloromethane
Scan Number : 41
Retention Time (minutes): 1.081
Quant Ion : 50.00
Area (flag) : 2811597M
On-Column Amount (ng) : 272.5468
Integration start scan : 31 Integration stop scan: 47
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

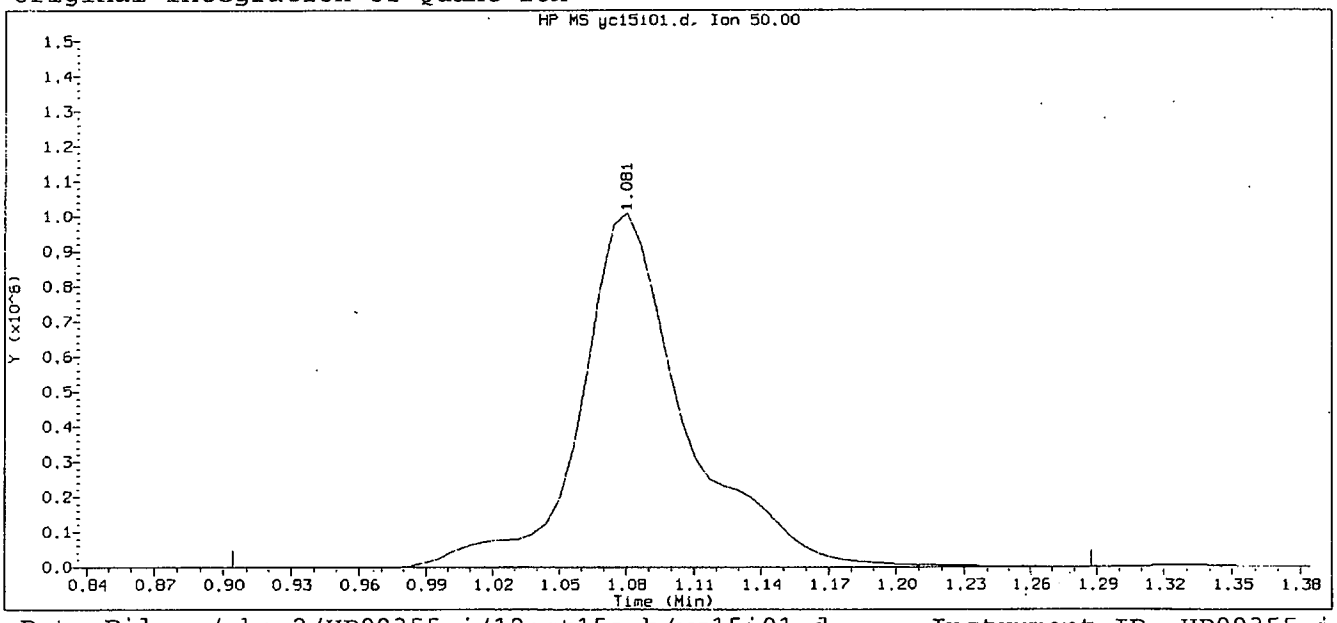
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 14:07
Date, time and analyst ID of latest file update: 15-Oct-2012 14:08 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compound Number	: 3		
Compound Name	: Chloromethane		
Scan Number	: 41		
Retention Time (minutes)	: 1.081		
Quant Ion	: 50.00		
Area	: 3293849		
On-column Amount (ng)	: 305.4692		
Integration start scan	: 11	Integration stop scan:	74
Y at integration start	: 0	Y at integration end:	0

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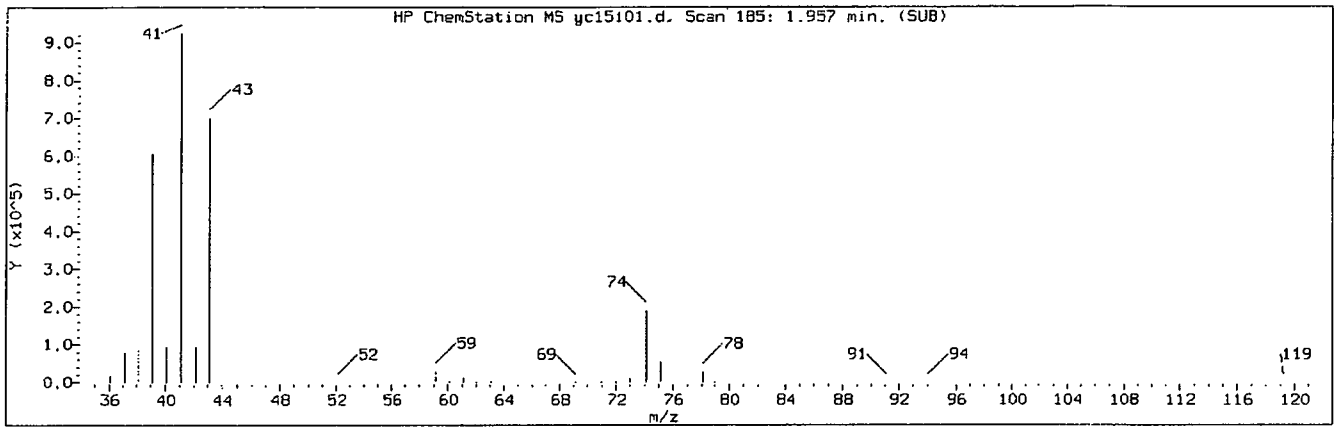
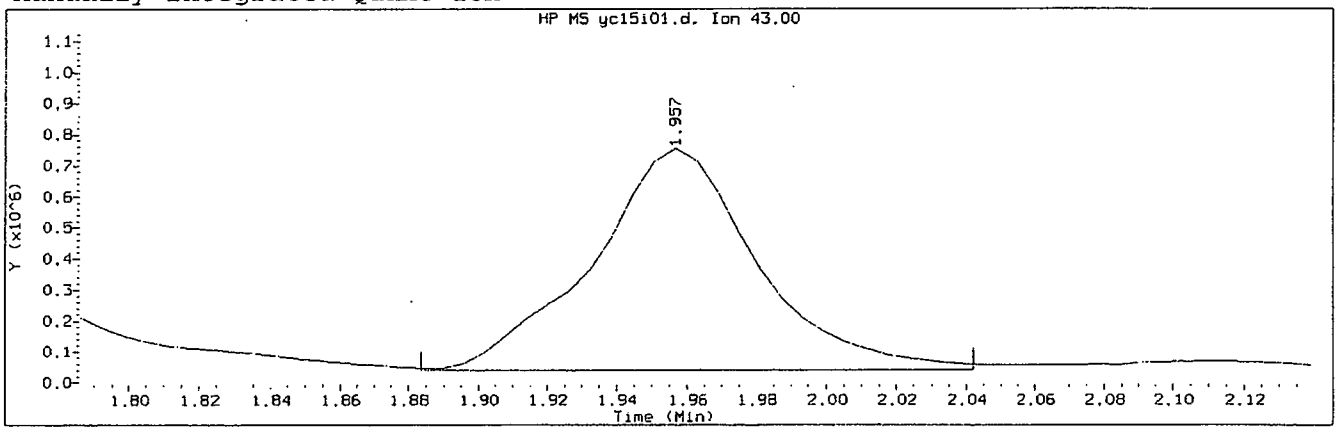
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD300 Lab Sample ID: VSTD300

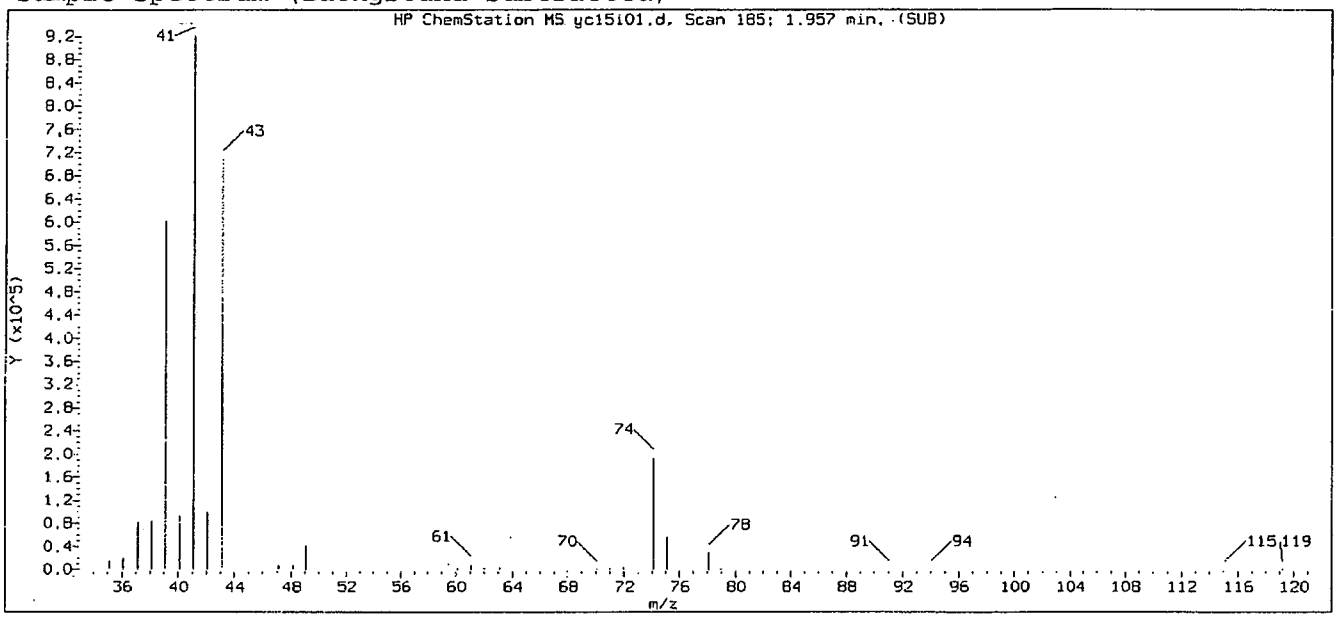
Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 185		
Retention Time (minutes)	: 1.957		
Quant Ion	: 43.00		
Area (flag)	: 2329967M		
On-Column Amount (ng)	: 261.9493		
Integration start scan	: 172	Integration stop scan:	198
Y at integration start	: 41407	Y at integration end:	41407

Reason for manual integration: improper integration

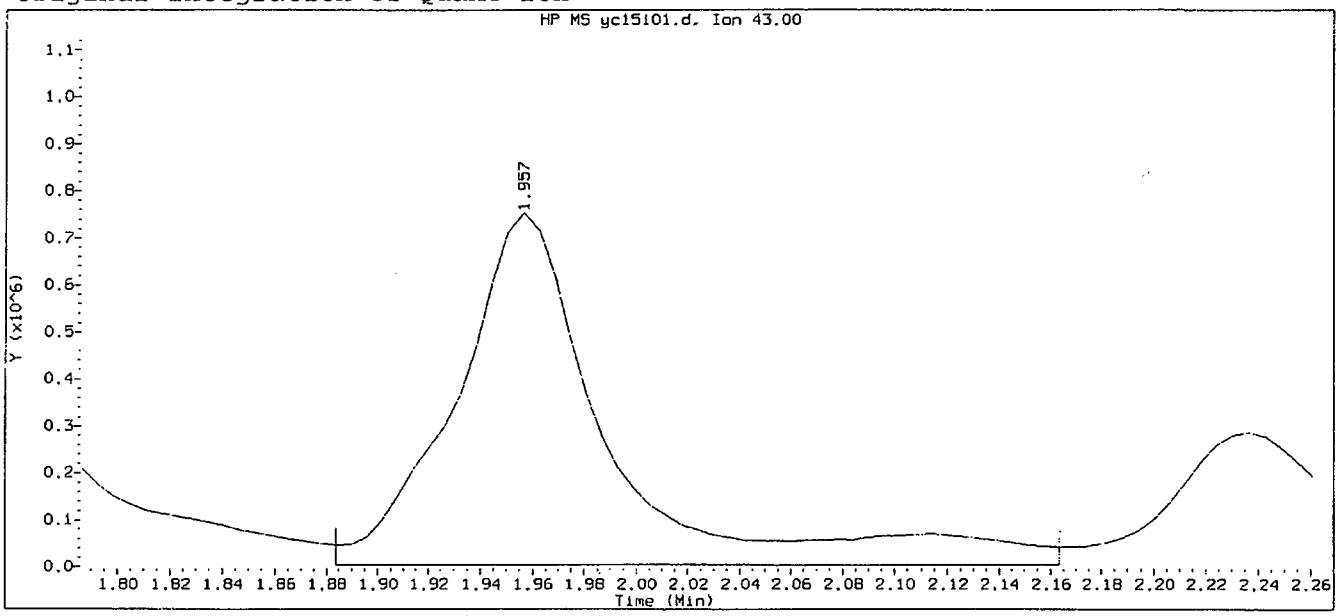
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 14:07
Date, time and analyst ID of latest file update: 15-Oct-2012 14:08 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 185		
Retention Time (minutes)	: 1.957		
Quant Ion	: 43.00		
Area	: 3067275		
On-column Amount (ng)	: 232.8283		
Integration start scan	: 172	Integration stop scan:	218
Y at integration start	: 4883	Y at integration end:	4883

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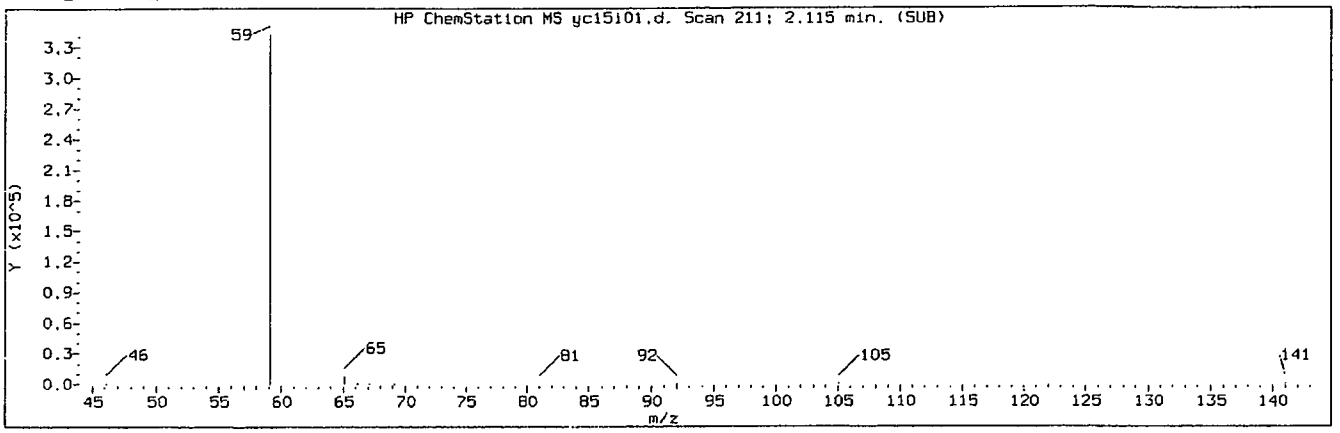
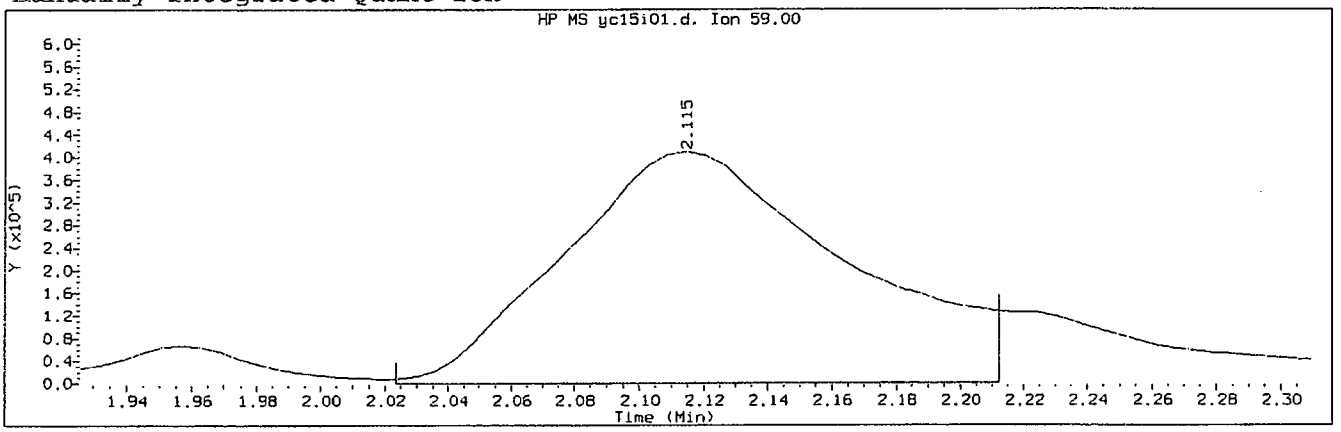
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD300 Lab Sample ID: VSTD300

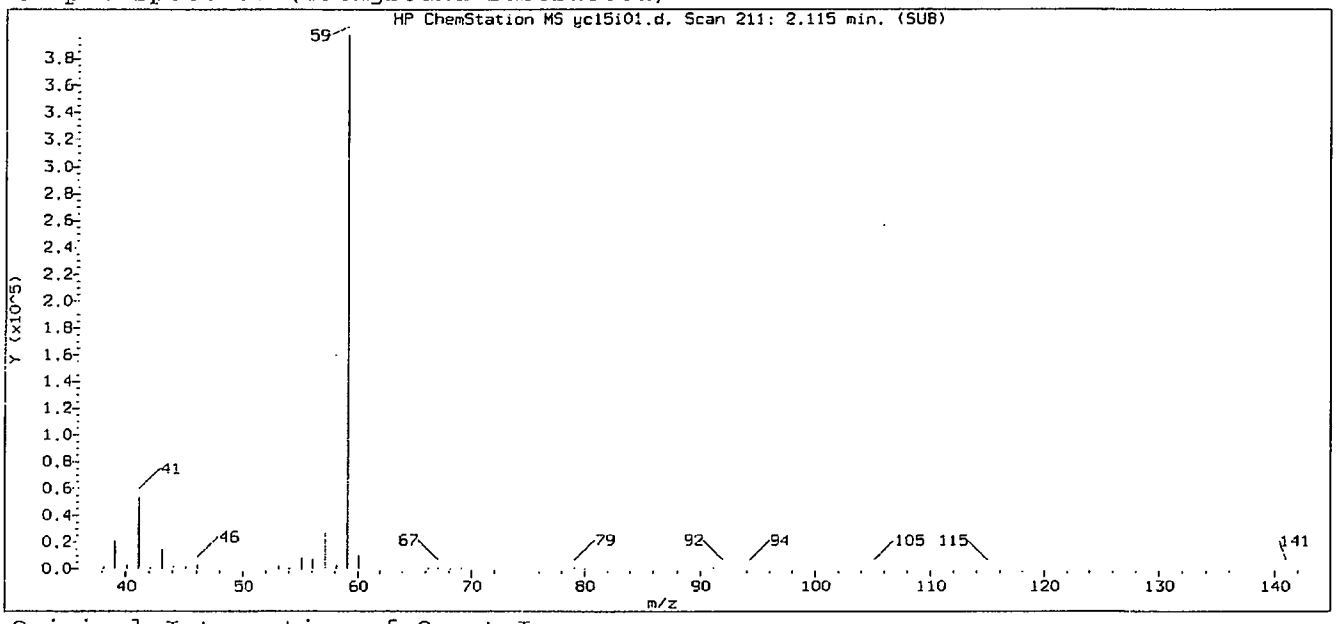
Compound Number	: 29		
Compound Name	: t-Butyl Alcohol		
Scan Number	: 211		
Retention Time (minutes)	: 2.115		
Quant Ion	: 59.00		
Area (flag)	: 2504801M		
On-Column Amount (ng)	: 1241.7089		
Integration start scan	: 195	Integration stop scan:	226
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

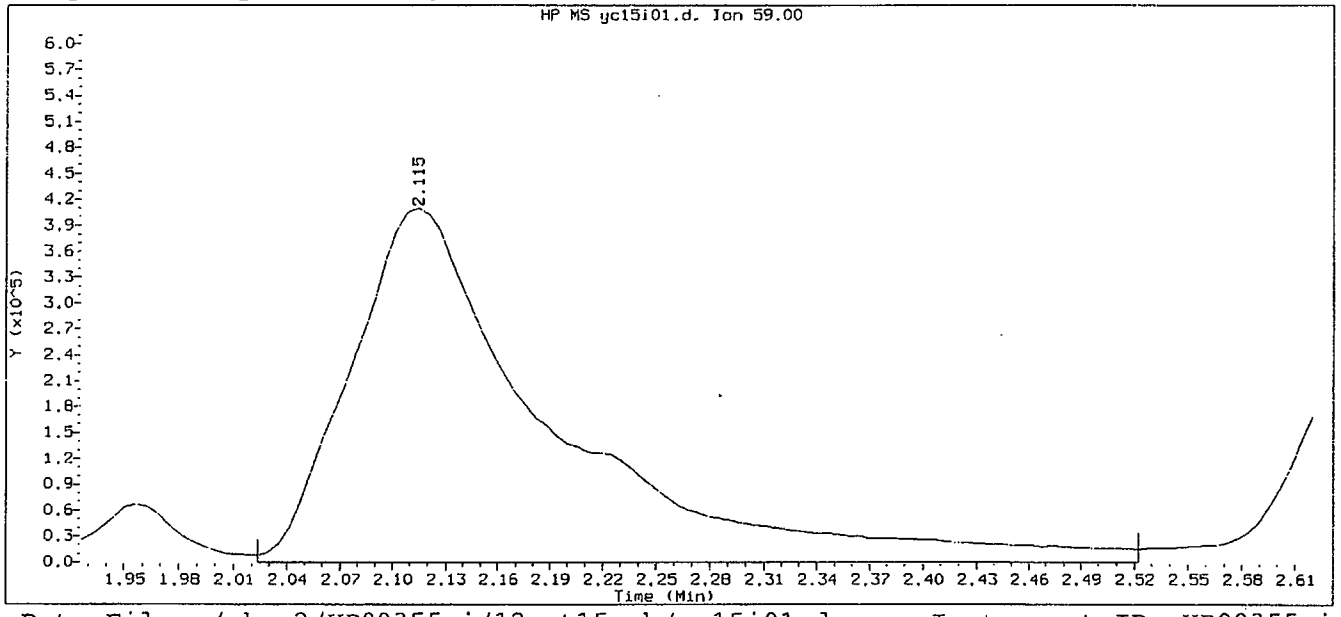
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

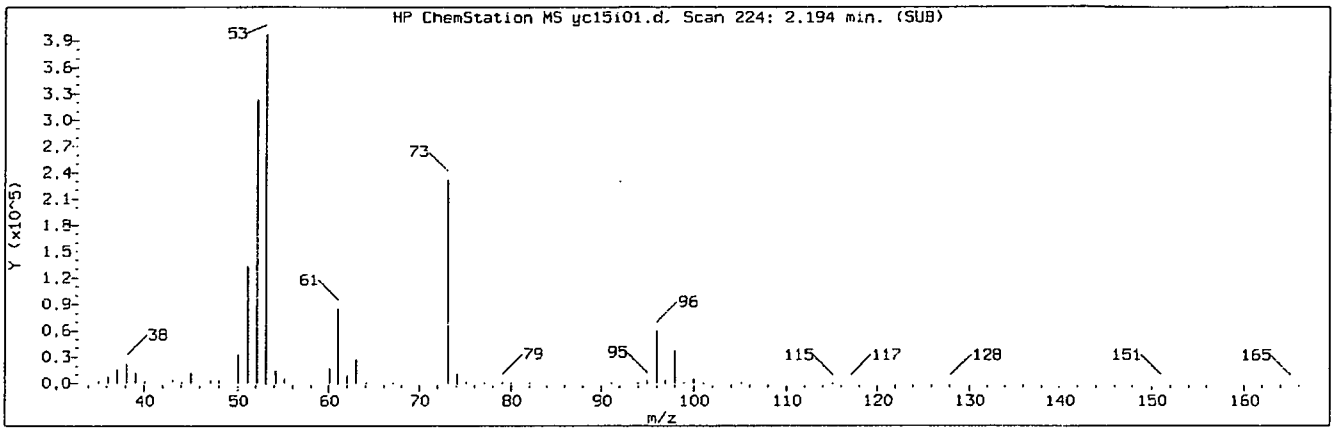
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 14:07
Date, time and analyst ID of latest file update: 15-Oct-2012 14:08 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

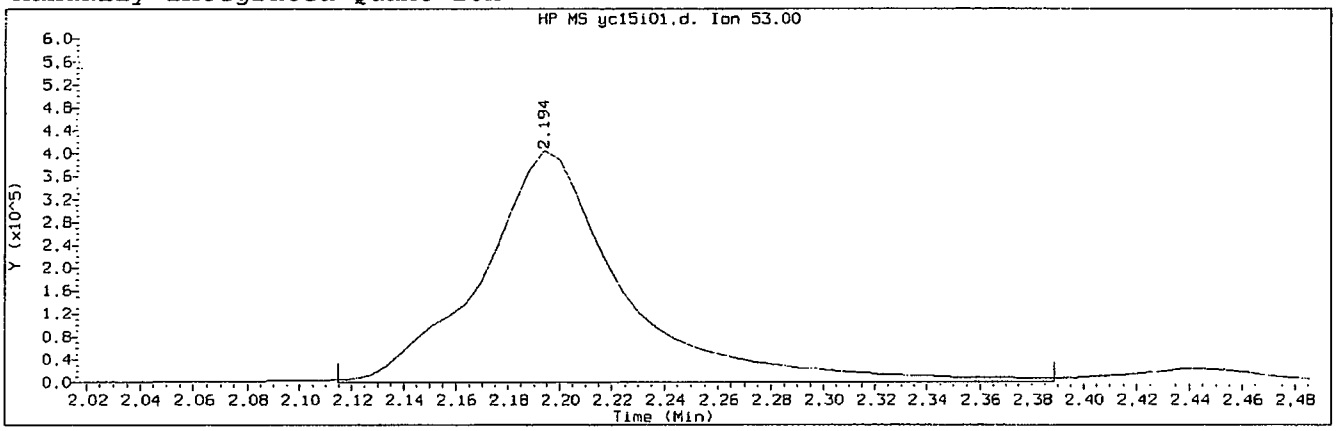
Compound Number	: 29		
Compound Name	: t-Butyl Alcohol		
Scan Number	: 211		
Retention Time (minutes)	: 2.115		
Quant Ion	: 59.00		
Area	: 3252020		
On-column Amount (ng)	: 1600.8535		
Integration start scan	: 195	Integration stop scan:	277
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD300 Lab Sample ID: VSTD300

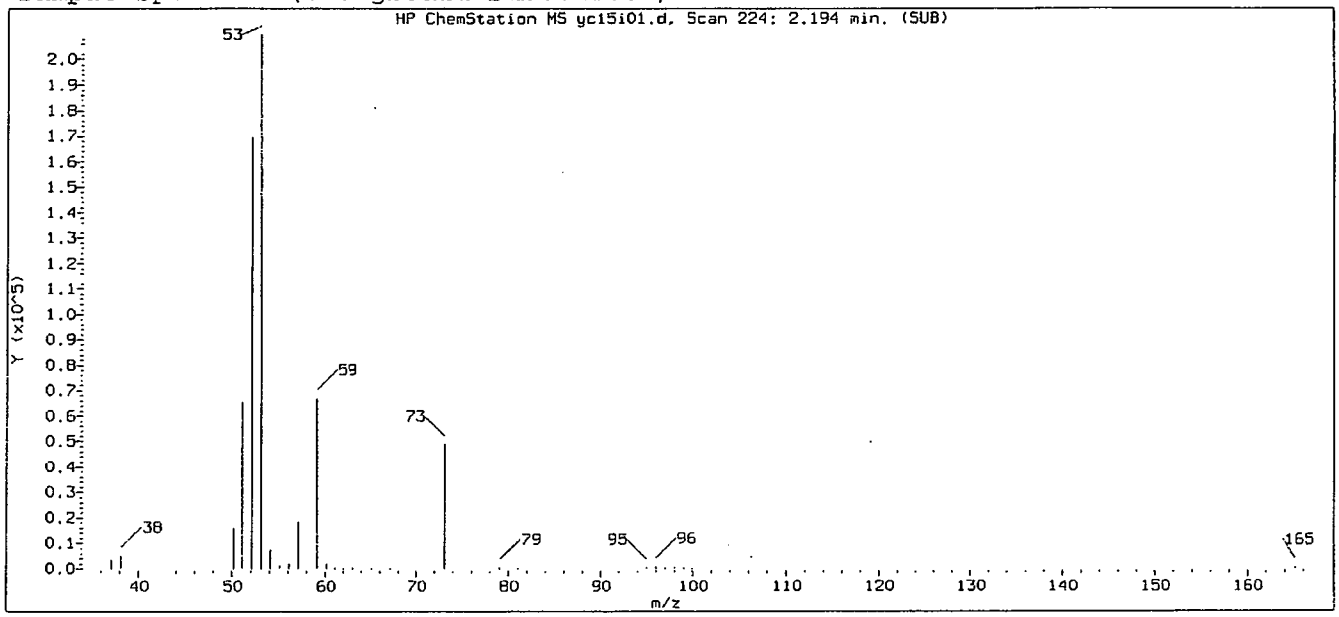
Compound Number : 30
Compound Name : Acrylonitrile
Scan Number : 224
Retention Time (minutes): 2.194
Quant Ion : 53.00
Area (flag) : 1525209M
On-Column Amount (ng) : 249.0849
Integration start scan : 210 Integration stop scan: 255
Y at integration start : 1078 Y at integration end: 1078

Reason for manual integration: improper integration

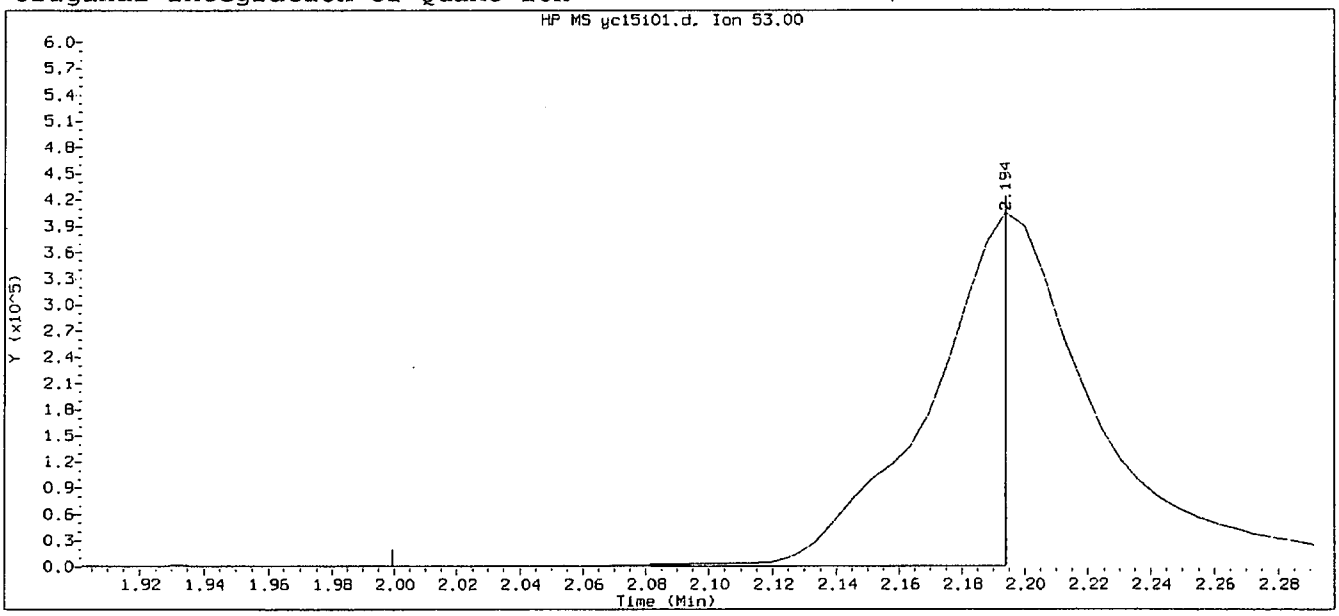
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



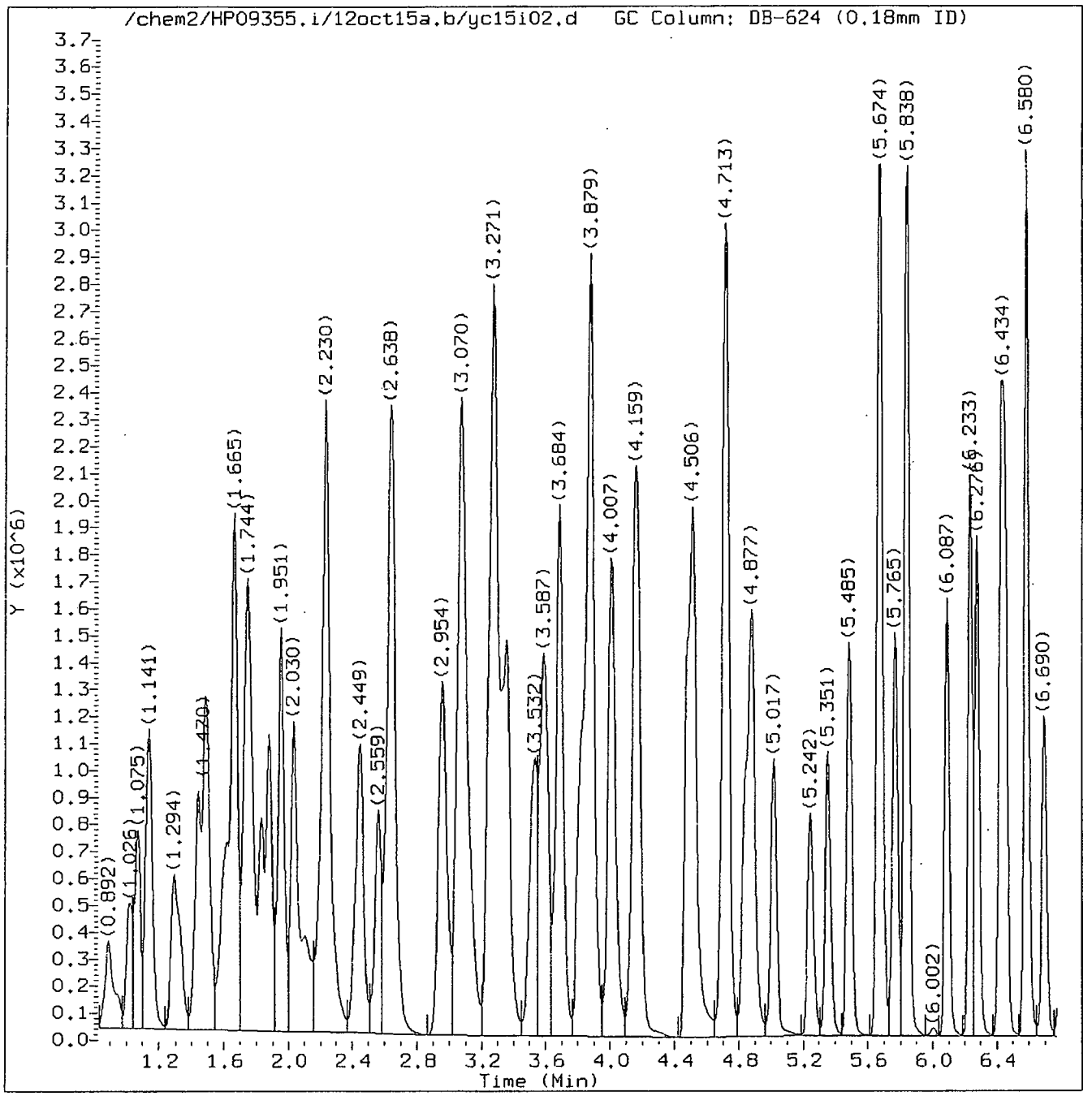
Data File: /chem2/HP09355.i/12oct15a.b/yc15i01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 13:52 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 14:07
Date, time and analyst ID of latest file update: 15-Oct-2012 14:08 Automation

Sample Name: VSTD300 Lab Sample ID: VSTD300

Compound Number	: 30		
Compound Name	: Acrylonitrile		
Scan Number	: 224		
Retention Time (minutes)	: 2.194		
Quant Ion	: 53.00		
Area	: 670056		
On-column Amount (ng)	: 106.0078		
Integration start scan	: 191	Integration stop scan:	223
Y at integration start	: 1062	Y at integration end:	1062

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

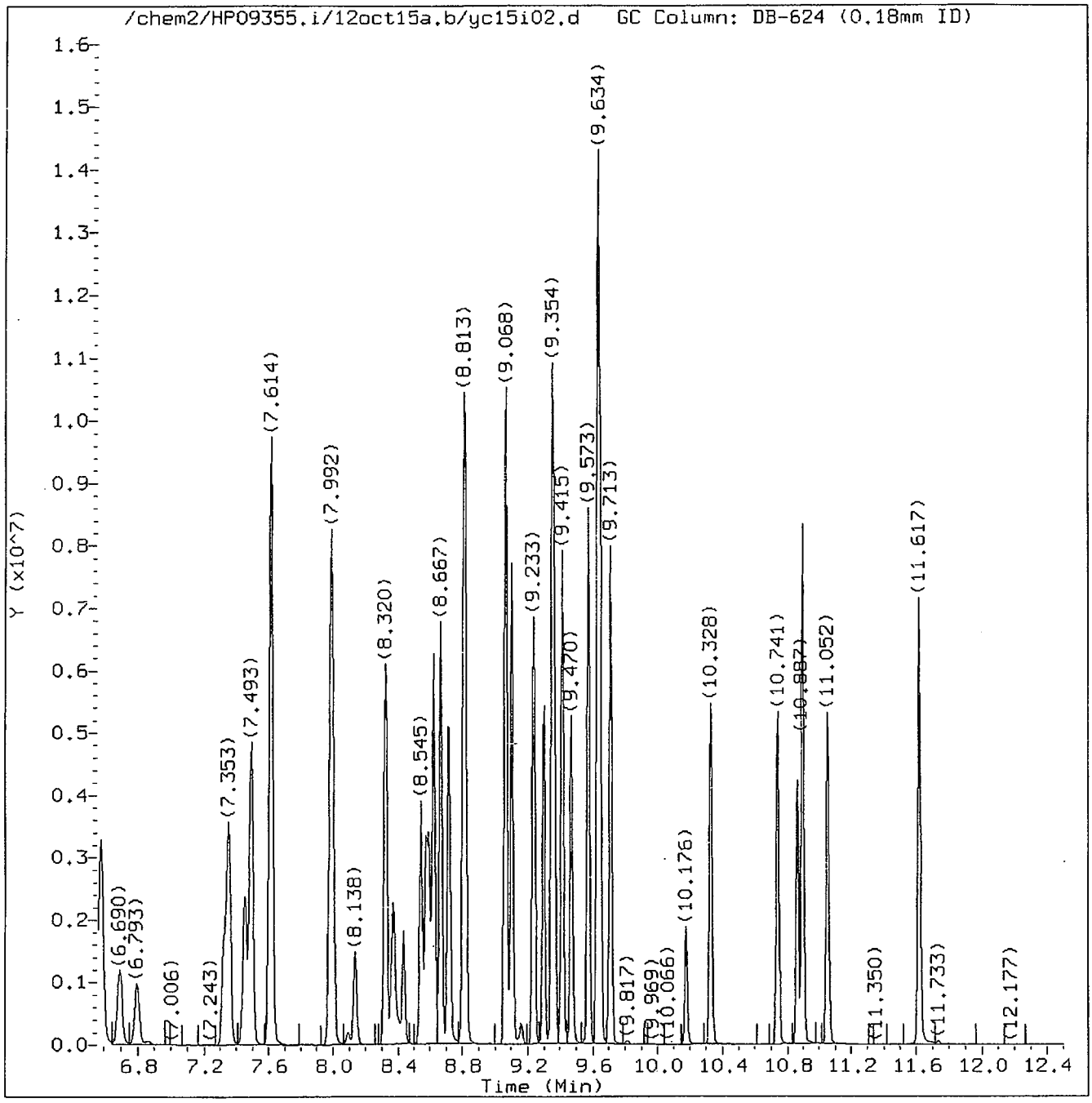
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD100 Lab Sample ID: VSTD100

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Dichlorodifluoromethane	(1)	1.020	85	901386	97.855
3) Chloromethane	(1)	1.075	50	921384M	94.323
4) 1,3-Butadiene	(1)	1.135	39	432112	105.121
5) Vinyl Chloride	(1)	1.148	62	901843	94.247
7) Bromomethane	(1)	1.294	94	565352	90.395
8) Chloroethane	(1)	1.330	64	444432	85.705
9) Dichlorofluoromethane	(1)	1.440	67	1011524	88.838
11) n-Pentane	(1)	1.482	43	817558	87.199
10) Trichlorofluoromethane	(1)	1.500	101	972224M	94.466
14) Freon 123a	(1)	1.610	67	636862	87.513
15) Acrolein	(4)	1.665	56	2563229	952.752
16) 1,1-Dichloroethene	(1)	1.738	96	528172	95.485
17) Acetone	(1)	1.750	58	288181	186.506
18) Freon 113	(1)	1.756	101	555570	97.788
20) Methyl Iodide	(1)	1.835	142	1037905	98.603
21) 2-Propanol	(4)	1.835	45	570466	504.345
22) Carbon Disulfide	(1)	1.878	76	1687343	99.004
24) Allyl Chloride	(1)	1.951	41	967490	94.814
25) Methyl Acetate	(1)	1.957	43	824566M	97.900
26) Methylene Chloride	(1)	2.030	84	651792	94.723
28)*t-Butyl Alcohol-d10	(4)	2.054	65	403352	250.000
29) t-Butyl Alcohol	(4)	2.109	59	909052M	454.415
30) Acrylonitrile	(1)	2.194	53	532652	91.865
31) trans-1,2-Dichloroethene	(1)	2.230	96	650621	98.258
32) Methyl Tertiary Butyl Ether	(1)	2.237	73	2272679	99.238
33) n-Hexane	(1)	2.449	57	994986	100.365
34) 1,1-Dichloroethane	(1)	2.559	63	1196865	99.566
36) di-Isopropyl Ether	(1)	2.632	45	2319889	96.268
37) 2-Chloro-1,3-Butadiene	(1)	2.644	53	996305	97.650
39) Ethyl t-Butyl Ether	(1)	2.954	59	2286688	98.542
40) cis-1,2-Dichloroethene	(1)	3.070	96	745535	100.625
41) 2-Butanone	(1)	3.076	43	1666142	198.771
42) 2,2-Dichloropropane	(1)	3.076	77	896042	99.231
43) Propionitrile	(4)	3.125	54	1188000	476.521
46) Methacrylonitrile	(1)	3.265	67	1382515	240.942
47) Bromochloromethane	(1)	3.277	128	391264	97.354
48) Tetrahydrofuran	(4)	3.325	71	469454	201.138
50) Chloroform	(1)	3.362	83	1170741	96.859

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

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on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
52)$Dibromofluoromethane	(1)	3.508	113	302389	50.022
51)$Dibromofluoromethane(mz111)	(1)	3.508	111	308698	49.928
53) 1,1,1-Trichloroethane	(1)	3.532	97	999798	97.042
54) Cyclohexane (mz 84)	(1)	3.587	84	985385	99.103
55) Cyclohexane (mz 69)	(1)	3.587	69	369481	99.343
56) Cyclohexane	(1)	3.593	56	1191919	98.638
45) 1,2-Dichloroethene (total)	(1)		96	1396156	198.883
57) 1,1-Dichloropropene	(1)	3.684	75	894003	99.937
58) Carbon Tetrachloride	(1)	3.691	117	792242	103.473
61)$1,2-Dichloroethane-d4(mz65)	(1)	3.812	65	369282	49.652
60)$1,2-Dichloroethane-d4(mz104)	(1)	3.818	104	51250	50.236
62)$1,2-Dichloroethane-d4	(1)	3.818	102	80057	49.288
59) Isobutyl Alcohol	(4)	3.824	41	795130	1153.866
63) Benzene	(1)	3.873	78	2845591	99.757
64) 1,2-Dichloroethane (mz 98)	(1)	3.885	98	96104	100.630
65) 1,2-Dichloroethane	(1)	3.885	62	934149	99.150
69) t-Amyl Methyl Ether	(1)	4.007	73	2268951	99.484
71)*Fluorobenzene	(1)	4.147	96	1360921	50.000
72) n-Heptane	(1)	4.171	43	1126520	97.991
73) n-Butanol	(4)	4.475	56	1489241	2330.282
74) Trichloroethene	(1)	4.512	95	708300	99.837
75) Methylcyclohexane (mz98)	(1)	4.706	98	560575	99.182
76) Methylcyclohexane	(1)	4.706	83	1270852	98.851
77) 1,2-Dichloropropane	(1)	4.725	63	758537	101.282
78) Dibromomethane	(1)	4.840	93	498895	100.529
79) 1,4-Dioxane	(4)	4.865	88	227365	1279.120
80) Methyl Methacrylate	(1)	4.883	69	860099	97.109
83) Bromodichloromethane	(1)	5.017	83	887720	105.746
85) 2 Nitropropane	(1)	5.242	41	742404	213.698
86) 2-Chloroethyl Vinyl Ether	(1)	5.351	63	646986	96.601
87) cis-1,3-Dichloropropene	(1)	5.485	75	1130832	105.270
89) 4-Methyl-2-Pentanone	(1)	5.668	43	3179941	200.601
92)$Toluene-d8(mz100)	(2)	5.765	100	858570	50.298
93)$Toluene-d8	(2)	5.765	98	1302287	49.896
94) Toluene	(2)	5.838	92	1808515	99.329
95) trans-1,3-Dichloropropene	(2)	6.087	75	1112216	106.833
96) Ethyl Methacrylate	(2)	6.233	69	1346592	97.738
97) 1,1,2-Trichloroethane	(2)	6.276	97	725533	98.616

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 10/15/2012 at 17:44:
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
98) Tetrachloroethene	(2)	6.422	166	786193	100.110
99) 1,3-Dichloropropane	(2)	6.452	76	1229573	99.680
101) 2-Hexanone	(2)	6.580	43	2549945	198.994
102) Dibromochloromethane	(2)	6.690	129	738217	109.009
104) 1,2-Dibromoethane	(2)	6.793	107	813587	101.895
106) *Chlorobenzene-d5	(2)	7.328	117	978073	50.000
107) Chlorobenzene	(2)	7.353	112	2014254	99.363
108) 1,1,1,2-Tetrachloroethane	(2)	7.456	131	697550	105.594
109) Ethylbenzene	(2)	7.493	91	3505154	99.109
110) m+p-Xylene	(2)	7.614	106	2785917	199.710
113) o-Xylene	(2)	7.986	106	1401873	99.501
114) Styrene	(2)	7.998	104	2354751	100.096
115) Bromoform	(2)	8.138	173	619834	107.814
112) Xylene (Total)	(2)		106	4187790	299.211
116) Isopropylbenzene	(2)	8.320	105	3541823	100.189
118) Cyclohexanone	(4)	8.369	55	1090211	1385.279
120) $4-Bromofluorobenzene(mz174)	(2)	8.436	174	417090	49.726
119) $4-Bromofluorobenzene	(2)	8.436	95	492917	50.096
121) Bromobenzene	(3)	8.545	156	919900	96.921
122) 1,1,2,2-Tetrachloroethane	(3)	8.576	83	1296487	96.159
123) 1,2,3-Trichloropropane	(3)	8.600	110	397415	94.785
124) trans-1,4-Dichloro-2-Butene	(3)	8.624	53	951746	241.752
125) n-Propylbenzene	(3)	8.667	91	4101494	98.702
126) 2-Chlorotoluene	(3)	8.722	126	857392	97.144
128) 4-Chlorotoluene	(3)	8.807	126	895956	98.174
127) 1,3,5-Trimethylbenzene	(3)	8.819	105	3097304	100.083
130) tert-Butylbenzene	(3)	9.068	134	697486	100.357
131) Pentachloroethane	(3)	9.068	167	600550	104.894
132) 1,2,4-Trimethylbenzene	(3)	9.105	105	3179190	99.569
133) sec-Butylbenzene	(3)	9.239	105	3853434	101.262
134) 1,3-Dichlorobenzene	(3)	9.300	146	1766050	98.569
135) p-Isopropyltoluene	(3)	9.348	119	3403904	101.276
136) *1,4-Dichlorobenzene-d4	(3)	9.348	152	571243	50.000
138) 1,4-Dichlorobenzene	(3)	9.366	146	1866675	97.613
139) 1,2,3-Trimethylbenzene	(3)	9.415	105	3336248	97.195
141) Benzyl Chloride	(3)	9.470	91	2697090	104.521
142) 1,3-Diethylbenzene	(3)	9.573	119	2053421	96.906
144) 1,2-Dichlorobenzene	(3)	9.634	146	1777548	98.137

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$ = Compound is a surrogate standard.

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on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD100 Lab Sample ID: VSTD100

	Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
143)	1,4-Diethylbenzene	(3)	9.634	119	2110504	96.948
145)	n-Butylbenzene	(3)	9.646	92	1674120	100.513
146)	1,2-Diethylbenzene	(3)	9.713	119	1719668	94.389
148)	1,2-Dibromo-3-Chloropropane	(3)	10.176	75	342234	99.814
149)	1,3,5-Trichlorobenzene	(3)	10.334	180	1363215	99.181
150)	1,2,4-Trichlorobenzene	(3)	10.741	180	1274591	98.661
151)	Hexachlorobutadiene	(3)	10.863	225	595648	99.414
152)	Naphthalene	(3)	10.893	128	4630407	92.444
153)	1,2,3-Trichlorobenzene	(3)	11.052	180	1228673	96.950
154)	2-Methylnaphthalene	(3)	11.617	142	2579782	92.596

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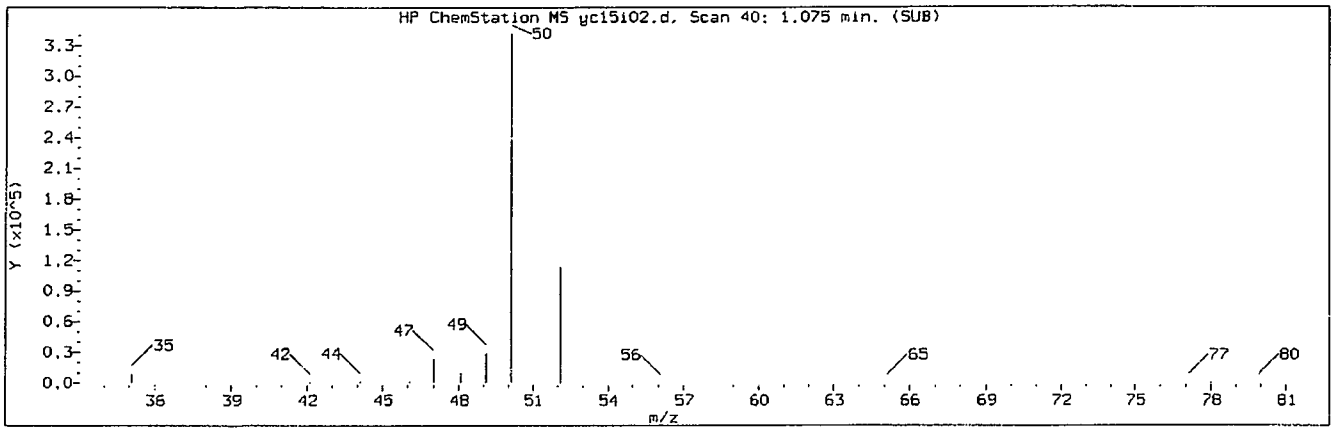
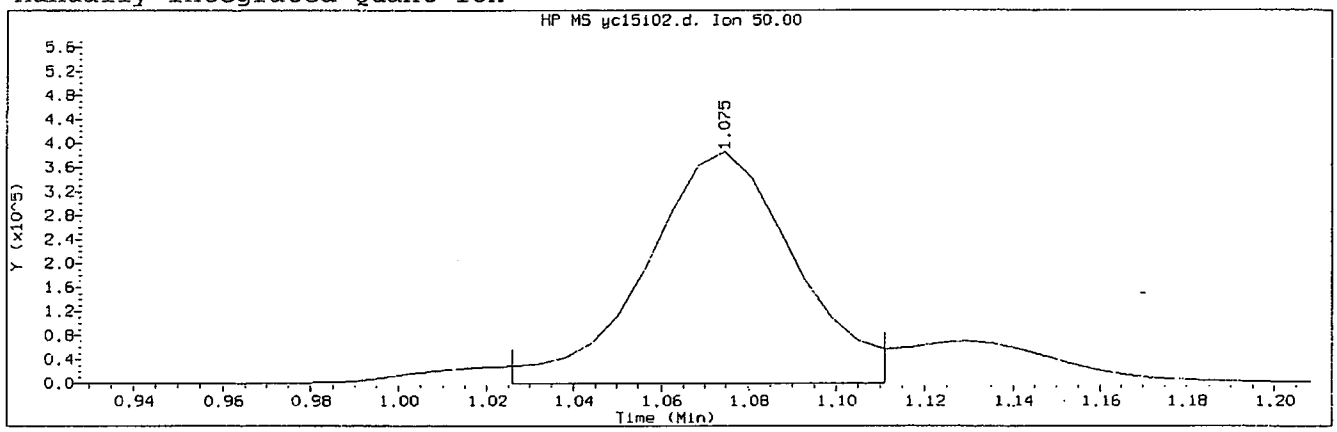
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD100 Lab Sample ID: VSTD100

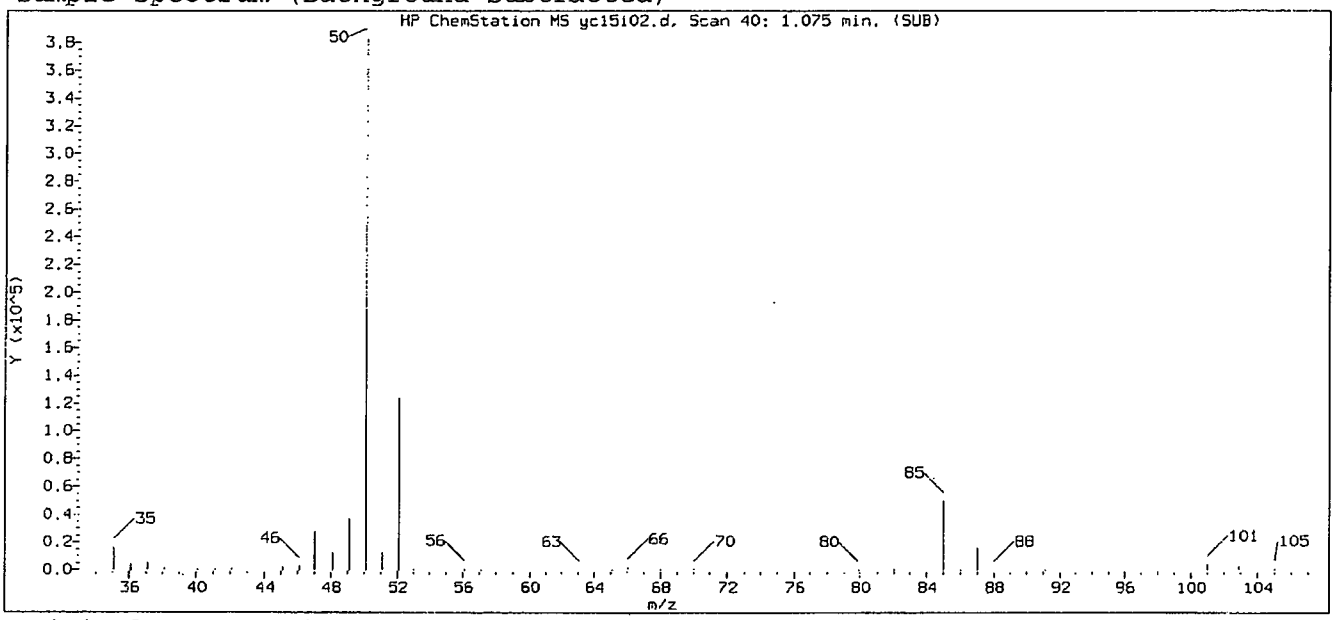
Compound Number : 3
Compound Name : Chloromethane
Scan Number : 40
Retention Time (minutes): 1.075
Quant Ion : 50.00
Area (flag) : 921384M
On-Column Amount (ng) : 94.3230
Integration start scan : 31 Integration stop scan: 45
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

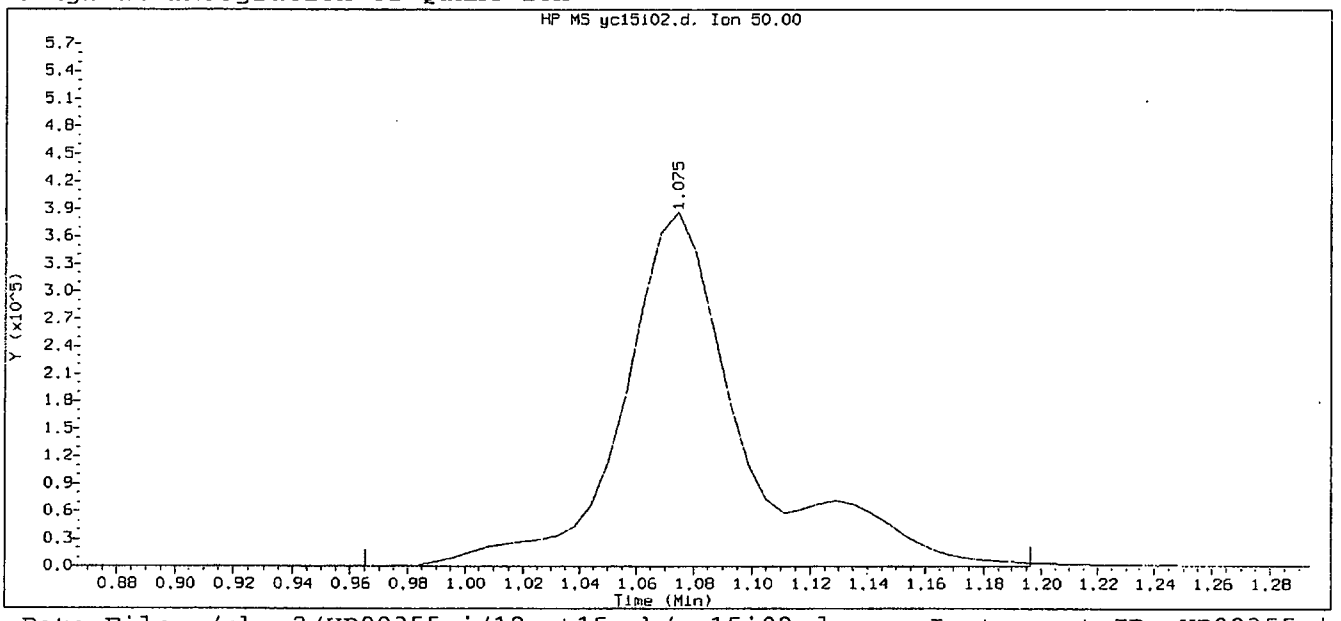
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

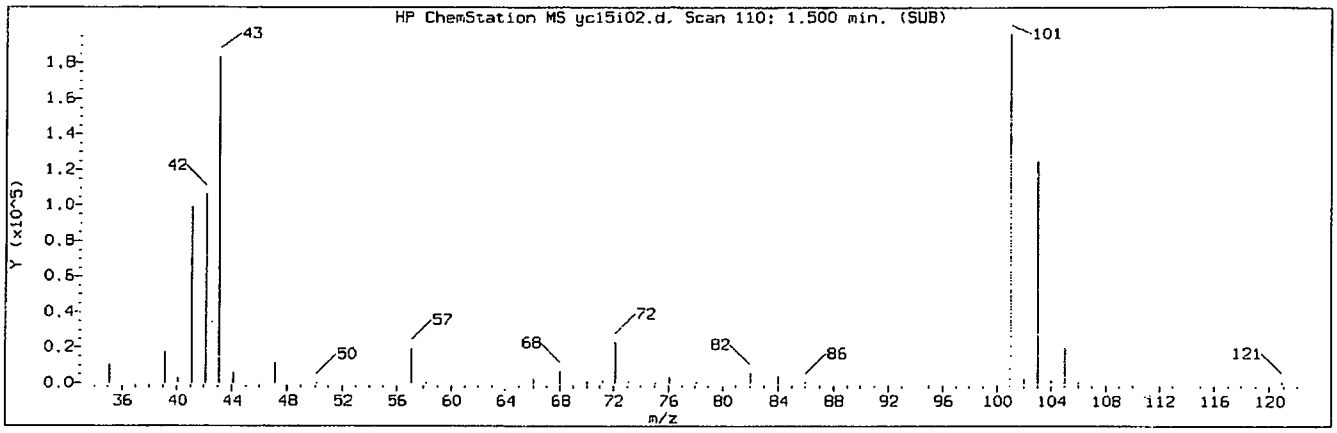
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 14:28
Date, time and analyst ID of latest file update: 15-Oct-2012 14:28 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

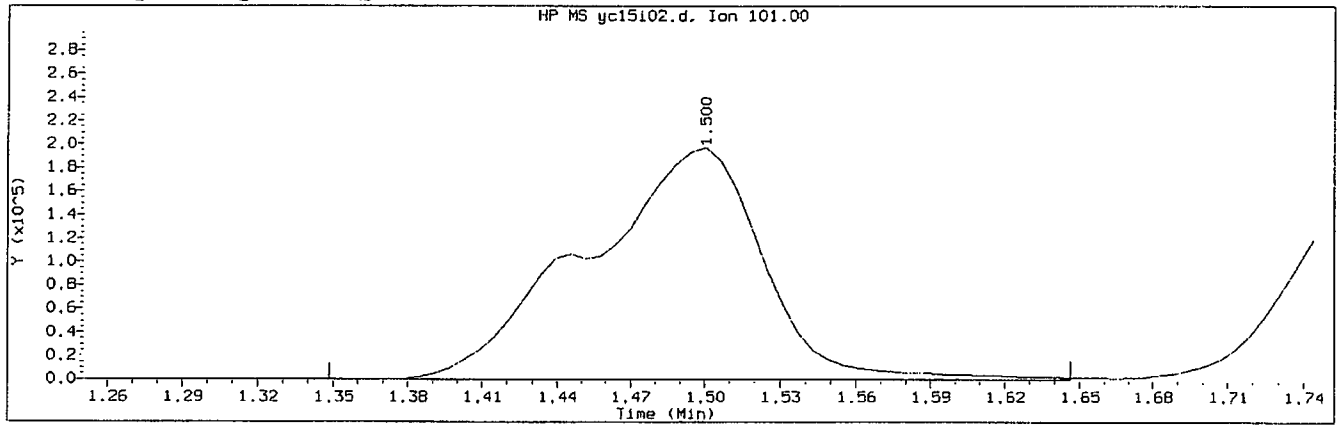
Compound Number	: 3		
Compound Name	: Chloromethane		
Scan Number	: 40		
Retention Time (minutes)	: 1.075		
Quant Ion	: 50.00		
Area	: 1129451		
On-column Amount (ng)	: 104.1393		
Integration start scan	: 21	Integration stop scan:	59
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD100 Lab Sample ID: VSTD100

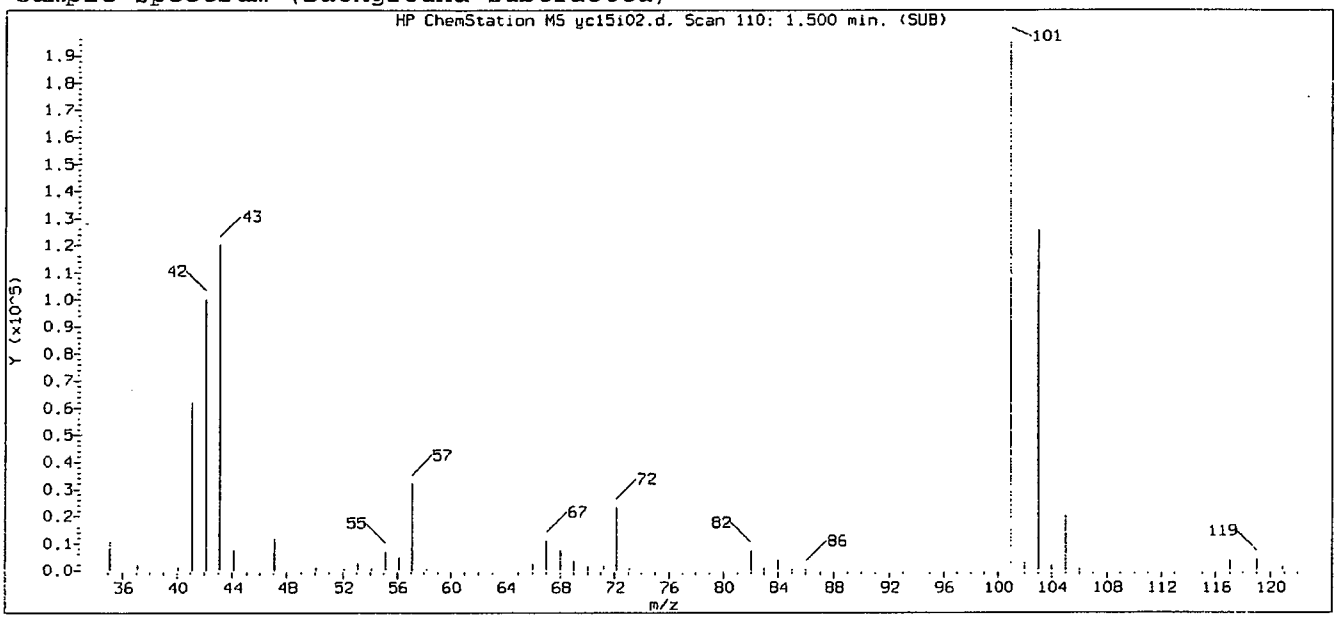
Compound Number	: 10		
Compound Name	: Trichlorofluoromethane		
Scan Number	: 110		
Retention Time (minutes)	: 1.500		
Quant Ion	: 101.00		
Area (flag)	: 972224M		
On-Column Amount (ng)	: 94.4657		
Integration start scan	: 84	Integration stop scan:	133
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

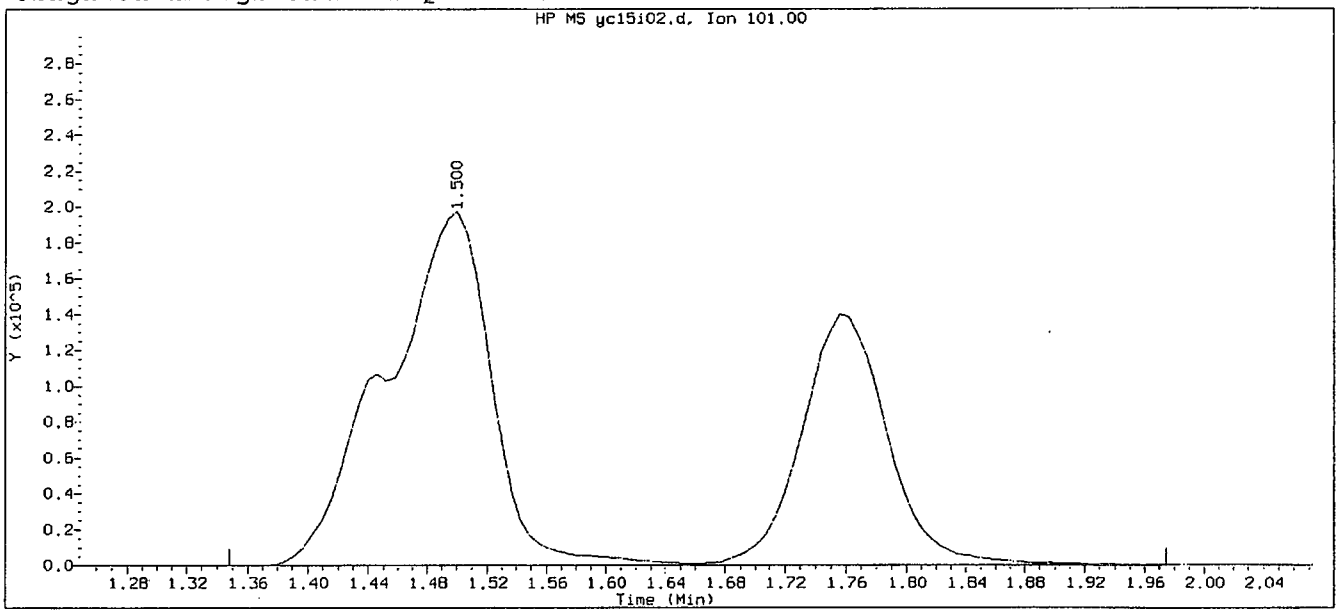
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

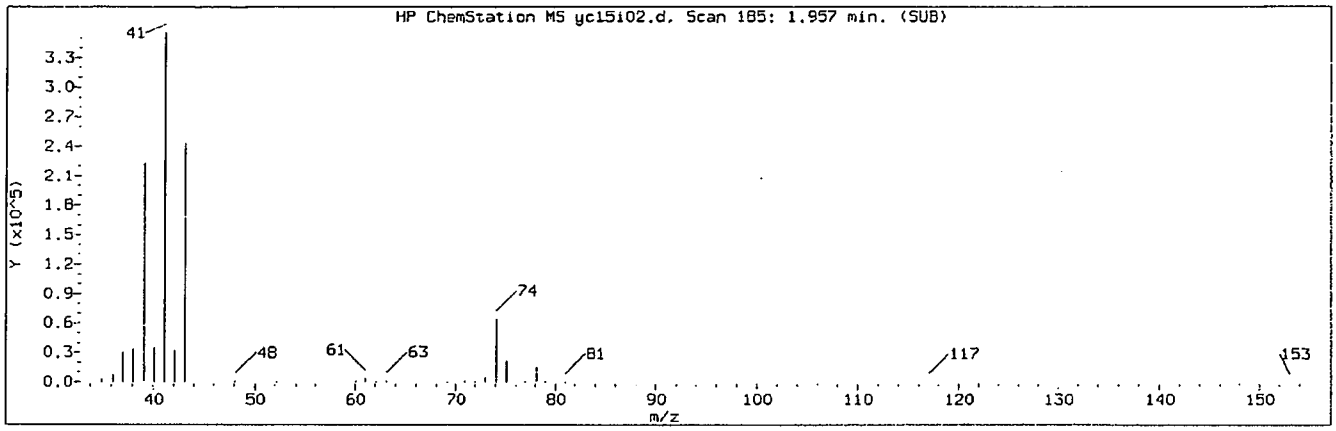
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 14:28
Date, time and analyst ID of latest file update: 15-Oct-2012 14:28 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

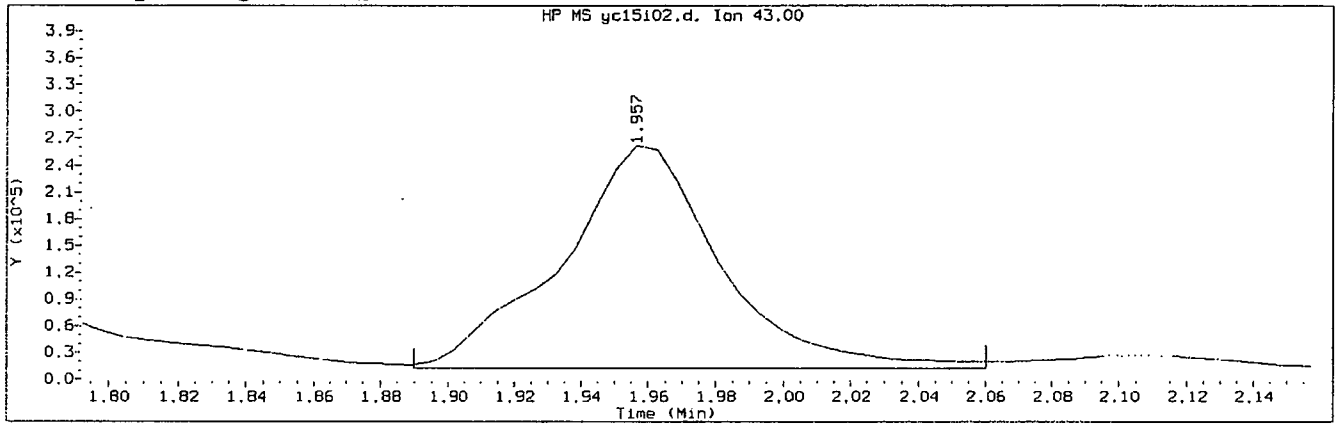
Compound Number	: 10		
Compound Name	: Trichlorofluoromethane		
Scan Number	: 110		
Retention Time (minutes)	: 1.500		
Quant Ion	: 101.00		
Area	: 1526423		
On-column Amount (ng)	: 127.0629		
Integration start scan	: 84	Integration stop scan:	187
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD100 Lab Sample ID: VSTD100

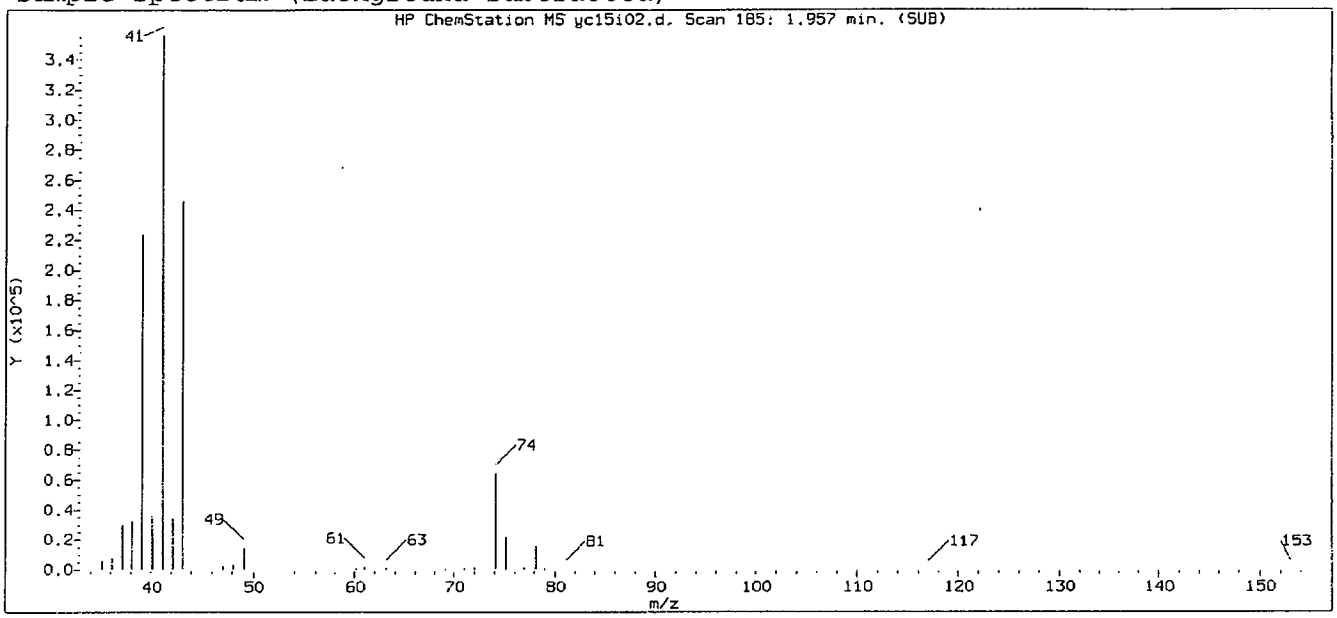
Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 185		
Retention Time (minutes)	: 1.957		
Quant Ion	: 43.00		
Area (flag)	: 824566M		
On-Column Amount (ng)	: 97.8998		
Integration start scan	: 173	Integration stop scan:	201
Y at integration start	: 12359	Y at integration end:	12359

Reason for manual integration: improper integration

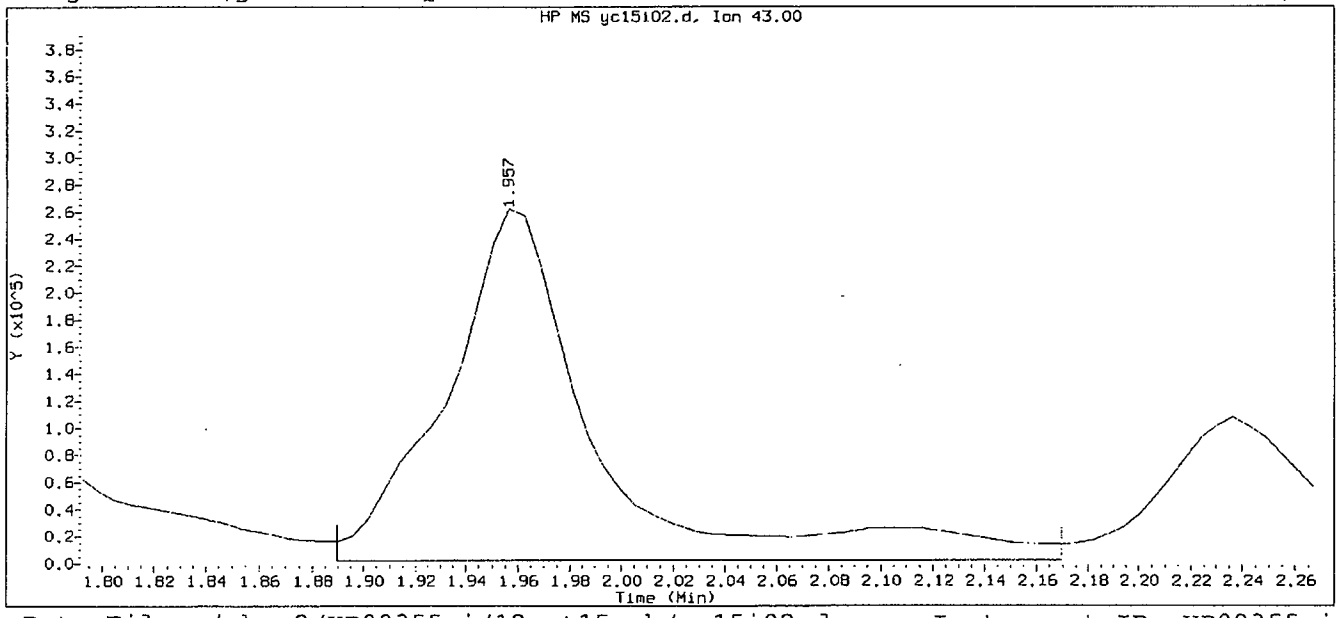
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 14:28
Date, time and analyst ID of latest file update: 15-Oct-2012 14:28 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 185		
Retention Time (minutes)	: 1.957		
Quant Ion	: 43.00		
Area	: 1045807		
On-column Amount (ng)	: 117.4250		
Integration start scan	: 173	Integration stop scan:	219
Y at integration start	: 2496	Y at integration end:	2496

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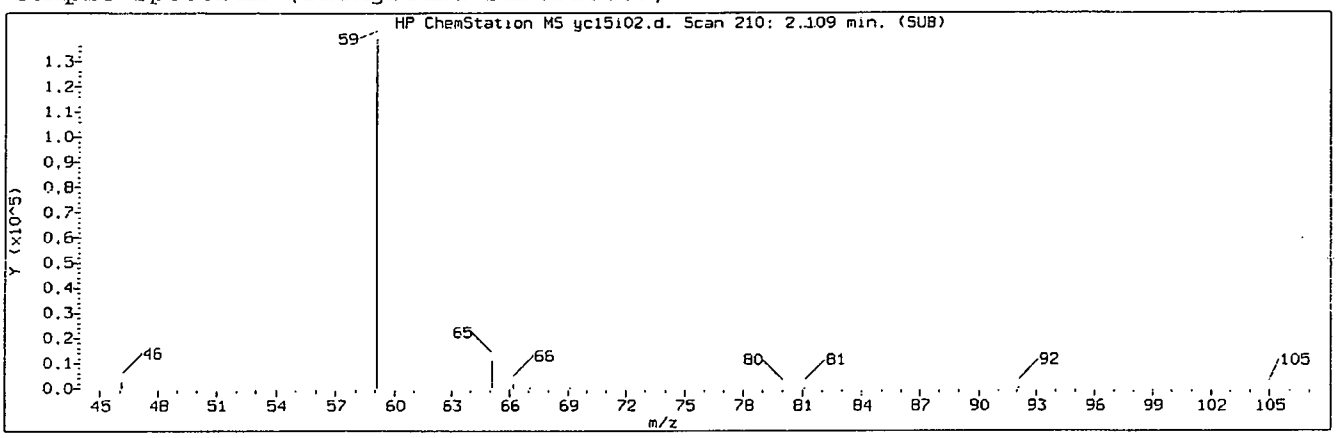
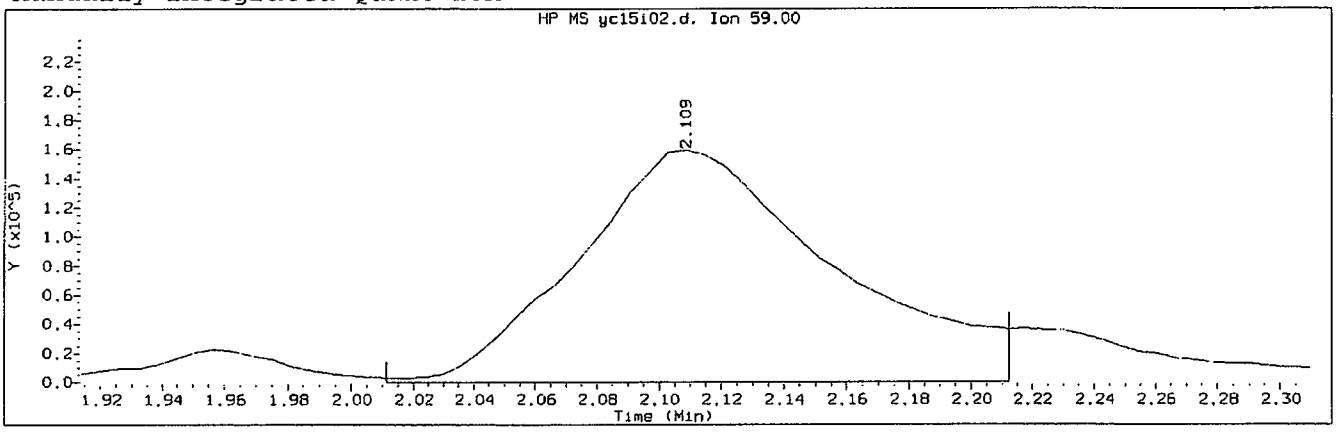
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD100 Lab Sample ID: VSTD100

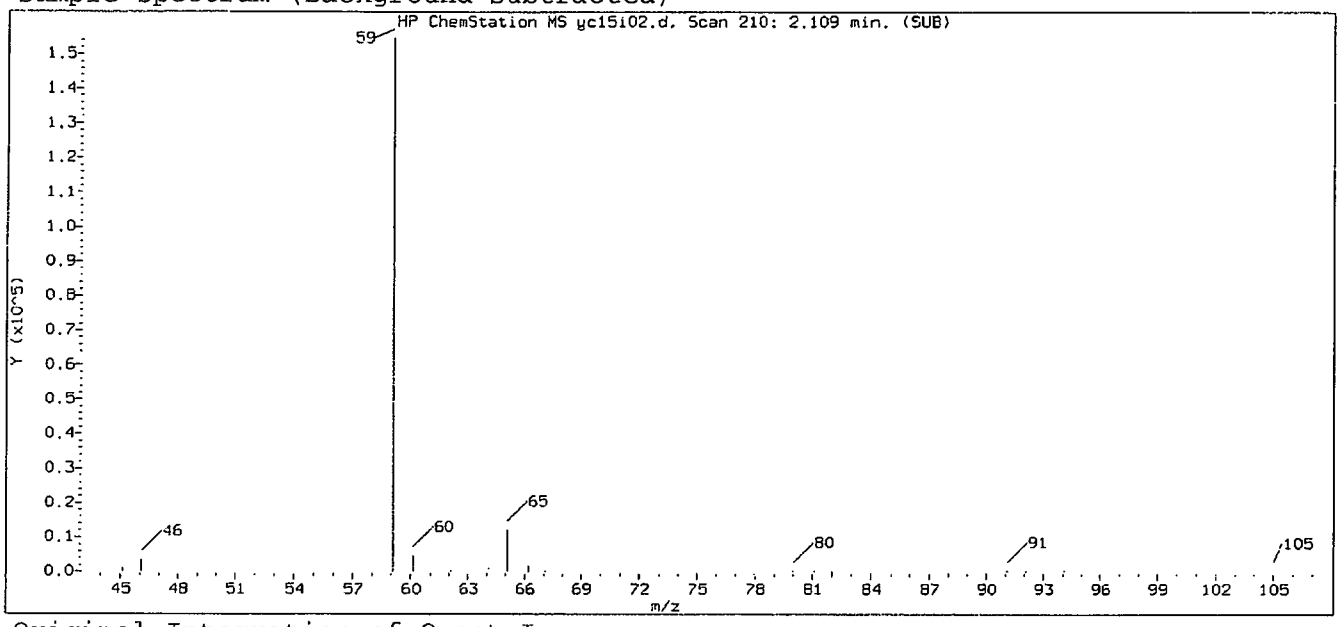
Compound Number : 29
Compound Name : t-Butyl Alcohol
Scan Number : 210
Retention Time (minutes): 2.109
Quant Ion : 59.00
Area (flag) : 909052M
On-Column Amount (ng) : 454.4154
Integration start scan : 193 Integration stop scan: 226
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

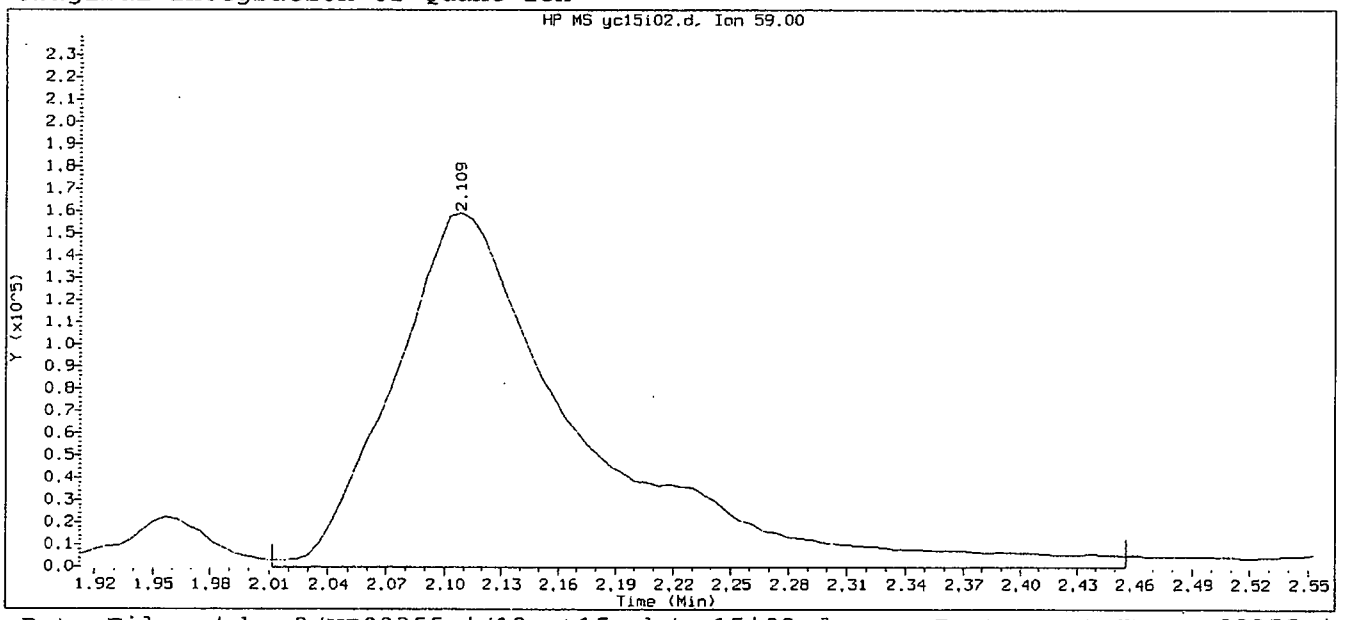
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



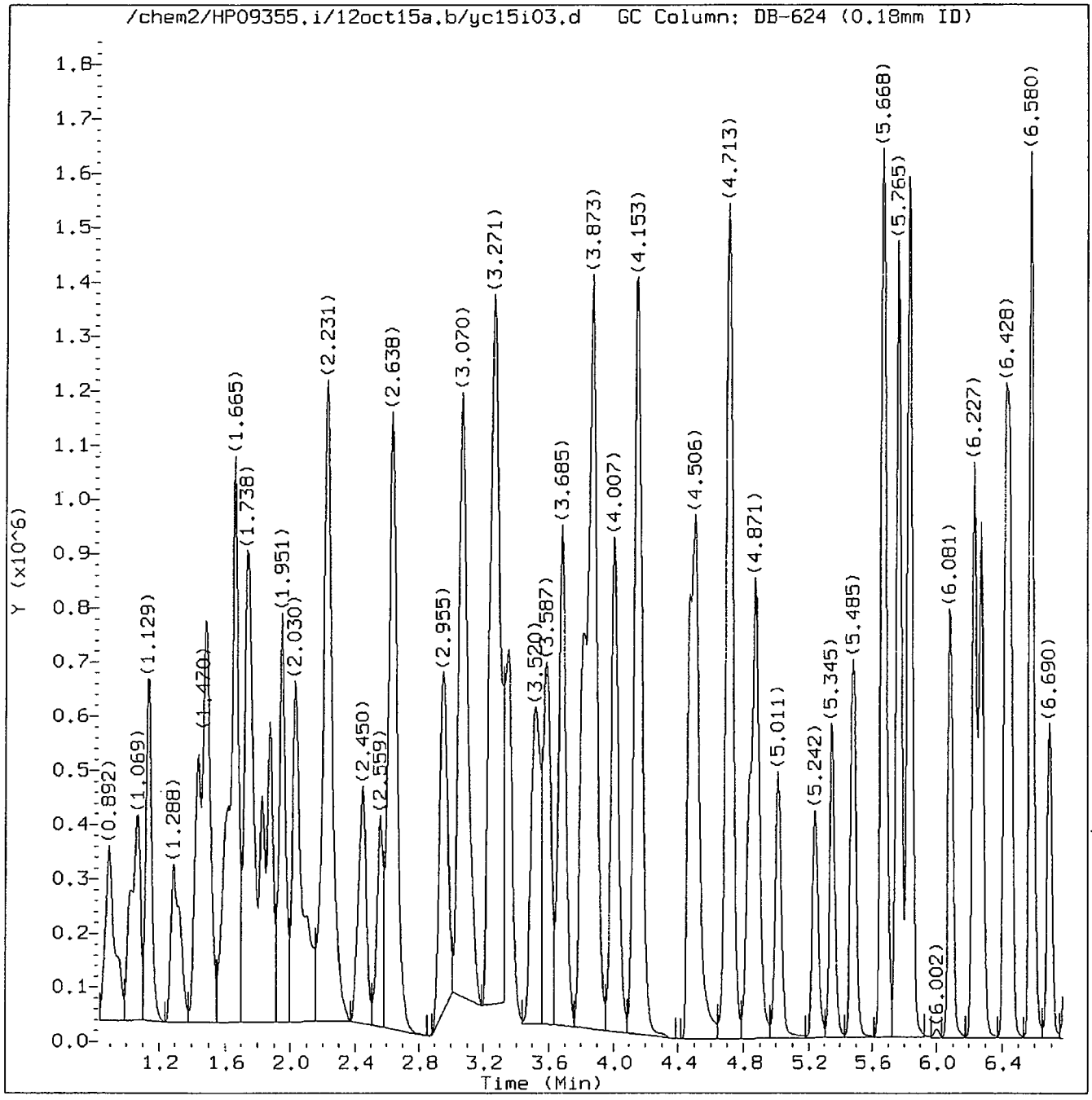
Data File: /chem2/HP09355.i/12oct15a.b/yc15i02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:13 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 14:28
Date, time and analyst ID of latest file update: 15-Oct-2012 14:28 Automation

Sample Name: VSTD100 Lab Sample ID: VSTD100

Compound Number	: 29		
Compound Name	: t-Butyl Alcohol		
Scan Number	: 210		
Retention Time (minutes)	: 2.109		
Quant Ion	: 59.00		
Area	: 1089768		
On-column Amount (ng)	: 503.4072		
Integration start scan	: 193	Integration stop scan:	266
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

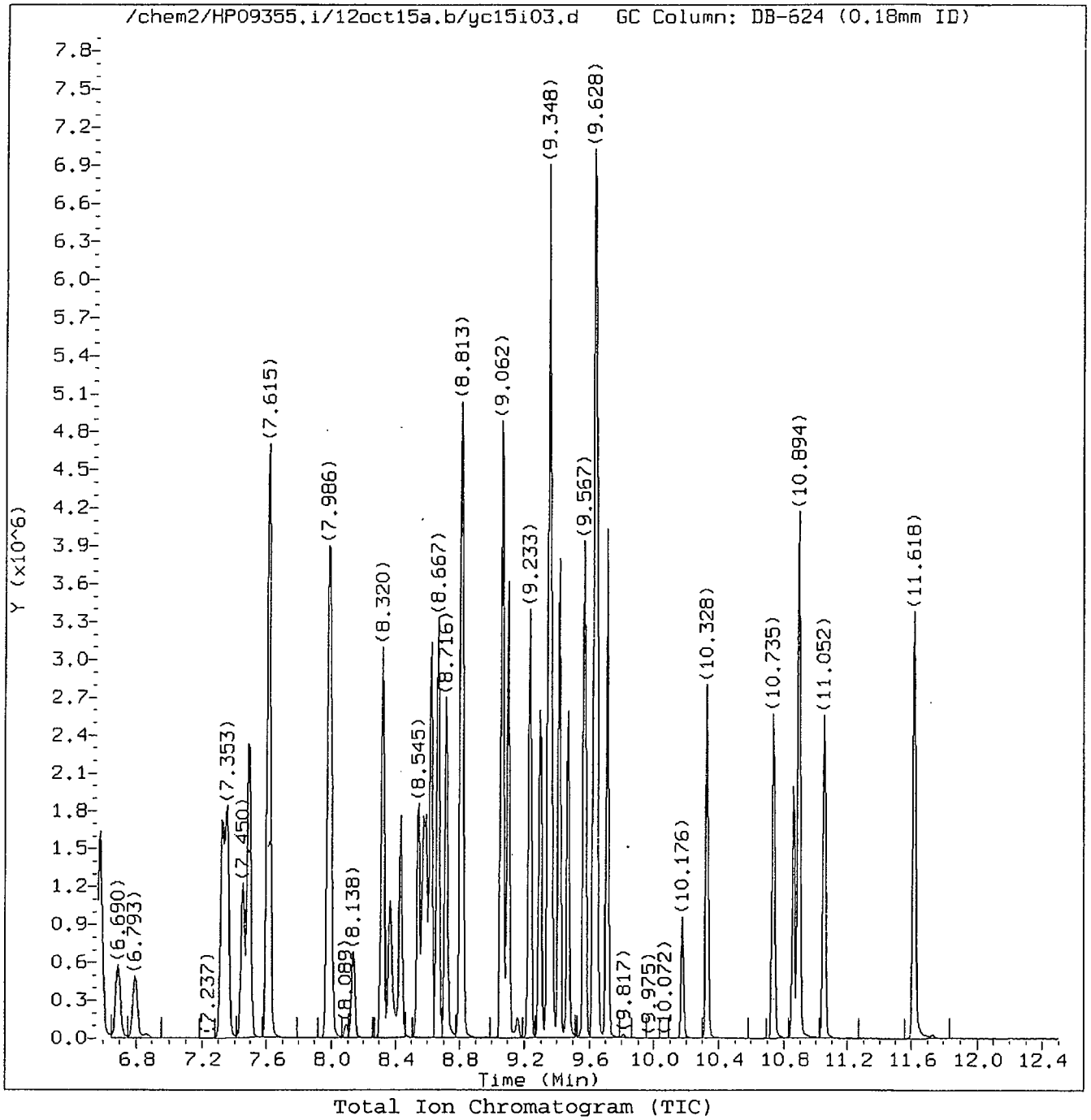
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Dichlorodifluoromethane	(1)	1.020	85	434781	46.446
3) Chloromethane	(1)	1.069	50	453655M	45.699
4) 1,3-Butadiene	(1)	1.129	39	209981	50.266
5) Vinyl Chloride	(1)	1.136	62	450837	46.362
7) Bromomethane	(1)	1.288	94	292630	46.041
8) Chloroethane	(1)	1.324	64	232844	44.184
9) Dichlorofluoromethane	(1)	1.434	67	589798	50.971
11) n-Pentane	(1)	1.482	43	500208	52.498
10) Trichlorofluoromethane	(1)	1.494	101	490490	46.896
14) Freon 123a	(1)	1.604	67	374942	50.698
15) Acrolein	(4)	1.665	56	1409793	511.984
16) 1,1-Dichloroethene	(1)	1.738	96	271185	48.242
17) Acetone	(1)	1.750	58	154660	98.493
18) Freon 113	(1)	1.756	101	276442	47.880
20) Methyl Iodide	(1)	1.829	142	523180	48.909
21) 2-Propanol	(4)	1.829	45	273580M	236.315
22) Carbon Disulfide	(1)	1.878	76	852746	49.235
24) Allyl Chloride	(1)	1.951	41	504546	48.655
25) Methyl Acetate	(1)	1.957	43	418766M	48.925
26) Methylene Chloride	(1)	2.030	84	332136	47.497
28)*t-Butyl Alcohol-d10	(4)	2.054	65	412834	250.000
29) t-Butyl Alcohol	(4)	2.109	59	475775M	232.367
30) Acrylonitrile	(1)	2.194	53	291480	49.467
31) trans-1,2-Dichloroethene	(1)	2.231	96	332530	49.416
32) Methyl Tertiary Butyl Ether	(1)	2.231	73	1189401	51.106
33) n-Hexane	(1)	2.450	57	444052	44.076
34) 1,1-Dichloroethane	(1)	2.559	63	602992	49.361
36) di-Isopropyl Ether	(1)	2.632	45	1187284	48.481
37) 2 Chloro-1,3-Butadiene	(1)	2.644	53	498231	48.052
39) Ethyl t-Butyl Ether	(1)	2.955	59	1172789	49.732
41) 2-Butanone	(1)	3.052	43	858271	100.755
40) cis-1,2-Dichloroethene	(1)	3.064	96	375826	49.915
42) 2,2-Dichloropropane	(1)	3.076	77	450072	49.046
43) Propionitrile	(4)	3.119	54	625915	245.295
46) Methacrylonitrile	(1)	3.259	67	720792	123.610
47) Bromochloromethane	(1)	3.277	128	199435	48.830
48) Tetrahydrofuran	(4)	3.320	71	241366	101.038
50) Chloroform	(1)	3.356	83	584209	47.561

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
52)$Dibromofluoromethane	(1)	3.502	113	308274	50.180
51)$Dibromofluoromethane(mz111)	(1)	3.508	111	314592	50.068
53) 1,1,1-Trichloroethane	(1)	3.532	97	497389	47.506
54) Cyclohexane (mz 84)	(1)	3.587	84	474198	46.929
55) Cyclohexane (mz 69)	(1)	3.587	69	175759	46.501
56) Cyclohexane	(1)	3.587	56	570651	46.470
45) 1,2-Dichloroethene (total)	(1)		96	708356	99.331
57) 1,1-Dichloropropene	(1)	3.685	75	444104	48.851
58) Carbon Tetrachloride	(1)	3.691	117	386885	49.723
61)$1,2-Dichloroethane-d4(mz65)	(1)	3.812	65	396323	52.436
62)$1,2-Dichloroethane-d4	(1)	3.812	102	86614	52.472
59) Isobutyl Alcohol	(4)	3.818	41	411693	583.713
60)$1,2-Dichloroethane-d4(mz104)	(1)	3.818	104	51931	50.090
63) Benzene	(1)	3.873	78	1421590	49.040
65) 1,2-Dichloroethane	(1)	3.885	62	476480	49.765
64) 1,2-Dichloroethane (mz 98)	(1)	3.885	98	47618	48.730
69) t-Amyl Methyl Ether	(1)	4.007	73	1143974	49.356
71)*Fluorobenzene	(1)	4.147	96	1383029	50.000
72) n-Heptane	(1)	4.165	43	481761	41.236
73) n-Butanol	(4)	4.469	56	774854	1184.601
74) Trichloroethene	(1)	4.506	95	351018	48.686
75) Methylcyclohexane (mz98)	(1)	4.707	98	278880	48.553
76) Methylcyclohexane	(1)	4.707	83	630570	48.264
77) 1,2-Dichloropropane	(1)	4.719	63	380661	50.014
78) Dibromomethane	(1)	4.834	93	252948	50.155
79) 1,4-Dioxane	(4)	4.865	88	110432	607.004
80) Methyl Methacrylate	(1)	4.877	69	441937	49.099
83) Bromodichloromethane	(1)	5.011	83	437059	51.231
85) 2-Nitropropane	(1)	5.242	41	366923	103.929
86) 2-Chloroethyl Vinyl Ether	(1)	5.345	63	334343	49.123
87) cis-1,3-Dichloropropene	(1)	5.485	75	560789	51.370
89) 4-Methyl-2-Pentanone	(1)	5.668	43	1614577	100.225
92)$Toluene-d8(mz100)	(2)	5.765	100	864929	49.856
93)$Toluene-d8	(2)	5.765	98	1325653	49.976
94) Toluene	(2)	5.832	92	898938	48.579
95) trans-1,3-Dichloropropene	(2)	6.081	75	546965	51.694
96) Ethyl Methacrylate	(2)	6.227	69	687513	49.099
97) 1,1,2-Trichloroethane	(2)	6.270	97	369001	49.350

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
98) Tetrachloroethene	(2)	6.422	166	384675	48.196
99) 1,3-Dichloropropane	(2)	6.446	76	621234	49.554
101) 2-Hexanone	(2)	6.580	43	1284152	98.604
102) Dibromochloromethane	(2)	6.690	129	360153	52.328
104) 1,2-Dibromoethane	(2)	6.793	107	409087	50.412
106)*Chlorobenzene-d5	(2)	7.323	117	994041	50.000
107) Chlorobenzene	(2)	7.353	112	1000219	48.548
108) 1,1,1,2-Tetrachloroethane	(2)	7.450	131	342491	51.013
109) Ethylbenzene	(2)	7.487	91	1717429	47.781
110) m+p-Xylene	(2)	7.615	106	1360654	95.972
113) o-Xylene	(2)	7.980	106	686306	47.930
114) Styrene	(2)	7.998	104	1168306	48.865
115) Bromoform	(2)	8.138	173	297225	50.869
112) Xylene (Total)	(2)		106	2046960	143.902
116) Isopropylbenzene	(2)	8.320	105	1706529	47.498
118) Cyclohexanone	(4)	8.369	55	513442	637.422
120)$4-Bromofluorobenzene(mz174)	(2)	8.436	174	424464	49.792
119)$4-Bromofluorobenzene	(2)	8.436	95	500394	50.039
121) Bromobenzene	(3)	8.545	156	455838	47.911
122) 1,1,2,2-Tetrachloroethane	(3)	8.576	83	663156	49.067
123) 1,2,3-Trichloropropane	(3)	8.594	110	204995	48.774
124) trans-1,4-Dichloro-2-Butene	(3)	8.624	53	486098M	123.175
125) n-Propylbenzene	(3)	8.667	91	1990497	47.786
126) 2-Chlorotoluene	(3)	8.716	126	413242	46.708
128) 4-Chlorotoluene	(3)	8.807	126	434611	47.508
127) 1,3,5-Trimethylbenzene	(3)	8.819	105	1478992	47.675
131) Pentachloroethane	(3)	9.062	167	281551	49.058
130) tert-Butylbenzene	(3)	9.069	134	326211	46.823
132) 1,2,4-Trimethylbenzene	(3)	9.105	105	1533970	47.927
133) sec-Butylbenzene	(3)	9.233	105	1798071	47.136
134) 1,3-Dichlorobenzene	(3)	9.294	146	853770	47.537
135) p-Isopropyltoluene	(3)	9.348	119	1601010	47.520
136)*1,4-Dichlorobenzene-d4	(3)	9.348	152	572625	50.000
138) 1,4-Dichlorobenzene	(3)	9.367	146	908391	47.387
139) 1,2,3-Trimethylbenzene	(3)	9.415	105	1656058	48.129
141) Benzyl Chloride	(3)	9.470	91	1327510	51.321
142) 1,3-Diethylbenzene	(3)	9.567	119	1030454	48.512
144) 1,2-Dichlorobenzene	(3)	9.628	146	875901	48.241

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on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
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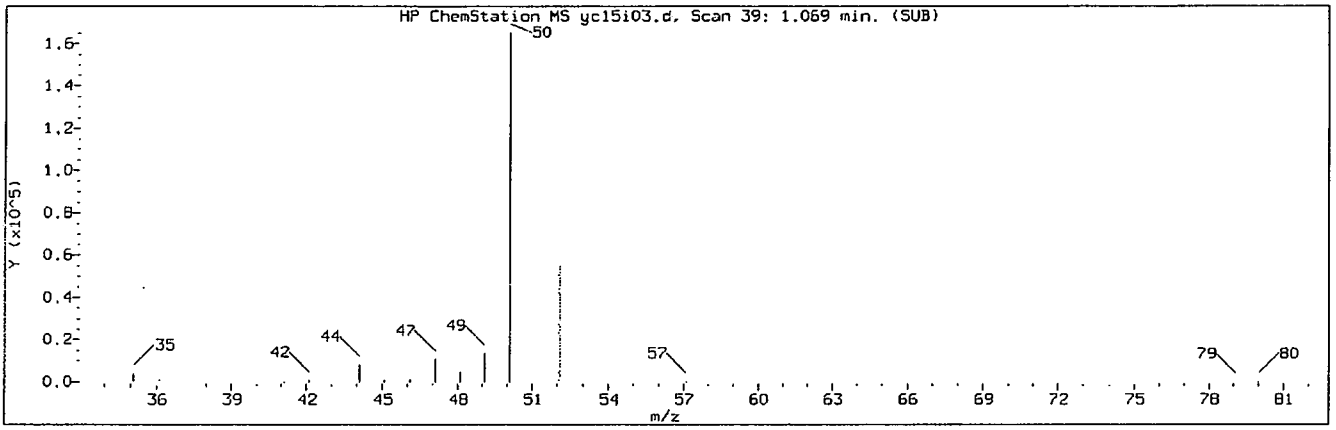
Sample Name: VSTD050 Lab Sample ID: VSTD050

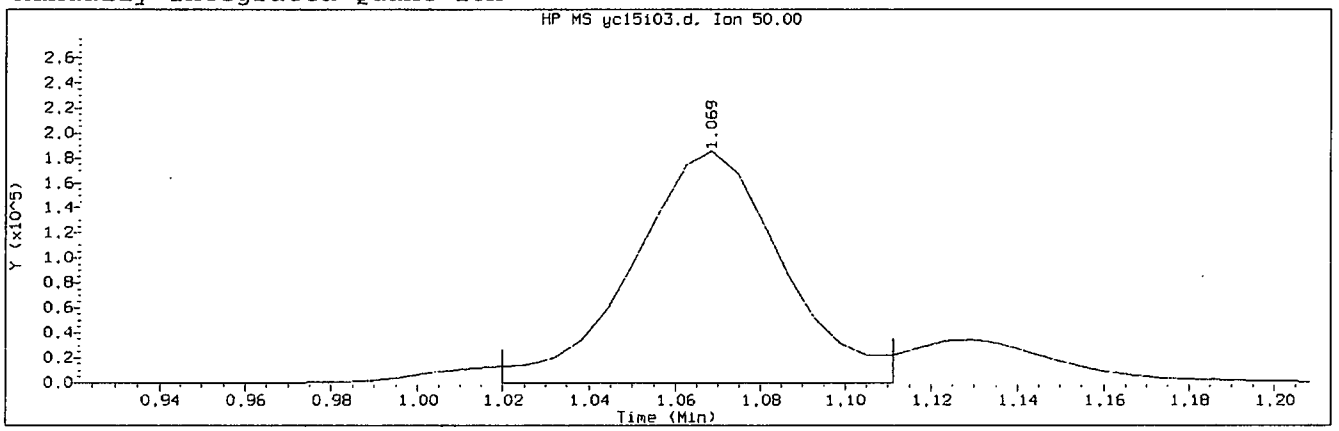
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
143) 1,4-Diethylbenzene	(3)	9.628	119	1069905	49.029
145) n-Butylbenzene	(3)	9.646	92	784926	47.013
146) 1,2-Diethylbenzene	(3)	9.707	119	869723	47.622
148) 1,2-Dibromo-3-Chloropropane	(3)	10.176	75	173494	50.478
149) 1,3,5-Trichlorobenzene	(3)	10.328	180	647712	47.010
150) 1,2,4-Trichlorobenzene	(3)	10.735	180	613633	47.384
151) Hexachlorobutadiene	(3)	10.857	225	277445	46.194
152) Naphthalene	(3)	10.894	128	2340962	46.623
153) 1,2,3-Trichlorobenzene	(3)	11.052	180	601926	47.381
154) 2-Methylnaphthalene	(3)	11.618	142	1272375	45.559

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD050 Lab Sample ID: VSTD050

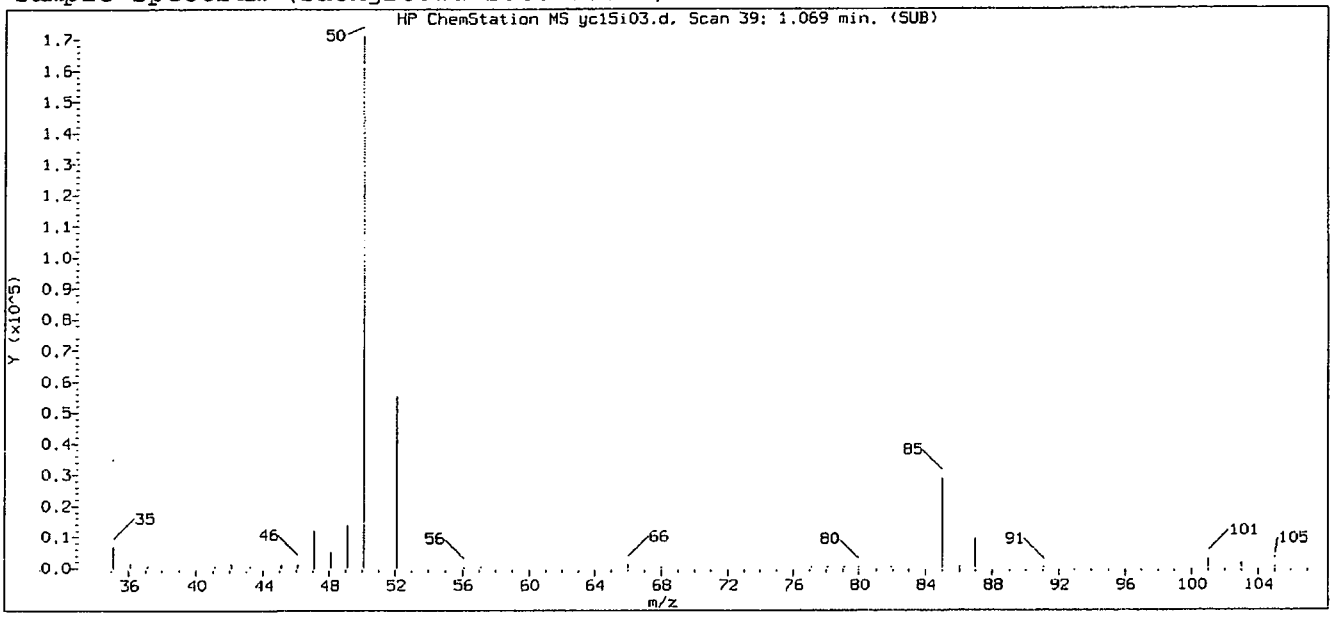
Compound Number : 3
Compound Name : Chloromethane
Scan Number : 39
Retention Time (minutes): 1.069
Quant Ion : 50.00
Area (flag) : 453655M
On-Column Amount (ng) : 45.6987
Integration start scan : 30 Integration stop scan: 45
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

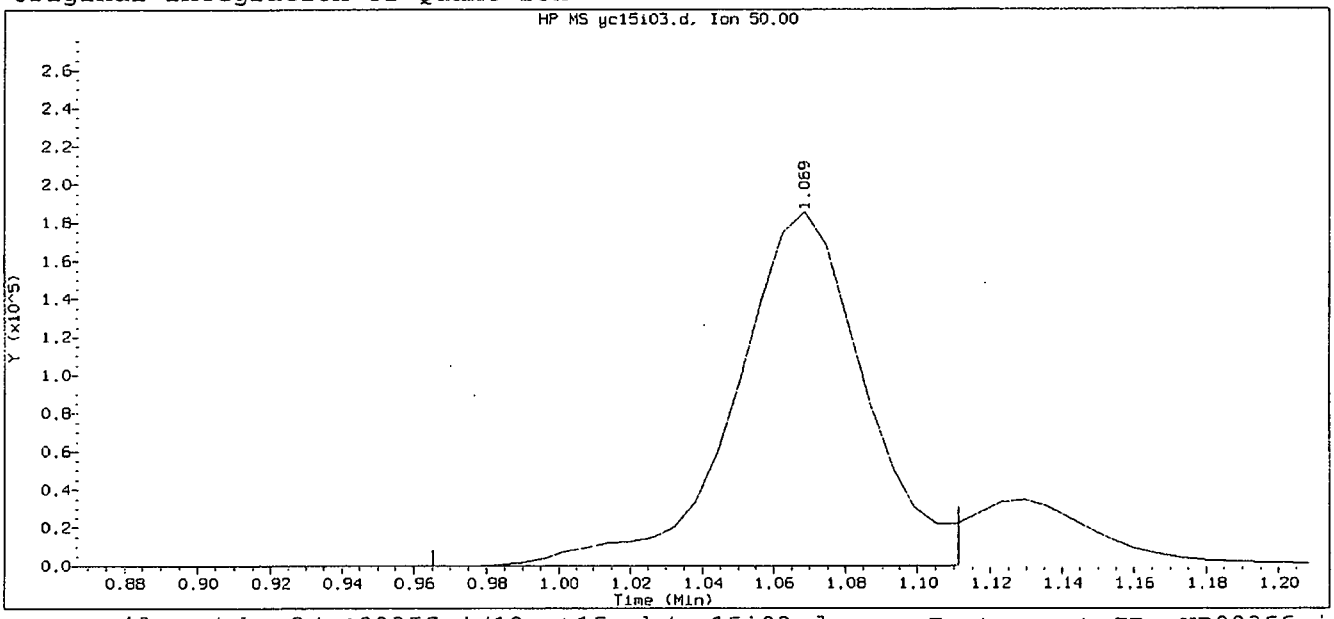
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:44. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

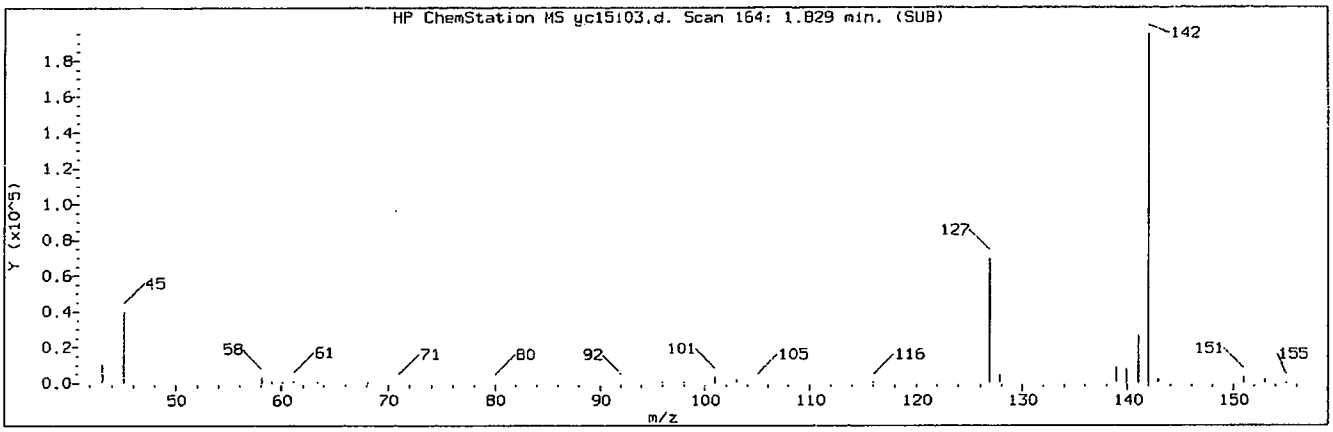
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 14:48
Date, time and analyst ID of latest file update: 15-Oct-2012 14:48 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

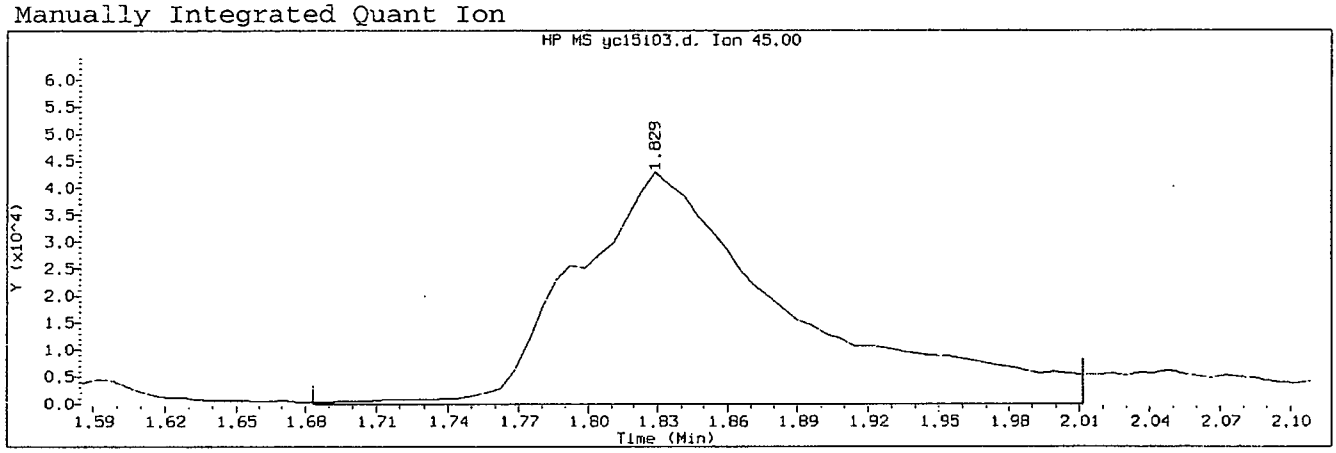
Compound Number	: 3		
Compound Name	: Chloromethane		
Scan Number	: 39		
Retention Time (minutes)	: 1.069		
Quant Ion	: 50.00		
Area	: 462772		
On-column Amount (ng)	: 46.9698		
Integration start scan	: 21	Integration stop scan:	45
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD050 Lab Sample ID: VSTD050

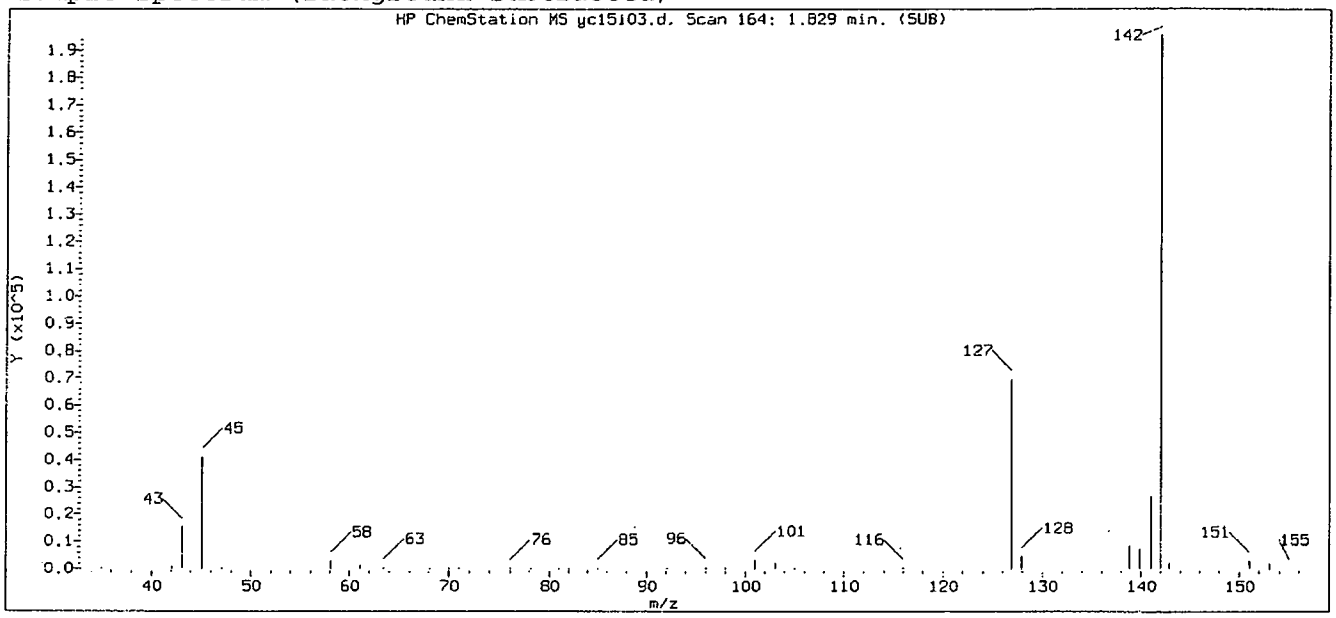
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 164
Retention Time (minutes): 1.829
Quant Ion : 45.00
Area (flag) : 273580M
On-Column Amount (ng) : 236.3150
Integration start scan : 139 Integration stop scan: 193
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

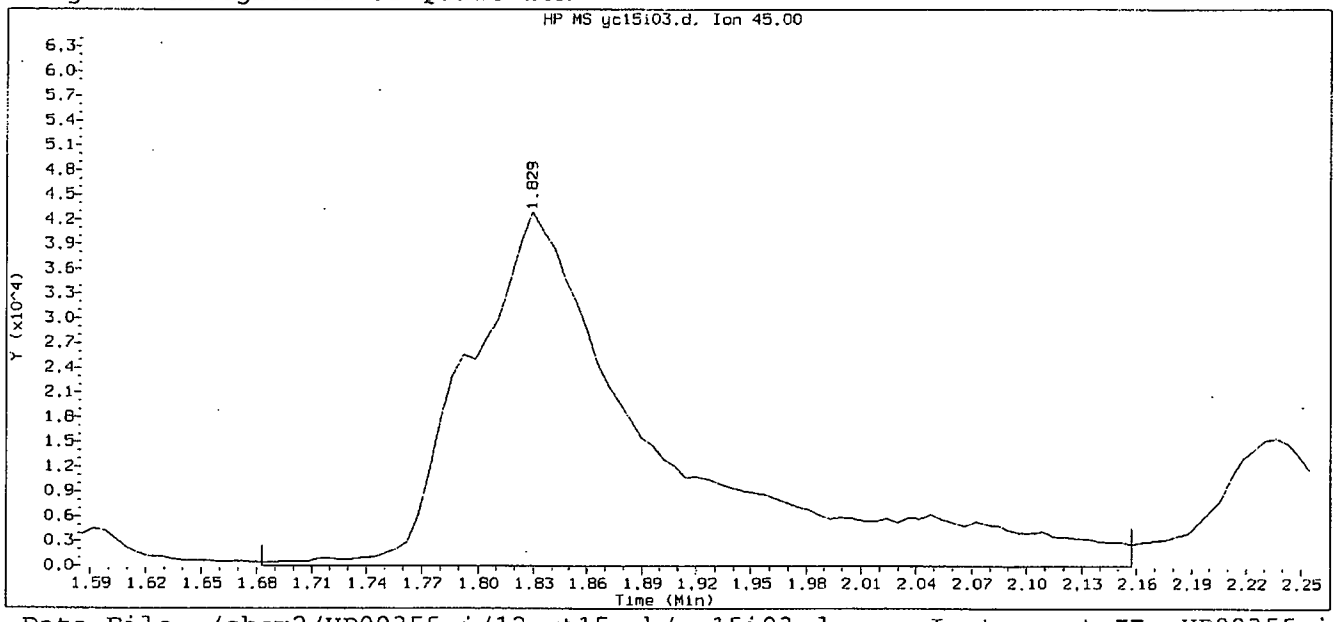
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:44. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

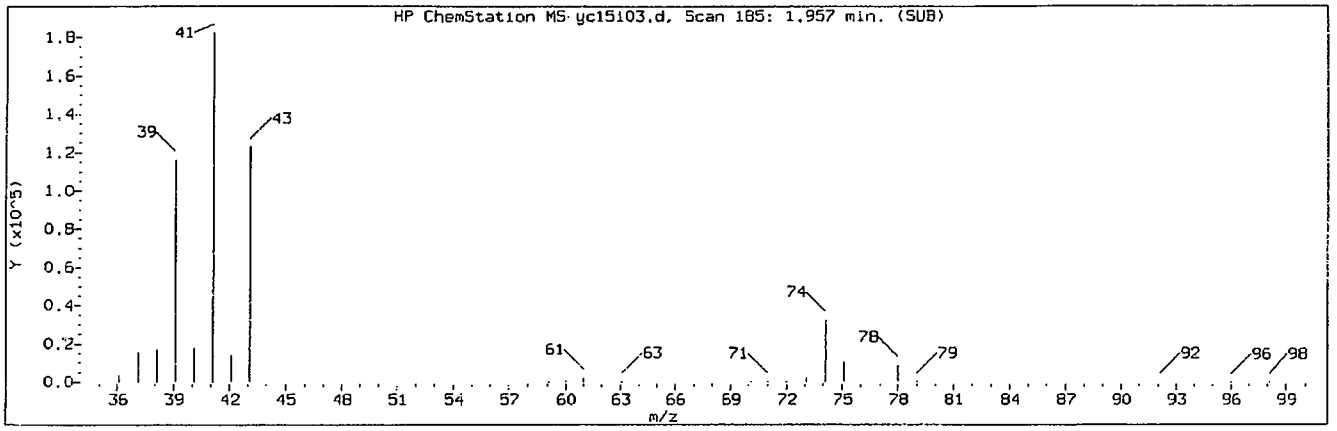
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 14:48
Date, time and analyst ID of latest file update: 15-Oct-2012 14:48 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

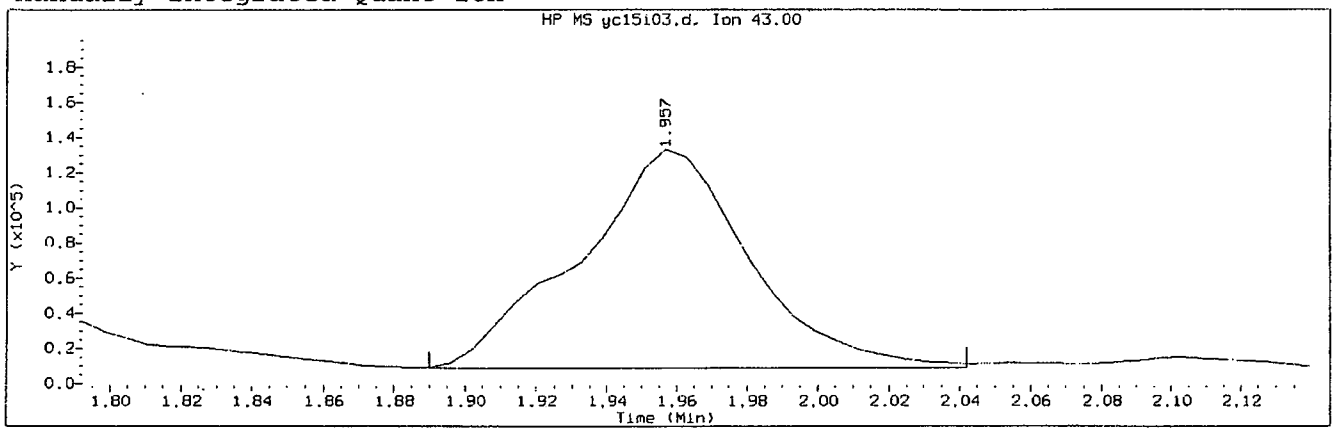
Compound Number	: 21		
Compound Name	: 2-Propanol		
Scan Number	: 164		
Retention Time (minutes)	: 1.829		
Quant Ion	: 45.00		
Area	: 312055		
On-column Amount (ng)	: 270.8075		
Integration start scan	: 139	Integration stop scan:	217
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD050 Lab Sample ID: VSTD050

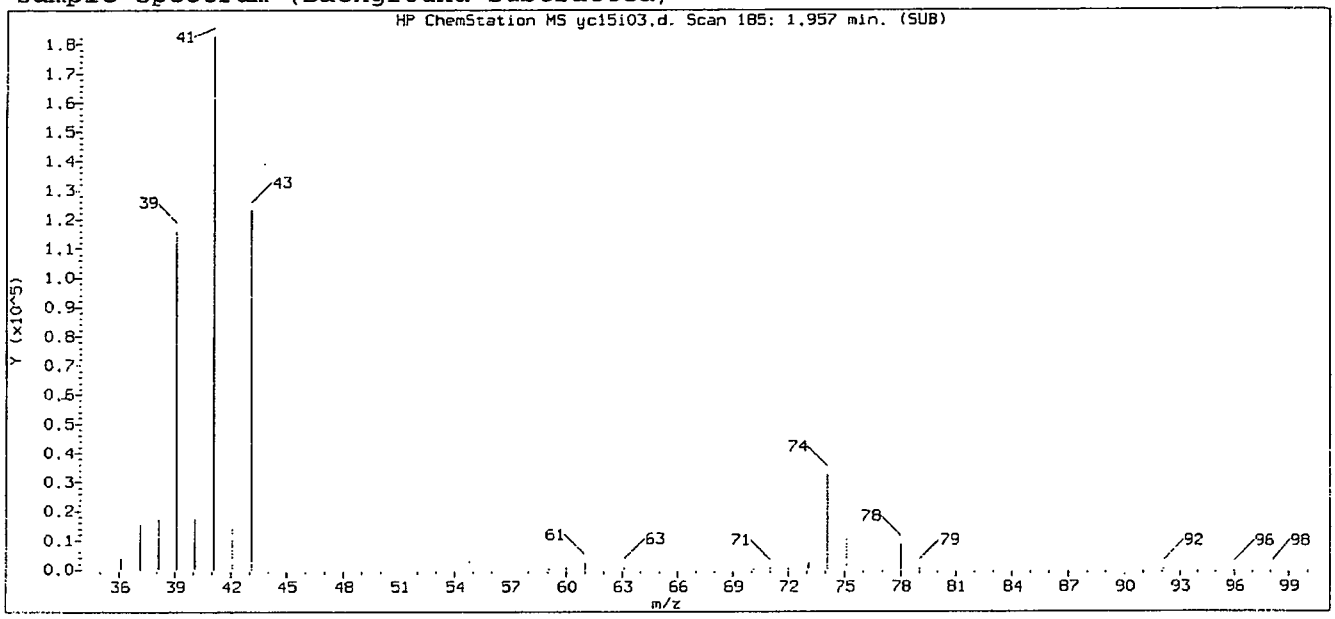
Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 185		
Retention Time (minutes)	: 1.957		
Quant Ion	: 43.00		
Area (flag)	: 418766M		
On-Column Amount (ng)	: 48.9248		
Integration start scan	: 173	Integration stop scan:	198
Y at integration start	: 8798	Y at integration end:	8798

Reason for manual integration: improper integration

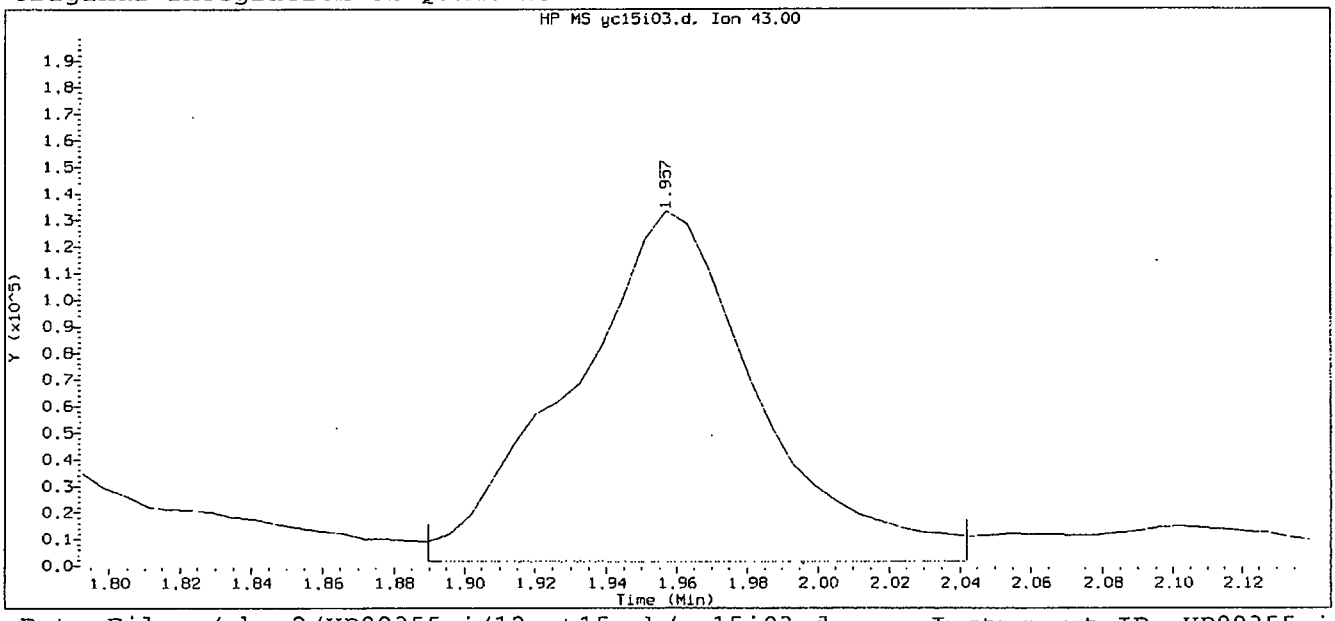
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

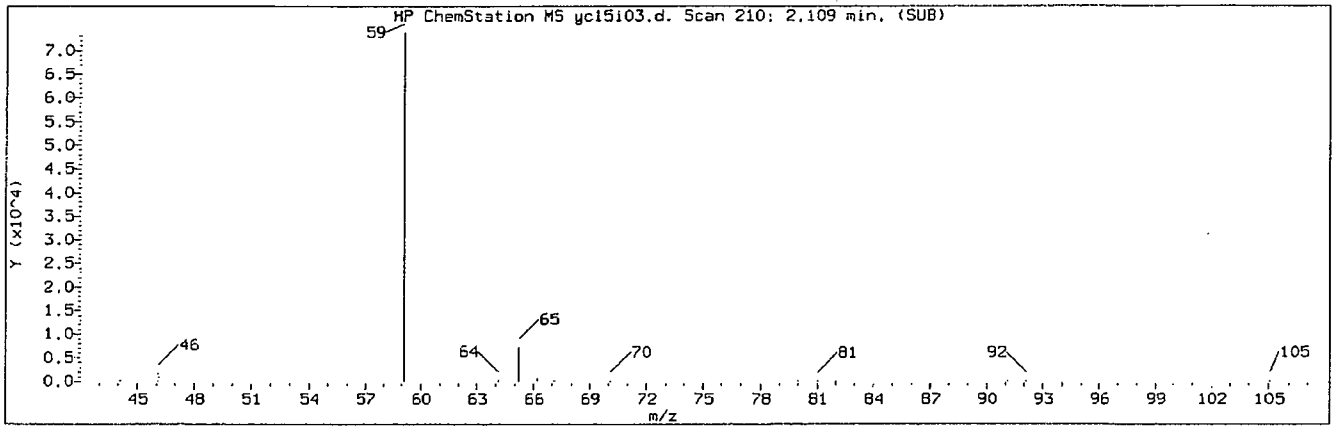
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 14:48
Date, time and analyst ID of latest file update: 15-Oct-2012 14:48 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

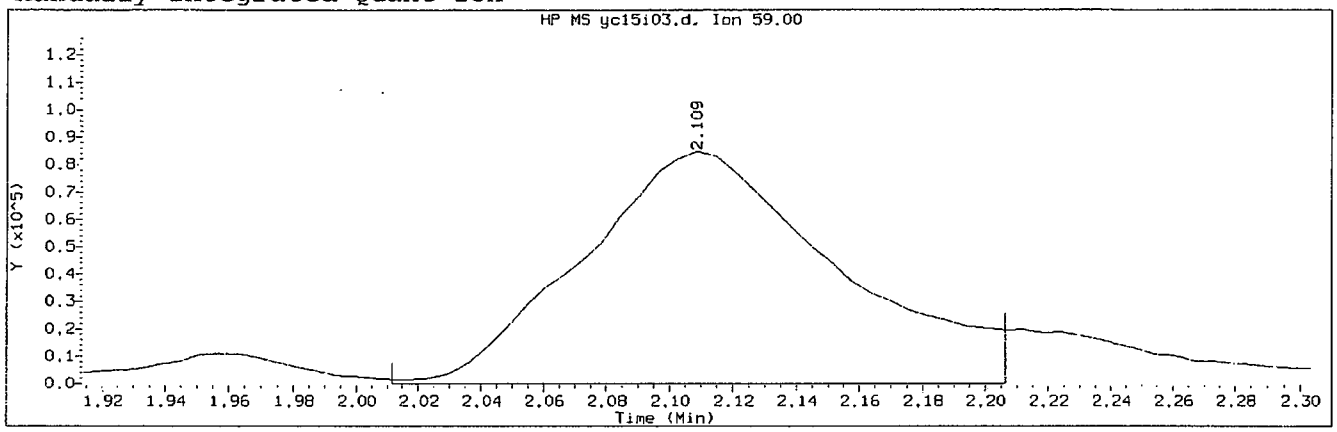
Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 185		
Retention Time (minutes)	: 1.957		
Quant Ion	: 43.00		
Area	: 483316		
On-column Amount (ng)	: 56.8169		
Integration start scan	: 173	Integration stop scan:	198
Y at integration start	: 1670	Y at integration end:	1670

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD050 Lab Sample ID: VSTD050

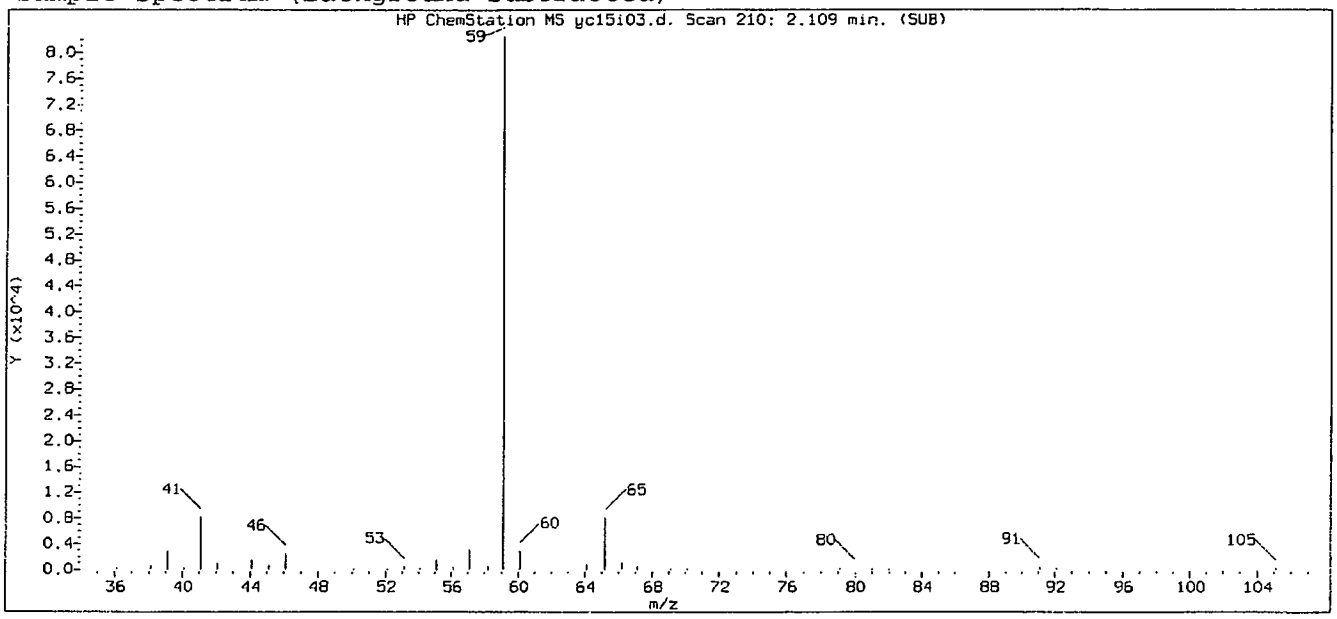
Compound Number : 29
Compound Name : t-Butyl Alcohol
Scan Number : 210
Retention Time (minutes): 2.109
Quant Ion : 59.00
Area (flag) : 475775M
On-Column Amount (ng) : 232.3671
Integration start scan : 193 Integration stop scan: 225
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

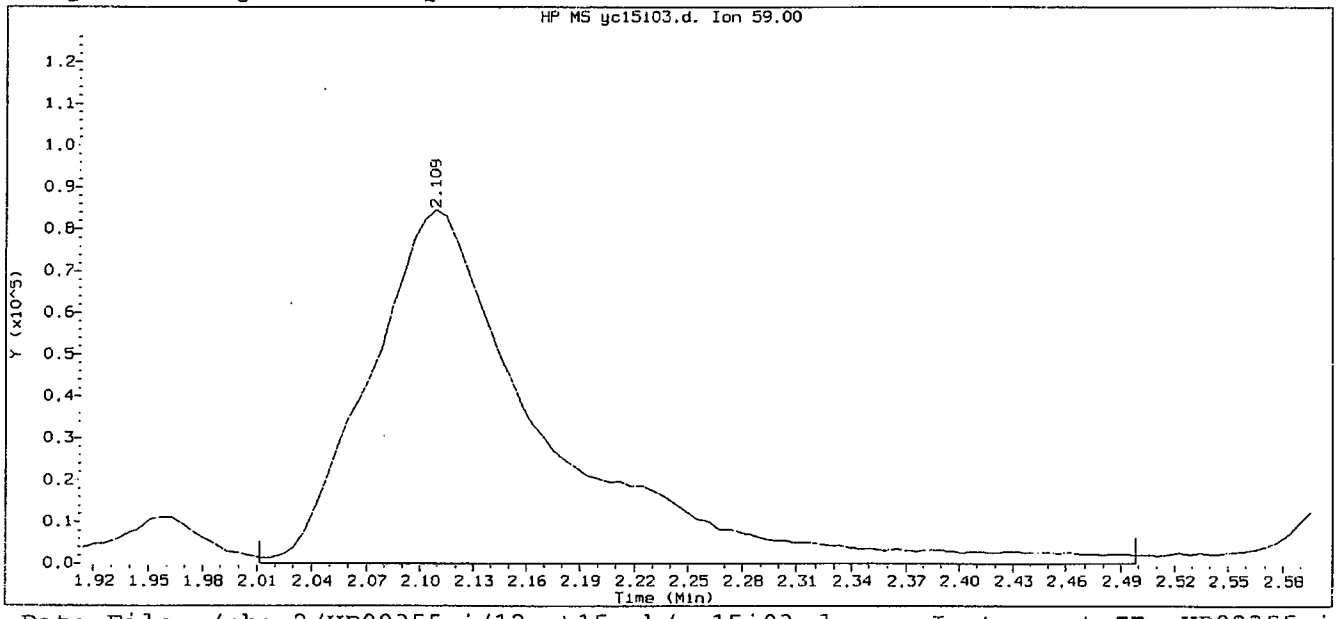
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

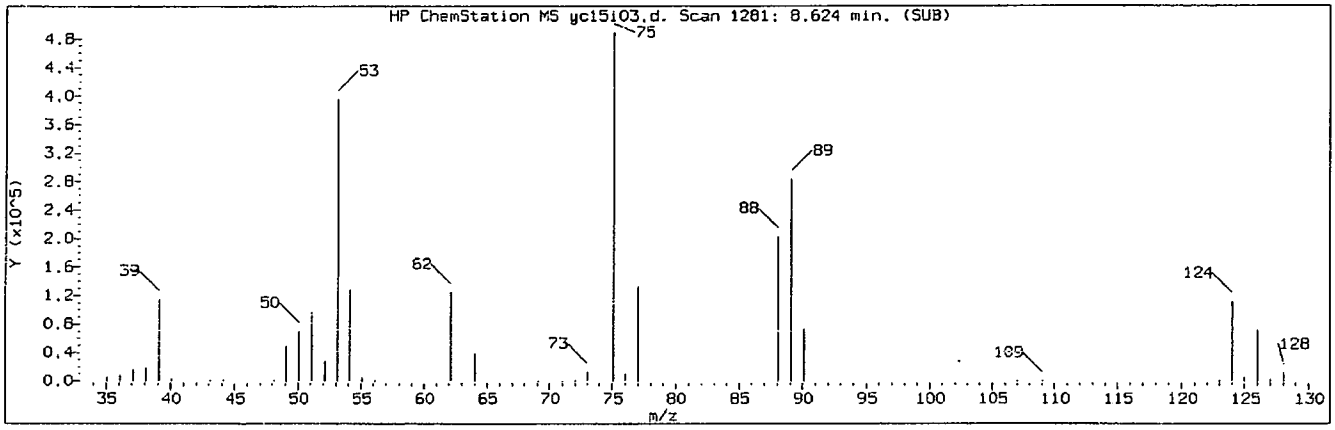
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 14:48
Date, time and analyst ID of latest file update: 15-Oct-2012 14:48 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

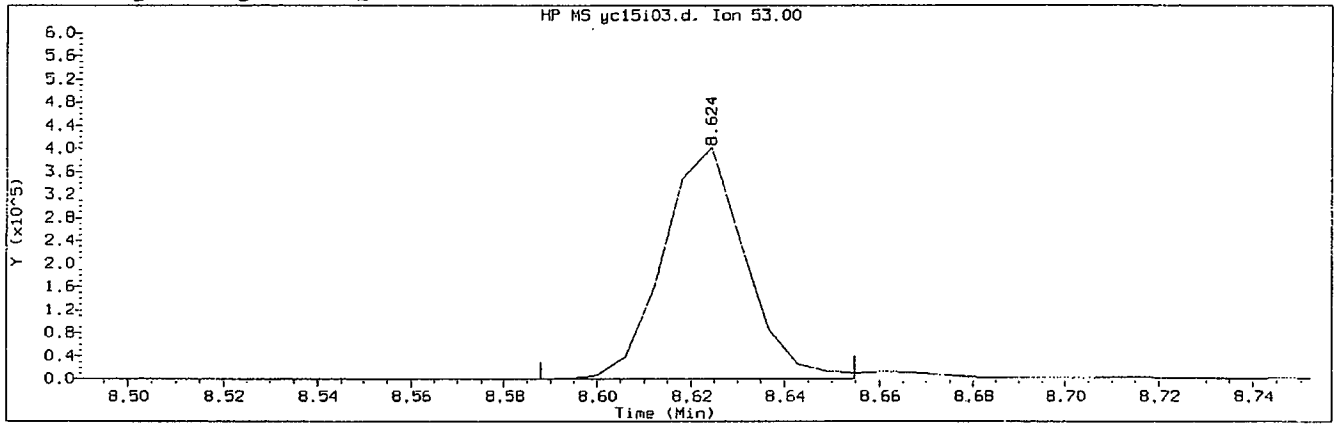
Compound Number	: 29		
Compound Name	: t-Butyl Alcohol		
Scan Number	: 210		
Retention Time (minutes)	: 2.109		
Quant Ion	: 59.00		
Area	: 579270		
On-column Amount (ng)	: 257.5134		
Integration start scan	: 193	Integration stop scan:	273
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD050 Lab Sample ID: VSTD050

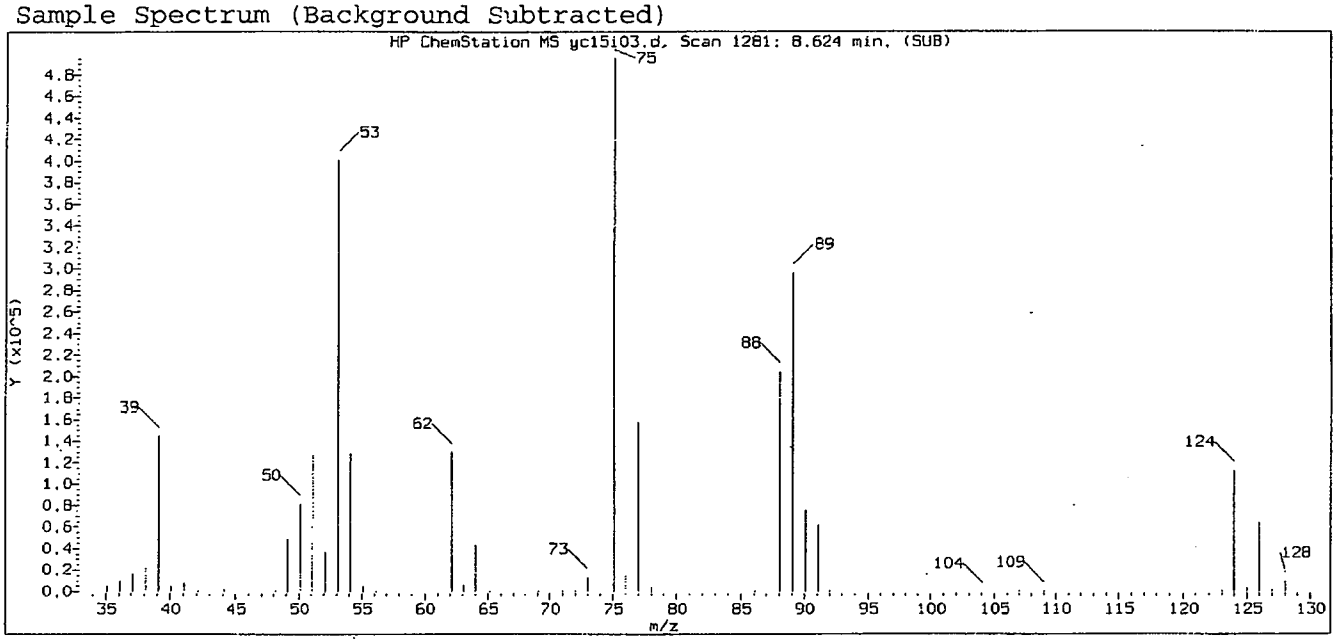
Compound Number : 124
Compound Name : trans-1,4-Dichloro-2-Butene
Scan Number : 1281
Retention Time (minutes): 8.624
Quant Ion : 53.00
Area (flag) : 486098M
On-Column Amount (ng) : 123.1752
Integration start scan : 1274 Integration stop scan: 1285
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

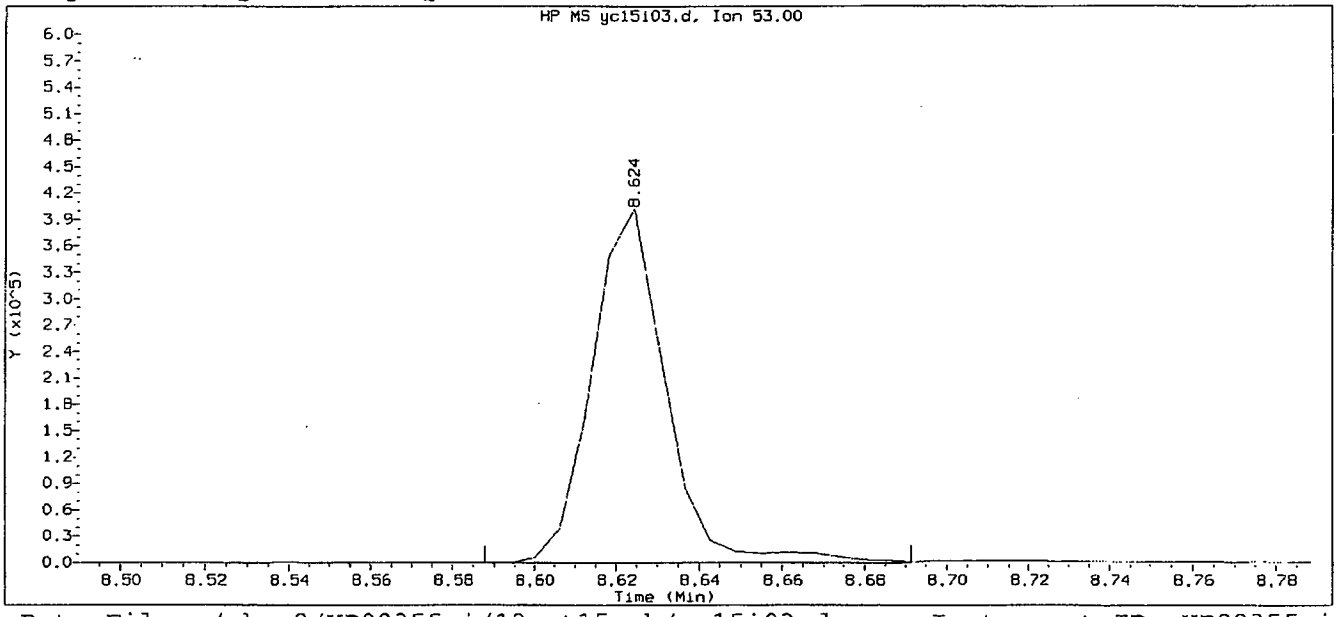
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



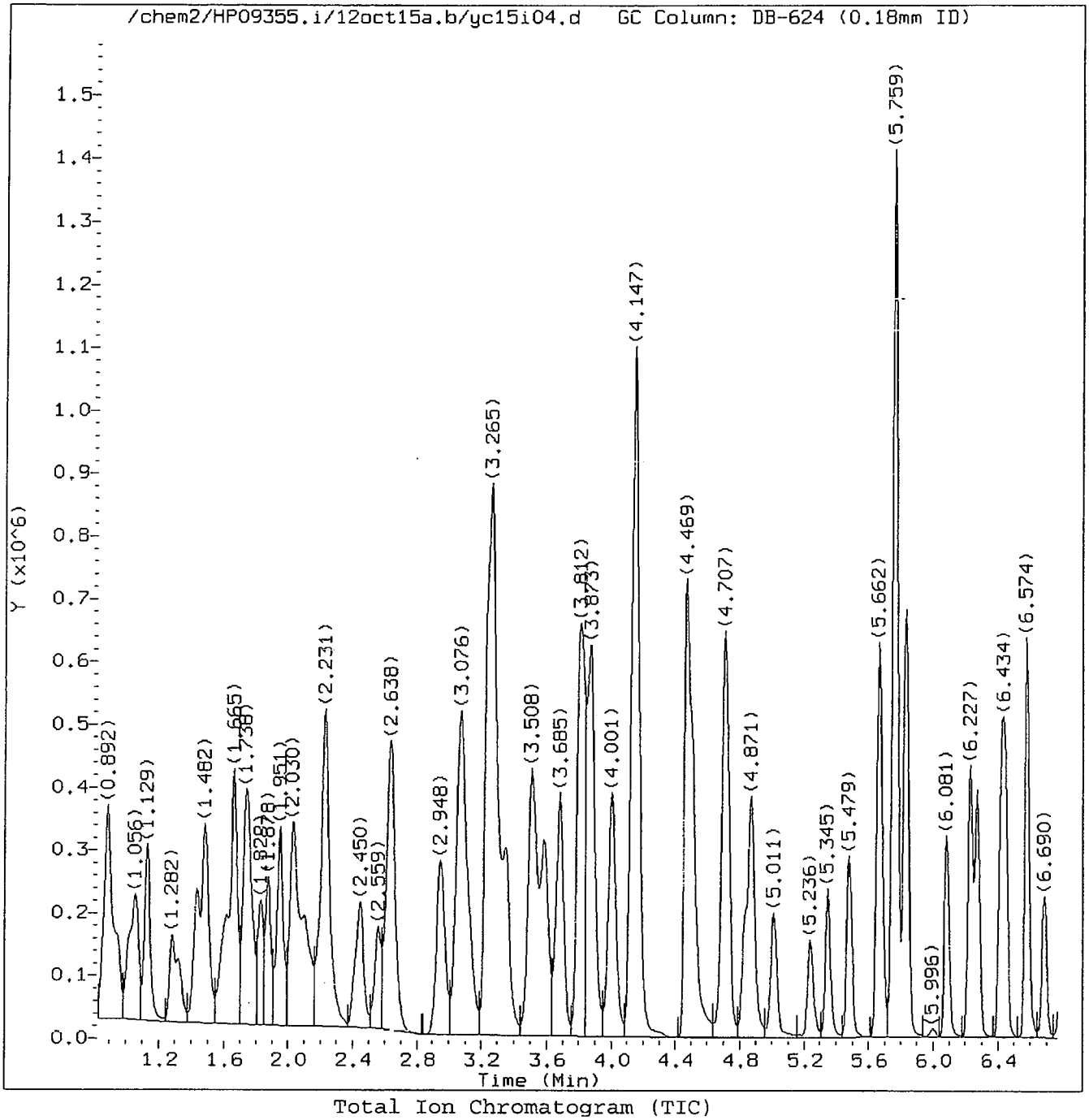
Data File: /chem2/HP09355.i/12oct15a.b/yc15i03.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:33 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 14:48
Date, time and analyst ID of latest file update: 15-Oct-2012 14:48 Automation

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compound Number	: 124		
Compound Name	: trans-1,4-Dichloro-2-Butene		
Scan Number	: 1281		
Retention Time (minutes)	: 8.624		
Quant Ion	: 53.00		
Area	: 500079		
On-column Amount (ng)	: 131.1969		
Integration start scan	: 1274	Integration stop scan:	1291
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:44.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

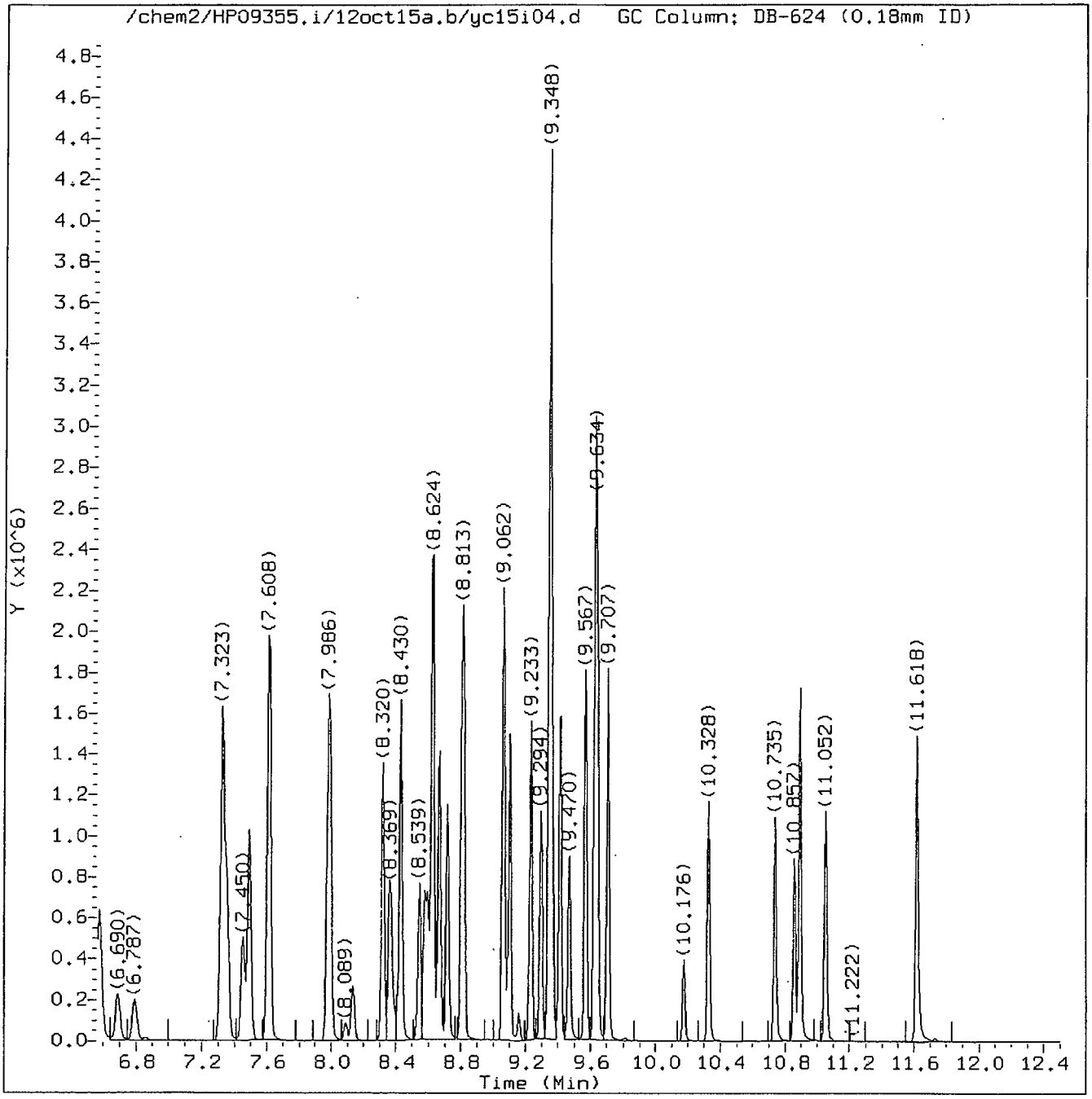
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD020 Lab Sample ID: VSTD020

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD020 Lab Sample ID: VSTD020

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Dichlorodifluoromethane	(1)	1.020	85	204176	22.623
3) Chloromethane	(1)	1.063	50	196895M	20.572
4) 1,3-Butadiene	(1)	1.123	39	82653	20.522
5) Vinyl Chloride	(1)	1.129	62	197463	21.061
7) Bromomethane	(1)	1.288	94	129803	21.182
8) Chloroethane	(1)	1.324	64	105521	20.768
9) Dichlorofluoromethane	(1)	1.434	67	239304	21.450
11) n-Pentane	(1)	1.482	43	212413	23.123
10) Trichlorofluoromethane	(1)	1.488	101	222357	22.051
14) Freon 123a	(1)	1.604	67	156022	21.881
15) Acrolein	(4)	1.665	56	551474	205.744
16) 1,1-Dichloroethene	(1)	1.732	96	115014	21.221
18) Freon 113	(1)	1.756	101	119920	21.543
17) Acetone	(1)	1.756	58	59495	39.298
20) Methyl Iodide	(1)	1.829	142	221289	21.456
21) 2-Propanol	(4)	1.829	45	234326M	207.936
22) Carbon Disulfide	(1)	1.878	76	354820	21.248
24) Allyl Chloride	(1)	1.951	41	206816	20.686
25) Methyl Acetate	(1)	1.957	43	181649M	22.012
26) Methylene Chloride	(1)	2.030	84	138392	20.527
28)*t-Butyl Alcohol-d10	(4)	2.042	65	401859	250.000
29) t-Butyl Alcohol	(4)	2.103	59	420066M	210.762
30) Acrylonitrile	(1)	2.194	53	119544M	21.043
31) trans-1,2-Dichloroethene	(1)	2.231	96	138379	21.329
32) Methyl Tertiary Butyl Ether	(1)	2.231	73	484728	21.602
33) n-Hexane	(1)	2.450	57	210328	21.653
34) 1,1-Dichloroethane	(1)	2.559	63	251632	21.365
36) di-Isopropyl Ether	(1)	2.632	45	501845	21.254
37) 2-Chloro-1,3-Butadiene	(1)	2.638	53	212925	21.300
39) Ethyl t-Butyl Ether	(1)	2.948	59	489391	21.525
41) 2-Butanone	(1)	3.046	43	322736	39.296
40) cis-1,2-Dichloroethene	(1)	3.064	96	154568	21.292
42) 2,2-Dichloropropane	(1)	3.076	77	187326	21.173
43) Propionitrile	(4)	3.119	54	515650	207.602
46) Methacrylonitrile	(1)	3.259	67	588210	104.626
47) Bromochloromethane	(1)	3.277	128	84312	21.411
48) Tetrahydrofuran	(4)	3.326	71	92522	39.788
50) Chloroform	(1)	3.356	83	244394	20.636

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
52)$Dibromofluoromethane	(1)	3.502	113	293608	49.571
51)$Dibromofluoromethane(mz111)	(1)	3.502	111	303959	50.175
53) 1,1,1-Trichloroethane	(1)	3.526	97	214001	21.200
54) Cyclohexane (mz 84)	(1)	3.587	84	206756	21.223
55) Cyclohexane (mz 69)	(1)	3.587	69	76590	21.017
56) Cyclohexane	(1)	3.587	56	252462	21.323
45) 1,2-Dichloroethene (total)	(1)		96	292947	42.621
57) 1,1-Dichloropropene	(1)	3.678	75	187791	21.425
58) Carbon Tetrachloride	(1)	3.685	117	159976	21.325
59) Isobutyl Alcohol	(4)	3.800	41	361755	526.917
61)$1,2-Dichloroethane-d4(mz65)	(1)	3.812	65	370509	50.844
60)$1,2-Dichloroethane-d4(mz104)	(1)	3.812	104	49732	49.753
62)$1,2-Dichloroethane-d4	(1)	3.812	102	80463	50.559
63) Benzene	(1)	3.873	78	590210	21.117
65) 1,2-Dichloroethane	(1)	3.885	62	193153	20.924
64) 1,2-Dichloroethane (mz 98)	(1)	3.885	98	19043	20.345
69) t-Amyl Methyl Ether	(1)	4.001	73	473652	21.196
71)*Fluorobenzene	(1)	4.147	96	1333428	50.000
72) n-Heptane	(1)	4.159	43	247251	21.951
73) n-Butanol	(4)	4.469	56	678410	1065.482
74) Trichloroethene	(1)	4.506	95	147217	21.179
75) Methylcyclohexane (mz98)	(1)	4.707	98	113206	20.442
76) Methylcyclohexane	(1)	4.707	83	259711	20.618
77) 1,2-Dichloropropane	(1)	4.719	63	156305	21.301
78) Dibromomethane	(1)	4.834	93	103620	21.310
79) 1,4-Dioxane	(4)	4.859	88	86450	488.161
80) Methyl Methacrylate	(1)	4.871	69	182789	21.063
83) Bromodichloromethane	(1)	5.011	83	176987	21.518
85) 2-Nitropropane	(1)	5.236	41	130676	38.390
86) 2-Chloroethyl Vinyl Ether	(1)	5.345	63	133418M	20.331
87) cis-1,3-Dichloropropene	(1)	5.479	75	228131	21.675
89) 4-Methyl-2-Pentanone	(1)	5.662	43	628263	40.450
92)$Toluene-d8(mz100)	(2)	5.759	100	826028	49.573
93)$Toluene-d8	(2)	5.759	98	1274356	50.019
94) Toluene	(2)	5.832	92	380818	21.426
95) trans-1,3-Dichloropropene	(2)	6.081	75	222324	21.877
96) Ethyl Methacrylate	(2)	6.227	69	286152	21.277
97) 1,1,2-Trichloroethane	(2)	6.270	97	155367	21.634

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
98) Tetrachloroethene	(2)	6.422	166	165475	21.585
99) 1,3-Dichloropropane	(2)	6.447	76	259595	21.559
101) 2-Hexanone	(2)	6.574	43	511300	40.876
102) Dibromochloromethane	(2)	6.690	129	142986	21.630
104) 1,2-Dibromoethane	(2)	6.787	107	169496	21.746
106) *Chlorobenzene-d5	(2)	7.323	117	954756	50.000
107) Chlorobenzene	(2)	7.353	112	426085	21.532
108) 1,1,1,2-Tetrachloroethane	(2)	7.450	131	140460	21.782
109) Ethylbenzene	(2)	7.487	91	737490	21.362
110) m+p-Xylene	(2)	7.608	106	586122	43.043
113) o-Xylene	(2)	7.980	106	292678	21.281
114) Styrene	(2)	7.992	104	491940	21.422
115) Bromoform	(2)	8.132	173	114153	20.341
112) Xylene (Total)	(2)		106	878800	64.323
116) Isopropylbenzene	(2)	8.320	105	750572	21.750
118) Cyclohexanone	(4)	8.363	55	382187	487.431
119) $4-Bromofluorobenzene	(2)	8.430	95	478917	49.862
120) $4-Bromofluorobenzene(mz174)	(2)	8.436	174	405120	49.479
121) Bromobenzene	(3)	8.545	156	192401	21.366
122) 1,1,2,2-Tetrachloroethane	(3)	8.576	83	278337	21.758
123) 1,2,3-Trichloropropane	(3)	8.594	110	84419	21.221
124) trans-1,4-Dichloro-2-Butene	(3)	8.618	53	400124M	107.123
125) n-Propylbenzene	(3)	8.667	91	884905	22.445
126) 2-Chlorotoluene	(3)	8.716	126	180285	21.529
128) 4-Chlorotoluene	(3)	8.807	126	185855	21.465
127) 1,3,5-Trimethylbenzene	(3)	8.813	105	647267	22.044
130) tert-Butylbenzene	(3)	9.062	134	144400	21.899
131) Pentachloroethane	(3)	9.062	167	116103	21.374
132) 1,2,4 Trimethylbenzene	(3)	9.099	105	661901	21.849
133) sec-Butylbenzene	(3)	9.233	105	809140	22.411
134) 1,3-Dichlorobenzene	(3)	9.294	146	364281	21.430
135) p-Isopropyltoluene	(3)	9.348	119	712945	22.358
136) *1,4-Dichlorobenzene-d4	(3)	9.348	152	541980	50.000
138) 1,4-Dichlorobenzene	(3)	9.361	146	389955	21.493
139) 1,2,3-Trimethylbenzene	(3)	9.415	105	720206	22.115
141) Benzyl Chloride	(3)	9.470	91	520885	21.276
142) 1,3-Diethylbenzene	(3)	9.567	119	443318	22.051
144) 1,2-Dichlorobenzene	(3)	9.628	146	374175	21.773

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Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
143) 1,4-Diethylbenzene	(3)	9.628	119	461000	22.320
145) n-Butylbenzene	(3)	9.646	92	349214	22.099
146) 1,2-Diethylbenzene	(3)	9.707	119	381014	22.042
148) 1,2-Dibromo-3-Chloropropane	(3)	10.176	75	68036	20.914
149) 1,3,5-Trichlorobenzene	(3)	10.328	180	284220	21.795
150) 1,2,4-Trichlorobenzene	(3)	10.735	180	270667	22.082
151) Hexachlorobutadiene	(3)	10.857	225	128536	22.611
152) Naphthalene	(3)	10.894	128	995053	20.938
153) 1,2,3-Trichlorobenzene	(3)	11.052	180	265498	22.080
154) 2-Methylnaphthalene	(3)	11.618	142	573203	21.685

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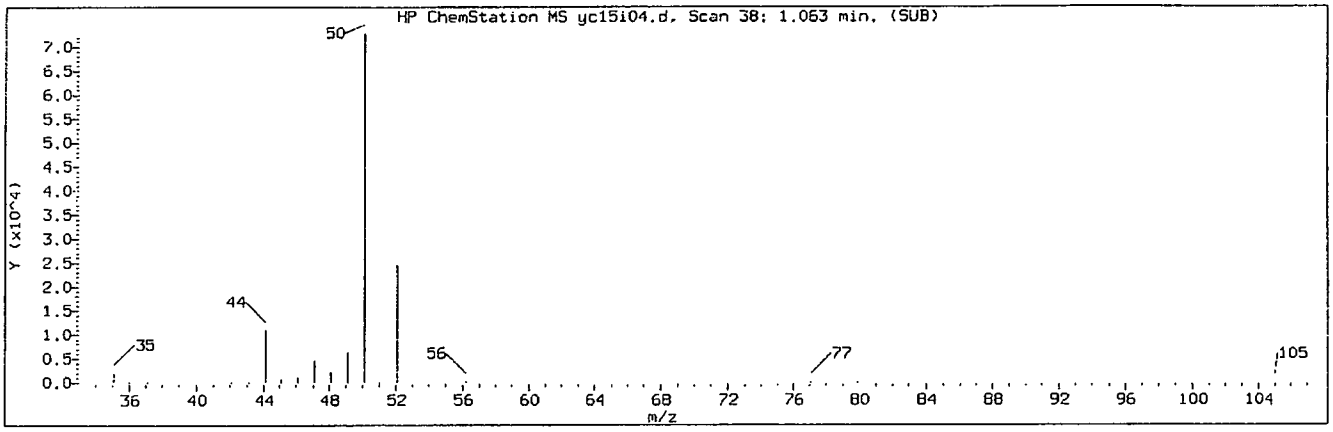
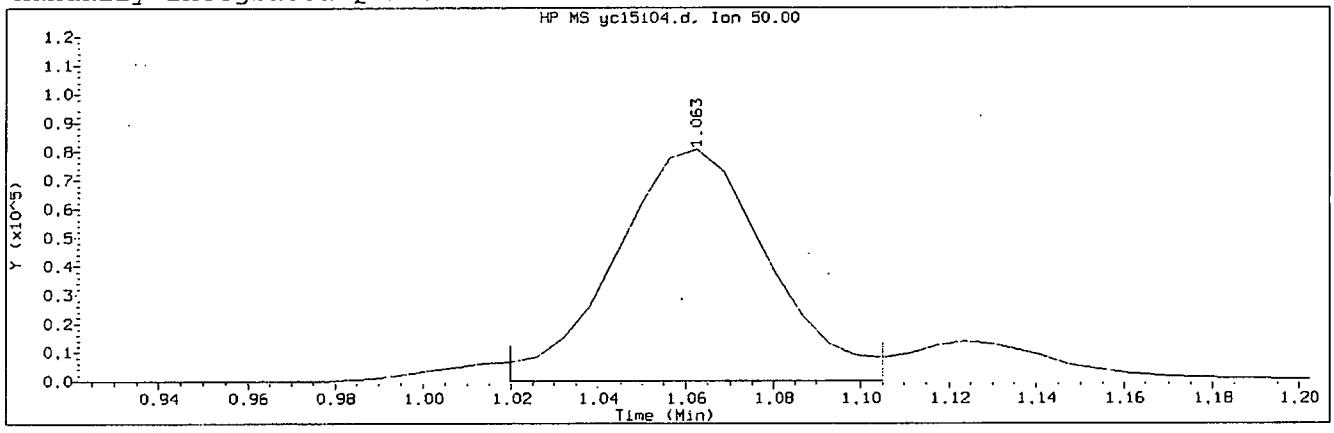
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD020 Lab Sample ID: VSTD020

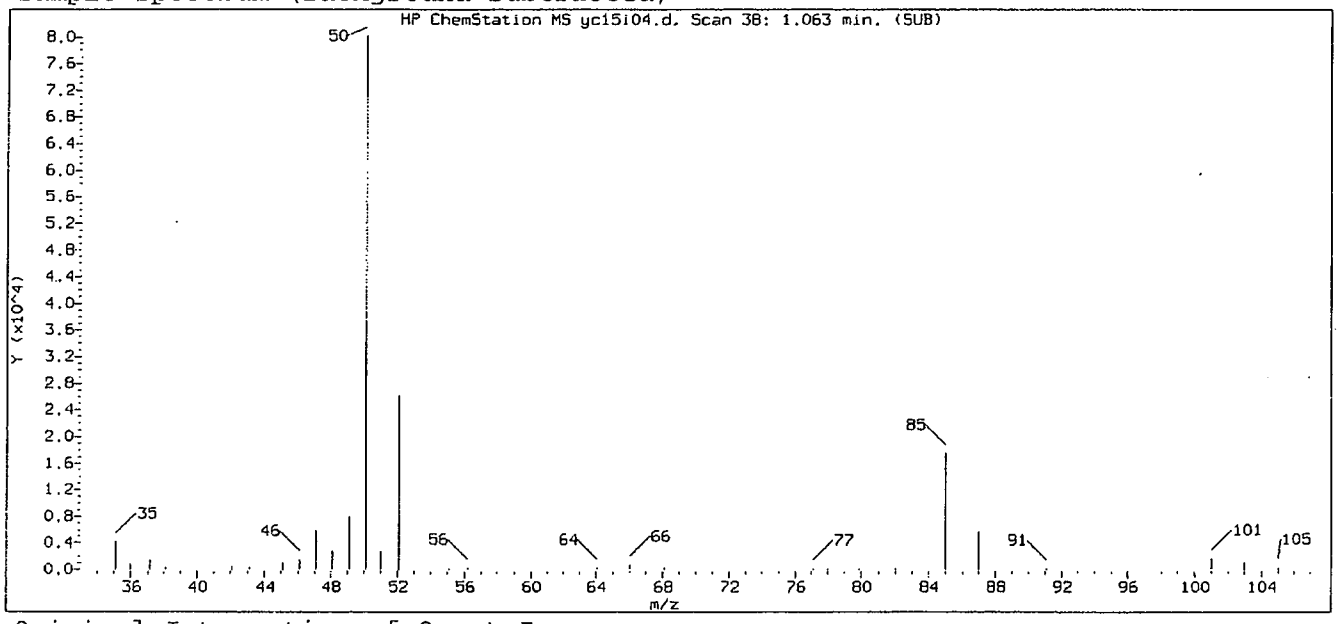
Compound Number	: 3		
Compound Name	: Chloromethane		
Scan Number	: 38		
Retention Time (minutes)	: 1.063		
Quant Ion	: 50.00		
Area (flag)	: 196895M		
On-Column Amount (ng)	: 20.5719		
Integration start scan	: 30	Integration stop scan:	44
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

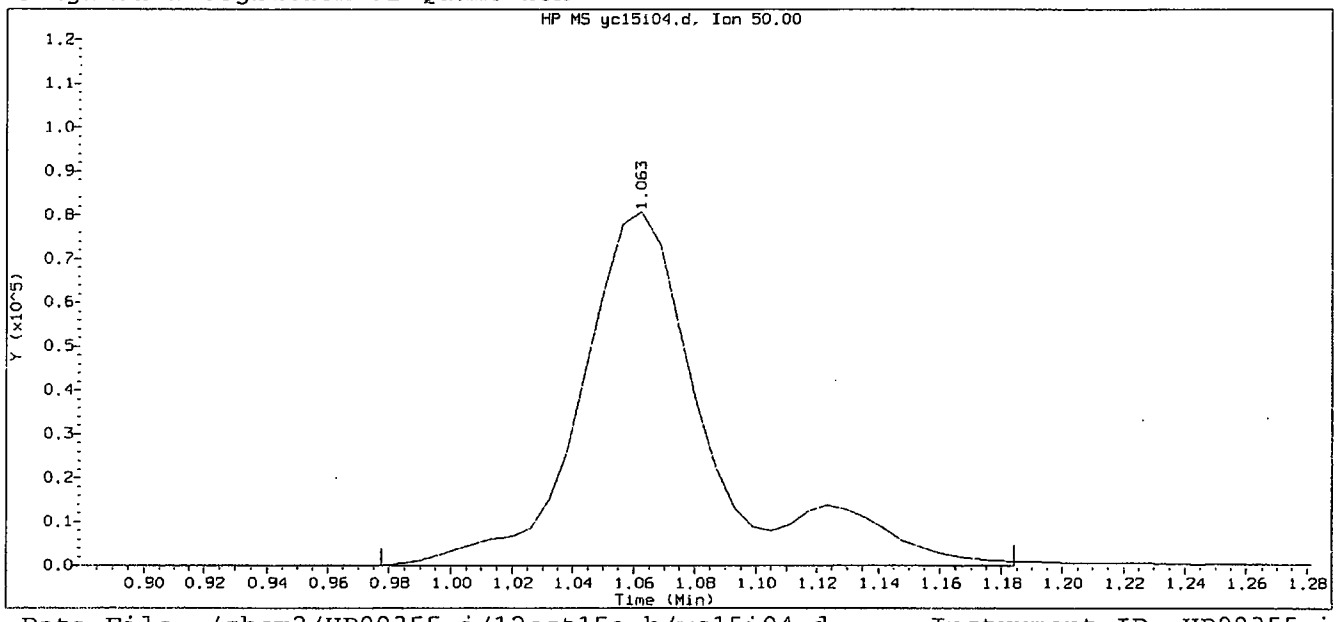
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:09
Date, time and analyst ID of latest file update: 15-Oct-2012 15:09 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compound Number	: 3		
Compound Name	: Chloromethane		
Scan Number	: 38		
Retention Time (minutes)	: 1.063		
Quant Ion	: 50.00		
Area	: 235208		
On-column Amount (ng)	: 23.3701		
Integration start scan	: 23	Integration stop scan:	57
Y at integration start	: 0	Y at integration end:	0

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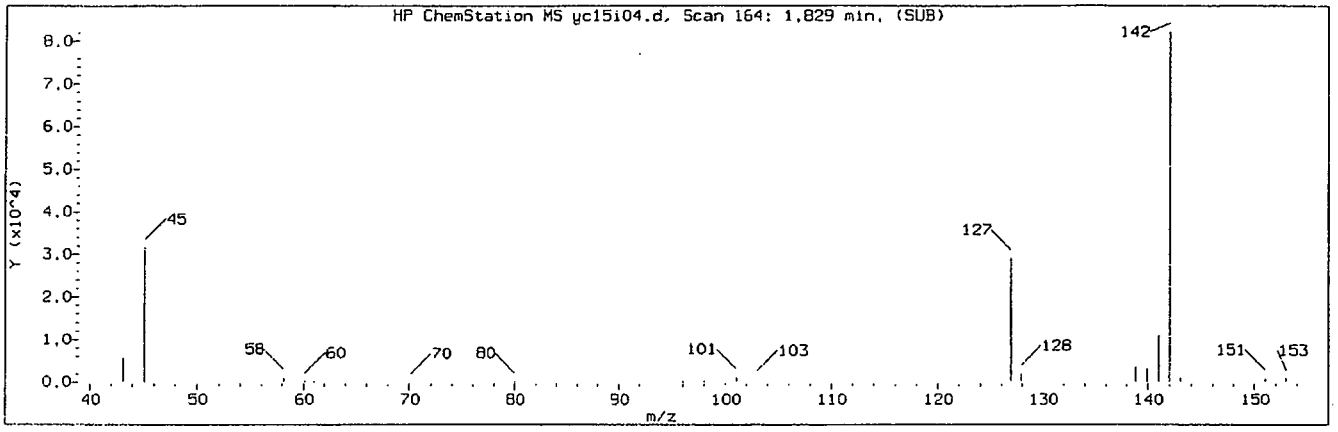
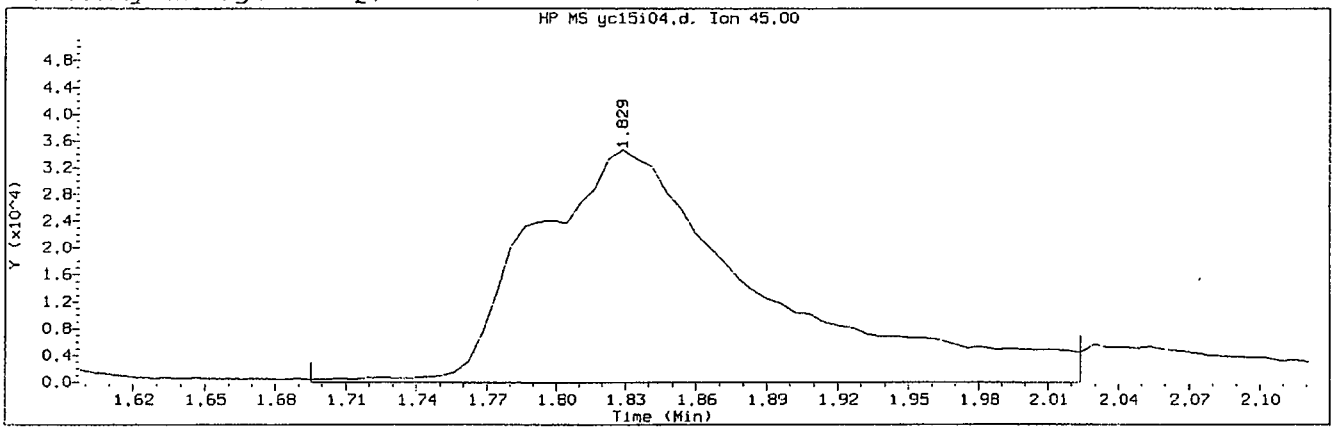
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD020 Lab Sample ID: VSTD020

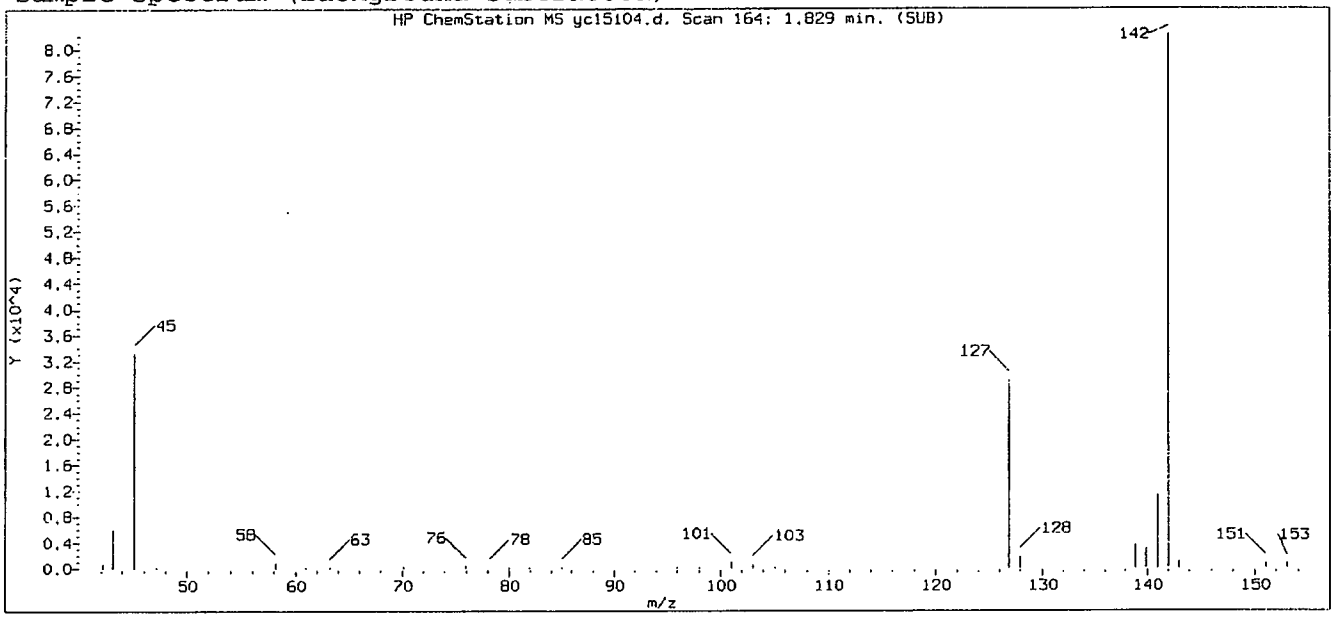
Compound Number : 21
Compound Name : 2-Propanol
Scan Number : 164
Retention Time (minutes): 1.829
Quant Ion : 45.00
Area (flag) : 234326M
On-Column Amount (ng) : 207.9358
Integration start scan : 141 Integration stop scan: 195
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

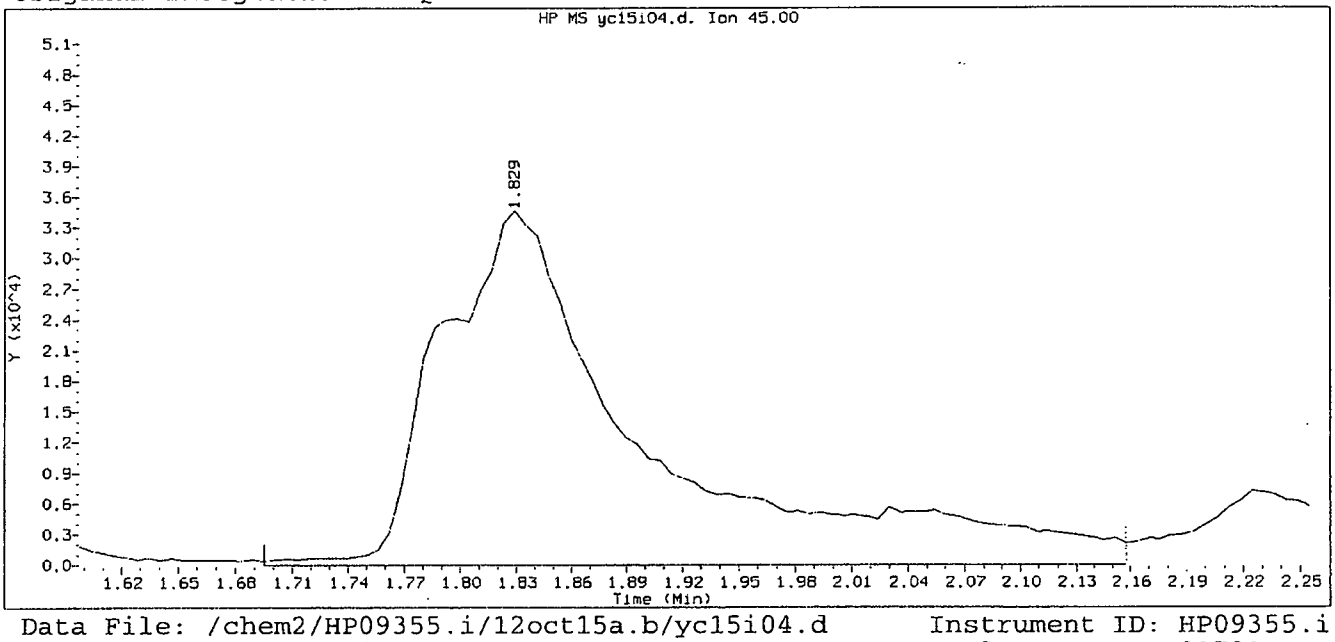
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:09
Date, time and analyst ID of latest file update: 15-Oct-2012 15:09 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compound Number	: 21		
Compound Name	: 2-Propanol		
Scan Number	: 164		
Retention Time (minutes)	: 1.829		
Quant Ion	: 45.00		
Area	: 264963		
On-column Amount (ng)	: 225.9884		
Integration start scan	: 141	Integration stop scan:	217
Y at integration start	: 0	Y at integration end:	0

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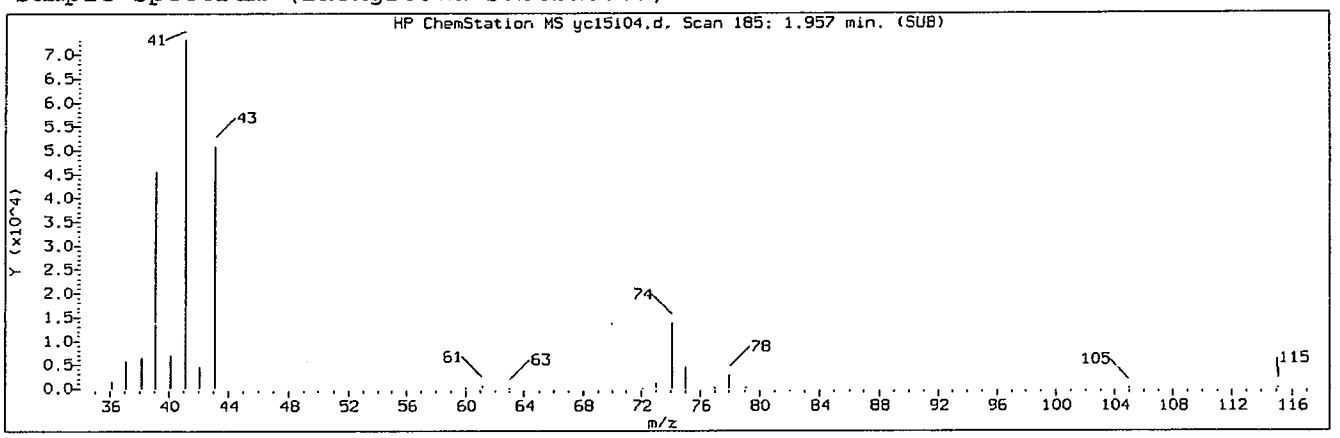
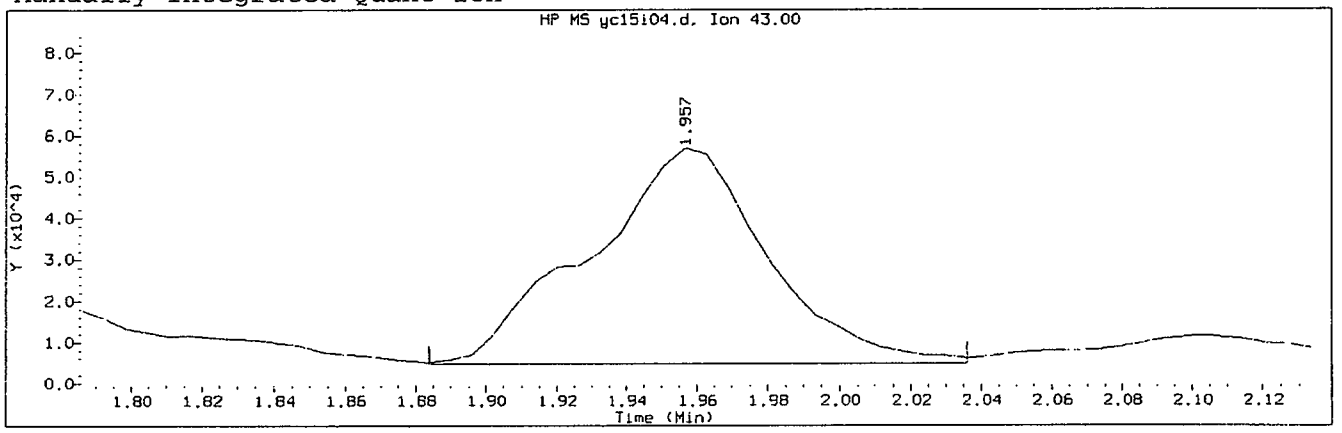
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD020 Lab Sample ID: VSTD020

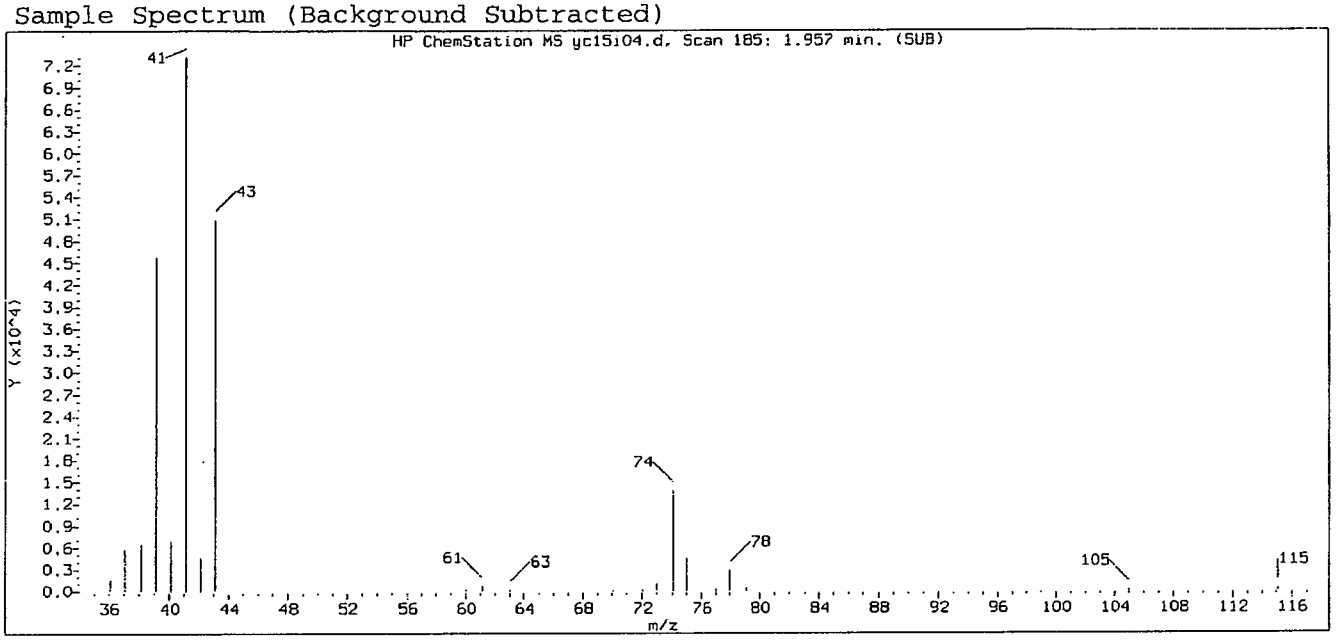
Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 185		
Retention Time (minutes)	: 1.957		
Quant Ion	: 43.00		
Area (flag)	: 181649M		
On-Column Amount (ng)	: 22.0117		
Integration start scan	: 172	Integration stop scan:	197
Y at integration start	: 4784	Y at integration end:	4784

Reason for manual integration: improper integration

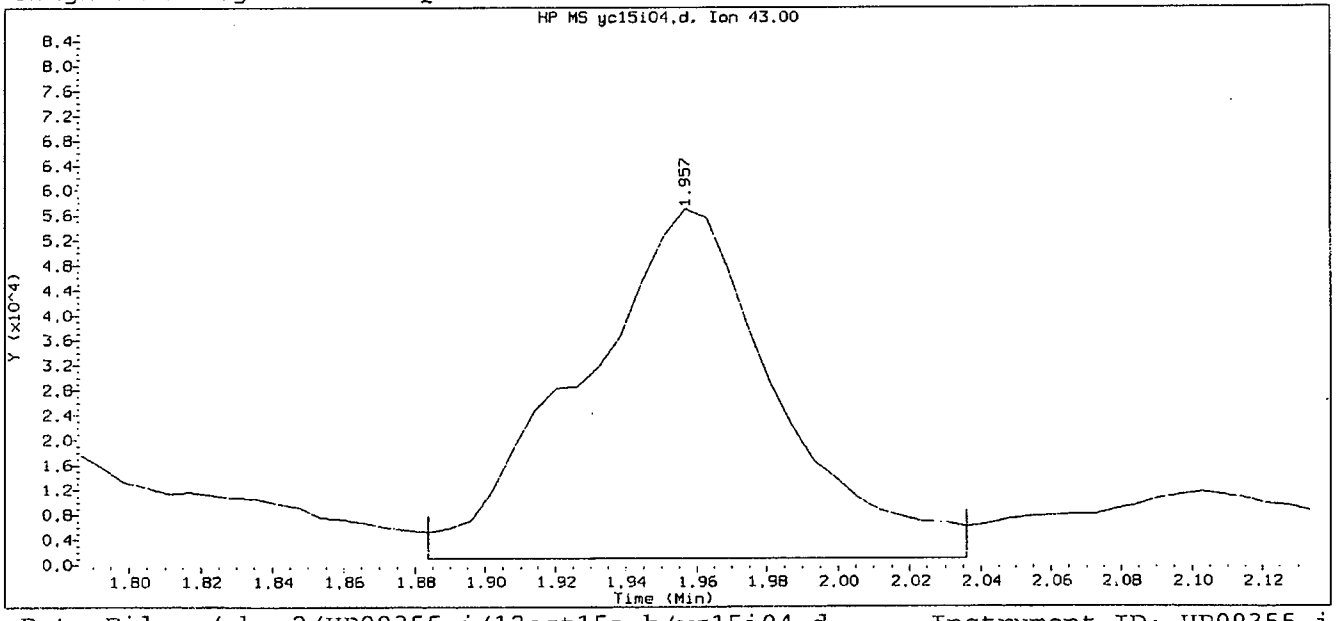
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

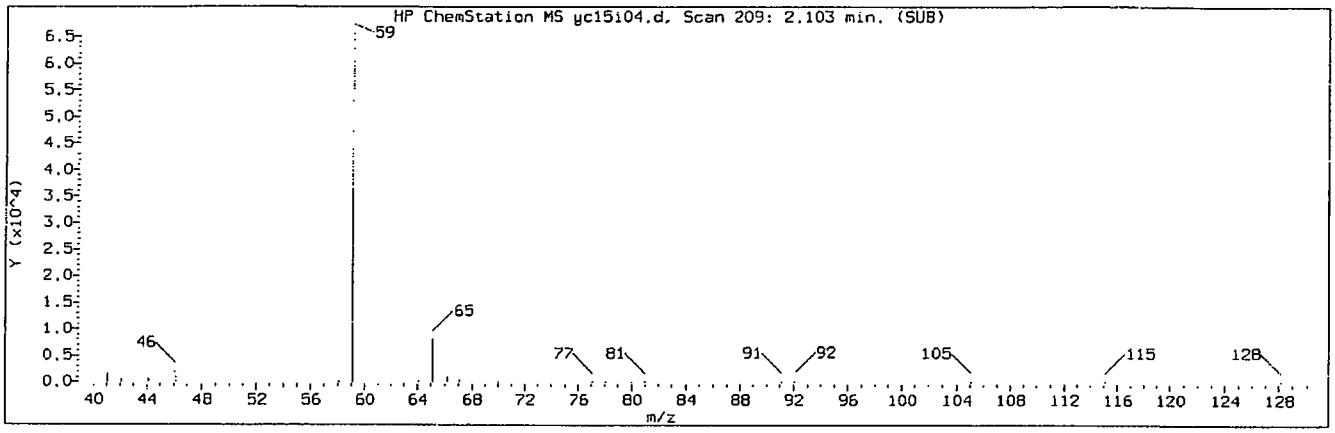
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:09
Date, time and analyst ID of latest file update: 15-Oct-2012 15:09 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

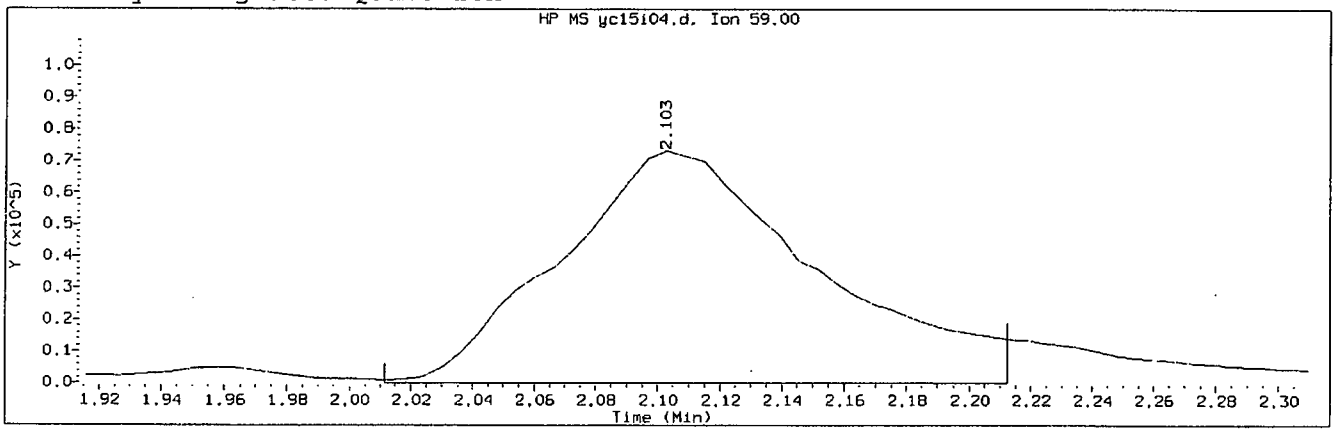
Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 185		
Retention Time (minutes)	: 1.957		
Quant Ion	: 43.00		
Area	: 215747		
On-column Amount (ng)	: 24.3839		
Integration start scan	: 172	Integration stop scan:	197
Y at integration start	: 1014	Y at integration end:	1014

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD020 Lab Sample ID: VSTD020

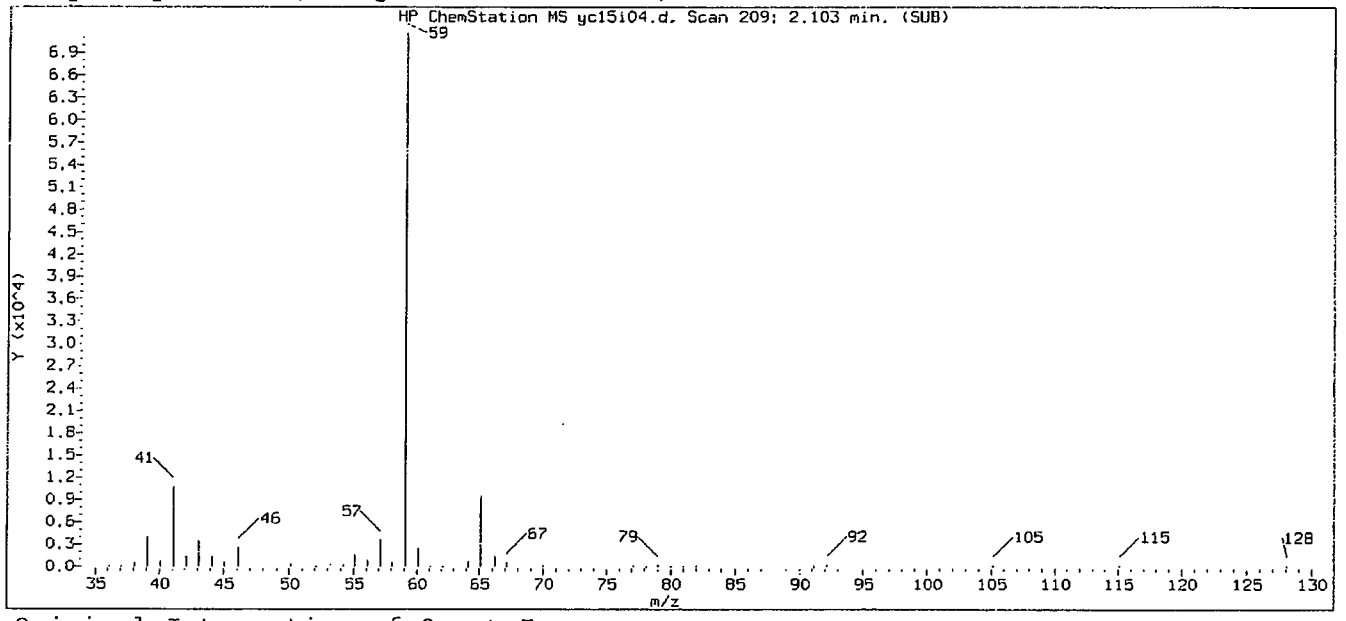
Compound Number	: 29		
Compound Name	: t-Butyl Alcohol		
Scan Number	: 209		
Retention Time (minutes)	: 2.103		
Quant Ion	: 59.00		
Area (flag)	: 420066M		
On-Column Amount (ng)	: 210.7620		
Integration start scan	: 193	Integration stop scan:	226
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

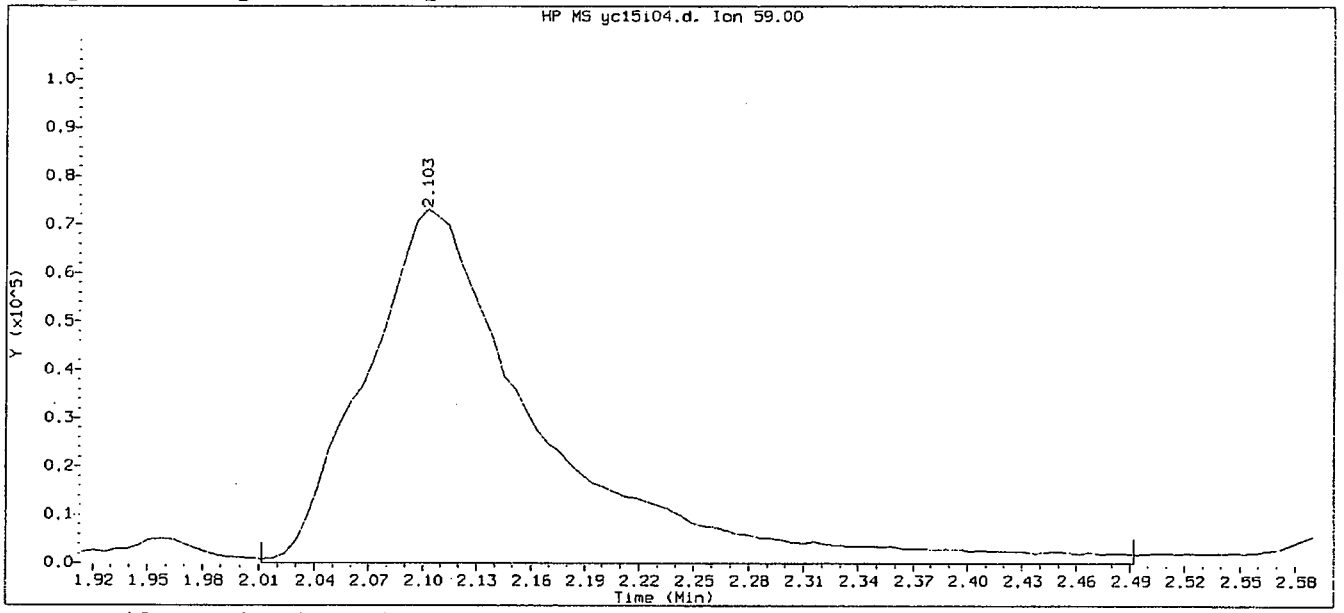
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:09
Date, time and analyst ID of latest file update: 15-Oct-2012 15:09 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compound Number	: 29		
Compound Name	: t-Butyl Alcohol		
Scan Number	: 209		
Retention Time (minutes)	: 2.103		
Quant Ion	: 59.00		
Area	: 495785		
On-column Amount (ng)	: 219.1813		
Integration start scan	: 193	Integration stop scan:	272
Y at integration start	: 0	Y at integration end:	0

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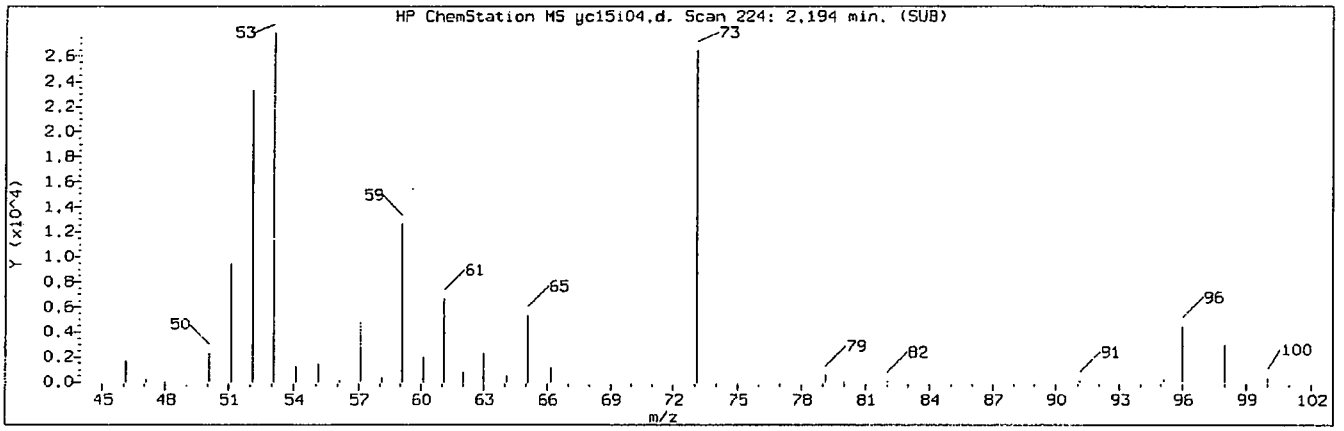
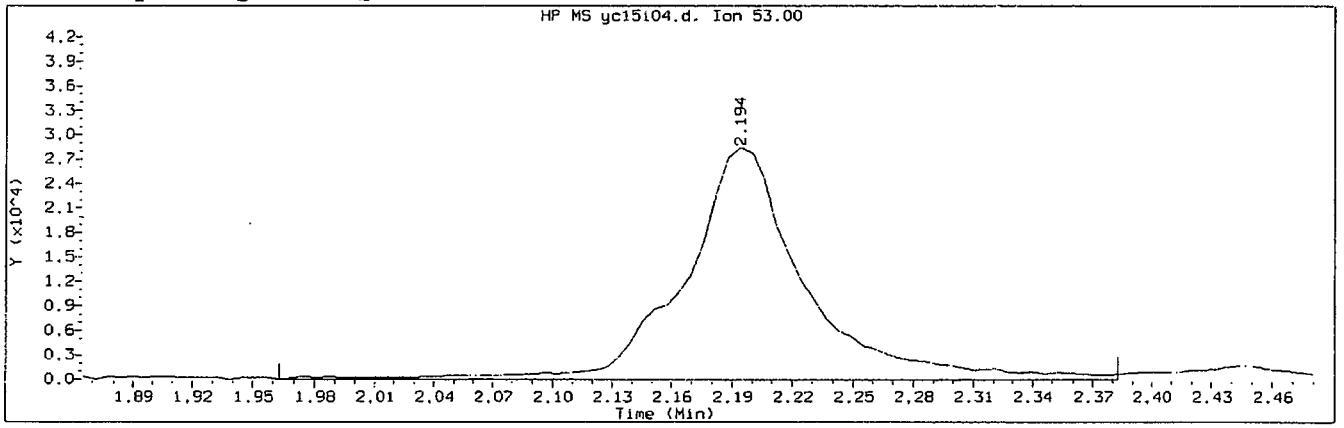
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD020 Lab Sample ID: VSTD020

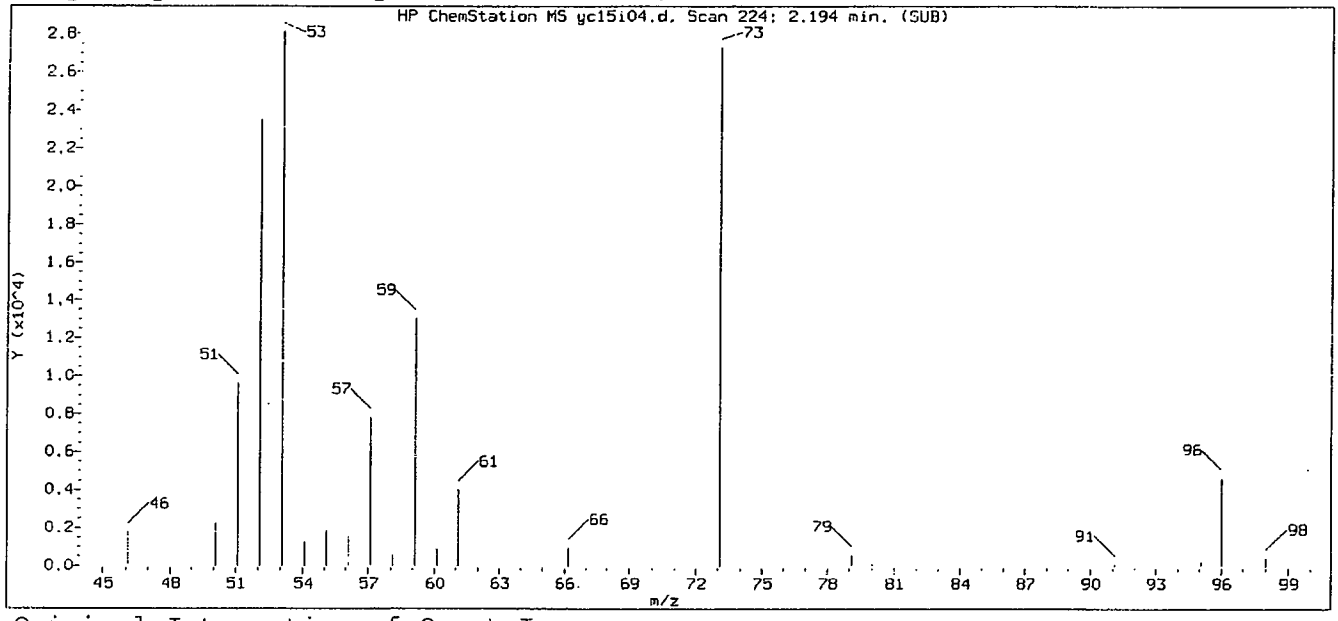
Compound Number	: 30		
Compound Name	: Acrylonitrile		
Scan Number	: 224		
Retention Time (minutes)	: 2.194		
Quant Ion	: 53.00		
Area (flag)	: 119544M		
On-Column Amount (ng)	: 21.0425		
Integration start scan	: 185	Integration stop scan:	254
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

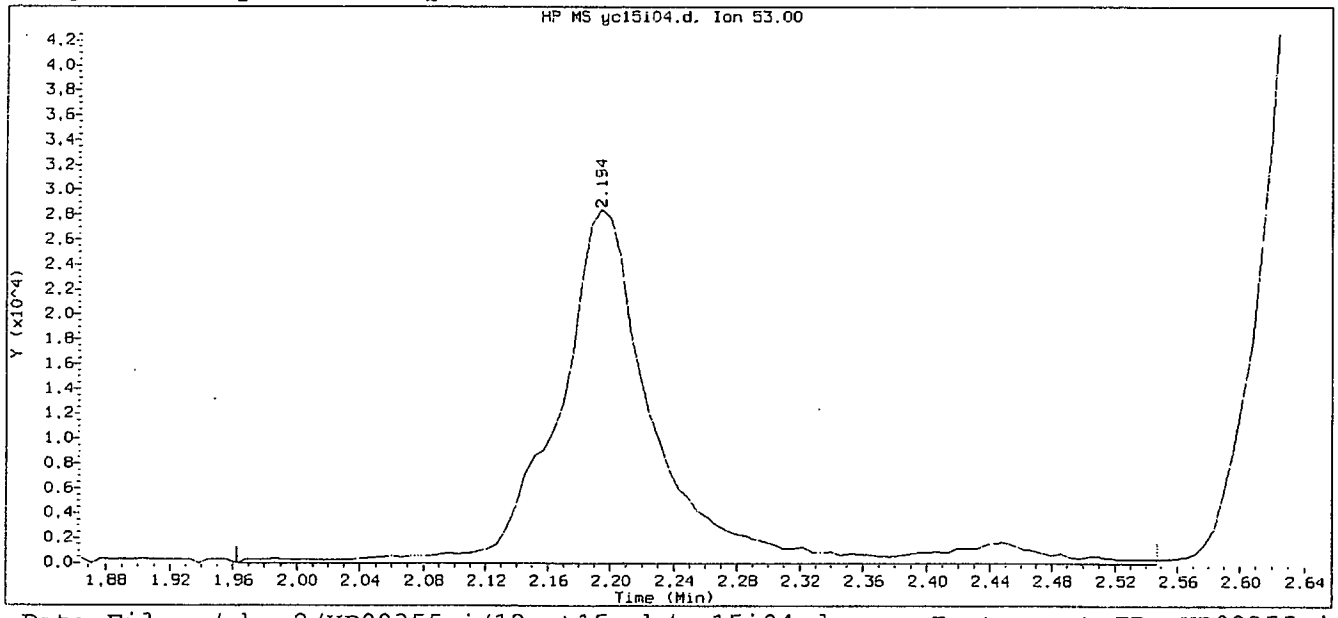
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:09
Date, time and analyst ID of latest file update: 15-Oct-2012 15:09 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compound Number	: 30		
Compound Name	: Acrylonitrile		
Scan Number	: 224		
Retention Time (minutes)	: 2.194		
Quant Ion	: 53.00		
Area	: 127956		
On-column Amount (ng)	: 23.3134		
Integration start scan	: 185	Integration stop scan:	281
Y at integration start	: 0	Y at integration end:	0

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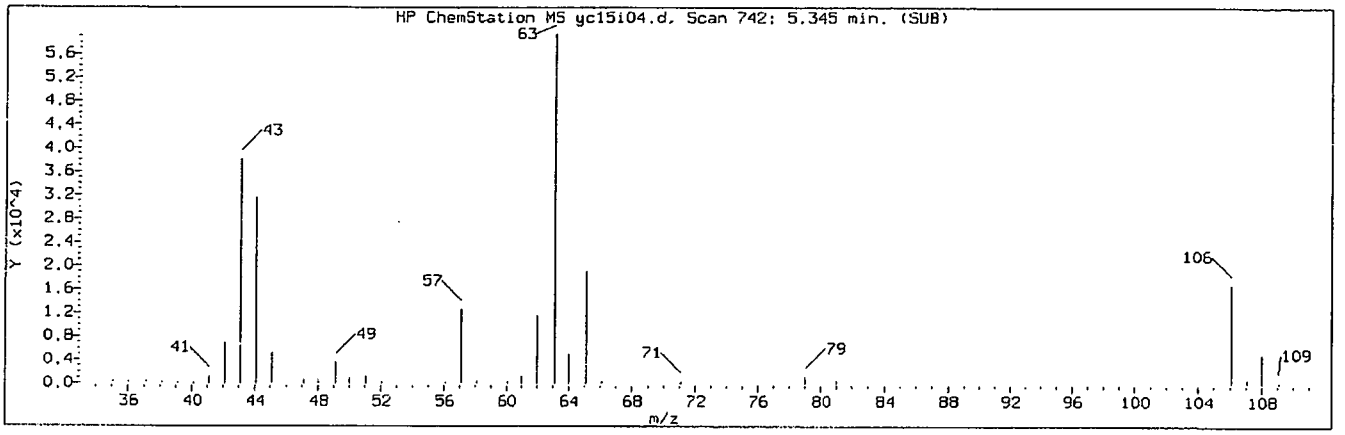
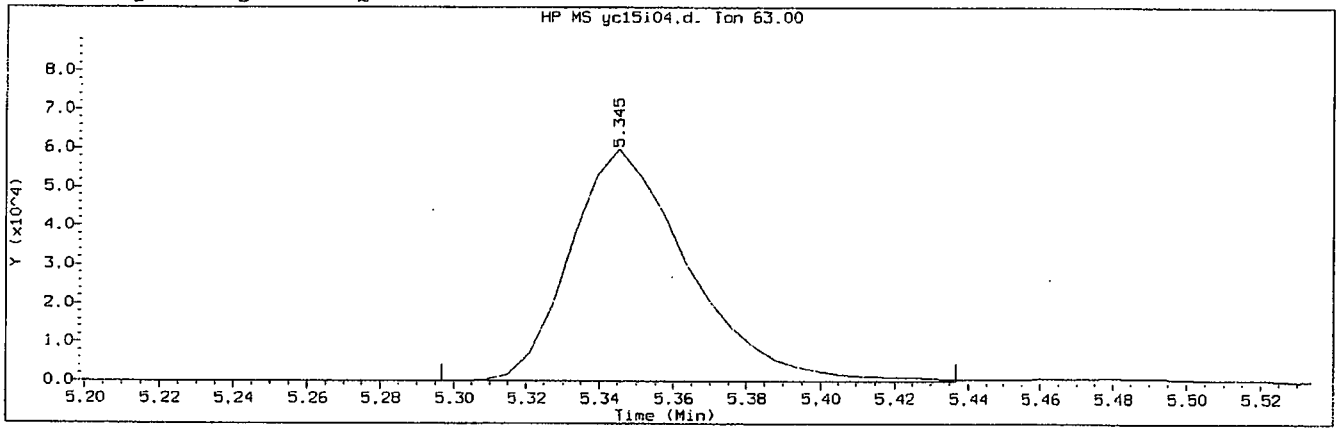
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD020 Lab Sample ID: VSTD020

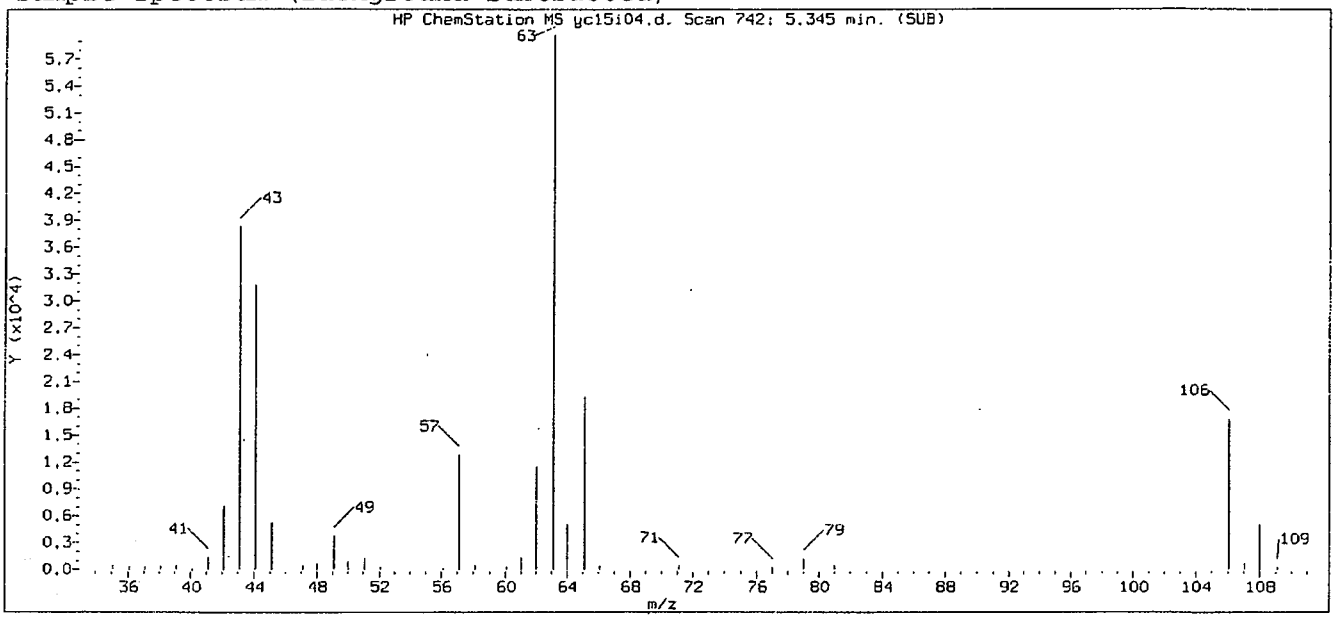
Compound Number	: 86		
Compound Name	: 2-Chloroethyl Vinyl Ether		
Scan Number	: 742		
Retention Time (minutes)	: 5.345		
Quant Ion	: 63.00		
Area (flag)	: 133418M		
On-Column Amount (ng)	: 20.3313		
Integration start scan	: 733	Integration stop scan:	756
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

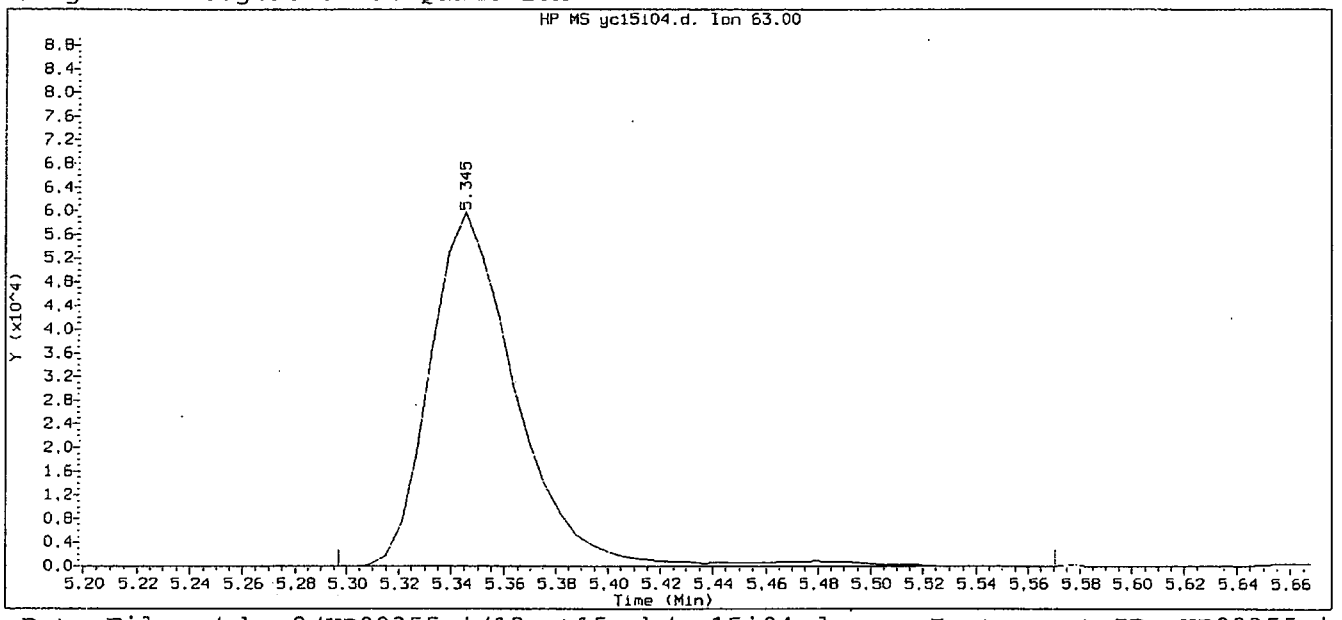
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:09
Date, time and analyst ID of latest file update: 15-Oct-2012 15:09 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compound Number	: 86		
Compound Name	: 2-Chloroethyl Vinyl Ether		
Scan Number	: 742		
Retention Time (minutes)	: 5.345		
Quant Ion	: 63.00		
Area	: 136383		
On-column Amount (ng)	: 21.2362		
Integration start scan	: 733	Integration stop scan:	778
Y at integration start	: 0	Y at integration end:	0

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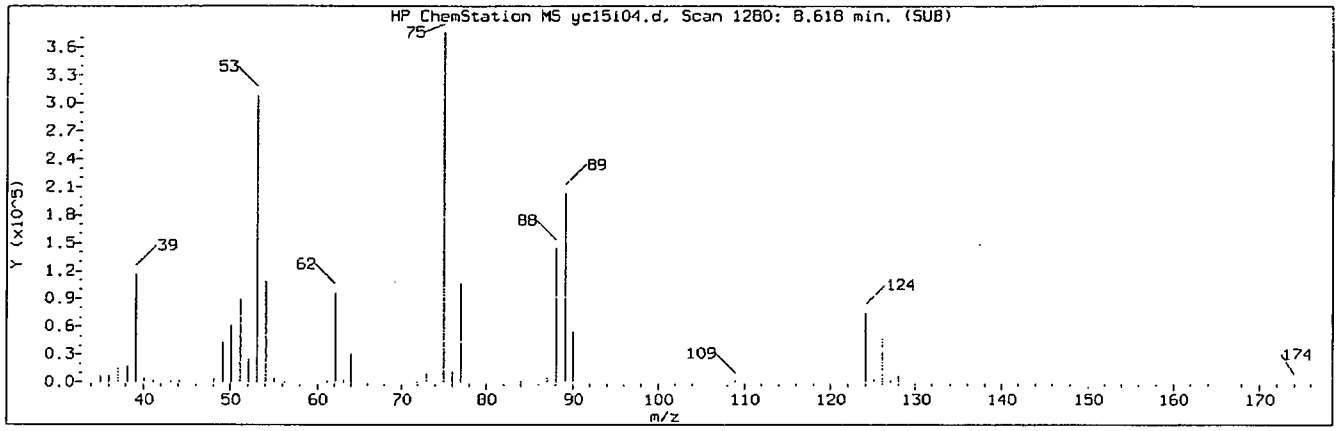
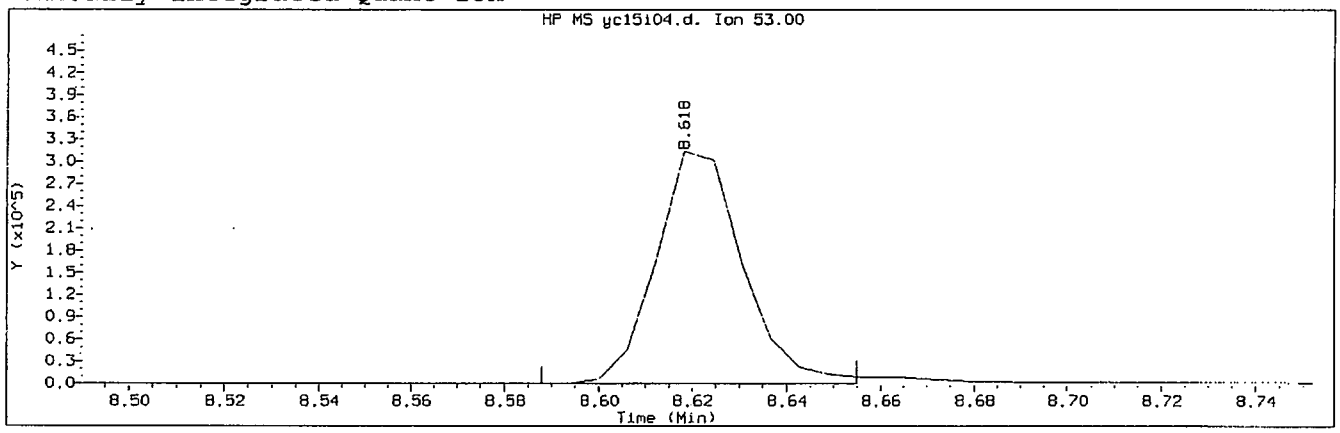
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD020 Lab Sample ID: VSTD020

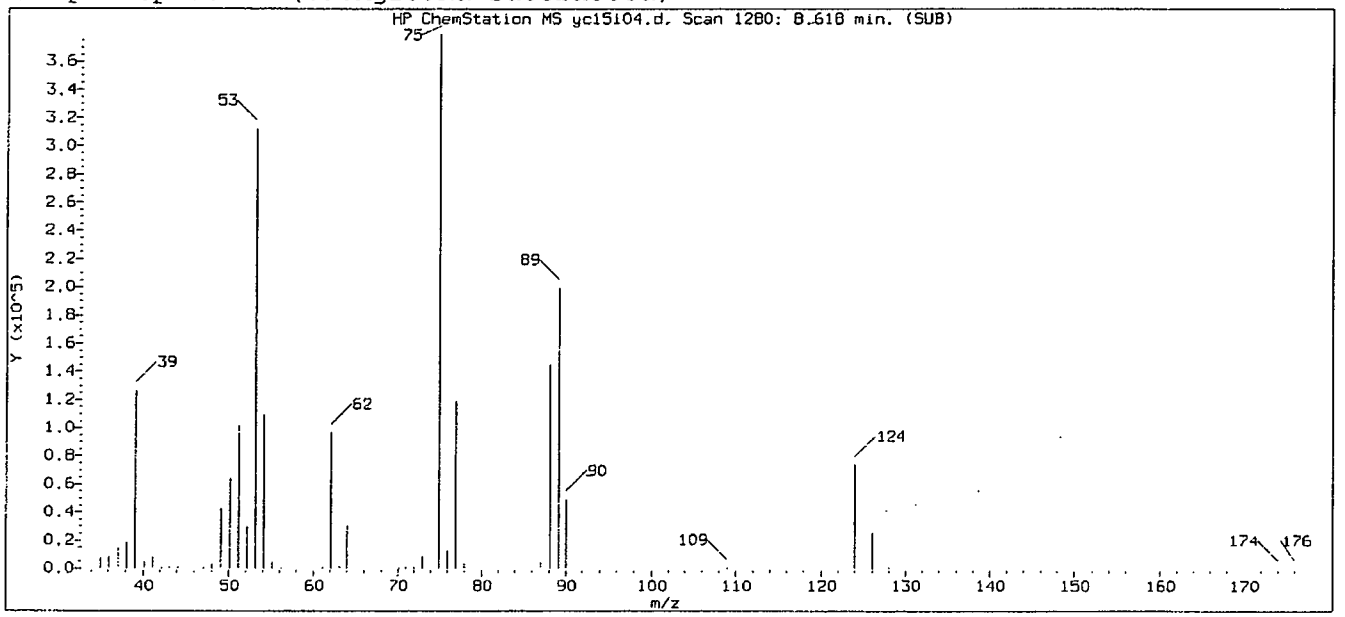
Compound Number : 124
Compound Name : trans-1,4-Dichloro-2-Butene
Scan Number : 1280
Retention Time (minutes): 8.618
Quant Ion : 53.00
Area (flag) : 400124M
On-Column Amount (ng) : 107.1226
Integration start scan : 1274 Integration stop scan: 1285
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

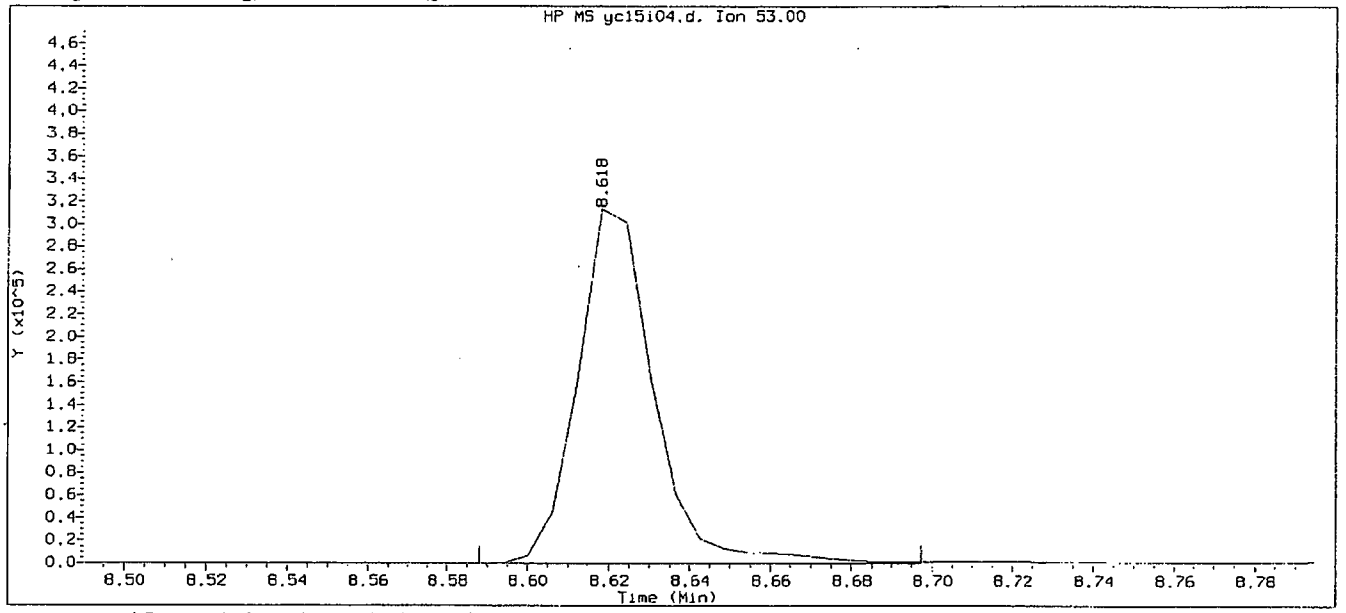
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i04.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 14:54 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:09
Date, time and analyst ID of latest file update: 15-Oct-2012 15:09 Automation

Sample Name: VSTD020 Lab Sample ID: VSTD020

Compound Number	: 124		
Compound Name	: trans-1,4-Dichloro-2-Butene		
Scan Number	: 1280		
Retention Time (minutes)	: 8.618		
Quant Ion	: 53.00		
Area	: 410660		
On-column Amount (ng)	: 110.0256		
Integration start scan	: 1274	Integration stop scan:	1292
Y at integration start	: 0	Y at integration end:	0

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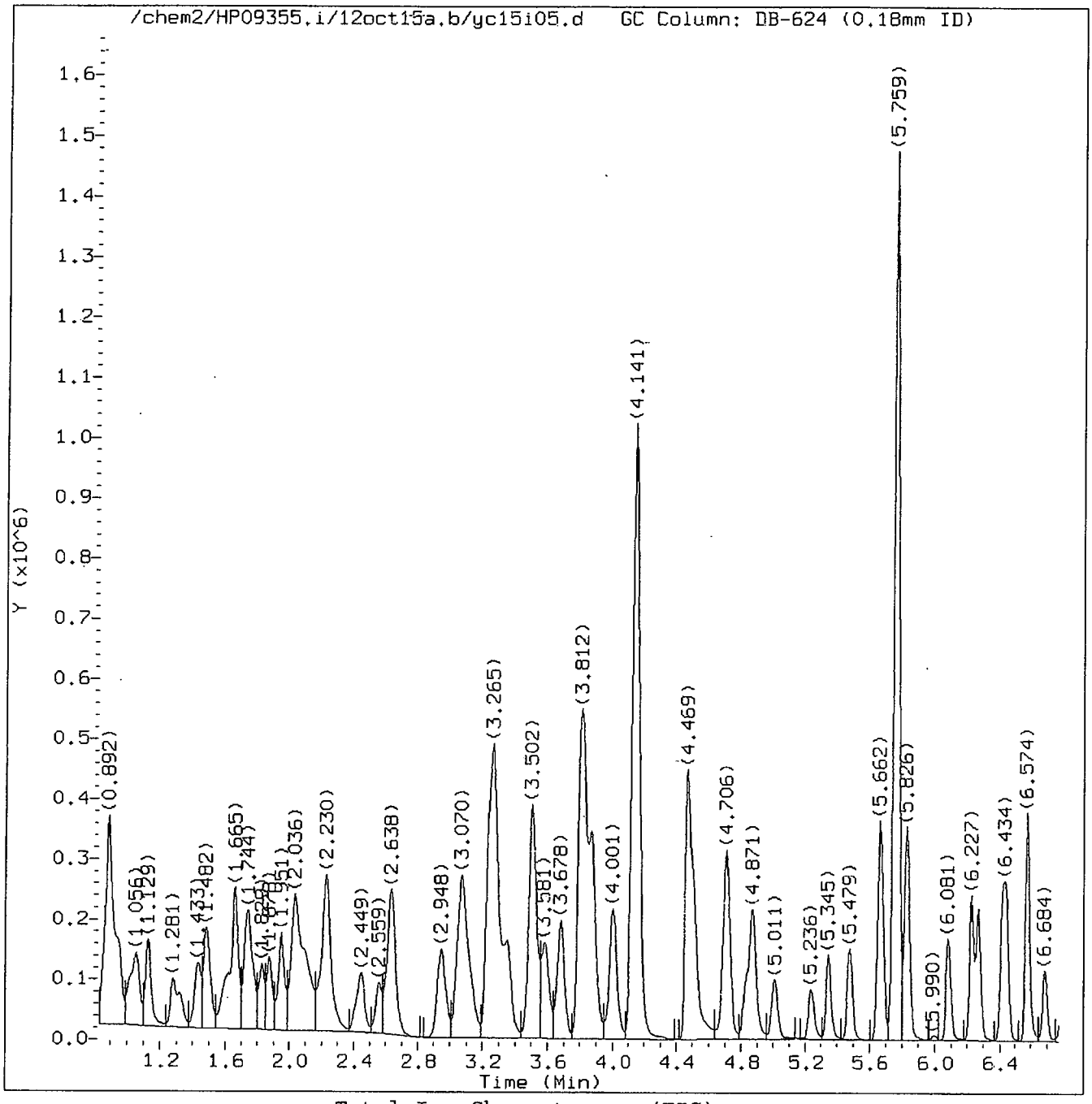
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

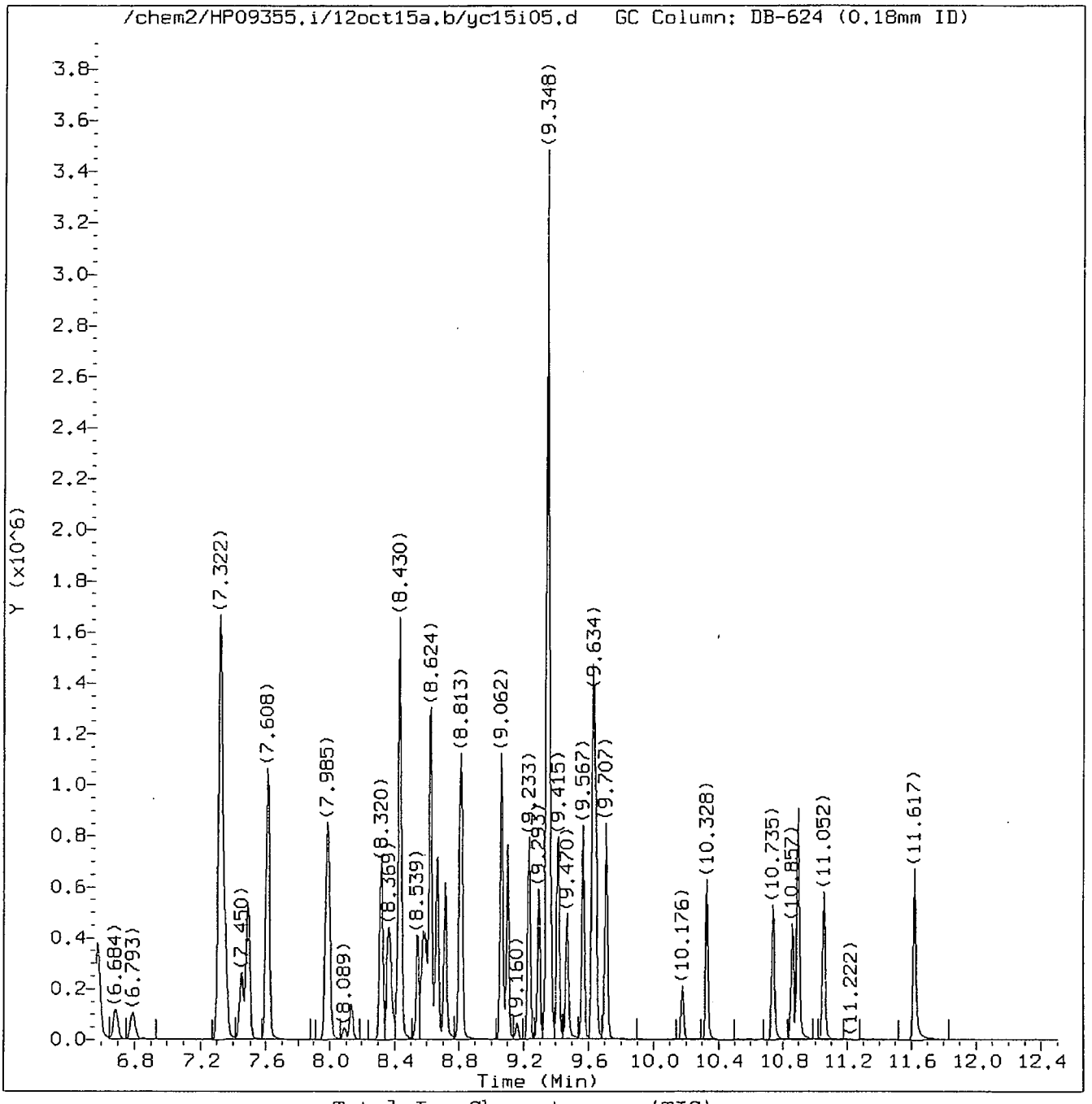
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Dichlorodifluoromethane	(1)	1.020	85	103529	10.985
3) Chloromethane	(1)	1.056	50	110543M	11.061
4) 1,3-Butadiene	(1)	1.123	39	37617	8.944
5) Vinyl Chloride	(1)	1.129	62	110898	11.328
7) Bromomethane	(1)	1.281	94	74828	11.694
8) Chloroethane	(1)	1.324	64	61076	11.512
9) Dichlorofluoromethane	(1)	1.433	67	121342	10.416
11) n-Pentane	(1)	1.482	43	103221M	10.761
10) Trichlorofluoromethane	(1)	1.488	101	119539M	11.353
14) Freon 123a	(1)	1.604	67	78947	10.603
15) Acrolein	(4)	1.665	56	312584	106.412
16) 1,1-Dichloroethene	(1)	1.732	96	59029	10.431
17) Acetone	(1)	1.750	58	34961	22.115
18) Freon 113	(1)	1.756	101	60121	10.343
20) Methyl Iodide	(1)	1.829	142	111961	10.396
21) 2-Propanol	(4)	1.829	45	142231	115.166
22) Carbon Disulfide	(1)	1.878	76	176244	10.107
24) Allyl Chloride	(1)	1.951	41	105544	10.110
25) Methyl Acetate	(1)	1.957	43	90864M	10.545
26) Methylene Chloride	(1)	2.030	84	72382	10.281
28)*t-Butyl Alcohol-d10	(4)	2.048	65	440407	250.000
29) t-Butyl Alcohol	(4)	2.097	59	266972M	122.225
30) Acrylonitrile	(1)	2.194	53	63180M	10.650
31) trans-1,2-Dichloroethene	(1)	2.230	96	69662	10.283
32) Methyl Tertiary Butyl Ether	(1)	2.230	73	252720	10.786
33) n-Hexane	(1)	2.443	57	104765	10.329
34) 1,1-Dichloroethane	(1)	2.559	63	127586	10.374
36) di-Isopropyl Ether	(1)	2.632	45	264955	10.746
37) 2-Chloro-1,3-Butadiene	(1)	2.638	53	107664	10.314
39) Ethyl t-Butyl Ether	(1)	2.948	59	257482	10.845
41) 2-Butanone	(1)	3.046	43	183671	21.417
40) cis-1,2-Dichloroethene	(1)	3.064	96	78231	10.320
42) 2,2-Dichloropropane	(1)	3.070	77	95027	10.286
43) Propionitrile	(4)	3.125	54	305049	112.064
46) Methacrylonitrile	(1)	3.259	67	328789	56.007
47) Bromochloromethane	(1)	3.277	128	40854	9.936
48) Tetrahydrofuran	(4)	3.319	71	51160	20.075
50) Chloroform	(1)	3.356	83	127266	10.291

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
52)$Dibromofluoromethane	(1)	3.502	113	312171	50.474
51)$Dibromofluoromethane(mz111)	(1)	3.502	111	315869	49.934
53) 1,1,1-Trichloroethane	(1)	3.526	97	108897	10.331
56) Cyclohexane	(1)	3.581	56	126867	10.262
55) Cyclohexane (mz 69)	(1)	3.587	69	39281	10.323
54) Cyclohexane (mz 84)	(1)	3.587	84	103726	10.196
45) 1,2-Dichloroethene (total)	(1)		96	147893	20.603
57) 1,1-Dichloropropene	(1)	3.678	75	94724	10.350
58) Carbon Tetrachloride	(1)	3.684	117	80157	10.233
59) Isobutyl Alcohol	(4)	3.806	41	227067	301.788
61)$1,2-Dichloroethane-d4(mz65)	(1)	3.812	65	381229	50.101
60)$1,2-Dichloroethane-d4(mz104)	(1)	3.812	104	51640	49.475
62)$1,2-Dichloroethane-d4	(1)	3.812	102	82371	49.567
63) Benzene	(1)	3.867	78	303903	10.413
65) 1,2-Dichloroethane	(1)	3.879	62	102135	10.596
64) 1,2-Dichloroethane (mz 98)	(1)	3.879	98	9935	10.366
69) t-Amyl Methyl Ether	(1)	4.001	73	255835	10.964
71)*Fluorobenzene	(1)	4.141	96	1392369	50.000
72) n-Heptane	(1)	4.159	43	122167	10.387
73) n-Butanol	(4)	4.463	56	425513	609.798
74) Trichloroethene	(1)	4.506	95	75599	10.415
75) Methylcyclohexane (mz98)	(1)	4.700	98	53284	9.215
76) Methylcyclohexane	(1)	4.700	83	121566	9.242
77) 1,2-Dichloropropane	(1)	4.719	63	81168	10.593
78) Dibromomethane	(1)	4.834	93	54945	10.822
79) 1,4-Dioxane	(4)	4.859	88	59162	304.832
80) Methyl Methacrylate	(1)	4.871	69	102633	11.326
83) Bromodichloromethane	(1)	5.011	83	90846	10.577
85) 2-Nitropropane	(1)	5.236	41	69720	19.615
86) 2-Chloroethyl Vinyl Ether	(1)	5.345	63	81221	11.853
87) cis-1,3-Dichloropropene	(1)	5.479	75	118253	10.760
89) 4-Methyl-2-Pentanone	(1)	5.662	43	364289M	22.462
92)$Toluene-d8(mz100)	(2)	5.759	100	855815	49.253
93)$Toluene-d8	(2)	5.759	98	1330941	50.096
94) Toluene	(2)	5.826	92	194229	10.480
95) trans-1,3-Dichloropropene	(2)	6.081	75	115241	10.874
96) Ethyl Methacrylate	(2)	6.227	69	158794	11.323
97) 1,1,2-Trichloroethane	(2)	6.270	97	85797	11.456

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
98) Tetrachloroethene	(2)	6.416	166	83584	10.456
99) 1,3-Dichloropropane	(2)	6.446	76	140380	11.180
101) 2-Hexanone	(2)	6.574	43	304801	23.367
102) Dibromochloromethane	(2)	6.690	129	74345	10.785
104) 1,2-Dibromoethane	(2)	6.793	107	91802	11.295
106)*Chlorobenzene-d5	(2)	7.322	117	995614	50.000
107) Chlorobenzene	(2)	7.347	112	223665	10.839
108) 1,1,1,2-Tetrachloroethane	(2)	7.450	131	72599	10.796
109) Ethylbenzene	(2)	7.487	91	384481	10.680
110) m+p-Xylene	(2)	7.608	106	303122	21.347
113) o-Xylene	(2)	7.979	106	154748	10.790
114) Styrene	(2)	7.992	104	255209	10.657
115) Bromoform	(2)	8.131	173	58840	10.054
112) Xylene (Total)	(2)		106	457870	32.137
116) Isopropylbenzene	(2)	8.320	105	387572	10.770
118) Cyclohexanone	(4)	8.363	55	222692	259.156
119)$4-Bromofluorobenzene	(2)	8.430	95	497328	49.654
120)$4-Bromofluorobenzene(mz174)	(2)	8.436	174	427071	50.019
121) Bromobenzene	(3)	8.545	156	102292	10.848
122) 1,1,2,2-Tetrachloroethane	(3)	8.576	83	158711	11.849
123) 1,2,3-Trichloropropane	(3)	8.594	110	47848	11.487
124) trans-1,4-Dichloro-2-Butene	(3)	8.618	53	224715M	57.455
125) n-Propylbenzene	(3)	8.667	91	453851	10.994
126) 2-Chlorotoluene	(3)	8.715	126	92900	10.595
128) 4-Chlorotoluene	(3)	8.807	126	97999	10.809
127) 1,3,5-Trimethylbenzene	(3)	8.813	105	334245	10.871
130) tert-Butylbenzene	(3)	9.062	134	73248	10.608
131) Pentachloroethane	(3)	9.062	167	54346	9.555
132) 1,2,4-Trimethylbenzene	(3)	9.105	105	345797	10.901
133) sec-Butylbenzene	(3)	9.233	105	412081	10.900
134) 1,3-Dichlorobenzene	(3)	9.293	146	191735	10.772
135) p-Isopropyltoluene	(3)	9.348	119	363479	10.886
136)*1,4-Dichlorobenzene-d4	(3)	9.348	152	567514	50.000
138) 1,4-Dichlorobenzene	(3)	9.366	146	209061	11.004
139) 1,2,3-Trimethylbenzene	(3)	9.415	105	351339	10.303
141) Benzyl Chloride	(3)	9.470	91	272299	10.622
142) 1,3-Diethylbenzene	(3)	9.567	119	210244	9.987
144) 1,2-Dichlorobenzene	(3)	9.628	146	200681	11.152

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

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on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

	Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
143)	1,4-Diethylbenzene	(3)	9.628	119	216776	10.023
145)	n-Butylbenzene	(3)	9.646	92	177306	10.715
146)	1,2-Diethylbenzene	(3)	9.707	119	182281	10.071
148)	1,2-Dibromo-3-Chloropropane	(3)	10.176	75	38467	11.293
149)	1,3,5-Trichlorobenzene	(3)	10.328	180	149495	10.948
150)	1,2,4-Trichlorobenzene	(3)	10.735	180	142467	11.100
151)	Hexachlorobutadiene	(3)	10.857	225	64183	10.783
152)	Naphthalene	(3)	10.893	128	556794	11.189
153)	1,2,3-Trichlorobenzene	(3)	11.052	180	141813	11.263
154)	2-Methylnaphthalene	(3)	11.617	142	283911	10.257

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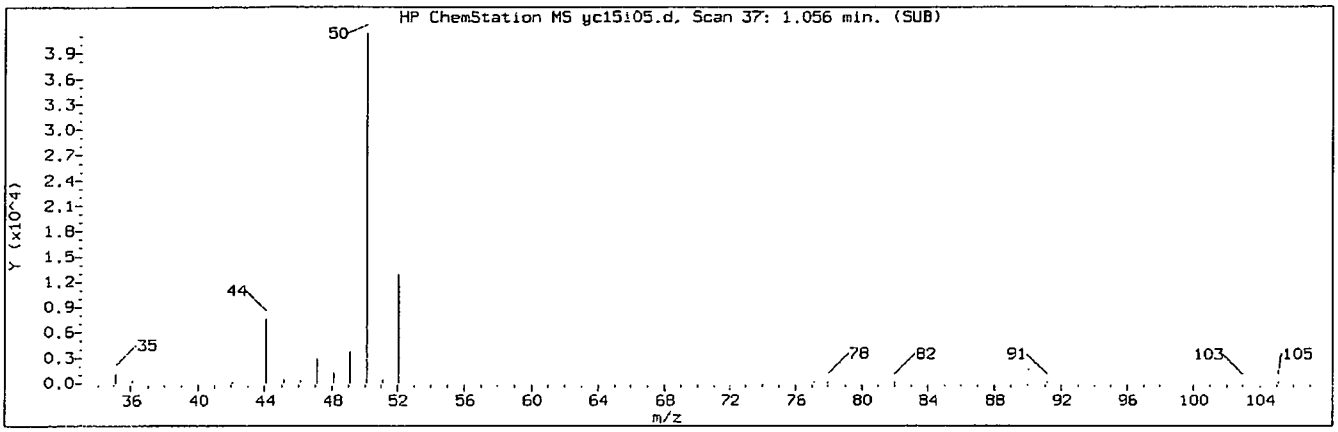
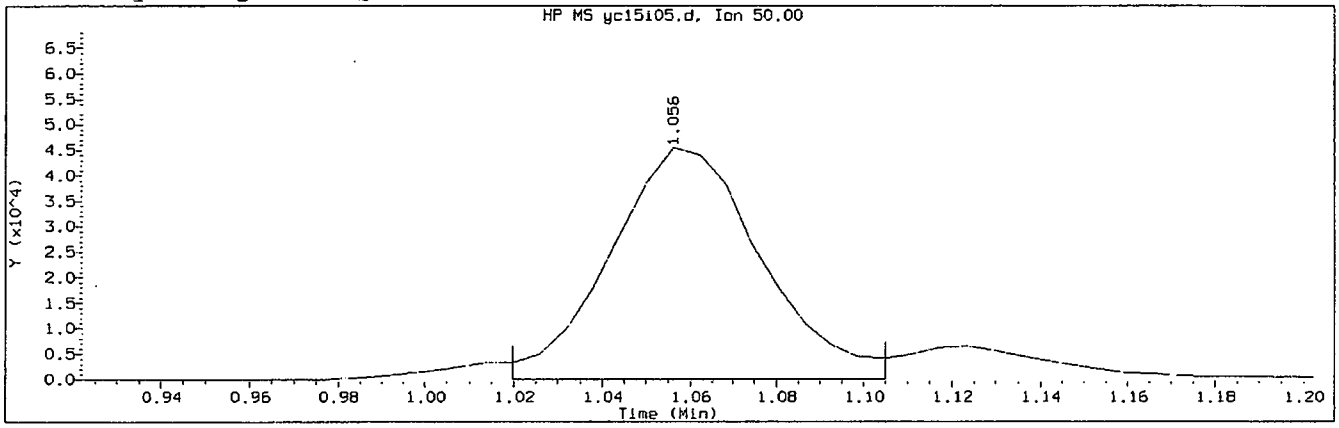
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

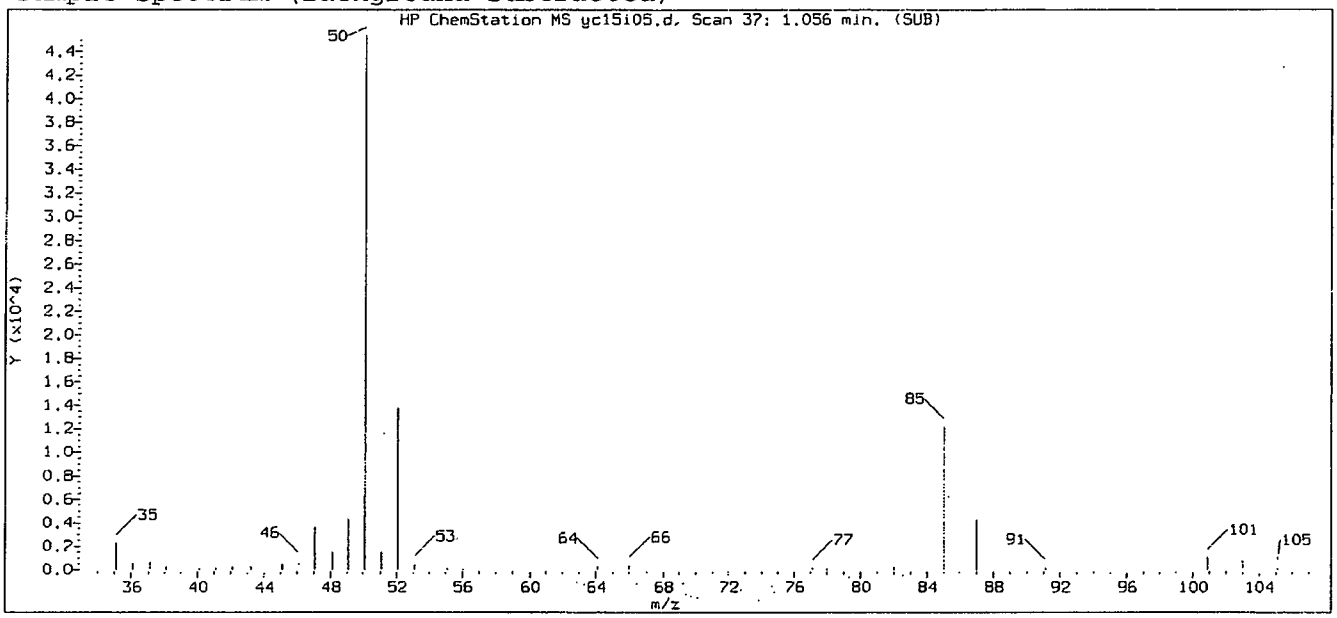
Compound Number	: 3		
Compound Name	: Chloromethane		
Scan Number	: 37		
Retention Time (minutes)	: 1.056		
Quant Ion	: 50.00		
Area (flag)	: 110543M		
On-Column Amount (ng)	: 11.0608		
Integration start scan	: 30	Integration stop scan:	44
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

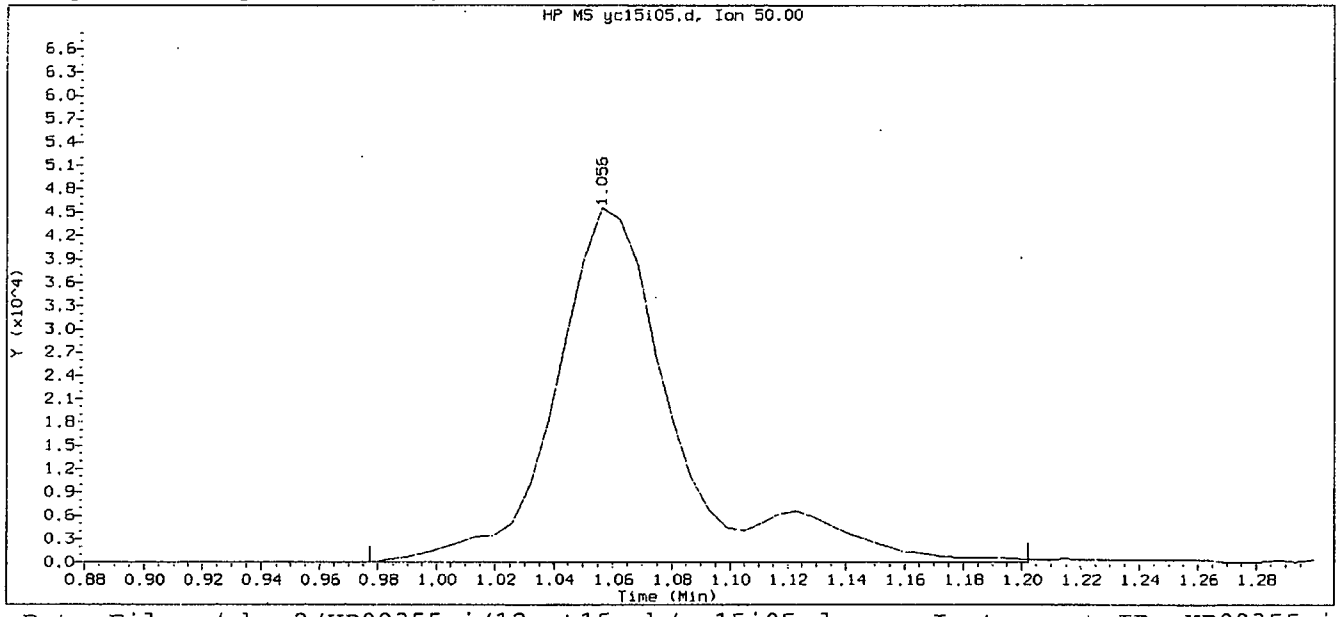
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:30
Date, time and analyst ID of latest file update: 15-Oct-2012 15:30 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number	: 3		
Compound Name	: Chloromethane		
Scan Number	: 37		
Retention Time (minutes)	: 1.056		
Quant Ion	: 50.00		
Area	: 129730		
On-column Amount (ng)	: 11.7914		
Integration start scan	: 23	Integration stop scan:	60
Y at integration start	: 0	Y at integration end:	0

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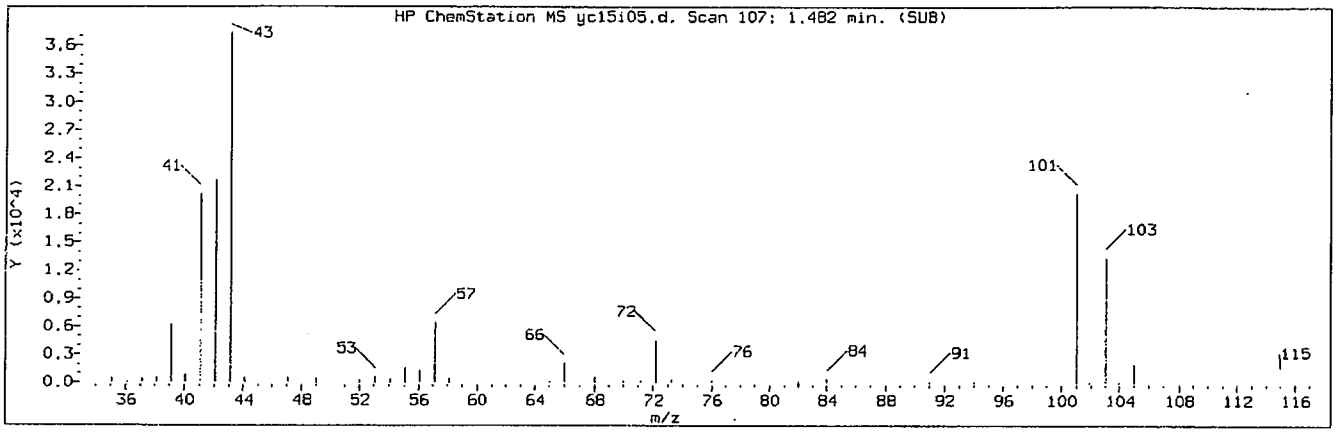
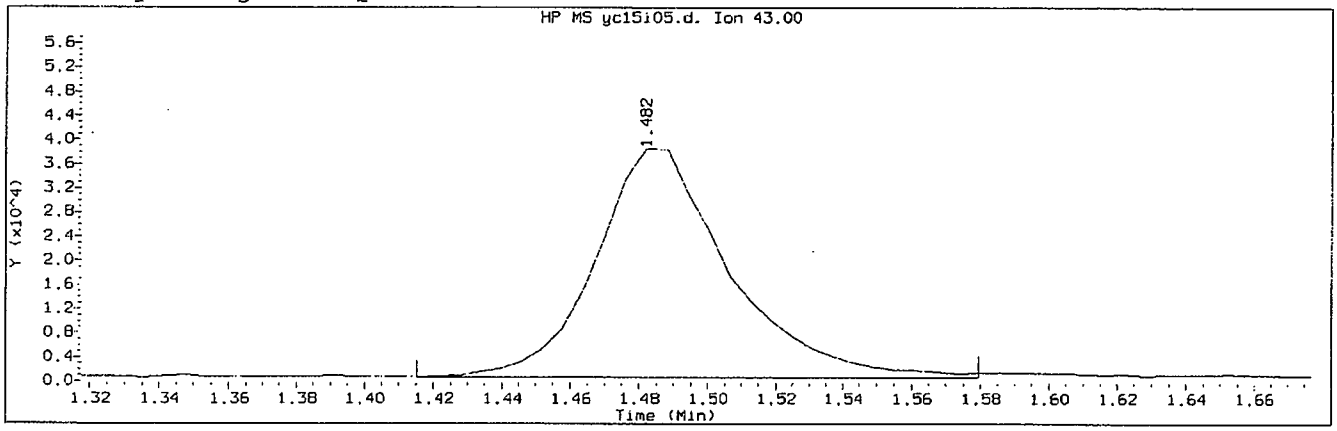
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

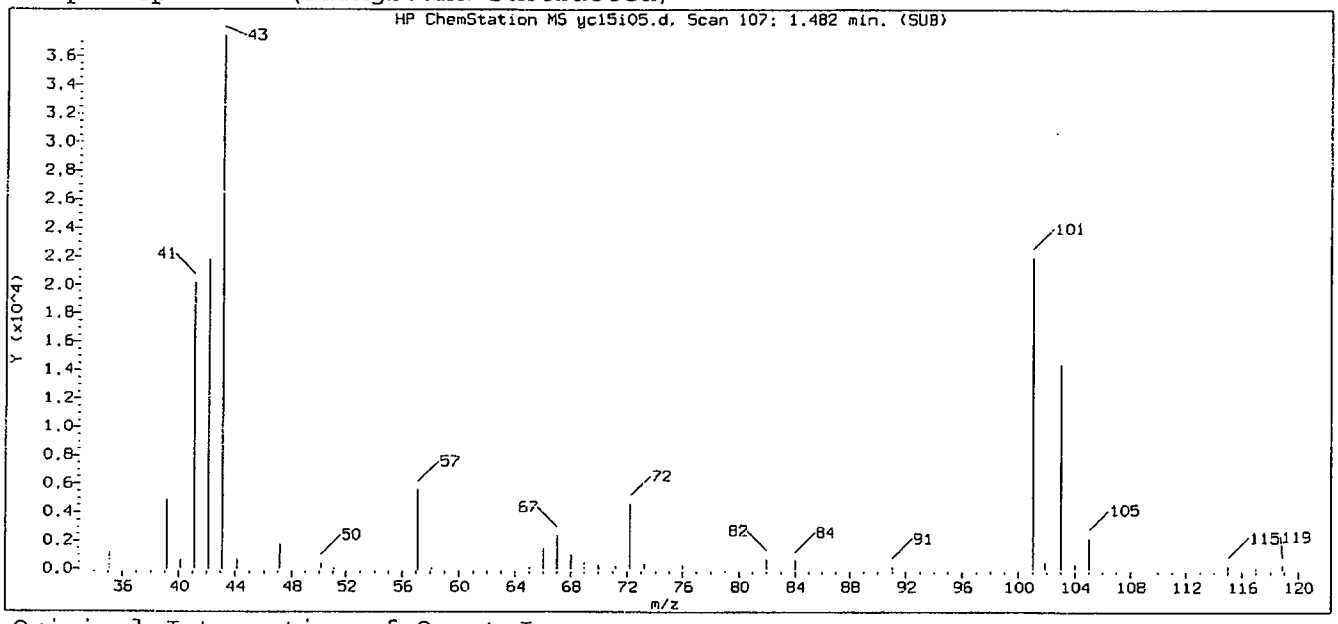
Compound Number	: 11		
Compound Name	: n-Pentane		
Scan Number	: 107		
Retention Time (minutes)	: 1.482		
Quant Ion	: 43.00		
Area (flag)	: 103221M		
On-Column Amount (ng)	: 10.7607		
Integration start scan	: 95	Integration stop scan:	122
Y at integration start	: 654	Y at integration end:	654

Reason for manual integration: improper integration

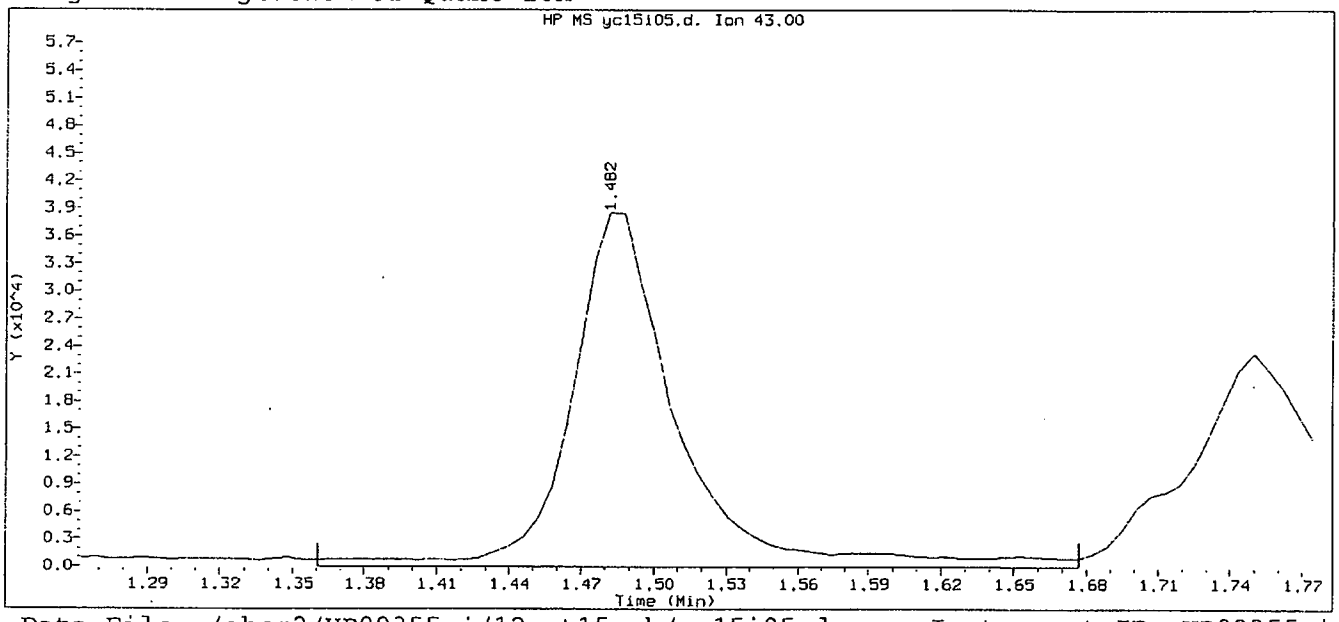
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:30
Date, time and analyst ID of latest file update: 15-Oct-2012 15:30 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number	: 11		
Compound Name	: n-Pentane		
Scan Number	: 107		
Retention Time (minutes)	: 1.482		
Quant Ion	: 43.00		
Area	: 118749		
On-column Amount (ng)	: 12.1106		
Integration start scan	: 86	Integration stop scan:	138
Y at integration start	: 0	Y at integration end:	0

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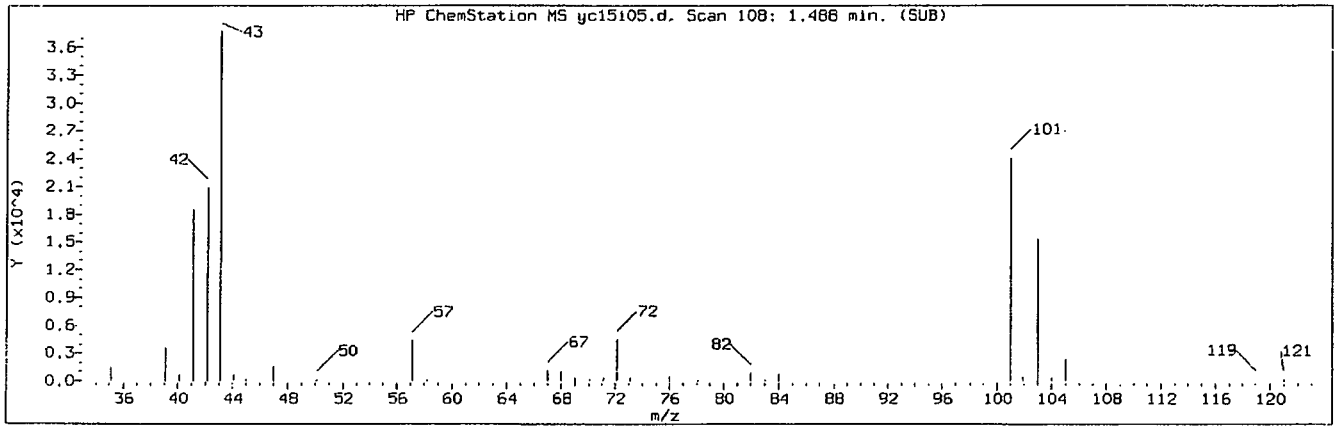
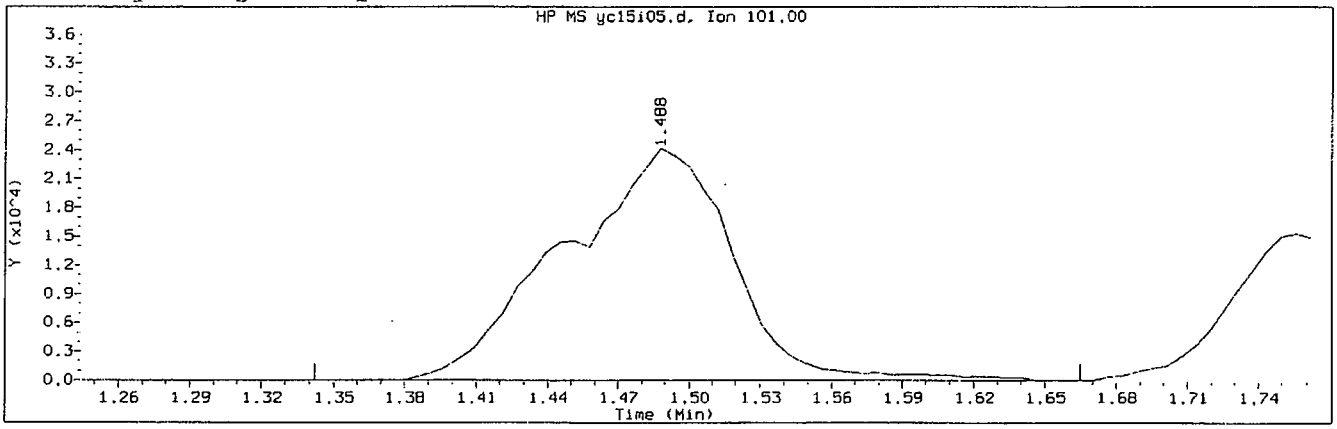
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

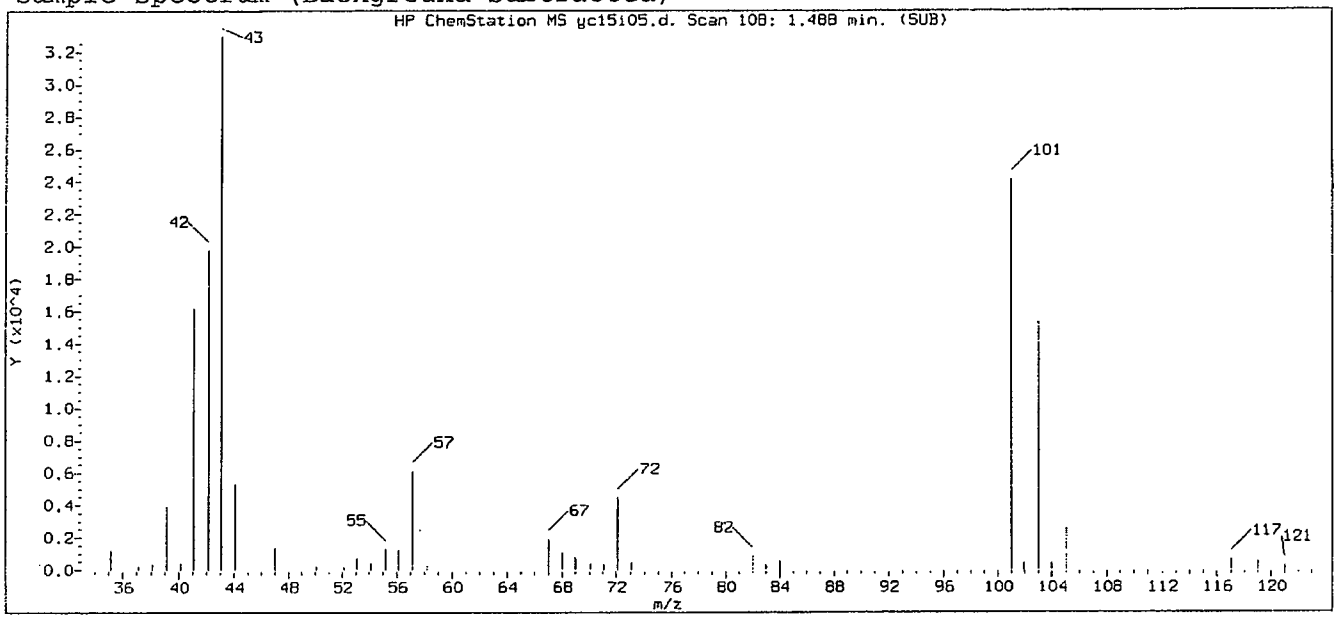
Compound Number	: 10		
Compound Name	: Trichlorofluoromethane		
Scan Number	: 108		
Retention Time (minutes)	: 1.488		
Quant Ion	: 101.00		
Area (flag)	: 119539M		
On-Column Amount (ng)	: 11.3526		
Integration start scan	: 83	Integration stop scan:	136
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

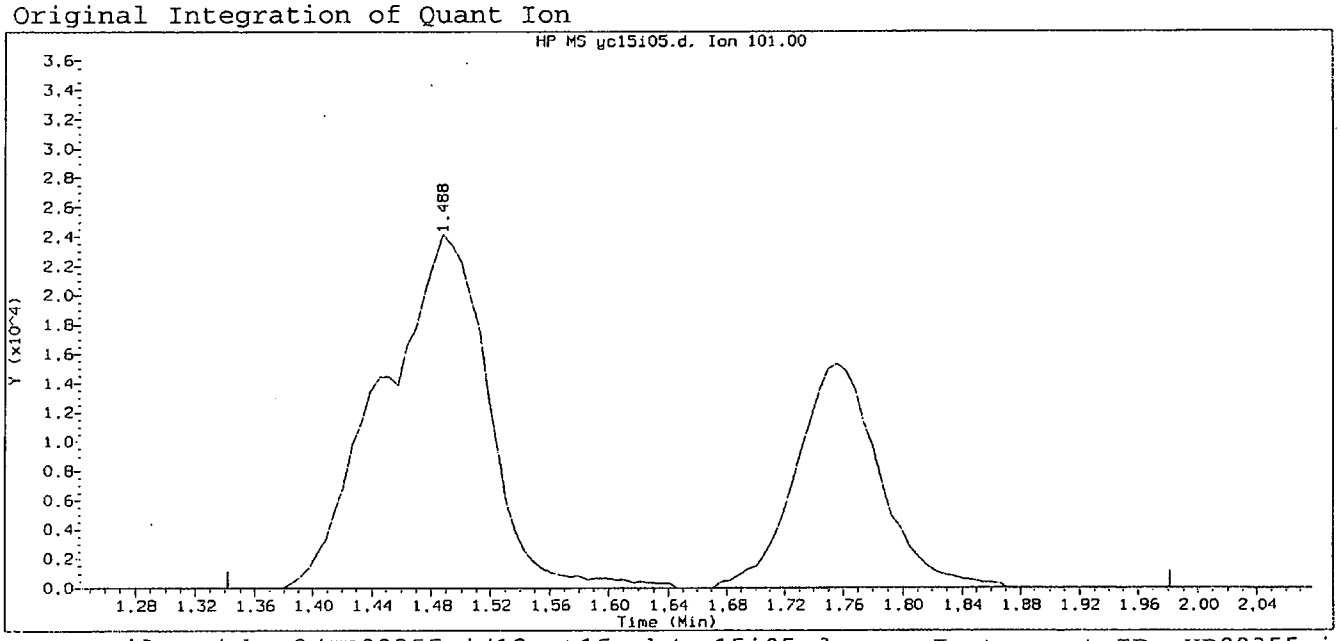
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:30
Date, time and analyst ID of latest file update: 15-Oct-2012 15:30 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number	: 10		
Compound Name	: Trichlorofluoromethane		
Scan Number	: 108		
Retention Time (minutes)	: 1.488		
Quant Ion	: 101.00		
Area	: 179656		
On-column Amount (ng)	: 15.3915		
Integration start scan	: 83	Integration stop scan:	188
Y at integration start	: 0	Y at integration end:	0

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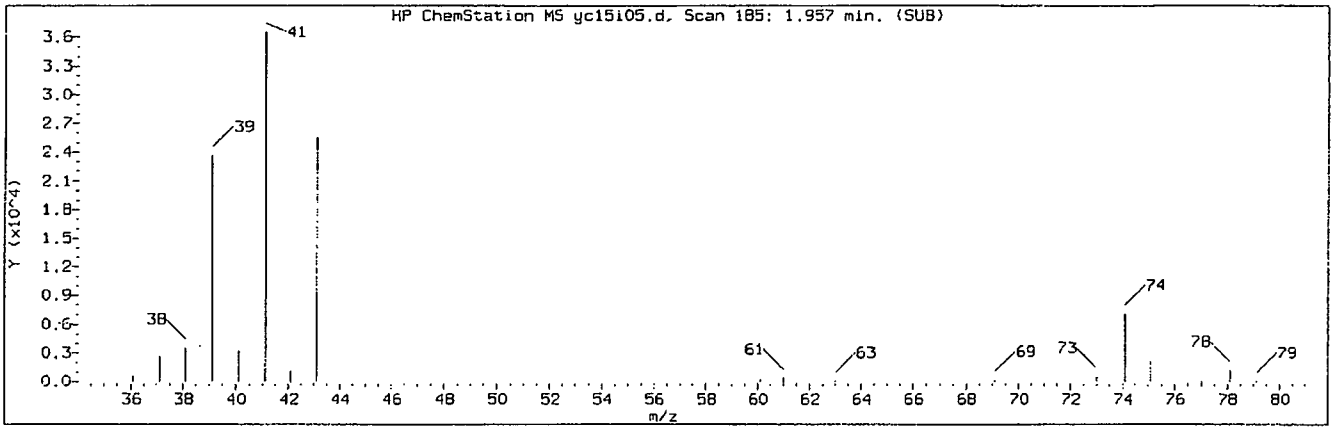
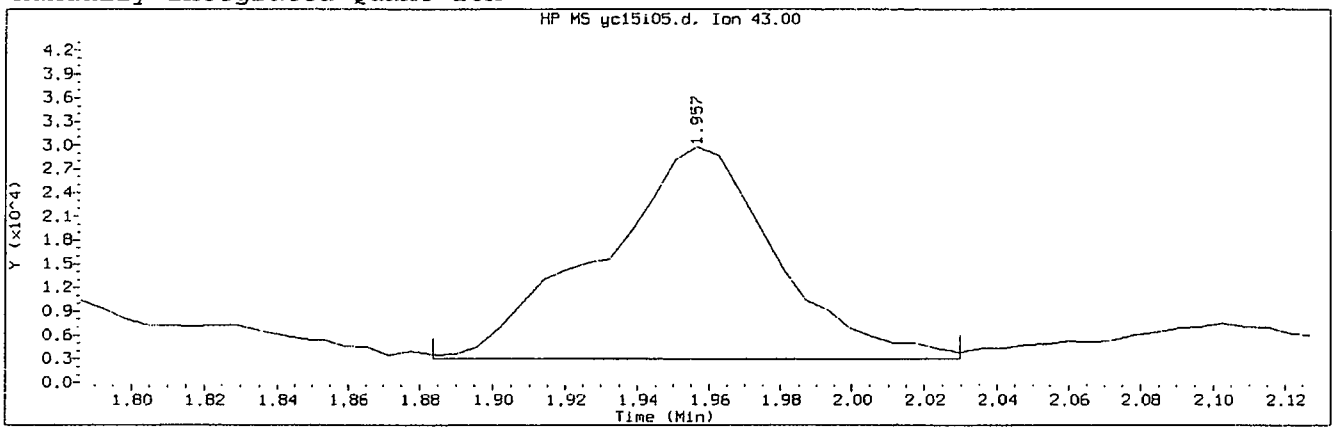
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

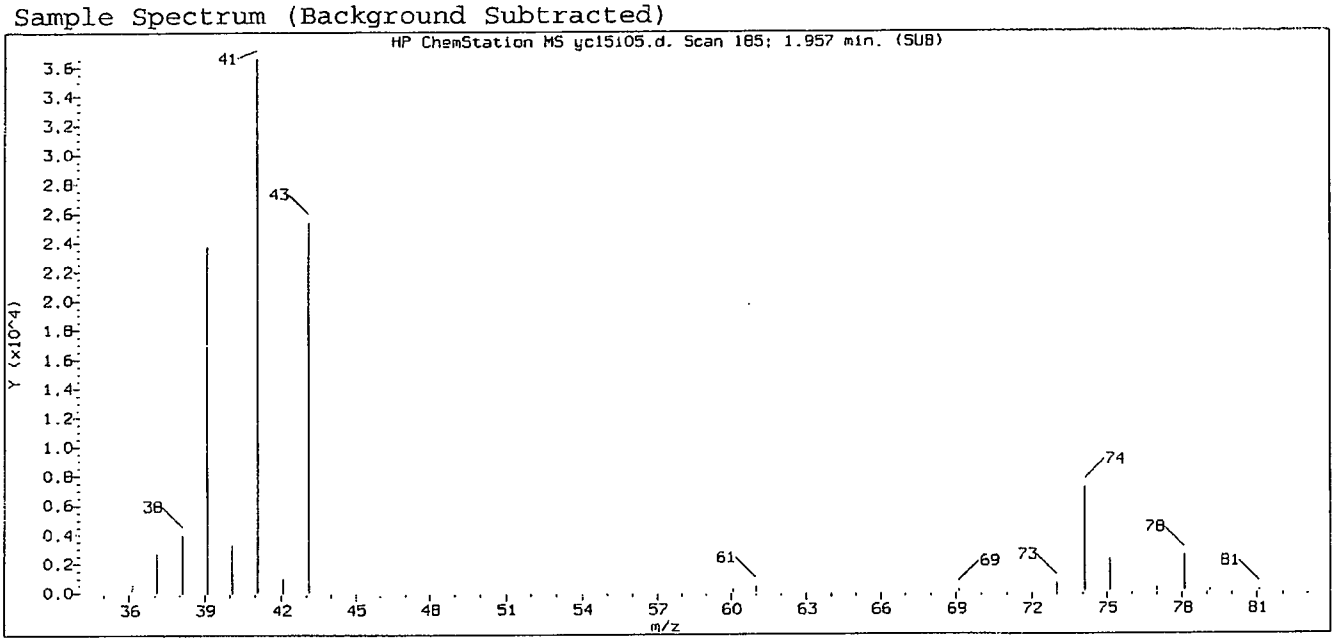
Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 185		
Retention Time (minutes)	: 1.957		
Quant Ion	: 43.00		
Area (flag)	: 90864M		
On-Column Amount (ng)	: 10.5445		
Integration start scan	: 172	Integration stop scan:	196
Y at integration start	: 2996	Y at integration end:	2996

Reason for manual integration: improper integration

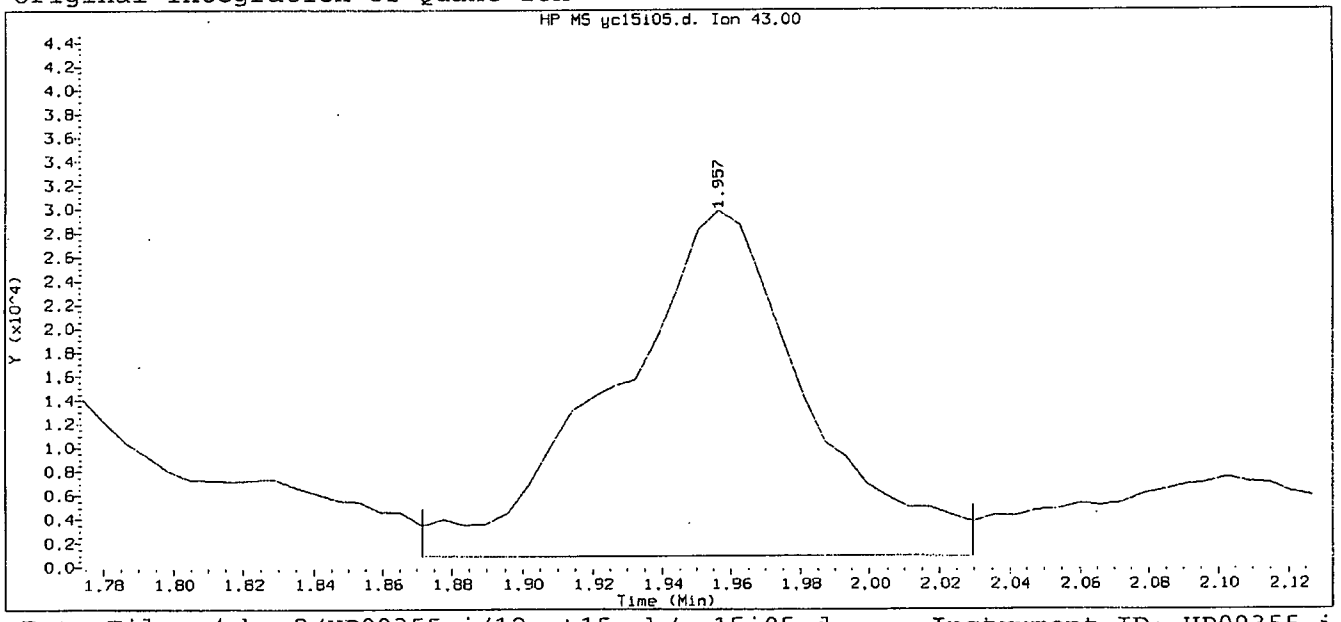
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:30
Date, time and analyst ID of latest file update: 15-Oct-2012 15:30 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 185		
Retention Time (minutes)	: 1.957		
Quant Ion	: 43.00		
Area	: 111203		
On-column Amount (ng)	: 11.5653		
Integration start scan	: 170	Integration stop scan:	196
Y at integration start	: 883	Y at integration end:	883

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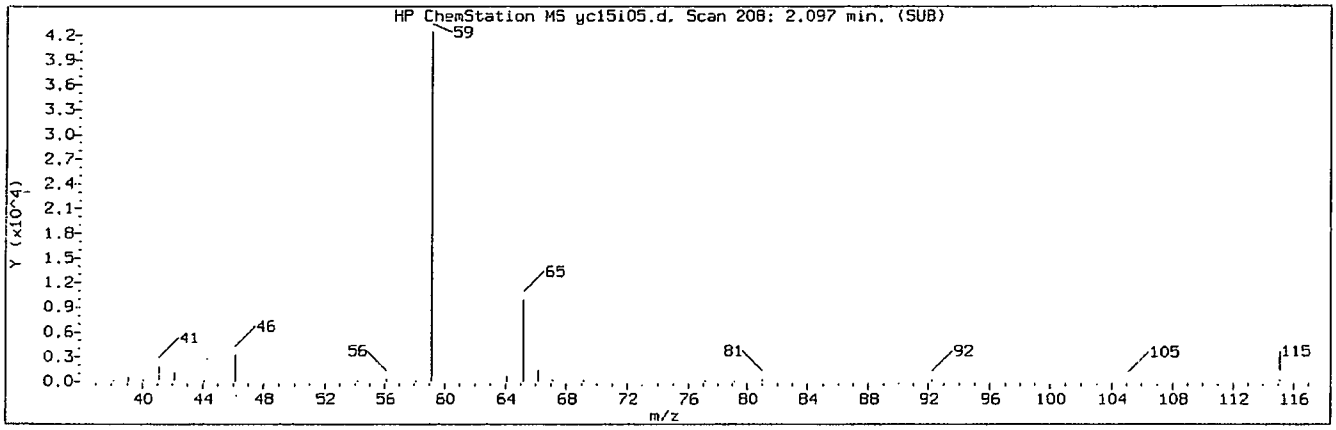
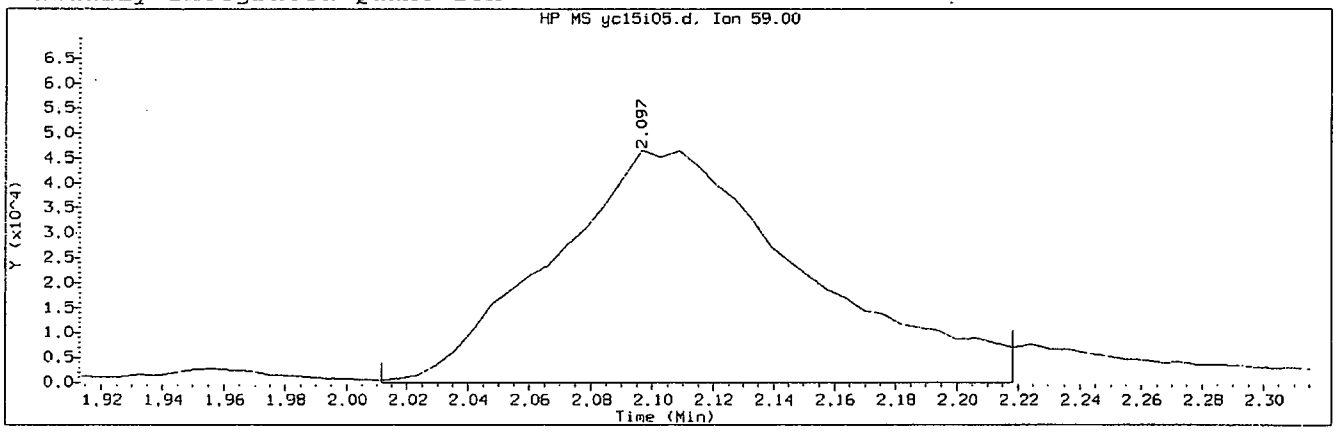
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

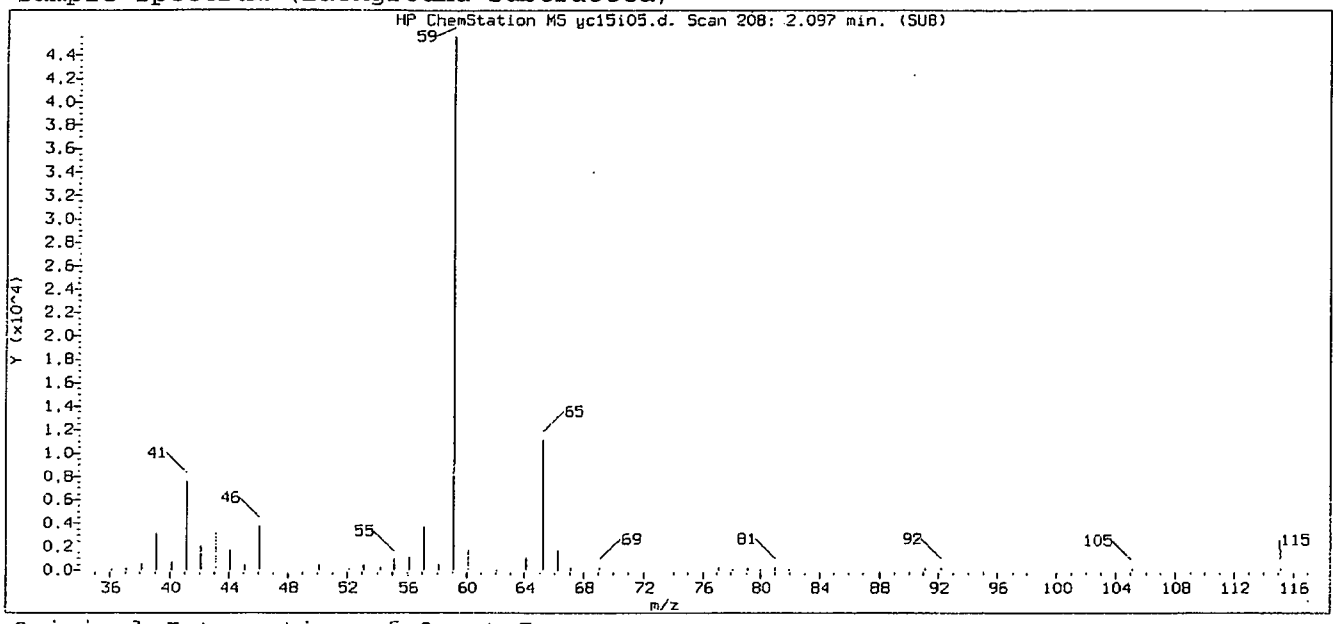
Compound Number : 29
Compound Name : t-Butyl Alcohol
Scan Number : 208
Retention Time (minutes): 2.097
Quant Ion : 59.00
Area (flag) : 266972M
On-Column Amount (ng) : 122.2250
Integration start scan : 193 Integration stop scan: 227
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

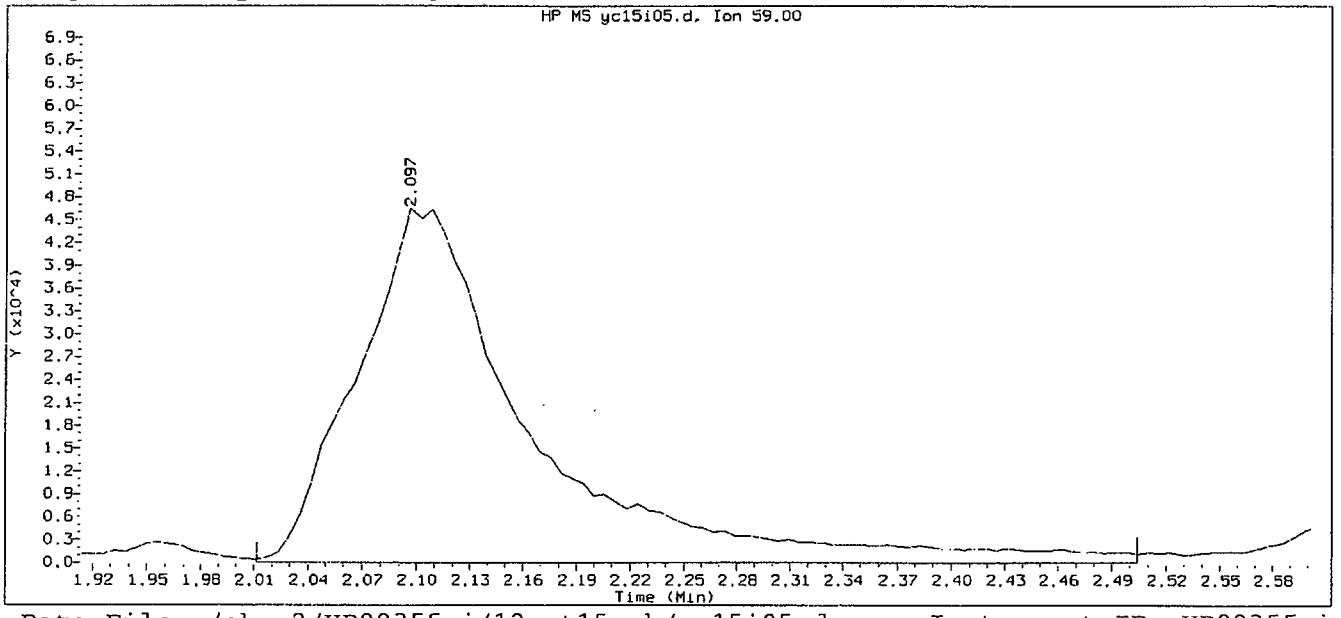
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

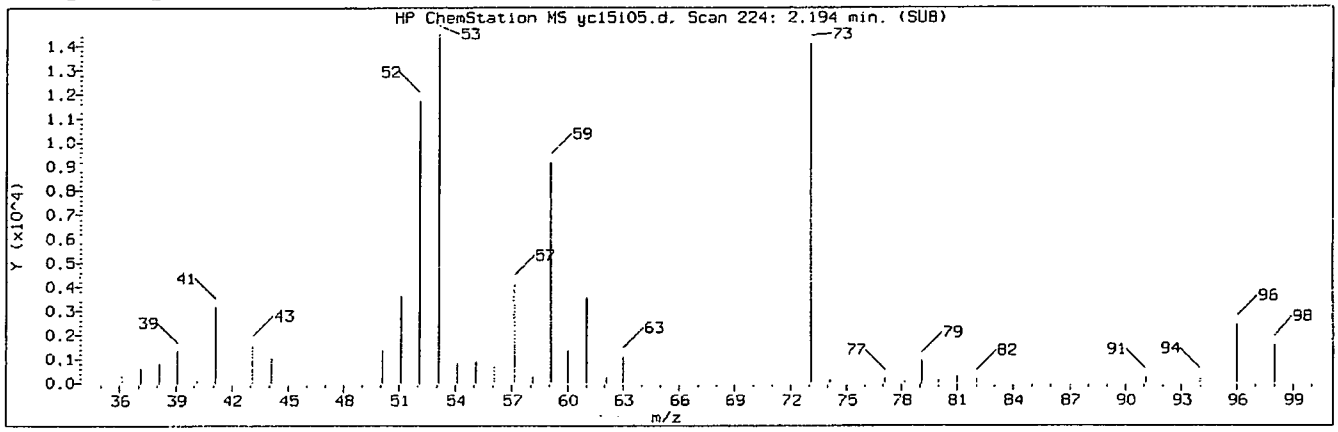
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:30
Date, time and analyst ID of latest file update: 15-Oct-2012 15:30 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

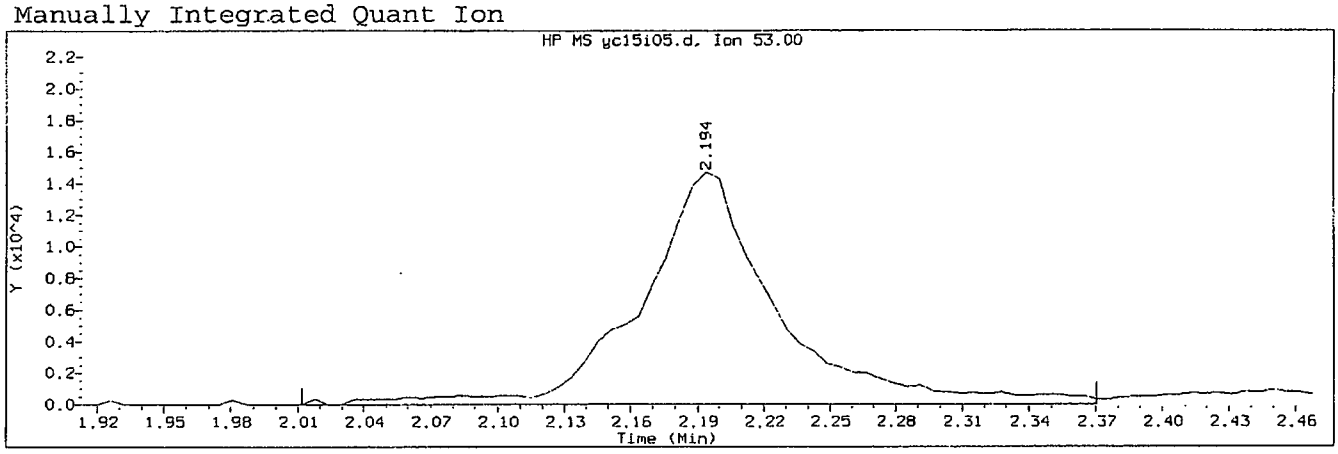
Compound Number	: 29		
Compound Name	: t-Butyl Alcohol		
Scan Number	: 208		
Retention Time (minutes)	: 2.097		
Quant Ion	: 59.00		
Area	: 314300		
On-column Amount (ng)	: 120.3399		
Integration start scan	: 193	Integration stop scan:	274
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

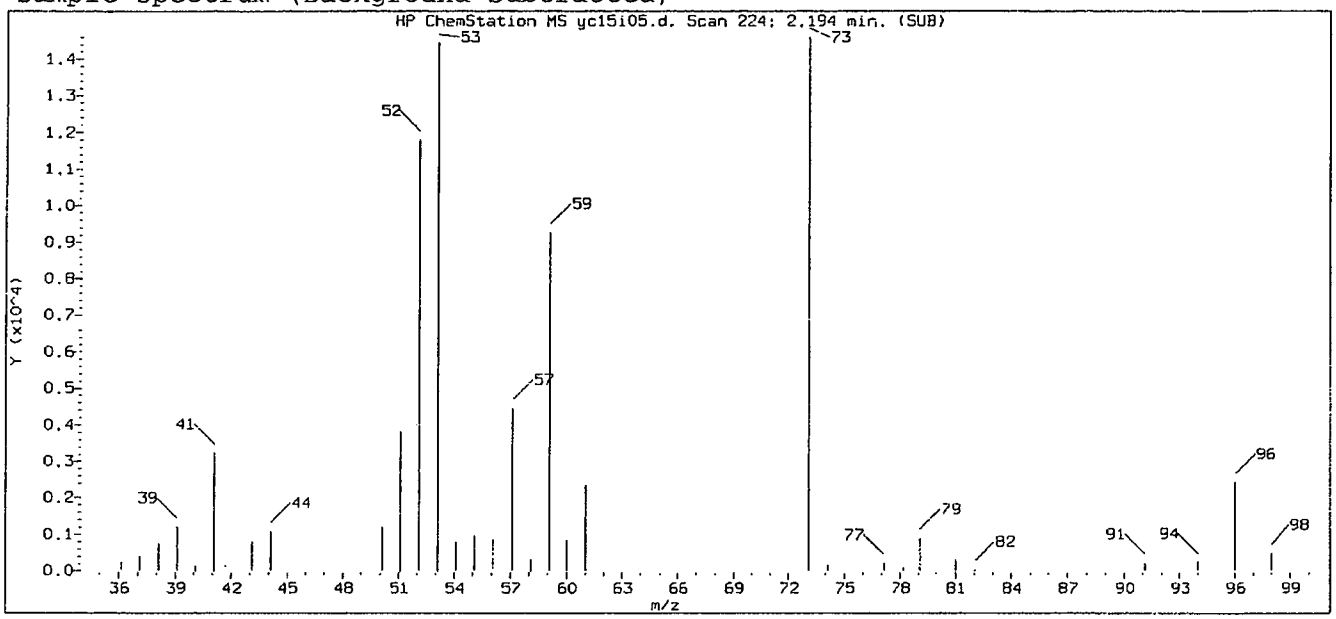
Compound Number	: 30		
Compound Name	: Acrylonitrile		
Scan Number	: 224		
Retention Time (minutes)	: 2.194		
Quant Ion	: 53.00		
Area (flag)	: 63180M		
On-Column Amount (ng)	: 10.6504		
Integration start scan	: 193	Integration stop scan:	252
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

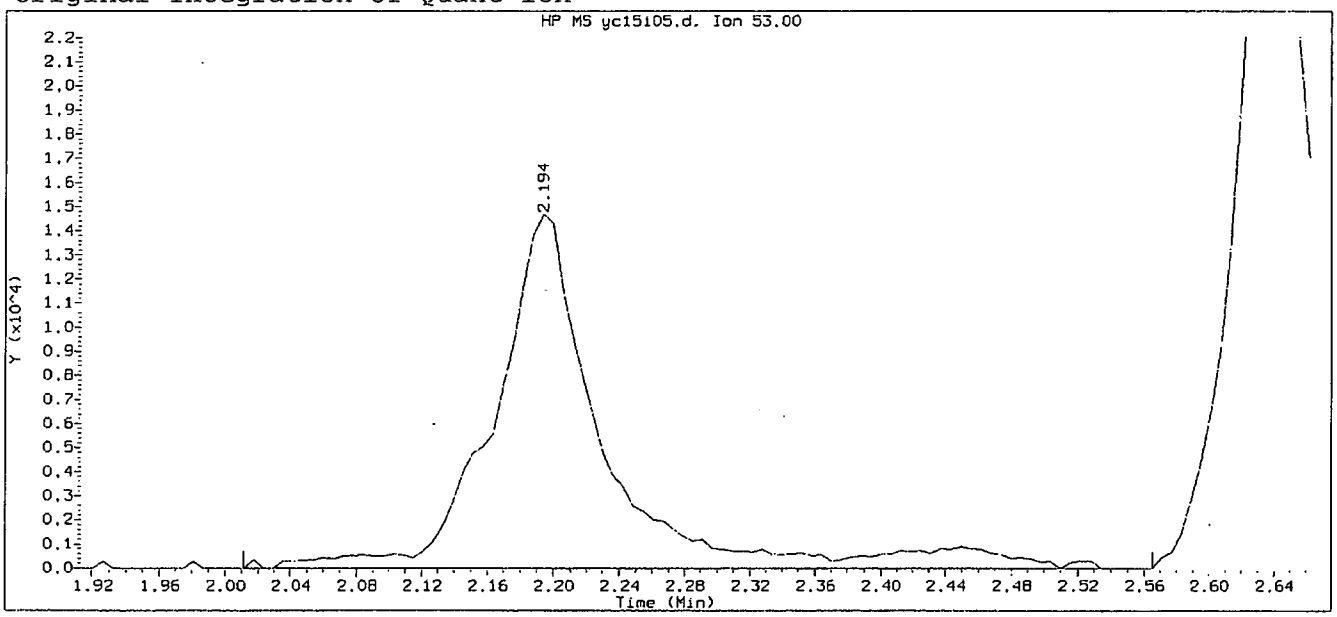
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

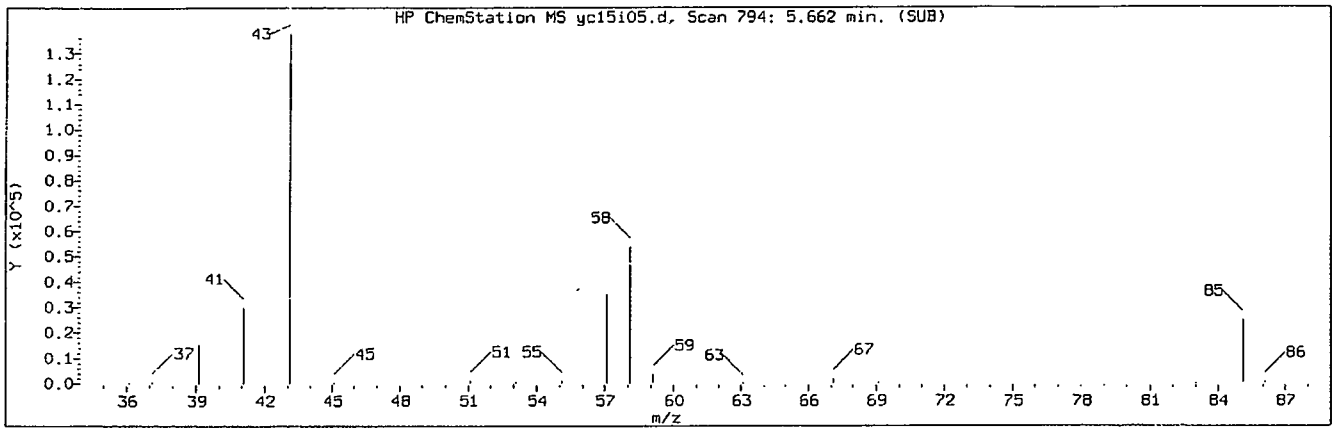
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:30
Date, time and analyst ID of latest file update: 15-Oct-2012 15:30 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

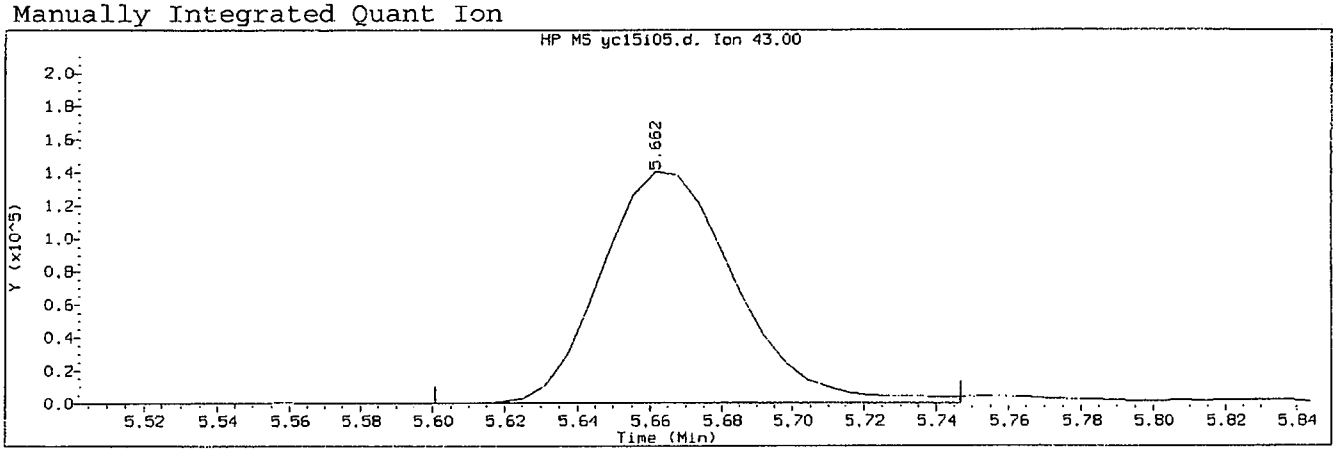
Compound Number	: 30		
Compound Name	: Acrylonitrile		
Scan Number	: 224		
Retention Time (minutes)	: 2.194		
Quant Ion	: 53.00		
Area	: 68166		
On-column Amount (ng)	: 11.4599		
Integration start scan	: 193	Integration stop scan:	284
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

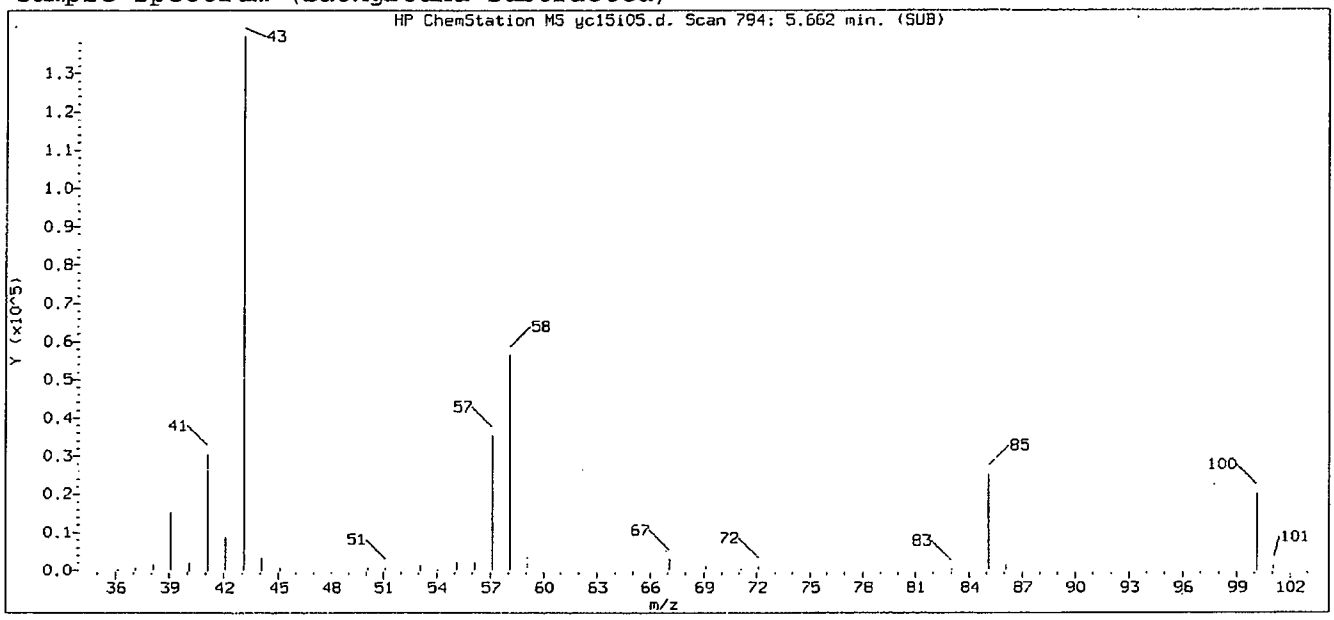
Compound Number	: 89		
Compound Name	: 4-Methyl-2-Pentanone		
Scan Number	: 794		
Retention Time (minutes)	: 5.662		
Quant Ion	: 43.00		
Area (flag)	: 364289M		
On-Column Amount (ng)	: 22.4615		
Integration start scan	: 783	Integration stop scan:	807
Y at integration start	: 268	Y at integration end:	268

Reason for manual integration: improper integration

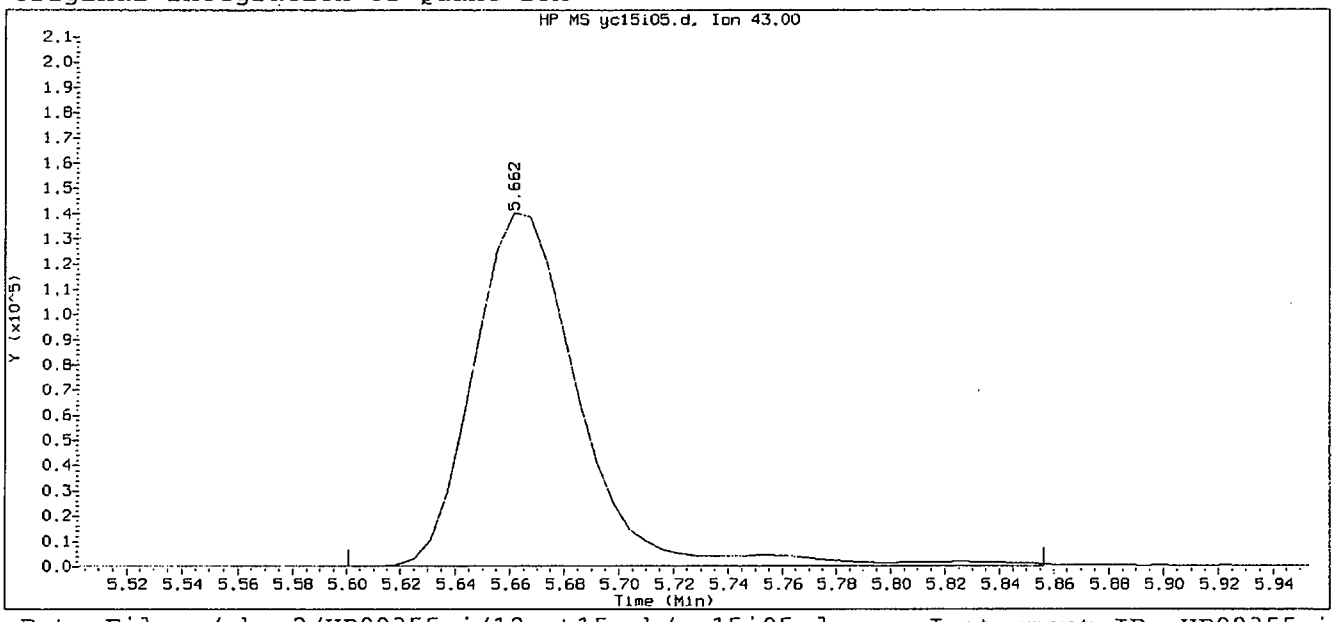
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:30
Date, time and analyst ID of latest file update: 15-Oct-2012 15:30 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number	: 89		
Compound Name	: 4-Methyl-2-Pentanone		
Scan Number	: 794		
Retention Time (minutes)	: 5.662		
Quant Ion	: 43.00		
Area	: 378053		
On-column Amount (ng)	: 23.0250		
Integration start scan	: 783	Integration stop scan:	825
Y at integration start	: 268	Y at integration end:	268

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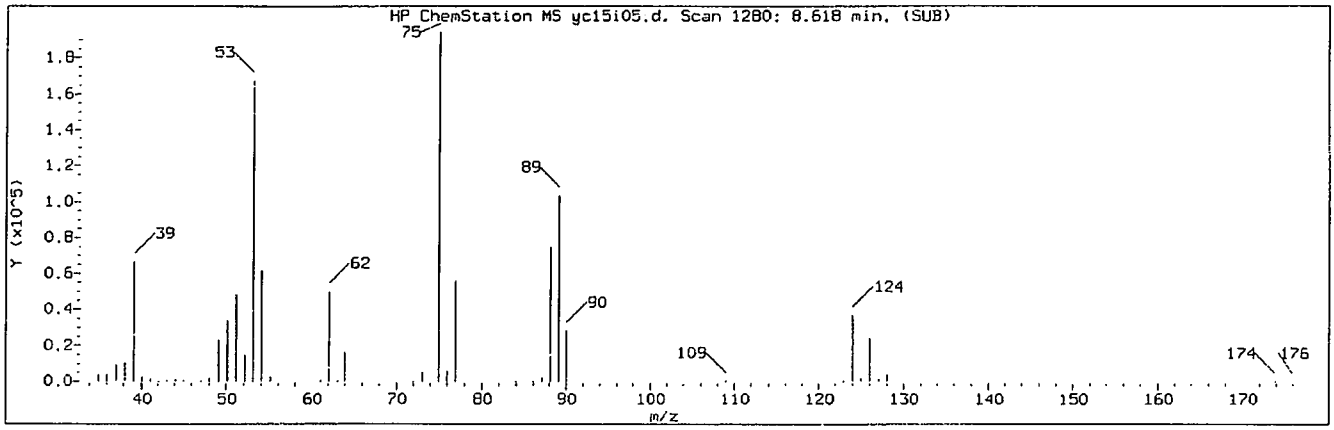
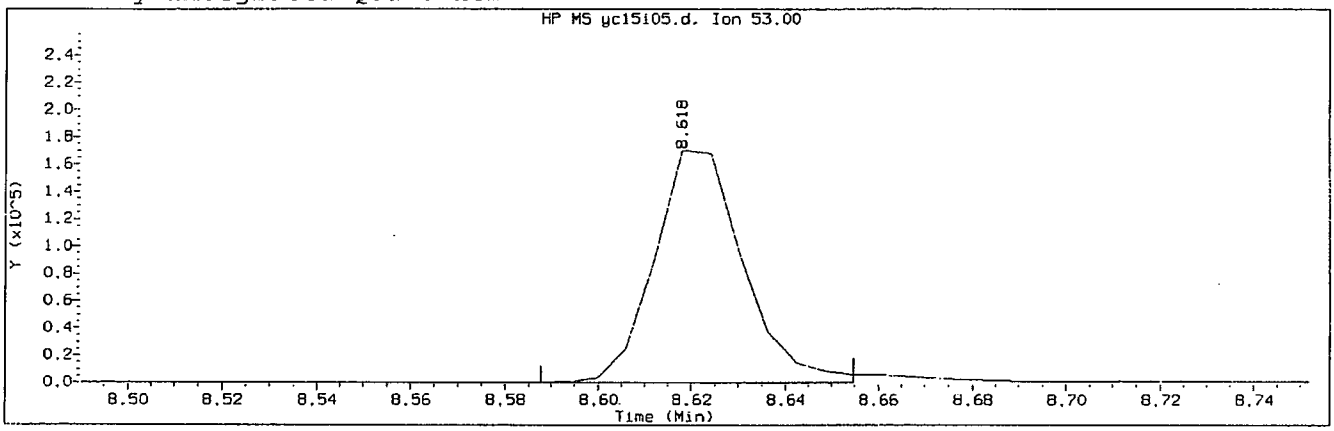
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:43
Date, time and analyst ID of latest file update: 15-Oct-2012 17:43 sej02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

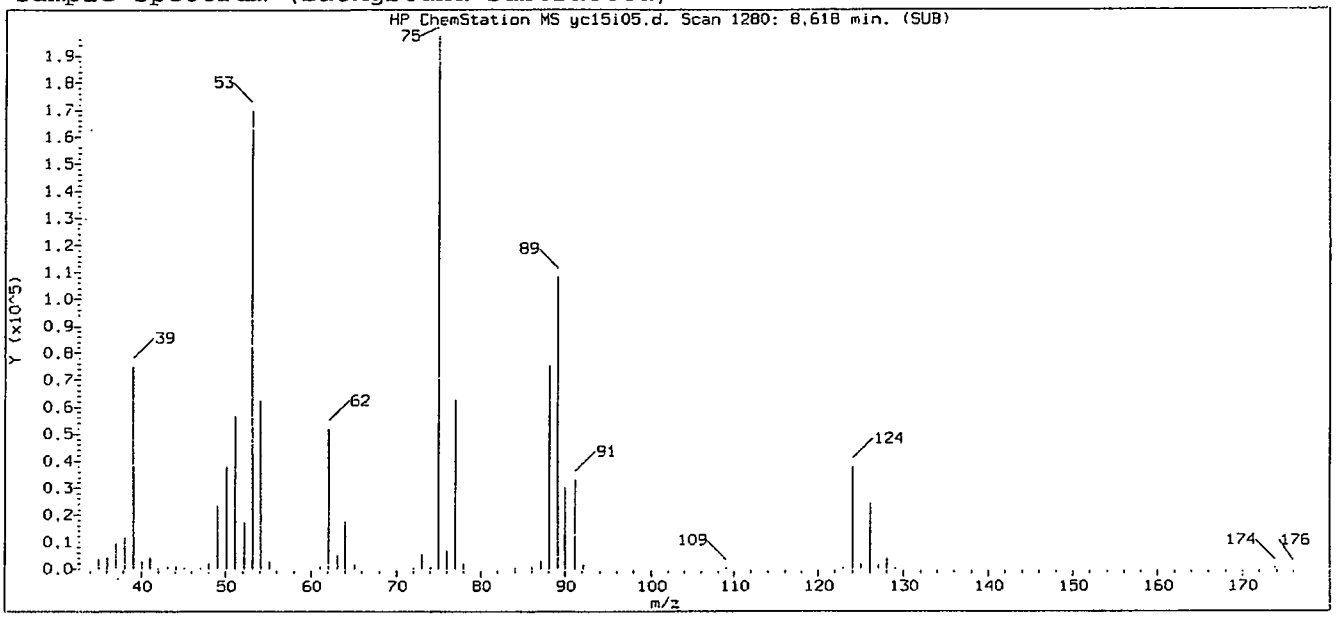
Compound Number : 124
Compound Name : trans-1,4-Dichloro-2-Butene
Scan Number : 1280
Retention Time (minutes): 8.618
Quant Ion : 53.00
Area (flag) : 224715M
On-Column Amount (ng) : 57.4546
Integration start scan : 1274 Integration stop scan: 1285
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

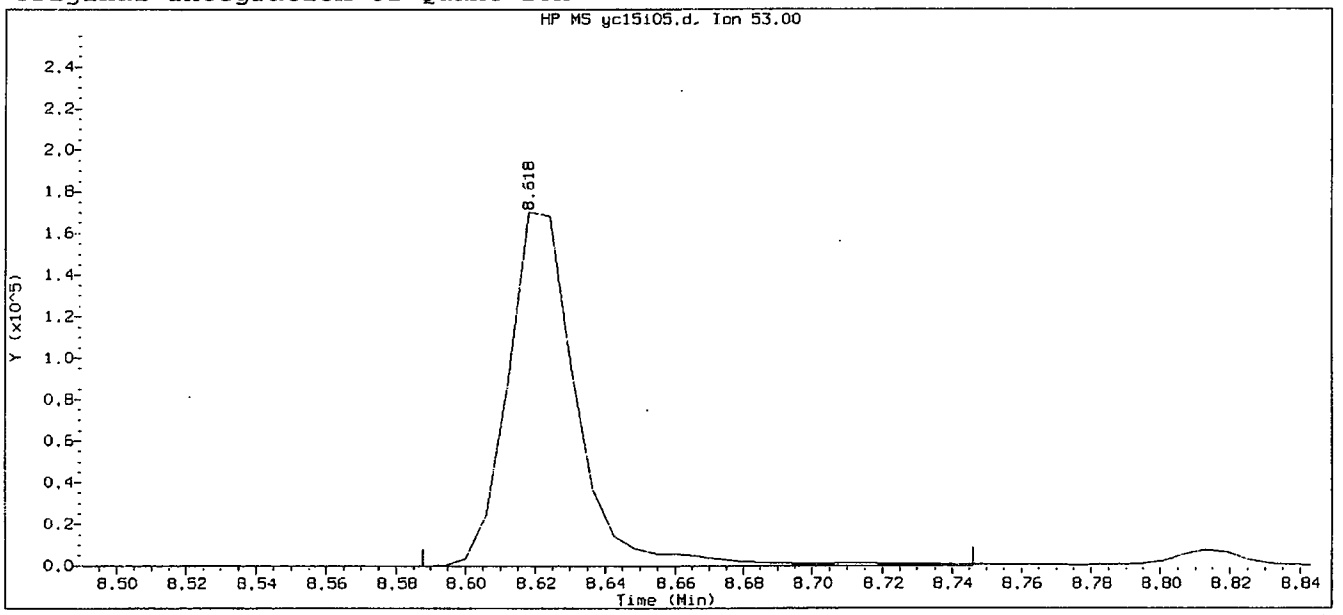
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



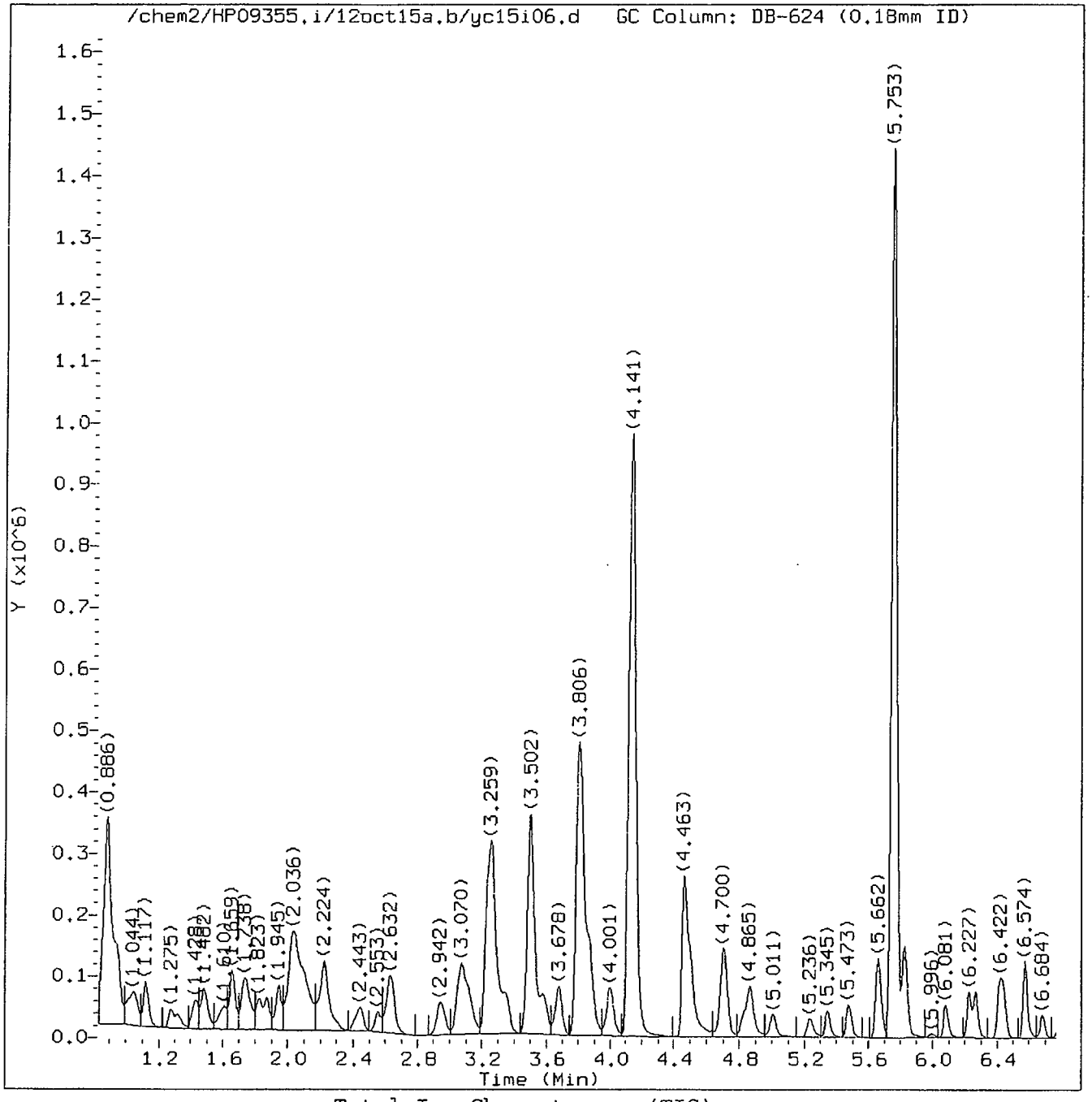
Data File: /chem2/HP09355.i/12oct15a.b/yc15i05.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:15 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:30
Date, time and analyst ID of latest file update: 15-Oct-2012 15:30 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number	: 124		
Compound Name	: trans-1,4-Dichloro-2-Butene		
Scan Number	: 1280		
Retention Time (minutes)	: 8.618		
Quant Ion	: 53.00		
Area	: 234900		
On-column Amount (ng)	: 57.7689		
Integration start scan	: 1274	Integration stop scan:	1300
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

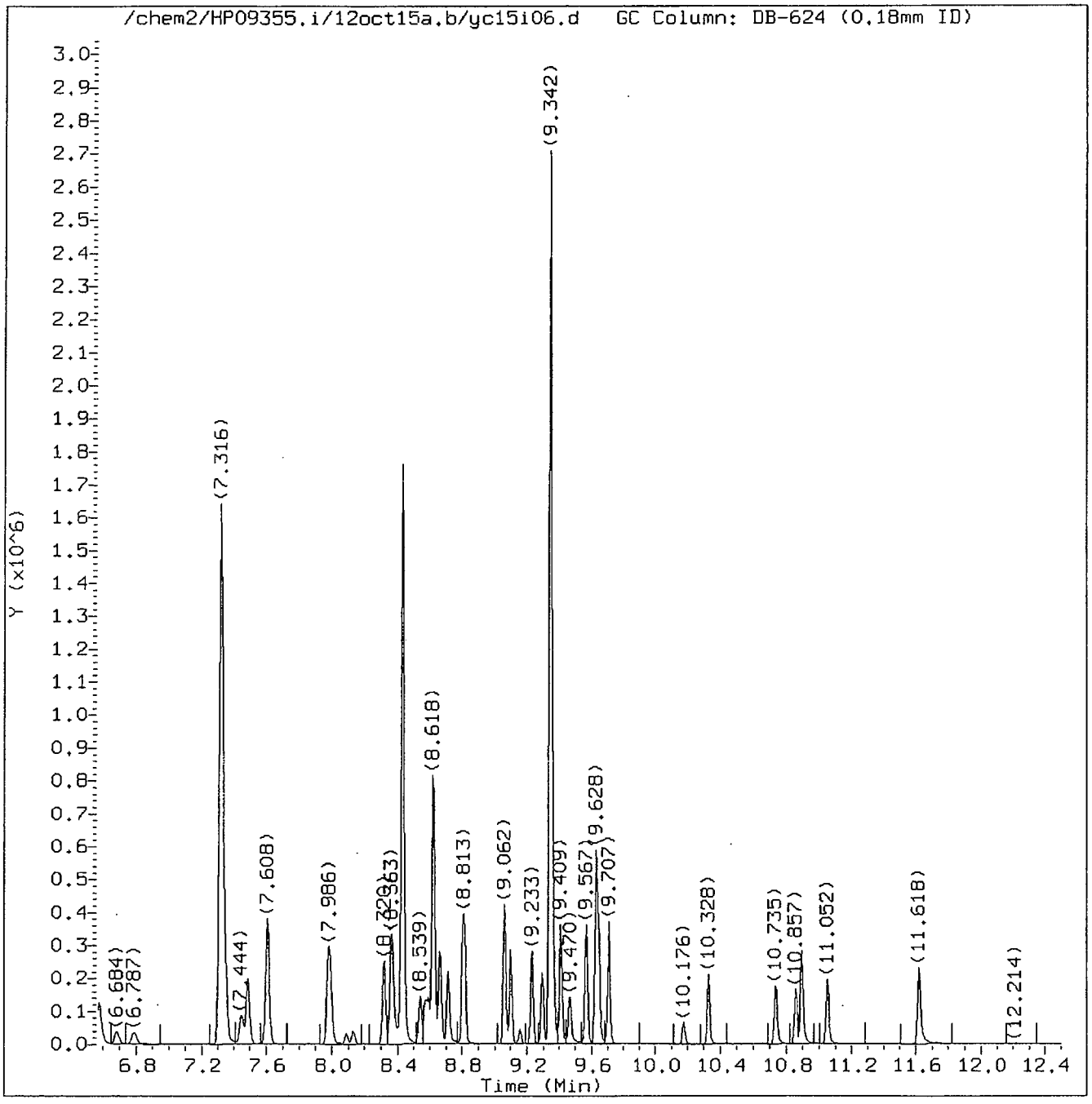
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Dichlorodifluoromethane	(1)	1.014	85	42288	4.479
3) Chloromethane	(1)	1.050	50	44033M	4.398
4) 1,3-Butadiene	(1)	1.117	39	20022M	4.752
5) Vinyl Chloride	(1)	1.123	62	43695M	4.455
7) Bromomethane	(1)	1.275	94	28566	4.456
8) Chloroethane	(1)	1.324	64	23007	4.329
9) Dichlorofluoromethane	(1)	1.428	67	50587	4.335
11) n-Pentane	(1)	1.482	43	40394	4.203
10) Trichlorofluoromethane	(1)	1.488	101	47432M	4.496
14) Freon 123a	(1)	1.604	67	33859	4.539
15) Acrolein	(4)	1.659	56	122063	43.366
16) 1,1-Dichloroethene	(1)	1.732	96	24767	4.368
18) Freon 113	(1)	1.750	101	24371	4.185
17) Acetone	(1)	1.750	58	15073	9.517
20) Methyl Iodide	(1)	1.829	142	45185	4.188
21) 2-Propanol	(4)	1.829	45	90462	76.443
22) Carbon Disulfide	(1)	1.872	76	71798	4.110
24) Allyl Chloride	(1)	1.945	41	49010	4.686
25) Methyl Acetate	(1)	1.951	43	35025M	4.057
26) Methylene Chloride	(1)	2.030	84	29869	4.235
28)*t-Butyl Alcohol-d10	(4)	2.048	65	421996	250.000
29) t-Butyl Alcohol	(4)	2.097	59	175984M	84.084
30) Acrylonitrile	(1)	2.194	53	27208M	4.578
31) trans-1,2-Dichloroethene	(1)	2.224	96	28386	4.183
32) Methyl Tertiary Butyl Ether	(1)	2.224	73	92260	3.930
33) n-Hexane	(1)	2.443	57	43290	4.260
34) 1,1-Dichloroethane	(1)	2.553	63	51097	4.147
36) di-Isopropyl Ether	(1)	2.626	45	103607	4.195
37) 2-Chloro-1,3-Butadiene	(1)	2.638	53	43365	4.147
39) Ethyl t-Butyl Ether	(1)	2.942	59	95739	4.025
41) 2-Butanone	(1)	3.046	43	73361	8.539
40) cis-1,2-Dichloroethene	(1)	3.058	96	30918	4.071
42) 2,2-Dichloropropane	(1)	3.064	77	37879	4.093
43) Propionitrile	(4)	3.119	54	198159	75.972
46) Methacrylonitrile	(1)	3.253	67	225546	38.351
47) Bromochloromethane	(1)	3.277	128	17187	4.172
48) Tetrahydrofuran	(4)	3.320	71	20019	8.198
50) Chloroform	(1)	3.350	83	51241M	4.136

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
52)$Dibromofluoromethane	(1)	3.496	113	308326	49.762
51)$Dibromofluoromethane(mz111)	(1)	3.496	111	315055	49.715
53) 1,1,1-Trichloroethane	(1)	3.526	97	46048	4.361
55) Cyclohexane (mz 69)	(1)	3.581	69	15989	4.194
54) Cyclohexane (mz 84)	(1)	3.581	84	42791	4.199
56) Cyclohexane	(1)	3.581	56	52532	4.241
45) 1,2-Dichloroethene (total)	(1)		96	59304	8.254
57) 1,1-Dichloropropene	(1)	3.678	75	38461M	4.195
58) Carbon Tetrachloride	(1)	3.678	117	31699	4.039
59) Isobutyl Alcohol	(4)	3.806	41	139956M	194.126
61)$1,2-Dichloroethane-d4(mz65)	(1)	3.806	65	378951	49.711
62)$1,2-Dichloroethane-d4	(1)	3.806	102	82495	49.552
60)$1,2-Dichloroethane-d4(mz104)	(1)	3.812	104	51874	49.609
63) Benzene	(1)	3.867	78	120286	4.114
64) 1,2-Dichloroethane (mz 98)	(1)	3.879	98	3679	4.108
65) 1,2-Dichloroethane	(1)	3.879	62	38414	3.978
69) t-Amyl Methyl Ether	(1)	4.001	73	91725	3.924
71)*Fluorobenzene	(1)	4.141	96	1394885	50.000
72) n-Heptane	(1)	4.153	43	56496	4.795
73) n-Butanol	(4)	4.463	56	253620	379.318
74) Trichloroethene	(1)	4.506	95	29687	4.083
75) Methylcyclohexane (mz98)	(1)	4.700	98	26005	4.489
76) Methylcyclohexane	(1)	4.700	83	59537	4.518
77) 1,2-Dichloropropane	(1)	4.707	63	30423	3.963
78) Dibromomethane	(1)	4.828	93	20100	3.952
79) 1,4-Dioxane	(4)	4.859	88	35256	189.582
80) Methyl Methacrylate	(1)	4.871	69	33314	3.670
83) Bromodichloromethane	(1)	5.005	83	31892	3.707
85) 2-Nitropropane	(1)	5.230	41	27715	7.783
86) 2-Chloroethyl Vinyl Ether	(1)	5.345	63	25333	3.690
87) cis-1,3-Dichloropropene	(1)	5.479	75	40392	3.669
89) 4-Methyl-2-Pentanone	(1)	5.662	43	127448	7.844
92)$Toluene-d8(mz100)	(2)	5.753	100	855170	49.756
93)$Toluene-d8	(2)	5.759	98	1321275	50.278
94) Toluene	(2)	5.826	92	75252	4.105
95) trans-1,3-Dichloropropene	(2)	6.081	75	38210	3.645
96) Ethyl Methacrylate	(2)	6.227	69	50745	3.658
97) 1,1,2-Trichloroethane	(2)	6.270	97	28271	3.816

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
98) Tetrachloroethene	(2)	6.416	166	32222	4.075
99) 1,3-Dichloropropane	(2)	6.440	76	47549	3.828
101) 2-Hexanone	(2)	6.574	43	101726	7.884
102) Dibromochloromethane	(2)	6.684	129	23258	3.411
104) 1,2-Dibromoethane	(2)	6.787	107	29915	3.721
106)*Chlorobenzene-d5	(2)	7.316	117	984797	50.000
107) Chlorobenzene	(2)	7.347	112	82911	4.062
108) 1,1,1,2-Tetrachloroethane	(2)	7.450	131	24917	3.746
109) Ethylbenzene	(2)	7.487	91	143706	4.036
110) m+p-Xylene	(2)	7.608	106	111091	7.909
113) o-Xylene	(2)	7.980	106	55145	3.887
114) Styrene	(2)	7.992	104	90113	3.804
115) Bromoform	(2)	8.132	173	17493	3.022
112) Xylene (Total)	(2)		106	166236	11.797
116) Isopropylbenzene	(2)	8.320	105	143329	4.027
118) Cyclohexanone	(4)	8.363	55	151899	184.484
120)$4-Bromofluorobenzene(mz174)	(2)	8.430	174	425138	50.339
119)$4-Bromofluorobenzene	(2)	8.430	95	496220	50.087
121) Bromobenzene	(3)	8.545	156	36142	3.843
122) 1,1,2,2-Tetrachloroethane	(3)	8.570	83	51962	3.889
123) 1,2,3-Trichloropropane	(3)	8.594	110	15660	3.769
124) trans-1,4-Dichloro-2-Butene	(3)	8.618	53	142069M	36.418
125) n-Propylbenzene	(3)	8.661	91	169712	4.122
126) 2-Chlorotoluene	(3)	8.716	126	35341	4.041
128) 4-Chlorotoluene	(3)	8.807	126	35478	3.923
127) 1,3,5-Trimethylbenzene	(3)	8.813	105	121863	3.974
130) tert-Butylbenzene	(3)	9.062	134	27270	3.960
131) Pentachloroethane	(3)	9.062	167	21463	3.783
132) 1,2,4-Trimethylbenzene	(3)	9.099	105	125950	3.981
133) sec-Butylbenzene	(3)	9.233	105	154691	4.102
134) 1,3-Dichlorobenzene	(3)	9.294	146	69360	3.907
135) p-Isopropyltoluene	(3)	9.348	119	134399	4.035
136)*1,4-Dichlorobenzene-d4	(3)	9.348	152	566053	50.000
138) 1,4-Dichlorobenzene	(3)	9.361	146	76271	4.025
139) 1,2,3-Trimethylbenzene	(3)	9.409	105	151598	4.457
141) Benzyl Chloride	(3)	9.470	91	85169	3.331
142) 1,3-Diethylbenzene	(3)	9.567	119	90824	4.326
144) 1,2-Dichlorobenzene	(3)	9.628	146	71358	3.976

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

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on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
143) 1,4-Diethylbenzene	(3)	9.628	119	94258	4.370
145) n-Butylbenzene	(3)	9.646	92	66422	4.025
146) 1,2-Diethylbenzene	(3)	9.707	119	82284	4.558
148) 1,2-Dibromo-3-Chloropropane	(3)	10.176	75	11709	3.446
149) 1,3,5-Trichlorobenzene	(3)	10.328	180	54740	4.019
150) 1,2,4-Trichlorobenzene	(3)	10.742	180	50945	3.980
151) Hexachlorobutadiene	(3)	10.857	225	24686	4.158
152) Naphthalene	(3)	10.894	128	194019	3.909
153) 1,2,3-Trichlorobenzene	(3)	11.052	180	51917	4.134
154) 2-Methylnaphthalene	(3)	11.618	142	116267	4.211

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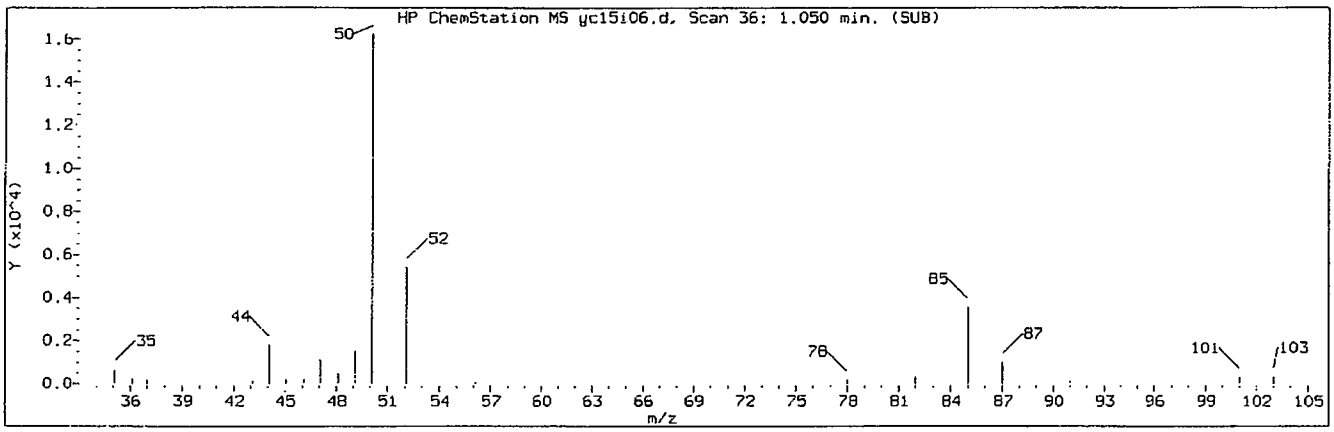
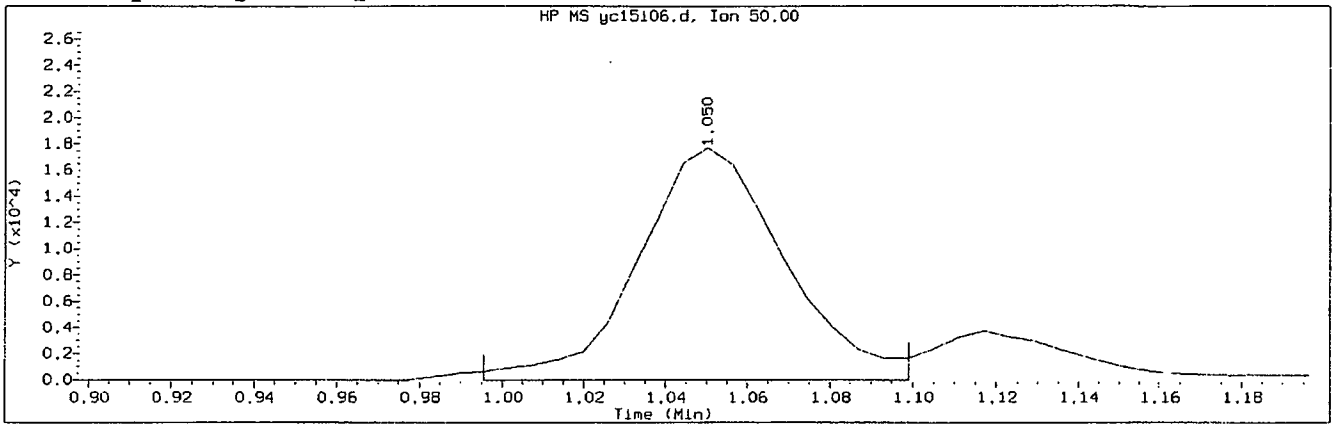
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

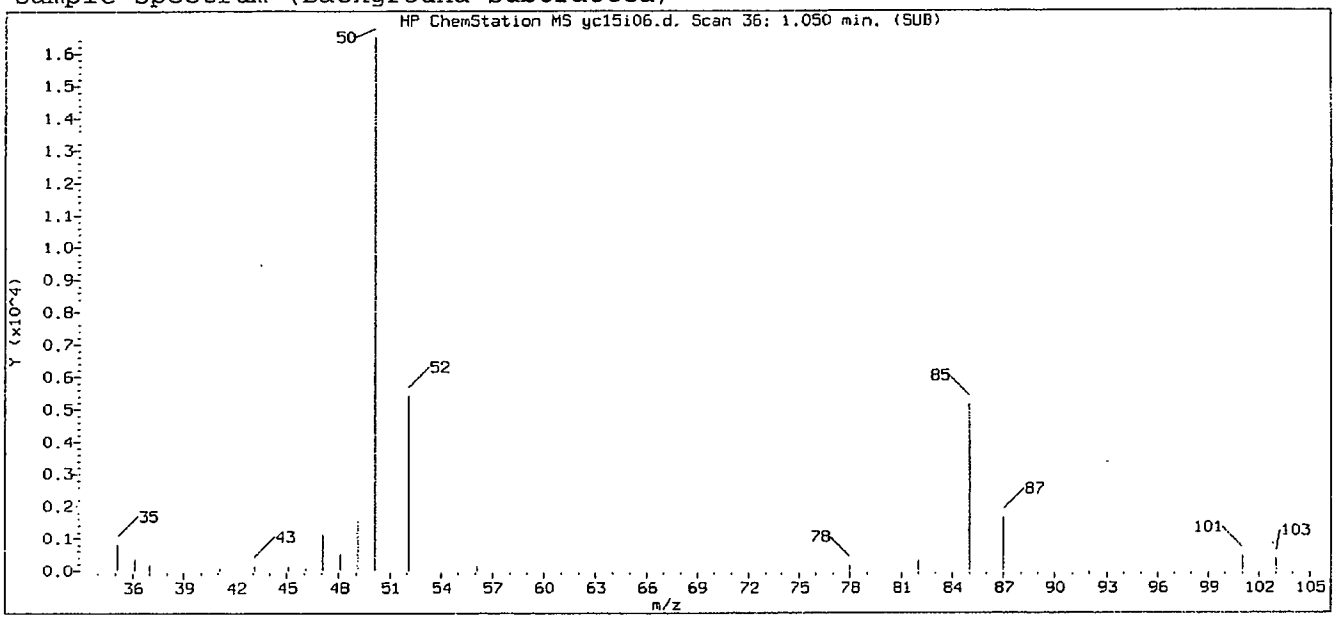
Compound Number	: 3		
Compound Name	: Chloromethane		
Scan Number	: 36		
Retention Time (minutes)	: 1.050		
Quant Ion	: 50.00		
Area (flag)	: 44033M		
On-Column Amount (ng)	: 4.3979		
Integration start scan	: 26	Integration stop scan:	43
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

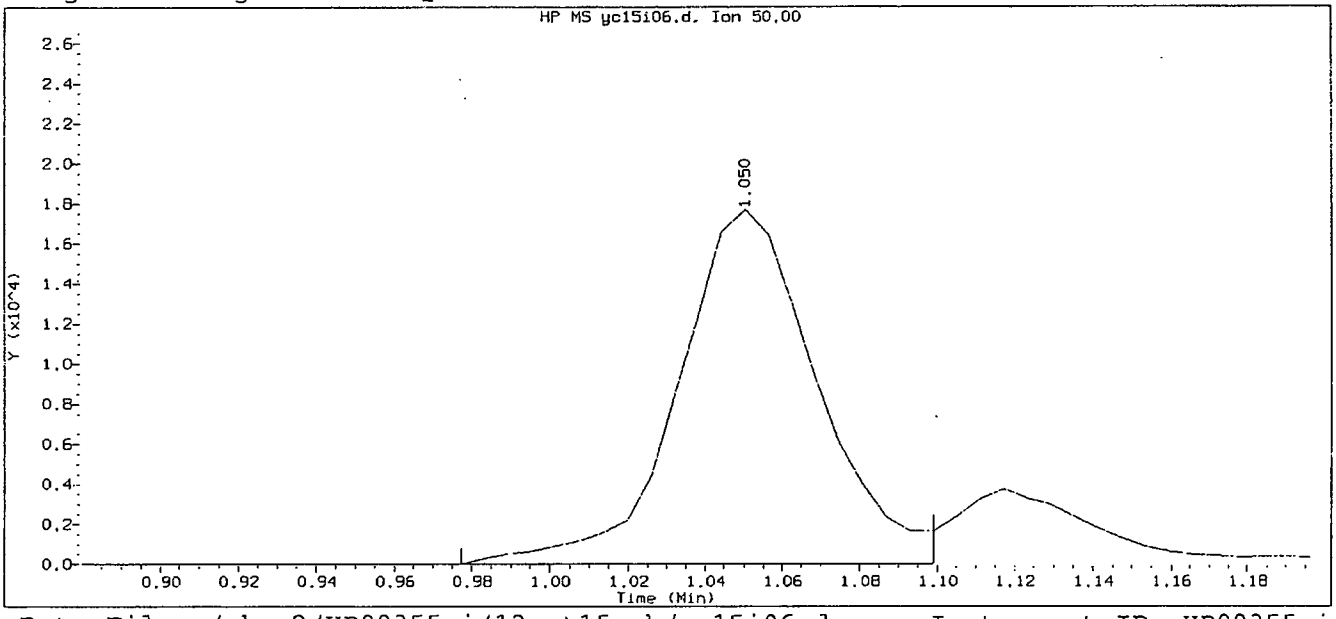
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:50
Date, time and analyst ID of latest file update: 15-Oct-2012 15:50 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compound Number	: 3		
Compound Name	: Chloromethane		
Scan Number	: 36		
Retention Time (minutes)	: 1.050		
Quant Ion	: 50.00		
Area	: 44021		
On-column Amount (ng)	: 3.9950		
Integration start scan	: 23	Integration stop scan:	43
Y at integration start	: 0	Y at integration end:	0

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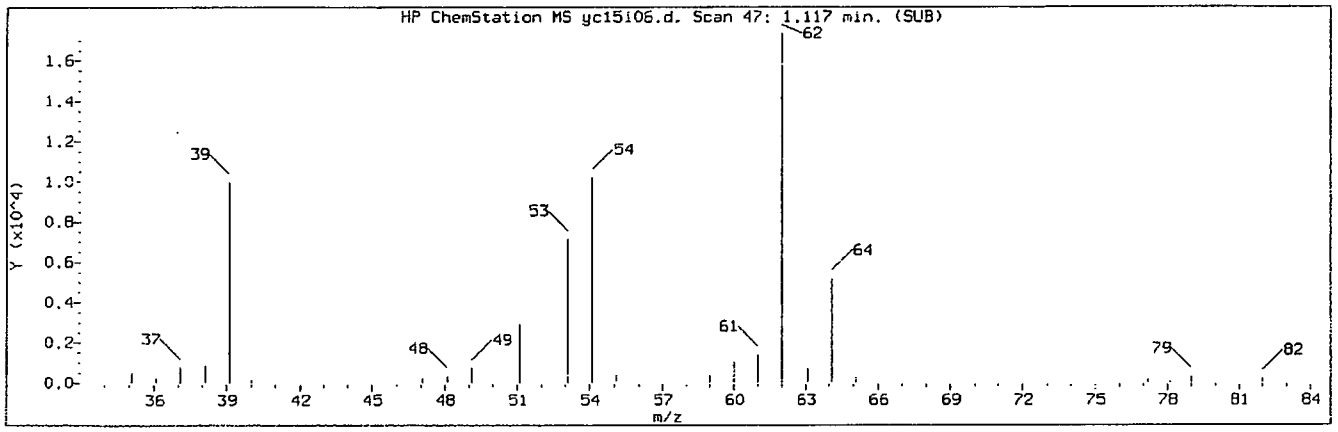
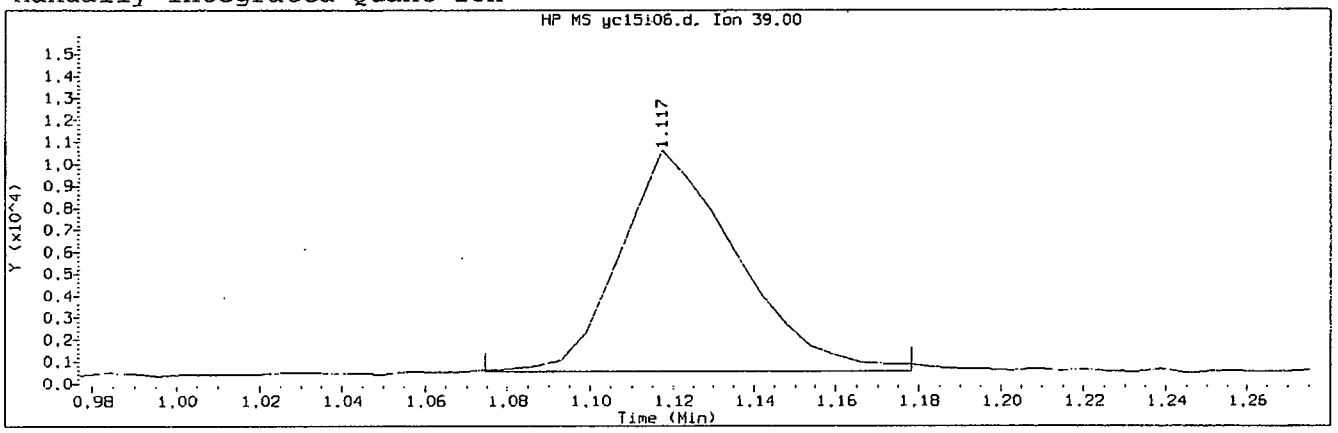
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

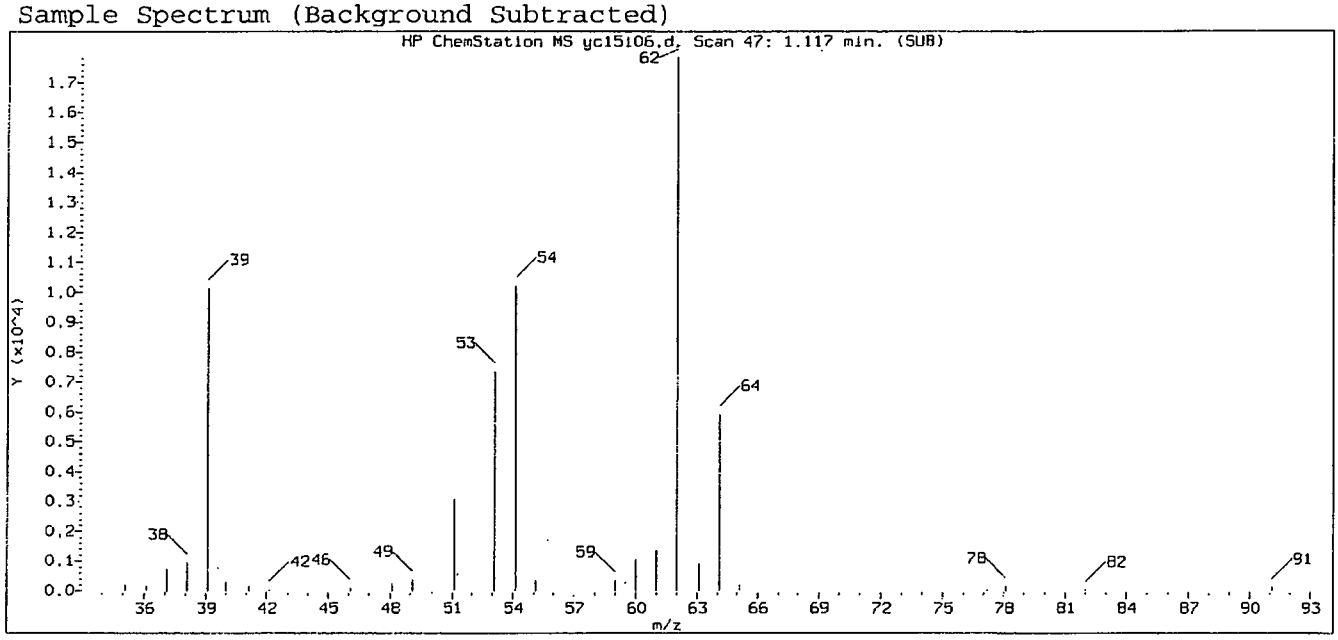
Compound Number	: 4		
Compound Name	: 1,3-Butadiene		
Scan Number	: 47		
Retention Time (minutes)	: 1.117		
Quant Ion	: 39.00		
Area (flag)	: 20022M		
On-Column Amount (ng)	: 4.7522		
Integration start scan	: 39	Integration stop scan:	56
Y at integration start	: 557	Y at integration end:	557

Reason for manual integration: improper integration

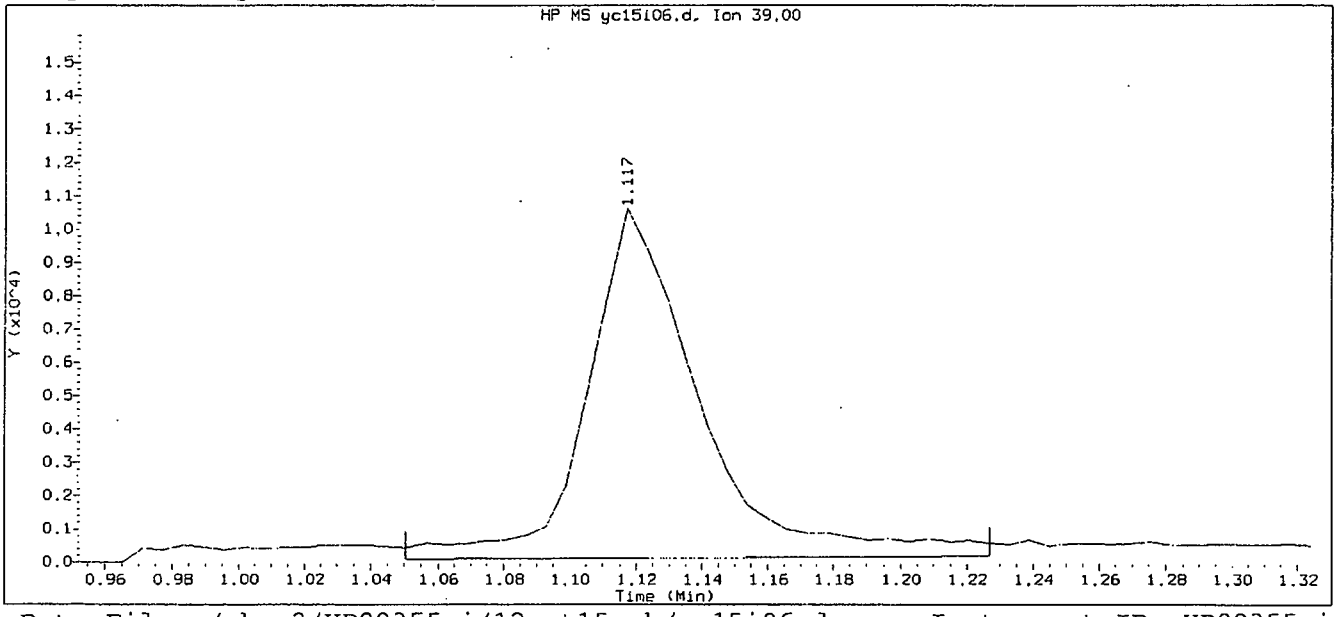
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:50
Date, time and analyst ID of latest file update: 15-Oct-2012 15:50 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compound Number	: 4		
Compound Name	: 1,3-Butadiene		
Scan Number	: 47		
Retention Time (minutes)	: 1.117		
Quant Ion	: 39.00		
Area	: 24817		
On-column Amount (ng)	: 5.6034		
Integration start scan	: 35	Integration stop scan:	64
Y at integration start	: 81	Y at integration end:	178

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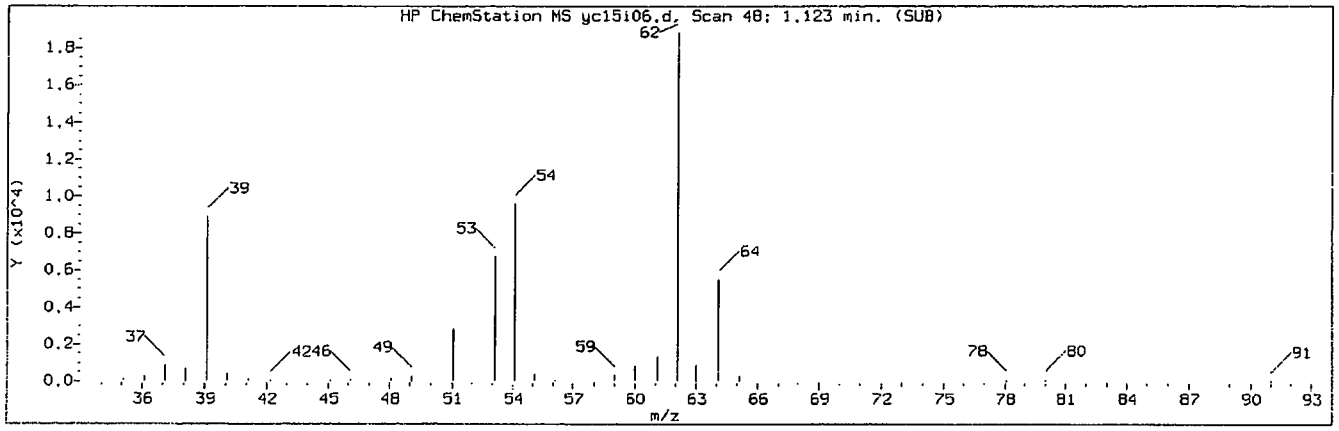
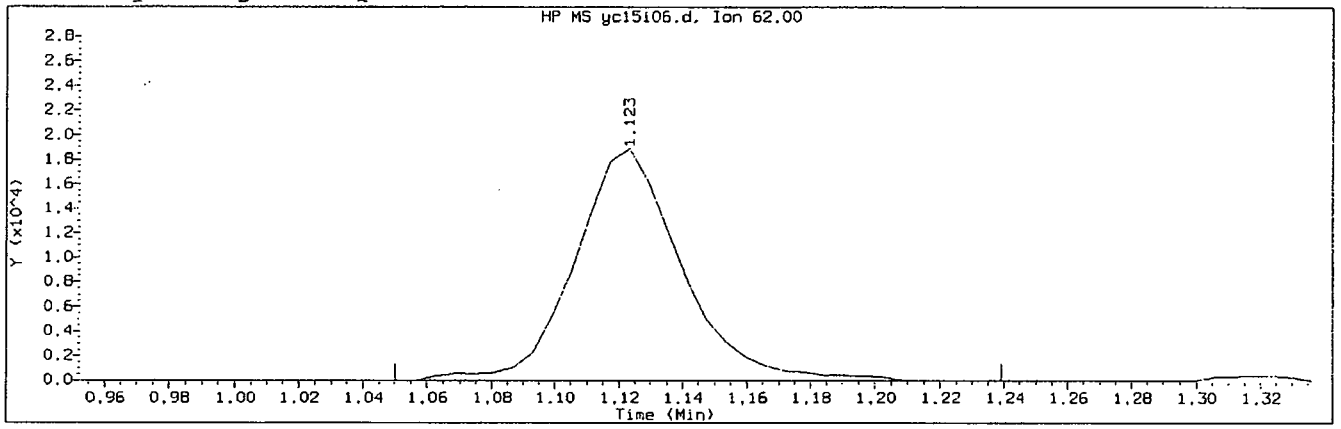
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

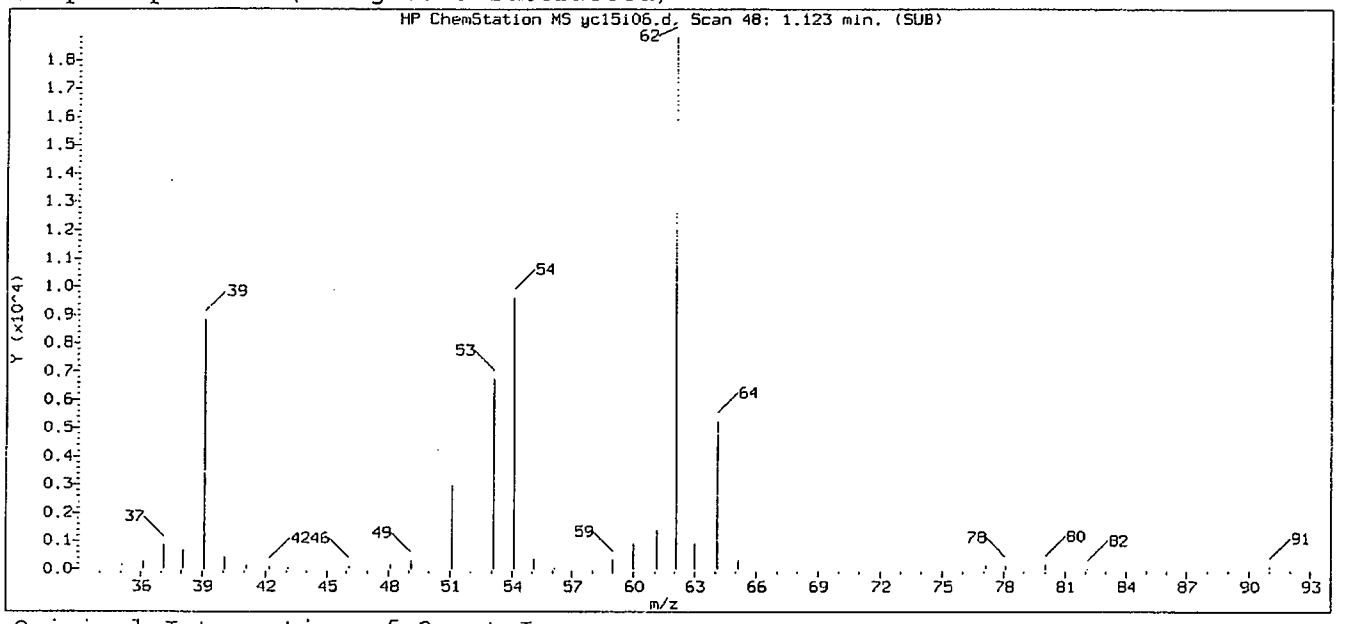
Compound Number	: 5		
Compound Name	: Vinyl Chloride		
Scan Number	: 48		
Retention Time (minutes)	: 1.123		
Quant Ion	: 62.00		
Area (flag)	: 43695M		
On-Column Amount (ng)	: 4.4552		
Integration start scan	: 35	Integration stop scan:	66
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

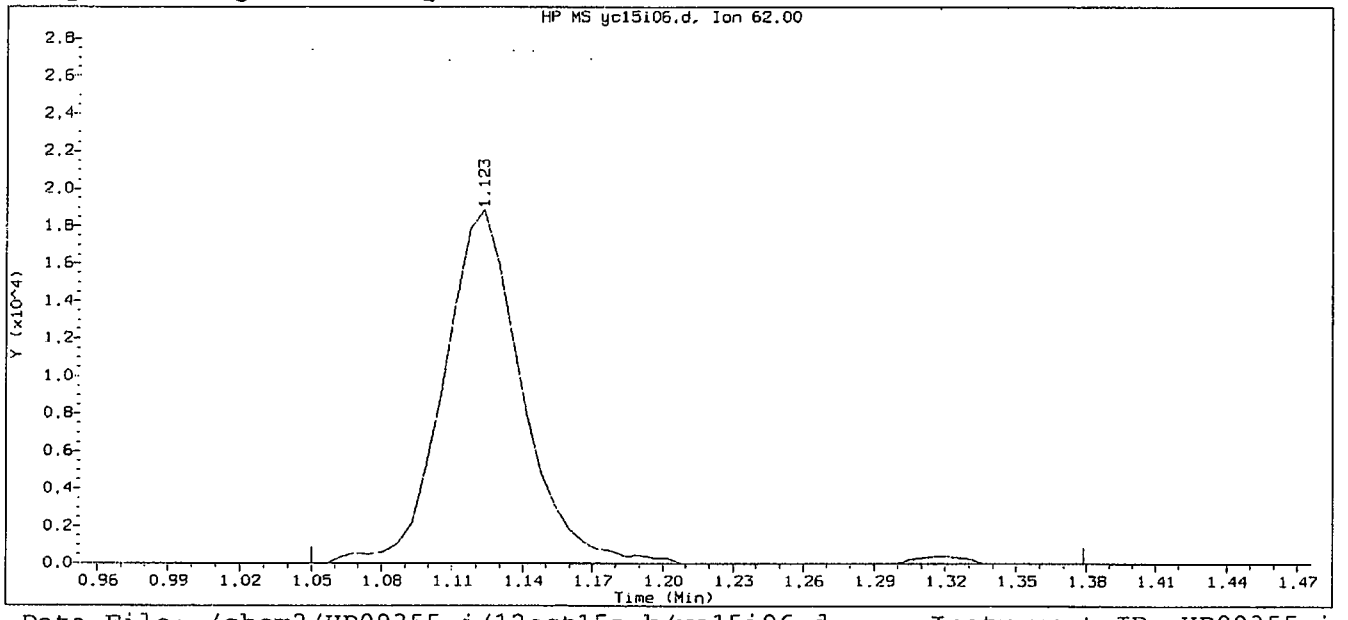
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:50
Date, time and analyst ID of latest file update: 15-Oct-2012 15:50 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compound Number	: 5		
Compound Name	: Vinyl Chloride		
Scan Number	: 48		
Retention Time (minutes)	: 1.123		
Quant Ion	: 62.00		
Area	: 44281		
On-column Amount (ng)	: 4.5222		
Integration start scan	: 35	Integration stop scan:	89
Y at integration start	: 0	Y at integration end:	0

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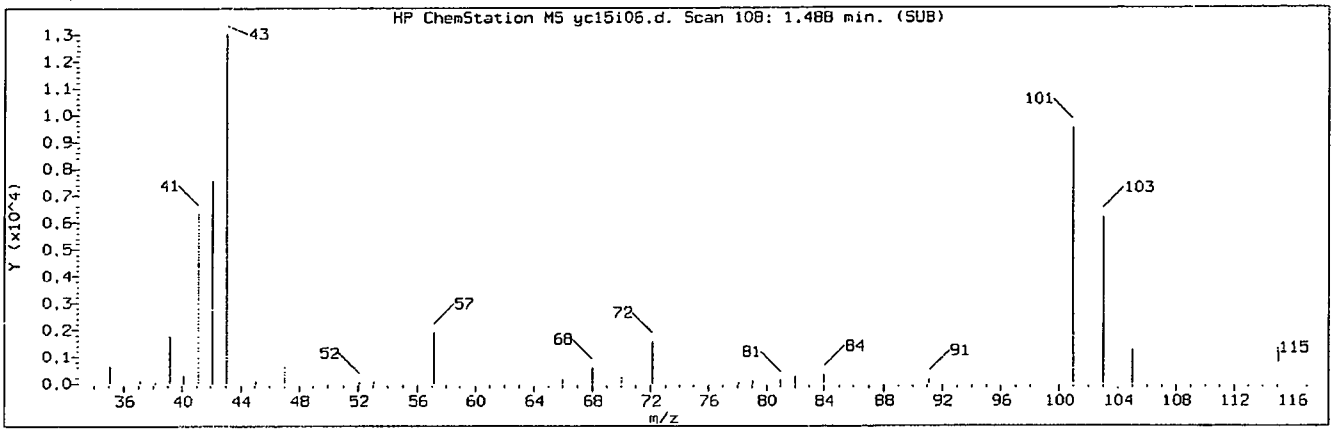
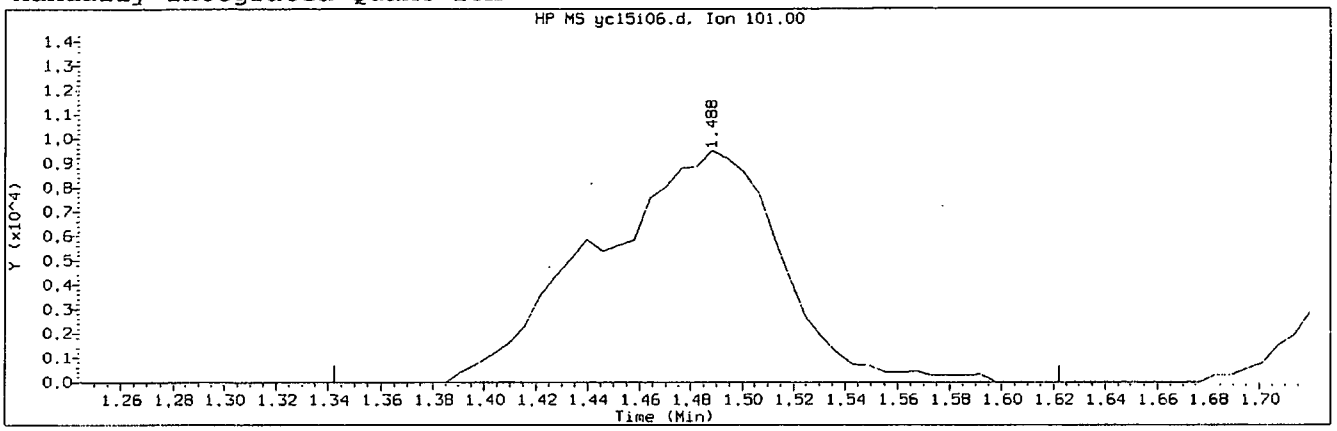
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

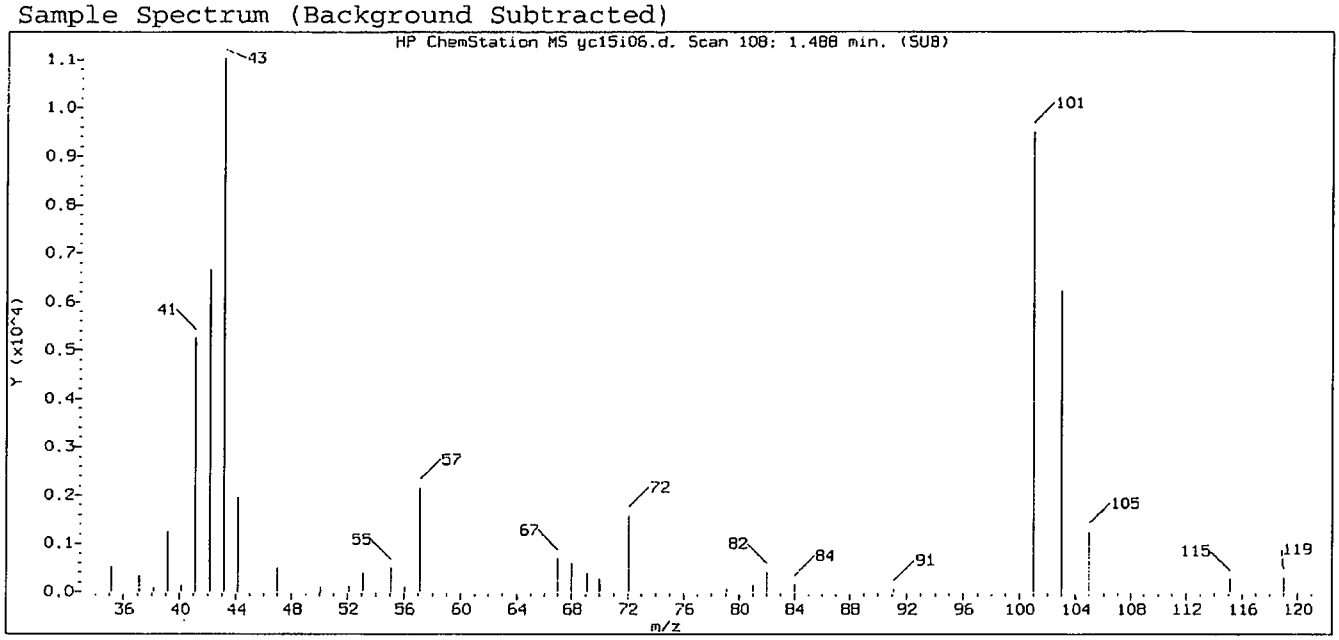
Compound Number	: 10		
Compound Name	: Trichlorofluoromethane		
Scan Number	: 108		
Retention Time (minutes)	: 1.488		
Quant Ion	: 101.00		
Area (flag)	: 47432M		
On-Column Amount (ng)	: 4.4965		
Integration start scan	: 83	Integration stop scan:	129
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

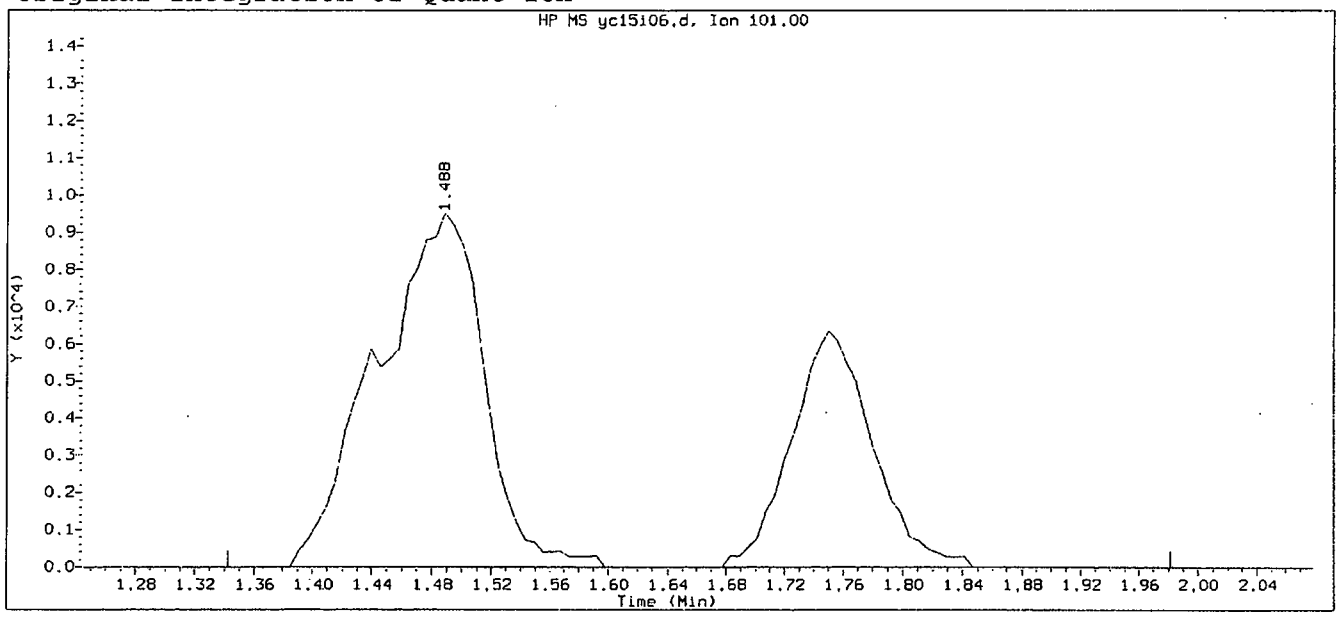
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:50
Date, time and analyst ID of latest file update: 15-Oct-2012 15:50 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compound Number	: 10		
Compound Name	: Trichlorofluoromethane		
Scan Number	: 108		
Retention Time (minutes)	: 1.488		
Quant Ion	: 101.00		
Area	: 71803		
On-column Amount (ng)	: 5.6377		
Integration start scan	: 83	Integration stop scan:	188
Y at integration start	: 0	Y at integration end:	0

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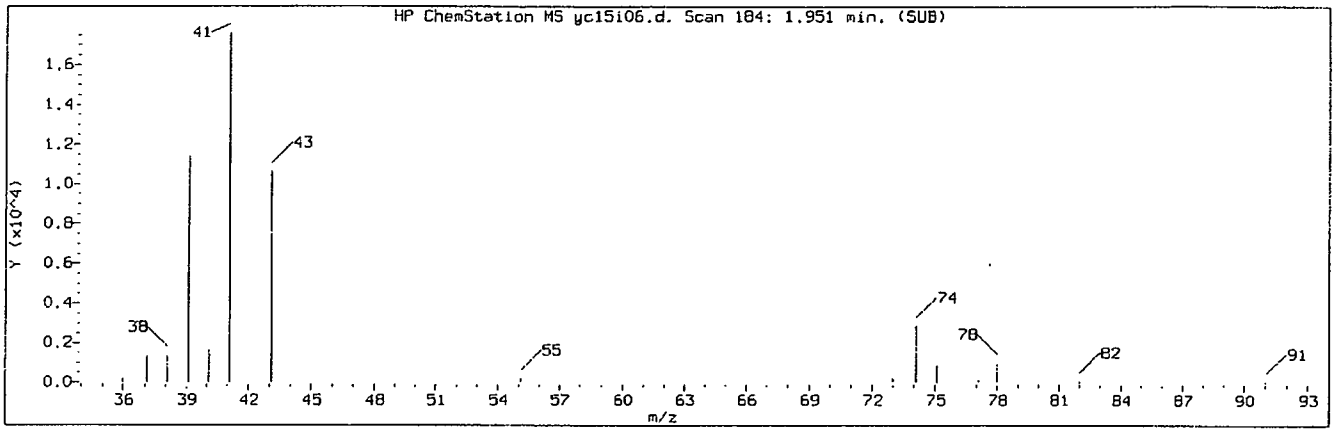
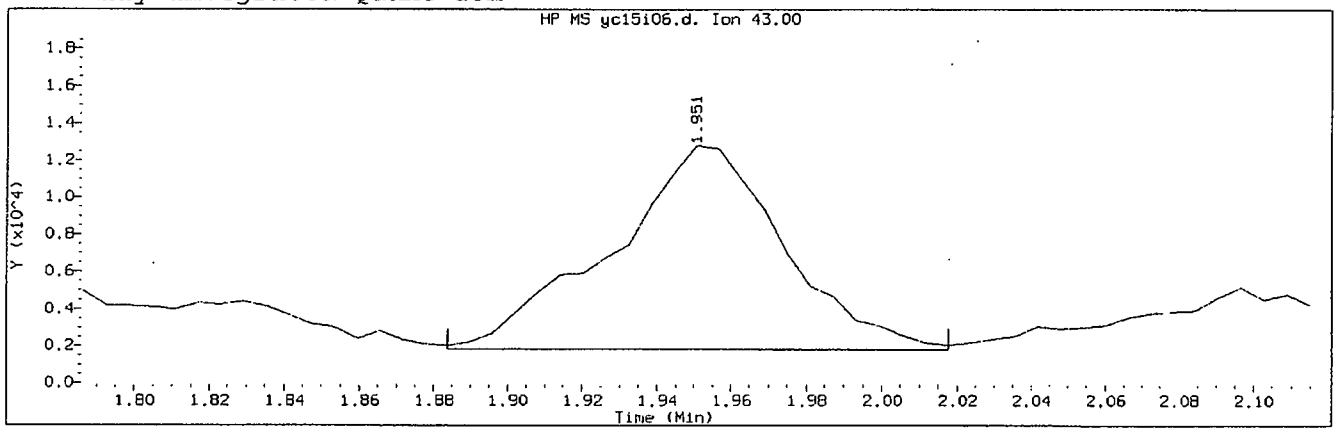
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

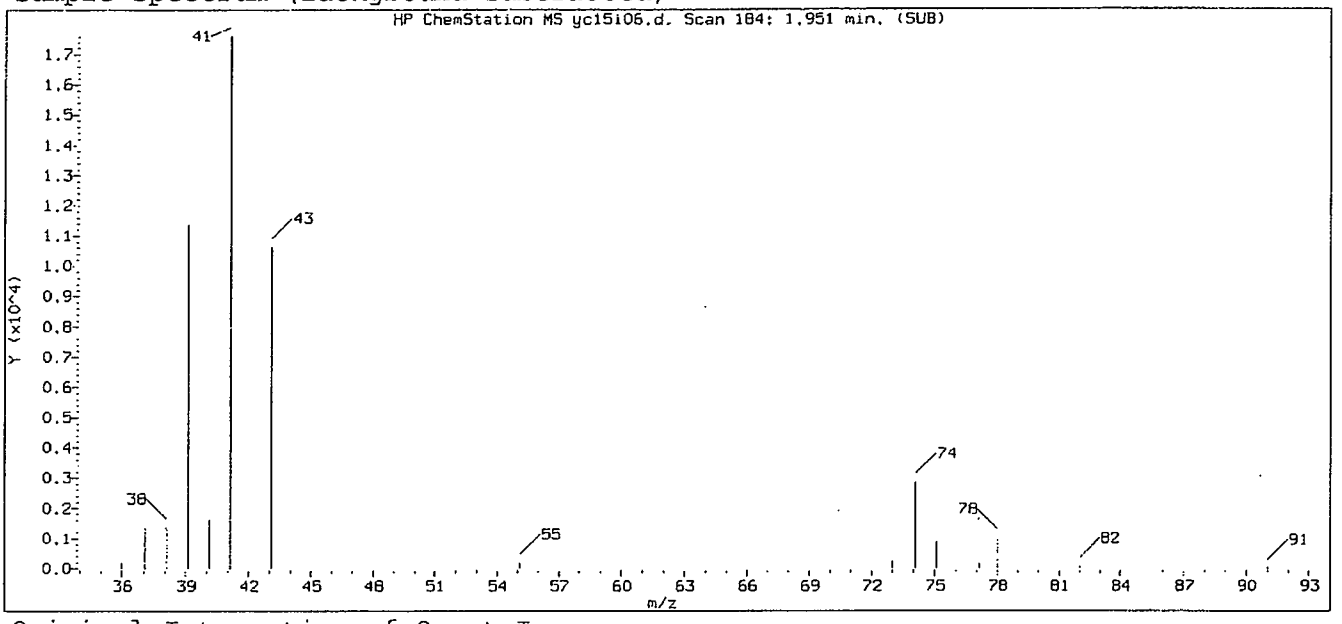
Compound Number : 25
Compound Name : Methyl Acetate
Scan Number : 184
Retention Time (minutes): 1.951
Quant Ion : 43.00
Area (flag) : 35025M
On-Column Amount (ng) : 4.0572
Integration start scan : 172 Integration stop scan: 194
Y at integration start : 1841 Y at integration end: 1841

Reason for manual integration: improper integration

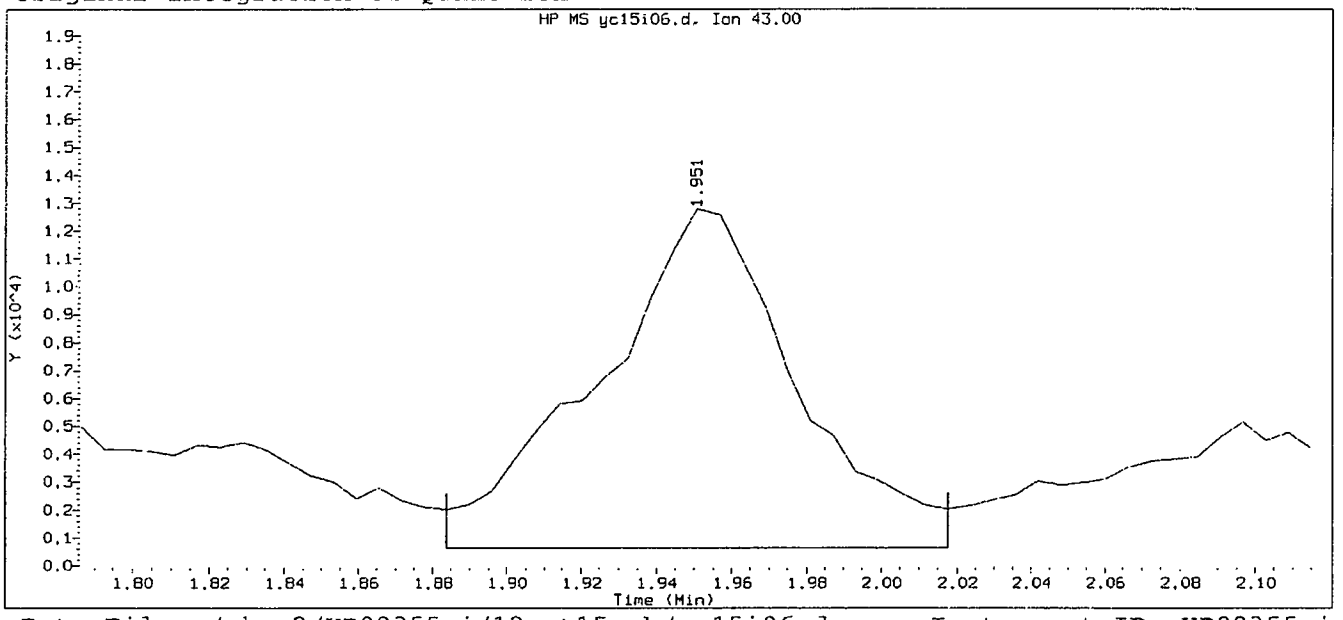
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

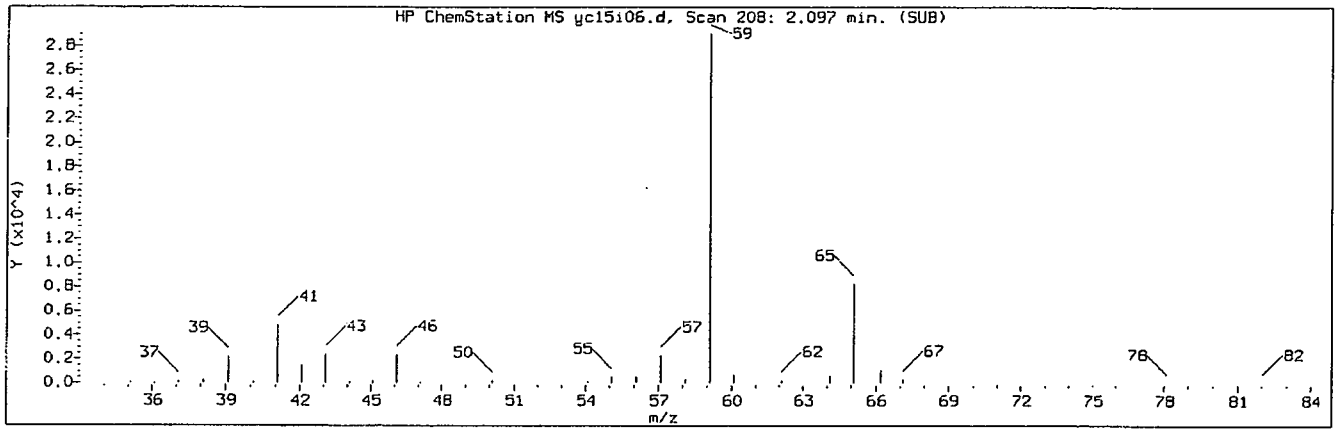
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:50
Date, time and analyst ID of latest file update: 15-Oct-2012 15:50 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

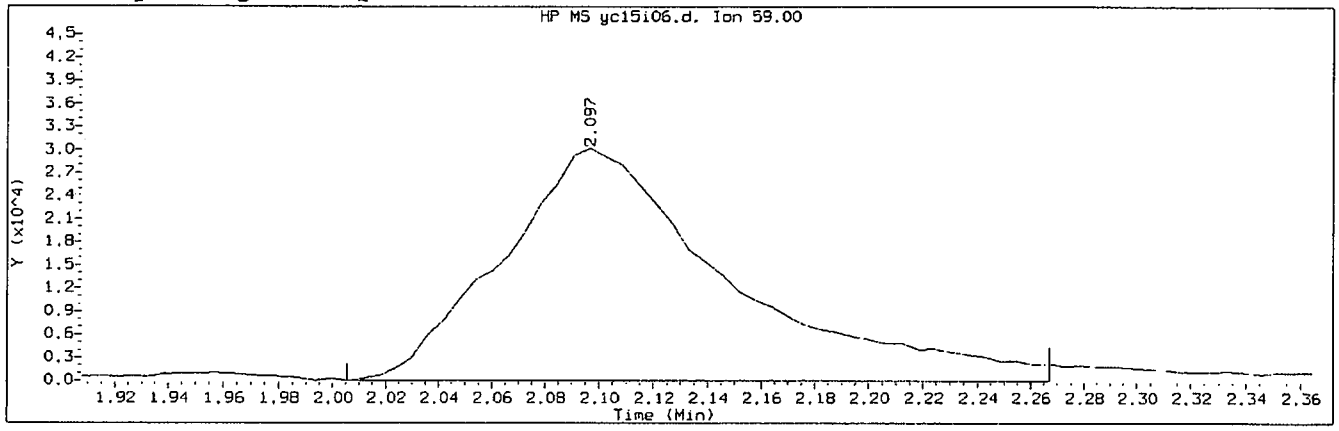
Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 184		
Retention Time (minutes)	: 1.951		
Quant Ion	: 43.00		
Area	: 44641		
On-column Amount (ng)	: 4.5151		
Integration start scan	: 172	Integration stop scan:	194
Y at integration start	: 635	Y at integration end:	635

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

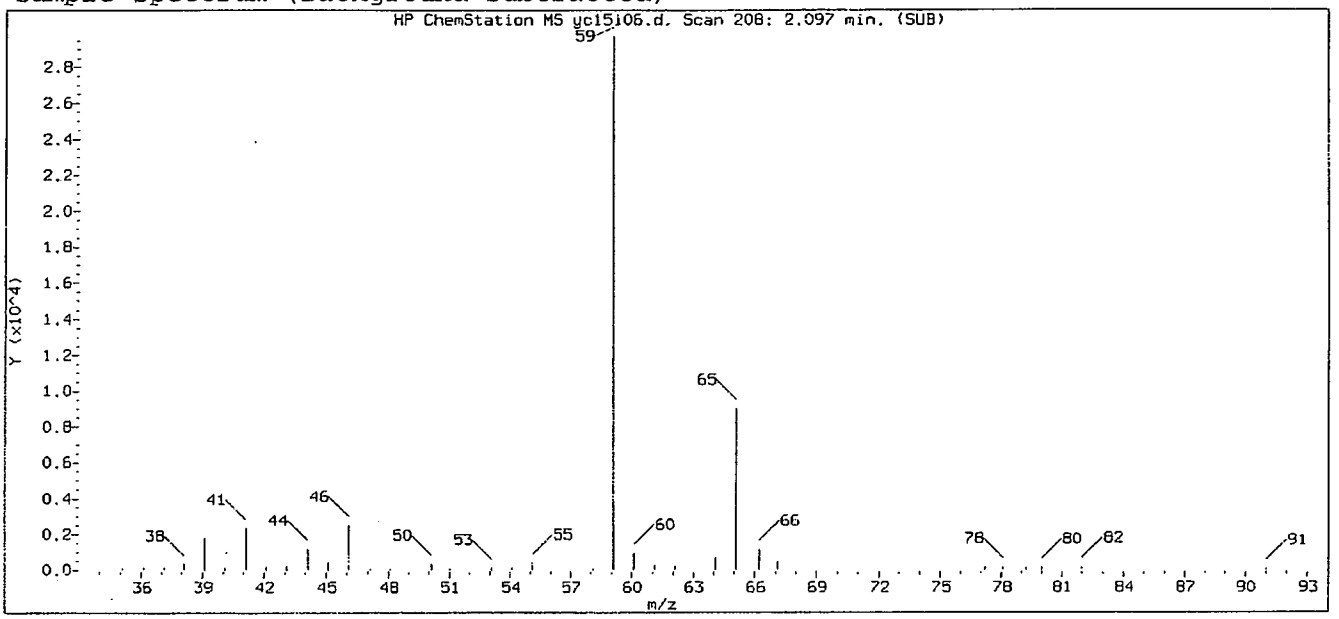
Compound Number	: 29		
Compound Name	: t-Butyl Alcohol		
Scan Number	: 208		
Retention Time (minutes)	: 2.097		
Quant Ion	: 59.00		
Area (flag)	: 175984M		
On-Column Amount (ng)	: 84.0840		
Integration start scan	: 192	Integration stop scan:	235
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

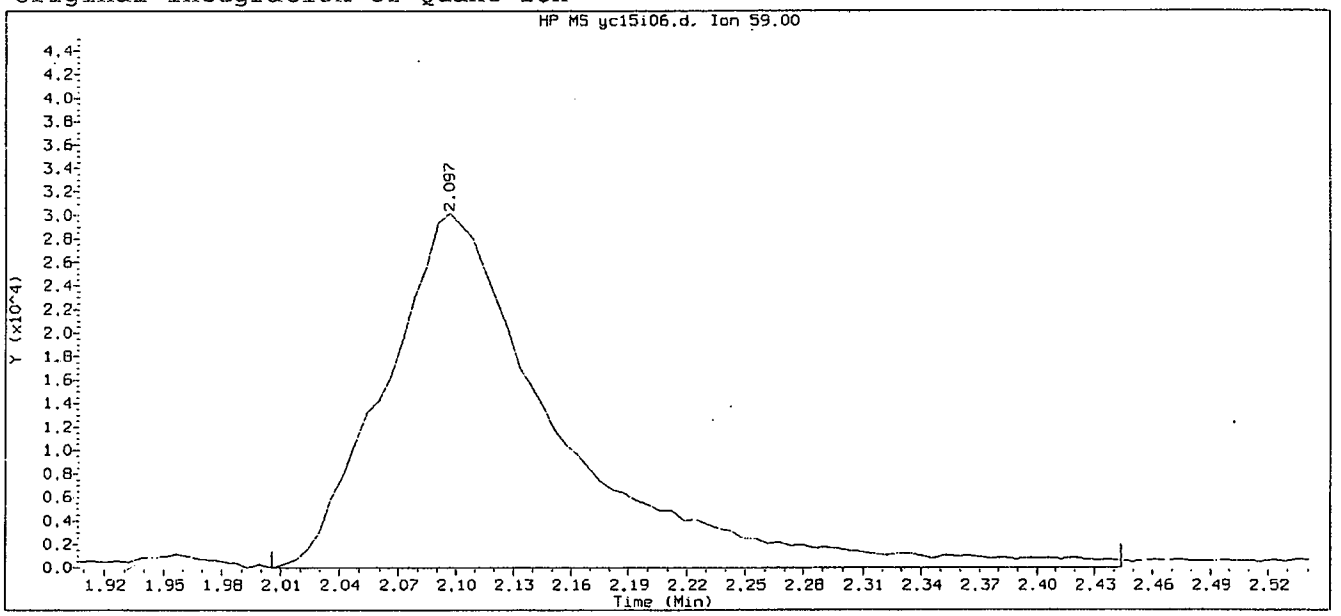
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

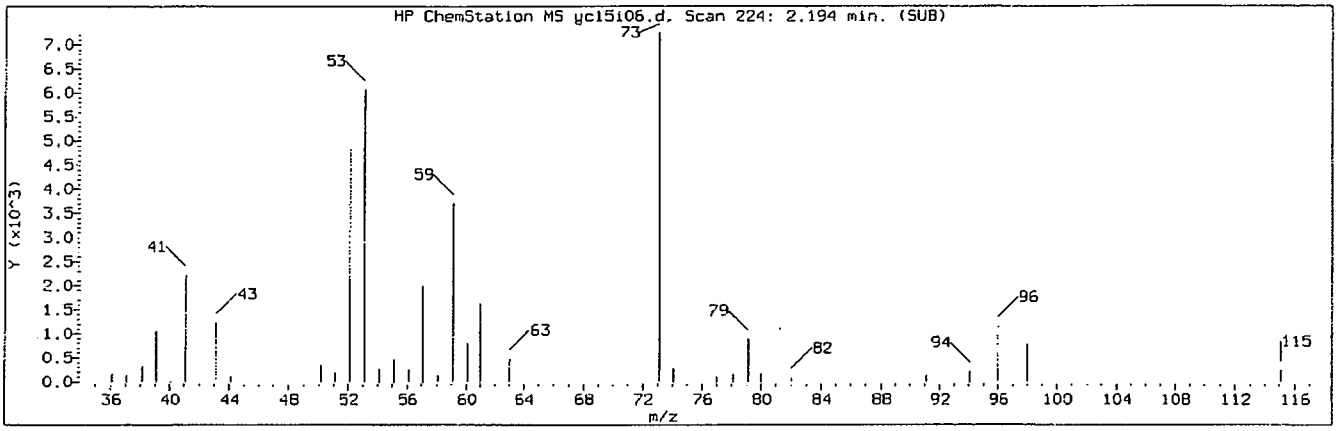
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:50
Date, time and analyst ID of latest file update: 15-Oct-2012 15:50 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

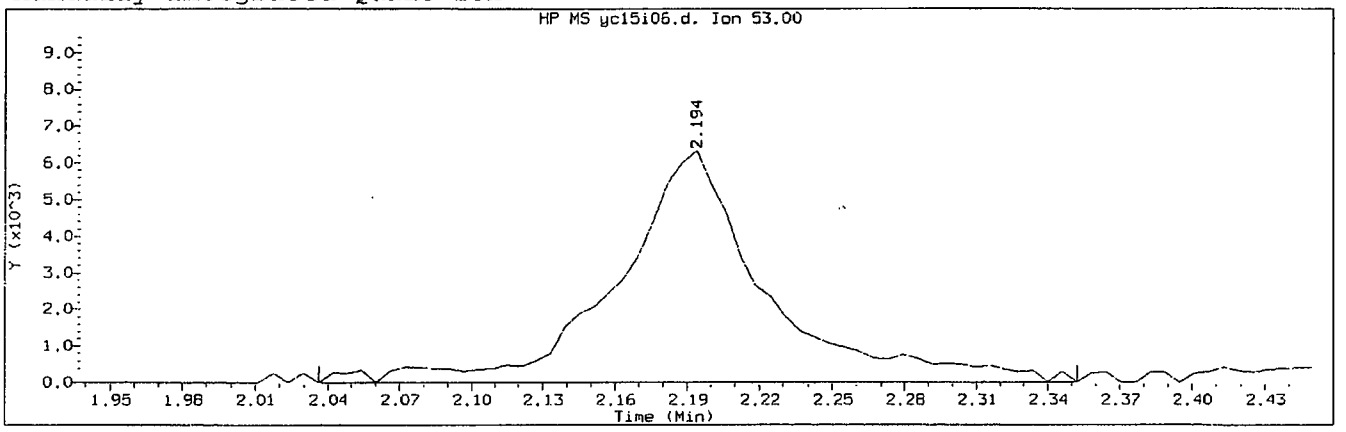
Compound Number	: 29		
Compound Name	: t-Butyl Alcohol		
Scan Number	: 208		
Retention Time (minutes)	: 2.097		
Quant Ion	: 59.00		
Area	: 187492		
On-column Amount (ng)	: 75.7209		
Integration start scan	: 192	Integration stop scan:	264
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

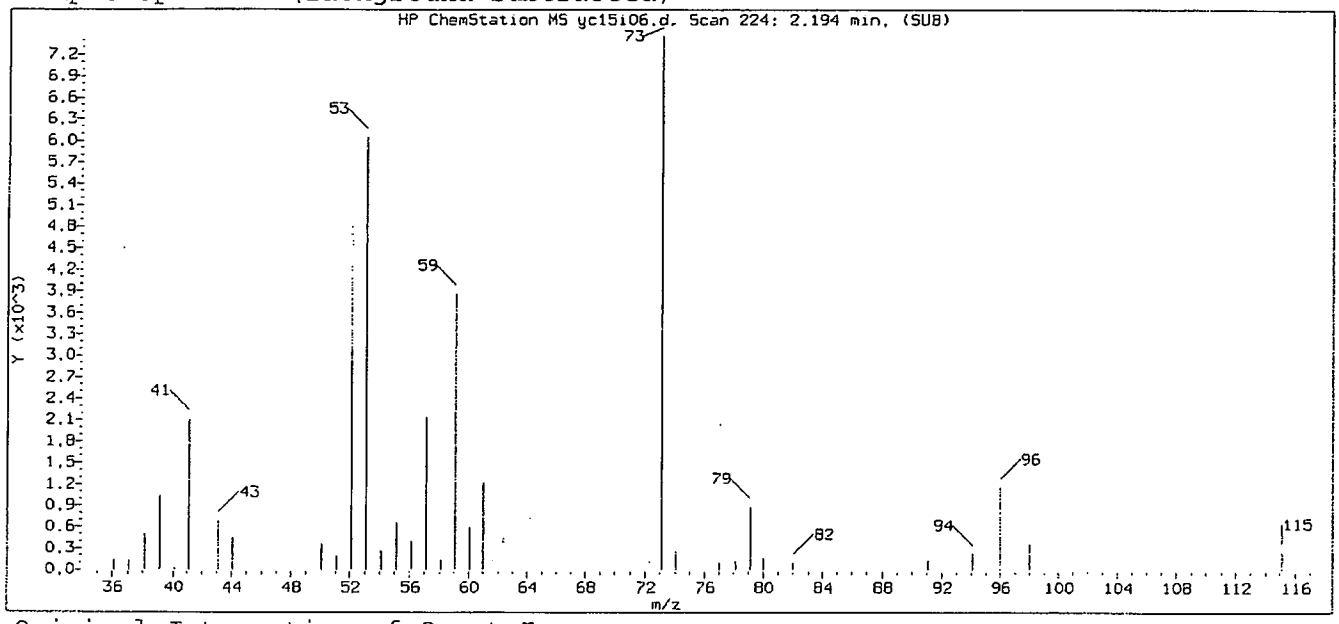
Compound Number	: 30		
Compound Name	: Acrylonitrile		
Scan Number	: 224		
Retention Time (minutes)	: 2.194		
Quant Ion	: 53.00		
Area (flag)	: 27208M		
On-Column Amount (ng)	: 4.5782		
Integration start scan	: 197	Integration stop scan:	249
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

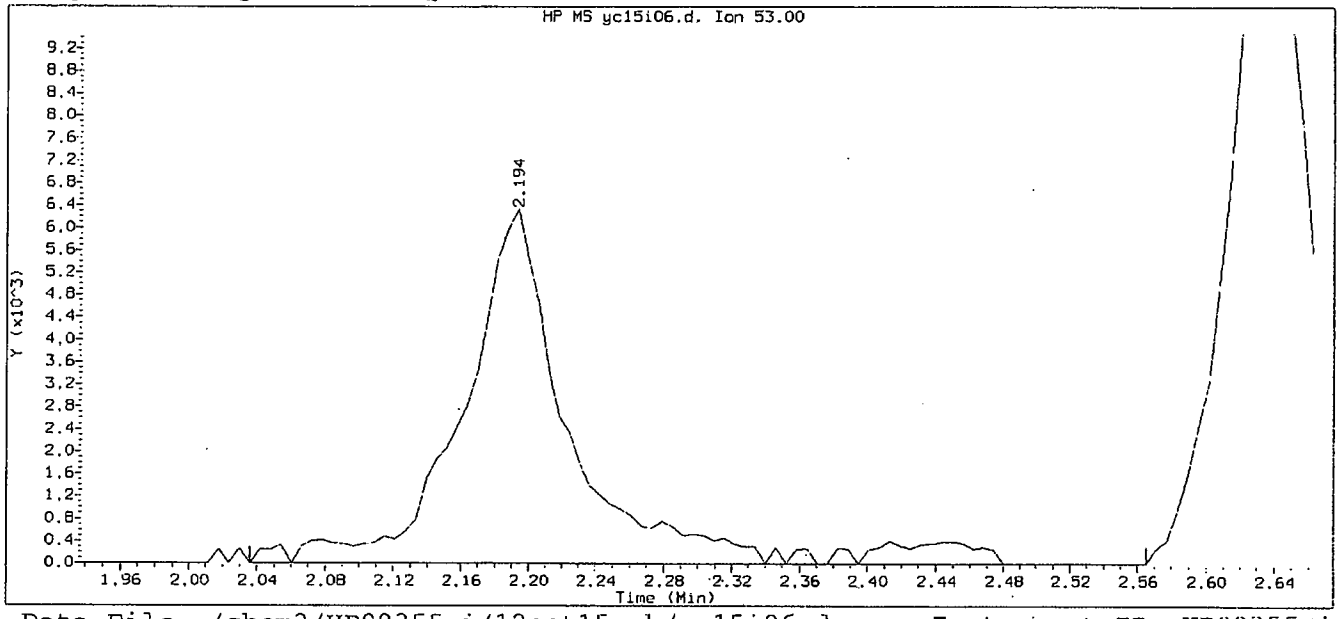
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

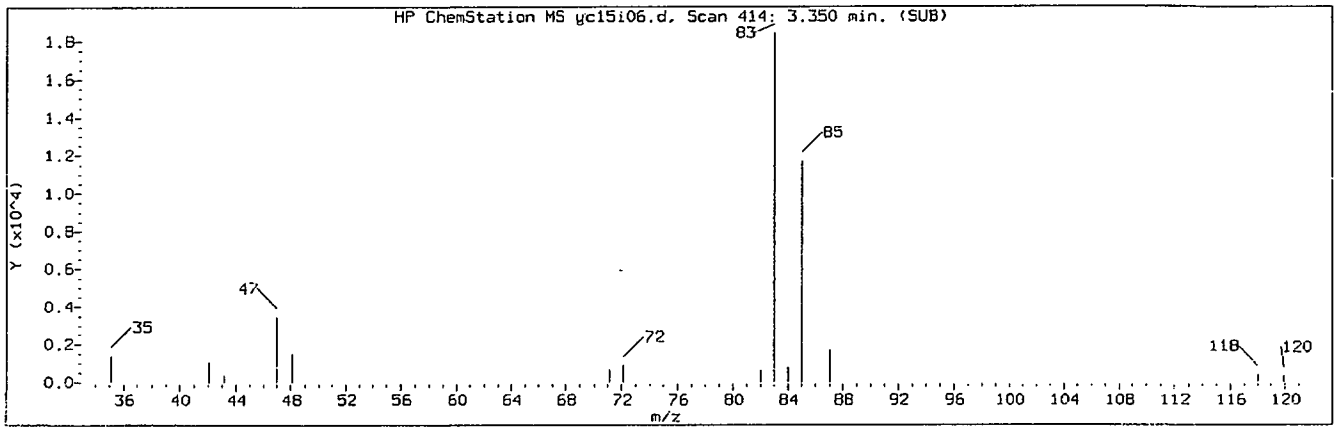
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:50
Date, time and analyst ID of latest file update: 15-Oct-2012 15:50 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

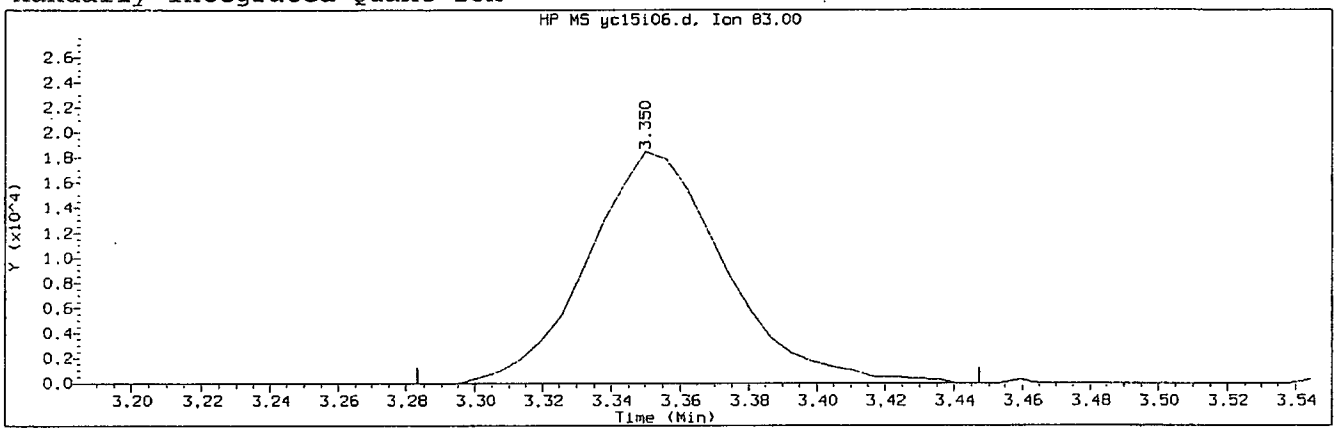
Compound Number	: 30		
Compound Name	: Acrylonitrile		
Scan Number	: 224		
Retention Time (minutes)	: 2.194		
Quant Ion	: 53.00		
Area	: 29135		
On-column Amount (ng)	: 4.7147		
Integration start scan	: 197	Integration stop scan:	284
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

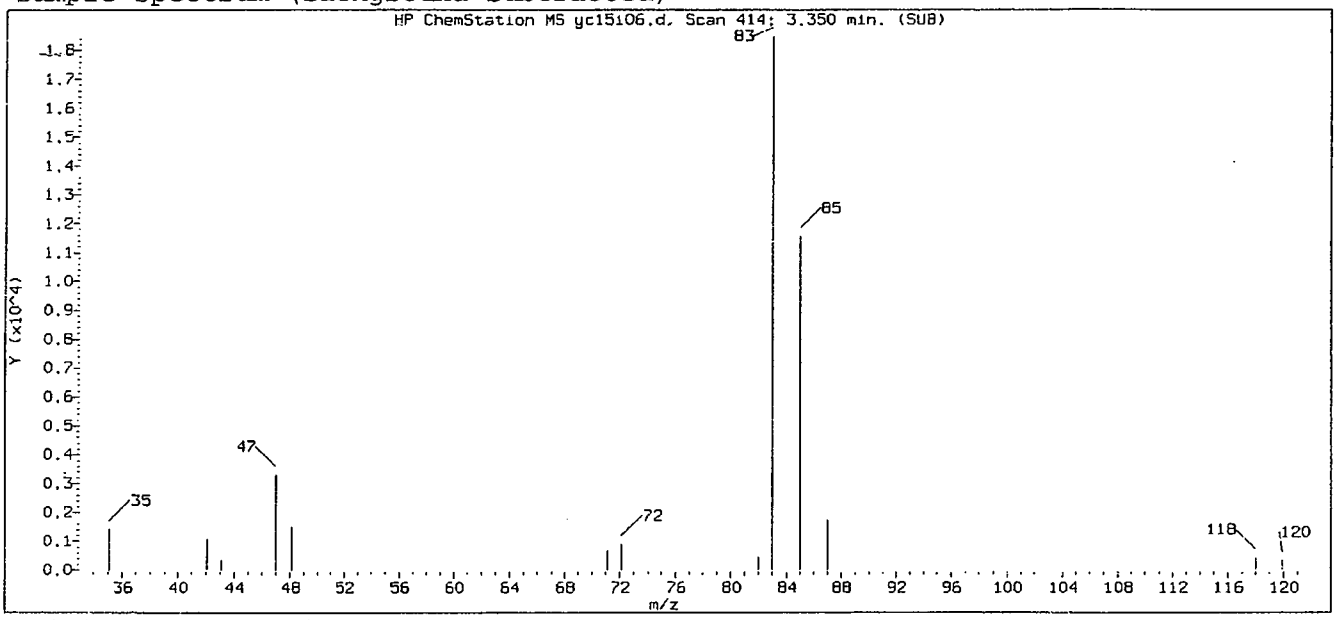
Compound Number	: 50		
Compound Name	: Chloroform		
Scan Number	: 414		
Retention Time (minutes)	: 3.350		
Quant Ion	: 83.00		
Area (flag)	: 51241M		
On-Column Amount (ng)	: 4.1361		
Integration start scan	: 402	Integration stop scan:	429
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

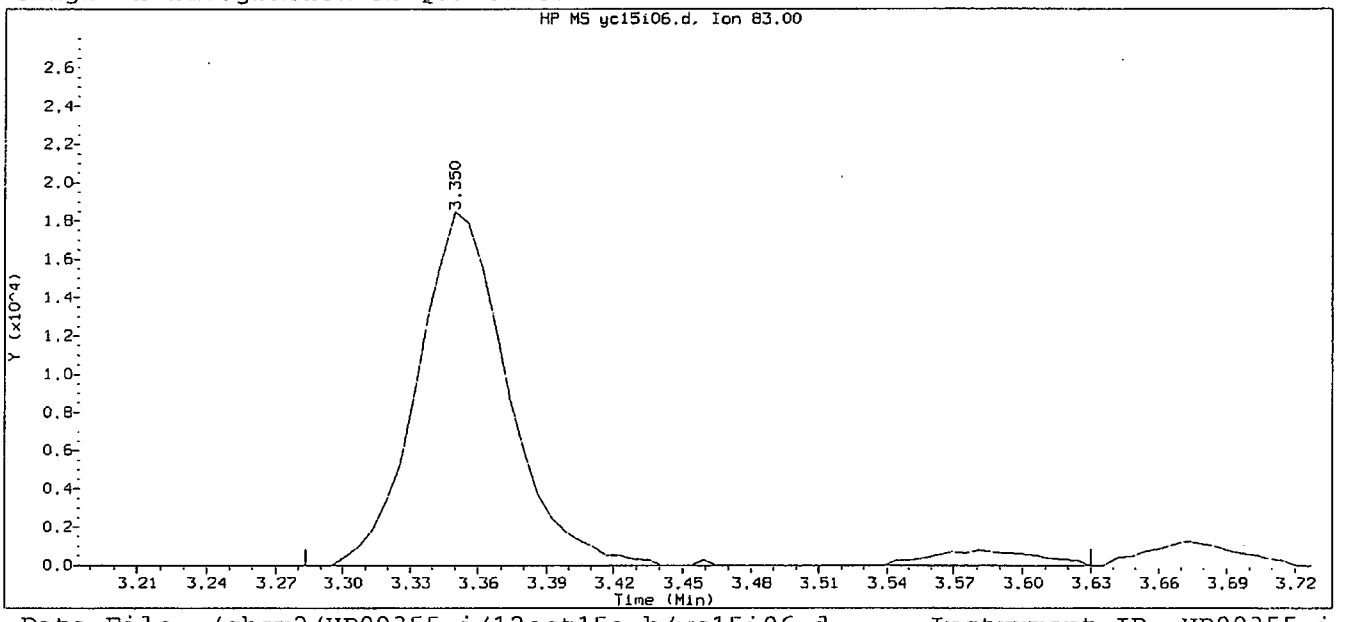
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

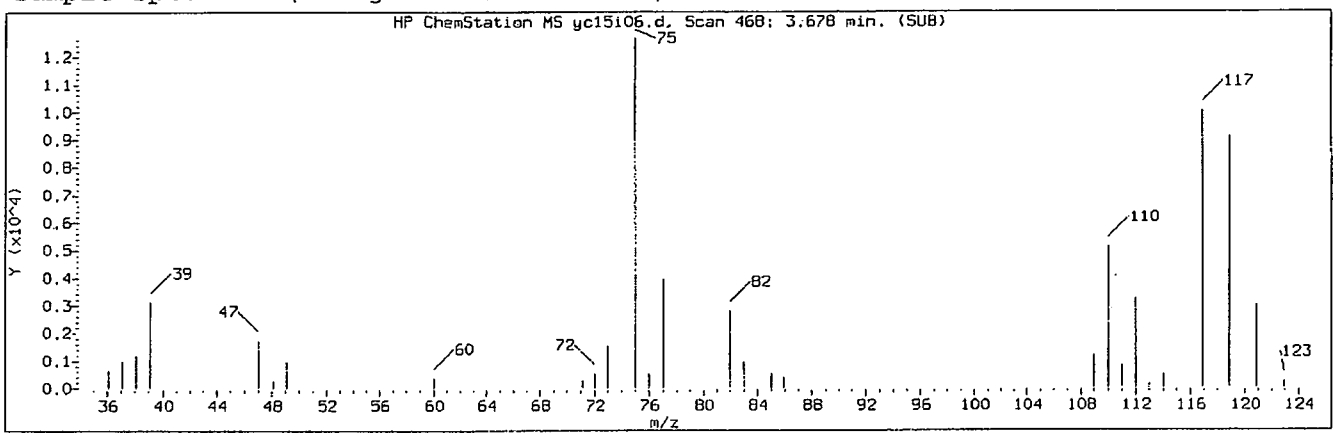
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:50
Date, time and analyst ID of latest file update: 15-Oct-2012 15:50 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

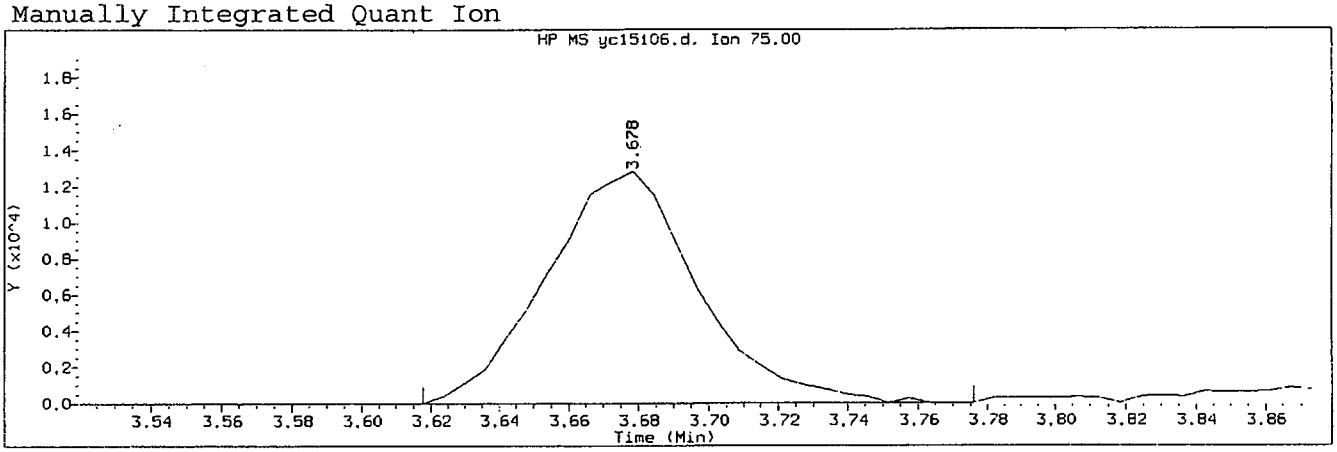
Compound Number	: 50		
Compound Name	: Chloroform		
Scan Number	: 414		
Retention Time (minutes)	: 3.350		
Quant Ion	: 83.00		
Area	: 53990		
On-column Amount (ng)	: 4.3660		
Integration start scan	: 402	Integration stop scan:	459
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

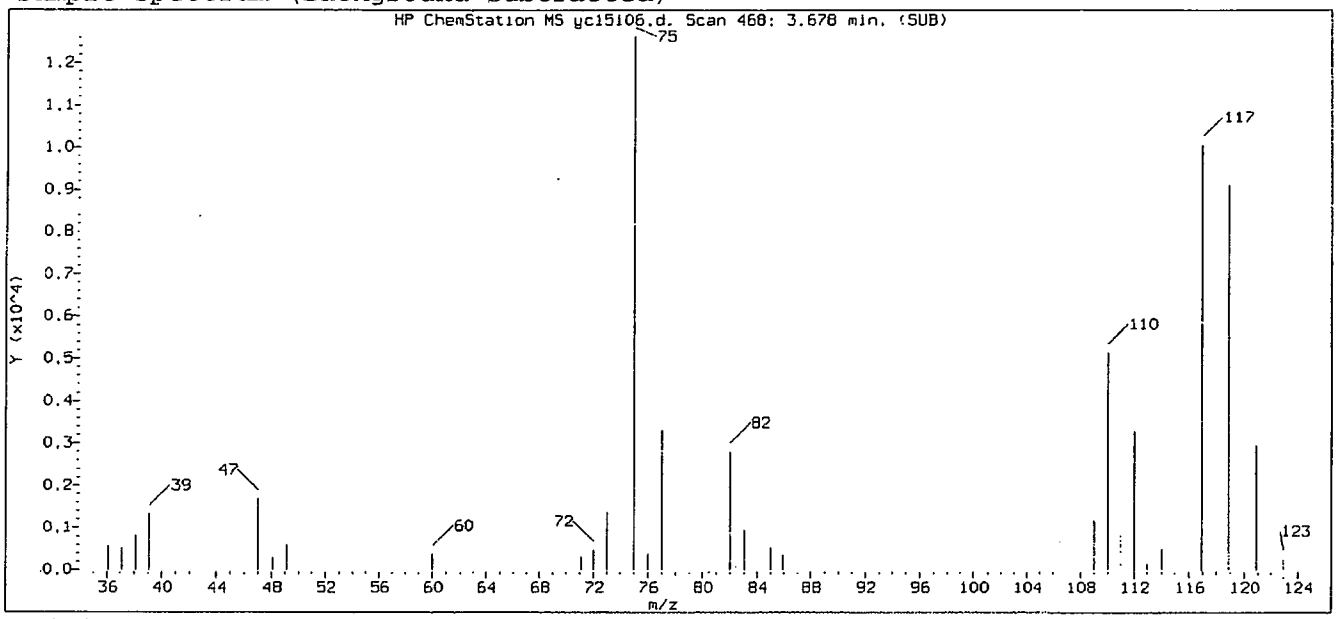
Compound Number : 57
Compound Name : 1,1-Dichloropropene
Scan Number : 468
Retention Time (minutes): 3.678
Quant Ion : 75.00
Area (flag) : 38461M
On-Column Amount (ng) : 4.1947
Integration start scan : 457 Integration stop scan: 483
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

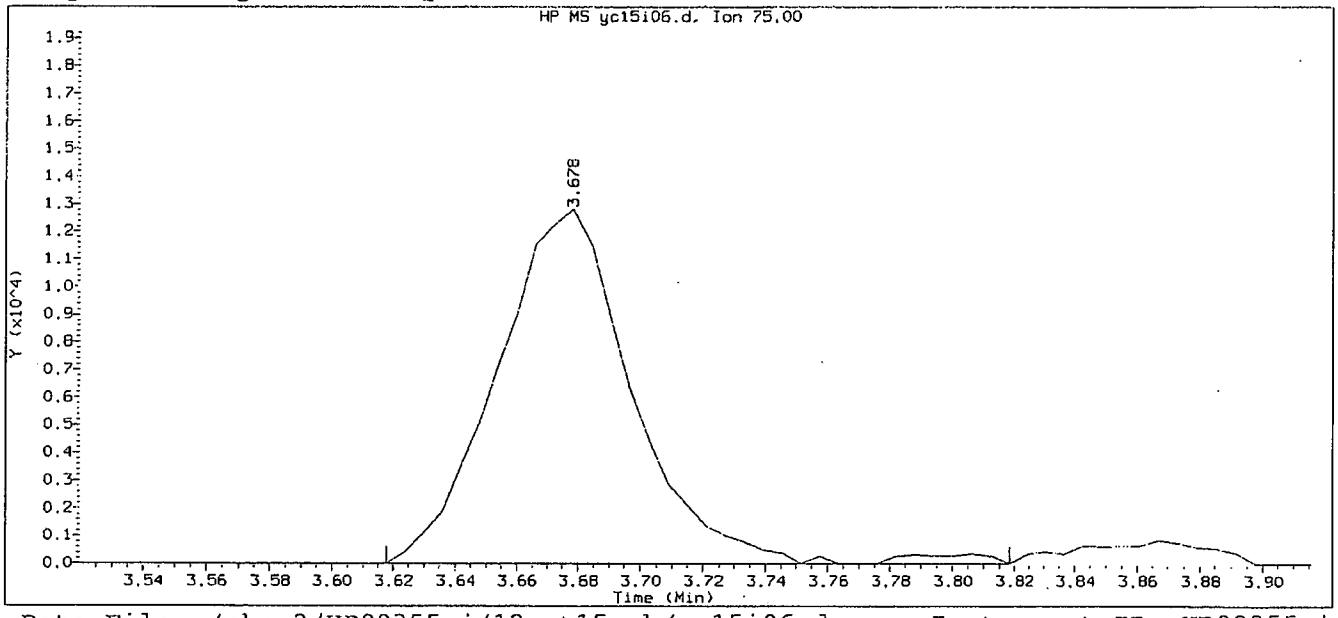
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

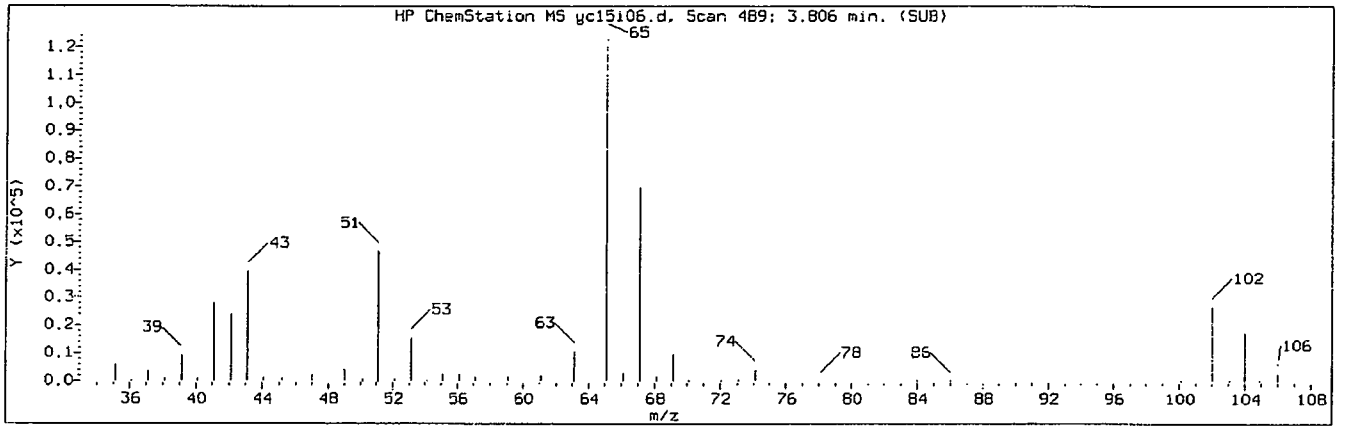
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:50
Date, time and analyst ID of latest file update: 15-Oct-2012 15:50 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

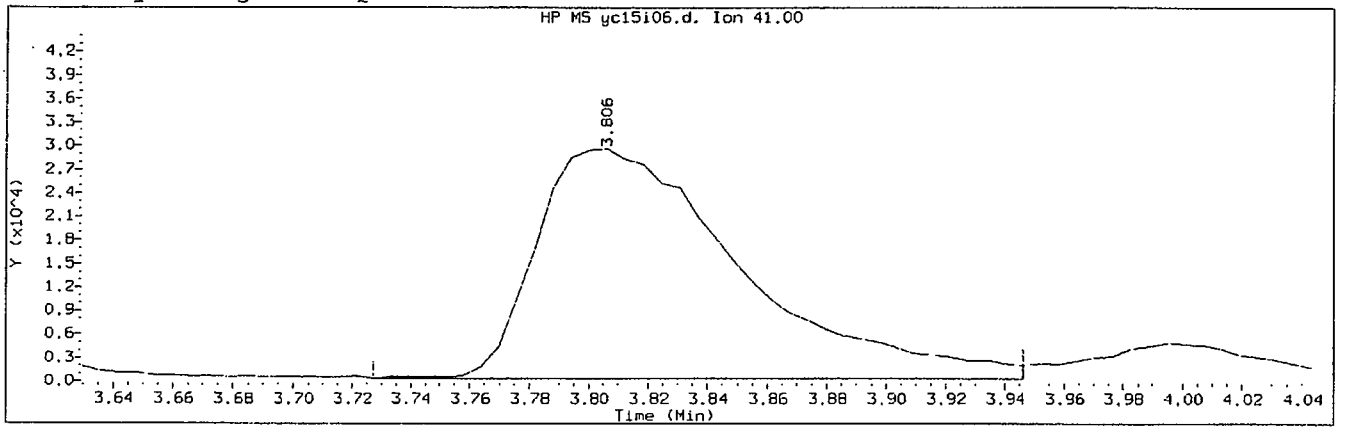
Compound Number	: 57		
Compound Name	: 1,1-Dichloropropene		
Scan Number	: 468		
Retention Time (minutes)	: 3.678		
Quant Ion	: 75.00		
Area	: 39103		
On-column Amount (ng)	: 4.1819		
Integration start scan	: 457	Integration stop scan:	490
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

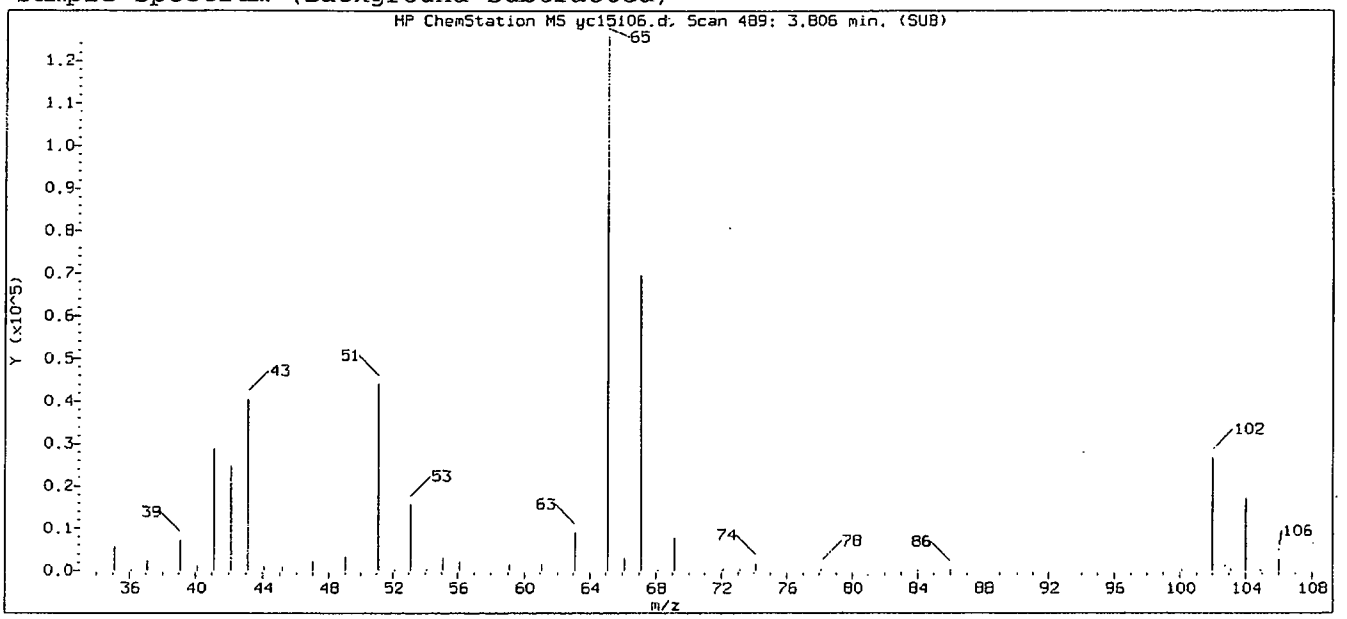
Compound Number	: 59		
Compound Name	: Isobutyl Alcohol		
Scan Number	: 489		
Retention Time (minutes)	: 3.806		
Quant Ion	: 41.00		
Area (flag)	: 139956M		
On-Column Amount (ng)	: 194.1264		
Integration start scan	: 475	Integration stop scan:	511
Y at integration start	: 375	Y at integration end:	375

Reason for manual integration: improper integration

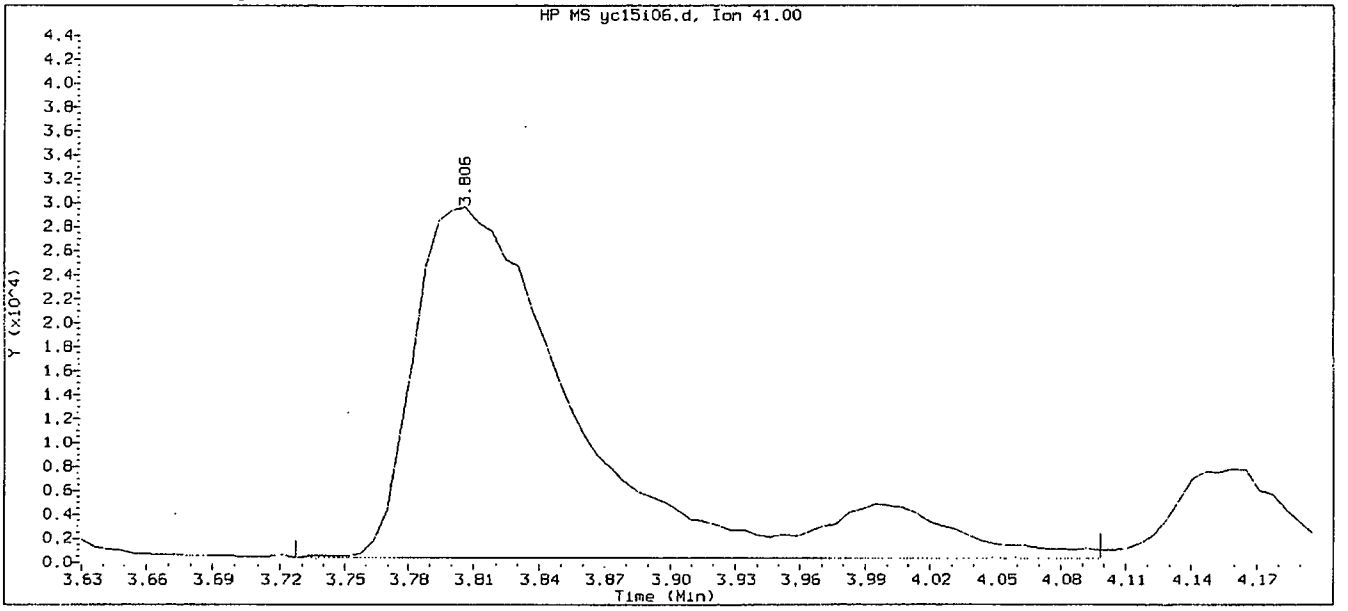
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

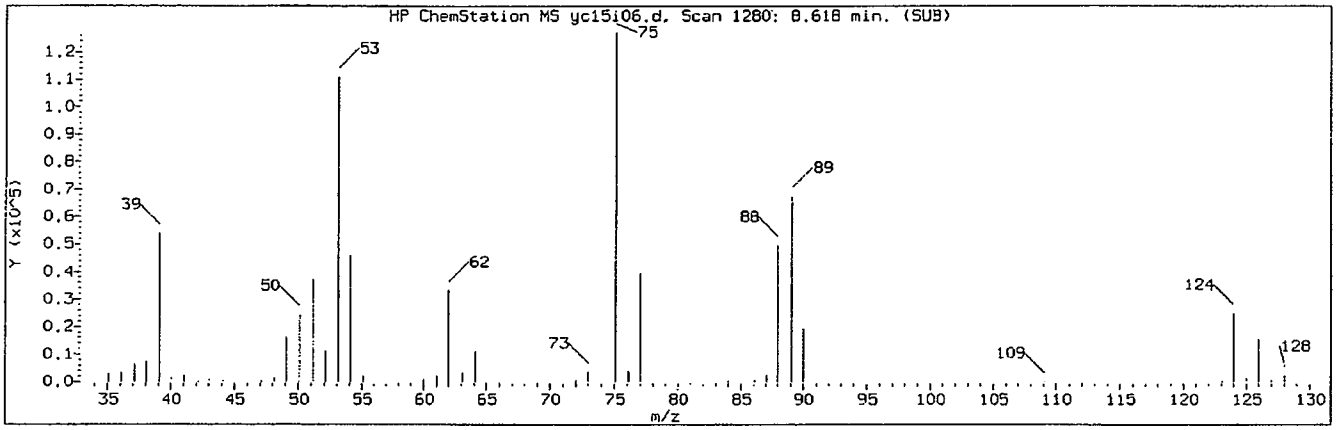
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:50
Date, time and analyst ID of latest file update: 15-Oct-2012 15:50 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

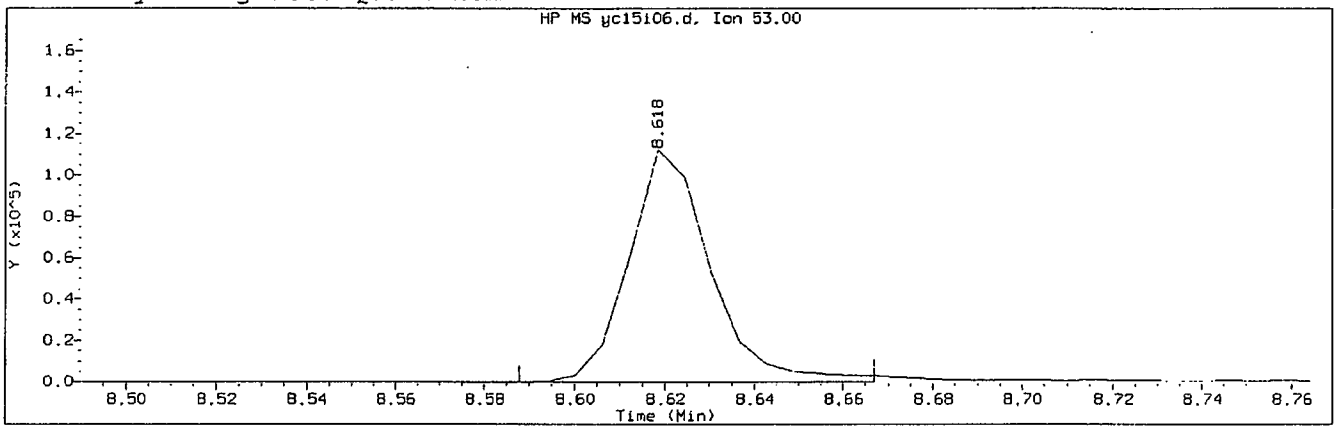
Compound Number	: 59		
Compound Name	: Isobutyl Alcohol		
Scan Number	: 489		
Retention Time (minutes)	: 3.806		
Quant Ion	: 41.00		
Area	: 160099		
On-column Amount (ng)	: 217.0138		
Integration start scan	: 475	Integration stop scan:	536
Y at integration start	: 375	Y at integration end:	375

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD004 Lab Sample ID: VSTD004

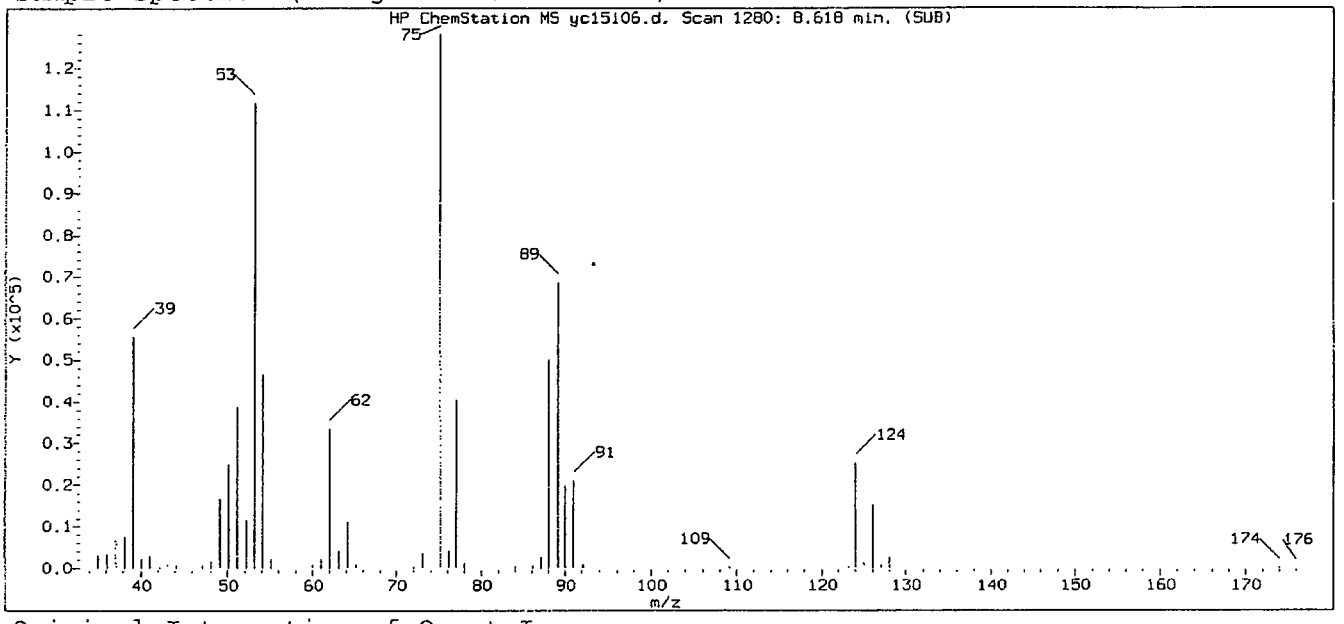
Compound Number	: 124		
Compound Name	: trans-1,4-Dichloro-2-Butene		
Scan Number	: 1280		
Retention Time (minutes)	: 8.618		
Quant Ion	: 53.00		
Area (flag)	: 142069M		
On-Column Amount (ng)	: 36.4176		
Integration start scan	: 1274	Integration stop scan:	1287
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

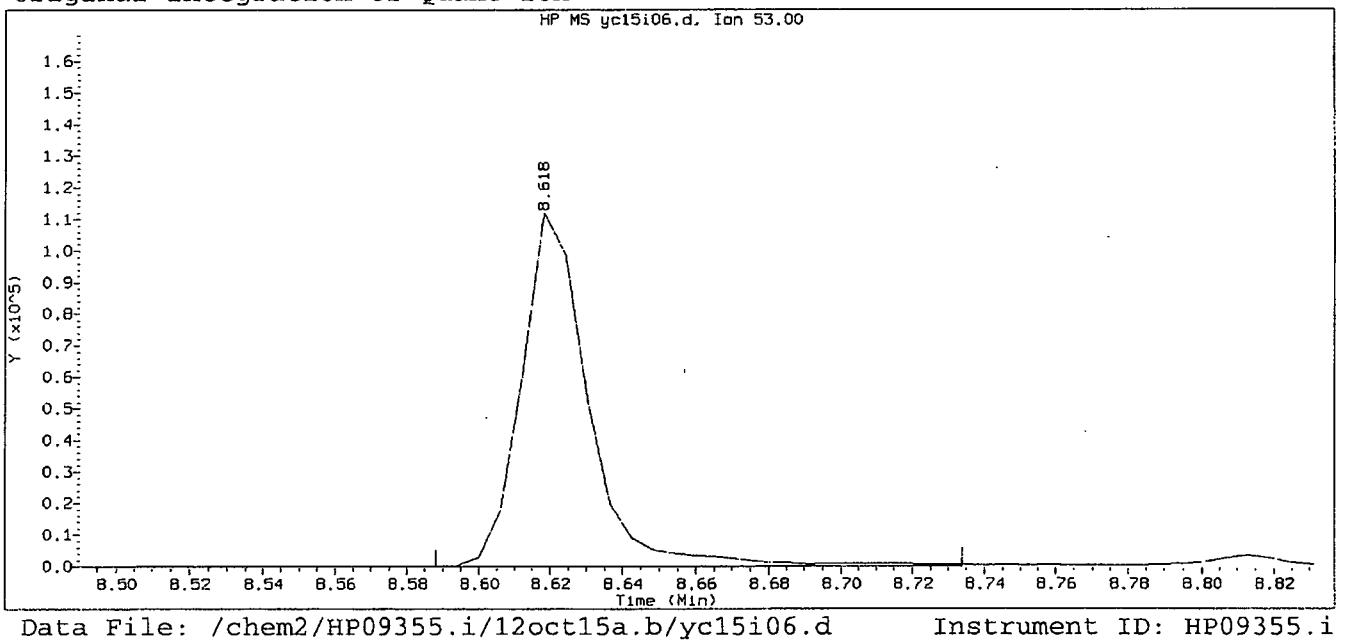
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



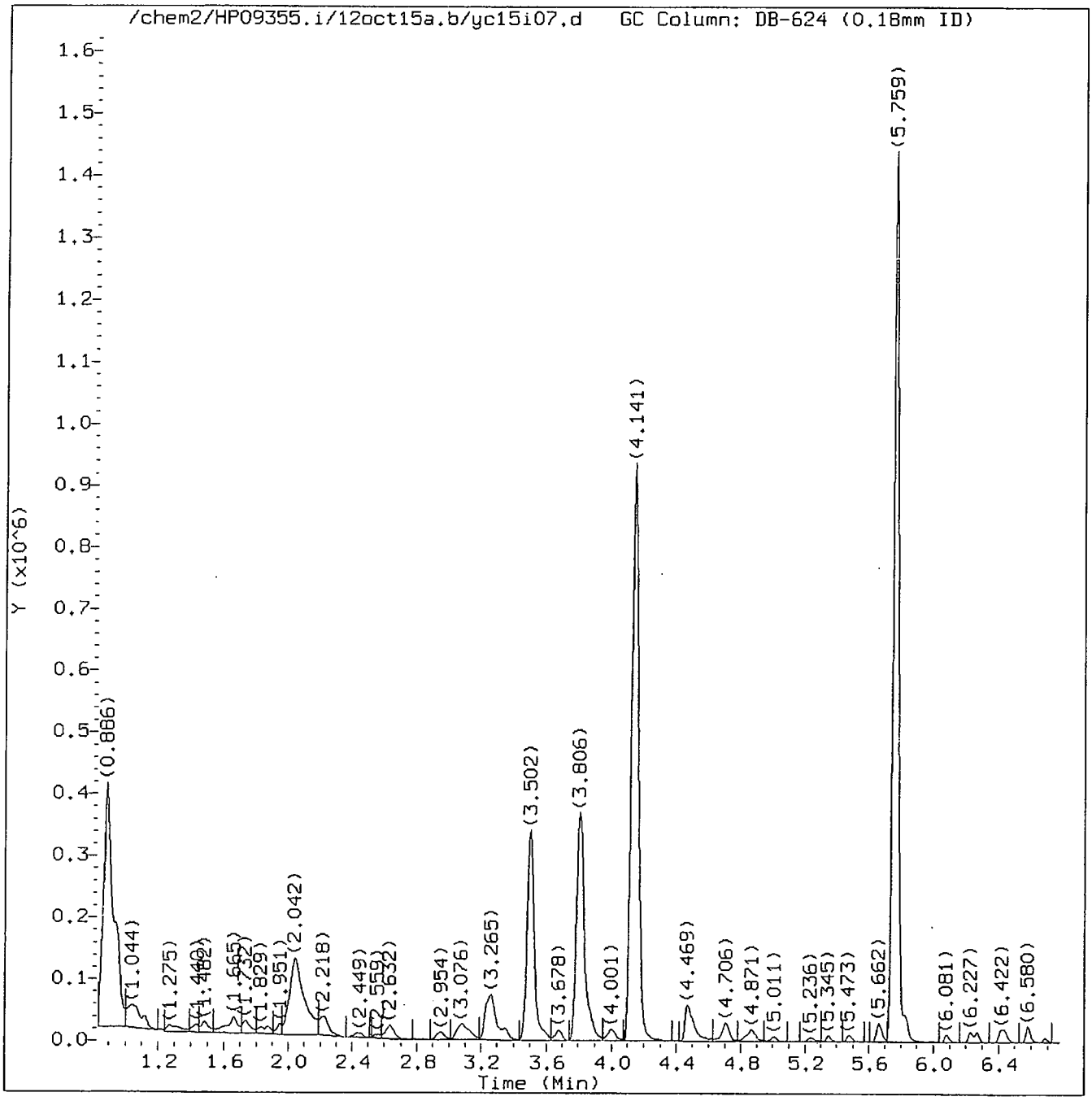
Data File: /chem2/HP09355.i/12oct15a.b/yc15i06.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:35 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 15:50
Date, time and analyst ID of latest file update: 15-Oct-2012 15:50 Automation

Sample Name: VSTD004 Lab Sample ID: VSTD004

Compound Number	: 124		
Compound Name	: trans-1,4-Dichloro-2-Butene		
Scan Number	: 1280		
Retention Time (minutes)	: 8.618		
Quant Ion	: 53.00		
Area	: 146137		
On-column Amount (ng)	: 36.6380		
Integration start scan	: 1274	Integration stop scan:	1298
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:45.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

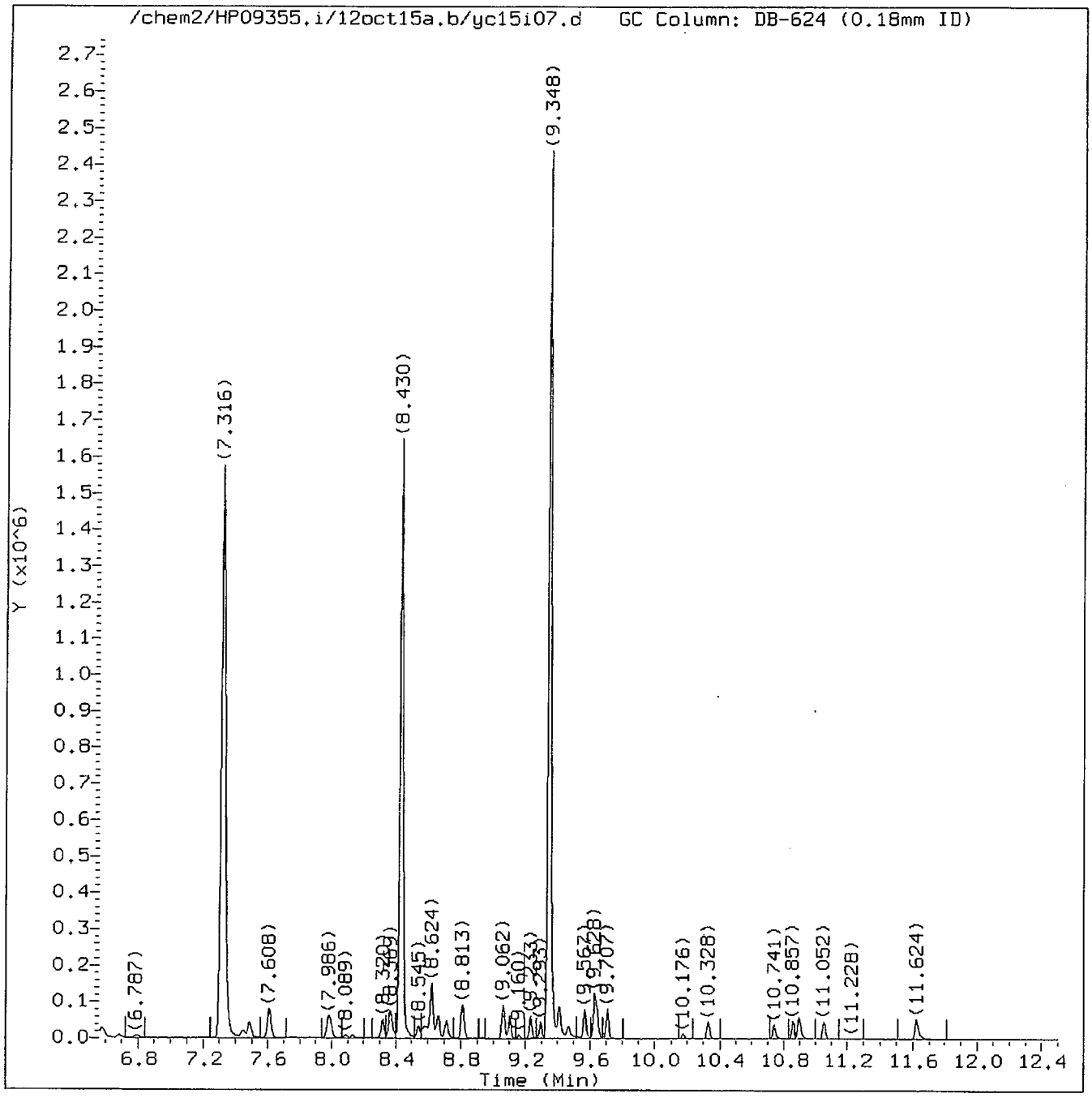
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Dichlorodifluoromethane	(1)	1.020	85	8064	0.858
3) Chloromethane	(1)	1.050	50	9967M	1.000
5) Vinyl Chloride	(1)	1.123	62	10002M	1.025
4) 1,3-Butadiene	(1)	1.123	39	4098M	0.977
7) Bromomethane	(1)	1.281	94	7034	1.102
8) Chloroethane	(1)	1.324	64	5224	0.987
9) Dichlorofluoromethane	(1)	1.427	67	12642	1.088
10) Trichlorofluoromethane	(1)	1.482	101	9493	0.904
11) n-Pentane	(1)	1.482	43	8382M	0.876
14) Freon 123a	(1)	1.598	67	8967	1.208
15) Acrolein	(4)	1.665	56	30349	10.501
16) 1,1-Dichloroethene	(1)	1.738	96	5624M	0.997
18) Freon 113	(1)	1.750	101	4633M	0.799
17) Acetone	(1)	1.750	58	3623	2.298
20) Methyl Iodide	(1)	1.829	142	10162	0.946
21) 2-Propanol	(4)	1.835	45	23828	19.609
22) Carbon Disulfide	(1)	1.872	76	16901M	0.972
24) Allyl Chloride	(1)	1.945	41	13263	1.274
25) Methyl Acetate	(1)	1.963	43	9849M	1.146
26) Methylene Chloride	(1)	2.030	84	7764	1.106
28)*t-Butyl Alcohol-d10	(4)	2.042	65	433320	250.000
29) t-Butyl Alcohol	(4)	2.103	59	43274	20.136
30) Acrylonitrile	(1)	2.194	53	6755	1.142
31) trans-1,2-Dichloroethene	(1)	2.230	96	6588	0.975
32) Methyl Tertiary Butyl Ether	(1)	2.230	73	21978	0.941
33) n-Hexane	(1)	2.449	57	8337	0.824
34) 1,1-Dichloroethane	(1)	2.559	63	11296	0.921
36) di-Isopropyl Ether	(1)	2.632	45	24261	0.987
37) 2-Chloro-1,3-Butadiene	(1)	2.638	53	9881	0.949
39) Ethyl t-Butyl Ether	(1)	2.942	59	22121	0.934
41) 2-Butanone	(1)	3.052	43	19985	2.337
40) cis-1,2-Dichloroethene	(1)	3.058	96	6915	0.915
42) 2,2-Dichloropropane	(1)	3.070	77	8814	0.957
43) Propionitrile	(4)	3.119	54	48491	18.105
46) Methacrylonitrile	(1)	3.259	67	53412	9.124
47) Bromochloromethane	(1)	3.277	128	3668	0.895
48) Tetrahydrofuran	(4)	3.319	71	4833	1.927
50) Chloroform	(1)	3.350	83	13150	1.066

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
52)$Dibromofluoromethane	(1)	3.502	113	306804	49.748
51)$Dibromofluoromethane(mz111)	(1)	3.502	111	314663	49.886
53) 1,1,1-Trichloroethane	(1)	3.526	97	10131	0.964
55) Cyclohexane (mz 69)	(1)	3.581	69	3090	0.814
54) Cyclohexane (mz 84)	(1)	3.581	84	8229	0.811
56) Cyclohexane	(1)	3.581	56	11072	0.898
45) 1,2-Dichloroethene (total)	(1)		96	13503	1.890
57) 1,1-Dichloropropene	(1)	3.684	75	8200	0.899
58) Carbon Tetrachloride	(1)	3.684	117	6580	0.842
61)$1,2-Dichloroethane-d4(mz65)	(1)	3.806	65	375095	49.436
59) Isobutyl Alcohol	(4)	3.806	41	36364	49.121
62)$1,2-Dichloroethane-d4	(1)	3.812	102	81300	49.063
60)$1,2-Dichloroethane-d4(mz104)	(1)	3.812	104	52039	50.000
63) Benzene	(1)	3.867	78	27629	0.949
65) 1,2-Dichloroethane	(1)	3.885	62	9276	0.965
64) 1,2-Dichloroethane (mz 98)	(1)	3.885	98	417	0.864
69) t-Amyl Methyl Ether	(1)	4.001	73	21664	0.931
71)*Fluorobenzene	(1)	4.141	96	1388390	50.000
72) n-Heptane	(1)	4.165	43	13494	1.151
73) n-Butanol	(4)	4.469	56	59741	87.014
74) Trichloroethene	(1)	4.506	95	6763	0.934
75) Methylcyclohexane (mz98)	(1)	4.700	98	4859	0.843
76) Methylcyclohexane	(1)	4.706	83	11171	0.852
77) 1,2-Dichloropropane	(1)	4.713	63	6888	0.902
78) Dibromomethane	(1)	4.834	93	4428	0.875
79) 1,4-Dioxane	(4)	4.865	88	8034	42.072
80) Methyl Methacrylate	(1)	4.871	69	7604	0.842
83) Bromodichloromethane	(1)	5.011	83	7010	0.819
85) 2-Nitropropane	(1)	5.230	41	7732	2.182
86) 2-Chloroethyl Vinyl Ether	(1)	5.345	63	5449	0.797
87) cis-1,3-Dichloropropene	(1)	5.479	75	8869	0.809
89) 4-Methyl-2-Pentanone	(1)	5.662	43	30354M	1.877
92)$Toluene-d8(mz100)	(2)	5.759	100	839183	49.173
93)$Toluene-d8	(2)	5.759	98	1310604	50.227
94) Toluene	(2)	5.826	92	17183	0.944
95) trans-1,3-Dichloropropene	(2)	6.081	75	7967	0.765
96) Ethyl Methacrylate	(2)	6.227	69	11470	0.833
97) 1,1,2-Trichloroethane	(2)	6.270	97	6597	0.897

M = Compound was manually integrated.
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on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
98) Tetrachloroethene	(2)	6.416	166	7112	0.906
99) 1,3-Dichloropropane	(2)	6.440	76	11141	0.903
101) 2-Hexanone	(2)	6.580	43	24876	1.942
102) Dibromochloromethane	(2)	6.684	129	5122	0.757
104) 1,2-Dibromoethane	(2)	6.787	107	6662	0.835
106)*Chlorobenzene-d5	(2)	7.322	117	977849	50.000
107) Chlorobenzene	(2)	7.347	112	18491	0.912
108) 1,1,1,2-Tetrachloroethane	(2)	7.450	131	5094	0.771
109) Ethylbenzene	(2)	7.487	91	32535	0.920
110) m+p-Xylene	(2)	7.614	106	24287	1.741
113) o-Xylene	(2)	7.979	106	12124	0.861
114) Styrene	(2)	7.992	104	19092	0.812
115) Bromoform	(2)	8.138	173	3957	0.688
112) Xylene (Total)	(2)		106	36411	2.602
116) Isopropylbenzene	(2)	8.320	105	31016	0.878
118) Cyclohexanone	(4)	8.363	55	38427M	45.451
119)$4-Bromofluorobenzene	(2)	8.430	95	489743	49.785
120)$4-Bromofluorobenzene(mz174)	(2)	8.436	174	420292	50.119
121) Bromobenzene	(3)	8.545	156	7661	0.822
122) 1,1,2,2-Tetrachloroethane	(3)	8.570	83	11703	0.884
123) 1,2,3-Trichloropropane	(3)	8.594	110	3662	0.889
124) trans-1,4-Dichloro-2-Butene	(3)	8.624	53	29660M	7.669
125) n-Propylbenzene	(3)	8.667	91	37054	0.908
126) 2-Chlorotoluene	(3)	8.716	126	7609	0.878
128) 4-Chlorotoluene	(3)	8.807	126	7798	0.870
127) 1,3,5-Trimethylbenzene	(3)	8.813	105	26794	0.881
130) tert-Butylbenzene	(3)	9.062	134	6491	0.951
131) Pentachloroethane	(3)	9.062	167	4091	0.727
132) 1,2,4-Trimethylbenzene	(3)	9.099	105	28303	0.902
133) sec-Butylbenzene	(3)	9.233	105	33709	0.902
134) 1,3-Dichlorobenzene	(3)	9.293	146	15884	0.902
135) p-Isopropyltoluene	(3)	9.348	119	29531	0.894
136)*1,4-Dichlorobenzene-d4	(3)	9.348	152	561154	50.000
138) 1,4-Dichlorobenzene	(3)	9.360	146	17081	0.909
139) 1,2,3-Trimethylbenzene	(3)	9.415	105	33365	0.989
141) Benzyl Chloride	(3)	9.470	91	16977	0.670
142) 1,3-Diethylbenzene	(3)	9.567	119	20009	0.961
144) 1,2-Dichlorobenzene	(3)	9.628	146	16317	0.917

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on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

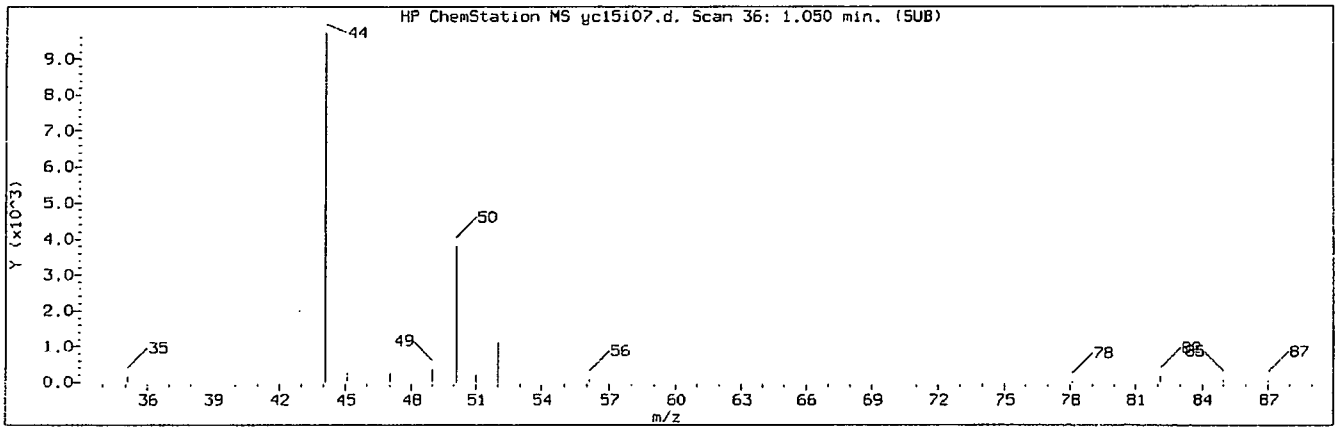
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
143) 1,4-Diethylbenzene	(3)	9.628	119	20519	0.960
145) n-Butylbenzene	(3)	9.646	92	14223	0.869
146) 1,2-Diethylbenzene	(3)	9.707	119	17980M	1.005
148) 1,2-Dibromo-3-Chloropropane	(3)	10.176	75	2510	0.745
149) 1,3,5-Trichlorobenzene	(3)	10.328	180	13310	0.986
150) 1,2,4-Trichlorobenzene	(3)	10.741	180	13506	1.064
151) Hexachlorobutadiene	(3)	10.857	225	7521	1.278
152) Naphthalene	(3)	10.893	128	48774	0.991
153) 1,2,3-Trichlorobenzene	(3)	11.052	180	14466	1.162
154) 2-Methylnaphthalene	(3)	11.624	142	36169	1.322

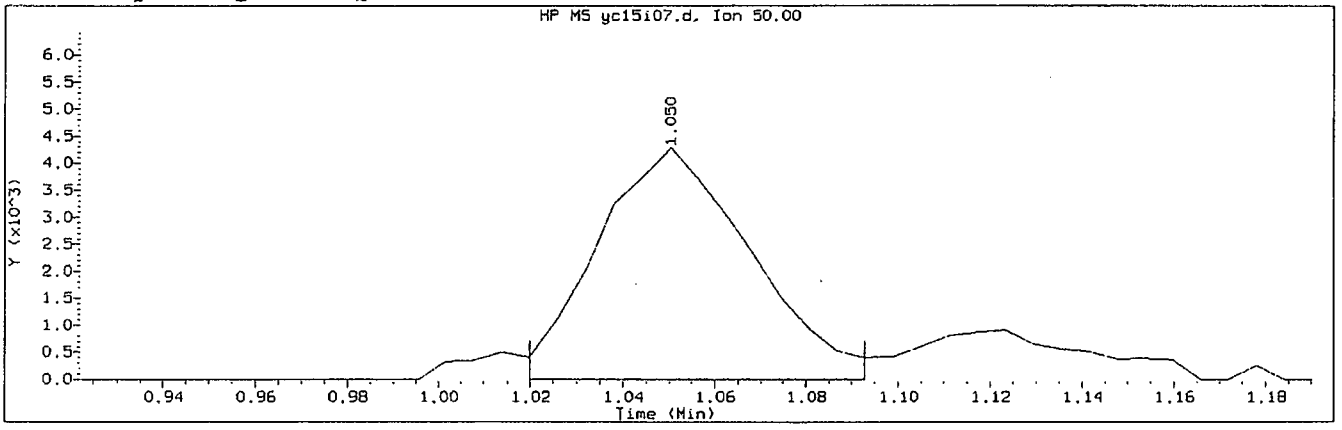
M = Compound was manually integrated.

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

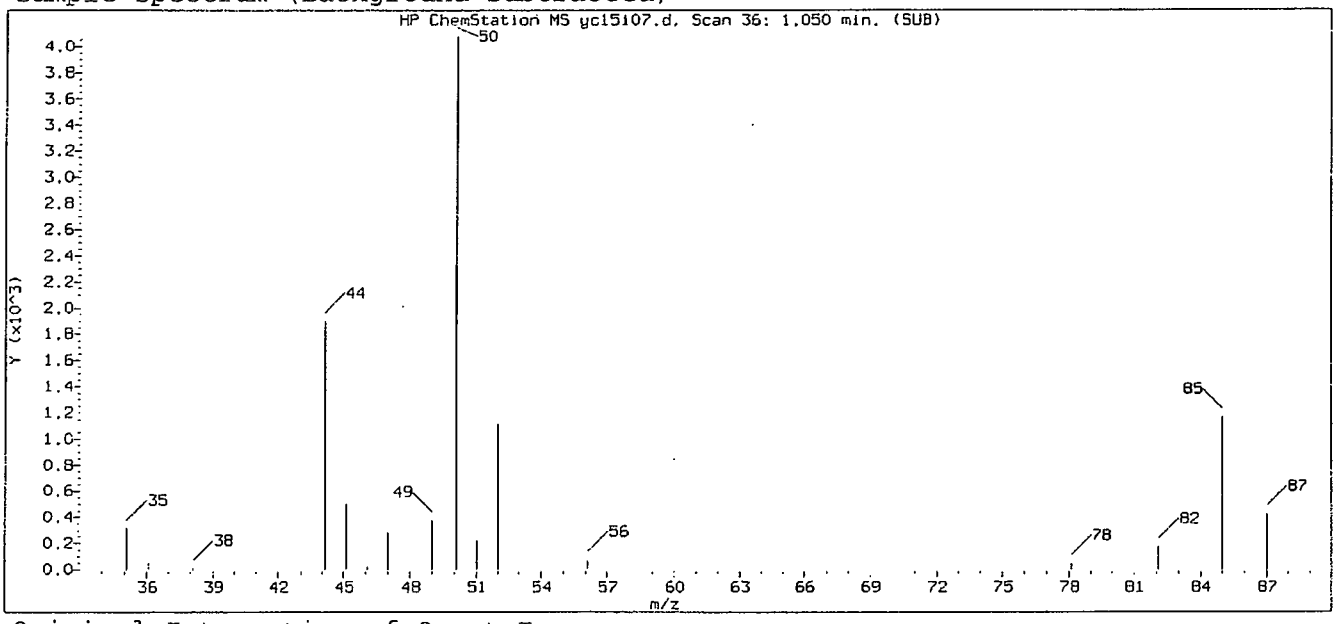
Compound Number : 3
Compound Name : Chloromethane
Scan Number : 36
Retention Time (minutes): 1.050
Quant Ion : 50.00
Area (flag) : 9967M
On-Column Amount (ng) : 1.0001
Integration start scan : 30 Integration stop scan: 42
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

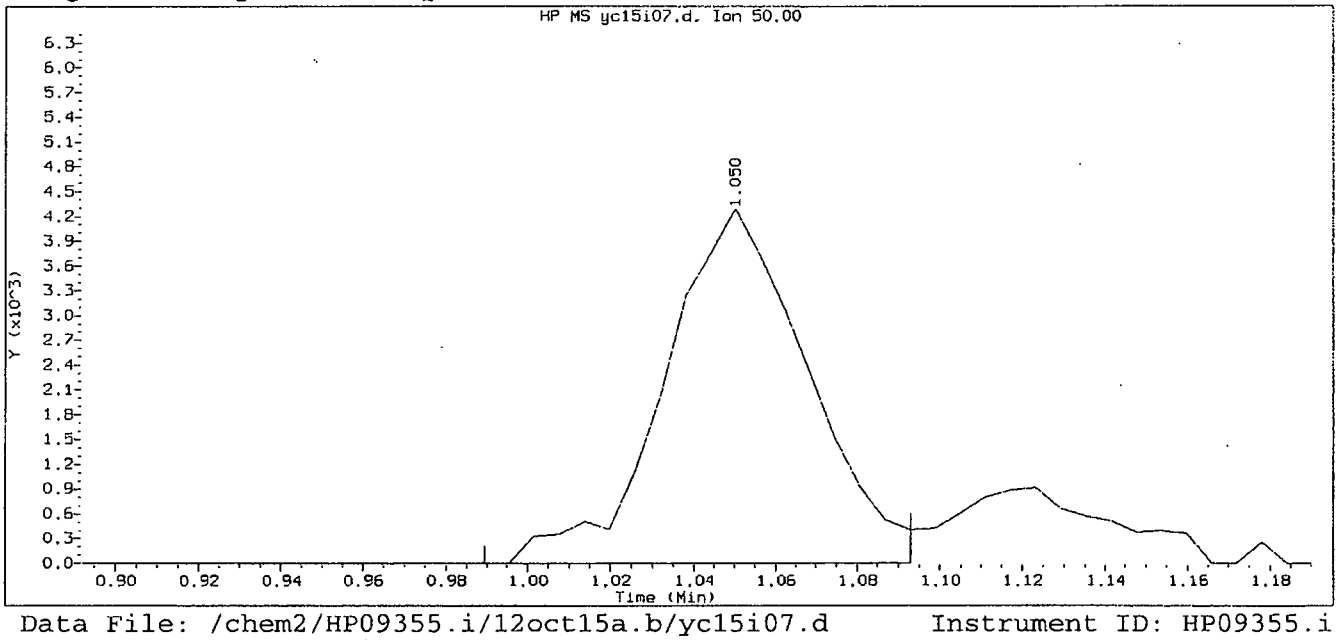
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 16:11
Date, time and analyst ID of latest file update: 15-Oct-2012 16:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number	: 3		
Compound Name	: Chloromethane		
Scan Number	: 36		
Retention Time (minutes)	: 1.050		
Quant Ion	: 50.00		
Area	: 10327		
On-column Amount (ng)	: 1.0310		
Integration start scan	: 25	Integration stop scan:	42
Y at integration start	: 0	Y at integration end:	0

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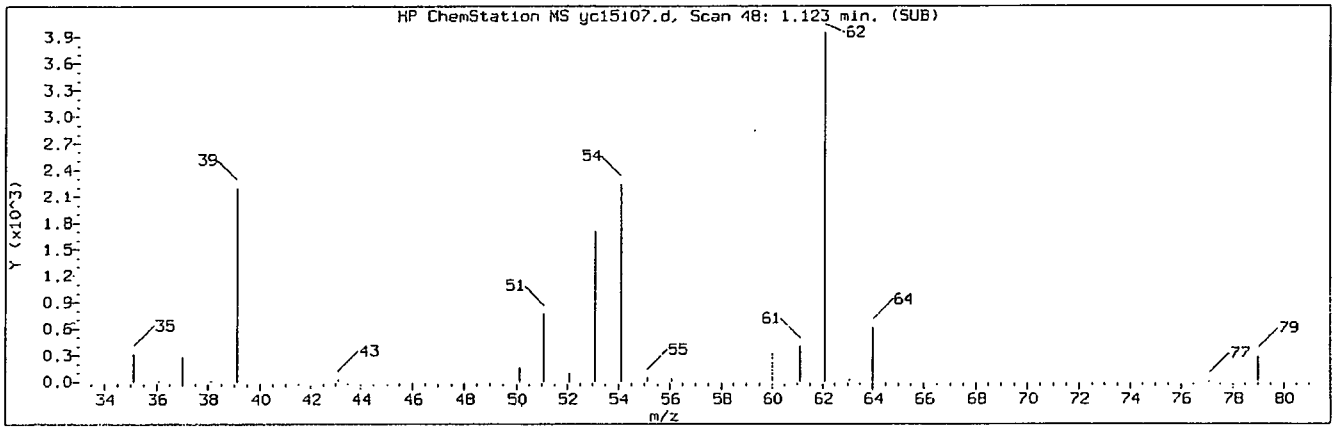
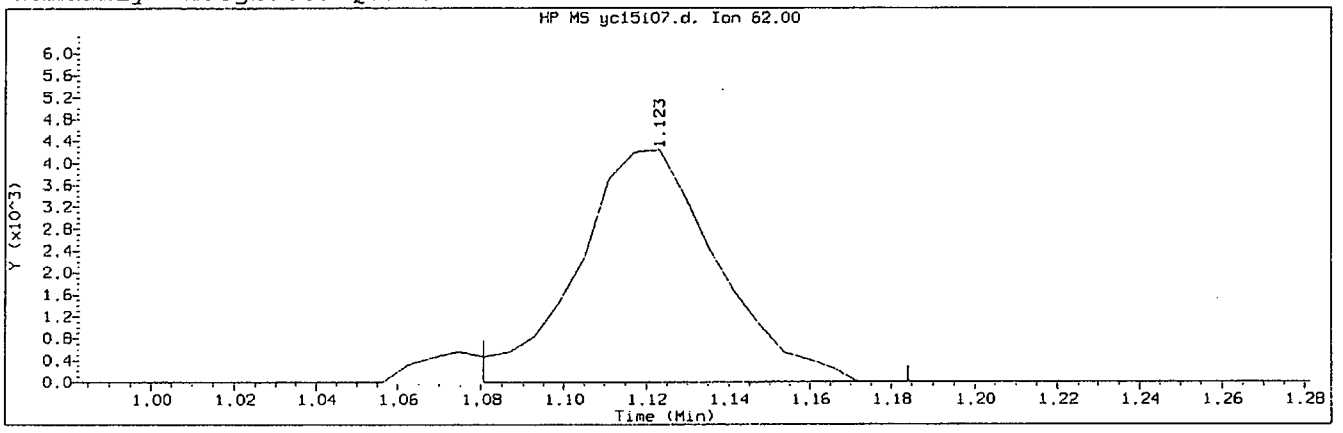
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

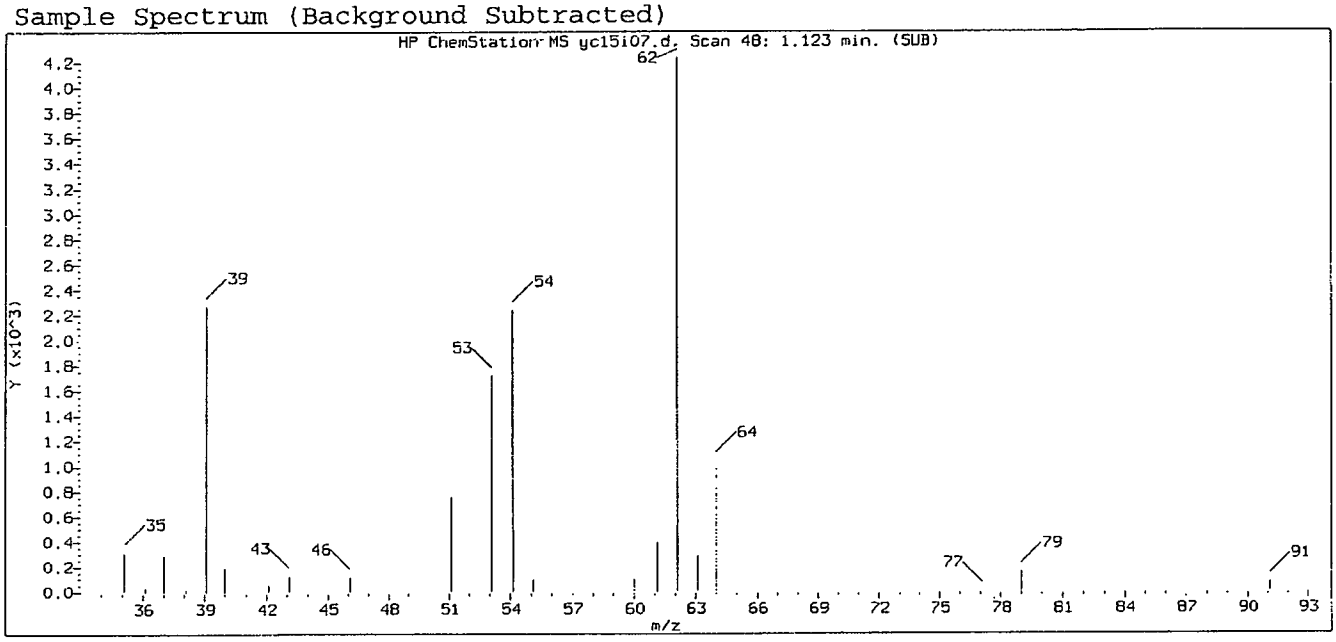
Compound Number	: 5		
Compound Name	: Vinyl Chloride		
Scan Number	: 48		
Retention Time (minutes)	: 1.123		
Quant Ion	: 62.00		
Area (flag)	: 10002M		
On-Column Amount (ng)	: 1.0246		
Integration start scan	: 40	Integration stop scan:	57
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

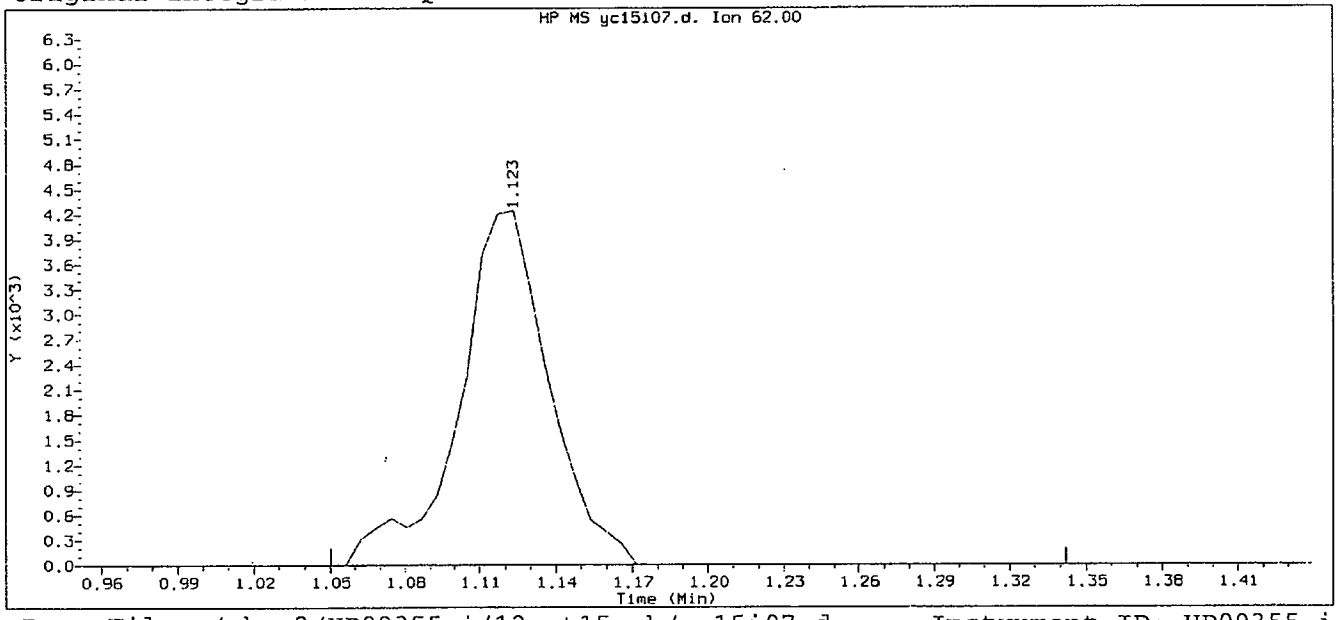
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

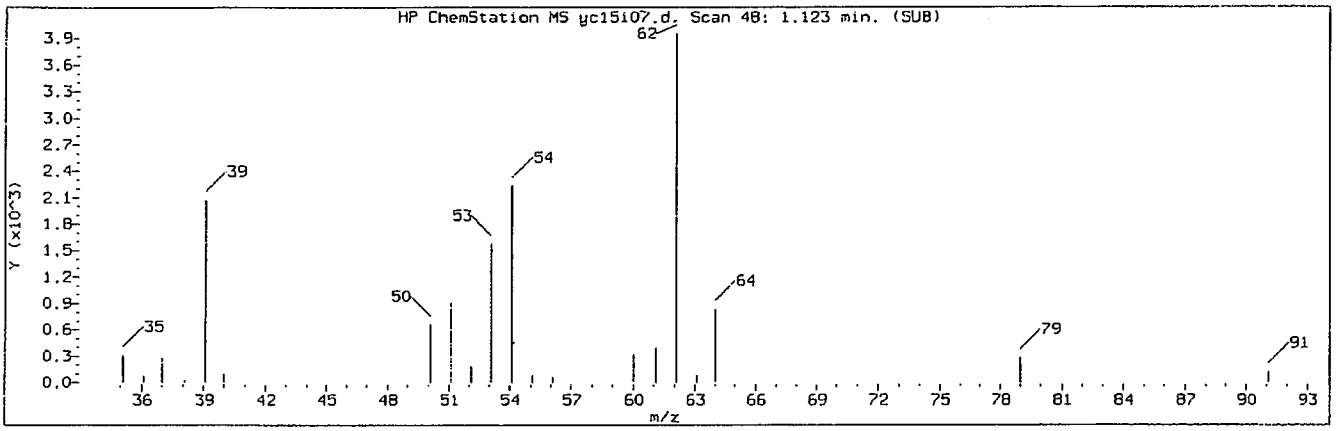
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 16:11
Date, time and analyst ID of latest file update: 15-Oct-2012 16:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

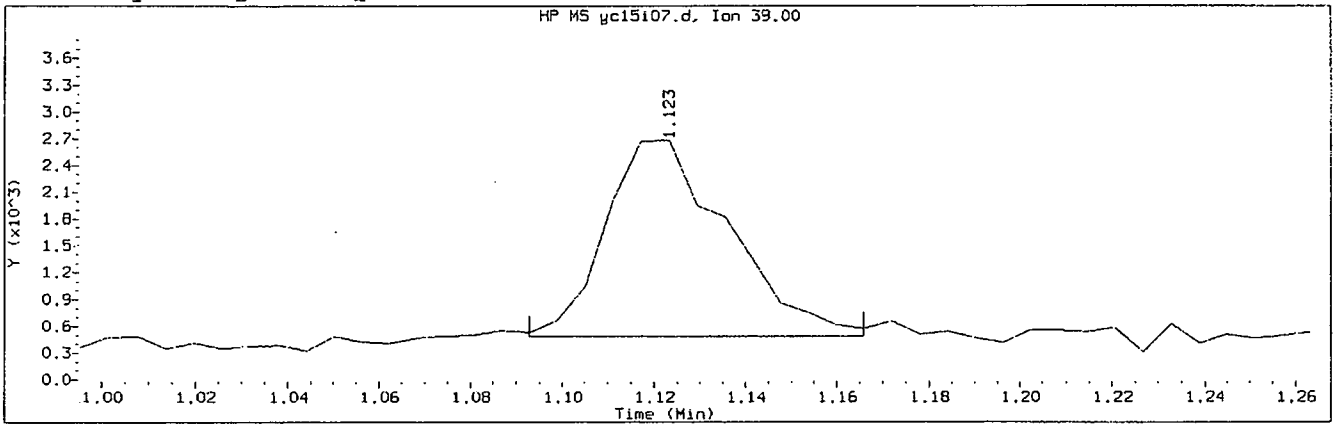
Compound Number	: 5		
Compound Name	: Vinyl Chloride		
Scan Number	: 48		
Retention Time (minutes)	: 1.123		
Quant Ion	: 62.00		
Area	: 10482		
On-column Amount (ng)	: 1.0663		
Integration start scan	: 35	Integration stop scan:	83
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

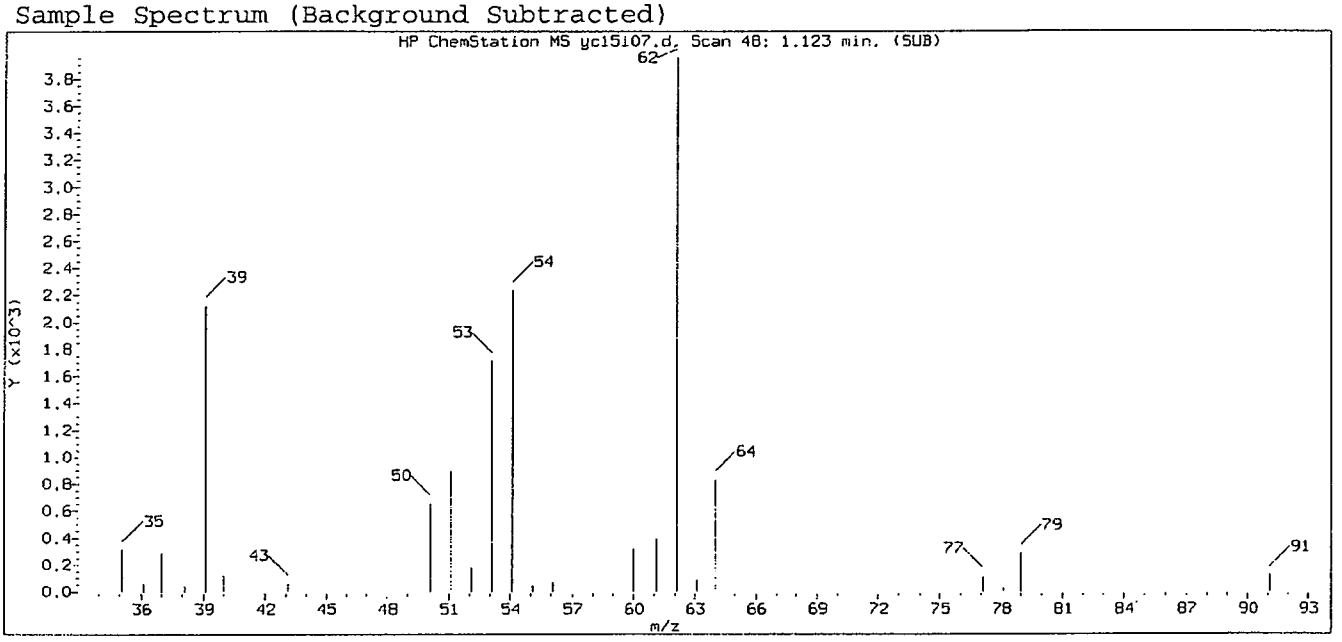
Compound Number	: 4		
Compound Name	: 1,3-Butadiene		
Scan Number	: 48		
Retention Time (minutes)	: 1.123		
Quant Ion	: 39.00		
Area (flag)	: 4098M		
On-Column Amount (ng)	: 0.9772		
Integration start scan	: 42	Integration stop scan:	54
Y at integration start	: 485	Y at integration end:	485

Reason for manual integration: improper integration

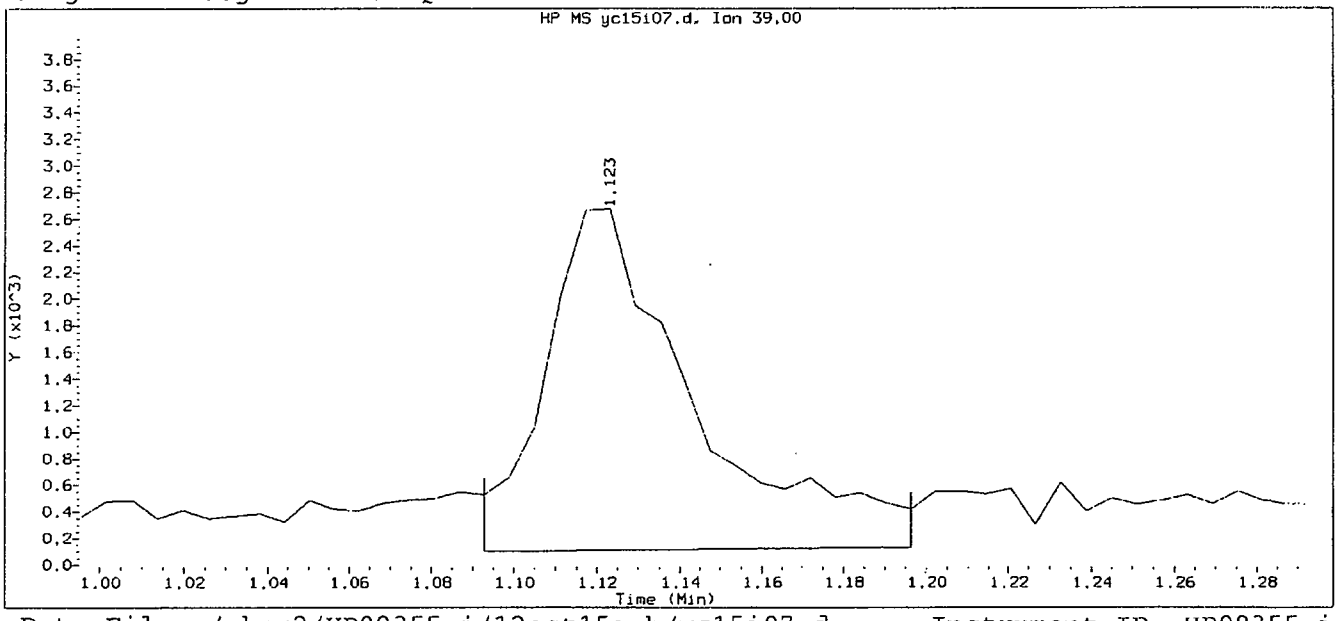
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

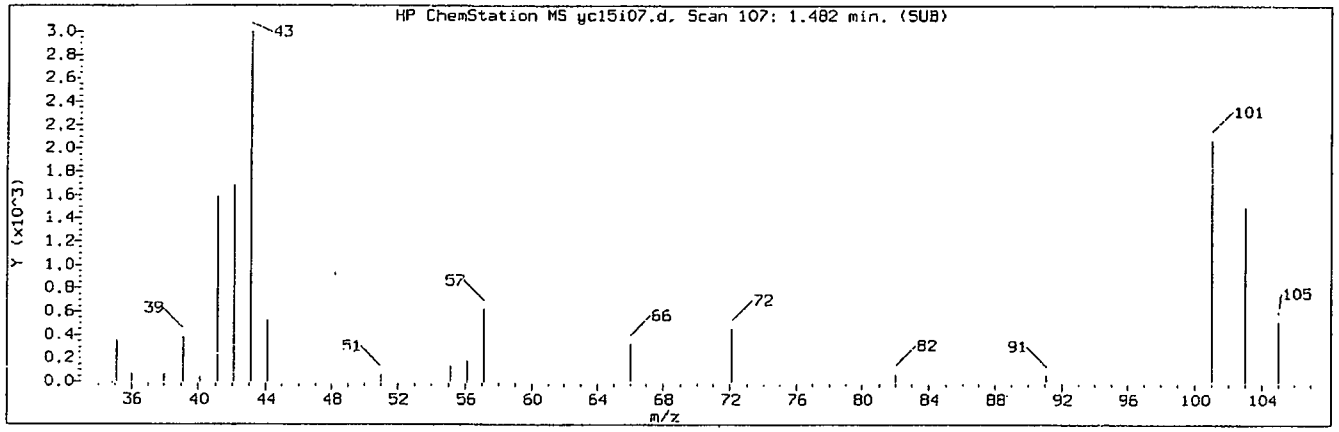
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 16:11
Date, time and analyst ID of latest file update: 15-Oct-2012 16:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

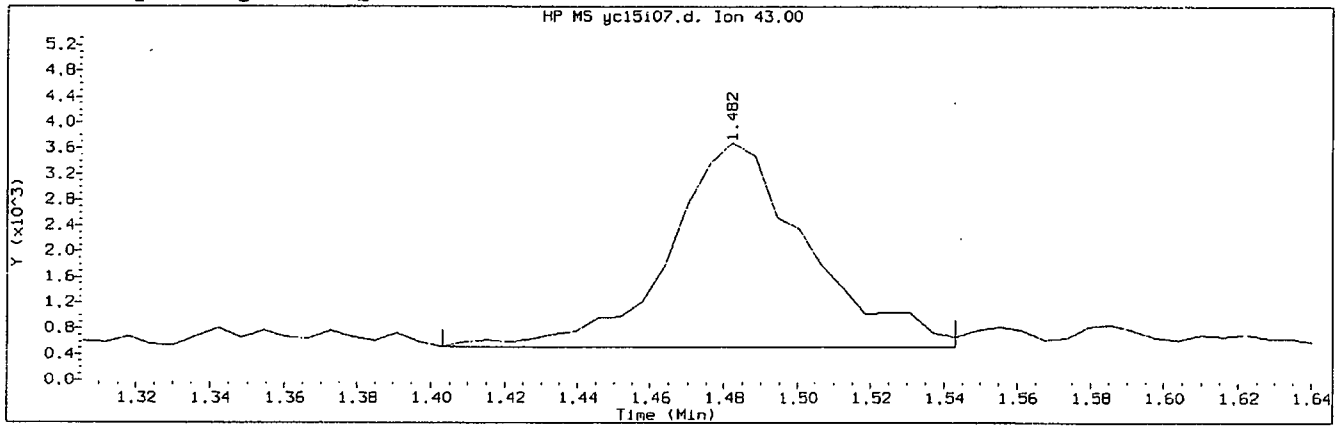
Compound Number	: 4		
Compound Name	: 1,3-Butadiene		
Scan Number	: 48		
Retention Time (minutes)	: 1.123		
Quant Ion	: 39.00		
Area	: 6428		
On-column Amount (ng)	: 1.3686		
Integration start scan	: 42	Integration stop scan:	59
Y at integration start	: 106	Y at integration end:	134

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

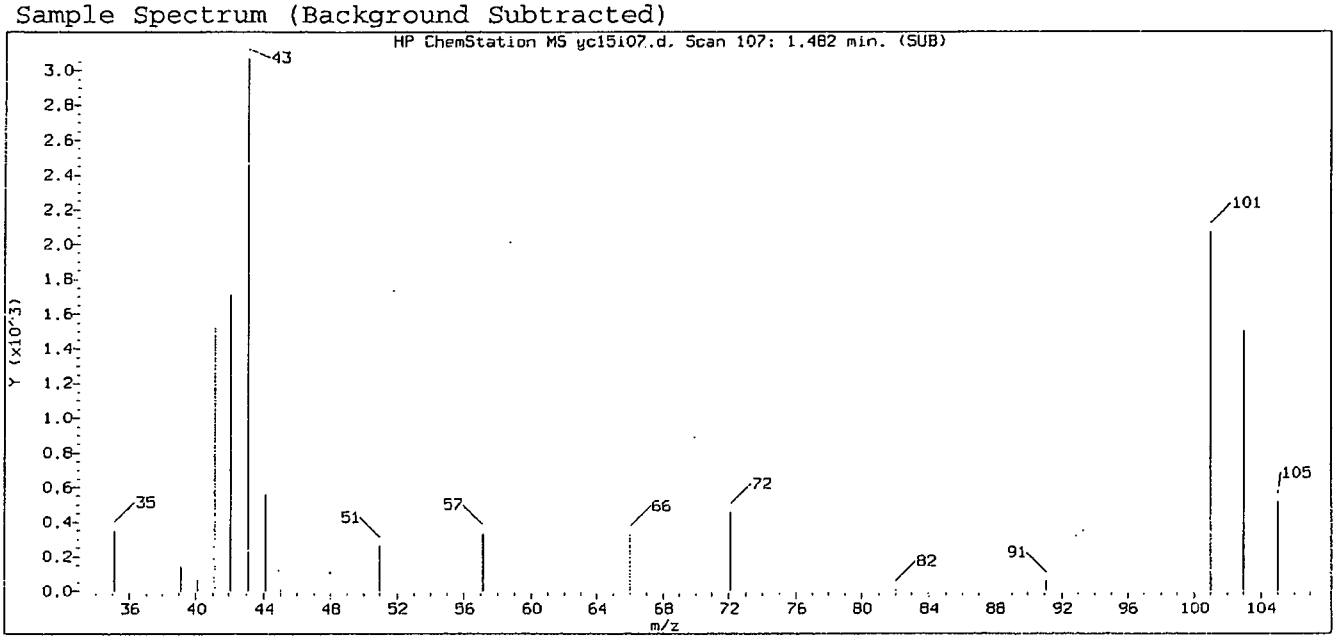
Compound Number	: 11		
Compound Name	: n-Pentane		
Scan Number	: 107		
Retention Time (minutes)	: 1.482		
Quant Ion	: 43.00		
Area (flag)	: 8382M		
On-Column Amount (ng)	: 0.8763		
Integration start scan	: 93	Integration stop scan:	116
Y at integration start	: 515	Y at integration end:	515

Reason for manual integration: improper integration

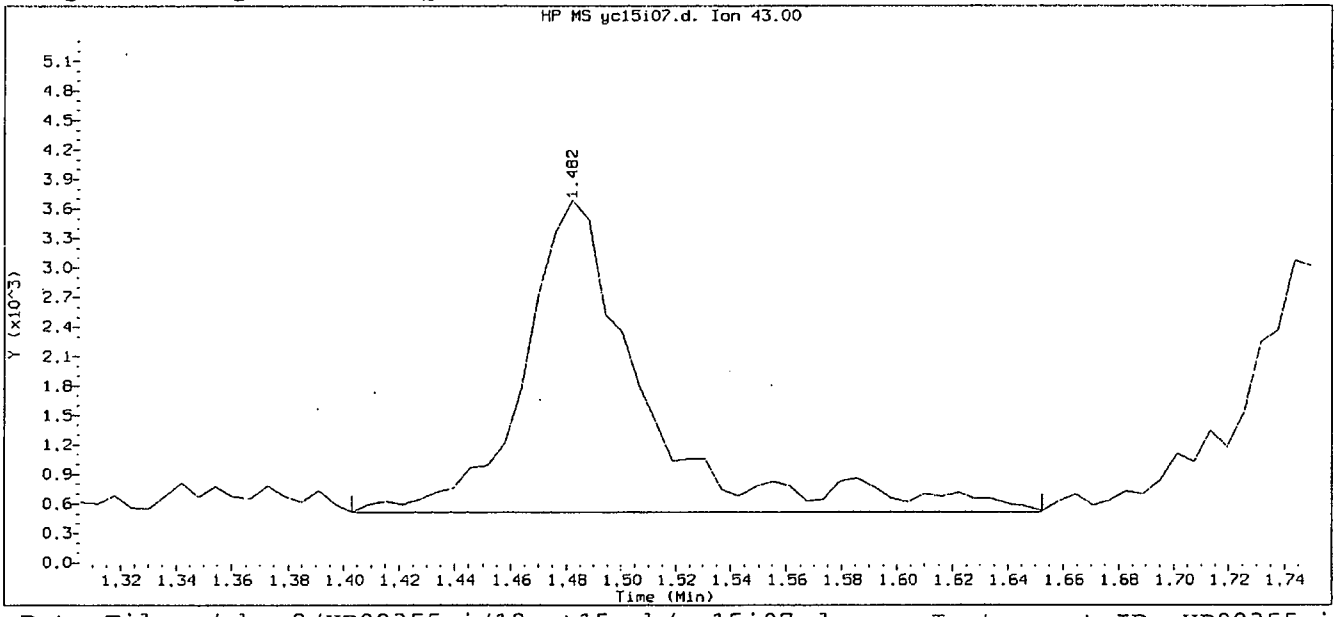
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

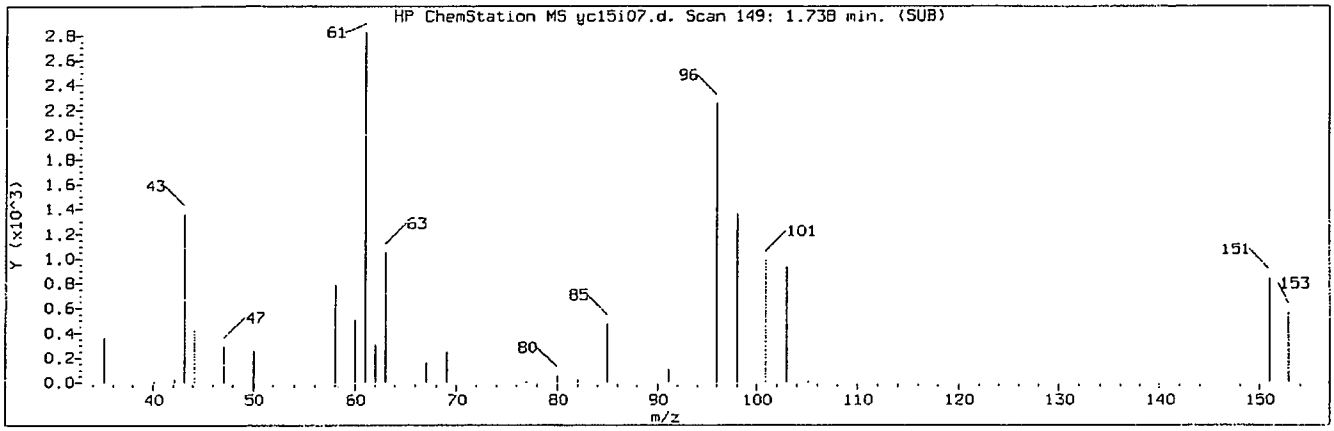
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 16:11
Date, time and analyst ID of latest file update: 15-Oct-2012 16:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

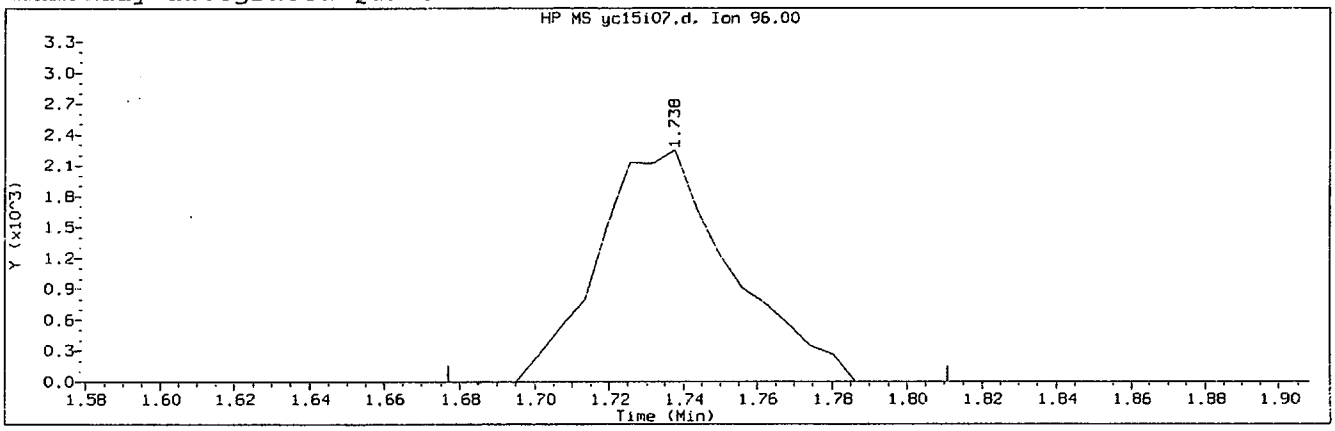
Compound Number	: 11		
Compound Name	: n-Pentane		
Scan Number	: 107		
Retention Time (minutes)	: 1.482		
Quant Ion	: 43.00		
Area	: 9544		
On-column Amount (ng)	: 0.9717		
Integration start scan	: 93	Integration stop scan:	134
Y at integration start	: 515	Y at integration end:	515

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

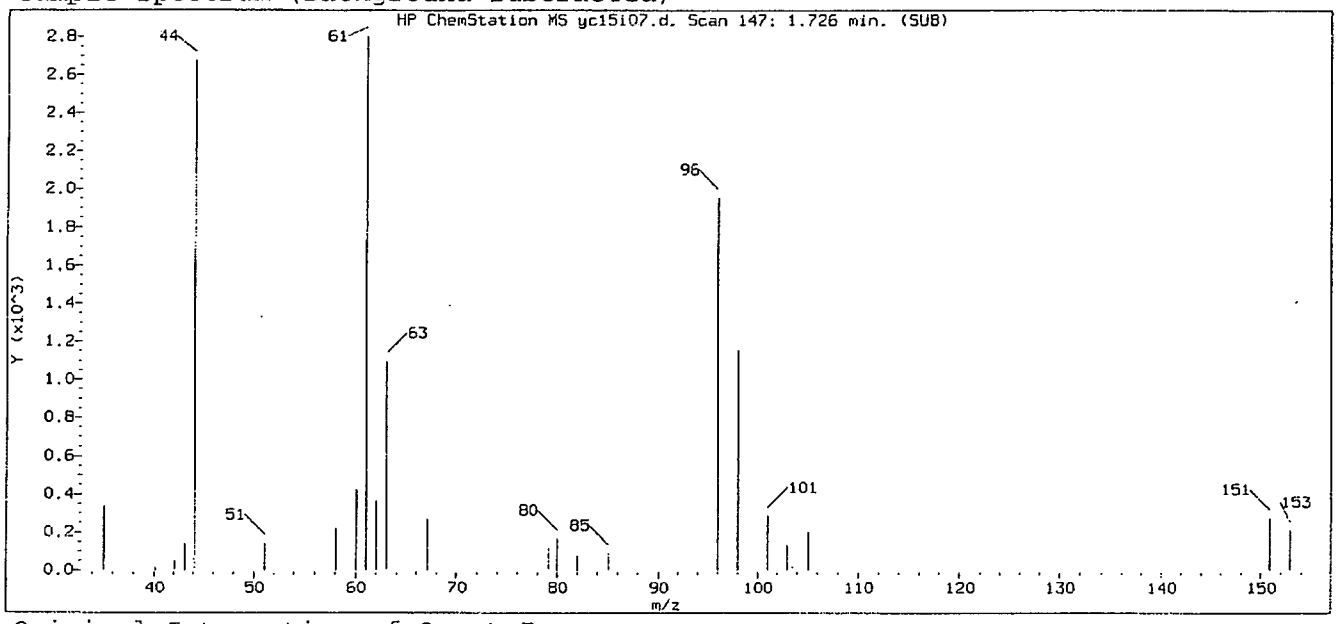
Compound Number	: 16		
Compound Name	: 1,1-Dichloroethene		
Scan Number	: 149		
Retention Time (minutes)	: 1.738		
Quant Ion	: 96.00		
Area (flag)	: 5624M		
On-Column Amount (ng)	: 0.9966		
Integration start scan	: 138	Integration stop scan:	160
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

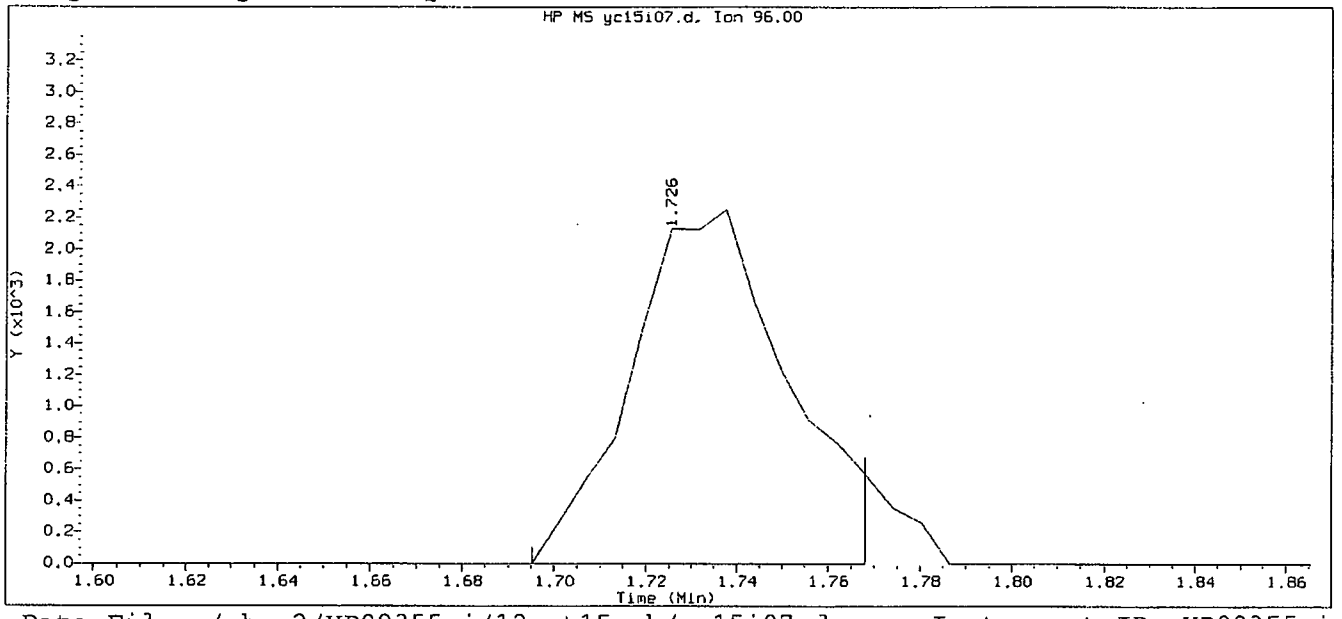
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

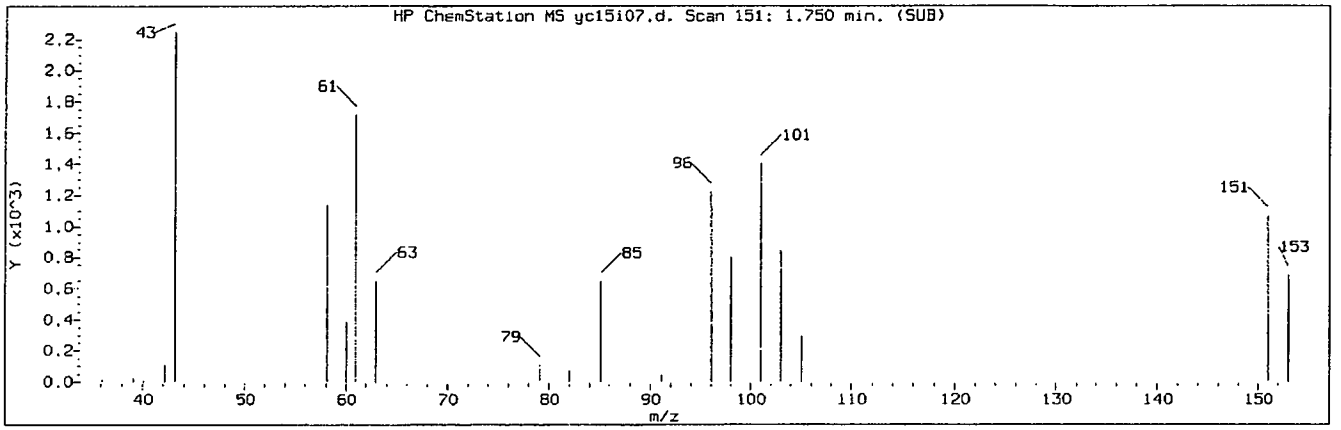
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 16:11
Date, time and analyst ID of latest file update: 15-Oct-2012 16:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

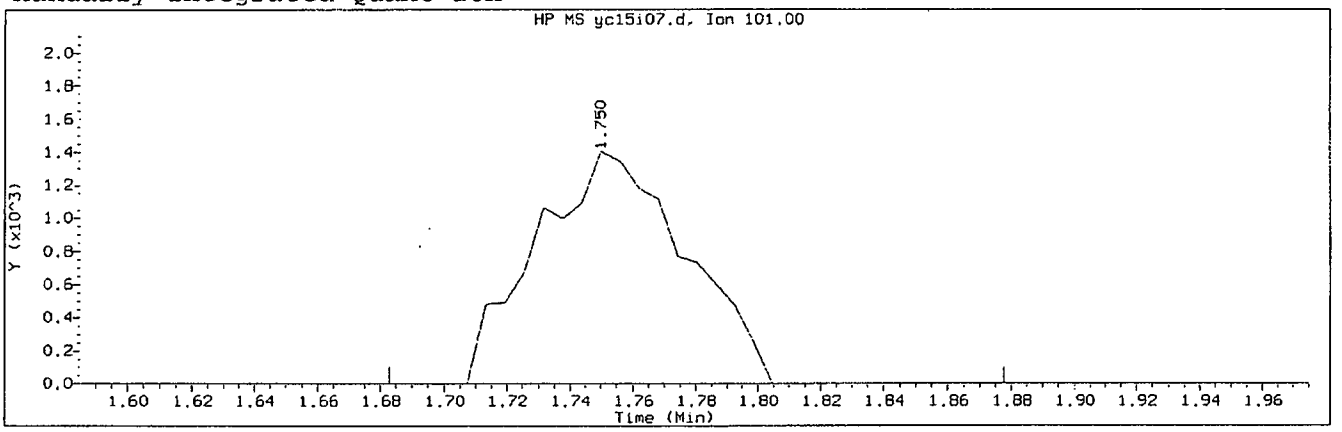
Compound Number	: 16		
Compound Name	: 1,1-Dichloroethene		
Scan Number	: 147		
Retention Time (minutes)	: 1.726		
Quant Ion	: 96.00		
Area	: 5295		
On-column Amount (ng)	: 0.9463		
Integration start scan	: 141	Integration stop scan:	153
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

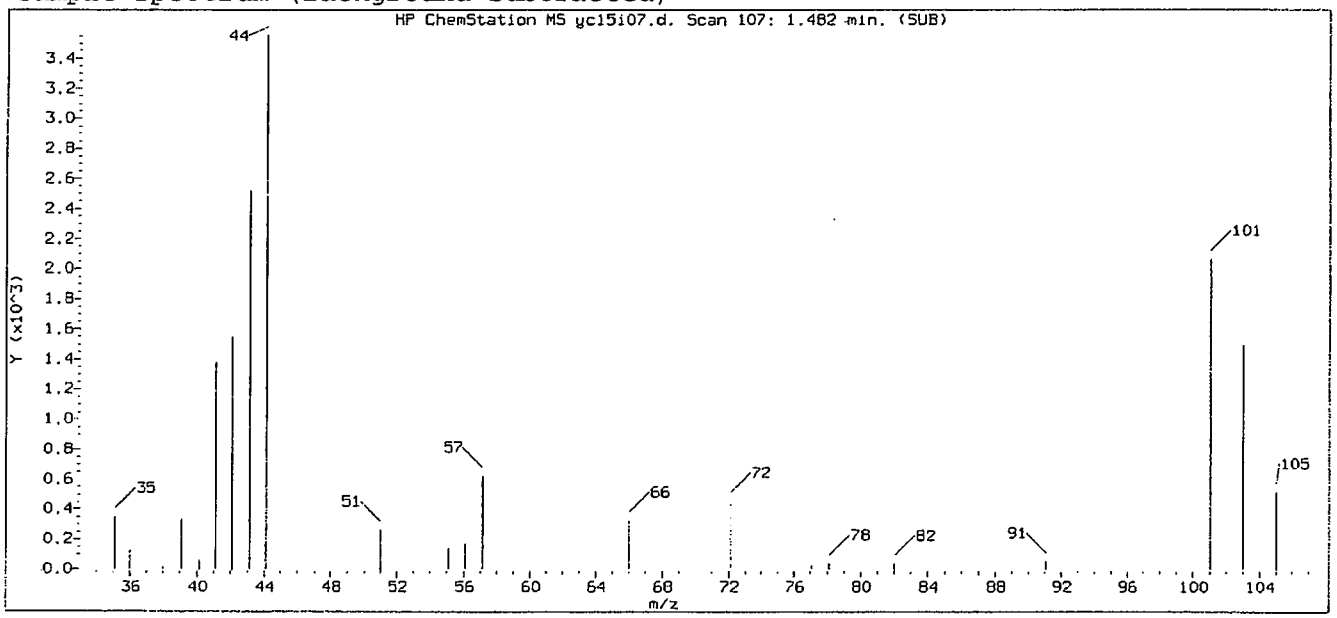
Compound Number	: 18		
Compound Name	: Freon 113		
Scan Number	: 151		
Retention Time (minutes)	: 1.750		
Quant Ion	: 101.00		
Area (flag)	: 4633M		
On-Column Amount (ng)	: 0.7993		
Integration start scan	: 139	Integration stop scan:	171
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

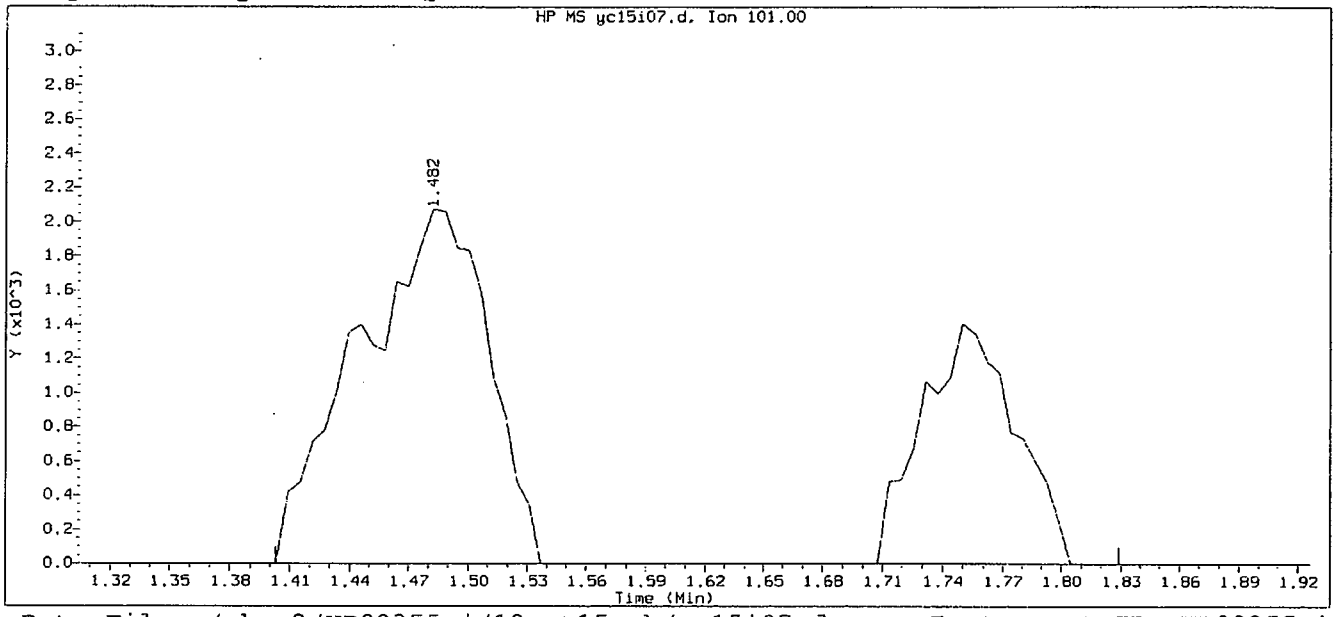
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

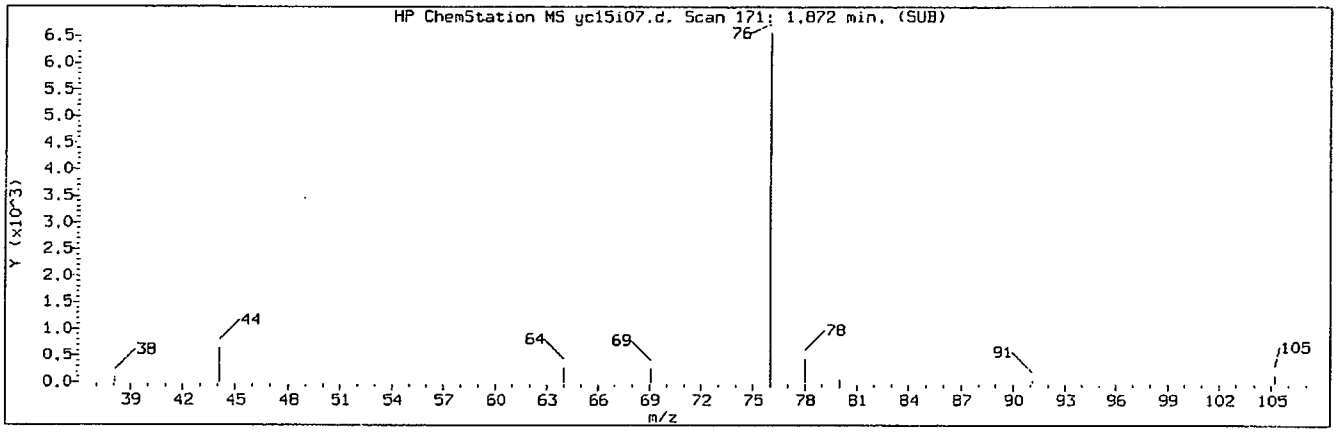
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 16:11
Date, time and analyst ID of latest file update: 15-Oct-2012 16:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

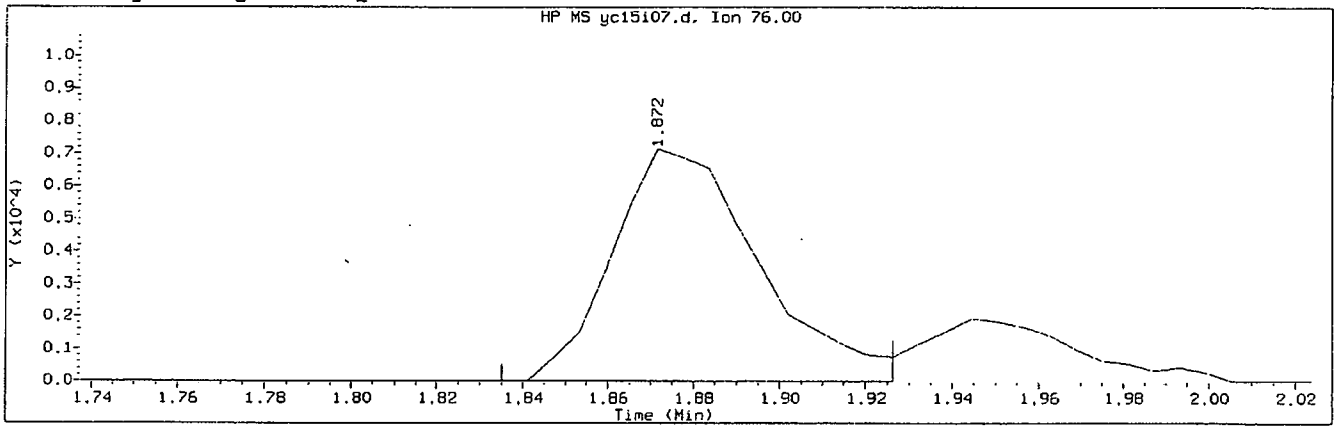
Compound Number	: 18		
Compound Name	: Freon 113		
Scan Number	: 107		
Retention Time (minutes)	: 1.482		
Quant Ion	: 101.00		
Area	: 14126		
On-column Amount (ng)	: 2.4373		
Integration start scan	: 93	Integration stop scan:	163
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

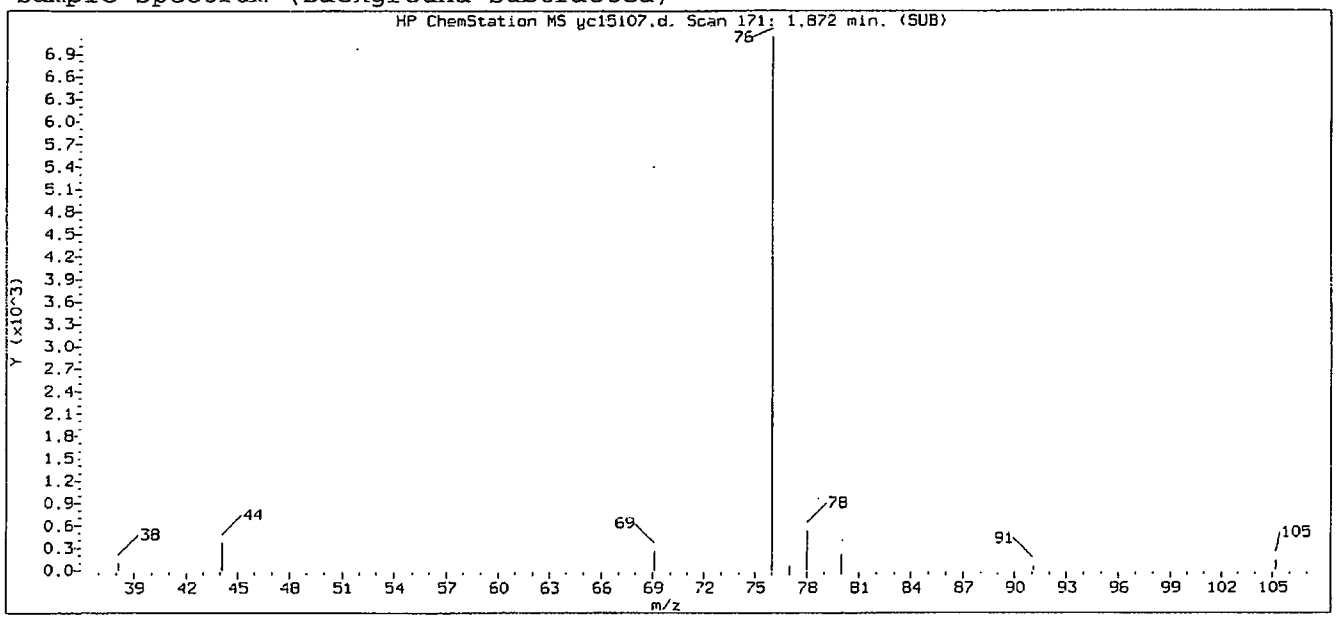
Compound Number	: 22		
Compound Name	: Carbon Disulfide		
Scan Number	: 171		
Retention Time (minutes)	: 1.872		
Quant Ion	: 76.00		
Area (flag)	: 16901M		
On-Column Amount (ng)	: 0.9720		
Integration start scan	: 164	Integration stop scan:	179
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

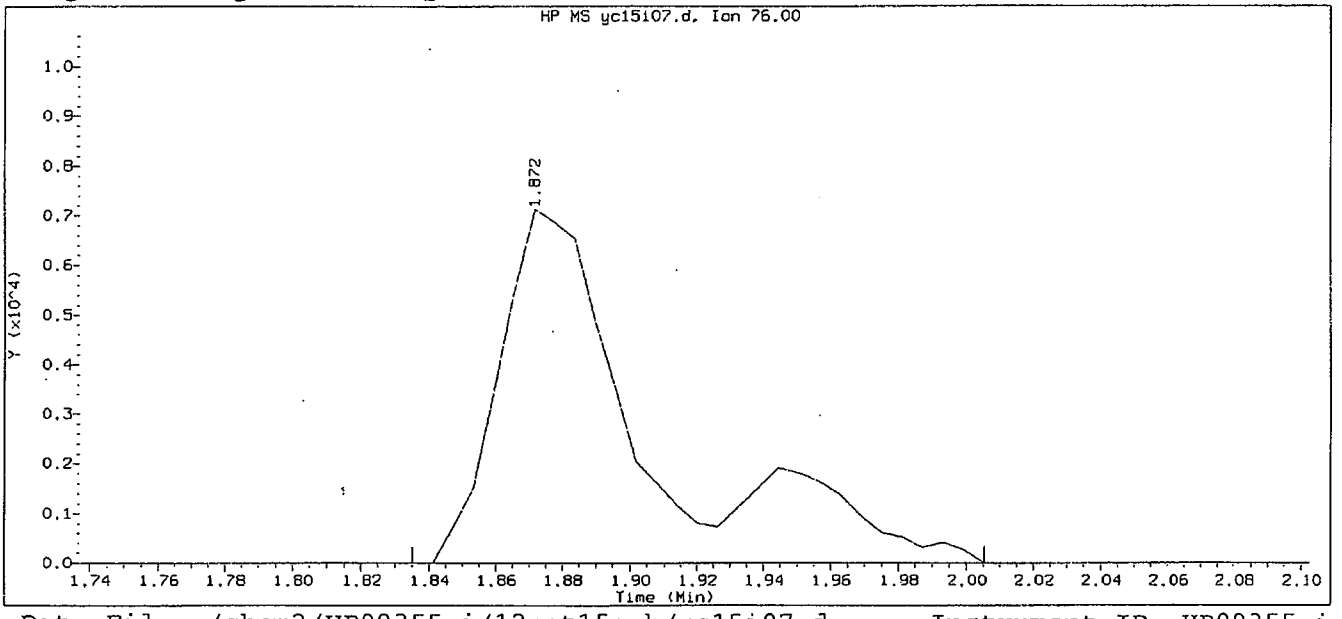
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

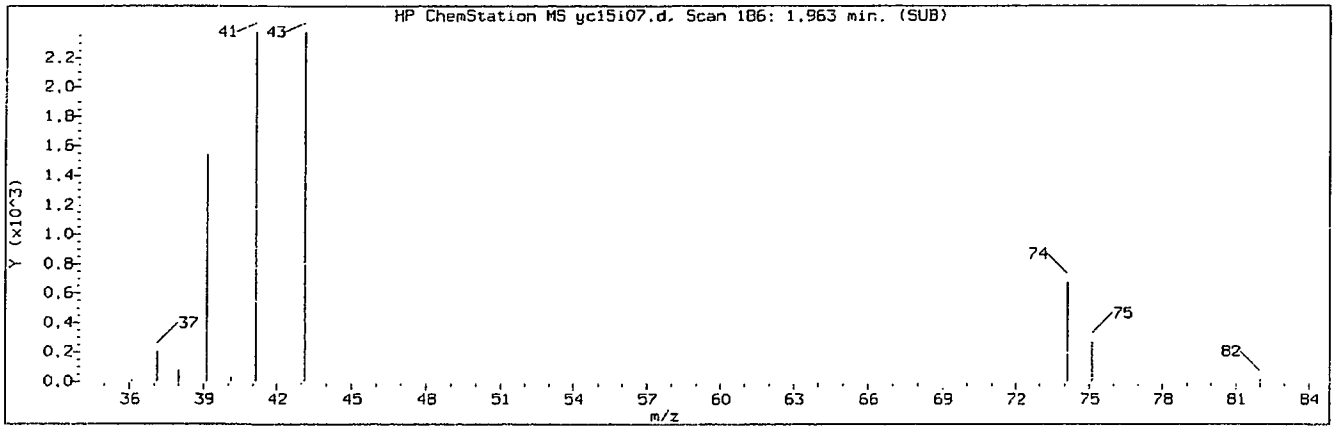
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 16:11
Date, time and analyst ID of latest file update: 15-Oct-2012 16:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

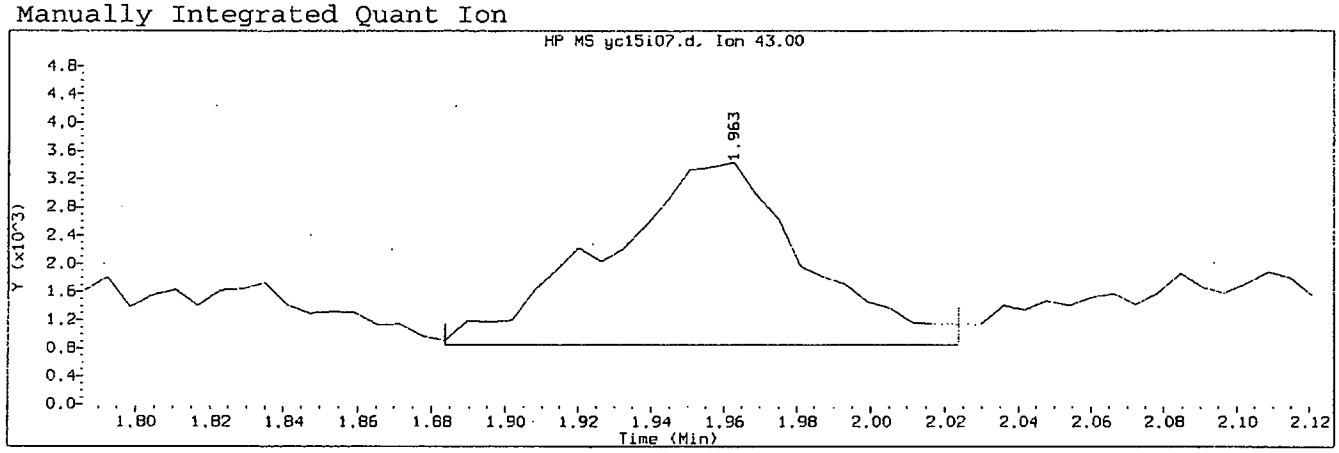
Compound Number	: 22		
Compound Name	: Carbon Disulfide		
Scan Number	: 171		
Retention Time (minutes)	: 1.872		
Quant Ion	: 76.00		
Area	: 21455		
On-column Amount (ng)	: 1.2340		
Integration start scan	: 164	Integration stop scan:	192
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

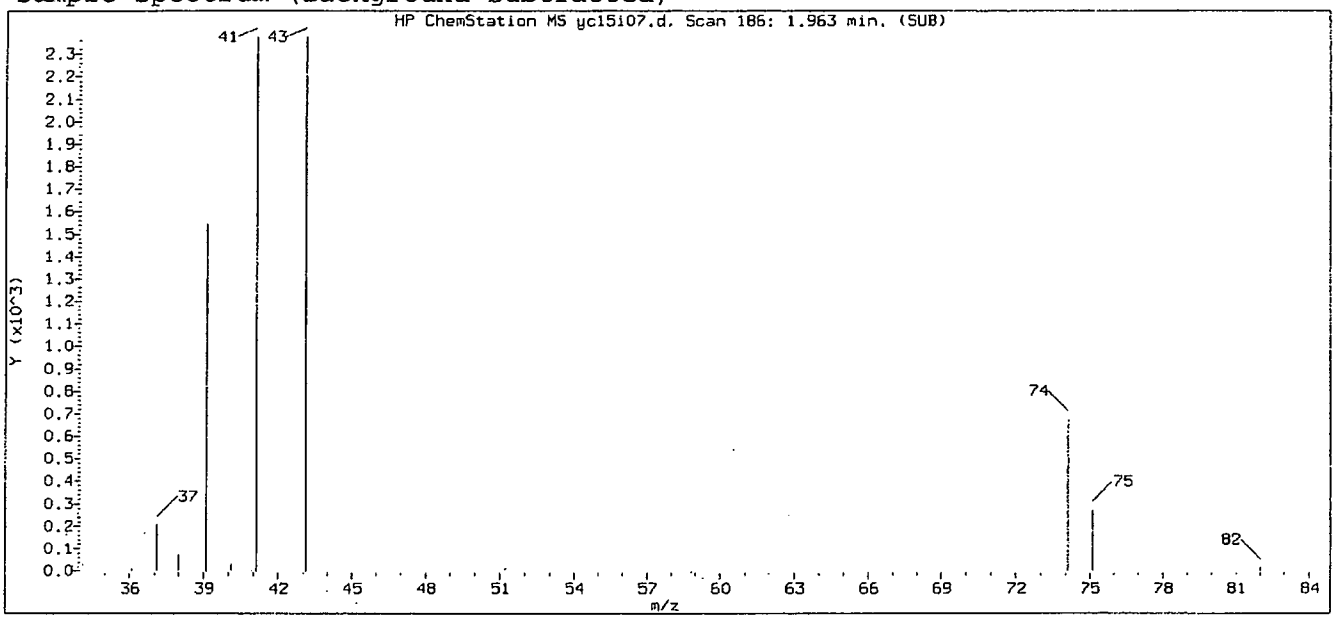
Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 186		
Retention Time (minutes)	: 1.963		
Quant Ion	: 43.00		
Area (flag)	: 9849M		
On-Column Amount (ng)	: 1.1462		
Integration start scan	: 172	Integration stop scan:	195
Y at integration start	: 848	Y at integration end:	848

Reason for manual integration: improper integration

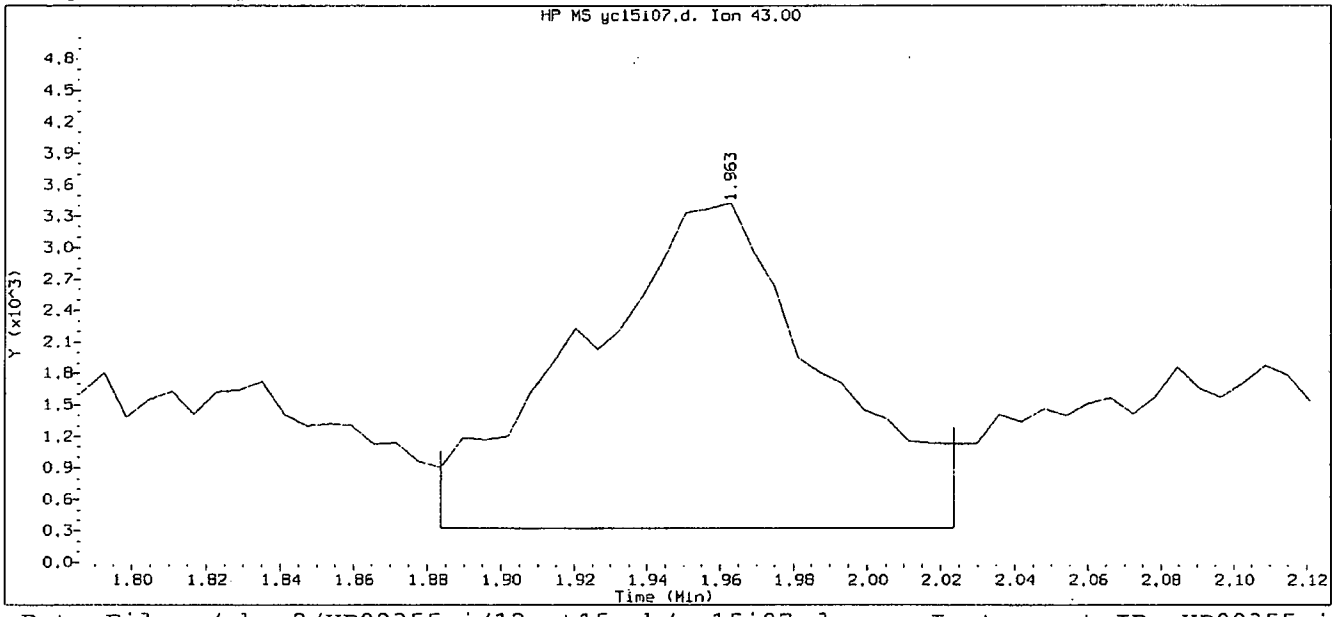
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

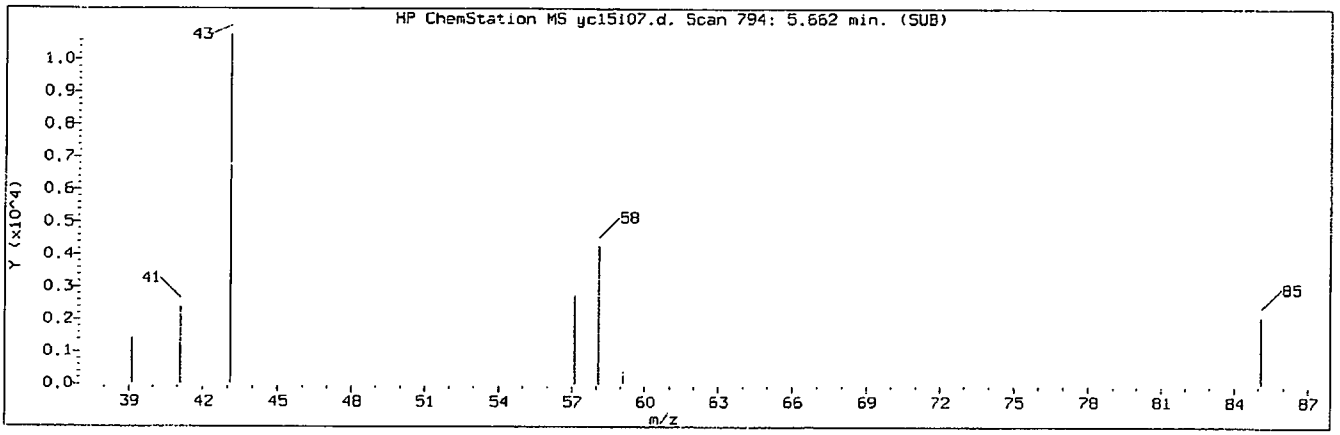
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 16:11
Date, time and analyst ID of latest file update: 15-Oct-2012 16:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

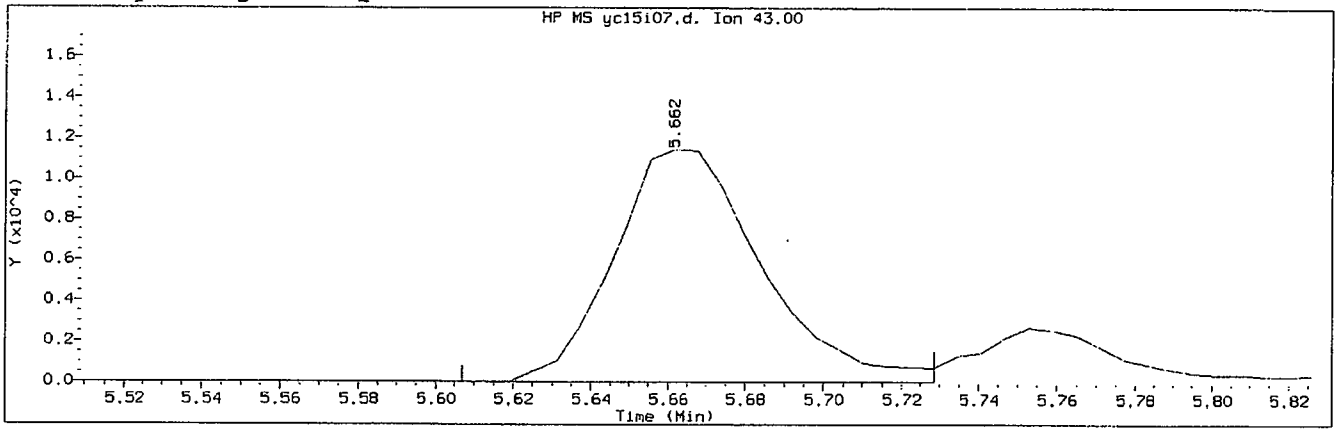
Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 186		
Retention Time (minutes)	: 1.963		
Quant Ion	: 43.00		
Area	: 14169		
On-column Amount (ng)	: 1.4398		
Integration start scan	: 172	Integration stop scan:	195
Y at integration start	: 326	Y at integration end:	326

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

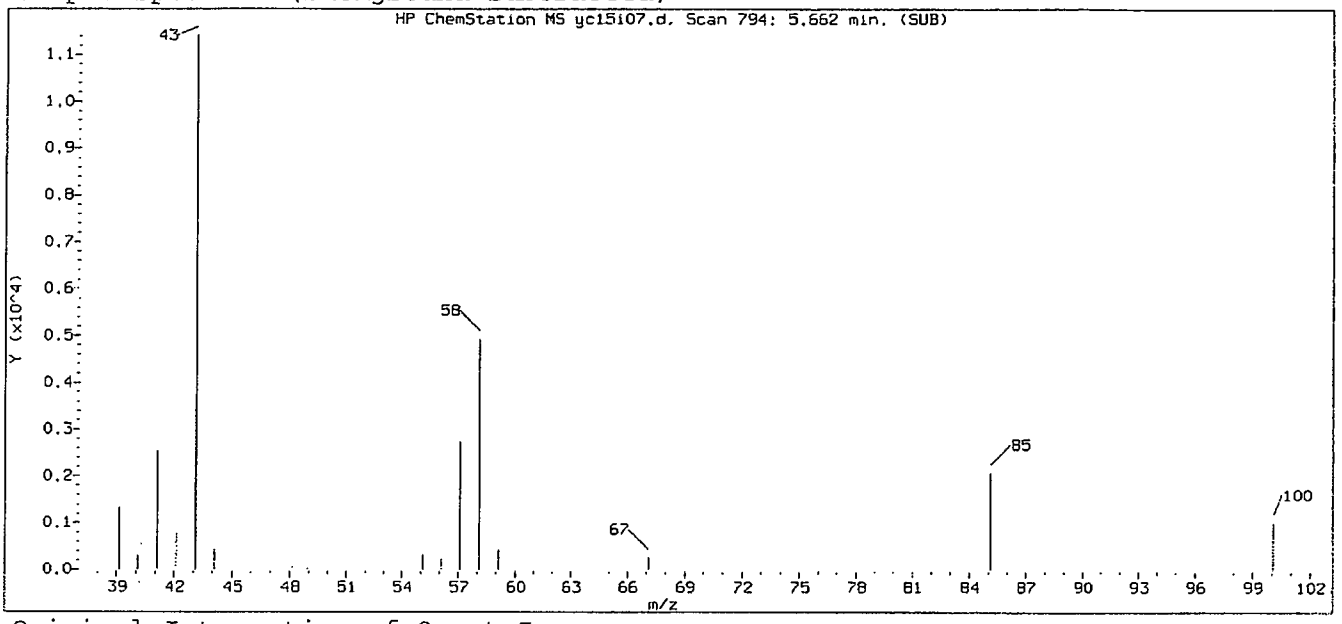
Compound Number	: 89		
Compound Name	: 4-Methyl-2-Pentanone		
Scan Number	: 794		
Retention Time (minutes)	: 5.662		
Quant Ion	: 43.00		
Area (flag)	: 30354M		
On-Column Amount (ng)	: 1.8769		
Integration start scan	: 784	Integration stop scan:	804
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

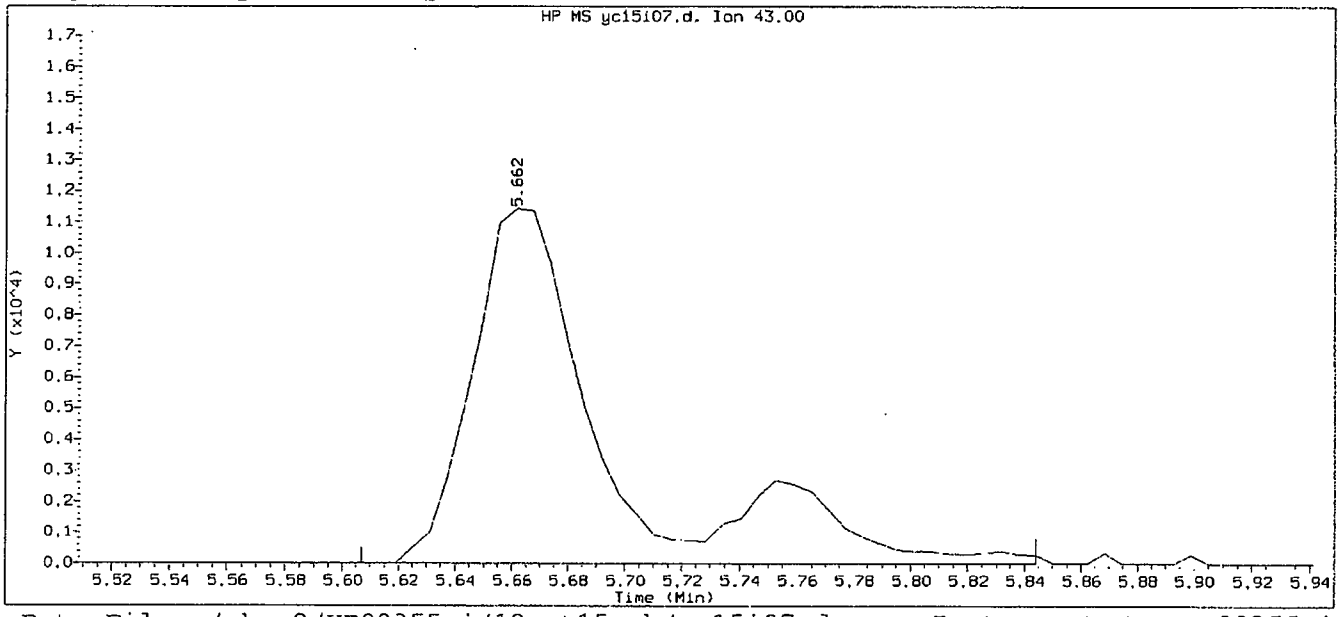
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

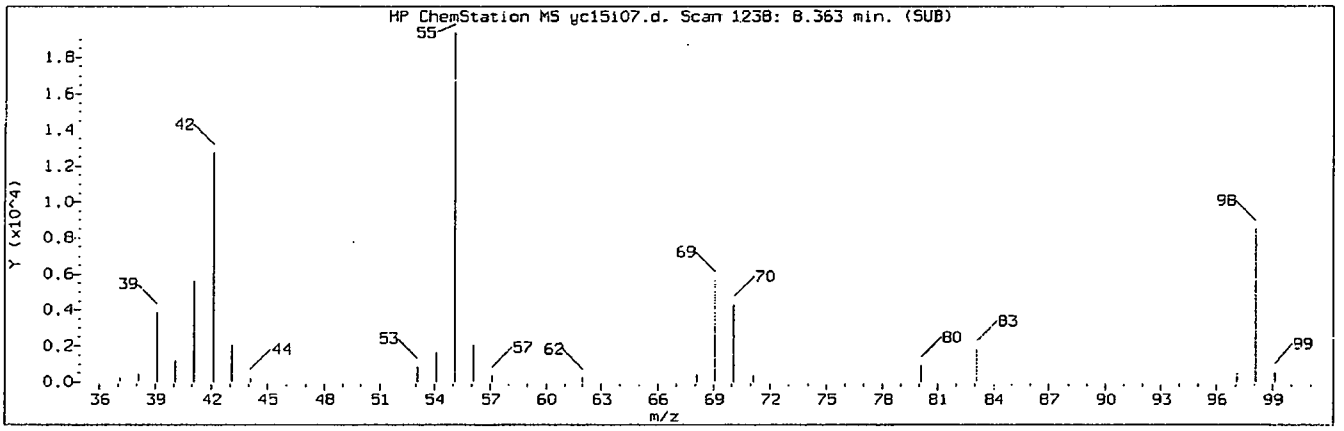
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 16:11
Date, time and analyst ID of latest file update: 15-Oct-2012 16:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

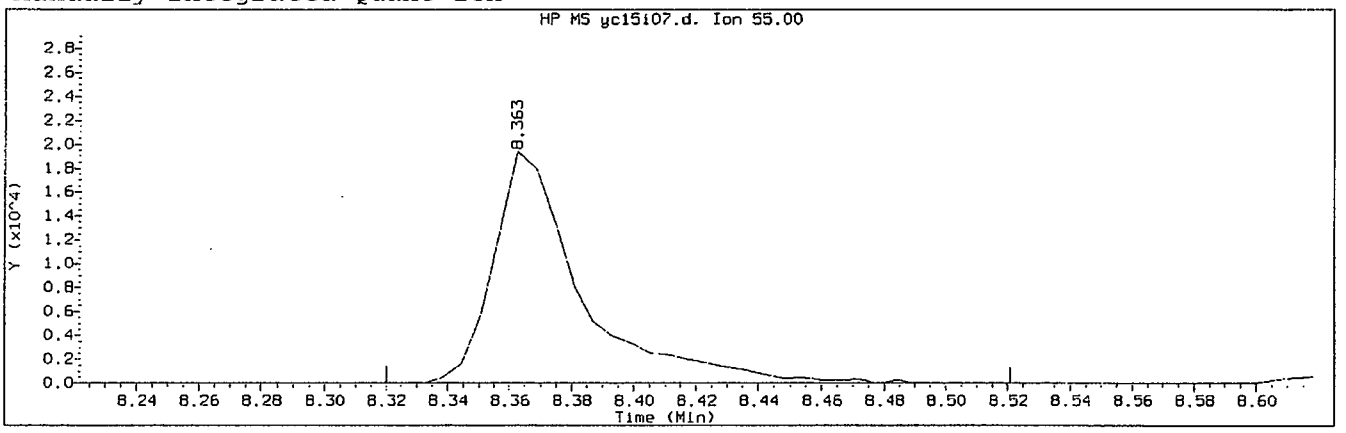
Compound Number	: 89		
Compound Name	: 4-Methyl-2-Pentanone		
Scan Number	: 794		
Retention Time (minutes)	: 5.662		
Quant Ion	: 43.00		
Area	: 37559		
On-column Amount (ng)	: 2.3225		
Integration start scan	: 784	Integration stop scan:	823
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

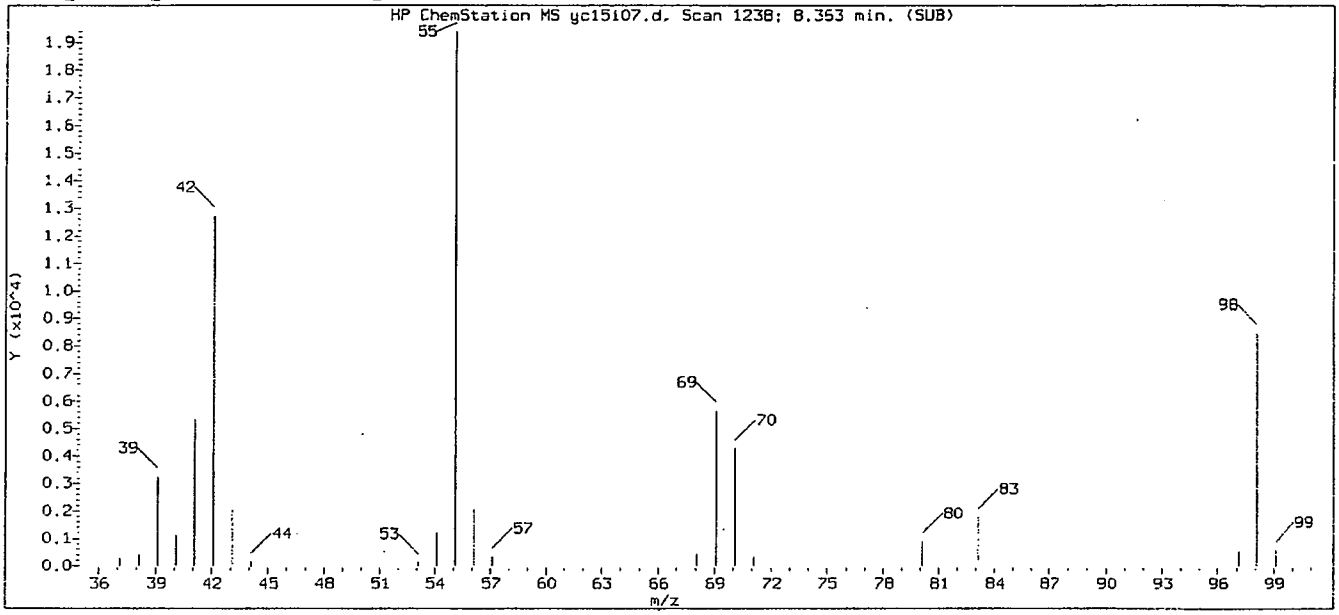
Compound Number	: 118		
Compound Name	: Cyclohexanone		
Scan Number	: 1238		
Retention Time (minutes)	: 8.363		
Quant Ion	: 55.00		
Area (flag)	: 38427M		
On-Column Amount (ng)	: 45.4505		
Integration start scan	: 1230	Integration stop scan:	1263
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

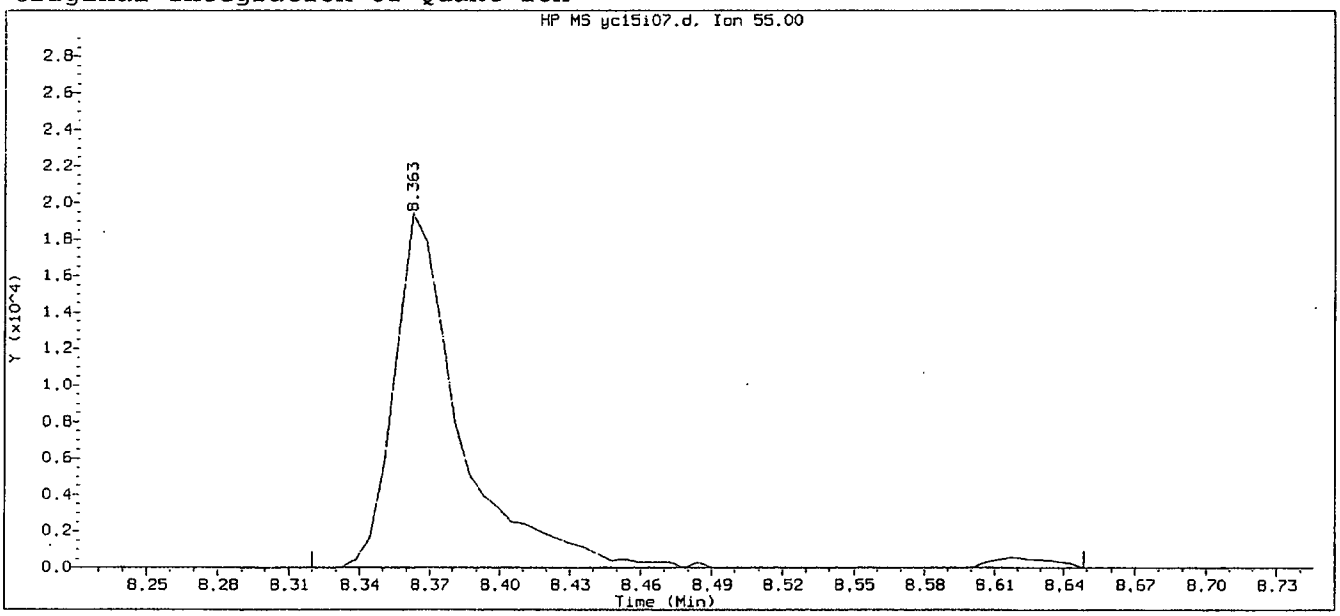
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

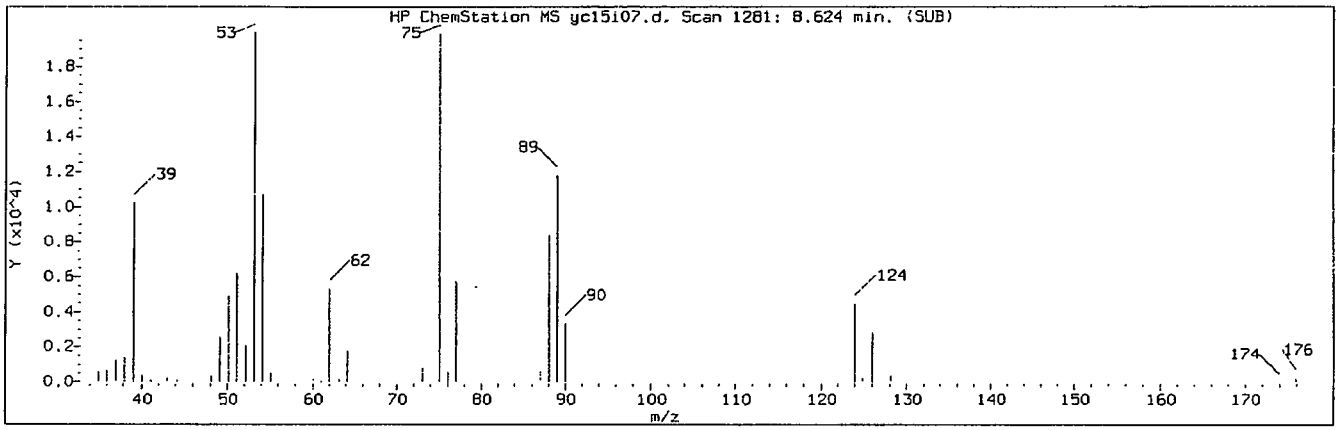
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 16:11
Date, time and analyst ID of latest file update: 15-Oct-2012 16:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

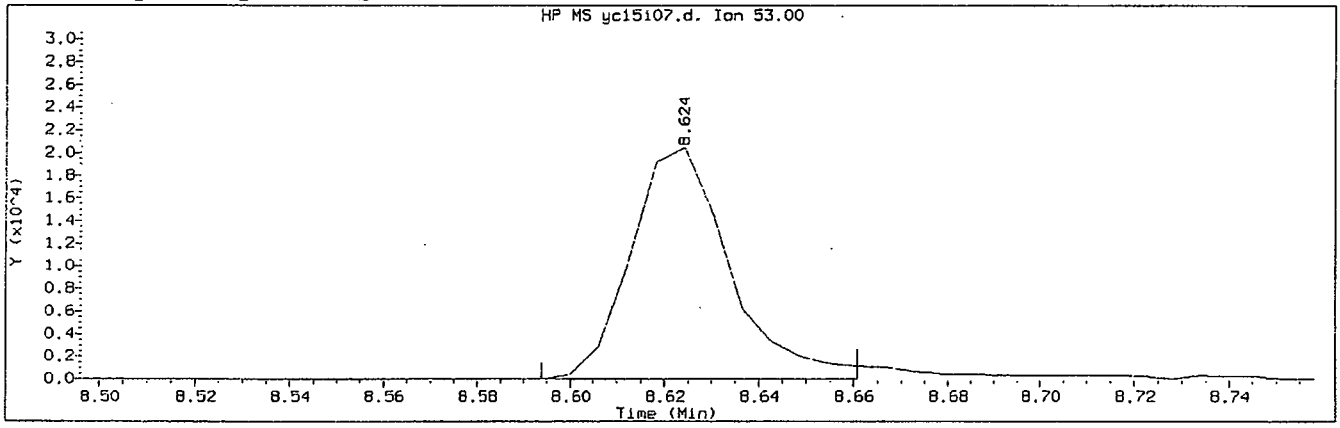
Compound Number	: 118		
Compound Name	: Cyclohexanone		
Scan Number	: 1238		
Retention Time (minutes)	: 8.363		
Quant Ion	: 55.00		
Area	: 39432		
On-column Amount (ng)	: 46.4815		
Integration start scan	: 1230	Integration stop scan:	1284
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

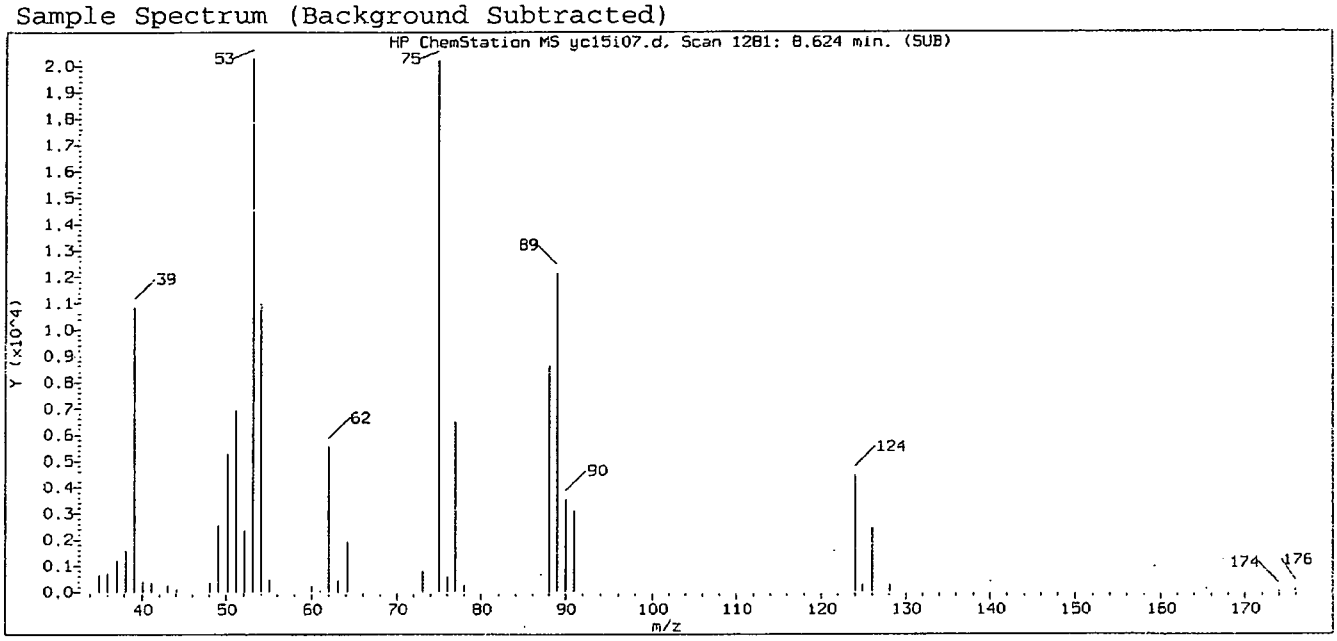
Compound Number	: 124		
Compound Name	: trans-1,4-Dichloro-2-Butene		
Scan Number	: 1281		
Retention Time (minutes)	: 8.624		
Quant Ion	: 53.00		
Area (flag)	: 29660M		
On-Column Amount (ng)	: 7.6694		
Integration start scan	: 1275	Integration stop scan:	1286
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

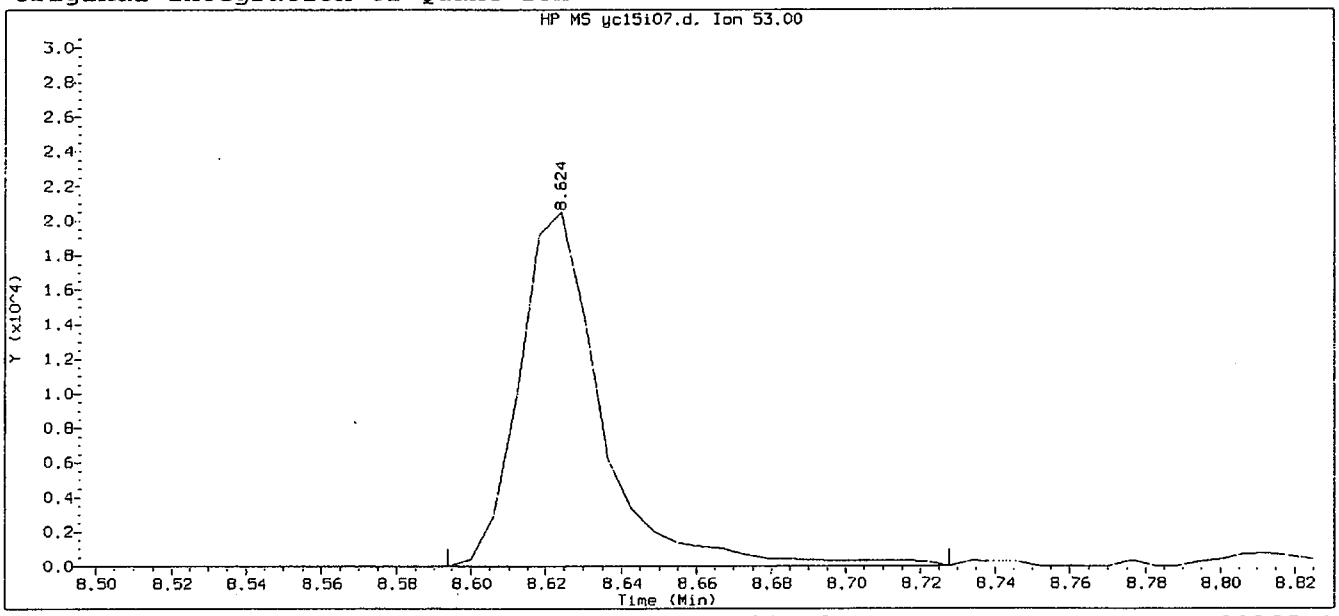
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

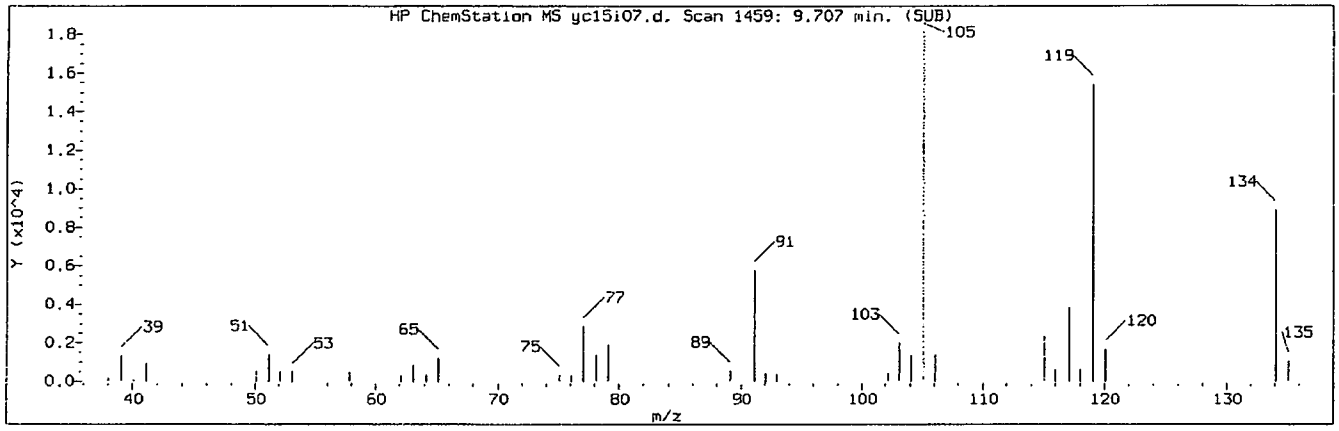
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 16:11
Date, time and analyst ID of latest file update: 15-Oct-2012 16:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

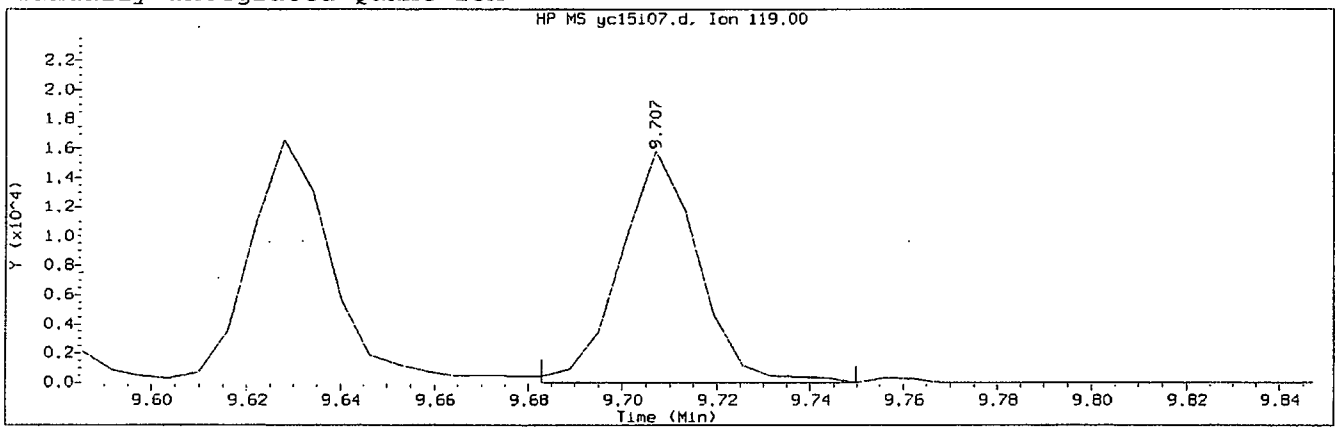
Compound Number	: 124		
Compound Name	: trans-1,4-Dichloro-2-Butene		
Scan Number	: 1281		
Retention Time (minutes)	: 8.624		
Quant Ion	: 53.00		
Area	: 31295		
On-column Amount (ng)	: 8.0923		
Integration start scan	: 1275	Integration stop scan:	1297
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:44 sej02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

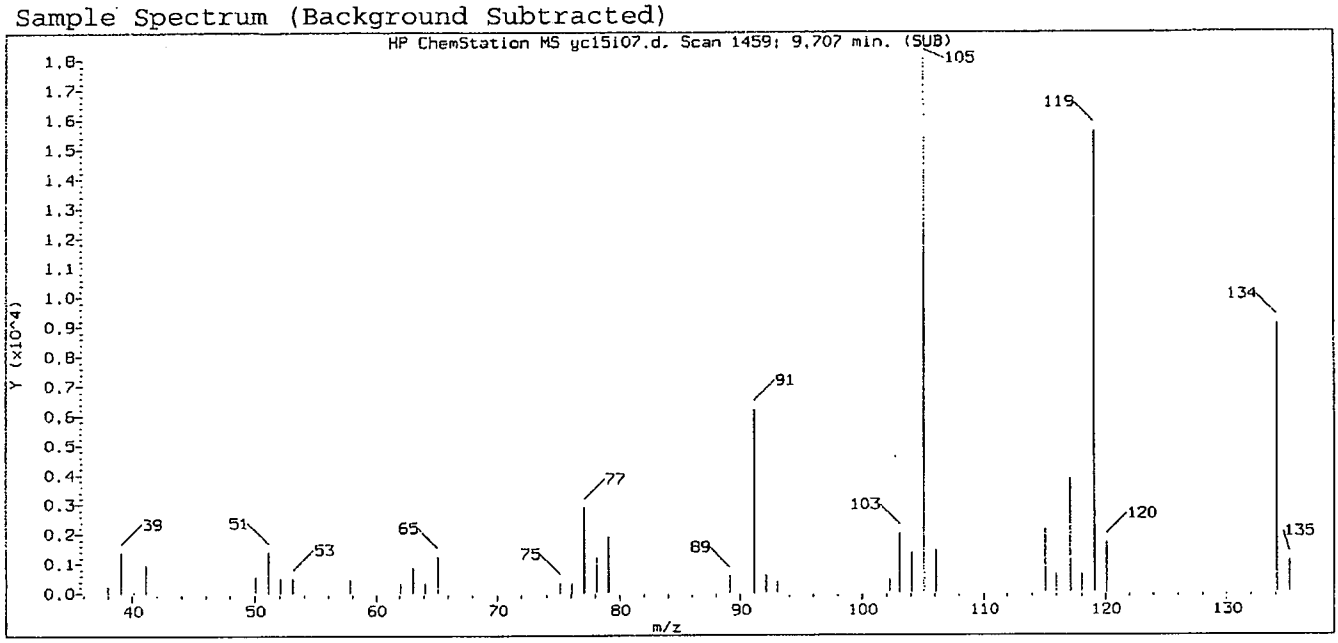
Compound Number	: 146		
Compound Name	: 1,2-Diethylbenzene		
Scan Number	: 1459		
Retention Time (minutes)	: 9.707		
Quant Ion	: 119.00		
Area (flag)	: 17980M		
On-Column Amount (ng)	: 1.0046		
Integration start scan	: 1454	Integration stop scan:	1465
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

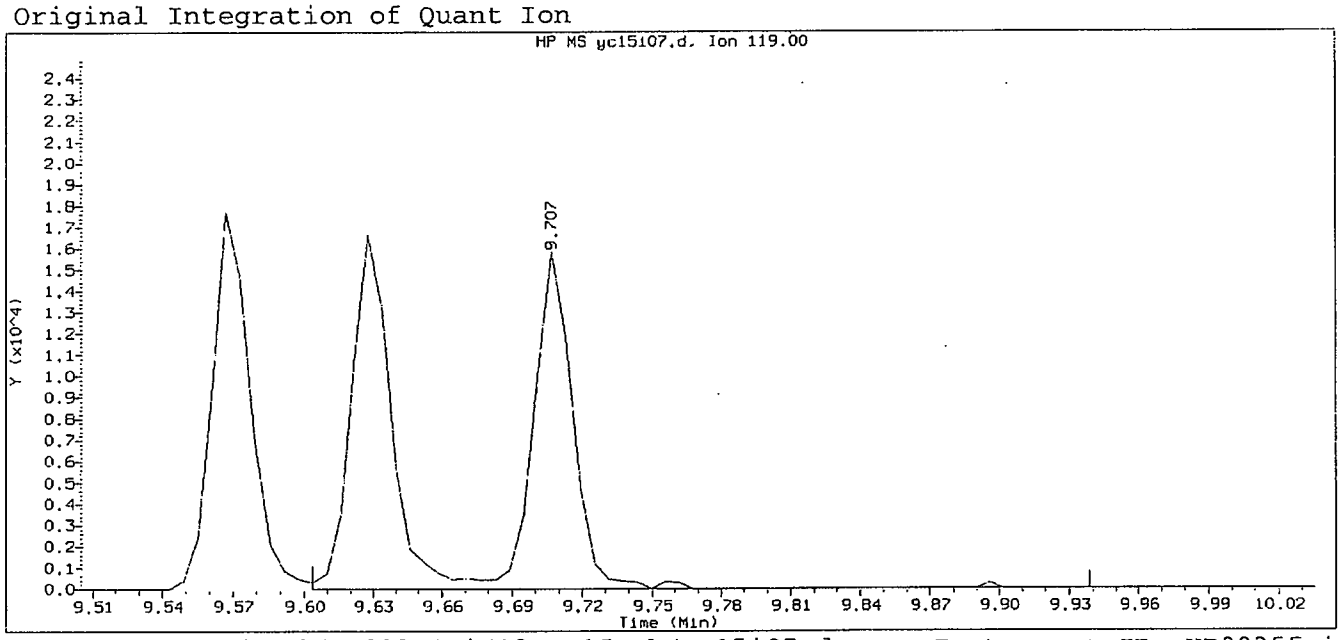
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



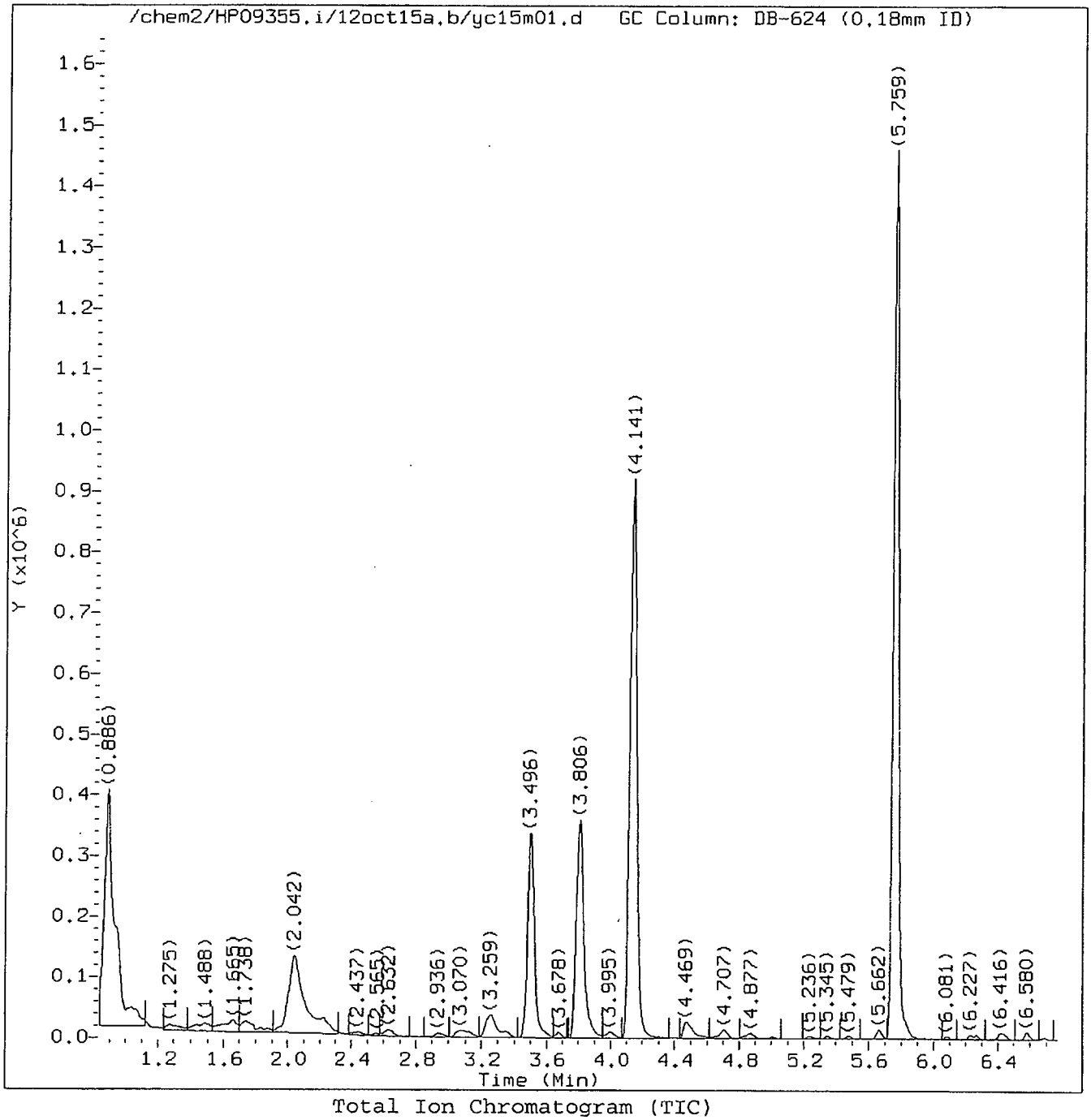
Data File: /chem2/HP09355.i/12oct15a.b/yc15i07.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 15:56 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260WI
Calibration date and time: 15-OCT-2012 16:11
Date, time and analyst ID of latest file update: 15-Oct-2012 16:11 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number	: 146		
Compound Name	: 1,2-Diethylbenzene		
Scan Number	: 1459		
Retention Time (minutes)	: 9.707		
Quant Ion	: 119.00		
Area	: 38736		
On-column Amount (ng)	: 2.1644		
Integration start scan	: 1441	Integration stop scan:	1496
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:46.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

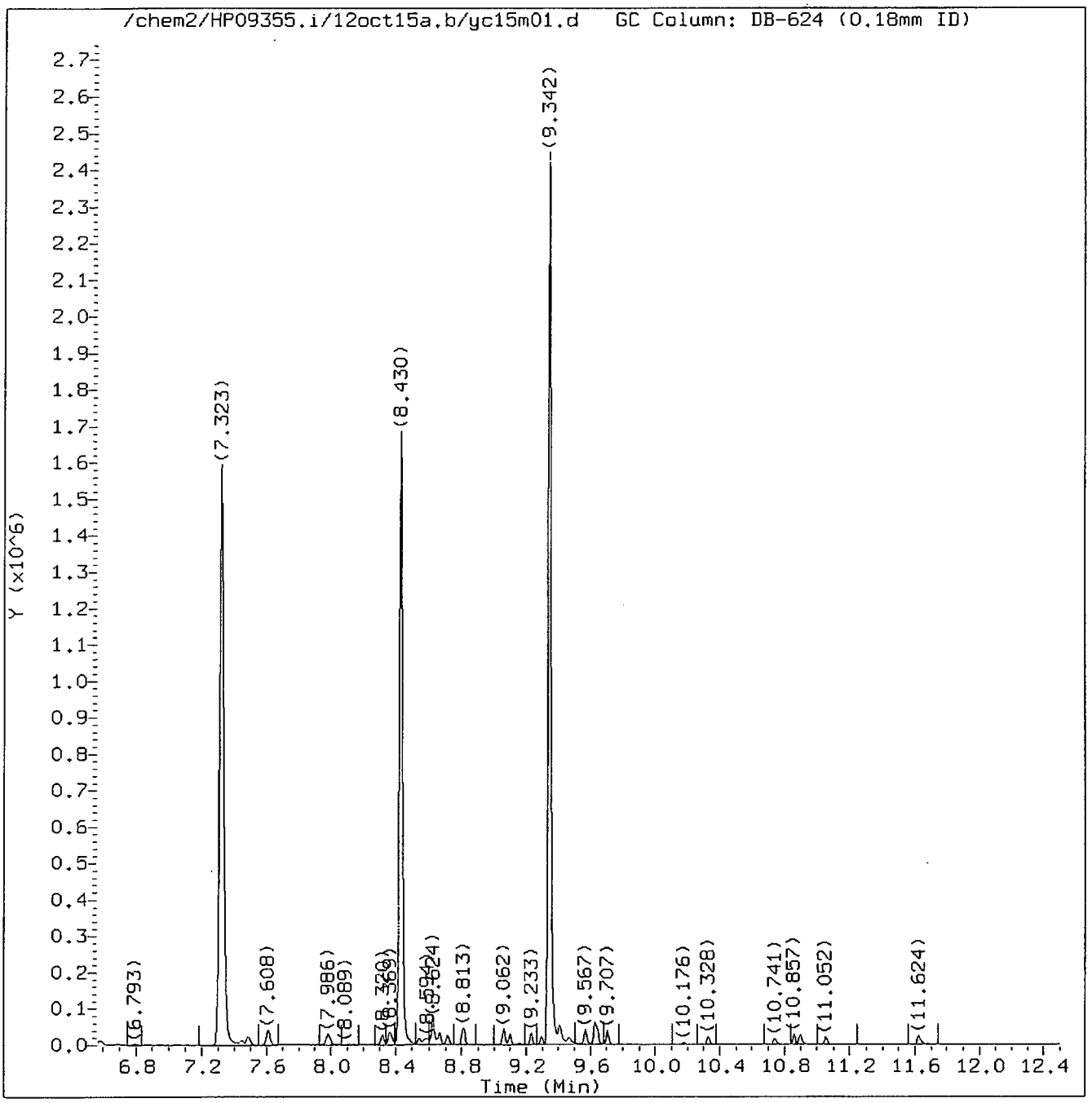
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Dichlorodifluoromethane	(1)	1.026	85	3771	0.400
3) Chloromethane	(1)	1.050	50	5204	0.521
4) 1,3-Butadiene	(1)	1.117	39	2400M	0.571
5) Vinyl Chloride	(1)	1.123	62	5487	0.561
7) Bromomethane	(1)	1.269	94	3462	0.541
8) Chloroethane	(1)	1.324	64	2760	0.521
9) Dichlorofluoromethane	(1)	1.421	67	7108	0.611
10) Trichlorofluoromethane	(1)	1.476	101	4707M	0.447
11) n-Pentane	(1)	1.482	43	4190M	0.437
14) Freon 123a	(1)	1.604	67	4872	0.655
15) Acrolein	(4)	1.665	56	21285	7.008
16) 1,1-Dichloroethene	(1)	1.738	96	2578	0.456
18) Freon 113	(1)	1.750	101	2036M	0.351
17) Acetone	(1)	1.750	58	1958	1.239
20) Methyl Iodide	(1)	1.823	142	5059	0.470
21) 2-Propanol	(4)	1.823	45	14330	11.222
22) Carbon Disulfide	(1)	1.872	76	8160M	0.468
24) Allyl Chloride	(1)	1.945	41	8650	0.829
25) Methyl Acetate	(1)	1.957	43	4791M	0.556
26) Methylene Chloride	(1)	2.024	84	4466	0.635
28)*t-Butyl Alcohol-d10	(4)	2.042	65	455382	250.000
29) t-Butyl Alcohol	(4)	2.103	59	23479	10.396
30) Acrylonitrile	(1)	2.194	53	3647	0.615
31) trans-1,2-Dichloroethene	(1)	2.224	96	3377	0.499
32) Methyl Tertiary Butyl Ether	(1)	2.231	73	10998	0.470
33) n-Hexane	(1)	2.443	57	4655	0.459
34) 1,1-Dichloroethane	(1)	2.553	63	5572	0.453
36) di-Isopropyl Ether	(1)	2.620	45	12355	0.501
37) 2-Chloro-1,3-Butadiene	(1)	2.644	53	4908	0.471
39) Ethyl t-Butyl Ether	(1)	2.936	59	10842	0.457
41) 2-Butanone	(1)	3.052	43	11738	1.370
40) cis-1,2-Dichloroethene	(1)	3.058	96	3283	0.433
42) 2,2-Dichloropropane	(1)	3.064	77	4410	0.478
43) Propionitrile	(4)	3.119	54	23571	8.374
46) Methacrylonitrile	(1)	3.253	67	26332	4.489
47) Bromochloromethane	(1)	3.265	128	1609	0.392
48) Tetrahydrofuran	(4)	3.320	71	2544	0.965
50) Chloroform	(1)	3.350	83	7816	0.632

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
52)$Dibromofluoromethane	(1)	3.496	113	306640	49.614
53) 1,1,1-Trichloroethane	(1)	3.526	97	4882	0.463
56) Cyclohexane	(1)	3.575	56	5562	0.450
45) 1,2-Dichloroethene (total)	(1)		96	6660	0.932
57) 1,1-Dichloropropene	(1)	3.678	75	4099	0.448
58) Carbon Tetrachloride	(1)	3.685	117	3140	0.401
59) Isobutyl Alcohol	(4)	3.806	41	20358	26.167
62)$1,2-Dichloroethane-d4	(1)	3.812	102	80327	48.371
63) Benzene	(1)	3.867	78	13974	0.479
65) 1,2-Dichloroethane	(1)	3.879	62	4256	0.442
69) t-Amyl Methyl Ether	(1)	3.995	73	10448	0.448
71)*Fluorobenzene	(1)	4.141	96	1391395	50.000
72) n-Heptane	(1)	4.153	43	8670	0.738
73) n-Butanol	(4)	4.469	56	29207M	40.480
74) Trichloroethene	(1)	4.494	95	3003	0.414
77) 1,2-Dichloropropane	(1)	4.707	63	3380	0.441
76) Methylcyclohexane	(1)	4.707	83	5977	0.455
78) Dibromomethane	(1)	4.834	93	1971	0.388
79) 1,4-Dioxane	(4)	4.859	88	2456	12.238
80) Methyl Methacrylate	(1)	4.877	69	3668	0.405
83) Bromodichloromethane	(1)	5.011	83	3273	0.381
85) 2-Nitropropane	(1)	5.236	41	4439	1.250
86) 2-Chloroethyl Vinyl Ether	(1)	5.345	63	2651	0.387
87) cis-1,3-Dichloropropene	(1)	5.485	75	3965	0.361
89) 4-Methyl-2-Pentanone	(1)	5.662	43	15257	0.941
93)$Toluene-d8	(2)	5.759	98	1316918	50.020
94) Toluene	(2)	5.826	92	8506	0.463
95) trans-1,3-Dichloropropene	(2)	6.088	75	3526	0.336
96) Ethyl Methacrylate	(2)	6.234	69	5540	0.399
97) 1,1,2-Trichloroethane	(2)	6.264	97	3090	0.416
98) Tetrachloroethene	(2)	6.416	166	3486	0.440
99) 1,3-Dichloropropane	(2)	6.446	76	5357	0.431
101) 2-Hexanone	(2)	6.580	43	12984	1.004
102) Dibromochloromethane	(2)	6.684	129	2329	0.341
104) 1,2-Dibromoethane	(2)	6.793	107	2997	0.372
106)*Chlorobenzene-d5	(2)	7.323	117	986609	50.000
107) Chlorobenzene	(2)	7.347	112	9118	0.446
108) 1,1,1,2-Tetrachloroethane	(2)	7.444	131	2427	0.364

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
109) Ethylbenzene	(2)	7.487	91	16515	0.463
110) m+p-Xylene	(2)	7.608	106	12282	0.873
113) o-Xylene	(2)	7.980	106	6172	0.434
114) Styrene	(2)	7.992	104	8787	0.370
115) Bromoform	(2)	8.138	173	1761	0.304
112) Xylene (Total)	(2)		106	18454	1.307
116) Isopropylbenzene	(2)	8.320	105	15914	0.446
118) Cyclohexanone	(4)	8.363	55	19001	21.385
119)$4-Bromofluorobenzene	(2)	8.430	95	493717	49.743
121) Bromobenzene	(3)	8.545	156	3857	0.416
122) 1,1,2,2-Tetrachloroethane	(3)	8.570	83	5570	0.423
123) 1,2,3-Trichloropropane	(3)	8.594	110	1776	0.433
124) trans-1,4-Dichloro-2-Butene	(3)	8.624	53	14698	3.820
125) n-Propylbenzene	(3)	8.667	91	19785	0.487
126) 2-Chlorotoluene	(3)	8.716	126	4007	0.465
128) 4-Chlorotoluene	(3)	8.807	126	3745	0.420
127) 1,3,5-Trimethylbenzene	(3)	8.813	105	13925	0.460
130) tert-Butylbenzene	(3)	9.062	134	3073	0.452
131) Pentachloroethane	(3)	9.069	167	1887	0.337
132) 1,2,4-Trimethylbenzene	(3)	9.099	105	14410	0.462
133) sec-Butylbenzene	(3)	9.233	105	18248	0.491
134) 1,3-Dichlorobenzene	(3)	9.294	146	7851	0.448
136)*1,4-Dichlorobenzene-d4	(3)	9.348	152	558311	50.000
135) p-Isopropyltoluene	(3)	9.348	119	15726	0.479
138) 1,4-Dichlorobenzene	(3)	9.367	146	7996	0.428
139) 1,2,3-Trimethylbenzene	(3)	9.409	105	16356	0.488
141) Benzyl Chloride	(3)	9.470	91	8312	0.330
142) 1,3-Diethylbenzene	(3)	9.567	119	9614	0.464
143) 1,4-Diethylbenzene	(3)	9.628	119	10227	0.481
144) 1,2-Dichlorobenzene	(3)	9.628	146	8132	0.459
145) n-Butylbenzene	(3)	9.646	92	7708M	0.474
146) 1,2-Diethylbenzene	(3)	9.707	119	9130M	0.513
148) 1,2-Dibromo-3-Chloropropane	(3)	10.176	75	1219	0.364
149) 1,3,5-Trichlorobenzene	(3)	10.328	180	6999	0.521
150) 1,2,4-Trichlorobenzene	(3)	10.741	180	6687	0.530
151) Hexachlorobutadiene	(3)	10.857	225	4401	0.752
152) Naphthalene	(3)	10.900	128	24703	0.505
153) 1,2,3-Trichlorobenzene	(3)	11.052	180	7293	0.589

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
154) 2-Methylnaphthalene	(3)	11.624	142	17620	0.647

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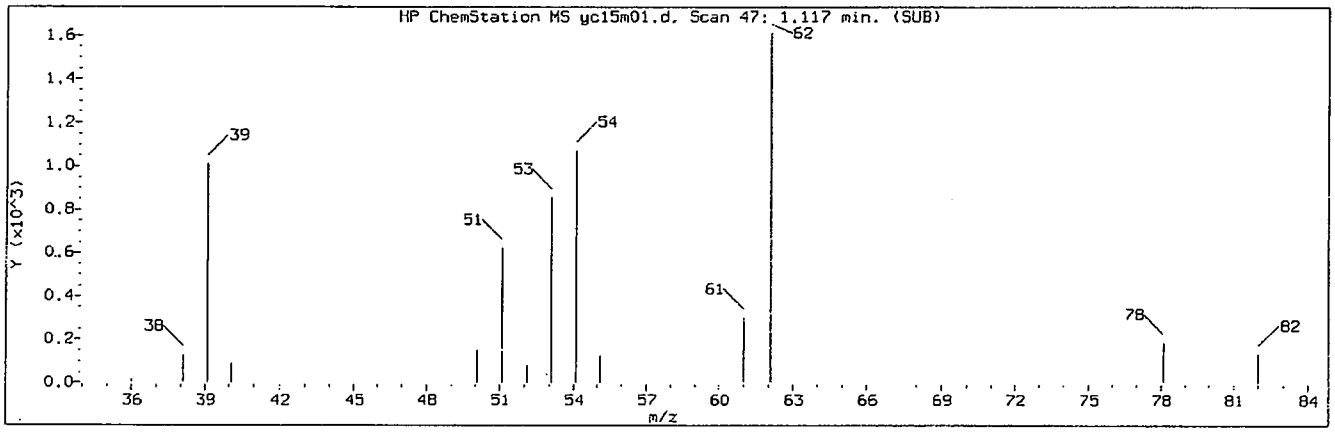
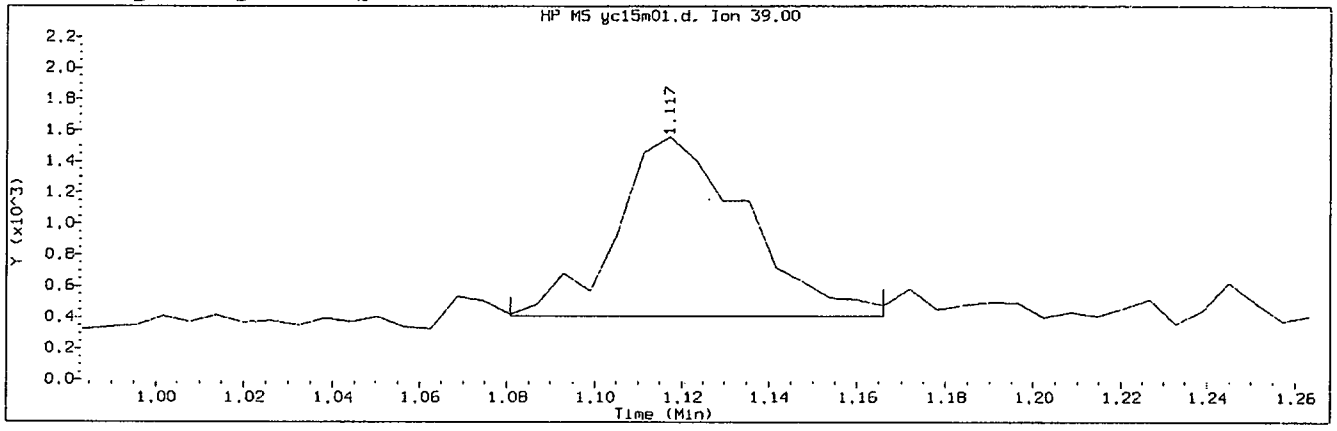
on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

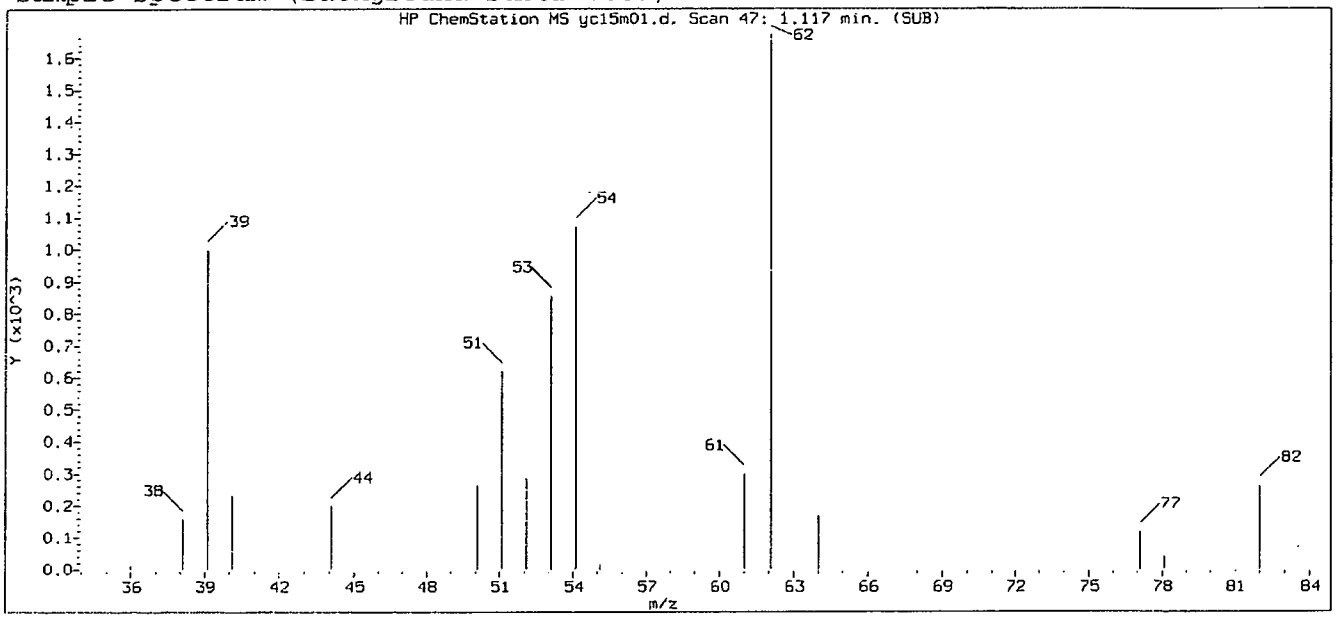
Compound Number : 4
Compound Name : 1,3-Butadiene
Scan Number : 47
Retention Time (minutes): 1.117
Quant Ion : 39.00
Area (flag) : 2400M
On-Column Amount (ng) : 0.5711
Integration start scan : 40 Integration stop scan: 54
Y at integration start : 406 Y at integration end: 406

Reason for manual integration: improper integration

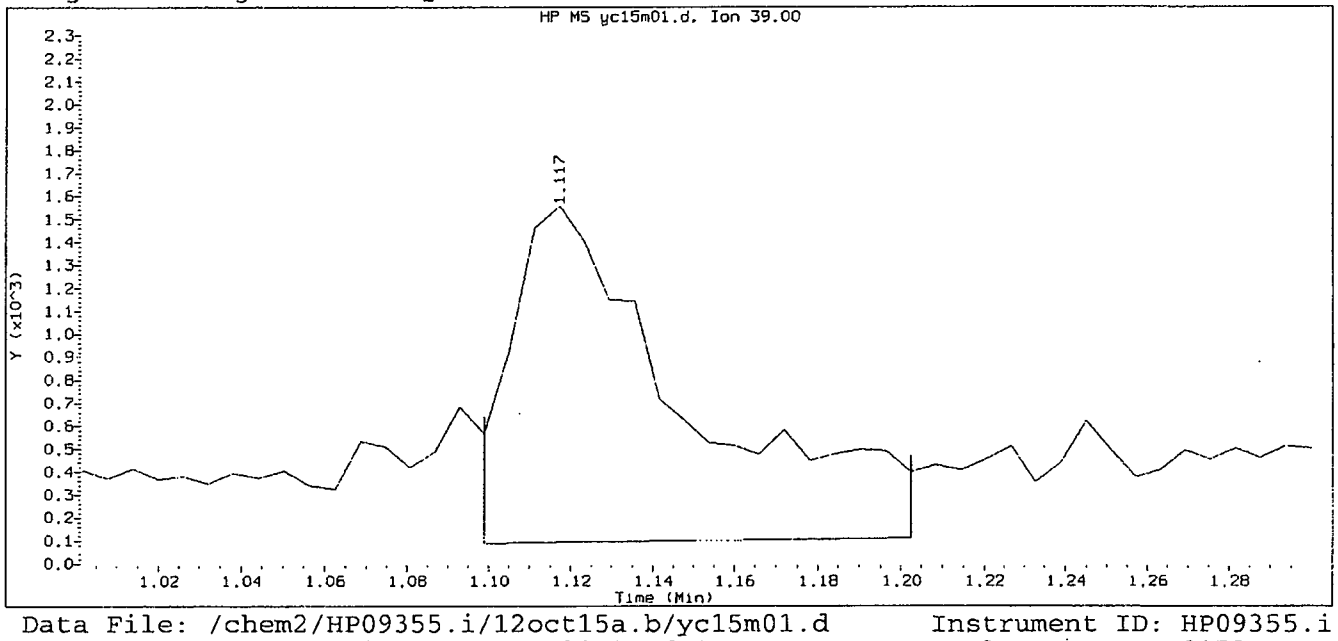
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W
Calibration date and time: 15-OCT-2012 16:26
Date, time and analyst ID of latest file update: 15-Oct-2012 16:32 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compound Number	: 4		
Compound Name	: 1,3-Butadiene		
Scan Number	: 47		
Retention Time (minutes)	: 1.117		
Quant Ion	: 39.00		
Area	: 4305		
On-column Amount (ng)	: 1.0245		
Integration start scan	: 43	Integration stop scan:	60
Y at integration start	: 89	Y at integration end:	111

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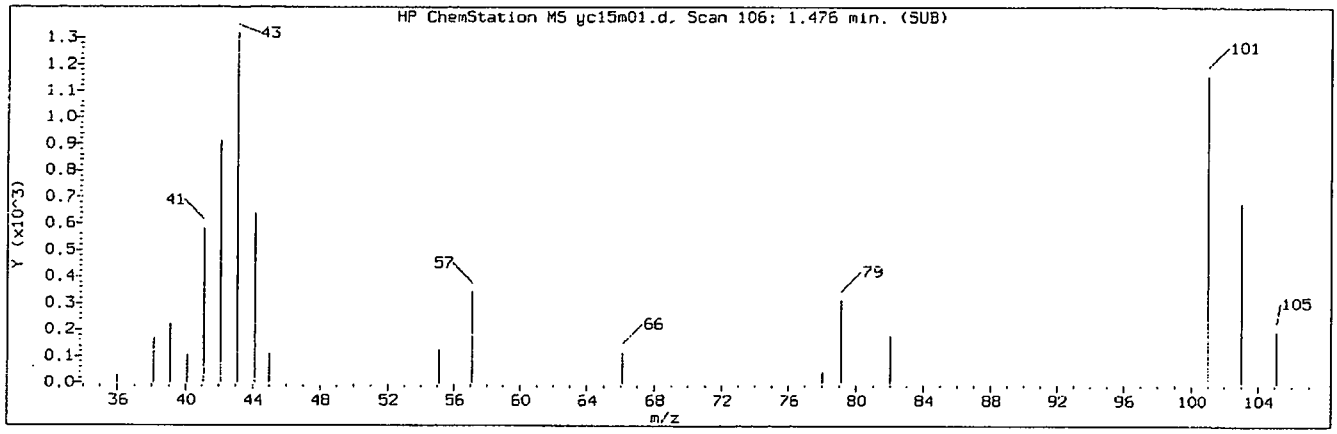
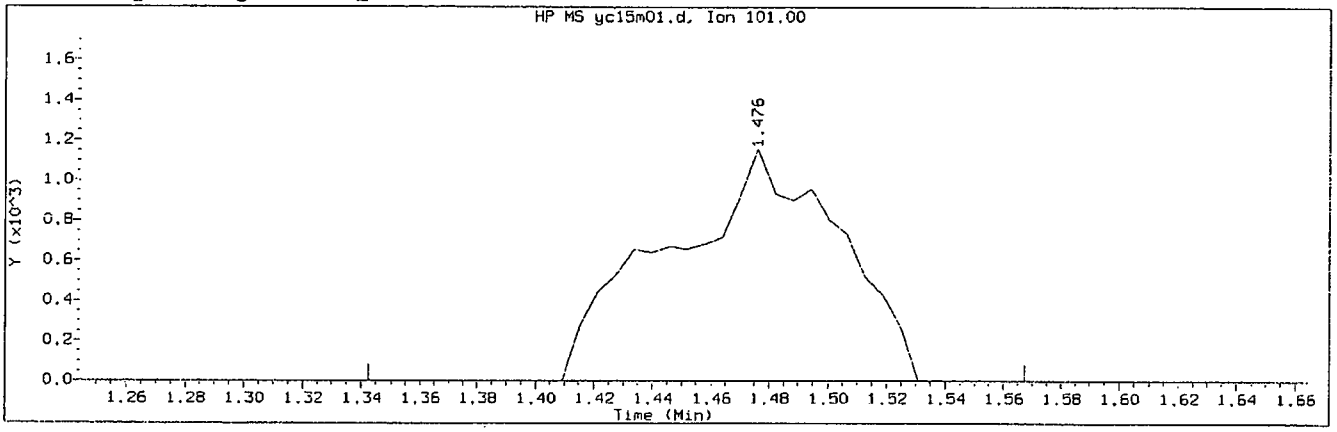
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

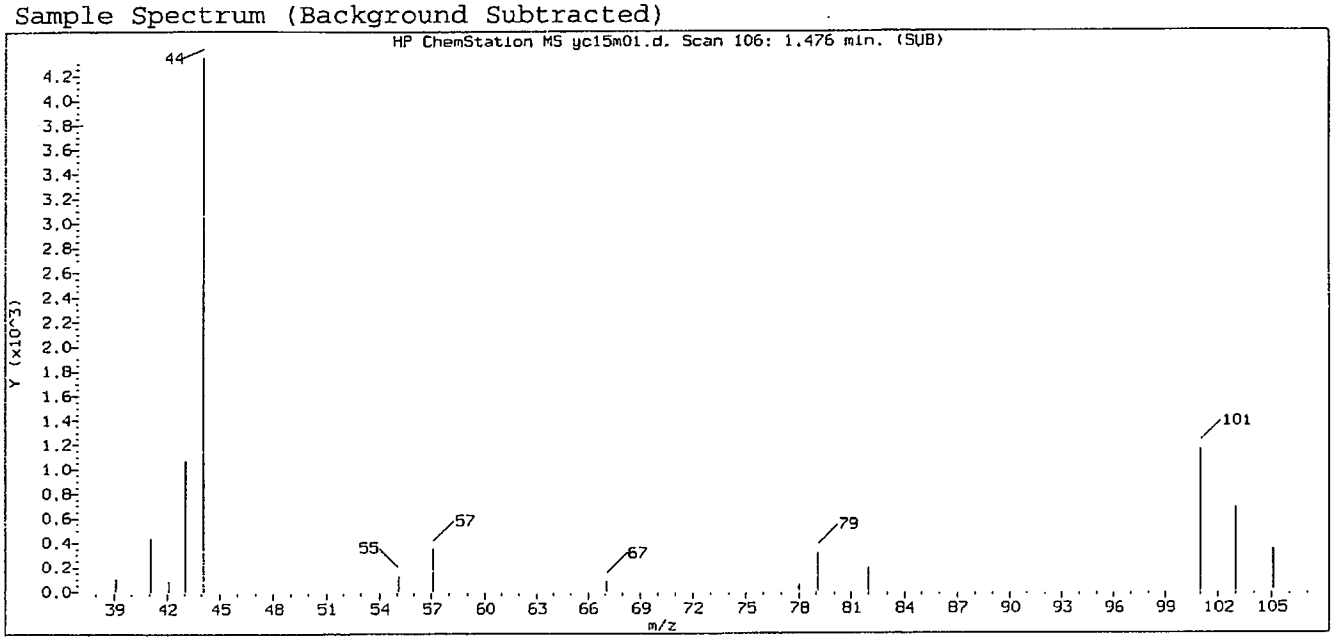
Compound Number	: 10		
Compound Name	: Trichlorofluoromethane		
Scan Number	: 106		
Retention Time (minutes)	: 1.476		
Quant Ion	: 101.00		
Area (flag)	: 4707M		
On-Column Amount (ng)	: 0.4473		
Integration start scan	: 83	Integration stop scan:	120
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

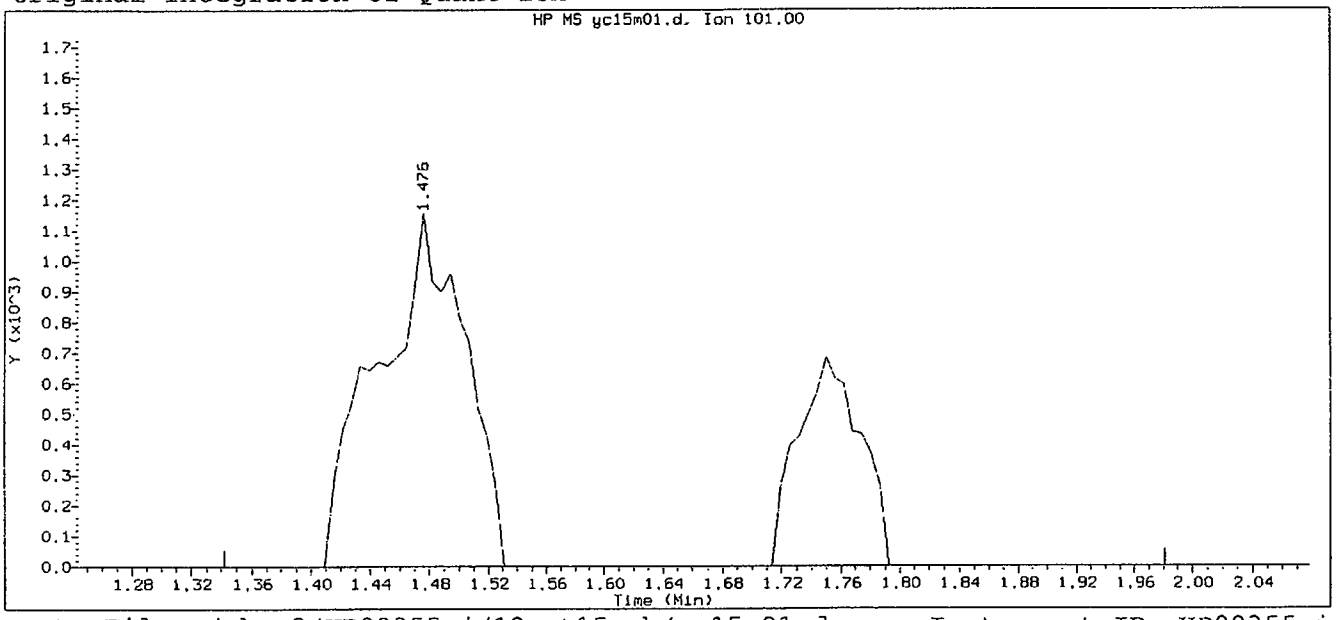
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W
Calibration date and time: 15-OCT-2012 16:26
Date, time and analyst ID of latest file update: 15-Oct-2012 16:32 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compound Number	: 10		
Compound Name	: Trichlorofluoromethane		
Scan Number	: 106		
Retention Time (minutes)	: 1.476		
Quant Ion	: 101.00		
Area	: 6743		
On-column Amount (ng)	: 0.6409		
Integration start scan	: 83	Integration stop scan:	188
Y at integration start	: 0	Y at integration end:	0

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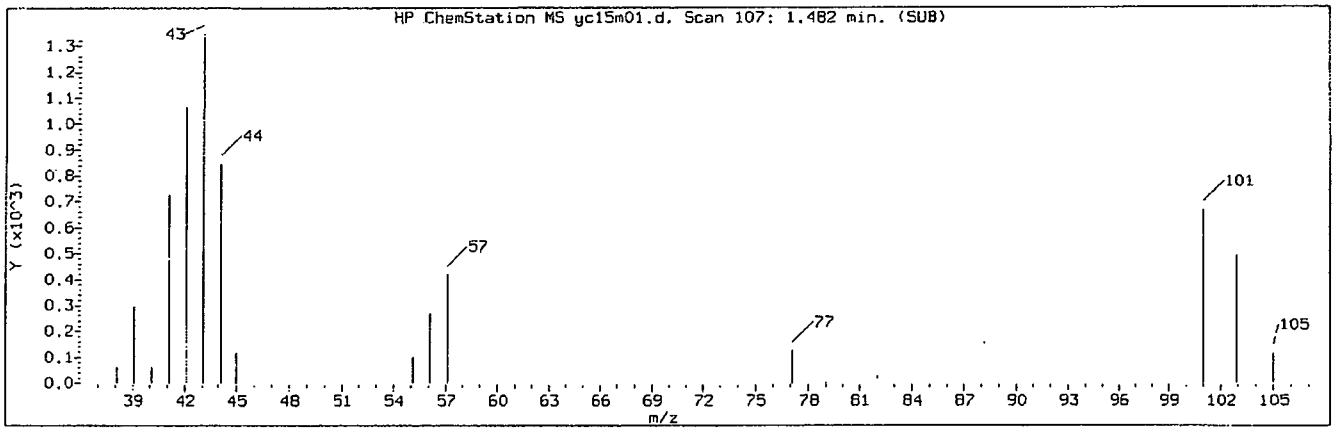
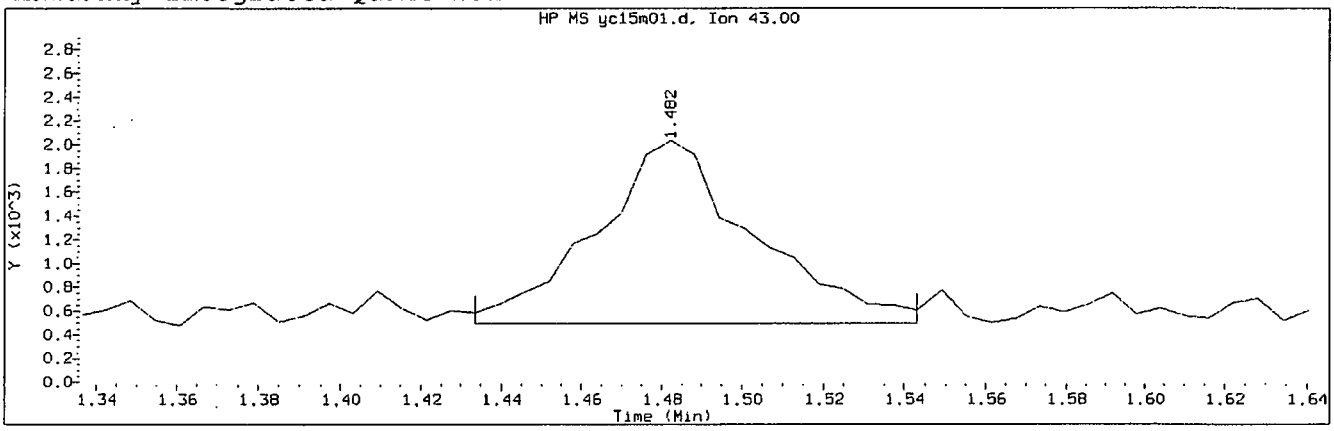
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

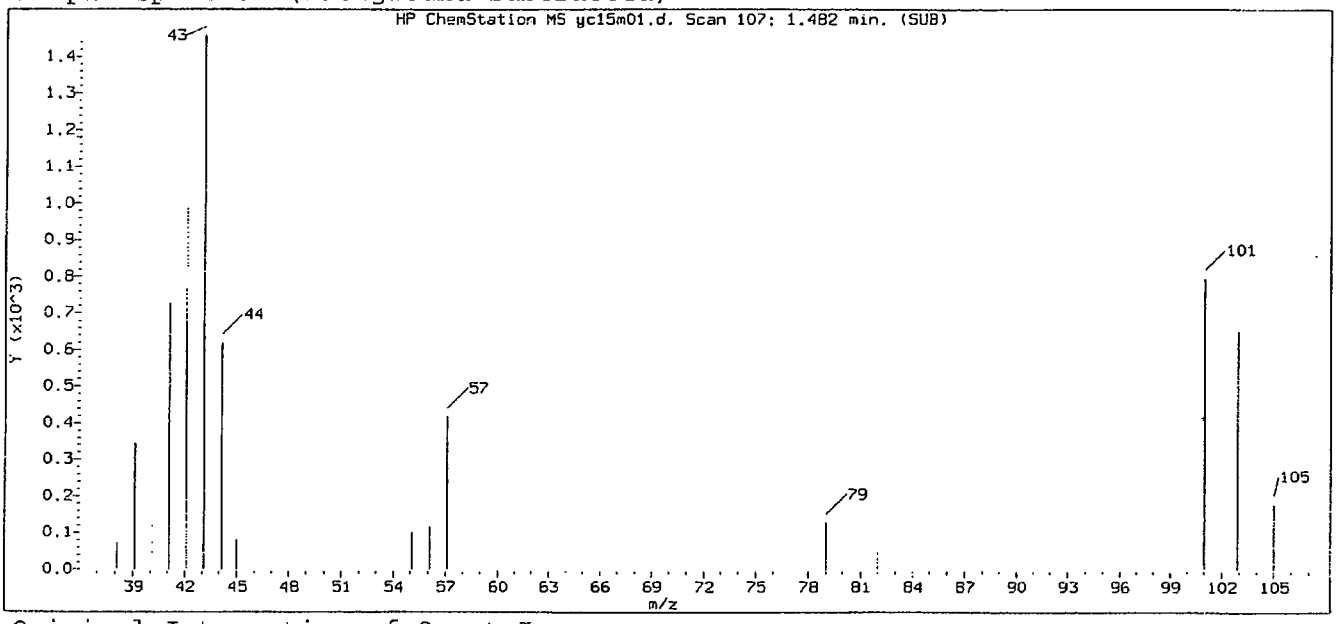
Compound Number	: 11		
Compound Name	: n-Pentane		
Scan Number	: 107		
Retention Time (minutes)	: 1.482		
Quant Ion	: 43.00		
Area (flag)	: 4190M		
On-Column Amount (ng)	: 0.4371		
Integration start scan	: 98	Integration stop scan:	116
Y at integration start	: 498	Y at integration end:	498

Reason for manual integration: improper integration

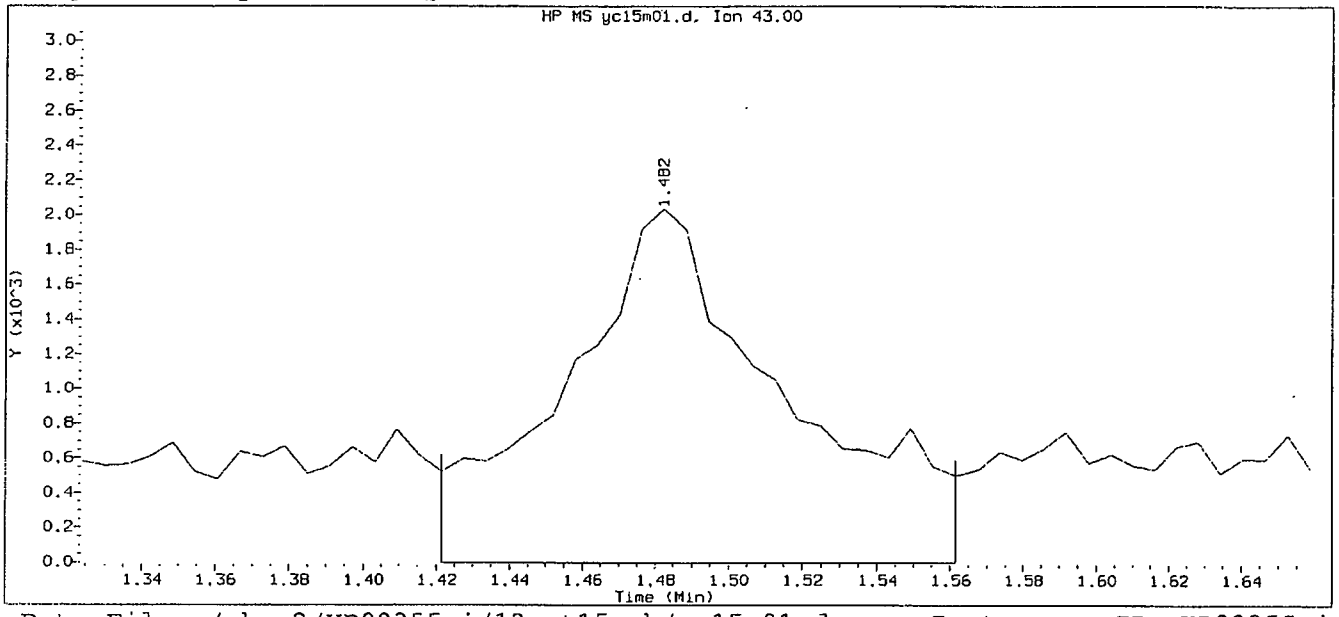
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W
Calibration date and time: 15-OCT-2012 16:26
Date, time and analyst ID of latest file update: 15-Oct-2012 16:32 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compound Number	: 11		
Compound Name	: n-Pentane		
Scan Number	: 107		
Retention Time (minutes)	: 1.482		
Quant Ion	: 43.00		
Area	: 8535		
On-column Amount (ng)	: 0.8904		
Integration start scan	: 96	Integration stop scan:	119
Y at integration start	: 0	Y at integration end:	0

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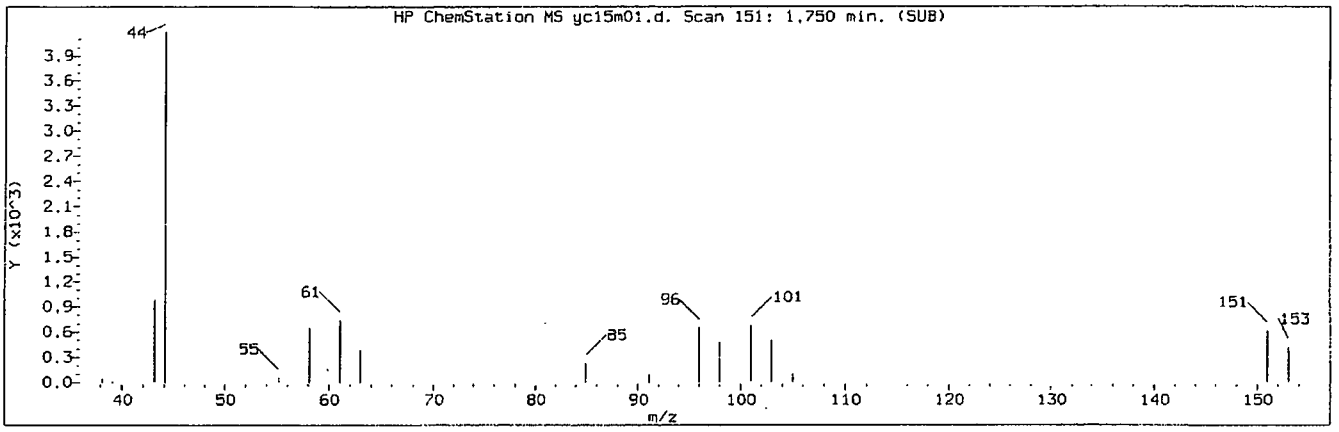
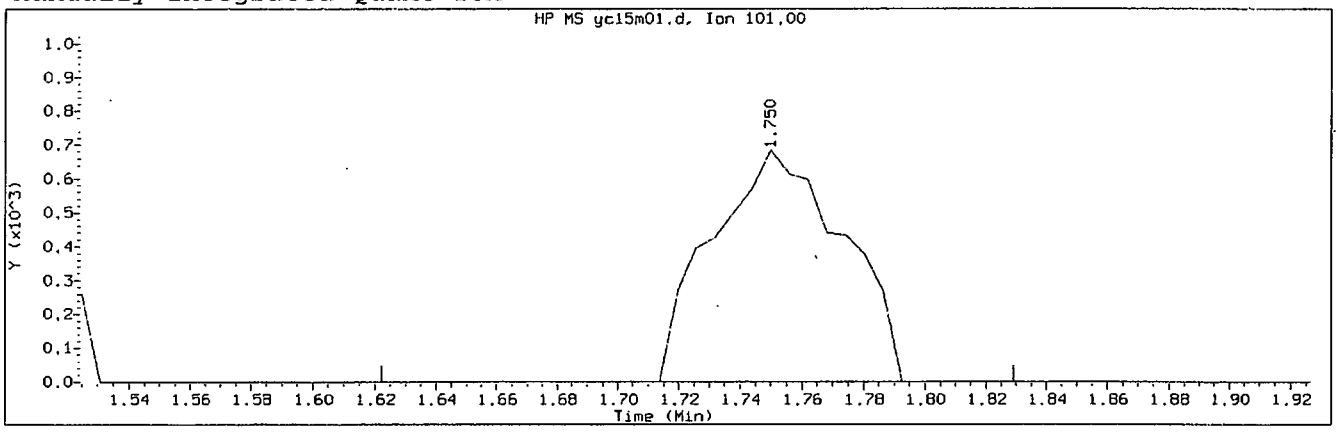
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

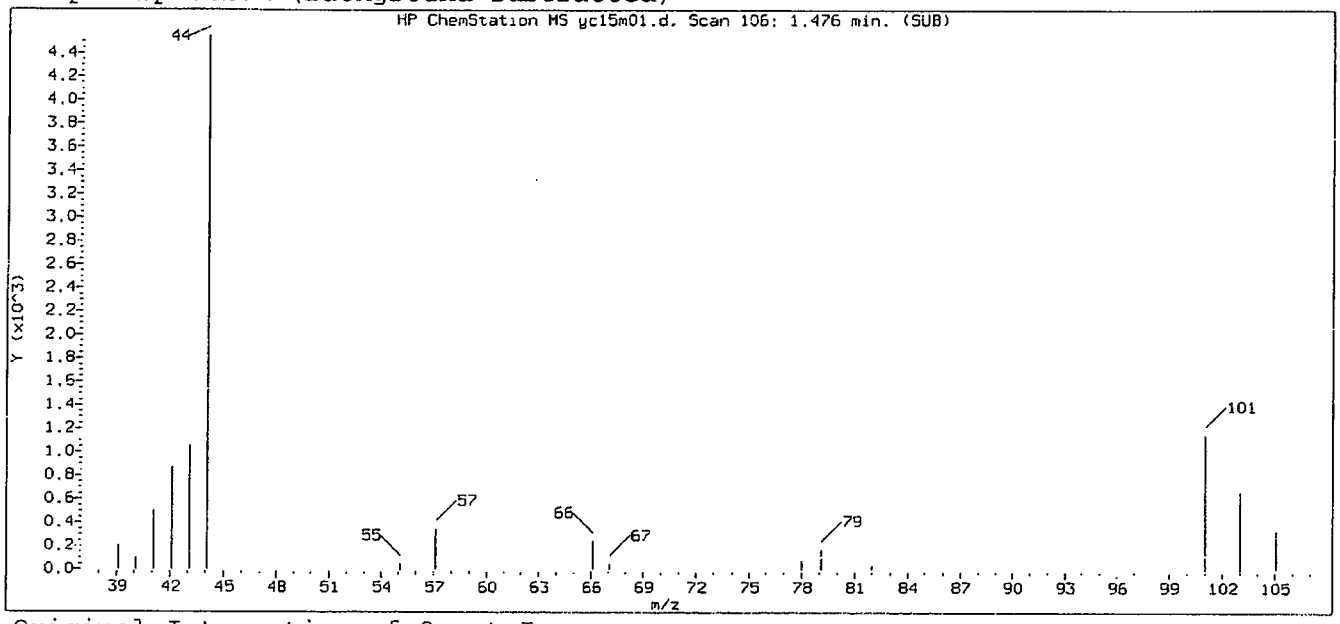
Compound Number	: 18		
Compound Name	: Freon 113		
Scan Number	: 151		
Retention Time (minutes)	: 1.750		
Quant Ion	: 101.00		
Area (flag)	: 2036M		
On-Column Amount (ng)	: 0.3505		
Integration start scan	: 129	Integration stop scan:	163
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

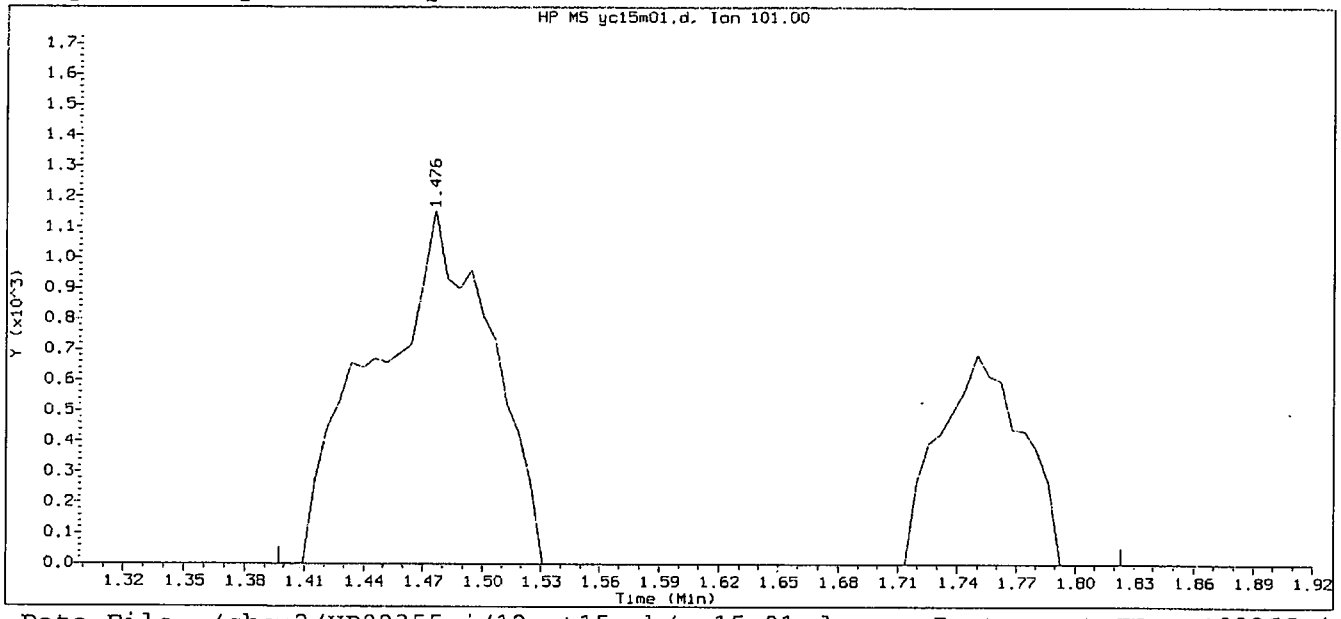
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

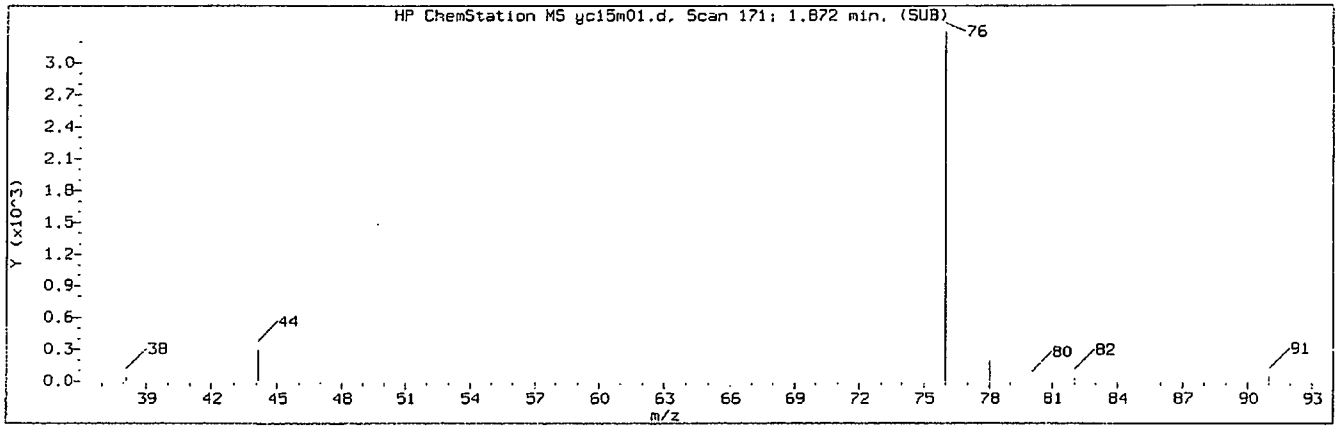
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W
Calibration date and time: 15-OCT-2012 16:26
Date, time and analyst ID of latest file update: 15-Oct-2012 16:32 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

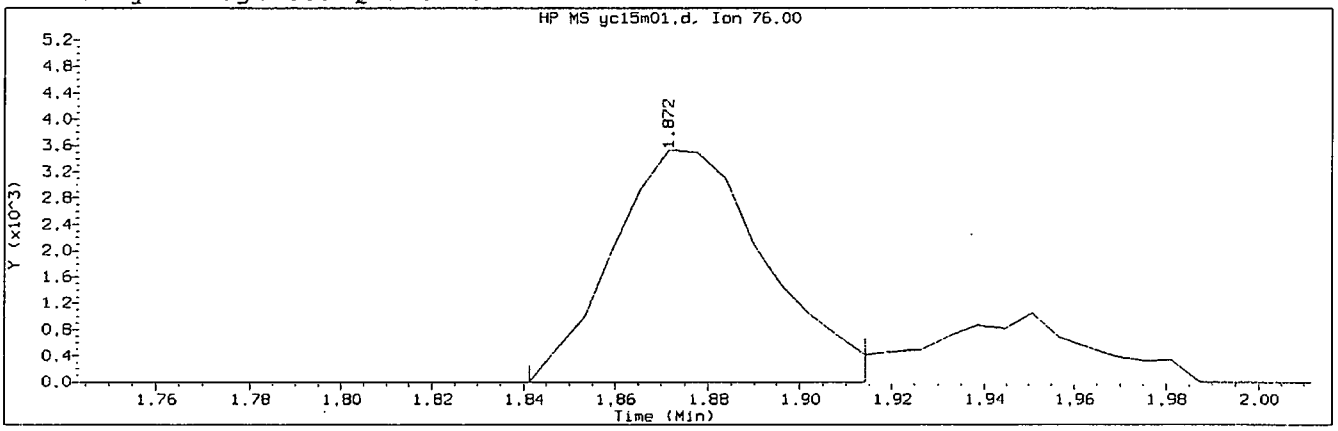
Compound Number	: 18		
Compound Name	: Freon 113		
Scan Number	: 106		
Retention Time (minutes)	: 1.476		
Quant Ion	: 101.00		
Area	: 6743		
On-column Amount (ng)	: 1.1610		
Integration start scan	: 92	Integration stop scan:	162
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

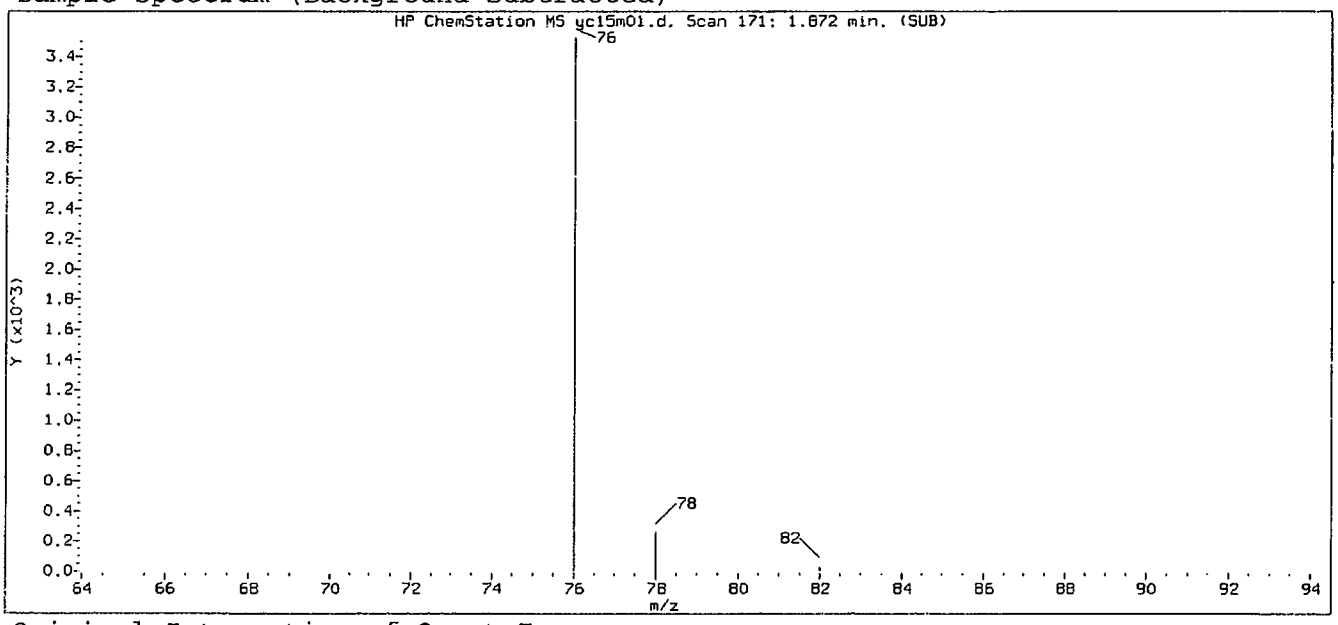
Compound Number	: 22		
Compound Name	: Carbon Disulfide		
Scan Number	: 171		
Retention Time (minutes)	: 1.872		
Quant Ion	: 76.00		
Area (flag)	: 8160M		
On-Column Amount (ng)	: 0.4683		
Integration start scan	: 165	Integration stop scan:	177
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

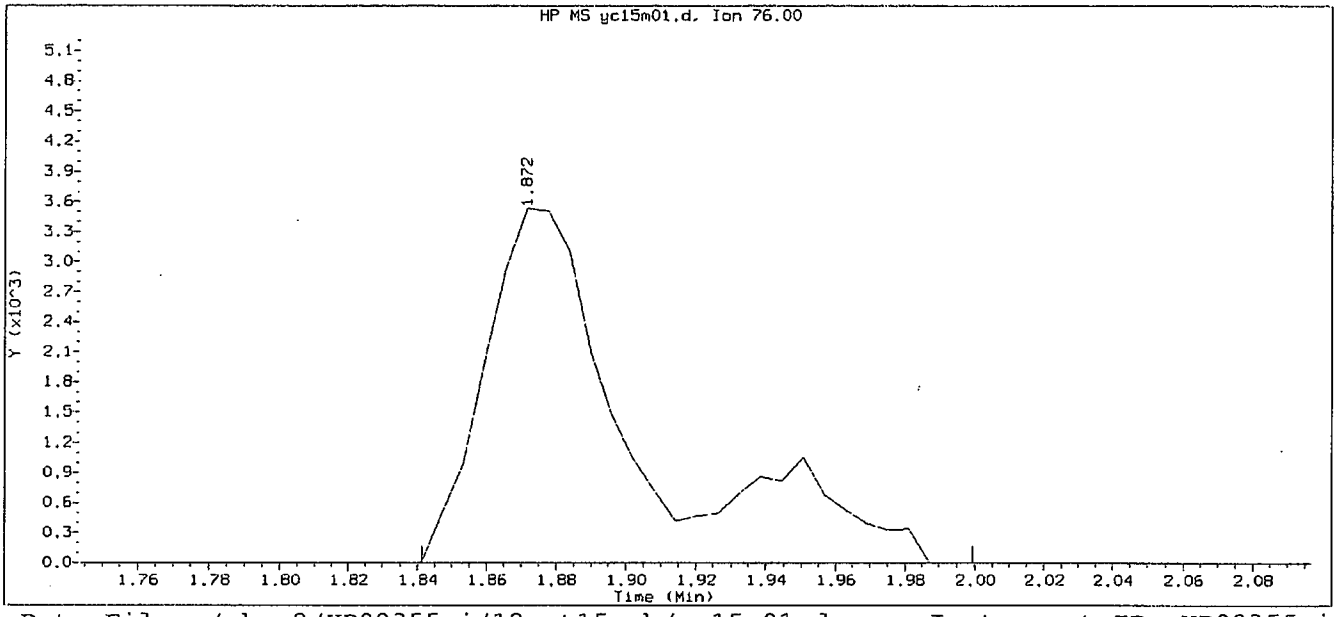
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

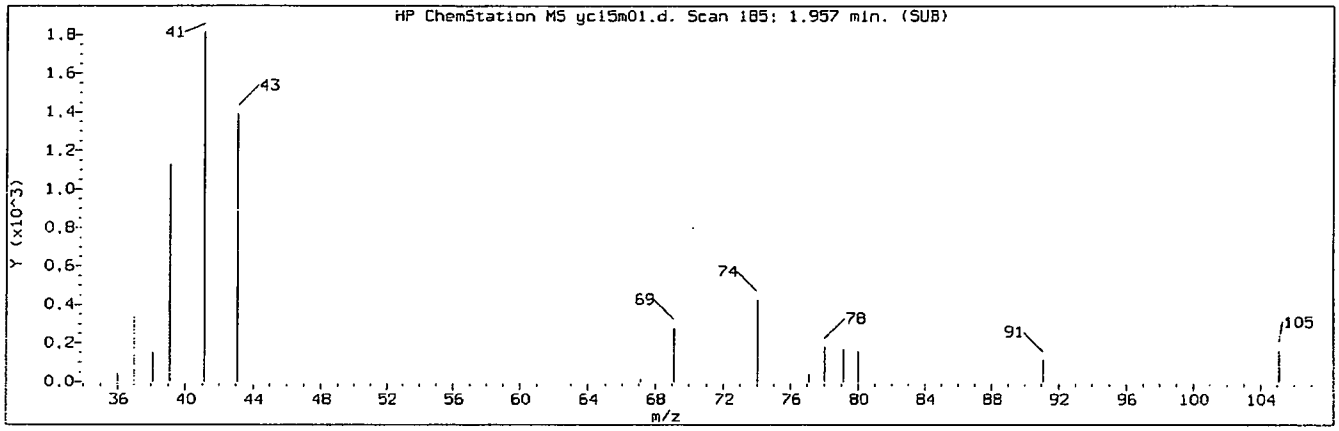
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W
Calibration date and time: 15-OCT-2012 16:26
Date, time and analyst ID of latest file update: 15-Oct-2012 16:32 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

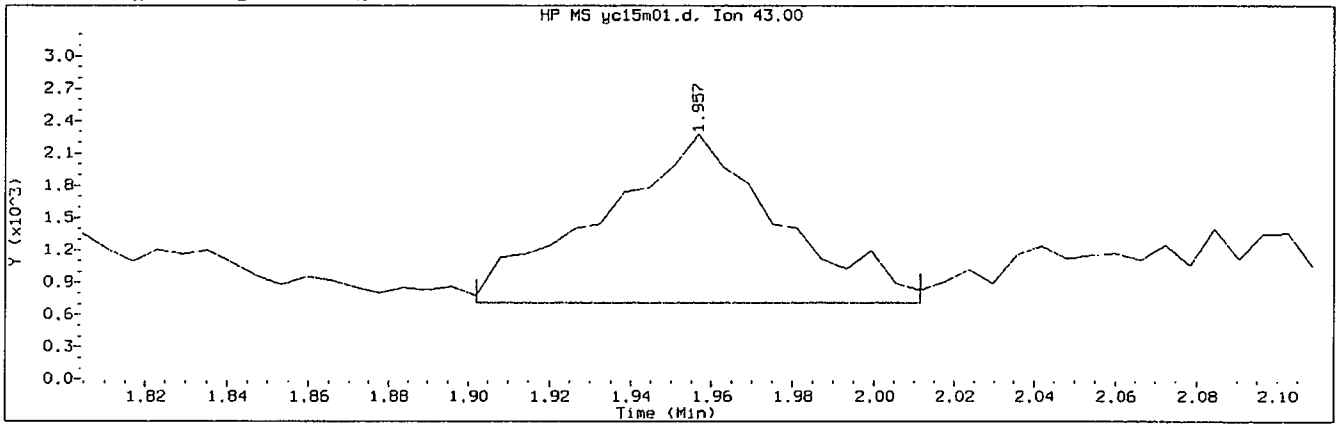
Compound Number	: 22		
Compound Name	: Carbon Disulfide		
Scan Number	: 171		
Retention Time (minutes)	: 1.872		
Quant Ion	: 76.00		
Area	: 10588		
On-column Amount (ng)	: 0.6077		
Integration start scan	: 165	Integration stop scan:	191
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

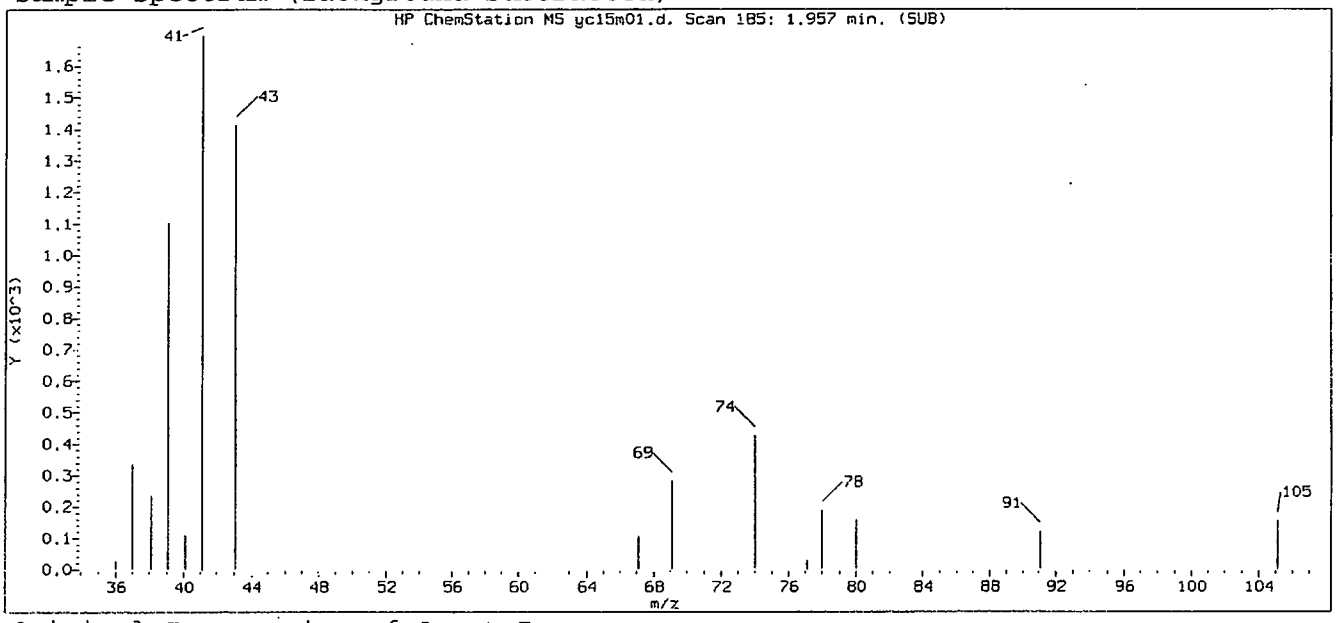
Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 185		
Retention Time (minutes)	: 1.957		
Quant Ion	: 43.00		
Area (flag)	: 4791M		
On-Column Amount (ng)	: 0.5564		
Integration start scan	: 175	Integration stop scan:	193
Y at integration start	: 710	Y at integration end:	710

Reason for manual integration: improper integration

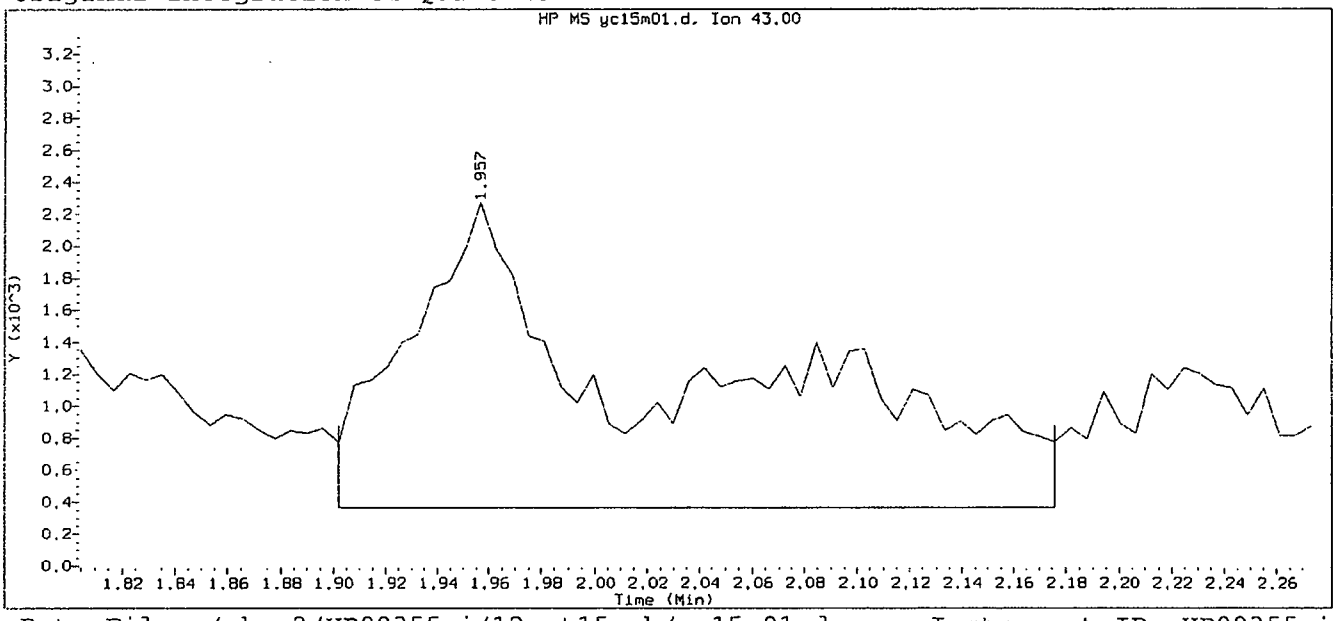
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

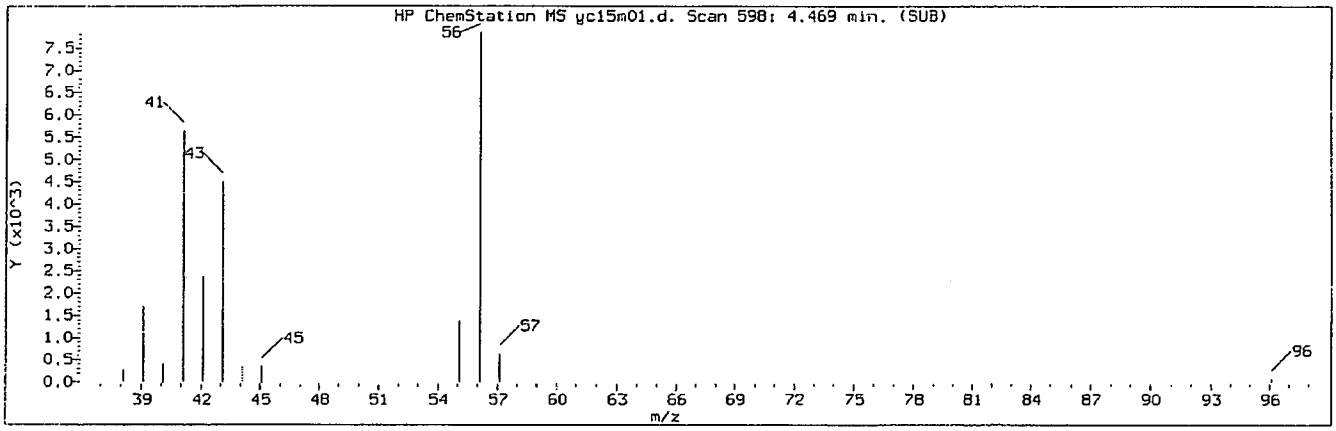
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W
Calibration date and time: 15-OCT-2012 16:26
Date, time and analyst ID of latest file update: 15-Oct-2012 16:32 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

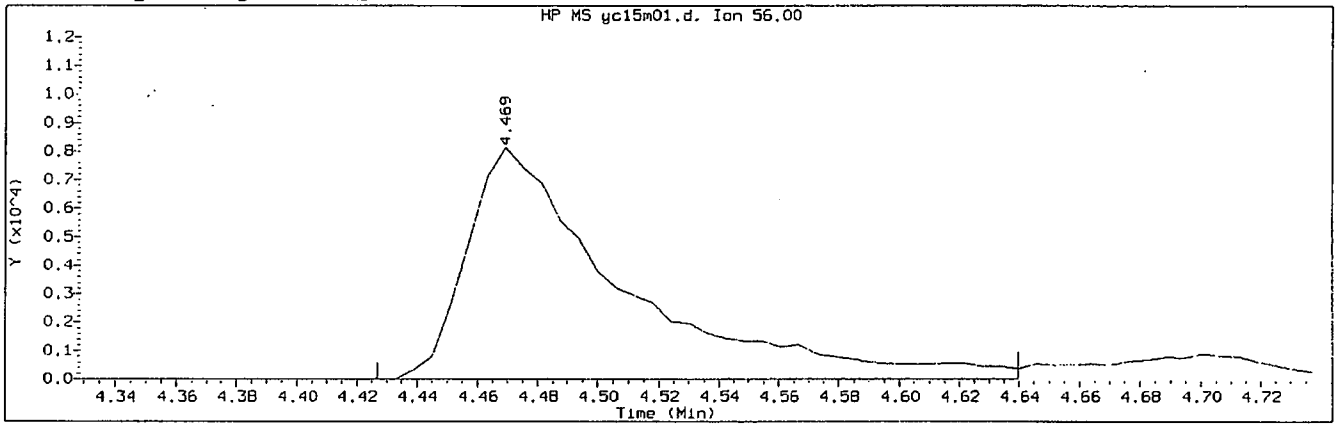
Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 185		
Retention Time (minutes)	: 1.957		
Quant Ion	: 43.00		
Area	: 13722		
On-column Amount (ng)	: 1.4677		
Integration start scan	: 175	Integration stop scan:	220
Y at integration start	: 366	Y at integration end:	366

Digitally signed by Sara E. Johnson on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

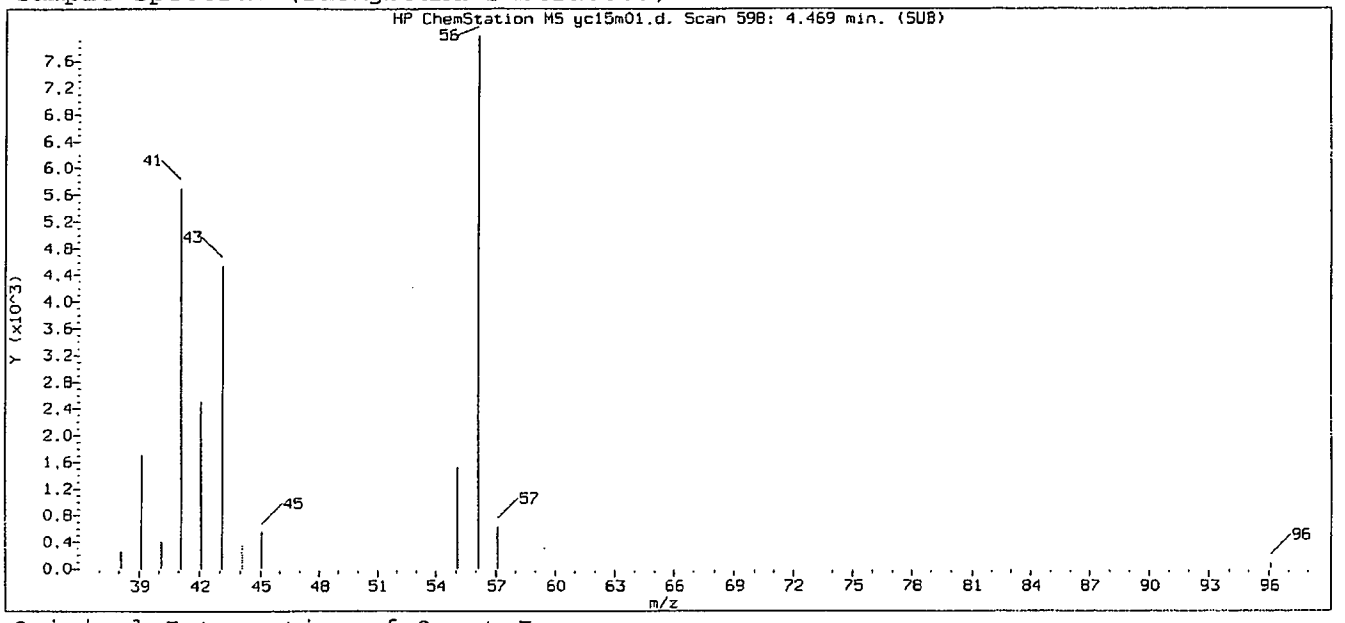
Compound Number	: 73		
Compound Name	: n-Butanol		
Scan Number	: 598		
Retention Time (minutes)	: 4.469		
Quant Ion	: 56.00		
Area (flag)	: 29207M		
On-Column Amount (ng)	: 40.4798		
Integration start scan	: 590	Integration stop scan:	625
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

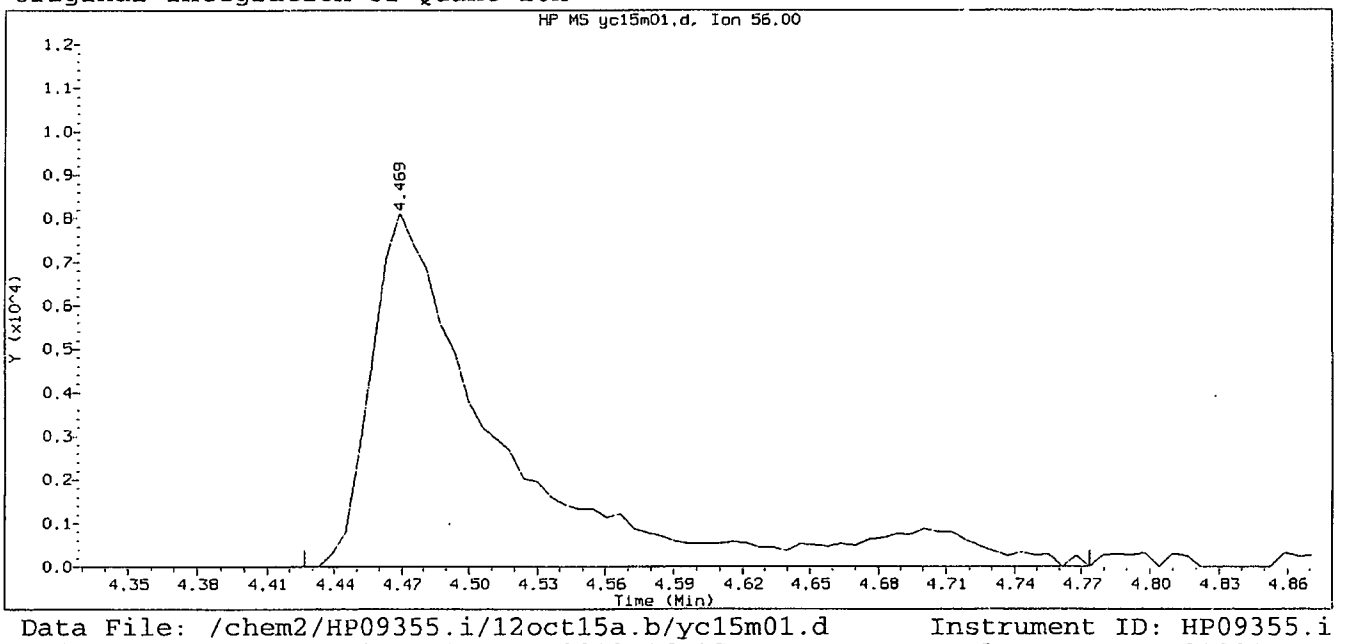
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:53. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W
Calibration date and time: 15-OCT-2012 16:26
Date, time and analyst ID of latest file update: 15-Oct-2012 16:32 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compound Number	: 73		
Compound Name	: n-Butanol		
Scan Number	: 598		
Retention Time (minutes)	: 4.469		
Quant Ion	: 56.00		
Area	: 33065		
On-column Amount (ng)	: 45.8276		
Integration start scan	: 590	Integration stop scan:	647
Y at integration start	: 0	Y at integration end:	0

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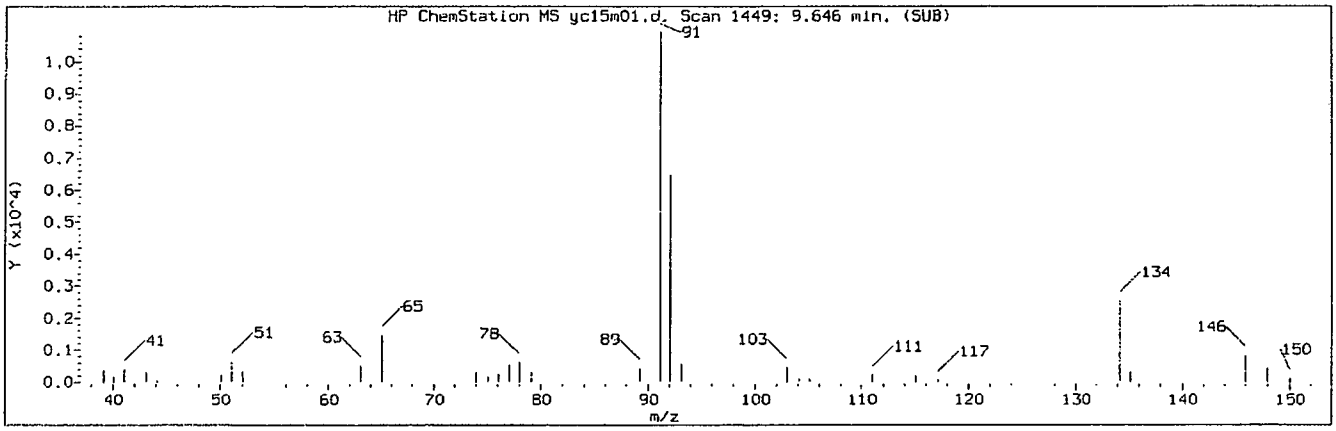
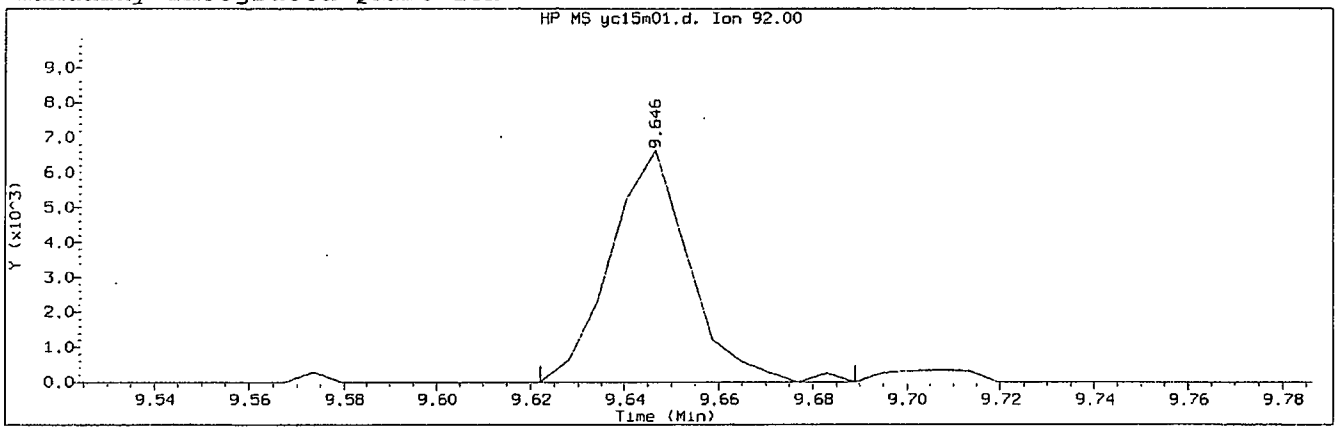
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

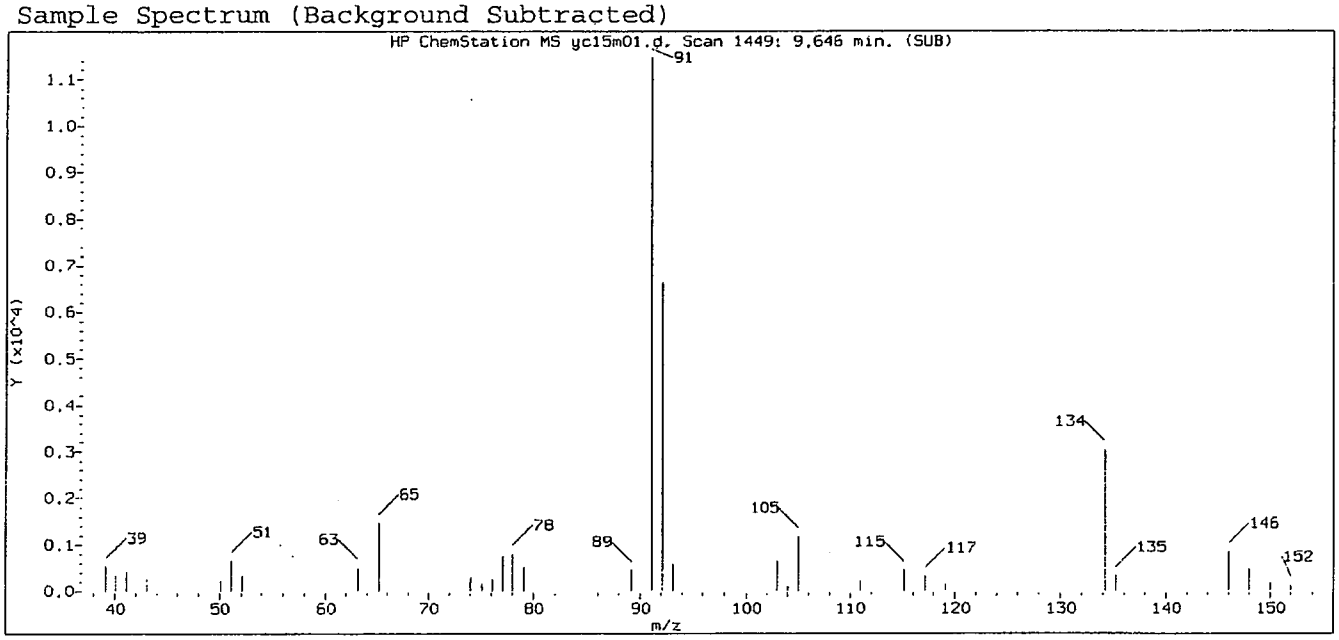
Compound Number	: 145		
Compound Name	: n-Butylbenzene		
Scan Number	: 1449		
Retention Time (minutes)	: 9.646		
Quant Ion	: 92.00		
Area (flag)	: 7708M		
On-Column Amount (ng)	: 0.4735		
Integration start scan	: 1444	Integration stop scan:	1455
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

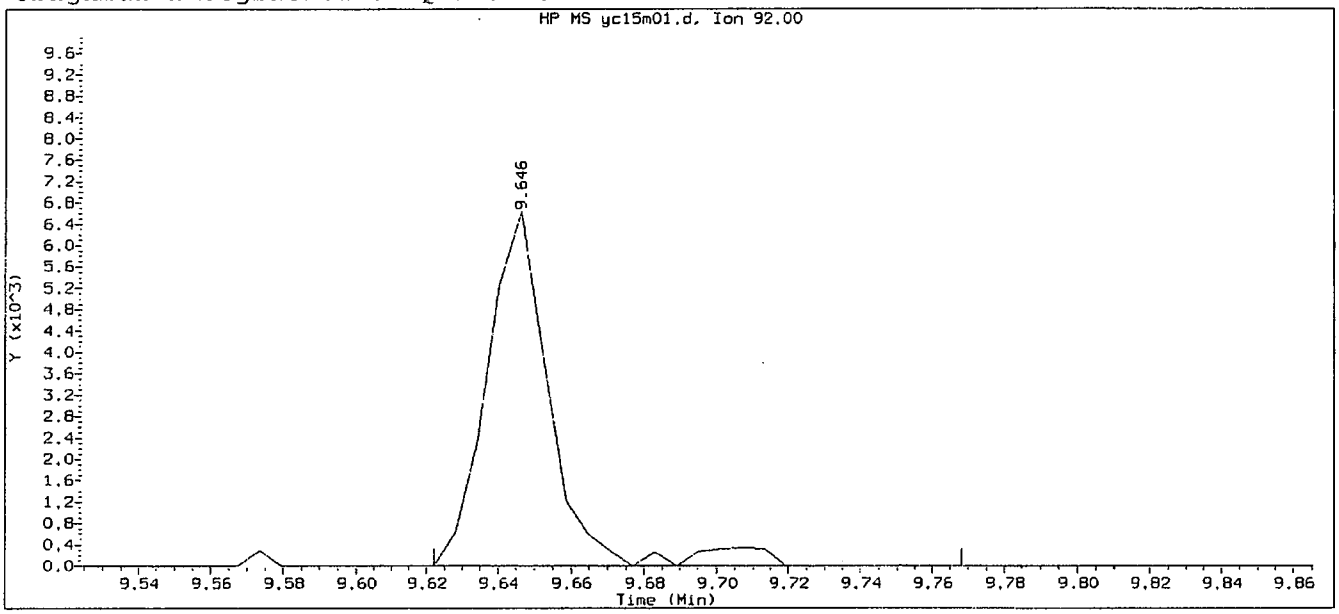
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 17:53. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W
Calibration date and time: 15-OCT-2012 16:26
Date, time and analyst ID of latest file update: 15-Oct-2012 16:32 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compound Number	: 145		
Compound Name	: n-Butylbenzene		
Scan Number	: 1449		
Retention Time (minutes)	: 9.646		
Quant Ion	: 92.00		
Area	: 8165		
On-column Amount (ng)	: 0.5016		
Integration start scan	: 1444	Integration stop scan:	1468
Y at integration start	: 0	Y at integration end:	0

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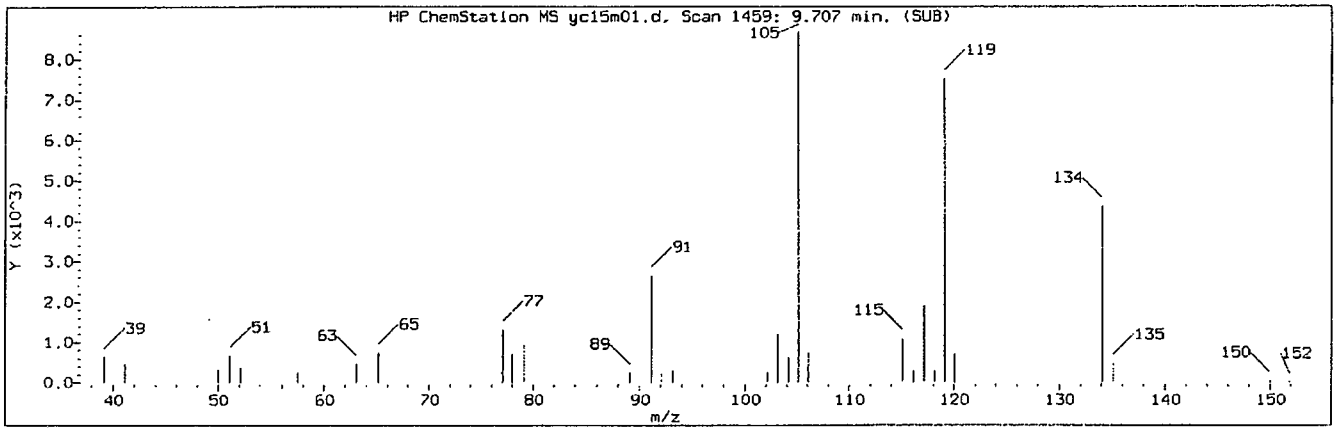
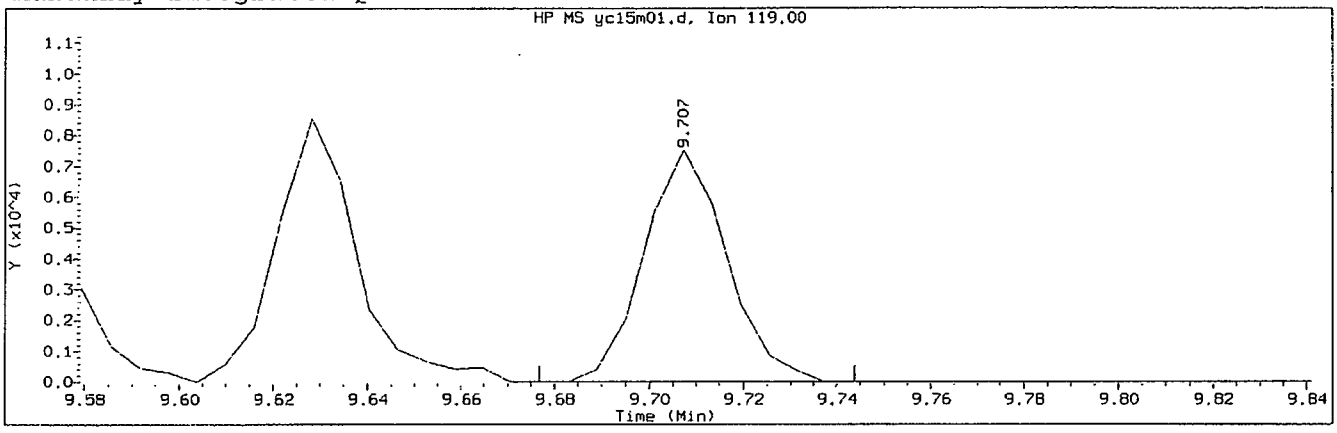
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 17:52 sej02002

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

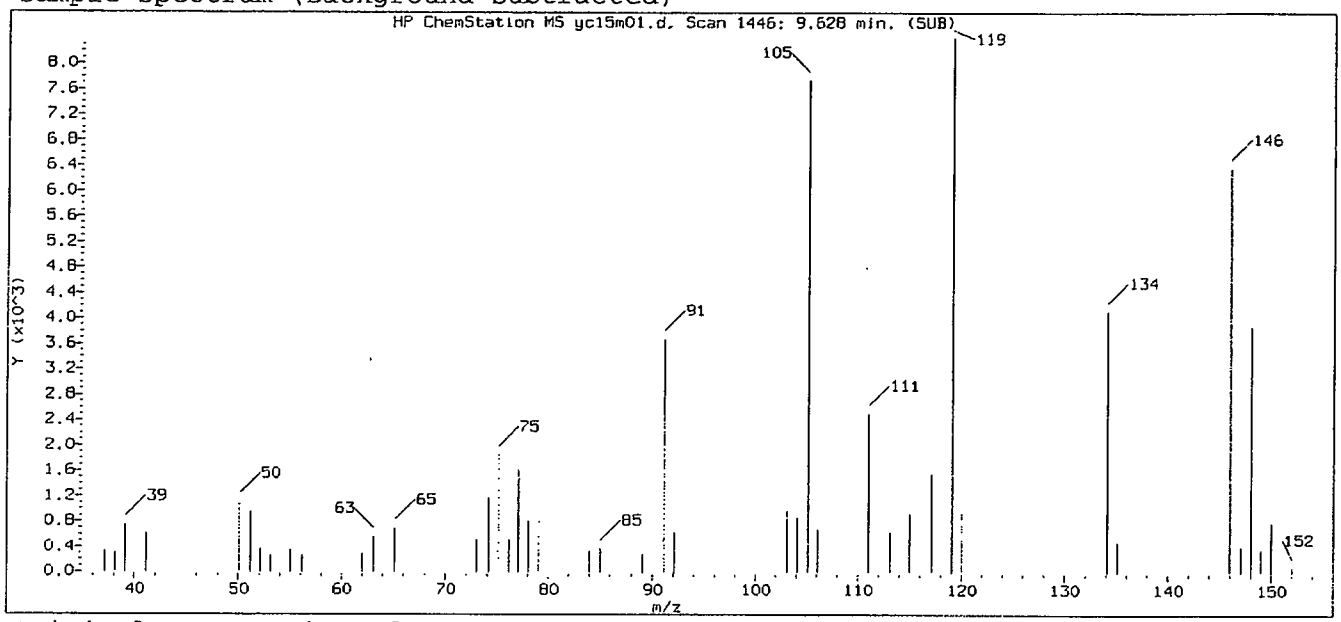
Compound Number	: 146		
Compound Name	: 1,2-Diethylbenzene		
Scan Number	: 1459		
Retention Time (minutes)	: 9.707		
Quant Ion	: 119.00		
Area (flag)	: 9130M		
On-Column Amount (ng)	: 0.5127		
Integration start scan	: 1453	Integration stop scan:	1464
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

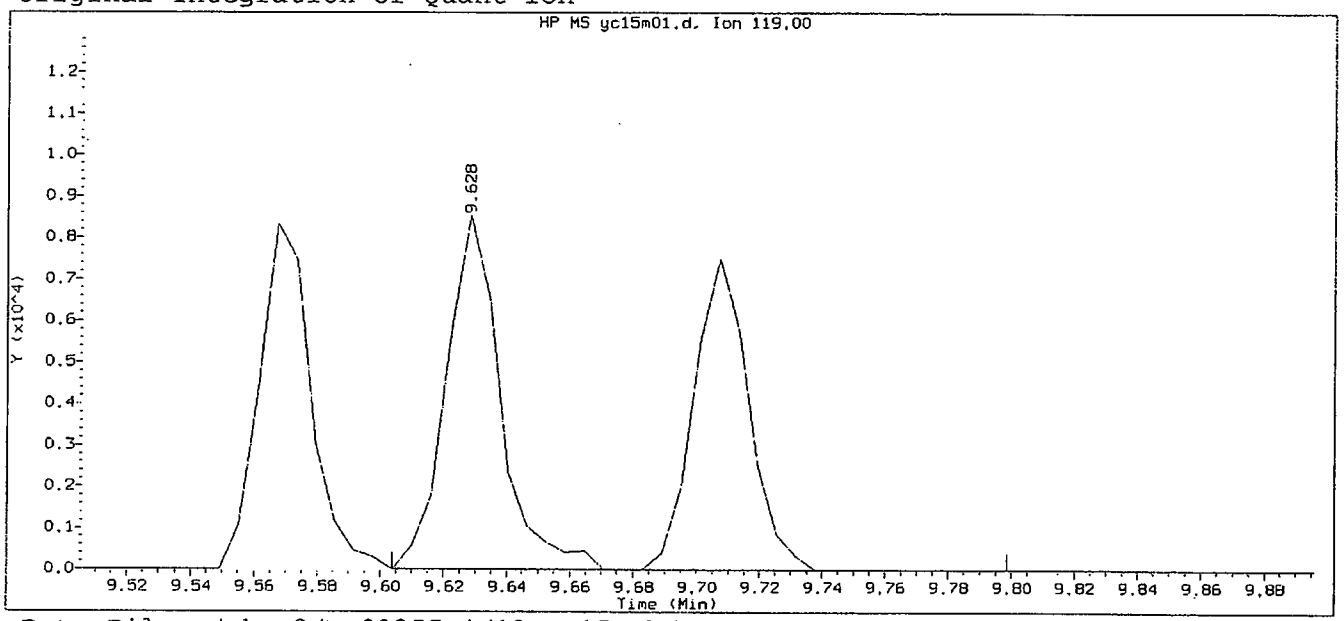
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 17:53.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15m01.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 16:17 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W
Calibration date and time: 15-OCT-2012 16:26
Date, time and analyst ID of latest file update: 15-Oct-2012 16:32 Automation

Sample Name: MDL0.5 Lab Sample ID: MDL0.5

Compound Number	: 146		
Compound Name	: 1,2-Diethylbenzene		
Scan Number	: 1446		
Retention Time (minutes)	: 9.628		
Quant Ion	: 119.00		
Area	: 19357		
On-column Amount (ng)	: 1.0871		
Integration start scan	: 1441	Integration stop scan:	1473
Y at integration start	: 0	Y at integration end:	0

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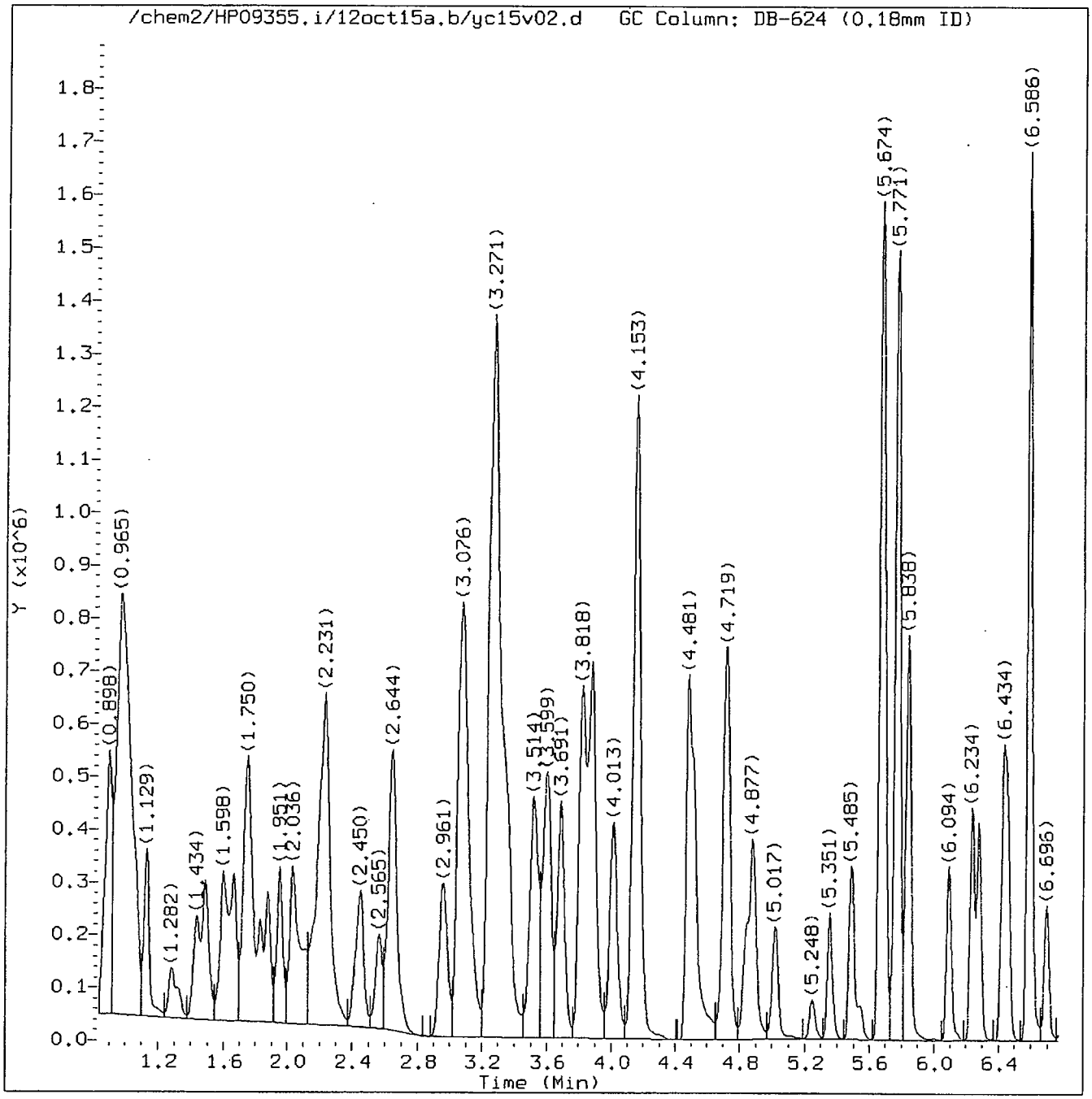
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

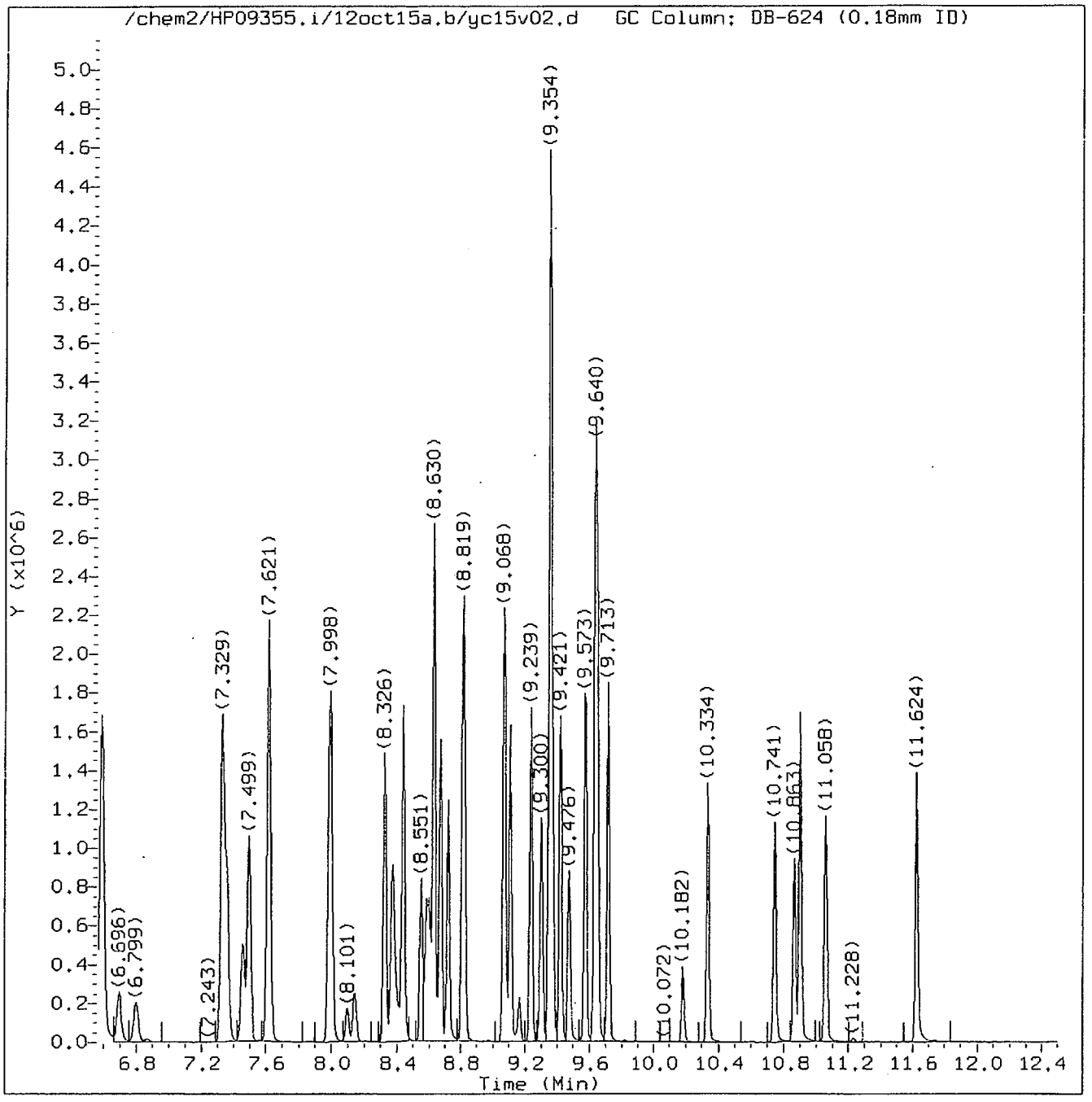
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 19:14 sej02002

Sample Name: YLGICV Lab Sample ID: YLGICV

Digitally signed by Sara E. Johnson
on 10/15/2012 at 19:14.
Target 3.5 esignature user ID: sej02002



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 19:14 sej02002

Sample Name: YLGICV Lab Sample ID: YLGICV

Digitally signed by Sara E. Johnson
on 10/15/2012 at 19:14.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 19:14 sej02002

Sample Name: YLGICV Lab Sample ID: YLGICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Dichlorodifluoromethane	(1)	1.026	85	178322	19.146
3) Chloromethane	(1)	1.062	50	195491	19.792
5) Vinyl Chloride	(1)	1.129	62	179924	18.596
4) 1,3-Butadiene	(1)	1.129	39	90412	21.753
7) Bromomethane	(1)	1.282	94	89760	14.194
8) Chloroethane	(1)	1.324	64	65639	12.519
9) Dichlorofluoromethane	(1)	1.434	67	238735	20.736
11) n-Pentane	(1)	1.482	43	155189	16.370
10) Trichlorofluoromethane	(1)	1.488	101	200839M	19.300
14) Freon 123a	(1)	1.604	67	154770	21.033
15) Acrolein	(4)	1.665	56	339062	116.181
16) 1,1-Dichloroethene	(1)	1.738	96	126032	22.534
18) Freon 113	(1)	1.756	101	131663	22.920
17) Acetone	(1)	1.756	58	203770	130.426
20) Methyl Iodide	(1)	1.829	142	230193	21.628
21) 2-Propanol	(4)	1.841	45	146011	119.000
22) Carbon Disulfide	(1)	1.878	76	370804	21.517
24) Allyl Chloride	(1)	1.951	41	195538	18.952
25) Methyl Acetate	(1)	1.963	43	172835M	20.295
26) Methylene Chloride	(1)	2.030	84	148656	21.366
28)*t-Butyl Alcohol-d10	(4)	2.060	65	437543	250.000
29) t-Butyl Alcohol	(4)	2.115	59	359628M	165.723
30) Acrylonitrile	(1)	2.200	53	572973	97.732
31) trans-1,2-Dichloroethene	(1)	2.231	96	153456	22.920
32) Methyl Tertiary Butyl Ether	(1)	2.243	73	499987	21.592
33) n-Hexane	(1)	2.450	57	253929	25.332
34) 1,1-Dichloroethane	(1)	2.559	63	275642	22.678
36) di-Isopropyl Ether	(1)	2.638	45	521654	21.409
37) 2-Chloro-1,3-Butadiene	(1)	2.644	53	244544	23.705
39) Ethyl t-Butyl Ether	(1)	2.961	59	510295	21.749
41) 2-Butanone	(1)	3.058	43	1308342	154.369
40) cis-1,2-Dichloroethene	(1)	3.070	96	172080	22.970
42) 2,2-Dichloropropane	(1)	3.082	77	207270	22.701
43) Propionitrile	(4)	3.125	54	405358	149.888
46) Methacrylonitrile	(1)	3.271	67	906857	156.307
47) Bromochloromethane	(1)	3.283	128	83455	20.537
48) Tetrahydrofuran	(4)	3.332	71	248561M	98.174
50) Chloroform	(1)	3.362	83	256892	21.020

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 19:14.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 19:14 sej02002

Sample Name: YLGICV Lab Sample ID: YLGICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
52)$Dibromofluoromethane	(1)	3.508	113	302844	49.546
53) 1,1,1-Trichloroethane	(1)	3.538	97	239146	22.957
56) Cyclohexane	(1)	3.593	56	294898	24.136
45) 1,2-Dichloroethene (total)	(1)		96	325536	45.891
57) 1,1-Dichloropropene	(1)	3.685	75	204415	22.599
58) Carbon Tetrachloride	(1)	3.697	117	179657	23.207
59) Isobutyl Alcohol	(4)	3.818	41	338772	453.198
62)$1,2-Dichloroethane-d4	(1)	3.818	102	82857	50.451
63) Benzene	(1)	3.879	78	654667	22.698
65) 1,2-Dichloroethane	(1)	3.891	62	207019	21.731
69) t-Amyl Methyl Ether	(1)	4.013	73	488431	21.180
71)*Fluorobenzene	(1)	4.153	96	1376056	50.000
72) n-Heptane	(1)	4.171	43	293681	25.265
73) n-Butanol	(4)	4.481	56	638335	920.779
74) Trichloroethene	(1)	4.512	95	164110	22.877
76) Methylcyclohexane	(1)	4.713	83	308633	23.743
77) 1,2-Dichloropropane	(1)	4.725	63	168379	22.235
78) Dibromomethane	(1)	4.840	93	107595	21.442
79) 1,4-Dioxane	(4)	4.865	88	93888	486.924
80) Methyl Methacrylate	(1)	4.883	69	181418	20.258
83) Bromodichloromethane	(1)	5.017	83	183477	21.616
85) 2-Nitropropane	(1)	5.248	41	61444	17.492
86) 2-Chloroethyl Vinyl Ether	(1)	5.351	63	137155	20.253
87) cis-1,3-Dichloropropene	(1)	5.485	75	256145M	23.583
89) 4-Methyl-2-Pentanone	(1)	5.674	43	1624729	101.366
93)$Toluene-d8	(2)	5.771	98	1321126	50.025
94) Toluene	(2)	5.838	92	411866	22.356
95) trans-1,3-Dichloropropene	(2)	6.094	75	223572	21.223
96) Ethyl Methacrylate	(2)	6.234	69	286523	20.553
97) 1,1,2-Trichloroethane	(2)	6.276	97	158303	21.265
98) Tetrachloroethene	(2)	6.428	166	181565	22.849
99) 1,3-Dichloropropane	(2)	6.453	76	264123	21.161
101) 2-Hexanone	(2)	6.586	43	1303405	100.524
102) Dibromochloromethane	(2)	6.696	129	147446	21.518
104) 1,2-Dibromoethane	(2)	6.799	107	171564	21.235
106)*Chlorobenzene-d5	(2)	7.329	117	989671	50.000
107) Chlorobenzene	(2)	7.359	112	447619	21.822
108) 1,1,1,2-Tetrachloroethane	(2)	7.462	131	143365	21.448

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

Digitally signed by Sara E. Johnson
on 10/15/2012 at 19:14.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 19:14 sej02002

Sample Name: YLGICV Lab Sample ID: YLGICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
109) Ethylbenzene	(2)	7.499	91	787672	22.011
110) m+p-Xylene	(2)	7.621	106	627902	44.484
113) o-Xylene	(2)	7.986	106	310582	21.786
114) Styrene	(2)	8.004	104	520548	21.868
115) Bromoform	(2)	8.144	173	110634	19.018
112) Xylene (Total)	(2)		106	938484	66.270
116) Isopropylbenzene	(2)	8.326	105	810032	22.645
118) Cyclohexanone	(4)	8.375	55	465397	545.147
119)$4-Bromofluorobenzene	(2)	8.442	95	495988	49.817
121) Bromobenzene	(3)	8.551	156	202312	21.091
122) 1,1,2,2-Tetrachloroethane	(3)	8.582	83	277426	20.359
123) 1,2,3-Trichloropropane	(3)	8.600	110	84655	19.978
124) trans-1,4-Dichloro-2-Butene	(3)	8.630	53	436399	109.681
125) n-Propylbenzene	(3)	8.673	91	952154	22.672
126) 2-Chlorotoluene	(3)	8.722	126	192073	21.533
128) 4-Chlorotoluene	(3)	8.813	126	198108	21.479
127) 1,3,5-Trimethylbenzene	(3)	8.825	105	703203	22.483
131) Pentachloroethane	(3)	9.075	167	112853	19.504
130) tert-Butylbenzene	(3)	9.075	134	157005	22.352
132) 1,2,4-Trimethylbenzene	(3)	9.111	105	712009	22.064
133) sec-Butylbenzene	(3)	9.239	105	901641	23.444
134) 1,3-Dichlorobenzene	(3)	9.306	146	392069	21.652
136)*1,4-Dichlorobenzene-d4	(3)	9.354	152	577326	50.000
135) p-Isopropyltoluene	(3)	9.354	119	788395	23.210
138) 1,4-Dichlorobenzene	(3)	9.373	146	412626	21.350
139) 1,2,3-Trimethylbenzene	(3)	9.421	105	733296	21.138
141) Benzyl Chloride	(3)	9.476	91	494093	18.946
142) 1,3-Diethylbenzene	(3)	9.579	119	463449	21.641
143) 1,4-Diethylbenzene	(3)	9.634	119	487797	22.171
144) 1,2-Dichlorobenzene	(3)	9.640	146	394384	21.544
145) n-Butylbenzene	(3)	9.652	92	393012	23.348
146) 1,2-Diethylbenzene	(3)	9.713	119	396064	21.510
148) 1,2-Dibromo-3-Chloropropane	(3)	10.182	75	67173	19.385
149) 1,3,5-Trichlorobenzene	(3)	10.334	180	312793	22.517
150) 1,2,4-Trichlorobenzene	(3)	10.748	180	296001	22.671
151) Hexachlorobutadiene	(3)	10.869	225	135842	22.433
152) Naphthalene	(3)	10.900	128	1006891	19.890
153) 1,2,3-Trichlorobenzene	(3)	11.058	180	275620	21.519

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 10/15/2012 at 19:14.
Target 3.5 esignature user ID: sej02002

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 19:14 sej02002

Sample Name: YLGICV Lab Sample ID: YLGICV

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
154) 2-Methylnaphthalene	(3)	11.624	142	523334	18.586

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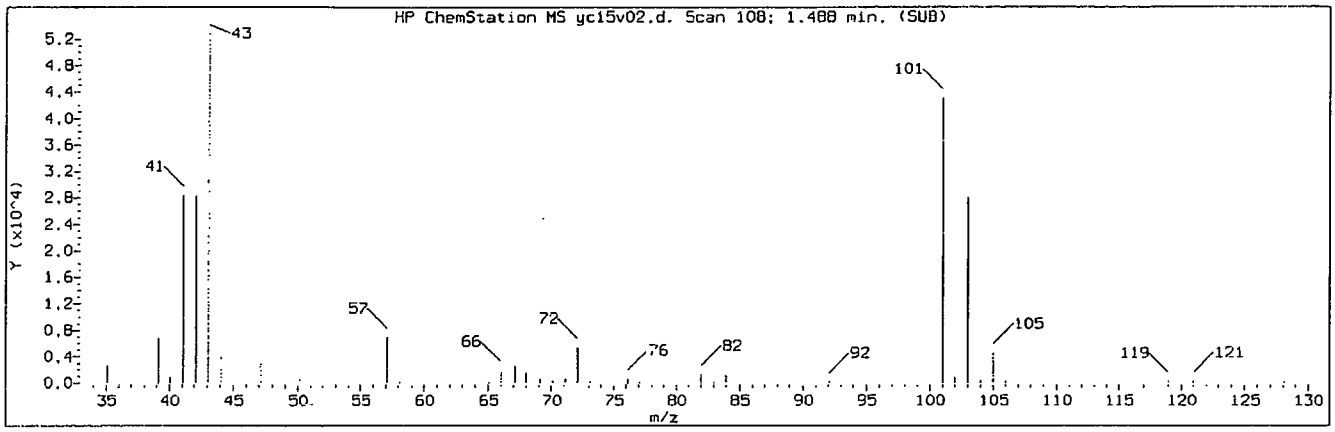
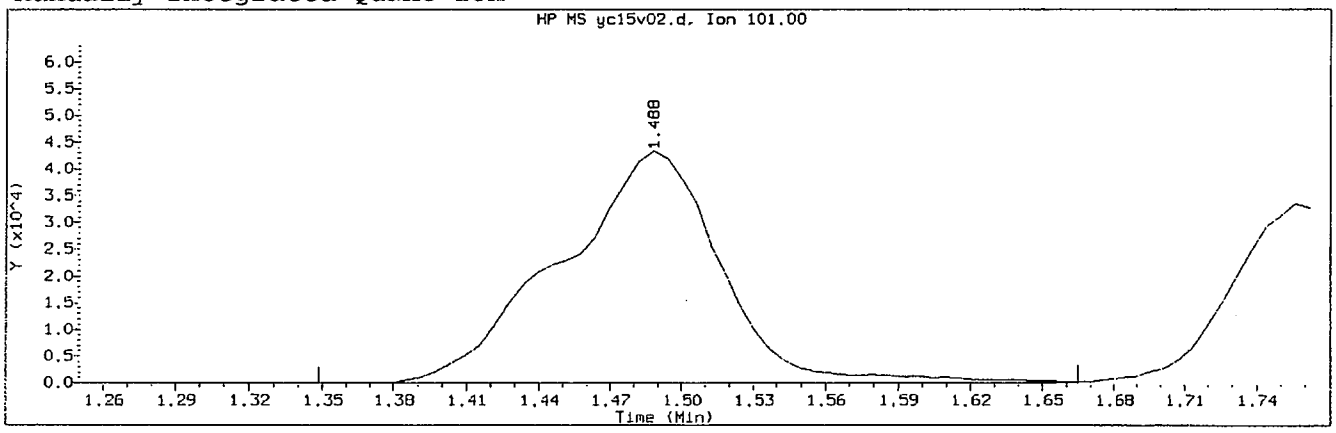
on 10/15/2012 at 19:14.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 19:14 sej02002

Sample Name: YLGICV Lab Sample ID: YLGICV

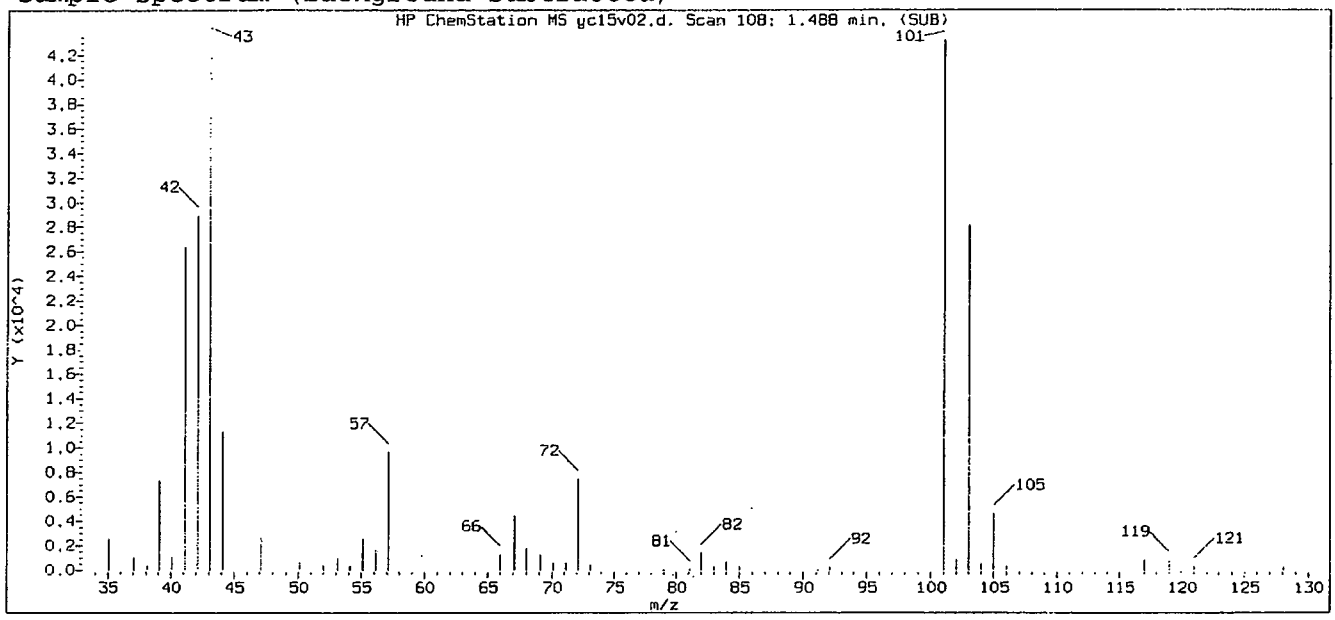
Compound Number	: 10		
Compound Name	: Trichlorofluoromethane		
Scan Number	: 108		
Retention Time (minutes)	: 1.488		
Quant Ion	: 101.00		
Area (flag)	: 200839M		
On-Column Amount (ng)	: 19.2999		
Integration start scan	: 84	Integration stop scan:	136
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

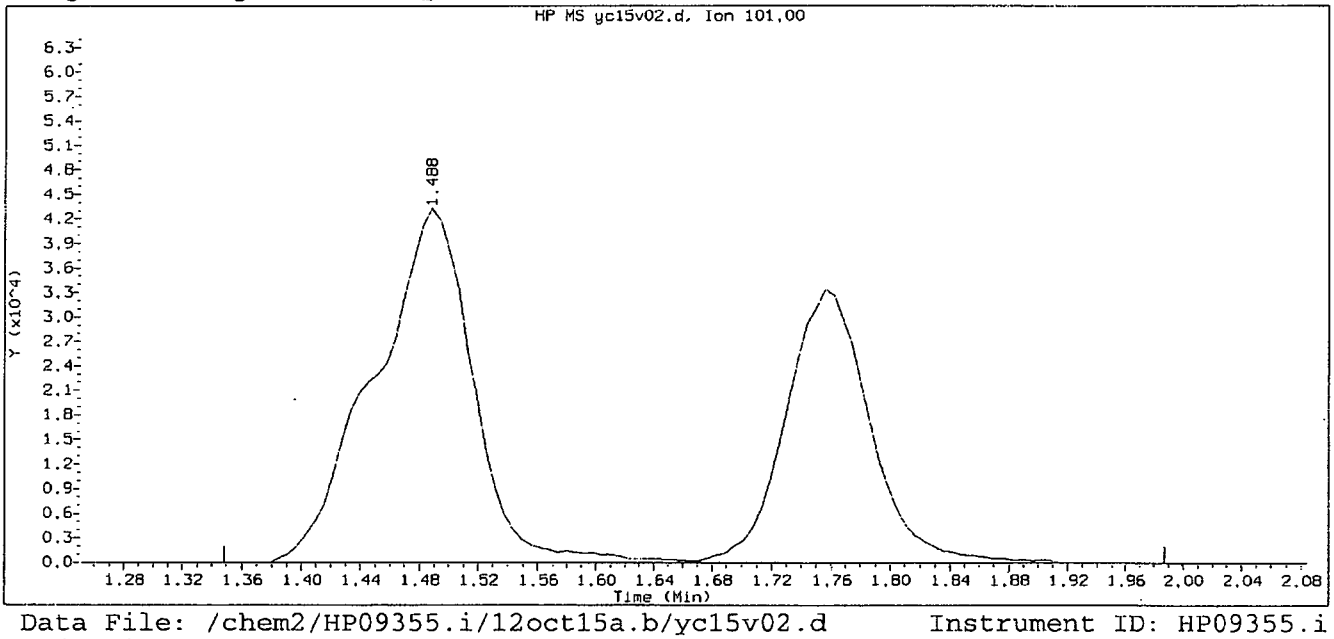
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 19:14.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 18:42 Automation

Sample Name: YLGICV Lab Sample ID: YLGICV

Compound Number	: 10		
Compound Name	: Trichlorofluoromethane		
Scan Number	: 108		
Retention Time (minutes)	: 1.488		
Quant Ion	: 101.00		
Area	: 332552		
On-column Amount (ng)	: 31.9569		
Integration start scan	: 84	Integration stop scan:	189
Y at integration start	: 0	Y at integration end:	0

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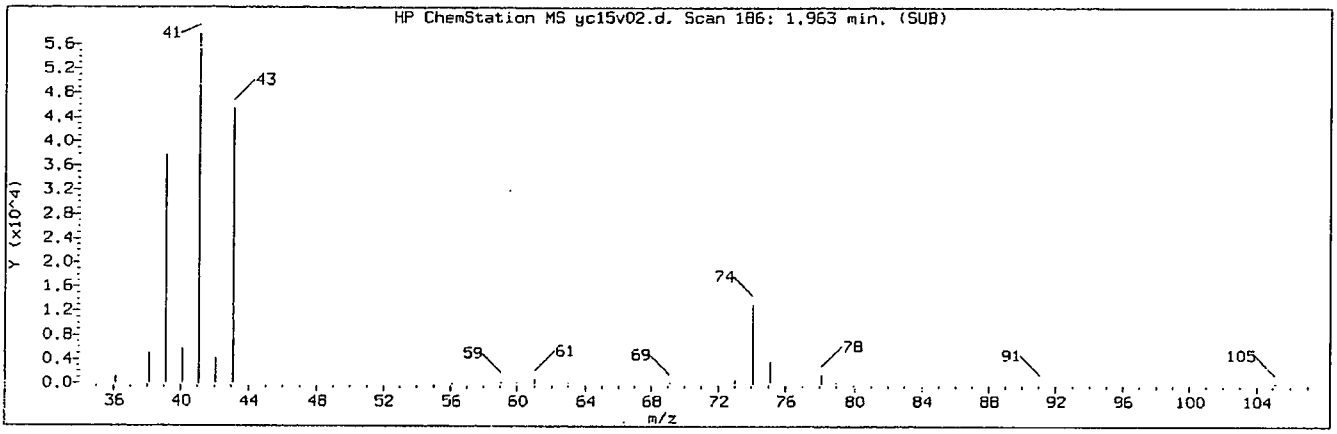
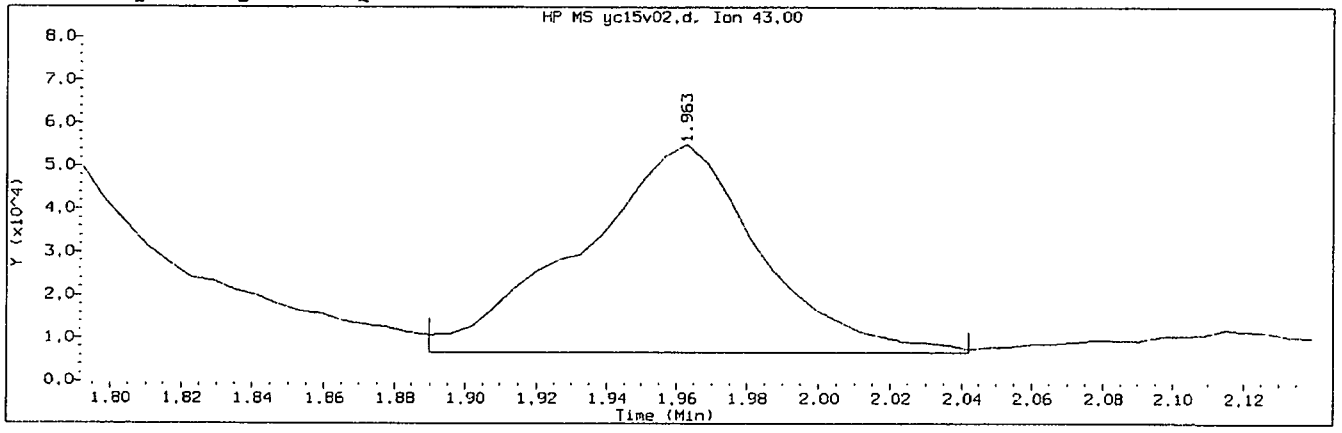
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 19:14 sej02002

Sample Name: YLGICV Lab Sample ID: YLGICV

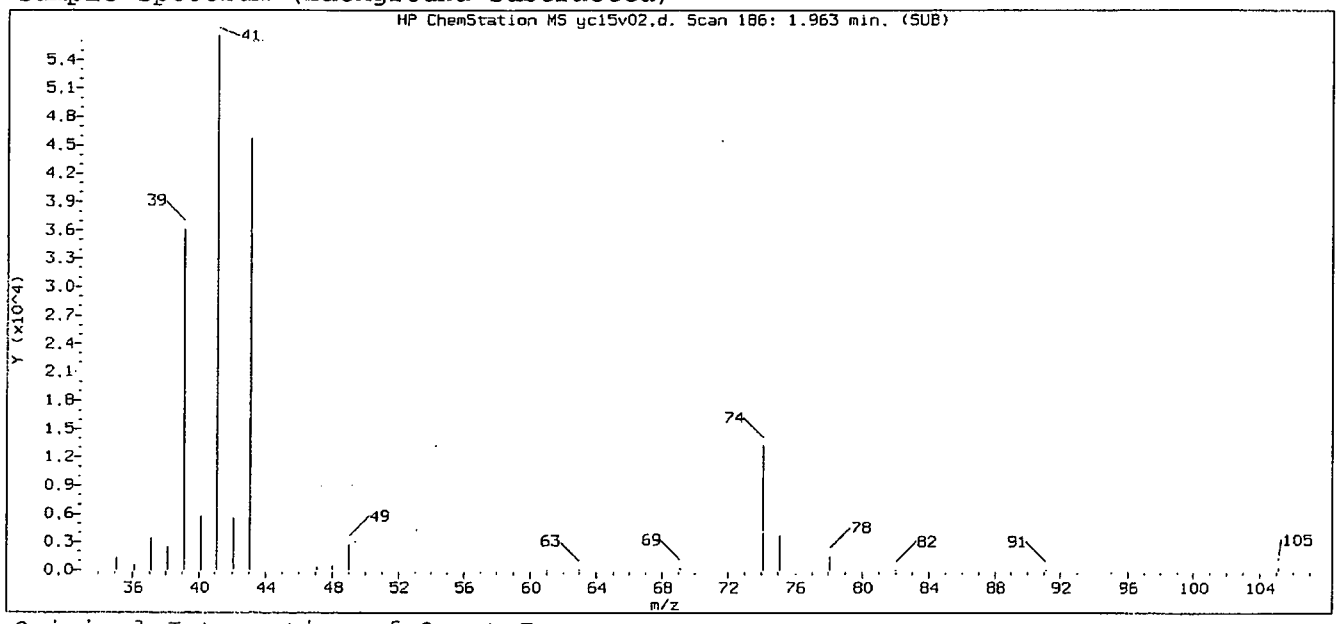
Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 186		
Retention Time (minutes)	: 1.963		
Quant Ion	: 43.00		
Area (flag)	: 172835M		
On-Column Amount (ng)	: 20.2949		
Integration start scan	: 173	Integration stop scan:	198
Y at integration start	: 6581	Y at integration end:	6581

Reason for manual integration: improper integration

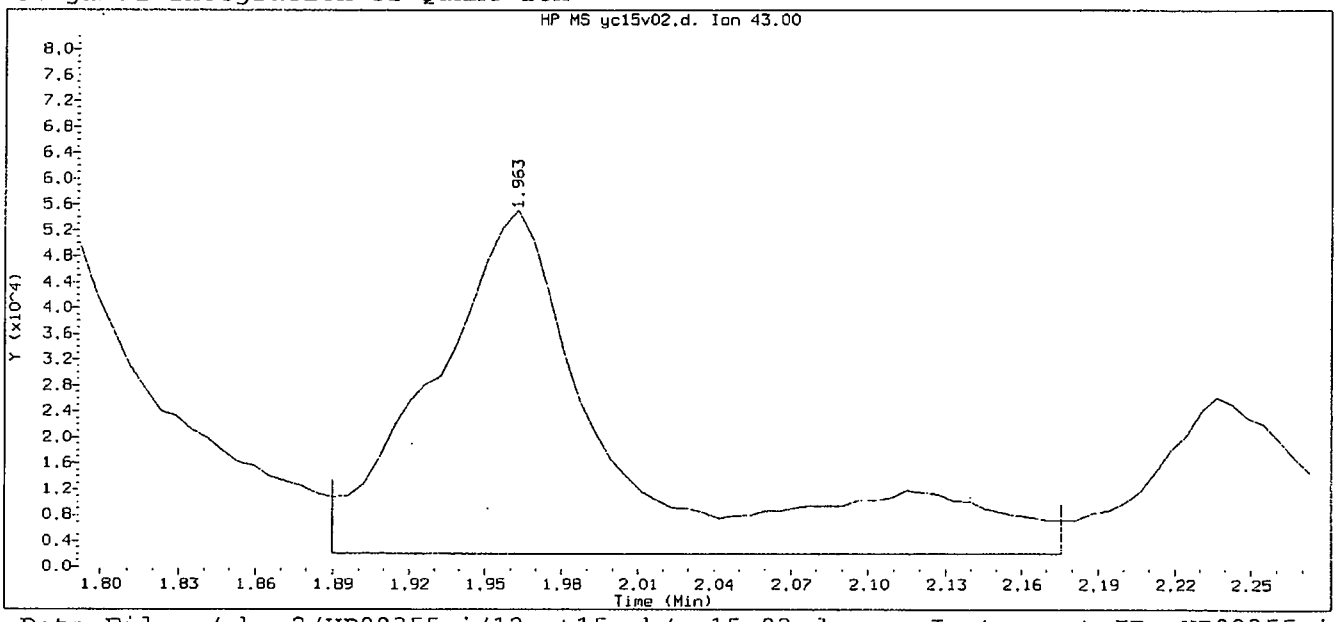
Analyst responsible for change: Digitally signed by Sara E. Johnson on 10/15/2012 at 19:14. Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10/16/12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 18:42 Automation

Sample Name: YLGICV Lab Sample ID: YLGICV

Compound Number	: 25		
Compound Name	: Methyl Acetate		
Scan Number	: 186		
Retention Time (minutes)	: 1.963		
Quant Ion	: 43.00		
Area	: 271990		
On-column Amount (ng)	: 31.9379		
Integration start scan	: 173	Integration stop scan:	220
Y at integration start	: 2040	Y at integration end:	2040

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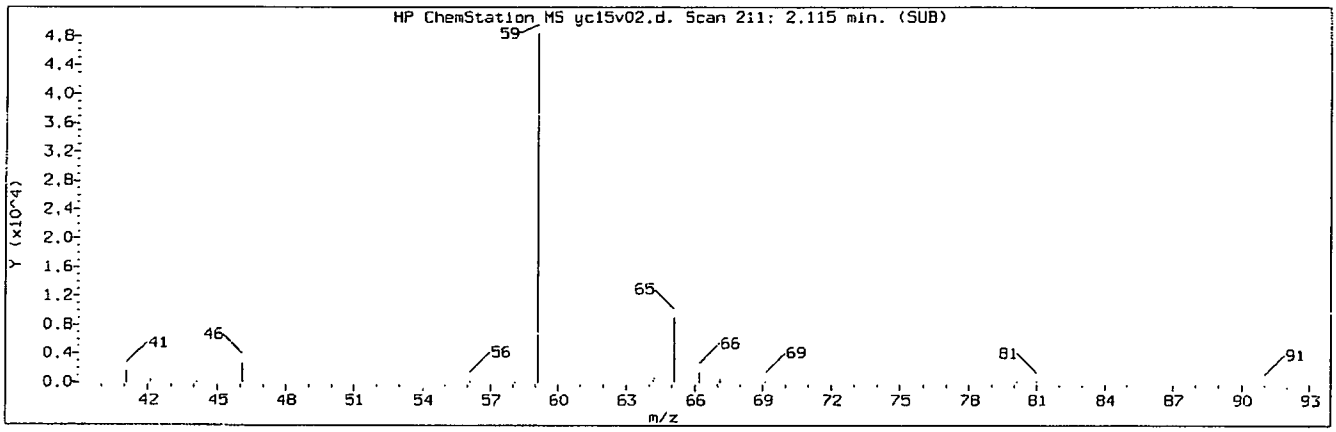
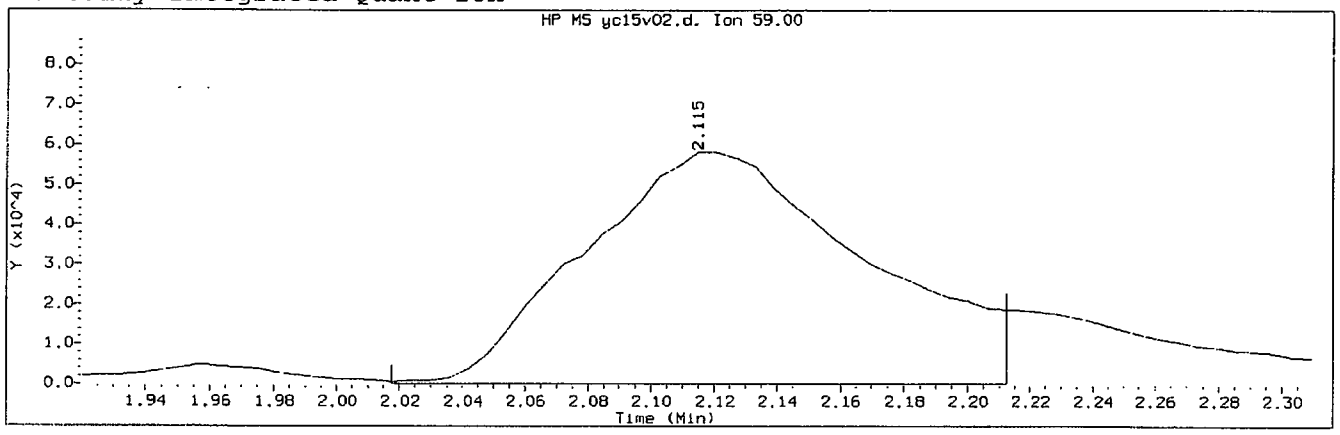
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 19:14 sej02002

Sample Name: YLGICV Lab Sample ID: YLGICV

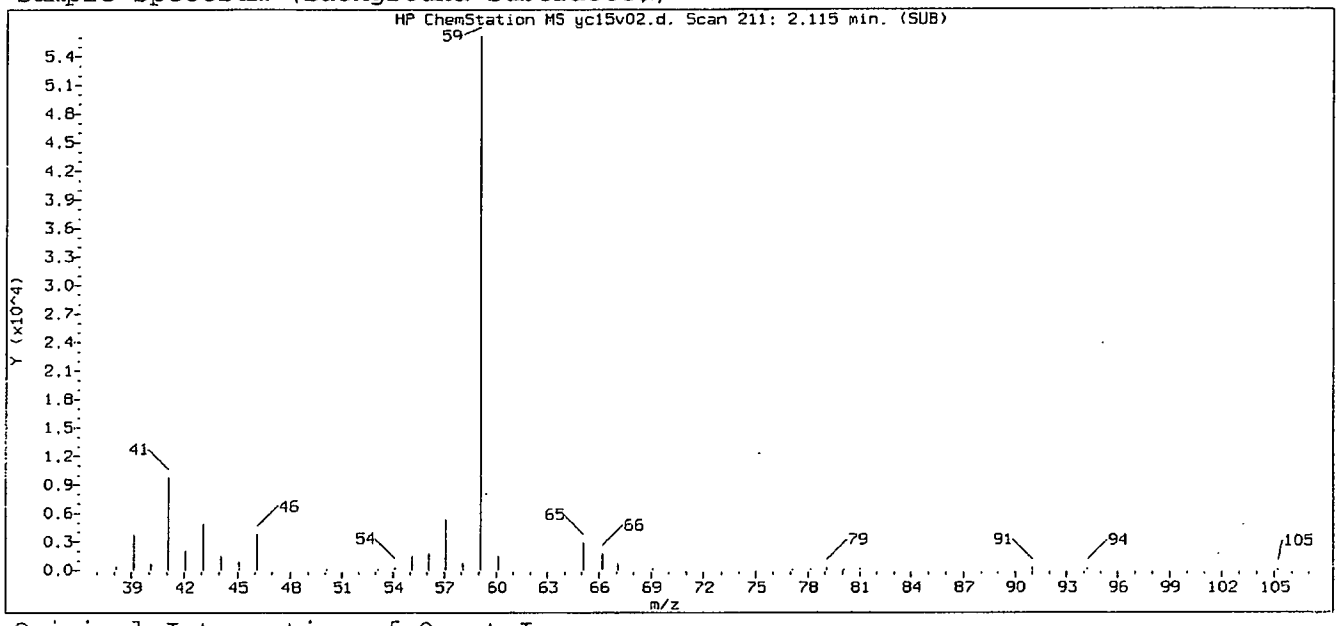
Compound Number	: 29		
Compound Name	: t-Butyl Alcohol		
Scan Number	: 211		
Retention Time (minutes)	: 2.115		
Quant Ion	: 59.00		
Area (flag)	: 359628M		
On-Column Amount (ng)	: 165.7227		
Integration start scan	: 194	Integration stop scan:	226
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

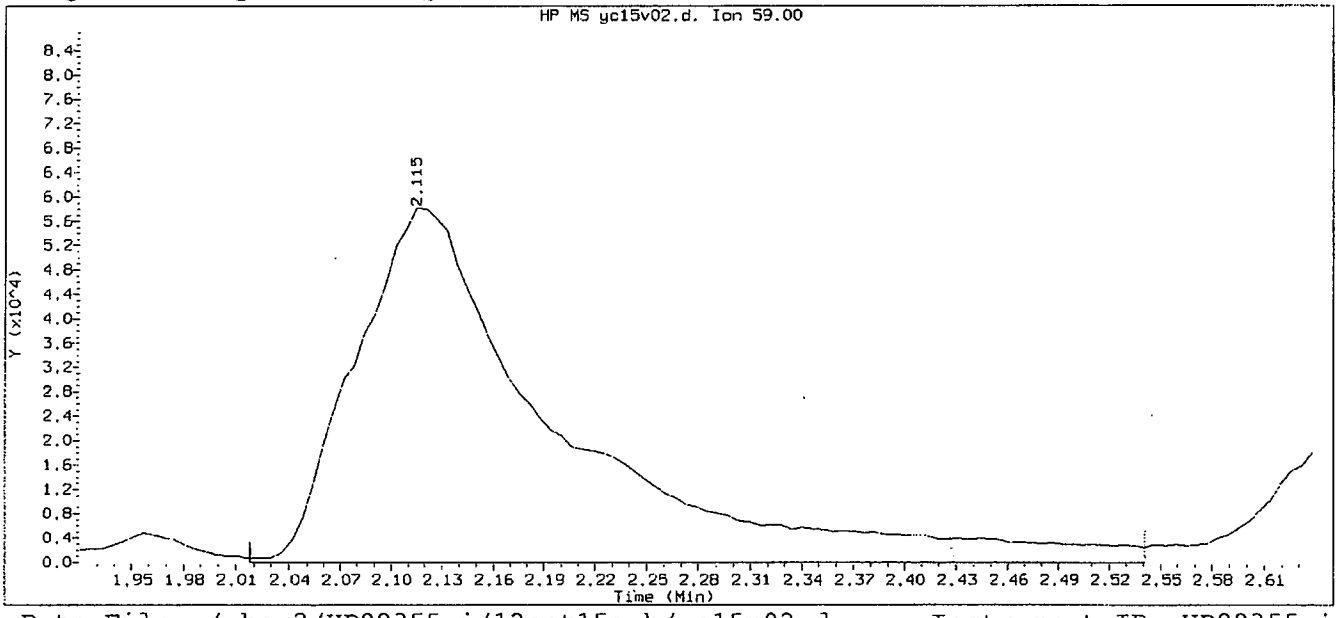
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 19:14.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 18:42 Automation

Sample Name: YLGICV Lab Sample ID: YLGICV

Compound Number	: 29		
Compound Name	: t-Butyl Alcohol		
Scan Number	: 211		
Retention Time (minutes)	: 2.115		
Quant Ion	: 59.00		
Area	: 485713		
On-column Amount (ng)	: 223.8244		
Integration start scan	: 194	Integration stop scan:	280
Y at integration start	: 0	Y at integration end:	0

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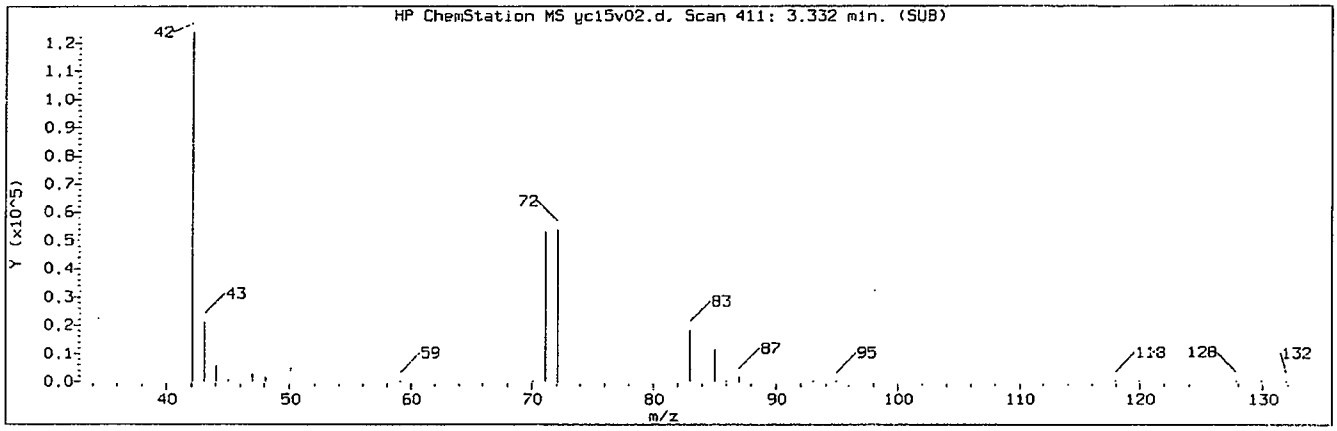
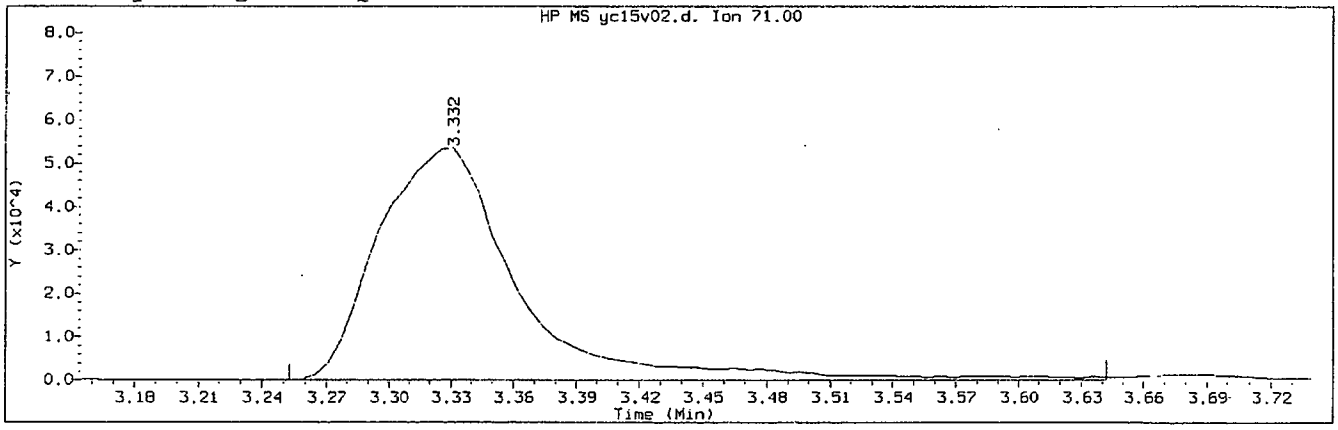
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 19:14 sej02002

Sample Name: YLGICV Lab Sample ID: YLGICV

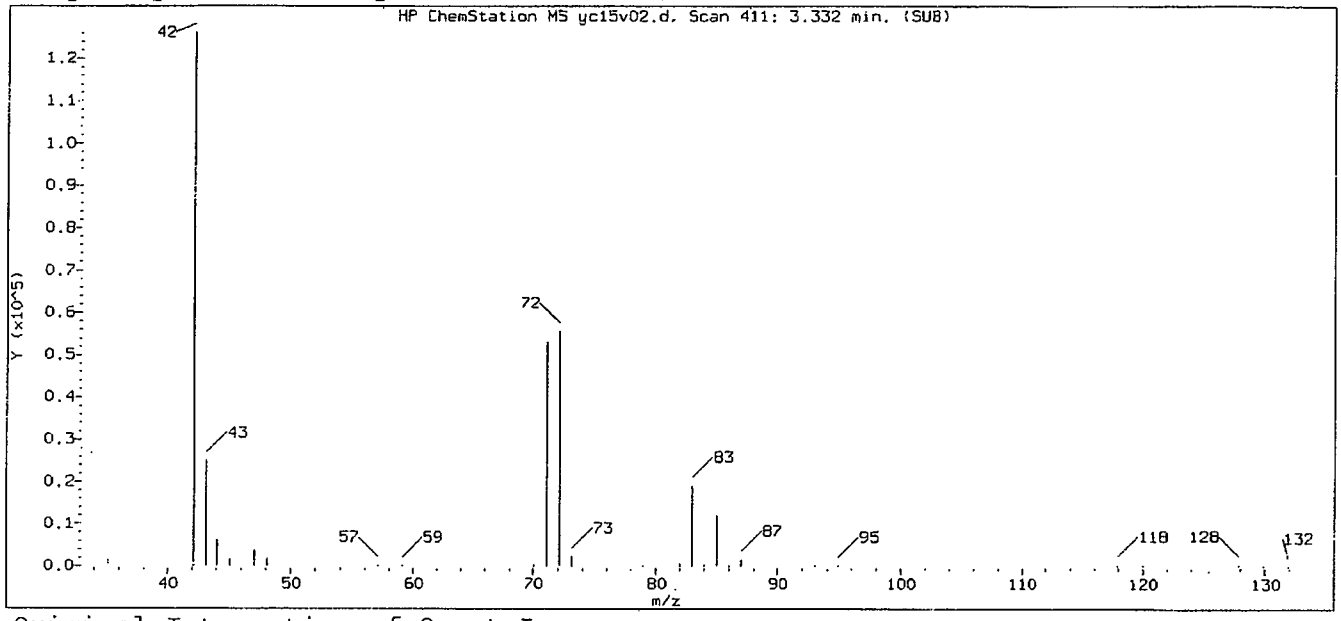
Compound Number : 48
Compound Name : Tetrahydrofuran
Scan Number : 411
Retention Time (minutes): 3.332
Quant Ion : 71.00
Area (flag) : 248561M
On-Column Amount (ng) : 98.1742
Integration start scan : 397 Integration stop scan: 461
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

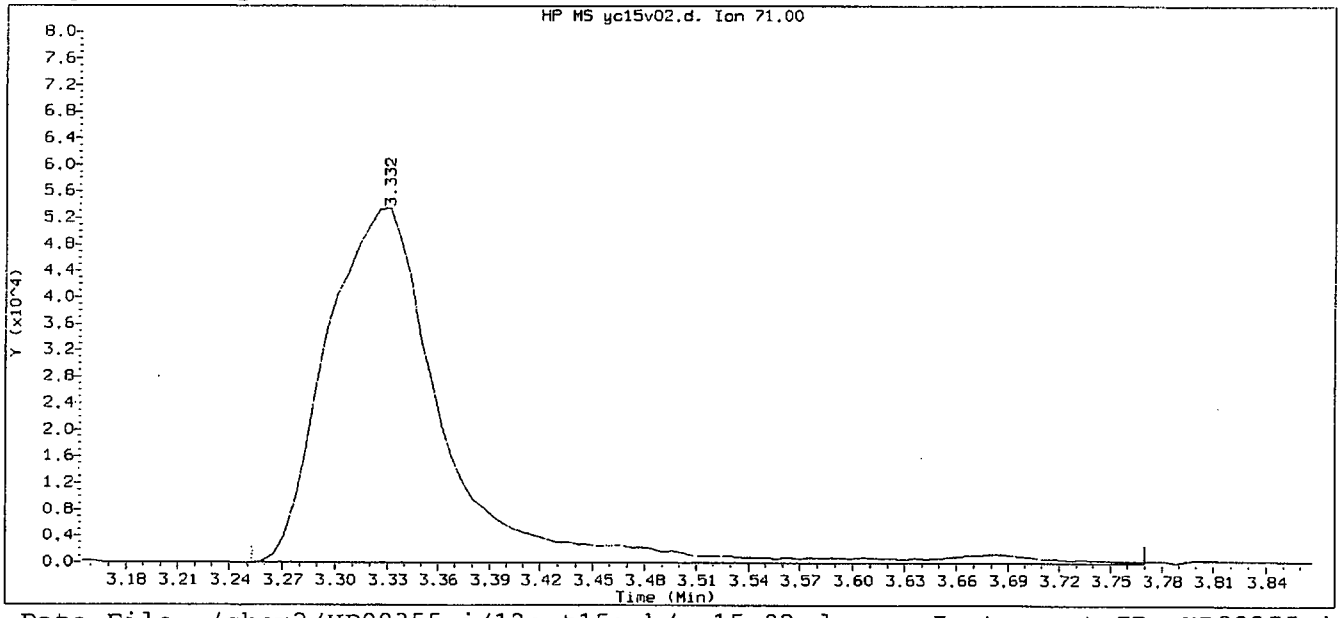
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 19:14.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

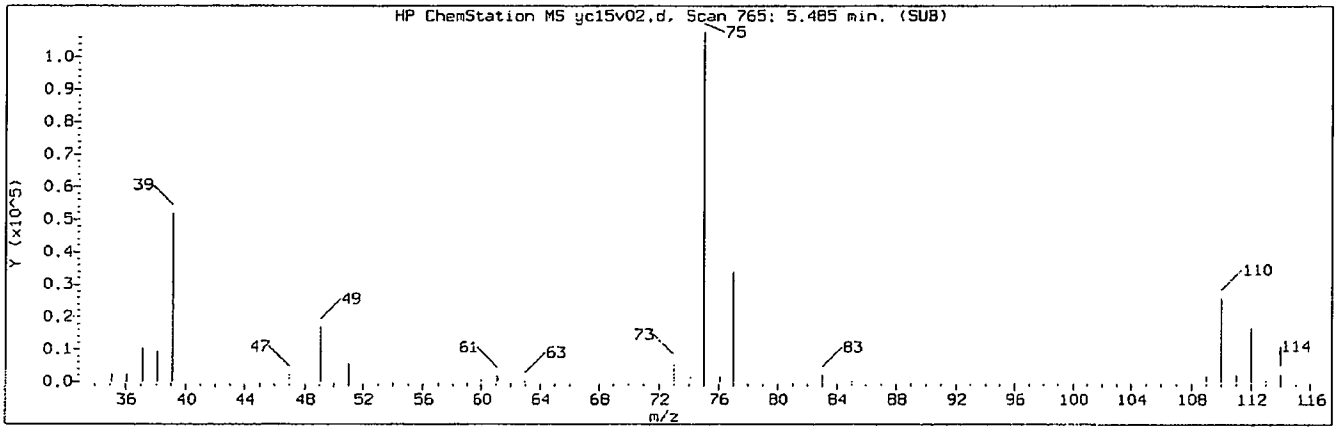
Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 18:42 Automation

Sample Name: YLGICV Lab Sample ID: YLGICV

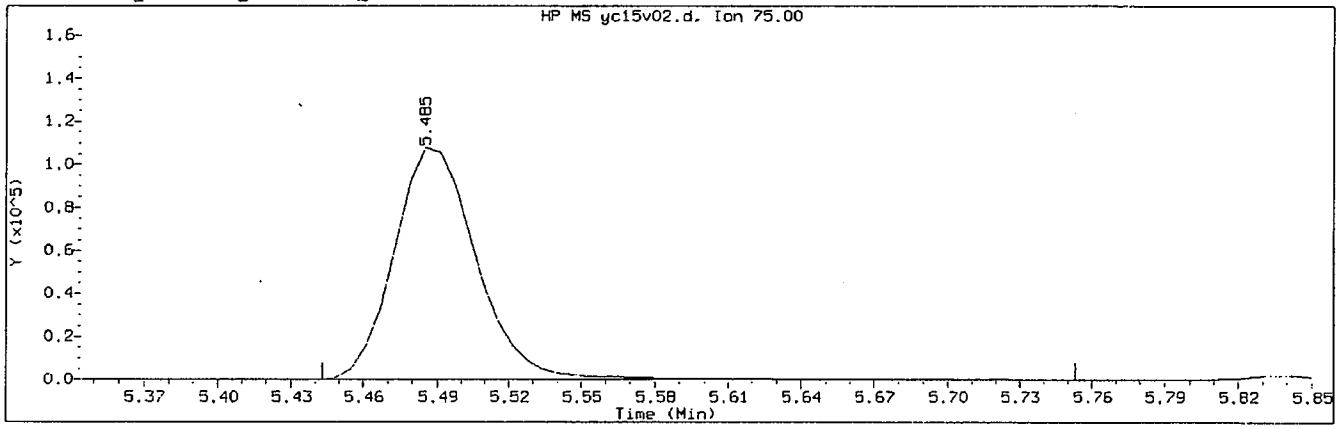
Compound Number	: 48		
Compound Name	: Tetrahydrofuran		
Scan Number	: 411		
Retention Time (minutes)	: 3.332		
Quant Ion	: 71.00		
Area	: 254031		
On-column Amount (ng)	: 100.3348		
Integration start scan	: 397	Integration stop scan:	482
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 19:14.
Target 3.5 esignature user ID: sej02002

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 19:14 sej02002

Sample Name: YLGICV Lab Sample ID: YLGICV

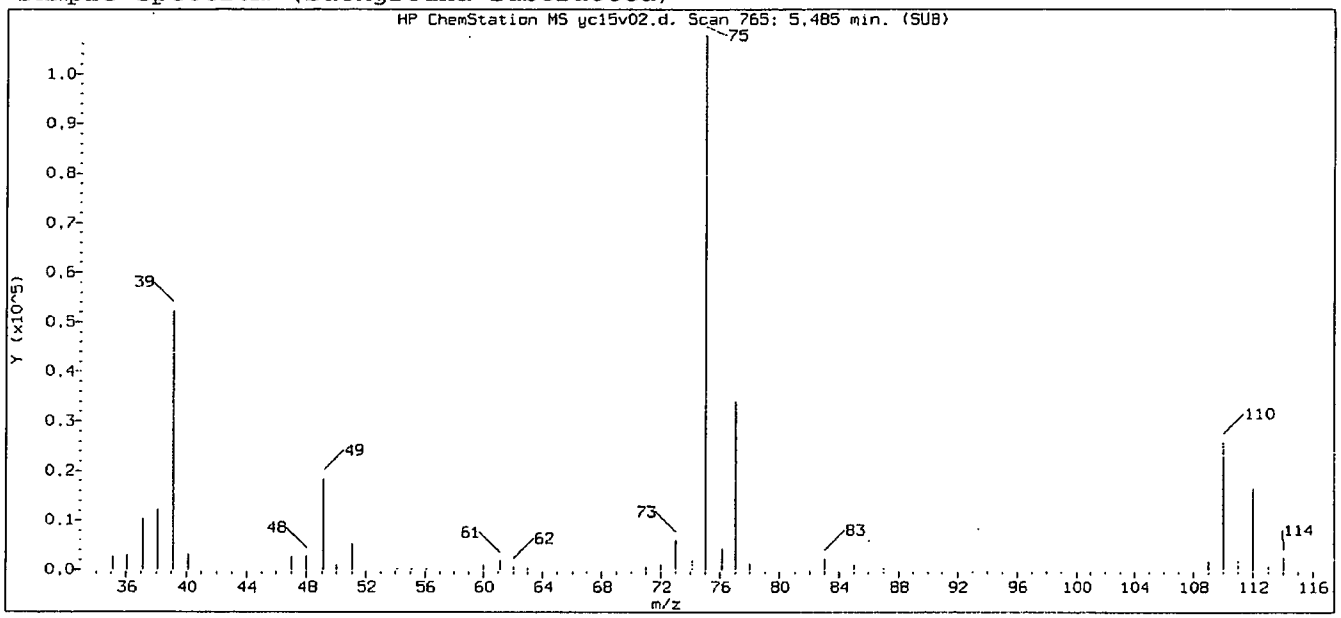
Compound Number : 87
Compound Name : cis-1,3-Dichloropropene
Scan Number : 765
Retention Time (minutes): 5.485
Quant Ion : 75.00
Area (flag) : 256145M
On-Column Amount (ng) : 23.5826
Integration start scan : 757 Integration stop scan: 808
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

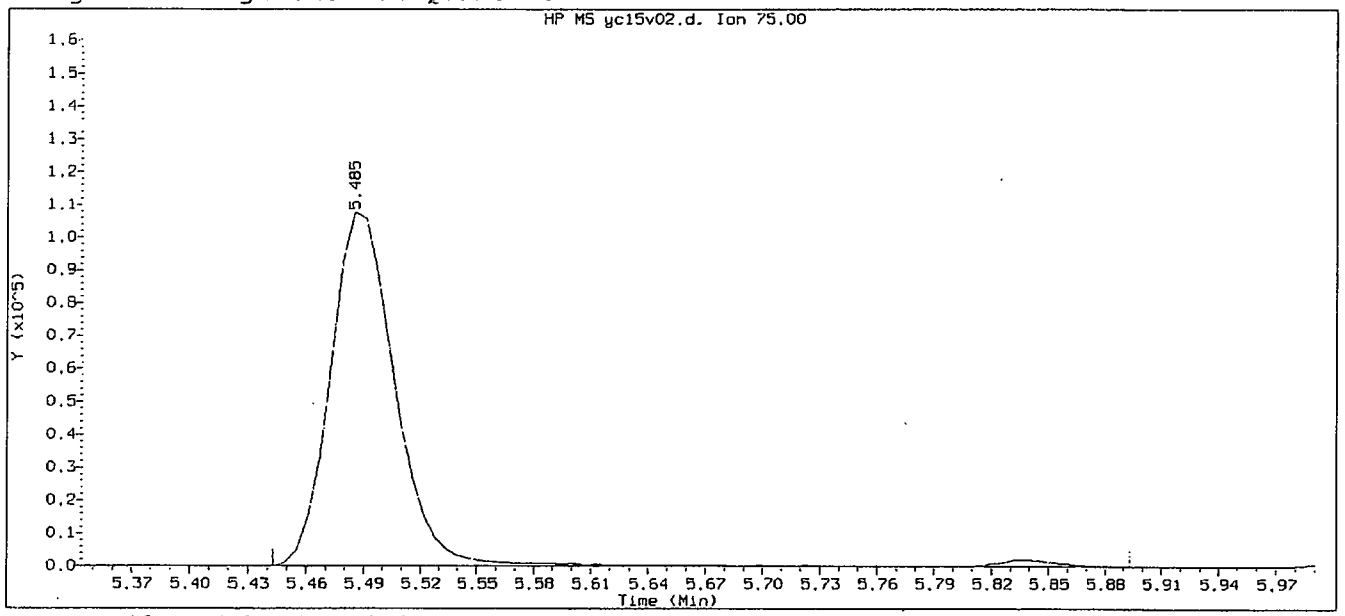
Analyst responsible for change: Digitally signed by Sara E. Johnson
on 10/15/2012 at 19:14.
Target 3.5 esignature user ID: sej02002

GC/MS audit/management approval: 10-16-12

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct15a.b/yc15v02.d Instrument ID: HP09355.i
Injection date and time: 15-OCT-2012 18:26 Analyst ID: ADS01731

Method used: /chem2/HP09355.i/12oct15a.b/Y8260W.m Sublist used: 8260W-EE
Calibration date and time: 15-OCT-2012 17:44
Date, time and analyst ID of latest file update: 15-Oct-2012 18:42 Automation

Sample Name: YLGICV Lab Sample ID: YLGICV

Compound Number	: 87		
Compound Name	: cis-1,3-Dichloropropene		
Scan Number	: 765		
Retention Time (minutes)	: 5.485		
Quant Ion	: 75.00		
Area	: 260433		
On-column Amount (ng)	: 23.9773		
Integration start scan	: 757	Integration stop scan:	831
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Sara E. Johnson on 10/15/2012 at 19:14.
Target 3.5 esignature user ID: sej02002

Data File: /chem2/HP09355.i/12oct21a.b/yc21t01.d

Date : 21-OCT-2012 00:41

Client ID: 50NG BFB SEP25-12

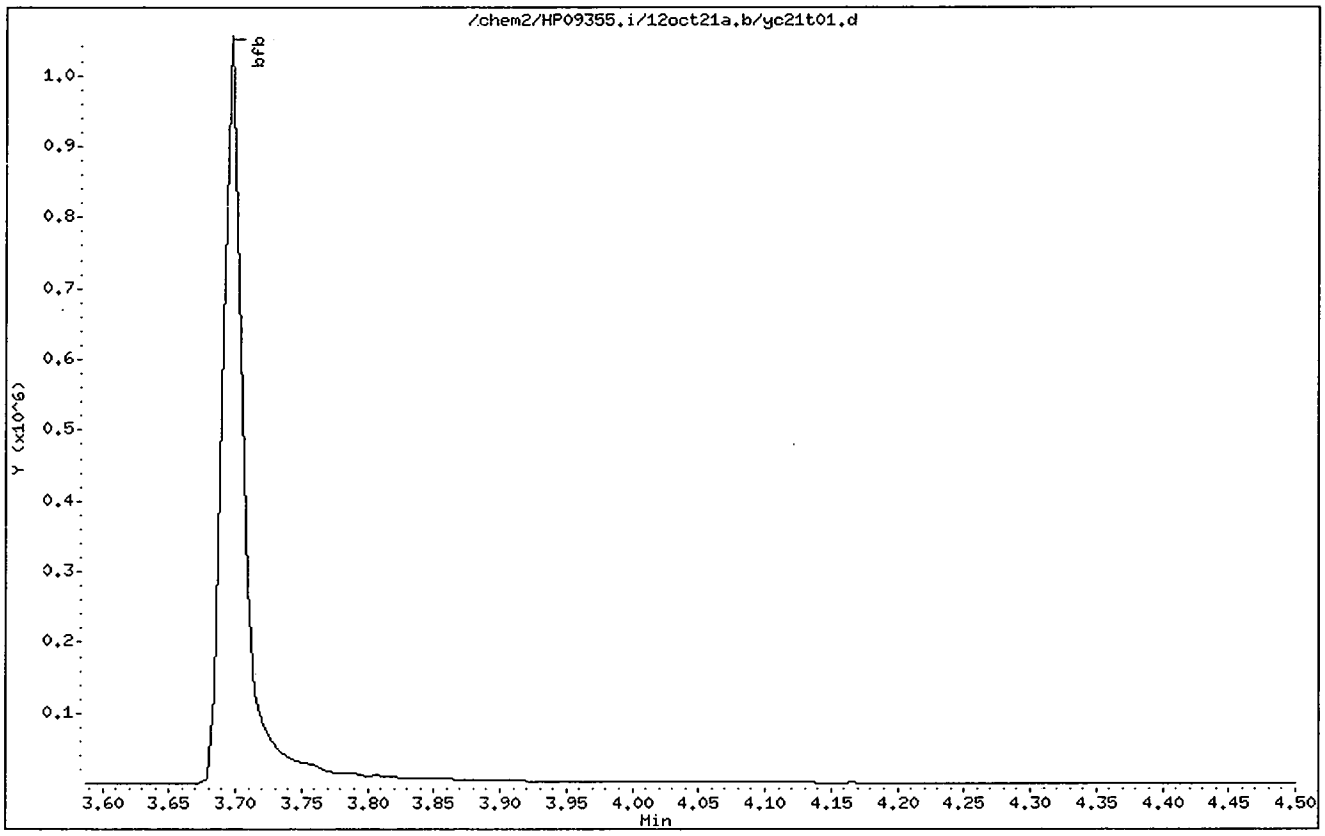
Instrument: HP09355.i

Sample Info: 50NG BFB SEP25-12

Operator: SAS00403

Column phase: DB-624

Column diameter: 0.18



Digitally signed by Stephanie A. Selis on 10/21/2012 at 02:14.
Target 3.5 esignature user ID: sas00403

Data File: /chem2/HP09355.i/12oct21a.b/yc21t01.d

Date : 21-OCT-2012 00:41

Client ID: 50NG BFB SEP25-12

Instrument: HP09355.i

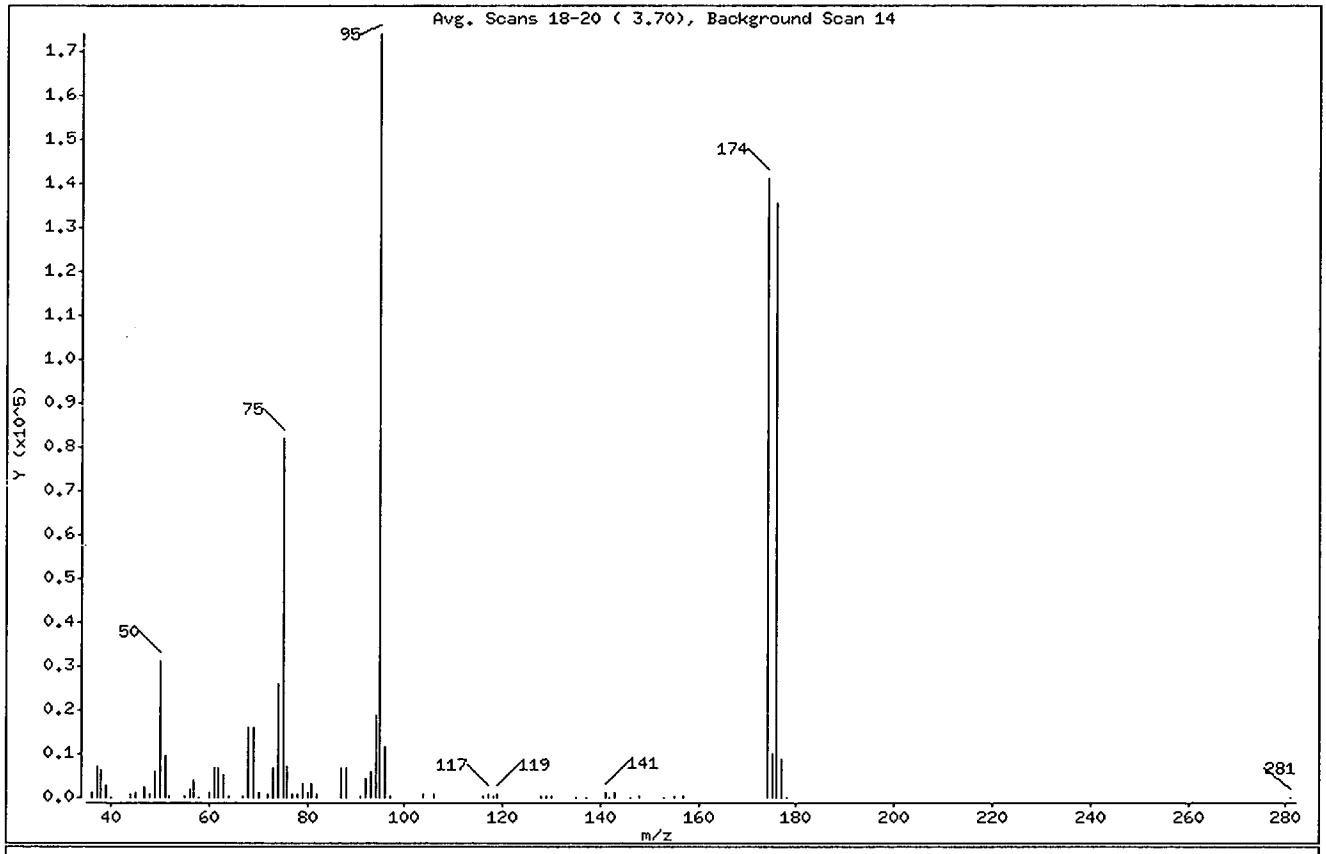
Sample Info: 50NG BFB SEP25-12

Operator: SAS00403

Column phase: DB-624

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.91
75	30.00 - 60.00% of mass 95	47.19
96	5.00 - 9.00% of mass 95	6.74
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	81.14
175	5.00 - 9.00% of mass 174	5.74 (7.08)
176	95.00 - 101.00% of mass 174	77.94 (96.07)
177	5.00 - 9.00% of mass 176	5.06 (6.49)

Digitally signed by Stephanie A. Selis on 10/21/2012 at 02:14.
Target 3.5 esignature user ID: sas00403

Date : 21-OCT-2012 00:41

Client ID: 50NG BFB SEP25-12 Instrument: HP09355.i

Sample Info: 50NG BFB SEP25-12

Operator: SAS00403

Column phase: DB-624 Column diameter: 0.18

Data File: yc21t01.d
Spectrum: Avg. Scans 18-20 (3.70), Background Scan 14
Location of Maximum: 95.00
Number of points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1304	61.00	6982	82.00	648	130.00	531
37.00	7222	62.00	6973	87.00	6918	135.00	122
38.00	6555	63.00	5159	88.00	6954	137.00	182
39.00	2747	64.00	520	91.00	486	141.00	1379
40.00	100	67.00	401	92.00	4422	142.00	96
44.00	779	68.00	15994	93.00	6181	143.00	1326
45.00	1346	69.00	16086	94.00	18800	146.00	93
47.00	2276	70.00	1264	95.00	173888	148.00	400
48.00	933	72.00	880	96.00	11721	153.00	92
49.00	6191	73.00	6930	97.00	369	155.00	300
50.00	31144	74.00	25920	104.00	629	157.00	240
51.00	9563	75.00	82048	106.00	612	174.00	141056
52.00	468	76.00	7149	116.00	546	175.00	9986
55.00	404	77.00	911	117.00	881	176.00	135488
56.00	2045	78.00	636	118.00	506	177.00	8796
57.00	3936	79.00	3114	119.00	729	178.00	97
58.00	113	80.00	1035	128.00	575	281.00	92
60.00	1365	81.00	3234	129.00	250		

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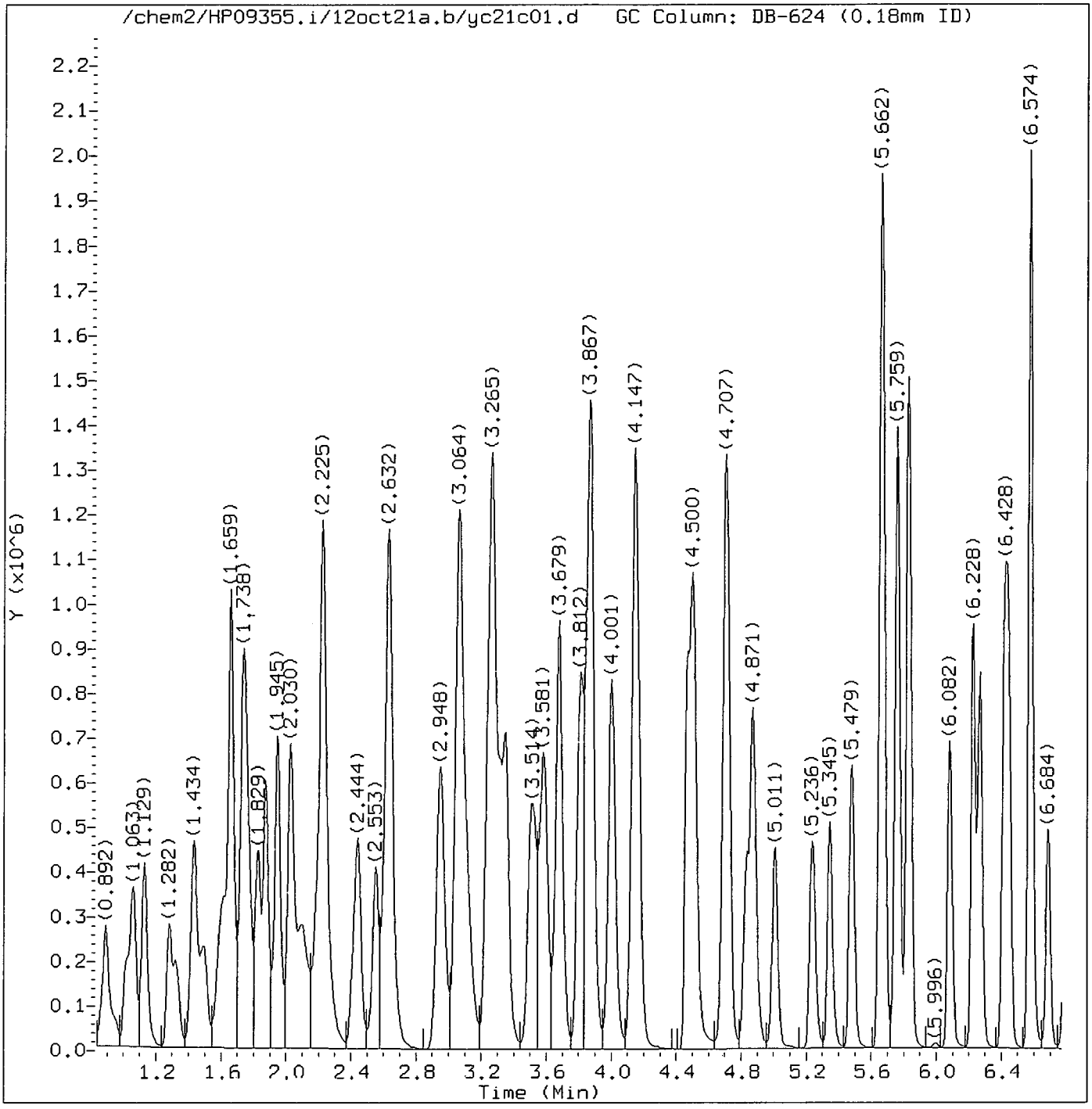
Target 3.5 esignature user ID: sas00403



Total Ion Chromatogram (TIC)

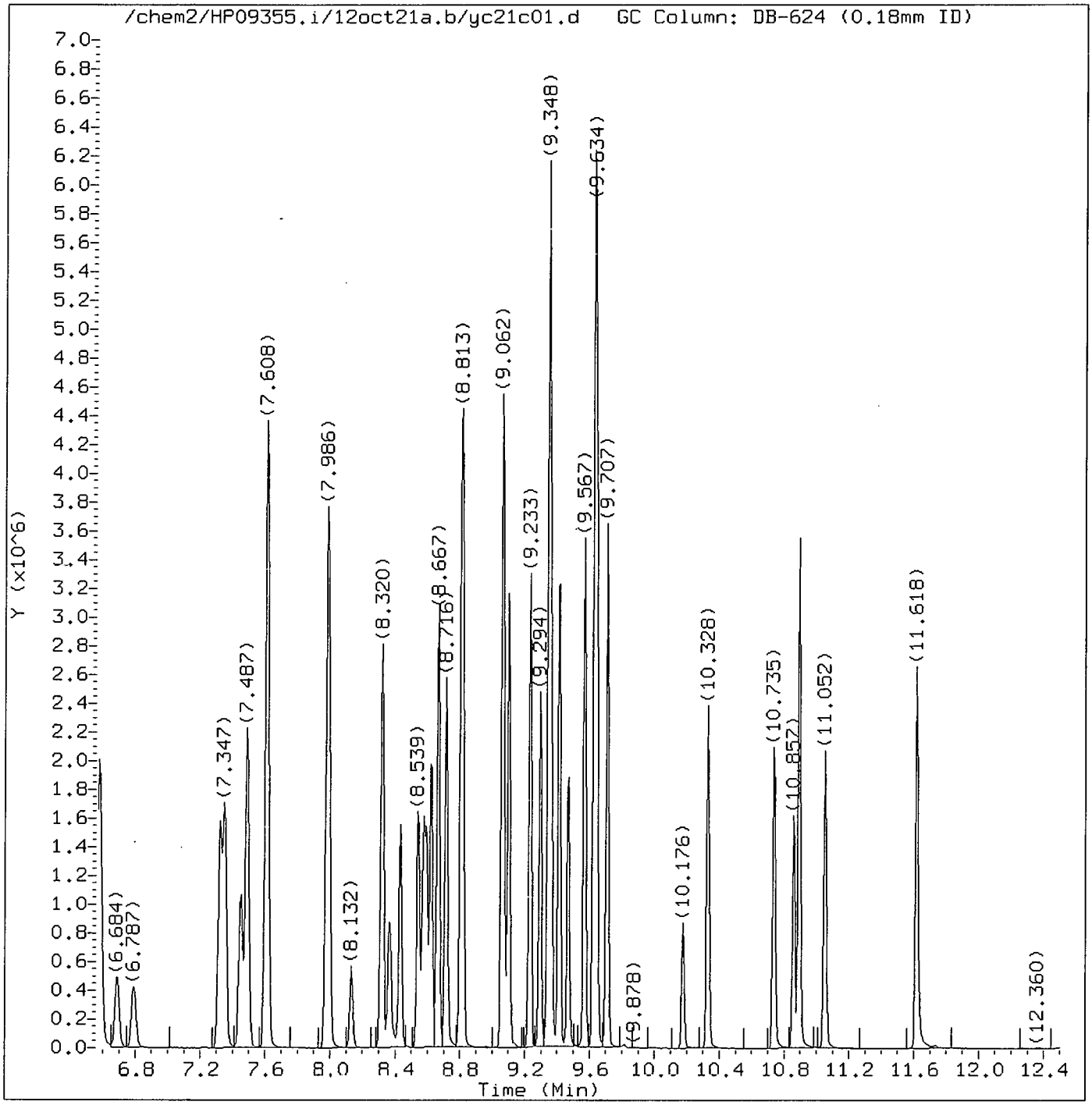
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21c01.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 01:24 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260WI-EEBN
Calibration date and time: 21-OCT-2012 01:53
Date, time and analyst ID of latest file update: 21-Oct-2012 01:54 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Stephanie A. Selis
on 10/21/2012 at 02:14.
Target 3.5 esignature user ID: sas00403



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21c01.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 01:24 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260WI-EEBN
Calibration date and time: 21-OCT-2012 01:53
Date, time and analyst ID of latest file update: 21-Oct-2012 01:54 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

Digitally signed by Stephanie A. Selis
on 10/21/2012 at 02:14.
Target 3.5 esignature user ID: sas00403

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21c01.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 01:24 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260WI-EEBN
Calibration date and time: 21-OCT-2012 01:53
Date, time and analyst ID of latest file update: 21-Oct-2012 01:54 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Dichlorodifluoromethane	(1)	1.020	85	384291	45.364
3) Chloromethane	(1)	1.063	50	483300	53.799
5) Vinyl Chloride	(1)	1.129	62	416809	47.364
7) Bromomethane	(1)	1.282	94	267647	46.533
8) Chloroethane	(1)	1.324	64	223940	46.958
9) Dichlorofluoromethane	(1)	1.434	67	550943A	52.615
10) Trichlorofluoromethane	(1)	1.494	101	456578	48.239
14) Freon 123a	(1)	1.598	67	349943	52.288
15) Acrolein	(4)	1.659	56	1246631	399.954
16) 1,1-Dichloroethene	(1)	1.732	96	272314	53.531
17) Acetone	(1)	1.744	58	160349	112.842
18) Freon 113	(1)	1.756	101	270352	51.743
20) Methyl Iodide	(1)	1.829	142	514936	53.194
21) 2-Propanol	(4)	1.829	45	349521	266.717
22) Carbon Disulfide	(1)	1.878	76	839087	53.534
24) Allyl Chloride	(1)	1.945	41	414229	44.141
25) Methyl Acetate	(1)	1.951	43	475920	61.442
26) Methylene Chloride	(1)	2.024	84	318752	50.371
28)*t-Butyl Alcohol-d10	(4)	2.048	65	467310	250.000
29) t-Butyl Alcohol	(4)	2.103	59	662160	285.697
30) Acrylonitrile	(1)	2.188	53	291701	54.704
31) trans-1,2-Dichloroethene	(1)	2.225	96	309099	50.759
32) Methyl Tertiary Butyl Ether	(1)	2.231	73	1038838	49.325
33) n-Hexane	(1)	2.444	57	427907	46.935
34) 1,1-Dichloroethane	(1)	2.553	63	577402	52.230
36) di-Isopropyl Ether	(1)	2.626	45	1129600	50.970
37) 2-Chloro-1,3-Butadiene	(1)	2.638	53	505388	53.862
39) Ethyl t-Butyl Ether	(1)	2.948	59	1044246	48.932
40) cis-1,2-Dichloroethene	(1)	3.058	96	339818	49.873
41) 2-Butanone	(1)	3.064	43	936440	121.479
42) 2,2-Dichloropropane	(1)	3.070	77	406775	48.984
43) Propionitrile	(4)	3.119	54	622078	215.372
46) Methacrylonitrile	(1)	3.259	67	642589	121.774
47) Bromochloromethane	(1)	3.271	128	163261	44.172
48) Tetrahydrofuran	(4)	3.313	71	230368	85.192
50) Chloroform	(1)	3.350	83	544030	48.942
52)$Dibromofluoromethane	(1)	3.496	113	272984	49.103
51)$Dibromofluoromethane(mz111)	(1)	3.496	111	281130	49.442

A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Stephanie A. Selis
on 10/21/2012 at 02:14.
Target 3.5 esignature user ID: sas00403

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21c01.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 01:24 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260WI-EEBN
Calibration date and time: 21-OCT-2012 01:53
Date, time and analyst ID of latest file update: 21-Oct-2012 01:54 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
53) 1,1,1-Trichloroethane	(1)	3.526	97	444770	46.942
56) Cyclohexane	(1)	3.581	56	553045	49.767
55) Cyclohexane (mz 69)	(1)	3.587	69	164235	48.016
54) Cyclohexane (mz 84)	(1)	3.587	84	435206	47.594
45) 1,2-Dichloroethene (total)	(1)		96	648917	100.632
57) 1,1-Dichloropropene	(1)	3.679	75	428755	52.117
58) Carbon Tetrachloride	(1)	3.685	117	355452	50.481
62)$1,2-Dichloroethane-d4	(1)	3.806	102	76332	51.101
60)$1,2-Dichloroethane-d4(mz104)	(1)	3.806	104	45309	48.293
61)$1,2-Dichloroethane-d4(mz65)	(1)	3.806	65	372061	54.397
59) Isobutyl Alcohol	(4)	3.818	41	511327	640.465
63) Benzene	(1)	3.867	78	1333617	50.837
64) 1,2-Dichloroethane (mz 98)	(1)	3.879	98	40964	46.321
65) 1,2-Dichloroethane	(1)	3.879	62	438793	50.642
69) t-Amyl Methyl Ether	(1)	4.001	73	977130	46.586
71)*Fluorobenzene	(1)	4.141	96	1251569	50.000
72) n-Heptane	(1)	4.159	43	444716	42.064
73) n-Butanol	(4)	4.469	56	853194	1152.313
74) Trichloroethene	(1)	4.506	95	327920	50.260
75) Methylcyclohexane (mz98)	(1)	4.701	98	214230	41.215
76) Methylcyclohexane	(1)	4.701	83	493862	41.771
77) 1,2-Dichloropropane	(1)	4.719	63	353562	51.333
78) Dibromomethane	(1)	4.834	93	219701	48.138
79) 1,4-Dioxane	(4)	4.859	88	101221	491.516
80) Methyl Methacrylate	(1)	4.871	69	380431	46.705
83) Bromodichloromethane	(1)	5.011	83	380222	49.250
85) 2-Nitropropane	(1)	5.236	41	388808	121.695
86) 2-Chloroethyl Vinyl Ether	(1)	5.345	63	290635	47.186
87) cis-1,3-Dichloropropene	(1)	5.479	75	475411	48.123
89) 4-Methyl-2-Pentanone	(1)	5.662	43	1890287	129.664
92)$Toluene-d8(mz100)	(2)	5.759	100	770987	50.758
93)$Toluene-d8	(2)	5.759	98	1191006	51.282
94) Toluene	(2)	5.832	92	820024	50.613
95) trans-1,3-Dichloropropene	(2)	6.082	75	452348	48.829
96) Ethyl Methacrylate	(2)	6.228	69	587693	47.937
97) 1,1,2-Trichloroethane	(2)	6.270	97	318593	48.665
98) Tetrachloroethene	(2)	6.416	166	332762	47.618
99) 1,3-Dichloropropane	(2)	6.440	76	546592	49.797

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Stephanie A. Selis
on 10/21/2012 at 02:14.
Target 3.5 esignature user ID: sas00403

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21c01.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 01:24 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260WI-EEBN
Calibration date and time: 21-OCT-2012 01:53
Date, time and analyst ID of latest file update: 21-Oct-2012 01:54 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
101) 2-Hexanone	(2)	6.574	43	1552718	136.173
102) Dibromochloromethane	(2)	6.690	129	292180	48.486
104) 1,2-Dibromoethane	(2)	6.787	107	348581	49.061
106)*Chlorobenzene-d5	(2)	7.323	117	870330	50.000
107) Chlorobenzene	(2)	7.347	112	885993	49.116
108) 1,1,1,2-Tetrachloroethane	(2)	7.450	131	288420	49.065
109) Ethylbenzene	(2)	7.487	91	1577435	50.124
110) m+p-Xylene	(2)	7.608	106	1226849	98.835
113) o-Xylene	(2)	7.980	106	612432	48.850
114) Styrene	(2)	7.992	104	1026779	49.050
115) Bromoform	(2)	8.132	173	225003	43.982
112) Xylene (Total)	(2)		106	1839281	147.685
116) Isopropylbenzene	(2)	8.320	105	1567693	49.836
118) Cyclohexanone	(4)	8.363	55	368070	403.679
119)$4-Bromofluorobenzene	(2)	8.430	95	443663	50.672
120)$4-Bromofluorobenzene(mz174)	(2)	8.436	174	362236	48.533
121) Bromobenzene	(3)	8.545	156	385755	46.133
122) 1,1,2,2-Tetrachloroethane	(3)	8.576	83	590210	49.688
123) 1,2,3-Trichloropropane	(3)	8.594	110	177405	48.027
124) trans-1,4-Dichloro-2-Butene	(3)	8.618	53	335126	96.623
125) n-Propylbenzene	(3)	8.667	91	1840076	50.263
126) 2-Chlorotoluene	(3)	8.716	126	368218	47.355
128) 4-Chlorotoluene	(3)	8.807	126	385237	47.914
127) 1,3,5-Trimethylbenzene	(3)	8.813	105	1338124	49.079
130) tert-Butylbenzene	(3)	9.062	134	295015	48.181
131) Pentachloroethane	(3)	9.062	167	237448	47.075
132) 1,2,4-Trimethylbenzene	(3)	9.099	105	1375095	48.884
133) sec-Butylbenzene	(3)	9.233	105	1651765	49.268
134) 1,3-Dichlorobenzene	(3)	9.294	146	737453	46.719
135) p-Isopropyltoluene	(3)	9.348	119	1455700	49.162
136)*1,4-Dichlorobenzene-d4	(3)	9.348	152	503266	50.000
138) 1,4-Dichlorobenzene	(3)	9.361	146	791047	46.953
139) 1,2,3-Trimethylbenzene	(3)	9.415	105	1445351	47.795
141) Benzyl Chloride	(3)	9.470	91	1022358	44.971
142) 1,3-Diethylbenzene	(3)	9.567	119	871397	46.678
143) 1,4-Diethylbenzene	(3)	9.628	119	912181	47.562
144) 1,2-Dichlorobenzene	(3)	9.634	146	764976	47.938
145) n-Butylbenzene	(3)	9.646	92	721905	49.197

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Stephanie A. Selis
on 10/21/2012 at 02:14.
Target 3.5 esignature user ID: sas00403

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21c01.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 01:24 Analyst ID: SAS00403

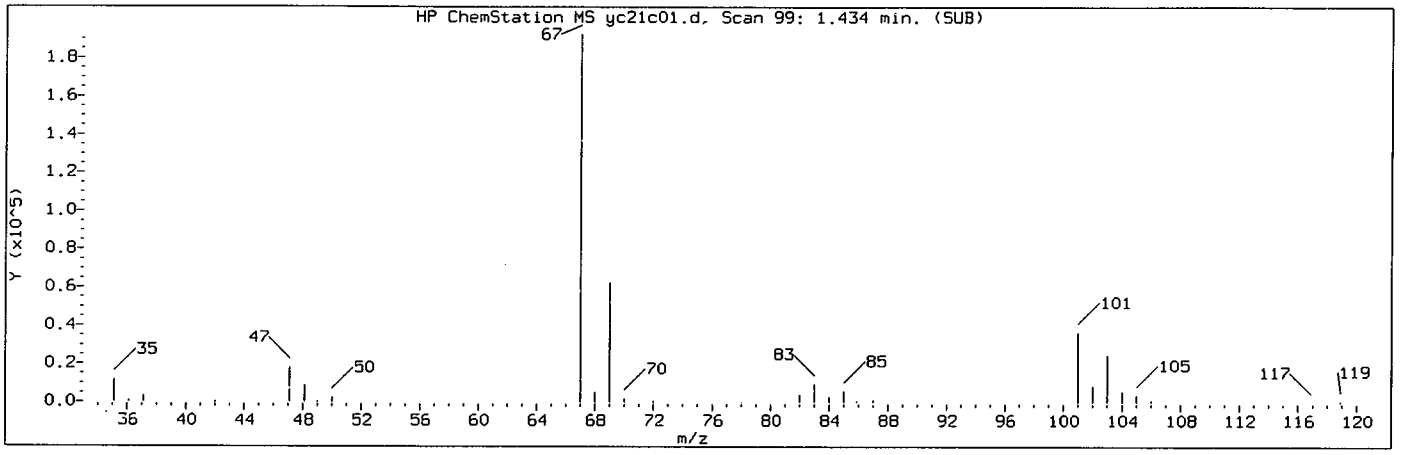
Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260WI-EEBN
Calibration date and time: 21-OCT-2012 01:53
Date, time and analyst ID of latest file update: 21-Oct-2012 01:54 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

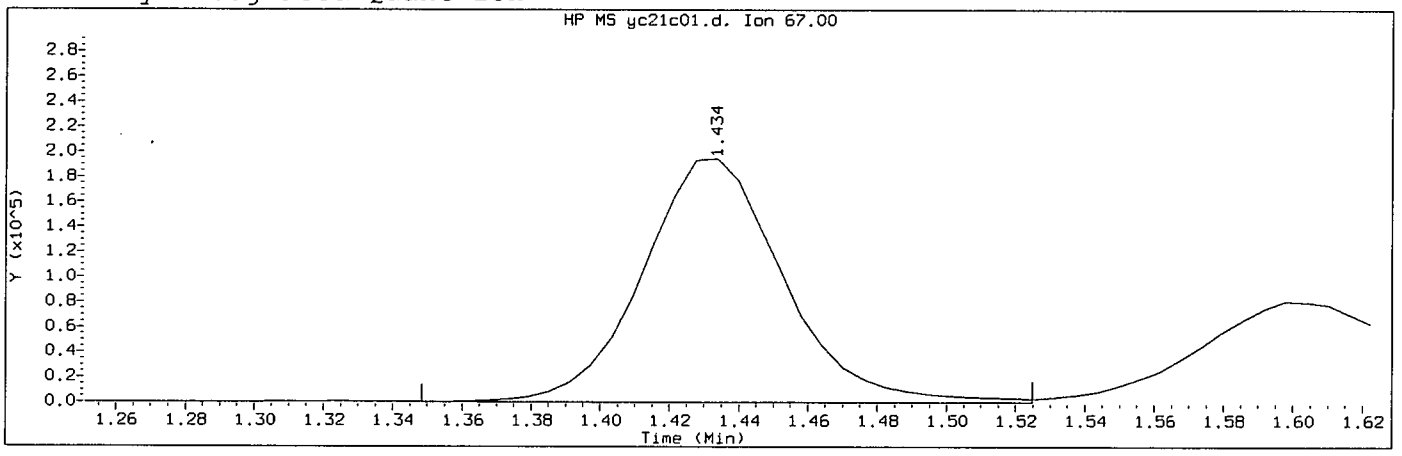
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
146) 1,2-Diethylbenzene	(3)	9.707	119	739532	46.074
148) 1,2-Dibromo-3-Chloropropane	(3)	10.176	75	154395	51.112
149) 1,3,5-Trichlorobenzene	(3)	10.328	180	541327	44.704
150) 1,2,4-Trichlorobenzene	(3)	10.735	180	497990	43.754
151) Hexachlorobutadiene	(3)	10.863	225	219632	41.608
152) Naphthalene	(3)	10.894	128	1930296	43.743
153) 1,2,3-Trichlorobenzene	(3)	11.052	180	470049	42.099
154) 2-Methylnaphthalene	(3)	11.618	142	987383	40.227

Digitally signed by Stephanie A. Selis
on 10/21/2012 at 02:14.
Target 3.5 esignature user ID: sas00403

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct21a.b/yc21c01.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 01:24 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260WI-EEBN
Calibration date and time: 21-OCT-2012 01:53
Date, time and analyst ID of latest file update: 21-Oct-2012 01:54 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

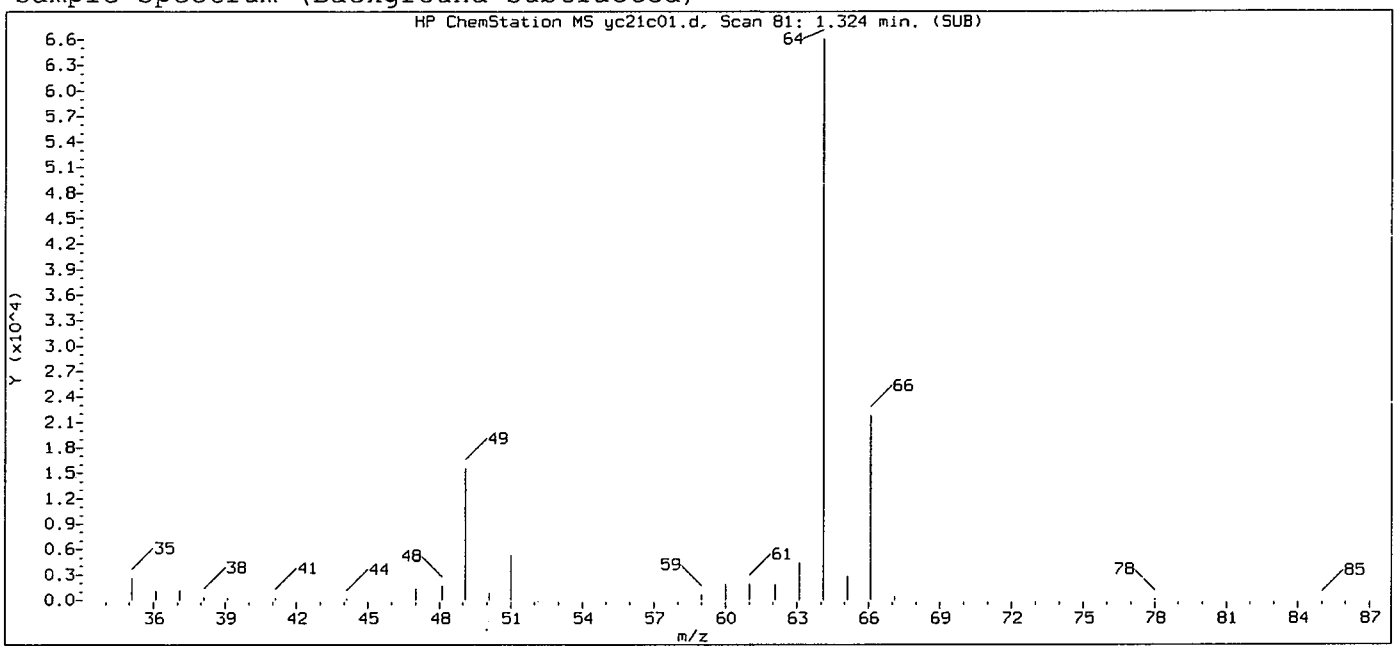
Compound Number	: 9		
Compound Name	: Dichlorofluoromethane		
Scan Number	: 99		
Retention Time (minutes)	: 1.434		
Quant Ion	: 67.00		
Area (flag)	: 550943A		
On-Column Amount (ng)	: 52.6146		
Integration start scan	: 84	Integration stop scan:	113
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

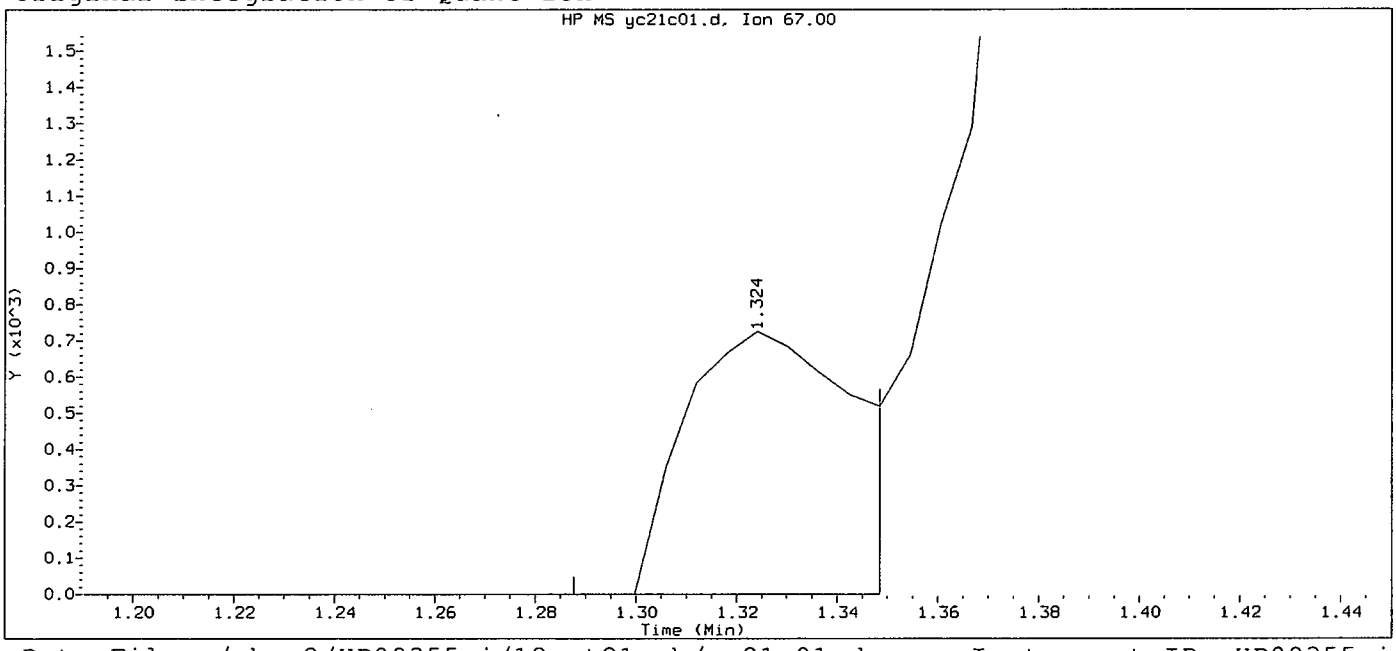
Analyst responsible for change: Digitally signed by Stephanie A. Selis on 10/21/2012 at 02:14. Target 3.5 esignature user ID: sas00403

Secondary review performed and digitally signed by Christine M. Dulaney on 10/24/2012 at 15:38.
Parallax ID: cmd00448

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct21a.b/yc21c01.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 01:24 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260WI-EEBN
Calibration date and time: 21-OCT-2012 01:53
Date, time and analyst ID of latest file update: 21-Oct-2012 01:53 sas00403

Sample Name: VSTD050 Lab Sample ID: VSTD050

Compound Number	: 9		
Compound Name	: Dichlorofluoromethane		
Scan Number	: 81		
Retention Time (minutes)	: 1.324		
Quant Ion	: 67.00		
Area	: 1618		
On-column Amount (ng)	: 0.1545		
Integration start scan	: 74	Integration stop scan:	84
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Stephanie A. Selis on 10/21/2012 at 02:14.
Target 3.5 esignature user ID: sas00403

Raw QC Data

VBLKY78 Lancaster Laboratories VBLKY78
Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP09355.i/12oct21a.b/yc21b01.d Injection date and time: **21-OCT-2012 02:05**
Data file Sample Info. Line: VBLKY78;VBLKY78;1;3;;;;;; Instrument ID: **HP09355.i** Batch: **Y122951AA**
Date, time and analyst ID of latest file update: 21-Oct-2012 03:56 sas00403

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **8260W-EEBN**
Calibration date and time (Last Method Edit): 21-OCT-2012 02:47
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
28) t-Butyl Alcohol-d10	2.036	(0.012)	198	65	441161	(-6)	250.00	
71) Fluorobenzene	4.129	(0.012)	542	96	1219483	(-3)	50.00	
106) Chlorobenzene-d5	7.316	(0.006)	1066	117	846223	(-3)	50.00	
136) 1,4-Dichlorobenzene-d4	9.342	(0.006)	1399	152	466979	(-7)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(1)	3.490	(-0.001)	113	260608	48.111	96%		80 - 116
62) 1,2-Dichloroethane-d4	(1)	3.800	(-0.001)	102	69697	47.886	96%		77 - 113
93) Toluene-d8	(2)	5.753	(0.000)	98	1144952	50.703	101%		80 - 113
119) 4-Bromofluorobenzene	(2)	8.430	(-0.001)	95	429269	50.425	101%		78 - 113

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
2) Dichlorodifluoromethane	(1)				Not Detected					2	5
3) Chloromethane	(1)				Not Detected					1	5
5) Vinyl Chloride	(1)				Not Detected					1	5
7) Bromomethane	(1)				Not Detected					1	5
8) Chloroethane	(1)				Not Detected					1	5
9) Dichlorofluoromethane	(1)				Not Detected					2	5
10) Trichlorofluoromethane	(1)				Not Detected					2	5
14) Freon 123a	(1)				Not Detected					2	5
15) Acrolein	(4)				Not Detected					40	100
16) 1,1-Dichloroethene	(1)				Not Detected					0.8	5
18) Freon 113	(1)				Not Detected					2	10
17) Acetone	(1)				Not Detected					6	20
20) Methyl Iodide	(1)				Not Detected					1	5
21) 2-Propanol	(4)				Not Detected					50	100
22) Carbon Disulfide	(1)				Not Detected					1	5
24) Allyl Chloride	(1)				Not Detected					1	5
25) Methyl Acetate	(1)				Not Detected					1	5
26) Methylene Chloride	(1)				Not Detected					2	5
29) t-Butyl Alcohol	(4)				Not Detected					10	80
30) Acrylonitrile	(1)				Not Detected					4	20
31) trans-1,2-Dichloroethene	(1)				Not Detected					0.8	5
32) Methyl Tertiary Butyl Ether	(1)				Not Detected					0.5	5
33) n-Hexane	(1)				Not Detected					2	5
45) 1,2-Dichloroethene (total)	(1)				Not Detected					0.8	5
34) 1,1-Dichloroethane	(1)				Not Detected					1	5
36) di-Isopropyl Ether	(1)				Not Detected					0.8	5
37) 2-Chloro-1,3-Butadiene	(1)				Not Detected					1	5
39) Ethyl t-Butyl Ether	(1)				Not Detected					0.8	5
40) cis-1,2-Dichloroethene	(1)				Not Detected					0.8	5
41) 2-Butanone	(1)				Not Detected					3	10
42) 2,2-Dichloropropane	(1)				Not Detected					1	5

Digitally signed by Stephanie A. Selis on 10/21/2012 at 03:57. Target 3.5 esignature user ID: sas00403

Data file: /chem2/HP09355.i/12oct21a.b/yc21b01.d Injection date and time: **21-OCT-2012 02:05**
Data file Sample Info. Line: VBLKY78;VBLKY78;1;3;;;;;; Instrument ID: **HP09355.i** Batch: **Y122951AA**
Date, time and analyst ID of latest file update: 21-Oct-2012 03:56 sas00403

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **8260W-EEBN**
Calibration date and time (Last Method Edit): 21-OCT-2012 02:47
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ (in sample)
43) Propionitrile	(4)				Not Detected					30	100
46) Methacrylonitrile	(1)				Not Detected					10	50
47) Bromochloromethane	(1)				Not Detected					1	5
48) Tetrahydrofuran	(4)				Not Detected					4	10
50) Chloroform	(1)				Not Detected					0.8	5
53) 1,1,1-Trichloroethane	(1)				Not Detected					0.8	5
56) Cyclohexane	(1)				Not Detected					2	5
57) 1,1-Dichloropropene	(1)				Not Detected					1	5
58) Carbon Tetrachloride	(1)				Not Detected					1	5
59) Isobutyl Alcohol	(4)				Not Detected					100	250
63) Benzene	(1)				Not Detected					0.5	5
65) 1,2-Dichloroethane	(1)				Not Detected					1	5
69) t-Amyl Methyl Ether	(1)				Not Detected					0.8	5
72) n-Heptane	(1)				Not Detected					2	5
73) n-Butanol	(4)				Not Detected					100	250
74) Trichloroethene	(1)				Not Detected					1	5
77) 1,2-Dichloropropane	(1)				Not Detected					1	5
76) Methylcyclohexane	(1)				Not Detected					1	5
80) Methyl Methacrylate	(1)				Not Detected					1	5
78) Dibromomethane	(1)				Not Detected					1	5
79) 1,4-Dioxane	(4)				Not Detected					70	250
83) Bromodichloromethane	(1)				Not Detected					1	5
85) 2-Nitropropane	(1)				Not Detected					2	10
86) 2-Chloroethyl Vinyl Ether	(1)				Not Detected					2	10
87) cis-1,3-Dichloropropene	(1)				Not Detected					1	5
89) 4-Methyl-2-Pentanone	(1)				Not Detected					3	10
94) Toluene	(2)				Not Detected					0.7	5
95) trans-1,3-Dichloropropene	(2)				Not Detected					1	5
96) Ethyl Methacrylate	(2)				Not Detected					1	5
97) 1,1,2-Trichloroethane	(2)				Not Detected					0.8	5
98) Tetrachloroethene	(2)				Not Detected					0.8	5
99) 1,3-Dichloropropane	(2)				Not Detected					1	5
101) 2-Hexanone	(2)				Not Detected					3	10
102) Dibromochloromethane	(2)				Not Detected					1	5
104) 1,2-Dibromoethane	(2)				Not Detected					1	5
107) Chlorobenzene	(2)				Not Detected					0.8	5
108) 1,1,1,2-Tetrachloroethane	(2)				Not Detected					1	5
109) Ethylbenzene	(2)				Not Detected					0.8	5
110) m+p-Xylene	(2)				Not Detected					0.8	5
112) Xylene (Total)	(2)				Not Detected					0.8	5
113) o-Xylene	(2)				Not Detected					0.8	5
114) Styrene	(2)				Not Detected					1	5
115) Bromoform	(2)				Not Detected					1	5
116) Isopropylbenzene	(2)				Not Detected					1	5
118) Cyclohexanone	(4)				Not Detected					55	250
122) 1,1,2,2-Tetrachloroethane	(3)				Not Detected					1	5
124) trans-1,4-Dichloro-2-Butene	(3)				Not Detected					15	50
121) Bromobenzene	(3)				Not Detected					1	5
123) 1,2,3-Trichloropropane	(3)				Not Detected					1	5
125) n-Propylbenzene	(3)				Not Detected					1	5
126) 2-Chlorotoluene	(3)				Not Detected					1	5
127) 1,3,5-Trimethylbenzene	(3)				Not Detected					1	5
128) 4-Chlorotoluene	(3)				Not Detected					1	5
130) tert-Butylbenzene	(3)				Not Detected					1	5

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Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

VBLKY78

Data file: /chem2/HP09355.i/12oct21a.b/yc21b01.d
Data file Sample Info. Line: VBLKY78;VBLKY78;1;3;;;;;;
Date, time and analyst ID of latest file update: 21-Oct-2012 03:56 sas00403

Injection date and time: **21-OCT-2012 02:05**
Instrument ID: **HP09355.i** Batch: **Y122951AA**

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **8260W-EEBN**
Calibration date and time (Last Method Edit): 21-OCT-2012 02:47
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

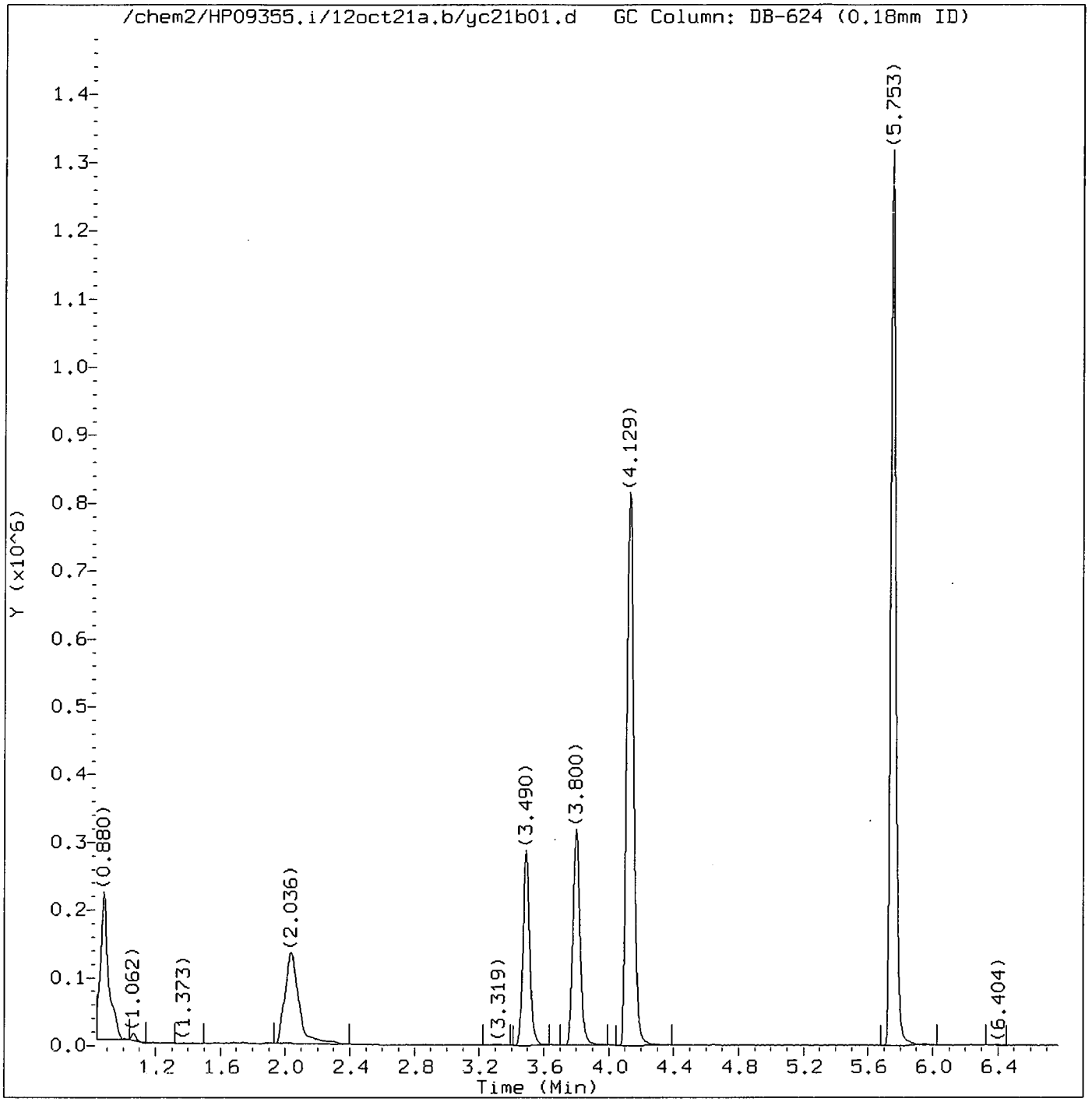
Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
131) Pentachloroethane	(3)				Not Detected					1	5
132) 1,2,4-Trimethylbenzene	(3)				Not Detected					1	5
133) sec-Butylbenzene	(3)				Not Detected					1	5
135) p-Isopropyltoluene	(3)				Not Detected					1	5
134) 1,3-Dichlorobenzene	(3)				Not Detected					1	5
138) 1,4-Dichlorobenzene	(3)				Not Detected					1	5
139) 1,2,3-Trimethylbenzene	(3)				Not Detected					1	5
141) Benzyl Chloride	(3)				Not Detected					1	5
142) 1,3-Diethylbenzene	(3)				Not Detected					1	5
143) 1,4-Diethylbenzene	(3)				Not Detected					1	5
145) n-Butylbenzene	(3)				Not Detected					1	5
144) 1,2-Dichlorobenzene	(3)				Not Detected					1	5
146) 1,2-Diethylbenzene	(3)				Not Detected					1	5
148) 1,2-Dibromo-3-Chloropropane	(3)				Not Detected					2	5
149) 1,3,5-Trichlorobenzene	(3)				Not Detected					1	5
150) 1,2,4-Trichlorobenzene	(3)				Not Detected					1	5
151) Hexachlorobutadiene	(3)				Not Detected					2	5
152) Naphthalene	(3)				Not Detected					1	5
153) 1,2,3-Trichlorobenzene	(3)				Not Detected					1	5
154) 2-Methylnaphthalene	(3)				Not Detected					2	5

Total number of targets = 105

Digitally signed by Stephanie A. Selis on 10/21/2012 at 03:57. Target 3.5 esignature user ID: sas00403

Secondary review performed and digitally signed by Christine M. Dulaney on 10/24/2012 at 15:38. Parallax ID: cmd00448



Total Ion Chromatogram (TIC)

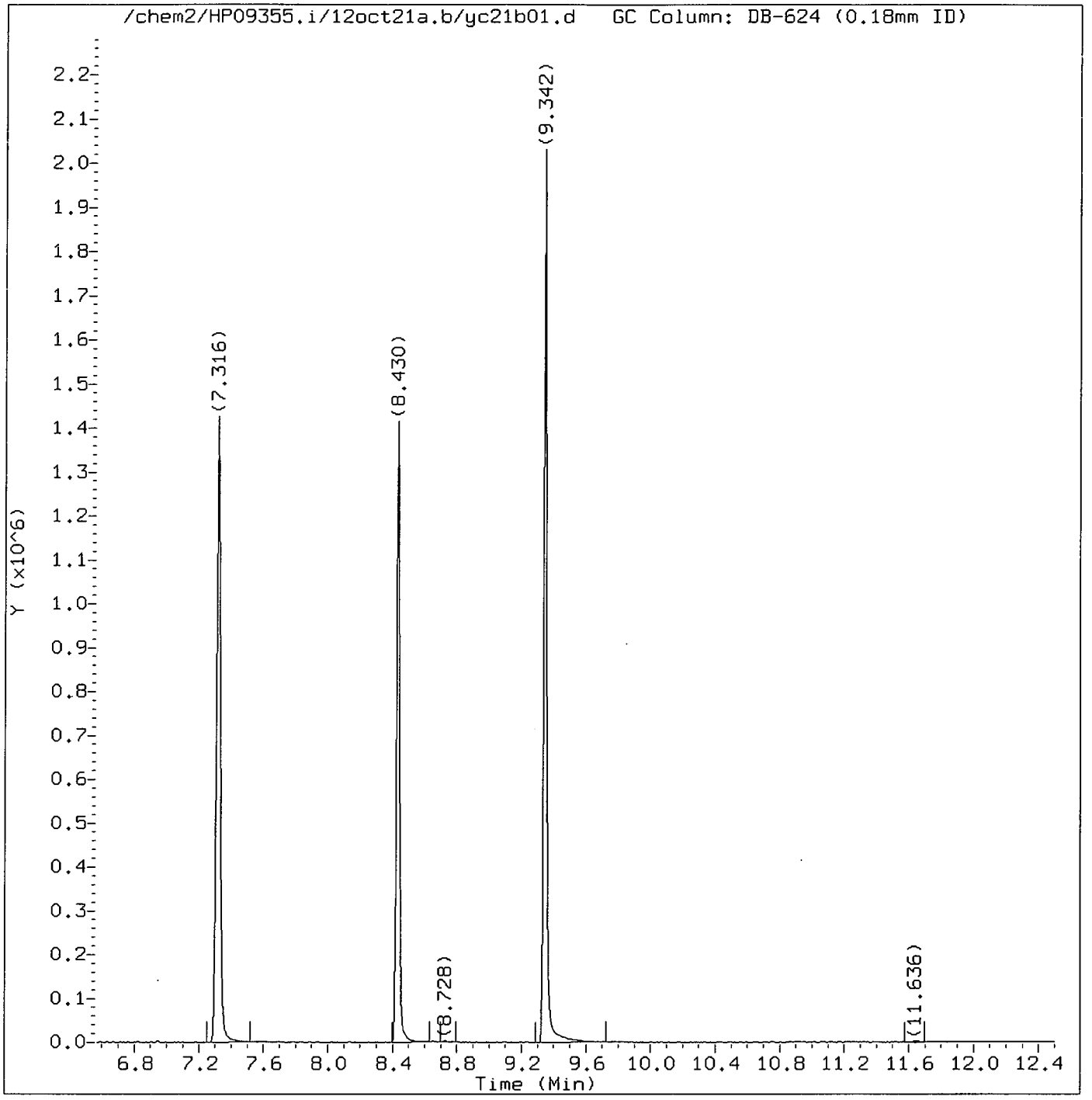
Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21b01.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 02:05 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260W-EEBN
Calibration date and time: 21-OCT-2012 02:47
Date, time and analyst ID of latest file update: 21-Oct-2012 03:56 sas00403

Sample Name: VBLKY78 Lab Sample ID: VBLKY78

Digitally signed by Stephanie A. Selis
on 10/21/2012 at 03:57.
Target 3.5 esignature user ID: sas00403



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21b01.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 02:05 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260W-EEBN
Calibration date and time: 21-OCT-2012 02:47
Date, time and analyst ID of latest file update: 21-Oct-2012 03:56 sas00403

Sample Name: VBLKY78 Lab Sample ID: VBLKY78

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on 10/21/2012 at 03:57.
Target 3.5 esignature user ID: sas00403

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21b01.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 02:05 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260W-EEBN
Calibration date and time: 21-OCT-2012 02:47
Date, time and analyst ID of latest file update: 21-Oct-2012 03:56 sas00403

Sample Name: VBLKY78 Lab Sample ID: VBLKY78

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
28)*t-Butyl Alcohol-d10	(4)	2.036	65	441161	250.000
52)$Dibromofluoromethane	(1)	3.490	113	260608	48.111
62)$1,2-Dichloroethane-d4	(1)	3.800	102	69697	47.886
71)*Fluorobenzene	(1)	4.129	96	1219483	50.000
93)$Toluene-d8	(2)	5.753	98	1144952	50.703
106)*Chlorobenzene-d5	(2)	7.316	117	846223	50.000
119)$4-Bromofluorobenzene	(2)	8.430	95	429269	50.425
136)*1,4-Dichlorobenzene-d4	(3)	9.342	152	466979	50.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Stephanie A. Selis
on 10/21/2012 at 03:57.
Target 3.5 esignature user ID: sas00403

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSY78

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: LCSY78

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct21a.b/yc21l02.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	13	
74-87-3	Chloromethane	18	
75-01-4	Vinyl Chloride	16	
74-83-9	Bromomethane	13	
75-00-3	Chloroethane	15	
75-43-4	Dichlorofluoromethane	25	
75-69-4	Trichlorofluoromethane	19	
354-23-4	Freon 123a	24	
107-02-8	Acrolein	110	
75-35-4	1,1-Dichloroethene	23	
67-64-1	Acetone	180	
76-13-1	Freon 113	22	
74-88-4	Methyl Iodide	21	
67-63-0	2-Propanol	150	
75-15-0	Carbon Disulfide	21	
107-05-1	Allyl Chloride	21	
79-20-9	Methyl Acetate	28	
75-09-2	Methylene Chloride	22	
75-65-0	t-Butyl Alcohol	220	
107-13-1	Acrylonitrile	100	
156-60-5	trans-1,2-Dichloroethene	22	
1634-04-4	Methyl Tertiary Butyl Ether	21	
110-54-3	n-Hexane	21	
75-34-3	1,1-Dichloroethane	22	
108-20-3	di-Isopropyl Ether	22	
126-99-8	2-Chloro-1,3-Butadiene	23	
637-92-3	Ethyl t-Butyl Ether	21	
156-59-2	cis-1,2-Dichloroethene	22	
78-93-3	2-Butanone	170	
594-20-7	2,2-Dichloropropane	21	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSY78

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: LCSY78

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct21a.b/yc21102.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
107-12-0	Propionitrile	140	
540-59-0	1,2-Dichloroethene (total)	44	
126-98-7	Methacrylonitrile	160	
74-97-5	Bromochloromethane	19	
109-99-9	Tetrahydrofuran	85	
67-66-3	Chloroform	21	
71-55-6	1,1,1-Trichloroethane	20	
110-82-7	Cyclohexane	22	
563-58-6	1,1-Dichloropropene	22	
56-23-5	Carbon Tetrachloride	21	
78-83-1	Isobutyl Alcohol	490	
71-43-2	Benzene	22	
107-06-2	1,2-Dichloroethane	22	
994-05-8	t-Amyl Methyl Ether	20	
142-82-5	n-Heptane	20	
71-36-3	n-Butanol	860	
79-01-6	Trichloroethene	22	
108-87-2	Methylcyclohexane	20	
78-87-5	1,2-Dichloropropane	22	
74-95-3	Dibromomethane	21	
123-91-1	1,4-Dioxane	400	
80-62-6	Methyl Methacrylate	20	
75-27-4	Bromodichloromethane	21	
79-46-9	2-Nitropropane	17	
110-75-8	2-Chloroethyl Vinyl Ether	20	
10061-01-5	cis-1,3-Dichloropropene	22	
108-10-1	4-Methyl-2-Pentanone	110	
108-88-3	Toluene	22	
10061-02-6	trans-1,3-Dichloropropene	20	
97-63-2	Ethyl Methacrylate	20	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSY78

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: LCSY78

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct21a.b/yc21102.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-00-5	1,1,2-Trichloroethane	21	
127-18-4	Tetrachloroethene	21	
142-28-9	1,3-Dichloropropane	22	
591-78-6	2-Hexanone	110	
124-48-1	Dibromochloromethane	20	
106-93-4	1,2-Dibromoethane	21	
108-90-7	Chlorobenzene	21	
630-20-6	1,1,1,2-Tetrachloroethane	20	
100-41-4	Ethylbenzene	22	
179601-23-1	m+p-Xylene	43	
1330-20-7	Xylene (Total)	64	
95-47-6	o-Xylene	21	
100-42-5	Styrene	21	
75-25-2	Bromoform	17	
98-82-8	Isopropylbenzene	22	
108-94-1	Cyclohexanone	330	
108-86-1	Bromobenzene	20	
79-34-5	1,1,2,2-Tetrachloroethane	21	
96-18-4	1,2,3-Trichloropropane	20	
110-57-6	trans-1,4-Dichloro-2-Butene	110	
103-65-1	n-Propylbenzene	22	
95-49-8	2-Chlorotoluene	21	
108-67-8	1,3,5-Trimethylbenzene	22	
106-43-4	4-Chlorotoluene	21	
98-06-6	tert-Butylbenzene	21	
76-01-7	Pentachloroethane	19	
95-63-6	1,2,4-Trimethylbenzene	21	
135-98-8	sec-Butylbenzene	22	
541-73-1	1,3-Dichlorobenzene	20	
99-87-6	p-Isopropyltoluene	22	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSY78

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: LCSY78

Sample wt/vol: 5.00 (g/mL) mL Lab File ID: HP09355.i/12oct21a.b/yc21102.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/21/12

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
106-46-7	1,4-Dichlorobenzene	20	
526-73-8	1,2,3-Trimethylbenzene	21	
100-44-7	Benzyl Chloride	16	
141-93-5	1,3-Diethylbenzene	20	
105-05-5	1,4-Diethylbenzene	21	
95-50-1	1,2-Dichlorobenzene	21	
104-51-8	n-Butylbenzene	22	
135-01-3	1,2-Diethylbenzene	20	
96-12-8	1,2-Dibromo-3-Chloropropane	20	
108-70-3	1,3,5-Trichlorobenzene	20	
120-82-1	1,2,4-Trichlorobenzene	20	
87-68-3	Hexachlorobutadiene	19	
91-20-3	Naphthalene	19	
87-61-6	1,2,3-Trichlorobenzene	19	
91-57-6	2-Methylnaphthalene	16	
25340-17-4	Diethylbenzene (total)	61	

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

LCSY78

Data file: /chem2/HP09355.i/12oct21a.b/yc21102.d Injection date and time: **21-OCT-2012 03:10**
Data file Sample Info. Line: LCSY78;LCSY78;1;3;LCS;;DRAPER;;yc21b01; Instrument ID: **HP09355.i** Batch: **Y122951AA**
Date, time and analyst ID of latest file update: 21-Oct-2012 03:33 sas00403

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **8260W-EEBN**
Calibration date and time (Last Method Edit): 21-OCT-2012 02:47
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
28) t-Butyl Alcohol-d10	2.054	(-0.006)	201	65	463237	(-1)	250.00	
71) Fluorobenzene	4.135	(0.006)	543	96	1275024	(2)	50.00	
106) Chlorobenzene-d5	7.316	(0.006)	1066	117	894322	(3)	50.00	
136) 1,4-Dichlorobenzene-d4	9.348	(0.000)	1400	152	508588	(1)	50.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
52) Dibromofluoromethane	(1)	3.496	(-0.001)	113	275149	48.582	97%		80 - 116
62) 1,2-Dichloroethane-d4	(1)	3.800	(0.000)	102	76122	50.023	100%		77 - 113
93) Toluene-d8	(2)	5.759	(-0.001)	98	1210519	50.724	101%		80 - 113
119) 4-Bromofluorobenzene	(2)	8.430	(-0.001)	95	456157	50.701	101%		78 - 113

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
2) Dichlorodifluoromethane	(1)	1.020	(-0.000)	85	115578	13.393	13.39			2	5
3) Chloromethane	(1)	1.050	(0.002)	50	163670	17.884	17.88			1	5
5) Vinyl Chloride	(1)	1.117	(0.002)	62	146604	16.353	16.35			1	5
7) Bromomethane	(1)	1.275	(0.001)	94	78222	13.350	13.35			1	5
8) Chloroethane	(1)	1.324	(-0.000)	64	72672	14.958	14.96			1	5
9) Dichlorofluoromethane	(1)	1.427	(0.000)	67	269035	25.220	25.22			2	5
10) Trichlorofluoromethane	(1)	1.482	(0.002)	101	181944	18.869	18.87			2	5
14) Freon 123a	(1)	1.592	(0.000)	67	162087	23.773	23.77			2	5
15) Acrolein	(4)	1.658	(0.002)	56	330635	107.010	107.01			40	100
16) 1,1-Dichloroethene	(1)	1.725	(0.000)	96	117533	22.680	22.68			0.8	5
18) Freon 113	(1)	1.750	(0.000)	101	116752	21.934	21.93			2	10
17) Acetone	(1)	1.744	(-0.000)	58	253615	175.193	175.19			6	20
20) Methyl Iodide	(1)	1.823	(0.000)	142	209941	21.288	21.29			1	5
21) 2 Propanol	(4)	1.829	(0.002)	45	196162	151.006	151.01			50	100
22) Carbon Disulfide	(1)	1.871	(0.000)	76	332595	20.829	20.83			1	5
24) Allyl Chloride	(1)	1.938	(0.000)	41	201907	21.120	21.12			1	5
25) Methyl Acetate	(1)	1.950	(-0.000)	43	217994	27.626	27.63			1	5
26) Methylene Chloride	(1)	2.024	(-0.000)	84	139205	21.593	21.59			2	5
29) t-Butyl Alcohol	(4)	2.109	(0.000)	59	512720	223.165	223.16			10	80
30) Acrylonitrile	(1)	2.188	(-0.000)	53	554035	101.990	101.99			4	20
31) trans-1,2-Dichloroethene	(1)	2.218	(0.000)	96	137229	22.121	22.12			0.8	5
32) Methyl Tertiary Butyl Ether	(1)	2.224	(0.000)	73	456316	21.268	21.27			0.5	5
33) n-Hexane	(1)	2.431	(0.002)	57	197042	21.215	21.21			2	5
45) 1,2-Dichloroethene (total)	(1)			96	290903	44.260	44.26			0.8	5
34) 1,1-Dichloroethane	(1)	2.547	(0.000)	63	252563	22.426	22.43			1	5
36) di-Isopropyl Ether	(1)	2.626	(-0.000)	45	503822	22.315	22.32			0.8	5
37) 2-Chloro-1,3-Butadiene	(1)	2.632	(0.000)	53	219228	22.935	22.93			1	5
39) Ethyl t-Butyl Ether	(1)	2.942	(0.000)	59	463760	21.332	21.33			0.8	5
40) cis-1,2-Dichloroethene	(1)	3.058	(-0.001)	96	153674	22.139	22.14			0.8	5
41) 2-Butanone	(1)	3.064	(-0.001)	43	1357978	172.921	172.92			3	10
42) 2,2-Dichloropropane	(1)	3.070	(-0.001)	77	174727	20.654	20.65			1	5

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Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP09355.i/12oct21a.b/yc21l02.d Injection date and time: **21-OCT-2012 03:10**
Data file Sample Info. Line: LCSY78;LCSY78;1;3;LCS;;DRAPER;;yc21b01; Instrument ID: **HP09355.i** Batch: **Y122951AA**
Date, time and analyst ID of latest file update: 21-Oct-2012 03:33 sas00403

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **8260W-EEBN**
Calibration date and time (Last Method Edit): 21-OCT-2012 02:47
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
43) Propionitrile	(4)	3.112(0.007)	54	398289	139.106	139.11			30	100
46) Methacrylonitrile	(1)	3.252(0.000)	67	850094	158.134	158.13			10	50
47) Bromochloromethane	(1)	3.265(0.000)	128	73033	19.396	19.40			1	5
48) Tetrahydrofuran	(4)	3.313(0.004)	71	226531	84.510	84.51			4	10
50) Chloroform	(1)	3.350(-0.001)	83	235752	20.818	20.82			0.8	5
53) 1,1,1-Trichloroethane	(1)	3.520(0.000)	97	191343	19.823	19.82			0.8	5
56) Cyclohexane	(1)	3.581(-0.001)	56	246325	21.758	21.76			2	5
57) 1,1-Dichloropropene	(1)	3.672(0.000)	75	183904	21.943	21.94			1	5
58) Carbon Tetrachloride	(1)	3.678(0.000)	117	151046	21.057	21.06			1	5
59) Isobutyl Alcohol	(4)	3.812(0.008)	41	387914M	490.156	490.16			100	250
63) Benzene	(1)	3.861(0.000)	78	587548	21.985	21.99			0.5	5
65) 1,2-Dichloroethane	(1)	3.873(0.000)	62	194754	22.064	22.06			1	5
69) t-Amyl Methyl Ether	(1)	4.001(-0.001)	73	431172	20.179	20.18			0.8	5
72) n-Heptane	(1)	4.159(-0.001)	43	213986	19.868	19.87			2	5
73) n-Butanol	(4)	4.463(0.009)	56	628589	856.429	856.43			100	250
74) Trichloroethene	(1)	4.500(-0.000)	95	143656	21.613	21.61			1	5
77) 1,2-Dichloropropane	(1)	4.712(-0.000)	63	155912	22.220	22.22			1	5
76) Methylcyclohexane	(1)	4.700(-0.001)	83	242113	20.101	20.10			1	5
80) Methyl Methacrylate	(1)	4.871(-0.001)	69	163682	19.725	19.73			1	5
78) Dibromomethane	(1)	4.828(-0.000)	93	97670	21.007	21.01			1	5
79) 1,4-Dioxane	(4)	4.852(0.009)	88	82629	404.763	404.76			70	250
83) Bromodichloromethane	(1)	5.004(-0.000)	83	161950	20.591	20.59			1	5
85) 2-Nitropropane	(1)	5.236(-0.001)	41	54788	16.833	16.83			2	10
86) 2-Chloroethyl Vinyl Ether	(1)	5.339(-0.000)	63	122669	19.550	19.55			2	10
87) cis-1,3-Dichloropropene	(1)	5.473(-0.000)	75	221697	22.028	22.03			1	5
89) 4-Methyl-2-Pentanone	(1)	5.662(-0.002)	43	1593816	107.317	107.32			3	10
94) Toluene	(2)	5.826(0.000)	92	363083	21.809	21.81			0.7	5
95) trans-1,3-Dichloropropene	(2)	6.081(-0.000)	75	190834	20.047	20.05			1	5
96) Ethyl Methacrylate	(2)	6.221(0.000)	69	254527	20.204	20.20			1	5
97) 1,1,2-Trichloroethane	(2)	6.264(0.000)	97	141909	21.095	21.09			0.8	5
98) Tetrachloroethene	(2)	6.416(-0.000)	166	147509	20.542	20.54			0.8	5
99) 1,3-Dichloropropane	(2)	6.440(-0.000)	76	243401	21.580	21.58			1	5
101) 2-Hexanone	(2)	6.574(-0.000)	43	1254897	107.101	107.10			3	10
102) Dibromochloromethane	(2)	6.684(0.000)	129	126408	20.414	20.41			1	5
104) 1,2-Dibromoethane	(2)	6.767(-0.000)	107	150128	20.563	20.56			1	5
107) Chlorobenzene	(2)	7.347(-0.000)	112	395080	21.314	21.31			0.8	5
108) 1,1,1,2-Tetrachloroethane	(2)	7.450(-0.000)	131	123270	20.408	20.41			1	5
109) Ethylbenzene	(2)	7.487(-0.000)	91	702812	21.733	21.73			0.8	5
110) m+p-Xylene	(2)	7.608(-0.000)	106	544906	42.720	42.72			0.8	5
112) Xylene (Total)	(2)		106	813992	63.607	63.61			0.8	5
113) o-Xylene	(2)	7.979(-0.000)	106	269086	20.888	20.89			0.8	5
114) Styrene	(2)	7.992(-0.000)	104	448432	20.847	20.85			1	5
115) Bromoform	(2)	8.131(-0.000)	173	88721	16.877	16.88			1	5
116) Isopropylbenzene	(2)	8.320(-0.000)	105	696223	21.539	21.54			1	5
118) Cyclohexanone	(4)	8.363(0.011)	55	301398	333.463	333.46			55	250
122) 1,1,2,2-Tetrachloroethane	(3)	8.576(0.000)	83	255103	21.252	21.25			1	5
124) trans-1,4-Dichloro-2-Butene	(3)	8.618(-0.000)	53	386110	110.158	110.16			15	50
121) Bromobenzene	(3)	8.545(0.000)	156	169474	20.056	20.06			1	5
123) 1,2,3-Trichloropropane	(3)	8.594(0.000)	110	76436	20.476	20.48			1	5
125) n-Propylbenzene	(3)	8.667(0.000)	91	831403	22.473	22.47			1	5
126) 2-Chlorotoluene	(3)	8.716(0.000)	126	163396	20.794	20.79			1	5
127) 1,3,5-Trimethylbenzene	(3)	8.813(0.000)	105	600621	21.799	21.80			1	5
128) 4-Chlorotoluene	(3)	8.807(0.000)	126	169856	20.905	20.90			1	5
130) tert-Butylbenzene	(3)	9.062(0.000)	134	128474	20.763	20.76			1	5

M = Compound was manually integrated.

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Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP09355.i/12oct21a.b/yc21102.d Injection date and time: **21-OCT-2012 03:10**
Data file Sample Info. Line: LCSY78;LCSY78;1;3;LCS;;DRAPER;;yc21b01; Instrument ID: **HP09355.i** Batch: **Y122951AA**
Date, time and analyst ID of latest file update: 21-Oct-2012 03:33 sas00403

Blank Data file reference: **/chem2/HP09355.i/12oct21a.b/yc21b01.d**

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: **8260W-EEBN**
Calibration date and time (Last Method Edit): 21-OCT-2012 02:47
Mid Level Daily Calibration Standard Reference: **/chem2/HP09355.i/12oct21a.b/yc21c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 5 ml Sample Volume (Vo): 5 ml

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
131) Pentachloroethane	(3)	9.062(0.000)	167	94570	18.553	18.55			1	5
132) 1,2,4-Trimethylbenzene	(3)	9.099(0.000)	105	607411	21.367	21.37			1	5
133) sec-Butylbenzene	(3)	9.233(0.000)	105	743806	21.954	21.95			1	5
135) p-Isopropyltoluene	(3)	9.348(0.000)	119	654060	21.858	21.86			1	5
134) 1,3-Dichlorobenzene	(3)	9.293(0.000)	146	326398	20.462	20.46			1	5
138) 1,4-Dichlorobenzene	(3)	9.366(-0.000)	146	348647	20.478	20.48			1	5
139) 1,2,3-Trimethylbenzene	(3)	9.415(-0.000)	105	635979	20.810	20.81			1	5
141) Benzyl Chloride	(3)	9.470(-0.000)	91	378462	16.473	16.47			1	5
142) 1,3-Diethylbenzene	(3)	9.567(-0.000)	119	380668	20.178	20.18			1	5
143) 1,4-Diethylbenzene	(3)	9.628(-0.000)	119	404518	20.871	20.87			1	5
145) n-Butylbenzene	(3)	9.646(-0.000)	92	324514	21.884	21.88			1	5
144) 1,2-Dichlorobenzene	(3)	9.628(0.000)	146	334630	20.751	20.75			1	5
146) 1,2-Diethylbenzene	(3)	9.707(-0.000)	119	331220	20.420	20.42			1	5
148) 1,2-Dibromo-3-Chloropropane	(3)	10.176(-0.000)	75	60553	19.836	19.84			2	5
149) 1,3,5-Trichlorobenzene	(3)	10.328(-0.000)	180	244874	20.011	20.01			1	5
150) 1,2,4-Trichlorobenzene	(3)	10.741(-0.000)	180	227057	19.741	19.74			1	5
151) Hexachlorobutadiene	(3)	10.863(-0.000)	225	99512	18.655	18.65			2	5
152) Naphthalene	(3)	10.893(-0.000)	128	838007	18.792	18.79			1	5
153) 1,2,3-Trichlorobenzene	(3)	11.052(-0.000)	180	214691	19.027	19.03			1	5
154) 2-Methylnaphthalene	(3)	11.617(-0.000)	142	404667	16.314	16.31			2	5

Total number of targets = 105

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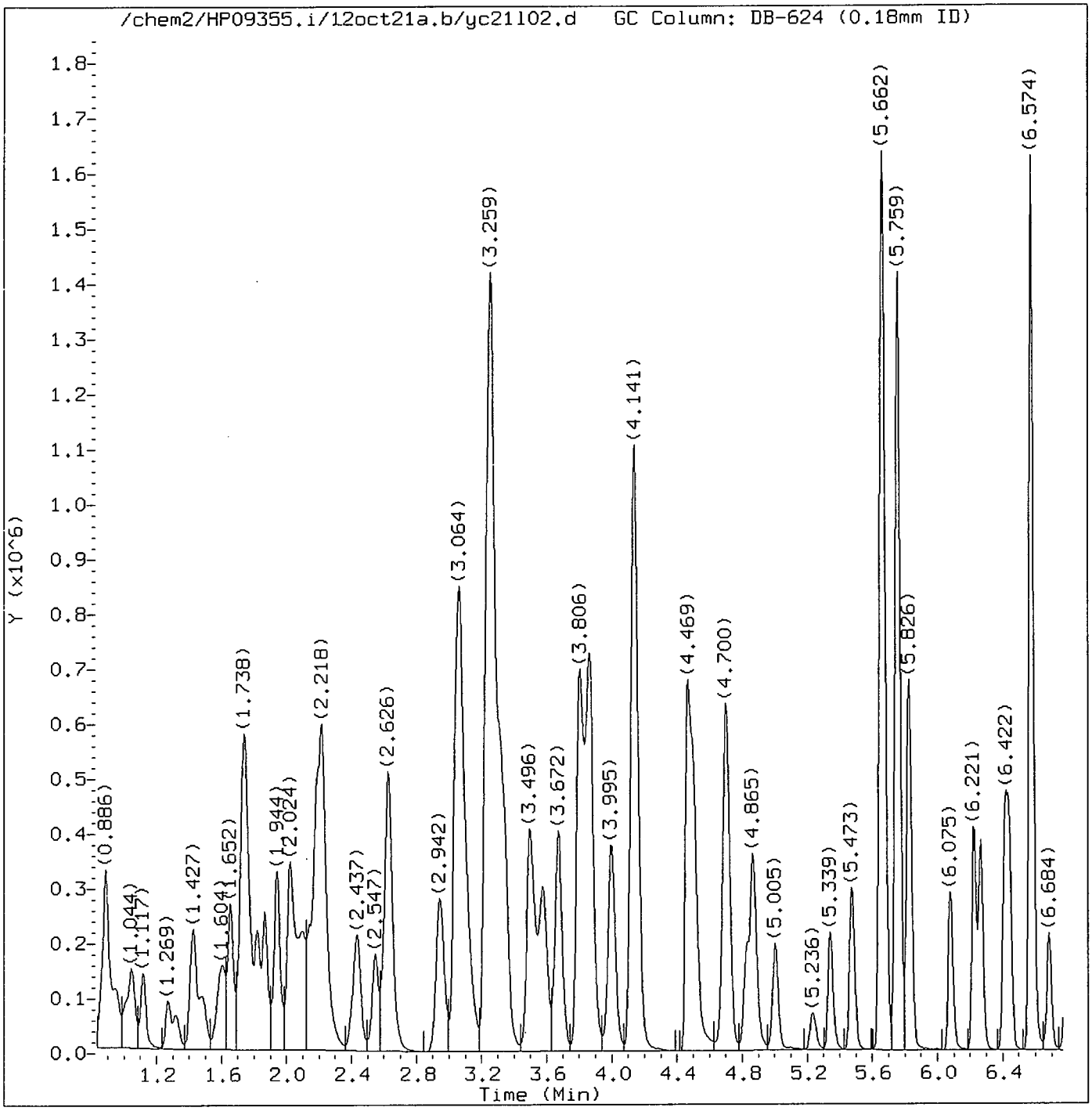
Secondary review performed and digitally signed by Christine M. Dulaney on 10/24/2012 at 15:38. Parallax ID: cmd00448



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21102.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 03:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260W-EEBN
Calibration date and time: 21-OCT-2012 02:47
Date, time and analyst ID of latest file update: 21-Oct-2012 03:33 sas00403

Sample Name: LCSY78 Lab Sample ID: LCSY78

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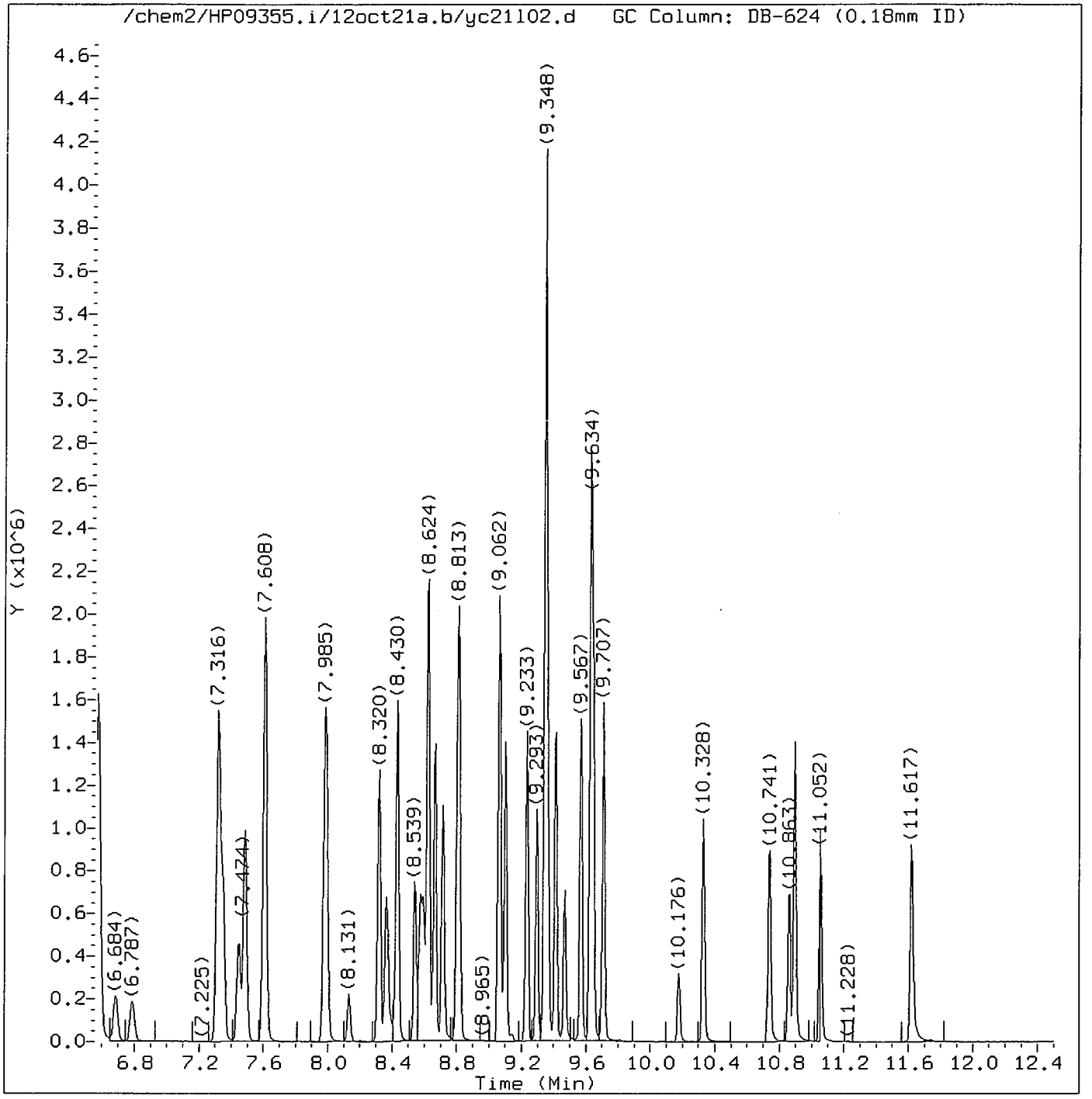
on 10/21/2012 at 03:57.
Target 3.5 esignature user ID: sas00403



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21102.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 03:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260W-EEBN
Calibration date and time: 21-OCT-2012 02:47
Date, time and analyst ID of latest file update: 21-Oct-2012 03:33 sas00403

Sample Name: LCSY78 Lab Sample ID: LCSY78

Digitally signed by Stephanie A. Selis
on 10/21/2012 at 03:57.
Target 3.5 esignature user ID: sas00403

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21102.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 03:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260W-EEBN
Calibration date and time: 21-OCT-2012 02:47
Date, time and analyst ID of latest file update: 21-Oct-2012 03:33 sas00403

Sample Name: LCSY78 Lab Sample ID: LCSY78

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
2) Dichlorodifluoromethane	(1)	1.020	85	115578	13.393
3) Chloromethane	(1)	1.050	50	163670	17.884
5) Vinyl Chloride	(1)	1.117	62	146604	16.353
7) Bromomethane	(1)	1.275	94	78222	13.350
8) Chloroethane	(1)	1.324	64	72672	14.958
9) Dichlorofluoromethane	(1)	1.427	67	269035	25.220
10) Trichlorofluoromethane	(1)	1.482	101	181944	18.869
14) Freon 123a	(1)	1.592	67	162087	23.773
15) Acrolein	(4)	1.659	56	330635	107.010
16) 1,1-Dichloroethene	(1)	1.725	96	117533	22.680
17) Acetone	(1)	1.744	58	253615	175.193
18) Freon 113	(1)	1.750	101	116752	21.934
20) Methyl Iodide	(1)	1.823	142	209941	21.288
21) 2-Propanol	(4)	1.829	45	196162	151.006
22) Carbon Disulfide	(1)	1.871	76	332595	20.829
24) Allyl Chloride	(1)	1.938	41	201907	21.120
25) Methyl Acetate	(1)	1.951	43	217994	27.626
26) Methylene Chloride	(1)	2.024	84	139205	21.593
28)*t-Butyl Alcohol-d10	(4)	2.054	65	463237	250.000
29) t-Butyl Alcohol	(4)	2.109	59	512720	223.165
30) Acrylonitrile	(1)	2.188	53	554035	101.990
31) trans-1,2-Dichloroethene	(1)	2.218	96	137229	22.121
32) Methyl Tertiary Butyl Ether	(1)	2.224	73	456316	21.268
33) n-Hexane	(1)	2.431	57	197042	21.215
34) 1,1-Dichloroethane	(1)	2.547	63	252563	22.426
36) di-Isopropyl Ether	(1)	2.626	45	503822	22.315
37) 2-Chloro-1,3-Butadiene	(1)	2.632	53	219228	22.935
39) Ethyl t-Butyl Ether	(1)	2.942	59	463760	21.332
40) cis-1,2-Dichloroethene	(1)	3.058	96	153674	22.139
41) 2-Butanone	(1)	3.064	43	1357978	172.921
42) 2,2-Dichloropropane	(1)	3.070	77	174727	20.654
43) Propionitrile	(4)	3.113	54	398289	139.106
46) Methacrylonitrile	(1)	3.252	67	850094	158.134
47) Bromochloromethane	(1)	3.265	128	73033	19.396
48) Tetrahydrofuran	(4)	3.313	71	226531	84.510
50) Chloroform	(1)	3.350	83	235752	20.818
52)$Dibromofluoromethane	(1)	3.496	113	275149	48.582
53) 1,1,1-Trichloroethane	(1)	3.520	97	191343	19.823

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Stephanie A. Selis
on 10/21/2012 at 03:57.
Target 3.5 esignature user ID: sas00403

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21102.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 03:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260W-EEBN
Calibration date and time: 21-OCT-2012 02:47
Date, time and analyst ID of latest file update: 21-Oct-2012 03:33 sas00403

Sample Name: LCSY78 Lab Sample ID: LCSY78

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
56) Cyclohexane	(1)	3.581	56	246325	21.758
45) 1,2-Dichloroethene (total)	(1)		96	290903	44.260
57) 1,1-Dichloropropene	(1)	3.672	75	183904	21.943
58) Carbon Tetrachloride	(1)	3.678	117	151046	21.057
62)$1,2-Dichloroethane-d4	(1)	3.800	102	76122	50.023
59) Isobutyl Alcohol	(4)	3.812	41	387914M	490.156
63) Benzene	(1)	3.861	78	587548	21.985
65) 1,2-Dichloroethane	(1)	3.873	62	194754	22.064
69) t-Amyl Methyl Ether	(1)	4.001	73	431172	20.179
71)*Fluorobenzene	(1)	4.135	96	1275024	50.000
72) n-Heptane	(1)	4.159	43	213986	19.868
73) n-Butanol	(4)	4.463	56	628589	856.429
74) Trichloroethene	(1)	4.500	95	143656	21.613
76) Methylcyclohexane	(1)	4.700	83	242113	20.101
77) 1,2-Dichloropropane	(1)	4.713	63	155912	22.220
78) Dibromomethane	(1)	4.828	93	97670	21.007
79) 1,4-Dioxane	(4)	4.852	88	82629	404.763
80) Methyl Methacrylate	(1)	4.871	69	163682	19.725
83) Bromodichloromethane	(1)	5.005	83	161950	20.591
85) 2-Nitropropane	(1)	5.236	41	54788	16.833
86) 2-Chloroethyl Vinyl Ether	(1)	5.339	63	122669	19.550
87) cis-1,3-Dichloropropene	(1)	5.473	75	221697	22.028
89) 4-Methyl-2-Pentanone	(1)	5.662	43	1593816	107.317
93)$Toluene-d8	(2)	5.759	98	1210519	50.724
94) Toluene	(2)	5.826	92	363083	21.809
95) trans-1,3-Dichloropropene	(2)	6.081	75	190834	20.047
96) Ethyl Methacrylate	(2)	6.221	69	254527	20.204
97) 1,1,2-Trichloroethane	(2)	6.264	97	141909	21.095
98) Tetrachloroethene	(2)	6.416	166	147509	20.542
99) 1,3-Dichloropropane	(2)	6.440	76	243401	21.580
101) 2-Hexanone	(2)	6.574	43	1254897	107.101
102) Dibromochloromethane	(2)	6.684	129	126408	20.414
104) 1,2-Dibromoethane	(2)	6.787	107	150128	20.563
106)*Chlorobenzene-d5	(2)	7.316	117	894322	50.000
107) Chlorobenzene	(2)	7.347	112	395080	21.314
108) 1,1,1,2-Tetrachloroethane	(2)	7.450	131	123270	20.408
109) Ethylbenzene	(2)	7.487	91	702812	21.733
110) m+p-Xylene	(2)	7.608	106	544906	42.720

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

Digitally signed by Stephanie A. Selis
on 10/21/2012 at 03:57.
Target 3.5 esignature user ID: sas00403

Quant Report

Target Revision 3.5

Data File: /chem2/HP09355.i/12oct21a.b/yc21102.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 03:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260W-EEBN
Calibration date and time: 21-OCT-2012 02:47
Date, time and analyst ID of latest file update: 21-Oct-2012 03:33 sas00403

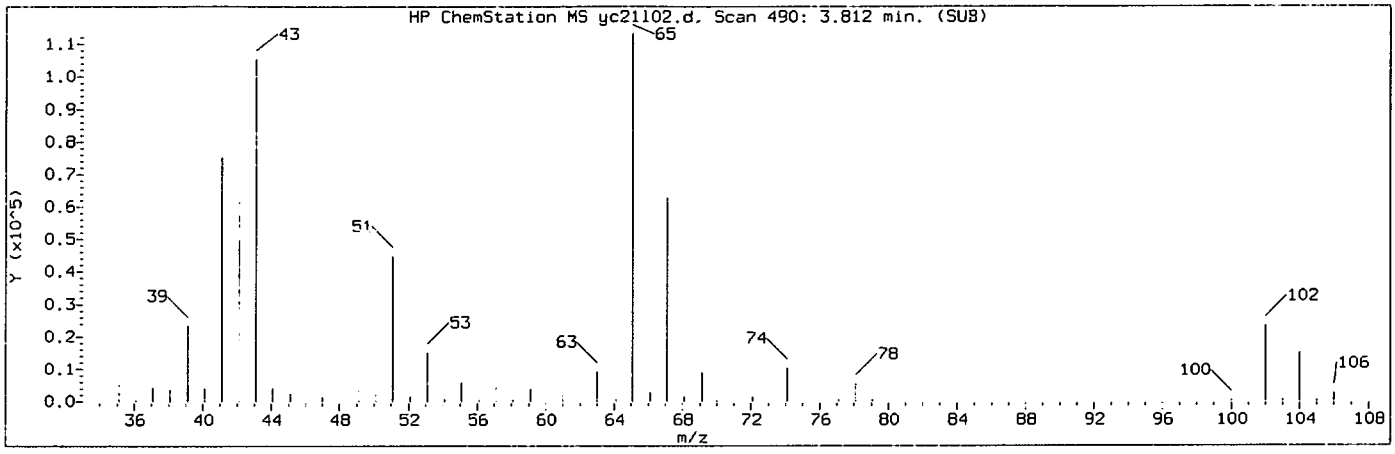
Sample Name: LCSY78 Lab Sample ID: LCSY78

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
113) o-Xylene	(2)	7.979	106	269086	20.888
114) Styrene	(2)	7.992	104	448432	20.847
115) Bromoform	(2)	8.131	173	88721	16.877
112) Xylene (Total)	(2)		106	813992	63.607
116) Isopropylbenzene	(2)	8.320	105	696223	21.539
118) Cyclohexanone	(4)	8.363	55	301398	333.463
119)$4-Bromofluorobenzene	(2)	8.430	95	456157	50.701
121) Bromobenzene	(3)	8.545	156	169474	20.056
122) 1,1,2,2-Tetrachloroethane	(3)	8.576	83	255103	21.252
123) 1,2,3-Trichloropropane	(3)	8.594	110	76436	20.476
124) trans-1,4-Dichloro-2-Butene	(3)	8.618	53	386110	110.158
125) n-Propylbenzene	(3)	8.667	91	831403	22.473
126) 2-Chlorotoluene	(3)	8.716	126	163396	20.794
128) 4-Chlorotoluene	(3)	8.807	126	169856	20.905
127) 1,3,5-Trimethylbenzene	(3)	8.813	105	600621	21.799
130) tert-Butylbenzene	(3)	9.062	134	128474	20.763
131) Pentachloroethane	(3)	9.062	167	94570	18.553
132) 1,2,4-Trimethylbenzene	(3)	9.099	105	607411	21.367
133) sec-Butylbenzene	(3)	9.233	105	743806	21.954
134) 1,3-Dichlorobenzene	(3)	9.293	146	326398	20.462
136)*1,4-Dichlorobenzene-d4	(3)	9.348	152	508588	50.000
135) p-Isopropyltoluene	(3)	9.348	119	654060	21.858
138) 1,4-Dichlorobenzene	(3)	9.366	146	348647	20.478
139) 1,2,3-Trimethylbenzene	(3)	9.415	105	635979	20.810
141) Benzyl Chloride	(3)	9.470	91	378462	16.473
142) 1,3-Diethylbenzene	(3)	9.567	119	380668	20.178
144) 1,2-Dichlorobenzene	(3)	9.628	146	334630	20.751
143) 1,4-Diethylbenzene	(3)	9.628	119	404518	20.871
145) n-Butylbenzene	(3)	9.646	92	324514	21.884
146) 1,2-Diethylbenzene	(3)	9.707	119	331220	20.420
148) 1,2-Dibromo-3-Chloropropane	(3)	10.176	75	60553	19.836
149) 1,3,5-Trichlorobenzene	(3)	10.328	180	244874	20.011
150) 1,2,4-Trichlorobenzene	(3)	10.741	180	227057	19.741
151) Hexachlorobutadiene	(3)	10.863	225	99512	18.655
152) Naphthalene	(3)	10.893	128	838007	18.792
153) 1,2,3-Trichlorobenzene	(3)	11.052	180	214691	19.027
154) 2-Methylnaphthalene	(3)	11.617	142	404667	16.314

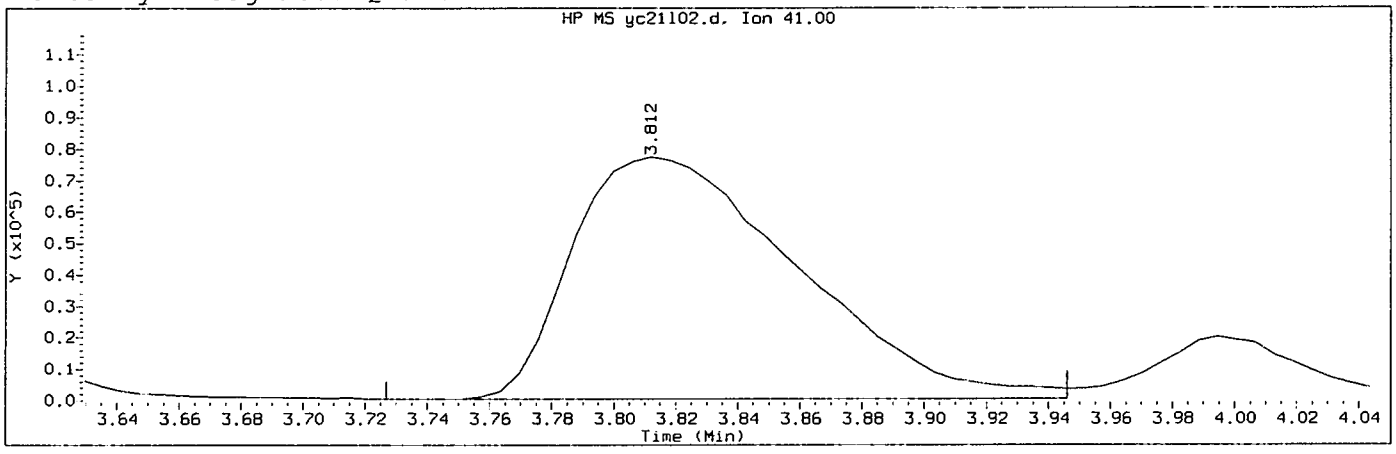
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Stephanie A. Selis
on 10/21/2012 at 03:57.
Target 3.5 esignature user ID: sas00403

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP09355.i/12oct21a.b/yc21102.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 03:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260W-EEBN
Calibration date and time: 21-OCT-2012 02:47
Date, time and analyst ID of latest file update: 21-Oct-2012 03:33 sas00403

Sample Name: LCSY78 Lab Sample ID: LCSY78

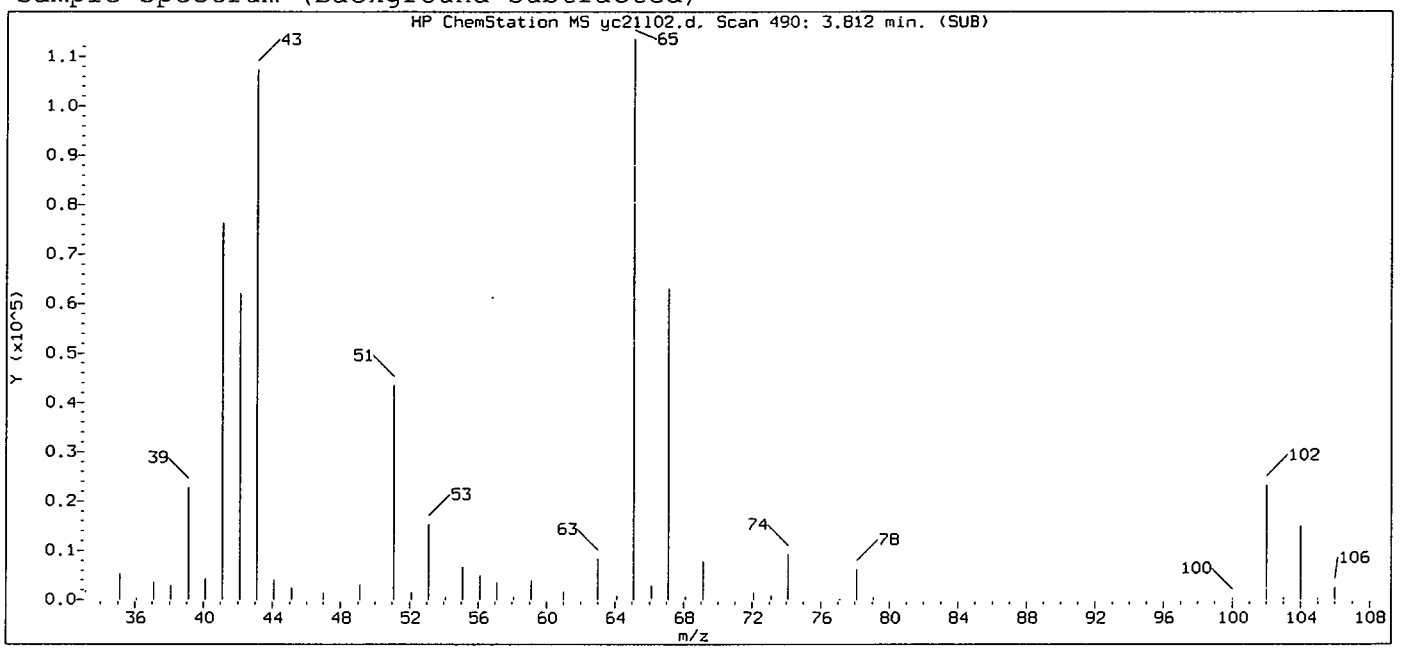
Compound Number	: 59		
Compound Name	: Isobutyl Alcohol		
Scan Number	: 490		
Retention Time (minutes)	: 3.812		
Quant Ion	: 41.00		
Area (flag)	: 387914M		
On-Column Amount (ng)	: 490.1560		
Integration start scan	: 475	Integration stop scan:	511
Y at integration start	: 573	Y at integration end:	573

Reason for manual integration: improper integration

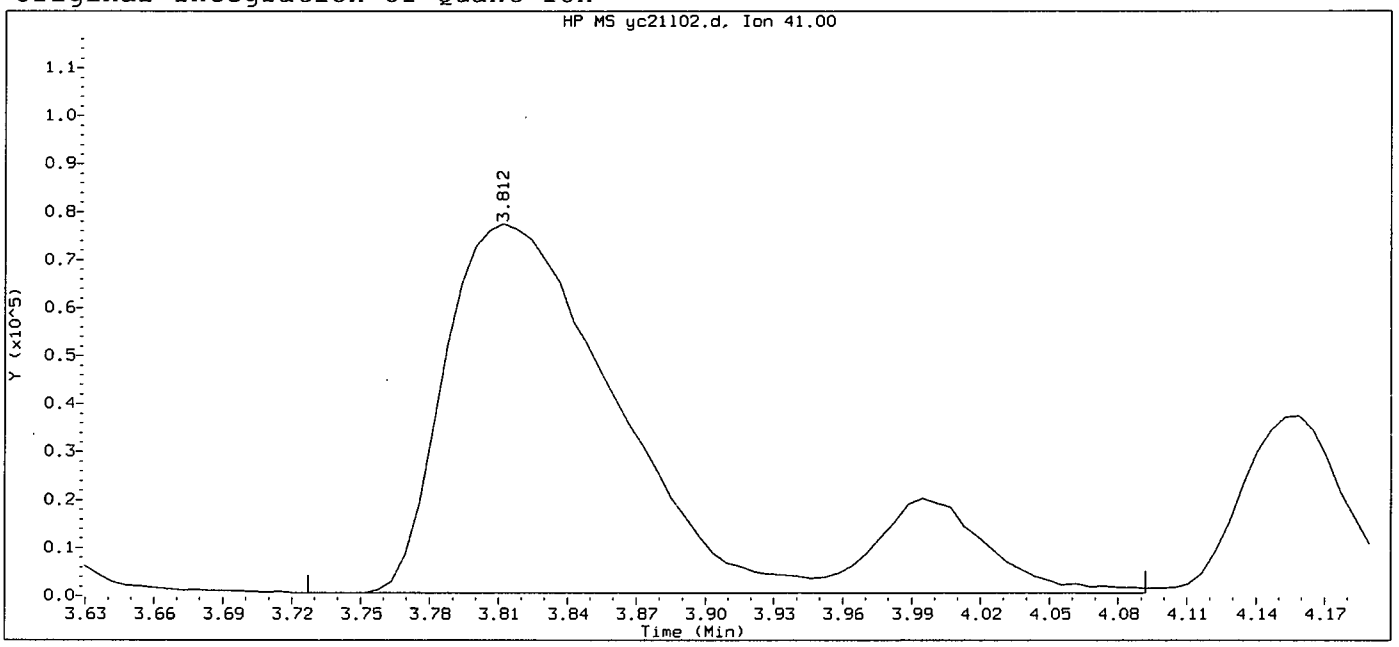
Analyst responsible for change: Digitally signed by Stephanie A. Selis on 10/21/2012 at 03:57. Target 3.5 esignature user ID: sas00403

Secondary review performed and digitally signed by Christine M. Dulaney on 10/24/2012 at 15:38.
Parallax ID: cmd00448

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP09355.i/12oct21a.b/yc21102.d Instrument ID: HP09355.i
Injection date and time: 21-OCT-2012 03:10 Analyst ID: SAS00403

Method used: /chem2/HP09355.i/12oct21a.b/Y8260W.m Sublist used: 8260W-EEBN
Calibration date and time: 21-OCT-2012 02:47
Date, time and analyst ID of latest file update: 21-Oct-2012 03:31 sas00403

Sample Name: LCSY78 Lab Sample ID: LCSY78

Compound Number : 59
Compound Name : Isobutyl Alcohol
Scan Number : 490
Retention Time (minutes): 3.812
Quant Ion : 41.00
Area : 455326
On-column Amount (ng) : 575.3354
Integration start scan : 475 Integration stop scan: 535
Y at integration start : 573 Y at integration end: 573

Digitally signed by Stephanie A. Selis on 10/21/2012 at 03:57.
Target 3.5 esignature user ID: sas00403

APPENDIX C
GROUND WATER MONITORING WELL SAMPLING
DATA USABILITY SUMMARY REPORT

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

February 8, 2013

Mark Zunich
Reliance Environmental, Inc.
130 E. Chestnut Street
Lancaster, PA 17602

RE: **D**ata **U**sability **S**ummary **R**eport for the BK Oceanside Plaza Site
Lancaster SDG No. OSP14

Dear Mr. Zunich:

Review has been completed for the analytical data packages generated by Lancaster Laboratories that pertain to samples collected at the BK Oceanside site. Two aqueous samples and an aqueous field duplicate were processed for Priority Pollutant volatiles and xylenes by USEPA SW846 method EPA8260B. Field and trip blanks were also processed.

The data packages that were submitted contain full deliverables for validation, but this usability report is generated from review of the summary form information, with review of sample raw data, and limited review of associated QC raw data. Full validation has not been performed. However, the reported summary forms have been reviewed for application of validation qualifiers, using guidance from the USEPA Region 2 validation SOPs, the USEPA National Functional Guidelines for Data Review, the specific laboratory methodologies, and professional judgment, as affects the usability of the data. The following items were reviewed:

* Laboratory Narrative Discussion
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Field Duplicate Correlation
* Preparation/Calibration Blanks
* Laboratory Control Samples
* Instrumental Tunes
* Calibration Standards
* Instrument IDLs
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review.

In summary, most sample analyte values/reporting limits are usable as reported. The results for one analyte in the samples are not usable due to lack of stability of that compound in the preserved medium.

A copy of the laboratory case narrative is attached to this text, and should be reviewed in conjunction with this report.

The following text discusses quality issues of concern.

Chain-of-Custody

The preservation code was not entered onto the custody form. The laboratory pH log indicates proper preservation of the aqueous samples.

Although some of the cooler temperature readings in April are elevated (up to 11°C). The associated samples were collected less than 5 hours before laboratory receipt, were iced, and in the process of cooling down. No qualification is indicated.

Volatiles by EPA 8260B

The results for 2-chloroethyl vinyl ether (CEVE) in the aqueous samples, field blank, and trip blank are not usable, as this compound is not stable in the acid-preserved medium.

Holding time requirements were met, and the surrogate and internal standard recoveries are within the required limits. The calibration standards show acceptable responses.

Field, trip, and method blanks show no contamination.

No sample matrix spikes were performed. Historically, accuracy and precision of the matrix were good. The LCS shows compliant recoveries.

The field duplicate evaluation was performed on BKO-MW-4, and shows good correlations.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected. The associated reported quantitation limit is an estimate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

CLIENT and LABORATORY SAMPLE IDs and LABORATORY CASE NARRATIVES

eurofins | Lancaster Laboratories

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

Sample Reference List for SDG Number OSP14 with a Data Package Type of NYSDEC B

12577 - Reliance Environmental, Inc.

Project: Oceanside Plaza

Lab Sample Number	Lab Sample Code	Client Sample Description
6828481	M4---	BKO-MW4 Grab Water Sample
6828482	-5---	BKO-MW5 Grab Water Sample
6828483	FD4--	BKO-DUP Grab Water Sample
6828484	FBOC-	BKO-FB Grab Water Sample
6828485	TBOC-	BKO-TB Water Sample

eurofins | Lancaster Laboratories

Case Narrative/Conformance Summary

CLIENT: Reliance Environmental, Inc.
SDG: OSP14

GC/MS Volatiles

Fraction: Volatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
6828481	BKO-MW4	X		1	
6828482	BKO-MW5	X		1	
6828483	BKO-DUP	X		1	Field Duplicate Sample
6828484	BKO-FB	X		1	Field Blank
6828485	BKO-TB	X		1	Trip Blank

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

(Sample number(s): 6828481-6828485: Analysis: 10903)
2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.

Matrix QC may not be included if site-specific QC were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, laboratory spike data (LCS) are provided.

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Case Narrative/Conformance Summary

CLIENT: Reliance Environmental, Inc.
SDG: OSP14

GC/MS Volatiles

Fraction: Volatiles by GC/MS

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

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

Narrative Reviewed and Approved 10/30/12 (Date) by

SAMPLE RESULTS FORMS

eurofins | Lancaster Laboratories

Analysis Report

Sample Description: BKO-MW4 Grab Water Sample
Oceanside Plaza

LLI Sample # WW 6828481
LLI Group # 1343222
Account # 12577

Project Name: Oceanside Plaza

Collected: 10/18/2012 08:35 by MEZ

Submitted: 10/18/2012 12:15
Reported: 10/24/2012 17:20

Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster PA 17602

M4--- SDG#: OSP14-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	~~< 10~~ R	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1

General Sample Comments

State of New York Certification No. 10670

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Std. Water Master	SW-846 8260B	1	Y122951AA	10/21/2012 09:26	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y122951AA	10/21/2012 09:26	Stephanie A Selis	1

Eurofins Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Sample Description: BKO-MW5 Grab Water Sample
Oceanside Plaza

LLI Sample # WW 6828482
LLI Group # 1343222
Account # 12577

Project Name: Oceanside Plaza

Collected: 10/18/2012 08:00 by MEZ

Submitted: 10/18/2012 12:15
Reported: 10/24/2012 17:20

Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster PA 17602

-5--- SDG#: OSP14-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	~~< 10~~ R	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	11	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	10	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1

General Sample Comments

State of New York Certification No. 10670

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Std. Water Master	SW-846 8260B	1	Y122951AA	10/21/2012 09:46	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y122951AA	10/21/2012 09:46	Stephanie A Selis	1

Sample Description: BKO-DUP Grab Water Sample
Oceanside Plaza

LLI Sample # WW 6828483
LLI Group # 1343222
Account # 12577

Project Name: Oceanside Plaza

Collected: 10/18/2012 08:35 by MEZ

Submitted: 10/18/2012 12:15
Reported: 10/24/2012 17:20

Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster PA 17602

FD4-- SDG#: OSP14-03FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	~~< 10~~ R	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1

General Sample Comments

State of New York Certification No. 10670

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Std. Water Master	SW-846 8260B	1	Y122951AA	10/21/2012 10:07	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y122951AA	10/21/2012 10:07	Stephanie A Selis	1

Eurofins Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

eurofins | Lancaster Laboratories

Analysis Report

Sample Description: BKO-FB Grab Water Sample
Oceanside Plaza

LLI Sample # WW 6828484
LLI Group # 1343222
Account # 12577

Project Name: Oceanside Plaza

Collected: 10/18/2012 07:30 by MEZ

Submitted: 10/18/2012 12:15
Reported: 10/24/2012 17:20

Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster PA 17602

FBOC- SDG#: OSP14-04FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		ug/l	ug/l	
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	~~< 10~~ R	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1

General Sample Comments

State of New York Certification No. 10670

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Std. Water Master	SW-846 8260B	1	Y122951AA	10/21/2012 10:28	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y122951AA	10/21/2012 10:28	Stephanie A Selis	1

Eurofins Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Sample Description: BKO-TB Water Sample
Oceanside Plaza

LLI Sample # WW 6828485
LLI Group # 1343222
Account # 12577

Project Name: Oceanside Plaza

Collected: 10/18/2012

Submitted: 10/18/2012 12:15
Reported: 10/24/2012 17:20

Reliance Environmental, Inc.
130 East Chestnut Street
Lancaster PA 17602

TBOC- SDG#: OSP14-05TB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10903	Acrolein	107-02-8	< 100	100	1
10903	Acrylonitrile	107-13-1	< 20	20	1
10903	Benzene	71-43-2	< 5	5	1
10903	Bromodichloromethane	75-27-4	< 5	5	1
10903	Bromoform	75-25-2	< 5	5	1
10903	Bromomethane	74-83-9	< 5	5	1
10903	Carbon Tetrachloride	56-23-5	< 5	5	1
10903	Chlorobenzene	108-90-7	< 5	5	1
10903	Chloroethane	75-00-3	< 5	5	1
10903	2-Chloroethyl Vinyl Ether	110-75-8	~~< 10~~ R	10	1
	2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.				
10903	Chloroform	67-66-3	< 5	5	1
10903	Chloromethane	74-87-3	< 5	5	1
10903	Dibromochloromethane	124-48-1	< 5	5	1
10903	1,1-Dichloroethane	75-34-3	< 5	5	1
10903	1,2-Dichloroethane	107-06-2	< 5	5	1
10903	1,1-Dichloroethene	75-35-4	< 5	5	1
10903	cis-1,2-Dichloroethene	156-59-2	< 5	5	1
10903	trans-1,2-Dichloroethene	156-60-5	< 5	5	1
10903	1,2-Dichloropropane	78-87-5	< 5	5	1
10903	cis-1,3-Dichloropropene	10061-01-5	< 5	5	1
10903	trans-1,3-Dichloropropene	10061-02-6	< 5	5	1
10903	Ethylbenzene	100-41-4	< 5	5	1
10903	Methylene Chloride	75-09-2	< 5	5	1
10903	1,1,2,2-Tetrachloroethane	79-34-5	< 5	5	1
10903	Tetrachloroethene	127-18-4	< 5	5	1
10903	Toluene	108-88-3	< 5	5	1
10903	1,1,1-Trichloroethane	71-55-6	< 5	5	1
10903	1,1,2-Trichloroethane	79-00-5	< 5	5	1
10903	Trichloroethene	79-01-6	< 5	5	1
10903	Trichlorofluoromethane	75-69-4	< 5	5	1
10903	Vinyl Chloride	75-01-4	< 5	5	1
10903	Xylene (Total)	1330-20-7	< 5	5	1

General Sample Comments

State of New York Certification No. 10670

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	8260 Std. Water Master	SW-846 8260B	1	Y122951AA	10/21/2012 10:49	Stephanie A Selis	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y122951AA	10/21/2012 10:49	Stephanie A Selis	1

APPENDIX D
INDOOR AIR QUALITY/SUB-SLAB SOIL VAPOR SAMPLING
DATA USABILITY SUMMARY REPORT AND LABORATORY ANALYTICAL DATA SHEETS

ENVIRONMENTAL CONSULTING & MANAGEMENT
ROUX ASSOCIATES INC

12 Gill Street, Suite 4700
Woburn, Massachusetts 01801 TEL 781-569-4000 FAX 781-569-4001

February 21, 2013

Mr. Robert Kovacs
Senior Engineer
Roux Associates, Inc.
209 Shafter Street
Islandia, New York 11749-5074

Re: Data Usability Summary Report for Oceanside Site, NY
Accutest Job Number JB24660

Dear Mr. Kovacs:

Data review was performed for the data package (Accutest Job Number JB24660) generated by Accutest Laboratories. This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2B – Guidance for Data Deliverables and Development of Data Usability Summary Reports*, May 2010.

Analytical data for nine (9) summa canister air samples collected by Roux Associates on December 18, 2012 are discussed in this DUSR. USEPA GC/MS method TO-15 was used for the sample analysis of seven site-specific volatile compounds. The data packages provided by the lab contained full deliverables for validation, but this DUSR is generated from review of the QC summary form information, with review of raw data for samples, and limited review of associated raw data for QC samples. Full validation has not been performed. The data review was performed on the sample results in accordance with the guidelines presented in USEPA Region II validation SOP HW-31, and in consideration of the specific requirements of USEPA method TO-15.

The data review included the following items:

- Data deliverable completeness,
- Laboratory case narratives,
- Chain of custody documentation,
- Holding times,
- Method blank results,
- Surrogate recoveries,
- Internal standard recoveries,
- Laboratory control samples,

- Laboratory duplicate results,
- Summa canister cleaning certifications,
- Instrument tunes,
- Initial calibration, initial calibration verification, and continuing calibration results,
- Method compliance, and
- Sample result verification.

Copies of the validated sample results are presented in **Appendix A**. Copies of the chain-of-custodies and lab case narratives are presented in **Appendix B**.

Data Deliverable Completeness

A full deliverable data package (i.e., NYSDEC Category B or equivalent) was provided by the laboratory, which included reporting forms and raw data necessary to validate the reported analytical results. Summa canister cleaning certifications were included in the data package.

Sample Receipt/Holding times

All samples were received by the laboratory intact, properly preserved, and under proper COCs. All samples were analyzed within the required holding times.

Volatile Analyses by USEPA Method TO-15

Method blank results, surrogate recoveries, internal standard recoveries, laboratory control samples results, and laboratory duplicate results were within laboratory control limits; results of instrument tunes, initial calibration, initial calibration verification, and continuing calibration were in compliance with the method requirements.

Summary

Sample analyses were in compliance with the method requirements. All sample data are usable as reported.

Please do not hesitate to contact me if you have any comments or questions regarding this report.

Sincerely
ROUX ASSOCIATES, INC.

Yixian Zhang, PhD
Senior Scientist

Definitions of Validation Data Qualifiers

Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

APPENDICES

Appendix A

Validated Sample Results

Accutest LabLink@713348 11:02 14-Feb-2013

Report of Analysis

Client Sample ID:	VS-(DCF) FRONT OF CLEANERS		
Lab Sample ID:	JB24660-1	Date Sampled:	12/18/12
Matrix:	AIR - Soil Vapor Comp. Summa ID: A815	Date Received:	12/21/12
Method:	TO-15	Percent Solids:	n/a
Project:	Basser Oceanside SVE Pilot Test, 3131-3221 Long Beach Road, Oceanside, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W37264.D	1	12/28/12	YMH	n/a	n/a	V2W1560
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.090	ppbv		ND	3.2	0.36	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.11	ppbv		ND	3.2	0.44	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.10	ppbv		ND	3.2	0.40	ug/m3
540-59-0	96	1,2-Dichloroethene (total)	ND	0.80	0.10	ppbv		ND	3.1	0.39	ug/m3
127-18-4	165.8	Tetrachloroethylene	1.6	0.16	0.097	ppbv		11	1.1	0.66	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.16	0.14	ppbv		ND	0.86	0.75	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.087	ppbv		ND	2.0	0.22	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	97%		65-128%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@713348 11:02 14-Feb-2013

Report of Analysis

Client Sample ID:	VS-MRE MIDDLE OF CLEANERS		
Lab Sample ID:	JB24660-2	Date Sampled:	12/18/12
Matrix:	AIR - Soil Vapor Comp. Summa ID: A255	Date Received:	12/21/12
Method:	TO-15	Percent Solids:	n/a
Project:	Basser Oceanside SVE Pilot Test, 3131-3221 Long Beach Road, Oceanside, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W37266.D	1	12/28/12	YMH	n/a	n/a	V2W1560
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.090	ppbv		ND	3.2	0.36	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.11	ppbv		ND	3.2	0.44	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.10	ppbv		ND	3.2	0.40	ug/m3
540-59-0	96	1,2-Dichloroethene (total)	ND	0.80	0.10	ppbv		ND	3.1	0.39	ug/m3
127-18-4	165.8	Tetrachloroethylene	30.3	0.16	0.097	ppbv		205	1.1	0.66	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.16	0.14	ppbv		ND	0.86	0.75	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.087	ppbv		ND	2.0	0.22	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		65-128%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@713348 11:02 14-Feb-2013

Report of Analysis

Client Sample ID:	VS-DCR BACK OF CLEANERS		
Lab Sample ID:	JB24660-3	Date Sampled:	12/18/12
Matrix:	AIR - Soil Vapor Comp. Summa ID: A368	Date Received:	12/21/12
Method:	TO-15	Percent Solids:	n/a
Project:	Basser Oceanside SVE Pilot Test, 3131-3221 Long Beach Road, Oceanside, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W37267.D	1	12/28/12	YMH	n/a	n/a	V2W1560
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.090	ppbv		ND	3.2	0.36	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.11	ppbv		ND	3.2	0.44	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.10	ppbv		ND	3.2	0.40	ug/m3
540-59-0	96	1,2-Dichloroethene (total)	ND	0.80	0.10	ppbv		ND	3.1	0.39	ug/m3
127-18-4	165.8	Tetrachloroethylene	24.2	0.16	0.097	ppbv		164	1.1	0.66	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.16	0.14	ppbv		ND	0.86	0.75	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.087	ppbv		ND	2.0	0.22	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%		65-128%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@713348 11:02 14-Feb-2013

Report of Analysis

Client Sample ID:	VS-BOOK YOGURT SHOP		
Lab Sample ID:	JB24660-4	Date Sampled:	12/18/12
Matrix:	AIR - Soil Vapor Comp. Summa ID: A1029	Date Received:	12/21/12
Method:	TO-15	Percent Solids:	n/a
Project:	Basser Oceanside SVE Pilot Test, 3131-3221 Long Beach Road, Oceanside, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W37268.D	1	12/28/12	YMH	n/a	n/a	V2W1560
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.090	ppbv		ND	3.2	0.36	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.11	ppbv		ND	3.2	0.44	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.10	ppbv		ND	3.2	0.40	ug/m3
540-59-0	96	1,2-Dichloroethene (total)	ND	0.80	0.10	ppbv		ND	3.1	0.39	ug/m3
127-18-4	165.8	Tetrachloroethylene	19.3	0.16	0.097	ppbv		131	1.1	0.66	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.16	0.14	ppbv		ND	0.86	0.75	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.087	ppbv		ND	2.0	0.22	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	98%		65-128%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@713348 11:02 14-Feb-2013

Report of Analysis

Client Sample ID:	BOOK-IAQ YOGURT SHOP IAQ		
Lab Sample ID:	JB24660-5	Date Sampled:	12/18/12
Matrix:	AIR - Indoor Air Comp. Summa ID: A999	Date Received:	12/21/12
Method:	TO-15	Percent Solids:	n/a
Project:	Basser Oceanside SVE Pilot Test, 3131-3221 Long Beach Road, Oceanside, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W37269.D	1	12/28/12	YMH	n/a	n/a	V2W1560
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.023	ppbv		ND	0.79	0.091	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.027	ppbv		ND	0.79	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.025	ppbv		ND	0.79	0.099	ug/m3
540-59-0	96	1,2-Dichloroethene (total)	ND	0.20	0.025	ppbv		ND	0.79	0.098	ug/m3
127-18-4	165.8	Tetrachloroethylene	1.2	0.040	0.024	ppbv		8.1	0.27	0.16	ug/m3
79-01-6	131.4	Trichloroethylene	0.061	0.040	0.036	ppbv		0.33	0.21	0.19	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	102%		65-128%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@713348 11:02 14-Feb-2013

Report of Analysis

Client Sample ID:	VS-VAC WINE STORE		
Lab Sample ID:	JB24660-6	Date Sampled:	12/18/12
Matrix:	AIR - Soil Vapor Comp. Summa ID: A286,A544	Date Received:	12/21/12
Method:	TO-15	Percent Solids:	n/a
Project:	Basser Oceanside SVE Pilot Test, 3131-3221 Long Beach Road, Oceanside, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W37270.D	1	12/28/12	YMH	n/a	n/a	V2W1560
Run #2	2W37286.D	53.2	12/31/12	YMH	n/a	n/a	V2W1561

	Initial Volume
Run #1	25.0 ml
Run #2	150 ml

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
75-35-4	96.94	1,1-Dichloroethylene	ND	3.2	0.36	ppbv		ND	13	1.4	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	3.2	0.44	ppbv		ND	13	1.7	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	3.2	0.40	ppbv		ND	13	1.6	ug/m3
540-59-0	96	1,2-Dichloroethene (total)	ND	3.2	0.40	ppbv		ND	13	1.6	ug/m3
127-18-4	165.8	Tetrachloroethylene	1450 [a]	5.7	3.4	ppbv		9830 [a]	39	23	ug/m3
79-01-6	131.4	Trichloroethylene	6.7	0.64	0.58	ppbv		36	3.4	3.1	ug/m3
75-01-4	62.5	Vinyl chloride	ND	3.2	0.35	ppbv		ND	8.2	0.89	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	89%	93%	65-128%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@713348 11:02 14-Feb-2013

Report of Analysis

Client Sample ID:	WINE-IAQ WINE STORE IAQ		
Lab Sample ID:	JB24660-7	Date Sampled:	12/18/12
Matrix:	AIR - Indoor Air Comp. Summa ID: A900	Date Received:	12/21/12
Method:	TO-15	Percent Solids:	n/a
Project:	Basser Oceanside SVE Pilot Test, 3131-3221 Long Beach Road, Oceanside, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W37271.D	1	12/29/12	YMH	n/a	n/a	V2W1560
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.023	ppbv		ND	0.79	0.091	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.027	ppbv		ND	0.79	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.025	ppbv		ND	0.79	0.099	ug/m3
540-59-0	96	1,2-Dichloroethene (total)	ND	0.20	0.025	ppbv		ND	0.79	0.098	ug/m3
127-18-4	165.8	Tetrachloroethylene	1.9	0.040	0.024	ppbv		13	0.27	0.16	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.036	ppbv		ND	0.21	0.19	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	104%		65-128%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@713348 11:02 14-Feb-2013

Report of Analysis

Client Sample ID:	FENCE AMBIENT		
Lab Sample ID:	JB24660-8	Date Sampled:	12/18/12
Matrix:	AIR - Ambient Air Comp. Summa ID: A306	Date Received:	12/21/12
Method:	TO-15	Percent Solids:	n/a
Project:	Basser Oceanside SVE Pilot Test, 3131-3221 Long Beach Road, Oceanside, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W37272.D	1	12/29/12	YMH	n/a	n/a	V2W1560
Run #2							

	Initial Volume
Run #1	400 ml
Run #2	

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
75-35-4	96.94	1,1-Dichloroethylene	ND	0.20	0.023	ppbv		ND	0.79	0.091	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.20	0.027	ppbv		ND	0.79	0.11	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.20	0.025	ppbv		ND	0.79	0.099	ug/m3
540-59-0	96	1,2-Dichloroethene (total)	ND	0.20	0.025	ppbv		ND	0.79	0.098	ug/m3
127-18-4	165.8	Tetrachloroethylene	0.18	0.040	0.024	ppbv		1.2	0.27	0.16	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.040	0.036	ppbv		ND	0.21	0.19	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.20	0.022	ppbv		ND	0.51	0.056	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	99%		65-128%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@713348 11:02 14-Feb-2013

Report of Analysis

Client Sample ID:	VS-FENCE SOIL VAPOR		
Lab Sample ID:	JB24660-9	Date Sampled:	12/18/12
Matrix:	AIR - Soil Vapor Comp. Summa ID: A857	Date Received:	12/21/12
Method:	TO-15	Percent Solids:	n/a
Project:	Basser Oceanside SVE Pilot Test, 3131-3221 Long Beach Road, Oceanside, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2W37273.D	1	12/29/12	YMH	n/a	n/a	V2W1560
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

VOA Special List

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
75-35-4	96.94	1,1-Dichloroethylene	ND	0.80	0.090	ppbv		ND	3.2	0.36	ug/m3
156-60-5	96.94	trans-1,2-Dichloroethylene	ND	0.80	0.11	ppbv		ND	3.2	0.44	ug/m3
156-59-2	96.94	cis-1,2-Dichloroethylene	ND	0.80	0.10	ppbv		ND	3.2	0.40	ug/m3
540-59-0	96	1,2-Dichloroethene (total)	ND	0.80	0.10	ppbv		ND	3.1	0.39	ug/m3
127-18-4	165.8	Tetrachloroethylene	ND	0.16	0.097	ppbv		ND	1.1	0.66	ug/m3
79-01-6	131.4	Trichloroethylene	ND	0.16	0.14	ppbv		ND	0.86	0.75	ug/m3
75-01-4	62.5	Vinyl chloride	ND	0.80	0.087	ppbv		ND	2.0	0.22	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	94%		65-128%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Appendix B

Laboratory Case Narratives and Chain of Custodies (COCs)

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Roux Associates	**Job No**	JB24660
Site:	Basser Oceanside SVE Pilot Test, 3131-3221 Long Beach Road, Oc	**Report Date**	2/14/2013 9:50:38 AM

On 12/21/2012, 9 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories . Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB24660 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. ** Deliverables upgraded per MV, 2/1.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method TO-15

Matrix: AIR **Batch ID:** V2W1560

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB24660-1DUP were used as the QC samples indicated.

Matrix: AIR **Batch ID:** V2W1561

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JB25102-16DUP were used as the QC samples indicated.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Air

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Air Sampling Field Data Sheet

FED-EX Tracking #:

Lab Quote #:

Bottle Order Control #: MV-12/14/2012-13

PAGE 1 OF 1

Lab Job #: JB24660

Client / Reporting Information

Company Name: ROUX ASSOCIATES

Address: 209 SHAFTER ST

City: ISLANDIA State: NY Zip: 11749

Project Contact: ROD KWACS E-mail: RKWACS@ROUXINC.COM

Phone #: (631-232-2600) Fax #:

Sampler(s) Name(s): MARIA DEAKOS

Project Information

Project Name: OCEANSIDE PLAZA

Street: LONG BEACH ROAD

City: OCEANSIDE State: NY

Project #: 1502.0001.4000

Client Purchase Order #:

Weather Parameters

Temperature (Fahrenheit) Start: 50°F Maximum: Stop: 48°F Minimum:

Atmospheric Pressure (Inches of Hg) Start: 29.4 Maximum: Stop: Minimum:

Other weather comment:

Requested Analysis

Standard TO-15 Reporting List (See Comments)

Lab Sample #	Field ID / Point of Collection	Air Type: Indoor(I) Soil Vap(SV) Ambient(A)	Sampling Equipment Info: Canister Serial #	Canister Size 6L or 1L	Flow Controller Serial #	Start Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Stop Sampling Information: Date	Time (24hr clock)	Canister Pressure ("Hg)	Interior Temp (F)	Sampler Init.	Standard TO-15 Reporting List	Requested Analysis
-1	VS(SDF) Front of Cleaners	SV	7697	6L	16027	12-18-12		-30			12-18-12		-7			X	A8155
-2	VS-MRE Middle of Cleaners	SV	4849	1	4916			-30					-6			X	A2555
-3	VS-DCE Back of Cleaners	SV	5710	1	4816			-31					-6			X	A3668
-4	VS-BOX Yogurt Shop	SV	10029	1	4811			-31					-6			X	A10029
-5	BOX-IAQ Yogurt Shop IAQ	I	7041	1	4855			-32					-8			X	A999
-6	VS-VAC WINESTORE	SV	4912	1	4885			-30					-6			X	A286
-7	WINE-IAQ Wine Store IAQ	I	8014	1	4887			-29					-4			X	A900
-8	FENCE Ambient	A	5193	1	20059			-31					-7			X	A3696
-9	VS-FENCE Soil Vapor Fence	SV	7368	1	1478			-31					-6			X	A857

Turnaround Time (Business days)

Standard - 15 Days

10 Day

5 Day

3 Day

2 Day

1 Day

Other

Approved By:

Date:

Data Deliverable Information

All NJDEP TO-15 is mandatory Full T1

Comm A

Comm B

Reduced T2

Full T1

Other: NJSEC ASP Category B

Comments / Remarks

Detection Limit: 1 µg/m3 or less

Analyze for: 1,1-Dichloroethene, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, 1,2-Dichloroethene (Total), Tetrachloroethene, Trichloroethene, Vinyl Chloride

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Lab/Client	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Ron Mancuso	12/15/12 1700	1	2		2
3	12-21-12 1225	3 Chris Lau	4 Chris Lau	12/21/12 1740	4
5		5	Custody Seal #		

5.1

5