Site Investigation Technical Memorandum
Volume I

Former Standard Oil Bulk Plant
#5482
Wedron, LaSalle County, Illinois

Stantec

August 6, 2014

US EPA RECORDS CENTER REGION 5
476568

bp

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August 6, 2014

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Mr. Steve Faryan
On-Scene Coordinator
U.S. Environmental Protection Agency Region 5 (SC-5J)
77 W. Jackson Blvd.
Chicago, IL 60604

RE: Site Investigation Technical Memorandum
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois 60557

Dear Mr. Faryan,

BP Products North America Inc. (BP) is submitting a revised Site Investigation Technical Memorandum (Memo) for the Former Standard Oil Bulk Plant #5482 (Site). The revisions were requested by the United States Environmental Protection Agency (EPA) in correspondence dated July 22, 2014 (**Attachment A**). The Memo has been prepared in support of an Administrative Order on Consent (AOC) as entered into voluntarily by the EPA and BP. The AOC provides for the preparation and performance of monitoring, testing, analysis and reporting on property formerly leased by BP's corporate predecessor at the Wedron Ground Water Contamination Site located in Wedron, LaSalle County, Illinois (the Wedron Site). The Memo provides a summary of the recently completed field investigation, which consisted of collecting soil samples from nine soil borings. Soil sampling activities were performed to evaluate subsurface conditions resulting from historical operations conducted at the Site. Site background and investigation activities are summarized below.

Background

The Site is located on a railroad right-of-way on the east side of Wedron, Illinois along Route 11 (**Figure 1**). BP's corporate predecessor, Standard Oil Company (Indiana) leased the Site property from the railroad from approximately 1921 to December 1971. The Site property was used for petroleum bulk plant operations. Site plans attached to leases dating from 1926 to 1942 indicate the presence of a warehouse and two above ground petroleum storage tanks. Additionally, Standard Oil Company leased a limited area between the Site property and railroad to accommodate above ground, two-inch diameter unloading pipes and an unloading rig. Historical correspondence indicates that by December 1971, the warehouse (garage), oil storage tanks and unloading pipes were removed from the property.

Previous investigations adjacent to or near the Site included the removal of a 560-gallon underground storage tank (UST) in July 2012 by Illinois Railway, LLC (Illinois Railway). The UST was uncovered on July 18, 2012 during construction of a new siding track (near the eastern edge of the Site). During the removal of the UST, approximately 80 tons of impacted soils were removed and transported from the Site for disposal. A total of twelve soil samples were collected from the floor and sidewalls of the excavated areas. The samples were submitted for laboratory analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX) and total lead. During the UST removal, a representative of Illinois Railway contacted the Illinois Emergency Management Agency (IEMA) to

report a release and incident number 20120767 was subsequently assigned to the Site. A 45-Day Report/Corrective Action Completion Report which provided a summary of the removal activities and data collection was submitted to the Illinois Environmental Protection Agency (IEPA) on August 7, 2012. The report requested a No Further Remediation (NFR) letter for the incident. The IEPA approved the request and granted Illinois Railway a NFR for the release on August 20, 2012. Ownership of the UST is unknown.

On August 23, 2012, six soil borings were advanced in the area of the former UST as part of a voluntary site assessment by Illinois Railway. Samples were collected and submitted for analysis of BTEX and total lead. No reported concentrations were greater than the Tiered Approach to Corrective Action Objectives (TACO) Tier 1 industrial/commercial soil remediation objectives. The data were summarized in a report prepared on behalf of Illinois Railway, titled *Voluntary Environmental Site Assessment, Illinois Railway Easements*, dated October 2012.

On May 16, 2013, one groundwater monitoring well (MW-5) was installed by GZA Environmental, Inc. for Wedron Silica near the former bulk plant as part of a larger investigation completed in association with the EPA's Wedron Ground Water Site Investigation. One soil sample was collected during installation of the monitoring well and analyzed for volatile organic compounds (VOCs). Benzene was detected at a concentration greater than TACO Tier 1 standards for the soil component of the groundwater ingestion exposure route for Class I groundwater. Based on information obtained from the MW-5 boring log, groundwater was not encountered above bedrock, and as a result, a 15 foot well screen was set into the upper portion of bedrock. Available data indicated no VOCs were present in groundwater at concentrations greater than method detection limits or the applicable TACO Tier 1 remediation objectives for samples collected from MW-5 on May 30, 2013.

The AOC as entered into voluntarily by the EPA and BP on September 30, 2013, included a Work Plan to complete investigation activities at the Site. A subsequent Field Sampling Plan (FSP) dated December 16, 2013 was also completed to summarize initial survey activities and propose modification of the soil sampling locations due to the limited accessibility of the Site. Field investigation activities included a geophysical survey, land survey and the advancement of 9 soil borings on the Site property. Investigation activities have been conducted in accordance with the EPA approved Work Plan and FSP. Details of the activities are presented below.

Pre-Field Investigation Activities

Based on the historical information provided above, a Work Plan was prepared in September 2013 to further evaluate the subsurface conditions resulting from historical operations at the Site. As described in the Work Plan, a Field Sampling Plan (FSP) was completed in December 2013 to identify soil sample locations. In addition, Stantec Consulting Services Inc. (Stantec) completed the following activities within the FSP per the requirements of the AOC:

- Geophysical survey of accessible portions of the Site. Ground penetrating radar (GPR) scanning of the flat portions of the Site and adjacent right-of-way did not reveal subsurface anomalies that were consistent with buried metallic objects such as USTs. In addition, electromagnetic interference (EMI) conducted across the entire Site and adjacent right-of-way revealed anomalous readings directly adjacent to the railroad tracks where rail cars were located and at a location along the right shoulder of Route 11 believed to be a groundwater monitoring well (MW-5). The EMI survey did not identify subsurface anomalies that were consistent with buried metallic objects such as underground storage tanks or piping;
- Property boundary survey. The property boundaries of the land originally leased by the

Standard Oil Company, as described on the survey drawing completed on October 2, 1935, were staked by Atwell on October 29, 2013;

- Public utility location using the Illinois Joint Utility Locating Information for Excavators (JULIE) utility locating service. Public utilities were notified using the JULIE utility locating services on October 29, 2013. JULIE did not identify subsurface utilities during locating activities;
- Historical document research. The following historical documents were used to identify Site features and historical bulk plant infrastructure: 1) Standard Oil Company leased land survey from 1935; 2) Sanborn Fire insurance maps from 1901-1951; 3) aerial photos from 1939 and 1951; and 4) correspondence between Standard Oil Company and Burlington Northern from October 1970 and January 1972;
- Health and Safety Plan (HASP). Prior to initiating Site activities, a HASP, consistent with 29 CFR 1910, was prepared for use at the Site outlining field conditions, travel directions to the nearest hospital, and Stantec safety protocols; and
- Quality Assurance Project Plan (QAPP). To support the proposed laboratory analysis for soil sampling, a QAPP was prepared to present the organization, objectives, functional activity, and quality assurance and quality control (QA/QC) objectives established for the Site.

Soil Boring Advancement

Nine soil borings (SB-1 through SB-9) were advanced at the Site in locations pre-approved by EPA. The goal was to achieve vertical delineation of impacted soils above the water table, if they exist, at each soil boring location. Soil boring installation was completed on January 22 and 23, and February 25 and 26, 2014. Prior to soil boring advancement, each location was reviewed for accessibility. Site utility locating was performed by JULIE and GPR/EMI in October 2013. No subsurface utilities were identified in the soil boring area. Once utilities were cleared, direct push technology was used to advance soil borings from the ground surface to refusal/bedrock. **Figure 2** illustrates soil boring locations.

Beginning at the ground surface, each soil boring was logged and classified by a Stantec field technician following the Unified Soil Classification System (USCS). Soil samples were logged continuously for visual classification, field screening headspace analysis using a photoionization detector (PID), and potential laboratory analysis. Soils were sampled continuously from the borings using acetate sleeves. Soil boring logs are included as **Attachment B**.

To complete field screening, a portion of each sample interval was placed in a quart-sized polyethylene freezer bag, sealed, allowed to equilibrate to approximate room temperature (i.e. ambient air temperature) and then analyzed using an UltraRae 3000 PID. Upon headspace development, the PID sampling probe was introduced into a small opening in the polyethylene bag and a headspace reading obtained. PID responses for each sample interval were recorded on field boring log sheets by Stantec field personnel. Soil samples were collected based on the results of PID readings and field observations.

The PID screening indicated that 0 parts per million (ppm) was observed in the majority of the screening intervals within soil borings SB-1 through SB-9. PID readings above 0 ppm ranged from 0.10 ppm at SB-5 (8 to 10 feet below ground surface (bgs)) to 2.25 ppm at SB-2 (2 to 3 feet bgs). Three soil boring locations (SB-2, SB-4 and SB-5) indicated PID readings above 0 ppm. The highest PID reading observed at SB-2 was 2.25 ppm at 2 to 3 feet bgs; the highest reading at SB-4 was 0.70 ppm at 19 to 20 feet bgs; and the highest reading at SB-5 was 0.45 ppm at 10 to 12 feet bgs. In accordance with the Work Plan and FSP, a sample was collected for laboratory analysis at each of these locations. Details of the sampling are provided below.

Two soil samples were collected from each soil boring location for laboratory analysis; one sample from the interval with the highest PID field reading within the 0 to 3 foot bgs interval and

one sample from within the interval with the highest PID reading above the top of the refusal/bedrock since no groundwater was encountered in soils above the bedrock. When no elevated PID readings were detected in a soil boring, one sample was collected from an interval within 0 to 3 feet bgs in undisturbed soil in addition to a sample collected above the top of the refusal/bedrock.

In some instances samples were collected at a deeper depth than the 0 to 3 foot bgs interval as described below.

- SB-3 (3 to 5 feet bgs): this interval was selected for analysis due to frozen fill material consisting of silt, gravel and cinders present from ground surface to approximately 2 to 2.5 feet bgs.
- SB-4 (2 to 3.5 feet bgs): this interval was selected for analysis to collect sufficient sample volume since frozen fill material was present above 2 feet bgs.
- SB-9 (3 to 4 feet bgs): this interval was selected due to the poor sample recovery in the sample sleeve (2 feet in the 5 foot sleeve). No sample was obtained from 0 to 2 feet bgs at this location.

In some instances samples were collected at a shallower depth than at the top of the refusal/bedrock interval. The deeper samples from SB-1 (20 to 21 feet bgs), SB-3 (25 to 27 feet bgs) and SB-8 (14 to 15 bgs) were selected for analysis since they were representative of the undisturbed silty clay soils above refusal/bedrock. The deeper samples were collected within 1 to 3 feet above refusal/bedrock and no elevated PID readings were observed above or below the selected sample depths.

As described in the QAPP, quality control samples were collected in the field and consisted of two field duplicates, two trip blanks, and two matrix spike/matrix spike duplicates (MS/MSDs).

Soil samples retained for laboratory analysis were placed in the appropriate containers provided by the laboratory, logged, labeled, placed in iced coolers and submitted under chain-of-custody (COC) documentation to Pace Analytical Services, Inc (Pace) for analysis of VOCs by EPA Method 8260B, total petroleum hydrocarbons (TPH) as gasoline (GRO) by EPA Method 8015, TPH as diesel (DRO) by EPA Method 8015, semi-volatile organic compounds (SVOCs) by EPA Method 8270C, total lead by EPA Method 6010 and pH by EPA Method 9045. Field preservation was required for analysis of VOCs and TPH/GRO. VOC samples were placed into separate pre-preserved 40 milliliter (mL) vials with methanol and sodium bisulfate within Terra Core kits. TPH/GRO samples were placed separately into pre-preserved 40 mL vials with methanol within Terra Core kits. Sample collection and sample analysis procedures were completed in compliance with the approved QAPP.

At the completion of sample collection, each borehole was abandoned using a hydrated bentonite grout mix and the surface restored to match the surrounding conditions.

Soil Analytical Results

Data Validation

The Summary of Data Quality Control for analytical results from samples collected at the site and associated Data Validation Checklists are included as **Attachment C**.

Tier 1 Evaluation

Soil analytical results were compared to the IEPA TACO Tier 1 soil ingestion, soil inhalation, and Class I soil component of groundwater ingestion remediation objectives. The results indicated that

constituent concentrations were below the applicable Tier 1 remediation objectives or were reported below the laboratory detection limit for VOCs, SVOCs and total lead.

TPH as GRO and TPH as DRO were detected in soil samples at concentrations below the TACO default attenuation capacities for soils.

Table 1 through **Table 5** provide a summary of soil analytical results. Soil laboratory analytical reports for the January and February 2014 investigation are included as **Attachment D**.

In summary, no compounds in soil were detected above the Tier 1 residential or industrial/commercial soil ingestion, or soil component of groundwater ingestion exposure route remediation objectives. As such, the pathway for leaching of compounds from soil to groundwater at levels that could result in groundwater concentrations exceeding Tier 1 remediation objectives is not considered complete under the current and likely future use of the Site. Detected analytes in soil samples are not considered a risk to human receptors. Therefore, investigation of potential groundwater impacts is not considered warranted.

Investigation-Derived Waste

Soil cuttings and water were placed into separate 55-gallon drums for temporary storage in a designated location near the Site. Heritage Environmental transported the soil drums to their facility in Lemont, Illinois to await future profiling for transport to a pre-approved disposal facility. Bills of lading are included as **Attachment E**. Manifests will be sent to the EPA upon receipt.

Conclusions

Soil boring advancement and sampling were completed at the Site in January and February 2014 to assess the locations of former structures associated with former bulk plant operations. A total of nine soil borings were advanced to depths ranging from 14 to 30 feet bgs under the direction of Stantec field personnel and EPA oversight.

Based on the laboratory analytical results, no concentrations of VOC, SVOC, TPH as GRO, TPH as DRO, or total lead constituents were reported above the applicable IEPA TACO criteria. Additionally, historical document review and GPR/EMI survey data did not indicate the presence of subsurface anomalies that were consistent with buried USTs. As a result, it is recommended that no further investigation is warranted at the Site.

Should you have any questions or require additional information regarding this Memo, please do not hesitate to contact me at (630) 420-5149.

Sincerely,

Mary Wojciechowski
Operations Project Manager

Attachments:
Figure 1 - Site Location Map
Figure 2 - Soil Boring Location Map
Table 1 – Soil VOC Analytical Results
Table 2 – Soil SVOC Analytical Results
Table 3 – Soil PNA Analytical Results
Table 4 – Soil Metal Analytical Results
Table 5 – Soil TPH Analytical Results
Table 6 – Analytical Endnotes
Attachment A – EPA Correspondence dated July 22, 2014
Attachment B – Soil Boring Logs
Attachment C – Summary of Data Quality Control and Data Validation Checklists
Attachment D - Soil Laboratory Analytical Reports
Attachment E - Bills of Lading

Cc: Douglas Reinhart, BP Legal
Jacqueline Clark, EPA
Thomas Kenney, EPA
Stantec Consulting Services Inc.

Figures

Figures

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APPROXIMATE SCALE (FEET)

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Stantec

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FOR:
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SITE LOCATION MAP
FORMER BULK PLANT
WEDRON, ILLINOIS

FIGURE: **1**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
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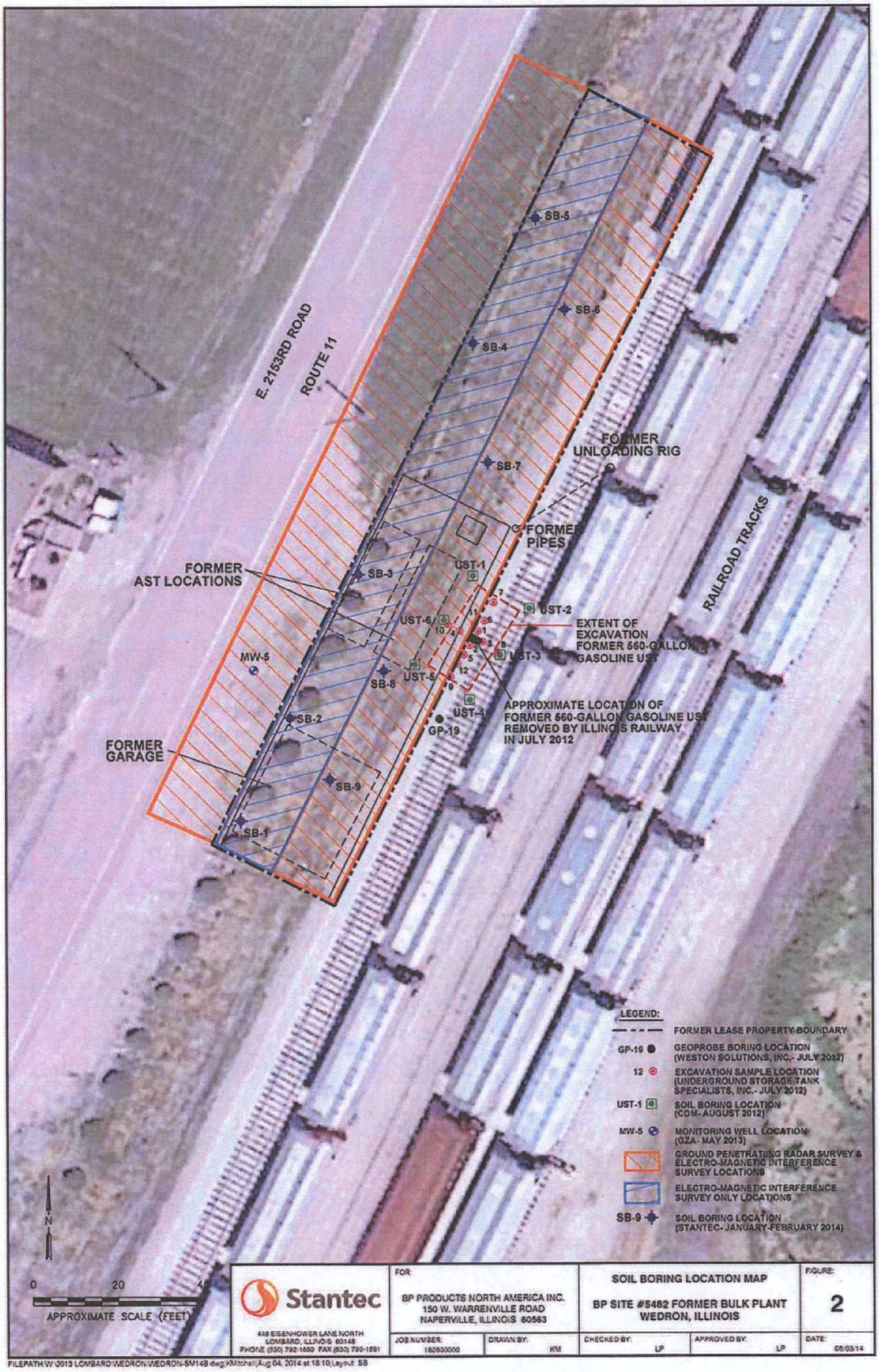

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SOIL BORING LOCATION MAP

BP SITE #5482 FORMER BULK PLANT
WEDRON, ILLINOIS

FIGURE: **2**

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182630000	KM	LP	LP	08/03/14

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Tables

Table 1
Soil VOC Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Component of Groundwater	SB-1 (2-3')	SB-1 (20-21')	SB-2 (2-3')	SB-2 (22-23')	SB-3 (3-5')	SB-3 (25-27')	SB-4 (2-3.5')	SB-4 (19-20')	SB-5 (2-3')	SB-5 (10-12')
Analyte	**IG**	**IH**	**IG**	**IH**	**CW IG**	**CW IH**	**SC CL1**	**1/22/2014**	**1/22/2014**	**1/22/2014**	**1/22/2014**	**1/22/2014**	**1/22/2014**	**1/23/2014**	**1/23/2014**	**1/23/2014**	**1/23/2014**
1,1,1-Trichloroethane	NL	1,200	NL	1,200	NL	1,200	2	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
1,1,2,2-Tetrachloroethane	3.2	0.62	27	1.2	620	1.7	0.0035	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
1,1,2-Trichloroethane	310	1,800	8,200	1,800	8,200	1,800	0.02	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
1,1-Dichloroethane	7,800	1,300	200,000	1,700	200,000	130	23	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
1,1-Dichloroethene	3,900	290	100,000	470	10,000	3	0.06	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
1,2-Dichloroethane	7	0.4	63	0.7	1,400	0.99	0.02	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
1,2-Dichloropropane	9	15	84	23	1,800	0.5	0.03	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
1, 3-Dichloropropene, Total	6.4	1.1	57	2.1	1,200	0.39	0.004	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
2-Butanone	47,000	25,000	1,000,000	25,000	120,000	730	17	<0.0499	<0.0597	0.0315 **NJ**	<0.0513	<0.0464	<0.0486	<0.0534	<0.0521	<0.0559	<0.043
4-Methyl-2-pentanone	6,300	3,100	160,000	3,100	160,000	340	2.5	<0.02	<0.0239	<0.242	<0.0205	<0.0186	<0.0195	<0.0214	<0.0208	<0.0224	<0.0172
Acetone	70,000	100,000	NL	100,000	NL	100,000	25	0.06	<0.0239	0.383	0.0166 **NJ**	0.0482	<0.0195	0.0394	<0.0208	0.0673	<0.0172
Benzene	12	0.8	100	1.6	2,300	2.2	0.03	<0.004	0.00084 **J,N**	0.0015 **J,N**	0.00026 **NJ**	0.00013 **NJ**	0.00018 **NJ**	<0.0043	0.0011 **NJ**	0.00015 **NJ**	0.00071 **NJ**
Bromodichloromethane	10	3,000	92	3,000	2,000	3,000	0.6	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
Bromoform	81	53	720	100	16,000	140	0.8	<0.02	<0.0239	<0.0242	<0.0205	<0.0186	<0.0195	<0.0214	<0.0208	<0.0224	<0.0172
Bromomethane	110	10	2,900	15	1,000	3.9	0.2	<0.02	<0.0239	<0.242	<0.0205	<0.0186	<0.0195	<0.0214	<0.0208	<0.0224	<0.0172
Carbon tetrachloride	5	0.3	44	0.64	410	0.9	0.07	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
Chlorobenzene	1,600	130	41,000	210	4,100	1.3	1	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034

Table 1
Soil VOC Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Component of Groundwater	SB-1 (2-3')	SB-1 (20-21')	SB-2 (2-3')	SB-2 (22-23')	SB-3 (3-5')	SB-3 (25-27')	SB-4 (2-3.5')	SB-4 (19-20')	SB-5 (2-3')	SB-5 (10-12')
Analyte	**IG**	**IH**	**IG**	**IH**	**CW IG**	**CW IH**	**SC CL1**	**1/22/2014**	**1/22/2014**	**1/22/2014**	**1/22/2014**	**1/22/2014**	**1/22/2014**	**1/23/2014**	**1/23/2014**	**1/23/2014**	**1/23/2014**
Chloroethane	NL	1,500	1,500	20,000	NL	39	NL	<0.01	<0.0119	<0.0121	<0.0103	<0.0093	<0.0097	<0.0107	<0.0104	<0.0112	<0.0086
Chloroform	100	0.3	940	0.54	2,000	0.76	0.6	<0.004	0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
Chloromethane	NL	110	180	NL	NL	5	NL	<0.01	<0.0119	<0.0121	<0.0103	<0.0093	<0.0097	<0.0107	<0.0104	<0.0112	<0.0086
cis-1,2-Dichloroethene	780	1,200	20,000	1,200	20,000	1,200	0.4	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
cis-1,3-Dichloropropene	6.4	1.1	57	2.1	1,200	0.39	0.004	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
Dibromochloromethane	1,600	1,300	41,000	1,300	41,000	1,300	0.4	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
Ethylbenzene	7,800	400	200,000	400	20,000	58	13	<0.004	0.00055 **J,N**	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	0.00071 **NJ**	<0.0045	0.00055 **NJ**
Methyl tert-butyl ether	780	8,800	20,000	8,800	2,000	140	0.32	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
Methylene chloride	85	13	760	24	12,000	34	0.02	<0.02	<0.0239	<0.0242	<0.0205	<0.0186	<0.0195	<0.0214	<0.0208	<0.0224	<0.0172
Styrene	16,000	1,500	410,000	1,500	41,000	430	4	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
Tetrachloroethene	12	11	110	20	2,400	28	0.06	<0.004	<0.0048	<0.0048	<0.0041	0.00018 **NJ**	<0.0039	0.00023 **NJ**	<0.0042	0.00020 **NJ**	<0.0034
Toluene	16,000	650	410,000	650	410,000	42	12	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
trans-1,2-Dichloroethene	1,600	3,100	41,000	3,100	41,000	3,100	0.7	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
trans-1,3-Dichloropropene	6.4	1.1	57	2.1	1200	0.39	0.004	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
Trichloroethene	58	5	520	8.9	1,200	12	0.06	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
Vinyl chloride	0.46	0.28	7.9	1.1	170	1.1	0.01	<0.004	<0.0048	<0.0048	<0.0041	<0.0037	<0.0039	<0.0043	<0.0042	<0.0045	<0.0034
Xylenes, Total	16,000	320	410,000	320	41,000	5.6	150	<0.012	<0.0143	<0.0145	<0.0123	<0.0111	<0.0117	<0.0128	<0.0125	<0.0134	<0.0103

See endnotes after Table 5.

Table 1
Soil VOC Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Component of Groundwater	DUP-001	SB-6 (1.5-3')	SB-6 (15-16.5')	SB-7 (1.5-3')	SB-7 (17-18')	SB-8 (1.5-2.5')	SB-8 (14-15')	DUP-002	SB-9 (3-4')	SB-9 (12-14')
Analyte	**IG**	**IH**	**IG**	**IH**	**CW IG**	**CW IH**	**SC CL1**	**1/23/2014**	**2/25/2014**	**2/25/2014**	**2/25/2014**	**2/25/2014**	**2/25/2014**	**2/25/2014**	**2/25/2014**	**2/26/2014**	**2/26/2014**
1,1,1-Trichloroethane	NL	1,200	NL	1,200	NL	1,200	2	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
1,1,2,2-Tetrachloroethane	3.2	0.62	27	1.2	620	1.7	0.0035	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
1,1,2-Trichloroethane	310	1,800	8,200	1,800	8,200	1,800	0.02	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
1,1-Dichloroethane	7,800	1,300	200,000	1,700	200,000	130	23	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
1,1-Dichloroethene	3,900	290	100,000	470	10,000	3	0.06	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
1,2-Dichloroethane	7	0.4	63	0.7	1,400	0.99	0.02	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
1,2-Dichloropropane	9	15	84	23	1,800	0.5	0.03	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
1, 3-Dichloropropene, Total	6.4	1.1	57	2.1	1,200	0.39	0.004	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
2-Butanone	47,000	25,000	1,000,000	25,000	120,000	730	17	<0.0476	<0.0166	<0.0232	<0.0194	<0.0161	<0.0165	<0.0229	<0.0228	<0.0165	<0.0193
4-Methyl-2-pentanone	6,300	3,100	160,000	3,100	160,000	340	2.5	<0.019	<0.0166	<0.0232	<0.0194	<0.0161	<0.0165	<0.0229	<0.0228	<0.0165	<0.0193
Acetone	70,000	100,000	NL	100,000	NL	100,000	25	<0.019	<0.0166	0.0332	<0.0194	0.186	<0.0165	<0.0229	0.026	<0.0165	<0.0193
Benzene	12	0.8	100	1.6	2,300	2.2	0.03	0.00059 **NJ**	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
Bromodichloromethane	10	3,000	92	3,000	2,000	3,000	0.6	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
Bromoform	81	53	720	100	16,000	140	0.8	<0.019	<0.0166	<0.0232	<0.0194	<0.0161	<0.0165	<0.0229	<0.0228	<0.0165	<0.0193
Bromomethane	110	10	2,900	15	1,000	3.9	0.2	<0.019	<0.0166	<0.0232	<0.0194	<0.0161	<0.0165	<0.0229	<0.0228	<0.0165	<0.0193
Carbon tetrachloride	5	0.3	44	0.64	410	0.9	0.07	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
Chlorobenzene	1,600	130	41,000	210	4,100	1.3	1	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039

Table 1
Soil VOC Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Component of Groundwater	DUP-001	SB-6 (1.5-3')	SB-6 (15-16.5')	SB-7 (1.5-3')	SB-7 (17-18')	SB-8 (1.5-2.5')	SB-8 (14-15')	DUP-002	SB-9 (3-4')	SB-9 (12-14')
Analyte	**IG**	**IH**	**IG**	**IH**	**CW IG**	**CW IH**	**SC CL1**	**1/23/2014**	**2/25/2014**	**2/25/2014**	**2/25/2014**	**2/25/2014**	**2/25/2014**	**2/25/2014**	**2/25/2014**	**2/26/2014**	**2/26/2014**
Chloroethane	NL	1,500	1,500	20,000	NL	39	NL	<0.0095	<0.0083	<0.0116	<0.0097	<0.0081	<0.0082	<0.0114	<0.0114	<0.0082	<0.0097
Chloroform	100	0.3	940	0.54	2,000	0.76	0.6	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
Chloromethane	NL	110	180	NL	NL	5	NL	<0.0095	<0.0083	<0.0116	<0.0097	<0.0081	<0.0082	<0.0114	<0.0114	<0.0082	<0.0097
cis-1,2-Dichloroethene	780	1,200	20,000	1,200	20,000	1,200	0.4	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
cis-1,3-Dichloropropene	6.4	1.1	57	2.1	1,200	0.39	0.004	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
Dibromochloromethane	1,600	1,300	41,000	1,300	41,000	1,300	0.4	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
Ethylbenzene	7,800	400	200,000	400	20,000	58	13	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
Methyl tert-butyl ether	780	8,800	20,000	8,800	2,000	140	0.32	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
Methylene chloride	85	13	760	24	12,000	34	0.02	<0.019	<0.0166	<0.0232	<0.0194	<0.0161	<0.0165	<0.0229	<0.0228	<0.0165	<0.0193
Styrene	16,000	1,500	410,000	1,500	41,000	430	4	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
Tetrachloroethene	12	11	110	20	2,400	28	0.06	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
Toluene	16,000	650	410,000	650	410,000	42	12	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
trans-1,2-Dichloroethene	1,600	3,100	41,000	3,100	41,000	3,100	0.7	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
trans-1,3-Dichloropropene	6.4	1.1	57	2.1	1200	0.39	0.004	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
Trichloroethene	58	5	520	8.9	1,200	12	0.06	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
Vinyl chloride	0.46	0.28	7.9	1.1	170	1.1	0.01	<0.0038	<0.0033	<0.0046	<0.0039	<0.0032	<0.0033	<0.0046	<0.0046	<0.0033	<0.0039
Xylenes, Total	16,000	320	410,000	320	41,000	5.6	150	<0.0114	<0.0099	<0.0139	<0.0116	<0.0097	<0.0099	<0.0137	<0.0137	<0.0099	<0.0116

See endnotes after Table 5.

Table 2
Soil SVOC Analytical Results
Former Standard oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater	Soil Component of Groundwater (pH Specific, Class II)					SB-1 (2-3')	SB-1 (20-21')	SB-2 (2-3')	SB-2 (22-23')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	6.65-6.89	7.25-7.74	7.75-8.24	8.25-8.74	8.75-9.0	1/22/2014	1/22/2014	1/22/2014	1/22/2014
pH	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	8.1	8.4	6.7	7.7
1,2,4-Trichlorobenzene	780	3,200	20,000	3,200	2,000	920	5	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
1,2-Dichlorobenzene	7,000	560	180,000	560	18,000	310	17	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
1,3-Dichlorobenzene	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
1,4-Dichlorobenzene	NL	11,00	NL	17,000	NL	340	2	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
2,4,5-Trichlorophenol	7,800	NL	200,000	NL	200,000	NL	NL	1,400	640	64	36	26	<0.382	<0.417	<0.419	<0.401
2,4,6-Trichlorophenol	58	200	520	390	11,000	540	NL	0.77	0.09	0.07	0.07	0.07	<0.382	<0.417	<0.419	<0.401
2,4-Dichlorophenol	230	NL	6,100	NL	610	NL	NL	1	0.86	0.69	0.56	0.48	<0.382	<0.417	<0.419	<0.401
2,4 Dimethylphenol	1,600	NL	41,000	NL	41,000	NL	9	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
2,4-Dinitrophenol	160	NL	4,100	NL	410	NL	0.2	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
2,4-Dinitrotoluene	0.9	NL	8.4	NL	180	NL	0.0008	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
2,6-Dinitrotoluene	0.9	NL	8.4	NL	180	NL	0.0007	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
2-Chloronaphthalene	6,300	NL	160,000	NL	41,000	NL	49	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
2-Chlorophenol	390	53,00	10,000	53,000	10,000	53,00	NL	20	3.6	3.1	2.2	1.5	<0.382	<0.417	<0.419	<0.401
2-Methylnaphthalene	310	NL	8,200	NL	820	NL	1.9	NL	NL	NL	NL	NL	<0.382	<0.417	0.0523 **NJ**	<0.401
2-Methylphenol	3,900	NL	100,000	NL	100,000	NL	15	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
2-Nitroaniline	1,200	18	31,000	28	31,000	1.5	0.7	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
2-Nitrophenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
3&4 Methylphenol	390	NL	10000	NL	1000	NL	0.2	NL	NL	NL	NL	NL	<0.763	<0.834	<0.837	<0.802
3,3'-Dichlorobenzidine	1	NL	13	NL	280	NL	0.007	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
3-Nitroaniline	NL	NL	NL	NL	200	NL	NL	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
4,6-Dinitro-2-	6.3	NL	160	NL	160	NL	NL	NL	NL	NL	NL	NL	<1.97	<2.15	<2.16	<2.07
4-Bromophenyl phenyl	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
4-Chloro-3-methylphenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
4-Chloroaniline	310	NL	8,200	NL	820	NL	0.7	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
4-Chlorophenyl phenyl	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
4-Nitroaniline	310	1,500	8,200	2,400	2,000	52	0.14	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
4-Nitrophenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Bis(2-	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Bis(2-chloroethyl)ether	0.6	0.2	5	0.47	75	0.66	0.0004	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Bis(2-ethylhexyl)phthalate	46	31,00	410	31,000	4,100	31,00	3,600	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Butyl benzyl phthalate	16,000	930	410,000	930	410,000	930	930	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Carbazole	32	NL	290	NL	6,200	NL	0.6	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Dibenzofuran	78	NL	2000	NL	820	NL	3	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Diethyl phthalate	63,000	2,000	1,000,000	2,000	1,000,0	2,000	470	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Dimethyl phthalate	NL	NL	NL	NL	20,000	NL	NL	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Di-n-butyl phthalate	7,800	2,300	200,000	2,300	200,000	2,300	2,300	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Di-n-octyl phthalate	1,600	10,00	41,000	10,000	4,100	10,00	10,000	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Hexachlorobenzene	0.4	1	4	1.8	78	2.6	2	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Hexachloroethane	78	NL	2,000	NL	2,000	NL	0.5	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Isophorone	15,600	4,600	410,000	4,600	410,000	4,600	8	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Nitrobenzene	39	92	1,000	140	1,000	9.4	0.1	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
N-Nitrosodi-n-	0.09	NL	0.8	NL	18	NL	0.00005	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
N-Nitrosodiphenylamine	130	NL	1,200	NL	25,000	NL	1	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401
Pentachlorophenol	3	NL	24	NL	520	NL	NL	0.15	0.11	0.1	0.1	0.1	<0.775	<0.846	<0.850	<0.814
Phenol	23,000	NL	610,000	NL	61,000	NL	100	NL	NL	NL	NL	NL	<0.382	<0.417	<0.419	<0.401

See endnotes after Table 5.

Table 2
Soil SVOC Analytical Results
Former Standard oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater	Soil Component of Groundwater (pH Specific, Class II)					SB-3 (3-5')	SB-3 (25-27')	SB-4 (2-3.5')	SB-4 (19-20')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	6.65-6.89	7.25-7.74	7.75-8.24	8.25-8.74	8.75-9.0	1/22/2014	1/22/2014	1/23/2014	1/23/2014
pH	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	7.6	8.2	6.9	8
1,2,4-Trichlorobenzene	780	3,200	20,000	3,200	2,000	920	5	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
1,2-Dichlorobenzene	7,000	560	180,000	560	18,000	310	17	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
1,3-Dichlorobenzene	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
1,4-Dichlorobenzene	NL	11,00	NL	17,000	NL	340	2	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
2,4,5-Trichlorophenol	7,800	NL	200,000	NL	200,000	NL	NL	1,400	640	64	36	26	<0.397	<0.404	<0.396	<0.407
2,4,6-Trichlorophenol	58	200	520	390	11,000	540	NL	0.77	0.09	0.07	0.07	0.07	<0.397	<0.404	<0.396	<0.407
2,4-Dichlorophenol	230	NL	6,100	NL	610	NL	NL	1	0.86	0.69	0.56	0.48	<0.397	<0.404	<0.396	<0.407
2,4 Dimethylphenol	1,600	NL	41,000	NL	41,000	NL	9	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
2,4-Dinitrophenol	160	NL	4,100	NL	410	NL	0.2	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
2,4-Dinitrotoluene	0.9	NL	8.4	NL	180	NL	0.0008	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
2,6-Dinitrotoluene	0.9	NL	8.4	NL	180	NL	0.0007	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
2-Chloronaphthalene	6,300	NL	160,000	NL	41,000	NL	49	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
2-Chlorophenol	390	53,00	10,000	53,000	10,000	53,00	NL	20	3.6	3.1	2.2	1.5	<0.397	<0.404	<0.396	<0.407
2-Methylnaphthalene	310	NL	8,200	NL	820	NL	1.9	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
2-Methylphenol	3,900	NL	100,000	NL	100,000	NL	15	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
2-Nitroaniline	1,200	18	31,000	28	31,000	1.5	0.7	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
2-Nitrophenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
3&4 Methylphenol	390	NL	10000	NL	1000	NL	0.2	NL	NL	NL	NL	NL	<0.794	<0.809	<0.792	<0.815
3,3'-Dichlorobenzidine	1	NL	13	NL	280	NL	0.007	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
3-Nitroaniline	NL	NL	NL	NL	200	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
4,6-Dinitro-2-	6.3	NL	160	NL	160	NL	NL	NL	NL	NL	NL	NL	<2.04	<2.08	<2.04	<2.1
4-Bromophenyl phenyl	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
4-Chloro-3-methylphenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
4-Chloroaniline	310	NL	8,200	NL	820	NL	0.7	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
4-Chlorophenyl phenyl	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
4-Nitroaniline	310	1,500	8,200	2,400	2,000	52	0.14	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
4-Nitrophenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Bis(2-	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Bis(2-chloroethyl)ether	0.6	0.2	5	0.47	75	0.66	0.0004	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Bis(2-ethylhexyl)phthalate	46	31,00	410	31,000	4,100	31,00	3,600	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Butyl benzyl phthalate	16,000	930	410,000	930	410,000	930	930	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Carbazole	32	NL	290	NL	6,200	NL	0.6	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Dibenzofuran	78	NL	2000	NL	820	NL	3	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Diethyl phthalate	63,000	2,000	1,000,000	2,000	1,000,0	2,000	470	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Dimethyl phthalate	NL	NL	NL	NL	20,000	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Di-n-butyl phthalate	7,800	2,300	200,000	2,300	200,000	2,300	2,300	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Di-n-octyl phthalate	1,600	10,00	41,000	10,000	4,100	10,00	10,000	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Hexachlorobenzene	0.4	1	4	1.8	78	2.6	2	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Hexachloroethane	78	NL	2,000	NL	2,000	NL	0.5	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Isophorone	15,600	4,600	410,000	4,600	410,000	4,600	8	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Nitrobenzene	39	92	1,000	140	1,000	9.4	0.1	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
N-Nitrosodi-n-	0.09	NL	0.8	NL	18	NL	0.00005	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
N-Nitrosodiphenylamine	130	NL	1,200	NL	25,000	NL	1	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407
Pentachlorophenol	3	NL	24	NL	520	NL	NL	0.15	0.11	0.1	0.1	0.1	<0.806	<0.821	<0.804	<0.827
Phenol	23,000	NL	610,000	NL	61,000	NL	100	NL	NL	NL	NL	NL	<0.397	<0.404	<0.396	<0.407

See endnotes after Table 5.

Table 2
Soil SVOC Analytical Results
Former Standard oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater	Soil Component of Groundwater (pH Specific, Class II)					SB-5 (2-3')	SB-5 (10-12')	DUP-001	SB-6 (1.5-3')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	6.65-6.89	7.25-7.74	7.75-8.24	8.25-8.74	8.75-9.0	1/23/2014	1/23/2014	1/23/2014	2/25/2014
pH	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	7.6	8.4	7.9	8.6
1,2,4-Trichlorobenzene	780	3,200	20,000	3,200	2,000	920	5	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
1,2-Dichlorobenzene	7,000	560	180,000	560	18,000	310	17	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
1,3-Dichlorobenzene	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
1,4-Dichlorobenzene	NL	11,00	NL	17,000	NL	340	2	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
2,4,5-Trichlorophenol	7,800	NL	200,000	NL	200,000	NL	NL	1,400	640	64	36	26	<0.397	<0.412	<0.413	<0.367
2,4,6-Trichlorophenol	58	200	520	390	11,000	540	NL	0.77	0.09	0.07	0.07	0.07	<0.397	<0.412	<0.413	<0.367
2,4-Dichlorophenol	230	NL	6,100	NL	610	NL	NL	1	0.86	0.69	0.56	0.48	<0.397	<0.412	<0.413	<0.367
2,4 Dimethylphenol	1,600	NL	41,000	NL	41,000	NL	9	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
2,4-Dinitrophenol	160	NL	4,100	NL	410	NL	0.2	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
2,4-Dinitrotoluene	0.9	NL	8.4	NL	180	NL	0.0008	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
2,6-Dinitrotoluene	0.9	NL	8.4	NL	180	NL	0.0007	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
2-Chloronaphthalene	6,300	NL	160,000	NL	41,000	NL	49	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
2-Chlorophenol	390	53,00	10,000	53,000	10,000	53,00	NL	20	3.6	3.1	2.2	1.5	<0.397	<0.412	<0.413	<0.367
2-Methylnaphthalene	310	NL	8,200	NL	820	NL	1.9	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
2-Methylphenol	3,900	NL	100,000	NL	100,000	NL	15	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
2-Nitroaniline	1,200	18	31,000	28	31,000	1.5	0.7	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
2-Nitrophenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
3&4 Methylphenol	390	NL	10000	NL	1000	NL	0.2	NL	NL	NL	NL	NL	<0.794	<0.824	<0.826	<0.733
3,3'-Dichlorobenzidine	1	NL	13	NL	280	NL	0.007	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
3-Nitroaniline	NL	NL	NL	NL	200	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
4,6-Dinitro-2-	6.3	NL	160	NL	160	NL	NL	NL	NL	NL	NL	NL	<2.05	<2.12	<2.130	<1.89
4-Bromophenyl phenyl	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
4-Chloro-3-methylphenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
4-Chloroaniline	310	NL	8,200	NL	820	NL	0.7	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
4-Chlorophenyl phenyl	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
4-Nitroaniline	310	1,500	8,200	2,400	2,000	52	0.14	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
4-Nitrophenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Bis(2-	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Bis(2-chloroethyl)ether	0.6	0.2	5	0.47	75	0.66	0.0004	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Bis(2-ethylhexyl)phthalate	46	31,00	410	31,000	4,100	31,00	3,600	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Butyl benzyl phthalate	16,000	930	410,000	930	410,000	930	930	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Carbazole	32	NL	290	NL	6,200	NL	0.6	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Dibenzofuran	78	NL	2000	NL	820	NL	3	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Diethyl phthalate	63,000	2,000	1,000,000	2,000	1,000,0	2,000	470	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Dimethyl phthalate	NL	NL	NL	NL	20,000	NL	NL	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Di-n-butyl phthalate	7,800	2,300	200,000	2,300	200,000	2,300	2,300	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Di-n-octyl phthalate	1,600	10,00	41,000	10,000	4,100	10,00	10,000	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Hexachlorobenzene	0.4	1	4	1.8	78	2.6	2	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Hexachloroethane	78	NL	2,000	NL	2,000	NL	0.5	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Isophorone	15,600	4,600	410,000	4,600	410,000	4,600	8	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Nitrobenzene	39	92	1,000	140	1,000	9.4	0.1	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
N-Nitrosodi-n-	0.09	NL	0.8	NL	18	NL	0.00005	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
N-Nitrosodiphenylamine	130	NL	1,200	NL	25,000	NL	1	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367
Pentachlorophenol	3	NL	24	NL	520	NL	NL	0.15	0.11	0.1	0.1	0.1	<0.806	<0.836	<0.839	<0.744
Phenol	23,000	NL	610,000	NL	61,000	NL	100	NL	NL	NL	NL	NL	<0.397	<0.412	<0.413	<0.367

See endnotes after Table 5.

Table 2
Soil SVOC Analytical Results
Former Standard oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater	Soil Component of Groundwater (pH Specific, Class II)					SB-6 (15-16.5')	SB-7 (1.5-3')	SB-7 (17-18')	SB-8 (1.5-2.5')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	6.65-6.89	7.25-7.74	7.75-8.24	8.25-8.74	8.75-9.0	2/25/2014	2/25/2014	2/25/2014	2/25/2014
pH	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	8	8.3	8	8.8
1,2,4-Trichlorobenzene	780	3,200	20,000	3,200	2,000	920	5	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
1,2-Dichlorobenzene	7,000	560	180,000	560	18,000	310	17	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
1,3-Dichlorobenzene	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
1,4-Dichlorobenzene	NL	11,00	NL	17,000	NL	340	2	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
2,4,5-Trichlorophenol	7,800	NL	200,000	NL	200,000	NL	NL	1,400	640	64	36	26	<0.412	<0.384	<0.397	<0.386
2,4,6-Trichlorophenol	58	200	520	390	11,000	540	NL	0.77	0.09	0.07	0.07	0.07	<0.412	<0.384	<0.397	<0.386
2,4-Dichlorophenol	230	NL	6,100	NL	610	NL	NL	1	0.86	0.69	0.56	0.48	<0.412	<0.384	<0.397	<0.386
2,4 Dimethylphenol	1,600	NL	41,000	NL	41,000	NL	9	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
2,4-Dinitrophenol	160	NL	4,100	NL	410	NL	0.2	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
2,4-Dinitrotoluene	0.9	NL	8.4	NL	180	NL	0.0008	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
2,6-Dinitrotoluene	0.9	NL	8.4	NL	180	NL	0.0007	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
2-Chloronaphthalene	6,300	NL	160,000	NL	41,000	NL	49	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
2-Chlorophenol	390	53,00	10,000	53,000	10,000	53,00	NL	20	3.6	3.1	2.2	1.5	<0.412	<0.384	<0.397	<0.386
2-Methylnaphthalene	310	NL	8,200	NL	820	NL	1.9	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
2-Methylphenol	3,900	NL	100,000	NL	100,000	NL	15	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
2-Nitroaniline	1,200	18	31,000	28	31,000	1.5	0.7	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
2-Nitrophenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
3&4 Methylphenol	390	NL	10000	NL	1000	NL	0.2	NL	NL	NL	NL	NL	<0.825	<0.767	<0.793	<0.772
3,3'-Dichlorobenzidine	1	NL	13	NL	280	NL	0.007	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
3-Nitroaniline	NL	NL	NL	NL	200	NL	NL	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
4,6-Dinitro-2-	6.3	NL	160	NL	160	NL	NL	NL	NL	NL	NL	NL	<2.12	<1.98	<2.04	<1.99
4-Bromophenyl phenyl	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
4-Chloro-3-methylphenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
4-Chloroaniline	310	NL	8,200	NL	820	NL	0.7	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
4-Chlorophenyl phenyl	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
4-Nitroaniline	310	1,500	8,200	2,400	2,000	52	0.14	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
4-Nitrophenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Bis(2-	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Bis(2-chloroethyl)ether	0.6	0.2	5	0.47	75	0.66	0.0004	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Bis(2-ethylhexyl)phthalate	46	31,00	410	31,000	4,100	31,00	3,600	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Butyl benzyl phthalate	16,000	930	410,000	930	410,000	930	930	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Carbazole	32	NL	290	NL	6,200	NL	0.6	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Dibenzofuran	78	NL	2000	NL	820	NL	3	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Diethyl phthalate	63,000	2,000	1,000,000	2,000	1,000,0	2,000	470	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Dimethyl phthalate	NL	NL	NL	NL	20,000	NL	NL	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Di-n-butyl phthalate	7,800	2,300	200,000	2,300	200,000	2,300	2,300	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Di-n-octyl phthalate	1,600	10,00	41,000	10,000	4,100	10,00	10,000	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Hexachlorobenzene	0.4	1	4	1.8	78	2.6	2	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Hexachloroethane	78	NL	2,000	NL	2,000	NL	0.5	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Isophorone	15,600	4,600	410,000	4,600	410,000	4,600	8	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Nitrobenzene	39	92	1,000	140	1,000	9.4	0.1	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
N-Nitrosodi-n-	0.09	NL	0.8	NL	18	NL	0.00005	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
N-Nitrosodiphenylamine	130	NL	1,200	NL	25,000	NL	1	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386
Pentachlorophenol	3	NL	24	NL	520	NL	NL	0.15	0.11	0.1	0.1	0.1	<0.837	<0.779	<0.805	<0.784
Phenol	23,000	NL	610,000	NL	61,000	NL	100	NL	NL	NL	NL	NL	<0.412	<0.384	<0.397	<0.386

See endnotes after Table 5.

Table 2
Soil SVOC Analytical Results
Former Standard oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater	Soil Component of Groundwater (pH Specific, Class II)					SB-8 (14-15')	DUP-002	SB-9 (3-4')	SB-9 (12-14')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	6.65-6.89	7.25-7.74	7.75-8.24	8.25-8.74	8.75-9.0	2/25/2014	2/25/2014	2/26/2014	2/26/2014
pH	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	7.9	7.8	8	8
1,2,4-Trichlorobenzene	780	3,200	20,000	3,200	2,000	920	5	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
1,2-Dichlorobenzene	7,000	560	180,000	560	18,000	310	17	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
1,3-Dichlorobenzene	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
1,4-Dichlorobenzene	NL	11,00	NL	17,000	NL	340	2	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
2,4,5-Trichlorophenol	7,800	NL	200,000	NL	200,000	NL	NL	1,400	640	64	36	26	<0.416	<0.408	<0.408	<0.409
2,4,6-Trichlorophenol	58	200	520	390	11,000	540	NL	0.77	0.09	0.07	0.07	0.07	<0.416	<0.408	<0.408	<0.409
2,4-Dichlorophenol	230	NL	6,100	NL	610	NL	NL	1	0.86	0.69	0.56	0.48	<0.416	<0.408	<0.408	<0.409
2,4 Dimethylphenol	1,600	NL	41,000	NL	41,000	NL	9	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
2,4-Dinitrophenol	160	NL	4,100	NL	410	NL	0.2	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
2,4-Dinitrotoluene	0.9	NL	8.4	NL	180	NL	0.0008	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
2,6-Dinitrotoluene	0.9	NL	8.4	NL	180	NL	0.0007	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
2-Chloronaphthalene	6,300	NL	160,000	NL	41,000	NL	49	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
2-Chlorophenol	390	53,00	10,000	53,000	10,000	53,00	NL	20	3.6	3.1	2.2	1.5	<0.416	<0.408	<0.408	<0.409
2-Methylnaphthalene	310	NL	8,200	NL	820	NL	1.9	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
2-Methylphenol	3,900	NL	100,000	NL	100,000	NL	15	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
2-Nitroaniline	1,200	18	31,000	28	31,000	1.5	0.7	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
2-Nitrophenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
3&4 Methylphenol	390	NL	10000	NL	1000	NL	0.2	NL	NL	NL	NL	NL	<0.833	<0.815	<0.815	<0.817
3,3'-Dichlorobenzidine	1	NL	13	NL	280	NL	0.007	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
3-Nitroaniline	NL	NL	NL	NL	200	NL	NL	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
4,6-Dinitro-2-	6.3	NL	160	NL	160	NL	NL	NL	NL	NL	NL	NL	<2.14	<2.1	<2.1	<2.1
4-Bromophenyl phenyl	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
4-Chloro-3-methylphenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
4-Chloroaniline	310	NL	8,200	NL	820	NL	0.7	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
4-Chlorophenyl phenyl	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
4-Nitroaniline	310	1,500	8,200	2,400	2,000	52	0.14	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
4-Nitrophenol	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Bis(2-	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Bis(2-chloroethyl)ether	0.6	0.2	5	0.47	75	0.66	0.0004	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Bis(2-ethylhexyl)phthalate	46	31,00	410	31,000	4,100	31,00	3,600	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Butyl benzyl phthalate	16,000	930	410,000	930	410,000	930	930	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Carbazole	32	NL	290	NL	6,200	NL	0.6	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Dibenzofuran	78	NL	2000	NL	820	NL	3	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Diethyl phthalate	63,000	2,000	1,000,000	2,000	1,000,0	2,000	470	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Dimethyl phthalate	NL	NL	NL	NL	20,000	NL	NL	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Di-n-butyl phthalate	7,800	2,300	200,000	2,300	200,000	2,300	2,300	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Di-n-octyl phthalate	1,600	10,00	41,000	10,000	4,100	10,00	10,000	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Hexachlorobenzene	0.4	1	4	1.8	78	2.6	2	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Hexachloroethane	78	NL	2,000	NL	2,000	NL	0.5	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Isophorone	15,600	4,600	410,000	4,600	410,000	4,600	8	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Nitrobenzene	39	92	1,000	140	1,000	9.4	0.1	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
N-Nitrosodi-n-	0.09	NL	0.8	NL	18	NL	0.00005	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
N-Nitrosodiphenylamine	130	NL	1,200	NL	25,000	NL	1	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409
Pentachlorophenol	3	NL	24	NL	520	NL	NL	0.15	0.11	0.1	0.1	0.1	<0.845	<0.828	<0.828	<0.829
Phenol	23,000	NL	610,000	NL	61,000	NL	100	NL	NL	NL	NL	NL	<0.416	<0.408	<0.408	<0.409

See endnotes after Table 5.

Table 3
Soil PNA Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater	PNAs in Background Soils	SB-1 (2-3')	SB-1 (20-21')	SB-2 (2-3')	SB-2 (22-23')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	Metropolitan Areas	1/22/2014	1/22/2014	1/22/2014	1/22/2014
Acenaphthene	4,700	NL	120,000	NL	120,000	NL	570	0.04	<0.382	<0.417	<0.419	<0.401
Acenaphthylene	2,300	NL	61,000	NL	61,000	NL	85	0.04	<0.382	<0.417	<0.419	<0.401
Anthracene	23,000	NL	610,000	NL	610,000	NL	12,000	0.14	<0.382	<0.417	<0.419	<0.401
Benz(a)anthracene	0.9	NL	8	NL	170	NL	2	0.72	<0.382	<0.417	<0.419	<0.401
Benzo(a)pyrene	0.09	NL	0.8	NL	17	NL	8	0.98	<0.382	<0.417	<0.419	<0.401
Benzo(b)fluoranthene	0.9	NL	8	NL	170	NL	5	0.7	<0.382	<0.417	<0.419	<0.401
Benzo(g,h,i)perylene	2,300	NL	61,000	NL	61,000	NL	27,000	0.84	<0.382	<0.417	<0.419	<0.401
Benzo(k)fluoranthene	9	NL	78	NL	1,700	NL	49	0.63	<0.382	<0.417	<0.419	<0.401
Chrysene	88	NL	780	NL	17,000	NL	160	1.1	<0.382	<0.417	<0.419	<0.401
Dibenz(a,h)anthracene	0.09	NL	0.8	NL	17	NL	2	0.15	<0.382	<0.417	<0.419	<0.401
Fluoranthene	3,100	NL	82,000	NL	82,000	NL	4,300	1.8	<0.382	<0.417	<0.419	<0.401
Fluorene	3,100	NL	82,000	NL	82,000	NL	560	0.04	<0.382	<0.417	<0.419	<0.401
Indeno(1,2,3-cd)pyrene	0.9	NL	8	NL	170	NL	14	0.51	<0.382	<0.417	<0.419	<0.401
Naphthalene	1,600	170	41,000	270	4,100	1.8	12	0.17	<0.382	<0.417	<0.419	<0.401
Phenanthrene	2,300	NL	61,000	NL	61,000	NL	200	0.99	<0.382	<0.417	<0.419	<0.401
Pyrene	2,300	NL	61,000	NL	61,000	NL	4,200	1.2	<0.382	<0.417	<0.419	<0.401

See endnotes after Table 5.

Table 3
Soil PNA Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater	PNAs in Background Soils	SB-3 (3-5')	SB-3 (25-27')	SB-4 (2-3.5')	SB-4 (19-20')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	Metropolitan Areas	1/22/2014	1/22/2014	1/23/2014	1/23/2014
Acenaphthene	4,700	NL	120,000	NL	120,000	NL	570	0.04	<0.397	<0.404	<0.396	<0.407
Acenaphthylene	2,300	NL	61,000	NL	61,000	NL	85	0.04	<0.397	<0.404	<0.396	<0.407
Anthracene	23,000	NL	610,000	NL	610,000	NL	12,000	0.14	<0.397	<0.404	<0.396	<0.407
Benz(a)anthracene	0.9	NL	8	NL	170	NL	2	0.72	<0.397	<0.404	<0.396	<0.407
Benzo(a)pyrene	0.09	NL	0.8	NL	17	NL	8	0.98	<0.397	<0.404	<0.396	<0.407
Benzo(b)fluoranthene	0.9	NL	8	NL	170	NL	5	0.7	<0.397	<0.404	<0.396	<0.407
Benzo(g,h,i)perylene	2,300	NL	61,000	NL	61,000	NL	27,000	0.84	<0.397	<0.404	<0.396	<0.407
Benzo(k)fluoranthene	9	NL	78	NL	1,700	NL	49	0.63	<0.397	<0.404	<0.396	<0.407
Chrysene	88	NL	780	NL	17,000	NL	160	1.1	<0.397	<0.404	<0.396	<0.407
Dibenz(a,h)anthracene	0.09	NL	0.8	NL	17	NL	2	0.15	<0.397	<0.404	<0.396	<0.407
Fluoranthene	3,100	NL	82,000	NL	82,000	NL	4,300	1.8	<0.397	<0.404	<0.396	<0.407
Fluorene	3,100	NL	82,000	NL	82,000	NL	560	0.04	<0.397	<0.404	<0.396	<0.407
Indeno(1,2,3-cd)pyrene	0.9	NL	8	NL	170	NL	14	0.51	<0.397	<0.404	<0.396	<0.407
Naphthalene	1,600	170	41,000	270	4,100	1.8	12	0.17	<0.397	<0.404	<0.396	<0.407
Phenanthrene	2,300	NL	61,000	NL	61,000	NL	200	0.99	<0.397	<0.404	<0.396	<0.407
Pyrene	2,300	NL	61,000	NL	61,000	NL	4,200	1.2	<0.397	<0.404	<0.396	<0.407

See endnotes after Table 5.

Table 3
Soil PNA Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater	PNAs in Background Soils	SB-5 (2-3')	SB-5 (10-12')	DUP-001	SB-6 (1.5-3')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	Metropolitan Areas	1/23/2014	1/23/2014	1/23/2014	2/25/2014
Acenaphthene	4,700	NL	120,000	NL	120,000	NL	570	0.04	<0.397	<0.412	<0.413	<0.367
Acenaphthylene	2,300	NL	61,000	NL	61,000	NL	85	0.04	<0.397	<0.412	<0.413	<0.367
Anthracene	23,000	NL	610,000	NL	610,000	NL	12,000	0.14	<0.397	<0.412	<0.413	<0.367
Benz(a)anthracene	0.9	NL	8	NL	170	NL	2	0.72	<0.397	<0.412	<0.413	<0.367
Benzo(a)pyrene	0.09	NL	0.8	NL	17	NL	8	0.98	<0.397	<0.412	<0.413	<0.367
Benzo(b)fluoranthene	0.9	NL	8	NL	170	NL	5	0.7	<0.397	<0.412	<0.413	<0.367
Benzo(g,h,i)perylene	2,300	NL	61,000	NL	61,000	NL	27,000	0.84	<0.397	<0.412	<0.413	<0.367
Benzo(k)fluoranthene	9	NL	78	NL	1,700	NL	49	0.63	<0.397	<0.412	<0.413	<0.367
Chrysene	88	NL	780	NL	17,000	NL	160	1.1	<0.397	<0.412	<0.413	<0.367
Dibenz(a,h)anthracene	0.09	NL	0.8	NL	17	NL	2	0.15	<0.397	<0.412	<0.413	<0.367
Fluoranthene	3,100	NL	82,000	NL	82,000	NL	4,300	1.8	<0.397	<0.412	<0.413	<0.367
Fluorene	3,100	NL	82,000	NL	82,000	NL	560	0.04	<0.397	<0.412	<0.413	<0.367
Indeno(1,2,3-cd)pyrene	0.9	NL	8	NL	170	NL	14	0.51	<0.397	<0.412	<0.413	<0.367
Naphthalene	1,600	170	41,000	270	4,100	1.8	12	0.17	<0.397	<0.412	<0.413	<0.367
Phenanthrene	2,300	NL	61,000	NL	61,000	NL	200	0.99	<0.397	<0.412	<0.413	<0.367
Pyrene	2,300	NL	61,000	NL	61,000	NL	4,200	1.2	<0.397	<0.412	<0.413	<0.367

See endnotes after Table 5.

Table 3
Soil PNA Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater	PNAs in Background Soils	SB-6 (15-16.5')	SB-7 (1.5-3')	SB-7 (17-18')	SB-8 (1.5-2.5')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	Metropolitan Areas	2/25/2014	2/25/2014	2/25/2014	2/25/2014
Acenaphthene	4,700	NL	120,000	NL	120,000	NL	570	0.04	<0.412	<0.384	<0.397	<0.386
Acenaphthylene	2,300	NL	61,000	NL	61,000	NL	85	0.04	<0.412	<0.384	<0.397	<0.386
Anthracene	23,000	NL	610,000	NL	610,000	NL	12,000	0.14	<0.412	<0.384	<0.397	<0.386
Benz(a)anthracene	0.9	NL	8	NL	170	NL	2	0.72	<0.412	<0.384	<0.397	<0.386
Benzo(a)pyrene	0.09	NL	0.8	NL	17	NL	8	0.98	<0.412	<0.384	<0.397	<0.386
Benzo(b)fluoranthene	0.9	NL	8	NL	170	NL	5	0.7	<0.412	<0.384	<0.397	<0.386
Benzo(g,h,i)perylene	2,300	NL	61,000	NL	61,000	NL	27,000	0.84	<0.412	<0.384	<0.397	<0.386
Benzo(k)fluoranthene	9	NL	78	NL	1,700	NL	49	0.63	<0.412	<0.384	<0.397	<0.386
Chrysene	88	NL	780	NL	17,000	NL	160	1.1	<0.412	<0.384	<0.397	<0.386
Dibenz(a,h)anthracene	0.09	NL	0.8	NL	17	NL	2	0.15	<0.412	<0.384	<0.397	<0.386
Fluoranthene	3,100	NL	82,000	NL	82,000	NL	4,300	1.8	<0.412	<0.384	<0.397	<0.386
Fluorene	3,100	NL	82,000	NL	82,000	NL	560	0.04	<0.412	<0.384	<0.397	<0.386
Indeno(1,2,3-cd)pyrene	0.9	NL	8	NL	170	NL	14	0.51	<0.412	<0.384	<0.397	<0.386
Naphthalene	1,600	170	41,000	270	4,100	1.8	12	0.17	<0.412	<0.384	<0.397	<0.386
Phenanthrene	2,300	NL	61,000	NL	61,000	NL	200	0.99	<0.412	<0.384	<0.397	<0.386
Pyrene	2,300	NL	61,000	NL	61,000	NL	4,200	1.2	<0.412	<0.384	<0.397	<0.386

See endnotes after Table 5.

Table 3
Soil PNA Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater	PNAs in Background Soils	SB-8 (14-15')	DUP-002	SB-9 (3-4')	SB-9 (12-14')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	Metropolitan Areas	2/25/2014	2/25/2014	2/26/2014	2/26/2014
Acenaphthene	4,700	NL	120,000	NL	120,000	NL	570	0.04	<0.416	<0.408	<0.408	<0.409
Acenaphthylene	2,300	NL	61,000	NL	61,000	NL	85	0.04	<0.416	<0.408	<0.408	<0.409
Anthracene	23,000	NL	610,000	NL	610,000	NL	12,000	0.14	<0.416	<0.408	<0.408	<0.409
Benz(a)anthracene	0.9	NL	8	NL	170	NL	2	0.72	<0.416	<0.408	<0.408	<0.409
Benzo(a)pyrene	0.09	NL	0.8	NL	17	NL	8	0.98	<0.416	<0.408	<0.408	<0.409
Benzo(b)fluoranthene	0.9	NL	8	NL	170	NL	5	0.7	<0.416	<0.408	<0.408	<0.409
Benzo(g,h,i)perylene	2,300	NL	61,000	NL	61,000	NL	27,000	0.84	<0.416	<0.408	<0.408	<0.409
Benzo(k)fluoranthene	9	NL	78	NL	1,700	NL	49	0.63	<0.416	<0.408	<0.408	<0.409
Chrysene	88	NL	780	NL	17,000	NL	160	1.1	<0.416	<0.408	<0.408	<0.409
Dibenz(a,h)anthracene	0.09	NL	0.8	NL	17	NL	2	0.15	<0.416	<0.408	<0.408	<0.409
Fluoranthene	3,100	NL	82,000	NL	82,000	NL	4,300	1.8	<0.416	<0.408	<0.408	<0.409
Fluorene	3,100	NL	82,000	NL	82,000	NL	560	0.04	<0.416	<0.408	<0.408	<0.409
Indeno(1,2,3-cd)pyrene	0.9	NL	8	NL	170	NL	14	0.51	<0.416	<0.408	<0.408	<0.409
Naphthalene	1,600	170	41,000	270	4,100	1.8	12	0.17	<0.416	<0.408	<0.408	<0.409
Phenanthrene	2,300	NL	61,000	NL	61,000	NL	200	0.99	<0.416	<0.408	<0.408	<0.409
Pyrene	2,300	NL	61,000	NL	61,000	NL	4,200	1.2	<0.416	<0.408	<0.408	<0.409

See endnotes after Table 5.

Table 4
Soil Metal Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater (mg/L)		Soil Component of Groundwater (pH-Specific, Class I)					Metals in Background Soils	SB-1 (2-3')	SB-1 (20-21')	SB-2 (2-3')	SB-2 (22-23')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	SC CL2	6.9 - 7.24	7.25 - 7.74	7.75 - 8.24	8.25 - 8.74	8.75 - 9.0	MSA	1/22/2014	1/22/2014	1/22/2014	1/22/2014
pH	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	8.1	8.4	6.7	7.7
Lead	400	NL	800	NL	700	NL	NL	NL	107	107	107	107	282	36	12	12.5	31.7	13.7

See endnotes after Table 5.

Table 4
Soil Metal Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater (mg/L)		Soil Component of Groundwater (pH-Specific, Class I)					Metals in Background Soils	SB-3 (3-5')	SB-3 (25-27')	SB-4 (2-3.5)	SB-4 (19-20')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	SC CL2	6.9 - 7.24	7.25 - 7.74	7.75 - 8.24	8.25 - 8.74	8.75 - 9.0	MSA	1/22/2014	1/22/2014	1/23/2014	1/23/2014
pH	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	7.6	8.2	6.9	8
Lead	400	NL	800	NL	700	NL	NL	NL	107	107	107	107	282	36	12.3	12.8	13.1	15.2

See endnotes after Table 5.

Table 4
Soil Metal Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater (mg/L)		Soil Component of Groundwater (pH-Specific, Class I)					Metals in Background Soils	SB-5 (2-3')	SB-5 (10-12')	DUP-001	SB-6 (1.5-3')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	SC CL2	6.9 - 7.24	7.25 - 7.74	7.75 - 8.24	8.25 - 8.74	8.75 - 9.0	MSA	1/23/2014	1/23/2014	1/23/2014	2/25/2014
pH	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	7.6	8.4	7.9	8.6
Lead	400	NL	800	NL	700	NL	NL	NL	107	107	107	107	282	36	12.2	11	12.3	2.8

See endnotes after Table 5.

Table 4
Soil Metal Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater (mg/L)		Soil Component of Groundwater (pH-Specific, Class I)					Metals in Background Soils	SB-6 (15-16.5')	SB-7 (1.5-3')	SB-7 (17-18')	SB-8 (1.5-2.5')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	SC CL2	6.9 - 7.24	7.25 - 7.74	7.75 - 8.24	8.25 - 8.74	8.75 - 9.0	MSA	2/25/2014	2/25/2014	2/25/2014	2/25/2014
pH	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	8	8.3	8	8.8
Lead	400	NL	800	NL	700	NL	NL	NL	107	107	107	107	282	36	13.6	6.2	12.4	5.5

See endnotes after Table 5.

Table 4
Soil Metal Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

	Residential		Industrial / Commercial				Soil Component of Groundwater (mg/L)		Soil Component of Groundwater (pH-Specific, Class I)					Metals in Background Soils	SB-8 (14-15')	DUP-002	SB-9 (3-4')	SB-9 (12-14')
Analyte	IG	IH	IG	IH	CW IG	CW IH	SC CL1	SC CL2	6.9 - 7.24	7.25 - 7.74	7.75 - 8.24	8.25 - 8.74	8.75 - 9.0	MSA	2/25/2014	2/25/2014	2/26/2014	2/26/2014
pH	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	NL	7.9	7.8	8	8
Lead	400	NL	800	NL	700	NL	NL	NL	107	107	107	107	282	36	12.9	12.3	8.4	13.8

See endnotes after Table 5.

Table 5
Soil TPH Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

Analyte	Attenuation Capacity		SB-1 (2-3')	SB-1 (20-21')	SB-2 (2-3')	SB-2 (22-23')	SB-3 (3-5')	SB-3 (25-27')	SB-4 (2-3.5')	SB-4 (19-20')
	0-1 Meter	>1 Meter	1/22/2014	1/22/2014	1/22/2014	1/22/2014	1/22/2014	1/22/2014	1/23/2014	1/23/2014
TPH (DRO)	6,000	2,000	16.6 **JB**	<12.6	97.2	12.0 **NJB**	1.5 **UJB**	11.5 **NJB**	4.3 **NJB**	<12.4
TPH (GRO)	6,000	2,000	<8.8	<11.0	9.0 **NJ**	<10.1	<6.1	3.1 **NJ**	<9.3	<9.6

See endnotes after Table 5.

Table 5
Soil TPH Analytical Results
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

SB-5 (2-3') 1/23/2014	SB-5 (10-12') 1/23/2014	DUP-001 1/23/2014	SB-6 (1.5-3') 2/25/2014	SB-6 (15-16.5') 2/25/2014	SB-7 (1.5-3') 2/25/2014	SB-7 (17-18') 2/25/2014	SB-8 (1.5-2.5') 2/25/2014	SB-8 (14-15') 2/25/2014	DUP-002 2/25/2014	SB-9 (3-4') 2/26/2014	SB-9 (12-14') 2/26/2014
<12.0	<12.5	3.1 **NJB**	<11	16.3	<11.5	<12.1	<11.7	<12.6	<12.4	<12.2	<12.4
<9.2	<9.6	<10.8	<19.8	<9.9	<8.9	<9.3	<7.5	<10	<10.4	<9.6	<11.2

Table 6
Analytical Endnotes
Former Standard Oil Bulk Plant #5482
Wedron, LaSalle County, Illinois

Sample Collection Method/Sample Type
DUP - Duplicate Sample
MW - Monitoring Well
SB - Soil Boring

General Abbreviations and Symbols
MSA - Metropolitan Statistical Area
NL - Not Listed
RO - Remediation Objective
Residential - Section 742. Appendix B. Table A. Tier 1 Soil Remediation Objectives for Residential Properties
Ind/Comm - Section 742. Appendix B. Table B. Tier 1 Soil Remediation Objectives for Industrial/Commercial Properties
PNAs in Background Soils - Section 742. Appendix A. Table H Concentrations of Polynuclear Aromatic Hydrocarbon Chemicals in Background Soils
Background Metro Statistical Areas - Section 742. Appendix A. Table G. Concentrations of Inorganic Chemicals in Background Soils; Counties Within Metropolitan Statistical Areas
pH Specific - Section 742. Appendix B. Table C. pH Specific Soil Remediation Objectives for Inorganics and Ionizing Organics for the Soil Component of the Groundwater Ingestion Route (Class I Groundwater) and Table D. pH Specific Soil Remediation Objectives for Inorganics and Ionizing Organics for the Soil Component of the Groundwater Ingestion Route (Class II Groundwater)
IG - Ingestion
IH - Inhalation
CW IG - Construction Worker Ingestion
CW IH - Construction Worker Inhalation
SC CL1 - Soil Component of the Groundwater Ingestion Exposure Route Values for Class I Groundwater
SC CL2 - Soil Component of the Groundwater Ingestion Exposure Route Values for Class II Groundwater
PNA - Polynuclear Aromatic Hydrocarbon
SVOC - Semivolatile Organic Compound
VOC - Volatile Organic Compound
TPH - Total Petroleum Hydrocarbon

Data Presentation

<0.005	Not detected
0.005	Detection below lowest specified RO
0.005	(Bold, Shaded) Indicates compound detected above lowest specified RO and background concentration (if applicable)
	(Blank) Indicates no analytical data for compound
NL	RO not listed

TACO ROs from:
Tiered Approach to Corrective Action Objectives (TACO) Illinois Administrative Code 35 Section 742; Dated July 15, 2013

Non-TACO ROs from:
Chemicals Not In TACO Tier 1 Tables prepared by IEPA Toxicity Assessment Unit, revised October 30, 2012.

Validation Flags Applicable to this Review:
U=The analyte was analyzed for, but not detected above the reported sample quantitation limit.
J=The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ=The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N=The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ=The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
R=The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
B=The analyte was detected in the method, field and/or trip blank.

Appendix A

EPA Correspondence dated July 22, 2014

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

July 22, 2014

Ms. Mary Wojciechowski
BP
150 West Warrenville Rd MC 200-1N
Naperville, IL. 60563

Dear Ms. Wojciechowski,

U.S. EPA has reviewed the Wedron Phase II Technical Memorandum which was submitted to U.S. EPA on May 9, 2014. Below are U.S. EPA's comments, including changes that you must incorporate into the Technical Memorandum.

Soil Boring Advancement Section:
According to the work plan, the first sampling interval was to be 0-3 feet. This first sampling interval varied with each soil boring. Explain the variation in sampling for each soil boring in this section. Also, discuss the PID readings encountered in boreholes in this section. Describe any sample preservation technique used by BP in this section (encores, methanol pre- preserved vials, etc.).

Figure 2:
Adjust Figure 2 to indicate the location of the UST removed in July 2012 by Illinois Railway.

Data Validation Reports:
Data validation was not discussed in this report and the data validation reports were not included as an attachment. Include a summary of each data validation report's findings (biased sample results, elevated detection limits, etc.), and provide a statement regarding the usability of the data sets and whether the data met the Data Quality Objectives for the project. Provide the data validation reports as an attachment to the Technical Memorandum.

Soil Boring Logs:
Boring logs indicated various times that do not coincide with a soil sample interval. Indicate what these times represent.
The Technical Memorandum states that soil borings were advanced from "the ground surface to refusal/bedrock". Only boring log SB-1 has any reference to termination at bedrock surface. Change the termination depth on the log for boring SB-4 to 24 ft. Boring logs SB-8 and SB-9 indicate trace white sand toward the bottom of the borehole. Is that the bedrock surface at these two locations? Provide evidence that indicates the other

borings were completed at or into the bedrock surface. Include PID units in the soil boring logs.

The Technical Memorandum indicates that the second soil sample would be collected from "above the top of bedrock" if there were no elevated PID readings. According to the boring logs, several samples were collected several feet above the termination of the soil boring. Explain why these samples were not collected from the interval immediately above the bedrock surface.

In summary, the most significant comments are regarding descriptions and omission of information in the soil boring logs. It is unclear where bedrock was encountered and why samples were not collected immediately above the bedrock, assuming that the end of the soil boring was at bedrock.

If you would like to discuss these comments you can call or e-mail me. Please send the data validation reports and a revised Technical Memorandum incorporating the requested changes to U.S. EPA as soon as possible. U.S. EPA will present the results of the BP investigation and other site investigations conducted by Illinois Railway, Wedron Silica Co./Technisand Inc./Lockheed Martin and IEPA at the Hoxsey Property at a public meeting in Ottawa, Illinois from 5 to 7 PM on August 6, 2014 at the Dayton Township Hall at 3312 E. 18th Rd., in Ottawa.

Sincerely,

Steve Faryan, USEPA
On-Scene Coordinator
Emergency Response Branch
312-353-9351

Appendix B

Soil Boring Logs

PROJECT: **Former BP Bulk Plant #5482**
LOCATION: **Wedron, Illinois**
PROJECT NUMBER: **182630000**

WELL / PROBEHOLE / BOREHOLE NO: **SB-1** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **1/22/14** COMPLETED: **1/22/14**
DRILLING COMPANY: **SEC**
DRILLING EQUIPMENT: **Geoprobe**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **Macro Core 5-foot sampler**

NORTHING (ft):
EASTING (ft):
LAT:
LONG:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **Not Encountered**
WELL DEPTH (ft): **---**
STATIC DTW (ft): **Not Encountered**
BOREHOLE DEPTH (ft): **23.0**
WELL CASING DIA. (in): **---**
BOREHOLE DIA. (in): **3**
LOGGED BY: **C. Varland**
CHECKED BY: **L. Price**

Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)
10:58			**CRUSHED LIMESTONE**; approximately 6 inches		-			0.00	
		ML	**SILT WITH GRAVEL** ; ML; dark brown; trace concrete		-			0.00	
		CL-ML	**SILTY CLAY** ; CL-ML; brown; low plasticity; trace gravel and concrete fill		1058 SB-1 2-3'	5		0.00	
			...same as above; trace gravel and fill; slightly moist		-			0.00	
5					-			0.00	5
			...same as above			0			
					-			0.00	
					-	4		0.00	
		SW	**SAND** ; SW; fine to coarse-grained		-			0.00	
10					-			0.00	10
		SP	**SAND** ; SP; brown; fine-grained		-			0.00	
					-			0.00	
		CL-ML	**SILTY CLAY** ; CL-ML; brown; moist		-	4		0.00	
					-			0.00	
		SP	**SAND** ; SP; brown; fine-grained; moist		-			0.00	
15									15
		CL-ML	**SILTY CLAY** ; CL-ML; brown		-			0.00	
						5			
			...same as above; low plasticity		-			0.00	
			...same as above; gray-brown						
11:30 20					-			0.00	20
					1130 SB-1 20-21'			0.00	
					-	3		0.00	
			SANDSTONE; gray; fine-grained		-			0.00	
			Refusal at 23 feet.						
25									

GEO FORM 304 FORMER BP #5482 WEDRON, ILLINOIS.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 8/5/14

PROJECT: **Former BP Bulk Plant #5482**
LOCATION: **Wedron, Illinois**
PROJECT NUMBER: **182630000**

WELL / PROBEHOLE / BOREHOLE NO: **SB-2** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **1/22/14** COMPLETED: **1/22/14**
DRILLING COMPANY: **SEC**
DRILLING EQUIPMENT: **Geoprobe**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **Macro Core 5-foot sampler**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **Not Encountered**
STATIC DTW (ft): **Not Encountered**
WELL CASING DIA. (in): ---
LOGGED BY: **C. Varland**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): ---
BOREHOLE DEPTH (ft): **23.0**
BOREHOLE DIA. (in): **3**
CHECKED BY: **L. Price**

Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)
		ML	**SILT** ; ML; black			0			
					1208 SB-2 2-3'			2.25	
		CL-ML	**SILTY CLAY** ; CL-ML; dark brown; mottled; moist; trace fill		-	3		0.00	
					-			0.00	
5			...same as above; brown		-			0.00	5
					-			0.00	
					-	5		0.00	
		SW	**SAND** ; SW; brown; fine to medium-grained; moist; trace gravel		-			0.00	
					-			0.00	
10					-			0.00	10
		CH	**CLAY** ; CH; brown; high plasticity; wet; trace silt		-			0.00	
					-			0.00	
					-	4.5		0.00	
					-			0.00	
		SW	**SAND** ; SW; brown; very fine to fine-grained; wet		-			0.00	
15					-			0.00	15
						3.5			
		CL-ML	**SILTY CLAY** ; CL-ML; grayish brown; low plasticity; very moist		-			0.00	
					-			0.00	
20			...same as above; gray; moist		-			0.00	20
					-	3		0.00	
					1240 SB-2 22-23'			0.00	
			Refusal at 23 feet.						
25									

GEO FORM 304 FORMER BP #5482 WEDRON, ILLINOIS.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 6/5/14

PROJECT: **Former BP Bulk Plant #5482**
LOCATION: **Wedron, Illinois**
PROJECT NUMBER: **182630000**

WELL / PROBEHOLE / BOREHOLE NO: **SB-3** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **1/22/14** COMPLETED: **1/22/14**
DRILLING COMPANY: **SEC**
DRILLING EQUIPMENT: **Geoprobe**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **Macro Core 5-foot sampler**

NORTHING (ft):
EASTING (ft):
LAT:
LONG:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **Not Encountered**
WELL DEPTH (ft): **---**
STATIC DTW (ft): **Not Encountered**
BOREHOLE DEPTH (ft): **30.0**
WELL CASING DIA. (in): **---**
BOREHOLE DIA. (in): **3**
LOGGED BY: **C. Varland**
CHECKED BY: **L. Price**

Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)
		ML	**SILT WITH GRAVEL** ; ML; dark brown; moist		-			0.00	
			..same as above; trace cinders and fill		-			0.00	
		CL-ML	**SILTY CLAY** ; CL-ML; brown; low plasticity; moist			5			
					1330 SB-3 3-5'			0.00	
5					-	0		0.00	5
					-			0.00	
		CL	**SANDY CLAY** ; CL; brown; low plasticity; moist			3.5			
		SW	**SAND WITH GRAVEL** ; SW; brown; fine-grained		-			0.00	
10		SM	**SILTY SAND** ; SM; brown; fine-grained; wet		-			0.00	10
					-			0.00	
		SW	**SAND WITH GRAVEL** ; SW; brown; fine to medium-grained		-	5		0.00	
					-			0.00	
14:15	15	SP	**SAND** ; SP; brown; fine-grained; wet		-			0.00	15
		CL-ML	**SILTY CLAY** ; CL-ML; brown; low plasticity; moist			5			
					-			0.00	
		SM	**SILTY SAND** ; SM; brown; very fine-grained		-			0.00	
13:30	20	SP	**SAND** ; SP; brown; fine-grained		-			0.00	20
					-			0.00	
					-	4.5		0.00	
					-			0.00	
		CL-ML	**SILTY CLAY** ; CL-ML; brown; moist		-			0.00	
25					1415 SB-3 25-27'			0.00	25
			...same as above; gray; low plasticity			5			
					-			0.00	
					-			0.00	

Refusal at 30 feet.

GEO FORM 304 FORMER BP #5482 WEDRON, ILLINOIS.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 8/5/14

PROJECT: **Former BP Bulk Plant #5482**
LOCATION: **Wedron, Illinois**
PROJECT NUMBER: **182630000**

WELL / PROBEHOLE / BOREHOLE NO: **SB-4** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **1/23/14** COMPLETED: **1/23/14**
DRILLING COMPANY: **SEC**
DRILLING EQUIPMENT: **Geoprobe**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **Macro Core 5-foot sampler**

NORTHING (ft):
EASTING (ft):
LAT:
LONG:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **Not Encountered**
WELL DEPTH (ft): **---**
STATIC DTW (ft): **Not Encountered**
BOREHOLE DEPTH (ft): **24.0**
WELL CASING DIA. (in): **---**
BOREHOLE DIA. (in): **3**
LOGGED BY: **C. Varland**
CHECKED BY: **L. Price**

Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)
09:55		ML	**SILT** ; ML; dark brown; moist; trace organics		-			0.00	
		CL-ML	**SILTY CLAY** ; CL-ML; brown; low plasticity; trace organics		-	3.5		0.00	
					955 SB-4 2-3.5'			0.00	
			NO RECOVERY						
5						0			5
		CL-ML	**SILTY CLAY** ; CL-ML; brown						
		SP	**SAND** ; SP; brown; fine-grained; trace gravel		-	3.5		0.00	
					-			0.00	
10			...same as above; very moist						10
		CL-ML	**SILTY CLAY** ; CL-ML; brown; wet		-			0.00	
						5			
		SP	**SAND** ; SP; fine-grained; wet		-			0.00	
		CL-ML	**SILTY CLAY** ; CL-ML; brown; moist						
15		SP	**SAND** ; SP; brown; very fine to fine-grained						15
			...same as above; fine-grained; moist		-			0.00	
		CL-ML	**SILTY CLAY** ; CL-ML; brown; moist to wet			5			
					-			0.00	
					1025 SB-4 19-20' (DUP-001)			0.70	
20			...same as above; gray; low plasticity						20
					-			0.35	
						4			
					-			0.25	
25			Refusal at 24 feet.						

GEO FORM 304 FORMER BP #5482 WEDRON, ILLINOIS.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 8/5/14

PROJECT: **Former BP Bulk Plant #5482**
LOCATION: **Wedron, Illinois**
PROJECT NUMBER: **182630000**

WELL / PROBEHOLE / BOREHOLE NO: **SB-5** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **1/23/14** COMPLETED: **1/23/14**
DRILLING COMPANY: **SEC**
DRILLING EQUIPMENT: **Geoprobe**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **Macro Core 5-foot sampler**

NORTHING (ft):
EASTING (ft):
LAT:
LONG:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **Not Encountered**
WELL DEPTH (ft): **---**
STATIC DTW (ft): **Not Encountered**
BOREHOLE DEPTH (ft): **24.0**
WELL CASING DIA. (in): **---**
BOREHOLE DIA. (in): **3**
LOGGED BY: **C. Varland**
CHECKED BY: **L. Price**

Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID ppm	Depth (feet)
11:15		ML	**SILT** ; ML; dark brown; moist; trace organics		-			0.00	
		CL-ML	**SILTY CLAY** ; CL-ML; brown; trace organics, trace gravel		-			0.00	
			...same as above; no gravel		1115 SB-5 2-3' (MS/MSD)	5		0.00	
					-			0.00	
5					-			0.00	5
			NO RECOVERY			0			
		CL	**SANDY CLAY** ; CL; brown; moist; trace organics						
		SP	**SAND** ; SP; brown; fine-grained; trace gravel		-			0.10	
						3			
11:30 10					-			0.10	10
			...same as above; wet		1130 SB-5 10-12'			0.45	
		CL-ML	**SILTY CLAY SOME FINE SAND** ; CL-ML; brown; wet			5			
					-			0.20	
		SP	**SAND** ; SP; brown; fine-grained; wet		-			0.00	
15		CL-ML	**SILTY CLAY** ; CL-ML; brown; low plasticity; very moist		-			0.00	15
		SP	**SAND** ; SP; brown; fine-grained; moist			5			
					-			0.00	
		CL-ML	**SILTY CLAY** ; CL-ML; brownish gray; low plasticity; moist		-			0.20	
20			...same as above; gray		-			0.00	20
						4			
					-			0.00	
25			Refusal at 24 feet.						

GEO FORM 304 FORMER BP #5482 WEDRON, ILLINOIS.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 8/5/14

PROJECT: **Former BP Bulk Plant #5482**
LOCATION: **Wedron, Illinois**
PROJECT NUMBER: **182630000**

WELL / PROBEHOLE / BOREHOLE NO: **SB-6** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **2/25/14** COMPLETED: **2/25/14**
DRILLING COMPANY: **SEC**
DRILLING EQUIPMENT: **Geoprobe**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **Macro Core 5-foot sampler**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **Not Encountered**
STATIC DTW (ft): **Not Encountered**
WELL CASING DIA. (in): **---**
LOGGED BY: **C. Varland**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): **---**
BOREHOLE DEPTH (ft): **16.5**
BOREHOLE DIA. (in): **3**
CHECKED BY: **L. Price**

Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)
10:26		SW	**SAND** ; SW; brown; very fine to medium-grained; wet		1026 SB-6 1.5-3'	3.5		0.00	
		CL-ML	**SILTY CLAY** ; CL-ML; brown; moist; trace very fine-grained sand					0.00	
								0.00	
10:35	5	SP	**SAND** ; SP; brown; fine-grained; moist					0.00	5
		CL-ML	**SILTY CLAY** ; CL-ML; brown; moist					0.00	
		SP	**SAND** ; SP; brown; fine-grained; moist			5		0.00	
								0.00	
10:45	10	CL-ML	**SILTY CLAY** ; CL-ML; brown; moist					0.00	10
			...same as above; gray; low plasticity			5		0.00	
								0.00	
10:55	15		...same as above; stiff		1055 SB-6 15-16.5' & DUP-002	1.5		0.00	15
			Refusal at 16.5 feet.						
	20								
	25								

GEO FORM 304 FORMER BP #5482 WEDRON, ILLINOIS.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 8/5/14

PROJECT: **Former BP Bulk Plant #5482**
LOCATION: **Wedron, Illinois**
PROJECT NUMBER: **182630000**

WELL / PROBEHOLE / BOREHOLE NO: **SB-7** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **2/25/14** COMPLETED: **2/25/14**
DRILLING COMPANY: **SEC**
DRILLING EQUIPMENT: **Geoprobe**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **Macro Core 5-foot sampler**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **Not Encountered**
STATIC DTW (ft): **Not Encountered**
WELL CASING DIA. (in): **---**
LOGGED BY: **C. Varland**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): **---**
BOREHOLE DEPTH (ft): **18.0**
BOREHOLE DIA. (in): **3**
CHECKED BY: **L. Price**

Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)
11:40		SP	**SAND** ; SP; brown; very fine to fine-grained; wet; trace organics		1140 SB-7 1.5-3'	3.5		0.00	
								0.00	
		ML	**CLAYEY SILT WITH FINE SAND** ; ML; moist					0.00	
11:50	5	SP	**SAND** ; SP; brown; very fine to fine-grained; moist					0.00	5
		CL-ML	**SILTY CLAY** ; CL-ML; brown; very moist						
		SM	**SILTY SAND** ; SM; brown; very moist			5		0.00	
12:05	10							0.00	10
		CL-ML	**SILTY CLAY** ; CL-ML; gray; low plasticity; moist			3.5		0.00	
								0.00	
12:15	15							0.00	15
						3		0.00	
					1215 SB-7 17-18'			0.00	
	20		Refusal at 18 feet.						
	25								

GEO FORM 304 FORMER BP #5482 WEDRON, ILLINOIS.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 8/5/14

PROJECT: **Former BP Bulk Plant #5482**
LOCATION: **Wedron, Illinois**
PROJECT NUMBER: **182630000**

WELL / PROBEHOLE / BOREHOLE NO: **SB-8** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **2/25/14** COMPLETED: **2/25/14**
DRILLING COMPANY: **SEC**
DRILLING EQUIPMENT: **Geoprobe**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **Macro Core 5-foot sampler**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **Not Encountered**
STATIC DTW (ft): **Not Encountered**
WELL CASING DIA. (in): **---**
LOGGED BY: **C. Varland**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): **---**
BOREHOLE DEPTH (ft): **16.0**
BOREHOLE DIA. (in): **3**
CHECKED BY: **L. Price**

Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)
13:05		SW	**SAND** ; SW; brown; fine to coarse-grained; wet; trace gravel		1305 SB-8 1.5-2.5'	3.5		0.00	
		SP	**SAND** ; SP; brown; fine-grained; wet		-			0.00	
					-			0.00	
13:10	5		...same as above; very moist		-			0.00	5
		CL-ML	**SILTY CLAY** ; CL-ML; brown; moist			4.5			
		SP	**SAND** ; SP; brown; fine to medium-grained; moist		-			0.00	
					-			0.00	
13:25	10	CL-ML	**SILTY CLAY** ; CL-ML; gray brown; stiff		-			0.00	10
			...same as above; gray; low plasticity		-	5		0.00	
					1325 SB-8 14-15'			0.00	
13:35	15		...same as above; trace white sand		-	1		0.00	15
			Refusal at 16 feet.						
	20								
	25								

GEO FORM 304 FORMER BP #5482 WEDRON, ILLINOIS.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 8/6/14

PROJECT: **Former BP Bulk Plant #5482**
LOCATION: **Wedron, Illinois**
PROJECT NUMBER: **182630000**

WELL / PROBEHOLE / BOREHOLE NO: **SB-9** PAGE 1 OF 1

Stantec

DRILLING / INSTALLATION:
STARTED **2/26/14** COMPLETED: **2/26/14**
DRILLING COMPANY: **SEC**
DRILLING EQUIPMENT: **Geoprobe**
DRILLING METHOD: **Direct Push**
SAMPLING EQUIPMENT: **Macro Core 5-foot sampler**

NORTHING (ft):
EASTING (ft):
LAT:
LONG:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **Not Encountered**
WELL DEPTH (ft): **---**
STATIC DTW (ft): **Not Encountered**
BOREHOLE DEPTH (ft): **14.0**
WELL CASING DIA. (in): **---**
BOREHOLE DIA. (in): **3**
LOGGED BY: **C. Varland**
CHECKED BY: **L. Price**

Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppm)	Depth (feet)
08:50		SP	**SAND** ; SP; brown; fine-grained; wet			2			
					850 SB-9 3-4'			0.00	
					-			0.00	
09:00	5								5
					-			0.00	
		CL-ML / SP	**SILTY CLAY** ; CL-ML; brown			4			
			SAND ; SP; brown; fine to medium-grained; very moist						
					-			0.00	
			...same as above; medium-grained; trace rounded gravel						
09:08	10	CL	**CLAY** ; CL; gray brown; low plasticity; moist						10
					-			0.00	
			...same as above			4			
					908 SB-9 12-14' & MS/MSD			0.00	
			...same as above; trace white sand						
	15		Refusal at 14 feet.						
	20								
	25								

GEO FORM 304 FORMER BP #5482 WEDRON, ILLINOIS.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 8/5/14

Appendix C

Summary of Data Quality Control and Data Validation Checklists

APPENDIX C
SUMMARY OF DATA QUALITY CONTROL

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Attachment Data Validation Checklists

1.0 SUMMARY OF DATA QUALITY CONTROL

This section summarizes actions taken to ensure data quality control by the laboratory and field personnel. Samples were collected from the field and delivered to Pace Laboratories in Minneapolis, Minnesota. The following analytical methods were used for data collection during the January 2014 through February 2014 reporting period.

- Volatile organic compounds (VOCs) - EPA Method 8260B
- Semi-Volatile organic compounds (SVOCs) – EPA Method 8270
- Diesel range organics (DRO) - EPA Method 8015 modified
- Gasoline range organics - 8015/8021
- Lead - EPA Method 6010
- pH - EPA Method 9045
- Percent moisture - ASTM Method D2974

1.1 Data Validation

Data validation was performed in accordance with the Scope of Work and Quality Assurance Project Plan (QAPP dated October 29, 2013) for the BP Wedron, Illinois site #5482. Data validation was performed to ensure the quality of project data. Three analytical reports 10256148, 10259041 and 10259055 were validated and reviewed for the following:

- Completeness of data deliverables,
- Sample holding time,
- Blank data (method, trip, equipment and field),
- Gas Chromatograph/Mass Spectrometer performance, calibration, internal standard and surrogate recoveries,
- Matrix spike/matrix spike duplicate (MS/MSD) recovery,
- Laboratory control sample (LCS) recovery,
- Laboratory duplicate sample precision,
- Field sample duplicate precision, and
- Overall data assessment

The Data Validation Checklists for data collected during the reporting period are presented in the Attachment to this summary.

1.2 Data Presentation and Evaluation

Pace Laboratories reported the analytical data using data qualifiers to identify values reported above the instrument detection limit (IDL) and below the method-specific reporting limit (RL). A J-qualifier was used by the laboratory for organic analysis and a B-qualifier for inorganic

analysis to signify a detected value above the IDL and below the RL. An NJ qualifier is used by the Validator. The level of confidence associated with the J- and NJ-qualified data is less than the 95 percent confidence associated with data reported above the RL; therefore, the data are considered estimated.

1.3 Laboratory Quality Controls

The types of laboratory quality control (QC) samples associated with this report include method blank, LCS, and MS/MSD samples and laboratory duplicates. These QC samples were used to measure analytical method precision and accuracy. The method blank was used to assess laboratory contamination. The holding time criteria for samples were met during the reporting period.

1.3.1 Laboratory Method Blank Samples

Representativeness of data was evaluated through review of analysis holding times and laboratory blank data in accordance with EPA analytical method guidelines. Analytes were reported in method blanks in all the laboratory packages. DRO was detected at 3.9 mg/Kg in packages 10259041 and 10259055. DRO was detected at 2.0 mg/Kg in package 10256148. Laboratory data were qualified appropriately. Refer to the Tables attachment of the Technical Memorandum (Memo).

1.3.2 Laboratory Control Samples

LCSs were analyzed with each sample delivery group (SDG) for each analytical method. LCS spike recoveries reported at concentrations above or below specific control limits resulted in qualification of those analytes in the associated field samples. The LCS data were used in conjunction with the matrix spike recovery data and the system monitoring compound recoveries to evaluate the accuracy of the analytical data.

No data packages reported laboratory control percent recoveries (%Rs) below or above limits for any analytes.

Matrix Spike Samples

Laboratory MS/MSD samples were analyzed at a frequency of 5 percent for each analytical method. MS/MSD sample recoveries were evaluated in conjunction with the other batch QC sample recoveries to evaluate the need for qualification of analytical data. Site specific MS/MSD samples were submitted and analyzed in three preparation batches in three data packages, a frequency greater than required by the QAPP.

Site specific MS/MSD samples reported %Rs and RPDs above limits for GRO in packages 10259041 and 10259055. The MS/MSD sample used for 8260 analysis in packages 10259041 and 10259055 reported numerous analyte %Rs below limits. The associated laboratory control sample is within limits, only the parent sample is flagged. Laboratory data were qualified appropriately (see Tables attachment of the Memo).

1.3.3 Measurement Monitoring Compounds

Analytical measurement monitoring compounds, also known as surrogate spike compounds, were used for EPA Method 8260B VOC and 8260 SIM analysis to monitor the performance of an individual measurement during sample extraction and analysis. All samples demonstrated surrogate recoveries which were within limits.

All performance evaluation and internal standards recoveries were within limits for all samples analyzed. Instrument initial and continuing calibrations are within limits for all analytical batches.

1.4 Field Quality Controls

Field QC samples for this report were collected in accordance with the Scope of Work and the QAPP. Two solid field duplicates were collected to assess the precision associated with the sampling and the laboratory analysis. The RPDs for all the duplicate samples collected are within limits.

Two trip blanks were collected for water samples and analyzed for VOCs to assess the potential for contamination resulting from sample shipping and storage. One rinsate or equipment blank was collected and analyzed in support of monitoring activities.

No analytes were detected in the trip or equipment blanks. The trip blanks, rinsate/equipment blanks and field duplicates were collected and used in the data validation procedure in accordance with the QAPP.

1.5 Data Assessment and Usability

The Data Validation Checklists summarize compounds that were qualified and are presented in the Attachment to this summary. Additionally, qualifiers and reasons are associated with the appropriate data in the Tables attachment of the Memo.

In general the following items were qualified: DRO was detected in all method blanks during the reporting period. GRO results are qualified because of matrix spike/matrix spike duplicate RPD being above limits. Sample SB-9 12-14 has flags due to %Rs below limit for numerous VOC analytes. Data flags reflecting these conditions are found in the Tables attachment of the Memo.

Data were considered "useable" and marked as such in the Tables attachment of the Memo provided that it was validated according to the QAPP and Scope of work, and that it was not qualified as "rejected". The Data Validation Checklists summarize compounds that were qualified and are presented in the Attachment. Additionally, qualifiers and reasons are associated with the appropriate data in the Tables attachment of the Memo.

Stantec Analytical Validation Checklist **Report No. 040414-EC-01**

Project Name: BP – Site # 5482	Project Number: 182630000
Stantec Validator: Elizabeth Crowley	Laboratory: Pace Analytical, Minneapolis, MN
Date Validated: 04/04/14	Laboratory Project Number: 10256148
Sample Start-End Date: 01/22-01/23/14	Laboratory Report Date: 02/21/14

Parameters Validated: Volatile Organic Compounds (VOC) by EPA SW 846 8260, Semi-Volatile Organic Compounds by 8270, Diesel Range Organics by 8015 mod, Gasoline Range Organics by 8015/8021, Lead by 6010 and Percent Moisture by ASTM D2974.

Associated Chain(s) of Custody – no numbers
Samples Validated – 11 solid field samples and 1 solid Trip Blank

VALIDATION CRITERIA CHECK

Validation Flags Applicable to this Review:

U	The analyte was analyzed for, but not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
B	The analyte was detected in the method, field and/or trip blank.

1.	Were all the analyses requested for the samples submitted with each COC completed by the lab?	Yes X	No
Comments:			
2.	Did the laboratory identify any non-conformances related to the analytical result?	Yes X	No
Comments: See case narrative.			
3.	Were sample Chain-of-Custody forms complete?	Yes X	No
Comments:			
4.	Were samples received in good condition and at the appropriate temperature?	Yes X	No
Comments:			
5.	Were sample holding times met?	Yes X	No
Comments:			
6.	Were correct concentration units reported?	Yes X	No
Comments:			
7.	Were detections found in laboratory blank samples?	Yes	No

		X	
Comments: 8015 mod batches OEXT 24241 and analytical 12762 – DRO = 2.0 mg/Kg. Associated sample results below the blank concentration validated to non-detect, flagged "UJB" and the detection limit changed to the blank concentration. Sample results above the blank concentration are flagged "JB" and the detection limit changed to the blank concentration. Sample results greater than 25 times the blank concentration require no qualifying action. Reason Code – MB			
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?		Yes	No X
Comments:			
9. Were instrument calibrations within method criteria?	NA	Yes	No
Comments: Level II data package – no data provided.			
10. Were surrogate recoveries within control limits?		Yes X	No
Comments:			
11. Were laboratory control sample recoveries within control limits?		Yes X	No
Comments:			
12. Were matrix spike recoveries within control limits?		Yes X	No
Comments:			
13. Were RPDs within control limits?		Yes	No X
Comments: 8260 batched prep 26251 and analytical 26253 – MS/DS RPD above limits for 1,2,4-Trichlorobenzene, Hexachlorobutadiene and n-Butylbenzene. Associated sample results non-detect. No qualifying action required.			
14. Were dilutions required on any samples?		Yes	No X
Comments:			
15. Were Tentatively Identified Compounds (TIC) present?		Yes X	No
Comments: Sample results below the reporting limit do not possess the degree of qualitative or quantitative confidence required. The value may be a false positive and is an estimated value and is flagged "NJ". Reason Code SQL			
16. Were organic system performance criteria met?	NA	Yes	No
Comments: Level II data package – no data provided.			
17. Were GC/MS internal standards within method criteria?	NA	Yes	No
Comments: Level II data package – no data provided.			

18. Were inorganic system performance criteria met?	NA	Yes	No
Comments: No inorganic samples submitted.			
19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results.		Yes X	No
Duplicate Sample No. DUP-001	Primary Sample No. SB-4 19-20		
Comments: All results non-detect or below the reporting limit. RPD within limits.			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:		Yes	No X
Comments:			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Analytical Validation Checklist **Report No. 040414-EC-02**

Project Name: BP – Site # 5482	Project Number: 182630000
Stantec Validator: Elizabeth Crowley	Laboratory: Pace Analytical, Minneapolis, MN
Date Validated: 03/26/14	Laboratory Project Number: 10259041
Sample Start-End Date: 02/26/14	Laboratory Report Date: 03/13/14

Parameters Validated: Volatile Organic Compounds (VOC) by EPA SW 846 8260, Semi-Volatile Organic Compounds by 8270, Diesel Range Organics by 8015 mod, Gasoline Range Organics by 8015/8021, Lead by 6010, pH by 9045 and Percent Moisture by ASTM D2974.

Associated Chain(s) of Custody – no numbers

Samples Validated – 2 solid field samples and 1 Equipment Blank

VALIDATION CRITERIA CHECK

Validation Flags Applicable to this Review:

U	The analyte was analyzed for, but not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
B	The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	

Comments: pH analysis not requested on chain-of-custody. No qualifying action required.

	Yes	No
2. Did the laboratory identify any non-conformances related to the analytical result?	X	

Comments: See case narrative.

	Yes	No
3. Were sample Chain-of-Custody forms complete?	X	

Comments:

	Yes	No
4. Were samples received in good condition and at the appropriate temperature?		X

Comments: One vial for sample SB-9 12-14' arrived at laboratory broken. Extra vials submitted for matrix spike purposes. No qualifying action required.

	Yes	No
5. Were sample holding times met?	X	

Comments:

	Yes	No
6. Were correct concentration units reported?	X	

Comments:

7. Were detections found in laboratory blank samples?	Yes	No
	X	
Comments: 8015 mod batch OEXT 24492 – DRO = 3.9 mg/Kg. 8260 batch MSV/26501 – Carbon Disulfide = 0.17 µg/Kg, Toluene = 0.01 µg/Kg, 2-Hexanone = 0.32 µg/Kg, 1,2,4-Trichlorobenzene = 0.08 µg/Kg, Naphthalene = 0.17 µg/Kg and 2-Methylnaphthalene = 0.18 µg/Kg. Associated sample results below the blank concentration validated to non-detect, flagged "UJB" and the detection limit changed to the blank concentration. Sample results above the blank concentration are flagged "JB" and the detection limit changed to the blank concentration. Sample results greater than 100 times the blank concentration require no qualifying action. Reason Code – MB		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes	No
		X
Comments:		
9. Were instrument calibrations within method criteria?	Yes	No
	X	
Comments: No sample results qualified for calibration issues.		
10. Were surrogate recoveries within control limits?	Yes	No
	X	
Comments:		
11. Were laboratory control sample recoveries within control limits?	Yes	No
	X	
Comments:		
12. Were matrix spike recoveries within control limits?	Yes	No
		X
Comments: 8015/8021 batch GCV/11739 - %Rs above limits for GRO. Sample site specific. GRO result flagged "UJ" for SB-9 12-14' only. 8260 batch MSV/26501 - %Rs below limits for 1,2-Dibromoethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1-Dichloropropene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 4-Chlorotoluene, Bromobenzene, Bromodichloromethane, Bromoform, Chlorobenzene, cis-1,3-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, n-Butylbenzene, n-Propylbenzene, Naphthalene, p-Isopropyltoluene, Styrene, Tetrachloroethene, Toluene, trans-1,3-Dichloropropene, Trichloroethene and Xylene. Sample site specific. Associated results flagged "UJ" for SB-9 12-14' only. 8260 batch MSV/26462 - %R above limits for Benzene and below limits for Bromomethane. Sample not site specific, no qualifying action required. Reason Code – MS		
13. Were RPDs within control limits?	Yes	No
		X

Comments: 8015/8021 batch GCV/11739 – MS/DS RPD above limits for GRO. Associated sample results flagged "J" if positive. Reason Code - MD 8260 batch MSV/26462 – MS/DS RPD above Bromomethane. Associated sample results non-detect. No qualifying action required.		
14. Were dilutions required on any samples?	Yes	No X
Comments:		
15. Were Tentatively Identified Compounds (TIC) present?	Yes	No X
Comments:		
16. Were organic system performance criteria met?	Yes X	No
Comments:		
17. Were GC/MS internal standards within method criteria?	Yes	No X
Comments: 8260 batch MSV/26501 – Matrix duplicate sample reported one of six internal standards areas below limits. No qualifying action required.		
18. Were inorganic system performance criteria met?	Yes X	No
Comments:		
19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample No. Primary Sample No.	Yes	No X
Comments:		

20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?	Yes X	No	Initials EAC
Comments:			
21. Other:	Yes		No X
Comments:			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Stantec Analytical Validation Checklist **Report No. 040414-EC-03**

Project Name: BP – Site # 5482	Project Number: 182630000
Stantec Validator: Elizabeth Crowley	Laboratory: Pace Analytical, Minneapolis, MN
Date Validated: 03/28/14	Laboratory Project Number: 10259055
Sample Start-End Date: 02/28/14	Laboratory Report Date: 03/13/14

Parameters Validated: Volatile Organic Compounds (VOC) by EPA SW 846 8260, Semi-Volatile Organic Compounds by 8270, Diesel Range Organics by 8015 mod, Gasoline Range Organics by 8015/8021, Lead by 6010, pH by 9045 and Percent Moisture by ASTM D2974.

Associated Chain(s) of Custody – no numbers

Samples Validated – 7 solid field samples and 1 Trip Blank

VALIDATION CRITERIA CHECK

Validation Flags Applicable to this Review:

U	The analyte was analyzed for, but not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
B	The analyte was detected in the method, field and/or trip blank.

	Yes	No
1. Were all the analyses requested for the samples submitted with each COC completed by the lab?	X	
Comments: pH analysis not requested on the COC. No qualifying action required.		
2. Did the laboratory identify any non-conformances related to the analytical result?	X	
Comments: See case narrative.		
3. Were sample Chain-of-Custody forms complete?	X	
Comments:		
4. Were samples received in good condition and at the appropriate temperature?	X	
Comments:		
5. Were sample holding times met?	X	
Comments:		
6. Were correct concentration units reported?	X	
Comments:		
7. Were detections found in laboratory blank samples?	Yes	No

		X
Comments: 8015 mod batch OEXT 24492 – DRO = 3.9 mg/Kg. 8260 batch MSV/26501 – Carbon Disulfide = 0.17 µg/Kg, Toluene = 0.01 µg/Kg, 2-Hexanone = 0.32 µg/Kg, 1,2,4-Trichlorobenzene = 0.08 µg/Kg, Naphthalene = 0.17 µg/Kg and 2-Methylnaphthalene = 0.18 µg/Kg. Associated sample results below the blank concentration validated to non-detect, flagged "UJB" and the detection limit changed to the blank concentration. Sample results above the blank concentration are flagged "JB" and the detection limit changed to the blank concentration. Sample results greater than 100 times the blank concentration require no qualifying action. Reason Code – MB		
8. Were detections found in field blank, equipment rinse blank, and/or trip blank samples?	Yes	No X
Comments:		
9. Were instrument calibrations within method criteria?	Yes X	No
Comments: No sample results qualified for calibration issues.		
10. Were surrogate recoveries within control limits?	Yes X	No
Comments:		
11. Were laboratory control sample recoveries within control limits?	Yes X	No
Comments:		
12. Were matrix spike recoveries within control limits?	Yes	No X
Comments: 8015/8021 batch GCV/11739 - %Rs above limits for GRO. Sample site specific. GRO result flagged "UJ" for parent sample only. Parent sample reported in a different sample delivery group. No qualifying action required. 8260 batch MSV/26501 - %Rs below limits for 1,2-Dibromoethane, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1-Dichloropropene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 4-Chlorotoluene, Bromobenzene, Bromodichloromethane, Bromoform, Chlorobenzene, cis-1,3-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, n-Butylbenzene, n-Propylbenzene, Naphthalene, p-Isopropyltoluene, Styrene, Tetrachloroethene, Toluene, trans-1,3-Dichloropropene, Trichloroethene and Xylene. Sample site specific. Associated results flagged "UJ" for parent only. Parent sample reported in a different sample delivery group. No qualifying action required. 8260 batch MSV/26462 - %R above limits for Benzene and below limits for Bromomethane. Sample not site specific, no qualifying action required.		
13. Were RPDs within control limits?	Yes	No X

Comments: 8015/8021 batch GCV/11739 – MS/DS RPD above limits for GRO. Associated sample results non-detect. No qualifying action required. 8260 batch MSV/26462 – MS/DS RPD above Bromomethane. Associated sample results non-detect. No qualifying action required.			
14. Were dilutions required on any samples?		Yes	No X
Comments:			
15. Were Tentatively Identified Compounds (TIC) present?		Yes	No X
Comments:			
16. Were organic system performance criteria met?		Yes X	No
Comments:			
17. Were GC/MS internal standards within method criteria?		Yes	No X
Comments: 8260 batch MSV/26501 – Matrix duplicate sample reported one of six internal standards areas below limits. No qualifying action required.			
18. Were inorganic system performance criteria met?		Yes X	No
Comments:			
19. Were blind field duplicates collected? If so, discuss the precision (RPD) of the results. Duplicate Sample No. DUP-002 Primary Sample No. SB-6 15-16.5'		Yes X	No
Comments: RPDs within limits.			
20. Were at least 10 percent of the hard copy results compared to the Electronic Data Deliverable Results?		Yes X	No Initials EAC
Comments:			
21. Other:		Yes	No X
Comments:			

PRECISION, ACCURACY, METHOD COMPLIANCE AND COMPLETENESS ASSESSMENT

Precision:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Accuracy:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Method Compliance:	Acceptable X	Unacceptable	Initials EAC
Comments:			
Completeness:	Acceptable X	Unacceptable	Initials EAC
Comments:			

Appendix D

Soil Laboratory Analytical Reports

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1700 Elm Street - Suite 200
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(612)607-1700

March 21, 2014

Luisa Price
STANTEC
446 Eisenhower Lane N
Lombard, IL 60148

RE: Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Dear Luisa Price:
Enclosed are the analytical results for sample(s) received by the laboratory on January 28, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This report was revised March 21, 2014. During the review of the data package it was found that there were failures in the BP required closing QC for method 6010. The data was valid from the standpoint of the method however BP requires additional QC per the Tech Specs. Rather than having to qualify the data as such, the lab opted to reanalyze the associated data. All samples have been re-reported and lead results may have changed slightly.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lori Castille
lori.castille@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Minnesota Certification IDs
1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alabama Certification #40770
Alabama Certification #40770
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: 8TMS-L
Florida/NELAP Certification #: E87605
Guam Certification #: Pace
Georgia Certification #: 959
Idaho Certification #: MN00064
Hawaii Certification #MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Kentucky Dept of Envi. Protection - WW #:90062
Louisiana DEQ Certification #: 3086
Louisiana DHH #: LA140001
Maine Certification #: 2013011
Maryland Certification #: 322
Michigan DEPH Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT0092
Nebraska Certification #: Pace
New York Certification #: 11647
North Carolina Certification #: 530
North Carolina State Public Health #: 27700
North Dakota Certification #: R-036
Ohio EPA #: 4150
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Saipan (CNMI) #:MP0003
South Carolina #:74003001
Texas Certification #: T104704192
Tennessee Certification #: 02818
Utah Certification #: MN000642013-4
Virginia DGS Certification #: 251
Virginia/VELAP Certification #: Pace
Washington Certification #: C486
Wisconsin Certification #: 999407970
West Virginia Certification #: 382
West Virginia TO-15 Approval
West Virginia DHHR #:9952C

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10256148001	SB-1 2-3'	Solid	01/22/14 10:58	01/28/14 10:07
10256148002	SB-1 20-21'	Solid	01/22/14 11:30	01/28/14 10:07
10256148003	SB-2 2-3'	Solid	01/22/14 12:08	01/28/14 10:07
10256148004	SB-2 22-23'	Solid	01/22/14 12:40	01/28/14 10:07
10256148005	SB-3 3-5'	Solid	01/22/14 13:30	01/28/14 10:07
10256148006	SB-3 25-27'	Solid	01/22/14 14:15	01/28/14 10:07
10256148007	SB-4 2-3.5'	Solid	01/23/14 09:55	01/28/14 10:07
10256148008	SB-4 19-20'	Solid	01/23/14 10:25	01/28/14 10:07
10256148009	SB-5 2-3	Solid	01/23/14 11:15	01/28/14 10:07
10256148010	SB-5 10-12'	Solid	01/23/14 11:30	01/28/14 10:07
10256148011	DUP-001	Solid	01/23/14 00:00	01/28/14 10:07
10256148013	TRIP BLANK	Solid	01/22/14 00:00	01/28/14 10:07

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SAMPLE ANALYTE COUNT

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10256148001	SB-1 2-3'	EPA 8015 Modified	JRH	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	AAD	1
10256148002	SB-1 20-21'	EPA 8015 Modified	JRH	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	AAD	1
10256148003	SB-2 2-3'	EPA 8015 Modified	JRH	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	AAD	1
10256148004	SB-2 22-23'	EPA 8015 Modified	JRH	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	AAD	1
10256148005	SB-3 3-5'	EPA 8015 Modified	JRH	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	AAD	1
10256148006	SB-3 25-27'	EPA 8015 Modified	JRH	3
		EPA 8015/8021	LLC	2

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SAMPLE ANALYTE COUNT

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	AAD	1
10256148007	SB-4 2-3.5'	EPA 8015 Modified	JRH	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	AAD	1
10256148008	SB-4 19-20'	EPA 8015 Modified	JRH	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	AAD	1
10256148009	SB-5 2-3	EPA 8015 Modified	JRH	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	HNKH	1
10256148010	SB-5 10-12'	EPA 8015 Modified	JRH	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	HNKH	1
10256148011	DUP-001	EPA 8015 Modified	JRH	3
		EPA 8015/8021	LLC	2
		EPA 6010	IP	1
		ASTM D2974	JDL	1

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SAMPLE ANALYTE COUNT

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 8270	JLR	72
		EPA 8260	HBP	70
		EPA 9045	HNKH	1
10256148013	TRIP BLANK	EPA 8260	HBP	70

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Method: **EPA 8015 Modified**
Description: 8015 GCS THC-Diesel
Client: BP-STANTEC-IL
Date: March 21, 2014

General Information:
11 samples were analyzed for EPA 8015 Modified. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3550 Sonication with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: OEXT/24241

B: Analyte was detected in the associated method blank.
- BLANK for HBN 285084 [OEXT/242 (Lab ID: 1616437)
  - TPH-DRO (C10-C28)

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Method: **EPA 8015/8021**
Description: 8015/8021 GCV GRO/BTEX
Client: BP-STANTEC-IL
Date: March 21, 2014

General Information:
11 samples were analyzed for EPA 8015/8021. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5030 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Method: EPA 6010
Description: 6010 MET ICP
Client: BP-STANTEC-IL
Date: March 21, 2014

General Information:
11 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Method: **EPA 8270**
Description: 8270 MSSV
Client: BP-STANTEC-IL
Date: March 21, 2014

General Information:
11 samples were analyzed for EPA 8270. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3550 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Method: **EPA 8260**
Description: 8260 MSV 5035 Low Level
Client: BP-STANTEC-IL
Date: March 21, 2014

General Information:
11 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/26253

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10256148009

R1: RPD value was outside control limits.

- MSD (Lab ID: 1617376)
  - 1,2,4-Trichlorobenzene
  - Hexachloro-1,3-butadiene
  - n-Butylbenzene

Additional Comments:

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PROJECT NARRATIVE

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Method: **EPA 8260**
Description: 8260 MSV 5030 Med Level
Client: BP-STANTEC-IL
Date: March 21, 2014

General Information:
1 sample was analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035/5030B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: MSV/26266

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- LCS (Lab ID: 1618516)
  - Dichlorofluoromethane
- MS (Lab ID: 1618517)
  - Dichlorofluoromethane

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Method: **EPA 9045**
Description: 9045 pH
Client: BP-STANTEC-IL
Date: March 21, 2014

General Information:
11 samples were analyzed for EPA 9045. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H3: Sample was received or analysis requested beyond the recognized method holding time.
- SB-1 2-3' (Lab ID: 10256148001)
- SB-1 20-21' (Lab ID: 10256148002)
- SB-2 2-3' (Lab ID: 10256148003)
- SB-2 22-23' (Lab ID: 10256148004)
- SB-3 25-27' (Lab ID: 10256148006)
- SB-3 3-5' (Lab ID: 10256148005)
- SB-4 19-20' (Lab ID: 10256148008)
- SB-4 2-3.5' (Lab ID: 10256148007)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-1 2-3' **Lab ID: 10256148001** Collected: 01/22/14 10:58 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication								
TPH-DRO (C10-C28)	**16.6**	mg/kg	11.6	1.4	1	01/29/14 08:59	02/02/14 19:38		B
Surrogates									
o-Terphenyl (S)	95	%.	30-150		1	01/29/14 08:59	02/02/14 19:38	84-15-1	
n-Triacontane (S)	88	%.	30-147		1	01/29/14 08:59	02/02/14 19:38	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030								
Gasoline Range Organics	ND	mg/kg	8.8	4.4	1	01/30/14 11:49	02/01/14 16:35		
Surrogates									
a,a,a-Trifluorotoluene (S)	97	%.	68-135		1	01/30/14 11:49	02/01/14 16:35	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**12.0**	mg/kg	5.7	0.41	5	03/07/14 08:39	03/21/14 08:28	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**13.8**	%	0.10	0.10	1		01/29/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
Acenaphthene	ND	ug/kg	382	36.9	1	01/30/14 11:02	01/31/14 13:18	83-32-9	
Acenaphthylene	ND	ug/kg	382	48.0	1	01/30/14 11:02	01/31/14 13:18	208-96-8	
Anthracene	ND	ug/kg	382	84.8	1	01/30/14 11:02	01/31/14 13:18	120-12-7	
Benzo(a)anthracene	ND	ug/kg	382	90.2	1	01/30/14 11:02	01/31/14 13:18	56-55-3	
Benzo(a)pyrene	ND	ug/kg	382	87.1	1	01/30/14 11:02	01/31/14 13:18	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	382	97.5	1	01/30/14 11:02	01/31/14 13:18	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	382	82.1	1	01/30/14 11:02	01/31/14 13:18	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	382	92.8	1	01/30/14 11:02	01/31/14 13:18	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	382	82.7	1	01/30/14 11:02	01/31/14 13:18	101-55-3	
Butylbenzylphthalate	ND	ug/kg	382	89.0	1	01/30/14 11:02	01/31/14 13:18	85-68-7	
Carbazole	ND	ug/kg	382	89.5	1	01/30/14 11:02	01/31/14 13:18	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	382	41.3	1	01/30/14 11:02	01/31/14 13:18	59-50-7	
4-Chloroaniline	ND	ug/kg	382	98.7	1	01/30/14 11:02	01/31/14 13:18	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	382	50.8	1	01/30/14 11:02	01/31/14 13:18	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	382	57.8	1	01/30/14 11:02	01/31/14 13:18	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	382	59.0	1	01/30/14 11:02	01/31/14 13:18	108-60-1	
2-Chloronaphthalene	ND	ug/kg	382	43.1	1	01/30/14 11:02	01/31/14 13:18	91-58-7	
2-Chlorophenol	ND	ug/kg	382	52.4	1	01/30/14 11:02	01/31/14 13:18	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	382	36.3	1	01/30/14 11:02	01/31/14 13:18	7005-72-3	
Chrysene	ND	ug/kg	382	93.9	1	01/30/14 11:02	01/31/14 13:18	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	382	85.6	1	01/30/14 11:02	01/31/14 13:18	53-70-3	
Dibenzofuran	ND	ug/kg	382	31.3	1	01/30/14 11:02	01/31/14 13:18	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	382	59.7	1	01/30/14 11:02	01/31/14 13:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	382	54.5	1	01/30/14 11:02	01/31/14 13:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	382	50.6	1	01/30/14 11:02	01/31/14 13:18	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	382	184	1	01/30/14 11:02	01/31/14 13:18	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	382	46.0	1	01/30/14 11:02	01/31/14 13:18	120-83-2	
Diethylphthalate	ND	ug/kg	382	89.4	1	01/30/14 11:02	01/31/14 13:18	84-66-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-1 2-3' **Lab ID: 10256148001** Collected: 01/22/14 10:58 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
2,4-Dimethylphenol	ND	ug/kg	382	167	1	01/30/14 11:02	01/31/14 13:18	105-67-9	
Dimethylphthalate	ND	ug/kg	382	85.0	1	01/30/14 11:02	01/31/14 13:18	131-11-3	
Di-n-butylphthalate	ND	ug/kg	382	77.5	1	01/30/14 11:02	01/31/14 13:18	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	1970	70.6	1	01/30/14 11:02	01/31/14 13:18	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	382	51.5	1	01/30/14 11:02	01/31/14 13:18	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	382	36.0	1	01/30/14 11:02	01/31/14 13:18	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	382	40.6	1	01/30/14 11:02	01/31/14 13:18	606-20-2	
Di-n-octylphthalate	ND	ug/kg	382	90.0	1	01/30/14 11:02	01/31/14 13:18	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	382	85.7	1	01/30/14 11:02	01/31/14 13:18	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	382	95.6	1	01/30/14 11:02	01/31/14 13:18	117-81-7	
Fluoranthene	ND	ug/kg	382	87.3	1	01/30/14 11:02	01/31/14 13:18	206-44-0	
Fluorene	ND	ug/kg	382	30.0	1	01/30/14 11:02	01/31/14 13:18	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	382	48.8	1	01/30/14 11:02	01/31/14 13:18	87-68-3	
Hexachlorobenzene	ND	ug/kg	382	90.5	1	01/30/14 11:02	01/31/14 13:18	118-74-1	
Hexachloroethane	ND	ug/kg	382	61.4	1	01/30/14 11:02	01/31/14 13:18	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	382	83.3	1	01/30/14 11:02	01/31/14 13:18	193-39-5	
Isophorone	ND	ug/kg	382	49.3	1	01/30/14 11:02	01/31/14 13:18	78-59-1	
1-Methylnaphthalene	ND	ug/kg	382	46.6	1	01/30/14 11:02	01/31/14 13:18	90-12-0	
2-Methylnaphthalene	ND	ug/kg	382	43.8	1	01/30/14 11:02	01/31/14 13:18	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	382	58.1	1	01/30/14 11:02	01/31/14 13:18	95-48-7	
3&4-Methylphenol	ND	ug/kg	763	41.9	1	01/30/14 11:02	01/31/14 13:18		
Naphthalene	ND	ug/kg	382	57.1	1	01/30/14 11:02	01/31/14 13:18	91-20-3	
2-Nitroaniline	ND	ug/kg	382	78.2	1	01/30/14 11:02	01/31/14 13:18	88-74-4	
3-Nitroaniline	ND	ug/kg	382	127	1	01/30/14 11:02	01/31/14 13:18	99-09-2	
4-Nitroaniline	ND	ug/kg	382	105	1	01/30/14 11:02	01/31/14 13:18	100-01-6	
Nitrobenzene	ND	ug/kg	382	64.1	1	01/30/14 11:02	01/31/14 13:18	98-95-3	
2-Nitrophenol	ND	ug/kg	382	59.7	1	01/30/14 11:02	01/31/14 13:18	88-75-5	
4-Nitrophenol	ND	ug/kg	382	65.9	1	01/30/14 11:02	01/31/14 13:18	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	382	91.3	1	01/30/14 11:02	01/31/14 13:18	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	382	59.7	1	01/30/14 11:02	01/31/14 13:18	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	382	91.8	1	01/30/14 11:02	01/31/14 13:18	86-30-6	
Pentachlorophenol	ND	ug/kg	775	59.3	1	01/30/14 11:02	01/31/14 13:18	87-86-5	
Phenanthrene	ND	ug/kg	382	89.3	1	01/30/14 11:02	01/31/14 13:18	85-01-8	
Phenol	ND	ug/kg	382	50.3	1	01/30/14 11:02	01/31/14 13:18	108-95-2	
Pyrene	ND	ug/kg	382	93.7	1	01/30/14 11:02	01/31/14 13:18	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	382	50.7	1	01/30/14 11:02	01/31/14 13:18	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	382	40.8	1	01/30/14 11:02	01/31/14 13:18	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	382	36.4	1	01/30/14 11:02	01/31/14 13:18	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	59	%.	30-125		1	01/30/14 11:02	01/31/14 13:18	4165-60-0	
2-Fluorobiphenyl (S)	73	%.	46-125		1	01/30/14 11:02	01/31/14 13:18	321-60-8	
Terphenyl-d14 (S)	81	%.	64-125		1	01/30/14 11:02	01/31/14 13:18	1718-51-0	
Phenol-d6 (S)	69	%.	38-125		1	01/30/14 11:02	01/31/14 13:18	13127-88-3	
2-Fluorophenol (S)	68	%.	31-125		1	01/30/14 11:02	01/31/14 13:18	367-12-4	
2,4,6-Tribromophenol (S)	78	%.	41-125		1	01/30/14 11:02	01/31/14 13:18	118-79-6	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-1 2-3' **Lab ID: 10256148001** Collected: 01/22/14 10:58 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
Acetone	**60.0**	ug/kg	20.0	10	1	01/30/14 13:07	01/30/14 20:15	67-64-1	
Allyl chloride	ND	ug/kg	10	0.13	1	01/30/14 13:07	01/30/14 20:15	107-05-1	
Benzene	ND	ug/kg	4.0	0.058	1	01/30/14 13:07	01/30/14 20:15	71-43-2	
Bromobenzene	ND	ug/kg	4.0	0.092	1	01/30/14 13:07	01/30/14 20:15	108-86-1	
Bromochloromethane	ND	ug/kg	4.0	0.055	1	01/30/14 13:07	01/30/14 20:15	74-97-5	
Bromodichloromethane	ND	ug/kg	4.0	2.0	1	01/30/14 13:07	01/30/14 20:15	75-27-4	
Bromoform	ND	ug/kg	20.0	10	1	01/30/14 13:07	01/30/14 20:15	75-25-2	
Bromomethane	ND	ug/kg	20.0	10	1	01/30/14 13:07	01/30/14 20:15	74-83-9	
2-Butanone (MEK)	ND	ug/kg	49.9	10	1	01/30/14 13:07	01/30/14 20:15	78-93-3	
n-Butylbenzene	ND	ug/kg	4.0	2.0	1	01/30/14 13:07	01/30/14 20:15	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.0	1.0	1	01/30/14 13:07	01/30/14 20:15	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.0	1.0	1	01/30/14 13:07	01/30/14 20:15	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.0	0.14	1	01/30/14 13:07	01/30/14 20:15	56-23-5	
Chlorobenzene	ND	ug/kg	4.0	0.084	1	01/30/14 13:07	01/30/14 20:15	108-90-7	
Chloroethane	ND	ug/kg	10	0.61	1	01/30/14 13:07	01/30/14 20:15	75-00-3	
Chloroform	ND	ug/kg	4.0	0.091	1	01/30/14 13:07	01/30/14 20:15	67-66-3	
Chloromethane	ND	ug/kg	10	0.78	1	01/30/14 13:07	01/30/14 20:15	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.0	0.047	1	01/30/14 13:07	01/30/14 20:15	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.0	1.0	1	01/30/14 13:07	01/30/14 20:15	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	10	2.5	1	01/30/14 13:07	01/30/14 20:15	96-12-8	
Dibromochloromethane	ND	ug/kg	4.0	0.11	1	01/30/14 13:07	01/30/14 20:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.0	0.042	1	01/30/14 13:07	01/30/14 20:15	106-93-4	
Dibromomethane	ND	ug/kg	4.0	0.26	1	01/30/14 13:07	01/30/14 20:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.0	0.058	1	01/30/14 13:07	01/30/14 20:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.0	1.0	1	01/30/14 13:07	01/30/14 20:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.0	1.0	1	01/30/14 13:07	01/30/14 20:15	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	10	1.0	1	01/30/14 13:07	01/30/14 20:15	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.0	0.053	1	01/30/14 13:07	01/30/14 20:15	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.0	0.088	1	01/30/14 13:07	01/30/14 20:15	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.0	0.070	1	01/30/14 13:07	01/30/14 20:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.0	0.12	1	01/30/14 13:07	01/30/14 20:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.0	0.19	1	01/30/14 13:07	01/30/14 20:15	156-60-5	
Dichlorofluoromethane	ND	ug/kg	4.0	0.088	1	01/30/14 13:07	01/30/14 20:15	75-43-4	
1,2-Dichloropropane	ND	ug/kg	4.0	0.088	1	01/30/14 13:07	01/30/14 20:15	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.0	1.0	1	01/30/14 13:07	01/30/14 20:15	142-28-9	
2,2-Dichloropropane	ND	ug/kg	10	0.065	1	01/30/14 13:07	01/30/14 20:15	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.0	0.13	1	01/30/14 13:07	01/30/14 20:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.0	0.051	1	01/30/14 13:07	01/30/14 20:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.0	0.12	1	01/30/14 13:07	01/30/14 20:15	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	10	0.063	1	01/30/14 13:07	01/30/14 20:15	60-29-7	
Ethylbenzene	ND	ug/kg	4.0	0.41	1	01/30/14 13:07	01/30/14 20:15	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	10	5.0	1	01/30/14 13:07	01/30/14 20:15	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	4.0	1.0	1	01/30/14 13:07	01/30/14 20:15	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.0	1.0	1	01/30/14 13:07	01/30/14 20:15	99-87-6	
Methylene Chloride	ND	ug/kg	20.0	10	1	01/30/14 13:07	01/30/14 20:15	75-09-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-1 2-3' **Lab ID: 10256148001** Collected: 01/22/14 10:58 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	20.0	10	1	01/30/14 13:07	01/30/14 20:15	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.0	1.0	1	01/30/14 13:07	01/30/14 20:15	1634-04-4	
Naphthalene	ND	ug/kg	10	5.0	1	01/30/14 13:07	01/30/14 20:15	91-20-3	
n-Propylbenzene	ND	ug/kg	4.0	1.0	1	01/30/14 13:07	01/30/14 20:15	103-65-1	
Styrene	ND	ug/kg	4.0	0.057	1	01/30/14 13:07	01/30/14 20:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.0	1.0	1	01/30/14 13:07	01/30/14 20:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.0	0.052	1	01/30/14 13:07	01/30/14 20:15	79-34-5	
Tetrachloroethene	ND	ug/kg	4.0	0.10	1	01/30/14 13:07	01/30/14 20:15	127-18-4	
Tetrahydrofuran	ND	ug/kg	40.0	0.88	1	01/30/14 13:07	01/30/14 20:15	109-99-9	
Toluene	ND	ug/kg	4.0	2.0	1	01/30/14 13:07	01/30/14 20:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.0	2.0	1	01/30/14 13:07	01/30/14 20:15	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.0	2.0	1	01/30/14 13:07	01/30/14 20:15	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.0	0.078	1	01/30/14 13:07	01/30/14 20:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.0	0.088	1	01/30/14 13:07	01/30/14 20:15	79-00-5	
Trichloroethene	ND	ug/kg	4.0	0.12	1	01/30/14 13:07	01/30/14 20:15	79-01-6	
Trichlorofluoromethane	ND	ug/kg	10	0.064	1	01/30/14 13:07	01/30/14 20:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.0	0.59	1	01/30/14 13:07	01/30/14 20:15	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	4.0	0.28	1	01/30/14 13:07	01/30/14 20:15	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	4.0	1.0	1	01/30/14 13:07	01/30/14 20:15	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.0	1.0	1	01/30/14 13:07	01/30/14 20:15	108-67-8	
Vinyl chloride	ND	ug/kg	4.0	0.066	1	01/30/14 13:07	01/30/14 20:15	75-01-4	
Xylene (Total)	ND	ug/kg	12.0	0.97	1	01/30/14 13:07	01/30/14 20:15	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	110	%.	30-150		1	01/30/14 13:07	01/30/14 20:15	17060-07-0	
Toluene-d8 (S)	99	%.	30-150		1	01/30/14 13:07	01/30/14 20:15	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	30-150		1	01/30/14 13:07	01/30/14 20:15	460-00-4	
9045 pH	Analytical Method: EPA 9045								
pH at 25 Degrees C	**8.1**	Std. Units	0.10	0.10	1		03/07/14 11:43		H3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-1 20-21' **Lab ID: 10256148002** Collected: 01/22/14 11:30 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication								
TPH-DRO (C10-C28)	ND	mg/kg	12.6	1.5	1	01/29/14 08:59	02/02/14 21:56		
Surrogates									
o-Terphenyl (S)	93	%.	30-150		1	01/29/14 08:59	02/02/14 21:56	84-15-1	
n-Triacontane (S)	95	%.	30-147		1	01/29/14 08:59	02/02/14 21:56	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030								
Gasoline Range Organics	ND	mg/kg	11.0	5.5	1	01/30/14 11:49	02/01/14 16:59		
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%.	68-135		1	01/30/14 11:49	02/01/14 16:59	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**12.5**	mg/kg	6.1	0.44	5	03/07/14 08:39	03/21/14 08:35	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**20.8**	%	0.10	0.10	1		01/29/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
Acenaphthene	ND	ug/kg	417	40.3	1	01/30/14 11:02	01/31/14 13:48	83-32-9	
Acenaphthylene	ND	ug/kg	417	52.4	1	01/30/14 11:02	01/31/14 13:48	208-96-8	
Anthracene	ND	ug/kg	417	92.6	1	01/30/14 11:02	01/31/14 13:48	120-12-7	
Benzo(a)anthracene	ND	ug/kg	417	98.5	1	01/30/14 11:02	01/31/14 13:48	56-55-3	
Benzo(a)pyrene	ND	ug/kg	417	95.1	1	01/30/14 11:02	01/31/14 13:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	417	106	1	01/30/14 11:02	01/31/14 13:48	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	417	89.7	1	01/30/14 11:02	01/31/14 13:48	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	417	101	1	01/30/14 11:02	01/31/14 13:48	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	417	90.3	1	01/30/14 11:02	01/31/14 13:48	101-55-3	
Butylbenzylphthalate	ND	ug/kg	417	97.1	1	01/30/14 11:02	01/31/14 13:48	85-68-7	
Carbazole	ND	ug/kg	417	97.8	1	01/30/14 11:02	01/31/14 13:48	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	417	45.1	1	01/30/14 11:02	01/31/14 13:48	59-50-7	
4-Chloroaniline	ND	ug/kg	417	108	1	01/30/14 11:02	01/31/14 13:48	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	417	55.5	1	01/30/14 11:02	01/31/14 13:48	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	417	63.2	1	01/30/14 11:02	01/31/14 13:48	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	417	64.4	1	01/30/14 11:02	01/31/14 13:48	108-60-1	
2-Chloronaphthalene	ND	ug/kg	417	47.1	1	01/30/14 11:02	01/31/14 13:48	91-58-7	
2-Chlorophenol	ND	ug/kg	417	57.2	1	01/30/14 11:02	01/31/14 13:48	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	417	39.7	1	01/30/14 11:02	01/31/14 13:48	7005-72-3	
Chrysene	ND	ug/kg	417	103	1	01/30/14 11:02	01/31/14 13:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	417	93.5	1	01/30/14 11:02	01/31/14 13:48	53-70-3	
Dibenzofuran	ND	ug/kg	417	34.2	1	01/30/14 11:02	01/31/14 13:48	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	417	65.2	1	01/30/14 11:02	01/31/14 13:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	417	59.5	1	01/30/14 11:02	01/31/14 13:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	417	55.2	1	01/30/14 11:02	01/31/14 13:48	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	417	201	1	01/30/14 11:02	01/31/14 13:48	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	417	50.3	1	01/30/14 11:02	01/31/14 13:48	120-83-2	
Diethylphthalate	ND	ug/kg	417	97.6	1	01/30/14 11:02	01/31/14 13:48	84-66-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-1 20-21' **Lab ID: 10256148002** Collected: 01/22/14 11:30 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
2,4-Dimethylphenol	ND	ug/kg	417	183	1	01/30/14 11:02	01/31/14 13:48	105-67-9	
Dimethylphthalate	ND	ug/kg	417	92.8	1	01/30/14 11:02	01/31/14 13:48	131-11-3	
Di-n-butylphthalate	ND	ug/kg	417	84.6	1	01/30/14 11:02	01/31/14 13:48	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2150	77.1	1	01/30/14 11:02	01/31/14 13:48	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	417	56.2	1	01/30/14 11:02	01/31/14 13:48	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	417	39.3	1	01/30/14 11:02	01/31/14 13:48	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	417	44.3	1	01/30/14 11:02	01/31/14 13:48	606-20-2	
Di-n-octylphthalate	ND	ug/kg	417	98.3	1	01/30/14 11:02	01/31/14 13:48	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	417	93.6	1	01/30/14 11:02	01/31/14 13:48	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	417	104	1	01/30/14 11:02	01/31/14 13:48	117-81-7	
Fluoranthene	ND	ug/kg	417	95.4	1	01/30/14 11:02	01/31/14 13:48	206-44-0	
Fluorene	ND	ug/kg	417	32.7	1	01/30/14 11:02	01/31/14 13:48	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	417	53.3	1	01/30/14 11:02	01/31/14 13:48	87-68-3	
Hexachlorobenzene	ND	ug/kg	417	98.8	1	01/30/14 11:02	01/31/14 13:48	118-74-1	
Hexachloroethane	ND	ug/kg	417	67.1	1	01/30/14 11:02	01/31/14 13:48	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	417	90.9	1	01/30/14 11:02	01/31/14 13:48	193-39-5	
Isophorone	ND	ug/kg	417	53.8	1	01/30/14 11:02	01/31/14 13:48	78-59-1	
1-Methylnaphthalene	ND	ug/kg	417	50.9	1	01/30/14 11:02	01/31/14 13:48	90-12-0	
2-Methylnaphthalene	ND	ug/kg	417	47.9	1	01/30/14 11:02	01/31/14 13:48	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	417	63.4	1	01/30/14 11:02	01/31/14 13:48	95-48-7	
3&4-Methylphenol	ND	ug/kg	834	45.7	1	01/30/14 11:02	01/31/14 13:48		
Naphthalene	ND	ug/kg	417	62.4	1	01/30/14 11:02	01/31/14 13:48	91-20-3	
2-Nitroaniline	ND	ug/kg	417	85.4	1	01/30/14 11:02	01/31/14 13:48	88-74-4	
3-Nitroaniline	ND	ug/kg	417	139	1	01/30/14 11:02	01/31/14 13:48	99-09-2	
4-Nitroaniline	ND	ug/kg	417	114	1	01/30/14 11:02	01/31/14 13:48	100-01-6	
Nitrobenzene	ND	ug/kg	417	70.0	1	01/30/14 11:02	01/31/14 13:48	98-95-3	
2-Nitrophenol	ND	ug/kg	417	65.2	1	01/30/14 11:02	01/31/14 13:48	88-75-5	
4-Nitrophenol	ND	ug/kg	417	72.0	1	01/30/14 11:02	01/31/14 13:48	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	417	99.7	1	01/30/14 11:02	01/31/14 13:48	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	417	65.2	1	01/30/14 11:02	01/31/14 13:48	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	417	100	1	01/30/14 11:02	01/31/14 13:48	86-30-6	
Pentachlorophenol	ND	ug/kg	846	64.8	1	01/30/14 11:02	01/31/14 13:48	87-86-5	
Phenanthrene	ND	ug/kg	417	97.5	1	01/30/14 11:02	01/31/14 13:48	85-01-8	
Phenol	ND	ug/kg	417	54.9	1	01/30/14 11:02	01/31/14 13:48	108-95-2	
Pyrene	ND	ug/kg	417	102	1	01/30/14 11:02	01/31/14 13:48	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	417	55.3	1	01/30/14 11:02	01/31/14 13:48	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	417	44.6	1	01/30/14 11:02	01/31/14 13:48	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	417	39.8	1	01/30/14 11:02	01/31/14 13:48	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	58	%.	30-125		1	01/30/14 11:02	01/31/14 13:48	4165-60-0	
2-Fluorobiphenyl (S)	66	%.	46-125		1	01/30/14 11:02	01/31/14 13:48	321-60-8	
Terphenyl-d14 (S)	75	%.	64-125		1	01/30/14 11:02	01/31/14 13:48	1718-51-0	
Phenol-d6 (S)	68	%.	38-125		1	01/30/14 11:02	01/31/14 13:48	13127-88-3	
2-Fluorophenol (S)	68	%.	31-125		1	01/30/14 11:02	01/31/14 13:48	367-12-4	
2,4,6-Tribromophenol (S)	71	%.	41-125		1	01/30/14 11:02	01/31/14 13:48	118-79-6	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-1 20-21' **Lab ID: 10256148002** Collected: 01/22/14 11:30 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
Acetone	ND	ug/kg	23.9	11.9	1	01/30/14 13:07	01/30/14 20:33	67-64-1	
Allyl chloride	ND	ug/kg	11.9	0.16	1	01/30/14 13:07	01/30/14 20:33	107-05-1	
Benzene	**0.84J**	ug/kg	4.8	0.069	1	01/30/14 13:07	01/30/14 20:33	71-43-2	
Bromobenzene	ND	ug/kg	4.8	0.11	1	01/30/14 13:07	01/30/14 20:33	108-86-1	
Bromochloromethane	ND	ug/kg	4.8	0.066	1	01/30/14 13:07	01/30/14 20:33	74-97-5	
Bromodichloromethane	ND	ug/kg	4.8	2.4	1	01/30/14 13:07	01/30/14 20:33	75-27-4	
Bromoform	ND	ug/kg	23.9	11.9	1	01/30/14 13:07	01/30/14 20:33	75-25-2	
Bromomethane	ND	ug/kg	23.9	11.9	1	01/30/14 13:07	01/30/14 20:33	74-83-9	
2-Butanone (MEK)	ND	ug/kg	59.7	11.9	1	01/30/14 13:07	01/30/14 20:33	78-93-3	
n-Butylbenzene	ND	ug/kg	4.8	2.4	1	01/30/14 13:07	01/30/14 20:33	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:33	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:33	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.8	0.17	1	01/30/14 13:07	01/30/14 20:33	56-23-5	
Chlorobenzene	ND	ug/kg	4.8	0.10	1	01/30/14 13:07	01/30/14 20:33	108-90-7	
Chloroethane	ND	ug/kg	11.9	0.73	1	01/30/14 13:07	01/30/14 20:33	75-00-3	
Chloroform	ND	ug/kg	4.8	0.11	1	01/30/14 13:07	01/30/14 20:33	67-66-3	
Chloromethane	ND	ug/kg	11.9	0.93	1	01/30/14 13:07	01/30/14 20:33	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.8	0.056	1	01/30/14 13:07	01/30/14 20:33	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:33	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	11.9	3.0	1	01/30/14 13:07	01/30/14 20:33	96-12-8	
Dibromochloromethane	ND	ug/kg	4.8	0.13	1	01/30/14 13:07	01/30/14 20:33	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.8	0.050	1	01/30/14 13:07	01/30/14 20:33	106-93-4	
Dibromomethane	ND	ug/kg	4.8	0.31	1	01/30/14 13:07	01/30/14 20:33	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.8	0.069	1	01/30/14 13:07	01/30/14 20:33	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:33	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:33	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	11.9	1.3	1	01/30/14 13:07	01/30/14 20:33	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.8	0.063	1	01/30/14 13:07	01/30/14 20:33	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.8	0.11	1	01/30/14 13:07	01/30/14 20:33	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.8	0.084	1	01/30/14 13:07	01/30/14 20:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.8	0.15	1	01/30/14 13:07	01/30/14 20:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.8	0.22	1	01/30/14 13:07	01/30/14 20:33	156-60-5	
Dichlorofluoromethane	ND	ug/kg	4.8	0.11	1	01/30/14 13:07	01/30/14 20:33	75-43-4	
1,2-Dichloropropane	ND	ug/kg	4.8	0.11	1	01/30/14 13:07	01/30/14 20:33	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:33	142-28-9	
2,2-Dichloropropane	ND	ug/kg	11.9	0.078	1	01/30/14 13:07	01/30/14 20:33	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.8	0.16	1	01/30/14 13:07	01/30/14 20:33	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.8	0.061	1	01/30/14 13:07	01/30/14 20:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.8	0.14	1	01/30/14 13:07	01/30/14 20:33	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	11.9	0.075	1	01/30/14 13:07	01/30/14 20:33	60-29-7	
Ethylbenzene	**0.55J**	ug/kg	4.8	0.49	1	01/30/14 13:07	01/30/14 20:33	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	11.9	6.0	1	01/30/14 13:07	01/30/14 20:33	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:33	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:33	99-87-6	
Methylene Chloride	ND	ug/kg	23.9	11.9	1	01/30/14 13:07	01/30/14 20:33	75-09-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-1 20-21' **Lab ID: 10256148002** Collected: 01/22/14 11:30 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	23.9	11.9	1	01/30/14 13:07	01/30/14 20:33	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:33	1634-04-4	
Naphthalene	ND	ug/kg	11.9	6.0	1	01/30/14 13:07	01/30/14 20:33	91-20-3	
n-Propylbenzene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:33	103-65-1	
Styrene	ND	ug/kg	4.8	0.068	1	01/30/14 13:07	01/30/14 20:33	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:33	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.8	0.062	1	01/30/14 13:07	01/30/14 20:33	79-34-5	
Tetrachloroethene	ND	ug/kg	4.8	0.12	1	01/30/14 13:07	01/30/14 20:33	127-18-4	
Tetrahydrofuran	ND	ug/kg	47.8	1.0	1	01/30/14 13:07	01/30/14 20:33	109-99-9	
Toluene	ND	ug/kg	4.8	2.4	1	01/30/14 13:07	01/30/14 20:33	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.8	2.4	1	01/30/14 13:07	01/30/14 20:33	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.8	2.4	1	01/30/14 13:07	01/30/14 20:33	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.8	0.093	1	01/30/14 13:07	01/30/14 20:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.8	0.11	1	01/30/14 13:07	01/30/14 20:33	79-00-5	
Trichloroethene	ND	ug/kg	4.8	0.15	1	01/30/14 13:07	01/30/14 20:33	79-01-6	
Trichlorofluoromethane	ND	ug/kg	11.9	0.076	1	01/30/14 13:07	01/30/14 20:33	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.8	0.70	1	01/30/14 13:07	01/30/14 20:33	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	4.8	0.33	1	01/30/14 13:07	01/30/14 20:33	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:33	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:33	108-67-8	
Vinyl chloride	ND	ug/kg	4.8	0.079	1	01/30/14 13:07	01/30/14 20:33	75-01-4	
Xylene (Total)	ND	ug/kg	14.3	1.2	1	01/30/14 13:07	01/30/14 20:33	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	109	%.	30-150		1	01/30/14 13:07	01/30/14 20:33	17060-07-0	
Toluene-d8 (S)	100	%.	30-150		1	01/30/14 13:07	01/30/14 20:33	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	30-150		1	01/30/14 13:07	01/30/14 20:33	460-00-4	
9045 pH	Analytical Method: EPA 9045								
pH at 25 Degrees C	**8.4**	Std. Units	0.10	0.10	1		03/07/14 11:45		H3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-2 2-3' **Lab ID: 10256148003** Collected: 01/22/14 12:08 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication								
TPH-DRO (C10-C28)	**97.2**	mg/kg	12.6	1.5	1	01/29/14 08:59	02/02/14 20:47		
Surrogates									
o-Terphenyl (S)	96	%.	30-150		1	01/29/14 08:59	02/02/14 20:47	84-15-1	
n-Triacontane (S)	96	%.	30-147		1	01/29/14 08:59	02/02/14 20:47	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030								
Gasoline Range Organics	**9.0J**	mg/kg	10.7	5.4	1	01/30/14 11:49	02/04/14 18:10		
Surrogates									
a,a,a-Trifluorotoluene (S)	102	%.	68-135		1	01/30/14 11:49	02/04/14 18:10	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**31.7**	mg/kg	4.3	0.31	5	03/07/14 08:39	03/21/14 08:42	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**21.4**	%	0.10	0.10	1		01/29/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
Acenaphthene	ND	ug/kg	419	40.5	1	01/30/14 11:02	01/31/14 14:18	83-32-9	
Acenaphthylene	ND	ug/kg	419	52.6	1	01/30/14 11:02	01/31/14 14:18	208-96-8	
Anthracene	ND	ug/kg	419	93.0	1	01/30/14 11:02	01/31/14 14:18	120-12-7	
Benzo(a)anthracene	ND	ug/kg	419	98.9	1	01/30/14 11:02	01/31/14 14:18	56-55-3	
Benzo(a)pyrene	ND	ug/kg	419	95.5	1	01/30/14 11:02	01/31/14 14:18	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	419	107	1	01/30/14 11:02	01/31/14 14:18	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	419	90.0	1	01/30/14 11:02	01/31/14 14:18	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	419	102	1	01/30/14 11:02	01/31/14 14:18	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	419	90.7	1	01/30/14 11:02	01/31/14 14:18	101-55-3	
Butylbenzylphthalate	ND	ug/kg	419	97.5	1	01/30/14 11:02	01/31/14 14:18	85-68-7	
Carbazole	ND	ug/kg	419	98.2	1	01/30/14 11:02	01/31/14 14:18	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	419	45.3	1	01/30/14 11:02	01/31/14 14:18	59-50-7	
4-Chloroaniline	ND	ug/kg	419	108	1	01/30/14 11:02	01/31/14 14:18	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	419	55.7	1	01/30/14 11:02	01/31/14 14:18	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	419	63.4	1	01/30/14 11:02	01/31/14 14:18	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	419	64.7	1	01/30/14 11:02	01/31/14 14:18	108-60-1	
2-Chloronaphthalene	ND	ug/kg	419	47.3	1	01/30/14 11:02	01/31/14 14:18	91-58-7	
2-Chlorophenol	ND	ug/kg	419	57.5	1	01/30/14 11:02	01/31/14 14:18	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	419	39.8	1	01/30/14 11:02	01/31/14 14:18	7005-72-3	
Chrysene	ND	ug/kg	419	103	1	01/30/14 11:02	01/31/14 14:18	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	419	93.9	1	01/30/14 11:02	01/31/14 14:18	53-70-3	
Dibenzofuran	ND	ug/kg	419	34.4	1	01/30/14 11:02	01/31/14 14:18	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	419	65.4	1	01/30/14 11:02	01/31/14 14:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	419	59.7	1	01/30/14 11:02	01/31/14 14:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	419	55.4	1	01/30/14 11:02	01/31/14 14:18	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	419	202	1	01/30/14 11:02	01/31/14 14:18	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	419	50.5	1	01/30/14 11:02	01/31/14 14:18	120-83-2	
Diethylphthalate	ND	ug/kg	419	98.0	1	01/30/14 11:02	01/31/14 14:18	84-66-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-2 2-3' **Lab ID: 10256148003** Collected: 01/22/14 12:08 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
2,4-Dimethylphenol	ND	ug/kg	419	183	1	01/30/14 11:02	01/31/14 14:18	105-67-9	
Dimethylphthalate	ND	ug/kg	419	93.2	1	01/30/14 11:02	01/31/14 14:18	131-11-3	
Di-n-butylphthalate	ND	ug/kg	419	85.0	1	01/30/14 11:02	01/31/14 14:18	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2160	77.4	1	01/30/14 11:02	01/31/14 14:18	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	419	56.4	1	01/30/14 11:02	01/31/14 14:18	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	419	39.4	1	01/30/14 11:02	01/31/14 14:18	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	419	44.5	1	01/30/14 11:02	01/31/14 14:18	606-20-2	
Di-n-octylphthalate	ND	ug/kg	419	98.7	1	01/30/14 11:02	01/31/14 14:18	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	419	94.0	1	01/30/14 11:02	01/31/14 14:18	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	419	105	1	01/30/14 11:02	01/31/14 14:18	117-81-7	
Fluoranthene	ND	ug/kg	419	95.8	1	01/30/14 11:02	01/31/14 14:18	206-44-0	
Fluorene	ND	ug/kg	419	32.8	1	01/30/14 11:02	01/31/14 14:18	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	419	53.5	1	01/30/14 11:02	01/31/14 14:18	87-68-3	
Hexachlorobenzene	ND	ug/kg	419	99.2	1	01/30/14 11:02	01/31/14 14:18	118-74-1	
Hexachloroethane	ND	ug/kg	419	67.3	1	01/30/14 11:02	01/31/14 14:18	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	419	91.3	1	01/30/14 11:02	01/31/14 14:18	193-39-5	
Isophorone	ND	ug/kg	419	54.0	1	01/30/14 11:02	01/31/14 14:18	78-59-1	
1-Methylnaphthalene	**55.9J**	ug/kg	419	51.1	1	01/30/14 11:02	01/31/14 14:18	90-12-0	
2-Methylnaphthalene	**52.3J**	ug/kg	419	48.1	1	01/30/14 11:02	01/31/14 14:18	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	419	63.7	1	01/30/14 11:02	01/31/14 14:18	95-48-7	
3&4-Methylphenol	ND	ug/kg	837	45.9	1	01/30/14 11:02	01/31/14 14:18		
Naphthalene	ND	ug/kg	419	62.7	1	01/30/14 11:02	01/31/14 14:18	91-20-3	
2-Nitroaniline	ND	ug/kg	419	85.7	1	01/30/14 11:02	01/31/14 14:18	88-74-4	
3-Nitroaniline	ND	ug/kg	419	140	1	01/30/14 11:02	01/31/14 14:18	99-09-2	
4-Nitroaniline	ND	ug/kg	419	115	1	01/30/14 11:02	01/31/14 14:18	100-01-6	
Nitrobenzene	ND	ug/kg	419	70.3	1	01/30/14 11:02	01/31/14 14:18	98-95-3	
2-Nitrophenol	ND	ug/kg	419	65.4	1	01/30/14 11:02	01/31/14 14:18	88-75-5	
4-Nitrophenol	ND	ug/kg	419	72.3	1	01/30/14 11:02	01/31/14 14:18	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	419	100	1	01/30/14 11:02	01/31/14 14:18	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	419	65.4	1	01/30/14 11:02	01/31/14 14:18	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	419	101	1	01/30/14 11:02	01/31/14 14:18	86-30-6	
Pentachlorophenol	ND	ug/kg	850	65.1	1	01/30/14 11:02	01/31/14 14:18	87-86-5	
Phenanthrene	ND	ug/kg	419	97.9	1	01/30/14 11:02	01/31/14 14:18	85-01-8	
Phenol	ND	ug/kg	419	55.2	1	01/30/14 11:02	01/31/14 14:18	108-95-2	
Pyrene	ND	ug/kg	419	103	1	01/30/14 11:02	01/31/14 14:18	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	419	55.6	1	01/30/14 11:02	01/31/14 14:18	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	419	44.8	1	01/30/14 11:02	01/31/14 14:18	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	419	40.0	1	01/30/14 11:02	01/31/14 14:18	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	57	%.	30-125		1	01/30/14 11:02	01/31/14 14:18	4165-60-0	
2-Fluorobiphenyl (S)	78	%.	46-125		1	01/30/14 11:02	01/31/14 14:18	321-60-8	
Terphenyl-d14 (S)	88	%.	64-125		1	01/30/14 11:02	01/31/14 14:18	1718-51-0	
Phenol-d6 (S)	74	%.	38-125		1	01/30/14 11:02	01/31/14 14:18	13127-88-3	
2-Fluorophenol (S)	65	%.	31-125		1	01/30/14 11:02	01/31/14 14:18	367-12-4	
2,4,6-Tribromophenol (S)	89	%.	41-125		1	01/30/14 11:02	01/31/14 14:18	118-79-6	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-2 2-3' **Lab ID: 10256148003** Collected: 01/22/14 12:08 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
Acetone	**383**	ug/kg	24.2	12.1	1	01/30/14 13:07	01/30/14 20:51	67-64-1	
Allyl chloride	ND	ug/kg	12.1	0.16	1	01/30/14 13:07	01/30/14 20:51	107-05-1	
Benzene	**1.5J**	ug/kg	4.8	0.070	1	01/30/14 13:07	01/30/14 20:51	71-43-2	
Bromobenzene	ND	ug/kg	4.8	0.11	1	01/30/14 13:07	01/30/14 20:51	108-86-1	
Bromochloromethane	ND	ug/kg	4.8	0.067	1	01/30/14 13:07	01/30/14 20:51	74-97-5	
Bromodichloromethane	ND	ug/kg	4.8	2.4	1	01/30/14 13:07	01/30/14 20:51	75-27-4	
Bromoform	ND	ug/kg	24.2	12.1	1	01/30/14 13:07	01/30/14 20:51	75-25-2	
Bromomethane	ND	ug/kg	24.2	12.1	1	01/30/14 13:07	01/30/14 20:51	74-83-9	
2-Butanone (MEK)	**31.5J**	ug/kg	60.6	12.1	1	01/30/14 13:07	01/30/14 20:51	78-93-3	
n-Butylbenzene	ND	ug/kg	4.8	2.4	1	01/30/14 13:07	01/30/14 20:51	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:51	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:51	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.8	0.17	1	01/30/14 13:07	01/30/14 20:51	56-23-5	
Chlorobenzene	ND	ug/kg	4.8	0.10	1	01/30/14 13:07	01/30/14 20:51	108-90-7	
Chloroethane	ND	ug/kg	12.1	0.75	1	01/30/14 13:07	01/30/14 20:51	75-00-3	
Chloroform	ND	ug/kg	4.8	0.11	1	01/30/14 13:07	01/30/14 20:51	67-66-3	
Chloromethane	ND	ug/kg	12.1	0.95	1	01/30/14 13:07	01/30/14 20:51	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.8	0.057	1	01/30/14 13:07	01/30/14 20:51	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:51	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	12.1	3.0	1	01/30/14 13:07	01/30/14 20:51	96-12-8	
Dibromochloromethane	ND	ug/kg	4.8	0.13	1	01/30/14 13:07	01/30/14 20:51	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.8	0.051	1	01/30/14 13:07	01/30/14 20:51	106-93-4	
Dibromomethane	ND	ug/kg	4.8	0.32	1	01/30/14 13:07	01/30/14 20:51	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.8	0.070	1	01/30/14 13:07	01/30/14 20:51	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:51	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	12.1	1.3	1	01/30/14 13:07	01/30/14 20:51	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.8	0.064	1	01/30/14 13:07	01/30/14 20:51	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.8	0.11	1	01/30/14 13:07	01/30/14 20:51	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.8	0.085	1	01/30/14 13:07	01/30/14 20:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.8	0.15	1	01/30/14 13:07	01/30/14 20:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.8	0.23	1	01/30/14 13:07	01/30/14 20:51	156-60-5	
Dichlorofluoromethane	ND	ug/kg	4.8	0.11	1	01/30/14 13:07	01/30/14 20:51	75-43-4	
1,2-Dichloropropane	ND	ug/kg	4.8	0.11	1	01/30/14 13:07	01/30/14 20:51	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:51	142-28-9	
2,2-Dichloropropane	ND	ug/kg	12.1	0.079	1	01/30/14 13:07	01/30/14 20:51	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.8	0.16	1	01/30/14 13:07	01/30/14 20:51	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.8	0.062	1	01/30/14 13:07	01/30/14 20:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.8	0.14	1	01/30/14 13:07	01/30/14 20:51	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	12.1	0.076	1	01/30/14 13:07	01/30/14 20:51	60-29-7	
Ethylbenzene	ND	ug/kg	4.8	0.49	1	01/30/14 13:07	01/30/14 20:51	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	12.1	6.1	1	01/30/14 13:07	01/30/14 20:51	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:51	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:51	99-87-6	
Methylene Chloride	ND	ug/kg	24.2	12.1	1	01/30/14 13:07	01/30/14 20:51	75-09-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-2 2-3' **Lab ID: 10256148003** Collected: 01/22/14 12:08 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	24.2	12.1	1	01/30/14 13:07	01/30/14 20:51	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:51	1634-04-4	
Naphthalene	ND	ug/kg	12.1	6.1	1	01/30/14 13:07	01/30/14 20:51	91-20-3	
n-Propylbenzene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:51	103-65-1	
Styrene	ND	ug/kg	4.8	0.069	1	01/30/14 13:07	01/30/14 20:51	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:51	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.8	0.063	1	01/30/14 13:07	01/30/14 20:51	79-34-5	
Tetrachloroethene	ND	ug/kg	4.8	0.12	1	01/30/14 13:07	01/30/14 20:51	127-18-4	
Tetrahydrofuran	ND	ug/kg	48.5	1.1	1	01/30/14 13:07	01/30/14 20:51	109-99-9	
Toluene	ND	ug/kg	4.8	2.4	1	01/30/14 13:07	01/30/14 20:51	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.8	2.4	1	01/30/14 13:07	01/30/14 20:51	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.8	2.4	1	01/30/14 13:07	01/30/14 20:51	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.8	0.095	1	01/30/14 13:07	01/30/14 20:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.8	0.11	1	01/30/14 13:07	01/30/14 20:51	79-00-5	
Trichloroethene	ND	ug/kg	4.8	0.15	1	01/30/14 13:07	01/30/14 20:51	79-01-6	
Trichlorofluoromethane	ND	ug/kg	12.1	0.078	1	01/30/14 13:07	01/30/14 20:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.8	0.71	1	01/30/14 13:07	01/30/14 20:51	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	4.8	0.34	1	01/30/14 13:07	01/30/14 20:51	76-13-1	
1,2,4-Trimethylbenzene	**1.6J**	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:51	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.8	1.2	1	01/30/14 13:07	01/30/14 20:51	108-67-8	
Vinyl chloride	ND	ug/kg	4.8	0.080	1	01/30/14 13:07	01/30/14 20:51	75-01-4	
Xylene (Total)	ND	ug/kg	14.5	1.2	1	01/30/14 13:07	01/30/14 20:51	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	106	%.	30-150		1	01/30/14 13:07	01/30/14 20:51	17060-07-0	
Toluene-d8 (S)	99	%.	30-150		1	01/30/14 13:07	01/30/14 20:51	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	30-150		1	01/30/14 13:07	01/30/14 20:51	460-00-4	
9045 pH	Analytical Method: EPA 9045								
pH at 25 Degrees C	**6.7**	Std. Units	0.10	0.10	1		03/07/14 11:50		H3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-2 22-23' **Lab ID: 10256148004** Collected: 01/22/14 12:40 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication								
TPH-DRO (C10-C28)	**12.0J**	mg/kg	12.2	1.5	1	01/29/14 08:59	02/02/14 21:33		B
Surrogates									
o-Terphenyl (S)	97	%.	30-150		1	01/29/14 08:59	02/02/14 21:33	84-15-1	
n-Triacontane (S)	98	%.	30-147		1	01/29/14 08:59	02/02/14 21:33	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030								
Gasoline Range Organics	ND	mg/kg	10.1	5.1	1	01/30/14 11:49	02/04/14 17:45		
Surrogates									
a,a,a-Trifluorotoluene (S)	101	%.	68-135		1	01/30/14 11:49	02/04/14 17:45	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**13.7**	mg/kg	4.6	0.33	5	03/07/14 08:39	03/21/14 08:49	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**17.7**	%	0.10	0.10	1		01/29/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
Acenaphthene	ND	ug/kg	401	38.8	1	01/30/14 11:02	01/31/14 14:48	83-32-9	
Acenaphthylene	ND	ug/kg	401	50.4	1	01/30/14 11:02	01/31/14 14:48	208-96-8	
Anthracene	ND	ug/kg	401	89.1	1	01/30/14 11:02	01/31/14 14:48	120-12-7	
Benzo(a)anthracene	ND	ug/kg	401	94.8	1	01/30/14 11:02	01/31/14 14:48	56-55-3	
Benzo(a)pyrene	ND	ug/kg	401	91.5	1	01/30/14 11:02	01/31/14 14:48	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	401	102	1	01/30/14 11:02	01/31/14 14:48	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	401	86.3	1	01/30/14 11:02	01/31/14 14:48	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	401	97.5	1	01/30/14 11:02	01/31/14 14:48	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	401	86.9	1	01/30/14 11:02	01/31/14 14:48	101-55-3	
Butylbenzylphthalate	ND	ug/kg	401	93.5	1	01/30/14 11:02	01/31/14 14:48	85-68-7	
Carbazole	ND	ug/kg	401	94.1	1	01/30/14 11:02	01/31/14 14:48	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	401	43.4	1	01/30/14 11:02	01/31/14 14:48	59-50-7	
4-Chloroaniline	ND	ug/kg	401	104	1	01/30/14 11:02	01/31/14 14:48	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	401	53.4	1	01/30/14 11:02	01/31/14 14:48	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	401	60.8	1	01/30/14 11:02	01/31/14 14:48	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	401	62.0	1	01/30/14 11:02	01/31/14 14:48	108-60-1	
2-Chloronaphthalene	ND	ug/kg	401	45.3	1	01/30/14 11:02	01/31/14 14:48	91-58-7	
2-Chlorophenol	ND	ug/kg	401	55.1	1	01/30/14 11:02	01/31/14 14:48	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	401	38.2	1	01/30/14 11:02	01/31/14 14:48	7005-72-3	
Chrysene	ND	ug/kg	401	98.7	1	01/30/14 11:02	01/31/14 14:48	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	401	89.9	1	01/30/14 11:02	01/31/14 14:48	53-70-3	
Dibenzofuran	ND	ug/kg	401	32.9	1	01/30/14 11:02	01/31/14 14:48	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	401	62.7	1	01/30/14 11:02	01/31/14 14:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	401	57.2	1	01/30/14 11:02	01/31/14 14:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	401	53.1	1	01/30/14 11:02	01/31/14 14:48	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	401	193	1	01/30/14 11:02	01/31/14 14:48	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	401	48.4	1	01/30/14 11:02	01/31/14 14:48	120-83-2	
Diethylphthalate	ND	ug/kg	401	93.9	1	01/30/14 11:02	01/31/14 14:48	84-66-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-2 22-23' **Lab ID: 10256148004** Collected: 01/22/14 12:40 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
2,4-Dimethylphenol	ND	ug/kg	401	176	1	01/30/14 11:02	01/31/14 14:48	105-67-9	
Dimethylphthalate	ND	ug/kg	401	89.3	1	01/30/14 11:02	01/31/14 14:48	131-11-3	
Di-n-butylphthalate	ND	ug/kg	401	81.4	1	01/30/14 11:02	01/31/14 14:48	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2070	74.1	1	01/30/14 11:02	01/31/14 14:48	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	401	54.1	1	01/30/14 11:02	01/31/14 14:48	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	401	37.8	1	01/30/14 11:02	01/31/14 14:48	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	401	42.7	1	01/30/14 11:02	01/31/14 14:48	606-20-2	
Di-n-octylphthalate	ND	ug/kg	401	94.6	1	01/30/14 11:02	01/31/14 14:48	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	401	90.1	1	01/30/14 11:02	01/31/14 14:48	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	401	100	1	01/30/14 11:02	01/31/14 14:48	117-81-7	
Fluoranthene	ND	ug/kg	401	91.8	1	01/30/14 11:02	01/31/14 14:48	206-44-0	
Fluorene	ND	ug/kg	401	31.5	1	01/30/14 11:02	01/31/14 14:48	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	401	51.3	1	01/30/14 11:02	01/31/14 14:48	87-68-3	
Hexachlorobenzene	ND	ug/kg	401	95.0	1	01/30/14 11:02	01/31/14 14:48	118-74-1	
Hexachloroethane	ND	ug/kg	401	64.5	1	01/30/14 11:02	01/31/14 14:48	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	401	87.5	1	01/30/14 11:02	01/31/14 14:48	193-39-5	
Isophorone	ND	ug/kg	401	51.8	1	01/30/14 11:02	01/31/14 14:48	78-59-1	
1-Methylnaphthalene	ND	ug/kg	401	49.0	1	01/30/14 11:02	01/31/14 14:48	90-12-0	
2-Methylnaphthalene	ND	ug/kg	401	46.1	1	01/30/14 11:02	01/31/14 14:48	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	401	61.0	1	01/30/14 11:02	01/31/14 14:48	95-48-7	
3&4-Methylphenol	ND	ug/kg	802	44.0	1	01/30/14 11:02	01/31/14 14:48		
Naphthalene	ND	ug/kg	401	60.0	1	01/30/14 11:02	01/31/14 14:48	91-20-3	
2-Nitroaniline	ND	ug/kg	401	82.2	1	01/30/14 11:02	01/31/14 14:48	88-74-4	
3-Nitroaniline	ND	ug/kg	401	134	1	01/30/14 11:02	01/31/14 14:48	99-09-2	
4-Nitroaniline	ND	ug/kg	401	110	1	01/30/14 11:02	01/31/14 14:48	100-01-6	
Nitrobenzene	ND	ug/kg	401	67.3	1	01/30/14 11:02	01/31/14 14:48	98-95-3	
2-Nitrophenol	ND	ug/kg	401	62.7	1	01/30/14 11:02	01/31/14 14:48	88-75-5	
4-Nitrophenol	ND	ug/kg	401	69.3	1	01/30/14 11:02	01/31/14 14:48	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	401	95.9	1	01/30/14 11:02	01/31/14 14:48	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	401	62.7	1	01/30/14 11:02	01/31/14 14:48	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	401	96.5	1	01/30/14 11:02	01/31/14 14:48	86-30-6	
Pentachlorophenol	ND	ug/kg	814	62.3	1	01/30/14 11:02	01/31/14 14:48	87-86-5	
Phenanthrene	ND	ug/kg	401	93.8	1	01/30/14 11:02	01/31/14 14:48	85-01-8	
Phenol	ND	ug/kg	401	52.9	1	01/30/14 11:02	01/31/14 14:48	108-95-2	
Pyrene	ND	ug/kg	401	98.4	1	01/30/14 11:02	01/31/14 14:48	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	401	53.2	1	01/30/14 11:02	01/31/14 14:48	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	401	42.9	1	01/30/14 11:02	01/31/14 14:48	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	401	38.3	1	01/30/14 11:02	01/31/14 14:48	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	70	%.	30-125		1	01/30/14 11:02	01/31/14 14:48	4165-60-0	
2-Fluorobiphenyl (S)	79	%.	46-125		1	01/30/14 11:02	01/31/14 14:48	321-60-8	
Terphenyl-d14 (S)	85	%.	64-125		1	01/30/14 11:02	01/31/14 14:48	1718-51-0	
Phenol-d6 (S)	82	%.	38-125		1	01/30/14 11:02	01/31/14 14:48	13127-88-3	
2-Fluorophenol (S)	81	%.	31-125		1	01/30/14 11:02	01/31/14 14:48	367-12-4	
2,4,6-Tribromophenol (S)	83	%.	41-125		1	01/30/14 11:02	01/31/14 14:48	118-79-6	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-2 22-23' **Lab ID: 10256148004** Collected: 01/22/14 12:40 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
Acetone	**16.6J**	ug/kg	20.5	10.3	1	01/30/14 13:07	01/30/14 21:09	67-64-1	
Allyl chloride	ND	ug/kg	10.3	0.14	1	01/30/14 13:07	01/30/14 21:09	107-05-1	
Benzene	**0.26J**	ug/kg	4.1	0.060	1	01/30/14 13:07	01/30/14 21:09	71-43-2	
Bromobenzene	ND	ug/kg	4.1	0.094	1	01/30/14 13:07	01/30/14 21:09	108-86-1	
Bromochloromethane	ND	ug/kg	4.1	0.056	1	01/30/14 13:07	01/30/14 21:09	74-97-5	
Bromodichloromethane	ND	ug/kg	4.1	2.1	1	01/30/14 13:07	01/30/14 21:09	75-27-4	
Bromoform	ND	ug/kg	20.5	10.3	1	01/30/14 13:07	01/30/14 21:09	75-25-2	
Bromomethane	ND	ug/kg	20.5	10.3	1	01/30/14 13:07	01/30/14 21:09	74-83-9	
2-Butanone (MEK)	ND	ug/kg	51.3	10.3	1	01/30/14 13:07	01/30/14 21:09	78-93-3	
n-Butylbenzene	ND	ug/kg	4.1	2.1	1	01/30/14 13:07	01/30/14 21:09	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.1	1.0	1	01/30/14 13:07	01/30/14 21:09	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.1	1.0	1	01/30/14 13:07	01/30/14 21:09	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.1	0.15	1	01/30/14 13:07	01/30/14 21:09	56-23-5	
Chlorobenzene	ND	ug/kg	4.1	0.086	1	01/30/14 13:07	01/30/14 21:09	108-90-7	
Chloroethane	ND	ug/kg	10.3	0.63	1	01/30/14 13:07	01/30/14 21:09	75-00-3	
Chloroform	ND	ug/kg	4.1	0.093	1	01/30/14 13:07	01/30/14 21:09	67-66-3	
Chloromethane	ND	ug/kg	10.3	0.80	1	01/30/14 13:07	01/30/14 21:09	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.1	0.048	1	01/30/14 13:07	01/30/14 21:09	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.1	1.0	1	01/30/14 13:07	01/30/14 21:09	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	10.3	2.6	1	01/30/14 13:07	01/30/14 21:09	96-12-8	
Dibromochloromethane	ND	ug/kg	4.1	0.11	1	01/30/14 13:07	01/30/14 21:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.1	0.043	1	01/30/14 13:07	01/30/14 21:09	106-93-4	
Dibromomethane	ND	ug/kg	4.1	0.27	1	01/30/14 13:07	01/30/14 21:09	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.1	0.060	1	01/30/14 13:07	01/30/14 21:09	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.1	1.0	1	01/30/14 13:07	01/30/14 21:09	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.1	1.0	1	01/30/14 13:07	01/30/14 21:09	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	10.3	1.1	1	01/30/14 13:07	01/30/14 21:09	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.1	0.054	1	01/30/14 13:07	01/30/14 21:09	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.1	0.090	1	01/30/14 13:07	01/30/14 21:09	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.1	0.072	1	01/30/14 13:07	01/30/14 21:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.1	0.13	1	01/30/14 13:07	01/30/14 21:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.1	0.19	1	01/30/14 13:07	01/30/14 21:09	156-60-5	
Dichlorofluoromethane	ND	ug/kg	4.1	0.090	1	01/30/14 13:07	01/30/14 21:09	75-43-4	
1,2-Dichloropropane	ND	ug/kg	4.1	0.090	1	01/30/14 13:07	01/30/14 21:09	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.1	1.0	1	01/30/14 13:07	01/30/14 21:09	142-28-9	
2,2-Dichloropropane	ND	ug/kg	10.3	0.067	1	01/30/14 13:07	01/30/14 21:09	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.1	0.14	1	01/30/14 13:07	01/30/14 21:09	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.1	0.052	1	01/30/14 13:07	01/30/14 21:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.1	0.12	1	01/30/14 13:07	01/30/14 21:09	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	10.3	0.065	1	01/30/14 13:07	01/30/14 21:09	60-29-7	
Ethylbenzene	ND	ug/kg	4.1	0.42	1	01/30/14 13:07	01/30/14 21:09	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	10.3	5.1	1	01/30/14 13:07	01/30/14 21:09	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	4.1	1.0	1	01/30/14 13:07	01/30/14 21:09	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.1	1.0	1	01/30/14 13:07	01/30/14 21:09	99-87-6	
Methylene Chloride	ND	ug/kg	20.5	10.3	1	01/30/14 13:07	01/30/14 21:09	75-09-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-2 22-23' **Lab ID: 10256148004** Collected: 01/22/14 12:40 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	20.5	10.3	1	01/30/14 13:07	01/30/14 21:09	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.1	1.0	1	01/30/14 13:07	01/30/14 21:09	1634-04-4	
Naphthalene	ND	ug/kg	10.3	5.1	1	01/30/14 13:07	01/30/14 21:09	91-20-3	
n-Propylbenzene	ND	ug/kg	4.1	1.0	1	01/30/14 13:07	01/30/14 21:09	103-65-1	
Styrene	ND	ug/kg	4.1	0.059	1	01/30/14 13:07	01/30/14 21:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.1	1.0	1	01/30/14 13:07	01/30/14 21:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.1	0.053	1	01/30/14 13:07	01/30/14 21:09	79-34-5	
Tetrachloroethene	ND	ug/kg	4.1	0.10	1	01/30/14 13:07	01/30/14 21:09	127-18-4	
Tetrahydrofuran	ND	ug/kg	41.1	0.90	1	01/30/14 13:07	01/30/14 21:09	109-99-9	
Toluene	ND	ug/kg	4.1	2.1	1	01/30/14 13:07	01/30/14 21:09	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.1	2.1	1	01/30/14 13:07	01/30/14 21:09	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.1	2.1	1	01/30/14 13:07	01/30/14 21:09	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.1	0.080	1	01/30/14 13:07	01/30/14 21:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.1	0.090	1	01/30/14 13:07	01/30/14 21:09	79-00-5	
Trichloroethene	ND	ug/kg	4.1	0.13	1	01/30/14 13:07	01/30/14 21:09	79-01-6	
Trichlorofluoromethane	ND	ug/kg	10.3	0.066	1	01/30/14 13:07	01/30/14 21:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.1	0.60	1	01/30/14 13:07	01/30/14 21:09	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	4.1	0.29	1	01/30/14 13:07	01/30/14 21:09	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	4.1	1.0	1	01/30/14 13:07	01/30/14 21:09	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.1	1.0	1	01/30/14 13:07	01/30/14 21:09	108-67-8	
Vinyl chloride	ND	ug/kg	4.1	0.068	1	01/30/14 13:07	01/30/14 21:09	75-01-4	
Xylene (Total)	ND	ug/kg	12.3	1.0	1	01/30/14 13:07	01/30/14 21:09	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	108	%.	30-150		1	01/30/14 13:07	01/30/14 21:09	17060-07-0	
Toluene-d8 (S)	104	%.	30-150		1	01/30/14 13:07	01/30/14 21:09	2037-26-5	
4-Bromofluorobenzene (S)	114	%.	30-150		1	01/30/14 13:07	01/30/14 21:09	460-00-4	
9045 pH	Analytical Method: EPA 9045								
pH at 25 Degrees C	7.7	Std. Units	0.10	0.10	1		03/07/14 11:53		H3

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-3 3-5' **Lab ID: 10256148005** Collected: 01/22/14 13:30 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication								
TPH-DRO (C10-C28)	**1.5J**	mg/kg	12.0	1.4	1	01/29/14 08:59	02/02/14 22:20		B
Surrogates									
o-Terphenyl (S)	102	%.	30-150		1	01/29/14 08:59	02/02/14 22:20	84-15-1	
n-Triacontane (S)	102	%.	30-147		1	01/29/14 08:59	02/02/14 22:20	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030								
Gasoline Range Organics	ND	mg/kg	6.1	3.1	1	01/30/14 11:49	02/04/14 17:21		
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%.	68-135		1	01/30/14 11:49	02/04/14 17:21	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**12.3**	mg/kg	4.8	0.35	5	03/07/14 08:39	03/21/14 08:56	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**16.8**	%	0.10	0.10	1		01/29/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
Acenaphthene	ND	ug/kg	397	38.4	1	01/30/14 11:02	01/31/14 15:18	83-32-9	
Acenaphthylene	ND	ug/kg	397	49.9	1	01/30/14 11:02	01/31/14 15:18	208-96-8	
Anthracene	ND	ug/kg	397	88.1	1	01/30/14 11:02	01/31/14 15:18	120-12-7	
Benzo(a)anthracene	ND	ug/kg	397	93.8	1	01/30/14 11:02	01/31/14 15:18	56-55-3	
Benzo(a)pyrene	ND	ug/kg	397	90.6	1	01/30/14 11:02	01/31/14 15:18	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	397	101	1	01/30/14 11:02	01/31/14 15:18	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	397	85.4	1	01/30/14 11:02	01/31/14 15:18	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	397	96.4	1	01/30/14 11:02	01/31/14 15:18	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	397	86.0	1	01/30/14 11:02	01/31/14 15:18	101-55-3	
Butylbenzylphthalate	ND	ug/kg	397	92.5	1	01/30/14 11:02	01/31/14 15:18	85-68-7	
Carbazole	ND	ug/kg	397	93.1	1	01/30/14 11:02	01/31/14 15:18	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	397	42.9	1	01/30/14 11:02	01/31/14 15:18	59-50-7	
4-Chloroaniline	ND	ug/kg	397	103	1	01/30/14 11:02	01/31/14 15:18	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	397	52.8	1	01/30/14 11:02	01/31/14 15:18	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	397	60.1	1	01/30/14 11:02	01/31/14 15:18	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	397	61.3	1	01/30/14 11:02	01/31/14 15:18	108-60-1	
2-Chloronaphthalene	ND	ug/kg	397	44.9	1	01/30/14 11:02	01/31/14 15:18	91-58-7	
2-Chlorophenol	ND	ug/kg	397	54.5	1	01/30/14 11:02	01/31/14 15:18	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	397	37.8	1	01/30/14 11:02	01/31/14 15:18	7005-72-3	
Chrysene	ND	ug/kg	397	97.6	1	01/30/14 11:02	01/31/14 15:18	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	397	89.0	1	01/30/14 11:02	01/31/14 15:18	53-70-3	
Dibenzofuran	ND	ug/kg	397	32.6	1	01/30/14 11:02	01/31/14 15:18	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	397	62.1	1	01/30/14 11:02	01/31/14 15:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	397	56.6	1	01/30/14 11:02	01/31/14 15:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	397	52.6	1	01/30/14 11:02	01/31/14 15:18	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	397	191	1	01/30/14 11:02	01/31/14 15:18	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	397	47.9	1	01/30/14 11:02	01/31/14 15:18	120-83-2	
Diethylphthalate	ND	ug/kg	397	93.0	1	01/30/14 11:02	01/31/14 15:18	84-66-2	

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-3 3-5' **Lab ID: 10256148005** Collected: 01/22/14 13:30 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
2,4-Dimethylphenol	ND	ug/kg	397	174	1	01/30/14 11:02	01/31/14 15:18	105-67-9	
Dimethylphthalate	ND	ug/kg	397	88.4	1	01/30/14 11:02	01/31/14 15:18	131-11-3	
Di-n-butylphthalate	ND	ug/kg	397	80.6	1	01/30/14 11:02	01/31/14 15:18	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2040	73.4	1	01/30/14 11:02	01/31/14 15:18	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	397	53.5	1	01/30/14 11:02	01/31/14 15:18	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	397	37.4	1	01/30/14 11:02	01/31/14 15:18	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	397	42.2	1	01/30/14 11:02	01/31/14 15:18	606-20-2	
Di-n-octylphthalate	ND	ug/kg	397	93.6	1	01/30/14 11:02	01/31/14 15:18	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	397	89.1	1	01/30/14 11:02	01/31/14 15:18	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	397	99.3	1	01/30/14 11:02	01/31/14 15:18	117-81-7	
Fluoranthene	ND	ug/kg	397	90.8	1	01/30/14 11:02	01/31/14 15:18	206-44-0	
Fluorene	ND	ug/kg	397	31.1	1	01/30/14 11:02	01/31/14 15:18	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	397	50.7	1	01/30/14 11:02	01/31/14 15:18	87-68-3	
Hexachlorobenzene	ND	ug/kg	397	94.0	1	01/30/14 11:02	01/31/14 15:18	118-74-1	
Hexachloroethane	ND	ug/kg	397	63.9	1	01/30/14 11:02	01/31/14 15:18	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	397	86.6	1	01/30/14 11:02	01/31/14 15:18	193-39-5	
Isophorone	ND	ug/kg	397	51.2	1	01/30/14 11:02	01/31/14 15:18	78-59-1	
1-Methylnaphthalene	ND	ug/kg	397	48.5	1	01/30/14 11:02	01/31/14 15:18	90-12-0	
2-Methylnaphthalene	ND	ug/kg	397	45.6	1	01/30/14 11:02	01/31/14 15:18	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	397	60.4	1	01/30/14 11:02	01/31/14 15:18	95-48-7	
3&4-Methylphenol	ND	ug/kg	794	43.5	1	01/30/14 11:02	01/31/14 15:18		
Naphthalene	ND	ug/kg	397	59.4	1	01/30/14 11:02	01/31/14 15:18	91-20-3	
2-Nitroaniline	ND	ug/kg	397	81.3	1	01/30/14 11:02	01/31/14 15:18	88-74-4	
3-Nitroaniline	ND	ug/kg	397	132	1	01/30/14 11:02	01/31/14 15:18	99-09-2	
4-Nitroaniline	ND	ug/kg	397	109	1	01/30/14 11:02	01/31/14 15:18	100-01-6	
Nitrobenzene	ND	ug/kg	397	66.6	1	01/30/14 11:02	01/31/14 15:18	98-95-3	
2-Nitrophenol	ND	ug/kg	397	62.1	1	01/30/14 11:02	01/31/14 15:18	88-75-5	
4-Nitrophenol	ND	ug/kg	397	68.5	1	01/30/14 11:02	01/31/14 15:18	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	397	94.9	1	01/30/14 11:02	01/31/14 15:18	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	397	62.1	1	01/30/14 11:02	01/31/14 15:18	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	397	95.5	1	01/30/14 11:02	01/31/14 15:18	86-30-6	
Pentachlorophenol	ND	ug/kg	806	61.7	1	01/30/14 11:02	01/31/14 15:18	87-86-5	
Phenanthrene	ND	ug/kg	397	92.8	1	01/30/14 11:02	01/31/14 15:18	85-01-8	
Phenol	ND	ug/kg	397	52.3	1	01/30/14 11:02	01/31/14 15:18	108-95-2	
Pyrene	ND	ug/kg	397	97.4	1	01/30/14 11:02	01/31/14 15:18	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	397	52.7	1	01/30/14 11:02	01/31/14 15:18	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	397	42.5	1	01/30/14 11:02	01/31/14 15:18	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	397	37.9	1	01/30/14 11:02	01/31/14 15:18	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	67	%.	30-125		1	01/30/14 11:02	01/31/14 15:18	4165-60-0	
2-Fluorobiphenyl (S)	77	%.	46-125		1	01/30/14 11:02	01/31/14 15:18	321-60-8	
Terphenyl-d14 (S)	88	%.	64-125		1	01/30/14 11:02	01/31/14 15:18	1718-51-0	
Phenol-d6 (S)	77	%.	38-125		1	01/30/14 11:02	01/31/14 15:18	13127-88-3	
2-Fluorophenol (S)	75	%.	31-125		1	01/30/14 11:02	01/31/14 15:18	367-12-4	
2,4,6-Tribromophenol (S)	81	%.	41-125		1	01/30/14 11:02	01/31/14 15:18	118-79-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-3 3-5' **Lab ID: 10256148005** Collected: 01/22/14 13:30 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
Acetone	**48.2**	ug/kg	18.6	9.3	1	01/30/14 13:07	01/30/14 21:27	67-64-1	
Allyl chloride	ND	ug/kg	9.3	0.12	1	01/30/14 13:07	01/30/14 21:27	107-05-1	
Benzene	**0.13J**	ug/kg	3.7	0.054	1	01/30/14 13:07	01/30/14 21:27	71-43-2	
Bromobenzene	ND	ug/kg	3.7	0.085	1	01/30/14 13:07	01/30/14 21:27	108-86-1	
Bromochloromethane	ND	ug/kg	3.7	0.051	1	01/30/14 13:07	01/30/14 21:27	74-97-5	
Bromodichloromethane	ND	ug/kg	3.7	1.9	1	01/30/14 13:07	01/30/14 21:27	75-27-4	
Bromoform	ND	ug/kg	18.6	9.3	1	01/30/14 13:07	01/30/14 21:27	75-25-2	
Bromomethane	ND	ug/kg	18.6	9.3	1	01/30/14 13:07	01/30/14 21:27	74-83-9	
2-Butanone (MEK)	ND	ug/kg	46.4	9.3	1	01/30/14 13:07	01/30/14 21:27	78-93-3	
n-Butylbenzene	ND	ug/kg	3.7	1.9	1	01/30/14 13:07	01/30/14 21:27	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.7	0.93	1	01/30/14 13:07	01/30/14 21:27	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.7	0.93	1	01/30/14 13:07	01/30/14 21:27	98-06-6	
Carbon tetrachloride	ND	ug/kg	3.7	0.13	1	01/30/14 13:07	01/30/14 21:27	56-23-5	
Chlorobenzene	ND	ug/kg	3.7	0.078	1	01/30/14 13:07	01/30/14 21:27	108-90-7	
Chloroethane	ND	ug/kg	9.3	0.57	1	01/30/14 13:07	01/30/14 21:27	75-00-3	
Chloroform	ND	ug/kg	3.7	0.084	1	01/30/14 13:07	01/30/14 21:27	67-66-3	
Chloromethane	ND	ug/kg	9.3	0.72	1	01/30/14 13:07	01/30/14 21:27	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.7	0.044	1	01/30/14 13:07	01/30/14 21:27	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.7	0.93	1	01/30/14 13:07	01/30/14 21:27	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	9.3	2.3	1	01/30/14 13:07	01/30/14 21:27	96-12-8	
Dibromochloromethane	ND	ug/kg	3.7	0.099	1	01/30/14 13:07	01/30/14 21:27	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.7	0.039	1	01/30/14 13:07	01/30/14 21:27	106-93-4	
Dibromomethane	ND	ug/kg	3.7	0.24	1	01/30/14 13:07	01/30/14 21:27	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.7	0.054	1	01/30/14 13:07	01/30/14 21:27	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.7	0.93	1	01/30/14 13:07	01/30/14 21:27	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.7	0.93	1	01/30/14 13:07	01/30/14 21:27	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	9.3	0.97	1	01/30/14 13:07	01/30/14 21:27	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.7	0.049	1	01/30/14 13:07	01/30/14 21:27	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.7	0.082	1	01/30/14 13:07	01/30/14 21:27	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.7	0.065	1	01/30/14 13:07	01/30/14 21:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.7	0.11	1	01/30/14 13:07	01/30/14 21:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.7	0.17	1	01/30/14 13:07	01/30/14 21:27	156-60-5	
Dichlorofluoromethane	ND	ug/kg	3.7	0.082	1	01/30/14 13:07	01/30/14 21:27	75-43-4	
1,2-Dichloropropane	ND	ug/kg	3.7	0.082	1	01/30/14 13:07	01/30/14 21:27	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.7	0.93	1	01/30/14 13:07	01/30/14 21:27	142-28-9	
2,2-Dichloropropane	ND	ug/kg	9.3	0.060	1	01/30/14 13:07	01/30/14 21:27	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.7	0.12	1	01/30/14 13:07	01/30/14 21:27	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.7	0.047	1	01/30/14 13:07	01/30/14 21:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.7	0.11	1	01/30/14 13:07	01/30/14 21:27	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	9.3	0.058	1	01/30/14 13:07	01/30/14 21:27	60-29-7	
Ethylbenzene	ND	ug/kg	3.7	0.38	1	01/30/14 13:07	01/30/14 21:27	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	9.3	4.6	1	01/30/14 13:07	01/30/14 21:27	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	3.7	0.93	1	01/30/14 13:07	01/30/14 21:27	98-82-8	
p-Isopropyltoluene	ND	ug/kg	3.7	0.93	1	01/30/14 13:07	01/30/14 21:27	99-87-6	
Methylene Chloride	ND	ug/kg	18.6	9.3	1	01/30/14 13:07	01/30/14 21:27	75-09-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-3 3-5' **Lab ID: 10256148005** Collected: 01/22/14 13:30 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	18.6	9.3	1	01/30/14 13:07	01/30/14 21:27	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	3.7	0.93	1	01/30/14 13:07	01/30/14 21:27	1634-04-4	
Naphthalene	ND	ug/kg	9.3	4.6	1	01/30/14 13:07	01/30/14 21:27	91-20-3	
n-Propylbenzene	ND	ug/kg	3.7	0.93	1	01/30/14 13:07	01/30/14 21:27	103-65-1	
Styrene	ND	ug/kg	3.7	0.053	1	01/30/14 13:07	01/30/14 21:27	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.7	0.93	1	01/30/14 13:07	01/30/14 21:27	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.7	0.048	1	01/30/14 13:07	01/30/14 21:27	79-34-5	
Tetrachloroethene	**0.18J**	ug/kg	3.7	0.095	1	01/30/14 13:07	01/30/14 21:27	127-18-4	
Tetrahydrofuran	ND	ug/kg	37.1	0.81	1	01/30/14 13:07	01/30/14 21:27	109-99-9	
Toluene	ND	ug/kg	3.7	1.9	1	01/30/14 13:07	01/30/14 21:27	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.7	1.9	1	01/30/14 13:07	01/30/14 21:27	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.7	1.9	1	01/30/14 13:07	01/30/14 21:27	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.7	0.072	1	01/30/14 13:07	01/30/14 21:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.7	0.082	1	01/30/14 13:07	01/30/14 21:27	79-00-5	
Trichloroethene	ND	ug/kg	3.7	0.11	1	01/30/14 13:07	01/30/14 21:27	79-01-6	
Trichlorofluoromethane	ND	ug/kg	9.3	0.059	1	01/30/14 13:07	01/30/14 21:27	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.7	0.54	1	01/30/14 13:07	01/30/14 21:27	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	3.7	0.26	1	01/30/14 13:07	01/30/14 21:27	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	3.7	0.93	1	01/30/14 13:07	01/30/14 21:27	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	3.7	0.93	1	01/30/14 13:07	01/30/14 21:27	108-67-8	
Vinyl chloride	ND	ug/kg	3.7	0.061	1	01/30/14 13:07	01/30/14 21:27	75-01-4	
Xylene (Total)	ND	ug/kg	11.1	0.91	1	01/30/14 13:07	01/30/14 21:27	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	108	%.	30-150		1	01/30/14 13:07	01/30/14 21:27	17060-07-0	
Toluene-d8 (S)	98	%.	30-150		1	01/30/14 13:07	01/30/14 21:27	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	30-150		1	01/30/14 13:07	01/30/14 21:27	460-00-4	
9045 pH	Analytical Method: EPA 9045								
pH at 25 Degrees C	**7.6**	Std. Units	0.10	0.10	1		03/07/14 11:53		H3

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Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-3 25-27' **Lab ID: 10256148006** Collected: 01/22/14 14:15 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication								
TPH-DRO (C10-C28)	**11.5J**	mg/kg	12.3	1.5	1	01/29/14 08:59	02/02/14 21:10		B
Surrogates									
o-Terphenyl (S)	95	%.	30-150		1	01/29/14 08:59	02/02/14 21:10	84-15-1	
n-Triacontane (S)	91	%.	30-147		1	01/29/14 08:59	02/02/14 21:10	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030								
Gasoline Range Organics	**3.1J**	mg/kg	6.1	3.0	1	01/30/14 11:49	02/01/14 23:49		
Surrogates									
a,a,a-Trifluorotoluene (S)	93	%.	68-135		1	01/30/14 11:49	02/01/14 23:49	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**12.8**	mg/kg	4.7	0.34	5	03/07/14 08:39	03/21/14 09:02	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**18.7**	%	0.10	0.10	1		01/29/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
Acenaphthene	ND	ug/kg	404	39.1	1	01/30/14 11:02	01/31/14 15:49	83-32-9	
Acenaphthylene	ND	ug/kg	404	50.9	1	01/30/14 11:02	01/31/14 15:49	208-96-8	
Anthracene	ND	ug/kg	404	89.8	1	01/30/14 11:02	01/31/14 15:49	120-12-7	
Benzo(a)anthracene	ND	ug/kg	404	95.6	1	01/30/14 11:02	01/31/14 15:49	56-55-3	
Benzo(a)pyrene	ND	ug/kg	404	92.3	1	01/30/14 11:02	01/31/14 15:49	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	404	103	1	01/30/14 11:02	01/31/14 15:49	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	404	87.0	1	01/30/14 11:02	01/31/14 15:49	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	404	98.3	1	01/30/14 11:02	01/31/14 15:49	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	404	87.6	1	01/30/14 11:02	01/31/14 15:49	101-55-3	
Butylbenzylphthalate	ND	ug/kg	404	94.2	1	01/30/14 11:02	01/31/14 15:49	85-68-7	
Carbazole	ND	ug/kg	404	94.9	1	01/30/14 11:02	01/31/14 15:49	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	404	43.8	1	01/30/14 11:02	01/31/14 15:49	59-50-7	
4-Chloroaniline	ND	ug/kg	404	105	1	01/30/14 11:02	01/31/14 15:49	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	404	53.8	1	01/30/14 11:02	01/31/14 15:49	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	404	61.3	1	01/30/14 11:02	01/31/14 15:49	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	404	62.5	1	01/30/14 11:02	01/31/14 15:49	108-60-1	
2-Chloronaphthalene	ND	ug/kg	404	45.7	1	01/30/14 11:02	01/31/14 15:49	91-58-7	
2-Chlorophenol	ND	ug/kg	404	55.5	1	01/30/14 11:02	01/31/14 15:49	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	404	38.5	1	01/30/14 11:02	01/31/14 15:49	7005-72-3	
Chrysene	ND	ug/kg	404	99.5	1	01/30/14 11:02	01/31/14 15:49	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	404	90.7	1	01/30/14 11:02	01/31/14 15:49	53-70-3	
Dibenzofuran	ND	ug/kg	404	33.2	1	01/30/14 11:02	01/31/14 15:49	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	404	63.2	1	01/30/14 11:02	01/31/14 15:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	404	57.7	1	01/30/14 11:02	01/31/14 15:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	404	53.6	1	01/30/14 11:02	01/31/14 15:49	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	404	195	1	01/30/14 11:02	01/31/14 15:49	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	404	48.8	1	01/30/14 11:02	01/31/14 15:49	120-83-2	
Diethylphthalate	ND	ug/kg	404	94.7	1	01/30/14 11:02	01/31/14 15:49	84-66-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-3 25-27' **Lab ID: 10256148006** Collected: 01/22/14 14:15 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
2,4-Dimethylphenol	ND	ug/kg	404	177	1	01/30/14 11:02	01/31/14 15:49	105-67-9	
Dimethylphthalate	ND	ug/kg	404	90.1	1	01/30/14 11:02	01/31/14 15:49	131-11-3	
Di-n-butylphthalate	ND	ug/kg	404	82.1	1	01/30/14 11:02	01/31/14 15:49	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2080	74.8	1	01/30/14 11:02	01/31/14 15:49	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	404	54.5	1	01/30/14 11:02	01/31/14 15:49	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	404	38.1	1	01/30/14 11:02	01/31/14 15:49	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	404	43.0	1	01/30/14 11:02	01/31/14 15:49	606-20-2	
Di-n-octylphthalate	ND	ug/kg	404	95.4	1	01/30/14 11:02	01/31/14 15:49	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	404	90.8	1	01/30/14 11:02	01/31/14 15:49	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	404	101	1	01/30/14 11:02	01/31/14 15:49	117-81-7	
Fluoranthene	ND	ug/kg	404	92.5	1	01/30/14 11:02	01/31/14 15:49	206-44-0	
Fluorene	ND	ug/kg	404	31.7	1	01/30/14 11:02	01/31/14 15:49	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	404	51.7	1	01/30/14 11:02	01/31/14 15:49	87-68-3	
Hexachlorobenzene	ND	ug/kg	404	95.8	1	01/30/14 11:02	01/31/14 15:49	118-74-1	
Hexachloroethane	ND	ug/kg	404	65.1	1	01/30/14 11:02	01/31/14 15:49	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	404	88.2	1	01/30/14 11:02	01/31/14 15:49	193-39-5	
Isophorone	ND	ug/kg	404	52.2	1	01/30/14 11:02	01/31/14 15:49	78-59-1	
1-Methylnaphthalene	ND	ug/kg	404	49.4	1	01/30/14 11:02	01/31/14 15:49	90-12-0	
2-Methylnaphthalene	ND	ug/kg	404	46.4	1	01/30/14 11:02	01/31/14 15:49	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	404	61.5	1	01/30/14 11:02	01/31/14 15:49	95-48-7	
3&4-Methylphenol	ND	ug/kg	809	44.4	1	01/30/14 11:02	01/31/14 15:49		
Naphthalene	ND	ug/kg	404	60.5	1	01/30/14 11:02	01/31/14 15:49	91-20-3	
2-Nitroaniline	ND	ug/kg	404	82.8	1	01/30/14 11:02	01/31/14 15:49	88-74-4	
3-Nitroaniline	ND	ug/kg	404	135	1	01/30/14 11:02	01/31/14 15:49	99-09-2	
4-Nitroaniline	ND	ug/kg	404	111	1	01/30/14 11:02	01/31/14 15:49	100-01-6	
Nitrobenzene	ND	ug/kg	404	67.9	1	01/30/14 11:02	01/31/14 15:49	98-95-3	
2-Nitrophenol	ND	ug/kg	404	63.2	1	01/30/14 11:02	01/31/14 15:49	88-75-5	
4-Nitrophenol	ND	ug/kg	404	69.9	1	01/30/14 11:02	01/31/14 15:49	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	404	96.7	1	01/30/14 11:02	01/31/14 15:49	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	404	63.2	1	01/30/14 11:02	01/31/14 15:49	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	404	97.3	1	01/30/14 11:02	01/31/14 15:49	86-30-6	
Pentachlorophenol	ND	ug/kg	821	62.9	1	01/30/14 11:02	01/31/14 15:49	87-86-5	
Phenanthrene	ND	ug/kg	404	94.6	1	01/30/14 11:02	01/31/14 15:49	85-01-8	
Phenol	ND	ug/kg	404	53.3	1	01/30/14 11:02	01/31/14 15:49	108-95-2	
Pyrene	ND	ug/kg	404	99.3	1	01/30/14 11:02	01/31/14 15:49	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	404	53.7	1	01/30/14 11:02	01/31/14 15:49	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	404	43.3	1	01/30/14 11:02	01/31/14 15:49	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	404	38.6	1	01/30/14 11:02	01/31/14 15:49	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	68	%.	30-125		1	01/30/14 11:02	01/31/14 15:49	4165-60-0	
2-Fluorobiphenyl (S)	78	%.	46-125		1	01/30/14 11:02	01/31/14 15:49	321-60-8	
Terphenyl-d14 (S)	88	%.	64-125		1	01/30/14 11:02	01/31/14 15:49	1718-51-0	
Phenol-d6 (S)	79	%.	38-125		1	01/30/14 11:02	01/31/14 15:49	13127-88-3	
2-Fluorophenol (S)	79	%.	31-125		1	01/30/14 11:02	01/31/14 15:49	367-12-4	
2,4,6-Tribromophenol (S)	85	%.	41-125		1	01/30/14 11:02	01/31/14 15:49	118-79-6	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-3 25-27' **Lab ID: 10256148006** Collected: 01/22/14 14:15 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
Acetone	ND	ug/kg	19.5	9.7	1	01/30/14 13:08	01/30/14 21:45	67-64-1	
Allyl chloride	ND	ug/kg	9.7	0.13	1	01/30/14 13:08	01/30/14 21:45	107-05-1	
Benzene	**0.18J**	ug/kg	3.9	0.056	1	01/30/14 13:08	01/30/14 21:45	71-43-2	
Bromobenzene	ND	ug/kg	3.9	0.090	1	01/30/14 13:08	01/30/14 21:45	108-86-1	
Bromochloromethane	ND	ug/kg	3.9	0.054	1	01/30/14 13:08	01/30/14 21:45	74-97-5	
Bromodichloromethane	ND	ug/kg	3.9	1.9	1	01/30/14 13:08	01/30/14 21:45	75-27-4	
Bromoform	ND	ug/kg	19.5	9.7	1	01/30/14 13:08	01/30/14 21:45	75-25-2	
Bromomethane	ND	ug/kg	19.5	9.7	1	01/30/14 13:08	01/30/14 21:45	74-83-9	
2-Butanone (MEK)	ND	ug/kg	48.6	9.7	1	01/30/14 13:08	01/30/14 21:45	78-93-3	
n-Butylbenzene	ND	ug/kg	3.9	1.9	1	01/30/14 13:08	01/30/14 21:45	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.9	0.97	1	01/30/14 13:08	01/30/14 21:45	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.9	0.97	1	01/30/14 13:08	01/30/14 21:45	98-06-6	
Carbon tetrachloride	ND	ug/kg	3.9	0.14	1	01/30/14 13:08	01/30/14 21:45	56-23-5	
Chlorobenzene	ND	ug/kg	3.9	0.082	1	01/30/14 13:08	01/30/14 21:45	108-90-7	
Chloroethane	ND	ug/kg	9.7	0.60	1	01/30/14 13:08	01/30/14 21:45	75-00-3	
Chloroform	ND	ug/kg	3.9	0.089	1	01/30/14 13:08	01/30/14 21:45	67-66-3	
Chloromethane	ND	ug/kg	9.7	0.76	1	01/30/14 13:08	01/30/14 21:45	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.9	0.046	1	01/30/14 13:08	01/30/14 21:45	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.9	0.97	1	01/30/14 13:08	01/30/14 21:45	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	9.7	2.4	1	01/30/14 13:08	01/30/14 21:45	96-12-8	
Dibromochloromethane	ND	ug/kg	3.9	0.10	1	01/30/14 13:08	01/30/14 21:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.9	0.041	1	01/30/14 13:08	01/30/14 21:45	106-93-4	
Dibromomethane	ND	ug/kg	3.9	0.25	1	01/30/14 13:08	01/30/14 21:45	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.9	0.056	1	01/30/14 13:08	01/30/14 21:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.9	0.97	1	01/30/14 13:08	01/30/14 21:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.9	0.97	1	01/30/14 13:08	01/30/14 21:45	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	9.7	1.0	1	01/30/14 13:08	01/30/14 21:45	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.9	0.052	1	01/30/14 13:08	01/30/14 21:45	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.9	0.086	1	01/30/14 13:08	01/30/14 21:45	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.9	0.068	1	01/30/14 13:08	01/30/14 21:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.9	0.12	1	01/30/14 13:08	01/30/14 21:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.9	0.18	1	01/30/14 13:08	01/30/14 21:45	156-60-5	
Dichlorofluoromethane	ND	ug/kg	3.9	0.086	1	01/30/14 13:08	01/30/14 21:45	75-43-4	
1,2-Dichloropropane	ND	ug/kg	3.9	0.086	1	01/30/14 13:08	01/30/14 21:45	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.9	0.97	1	01/30/14 13:08	01/30/14 21:45	142-28-9	
2,2-Dichloropropane	ND	ug/kg	9.7	0.063	1	01/30/14 13:08	01/30/14 21:45	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.9	0.13	1	01/30/14 13:08	01/30/14 21:45	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.9	0.050	1	01/30/14 13:08	01/30/14 21:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.9	0.12	1	01/30/14 13:08	01/30/14 21:45	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	9.7	0.061	1	01/30/14 13:08	01/30/14 21:45	60-29-7	
Ethylbenzene	ND	ug/kg	3.9	0.40	1	01/30/14 13:08	01/30/14 21:45	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	9.7	4.9	1	01/30/14 13:08	01/30/14 21:45	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	3.9	0.97	1	01/30/14 13:08	01/30/14 21:45	98-82-8	
p-Isopropyltoluene	ND	ug/kg	3.9	0.97	1	01/30/14 13:08	01/30/14 21:45	99-87-6	
Methylene Chloride	ND	ug/kg	19.5	9.7	1	01/30/14 13:08	01/30/14 21:45	75-09-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-3 25-27' **Lab ID: 10256148006** Collected: 01/22/14 14:15 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	19.5	9.7	1	01/30/14 13:08	01/30/14 21:45	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	3.9	0.97	1	01/30/14 13:08	01/30/14 21:45	1634-04-4	
Naphthalene	ND	ug/kg	9.7	4.9	1	01/30/14 13:08	01/30/14 21:45	91-20-3	
n-Propylbenzene	ND	ug/kg	3.9	0.97	1	01/30/14 13:08	01/30/14 21:45	103-65-1	
Styrene	ND	ug/kg	3.9	0.055	1	01/30/14 13:08	01/30/14 21:45	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.9	0.97	1	01/30/14 13:08	01/30/14 21:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.9	0.051	1	01/30/14 13:08	01/30/14 21:45	79-34-5	
Tetrachloroethene	ND	ug/kg	3.9	0.099	1	01/30/14 13:08	01/30/14 21:45	127-18-4	
Tetrahydrofuran	ND	ug/kg	38.9	0.85	1	01/30/14 13:08	01/30/14 21:45	109-99-9	
Toluene	ND	ug/kg	3.9	1.9	1	01/30/14 13:08	01/30/14 21:45	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.9	1.9	1	01/30/14 13:08	01/30/14 21:45	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.9	1.9	1	01/30/14 13:08	01/30/14 21:45	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.9	0.076	1	01/30/14 13:08	01/30/14 21:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.9	0.086	1	01/30/14 13:08	01/30/14 21:45	79-00-5	
Trichloroethene	ND	ug/kg	3.9	0.12	1	01/30/14 13:08	01/30/14 21:45	79-01-6	
Trichlorofluoromethane	ND	ug/kg	9.7	0.062	1	01/30/14 13:08	01/30/14 21:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.9	0.57	1	01/30/14 13:08	01/30/14 21:45	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	3.9	0.27	1	01/30/14 13:08	01/30/14 21:45	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	3.9	0.97	1	01/30/14 13:08	01/30/14 21:45	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	3.9	0.97	1	01/30/14 13:08	01/30/14 21:45	108-67-8	
Vinyl chloride	ND	ug/kg	3.9	0.064	1	01/30/14 13:08	01/30/14 21:45	75-01-4	
Xylene (Total)	ND	ug/kg	11.7	0.95	1	01/30/14 13:08	01/30/14 21:45	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	110	%.	30-150		1	01/30/14 13:08	01/30/14 21:45	17060-07-0	
Toluene-d8 (S)	103	%.	30-150		1	01/30/14 13:08	01/30/14 21:45	2037-26-5	
4-Bromofluorobenzene (S)	115	%.	30-150		1	01/30/14 13:08	01/30/14 21:45	460-00-4	
9045 pH	Analytical Method: EPA 9045								
pH at 25 Degrees C	**8.2**	Std. Units	0.10	0.10	1		03/07/14 11:56		H3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-4 2-3.5' **Lab ID: 10256148007** Collected: 01/23/14 09:55 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication								
TPH-DRO (C10-C28)	**4.3J**	mg/kg	11.9	1.4	1	01/29/14 08:59	02/02/14 23:53		B
Surrogates									
o-Terphenyl (S)	94	%.	30-150		1	01/29/14 08:59	02/02/14 23:53	84-15-1	
n-Triacontane (S)	94	%.	30-147		1	01/29/14 08:59	02/02/14 23:53	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030								
Gasoline Range Organics	ND	mg/kg	9.3	4.6	1	01/30/14 11:49	01/31/14 01:53		
Surrogates									
a,a,a-Trifluorotoluene (S)	100	%.	68-135		1	01/30/14 11:49	01/31/14 01:53	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**13.1**	mg/kg	4.8	0.35	5	03/07/14 08:39	03/21/14 09:09	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**16.6**	%	0.10	0.10	1		01/29/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
Acenaphthene	ND	ug/kg	396	38.3	1	01/30/14 11:02	01/31/14 16:19	83-32-9	
Acenaphthylene	ND	ug/kg	396	49.8	1	01/30/14 11:02	01/31/14 16:19	208-96-8	
Anthracene	ND	ug/kg	396	87.9	1	01/30/14 11:02	01/31/14 16:19	120-12-7	
Benzo(a)anthracene	ND	ug/kg	396	93.6	1	01/30/14 11:02	01/31/14 16:19	56-55-3	
Benzo(a)pyrene	ND	ug/kg	396	90.3	1	01/30/14 11:02	01/31/14 16:19	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	396	101	1	01/30/14 11:02	01/31/14 16:19	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	396	85.2	1	01/30/14 11:02	01/31/14 16:19	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	396	96.2	1	01/30/14 11:02	01/31/14 16:19	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	396	85.8	1	01/30/14 11:02	01/31/14 16:19	101-55-3	
Butylbenzylphthalate	ND	ug/kg	396	92.2	1	01/30/14 11:02	01/31/14 16:19	85-68-7	
Carbazole	ND	ug/kg	396	92.8	1	01/30/14 11:02	01/31/14 16:19	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	396	42.8	1	01/30/14 11:02	01/31/14 16:19	59-50-7	
4-Chloroaniline	ND	ug/kg	396	102	1	01/30/14 11:02	01/31/14 16:19	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	396	52.7	1	01/30/14 11:02	01/31/14 16:19	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	396	60.0	1	01/30/14 11:02	01/31/14 16:19	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	396	61.2	1	01/30/14 11:02	01/31/14 16:19	108-60-1	
2-Chloronaphthalene	ND	ug/kg	396	44.7	1	01/30/14 11:02	01/31/14 16:19	91-58-7	
2-Chlorophenol	ND	ug/kg	396	54.3	1	01/30/14 11:02	01/31/14 16:19	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	396	37.7	1	01/30/14 11:02	01/31/14 16:19	7005-72-3	
Chrysene	ND	ug/kg	396	97.4	1	01/30/14 11:02	01/31/14 16:19	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	396	88.8	1	01/30/14 11:02	01/31/14 16:19	53-70-3	
Dibenzofuran	ND	ug/kg	396	32.5	1	01/30/14 11:02	01/31/14 16:19	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	396	61.9	1	01/30/14 11:02	01/31/14 16:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	396	56.5	1	01/30/14 11:02	01/31/14 16:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	396	52.4	1	01/30/14 11:02	01/31/14 16:19	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	396	191	1	01/30/14 11:02	01/31/14 16:19	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	396	47.7	1	01/30/14 11:02	01/31/14 16:19	120-83-2	
Diethylphthalate	ND	ug/kg	396	92.7	1	01/30/14 11:02	01/31/14 16:19	84-66-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-4 2-3.5' **Lab ID: 10256148007** Collected: 01/23/14 09:55 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
2,4-Dimethylphenol	ND	ug/kg	396	173	1	01/30/14 11:02	01/31/14 16:19	105-67-9	
Dimethylphthalate	ND	ug/kg	396	88.2	1	01/30/14 11:02	01/31/14 16:19	131-11-3	
Di-n-butylphthalate	ND	ug/kg	396	80.4	1	01/30/14 11:02	01/31/14 16:19	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2040	73.2	1	01/30/14 11:02	01/31/14 16:19	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	396	53.4	1	01/30/14 11:02	01/31/14 16:19	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	396	37.3	1	01/30/14 11:02	01/31/14 16:19	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	396	42.1	1	01/30/14 11:02	01/31/14 16:19	606-20-2	
Di-n-octylphthalate	ND	ug/kg	396	93.3	1	01/30/14 11:02	01/31/14 16:19	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	396	88.9	1	01/30/14 11:02	01/31/14 16:19	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	396	99.1	1	01/30/14 11:02	01/31/14 16:19	117-81-7	
Fluoranthene	ND	ug/kg	396	90.6	1	01/30/14 11:02	01/31/14 16:19	206-44-0	
Fluorene	ND	ug/kg	396	31.1	1	01/30/14 11:02	01/31/14 16:19	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	396	50.6	1	01/30/14 11:02	01/31/14 16:19	87-68-3	
Hexachlorobenzene	ND	ug/kg	396	93.8	1	01/30/14 11:02	01/31/14 16:19	118-74-1	
Hexachloroethane	ND	ug/kg	396	63.7	1	01/30/14 11:02	01/31/14 16:19	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	396	86.4	1	01/30/14 11:02	01/31/14 16:19	193-39-5	
Isophorone	ND	ug/kg	396	51.1	1	01/30/14 11:02	01/31/14 16:19	78-59-1	
1-Methylnaphthalene	ND	ug/kg	396	48.3	1	01/30/14 11:02	01/31/14 16:19	90-12-0	
2-Methylnaphthalene	ND	ug/kg	396	45.5	1	01/30/14 11:02	01/31/14 16:19	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	396	60.2	1	01/30/14 11:02	01/31/14 16:19	95-48-7	
3&4-Methylphenol	ND	ug/kg	792	43.4	1	01/30/14 11:02	01/31/14 16:19		
Naphthalene	ND	ug/kg	396	59.3	1	01/30/14 11:02	01/31/14 16:19	91-20-3	
2-Nitroaniline	ND	ug/kg	396	81.1	1	01/30/14 11:02	01/31/14 16:19	88-74-4	
3-Nitroaniline	ND	ug/kg	396	132	1	01/30/14 11:02	01/31/14 16:19	99-09-2	
4-Nitroaniline	ND	ug/kg	396	109	1	01/30/14 11:02	01/31/14 16:19	100-01-6	
Nitrobenzene	ND	ug/kg	396	66.4	1	01/30/14 11:02	01/31/14 16:19	98-95-3	
2-Nitrophenol	ND	ug/kg	396	61.9	1	01/30/14 11:02	01/31/14 16:19	88-75-5	
4-Nitrophenol	ND	ug/kg	396	68.4	1	01/30/14 11:02	01/31/14 16:19	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	396	94.6	1	01/30/14 11:02	01/31/14 16:19	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	396	61.9	1	01/30/14 11:02	01/31/14 16:19	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	396	95.2	1	01/30/14 11:02	01/31/14 16:19	86-30-6	
Pentachlorophenol	ND	ug/kg	804	61.5	1	01/30/14 11:02	01/31/14 16:19	87-86-5	
Phenanthrene	ND	ug/kg	396	92.6	1	01/30/14 11:02	01/31/14 16:19	85-01-8	
Phenol	ND	ug/kg	396	52.2	1	01/30/14 11:02	01/31/14 16:19	108-95-2	
Pyrene	ND	ug/kg	396	97.2	1	01/30/14 11:02	01/31/14 16:19	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	396	52.5	1	01/30/14 11:02	01/31/14 16:19	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	396	42.3	1	01/30/14 11:02	01/31/14 16:19	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	396	37.8	1	01/30/14 11:02	01/31/14 16:19	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	59	%.	30-125		1	01/30/14 11:02	01/31/14 16:19	4165-60-0	
2-Fluorobiphenyl (S)	67	%.	46-125		1	01/30/14 11:02	01/31/14 16:19	321-60-8	
Terphenyl-d14 (S)	84	%.	64-125		1	01/30/14 11:02	01/31/14 16:19	1718-51-0	
Phenol-d6 (S)	69	%.	38-125		1	01/30/14 11:02	01/31/14 16:19	13127-88-3	
2-Fluorophenol (S)	68	%.	31-125		1	01/30/14 11:02	01/31/14 16:19	367-12-4	
2,4,6-Tribromophenol (S)	83	%.	41-125		1	01/30/14 11:02	01/31/14 16:19	118-79-6	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-4 2-3.5' **Lab ID: 10256148007** Collected: 01/23/14 09:55 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
Acetone	**39.4**	ug/kg	21.4	10.7	1	01/30/14 13:08	01/30/14 22:03	67-64-1	
Allyl chloride	ND	ug/kg	10.7	0.14	1	01/30/14 13:08	01/30/14 22:03	107-05-1	
Benzene	ND	ug/kg	4.3	0.062	1	01/30/14 13:08	01/30/14 22:03	71-43-2	
Bromobenzene	ND	ug/kg	4.3	0.098	1	01/30/14 13:08	01/30/14 22:03	108-86-1	
Bromochloromethane	ND	ug/kg	4.3	0.059	1	01/30/14 13:08	01/30/14 22:03	74-97-5	
Bromodichloromethane	ND	ug/kg	4.3	2.1	1	01/30/14 13:08	01/30/14 22:03	75-27-4	
Bromoform	ND	ug/kg	21.4	10.7	1	01/30/14 13:08	01/30/14 22:03	75-25-2	
Bromomethane	ND	ug/kg	21.4	10.7	1	01/30/14 13:08	01/30/14 22:03	74-83-9	
2-Butanone (MEK)	ND	ug/kg	53.4	10.7	1	01/30/14 13:08	01/30/14 22:03	78-93-3	
n-Butylbenzene	ND	ug/kg	4.3	2.1	1	01/30/14 13:08	01/30/14 22:03	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.3	1.1	1	01/30/14 13:08	01/30/14 22:03	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.3	1.1	1	01/30/14 13:08	01/30/14 22:03	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.3	0.15	1	01/30/14 13:08	01/30/14 22:03	56-23-5	
Chlorobenzene	ND	ug/kg	4.3	0.090	1	01/30/14 13:08	01/30/14 22:03	108-90-7	
Chloroethane	ND	ug/kg	10.7	0.66	1	01/30/14 13:08	01/30/14 22:03	75-00-3	
Chloroform	ND	ug/kg	4.3	0.097	1	01/30/14 13:08	01/30/14 22:03	67-66-3	
Chloromethane	ND	ug/kg	10.7	0.83	1	01/30/14 13:08	01/30/14 22:03	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.3	0.050	1	01/30/14 13:08	01/30/14 22:03	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.3	1.1	1	01/30/14 13:08	01/30/14 22:03	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	10.7	2.7	1	01/30/14 13:08	01/30/14 22:03	96-12-8	
Dibromochloromethane	ND	ug/kg	4.3	0.11	1	01/30/14 13:08	01/30/14 22:03	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.3	0.045	1	01/30/14 13:08	01/30/14 22:03	106-93-4	
Dibromomethane	ND	ug/kg	4.3	0.28	1	01/30/14 13:08	01/30/14 22:03	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.3	0.062	1	01/30/14 13:08	01/30/14 22:03	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.3	1.1	1	01/30/14 13:08	01/30/14 22:03	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.3	1.1	1	01/30/14 13:08	01/30/14 22:03	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	10.7	1.1	1	01/30/14 13:08	01/30/14 22:03	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.3	0.057	1	01/30/14 13:08	01/30/14 22:03	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.3	0.094	1	01/30/14 13:08	01/30/14 22:03	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.3	0.075	1	01/30/14 13:08	01/30/14 22:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.3	0.13	1	01/30/14 13:08	01/30/14 22:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.3	0.20	1	01/30/14 13:08	01/30/14 22:03	156-60-5	
Dichlorofluoromethane	ND	ug/kg	4.3	0.094	1	01/30/14 13:08	01/30/14 22:03	75-43-4	
1,2-Dichloropropane	ND	ug/kg	4.3	0.094	1	01/30/14 13:08	01/30/14 22:03	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.3	1.1	1	01/30/14 13:08	01/30/14 22:03	142-28-9	
2,2-Dichloropropane	ND	ug/kg	10.7	0.069	1	01/30/14 13:08	01/30/14 22:03	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.3	0.14	1	01/30/14 13:08	01/30/14 22:03	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.3	0.055	1	01/30/14 13:08	01/30/14 22:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.3	0.13	1	01/30/14 13:08	01/30/14 22:03	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	10.7	0.067	1	01/30/14 13:08	01/30/14 22:03	60-29-7	
Ethylbenzene	ND	ug/kg	4.3	0.44	1	01/30/14 13:08	01/30/14 22:03	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	10.7	5.3	1	01/30/14 13:08	01/30/14 22:03	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	4.3	1.1	1	01/30/14 13:08	01/30/14 22:03	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.3	1.1	1	01/30/14 13:08	01/30/14 22:03	99-87-6	
Methylene Chloride	ND	ug/kg	21.4	10.7	1	01/30/14 13:08	01/30/14 22:03	75-09-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-4 2-3.5' **Lab ID: 10256148007** Collected: 01/23/14 09:55 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	21.4	10.7	1	01/30/14 13:08	01/30/14 22:03	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.3	1.1	1	01/30/14 13:08	01/30/14 22:03	1634-04-4	
Naphthalene	ND	ug/kg	10.7	5.3	1	01/30/14 13:08	01/30/14 22:03	91-20-3	
n-Propylbenzene	ND	ug/kg	4.3	1.1	1	01/30/14 13:08	01/30/14 22:03	103-65-1	
Styrene	ND	ug/kg	4.3	0.061	1	01/30/14 13:08	01/30/14 22:03	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.3	1.1	1	01/30/14 13:08	01/30/14 22:03	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.3	0.056	1	01/30/14 13:08	01/30/14 22:03	79-34-5	
Tetrachloroethene	**0.23J**	ug/kg	4.3	0.11	1	01/30/14 13:08	01/30/14 22:03	127-18-4	
Tetrahydrofuran	ND	ug/kg	42.8	0.94	1	01/30/14 13:08	01/30/14 22:03	109-99-9	
Toluene	ND	ug/kg	4.3	2.1	1	01/30/14 13:08	01/30/14 22:03	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.3	2.1	1	01/30/14 13:08	01/30/14 22:03	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.3	2.1	1	01/30/14 13:08	01/30/14 22:03	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.3	0.083	1	01/30/14 13:08	01/30/14 22:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.3	0.094	1	01/30/14 13:08	01/30/14 22:03	79-00-5	
Trichloroethene	ND	ug/kg	4.3	0.13	1	01/30/14 13:08	01/30/14 22:03	79-01-6	
Trichlorofluoromethane	ND	ug/kg	10.7	0.068	1	01/30/14 13:08	01/30/14 22:03	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.3	0.63	1	01/30/14 13:08	01/30/14 22:03	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	4.3	0.30	1	01/30/14 13:08	01/30/14 22:03	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	4.3	1.1	1	01/30/14 13:08	01/30/14 22:03	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.3	1.1	1	01/30/14 13:08	01/30/14 22:03	108-67-8	
Vinyl chloride	ND	ug/kg	4.3	0.071	1	01/30/14 13:08	01/30/14 22:03	75-01-4	
Xylene (Total)	ND	ug/kg	12.8	1.0	1	01/30/14 13:08	01/30/14 22:03	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	107	%.	30-150		1	01/30/14 13:08	01/30/14 22:03	17060-07-0	
Toluene-d8 (S)	98	%.	30-150		1	01/30/14 13:08	01/30/14 22:03	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	30-150		1	01/30/14 13:08	01/30/14 22:03	460-00-4	
9045 pH	Analytical Method: EPA 9045								
pH at 25 Degrees C	**6.9**	Std. Units	0.10	0.10	1		03/07/14 12:12		H3

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-4 19-20' **Lab ID: 10256148008** Collected: 01/23/14 10:25 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication								
TPH-DRO (C10-C28)	ND	mg/kg	12.4	1.5	1	01/29/14 08:59	02/03/14 03:45		
Surrogates									
o-Terphenyl (S)	92	%.	30-150		1	01/29/14 08:59	02/03/14 03:45	84-15-1	
n-Triacontane (S)	104	%.	30-147		1	01/29/14 08:59	02/03/14 03:45	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030								
Gasoline Range Organics	ND	mg/kg	9.6	4.8	1	01/30/14 11:49	01/31/14 02:17		
Surrogates									
a,a,a-Trifluorotoluene (S)	103	%.	68-135		1	01/30/14 11:49	01/31/14 02:17	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**15.2**	mg/kg	5.5	0.40	5	03/07/14 08:39	03/18/14 10:19	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**19.3**	%	0.10	0.10	1		01/29/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
Acenaphthene	ND	ug/kg	407	39.4	1	01/30/14 11:02	01/31/14 16:49	83-32-9	
Acenaphthylene	ND	ug/kg	407	51.2	1	01/30/14 11:02	01/31/14 16:49	208-96-8	
Anthracene	ND	ug/kg	407	90.5	1	01/30/14 11:02	01/31/14 16:49	120-12-7	
Benzo(a)anthracene	ND	ug/kg	407	96.3	1	01/30/14 11:02	01/31/14 16:49	56-55-3	
Benzo(a)pyrene	ND	ug/kg	407	93.0	1	01/30/14 11:02	01/31/14 16:49	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	407	104	1	01/30/14 11:02	01/31/14 16:49	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	407	87.7	1	01/30/14 11:02	01/31/14 16:49	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	407	99.0	1	01/30/14 11:02	01/31/14 16:49	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	407	88.3	1	01/30/14 11:02	01/31/14 16:49	101-55-3	
Butylbenzylphthalate	ND	ug/kg	407	94.9	1	01/30/14 11:02	01/31/14 16:49	85-68-7	
Carbazole	ND	ug/kg	407	95.6	1	01/30/14 11:02	01/31/14 16:49	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	407	44.1	1	01/30/14 11:02	01/31/14 16:49	59-50-7	
4-Chloroaniline	ND	ug/kg	407	105	1	01/30/14 11:02	01/31/14 16:49	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	407	54.2	1	01/30/14 11:02	01/31/14 16:49	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	407	61.7	1	01/30/14 11:02	01/31/14 16:49	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	407	63.0	1	01/30/14 11:02	01/31/14 16:49	108-60-1	
2-Chloronaphthalene	ND	ug/kg	407	46.1	1	01/30/14 11:02	01/31/14 16:49	91-58-7	
2-Chlorophenol	ND	ug/kg	407	55.9	1	01/30/14 11:02	01/31/14 16:49	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	407	38.8	1	01/30/14 11:02	01/31/14 16:49	7005-72-3	
Chrysene	ND	ug/kg	407	100	1	01/30/14 11:02	01/31/14 16:49	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	407	91.4	1	01/30/14 11:02	01/31/14 16:49	53-70-3	
Dibenzofuran	ND	ug/kg	407	33.5	1	01/30/14 11:02	01/31/14 16:49	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	407	63.7	1	01/30/14 11:02	01/31/14 16:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	407	58.2	1	01/30/14 11:02	01/31/14 16:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	407	54.0	1	01/30/14 11:02	01/31/14 16:49	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	407	196	1	01/30/14 11:02	01/31/14 16:49	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	407	49.1	1	01/30/14 11:02	01/31/14 16:49	120-83-2	
Diethylphthalate	ND	ug/kg	407	95.4	1	01/30/14 11:02	01/31/14 16:49	84-66-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-4 19-20' **Lab ID: 10256148008** Collected: 01/23/14 10:25 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
2,4-Dimethylphenol	ND	ug/kg	407	178	1	01/30/14 11:02	01/31/14 16:49	105-67-9	
Dimethylphthalate	ND	ug/kg	407	90.7	1	01/30/14 11:02	01/31/14 16:49	131-11-3	
Di-n-butylphthalate	ND	ug/kg	407	82.7	1	01/30/14 11:02	01/31/14 16:49	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2100	75.3	1	01/30/14 11:02	01/31/14 16:49	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	407	54.9	1	01/30/14 11:02	01/31/14 16:49	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	407	38.4	1	01/30/14 11:02	01/31/14 16:49	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	407	43.3	1	01/30/14 11:02	01/31/14 16:49	606-20-2	
Di-n-octylphthalate	ND	ug/kg	407	96.1	1	01/30/14 11:02	01/31/14 16:49	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	407	91.5	1	01/30/14 11:02	01/31/14 16:49	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	407	102	1	01/30/14 11:02	01/31/14 16:49	117-81-7	
Fluoranthene	ND	ug/kg	407	93.2	1	01/30/14 11:02	01/31/14 16:49	206-44-0	
Fluorene	ND	ug/kg	407	32.0	1	01/30/14 11:02	01/31/14 16:49	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	407	52.1	1	01/30/14 11:02	01/31/14 16:49	87-68-3	
Hexachlorobenzene	ND	ug/kg	407	96.6	1	01/30/14 11:02	01/31/14 16:49	118-74-1	
Hexachloroethane	ND	ug/kg	407	65.6	1	01/30/14 11:02	01/31/14 16:49	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	407	88.9	1	01/30/14 11:02	01/31/14 16:49	193-39-5	
Isophorone	ND	ug/kg	407	52.6	1	01/30/14 11:02	01/31/14 16:49	78-59-1	
1-Methylnaphthalene	ND	ug/kg	407	49.8	1	01/30/14 11:02	01/31/14 16:49	90-12-0	
2-Methylnaphthalene	ND	ug/kg	407	46.8	1	01/30/14 11:02	01/31/14 16:49	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	407	62.0	1	01/30/14 11:02	01/31/14 16:49	95-48-7	
3&4-Methylphenol	ND	ug/kg	815	44.7	1	01/30/14 11:02	01/31/14 16:49		
Naphthalene	ND	ug/kg	407	61.0	1	01/30/14 11:02	01/31/14 16:49	91-20-3	
2-Nitroaniline	ND	ug/kg	407	83.5	1	01/30/14 11:02	01/31/14 16:49	88-74-4	
3-Nitroaniline	ND	ug/kg	407	136	1	01/30/14 11:02	01/31/14 16:49	99-09-2	
4-Nitroaniline	ND	ug/kg	407	112	1	01/30/14 11:02	01/31/14 16:49	100-01-6	
Nitrobenzene	ND	ug/kg	407	68.4	1	01/30/14 11:02	01/31/14 16:49	98-95-3	
2-Nitrophenol	ND	ug/kg	407	63.7	1	01/30/14 11:02	01/31/14 16:49	88-75-5	
4-Nitrophenol	ND	ug/kg	407	70.4	1	01/30/14 11:02	01/31/14 16:49	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	407	97.4	1	01/30/14 11:02	01/31/14 16:49	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	407	63.7	1	01/30/14 11:02	01/31/14 16:49	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	407	98.0	1	01/30/14 11:02	01/31/14 16:49	86-30-6	
Pentachlorophenol	ND	ug/kg	827	63.3	1	01/30/14 11:02	01/31/14 16:49	87-86-5	
Phenanthrene	ND	ug/kg	407	95.3	1	01/30/14 11:02	01/31/14 16:49	85-01-8	
Phenol	ND	ug/kg	407	53.7	1	01/30/14 11:02	01/31/14 16:49	108-95-2	
Pyrene	ND	ug/kg	407	100	1	01/30/14 11:02	01/31/14 16:49	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	407	54.1	1	01/30/14 11:02	01/31/14 16:49	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	407	43.6	1	01/30/14 11:02	01/31/14 16:49	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	407	38.9	1	01/30/14 11:02	01/31/14 16:49	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	70	%.	30-125		1	01/30/14 11:02	01/31/14 16:49	4165-60-0	
2-Fluorobiphenyl (S)	80	%.	46-125		1	01/30/14 11:02	01/31/14 16:49	321-60-8	
Terphenyl-d14 (S)	89	%.	64-125		1	01/30/14 11:02	01/31/14 16:49	1718-51-0	
Phenol-d6 (S)	80	%.	38-125		1	01/30/14 11:02	01/31/14 16:49	13127-88-3	
2-Fluorophenol (S)	79	%.	31-125		1	01/30/14 11:02	01/31/14 16:49	367-12-4	
2,4,6-Tribromophenol (S)	84	%.	41-125		1	01/30/14 11:02	01/31/14 16:49	118-79-6	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-4 19-20' **Lab ID: 10256148008** Collected: 01/23/14 10:25 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
Acetone	ND	ug/kg	20.8	10.4	1	01/30/14 13:08	01/30/14 22:21	67-64-1	
Allyl chloride	ND	ug/kg	10.4	0.14	1	01/30/14 13:08	01/30/14 22:21	107-05-1	
Benzene	1.1J	ug/kg	4.2	0.060	1	01/30/14 13:08	01/30/14 22:21	71-43-2	
Bromobenzene	ND	ug/kg	4.2	0.096	1	01/30/14 13:08	01/30/14 22:21	108-86-1	
Bromochloromethane	ND	ug/kg	4.2	0.057	1	01/30/14 13:08	01/30/14 22:21	74-97-5	
Bromodichloromethane	ND	ug/kg	4.2	2.1	1	01/30/14 13:08	01/30/14 22:21	75-27-4	
Bromoform	ND	ug/kg	20.8	10.4	1	01/30/14 13:08	01/30/14 22:21	75-25-2	
Bromomethane	ND	ug/kg	20.8	10.4	1	01/30/14 13:08	01/30/14 22:21	74-83-9	
2-Butanone (MEK)	ND	ug/kg	52.1	10.4	1	01/30/14 13:08	01/30/14 22:21	78-93-3	
n-Butylbenzene	ND	ug/kg	4.2	2.1	1	01/30/14 13:08	01/30/14 22:21	104-51-8	
sec-Butylbenzene	ND	ug/kg	4.2	1.0	1	01/30/14 13:08	01/30/14 22:21	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.2	1.0	1	01/30/14 13:08	01/30/14 22:21	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.2	0.15	1	01/30/14 13:08	01/30/14 22:21	56-23-5	
Chlorobenzene	ND	ug/kg	4.2	0.087	1	01/30/14 13:08	01/30/14 22:21	108-90-7	
Chloroethane	ND	ug/kg	10.4	0.64	1	01/30/14 13:08	01/30/14 22:21	75-00-3	
Chloroform	ND	ug/kg	4.2	0.095	1	01/30/14 13:08	01/30/14 22:21	67-66-3	
Chloromethane	ND	ug/kg	10.4	0.81	1	01/30/14 13:08	01/30/14 22:21	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.2	0.049	1	01/30/14 13:08	01/30/14 22:21	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.2	1.0	1	01/30/14 13:08	01/30/14 22:21	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	10.4	2.6	1	01/30/14 13:08	01/30/14 22:21	96-12-8	
Dibromochloromethane	ND	ug/kg	4.2	0.11	1	01/30/14 13:08	01/30/14 22:21	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.2	0.044	1	01/30/14 13:08	01/30/14 22:21	106-93-4	
Dibromomethane	ND	ug/kg	4.2	0.27	1	01/30/14 13:08	01/30/14 22:21	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.2	0.060	1	01/30/14 13:08	01/30/14 22:21	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.2	1.0	1	01/30/14 13:08	01/30/14 22:21	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.2	1.0	1	01/30/14 13:08	01/30/14 22:21	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	10.4	1.1	1	01/30/14 13:08	01/30/14 22:21	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.2	0.055	1	01/30/14 13:08	01/30/14 22:21	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.2	0.092	1	01/30/14 13:08	01/30/14 22:21	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.2	0.073	1	01/30/14 13:08	01/30/14 22:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.2	0.13	1	01/30/14 13:08	01/30/14 22:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.2	0.20	1	01/30/14 13:08	01/30/14 22:21	156-60-5	
Dichlorofluoromethane	ND	ug/kg	4.2	0.092	1	01/30/14 13:08	01/30/14 22:21	75-43-4	
1,2-Dichloropropane	ND	ug/kg	4.2	0.092	1	01/30/14 13:08	01/30/14 22:21	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.2	1.0	1	01/30/14 13:08	01/30/14 22:21	142-28-9	
2,2-Dichloropropane	ND	ug/kg	10.4	0.068	1	01/30/14 13:08	01/30/14 22:21	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.2	0.14	1	01/30/14 13:08	01/30/14 22:21	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.2	0.053	1	01/30/14 13:08	01/30/14 22:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.2	0.12	1	01/30/14 13:08	01/30/14 22:21	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	10.4	0.066	1	01/30/14 13:08	01/30/14 22:21	60-29-7	
Ethylbenzene	0.71J	ug/kg	4.2	0.42	1	01/30/14 13:08	01/30/14 22:21	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	10.4	5.2	1	01/30/14 13:08	01/30/14 22:21	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	4.2	1.0	1	01/30/14 13:08	01/30/14 22:21	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.2	1.0	1	01/30/14 13:08	01/30/14 22:21	99-87-6	
Methylene Chloride	ND	ug/kg	20.8	10.4	1	01/30/14 13:08	01/30/14 22:21	75-09-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-4 19-20' **Lab ID: 10256148008** Collected: 01/23/14 10:25 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	20.8	10.4	1	01/30/14 13:08	01/30/14 22:21	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.2	1.0	1	01/30/14 13:08	01/30/14 22:21	1634-04-4	
Naphthalene	ND	ug/kg	10.4	5.2	1	01/30/14 13:08	01/30/14 22:21	91-20-3	
n-Propylbenzene	ND	ug/kg	4.2	1.0	1	01/30/14 13:08	01/30/14 22:21	103-65-1	
Styrene	ND	ug/kg	4.2	0.059	1	01/30/14 13:08	01/30/14 22:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.2	1.0	1	01/30/14 13:08	01/30/14 22:21	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.2	0.054	1	01/30/14 13:08	01/30/14 22:21	79-34-5	
Tetrachloroethene	ND	ug/kg	4.2	0.11	1	01/30/14 13:08	01/30/14 22:21	127-18-4	
Tetrahydrofuran	ND	ug/kg	41.6	0.91	1	01/30/14 13:08	01/30/14 22:21	109-99-9	
Toluene	ND	ug/kg	4.2	2.1	1	01/30/14 13:08	01/30/14 22:21	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.2	2.1	1	01/30/14 13:08	01/30/14 22:21	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.2	2.1	1	01/30/14 13:08	01/30/14 22:21	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	4.2	0.081	1	01/30/14 13:08	01/30/14 22:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.2	0.092	1	01/30/14 13:08	01/30/14 22:21	79-00-5	
Trichloroethene	ND	ug/kg	4.2	0.13	1	01/30/14 13:08	01/30/14 22:21	79-01-6	
Trichlorofluoromethane	ND	ug/kg	10.4	0.067	1	01/30/14 13:08	01/30/14 22:21	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.2	0.61	1	01/30/14 13:08	01/30/14 22:21	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	4.2	0.29	1	01/30/14 13:08	01/30/14 22:21	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	4.2	1.0	1	01/30/14 13:08	01/30/14 22:21	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.2	1.0	1	01/30/14 13:08	01/30/14 22:21	108-67-8	
Vinyl chloride	ND	ug/kg	4.2	0.069	1	01/30/14 13:08	01/30/14 22:21	75-01-4	
Xylene (Total)	ND	ug/kg	12.5	1.0	1	01/30/14 13:08	01/30/14 22:21	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	107	%.	30-150		1	01/30/14 13:08	01/30/14 22:21	17060-07-0	
Toluene-d8 (S)	100	%.	30-150		1	01/30/14 13:08	01/30/14 22:21	2037-26-5	
4-Bromofluorobenzene (S)	106	%.	30-150		1	01/30/14 13:08	01/30/14 22:21	460-00-4	
9045 pH	Analytical Method: EPA 9045								
pH at 25 Degrees C	**8.0**	Std. Units	0.10	0.10	1		03/07/14 12:17		H3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-5 2-3 **Lab ID: 10256148009** Collected: 01/23/14 11:15 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication								
TPH-DRO (C10-C28)	ND	mg/kg	12.0	1.4	1	01/29/14 08:59	02/03/14 04:09		
Surrogates									
o-Terphenyl (S)	102	%.	30-150		1	01/29/14 08:59	02/03/14 04:09	84-15-1	
n-Triacontane (S)	105	%.	30-147		1	01/29/14 08:59	02/03/14 04:09	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030								
Gasoline Range Organics	ND	mg/kg	9.2	4.6	1	01/30/14 11:49	01/31/14 01:29		
Surrogates									
a,a,a-Trifluorotoluene (S)	103	%.	68-135		1	01/30/14 11:49	01/31/14 01:29	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	12.2	mg/kg	5.1	0.37	5	03/07/14 08:39	03/18/14 10:25	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	16.9	%	0.10	0.10	1		01/29/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
Acenaphthene	ND	ug/kg	397	38.4	1	01/30/14 11:02	01/31/14 17:19	83-32-9	
Acenaphthylene	ND	ug/kg	397	49.9	1	01/30/14 11:02	01/31/14 17:19	208-96-8	
Anthracene	ND	ug/kg	397	88.2	1	01/30/14 11:02	01/31/14 17:19	120-12-7	
Benzo(a)anthracene	ND	ug/kg	397	93.9	1	01/30/14 11:02	01/31/14 17:19	56-55-3	
Benzo(a)pyrene	ND	ug/kg	397	90.6	1	01/30/14 11:02	01/31/14 17:19	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	397	101	1	01/30/14 11:02	01/31/14 17:19	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	397	85.4	1	01/30/14 11:02	01/31/14 17:19	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	397	96.5	1	01/30/14 11:02	01/31/14 17:19	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	397	86.0	1	01/30/14 11:02	01/31/14 17:19	101-55-3	
Butylbenzylphthalate	ND	ug/kg	397	92.5	1	01/30/14 11:02	01/31/14 17:19	85-68-7	
Carbazole	ND	ug/kg	397	93.2	1	01/30/14 11:02	01/31/14 17:19	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	397	43.0	1	01/30/14 11:02	01/31/14 17:19	59-50-7	
4-Chloroaniline	ND	ug/kg	397	103	1	01/30/14 11:02	01/31/14 17:19	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	397	52.8	1	01/30/14 11:02	01/31/14 17:19	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	397	60.2	1	01/30/14 11:02	01/31/14 17:19	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	397	61.4	1	01/30/14 11:02	01/31/14 17:19	108-60-1	
2-Chloronaphthalene	ND	ug/kg	397	44.9	1	01/30/14 11:02	01/31/14 17:19	91-58-7	
2-Chlorophenol	ND	ug/kg	397	54.5	1	01/30/14 11:02	01/31/14 17:19	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	397	37.8	1	01/30/14 11:02	01/31/14 17:19	7005-72-3	
Chrysene	ND	ug/kg	397	97.7	1	01/30/14 11:02	01/31/14 17:19	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	397	89.1	1	01/30/14 11:02	01/31/14 17:19	53-70-3	
Dibenzofuran	ND	ug/kg	397	32.6	1	01/30/14 11:02	01/31/14 17:19	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	397	62.1	1	01/30/14 11:02	01/31/14 17:19	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	397	56.7	1	01/30/14 11:02	01/31/14 17:19	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	397	52.6	1	01/30/14 11:02	01/31/14 17:19	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	397	191	1	01/30/14 11:02	01/31/14 17:19	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	397	47.9	1	01/30/14 11:02	01/31/14 17:19	120-83-2	
Diethylphthalate	ND	ug/kg	397	93.0	1	01/30/14 11:02	01/31/14 17:19	84-66-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-5 2-3 **Lab ID: 10256148009** Collected: 01/23/14 11:15 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
2,4-Dimethylphenol	ND	ug/kg	397	174	1	01/30/14 11:02	01/31/14 17:19	105-67-9	
Dimethylphthalate	ND	ug/kg	397	88.5	1	01/30/14 11:02	01/31/14 17:19	131-11-3	
Di-n-butylphthalate	ND	ug/kg	397	80.6	1	01/30/14 11:02	01/31/14 17:19	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2050	73.4	1	01/30/14 11:02	01/31/14 17:19	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	397	53.6	1	01/30/14 11:02	01/31/14 17:19	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	397	37.4	1	01/30/14 11:02	01/31/14 17:19	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	397	42.2	1	01/30/14 11:02	01/31/14 17:19	606-20-2	
Di-n-octylphthalate	ND	ug/kg	397	93.6	1	01/30/14 11:02	01/31/14 17:19	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	397	89.2	1	01/30/14 11:02	01/31/14 17:19	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	397	99.4	1	01/30/14 11:02	01/31/14 17:19	117-81-7	
Fluoranthene	ND	ug/kg	397	90.9	1	01/30/14 11:02	01/31/14 17:19	206-44-0	
Fluorene	ND	ug/kg	397	31.2	1	01/30/14 11:02	01/31/14 17:19	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	397	50.8	1	01/30/14 11:02	01/31/14 17:19	87-68-3	
Hexachlorobenzene	ND	ug/kg	397	94.1	1	01/30/14 11:02	01/31/14 17:19	118-74-1	
Hexachloroethane	ND	ug/kg	397	63.9	1	01/30/14 11:02	01/31/14 17:19	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	397	86.7	1	01/30/14 11:02	01/31/14 17:19	193-39-5	
Isophorone	ND	ug/kg	397	51.3	1	01/30/14 11:02	01/31/14 17:19	78-59-1	
1-Methylnaphthalene	ND	ug/kg	397	48.5	1	01/30/14 11:02	01/31/14 17:19	90-12-0	
2-Methylnaphthalene	ND	ug/kg	397	45.6	1	01/30/14 11:02	01/31/14 17:19	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	397	60.4	1	01/30/14 11:02	01/31/14 17:19	95-48-7	
3&4-Methylphenol	ND	ug/kg	794	43.6	1	01/30/14 11:02	01/31/14 17:19		
Naphthalene	ND	ug/kg	397	59.5	1	01/30/14 11:02	01/31/14 17:19	91-20-3	
2-Nitroaniline	ND	ug/kg	397	81.4	1	01/30/14 11:02	01/31/14 17:19	88-74-4	
3-Nitroaniline	ND	ug/kg	397	132	1	01/30/14 11:02	01/31/14 17:19	99-09-2	
4-Nitroaniline	ND	ug/kg	397	109	1	01/30/14 11:02	01/31/14 17:19	100-01-6	
Nitrobenzene	ND	ug/kg	397	66.7	1	01/30/14 11:02	01/31/14 17:19	98-95-3	
2-Nitrophenol	ND	ug/kg	397	62.1	1	01/30/14 11:02	01/31/14 17:19	88-75-5	
4-Nitrophenol	ND	ug/kg	397	68.6	1	01/30/14 11:02	01/31/14 17:19	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	397	95.0	1	01/30/14 11:02	01/31/14 17:19	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	397	62.1	1	01/30/14 11:02	01/31/14 17:19	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	397	95.6	1	01/30/14 11:02	01/31/14 17:19	86-30-6	
Pentachlorophenol	ND	ug/kg	806	61.7	1	01/30/14 11:02	01/31/14 17:19	87-86-5	
Phenanthrene	ND	ug/kg	397	92.9	1	01/30/14 11:02	01/31/14 17:19	85-01-8	
Phenol	ND	ug/kg	397	52.4	1	01/30/14 11:02	01/31/14 17:19	108-95-2	
Pyrene	ND	ug/kg	397	97.5	1	01/30/14 11:02	01/31/14 17:19	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	397	52.7	1	01/30/14 11:02	01/31/14 17:19	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	397	42.5	1	01/30/14 11:02	01/31/14 17:19	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	397	37.9	1	01/30/14 11:02	01/31/14 17:19	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	66	%.	30-125		1	01/30/14 11:02	01/31/14 17:19	4165-60-0	
2-Fluorobiphenyl (S)	76	%.	46-125		1	01/30/14 11:02	01/31/14 17:19	321-60-8	
Terphenyl-d14 (S)	88	%.	64-125		1	01/30/14 11:02	01/31/14 17:19	1718-51-0	
Phenol-d6 (S)	77	%.	38-125		1	01/30/14 11:02	01/31/14 17:19	13127-88-3	
2-Fluorophenol (S)	75	%.	31-125		1	01/30/14 11:02	01/31/14 17:19	367-12-4	
2,4,6-Tribromophenol (S)	82	%.	41-125		1	01/30/14 11:02	01/31/14 17:19	118-79-6	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-5 2-3 **Lab ID: 10256148009** Collected: 01/23/14 11:15 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
Acetone	**67.3**	ug/kg	22.4	11.2	1	01/30/14 13:08	01/30/14 22:39	67-64-1	
Allyl chloride	ND	ug/kg	11.2	0.15	1	01/30/14 13:08	01/30/14 22:39	107-05-1	
Benzene	**0.15J**	ug/kg	4.5	0.065	1	01/30/14 13:08	01/30/14 22:39	71-43-2	
Bromobenzene	ND	ug/kg	4.5	0.10	1	01/30/14 13:08	01/30/14 22:39	108-86-1	
Bromochloromethane	ND	ug/kg	4.5	0.062	1	01/30/14 13:08	01/30/14 22:39	74-97-5	
Bromodichloromethane	ND	ug/kg	4.5	2.2	1	01/30/14 13:08	01/30/14 22:39	75-27-4	
Bromoform	ND	ug/kg	22.4	11.2	1	01/30/14 13:08	01/30/14 22:39	75-25-2	
Bromomethane	ND	ug/kg	22.4	11.2	1	01/30/14 13:08	01/30/14 22:39	74-83-9	
2-Butanone (MEK)	ND	ug/kg	55.9	11.2	1	01/30/14 13:08	01/30/14 22:39	78-93-3	
n-Butylbenzene	ND	ug/kg	4.5	2.2	1	01/30/14 13:08	01/30/14 22:39	104-51-8	R1
sec-Butylbenzene	ND	ug/kg	4.5	1.1	1	01/30/14 13:08	01/30/14 22:39	135-98-8	
tert-Butylbenzene	ND	ug/kg	4.5	1.1	1	01/30/14 13:08	01/30/14 22:39	98-06-6	
Carbon tetrachloride	ND	ug/kg	4.5	0.16	1	01/30/14 13:08	01/30/14 22:39	56-23-5	
Chlorobenzene	ND	ug/kg	4.5	0.094	1	01/30/14 13:08	01/30/14 22:39	108-90-7	
Chloroethane	ND	ug/kg	11.2	0.69	1	01/30/14 13:08	01/30/14 22:39	75-00-3	
Chloroform	ND	ug/kg	4.5	0.10	1	01/30/14 13:08	01/30/14 22:39	67-66-3	
Chloromethane	ND	ug/kg	11.2	0.87	1	01/30/14 13:08	01/30/14 22:39	74-87-3	
2-Chlorotoluene	ND	ug/kg	4.5	0.053	1	01/30/14 13:08	01/30/14 22:39	95-49-8	
4-Chlorotoluene	ND	ug/kg	4.5	1.1	1	01/30/14 13:08	01/30/14 22:39	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	11.2	2.8	1	01/30/14 13:08	01/30/14 22:39	96-12-8	
Dibromochloromethane	ND	ug/kg	4.5	0.12	1	01/30/14 13:08	01/30/14 22:39	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	4.5	0.047	1	01/30/14 13:08	01/30/14 22:39	106-93-4	
Dibromomethane	ND	ug/kg	4.5	0.29	1	01/30/14 13:08	01/30/14 22:39	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	4.5	0.065	1	01/30/14 13:08	01/30/14 22:39	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	4.5	1.1	1	01/30/14 13:08	01/30/14 22:39	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	4.5	1.1	1	01/30/14 13:08	01/30/14 22:39	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	11.2	1.2	1	01/30/14 13:08	01/30/14 22:39	75-71-8	
1,1-Dichloroethane	ND	ug/kg	4.5	0.059	1	01/30/14 13:08	01/30/14 22:39	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.5	0.098	1	01/30/14 13:08	01/30/14 22:39	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.5	0.078	1	01/30/14 13:08	01/30/14 22:39	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.5	0.14	1	01/30/14 13:08	01/30/14 22:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.5	0.21	1	01/30/14 13:08	01/30/14 22:39	156-60-5	
Dichlorofluoromethane	ND	ug/kg	4.5	0.098	1	01/30/14 13:08	01/30/14 22:39	75-43-4	
1,2-Dichloropropane	ND	ug/kg	4.5	0.098	1	01/30/14 13:08	01/30/14 22:39	78-87-5	
1,3-Dichloropropane	ND	ug/kg	4.5	1.1	1	01/30/14 13:08	01/30/14 22:39	142-28-9	
2,2-Dichloropropane	ND	ug/kg	11.2	0.073	1	01/30/14 13:08	01/30/14 22:39	594-20-7	
1,1-Dichloropropene	ND	ug/kg	4.5	0.15	1	01/30/14 13:08	01/30/14 22:39	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	4.5	0.057	1	01/30/14 13:08	01/30/14 22:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.5	0.13	1	01/30/14 13:08	01/30/14 22:39	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	11.2	0.070	1	01/30/14 13:08	01/30/14 22:39	60-29-7	
Ethylbenzene	ND	ug/kg	4.5	0.46	1	01/30/14 13:08	01/30/14 22:39	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	11.2	5.6	1	01/30/14 13:08	01/30/14 22:39	87-68-3	R1
Isopropylbenzene (Cumene)	ND	ug/kg	4.5	1.1	1	01/30/14 13:08	01/30/14 22:39	98-82-8	
p-Isopropyltoluene	ND	ug/kg	4.5	1.1	1	01/30/14 13:08	01/30/14 22:39	99-87-6	
Methylene Chloride	ND	ug/kg	22.4	11.2	1	01/30/14 13:08	01/30/14 22:39	75-09-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-5 2-3 **Lab ID: 10256148009** Collected: 01/23/14 11:15 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	22.4	11.2	1	01/30/14 13:08	01/30/14 22:39	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	4.5	1.1	1	01/30/14 13:08	01/30/14 22:39	1634-04-4	
Naphthalene	ND	ug/kg	11.2	5.6	1	01/30/14 13:08	01/30/14 22:39	91-20-3	
n-Propylbenzene	ND	ug/kg	4.5	1.1	1	01/30/14 13:08	01/30/14 22:39	103-65-1	
Styrene	ND	ug/kg	4.5	0.064	1	01/30/14 13:08	01/30/14 22:39	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.5	1.1	1	01/30/14 13:08	01/30/14 22:39	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.5	0.058	1	01/30/14 13:08	01/30/14 22:39	79-34-5	
Tetrachloroethene	**0.20J**	ug/kg	4.5	0.11	1	01/30/14 13:08	01/30/14 22:39	127-18-4	
Tetrahydrofuran	ND	ug/kg	44.7	0.98	1	01/30/14 13:08	01/30/14 22:39	109-99-9	
Toluene	ND	ug/kg	4.5	2.2	1	01/30/14 13:08	01/30/14 22:39	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	4.5	2.2	1	01/30/14 13:08	01/30/14 22:39	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	4.5	2.2	1	01/30/14 13:08	01/30/14 22:39	120-82-1	R1
1,1,1-Trichloroethane	ND	ug/kg	4.5	0.087	1	01/30/14 13:08	01/30/14 22:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.5	0.098	1	01/30/14 13:08	01/30/14 22:39	79-00-5	
Trichloroethene	ND	ug/kg	4.5	0.14	1	01/30/14 13:08	01/30/14 22:39	79-01-6	
Trichlorofluoromethane	ND	ug/kg	11.2	0.072	1	01/30/14 13:08	01/30/14 22:39	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	4.5	0.66	1	01/30/14 13:08	01/30/14 22:39	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	4.5	0.31	1	01/30/14 13:08	01/30/14 22:39	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	4.5	1.1	1	01/30/14 13:08	01/30/14 22:39	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	4.5	1.1	1	01/30/14 13:08	01/30/14 22:39	108-67-8	
Vinyl chloride	ND	ug/kg	4.5	0.074	1	01/30/14 13:08	01/30/14 22:39	75-01-4	
Xylene (Total)	ND	ug/kg	13.4	1.1	1	01/30/14 13:08	01/30/14 22:39	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	107	%.	30-150		1	01/30/14 13:08	01/30/14 22:39	17060-07-0	
Toluene-d8 (S)	98	%.	30-150		1	01/30/14 13:08	01/30/14 22:39	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	30-150		1	01/30/14 13:08	01/30/14 22:39	460-00-4	
9045 pH	Analytical Method: EPA 9045								
pH at 25 Degrees C	**7.6**	Std. Units	0.10	0.10	1		03/10/14 14:25		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-5 10-12' **Lab ID: 10256148010** Collected: 01/23/14 11:30 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication								
TPH-DRO (C10-C28)	ND	mg/kg	12.5	1.5	1	01/29/14 08:59	02/03/14 00:16		
Surrogates									
o-Terphenyl (S)	99	%.	30-150		1	01/29/14 08:59	02/03/14 00:16	84-15-1	
n-Triacontane (S)	101	%.	30-147		1	01/29/14 08:59	02/03/14 00:16	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030								
Gasoline Range Organics	ND	mg/kg	9.6	4.8	1	01/30/14 11:49	01/31/14 02:41		
Surrogates									
a,a,a-Trifluorotoluene (S)	104	%.	68-135		1	01/30/14 11:49	01/31/14 02:41	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**11.0**	mg/kg	5.8	0.42	5	03/07/14 08:39	03/18/14 10:56	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**20.2**	%	0.10	0.10	1		01/29/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
Acenaphthene	ND	ug/kg	412	39.8	1	01/30/14 11:02	01/31/14 18:49	83-32-9	
Acenaphthylene	ND	ug/kg	412	51.8	1	01/30/14 11:02	01/31/14 18:49	208-96-8	
Anthracene	ND	ug/kg	412	91.5	1	01/30/14 11:02	01/31/14 18:49	120-12-7	
Benzo(a)anthracene	ND	ug/kg	412	97.4	1	01/30/14 11:02	01/31/14 18:49	56-55-3	
Benzo(a)pyrene	ND	ug/kg	412	94.0	1	01/30/14 11:02	01/31/14 18:49	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	412	105	1	01/30/14 11:02	01/31/14 18:49	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	412	88.6	1	01/30/14 11:02	01/31/14 18:49	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	412	100	1	01/30/14 11:02	01/31/14 18:49	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	412	89.3	1	01/30/14 11:02	01/31/14 18:49	101-55-3	
Butylbenzylphthalate	ND	ug/kg	412	96.0	1	01/30/14 11:02	01/31/14 18:49	85-68-7	
Carbazole	ND	ug/kg	412	96.6	1	01/30/14 11:02	01/31/14 18:49	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	412	44.6	1	01/30/14 11:02	01/31/14 18:49	59-50-7	
4-Chloroaniline	ND	ug/kg	412	106	1	01/30/14 11:02	01/31/14 18:49	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	412	54.8	1	01/30/14 11:02	01/31/14 18:49	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	412	62.4	1	01/30/14 11:02	01/31/14 18:49	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	412	63.7	1	01/30/14 11:02	01/31/14 18:49	108-60-1	
2-Chloronaphthalene	ND	ug/kg	412	46.6	1	01/30/14 11:02	01/31/14 18:49	91-58-7	
2-Chlorophenol	ND	ug/kg	412	56.6	1	01/30/14 11:02	01/31/14 18:49	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	412	39.2	1	01/30/14 11:02	01/31/14 18:49	7005-72-3	
Chrysene	ND	ug/kg	412	101	1	01/30/14 11:02	01/31/14 18:49	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	412	92.4	1	01/30/14 11:02	01/31/14 18:49	53-70-3	
Dibenzofuran	ND	ug/kg	412	33.8	1	01/30/14 11:02	01/31/14 18:49	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	412	64.4	1	01/30/14 11:02	01/31/14 18:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	412	58.8	1	01/30/14 11:02	01/31/14 18:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	412	54.6	1	01/30/14 11:02	01/31/14 18:49	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	412	199	1	01/30/14 11:02	01/31/14 18:49	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	412	49.7	1	01/30/14 11:02	01/31/14 18:49	120-83-2	
Diethylphthalate	ND	ug/kg	412	96.5	1	01/30/14 11:02	01/31/14 18:49	84-66-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-5 10-12' **Lab ID: 10256148010** Collected: 01/23/14 11:30 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
2,4-Dimethylphenol	ND	ug/kg	412	180	1	01/30/14 11:02	01/31/14 18:49	105-67-9	
Dimethylphthalate	ND	ug/kg	412	91.8	1	01/30/14 11:02	01/31/14 18:49	131-11-3	
Di-n-butylphthalate	ND	ug/kg	412	83.6	1	01/30/14 11:02	01/31/14 18:49	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2120	76.2	1	01/30/14 11:02	01/31/14 18:49	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	412	55.6	1	01/30/14 11:02	01/31/14 18:49	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	412	38.8	1	01/30/14 11:02	01/31/14 18:49	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	412	43.8	1	01/30/14 11:02	01/31/14 18:49	606-20-2	
Di-n-octylphthalate	ND	ug/kg	412	97.1	1	01/30/14 11:02	01/31/14 18:49	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	412	92.5	1	01/30/14 11:02	01/31/14 18:49	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	412	103	1	01/30/14 11:02	01/31/14 18:49	117-81-7	
Fluoranthene	ND	ug/kg	412	94.3	1	01/30/14 11:02	01/31/14 18:49	206-44-0	
Fluorene	ND	ug/kg	412	32.3	1	01/30/14 11:02	01/31/14 18:49	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	412	52.7	1	01/30/14 11:02	01/31/14 18:49	87-68-3	
Hexachlorobenzene	ND	ug/kg	412	97.6	1	01/30/14 11:02	01/31/14 18:49	118-74-1	
Hexachloroethane	ND	ug/kg	412	66.3	1	01/30/14 11:02	01/31/14 18:49	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	412	89.9	1	01/30/14 11:02	01/31/14 18:49	193-39-5	
Isophorone	ND	ug/kg	412	53.2	1	01/30/14 11:02	01/31/14 18:49	78-59-1	
1-Methylnaphthalene	ND	ug/kg	412	50.3	1	01/30/14 11:02	01/31/14 18:49	90-12-0	
2-Methylnaphthalene	ND	ug/kg	412	47.3	1	01/30/14 11:02	01/31/14 18:49	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	412	62.7	1	01/30/14 11:02	01/31/14 18:49	95-48-7	
3&4-Methylphenol	ND	ug/kg	824	45.2	1	01/30/14 11:02	01/31/14 18:49		
Naphthalene	ND	ug/kg	412	61.7	1	01/30/14 11:02	01/31/14 18:49	91-20-3	
2-Nitroaniline	ND	ug/kg	412	84.4	1	01/30/14 11:02	01/31/14 18:49	88-74-4	
3-Nitroaniline	ND	ug/kg	412	137	1	01/30/14 11:02	01/31/14 18:49	99-09-2	
4-Nitroaniline	ND	ug/kg	412	113	1	01/30/14 11:02	01/31/14 18:49	100-01-6	
Nitrobenzene	ND	ug/kg	412	69.2	1	01/30/14 11:02	01/31/14 18:49	98-95-3	
2-Nitrophenol	ND	ug/kg	412	64.4	1	01/30/14 11:02	01/31/14 18:49	88-75-5	
4-Nitrophenol	ND	ug/kg	412	71.2	1	01/30/14 11:02	01/31/14 18:49	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	412	98.5	1	01/30/14 11:02	01/31/14 18:49	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	412	64.4	1	01/30/14 11:02	01/31/14 18:49	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	412	99.1	1	01/30/14 11:02	01/31/14 18:49	86-30-6	
Pentachlorophenol	ND	ug/kg	836	64.0	1	01/30/14 11:02	01/31/14 18:49	87-86-5	
Phenanthrene	ND	ug/kg	412	96.4	1	01/30/14 11:02	01/31/14 18:49	85-01-8	
Phenol	ND	ug/kg	412	54.3	1	01/30/14 11:02	01/31/14 18:49	108-95-2	
Pyrene	ND	ug/kg	412	101	1	01/30/14 11:02	01/31/14 18:49	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	412	54.7	1	01/30/14 11:02	01/31/14 18:49	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	412	44.1	1	01/30/14 11:02	01/31/14 18:49	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	412	39.3	1	01/30/14 11:02	01/31/14 18:49	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	68	%.	30-125		1	01/30/14 11:02	01/31/14 18:49	4165-60-0	
2-Fluorobiphenyl (S)	79	%.	46-125		1	01/30/14 11:02	01/31/14 18:49	321-60-8	
Terphenyl-d14 (S)	85	%.	64-125		1	01/30/14 11:02	01/31/14 18:49	1718-51-0	
Phenol-d6 (S)	78	%.	38-125		1	01/30/14 11:02	01/31/14 18:49	13127-88-3	
2-Fluorophenol (S)	78	%.	31-125		1	01/30/14 11:02	01/31/14 18:49	367-12-4	
2,4,6-Tribromophenol (S)	78	%.	41-125		1	01/30/14 11:02	01/31/14 18:49	118-79-6	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-5 10-12' **Lab ID: 10256148010** Collected: 01/23/14 11:30 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
Acetone	ND	ug/kg	17.2	8.6	1	01/30/14 13:08	01/30/14 22:57	67-64-1	
Allyl chloride	ND	ug/kg	8.6	0.12	1	01/30/14 13:08	01/30/14 22:57	107-05-1	
Benzene	**0.71J**	ug/kg	3.4	0.050	1	01/30/14 13:08	01/30/14 22:57	71-43-2	
Bromobenzene	ND	ug/kg	3.4	0.079	1	01/30/14 13:08	01/30/14 22:57	108-86-1	
Bromochloromethane	ND	ug/kg	3.4	0.047	1	01/30/14 13:08	01/30/14 22:57	74-97-5	
Bromodichloromethane	ND	ug/kg	3.4	1.7	1	01/30/14 13:08	01/30/14 22:57	75-27-4	
Bromoform	ND	ug/kg	17.2	8.6	1	01/30/14 13:08	01/30/14 22:57	75-25-2	
Bromomethane	ND	ug/kg	17.2	8.6	1	01/30/14 13:08	01/30/14 22:57	74-83-9	
2-Butanone (MEK)	ND	ug/kg	43.0	8.6	1	01/30/14 13:08	01/30/14 22:57	78-93-3	
n-Butylbenzene	ND	ug/kg	3.4	1.7	1	01/30/14 13:08	01/30/14 22:57	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.4	0.86	1	01/30/14 13:08	01/30/14 22:57	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.4	0.86	1	01/30/14 13:08	01/30/14 22:57	98-06-6	
Carbon tetrachloride	ND	ug/kg	3.4	0.12	1	01/30/14 13:08	01/30/14 22:57	56-23-5	
Chlorobenzene	ND	ug/kg	3.4	0.072	1	01/30/14 13:08	01/30/14 22:57	108-90-7	
Chloroethane	ND	ug/kg	8.6	0.53	1	01/30/14 13:08	01/30/14 22:57	75-00-3	
Chloroform	ND	ug/kg	3.4	0.078	1	01/30/14 13:08	01/30/14 22:57	67-66-3	
Chloromethane	ND	ug/kg	8.6	0.67	1	01/30/14 13:08	01/30/14 22:57	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.4	0.040	1	01/30/14 13:08	01/30/14 22:57	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.4	0.86	1	01/30/14 13:08	01/30/14 22:57	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	8.6	2.2	1	01/30/14 13:08	01/30/14 22:57	96-12-8	
Dibromochloromethane	ND	ug/kg	3.4	0.092	1	01/30/14 13:08	01/30/14 22:57	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.4	0.036	1	01/30/14 13:08	01/30/14 22:57	106-93-4	
Dibromomethane	ND	ug/kg	3.4	0.22	1	01/30/14 13:08	01/30/14 22:57	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.4	0.050	1	01/30/14 13:08	01/30/14 22:57	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.4	0.86	1	01/30/14 13:08	01/30/14 22:57	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.4	0.86	1	01/30/14 13:08	01/30/14 22:57	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	8.6	0.90	1	01/30/14 13:08	01/30/14 22:57	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.4	0.046	1	01/30/14 13:08	01/30/14 22:57	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.4	0.076	1	01/30/14 13:08	01/30/14 22:57	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.4	0.060	1	01/30/14 13:08	01/30/14 22:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.4	0.11	1	01/30/14 13:08	01/30/14 22:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.4	0.16	1	01/30/14 13:08	01/30/14 22:57	156-60-5	
Dichlorofluoromethane	ND	ug/kg	3.4	0.076	1	01/30/14 13:08	01/30/14 22:57	75-43-4	
1,2-Dichloropropane	ND	ug/kg	3.4	0.076	1	01/30/14 13:08	01/30/14 22:57	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.4	0.86	1	01/30/14 13:08	01/30/14 22:57	142-28-9	
2,2-Dichloropropane	ND	ug/kg	8.6	0.056	1	01/30/14 13:08	01/30/14 22:57	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.4	0.11	1	01/30/14 13:08	01/30/14 22:57	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.4	0.044	1	01/30/14 13:08	01/30/14 22:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.4	0.10	1	01/30/14 13:08	01/30/14 22:57	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	8.6	0.054	1	01/30/14 13:08	01/30/14 22:57	60-29-7	
Ethylbenzene	**0.55J**	ug/kg	3.4	0.35	1	01/30/14 13:08	01/30/14 22:57	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	8.6	4.3	1	01/30/14 13:08	01/30/14 22:57	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	3.4	0.86	1	01/30/14 13:08	01/30/14 22:57	98-82-8	
p-Isopropyltoluene	ND	ug/kg	3.4	0.86	1	01/30/14 13:08	01/30/14 22:57	99-87-6	
Methylene Chloride	ND	ug/kg	17.2	8.6	1	01/30/14 13:08	01/30/14 22:57	75-09-2	

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: SB-5 10-12' **Lab ID: 10256148010** Collected: 01/23/14 11:30 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	17.2	8.6	1	01/30/14 13:08	01/30/14 22:57	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	3.4	0.86	1	01/30/14 13:08	01/30/14 22:57	1634-04-4	
Naphthalene	ND	ug/kg	8.6	4.3	1	01/30/14 13:08	01/30/14 22:57	91-20-3	
n-Propylbenzene	ND	ug/kg	3.4	0.86	1	01/30/14 13:08	01/30/14 22:57	103-65-1	
Styrene	ND	ug/kg	3.4	0.049	1	01/30/14 13:08	01/30/14 22:57	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.4	0.86	1	01/30/14 13:08	01/30/14 22:57	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.4	0.045	1	01/30/14 13:08	01/30/14 22:57	79-34-5	
Tetrachloroethene	ND	ug/kg	3.4	0.088	1	01/30/14 13:08	01/30/14 22:57	127-18-4	
Tetrahydrofuran	ND	ug/kg	34.4	0.75	1	01/30/14 13:08	01/30/14 22:57	109-99-9	
Toluene	ND	ug/kg	3.4	1.7	1	01/30/14 13:08	01/30/14 22:57	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.4	1.7	1	01/30/14 13:08	01/30/14 22:57	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.4	1.7	1	01/30/14 13:08	01/30/14 22:57	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.4	0.067	1	01/30/14 13:08	01/30/14 22:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.4	0.076	1	01/30/14 13:08	01/30/14 22:57	79-00-5	
Trichloroethene	ND	ug/kg	3.4	0.10	1	01/30/14 13:08	01/30/14 22:57	79-01-6	
Trichlorofluoromethane	ND	ug/kg	8.6	0.055	1	01/30/14 13:08	01/30/14 22:57	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.4	0.50	1	01/30/14 13:08	01/30/14 22:57	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	3.4	0.24	1	01/30/14 13:08	01/30/14 22:57	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	3.4	0.86	1	01/30/14 13:08	01/30/14 22:57	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	3.4	0.86	1	01/30/14 13:08	01/30/14 22:57	108-67-8	
Vinyl chloride	ND	ug/kg	3.4	0.057	1	01/30/14 13:08	01/30/14 22:57	75-01-4	
Xylene (Total)	ND	ug/kg	10.3	0.84	1	01/30/14 13:08	01/30/14 22:57	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	106	%.	30-150		1	01/30/14 13:08	01/30/14 22:57	17060-07-0	
Toluene-d8 (S)	99	%.	30-150		1	01/30/14 13:08	01/30/14 22:57	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	30-150		1	01/30/14 13:08	01/30/14 22:57	460-00-4	
9045 pH	Analytical Method: EPA 9045								
pH at 25 Degrees C	**8.4**	Std. Units	0.10	0.10	1		03/10/14 14:32		

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: DUP-001 **Lab ID: 10256148011** Collected: 01/23/14 00:00 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015 GCS THC-Diesel	Analytical Method: EPA 8015 Modified Preparation Method: EPA 3550 Sonication								
TPH-DRO (C10-C28)	**3.1J**	mg/kg	12.5	1.5	1	01/29/14 08:59	02/03/14 00:39		B
Surrogates									
o-Terphenyl (S)	96	%.	30-150		1	01/29/14 08:59	02/03/14 00:39	84-15-1	
n-Triacontane (S)	97	%.	30-147		1	01/29/14 08:59	02/03/14 00:39	638-68-6	
8015/8021 GCV GRO/BTEX	Analytical Method: EPA 8015/8021 Preparation Method: EPA 5030								
Gasoline Range Organics	ND	mg/kg	10.8	5.4	1	01/30/14 11:49	02/04/14 16:57		
Surrogates									
a,a,a-Trifluorotoluene (S)	103	%.	68-135		1	01/30/14 11:49	02/04/14 16:57	98-08-8	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**12.3**	mg/kg	4.7	0.34	5	03/07/14 08:39	03/18/14 11:03	7439-92-1	
Dry Weight	Analytical Method: ASTM D2974								
Percent Moisture	**20.1**	%	0.10	0.10	1		01/29/14 00:00		
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
Acenaphthene	ND	ug/kg	413	39.9	1	01/30/14 11:02	02/03/14 10:44	83-32-9	
Acenaphthylene	ND	ug/kg	413	52.0	1	01/30/14 11:02	02/03/14 10:44	208-96-8	
Anthracene	ND	ug/kg	413	91.8	1	01/30/14 11:02	02/03/14 10:44	120-12-7	
Benzo(a)anthracene	ND	ug/kg	413	97.7	1	01/30/14 11:02	02/03/14 10:44	56-55-3	
Benzo(a)pyrene	ND	ug/kg	413	94.3	1	01/30/14 11:02	02/03/14 10:44	50-32-8	
Benzo(b)fluoranthene	ND	ug/kg	413	106	1	01/30/14 11:02	02/03/14 10:44	205-99-2	
Benzo(g,h,i)perylene	ND	ug/kg	413	88.9	1	01/30/14 11:02	02/03/14 10:44	191-24-2	
Benzo(k)fluoranthene	ND	ug/kg	413	100	1	01/30/14 11:02	02/03/14 10:44	207-08-9	
4-Bromophenylphenyl ether	ND	ug/kg	413	89.5	1	01/30/14 11:02	02/03/14 10:44	101-55-3	
Butylbenzylphthalate	ND	ug/kg	413	96.3	1	01/30/14 11:02	02/03/14 10:44	85-68-7	
Carbazole	ND	ug/kg	413	96.9	1	01/30/14 11:02	02/03/14 10:44	86-74-8	
4-Chloro-3-methylphenol	ND	ug/kg	413	44.7	1	01/30/14 11:02	02/03/14 10:44	59-50-7	
4-Chloroaniline	ND	ug/kg	413	107	1	01/30/14 11:02	02/03/14 10:44	106-47-8	
bis(2-Chloroethoxy)methane	ND	ug/kg	413	55.0	1	01/30/14 11:02	02/03/14 10:44	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/kg	413	62.6	1	01/30/14 11:02	02/03/14 10:44	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/kg	413	63.8	1	01/30/14 11:02	02/03/14 10:44	108-60-1	
2-Chloronaphthalene	ND	ug/kg	413	46.7	1	01/30/14 11:02	02/03/14 10:44	91-58-7	
2-Chlorophenol	ND	ug/kg	413	56.7	1	01/30/14 11:02	02/03/14 10:44	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/kg	413	39.3	1	01/30/14 11:02	02/03/14 10:44	7005-72-3	
Chrysene	ND	ug/kg	413	102	1	01/30/14 11:02	02/03/14 10:44	218-01-9	
Dibenz(a,h)anthracene	ND	ug/kg	413	92.6	1	01/30/14 11:02	02/03/14 10:44	53-70-3	
Dibenzofuran	ND	ug/kg	413	33.9	1	01/30/14 11:02	02/03/14 10:44	132-64-9	
1,2-Dichlorobenzene	ND	ug/kg	413	64.6	1	01/30/14 11:02	02/03/14 10:44	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	413	59.0	1	01/30/14 11:02	02/03/14 10:44	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	413	54.7	1	01/30/14 11:02	02/03/14 10:44	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/kg	413	199	1	01/30/14 11:02	02/03/14 10:44	91-94-1	
2,4-Dichlorophenol	ND	ug/kg	413	49.8	1	01/30/14 11:02	02/03/14 10:44	120-83-2	
Diethylphthalate	ND	ug/kg	413	96.8	1	01/30/14 11:02	02/03/14 10:44	84-66-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: DUP-001 **Lab ID: 10256148011** Collected: 01/23/14 00:00 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV	Analytical Method: EPA 8270 Preparation Method: EPA 3550								
2,4-Dimethylphenol	ND	ug/kg	413	181	1	01/30/14 11:02	02/03/14 10:44	105-67-9	
Dimethylphthalate	ND	ug/kg	413	92.0	1	01/30/14 11:02	02/03/14 10:44	131-11-3	
Di-n-butylphthalate	ND	ug/kg	413	83.9	1	01/30/14 11:02	02/03/14 10:44	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/kg	2130	76.4	1	01/30/14 11:02	02/03/14 10:44	534-52-1	
2,4-Dinitrophenol	ND	ug/kg	413	55.7	1	01/30/14 11:02	02/03/14 10:44	51-28-5	
2,4-Dinitrotoluene	ND	ug/kg	413	38.9	1	01/30/14 11:02	02/03/14 10:44	121-14-2	
2,6-Dinitrotoluene	ND	ug/kg	413	43.9	1	01/30/14 11:02	02/03/14 10:44	606-20-2	
Di-n-octylphthalate	ND	ug/kg	413	97.4	1	01/30/14 11:02	02/03/14 10:44	117-84-0	
1,2-Diphenylhydrazine	ND	ug/kg	413	92.8	1	01/30/14 11:02	02/03/14 10:44	122-66-7	
bis(2-Ethylhexyl)phthalate	ND	ug/kg	413	103	1	01/30/14 11:02	02/03/14 10:44	117-81-7	
Fluoranthene	ND	ug/kg	413	94.5	1	01/30/14 11:02	02/03/14 10:44	206-44-0	
Fluorene	ND	ug/kg	413	32.4	1	01/30/14 11:02	02/03/14 10:44	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/kg	413	52.8	1	01/30/14 11:02	02/03/14 10:44	87-68-3	
Hexachlorobenzene	ND	ug/kg	413	97.9	1	01/30/14 11:02	02/03/14 10:44	118-74-1	
Hexachloroethane	ND	ug/kg	413	66.5	1	01/30/14 11:02	02/03/14 10:44	67-72-1	
Indeno(1,2,3-cd)pyrene	ND	ug/kg	413	90.1	1	01/30/14 11:02	02/03/14 10:44	193-39-5	
Isophorone	ND	ug/kg	413	53.3	1	01/30/14 11:02	02/03/14 10:44	78-59-1	
1-Methylnaphthalene	ND	ug/kg	413	50.5	1	01/30/14 11:02	02/03/14 10:44	90-12-0	
2-Methylnaphthalene	ND	ug/kg	413	47.4	1	01/30/14 11:02	02/03/14 10:44	91-57-6	
2-Methylphenol(o-Cresol)	ND	ug/kg	413	62.8	1	01/30/14 11:02	02/03/14 10:44	95-48-7	
3&4-Methylphenol	ND	ug/kg	826	45.3	1	01/30/14 11:02	02/03/14 10:44		
Naphthalene	ND	ug/kg	413	61.8	1	01/30/14 11:02	02/03/14 10:44	91-20-3	
2-Nitroaniline	ND	ug/kg	413	84.6	1	01/30/14 11:02	02/03/14 10:44	88-74-4	
3-Nitroaniline	ND	ug/kg	413	138	1	01/30/14 11:02	02/03/14 10:44	99-09-2	
4-Nitroaniline	ND	ug/kg	413	113	1	01/30/14 11:02	02/03/14 10:44	100-01-6	
Nitrobenzene	ND	ug/kg	413	69.4	1	01/30/14 11:02	02/03/14 10:44	98-95-3	
2-Nitrophenol	ND	ug/kg	413	64.6	1	01/30/14 11:02	02/03/14 10:44	88-75-5	
4-Nitrophenol	ND	ug/kg	413	71.4	1	01/30/14 11:02	02/03/14 10:44	100-02-7	
N-Nitrosodimethylamine	ND	ug/kg	413	98.8	1	01/30/14 11:02	02/03/14 10:44	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/kg	413	64.6	1	01/30/14 11:02	02/03/14 10:44	621-64-7	
N-Nitrosodiphenylamine	ND	ug/kg	413	99.4	1	01/30/14 11:02	02/03/14 10:44	86-30-6	
Pentachlorophenol	ND	ug/kg	839	64.2	1	01/30/14 11:02	02/03/14 10:44	87-86-5	
Phenanthrene	ND	ug/kg	413	96.6	1	01/30/14 11:02	02/03/14 10:44	85-01-8	
Phenol	ND	ug/kg	413	54.5	1	01/30/14 11:02	02/03/14 10:44	108-95-2	
Pyrene	ND	ug/kg	413	101	1	01/30/14 11:02	02/03/14 10:44	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/kg	413	54.8	1	01/30/14 11:02	02/03/14 10:44	120-82-1	
2,4,5-Trichlorophenol	ND	ug/kg	413	44.2	1	01/30/14 11:02	02/03/14 10:44	95-95-4	
2,4,6-Trichlorophenol	ND	ug/kg	413	39.4	1	01/30/14 11:02	02/03/14 10:44	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	66	%.	30-125		1	01/30/14 11:02	02/03/14 10:44	4165-60-0	
2-Fluorobiphenyl (S)	76	%.	46-125		1	01/30/14 11:02	02/03/14 10:44	321-60-8	
Terphenyl-d14 (S)	85	%.	64-125		1	01/30/14 11:02	02/03/14 10:44	1718-51-0	
Phenol-d6 (S)	78	%.	38-125		1	01/30/14 11:02	02/03/14 10:44	13127-88-3	
2-Fluorophenol (S)	76	%.	31-125		1	01/30/14 11:02	02/03/14 10:44	367-12-4	
2,4,6-Tribromophenol (S)	78	%.	41-125		1	01/30/14 11:02	02/03/14 10:44	118-79-6	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: DUP-001 **Lab ID: 10256148011** Collected: 01/23/14 00:00 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
Acetone	ND	ug/kg	19.0	9.5	1	01/30/14 13:08	01/30/14 23:14	67-64-1	
Allyl chloride	ND	ug/kg	9.5	0.13	1	01/30/14 13:08	01/30/14 23:14	107-05-1	
Benzene	**0.59J**	ug/kg	3.8	0.055	1	01/30/14 13:08	01/30/14 23:14	71-43-2	
Bromobenzene	ND	ug/kg	3.8	0.088	1	01/30/14 13:08	01/30/14 23:14	108-86-1	
Bromochloromethane	ND	ug/kg	3.8	0.052	1	01/30/14 13:08	01/30/14 23:14	74-97-5	
Bromodichloromethane	ND	ug/kg	3.8	1.9	1	01/30/14 13:08	01/30/14 23:14	75-27-4	
Bromoform	ND	ug/kg	19.0	9.5	1	01/30/14 13:08	01/30/14 23:14	75-25-2	
Bromomethane	ND	ug/kg	19.0	9.5	1	01/30/14 13:08	01/30/14 23:14	74-83-9	
2-Butanone (MEK)	ND	ug/kg	47.6	9.5	1	01/30/14 13:08	01/30/14 23:14	78-93-3	
n-Butylbenzene	ND	ug/kg	3.8	1.9	1	01/30/14 13:08	01/30/14 23:14	104-51-8	
sec-Butylbenzene	ND	ug/kg	3.8	0.95	1	01/30/14 13:08	01/30/14 23:14	135-98-8	
tert-Butylbenzene	ND	ug/kg	3.8	0.95	1	01/30/14 13:08	01/30/14 23:14	98-06-6	
Carbon tetrachloride	ND	ug/kg	3.8	0.14	1	01/30/14 13:08	01/30/14 23:14	56-23-5	
Chlorobenzene	ND	ug/kg	3.8	0.080	1	01/30/14 13:08	01/30/14 23:14	108-90-7	
Chloroethane	ND	ug/kg	9.5	0.59	1	01/30/14 13:08	01/30/14 23:14	75-00-3	
Chloroform	ND	ug/kg	3.8	0.087	1	01/30/14 13:08	01/30/14 23:14	67-66-3	
Chloromethane	ND	ug/kg	9.5	0.74	1	01/30/14 13:08	01/30/14 23:14	74-87-3	
2-Chlorotoluene	ND	ug/kg	3.8	0.045	1	01/30/14 13:08	01/30/14 23:14	95-49-8	
4-Chlorotoluene	ND	ug/kg	3.8	0.95	1	01/30/14 13:08	01/30/14 23:14	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	9.5	2.4	1	01/30/14 13:08	01/30/14 23:14	96-12-8	
Dibromochloromethane	ND	ug/kg	3.8	0.10	1	01/30/14 13:08	01/30/14 23:14	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	3.8	0.040	1	01/30/14 13:08	01/30/14 23:14	106-93-4	
Dibromomethane	ND	ug/kg	3.8	0.25	1	01/30/14 13:08	01/30/14 23:14	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	3.8	0.055	1	01/30/14 13:08	01/30/14 23:14	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	3.8	0.95	1	01/30/14 13:08	01/30/14 23:14	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	3.8	0.95	1	01/30/14 13:08	01/30/14 23:14	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	9.5	1.0	1	01/30/14 13:08	01/30/14 23:14	75-71-8	
1,1-Dichloroethane	ND	ug/kg	3.8	0.050	1	01/30/14 13:08	01/30/14 23:14	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.8	0.084	1	01/30/14 13:08	01/30/14 23:14	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.8	0.067	1	01/30/14 13:08	01/30/14 23:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.8	0.12	1	01/30/14 13:08	01/30/14 23:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.8	0.18	1	01/30/14 13:08	01/30/14 23:14	156-60-5	
Dichlorofluoromethane	ND	ug/kg	3.8	0.084	1	01/30/14 13:08	01/30/14 23:14	75-43-4	
1,2-Dichloropropane	ND	ug/kg	3.8	0.084	1	01/30/14 13:08	01/30/14 23:14	78-87-5	
1,3-Dichloropropane	ND	ug/kg	3.8	0.95	1	01/30/14 13:08	01/30/14 23:14	142-28-9	
2,2-Dichloropropane	ND	ug/kg	9.5	0.062	1	01/30/14 13:08	01/30/14 23:14	594-20-7	
1,1-Dichloropropene	ND	ug/kg	3.8	0.13	1	01/30/14 13:08	01/30/14 23:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	3.8	0.049	1	01/30/14 13:08	01/30/14 23:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.8	0.11	1	01/30/14 13:08	01/30/14 23:14	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	9.5	0.060	1	01/30/14 13:08	01/30/14 23:14	60-29-7	
Ethylbenzene	ND	ug/kg	3.8	0.39	1	01/30/14 13:08	01/30/14 23:14	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	9.5	4.8	1	01/30/14 13:08	01/30/14 23:14	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	3.8	0.95	1	01/30/14 13:08	01/30/14 23:14	98-82-8	
p-Isopropyltoluene	ND	ug/kg	3.8	0.95	1	01/30/14 13:08	01/30/14 23:14	99-87-6	
Methylene Chloride	ND	ug/kg	19.0	9.5	1	01/30/14 13:08	01/30/14 23:14	75-09-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: DUP-001 **Lab ID: 10256148011** Collected: 01/23/14 00:00 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035 Low Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035A								
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	19.0	9.5	1	01/30/14 13:08	01/30/14 23:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	3.8	0.95	1	01/30/14 13:08	01/30/14 23:14	1634-04-4	
Naphthalene	ND	ug/kg	9.5	4.8	1	01/30/14 13:08	01/30/14 23:14	91-20-3	
n-Propylbenzene	ND	ug/kg	3.8	0.95	1	01/30/14 13:08	01/30/14 23:14	103-65-1	
Styrene	ND	ug/kg	3.8	0.054	1	01/30/14 13:08	01/30/14 23:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	3.8	0.95	1	01/30/14 13:08	01/30/14 23:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.8	0.049	1	01/30/14 13:08	01/30/14 23:14	79-34-5	
Tetrachloroethene	ND	ug/kg	3.8	0.097	1	01/30/14 13:08	01/30/14 23:14	127-18-4	
Tetrahydrofuran	ND	ug/kg	38.1	0.83	1	01/30/14 13:08	01/30/14 23:14	109-99-9	
Toluene	ND	ug/kg	3.8	1.9	1	01/30/14 13:08	01/30/14 23:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	3.8	1.9	1	01/30/14 13:08	01/30/14 23:14	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	3.8	1.9	1	01/30/14 13:08	01/30/14 23:14	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	3.8	0.074	1	01/30/14 13:08	01/30/14 23:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.8	0.084	1	01/30/14 13:08	01/30/14 23:14	79-00-5	
Trichloroethene	ND	ug/kg	3.8	0.12	1	01/30/14 13:08	01/30/14 23:14	79-01-6	
Trichlorofluoromethane	ND	ug/kg	9.5	0.061	1	01/30/14 13:08	01/30/14 23:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	3.8	0.56	1	01/30/14 13:08	01/30/14 23:14	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	3.8	0.27	1	01/30/14 13:08	01/30/14 23:14	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	3.8	0.95	1	01/30/14 13:08	01/30/14 23:14	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	3.8	0.95	1	01/30/14 13:08	01/30/14 23:14	108-67-8	
Vinyl chloride	ND	ug/kg	3.8	0.063	1	01/30/14 13:08	01/30/14 23:14	75-01-4	
Xylene (Total)	ND	ug/kg	11.4	0.93	1	01/30/14 13:08	01/30/14 23:14	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	107	%.	30-150		1	01/30/14 13:08	01/30/14 23:14	17060-07-0	
Toluene-d8 (S)	99	%.	30-150		1	01/30/14 13:08	01/30/14 23:14	2037-26-5	
4-Bromofluorobenzene (S)	103	%.	30-150		1	01/30/14 13:08	01/30/14 23:14	460-00-4	
9045 pH	Analytical Method: EPA 9045								
pH at 25 Degrees C	7.9	Std. Units	0.10	0.10	1		03/10/14 14:24		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: TRIP BLANK **Lab ID: 10256148013** Collected: 01/22/14 00:00 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Acetone	ND	ug/kg	1250	500	1	02/03/14 12:36	02/03/14 14:51	67-64-1	
Allyl chloride	ND	ug/kg	2500	8.8	1	02/03/14 12:36	02/03/14 14:51	107-05-1	
Benzene	ND	ug/kg	20.0	10.0	1	02/03/14 12:36	02/03/14 14:51	71-43-2	
Bromobenzene	ND	ug/kg	250	5.8	1	02/03/14 12:36	02/03/14 14:51	108-86-1	
Bromochloromethane	ND	ug/kg	250	10.2	1	02/03/14 12:36	02/03/14 14:51	74-97-5	
Bromodichloromethane	ND	ug/kg	250	6.4	1	02/03/14 12:36	02/03/14 14:51	75-27-4	
Bromoform	ND	ug/kg	250	100	1	02/03/14 12:36	02/03/14 14:51	75-25-2	
Bromomethane	ND	ug/kg	500	250	1	02/03/14 12:36	02/03/14 14:51	74-83-9	
2-Butanone (MEK)	ND	ug/kg	1200	125	1	02/03/14 12:36	02/03/14 14:51	78-93-3	
n-Butylbenzene	ND	ug/kg	250	20.0	1	02/03/14 12:36	02/03/14 14:51	104-51-8	
sec-Butylbenzene	ND	ug/kg	250	20.0	1	02/03/14 12:36	02/03/14 14:51	135-98-8	
tert-Butylbenzene	ND	ug/kg	250	20.0	1	02/03/14 12:36	02/03/14 14:51	98-06-6	
Carbon tetrachloride	ND	ug/kg	250	5.0	1	02/03/14 12:36	02/03/14 14:51	56-23-5	
Chlorobenzene	ND	ug/kg	250	3.7	1	02/03/14 12:36	02/03/14 14:51	108-90-7	
Chloroethane	ND	ug/kg	500	12.5	1	02/03/14 12:36	02/03/14 14:51	75-00-3	
Chloroform	ND	ug/kg	250	7.6	1	02/03/14 12:36	02/03/14 14:51	67-66-3	
Chloromethane	ND	ug/kg	500	15.2	1	02/03/14 12:36	02/03/14 14:51	74-87-3	
2-Chlorotoluene	ND	ug/kg	250	25.0	1	02/03/14 12:36	02/03/14 14:51	95-49-8	
4-Chlorotoluene	ND	ug/kg	250	25.0	1	02/03/14 12:36	02/03/14 14:51	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/kg	500	73.0	1	02/03/14 12:36	02/03/14 14:51	96-12-8	
Dibromochloromethane	ND	ug/kg	250	6.4	1	02/03/14 12:36	02/03/14 14:51	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/kg	250	5.4	1	02/03/14 12:36	02/03/14 14:51	106-93-4	
Dibromomethane	ND	ug/kg	250	7.8	1	02/03/14 12:36	02/03/14 14:51	74-95-3	
1,2-Dichlorobenzene	ND	ug/kg	250	25.0	1	02/03/14 12:36	02/03/14 14:51	95-50-1	
1,3-Dichlorobenzene	ND	ug/kg	250	25.0	1	02/03/14 12:36	02/03/14 14:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/kg	250	25.0	1	02/03/14 12:36	02/03/14 14:51	106-46-7	
Dichlorodifluoromethane	ND	ug/kg	500	15.2	1	02/03/14 12:36	02/03/14 14:51	75-71-8	
1,1-Dichloroethane	ND	ug/kg	250	4.1	1	02/03/14 12:36	02/03/14 14:51	75-34-3	
1,2-Dichloroethane	ND	ug/kg	250	6.7	1	02/03/14 12:36	02/03/14 14:51	107-06-2	
1,1-Dichloroethene	ND	ug/kg	250	7.1	1	02/03/14 12:36	02/03/14 14:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	250	8.2	1	02/03/14 12:36	02/03/14 14:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	250	6.1	1	02/03/14 12:36	02/03/14 14:51	156-60-5	
Dichlorofluoromethane	ND	ug/kg	500	41.0	1	02/03/14 12:36	02/03/14 14:51	75-43-4	
1,2-Dichloropropane	ND	ug/kg	250	5.9	1	02/03/14 12:36	02/03/14 14:51	78-87-5	
1,3-Dichloropropane	ND	ug/kg	250	25.0	1	02/03/14 12:36	02/03/14 14:51	142-28-9	
2,2-Dichloropropane	ND	ug/kg	250	49.3	1	02/03/14 12:36	02/03/14 14:51	594-20-7	
1,1-Dichloropropene	ND	ug/kg	250	6.4	1	02/03/14 12:36	02/03/14 14:51	563-58-6	
cis-1,3-Dichloropropene	ND	ug/kg	250	3.9	1	02/03/14 12:36	02/03/14 14:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	250	4.9	1	02/03/14 12:36	02/03/14 14:51	10061-02-6	
Diethyl ether (Ethyl ether)	ND	ug/kg	2500	11.2	1	02/03/14 12:36	02/03/14 14:51	60-29-7	
Ethylbenzene	ND	ug/kg	50.0	20.0	1	02/03/14 12:36	02/03/14 14:51	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/kg	250	125	1	02/03/14 12:36	02/03/14 14:51	87-68-3	
Isopropylbenzene (Cumene)	ND	ug/kg	250	25.0	1	02/03/14 12:36	02/03/14 14:51	98-82-8	
p-Isopropyltoluene	ND	ug/kg	250	20.0	1	02/03/14 12:36	02/03/14 14:51	99-87-6	
Methylene Chloride	ND	ug/kg	250	100	1	02/03/14 12:36	02/03/14 14:51	75-09-2	

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ANALYTICAL RESULTS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Sample: TRIP BLANK **Lab ID: 10256148013** Collected: 01/22/14 00:00 Received: 01/28/14 10:07 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Med Level	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	1200	125	1	02/03/14 12:36	02/03/14 14:51	108-10-1	
Methyl-tert-butyl ether	ND	ug/kg	50.0	25.0	1	02/03/14 12:36	02/03/14 14:51	1634-04-4	
Naphthalene	ND	ug/kg	250	100	1	02/03/14 12:36	02/03/14 14:51	91-20-3	
n-Propylbenzene	ND	ug/kg	250	20.0	1	02/03/14 12:36	02/03/14 14:51	103-65-1	
Styrene	ND	ug/kg	250	4.1	1	02/03/14 12:36	02/03/14 14:51	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/kg	250	25.0	1	02/03/14 12:36	02/03/14 14:51	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/kg	250	6.4	1	02/03/14 12:36	02/03/14 14:51	79-34-5	
Tetrachloroethene	ND	ug/kg	250	6.6	1	02/03/14 12:36	02/03/14 14:51	127-18-4	
Tetrahydrofuran	ND	ug/kg	2500	60.3	1	02/03/14 12:36	02/03/14 14:51	109-99-9	
Toluene	ND	ug/kg	50.0	20.0	1	02/03/14 12:36	02/03/14 14:51	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/kg	250	20.0	1	02/03/14 12:36	02/03/14 14:51	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/kg	250	20.0	1	02/03/14 12:36	02/03/14 14:51	120-82-1	
1,1,1-Trichloroethane	ND	ug/kg	250	3.3	1	02/03/14 12:36	02/03/14 14:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	250	4.5	1	02/03/14 12:36	02/03/14 14:51	79-00-5	
Trichloroethene	ND	ug/kg	250	7.6	1	02/03/14 12:36	02/03/14 14:51	79-01-6	
Trichlorofluoromethane	ND	ug/kg	500	9.2	1	02/03/14 12:36	02/03/14 14:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/kg	250	14.7	1	02/03/14 12:36	02/03/14 14:51	96-18-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/kg	250	25.0	1	02/03/14 12:36	02/03/14 14:51	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/kg	250	25.0	1	02/03/14 12:36	02/03/14 14:51	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	250	25.0	1	02/03/14 12:36	02/03/14 14:51	108-67-8	
Vinyl chloride	ND	ug/kg	500	8.0	1	02/03/14 12:36	02/03/14 14:51	75-01-4	
Xylene (Total)	ND	ug/kg	150	60.0	1	02/03/14 12:36	02/03/14 14:51	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	82	%.	74-125		1	02/03/14 12:36	02/03/14 14:51	17060-07-0	
Toluene-d8 (S)	98	%.	75-125		1	02/03/14 12:36	02/03/14 14:51	2037-26-5	
4-Bromofluorobenzene (S)	93	%.	75-125		1	02/03/14 12:36	02/03/14 14:51	460-00-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

QC Batch: GCV/11637 Analysis Method: EPA 8015/8021
QC Batch Method: EPA 5030 Analysis Description: 8015/8021 Solid
Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008, 10256148009, 10256148010, 10256148011

METHOD BLANK: 1617199 Matrix: Solid
Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008, 10256148009, 10256148010, 10256148011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	ND	5.0	01/31/14 01:05	
a,a,a-Trifluorotoluene (S)	%.	106	68-135	01/31/14 01:05	

LABORATORY CONTROL SAMPLE: 1617200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	mg/kg	50	59.6	119	75-132	
a,a,a-Trifluorotoluene (S)	%.			117	68-135	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1617201 1617202

Parameter	Units	10256148009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Gasoline Range Organics	mg/kg	ND	93.9	102	114	117	120	113	30-150	2	20	
a,a,a-Trifluorotoluene (S)	%.						117	115	68-135			

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

QC Batch: MPRP/44651 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008, 10256148009, 10256148010, 10256148011

METHOD BLANK: 1634067 Matrix: Solid
Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008, 10256148009, 10256148010, 10256148011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	ND	0.82	03/21/14 08:19	

LABORATORY CONTROL SAMPLE: 1634068

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	46.7	39.7	85	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1634069 1634070

Parameter	Units	10256148009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	mg/kg	12.2	59	49.3	68.6	60.0	96	97	75-125	13	30	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

QC Batch: MPRP/44261 Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008, 10256148009, 10256148010, 10256148011

SAMPLE DUPLICATE: 1616415

Parameter	Units	10256139001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	13.2	13.2	.2	30	

SAMPLE DUPLICATE: 1616422

Parameter	Units	10256148012 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%		18.5			

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

QC Batch: MSV/26253 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035 Low Level
Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008, 10256148009, 10256148010, 10256148011

METHOD BLANK: 1617373 Matrix: Solid
Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008, 10256148009, 10256148010, 10256148011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	4.0	01/30/14 19:57	
1,1,1-Trichloroethane	ug/kg	ND	4.0	01/30/14 19:57	
1,1,2,2-Tetrachloroethane	ug/kg	ND	4.0	01/30/14 19:57	
1,1,2-Trichloroethane	ug/kg	ND	4.0	01/30/14 19:57	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	4.0	01/30/14 19:57	
1,1-Dichloroethane	ug/kg	ND	4.0	01/30/14 19:57	
1,1-Dichloroethene	ug/kg	ND	4.0	01/30/14 19:57	
1,1-Dichloropropene	ug/kg	ND	4.0	01/30/14 19:57	
1,2,3-Trichlorobenzene	ug/kg	ND	4.0	01/30/14 19:57	
1,2,3-Trichloropropane	ug/kg	ND	4.0	01/30/14 19:57	
1,2,4-Trichlorobenzene	ug/kg	ND	4.0	01/30/14 19:57	
1,2,4-Trimethylbenzene	ug/kg	ND	4.0	01/30/14 19:57	
1,2-Dibromo-3-chloropropane	ug/kg	ND	10.0	01/30/14 19:57	
1,2-Dibromoethane (EDB)	ug/kg	ND	4.0	01/30/14 19:57	
1,2-Dichlorobenzene	ug/kg	ND	4.0	01/30/14 19:57	
1,2-Dichloroethane	ug/kg	ND	4.0	01/30/14 19:57	
1,2-Dichloropropane	ug/kg	ND	4.0	01/30/14 19:57	
1,3,5-Trimethylbenzene	ug/kg	ND	4.0	01/30/14 19:57	
1,3-Dichlorobenzene	ug/kg	ND	4.0	01/30/14 19:57	
1,3-Dichloropropane	ug/kg	ND	4.0	01/30/14 19:57	
1,4-Dichlorobenzene	ug/kg	ND	4.0	01/30/14 19:57	
2,2-Dichloropropane	ug/kg	ND	10.0	01/30/14 19:57	
2-Butanone (MEK)	ug/kg	ND	50.0	01/30/14 19:57	
2-Chlorotoluene	ug/kg	ND	4.0	01/30/14 19:57	
4-Chlorotoluene	ug/kg	ND	4.0	01/30/14 19:57	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	20.0	01/30/14 19:57	
Acetone	ug/kg	ND	20.0	01/30/14 19:57	
Allyl chloride	ug/kg	ND	10.0	01/30/14 19:57	
Benzene	ug/kg	ND	4.0	01/30/14 19:57	
Bromobenzene	ug/kg	ND	4.0	01/30/14 19:57	
Bromochloromethane	ug/kg	ND	4.0	01/30/14 19:57	
Bromodichloromethane	ug/kg	ND	4.0	01/30/14 19:57	
Bromoform	ug/kg	ND	20.0	01/30/14 19:57	
Bromomethane	ug/kg	ND	20.0	01/30/14 19:57	
Carbon tetrachloride	ug/kg	ND	4.0	01/30/14 19:57	
Chlorobenzene	ug/kg	ND	4.0	01/30/14 19:57	
Chloroethane	ug/kg	ND	10.0	01/30/14 19:57	
Chloroform	ug/kg	ND	4.0	01/30/14 19:57	
Chloromethane	ug/kg	ND	10.0	01/30/14 19:57	
cis-1,2-Dichloroethene	ug/kg	ND	4.0	01/30/14 19:57	
cis-1,3-Dichloropropene	ug/kg	ND	4.0	01/30/14 19:57	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

METHOD BLANK: 1617373 Matrix: Solid

Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008, 10256148009, 10256148010, 10256148011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/kg	ND	4.0	01/30/14 19:57	
Dibromomethane	ug/kg	ND	4.0	01/30/14 19:57	
Dichlorodifluoromethane	ug/kg	ND	10.0	01/30/14 19:57	
Dichlorofluoromethane	ug/kg	ND	4.0	01/30/14 19:57	
Diethyl ether (Ethyl ether)	ug/kg	ND	10.0	01/30/14 19:57	
Ethylbenzene	ug/kg	ND	4.0	01/30/14 19:57	
Hexachloro-1,3-butadiene	ug/kg	ND	10.0	01/30/14 19:57	
Isopropylbenzene (Cumene)	ug/kg	ND	4.0	01/30/14 19:57	
Methyl-tert-butyl ether	ug/kg	ND	4.0	01/30/14 19:57	
Methylene Chloride	ug/kg	ND	20.0	01/30/14 19:57	
n-Butylbenzene	ug/kg	ND	4.0	01/30/14 19:57	
n-Propylbenzene	ug/kg	ND	4.0	01/30/14 19:57	
Naphthalene	ug/kg	ND	10.0	01/30/14 19:57	
p-Isopropyltoluene	ug/kg	ND	4.0	01/30/14 19:57	
sec-Butylbenzene	ug/kg	ND	4.0	01/30/14 19:57	
Styrene	ug/kg	ND	4.0	01/30/14 19:57	
tert-Butylbenzene	ug/kg	ND	4.0	01/30/14 19:57	
Tetrachloroethene	ug/kg	ND	4.0	01/30/14 19:57	
Tetrahydrofuran	ug/kg	ND	40.0	01/30/14 19:57	
Toluene	ug/kg	ND	4.0	01/30/14 19:57	
trans-1,2-Dichloroethene	ug/kg	ND	4.0	01/30/14 19:57	
trans-1,3-Dichloropropene	ug/kg	ND	4.0	01/30/14 19:57	
Trichloroethene	ug/kg	ND	4.0	01/30/14 19:57	
Trichlorofluoromethane	ug/kg	ND	10.0	01/30/14 19:57	
Vinyl chloride	ug/kg	ND	4.0	01/30/14 19:57	
Xylene (Total)	ug/kg	ND	12.0	01/30/14 19:57	
1,2-Dichloroethane-d4 (S)	%.	102	30-150	01/30/14 19:57	
4-Bromofluorobenzene (S)	%.	100	30-150	01/30/14 19:57	
Toluene-d8 (S)	%.	98	30-150	01/30/14 19:57	

LABORATORY CONTROL SAMPLE: 1617374

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	50	42.9	86	75-125	
1,1,1-Trichloroethane	ug/kg	50	42.1	84	71-128	
1,1,2,2-Tetrachloroethane	ug/kg	50	40.3	81	69-125	
1,1,2-Trichloroethane	ug/kg	50	41.4	83	75-125	
1,1,2-Trichlorotrifluoroethane	ug/kg	50	39.8	80	69-137	
1,1-Dichloroethane	ug/kg	50	42.5	85	69-127	
1,1-Dichloroethene	ug/kg	50	43.0	86	71-125	
1,1-Dichloropropene	ug/kg	50	41.1	82	71-127	
1,2,3-Trichlorobenzene	ug/kg	50	40.5	81	68-126	
1,2,3-Trichloropropane	ug/kg	50	40.8	82	70-126	
1,2,4-Trichlorobenzene	ug/kg	50	39.4	79	65-130	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

LABORATORY CONTROL SAMPLE: 1617374

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	50	40.7	81	68-125	
1,2-Dibromo-3-chloropropane	ug/kg	125	101	81	63-131	
1,2-Dibromoethane (EDB)	ug/kg	50	40.4	81	75-125	
1,2-Dichlorobenzene	ug/kg	50	40.8	82	74-125	
1,2-Dichloroethane	ug/kg	50	42.0	84	70-129	
1,2-Dichloropropane	ug/kg	50	42.7	85	75-125	
1,3,5-Trimethylbenzene	ug/kg	50	40.8	82	69-125	
1,3-Dichlorobenzene	ug/kg	50	40.9	82	72-125	
1,3-Dichloropropane	ug/kg	50	42.2	84	75-125	
1,4-Dichlorobenzene	ug/kg	50	39.4	79	70-125	
2,2-Dichloropropane	ug/kg	50	41.5	83	58-135	
2-Butanone (MEK)	ug/kg	250	194	78	57-129	
2-Chlorotoluene	ug/kg	50	40.8	82	69-125	
4-Chlorotoluene	ug/kg	50	41.4	83	70-125	
4-Methyl-2-pentanone (MIBK)	ug/kg	250	200	80	62-127	
Acetone	ug/kg	250	203	81	56-144	
Allyl chloride	ug/kg	50	42.5	85	60-132	
Benzene	ug/kg	50	40.5	81	67-125	
Bromobenzene	ug/kg	50	40.1	80	72-125	
Bromochloromethane	ug/kg	50	42.0	84	74-125	
Bromodichloromethane	ug/kg	50	42.6	85	75-125	
Bromoform	ug/kg	50	42.2	84	70-125	
Bromomethane	ug/kg	50	42.5	85	60-142	
Carbon tetrachloride	ug/kg	50	42.1	84	71-126	
Chlorobenzene	ug/kg	50	41.5	83	73-125	
Chloroethane	ug/kg	50	51.4	103	64-143	
Chloroform	ug/kg	50	42.0	84	72-125	
Chloromethane	ug/kg	50	42.0	84	48-143	
cis-1,2-Dichloroethene	ug/kg	50	41.4	83	74-125	
cis-1,3-Dichloropropene	ug/kg	50	43.5	87	71-125	
Dibromochloromethane	ug/kg	50	42.3	85	74-125	
Dibromomethane	ug/kg	50	43.0	86	75-125	
Dichlorodifluoromethane	ug/kg	50	38.5	77	39-150	
Dichlorofluoromethane	ug/kg	50	40.4	81	50-150	
Diethyl ether (Ethyl ether)	ug/kg	50	41.3	83	63-129	
Ethylbenzene	ug/kg	50	38.6	77	72-125	
Hexachloro-1,3-butadiene	ug/kg	50	39.7	79	65-133	
Isopropylbenzene (Cumene)	ug/kg	50	39.9	80	72-125	
Methyl-tert-butyl ether	ug/kg	50	41.2	82	71-125	
Methylene Chloride	ug/kg	50	40.4	81	65-125	
n-Butylbenzene	ug/kg	50	41.2	82	63-132	
n-Propylbenzene	ug/kg	50	40.7	81	68-125	
Naphthalene	ug/kg	50	40.6	81	65-127	
p-Isopropyltoluene	ug/kg	50	41.1	82	68-126	
sec-Butylbenzene	ug/kg	50	41.1	82	69-125	
Styrene	ug/kg	50	42.3	85	75-125	
tert-Butylbenzene	ug/kg	50	40.6	81	70-125	
Tetrachloroethene	ug/kg	50	41.1	82	68-125	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

LABORATORY CONTROL SAMPLE: 1617374

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrahydrofuran	ug/kg	500	415	83	69-129	
Toluene	ug/kg	50	38.2	76	71-125	
trans-1,2-Dichloroethene	ug/kg	50	42.8	86	71-125	
trans-1,3-Dichloropropene	ug/kg	50	42.4	85	71-127	
Trichloroethene	ug/kg	50	42.3	85	75-125	
Trichlorofluoromethane	ug/kg	50	39.8	80	61-145	
Vinyl chloride	ug/kg	50	40.9	82	60-134	
Xylene (Total)	ug/kg	150	123	82	74-125	
1,2-Dichloroethane-d4 (S)	%			101	30-150	
4-Bromofluorobenzene (S)	%			99	30-150	
Toluene-d8 (S)	%			99	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1617375 1617376

Parameter	Units	10256148009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/kg	ND	54.3	49.2	50.4	42.7	93	87	39-150	17	30	
1,1,1-Trichloroethane	ug/kg	ND	54.3	49.2	48.3	41.9	89	85	49-150	14	30	
1,1,2,2-Tetrachloroethane	ug/kg	ND	54.3	49.2	44.5	36.3	82	74	30-150	20	30	
1,1,2-Trichloroethane	ug/kg	ND	54.3	49.2	46.6	39.9	86	81	46-150	16	30	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	54.3	49.2	45.3	39.3	83	80	30-150	14	30	
1,1-Dichloroethane	ug/kg	ND	54.3	49.2	50.0	42.6	92	86	56-150	16	30	
1,1-Dichloroethene	ug/kg	ND	54.3	49.2	49.4	42.4	91	86	44-150	15	30	
1,1-Dichloropropene	ug/kg	ND	54.3	49.2	48.5	40.3	89	82	48-150	18	30	
1,2,3-Trichlorobenzene	ug/kg	ND	54.3	49.2	46.1	34.9	85	71	30-150	28	30	
1,2,3-Trichloropropane	ug/kg	ND	54.3	49.2	45.0	37.1	83	75	33-150	19	30	
1,2,4-Trichlorobenzene	ug/kg	ND	54.3	49.2	49.5	36.0	91	73	30-150	32	30	R1
1,2,4-Trimethylbenzene	ug/kg	ND	54.3	49.2	51.6	40.2	95	82	34-150	25	30	
1,2-Dibromo-3-chloropropane	ug/kg	ND	136	123	105	86.9	77	71	30-150	19	30	
1,2-Dibromoethane (EDB)	ug/kg	ND	54.3	49.2	44.8	39.1	83	79	55-145	14	30	
1,2-Dichlorobenzene	ug/kg	ND	54.3	49.2	48.6	38.8	90	79	30-150	22	30	
1,2-Dichloroethane	ug/kg	ND	54.3	49.2	47.4	40.1	87	82	49-150	17	30	
1,2-Dichloropropane	ug/kg	ND	54.3	49.2	49.4	41.7	91	85	59-146	17	30	
1,3,5-Trimethylbenzene	ug/kg	ND	54.3	49.2	49.8	39.5	92	80	34-150	23	30	
1,3-Dichlorobenzene	ug/kg	ND	54.3	49.2	51.0	39.1	94	79	30-150	26	30	
1,3-Dichloropropane	ug/kg	ND	54.3	49.2	47.2	40.4	87	82	57-145	15	30	
1,4-Dichlorobenzene	ug/kg	ND	54.3	49.2	49.0	38.9	90	79	30-150	23	30	
2,2-Dichloropropane	ug/kg	ND	54.3	49.2	47.7	40.8	88	83	43-150	15	30	
2-Butanone (MEK)	ug/kg	ND	272	247	187	159	67	62	43-150	17	30	
2-Chlorotoluene	ug/kg	ND	54.3	49.2	50.0	40.1	92	81	33-150	22	30	
4-Chlorotoluene	ug/kg	ND	54.3	49.2	50.7	39.7	93	81	33-150	24	30	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	272	247	209	180	77	73	43-150	15	30	
Acetone	ug/kg	67.3	272	247	366	320	110	103	43-150	13	30	
Allyl chloride	ug/kg	ND	54.3	49.2	49.6	42.6	91	86	46-150	15	30	
Benzene	ug/kg	0.15J	54.3	49.2	47.4	39.9	87	81	49-145	17	30	
Bromobenzene	ug/kg	ND	54.3	49.2	48.7	40.0	90	81	35-150	20	30	
Bromochloromethane	ug/kg	ND	54.3	49.2	47.1	40.5	87	82	60-142	15	30	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1617375 1617376

Parameter	Units	10256148009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Bromodichloromethane	ug/kg	ND	54.3	49.2	50.1	42.5	92	86	43-150	16	30	
Bromoform	ug/kg	ND	54.3	49.2	46.7	39.9	86	81	32-150	16	30	
Bromomethane	ug/kg	ND	54.3	49.2	52.7	46.9	97	95	46-150	12	30	
Carbon tetrachloride	ug/kg	ND	54.3	49.2	47.5	40.9	87	83	38-150	15	30	
Chlorobenzene	ug/kg	ND	54.3	49.2	48.9	41.5	90	84	40-150	16	30	
Chloroethane	ug/kg	ND	54.3	49.2	68.7	60.5	127	123	41-150	13	30	
Chloroform	ug/kg	ND	54.3	49.2	49.0	41.6	90	85	55-148	16	30	
Chloromethane	ug/kg	ND	54.3	49.2	50.7	42.7	93	87	30-150	17	30	
cis-1,2-Dichloroethene	ug/kg	ND	54.3	49.2	49.1	41.8	90	85	61-142	16	30	
cis-1,3-Dichloropropene	ug/kg	ND	54.3	49.2	49.6	41.7	91	85	47-148	17	30	
Dibromochloromethane	ug/kg	ND	54.3	49.2	47.8	41.3	88	84	36-150	14	30	
Dibromomethane	ug/kg	ND	54.3	49.2	47.1	40.2	87	82	60-140	16	30	
Dichlorodifluoromethane	ug/kg	ND	54.3	49.2	42.7	37.8	79	77	30-150	12	30	
Dichlorofluoromethane	ug/kg	ND	54.3	49.2	46.9	40.3	86	82	34-150	15	30	
Diethyl ether (Ethyl ether)	ug/kg	ND	54.3	49.2	48.0	40.6	88	82	56-143	17	30	
Ethylbenzene	ug/kg	ND	54.3	49.2	46.1	38.6	85	78	42-148	18	30	
Hexachloro-1,3-butadiene	ug/kg	ND	54.3	49.2	47.8	34.9	88	71	30-150	31	30	R1
Isopropylbenzene (Cumene)	ug/kg	ND	54.3	49.2	47.7	40.0	88	81	30-150	18	30	
Methyl-tert-butyl ether	ug/kg	ND	54.3	49.2	46.6	39.8	86	81	58-147	16	30	
Methylene Chloride	ug/kg	ND	54.3	49.2	46.8	40.4	85	80	53-135	15	30	
n-Butylbenzene	ug/kg	ND	54.3	49.2	52.1	38.1	96	77	30-150	31	30	R1
n-Propylbenzene	ug/kg	ND	54.3	49.2	50.2	39.7	92	81	31-150	23	30	
Naphthalene	ug/kg	ND	54.3	49.2	42.9	33.9	79	69	30-150	24	30	
p-Isopropyltoluene	ug/kg	ND	54.3	49.2	50.6	39.5	93	80	30-150	25	30	
sec-Butylbenzene	ug/kg	ND	54.3	49.2	49.4	39.4	91	80	30-150	22	30	
Styrene	ug/kg	ND	54.3	49.2	46.8	36.2	86	73	33-150	26	30	
tert-Butylbenzene	ug/kg	ND	54.3	49.2	48.9	40.0	90	81	30-150	20	30	
Tetrachloroethene	ug/kg	0.20J	54.3	49.2	49.9	41.2	92	83	38-150	19	30	
Tetrahydrofuran	ug/kg	ND	543	492	618	512	114	104	51-150	19	30	
Toluene	ug/kg	ND	54.3	49.2	45.8	39.4	84	80	44-150	15	30	
trans-1,2-Dichloroethene	ug/kg	ND	54.3	49.2	49.6	42.1	91	85	59-142	17	30	
trans-1,3-Dichloropropene	ug/kg	ND	54.3	49.2	49.1	42.0	90	85	45-150	16	30	
Trichloroethene	ug/kg	ND	54.3	49.2	49.5	41.5	91	84	48-150	18	30	
Trichlorofluoromethane	ug/kg	ND	54.3	49.2	44.9	39.6	83	80	32-150	13	30	
Vinyl chloride	ug/kg	ND	54.3	49.2	46.1	39.9	85	81	34-150	14	30	
Xylene (Total)	ug/kg	ND	162	148	148	124	91	84	42-150	17	30	
1,2-Dichloroethane-d4 (S)	%.						92	92	30-150			
4-Bromofluorobenzene (S)	%.						101	99	30-150			
Toluene-d8 (S)	%.						100	101	30-150			

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

QC Batch: MSV/26266 Analysis Method: EPA 8260
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV 5030 Med Level
Associated Lab Samples: 10256148013

METHOD BLANK: 1618515 Matrix: Solid
Associated Lab Samples: 10256148013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	250	02/03/14 14:33	
1,1,1-Trichloroethane	ug/kg	ND	250	02/03/14 14:33	
1,1,2,2-Tetrachloroethane	ug/kg	ND	250	02/03/14 14:33	
1,1,2-Trichloroethane	ug/kg	ND	250	02/03/14 14:33	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	250	02/03/14 14:33	
1,1-Dichloroethane	ug/kg	ND	250	02/03/14 14:33	
1,1-Dichloroethene	ug/kg	ND	250	02/03/14 14:33	
1,1-Dichloropropene	ug/kg	ND	250	02/03/14 14:33	
1,2,3-Trichlorobenzene	ug/kg	ND	250	02/03/14 14:33	
1,2,3-Trichloropropane	ug/kg	ND	250	02/03/14 14:33	
1,2,4-Trichlorobenzene	ug/kg	ND	250	02/03/14 14:33	
1,2,4-Trimethylbenzene	ug/kg	ND	250	02/03/14 14:33	
1,2-Dibromo-3-chloropropane	ug/kg	ND	500	02/03/14 14:33	
1,2-Dibromoethane (EDB)	ug/kg	ND	250	02/03/14 14:33	
1,2-Dichlorobenzene	ug/kg	ND	250	02/03/14 14:33	
1,2-Dichloroethane	ug/kg	ND	250	02/03/14 14:33	
1,2-Dichloropropane	ug/kg	ND	250	02/03/14 14:33	
1,3,5-Trimethylbenzene	ug/kg	ND	250	02/03/14 14:33	
1,3-Dichlorobenzene	ug/kg	ND	250	02/03/14 14:33	
1,3-Dichloropropane	ug/kg	ND	250	02/03/14 14:33	
1,4-Dichlorobenzene	ug/kg	ND	250	02/03/14 14:33	
2,2-Dichloropropane	ug/kg	ND	250	02/03/14 14:33	
2-Butanone (MEK)	ug/kg	ND	1200	02/03/14 14:33	
2-Chlorotoluene	ug/kg	ND	250	02/03/14 14:33	
4-Chlorotoluene	ug/kg	ND	250	02/03/14 14:33	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	1200	02/03/14 14:33	
Acetone	ug/kg	ND	1250	02/03/14 14:33	
Allyl chloride	ug/kg	ND	2500	02/03/14 14:33	
Benzene	ug/kg	ND	20.0	02/03/14 14:33	
Bromobenzene	ug/kg	ND	250	02/03/14 14:33	
Bromochloromethane	ug/kg	ND	250	02/03/14 14:33	
Bromodichloromethane	ug/kg	ND	250	02/03/14 14:33	
Bromoform	ug/kg	ND	250	02/03/14 14:33	
Bromomethane	ug/kg	ND	500	02/03/14 14:33	
Carbon tetrachloride	ug/kg	ND	250	02/03/14 14:33	
Chlorobenzene	ug/kg	ND	250	02/03/14 14:33	
Chloroethane	ug/kg	ND	500	02/03/14 14:33	
Chloroform	ug/kg	ND	250	02/03/14 14:33	
Chloromethane	ug/kg	ND	500	02/03/14 14:33	
cis-1,2-Dichloroethene	ug/kg	ND	250	02/03/14 14:33	
cis-1,3-Dichloropropene	ug/kg	ND	250	02/03/14 14:33	
Dibromochloromethane	ug/kg	ND	250	02/03/14 14:33	
Dibromomethane	ug/kg	ND	250	02/03/14 14:33	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

METHOD BLANK: 1618515 Matrix: Solid
Associated Lab Samples: 10256148013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/kg	ND	500	02/03/14 14:33	
Dichlorofluoromethane	ug/kg	ND	500	02/03/14 14:33	
Diethyl ether (Ethyl ether)	ug/kg	ND	2500	02/03/14 14:33	
Ethylbenzene	ug/kg	ND	50.0	02/03/14 14:33	
Hexachloro-1,3-butadiene	ug/kg	ND	250	02/03/14 14:33	
Isopropylbenzene (Cumene)	ug/kg	ND	250	02/03/14 14:33	
Methyl-tert-butyl ether	ug/kg	ND	50.0	02/03/14 14:33	
Methylene Chloride	ug/kg	ND	250	02/03/14 14:33	
n-Butylbenzene	ug/kg	ND	250	02/03/14 14:33	
n-Propylbenzene	ug/kg	ND	250	02/03/14 14:33	
Naphthalene	ug/kg	ND	250	02/03/14 14:33	
p-Isopropyltoluene	ug/kg	ND	250	02/03/14 14:33	
sec-Butylbenzene	ug/kg	ND	250	02/03/14 14:33	
Styrene	ug/kg	ND	250	02/03/14 14:33	
tert-Butylbenzene	ug/kg	ND	250	02/03/14 14:33	
Tetrachloroethene	ug/kg	ND	250	02/03/14 14:33	
Tetrahydrofuran	ug/kg	ND	2500	02/03/14 14:33	
Toluene	ug/kg	ND	50.0	02/03/14 14:33	
trans-1,2-Dichloroethene	ug/kg	ND	250	02/03/14 14:33	
trans-1,3-Dichloropropene	ug/kg	ND	250	02/03/14 14:33	
Trichloroethene	ug/kg	ND	250	02/03/14 14:33	
Trichlorofluoromethane	ug/kg	ND	500	02/03/14 14:33	
Vinyl chloride	ug/kg	ND	500	02/03/14 14:33	
Xylene (Total)	ug/kg	ND	150	02/03/14 14:33	
1,2-Dichloroethane-d4 (S)	%.	80	74-125	02/03/14 14:33	
4-Bromofluorobenzene (S)	%.	95	75-125	02/03/14 14:33	
Toluene-d8 (S)	%.	100	75-125	02/03/14 14:33	

LABORATORY CONTROL SAMPLE: 1618516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	1000	1040	104	68-125	
1,1,1-Trichloroethane	ug/kg	1000	819	82	62-125	
1,1,2,2-Tetrachloroethane	ug/kg	1000	938	94	61-127	
1,1,2-Trichloroethane	ug/kg	1000	984	98	70-125	
1,1,2-Trichlorotrifluoroethane	ug/kg	1000	799	80	56-149	
1,1-Dichloroethane	ug/kg	1000	858	86	60-127	
1,1-Dichloroethene	ug/kg	1000	845	85	63-125	
1,1-Dichloropropene	ug/kg	1000	833	83	67-125	
1,2,3-Trichlorobenzene	ug/kg	1000	904	90	63-132	
1,2,3-Trichloropropane	ug/kg	1000	887	89	67-125	
1,2,4-Trichlorobenzene	ug/kg	1000	941	94	64-132	
1,2,4-Trimethylbenzene	ug/kg	1000	885	89	64-125	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2560	102	56-132	
1,2-Dibromoethane (EDB)	ug/kg	1000	982	98	72-125	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

LABORATORY CONTROL SAMPLE: 1618516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichlorobenzene	ug/kg	1000	955	95	68-125	
1,2-Dichloroethane	ug/kg	1000	783	78	69-125	
1,2-Dichloropropane	ug/kg	1000	947	95	73-125	
1,3,5-Trimethylbenzene	ug/kg	1000	885	89	64-125	
1,3-Dichlorobenzene	ug/kg	1000	936	94	67-125	
1,3-Dichloropropane	ug/kg	1000	948	95	71-125	
1,4-Dichlorobenzene	ug/kg	1000	946	95	69-125	
2,2-Dichloropropane	ug/kg	1000	863	86	53-131	
2-Butanone (MEK)	ug/kg	5000	4540	91	52-131	
2-Chlorotoluene	ug/kg	1000	868	87	66-125	
4-Chlorotoluene	ug/kg	1000	884	88	52-131	
4-Methyl-2-pentanone (MIBK)	ug/kg	5000	4630	93	64-125	
Acetone	ug/kg	5000	5890	118	42-150	
Allyl chloride	ug/kg	1000	887J	89	58-128	
Benzene	ug/kg	1000	888	89	71-125	
Bromobenzene	ug/kg	1000	947	95	69-125	
Bromochloromethane	ug/kg	1000	964	96	75-125	
Bromodichloromethane	ug/kg	1000	938	94	69-125	
Bromoform	ug/kg	1000	1130	113	62-125	
Bromomethane	ug/kg	1000	1100	110	62-125	
Carbon tetrachloride	ug/kg	1000	875	88	66-125	
Chlorobenzene	ug/kg	1000	948	95	75-125	
Chloroethane	ug/kg	1000	792	79	61-125	
Chloroform	ug/kg	1000	836	84	72-125	
Chloromethane	ug/kg	1000	726	73	59-125	
cis-1,2-Dichloroethene	ug/kg	1000	892	89	74-125	
cis-1,3-Dichloropropene	ug/kg	1000	982	98	68-125	
Dibromochloromethane	ug/kg	1000	1040	104	65-125	
Dibromomethane	ug/kg	1000	1070	107	72-125	
Dichlorodifluoromethane	ug/kg	1000	558	56	39-125	
Dichlorofluoromethane	ug/kg	1000	1040	104	64-127	CH
Diethyl ether (Ethyl ether)	ug/kg	1000	817J	82	66-125	
Ethylbenzene	ug/kg	1000	894	89	69-125	
Hexachloro-1,3-butadiene	ug/kg	1000	1010	101	53-150	
Isopropylbenzene (Cumene)	ug/kg	1000	931	93	70-125	
Methyl-tert-butyl ether	ug/kg	1000	878	88	69-125	
Methylene Chloride	ug/kg	1000	936	94	71-125	
n-Butylbenzene	ug/kg	1000	875	87	59-133	
n-Propylbenzene	ug/kg	1000	869	87	64-125	
Naphthalene	ug/kg	1000	836	84	61-131	
p-Isopropyltoluene	ug/kg	1000	912	91	63-127	
sec-Butylbenzene	ug/kg	1000	875	87	64-125	
Styrene	ug/kg	1000	987	99	74-125	
tert-Butylbenzene	ug/kg	1000	900	90	66-125	
Tetrachloroethene	ug/kg	1000	961	96	68-125	
Tetrahydrofuran	ug/kg	10000	10900	109	68-125	
Toluene	ug/kg	1000	918	92	70-125	
trans-1,2-Dichloroethene	ug/kg	1000	915	91	68-125	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

LABORATORY CONTROL SAMPLE: 1618516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,3-Dichloropropene	ug/kg	1000	974	97	70-125	
Trichloroethene	ug/kg	1000	955	96	71-125	
Trichlorofluoromethane	ug/kg	1000	937	94	62-132	
Vinyl chloride	ug/kg	1000	793	79	55-125	
Xylene (Total)	ug/kg	3000	2900	97	74-125	
1,2-Dichloroethane-d4 (S)	%.			84	74-125	
4-Bromofluorobenzene (S)	%.			93	75-125	
Toluene-d8 (S)	%.			98	75-125	

MATRIX SPIKE SAMPLE: 1618517

Parameter	Units	10256574001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	1200	1270	106	63-140	
1,1,1-Trichloroethane	ug/kg	ND	1200	1000	84	54-149	
1,1,2,2-Tetrachloroethane	ug/kg	ND	1200	1180	99	46-150	
1,1,2-Trichloroethane	ug/kg	ND	1200	1220	102	62-141	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	1200	1010	84	65-150	
1,1-Dichloroethane	ug/kg	ND	1200	1060	88	57-145	
1,1-Dichloroethene	ug/kg	ND	1200	1040	87	58-137	
1,1-Dichloropropene	ug/kg	ND	1200	992	83	61-141	
1,2,3-Trichlorobenzene	ug/kg	ND	1200	1210	101	62-147	
1,2,3-Trichloropropane	ug/kg	ND	1200	1180	98	65-141	
1,2,4-Trichlorobenzene	ug/kg	ND	1200	1230	103	64-147	
1,2,4-Trimethylbenzene	ug/kg	ND	1200	1120	92	59-144	
1,2-Dibromo-3-chloropropane	ug/kg	ND	3000	3160	105	56-147	
1,2-Dibromoethane (EDB)	ug/kg	ND	1200	1220	102	66-135	
1,2-Dichlorobenzene	ug/kg	ND	1200	1180	98	63-143	
1,2-Dichloroethane	ug/kg	ND	1200	988	83	57-145	
1,2-Dichloropropane	ug/kg	ND	1200	1200	100	62-139	
1,3,5-Trimethylbenzene	ug/kg	ND	1200	1110	92	60-144	
1,3-Dichlorobenzene	ug/kg	ND	1200	1160	97	61-146	
1,3-Dichloropropane	ug/kg	ND	1200	1190	99	63-138	
1,4-Dichlorobenzene	ug/kg	ND	1200	1160	97	60-145	
2,2-Dichloropropane	ug/kg	ND	1200	1030	86	54-143	
2-Butanone (MEK)	ug/kg	ND	5990	5760	96	45-150	
2-Chlorotoluene	ug/kg	ND	1200	1080	90	62-140	
4-Chlorotoluene	ug/kg	ND	1200	1090	91	60-143	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	5990	5920	99	58-146	
Acetone	ug/kg	ND	5990	7640	128	30-150	
Allyl chloride	ug/kg	ND	1200	1080J	90	55-142	
Benzene	ug/kg	ND	1200	1100	92	61-134	
Bromobenzene	ug/kg	ND	1200	1160	97	64-143	
Bromochloromethane	ug/kg	ND	1200	1180	98	62-141	
Bromodichloromethane	ug/kg	ND	1200	1130	95	57-146	
Bromoform	ug/kg	ND	1200	1390	116	60-136	
Bromomethane	ug/kg	ND	1200	1360	110	54-141	
Carbon tetrachloride	ug/kg	ND	1200	1050	88	50-150	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

MATRIX SPIKE SAMPLE: 1618517

Parameter	Units	10256574001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chlorobenzene	ug/kg	ND	1200	1180	99	67-135	
Chloroethane	ug/kg	ND	1200	931	78	46-150	
Chloroform	ug/kg	ND	1200	1050	88	60-141	
Chloromethane	ug/kg	ND	1200	843	70	46-133	
cis-1,2-Dichloroethene	ug/kg	ND	1200	1110	93	64-138	
cis-1,3-Dichloropropene	ug/kg	ND	1200	1200	100	64-138	
Dibromochloromethane	ug/kg	ND	1200	1330	111	56-145	
Dibromomethane	ug/kg	ND	1200	1310	109	62-138	
Dichlorodifluoromethane	ug/kg	ND	1200	661	55	30-136	
Dichlorofluoromethane	ug/kg	ND	1200	1230	103	47-150	CH
Diethyl ether (Ethyl ether)	ug/kg	ND	1200	1090J	90	59-137	
Ethylbenzene	ug/kg	ND	1200	1100	91	63-135	
Hexachloro-1,3-butadiene	ug/kg	ND	1200	1740	144	65-150	
Isopropylbenzene (Cumene)	ug/kg	ND	1200	1130	95	65-137	
Methyl-tert-butyl ether	ug/kg	ND	1200	1090	91	56-143	
Methylene Chloride	ug/kg	ND	1200	1140	95	62-133	
n-Butylbenzene	ug/kg	ND	1200	1140	94	58-148	
n-Propylbenzene	ug/kg	ND	1200	1080	90	60-142	
Naphthalene	ug/kg	ND	1200	1060	87	61-146	
p-Isopropyltoluene	ug/kg	ND	1200	1160	97	61-145	
sec-Butylbenzene	ug/kg	ND	1200	1130	94	57-147	
Styrene	ug/kg	ND	1200	1220	102	67-137	
tert-Butylbenzene	ug/kg	ND	1200	1150	96	57-149	
Tetrachloroethene	ug/kg	ND	1200	1190	99	66-138	
Tetrahydrofuran	ug/kg	ND	12000	14500	121	53-145	
Toluene	ug/kg	ND	1200	1140	94	67-132	
trans-1,2-Dichloroethene	ug/kg	ND	1200	1080	90	61-136	
trans-1,3-Dichloropropene	ug/kg	ND	1200	1230	102	60-140	
Trichloroethene	ug/kg	ND	1200	1160	97	58-150	
Trichlorofluoromethane	ug/kg	ND	1200	1170	97	53-150	
Vinyl chloride	ug/kg	ND	1200	937	78	45-139	
Xylene (Total)	ug/kg	ND	3600	3550	99	66-136	
1,2-Dichloroethane-d4 (S)	%.				84	74-125	
4-Bromofluorobenzene (S)	%.				94	75-125	
Toluene-d8 (S)	%.				99	75-125	

SAMPLE DUPLICATE: 1618518

Parameter	Units	10256574003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	ND		30	
1,1,1-Trichloroethane	ug/kg	ND	ND		30	
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND		30	
1,1,2-Trichloroethane	ug/kg	ND	ND		30	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	ND		30	
1,1-Dichloroethane	ug/kg	ND	ND		30	
1,1-Dichloroethene	ug/kg	ND	ND		30	
1,1-Dichloropropene	ug/kg	ND	ND		30	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

SAMPLE DUPLICATE: 1618518

Parameter	Units	10256574003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,3-Trichlorobenzene	ug/kg	ND	ND		30	
1,2,3-Trichloropropane	ug/kg	ND	ND		30	
1,2,4-Trichlorobenzene	ug/kg	ND	ND		30	
1,2,4-Trimethylbenzene	ug/kg	ND	ND		30	
1,2-Dibromo-3-chloropropane	ug/kg	ND	ND		30	
1,2-Dibromoethane (EDB)	ug/kg	ND	ND		30	
1,2-Dichlorobenzene	ug/kg	ND	ND		30	
1,2-Dichloroethane	ug/kg	ND	ND		30	
1,2-Dichloropropane	ug/kg	ND	ND		30	
1,3,5-Trimethylbenzene	ug/kg	ND	ND		30	
1,3-Dichlorobenzene	ug/kg	ND	ND		30	
1,3-Dichloropropane	ug/kg	ND	ND		30	
1,4-Dichlorobenzene	ug/kg	ND	ND		30	
2,2-Dichloropropane	ug/kg	ND	ND		30	
2-Butanone (MEK)	ug/kg	ND	ND		30	
2-Chlorotoluene	ug/kg	ND	ND		30	
4-Chlorotoluene	ug/kg	ND	ND		30	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND		30	
Acetone	ug/kg	ND	ND		30	
Allyl chloride	ug/kg	ND	ND		30	
Benzene	ug/kg	ND	ND		30	
Bromobenzene	ug/kg	ND	ND		30	
Bromochloromethane	ug/kg	ND	ND		30	
Bromodichloromethane	ug/kg	ND	ND		30	
Bromoform	ug/kg	ND	ND		30	
Bromomethane	ug/kg	ND	ND		30	
Carbon tetrachloride	ug/kg	ND	ND		30	
Chlorobenzene	ug/kg	ND	ND		30	
Chloroethane	ug/kg	ND	ND		30	
Chloroform	ug/kg	ND	ND		30	
Chloromethane	ug/kg	ND	ND		30	
cis-1,2-Dichloroethene	ug/kg	ND	ND		30	
cis-1,3-Dichloropropene	ug/kg	ND	ND		30	
Dibromochloromethane	ug/kg	ND	ND		30	
Dibromomethane	ug/kg	ND	ND		30	
Dichlorodifluoromethane	ug/kg	ND	ND		30	
Dichlorofluoromethane	ug/kg	ND	ND		30	
Diethyl ether (Ethyl ether)	ug/kg	ND	ND		30	
Ethylbenzene	ug/kg	ND	ND		30	
Hexachloro-1,3-butadiene	ug/kg	ND	ND		30	
Isopropylbenzene (Cumene)	ug/kg	ND	ND		30	
Methyl-tert-butyl ether	ug/kg	ND	ND		30	
Methylene Chloride	ug/kg	ND	ND		30	
n-Butylbenzene	ug/kg	ND	ND		30	
n-Propylbenzene	ug/kg	ND	ND		30	
Naphthalene	ug/kg	ND	ND		30	
p-Isopropyltoluene	ug/kg	ND	ND		30	
sec-Butylbenzene	ug/kg	ND	ND		30	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

SAMPLE DUPLICATE: 1618518

Parameter	Units	10256574003 Result	Dup Result	RPD	Max RPD	Qualifiers
Styrene	ug/kg	ND	4.7J		30	
tert-Butylbenzene	ug/kg	ND	ND		30	
Tetrachloroethene	ug/kg	ND	ND		30	
Tetrahydrofuran	ug/kg	ND	ND		30	
Toluene	ug/kg	ND	ND		30	
trans-1,2-Dichloroethene	ug/kg	ND	ND		30	
trans-1,3-Dichloropropene	ug/kg	ND	ND		30	
Trichloroethene	ug/kg	ND	ND		30	
Trichlorofluoromethane	ug/kg	ND	ND		30	
Vinyl chloride	ug/kg	ND	ND		30	
Xylene (Total)	ug/kg	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%.	83	86	4		
4-Bromofluorobenzene (S)	%.	91	91	.5		
Toluene-d8 (S)	%.	104	102	2		

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

QC Batch: OEXT/24241 Analysis Method: EPA 8015 Modified
QC Batch Method: EPA 3550 Sonication Analysis Description: 8015 Solid GCSV
Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008, 10256148009, 10256148010, 10256148011

METHOD BLANK: 1616437 Matrix: Solid
Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008, 10256148009, 10256148010, 10256148011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO (C10-C28)	mg/kg	2.0J	10.0	02/02/14 18:52	
n-Triacontane (S)	%.	93	30-147	02/02/14 18:52	
o-Terphenyl (S)	%.	98	30-150	02/02/14 18:52	

LABORATORY CONTROL SAMPLE: 1616438

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO (C10-C28)	mg/kg	50	50.8	102	70-125	
n-Triacontane (S)	%.			92	30-147	
o-Terphenyl (S)	%.			97	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1616439 1616440

Parameter	Units	10256148001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-DRO (C10-C28)	mg/kg	16.6	57.5	58	53.7	66.6	65	86	30-150	21	30	
n-Triacontane (S)	%.						91	91	30-147			
o-Terphenyl (S)	%.						95	97	30-150			

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

QC Batch: OEXT/24255 Analysis Method: EPA 8270
QC Batch Method: EPA 3550 Analysis Description: 8270 Solid MSSV
Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008, 10256148009, 10256148010, 10256148011

METHOD BLANK: 1617223 Matrix: Solid
Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008, 10256148009, 10256148010, 10256148011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	01/31/14 07:49	
1,2-Dichlorobenzene	ug/kg	ND	330	01/31/14 07:49	
1,2-Diphenylhydrazine	ug/kg	ND	330	01/31/14 07:49	
1,3-Dichlorobenzene	ug/kg	ND	330	01/31/14 07:49	
1,4-Dichlorobenzene	ug/kg	ND	330	01/31/14 07:49	
1-Methylnaphthalene	ug/kg	ND	330	01/31/14 07:49	
2,4,5-Trichlorophenol	ug/kg	ND	330	01/31/14 07:49	
2,4,6-Trichlorophenol	ug/kg	ND	330	01/31/14 07:49	
2,4-Dichlorophenol	ug/kg	ND	330	01/31/14 07:49	
2,4-Dimethylphenol	ug/kg	ND	330	01/31/14 07:49	
2,4-Dinitrophenol	ug/kg	ND	330	01/31/14 07:49	
2,4-Dinitrotoluene	ug/kg	ND	330	01/31/14 07:49	
2,6-Dinitrotoluene	ug/kg	ND	330	01/31/14 07:49	
2-Chloronaphthalene	ug/kg	ND	330	01/31/14 07:49	
2-Chlorophenol	ug/kg	ND	330	01/31/14 07:49	
2-Methylnaphthalene	ug/kg	ND	330	01/31/14 07:49	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	01/31/14 07:49	
2-Nitroaniline	ug/kg	ND	330	01/31/14 07:49	
2-Nitrophenol	ug/kg	ND	330	01/31/14 07:49	
3&4-Methylphenol	ug/kg	ND	660	01/31/14 07:49	
3,3'-Dichlorobenzidine	ug/kg	ND	330	01/31/14 07:49	
3-Nitroaniline	ug/kg	ND	330	01/31/14 07:49	
4,6-Dinitro-2-methylphenol	ug/kg	ND	1700	01/31/14 07:49	
4-Bromophenylphenyl ether	ug/kg	ND	330	01/31/14 07:49	
4-Chloro-3-methylphenol	ug/kg	ND	330	01/31/14 07:49	
4-Chloroaniline	ug/kg	ND	330	01/31/14 07:49	
4-Chlorophenylphenyl ether	ug/kg	ND	330	01/31/14 07:49	
4-Nitroaniline	ug/kg	ND	330	01/31/14 07:49	
4-Nitrophenol	ug/kg	ND	330	01/31/14 07:49	
Acenaphthene	ug/kg	ND	330	01/31/14 07:49	
Acenaphthylene	ug/kg	ND	330	01/31/14 07:49	
Anthracene	ug/kg	ND	330	01/31/14 07:49	
Benzo(a)anthracene	ug/kg	ND	330	01/31/14 07:49	
Benzo(a)pyrene	ug/kg	ND	330	01/31/14 07:49	
Benzo(b)fluoranthene	ug/kg	ND	330	01/31/14 07:49	
Benzo(g,h,i)perylene	ug/kg	ND	330	01/31/14 07:49	
Benzo(k)fluoranthene	ug/kg	ND	330	01/31/14 07:49	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	01/31/14 07:49	
bis(2-Chloroethyl) ether	ug/kg	ND	330	01/31/14 07:49	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	01/31/14 07:49	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	01/31/14 07:49	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

METHOD BLANK: 1617223 Matrix: Solid

Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008, 10256148009, 10256148010, 10256148011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Butylbenzylphthalate	ug/kg	ND	330	01/31/14 07:49	
Carbazole	ug/kg	ND	330	01/31/14 07:49	
Chrysene	ug/kg	ND	330	01/31/14 07:49	
Di-n-butylphthalate	ug/kg	ND	330	01/31/14 07:49	
Di-n-octylphthalate	ug/kg	ND	330	01/31/14 07:49	
Dibenz(a,h)anthracene	ug/kg	ND	330	01/31/14 07:49	
Dibenzofuran	ug/kg	ND	330	01/31/14 07:49	
Diethylphthalate	ug/kg	ND	330	01/31/14 07:49	
Dimethylphthalate	ug/kg	ND	330	01/31/14 07:49	
Fluoranthene	ug/kg	ND	330	01/31/14 07:49	
Fluorene	ug/kg	ND	330	01/31/14 07:49	
Hexachloro-1,3-butadiene	ug/kg	ND	330	01/31/14 07:49	
Hexachlorobenzene	ug/kg	ND	330	01/31/14 07:49	
Hexachloroethane	ug/kg	ND	330	01/31/14 07:49	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	330	01/31/14 07:49	
Isophorone	ug/kg	ND	330	01/31/14 07:49	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	01/31/14 07:49	
N-Nitrosodimethylamine	ug/kg	ND	330	01/31/14 07:49	
N-Nitrosodiphenylamine	ug/kg	ND	330	01/31/14 07:49	
Naphthalene	ug/kg	ND	330	01/31/14 07:49	
Nitrobenzene	ug/kg	ND	330	01/31/14 07:49	
Pentachlorophenol	ug/kg	ND	670	01/31/14 07:49	
Phenanthrene	ug/kg	ND	330	01/31/14 07:49	
Phenol	ug/kg	ND	330	01/31/14 07:49	
Pyrene	ug/kg	ND	330	01/31/14 07:49	
2,4,6-Tribromophenol (S)	%.	80	41-125	01/31/14 07:49	
2-Fluorobiphenyl (S)	%.	72	46-125	01/31/14 07:49	
2-Fluorophenol (S)	%.	73	31-125	01/31/14 07:49	
Nitrobenzene-d5 (S)	%.	64	30-125	01/31/14 07:49	
Phenol-d6 (S)	%.	73	38-125	01/31/14 07:49	
Terphenyl-d14 (S)	%.	86	64-125	01/31/14 07:49	

LABORATORY CONTROL SAMPLE: 1617224

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1250	75	40-125	
1,2-Dichlorobenzene	ug/kg	1670	1250	75	32-125	
1,2-Diphenylhydrazine	ug/kg	1670	1330	80	63-125	
1,3-Dichlorobenzene	ug/kg	1670	1210	72	31-125	
1,4-Dichlorobenzene	ug/kg	1670	1230	74	30-125	
1-Methylnaphthalene	ug/kg	1670	1260	76	54-125	
2,4,5-Trichlorophenol	ug/kg	1670	1340	80	63-125	
2,4,6-Trichlorophenol	ug/kg	1670	1320	79	62-125	
2,4-Dichlorophenol	ug/kg	1670	1280	77	56-125	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

LABORATORY CONTROL SAMPLE: 1617224

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,4-Dimethylphenol	ug/kg	1670	1270	76	55-125	
2,4-Dinitrophenol	ug/kg	1670	999	60	30-129	
2,4-Dinitrotoluene	ug/kg	1670	1360	82	61-125	
2,6-Dinitrotoluene	ug/kg	1670	1310	78	63-125	
2-Chloronaphthalene	ug/kg	1670	1290	77	60-125	
2-Chlorophenol	ug/kg	1670	1270	76	37-125	
2-Methylnaphthalene	ug/kg	1670	1280	77	56-125	
2-Methylphenol(o-Cresol)	ug/kg	1670	1280	77	45-125	
2-Nitroaniline	ug/kg	1670	1330	80	63-125	
2-Nitrophenol	ug/kg	1670	1250	75	47-125	
3&4-Methylphenol	ug/kg	1670	1320	79	50-125	
3,3'-Dichlorobenzidine	ug/kg	1670	975	59	49-125	
3-Nitroaniline	ug/kg	1670	1070	64	48-125	
4,6-Dinitro-2-methylphenol	ug/kg	1670	1080J	65	39-125	
4-Bromophenylphenyl ether	ug/kg	1670	1380	83	65-125	
4-Chloro-3-methylphenol	ug/kg	1670	1320	79	63-125	
4-Chloroaniline	ug/kg	1670	769	46	30-125	
4-Chlorophenylphenyl ether	ug/kg	1670	1330	80	66-125	
4-Nitroaniline	ug/kg	1670	1250	75	60-125	
4-Nitrophenol	ug/kg	1670	1320	79	59-125	
Acenaphthene	ug/kg	1670	1300	78	62-125	
Acenaphthylene	ug/kg	1670	1280	77	64-125	
Anthracene	ug/kg	1670	1340	80	66-125	
Benzo(a)anthracene	ug/kg	1670	1330	80	66-125	
Benzo(a)pyrene	ug/kg	1670	1320	79	66-125	
Benzo(b)fluoranthene	ug/kg	1670	1360	82	65-125	
Benzo(g,h,i)perylene	ug/kg	1670	1340	80	67-125	
Benzo(k)fluoranthene	ug/kg	1670	1320	79	66-125	
bis(2-Chloroethoxy)methane	ug/kg	1670	1250	75	51-125	
bis(2-Chloroethyl) ether	ug/kg	1670	1250	75	30-125	
bis(2-Chloroisopropyl) ether	ug/kg	1670	1230	74	30-125	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1370	82	68-125	
Butylbenzylphthalate	ug/kg	1670	1350	81	67-125	
Carbazole	ug/kg	1670	1340	81	63-125	
Chrysene	ug/kg	1670	1350	81	67-125	
Di-n-butylphthalate	ug/kg	1670	1350	81	68-125	
Di-n-octylphthalate	ug/kg	1670	1360	82	65-125	
Dibenz(a,h)anthracene	ug/kg	1670	1340	81	67-125	
Dibenzofuran	ug/kg	1670	1320	79	64-125	
Diethylphthalate	ug/kg	1670	1320	79	65-125	
Dimethylphthalate	ug/kg	1670	1320	79	66-125	
Fluoranthene	ug/kg	1670	1330	80	66-125	
Fluorene	ug/kg	1670	1320	79	64-125	
Hexachloro-1,3-butadiene	ug/kg	1670	1230	74	33-125	
Hexachlorobenzene	ug/kg	1670	1320	79	65-125	
Hexachloroethane	ug/kg	1670	1230	74	30-125	
Indeno(1,2,3-cd)pyrene	ug/kg	1670	1330	80	67-125	
Isophorone	ug/kg	1670	1250	75	56-125	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

LABORATORY CONTROL SAMPLE: 1617224

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
N-Nitroso-di-n-propylamine	ug/kg	1670	1260	76	45-125	
N-Nitrosodimethylamine	ug/kg	1670	1200	72	30-125	
N-Nitrosodiphenylamine	ug/kg	1670	1340	80	65-125	
Naphthalene	ug/kg	1670	1250	75	44-125	
Nitrobenzene	ug/kg	1670	1250	75	39-125	
Pentachlorophenol	ug/kg	1670	1190	72	45-125	
Phenanthrene	ug/kg	1670	1340	80	66-125	
Phenol	ug/kg	1670	1290	77	44-125	
Pyrene	ug/kg	1670	1360	81	67-125	
2,4,6-Tribromophenol (S)	%.			84	41-125	
2-Fluorobiphenyl (S)	%.			75	46-125	
2-Fluorophenol (S)	%.			76	31-125	
Nitrobenzene-d5 (S)	%.			67	30-125	
Phenol-d6 (S)	%.			76	38-125	
Terphenyl-d14 (S)	%.			79	64-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1617225 1617226

Parameter	Units	10256148009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	ND	2010	2010	1500	1440	75	72	38-125	4	30	
1,2-Dichlorobenzene	ug/kg	ND	2010	2010	1490	1420	74	71	42-125	5	30	
1,2-Diphenylhydrazine	ug/kg	ND	2010	2010	1560	1530	78	76	58-125	3	30	
1,3-Dichlorobenzene	ug/kg	ND	2010	2010	1440	1390	72	69	32-125	4	30	
1,4-Dichlorobenzene	ug/kg	ND	2010	2010	1450	1420	72	71	31-125	2	30	
1-Methylnaphthalene	ug/kg	ND	2010	2010	1510	1470	75	73	56-125	3	30	
2,4,5-Trichlorophenol	ug/kg	ND	2010	2010	1580	1570	79	78	56-125	7	30	
2,4,6-Trichlorophenol	ug/kg	ND	2010	2010	1590	1560	79	78	57-125	2	30	
2,4-Dichlorophenol	ug/kg	ND	2010	2010	1530	1520	77	76	55-125	1	30	
2,4-Dimethylphenol	ug/kg	ND	2010	2010	1520	1490	76	74	55-125	2	30	
2,4-Dinitrophenol	ug/kg	ND	2010	2010	853	906	43	45	30-127	6	30	
2,4-Dinitrotoluene	ug/kg	ND	2010	2010	1620	1630	81	81	36-129	5	30	
2,6-Dinitrotoluene	ug/kg	ND	2010	2010	1620	1560	81	78	37-127	4	30	
2-Chloronaphthalene	ug/kg	ND	2010	2010	1530	1510	76	75	56-125	1	30	
2-Chlorophenol	ug/kg	ND	2010	2010	1480	1450	74	72	46-125	2	30	
2-Methylnaphthalene	ug/kg	ND	2010	2010	1540	1480	77	74	54-125	4	30	
2-Methylphenol(o-Cresol)	ug/kg	ND	2010	2010	1510	1480	75	74	53-125	2	30	
2-Nitroaniline	ug/kg	ND	2010	2010	1540	1480	77	74	59-125	4	30	
2-Nitrophenol	ug/kg	ND	2010	2010	1450	1410	72	70	30-125	3	30	
3&4-Methylphenol	ug/kg	ND	2010	2010	1540	1500	77	75	54-125	2	30	
3,3'-Dichlorobenzidine	ug/kg	ND	2010	2010	1110	1270	56	63	30-148	13	30	
3-Nitroaniline	ug/kg	ND	2010	2010	1120	1250	56	62	31-125	11	30	
4,6-Dinitro-2-methylphenol	ug/kg	ND	2010	2010	1030J	1110J	51	55	30-150		30	
4-Bromophenylphenyl ether	ug/kg	ND	2010	2010	1580	1600	79	80	59-125	1	30	
4-Chloro-3-methylphenol	ug/kg	ND	2010	2010	1600	1530	80	76	62-125	4	30	
4-Chloroaniline	ug/kg	ND	2010	2010	765	875	38	44	30-125	13	30	
4-Chlorophenylphenyl ether	ug/kg	ND	2010	2010	1590	1530	79	76	61-125	4	30	

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1617225 1617226

Parameter	Units	10256148009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
4-Nitroaniline	ug/kg	ND	2010	2010	1470	1470	73	73	53-125	.2	30	
4-Nitrophenol	ug/kg	ND	2010	2010	1430	1490	71	74	45-125	4	30	
Acenaphthene	ug/kg	ND	2010	2010	1520	1510	76	75	58-125	.5	30	
Acenaphthylene	ug/kg	ND	2010	2010	1570	1540	78	77	59-125	2	30	
Anthracene	ug/kg	ND	2010	2010	1570	1570	78	78	54-125	.2	30	
Benzo(a)anthracene	ug/kg	ND	2010	2010	1580	1570	79	78	61-125	1	30	
Benzo(a)pyrene	ug/kg	ND	2010	2010	1580	1560	79	78	41-129	2	30	
Benzo(b)fluoranthene	ug/kg	ND	2010	2010	1580	1560	79	78	43-129	2	30	
Benzo(g,h,i)perylene	ug/kg	ND	2010	2010	1610	1570	80	78	55-125	2	30	
Benzo(k)fluoranthene	ug/kg	ND	2010	2010	1580	1560	79	78	53-125	2	30	
bis(2-Chloroethoxy)methane	ug/kg	ND	2010	2010	1510	1460	75	73	52-125	3	30	
bis(2-Chloroethyl) ether	ug/kg	ND	2010	2010	1430	1360	72	68	30-125	5	30	
bis(2-Chloroisopropyl) ether	ug/kg	ND	2010	2010	1390	1330	69	66	30-127	5	30	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	2010	2010	1600	1610	80	80	67-125	1	30	
Butylbenzylphthalate	ug/kg	ND	2010	2010	1620	1590	81	79	63-125	2	30	
Carbazole	ug/kg	ND	2010	2010	1570	1560	78	78	58-125	.7	30	
Chrysene	ug/kg	ND	2010	2010	1610	1600	80	80	39-133	1	30	
Di-n-butylphthalate	ug/kg	ND	2010	2010	1570	1560	78	78	64-125	.7	30	
Di-n-octylphthalate	ug/kg	ND	2010	2010	1600	1580	80	79	64-125	.7	30	
Dibenz(a,h)anthracene	ug/kg	ND	2010	2010	1590	1570	79	79	58-125	1	30	
Dibenzofuran	ug/kg	ND	2010	2010	1580	1550	79	77	60-125	2	30	
Diethylphthalate	ug/kg	ND	2010	2010	1570	1540	78	77	63-125	2	30	
Dimethylphthalate	ug/kg	ND	2010	2010	1580	1560	79	78	63-125	1	30	
Fluoranthene	ug/kg	ND	2010	2010	1570	1560	78	78	54-125	.7	30	
Fluorene	ug/kg	ND	2010	2010	1590	1540	79	77	60-125	3	30	
Hexachloro-1,3-butadiene	ug/kg	ND	2010	2010	1480	1440	74	72	35-125	3	30	
Hexachlorobenzene	ug/kg	ND	2010	2010	1610	1590	80	79	58-125	.9	30	
Hexachloroethane	ug/kg	ND	2010	2010	1390	1350	69	67	30-125	3	30	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	2010	2010	1610	1560	80	78	51-125	3	30	
Isophorone	ug/kg	ND	2010	2010	1490	1460	74	73	54-125	2	30	
N-Nitroso-di-n-propylamine	ug/kg	ND	2010	2010	1500	1430	75	71	51-125	5	30	
N-Nitrosodimethylamine	ug/kg	ND	2010	2010	1430	1380	71	69	30-130	4	30	
N-Nitrosodiphenylamine	ug/kg	ND	2010	2010	1590	1560	79	78	61-125	2	30	
Naphthalene	ug/kg	ND	2010	2010	1500	1440	75	72	46-125	4	30	
Nitrobenzene	ug/kg	ND	2010	2010	1460	1420	73	71	41-125	2	30	
Pentachlorophenol	ug/kg	ND	2010	2010	1430	1440	71	72	30-136	.5	30	
Phenanthrene	ug/kg	ND	2010	2010	1570	1560	78	78	55-125	.7	30	
Phenol	ug/kg	ND	2010	2010	1500	1460	75	73	49-125	3	30	
Pyrene	ug/kg	ND	2010	2010	1600	1600	80	80	43-129	.2	30	
2,4,6-Tribromophenol (S)	%.						86	85	41-125			
2-Fluorobiphenyl (S)	%.						78	77	46-125			
2-Fluorophenol (S)	%.						76	74	31-125			
Nitrobenzene-d5 (S)	%.						69	68	30-125			
Phenol-d6 (S)	%.						77	74	38-125			
Terphenyl-d14 (S)	%.						82	81	64-125			

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

QC Batch: WET/34549 Analysis Method: EPA 9045
QC Batch Method: EPA 9045 Analysis Description: 9045 pH
Associated Lab Samples: 10256148001, 10256148002, 10256148003, 10256148004, 10256148005, 10256148006, 10256148007, 10256148008

LABORATORY CONTROL SAMPLE: 1633625

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
pH at 25 Degrees C	Std. Units	5	4.9	98	98-102	

SAMPLE DUPLICATE: 1633626

Parameter	Units	10259181001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	2.9	2.8	3	3	

SAMPLE DUPLICATE: 1633627

Parameter	Units	10256148001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.1	8.1	.6	3	H3

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QUALITY CONTROL DATA

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

QC Batch: WET/34603 Analysis Method: EPA 9045
QC Batch Method: EPA 9045 Analysis Description: 9045 pH
Associated Lab Samples: 10256148009, 10256148010, 10256148011

LABORATORY CONTROL SAMPLE: 1635852

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
pH at 25 Degrees C	Std. Units	5	5.0	100	98-102	

SAMPLE DUPLICATE: 1635853

Parameter	Units	10256148009 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.6	7.6	.3	3	

SAMPLE DUPLICATE: 1635854

Parameter	Units	10259041002 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.0	8.0	.9	3	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
H3	Sample was received or analysis requested beyond the recognized method holding time.
R1	RPD value was outside control limits.

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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10256148001	SB-1 2-3'	EPA 3550 Sonication	OEXT/24241	EPA 8015 Modified	GCSV/12762
10256148002	SB-1 20-21'	EPA 3550 Sonication	OEXT/24241	EPA 8015 Modified	GCSV/12762
10256148003	SB-2 2-3'	EPA 3550 Sonication	OEXT/24241	EPA 8015 Modified	GCSV/12762
10256148004	SB-2 22-23'	EPA 3550 Sonication	OEXT/24241	EPA 8015 Modified	GCSV/12762
10256148005	SB-3 3-5'	EPA 3550 Sonication	OEXT/24241	EPA 8015 Modified	GCSV/12762
10256148006	SB-3 25-27'	EPA 3550 Sonication	OEXT/24241	EPA 8015 Modified	GCSV/12762
10256148007	SB-4 2-3.5'	EPA 3550 Sonication	OEXT/24241	EPA 8015 Modified	GCSV/12762
10256148008	SB-4 19-20'	EPA 3550 Sonication	OEXT/24241	EPA 8015 Modified	GCSV/12762
10256148009	SB-5 2-3	EPA 3550 Sonication	OEXT/24241	EPA 8015 Modified	GCSV/12762
10256148010	SB-5 10-12'	EPA 3550 Sonication	OEXT/24241	EPA 8015 Modified	GCSV/12762
10256148011	DUP-001	EPA 3550 Sonication	OEXT/24241	EPA 8015 Modified	GCSV/12762
10256148001	SB-1 2-3'	EPA 5030	GCV/11637	EPA 8015/8021	GCV/11639
10256148002	SB-1 20-21'	EPA 5030	GCV/11637	EPA 8015/8021	GCV/11639
10256148003	SB-2 2-3'	EPA 5030	GCV/11637	EPA 8015/8021	GCV/11639
10256148004	SB-2 22-23'	EPA 5030	GCV/11637	EPA 8015/8021	GCV/11639
10256148005	SB-3 3-5'	EPA 5030	GCV/11637	EPA 8015/8021	GCV/11639
10256148006	SB-3 25-27'	EPA 5030	GCV/11637	EPA 8015/8021	GCV/11639
10256148007	SB-4 2-3.5'	EPA 5030	GCV/11637	EPA 8015/8021	GCV/11639
10256148008	SB-4 19-20'	EPA 5030	GCV/11637	EPA 8015/8021	GCV/11639
10256148009	SB-5 2-3	EPA 5030	GCV/11637	EPA 8015/8021	GCV/11639
10256148010	SB-5 10-12'	EPA 5030	GCV/11637	EPA 8015/8021	GCV/11639
10256148011	DUP-001	EPA 5030	GCV/11637	EPA 8015/8021	GCV/11639
10256148001	SB-1 2-3'	EPA 3050	MPRP/44651	EPA 6010	ICP/18872
10256148002	SB-1 20-21'	EPA 3050	MPRP/44651	EPA 6010	ICP/18872
10256148003	SB-2 2-3'	EPA 3050	MPRP/44651	EPA 6010	ICP/18872
10256148004	SB-2 22-23'	EPA 3050	MPRP/44651	EPA 6010	ICP/18872
10256148005	SB-3 3-5'	EPA 3050	MPRP/44651	EPA 6010	ICP/18872
10256148006	SB-3 25-27'	EPA 3050	MPRP/44651	EPA 6010	ICP/18872
10256148007	SB-4 2-3.5'	EPA 3050	MPRP/44651	EPA 6010	ICP/18872
10256148008	SB-4 19-20'	EPA 3050	MPRP/44651	EPA 6010	ICP/18872
10256148009	SB-5 2-3	EPA 3050	MPRP/44651	EPA 6010	ICP/18872
10256148010	SB-5 10-12'	EPA 3050	MPRP/44651	EPA 6010	ICP/18872
10256148011	DUP-001	EPA 3050	MPRP/44651	EPA 6010	ICP/18872
10256148001	SB-1 2-3'	ASTM D2974	MPRP/44261		
10256148002	SB-1 20-21'	ASTM D2974	MPRP/44261		
10256148003	SB-2 2-3'	ASTM D2974	MPRP/44261		
10256148004	SB-2 22-23'	ASTM D2974	MPRP/44261		
10256148005	SB-3 3-5'	ASTM D2974	MPRP/44261		
10256148006	SB-3 25-27'	ASTM D2974	MPRP/44261		
10256148007	SB-4 2-3.5'	ASTM D2974	MPRP/44261		
10256148008	SB-4 19-20'	ASTM D2974	MPRP/44261		
10256148009	SB-5 2-3	ASTM D2974	MPRP/44261		
10256148010	SB-5 10-12'	ASTM D2974	MPRP/44261		
10256148011	DUP-001	ASTM D2974	MPRP/44261		
10256148001	SB-1 2-3'	EPA 3550	OEXT/24255	EPA 8270	MSSV/10257
10256148002	SB-1 20-21'	EPA 3550	OEXT/24255	EPA 8270	MSSV/10257
10256148003	SB-2 2-3'	EPA 3550	OEXT/24255	EPA 8270	MSSV/10257

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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BP SS# 5482 REV4
Pace Project No.: 10256148

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10256148004	SB-2 22-23'	EPA 3550	OEXT/24255	EPA 8270	MSSV/10257
10256148005	SB-3 3-5'	EPA 3550	OEXT/24255	EPA 8270	MSSV/10257
10256148006	SB-3 25-27'	EPA 3550	OEXT/24255	EPA 8270	MSSV/10257
10256148007	SB-4 2-3.5'	EPA 3550	OEXT/24255	EPA 8270	MSSV/10257
10256148008	SB-4 19-20'	EPA 3550	OEXT/24255	EPA 8270	MSSV/10257
10256148009	SB-5 2-3	EPA 3550	OEXT/24255	EPA 8270	MSSV/10257
10256148010	SB-5 10-12'	EPA 3550	OEXT/24255	EPA 8270	MSSV/10257
10256148011	DUP-001	EPA 3550	OEXT/24255	EPA 8270	MSSV/10257
10256148001	SB-1 2-3'	EPA 5035A	MSV/26251	EPA 8260	MSV/26253
10256148002	SB-1 20-21'	EPA 5035A	MSV/26251	EPA 8260	MSV/26253
10256148003	SB-2 2-3'	EPA 5035A	MSV/26251	EPA 8260	MSV/26253
10256148004	SB-2 22-23'	EPA 5035A	MSV/26251	EPA 8260	MSV/26253
10256148005	SB-3 3-5'	EPA 5035A	MSV/26251	EPA 8260	MSV/26253
10256148006	SB-3 25-27'	EPA 5035A	MSV/26251	EPA 8260	MSV/26253
10256148007	SB-4 2-3.5'	EPA 5035A	MSV/26251	EPA 8260	MSV/26253
10256148008	SB-4 19-20'	EPA 5035A	MSV/26251	EPA 8260	MSV/26253
10256148009	SB-5 2-3	EPA 5035A	MSV/26251	EPA 8260	MSV/26253
10256148010	SB-5 10-12'	EPA 5035A	MSV/26251	EPA 8260	MSV/26253
10256148011	DUP-001	EPA 5035A	MSV/26251	EPA 8260	MSV/26253
10256148013	TRIP BLANK	EPA 5035/5030B	MSV/26266	EPA 8260	MSV/26272
10256148001	SB-1 2-3'	EPA 9045	WET/34549		
10256148002	SB-1 20-21'	EPA 9045	WET/34549		
10256148003	SB-2 2-3'	EPA 9045	WET/34549		
10256148004	SB-2 22-23'	EPA 9045	WET/34549		
10256148005	SB-3 3-5'	EPA 9045	WET/34549		
10256148006	SB-3 25-27'	EPA 9045	WET/34549		
10256148007	SB-4 2-3.5'	EPA 9045	WET/34549		
10256148008	SB-4 19-20'	EPA 9045	WET/34549		
10256148009	SB-5 2-3	EPA 9045	WET/34603		
10256148010	SB-5 10-12'	EPA 9045	WET/34603		
10256148011	DUP-001	EPA 9045	WET/34603		

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112+1128

bp rm Laboratory Management Program LaMP Chain of Custody Record

Page 1 of 2

BP Site Node Path: BP USA IL LASALLE 05482 ASSESSMENT FIELD WORK AOC SITE INVESTIGATION

Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X

BP Facility No: 5482

Lab Work Order Number: 10256148

10256148

Lab Name: Pace Analytical	Facility Address: E 2153 RD ROAD / ROUTE 11	Consultant/Contractor: STANTEC
Lab Address: 1700 Elm St SE, Minneapolis, MN 55414	City, State, ZIP Code: WEDRON, IL	Consultant/Contractor Project No: 182630000
Lab PM: Lori Castille	Lead Regulatory Agency:	Address: 440 EISENHOWER LANE N., LOMBARD, IL 60148
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM: LUISA PRIGG
Lab Shipping Accnt: 1797 5692 7	Enfos Proposal No: 008X9-0004	Phone: 630.792.1680 Email: luisa.prigg@stantec.com
Lab Bottle Order No: 68129 ; 68344	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___ Contractor X

BP Project Manager (PM): MARY WOJCIECHOWSKI

BP PM Phone: 630.836.7174

BP PM Email: mary.wojciechowski@bp.com

Report Type & QC Level: Standard X; Full Data Package ___

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Water / Liquid	Air / Vapor	Is this location a well?	No. Containers / Preservative: Total Number of Container	Unpreserved	H2SO4	HNO3	HCl	Methanol	SBS	Requested Analyses: VOC 8260	TPH DRO GRO 8015	TPH DIESEL	SVOC 8270	Comments
	SB-1 2-3'	1-22-14	1058	X			N	9	3				4	2	✓	✓	✓	✓	10256148 001
	SB-1 20-21'		1130	X				9	3				4	2	✓	✓	✓	✓	002
	SB-2 2-3'		1208	X				9	3				4	2	✓	✓	✓	✓	003
	SB-2 22-23'		1240	X				9	3				4	2	✓	✓	✓	✓	004
	SB-3 3-5'	1-23-14	1330	X				9	3				4	2	✓	✓	✓	✓	005
	SB-3 25-27'	1-22-14	1415	X				9	3				4	2	✓	✓	✓	✓	006
	SB-4 2-3.5'	1-23-14	0955	X				9	3				4	2	✓	✓	✓	✓	007
	SB-4 19-20'		1025	X				9	3				4	2	✓	✓	✓	✓	008
	SB-5 2-3'		1115	X				27	9				12	6	✓	✓	✓	✓	MS/MSD 009
	SB-5 10-12'		1130	X			↓	9	3				4	2	✓	✓	✓	✓	010

Sampler's Name: CRAIG VARLAND	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: STANTEC	- STANTEC	1-27-14	1700	Pace	1/28/14	11:07
Shipment Method: FED EX Ship Date: 1-27-14						
Shipment Tracking No:						

Special Instructions: THREE (3) COOLERS 577534197 6180 ; 6190 ; 6205

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 1.8, 1.3 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Laboratory Management Program (LaMP) Chain of Custody Record

Page 2 of 2

BP Site Node Path: BP USA IL LASALLE 05482 ASSESSMENT FIELD WORK AOC SITE INVESTIGATION

Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X

BP Facility No: 5482

Lab Work Order Number: _____

10256148

Lab Name: Pace Analytical	Facility Address: E 2153RD ROAD / ROUTE 11	Consultant/Contractor: STANTEC
Lab Address: 1700 Elm St SE, Minneapolis, MN 55414	City, State, ZIP Code: WEDRON, IL	Consultant/Contractor Project No: 182630000
Lab PM: Lori Castille	Lead Regulatory Agency:	Address: 440 EISENHOWER LANE NORTH, LOMBARD, IL
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM: LUISA PRICE
Lab Shipping Accnt: 1797 5692 7	Enfos Proposal No: 008X9-0004	Phone: 630.792.1680 Email: luisa.price@stantec.com
Lab Bottle Order No: 68129; 68344	Accounting Mode: Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To: and to lab.enfosdoc@bp.com
Other Info:	Stage: Activity:	Invoice To: BP ___ Contractor X

BP Project Manager (PM): MARY WOJCIECHOWSKI

BP PM Phone: 630.836.7174

BP PM Email: mary.wojciechowski@bp.com

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Container	Unpreserved	H2SO4	HNO3	HCl	Methanol	SBS	Requested Analyses: VOC 8260	TPH as GRO 8015	TPH DIESEL	SVOC 8270	RCRA METALS
	DUP-001	1-23-14	—	X			N	9	3				4	2	✓	✓	✓	✓	
	WASTE COMPOSITE	1-23-14	1300	X			N	4	4										✓
	TRIP BLANKS	—	—					5					5		✓				

Report Type & QC Level: Standard X; Full Data Package ___

Comments: Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

011
012
013

Sampler's Name: CRAIG VARLAND	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: STANTEC	[signature] - STANTEC	1-27-14	1700	[signature] Pace	1-28-14	10:07
Shipment Method: FED EX Ship Date: 1-27-14						
Shipment Tracking No:						

Special Instructions: THREE (3) COOLERS - 5753 4197 6180; 6190; 6205

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No	Temp Blank: Yes / No	Cooler Temp on Receipt: -8, 1.3 °F/C	Trip Blank: Yes / No	MS/MSD Sample Submitted: Yes / No

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Pace Analytical®	Document Name: Sample Condition Upon Receipt Form - ESI	Document Revised: 28Jan2013 Page 1 of 1
	Document No.: F-MN-L-210-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt – ESI Tech Specs

Client Name: BP-Stantec

Project #: WO#: 10256148

10256148

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other:

Tracking Number: 575341976190, 11 6180, 11 6205

Custody Seal on Cooler/Box Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☑ Yes ☐ No

Thermom. Used: ☑ 888A91216~~7504~~ 1491 JP 1.28.14 ☐ 80512447 ☐ 72337080 **Type of Ice:** ☑ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 18, 1.3 5.3 **Cooler Temp Corrected (°C):** 18, 1.3 6.0 **Biological Tissue Frozen?** ☐ Yes ☑ No

Temp should be above freezing to 6°C **Correction Factor:** 0.0, 0.0, +0.7 **Date and Initials of Person Examining Contents:** JP 1.28.14

				Comments:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☑ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	7.
Sufficient Volume (triple volume provided for MS/MSD)?	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☑ N/A	11.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: SL	☐ Yes	☑ No	☐ N/A	12. #1: 1 BJFU no time, #4: 1 VGAM no time Waste composite: no date/time on vials + no on COC
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☑ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH>12)	☐ Yes	☐ No	☑ N/A	Sample #
Per method, VOA pH is checked after analysis				Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☑ N/A	14.
3 Trip Blanks Present?	☑ Yes	☐ No	☐ N/A	15.
Trip Blank Custody Seals Present?	☑ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if purchased): 111813-3, 090213-3				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Temp Log: Temp must be maintained at <6°C during login, record temp every 20 mins			
Opened Time: 12:13	Temp: 1.4	Corrected Temp: 1.4	
Time:	put in cooler		
Time: 19:32	Temp:	Corrected Temp:	

Project Manager Review: **Date:** 1/30/14

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Fraction: 8015-DRO

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 285084 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148
Lab File ID: 0202R016.D Lab Sample ID: 1616437
GC Column: DB-5MS ID: 0.25 (mm) Time Analyzed: 18:52
Instrument ID: 10GCS8

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BLANK for HBN 285084 [OEXT/242	1616437	0202R016.D	18:52
02	LCS for HBN 285084 [OEXT/24241	1616438	0202R017.D	19:15
03	SB-1 2-3'	10256148001	0202R018.D	19:38
04	SB-1 2-3'(1616155MS)	1616439-MS	0202R019.D	20:01
05	SB-1 2-3'(1616155MSD)	1616440-MSD	0202R020.D	20:24
06	SB-2 2-3'	10256148003	0202R021.D	20:47
07	SB-3 25-27'	10256148006	0202R022.D	21:10
08	SB-2 22-23'	10256148004	0202R023.D	21:33
09	SB-1 20-21'	10256148002	0202R024.D	21:56
10	SB-3 3-5'	10256148005	0202R025.D	22:20
11	SB-4 2-3.5'	10256148007	0202R029.D	23:53
12	SB-5 10-12'	10256148010	0202R030.D	00:16
13	DUP-001	10256148011	0202R031.D	00:39
14	SB-4 19-20'	10256148008	0202R039.D	03:45
15	SB-5 2-3	10256148009	0202R040.D	04:09

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SURROGATE RECOVERY SUMMARY

Project: BP SS# 5482
Pace Project No.: 10256148

QB Batch: OEXT / 24241
Method(s): EPA 3550 Sonication / EPA 8015

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
10256148001		SB-1 2-3'	1	88		95									
1616437	BLANK		1	93		98									
10256148002		SB-1 20-21'	1	95		93									
1616438	LCS		1	92		97									
10256148003		SB-2 2-3'	1	96		96									
1616439	MS		1	91		95									
10256148004		SB-2 22-23'	1	98		97									
1616440	MSD		1	91		97									
10256148005		SB-3 3-5'	1	102		102									
10256148006		SB-3 25-27'	1	91		95									
10256148007		SB-4 2-3.5'	1	94		94									
10256148008		SB-4 19-20'	1	104		92									
10256148009	OQS	SB-5 2-3	1	105		102									
10256148010		SB-5 10-12'	1	101		99									
10256148011		DUP-001	1	97		96									
		QC Limits:		30-147		30-150									
		Sample Limits:		30-147		30-150									

Sur 1: n-Triacontane (S)
Sur 2: o-Terphenyl (S)

REPORT OF LABORATORY ANALYSIS

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Instrument Run Log

Instrument: 10GCS8 Method: 8015/AK102/103/NwTPH Misc. Prep. Info: Surrogate Lot: See extract sheet
Column: DB-5MS 0.25mm HydrogenTune Standard: NA ISTD Lot: NA Cal. Standard: 10328-64

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
0131R001.D	MECL2 RINSE	Solid	Sample	1		GCS8akNW8015-013114R	1/31/14 11:50	JRH	
0131R002.D	MECL2 RINSE	Solid	Sample	1		GCS8akNW8015-013114R	1/31/14 13:25	JRH	
0131R003.D	MECL2 RINSE	Solid	Sample	1		GCS8akNW8015-013114R	1/31/14 13:48	JRH	
0131R004.D	MECL2 RINSE	Solid	Sample	1		GCS8akNW8015-013114R	1/31/14 14:11	JRH	
0131R005.D	MECL2 RINSE	Solid	Sample	1		GCS8akNW8015-013114R	1/31/14 14:34	JRH	ICAL due to 2 ccal's failing
0131R006.D	RTMARK 10328-49	Solid	Sample	1		GCS8akNW8015-013114R	1/31/14 14:57	JRH	
0131R007.D	ICAL 1 10328-64	Solid	Ical	1		GCS8akNW8015-013114R	1/31/14 15:21	JRH	
0131R008.D	ICAL 2 10328-64	Solid	Ical	1		GCS8akNW8015-013114R	1/31/14 15:44	JRH	
0131R009.D	ICAL 3 10328-64	Solid	Ical	1		GCS8akNW8015-013114R	1/31/14 16:07	JRH	passes 40% rule
0131R010.D	ICAL 4 10328-64	Solid	Ical	1		GCS8akNW8015-013114R	1/31/14 16:30	JRH	passes 40% rule
0131R011.D	ICAL 5 10328-64	Solid	Ical	1		GCS8akNW8015-013114R	1/31/14 16:54	JRH	passes 40% rule
0131R012.D	ICAL 6 10328-64	Solid	Ical	1		GCS8akNW8015-013114R	1/31/14 17:17	JRH	passes 40% rule
0131R013.D	ICAL 7 10328-64	Solid	Ical	1		GCS8akNW8015-013114R	1/31/14 17:40	JRH	
0131R014.D	ICAL 8 10328-64	Solid	Ical	1		GCS8akNW8015-013114R	1/31/14 18:03	JRH	
0131R015.D	ICAL 9 10328-64	Solid	Ical	1		GCS8akNW8015-013114R	1/31/14 18:26	JRH	
0131R016.D	ICAL 10 10328-64	Solid	Ical	1		GCS8akNW8015-013114R	1/31/14 18:49	JRH	ICAL passes
0131R017.D	MECL2 RINSE	Solid	Sample	1		GCS8akNW8015-013114R	1/31/14 19:12	JRH	ran to remover carryover, carryover large in MO range
0131R018.D	ICV 1074-40		CCal	1		GCS8akNW8015-013114R	1/31/14 19:36	JRH	passes 15% for all ranges
0131R019.D	D\MO7 10328-107		CCal	1		GCS8akNW8015-013114R	1/31/14 19:59	JRH	pass all
0131R020.D	8015WMDL	Liquid	Blank	1		GCS8akNW8015-013114R	1/31/14 20:22	JRH	ok
0131R021.D	8015WMDL 1	Liquid	Sample	1		GCS8akNW8015-013114R	1/31/14 20:45	JRH	MDL fails MDL 2x > PRL ? spike lower ? currently spiked at PRL
0131R022.D	8015WMDL 2	Liquid	Sample	1		GCS8akNW8015-013114R	1/31/14 21:08	JRH	I
0131R023.D	8015WMDL 3	Liquid	Sample	1		GCS8akNW8015-013114R	1/31/14 21:32	JRH	I
0131R024.D	8015WMDL 4	Liquid	Sample	1		GCS8akNW8015-013114R	1/31/14 21:55	JRH	I
0131R025.D	8015WMDL 5	Liquid	Sample	1		GCS8akNW8015-013114R	1/31/14 22:18	JRH	I
0131R026.D	8015WMDL 6	Liquid	Sample	1		GCS8akNW8015-013114R	1/31/14 22:41	JRH	I
0131R027.D	8015WMDL 7	Liquid	Sample	1		GCS8akNW8015-013114R	1/31/14 23:05	JRH	I
0131R028.D	8015WMDL 8	Liquid	Sample	1		GCS8akNW8015-013114R	1/31/14 23:28	JRH	V
0131R029.D	D\MO7 10328-107		CCal	1		GCS8akNW8015-013114R	1/31/14 23:51	JRH	pass all

Check Maintenance Items Performed:

- x Changed septum
- x Cleaned liner
- x Replaced/Cleaned gold seal
- x Clipped column
- Changed trap - Lot #
- Cleaned MS Source
- x Changed column - Lot #
- Other minor parts replaced
- No maintenance performed today

Additional Comments:

File Path 1: U:\10GCS8.I\013114RLL.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: JRH

Report Date: 02/01/2014 12:33
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10GCS8 Method: 8015 Misc. Prep. Info: Surrogate Lot: See extract sheet
Column: DB-5MS 0.25mm HydrogenTune Standard: NA ISTD Lot: NA Cal. Standard: 10328-64

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
0202R001.D	MECL2 RINSE	S/	Sample	1		GCS8akNW8015-013114R	2/02/14 13:04	JRH	
0202R002.D	MECL2 RINSE	S/	Sample	1		GCS8akNW8015-013114R	2/02/14 13:27	JRH	
0202R003.D	MECL2 RINSE	S/	Sample	1		GCS8akNW8015-013114R	2/02/14 13:50	JRH	
0202R004.D	MECL2 RINSE	S/	Sample	1		GCS8akNW8015-013114R	2/02/14 14:13	JRH	
0202R005.D	MECL2 RINSE	S/	Sample	1		GCS8akNW8015-013114R	2/02/14 14:37	JRH	
0202R006.D	RTMARK 10328-49	S/	Sample	1		GCS8akNW8015-013114R	2/02/14 15:00	JRH	
0202R007.D	D\MO7 10328-107	/	CCal	1		GCS8akNW8015-013114R	2/02/14 15:23	JRH	pass 8015
0202R008.D	1617567	S/12773	Blank	1		GCS8akNW8015-013114R	2/02/14 15:46	JRH	ok
0202R009.D	1617568	S/12773	LCS	1		GCS8akNW8015-013114R	2/02/14 16:10	JRH	pass
0202R010.D	10256430001	S/12773	Sample	1		GCS8akNW8015-013114R	2/02/14 16:33	JRH	
0202R011.D	1617569	S/12773	MS	1		GCS8akNW8015-013114R	2/02/14 16:56	JRH	
0202R012.D	1617570	S/12773	MSD	1		GCS8akNW8015-013114R	2/02/14 17:19	JRH	
0202R013.D	10256322001	S/12773	Sample	25		GCS8akNW8015-013114R	2/02/14 17:42	JRH	ok
0202R014.D	10256322001	S/12773	Sample	250		GCS8akNW8015-013114R	2/02/14 18:05	JRH	NR. ran in case 25x was OR since it's on quadratic, estimates can be
0202R015.D	D\MO7 10328-107	/	CCal	1		GCS8akNW8015-013114R	2/02/14 18:28	JRH	pass 8015
0202R016.D	1616437	S/12762	Blank	1		GCS8akNW8015-013114R	2/02/14 18:52	JRH	ok
0202R017.D	1616438	S/12762	LCS	1		GCS8akNW8015-013114R	2/02/14 19:15	JRH	pass
0202R018.D	10256148001	S/12762	Sample	1		GCS8akNW8015-013114R	2/02/14 19:38	JRH	
0202R019.D	1616439	S/12762	MS	1		GCS8akNW8015-013114R	2/02/14 20:01	JRH	
0202R020.D	1616440	S/12762	MSD	1		GCS8akNW8015-013114R	2/02/14 20:24	JRH	
0202R021.D	10256148003	S/12762	Sample	1		GCS8akNW8015-013114R	2/02/14 20:47	JRH	
0202R022.D	10256148006	S/12762	Sample	1		GCS8akNW8015-013114R	2/02/14 21:10	JRH	
0202R023.D	10256148004	S/12762	Sample	1		GCS8akNW8015-013114R	2/02/14 21:33	JRH	
0202R024.D	10256148002	S/12762	Sample	1		GCS8akNW8015-013114R	2/02/14 21:56	JRH	
0202R025.D	10256148005	S/12762	Sample	1		GCS8akNW8015-013114R	2/02/14 22:20	JRH	
0202R026.D	D\MO7 10328-107	/	CCal	1		GCS8akNW8015-013114R	2/02/14 22:43	JRH	pass 8015
0202R027.D	1616437	S/12762	Blank	1		GCS8akNW8015-013114R	2/02/14 23:06	JRH	ok
0202R028.D	10256197001	S/12762	Sample	1		GCS8akNW8015-013114R	2/02/14 23:29	JRH	5x for both
0202R029.D	10256148007	S/12762	Sample	1		GCS8akNW8015-013114R	2/02/14 23:53	JRH	
0202R030.D	10256148010	S/12762	Sample	1		GCS8akNW8015-013114R	2/03/14 00:16	JRH	
0202R031.D	10256148011	S/12762	Sample	1		GCS8akNW8015-013114R	2/03/14 00:39	JRH	
0202R032.D	10256188001	S/12762	Sample	1		GCS8akNW8015-013114R	2/03/14 01:02	JRH	2x for both
0202R033.D	10256224001	S/12762	Sample	1		GCS8akNW8015-013114R	2/03/14 01:26	JRH	
0202R034.D	10256224002	S/12762	Sample	1		GCS8akNW8015-013114R	2/03/14 01:49	JRH	
0202R035.D	10256224003	S/12762	Sample	1		GCS8akNW8015-013114R	2/03/14 02:12	JRH	
0202R036.D	10256224004	S/12762	Sample	1		GCS8akNW8015-013114R	2/03/14 02:35	JRH	5x, reporting DRO only
0202R037.D	D\MO7 10328-107	/	CCal	1		GCS8akNW8015-013114R	2/03/14 02:59	JRH	pass 8015
0202R038.D	1616437	S/12762	Blank	1		GCS8akNW8015-013114R	2/03/14 03:22	JRH	ok
0202R039.D	10256148008	S/12762	Sample	1		GCS8akNW8015-013114R	2/03/14 03:45	JRH	
0202R040.D	10256148009	S/12762	Sample	1		GCS8akNW8015-013114R	2/03/14 04:09	JRH	
0202R041.D	D\MO7 10328-107	/	CCal	1		GCS8akNW8015-013114R	2/03/14 04:32	JRH	pass 8015

Pace Analytical™

Instrument Run Log

Instrument: 10GCS8 Method: 8015 Misc. Prep. Info: Surrogate Lot: See extract sheet
Column: DB-5MS 0.25mm Hydrogen Tune Standard: NA ISTD Lot: NA Cal. Standard: 10328-64

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
x Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: U:\10GCS8.I\020214RLL.B\ Report Date: 02/03/2014 15:38
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one Run order verified: JRH Reviewed By/Date:

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 31-JAN-2014 15:21
End Cal Date : 31-JAN-2014 18:49
Quant Method : ESTD
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Last Edit : 01-Feb-2014 11:48 jheinecke

Calibration File Names:
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Level 2: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R008.d
Level 3: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R009.d
Level 4: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R010.d
Level 5: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R011.d
Level 6: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R012.d
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Level 8: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R014.d
Level 9: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R015.d
Level 10: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R016.d

Compound	6.0000 Level 1	10.0000 Level 2	25.0000 Level 3	50.0000 Level 4	100.0000 Level 5	250.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	500.0000 Level 7	1000.0000 Level 8	2000.0000 Level 9	4000.0000 Level 10							
S 1 DRO by AK 102	2749655	3506769	4094247	5777397	8436791	17113003					
	31986216	60669708	120245373	251388700			QUAD	-51.09252	0.00002	-6.658e-01	0.99998
S 4 Residual Range Organics AK103	1438427	1554411	1423952	2289964	3816405	8154011					
	16075354	31331389	62581201	126551204			LINR	-20.22658	31341		0.99985
S 5 TPH-DRO (C10-C28)	2879108	3702774	4280678	6190117	9266784	19049133					
	35668041	68385095	135879856	284430986			QUAD	-46.05368	0.00002	-5.244e-01	0.99999

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 31-JAN-2014 15:21
End Cal Date : 31-JAN-2014 18:49
Quant Method : ESTD
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Last Edit : 01-Feb-2014 11:48 jheinecke

	Compound	6.0000 Level 1	10.0000 Level 2	25.0000 Level 3	50.0000 Level 4	100.0000 Level 5	250.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
		500.0000 Level 7	1000.0000 Level 8	2000.0000 Level 9	4000.0000 Level 10							
S	6 Motor Oil Range (C24-C36)	1476864	1604496	1477442	2395420	3996063	8570745					
		16882643	32847058	65671637	133046858			LINR	-19.28152	32945		0.99984
S	7 DRO (C12-C24)	1823016	2405842	2862703	4374355	6734848	14309642					
		27474258	52756564	105357857	222908472			QUAD	-37.60110	0.00002	-9.677e-01	0.99998
S	8 Diesel Fuel Range	1823016	2405842	2862703	4374355	6734848	14309642					
		27474258	52756564	105357857	222908472			QUAD	-37.60110	0.00002	-9.677e-01	0.99998
S	9 ORO (C24-C40)	2959360	3000142	2871607	3914839	5732975	11238208					
		21874302	41308278	81491585	163354070			LINR	-45.46847	40228		0.99986
S	10 Motor Oil Range	2959360	3000142	2871607	3914839	5732975	11238208					
		21874302	41308278	81491585	163354070			LINR	-45.46847	40228		0.99986
$	2 o-Terphenyl (S)	47316	77968	125288	321610	623785	1515625					
		3131296	6214242	12453001	+++++			QUAD	0.02263	0.00002	-3.008e-01	0.99998
S	3 n-Triacontane (S)	34366	55144	89341	229494	446940	1084828					
		2240474	4388645	8711046	18001235			LINR	0.62867	44784		0.99977

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 31-JAN-2014 15:21
End Cal Date : 31-JAN-2014 18:49
Quant Method : ESTD
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Last Edit : 01-Feb-2014 11:48 jheinecke

Average %RSD Results.
Calculated Average %RSD = 0.000e+000
Maximun Average %RSD = 25.00000
* Passed Average %RSD Test.

Curve	Formula	Units
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R007.d
Lab Smp Id: ICAL 1 10328-64
Inj Date : 31-JAN-2014 15:21
Operator : JRH Inst ID: 10gcs8.i
Smp Info : ICAL 1 10328-64
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Meth Date : 01-Feb-2014 11:46 10gcs8.i Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S 1	DRO by AK 102	3.600-8.550			2749655	6.00000	(M)
S 2	o-Terphenyl (S)	6.990	6.990	0.000	47316	0.60000	0.784 (M)
S 3	n-Triacontane (S)	9.945	9.945	0.000	34366	0.60000	1.40 (M)
S 4	Residual Range Organics AK103	8.560-11.950			1438427	6.00000	25.7 (M)
S 5	TPH-DRO (C10-C28)	3.600-9.660			2879108	6.00000	(M)
S 6	Motor Oil Range (C24-C36)	8.270-11.950			1476864	6.00000	25.5 (M)
S 7	DRO (C12-C24)	4.490-8.529			1823016	6.00000	(M)
S 8	Diesel Fuel Range	4.490-8.529			1823016	6.00000	(M)
S 9	ORO (C24-C40)	8.539-14.000			2959360	6.00000	28.1 (M)
S 10	Motor Oil Range	8.539-14.000			2959360	6.00000	28.1 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R007.D

Page 1

Date : 31-JAN-2014 15:21

Client ID:

Instrument: 10gcs8.i

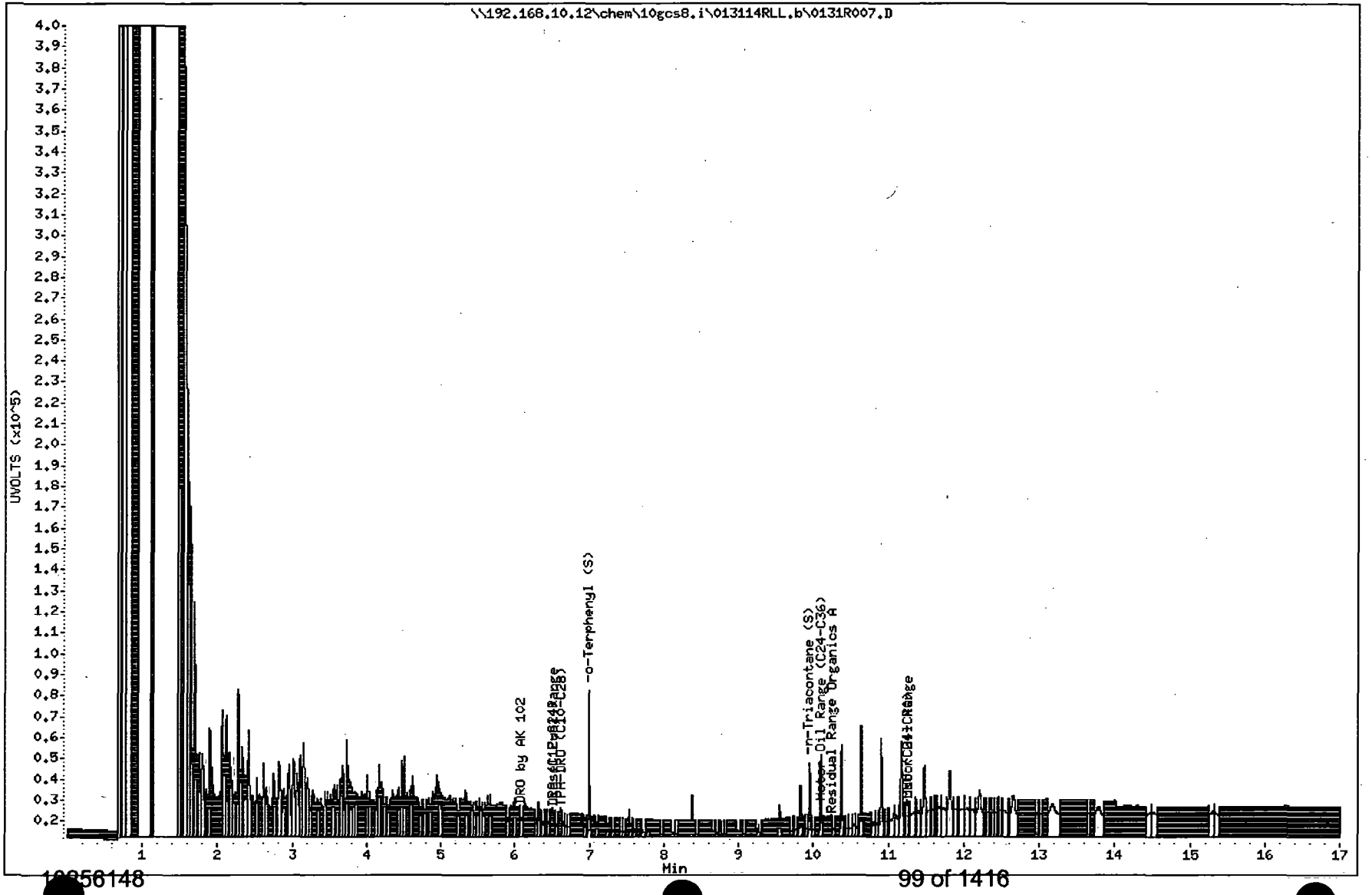
Sample Info: ICAL 1 10328-64

Volume Injected (uL): 1.0

Operator: JRH

Column phase: DB-5MS

Column diameter: 0.25



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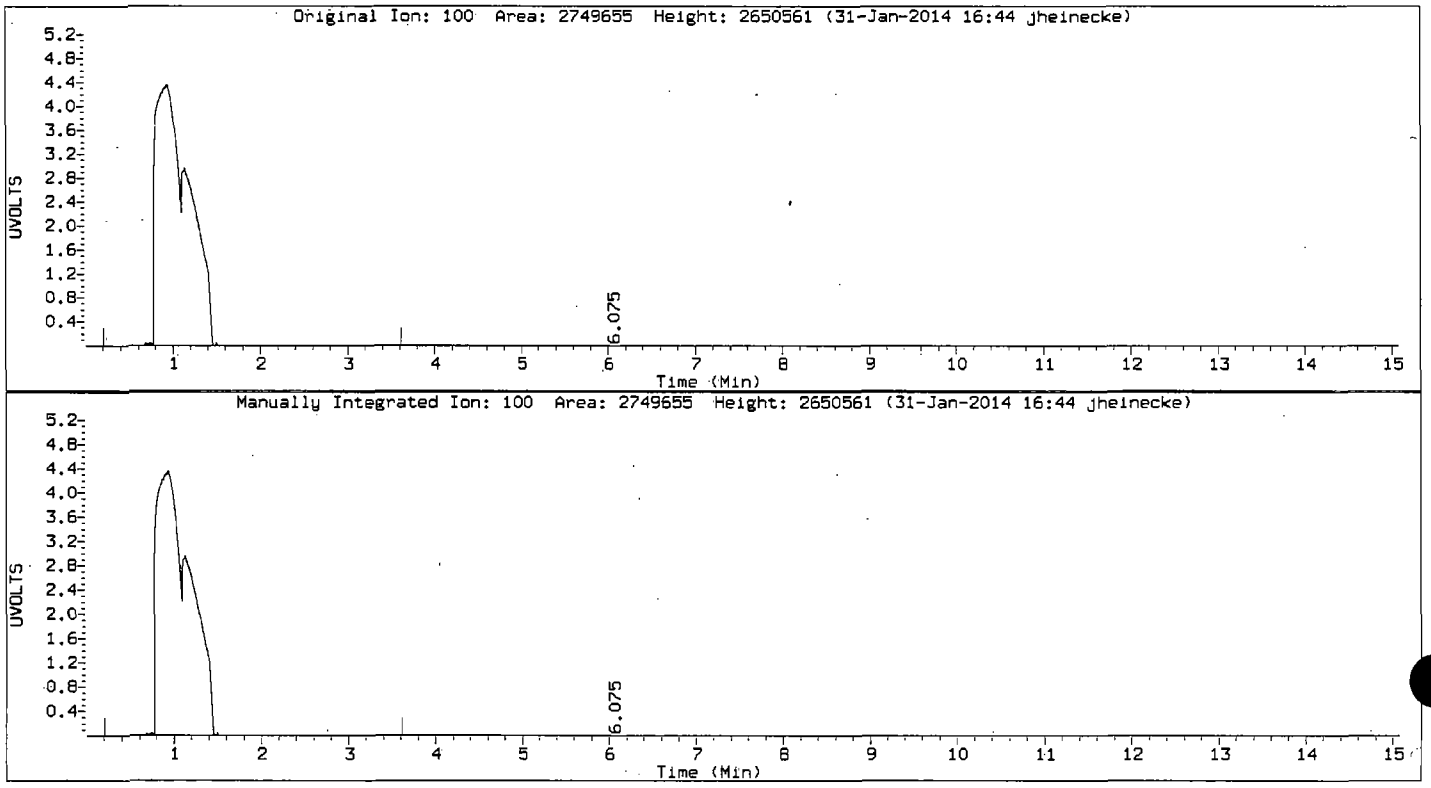
Injection Date: 31-JAN-2014 15:21
Instrument: 10gcs8.i
Lab Sample ID: ICAL 1 10328-64

Compound: DRO by AK 102
CAS Number:



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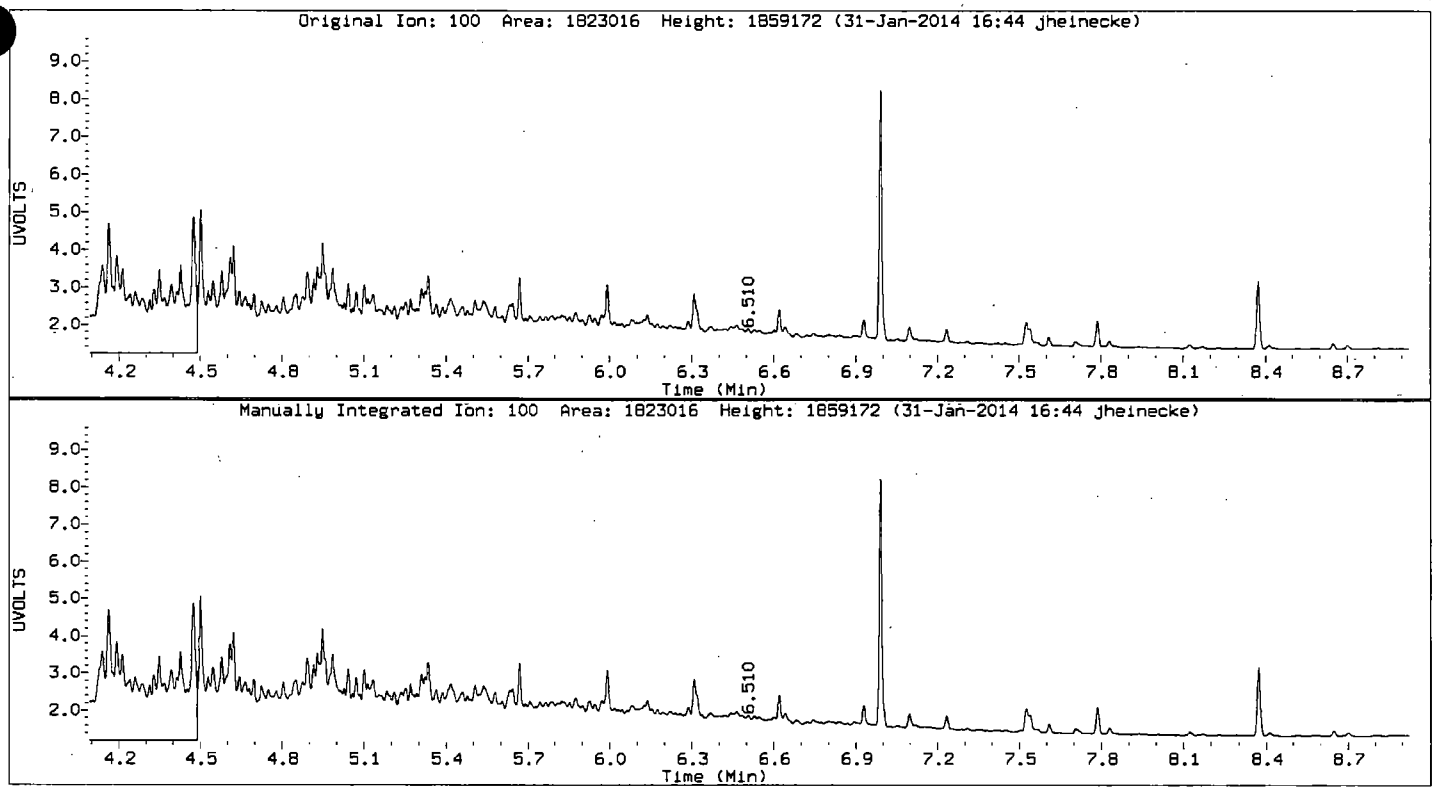
Injection Date: 31-JAN-2014 15:21
Instrument: 10gcs8.i
Lab Sample ID: ICAL 1 10328-64

Compound: Diesel Fuel Range
CAS Number:



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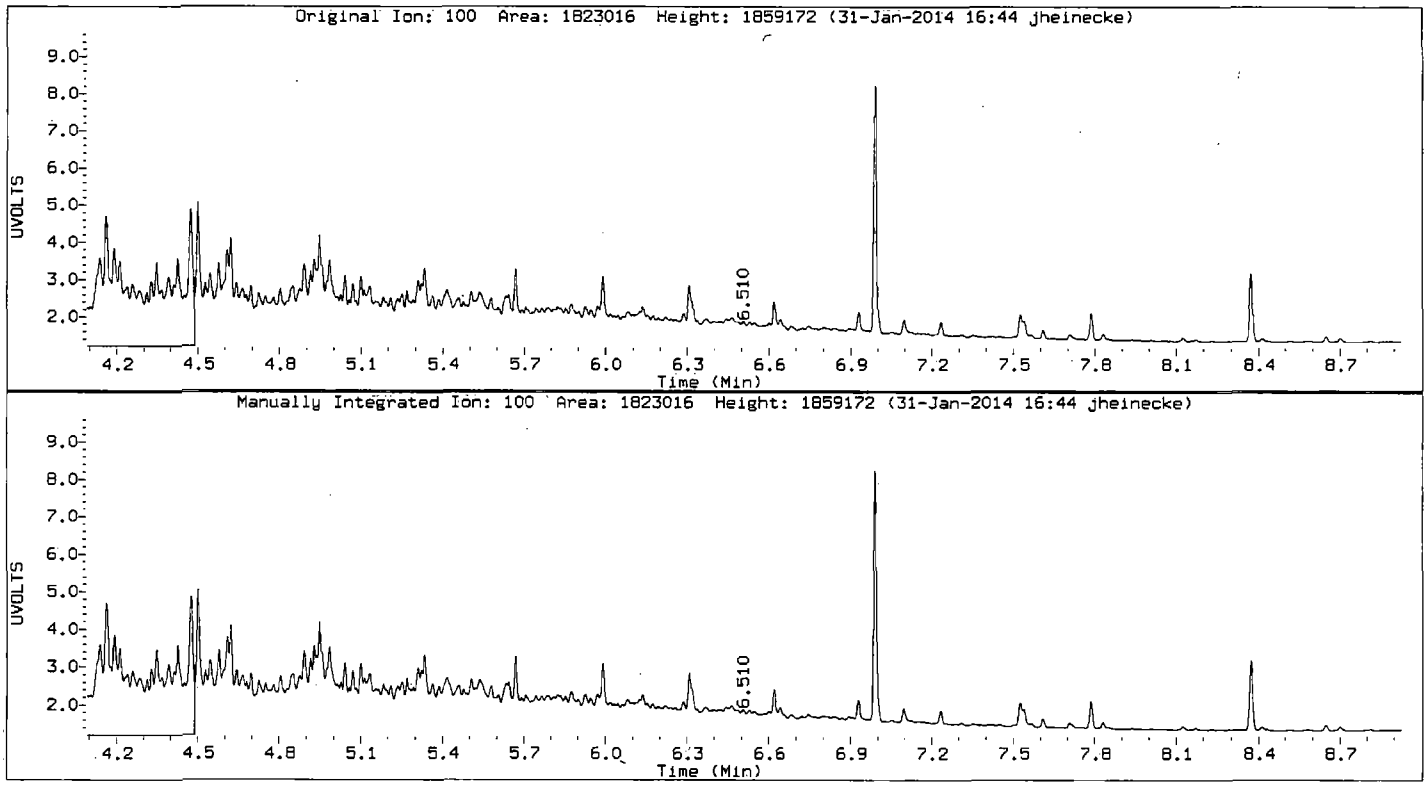
Injection Date: 31-JAN-2014 15:21
Instrument: 10gcs8.i
Lab Sample ID: ICAL 1 10328-64

Compound: DRO (C12-C24)
CAS Number:



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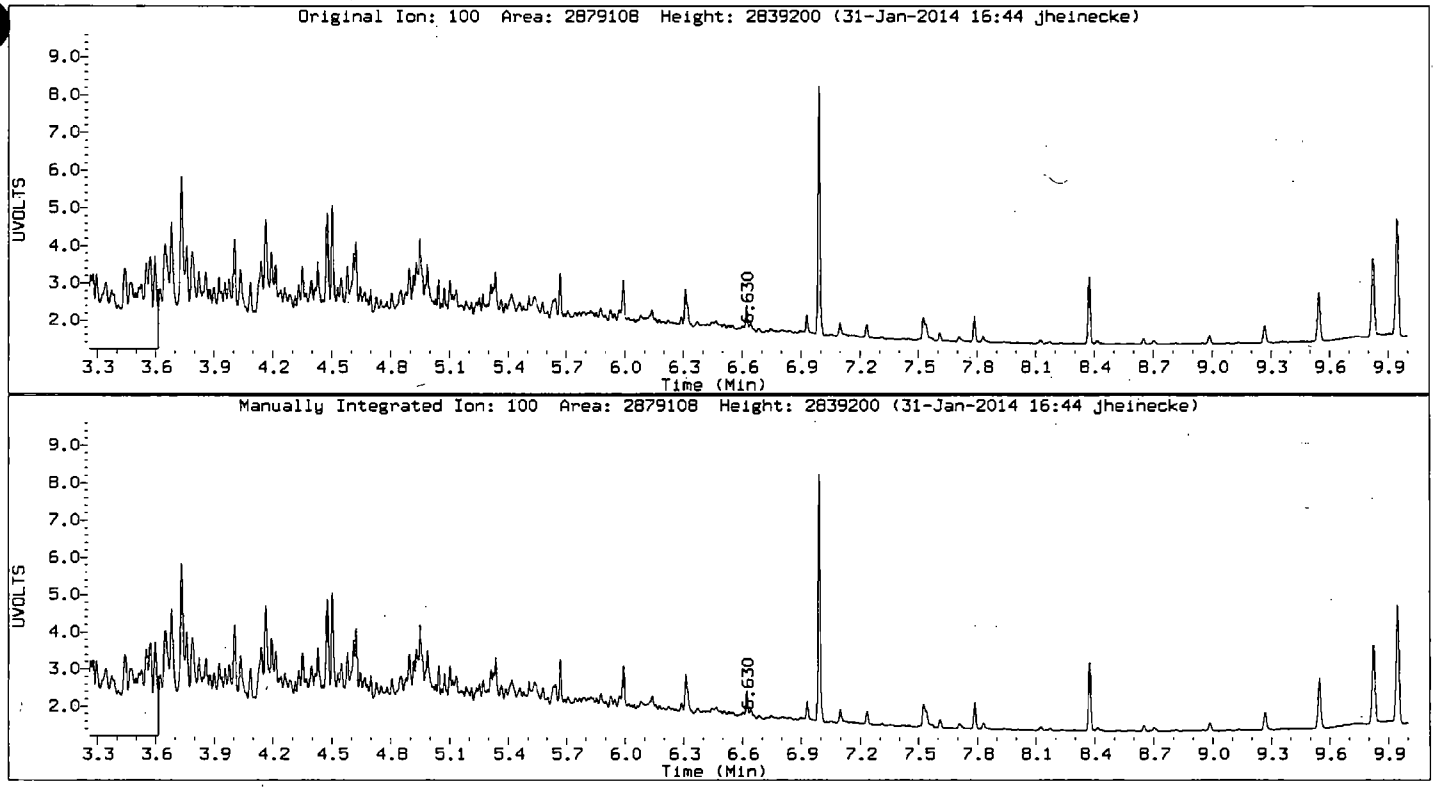
Injection Date: 31-JAN-2014 15:21
Instrument: 10gcs8.i
Lab Sample ID: ICAL 1 10328-64

Compound: TPH-DRO (C10-C28)
CAS Number:



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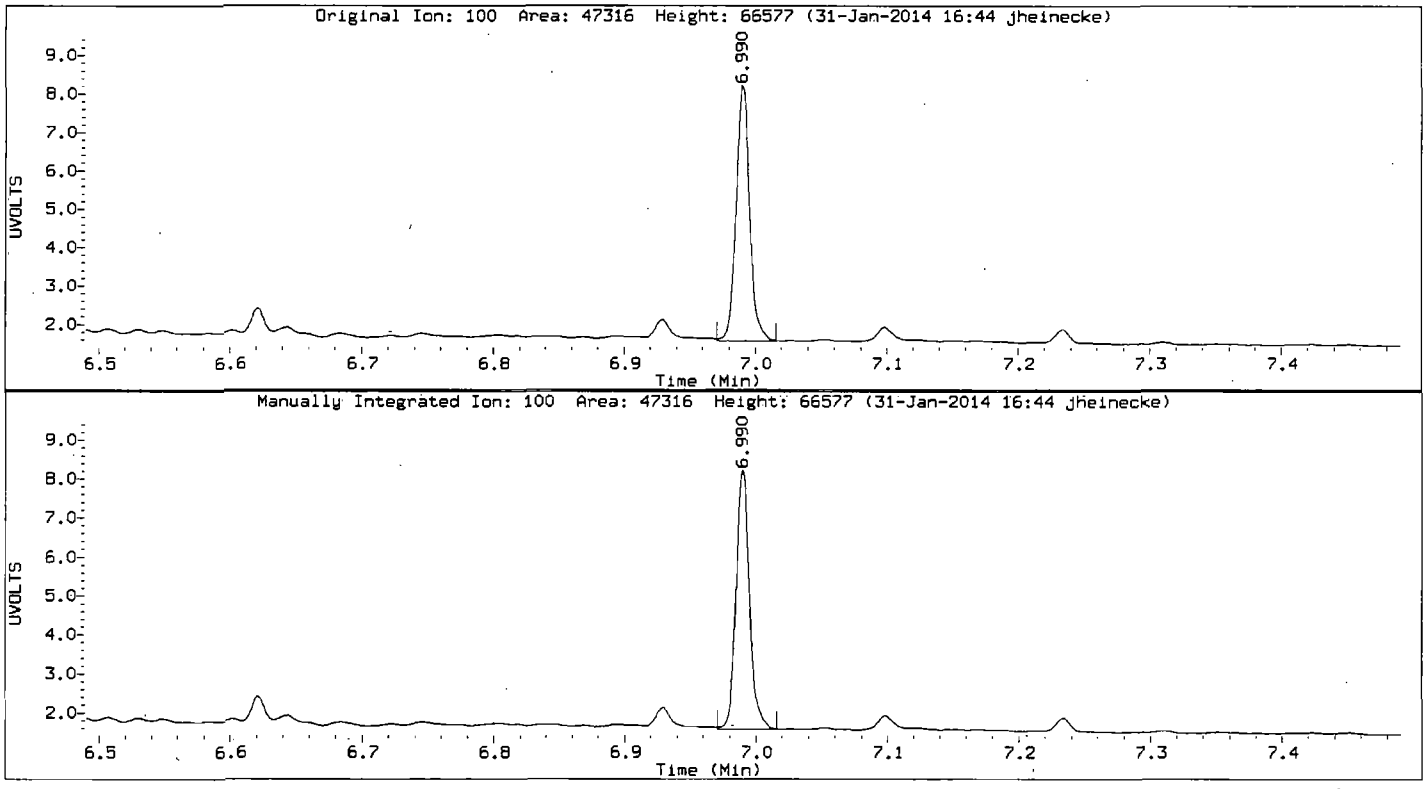
Injection Date: 31-JAN-2014 15:21
Instrument: 10gcs8.i
Lab Sample ID: ICAL 1 10328-64

Compound: o-Terphenyl (S)
CAS Number:



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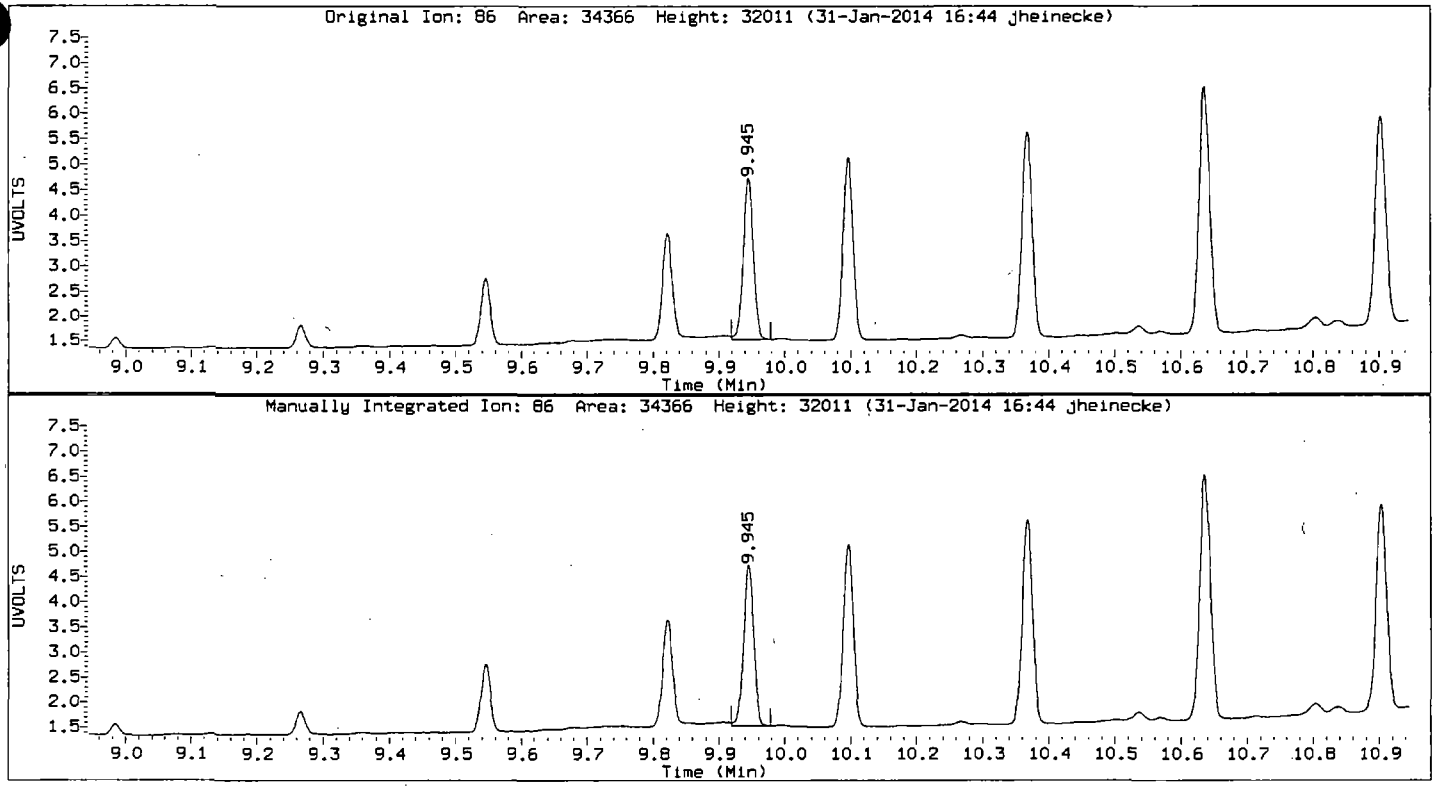
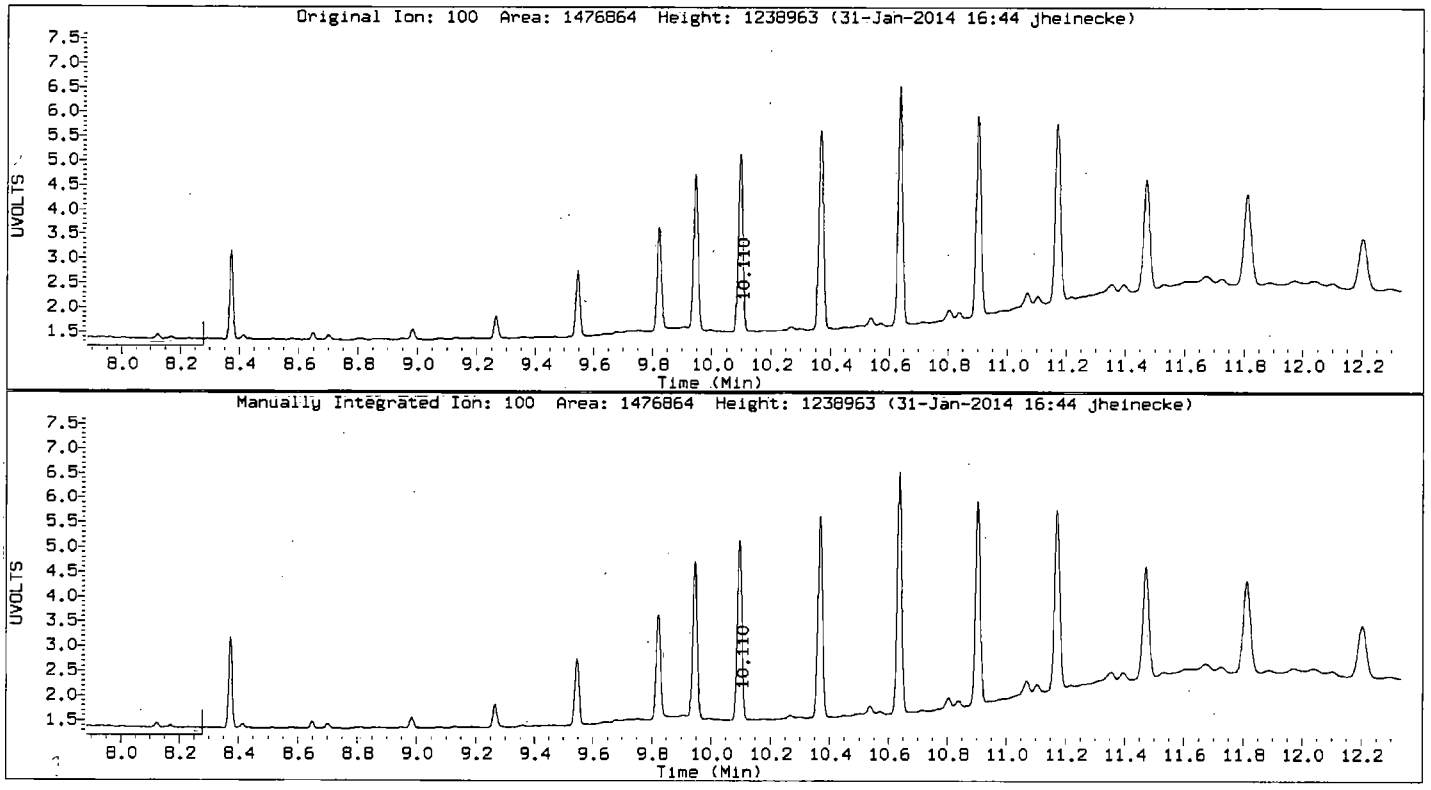
Injection Date: 31-JAN-2014 15:21
Instrument: 10gcs8.i
Lab Sample ID: ICAL 1 10328-64

Compound: n-Triacontane (S)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R007.d
Injection Date: 31-JAN-2014 15:21
Instrument: 10gcs8.i
Lab Sample ID: ICAL 1 10328-64

Compound: Motor Oil Range (C24-C36)
CAS Number:



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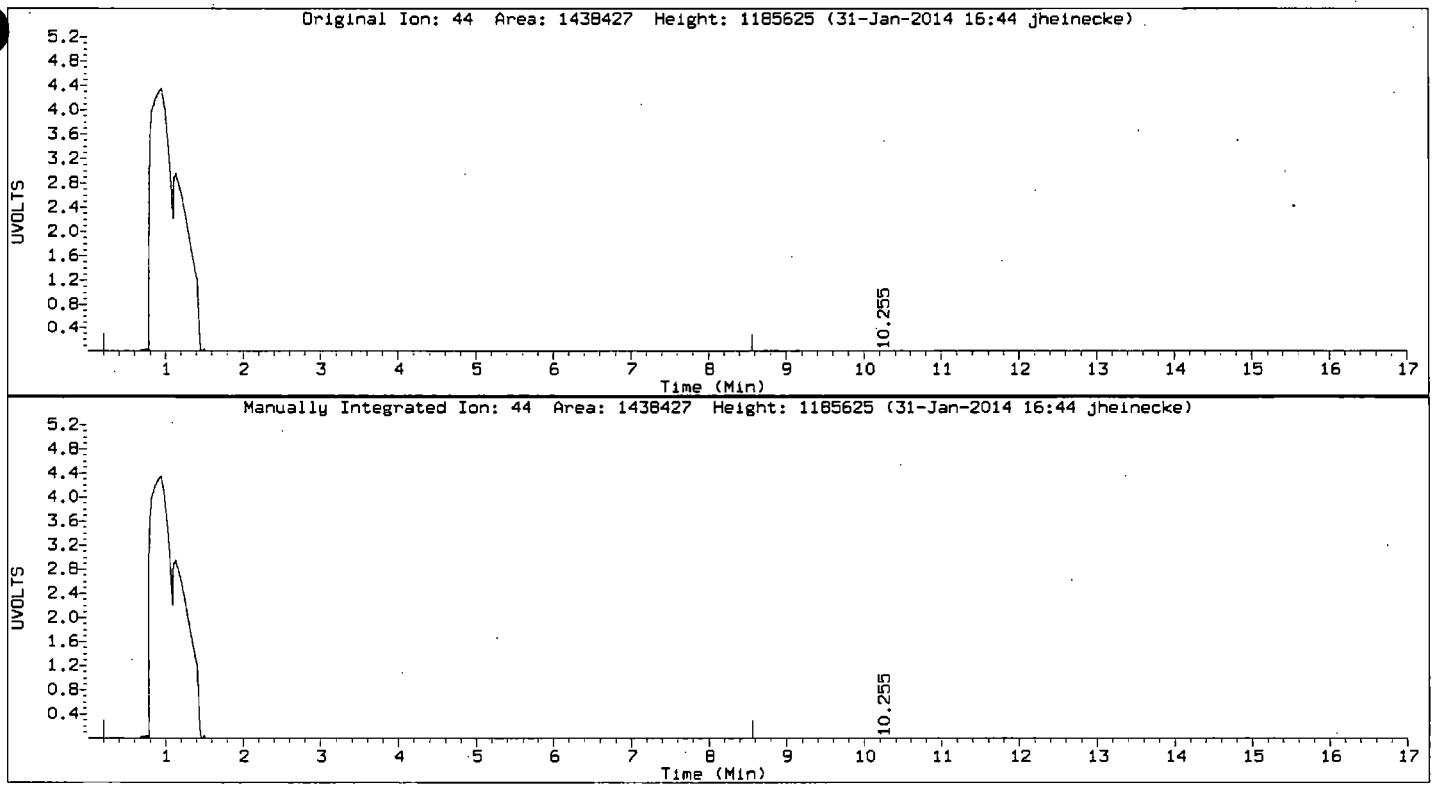
Injection Date: 31-JAN-2014 15:21
Instrument: 10gcs8.i
Lab Sample ID: ICAL 1 10328-64

Compound: Residual Range Organics AK103
CAS Number:



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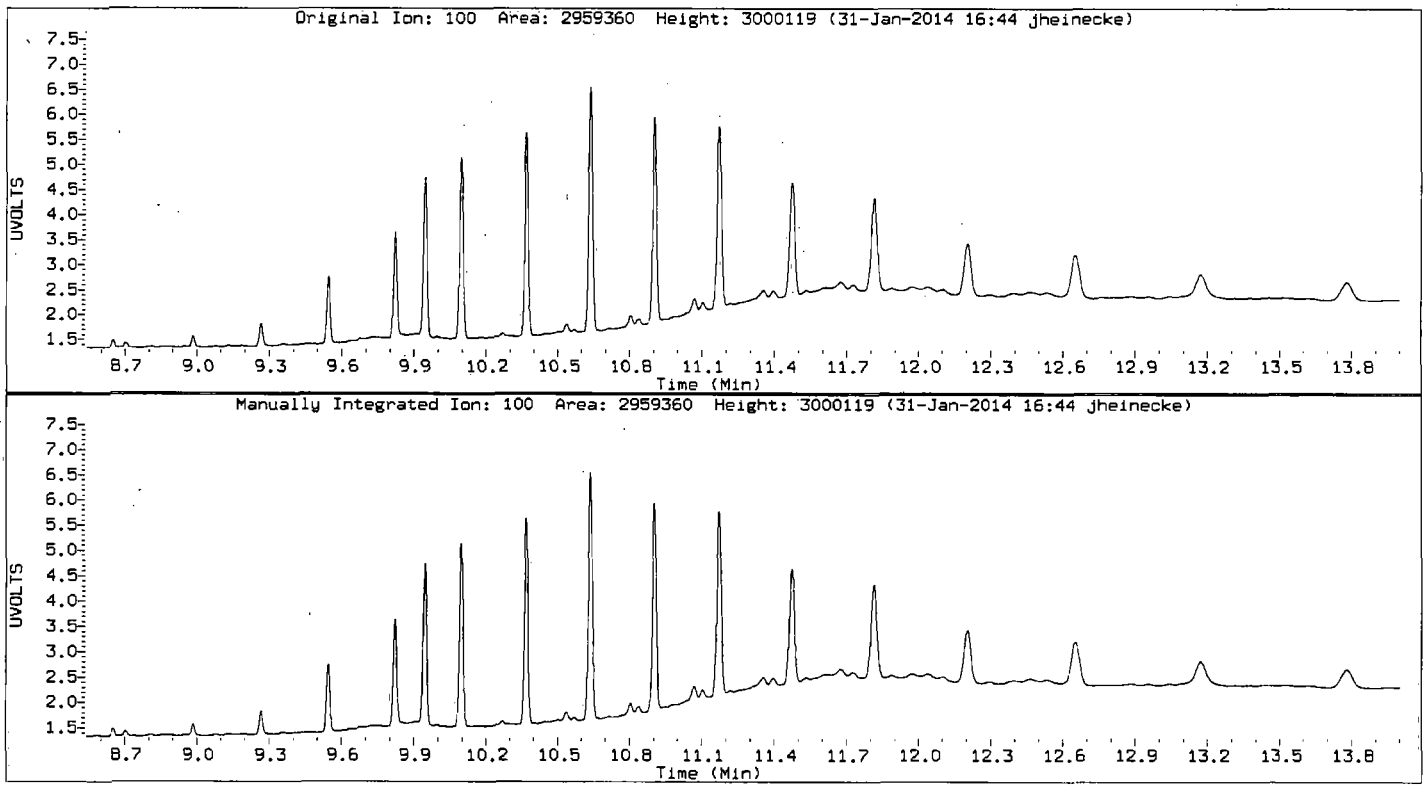
Injection Date: 31-JAN-2014 15:21
Instrument: 10gcs8.i
Lab Sample ID: ICAL 1 10328-64

Compound: ORO (C24-C40)
CAS Number:



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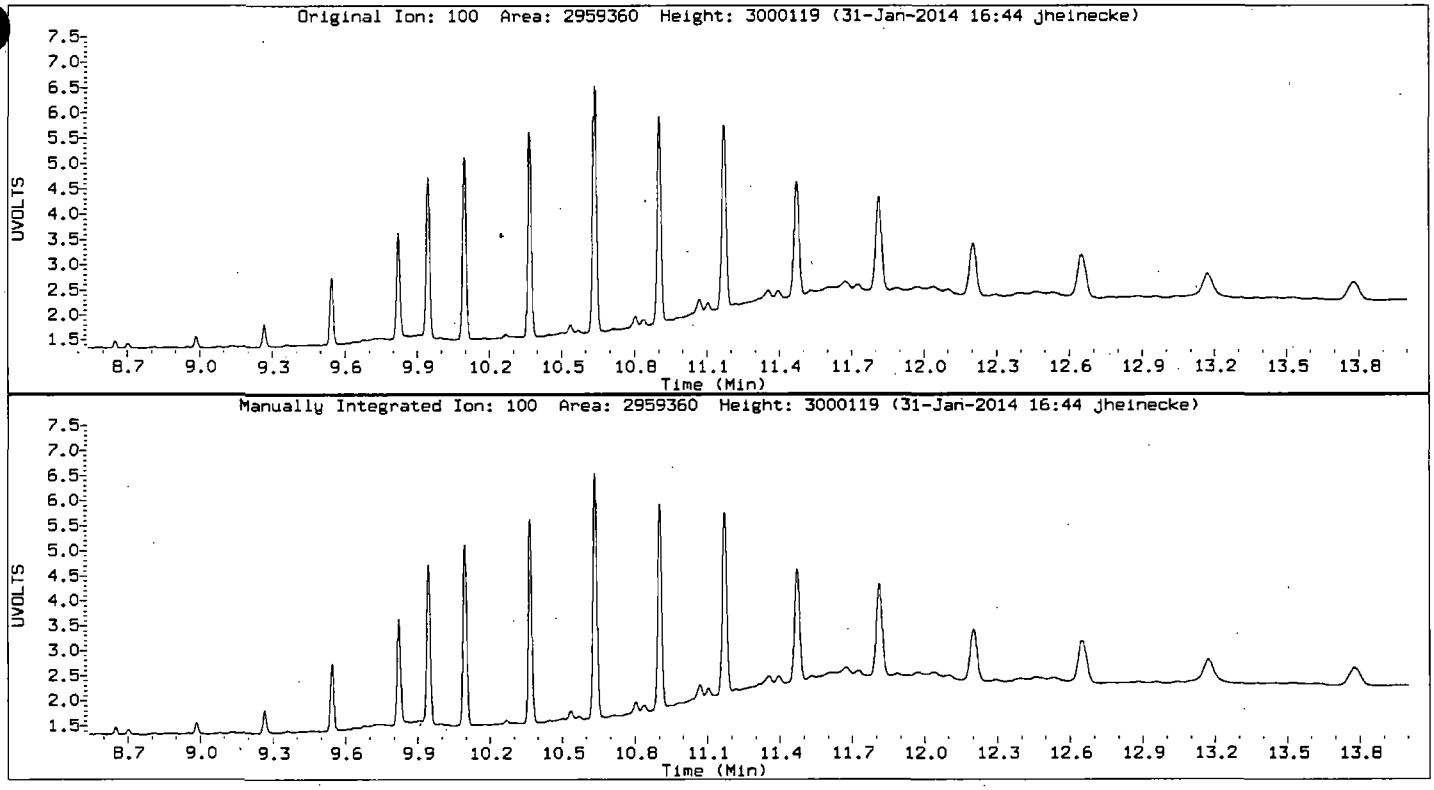
Injection Date: 31-JAN-2014 15:21
Instrument: 10gcs8.i
Lab Sample ID: ICAL 1 10328-64

Compound: Motor Oil Range
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R008.d
Lab Smp Id: ICAL 2 10328-64
Inj Date : 31-JAN-2014 15:44
Operator : JRH Inst ID: 10gcs8.i
Smp Info : ICAL 2 10328-64
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Meth Date : 01-Feb-2014 11:46 10gcs8.i Quant Type: ESTD
Cal Date : 31-JAN-2014 15:21 Cal File: 0131R007.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S 1	DRO by AK 102	3.600-8.550			3506769	10.0000	11.2(M)
S 2	o-Terphenyl (S)	6.984	6.984	0.000	77968	1.00000	1.28(M)
S 3	n-Triacontane (S)	9.919	9.919	0.000	55144	1.00000	1.86(M)
S 4	Residual Range Organics AK103	8.560-11.950			1554411	10.0000	29.4(M)
S 5	TPH-DRO (C10-C28)	3.600-9.660			3702774	10.0000	12.1(M)
S 6	Motor Oil Range (C24-C36)	8.270-11.950			1604496	10.0000	29.4(M)
S 7	DRO (C12-C24)	4.490-8.529			2405842	10.0000	11.1(M)
S 8	Diesel Fuel Range	4.490-8.529			2405842	10.0000	11.1(M)
S 9	ORO (C24-C40)	8.539-14.000			3000142	10.0000	29.1(M)
S 10	Motor Oil Range	8.539-14.000			3000142	10.0000	29.1(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R008.D

Date : 31-JAN-2014 15:44

Client ID:

Instrument: 10gcs8.i

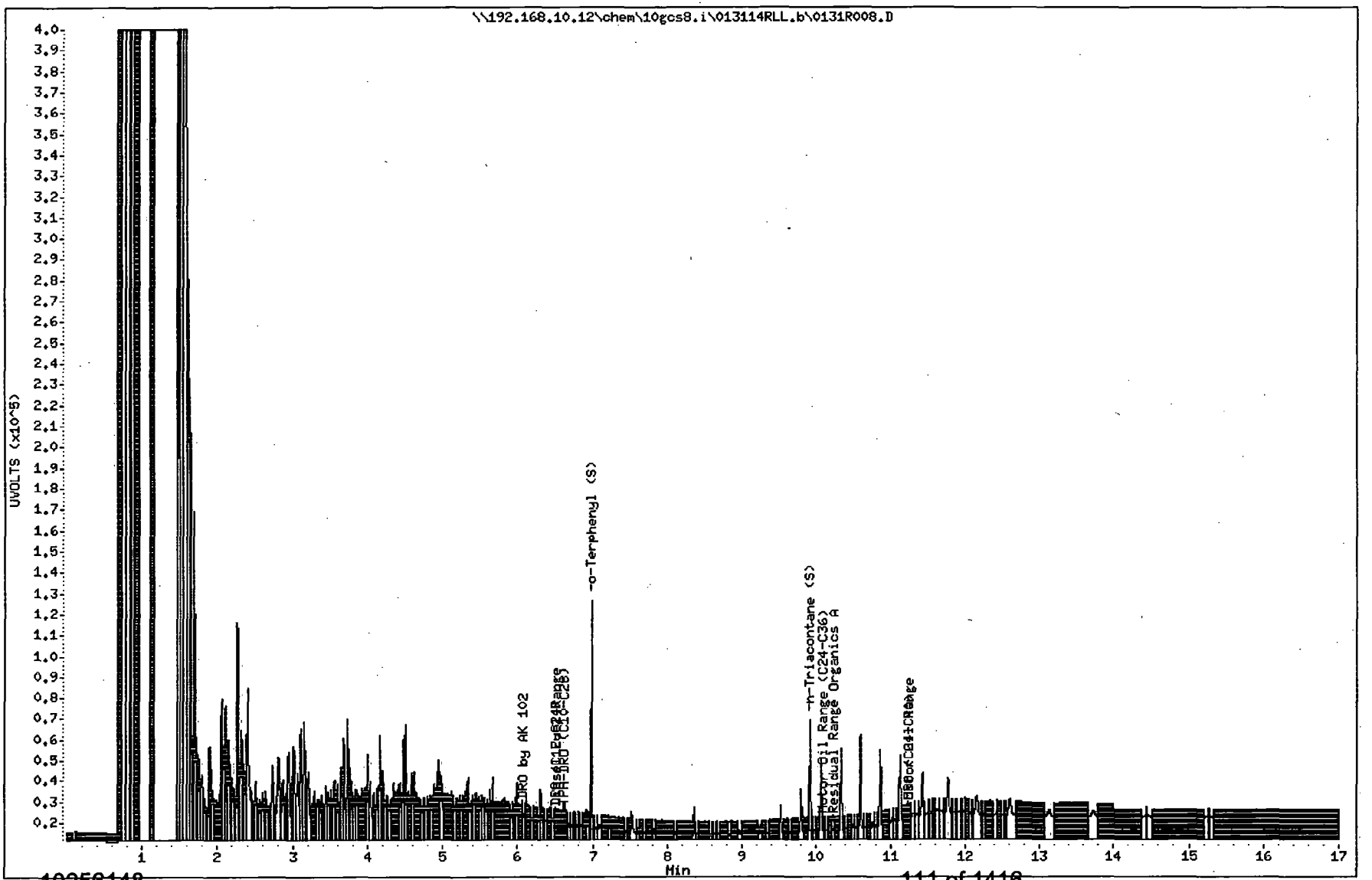
Sample Info: ICAL 2 10328-64

Volume Injected (uL): 1.0

Operator: JRH

Column phase: DB-5MS

Column diameter: 0.25



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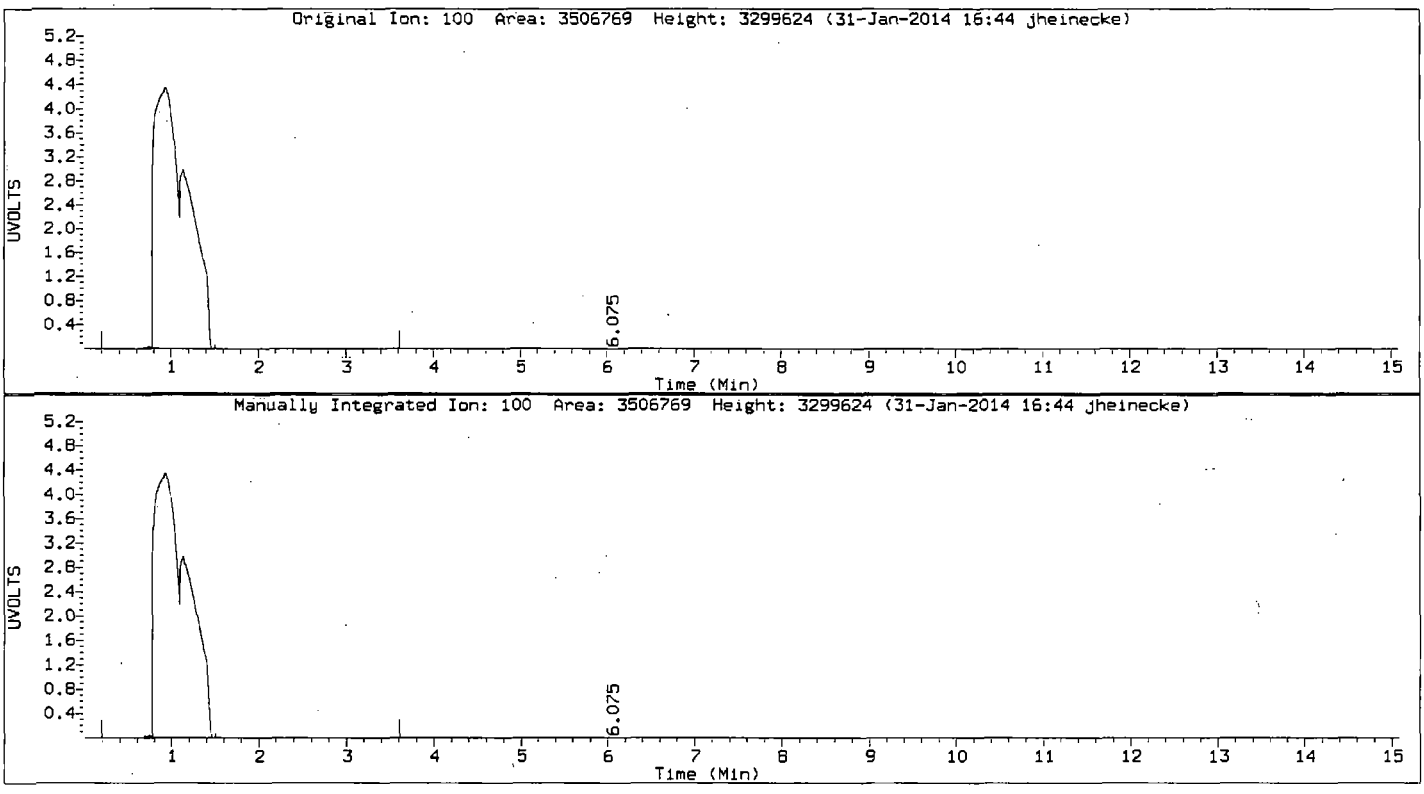
Injection Date: 31-JAN-2014 15:44
Instrument: 10gcs8.i
Lab Sample ID: ICAL 2 10328-64

Compound: DRO by AK 102
CAS Number:



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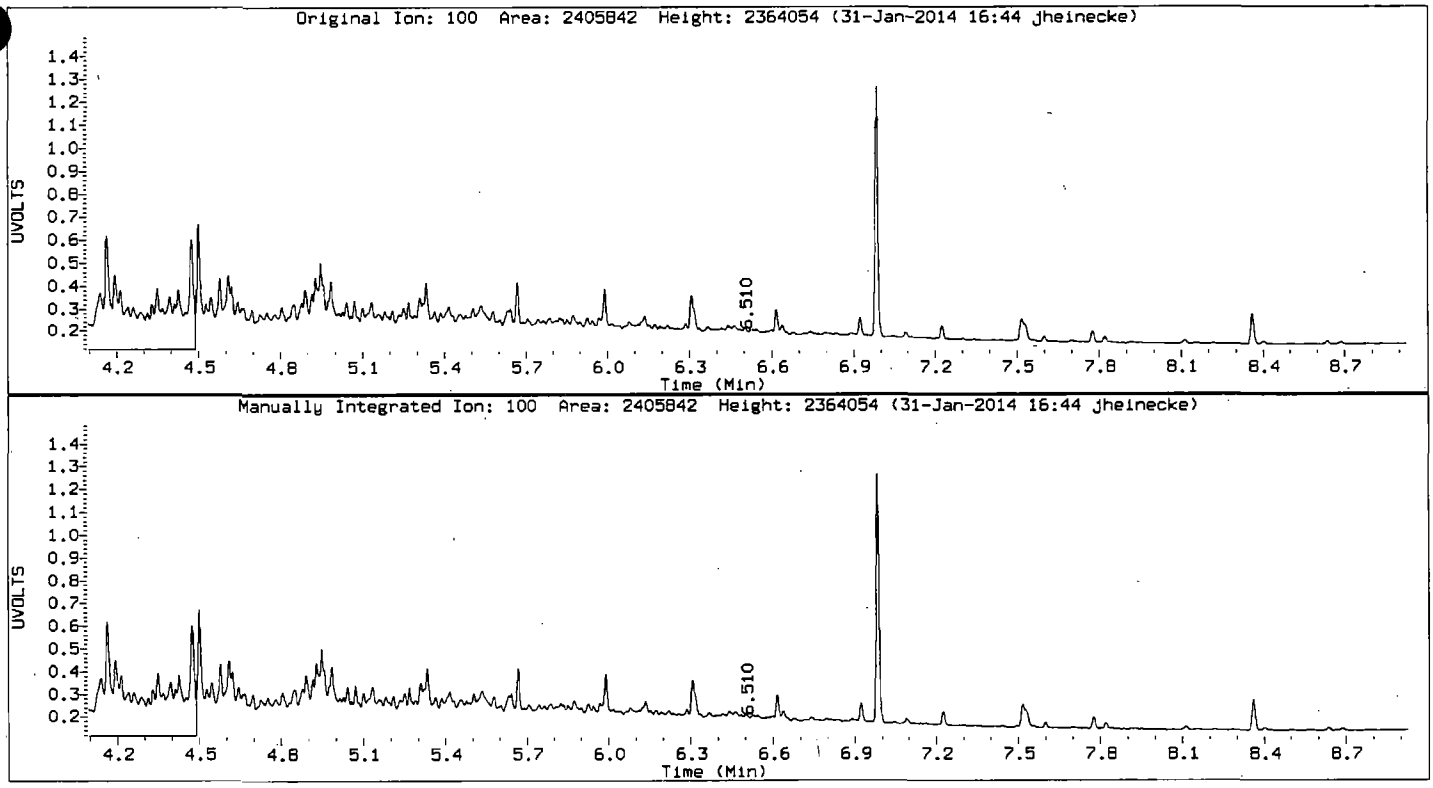
Injection Date: 31-JAN-2014 15:44
Instrument: 10gcs8.i
Lab Sample ID: ICAL 2 10328-64

Compound: Diesel Fuel Range
CAS Number:



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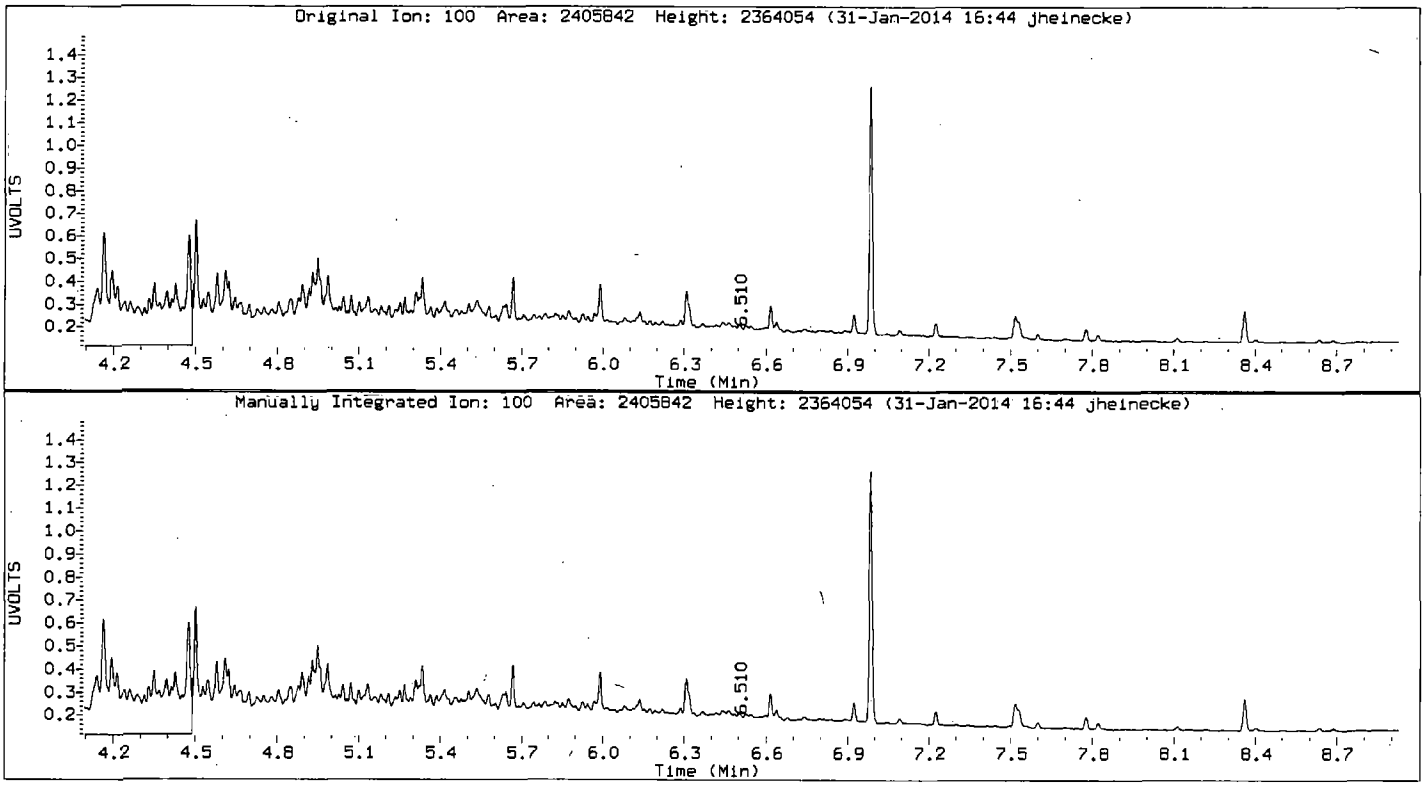
Injection Date: 31-JAN-2014 15:44
Instrument: 10gcs8.i
Lab Sample ID: ICAL 2 10328-64

Compound: DRO (C12-C24)
CAS Number:



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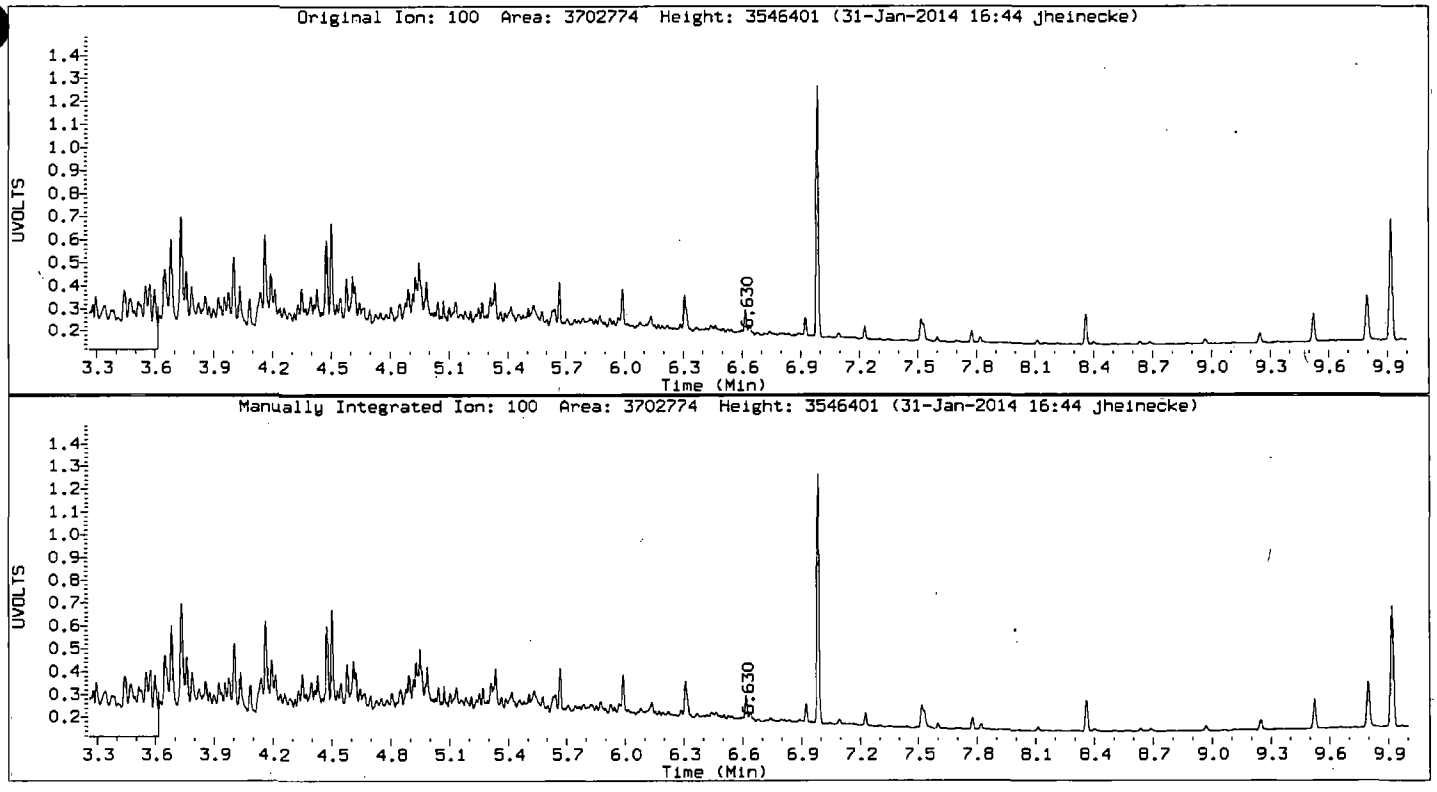
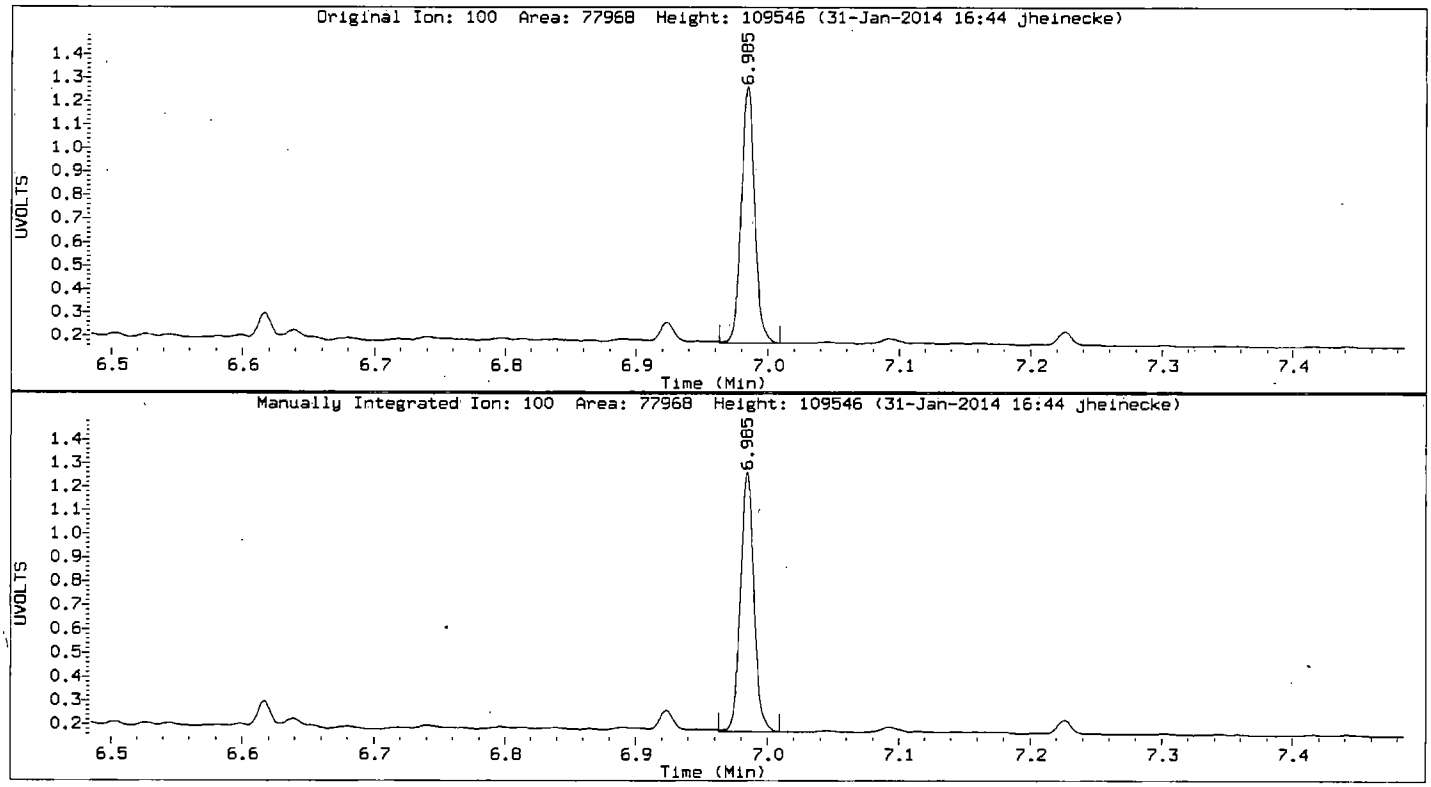
Injection Date: 31-JAN-2014 15:44
Instrument: 10gcs8.i
Lab Sample ID: ICAL 2 10328-64

Compound: TPH-DRO (C10-C28)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R008.d
Injection Date: 31-JAN-2014 15:44
Instrument: 10gcs8.i
Lab Sample ID: ICAL 2 10328-64

Compound: o-Terphenyl (S)
CAS Number:



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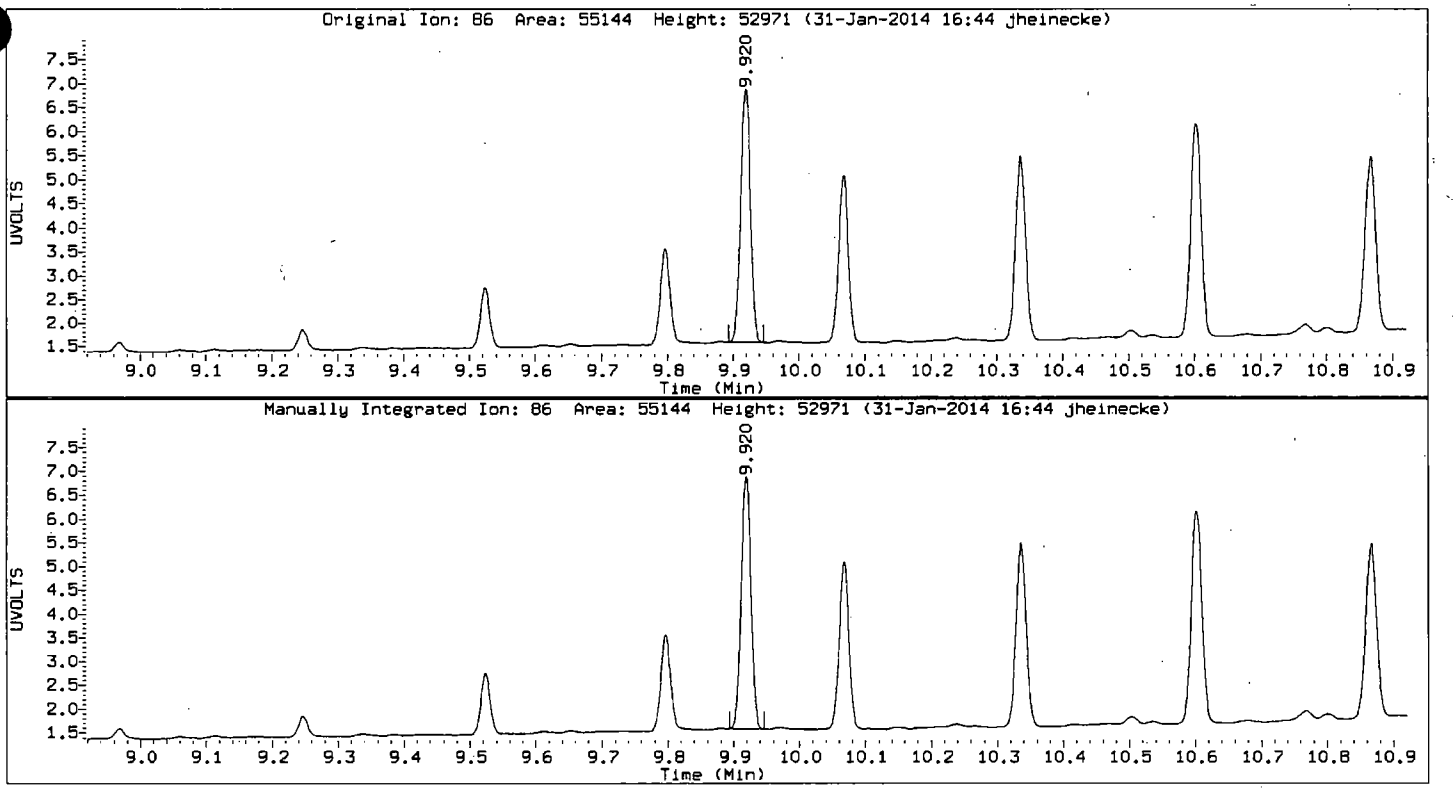
Injection Date: 31-JAN-2014 15:44
Instrument: 10gcs8.i
Lab Sample ID: ICAL 2 10328-64

Compound: n-Triacontane (S)
CAS Number:



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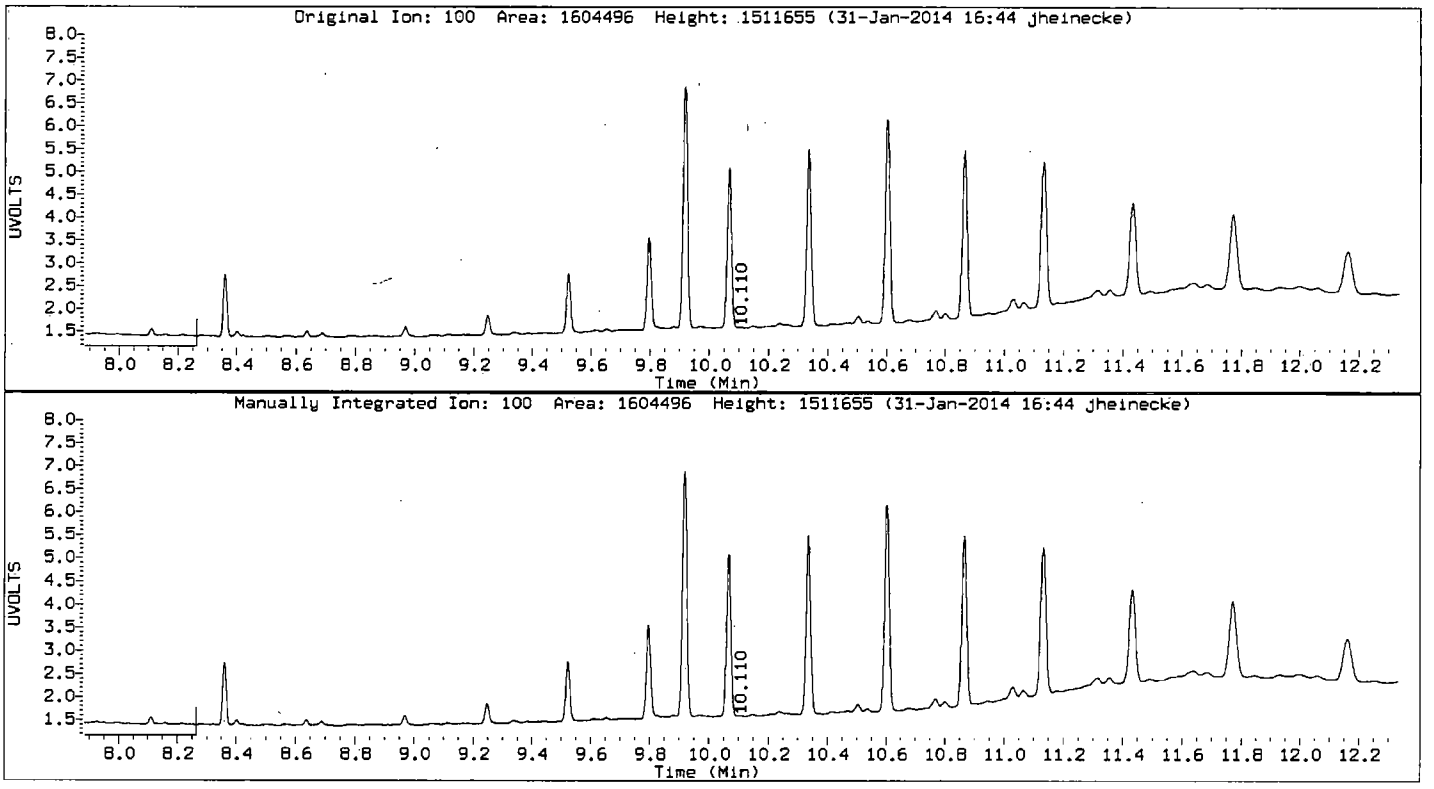
Injection Date: 31-JAN-2014 15:44
Instrument: 10gcs8.i
Lab Sample ID: ICAL 2 10328-64

Compound: Motor Oil Range (C24-C36)
CAS Number:



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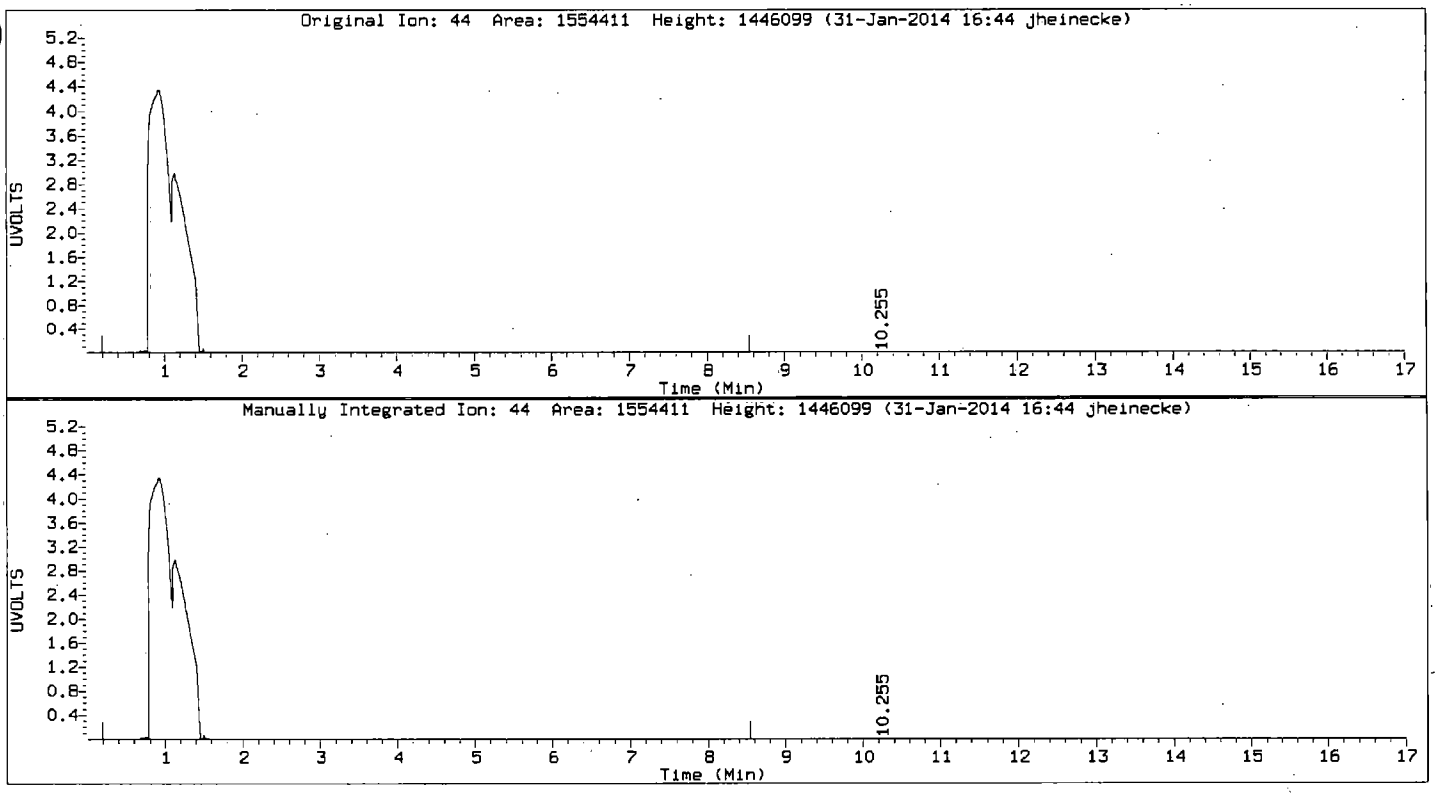
Injection Date: 31-JAN-2014 15:44
Instrument: 10gcs8.i
Lab Sample ID: ICAL 2 10328-64

Compound: Residual Range Organics AK103
CAS Number:



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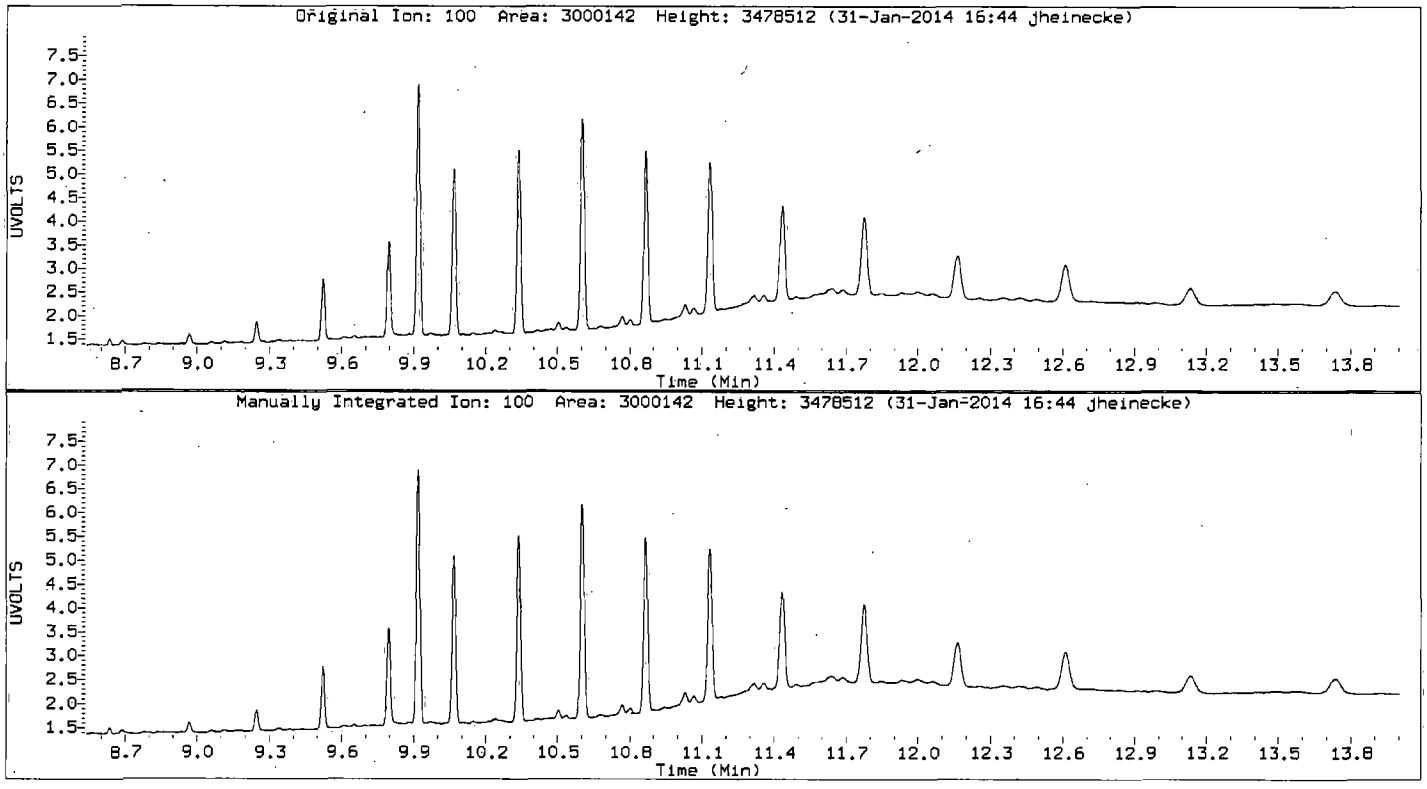
Injection Date: 31-JAN-2014 15:44
Instrument: 10gcs8.i
Lab Sample ID: ICAL 2 10328-64

Compound: ORO (C24-C40)
CAS Number:



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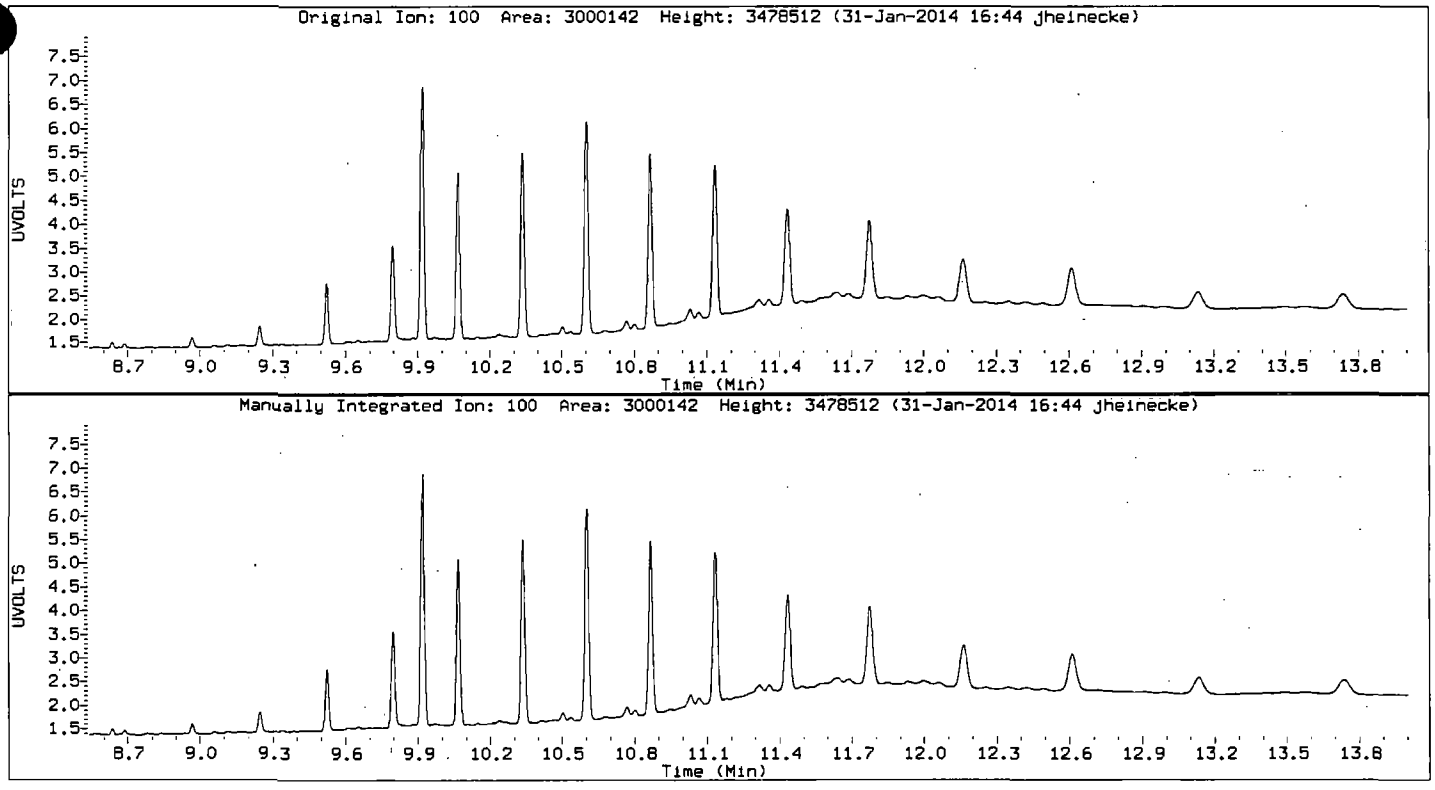
Injection Date: 31-JAN-2014 15:44
Instrument: 10gcs8.i
Lab Sample ID: ICAL 2 10328-64

Compound: Motor Oil Range
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R009.d
Lab Smp Id: ICAL 3 10328-64
Inj Date : 31-JAN-2014 16:07
Operator : JRH Inst ID: 10gcs8.i
Smp Info : ICAL 3 10328-64
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Meth Date : 01-Feb-2014 11:46 10gcs8.i Quant Type: ESTD
Cal Date : 31-JAN-2014 15:44 Cal File: 0131R008.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

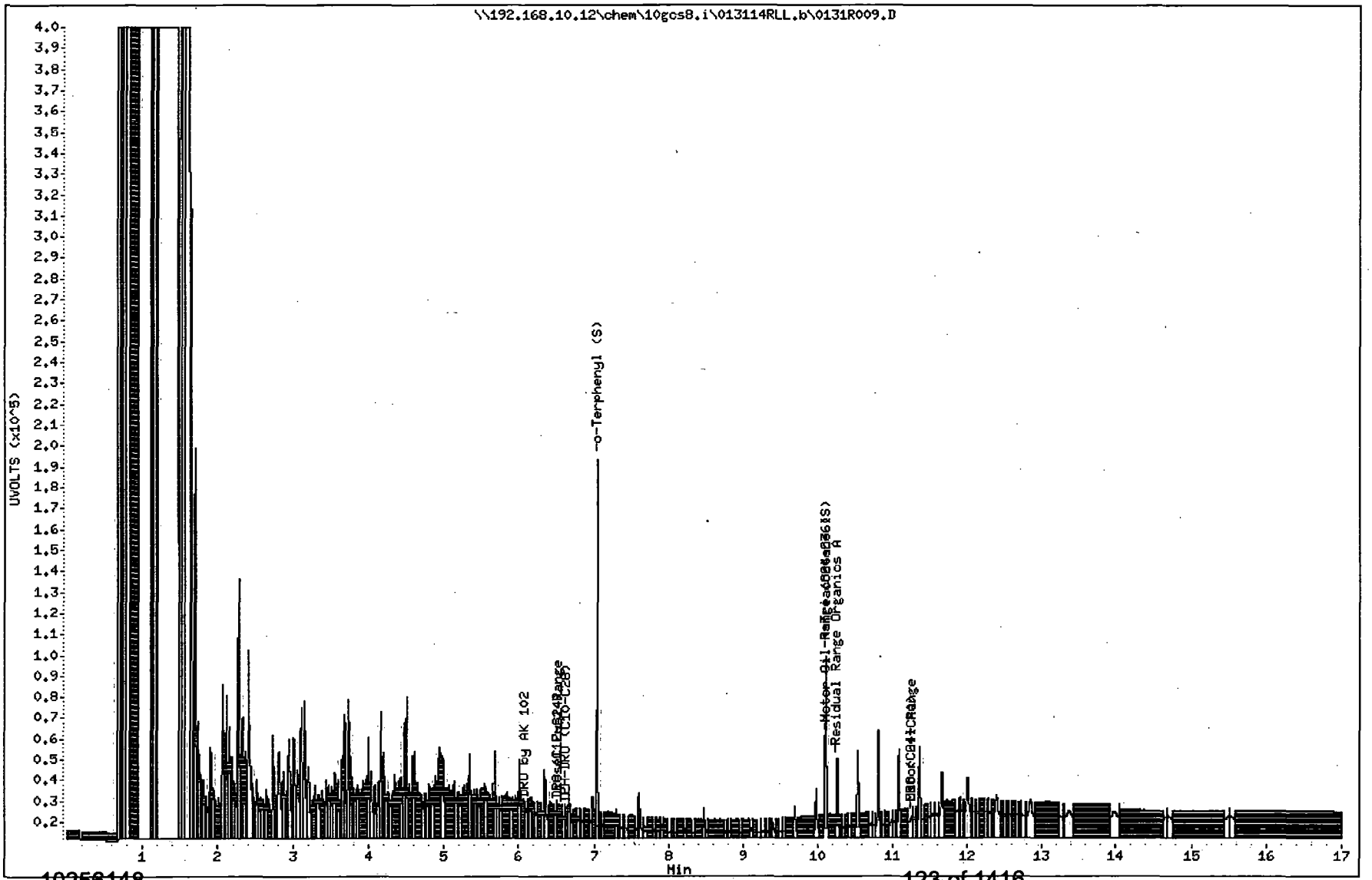
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S 1	DRO by AK 102	3.600-8.550			4094247	25.0000	21.6(M)
S 2	o-Terphenyl (S)	7.040	7.040	0.000	125288	2.50000	2.04(M)
S 3	n-Triacontane (S)	10.100	10.100	0.000	89341	2.50000	2.62(M)
S 4	Residual Range Organics AK103	8.560-11.950			1423952	25.0000	25.2(M)
S 5	TPH-DRO (C10-C28)	3.600-9.660			4280678	25.0000	21.1(M)
S 6	Motor Oil Range (C24-C36)	8.270-11.950			1477442	25.0000	25.6(M)
S 7	DRO (C12-C24)	4.490-8.529			2862703	25.0000	20.4(M)
S 8	Diesel Fuel Range	4.490-8.529			2862703	25.0000	20.4(M)
S 9	ORO (C24-C40)	8.539-14.000			2871607	25.0000	25.9(M)
S 10	Motor Oil Range	8.539-14.000			2871607	25.0000	25.9(M)

QC Flag Legend

M - Compound response manually integrated.

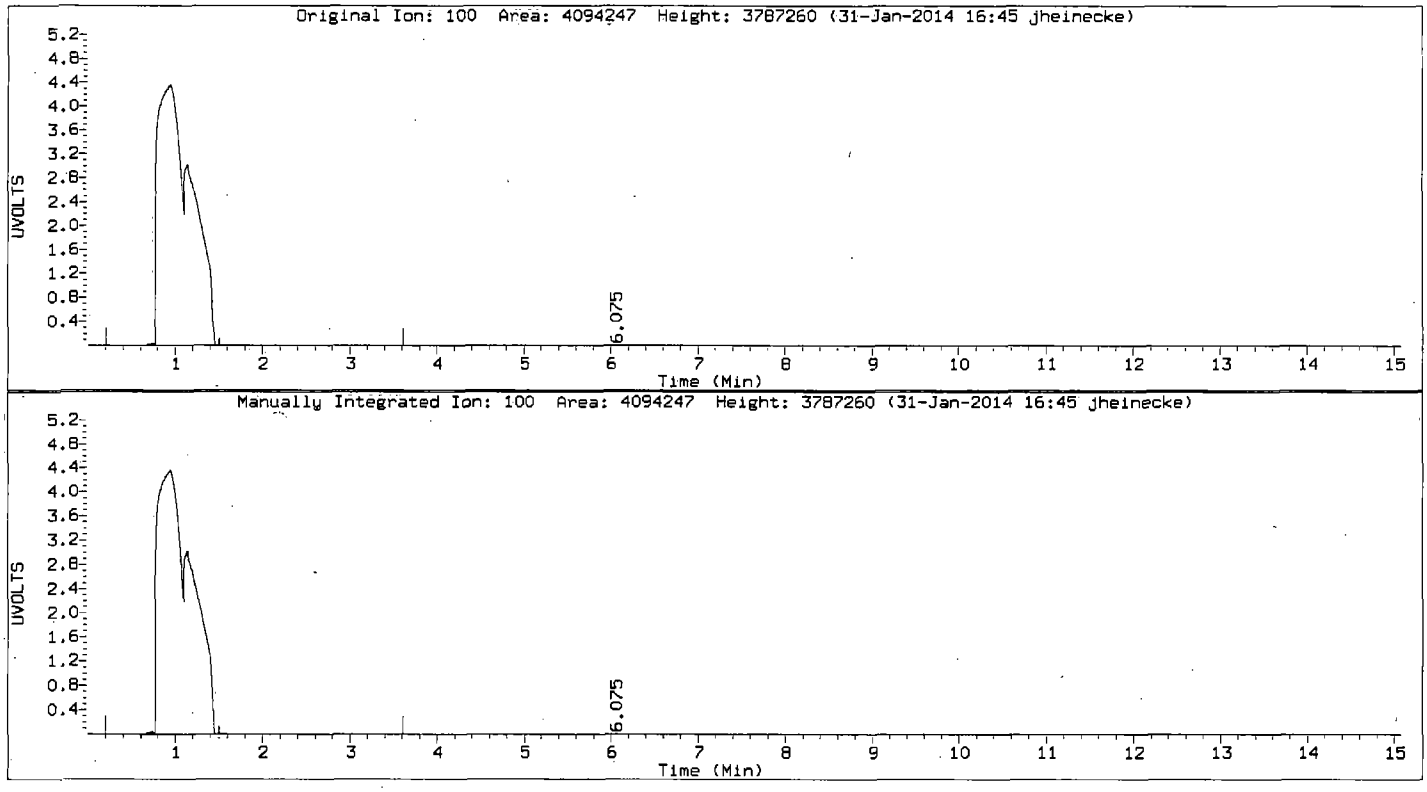
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R009.D
Date : 31-JAN-2014 16:07
Client ID:
Sample Info: ICAL 3 10328-64
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: 10gcs8.i
Operator: JRH
Column diameter: 0.25



Data File: \\192.168.10.12\Chem\10gcs8.i\013114RLL.B\0131R009.d
Injection Date: 31-JAN-2014 16:07
Instrument: 10gcs8.i
Lab Sample ID: ICAL 3 10328-64

Compound: DRO by AK 102
CAS Number:



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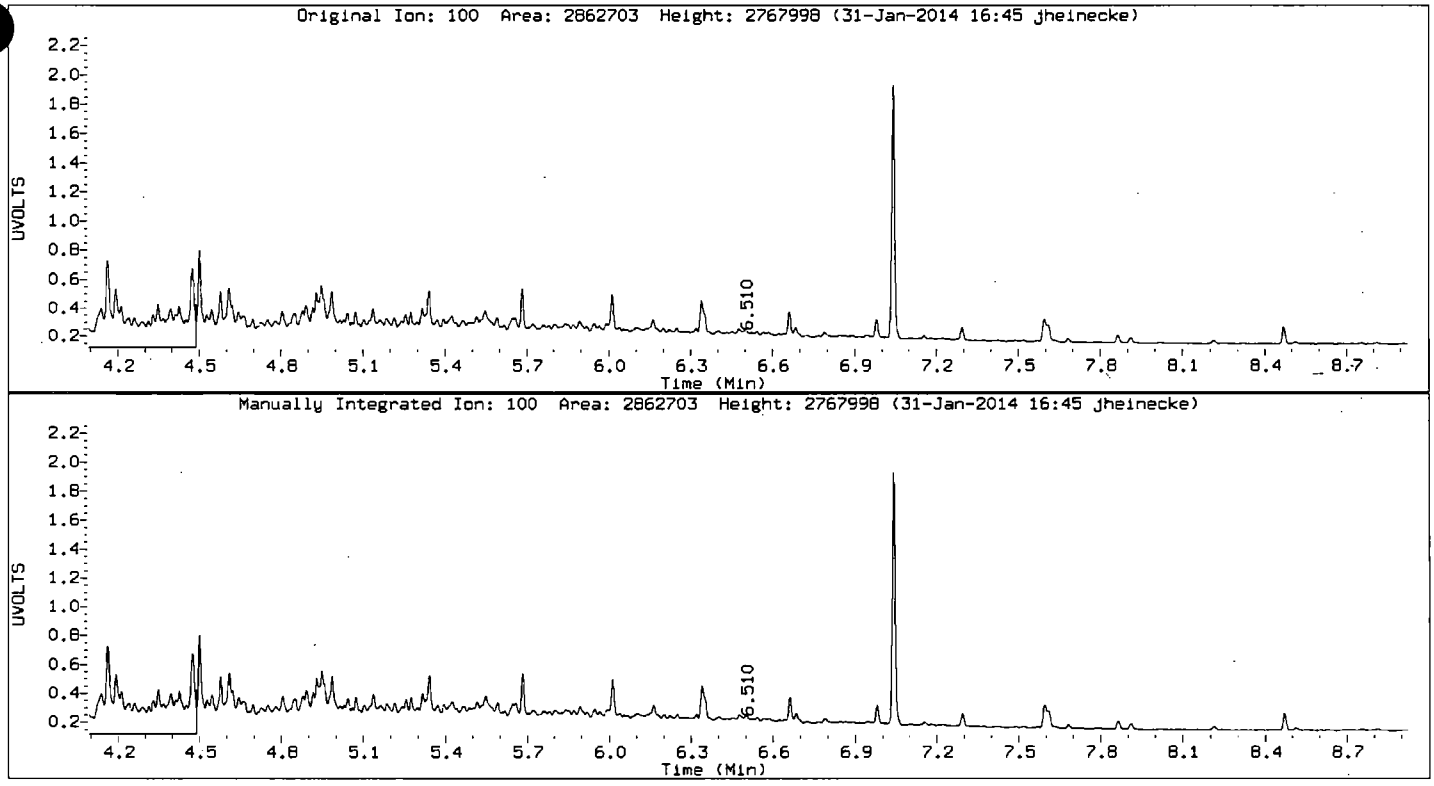
Injection Date: 31-JAN-2014 16:07
Instrument: 10gcs8.i
Lab Sample ID: ICAL 3 10328-64

Compound: Diesel Fuel Range
CAS Number:



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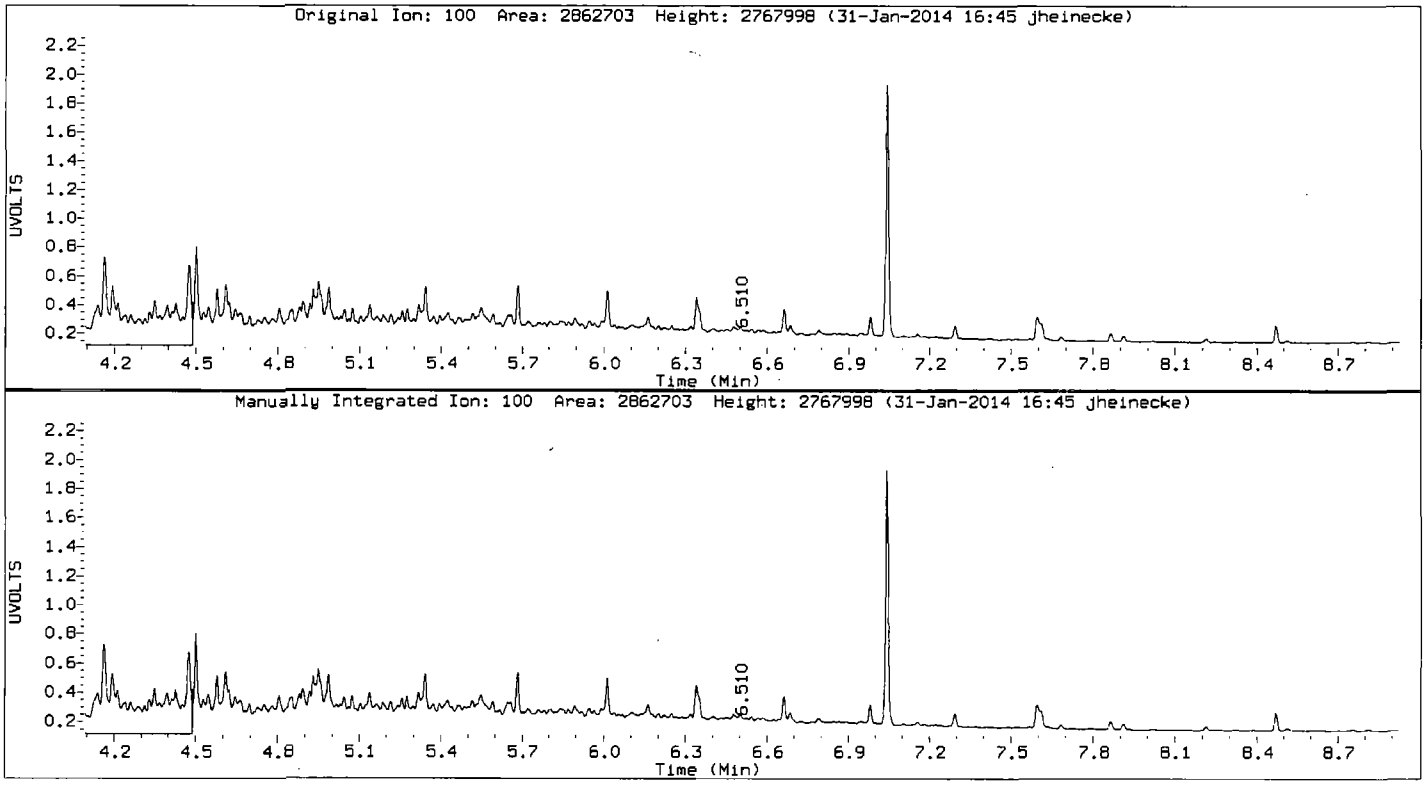
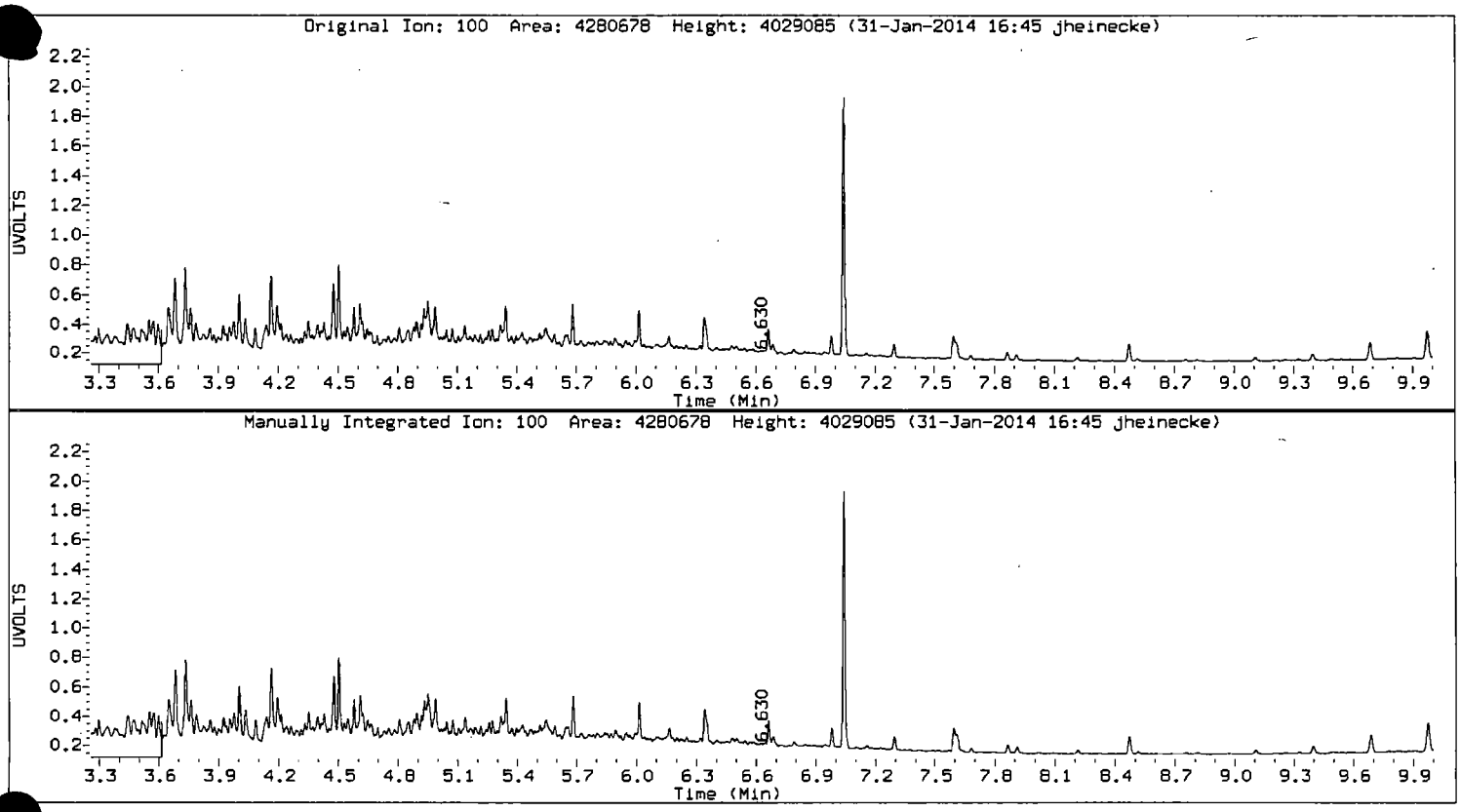
Injection Date: 31-JAN-2014 16:07
Instrument: 10gcs8.i
Lab Sample ID: ICAL 3 10328-64

Compound: DRO (C12-C24)
CAS Number:



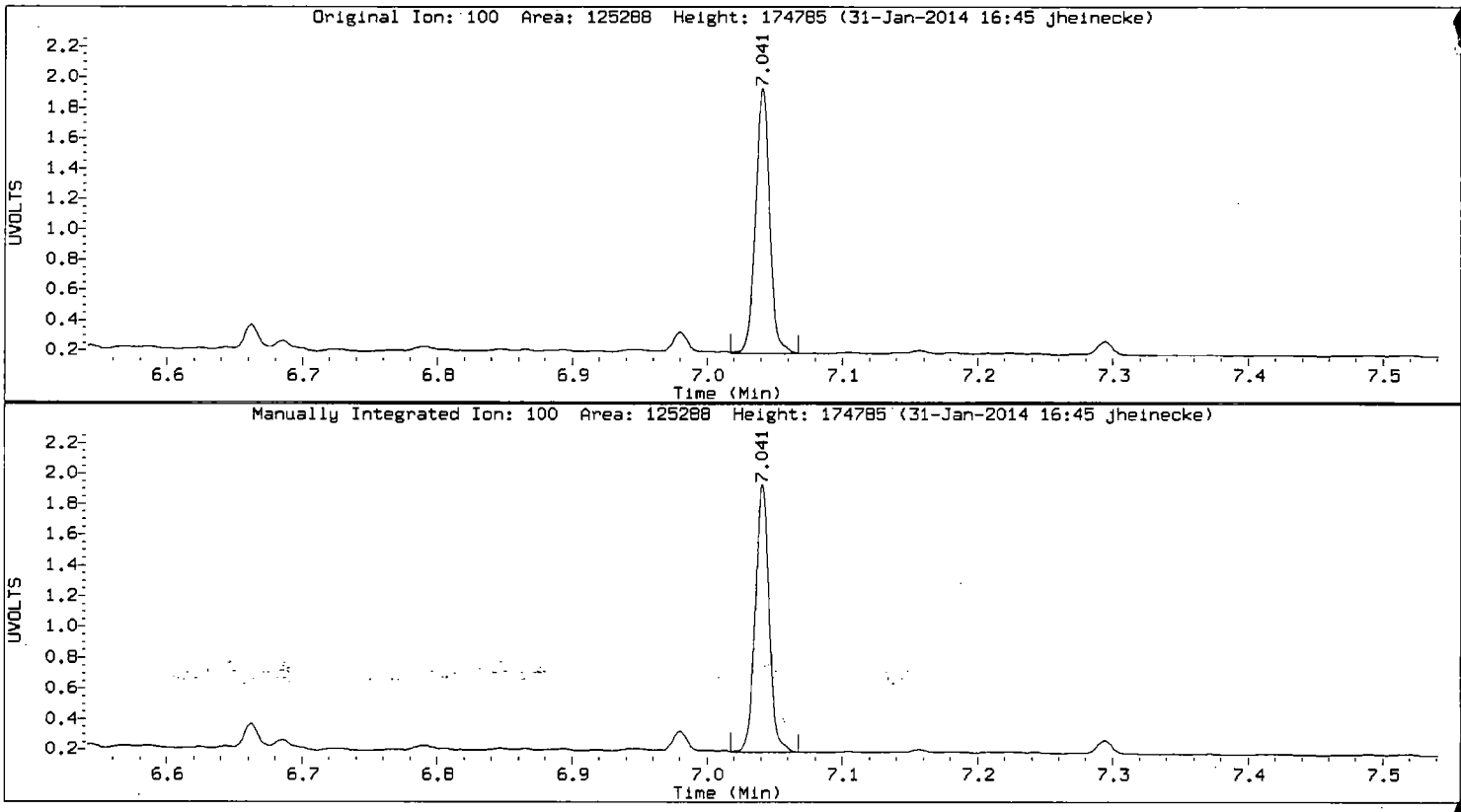
Injection Date: 31-JAN-2014 16:07
Instrument: 10gcs8.i
Lab Sample ID: ICAL 3 10328-64

Compound: TPH-DRO (C10-C28)
CAS Number:



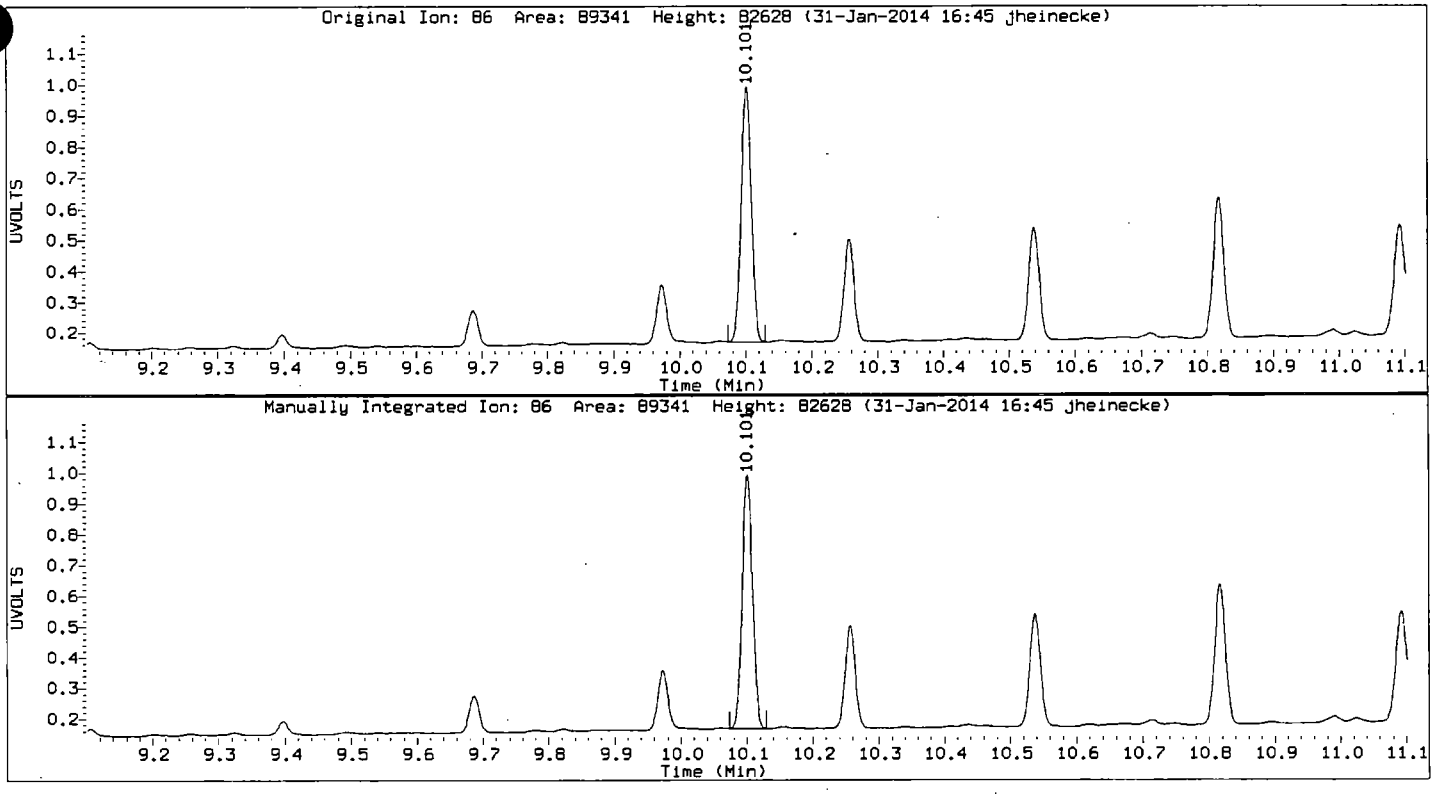
Injection Date: 31-JAN-2014 16:07
Instrument: 10gcs8.i
Lab Sample ID: ICAL 3 10328-64

Compound: o-Terphenyl (S)
CAS Number:



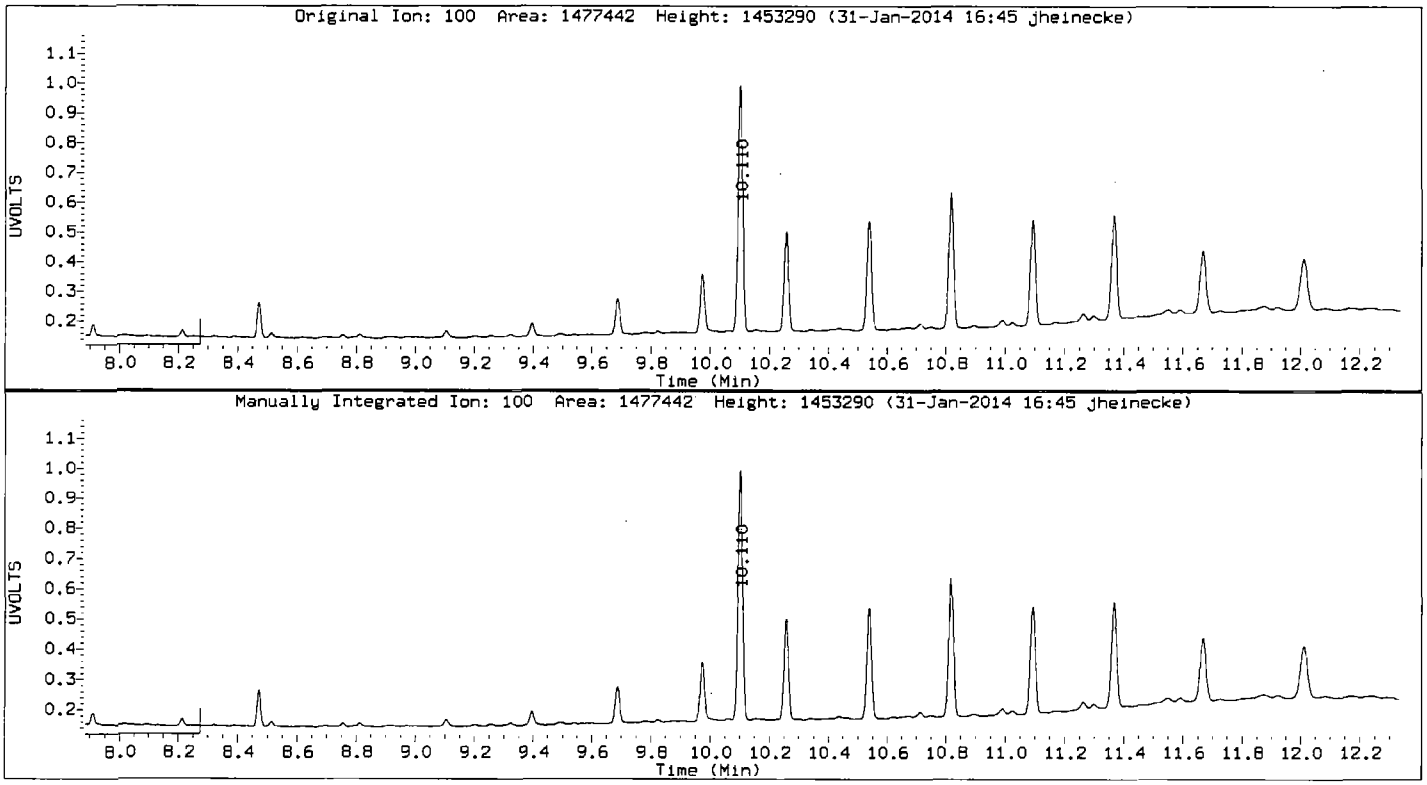
Data File: \\192.168.10.12\Chem\10gcs8.i\013114REE.D\0131K009.d
Injection Date: 31-JAN-2014 16:07
Instrument: 10gcs8.i
Lab Sample ID: ICAL 3 10328-64

Compound: n-Triacontane (S)
CAS Number:



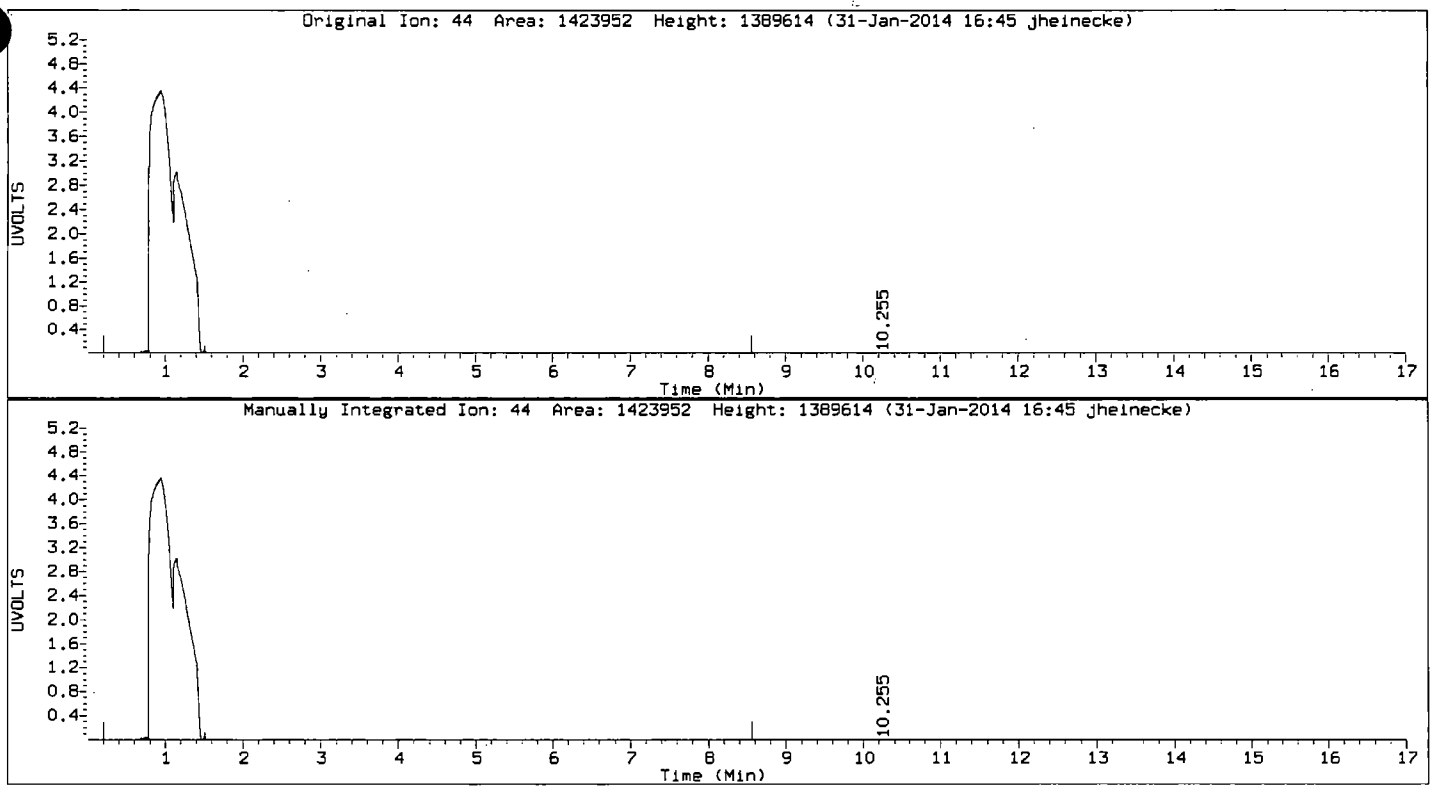
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R009.d
Injection Date: 31-JAN-2014 16:07
Instrument: 10gcs8.i
Lab Sample ID: ICAL 3 10328-64

Compound: Motor Oil Range (C24-C36)
CAS Number:



Data File: \\192.168.10.12\Chem\10gcs8.i\013114RLL.D\0131R009.d
Injection Date: 31-JAN-2014 16:07
Instrument: 10gcs8.i
Lab Sample ID: ICAL 3 10328-64

Compound: Residual Range Organics AK103
CAS Number:



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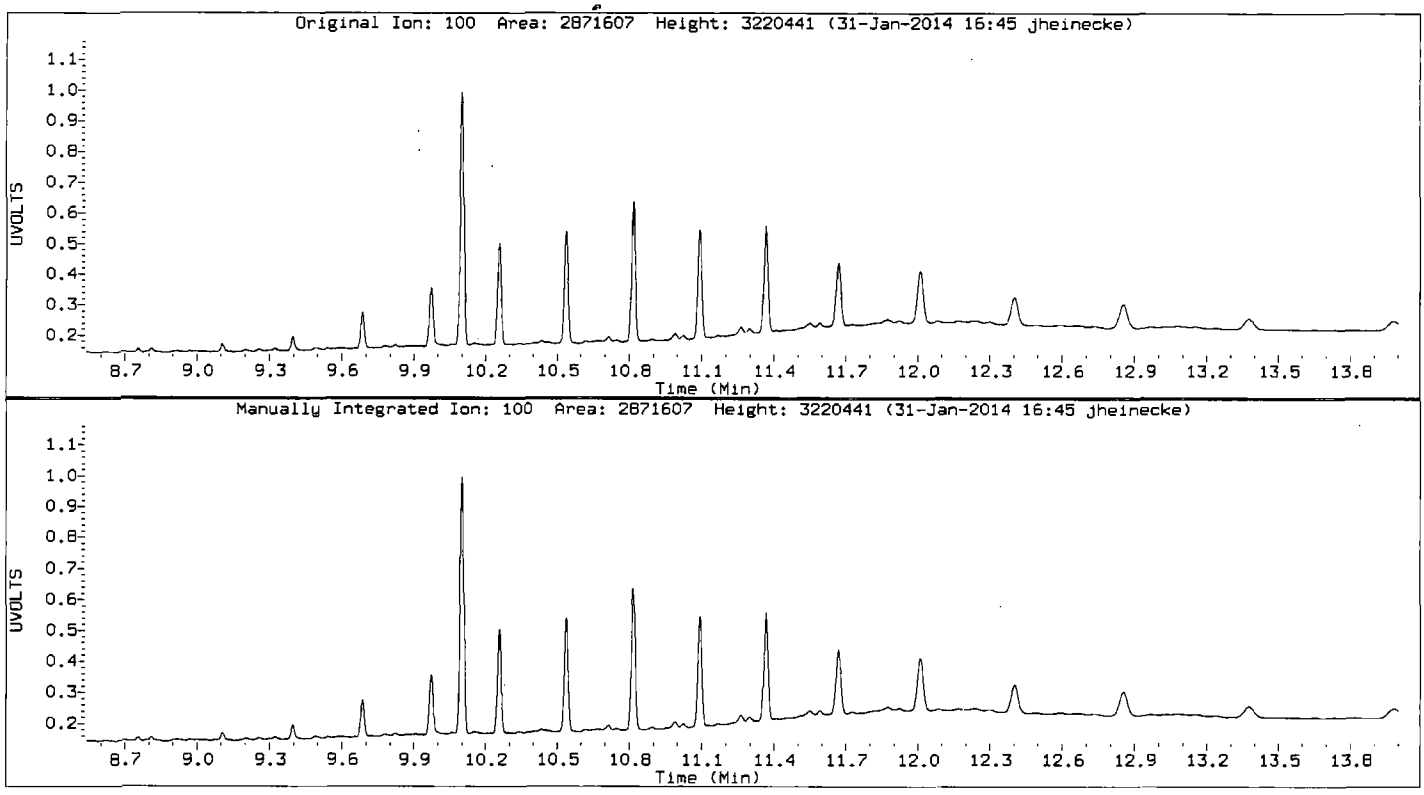
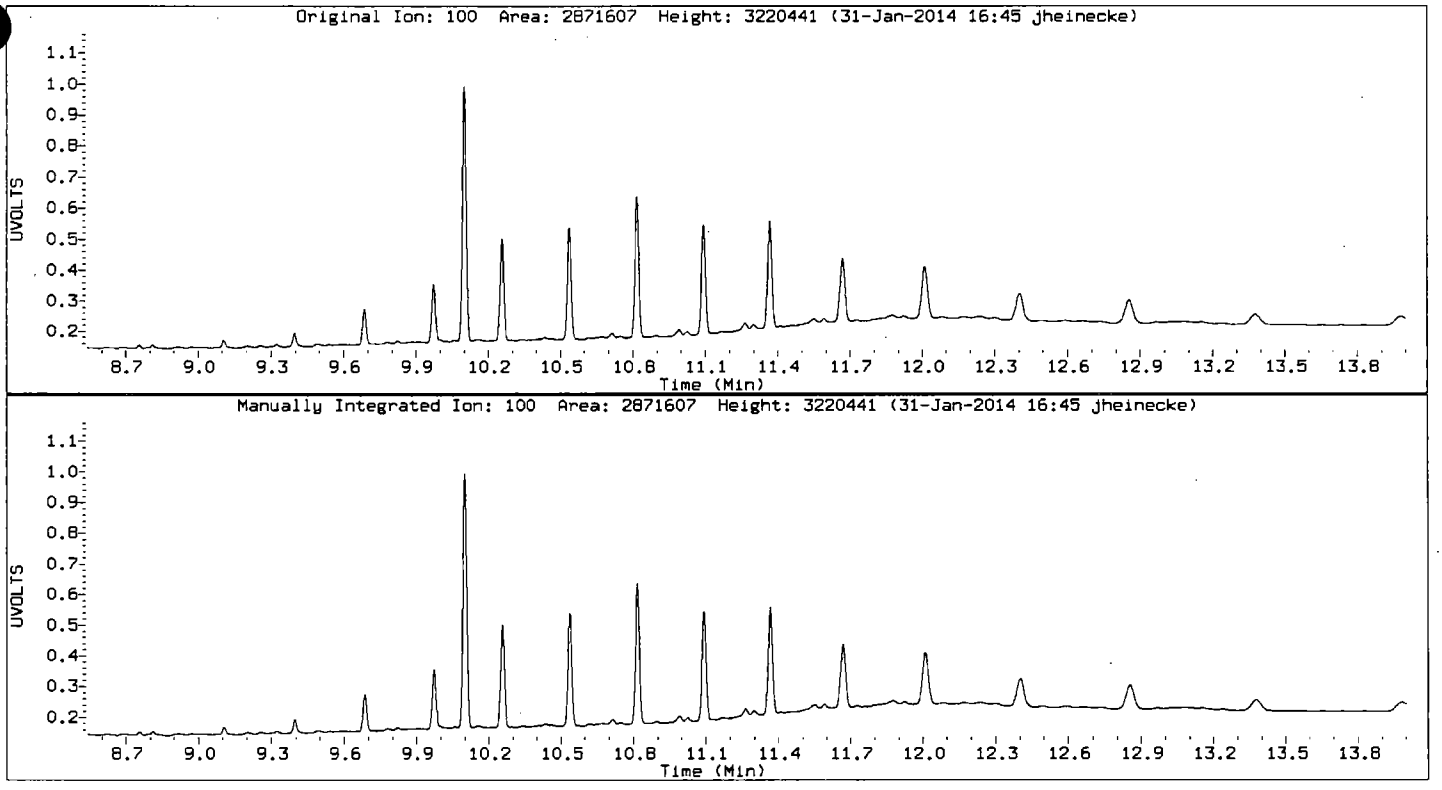
Injection Date: 31-JAN-2014 16:07
Instrument: 10gcs8.i
Lab Sample ID: ICAL 3 10328-64

Compound: ORO (C24-C40)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R009.d
Injection Date: 31-JAN-2014 16:07
Instrument: 10gcs8.i
Lab Sample ID: ICAL 3 10328-64

Compound: Motor Oil Range
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R010.d
Lab Smp Id: ICAL 4 10328-64
Inj Date : 31-JAN-2014 16:30
Operator : JRH Inst ID: 10gcs8.i
Smp Info : ICAL 4 10328-64
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Meth Date : 01-Feb-2014 11:46 10gcs8.i Quant Type: ESTD
Cal Date : 31-JAN-2014 16:07 Cal File: 0131R009.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

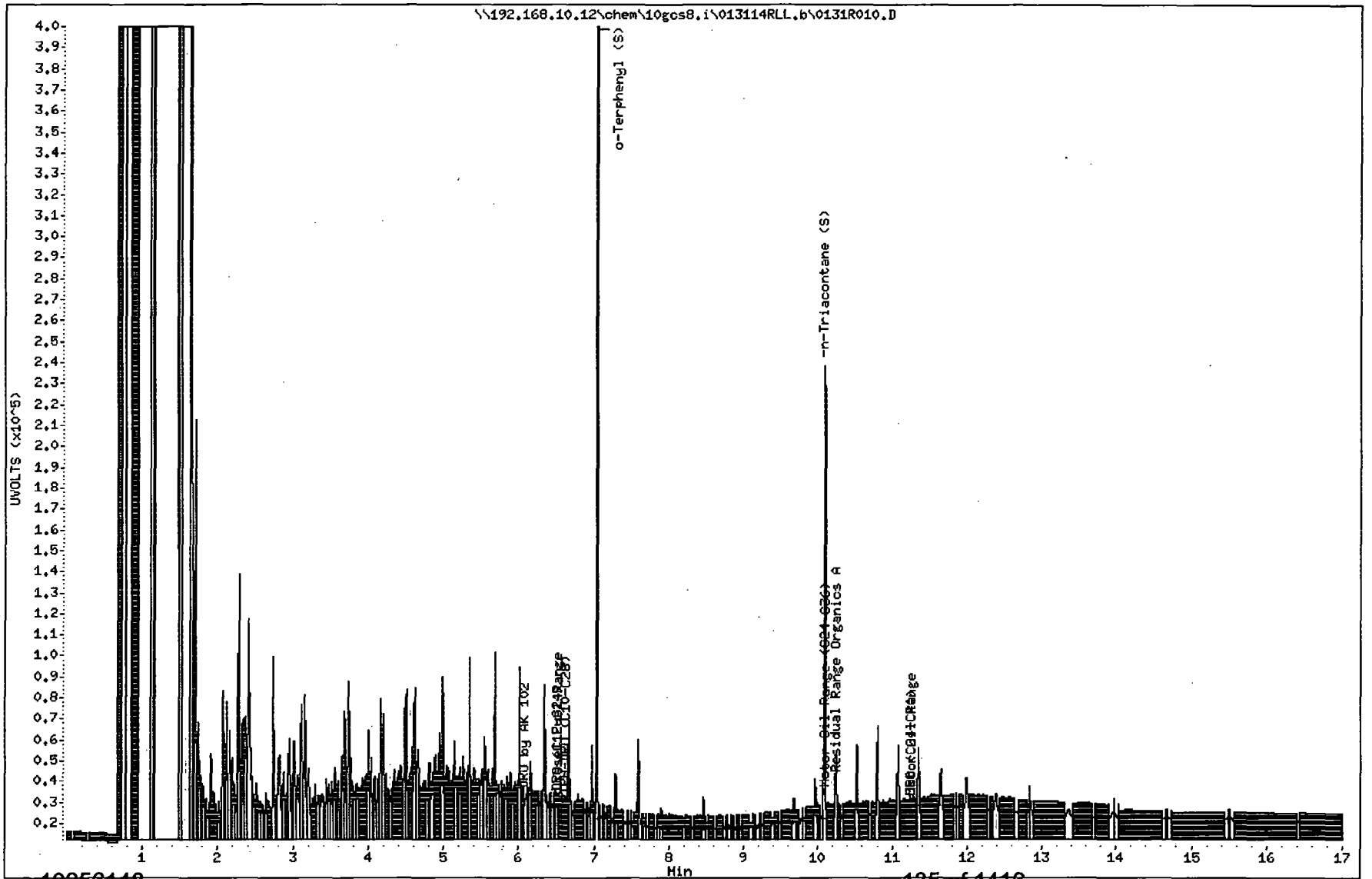
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.600-8.550			5777397	50.0000	51.5(M)
$	2 o-Terphenyl (S)	7.034	7.034	0.000	321610	5.00000	5.20(M)
$	3 n-Triacontane (S)	10.091	10.091	0.000	229494	5.00000	5.75(M)
S	4 Residual Range Organics AK103	8.560-11.950			2289964	50.0000	52.8(M)
S	5 TPH-DRO (C10-C28)	3.600-9.660			6190117	50.0000	51.0(M)
S	6 Motor Oil Range (C24-C36)	8.270-11.950			2395420	50.0000	53.4(M)
S	7 DRO (C12-C24)	4.490-8.529			4374355	50.0000	50.9(M)
S	8 Diesel Fuel Range	4.490-8.529			4374355	50.0000	50.9(M)
S	9 ORO (C24-C40)	8.539-14.000			3914839	50.0000	51.8(M)
S	10 Motor Oil Range	8.539-14.000			3914839	50.0000	51.8(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R010.D
Date : 31-JAN-2014 16:30
Client ID:
Sample Info: ICAL 4 10328-64
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: 10gcs8.i
Operator: JRH
Column diameter: 0.25



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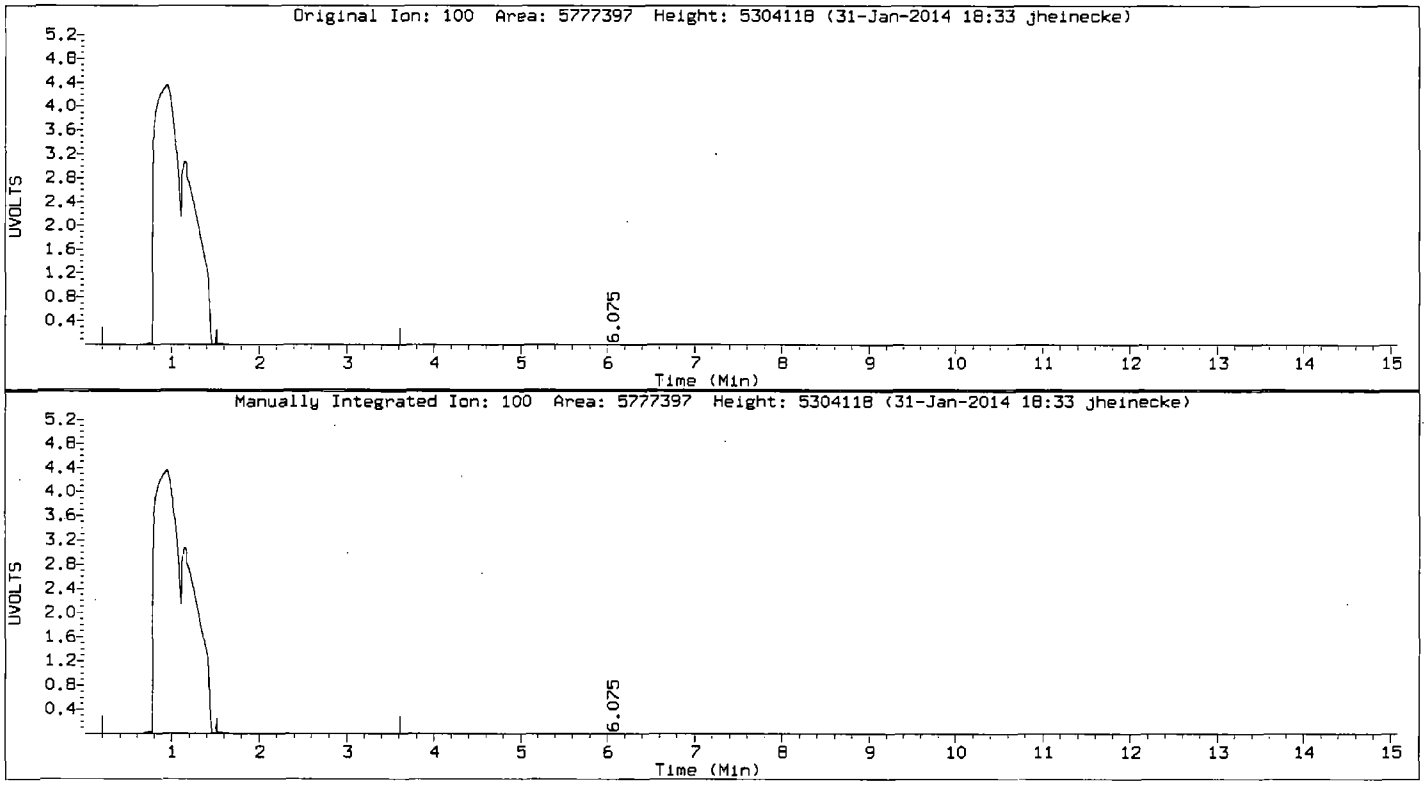
Injection Date: 31-JAN-2014 16:30
Instrument: 10gcs8.i
Lab Sample ID: ICAL 4 10328-64

Compound: DRO by AK 102
CAS Number:



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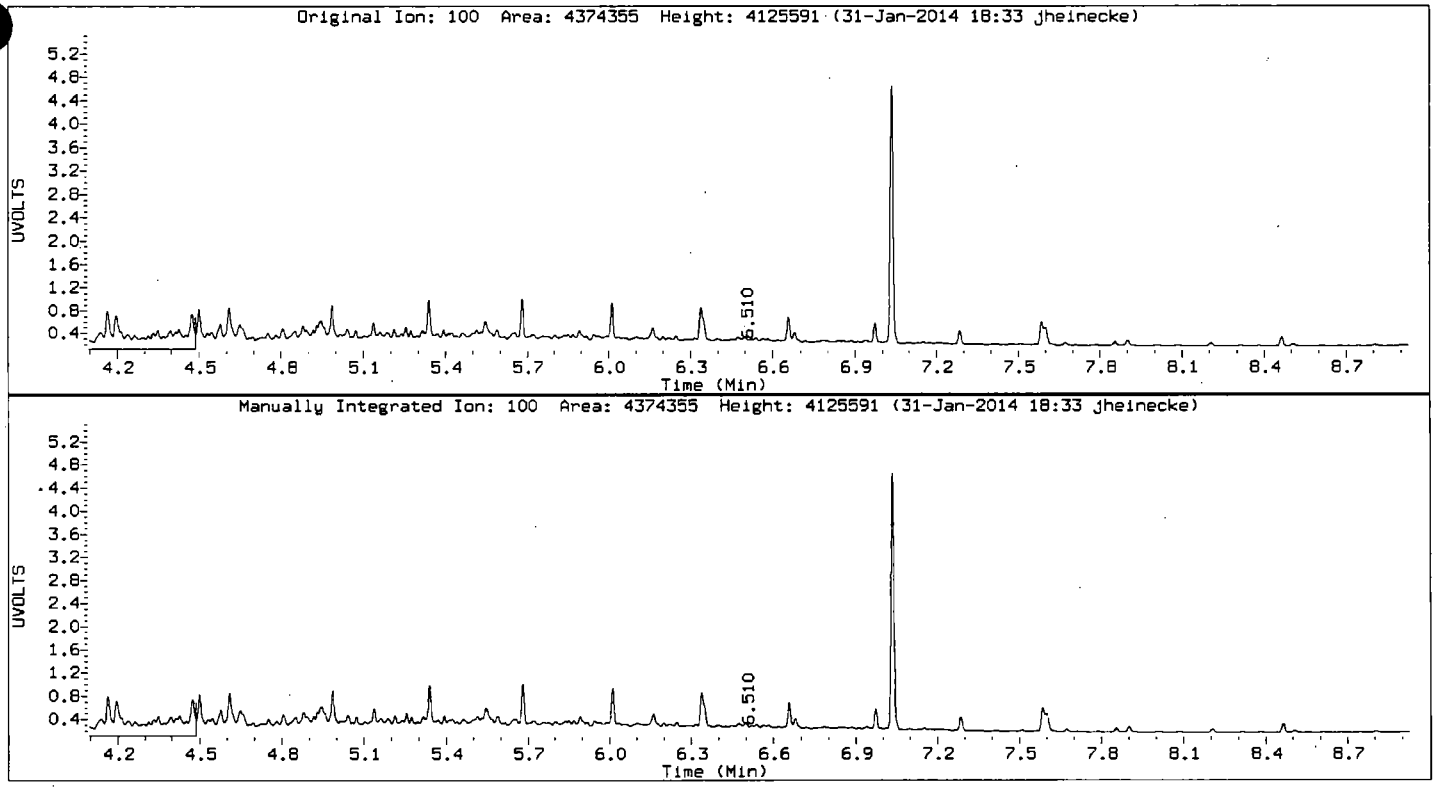
Instrument: 10gcs8.i
Lab Sample ID: ICAL 4 10328-64

Compound: Diesel Fuel Range
CAS Number:



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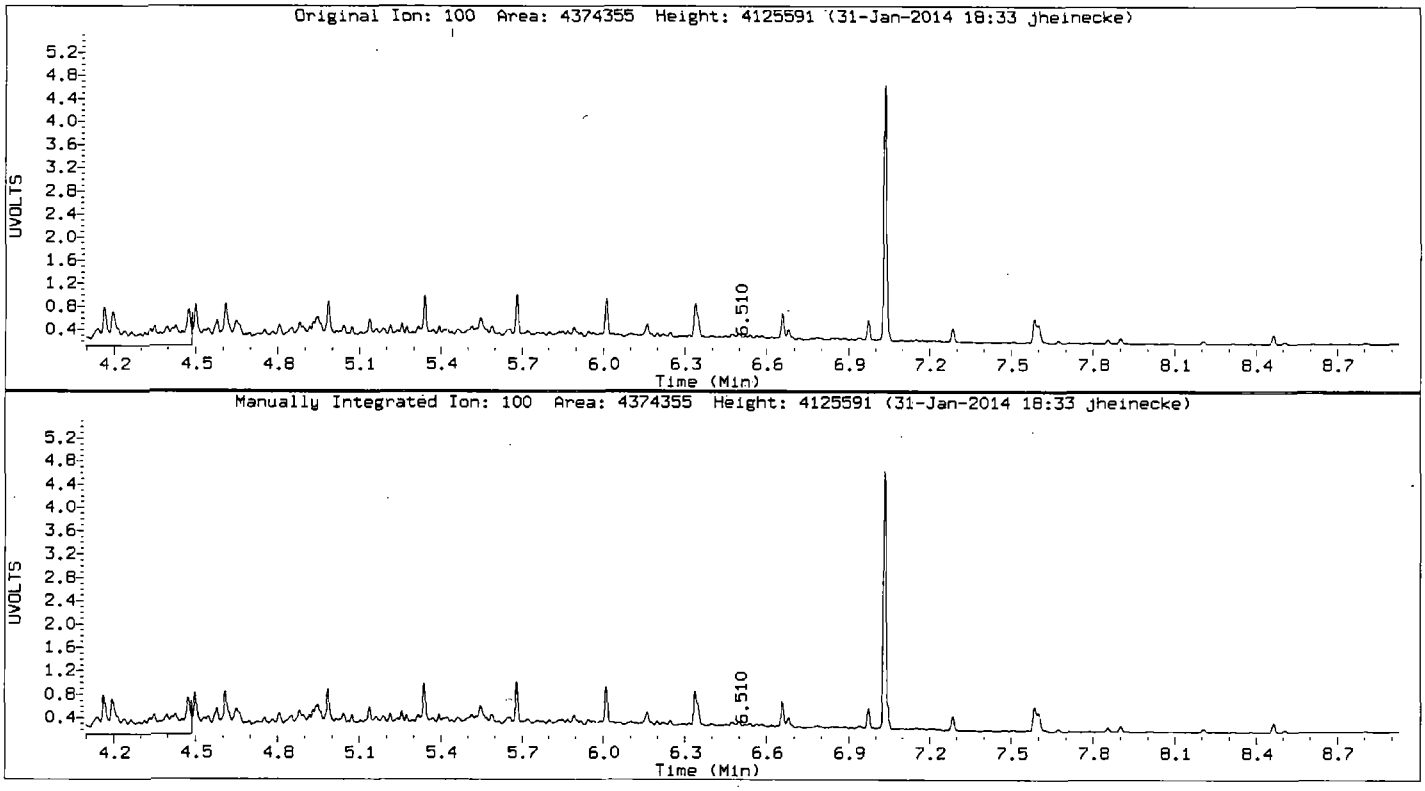
Injection Date: 31-JAN-2014 16:30
Instrument: 10gcs8.i
Lab Sample ID: ICAL 4 10328-64

Compound: DRO (C12-C24)
CAS Number:



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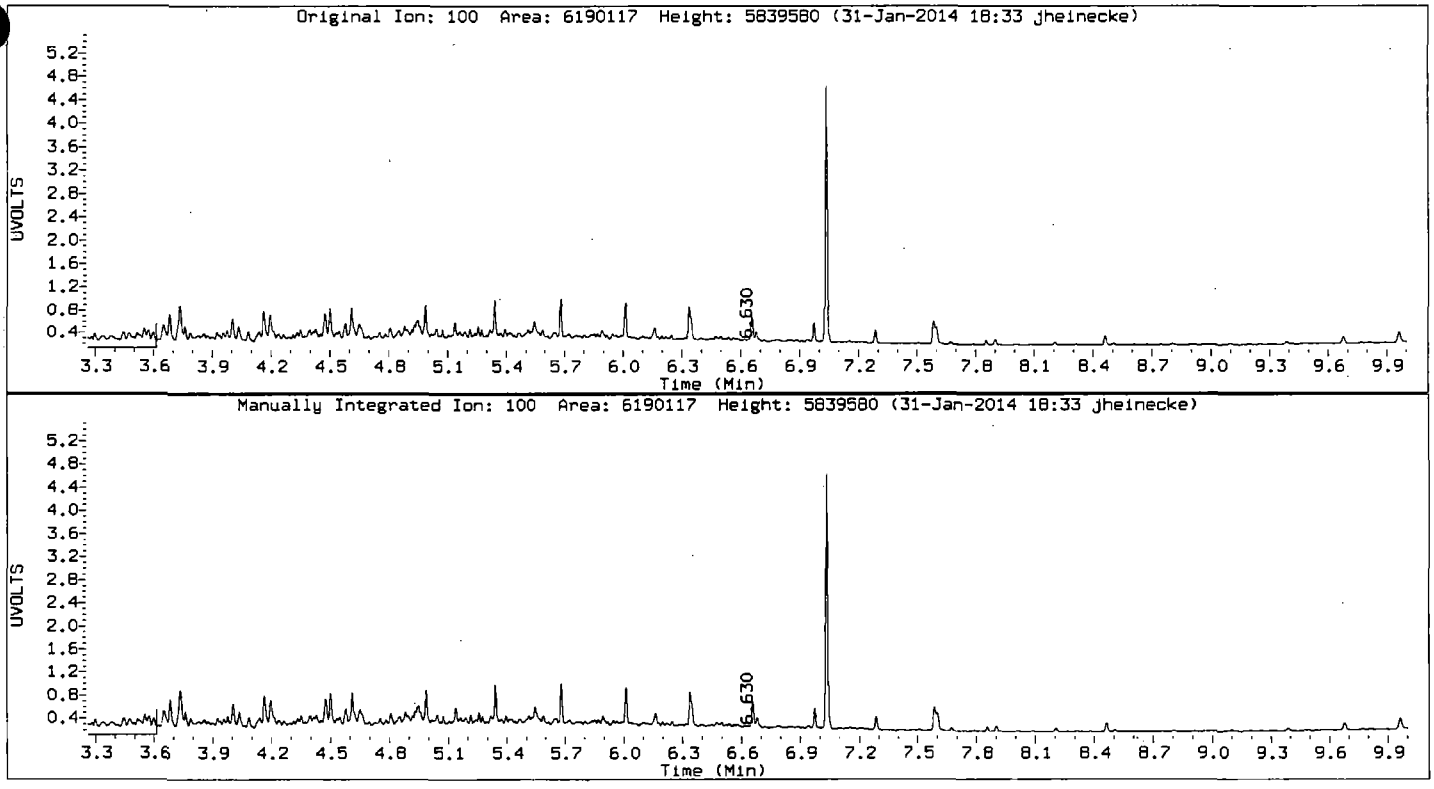
Injection Date: 31-JAN-2014 16:30
Instrument: 10gcs8.i
Lab Sample ID: ICAL 4 10328-64

Compound: TPH-DRO (C10-C28)
CAS Number:



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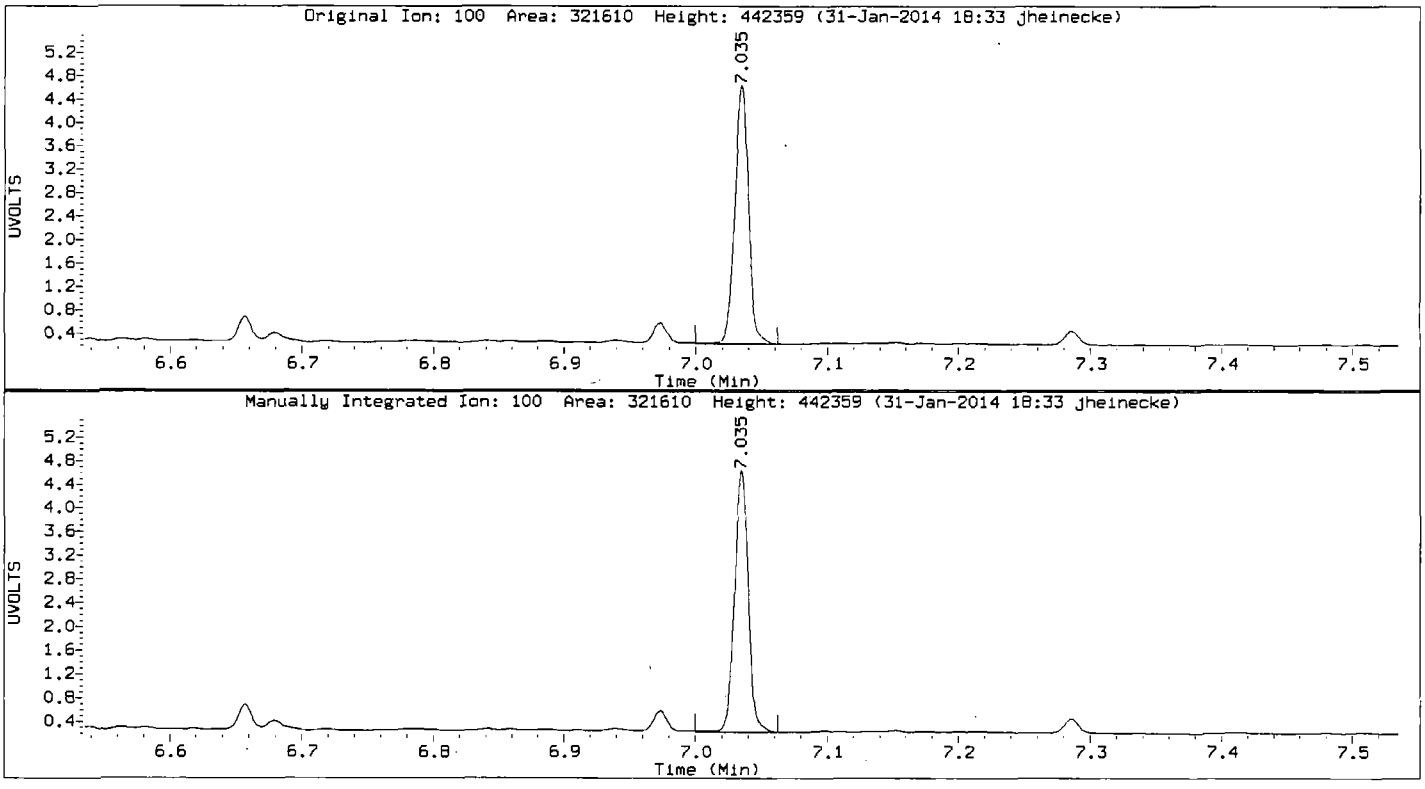
Injection Date: 31-JAN-2014 16:30
Instrument: 10gcs8.i
Lab Sample ID: ICAL 4 10328-64

Compound: o-Terphenyl (S)
CAS Number:



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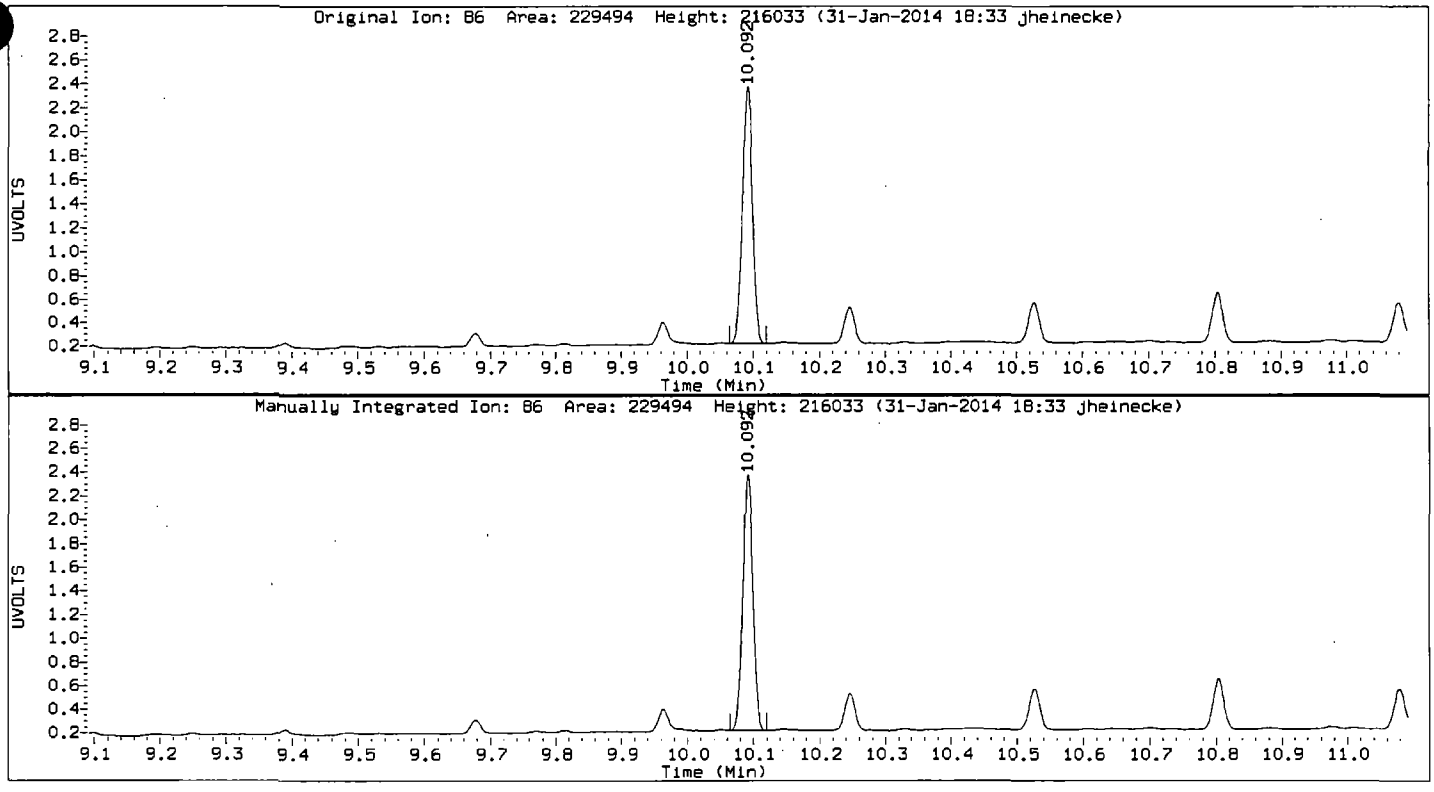
Injection Date: 31-JAN-2014 16:30
Instrument: 10gcs8.i
Lab Sample ID: ICAL 4 10328-64

Compound: n-Triacontane (S)
CAS Number:



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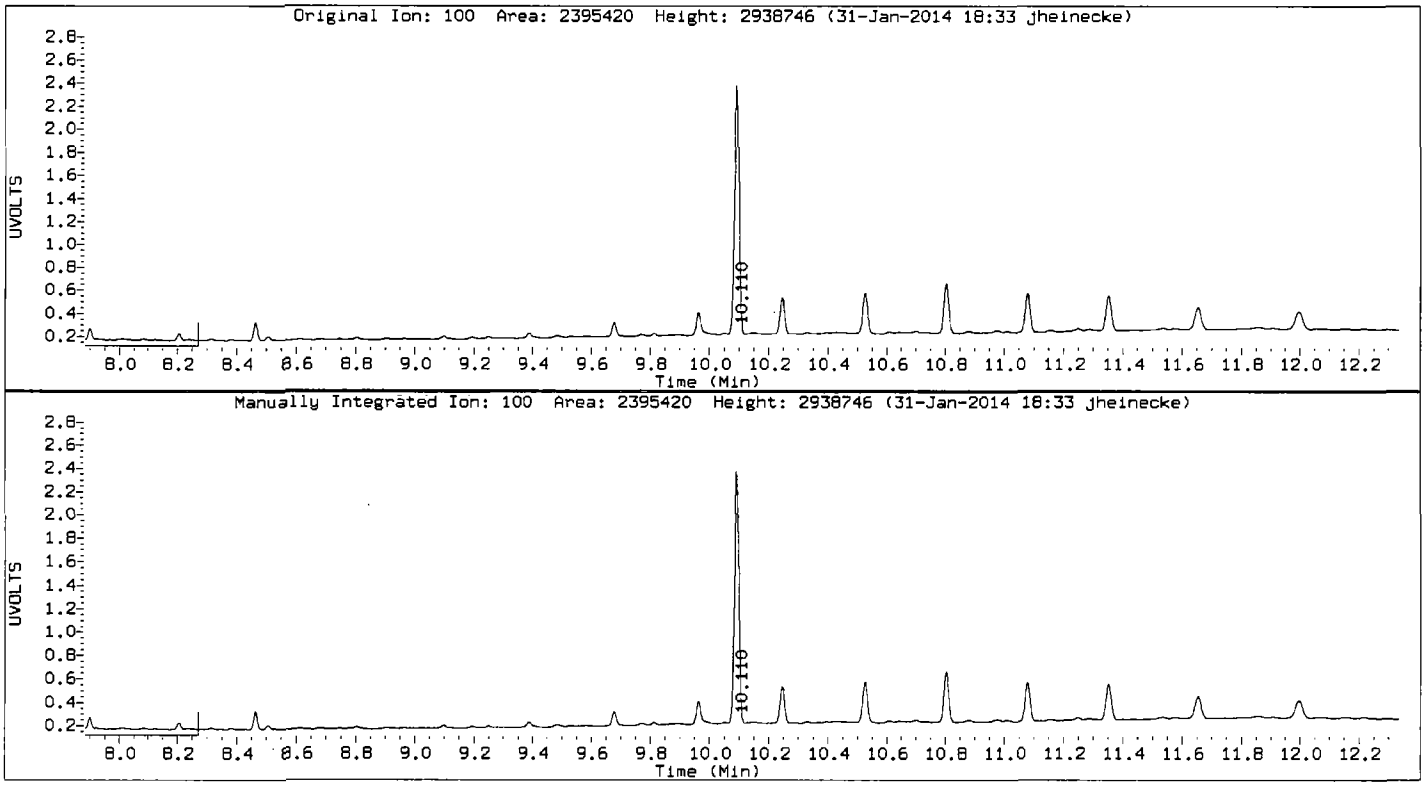
Injection Date: 31-JAN-2014 16:30
Instrument: 10gcs8.i
Lab Sample ID: ICAL 4 10328-64

Compound: Motor Oil Range (C24-C36)
CAS Number:



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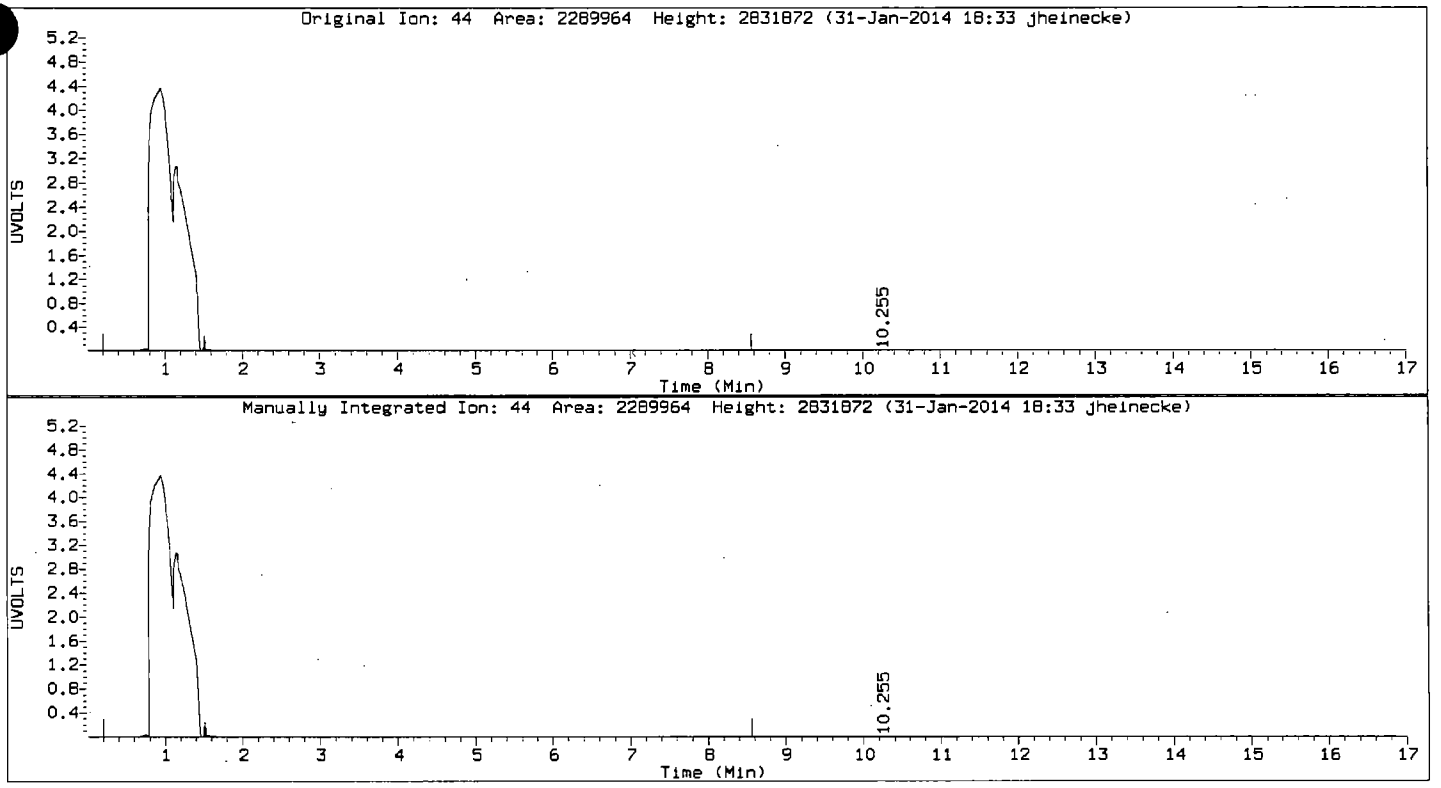
Injection Date: 31-JAN-2014 16:30
Instrument: 10gcs8.i
Lab Sample ID: ICAL 4 10328-64

Compound: Residual Range Organics AK103
CAS Number:



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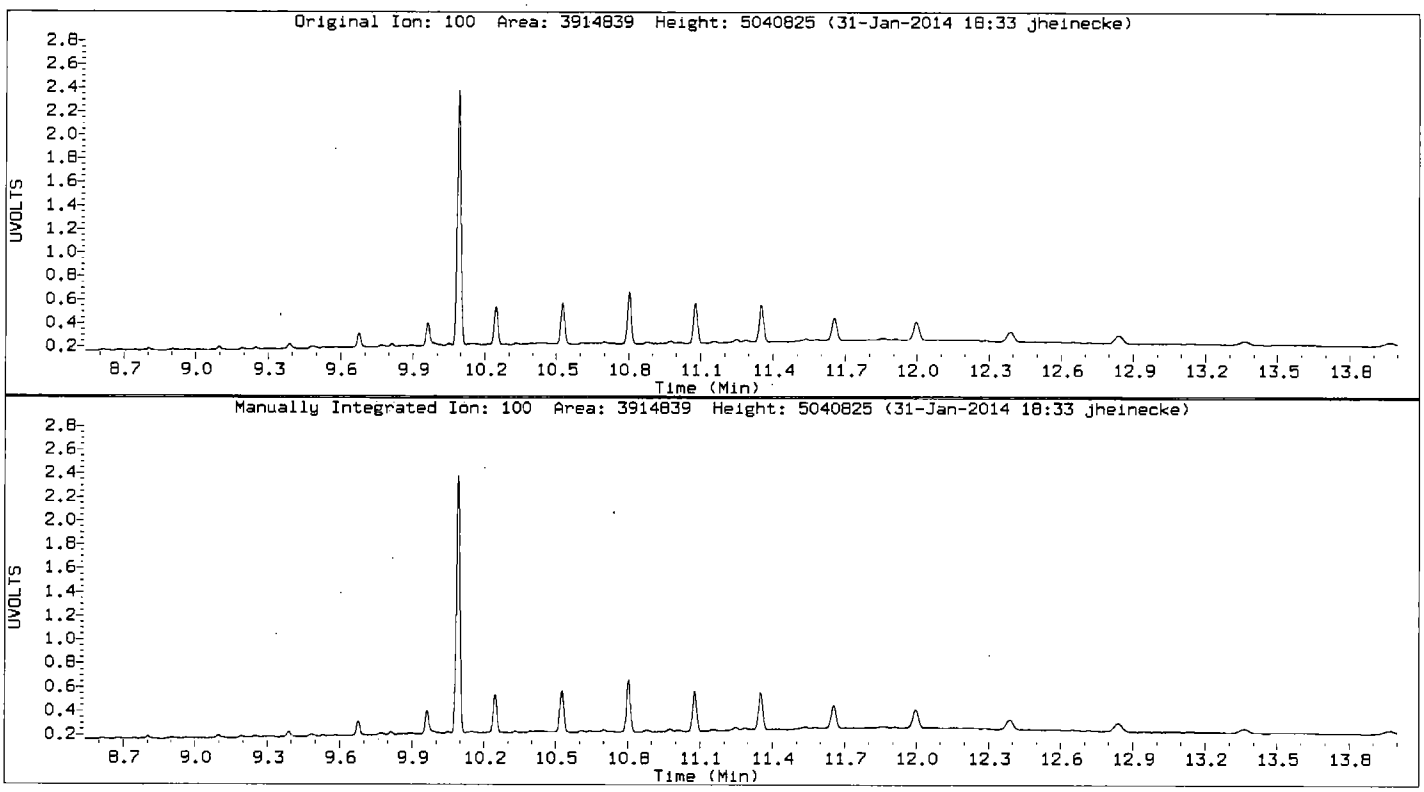
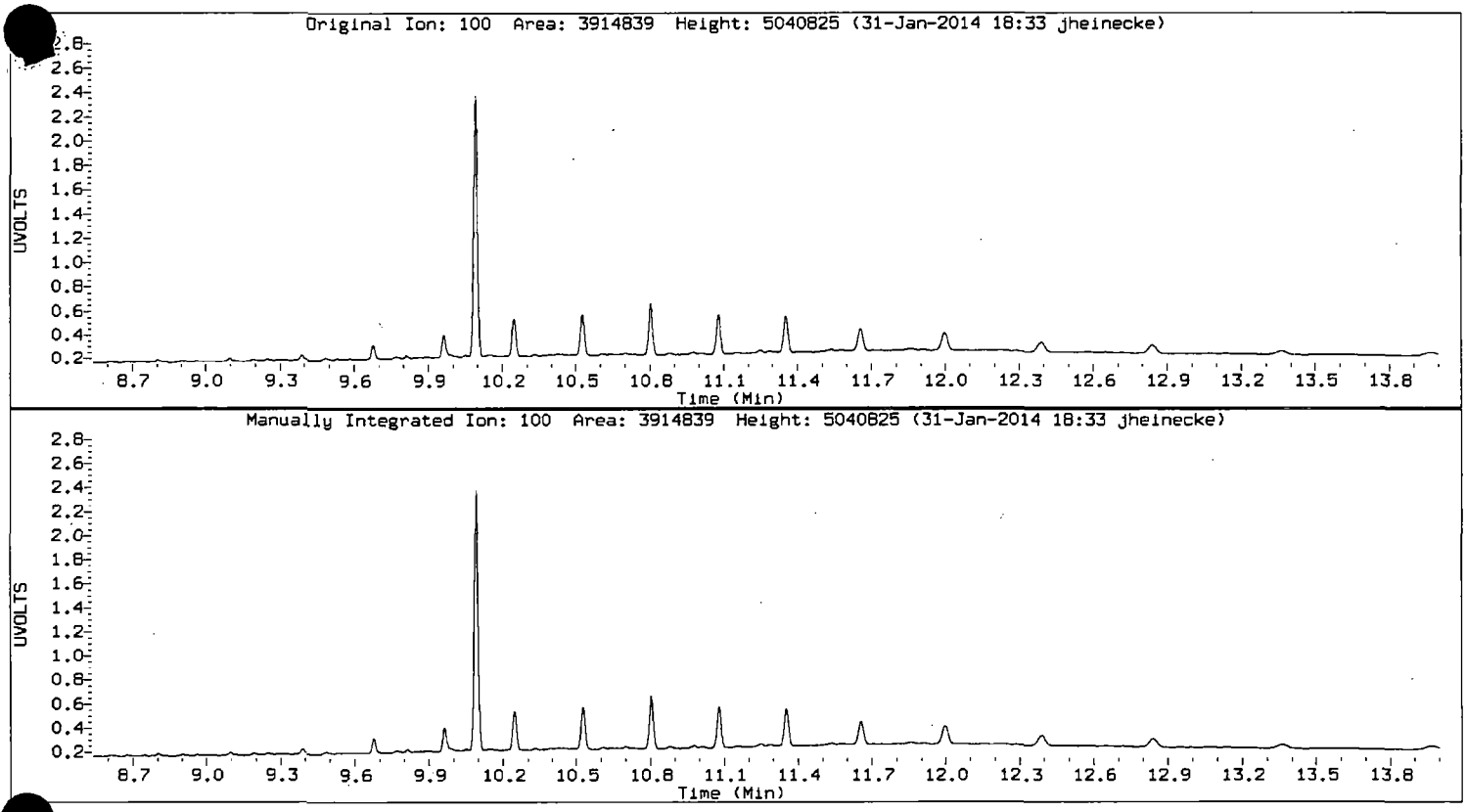
Injection Date: 31-JAN-2014 16:30
Instrument: 10gcs8.i
Lab Sample ID: ICAL 4 10328-64

Compound: ORO (C24-C40)
CAS Number:



Injection Date: 31-JAN-2014 18:33
Instrument: 10gcs8.i
Lab Sample ID: ICAL 4 10328-64

Compound: Motor Oil Range
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R011.d
Lab Smp Id: ICAL 5 10328-64
Inj Date : 31-JAN-2014 16:54
Operator : JRH Inst ID: 10gcs8.i
Smp Info : ICAL 5 10328-64
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Meth Date : 01-Feb-2014 11:46 10gcs8.i Quant Type: ESTD
Cal Date : 31-JAN-2014 16:30 Cal File: 0131R010.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.600-8.550			8436791	100.000	98.6(M)
$	2 o-Terphenyl (S)	7.012	7.012	0.000	623785	10.0000	10.1(M)
$	3 n-Triacontane (S)	10.004	10.004	0.000	446940	10.0000	10.6(M)
S	4 Residual Range Organics AK103	8.560-11.950			3816405	100.000	102(M)
S	5 TPH-DRO (C10-C28)	3.600-9.660			9266784	100.000	99.2(M)
S	6 Motor Oil Range (C24-C36)	8.270-11.950			3996063	100.000	102(M)
S	7 DRO (C12-C24)	4.490-8.529			6734848	100.000	98.5(M)
S	8 Diesel Fuel Range	4.490-8.529			6734848	100.000	98.5(M)
S	9 ORO (C24-C40)	8.539-14.000			5732975	100.000	97.0(M)
S	10 Motor Oil Range	8.539-14.000			5732975	100.000	97.0(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R011.D

Date : 31-JAN-2014 16:54

Client ID:

Instrument: 10gcs8.i

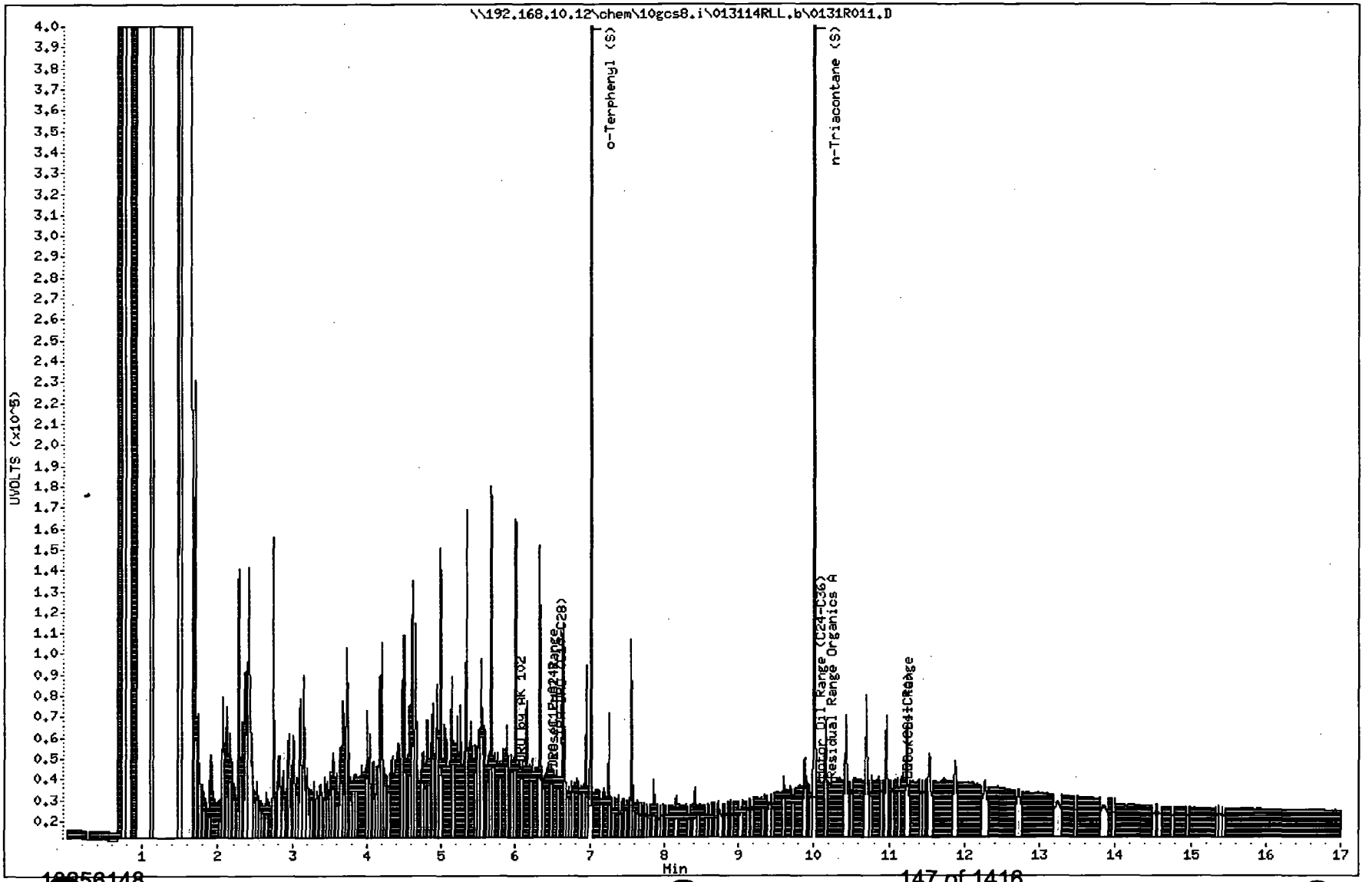
Sample Info: ICAL 5 10328-64

Volume Injected (uL): 1.0

Operator: JRH

Column phase: DB-5MS

Column diameter: 0.25



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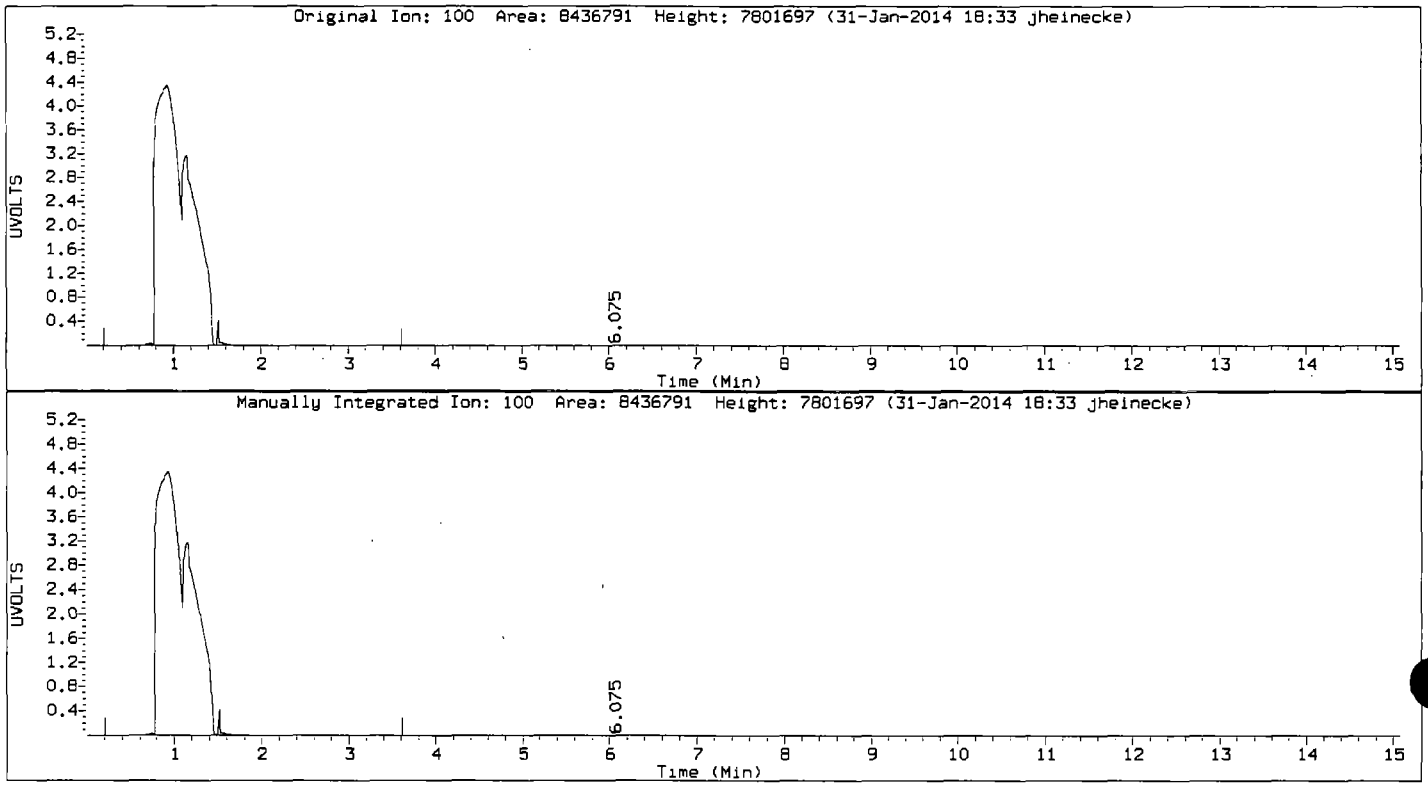
Injection Date: 31-JAN-2014 16:54
Instrument: 10gcs8.i
Lab Sample ID: ICAL 5 10328-64

Compound: DRO by AK 102
CAS Number:



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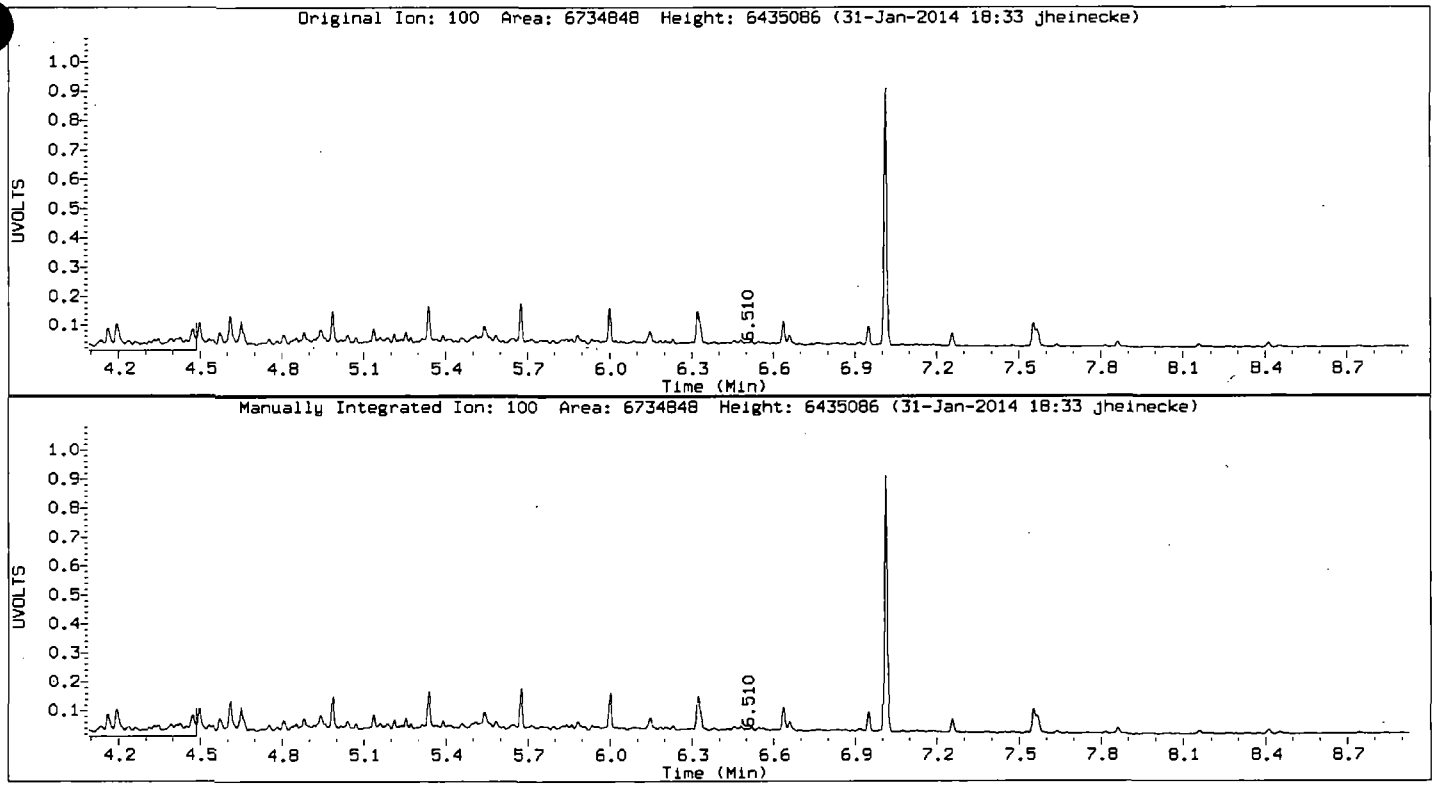
Injection Date: 31-JAN-2014 16:54
Instrument: 10gcs8.i
Lab Sample ID: ICAL 5 10328-64

Compound: Diesel Fuel Range
CAS Number:



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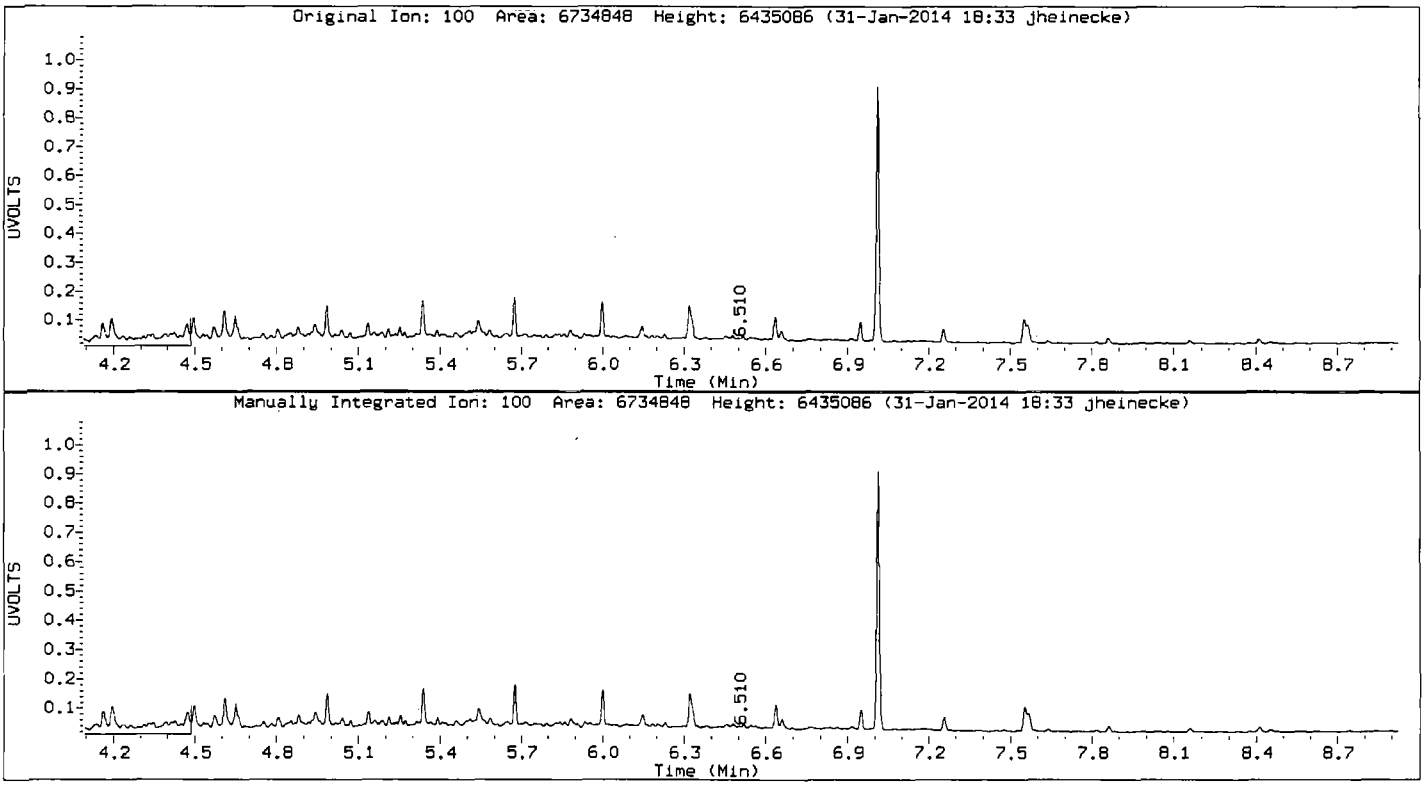
Injection Date: 31-JAN-2014 16:54
Instrument: 10gcs8.i
Lab Sample ID: ICAL 5 10328-64

Compound: DRO (C12-C24)
CAS Number:



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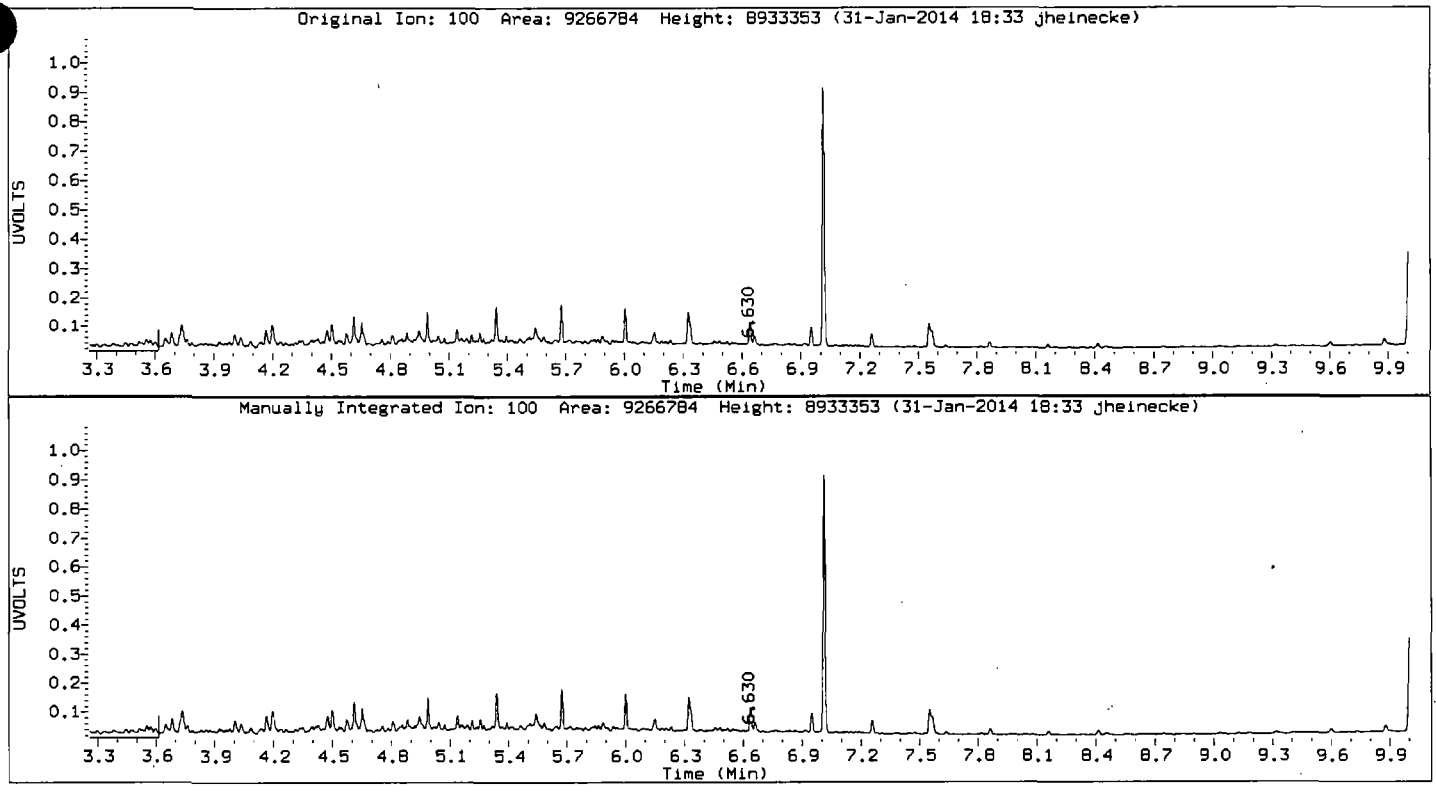
Injection Date: 31-JAN-2014 16:54
Instrument: 10gcs8.i
Lab Sample ID: ICAL 5 10328-64

Compound: TPH-DRO (C10-C28)
CAS Number:



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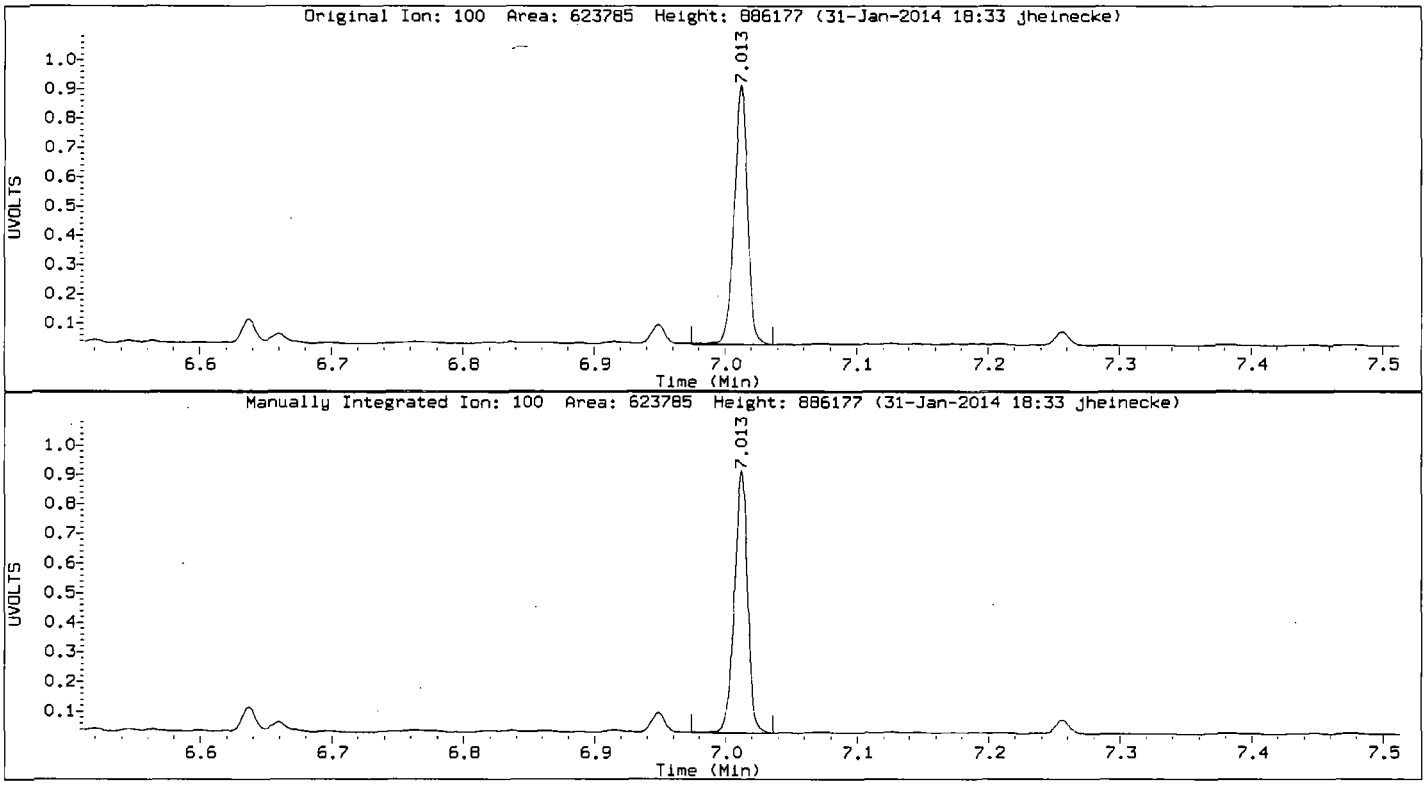
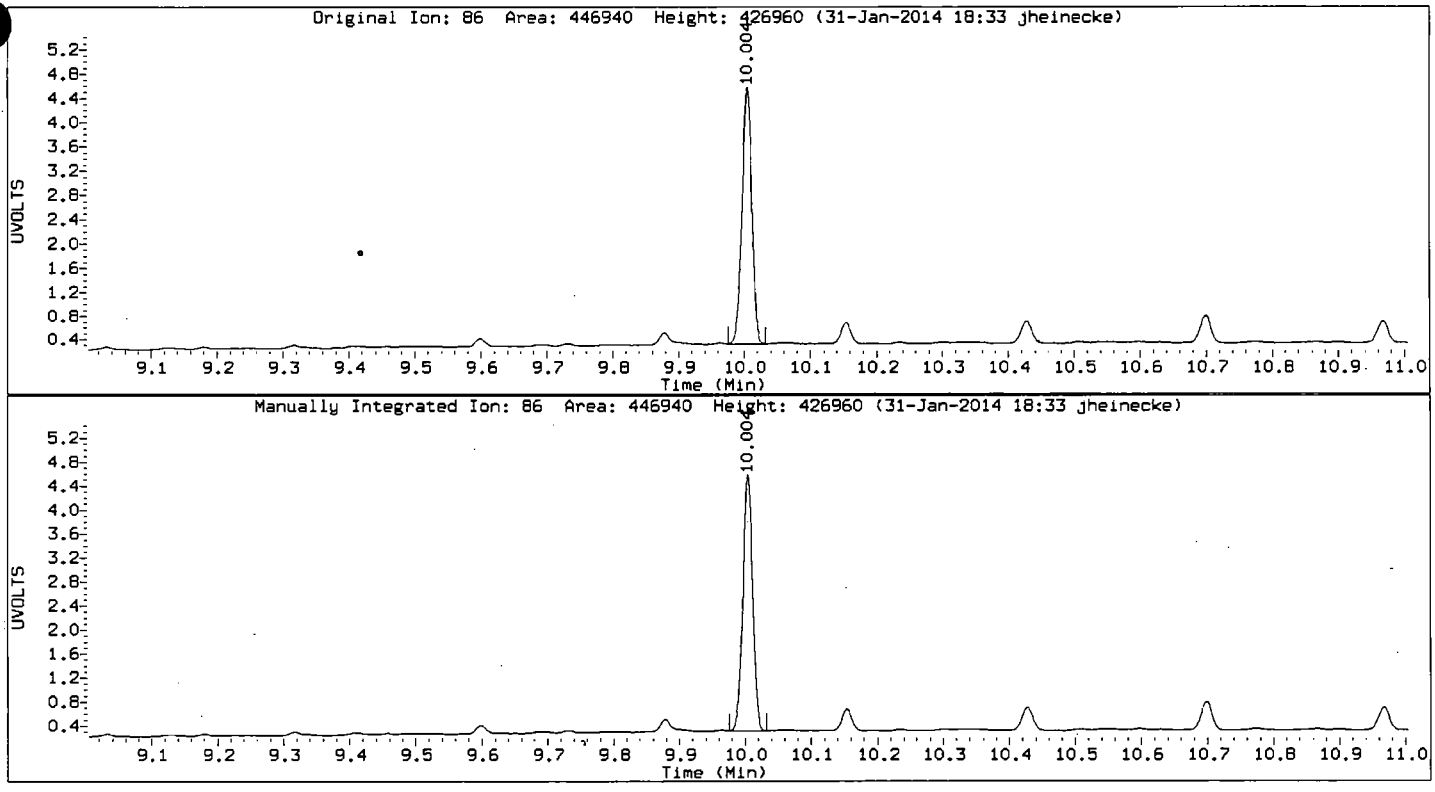
Injection Date: 31-JAN-2014 16:54
Instrument: 10gcs8.i
Lab Sample ID: ICAL 5 10328-64

Compound: o-Terphenyl (S)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R011.d
Injection Date: 31-JAN-2014 16:54
Instrument: 10gcs8.i
Lab Sample ID: ICAL 5 10328-64

Compound: n-Triacontane (S)
CAS Number:



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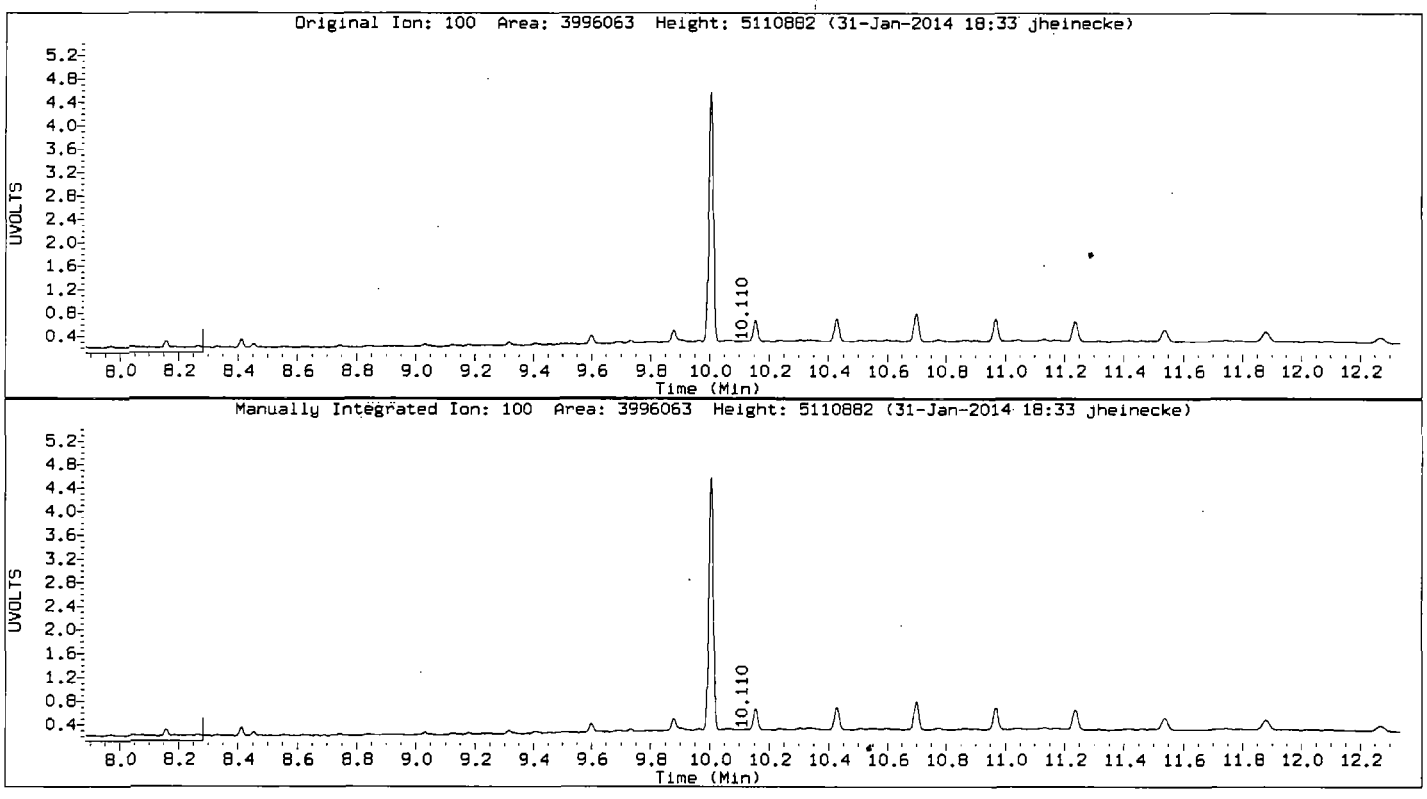
Injection Date: 31-JAN-2014 16:54
Instrument: 10gcs8.i
Lab Sample ID: ICAL 5 10328-64

Compound: Motor Oil Range (C24-C36)
CAS Number:



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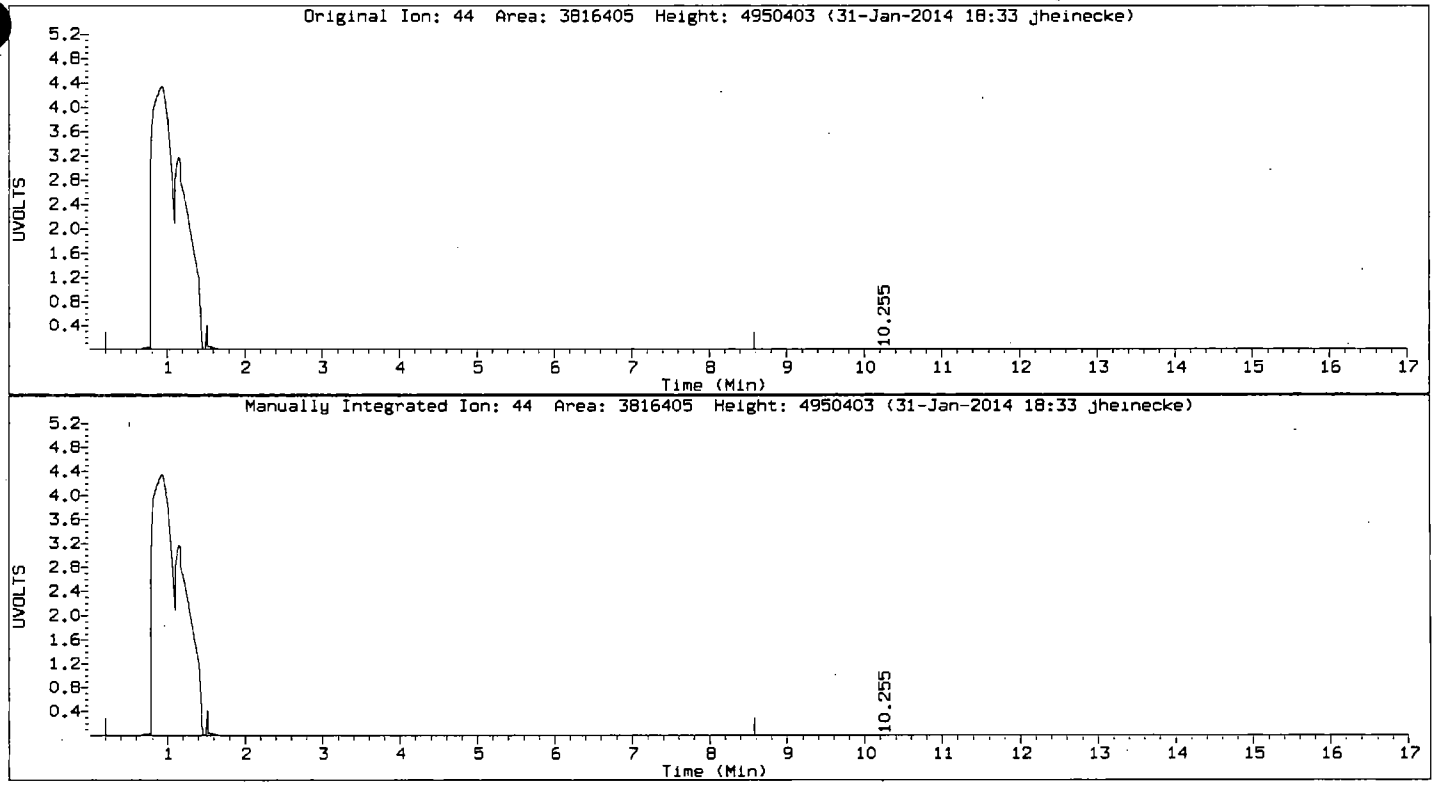
Injection Date: 31-JAN-2014 16:54
Instrument: 10gcs8.i
Lab Sample ID: ICAL 5 10328-64

Compound: Residual Range Organics AK103
CAS Number:



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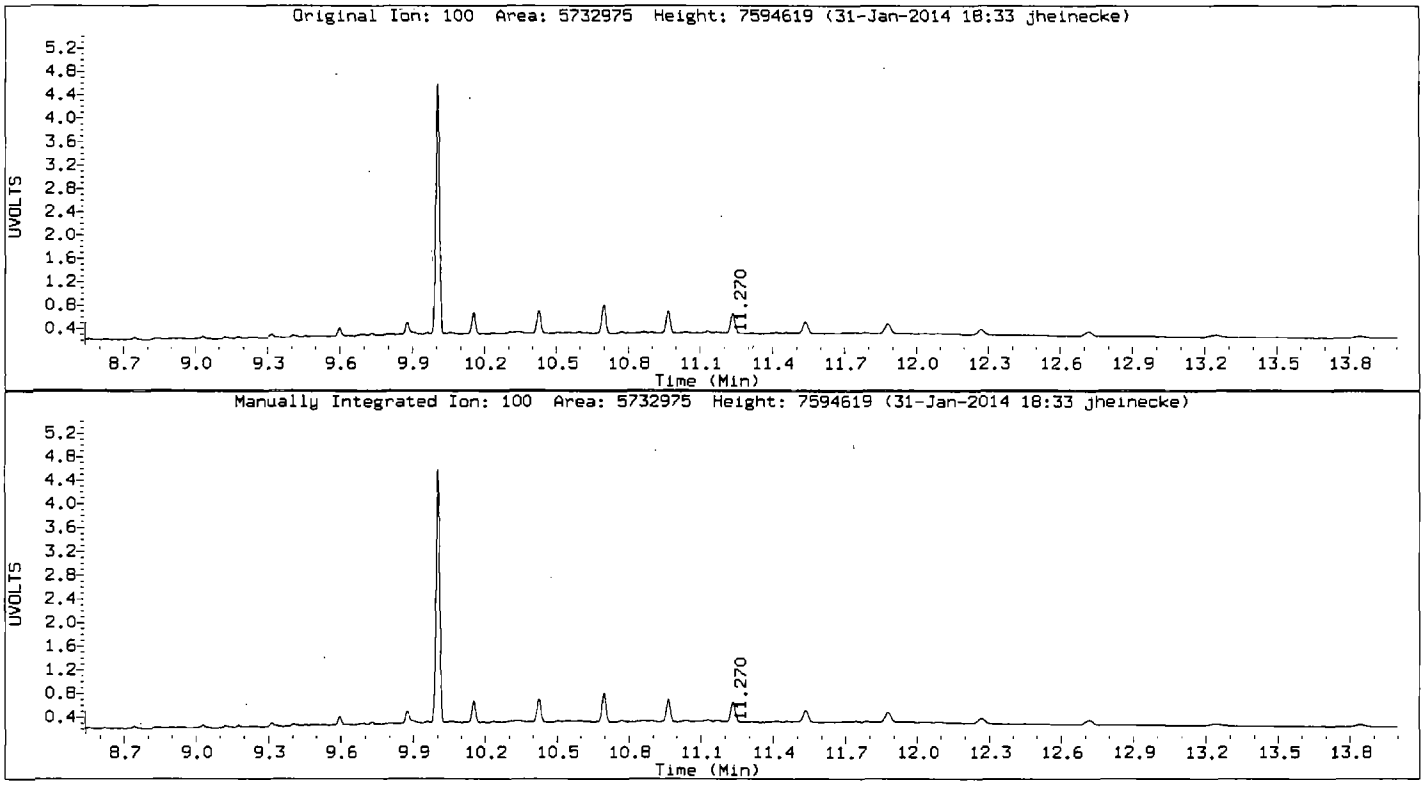
Injection Date: 31-JAN-2014 16:54
Instrument: 10gcs8.i
Lab Sample ID: ICAL 5 10328-64

Compound: ORO (C24-C40)
CAS Number:



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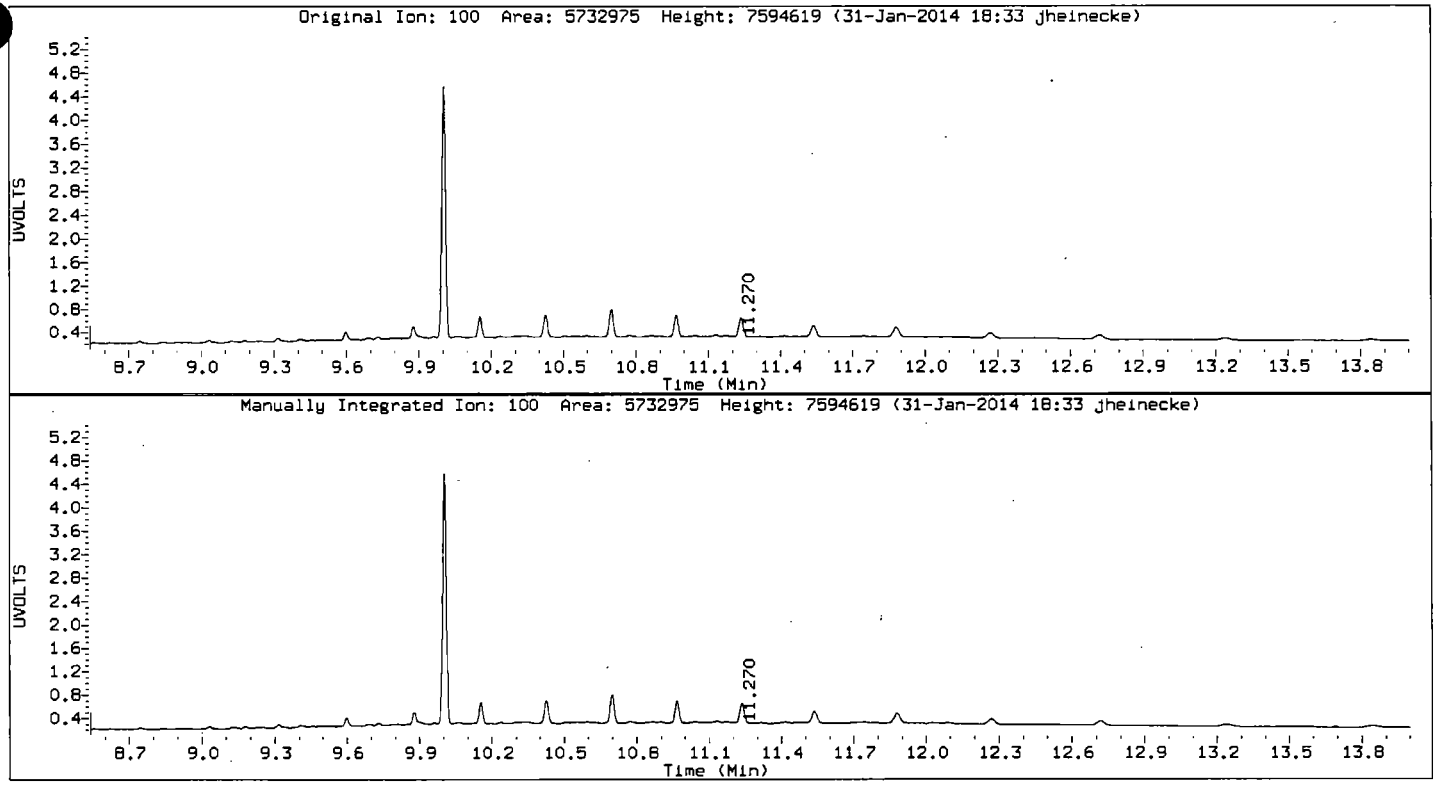
Injection Date: 31-JAN-2014 16:54
Instrument: 10gcs8.i
Lab Sample ID: ICAL 5 10328-64

Compound: Motor Oil Range
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R012.d
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Inj Date : 31-JAN-2014 17:17
Operator : JRH Inst ID: 10gcs8.i
Smp Info : ICAL 6 10328-64
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Meth Date : 01-Feb-2014 11:46 10gcs8.i Quant Type: ESTD
Cal Date : 31-JAN-2014 16:54 Cal File: 0131R011.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

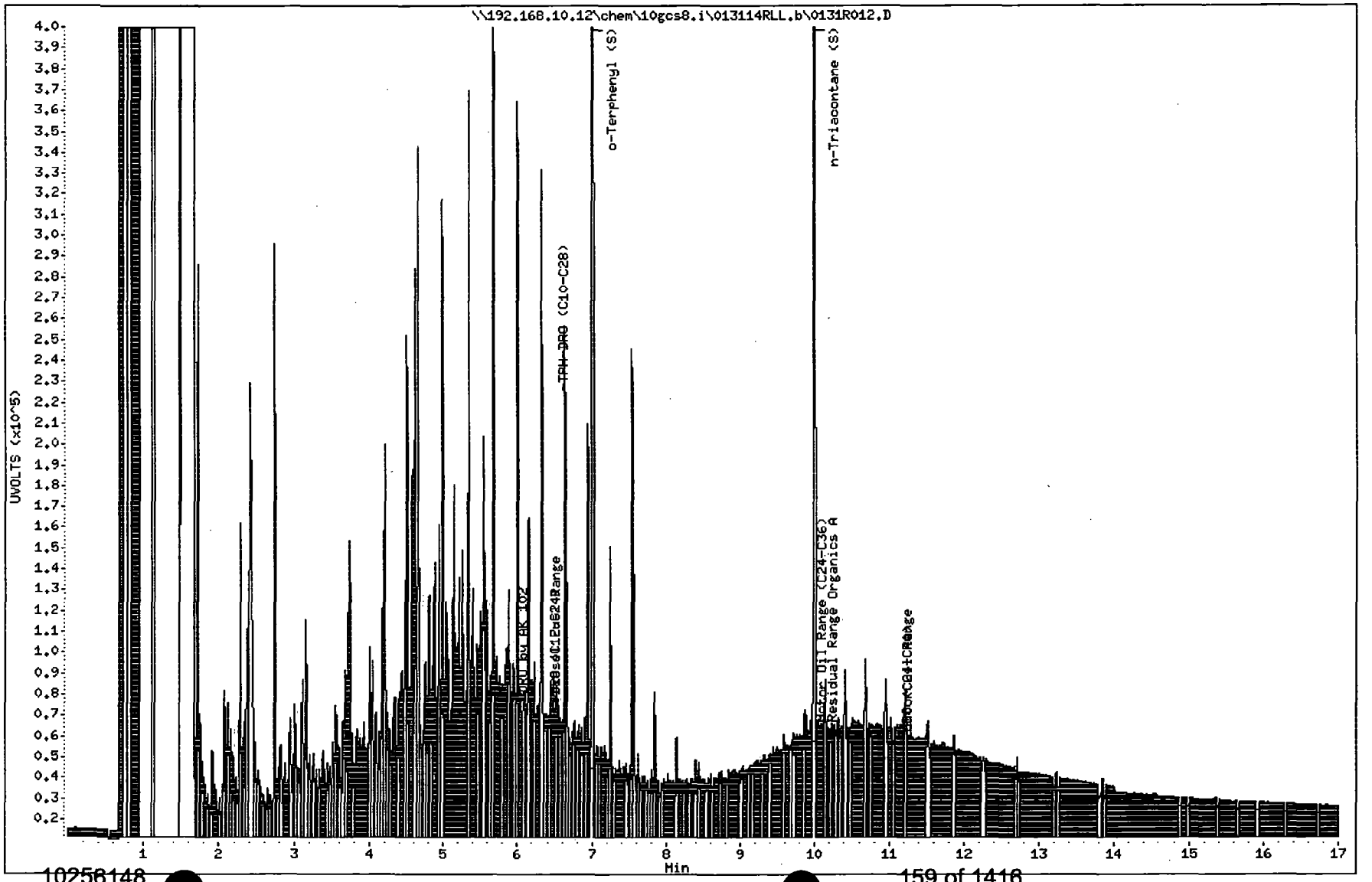
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S 1	DRO by AK 102	3.600-8.550			17113003	250.000	251 (M)
S 2	o-Terphenyl (S)	7.008	7.008	0.000	1515625	25.0000	24.4 (M)
S 3	n-Triacontane (S)	9.990	9.990	0.000	1084828	25.0000	24.8 (M)
S 4	Residual Range Organics AK103	8.560-11.950			8154011	250.000	240 (M)
S 5	TPH-DRO (C10-C28)	3.600-9.660			19049133	250.000	252 (M)
S 6	Motor Oil Range (C24-C36)	8.270-11.950			8570745	250.000	241 (M)
S 7	DRO (C12-C24)	4.490-8.529			14309642	250.000	250 (M)
S 8	Diesel Fuel Range	4.490-8.529			14309642	250.000	250 (M)
S 9	ORO (C24-C40)	8.539-14.000			11238208	250.000	234 (M)
S 10	Motor Oil Range	8.539-14.000			11238208	250.000	234 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R012.D
Date : 31-JAN-2014 17:17
Client ID:
Sample Info: ICAL 6 10328-64
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: 10gcs8.i
Operator: JRH
Column diameter: 0.25



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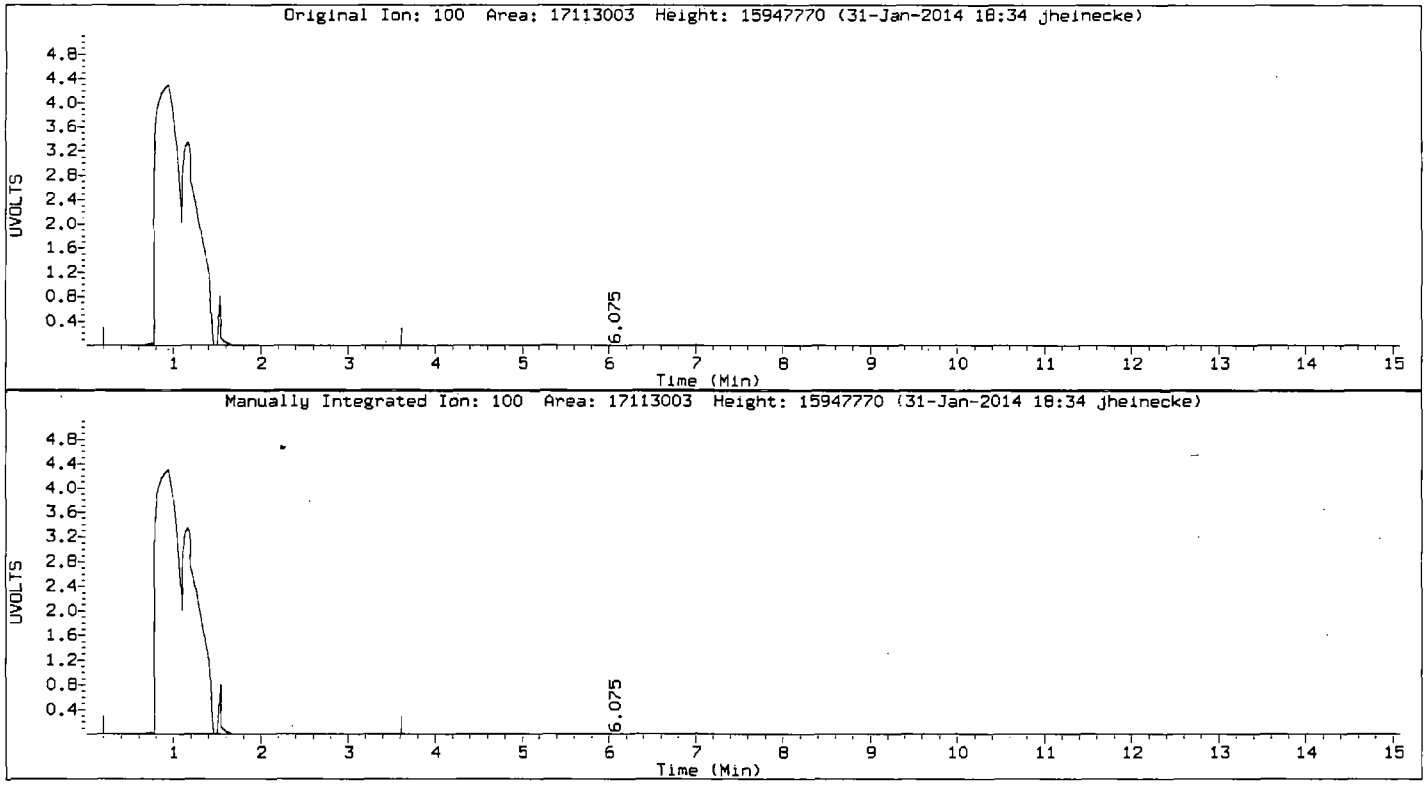
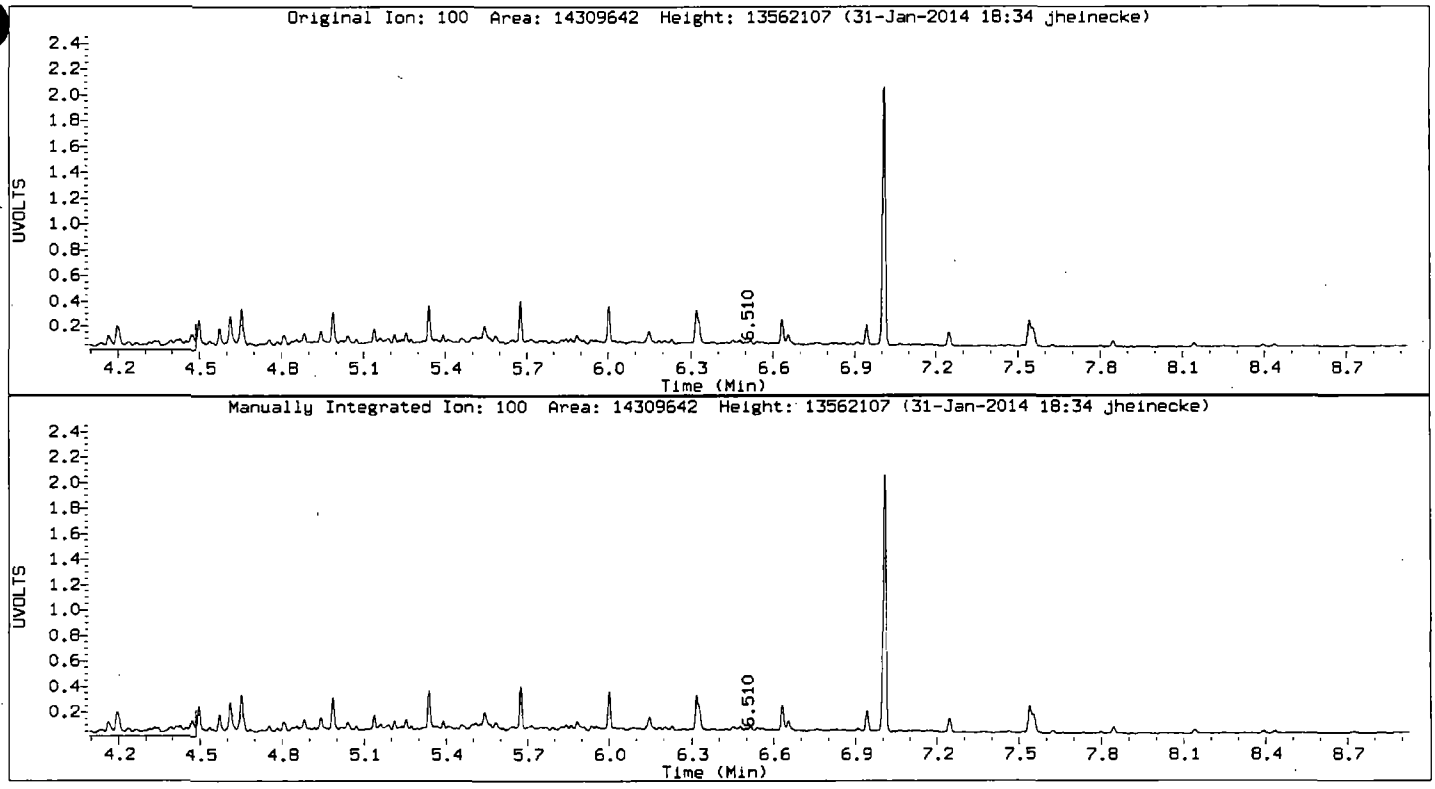
Injection Date: 31-JAN-2014 17:17
Instrument: 10gcs8.i
Lab Sample ID: ICAL 6 10328-64

Compound: DRO by AK 102
CAS Number:



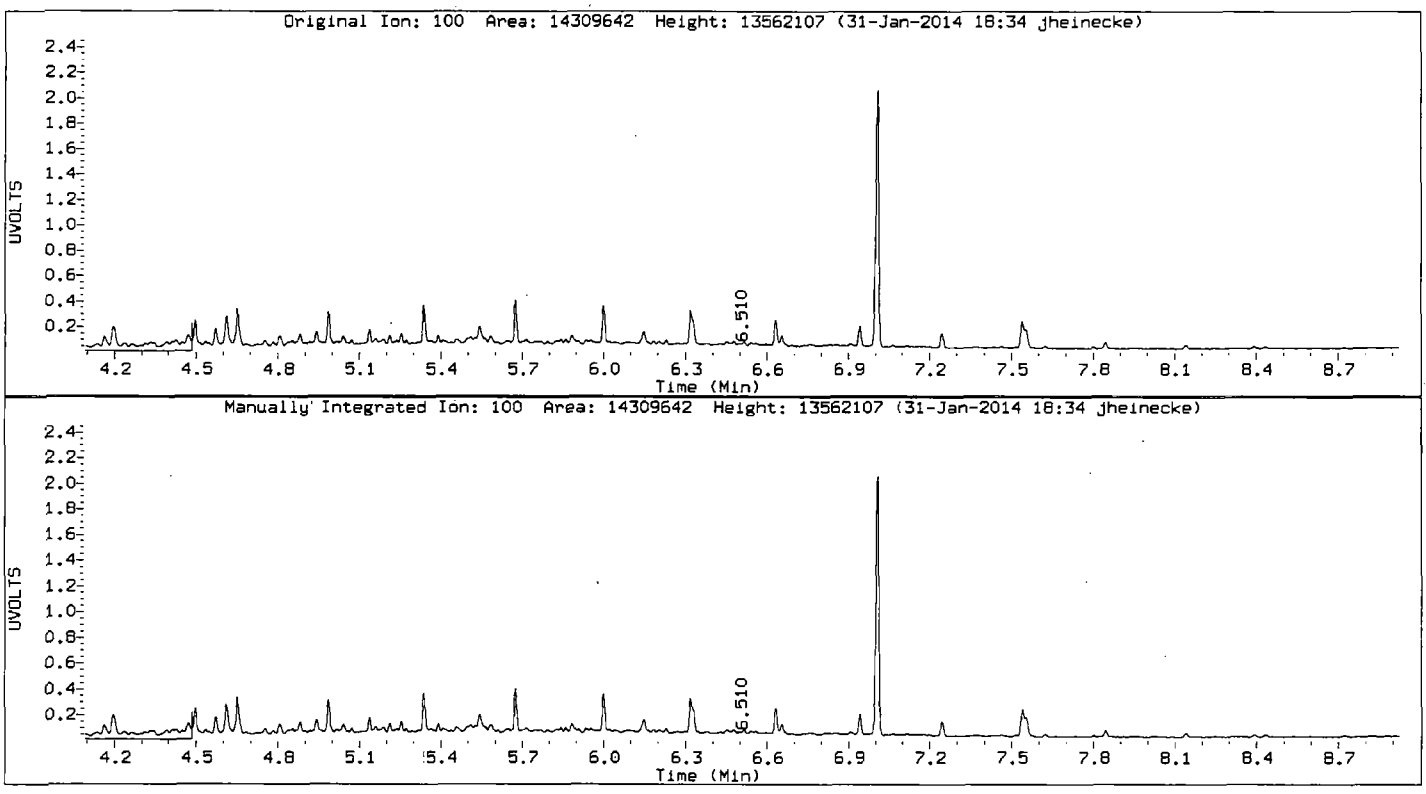
Data File: \\192.168.10.12\Chem\10gcs8.i\013114RLL.D\013R012.d
Injection Date: 31-JAN-2014 17:17
Instrument: 10gcs8.i
Lab Sample ID: ICAL 6 10328-64

Compound: Diesel Fuel Range
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R012.d
Injection Date: 31-JAN-2014 17:17
Instrument: 10gcs8.i
Lab Sample ID: ICAL 6 10328-64

Compound: DRO (C12-C24)
CAS Number:



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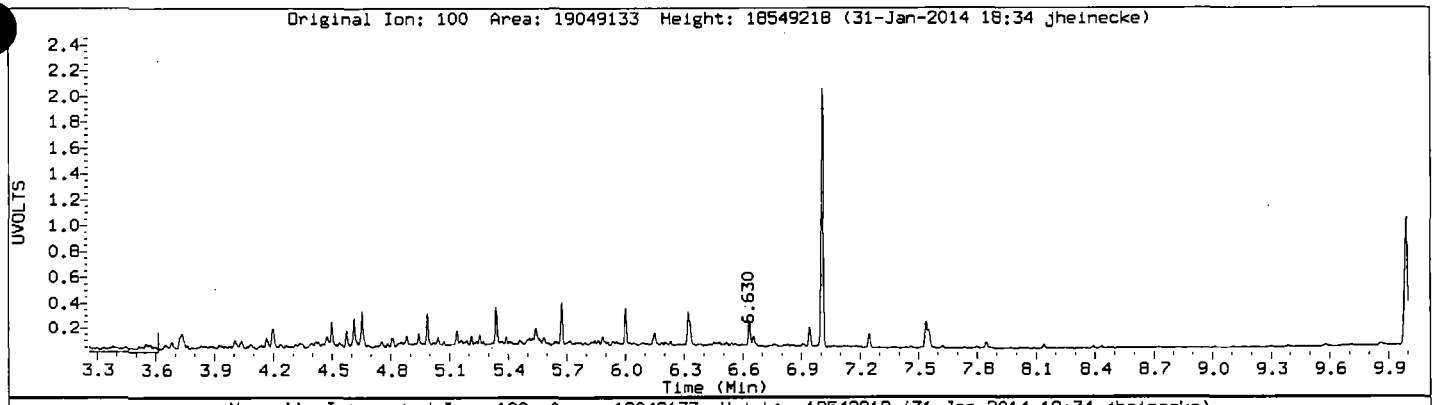
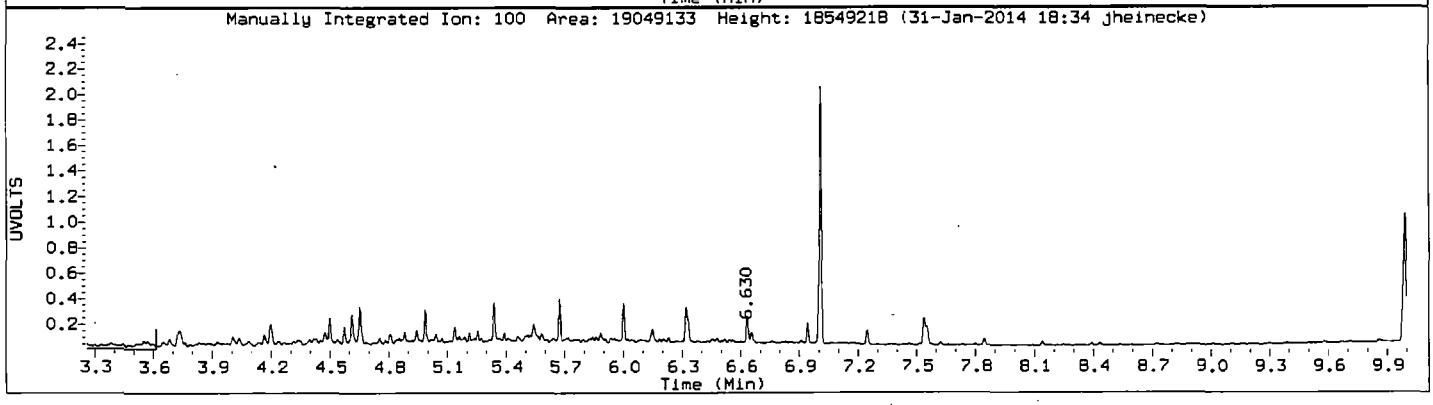
Injection Date: 31-JAN-2014 17:17
Instrument: 10gcs8.i
Lab Sample ID: ICAL 6 10328-64

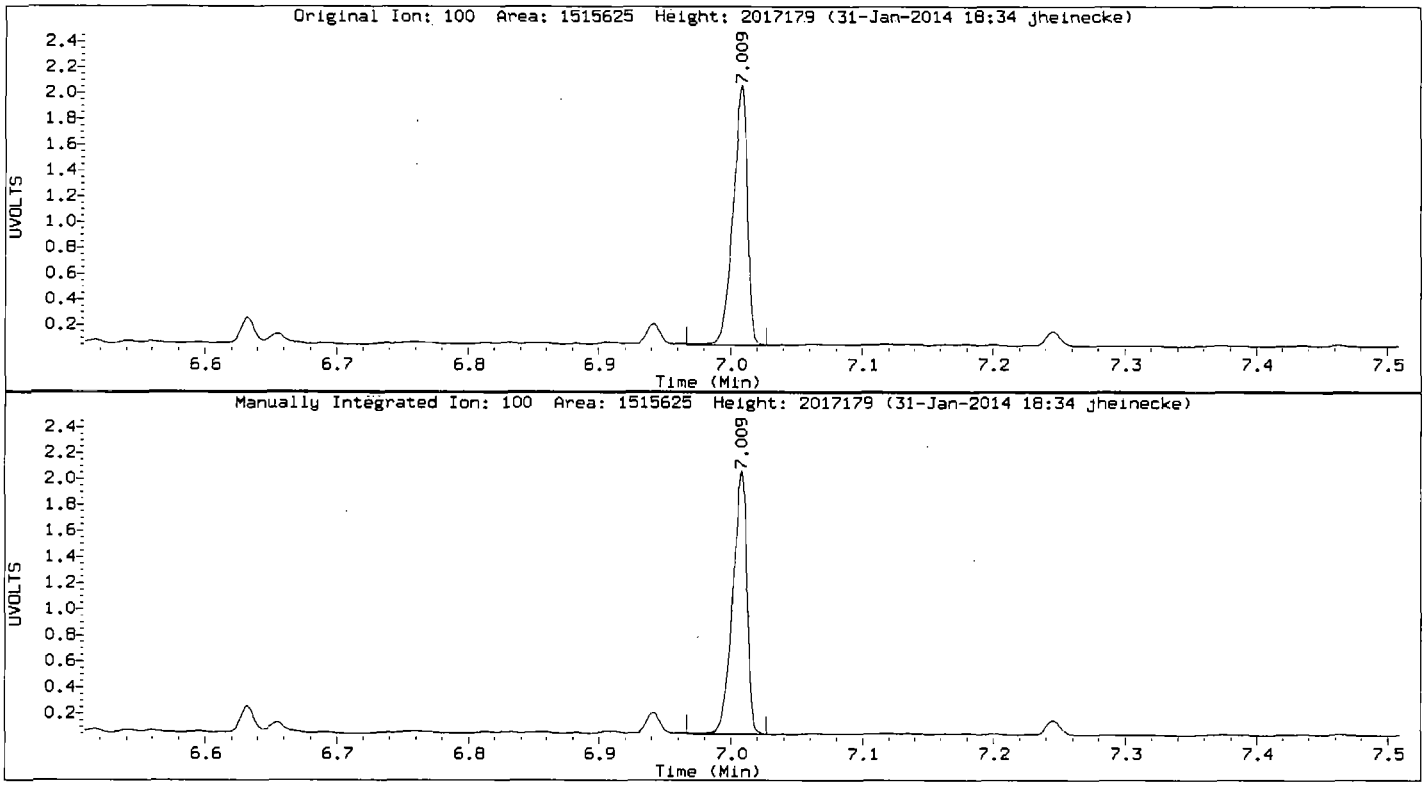
Compound: TPH-DRO (C10-C28)
CAS Number:





Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R012.d
Injection Date: 31-JAN-2014 17:17
Instrument: 10gcs8.i
Lab Sample ID: ICAL 6 10328-64

Compound: o-Terphenyl (S)
CAS Number:



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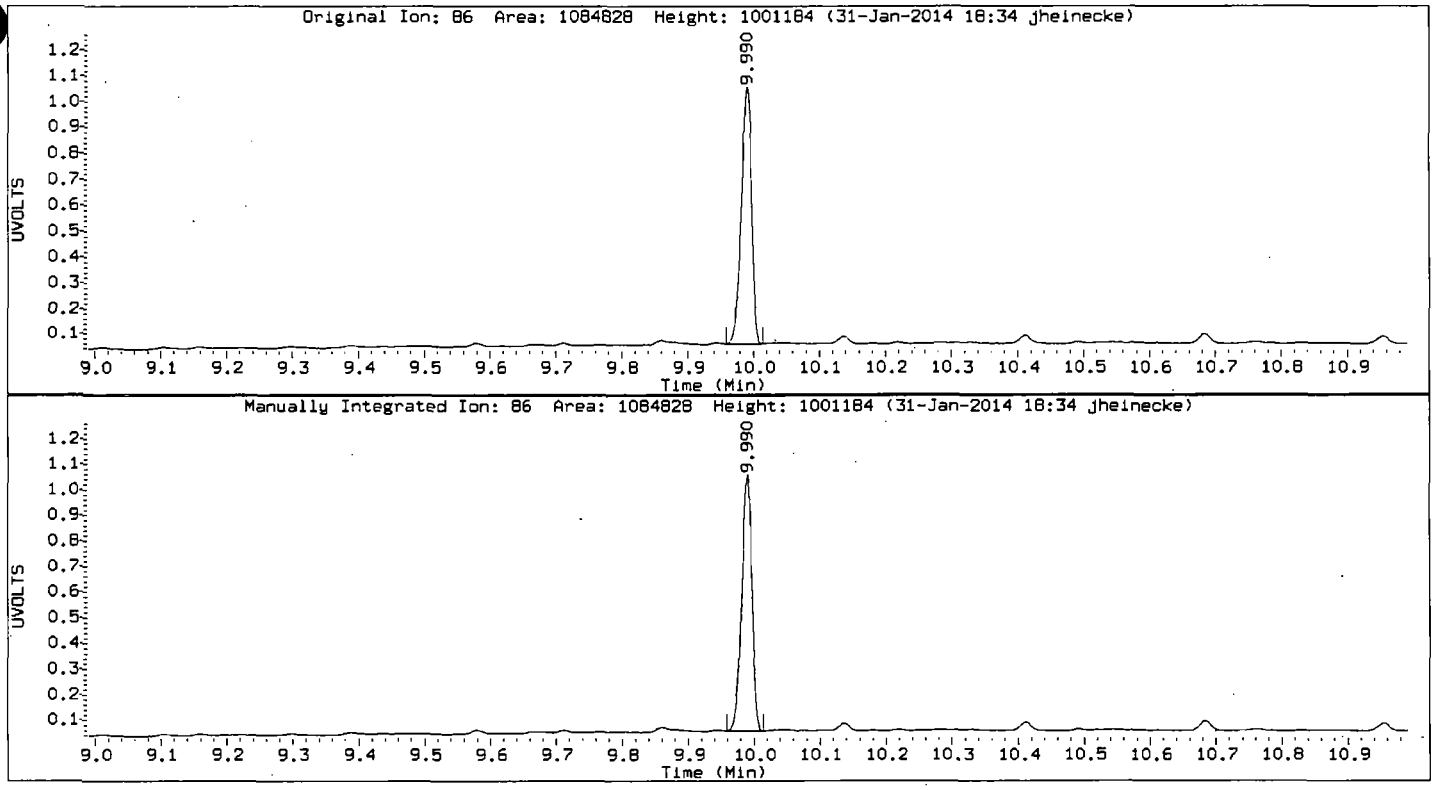
Injection Date: 31-JAN-2014 17:17
Instrument: 10gcs8.i
Lab Sample ID: ICAL 6 10328-64

Compound: n-Triacontane (S)
CAS Number:



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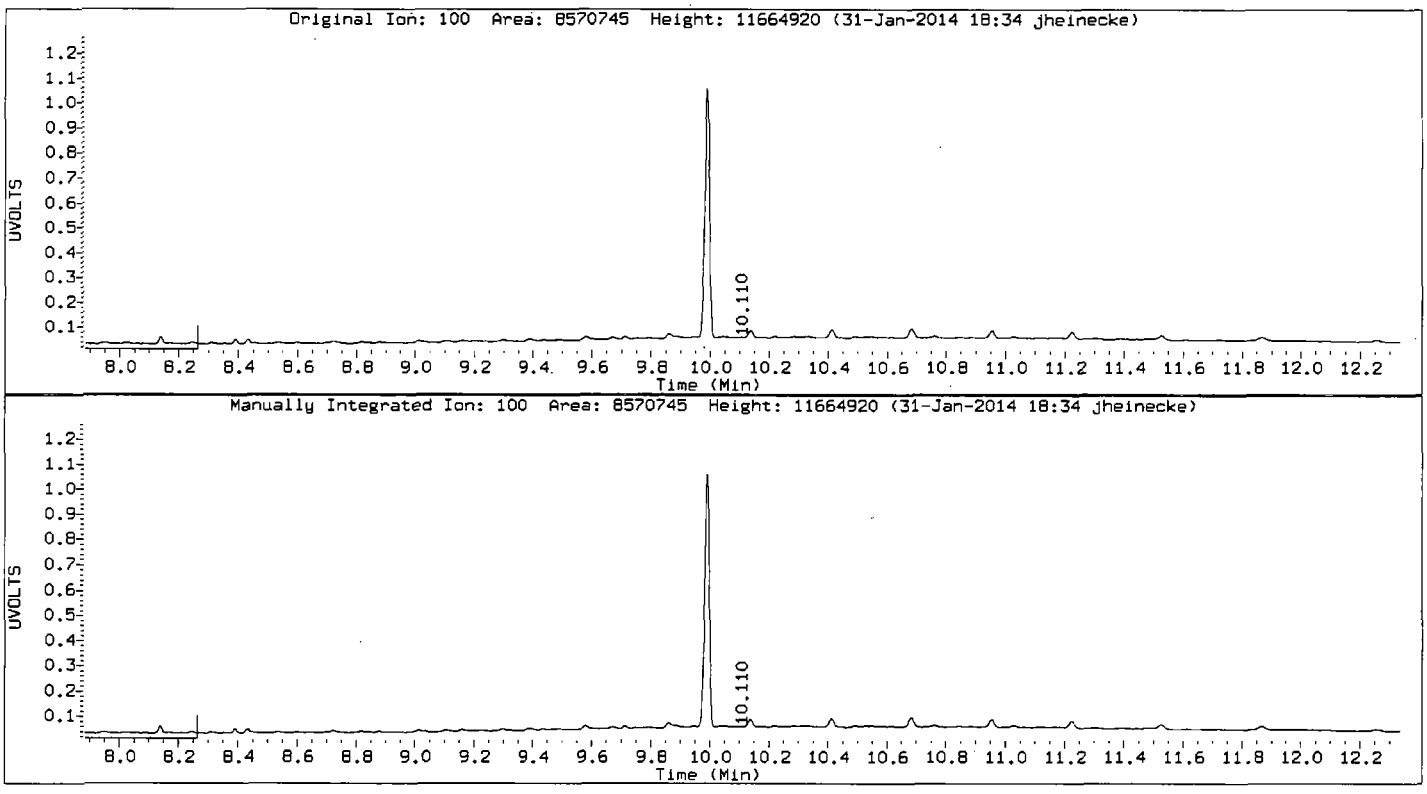
Injection Date: 31-JAN-2014 17:17
Instrument: 10gcs8.i
Lab Sample ID: ICAL 6 10328-64

Compound: Motor Oil Range (C24-C36)
CAS Number:



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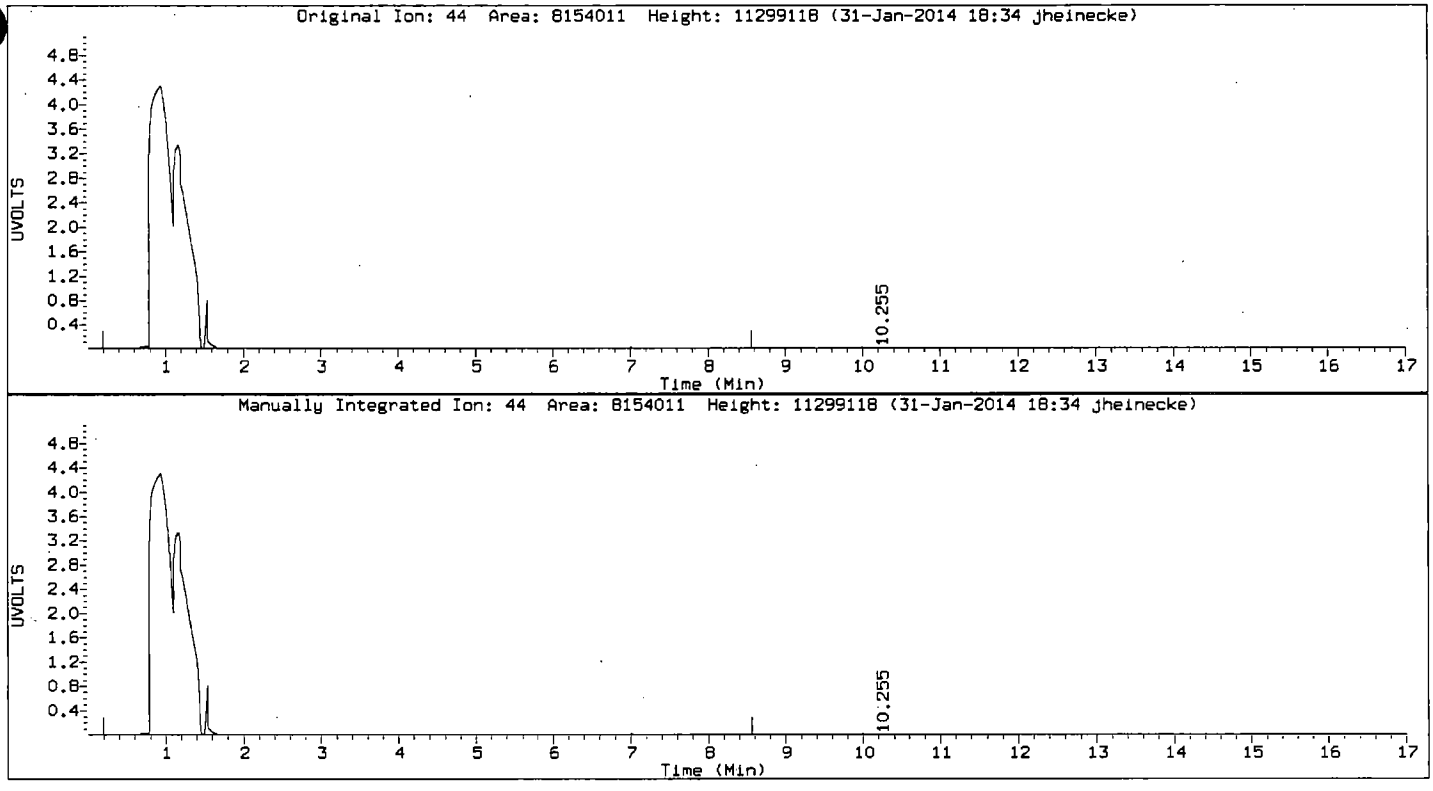
Injection Date: 31-JAN-2014 17:17
Instrument: 10gcs8.i
Lab Sample ID: ICAL 6 10328-64

Compound: Residual Range Organics AK103
CAS Number:



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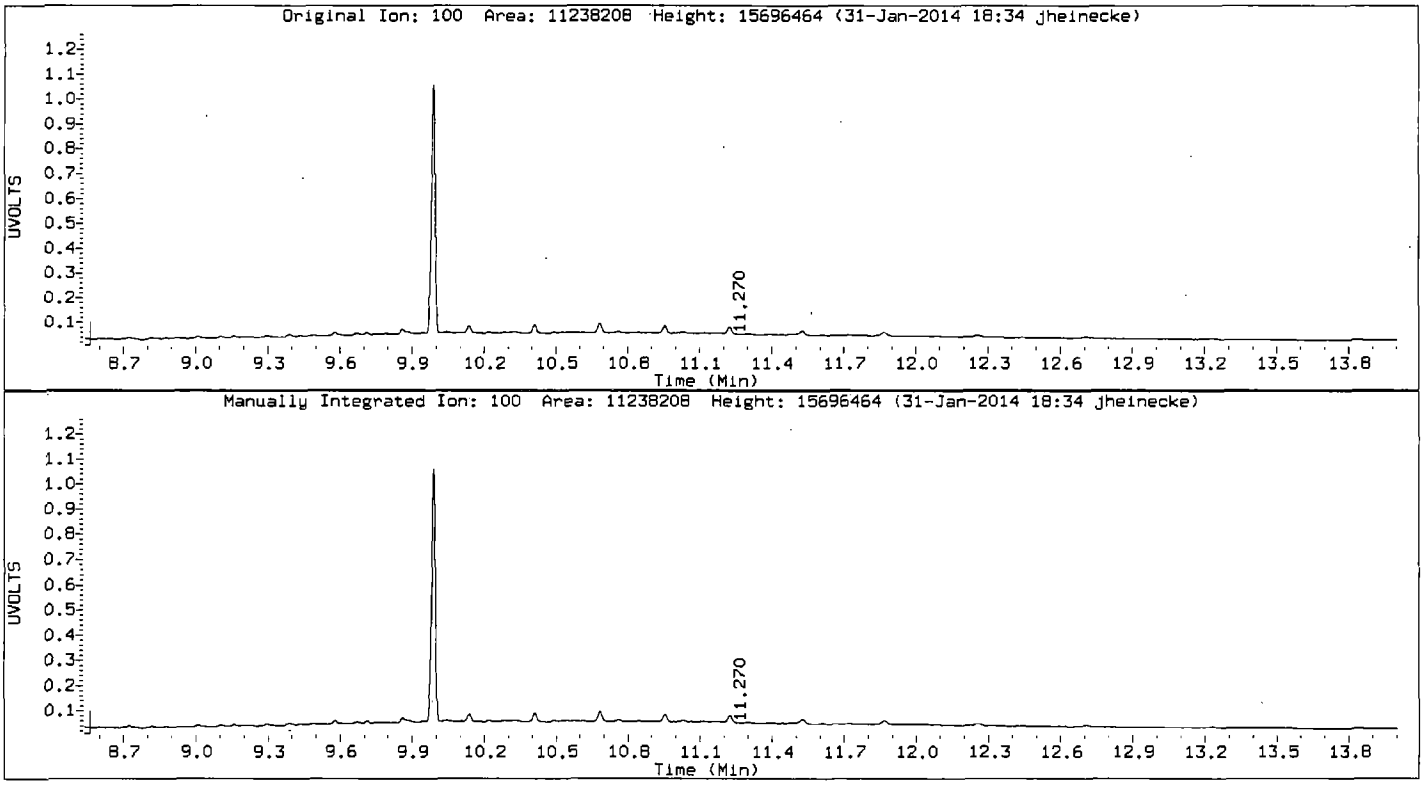
Injection Date: 31-JAN-2014 17:17
Instrument: 10gcs8.i
Lab Sample ID: ICAL 6 10328-64

Compound: ORO (C24-C40)
CAS Number:



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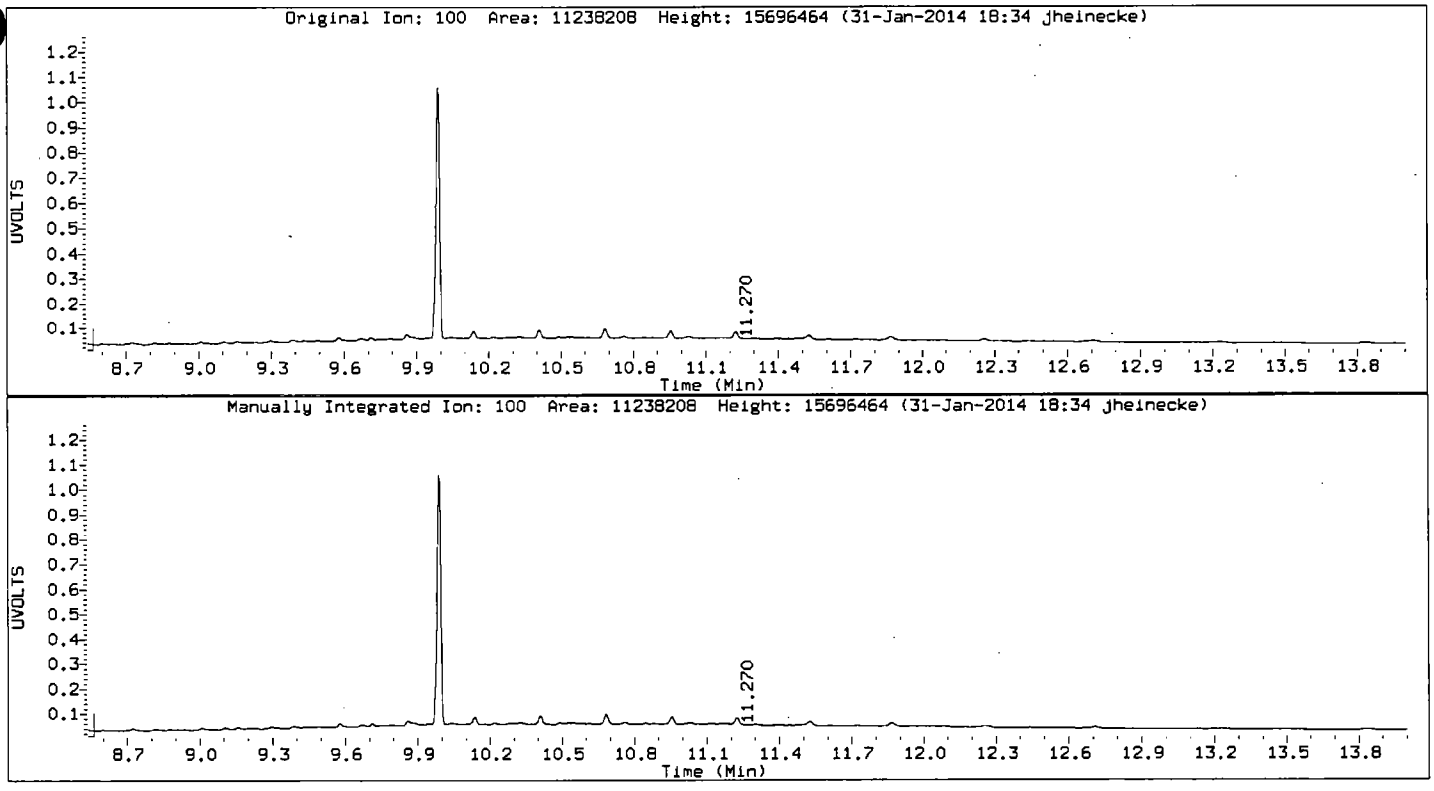
Injection Date: 31-JAN-2014 17:17
Instrument: 10gcs8.i
Lab Sample ID: ICAL 6 10328-64

Compound: Motor Oil Range
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R013.d
Lab Smp Id: ICAL 7 10328-64
Inj Date : 31-JAN-2014 17:40
Operator : JRH Inst ID: 10gcs8.i
Smp Info : ICAL 7 10328-64
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Meth Date : 01-Feb-2014 11:46 10gcs8.i Quant Type: ESTD
Cal Date : 31-JAN-2014 17:17 Cal File: 0131R012.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.600-8.550			31986216	500.000	511(M)
$	2 o-Terphenyl (S)	7.043	7.043	0.000	3131296	50.0000	50.4(M)
$	3 n-Triacontane (S)	10.095	10.095	0.000	2240474	50.0000	50.6(M)
S	4 Residual Range Organics AK103	8.560-11.950			16075354	500.000	493(M)
S	5 TPH-DRO (C10-C28)	3.600-9.660			35668041	500.000	508(M)
S	6 Motor Oil Range (C24-C36)	8.270-11.950			16882643	500.000	493(M)
S	7 DRO (C12-C24)	4.490-8.529			27474258	500.000	512(M)
S	8 Diesel Fuel Range	4.490-8.529			27474258	500.000	512(M)
S	9 ORO (C24-C40)	8.539-14.000			21874302	500.000	498(M)
S	10 Motor Oil Range	8.539-14.000			21874302	500.000	498(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R013.D

Date : 31-JAN-2014 17:40

Client ID:

Instrument: 10gcs8.i

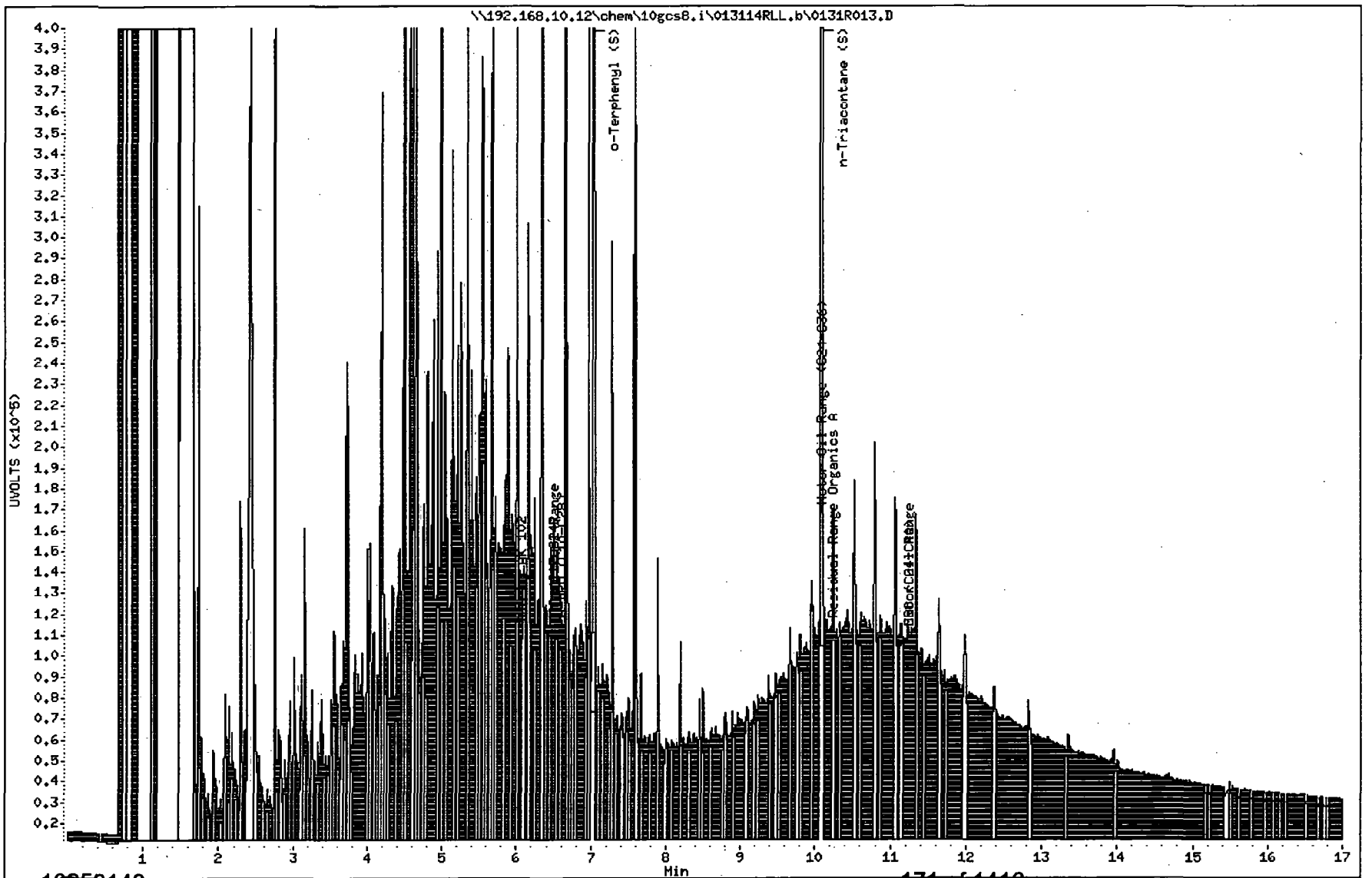
Sample Info: ICAL 7 10328-64

Volume Injected (uL): 1.0

Operator: JRH

Column phase: DB-5MS

Column diameter: 0.25



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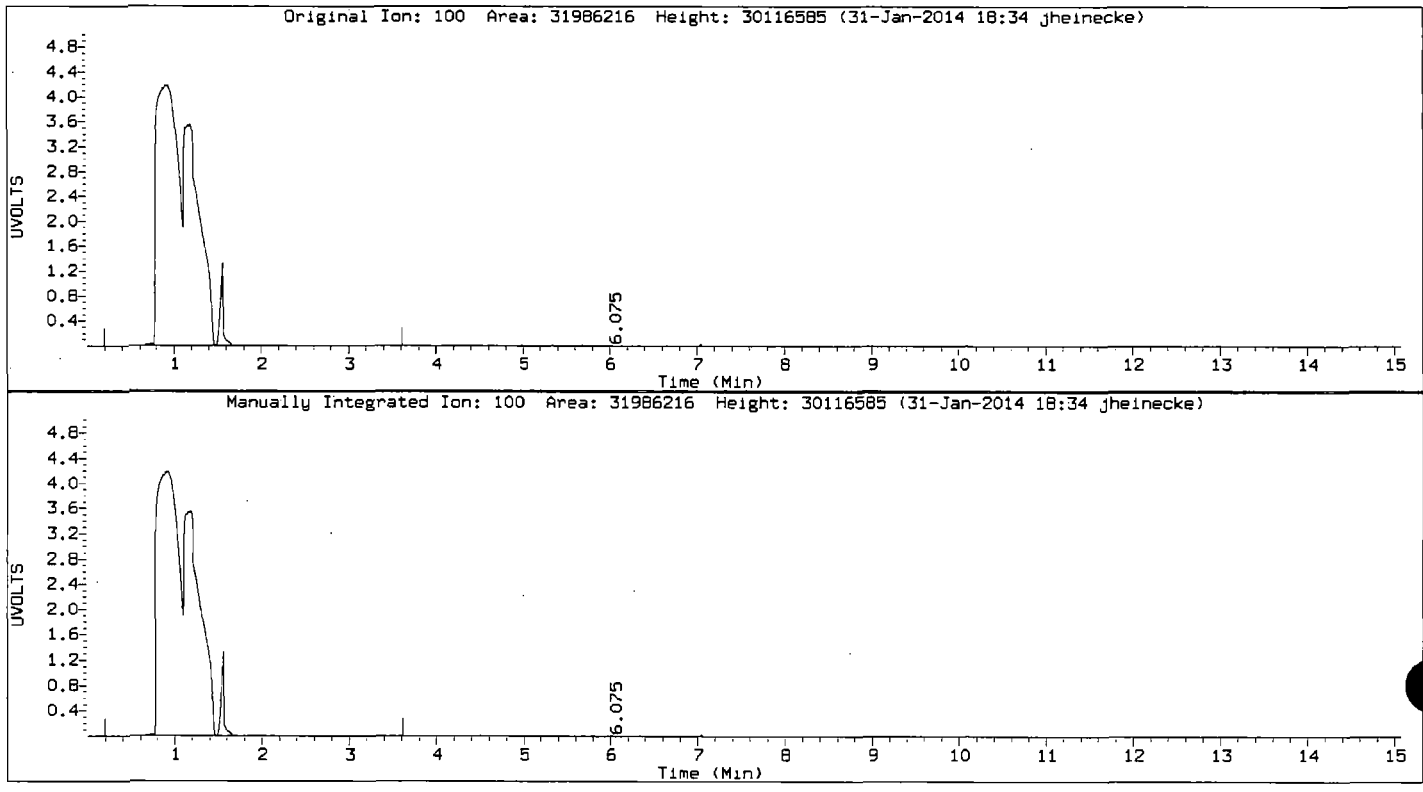
Injection Date: 31-JAN-2014 17:40
Instrument: 10gcs8.i
Lab Sample ID: ICAL 7 10328-64

Compound: DRO by AK 102
CAS Number:



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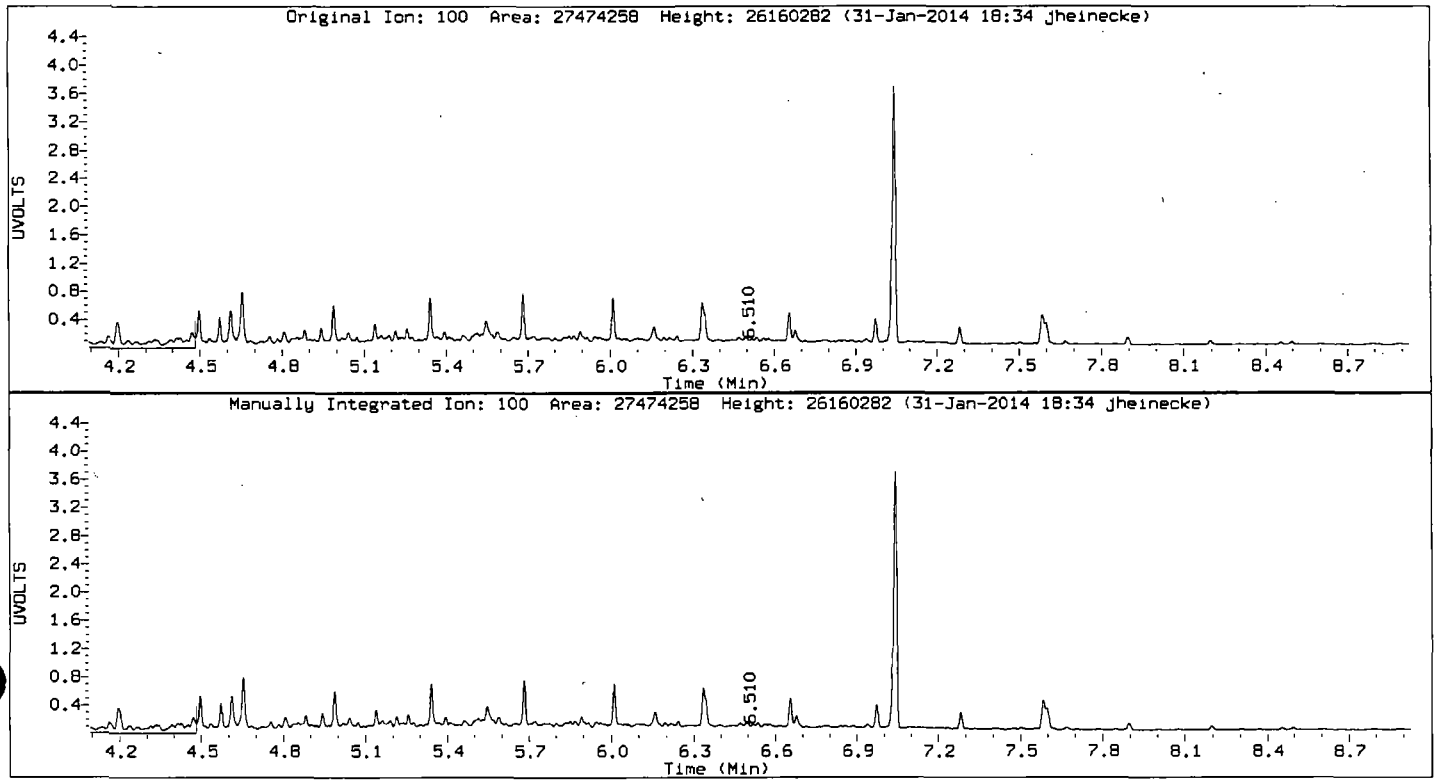
Instrument: 10gcs8.i
Lab Sample ID: ICAL 7 10328-64

Compound: Diesel Fuel Range
CAS Number:



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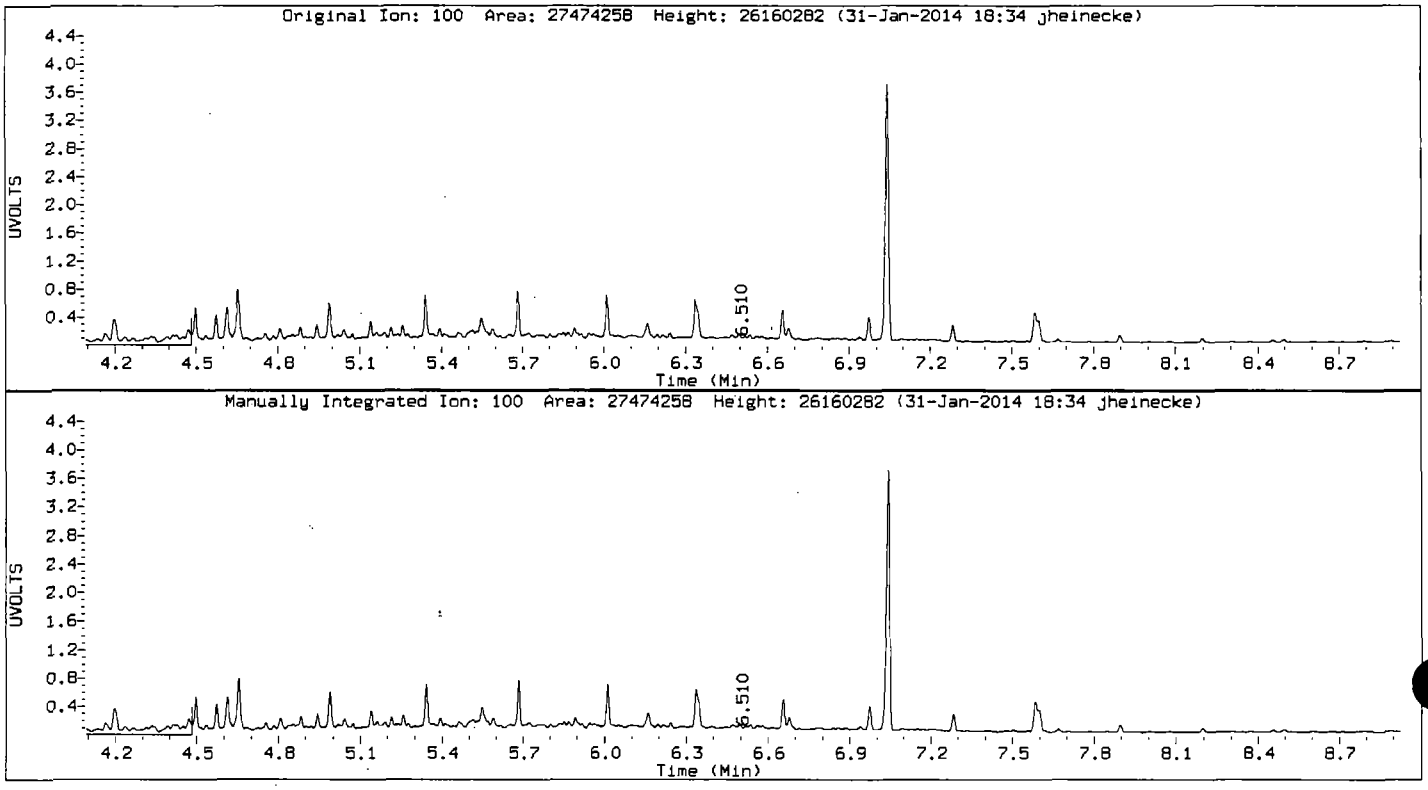
Injection Date: 31-JAN-2014 17:40
Instrument: 10gcs8.i
Lab Sample ID: ICAL 7 10328-64

Compound: DRO (C12-C24)
CAS Number:



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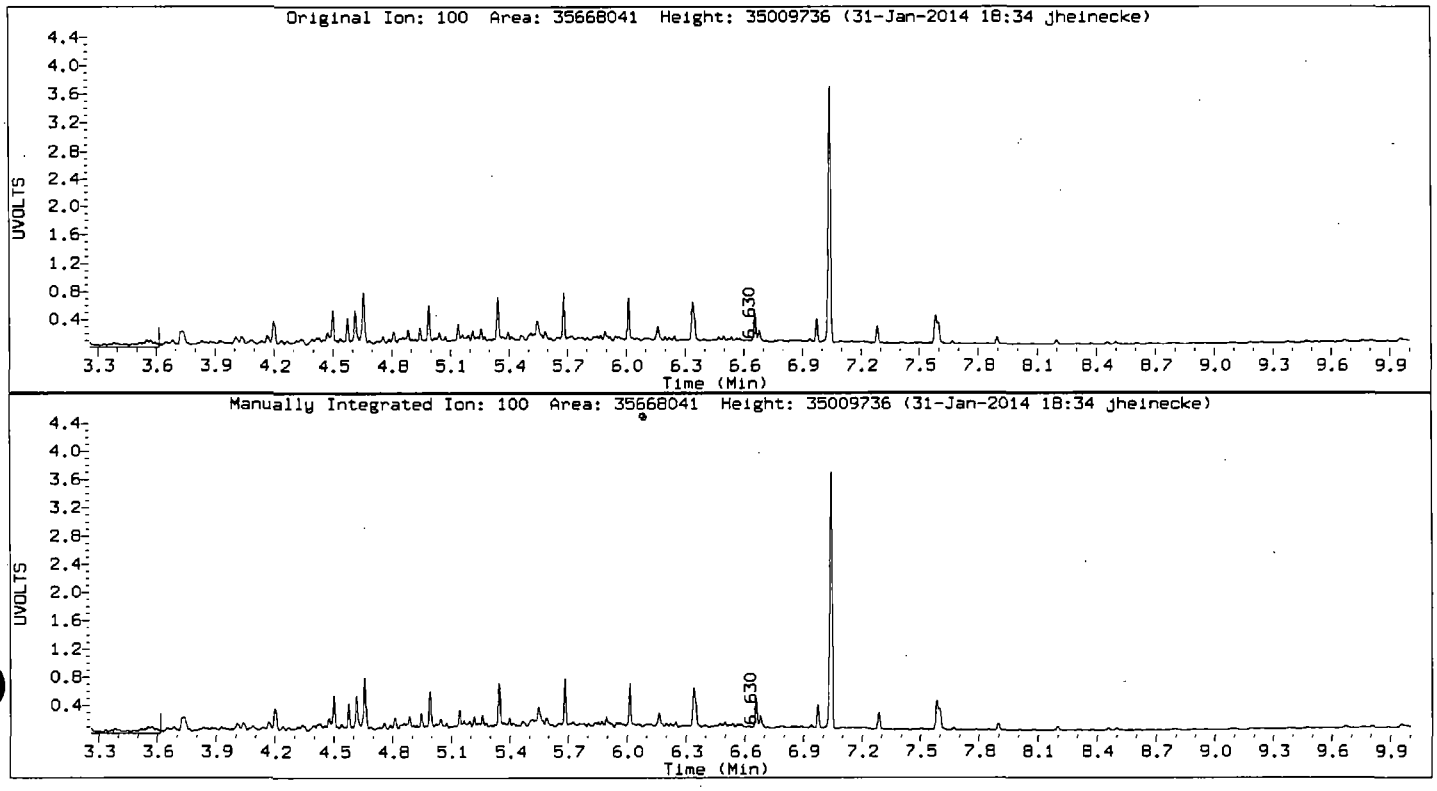
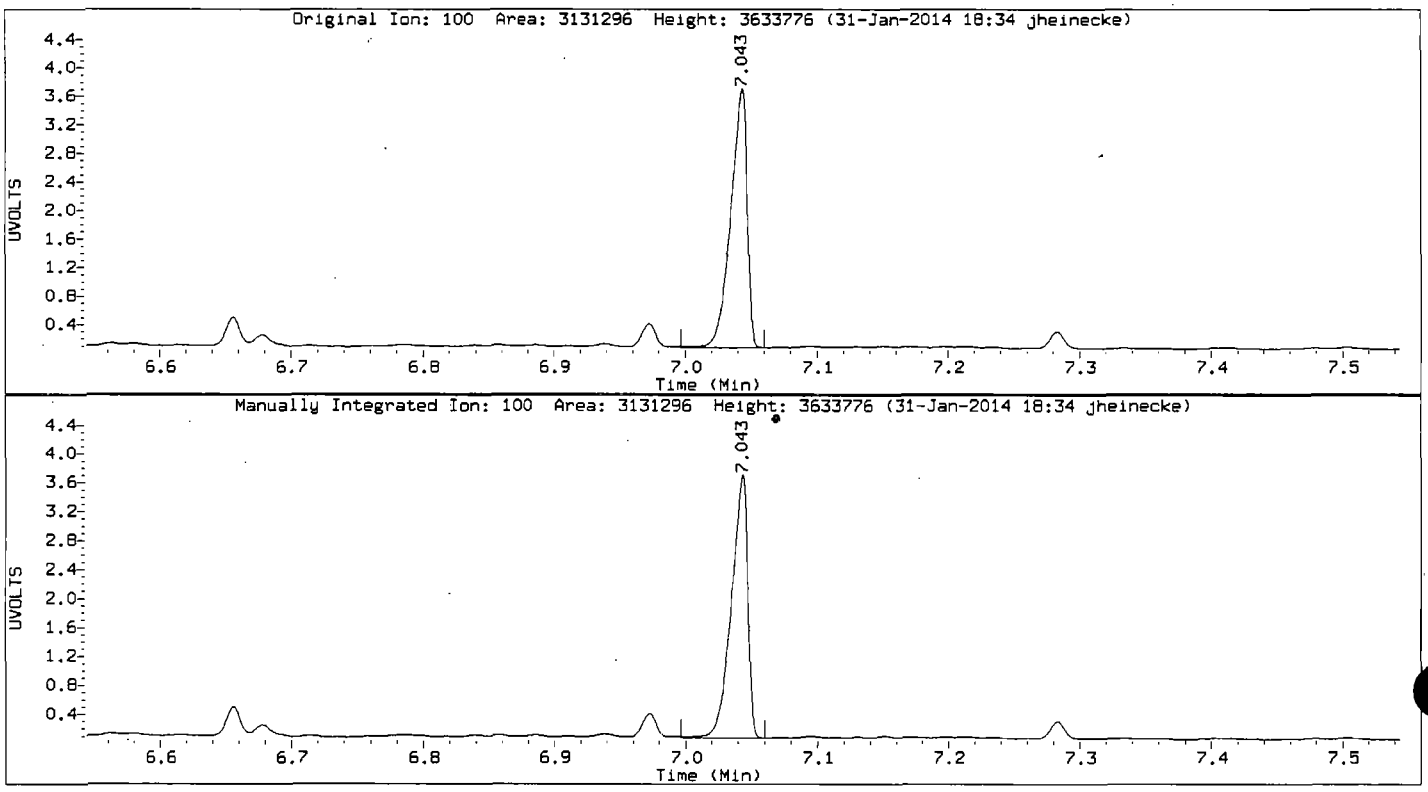
Injection Date: 31-JAN-2014 17:40
Instrument: 10gcs8.i
Lab Sample ID: ICAL 7 10328-64

Compound: TPH-DRO (C10-C28)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b/0131R013.d
Injection Date: 31-JAN-2014 17:40
Instrument: 10gcs8.i
Lab Sample ID: ICAL 7 10328-64

Compound: o-Terphenyl (S)
CAS Number:



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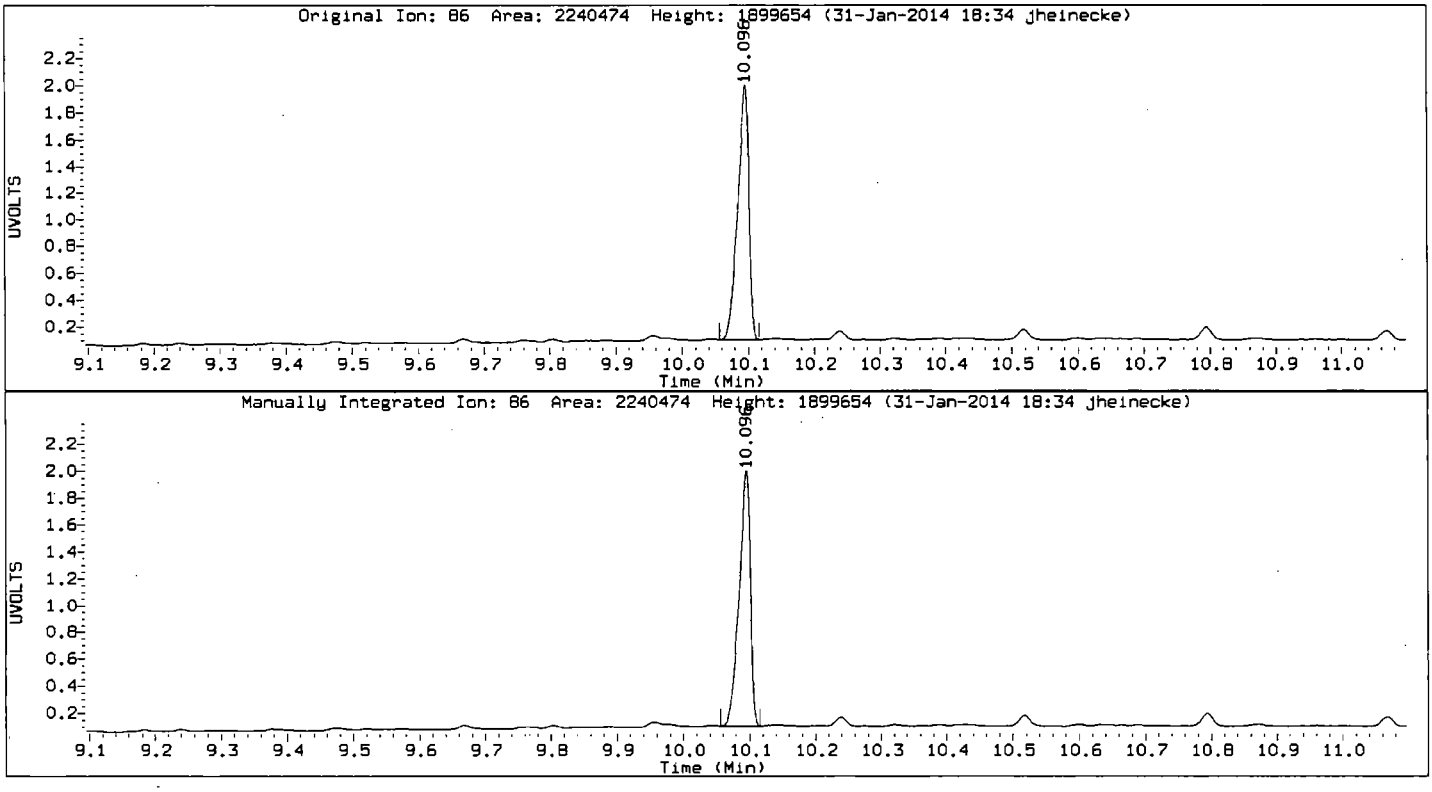
Injection Date: 31-JAN-2014 17:40
Instrument: 10gcs8.i
Lab Sample ID: ICAL 7 10328-64

Compound: n-Triacontane (S)
CAS Number:



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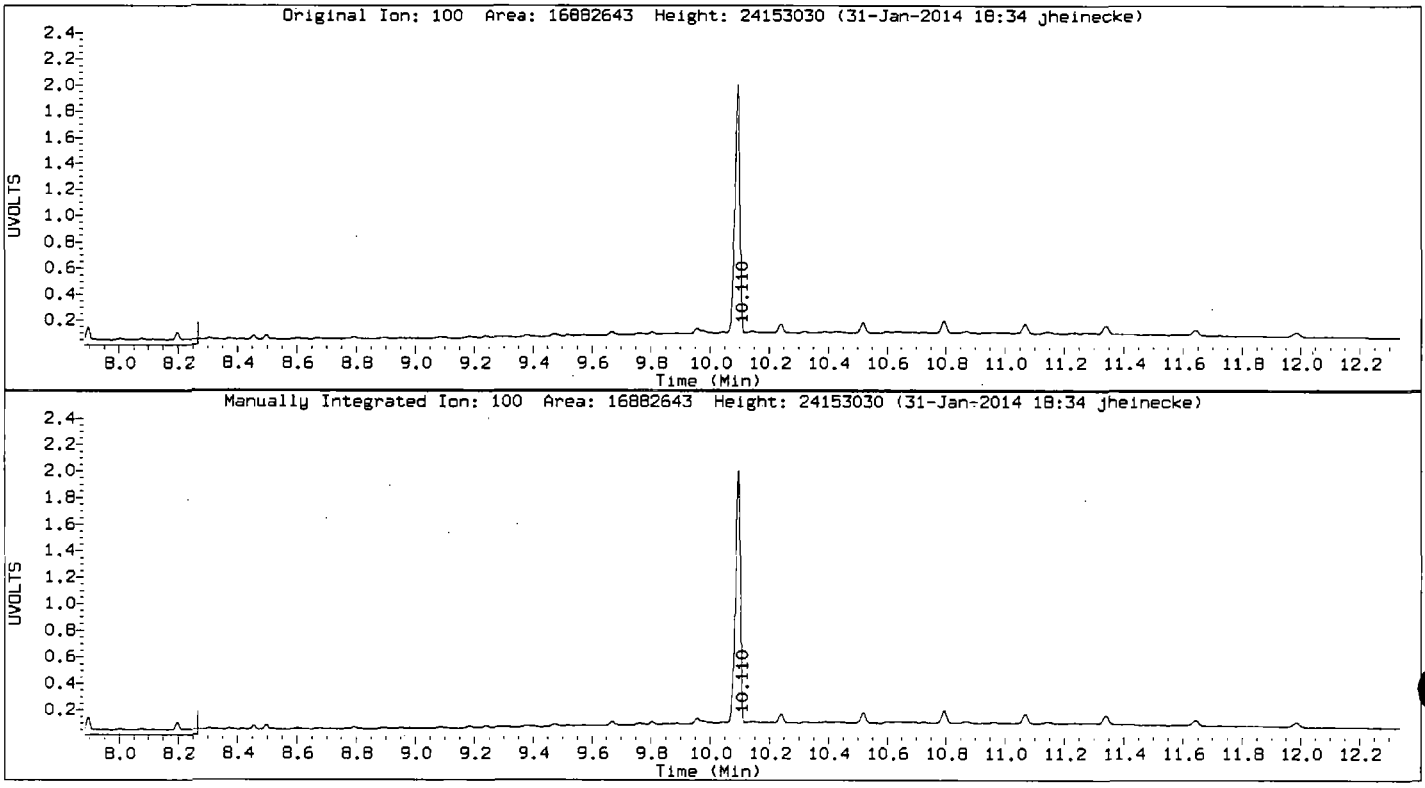
Injection Date: 31-JAN-2014 17:40
Instrument: 10gcs8.i
Lab Sample ID: ICAL 7 10328-64

Compound: Motor Oil Range (C24-C36)
CAS Number:



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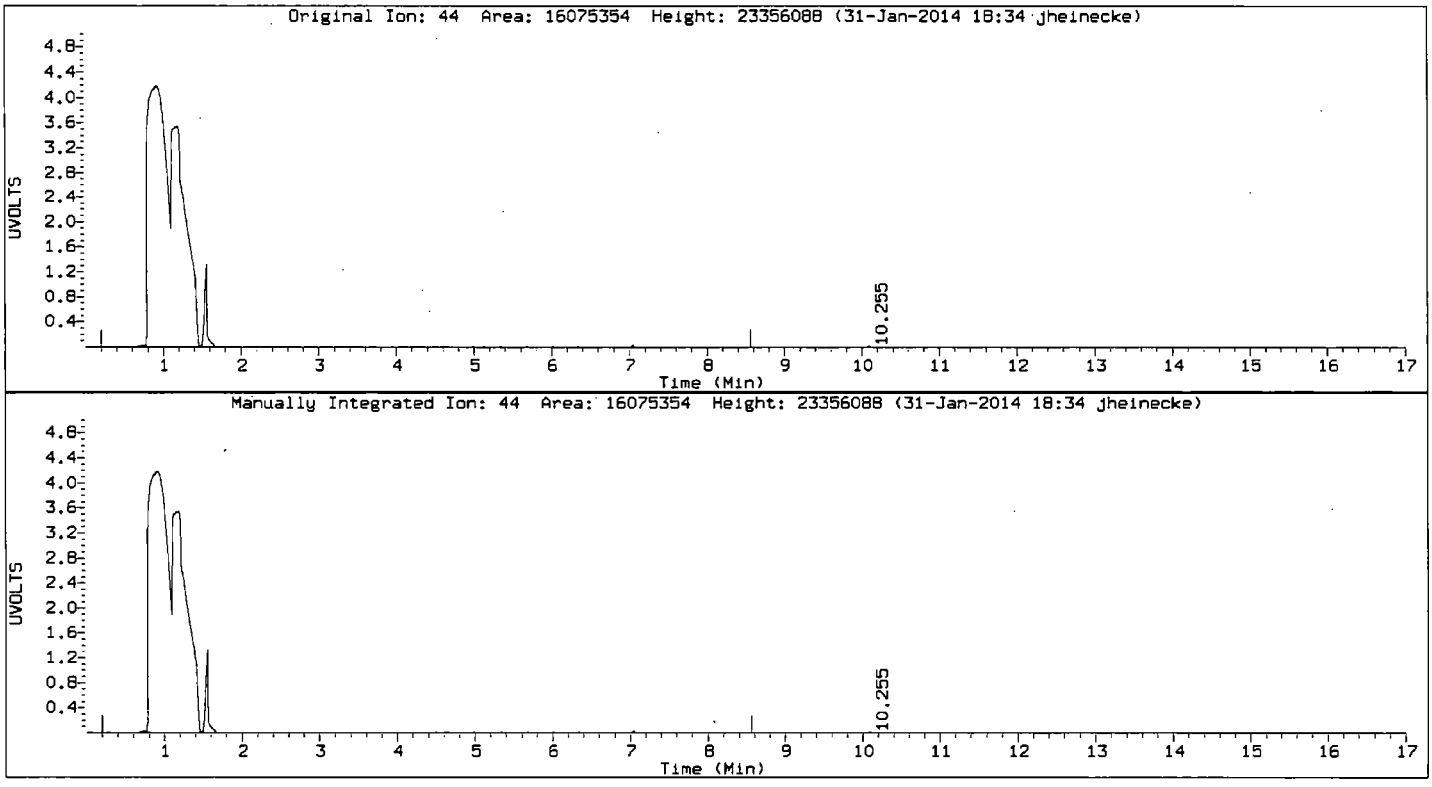
Injection Date: 31-JAN-2014 17:40
Instrument: 10gcs8.i
Lab Sample ID: ICAL 7 10328-64

Compound: Residual Range Organics AK103
CAS Number:



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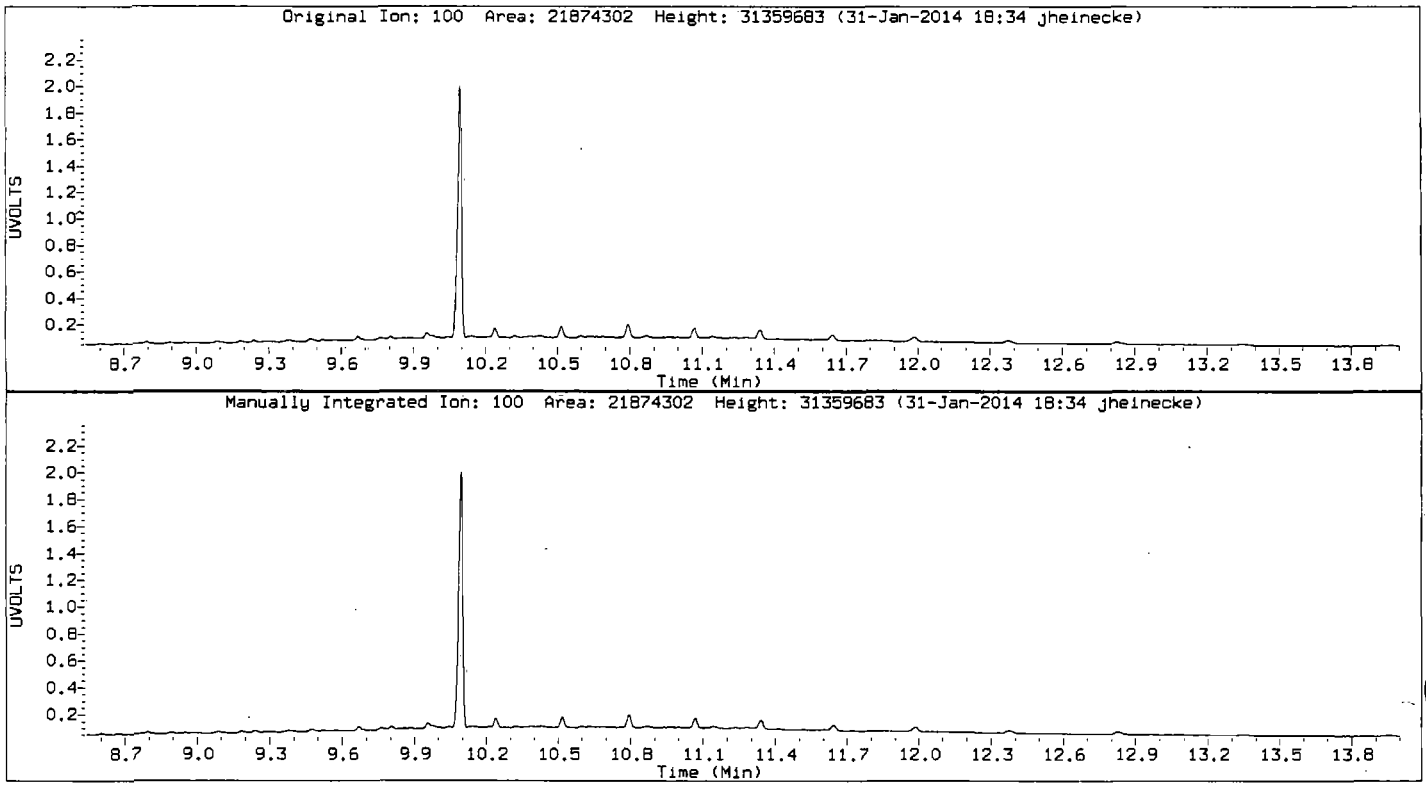
Injection Date: 31-JAN-2014 17:40
Instrument: 10gcs8.i
Lab Sample ID: ICAL 7 10328-64

Compound: ORO (C24-C40)
CAS Number:



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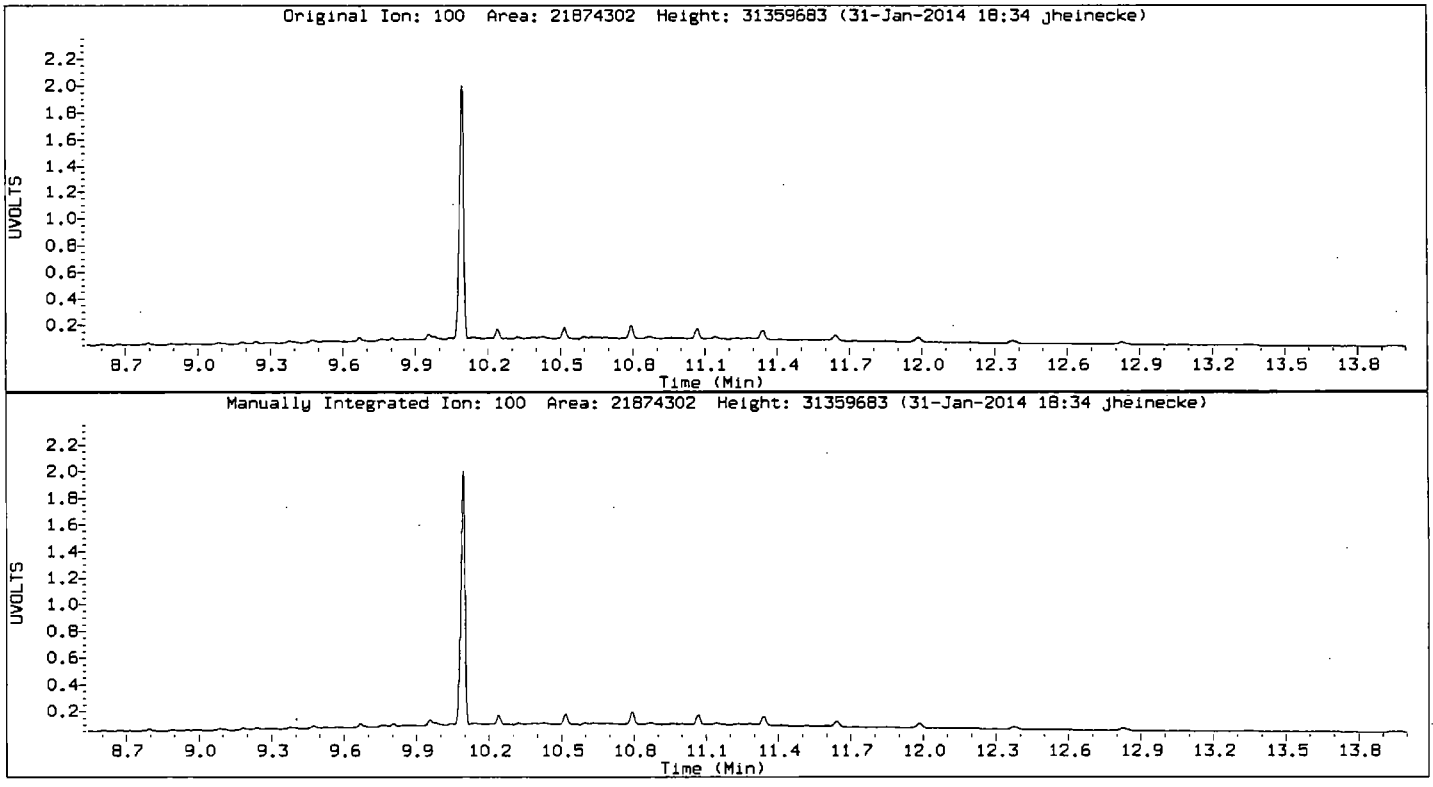
Injection Date: 31-JAN-2014 17:40
Instrument: 10gcs8.i
Lab Sample ID: ICAL 7 10328-64

Compound: Motor Oil Range
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R014.d
Lab Smp Id: ICAL 8 10328-64
Inj Date : 31-JAN-2014 18:03
Operator : JRH Inst ID: 10gcs8.i
Smp Info : ICAL 8 10328-64
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Meth Date : 01-Feb-2014 11:46 10gcs8.i Quant Type: ESTD
Cal Date : 31-JAN-2014 17:40 Cal File: 0131R013.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.600-8.550			60669708	1000.00	1000(M)
S	2 o-Terphenyl (S)	7.052	7.052	0.000	6214242	100.000	99.9(M)
S	3 n-Triacontane (S)	10.061	10.061	0.000	4388645	100.000	98.6(M)
S	4 Residual Range Organics AK103	8.560-11.950			31331389	1000.00	979(M)
S	5 TPH-DRO (C10-C28)	3.600-9.660			68385095	1000.00	1000(M)
S	6 Motor Oil Range (C24-C36)	8.270-11.950			32847058	1000.00	978(M)
S	7 DRO (C12-C24)	4.490-8.529			52756564	1000.00	1000(M)
S	8 Diesel Fuel Range	4.490-8.529			52756564	1000.00	1000(M)
S	9 ORO (C24-C40)	8.539-14.000			41308278	1000.00	981(M)
S	10 Motor Oil Range	8.539-14.000			41308278	1000.00	981(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R014.D

Page 1

Date : 31-JAN-2014 18:03

Client ID:

Instrument: 10gcs8.i

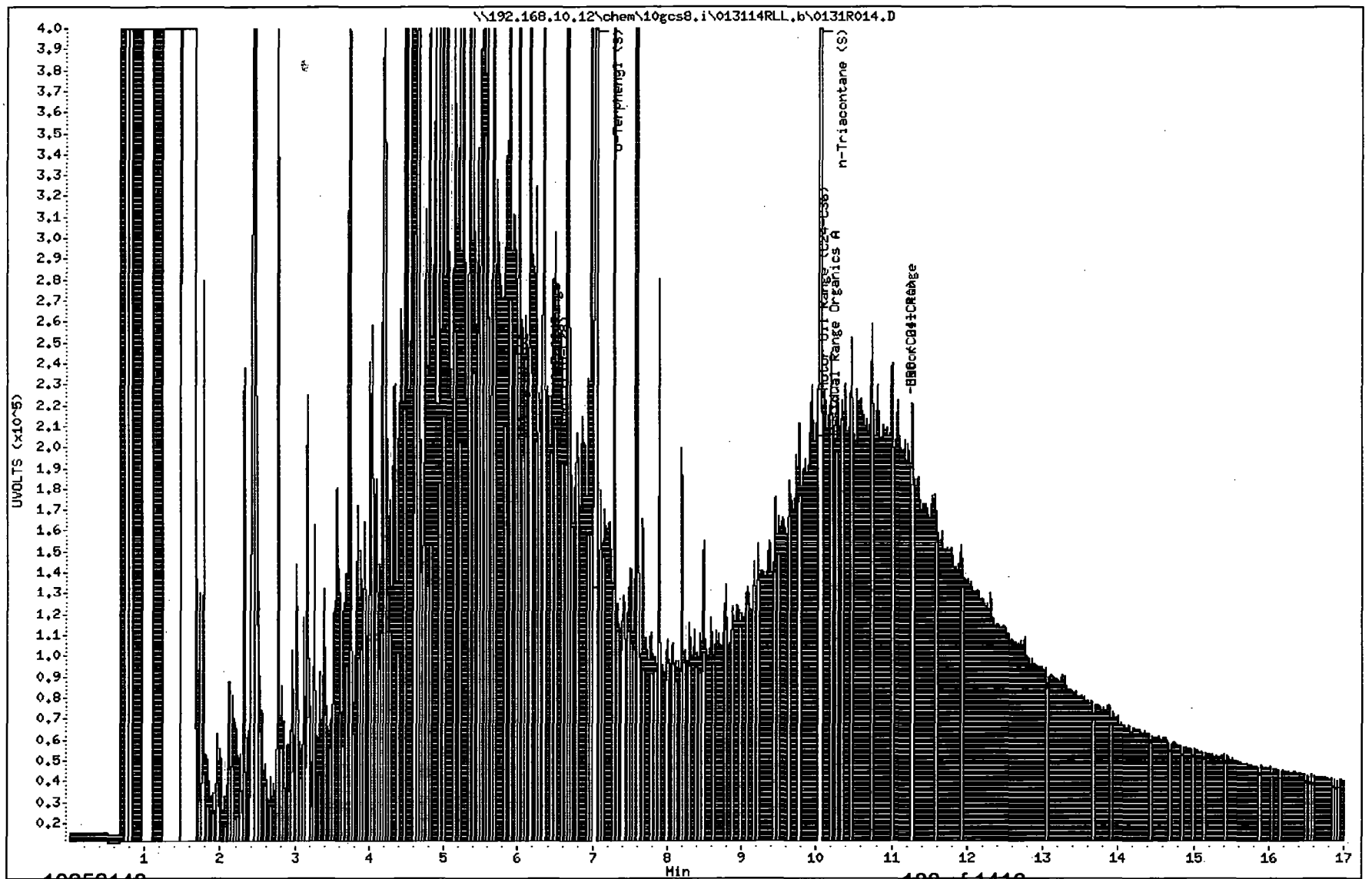
Sample Info: ICAL 8 10328-64

Volume Injected (uL): 1.0

Operator: JRH

Column phase: DB-5MS

Column diameter: 0.25



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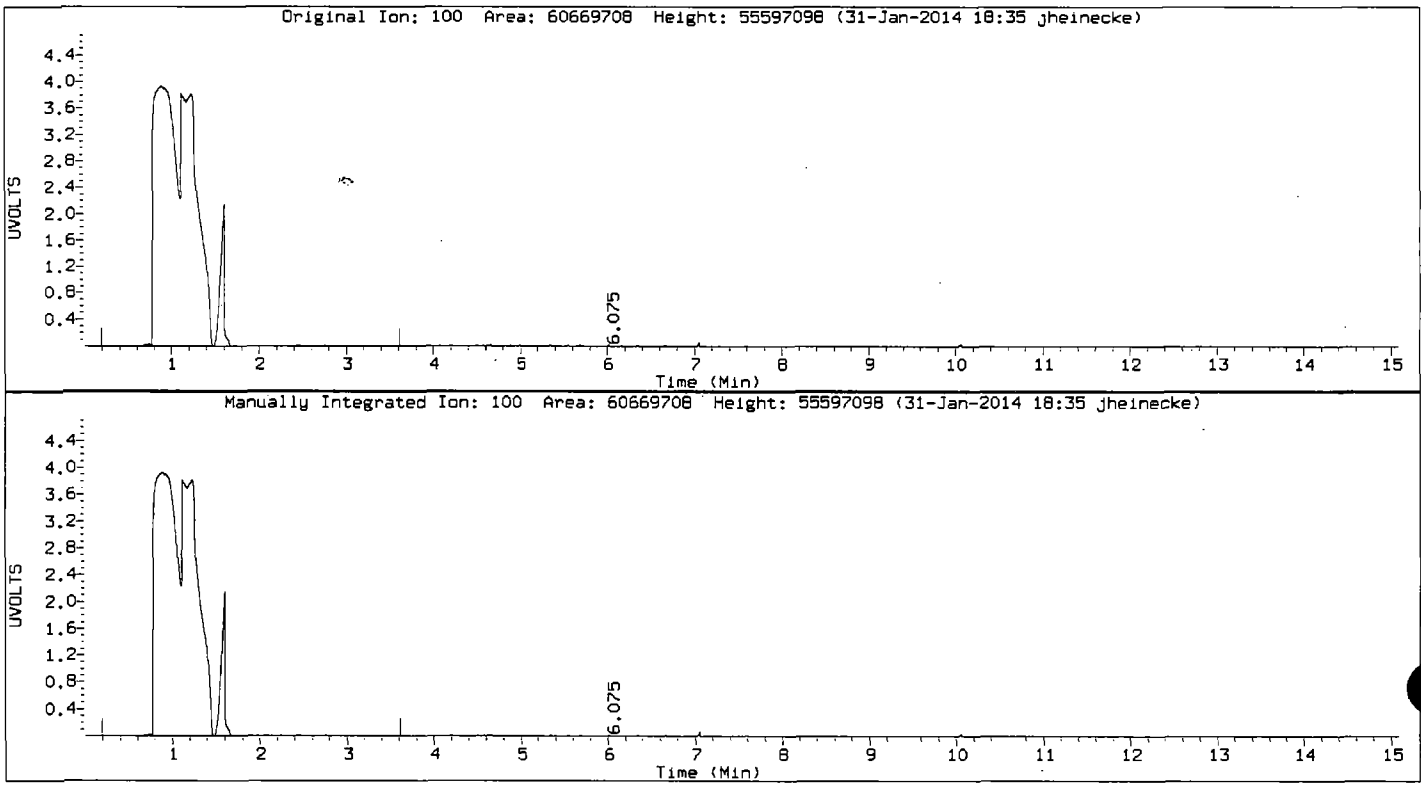
Injection Date: 31-JAN-2014 18:03
Instrument: 10gcs8.i
Lab Sample ID: ICAL 8 10328-64

Compound: DRO by AK 102
CAS Number:



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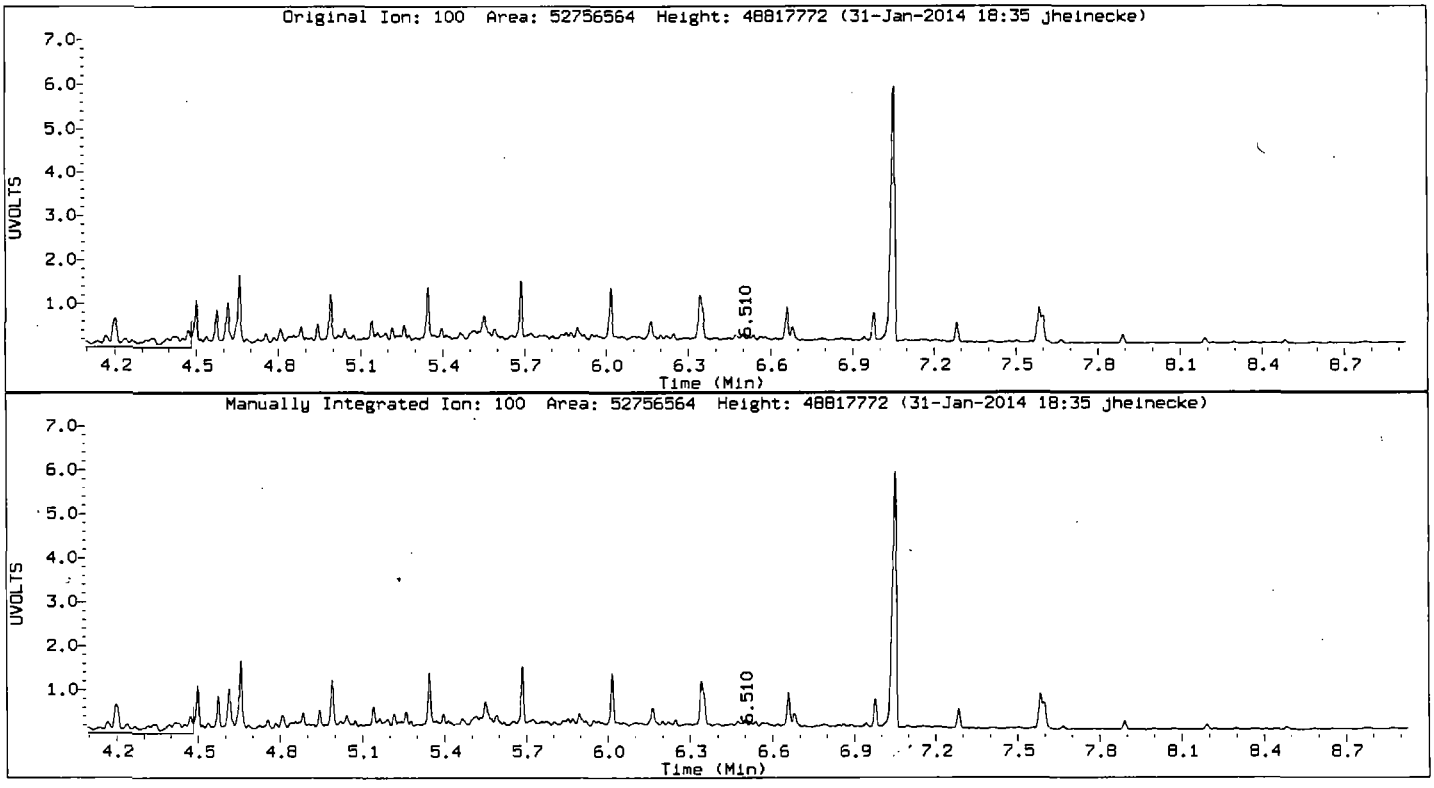
Instrument: 10gcs8.i
Lab Sample ID: ICAL 8 10328-64

Compound: Diesel Fuel Range
CAS Number:



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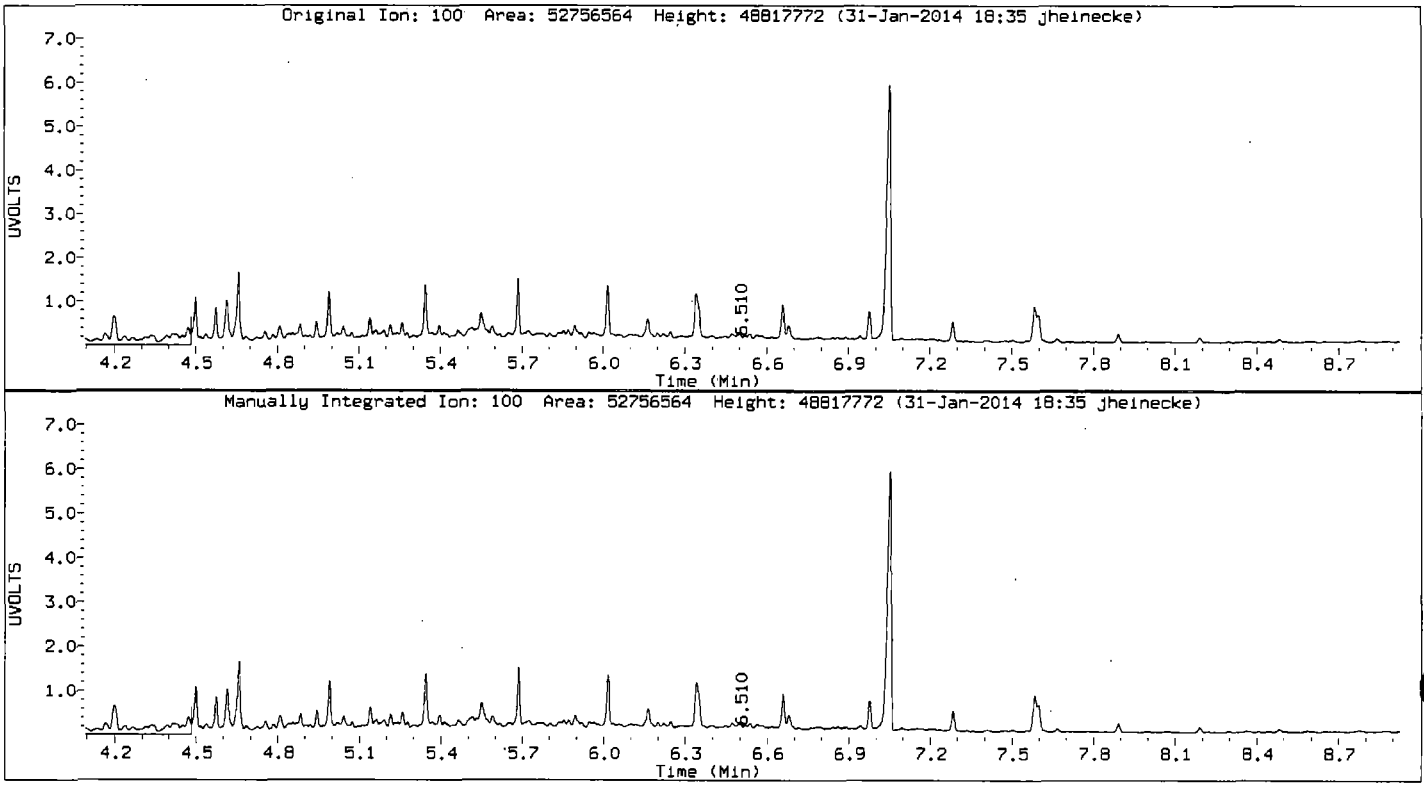
Injection Date: 31-JAN-2014 18:03
Instrument: 10gcs8.i
Lab Sample ID: ICAL 8 10328-64

Compound: DRO (C12-C24)
CAS Number:



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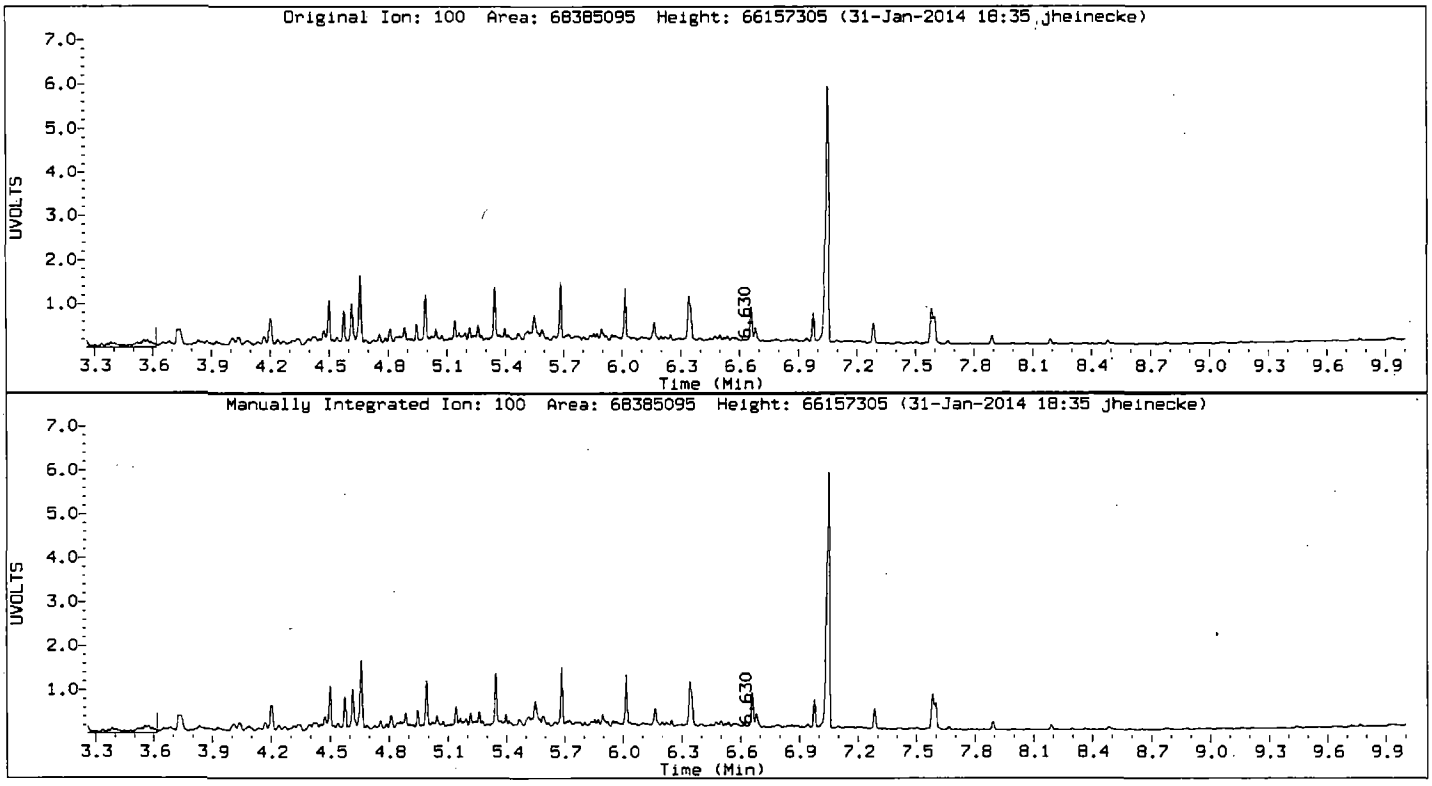
Injection Date: 31-JAN-2014 18:03
Instrument: 10gcs8.i
Lab Sample ID: ICAL 8 10328-64

Compound: TPH-DRO (C10-C28)
CAS Number:



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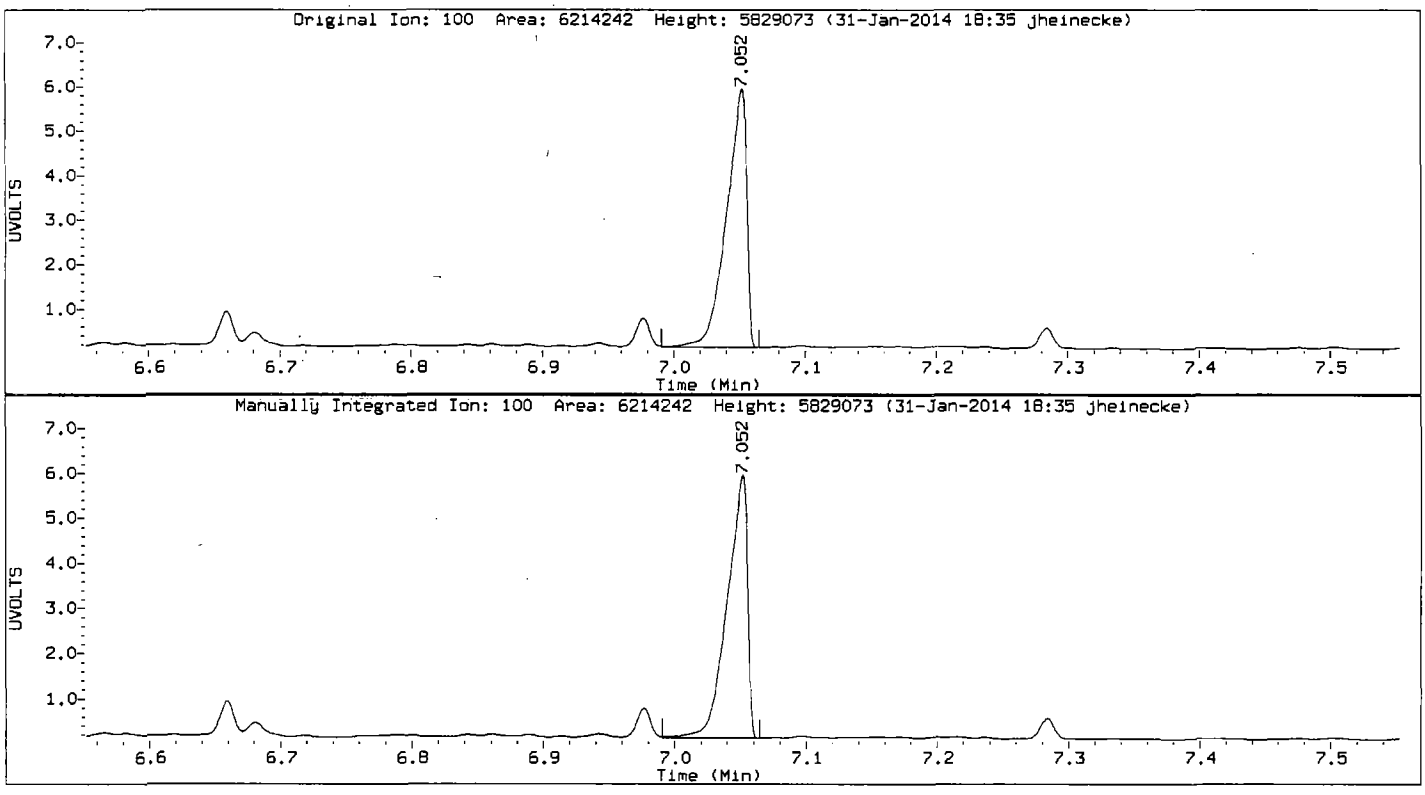
Injection Date: 31-JAN-2014 18:03
Instrument: 10gcs8.i
Lab Sample ID: ICAL 8 10328-64

Compound: o-Terphenyl (S)
CAS Number:



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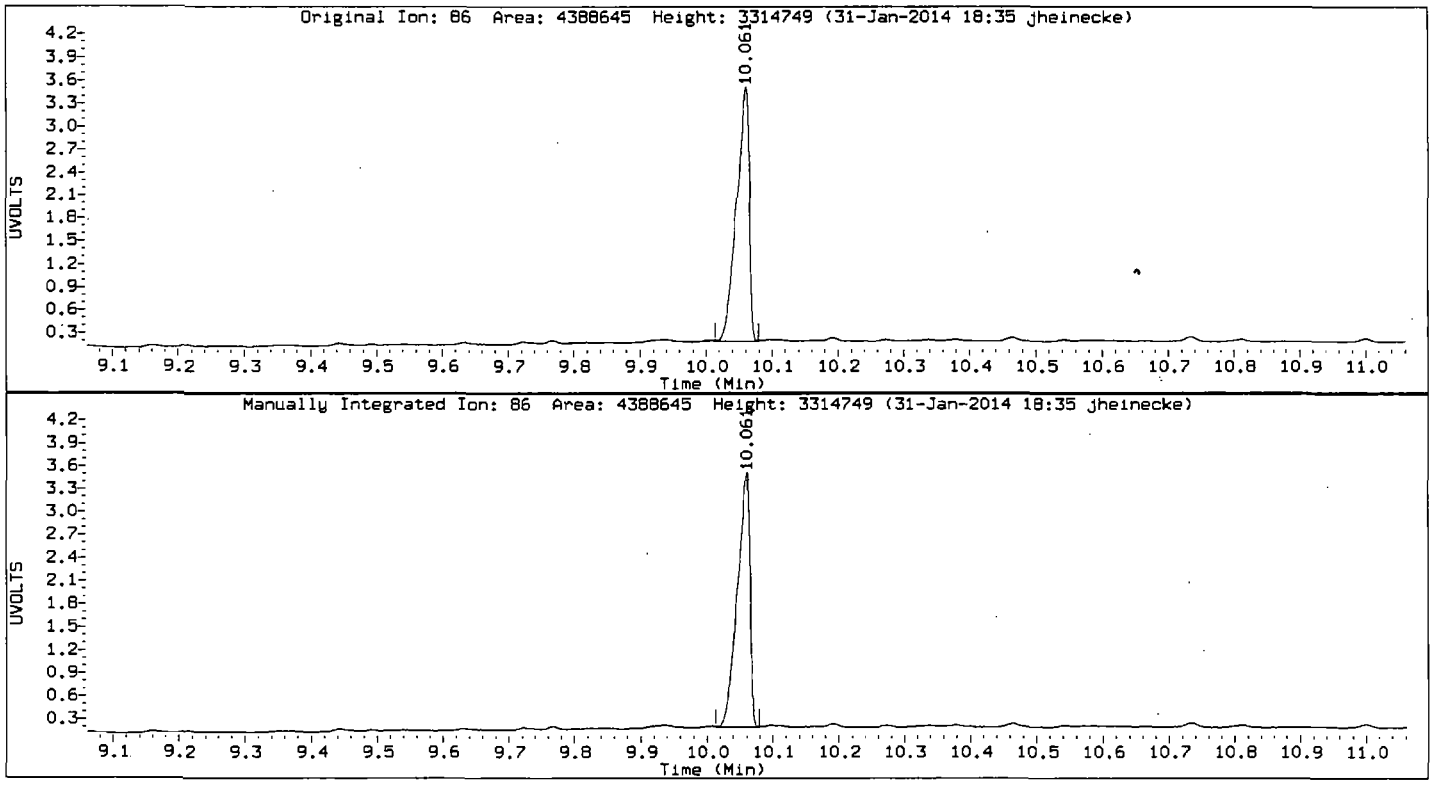
Injection Date: 31-JAN-2014 18:03
Instrument: 10gcs8.i
Lab Sample ID: ICAL 8 10328-64

Compound: n-Triacontane (S)
CAS Number:



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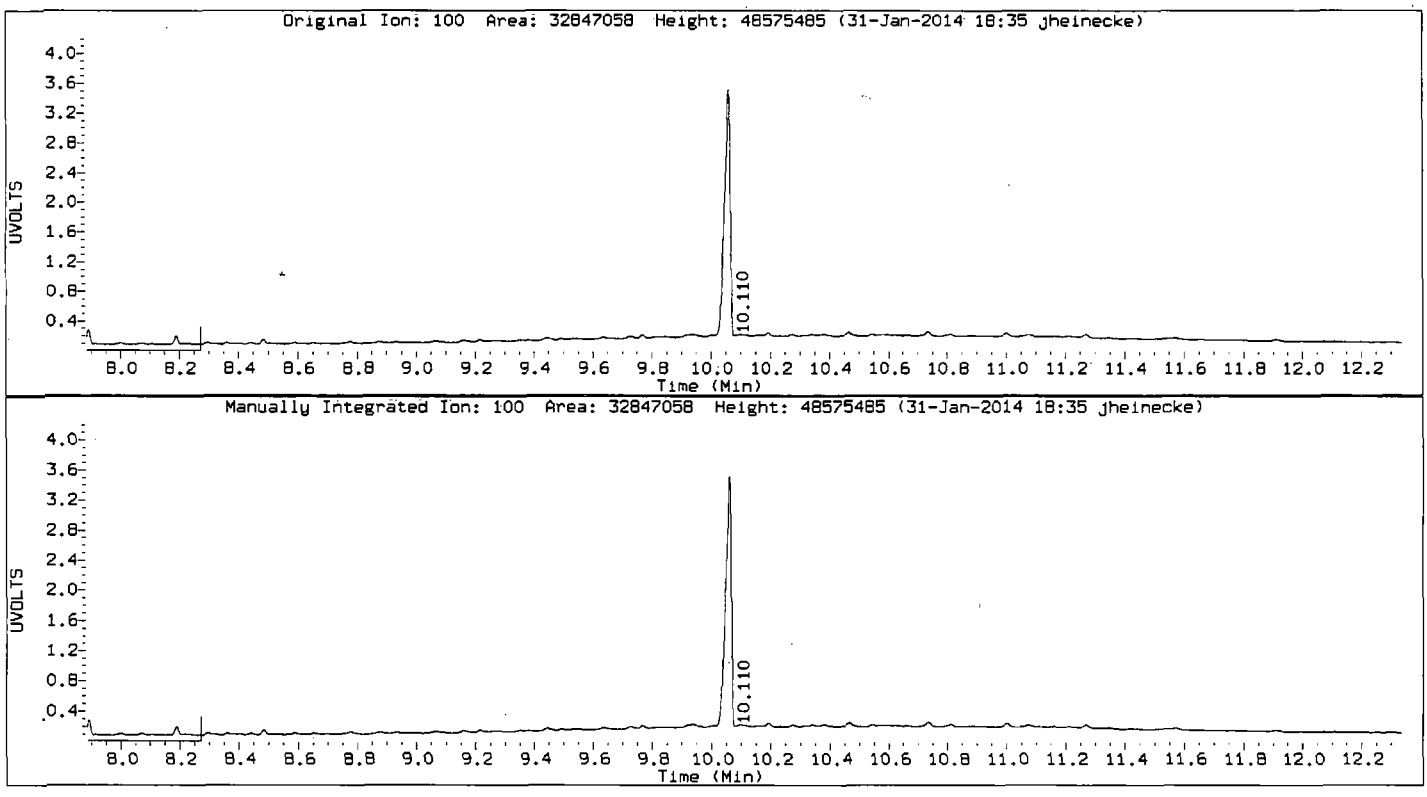
Injection Date: 31-JAN-2014 18:03
Instrument: 10gcs8.i
Lab Sample ID: ICAL 8 10328-64

Compound: Motor Oil Range (C24-C36)
CAS Number:



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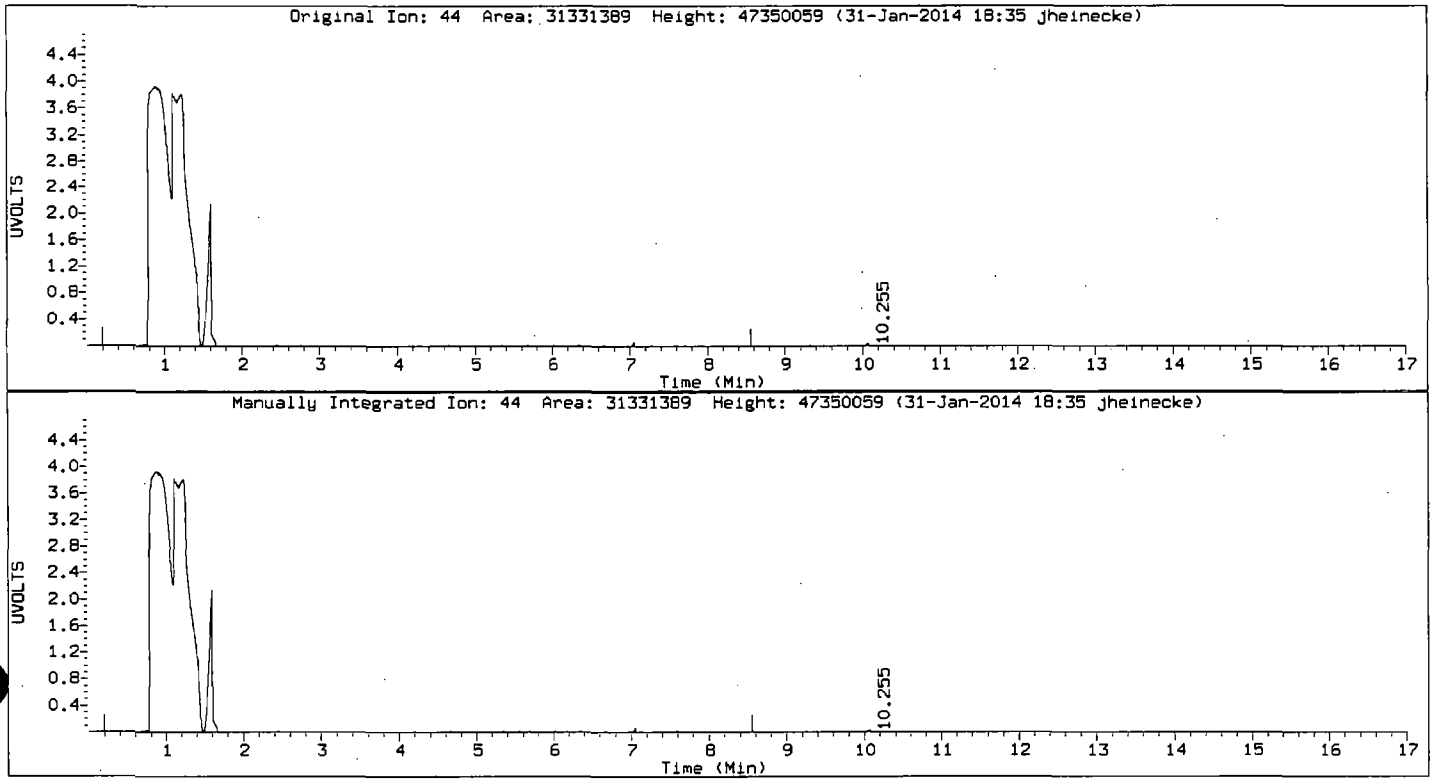
Injection Date: 31-JAN-2014 18:03
Instrument: 10gcs8.i
Lab Sample ID: ICAL 8 10328-64

Compound: Residual Range Organics AK103
CAS Number:



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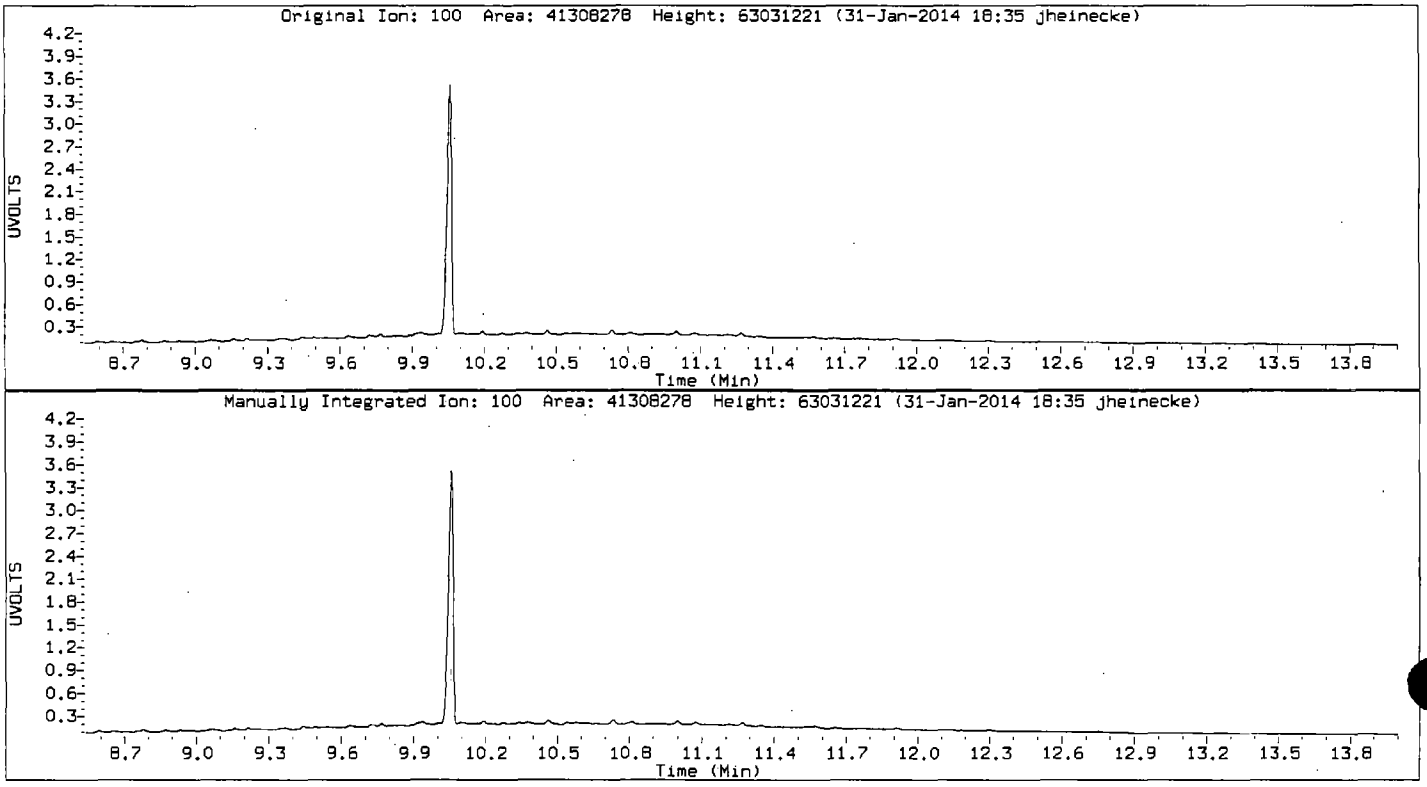
Injection Date: 31-JAN-2014 18:03
Instrument: 10gcs8.i
Lab Sample ID: ICAL 8 10328-64

Compound: ORO (C24-C40)
CAS Number:



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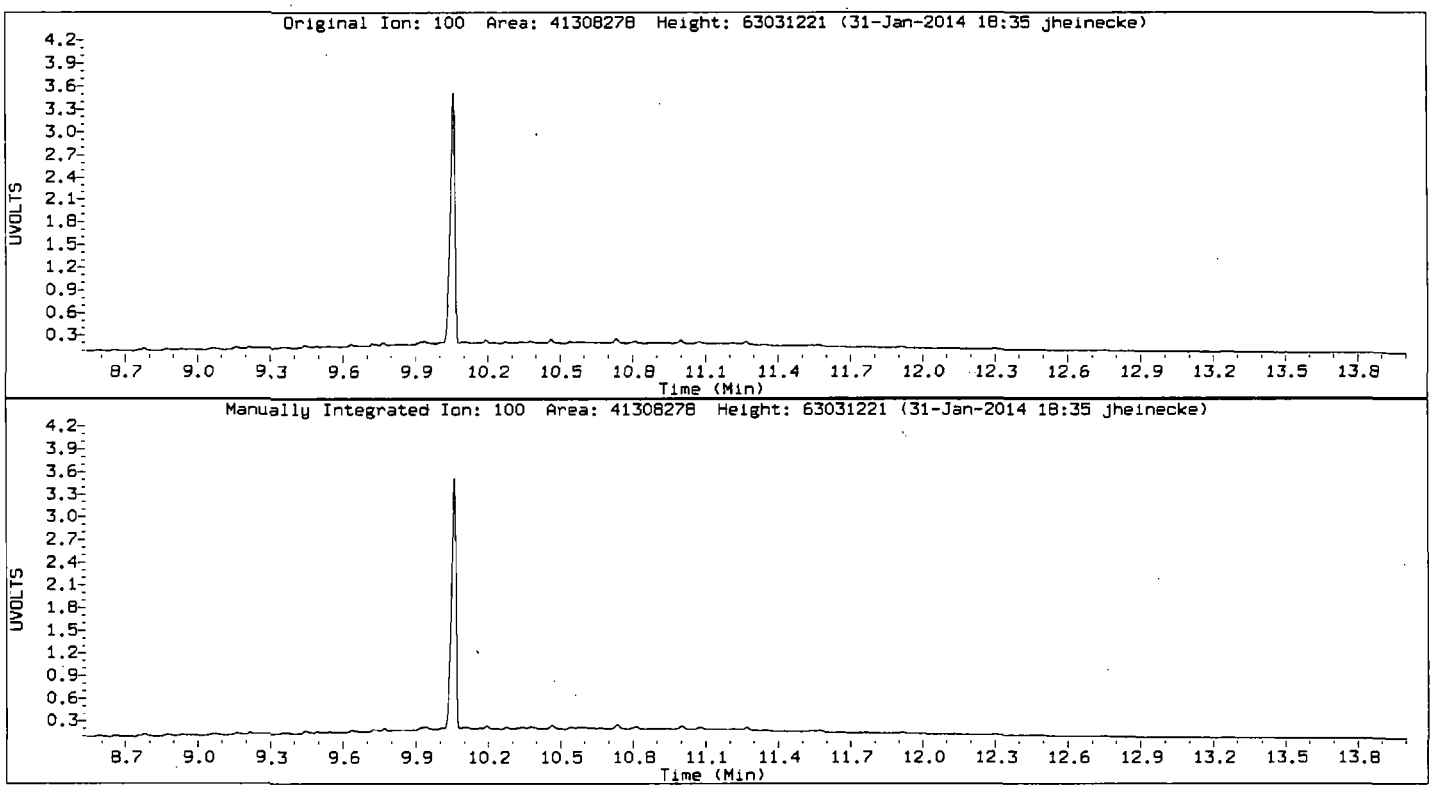
Injection Date: 31-JAN-2014 18:03
Instrument: 10gcs8.i
Lab Sample ID: ICAL 8 10328-64

Compound: Motor Oil Range
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R015.d
Lab Smp Id: ICAL 9 10328-64
Inj Date : 31-JAN-2014 18:26
Operator : JRH Inst ID: 10gcs8.i
Smp Info : ICAL 9 10328-64
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Meth Date : 01-Feb-2014 11:46 10gcs8.i Quant Type: ESTD
Cal Date : 31-JAN-2014 18:03 Cal File: 0131R014.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

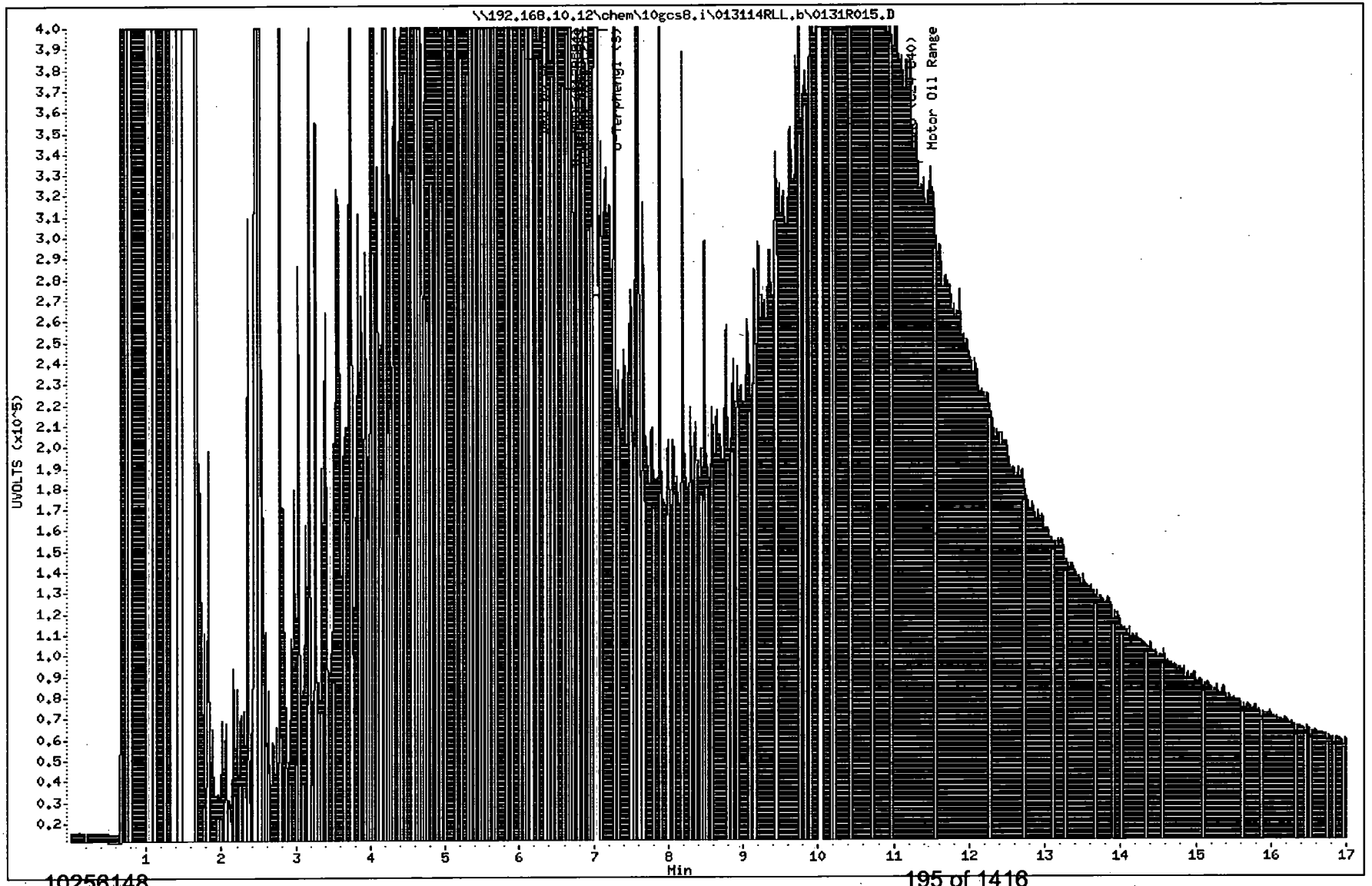
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.600-8.550			120245373	2000.00	1990(M)
S	2 o-Terphenyl (S)	7.061	7.061	0.000	12453001	200.000	200(M)
S	3 n-Triacontane (S)	10.054	10.054	0.000	8711046	200.000	195(M)
S	4 Residual Range Organics AK103	8.560-11.950			62581201	2000.00	1980(M)
S	5 TPH-DRO (C10-C28)	3.600-9.660			135879856	2000.00	1990(M)
S	6 Motor Oil Range (C24-C36)	8.270-11.950			65671637	2000.00	1970(M)
S	7 DRO (C12-C24)	4.490-8.529			105357857	2000.00	1990(M)
S	8 Diesel Fuel Range	4.490-8.529			105357857	2000.00	1990(M)
S	9 ORO (C24-C40)	8.539-14.000			81491585	2000.00	1980(M)
S	10 Motor Oil Range	8.539-14.000			81491585	2000.00	1980(M)

QC Flag Legend

M - Compound response manually integrated.

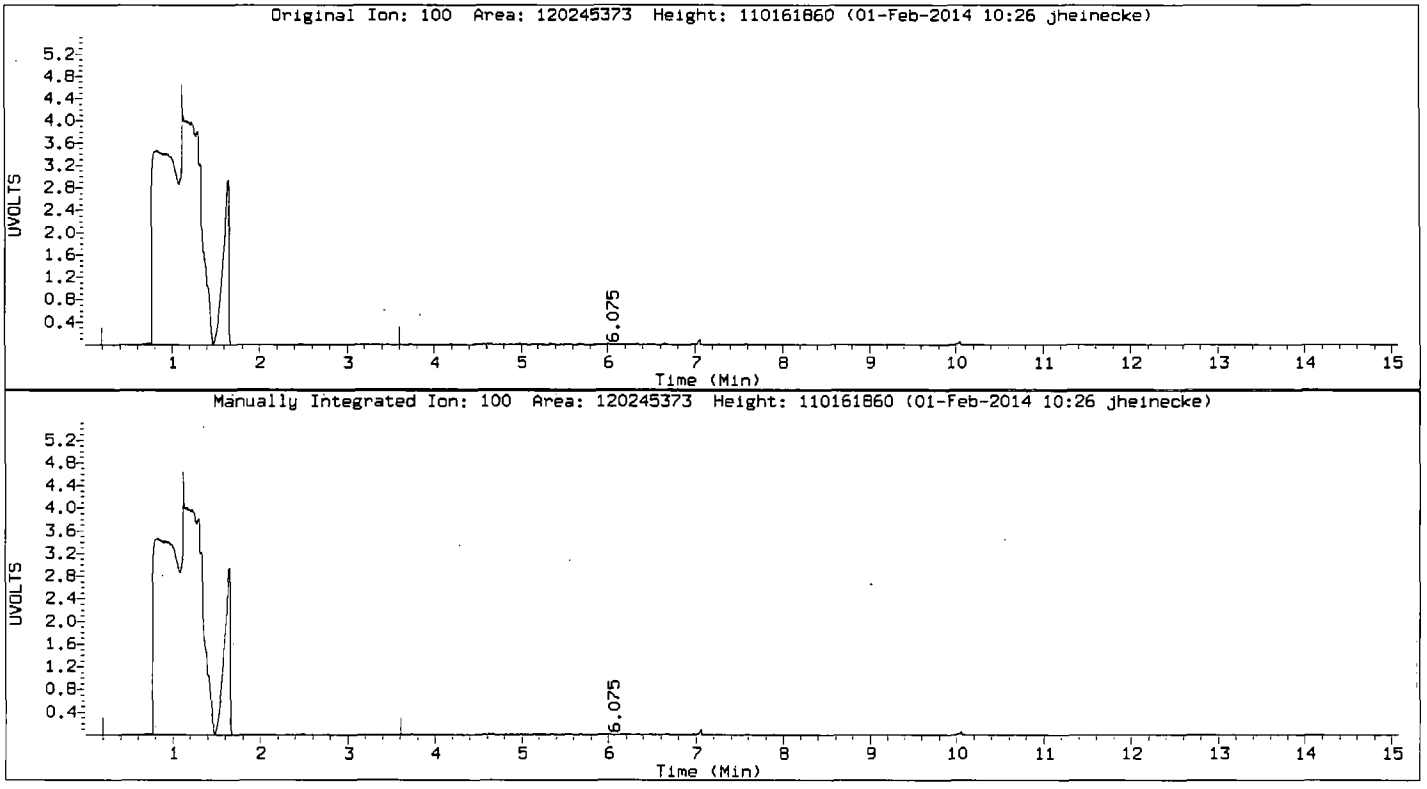
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R015.D
Date : 31-JAN-2014 18:26
Client ID:
Sample Info: ICAL 9 10328-64
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: 10gcs8.i
Operator: JRH
Column diameter: 0.25



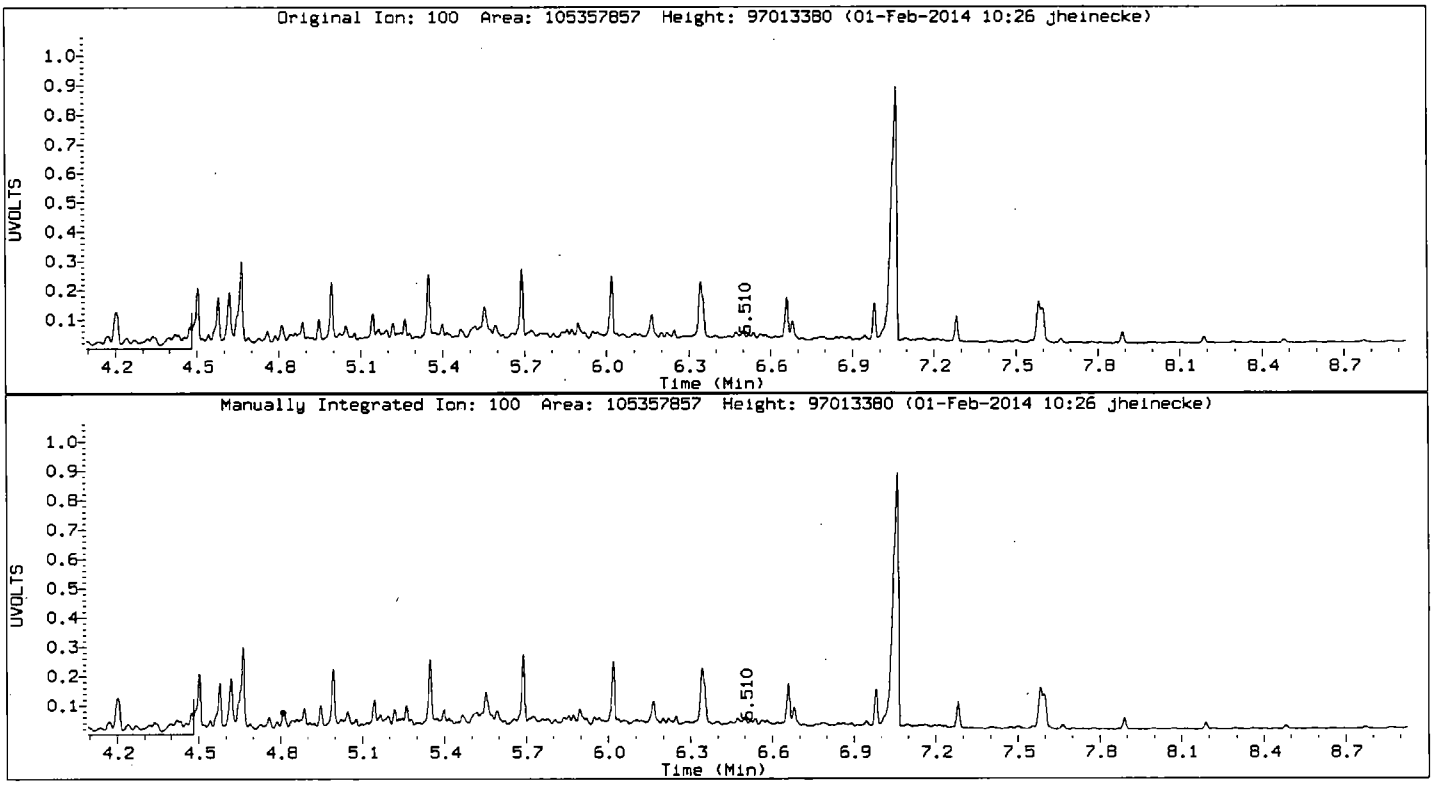
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b/0131R015.d
Injection Date: 31-JAN-2014 18:26
Instrument: 10gcs8.i
Lab Sample ID: ICAL 9 10328-64

Compound: DRO by AK 102
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b/0131R015.d
Injection Date: 31-JAN-2014 18:26
Instrument: 10gcs8.i
Lab Sample ID: ICAL 9 10328-64

Compound: Diesel Fuel Range
CAS Number:



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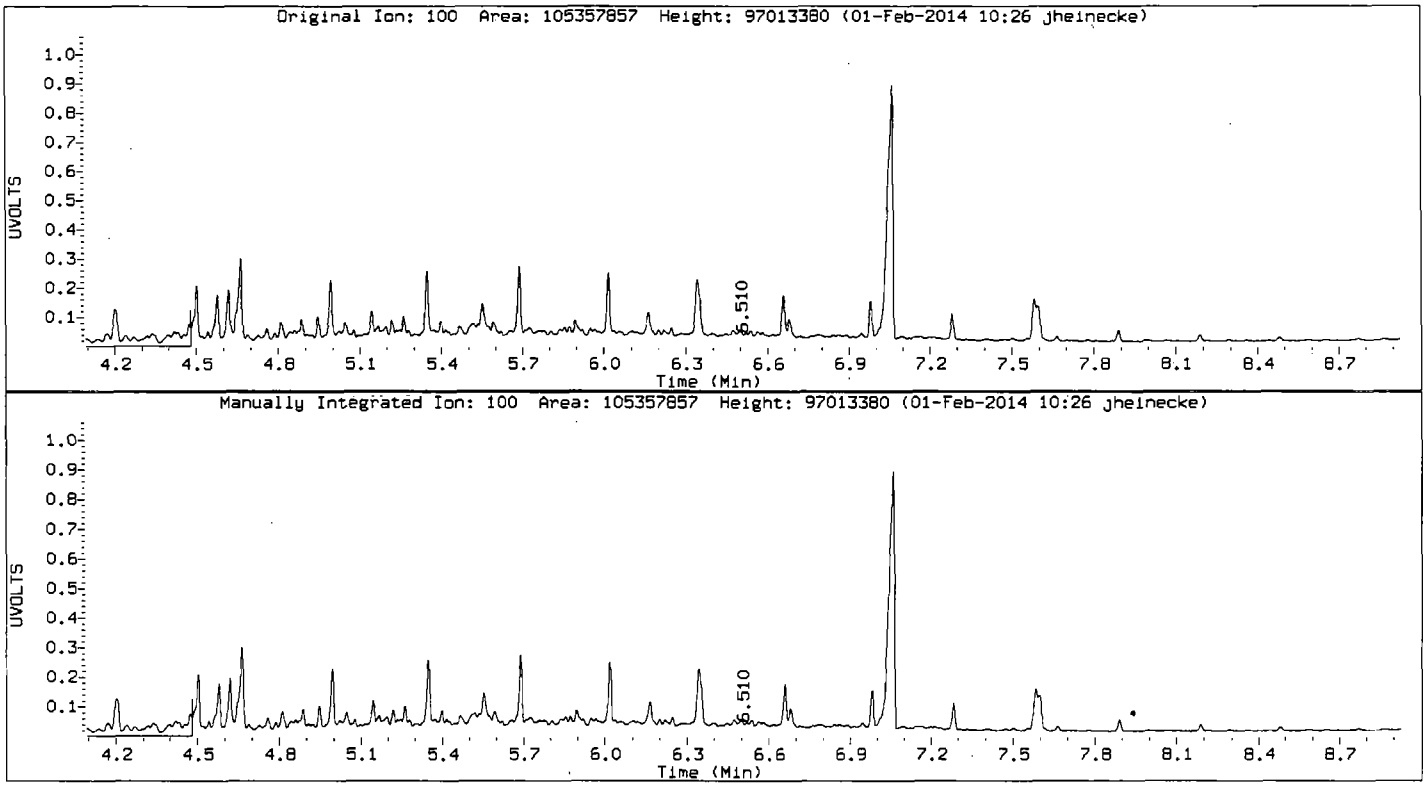
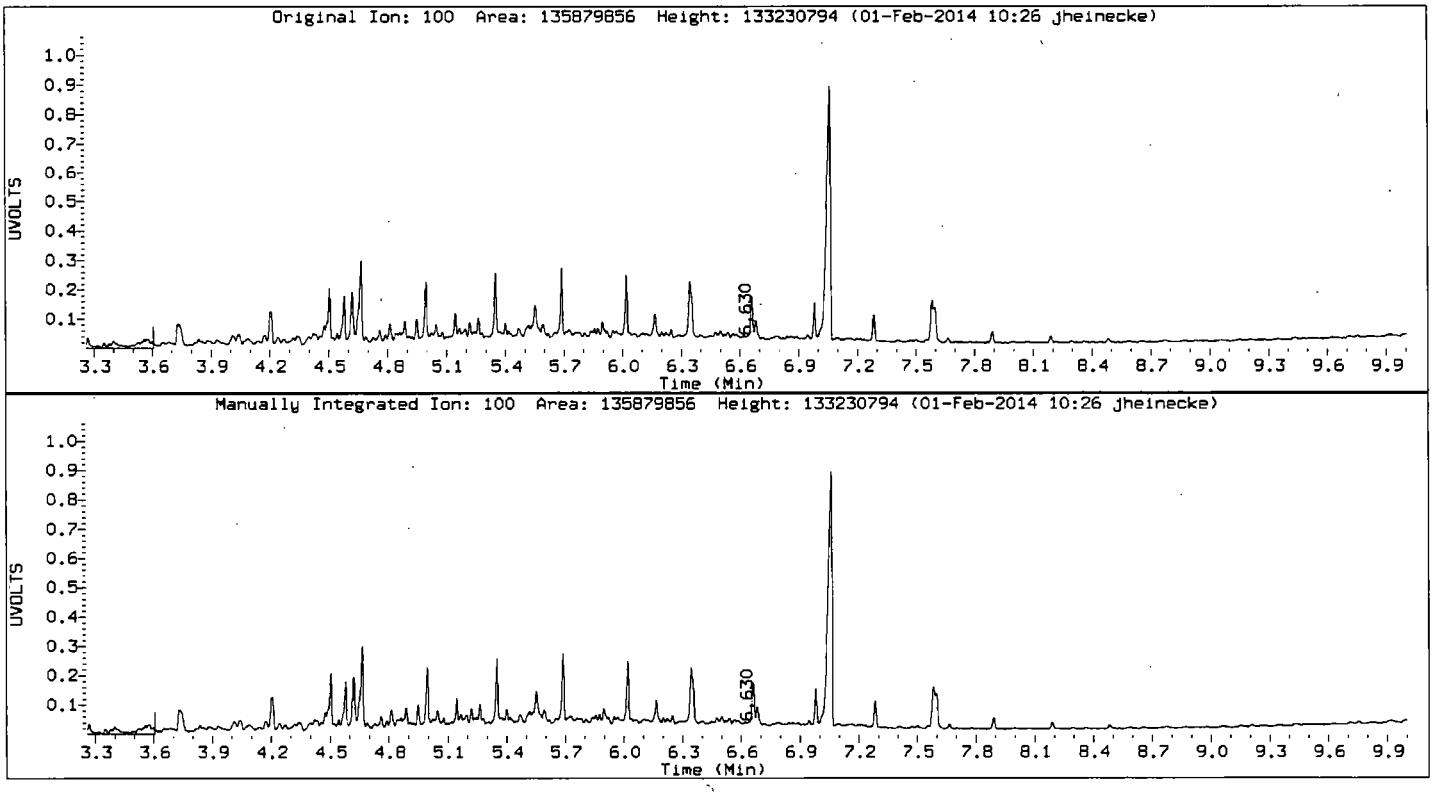
Injection Date: 31-JAN-2014 18:26
Instrument: 10gcs8.i
Lab Sample ID: ICAL 9 10328-64

Compound: DRO (C12-C24)
CAS Number:



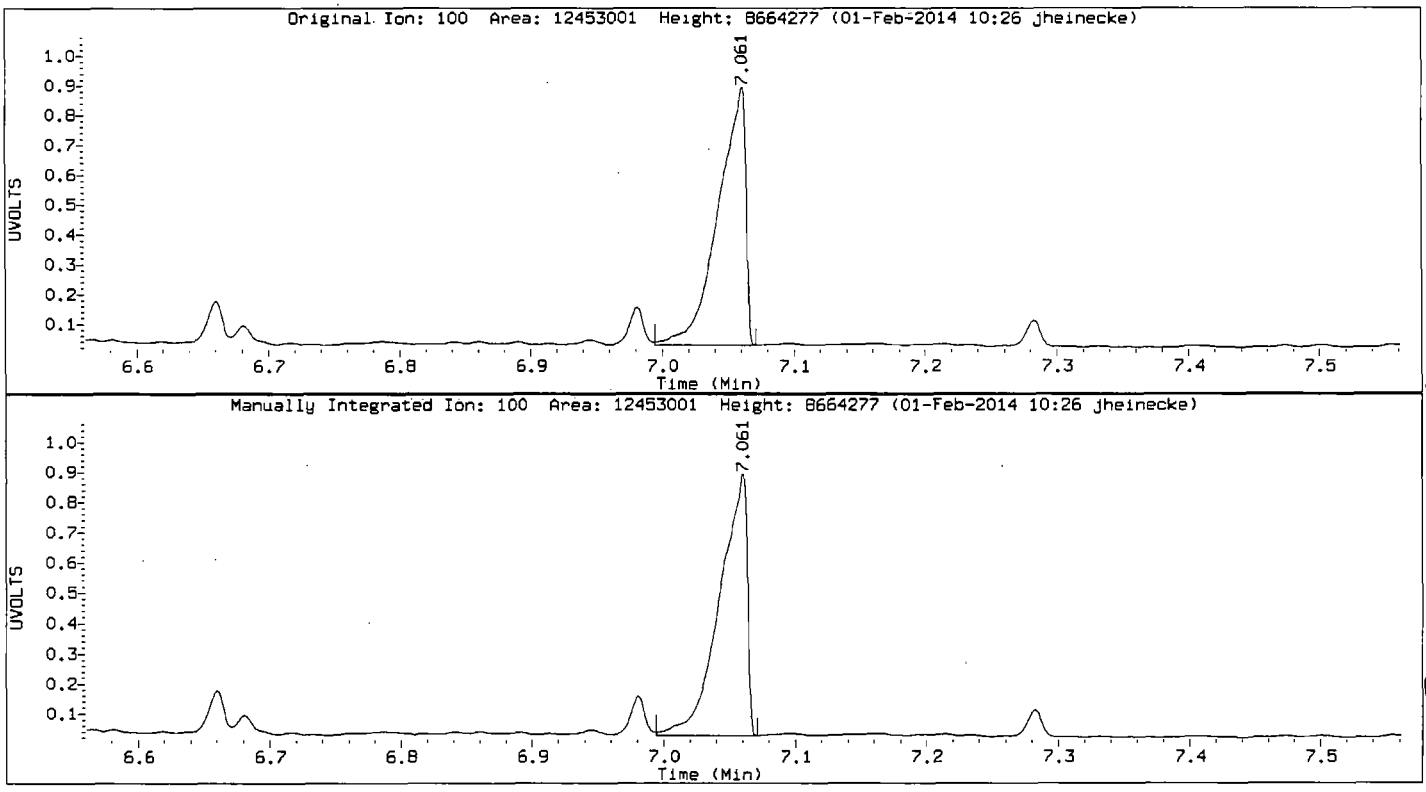
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b/0131R015.d
Injection Date: 31-JAN-2014 18:26
Instrument: 10gcs8.i
Lab Sample ID: ICAL 9 10328-64

Compound: TPH-DRO (C10-C28)
CAS Number:



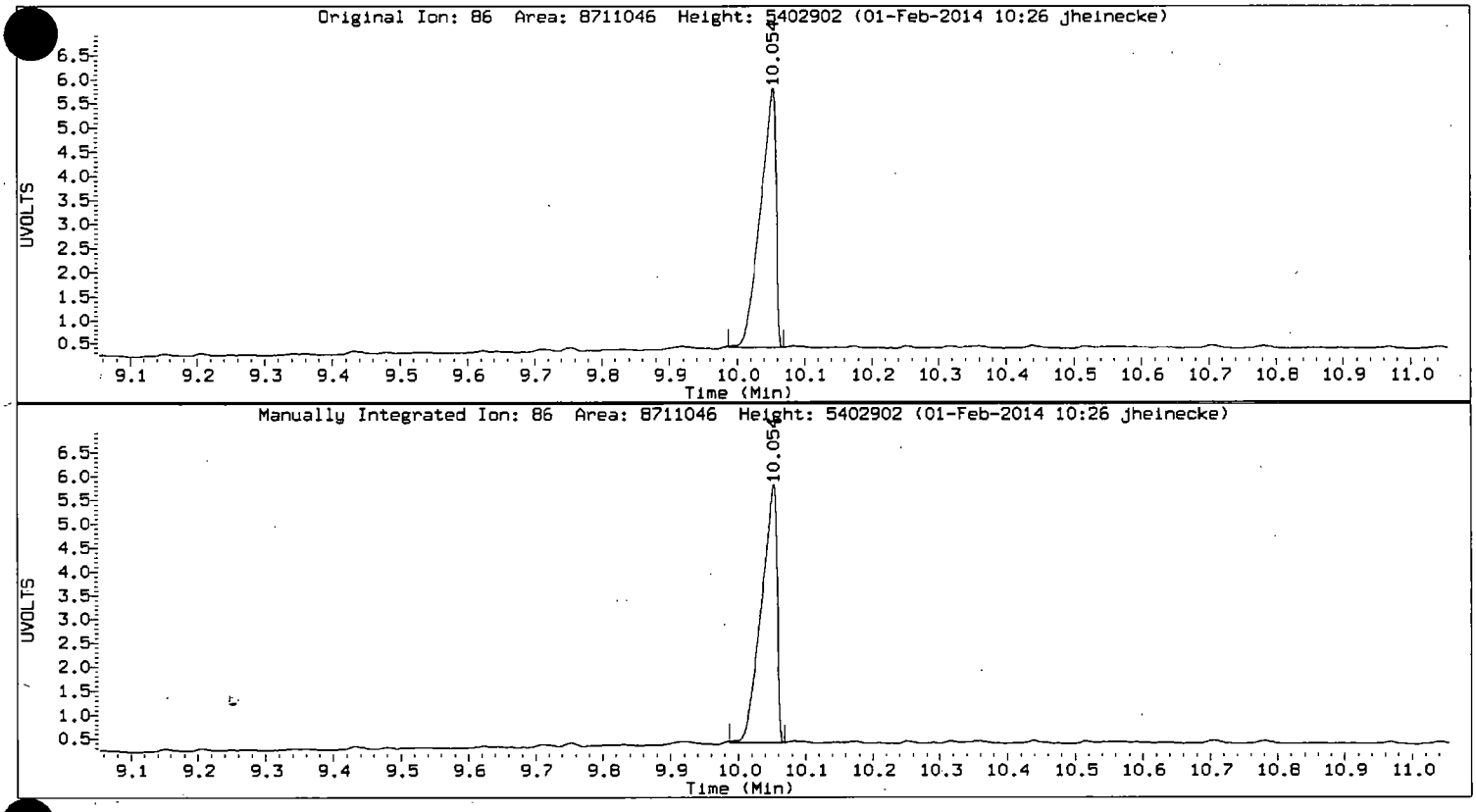
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b/0131R015.d
Injection Date: 31-JAN-2014 18:26
Instrument: 10gcs8.i
Lab Sample ID: ICAL 9 10328-64

Compound: o-Terphenyl (S)
CAS Number:



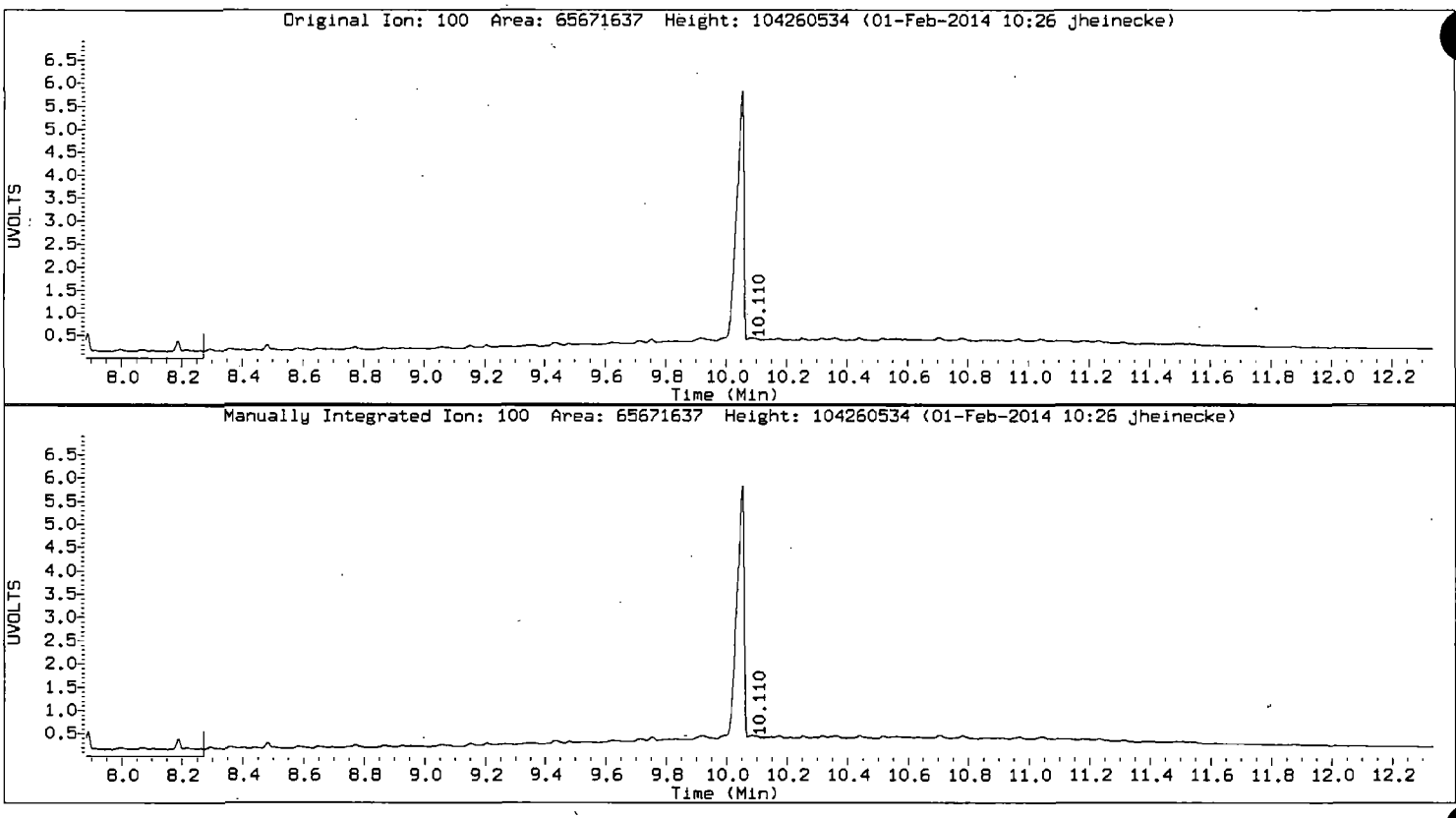
Injection Date: 31-JAN-2014 13:20
Instrument: 10gcs8.i
Lab Sample ID: ICAL 9 10328-64

Compound: n-Triacontane (S)
CAS Number:



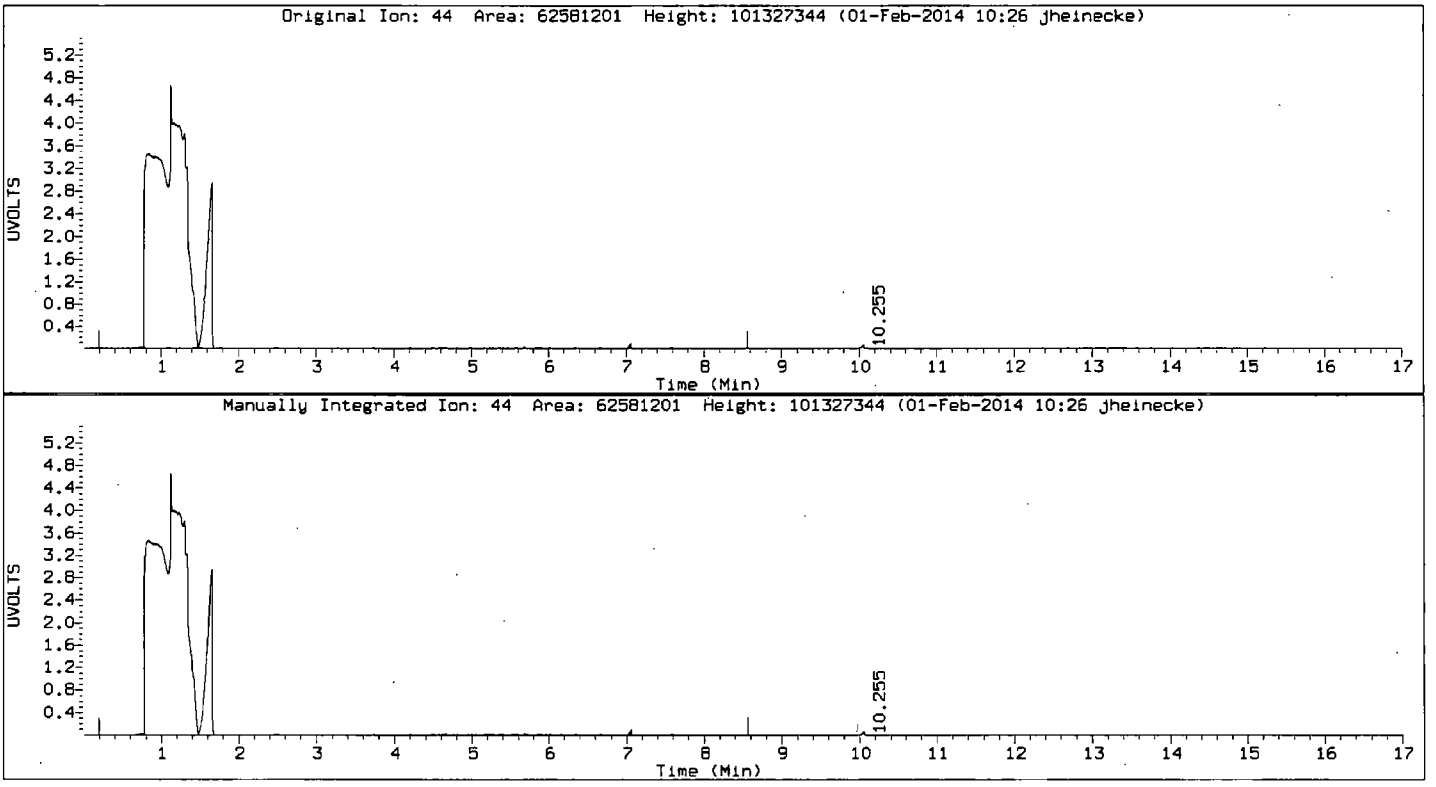
Injection Date: 31-JAN-2014 18:26
Instrument: 10gcs8.i
Lab Sample ID: ICAL 9 10328-64

Compound: Motor Oil Range (C24-C36)
CAS Number:



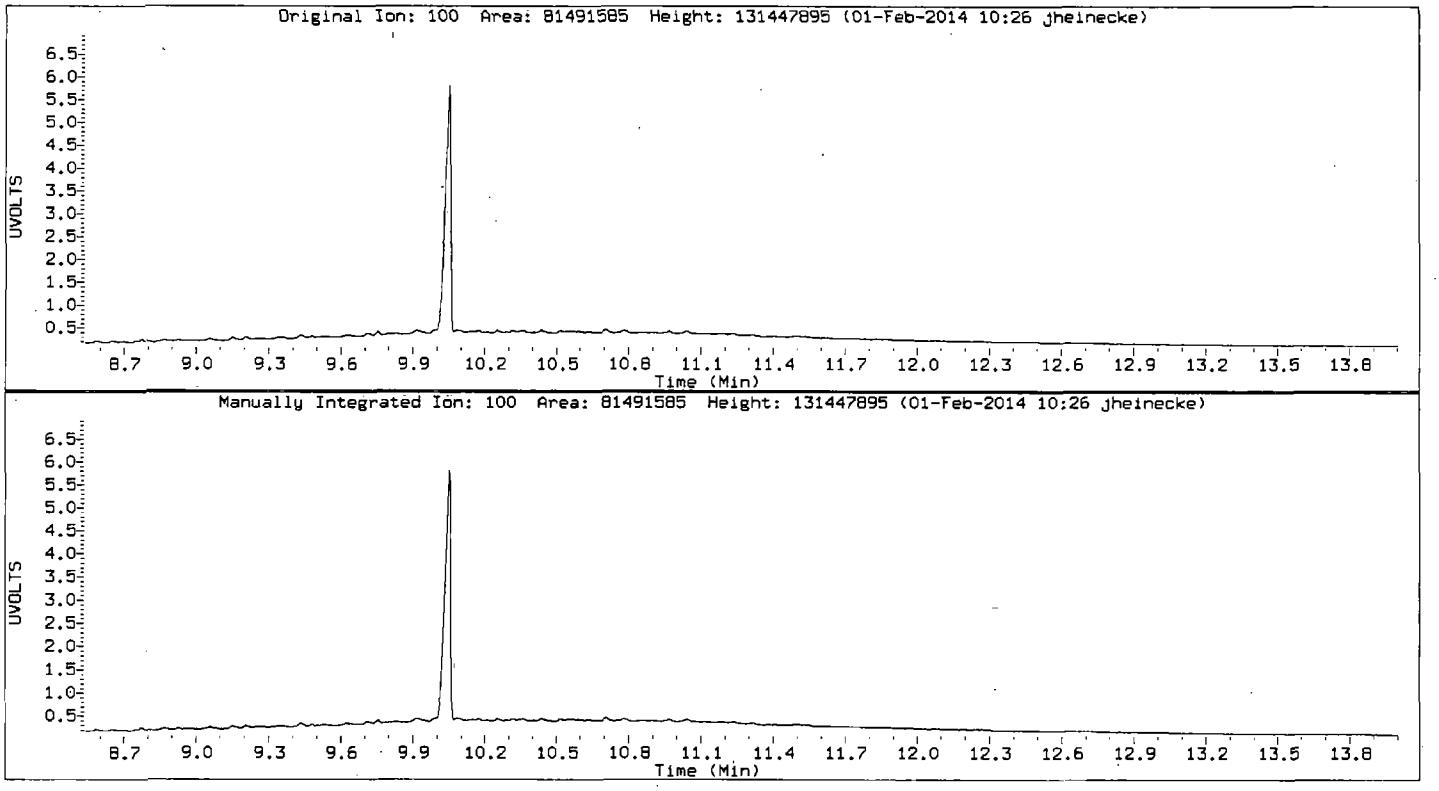
Data File: \\192.168.10.12\Chem\10gcs8.i\013114RLL.D\013IK015.d
Injection Date: 31-JAN-2014 18:26
Instrument: 10gcs8.i
Lab Sample ID: ICAL 9 10328-64

Compound: Residual Range Organics AK103
CAS Number:



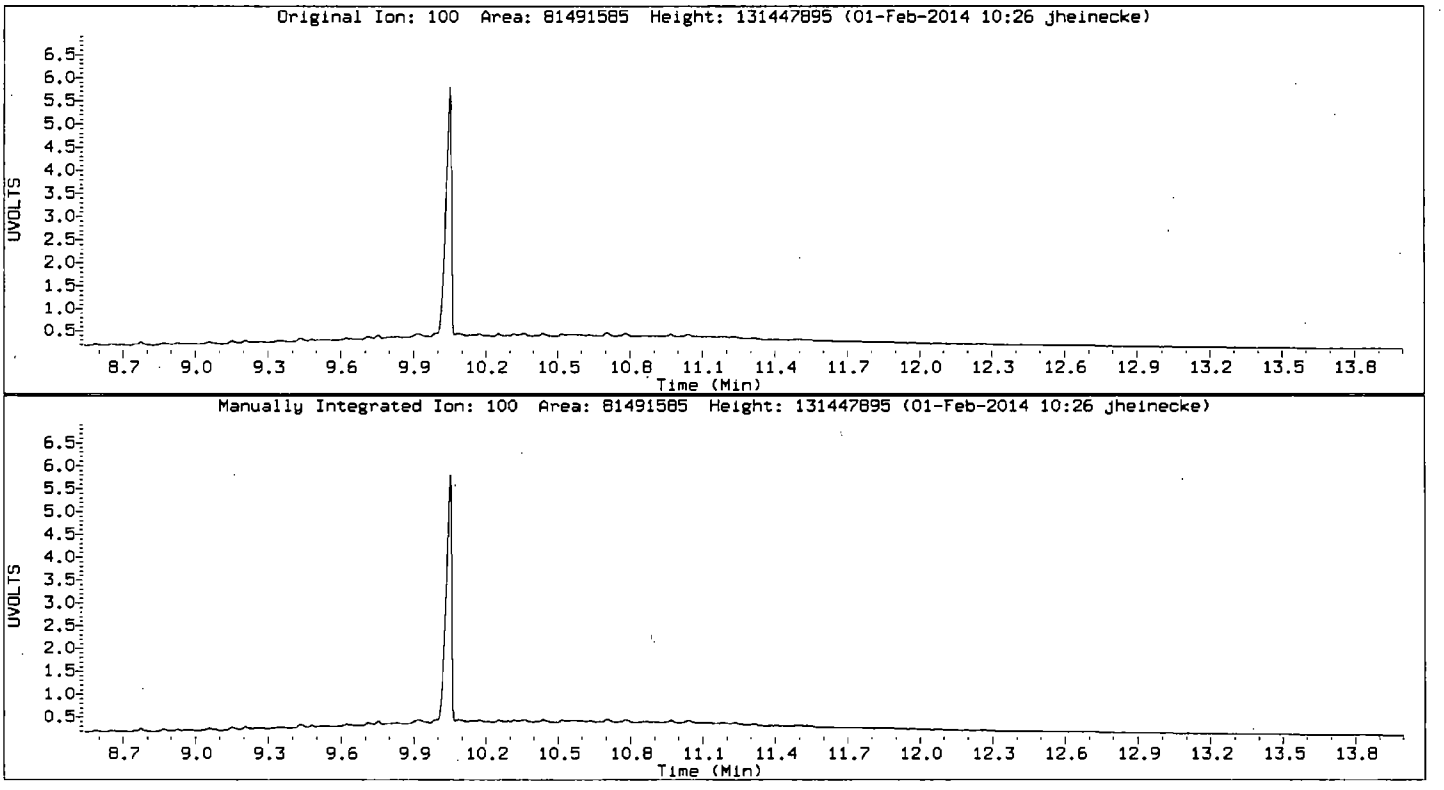
Data File: \\192.168.10.12\Chem\10gcs8.i\013114RLL.B\0131R015.d
Injection Date: 31-JAN-2014 18:26
Instrument: 10gcs8.i
Lab Sample ID: ICAL 9 10328-64

Compound: ORO (C24-C40)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.D\0131R015.d
Injection Date: 31-JAN-2014 18:26
Instrument: 10gcs8.i
Lab Sample ID: ICAL 9 10328-64

Compound: Motor Oil Range
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R016.d
Lab Smp Id: ICAL 10 10328-64
Inj Date : 31-JAN-2014 18:49
Operator : JRH Inst ID: 10gcs8.i
Smp Info : ICAL 10 10328-64
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Meth Date : 01-Feb-2014 11:46 10gcs8.i Quant Type: ESTD
Cal Date : 31-JAN-2014 18:26 Cal File: 0131R015.d
Als bottle: 1 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

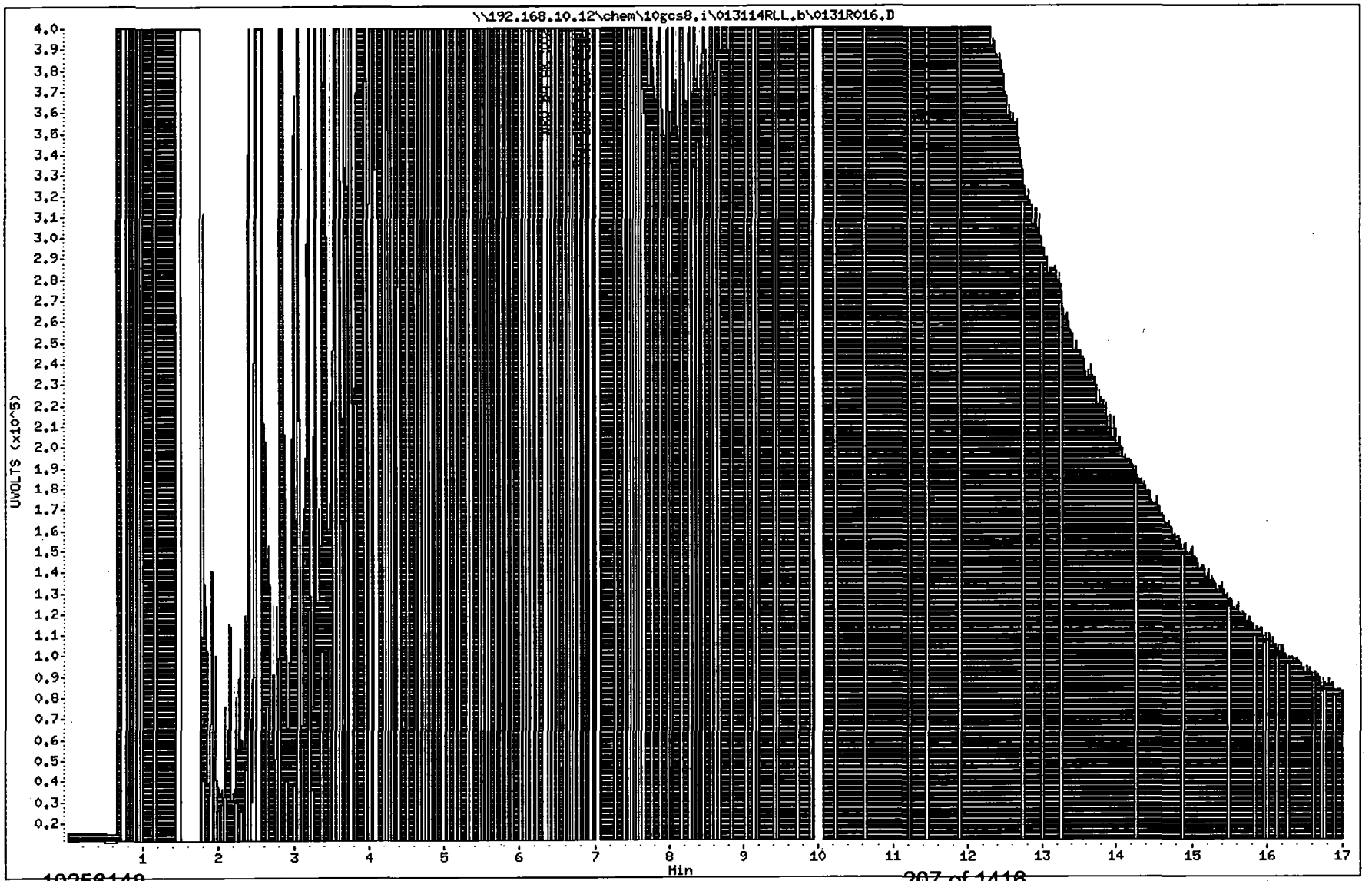
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S 1	DRO by AK 102	3.600-8.550			251388700	4000.00	4000 (AM)
$ 2	o-Terphenyl (S)	7.067	7.067	0.000	24487727	400.000	392 (M)
$ 3	n-Triacontane (S)	10.047	10.047	0.000	18001235	400.000	402 (AM)
S 4	Residual Range Organics AK103	8.560-11.950			126551204	4000.00	4020 (AM)
S 5	TPH-DRO (C10-C28)	3.600-9.660			284430986	4000.00	4000 (AM)
S 6	Motor Oil Range (C24-C36)	8.270-11.950			133046858	4000.00	4020 (AM)
S 7	DRO (C12-C24)	4.490-8.529			222908472	4000.00	4000 (AM)
S 8	Diesel Fuel Range	4.490-8.529			222908472	4000.00	4000 (AM)
S 9	ORO (C24-C40)	8.539-14.000			163354070	4000.00	4020 (AM)
S 10	Motor Oil Range	8.539-14.000			163354070	4000.00	4020 (AM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

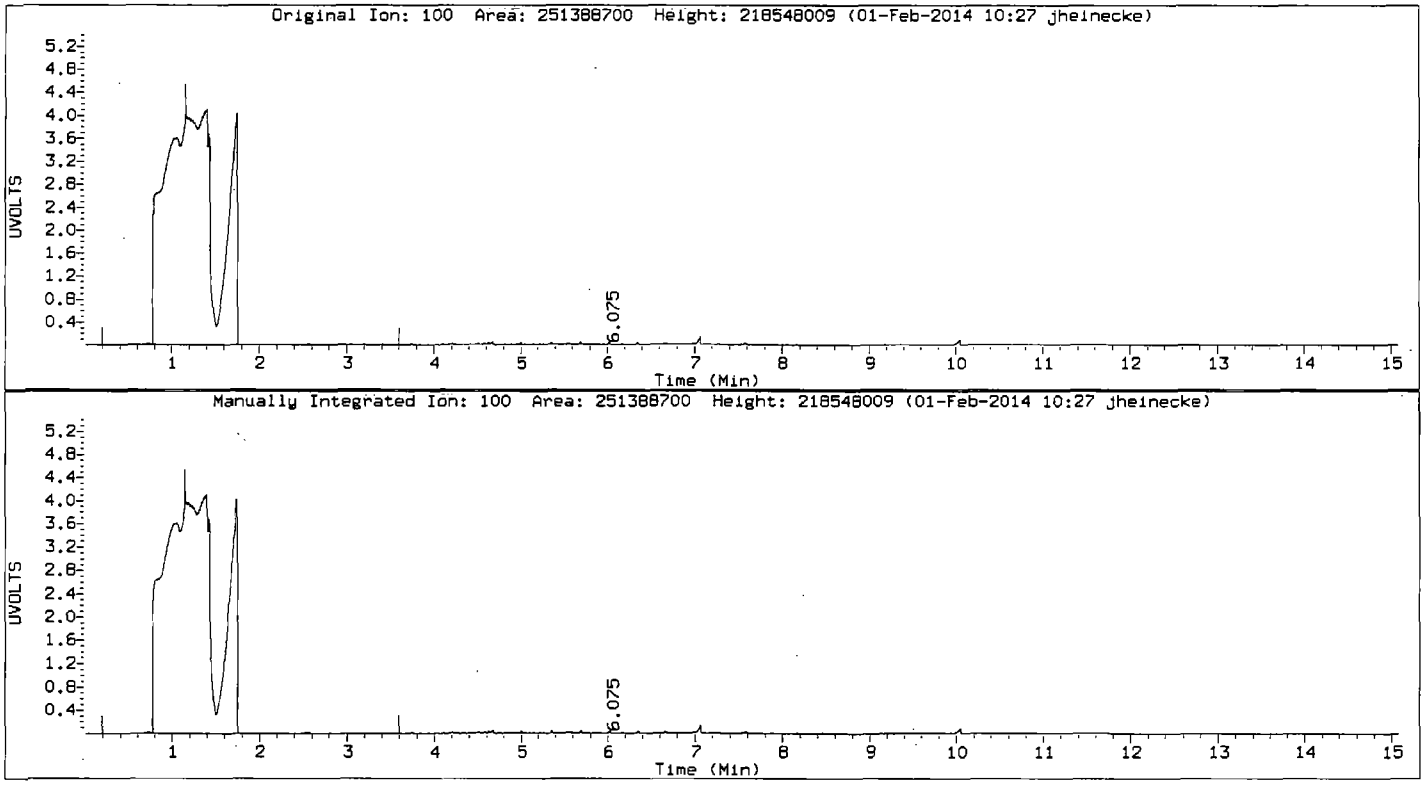
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R016.D
Date : 31-JAN-2014 18:49
Client ID:
Sample Info: ICAL 10 10328-64
Volume Injected (uL): 1.0
Column phase: DB-5MS

Instrument: 10gcs8.i
Operator: JRH
Column diameter: 0.25



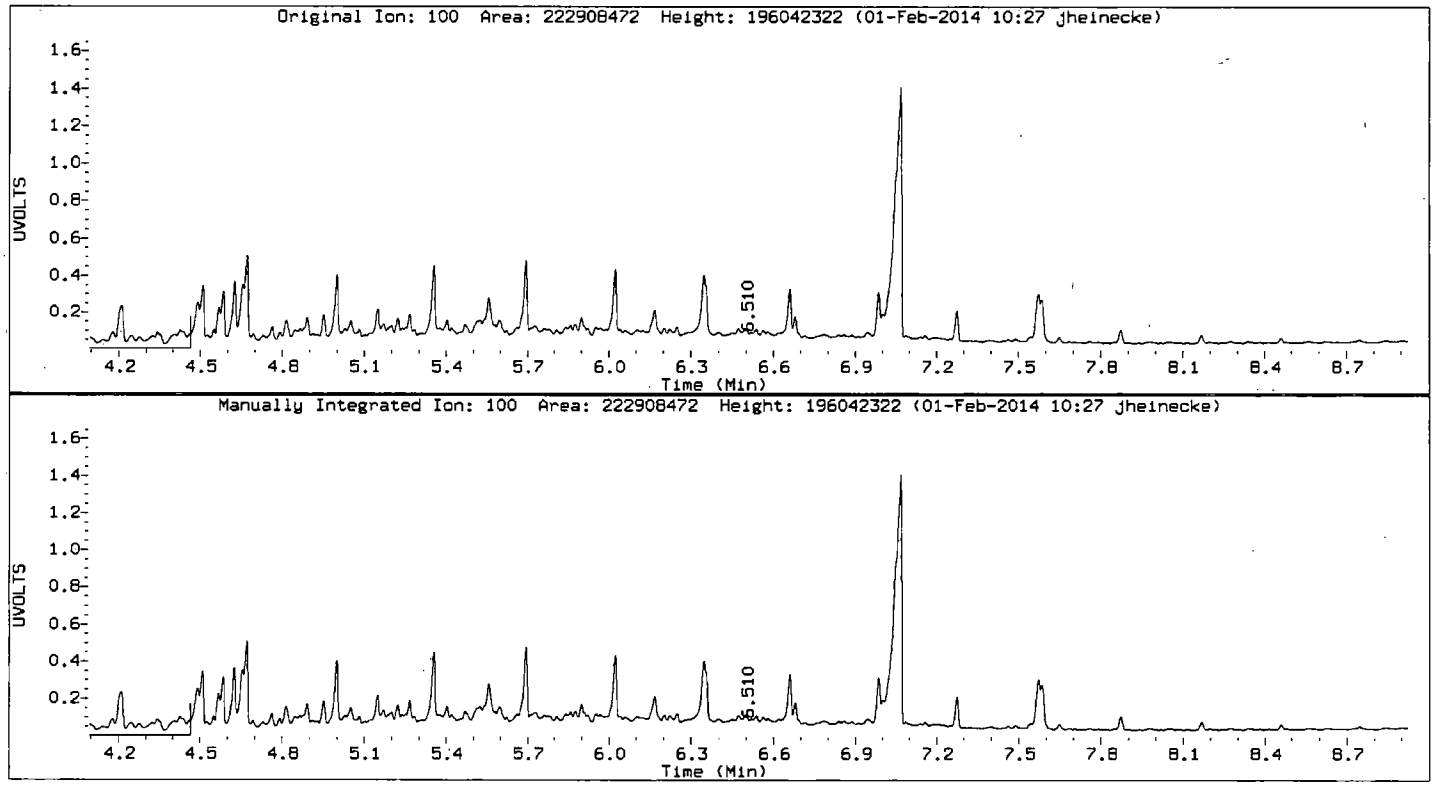
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.B\0131R016.d
Injection Date: 31-JAN-2014 18:49
Instrument: 10gcs8.i
Lab Sample ID: ICAL 10 10328-64

Compound: DRO by AK 102
CAS Number:



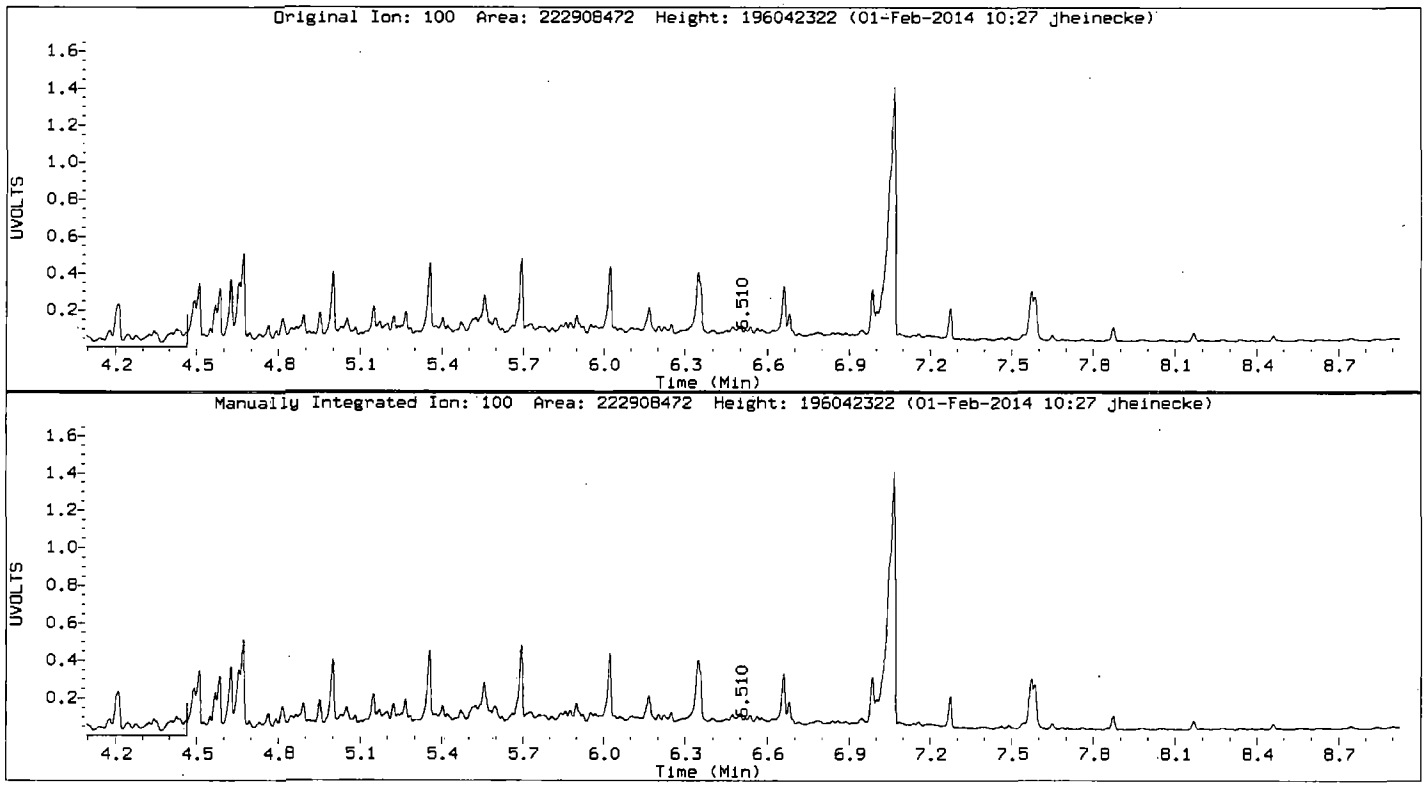
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.B\0131R016.d
Injection Date: 31-JAN-2014 18:49
Instrument: 10gcs8.i
Lab Sample ID: ICAL 10 10328-64

Compound: Diesel Fuel Range
CAS Number:



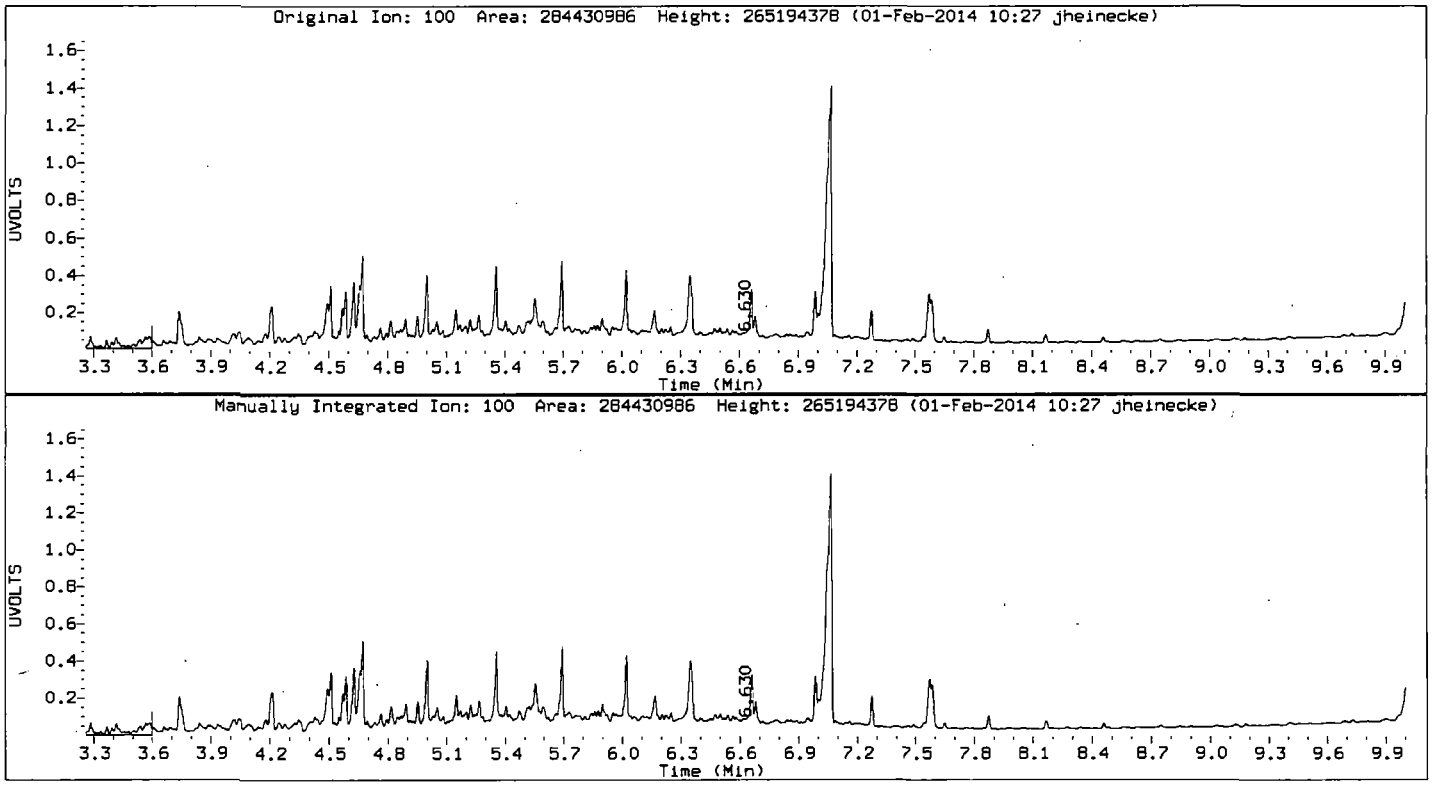
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R016.d
Injection Date: 31-JAN-2014 18:49
Instrument: 10gcs8.i
Lab Sample ID: ICAL 10 10328-64

Compound: DRO (C12-C24)
CAS Number:



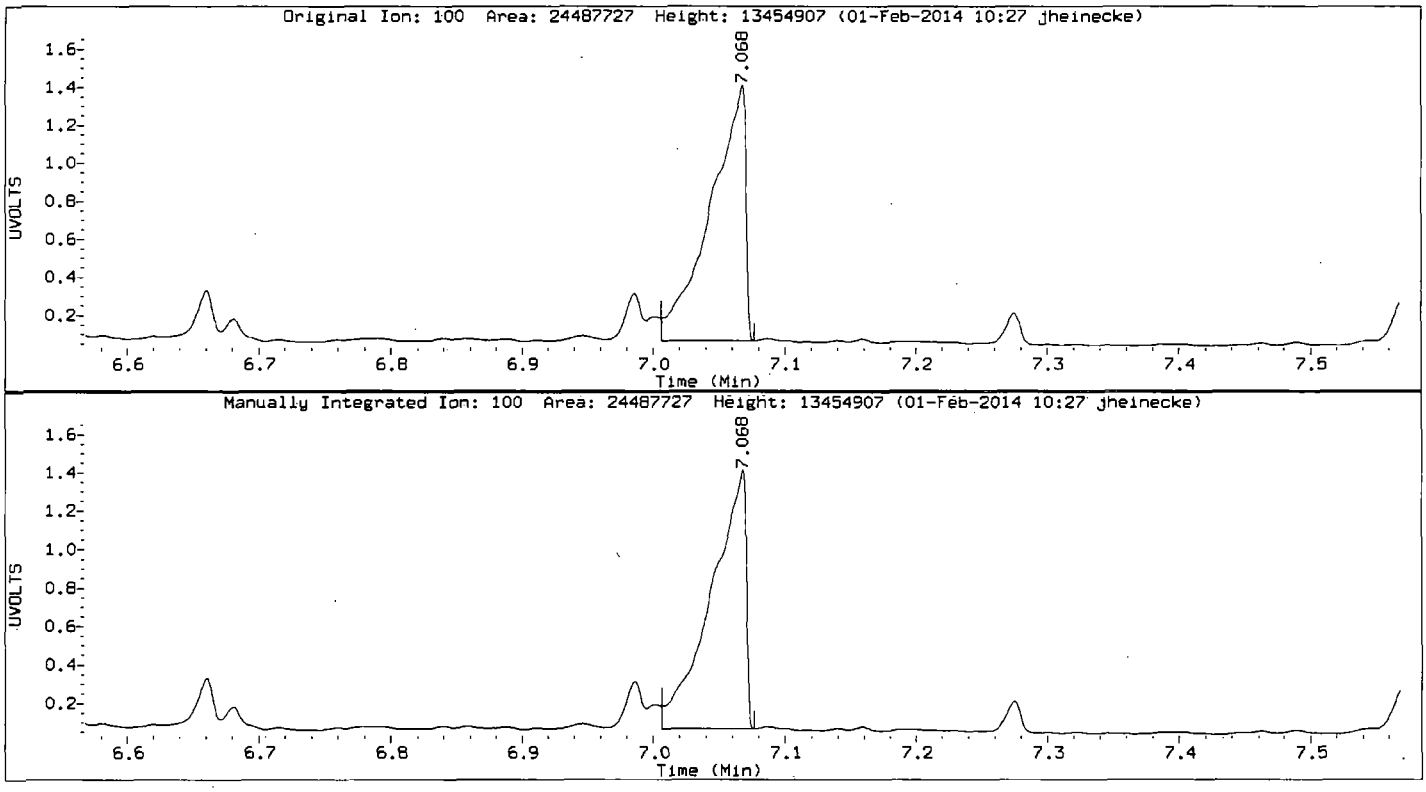
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.D\0131R016.d
Injection Date: 31-JAN-2014 18:49
Instrument: 10gcs8.i
Lab Sample ID: ICAL 10 10328-64

Compound: TPH-DRO (C10-C28)
CAS Number:



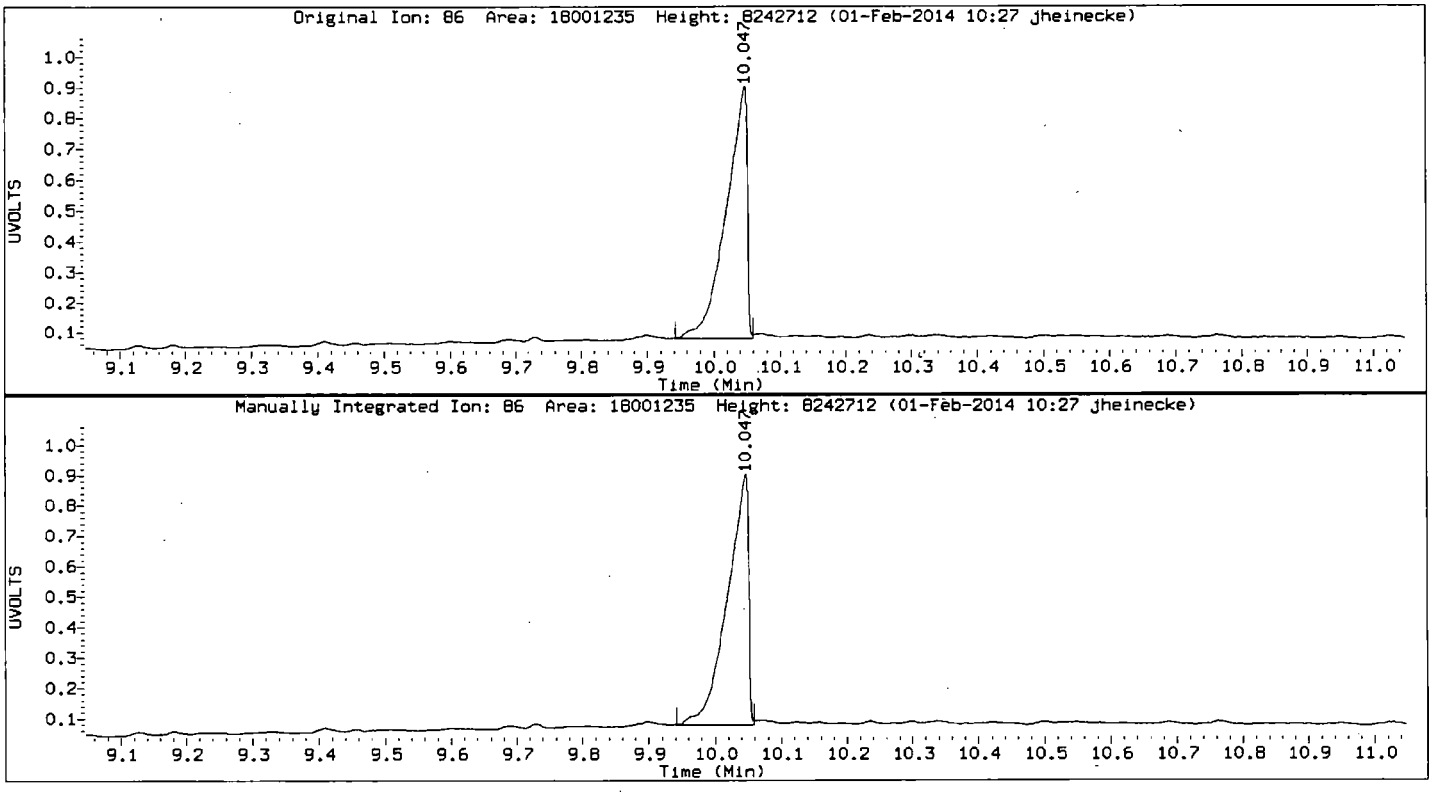
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R016.d
Injection Date: 31-JAN-2014 18:49
Instrument: 10gcs8.i
Lab Sample ID: ICAL 10 10328-64

Compound: o-Terphenyl (S)
CAS Number:



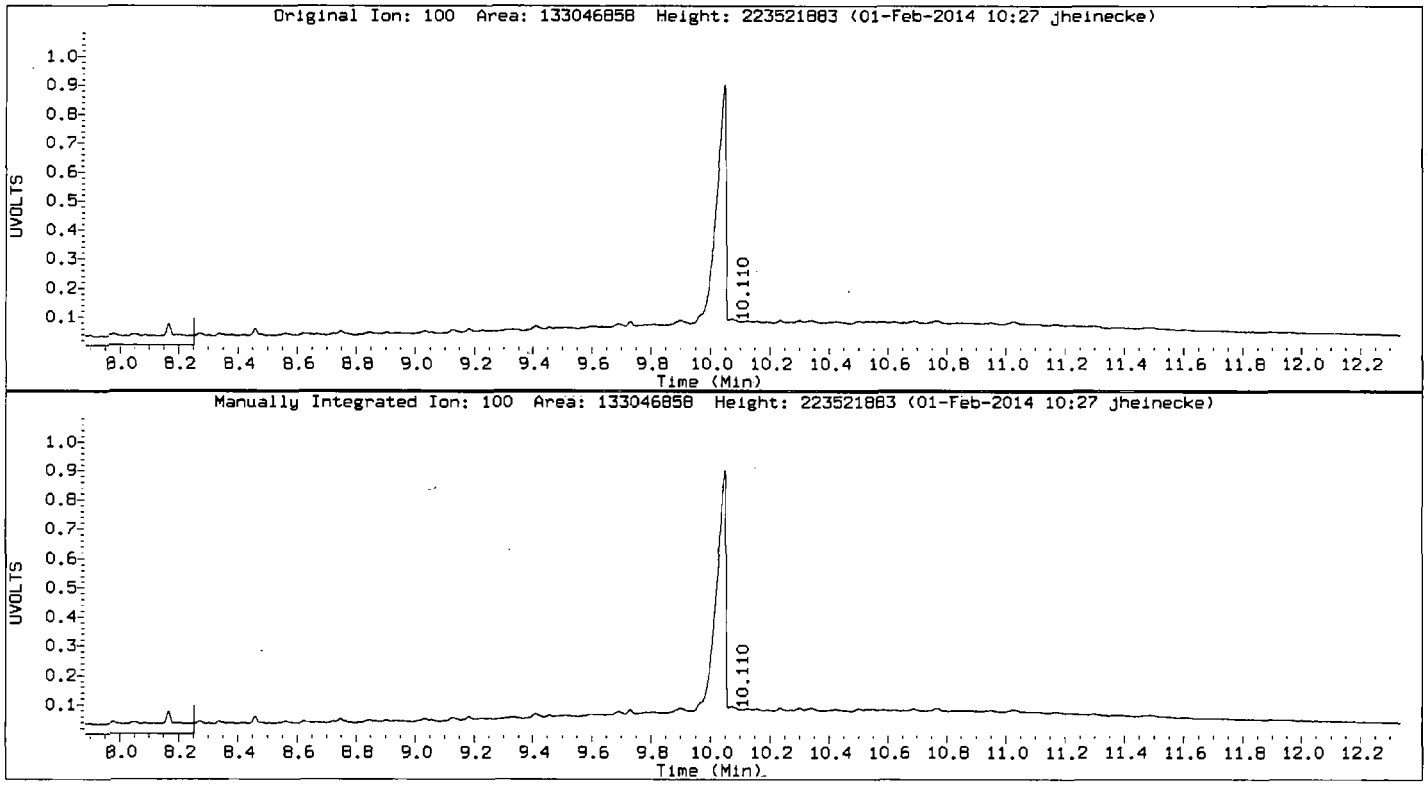
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R016.d
Injection Date: 31-JAN-2014 18:49
Instrument: 10gcs8.i
Lab Sample ID: ICAL 10 10328-64

Compound: n-Triacontane (S)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R016.d
Injection Date: 31-JAN-2014 18:49
Instrument: 10gcs8.i
Lab Sample ID: ICAL 10 10328-64

Compound: Motor Oil Range (C24-C36)
CAS Number:



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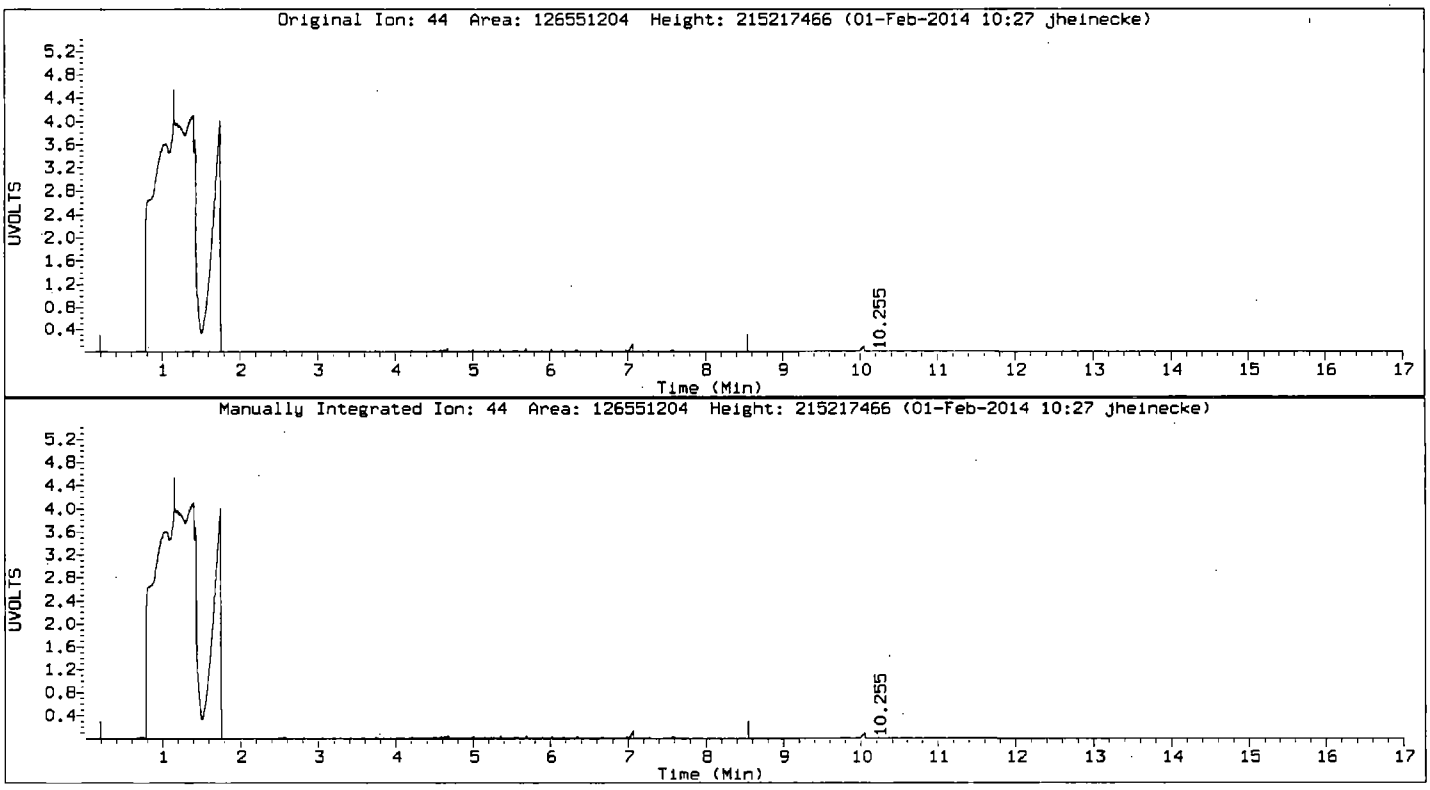
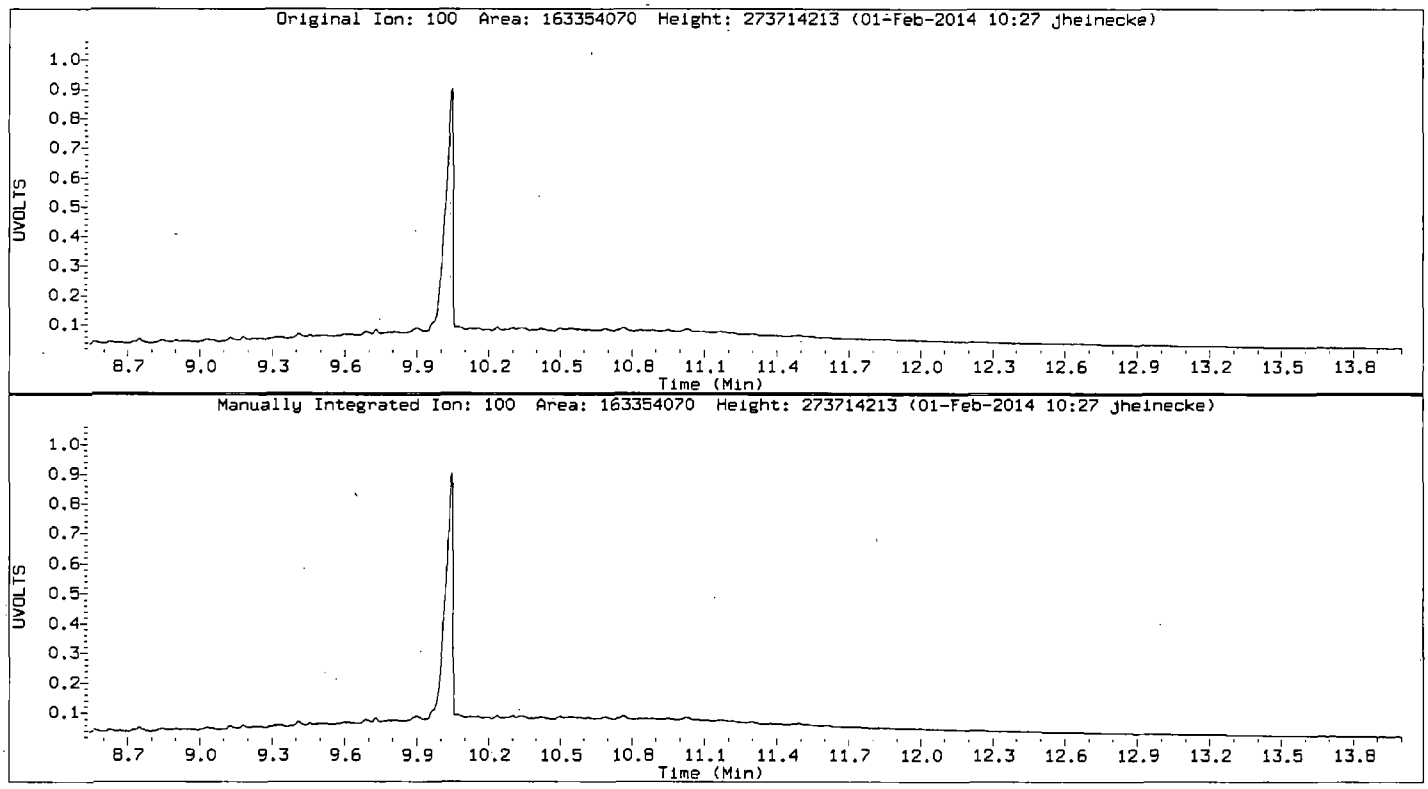
Injection Date: 31-JAN-2014 18:49
Instrument: 10gcs8.i
Lab Sample ID: ICAL 10 10328-64

Compound: Residual Range Organics AK103
CAS Number:



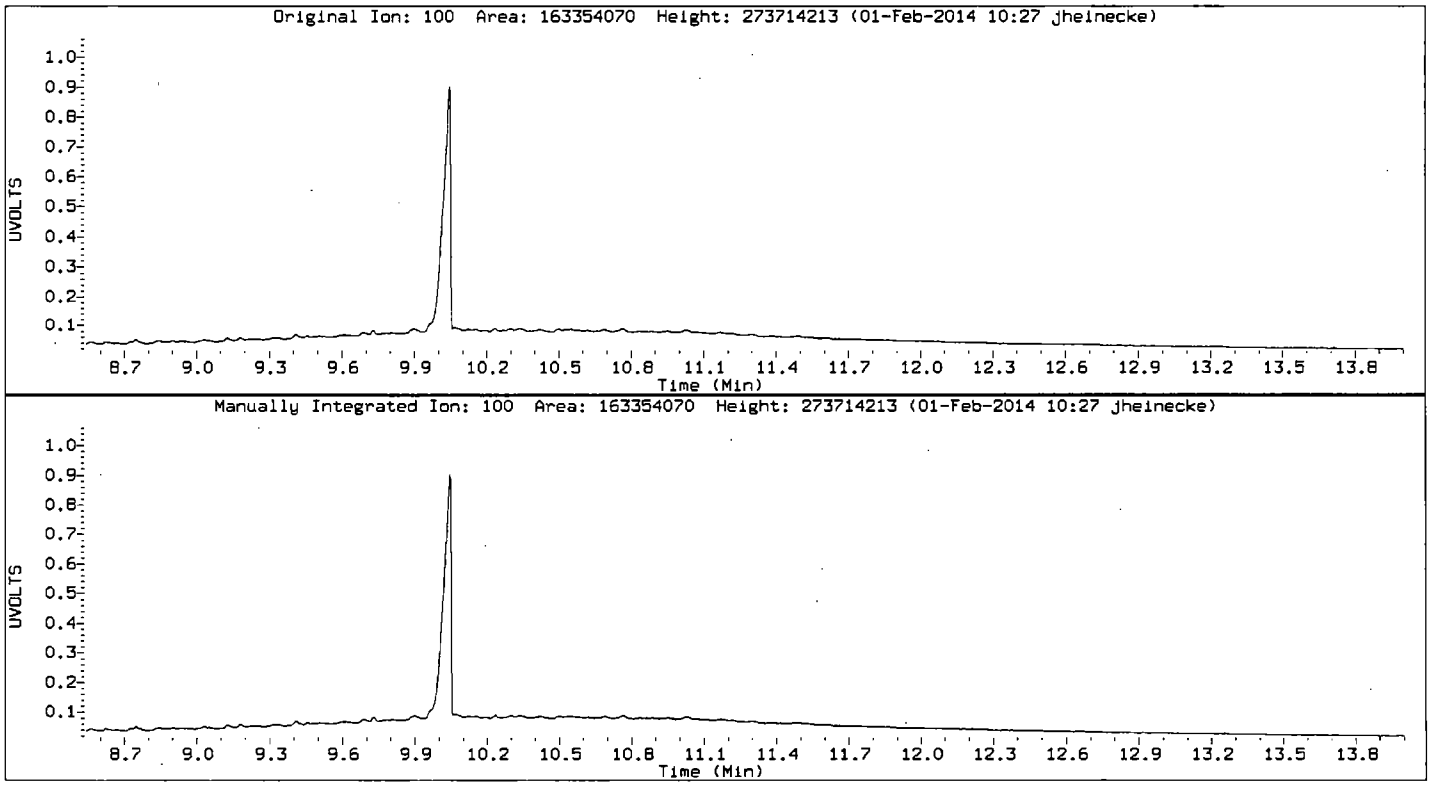
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R016.d
Injection Date: 31-JAN-2014 18:49
Instrument: 10gcs8.i
Lab Sample ID: ICAL 10 10328-64

Compound: ORO (C24-C40)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.B\0131R016.d
Injection Date: 31-JAN-2014 18:49
Instrument: 10gcs8.i
Lab Sample ID: ICAL 10 10328-64

Compound: Motor Oil Range
CAS Number:



Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcs8.i Injection Date: 31-JAN-2014 19:36
Lab File ID: 0131R018.d Init. Cal. Date(s): 31-JAN-2014 31-JAN-2014
Analysis Type: Init. Cal. Times: 15:21 18:49
Lab Sample ID: ICV 1074-40 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m

	COMPOUND	RRF / AMOUNT	RF250	CCAL RRF250	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S	1 DRO by AK 102	250	253	68727	0.010	1.06963	25.00000	Quadratic
$	2 o-Terphenyl (S)	25.00000	24.99722	62082	0.010	-0.01113	15.00000	Quadratic
S	3 n-Triacontane (S)	25.00000	25.59333	44721	0.010	2.37334	15.00000	Linear
S	4 Residual Range Organics AK1	250	270	36354	0.010	7.90475	25.00000	Linear
S	5 TPH-DRO (C10-C28)	250	257	77712	0.010	2.95467	15.00000	Quadratic
S	6 Motor Oil Range (C24-C36)	250	269	37963	0.010	7.51954	15.00000	Linear
S	7 DRO (C12-C24)	250	254	58018	0.010	1.78797	15.00000	Quadratic
S	8 Diesel Fuel Range	250	254	58018	0.010	1.78797	15.00000	Quadratic
S	9 ORO (C24-C40)	250	263	49658	0.010	5.25200	15.00000	Linear
S	10 Motor Oil Range	250	263	49658	0.010	5.25200	15.00000	Linear

Average %D / Drift Results.

Calculated Average %D/Drift = 3.59130
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R018.d
Lab Smp Id: ICV 1074-40
Inj Date : 31-JAN-2014 19:36
Operator : JRH Inst ID: 10gcs8.i
Smp Info : ICV 1074-40
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Meth Date : 01-Feb-2014 11:46 10gcs8.i Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
S 1	DRO by AK 102	3.600-8.550			17181862	250.000	253(M)
S 2	o-Terphenyl (S)	6.993	6.993	0.000	1552045	25.0000	25.0(M)
S 3	n-Triacontane (S)	9.898	9.898	0.000	1118020	25.0000	25.6(M)
S 4	Residual Range Organics AK103	8.560-11.950			9088465	250.000	270(M)
S 5	TPH-DRO (C10-C28)	3.600-9.660			19428028	250.000	257(M)
S 6	Motor Oil Range (C24-C36)	8.270-11.950			9490832	250.000	269(M)
S 7	DRO (C12-C24)	4.490-8.529			14504527	250.000	254(M)
S 8	Diesel Fuel Range	4.490-8.529			14504527	250.000	254(M)
S 9	ORO (C24-C40)	8.539-14.000			12414438	250.000	263(M)
S 10	Motor Oil Range	8.539-14.000			12414438	250.000	263(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R018.D

Date : 31-JAN-2014 19:36

Client ID:

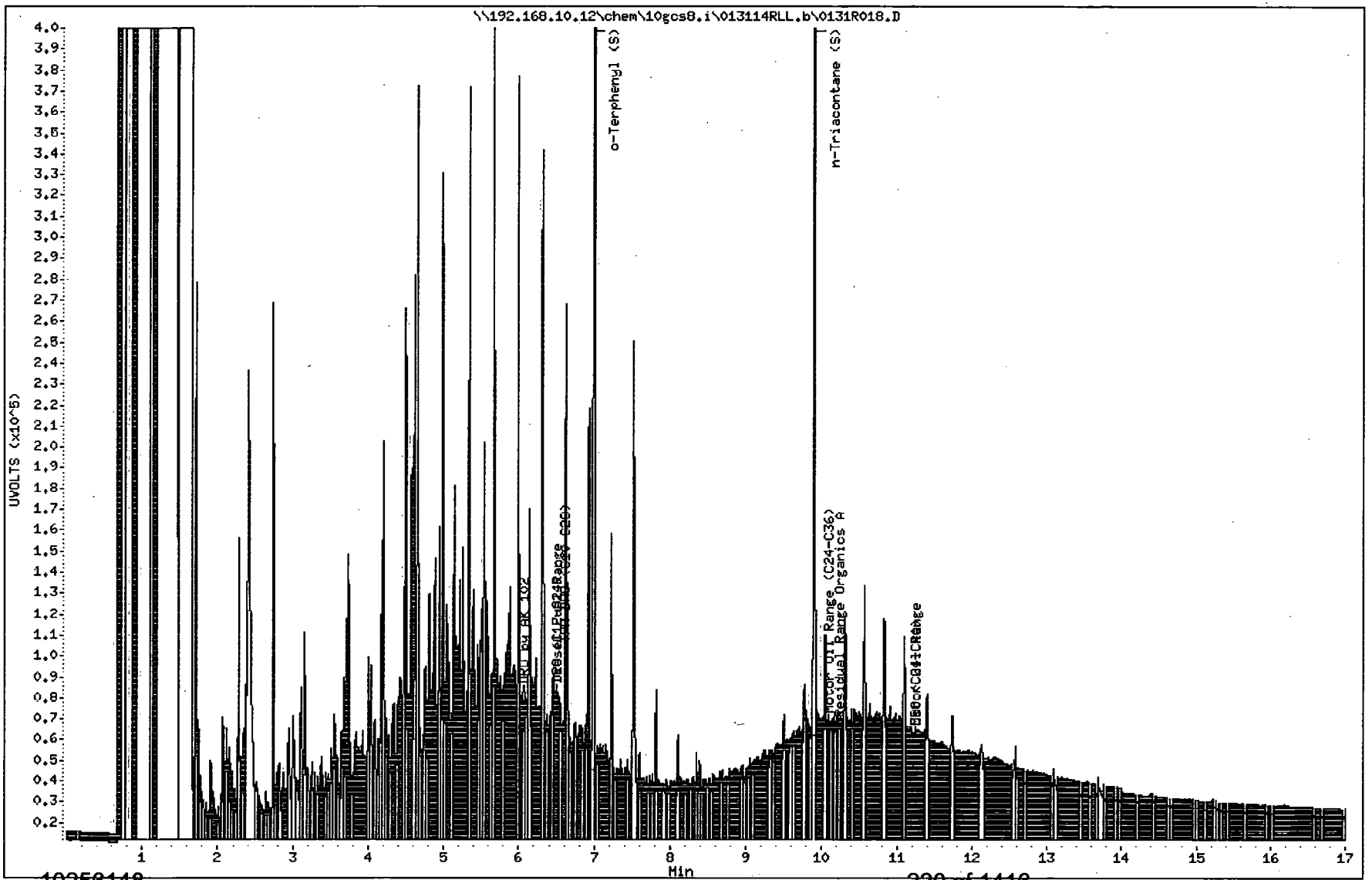
Instrument: 10gcs8.i

Sample Info: ICV 1074-40

Operator: JRH

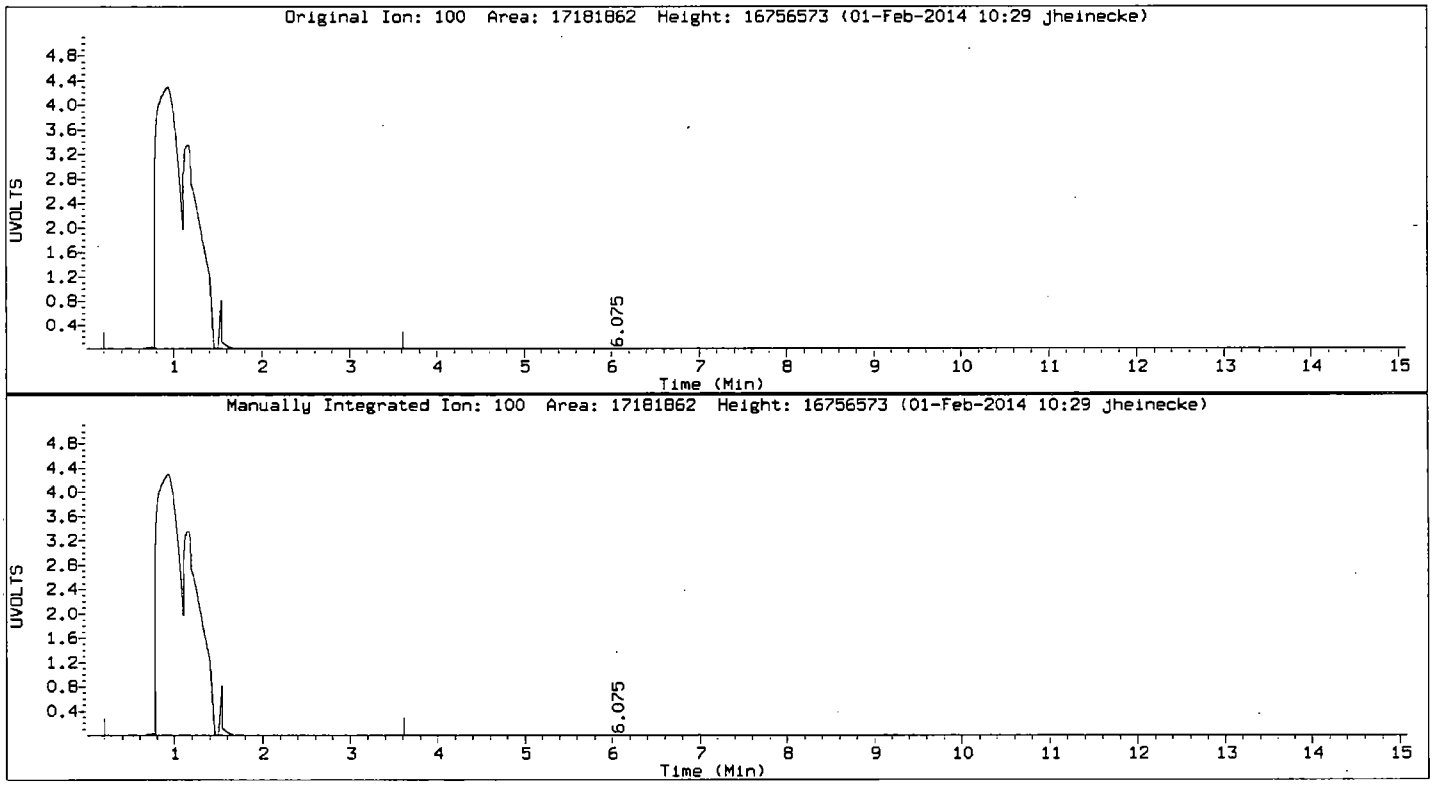
Column phase: DB-5MS

Column diameter: 0.25



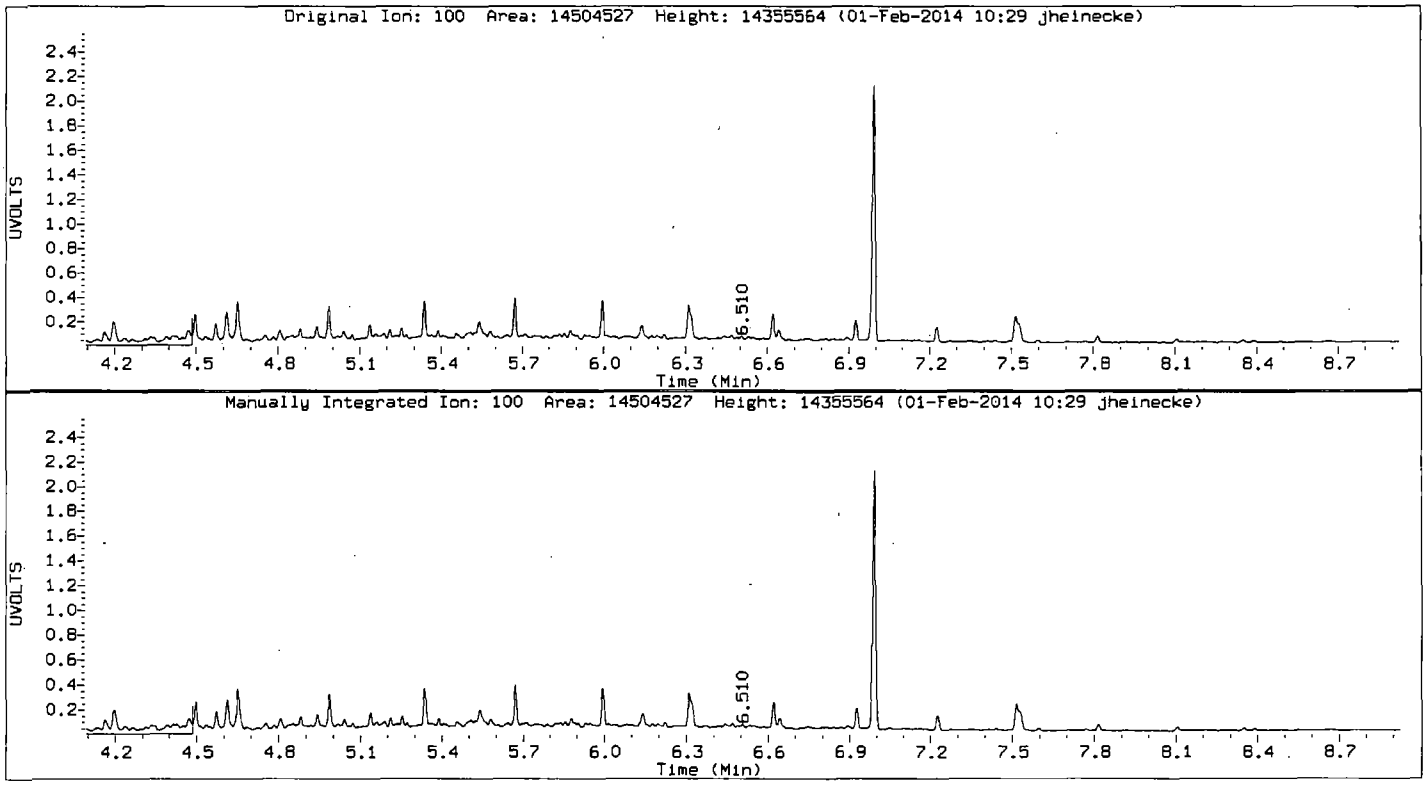
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\013R040.d
Injection Date: 31-JAN-2014 19:36
Instrument: 10gcs8.i
Lab Sample ID: ICV 1074-40

Compound: DRO by AK 102
CAS Number:



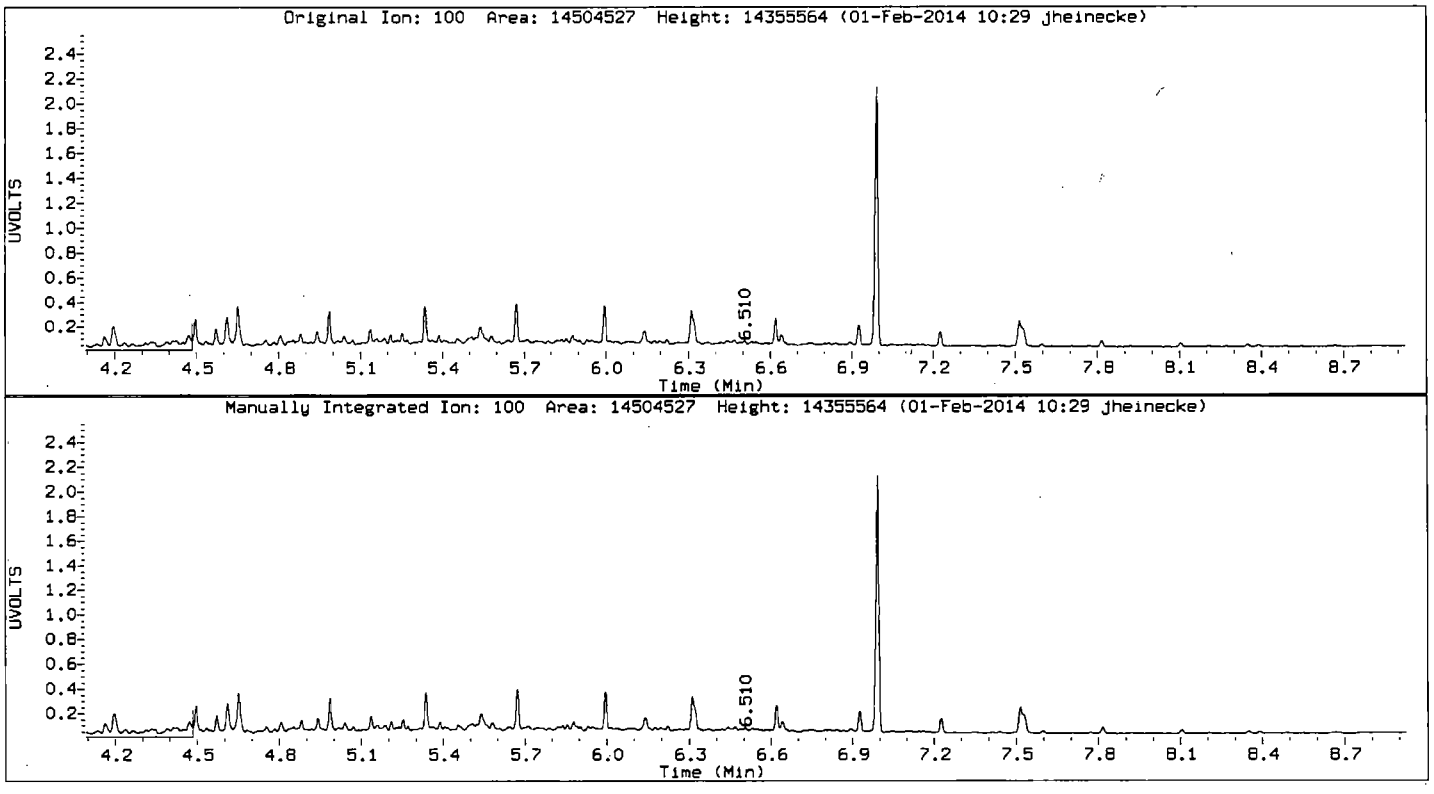
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.B\0131R018.d
Injection Date: 31-JAN-2014 19:36
Instrument: 10gcs8.i
Lab Sample ID: ICV 1074-40

Compound: Diesel Fuel Range
CAS Number:



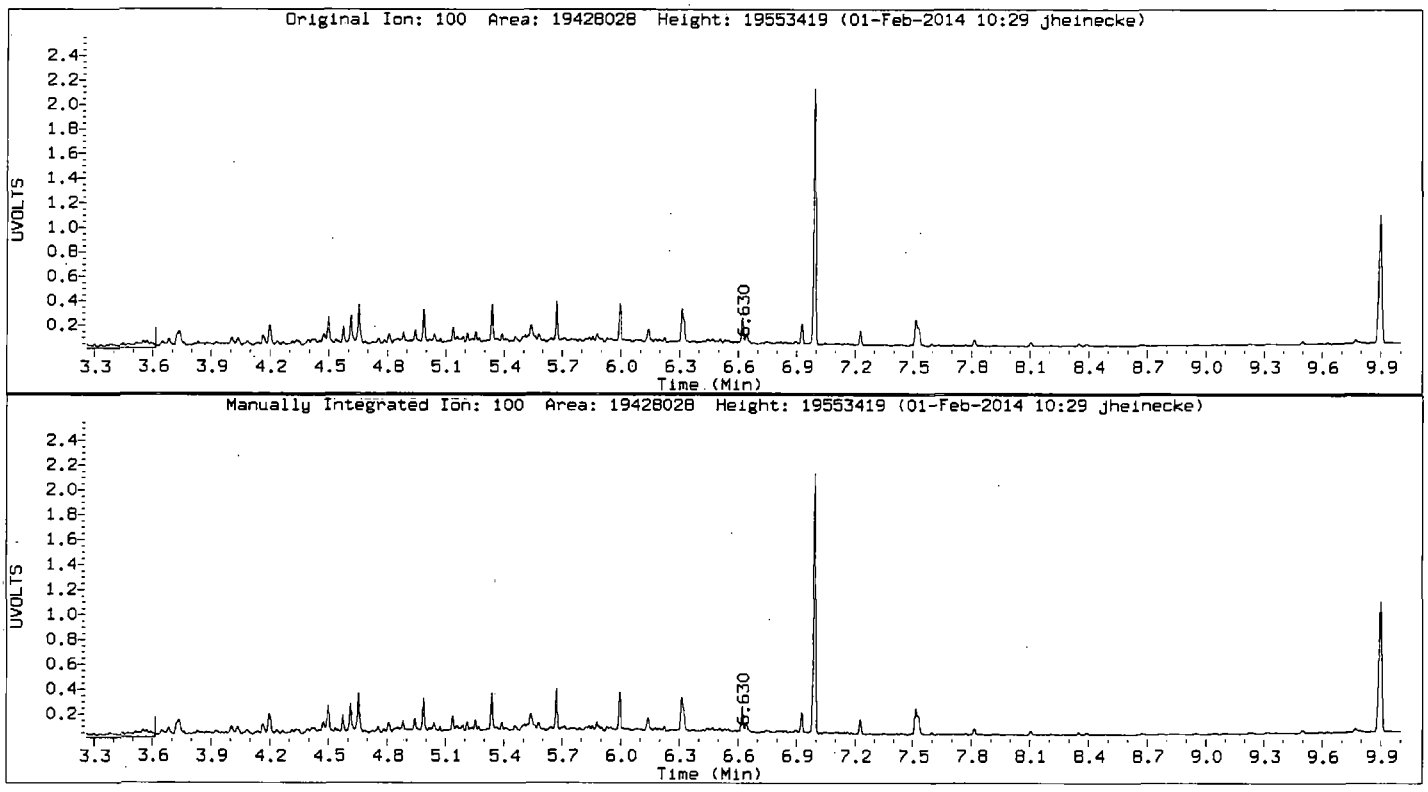
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.B\0131R018.d
Injection Date: 31-JAN-2014 19:36
Instrument: 10gcs8.i
Lab Sample ID: ICV 1074-40

Compound: DRO (C12-C24)
CAS Number:



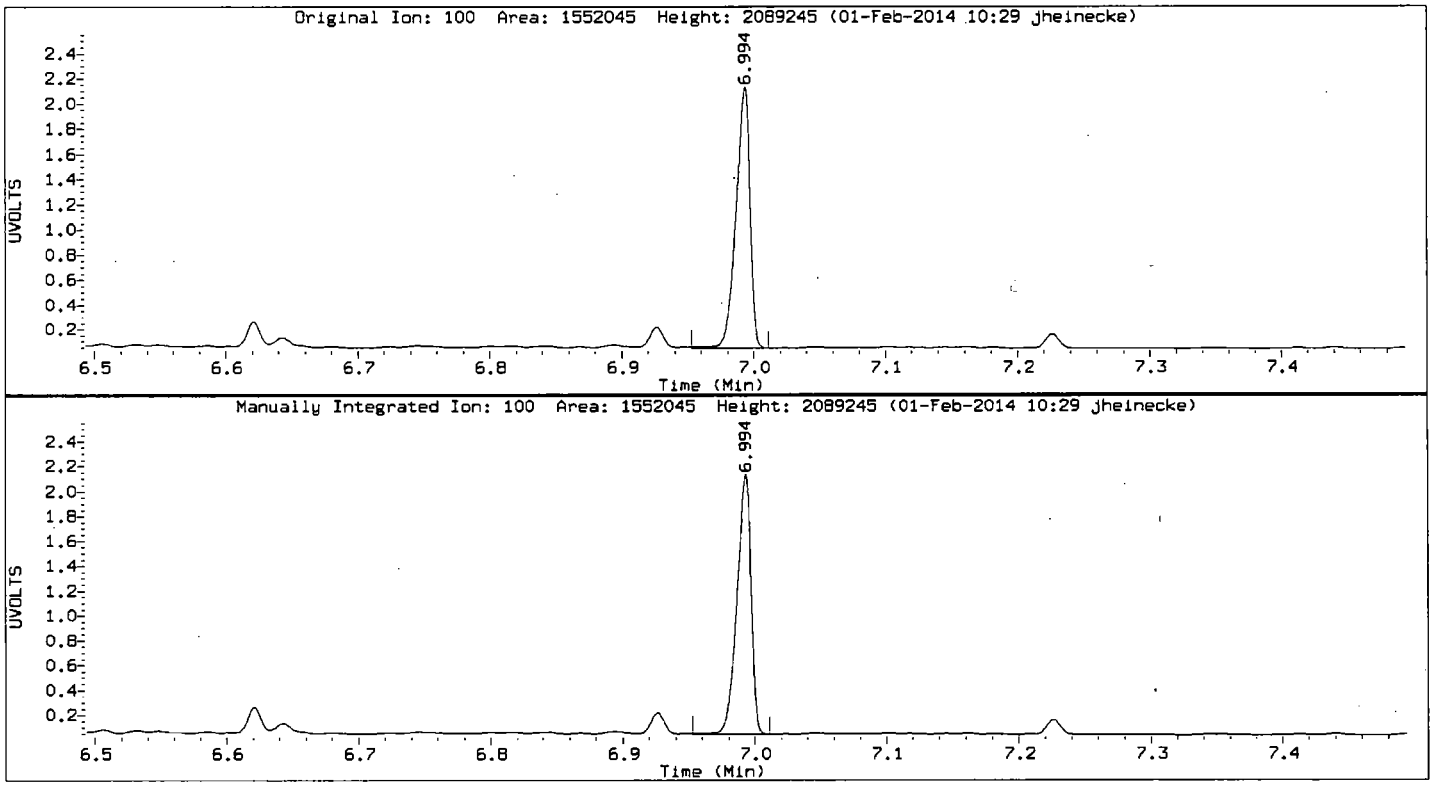
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R018.d
Injection Date: 31-JAN-2014 19:36
Instrument: 10gcs8.i
Lab Sample ID: ICV 1074-40

Compound: TPH-DRO (C10-C28)
CAS Number:



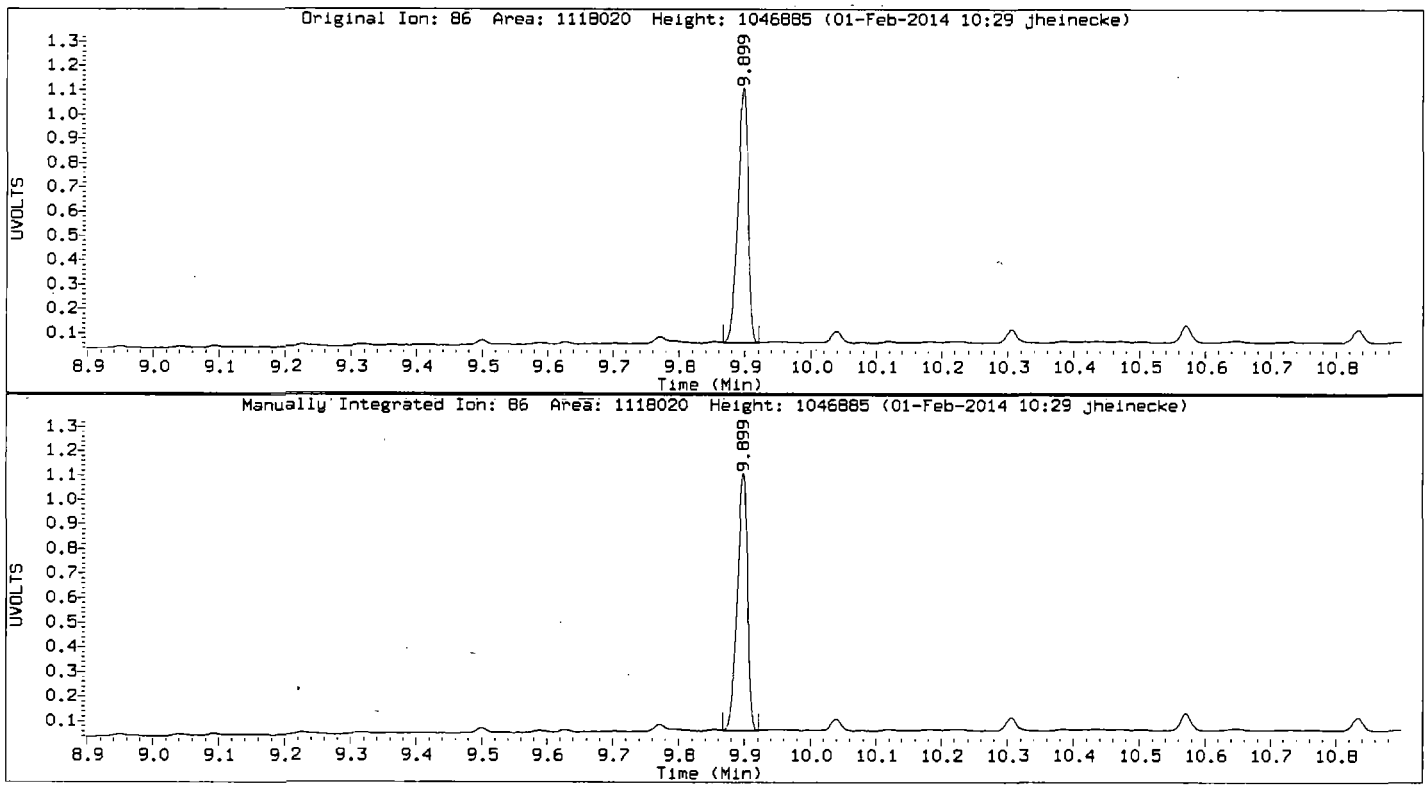
Data File: \\192.168.10.12\Chem\10gcs8.i\013114RLL.D\013IR018.d
Injection Date: 31-JAN-2014 19:36
Instrument: 10gcs8.i
Lab Sample ID: ICV 1074-40

Compound: o-Terphenyl (S)
CAS Number:



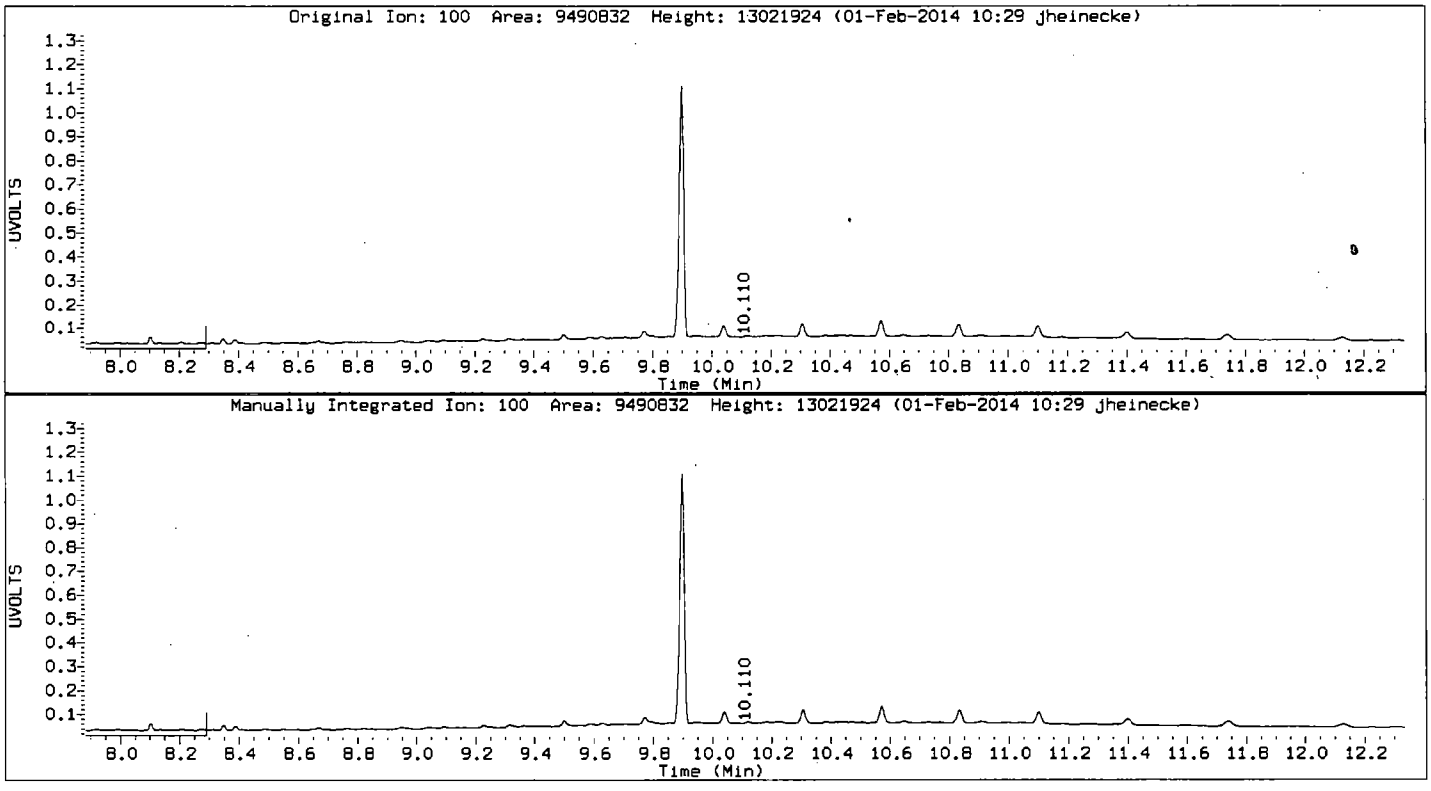
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R018.d
Injection Date: 31-JAN-2014 19:36
Instrument: 10gcs8.i
Lab Sample ID: ICV 1074-40

Compound: n-Triacontane (S)
CAS Number:



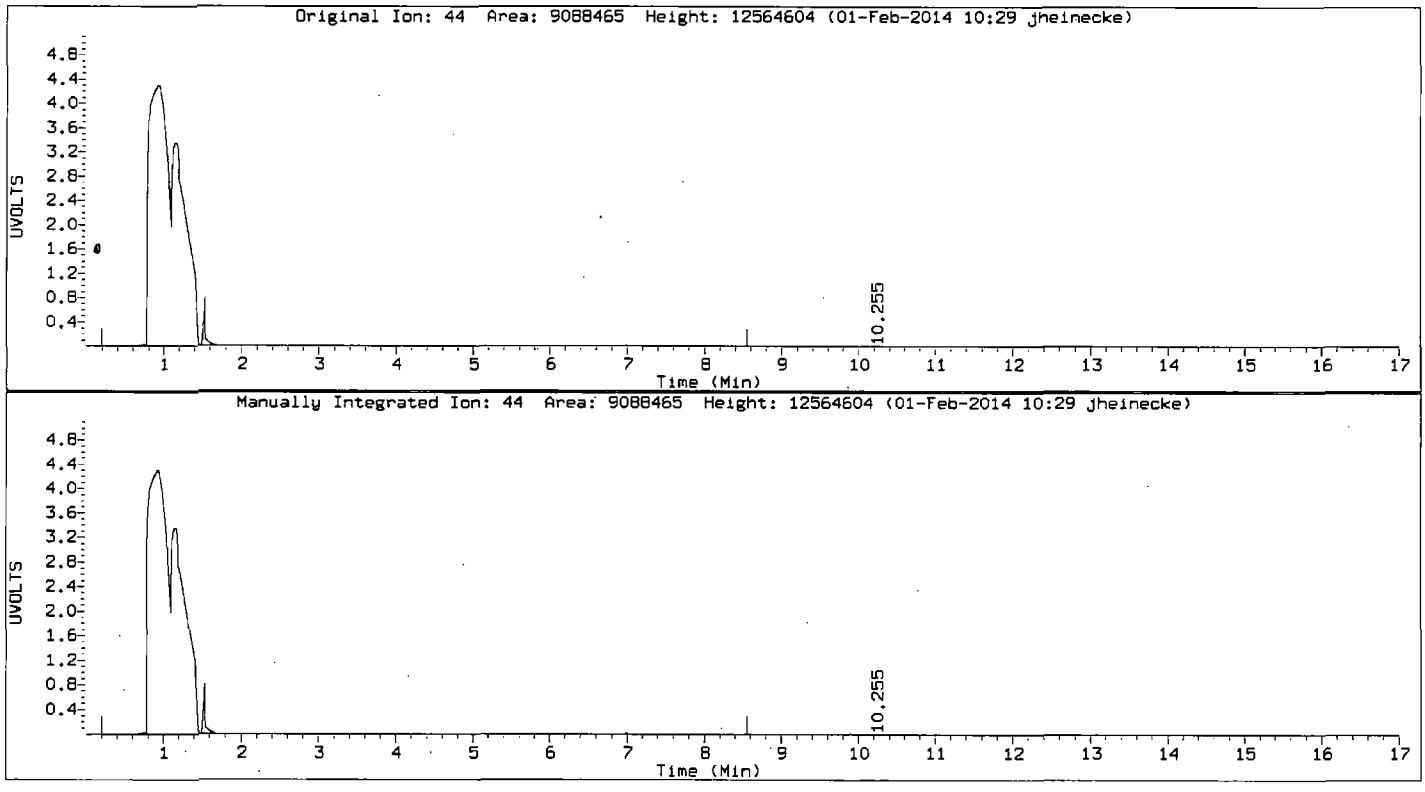
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.D\0131R018.d
Injection Date: 31-JAN-2014 19:36
Instrument: 10gcs8.i
Lab Sample ID: ICV 1074-40

Compound: Motor Oil Range (C24-C36)
CAS Number:



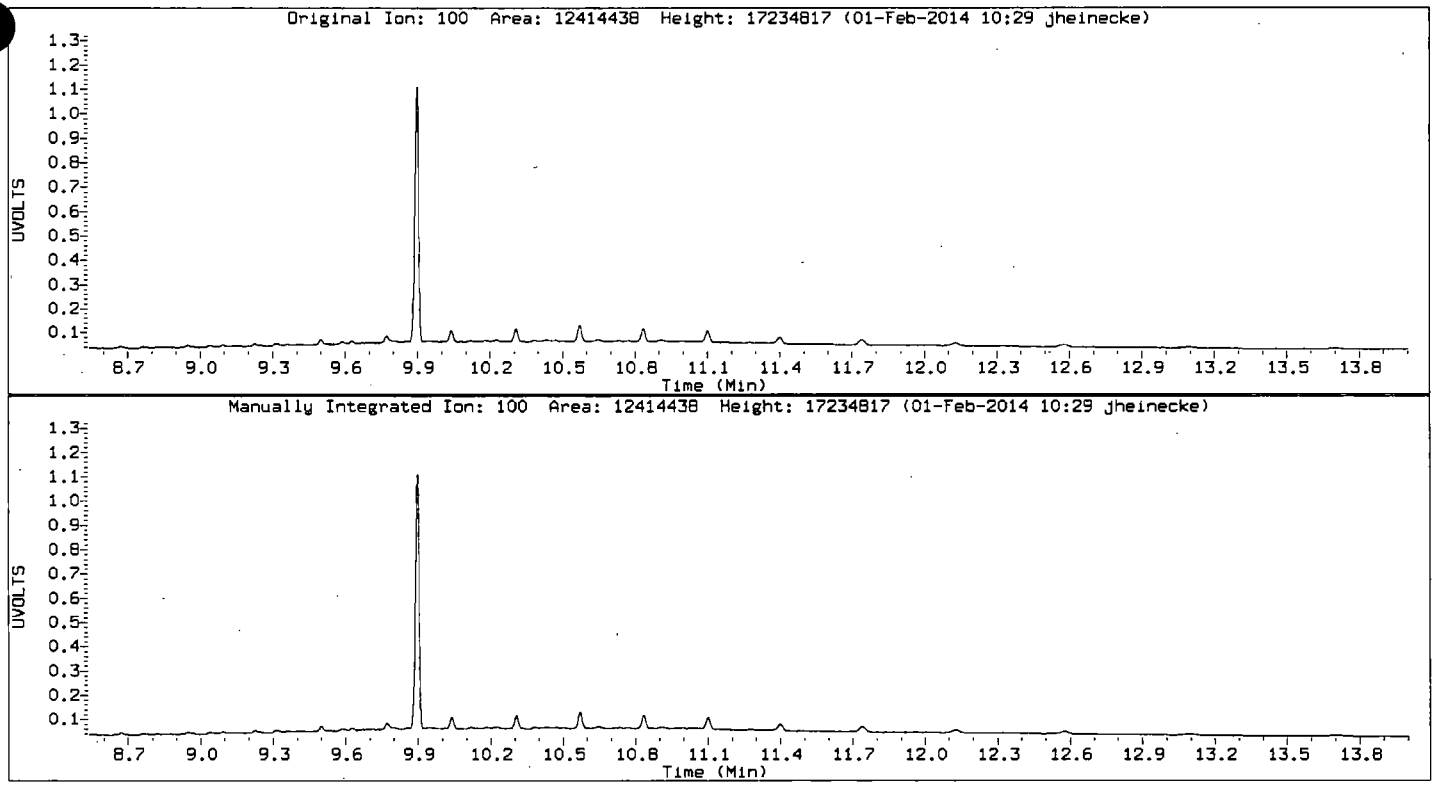
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R018.d
Injection Date: 31-JAN-2014 19:36
Instrument: 10gcs8.i
Lab Sample ID: ICV 1074-40

Compound: Residual Range Organics AK103
CAS Number:



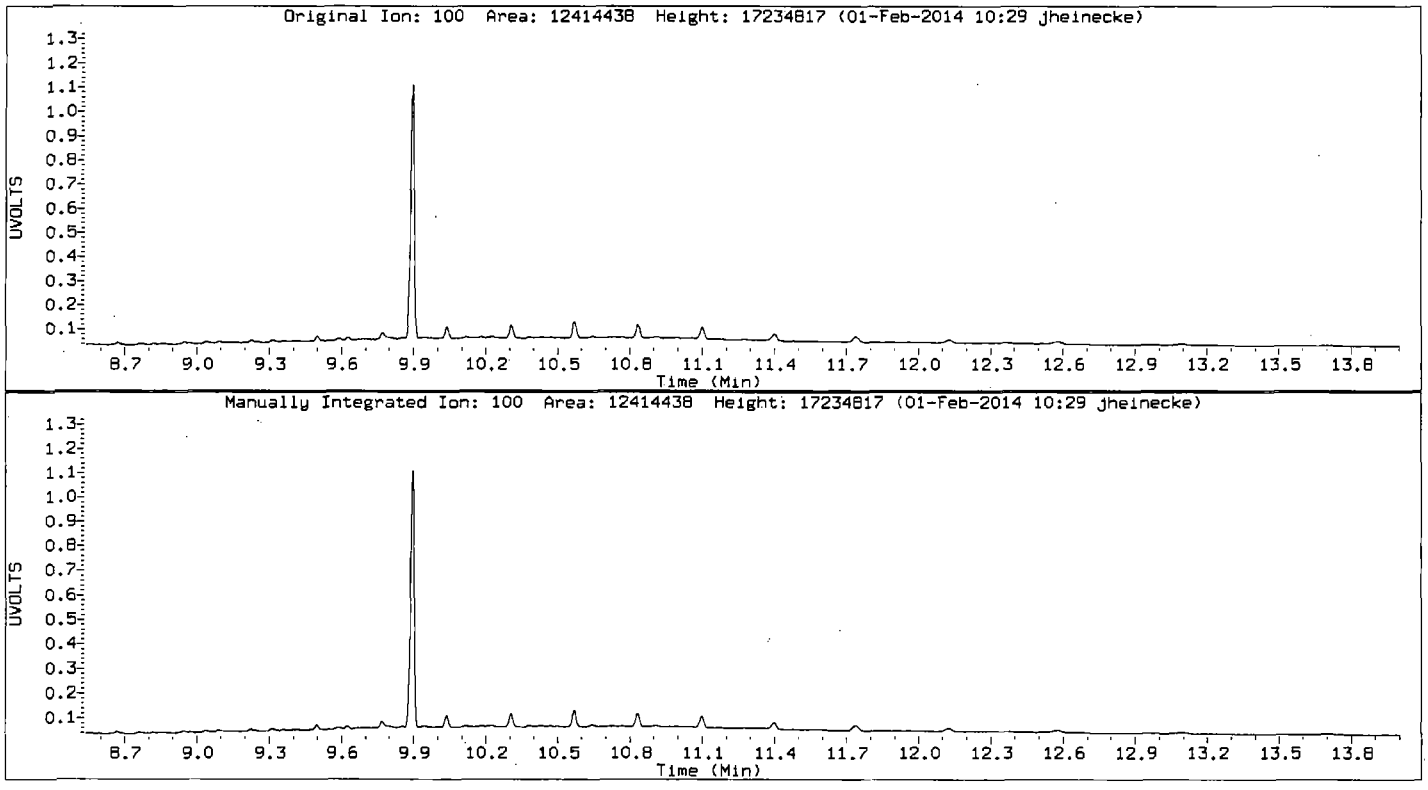
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R018.d
Injection Date: 31-JAN-2014 19:36
Instrument: 10gcs8.i
Lab Sample ID: ICV 1074-40

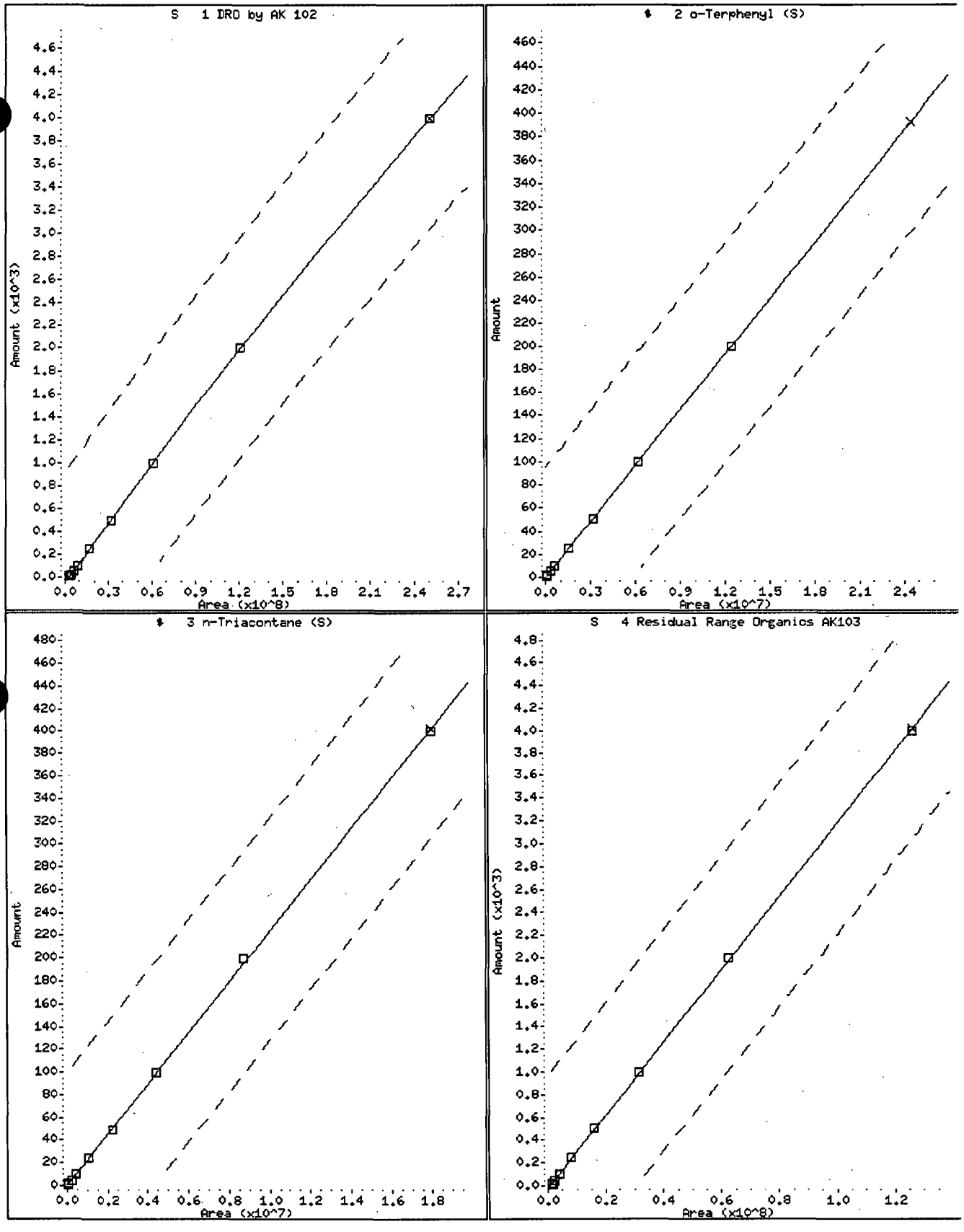
Compound: ORO (C24-C40)
CAS Number:

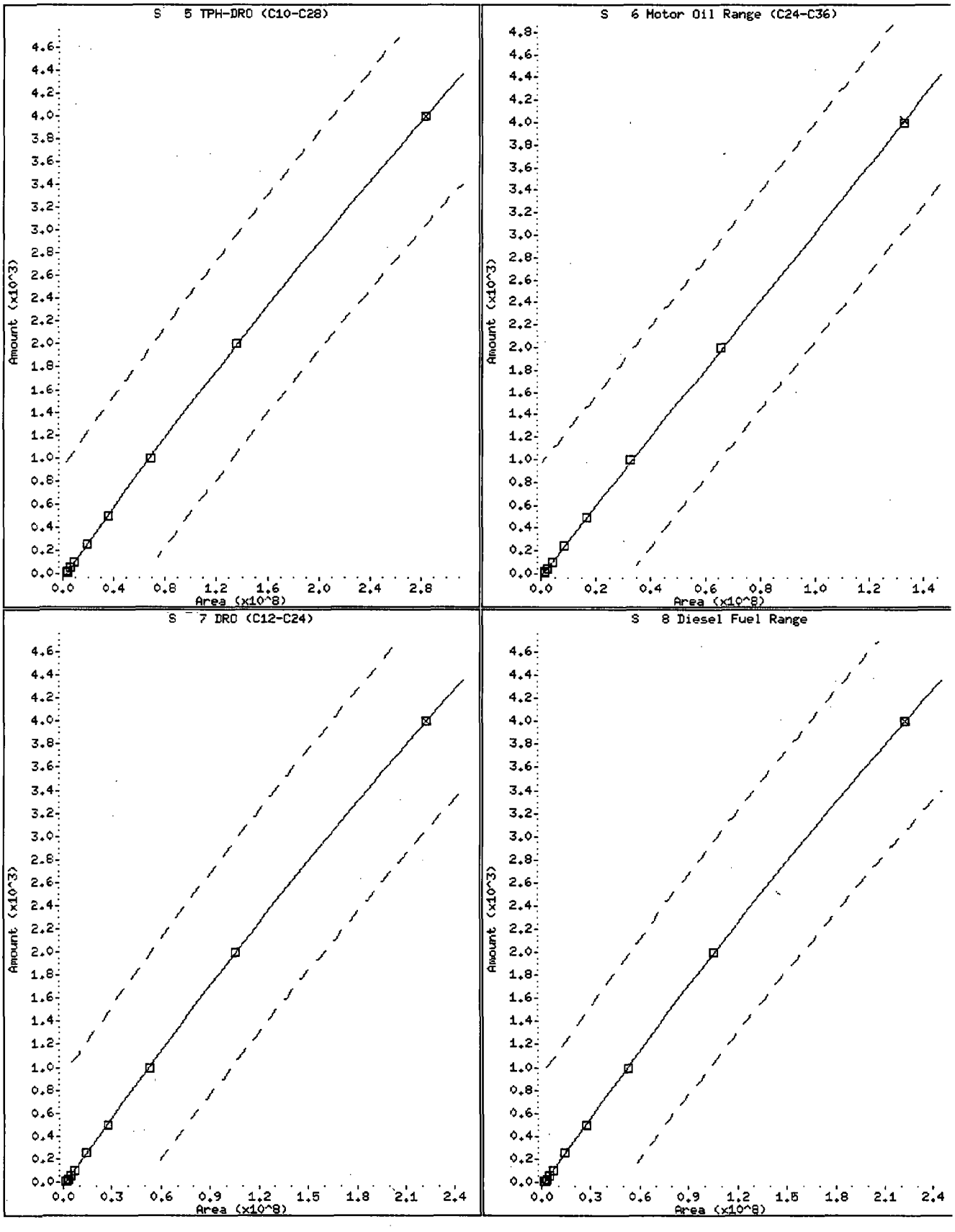


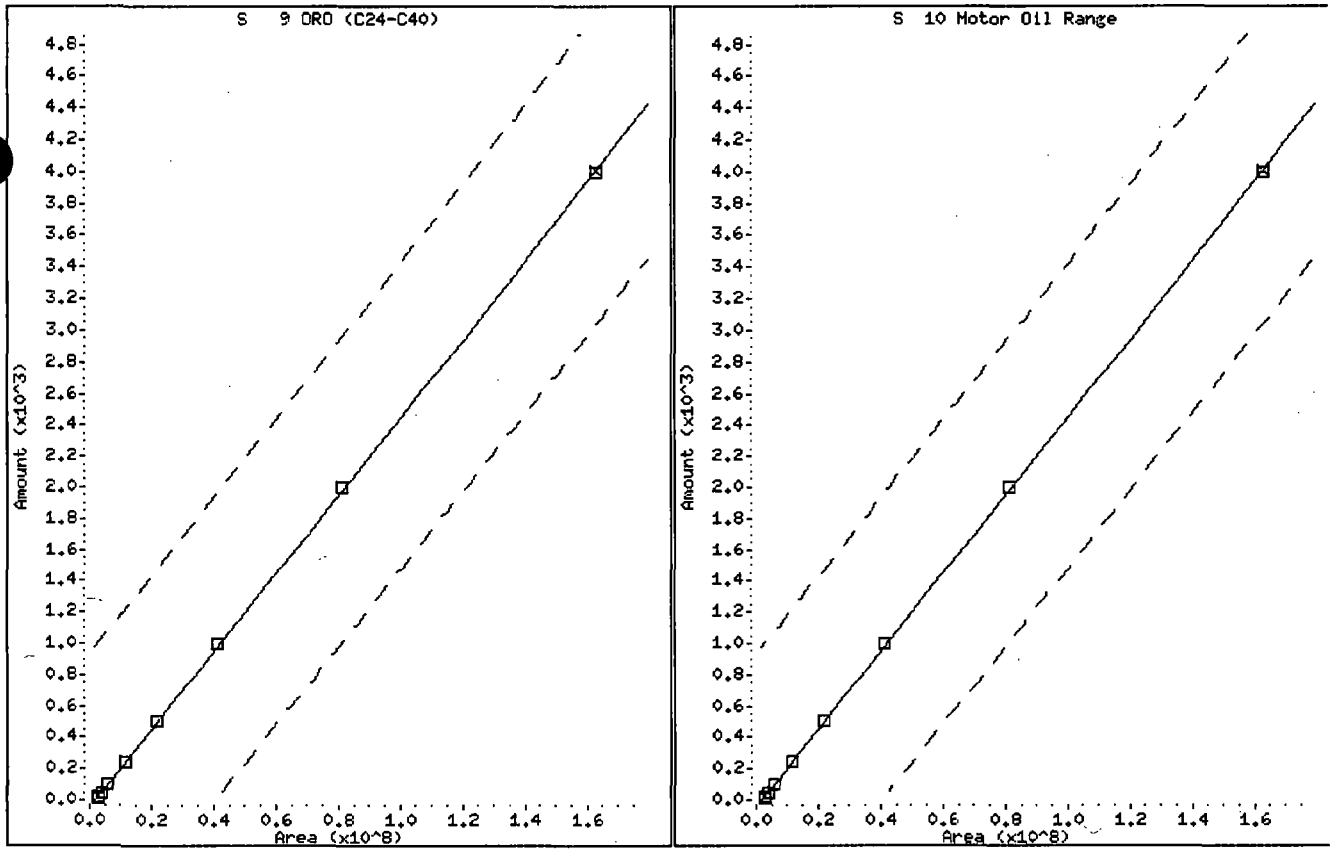
Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R018.d
Injection Date: 31-JAN-2014 19:36
Instrument: 10gcs8.i
Lab Sample ID: ICV 1074-40

Compound: Motor Oil Range
CAS Number:




S 1 DRO by AK 102
Amount (x10^3)
Area (x10^8)
$ 2 o-Terphenyl (S)
Amount
Area (x10^7)
$ 3 n-Triacontane (S)
Amount
Area (x10^7)
S 4 Residual Range Organics AK103
Amount (x10^3)
Area (x10^8)


S 5 TPH-DRO (C10-C28)
Amount (x10^3)
Area (x10^8)
S 6 Motor Oil Range (C24-C36)
Amount (x10^3)
Area (x10^8)
S 7 DRO (C12-C24)
Amount (x10^3)
Area (x10^8)
S 8 Diesel Fuel Range
Amount (x10^3)
Area (x10^8)


S 9 DRO (C24-C40)
Amount (x10^3)
Area (x10^8)
S 10 Motor Oil Range
Amount (x10^3)
Area (x10^8)

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R006.d
Lab Smp Id: RTmark 10328-49
Inj Date : 02-FEB-2014 15:00
Operator : JRH Inst ID: 10gcs8.i
Smp Info : RTmark 10328-49
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 02-Feb-2014 15:30 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$ 2 o-Terphenyl (S)	6.977	6.977	0.000	16056	0.28107	0.0281(R)
$ 3 n-Triacontane (S)	9.838	9.837	0.001	883	0.64839	0.0648(R)
$ 5 TPH-DRO (C10-C28)	3.600-9.610			18675005	245.699	24.6
$ 6 Motor Oil Range (C24-C36)	8.240-11.850			16725962	488.411	48.8

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R006.D

Page 1

Date : 02-FEB-2014 15:00

Client ID:

Instrument: 10gcs8.i

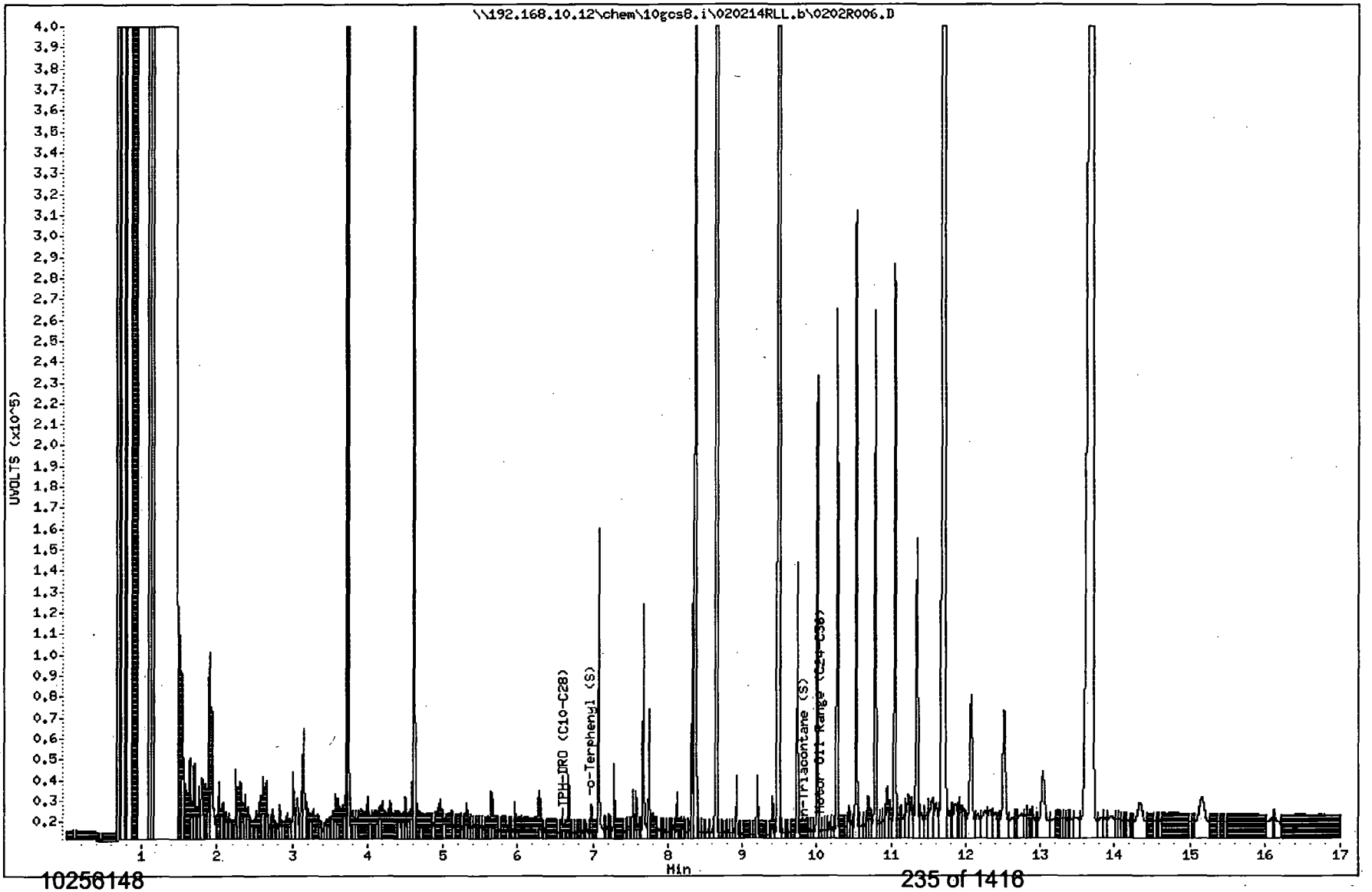
Sample Info: RTmark 10328-49

Volume Injected (uL): 1.0

Operator: JRH

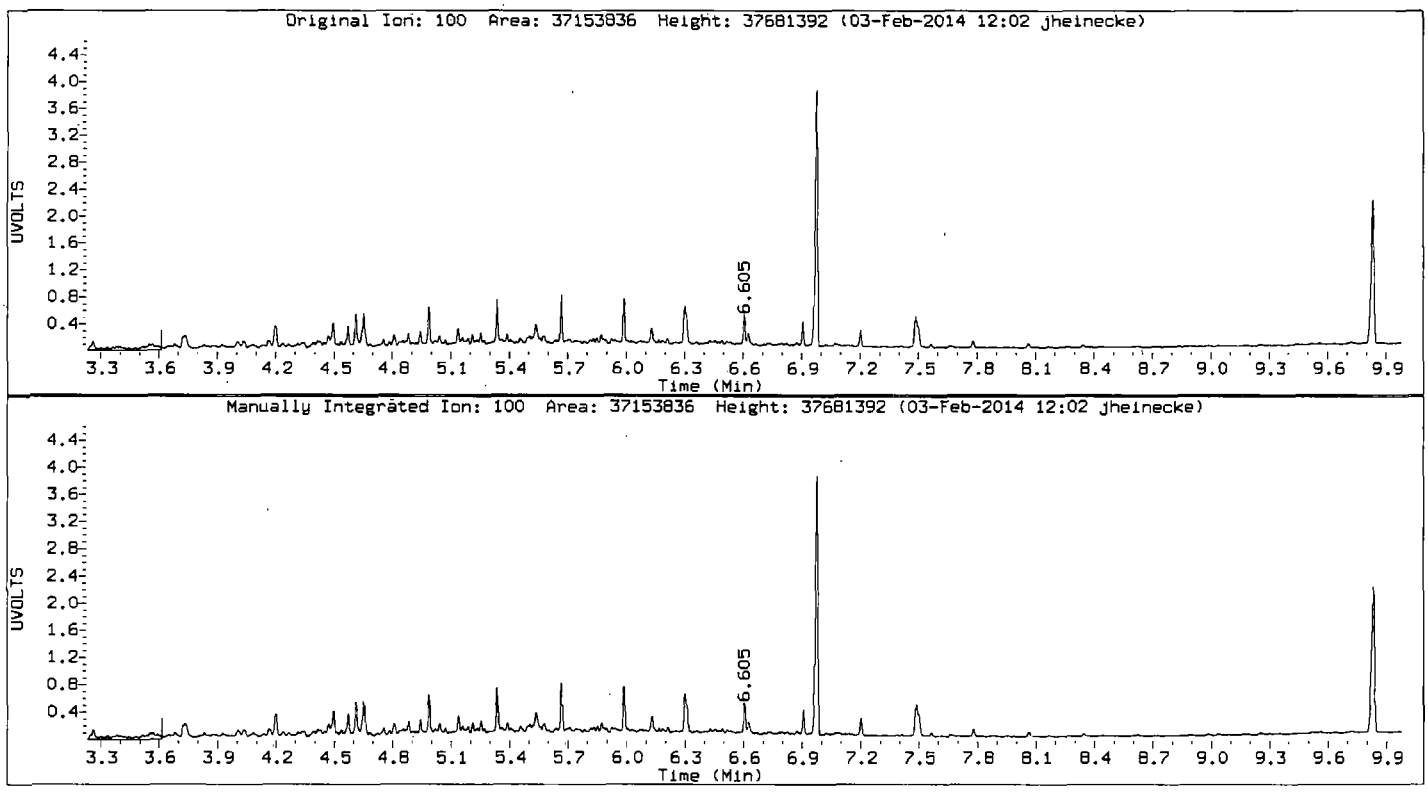
Column phase: DB-5HS

Column diameter: 0.25



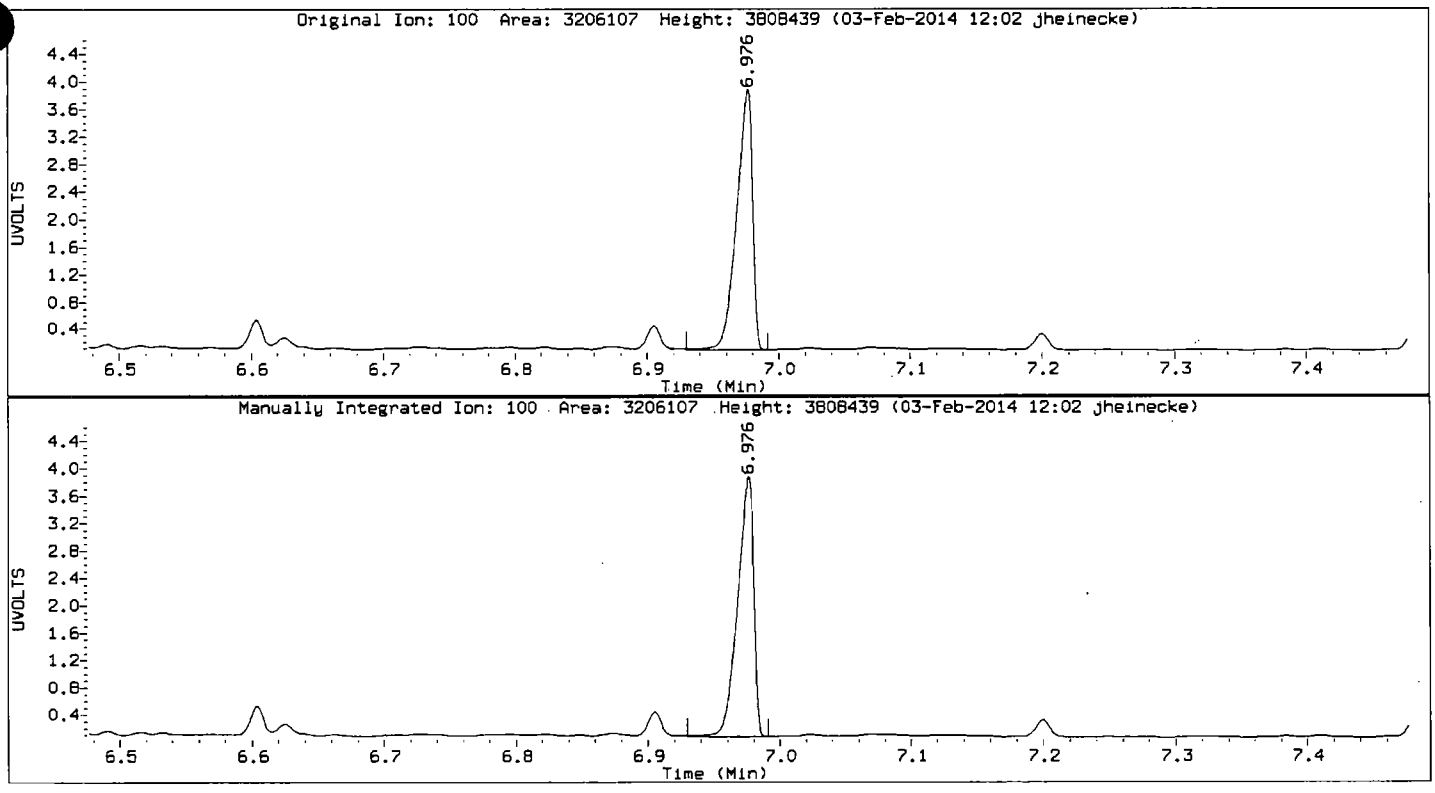
Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.b\0202R015.d
Injection Date: 02-FEB-2014 18:28
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: TPH-DRO (C10-C28)
CAS Number:



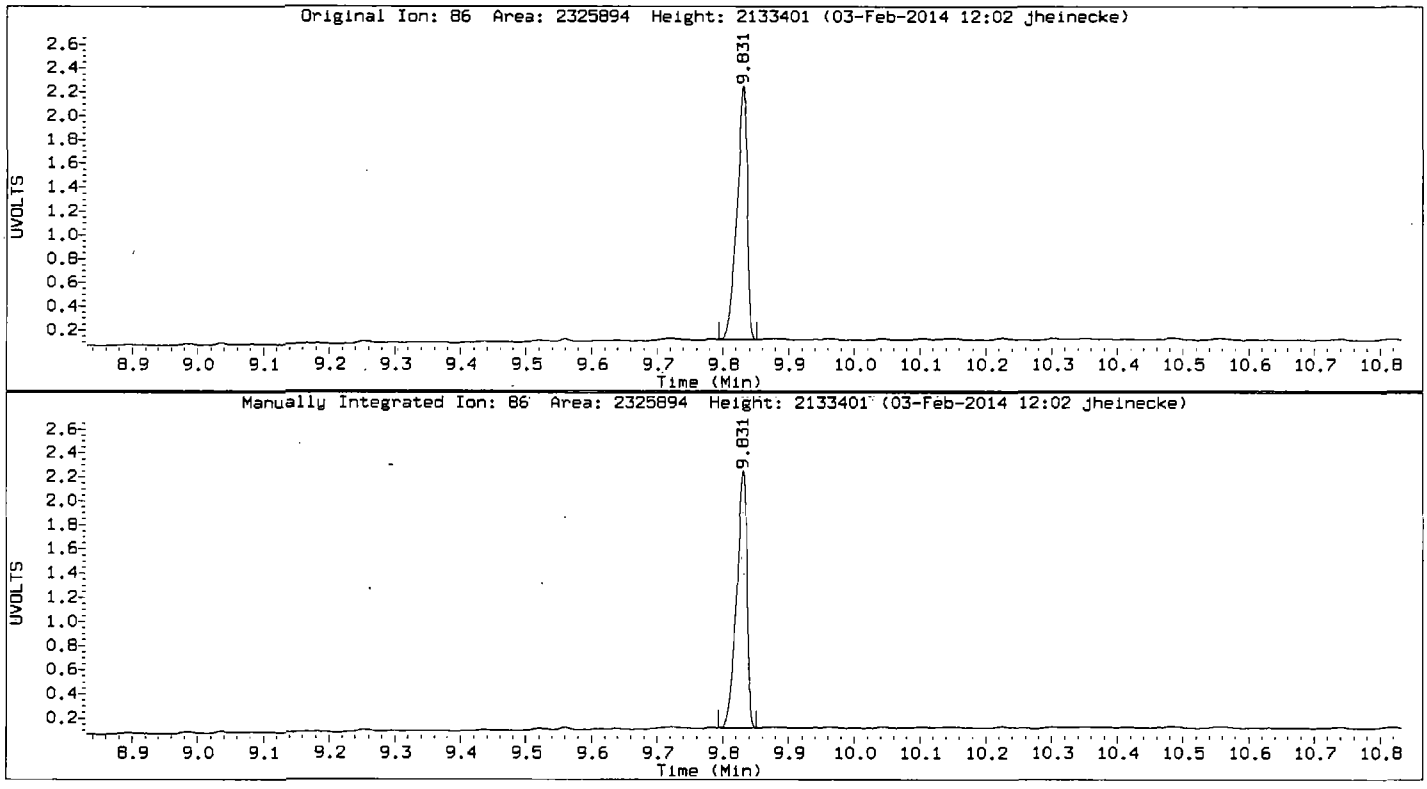
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.D\0202R015.d
Injection Date: 02-FEB-2014 18:28
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: o-Terphenyl (S)
CAS Number:



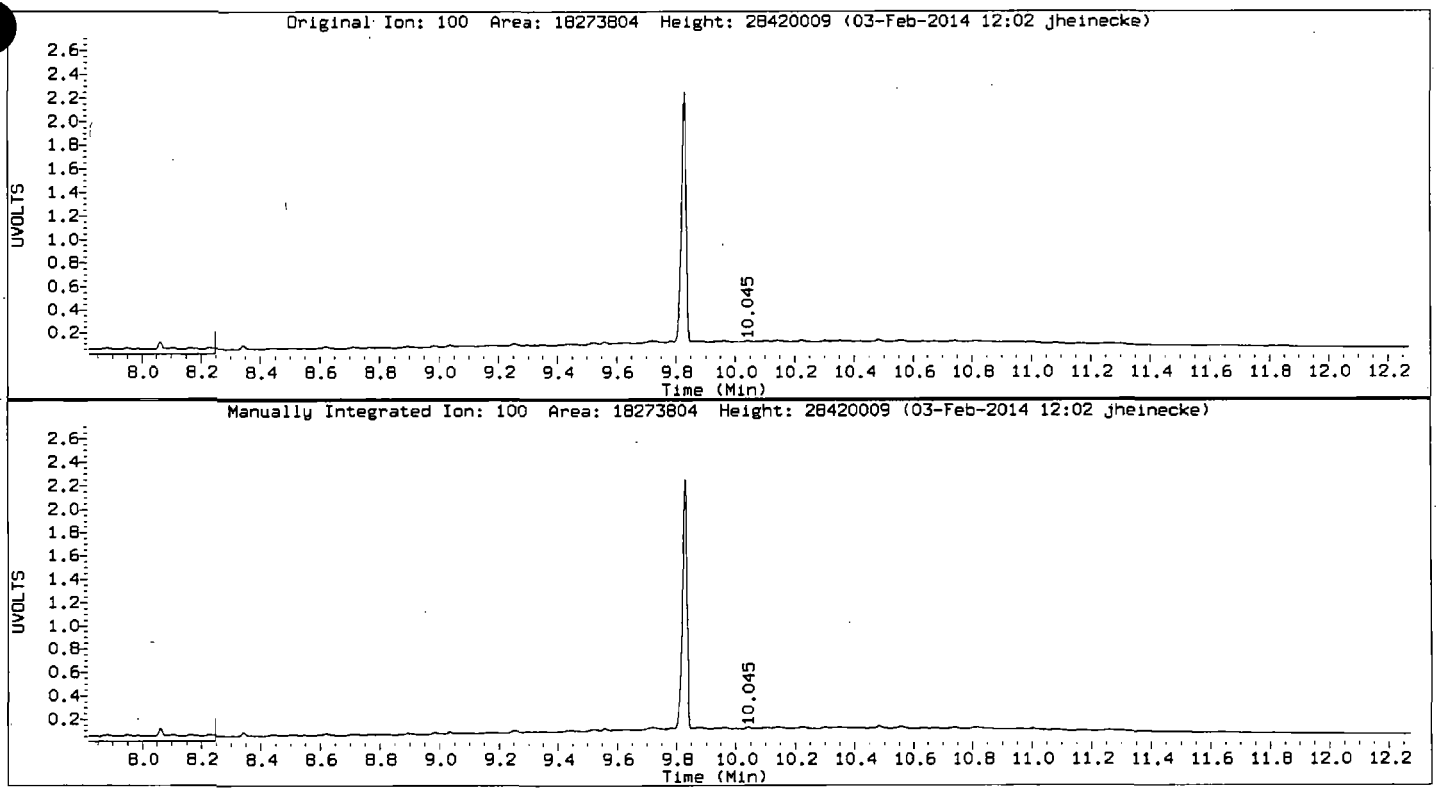
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R015.d
Injection Date: 02-FEB-2014 18:28
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: n-Triacontane (S)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.D\0202R015.d
Injection Date: 02-FEB-2014 18:28
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R006.d
Lab Smp Id: RTmark 10328-49
Inj Date : 31-JAN-2014 14:57
Operator : JRH Inst ID: 10gcs8.i
Smp Info : RTmark 10328-49
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Meth Date : 31-Jan-2014 16:43 jheinecke Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)	
S 1	DRO by AK 102	3.600-8.550			10685133			
S 2	o-Terphenyl (S)	6.616	6.615	0.001	5141			(R)
S 3	n-Triacontane (S)	9.539	9.516	0.023	3269855			(R)
S 4	Residual Range Organics AK103	8.560-11.950			9357127			
S 5	TPH-DRO (C10-C28)	3.600-9.660			14013647			
S 6	Motor Oil Range (C24-C36)	8.270-11.950			12599345			
S 7	DRO (C12-C24)	4.490-8.529			7086306			
S 8	Diesel Fuel Range	4.490-8.529			7086306			
S 9	ORO (C24-C40)	8.539-14.000			14550022			
S 10	Motor Oil Range	8.539-14.000			14550022			

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Pace Analytical Services, Inc.

RECOVERY REPORT

Client Name:
Client SDG: 013114RLL.b
Sample Matrix: SOLID
Fraction: SV
Lab Smp Id: RTmark 10328-49
Level: MED
Operator: JRH
Data Type: GC DATA
SampleType: SAMPLE
SpikeList File: 8015LL.spk
Quant Type: ESTD
Sublist File: all.sub
Method File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\GCS8akNW8015-013114R.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED mg/Kg	CONC RECOVERED mg/Kg	% RECOVERED	LIMITS
$ 2 o-Terphenyl (S)	5.00	0.000	0.00*	60-120
$ 3 n-Triacontane (S)	5.00	0.000	0.00*	60-120

Data File: \\192.168.10.12\chem\10gcs8.i\013114RLL.b\0131R006.D

Page 1

Date : 31-JAN-2014 14:57

Client ID:

Instrument: 10gcs8.i

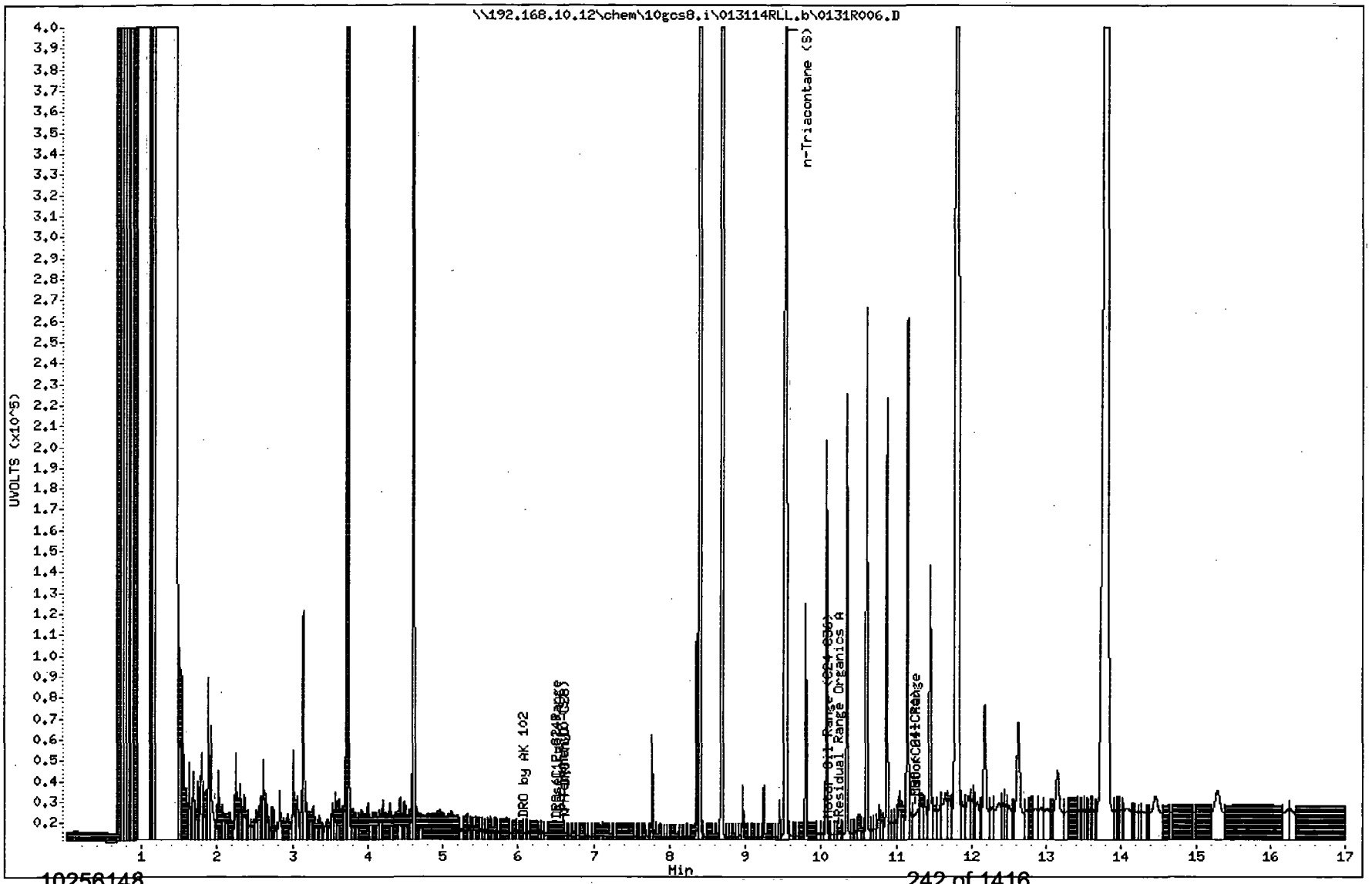
Sample Info: RTmark 10328-49

Volume Injected (uL): 1.0

Operator: JRH

Column phase: DB-5HS

Column diameter: 0.25



Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcs8.i Injection Date: 02-FEB-2014 18:28
Lab File ID: 0202R015.d Init. Cal. Date(s): 31-JAN-2014 31-JAN-2014
Analysis Type: Init. Cal. Times: 15:21 18:49
Lab Sample ID: D\MO7 10328-107 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m

	COMPOUND	RRF / AMOUNT	RF500	CCAL RRF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	2 o-Terphenyl (S)	50.00000	51.59745	64122	0.010	3.19489	15.00000	Quadratic
$	3 n-Triacontane (S)	50.00000	52.56438	46518	0.010	5.12875	15.00000	Linear
S	5 TPH-DRO (C10-C28)	500	531	74308	0.010	6.15746	15.00000	Quadratic
S	6 Motor Oil Range (C24-C36)	500	535	36548	0.010	7.07863	15.00000	Linear

Average %D / Drift Results.

Calculated Average %D/Drift = 5.38993
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R015.d
Lab Smp Id: D\MO7 10328-107
Inj Date : 02-FEB-2014 18:28
Operator : JRH Inst ID: 10gcs8.i
Smp Info : D\MO7 10328-107
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	2 o-Terphenyl (S)	6.976	6.976	0.000	3206107	50.0000	51.6(M)
$	3 n-Triacontane (S)	9.831	9.831	0.000	2325894	50.0000	52.6(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			37153836	500.000	531(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			18273804	500.000	535(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R015.D

Page 1

Date : 02-FEB-2014 18:28

Client ID:

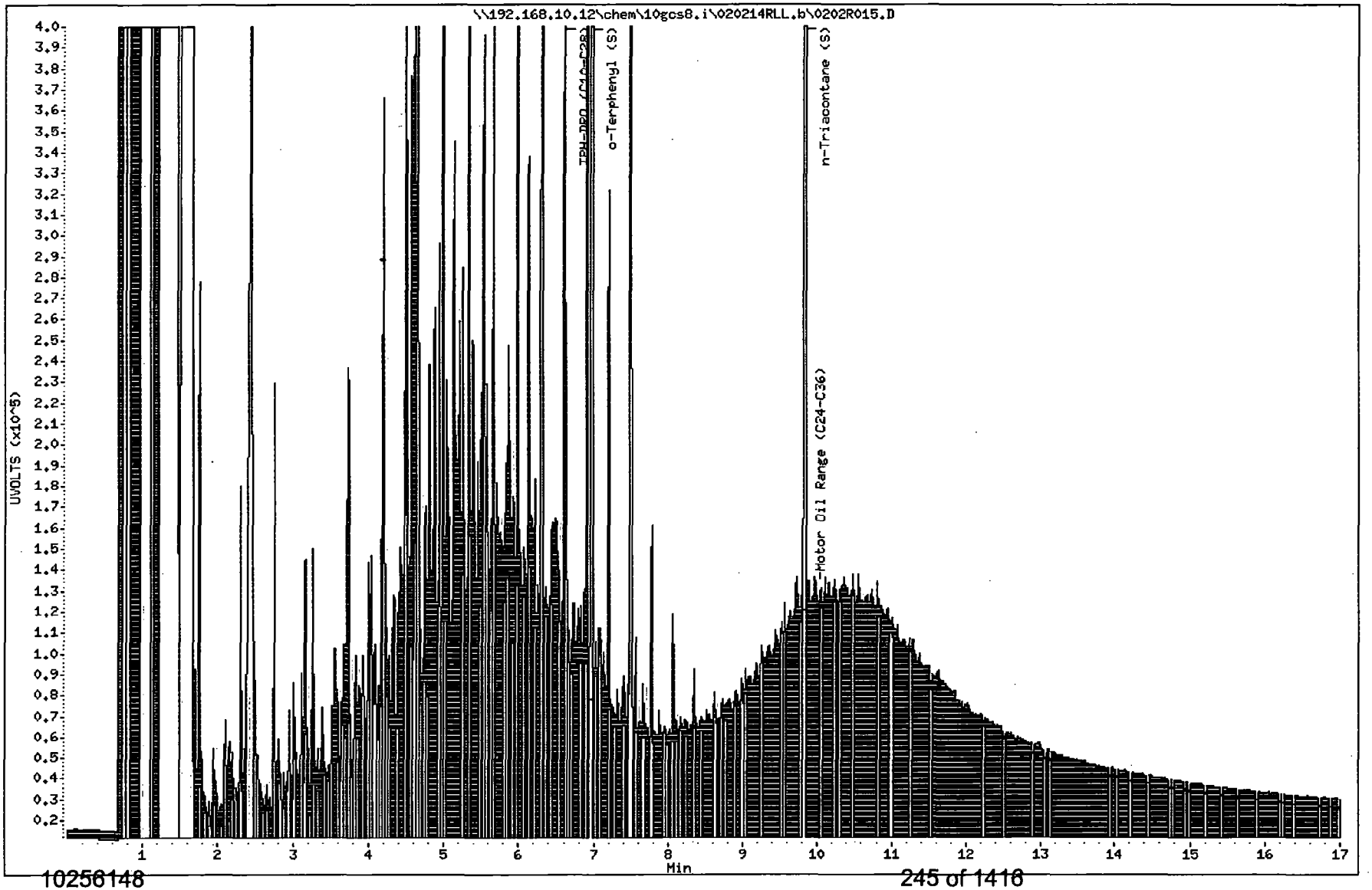
Instrument: 10gcs8.i

Sample Info: D\M07 10328-107

Operator: JRH

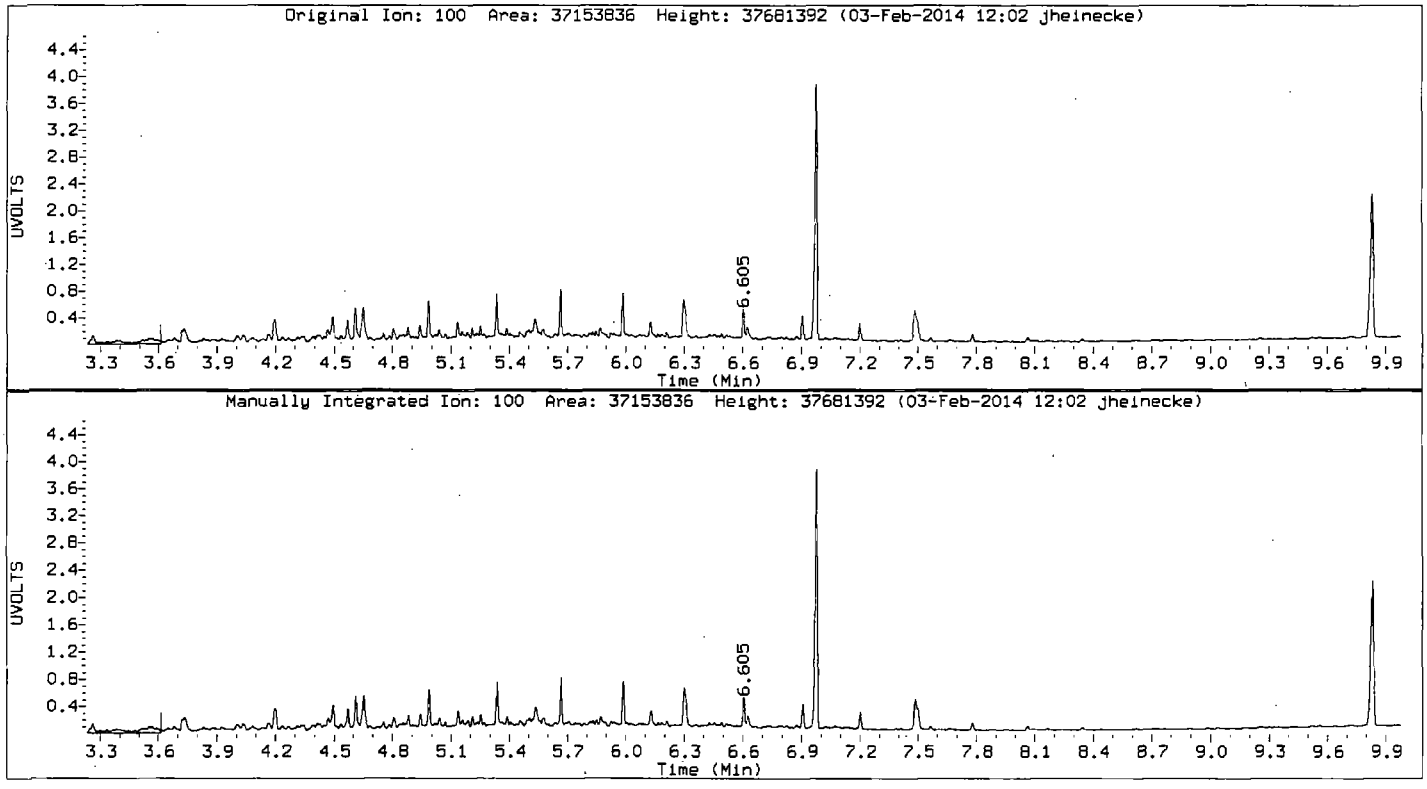
Column phase: DB-5MS

Column diameter: 0.25



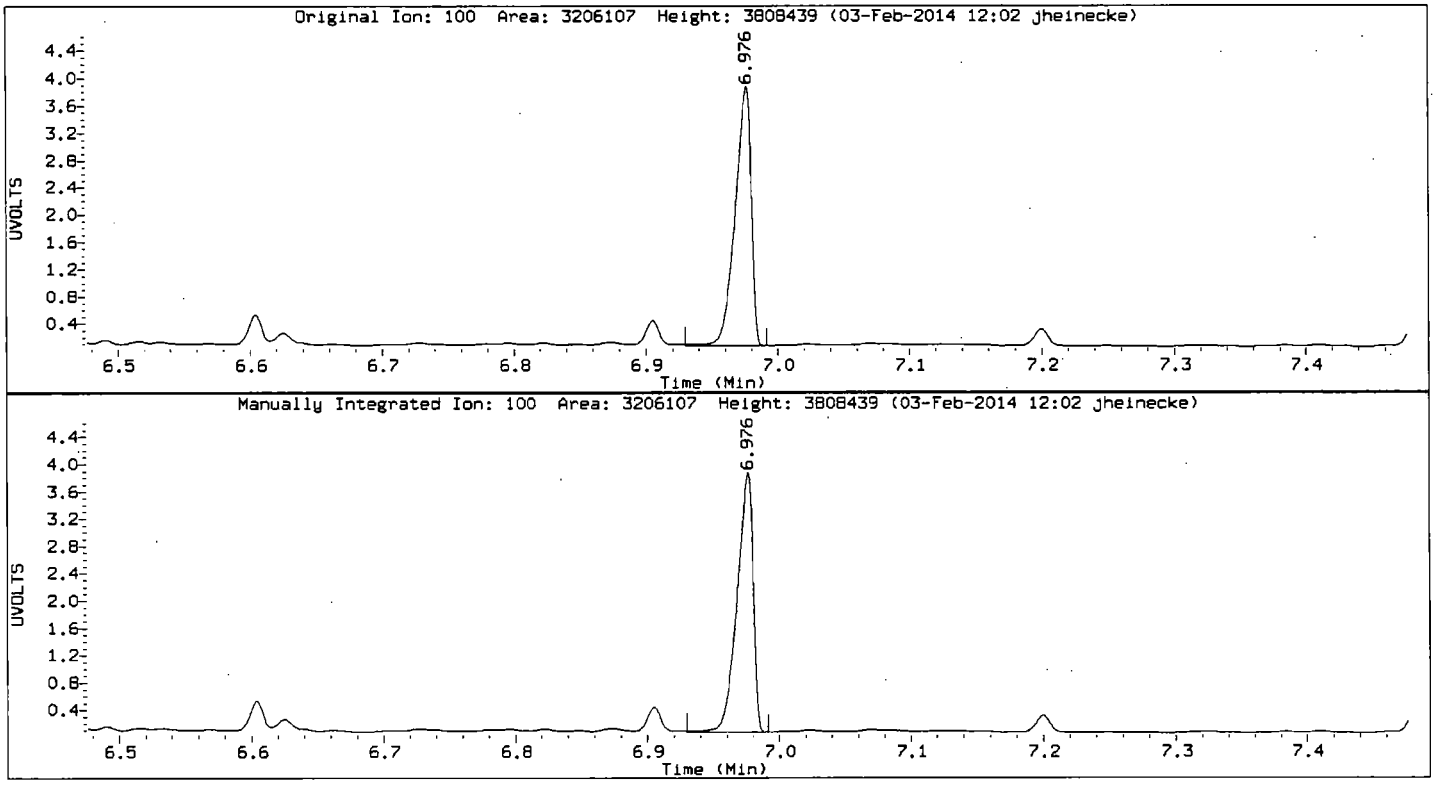
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R015.d
Injection Date: 02-FEB-2014 18:28
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: TPH-DRO (C10-C28)
CAS Number:



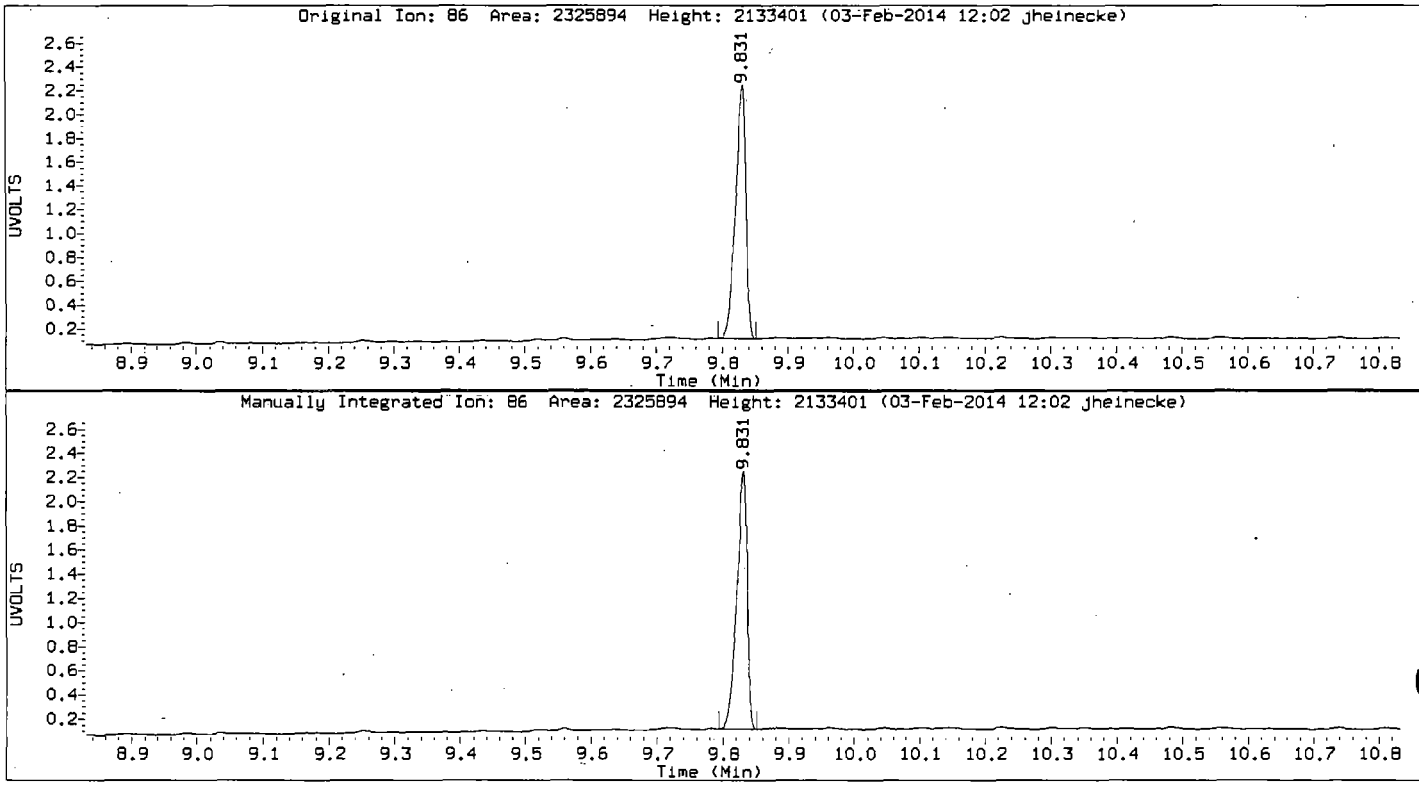
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R015.d
Injection Date: 02-FEB-2014 18:28
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: o-Terphenyl (S)
CAS Number:



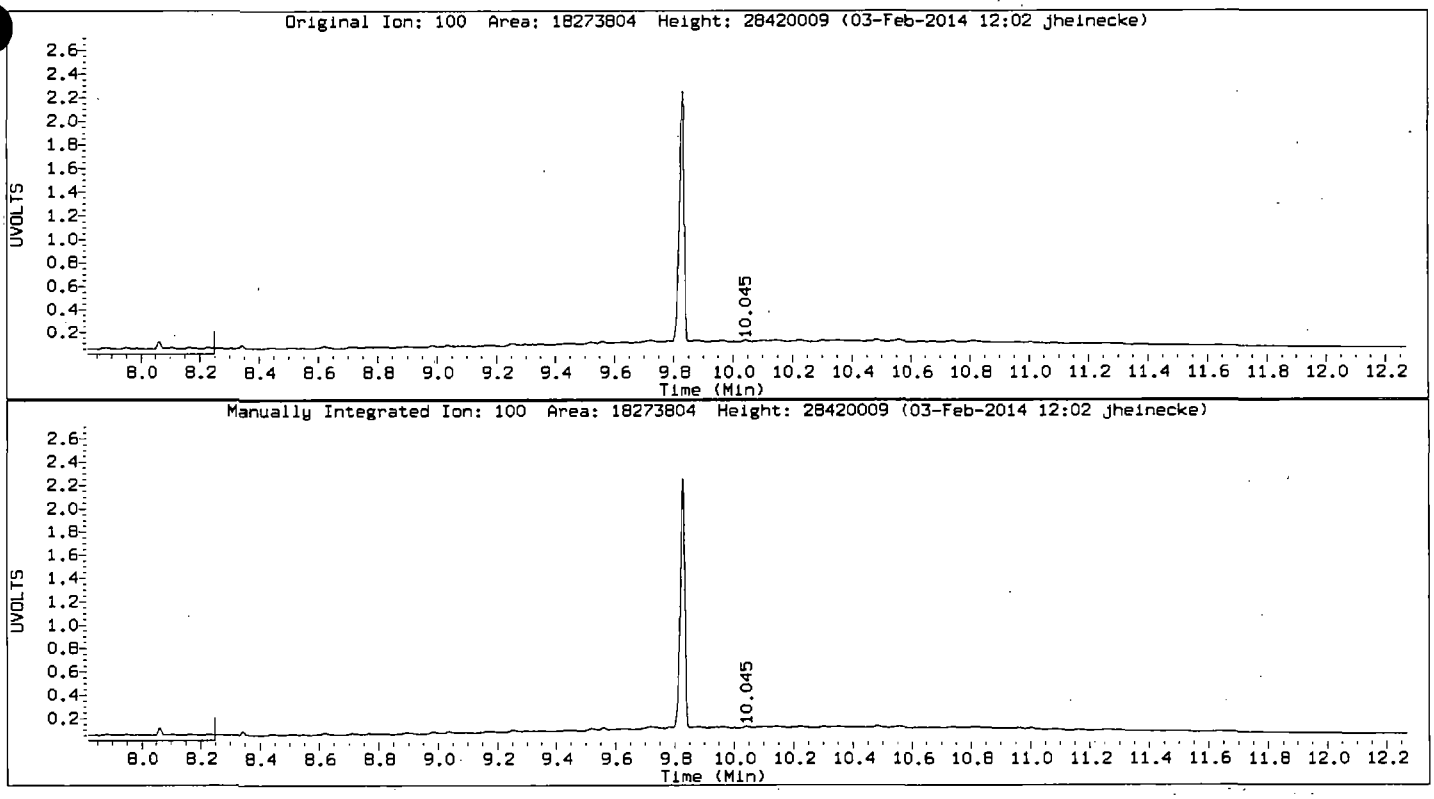
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R015.d
Injection Date: 02-FEB-2014 18:28
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: n-Triacontane (S)
CAS Number:



Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.b\0202R015.d
Injection Date: 02-FEB-2014 18:28
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcs8.i Injection Date: 02-FEB-2014 22:43
Lab File ID: 0202R026.d Init. Cal. Date(s): 31-JAN-2014 31-JAN-2014
Analysis Type: Init. Cal. Times: 15:21 18:49
Lab Sample ID: D\MO7 10328-107 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m

	COMPOUND	RRF / AMOUNT	RF500	CCAL RRF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	2 o-Terphenyl (S)	50.00000	53.96453	67067	0.010	7.92905	15.00000	Quadratic
$	3 n-Triacontane (S)	50.00000	54.74379	48470	0.010	9.48757	15.00000	Linear
S	5 TPH-DRO (C10-C28)	500	560	78165	0.010	12.06751	15.00000	Quadratic
S	6 Motor Oil Range (C24-C36)	500	525	35894	0.010	5.09444	15.00000	Linear

Average %D / Drift Results.

Calculated Average %D/Drift = 8.64464
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R026.d
Lab Smp Id: D\MO7 10328-107
Inj Date : 02-FEB-2014 22:43
Operator : JRH Inst ID: 10gcs8.i
Smp Info : D\MO7 10328-107
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	2 o-Terphenyl (S)	7.012	7.012	0.000	3353347	50.0000	54.0(M)
$	3 n-Triacontane (S)	9.956	9.956	0.000	2423497	50.0000	54.7(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			39082600	500.000	560(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			17946957	500.000	525(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R026.D

Date : 02-FEB-2014 22:43

Client ID:

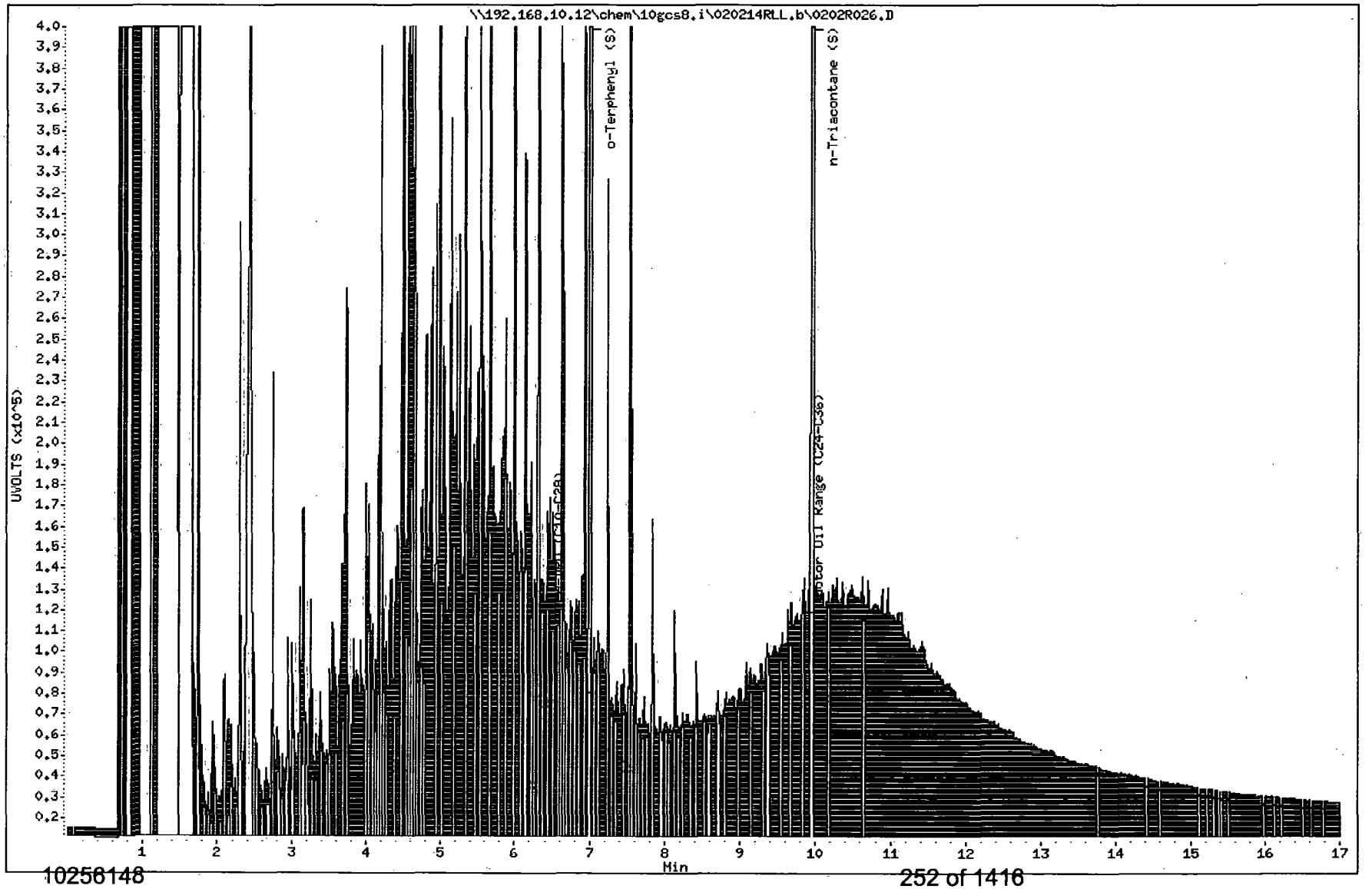
Instrument: 10gcs8.i

Sample Info: D\H07 10328-107

Operator: JRH

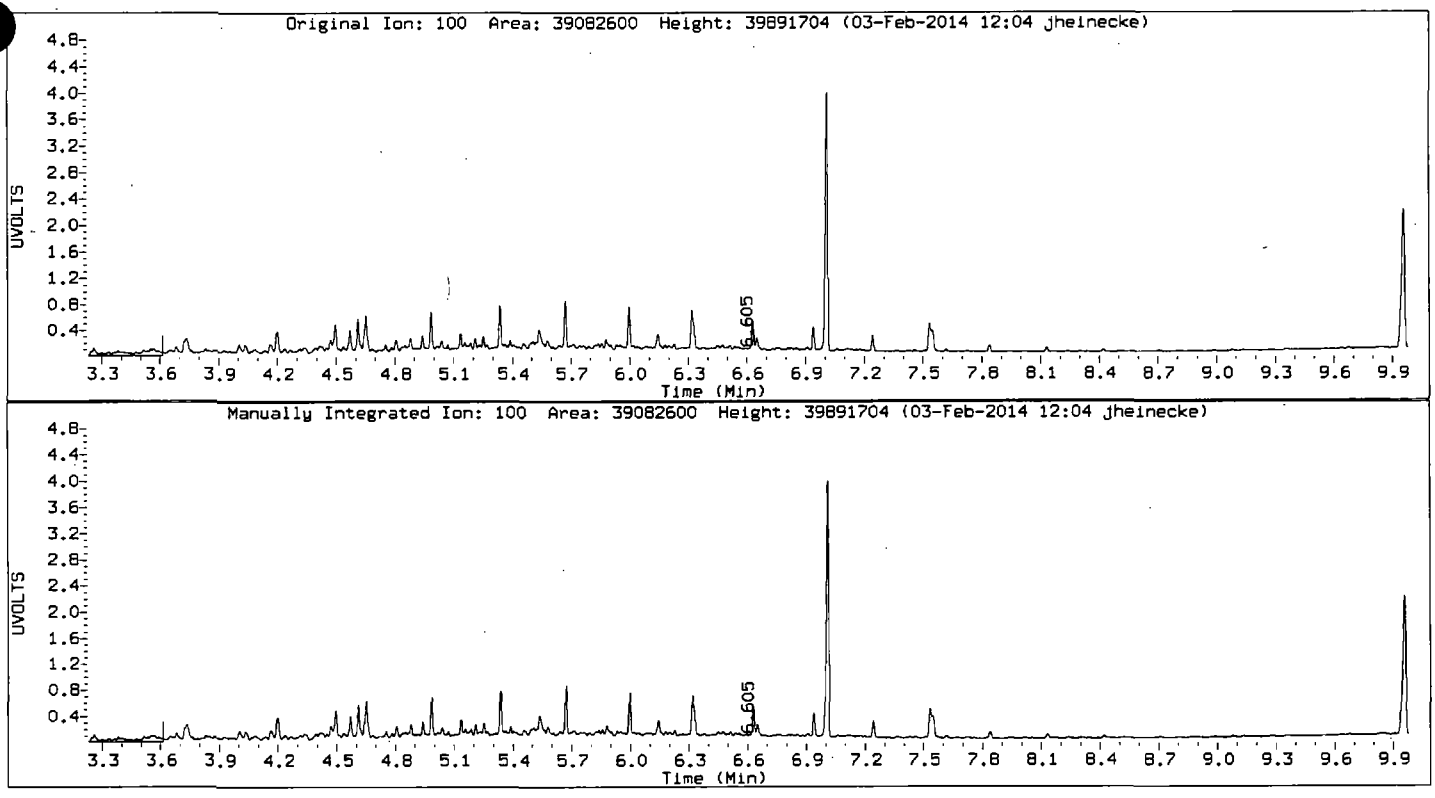
Column phase: DB-5MS

Column diameter: 0.25



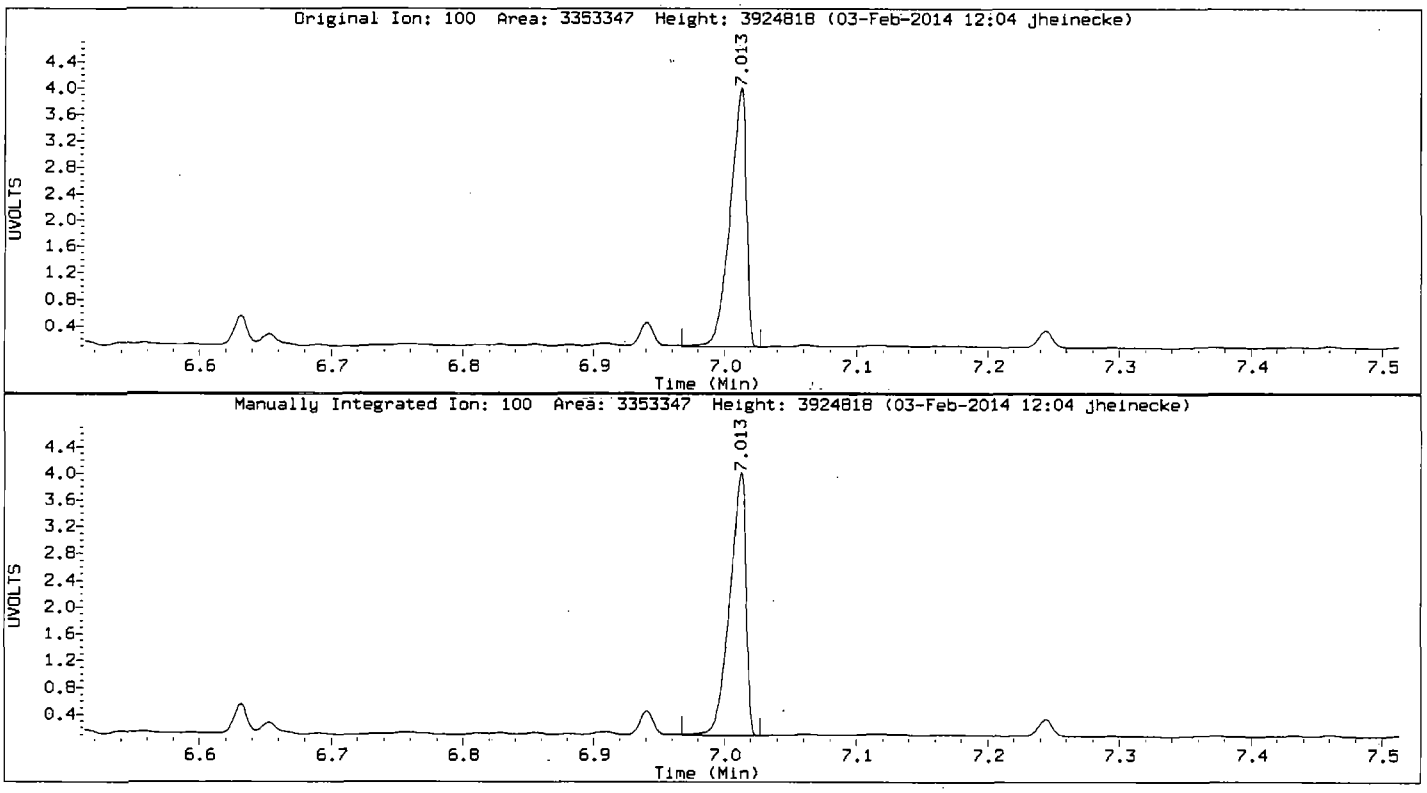
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.B\0202R026.d
Injection Date: 02-FEB-2014 22:43
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: TPH-DRO (C10-C28)
CAS Number:



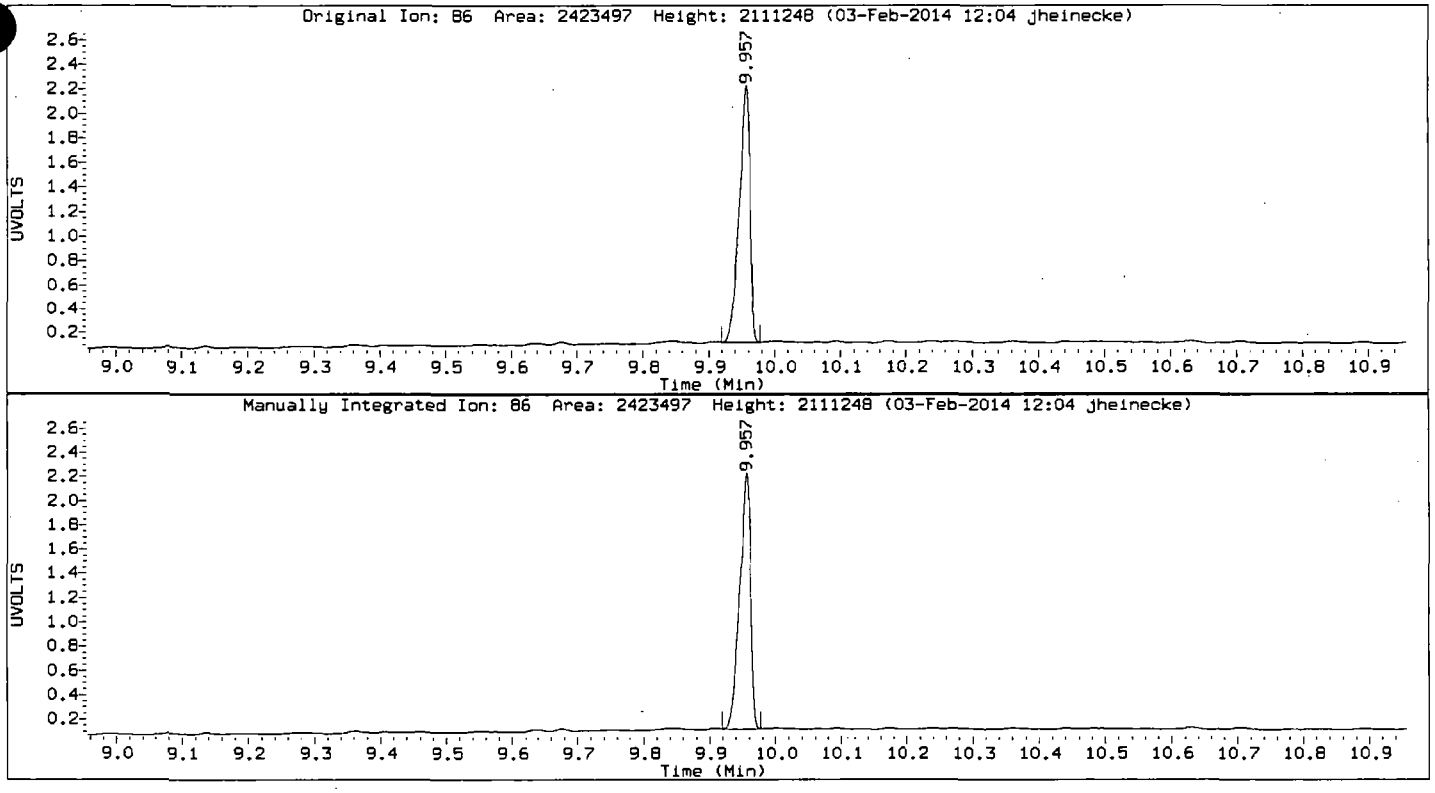
Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.b\0202R026.d
Injection Date: 02-FEB-2014 22:43
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: o-Terphenyl (S)
CAS Number:



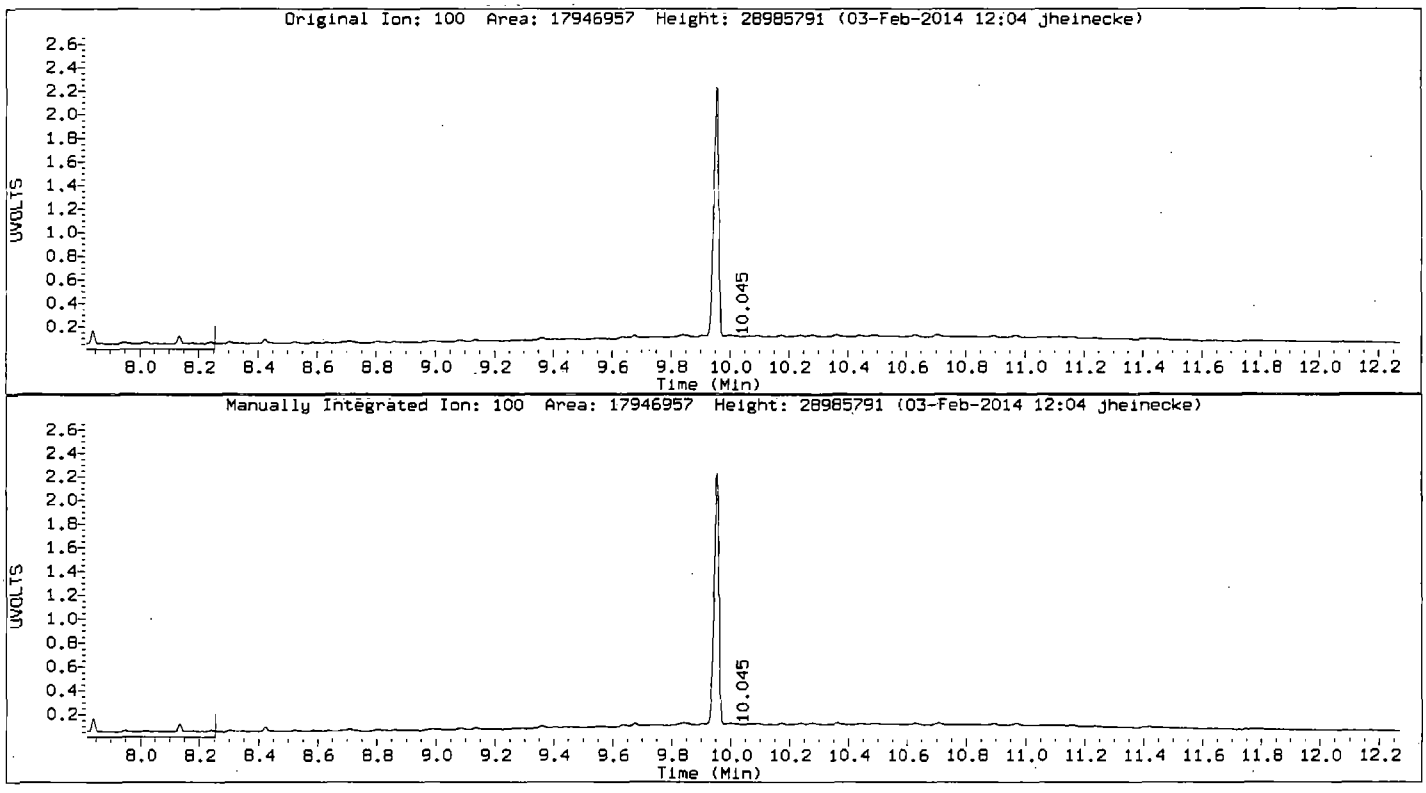
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.B\0202R026.d
Injection Date: 02-FEB-2014 22:43
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: n-Triacontane (S)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R026.d
Injection Date: 02-FEB-2014 22:43
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcs8.i Injection Date: 03-FEB-2014 02:59
Lab File ID: 0202R037.d Init. Cal. Date(s): 31-JAN-2014 31-JAN-2014
Analysis Type: Init. Cal. Times: 15:21 18:49
Lab Sample ID: D\MO7 10328-107 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m

	COMPOUND	RRF / AMOUNT	RF500	CCAL RRF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	2 o-Terphenyl (S)	50.00000	53.01353	65884	0.010	6.02706	15.00000	Quadratic
$	3 n-Triacontane (S)	50.00000	53.39541	47262	0.010	6.79081	15.00000	Linear
S	5 TPH-DRO (C10-C28)	500	* 552	77119	0.010	10.46492	15.00000	Quadratic
S	6 Motor Oil Range (C24-C36)	500	523	35739	0.010	4.62568	15.00000	Linear

Average %D / Drift Results.

Calculated Average %D/Drift = 6.97712
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R037.d
Lab Smp Id: D\MO7 10328-107
Inj Date : 03-FEB-2014 02:59
Operator : JRH Inst ID: 10gcs8.i
Smp Info : D\MO7 10328-107
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	2 o-Terphenyl (S)	6.975	6.975	0.000	3294191	50.0000	53.0(M)
$	3 n-Triacontane (S)	9.869	9.869	0.000	2363111	50.0000	53.4(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			38559340	500.000	552(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			17869740	500.000	523(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R037.D

Page 1

Date : 03-FEB-2014 02:59

Client ID:

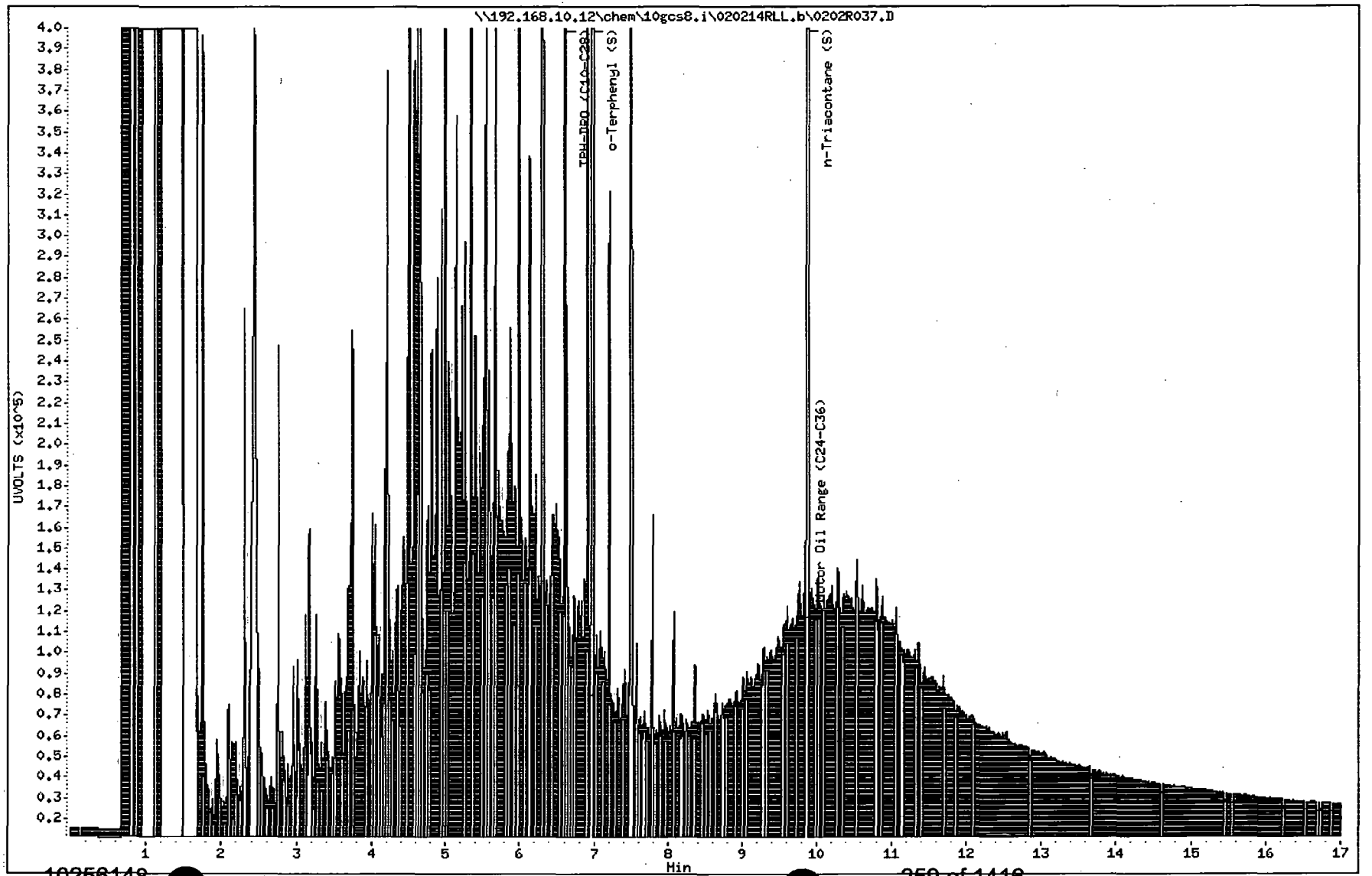
Instrument: 10gcs8.i

Sample Info: D\M07 10328-107

Operator: JRH

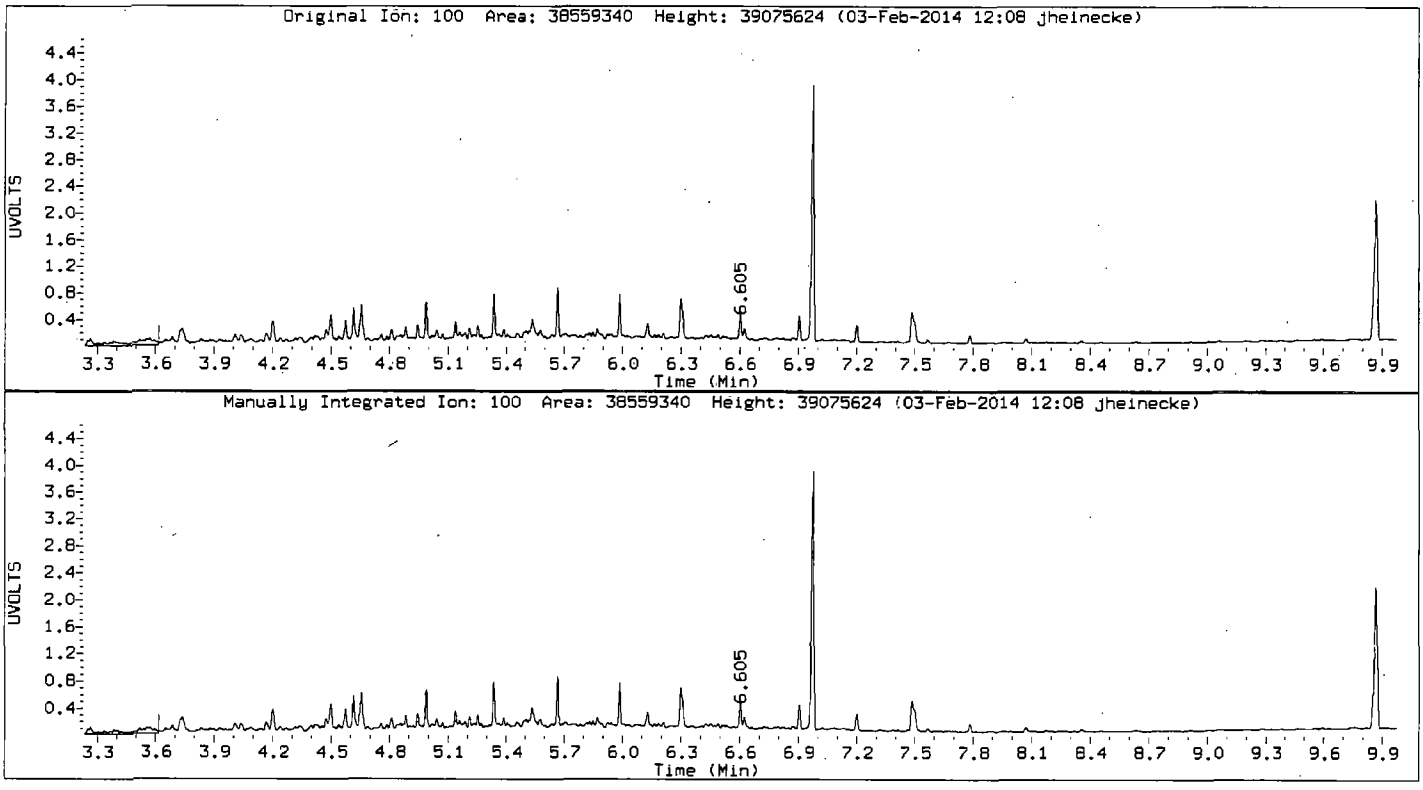
Column phase: DB-5MS

Column diameter: 0.25



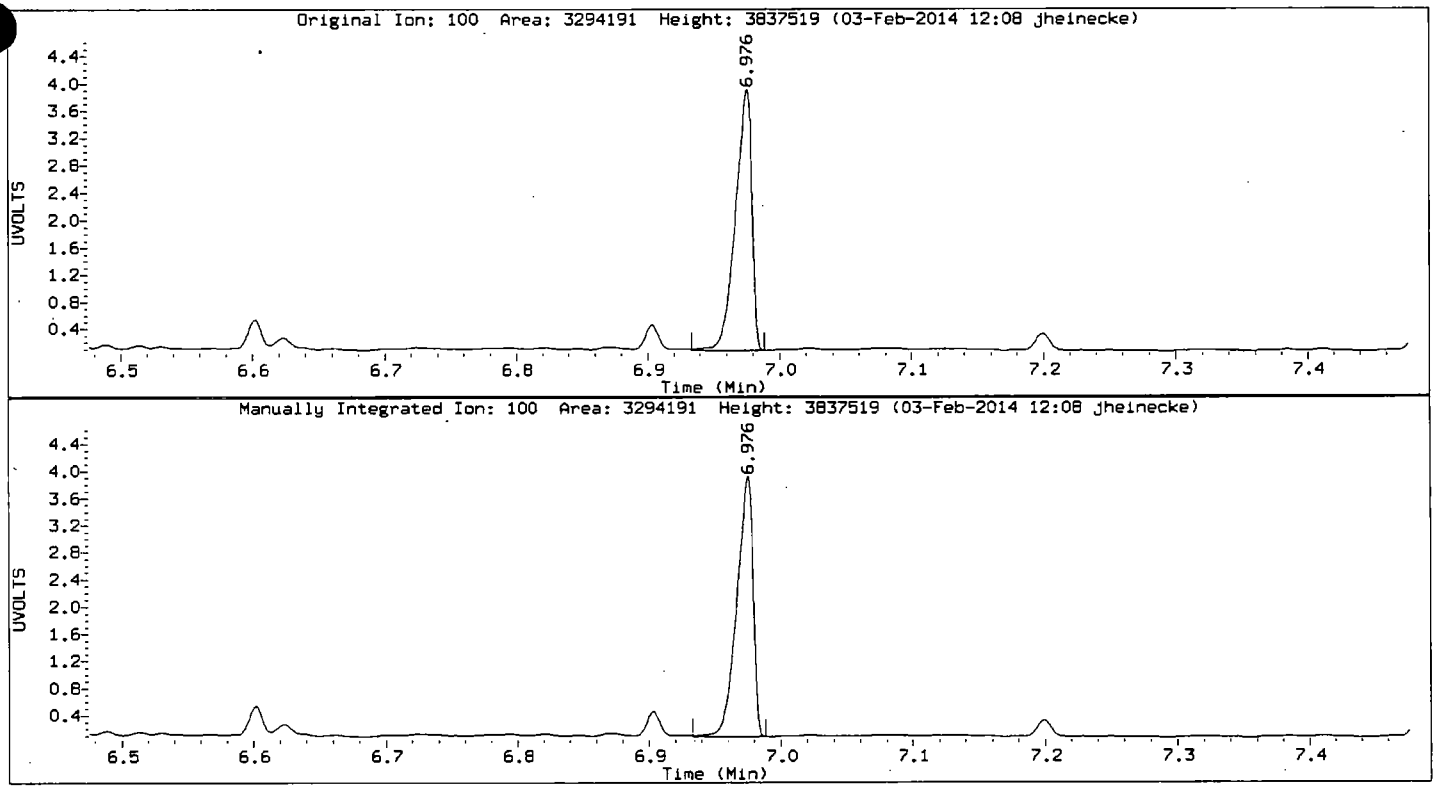
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.B\0202R037.d
Injection Date: 03-FEB-2014 02:59
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: TPH-DRO (C10-C28)
CAS Number:



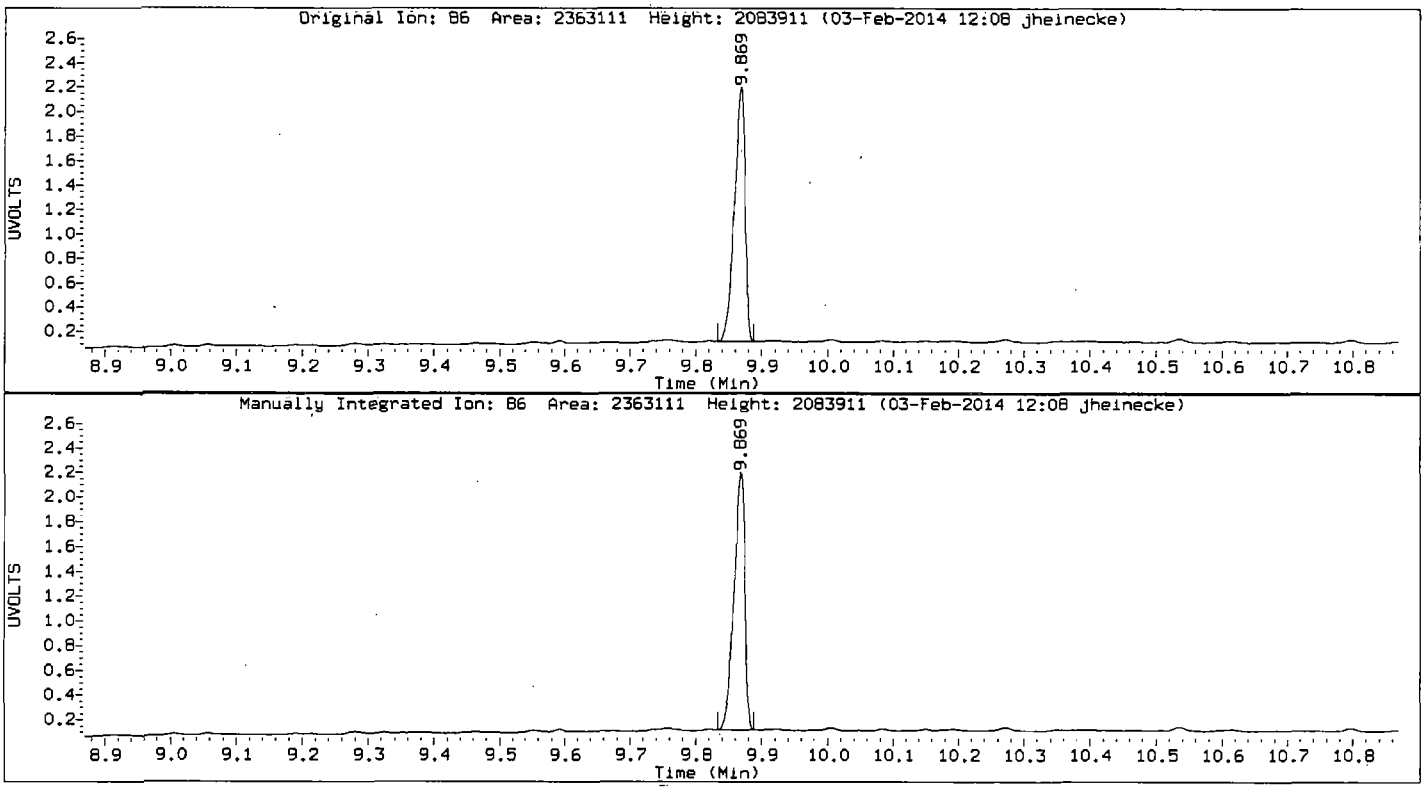
Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.b\0202R037.d
Injection Date: 03-FEB-2014 02:59
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: o-Terphenyl (S)
CAS Number:



Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.b\0202R037.d
Injection Date: 03-FEB-2014 02:59
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: n-Triacontane (S)
CAS Number:



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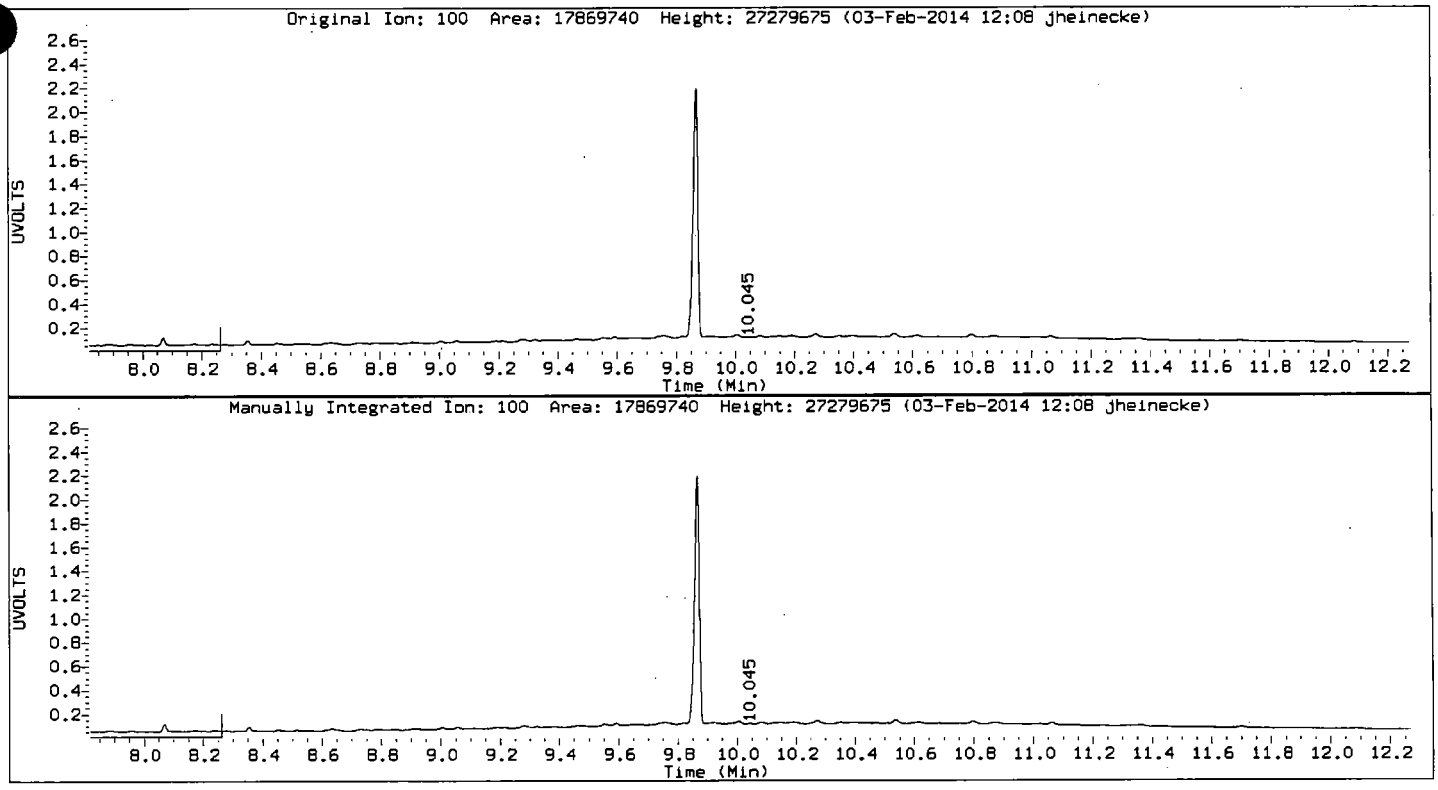
Injection Date: 03-FEB-2014 02:59
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcs8.i Injection Date: 03-FEB-2014 04:32
Lab File ID: 0202R041.d Init. Cal. Date(s): 31-JAN-2014 31-JAN-2014
Analysis Type: Init. Cal. Times: 15:21 18:49
Lab Sample ID: D\MO7 10328-107 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m

	COMPOUND	RRF / AMOUNT	RF500	CCAL RRF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	2 o-Terphenyl (S)	50.00000	53.20680	66124	0.010	6.41360	15.00000	Quadratic
$	3 n-Triacontane (S)	50.00000	53.67613	47514	0.010	7.35226	15.00000	Linear
S	5 TPH-DRO (C10-C28)	500	550	76844	0.010	10.04347	15.00000	Quadratic
S	6 Motor Oil Range (C24-C36)	500	516	35267	0.010	3.19067	15.00000	Linear

Average %D / Drift Results.

Calculated Average %D/Drift = 6.75000
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R041.d
Lab Smp Id: D\MO7 10328-107
Inj Date : 03-FEB-2014 04:32
Operator : JRH Inst ID: 10gcs8.i
Smp Info : D\MO7 10328-107
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	2 o-Terphenyl (S)	6.979	6.979	0.000	3306213	50.0000	53.2(M)
$	3 n-Triacontane (S)	9.895	9.895	0.000	2375683	50.0000	53.7(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			38421762	500.000	550(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			17633358	500.000	516(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R041.D

Page 1

Date : 03-FEB-2014 04:32

Client ID:

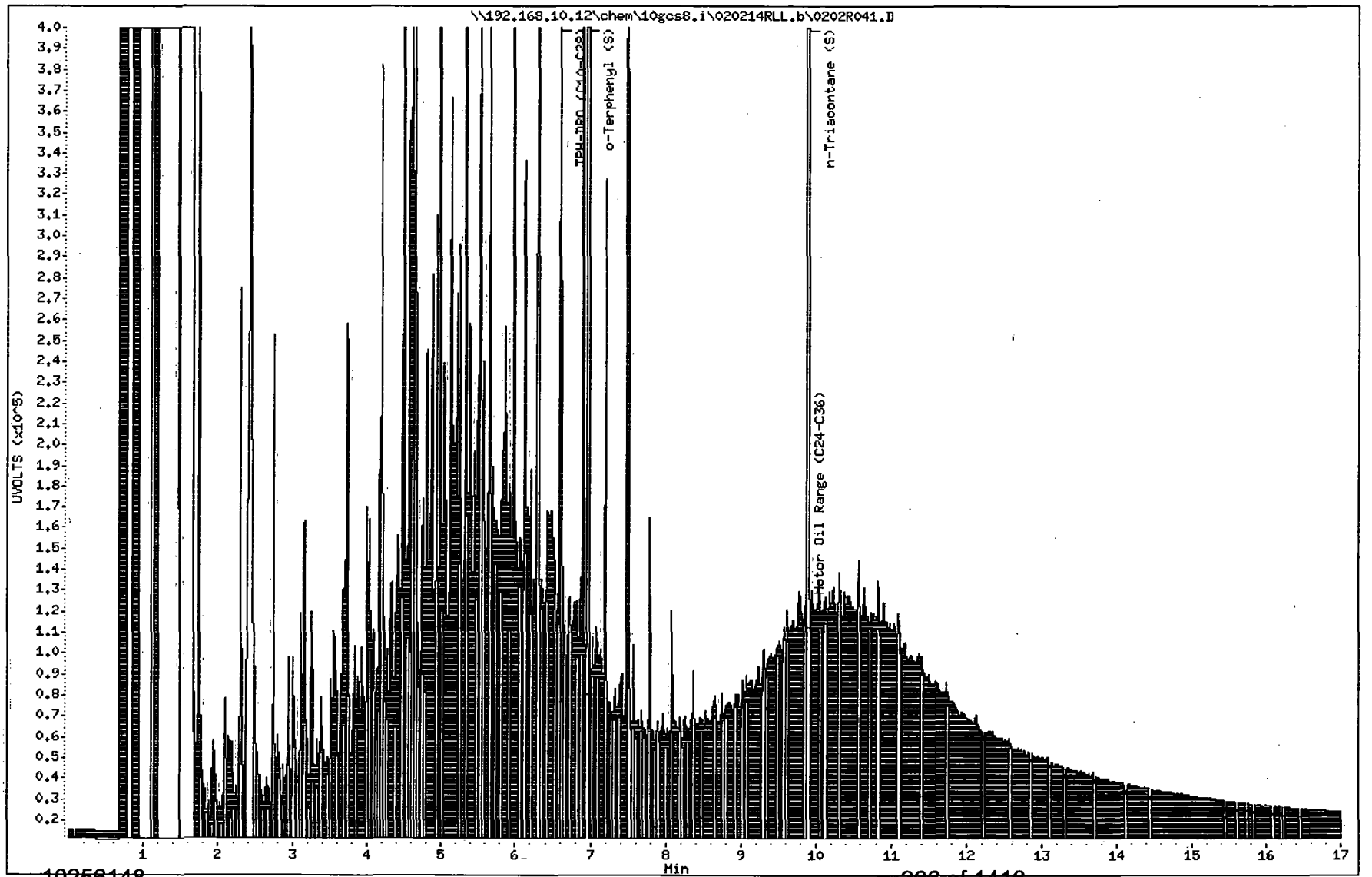
Instrument: 10gcs8.i

Sample Info: D\M07 10328-107

Operator: JRH

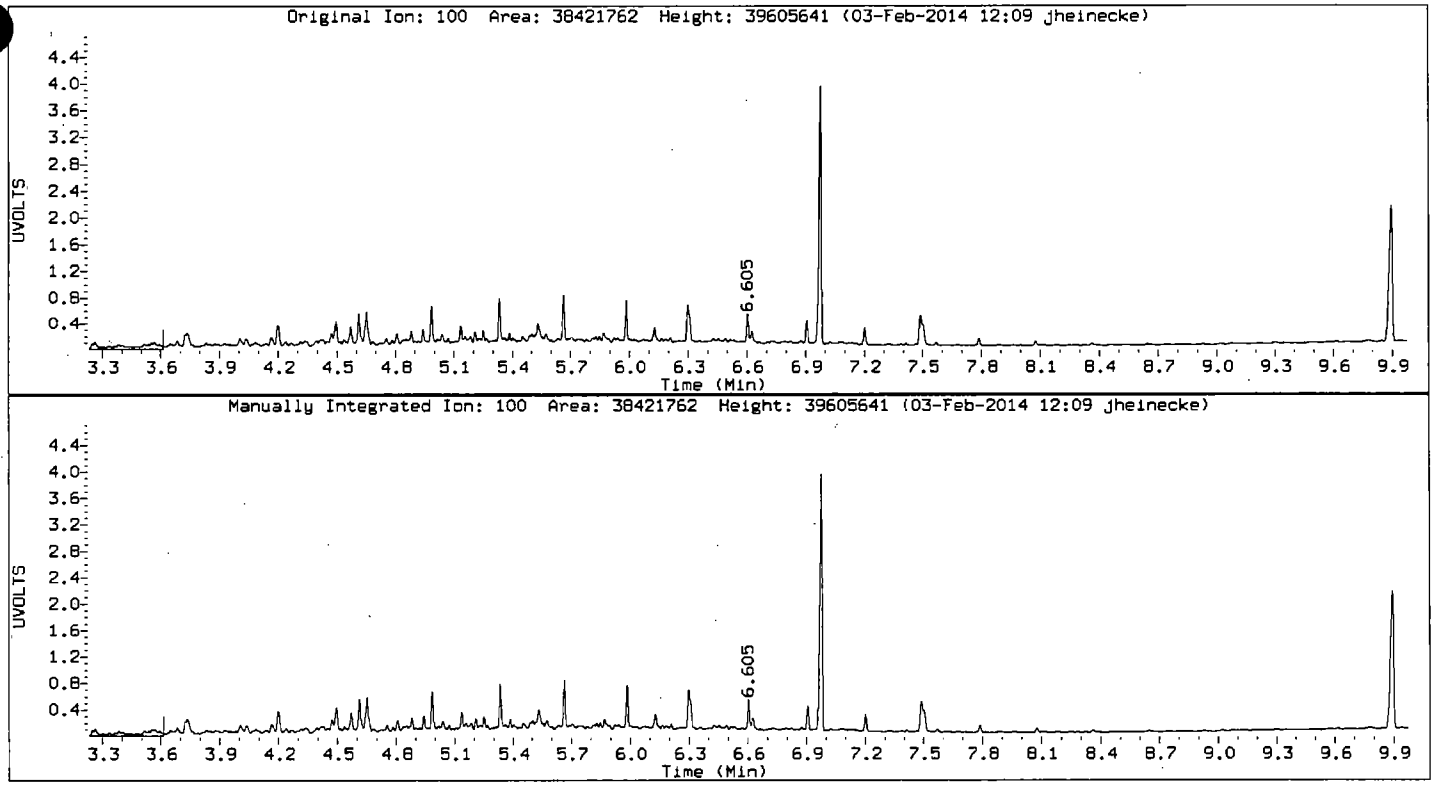
Column phase: DB-5MS

Column diameter: 0.25



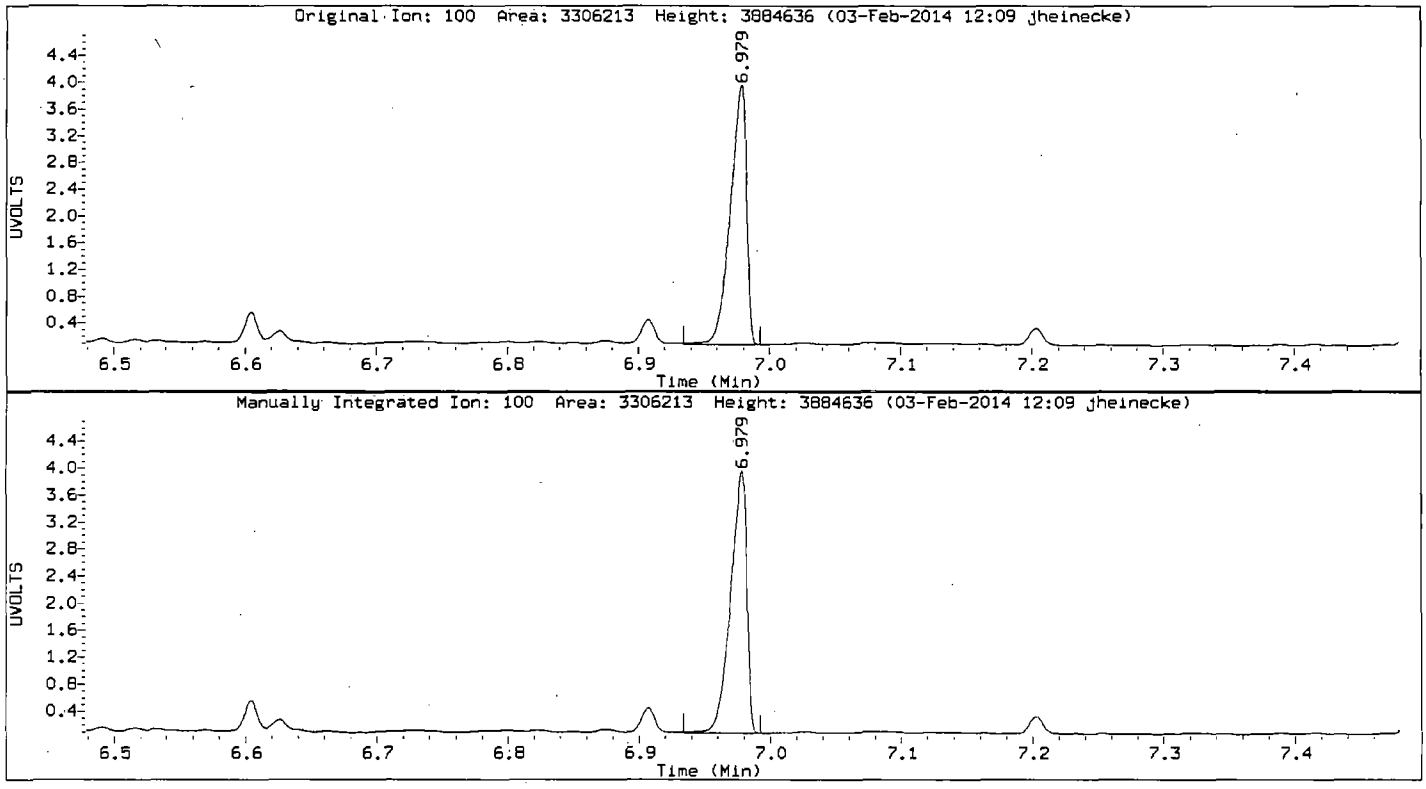
Data File: \\192.168.10.12\Chem\10gcs8.i\020214RBB.b\0202R041.d
Injection Date: 03-FEB-2014 04:32
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: TPH-DRO (C10-C28)
CAS Number:



Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.B\0202R041.d
Injection Date: 03-FEB-2014 04:32
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: o-Terphenyl (S)
CAS Number:



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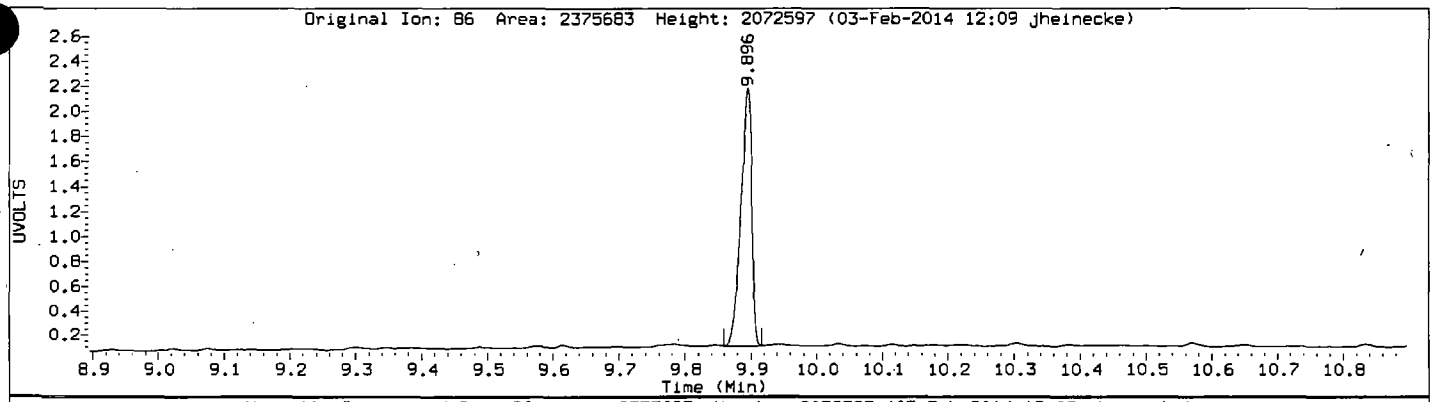
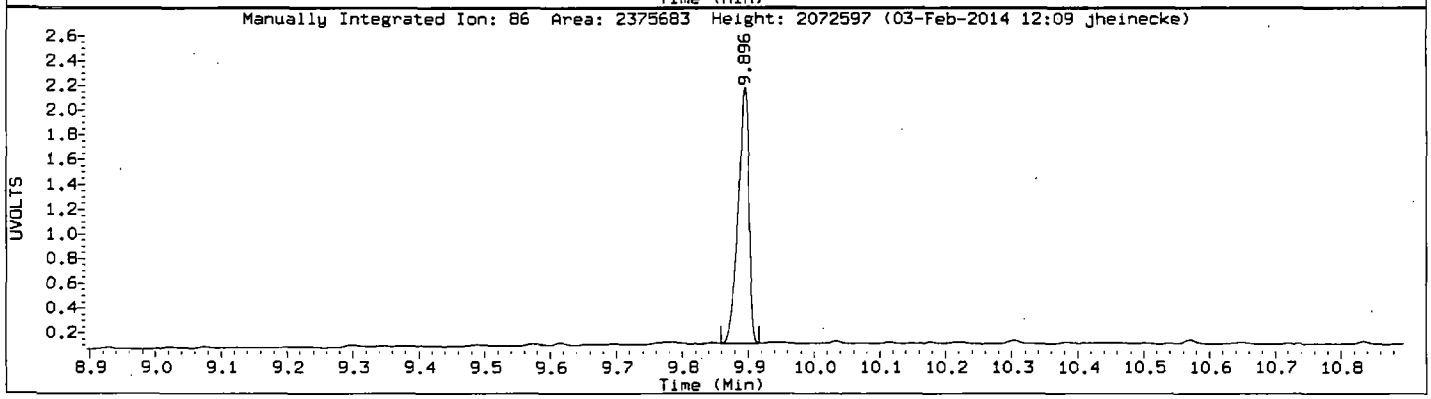
Injection Date: 03-FEB-2014 04:32
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: n-Triacontane (S)
CAS Number:





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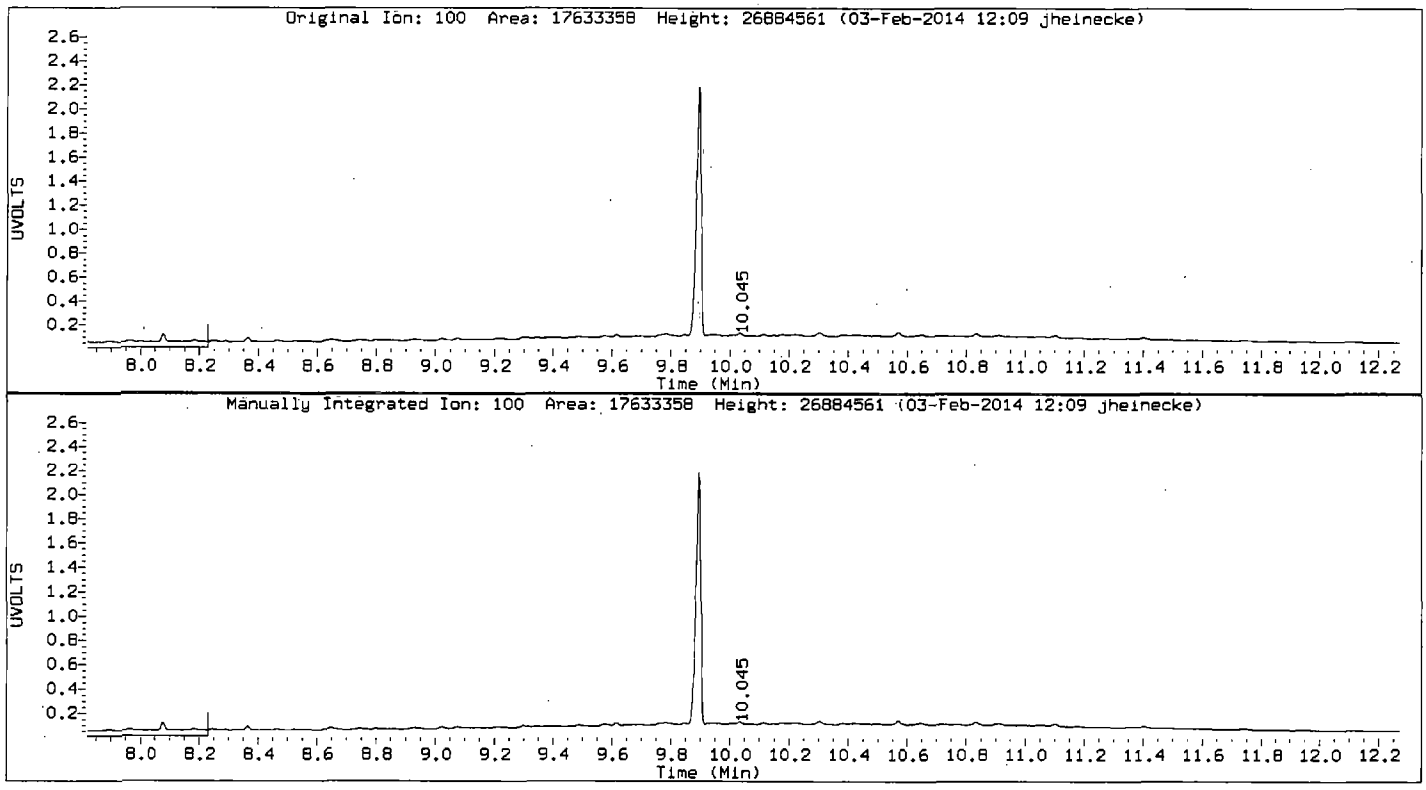
Injection Date: 03-FEB-2014 04:32
Instrument: 10gcs8.i
Lab Sample ID: D\MO7 10328-107

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R016.d
Lab Smp Id: 1616437
Inj Date : 02-FEB-2014 18:52
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 1616437,MB
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
S	2 o-Terphenyl (S)	6.981	6.979	0.002	3031954	48.7975	4.88(M)
S	3 n-Triacontane (S)	9.865	9.895	-0.030	2061027	46.6501	4.66(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			4238021	20.4762	2.05(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			3128545	75.6809	7.57(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R016.D

Date : 02-FEB-2014 18:52

Client ID:

Sample Info: 1616437,MB

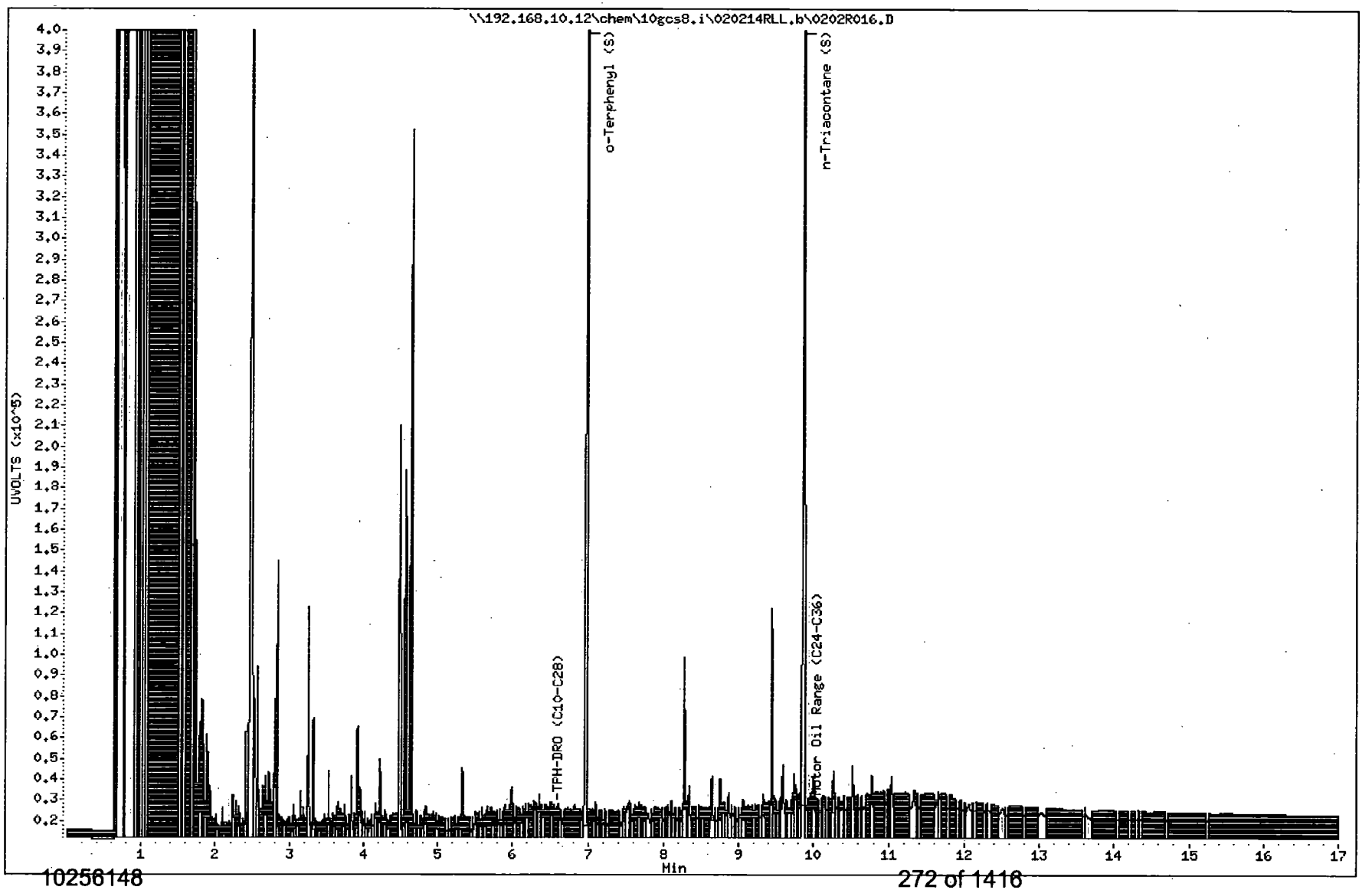
Volume Injected (uL): 1.0

Column phase: DB-5MS

Instrument: 10gcs8.i

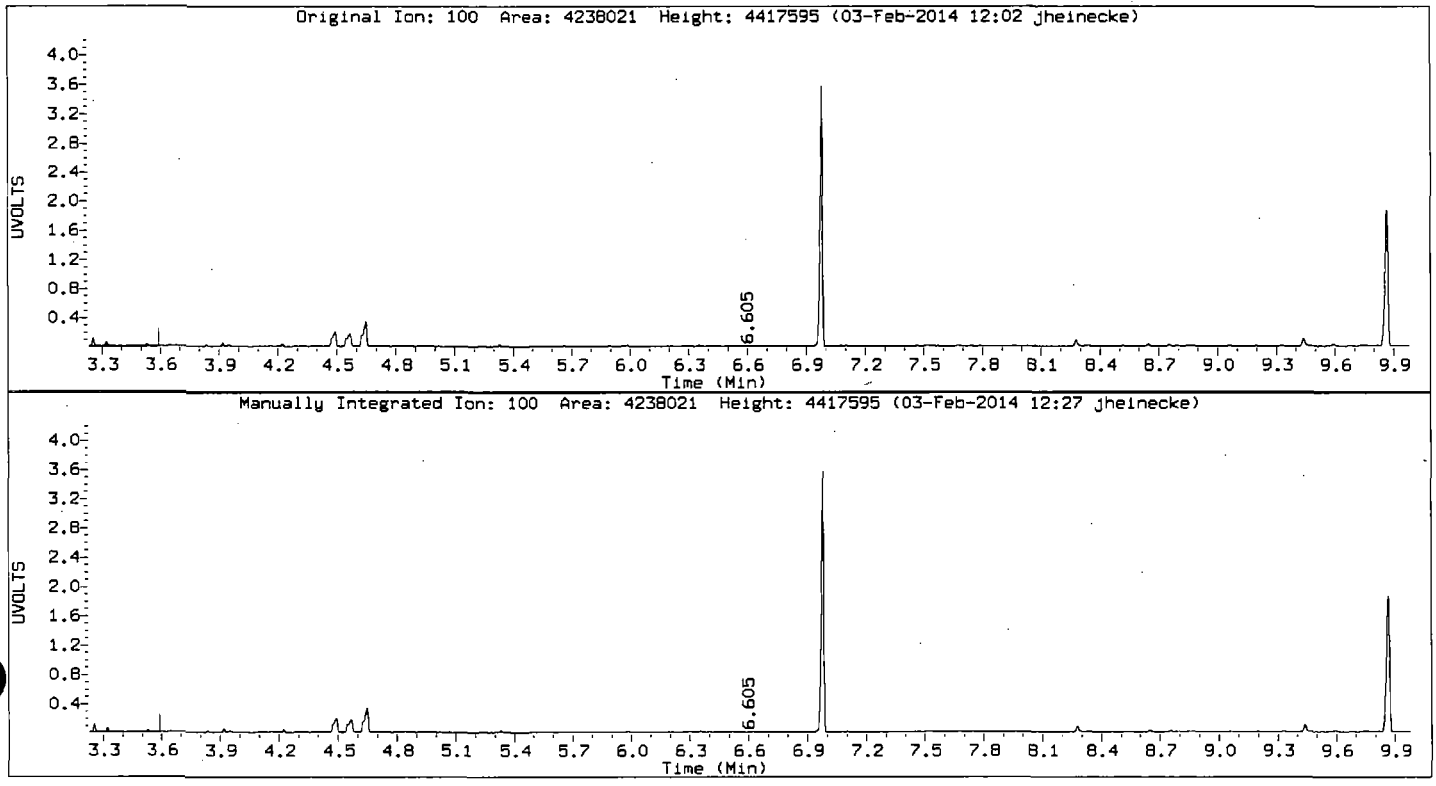
Operator: JRH

Column diameter: 0.25



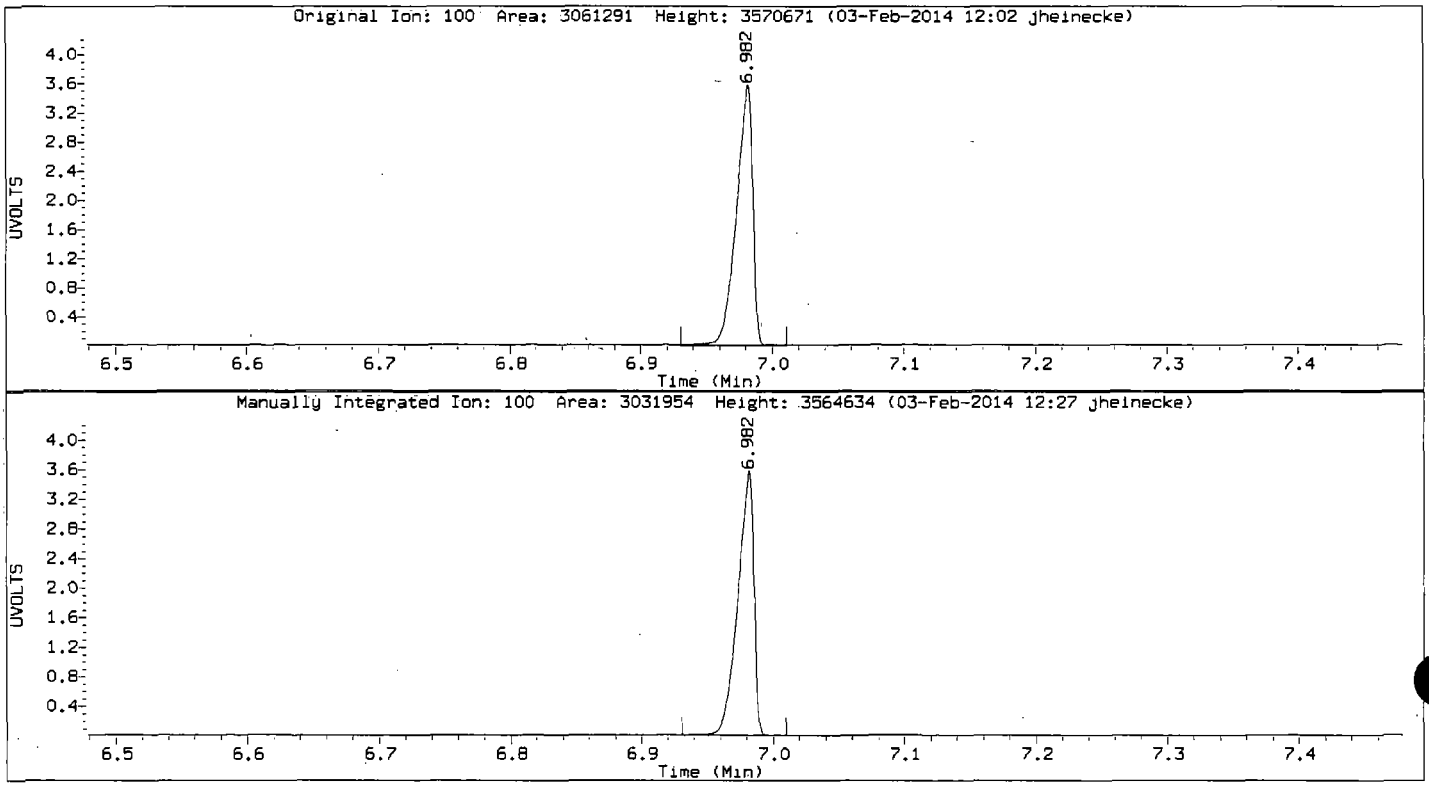
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R016.d
Injection Date: 02-FEB-2014 18:52
Instrument: 10gcs8.i
Lab Sample ID: 1616437

Compound: TPH-DRO (C10-C28)
CAS Number:



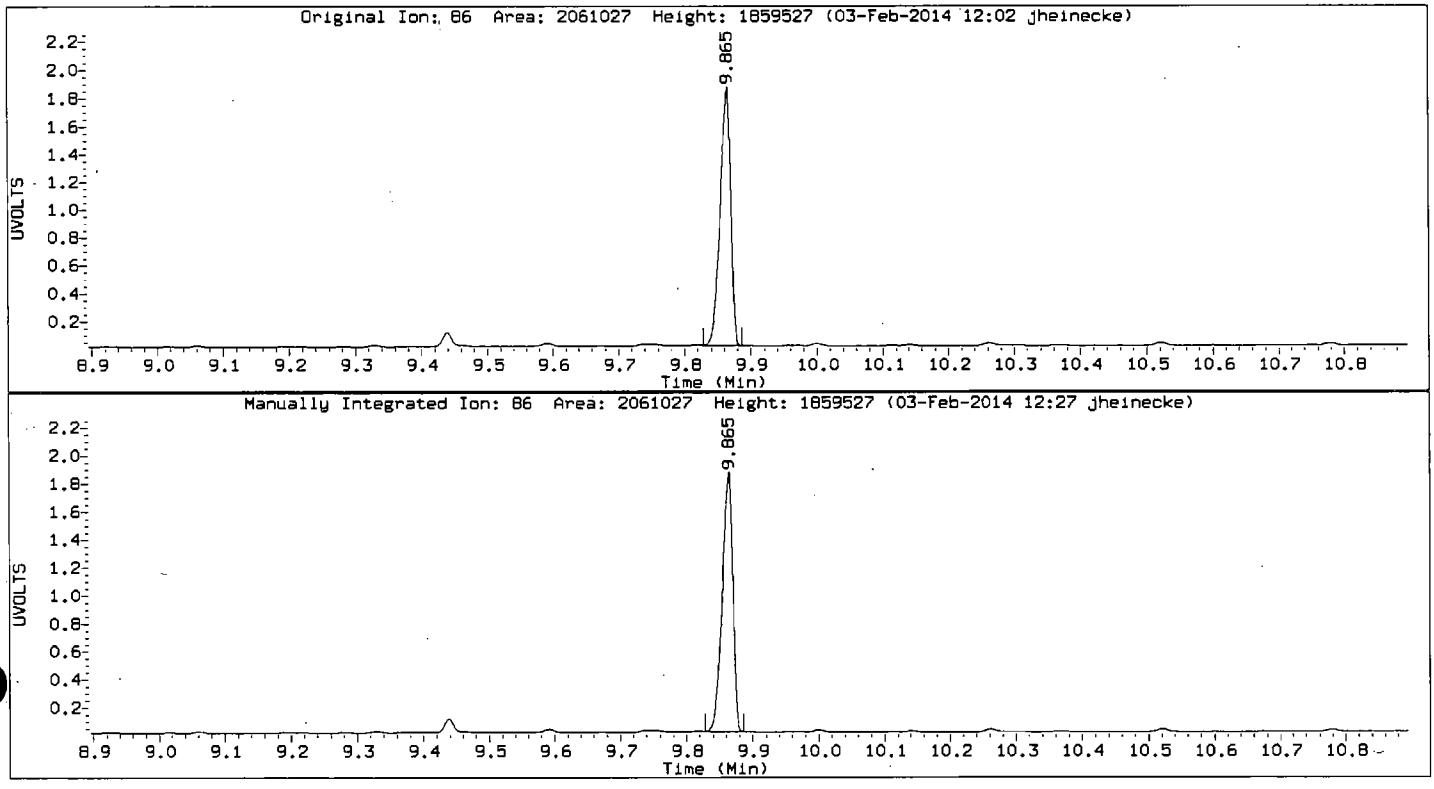
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R016.d
Injection Date: 02-FEB-2014 18:52
Instrument: 10gcs8.i
Lab Sample ID: 1616437

Compound: o-Terphenyl (S)
CAS Number:



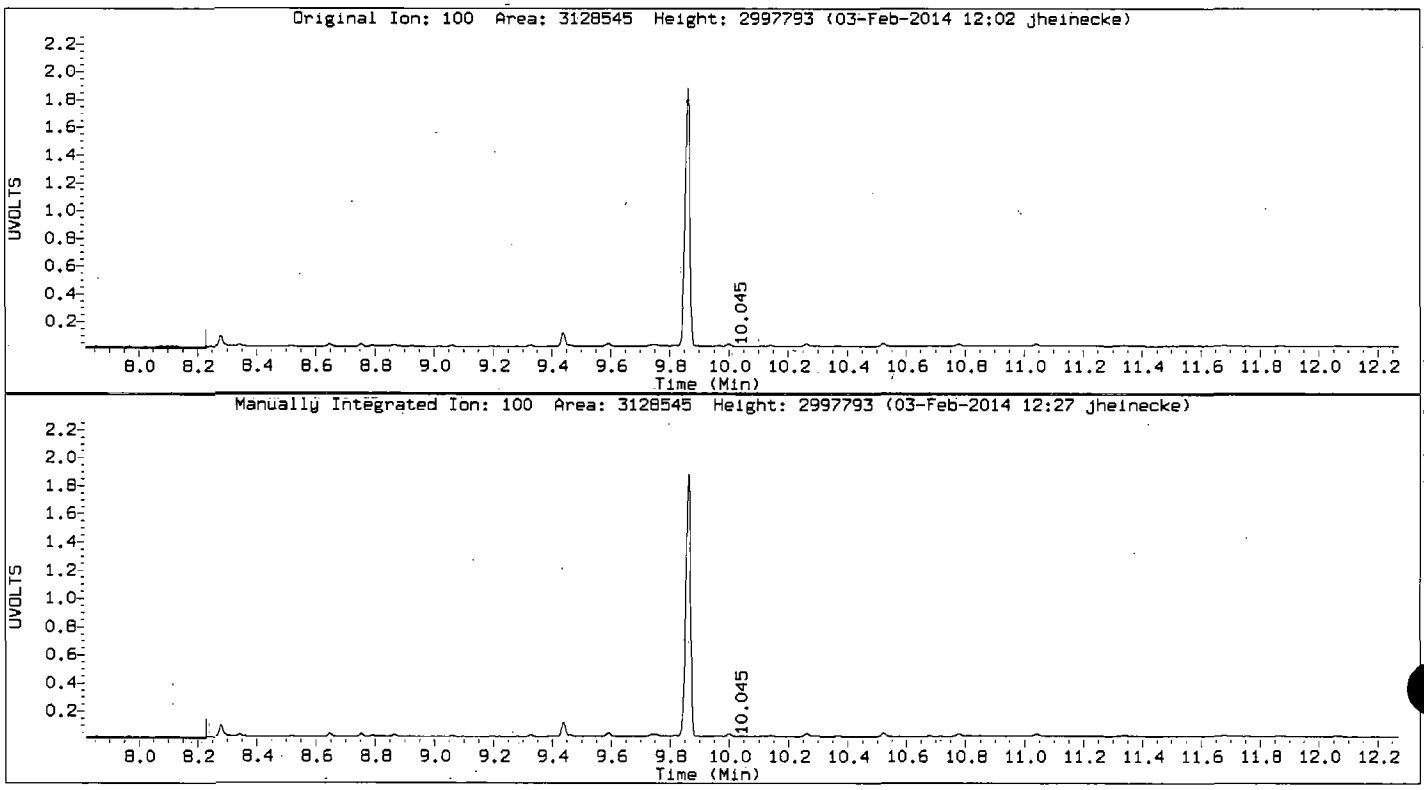
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R016.d
Injection Date: 02-FEB-2014 18:52
Instrument: 10gcs8.i
Lab Sample ID: 1616437

Compound: n-Triacontane (S)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R016.d
Injection Date: 02-FEB-2014 18:52
Instrument: 10gcs8.i
Lab Sample ID: 1616437

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R019.d
Lab Smp Id: 1616439
Inj Date : 02-FEB-2014 20:01
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 1616439,MS
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.989	6.979	0.010	2950820	47.4931	4.75(M)
$	3 n-Triacontane (S)	9.920	9.895	0.025	2015228	45.6274	4.56(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			33024308	467.388	46.7(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			18356836	537.913	53.8(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R019.D

Date : 02-FEB-2014 20:01

Client ID:

Instrument: 10gcs8.i

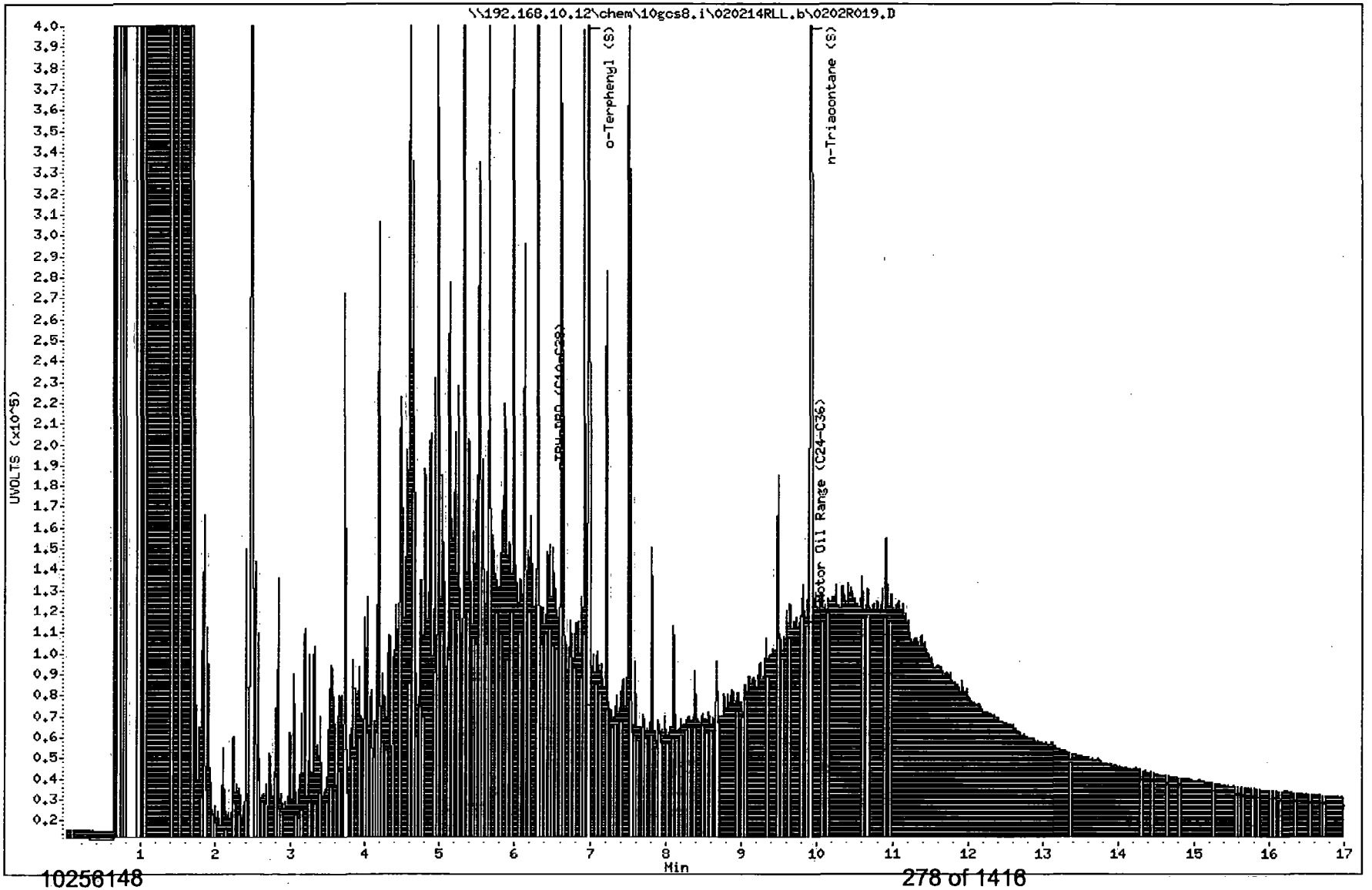
Sample Info: 1616439,MS

Volume Injected (uL): 1.0

Operator: JRH

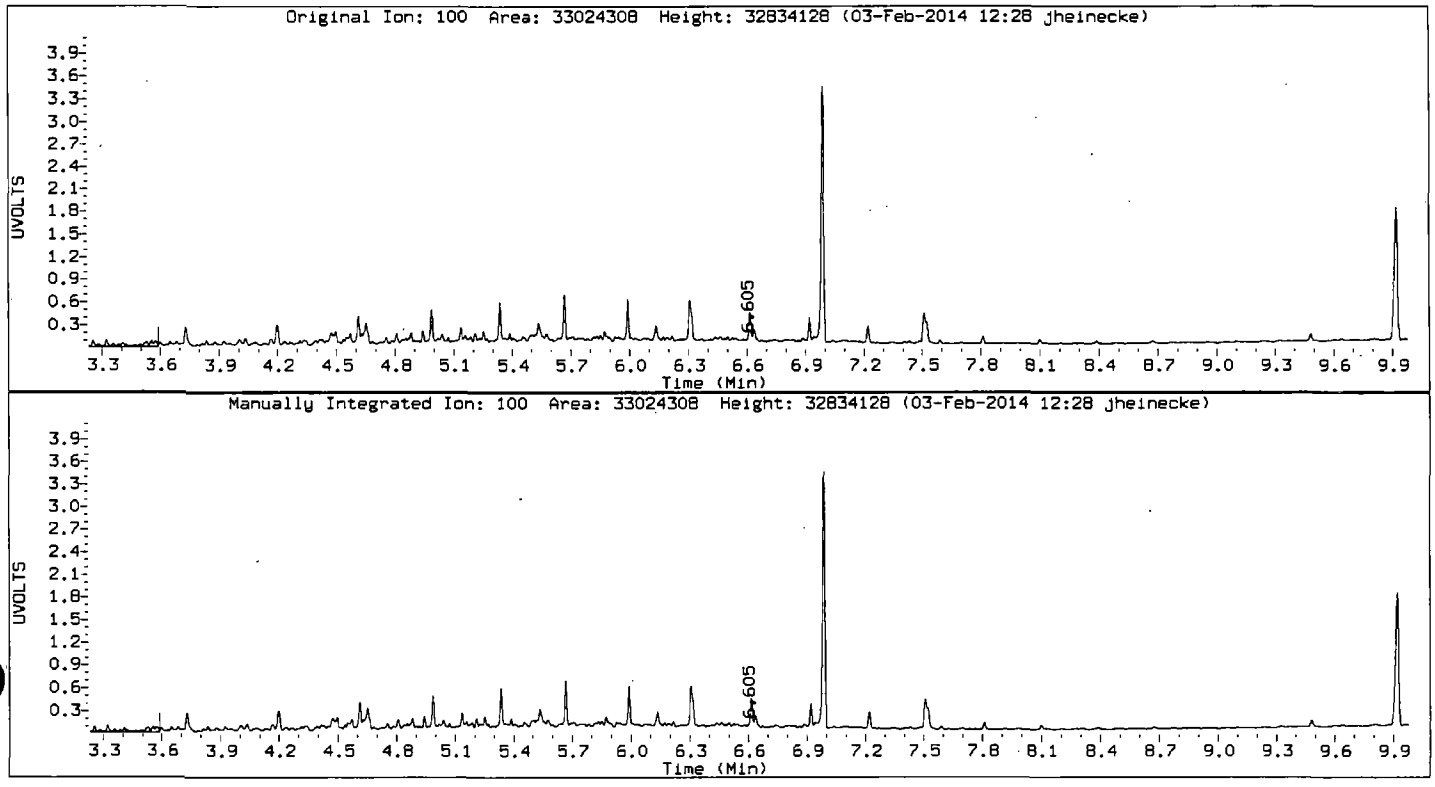
Column phase: DB-5MS

Column diameter: 0.25



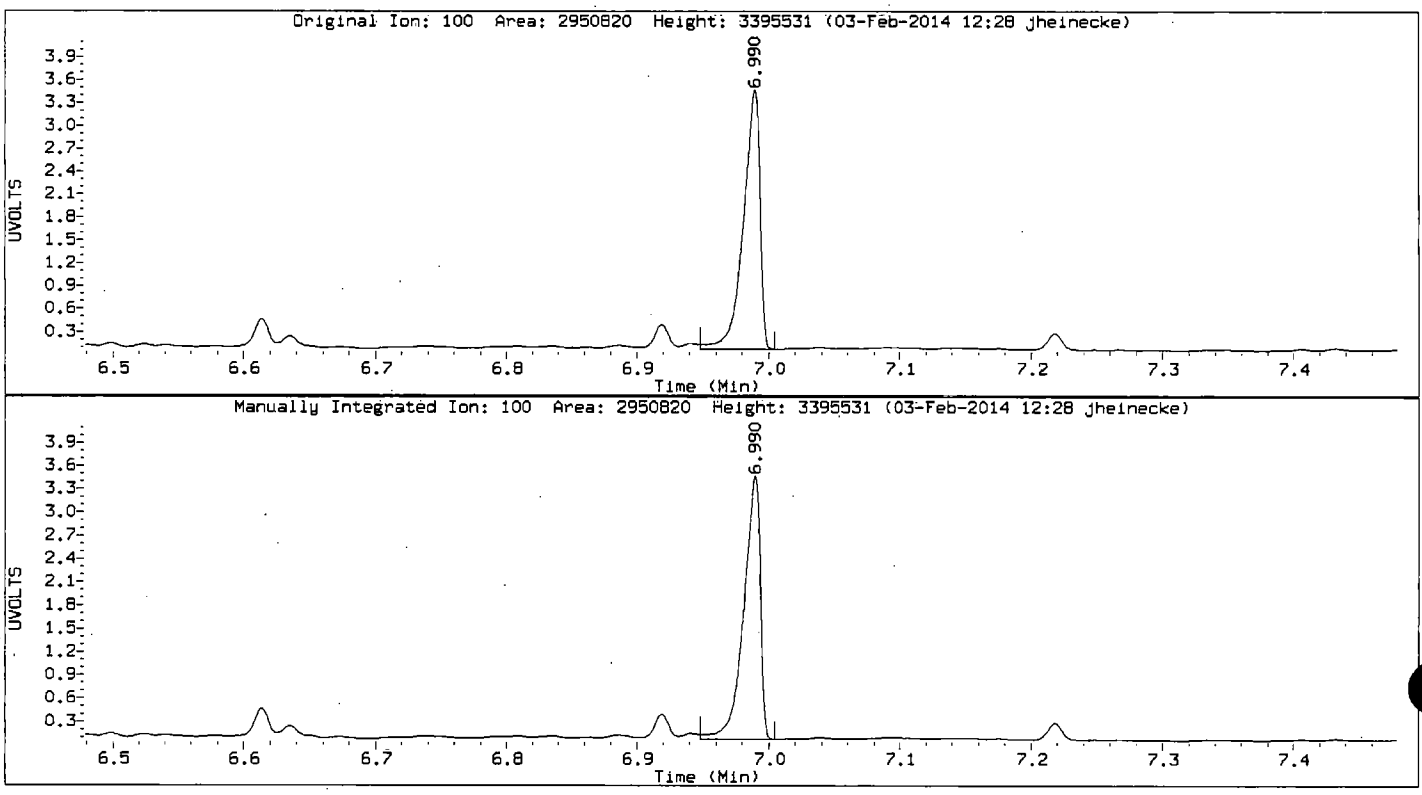
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R019.d
Injection Date: 02-FEB-2014 20:01
Instrument: 10gcs8.i
Lab Sample ID: 1616439

Compound: TPH-DRO (C10-C28)
CAS Number:



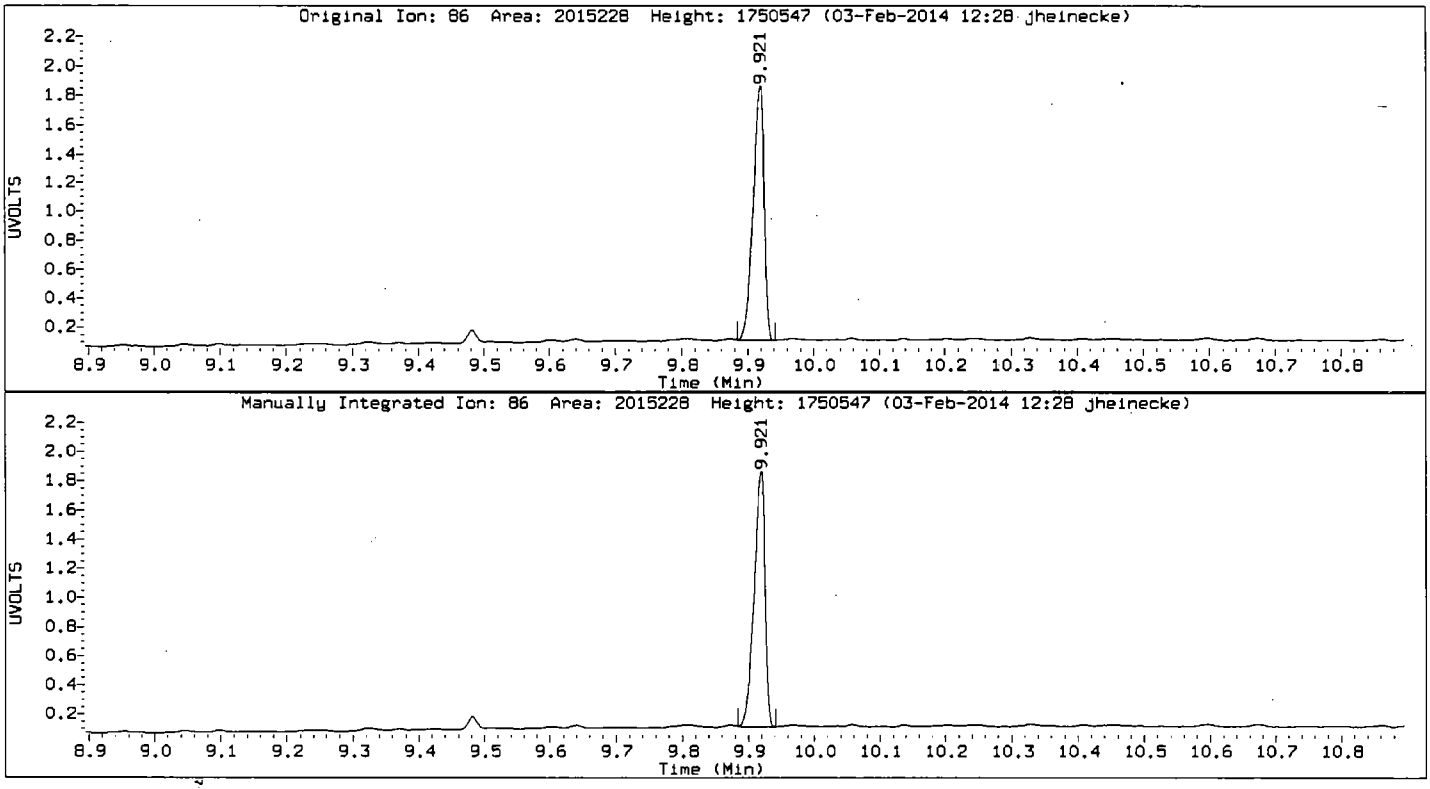
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R019.d
Injection Date: 02-FEB-2014 20:01
Instrument: 10gcs8.i
Lab Sample ID: 1616439

Compound: o-Terphenyl (S)
CAS Number:



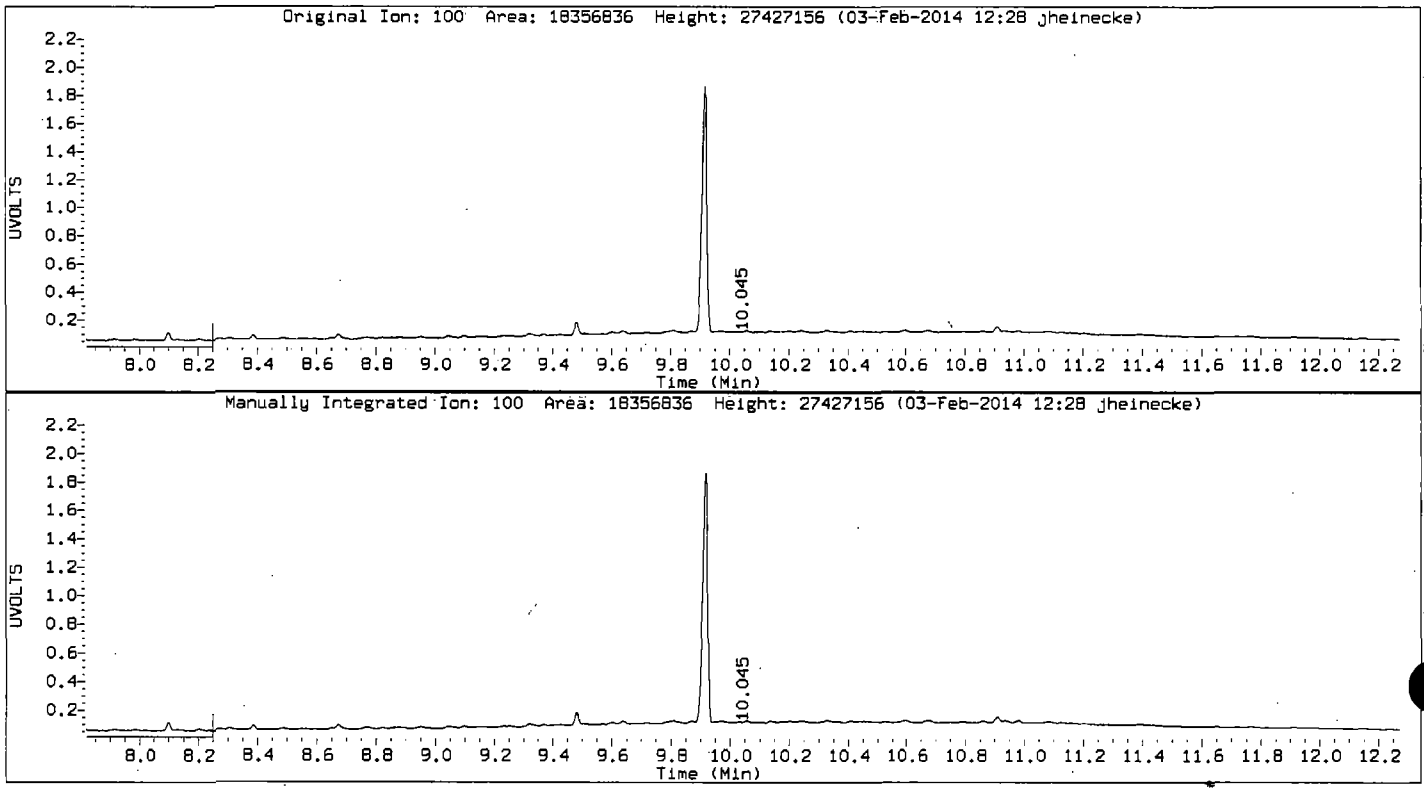
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R019.d
Injection Date: 02-FEB-2014 20:01
Instrument: 10gcs8.i
Lab Sample ID: 1616439

Compound: n-Triacontane (S)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R019.d
Injection Date: 02-FEB-2014 20:01
Instrument: 10gcs8.i
Lab Sample ID: 1616439

Compound: Motor Oil Range (C24-C36)
CAS Number:



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AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R020.d
Lab Smp Id: 1616440
Inj Date : 02-FEB-2014 20:24
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 1616440,MSD
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
S	2 o-Terphenyl (S)	7.007	6.979	0.028	3004020	48.3484	4.83(M)
S	3 n-Triacontane (S)	9.973	9.895	0.078	2007638	45.4579	4.54(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			39935760	573.396	57.3(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			29433130	874.118	87.4(RM)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R020.D

Page 1

Date : 02-FEB-2014 20:24

Client ID:

Instrument: 10gcs8.i

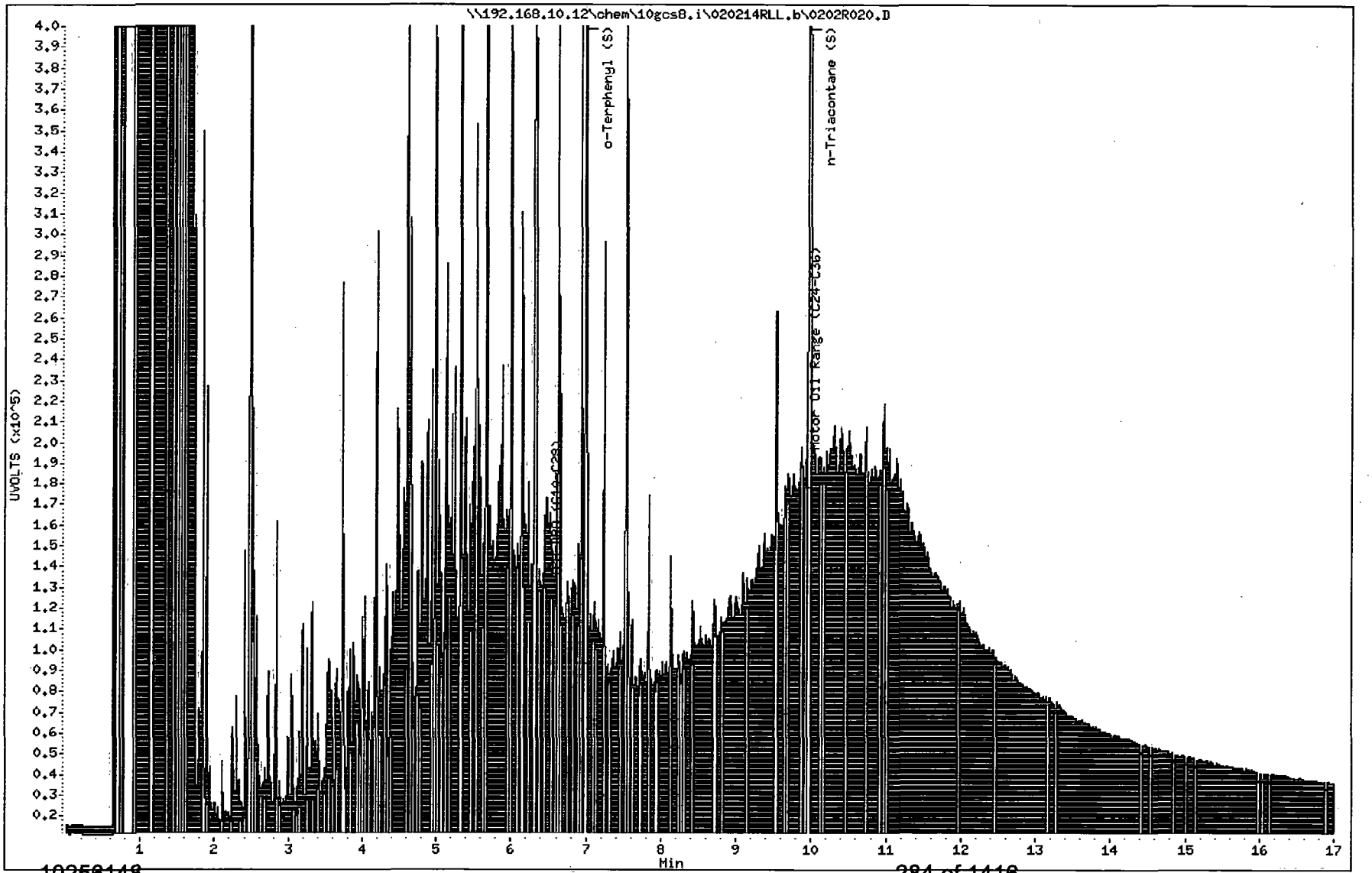
Sample Info: 1616440,MSD

Volume Injected (uL): 1.0

Operator: JRH

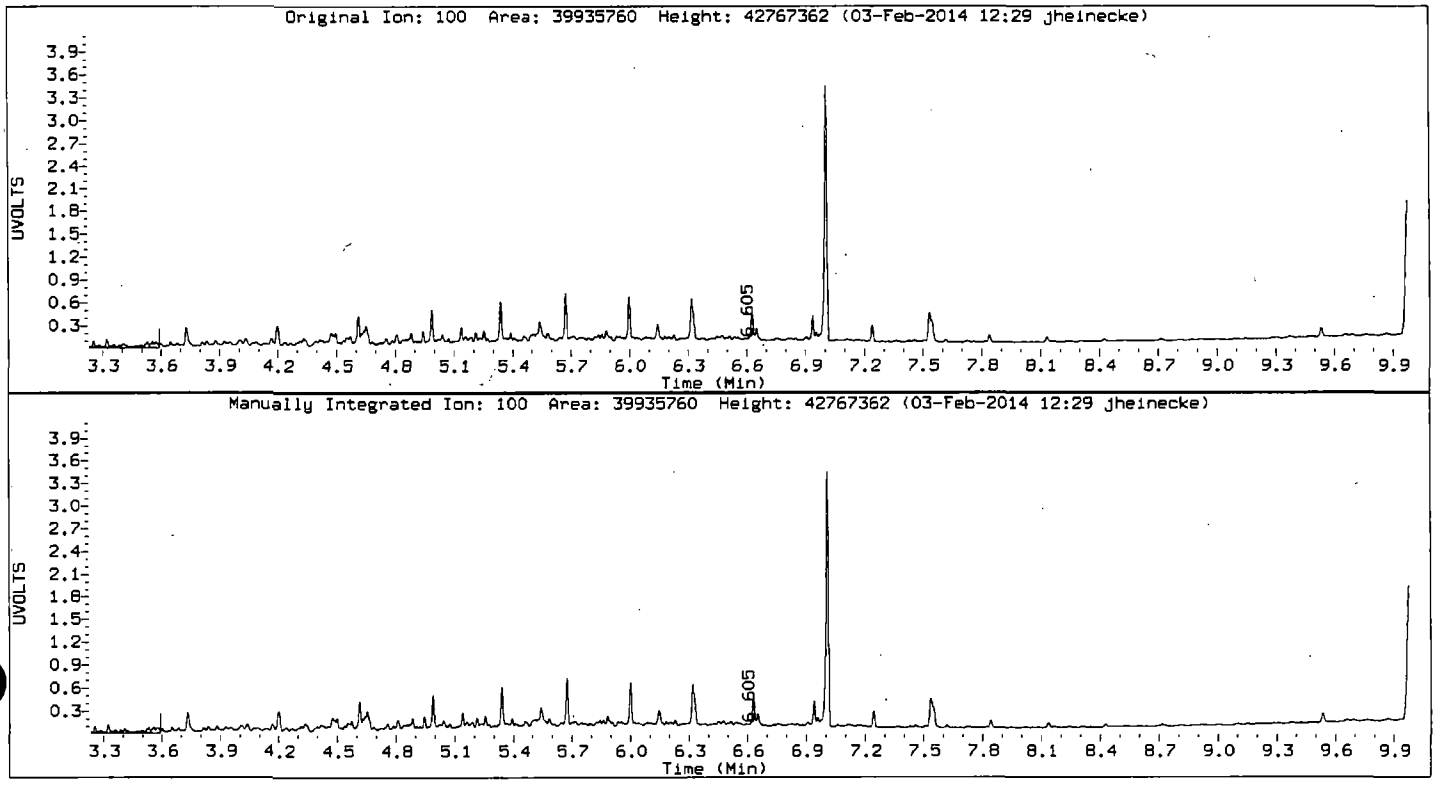
Column phase: DB-5MS

Column diameter: 0.25



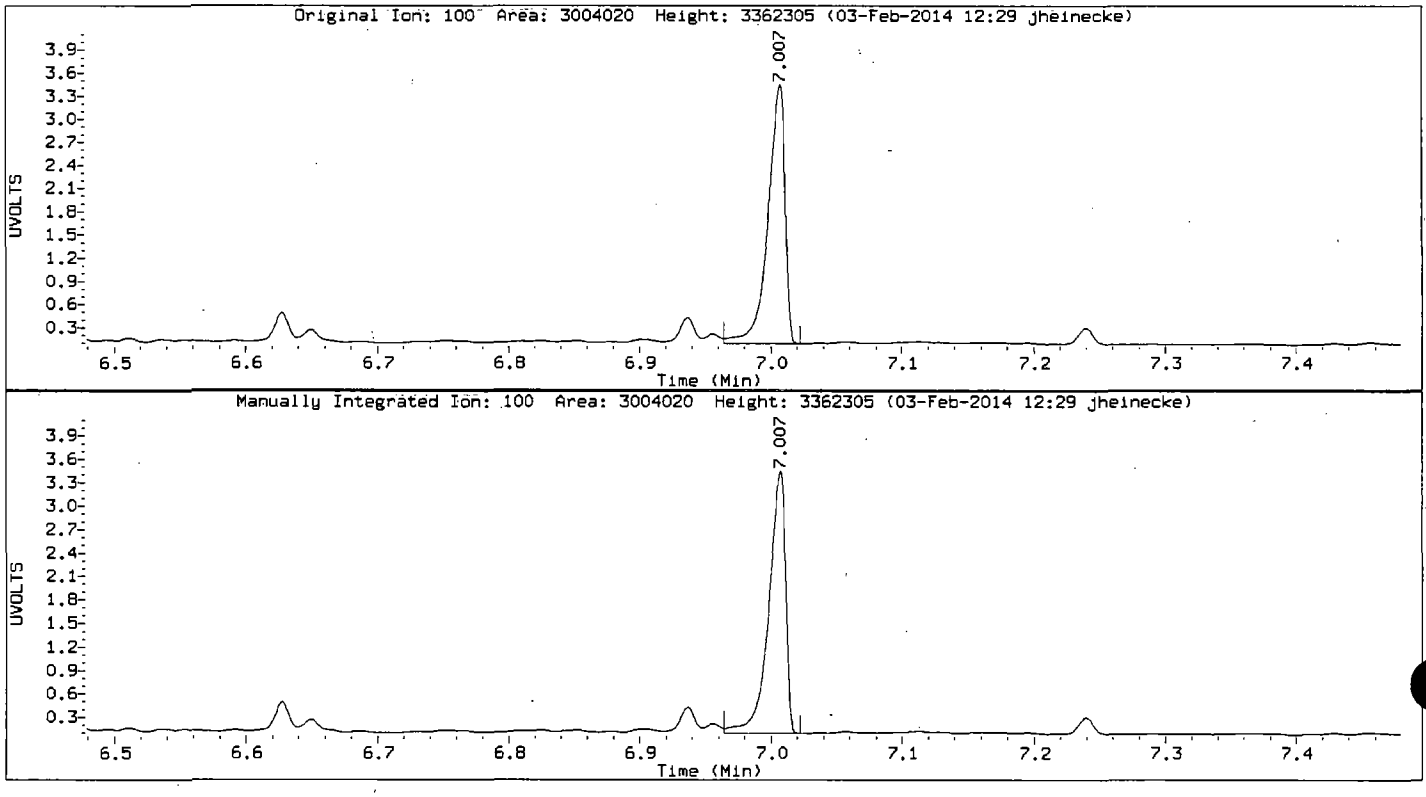
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R020.d
Injection Date: 02-FEB-2014 20:24
Instrument: 10gcs8.i
Lab Sample ID: 1616440

Compound: TPH-DRO (C10-C28)
CAS Number:



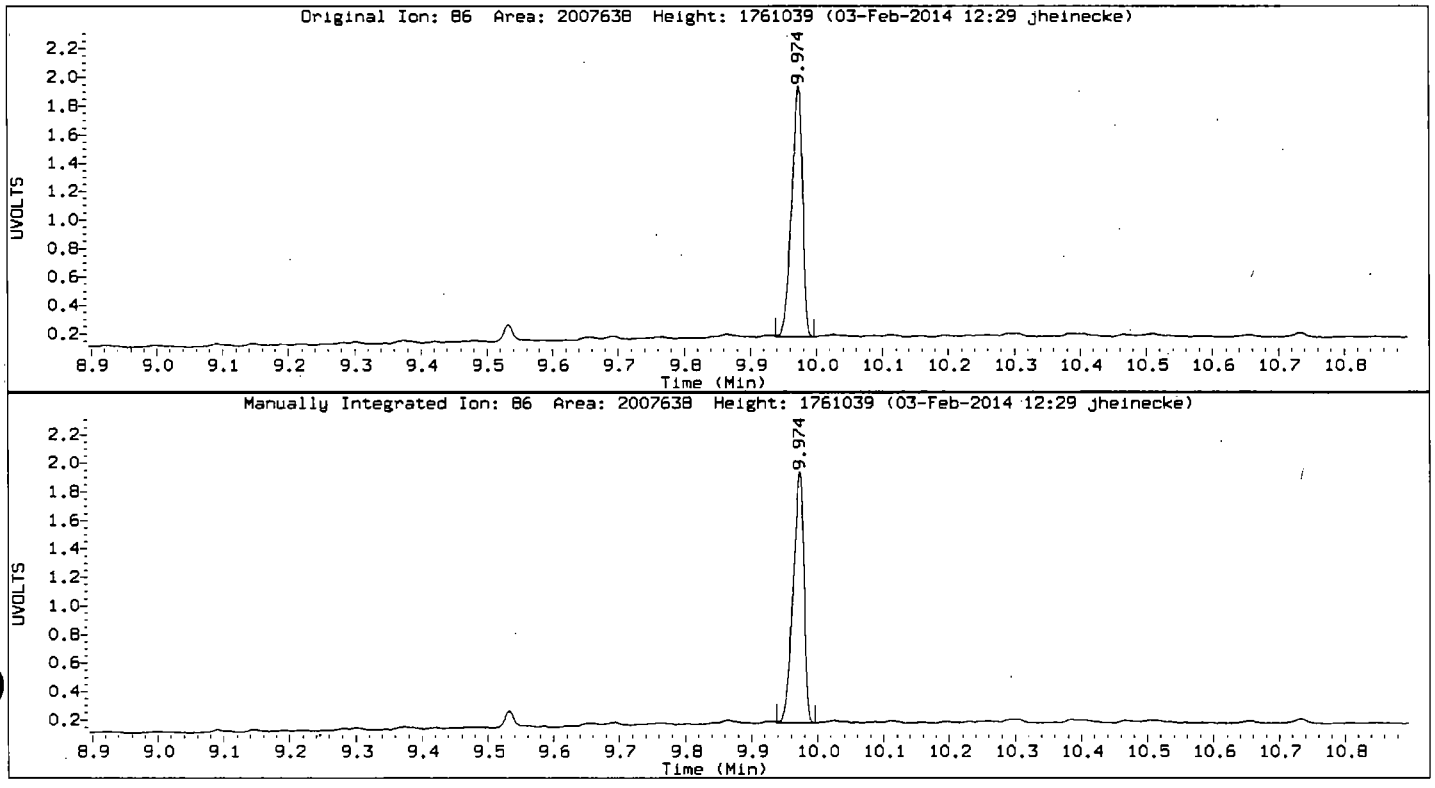
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R020.d
Injection Date: 02-FEB-2014 20:24
Instrument: 10gcs8.i
Lab Sample ID: 1616440

Compound: o-Terphenyl (S)
CAS Number:



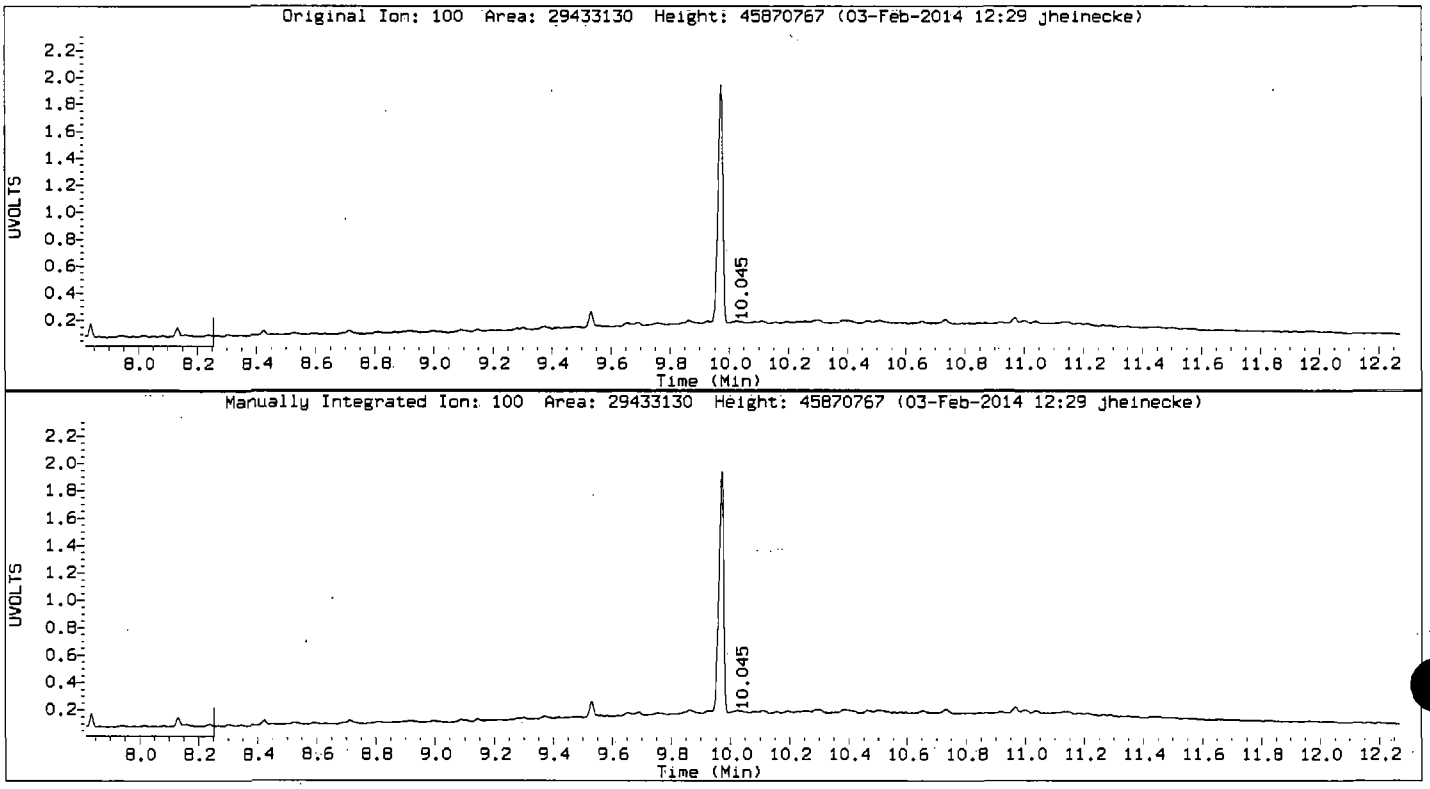
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R020.d
Injection Date: 02-FEB-2014 20:24
Instrument: 10gcs8.i
Lab Sample ID: 1616440

Compound: n-Triacontane (S)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R020.d
Injection Date: 02-FEB-2014 20:24
Instrument: 10gcs8.i
Lab Sample ID: 1616440

Compound: Motor Oil Range (C24-C36)
CAS Number:



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AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R017.d
Lab Smp Id: 1616438
Inj Date : 02-FEB-2014 19:15
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 1616438,LCS
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.952	6.976	-0.024	3003208	48.3354	4.83(M)
$	3 n-Triacontane (S)	9.775	9.831	-0.056	2040698	46.1961	4.62(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			35638432	507.543	50.8(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			18258377	534.925	53.5(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R017.D

Page 1

Date : 02-FEB-2014 19:15

Client ID:

Instrument: 10gcs8.i

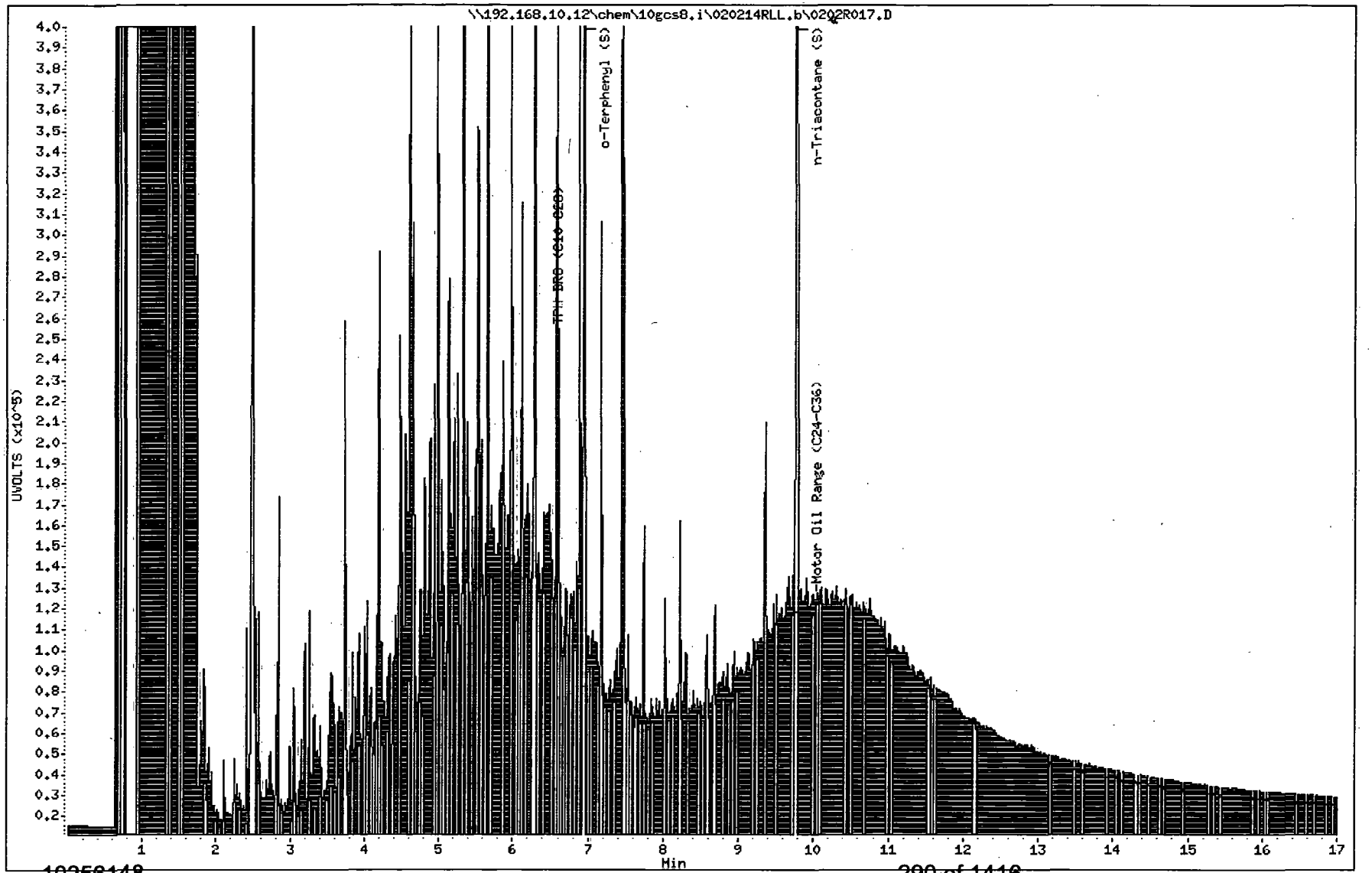
Sample Info: 1616438,LCS

Volume Injected (uL): 1.0

Operator: JRH

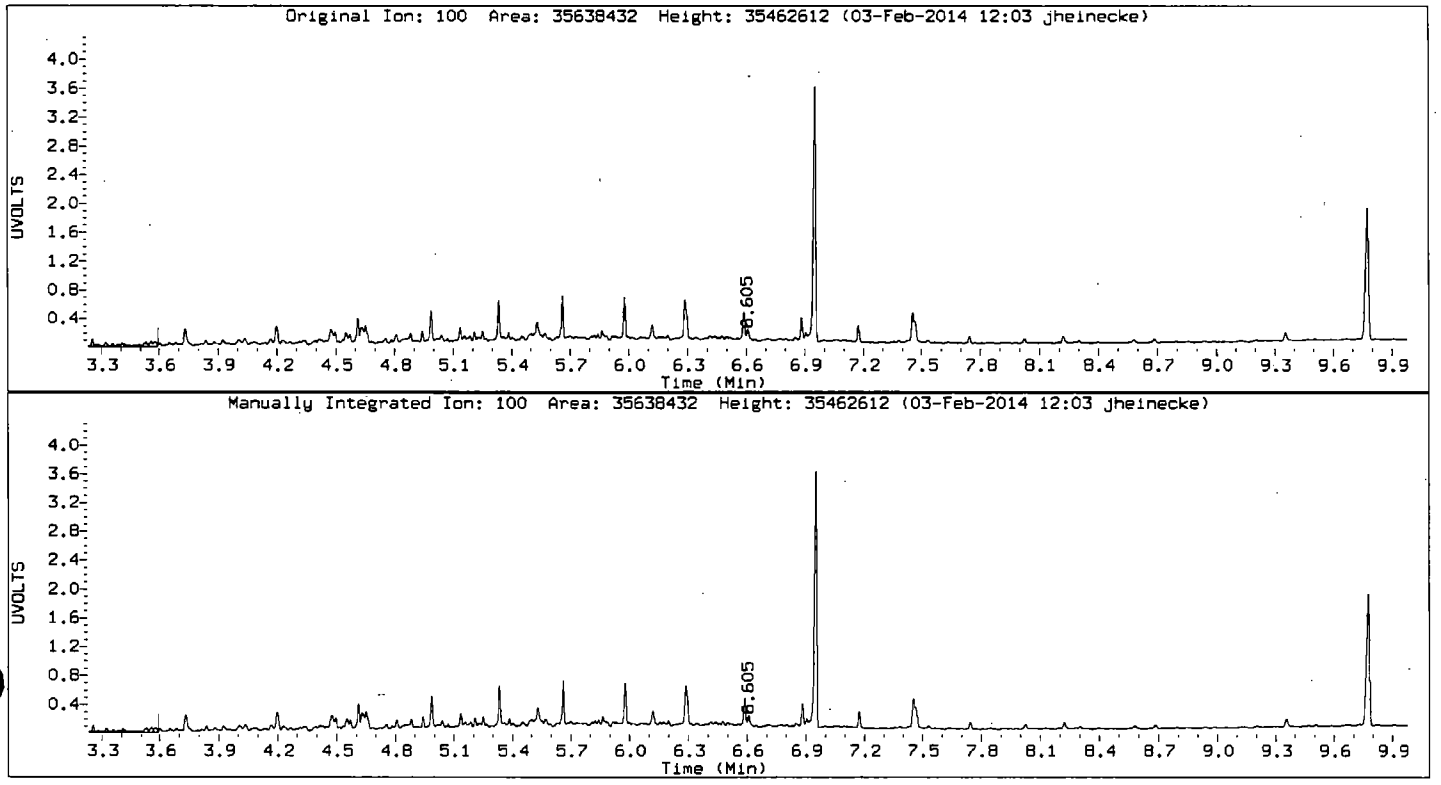
Column phase: DB-5MS

Column diameter: 0.25



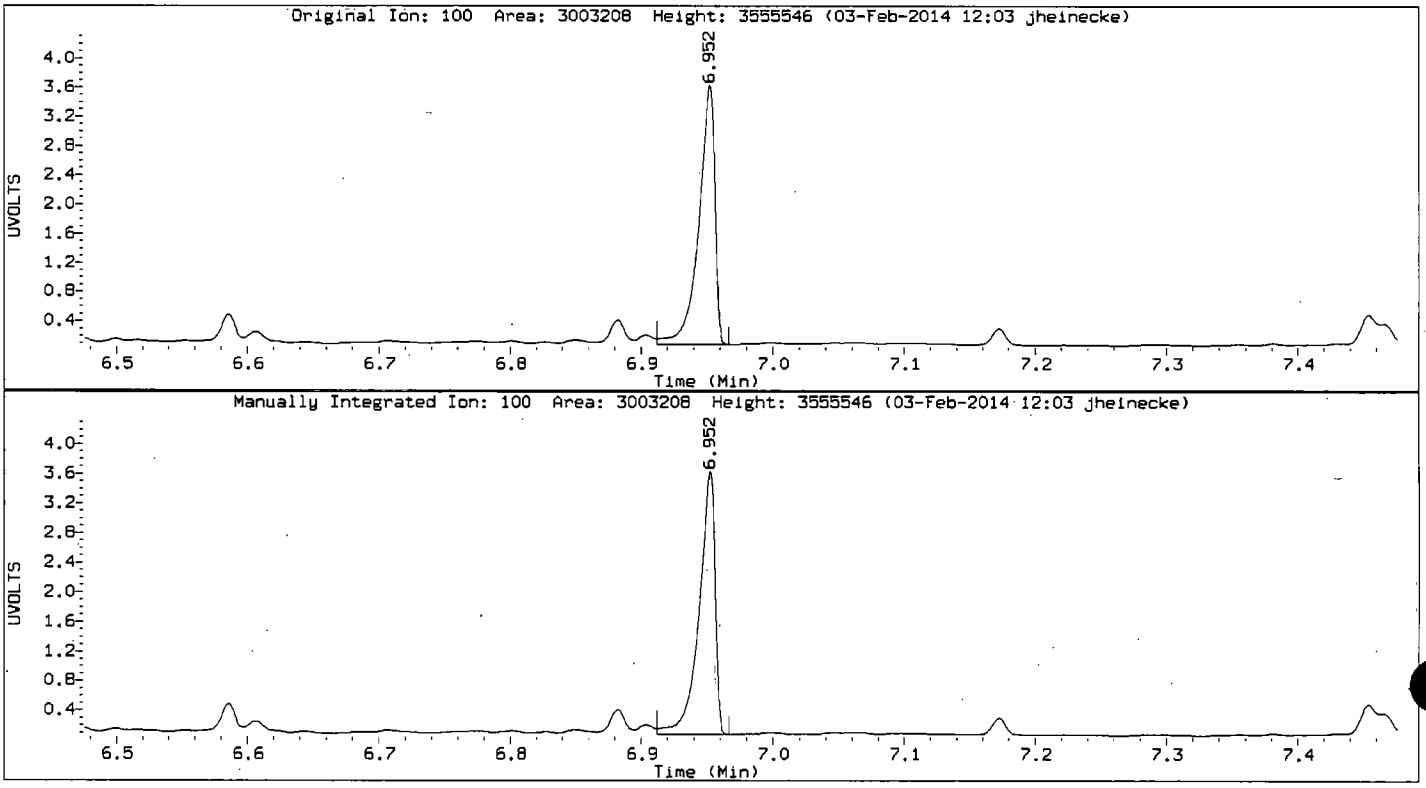
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R017.d
Injection Date: 02-FEB-2014 19:15
Instrument: 10gcs8.i
Lab Sample ID: 1616438

Compound: TPH-DRO (C10-C28)
CAS Number:



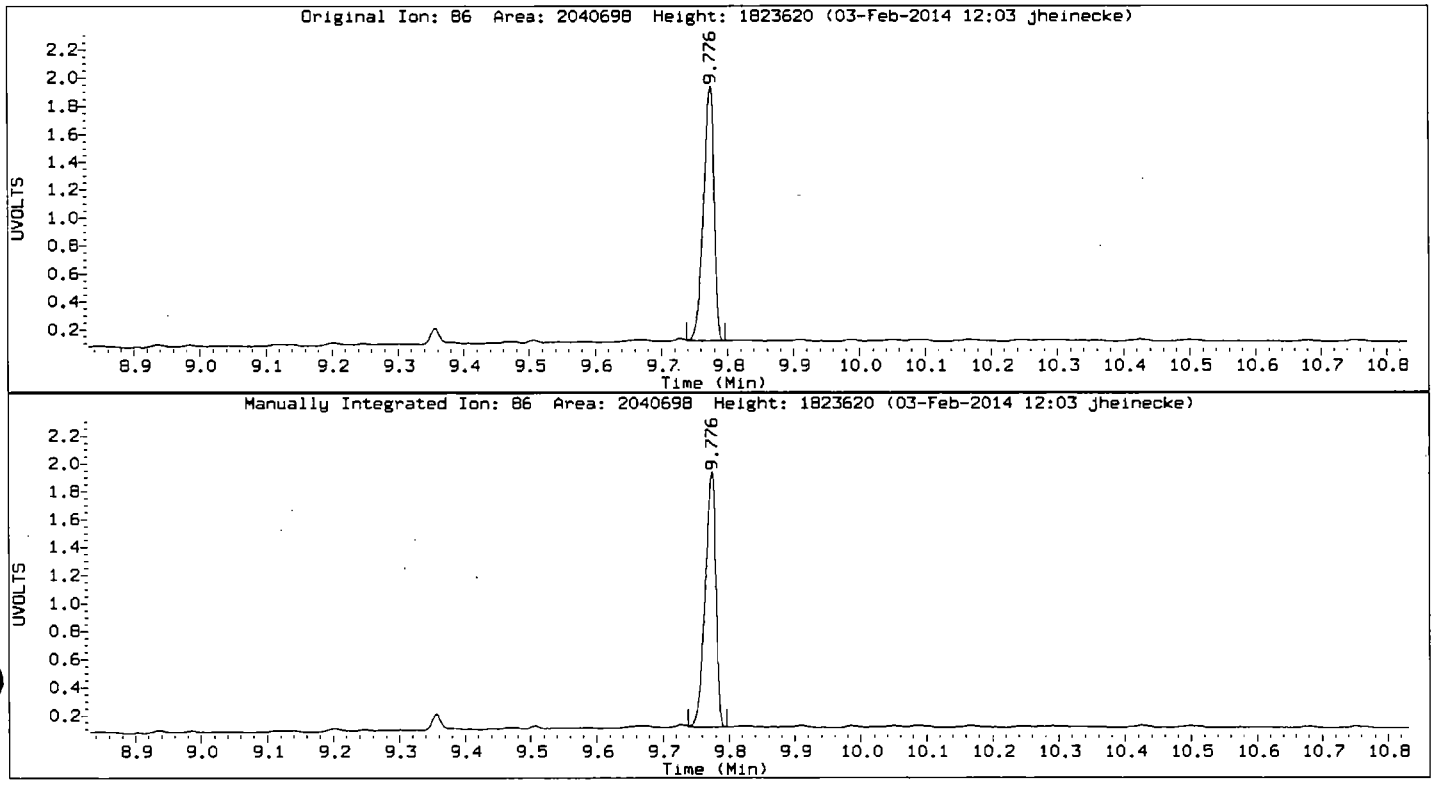
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R017.d
Injection Date: 02-FEB-2014 19:15
Instrument: 10gcs8.i
Lab Sample ID: 1616438

Compound: o-Terphenyl (S)
CAS Number:



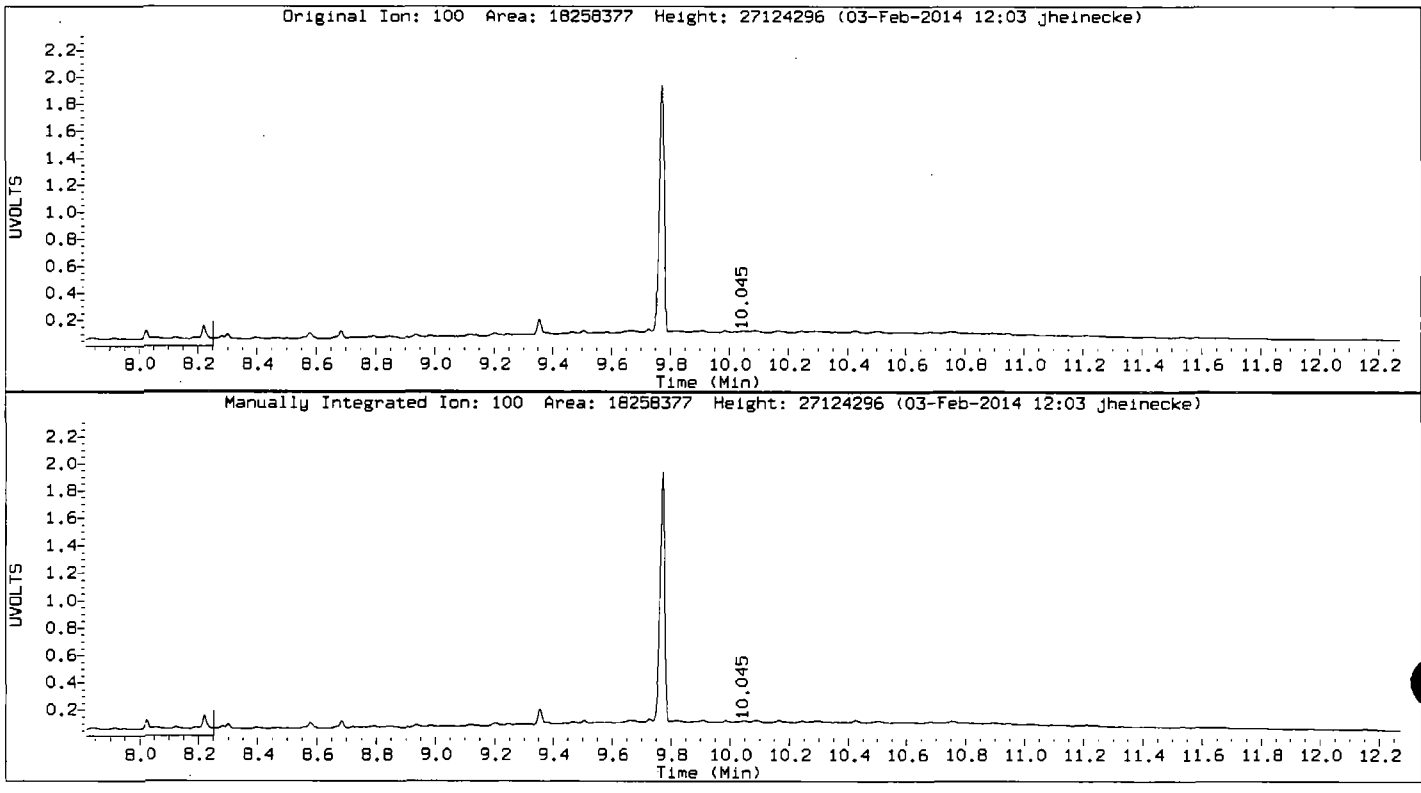
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R017.d
Injection Date: 02-FEB-2014 19:15
Instrument: 10gcs8.i
Lab Sample ID: 1616438

Compound: n-Triacontane (S)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R017.d
Injection Date: 02-FEB-2014 19:15
Instrument: 10gcs8.i
Lab Sample ID: 1616438

Compound: Motor Oil Range (C24-C36)
CAS Number:



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AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R018.d
Lab Smp Id: 10256148001
Inj Date : 02-FEB-2014 19:38
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 10256148001
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
S	2 o-Terphenyl (S)	6.992	6.979	0.013	2936918	47.2695	4.73(M)
S	3 n-Triacontane (S)	9.696	9.695	0.001	1952471	44.2261	4.42(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			12081798	143.114	14.3(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			17042281	498.012	49.8(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R018.D

Page 1

Date : 02-FEB-2014 19:38

Client ID:

Instrument: 10gcs8.i

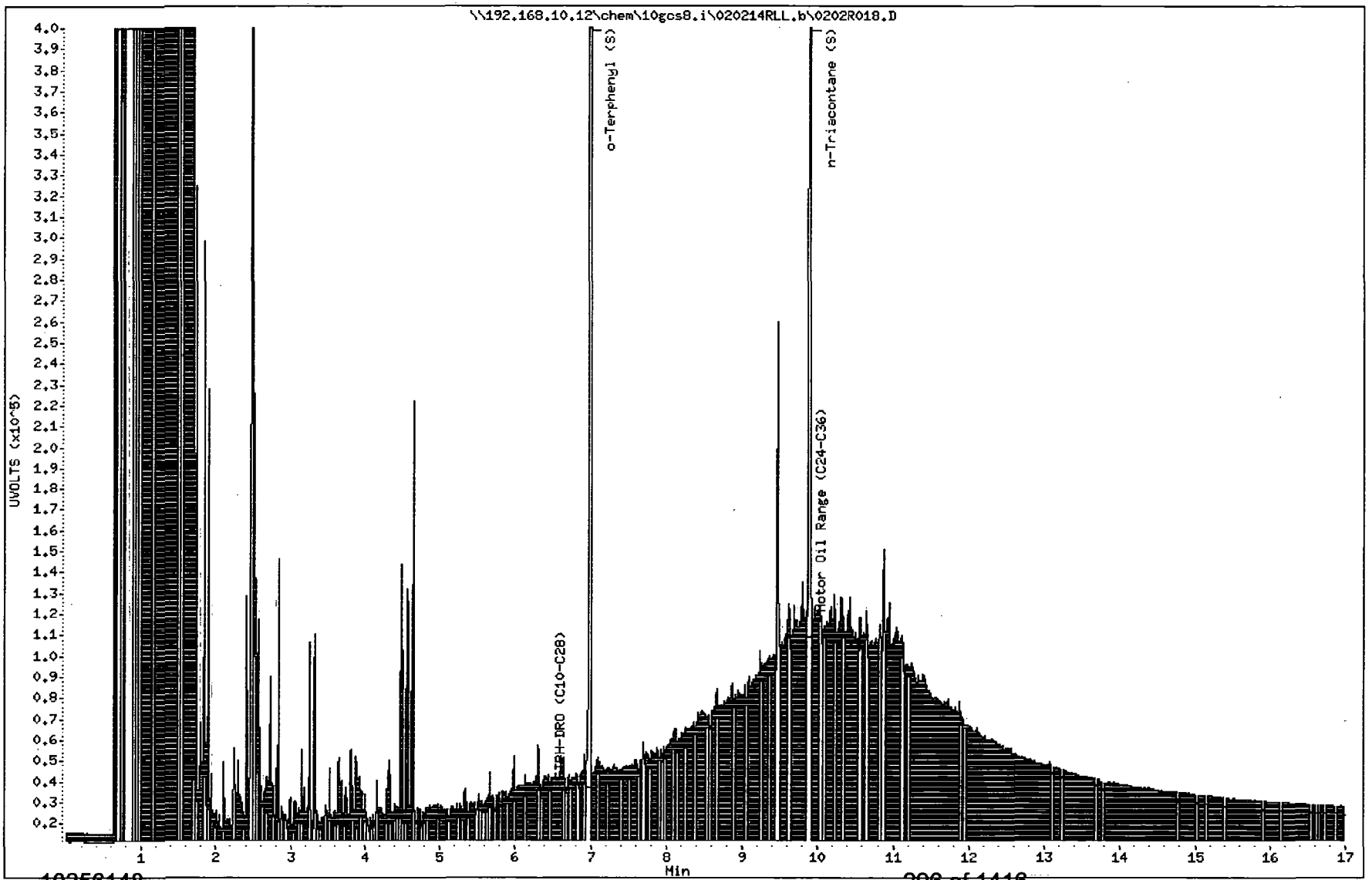
Sample Info: 10256148001

Volume Injected (uL): 1.0

Operator: JRH

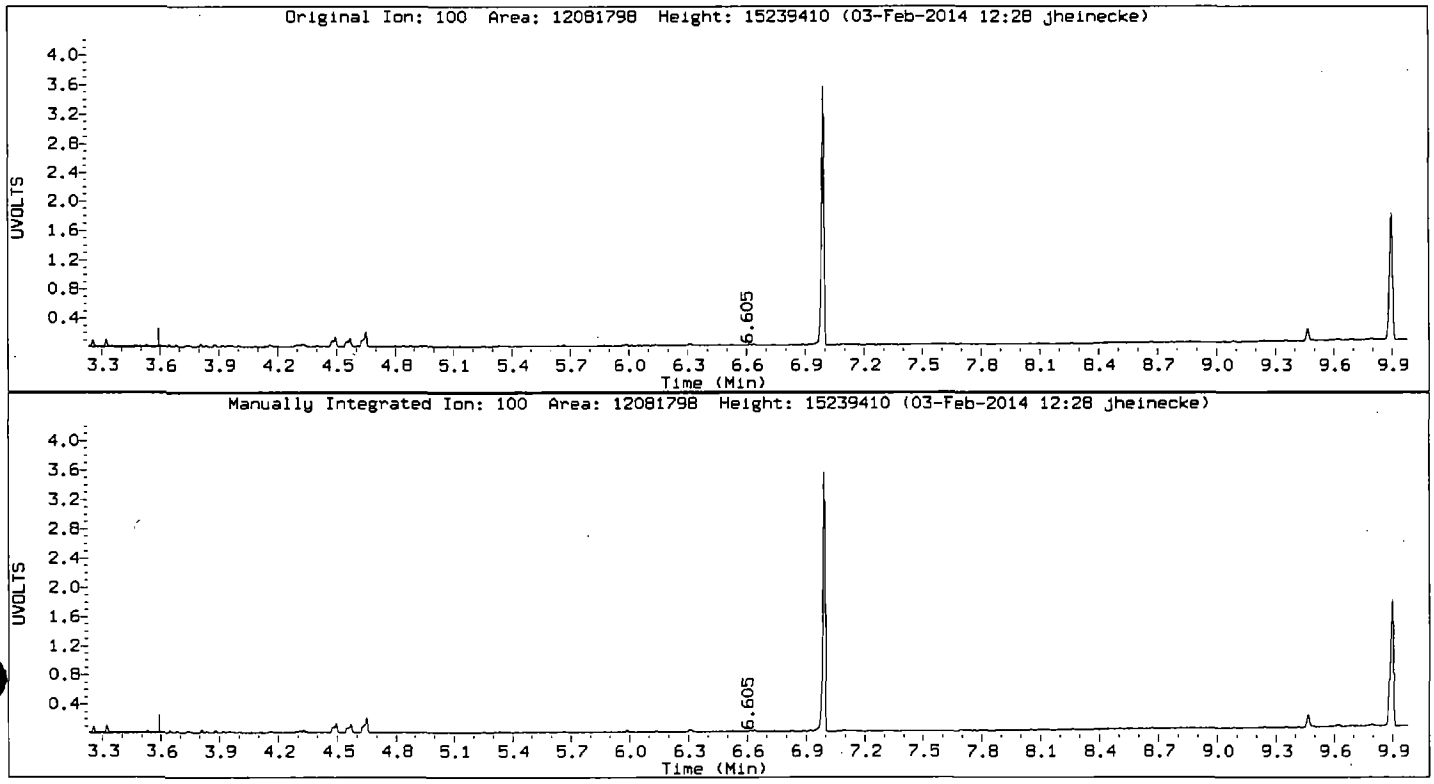
Column phase: DB-5MS

Column diameter: 0.25



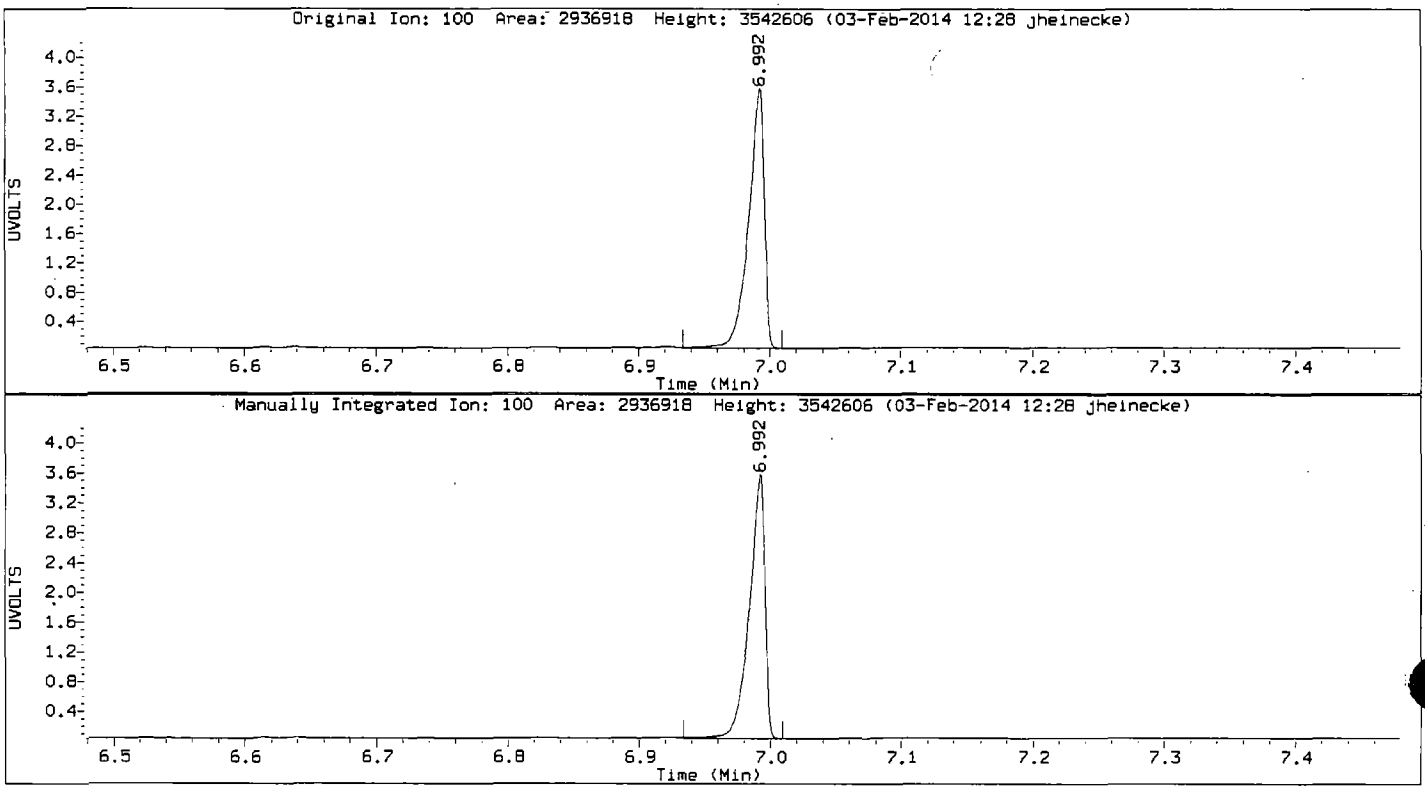
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R018.d
Injection Date: 02-FEB-2014 19:38
Instrument: 10gcs8.i
Lab Sample ID: 10256148001

Compound: TPH-DRO (C10-C28)
CAS Number:



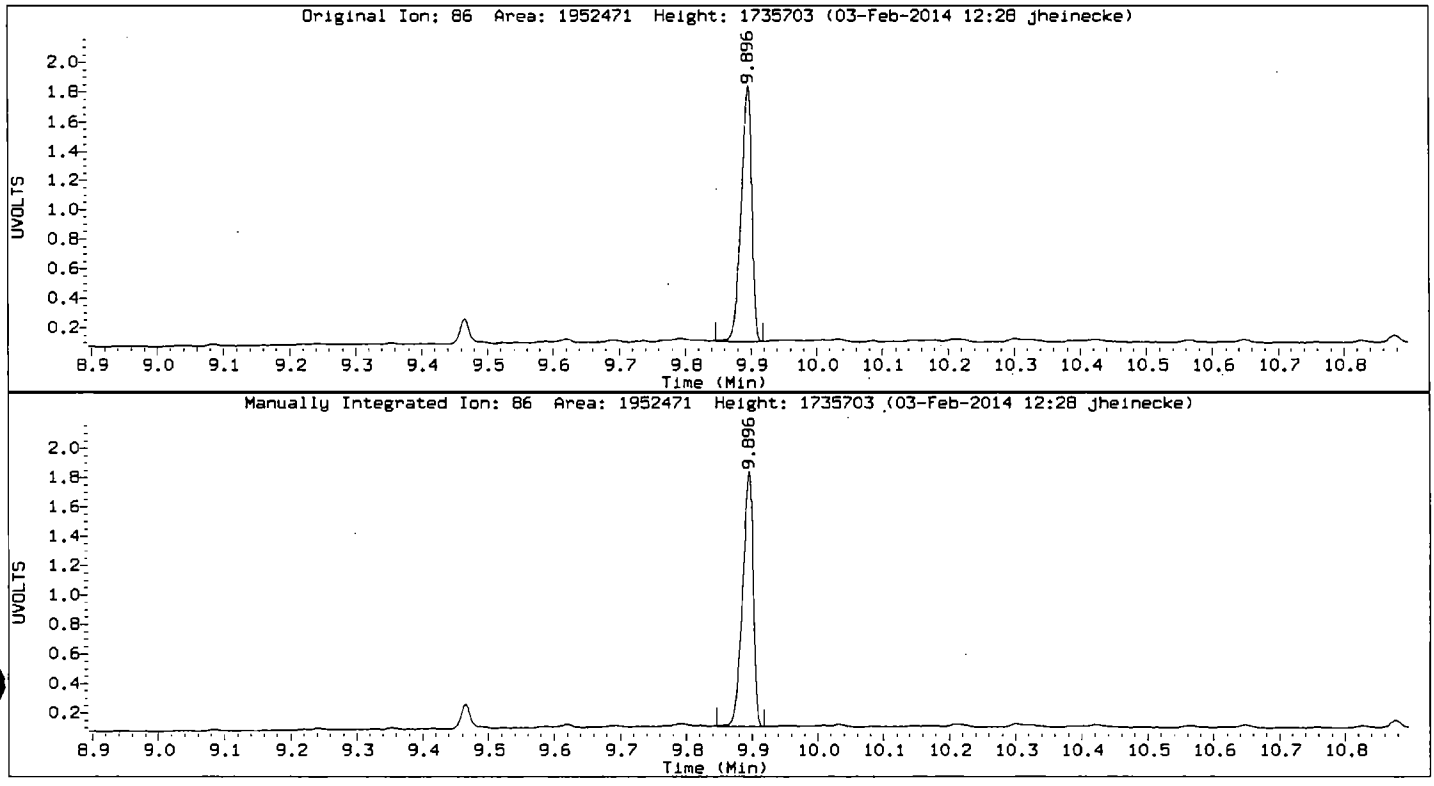
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R018.d
Injection Date: 02-FEB-2014 19:38
Instrument: 10gcs8.i
Lab Sample ID: 10256148001

Compound: o-Terphenyl (S)
CAS Number:



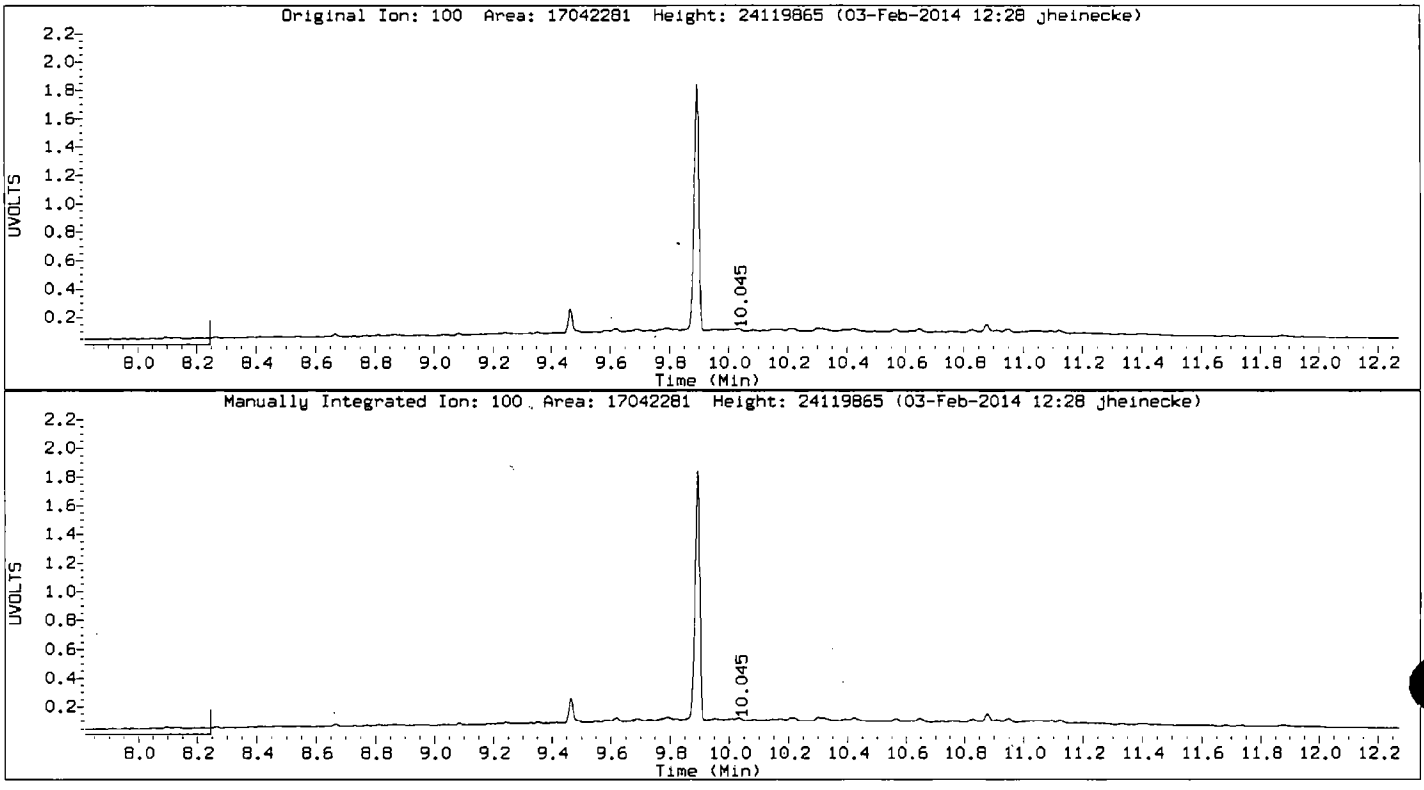
Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R018.d
Injection Date: 02-FEB-2014 19:38
Instrument: 10gcs8.i
Lab Sample ID: 10256148001

Compound: n-Triacontane (S)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b/0202R018.d
Injection Date: 02-FEB-2014 19:38
Instrument: 10gcs8.i
Lab Sample ID: 10256148001

Compound: Motor Oil Range (C24-C36)
CAS Number:



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AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R024.d
Lab Smp Id: 10256148002
Inj Date : 02-FEB-2014 21:56
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 10256148002
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	7.020	6.979	0.041	2900054	46.6768	4.67(M)
$	3 n-Triacontane (S)	10.017	9.895	0.122	2105047	47.6330	4.76(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			3053777	1.90451	0.190(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			2312954	50.9248	5.09(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R024.D

Date : 02-FEB-2014 21:56

Client ID:

Instrument: 10gcs8.i

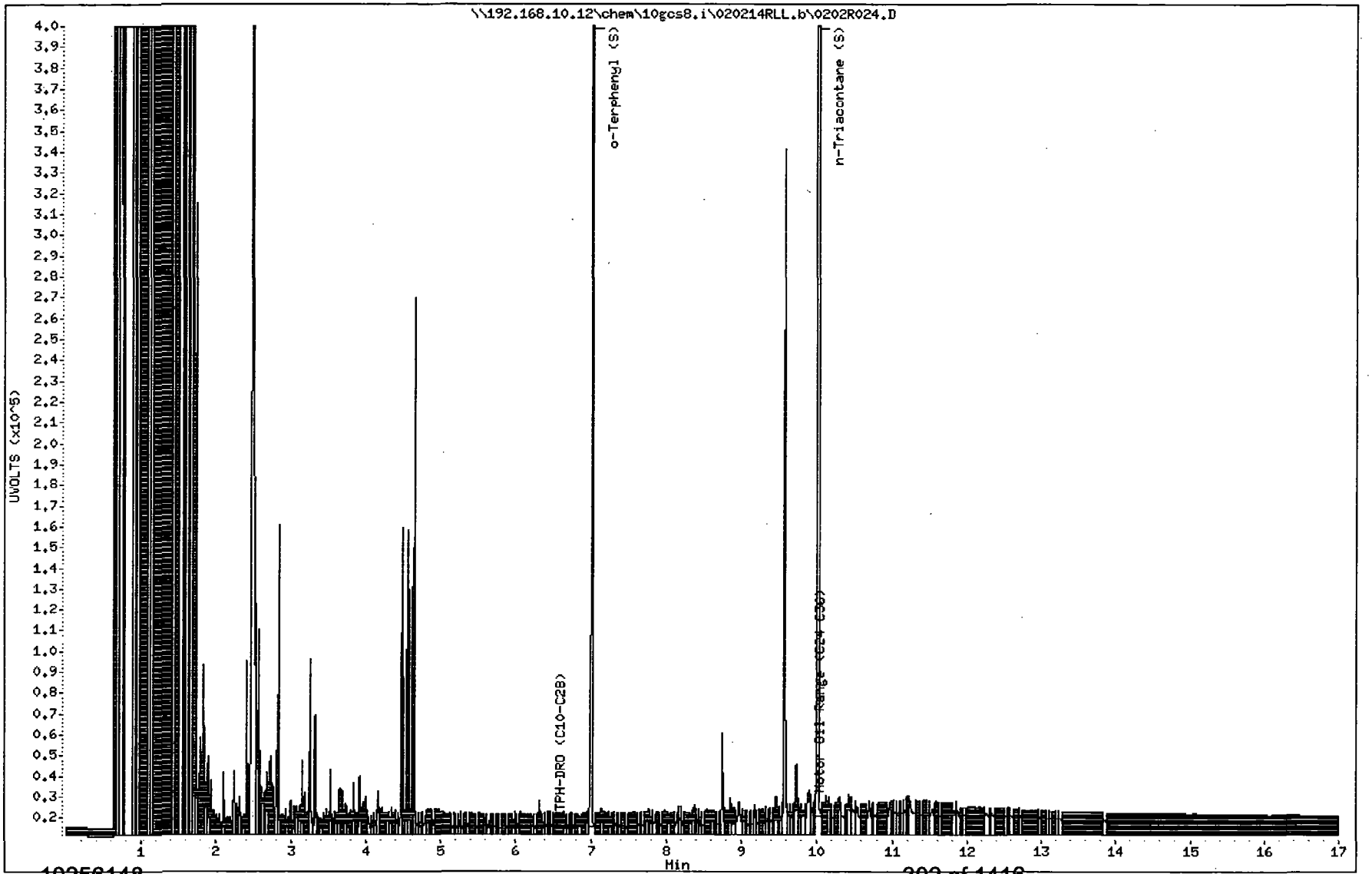
Sample Info: 10256148002

Volume Injected (uL): 1.0

Operator: JRH

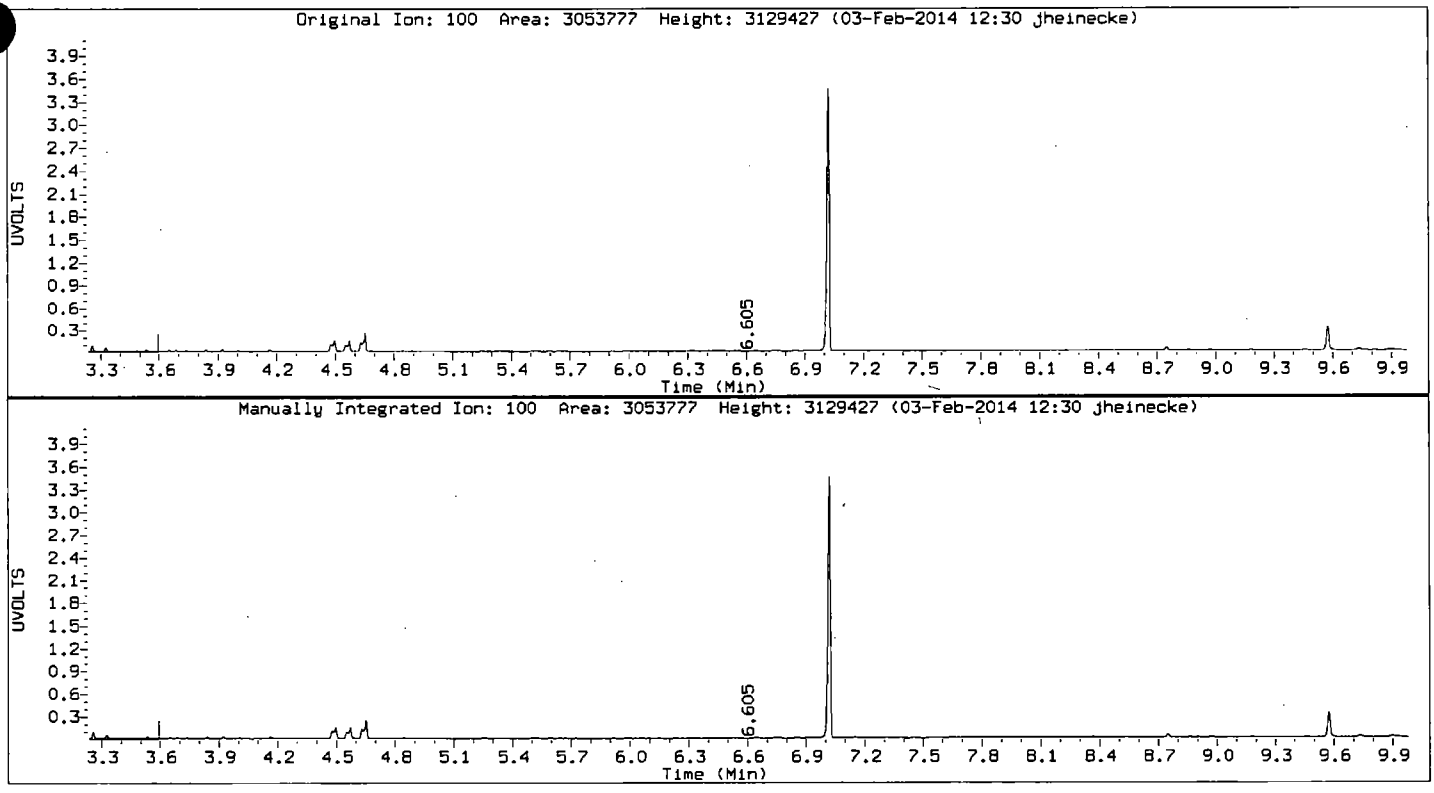
Column phase: DB-5MS

Column diameter: 0.25



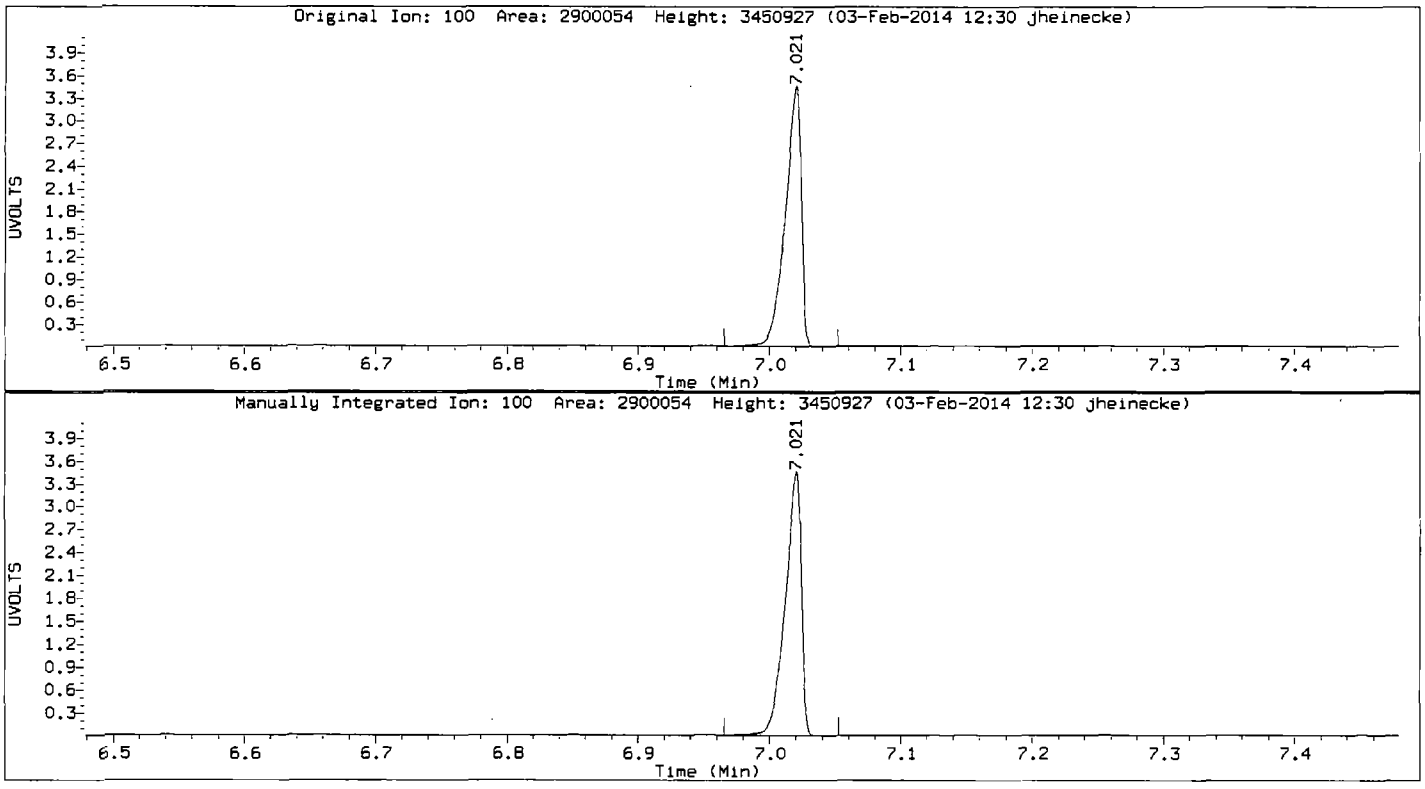
Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.D\0202R024.d
Injection Date: 02-FEB-2014 21:56
Instrument: 10gcs8.i
Lab Sample ID: 10256148002

Compound: TPH-DRO (C10-C28)
CAS Number:



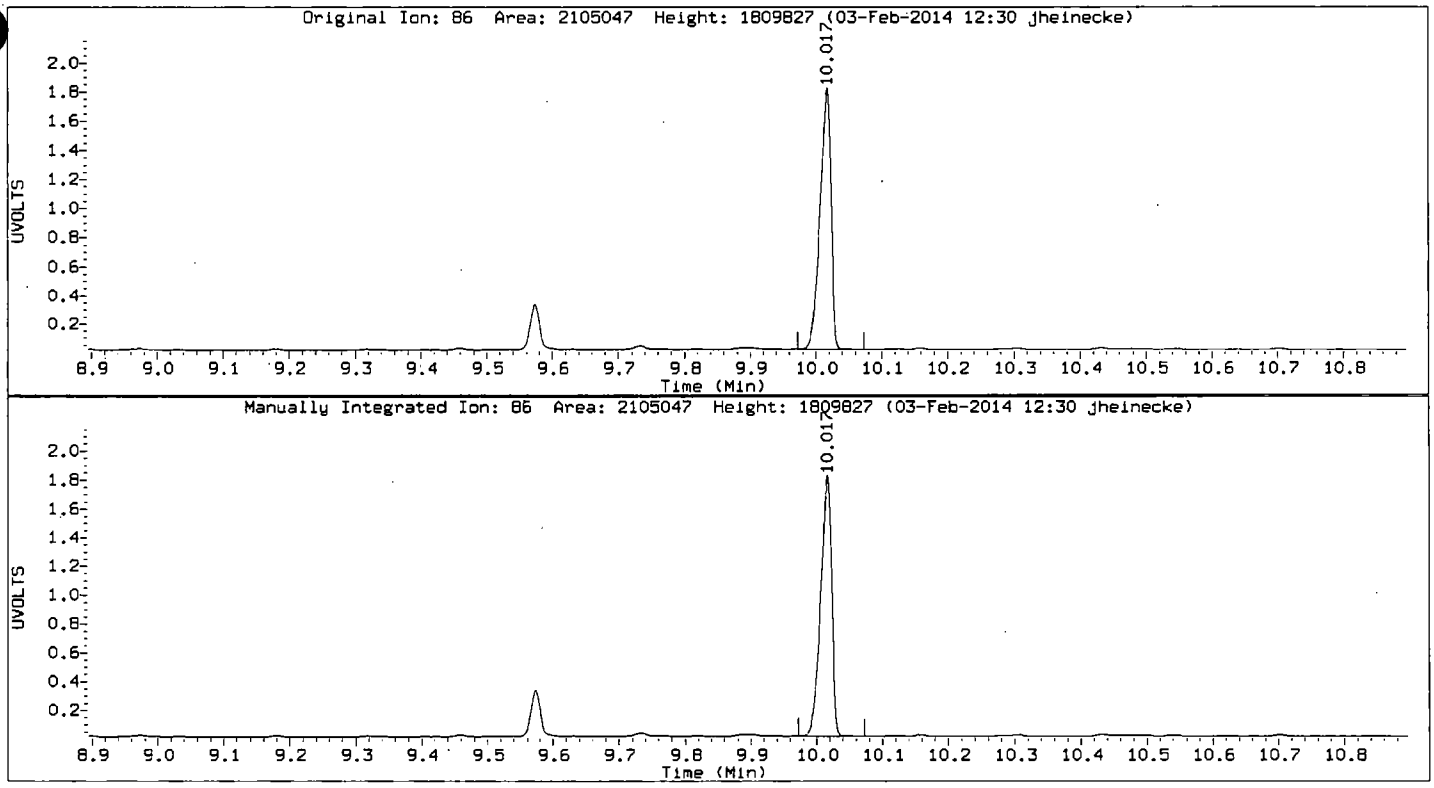
Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.b\0202R024.d
Injection Date: 02-FEB-2014 21:56
Instrument: 10gcs8.i
Lab Sample ID: 10256148002

Compound: o-Terphenyl (S)
CAS Number:



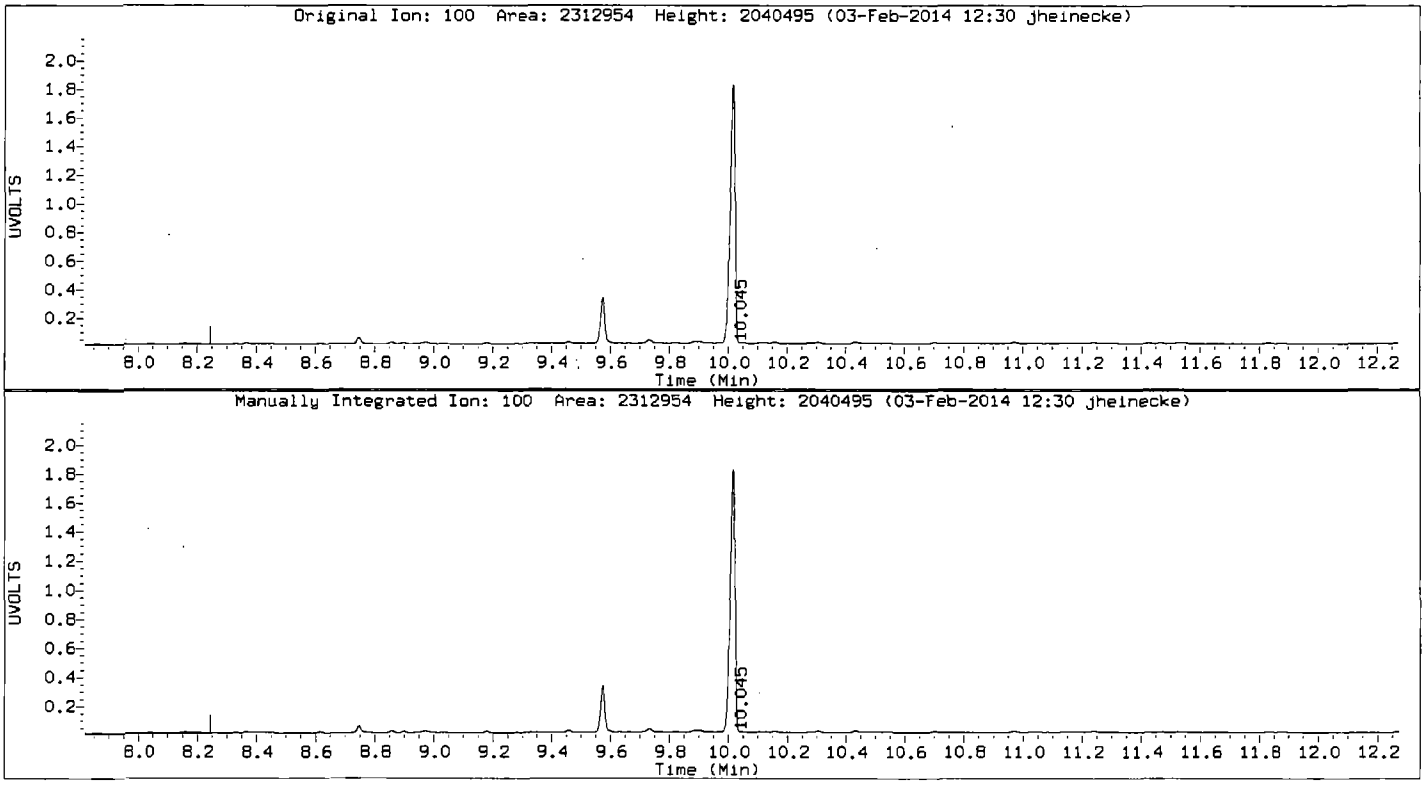
Data File: \\192.168.10.12\Chem\10gcs8.i\020214REB.D\0202R024.d
Injection Date: 02-FEB-2014 21:56
Instrument: 10gcs8.i
Lab Sample ID: 10256148002

Compound: n-Triacontane (S)
CAS Number:



Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.D\0202R024.d
Injection Date: 02-FEB-2014 21:56
Instrument: 10gcs8.i
Lab Sample ID: 10256148002

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R021.d
Lab Smp Id: 10256148003
Inj Date : 02-FEB-2014 20:47
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 10256148003
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.994	6.979	0.015	2975399	47.8882	4.79(M)
$	3 n-Triacontane (S)	9.919	9.895	0.024	2120897	47.9869	4.80(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			52923636	771.249	77.1(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			29235558	868.121	86.8(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R021.D

Date : 02-FEB-2014 20:47

Client ID:

Instrument: 10gcs8.i

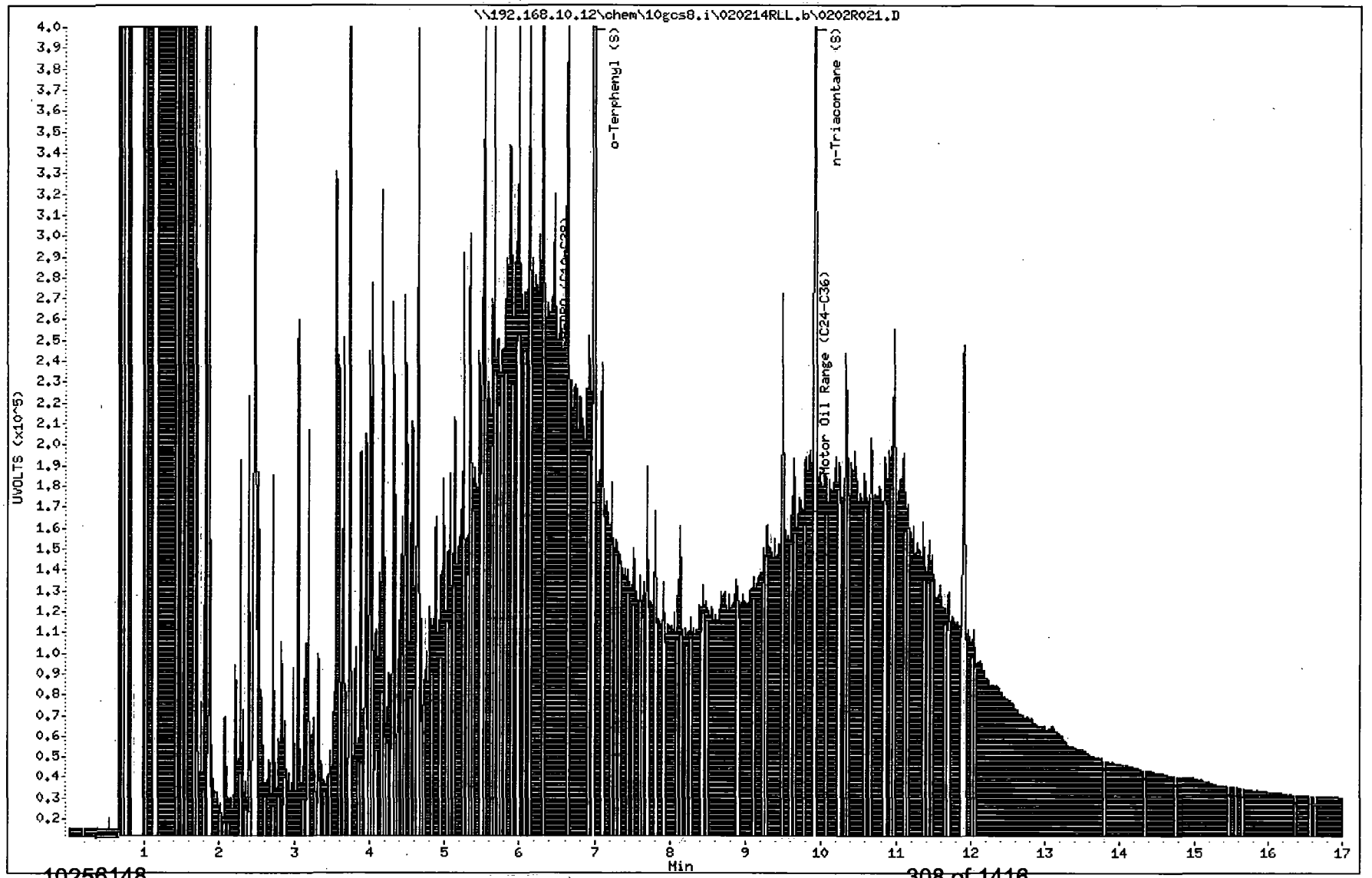
Sample Info: 10256148003

Volume Injected (uL): 1.0

Operator: JRH

Column phase: DB-5MS

Column diameter: 0.25



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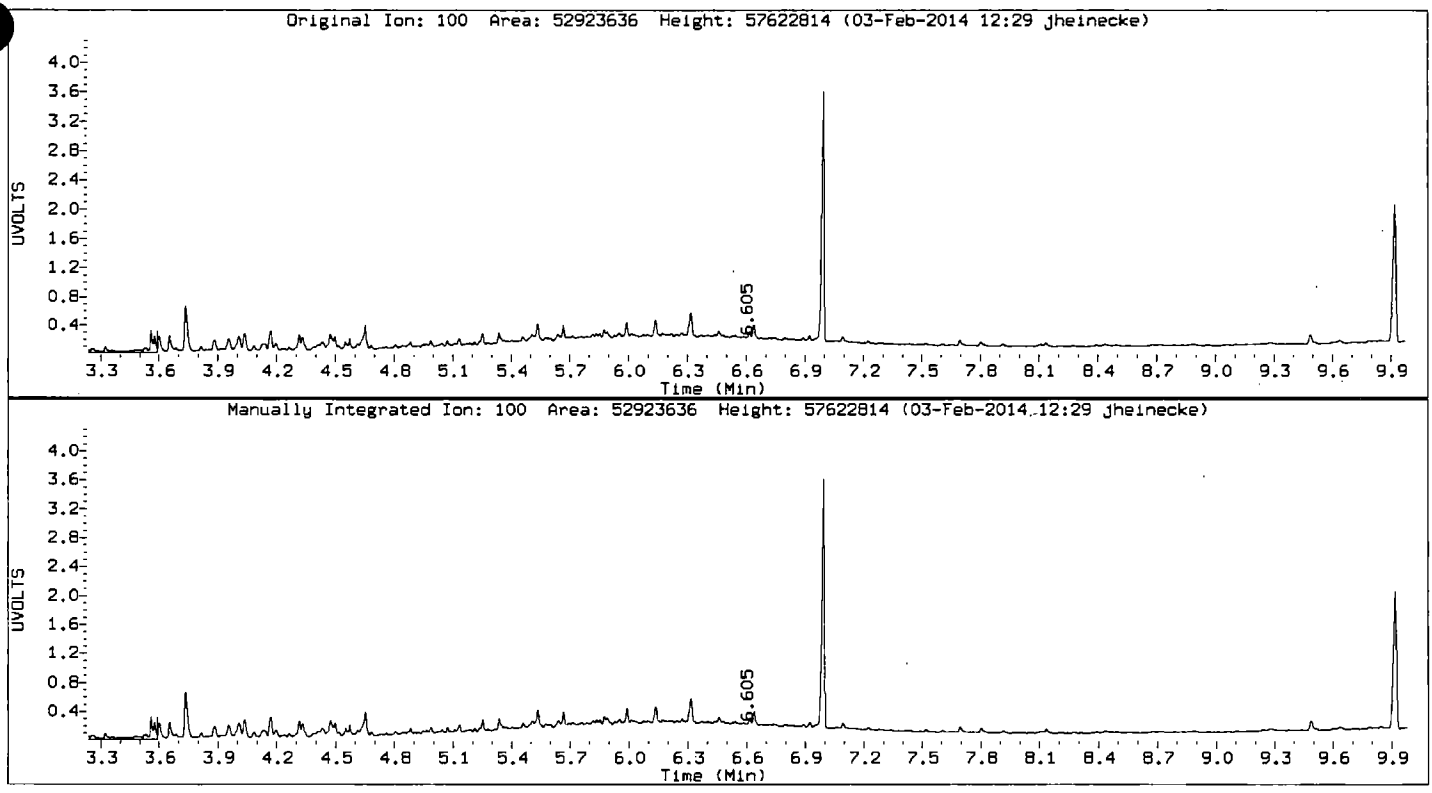
Injection Date: 02-FEB-2014 20:47
Instrument: 10gcs8.i
Lab Sample ID: 10256148003

Compound: TPH-DRO (C10-C28)
CAS Number:



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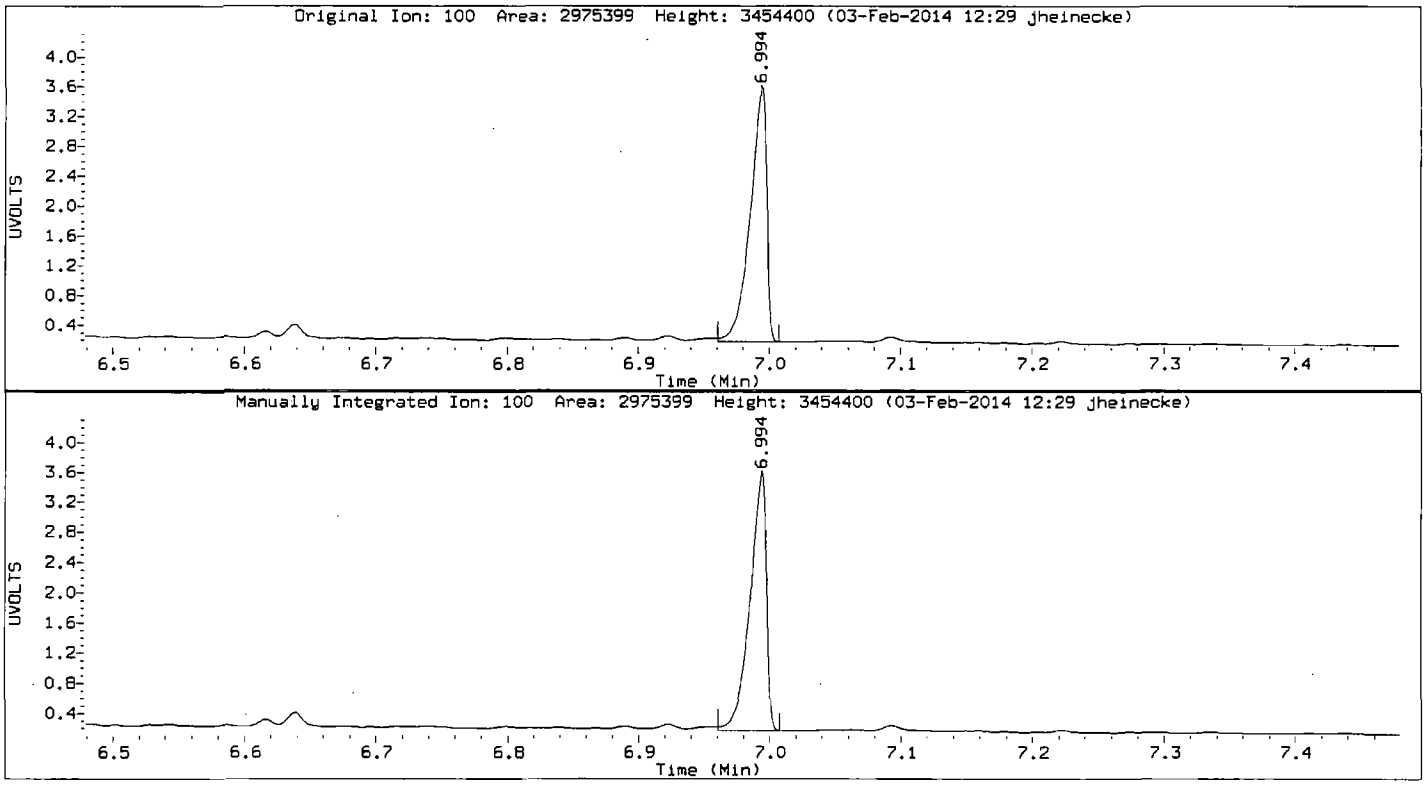
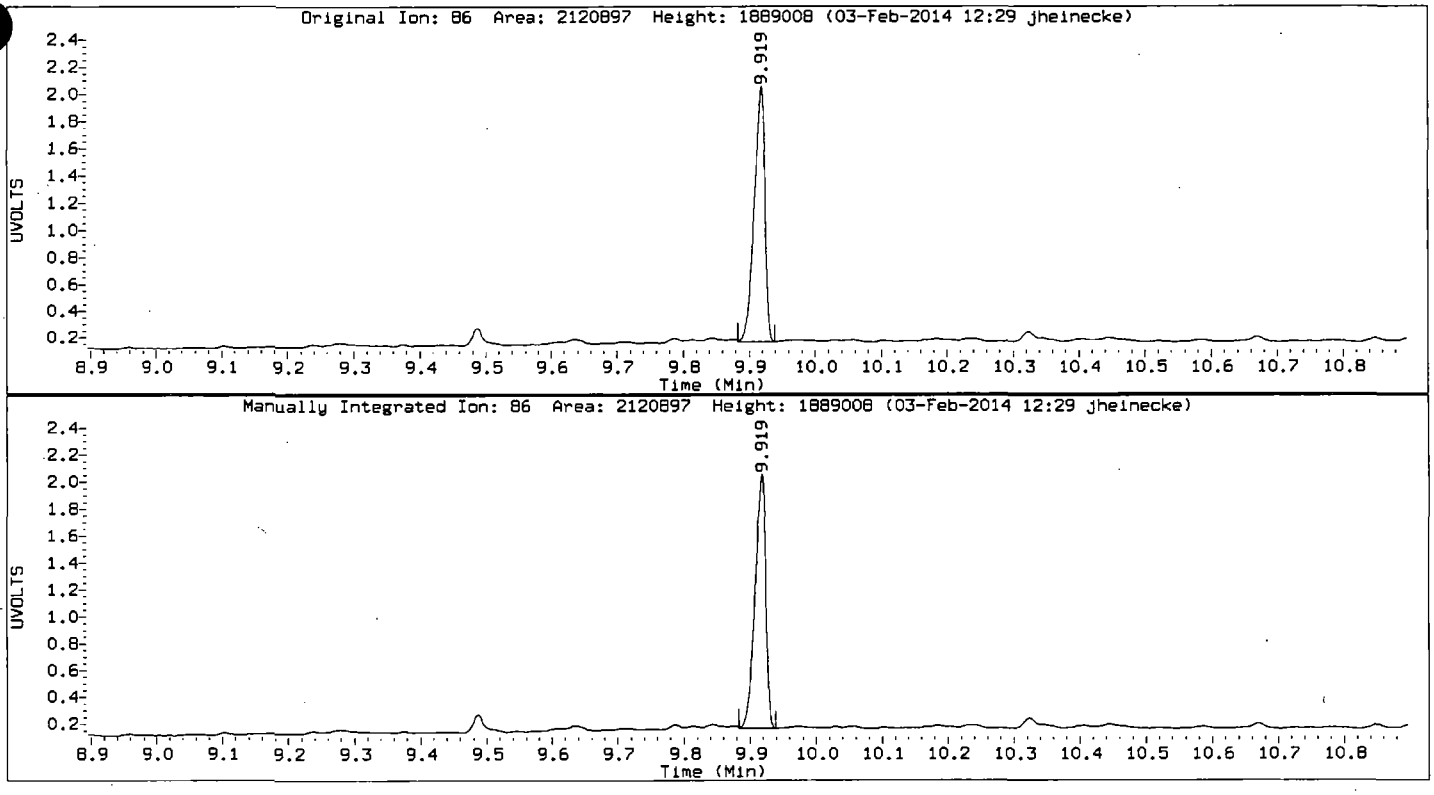
Injection Date: 02-FEB-2014 20:47
Instrument: 10gcs8.i
Lab Sample ID: 10256148003

Compound: o-Terphenyl (S)
CAS Number:



Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLB.b\0202R021.d
Injection Date: 02-FEB-2014 20:47
Instrument: 10gcs8.i
Lab Sample ID: 10256148003

Compound: n-Triacontane (S)
CAS Number:



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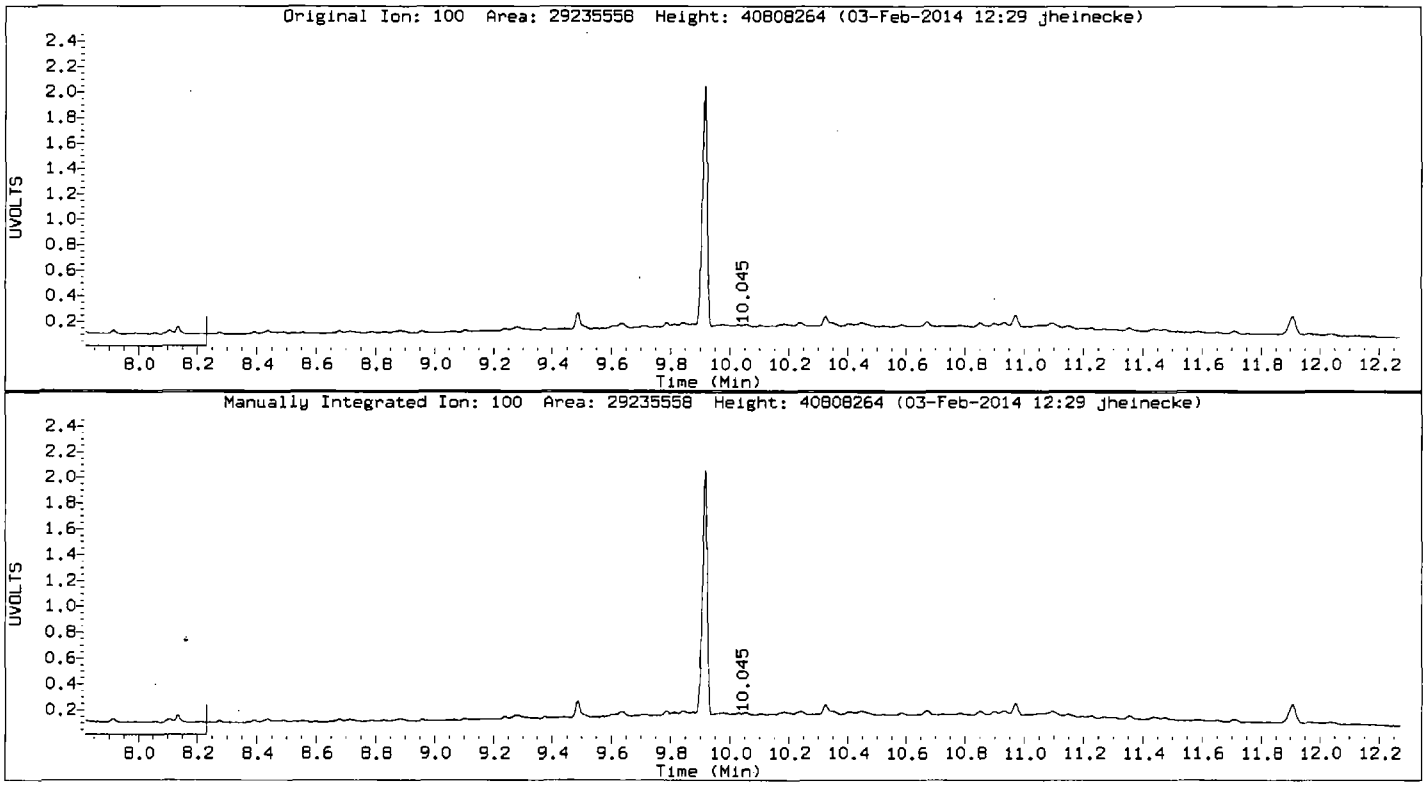
Injection Date: 02-FEB-2014 20:47
Instrument: 10gcs8.i
Lab Sample ID: 10256148003

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R023.d
Lab Smp Id: 10256148004
Inj Date : 02-FEB-2014 21:33
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 10256148004
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.982	6.979	0.003	3004553	48.3570	4.84(M)
$	3 n-Triacontane (S)	9.895	9.895	0.000	2168504	49.0500	4.90(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			9251831	98.9415	9.89(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			6579694	180.435	18.0(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R023.D

Date : 02-FEB-2014 21:33

Client ID:

Instrument: 10gcs8.i

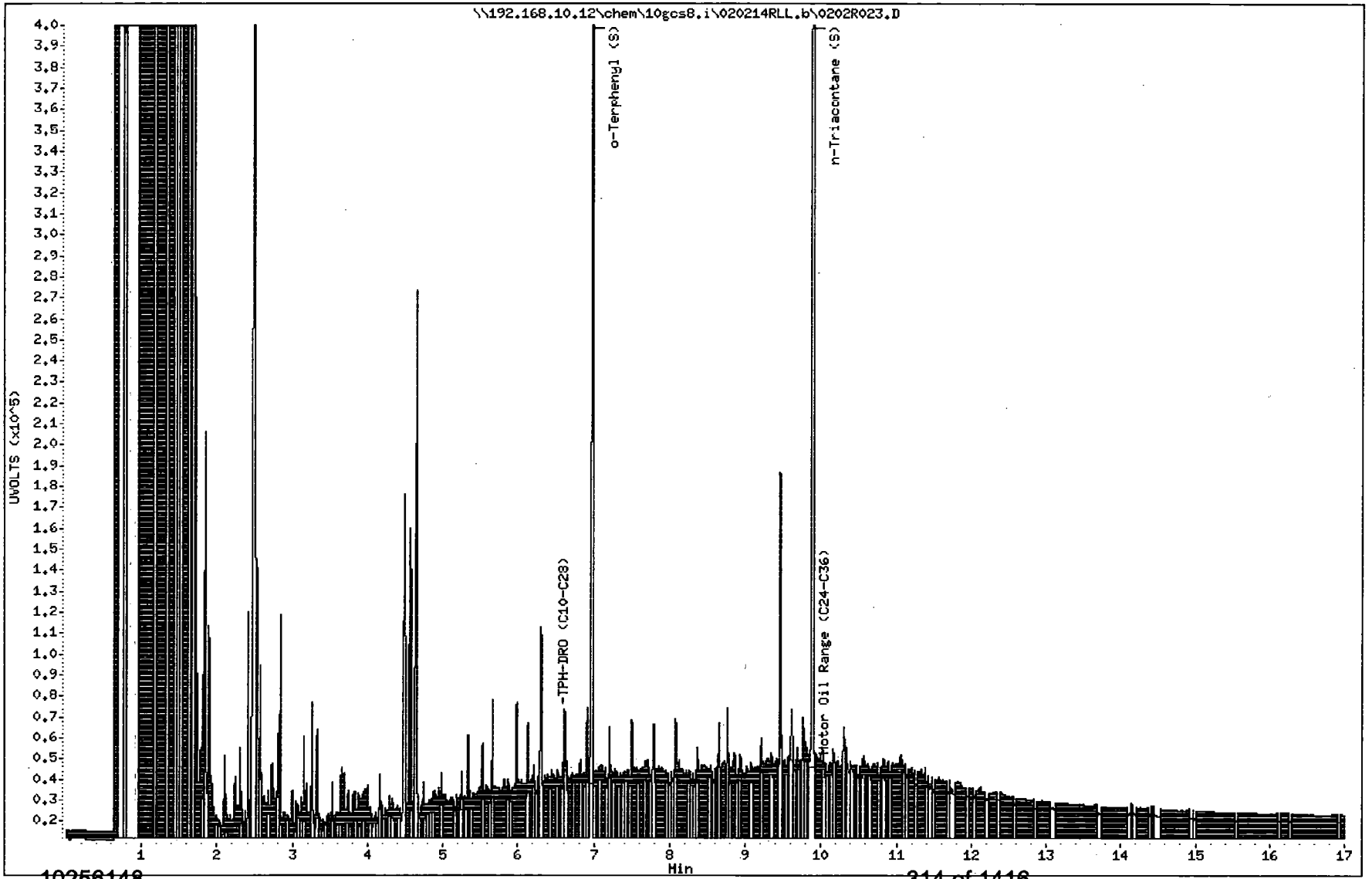
Sample Info: 10256148004

Volume Injected (uL): 1.0

Operator: JRH

Column phase: DB-5MS

Column diameter: 0.25



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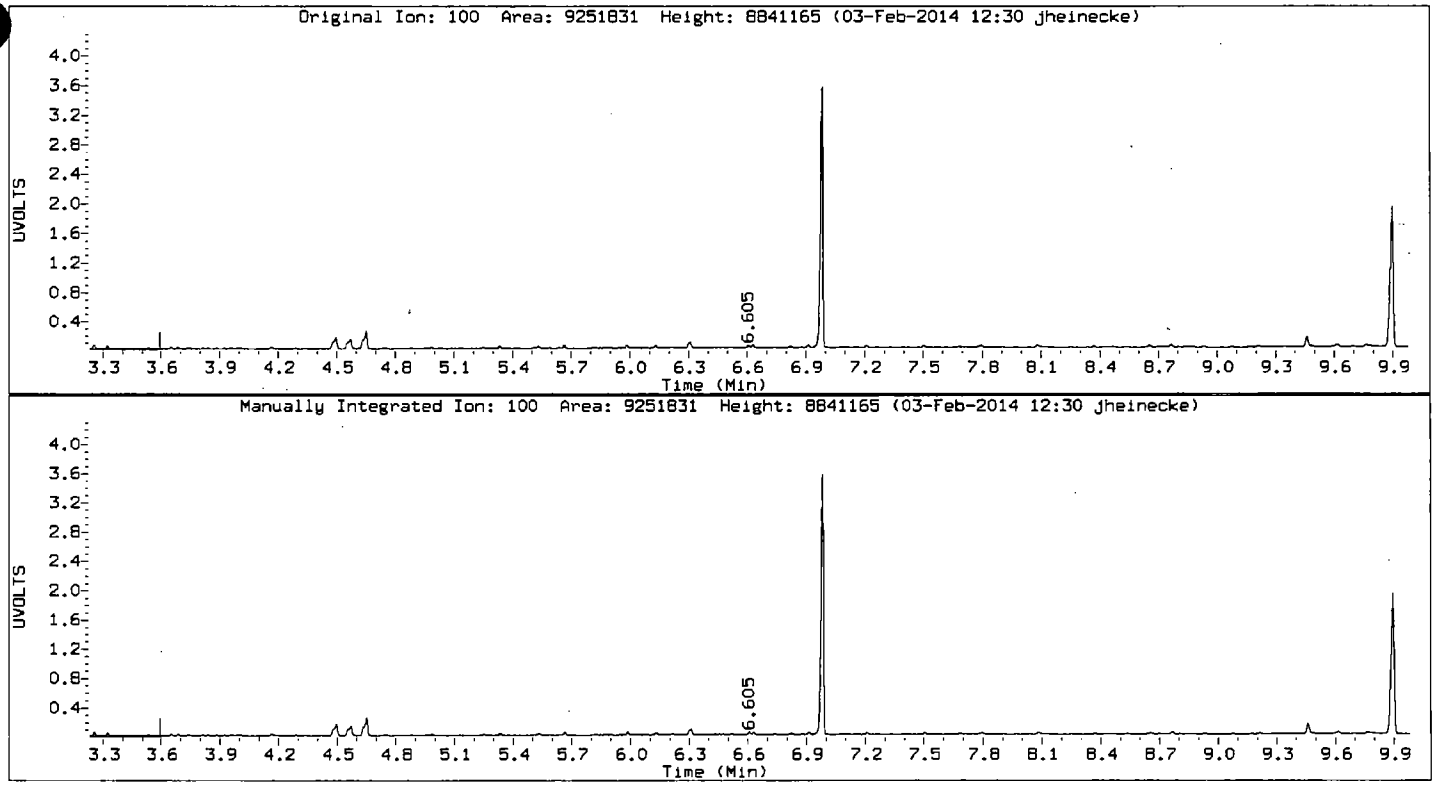
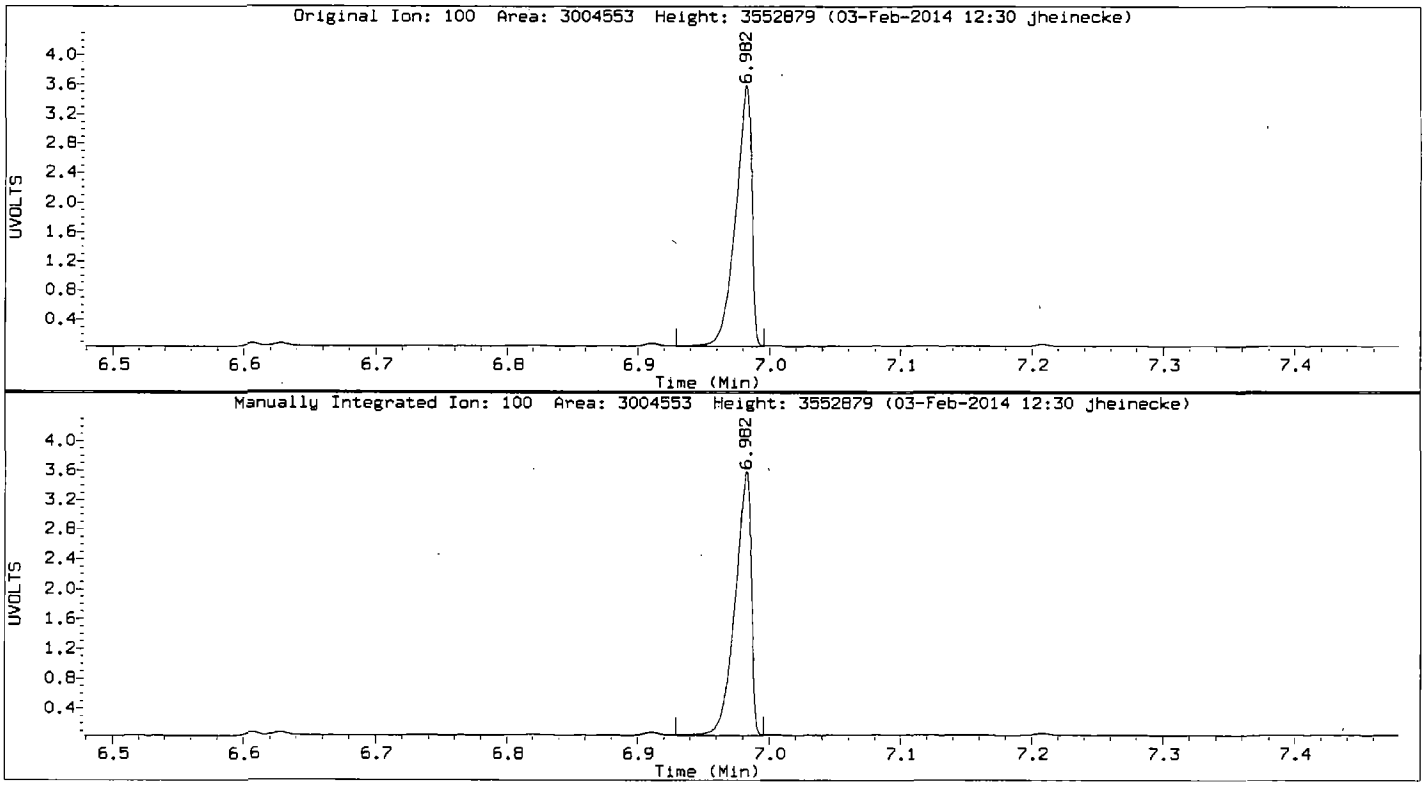
Injection Date: 02-FEB-2014 21:33
Instrument: 10gcs8.i
Lab Sample ID: 10256148004

Compound: TPH-DRO (C10-C28)
CAS Number:



Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R023.d
Injection Date: 02-FEB-2014 21:33
Instrument: 10gcs8.i
Lab Sample ID: 10256148004

Compound: o-Terphenyl (S)
CAS Number:



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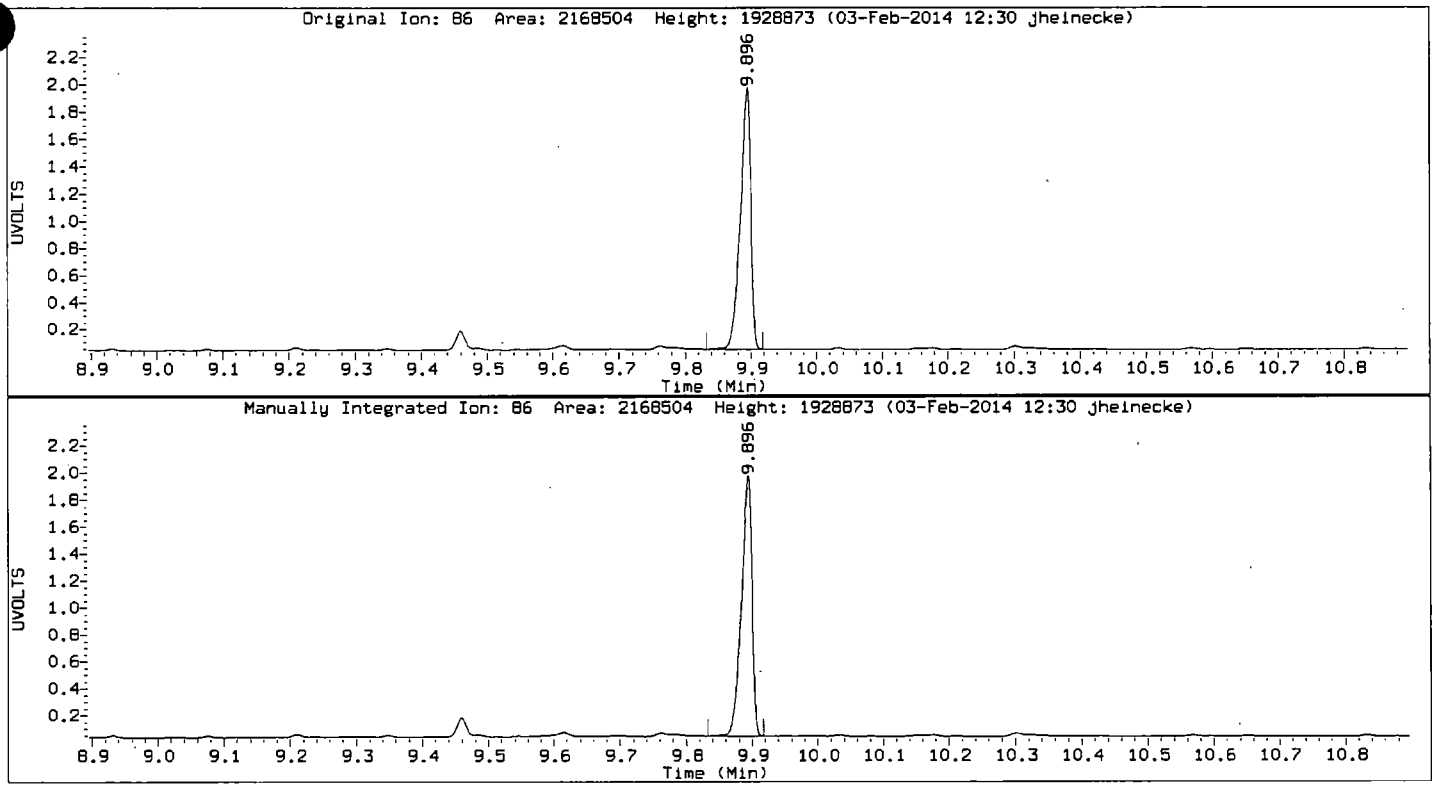
Injection Date: 02-FEB-2014 21:33
Instrument: 10gcs8.i
Lab Sample ID: 10256148004

Compound: n-Triacontane (S)
CAS Number:



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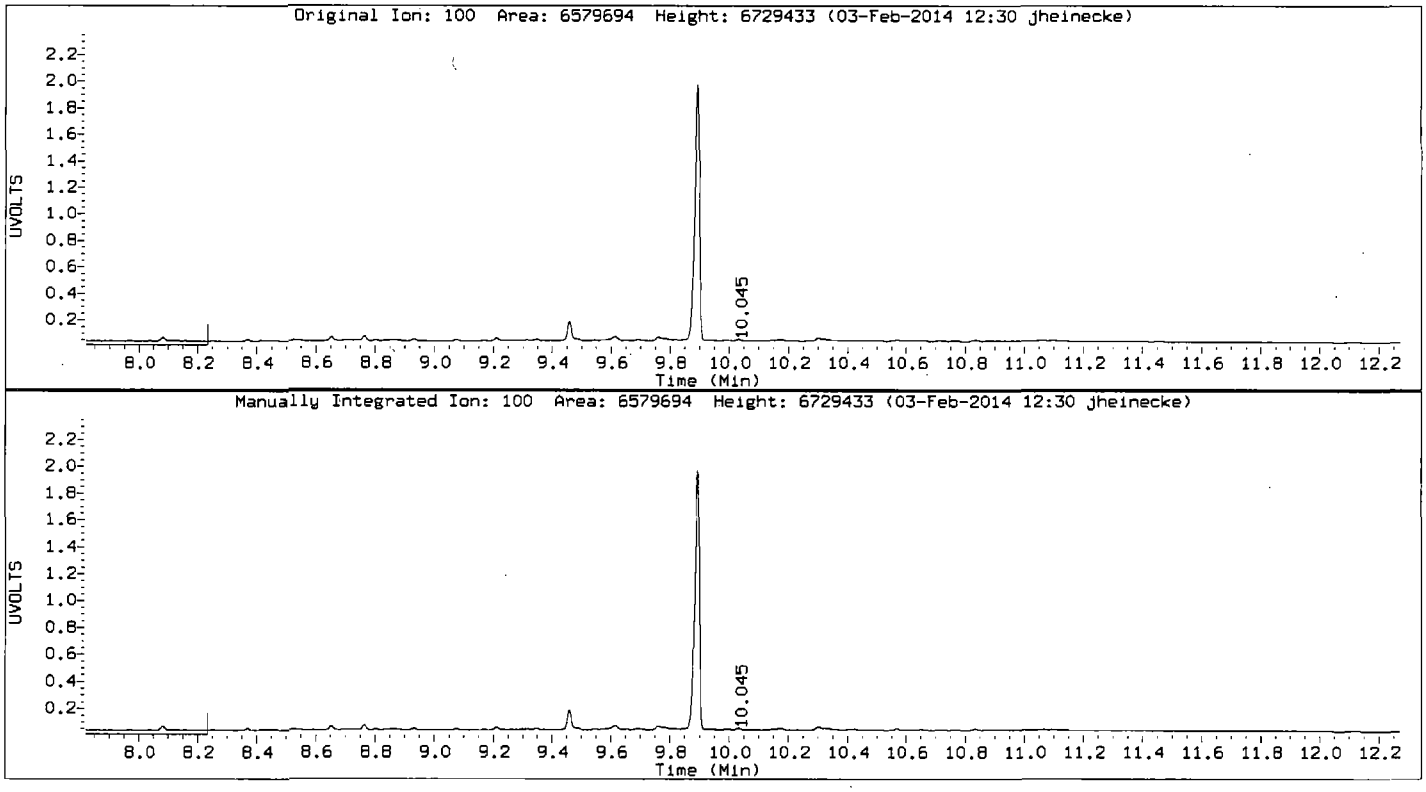
Injection Date: 02-FEB-2014 21:33
Instrument: 10gcs8.i
Lab Sample ID: 10256148004

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R025.d
Lab Smp Id: 10256148005
Inj Date : 02-FEB-2014 22:20
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 10256148005
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	7.017	6.979	0.038	3155579	50.7851	5.08(M)
$	3 n-Triacontane (S)	9.992	9.895	0.097	2260199	51.0974	5.11(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			3710587	12.2066	1.22(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			2232711	48.4892	4.85(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R025.D

Date : 02-FEB-2014 22:20

Client ID:

Instrument: 10gcs8.i

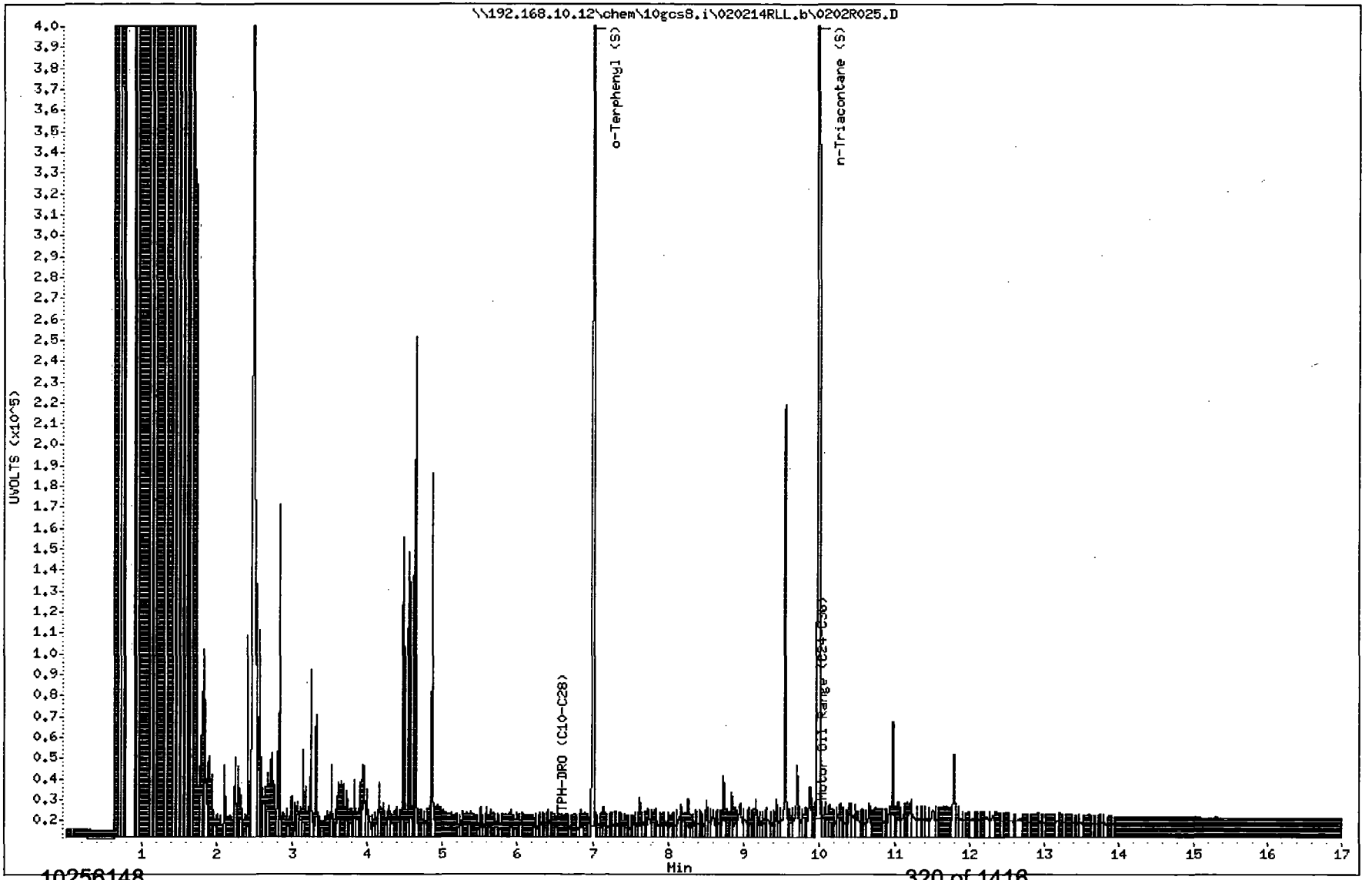
Sample Info: 10256148005

Volume Injected (uL): 1.0

Operator: JRH

Column phase: DB-5MS

Column diameter: 0.25



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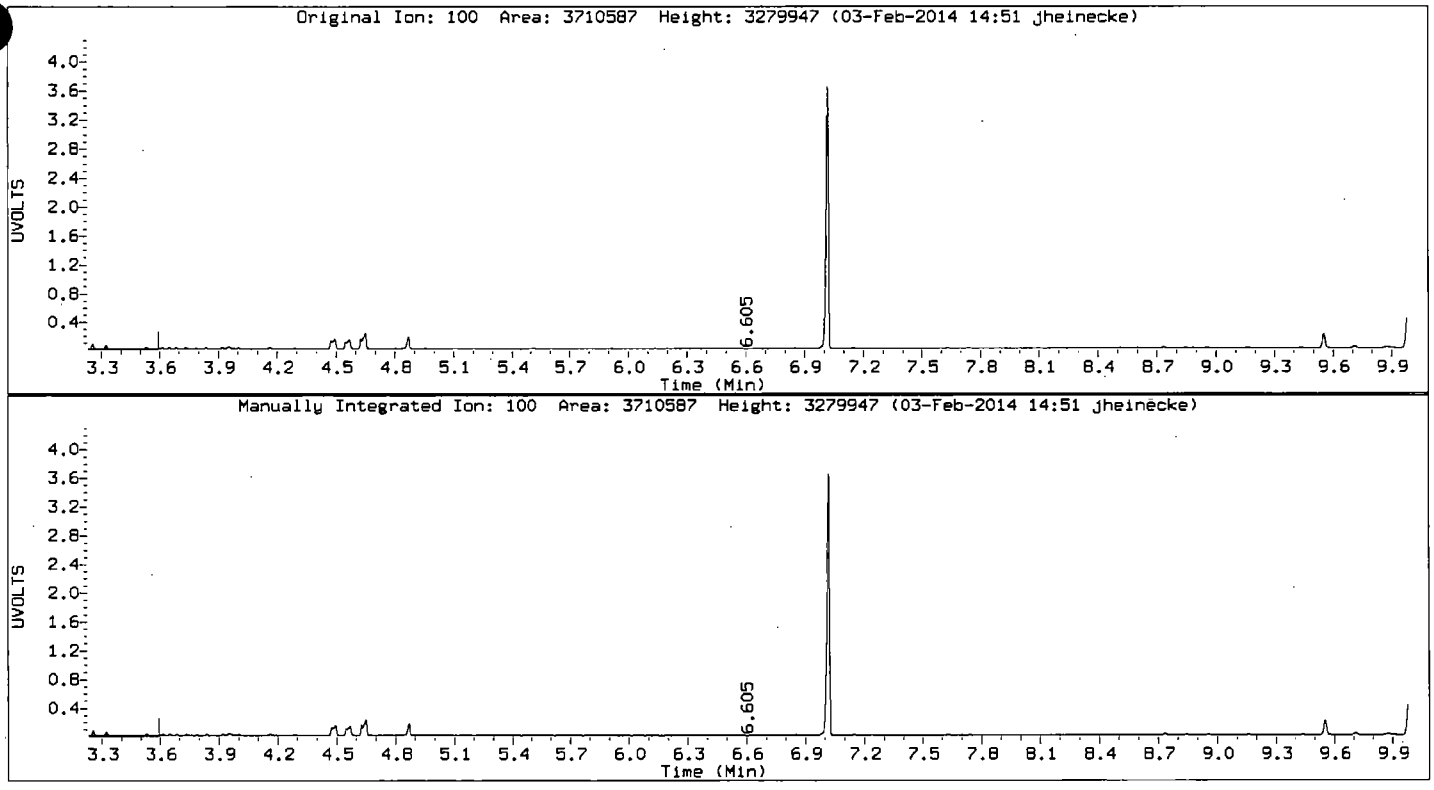
Injection Date: 02-FEB-2014 22:20
Instrument: 10gcs8.i
Lab Sample ID: 10256148005

Compound: TPH-DRO (C10-C28)
CAS Number:



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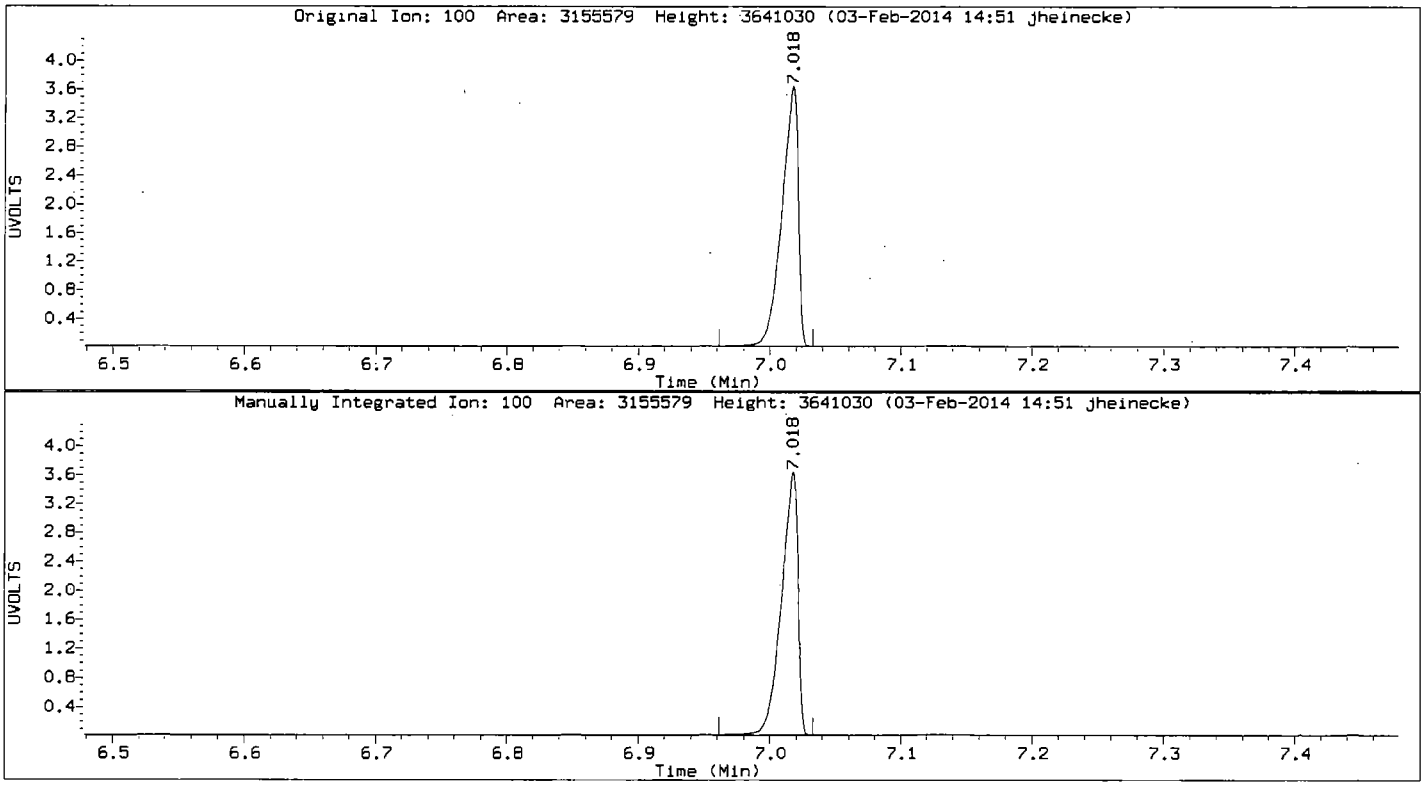
Injection Date: 02-FEB-2014 22:20
Instrument: 10gcs8.i
Lab Sample ID: 10256148005

Compound: o-Terphenyl (S)
CAS Number:



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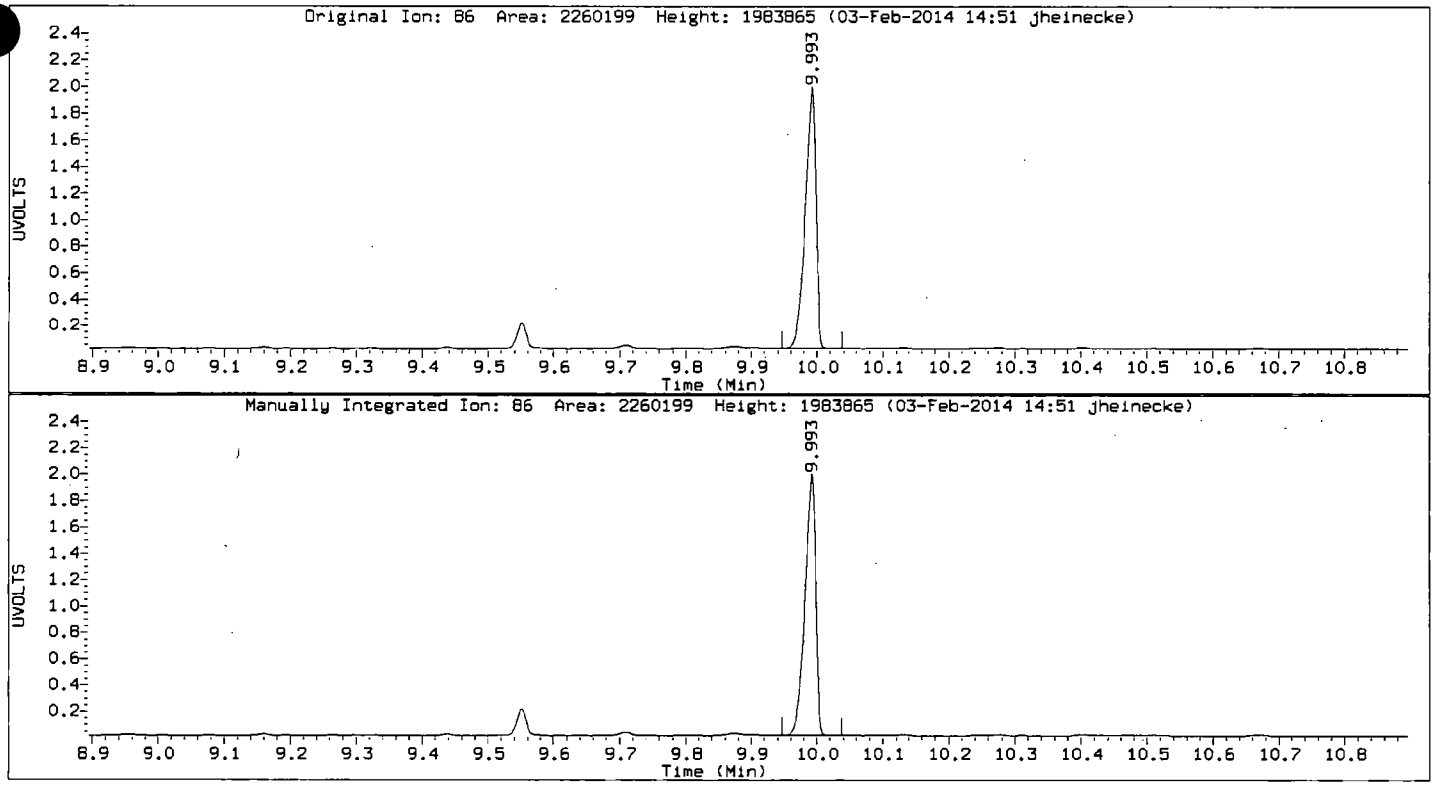
Injection Date: 02-FEB-2014 22:20
Instrument: 10gcs8.i
Lab Sample ID: 10256148005

Compound: n-Triacontane (S)
CAS Number:



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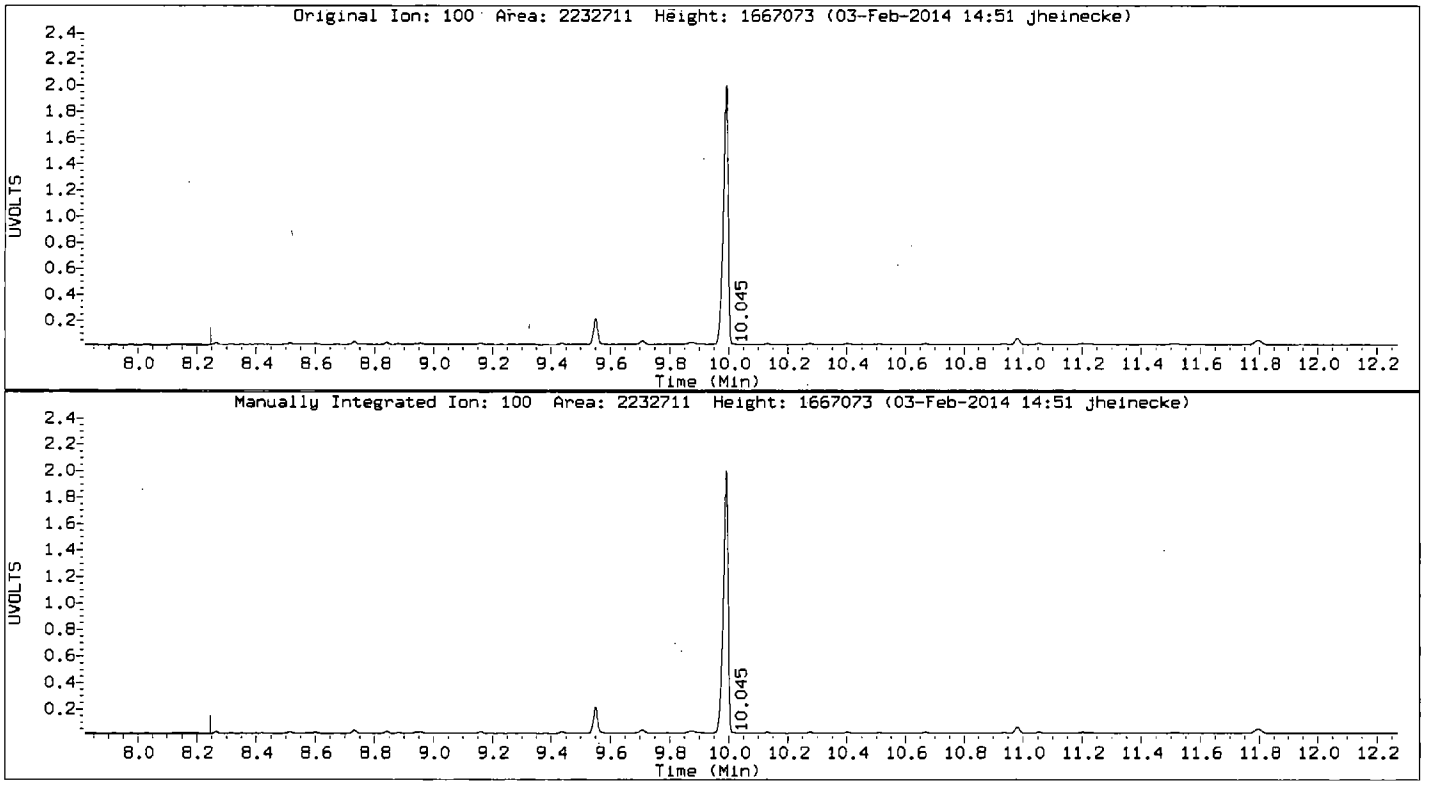
Injection Date: 02-FEB-2014 22:20
Instrument: 10gcs8.i
Lab Sample ID: 10256148005

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R022.d
Lab Smp Id: 10256148006
Inj Date : 02-FEB-2014 21:10
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 10256148006
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
S	2 o-Terphenyl (S)	6.983	6.979	0.004	2947967	47.4472	4.74 (M)
S	3 n-Triacontane (S)	9.879	9.895	-0.016	2006225	45.4264	4.54 (M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			8920979	93.7718	9.38 (M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			7244968	200.629	20.1 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R022.D

Date : 02-FEB-2014 21:10

Client ID:

Instrument: 10gcs8.i

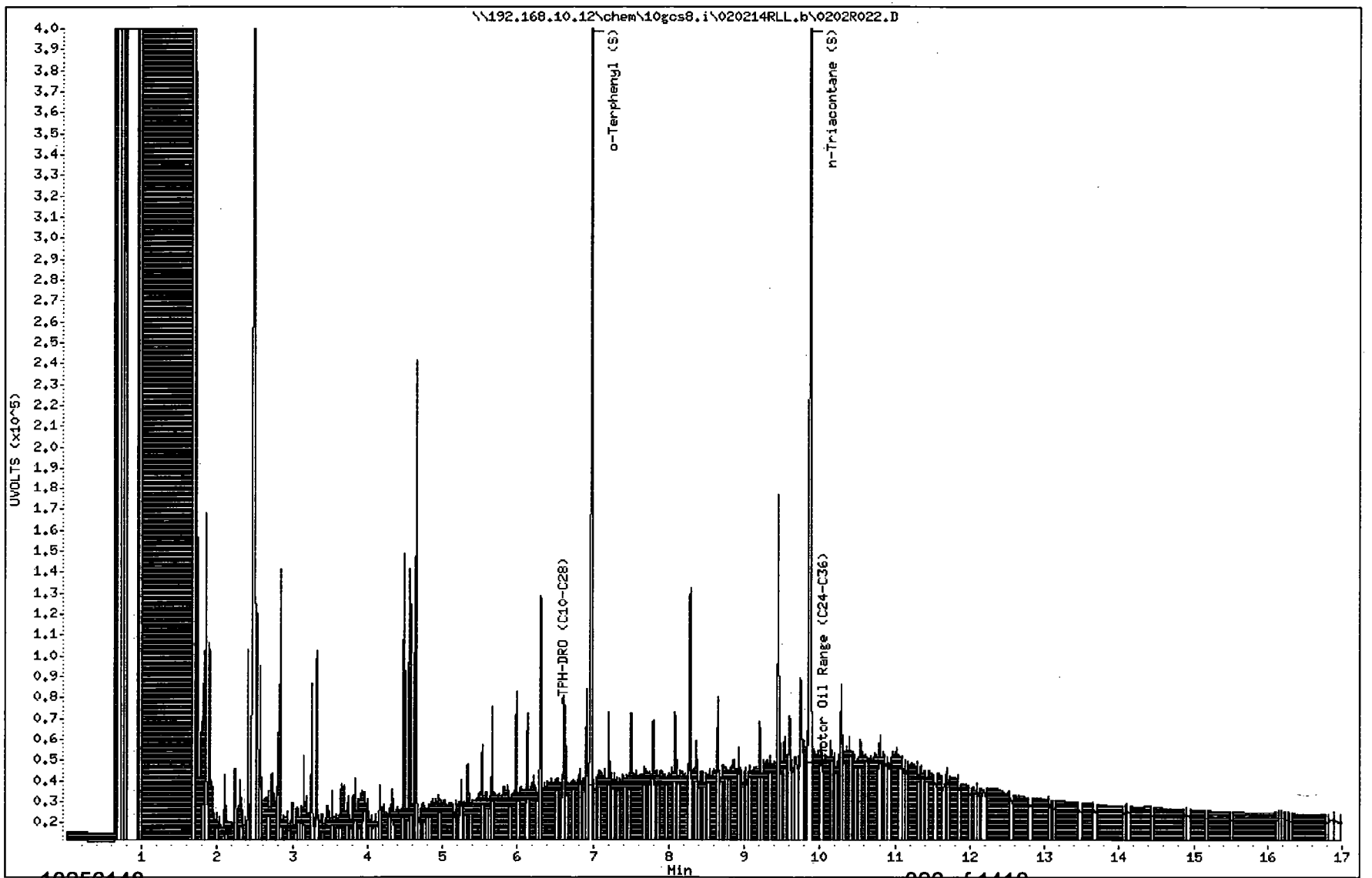
Sample Info: 10256148006

Volume Injected (uL): 1.0

Operator: JRH

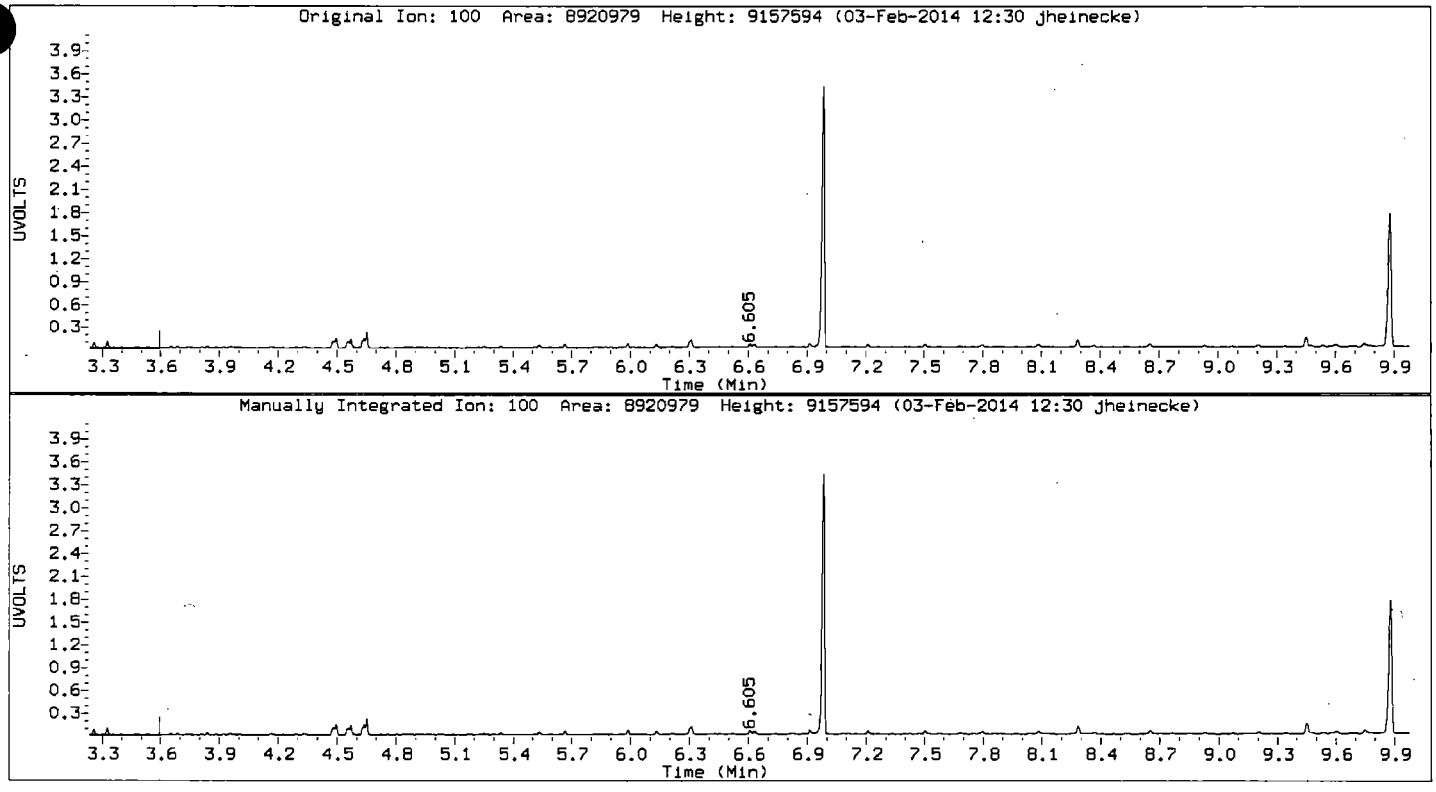
Column phase: DB-5MS

Column diameter: 0.25



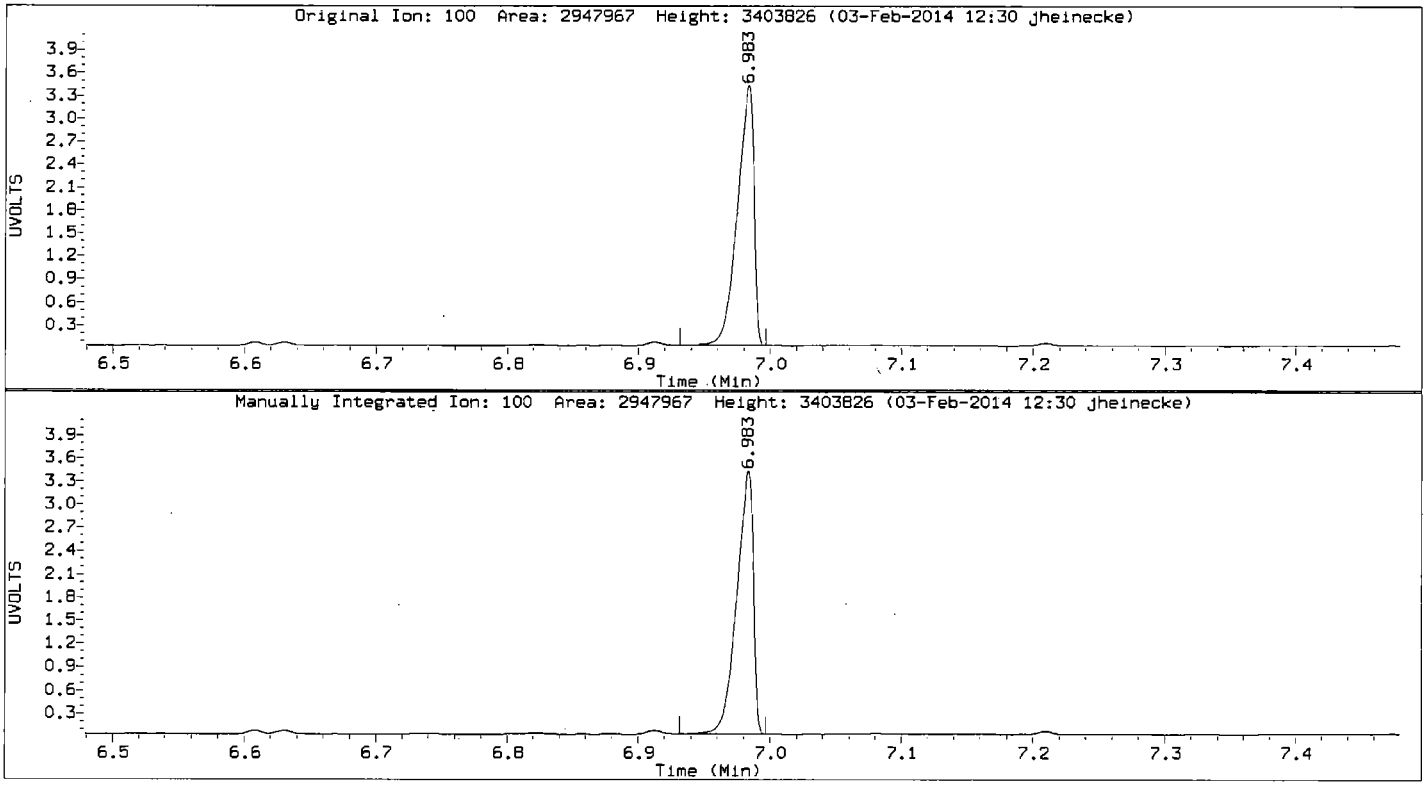
Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.b\0202R022.d
Injection Date: 02-FEB-2014 21:10
Instrument: 10gcs8.i
Lab Sample ID: 10256148006

Compound: TPH-DRO (C10-C28)
CAS Number:



Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.b\0202R022.d
Injection Date: 02-FEB-2014 21:10
Instrument: 10gcs8.i
Lab Sample ID: 10256148006

Compound: o-Terphenyl (S)
CAS Number:



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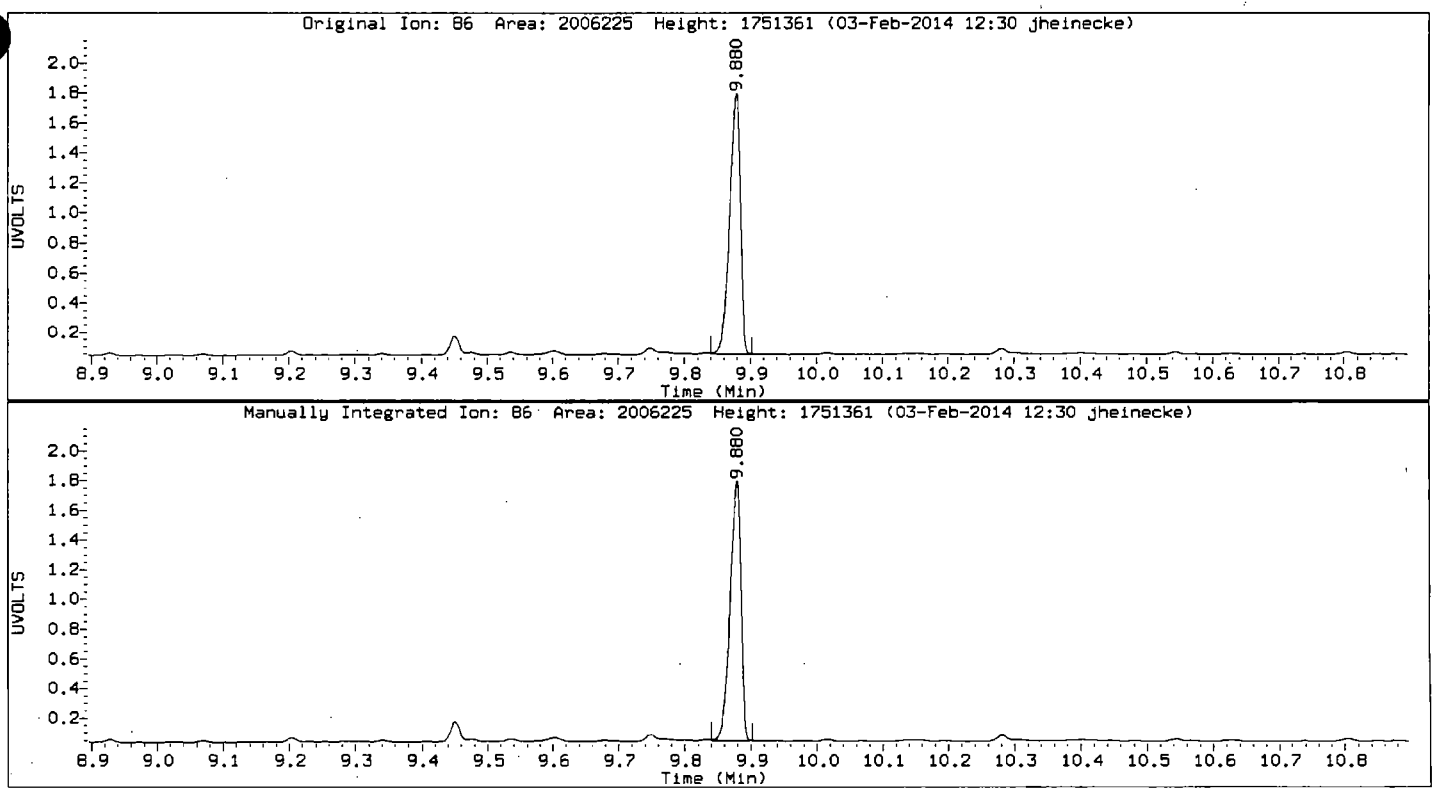
Injection Date: 02-FEB-2014 21:10
Instrument: 10gcs8.i
Lab Sample ID: 10256148006

Compound: n-Triacontane (S)
CAS Number:



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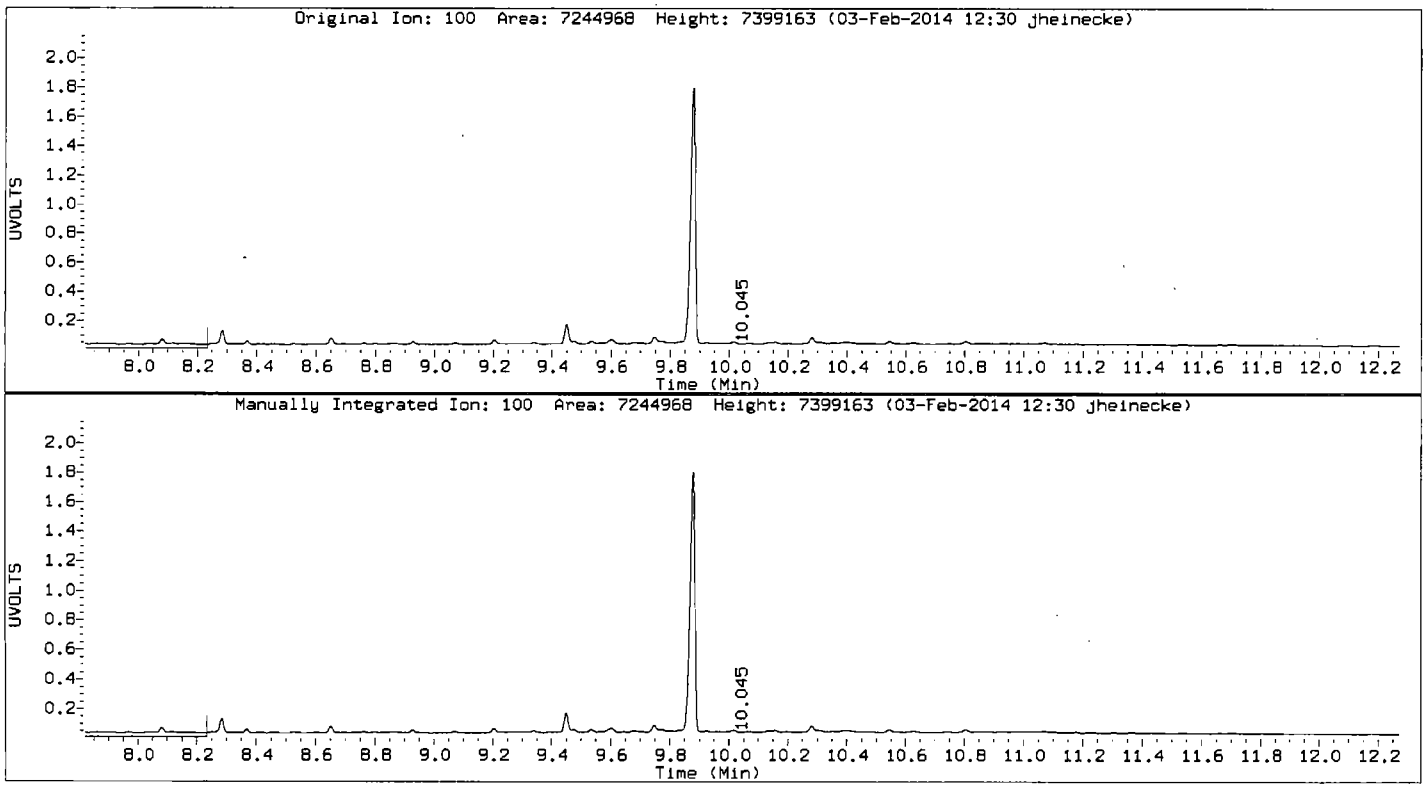
Injection Date: 02-FEB-2014 21:10
Instrument: 10gcs8.i
Lab Sample ID: 10256148006

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R029.d
Lab Smp Id: 10256148007
Inj Date : 02-FEB-2014 23:53
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 10256148007
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
$	2 o-Terphenyl (S)	7.010	6.979	0.031	2923152	47.0482	4.70(M)
$	3 n-Triacontane (S)	9.973	9.895	0.078	2074431	46.9494	4.69(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			5251468	36.3577	3.64(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			5407224	144.847	14.5(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R029.D

Page 1

Date : 02-FEB-2014 23:53

Client ID:

Instrument: 10gcs8.i

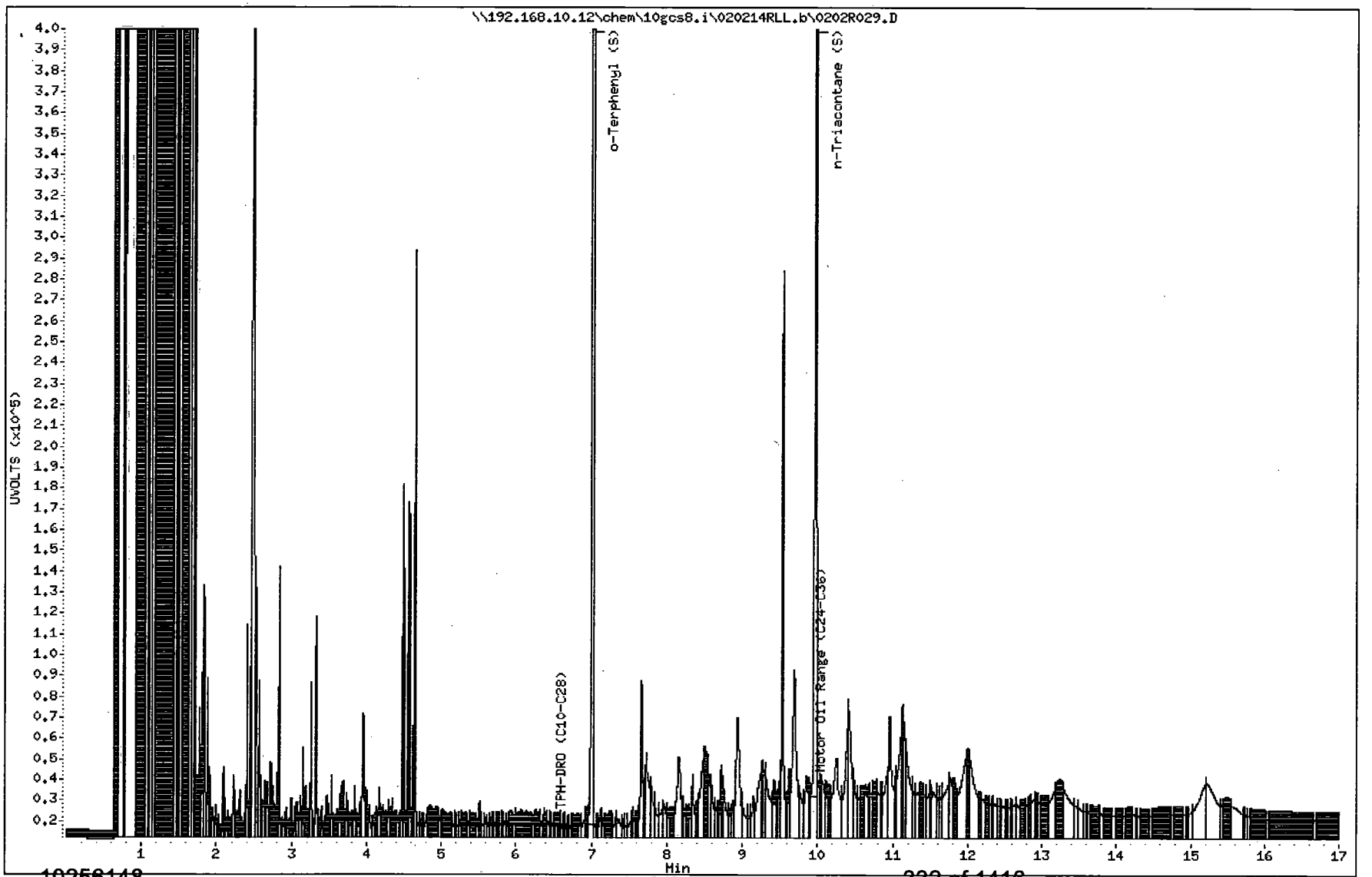
Sample Info: 10256148007

Volume Injected (uL): 1.0

Operator: JRH

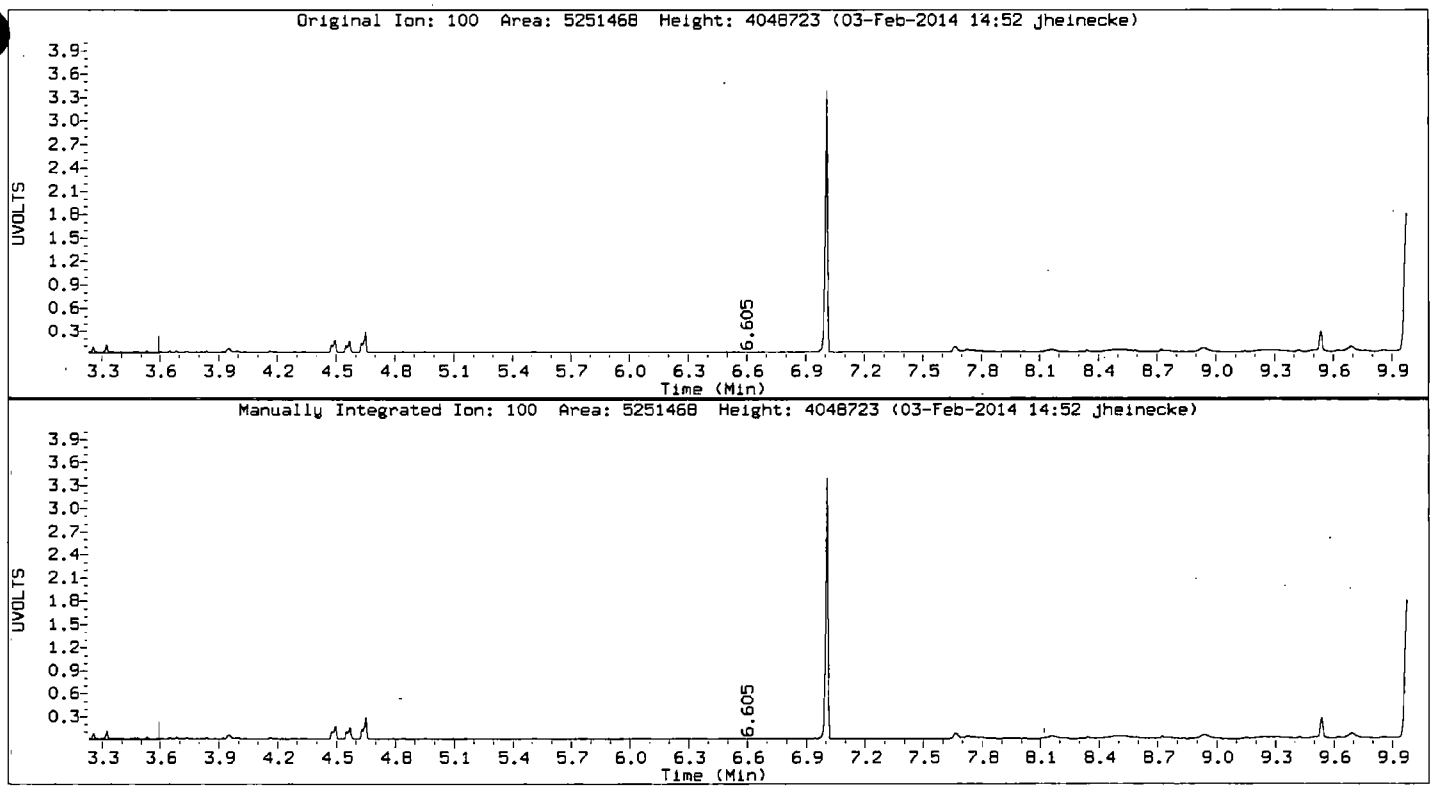
Column phase: DB-5MS

Column diameter: 0.25



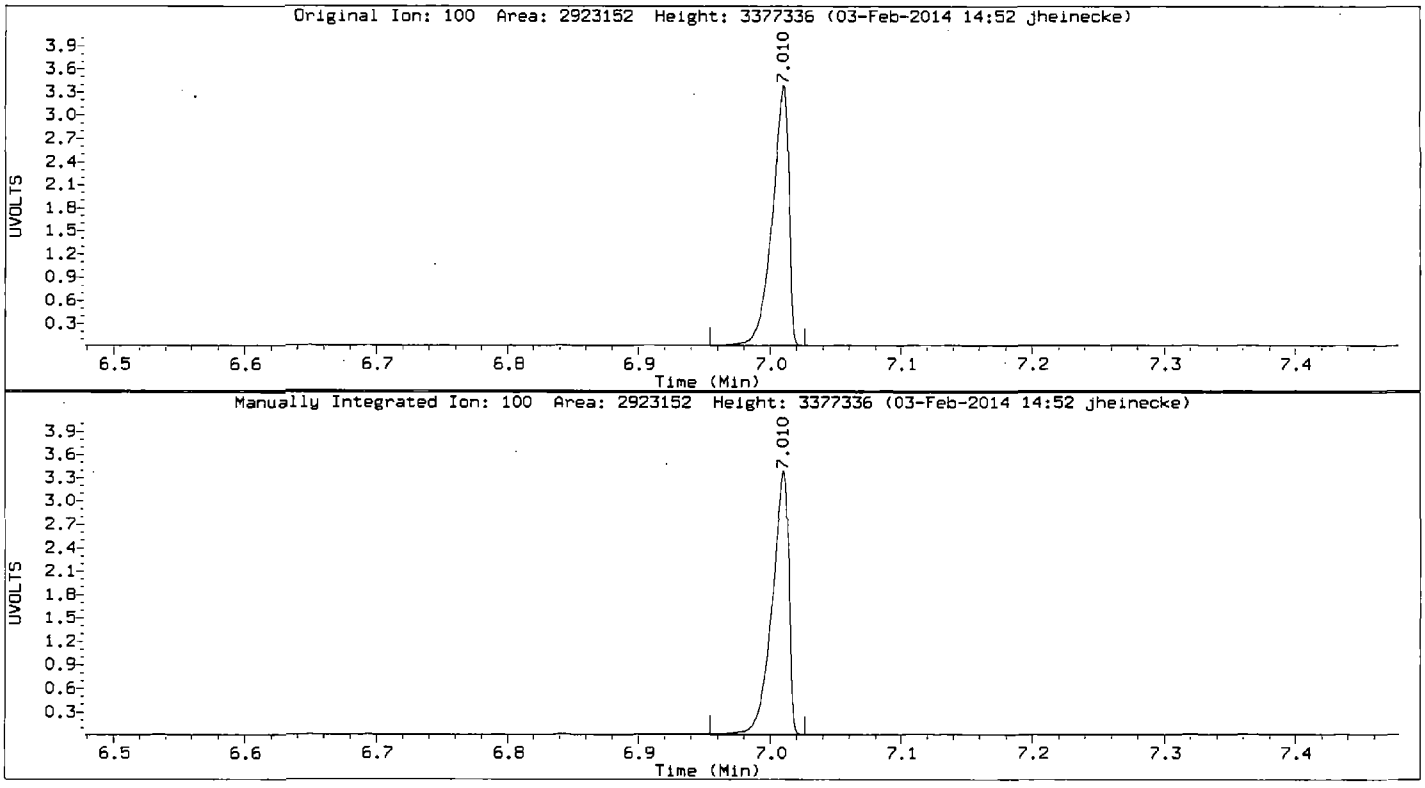
Data File: \\192.168.10.12\CHEM\10gcs8.i\020214RLL.D\020R029.d
Injection Date: 02-FEB-2014 23:53
Instrument: 10gcs8.i
Lab Sample ID: 10256148007

Compound: TPH-DRO (C10-C28)
CAS Number:



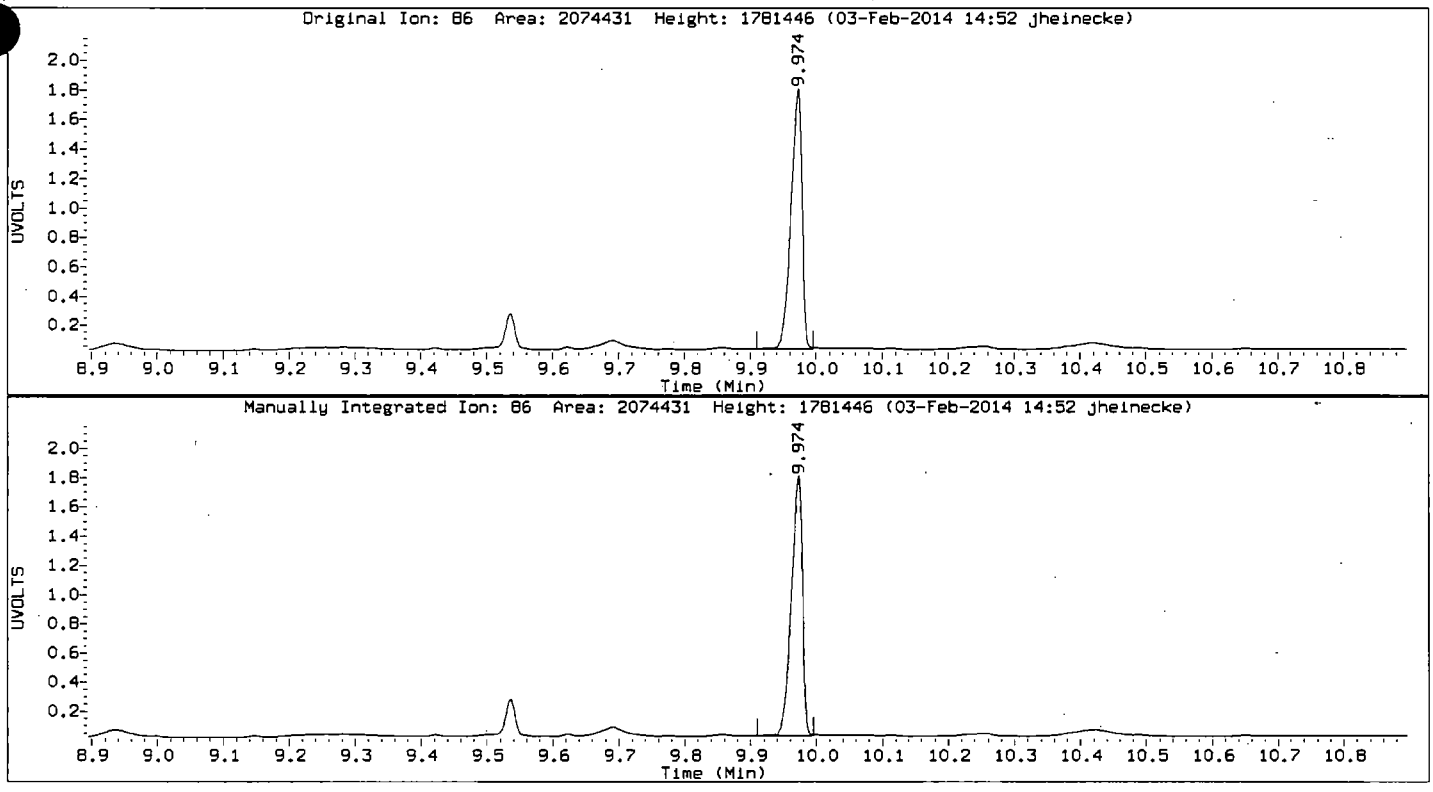
Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.b\0202R029.d
Injection Date: 02-FEB-2014 23:53
Instrument: 10gcs8.i
Lab Sample ID: 10256148007

Compound: o-Terphenyl (S)
CAS Number:



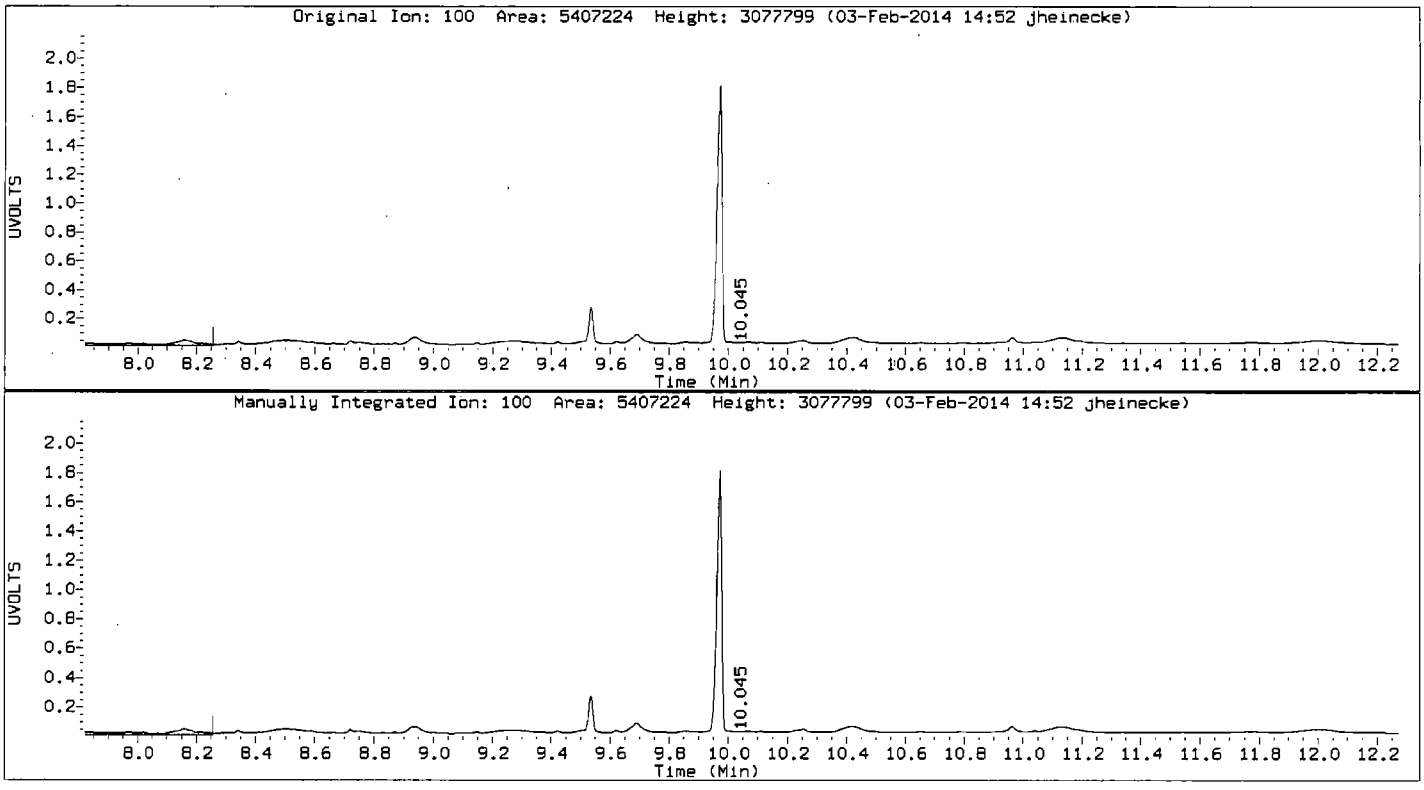
Data File: \\192.168.10.12\Chem\10gcs8.i\020214REB.b\0202R029.d
Injection Date: 02-FEB-2014 23:53
Instrument: 10gcs8.i
Lab Sample ID: 10256148007

Compound: n-Triacontane (S)
CAS Number:



Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.b\0202R029.d
Injection Date: 02-FEB-2014 23:53
Instrument: 10gcs8.i
Lab Sample ID: 10256148007

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R039.d
Lab Smp Id: 10256148008
Inj Date : 03-FEB-2014 03:45
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 10256148008
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
S	2 o-Terphenyl (S)	7.000	6.979	0.021	2873400	46.2483	4.62(M)
S	3 n-Triacontane (S)	9.948	9.895	0.053	2294538	51.8642	5.19(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			3566182	9.94202	0.994(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			2397932	53.5042	5.35(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R039.D

Page 1

Date : 03-FEB-2014 03:45

Client ID:

Instrument: 10gcs8.i

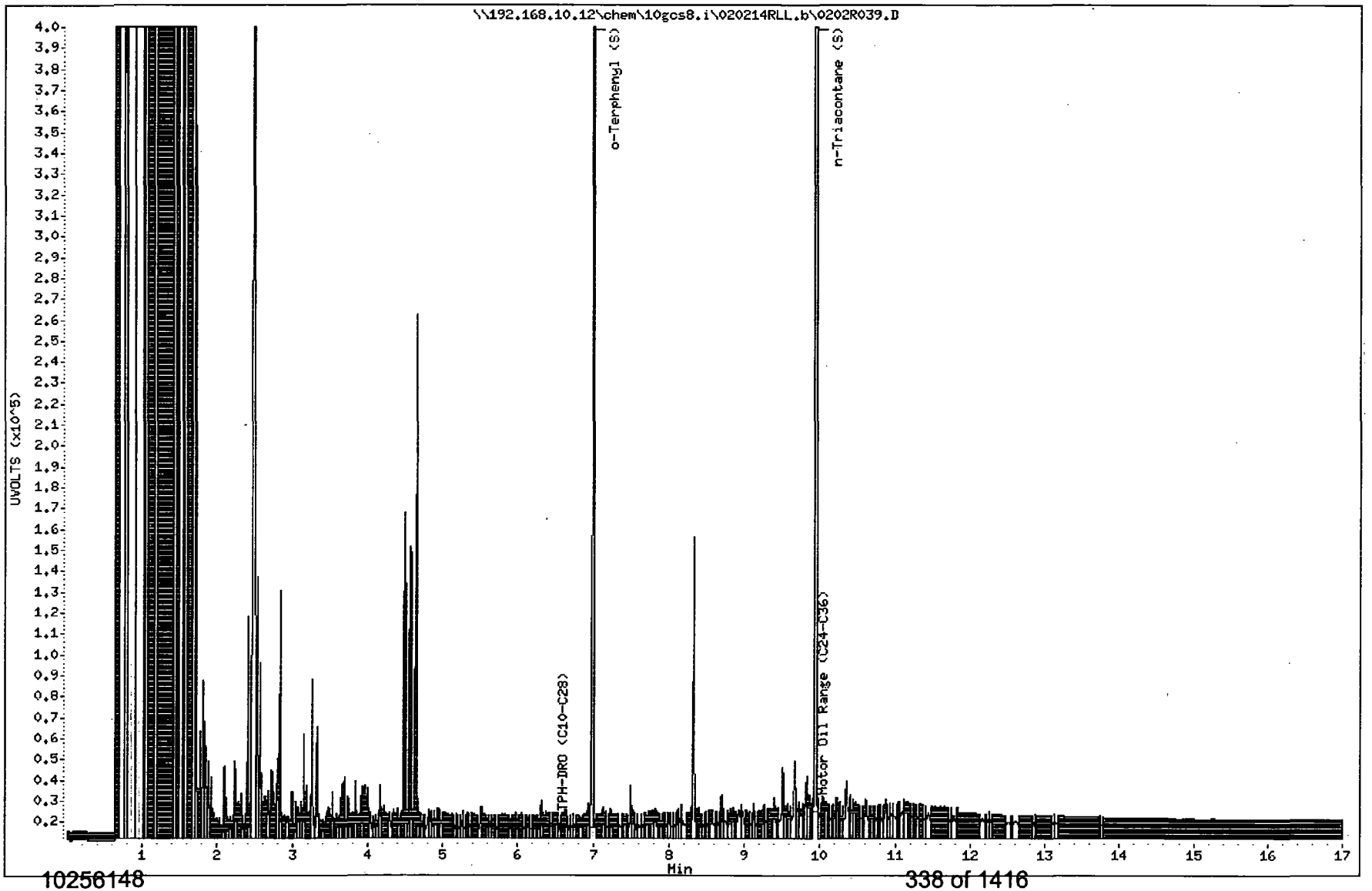
Sample Info: 10256148008

Volume Injected (uL): 1.0

Operator: JRH

Column phase: DB-5MS

Column diameter: 0.25



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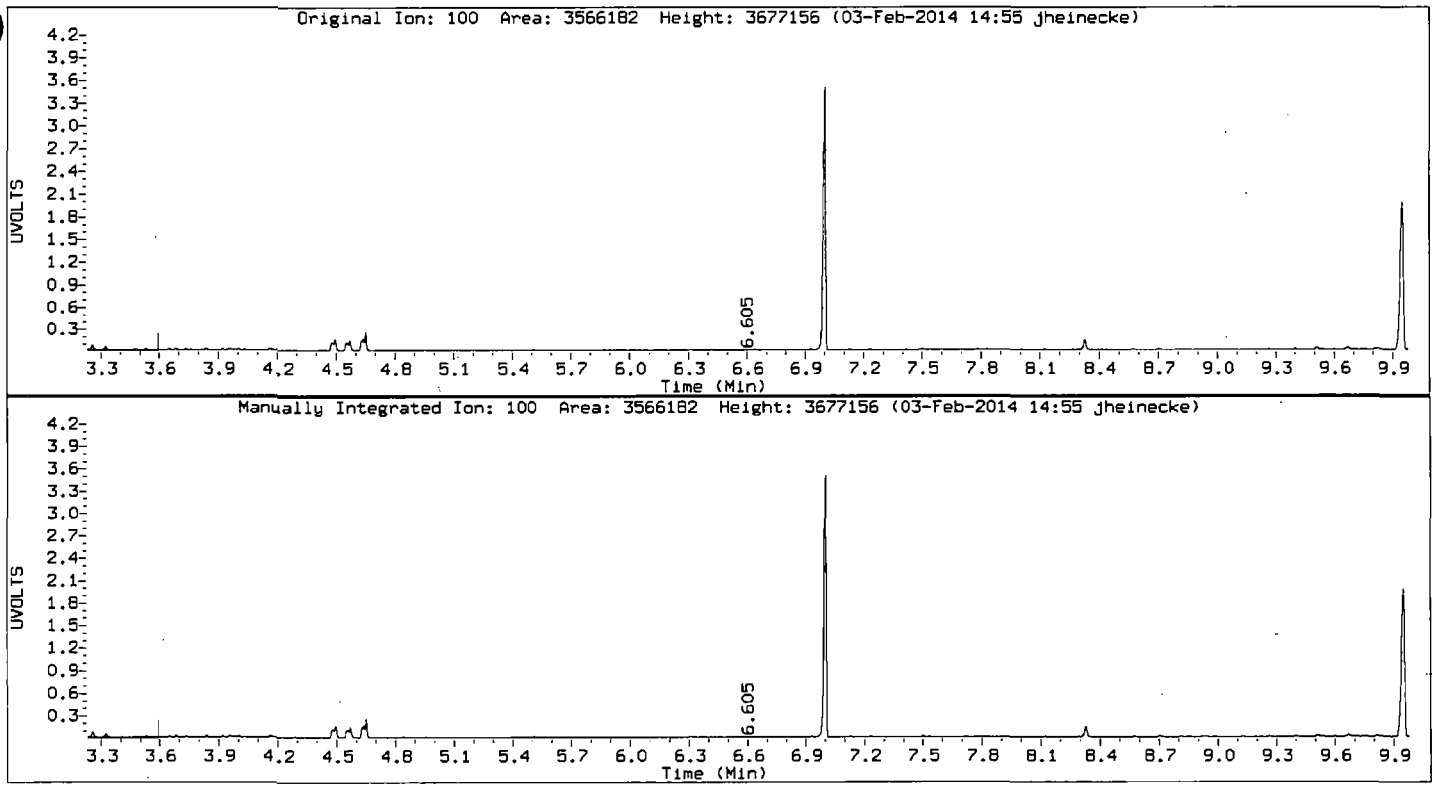
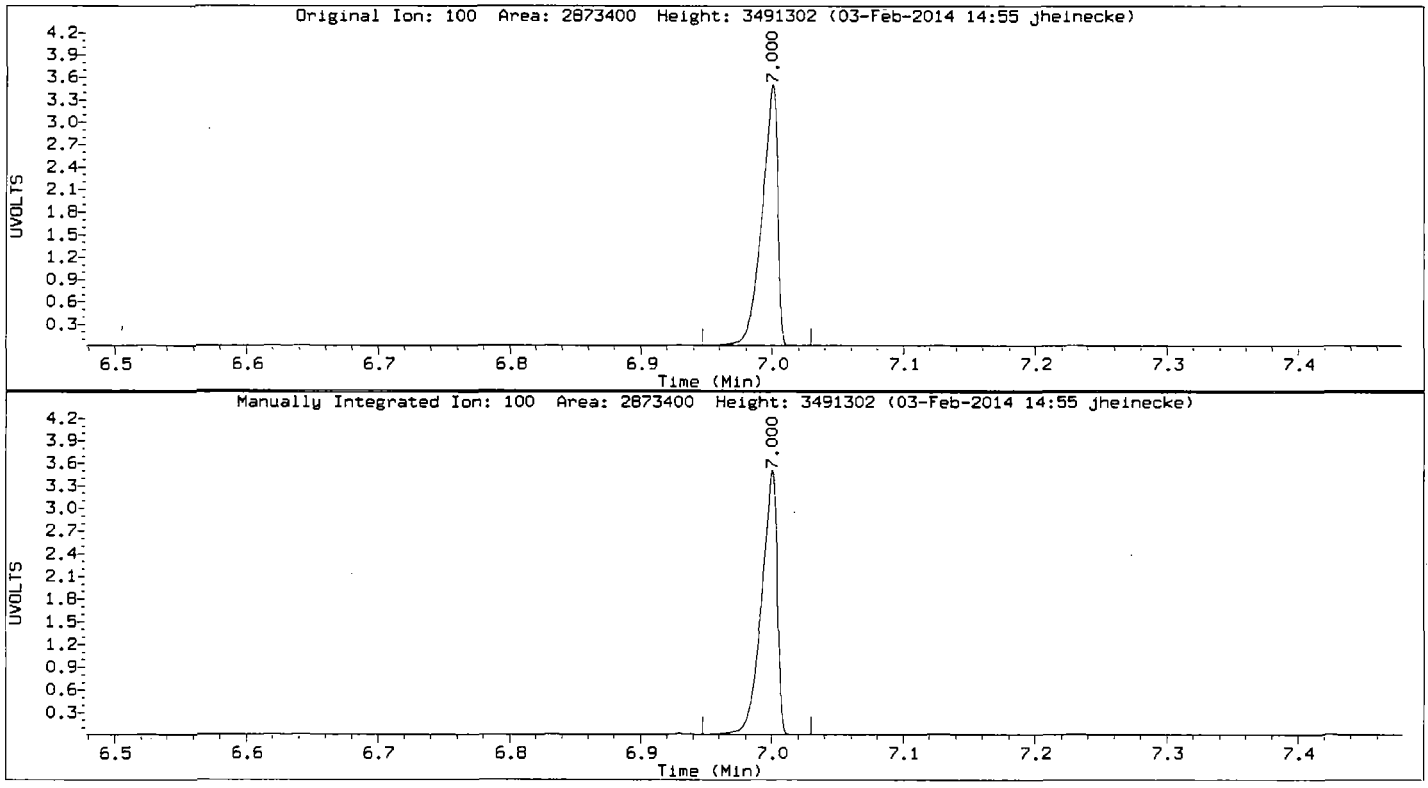
Injection Date: 03-FEB-2014 03:45
Instrument: 10gcs8.i
Lab Sample ID: 10256148008

Compound: TPH-DRO (C10-C28)
CAS Number:



Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.B\0202R039.d
Injection Date: 03-FEB-2014 03:45
Instrument: 10gcs8.i
Lab Sample ID: 10256148008

Compound: o-Terphenyl (S)
CAS Number:



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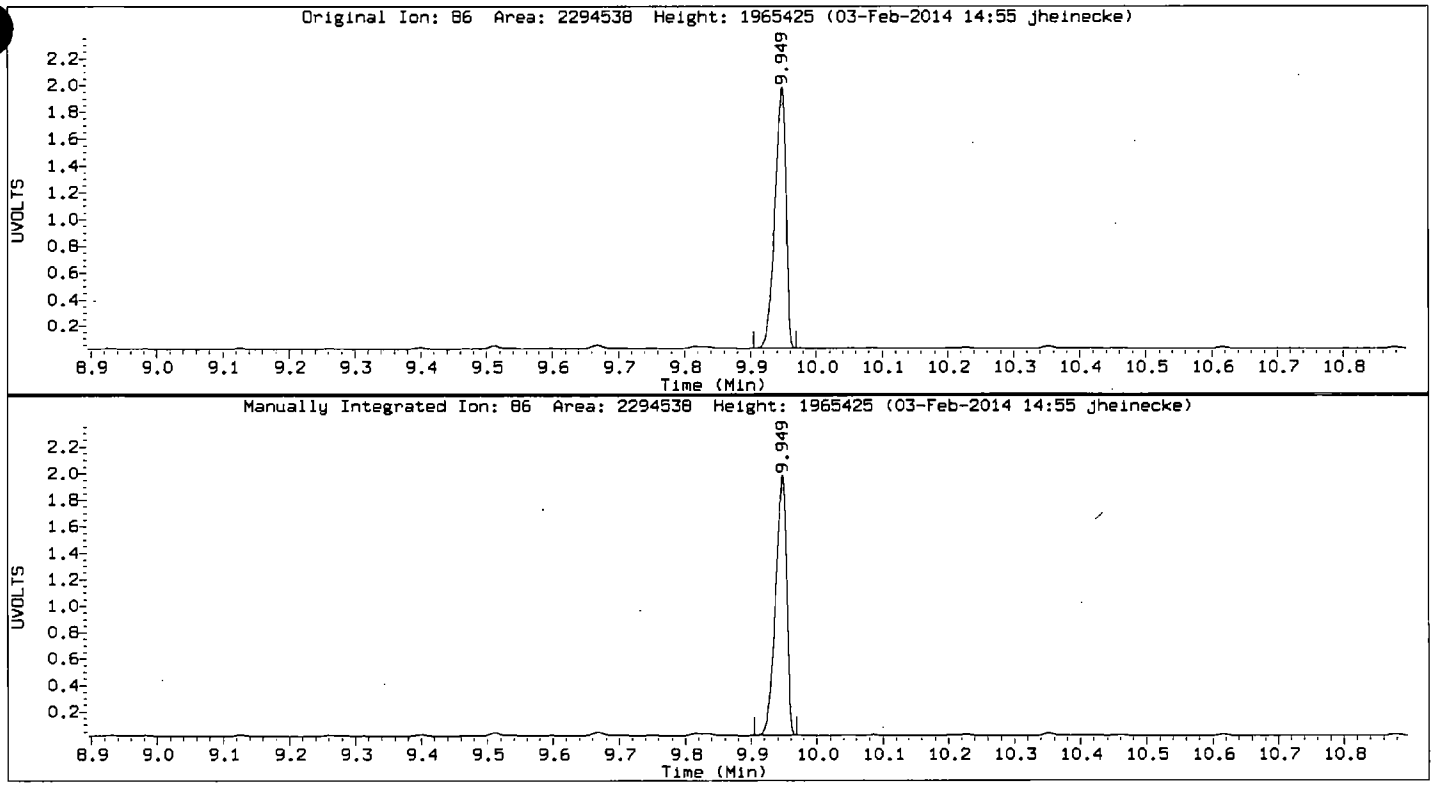
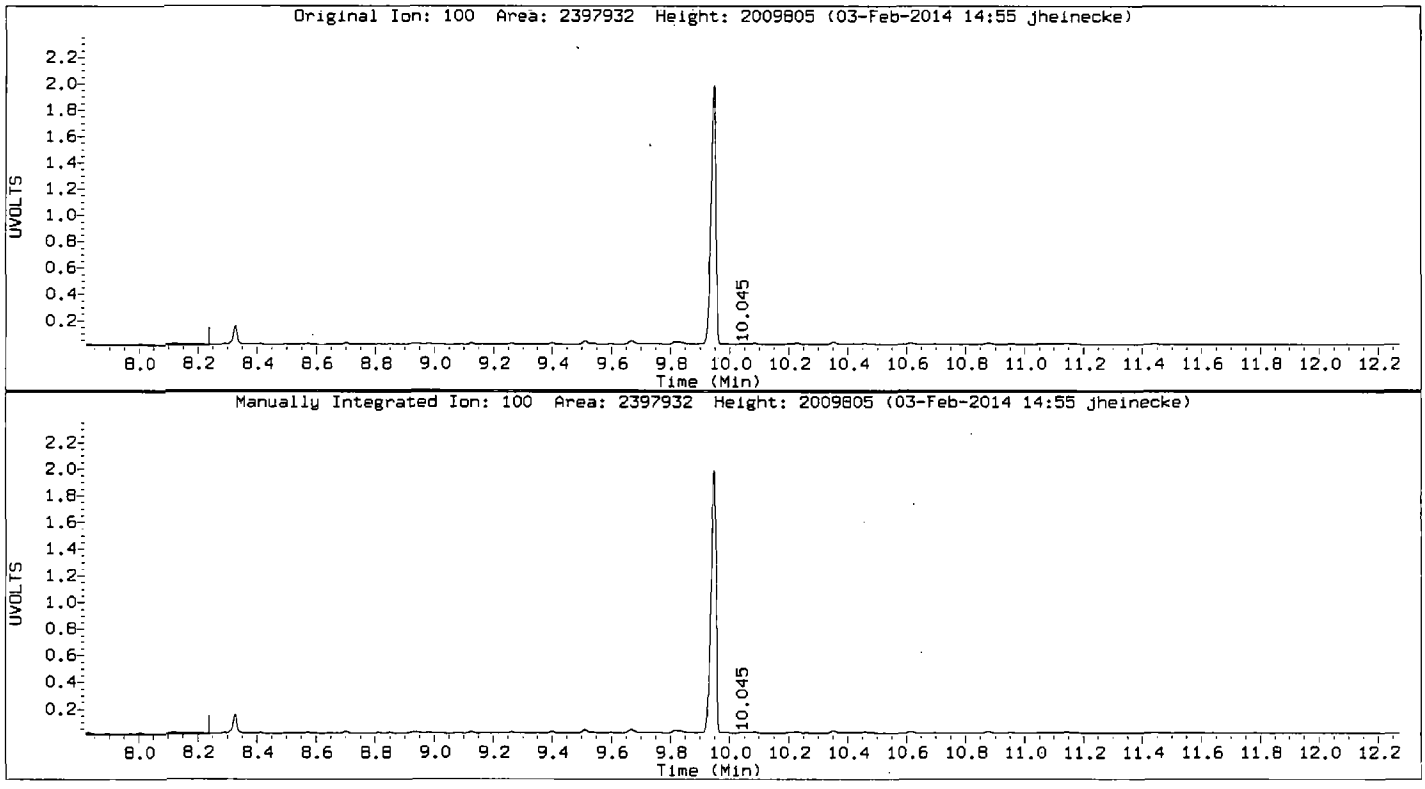
Injection Date: 03-FEB-2014 03:45
Instrument: 10gcs8.i
Lab Sample ID: 10256148008

Compound: n-Triacontane (S)
CAS Number:



Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.b\0202R039.d
Injection Date: 03-FEB-2014 03:45
Instrument: 10gcs8.i
Lab Sample ID: 10256148008

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R040.d
Lab Smp Id: 10256148009
Inj Date : 03-FEB-2014 04:09
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 10256148009
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.993	6.979	0.014	3165366	50.9425	5.09
$	3 n-Triacontane (S)	9.890	9.895	-0.005	2319115	52.4130	5.24(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			3001823	1.08941	0.109
S	6 Motor Oil Range (C24-C36)	8.240-11.850			2337372	51.6660	5.17(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R040.D

Date : 03-FEB-2014 04:09

Client ID:

Instrument: 10gcs8.i

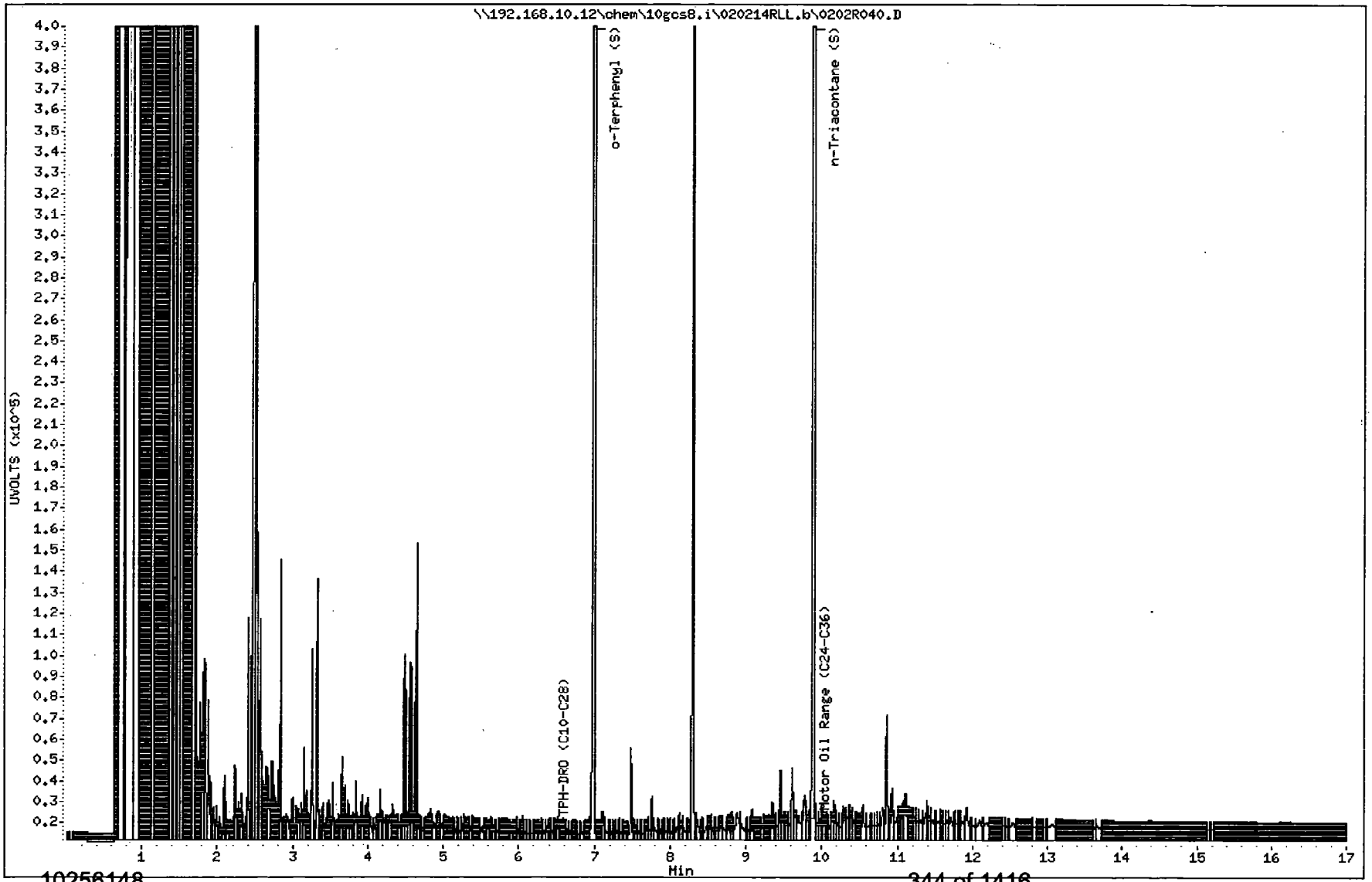
Sample Info: 10256148009

Volume Injected (uL): 1.0

Operator: JRH

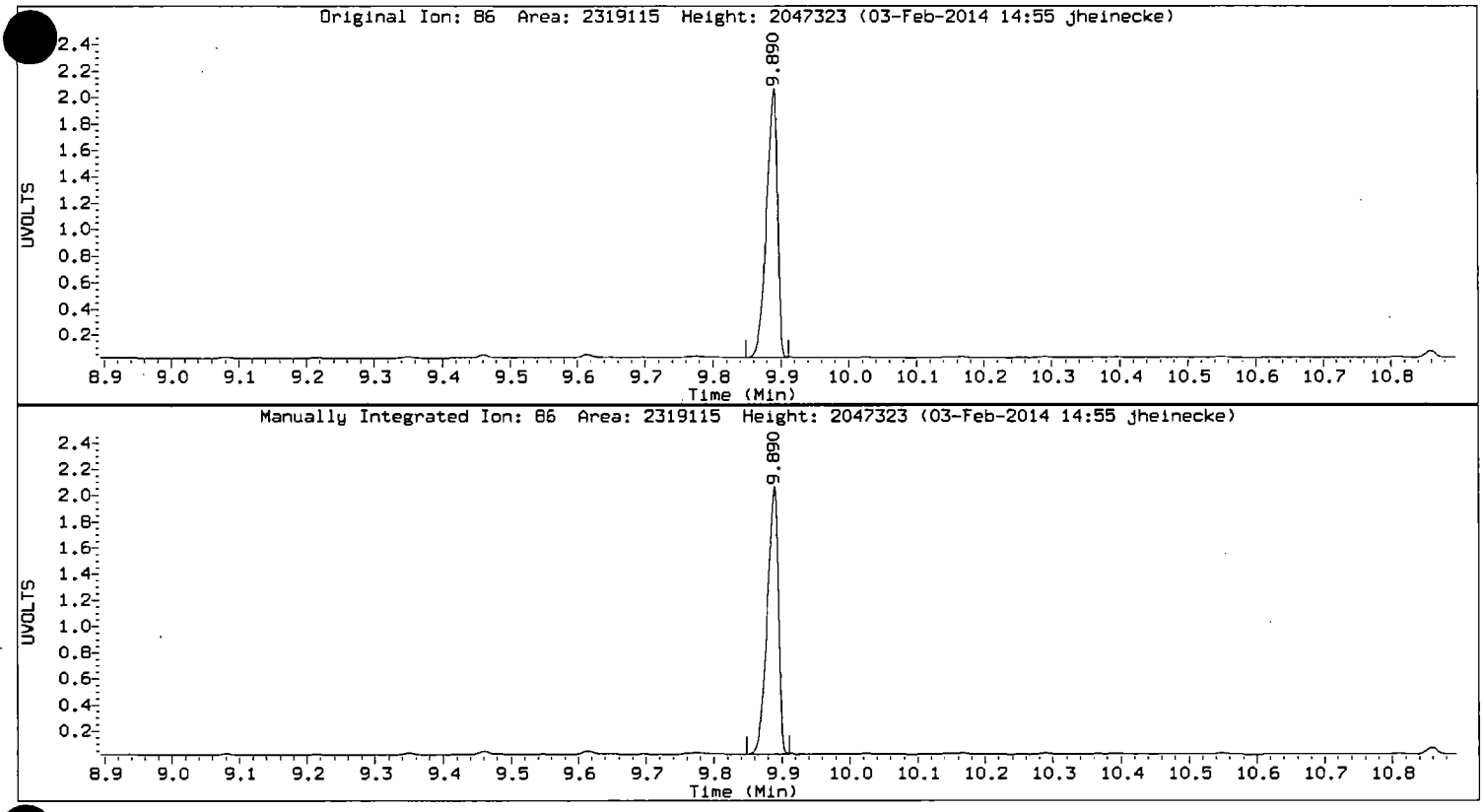
Column phase: DB-5MS

Column diameter: 0.25



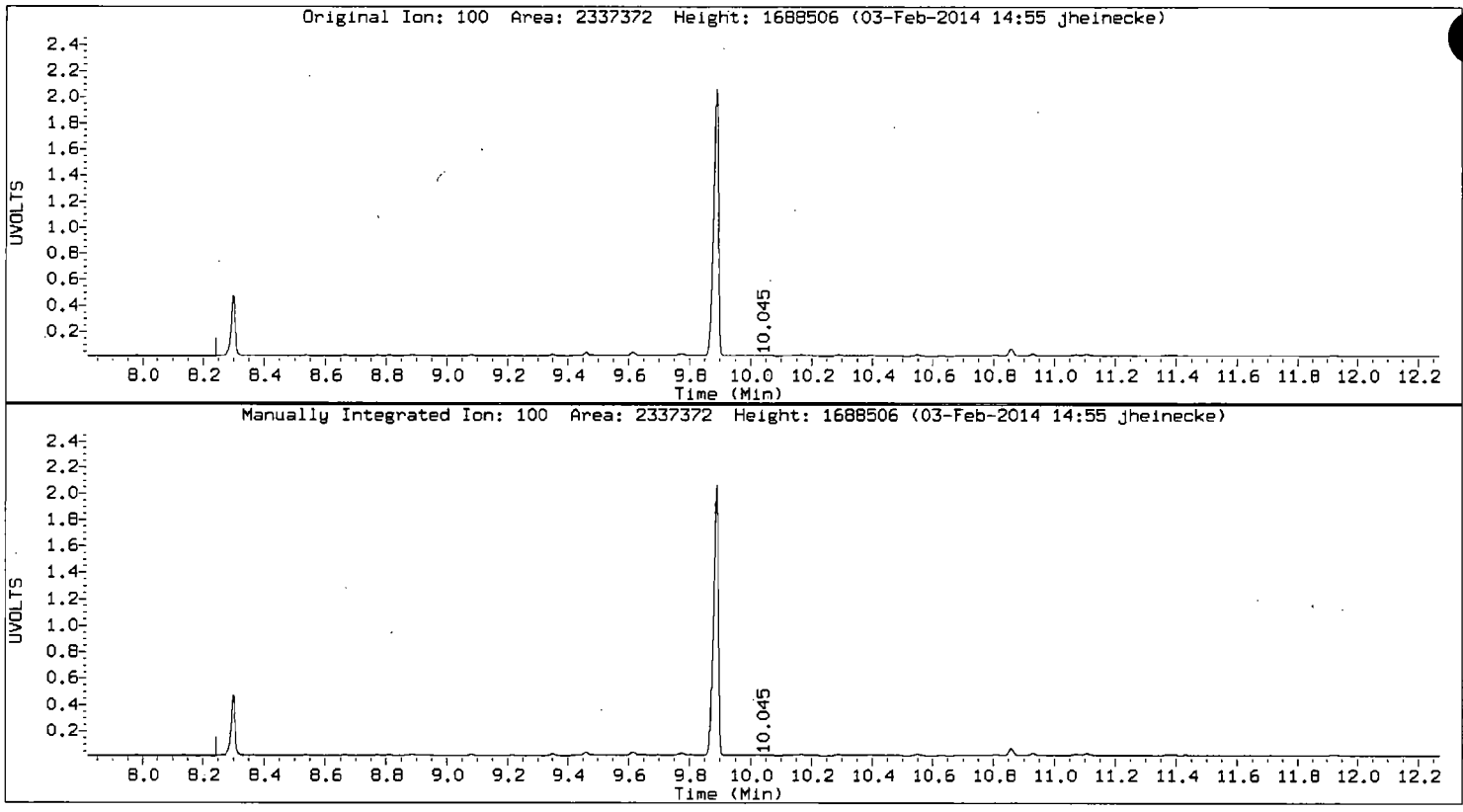
Injection Date: 03-Feb-2014 04:09
Instrument: 10gcs8.i
Lab Sample ID: 10256148009

Compound: n-Triacontane (S)
CAS Number:



Injection Date: 03-FEB-2014 04:09
Instrument: 10gcs8.i
Lab Sample ID: 10256148009

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R030.d
Lab Smp Id: 10256148010
Inj Date : 03-FEB-2014 00:16
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 10256148010
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
S	2 o-Terphenyl (S)	7.009	6.979	0.030	3071757	49.4375	4.94(M)
S	3 n-Triacontane (S)	9.946	9.895	0.051	2229683	50.4160	5.04(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			3610526	10.6375	1.06(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			2416383	54.0643	5.41(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R030.D

Page 1

Date : 03-FEB-2014 00:16

Client ID:

Instrument: 10gcs8.i

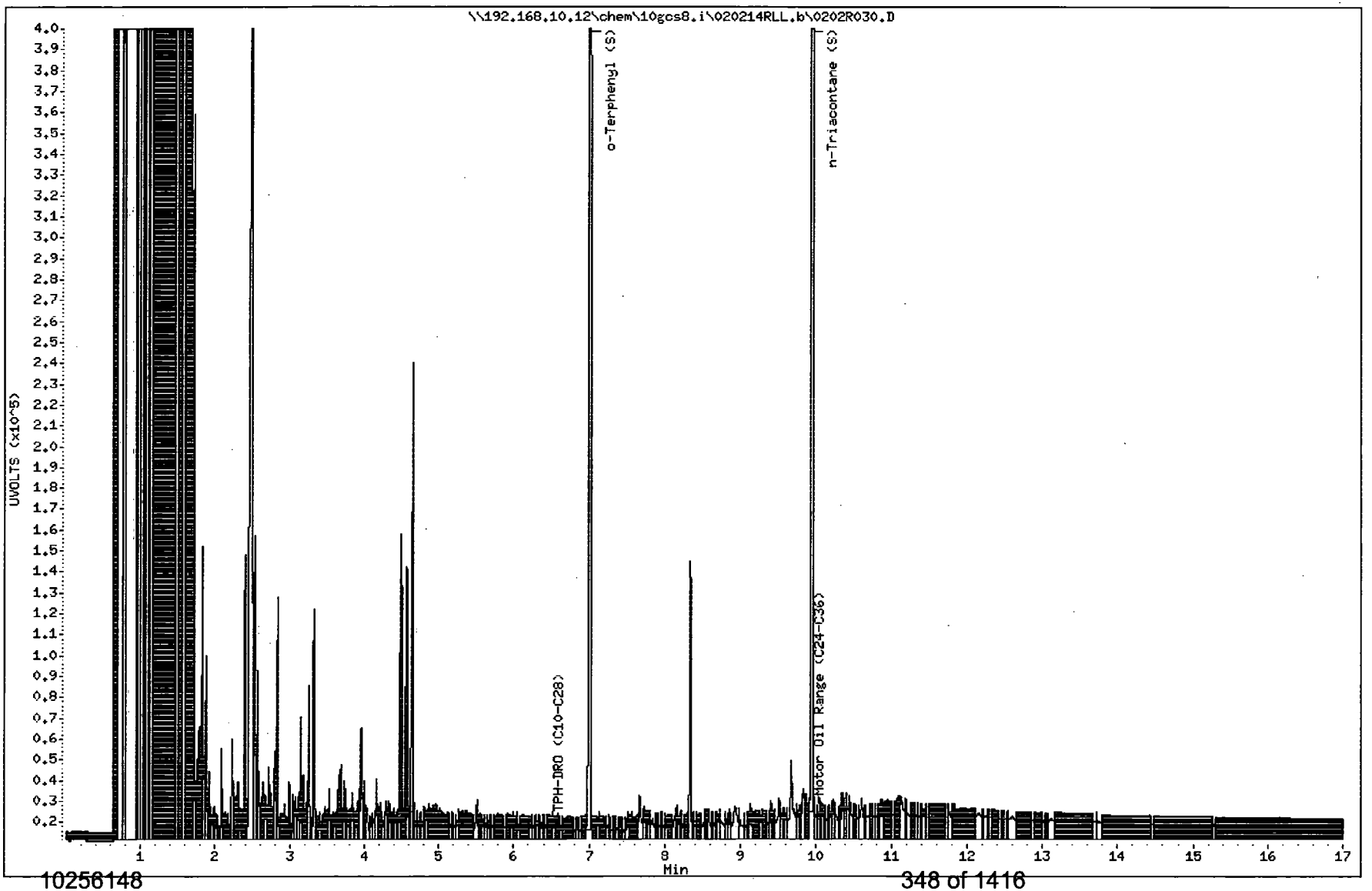
Sample Info: 10256148010

Volume Injected (uL): 1.0

Operator: JRH

Column phase: DB-5MS

Column diameter: 0.25



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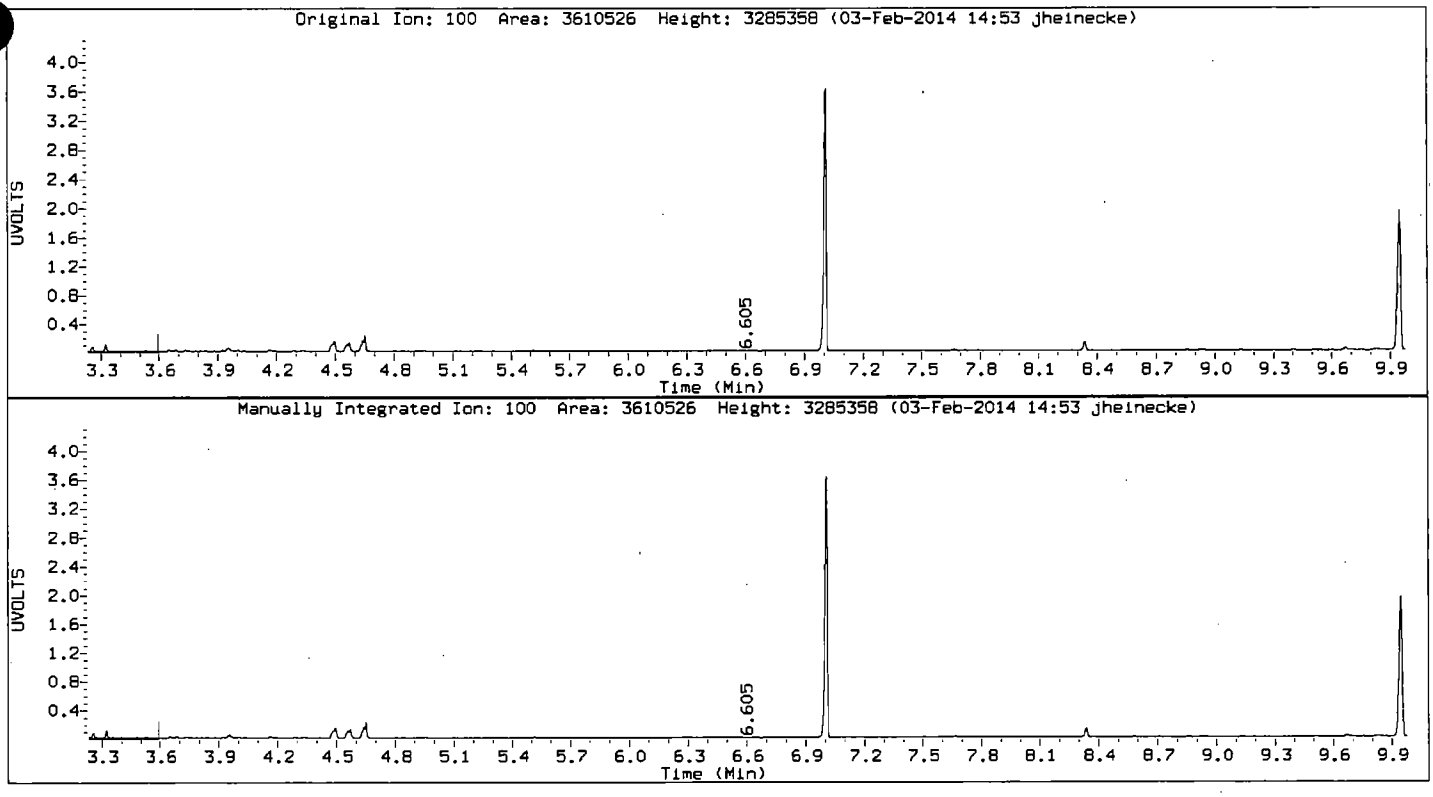
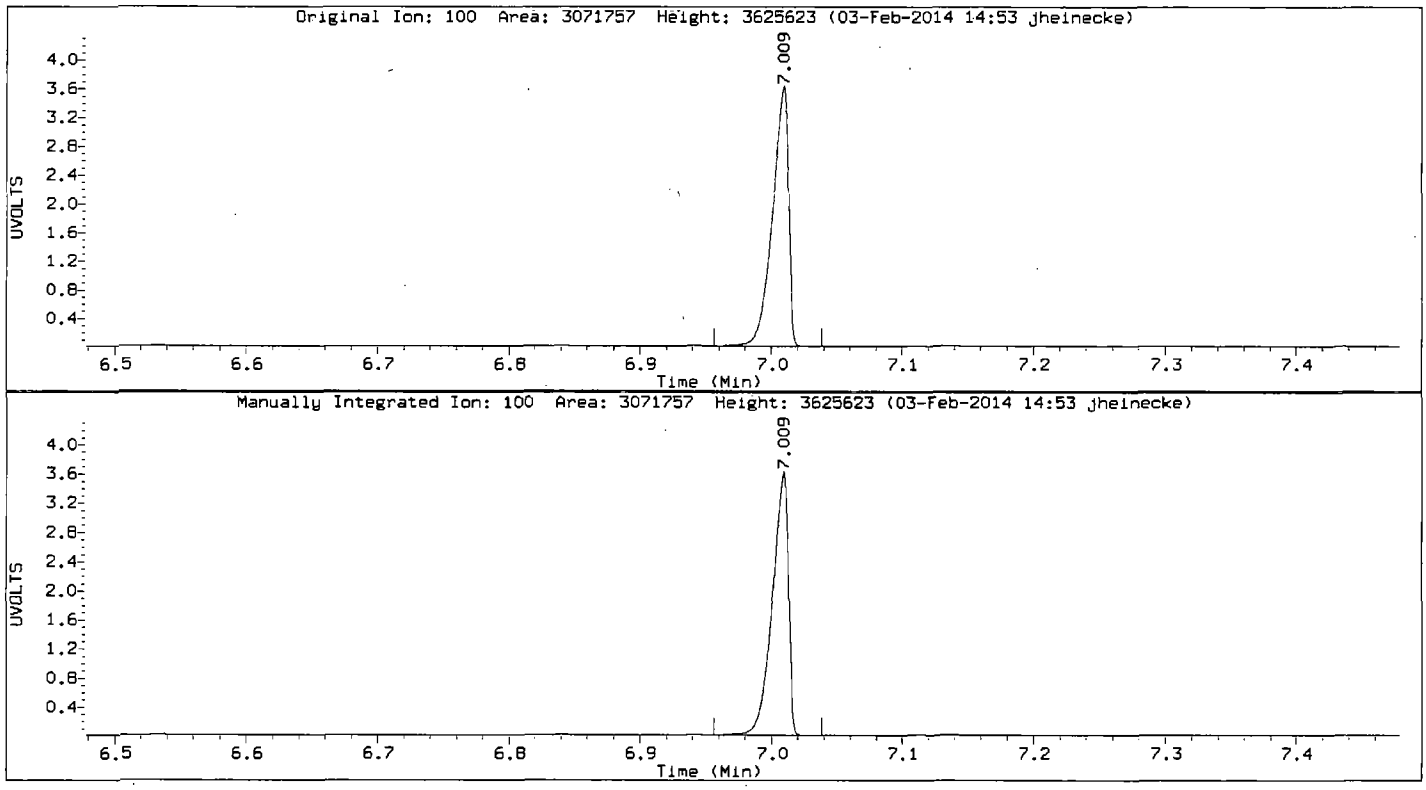
Injection Date: 03-FEB-2014 00:16
Instrument: 10gcs8.i
Lab Sample ID: 10256148010

Compound: TPH-DRO (C10-C28)
CAS Number:



Data File: \\192.168.10.12\Chem\10gcs8.i\020214RLL.b\0202R030.d
Injection Date: 03-FEB-2014 00:16
Instrument: 10gcs8.i
Lab Sample ID: 10256148010

Compound: o-Terphenyl (S)
CAS Number:



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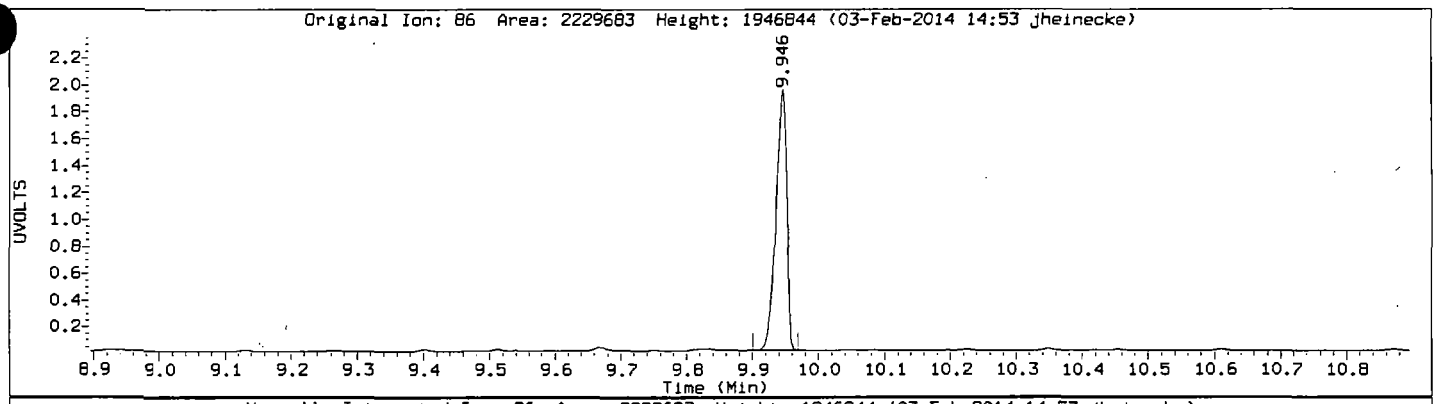
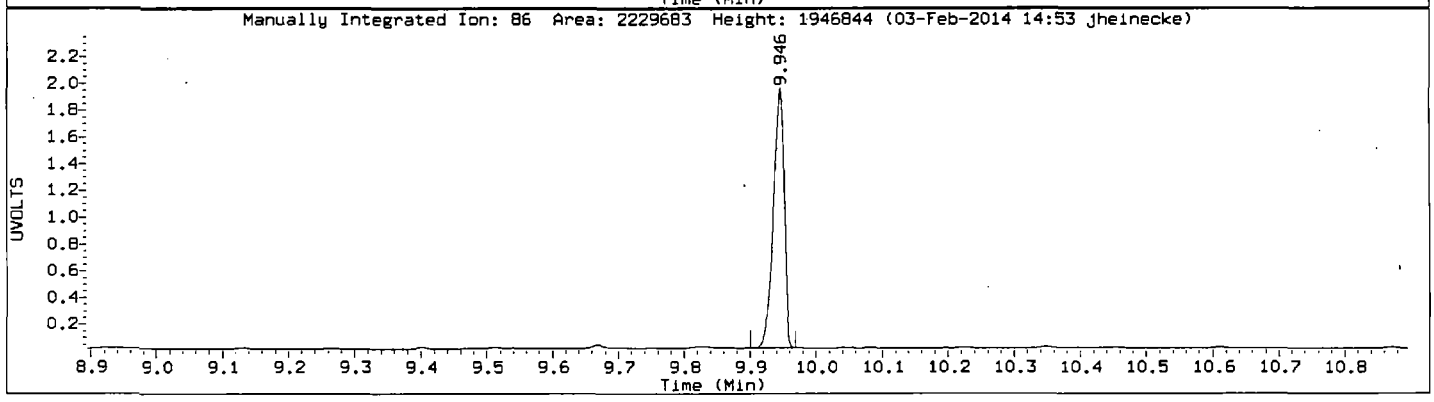
Injection Date: 03-FEB-2014 00:16
Instrument: 10gcs8.i
Lab Sample ID: 10256148010

Compound: n-Triacontane (S)
CAS Number:





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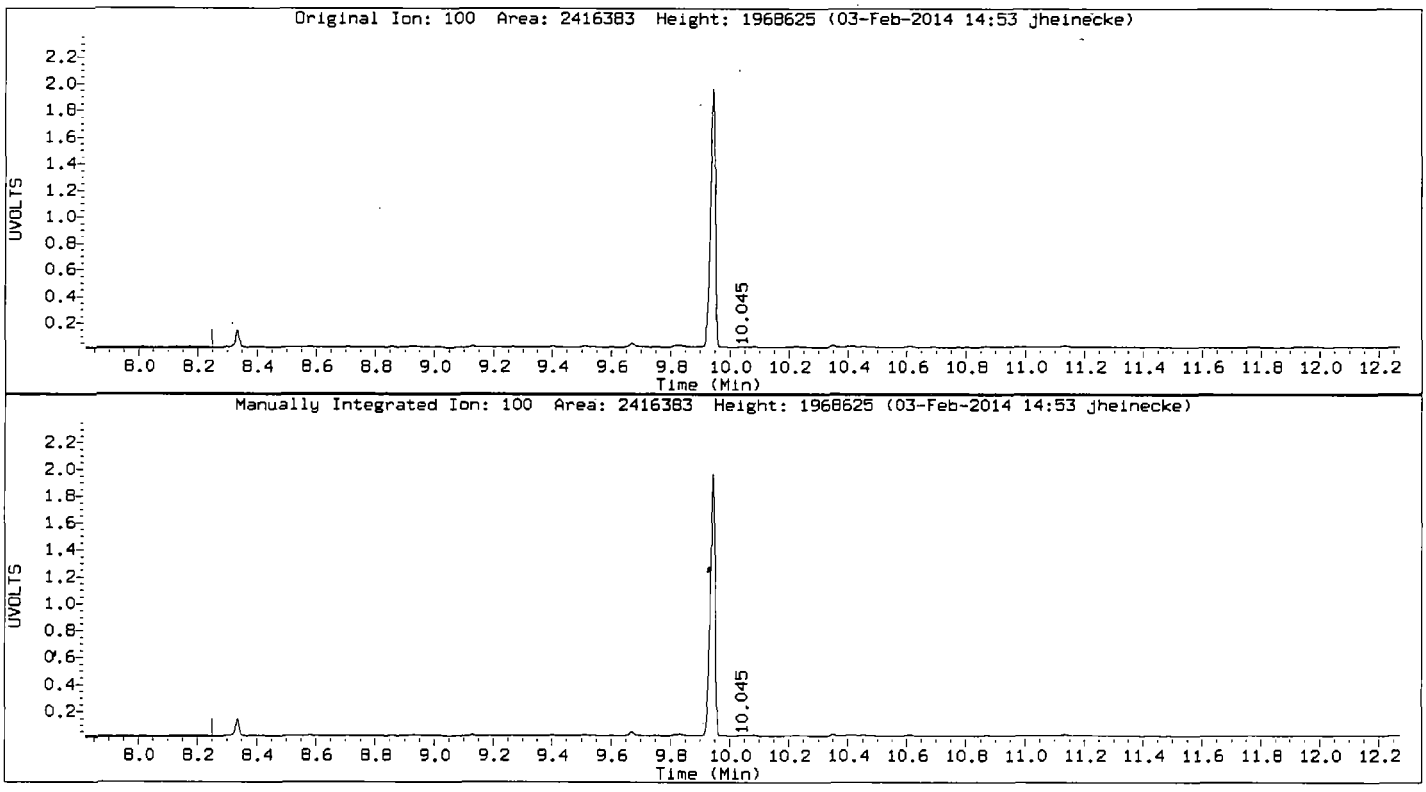
Injection Date: 03-FEB-2014 00:16
Instrument: 10gcs8.i
Lab Sample ID: 10256148010

Compound: Motor Oil Range (C24-C36)
CAS Number:



Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R031.d
Lab Smp Id: 10256148011
Inj Date : 03-FEB-2014 00:39
Operator : JRH Inst ID: 10gcs8.i
Smp Info : 10256148011
Misc Info : 12762
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\020214RLL.b\GCS8akNW8015-013114R.m
Meth Date : 03-Feb-2014 11:58 jheinecke Quant Type: ESTD
Cal Date : 31-JAN-2014 18:49 Cal File: 0131R016.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.985	6.979	0.006	2986825	48.0720	4.81(M)
$	3 n-Triacontane (S)	9.895	9.895	0.000	2138419	48.3782	4.84(M)
S	5 TPH-DRO (C10-C28)	3.600-9.610			4535497	25.1390	2.51(M)
S	6 Motor Oil Range (C24-C36)	8.240-11.850			3447517	85.3628	8.54(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\020214RLL.b\0202R031.D

Date : 03-FEB-2014 00:39

Client ID:

Instrument: 10gcs8.i

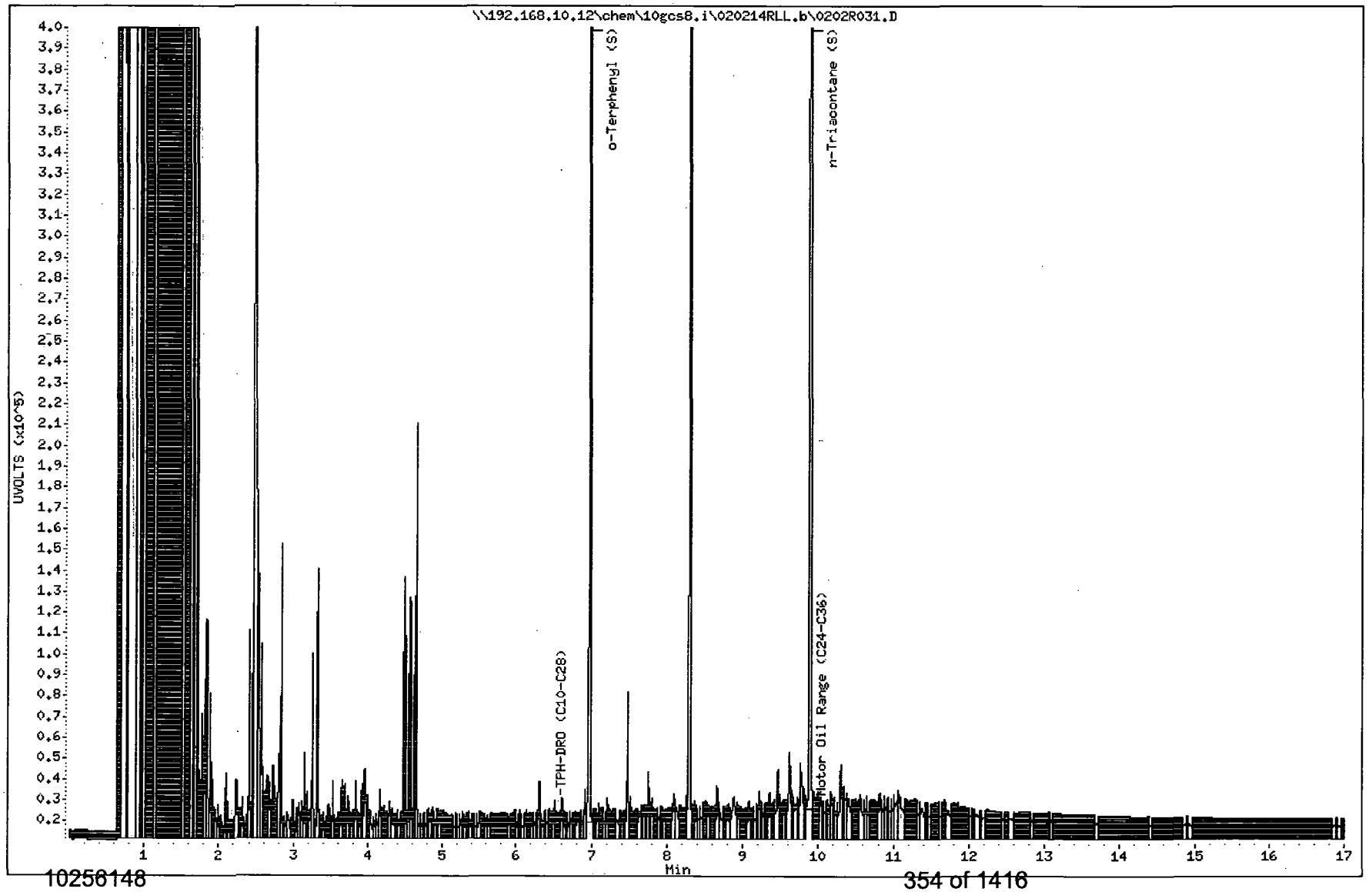
Sample Info: 10256148011

Volume Injected (uL): 1.0

Operator: JRH

Column phase: DB-5MS

Column diameter: 0.25



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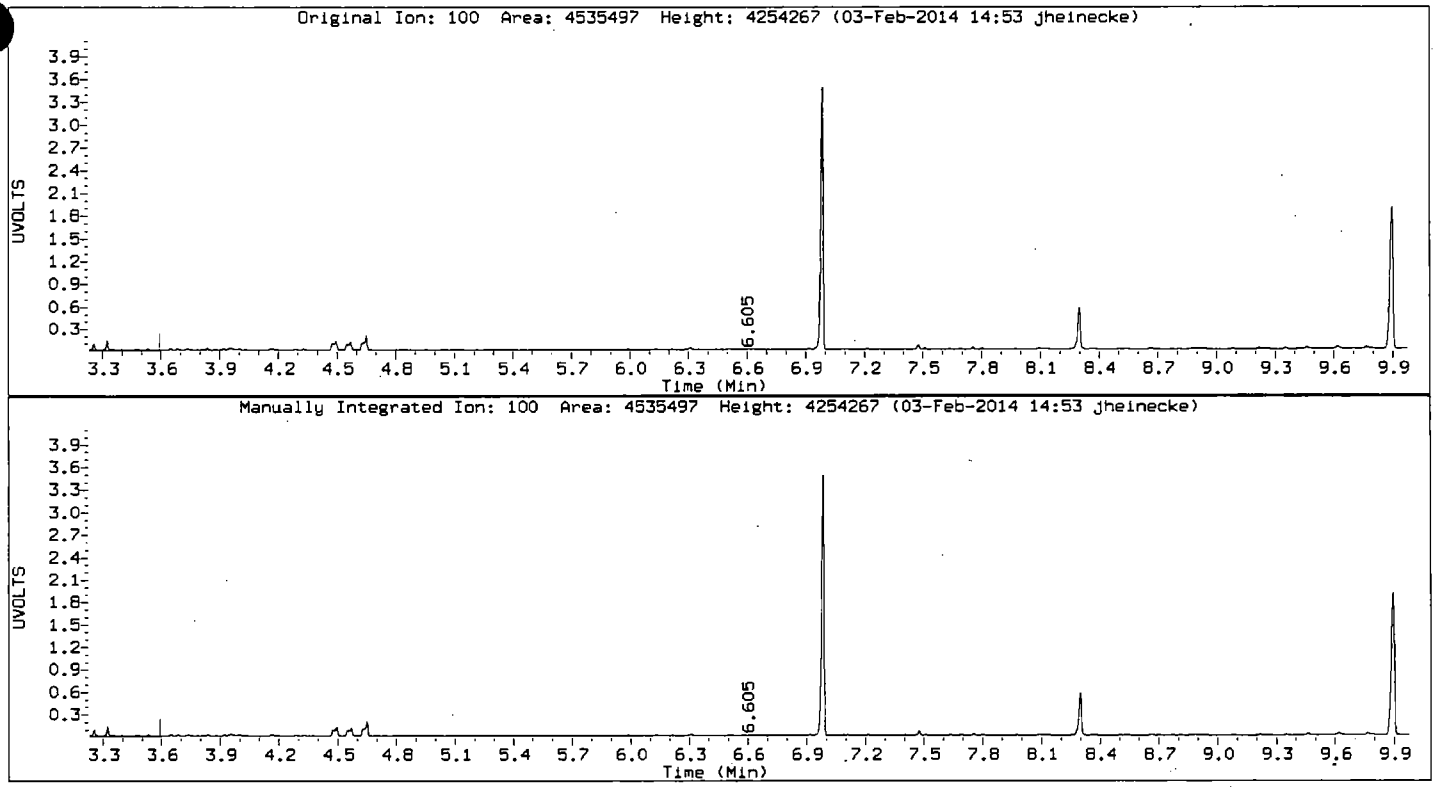
Injection Date: 03-FEB-2014 00:39
Instrument: 10gcs8.i
Lab Sample ID: 10256148011

Compound: TPH-DRO (C10-C28)
CAS Number:



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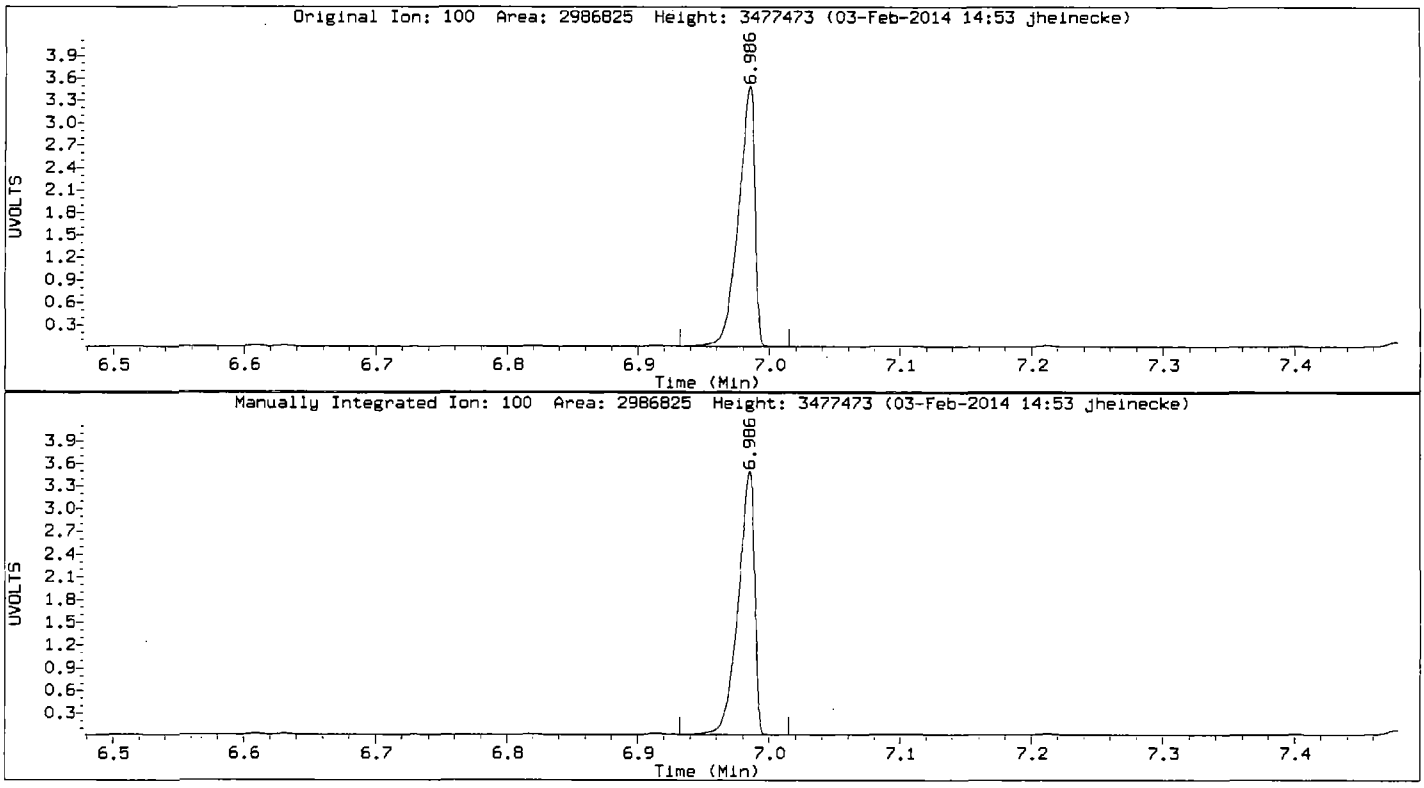
Injection Date: 03-FEB-2014 00:39
Instrument: 10gcs8.i
Lab Sample ID: 10256148011

Compound: o-Terphenyl (S)
CAS Number:



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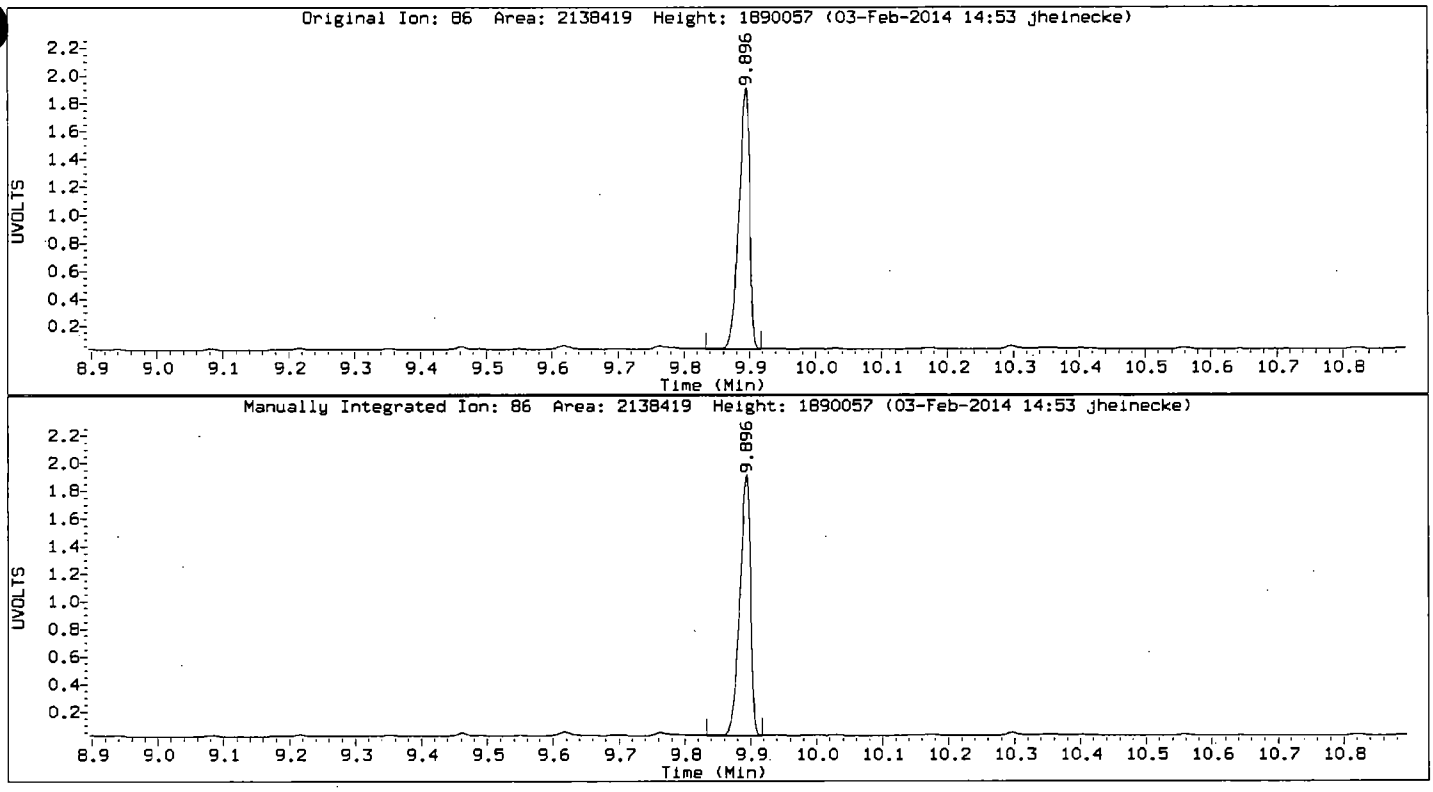
Injection Date: 03-FEB-2014 00:39
Instrument: 10gcs8.i
Lab Sample ID: 10256148011

Compound: n-Triacontane (S)
CAS Number:



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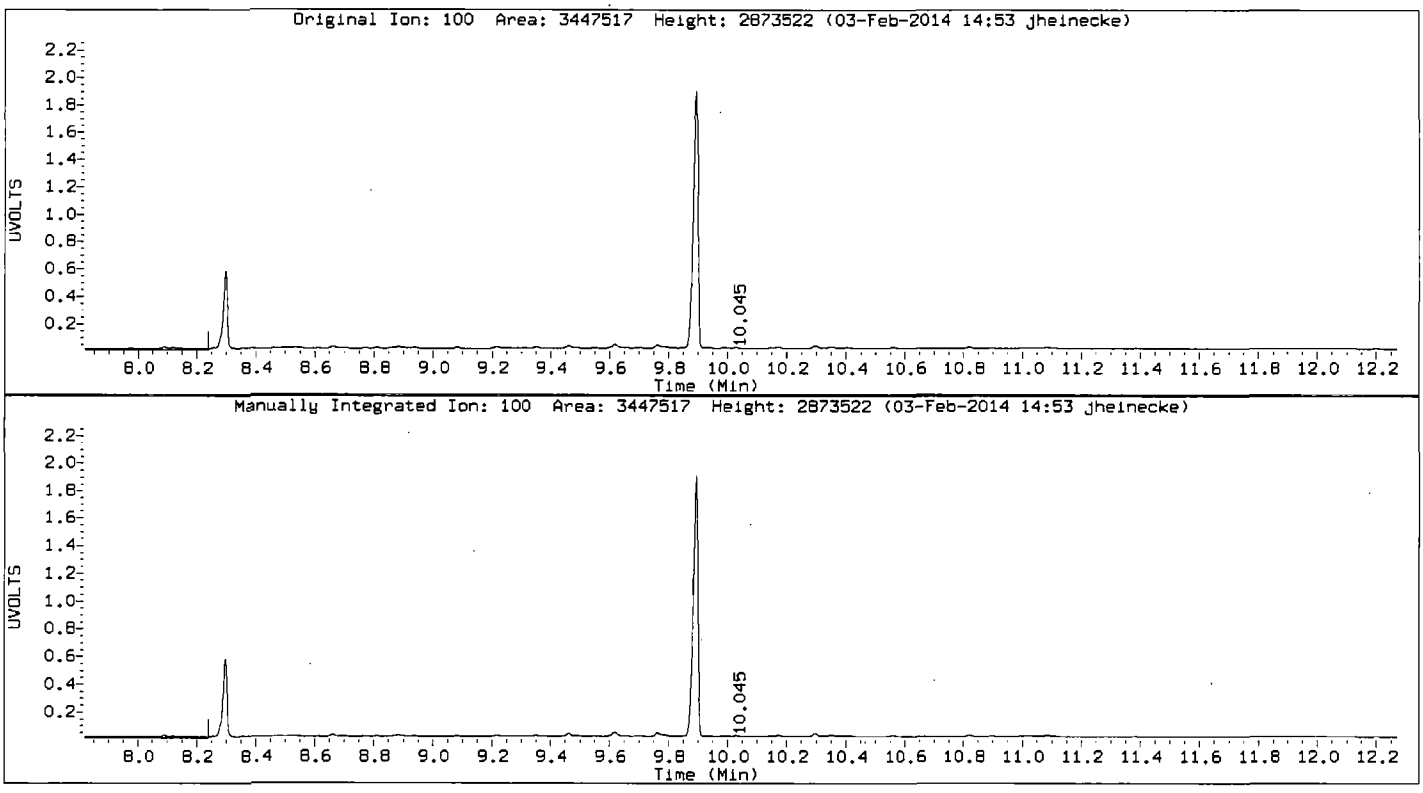
Injection Date: 03-FEB-2014 00:39
Instrument: 10gcs8.i
Lab Sample ID: 10256148011

Compound: Motor Oil Range (C24-C36)
CAS Number:



12762-285312

Pace Analytical	Document Name: Extraction Method: SW 3550 Sonication Analysis: AK102/AK103, 8015, NwTPH-Dx – Soil	Document Revised: 22Jan2014 Page 1 of 1
	Document No.: F-MN-O-253-rev.02	Issuing Authority: Pace Minnesota Quality Office

☐ AK102/AK103 ☒ 8015 ☐ NwTPH-Dx

SS (1): 10185-246 Amt: 25 µL Analyst: SR

SS (2): 10189-275 Amt: 10 µL Analyst: SR

MS: 10328-73 Amt: 250 µL Analyst: SR

Ext. Date/By: 1/29/14 SR

Batch: 24241-285084

Dispensor/Pipettor IDs: BT3/ PP1-35

SS (1): o-terphenyl: 2,000 µg/mL SS (2): n-triacontane d62: 5,000 µg/mL MS: Diesel/MO: 2,000 µg/mL

	Sample ID	10 grams IV	Spike Ver.		F.V. 1.0 mL (clear) Lot # 13725	Comments
1	MB- 1616437	10	1	1	1.0	
2	LCS- 1616438	10	1	1 1	1.0	
3	~~LCSD-~~	~~10~~				
4	10256148001	10.0	1	1	1.0	
5	MS 1616439	10.1	1	1 1	1.0	
6	MSD 1616440	10.2	1	1 1	1.0	
7	48002	10.0	1	1	1.0	
8	48003	10.1	1	1	1.0	
9	48004	10.0	1	1	1.0	
10	48005	10.0	1	1	1.0	
11	48006	10.0	1	1	1.0	
12	48007	10.1	1	1	1.0	
13	48008	10.0	1	1	1.0	
14	48009	10.0	1	1	1.0	
15	48010	10.0	1	1	1.0	
16	48011	10.0	1	1	1.0	
17	10256188001	10.0	1	1	1.0	
18	10256224001	10.1	1	1	1.0	
19	24002	10.0	1	1	1.0	
20	24003	10.0	1	1	1.0	
21	24004	10.0	1	1	1.0	
22	10256197001	10.0	1	1	1.0	
23					KR 1-30-14	
24						
25						

Sample IDs Verified: 1

Na_2SO_4: 136130-03

MeCl2/Acetone: 4222-461

Comments: 1 No one to verify

H_2SO_4: NA

Silica Lot: NA

Date Conc./By KR 1-30-14

Bath Temp Read (80°C): 84 °C

Bath Temp Corrected: 85 °C

MeCl2 Final Volume: 13725

Posted by: MD	Date: 1-30-14	Validated by: KR	Date: 1-30-14

Fraction: 8015-GRO

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 285266 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148
Lab File ID: 01301430.D Lab Sample ID: 1617199
GC Column: DB-624 ID: 0.53 (mm) Time Analyzed: 01:05
Instrument ID: 10GCV5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS for HBN 285266 [GCV/11637]	1617200	01301425.D	23:04
02	SB-5 2-3(1616163MS)	1617201-MS	01301426.D	23:28
03	SB-5 2-3(1616163MSD)	1617202-MSD	01301427.D	23:52
04	BLANK for HBN 285266 [GCV/1163	1617199	01301430.D	01:05
05	SB-5 2-3	10256148009	01301431.D	01:29
06	SB-4 2-3.5'	10256148007	01301432.D	01:53
07	SB-4 19-20'	10256148008	01301433.D	02:17
08	SB-5 10-12'	10256148010	01301434.D	02:41
09	SB-1 2-3'	10256148001	02011416.D	16:35
10	SB-1 20-21'	10256148002	02011417.D	16:59
11	SB-3 25-27'	10256148006	02011434.D	23:49
12	DUP-001	10256148011	02041409.D	16:57
13	SB-3 3-5'	10256148005	02041410.D	17:21
14	SB-2 22-23'	10256148004	02041411.D	17:45
15	SB-2 2-3'	10256148003	02041412.D	18:10

Pace Analytical®
www.pacelabs.com

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Minneapolis, MN 55414
(612)607-1700

SURROGATE RECOVERY SUMMARY

Project: BP SS# 5482
Pace Project No.: 10256148

QB Batch: GCV / 11637
Method(s): EPA 5030 / EPA 8015/8021

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
10256148001		SB-1 2-3'	1	97											
1617199	BLANK		1	106											
10256148002		SB-1 20-21'	1	101											
1617200	LCS		1	117											
10256148003		SB-2 2-3'	1	102											
1617201	MS		1	117											
10256148004		SB-2 22-23'	1	101											
1617202	MSD		1	115											
10256148005		SB-3 3-5'	1	100											
10256148006		SB-3 25-27'	1	93											
10256148007		SB-4 2-3.5'	1	100											
10256148008		SB-4 19-20'	1	103											
10256148009	OQS	SB-5 2-3	1	103											
10256148010		SB-5 10-12'	1	104											
10256148011		DUP-001	1	103											
			QC Limits:	68-135											
			Sample Limits:	68-135											

Sur 1: a,a,a-Trifluorotoluene (S)

REPORT OF LABORATORY ANALYSIS

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Instrument Run Log

Instrument: 10GCV5 Method: TPH Soil Ical Misc. Prep. Info: Surrogate Lot: 10186-41
Column: DB-624 0.53mm Hydrogen Tune Standard: NA ISTD Lot: N/A Cal. Standard: 10186-53A, 10186-54A

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
01201401.D	CONDITIONING BLK	Solid	Sample	1		G514-TPH-MLS-012014	1/20/14 15:49	LLC	DNR
01201402.D	REAGENT BLANK	Solid	Sample	1		G514-TPH-MLS-012014	1/20/14 16:13	LLC	ok
01201403.D	RTM 9314-425	Solid	Sample	1		G514-TPH-MLS-012014	1/20/14 16:37	LLC	ok
01201404.D	VB	Solid	Sample	1		G514-TPH-MLS-012014	1/20/14 17:01	LLC	ok
01201405.D	TPH ICAL 10 9895	Solid	Ical	1		G514-TPH-MLS-012014	1/20/14 17:25	LLC	ok
01201406.D	TPH ICAL 25 9895	Solid	Ical	1		G514-TPH-MLS-012014	1/20/14 17:50	LLC	ok
01201407.D	TPH ICAL 50 9895	Solid	Ical	1		G514-TPH-MLS-012014	1/20/14 18:14	LLC	ok
01201408.D	TPH ICAL 100 9895	Solid	Ical	1		G514-TPH-MLS-012014	1/20/14 18:38	LLC	ok
01201409.D	TPH ICAL 500 9895	Solid	Ical	1		G514-TPH-MLS-012014	1/20/14 19:02	LLC	ok
01201410.D	TPH ICAL 1000 9895	Solid	Ical	1		G514-TPH-MLS-012014	1/20/14 19:26	LLC	ok
01201411.D	TPH ICAL 2500 9895	Solid	Ical	1		G514-TPH-MLS-012014	1/20/14 19:50	LLC	ok
01201412.D	VB	Solid	Sample	1		G514-TPH-MLS-012014	1/20/14 20:14	LLC	ok
01201413.D	VB	Solid	Sample	1		G514-TPH-MLS-012014	1/20/14 20:39	LLC	ok
01201414.D	TPH ICV 9895-82	Solid	CCal	1		G514-TPH-MLS-012014	1/20/14 21:03	LLC	pass

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: TPH Soil Ical

File Path 1: U:\10GCV5.I\012014A-2.B\ Run order verified: 1/21/14 LC Report Date: 01/21/2014 09:36
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one Reviewed By/Date:

Instrument: 10GCV5 Method: 8015Soils32 Misc. Prep. Info: Surrogate Lot: 10186-41
Column: DB-624 0.53mm Hydrogen Tune Standard: NA ISTD Lot: N/A Cal. Standard: 10186-52D

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
01301401.D	CONDITIONING BLK	S/	Sample	1		G514-TPH-MLS-012014	1/30/14 12:17	LLC	DNR
01301402.D	VB	S/	Sample	1		G514-TPH-MLS-012014	1/30/14 12:41	LLC	ok
01301403.D	VB	S/	Sample	1		G514-TPH-MLS-012014	1/30/14 13:05	LLC	ok
01301404.D	RTM 9314-454	S/	Sample	1		G514-TPH-MLS-012014	1/30/14 13:30	LLC	ok
01301405.D	CCV 9314-463	S/11632	CCal	1		G514-TPH-MLS-012014	1/30/14 13:54	LLC	pass
01301406.D	1616508	S/11632	LCSD	1		G514-TPH-MLS-012014	1/30/14 15:08	LLC	pass
01301407.D	VB	S/	Sample	1		G514-TPH-MLS-012014	1/30/14 15:32	LLC	ok
01301408.D	VB	S/	Sample	1		G514-TPH-MLS-012014	1/30/14 15:56	LLC	ok
01301409.D	10256045007	S/11632	Sample	1		G514-TPH-MLS-012014	1/30/14 16:20	LLC	ok
01301410.D	10255645004	S/11632	Sample	5		G514-TPH-MLS-012014	1/30/14 16:53	LLC	ok
01301411.D	10256148004	S/11639	Sample	1		G514-TPH-MLS-012014	1/30/14 17:26	LLC	ok
01301412.D	10256045006	S/11632	Sample	1		G514-TPH-MLS-012014	1/30/14 17:51	LLC	ok
01301413.D	10256045005	S/11632	Sample	1		G514-TPH-MLS-012014	1/30/14 18:15	LLC	ok
01301414.D	10256045002	S/11632	Sample	1		G514-TPH-MLS-012014	1/30/14 18:39	LLC	ok
01301415.D	10255794003	S/11632	Sample	1		G514-TPH-MLS-012014	1/30/14 19:03	LLC	ok
01301416.D	CCV 9314-463	S/	CCal	1		G514-TPH-MLS-012014	1/30/14 19:27	LLC	pass
01301417.D	VB	S/	Sample	1		G514-TPH-MLS-012014	1/30/14 19:51	LLC	ok
01301418.D	VB	S/	Sample	1		G514-TPH-MLS-012014	1/30/14 20:15	LLC	ok
01301419.D	10255645004	S/11632	Sample	2		G514-TPH-MLS-012014	1/30/14 20:40	LLC	ok
01301420.D	10256045004	S/11632	Sample	10		G514-TPH-MLS-012014	1/30/14 21:04	LLC	ok
01301421.D	10256045003	S/11632	Sample	10		G514-TPH-MLS-012014	1/30/14 21:28	LLC	ok
01301422.D	10255794002	S/11632	Sample	5		G514-TPH-MLS-012014	1/30/14 21:52	LLC	ok
01301423.D	10256045001	S/11632	Sample	100		G514-TPH-MLS-012014	1/30/14 22:16	LLC	ok
01301424.D	CCV 9314-466	S/	CCal	1		G514-TPH-MLS-012014	1/30/14 22:40	LLC	pass
01301425.D	1617200	S/11639	LCS	1		G514-TPH-MLS-012014	1/30/14 23:04	LLC	pass
01301426.D	1617201	S/11639	MS	1		G514-TPH-MLS-012014	1/30/14 23:28	LLC	ok
01301427.D	1617202	S/11639	MSD	1		G514-TPH-MLS-012014	1/30/14 23:52	LLC	ok
01301428.D	VB	S/	Sample	1		G514-TPH-MLS-012014	1/31/14 00:17	LLC	ok
01301429.D	VB	S/	Sample	1		G514-TPH-MLS-012014	1/31/14 00:41	LLC	ok
01301430.D	1617199	S/11639	Blank	1		G514-TPH-MLS-012014	1/31/14 01:05	LLC	ok
01301431.D	10256148009	S/11639	Sample	1		G514-TPH-MLS-012014	1/31/14 01:29	LLC	ok
01301432.D	10256148007	S/11639	Sample	1		G514-TPH-MLS-012014	1/31/14 01:53	LLC	ok
01301433.D	10256148008	S/11639	Sample	1		G514-TPH-MLS-012014	1/31/14 02:17	LLC	ok
01301434.D	10256148010	S/11639	Sample	1		G514-TPH-MLS-012014	1/31/14 02:41	LLC	ok
01301435.D	CCV 9314-466	S/	CCal	1		G514-TPH-MLS-012014	1/31/14 03:05	LLC	pass
01301436.D	VB	S/	Sample	1		G514-TPH-MLS-012014	1/31/14 03:29	LLC	DNR
01301437.D	VB	S/	Sample	1		G514-TPH-MLS-012014	1/31/14 03:53	LLC	|
01301438.D	10256148011	S/	Sample	1		G514-TPH-MLS-012014	1/31/14 04:18	LLC	|
01301439.D	10256197001	S/	Sample	1		G514-TPH-MLS-012014	1/31/14 04:42	LLC	|
01301440.D	10256188001	S/	Sample	1		G514-TPH-MLS-012014	1/31/14 05:06	LLC	|
01301441.D	10256148002	S/	Sample	1		G514-TPH-MLS-012014	1/31/14 05:30	LLC	|
01301442.D	10256148005	S/	Sample	1		G514-TPH-MLS-012014	1/31/14 05:54	LLC	|
01301443.D	10256148004	S/	Sample	1		G514-TPH-MLS-012014	1/31/14 07:52	LLC	|
01301444.D	10256148003	S/	Sample	1		G514-TPH-MLS-012014	1/31/14 08:16	LLC	|
01301445.D	10256322001	S/	Sample	20		G514-TPH-MLS-012014	1/31/14 08:40	LLC	|
01301446.D	CCV 9314-466	S/	CCal	1		G514-TPH-MLS-012014	1/31/14 09:32	LLC	|

Instrument Run Log

Instrument: 10GCV5 Method: 8015Soils32 Misc. Prep. Info: Surrogate Lot: 10186-41
Column: DB-624 0.53mm Hydrogen Tune Standard: NA ISTD Lot: N/A Cal. Standard: 10186-52D

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
01301447.D	VB	S/	Sample	1		G514-TPH-MLS-012014	1/31/14 09:56	LLC	V

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: Batch 11639.285295, 11632 DNR CCV file 446 failed, RR samples

File Path 1: U:\10GCV5.I\013014A-2.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: 2/5/14 LC

Report Date: 02/05/2014 12:15
Reviewed By/Date:

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Instrument Run Log

Instrument: 10GCV5 Method: 8015B Soils Misc. Prep. Info: Surrogate Lot: 10186-41
Column: DB-624 0.53mm Hydrogen Tune Standard: NA ISTD Lot: N/A Cal. Standard: 10186-52D

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
02011401.D	CONDITIONING BLK	S/	Sample	1		G514-TPH-MLS-012014	2/01/14 10:24	LLC	DNR
02011402.D	VB	S/	Sample	1		G514-TPH-MLS-012014	2/01/14 10:48	LLC	ok
02011403.D	RTM 9314-454	S/	Sample	1		G514-TPH-MLS-012014	2/01/14 11:12	LLC	ok
02011404.D	CCV 9314-470	S/	CCal	1		G514-TPH-MLS-012014	2/01/14 11:37	LLC	DNR
02011405.D	VB	S/	Sample	1		G514-TPH-MLS-012014	2/01/14 12:01	LLC	ok
02011406.D	VB	S/	Sample	1		G514-TPH-MLS-012014	2/01/14 12:25	LLC	ok
02011407.D	TPH CCV 9314-471	S/	CCal	1		G514-TPH-MLS-012014	2/01/14 12:49	LLC	pass
02011408.D	SS VB	S/	Sample	1		G514-TPH-MLS-012014	2/01/14 13:13	LLC	ok
02011409.D	SS VB	S/	Sample	1		G514-TPH-MLS-012014	2/01/14 13:46	LLC	ok
02011410.D	10256314001	S/	Sample	50		G514-TPH-MLS-012014	2/01/14 14:10	LLC	DNR,O/D RR
02011411.D	10256314002	S/	Sample	50		G514-TPH-MLS-012014	2/01/14 14:34	LLC	|
02011412.D	10256314003	S/	Sample	50		G514-TPH-MLS-012014	2/01/14 14:58	LLC	|
02011413.D	10256314004	S/	Sample	50		G514-TPH-MLS-012014	2/01/14 15:22	LLC	|
02011414.D	10256314005	S/	Sample	50		G514-TPH-MLS-012014	2/01/14 15:46	LLC	|
02011415.D	10256314006	S/	Sample	50		G514-TPH-MLS-012014	2/01/14 16:11	LLC	V
02011416.D	10256148001	S/11639	Sample	1		G514-TPH-MLS-012014	2/01/14 16:35	LLC	ok
02011417.D	10256148002	S/11639	Sample	1		G514-TPH-MLS-012014	2/01/14 16:59	LLC	ok
02011418.D	TPH CCV 9314-471	S/	CCal	1		G514-TPH-MLS-012014	2/01/14 17:23	LLC	pass
02011419.D	SS VB	S/	Sample	1		G514-TPH-MLS-012014	2/01/14 17:47	LLC	ok
02011420.D	SS VB	S/	Sample	1		G514-TPH-MLS-012014	2/01/14 18:11	LLC	ok
02011421.D	10256314003	S/11639	Sample	2		G514-TPH-MLS-012014	2/01/14 18:35	LLC	ok, SS out
02011422.D	10256314004	S/11639	Sample	2		G514-TPH-MLS-012014	2/01/14 19:00	LLC	ok,SS out
02011423.D	10256314005	S/11639	Sample	2		G514-TPH-MLS-012014	2/01/14 19:24	LLC	ok, SS out
02011424.D	10256314001	S/11639	Sample	5		G514-TPH-MLS-012014	2/01/14 19:48	LLC	ok, SS out
02011425.D	10256314002	S/11639	Sample	5		G514-TPH-MLS-012014	2/01/14 20:12	LLC	ok, SS out
02011426.D	10256314006	S/11639	Sample	5		G514-TPH-MLS-012014	2/01/14 20:36	LLC	ok, SS out
02011427.D	SS VB	S/	Sample	1		G514-TPH-MLS-012014	2/01/14 21:00	LLC	ok
02011428.D	10256188001	S/11639	Sample	1		G514-TPH-MLS-012014	2/01/14 21:24	LLC	ok
02011429.D	TPH CCV 9314-471	S/	CCal	1		G514-TPH-MLS-012014	2/01/14 21:48	LLC	pass
02011430.D	SS VB	S/	Sample	1		G514-TPH-MLS-012014	2/01/14 22:12	LLC	ok
02011431.D	SS VB	S/	Sample	1		G514-TPH-MLS-012014	2/01/14 22:36	LLC	ok
02011432.D	10256197001	S/11639	Sample	10		G514-TPH-MLS-012014	2/01/14 23:01	LLC	ok
02011433.D	10256322001	S/11639	Sample	50		G514-TPH-MLS-012014	2/01/14 23:25	LLC	ok
02011434.D	10256148006	S/11639	Sample	1		G514-TPH-MLS-012014	2/01/14 23:49	LLC	ok
02011435.D	TPH CCV 9314-471	S/	CCal	1		G514-TPH-MLS-012014	2/02/14 00:13	LLC	pass

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: Batch 11639-285295

File Path 1: U:\10GCV5.I\020114A-2.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: 2/5/14 LC

Report Date: 02/05/2014 12:26
Reviewed By/Date:

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Instrument Run Log

Instrument: 10GCV5 Method: TPH Soils Misc. Prep. Info: Surrogate Lot: 10186-41exp 3/11/1
Column: DB-624 0.53mm Hydrogen Tune Standard: NA ISTD Lot: 10186-41exp 3/11/14 Cal. Standard: 10186-52D

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
02041401.D	CONDITIONING BLK	S/	Sample	1		G514-TPH-MLS-012014	2/04/14 12:53	LLC	DNR
02041402.D	VB	S/	Sample	1		G514-TPH-MLS-012014	2/04/14 13:17	LLC	ok
02041403.D	RTM 9314-454	S/	Sample	1		G514-TPH-MLS-012014	2/04/14 13:41	LLC	ok
02041404.D	CCV 9314-477	S/	CCal	1		G514-TPH-MLS-012014	2/04/14 14:05	LLC	pass
02041405.D	1618824	S/	LCS	1		G514-TPH-MLS-012014	2/04/14 15:20	LLC	DNR
02041406.D	VB	S/	Sample	1		G514-TPH-MLS-012014	2/04/14 15:45	LLC	ok
02041407.D	VB	S/	Sample	1		G514-TPH-MLS-012014	2/04/14 16:09	LLC	ok
02041408.D	1618823	S/	Blank	1		G514-TPH-MLS-012014	2/04/14 16:33	LLC	DNR
02041409.D	10256148011	S/11639	Sample	1		G514-TPH-MLS-012014	2/04/14 16:57	LLC	ok
02041410.D	10256148005	S/11639	Sample	1		G514-TPH-MLS-012014	2/04/14 17:21	LLC	ok
02041411.D	10256148004	S/11639	Sample	1		G514-TPH-MLS-012014	2/04/14 17:45	LLC	ok
02041412.D	10256148003	S/11639	Sample	1		G514-TPH-MLS-012014	2/04/14 18:10	LLC	ok
02041413.D	10256514001	S/	Sample	1		G514-TPH-MLS-012014	2/04/14 18:34	LLC	DNR,RR
02041414.D	CCV 9314-477	S/	CCal	1		G514-TPH-MLS-012014	2/04/14 18:58	LLC	pass, failed for 8015 Soils
02041415.D	VB	S/	Sample	1		G514-TPH-MLS-012014	2/04/14 19:22	LLC	ok
02041416.D	VB	S/	Sample	1		G514-TPH-MLS-012014	2/04/14 19:46	LLC	ok
02041417.D	10256455001	S/	Sample	5		G514-TPH-MLS-012014	2/04/14 20:10	LLC	DNR,RR
02041418.D	10256455002	S/	Sample	5		G514-TPH-MLS-012014	2/04/14 20:34	LLC	|
02041419.D	10256455003	S/	Sample	5		G514-TPH-MLS-012014	2/04/14 20:59	LLC	|
02041420.D	10256455004	S/	Sample	5		G514-TPH-MLS-012014	2/04/14 21:23	LLC	|
02041421.D	10256455005	S/	Sample	5		G514-TPH-MLS-012014	2/04/14 21:47	LLC	|
02041422.D	VB	S/	Sample	1		G514-TPH-MLS-012014	2/04/14 22:11	LLC	|
02041423.D	VB	S/	Sample	1		G514-TPH-MLS-012014	2/04/14 22:35	LLC	|
02041424.D	1618825	S/	LCSD	1		G514-TPH-MLS-012014	2/04/14 22:59	LLC	V
02041425.D	CCV 9314-477	S/	CCal	1		G514-TPH-MLS-012014	2/04/14 23:23	LLC	pass
02041426.D	1618827	S/11649	LCS	1		G514-TPH-MLS-012014	2/04/14 23:47	LLC	pass
02041427.D	VB	S/	Sample	1		G514-TPH-MLS-012014	2/05/14 00:11	LLC	ok
02041428.D	VB	S/	Sample	1		G514-TPH-MLS-012014	2/05/14 00:36	LLC	ok
02041429.D	1618826	S/11649	Blank	1		G514-TPH-MLS-012014	2/05/14 01:00	LLC	ok
02041430.D	10256525001	S/11649	Sample	1		G514-TPH-MLS-012014	2/05/14 01:24	LLC	ok
02041431.D	10256525002	S/11649	Sample	1		G514-TPH-MLS-012014	2/05/14 01:48	LLC	ok
02041432.D	10256525003	S/	Sample	1		G514-TPH-MLS-012014	2/05/14 02:12	LLC	DNR,O/R 10x RR
02041433.D	VB	S/	Sample	1		G514-TPH-MLS-012014	2/05/14 02:36	LLC	ok
02041434.D	1618828	S/11649	LCSD	1		G514-TPH-MLS-012014	2/05/14 03:00	LLC	pass
02041435.D	CCV 9314-477	S/	CCal	1		G514-TPH-MLS-012014	2/05/14 03:24	LLC	passs

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: batch 11649,285628

File Path 1: U:\10GCV5.I\020414A-2.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: 2/10/14 LC

Report Date: 02/10/2014 13:08
Reviewed By/Date:

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301404.d
Lab Smp Id: RTM 9314-454
Inj Date : 30-JAN-2014 13:30
Operator : LLC Inst ID: 10gcv5.i
Smp Info : RTM 9314-454
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 31-Jan-2014 14:41 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 1	a,a,a-Trifluorotoluene (S)	Compound Not Detected.					
S 2	GRO by AK101	4.230-10.420			327018	39.1404	1957
S 4	GRO by 8015B	3.450-11.000			362549	33.9212	1696
S 5	GRO by 8015 C5-C12	2.360-12.290			483982	36.9041	1845
S 8	GRO by 8015 AZ C6-C10	5.900-12.800			501447	45.0933	2255
S 9	GRO by NWPTH-Gx	7.850-12.690			474960	48.0285	2401
10	Pentane (C5)	2.502	2.488	0.014	72901		
11	2-methylpentane (C6)	3.675	3.667	0.008	663385		
12	MTBE (C6)	4.029	4.027	0.002	35689		
13	Hexane (C6)	4.410	4.401	0.009	61136		
14	Benzene (C6.5)	6.183	6.181	0.002	264447		
15	Toluene (C7.6)	7.997	7.996	0.001	243735		
16	n-Octane (C8)	8.126	8.126	0.000	65683		
17	Ethylbenzene (C8.5)	9.343	9.341	0.002	210808		
18	m&p xylene (C8.6)	9.449	9.446	0.003	515909		
19	o-xylene (C8.8)	9.797	9.794	0.003	221093		
21	n-decane (C10)	10.598	10.600	-0.002	120256		
20	1,2,4 Trimethylbenzene (C10)	10.858	10.858	0.000	2153735		
22	1,2,3 Trimethylbenzene (C10.1)	11.160	11.158	0.002	190517		

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
23 n-dodecane (C12)	12.169	12.167	0.002	35945		
24 Naphthalene (C11.7)	12.575	12.574	0.001	70527		
25 1-Methylnaphthalene (C13)	13.463	13.461	0.002	60212		

Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301404.D

Page 1

Date : 30-JAN-2014 13:30

Client ID:

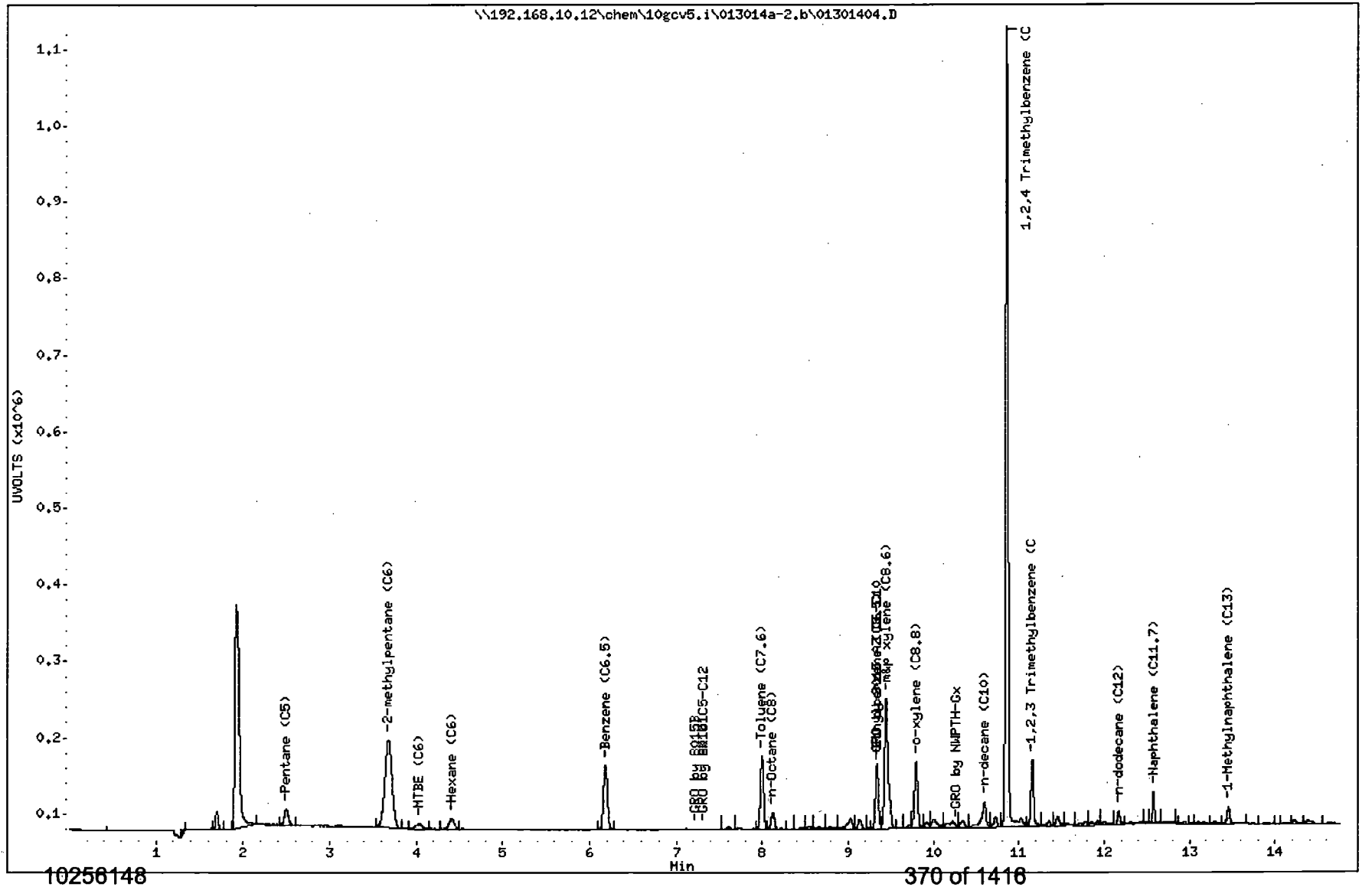
Instrument: 10gcv5.i

Sample Info: RTM 9314-464

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011403.d
Lab Smp Id: RTM 9314-454
Inj Date : 01-FEB-2014 11:12
Operator : LLC Inst ID: 10gcv5.i
Smp Info : RTM 9314-454
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\G514-TPH-MLS-012014.m
Meth Date : 04-Feb-2014 10:14 target Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 1	a,a,a-Trifluorotoluene (S)	Compound Not Detected.					
S 2	GRO by AK101	4.230-10.420			19497	2.33357	116.7
S 4	GRO by 8015B	3.450-11.000			42595	3.98532	199.3
S 5	GRO by 8015 C5-C12	2.360-12.290			115773	8.82780	441.4
S 8	GRO by 8015 AZ C6-C10	5.900-12.800			137879	12.3990	619.9
S 9	GRO by NWPTH-Gx	7.850-12.690			118419	11.9747	598.7
10	Pentane (C5)	2.506	2.488	0.018	68382		
11	2-methylpentane (C6)	3.683	3.667	0.016	620301		
12	MTBE (C6)	4.044	4.027	0.017	26798		
13	Hexane (C6)	4.413	4.401	0.012	54944		
14	Benzene (C6.5)	6.185	6.181	0.004	239955		
15	Toluene (C7.6)	7.999	7.996	0.003	222900		
16	n-Octane (C8)	8.126	8.126	0.000	28767		
17	Ethylbenzene (C8.5)	9.342	9.341	0.001	188237		
18	m&p xylene (C8.6)	9.446	9.446	0.000	390685		
19	o-xylene (C8.8)	9.793	9.794	-0.001	192490		
21	n-decane (C10)	10.597	10.600	-0.003	64121		
20	1,2,4 Trimethylbenzene (C10)	10.855	10.858	-0.003	1971764		
22	1,2,3 Trimethylbenzene (C10.1)	11.157	11.158	-0.001	174167		

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
23 n-dodecane (C12)	12.166	12.167	-0.001	37979		
24 Naphthalene (C11.7)	12.573	12.574	-0.001	72973		
25 1-Methylnaphthalene (C13)	13.458	13.461	-0.003	43143		

Data File: \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011403.D

Page 1

Date : 01-FEB-2014 11:12

Client ID:

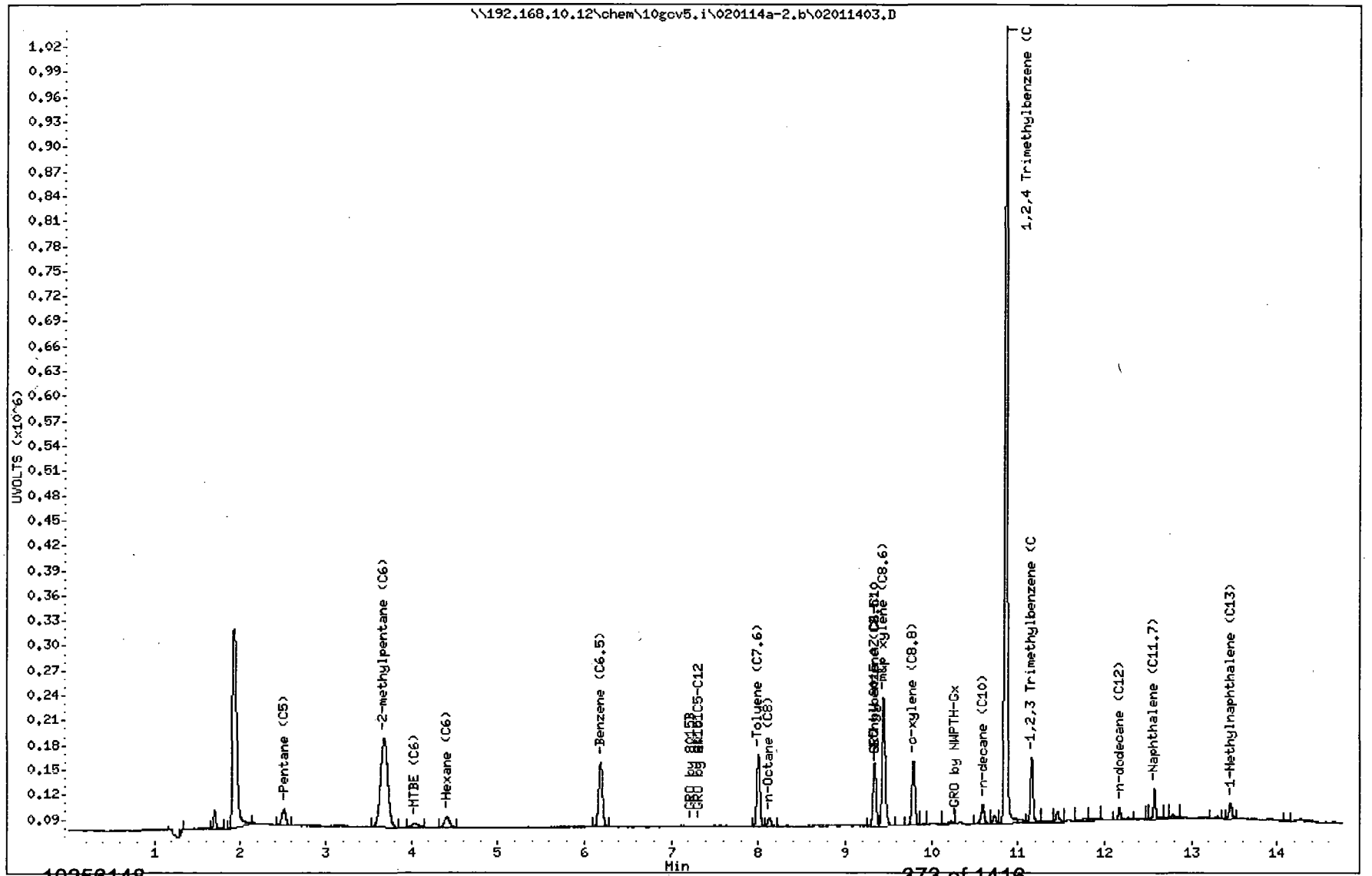
Instrument: 10gcv5.i

Sample Info: RTM 9314-454

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041403.d
Lab Smp Id: RTM 9314-454
Inj Date : 04-FEB-2014 13:41
Operator : LLC Inst ID: 10gcv5.i
Smp Info : RTM 9314-454
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\G514-TPH-MLS-012014.m
Meth Date : 04-Feb-2014 14:33 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 1	a,a,a-Trifluorotoluene (S)	Compound Not Detected.					
S 2	GRO by AK101	4.230-10.420			50012	5.98587	299.3
S 4	GRO by 8015B	3.450-11.000			75574	7.07095	353.5
S 5	GRO by 8015 C5-C12	2.360-12.290			202781	15.4622	773.1
S 8	GRO by 8015 AZ C6-C10	5.900-12.800			233274	20.9775	1049
S 9	GRO by NWPTH-Gx	7.850-12.690			205520	20.7824	1039
10	Pentane (C5)	2.486	2.488	-0.002	74591		
11	2-methylpentane (C6)	3.655	3.667	-0.012	670496		
12	MTBE (C6)	4.012	4.027	-0.015	35261		
13	Hexane (C6)	4.387	4.401	-0.014	59815		
14	Benzene (C6.5)	6.169	6.181	-0.012	263168		
15	Toluene (C7.6)	7.986	7.996	-0.010	243431		
16	n-Octane (C8)	8.115	8.126	-0.011	32677		
17	Ethylbenzene (C8.5)	9.330	9.341	-0.011	203312		
18	m&p xylene (C8.6)	9.437	9.446	-0.009	467584		
19	o-xylene (C8.8)	9.784	9.794	-0.010	206407		
21	n-decane (C10)	10.591	10.600	-0.009	121270		
20	1,2,4 Trimethylbenzene (C10)	10.848	10.858	-0.010	2068230		
22	1,2,3 Trimethylbenzene (C10.1)	11.150	11.158	-0.008	176771		

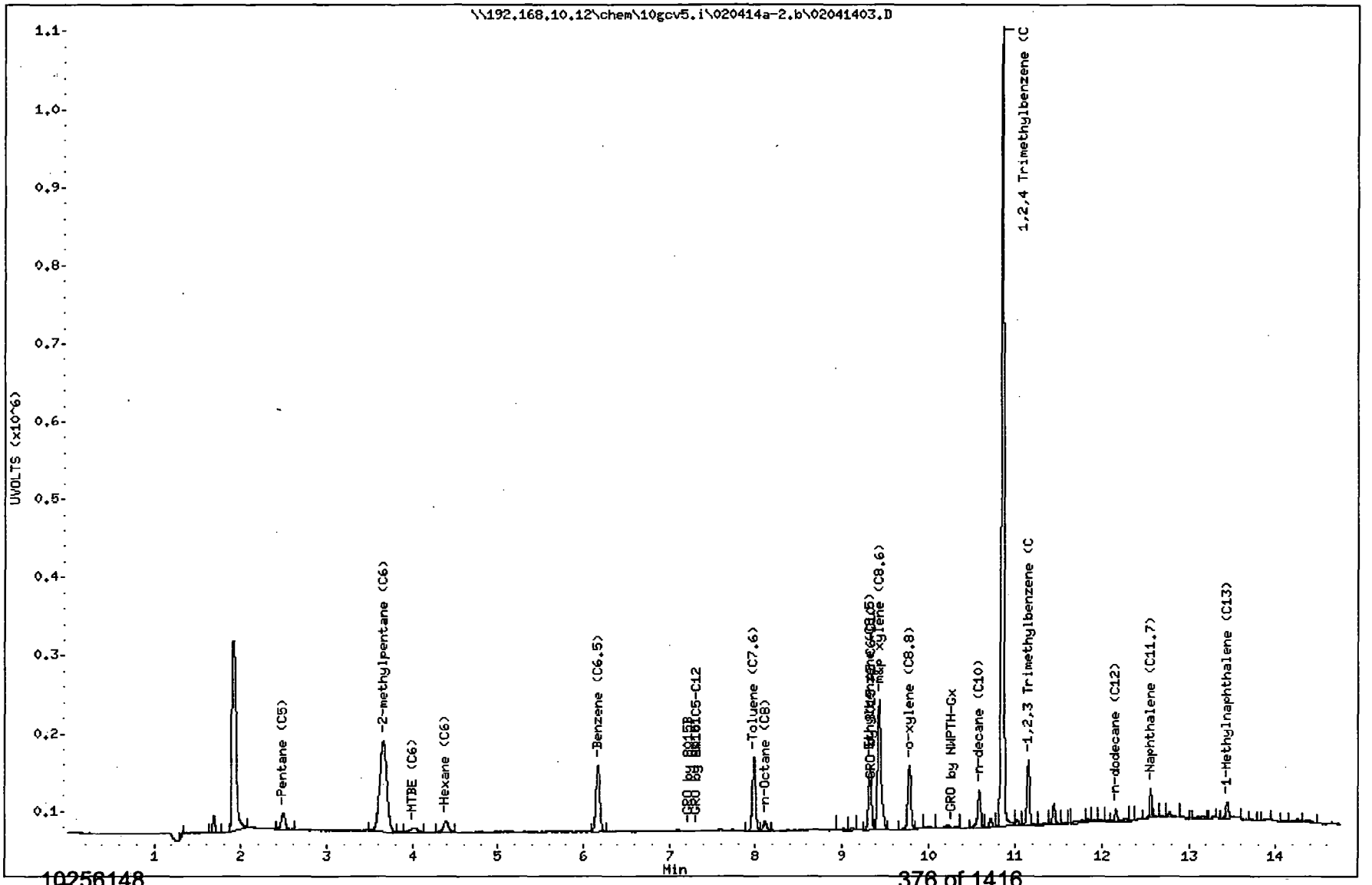
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
23 n-dodecane (C12)	12.162	12.167	-0.005	45177		
24 Naphthalene (C11.7)	12.566	12.574	-0.008	65692		
25 1-Methylnaphthalene (C13)	13.449	13.461	-0.012	57220		

Data File: \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041403.D
Date : 04-FEB-2014 13:41
Client ID:
Sample Info: RTH 9314-464

Instrument: 10gcv5.i

Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Pace Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2014 17:25
End Cal Date : 20-JAN-2014 19:50
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.
Last Edit : 21-Jan-2014 09:40 10gcv5.i
Curve Type : Average

Calibration File Names:
Level 1: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201405.d
Level 2: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201406.d
Level 3: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201407.d
Level 4: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201408.d
Level 5: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201409.d
Level 6: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201410.d
Level 7: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201411.d

	Compound	10.000 Level 1	25.000 Level 2	50.000 Level 3	100.000 Level 4	500.000 Level 5	1000.000 Level 6	2500.000 Level 7	RRF	% RSD	
S	2 GRO by AK101	+++++	7810	7651	7642	8898	9093	9036	8355	8.639	
S	4 GRO by 8015B	+++++	10429	9903	9949	11215	11408	11224	10688	6.363	
S	5 GRO by 8015 C5-C12	+++++	14425	12738	11697	13407	13431	12989	13115	6.879	
S	8 GRO by 8015 AZ C6-C10	+++++	+++++	12638	10515	10357	11147	10944	11120	8.147	
S	9 GRO by NWPTH-Gx	+++++	+++++	11670	9749	8898	9596	9532	9889	10.591	
	10 Pentane (C5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
	11 2-methylpentane (C6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
	12 MTBE (C6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

Pace Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2014 17:25
End Cal Date : 20-JAN-2014 19:50
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.
Last Edit : 21-Jan-2014 09:40 10gcv5.i
Curve Type : Average

Compound	10.000 Level 1	25.000 Level 2	50.000 Level 3	100.000 Level 4	500.000 Level 5	1000.000 Level 6	2500.000 Level 7	RRF	% RSD	
13 Hexane (C6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
14 Benzene (C6.5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
15 Toluene (C7.6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
16 n-Octane (C8)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
17 Ethylbenzene (C8.5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
18 m&p xylene (C8.6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
19 o-xylene (C8.8)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
21 n-decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
20 1,2,4 Trimethylbenzene (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
22 1,2,3 Trimethylbenzene (C10.1	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
23 n-dodecane (C12)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

Pace Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2014 17:25
End Cal Date : 20-JAN-2014 19:50
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.
Last Edit : 21-Jan-2014 09:40 10gcv5.i
Curve Type : Average

Compound	10.000 Level 1	25.000 Level 2	50.000 Level 3	100.000 Level 4	500.000 Level 5	1000.000 Level 6	2500.000 Level 7	RRF	% RSD	
24 Naphthalene (C11.7)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
25 1-Methylnaphthalene (C13)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 1 a,a,a-Trifluorotoluene (S)	16758	17071	16579	16334	17193	18560	19172	17381	6.151	

Pace Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 20-JAN-2014 17:25
End Cal Date : 20-JAN-2014 19:50
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.
Last Edit : 21-Jan-2014 09:40 10gcv5.i
Curve Type : Average

Average %RSD Results.	
Calculated Average %RSD =	7.79508
Maximun Average %RSD =	15.00000
* Passed Average %RSD Test.	

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201403.d
Lab Smp Id: RTM 9314-425
Inj Date : 20-JAN-2014 16:37
Operator : LLC Inst ID: 10gcv5.i
Smp Info : RTM 9314-425
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 21-Jan-2014 09:30 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
S	1 a,a,a-Trifluorotoluene (S)	7.118	7.097	0.021	10522	0.60537	0.6054(R)
S	2 GRO by AK101	4.230-10.420			45498	5.44560	272.3
S	4 GRO by 8015B	3.450-11.000			65669	6.14420	307.2
S	5 GRO by 8015 C5-C12	2.360-12.290			144573	11.0238	551.2
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			180105	16.1962	809.8
S	9 GRO by NWPTH-Gx	7.850-12.690			158232	16.0006	800.0

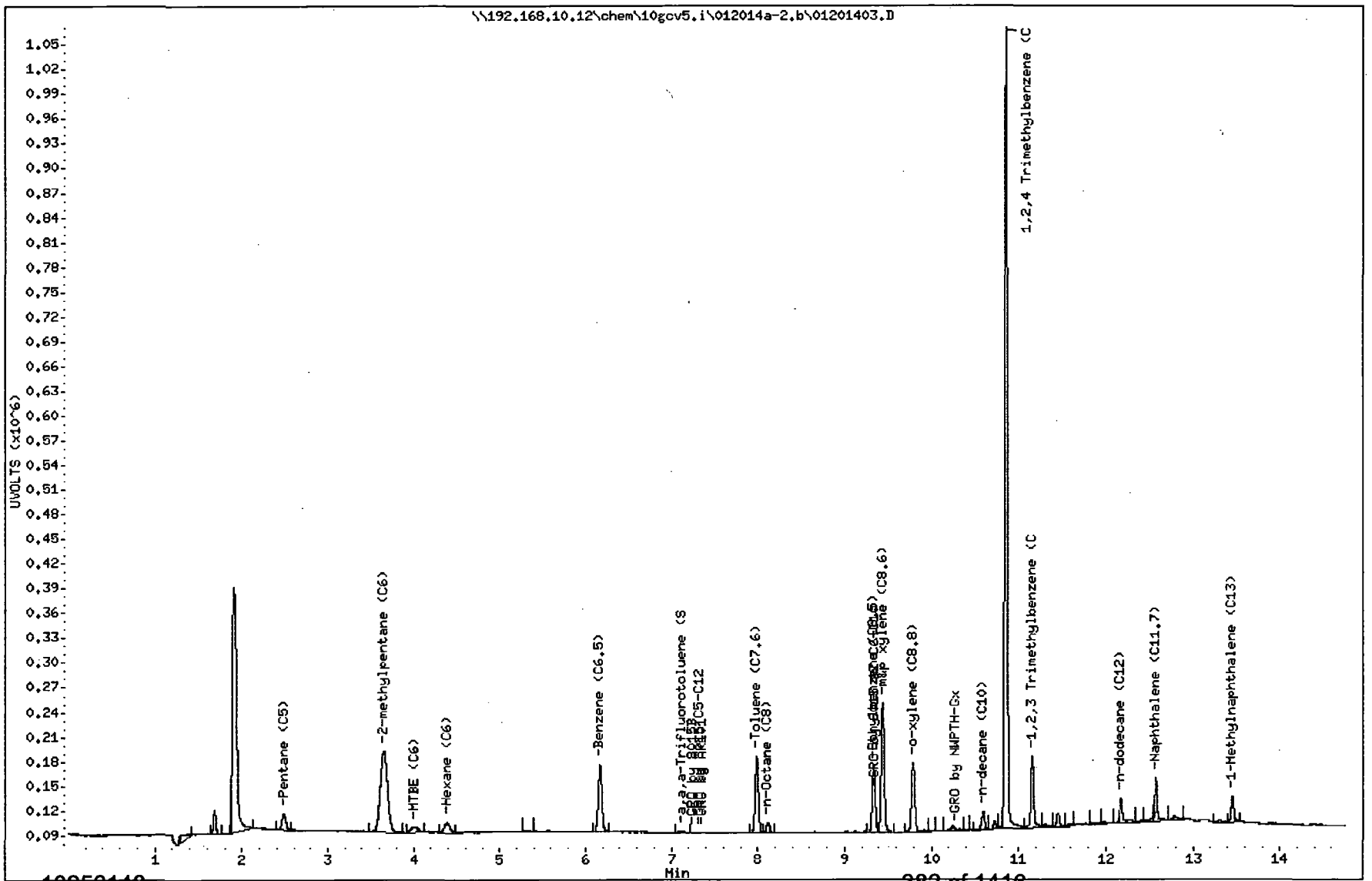
QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201403.D
Date : 20-JAN-2014 16:37
Client ID:
Sample Info: RTM 9314-425

Instrument: 10gcv5.i
Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201405.d
Lab Smp Id: TPH ICAL 10 9895
Inj Date : 20-JAN-2014 17:25
Operator : LLC Inst ID: 10gcv5.i
Smp Info : TPH ICAL 10 9895-81
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 21-Jan-2014 09:30 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

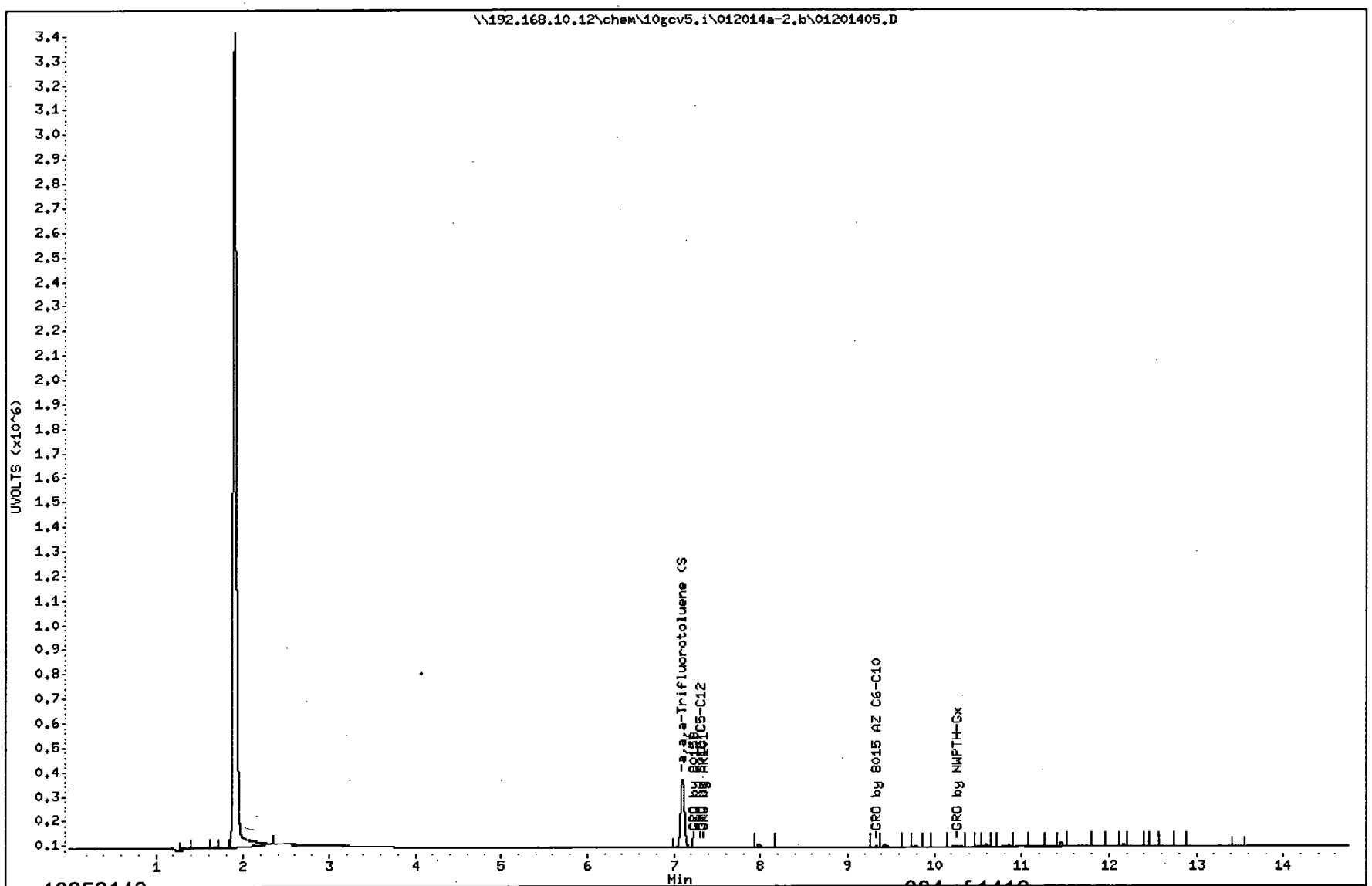
Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	1 a,a,a-Trifluorotoluene (S)	7.101	7.097	0.004	837882	50.0000	48.21
S	2 GRO by AK101	4.230	10.420		119735	10.0000	14.33
S	4 GRO by 8015B	3.450	11.000		171078	10.0000	16.01
S	5 GRO by 8015 C5-C12	2.360	12.290		277537	10.0000	21.16
S	8 GRO by 8015 AZ C6-C10	5.900	12.800		289714	10.0000	26.05
S	9 GRO by NWPTH-Gx	7.850	12.690		282897	10.0000	28.61

Data File: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201405.D
Date : 20-JAN-2014 17:25
Client ID:
Sample Info: TPH ICAL 10 9895-81

Instrument: 10gcv5.i
Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Data File: \\192.168.10.12\chem\10gcv5.i\012014a-2.b/01201405.d (ManInt: ALLGRO.sub Orig: ALLGRO.sub)
Injection Date: 20-JAN-2014 17:25
Instrument: 10gcv5.i
Lab Sample ID: TPH ICAL 10 9895

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	277537	277537
GRO by 8015B	171078	171078
GRO by AK101	119735	119735
GRO by 8015 AZ C6-C10	289714	289714
GRO by NWPTH-Gx	282897	282897
a,a,a-Trifluorotoluene (S)	837882	837882

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201406.d
Lab Smp Id: TPH ICAL 25 9895
Inj Date : 20-JAN-2014 17:50
Operator : LLC Inst ID: 10gcv5.i
Smp Info : TPH ICAL 25 9895-81
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 21-Jan-2014 09:30 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.100	7.097	0.003	853563	50.0000	49.11
S	2 GRO by AK101	4.230-10.420			195247	25.0000	23.37
S	4 GRO by 8015B	3.450-11.000			260731	25.0000	24.39
S	5 GRO by 8015 C5-C12	2.360-12.290			360622	25.0000	27.50
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			380162	25.0000	34.19
S	9 GRO by NWPTH-Gx	7.850-12.690			364336	25.0000	36.84

Data File: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201406.D

Page 1

Date : 20-JAN-2014 17:50

Client ID:

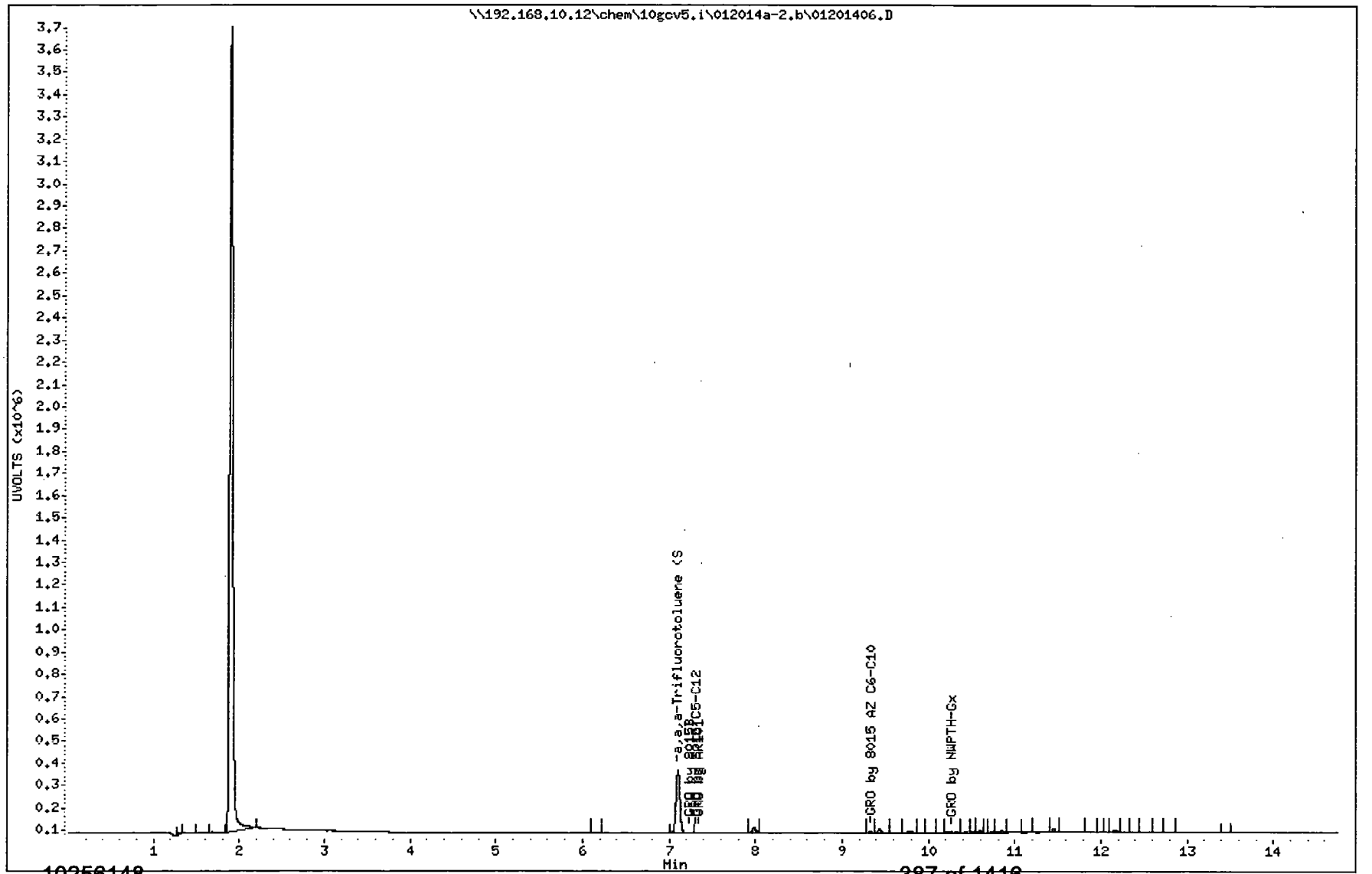
Instrument: 10gcv5.i

Sample Info: TPH ICAL 25 9895-81

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



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Injection Date: 20-JAN-2014 17:50
Instrument: 10gcv5.i
Lab Sample ID: TPH ICAL 25 9895

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	360622	360622
GRO by 8015B	260731	260731
GRO by AK101	195247	195247
GRO by 8015 AZ C6-C10	380162	380162
GRO by NWPTH-Gx	364336	364336
a,a,a-Trifluorotoluene (S)	853563	853563

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201407.d
Lab Smp Id: TPH ICAL 50 9895
Inj Date : 20-JAN-2014 18:14
Operator : LLC Inst ID: 10gcv5.i
Smp Info : TPH ICAL 50 9895-81
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 21-Jan-2014 09:30 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

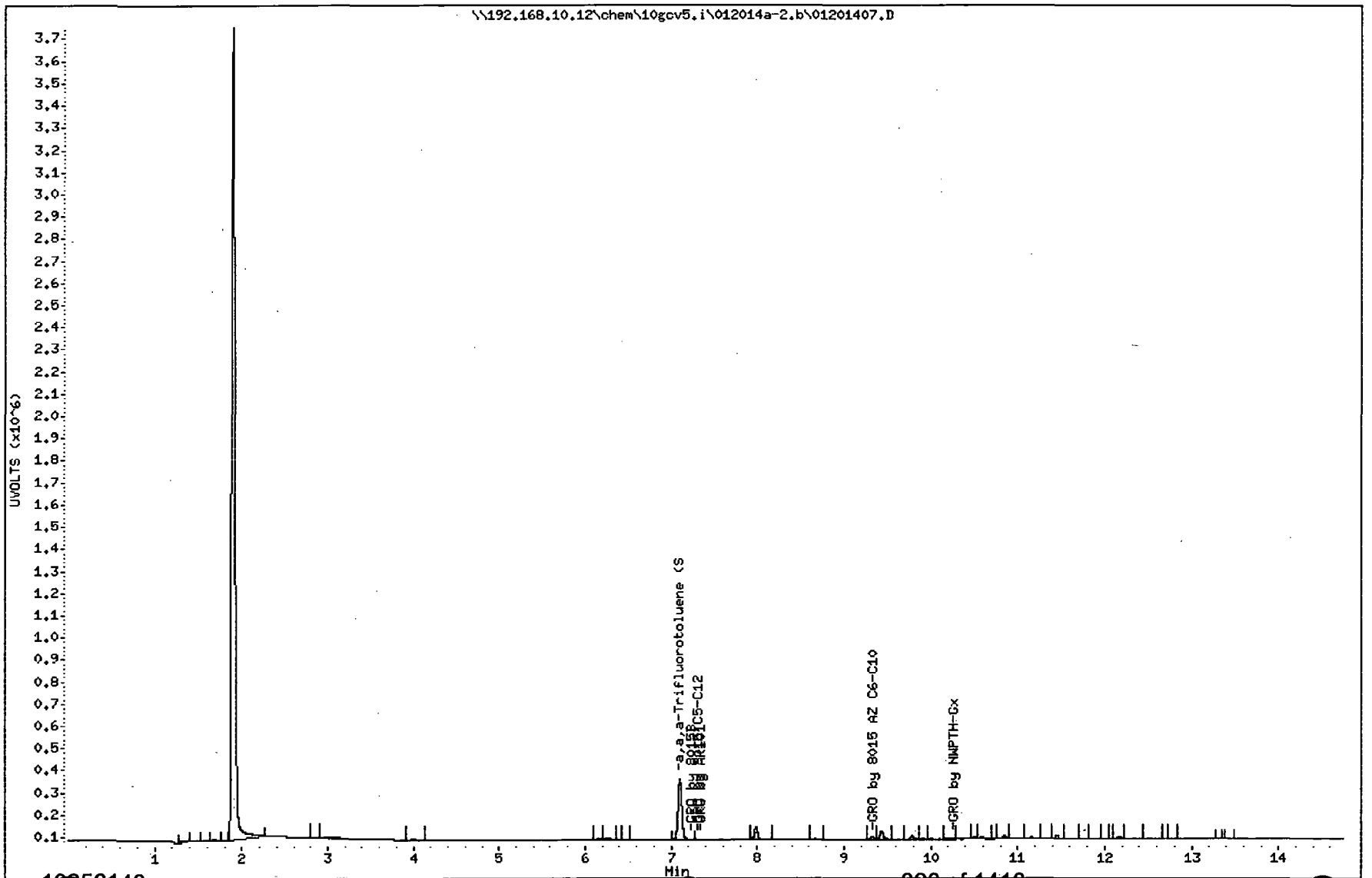
Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	1 a,a,a-Trifluorotoluene (S)	7.101	7.097	0.004	828972	50.0000	47.69
S	2 GRO by AK101	4.230-10.420			382528	50.0000	45.78
S	4 GRO by 8015B	3.450-11.000			495142	50.0000	46.33
S	5 GRO by 8015 C5-C12	2.360-12.290			636901	50.0000	48.56
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			631885	50.0000	56.82
S	9 GRO by NWPTH-Gx	7.850-12.690			583513	50.0000	59.00

Data File: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201407.D
Date : 20-JAN-2014 18:14
Client ID:
Sample Info: TPH ICAL 50 9895-81

Instrument: 10gcv5.i
Operator: LLC
Column diameter: 0.53

Column phase: DB-624



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Injection Date: 20-JAN-2014 18:14
Instrument: 10gcv5.i
Lab Sample ID: TPH ICAL 50 9895

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	636901	636901
GRO by 8015B	495142	495142
GRO by AK101	382528	382528
GRO by 8015 AZ C6-C10	631885	631885
GRO by NWPTH-Gx	583513	583513
a,a,a-Trifluorotoluene (S)	828972	828972

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201408.d
Lab Smp Id: TPH ICAL 100 9895
Inj Date : 20-JAN-2014 18:38
Operator : LLC Inst ID: 10gcv5.i
Smp Info : TPH ICAL 100 9895-81
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 21-Jan-2014 09:30 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.099	7.097	0.002	816688	50.0000	46.99
S	2 GRO by AK101	4.230-10.420			764246	100.000	91.47
S	4 GRO by 8015B	3.450-11.000			994894	100.000	93.08
S	5 GRO by 8015 C5-C12	2.360-12.290			1169695	100.000	89.19
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			1051545	100.000	94.56
S	9 GRO by NWPTH-Gx	7.850-12.690			974945	100.000	98.59

Data File: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201408.D

Page 1

Date : 20-JAN-2014 18:38

Client ID:

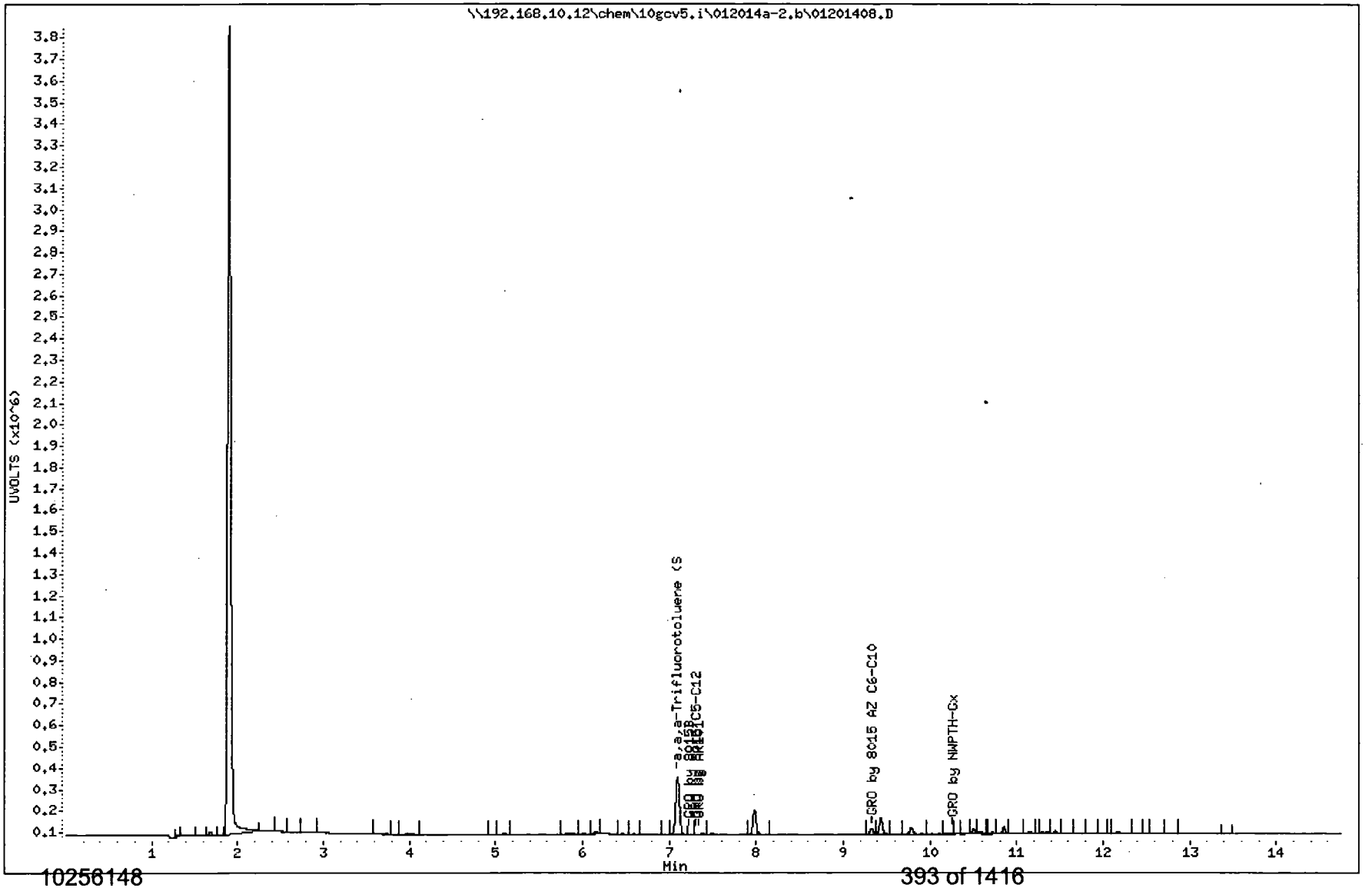
Instrument: 10gcv5.i

Sample Info: TPH ICAL 100 9895-81

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



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Injection Date: 20-JAN-2014 18:38
Instrument: 10gcv5.i
Lab Sample ID: TPH ICAL 100 9895

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	1169695	1169695
GRO by 8015B	994894	994894
GRO by AK101	764246	764246
GRO by 8015 AZ C6-C10	1051545	1051545
GRO by NWPTH-Gx	974945	974945
a,a,a-Trifluorotoluene (S)	816688	816688

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201409.d
Lab Smp Id: TPH ICAL 500 9895
Inj Date : 20-JAN-2014 19:02
Operator : LLC Inst ID: 10gcv5.i
Smp Info : TPH ICAL 500 9895-81
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 21-Jan-2014 09:30 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.099	7.097	0.002	859656	50.0000	49.46(M)
S	2 GRO by AK101	4.230-10.420			4448892	500.000	532.5
S	4 GRO by 8015B	3.450-11.000			5607663	500.000	524.7
S	5 GRO by 8015 C5-C12	2.360-12.290			6703617	500.000	511.2
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			5178482	500.000	465.7
S	9 GRO by NWPTH-Gx	7.850-12.690			4448902	500.000	449.9

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gov5.i\012014a-2.b\01201409.D

Page 1

Date : 20-JAN-2014 19:02

Client ID:

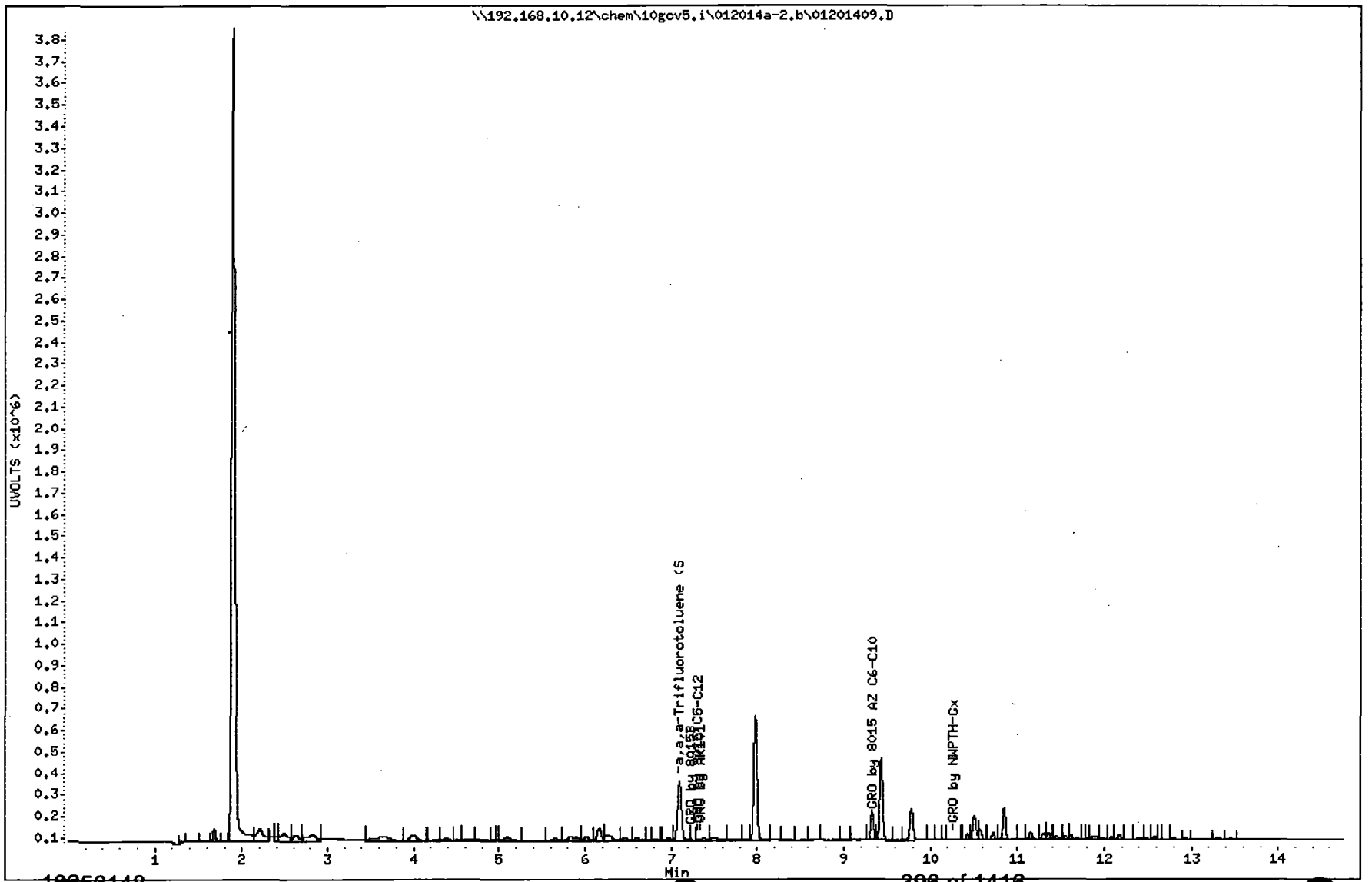
Instrument: 10gov5.i

Sample Info: TPH ICAL 500 9895-81

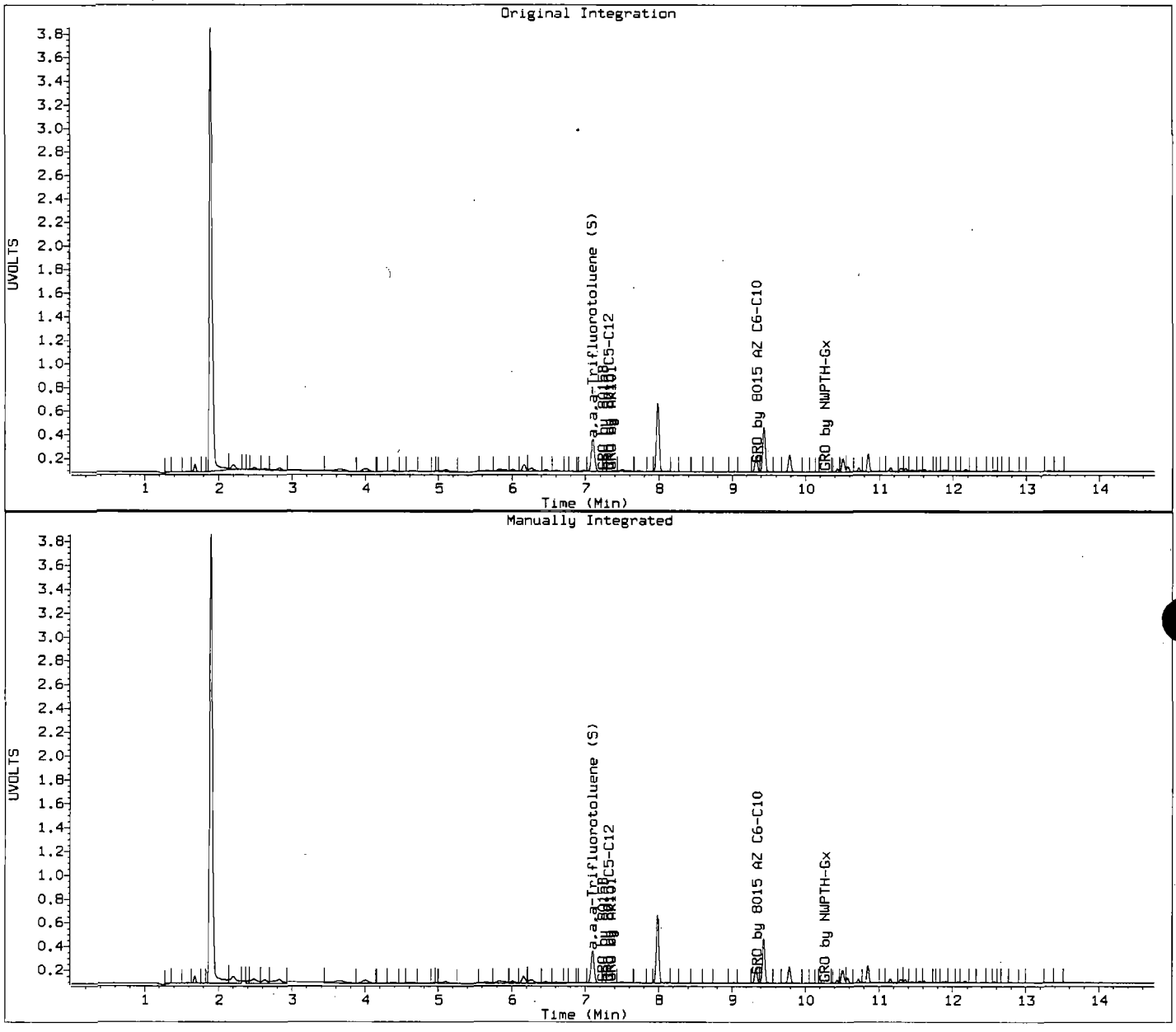
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\012014a-2.b/01201409.d (ManInt: ALLGRO.sub Orig: ALLGRO.sub)
Injection Date: 20-JAN-2014 19:02
Instrument: 10gcv5.i
Lab Sample ID: TPH ICAL 500 9895



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	5928552	6703617
GRO by 8015B	5266937	5607663
GRO by AK101	4202295	4448892
GRO by 8015 AZ C6-C10	5054744	5178482
GRO by NWPTH-Gx	4408437	4448902
a,a,a-Trifluorotoluene (S)	845794	859656

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201410.d
Lab Smp Id: TPH ICAL 1000 9895
Inj Date : 20-JAN-2014 19:26
Operator : LLC Inst ID: 10gcv5.i
Smp Info : TPH ICAL 1000 9895-81
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 21-Jan-2014 09:30 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.101	7.097	0.004	928012	50.0000	53.39(M)
S	2 GRO by AK101	4.230-10.420			9093052	1000.00	1088
S	4 GRO by 8015B	3.450-11.000			11407804	1000.00	1067
S	5 GRO by 8015 C5-C12	2.360-12.290			13430963	1000.00	1024
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			11146864	1000.00	1002
S	9 GRO by NWPTH-Gx	7.850-12.690			9595860	1000.00	970.3

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201410.D

Page 1

Date : 20-JAN-2014 19:26

Client ID:

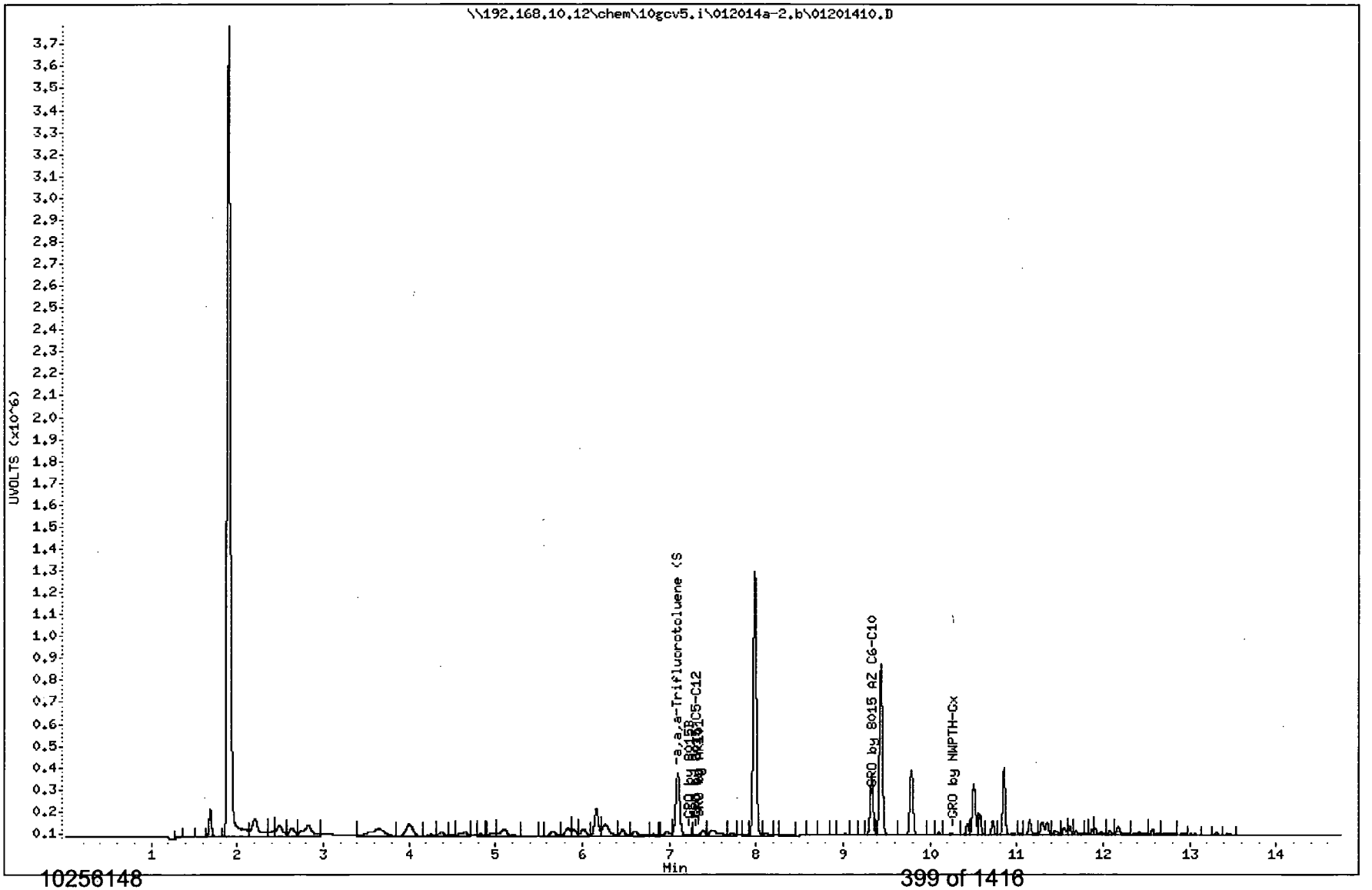
Instrument: 10gcv5.i

Sample Info: TPH ICAL 1000 9895-81

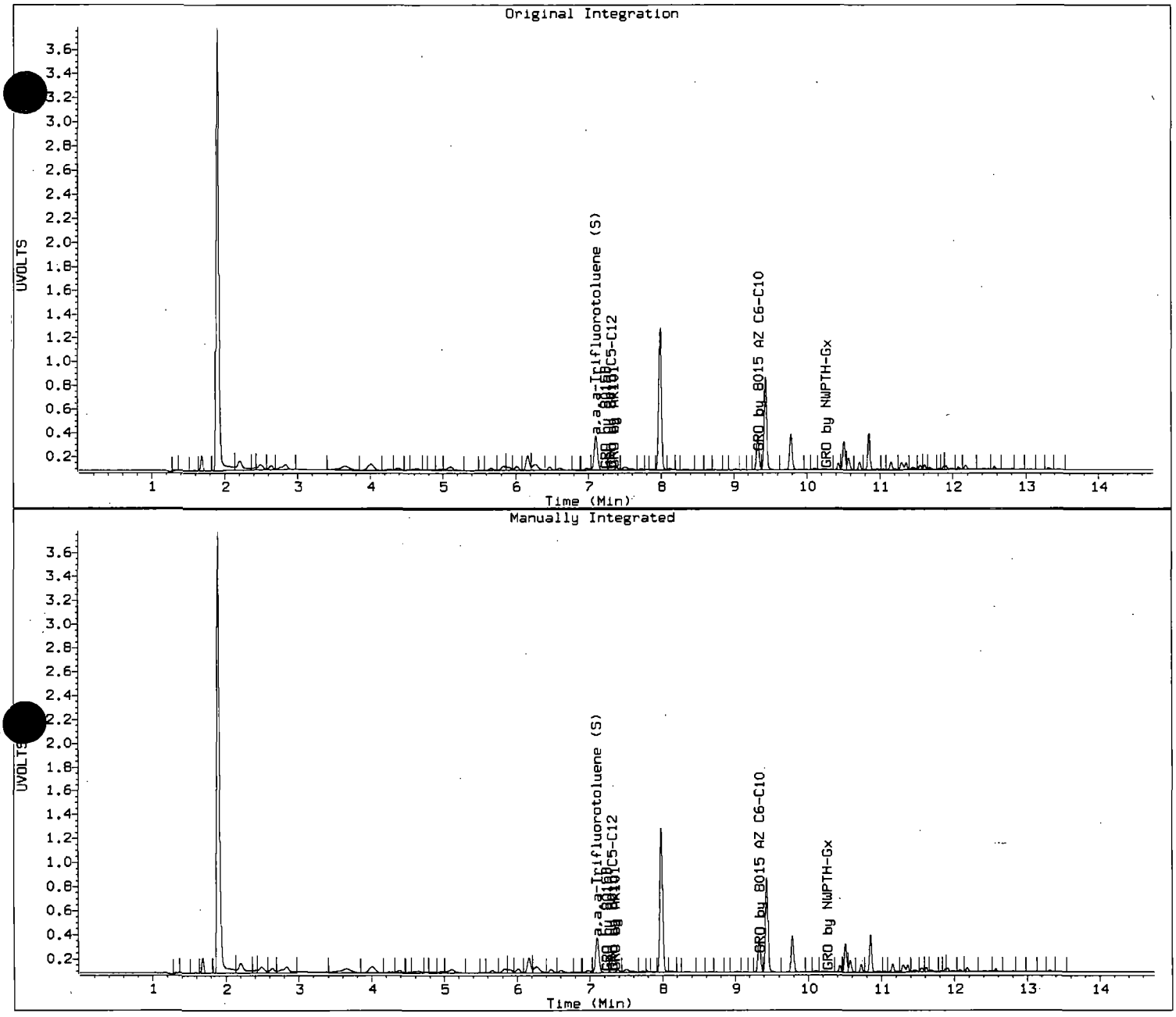
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 20-JAN-2014 15:20
Instrument: 10gcv5.i
Lab Sample ID: TPH ICAL 1000 9895



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	12570417	13430963
GRO by 8015B	10823128	11407804
GRO by AK101	8619721	9093052
GRO by 8015 AZ C6-C10	10894750	11146864
GRO by NWPTH-Gx	9510563	9595860
a,a,a-Trifluorotoluene (S)	905177	928012

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201411.d
Lab Smp Id: TPH ICAL 2500 9895
Inj Date : 20-JAN-2014 19:50
Operator : LLC Inst ID: 10gcv5.i
Smp Info : TPH ICAL 2500 9895-81
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 21-Jan-2014 09:30 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.100	7.097	0.003	958624	50.0000	55.15(M)
S	2 GRO by AK101	4.230-10.420			22590735	2500.00	2704(A)
S	4 GRO by 8015B	3.450-11.000			28059053	2500.00	2625(A)
S	5 GRO by 8015 C5-C12	2.360-12.290			32473734	2500.00	2476
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			27360125	2500.00	2460
S	9 GRO by NWPTH-Gx	7.850-12.690			23830576	2500.00	2410

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201411.D

Page 1

Date : 20-JAN-2014 19:50

Client ID:

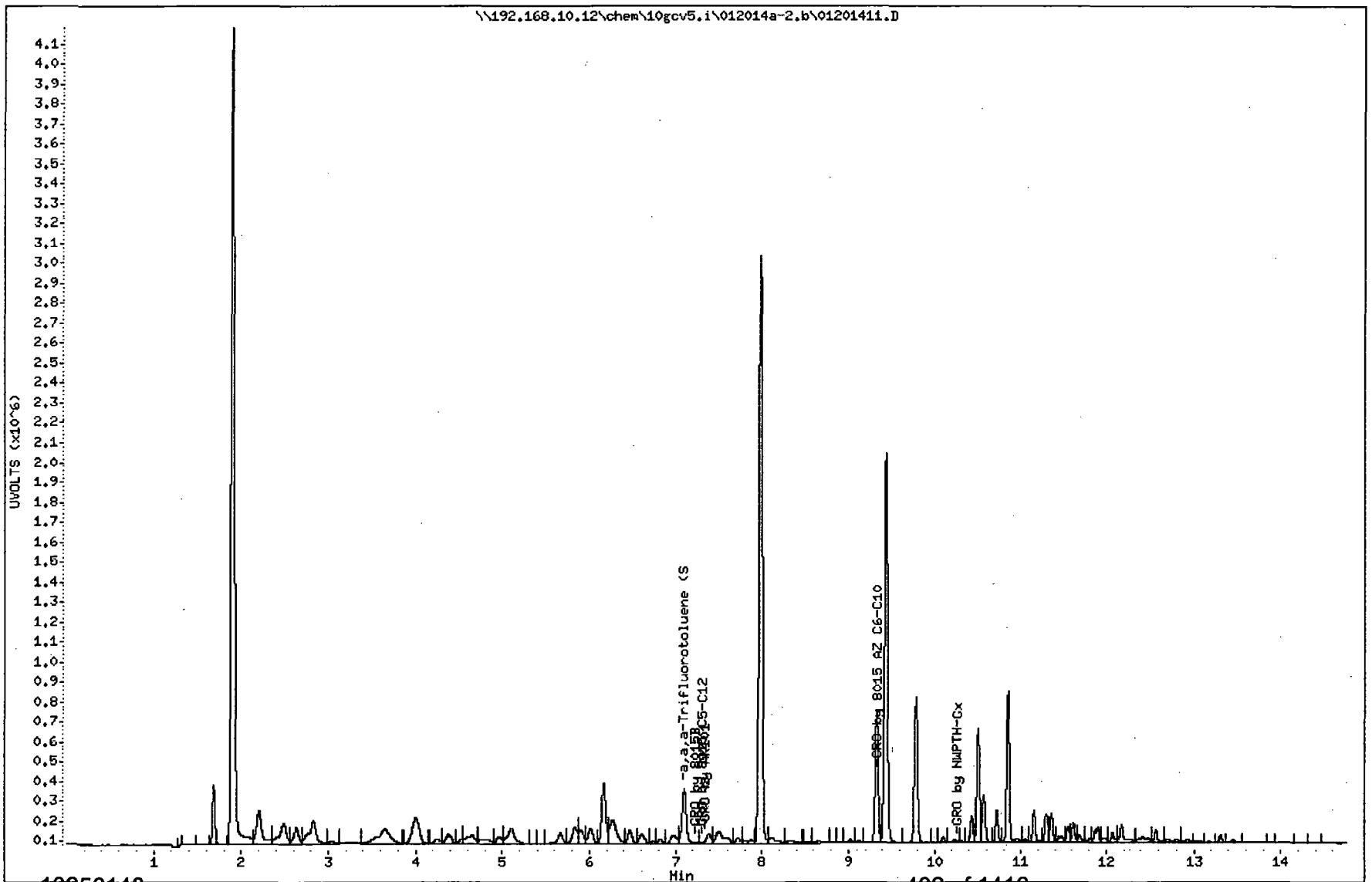
Instrument: 10gcv5.i

Sample Info: TPH ICAL 2500 9895-81

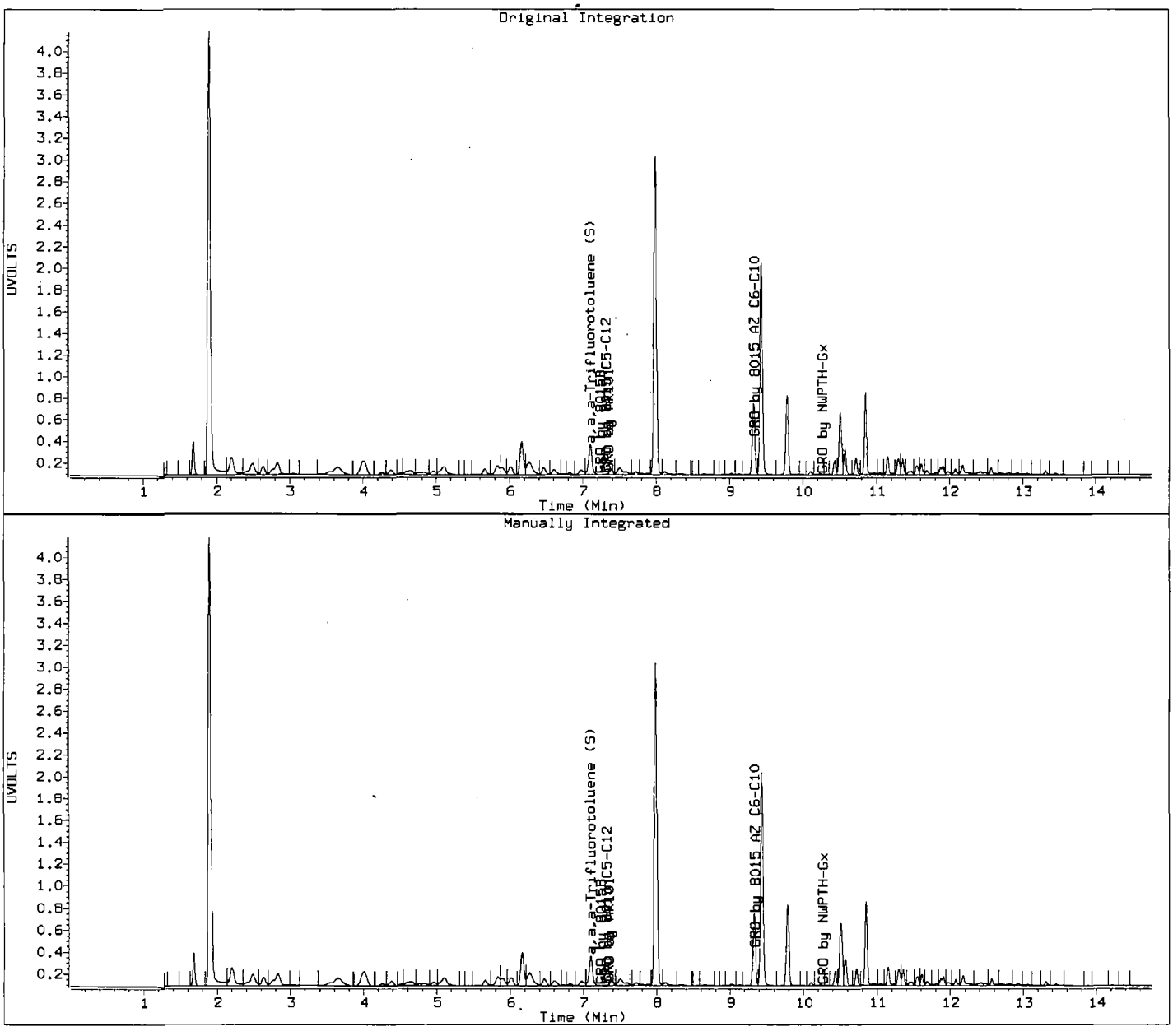
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\012014a-2.b/01201411.d (ManInt: ALLGRO.sub Orig: ALLGRO.sub)
Injection Date: 20-JAN-2014 19:50
Instrument: 10gcv5.i
Lab Sample ID: TPH ICAL 2500 9895



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	31836631	32473734
GRO by 8015B	27690644	28059053
GRO by AK101	22316649	22590735
GRO by 8015 AZ C6-C10	27180408	27360125
GRO by NWPTH-Gx	23763175	23830576
a,a,a-Trifluorotoluene (S)	940881	958624

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 20-JAN-2014 21:03
Lab File ID: 01201414.d Init. Cal. Date(s): 20-JAN-2014 20-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 17:25 19:50
Lab Sample ID: TPH ICV 9895-82 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.m

	COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S	1 a,a,a-Trifluorotoluene (S)	17381	16862	0.010	-2.98435	25.00000	Averaged
S	2 GRO by AK101	8355	7758	0.010	-7.14375	25.00000	Averaged
S	4 GRO by 8015B	10688	9918	0.010	-7.20665	15.00000	Averaged
S	5 GRO by 8015 C5-C12	13115	11942	0.010	-8.93953	15.00000	Averaged
S	8 GRO by 8015 AZ C6-C10	11120	9562	0.010	-14.01629	15.00000	Averaged
S	9 GRO by NWPTH-Gx	9889	8498	0.010	-14.06708	15.00000	Averaged

Average %D / Drift Results.	
Calculated Average %D/Drift =	9.05961
Maximun Average %D/Drift =	15.00000
* Passed Average %D/Drift Test.	

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201414.d
Lab Smp Id: TPH ICV 9895-82
Inj Date : 20-JAN-2014 21:03
Operator : LLC Inst ID: 10gcv5.i
Smp Info : TPH ICV 9895-82,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\012014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 21-Jan-2014 09:40 10gcv5.i Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

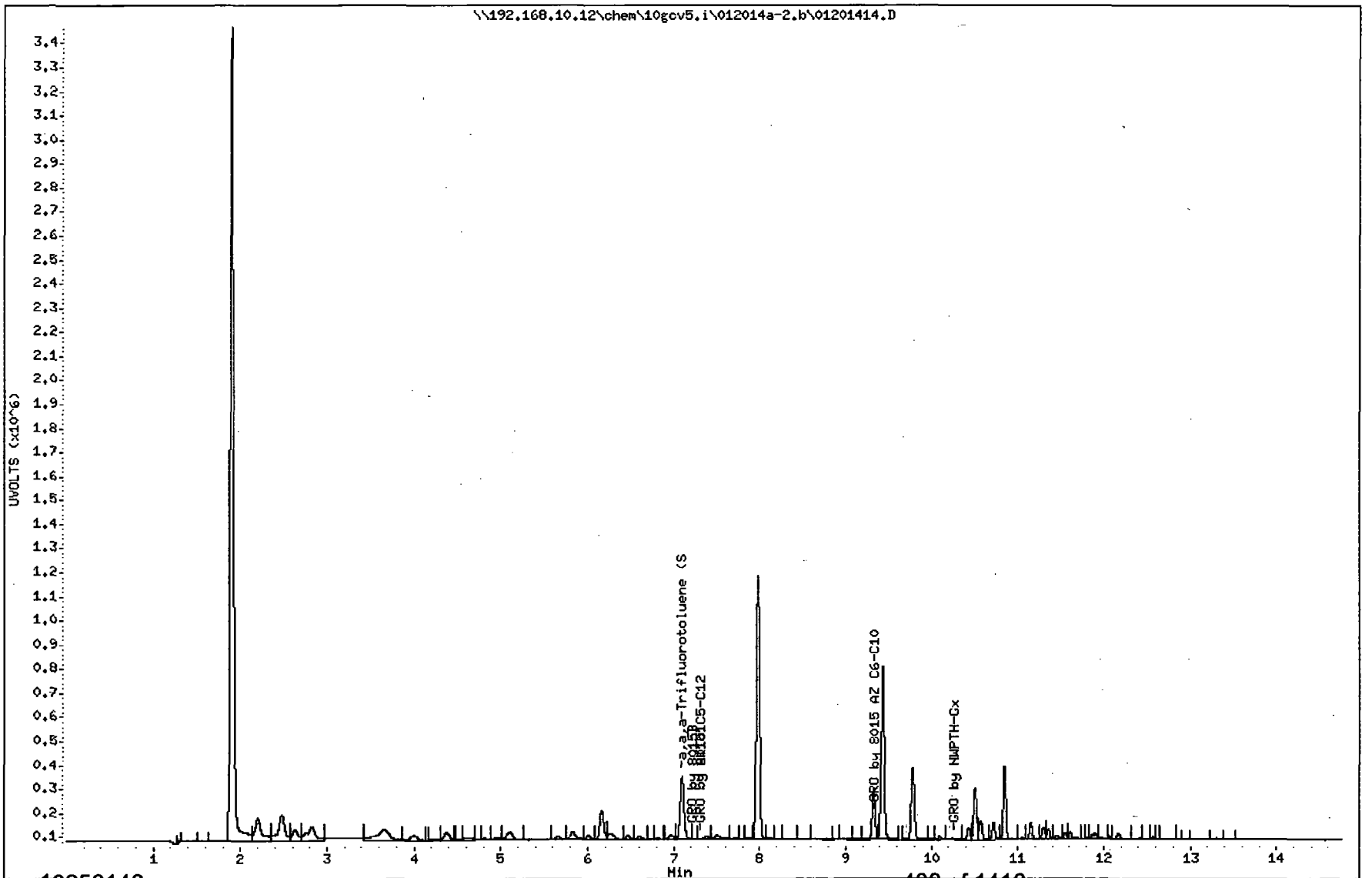
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	1 a,a,a-Trifluorotoluene (S)	7.097	7.097	0.000	843121	50.0000	48.51(M)
S	2 GRO by AK101	4.230-10.420			7758144	1000.00	928.6
S	4 GRO by 8015B	3.450-11.000			9917718	1000.00	927.9
S	5 GRO by 8015 C5-C12	2.360-12.290			11942207	1000.00	910.6
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			9561565	1000.00	859.8
S	9 GRO by NWPTH-Gx	7.850-12.690			8498010	1000.00	859.3

QC Flag Legend

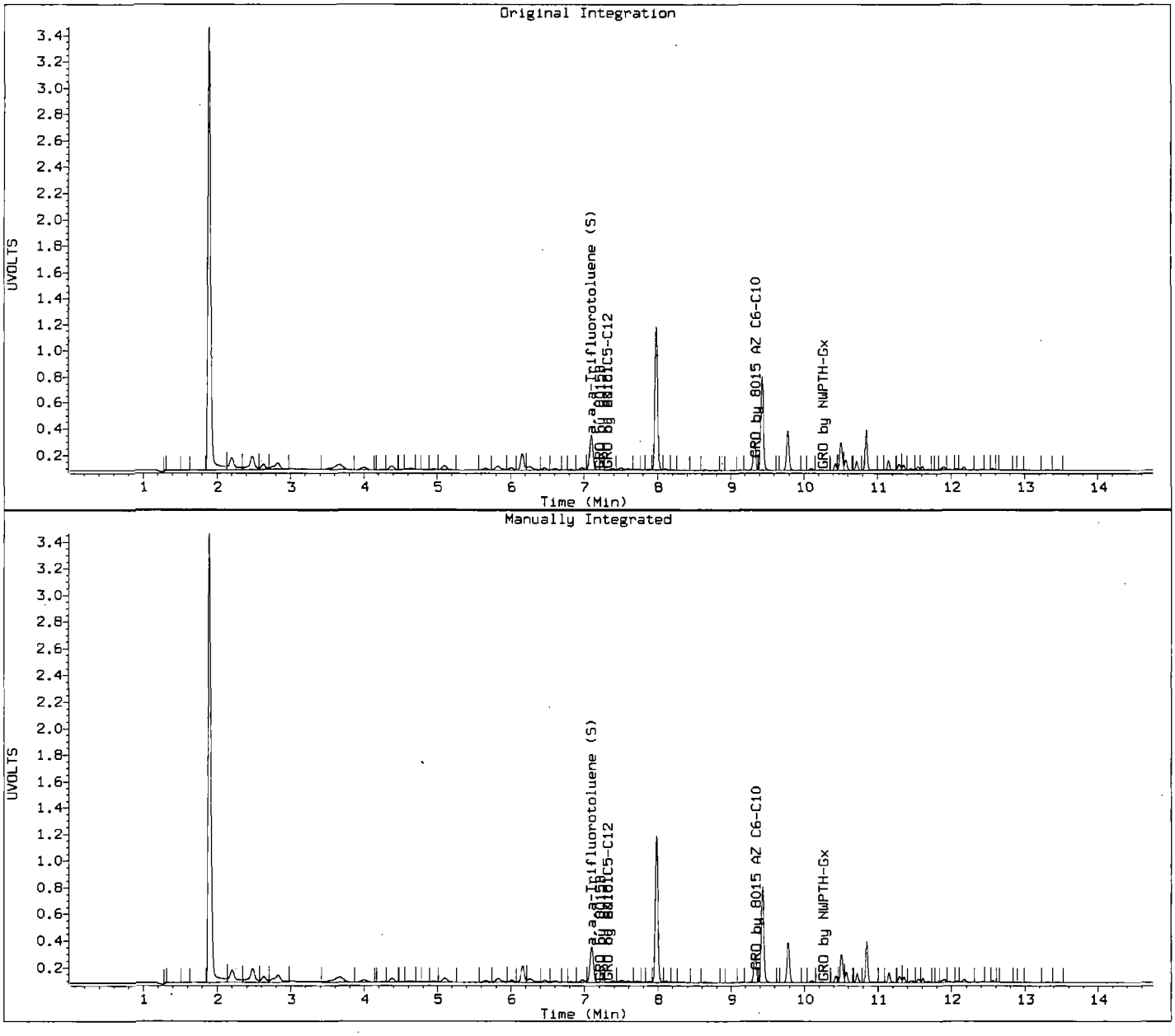
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\012014a-2.b\01201414.D
Date : 20-JAN-2014 21:03
Client ID:
Sample Info: TPH ICV 9895-82,1,2

Instrument: 10gcv5.i
Operator: LLC
Column phase: DB-624
Column diameter: 0.53

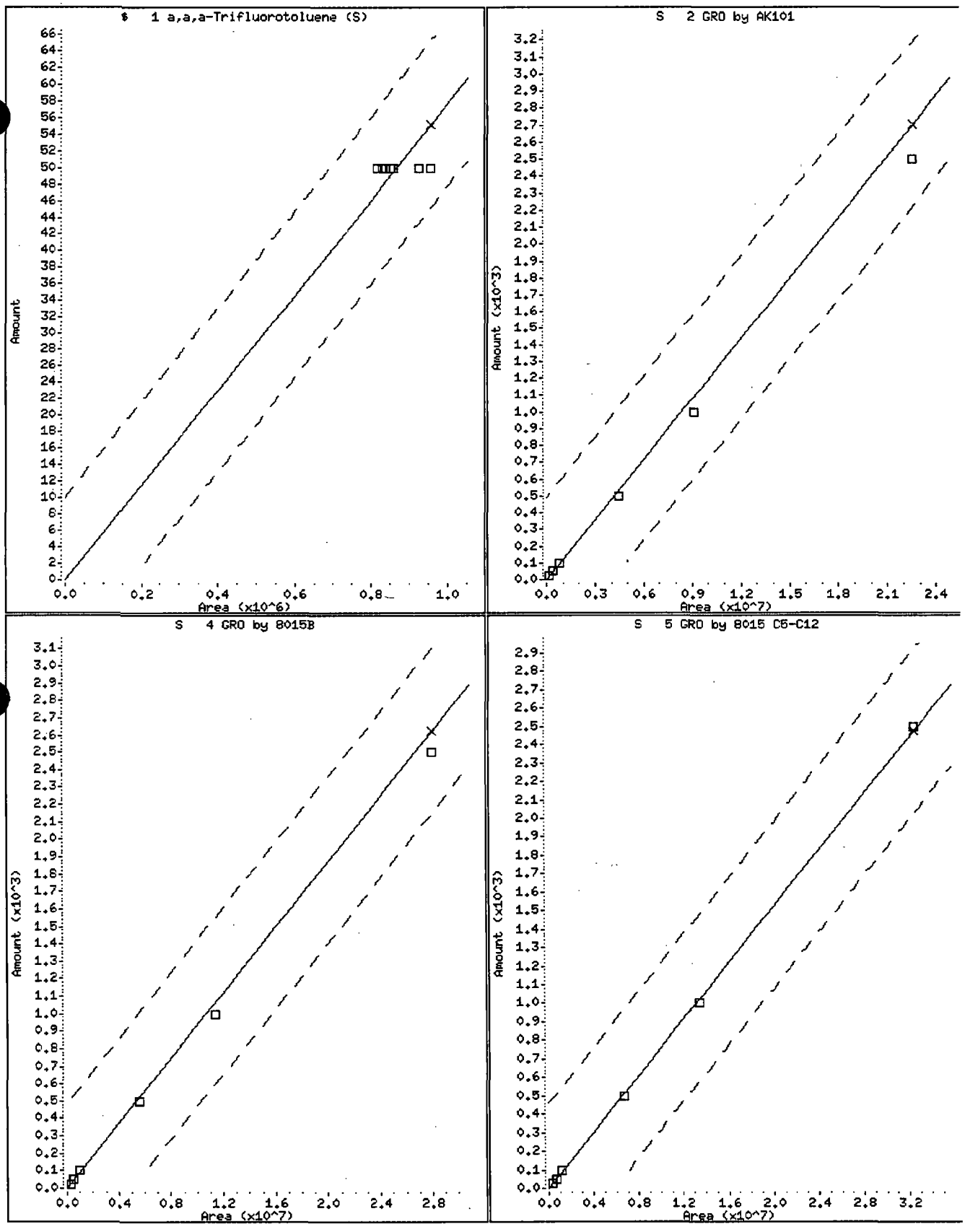


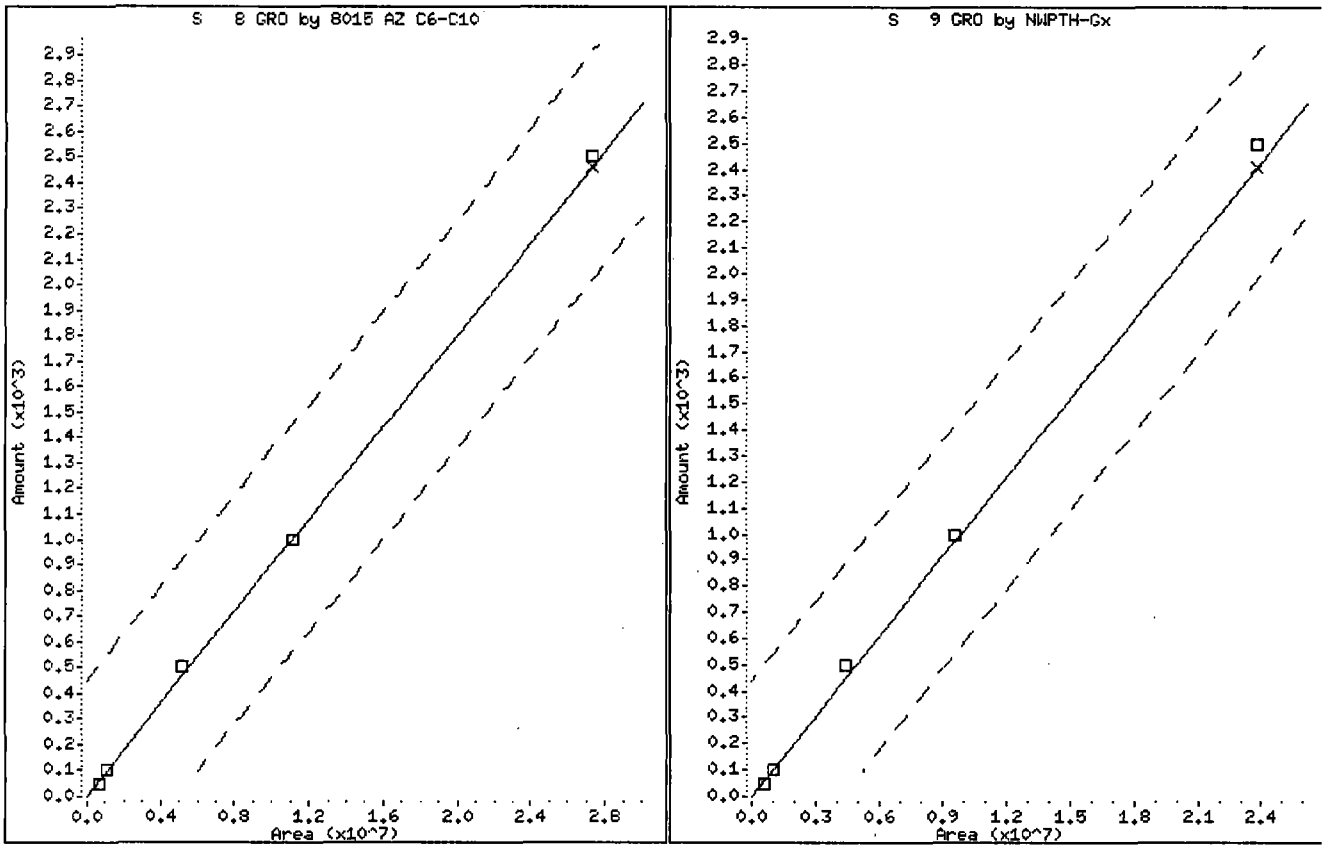
Data File: \\192.168.10.12\chem\10gcv5.i\0120114a-2.b\01201414.d (Manint: ALLGRO.sub Orig: ALLGRO.sub)
Injection Date: 20-JAN-2014 21:03
Instrument: 10gcv5.i
Lab Sample ID: TPH ICV 9895-82



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	11088199	11942207
GRO by 8015B	9445300	9917718
GRO by AK101	7434955	7758144
GRO by 8015 AZ C6-C10	9225003	9561565
GRO by NWPTH-Gx	8284611	8498010
a,a,a-Trifluorotoluene (S)	821002	843121


$ 1 a,a,a-Trifluorotoluene (S)
Amount
Area (x10^6)
S 2 GRO by AK101
Amount (x10^3)
Area (x10^7)
S 4 GRO by 8015B
Amount (x10^3)
Area (x10^7)
S 5 GRO by 8015 C5-C12
Amount (x10^3)
Area (x10^7)


S 8 GRO by 8015 AZ C6-C10
Amount (x10^3)
Area (x10^7)
S 9 GRO by NWPTH-Gx
Amount (x10^3)
Area (x10^7)

Pace Analytical Services

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 30-JAN-2014 22:40
Lab File ID: 01301424.d Init. Cal. Date(s): 20-JAN-2014 20-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 17:25 19:50
Lab Sample ID: CCV 9314-466 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\013014a-2.b\G514-TPH-MLS-012014.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF1000	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
$ 1 a,a,a-Trifluorotoluene (S)	17381	18636	0.010	7.22004	25.00000	Averaged
S 4 GRO by 8015B	10688	12288	0.010	14.97388	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 11.09696
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301424.d
Lab Smp Id: CCV 9314-466
Inj Date : 30-JAN-2014 22:40
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-466,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 31-Jan-2014 10:46 mheckman Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: 10MHECKMAN

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	1 a,a,a-Trifluorotoluene (S)	7.116	7.116	0.000	931803	50.0000	53.61(M)
S	4 GRO by 8015B	3.450-11.000			12288364	1000.00	1150

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301424.D

Page 1

Date : 30-JAN-2014 22:40

Client ID:

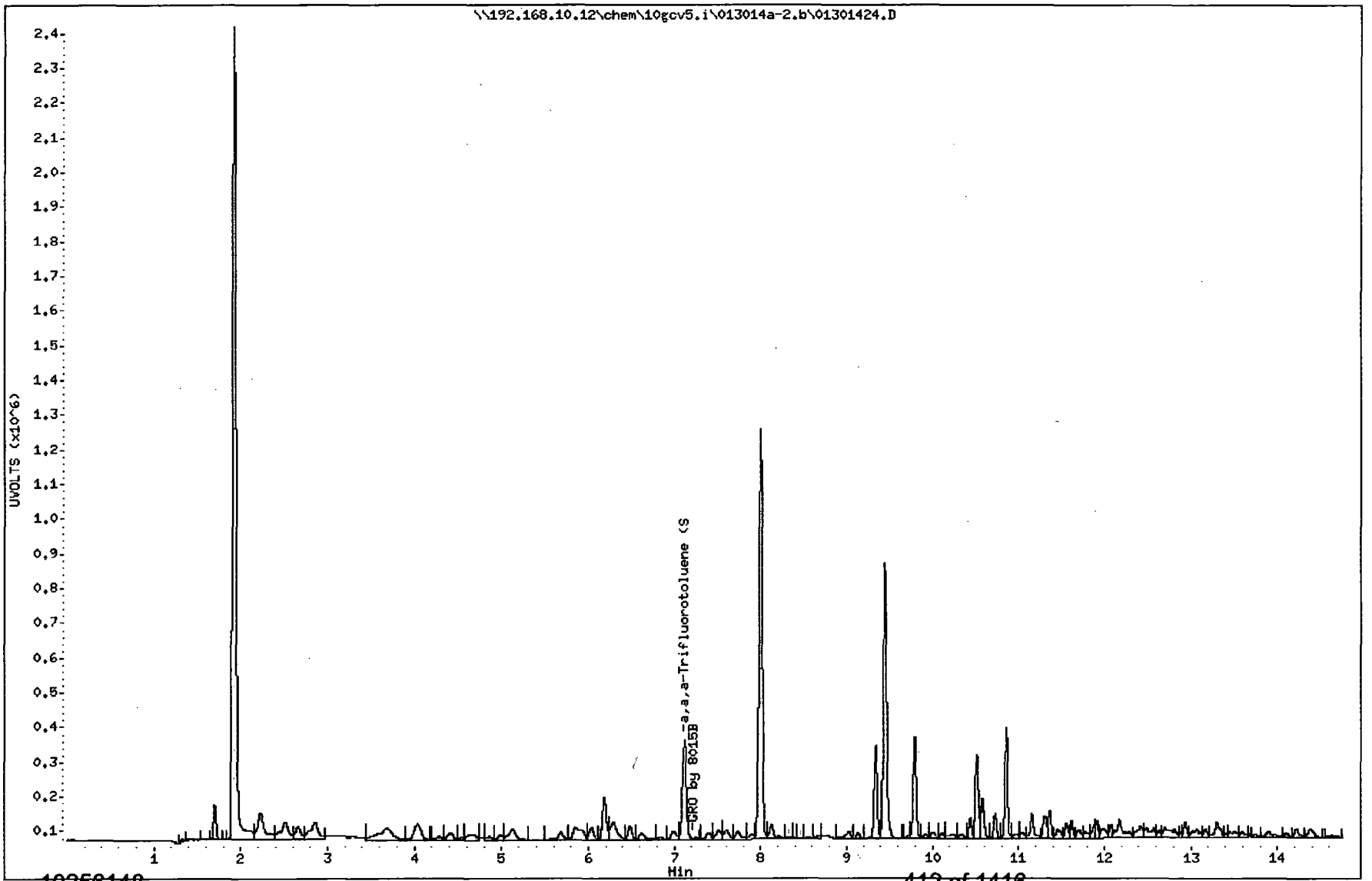
Instrument: 10gcv5.i

Sample Info: CCV 9314-466,1,2

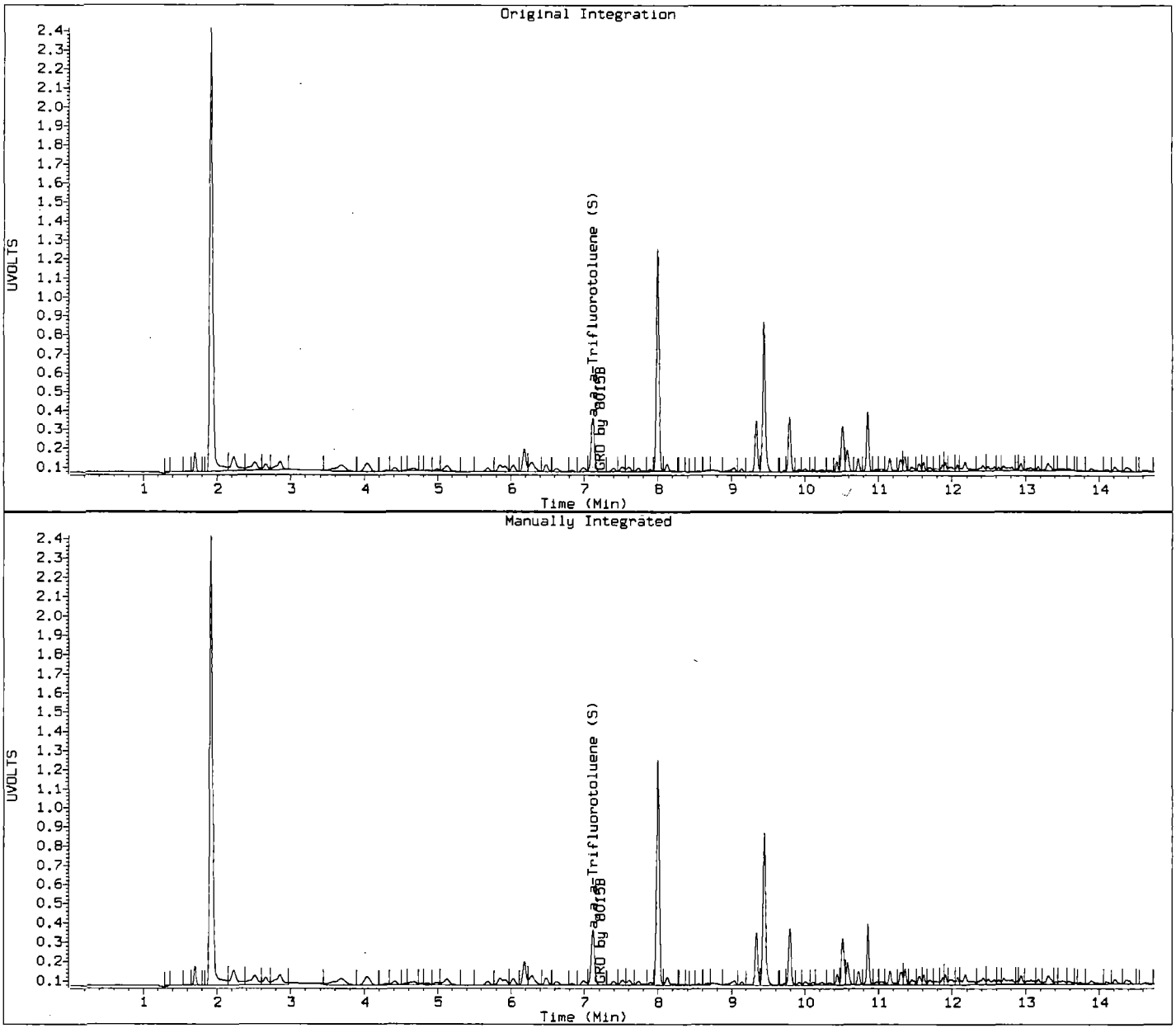
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\0130114a-2.b\01301424.d (Manint: 8015.sub Orig: 8015.sub)
Injection Date: 30-JAN-2014 22:40
Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-466



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	11372276	12288364
a,a,a-Trifluorotoluene (S)	900976	931803

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 31-JAN-2014 03:05
Lab File ID: 01301435.d Init. Cal. Date(s): 20-JAN-2014 20-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 17:25 19:50
Lab Sample ID: CCV 9314-466 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\013014a-2.b\G514-TPH-MLS-012014.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF1000	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
$ 1 a,a,a-Trifluorotoluene (S)	17381	19482	0.010	12.08912	25.00000	Averaged
S 4 GRO by 8015B	10688	11935	0.010	11.66861	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 11.87886
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301435.d
Lab Smp Id: CCV 9314-466
Inj Date : 31-JAN-2014 03:05
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-466,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 04-Feb-2014 10:39 10gcv5.i Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 1 a,a,a-Trifluorotoluene (S)	7.118	7.118	0.000	974118	50.0000	56.04(M)
S 4 GRO by 8015B	3.450-11.000			11935098	1000.00	1117

QC Flag Legend

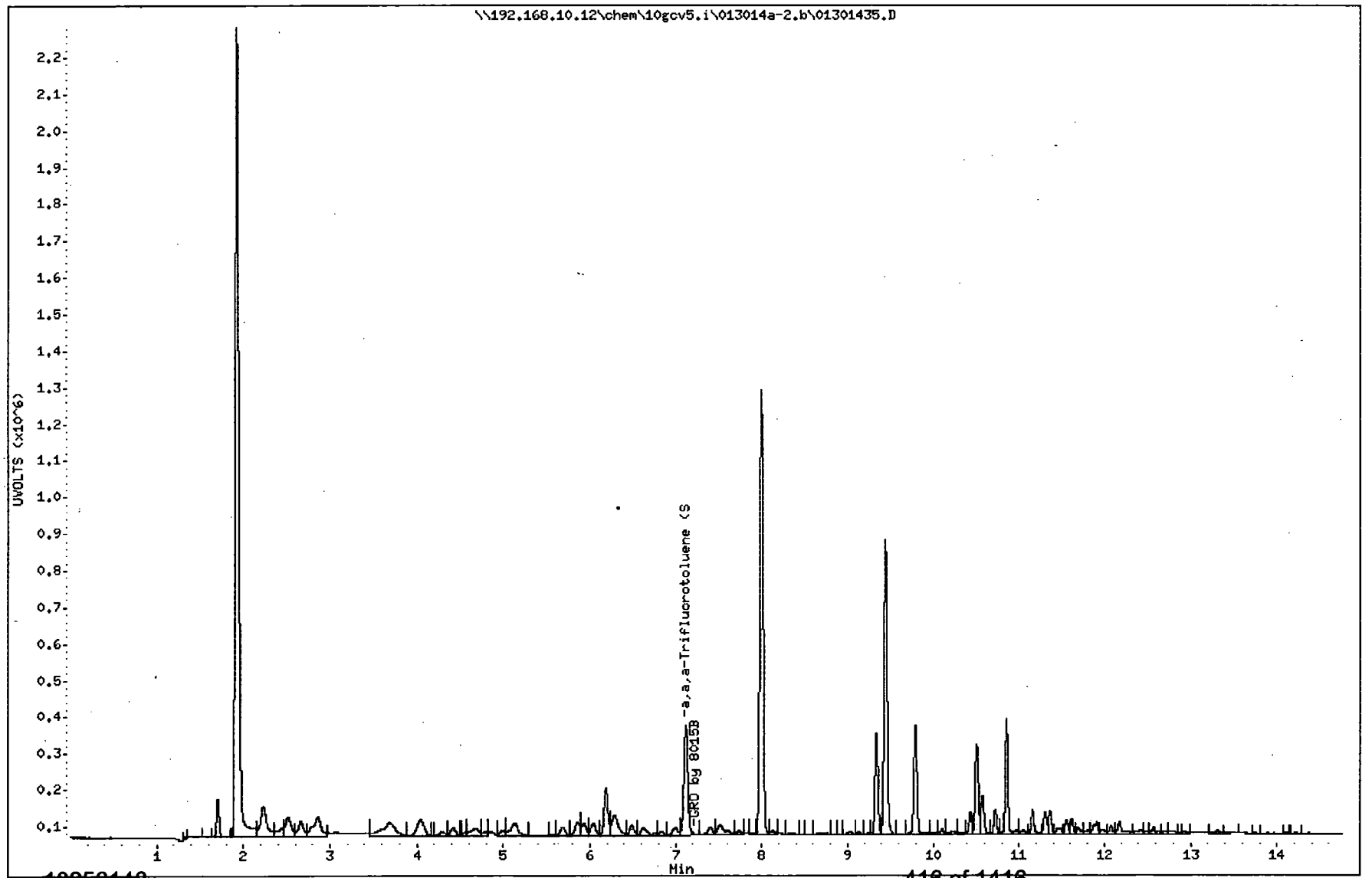
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301435.D
Date : 31-JAN-2014 03:05
Client ID:
Sample Info: CCV 9314-466,1,2

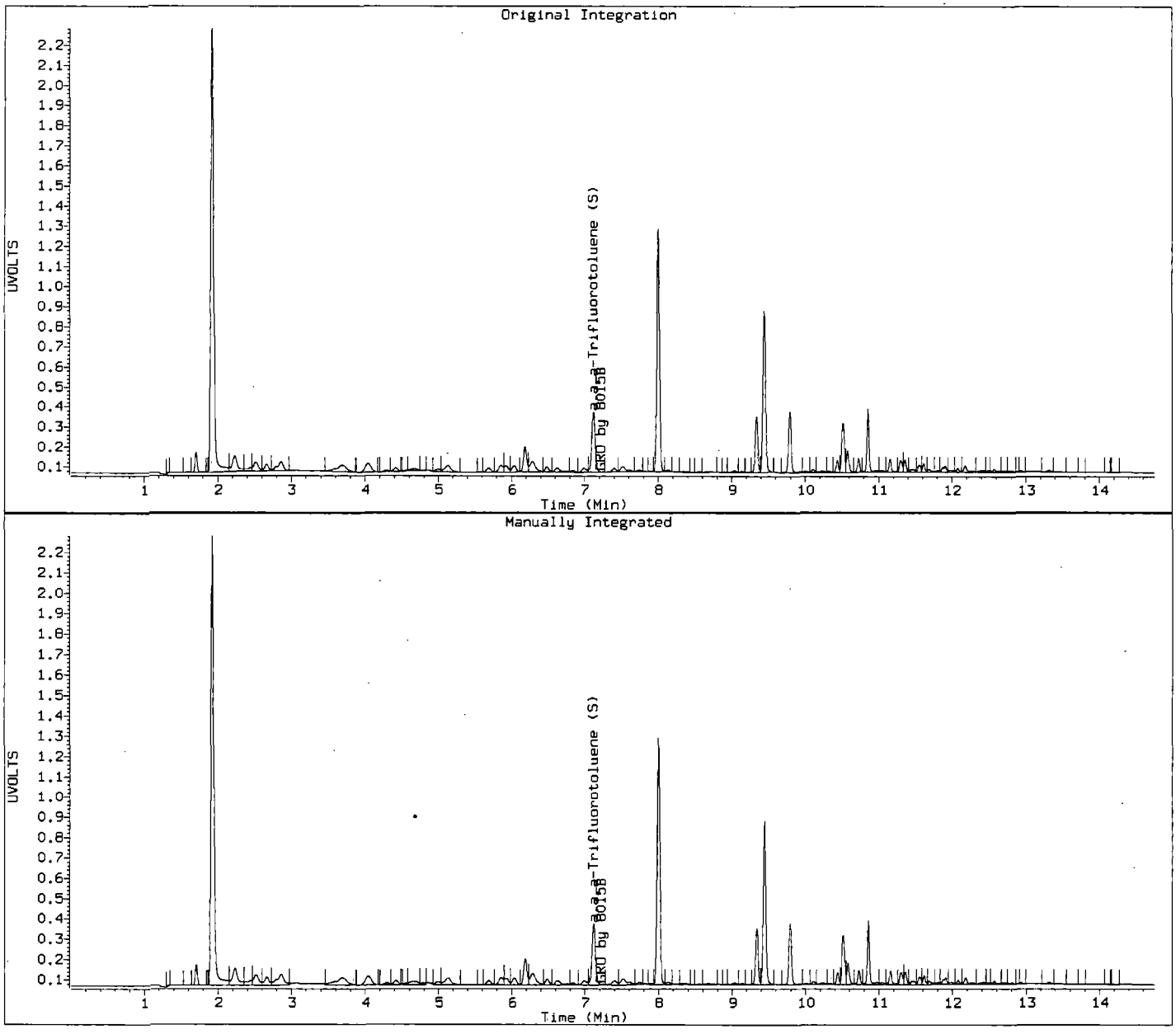
Instrument: 10gcv5.i

Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b/01301435.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 31-JAN-2014 03:05
Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-466



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	11258489	11935098
a,a,a-Trifluorotoluene (S)	949870	974118

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 04-FEB-2014 14:05
Lab File ID: 02041404.d Init. Cal. Date(s): 20-JAN-2014 20-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 17:25 19:50
Lab Sample ID: CCV 9314-477 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\020414a-2.b\G514-TPH-MLS-012014.m

	COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	1 a,a,a-Trifluorotoluene (S)	17381	18324	0.010	5.42661	25.00000	Averaged
S	2 GRO by AK101	8355	9493	0.010	13.62458	25.00000	Averaged
S	4 GRO by 8015B	10688	12066	0.010	12.89604	15.00000	Averaged
S	5 GRO by 8015 C5-C12	13115	13758	0.010	4.90781	15.00000	Averaged
S	8 GRO by 8015 AZ C6-C10	11120	11570	0.010	4.04636	15.00000	Averaged
S	9 GRO by NWPTH-Gx	9889	9829	0.010	-0.60978	15.00000	Averaged

Average %D / Drift Results.	
Calculated Average %D/Drift =	6.91853
Maximun Average %D/Drift =	15.00000
* Passed Average %D/Drift Test.	

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041404.d
Lab Smp Id: CCV 9314-477
Inj Date : 04-FEB-2014 14:05
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-477,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\G514-TPH-MLS-012014.m
Meth Date : 04-Feb-2014 14:34 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

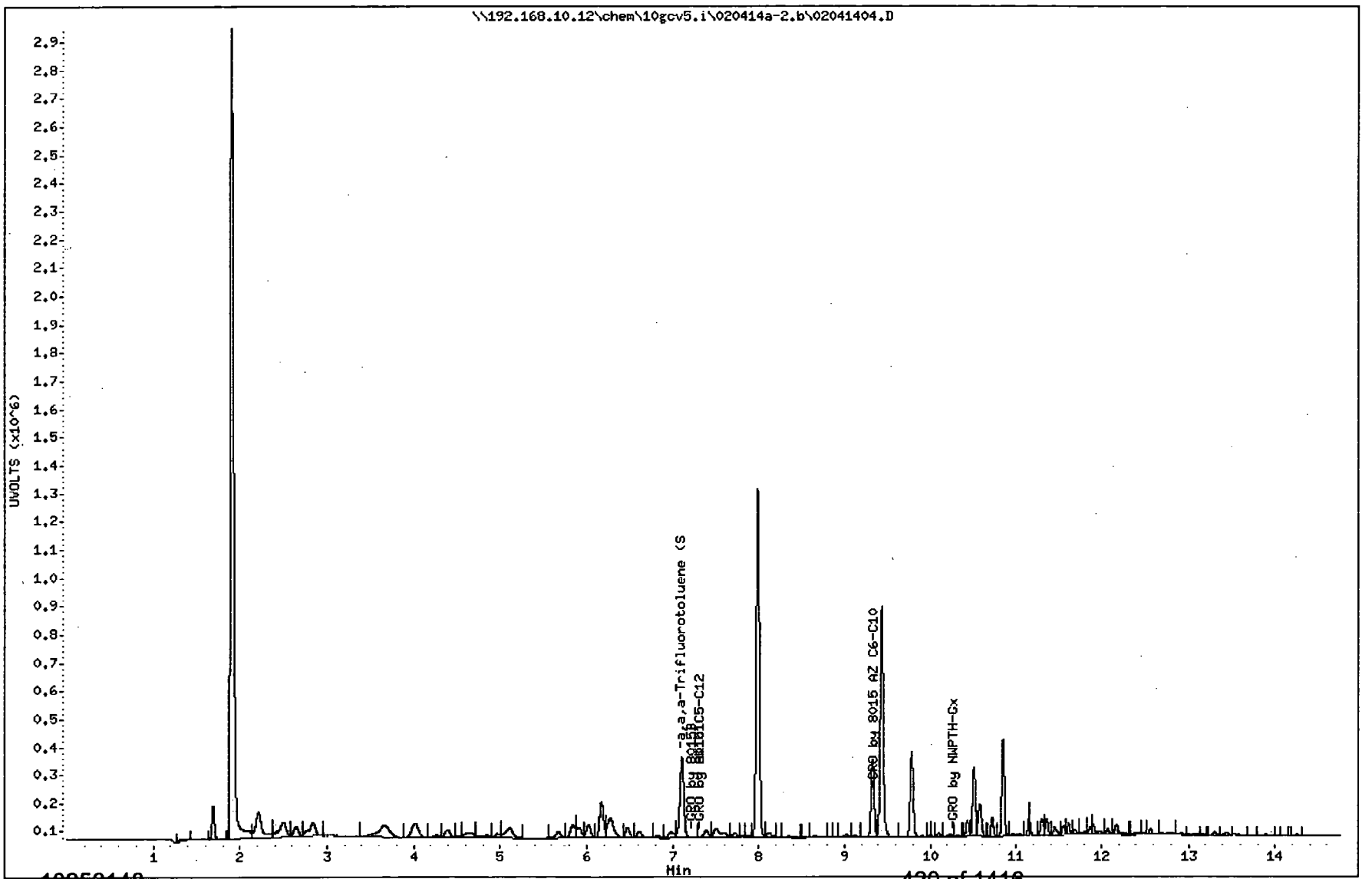
Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	1 a,a,a-Trifluorotoluene (S)	7.106	7.106	0.000	916217	50.0000	52.71
S	2 GRO by AK101	4.230-10.420			9493339	1000.00	1136
S	4 GRO by 8015B	3.450-11.000			12066286	1000.00	1129
S	5 GRO by 8015 C5-C12	2.360-12.290			13758229	1000.00	1049
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			11570169	1000.00	1040
S	9 GRO by NWPTH-Gx	7.850-12.690			9828819	1000.00	993.9

Data File: \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041404.D
Date : 04-FEB-2014 14:05
Client ID:
Sample Info: CCV 9314-477,1,2

Instrument: 10gcv5.i
Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Data File: \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041404.d (Manint: ALLGRO.sub Orig: ALLGRO.sub)
Injection Date: 04-FEB-2014 14:05
Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-477

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	13758229	13758229
GRO by 8015B	12066286	12066286
GRO by AK101	9493339	9493339
GRO by 8015 AZ C6-C10	11570169	11570169
GRO by NWPTH-Gx	9828819	9828819
a,a,a-Trifluorotoluene (S)	916217	916217

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 04-FEB-2014 18:58
Lab File ID: 02041414.d Init. Cal. Date(s): 20-JAN-2014 20-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 17:25 19:50
Lab Sample ID: CCV 9314-477 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\020414a-2.b\G514-TPH-MLS-012014.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF1000	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
$ 1 a,a,a-Trifluorotoluene (S)	17381	18892	0.010	8.69452	25.00000	Averaged
S 4 GRO by 8015B	10688	12856	0.010	20.28019	15.00000	Averaged <-

Average %D / Drift Results.	
Calculated Average %D/Drift =	14.48735
Maximun Average %D/Drift =	15.00000
* Passed Average %D/Drift Test.	

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041414.d
Lab Smp Id: CCV 9314-477
Inj Date : 04-FEB-2014 18:58
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-477,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\G514-TPH-MLS-012014.m
Meth Date : 05-Feb-2014 11:30 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 1 a,a,a-Trifluorotoluene (S)	7.107	7.107	0.000	944617	50.0000	54.35
S 4 GRO by 8015B	3.450-11.000			12855501	1000.00	1203

Data File: \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041414.D

Page 1

Date : 04-FEB-2014 18:58

Client ID:

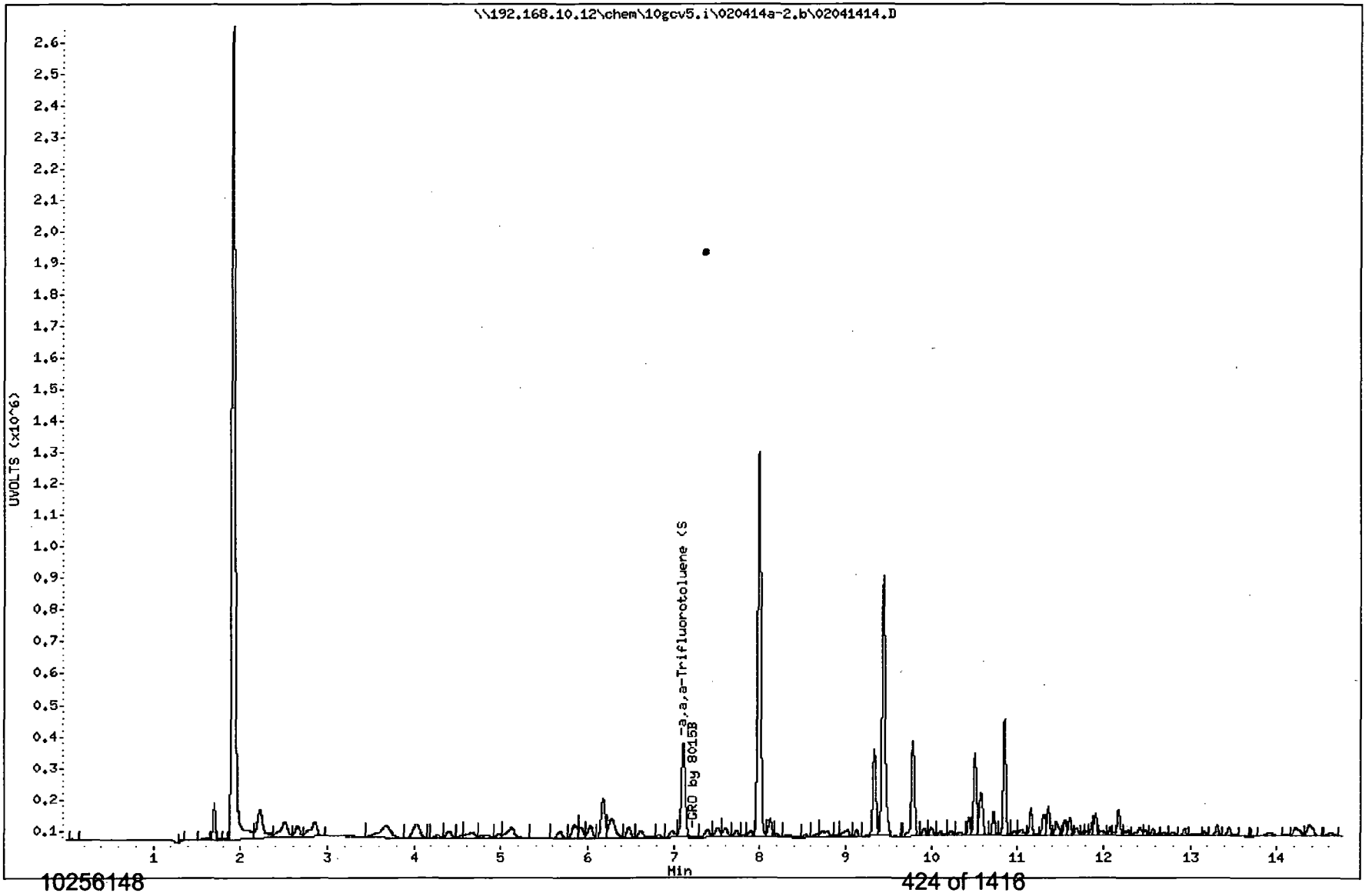
Instrument: 10gcv5.i

Sample Info: CCV 9314-477,1,2

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041414.d (Manint: 8015.sub Orig: 8015.sub)
Injection Date: 04-FEB-2014 18:58
Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-477

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	12855501	12855501
a,a,a-Trifluorotoluene (S)	944617	944617

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 01-FEB-2014 12:49
Lab File ID: 02011407.d Init. Cal. Date(s): 20-JAN-2014 20-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 17:25 19:50
Lab Sample ID: TPH CCV 9314-471 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\020114a-2.b\G514-TPH-MLS-012014.m

COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 1 a,a,a-Trifluorotoluene (S)	17381	19646	0.010	13.03094	25.00000	Averaged
S 4 GRO by 8015B	10688	11884	0.010	11.19363	15.00000	Averaged

Average %D / Drift Results.
Calculated Average %D/Drift = 12.11229
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011407.d
Lab Smp Id: TPH CCV 9314-471
Inj Date : 01-FEB-2014 12:49
Operator : LLC Inst ID: 10gcv5.i
Smp Info : TPH CCV 9314-471,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\G514-TPH-MLS-012014.m
Meth Date : 04-Feb-2014 10:16 target Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	1 a,a,a-Trifluorotoluene (S)	7.115	7.115	0.000	982303	50.0000	56.52
S	4 GRO by 8015B	3.450-11.000			11884333	1000.00	1112

Data File: \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011407.D

Page 1

Date : 01-FEB-2014 12:49

Client ID:

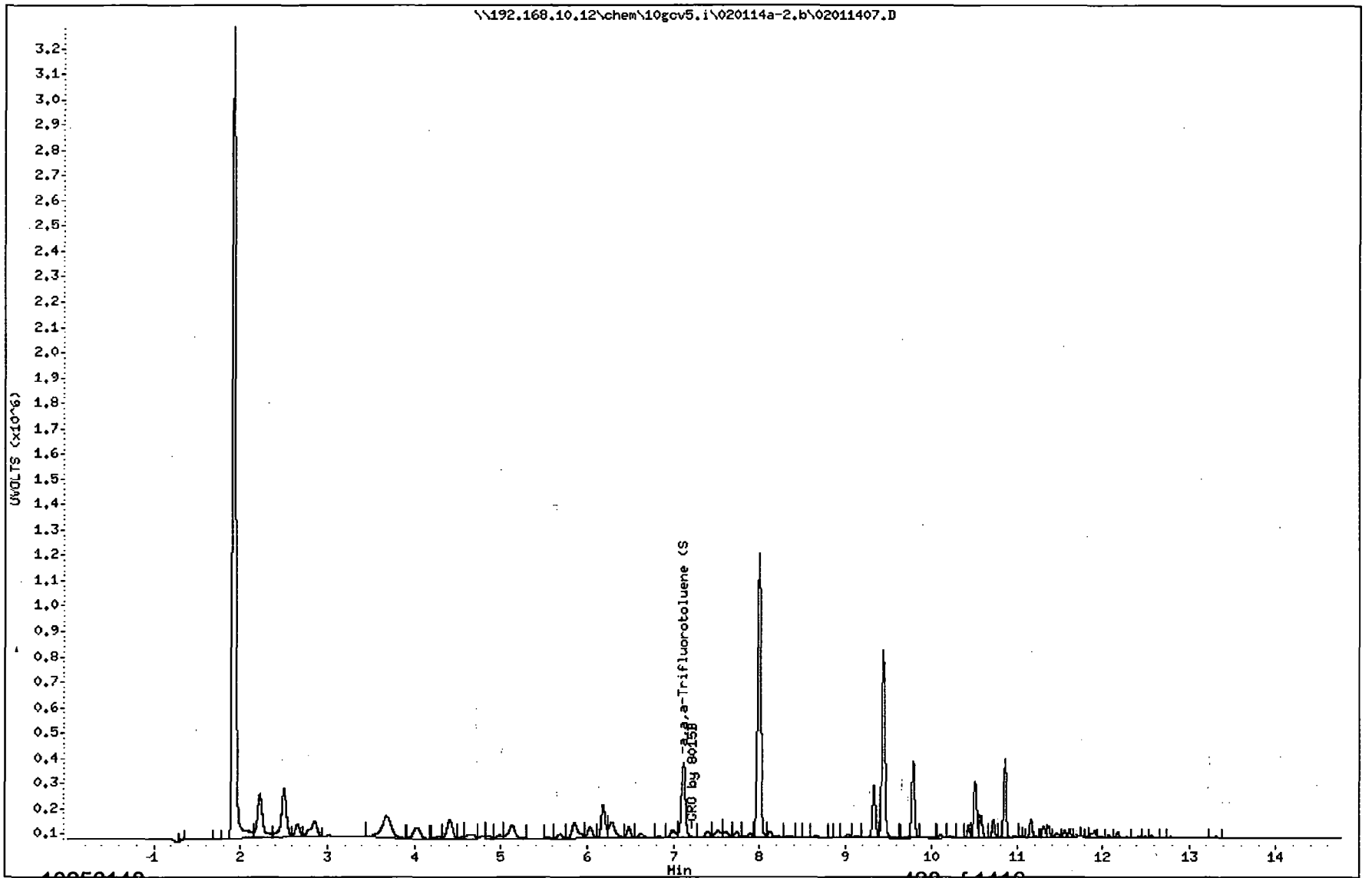
Instrument: 10gcv5.i

Sample Info: TPH CCV 9314-471,1,2

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011407.d (Manint: 8015.sub Orig: 8015.sub)
Injection Date: 01-FEB-2014 12:49
Instrument: 10gcv5.i
Lab Sample ID: TPH CCV 9314-471

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	11654721	11884333
a,a,a-Trifluorotoluene (S)	982303	982303

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 01-FEB-2014 17:23
Lab File ID: 02011418.d Init. Cal. Date(s): 20-JAN-2014 20-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 17:25 19:50
Lab Sample ID: TPH CCV 9314-471 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\020114a-2.b\G514-TPH-MLS-012014.m

	COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S	1 a,a,a-Trifluorotoluene (S)	17381	19188	0.010	10.39475	25.00000	Averaged
S	4 GRO by 8015B	10688	11699	0.010	9.46383	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.92929
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011418.d
Lab Smp Id: TPH CCV 9314-471
Inj Date : 01-FEB-2014 17:23
Operator : LLC Inst ID: 10gcv5.i
Smp Info : TPH CCV 9314-471,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\G514-TPH-MLS-012014.m
Meth Date : 04-Feb-2014 10:15 target Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

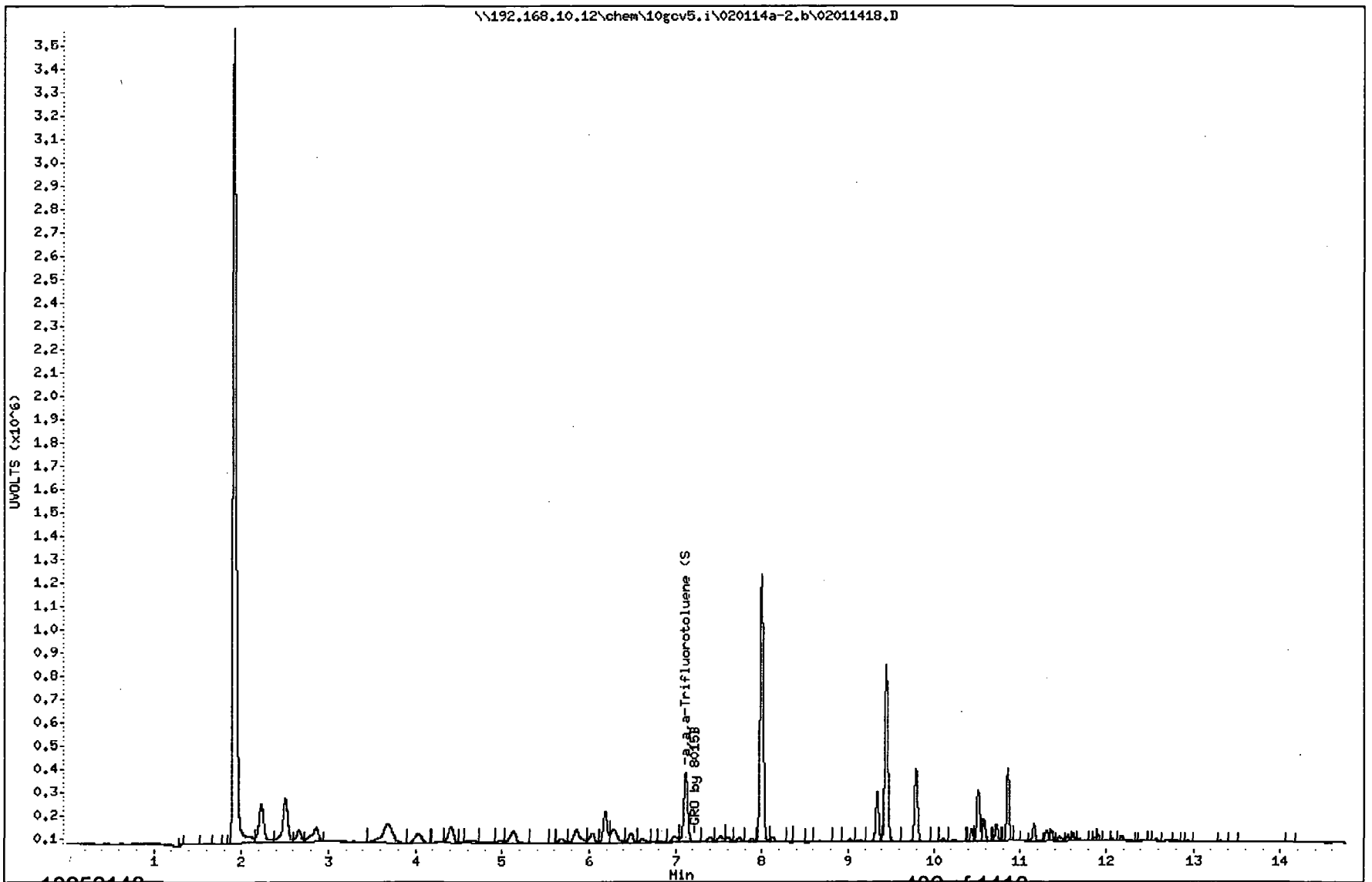
Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	1 a,a,a-Trifluorotoluene (S)	7.112	7.112	0.000	959393	50.0000	55.20
S	4 GRO by 8015B	3.450-11.000			11699452	1000.00	1095

Data File: \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011418.D
Date : 01-FEB-2014 17:23
Client ID:
Sample Info: TPH CCV 9314-471,1,2

Instrument: 10gcv5.i
Operator: LLC
Column phase: DB-624
Column diameter: 0.53



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Injection Date: 01-FEB-2014 17:23
Instrument: 10gcv5.i
Lab Sample ID: TPH CCV 9314-471

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	11699452	11699452
a,a,a-Trifluorotoluene (S)	959393	959393

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 01-FEB-2014 21:48
Lab File ID: 02011429.d Init. Cal. Date(s): 20-JAN-2014 20-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 17:25 19:50
Lab Sample ID: TPH CCV 9314-471 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\020114a-2.b\G514-TPH-MLS-012014.m

	COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	1 a,a,a-Trifluorotoluene (S)	17381	17582	0.010	1.15657	25.00000	Averaged
S	4 GRO by 8015B	10688	11639	0.010	8.89866	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 5.02762
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011429.d
Lab Smp Id: TPH CCV 9314-471
Inj Date : 01-FEB-2014 21:48
Operator : LLC Inst ID: 10gcv5.i
Smp Info : TPH CCV 9314-471,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\G514-TPH-MLS-012014.m
Meth Date : 04-Feb-2014 10:16 target Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.113	7.113	0.000	879108	50.0000	50.58
S	4 GRO by 8015B	3.450-11.000			11639047	1000.00	1089

Data File: \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011429.D

Page 1

Date : 01-FEB-2014 21:48

Client ID:

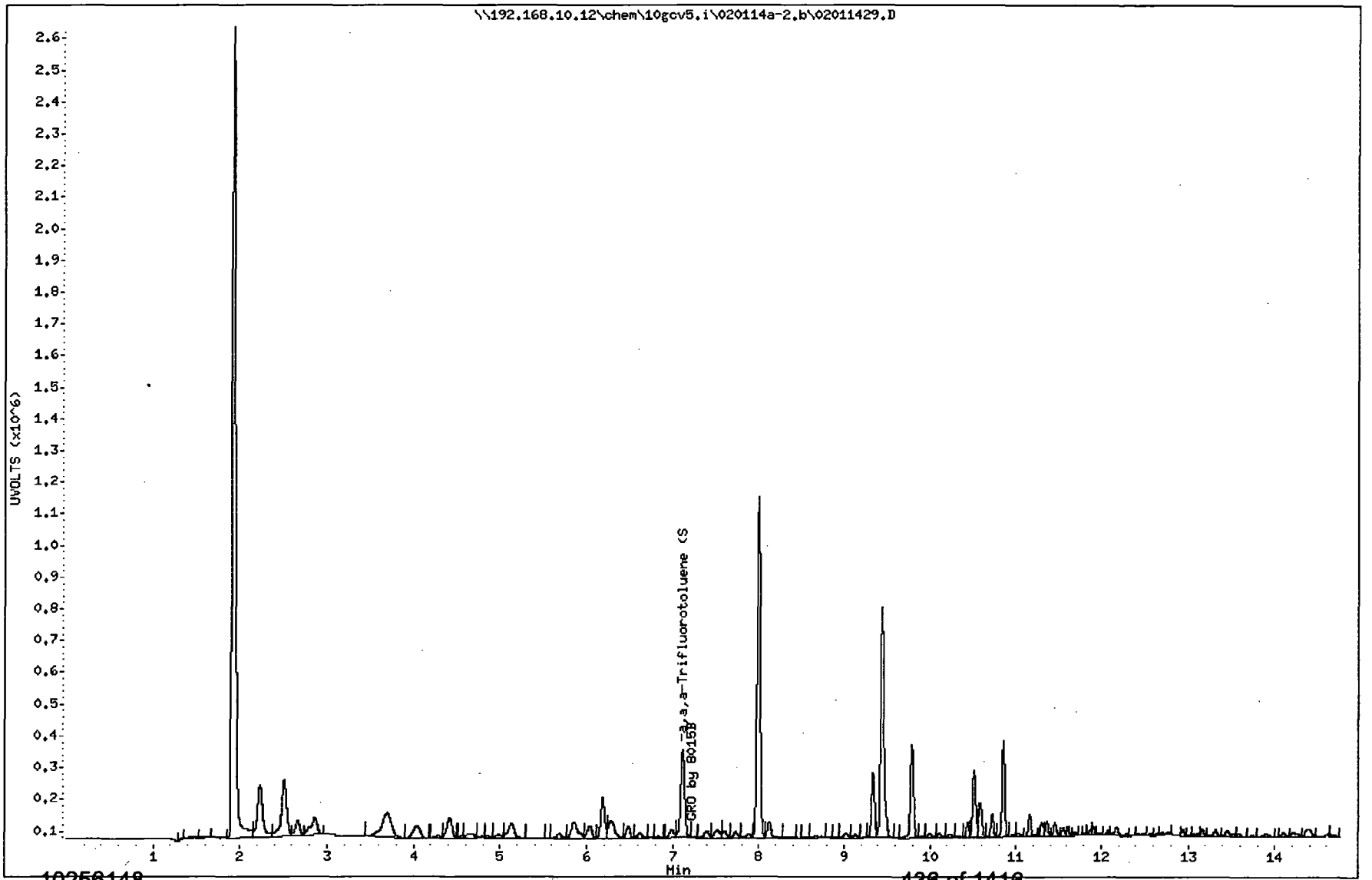
Instrument: 10gcv5.i

Sample Info: TPH CCV 9314-471,1,2

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



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Injection Date: 01-FEB-2014 21:48
Instrument: 10gcv5.i
Lab Sample ID: TPH CCV 9314-471

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	11463997	11639047
a,a,a-Trifluorotoluene (S)	879108	879108

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 02-FEB-2014 00:13
Lab File ID: 02011435.d Init. Cal. Date(s): 20-JAN-2014 20-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 17:25 19:50
Lab Sample ID: TPH CCV 9314-471 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\020114a-2.b\G514-TPH-MLS-012014.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF1000	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
$ 1 a,a,a-Trifluorotoluene (S)	17381	19078	0.010	9.76234	25.00000	Averaged
S 4 GRO by 8015B	10688	11451	0.010	7.13792	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.45013
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011435.d
Lab Smp Id: TPH CCV 9314-471
Inj Date : 02-FEB-2014 00:13
Operator : LLC Inst ID: 10gcv5.i
Smp Info : TPH CCV 9314-471,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\G514-TPH-MLS-012014.m
Meth Date : 04-Feb-2014 10:16 target Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	1 a,a,a-Trifluorotoluene (S)	7.115	7.115	0.000	953897	50.0000	54.88
S	4 GRO by 8015B	3.450-11.000			11450860	1000.00	1071

Data File: \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011435.D

Page 1

Date : 02-FEB-2014 00:13

Client ID:

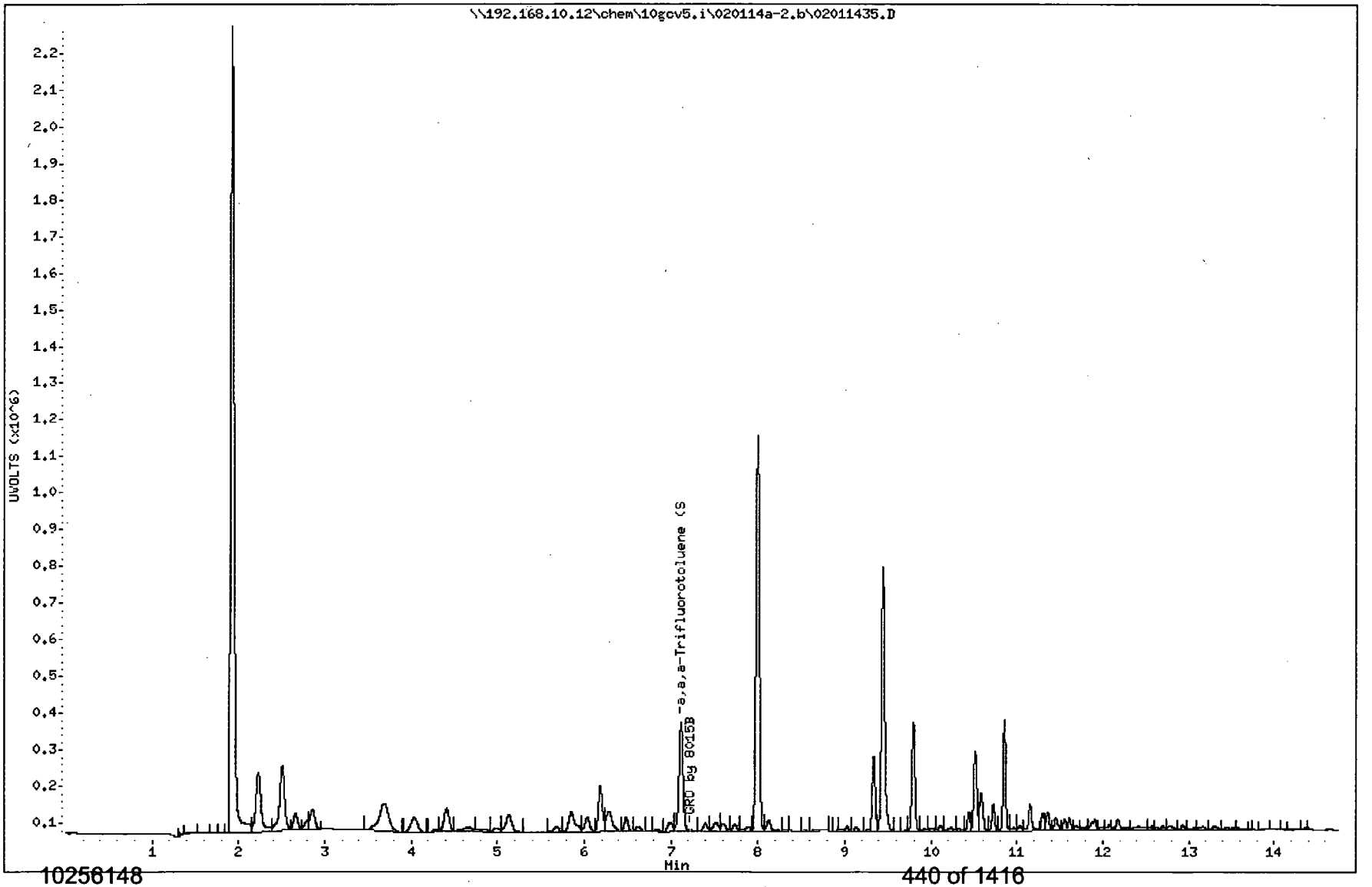
Instrument: 10gcv5.i

Sample Info: TPH CCV 9314-471,1,2

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



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Injection Date: 02-FEB-2014 00:13
Instrument: 10gcv5.i
Lab Sample ID: TPH CCV 9314-471

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	11450860	11450860
a,a,a-Trifluorotoluene (S)	953897	953897

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301430.d
Lab Smp Id: 1617199
Inj Date : 31-JAN-2014 01:05
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1617199,1,3,BLANK
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 31-Jan-2014 14:43 10gcv5.i Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

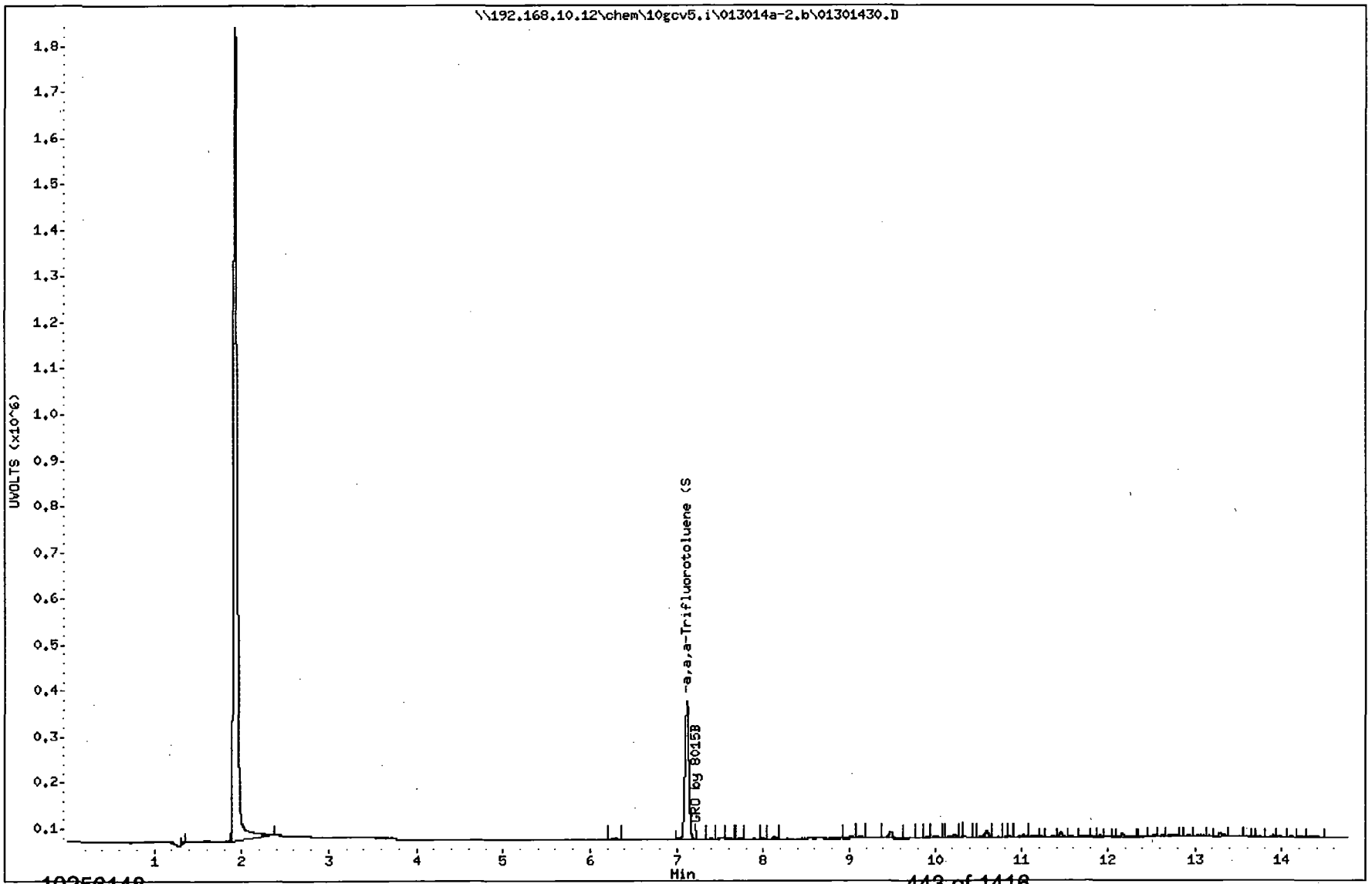
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 1 a,a,a-Trifluorotoluene (S)	7.118	7.113	0.005	920607	52.9659	52.96
S 4 GRO by 8015B	3.450-11.000			268194	25.0931	1255

Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301430.D
Date : 31-JAN-2014 01:05
Client ID:
Sample Info: 1617199,1,3,BLANK

Column phase: DB-624

Instrument: 10gcv5.i

Operator: LLC
Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b/01301430.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 31-JAN-2014 01:05
Instrument: 10gcv5.i
Lab Sample ID: 1617199

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	268194	268194
a,a,a-Trifluorotoluene (S)	920607	920607

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301426.d
Lab Smp Id: 1617201
Inj Date : 30-JAN-2014 23:28
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1617201,1,3,MS
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 31-Jan-2014 14:43 10gcv5.i Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 1 a,a,a-Trifluorotoluene (S)	7.118	7.113	0.005	1017289	58.5283	58.53(M)
S 4 GRO by 8015B	3.450-11.000			12979789	1214.43	60720

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301426.D

Page 1

Date : 30-JAN-2014 23:28

Client ID:

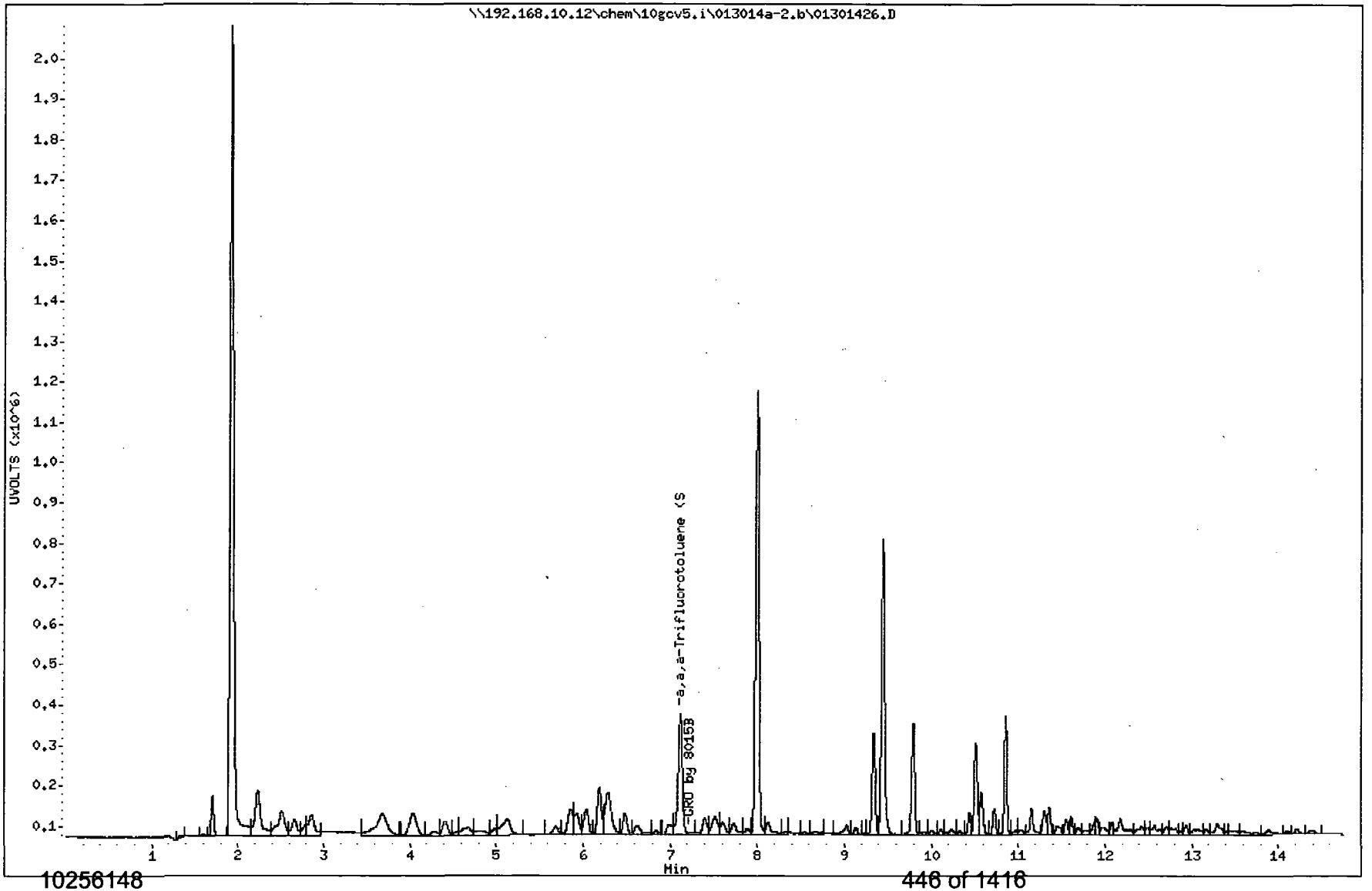
Instrument: 10gcv5.i

Sample Info: 1617201,1,3,MS

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



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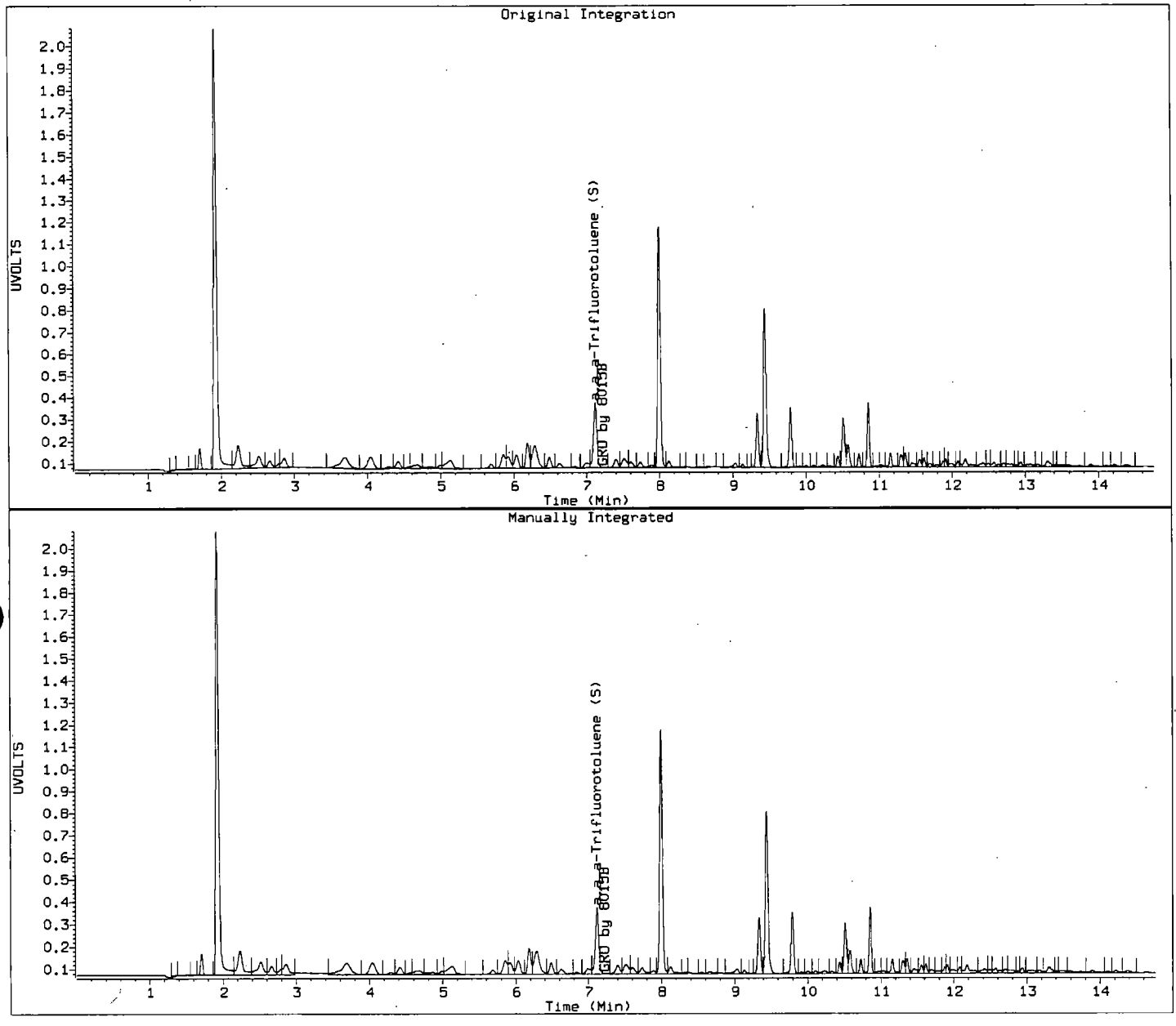
Injection Date: 30-JAN-2014 23:28
Instrument: 10gcv5.i
Lab Sample ID: 1617201



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	12198974	12979789
a,a,a-Trifluorotoluene (S)	989288	1017289

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301427.d
Lab Smp Id: 1617202
Inj Date : 30-JAN-2014 23:52
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1617202,1,3,MSD
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 31-Jan-2014 14:43 10gcv5.i Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
S	1 a,a,a-Trifluorotoluene (S)	7.117	7.113	0.004	998240	57.4324	57.43(M)
S	4 GRO by 8015B	3.450-11.000			12194629	1140.97	57050

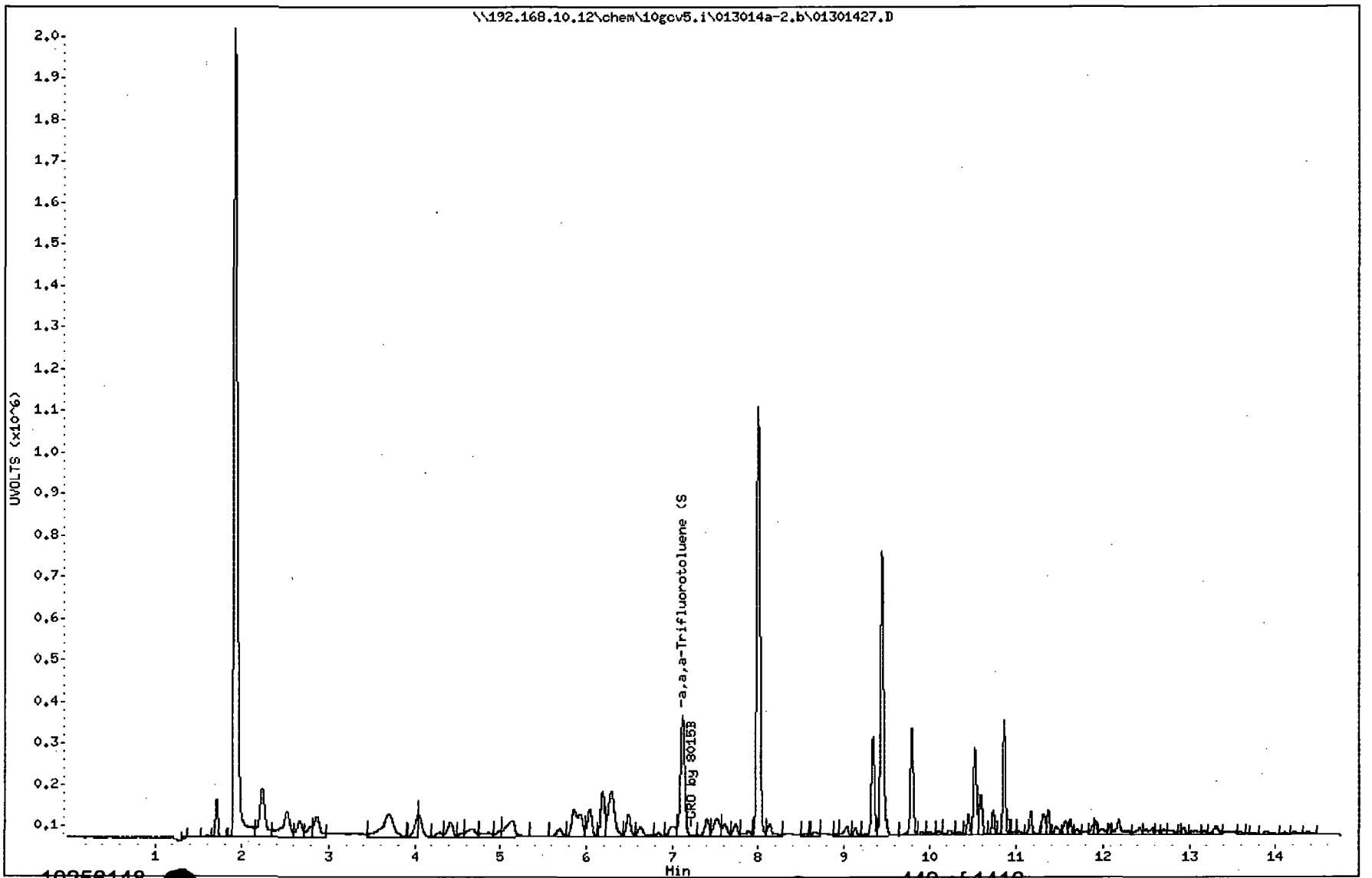
QC Flag Legend

M - Compound response manually integrated.

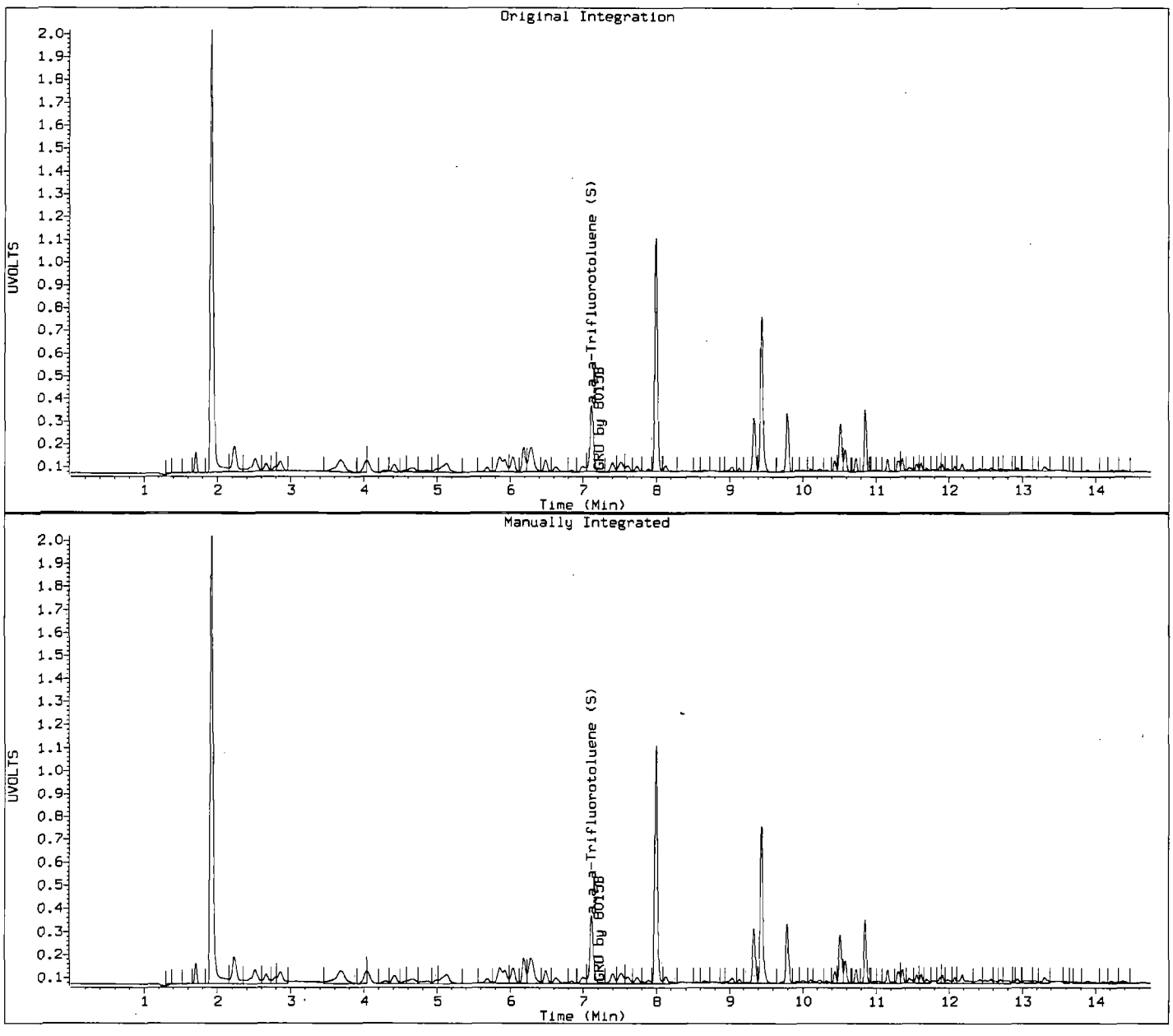
Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301427.D
Date : 30-JAN-2014 23:52
Client ID:
Sample Info: 1617202,1,3,MSD

Instrument: 10gcv5.i
Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b/01301427.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 30-JAN-2014 23:52
Instrument: 10gcv5.i
Lab Sample ID: 1617202



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	11337003	12194629
a,a,a-Trifluorotoluene (S)	963316	998240

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301425.d
Lab Smp Id: 1617200
Inj Date : 30-JAN-2014 23:04
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1617200,1,3,LCS
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 04-Feb-2014 10:39 10gcv5.i Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
S	1 a,a,a-Trifluorotoluene (S)	7.118	7.118	0.000	1015132	58.4042	58.40(M)
S	4 GRO by 8015B	3.450-11.000			12741865	1192.17	59610

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301425.D

Page 1

Date : 30-JAN-2014 23:04

Client ID:

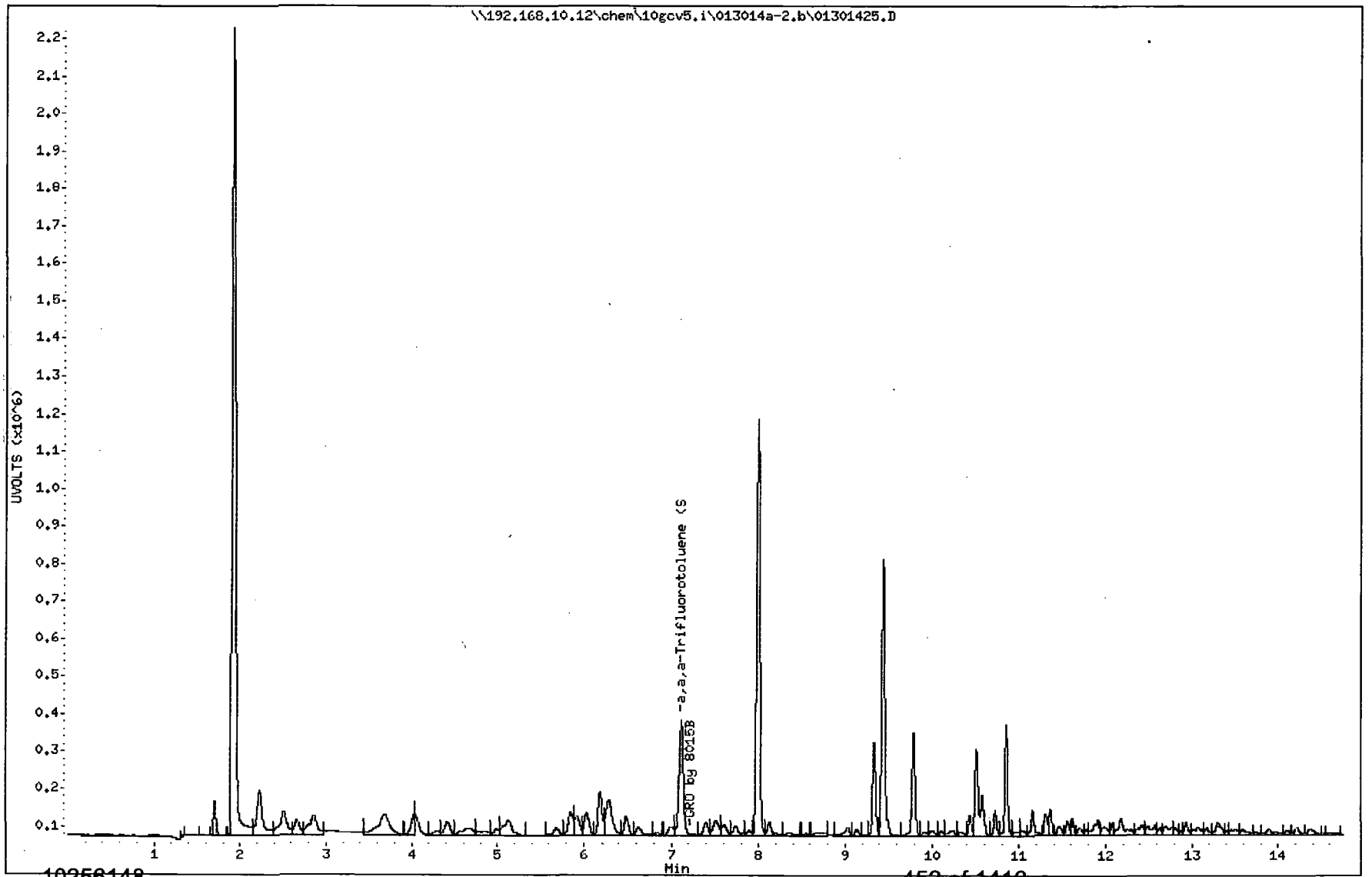
Instrument: 10gcv5.i

Sample Info: 1617200,1,3,LCS

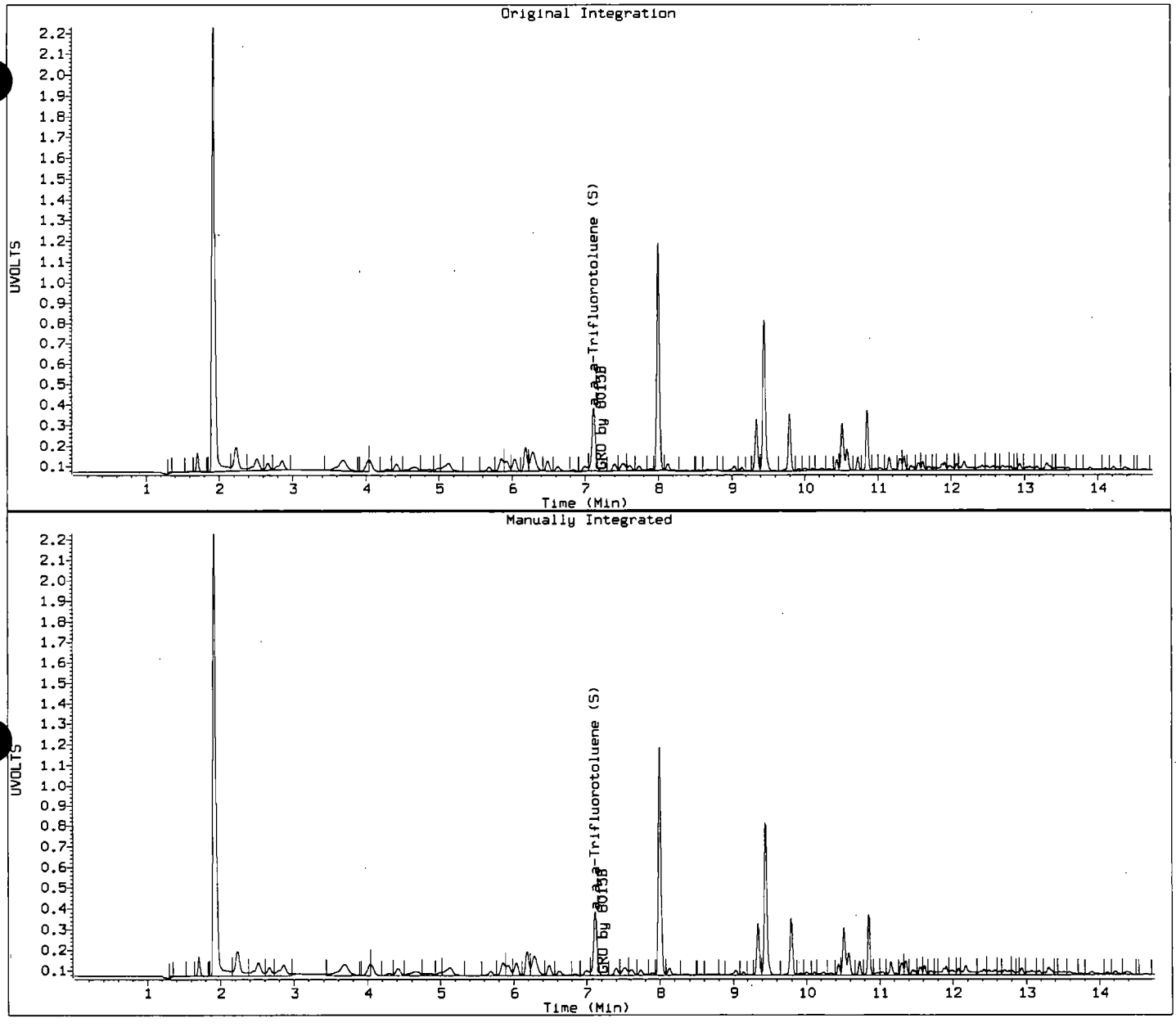
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\Chem\10gcv5.i\0130114a-2.b\01301425.d (Manint: 8015.sub Orig: 8015.sub)
Injection Date: 30-JAN-2014 23:04
Instrument: 10gcv5.i
Lab Sample ID: 1617200



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	12060576	12741865
a,a,a-Trifluorotoluene (S)	991463	1015132

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011416.d
Lab Smp Id: 10256148001
Inj Date : 01-FEB-2014 16:35
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10256148001
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\G514-TPH-MLS-012014.m
Meth Date : 04-Feb-2014 14:31 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

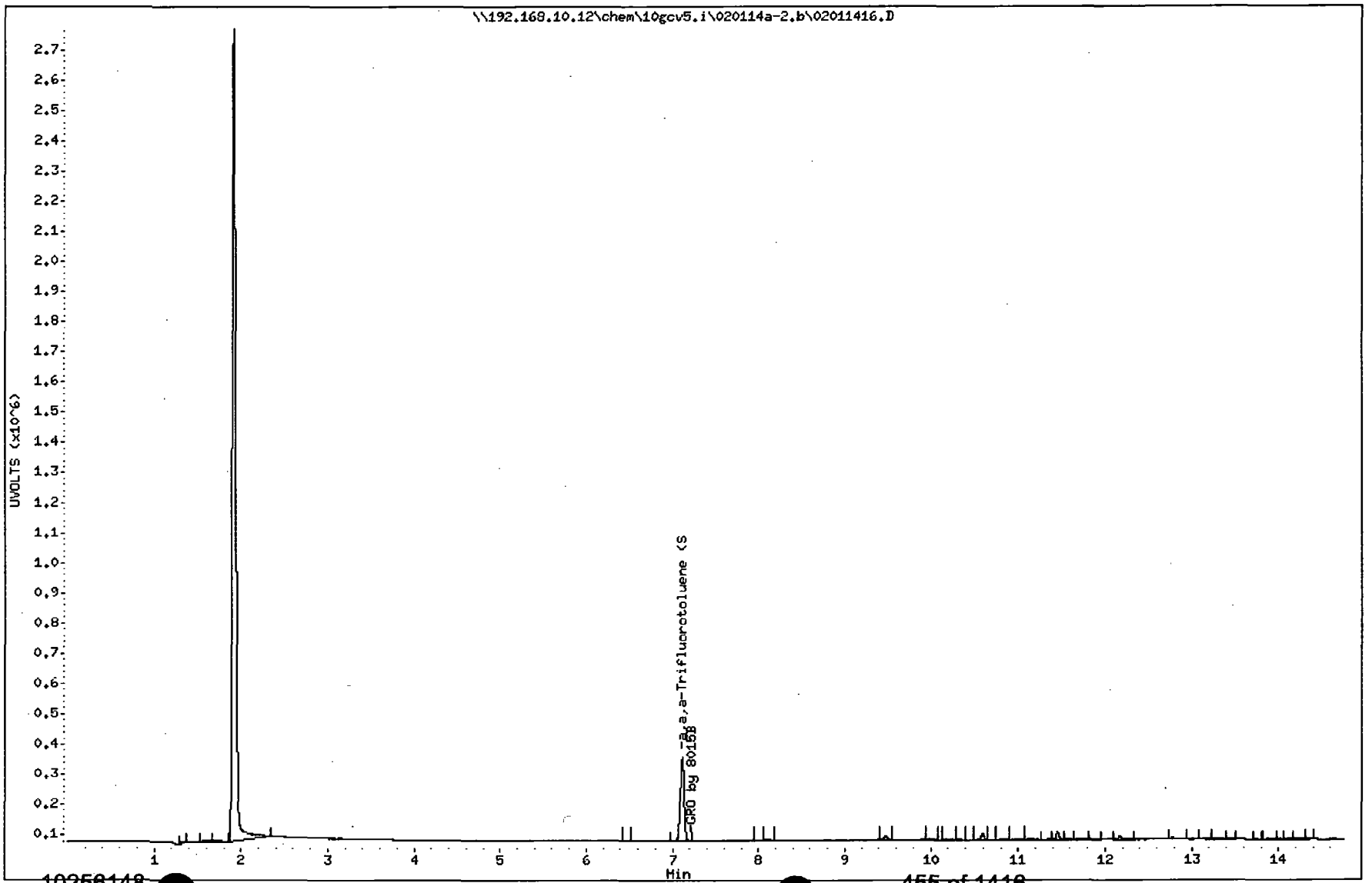
Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
S	1 a,a,a-Trifluorotoluene (S)	7.113	7.113	0.000	843396	48.5236	48.52
S	4 GRO by 8015B	3.450-11.000			146229	13.6817	684.1

Data File: \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011416.D
Date : 01-FEB-2014 16:36
Client ID:
Sample Info: 10256148001

Instrument: 10gcv5.i
Operator: LLC
Column diameter: 0.53

Column phase: DB-624



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Injection Date: 01-FEB-2014 16:35
Instrument: 10gcv5.i
Lab Sample ID: 10256148001

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	146229	146229
a,a,a-Trifluorotoluene (S)	843396	843396

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011417.d
Lab Smp Id: 10256148002
Inj Date : 01-FEB-2014 16:59
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10256148002
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\G514-TPH-MLS-012014.m
Meth Date : 04-Feb-2014 10:41 target Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.114	7.113	0.001	879708	50.6128	50.61
S	4 GRO by 8015B	3.450-11.000			88428	8.27361	413.7

Data File: \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011417.D

Page 1

Date : 01-FEB-2014 16:59

Client ID:

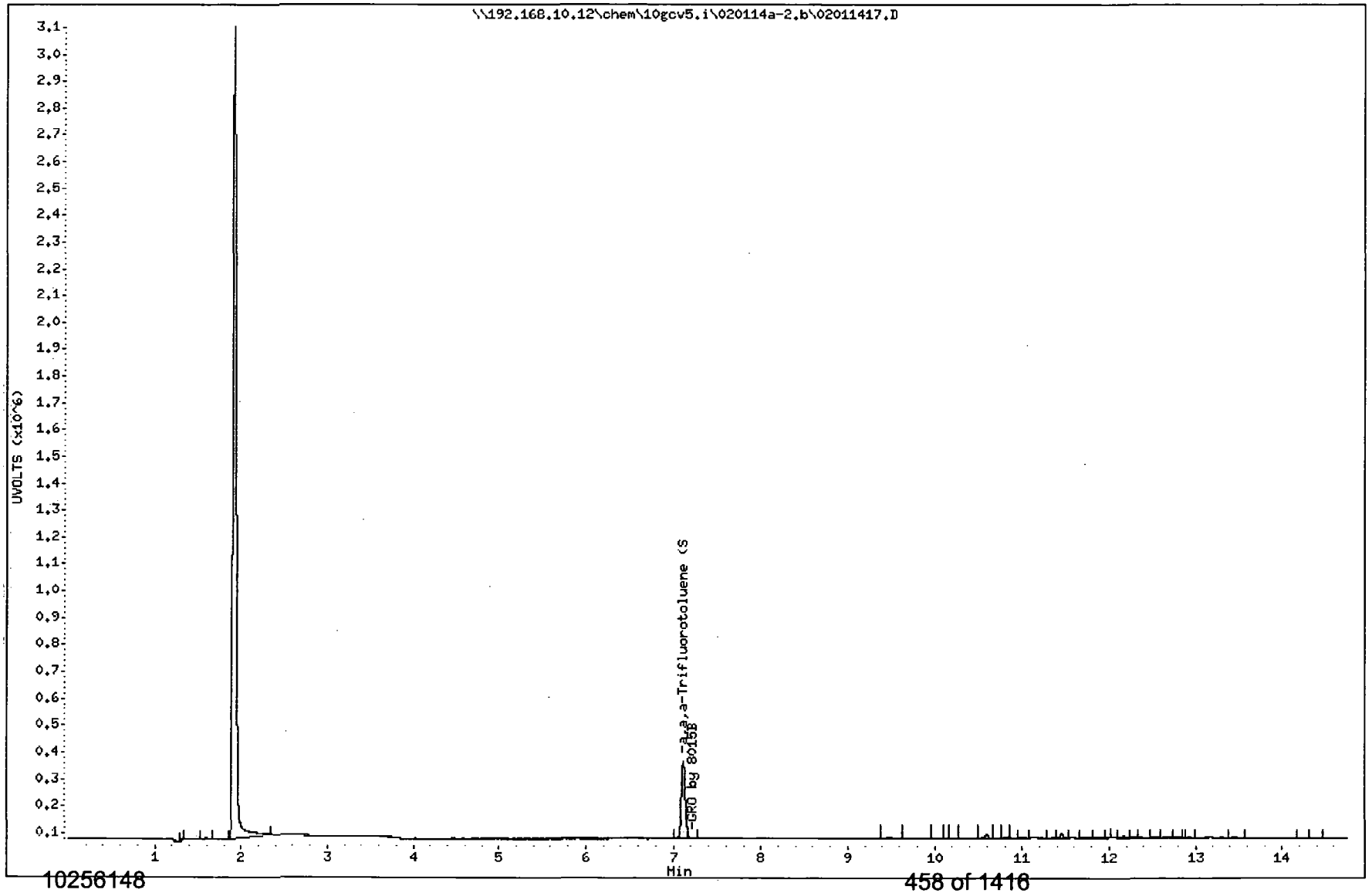
Instrument: 10gcv5.i

Sample Info: 10256148002

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



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Injection Date: 01-FEB-2014 16:59
Instrument: 10gcv5.i
Lab Sample ID: 10256148002

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	88428	88428
a,a,a-Trifluorotoluene (S)	879708	879708

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041412.d
Lab Smp Id: 10256148003
Inj Date : 04-FEB-2014 18:10
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10256148003,RR
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\G514-TPH-MLS-012014.m
Meth Date : 05-Feb-2014 11:31 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
S	1 a,a,a-Trifluorotoluene (S)	7.108	7.111	-0.003	888658	51.1277	51.13
S	4 GRO by 8015B	3.450-11.000			901095	84.3093	4215

Data File: \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041412.D

Page 1

Date : 04-FEB-2014 18:10

Client ID:

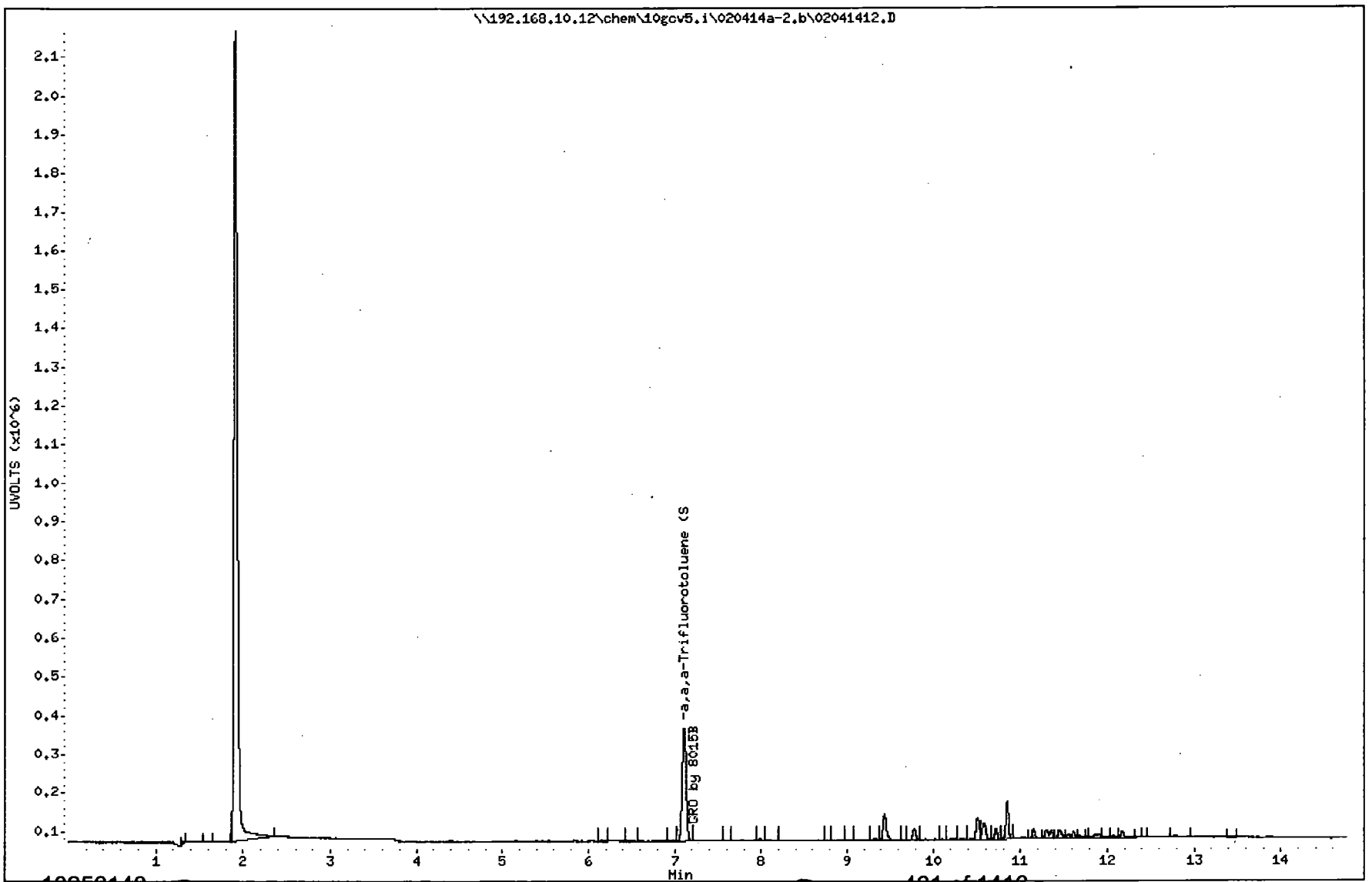
Instrument: 10gcv5.i

Sample Info: 10256148003,RR

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



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Injection Date: 04-FEB-2014 18:10
Instrument: 10gcv5.i
Lab Sample ID: 10256148003

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	901095	901095
a,a,a-Trifluorotoluene (S)	888658	888658

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041411.d
Lab Smp Id: 10256148004
Inj Date : 04-FEB-2014 17:45
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10256148004,RR
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\G514-TPH-MLS-012014.m
Meth Date : 05-Feb-2014 11:31 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

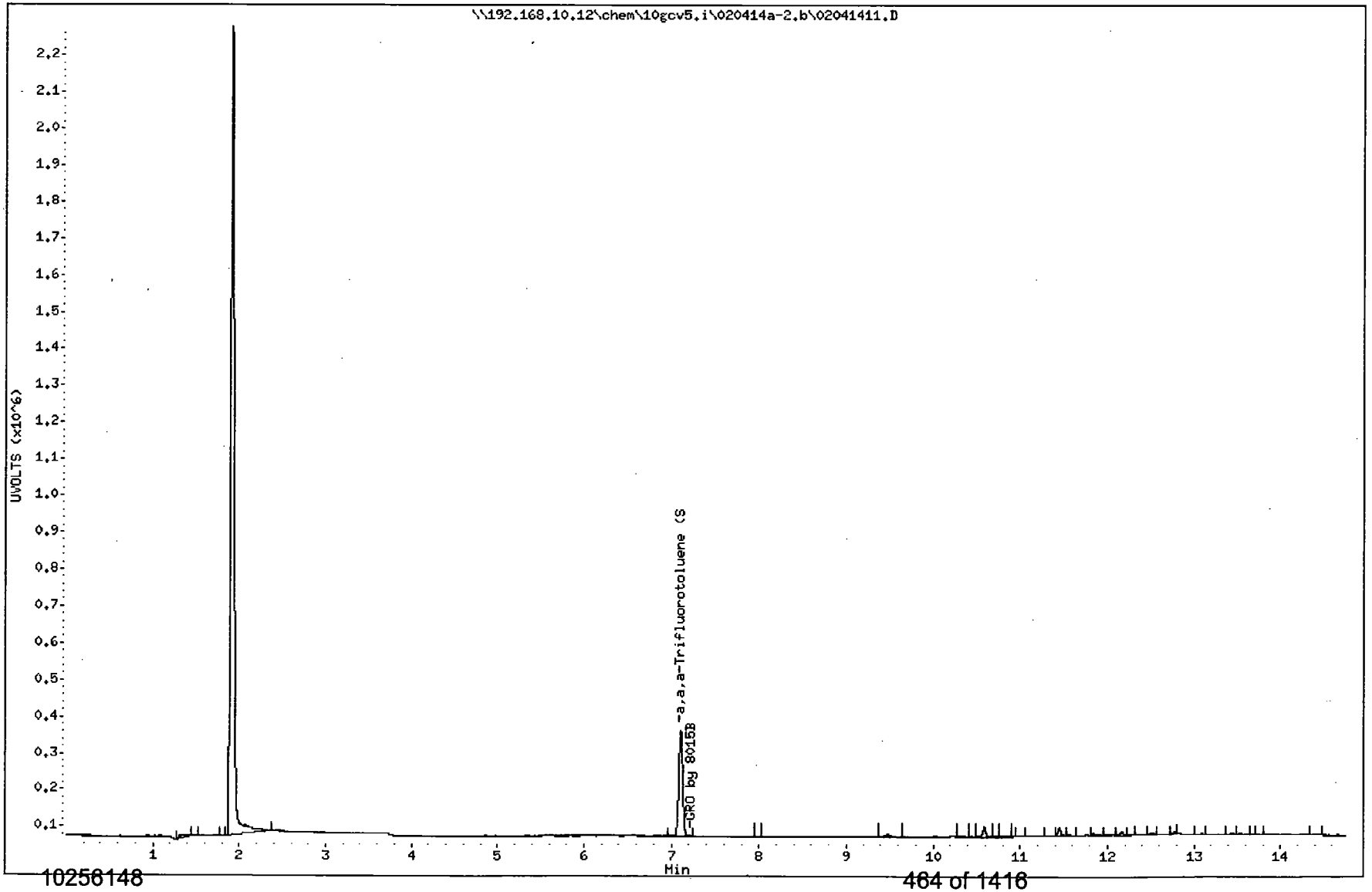
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.106	7.111	-0.005	880264	50.6448	50.64
S	4 GRO by 8015B	3.450-11.000			114389	10.7026	535.1

Data File: \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041411.D
Date : 04-FEB-2014 17:45
Client ID:
Sample Info: 10256148004,RR

Instrument: 10gcv5.i

Operator: LLC
Column diameter: 0.53

Column phase: DB-624



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Injection Date: 04-FEB-2014 17:45
Instrument: 10gcv5.i
Lab Sample ID: 10256148004

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	114389	114389
a,a,a-Trifluorotoluene (S)	880264	880264

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041410.d
Lab Smp Id: 10256148005
Inj Date : 04-FEB-2014 17:21
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10256148005,RR
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\G514-TPH-MLS-012014.m
Meth Date : 05-Feb-2014 11:31 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
S	1 a,a,a-Trifluorotoluene (S)	7.102	7.111	-0.009	866700	49.8644	49.86
S	4 GRO by 8015B	3.450-11.000			125782	11.7686	588.4

Data File: \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041410.D

Page 1

Date : 04-FEB-2014 17:21

Client ID:

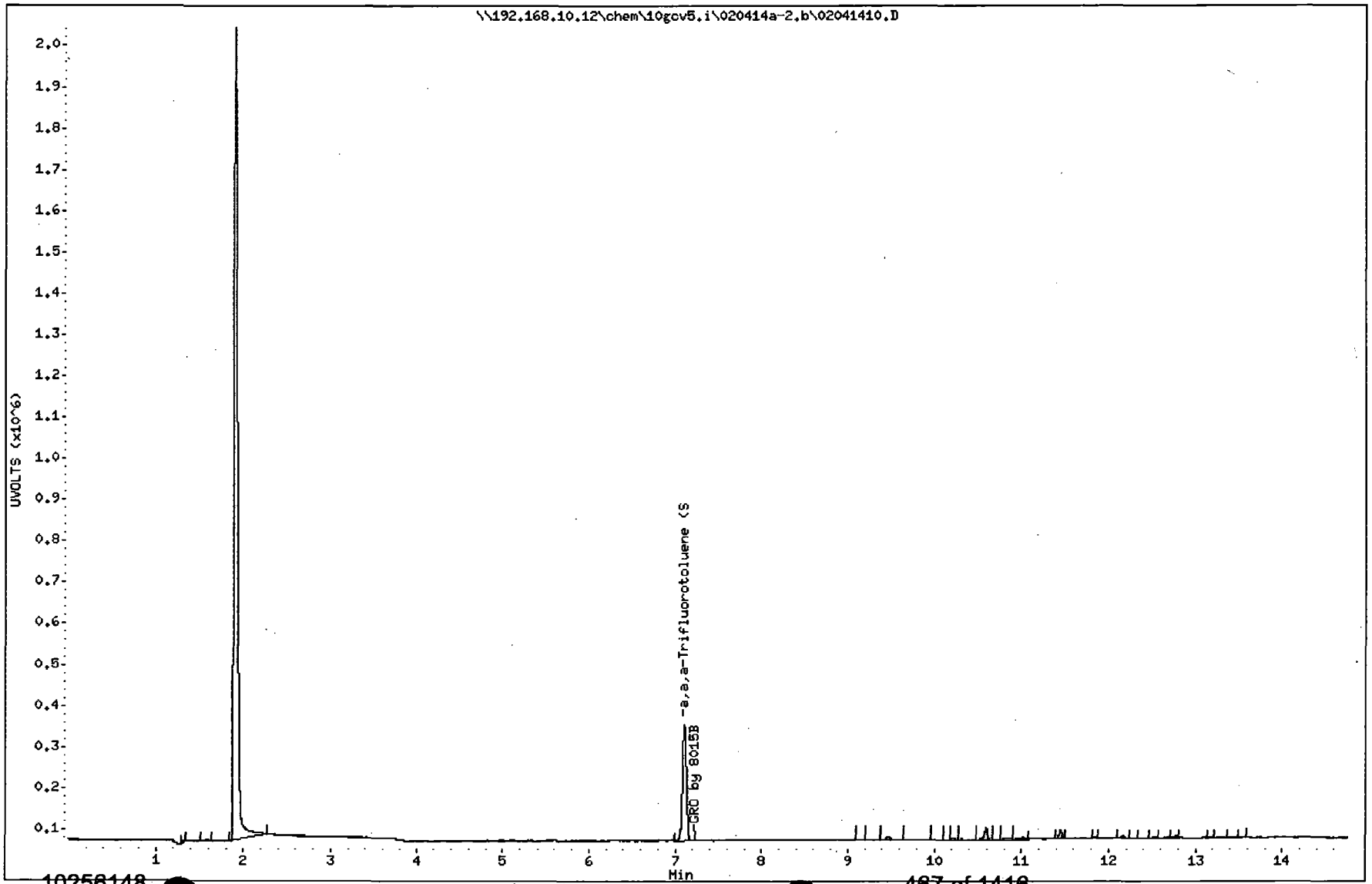
Instrument: 10gcv5.i

Sample Info: 10256148005,RR

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



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Injection Date: 04-FEB-2014 17:21
Instrument: 10gcv5.i
Lab Sample ID: 10256148005

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	125782	125782
a,a,a-Trifluorotoluene (S)	866700	866700

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011434.d
Lab Smp Id: 10256148006
Inj Date : 01-FEB-2014 23:49
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10256148006
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020114a-2.b\G514-TPH-MLS-012014.m
Meth Date : 04-Feb-2014 10:41 target Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.115	7.113	0.002	808293	46.5040	46.50
S	4 GRO by 8015B	3.450-11.000			548438	51.3136	2566

Data File: \\192.168.10.12\chem\10gcv5.i\020114a-2.b\02011434.D

Page 1

Date : 01-FEB-2014 23:49

Client ID:

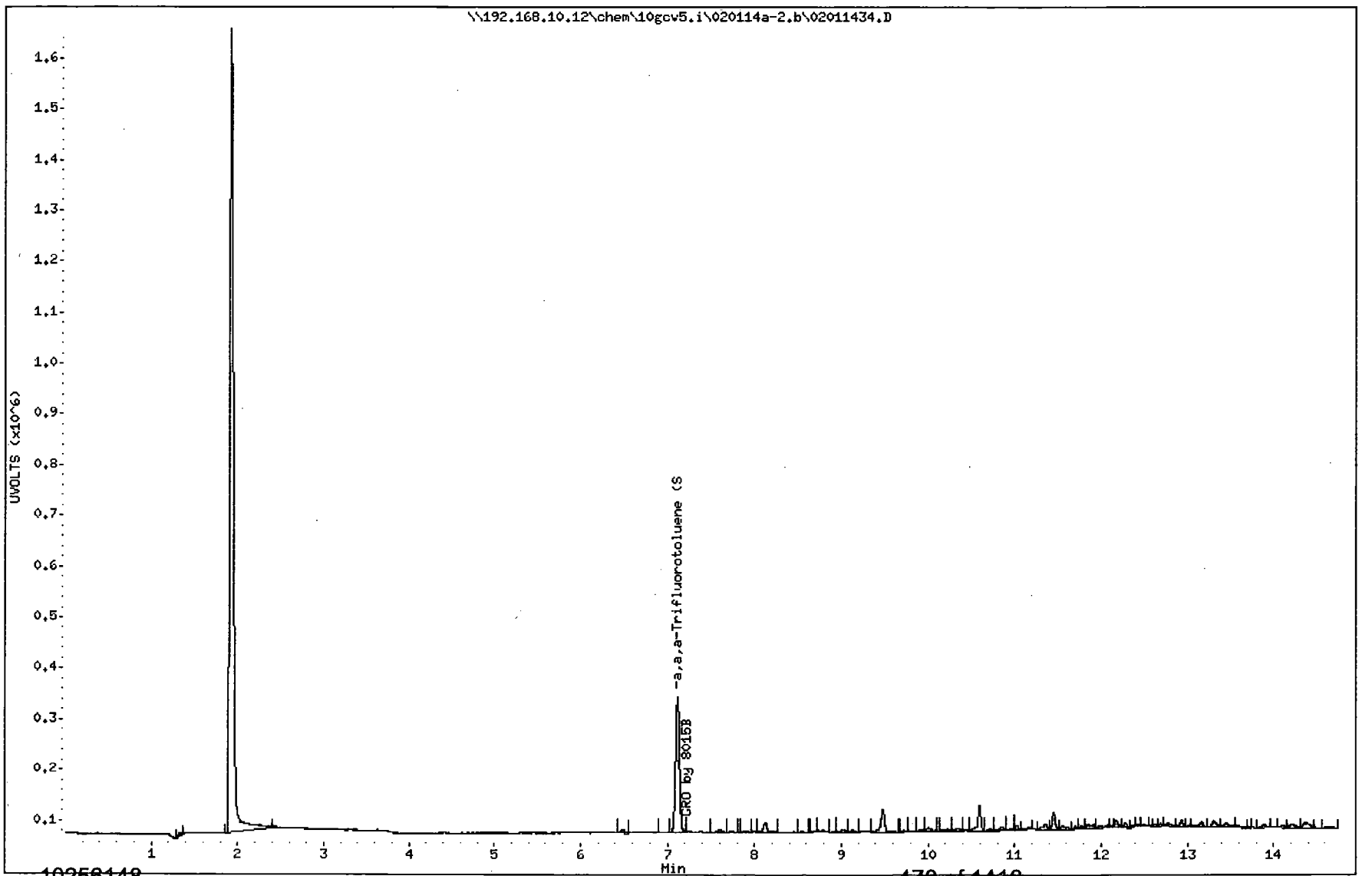
Instrument: 10gcv5.i

Sample Info: 10256148006

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



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Injection Date: 01-FEB-2014 23:49
Instrument: 10gcv5.i
Lab Sample ID: 10256148006

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	548438	548438
a,a,a-Trifluorotoluene (S)	808293	808293

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301432.d
Lab Smp Id: 10256148007
Inj Date : 31-JAN-2014 01:53
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10256148007
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 31-Jan-2014 14:43 10gcv5.i Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.118	7.113	0.005	871595	50.1460	50.15
S	4 GRO by 8015B	3.450-11.000			161193	15.0817	754.1

Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301432.D

Page 1

Date : 31-JAN-2014 01:53

Client ID:

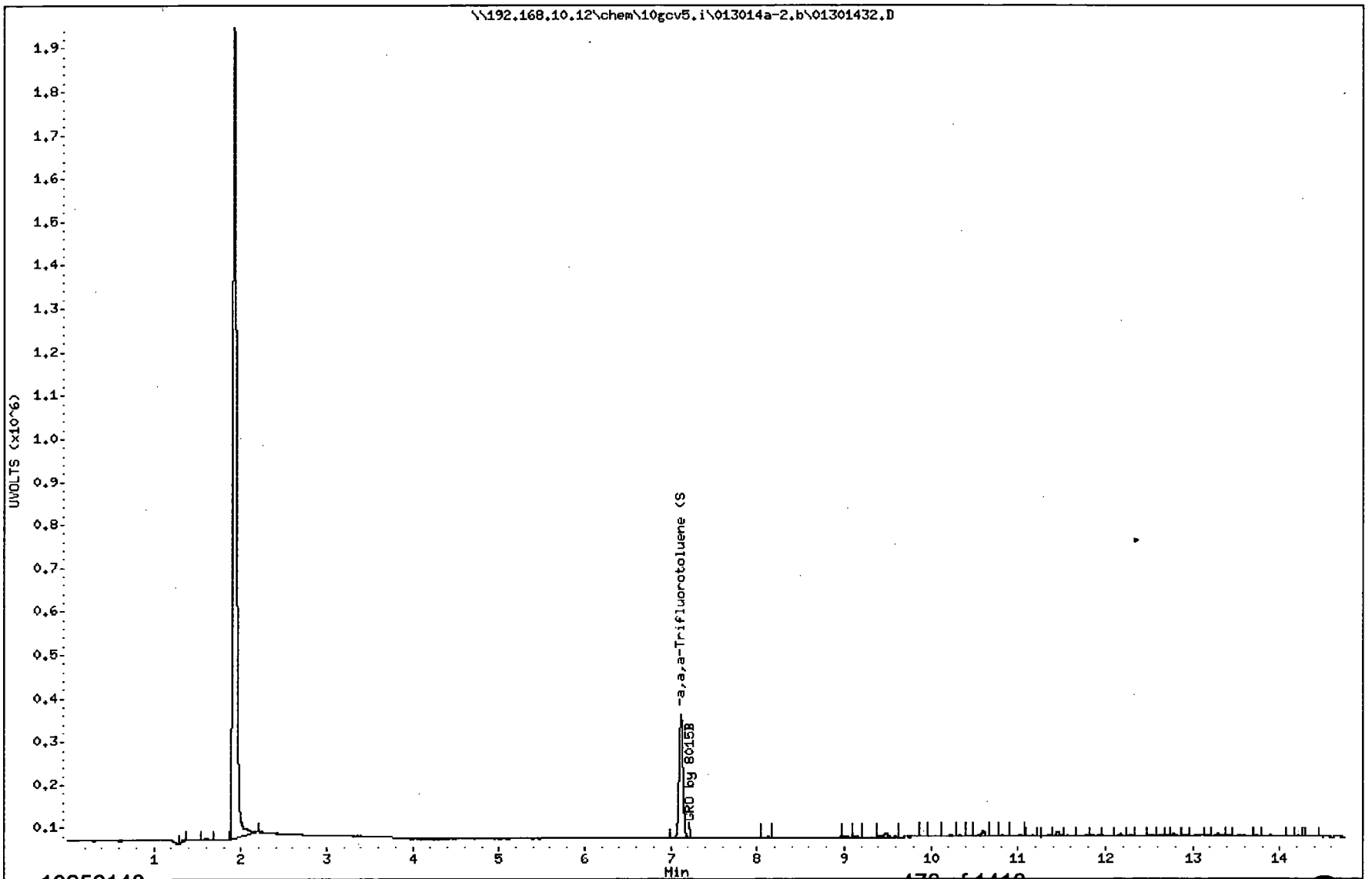
Instrument: 10gcv5.i

Sample Info: 10256148007

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



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Injection Date: 31-JAN-2014 01:53
Instrument: 10gcv5.i
Lab Sample ID: 10256148007

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	161193	161193
a,a,a-Trifluorotoluene (S)	871595	871595

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301433.d
Lab Smp Id: 10256148008
Inj Date : 31-JAN-2014 02:17
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10256148008
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 31-Jan-2014 14:43 10gcv5.i Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.118	7.113	0.005	895135	51.5004	51.50
S	4 GRO by 8015B	3.450-11.000			128489	12.0218	601.1

Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301433.D

Page 1

Date : 31-JAN-2014 02:17

Client ID:

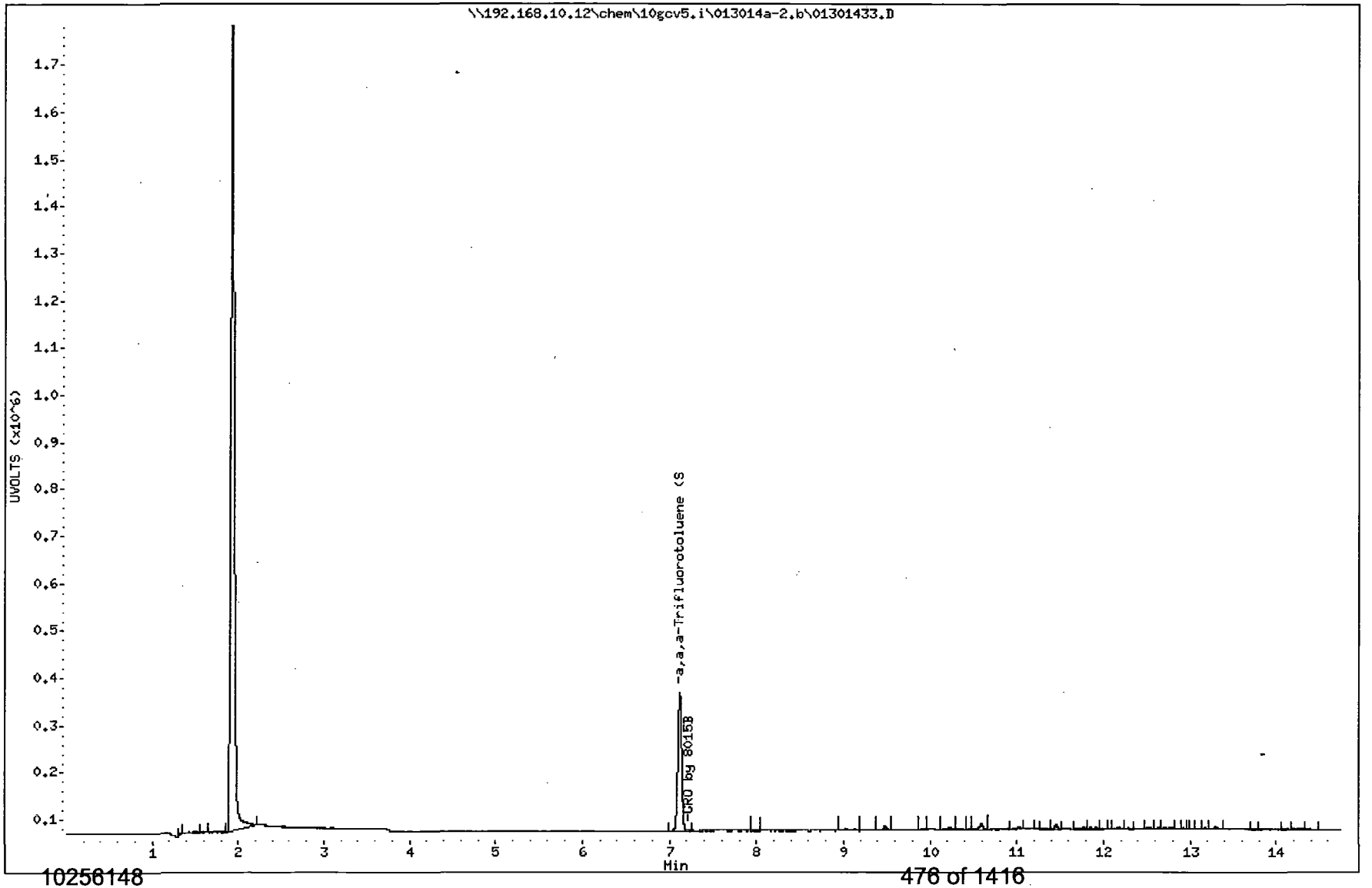
Instrument: 10gcv5.i

Sample Info: 10256148008

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b/01301433.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 31-JAN-2014 02:17
Instrument: 10gcv5.i
Lab Sample ID: 10256148008

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	128489	128489
a,a,a-Trifluorotoluene (S)	895135	895135

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301431.d
Lab Smp Id: 10256148009
Inj Date : 31-JAN-2014 01:29
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10256148009,MS/MSD PARENT
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 04-Feb-2014 10:39 10gcv5.i Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

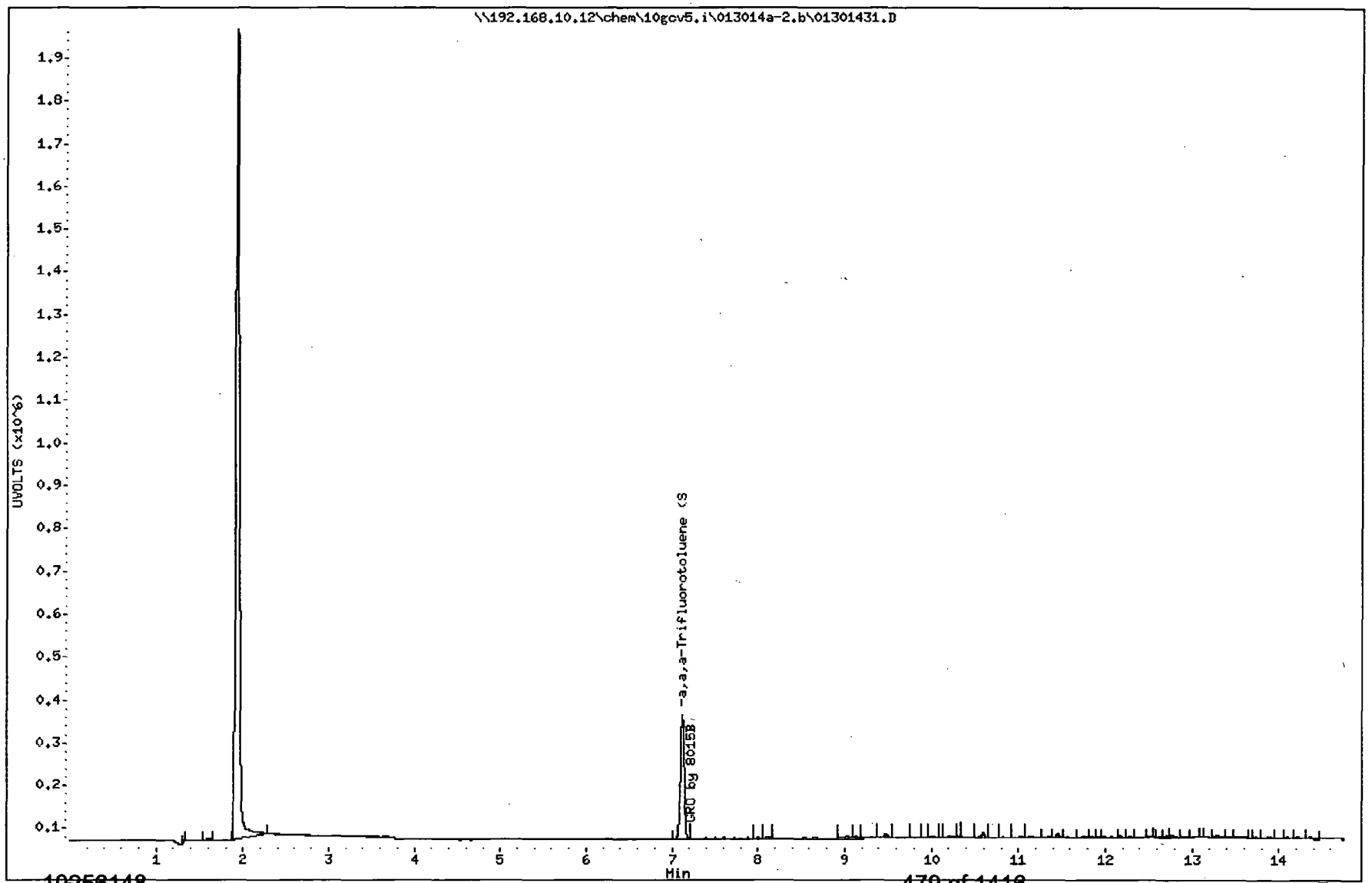
Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
S	1 a,a,a-Trifluorotoluene (S)	7.118	7.118	0.000	890979	51.2613	51.26
S	4 GRO by 8015B	3.450-11.000			186954	17.4920	874.6

Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301431.D
Date : 31-JAN-2014 01:29
Client ID:
Sample Info: 10256148009,MS/MSD PARENT

Instrument: 10gcv5.i
Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b/01301431.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 31-JAN-2014 01:29
Instrument: 10gcv5.i
Lab Sample ID: 10256148009

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	186954	186954
a,a,a-Trifluorotoluene (S)	890979	890979

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301434.d
Lab Smp Id: 10256148010
Inj Date : 31-JAN-2014 02:41
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10256148010
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\013014a-2.b\G514-TPH-MLS-012014.m
Meth Date : 31-Jan-2014 14:43 10gcv5.i Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

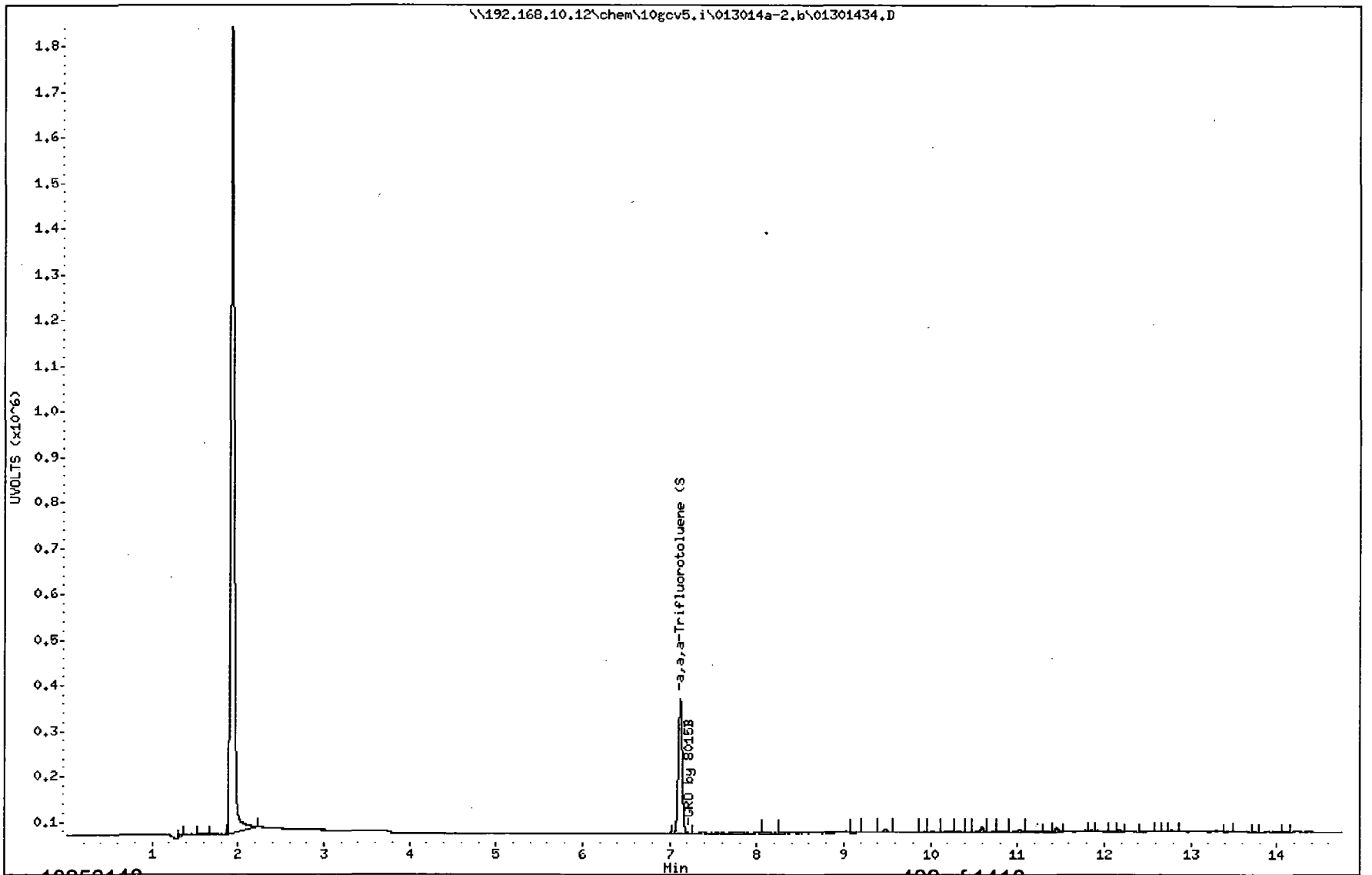
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
S	1 a,a,a-Trifluorotoluene (S)	7.119	7.113	0.006	906273	52.1412	52.14
S	4 GRO by 8015B	3.450-11.000			140282	13.1252	656.3

Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b\01301434.D
Date : 31-JAN-2014 02:41
Client ID:
Sample Info: 10256148010

Instrument: 10gcv5.i

Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Data File: \\192.168.10.12\chem\10gcv5.i\013014a-2.b/01301434.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 31-JAN-2014 02:41
Instrument: 10gcv5.i
Lab Sample ID: 10256148010

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	140282	140282
a,a,a-Trifluorotoluene (S)	906273	906273

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041409.d
Lab Smp Id: 10256148011
Inj Date : 04-FEB-2014 16:57
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10256148011,RR
Misc Info : 11639
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\020414a-2.b\G514-TPH-MLS-012014.m
Meth Date : 05-Feb-2014 11:31 lchristoph Quant Type: ESTD
Cal Date : 20-JAN-2014 19:50 Cal File: 01201411.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.105	7.111	-0.006	899454	51.7489	51.75
S	4 GRO by 8015B	3.450-11.000			135594	12.6866	634.3

Data File: \\192.168.10.12\chem\10gcv5.i\020414a-2.b\02041409.D

Page 1

Date : 04-FEB-2014 16:57

Client ID:

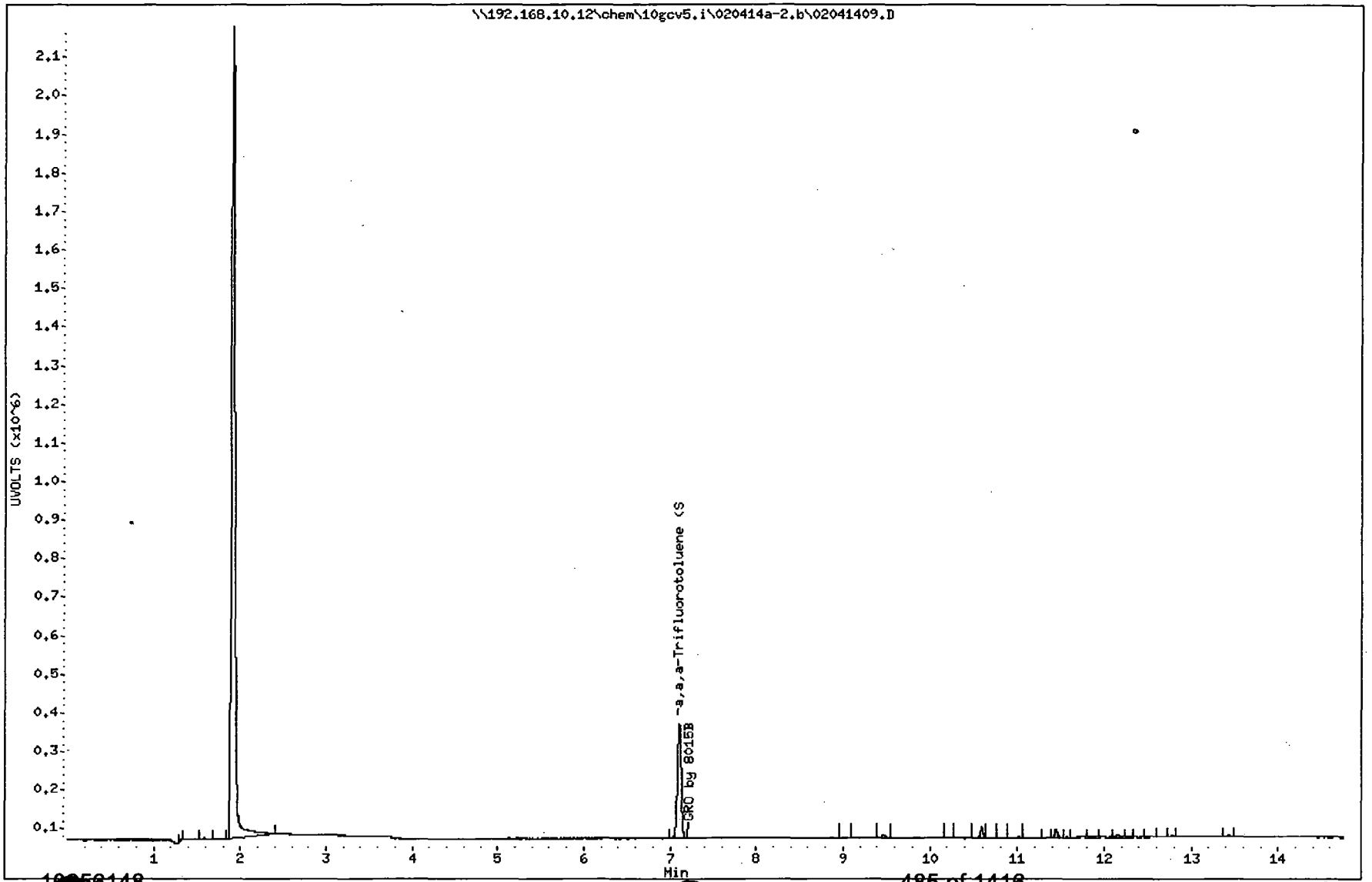
Instrument: 10gcv5.i

Sample Info: 10256148011,RR

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\020414a-2.b/02041409.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 04-FEB-2014 16:57
Instrument: 10gcv5.i
Lab Sample ID: 10256148011

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	135594	135594
a,a,a-Trifluorotoluene (S)	899454	899454

Pace Analytical

Document Name: MSV/GCV Soil Prep Batch Worklist	Document Revised: 06Feb2013 Page 1 of 1
Document Number: F-MN-Q-173-rev.04	Issuing Authority: Pace Minnesota Quality Office

Prep Date 1/30/2014

Prep Analyst Mary Schweich

Balance ID	Sand Lot #	MeOH Lot #	Standard Traceability #	Standard Verification (Initial)
21353507	12/11/2012	134079	10186-52D	MS

Queue GCV GC Volatiles QC Rule 8015 SG_P: 5030 GCV Extraction Soil

Batch 11637 HBN 285286 Created 1/30/2014 10:27:56 AM

Analyst Michael Heckman

*Weight of Pace label subtracted from soil weight= 0.18

Has the balance been calibrated before use? Yes

Has the batch been methanol corrected (mc) for Alaska? N/A

Lab ID	Type	Sample ID	**	***	Comments	Soil & Vial Wt (g)	Vial Wt (g)	Soil Wt (g)*	MeOH Added (mL)	Total MeOH (mL)	Standard Added (uL)
1617199	BLANK					-----	-----	10	10	10	-----
1617200	LCS					-----	-----	10	10	10	100
						-----	-----	10	10	10	100
10256314001	PS	285-1-22-14-Sec17-Box-Reel MS	1	10.15	Previously preserved from encore. See attached.	-----	-----	10.15	10	10	-----
10256314002	PS	285-1-22-14-Sec17-Northside	1	10.28	Previously preserved from encore. See attached.	-----	-----	10.28	10	10	-----
10256314003	PS	285-1-22-14-Sec17-Westend-Rep	1	10.47	Previously preserved from encore. See attached.	-----	-----	10.47	10	10	-----
10256314004	PS	285-1-22-14-Sec17-side east	1	10.17	Previously preserved from encore. See attached.	-----	-----	10.17	10	10	-----
10256314005	PS	285-1-22-14-Sec17-side mid-Rep	1	10.48	Previously preserved from encore. See attached.	-----	-----	10.48	10	10	-----
10256314006	PS	285-1-22-14-Sec17-CSC#1-Reel MS	1	10.24	Previously preserved from encore. See attached.	-----	-----	10.24	10	10	-----
10256322001	PS	287-201401220536-MS	1	10.13	Previously preserved from encore. See attached.	-----	-----	10.13	10	10	-----
10256148001	PS	SB-1 2-3'	10			44.08	37.32	6.58	0	10	-----
10256148002	PS	SB-1 20-21'	10			42.78	36.85	5.75	0	10	-----
10256148003	PS	SB-2 2-3'	10			42.98	36.87	5.93	0	10	-----
10256148004	PS	SB-2 22-23'	10			43.43	37.26	5.99	0	10	-----
10256148005	PS	SB-3 3-5'	5			38.81	32.76	5.87	1	6	-----
10256148006	PS	SB-3 25-27'	5			40.09	32.85	7.06	2	7	-----
10256148007	PS	SB-4 2-3.5'	10			43.75	37.12	6.45	0	10	-----
10256148008	PS	SB-4 19-20'	10			43.38	36.74	6.46	0	10	-----
10256148009	RQS	SB-5 2-3	10			43.66	36.95	6.53	0	10	-----
1617201	MS	SB-5 2-3(1616163MS)	10			43.71	37.12	6.41	0	10	100
1617202	MSD	SB-5 2-3(1616163MSD)	10			42.60	36.84	5.58	0	10	100
10256148010	PS	SB-5 10-12'	10			43.75	37.07	6.50	0	10	-----
10256148011	PS	DUP-001	10			42.57	36.59	5.80	0	10	-----
10256188001	PS	Links 15-3	1	10.13	Previously preserved from encore. See attached.	-----	-----	10.13	10	10	-----
10256197001	PS	SL-1	1	10.41	Previously preserved from encore. See attached.	-----	-----	10.41	10	10	-----
											-----

**If blank=manually entered; 1=waste dl or preserved from jar w/10mls MeOH; 2=Preserved Jar greater than 10mls MeOH; 5=5g/5mL; 10=10g/10mL; TB=trip blank

***Weight for jars--manually entering

Note: Methanol extracts are diluted 1:50 for a 1x analysis. Further dilutions maybe be performed refer to department SOP for more information.

Date/Initials Reviewed_____

Pace Analytical®	Document Name: Encore Soil Prep	Date Revised: 11 Aug 2011 Page 1 of 1
	Document Number: O221 Rev.01	Issuing Authority: Pace Minnesota Quality Office

Prep Date: 1/30/2014 Methanol Lot #: 134079

Prep Analyst: Mary Schweich Balance ID: 21353507

Lab ID	Type	Date/Time Collected	Date/Time Preserved	Date/Time Frozen	Preserved (Yes or No)	Comments	Soil Wt (g)	H2O Added (mL)	MeOH Added (mL)
	LLS							5.0	na
	LLS							5.0	na
10256188001 VG9M3/4	MLS	1/27/2014 12:40	1/30/2014 11:30		no	jar w/HS	10.13	na	10
	LLS							5.0	na
	LLS							5.0	na
10256188001 VG9M4/4	MLS	1/27/2014 12:40	1/30/2014 11:30		no	jar w/HS	10.03	na	10
	LLS							5.0	na
	LLS							5.0	na
10256319001 VG9M1/1	MLS	1/23/2014 11:05	1/30/2014 11:30		no	packed jar	10.06	na	10
	LLS							5.0	na
	LLS							5.0	na
10256322001 VG9M1/1	MLS	1/25/2014 9:00	1/30/2014 11:30		no	packed jar	10.13	na	10
	LLS							5.0	na
	LLS							5.0	na
10256322001 VG9M2/2	MLS	1/25/2014 9:00	1/30/2014 11:30		no	packed jar	10.24	na	10
	LLS							5.0	na
	LLS							5.0	na
10256197001 VG9M2/4	MLS	1/24/2014 14:40	1/30/2014 11:30		no	packed jar	10.41	na	10
	LLS							5.0	na
	LLS							5.0	na
10256197001 VG9M1/4	MLS	1/24/2014 14:40	1/30/2014 11:30		no	packed jar	10.24	na	10
	LLS							5.0	na
	LLS							5.0	na
	MLS							na	
	LLS							5.0	na
	LLS					MS 4/30/14		5.0	na
	MLS							na	

LLS= Low level soil with a stir bar
MLS = Medium level soil

Date/Initials Reviewed: _____

Pace Analytical®	Document Name: Encore Soil Prep	Date Revised: 11 Aug 2011 Page 1 of 1
	Document Number: O221 Rev.01	Issuing Authority: Pace Minnesota Quality Office

Prep Date: 1/30/2014 Methanol Lot #: 134079

Prep Analyst: Mary Schwelch Balance ID: 21353507

Lab ID	Type	Date/Time Collected	Date/Time Preserved	Date/Time Frozen	Preserved (Enter "Yes" if sample is preserved upon receipt) Yes / No	Comments	Soil Wt (g)	H2O Added (mL)	MeOH Added (mL)
	LLS							5.0	na
	LLS							5.0	na
10256314001 VG9M1/2	MLS	1/22/2014 10:05	1/30/2014 11:30		no	packed jar	10.18	na	10
	LLS							5.0	na
	LLS							5.0	na
10256314001 VG9M2/2	MLS	1/22/2014 10:05	1/30/2014 11:30		no	packed jar	10.15	na	10
	LLS							5.0	na
	LLS							5.0	na
10256314002 VG9M1/2	MLS	1/22/2014 10:20	1/30/2014 11:30		no	jar w/HS	10.28	na	10
	LLS							5.0	na
	LLS							5.0	na
10256314002 VG9M2/2	MLS	1/22/2014 10:20	1/30/2014 11:30		no	jar w/HS	10.11	na	10
	LLS							5.0	na
	LLS							5.0	na
10256314003 VG9M1/2	MLS	1/22/2014 10:45	1/30/2014 11:30		no	packed jar	10.47	na	10
	LLS							5.0	na
	LLS							5.0	na
10256314003 VG9M2/2	MLS	1/22/2014 10:45	1/30/2014 11:30		no	packed jar	10.13	na	10
	LLS							5.0	na
	LLS							5.0	na
10256314004 VG9M1/2	MLS	1/22/2014 11:20	1/30/2014 11:30		no	jar w/hs	10.17	na	10
	LLS							5.0	na
	LLS							5.0	na
10256314004 VG9M2/2	MLS	1/22/2014 11:20	1/30/2014 11:30		no	jar w/hs	10.45	na	10
	LLS							5.0	na
	LLS							5.0	na
10256314005 VG9M1/2	MLS	1/22/2014 11:45	1/30/2014 11:30		no	jar w/hs	10.48	na	10

LLS= Low level soil with a stir bar
MLS = Medium level soil

MJ 1/31/14 Date/Initials Reviewed: _____

Pace Analytical®	Document Name: Encore Soil Prep	Date Revised: 11 Aug 2011 Page 1 of 1
	Document Number: O221 Rev.01	Issuing Authority: Pace Minnesota Quality Office

Prep Date: 1/30/2014 Methanol Lot #: 134079

Prep Analyst: Mary Schwelch Balance ID: 21353507

Lab ID	Type	Date/Time Collected	Date/Time Preserved	Date/Time Frozen	Preserved (Y/N)	Comments	Soil Wt (g)	H2O Added (mL)	MeOH Added (mL)
	LLS							5.0	na
	LLS							5.0	na
10256314005 VG9M2/2	MLS	1/22/2014 11:45	1/30/2014 11:30		no	jar w/ hs	10.48	na	10
	LLS							5.0	na
	LLS							5.0	na
10256314006 VG9M1/2	MLS	1/22/2014 12:00	1/30/2014 11:30		no	packed jar	10.24	na	10
	LLS							5.0	na
	LLS							5.0	na
10256314006 VG9M2/2	MLS	1/22/2014 12:00	1/30/2014 11:30		no	packed jar	10.19	na	10
	LLS							5.0	na
	LLS							5.0	na
	MLS							na	
	LLS							5.0	na
	LLS							5.0	na
	MLS							na	
	LLS							5.0	na
	LLS							5.0	na
	MLS							na	
	LLS							5.0	na
	LLS							5.0	na
	MLS							na	
	LLS							5.0	na
	LLS							5.0	na
	MLS							na	
	LLS							5.0	na
	LLS							5.0	na
	MLS							na	

LLS= Low level soil with a stir bar
MLS = Medium level soil

Date/Initials Reviewed: _____

Fraction: 8260

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 285546 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148
Lab File ID: 02031407.D Lab Sample ID: 1618515
GC Column: Rtx-VMS ID: 0.18 (mm) Time Analyzed: 14:33
Instrument ID: 10MSV3

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS for HBN 285546 [MSV/26266]	1618516	02031403.D	13:25
02	SB-02 (1-2)(1618321MS)	1618517-MS	02031404.D	13:42
03	BLANK for HBN 285546 [MSV/2626	1618515	02031407.D	14:33
04	TRIP BLANK	10256148013	02031408.D	14:51
05	TP-01 (0-1)(1618323DUP)	1618518-DUP	02031415.D	16:51

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 285327 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148
Lab File ID: 013014026.D Lab Sample ID: 1617373
GC Column: Rtx-VMS ID: 0.18 (mm) Time Analyzed: 19:57
Instrument ID: 10MSV7

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS for HBN 285327 [MSV/26253]	1617374	013014021.D	18:26
02	SB-5 2-3(1616163MS)	1617375-MS	013014022.D	18:44
03	SB-5 2-3(1616163MSD)	1617376-MSD	013014023.D	19:02
04	BLANK for HBN 285327 [MSV/2625	1617373	013014026.D	19:57
05	SB-1 2-3'	10256148001	013014027.D	20:15
06	SB-1 20-21'	10256148002	013014028.D	20:33
07	SB-2 2-3'	10256148003	013014029.D	20:51
08	SB-2 22-23'	10256148004	013014030.D	21:09
09	SB-3 3-5'	10256148005	013014031.D	21:27
10	SB-3 25-27'	10256148006	013014032.D	21:45
11	SB-4 2-3.5'	10256148007	013014033.D	22:03
12	SB-4 19-20'	10256148008	013014034.D	22:21
13	SB-5 2-3	10256148009	013014035.D	22:39
14	SB-5 10-12'	10256148010	013014036.D	22:57
15	DUP-001	10256148011	013014037.D	23:14

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SURROGATE RECOVERY SUMMARY

Project: BP SS# 5482 REV
Pace Project No.: 10256148

QB Batch: MSV / 26251
Method(s): EPA 5035A / EPA 8260

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
10256148001		SB-1 2-3'	1	110		100		99							
1617373	BLANK		1	102		100		98							
10256148002		SB-1 20-21'	1	109		103		100							
1617374	LCS		1	101		99		99							
10256148003		SB-2 2-3'	1	106		101		99							
1617375	MS		1	92		101		100							
10256148004		SB-2 22-23'	1	108		114		104							
1617376	MSD		1	92		99		101							
10256148005		SB-3 3-5'	1	108		101		98							
10256148006		SB-3 25-27'	1	110		115		103							
10256148007		SB-4 2-3.5'	1	107		100		98							
10256148008		SB-4 19-20'	1	107		106		100							
10256148009	OQS	SB-5 2-3	1	107		100		98							
10256148010		SB-5 10-12'	1	106		101		99							
10256148011		DUP-001	1	107		103		99							
		QC Limits:		30-150		30-150		30-150							
		Sample Limits:		30-150		30-150		30-150							

Sur 1: 1,2-Dichloroethane-d4 (S)
Sur 2: 4-Bromofluorobenzene (S)
Sur 3: Toluene-d8 (S)

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SURROGATE RECOVERY SUMMARY

Project: BP SS# 5482 REV
Pace Project No.: 10256148

QB Batch: MSV / 26266
Method(s): EPA 5035/5030B / EPA 8260

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
1618515	BLANK		1	80		95		100							
1618518	DUP		1	86		91		102							
1618516	LCS		1	84		93		98							
1618517	MS		1	84		94		99							
10256148013		TRIP BLANK	1	82		93		98							
			QC Limits:	74-125		75-125		75-125							
			Sample Limits:	74-125		75-125		75-125							

Sur 1: 1,2-Dichloroethane-d4 (S)
Sur 2: 4-Bromofluorobenzene (S)
Sur 3: Toluene-d8 (S)

REPORT OF LABORATORY ANALYSIS

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Tel: 612-607-1700
Fax: 612- 607-6444

8 FORM VIII VOA-I

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148

EPA Sample No. (VSTD050##): V209525-486 Date Analyzed: 02/03/2014

Lab File ID (Standard): 02031402.D Time Analyzed: 12:36

Instrument ID: 10MSV3 Heated Purge (Y/N): N

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS1 AREA #	RT #	IS2 AREA #	RT #
12 HOUR STANDARD	52518	2.624	371366	4.218
UPPER LIMIT	105036	3.124	742732	4.718
LOWER LIMIT	26259	2.124	185683	3.718
EPA SAMPLE NO.				
LCS for HBN 285546 [MSV/26266]	60489	2.654	351965	4.218
SB-02 (1-2)(1618321MS)	58113	2.654	351414	4.217
BLANK for HBN 285546 [MSV/2626	53837	2.654	351761	4.217
TRIP BLANK	57151	2.654	356362	4.217
TP-01 (0-1)(1618323DUP)	54651	2.642	341422	4.218

IS1 = Acetone d6
IS2 = Pentafluorobenzene

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8 FORM VIII VOA-II

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148

EPA Sample No. (VSTD050##): V209525-486 Date Analyzed: 02/03/2014

Lab File ID (Standard): 02031402.D Time Analyzed: 12:36

Instrument ID: 10MSV3 Heated Purge (Y/N): N

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS3 AREA #	RT #	IS4 AREA #	RT #
12 HOUR STANDARD	520400	4.497	62794	4.844
UPPER LIMIT	1040800	4.997	125588	5.344
LOWER LIMIT	260200	3.997	31397	4.344
EPA SAMPLE NO.				
LCS for HBN 285546 [MSV/26266]	503059	4.497	60212	4.856
SB-02 (1-2)(1618321MS)	501802	4.497	63805	4.856
BLANK for HBN 285546 [MSV/2626	505136	4.497	59429	4.856
TRIP BLANK	512314	4.497	62703	4.856
TP-01 (0-1)(1618323DUP)	508851	4.497	51596	4.856

IS3 = 1,4-Difluorobenzene
IS4 = 1,4 dioxane d8

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

FORM VIII VOA

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8 FORM VIII VOA-III

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148

EPA Sample No. (VSTD050##): V209525-486 Date Analyzed: 02/03/2014

Lab File ID (Standard): 02031402.D Time Analyzed: 12:36

Instrument ID: 10MSV3 Heated Purge (Y/N): N

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS5 AREA #	RT #	IS6 AREA #	RT #
12 HOUR STANDARD	463274	5.805	262539	7.059
UPPER LIMIT	926548	6.305	525078	7.559
LOWER LIMIT	231637	5.305	131270	6.559
EPA SAMPLE NO.				
LCS for HBN 285546 [MSV/2	471813	5.805	267341	7.059
SB-02 (1-2)(1618321MS)	471112	5.805	265219	7.058
BLANK for HBN 285546 [MSV	474033	5.805	265583	7.058
TRIP BLANK	485758	5.805	270476	7.058
TP-01 (0-1)(1618323DUP)	470860	5.799	269894	7.059

IS5 = Chlorobenzene-d5
IS6 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

FORM VIII VOA

REPORT OF LABORATORY ANALYSIS

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8 FORM VIII VOA-I

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148

EPA Sample No. (VSTD050##): V509525-477 Date Analyzed: 01/30/2014

Lab File ID (Standard): 013014020.D Time Analyzed: 18:08

Instrument ID: 10MSV7 Heated Purge (Y/N): Y

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS1 AREA #	RT #	IS2 AREA #	RT #
12 HOUR STANDARD	143148	2.650	1116303	4.217
UPPER LIMIT	286296	3.150	2232606	4.717
LOWER LIMIT	71574	2.150	558152	3.717
EPA SAMPLE NO.				
LCS for HBN 285327 [MSV/26253]	154773	2.650	1201204	4.217
SB-5 2-3(1616163MS)	98343	2.650	1183727	4.217
SB-5 2-3(1616163MSD)	102123	2.650	1199133	4.217
BLANK for HBN 285327 [MSV/2625	152081	2.650	1155832	4.217
SB-1 2-3'	147097	2.650	1161380	4.217
SB-1 20-21'	161664	2.644	1137395	4.217
SB-2 2-3'	149199	2.644	1185492	4.211
SB-2 22-23'	162893	2.638	1134820	4.211
SB-3 3-5'	142805	2.638	1132659	4.211
SB-3 25-27'	172473	2.638	1146569	4.210
SB-4 2-3.5'	145712	2.644	1154472	4.210
SB-4 19-20'	158531	2.644	1136693	4.210
SB-5 2-3	143490	2.638	1136163	4.211
SB-5 10-12'	150055	2.638	1147238	4.211
DUP-001	155144	2.638	1152757	4.210

IS1 = Acetone d6
IS2 = Pentafluorobenzene

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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8 FORM VIII VOA-II

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148

EPA Sample No. (VSTD050##): V509525-477 Date Analyzed: 01/30/2014

Lab File ID (Standard): 013014020.D Time Analyzed: 18:08

Instrument ID: 10MSV7 Heated Purge (Y/N): Y

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS3 AREA #	RT #	IS4 AREA #	RT #
12 HOUR STANDARD	1540471	4.497	136838	4.845
UPPER LIMIT	3080942	4.997	273676	5.345
LOWER LIMIT	770236	3.997	68419	4.345
EPA SAMPLE NO.				
LCS for HBN 285327 [MSV/26253]	1655801	4.497	148191	4.839
SB-5 2-3(1616163MS)	1641517	4.497	99281	4.839
SB-5 2-3(1616163MSD)	1650166	4.497	99608	4.838
BLANK for HBN 285327 [MSV/2625	1595499	4.491	144859	4.839
SB-1 2-3'	1610783	4.491	124352	4.838
SB-1 20-21'	1585339	4.491	116828	4.838
SB-2 2-3'	1641404	4.491	144046	4.839
SB-2 22-23'	1557296	4.491	120156	4.839
SB-3 3-5'	1583381	4.491	148585	4.839
SB-3 25-27'	1590943	4.491	152346	4.838
SB-4 2-3.5'	1600653	4.491	141686	4.838
SB-4 19-20'	1580502	4.491	123975	4.838
SB-5 2-3	1579545	4.491	147578	4.839
SB-5 10-12'	1584910	4.491	95549	4.839
DUP-001	1606457	4.491	125339	4.838

IS3 = 1,4-Difluorobenzene
IS4 = 1,4 dioxane d8

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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8 FORM VIII VOA-III

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148

EPA Sample No. (VSTD050##): V509525-477 Date Analyzed: 01/30/2014

Lab File ID (Standard): 013014020.D Time Analyzed: 18:08

Instrument ID: 10MSV7 Heated Purge (Y/N): Y

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS5 AREA #	RT #	IS6 AREA #	RT #
12 HOUR STANDARD	1416803	5.814	843357	7.088
UPPER LIMIT	2833606	6.314	1686714	7.588
LOWER LIMIT	708402	5.314	421678	6.588
EPA SAMPLE NO.				
LCS for HBN 285327 [MSV/2	1528903	5.814	909194	7.088
SB-5 2-3(1616163MS)	1497317	5.814	875170	7.088
SB-5 2-3(1616163MSD)	1494498	5.814	903067	7.088
BLANK for HBN 285327 [MSV	1478275	5.814	867373	7.088
SB-1 2-3'	1506181	5.814	905879	7.088
SB-1 20-21'	1442966	5.814	790545	7.088
SB-2 2-3'	1523925	5.814	893005	7.088
SB-2 22-23'	1358858	5.814	673602	7.088
SB-3 3-5'	1478530	5.814	877827	7.088
SB-3 25-27'	1393318	5.814	665908	7.088
SB-4 2-3.5'	1502626	5.814	892595	7.088
SB-4 19-20'	1445099	5.814	787475	7.088
SB-5 2-3	1466545	5.814	886743	7.088
SB-5 10-12'	1462522	5.814	849182	7.088
DUP-001	1470156	5.814	830905	7.088

IS5 = Chlorobenzene-d5
IS6 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

FORM VIII VOA

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Instrument Run Log

Instrument: 10MSV3 Method: 2860B Misc. Prep. Info: Surrogate Lot: 10233-30exp02/25/14
Column: Rtx-VMS 0.18mm Helium Tune Standard: 10233-30/bfb ISTD Lot: 10233-30exp02/25/14 Cal. Standard: 10233-46B/10233-48C

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
01161411.D	TUNE	Liquid	Tune	1		voa-bfb-tune	1/16/14 21:06	HBP	pass
01161412.D	0.4 ICAL 10097-99	Solid	Ical	1		v314-MLS-011614	1/16/14 21:23	HBP	ok
01161413.D	1.0 ICAL 10097-99	Solid	Ical	1		v314-MLS-011614	1/16/14 21:40	HBP	ok
01161414.D	4.0 ICAL 10097-99	Solid	Ical	1		v314-MLS-011614	1/16/14 21:57	HBP	ok
01161415.D	10 ICAL 10097-99	Solid	Ical	1		v314-MLS-011614	1/16/14 22:14	HBP	ok
01161416.D	20 ICAL 10097-99	Solid	Ical	1		v314-MLS-011614	1/16/14 22:32	HBP	ok
01161417.D	50 ICAL 10097-99	Solid	Ical	1		v314-MLS-011614	1/16/14 22:49	HBP	ok
01161418.D	100 ICAL 10097-99	Solid	Ical	1		v314-MLS-011614	1/16/14 23:06	HBP	ok
01161419.D	250 ICAL 10097-99	Solid	Ical	1		v314-MLS-011614	1/16/14 23:23	HBP	ok
01161420.D	VB	Solid	Sample	1		v314-MLS-011614	1/16/14 23:41	HBP	dne
01161421.D	VB	Solid	Sample	1		v314-MLS-011614	1/16/14 23:58	HBP	dne
01161422.D	ICV 20 10097-100	Solid	CCal	1		v314-MLS-011614	1/17/14 00:15	HBP	ok
01161423.D	VB	Solid	Sample	1		v314-MLS-011614	1/17/14 00:32	HBP	dne

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: 8260 MLS ical

File Path 1: U:\10MSV3.I\011614B.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: hp 1/17/14

Report Date: 01/17/2014 10:14
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSV3 Method: 8260B Misc. Prep. Info: Surrogate Lot: 10233-30exp02/25/14
Column: Rtx-VMS 0.18mm Helium Tune Standard: 10233-30/BFB ISTD Lot: 10233-30exp02/25/14 Cal. Standard: 10233-52E/10233-56E

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
02031401.D	TUNE	L/	Tune	1		voa-bfb-tune	2/03/14 12:19	HBP	pass
02031402.D	V20 9525-486	S/	CCal	1		v314-MLS-011614	2/03/14 12:36	HBP	pass
02031403.D	1618516	S/26272	LCS	1		v314-MLS-011614	2/03/14 13:25	HBP	ok
02031404.D	1618517	S/26272	MS	1		v314-MLS-011614	2/03/14 13:42	HBP	ok
02031405.D	VB	S/	Sample	1		v314-MLS-011614	2/03/14 13:59	HBP	dne
02031406.D	VB	S/	Sample	1		v314-MLS-011614	2/03/14 14:16	HBP	dne
02031407.D	1618515	S/26272	Blank	1		v314-MLS-011614	2/03/14 14:33	HBP	CL
02031408.D	10256148013	S/26272	Sample	1		v314-MLS-011614	2/03/14 14:51	HBP	ok
02031409.D	10256574024	S/26272	Sample	1		v314-MLS-011614	2/03/14 15:08	HBP	ok
02031410.D	10256182001	S/26272	Sample	1		v314-MLS-011614	2/03/14 15:25	HBP	ok
02031411.D	10256295001	S/26272	Sample	1		v314-MLS-011614	2/03/14 15:43	HBP	ok, RR 5xdl for styrene
02031412.D	10256319001	S/26272	Sample	1		v314-MLS-011614	2/03/14 16:00	HBP	DNR IS acetone d6 out low RR
02031413.D	10256574001	S/26272	Sample	1		v314-MLS-011614	2/03/14 16:17	HBP	DNR IS acetone d6 out low RR
02031414.D	10256574003	S/26272	Sample	1		v314-MLS-011614	2/03/14 16:34	HBP	ok
02031415.D	1618518	S/26272	Duplicate	1		v314-MLS-011614	2/03/14 16:51	HBP	ok
02031416.D	10256574004	S/26272	Sample	1		v314-MLS-011614	2/03/14 17:08	HBP	ok
02031417.D	10256574005	S/26272	Sample	1		v314-MLS-011614	2/03/14 17:26	HBP	ok
02031418.D	10256574012	S/26272	Sample	1		v314-MLS-011614	2/03/14 17:43	HBP	ok
02031419.D	10256574014	S/26272	Sample	1		v314-MLS-011614	2/03/14 18:00	HBP	ok
02031420.D	10256574015	S/26272	Sample	1		v314-MLS-011614	2/03/14 18:18	HBP	ok
02031421.D	10256574016	S/26272	Sample	1		v314-MLS-011614	2/03/14 18:35	HBP	ok
02031422.D	10256574017	S/26272	Sample	1		v314-MLS-011614	2/03/14 18:52	HBP	ok
02031423.D	10256574018	S/26272	Sample	1		v314-MLS-011614	2/03/14 19:09	HBP	ok
02031424.D	10256574019	S/26272	Sample	1		v314-MLS-011614	2/03/14 19:26	HBP	ok
02031425.D	10256574020	S/26272	Sample	1		v314-MLS-011614	2/03/14 19:44	HBP	ok
02031426.D	10256574021	S/26272	Sample	1		v314-MLS-011614	2/03/14 20:01	HBP	ok
02031427.D	10256574023	S/26272	Sample	1		v314-MLS-011614	2/03/14 20:18	HBP	ok
02031428.D	VB	S/	Sample	1		v314-MLS-011614	2/03/14 20:35	HBP	dne
02031429.D	VB	S/	Sample	1		v314-MLS-011614	2/03/14 20:52	HBP	dne

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: 26272 (8260 MLS)

File Path 1: U:\10MSV3.I\020314A.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: hp 2/04/14

Report Date: 02/04/2014 13:04
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSV7 Method: 8260B Misc. Prep. Info: Surrogate Lot: 10233-54exp4/28/14
Column: Rtx-VMS 0.18mm Helium Tune Standard: 10233-54/BFB ISTD Lot: 10233-54exp4/28/14 Cal. Standard: 10233-56A/10233-52D

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
012914001.D	VB	Solid	Sample	1		v714-LLS-012914	1/29/14 12:35	HBP	dne
012914002.D	VB	Solid	Sample	1		v714-LLS-012914	1/29/14 12:53	HBP	dne
012914003.D	TUNE	Liquid	Tune	1		voa-bfb-tune	1/29/14 13:11	HBP	pass
012914004.D	0.4 ICAL 10098-17	Solid	Ical	1		v714-LLS-012914	1/29/14 13:30	HBP	ok
012914005.D	1.0 ICAL 10098-17	Solid	Ical	1		v714-LLS-012914	1/29/14 13:48	HBP	ok
012914006.D	4.0 ICAL 10098-17	Solid	Ical	1		v714-LLS-012914	1/29/14 14:06	HBP	ok
012914007.D	10 ICAL 10098-17	Solid	Ical	1		v714-LLS-012914	1/29/14 14:25	HBP	ok
012914008.D	20 ICAL 10098-17	Solid	Ical	1		v714-LLS-012914	1/29/14 14:43	HBP	ok
012914009.D	50 ICAL 10098-17	Solid	Ical	1		v714-LLS-012914	1/29/14 15:01	HBP	ok
012914010.D	100 ICAL 10098-17	Solid	Ical	1		v714-LLS-012914	1/29/14 15:20	HBP	ok
012914011.D	250 ICAL 10098-17	Solid	Ical	1		v714-LLS-012914	1/29/14 15:38	HBP	ok
012914012.D	VB	Solid	Sample	1		v714-LLS-012914	1/29/14 15:57	HBP	dne
012914013.D	VB	Solid	Sample	1		v714-LLS-012914	1/29/14 16:15	HBP	dne
012914014.D	ICV 50 10098-18	Solid	CCal	1		v714-LLS-012914	1/29/14 16:34	HBP	ok
012914015.D	VB	Solid	Sample	1		v714-LLS-012914	1/29/14 16:52	HBP	dne

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: 8260 LLS ical

File Path 1: U:\10MSV7.I\012914A.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: hp 1/30/14

Report Date: 01/30/2014 10:12
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSV7 Method: 8260B Misc. Prep. Info: Surrogate Lot: 10233-54exp4/28/14
Column: Rtx-VMS 0.18mm Helium Tune Standard: 10233-54/BFB ISTD Lot: 10233-54exp4/28/14 Cal. Standard: 10233-52D/10233-56A

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
013014019.D	TUNE	L/	Tune	1		voa-bfb-tune	1/30/14 17:50	HBP	pass
013014020.D	V50 9525-477	S/	CCal	1		v714-LLS-012914	1/30/14 18:08	HBP	pass
013014021.D	1617374	S/26253	LCS	1		v714-LLS-012914	1/30/14 18:26	HBP	ok
013014022.D	1617375	S/26253	MS	1		v714-LLS-012914	1/30/14 18:44	HBP	ok
013014023.D	1617376	S/26253	MSD	1		v714-LLS-012914	1/30/14 19:02	HBP	ok
013014024.D	VB	S/	Sample	1		v714-LLS-012914	1/30/14 19:20	HBP	dne
013014025.D	VB	S/	Sample	1		v714-LLS-012914	1/30/14 19:39	HBP	dne
013014026.D	1617373	S/26253	Blank	1		v714-LLS-012914	1/30/14 19:57	HBP	CL
013014027.D	10256148001	S/26253	Sample	1		v714-LLS-012914	1/30/14 20:15	HBP	ok
013014028.D	10256148002	S/26253	Sample	1		v714-LLS-012914	1/30/14 20:33	HBP	ok
013014029.D	10256148003	S/26253	Sample	1		v714-LLS-012914	1/30/14 20:51	HBP	ok
013014030.D	10256148004	S/26253	Sample	1		v714-LLS-012914	1/30/14 21:09	HBP	ok
013014031.D	10256148005	S/26253	Sample	1		v714-LLS-012914	1/30/14 21:27	HBP	ok
013014032.D	10256148006	S/26253	Sample	1		v714-LLS-012914	1/30/14 21:45	HBP	ok
013014033.D	10256148007	S/26253	Sample	1		v714-LLS-012914	1/30/14 22:03	HBP	ok
013014034.D	10256148008	S/26253	Sample	1		v714-LLS-012914	1/30/14 22:21	HBP	ok
013014035.D	10256148009	S/26253	Sample	1		v714-LLS-012914	1/30/14 22:39	HBP	ok
013014036.D	10256148010	S/26253	Sample	1		v714-LLS-012914	1/30/14 22:57	HBP	ok
013014037.D	10256148011	S/26253	Sample	1		v714-LLS-012914	1/30/14 23:14	HBP	ok
013014038.D	VB	S/	Sample	1		v714-LLS-012914	1/30/14 23:32	HBP	dne

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: 26253 (8260 LLS)

File Path 1: U:\10MSV7.I\013014B.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: hp 2/03/14

Report Date: 02/03/2014 16:30
Reviewed By/Date:

Report Date : 17-Jan-2014 10:10

Pace Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 16-JAN-2014 21:23
End Cal Date : 16-JAN-2014 23:23
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Last Edit : 17-Jan-2014 10:09 hpham

Calibration File Names:
Level 2: \\192.168.10.12\chem\10msv3.i\011614B.b\01161412.D
Level 3: \\192.168.10.12\chem\10msv3.i\011614B.b\01161413.D
Level 4: \\192.168.10.12\chem\10msv3.i\011614B.b\01161414.D
Level 5: \\192.168.10.12\chem\10msv3.i\011614B.b\01161415.D
Level 6: \\192.168.10.12\chem\10msv3.i\011614B.b\01161416.D
Level 7: \\192.168.10.12\chem\10msv3.i\011614B.b\01161417.D
Level 8: \\192.168.10.12\chem\10msv3.i\011614B.b\01161418.D
Level 9: \\192.168.10.12\chem\10msv3.i\011614B.b\01161419.D

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
1 Dichlorodifluoromethane	0.59996	0.62472	0.53066	0.49770	0.55573	0.54134					
	0.57718	0.58343					AVRG		0.56384		7.22583
2 Chloromethane	5795	11301	29153	63920	123728	285643					
	587973	1431014					QUAD	-0.02354	1.34206	0.03900	0.99993
3 Vinyl Chloride	0.75003	0.74566	0.66715	0.64019	0.68174	0.65020					
	0.67783	0.66447					AVRG		0.68466		6.02962

Pace Analytical Services

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Last Edit : 17-Jan-2014 10:09 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
4 Bromomethane	4018	5333	9277	20813	40293	98262					
	240318	665894					QUAD	-0.00379	3.67048	-0.32606	0.99917
5 Chloroethane	0.30185	0.35807	0.29613	0.27988	0.28326	0.27152					
	0.27692	0.25649					AVRG		0.29052		10.56356
6 Trichlorofluoromethane	0.57199	0.58445	0.51894	0.48131	0.51301	0.51694					
	0.51680	0.49388					AVRG		0.52467		6.80823
7 Dichlorofluoromethane	2053	4613	15728	37884	76705	190411					
	409510	936241					QUAD	0.01108	1.82116	0.18629	0.99968
8 Diethyl ether (Ethyl Ether)	0.41509	0.38310	0.36357	0.34379	0.34643	0.32898					
	0.34034	0.34976					AVRG		0.35888		7.79060
9 1,1-Dichlorcethene	0.51673	0.55411	0.49790	0.47645	0.49490	0.48600					
	0.50926	0.50497					AVRG		0.50504		4.67152
10 Carbon Disulfide	1.84558	1.85430	1.56673	1.50989	1.56207	1.53465					
	1.58492	1.56769					AVRG		1.62823		8.52310

Pace Analytical Services

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9	Curve	Coefficients b	m1	m2	%RSD or R^2
11 Trichlorotrifluoroethane	0.47987	0.52581	0.46067	0.44287	0.49477	0.46871							
	0.49523	0.51124							AVRG		0.48477		5.63506
12 Iodomethane	2046	4420	14567	40353	95232	287907							
	671168	1764071							QUAD	0.04259	1.23008	-0.01205	0.99940
13 Acrolein	0.08418	0.08786	0.07991	0.08218	0.08430	0.07748							
	0.08158	0.08097							AVRG		0.08231		3.83258
14 Allyl Chloride	0.89431	0.91422	0.75327	0.70759	0.71400	0.69563							
	0.71758	0.71624							AVRG		0.76411		11.54294
15 Methylene Chloride	2576	5708	17051	40637	82112	201365							
	421678	1065621							QUAD	-0.00731	1.90969	0.02539	0.99996
17 Acetone	1200	2194	6015	15095	30521	70710							
	148394	379921							QUAD	-0.04918	2.89457	-0.02245	0.99994
18 trans-1,2-Dichloroethene	0.49218	0.58309	0.51665	0.50483	0.52237	0.50904							
	0.52930	0.54519							AVRG		0.52533		5.39141

Pace Analytical Services

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
19 Hexane	0.90160	0.80310	0.72931	0.71416	0.75439	0.80678					
	0.82397	0.83444					AVRG		0.79597		7.72344
20 Methyl-tert-butyl Ether	1.40934	1.46956	1.29654	1.28006	1.30426	1.23245					
	1.26553	1.27068					AVRG		1.31605		6.13841
21 tert-Butyl Alcohol	+++++	8.50361	7.71579	7.63389	8.05204	8.50803					
	8.97700	8.97479					AVRG		8.33788		6.63239
22 Acetonitrile	+++++	7264	21615	49970	103443	216725					
	513837	1327958					QUAD	-0.08238	16.42864	-0.18880	0.99917
23 Isopropyl Ether	1.76679	1.72356	1.54042	1.48196	1.51961	1.46045					
	1.52260	1.49622					AVRG		1.56395		7.36499
24 1,1-Dichloroethane	0.98879	0.98932	0.90085	0.88667	0.89412	0.87105					
	0.91028	0.91024					AVRG		0.91892		4.91181
25 Acrylonitrile	0.16385	0.18240	0.16862	0.16999	0.17437	0.15770					
	0.16078	0.15761					AVRG		0.16692		5.19427

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
26 Vinyl Acetate	+++++	0.74539	0.80714	0.86163	0.91526	0.90277					
	0.96639	0.98021					AVRG		0.88268		9.58892
27 Ethyl-tert-butyl ether	1.54713	1.65404	1.41885	1.42735	1.44189	1.36985					
	1.41165	1.40197					AVRG		1.45909		6.45818
28 cis-1,2-Dichloroethene	0.66135	0.62431	0.57982	0.54137	0.55651	0.53854					
	0.56243	0.57741					AVRG		0.58022		7.32934
29 2,2-Dichloropropane	0.74526	0.85287	0.72189	0.69276	0.71621	0.71187					
	0.74328	0.77687					AVRG		0.74513		6.77569
30 Cyclohexane	0.87978	0.86538	0.76830	0.74190	0.79778	0.77675					
	0.81968	0.80633					AVRG		0.80699		5.85034
31 Bromochloromethane	0.34040	0.38188	0.36232	0.36056	0.36339	0.35033					
	0.36307	0.36937					AVRG		0.36142		3.39641
32 Chloroform	0.93660	0.98048	0.89389	0.84518	0.86686	0.85154					
	0.88197	0.90294					AVRG		0.89493		5.07409

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Method file : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Last Edit : 17-Jan-2014 10:09 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
33 Carbon Tetrachloride	0.63100	0.59683	0.51514	0.51613	0.54977	0.56815					
	0.62105	0.65517					AVRG		0.58165		9.08305
34 Tetrahydrofuran	0.58423	0.64842	0.58722	0.57883	0.55304	0.55269					
	0.56157	0.59822					AVRG		0.58303		5.35526
35 1,1,1-Trichloroethane	0.86532	0.83668	0.72290	0.71603	0.75360	0.77046					
	0.79077	0.82774					AVRG		0.78544		6.93863
36 1,1-Dichloropropene	0.87521	0.80226	0.71655	0.65244	0.70880	0.67662					
	0.72278	0.72752					AVRG		0.73527		9.70421
37 2-Butanone	0.19912	0.20940	0.19042	0.19705	0.19748	0.18568					
	0.19229	0.19276					AVRG		0.19553		3.63003
38 Benzene	2.36095	2.41956	2.05693	2.00903	2.05489	1.99665					
	2.06602	2.05192					AVRG		2.12700		7.75989
40 Tert-amyl methyl ether	1.57579	1.58874	1.43595	1.41231	1.43352	1.36825					
	1.41383	1.40409					AVRG		1.45406		5.63087

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Pace Analytical Services

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Last Edit : 17-Jan-2014 10:09 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9	Curve	Coefficients b	m1	m2	%RSD or R^2
42 1,2-Dichloroethane	0.73741	0.71220	0.63322	0.60670	0.62070	0.60402							
	0.61337	0.62031							AVRG		0.64349		7.99404
43 Isobutanol	161	873	9989	27821	63877	160709							
	375806	1002719							QUAD	0.02057	0.18585	-0.00041	0.99950
44 Tert-Amyl Alcohol	5.36508	6.16628	6.03268	6.57126	6.96020	6.95751							
	7.70609	7.66191							AVRG		6.67763		12.13474
45 Trichloroethene	0.42850	0.46299	0.38975	0.38168	0.39758	0.39326							
	0.40560	0.41347							AVRG		0.40910		6.41509
47 Tert-amyl ethyl ether	0.94040	0.94682	0.86330	0.80993	0.84485	0.81315							
	0.81965	0.80518							AVRG		0.85541		6.76030
48 Dibromomethane	269	3002	10008	26491	53945	138554							
	291279	789501							QUAD	-0.00052	4.19229	-0.16484	0.99999
49 1,2-Dichloropropane	0.33877	0.38269	0.33491	0.33542	0.34007	0.33138							
	0.34194	0.34314							AVRG		0.34354		4.74295

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
50 Bromodichloromethane	0.43927	0.43098	0.40106	0.40126	0.42411	0.42826					
	0.44773	0.45173					AVRG		0.42805		4.45382
52 1,4-Dioxane (P-Dioxane)	1.35634	1.07309	1.36727	1.32916	1.30171	1.33240					
	1.31222	1.30593					AVRG		1.29727		7.20865
53 2-Chloroethyl Vinyl Ether	0.19295	0.21203	0.19805	0.19700	0.20378	0.19815					
	0.20181	0.20294					AVRG		0.20084		2.86132
54 cis-1,3-Dichloropropene	0.51682	0.56394	0.50917	0.50139	0.52723	0.52709					
	0.54732	0.55801					AVRG		0.53137		4.30531
56 Toluene	+++++	1.23540	0.99138	0.94234	0.93614	0.91435					
	0.94120	0.90125					AVRG		0.98029		11.83181
57 4-Methyl-2-Pentanone	0.34889	0.32022	0.30564	0.30742	0.30965	0.28950					
	0.29440	0.27191					AVRG		0.30595		7.43924
58 Tetrachloroethene	0.45936	0.51621	0.42925	0.41751	0.43135	0.42369					
	0.44301	0.43543					AVRG		0.44448		7.12225

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
59 trans-1,3-Dichloropropene	0.47835	0.51322	0.48994	0.49310	0.51700	0.52590					
	0.55573	0.55265					AVRG		0.51574		5.50823
60 1,1,2-Trichloroethane	0.35006	0.35670	0.33182	0.32213	0.32936	0.32519					
	0.33611	0.33157					AVRG		0.33537		3.58738
61 Dibromochloromethane	0.30868	0.31517	0.30992	0.31721	0.34018	0.35372					
	0.38211	0.38671					AVRG		0.33921		9.42828
62 1,3-Dichloropropane	0.59861	0.60582	0.54423	0.54144	0.54807	0.53949					
	0.55519	0.53978					AVRG		0.55908		4.86178
63 1,2-Dibromoethane	0.37830	0.37572	0.34077	0.34139	0.35237	0.34615					
	0.35876	0.35229					AVRG		0.35572		4.06332
64 2-Hexanone	0.24577	0.21228	0.20654	0.21234	0.21160	0.19850					
	0.20264	0.19004					AVRG		0.20997		7.82452
66 Chlorobenzene	1.15267	1.19359	1.04253	1.02294	1.02430	1.01374					
	1.03744	1.00142					AVRG		1.06108		6.70752

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
67 Ethylbenzene	2.14004	2.00847	1.71690	1.66828	1.69111	1.64187					
	1.71087	1.61270					AVRG		1.77378		10.81764
68 1,1,1,2-Tetrachloroethane	0.35834	0.34076	0.31342	0.33000	0.33771	0.35535					
	0.37903	0.38205					AVRG		0.34958		6.78805
69 M&P-Xylene	0.72982	0.75250	0.65133	0.64862	0.65438	0.64654					
	0.67191	0.64028					AVRG		0.67442		6.31952
70 O-Xylene (1,2-Dimethylbenzene	0.63707	0.66907	0.61721	0.60504	0.62979	0.61559					
	0.63782	0.61587					AVRG		0.62843		3.18943
71 Styrene	1.12832	1.16366	1.08469	1.08602	1.11065	1.09599					
	1.13733	1.08052					AVRG		1.11090		2.69696
72 Bromoform	+++++	+++++	0.20235	0.21732	0.23226	0.25106					
	0.28031	0.29021					AVRG		0.24558		14.19089
73 Isopropylbenzene (Cumene)	1.67849	1.73114	1.47878	1.49895	1.53109	1.49757					
	1.55111	1.46229					AVRG		1.55242		6.39018

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
75 cis-1,4-Dichloro-2-Butene	0.22866	0.23795	0.22826	0.23042	0.23280	0.23491					
	0.24165	0.24308					AVRG		0.23472		2.43685
76 Bromobenzene	0.97248	0.98730	0.85201	0.83716	0.83461	0.82633					
	0.84690	0.84607					AVRG		0.87536		7.44118
77 n-Propylbenzene	3.48682	3.49617	3.12172	3.09407	3.15637	3.07478					
	3.17592	3.03246					AVRG		3.20479		5.69754
78 1,1,2,2-Tetrachloroethane	0.84324	0.84608	0.75404	0.74929	0.76881	0.72833					
	0.74662	0.72779					AVRG		0.77052		6.18512
79 2-Chlorotoluene	2.25224	2.38566	2.09589	2.09495	2.09691	2.03830					
	2.10687	2.04881					AVRG		2.13995		5.54427
80 1,3,5-Trimethylbenzene	2.50756	2.55120	2.15455	2.16815	2.21384	2.15685					
	2.23921	2.17157					AVRG		2.27037		7.17604
81 1,2,3-Trichloropropane	0.24176	0.25633	0.23511	0.23007	0.23457	0.21905					
	0.22874	0.22402					AVRG		0.23371		4.92113

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
82 trans-1,4-Dichloro-2-Butene	0.18040	0.20859	0.19619	0.20095	0.20599	0.20340					
	0.20518	0.20069					AVRG		0.20017		4.42016
83 4-Chlorotoluene	2.27213	2.28497	1.99967	2.01163	2.00925	1.96844					
	2.01031	1.94596					AVRG		2.06279		6.55434
84 tert-Butylbenzene	2.08775	2.06269	1.75016	1.78801	1.81360	1.75876					
	1.83556	1.78250					AVRG		1.85988		7.30477
85 1,2,4-Trimethylbenzene	2.53965	2.45735	2.20300	2.21008	2.25832	2.18917					
	2.25736	2.16356					AVRG		2.28481		6.01695
86 sec-Butylbenzene	3.00284	2.90516	2.40933	2.43633	2.52113	2.42844					
	2.51768	2.40736					AVRG		2.57853		9.20547
87 p-Isopropyltoluene	2.28749	2.47104	2.03434	2.12243	2.17638	2.10157					
	2.19298	2.10141					AVRG		2.18596		6.30612
88 1,3-Dichlorobenzene	1.50255	1.56228	1.35540	1.37604	1.38275	1.33648					
	1.37611	1.34793					AVRG		1.40494		5.82190

Pace Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 16-JAN-2014 21:23
End Cal Date : 16-JAN-2014 23:23
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Last Edit : 17-Jan-2014 10:09 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
90 1,4-Dichlorobenzene	1.62230	1.68891	1.44711	1.44597	1.45316	1.42038					
	1.46423	1.44444					AVRG		1.49831		6.63783
91 1,2,3 Trimethylbenzene	1.89572	1.92694	1.70335	1.73469	1.79162	1.71286					
	1.77234	1.72189					AVRG		1.78243		4.78602
92 n-Butylbenzene	1.85729	1.97118	1.64206	1.73217	1.81638	1.75241					
	1.81329	1.72149					AVRG		1.78828		5.58814
93 1,2-Dichlorobenzene	1.45013	1.45528	1.34428	1.35863	1.34740	1.31731					
	1.34909	1.31016					AVRG		1.36653		4.07385
94 1,2-Dibromo-3-Chloropropane	0.13430	0.15441	0.13631	0.13941	0.14745	0.14801					
	0.15513	0.15521					AVRG		0.14628		5.88260
95 Hexachlorobutadiene	0.25261	0.41106	0.32142	0.32441	0.35067	0.32641					
	0.33101	0.30989					AVRG		0.32843		13.36705
96 1,2,4-Trichlorobenzene	0.63265	0.72359	0.62604	0.66943	0.68712	0.66551					
	0.67317	0.64734					AVRG		0.66561		4.71077

Pace Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 16-JAN-2014 21:23
End Cal Date : 16-JAN-2014 23:23
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Last Edit : 17-Jan-2014 10:09 hpham

	Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9	Curve	Coefficients b	m1	m2	%RSD or R^2
	97 Naphthalene	1.83605	1.89931	1.65894	1.72889	1.77927	1.70672							
		1.71946	1.64028							AVRG		1.74611		5.03069
	98 1,2,3-Trichlorobenzene	0.66609	0.67693	0.56314	0.61607	0.62911	0.60721							
		0.61025	0.57900							AVRG		0.61848		6.29725
	99 2-Methylnaphthalene	0.72122	0.77276	0.57242	0.59378	0.66895	0.60937							
		0.64291	0.62484							AVRG		0.65078		10.39147
$	41 1,2-Dichloroethane d4 (S)	0.46891	0.48144	0.47693	0.47692	0.48980	0.46617							
		0.47068	0.50579							AVRG		0.47958		2.70970
$	55 Toluene-d8 (S)	1.17201	1.17884	1.20139	1.18567	1.17861	1.19756							
		1.19475	1.16228							AVRG		1.18389		1.14023
$	74 4-Bromofluorobenzene (S)	0.87454	0.87128	0.97909	0.97028	0.86796	0.86536							
		0.86215	0.84902							AVRG		0.86745		1.04998

Pace Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 16-JAN-2014 21:23
End Cal Date : 16-JAN-2014 23:23
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Last Edit : 17-Jan-2014 10:09 hpham

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161412.D
Report Date: 17-Jan-2014 10:09

Pace Analytical Services

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv3.i\011614B.b\01161412.D
Lab Smp Id: 0.4 ICAL 10097-99
Inj Date : 16-JAN-2014 21:23
Operator : HBP Inst ID: 10msv3.i
Smp Info : 0.4 ICAL 10097-99
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Meth Date : 17-Jan-2014 10:09 hpham Quant Type: ISTD
Cal Date : 16-JAN-2014 23:23 Cal File: 01161419.D
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10CCURTIS

Concentration Formula: Amt * DF * Uf * Vt/(Va * Ws * (1-(M/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.035	1.036	(0.246)	1759	0.40000	0.42(a)
2	Chloromethane	50	1.163	1.170	(0.276)	5795	0.40000	(a)
3	Vinyl Chloride	62	1.230	1.224	(0.292)	2199	0.40000	0.44(a)
4	Bromomethane	94	1.461	1.462	(0.347)	4018	0.40000	1.8(aQM)
5	Chloroethane	64	1.552	1.547	(0.368)	885	0.40000	0.42(aQ)
6	Trichlorofluoromethane	101	1.644	1.644	(0.390)	1677	0.40000	0.44(a)
7	Dichlorofluoromethane	67	1.704	1.705	(0.404)	2053	0.40000	1.1(a)
8	Diethyl ether (Ethyl Ether)	59	1.936	1.948	(0.459)	1217	0.40000	0.46(aQ)
9	1,1-Dichloroethene	96	2.057	2.052	(0.488)	1515	0.40000	0.41(a)
10	Carbon Disulfide	76	2.057	2.052	(0.488)	5411	0.40000	0.45(a)
11	Trichlorotrifluoroethane	101	2.100	2.093	(0.498)	1404	0.40000	0.40(a)
12	Iodomethane	142	2.179	2.173	(0.517)	2046	0.40000	2.5(aQ)
13	Acrolein	56	2.404	2.405	(0.570)	2468	4.00000	4.1(a)
14	Allyl Chloride	41	2.507	2.508	(0.595)	2622	0.40000	0.47(a)
15	Methylene Chloride	84	2.617	2.618	(0.621)	2576	0.40000	0.30(a)
* 16	Acetone d6	46	2.647	2.672	(1.000)	74756	100.000	
17	Acetone	58	2.702	2.709	(1.021)	1200	2.00000	(aM)
18	trans-1,2-Dichloroethene	96	2.757	2.757	(0.654)	1443	0.40000	0.37(a)
19	Hexane	86	2.830	2.830	(1.069)	674	1.00000	1.1(aQ)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 Methyl-tert-butyl Ether	73	2.891	2.897	(0.686)	4132	0.40000	0.43(a)
	21 tert-Butyl Alcohol	59	Compound Not Detected.					
	22 Acetonitrile	41	Compound Not Detected.					
	23 Isopropyl Ether	45	3.207	3.214	(0.761)	5180	0.40000	0.45(a)
	24 1,1-Dichloroethane	63	3.262	3.262	(0.774)	2899	0.40000	0.43(a)
	25 Acrylonitrile	53	3.323	3.323	(0.788)	4804	4.00000	3.9(a)
	26 Vinyl Acetate	43	Compound Not Detected.					
	27 Ethyl-tert-butyl ether	59	3.469	3.469	(0.823)	4536	0.40000	0.42(a)
	28 cis-1,2-Dichloroethene	96	3.639	3.640	(0.863)	1939	0.40000	0.46(a)
	29 2,2-Dichloropropane	77	3.706	3.707	(0.879)	2185	0.40000	0.40(a)
	30 Cyclohexane	56	3.755	3.761	(0.890)	12897	2.00000	2.2(a)
	31 Bromochloromethane	130	3.773	3.767	(0.895)	998	0.40000	0.38(a)
	32 Chloroform	83	3.822	3.828	(0.906)	2746	0.40000	0.42(a)
	33 Carbon Tetrachloride	117	3.895	3.895	(0.924)	1850	0.40000	0.43(a)
	34 Tetrahydrofuran	72	3.925	3.926	(1.482)	1747	4.00000	4.0(a)
	35 1,1,1-Trichloroethane	97	3.937	3.938	(0.934)	2537	0.40000	0.44(a)
	36 1,1-Dichloropropene	75	4.016	4.011	(0.952)	2566	0.40000	0.48(a)
	37 2-Butanone	43	4.041	4.022	(0.958)	2919	2.00000	2.0(aM)
	38 Benzene	78	4.156	4.157	(0.986)	6922	0.40000	0.44(a)
*	39 Pentafluorobenzene	168	4.217	4.218	(1.000)	366484	50.0000	
	40 Tert-amyl methyl ether	73	4.241	4.242	(1.006)	4620	0.40000	0.43(aQ)
$	41 1,2-Dichloroethane d4 (S)	65	4.235	4.242	(1.004)	171849	50.0000	48.9(Q)
	42 1,2-Dichloroethane	62	4.278	4.277	(1.014)	2162	0.40000	0.46(aQ)
	43 Isobutanol	43	4.345	4.344	(0.893)	161	8.00000	42.0(Q)
	44 Tert-Amyl Alcohol	59	4.399	4.388	(0.904)	712	4.00000	3.2(aQ)
	45 Trichloroethene	130	4.479	4.479	(0.996)	1829	0.40000	0.42(aQ)
*	46 1,4 Difluorobenzene	114	4.497	4.497	(1.000)	533551	50.0000	
	47 Tert-amyl ethyl ether	59	4.606	4.607	(1.024)	4014	0.40000	0.44(a)
	48 Dibromomethane	174	4.685	4.692	(1.042)	269	0.40000	0.080(aQ)
	49 1,2-Dichloropropane	63	4.734	4.735	(1.053)	1446	0.40000	0.39(TaQ)
	50 Bromodichloromethane	83	4.771	4.771	(1.061)	1875	0.40000	0.41(TaQ)
*	51 1,4 dioxane d8	96	4.868	4.856	(1.000)	66355	2000.00	
	52 1,4-Dioxane (P-Dioxane)	88	4.880	4.868	(1.002)	360	8.00000	8.4(TQ)
	53 2-Chloroethyl Vinyl Ether	63	5.026	5.021	(1.118)	2059	1.00000	0.96(a)
	54 cis-1,3-Dichloropropene	75	5.050	5.051	(1.123)	2206	0.40000	0.39(a)
$	55 Toluene-d8 (S)	98	5.123	5.124	(0.883)	601809	50.0000	49.5
	56 Toluene	92	5.148	5.148	(0.887)	5444	0.40000	0.54(a)
	57 4-Methyl-2-Pentanone	43	5.312	5.307	(0.915)	7166	2.00000	2.3(a)
	58 Tetrachloroethene	166	5.312	5.313	(0.915)	1887	0.40000	0.41(a)
	59 trans-1,3-Dichloropropene	75	5.324	5.325	(0.917)	1965	0.40000	0.37(aQ)
	60 1,1,2-Trichloroethane	97	5.391	5.392	(0.929)	1438	0.40000	0.42(a)
	61 Dibromochloromethane	129	5.470	5.471	(0.942)	1268	0.40000	0.36(a)
	62 1,3-Dichloropropane	76	5.513	5.513	(0.950)	2459	0.40000	0.43(a)
	63 1,2-Dibromoethane	107	5.580	5.580	(0.961)	1554	0.40000	0.42(TaQ)
	64 2-Hexanone	43	5.671	5.665	(0.977)	5048	2.00000	2.3(a)
*	65 Chlorobenzene-d5	117	5.805	5.805	(1.000)	513483	50.0000	
	66 Chlorobenzene	112	5.811	5.811	(1.001)	4735	0.40000	0.43(aQ)
	67 Ethylbenzene	91	5.817	5.818	(1.002)	8791	0.40000	0.48(a)
	68 1,1,1,2-Tetrachloroethane	131	5.841	5.842	(1.006)	1472	0.40000	0.41(aQ)
	69 M&P-Xylene	106	5.884	5.884	(1.014)	5996	0.80000	0.86(a)
	70 O-Xylene (1,2-Dimethylbenzene)	106	6.097	6.097	(1.050)	2617	0.40000	0.40(a)
	71 Styrene	104	6.121	6.122	(1.054)	4635	0.40000	0.41(a)
	72 Bromoform	173	6.145	6.146	(1.059)	555	0.40000	0.22(TaQ)
	73 Isopropylbenzene (Cumene)	105	6.249	6.249	(1.076)	6895	0.40000	0.43(a)

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161412.D
Report Date: 17-Jan-2014 10:09

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	74	4-Bromofluorobenzene (S)	95	6.407	6.408	(0.907)	241909	50.0000	50.4
	75	cis-1,4-Dichloro-2-Butene	53	6.437	6.438	(0.911)	506	0.40000	0.39(aQ)
	76	Bromobenzene	156	6.468	6.468	(0.916)	2152	0.40000	0.44(a)
	77	n-Propylbenzene	91	6.468	6.468	(0.916)	7716	0.40000	0.44(a)
	78	1,1,2,2-Tetrachloroethane	83	6.510	6.511	(0.922)	1866	0.40000	0.44(aQM)
	79	2-Chlorotoluene	91	6.565	6.566	(0.929)	4984	0.40000	0.42(a)
	80	1,3,5-Trimethylbenzene	105	6.571	6.578	(0.930)	5549	0.40000	0.44(a)
	81	1,2,3-Trichloropropane	110	6.596	6.596	(0.934)	535	0.40000	0.41(aQ)
	82	trans-1,4-Dichloro-2-Butene	53	6.608	6.608	(0.935)	998	1.00000	0.90(aQ)
	83	4-Chlorotoluene	91	6.663	6.663	(0.943)	5028	0.40000	0.44(a)
	84	tert-Butylbenzene	119	6.766	6.767	(0.958)	4620	0.40000	0.45(a)
	85	1,2,4-Trimethylbenzene	105	6.802	6.803	(0.963)	5620	0.40000	0.44(a)
	86	sec-Butylbenzene	105	6.869	6.870	(0.972)	6645	0.40000	0.46(a)
	87	p-Isopropyltoluene	119	6.955	6.955	(0.984)	5062	0.40000	0.42(a)
	88	1,3-Dichlorobenzene	146	7.021	7.016	(0.994)	3325	0.40000	0.43(a)
*	89	1,4-Dichlorobenzene-d4	152	7.064	7.065	(1.000)	276613	50.0000	
	90	1,4-Dichlorobenzene	146	7.070	7.071	(1.001)	3590	0.40000	0.43(aQ)
	91	1,2,3 Trimethylbenzene	105	7.082	7.083	(1.679)	5558	0.40000	0.42(a)
	92	n-Butylbenzene	91	7.228	7.229	(1.023)	4110	0.40000	0.42(a)
	93	1,2-Dichlorobenzene	146	7.350	7.351	(1.040)	3209	0.40000	0.42(a)
	94	1,2-Dibromo-3-Chloropropane	157	7.849	7.843	(1.111)	743	1.00000	0.92(a)
	95	Hexachlorobutadiene	225	8.208	8.208	(1.162)	559	0.40000	0.31(aQ)
	96	1,2,4-Trichlorobenzene	180	8.226	8.227	(1.164)	1400	0.40000	0.38(a)
	97	Naphthalene	128	8.409	8.409	(1.190)	4063	0.40000	0.42(a)
	98	1,2,3-Trichlorobenzene	180	8.518	8.519	(1.206)	1474	0.40000	0.43(a)
	99	2-Methylnaphthalene	142	9.029	9.024	(1.278)	798	0.20000	0.22(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 17-Jan-2014 10:09

Pace Analytical Services

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv3.i
Lab File ID: 01161412.D
Lab Smp Id: 0.4 ICAL 10097-99
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Misc Info:

Calibration Date: 16-JAN-2014
Calibration Time: 22:32
Level: MED
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 6.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	80423	40212	160846	74756	-7.05
39 Pentafluorobenzen	375691	187846	751382	366484	-2.45
46 1,4 Difluorobenze	552756	276378	1105512	533551	-3.47
51 1,4 dioxane d8	72712	36356	145424	66355	-8.74
65 Chlorobenzene-d5	532816	266408	1065632	513483	-3.63
89 1,4-Dichlorobenze	290523	145262	581046	276613	-4.79

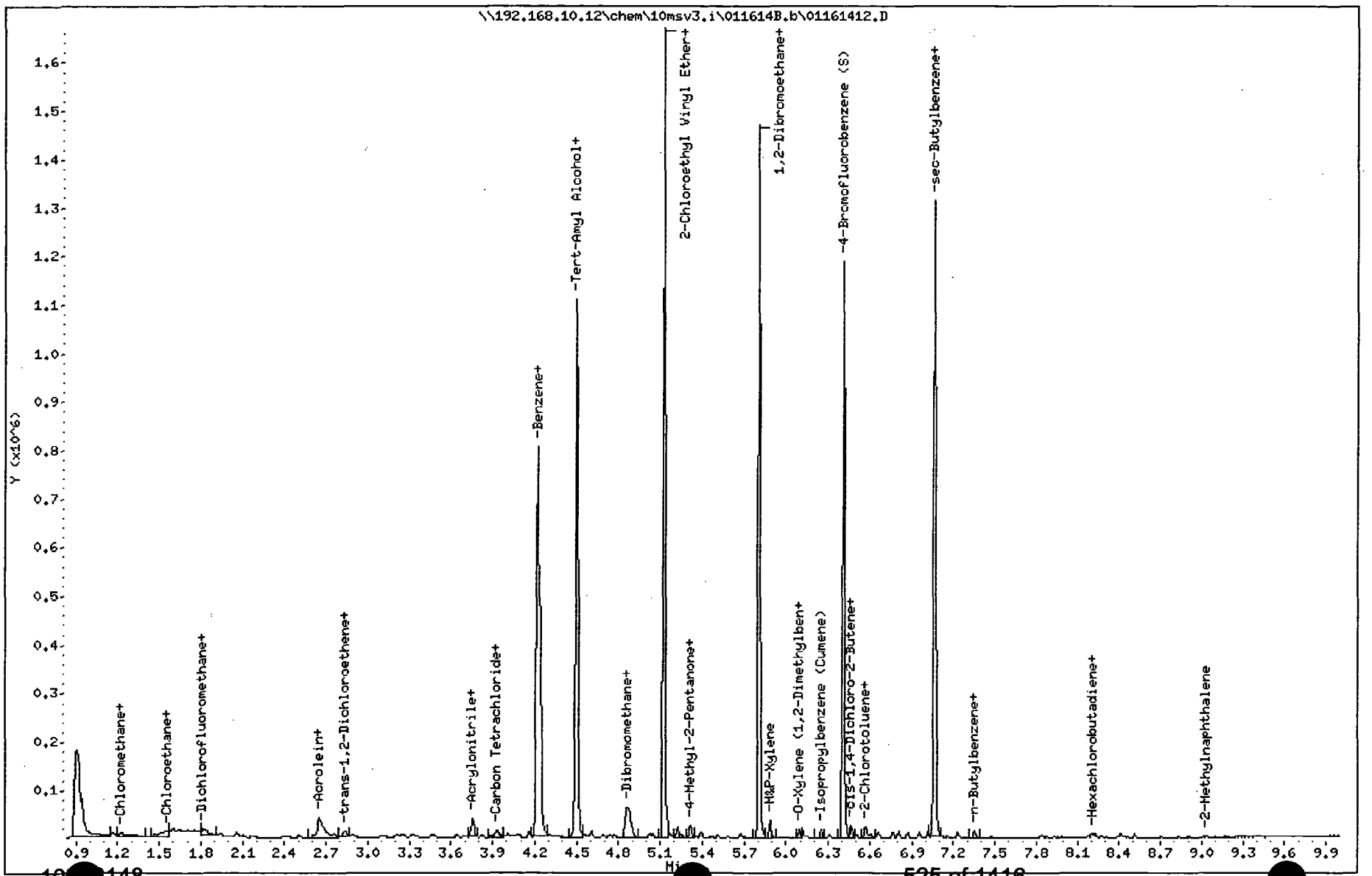
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	2.66	2.16	3.16	2.65	-0.46
39 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
46 1,4 Difluorobenze	4.50	4.00	5.00	4.50	-0.00
51 1,4 dioxane d8	4.86	4.36	5.36	4.87	0.25
65 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
89 1,4-Dichlorobenze	7.06	6.56	7.56	7.06	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161412.D
Date : 16-JAN-2014 21:23
Client ID:
Sample Info: 0.4 ICAL 10097-99

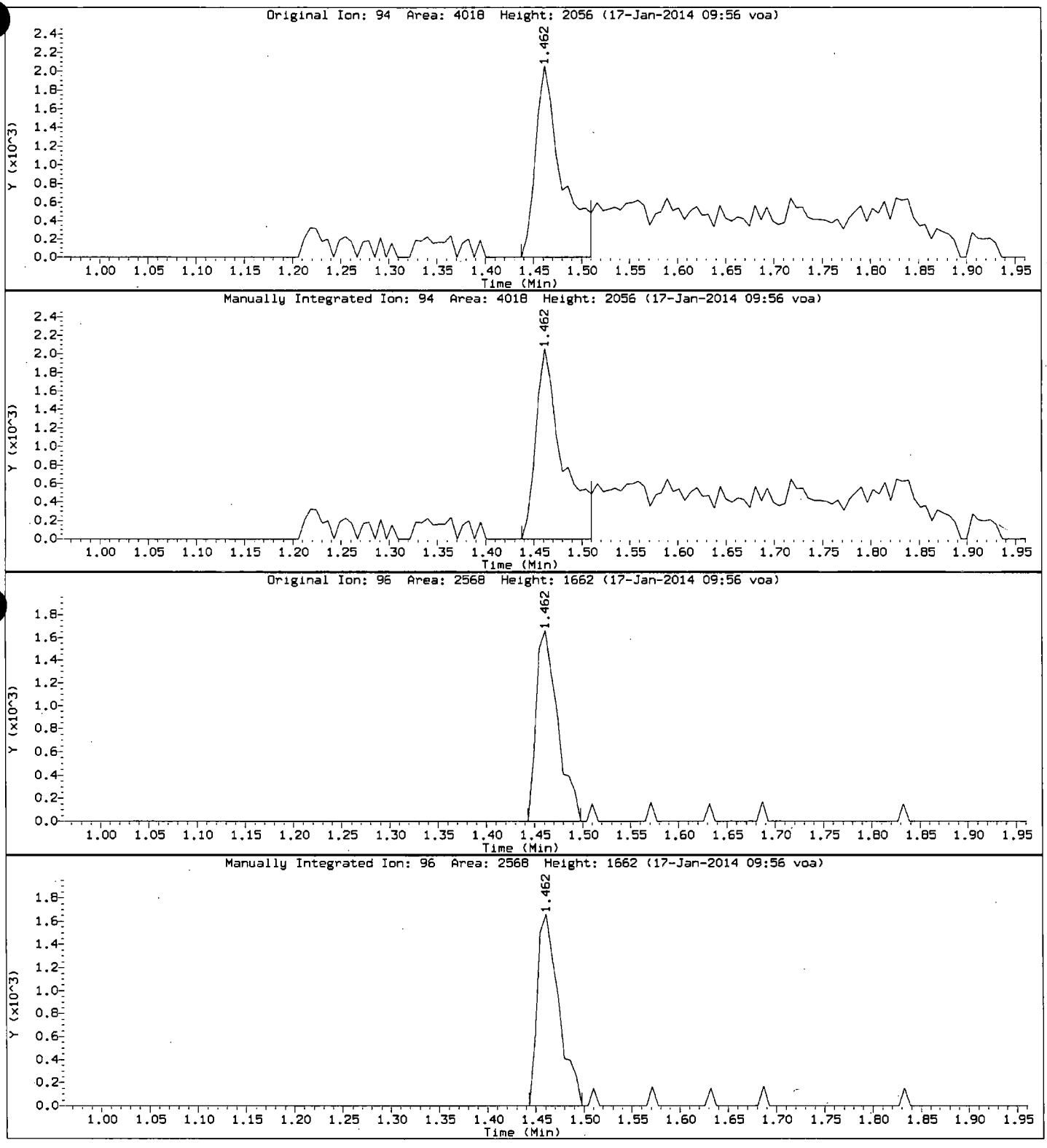
Instrument: 10msv3.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



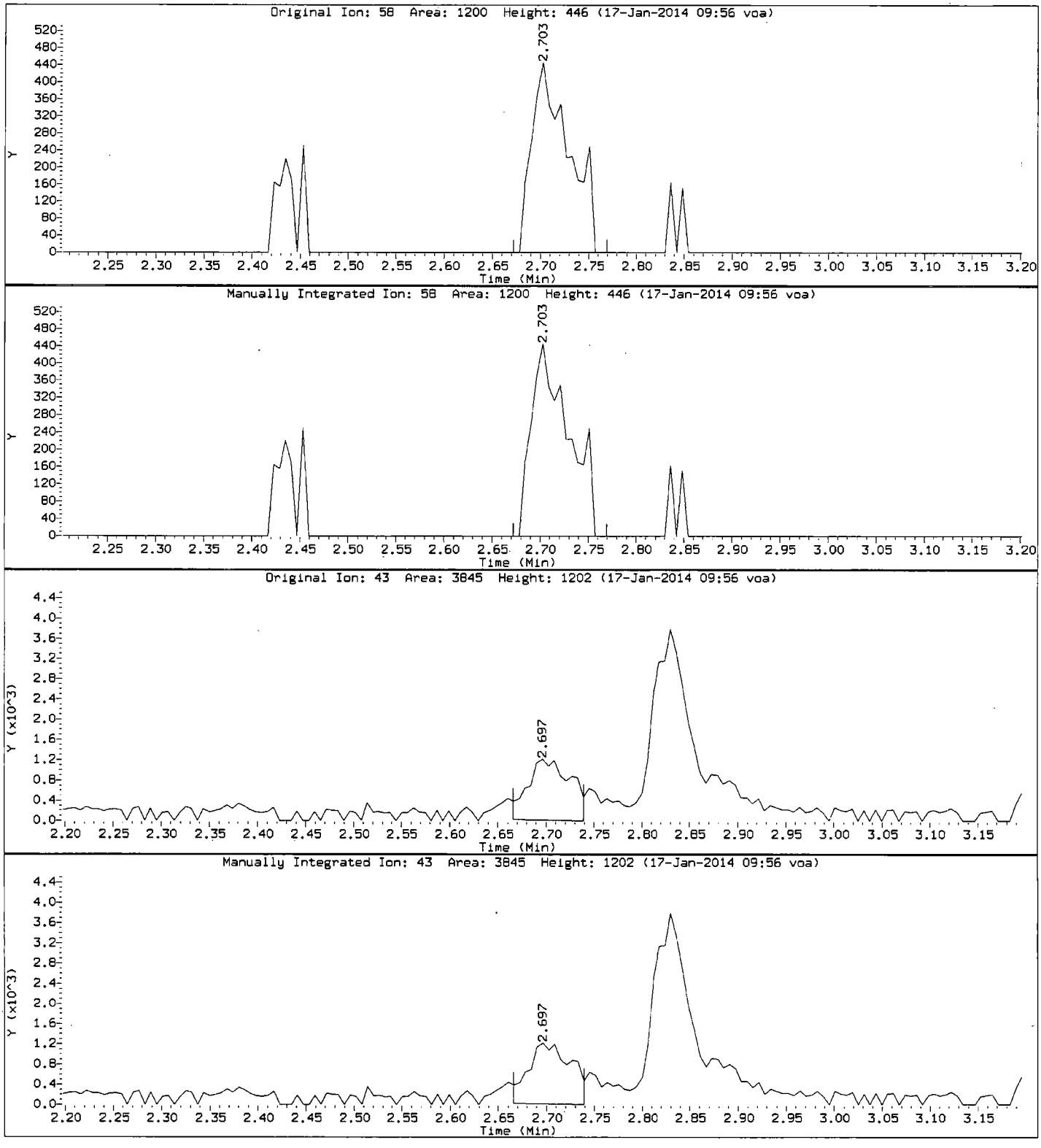
Data File: \\192.168.10.12\Chem\10msv3.i\011614B.D\01101412.D
Injection Date: 16-JAN-2014 21:23
Instrument: 10msv3.i
Lab Sample ID: 0.4 ICAL 10097-99

Compound: Bromomethane
CAS Number: 74-83-9



Data File: \\192.168.10.12\chem\10msv3.i\0116148.D\0116412.D
Injection Date: 16-JAN-2014 21:23
Instrument: 10msv3.i
Lab Sample ID: 0.4 ICAL 10097-99

Compound: Acetone
CAS Number: 67-64-1



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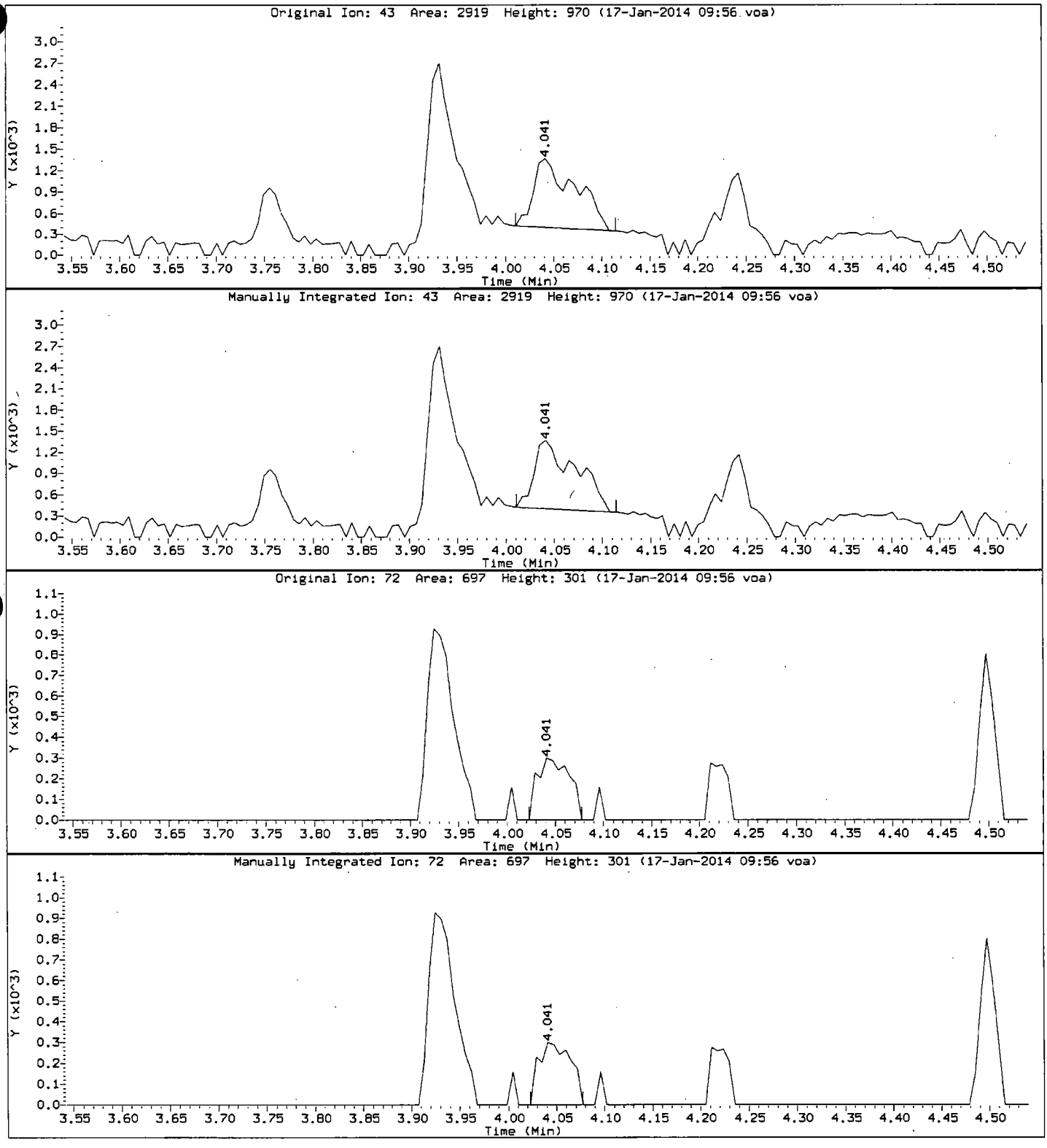
Injection Date: 16-JAN-2014 21:23
Instrument: 10msv3.i
Lab Sample ID: 0.4 ICAL 10097-99

Compound: 2-Butanone
CAS Number: 78-93-3



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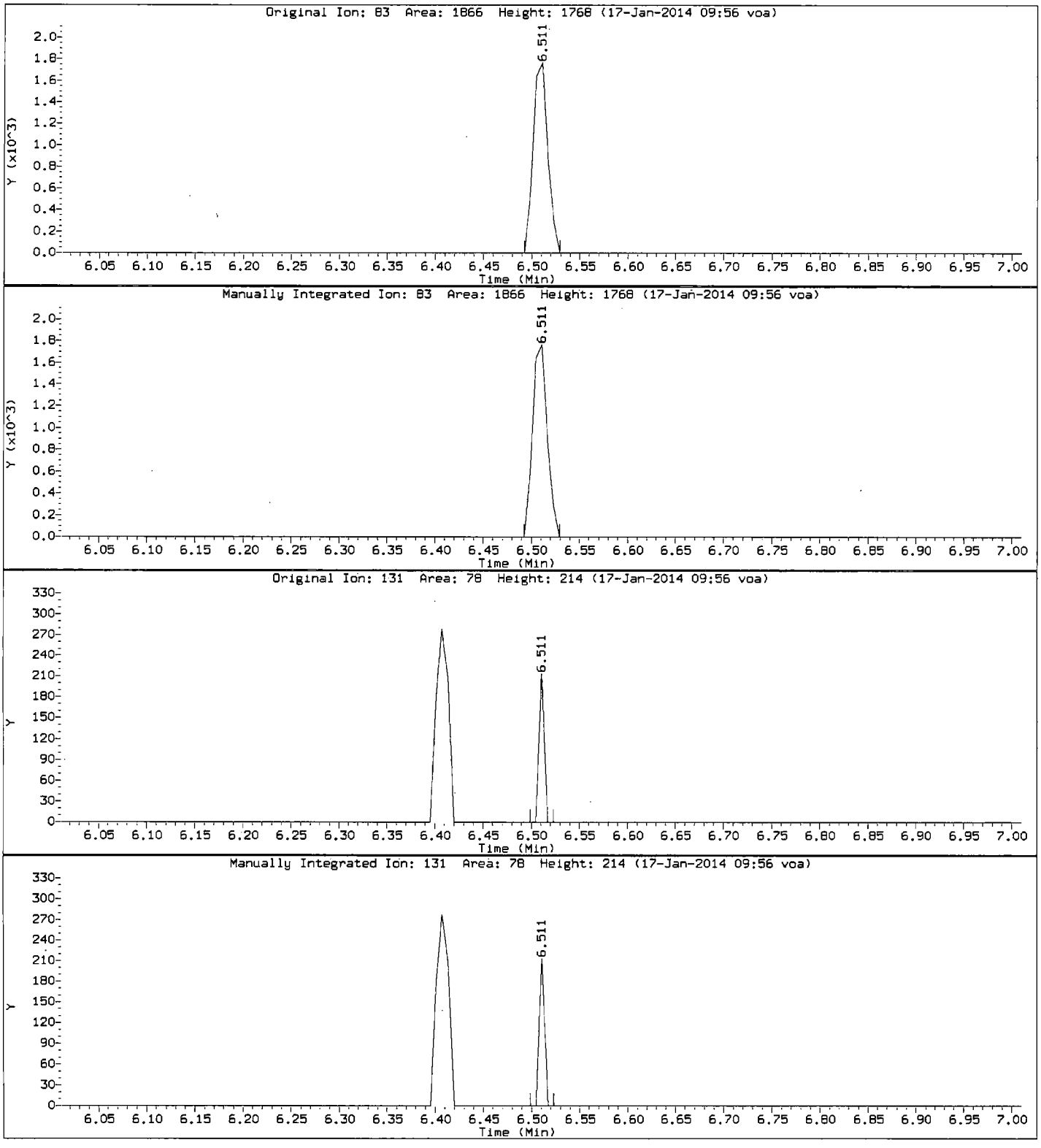
Injection Date: 16-JAN-2014 21:23
Instrument: 10msv3.i
Lab Sample ID: 0.4 ICAL 10097-99

Compound: 1,1,2,2-Tetrachloroethane
CAS Number: 79-34-5



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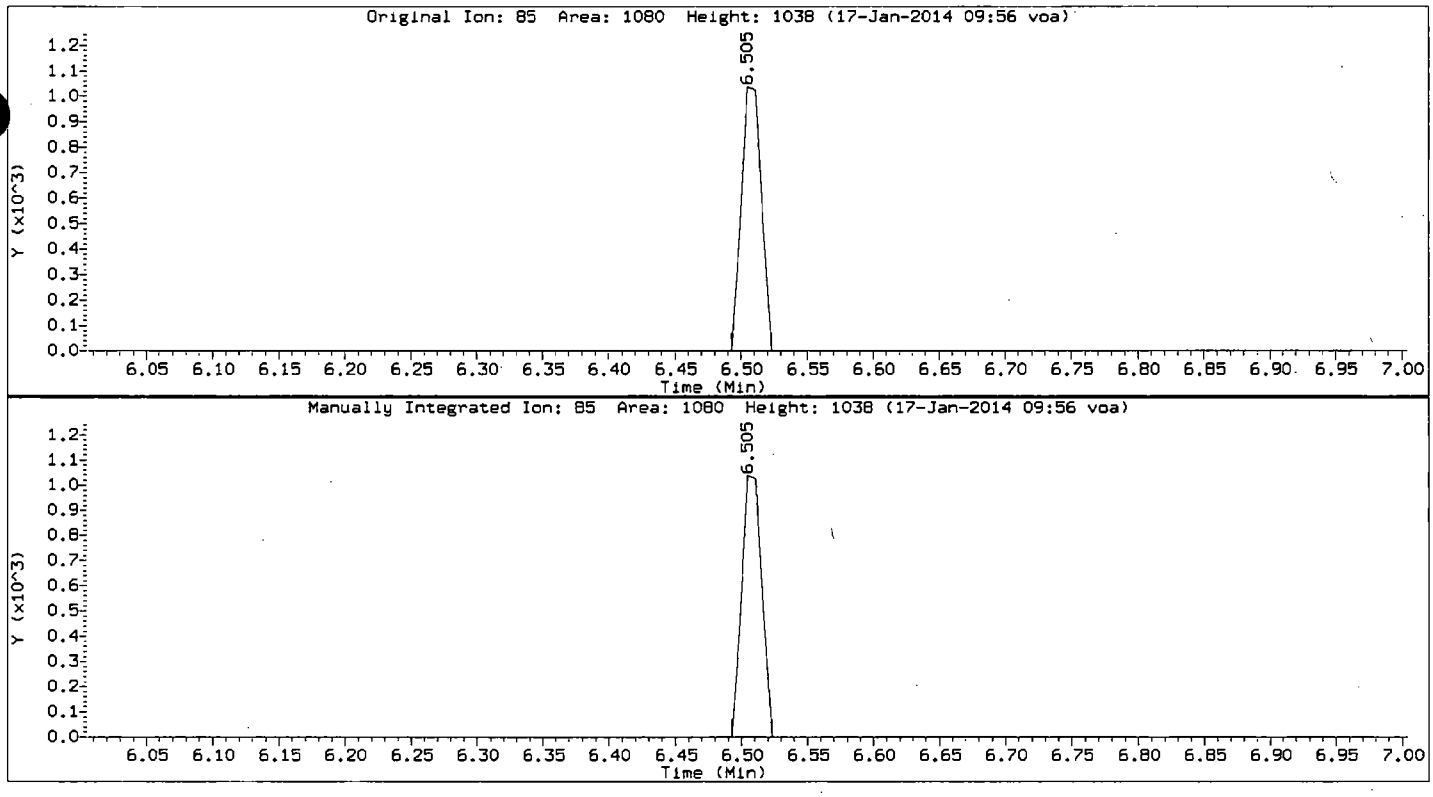
Injection Date: 16-JAN-2014 21:23
Instrument: 10msv3.i
Lab Sample ID: 0.4 ICAL 10097-99



Pace Analytical Services

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv3.i\011614B.b\01161413.D
Lab Smp Id: 1.0 ICAL 10097-99
Inj Date : 16-JAN-2014 21:40
Operator : HBP Inst ID: 10msv3.i
Smp Info : 1.0 ICAL 10097-99
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Meth Date : 17-Jan-2014 10:09 hpham Quant Type: ISTD
Cal Date : 16-JAN-2014 23:23 Cal File: 01161419.D
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10CCURTIS

Concentration Formula: Amt * DF * Uf * Vt/(Va * Ws * (1-(M/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.035	1.036	(0.246)	4592	1.00000	1.1(a)
2	Chloromethane	50	1.163	1.170	(0.276)	11301	1.00000	0.89(a)
3	Vinyl Chloride	62	1.224	1.224	(0.290)	5481	1.00000	1.1(a)
4	Bromomethane	94	1.461	1.462	(0.347)	5333	1.00000	2.5(a)
5	Chloroethane	64	1.552	1.547	(0.368)	2632	1.00000	1.2(aQ)
6	Trichlorofluoromethane	101	1.644	1.644	(0.390)	4296	1.00000	1.1(a)
7	Dichlorofluoromethane	67	1.704	1.705	(0.404)	4613	1.00000	1.7(a)
8	Diethyl ether (Ethyl Ether)	59	1.942	1.948	(0.461)	2816	1.00000	1.1(aQ)
9	1,1-Dichloroethene	96	2.051	2.052	(0.486)	4073	1.00000	1.1(a)
10	Carbon Disulfide	76	2.057	2.052	(0.488)	13630	1.00000	1.1(a)
11	Trichlorotrifluoroethane	101	2.100	2.093	(0.498)	3865	1.00000	1.1(a)
12	Iodomethane	142	2.179	2.173	(0.517)	4420	1.00000	2.9(aQ)
13	Acrolein	56	2.398	2.405	(0.569)	6458	10.0000	10.7
14	Allyl Chloride	41	2.508	2.508	(0.595)	6720	1.00000	1.2(a)
15	Methylene Chloride	84	2.617	2.618	(0.621)	5708	1.00000	1.1(a)
* 16	Acetone d6	46	2.654	2.672	(1.000)	75707	100.000	
17	Acetone	58	2.702	2.709	(1.018)	2194	5.00000	3.5(aM)
18	trans-1,2-Dichloroethene	96	2.757	2.757	(0.654)	4286	1.00000	1.1(a)
19	Hexane	86	2.830	2.830	(1.066)	1520	2.50000	2.5(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 Methyl-tert-butyl Ether	73	2.897	2.897	(0.687)	10802	1.00000	1.1(a)
	21 tert-Butyl Alcohol	59	3.055	3.074	(0.628)	2936	10.0000	10.2(QM)
	22 Acetonitrile	41	3.098	3.086	(0.735)	7264	10.0000	12.1(QM)
	23 Isopropyl Ether	45	3.207	3.214	(0.761)	12669	1.00000	1.1(a)
	24 1,1-Dichloroethane	63	3.262	3.262	(0.774)	7272	1.00000	1.1(a)
	25 Acrylonitrile	53	3.323	3.323	(0.788)	13407	10.0000	10.9
	26 Vinyl Acetate	43	3.481	3.469	(0.825)	5479	1.00000	0.84(aQ)
	27 Ethyl-tert-butyl ether	59	3.469	3.469	(0.823)	12158	1.00000	1.1(a)
	28 cis-1,2-Dichloroethene	96	3.639	3.640	(0.863)	4589	1.00000	1.1(a)
	29 2,2-Dichloropropane	77	3.706	3.707	(0.879)	6269	1.00000	1.1(a)
	30 Cyclohexane	56	3.755	3.761	(0.890)	31805	5.00000	5.4
	31 Bromochloromethane	130	3.767	3.767	(0.893)	2807	1.00000	1.0(a)
	32 Chloroform	83	3.822	3.828	(0.906)	7207	1.00000	1.1(a)
	33 Carbon Tetrachloride	117	3.895	3.895	(0.924)	4387	1.00000	1.0(a)
	34 Tetrahydrofuran	72	3.925	3.926	(1.479)	4909	10.0000	11.1
	35 1,1,1-Trichloroethane	97	3.937	3.938	(0.934)	6150	1.00000	1.1(a)
	36 1,1-Dichloropropene	75	4.010	4.011	(0.951)	5897	1.00000	1.1(a)
	37 2-Butanone	43	4.028	4.022	(0.955)	7696	5.00000	5.4(M)
	38 Benzene	78	4.156	4.157	(0.986)	17785	1.00000	1.1(a)
*	39 Pentafluorobenzene	168	4.217	4.218	(1.000)	367525	50.0000	
	40 Tert-amyl methyl ether	73	4.241	4.242	(1.006)	11678	1.00000	1.1(aQ)
$	41 1,2-Dichloroethane d4 (S)	65	4.235	4.242	(1.004)	176943	50.0000	50.2(Q)
	42 1,2-Dichloroethane	62	4.278	4.277	(1.014)	5235	1.00000	1.1(a)
	43 Isobutanol	43	4.339	4.344	(0.891)	873	20.0000	45.8(Q)
	44 Tert-Amyl Alcohol	59	4.393	4.388	(0.903)	2129	10.0000	9.2(Q)
	45 Trichloroethene	130	4.479	4.479	(0.996)	4976	1.00000	1.1(aQ)
*	46 1,4 Difluorobenzene	114	4.497	4.497	(1.000)	537378	50.0000	
	47 Tert-amyl ethyl ether	59	4.606	4.607	(1.024)	10176	1.00000	1.1(a)
	48 Dibromomethane	174	4.692	4.692	(1.043)	3002	1.00000	1.1(a)
	49 1,2-Dichloropropane	63	4.734	4.735	(1.053)	4113	1.00000	1.1(TaQ)
	50 Bromodichloromethane	83	4.771	4.771	(1.061)	4632	1.00000	1.0(a)
*	51 1,4 dioxane d8	96	4.868	4.856	(1.000)	69053	2000.00	
	52 1,4-Dioxane (P-Dioxane)	88	4.880	4.868	(1.002)	741	20.0000	16.5
	53 2-Chloroethyl Vinyl Ether	63	5.026	5.021	(1.118)	5697	2.50000	2.6(a)
	54 cis-1,3-Dichloropropene	75	5.050	5.051	(1.123)	6061	1.00000	1.1(a)
$	55 Toluene-d8 (S)	98	5.123	5.124	(0.883)	610411	50.0000	49.8
	56 Toluene	92	5.148	5.148	(0.887)	12794	1.00000	1.3(a)
	57 4-Methyl-2-Pentanone	43	5.312	5.307	(0.915)	16581	5.00000	5.2
	58 Tetrachloroethene	166	5.312	5.313	(0.915)	5346	1.00000	1.2(a)
	59 trans-1,3-Dichloropropene	75	5.324	5.325	(0.917)	5315	1.00000	1.00(aQ)
	60 1,1,2-Trichloroethane	97	5.391	5.392	(0.929)	3694	1.00000	1.1(a)
	61 Dibromochloromethane	129	5.470	5.471	(0.942)	3264	1.00000	0.93(a)
	62 1,3-Dichloropropane	76	5.513	5.513	(0.950)	6274	1.00000	1.1(a)
	63 1,2-Dibromoethane	107	5.580	5.580	(0.961)	3891	1.00000	1.0(TaQ)
	64 2-Hexanone	43	5.671	5.665	(0.977)	10992	5.00000	5.0
*	65 Chlorobenzene-d5	117	5.805	5.805	(1.000)	517808	50.0000	
	66 Chlorobenzene	112	5.811	5.811	(1.001)	12361	1.00000	1.1(aQ)
	67 Ethylbenzene	91	5.817	5.818	(1.002)	20800	1.00000	1.1(a)
	68 1,1,1,2-Tetrachloroethane	131	5.841	5.842	(1.006)	3529	1.00000	0.97(aQ)
	69 M&P-Xylene	106	5.884	5.884	(1.014)	15586	2.00000	2.2(a)
	70 O-Xylene (1,2-Dimethylbenzene)	106	6.097	6.097	(1.050)	6929	1.00000	1.1(a)
	71 Styrene	104	6.121	6.122	(1.054)	12051	1.00000	1.0(a)
	72 Bromoform	173	6.139	6.146	(1.058)	871	1.00000	0.34(TaQ)
	73 Isopropylbenzene (Cumene)	105	6.249	6.249	(1.076)	17928	1.00000	1.1(a)

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161413.D
Report Date: 17-Jan-2014 10:09

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
S	74	4-Bromofluorobenzene (S)	95	6.407	6.408	(0.907)	241846	50.0000	50.2
	75	cis-1,4-Dichloro-2-Butene	53	6.438	6.438	(0.911)	1321	1.00000	1.0(aQ)
	76	Bromobenzene	156	6.468	6.468	(0.916)	5481	1.00000	1.1(a)
	77	n-Propylbenzene	91	6.468	6.468	(0.916)	19409	1.00000	1.1(a)
	78	1,1,2,2-Tetrachloroethane	83	6.511	6.511	(0.922)	4697	1.00000	1.1(a)
	79	2-Chlorotoluene	91	6.565	6.566	(0.929)	13244	1.00000	1.1(a)
	80	1,3,5-Trimethylbenzene	105	6.571	6.578	(0.930)	14163	1.00000	1.1(a)
	81	1,2,3-Trichloropropane	110	6.596	6.596	(0.934)	1423	1.00000	1.1(a)
	82	trans-1,4-Dichloro-2-Butene	53	6.608	6.608	(0.935)	2895	2.50000	2.6(a)
	83	4-Chlorotoluene	91	6.657	6.663	(0.942)	12685	1.00000	1.1(a)
	84	tert-Butylbenzene	119	6.760	6.767	(0.957)	11451	1.00000	1.1(a)
	85	1,2,4-Trimethylbenzene	105	6.803	6.803	(0.963)	13642	1.00000	1.1(a)
	86	sec-Butylbenzene	105	6.869	6.870	(0.972)	16128	1.00000	1.1(a)
	87	p-Isopropyltoluene	119	6.955	6.955	(0.985)	13718	1.00000	1.1(a)
	88	1,3-Dichlorobenzene	146	7.015	7.016	(0.993)	8673	1.00000	1.1(a)
*	89	1,4-Dichlorobenzene-d4	152	7.064	7.065	(1.000)	277575	50.0000	
	90	1,4-Dichlorobenzene	146	7.070	7.071	(1.001)	9376	1.00000	1.1(aQ)
	91	1,2,3 Trimethylbenzene	105	7.076	7.083	(1.678)	14164	1.00000	1.1(a)
	92	n-Butylbenzene	91	7.228	7.229	(1.023)	10943	1.00000	1.1(a)
	93	1,2-Dichlorobenzene	146	7.356	7.351	(1.041)	8079	1.00000	1.1(a)
	94	1,2-Dibromo-3-Chloropropane	157	7.843	7.843	(1.110)	2143	2.50000	2.6(a)
	95	Hexachlorobutadiene	225	8.208	8.208	(1.162)	2282	1.00000	1.2(aQ)
	96	1,2,4-Trichlorobenzene	180	8.226	8.227	(1.164)	4017	1.00000	1.1(a)
	97	Naphthalene	128	8.415	8.409	(1.191)	10544	1.00000	1.1(a)
	98	1,2,3-Trichlorobenzene	180	8.518	8.519	(1.206)	3758	1.00000	1.1(a)
	99	2-Methylnaphthalene	142	9.029	9.024	(1.278)	2145	0.50000	0.59(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161413.D
Report Date: 17-Jan-2014 10:09

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv3.i
Lab File ID: 01161413.D
Lab Smp Id: 1.0 ICAL 10097-99
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Misc Info:

Calibration Date: 16-JAN-2014
Calibration Time: 22:32
Level: MED
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 6.
If Continuing Cal. use Initial Cal. Level 6

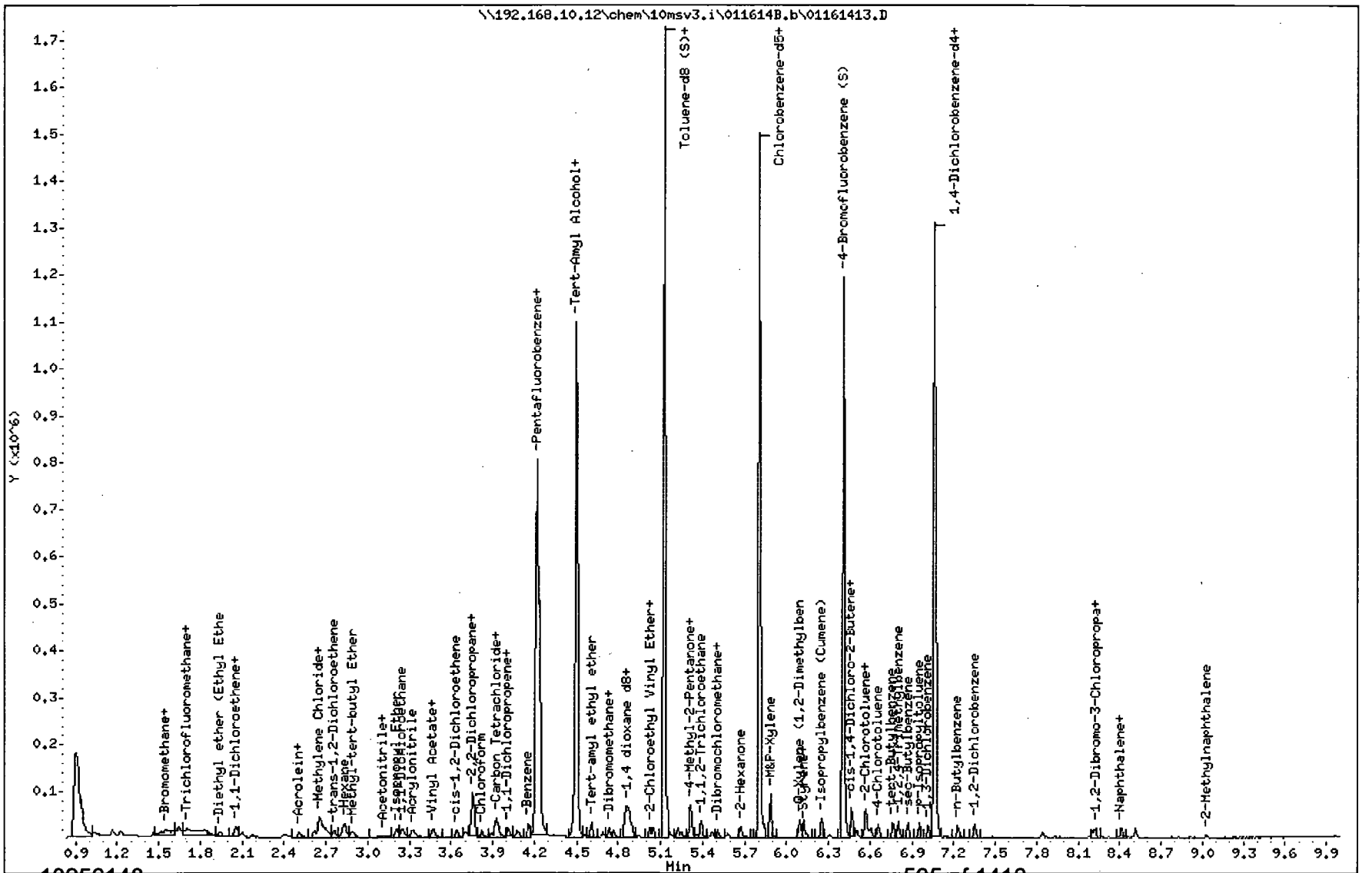
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	80423	40212	160846	75707	-5.86
39 Pentafluorobenzen	375691	187846	751382	367525	-2.17
46 1,4 Difluorobenze	552756	276378	1105512	537378	-2.78
51 1,4 dioxane d8	72712	36356	145424	69053	-5.03
65 Chlorobenzene-d5	532816	266408	1065632	517808	-2.82
89 1,4-Dichlorobenze	290523	145262	581046	277575	-4.46

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	2.66	2.16	3.16	2.65	-0.23
39 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
46 1,4 Difluorobenze	4.50	4.00	5.00	4.50	0.00
51 1,4 dioxane d8	4.86	4.36	5.36	4.87	0.25
65 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
89 1,4-Dichlorobenze	7.06	6.56	7.56	7.06	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

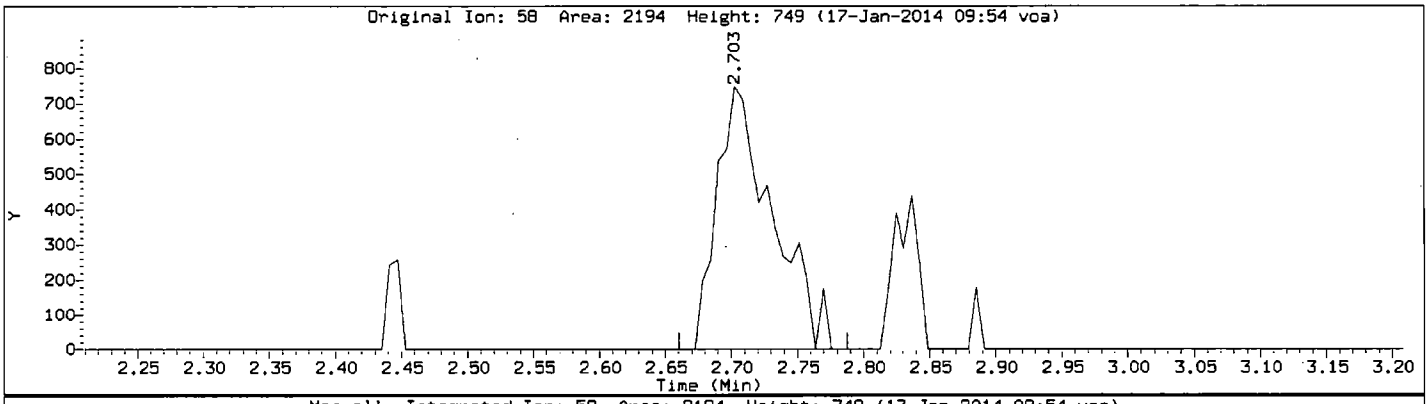
Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161413.D
Date : 16-JAN-2014 21:40
Client ID:
Sample Info: 1.0 ICAL 10097-99

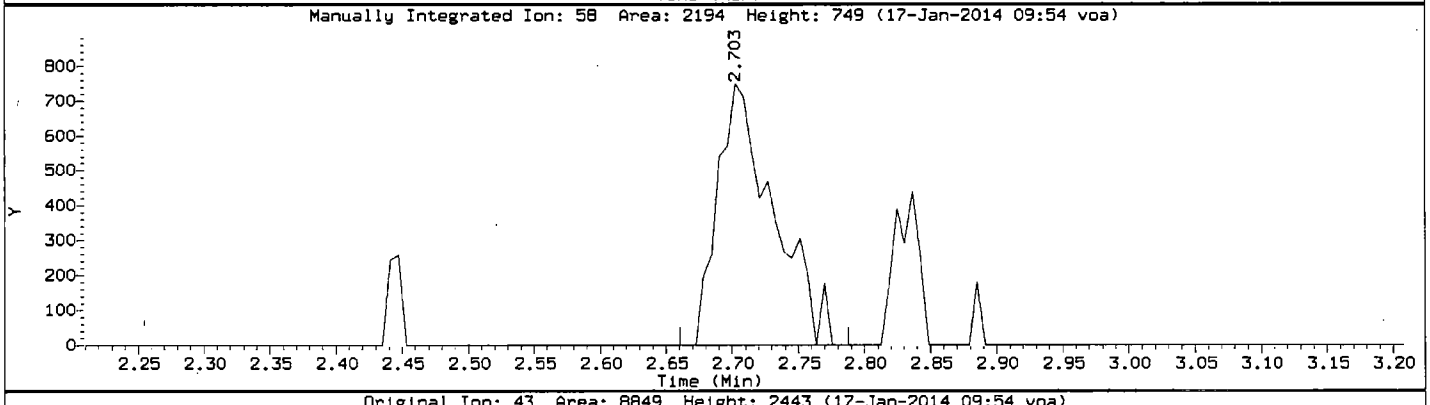
Instrument: 10msv3.i
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18

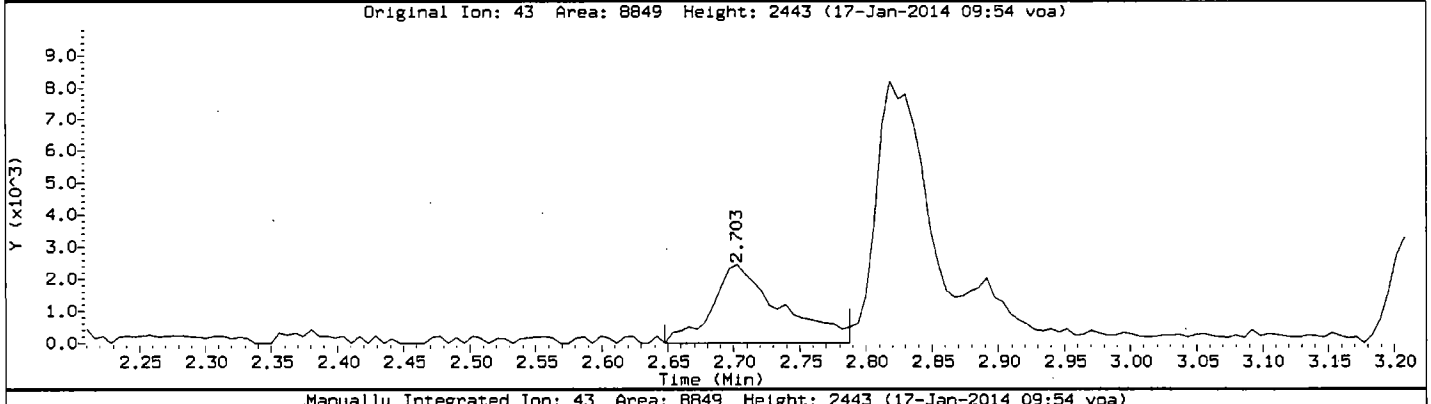


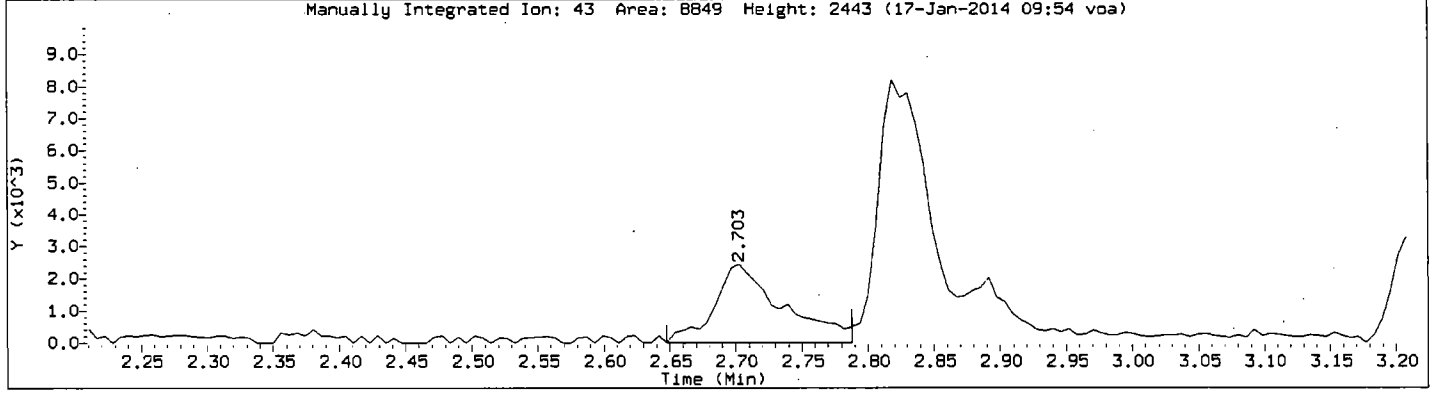
Injection Date: 16-JAN-2014 21:40
Instrument: 10msv3.i
Lab Sample ID: 1.0 ICAL 10097-99

Compound: Acetone
CAS Number: 67-64-1









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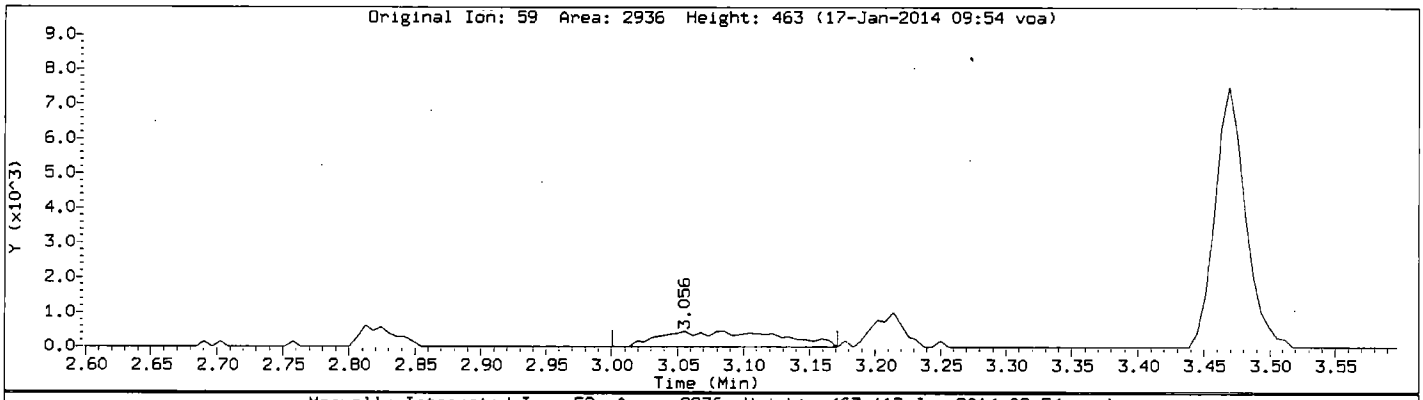
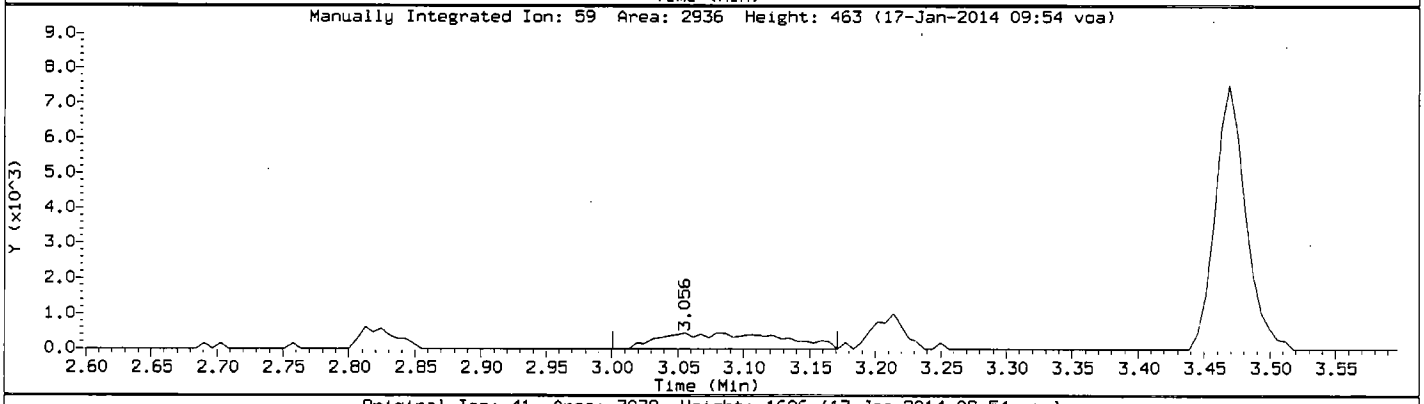
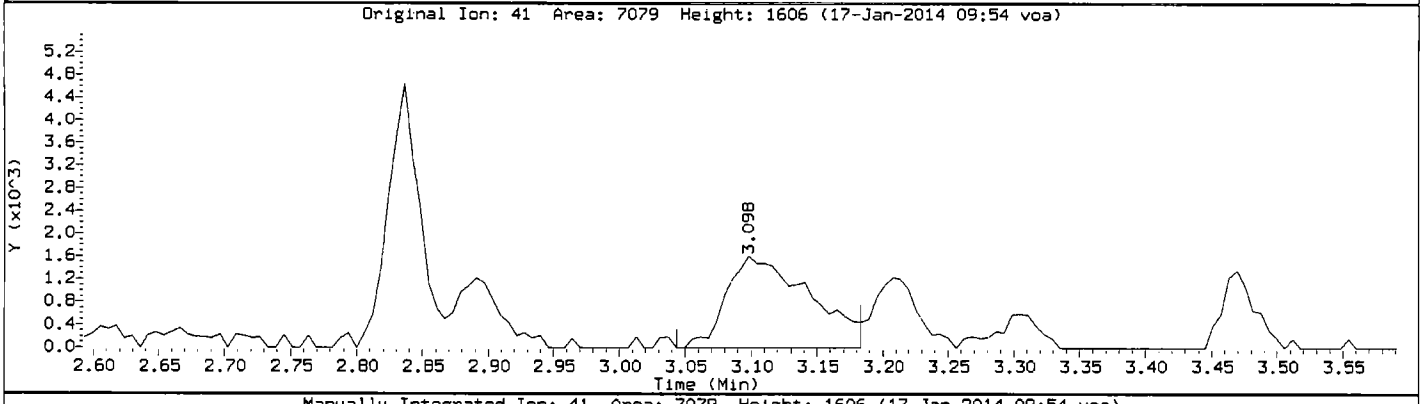
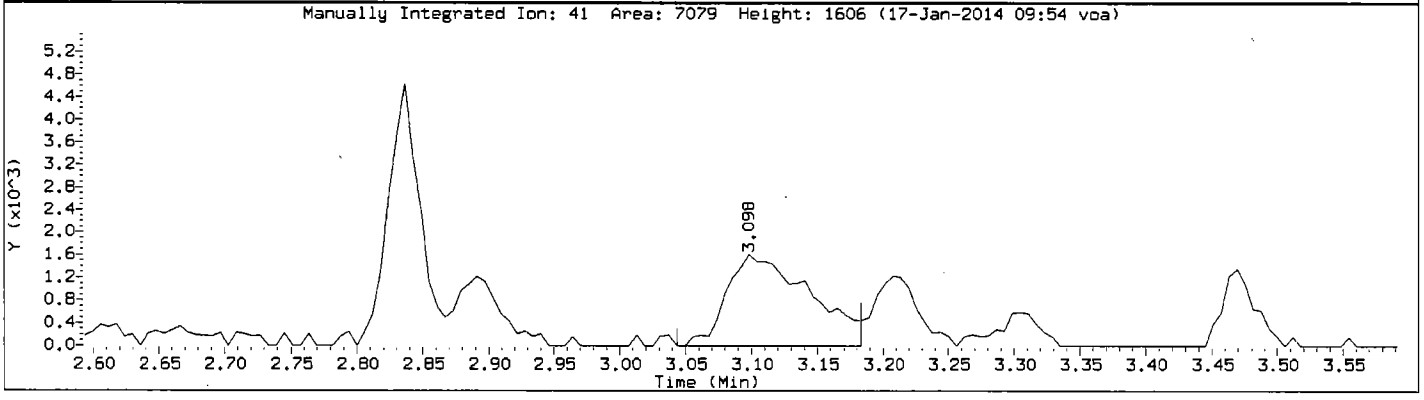
Injection Date: 16-JAN-2014 21:40
Instrument: 10msv3.i
Lab Sample ID: 1.0 ICAL 10097-99

Compound: tert-Butyl Alcohol
CAS Number: 75-65-0









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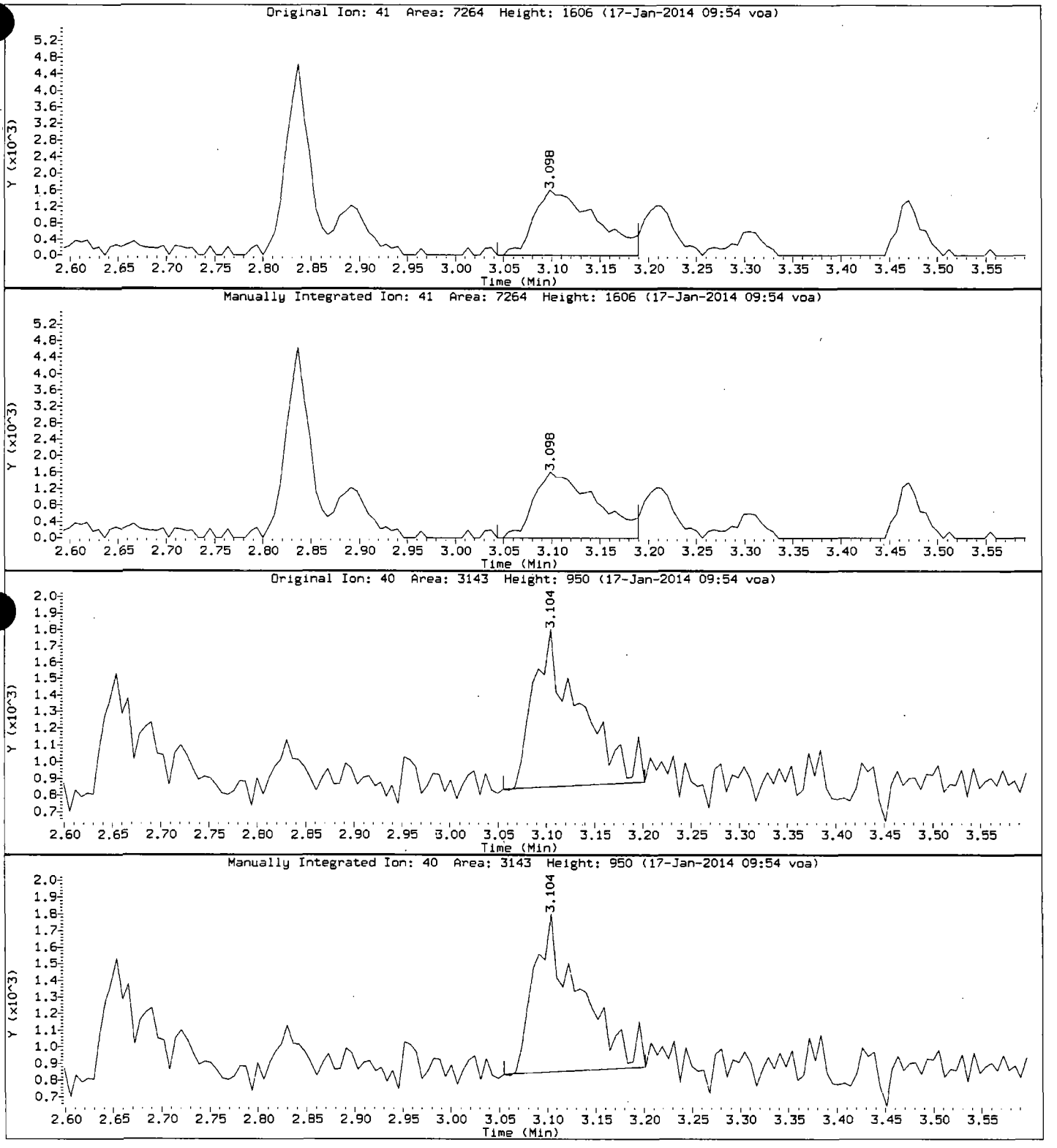
Injection Date: 16-JAN-2014 21:40
Instrument: 10msv3.i
Lab Sample ID: 1.0 ICAL 10097-99

Compound: Acetonitrile
CAS Number: 75-05-8



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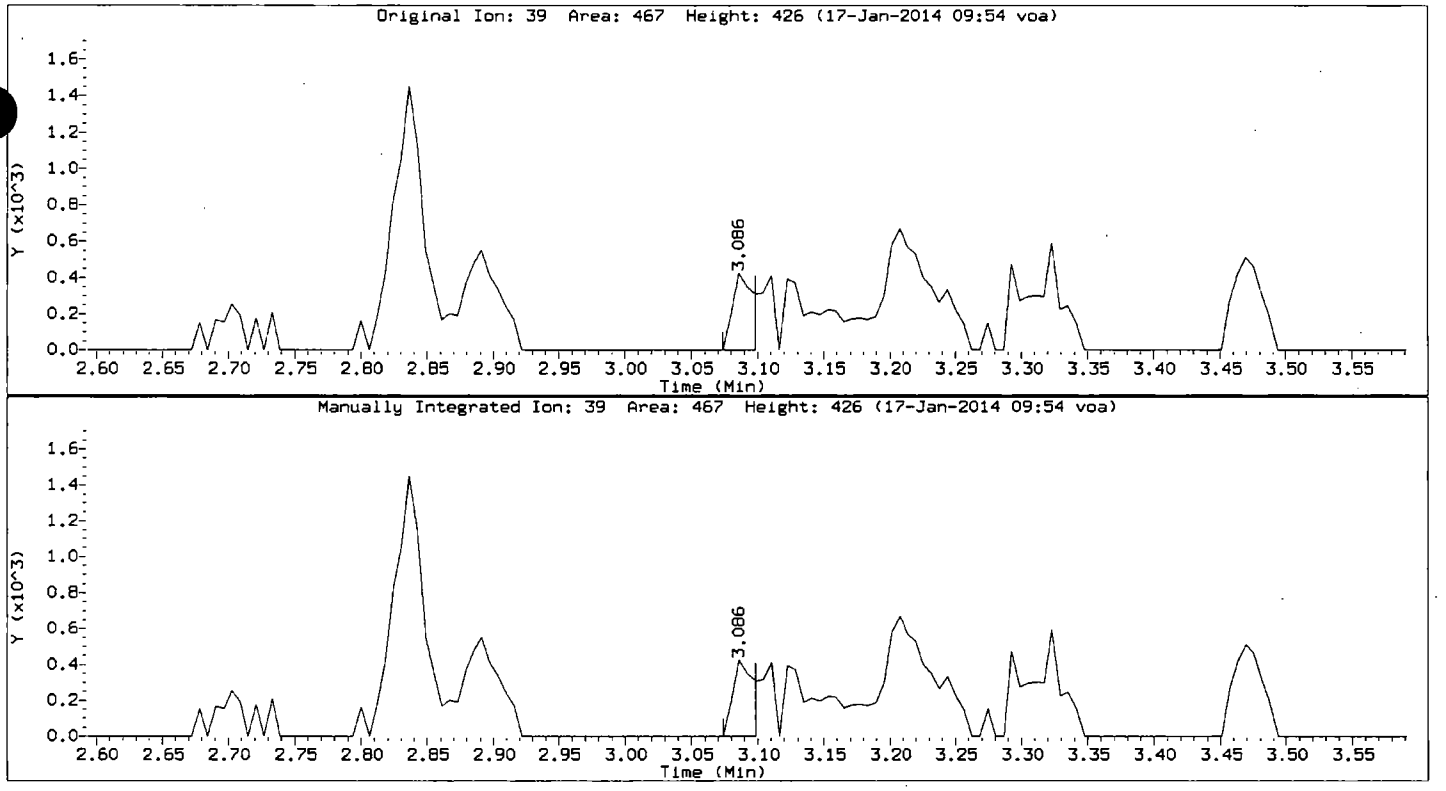
Injection Date: 16-JAN-2014 21:40
Instrument: 10msv3.i
Lab Sample ID: 1.0 ICAL 10097-99



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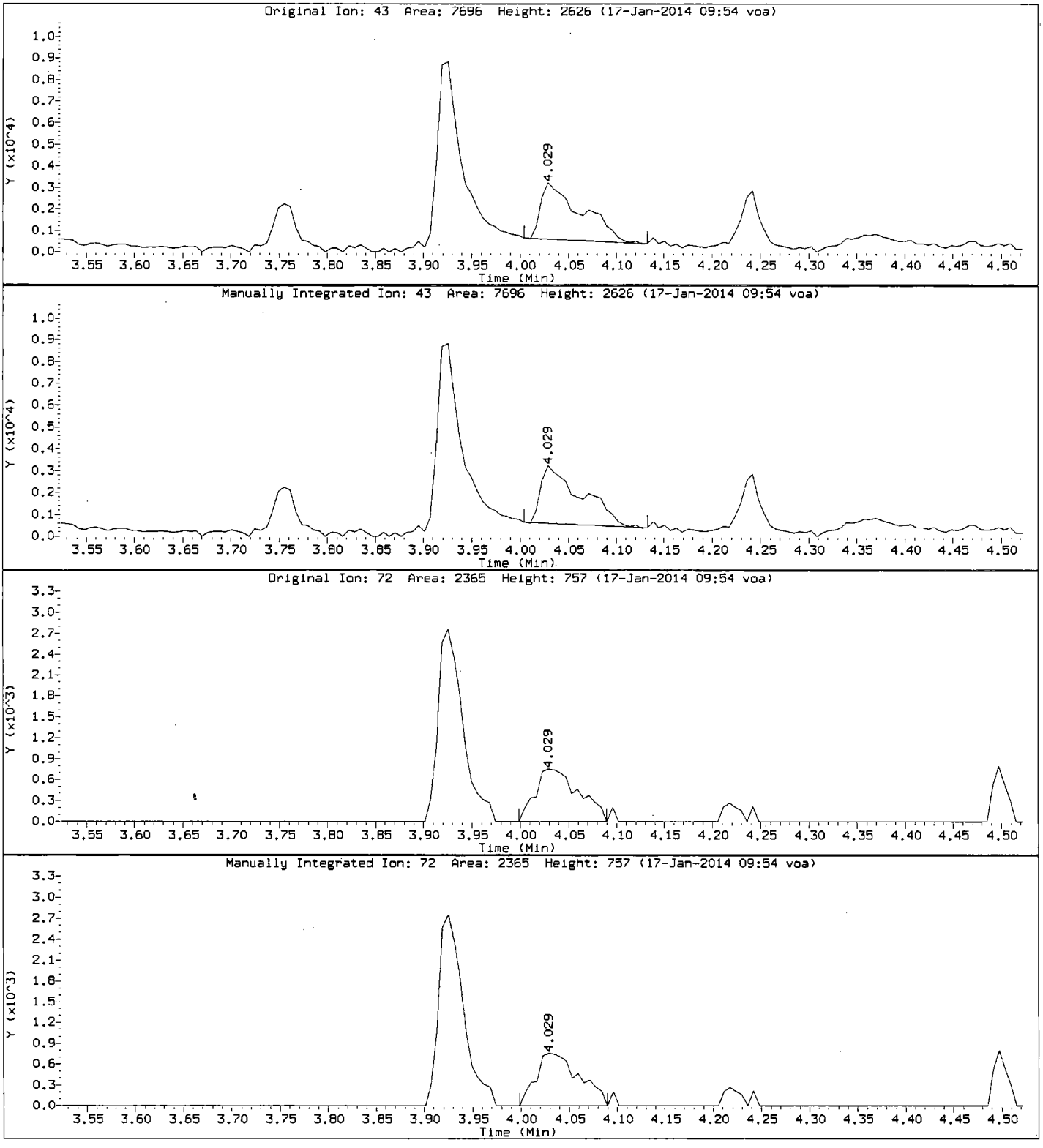
Injection Date: 16-JAN-2014 21:40
Instrument: 10msv3.i
Lab Sample ID: 1.0 ICAL 10097-99

Compound: 2-Butanone
CAS Number: 78-93-3



Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161414.D
Report Date: 17-Jan-2014 10:09

Pace Analytical Services

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv3.i\011614B.b\01161414.D
Lab Smp Id: 4.0 ICAL 10097-99
Inj Date : 16-JAN-2014 21:57
Operator : HBP Inst ID: 10msv3.i
Smp Info : 4.0 ICAL 10097-99
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Meth Date : 17-Jan-2014 10:09 hpham Quant Type: ISTD
Cal Date : 16-JAN-2014 23:23 Cal File: 01161419.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10CCURTIS

Concentration Formula: Amt * DF * Uf * Vt/(Va * Ws * (1-(M/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.035	1.036	(0.246)	15793	4.00000	3.8(a)
2	Chloromethane	50	1.163	1.170	(0.276)	29153	4.00000	4.1(a)
3	Vinyl Chloride	62	1.224	1.224	(0.290)	19855	4.00000	3.9(a)
4	Bromomethane	94	1.461	1.462	(0.347)	9277	4.00000	4.4(aM)
5	Chloroethane	64	1.546	1.547	(0.367)	8813	4.00000	4.1(aQ)
6	Trichlorofluoromethane	101	1.644	1.644	(0.390)	15444	4.00000	4.0(a)
7	Dichlorofluoromethane	67	1.705	1.705	(0.404)	15728	4.00000	4.4(a)
8	Diethyl ether (Ethyl Ether)	59	1.948	1.948	(0.462)	10820	4.00000	4.0(a)
9	1,1-Dichloroethene	96	2.051	2.052	(0.487)	14818	4.00000	3.9(a)
10	Carbon Disulfide	76	2.051	2.052	(0.487)	46627	4.00000	3.8(a)
11	Trichlorotrifluoroethane	101	2.094	2.093	(0.497)	13710	4.00000	3.8(a)
12	Iodomethane	142	2.173	2.173	(0.515)	14567	4.00000	4.5(a)
13	Acrolein	56	2.404	2.405	(0.570)	23782	40.0000	38.8
14	Allyl Chloride	41	2.508	2.508	(0.595)	22418	4.00000	3.9(a)
15	Methylene Chloride	84	2.617	2.618	(0.621)	17051	4.00000	4.0(a)
* 16	Acetone d6	46	2.660	2.672	(1.000)	75044	100.000	
17	Acetone	58	2.708	2.709	(1.018)	6015	20.0000	18.3
18	trans-1,2-Dichloroethene	96	2.757	2.757	(0.654)	15376	4.00000	3.9(a)
19	Hexane	86	2.836	2.830	(1.066)	5473	10.0000	9.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
20	Methyl-tert-butyl Ether	73	2.891	2.897	(0.686)	38586	4.00000	3.9(a)
21	tert-Butyl Alcohol	59	3.098	3.074	(0.637)	10993	40.0000	37.0(M)
22	Acetonitrile	41	3.092	3.086	(0.733)	21615	40.0000	43.6
23	Isopropyl Ether	45	3.207	3.214	(0.761)	45844	4.00000	3.9(a)
24	1,1-Dichloroethane	63	3.262	3.262	(0.774)	26810	4.00000	3.9(a)
25	Acrylonitrile	53	3.317	3.323	(0.787)	50182	40.0000	40.4
26	Vinyl Acetate	43	3.475	3.469	(0.824)	24021	4.00000	3.6(a)
27	Ethyl-tert-butyl ether	59	3.469	3.469	(0.823)	42226	4.00000	3.9(a)
28	cis-1,2-Dichloroethene	96	3.639	3.640	(0.863)	17256	4.00000	4.0(a)
29	2,2-Dichloropropane	77	3.706	3.707	(0.879)	21484	4.00000	3.9(a)
30	Cyclohexane	56	3.755	3.761	(0.890)	114326	20.0000	19.0
31	Bromochloromethane	130	3.767	3.767	(0.893)	10783	4.00000	4.0(a)
32	Chloroform	83	3.822	3.828	(0.906)	26603	4.00000	4.0(a)
33	Carbon Tetrachloride	117	3.889	3.895	(0.922)	15331	4.00000	3.5(a)
34	Tetrahydrofuran	72	3.925	3.926	(1.476)	17627	40.0000	40.3
35	1,1,1-Trichloroethane	97	3.937	3.938	(0.934)	21514	4.00000	3.7(a)
36	1,1-Dichloropropene	75	4.010	4.011	(0.951)	21325	4.00000	3.9(a)
37	2-Butanone	43	4.022	4.022	(0.954)	28335	20.0000	19.5
38	Benzene	78	4.156	4.157	(0.986)	61216	4.00000	3.9(a)
* 39	Pentafluorobenzene	168	4.217	4.218	(1.000)	372010	50.0000	
40	Tert-amyl methyl ether	73	4.241	4.242	(1.006)	42735	4.00000	4.0(a)
$ 41	1,2-Dichloroethane d4 (S)	65	4.235	4.242	(1.004)	177422	50.0000	49.7(Q)
42	1,2-Dichloroethane	62	4.278	4.277	(1.014)	18845	4.00000	3.9(a)
43	Isobutanol	43	4.351	4.344	(0.895)	9989	80.0000	93.2(M)
44	Tert-Amyl Alcohol	59	4.381	4.388	(0.901)	8595	40.0000	36.1
45	Trichloroethene	130	4.479	4.479	(0.996)	16916	4.00000	3.8(a)
* 46	1,4 Difluorobenzene	114	4.497	4.497	(1.000)	542527	50.0000	
47	Tert-amyl ethyl ether	59	4.606	4.607	(1.024)	37469	4.00000	4.0(a)
48	Dibromomethane	174	4.692	4.692	(1.043)	10008	4.00000	3.8(a)
49	1,2-Dichloropropane	63	4.734	4.735	(1.053)	14536	4.00000	3.9(a)
50	Bromodichloromethane	83	4.765	4.771	(1.060)	17407	4.00000	3.7(a)
* 51	1,4 dioxane d8	96	4.862	4.856	(1.000)	71237	2000.00	
52	1,4-Dioxane (P-Dioxane)	88	4.874	4.868	(1.002)	3896	80.0000	84.3(Q)
53	2-Chloroethyl Vinyl Ether	63	5.020	5.021	(1.116)	21490	10.0000	9.9
54	cis-1,3-Dichloropropene	75	5.045	5.051	(1.122)	22099	4.00000	3.8(a)
$ 55	Toluene-d8 (S)	98	5.124	5.124	(0.883)	622657	50.0000	50.7
56	Toluene	92	5.148	5.148	(0.887)	41105	4.00000	4.0(a)
57	4-Methyl-2-Pentanone	43	5.306	5.307	(0.914)	63364	20.0000	20.0
58	Tetrachloroethene	166	5.312	5.313	(0.915)	17798	4.00000	3.9(a)
59	trans-1,3-Dichloropropene	75	5.324	5.325	(0.917)	20314	4.00000	3.8(a)
60	1,1,2-Trichloroethane	97	5.391	5.392	(0.929)	13758	4.00000	4.0(a)
61	Dibromochloromethane	129	5.470	5.471	(0.942)	12350	4.00000	3.6(a)
62	1,3-Dichloropropane	76	5.507	5.513	(0.949)	22565	4.00000	3.9(a)
63	1,2-Dibromoethane	107	5.580	5.580	(0.961)	14129	4.00000	3.8(a)
64	2-Hexanone	43	5.665	5.665	(0.976)	42819	20.0000	19.7
* 65	Chlorobenzene-d5	117	5.805	5.805	(1.000)	518282	50.0000	
66	Chlorobenzene	112	5.811	5.811	(1.001)	43226	4.00000	3.9(a)
67	Ethylbenzene	91	5.817	5.818	(1.002)	71187	4.00000	3.9(a)
68	1,1,1,2-Tetrachloroethane	131	5.841	5.842	(1.006)	12995	4.00000	3.6(a)
69	M&P-Xylene	106	5.884	5.884	(1.014)	54012	8.00000	7.7
70	O-Xylene (1,2-Dimethylbenzene)	106	6.091	6.097	(1.049)	25591	4.00000	3.9(a)
71	Styrene	104	6.121	6.122	(1.054)	44974	4.00000	3.9(a)
72	Bromoform	173	6.146	6.146	(1.059)	8390	4.00000	3.3(TaQ)
73	Isopropylbenzene (Cumene)	105	6.249	6.249	(1.076)	61314	4.00000	3.8(a)

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161414.D
Report Date: 17-Jan-2014 10:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	74 4-Bromofluorobenzene (S)	95	6.407	6.408	(0.907)	244069	50.0000	50.7
	75 cis-1,4-Dichloro-2-Butene	53	6.438	6.438	(0.911)	5070	4.00000	3.9(a)
	76 Bromobenzene	156	6.468	6.468	(0.916)	18924	4.00000	3.9(a)
	77 n-Propylbenzene	91	6.468	6.468	(0.916)	69337	4.00000	3.9(a)
	78 1,1,2,2-Tetrachloroethane	83	6.505	6.511	(0.921)	16748	4.00000	3.9(a)
	79 2-Chlorotoluene	91	6.565	6.566	(0.929)	46552	4.00000	3.9(a)
	80 1,3,5-Trimethylbenzene	105	6.571	6.578	(0.930)	47855	4.00000	3.8(a)
	81 1,2,3-Trichloropropane	110	6.590	6.596	(0.933)	5222	4.00000	4.0(a)
	82 trans-1,4-Dichloro-2-Butene	53	6.608	6.608	(0.935)	10894	10.0000	9.8
	83 4-Chlorotoluene	91	6.657	6.663	(0.942)	44415	4.00000	3.9(a)
	84 tert-Butylbenzene	119	6.760	6.767	(0.957)	38873	4.00000	3.8(a)
	85 1,2,4-Trimethylbenzene	105	6.803	6.803	(0.963)	48931	4.00000	3.8(a)
	86 sec-Butylbenzene	105	6.870	6.870	(0.972)	53514	4.00000	3.7(a)
	87 p-Isopropyltoluene	119	6.955	6.955	(0.985)	45185	4.00000	3.7(a)
	88 1,3-Dichlorobenzene	146	7.016	7.016	(0.993)	30105	4.00000	3.8(a)
*	89 1,4-Dichlorobenzene-d4	152	7.064	7.065	(1.000)	277639	50.0000	
	90 1,4-Dichlorobenzene	146	7.070	7.071	(1.001)	32142	4.00000	3.9(a)
	91 1,2,3 Trimethylbenzene	105	7.076	7.083	(1.678)	50693	4.00000	3.8(a)
	92 n-Butylbenzene	91	7.229	7.229	(1.023)	36472	4.00000	3.7(a)
	93 1,2-Dichlorobenzene	146	7.356	7.351	(1.041)	29858	4.00000	3.9(a)
	94 1,2-Dibromo-3-Chloropropane	157	7.843	7.843	(1.110)	7569	10.0000	9.3
	95 Hexachlorobutadiene	225	8.208	8.208	(1.162)	7139	4.00000	3.9(a)
	96 1,2,4-Trichlorobenzene	180	8.226	8.227	(1.164)	13905	4.00000	3.8(a)
	97 Naphthalene	128	8.409	8.409	(1.190)	36847	4.00000	3.8(a)
	98 1,2,3-Trichlorobenzene	180	8.518	8.519	(1.206)	12508	4.00000	3.6(a)
	99 2-Methylnaphthalene	142	9.023	9.024	(1.277)	6357	2.00000	1.8(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161414.D
Report Date: 17-Jan-2014 10:09

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv3.i
Lab File ID: 01161414.D
Lab Smp Id: 4.0 ICAL 10097-99
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Misc Info:

Calibration Date: 16-JAN-2014
Calibration Time: 22:32

Level: MED
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 6.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	80423	40212	160846	75044	-6.69
39 Pentafluorobenzen	375691	187846	751382	372010	-0.98
46 1,4 Difluorobenze	552756	276378	1105512	542527	-1.85
51 1,4 dioxane d8	72712	36356	145424	71237	-2.03
65 Chlorobenzene-d5	532816	266408	1065632	518282	-2.73
89 1,4-Dichlorobenze	290523	145262	581046	277639	-4.43

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	2.66	2.16	3.16	2.66	0.01
39 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
46 1,4 Difluorobenze	4.50	4.00	5.00	4.50	0.00
51 1,4 dioxane d8	4.86	4.36	5.36	4.86	0.13
65 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
89 1,4-Dichlorobenze	7.06	6.56	7.56	7.06	0.00

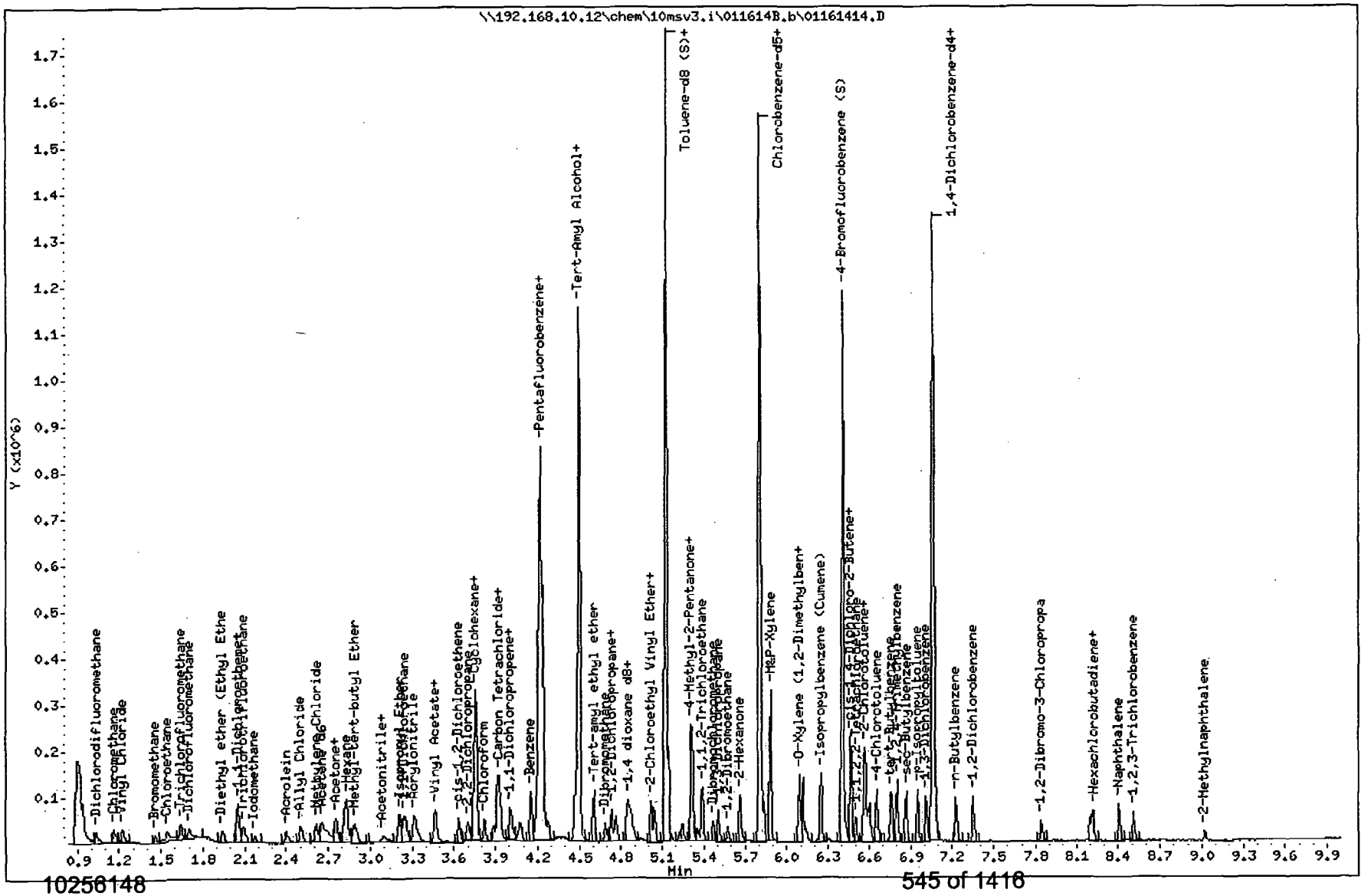
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161414.D
Date : 16-JAN-2014 21:57
Client ID:
Sample Info: 4.0 ICAL 10097-99

Instrument: 10msv3.i

Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



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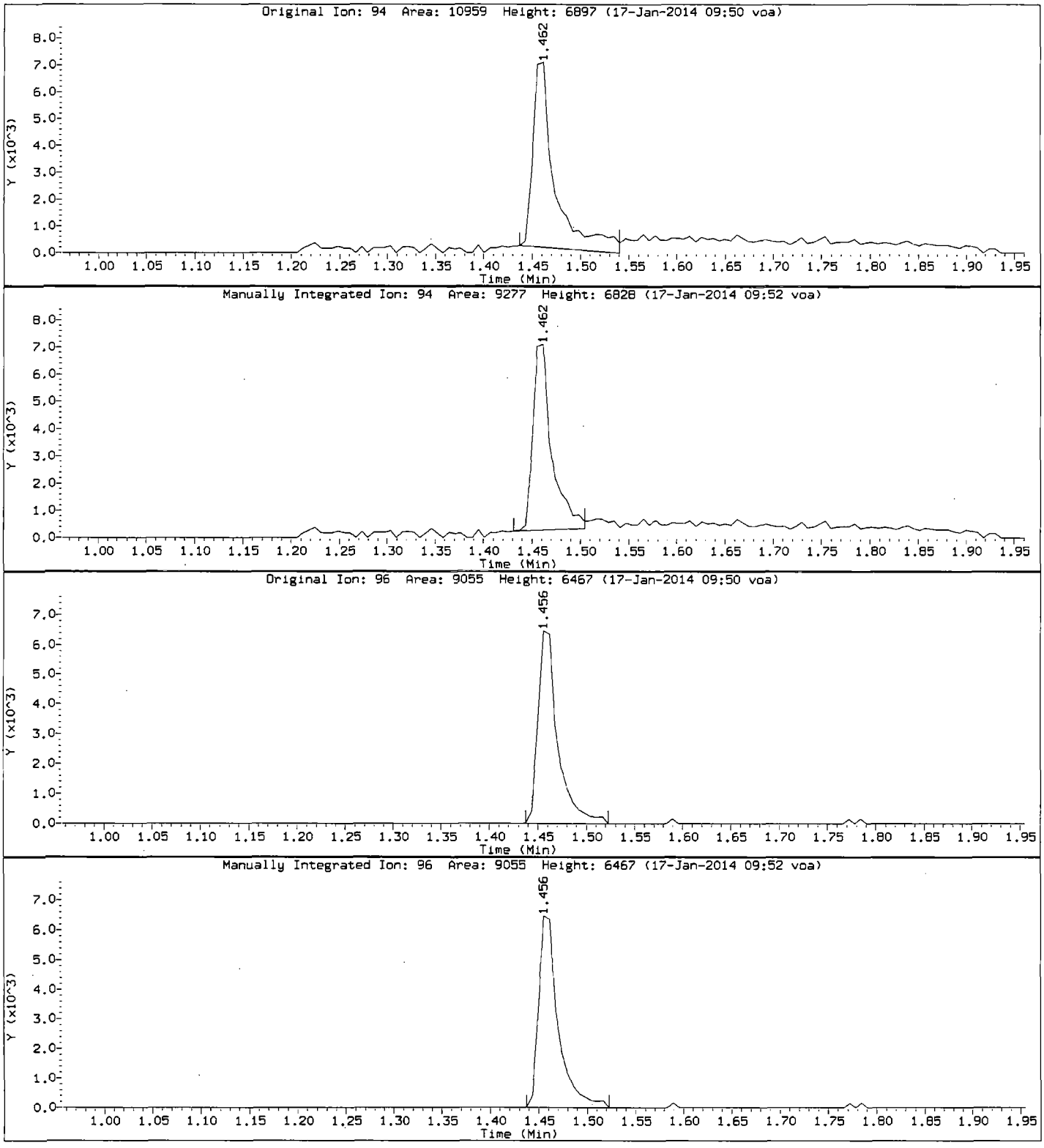
Injection Date: 16-JAN-2014 21:57
Instrument: 10msv3.i
Lab Sample ID: 4.0 ICAL 10097-99

Compound: Bromomethane
CAS Number: 74-83-9



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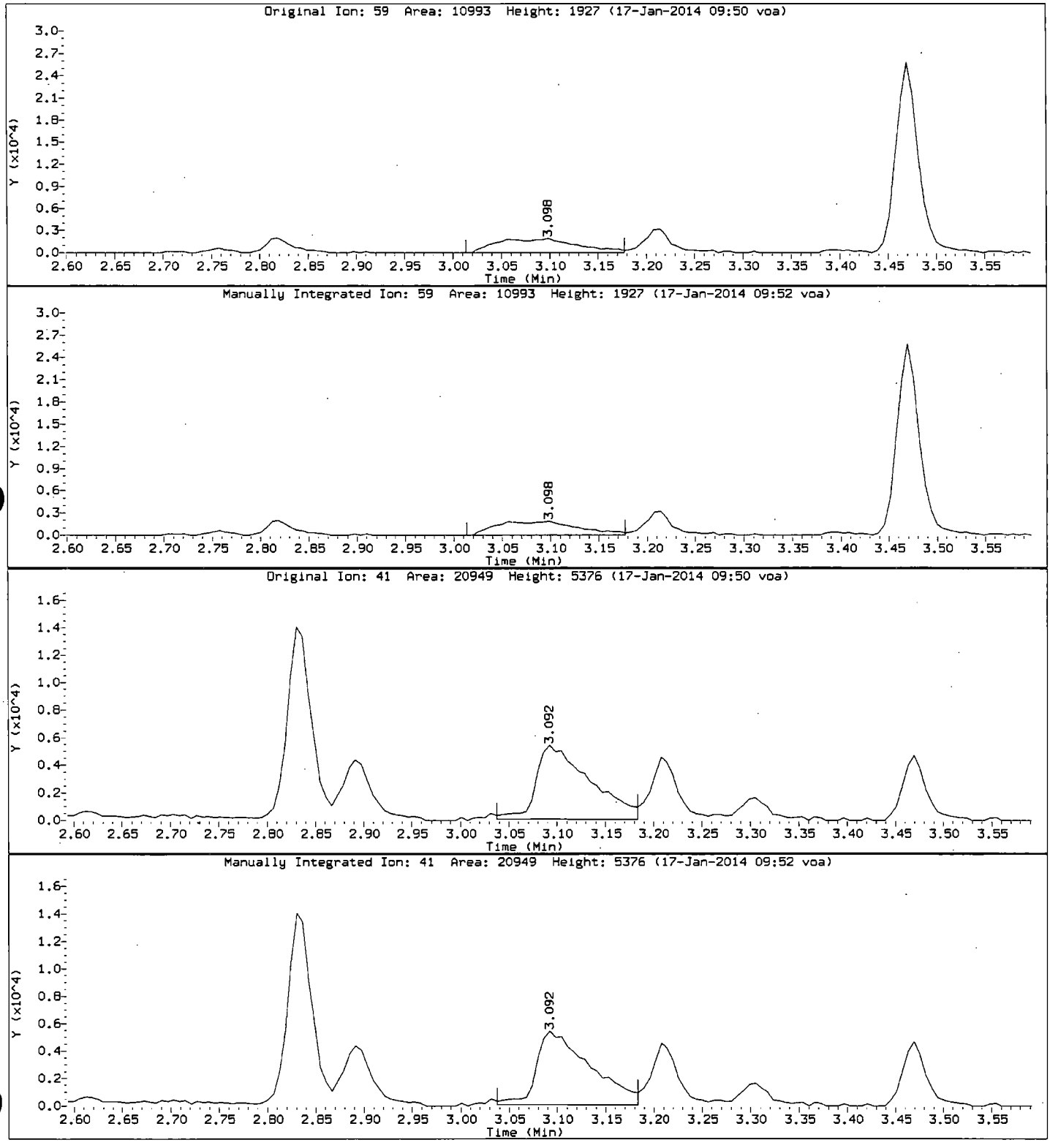
Injection Date: 16-JAN-2014 21:57
Instrument: 10msv3.i
Lab Sample ID: 4.0 ICAL 10097-99

Compound: tert-Butyl Alcohol
CAS Number: 75-65-0



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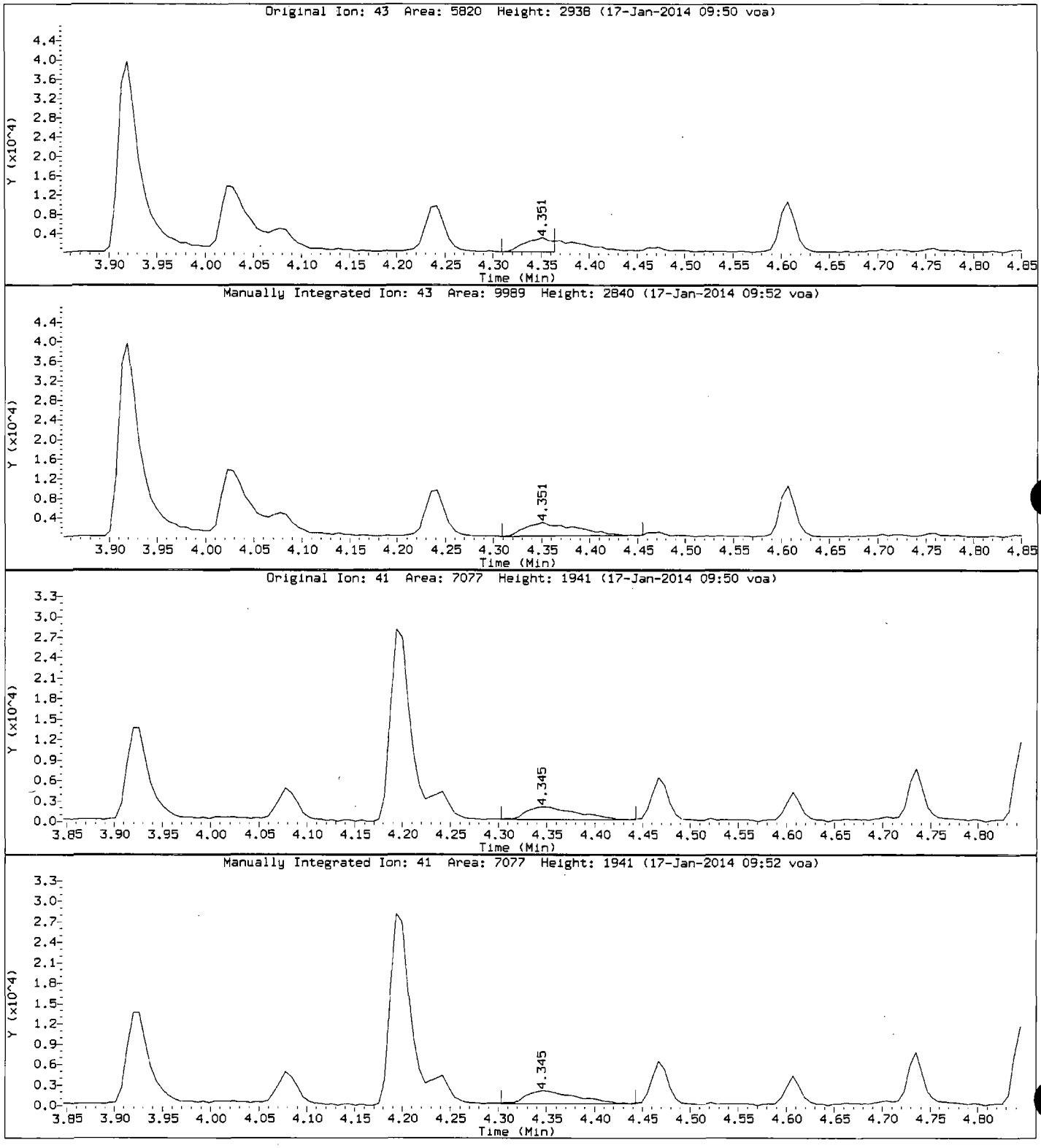
Injection Date: 16-JAN-2014 21:57
Instrument: 10msv3.i
Lab Sample ID: 4.0 ICAL 10097-99

Compound: Isobutanol
CAS Number: 78-83-1



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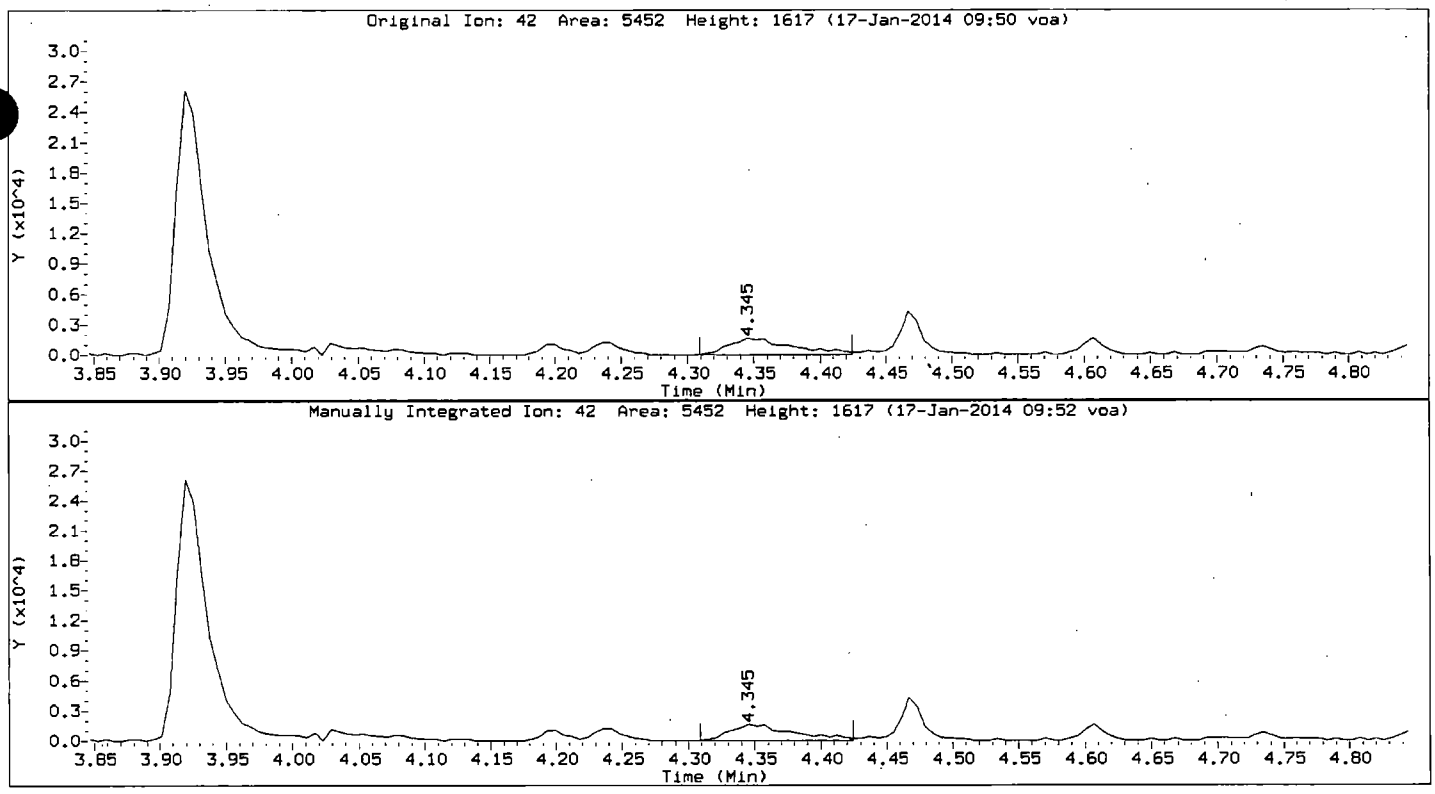
Injection Date: 16-JAN-2014 21:57
Instrument: 10msv3.i
Lab Sample ID: 4.0 ICAL 10097-99



Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161415.D
Report Date: 17-Jan-2014 10:09

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8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv3.i\011614B.b\01161415.D
Lab Smp Id: 10 ICAL 10097-99
Inj Date : 16-JAN-2014 22:14
Operator : HBP Inst ID: 10msv3.i
Smp Info : 10 ICAL 10097-99
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Meth Date : 17-Jan-2014 10:09 hpham Quant Type: ISTD
Cal Date : 16-JAN-2014 23:23 Cal File: 01161419.D
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10CCURTIS

Concentration Formula: Amt * DF * Uf * Vt/(Va * Ws * (1-(M/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.035	1.036	(0.246)	37278	10.0000	8.8
2	Chloromethane	50	1.163	1.170	(0.276)	63920	10.0000	10.3
3	Vinyl Chloride	62	1.224	1.224	(0.290)	47950	10.0000	9.4
4	Bromomethane	94	1.455	1.462	(0.345)	20813	10.0000	10
5	Chloroethane	64	1.546	1.547	(0.367)	20963	10.0000	9.6
6	Trichlorofluoromethane	101	1.644	1.644	(0.390)	36050	10.0000	9.2
7	Dichlorofluoromethane	67	1.704	1.705	(0.404)	37884	10.0000	9.9
8	Diethyl ether (Ethyl Ether)	59	1.948	1.948	(0.462)	25750	10.0000	9.6
9	1,1-Dichloroethene	96	2.051	2.052	(0.486)	35686	10.0000	9.4
10	Carbon Disulfide	76	2.051	2.052	(0.486)	113091	10.0000	9.3
11	Trichlorotrifluoroethane	101	2.094	2.093	(0.497)	33171	10.0000	9.1
12	Iodomethane	142	2.173	2.173	(0.515)	40353	10.0000	8.7
13	Acrolein	56	2.404	2.405	(0.570)	61550	100.000	99.8
14	Allyl Chloride	41	2.508	2.508	(0.595)	52999	10.0000	9.3
15	Methylene Chloride	84	2.617	2.618	(0.621)	40637	10.0000	10.0
* 16	Acetone d6	46	2.660	2.672	(1.000)	79226	100.000	
17	Acetone	58	2.708	2.709	(1.018)	15095	50.0000	50.2
18	trans-1,2-Dichloroethene	96	2.757	2.757	(0.654)	37812	10.0000	9.6
19	Hexane	86	2.836	2.830	(1.066)	14145	25.0000	22.4

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161415.D
Report Date: 17-Jan-2014 10:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 Methyl-tert-butyl Ether	73	2.891	2.897	(0.686)	95877	10.0000	9.7
	21 tert-Butyl Alcohol	59	3.067	3.074	(0.632)	27953	100.000	91.6(M)
	22 Acetonitrile	*41*	*3.085*	*3.086*	*(0.732)*	*49970*	*100.000*	*105*
	23 Isopropyl Ether	45	3.207	3.214	(0.761)	110999	10.0000	9.5
	24 1,1-Dichloroethane	63	3.262	3.262	(0.774)	66412	10.0000	9.6
	25 Acrylonitrile	53	3.317	3.323	(0.787)	127324	100.000	102
	26 Vinyl Acetate	43	3.475	3.469	(0.824)	64536	10.0000	9.8
	27 Ethyl-tert-butyl ether	59	3.469	3.469	(0.823)	106909	10.0000	9.8
	28 cis-1,2-Dichloroethene	96	3.639	3.640	(0.863)	40549	10.0000	9.3
	29 2,2-Dichloropropane	77	3.700	3.707	(0.877)	51888	10.0000	9.3
	30 Cyclohexane	56	3.755	3.761	(0.890)	277842	50.0000	46.0
	31 Bromochloromethane	130	3.767	3.767	(0.893)	27006	10.0000	10
	32 Chloroform	83	3.822	3.828	(0.906)	63304	10.0000	9.4
	33 Carbon Tetrachloride	117	3.889	3.895	(0.922)	38658	10.0000	8.9
	34 Tetrahydrofuran	72	3.919	3.926	(1.473)	45858	100.000	99.3
	35 1,1,1-Trichloroethane	97	3.937	3.938	(0.934)	53631	10.0000	9.1
	36 1,1-Dichloropropene	75	4.010	4.011	(0.951)	48868	10.0000	8.9
	37 2-Butanone	43	4.022	4.022	(0.954)	73797	50.0000	50.4
	38 Benzene	78	4.156	4.157	(0.986)	150477	10.0000	9.4
*	39 Pentafluorobenzene	168	4.217	4.218	(1.000)	374501	50.0000	
	40 Tert-amyl methyl ether	73	4.241	4.242	(1.006)	105782	10.0000	9.7
$	41 1,2-Dichloroethane d4 (S)	65	4.235	4.242	(1.004)	178606	50.0000	49.7(Q)
	42 1,2-Dichloroethane	62	4.278	4.277	(1.014)	45442	10.0000	9.4
	43 Isobutanol	43	4.345	4.344	(0.895)	27821	200.000	182
	44 Tert-Amyl Alcohol	59	4.387	4.388	(0.904)	24062	100.000	98.4
	45 Trichloroethene	*130*	*4.479*	*4.479*	*(0.996)*	*41938*	*10.0000*	*9.3(Q)*
*	46 1,4 Difluorobenzene	114	4.497	4.497	(1.000)	549380	50.0000	
	47 Tert-amyl ethyl ether	59	4.606	4.607	(1.024)	88992	10.0000	9.5
	48 Dibromomethane	174	4.692	4.692	(1.043)	26491	10.0000	10.1
	49 1,2-Dichloropropane	63	4.734	4.735	(1.053)	36855	10.0000	9.8
	50 Bromodichloromethane	83	4.765	4.771	(1.060)	44089	10.0000	9.4
*	51 1,4 dioxane d8	96	4.856	4.856	(1.000)	73234	2000.00	
	52 1,4-Dioxane (P-Dioxane)	88	4.874	4.868	(1.004)	9734	200.000	205(Q)
	53 2-Chloroethyl Vinyl Ether	63	5.020	5.021	(1.116)	54113	25.0000	24.5
	54 cis-1,3-Dichloropropene	75	5.044	5.051	(1.122)	55091	10.0000	9.4
$	55 Toluene-d8 (S)	98	5.123	5.124	(0.883)	621240	50.0000	50.1
	56 Toluene	92	5.148	5.148	(0.887)	98749	10.0000	9.6
	57 4-Methyl-2-Pentanone	43	5.306	5.307	(0.914)	161076	50.0000	50.2
	58 Tetrachloroethene	166	5.312	5.313	(0.915)	43752	10.0000	9.4
	59 trans-1,3-Dichloropropene	75	5.324	5.325	(0.917)	51673	10.0000	9.6
	60 1,1,2-Trichloroethane	97	5.391	5.392	(0.929)	33757	10.0000	9.6
	61 Dibromochloromethane	129	5.470	5.471	(0.942)	33241	10.0000	9.4
	62 1,3-Dichloropropane	76	5.507	5.513	(0.949)	56738	10.0000	9.7
	63 1,2-Dibromoethane	107	5.580	5.580	(0.961)	35775	10.0000	9.6
	64 2-Hexanone	43	5.665	5.665	(0.976)	111258	50.0000	50.6
*	65 Chlorobenzene-d5	117	5.805	5.805	(1.000)	523959	50.0000	
	66 Chlorobenzene	112	5.811	5.811	(1.001)	107196	10.0000	9.6
	67 Ethylbenzene	91	5.817	5.818	(1.002)	174822	10.0000	9.4
	68 1,1,1,2-Tetrachloroethane	131	5.841	5.842	(1.006)	34581	10.0000	9.4
	69 M&P-Xylene	106	5.884	5.884	(1.014)	135940	20.0000	19.2
	70 O-Xylene (1,2-Dimethylbenzene)	106	6.091	6.097	(1.049)	63403	10.0000	9.6
	71 Styrene	104	6.121	6.122	(1.054)	113806	10.0000	9.8
	72 Bromoform	173	6.146	6.146	(1.059)	22773	10.0000	8.8(TQ)
	73 Isopropylbenzene (Cumene)	105	6.249	6.249	(1.076)	156019	10.0000	9.6

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161415.D
Report Date: 17-Jan-2014 10:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	74 4-Bromofluorobenzene (S)	95	6.407	6.408	(0.907)	246349	50.0000	50.2
	75 cis-1,4-Dichloro-2-Butene	53	6.438	6.438	(0.911)	13045	10.0000	9.8
	76 Bromobenzene	156	6.468	6.468	(0.916)	47395	10.0000	9.6
	77 n-Propylbenzene	91	6.468	6.468	(0.916)	175167	10.0000	9.6
	78 1,1,2,2-Tetrachloroethane	83	6.504	6.511	(0.921)	42420	10.0000	9.7
	79 2-Chlorotoluene	91	6.565	6.566	(0.929)	118603	10.0000	9.8
	80 1,3,5-Trimethylbenzene	105	6.571	6.578	(0.930)	122747	10.0000	9.5
	81 1,2,3-Trichloropropane	110	6.590	6.596	(0.933)	13025	10.0000	9.8(Q)
	82 trans-1,4-Dichloro-2-Butene	53	6.608	6.608	(0.935)	28442	25.0000	25.1
	83 4-Chlorotoluene	91	6.657	6.663	(0.942)	113886	10.0000	9.8
	84 tert-Butylbenzene	119	6.766	6.767	(0.958)	101226	10.0000	9.6
	85 1,2,4-Trimethylbenzene	105	6.803	6.803	(0.963)	125121	10.0000	9.7
	86 sec-Butylbenzene	105	6.869	6.870	(0.972)	137930	10.0000	9.4
	87 p-Isopropyltoluene	119	6.955	6.955	(0.985)	120159	10.0000	9.7
	88 1,3-Dichlorobenzene	146	7.015	7.016	(0.993)	77903	10.0000	9.8
*	89 1,4-Dichlorobenzene-d4	152	7.064	7.065	(1.000)	283069	50.0000	
	90 1,4-Dichlorobenzene	146	7.070	7.071	(1.001)	81862	10.0000	9.6
	91 1,2,3 Trimethylbenzene	105	7.076	7.083	(1.678)	129929	10.0000	9.7
	92 n-Butylbenzene	91	7.228	7.229	(1.023)	98065	10.0000	9.7
	93 1,2-Dichlorobenzene	146	7.350	7.351	(1.040)	76917	10.0000	9.9
	94 1,2-Dibromo-3-Chloropropane	157	7.843	7.843	(1.110)	19732	25.0000	23.8
	95 Hexachlorobutadiene	225	8.208	8.208	(1.162)	18366	10.0000	9.9
	96 1,2,4-Trichlorobenzene	180	8.226	8.227	(1.164)	37899	10.0000	10.0
	97 Naphthalene	128	8.409	8.409	(1.190)	97879	10.0000	9.9
	98 1,2,3-Trichlorobenzene	180	8.518	8.519	(1.206)	34878	10.0000	10
	99 2-Methylnaphthalene	142	9.029	9.024	(1.278)	16808	5.00000	4.6(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161415.D
Report Date: 17-Jan-2014 10:09

Pace Analytical Services

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv3.i
Lab File ID: 01161415.D
Lab Smp Id: 10 ICAL 10097-99
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Misc Info:

Calibration Date: 16-JAN-2014
Calibration Time: 22:32
Level: MED
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 6.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	80423	40212	160846	79226	-1.49
39 Pentafluorobenzen	375691	187846	751382	374501	-0.32
46 1,4 Difluorobenze	552756	276378	1105512	549380	-0.61
51 1,4 dioxane d8	72712	36356	145424	73234	0.72
65 Chlorobenzene-d5	532816	266408	1065632	523959	-1.66
89 1,4-Dichlorobenze	290523	145262	581046	283069	-2.57

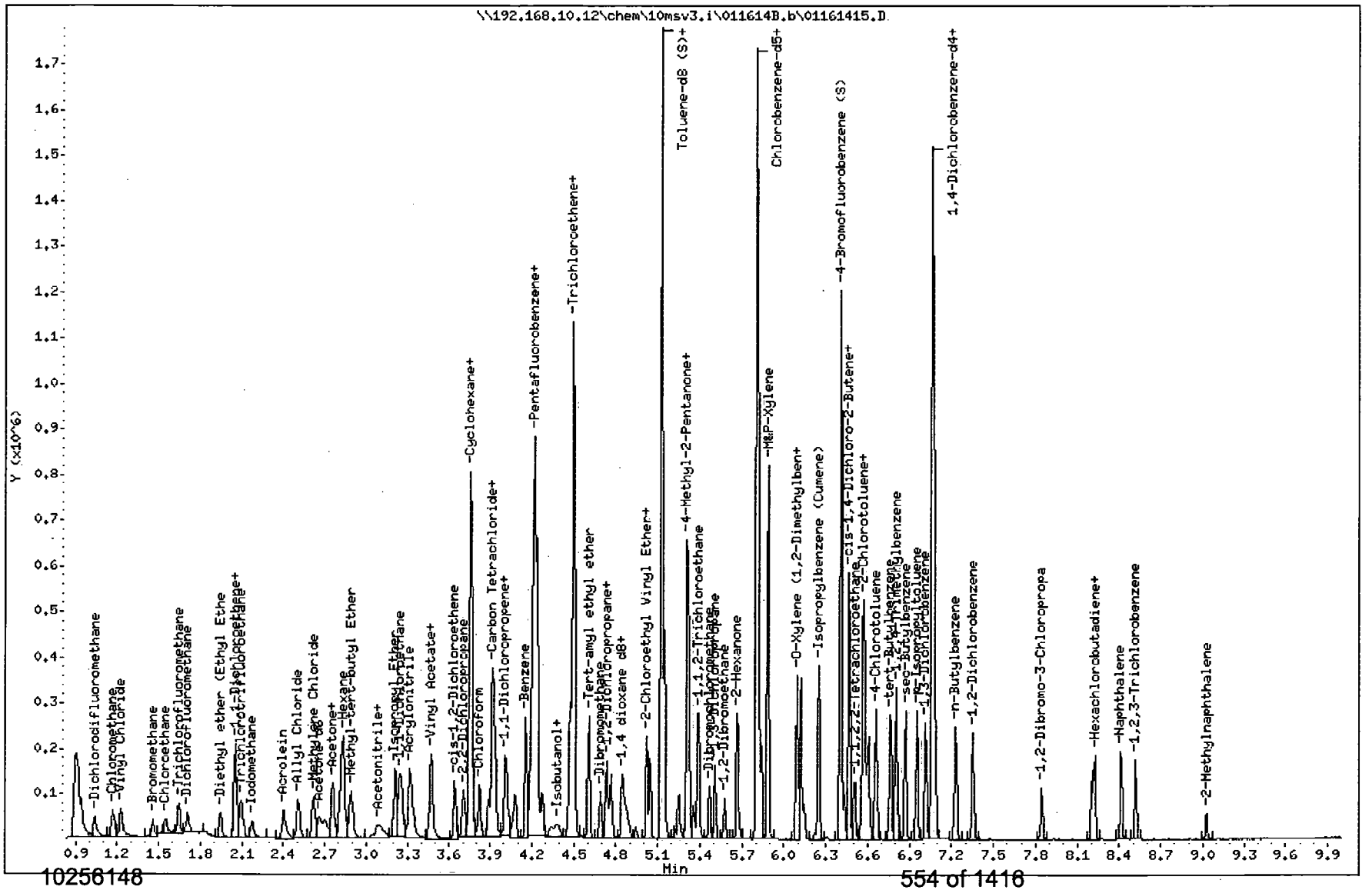
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	2.66	2.16	3.16	2.66	0.00
39 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
46 1,4 Difluorobenze	4.50	4.00	5.00	4.50	0.00
51 1,4 dioxane d8	4.86	4.36	5.36	4.86	0.00
65 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
89 1,4-Dichlorobenze	7.06	6.56	7.56	7.06	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161415.D
Date : 16-JAN-2014 22:14
Client ID:
Sample Info: 10 ICAL 10097-99

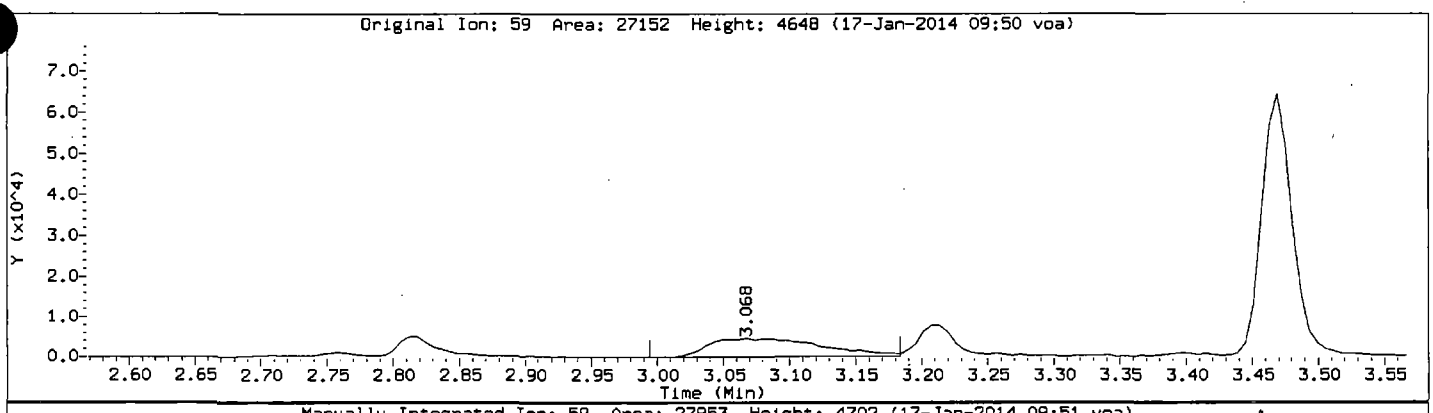
Instrument: 10msv3.i

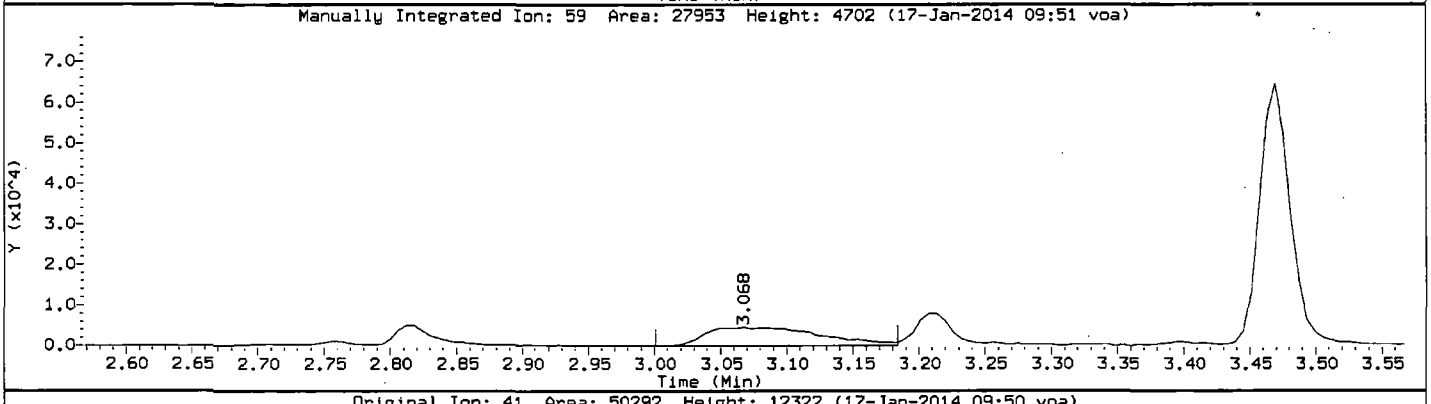
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18

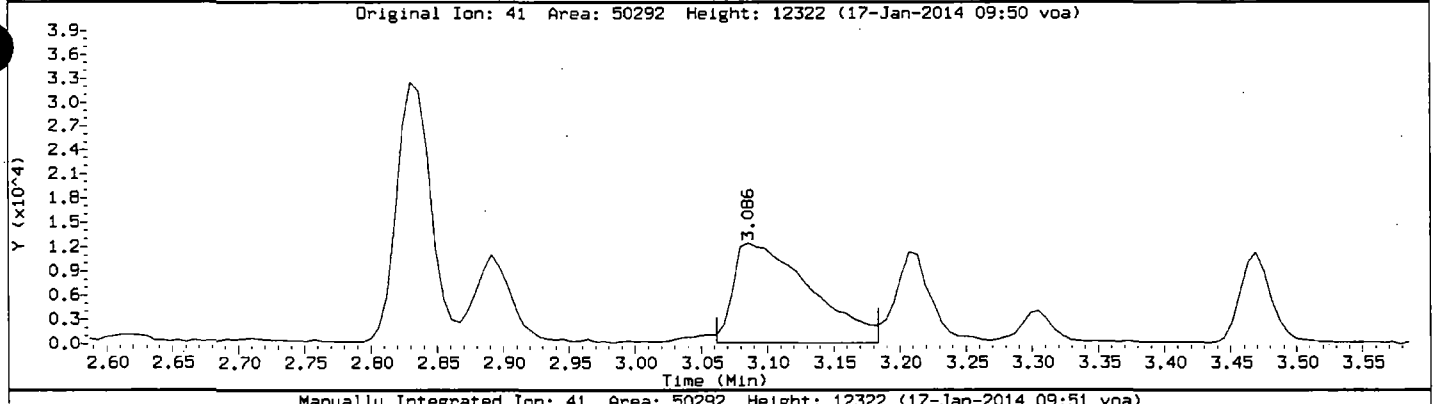


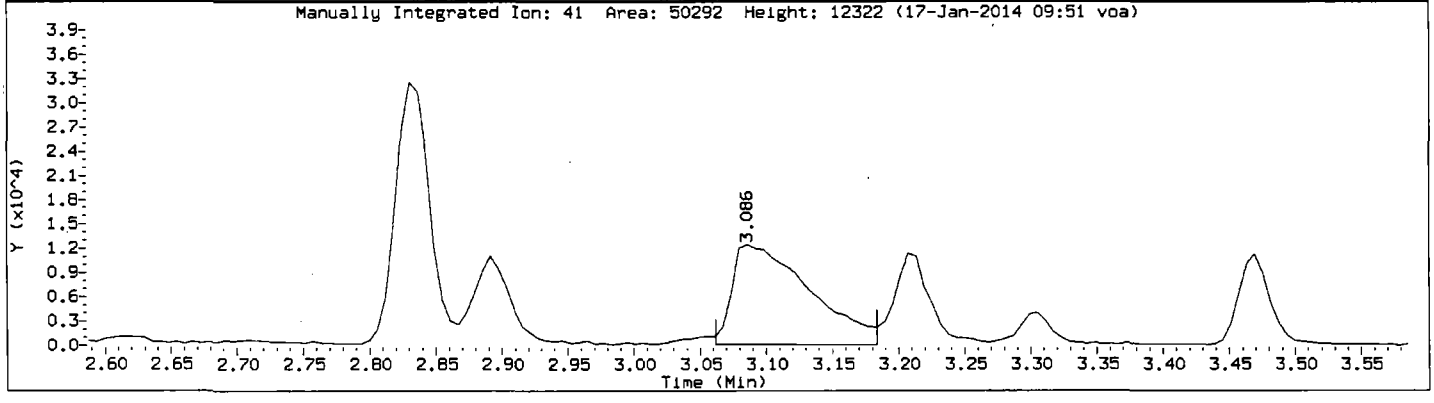
Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01101415.D
Injection Date: 16-JAN-2014 22:14
Instrument: 10msv3.i
Lab Sample ID: 10 ICAL 10097-99

Compound: tert-Butyl Alcohol
CAS Number: 75-65-0









Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161416.D
Report Date: 17-Jan-2014 10:09

Pace Analytical Services

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv3.i\011614B.b\01161416.D
Lab Smp Id: 20 ICAL 10097-99
Inj Date : 16-JAN-2014 22:32
Operator : HBP Inst ID: 10msv3.i
Smp Info : 20 ICAL 10097-99
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Meth Date : 17-Jan-2014 10:09 hpham Quant Type: ISTD
Cal Date : 16-JAN-2014 23:23 Cal File: 01161419.D
Als bottle: 16 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10CCURTIS

Concentration Formula: Amt * DF * Uf * Vt/(Va * Ws * (1-(M/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.035	1.036	(0.246)	83513	20.0000	19.7
2	Chloromethane	50	1.163	1.170	(0.276)	123728	20.0000	21.1
3	Vinyl Chloride	62	1.224	1.224	(0.290)	102450	20.0000	19.9
4	Bromomethane	94	1.455	1.462	(0.345)	40293	20.0000	19.3
5	Chloroethane	64	1.546	1.547	(0.367)	42568	20.0000	19.5
6	Trichlorofluoromethane	101	1.644	1.644	(0.390)	77093	20.0000	19.6
7	Dichlorofluoromethane	67	1.704	1.705	(0.404)	76705	20.0000	19.5
8	Diethyl ether (Ethyl Ether)	59	1.942	1.948	(0.461)	52061	20.0000	19.3
9	1,1-Dichloroethene	96	2.051	2.052	(0.486)	74372	20.0000	19.6
10	Carbon Disulfide	76	2.051	2.052	(0.486)	234742	20.0000	19.2
11	Trichlorotrifluoroethane	101	2.094	2.093	(0.497)	74353	20.0000	20.4
12	Iodomethane	142	2.173	2.173	(0.515)	95232	20.0000	17.7
13	Acrolein	56	2.398	2.405	(0.569)	126680	200.000	205
14	Allyl Chloride	41	2.507	2.508	(0.595)	107297	20.0000	18.7
15	Methylene Chloride	84	2.617	2.618	(0.621)	82112	20.0000	20.6
* 16	Acetone d6	46	2.660	2.672	(1.000)	80423	100.000	
17	Acetone	58	2.702	2.709	(1.016)	30521	100.000	105
18	trans-1,2-Dichloroethene	96	2.757	2.757	(0.654)	78500	20.0000	19.9
19	Hexane	86	2.830	2.830	(1.064)	30335	50.0000	47.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 Methyl-tert-butyl Ether	73	2.891	2.897	(0.686)	195999	20.0000	19.8
	21 tert-Butyl Alcohol	59	3.061	3.074	(0.630)	58548	200.000	193(Q)
	22 Acetonitrile	41	3.085	3.086	(0.732)	103443	200.000	221
	23 Isopropyl Ether	45	3.207	3.214	(0.761)	228361	20.0000	19.4
	24 1,1-Dichloroethane	63	3.262	3.262	(0.774)	134365	20.0000	19.5
	25 Acrylonitrile	53	3.317	3.323	(0.787)	262044	200.000	209
	26 Vinyl Acetate	43	3.469	3.469	(0.823)	137542	20.0000	20.7
	27 Ethyl-tert-butyl ether	59	3.469	3.469	(0.823)	216682	20.0000	19.8
	28 cis-1,2-Dichloroethene	96	3.639	3.640	(0.863)	83631	20.0000	19.2
	29 2,2-Dichloropropane	77	3.706	3.707	(0.879)	107630	20.0000	19.2
	30 Cyclohexane	56	3.755	3.761	(0.890)	599438	100.000	98.8
	31 Bromochloromethane	130	3.767	3.767	(0.893)	54609	20.0000	20.1
	32 Chloroform	83	3.822	3.828	(0.906)	130263	20.0000	19.4
	33 Carbon Tetrachloride	117	3.888	3.895	(0.922)	82618	20.0000	18.9
	34 Tetrahydrofuran	72	3.919	3.926	(1.473)	88955	200.000	190
	35 1,1,1-Trichloroethane	97	3.937	3.938	(0.934)	113248	20.0000	19.2
	36 1,1-Dichloropropene	75	4.010	4.011	(0.951)	106516	20.0000	19.3
	37 2-Butanone	43	4.022	4.022	(0.954)	148380	100.000	101
	38 Benzene	78	4.156	4.157	(0.986)	308802	20.0000	19.3
*	39 Pentafluorobenzene	168	4.217	4.218	(1.000)	375691	50.0000	
	40 Tert-amyl methyl ether	73	4.241	4.242	(1.006)	215424	20.0000	19.7
$	41 1,2-Dichloroethane d4 (S)	65	4.235	4.242	(1.004)	184014	50.0000	51.1(Q)
	42 1,2-Dichloroethane	62	4.278	4.277	(1.014)	93277	20.0000	19.3
	43 Isobutanol	43	4.345	4.344	(0.895)	63877	400.000	367
	44 Tert-Amyl Alcohol	59	4.387	4.388	(0.904)	50609	200.000	208
	45 Trichloroethene	130	4.479	4.479	(0.996)	87905	20.0000	19.4
*	46 1,4 Difluorobenzene	114	4.497	4.497	(1.000)	552756	50.0000	
	47 Tert-amyl ethyl ether	59	4.606	4.607	(1.024)	186799	20.0000	19.8
	48 Dibromomethane	174	4.691	4.692	(1.043)	53945	20.0000	20.4
	49 1,2-Dichloropropane	63	4.734	4.735	(1.053)	75190	20.0000	19.8
	50 Bromodichloromethane	83	4.764	4.771	(1.060)	93771	20.0000	19.8
*	51 1,4 dioxane d8	96	4.856	4.856	(1.000)	72712	2000.00	
	52 1,4-Dioxane (P-Dioxane)	88	4.868	4.868	(1.002)	18930	400.000	401
	53 2-Chloroethyl Vinyl Ether	63	5.020	5.021	(1.116)	112641	50.0000	50.7
	54 cis-1,3-Dichloropropene	75	5.044	5.051	(1.122)	116572	20.0000	19.8
$	55 Toluene-d8 (S)	98	5.123	5.124	(0.883)	627981	50.0000	49.8
	56 Toluene	92	5.148	5.148	(0.887)	199517	20.0000	19.1
	57 4-Methyl-2-Pentanone	43	5.306	5.307	(0.914)	329968	100.000	101
	58 Tetrachloroethene	166	5.312	5.313	(0.915)	91932	20.0000	19.4
	59 trans-1,3-Dichloropropene	75	5.324	5.325	(0.917)	110186	20.0000	20.0
	60 1,1,2-Trichloroethane	97	5.391	5.392	(0.929)	70195	20.0000	19.6
	61 Dibromochloromethane	129	5.470	5.471	(0.942)	72501	20.0000	20.0
	62 1,3-Dichloropropane	76	5.507	5.513	(0.949)	116809	20.0000	19.6
	63 1,2-Dibromoethane	107	5.580	5.580	(0.961)	75100	20.0000	19.8
	64 2-Hexanone	43	5.665	5.665	(0.976)	225484	100.000	101
*	65 Chlorobenzene-d5	117	5.805	5.805	(1.000)	532816	50.0000	
	66 Chlorobenzene	112	5.811	5.811	(1.001)	218306	20.0000	19.3
	67 Ethylbenzene	91	5.817	5.818	(1.002)	360421	20.0000	19.1
	68 1,1,1,2-Tetrachloroethane	131	5.841	5.842	(1.006)	71975	20.0000	19.3
	69 M&P-Xylene	106	5.884	5.884	(1.014)	278930	40.0000	38.8
	70 O-Xylene (1,2-Dimethylbenzene)	106	6.091	6.097	(1.049)	134224	20.0000	20.0
	71 Styrene	104	6.121	6.122	(1.054)	236709	20.0000	20.0
	72 Bromoform	173	6.145	6.146	(1.059)	49501	20.0000	18.9(TQ)
	73 Isopropylbenzene (Cumene)	105	6.249	6.249	(1.076)	326316	20.0000	19.7

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161416.D
Report Date: 17-Jan-2014 10:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	74 4-Bromofluorobenzene (S)	95	6.407	6.408	(0.907)	252134	50.0000	50.0
	75 cis-1,4-Dichloro-2-Butene	53	6.437	6.438	(0.911)	27054	20.0000	19.8
	76 Bromobenzene	156	6.468	6.468	(0.916)	96989	20.0000	19.1
	77 n-Propylbenzene	91	6.468	6.468	(0.916)	366799	20.0000	19.7
	78 1,1,2,2-Tetrachloroethane	83	6.504	6.511	(0.921)	89343	20.0000	20.0
	79 2-Chlorotoluene	91	6.565	6.566	(0.929)	243680	20.0000	19.6
	80 1,3,5-Trimethylbenzene	105	6.571	6.578	(0.930)	257268	20.0000	19.5
	81 1,2,3-Trichloropropane	110	6.590	6.596	(0.933)	27259	20.0000	20.1(Q)
	82 trans-1,4-Dichloro-2-Butene	53	6.608	6.608	(0.935)	59845	50.0000	51.4
	83 4-Chlorotoluene	91	6.656	6.663	(0.942)	233493	20.0000	19.5
	84 tert-Butylbenzene	119	6.760	6.767	(0.957)	210757	20.0000	19.5
	85 1,2,4-Trimethylbenzene	105	6.802	6.803	(0.963)	262433	20.0000	19.8
	86 sec-Butylbenzene	105	6.869	6.870	(0.972)	292979	20.0000	19.6
	87 p-Isopropyltoluene	119	6.955	6.955	(0.985)	252915	20.0000	19.9
	88 1,3-Dichlorobenzene	146	7.015	7.016	(0.993)	160688	20.0000	19.7
*	89 1,4-Dichlorobenzene-d4	152	7.064	7.065	(1.000)	290523	50.0000	
	90 1,4-Dichlorobenzene	146	7.070	7.071	(1.001)	168870	20.0000	19.4
	91 1,2,3 Trimethylbenzene	105	7.076	7.083	(1.678)	269238	20.0000	20.1
	92 n-Butylbenzene	91	7.228	7.229	(1.023)	211080	20.0000	20.3
	93 1,2-Dichlorobenzene	146	7.350	7.351	(1.040)	156580	20.0000	19.7
	94 1,2-Dibromo-3-Chloropropane	157	7.843	7.843	(1.110)	42838	50.0000	50.4
	95 Hexachlorobutadiene	225	8.208	8.208	(1.162)	40751	20.0000	21.4
	96 1,2,4-Trichlorobenzene	180	8.226	8.227	(1.164)	79850	20.0000	20.6
	97 Naphthalene	128	8.415	8.409	(1.191)	206767	20.0000	20.4
	98 1,2,3-Trichlorobenzene	180	8.518	8.519	(1.206)	73108	20.0000	20.3
	99 2-Methylnaphthalene	142	9.029	9.024	(1.278)	38869	10.0000	10.3

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161416.D
Report Date: 17-Jan-2014 10:09

Pace Analytical Services

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv3.i
Lab File ID: 01161416.D
Lab Smp Id: 20 ICAL 10097-99
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Misc Info:

Calibration Date: 16-JAN-2014
Calibration Time: 22:32
Level: MED
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 6.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	80423	40212	160846	80423	0.00
39 Pentafluorobenzen	375691	187846	751382	375691	0.00
46 1,4 Difluorobenze	552756	276378	1105512	552756	0.00
51 1,4 dioxane d8	72712	36356	145424	72712	0.00
65 Chlorobenzene-d5	532816	266408	1065632	532816	0.00
89 1,4-Dichlorobenze	290523	145262	581046	290523	0.00

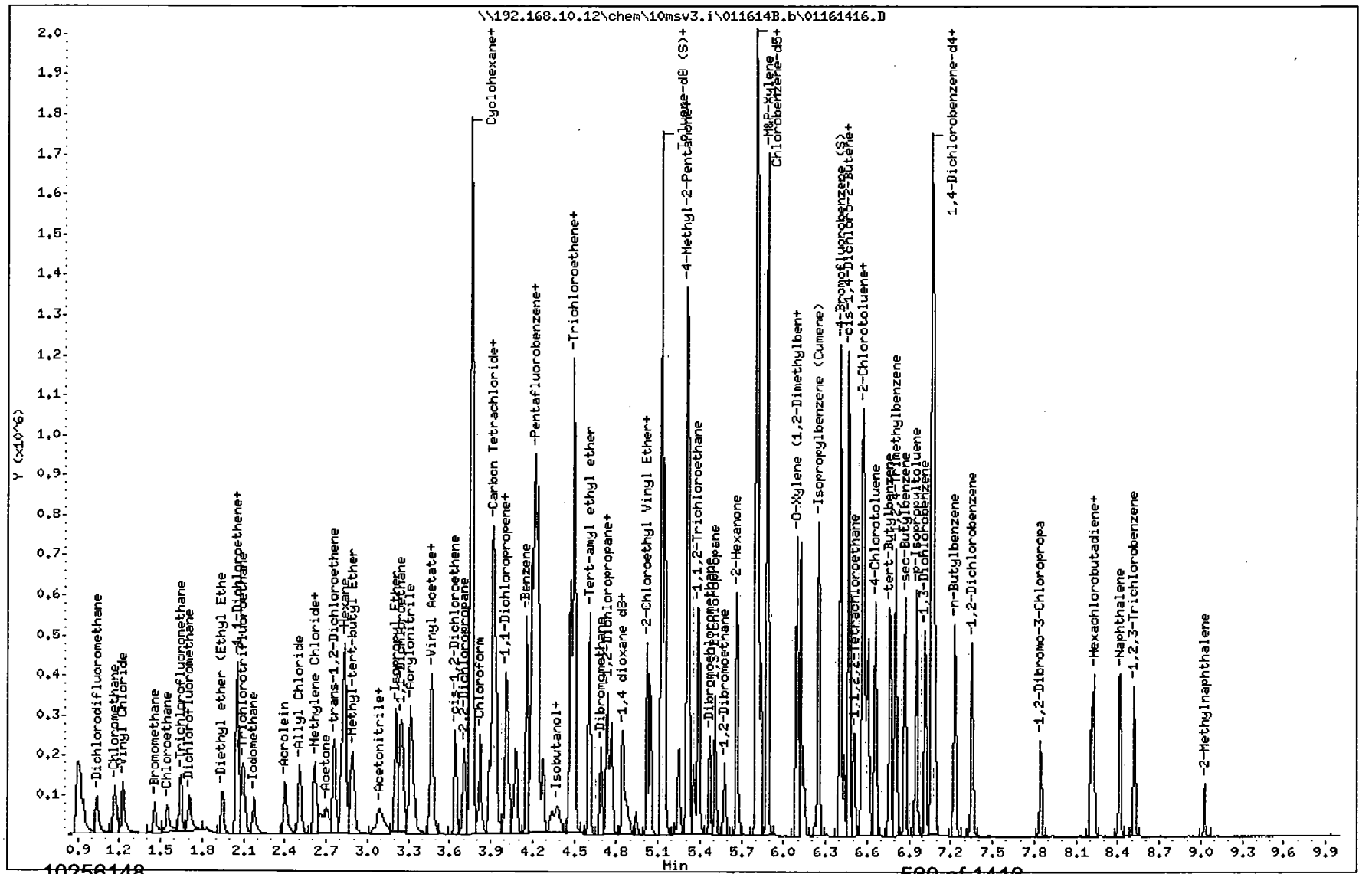
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	2.66	2.16	3.16	2.66	0.00
39 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
46 1,4 Difluorobenze	4.50	4.00	5.00	4.50	0.00
51 1,4 dioxane d8	4.86	4.36	5.36	4.86	0.00
65 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
89 1,4-Dichlorobenze	7.06	6.56	7.56	7.06	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161416.D
Date : 16-JAN-2014 22:32
Client ID:
Sample Info: 20 ICAL 10097-99

Instrument: 10msv3.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\Chem\10msv3.i\011614B.b\0116l416.D
Injection Date: 16-JAN-2014 22:32
Instrument: 10msv3.i
Lab Sample ID: 20 ICAL 10097-99
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv3.i\011614B.b\01161417.D
Lab Smp Id: 50 ICAL 10097-99
Inj Date : 16-JAN-2014 22:49
Operator : HBP Inst ID: 10msv3.i
Smp Info : 50 ICAL 10097-99
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Meth Date : 17-Jan-2014 10:09 hpham Quant Type: ISTD
Cal Date : 16-JAN-2014 23:23 Cal File: 01161419.D
Als bottle: 17 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10CCURTIS

Concentration Formula: Amt * DF * Uf * Vt/(Va * Ws * (1-(M/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.035	1.036	(0.246)	212753	50.0000	48.0
2	Chloromethane	50	1.163	1.170	(0.276)	285643	50.0000	48.6
3	Vinyl Chloride	62	1.224	1.224	(0.290)	255537	50.0000	47.5
4	Bromomethane	94	1.455	1.462	(0.345)	98262	50.0000	44.7
5	Chloroethane	64	1.546	1.547	(0.367)	106712	50.0000	46.7
6	Trichlorofluoromethane	101	1.644	1.644	(0.390)	203166	50.0000	49.3
7	Dichlorofluoromethane	67	1.705	1.705	(0.404)	190411	50.0000	46.8
8	Diethyl ether (Ethyl Ether)	59	1.942	1.948	(0.461)	129295	50.0000	45.8
9	1,1-Dichloroethene	96	2.051	2.052	(0.486)	191004	50.0000	48.1
10	Carbon Disulfide	76	2.051	2.052	(0.486)	603136	50.0000	47.1
11	Trichlorotrifluoroethane	101	2.094	2.093	(0.497)	184211	50.0000	48.3
12	Iodomethane	142	2.173	2.173	(0.515)	287907	50.0000	46.9
13	Acrolein	56	2.398	2.405	(0.569)	304504	500.000	471
14	Allyl Chloride	41	2.508	2.508	(0.595)	273391	50.0000	45.5
15	Methylene Chloride	84	2.617	2.618	(0.621)	201365	50.0000	48.9
* 16	Acetone d6	46	2.660	2.672	(1.000)	78196	100.000	
17	Acetone	58	2.702	2.709	(1.016)	70710	250.000	255
18	trans-1,2-Dichloroethene	96	2.757	2.757	(0.654)	200058	50.0000	48.4
19	Hexane	86	2.836	2.830	(1.066)	78859	125.000	127

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 Methyl-tert-butyl Ether	73	2.891	2.897	(0.686)	484367	50.0000	46.8
	21 tert-Butyl Alcohol	59	3.067	3.074	(0.631)	141614	500.000	510
	22 Acetonitrile	41	3.080	3.086	(0.730)	216725	500.000	446
	23 Isopropyl Ether	45	3.207	3.214	(0.761)	573977	50.0000	46.7
	24 1,1-Dichloroethane	63	3.262	3.262	(0.774)	342335	50.0000	47.4
	25 Acrylonitrile	53	3.317	3.323	(0.787)	619789	500.000	472
	26 Vinyl Acetate	43	3.469	3.469	(0.823)	354802	50.0000	51.1
	27 Ethyl-tert-butyl ether	59	3.469	3.469	(0.823)	538368	50.0000	46.9
	28 cis-1,2-Dichloroethene	96	3.639	3.640	(0.863)	211652	50.0000	46.4
	29 2,2-Dichloropropane	77	3.706	3.707	(0.879)	279775	50.0000	47.8
	30 Cyclohexane	56	3.755	3.761	(0.890)	1526364	250.000	241
	31 Bromochloromethane	130	3.767	3.767	(0.893)	137686	50.0000	48.5
	32 Chloroform	83	3.822	3.828	(0.906)	334666	50.0000	47.6
	33 Carbon Tetrachloride	117	3.889	3.895	(0.922)	223289	50.0000	48.8
	34 Tetrahydrofuran	72	3.919	3.926	(1.473)	216089	500.000	474
	35 1,1,1-Trichloroethane	97	3.937	3.938	(0.934)	302801	50.0000	49.0
	36 1,1-Dichloropropene	75	4.010	4.011	(0.951)	265920	50.0000	46.0
	37 2-Butanone	43	4.022	4.022	(0.954)	364883	250.000	237
	38 Benzene	78	4.156	4.157	(0.986)	784709	50.0000	46.9
*	39 Pentafluorobenzene	168	4.217	4.218	(1.000)	393013	50.0000	
	40 Tert-amyl methyl ether	73	4.235	4.242	(1.004)	537742	50.0000	47.0
$	41 1,2-Dichloroethane d4 (S)	65	4.235	4.242	(1.004)	183212	50.0000	48.6
	42 1,2-Dichloroethane	62	4.278	4.277	(1.014)	237386	50.0000	46.9
	43 Isobutanol	43	4.339	4.344	(0.892)	160709	1000.00	934
	44 Tert-Amyl Alcohol	59	4.381	4.388	(0.901)	115806	500.000	521
	45 Trichloroethene	130	4.479	4.479	(0.996)	225961	50.0000	48.1
*	46 1,4 Difluorobenzene	114	4.497	4.497	(1.000)	574587	50.0000	
	47 Tert-amyl ethyl ether	59	4.606	4.607	(1.024)	467224	50.0000	47.5
	48 Dibromomethane	174	4.692	4.692	(1.043)	138554	50.0000	50.0
	49 1,2-Dichloropropane	63	4.734	4.735	(1.053)	190408	50.0000	48.2
	50 Bromodichloromethane	83	4.765	4.771	(1.060)	246071	50.0000	50.0
*	51 1,4 dioxane d8	96	4.862	4.856	(1.000)	66579	2000.00	
	52 1,4-Dioxane (P-Dioxane)	88	4.868	4.868	(1.001)	44355	1000.00	1030
	53 2-Chloroethyl Vinyl Ether	63	5.020	5.021	(1.116)	284642	125.000	123
	54 cis-1,3-Dichloropropene	75	5.044	5.051	(1.122)	302858	50.0000	49.6
$	55 Toluene-d8 (S)	98	5.124	5.124	(0.883)	649904	50.0000	50.6
	56 Toluene	92	5.148	5.148	(0.887)	496207	50.0000	46.6
	57 4-Methyl-2-Pentanone	43	5.306	5.307	(0.914)	785548	250.000	236
	58 Tetrachloroethene	166	5.312	5.313	(0.915)	229931	50.0000	47.7
	59 trans-1,3-Dichloropropene	75	5.318	5.325	(0.916)	285399	50.0000	51.0
	60 1,1,2-Trichloroethane	97	5.391	5.392	(0.929)	176475	50.0000	48.5
	61 Dibromochloromethane	129	5.470	5.471	(0.942)	191962	50.0000	52.1
	62 1,3-Dichloropropane	76	5.507	5.513	(0.949)	292775	50.0000	48.2
	63 1,2-Dibromoethane	107	5.574	5.580	(0.960)	187853	50.0000	48.6
	64 2-Hexanone	43	5.665	5.665	(0.976)	538631	250.000	236
*	65 Chlorobenzene-d5	117	5.805	5.805	(1.000)	542688	50.0000	
	66 Chlorobenzene	112	5.811	5.811	(1.001)	550142	50.0000	47.8
	67 Ethylbenzene	91	5.817	5.818	(1.002)	891024	50.0000	46.3
	68 1,1,1,2-Tetrachloroethane	131	5.841	5.842	(1.006)	192845	50.0000	50.8
	69 M&P-Xylene	106	5.884	5.884	(1.014)	701734	100.000	95.9
	70 O-Xylene (1,2-Dimethylbenzene)	106	6.091	6.097	(1.049)	334073	50.0000	49.0
	71 Styrene	104	6.121	6.122	(1.054)	594783	50.0000	49.3
	72 Bromoform	173	6.146	6.146	(1.059)	136245	50.0000	51.1(Q)
	73 Isopropylbenzene (Cumene)	105	6.249	6.249	(1.076)	812713	50.0000	48.2

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161417.D
Report Date: 17-Jan-2014 10:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	74 4-Bromofluorobenzene (S)	95	6.407	6.408	(0.907)	256396	50.0000	49.9
	75 cis-1,4-Dichloro-2-Butene	53	6.432	6.438	(0.910)	69602	50.0000	50.0
	76 Bromobenzene	156	6.468	6.468	(0.916)	244830	50.0000	47.2
	77 n-Propylbenzene	91	6.468	6.468	(0.916)	911016	50.0000	48.0
	78 1,1,2,2-Tetrachloroethane	83	6.505	6.511	(0.921)	215796	50.0000	47.3
	79 2-Chlorotoluene	91	6.565	6.566	(0.929)	603922	50.0000	47.6
	80 1,3,5-Trimethylbenzene	105	6.571	6.578	(0.930)	639048	50.0000	47.5
	81 1,2,3-Trichloropropane	110	6.590	6.596	(0.933)	64902	50.0000	46.9
	82 trans-1,4-Dichloro-2-Butene	53	6.608	6.608	(0.935)	150659	125.000	127
	83 4-Chlorotoluene	91	6.657	6.663	(0.942)	583224	50.0000	47.7
	84 tert-Butylbenzene	119	6.760	6.767	(0.957)	521099	50.0000	47.3
	85 1,2,4-Trimethylbenzene	105	6.803	6.803	(0.963)	648622	50.0000	47.9
	86 sec-Butylbenzene	105	6.870	6.870	(0.972)	719515	50.0000	47.1
	87 p-Isopropyltoluene	119	6.955	6.955	(0.985)	622669	50.0000	48.1
	88 1,3-Dichlorobenzene	146	7.016	7.016	(0.993)	395983	50.0000	47.6
*	89 1,4-Dichlorobenzene-d4	152	7.064	7.065	(1.000)	296287	50.0000	
	90 1,4-Dichlorobenzene	146	7.070	7.071	(1.001)	420839	50.0000	47.4
	91 1,2,3 Trimethylbenzene	105	7.076	7.083	(1.678)	673178	50.0000	48.0
	92 n-Butylbenzene	91	7.229	7.229	(1.023)	519215	50.0000	49.0
	93 1,2-Dichlorobenzene	146	7.350	7.351	(1.040)	390301	50.0000	48.2
	94 1,2-Dibromo-3-Chloropropane	157	7.843	7.843	(1.110)	109631	125.000	126
	95 Hexachlorobutadiene	225	8.208	8.208	(1.162)	96711	50.0000	49.7
	96 1,2,4-Trichlorobenzene	180	8.226	8.227	(1.164)	197182	50.0000	50.0
	97 Naphthalene	128	8.415	8.409	(1.191)	505679	50.0000	48.9
	98 1,2,3-Trichlorobenzene	180	8.518	8.519	(1.206)	179909	50.0000	49.1
	99 2-Methylnaphthalene	142	9.029	9.024	(1.278)	90274	25.0000	23.4

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161417.D
Report Date: 17-Jan-2014 10:09

Pace Analytical Services

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv3.i
Lab File ID: 01161417.D
Lab Smp Id: 50 ICAL 10097-99
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Misc Info:

Calibration Date: 16-JAN-2014
Calibration Time: 22:32
Level: MED
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 6.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	80423	40212	160846	78196	-2.77
39 Pentafluorobenzen	375691	187846	751382	393013	4.61
46 1,4 Difluorobenze	552756	276378	1105512	574587	3.95
51 1,4 dioxane d8	72712	36356	145424	66579	-8.43
65 Chlorobenzene-d5	532816	266408	1065632	542688	1.85
89 1,4-Dichlorobenze	290523	145262	581046	296287	1.98

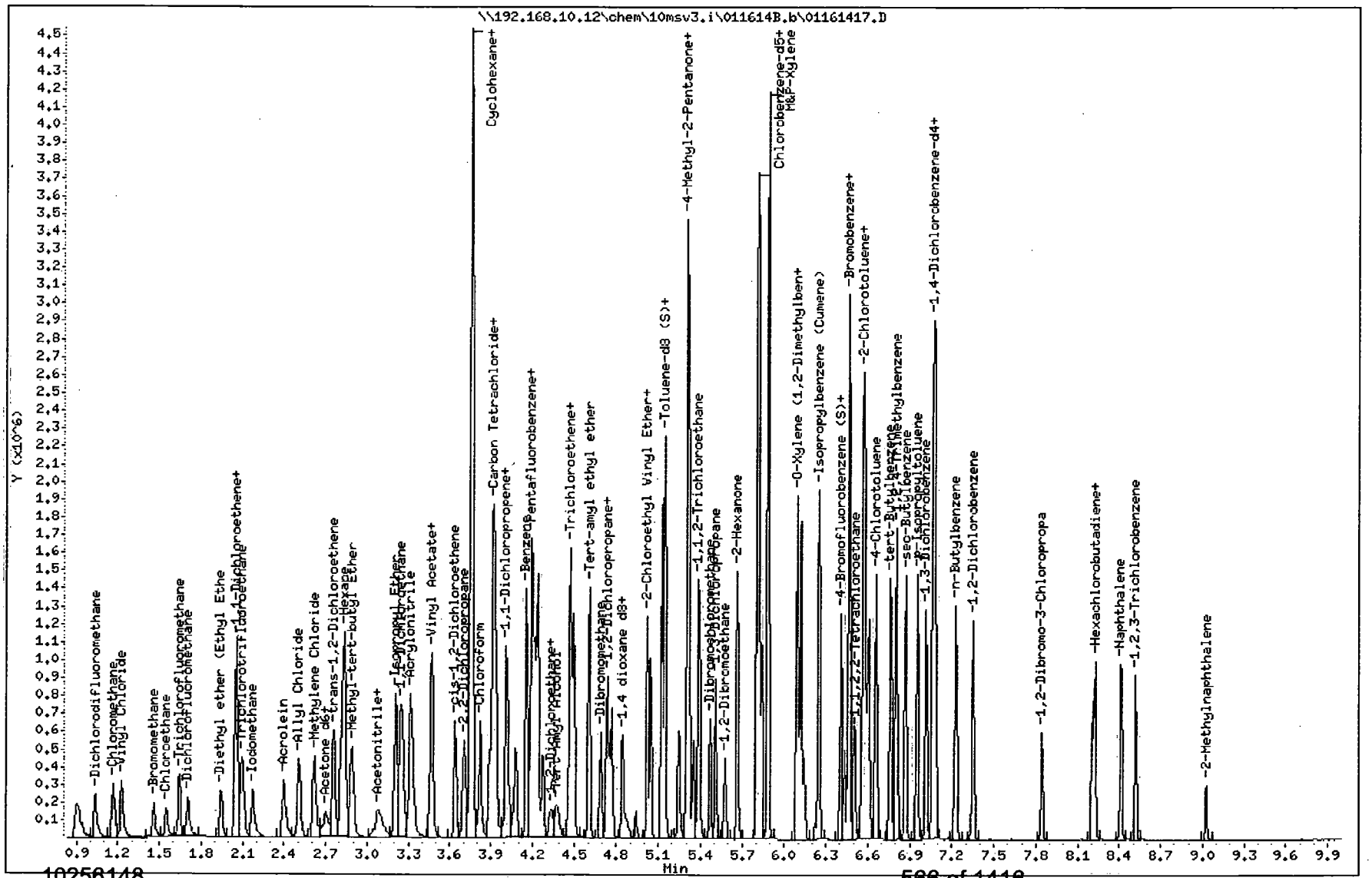
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	2.66	2.16	3.16	2.66	0.01
39 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
46 1,4 Difluorobenze	4.50	4.00	5.00	4.50	0.00
51 1,4 dioxane d8	4.86	4.36	5.36	4.86	0.13
65 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
89 1,4-Dichlorobenze	7.06	6.56	7.56	7.06	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161417.D
Date : 16-JAN-2014 22:49
Client ID:
Sample Info: 50 ICAL 10097-99

Instrument: 10msv3.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



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Injection Date: 16-JAN-2014 22:49
Instrument: 10msv3.i
Lab Sample ID: 50 ICAL 10097-99
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv3.i\011614B.b\01161418.D
Lab Smp Id: 100 ICAL 10097-99
Inj Date : 16-JAN-2014 23:06
Operator : HBP Inst ID: 10msv3.i
Smp Info : 100 ICAL 10097-99
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Meth Date : 17-Jan-2014 10:09 hpham Quant Type: ISTD
Cal Date : 16-JAN-2014 23:23 Cal File: 01161419.D
Als bottle: 18 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10CCURTIS

Concentration Formula: Amt * DF * Uf * Vt/(Va * Ws * (1-(M/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.035	1.036	(0.246)	466954	100.000	102
2	Chloromethane	50	1.163	1.170	(0.276)	587973	100.000	100
3	Vinyl Chloride	62	1.224	1.224	(0.290)	548380	100.000	99.0
4	Bromomethane	94	1.455	1.462	(0.345)	240318	100.000	103
5	Chloroethane	64	1.546	1.547	(0.367)	224036	100.000	95.3
6	Trichlorofluoromethane	101	1.644	1.644	(0.390)	418105	100.000	98.5
7	Dichlorofluoromethane	67	1.704	1.705	(0.404)	409510	100.000	102
8	Diethyl ether (Ethyl Ether)	59	1.942	1.948	(0.461)	275339	100.000	94.8
9	1,1-Dichloroethene	96	2.051	2.052	(0.486)	411999	100.000	101
10	Carbon Disulfide	76	2.057	2.052	(0.488)	1282229	100.000	97.3
11	Trichlorotrifluoroethane	101	2.094	2.093	(0.497)	400654	100.000	102
12	Iodomethane	142	2.173	2.173	(0.515)	671168	100.000	102
13	Acrolein	56	2.398	2.405	(0.569)	659993	1000.00	991
14	Allyl Chloride	41	2.508	2.508	(0.595)	580539	100.000	93.9
15	Methylene Chloride	84	2.617	2.618	(0.621)	421673	100.000	100
* 16	Acetone d6	46	2.660	2.672	(1.000)	84702	100.000	
17	Acetone	58	2.696	2.709	(1.014)	148394	500.000	495
18	trans-1,2-Dichloroethene	96	2.757	2.757	(0.654)	428218	100.000	101
19	Hexane	86	2.836	2.830	(1.066)	174479	250.000	259

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 Methyl-tert-butyl Ether	73	2.891	2.897	(0.686)	1023838	100.000	96.2
	21 tert-Butyl Alcohol	59	3.055	3.074	(0.629)	308396	1000.00	1080
	22 Acetonitrile	41	3.085	3.086	(0.732)	513837	1000.00	1020
	23 Isopropyl Ether	45	3.207	3.214	(0.761)	1231813	100.000	97.4
	24 1,1-Dichloroethane	63	3.262	3.262	(0.774)	736437	100.000	99.1
	25 Acrylonitrile	53	3.317	3.323	(0.787)	1300732	1000.00	963
	26 Vinyl Acetate	43	3.469	3.469	(0.823)	781830	100.000	109
	27 Ethyl-tert-butyl ether	59	3.469	3.469	(0.823)	1142057	100.000	96.7
	28 cis-1,2-Dichloroethene	96	3.639	3.640	(0.863)	455019	100.000	96.9
	29 2,2-Dichloropropane	77	3.706	3.707	(0.879)	601326	100.000	99.8
	30 Cyclohexane	56	3.755	3.761	(0.890)	3315671	500.000	508
	31 Bromochloromethane	130	3.767	3.767	(0.893)	293734	100.000	100
	32 Chloroform	83	3.822	3.828	(0.906)	713533	100.000	98.6
	33 Carbon Tetrachloride	117	3.895	3.895	(0.924)	502443	100.000	107
	34 Tetrahydrofuran	72	3.919	3.926	(1.473)	475658	1000.00	963
	35 1,1,1-Trichloroethane	97	3.937	3.938	(0.934)	639752	100.000	101
	36 1,1-Dichloropropene	75	4.010	4.011	(0.951)	584741	100.000	98.3
	37 2-Butanone	43	4.022	4.022	(0.954)	777840	500.000	492
	38 Benzene	78	4.156	4.157	(0.986)	1671452	100.000	97.1
*	39 Pentafluorobenzene	168	4.217	4.218	(1.000)	404510	50.0000	
	40 Tert-amyl methyl ether	73	4.241	4.242	(1.006)	1143816	100.000	97.2
S	41 1,2-Dichloroethane d4 (S)	65	4.235	4.242	(1.004)	190393	50.0000	49.1
	42 1,2-Dichloroethane	62	4.278	4.277	(1.014)	496226	100.000	95.3
	43 Isobutanol	43	4.339	4.344	(0.894)	375806	2000.00	2050
	44 Tert-Amyl Alcohol	59	4.381	4.388	(0.902)	264735	1000.00	1150
	45 Trichloroethene	130	4.479	4.479	(0.996)	486363	100.000	99.1
*	46 1,4 Difluorobenzene	114	4.497	4.497	(1.000)	599555	50.0000	
	47 Tert-amyl ethyl ether	59	4.606	4.607	(1.024)	982851	100.000	95.8
	48 Dibromomethane	174	4.692	4.692	(1.043)	291279	100.000	99.9
	49 1,2-Dichloropropane	63	4.734	4.735	(1.053)	410028	100.000	99.5
	50 Bromodichloromethane	83	4.765	4.771	(1.060)	536876	100.000	104
*	51 1,4 dioxane d8	96	4.856	4.856	(1.000)	68708	2000.00	
	52 1,4-Dioxane (P-Dioxane)	*88*	*4.868*	*4.868*	*(1.002)*	*90160*	*2000.00*	*2020*
	53 2-Chloroethyl Vinyl Ether	63	5.020	5.021	(1.116)	604978	250.000	251
	54 cis-1,3-Dichloropropene	75	5.044	5.051	(1.122)	656296	100.000	103
S	55 Toluene-d8 (S)	98	5.123	5.124	(0.883)	670225	50.0000	50.4
	56 Toluene	92	5.148	5.148	(0.887)	1055981	100.000	96.0
	57 4-Methyl-2-Pentanone	43	5.306	5.307	(0.914)	1651485	500.000	481
	58 Tetrachloroethene	166	5.312	5.313	(0.915)	497038	100.000	99.7
	59 trans-1,3-Dichloropropene	75	5.324	5.325	(0.917)	623504	100.000	108
	60 1,1,2-Trichloroethane	97	5.391	5.392	(0.929)	377101	100.000	100
	61 Dibromochloromethane	129	5.470	5.471	(0.942)	428707	100.000	113
	62 1,3-Dichloropropane	76	5.507	5.513	(0.949)	622893	100.000	99.3
	63 1,2-Dibromoethane	107	5.580	5.580	(0.961)	402512	100.000	101
	64 2-Hexanone	43	5.665	5.665	(0.976)	1136768	500.000	482
*	65 Chlorobenzene-d5	117	5.805	5.805	(1.000)	560975	50.0000	
	66 Chlorobenzene	112	5.811	5.811	(1.001)	1163954	100.000	97.8
	67 Ethylbenzene	91	5.817	5.818	(1.002)	1919507	100.000	96.4
	68 1,1,1,2-Tetrachloroethane	131	5.841	5.842	(1.006)	425253	100.000	108
	69 M&P-Xylene	106	5.884	5.884	(1.014)	1507705	200.000	199
	70 O-Xylene (1,2-Dimethylbenzene)	106	6.091	6.097	(1.049)	715605	100.000	101
	71 Styrene	104	6.121	6.122	(1.054)	1276027	100.000	102
	72 Bromoform	173	6.145	6.146	(1.059)	314497	100.000	114(TQ)
	73 Isopropylbenzene (Cumene)	105	6.249	6.249	(1.076)	1740268	100.000	99.9

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161418.D
Report Date: 17-Jan-2014 10:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	74 4-Bromofluorobenzene (S)	95	6.407	6.408	(0.907)	264487	50.0000	49.7
	75 cis-1,4-Dichloro-2-Butene	53	6.438	6.438	(0.911)	148268	100.000	103
	76 Bromobenzene	156	6.468	6.468	(0.916)	519618	100.000	96.7
	77 n-Propylbenzene	91	6.468	6.468	(0.916)	1948599	100.000	99.1
	78 1,1,2,2-Tetrachloroethane	83	6.504	6.511	(0.921)	458092	100.000	96.9
	79 2-Chlorotoluene	91	6.565	6.566	(0.929)	1292680	100.000	98.4
	80 1,3,5-Trimethylbenzene	105	6.571	6.578	(0.930)	1373875	100.000	98.6
	81 1,2,3-Trichloropropane	110	6.590	6.596	(0.933)	140343	100.000	97.9
	82 trans-1,4-Dichloro-2-Butene	53	6.608	6.608	(0.935)	314717	250.000	256
	83 4-Chlorotoluene	91	6.657	6.663	(0.942)	1233432	100.000	97.4
	84 tert-Butylbenzene	119	6.760	6.767	(0.957)	1126218	100.000	98.7
	85 1,2,4-Trimethylbenzene	105	6.803	6.803	(0.963)	1385011	100.000	98.8
	86 sec-Butylbenzene	105	6.869	6.870	(0.972)	1544731	100.000	97.6
	87 p-Isopropyltoluene	119	6.955	6.955	(0.985)	1345511	100.000	100
	88 1,3-Dichlorobenzene	146	7.015	7.016	(0.993)	844318	100.000	97.9
*	89 1,4-Dichlorobenzene-d4	152	7.064	7.065	(1.000)	306777	50.0000	
	90 1,4-Dichlorobenzene	146	7.070	7.071	(1.001)	898383	100.000	97.7
	91 1,2,3 Trimethylbenzene	105	7.076	7.083	(1.678)	1433858	100.000	99.4
	92 n-Butylbenzene	91	7.228	7.229	(1.023)	1112551	100.000	101
	93 1,2-Dichlorobenzene	146	7.350	7.351	(1.040)	827737	100.000	98.7
	94 1,2-Dibromo-3-Chloropropane	157	7.843	7.843	(1.110)	237946	250.000	265
	95 Hexachlorobutadiene	225	8.208	8.208	(1.162)	203090	100.000	101
	96 1,2,4-Trichlorobenzene	180	8.226	8.227	(1.164)	413029	100.000	101
	97 Naphthalene	128	8.409	8.409	(1.190)	1054982	100.000	98.5
	98 1,2,3-Trichlorobenzene	180	8.518	8.519	(1.206)	374424	100.000	98.7
	99 2-Methylnaphthalene	142	9.023	9.024	(1.277)	197231	50.0000	49.4

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161418.D
Report Date: 17-Jan-2014 10:09

Pace Analytical Services

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv3.i
Lab File ID: 01161418.D
Lab Smp Id: 100 ICAL 10097-99
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Misc Info:

Calibration Date: 16-JAN-2014
Calibration Time: 22:32
Level: MED
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 6.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	80423	40212	160846	84702	5.32
39 Pentafluorobenzen	375691	187846	751382	404510	7.67
46 1,4 Difluorobenze	552756	276378	1105512	599555	8.47
51 1,4 dioxane d8	72712	36356	145424	68708	-5.51
65 Chlorobenzene-d5	532816	266408	1065632	560975	5.28
89 1,4-Dichlorobenze	290523	145262	581046	306777	5.59

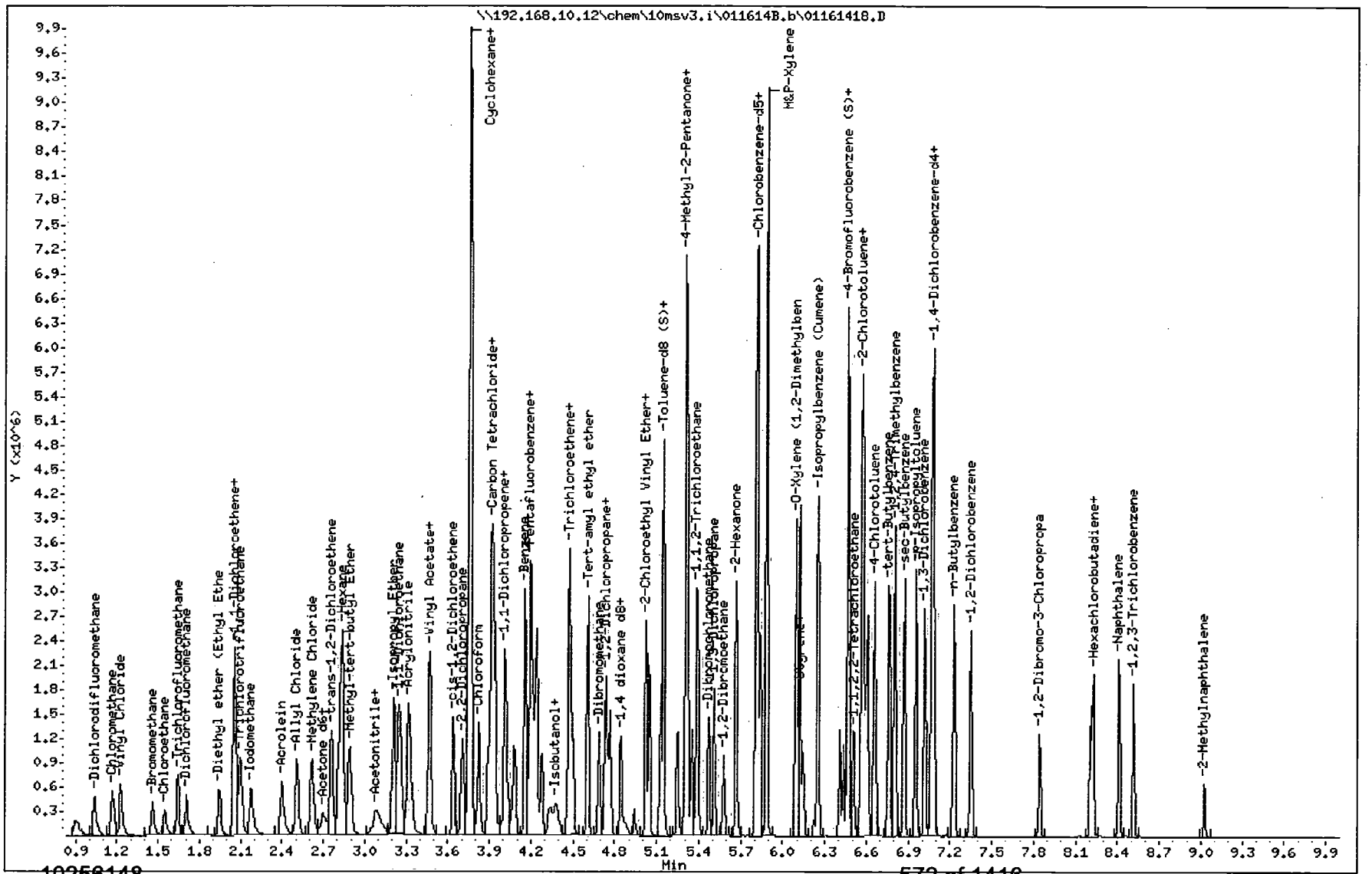
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	2.66	2.16	3.16	2.66	0.00
39 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
46 1,4 Difluorobenze	4.50	4.00	5.00	4.50	0.00
51 1,4 dioxane d8	4.86	4.36	5.36	4.86	0.00
65 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
89 1,4-Dichlorobenze	7.06	6.56	7.56	7.06	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161418.D
Date : 16-JAN-2014 23:06
Client ID:
Sample Info: 100 ICAL 10097-99

Instrument: 10msv3.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv3.i\011614B.b/01161418.D
Injection Date: 16-JAN-2014 23:06
Instrument: 10msv3.i
Lab Sample ID: 100 ICAL 10097-99
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161419.D
Report Date: 17-Jan-2014 10:09

Pace Analytical Services

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv3.i\011614B.b\01161419.D
Lab Smp Id: 250 ICAL 10097-99
Inj Date : 16-JAN-2014 23:23
Operator : HBP Inst ID: 10msv3.i
Smp Info : 250 ICAL 10097-99
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Meth Date : 17-Jan-2014 10:09 hpham Quant Type: ISTD
Cal Date : 16-JAN-2014 23:23 Cal File: 01161419.D
Als bottle: 19 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10CCURTIS

Concentration Formula: Amt * DF * Uf * Vt/(Va * Ws * (1-(M/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT STG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.035	1.036	(0.246)	1225774	250.000	259(A)
2	Chloromethane	50	1.169	1.170	(0.277)	1431014	250.000	250
3	Vinyl Chloride	62	1.224	1.224	(0.290)	1396051	250.000	243
4	Bromomethane	94	1.461	1.462	(0.347)	665894	250.000	250
5	Chloroethane	64	1.546	1.547	(0.367)	538885	250.000	221
6	Trichlorofluoromethane	101	1.644	1.644	(0.390)	1037635	250.000	235
7	Dichlorofluoromethane	67	1.705	1.705	(0.404)	936241	250.000	250
8	Diethyl ether (Ethyl Ether)	59	1.948	1.948	(0.462)	734842	250.000	244
9	1,1-Dichloroethene	96	2.051	2.052	(0.486)	1060942	250.000	250
10	Carbon Disulfide	76	2.051	2.052	(0.486)	3293695	250.000	241
11	Trichlorotrifluoroethane	101	2.094	2.093	(0.497)	1074106	250.000	264(A)
12	Iodomethane	142	2.173	2.173	(0.515)	1764071	250.000	250
13	Acrolein	56	2.404	2.405	(0.570)	1701236	2500.00	2460
14	Allyl Chloride	41	2.508	2.508	(0.595)	1504804	250.000	234
15	Methylene Chloride	84	2.617	2.618	(0.621)	1065621	250.000	250
* 16	Acetone d6	46	2.672	2.672	(1.000)	84545	100.000	
17	Acetone	58	2.708	2.709	(1.014)	379921	1250.00	1250(A)
18	trans-1,2-Dichloroethene	96	2.757	2.757	(0.654)	1145442	250.000	259(A)
19	Hexane	86	2.830	2.830	(1.059)	440921	625.000	655(A)

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161419.D
Report Date: 17-Jan-2014 10:09

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 Methyl-tert-butyl Ether	73	2.897	2.897	(0.687)	2669694	250.000	241
	21 tert-Butyl Alcohol	59	3.073	3.074	(0.633)	818602	2500.00	2690(A)
	22 Acetonitrile	41	3.086	3.086	(0.732)	1327958	2500.00	2500
	23 Isopropyl Ether	45	3.213	3.214	(0.762)	3143536	250.000	239
	24 1,1-Dichloroethane	63	3.262	3.262	(0.774)	1912412	250.000	248
	25 Acrylonitrile	53	3.323	3.323	(0.788)	3311330	2500.00	2360
	26 Vinyl Acetate	43	3.469	3.469	(0.823)	2059413	250.000	278(A)
	27 Ethyl-tert-butyl ether	59	3.469	3.469	(0.823)	2945522	250.000	240
	28 cis-1,2-Dichloroethene	96	3.639	3.640	(0.863)	1213134	250.000	249
	29 2,2-Dichloropropane	77	3.706	3.707	(0.879)	1632193	250.000	261(A)
	30 Cyclohexane	56	3.761	3.761	(0.892)	8470493	1250.00	1250
	31 Bromochloromethane	130	3.767	3.767	(0.893)	776037	250.000	256(A)
	32 Chloroform	83	3.828	3.828	(0.908)	1897058	250.000	252(A)
	33 Carbon Tetrachloride	117	3.895	3.895	(0.924)	1376508	250.000	282(A)
	34 Tetrahydrofuran	72	3.925	3.926	(1.469)	1264410	2500.00	2560(A)
	35 1,1,1-Trichloroethane	97	3.937	3.938	(0.934)	1739073	250.000	263(A)
	36 1,1-Dichloropropene	75	4.010	4.011	(0.951)	1528519	250.000	247
	37 2-Butanone	43	4.022	4.022	(0.954)	2024909	1250.00	1230
	38 Benzene	78	4.156	4.157	(0.986)	4311071	250.000	241
*	39 Pentafluorobenzene	168	4.217	4.218	(1.000)	420198	50.0000	
	40 Tert-amyl methyl ether	73	4.241	4.242	(1.006)	2949977	250.000	241
S	41 1,2-Dichloroethane d4 (S)	65	4.241	4.242	(1.006)	212534	50.0000	52.7
	42 1,2-Dichloroethane	62	4.278	4.277	(1.014)	1303271	250.000	241
	43 Isobutanol	43	4.345	4.344	(0.895)	1002719	5000.00	4990
	44 Tert-Amyl Alcohol	59	4.387	4.388	(0.904)	698852	2500.00	2870(A)
	45 Trichloroethene	130	4.479	4.479	(0.996)	1300777	250.000	253(A)
*	46 1,4 Difluorobenzene	114	4.497	4.497	(1.000)	629196	50.0000	
	47 Tert-amyl ethyl ether	59	4.606	4.607	(1.024)	2533073	250.000	235
	48 Dibromomethane	174	4.692	4.692	(1.043)	789501	250.000	250(A)
	49 1,2-Dichloropropane	63	4.734	4.735	(1.053)	1079514	250.000	250
	50 Bromodichloromethane	83	4.771	4.771	(1.061)	1421142	250.000	264(A)
*	51 1,4 dioxane d8	96	4.856	4.856	(1.000)	72969	2000.00	
	52 1,4-Dioxane (P-Dioxane)	88	4.868	4.868	(1.002)	238231	5000.00	5030(A)
	53 2-Chloroethyl Vinyl Ether	63	5.020	5.021	(1.116)	1596134	625.000	632(A)
	54 cis-1,3-Dichloropropene	75	5.051	5.051	(1.123)	1755478	250.000	262(A)
S	55 Toluene-d8 (S)	98	5.124	5.124	(0.883)	694965	50.0000	49.1
	56 Toluene	92	5.148	5.148	(0.887)	2694418	250.000	230
	57 4-Methyl-2-Pentanone	43	5.306	5.307	(0.914)	4064552	1250.00	1110
	58 Tetrachloroethene	166	5.312	5.313	(0.915)	1301780	250.000	245
	59 trans-1,3-Dichloropropene	75	5.324	5.325	(0.917)	1652229	250.000	268(A)
	60 1,1,2-Trichloroethane	97	5.391	5.392	(0.929)	991294	250.000	247
	61 Dibromochloromethane	129	5.470	5.471	(0.942)	1156120	250.000	285(A)
	62 1,3-Dichloropropane	76	5.513	5.513	(0.950)	1613767	250.000	241
	63 1,2-Dibromoethane	107	5.580	5.580	(0.961)	1053232	250.000	248
	64 2-Hexanone	43	5.665	5.665	(0.976)	2840842	1250.00	1130
*	65 Chlorobenzene-d5	117	5.805	5.805	(1.000)	597931	50.0000	
	66 Chlorobenzene	112	5.811	5.811	(1.001)	2993889	250.000	236
	67 Ethylbenzene	91	5.817	5.818	(1.002)	4821424	250.000	227
	68 1,1,1,2-Tetrachloroethane	131	5.841	5.842	(1.006)	1142203	250.000	273(A)
	69 M&P-Xylene	106	5.884	5.884	(1.014)	3828413	500.000	475
	70 O-Xylene (1,2-Dimethylbenzene)	106	6.097	6.097	(1.050)	1841236	250.000	245
	71 Styrene	104	6.121	6.122	(1.054)	3230382	250.000	243
	72 Bromoform	173	6.146	6.146	(1.059)	867617	250.000	295(A)
	73 Isopropylbenzene (Cumene)	105	6.249	6.249	(1.076)	4371754	250.000	235

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161419.D
Report Date: 17-Jan-2014 10:09

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	74	4-Bromofluorobenzene (S)	95	6.407	6.408	(0.907)	271761	50.0000	48.9
	75	cis-1,4-Dichloro-2-Butene	53	6.438	6.438	(0.911)	389032	250.000	259(A)
	76	Bromobenzene	156	6.468	6.468	(0.916)	1354092	250.000	242
	77	n-Propylbenzene	91	6.468	6.468	(0.916)	4853267	250.000	236
	78	1,1,2,2-Tetrachloroethane	83	6.511	6.511	(0.922)	1164780	250.000	236
	79	2-Chlorotoluene	91	6.565	6.566	(0.929)	3279002	250.000	239
	80	1,3,5-Trimethylbenzene	105	6.577	6.578	(0.931)	3475469	250.000	239
	81	1,2,3-Trichloropropane	110	6.596	6.596	(0.934)	358527	250.000	240
	82	trans-1,4-Dichloro-2-Butene	53	6.608	6.608	(0.935)	802994	625.000	627(A)
	83	4-Chlorotoluene	91	6.663	6.663	(0.943)	3114393	250.000	236
	84	tert-Butylbenzene	119	6.766	6.767	(0.958)	2852791	250.000	240
	85	1,2,4-Trimethylbenzene	105	6.803	6.803	(0.963)	3462643	250.000	237
	86	sec-Butylbenzene	105	6.869	6.870	(0.972)	3852836	250.000	233
	87	p-Isopropyltoluene	119	6.955	6.955	(0.985)	3363179	250.000	240
	88	1,3-Dichlorobenzene	146	7.015	7.016	(0.993)	2157289	250.000	240
*	89	1,4-Dichlorobenzene-d4	152	7.064	7.065	(1.000)	320088	50.0000	
	90	1,4-Dichlorobenzene	146	7.070	7.071	(1.001)	2311745	250.000	241
	91	1,2,3 Trimethylbenzene	105	7.082	7.083	(1.679)	3617676	250.000	242
	92	n-Butylbenzene	91	7.228	7.229	(1.023)	2755148	250.000	241
	93	1,2-Dichlorobenzene	146	7.350	7.351	(1.040)	2096830	250.000	240
	94	1,2-Dibromo-3-Chloropropane	157	7.843	7.843	(1.110)	620991	625.000	663(A)
	95	Hexachlorobutadiene	225	8.208	8.208	(1.162)	495937	250.000	236
	96	1,2,4-Trichlorobenzene	180	8.226	8.227	(1.164)	1036028	250.000	243
	97	Naphthalene	128	8.409	8.409	(1.190)	2625174	250.000	235
	98	1,2,3-Trichlorobenzene	180	8.518	8.519	(1.206)	926659	250.000	234
	99	2-Methylnaphthalene	142	9.023	9.024	(1.277)	500007	125.000	120

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161419.D
Report Date: 17-Jan-2014 10:09

Pace Analytical Services

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv3.i
Lab File ID: 01161419.D
Lab Smp Id: 250 ICAL 10097-99
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Misc Info:

Calibration Date: 16-JAN-2014
Calibration Time: 22:32

Level: MED
Sample Type: SOIL

Test Mode:
Use Initial Calibration Level 6.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	80423	40212	160846	84545	5.13
39 Pentafluorobenzen	375691	187846	751382	420198	11.85
46 1,4 Difluorobenze	552756	276378	1105512	629196	13.83
51 1,4 dioxane d8	72712	36356	145424	72969	0.35
65 Chlorobenzene-d5	532816	266408	1065632	597931	12.22
89 1,4-Dichlorobenze	290523	145262	581046	320088	10.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	2.66	2.16	3.16	2.67	0.46
39 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
46 1,4 Difluorobenze	4.50	4.00	5.00	4.50	0.00
51 1,4 dioxane d8	4.86	4.36	5.36	4.86	0.00
65 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
89 1,4-Dichlorobenze	7.06	6.56	7.56	7.06	0.00

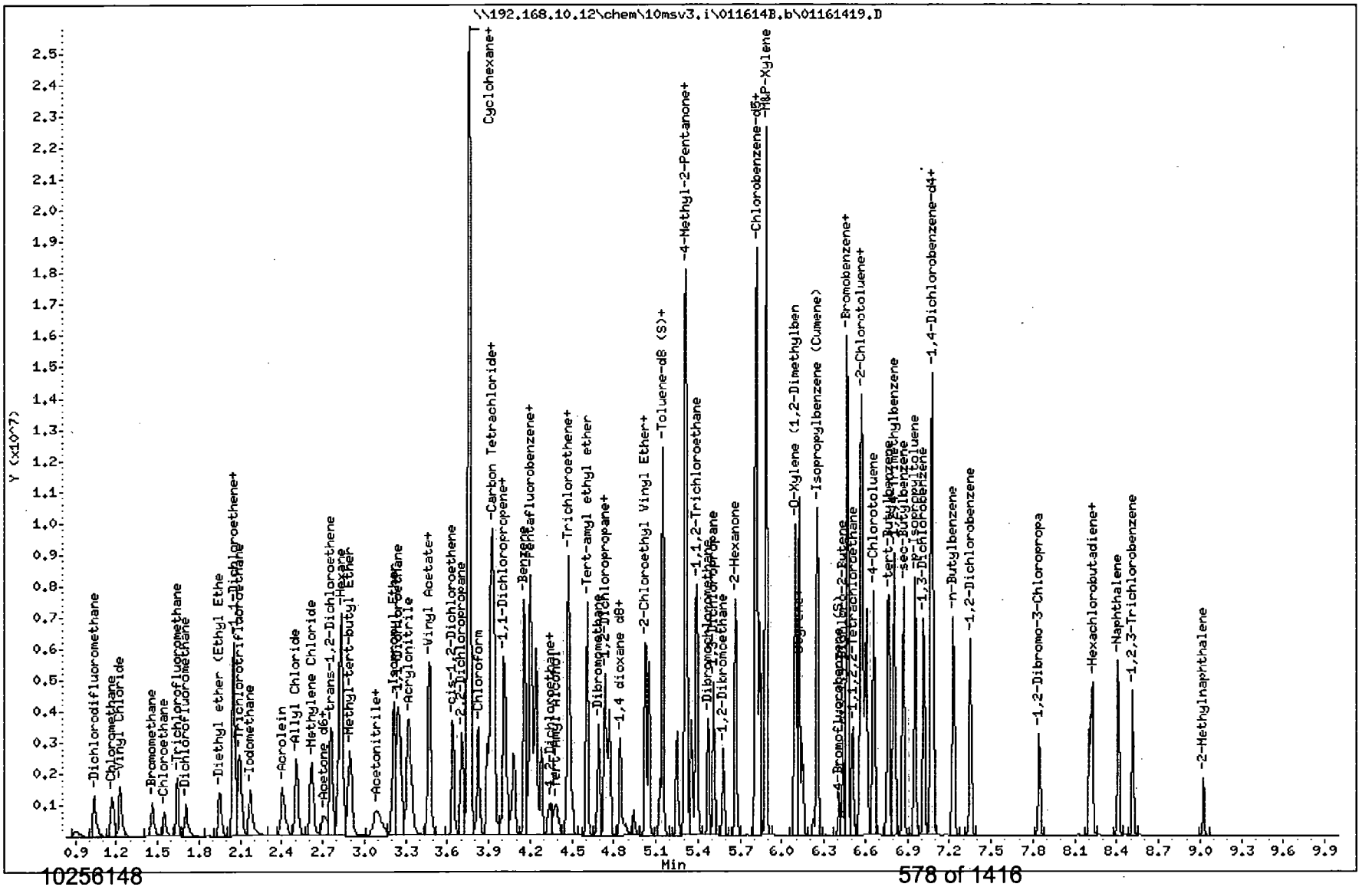
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161419.D
Date : 16-JAN-2014 23:23
Client ID:
Sample Info: 250 ICAL 10097-99

Instrument: 10msv3.i

Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



Data File: \\192.168.10.12\chem\10msv3.i\011614B.b/01161419.D
Injection Date: 16-JAN-2014 23:23
Instrument: 10msv3.i
Lab Sample ID: 250 ICAL 10097-99
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161422.D
Report Date: 17-Jan-2014 10:12

Pace Analytical Services

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv3.i Injection Date: 17-JAN-2014 00:15
Lab File ID: 01161422.D Init. Cal. Date(s): 16-JAN-2014 16-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 21:23 23:23
Lab Sample ID: ICV 20 10097-100 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m

COMPOUND	RRF / AMOUNT	RF20	CCAL RRF20	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	0.56384	0.52505	0.52505	0.100	-6.87953	40.00000	Averaged
2 Chloromethane	20.00000	19.77705	0.77371	0.100	-1.11475	40.00000	Quadratic
3 Vinyl Chloride	0.68466	0.64353	0.64353	0.100	-6.00802	20.00000	Averaged
4 Bromomethane	20.00000	26.57980	0.36951	0.050	32.89900	40.00000	Quadratic
5 Chloroethane	0.29052	0.26610	0.26610	0.050	-8.40305	40.00000	Averaged
6 Trichlorofluoromethane	0.52467	0.49879	0.49879	0.100	-4.93133	40.00000	Averaged
7 Dichlorofluoromethane	20.00000	17.53817	0.45773	0.010	-12.30917	40.00000	Quadratic
8 Diethyl ether (Ethyl Ether)	0.35888	0.33390	0.33390	0.010	-6.96110	40.00000	Averaged
9 1,1-Dichloroethene	0.50504	0.49992	0.49992	0.100	-1.01460	20.00000	Averaged
10 Carbon Disulfide	1.62823	1.56159	1.56159	0.100	-4.09266	40.00000	Averaged
11 Trichlorotrifluoroethane	0.48477	0.47403	0.47403	0.010	-2.21616	40.00000	Averaged
12 Iodomethane	20.00000	16.49027	0.58508	0.010	-17.54865	40.00000	Quadratic
13 Acrolein	0.08231	0.08022	0.08022	0.010	-2.52945	40.00000	Averaged
14 Allyl Chloride	0.76411	0.72287	0.72287	0.010	-5.39609	40.00000	Averaged
15 Methylene Chloride	20.00000	19.66400	0.52297	0.100	-1.68002	40.00000	Quadratic
17 Acetone	100	107	0.38694	0.010	6.74828	40.00000	Quadratic
18 trans-1,2-Dichloroethene	0.52533	0.51344	0.51344	0.100	-2.26296	20.00000	Averaged
19 Hexane	0.79597	0.84623	0.84623	0.010	6.31467	40.00000	Averaged
20 Methyl-tert-butyl Ether	1.31605	1.23238	1.23238	0.300	-6.35792	20.00000	Averaged
21 tert-Butyl Alcohol	8.33788	8.30463	8.30463	0.010	-0.39877	40.00000	Averaged
22 Acetonitrile	200	204	0.06358	0.010	2.08282	40.00000	Quadratic
23 Isopropyl Ether	1.56395	1.49106	1.49106	0.010	-4.66076	40.00000	Averaged
24 1,1-Dichloroethane	0.91892	0.88136	0.88136	0.200	-4.08650	20.00000	Averaged
25 Acrylonitrile	0.16692	0.16054	0.16054	0.010	-3.81763	40.00000	Averaged
26 Vinyl Acetate	0.88268	0.90176	0.90176	0.010	2.16084	40.00000	Averaged
27 Ethyl-tert-butyl ether	1.45909	1.40250	1.40250	0.010	-3.87848	40.00000	Averaged
28 cis-1,2-Dichloroethene	0.58022	0.55260	0.55260	0.100	-4.75981	20.00000	Averaged
29 2,2-Dichloropropane	0.74513	0.70712	0.70712	0.010	-5.10029	40.00000	Averaged
30 Cyclohexane	0.80699	0.77923	0.77923	0.100	-3.43995	40.00000	Averaged
31 Bromochloromethane	0.36142	0.35091	0.35091	0.010	-2.90561	40.00000	Averaged
32 Chloroform	0.89493	0.87025	0.87025	0.200	-2.75814	20.00000	Averaged
33 Carbon Tetrachloride	0.58165	0.57288	0.57288	0.100	-1.50799	40.00000	Averaged
34 Tetrahydrofuran	0.58303	0.56994	0.56994	0.010	-2.24392	40.00000	Averaged
35 1,1,1-Trichloroethane	0.78544	0.76789	0.76789	0.100	-2.23467	20.00000	Averaged
36 1,1-Dichloropropene	0.73527	0.68429	0.68429	0.010	-6.93412	40.00000	Averaged
37 2-Butanone	0.19553	0.18418	0.18418	0.050	-5.80312	40.00000	Averaged
38 Benzene	2.12700	2.04370	2.04370	0.500	-3.91599	20.00000	Averaged
40 Tert-amyl methyl ether	1.45406	1.39415	1.39415	0.010	-4.12010	40.00000	Averaged
S 41 1,2-Dichloroethane d4 (S)	0.47958	0.48302	0.48302	0.200	0.71749	40.00000	Averaged
42 1,2-Dichloroethane	0.64349	0.60706	0.60706	0.100	-5.66070	20.00000	Averaged
43 Isobutanol	400	394	4.76105	0.010	-1.41643	40.00000	Quadratic
44 Tert-Amyl Alcohol	6.67763	7.25181	7.25181	0.010	8.59864	40.00000	Averaged

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161422.D
Report Date: 17-Jan-2014 10:12

Pace Analytical Services

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv3.i Injection Date: 17-JAN-2014 00:15
Lab File ID: 01161422.D Init. Cal. Date(s): 16-JAN-2014 16-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 21:23 23:23
Lab Sample ID: ICV 20 10097-100 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m

COMPOUND	RRF / AMOUNT	RF20	CCAL RRF20	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
45 Trichloroethene	0.40910	0.40276	0.40276	0.200	-1.55071	20.00000	Averaged
47 Tert-amyl ethyl ether	0.85541	0.81887	0.81887	0.010	-4.27151	40.00000	Averaged
48 Dibromomethane	20.00000	20.42786	0.24489	0.010	2.13931	40.00000	Quadratic
49 1,2-Dichloropropane	0.34354	0.33390	0.33390	0.100	-2.80676	20.00000	Averaged
50 Bromodichloromethane	0.42805	0.42863	0.42863	0.050	0.13542	40.00000	Averaged
52 1,4-Dioxane (P-Dioxane)	1.29727	1.32613	1.32613	0.010	2.22478	40.00000	Averaged
53 2-Chloroethyl Vinyl Ether	0.20084	0.19416	0.19416	0.010	-3.32360	40.00000	Averaged
54 cis-1,3-Dichloropropene	0.53137	0.52209	0.52209	0.050	-1.74750	40.00000	Averaged
$ 55 Toluene-d8 (S)	1.18389	1.19345	1.19345	0.200	0.80782	40.00000	Averaged
56 Toluene	0.98029	0.95577	0.95577	0.400	-2.50204	20.00000	Averaged
57 4-Methyl-2-Pentanone	0.30595	0.28915	0.28915	0.100	-5.49286	40.00000	Averaged
58 Tetrachloroethene	0.44448	0.44276	0.44276	0.200	-0.38711	40.00000	Averaged
59 trans-1,3-Dichloropropene	0.51574	0.52547	0.52547	0.100	1.88713	40.00000	Averaged
60 1,1,2-Trichloroethane	0.33537	0.32657	0.32657	0.100	-2.62446	40.00000	Averaged
61 Dibromochloromethane	0.33921	0.34721	0.34721	0.100	2.35704	40.00000	Averaged
62 1,3-Dichloropropane	0.55908	0.53734	0.53734	0.010	-3.88876	40.00000	Averaged
63 1,2-Dibromoethane	0.35572	0.35002	0.35002	0.100	-1.60240	20.00000	Averaged
64 2-Hexanone	0.20997	0.20106	0.20106	0.050	-4.24192	40.00000	Averaged
66 Chlorobenzene	1.06108	1.03242	1.03242	0.500	-2.70073	40.00000	Averaged
67 Ethylbenzene	1.77378	1.68621	1.68621	0.300	-4.93682	20.00000	Averaged
68 1,1,1,2-Tetrachloroethane	0.34958	0.35814	0.35814	0.010	2.44735	40.00000	Averaged
69 M&P-Xylene	0.67442	0.65264	0.65264	0.300	-3.23005	20.00000	Averaged
70 O-Xylene (1,2-Dimethylbenze	0.62843	0.62186	0.62186	0.300	-1.04605	20.00000	Averaged
71 Styrene	1.11090	1.10142	1.10142	0.300	-0.85299	40.00000	Averaged
72 Bromoform	0.24558	0.24281	0.24281	0.100	-1.13041	40.00000	Averaged
73 Isopropylbenzene (Cumene)	1.55242	1.51208	1.51208	0.100	-2.59795	20.00000	Averaged
$ 74 4-Bromofluorobenzene (S)	0.86745	0.86949	0.86949	0.200	0.23498	40.00000	Averaged
75 cis-1,4-Dichloro-2-Butene	0.23472	0.23290	0.23290	0.010	-0.77344	40.00000	Averaged
76 Bromobenzene	0.87536	0.84744	0.84744	0.010	-3.18940	40.00000	Averaged
77 n-Propylbenzene	3.20479	3.19874	3.19874	0.010	-0.18864	20.00000	Averaged
78 1,1,2,2-Tetrachloroethane	0.77052	0.74502	0.74502	0.300	-3.31032	40.00000	Averaged
79 2-Chlorotoluene	2.13995	2.11713	2.11713	0.010	-1.06660	40.00000	Averaged
80 1,3,5-Trimethylbenzene	2.27037	2.24276	2.24276	0.300	-1.21598	20.00000	Averaged
81 1,2,3-Trichloropropane	0.23371	0.22447	0.22447	0.010	-3.95138	40.00000	Averaged
82 trans-1,4-Dichloro-2-Butene	0.20017	0.20121	0.20121	0.010	0.51587	40.00000	Averaged
83 4-Chlorotoluene	2.06279	2.03461	2.03461	0.010	-1.36609	40.00000	Averaged
84 tert-Butylbenzene	1.85988	1.85665	1.85665	0.010	-0.17345	40.00000	Averaged
85 1,2,4-Trimethylbenzene	2.28481	2.25936	2.25936	0.300	-1.11412	20.00000	Averaged
86 sec-Butylbenzene	2.57853	2.59904	2.59904	0.010	0.79534	40.00000	Averaged
87 p-Isopropyltoluene	2.18596	2.23132	2.23132	0.010	2.07522	40.00000	Averaged
88 1,3-Dichlorobenzene	1.40494	1.37091	1.37091	0.600	-2.42260	40.00000	Averaged
90 1,4-Dichlorobenzene	1.49831	1.45730	1.45730	0.500	-2.73742	40.00000	Averaged
91 1,2,3 Trimethylbenzene	1.78243	1.72487	1.72487	0.010	-3.22917	40.00000	Averaged

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161422.D
Report Date: 17-Jan-2014 10:12

Pace Analytical Services

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv3.i Injection Date: 17-JAN-2014 00:15
Lab File ID: 01161422.D Init. Cal. Date(s): 16-JAN-2014 16-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 21:23 23:23
Lab Sample ID: ICV 20 10097-100 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m

COMPOUND	RRF / AMOUNT	RF20	CCAL RRF20	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
92 n-Butylbenzene	1.78828	1.91020	1.91020	0.010	6.81740	40.00000	Averaged
93 1,2-Dichlorobenzene	1.36653	1.34315	1.34315	0.400	-1.71115	40.00000	Averaged
94 1,2-Dibromo-3-Chloropropane	0.14628	0.14782	0.14782	0.010	1.05214	40.00000	Averaged
95 Hexachlorobutadiene	0.32843	0.40707	0.40707	0.010	23.94446	40.00000	Averaged
96 1,2,4-Trichlorobenzene	0.66561	0.70889	0.70889	0.200	6.50215	40.00000	Averaged
97 Naphthalene	1.74611	1.74646	1.74646	0.300	0.01964	20.00000	Averaged
98 1,2,3-Trichlorobenzene	0.61848	0.65431	0.65431	0.010	5.79310	40.00000	Averaged
99 2-Methylnaphthalene	0.65078	0.71894	0.71894	0.100	10.47275	20.00000	Averaged

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161422.D
Report Date: 17-Jan-2014 10:12

Pace Analytical Services

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv3.i\011614B.b\01161422.D
Lab Smp Id: ICV 20 10097-100
Inj Date : 17-JAN-2014 00:15
Operator : HBP Inst ID: 10msv3.i
Smp Info : ICV 20 10097-100
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Meth Date : 17-Jan-2014 10:11 voa Quant Type: ISTD
Cal Date : 16-JAN-2014 23:23 Cal File: 01161419.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10CCURTIS

Concentration Formula: Amt * DF * Uf * Vt/(Va * Ws * (1-(M/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.035	1.035	(0.246)	84500	20.0000	18.6
2	Chloromethane	50	1.163	1.163	(0.276)	124519	20.0000	19.8
3	Vinyl Chloride	62	1.224	1.224	(0.290)	103567	20.0000	18.8
4	Bromomethane	94	1.455	1.455	(0.345)	59467	20.0000	26.6
5	Chloroethane	64	1.546	1.546	(0.367)	42826	20.0000	18.3
6	Trichlorofluoromethane	101	1.644	1.644	(0.390)	80274	20.0000	19.0
7	Dichlorofluoromethane	67	1.705	1.705	(0.404)	73665	20.0000	17.5
8	Diethyl ether (Ethyl Ether)	59	1.942	1.942	(0.461)	53737	20.0000	18.6
9	1,1-Dichloroethene	96	2.051	2.051	(0.486)	80455	20.0000	19.8
10	Carbon Disulfide	76	2.057	2.057	(0.488)	251317	20.0000	19.2
11	Trichlorotrifluoroethane	101	2.094	2.094	(0.497)	76289	20.0000	19.6
12	Iodomethane	142	2.173	2.173	(0.515)	94161	20.0000	16.5
13	Acrolein	56	2.398	2.398	(0.569)	129111	200.000	195
14	Allyl Chloride	41	2.508	2.508	(0.595)	116337	20.0000	18.9
15	Methylene Chloride	84	2.617	2.617	(0.621)	84165	20.0000	19.7
* 16	Acetone d6	46	2.654	2.654	(1.000)	76575	100.000	
17	Acetone	58	2.702	2.702	(1.018)	29630	100.000	107
18	trans-1,2-Dichloroethene	96	2.757	2.757	(0.654)	82632	20.0000	19.5
19	Hexane	86	2.830	2.830	(1.066)	32400	50.0000	53.2

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 Methyl-tert-butyl Ether	73	2.891	2.891	(0.686)	198335	20.0000	18.7
	21 tert-Butyl Alcohol	59	3.092	3.092	(0.637)	60422	200.000	199(M)
	22 Acetonitrile	41	3.092	3.092	(0.733)	102318	200.000	204
	23 Isopropyl Ether	45	3.207	3.207	(0.761)	239966	20.0000	19.1
	24 1,1-Dichloroethane	63	3.262	3.262	(0.774)	141844	20.0000	19.2
	25 Acrylonitrile	53	3.317	3.317	(0.787)	258373	200.000	192
	26 Vinyl Acetate	43	3.469	3.469	(0.823)	145126	20.0000	20.4
	27 Ethyl-tert-butyl ether	59	3.469	3.469	(0.823)	225714	20.0000	19.2
	28 cis-1,2-Dichloroethene	96	3.639	3.639	(0.863)	88934	20.0000	19.0
	29 2,2-Dichloropropane	77	3.706	3.706	(0.879)	113802	20.0000	19.0
	30 Cyclohexane	56	3.755	3.755	(0.890)	627032	100.000	96.6
	31 Bromochloromethane	130	3.767	3.767	(0.893)	56475	20.0000	19.4
	32 Chloroform	83	3.822	3.822	(0.906)	140055	20.0000	19.4
	33 Carbon Tetrachloride	117	3.889	3.889	(0.922)	92198	20.0000	19.7
	34 Tetrahydrofuran	72	3.919	3.919	(1.477)	87287	200.000	196
	35 1,1,1-Trichloroethane	97	3.937	3.937	(0.934)	123581	20.0000	19.6
	36 1,1-Dichloropropene	75	4.010	4.010	(0.951)	110127	20.0000	18.6
	37 2-Butanone	43	4.022	4.022	(0.954)	148206	100.000	94.2
	38 Benzene	78	4.156	4.156	(0.986)	328907	20.0000	19.2
*	39 Pentafluorobenzene	168	4.217	4.217	(1.000)	402342	50.0000	
	40 Tert-amyl methyl ether	73	4.235	4.235	(1.004)	224370	20.0000	19.2
S	41 1,2-Dichloroethane d4 (S)	65	4.235	4.235	(1.004)	194340	50.0000	50.4(Q)
	42 1,2-Dichloroethane	62	4.278	4.278	(1.014)	97699	20.0000	18.9
	43 Isobutanol	43	4.345	4.345	(0.895)	69280	400.000	394
	44 Tert-Amyl Alcohol	59	4.387	4.387	(0.904)	52762	200.000	217
	45 Trichloroethene	130	4.479	4.479	(0.996)	94998	20.0000	19.7
*	46 1,4 Difluorobenzene	114	4.497	4.497	(1.000)	589669	50.0000	
	47 Tert-amyl ethyl ether	59	4.606	4.606	(1.024)	193145	20.0000	19.1
	48 Dibromomethane	174	4.692	4.692	(1.043)	57761	20.0000	20.4
	49 1,2-Dichloropropane	63	4.734	4.734	(1.053)	78756	20.0000	19.4
	50 Bromodichloromethane	83	4.765	4.765	(1.060)	101100	20.0000	20.0
*	51 1,4 dioxane d8	96	4.856	4.856	(1.000)	72757	2000.00	
	52 1,4-Dioxane (P-Dioxane)	88	4.880	4.880	(1.005)	19297	400.000	409
	53 2-Chloroethyl Vinyl Ether	63	5.020	5.020	(1.116)	114493	50.0000	48.3
	54 cis-1,3-Dichloropropene	75	5.044	5.044	(1.122)	123143	20.0000	19.6
S	55 Toluene-d8 (S)	98	5.124	5.124	(0.883)	661145	50.0000	50.4
	56 Toluene	92	5.148	5.148	(0.887)	211789	20.0000	19.5
	57 4-Methyl-2-Pentanone	43	5.306	5.306	(0.914)	320362	100.000	94.5
	58 Tetrachloroethene	166	5.312	5.312	(0.915)	98111	20.0000	19.9
	59 trans-1,3-Dichloropropene	75	5.324	5.324	(0.917)	116439	20.0000	20.4
	60 1,1,2-Trichloroethane	97	5.391	5.391	(0.929)	72364	20.0000	19.5
	61 Dibromochloromethane	129	5.470	5.470	(0.942)	76938	20.0000	20.5
	62 1,3-Dichloropropane	76	5.507	5.507	(0.949)	119069	20.0000	19.2
	63 1,2-Dibromoethane	107	5.580	5.580	(0.961)	77561	20.0000	19.7
	64 2-Hexanone	43	5.665	5.665	(0.976)	222764	100.000	95.8
*	65 Chlorobenzene-d5	117	5.805	5.805	(1.000)	553977	50.0000	
	66 Chlorobenzene	112	5.811	5.811	(1.001)	228775	20.0000	19.4
	67 Ethylbenzene	91	5.817	5.817	(1.002)	373649	20.0000	19.0
	68 1,1,1,2-Tetrachloroethane	131	5.841	5.841	(1.006)	79360	20.0000	20.5
	69 M&P-Xylene	106	5.884	5.884	(1.014)	289237	40.0000	38.7
	70 O-Xylene (1,2-Dimethylbenzene)	106	6.091	6.091	(1.049)	137798	20.0000	19.8
	71 Styrene	104	6.121	6.121	(1.054)	244065	20.0000	19.8
	72 Bromoform	173	6.146	6.146	(1.059)	53804	20.0000	19.8(TQ)
	73 Isopropylbenzene (Cumene)	105	6.249	6.249	(1.076)	335064	20.0000	19.5

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	74 4-Bromofluorobenzene (S)	95	6.407	6.407	(0.907)	258033	50.0000	50.1
	75 cis-1,4-Dichloro-2-Butene	53	6.438	6.438	(0.911)	27647	20.0000	19.8
	76 Bromobenzene	156	6.468	6.468	(0.916)	100596	20.0000	19.4
	77 n-Propylbenzene	91	6.468	6.468	(0.916)	379710	20.0000	20.0
	78 1,1,2,2-Tetrachloroethane	83	6.504	6.504	(0.921)	88438	20.0000	19.3
	79 2-Chlorotoluene	91	6.565	6.565	(0.929)	251316	20.0000	19.8
	80 1,3,5-Trimethylbenzene	105	6.571	6.571	(0.930)	266229	20.0000	19.8
	81 1,2,3-Trichloropropane	110	6.590	6.590	(0.933)	26646	20.0000	19.2(Q)
	82 trans-1,4-Dichloro-2-Butene	53	6.608	6.608	(0.935)	59711	50.0000	50.2
	83 4-Chlorotoluene	91	6.657	6.657	(0.942)	241521	20.0000	19.7
	84 tert-Butylbenzene	119	6.760	6.760	(0.957)	220396	20.0000	20.0
	85 1,2,4-Trimethylbenzene	105	6.803	6.803	(0.963)	268199	20.0000	19.8
	86 sec-Butylbenzene	105	6.870	6.870	(0.972)	308522	20.0000	20.2
	87 p-Isopropyltoluene	119	6.955	6.955	(0.984)	264871	20.0000	20.4
	88 1,3-Dichlorobenzene	146	7.016	7.016	(0.993)	162735	20.0000	19.5
*	89 1,4-Dichlorobenzene-d4	152	7.064	7.064	(1.000)	296765	50.0000	
	90 1,4-Dichlorobenzene	146	7.070	7.070	(1.001)	172990	20.0000	19.4
	91 1,2,3 Trimethylbenzene	105	7.076	7.076	(1.678)	277595	20.0000	19.4
	92 n-Butylbenzene	91	7.228	7.228	(1.023)	226752	20.0000	21.4
	93 1,2-Dichlorobenzene	146	7.350	7.350	(1.040)	159440	20.0000	19.6
	94 1,2-Dibromo-3-Chloropropane	157	7.843	7.843	(1.110)	43867	50.0000	50.5
	95 Hexachlorobutadiene	225	8.208	8.208	(1.162)	48322	20.0000	24.8
	96 1,2,4-Trichlorobenzene	180	8.226	8.226	(1.164)	84149	20.0000	21.3
	97 Naphthalene	128	8.409	8.409	(1.190)	207315	20.0000	20.0
	98 1,2,3-Trichlorobenzene	180	8.518	8.518	(1.206)	77670	20.0000	21.2
	99 2-Methylnaphthalene	142	9.023	9.023	(1.277)	42671	10.0000	11.0

QC Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

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Report Date: 17-Jan-2014 10:12

Pace Analytical Services

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv3.i
Lab File ID: 01161422.D
Lab Smp Id: ICV 20 10097-100
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv3.i\011614B.b\v314-MLS-011614.m
Misc Info:

Calibration Date: 16-JAN-2014
Calibration Time: 22:32
Level: MED
Sample Type: SOIL

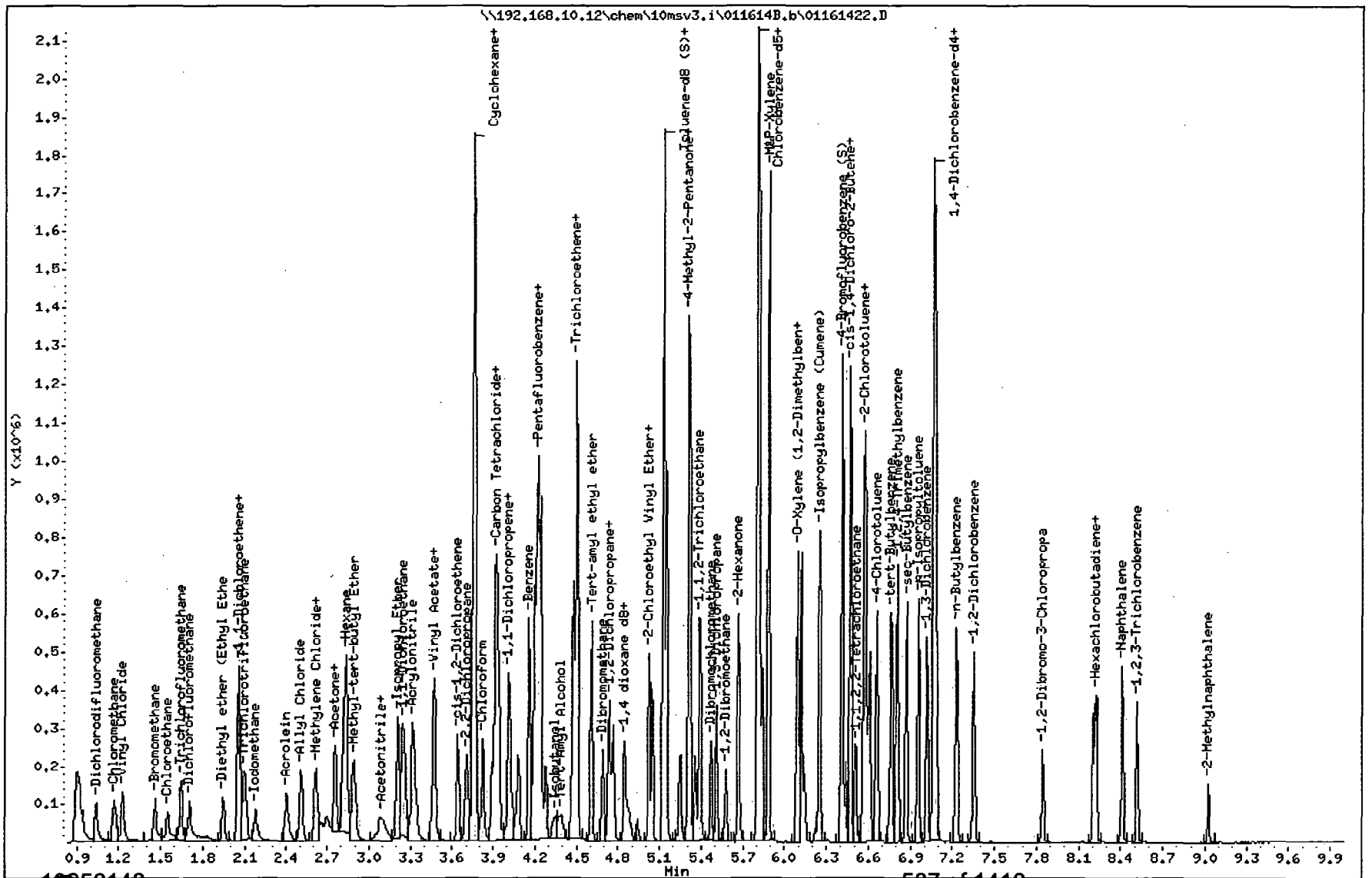
Test Mode:
Use Initial Calibration Level 6.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	80423	40212	160846	76575	-4.78
39 Pentafluorobenzen	375691	187846	751382	402342	7.09
46 1,4 Difluorobenze	552756	276378	1105512	589669	6.68
51 1,4 dioxane d8	72712	36356	145424	72757	0.06
65 Chlorobenzene-d5	532816	266408	1065632	553977	3.97
89 1,4-Dichlorobenze	290523	145262	581046	296765	2.15

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	2.66	2.16	3.16	2.65	-0.22
39 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
46 1,4 Difluorobenze	4.50	4.00	5.00	4.50	0.00
51 1,4 dioxane d8	4.86	4.36	5.36	4.86	0.00
65 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
89 1,4-Dichlorobenze	7.06	6.56	7.56	7.06	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv3.i\011614B.b\01161422.D
Date : 17-JAN-2014 00:15
Client ID:
Instrument: 10msv3.i
Sample Info: ICV 20 10097-100
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



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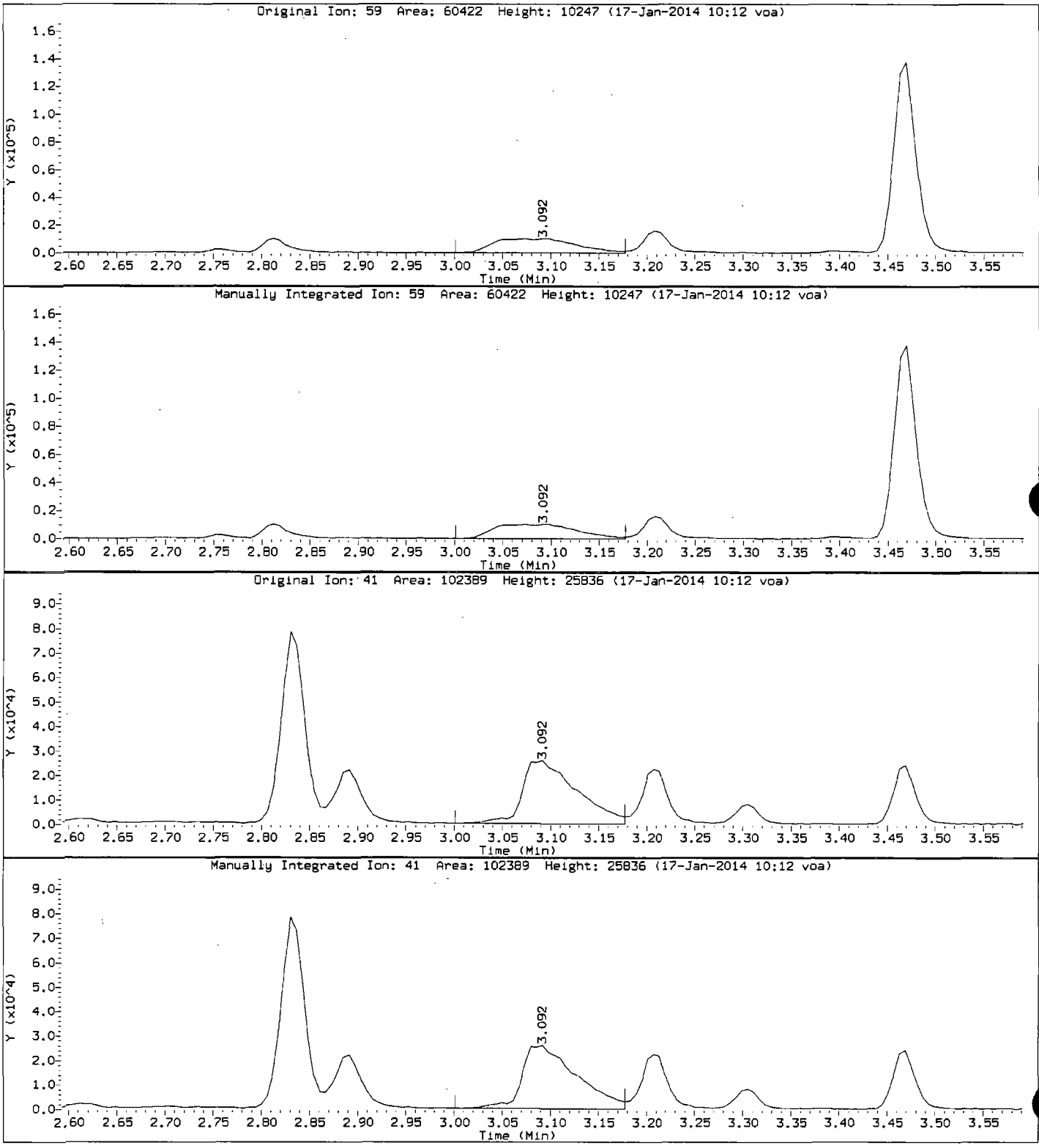
Injection Date: 17-JAN-2014 00:15
Instrument: 10msv3.i
Lab Sample ID: ICV 20 10097-100

Compound: tert-Butyl Alcohol
CAS Number: 75-65-0



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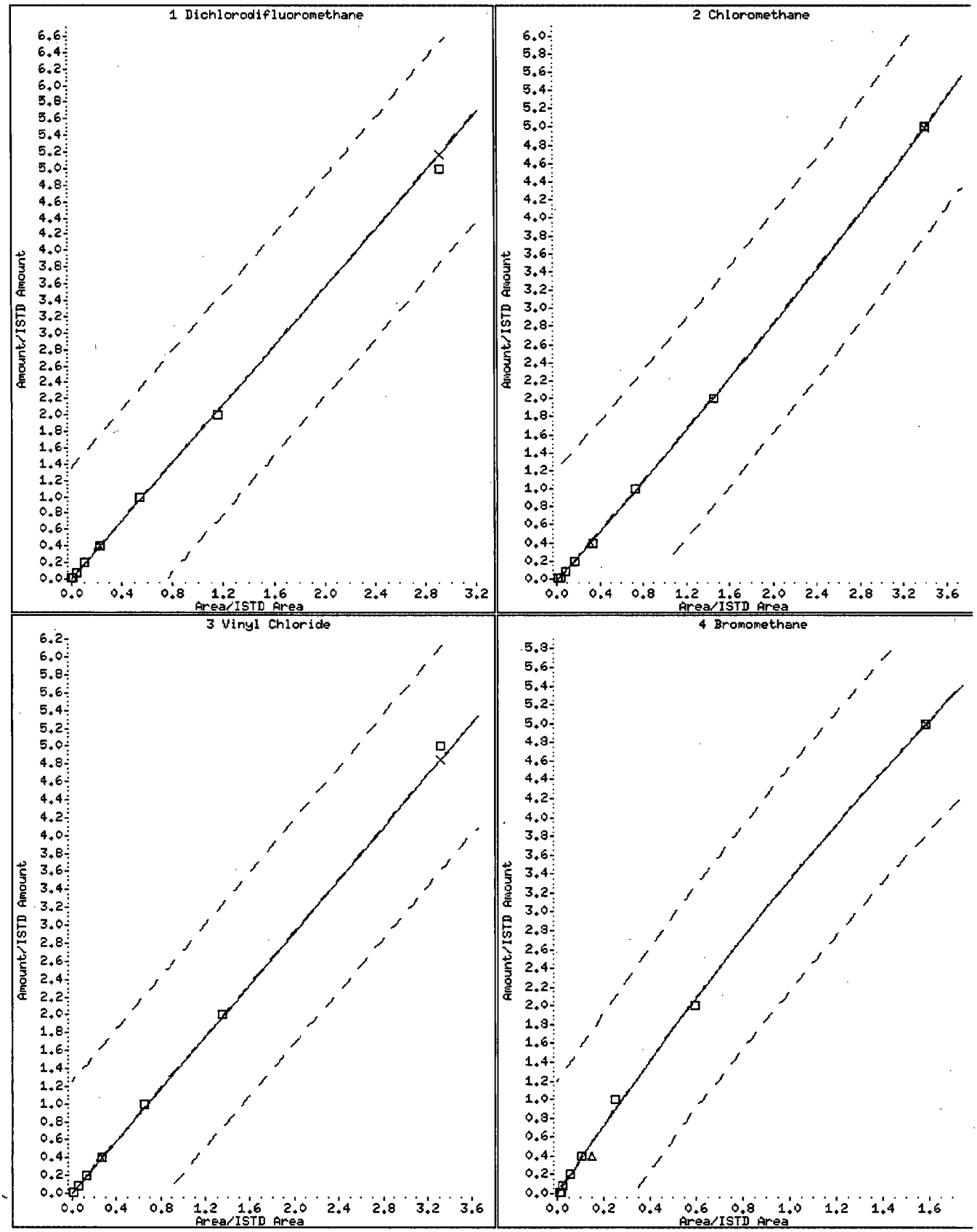

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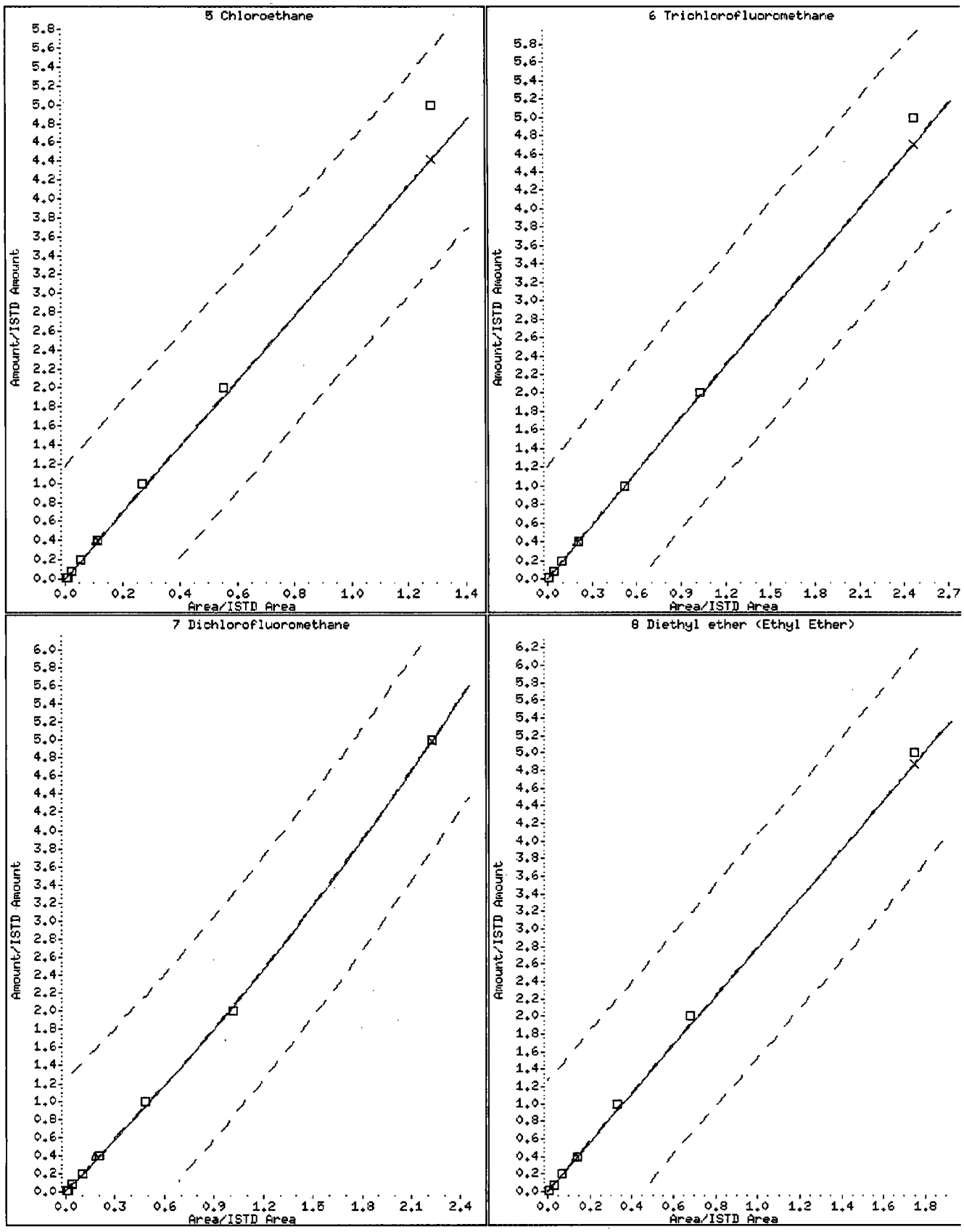

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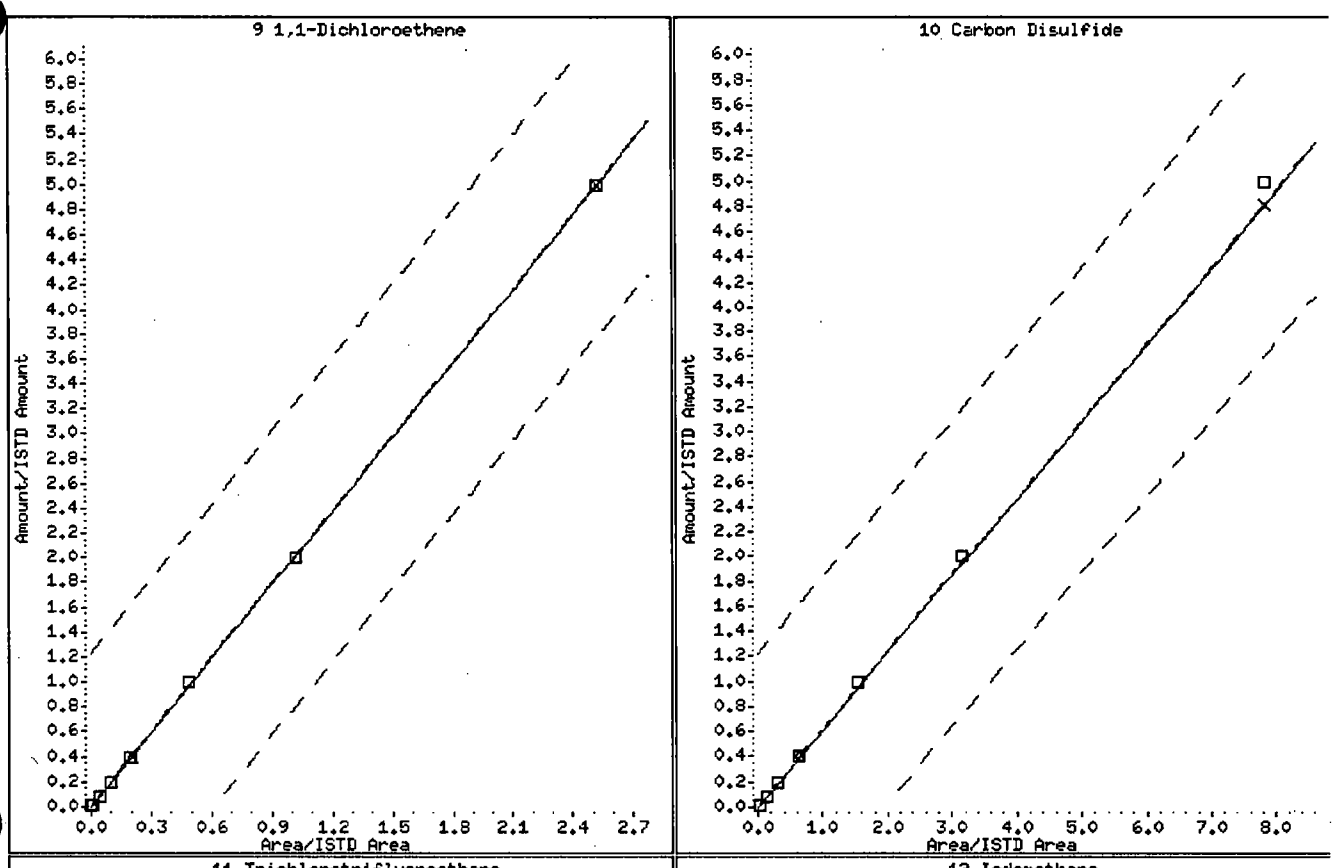

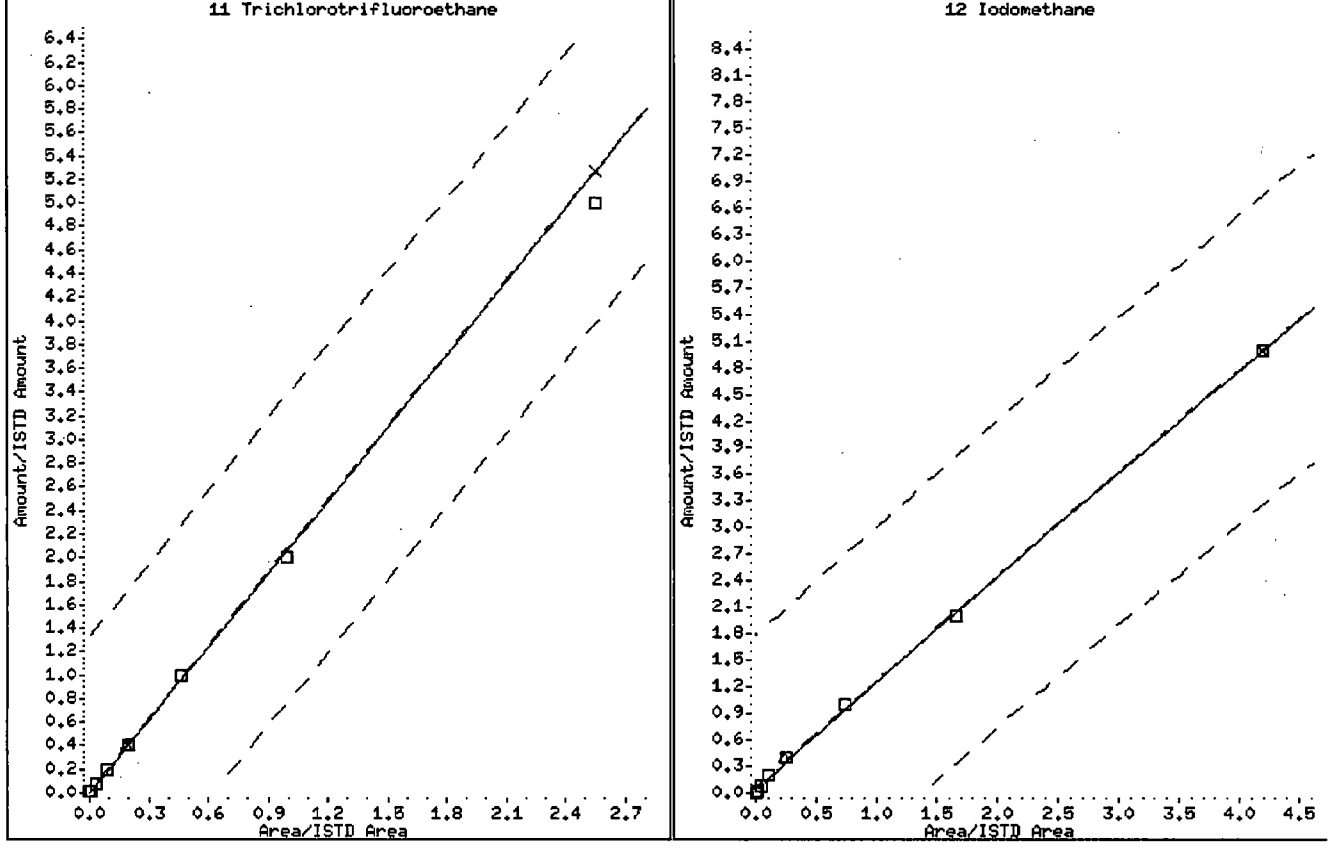

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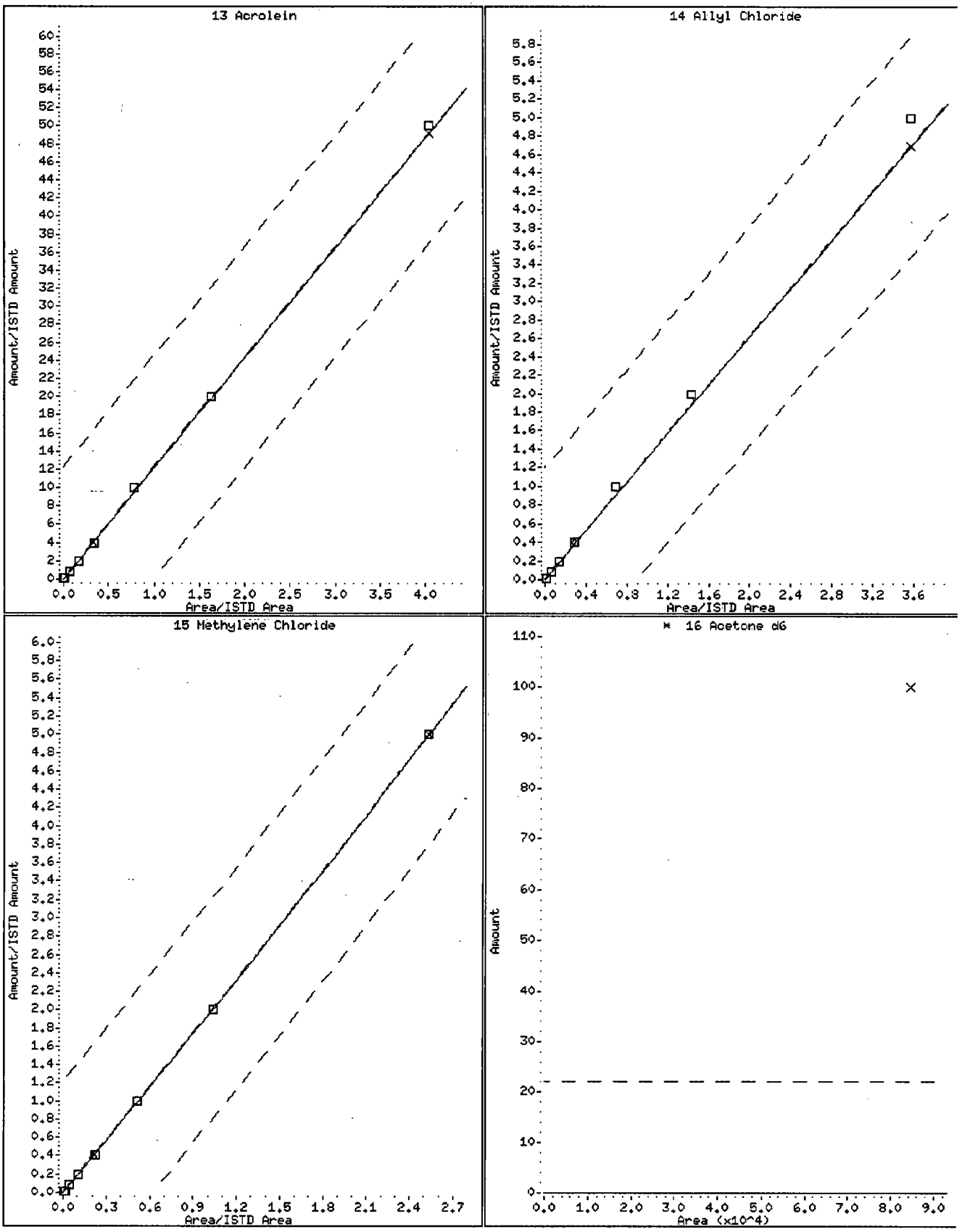

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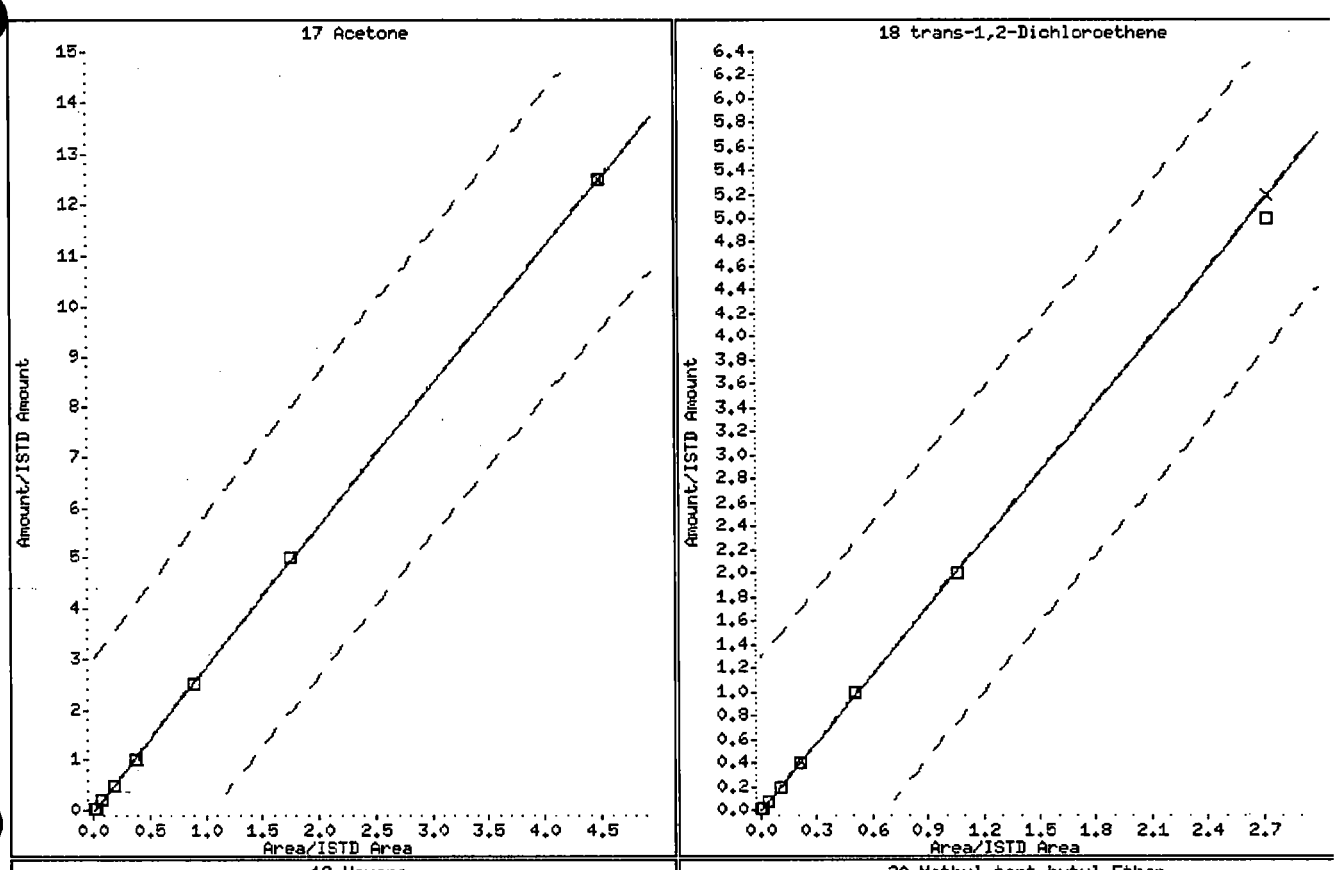

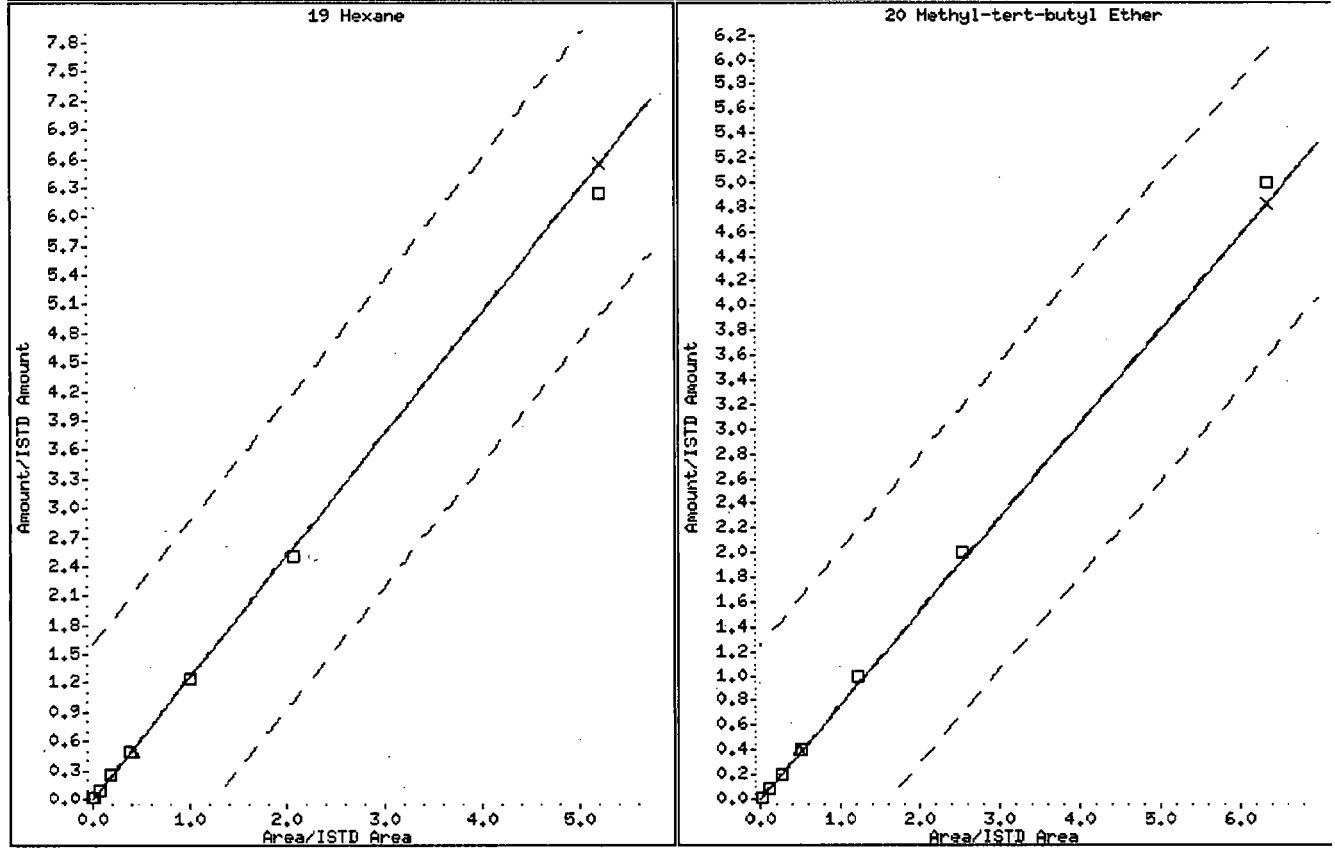

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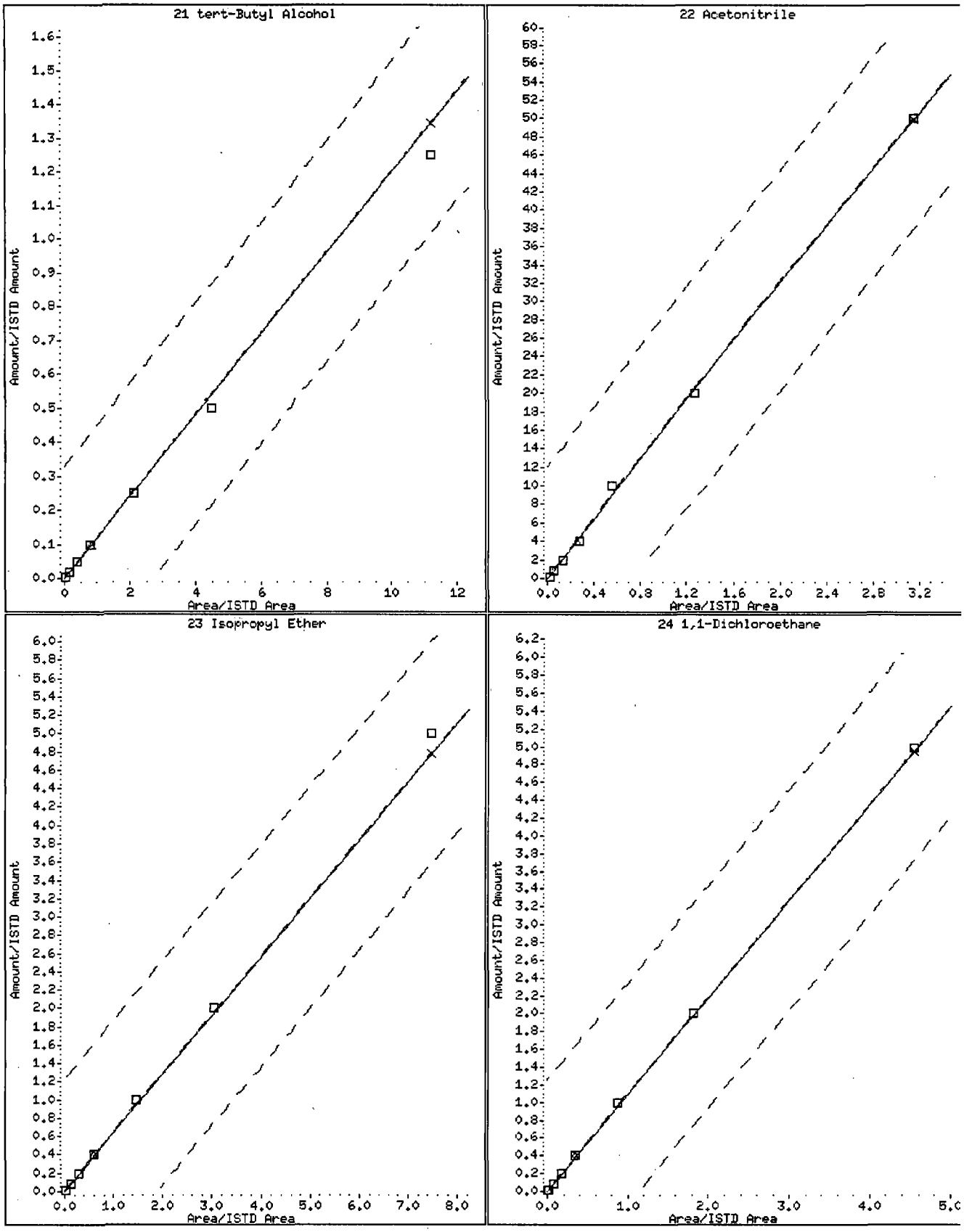

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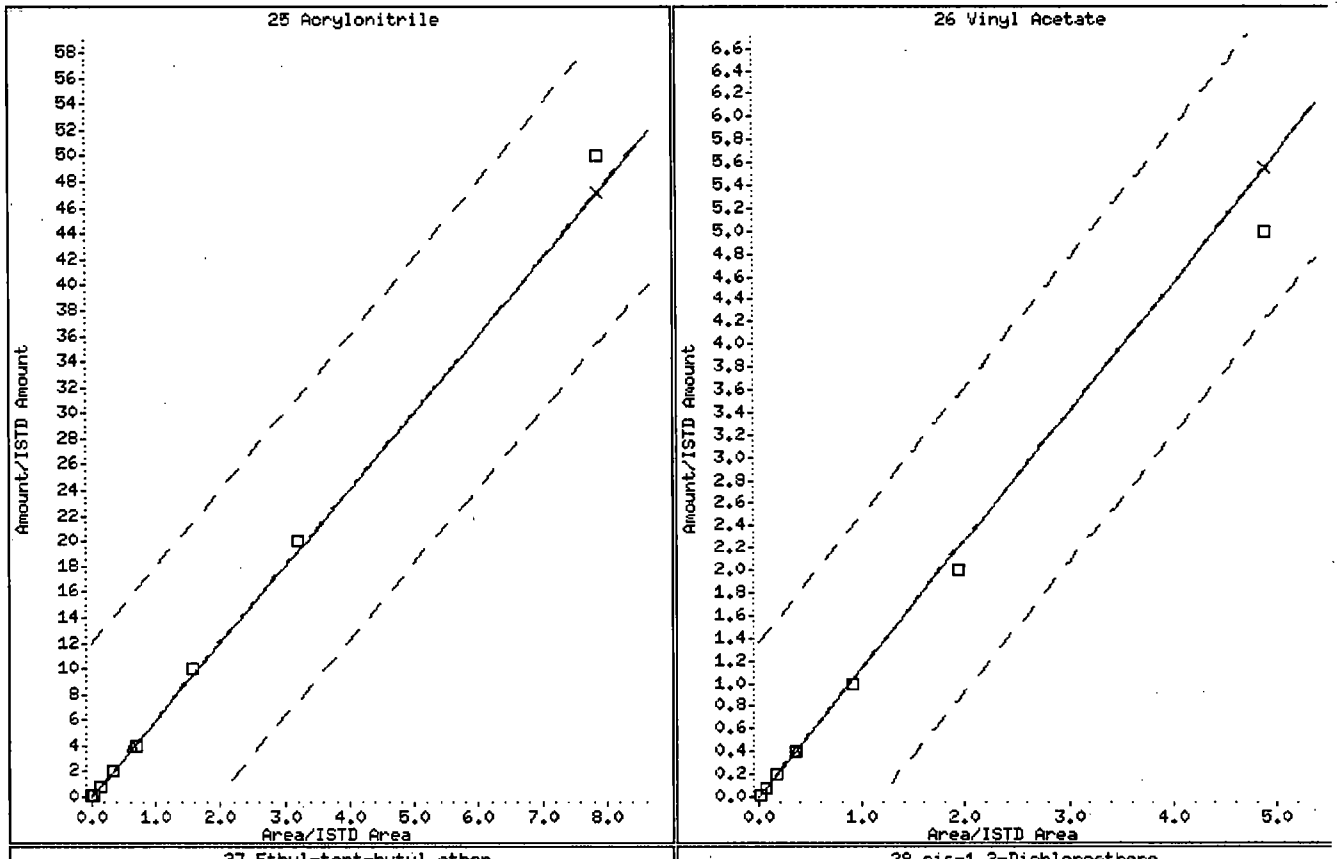

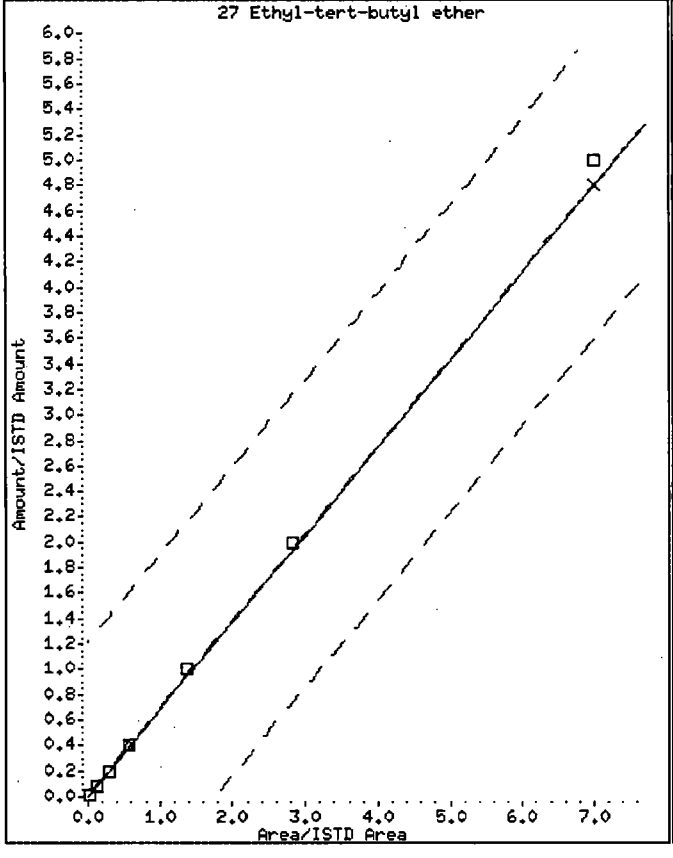

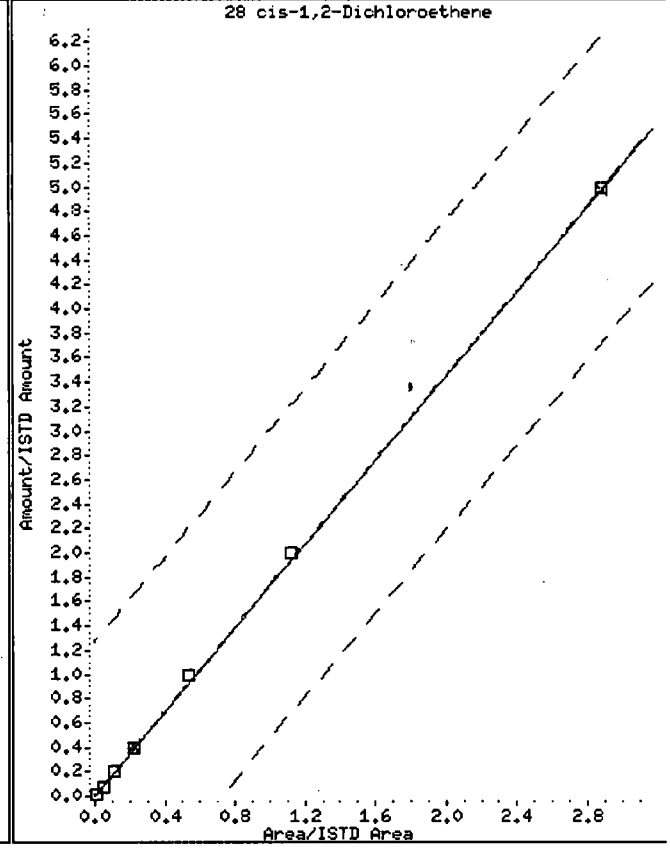

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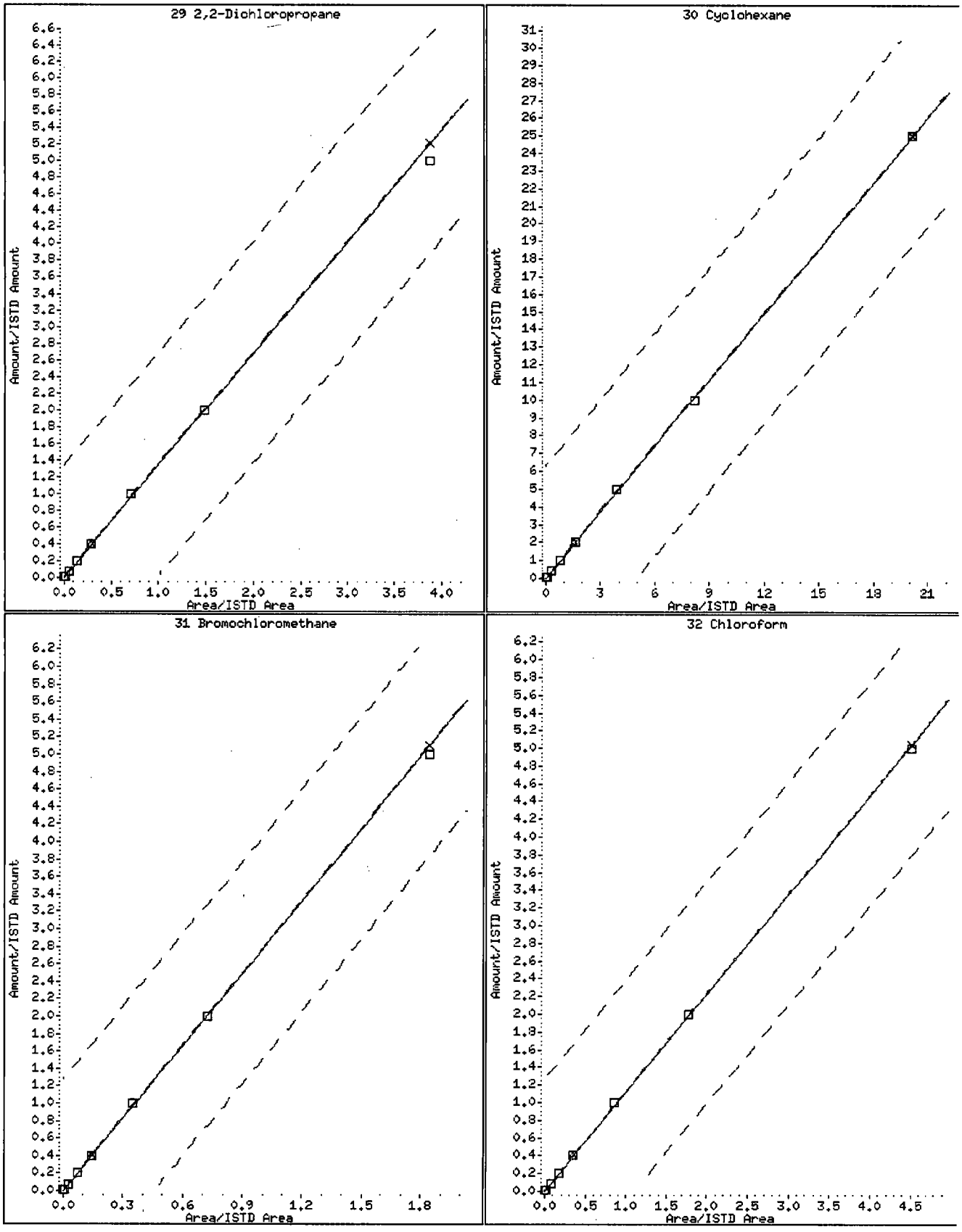

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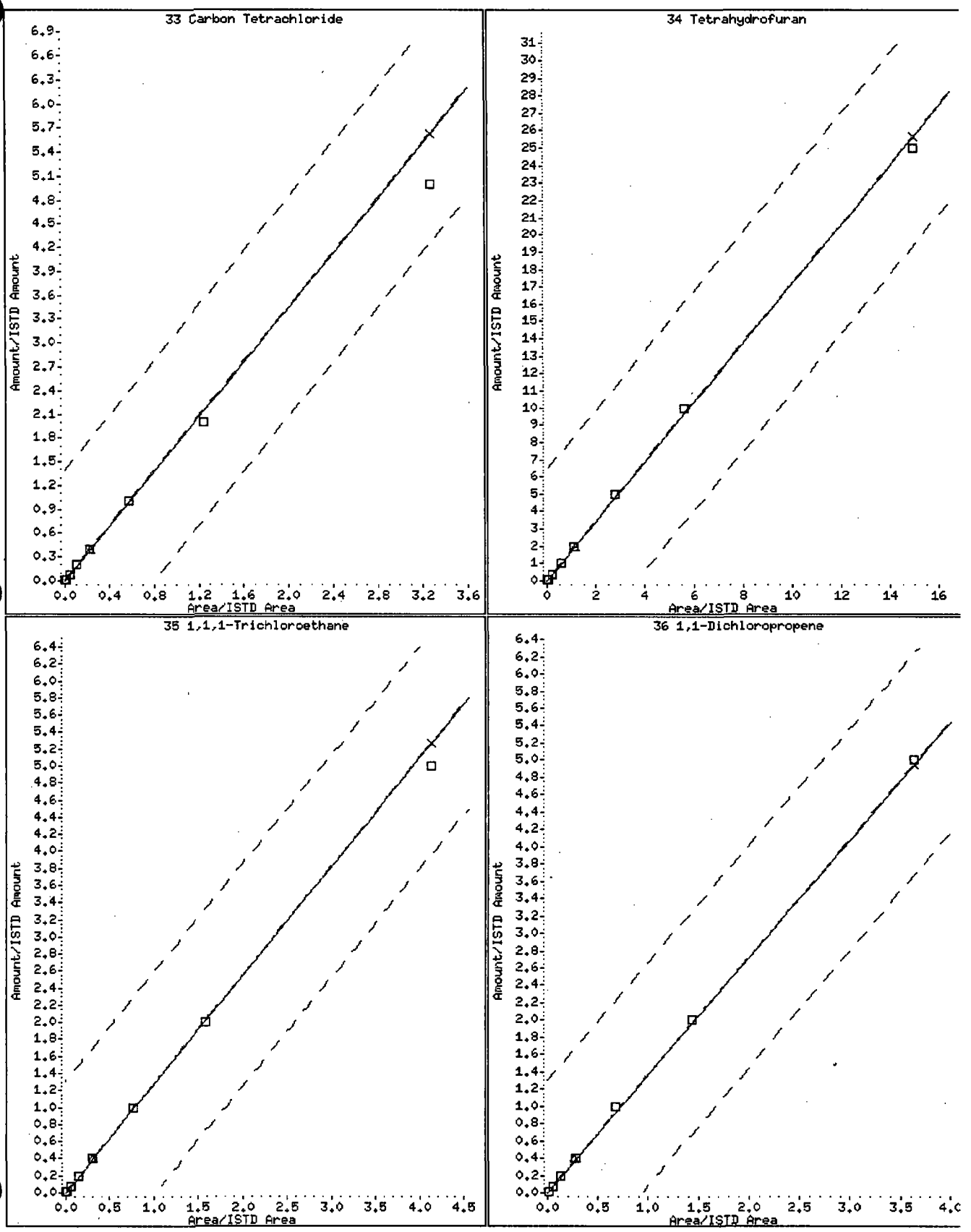

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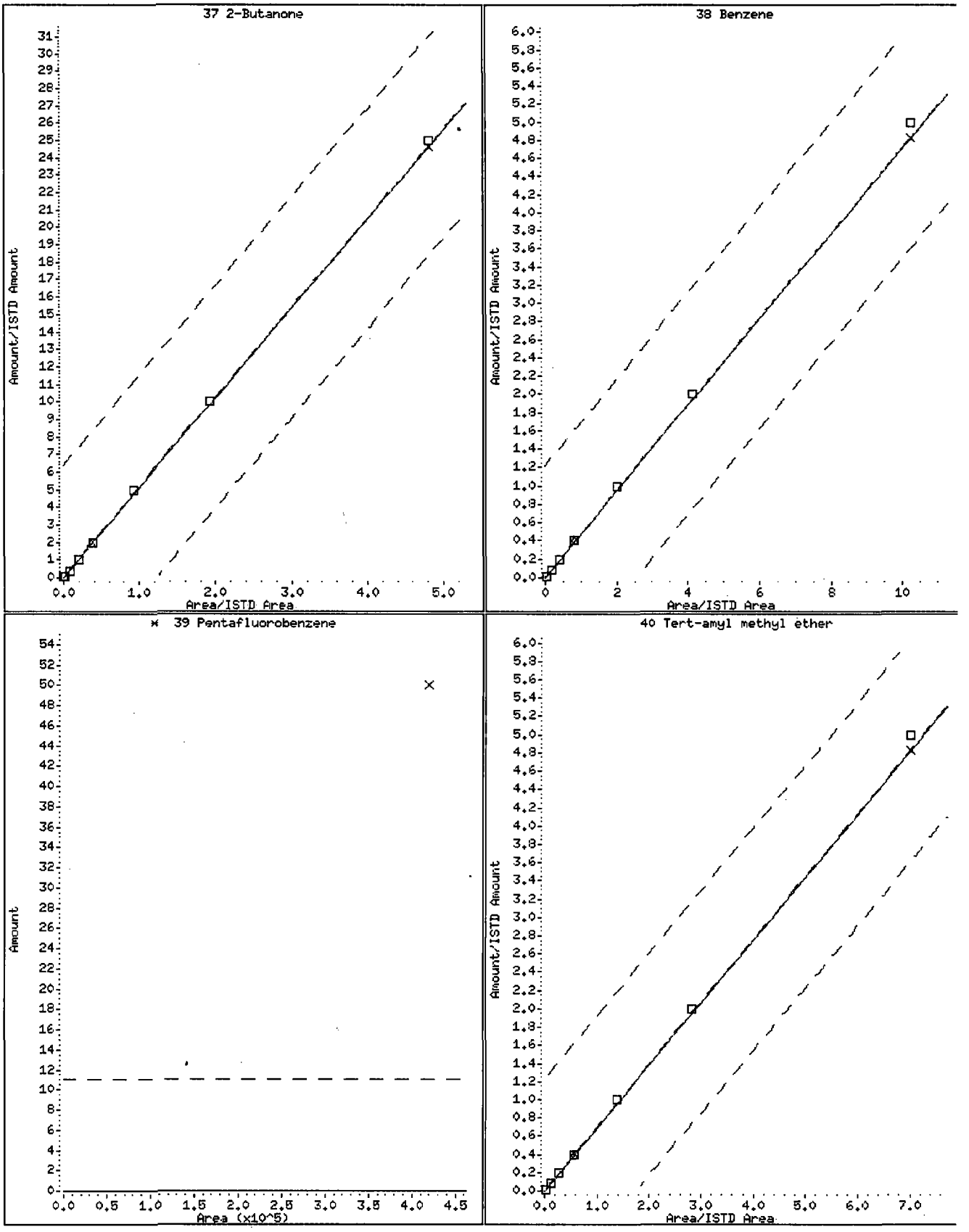

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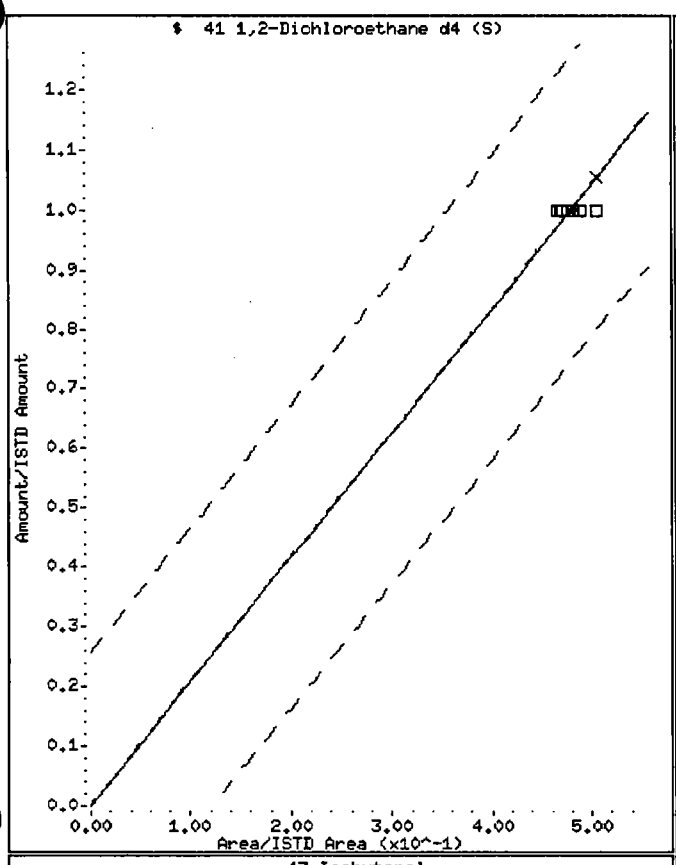

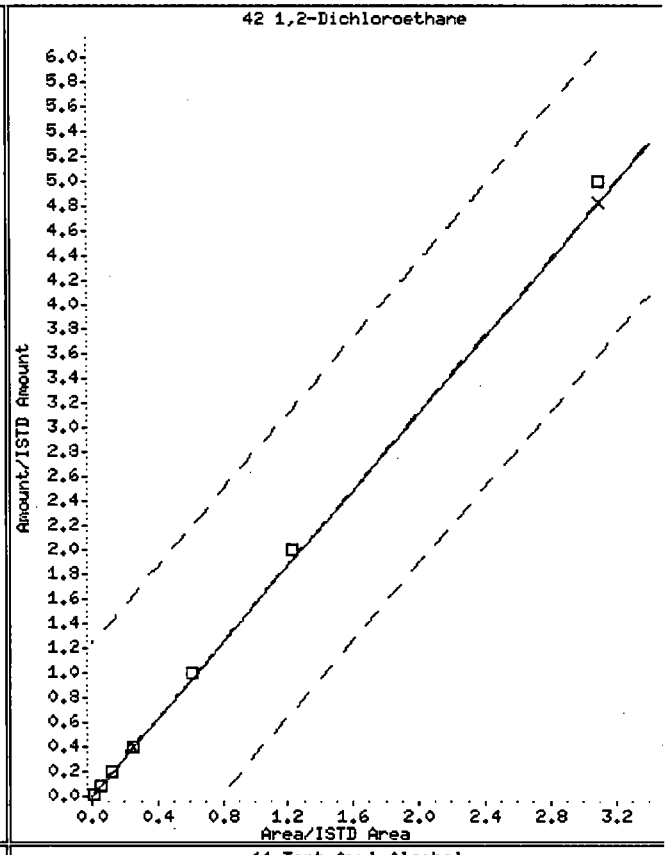

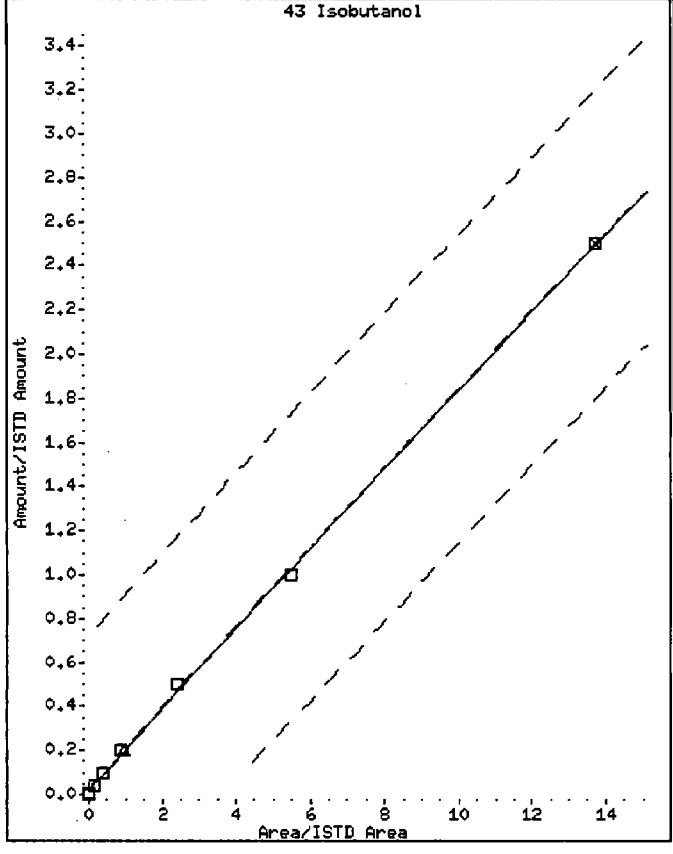

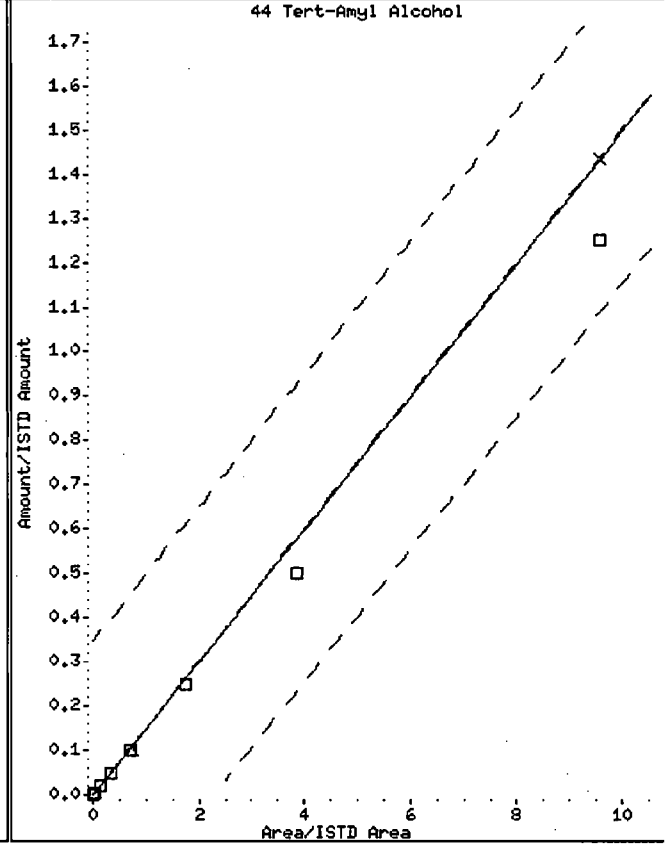

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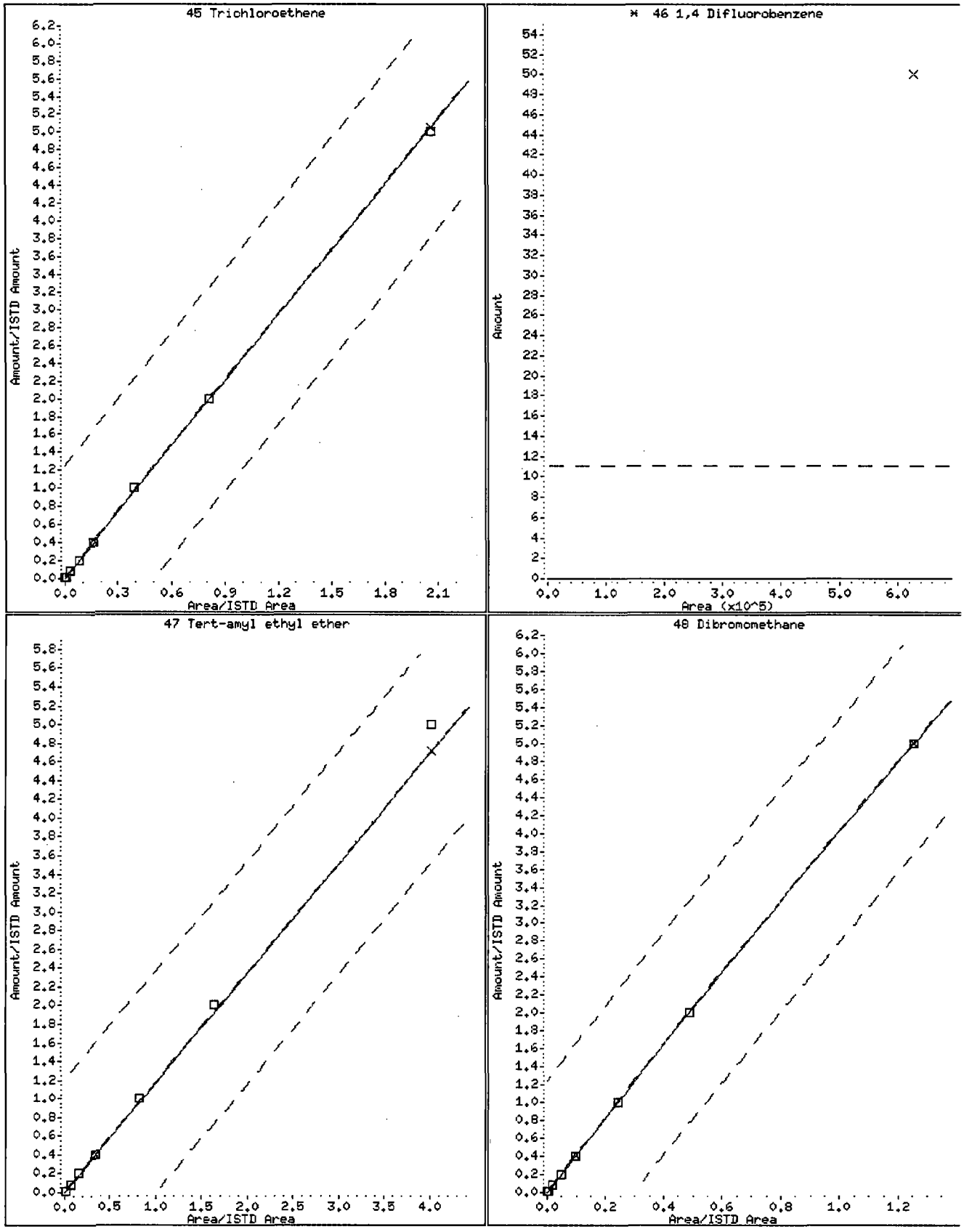

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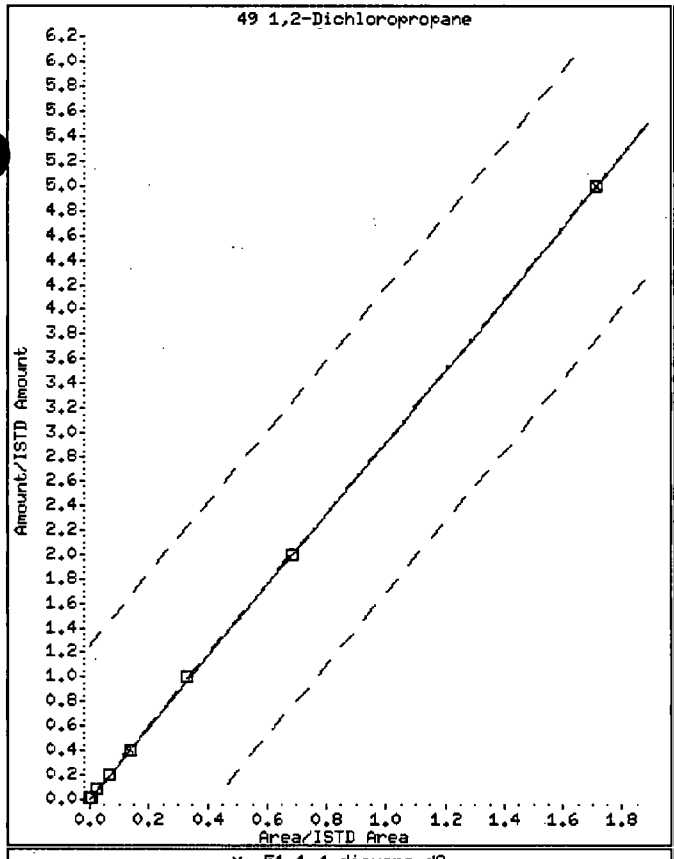

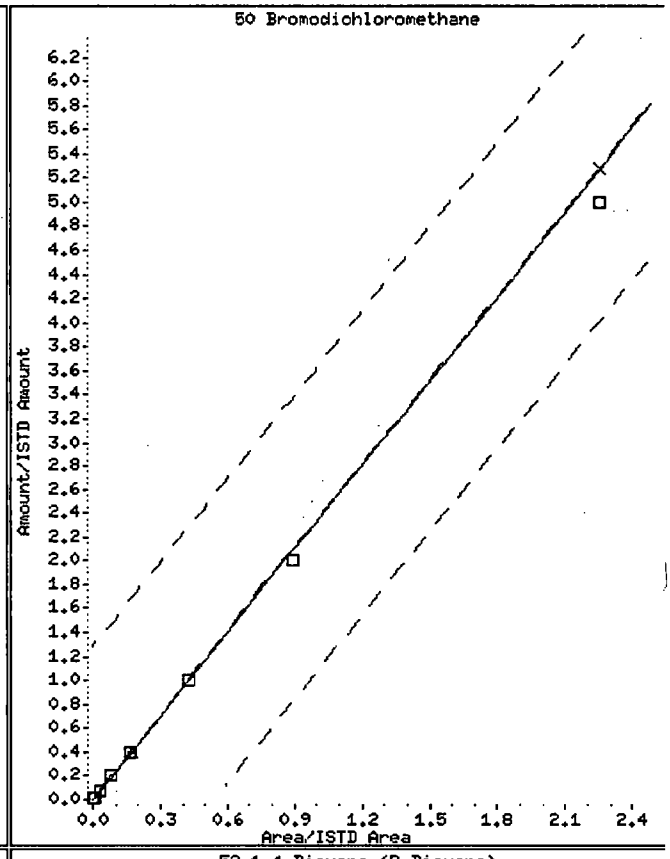

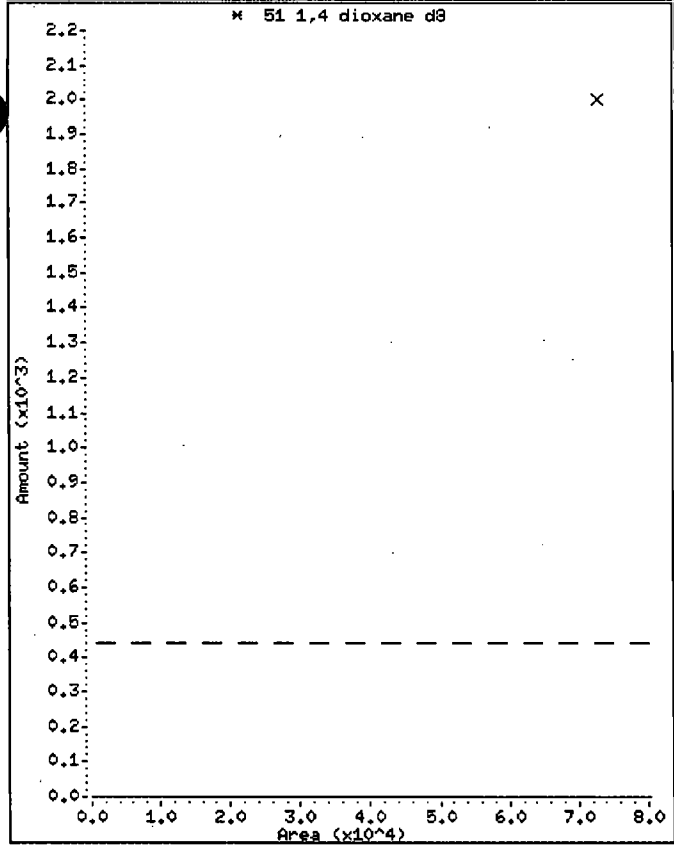

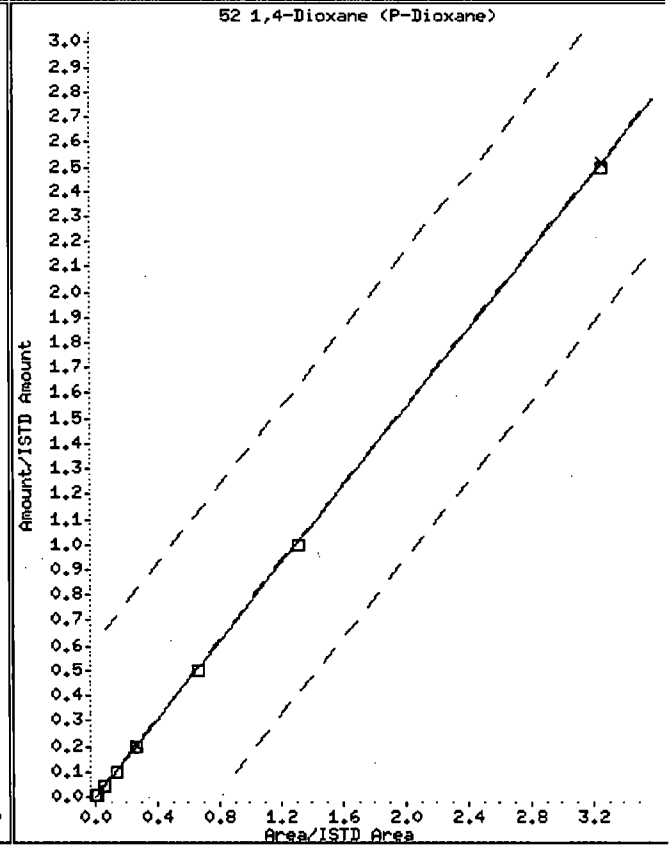

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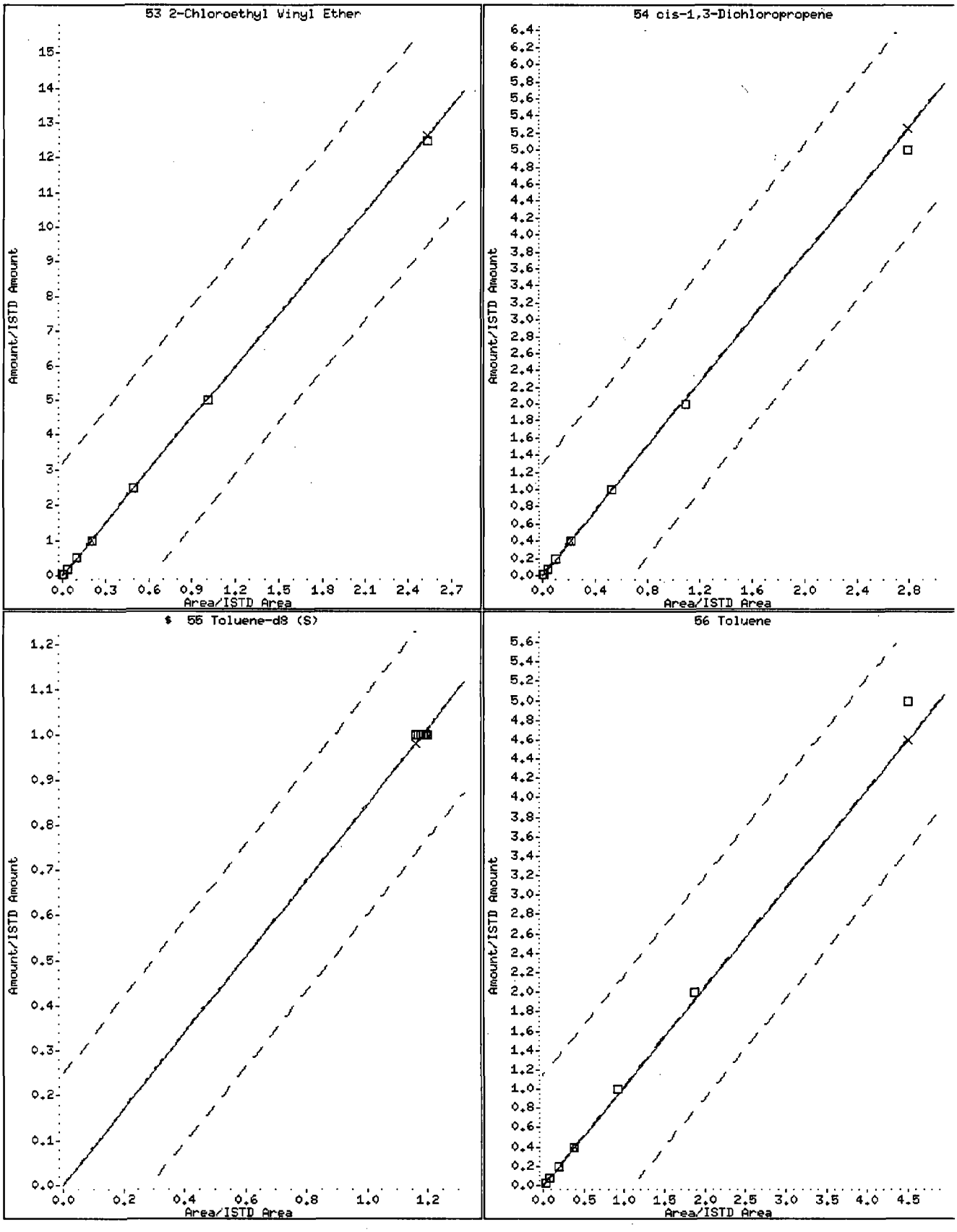

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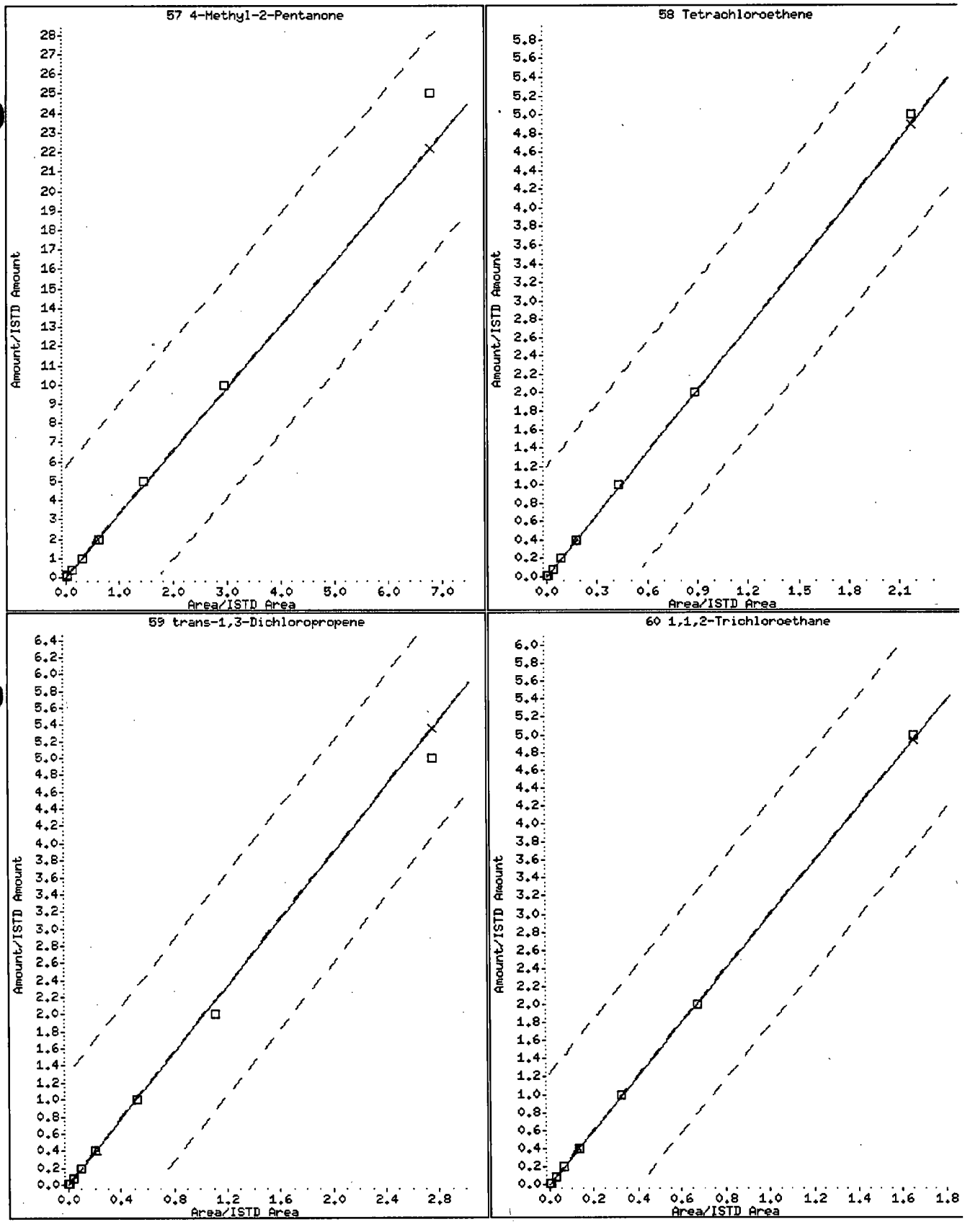

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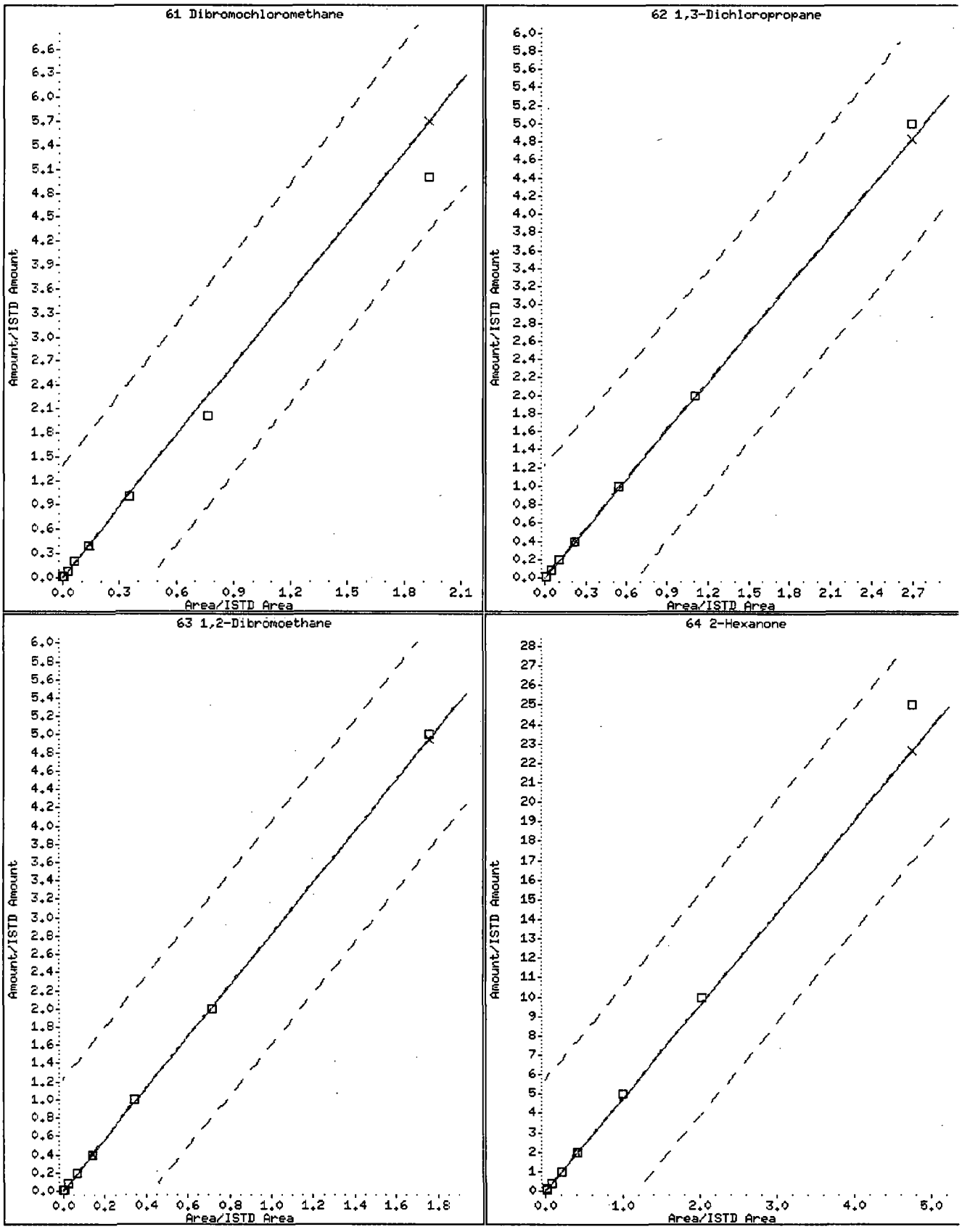

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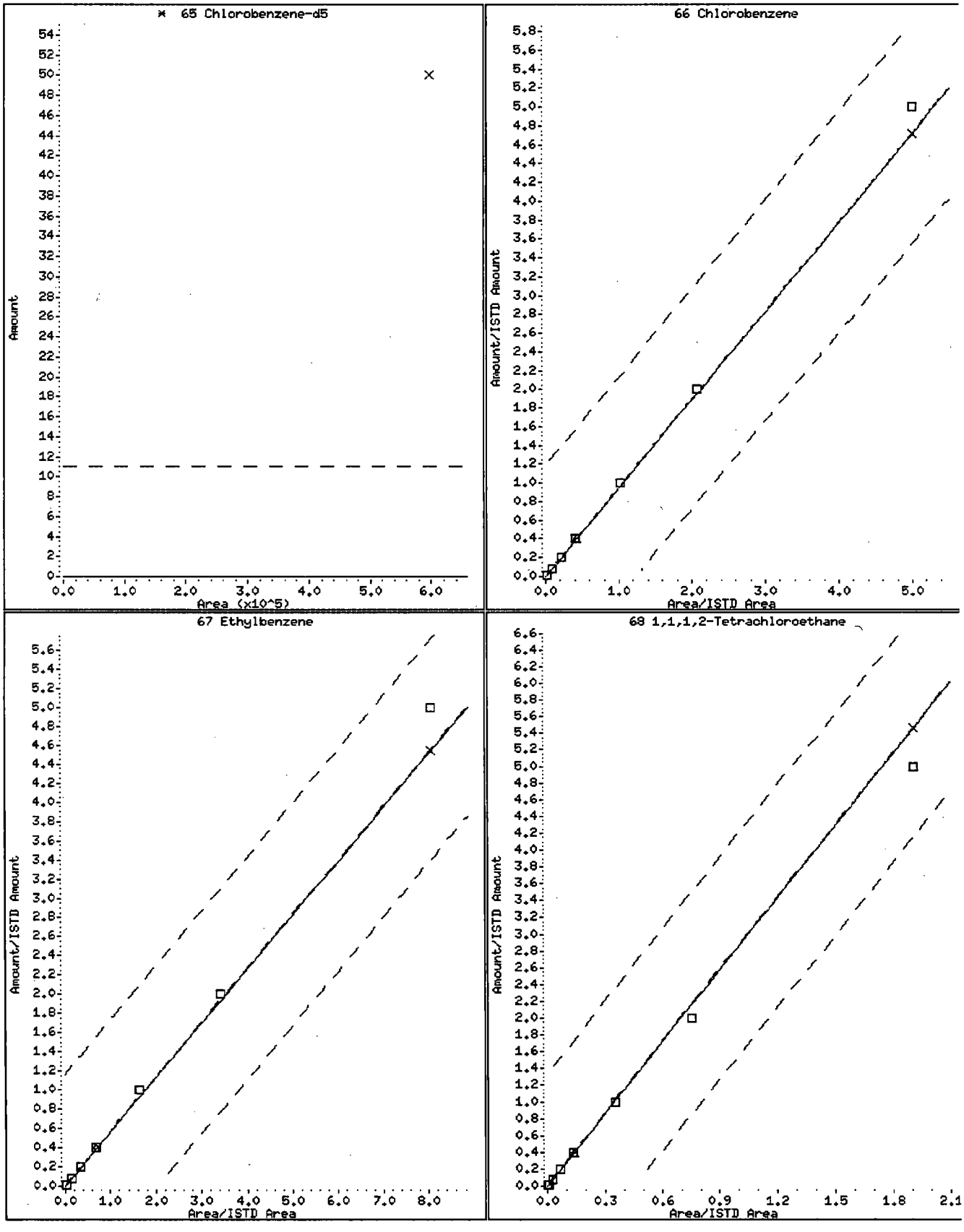

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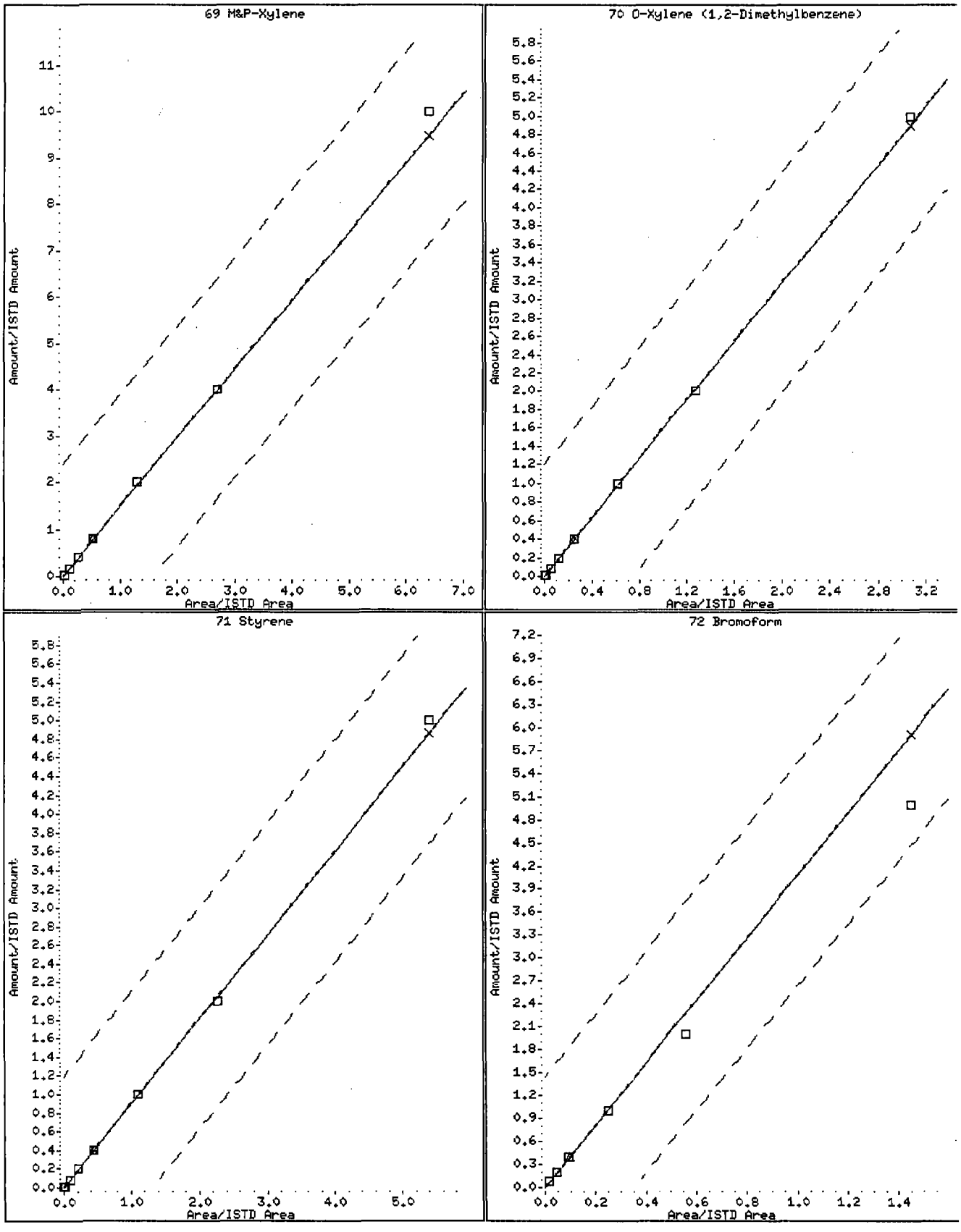

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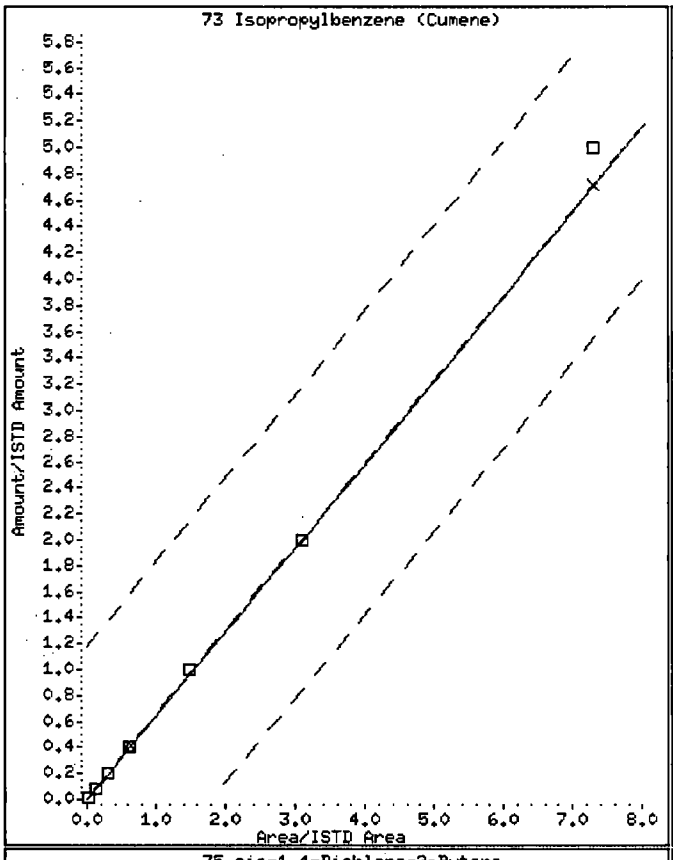

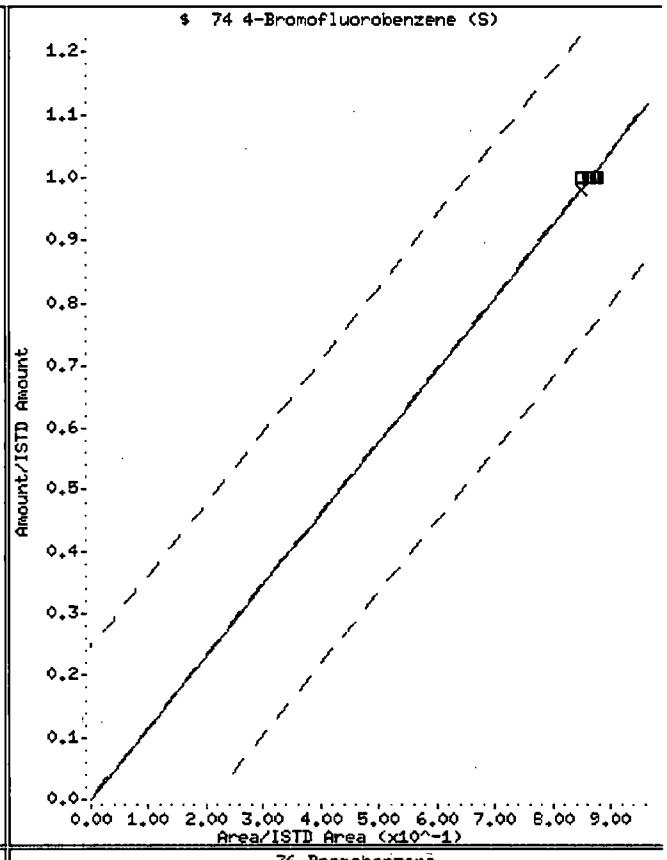

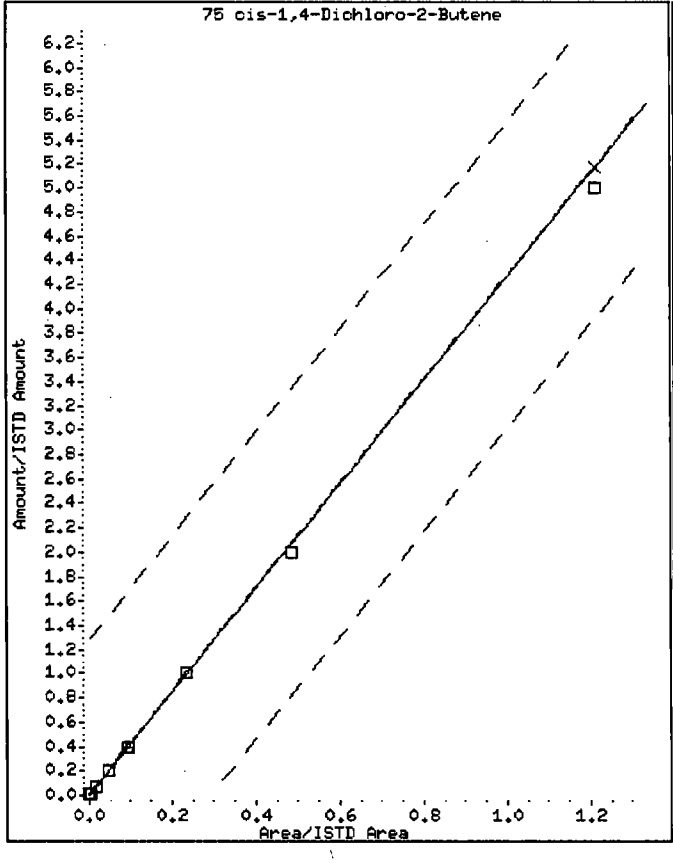

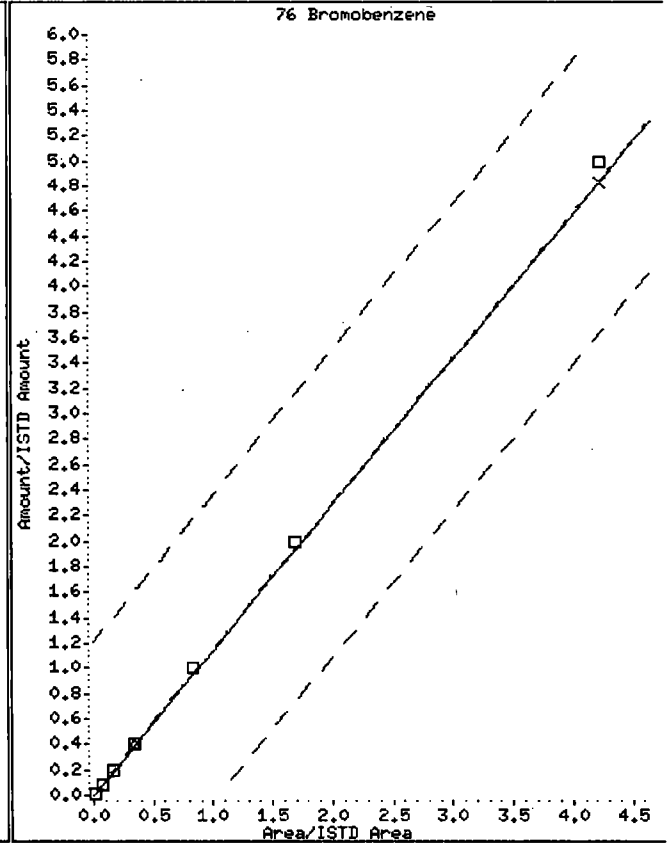

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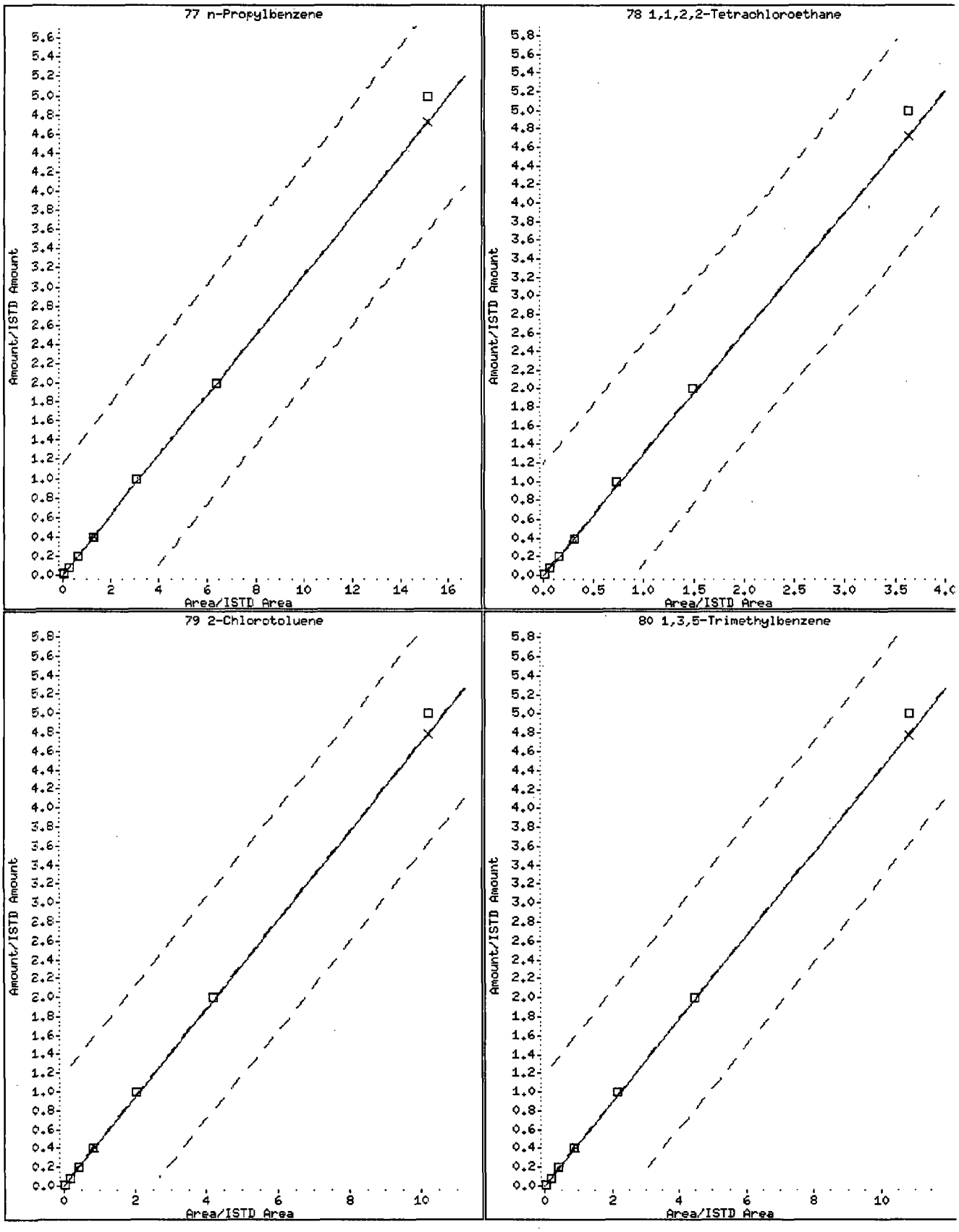

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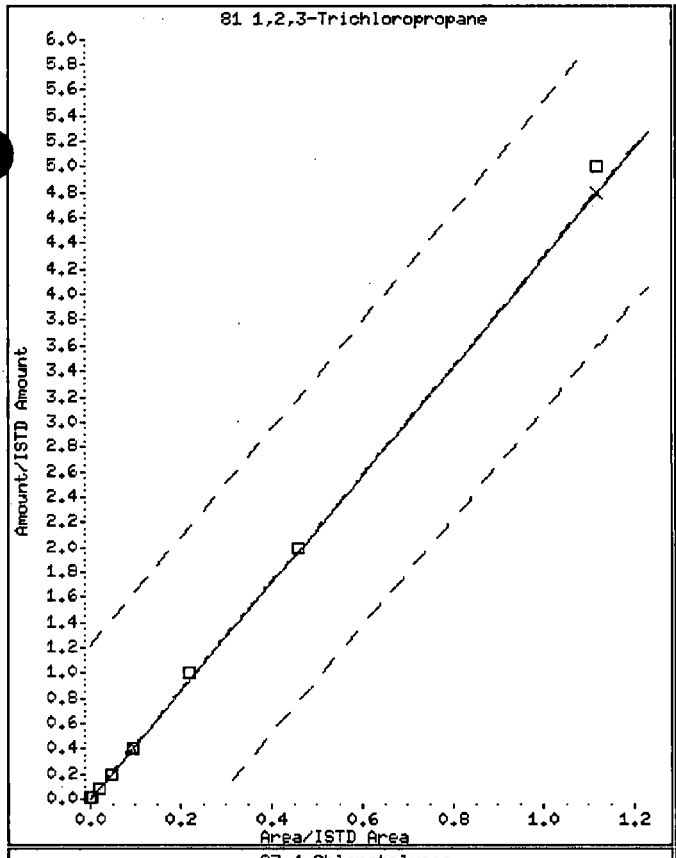

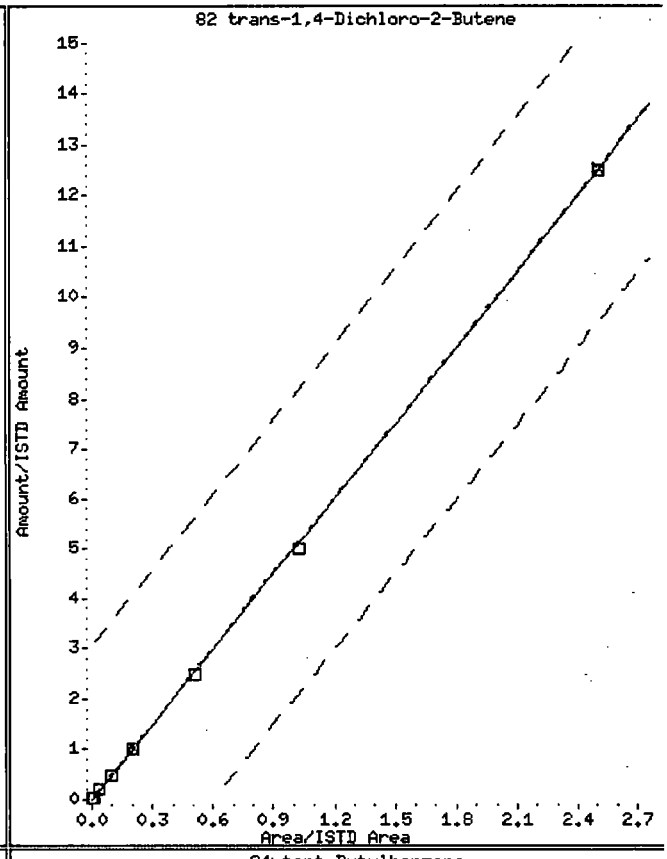

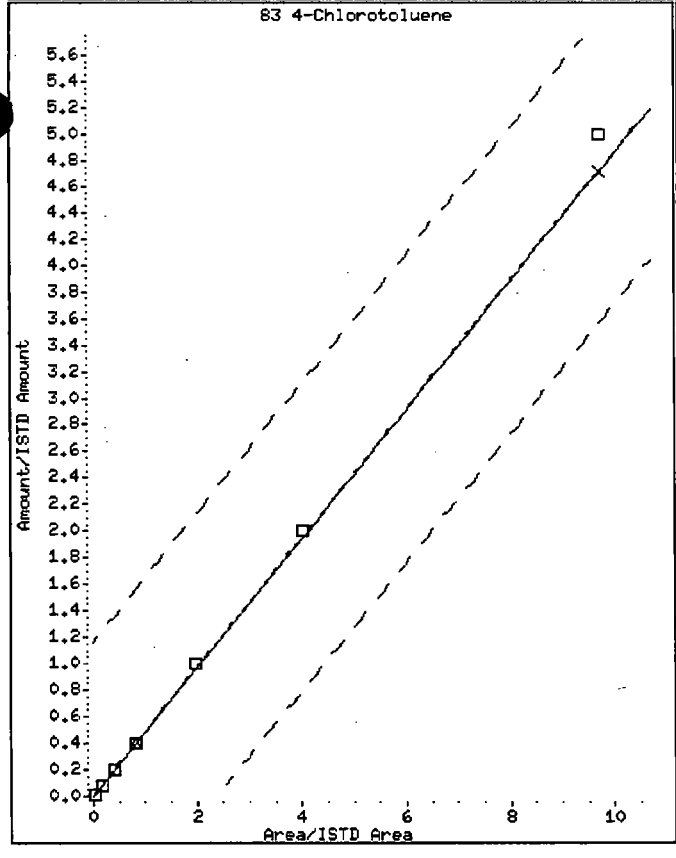

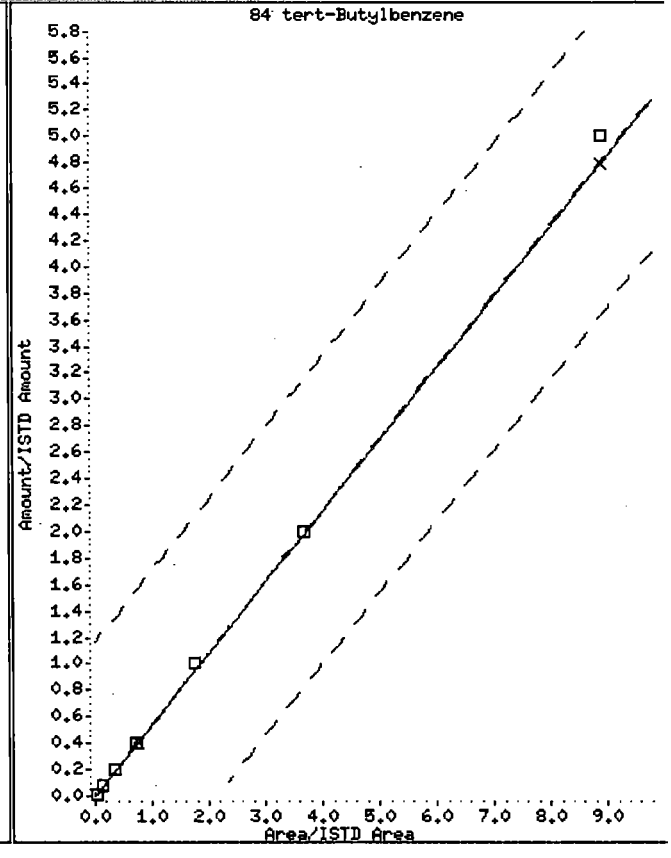

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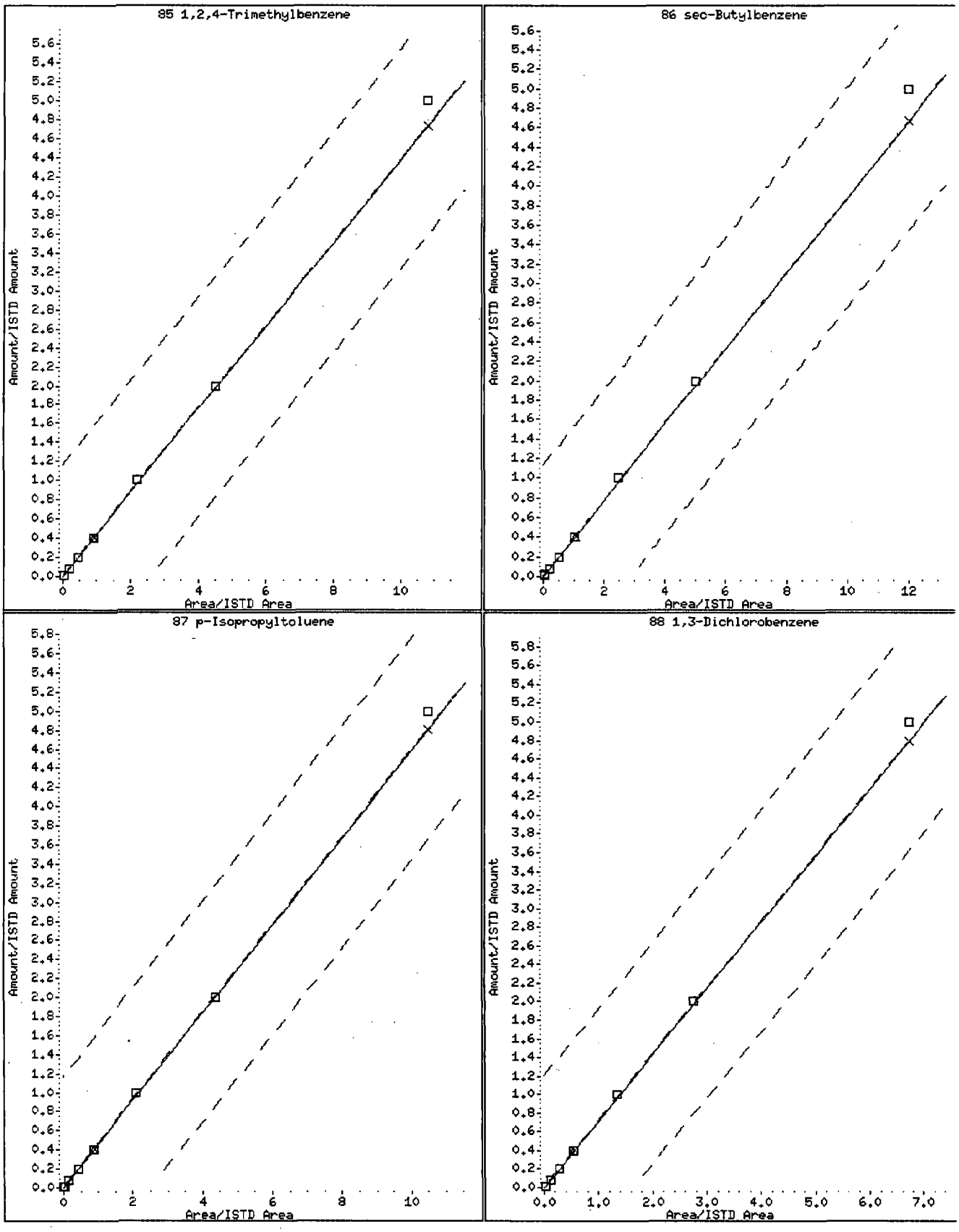

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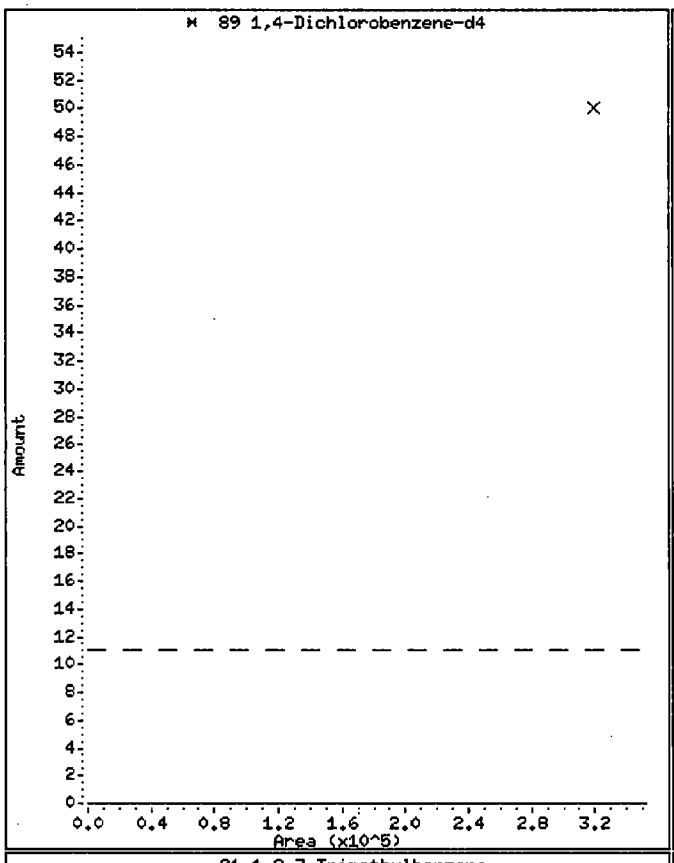

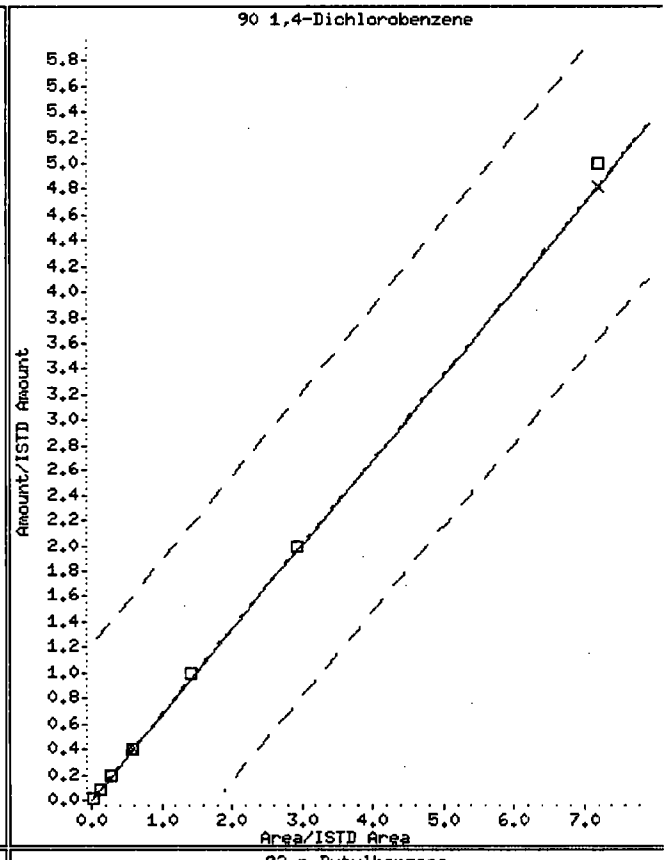

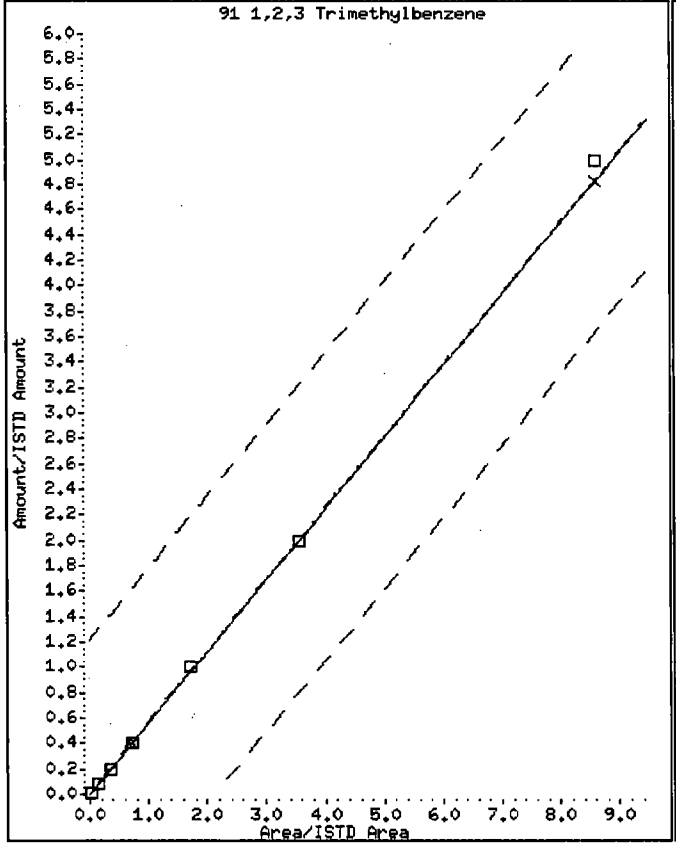

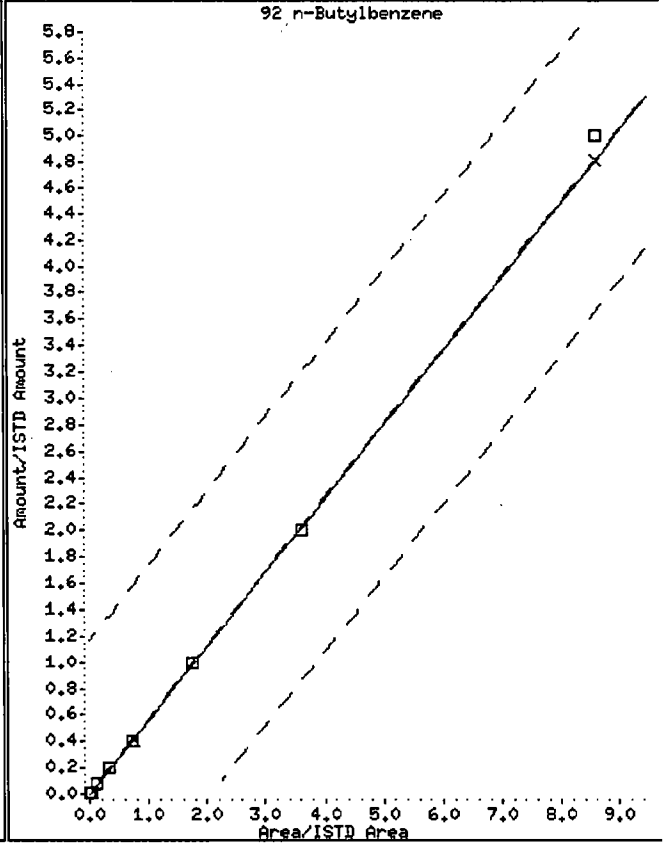

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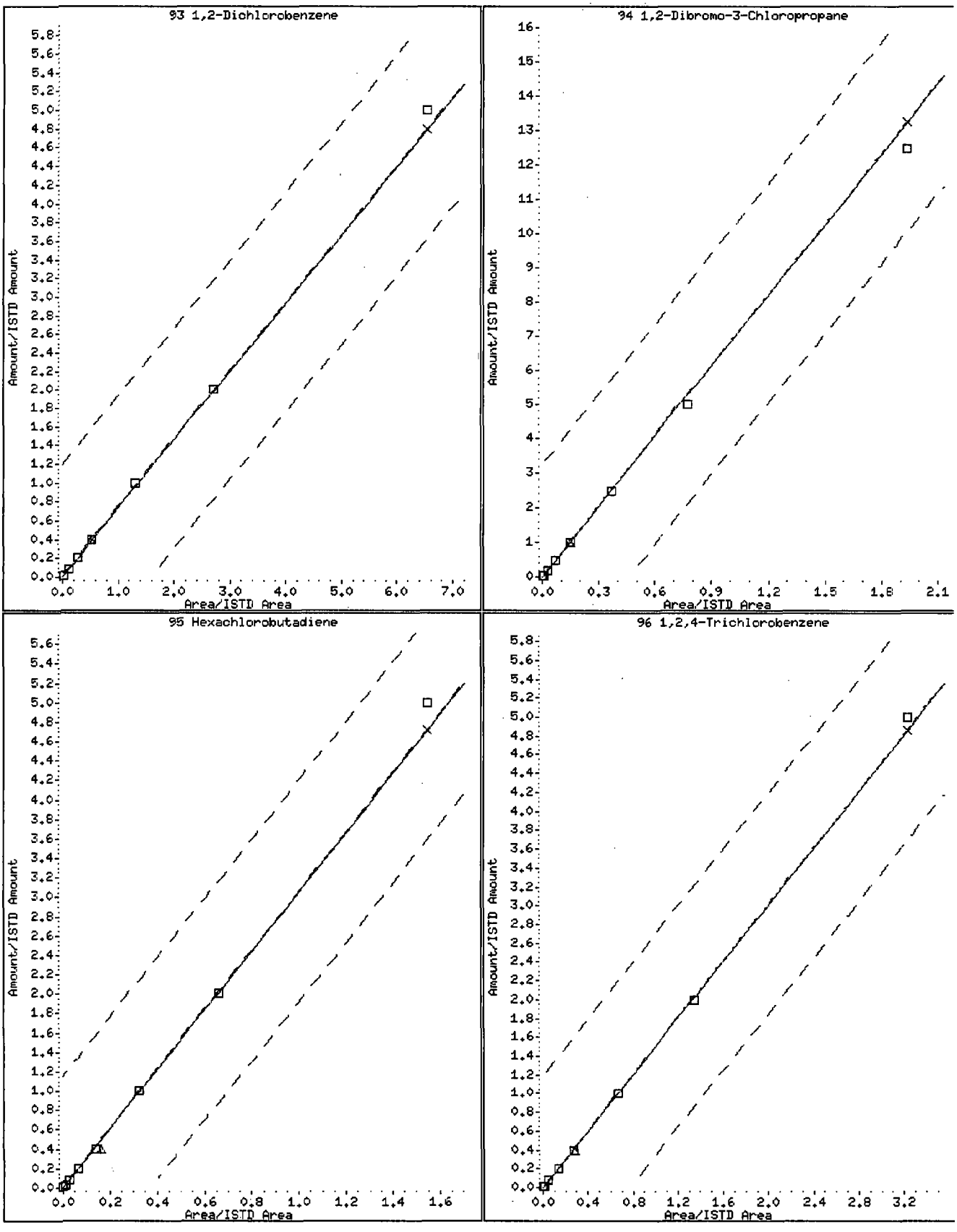

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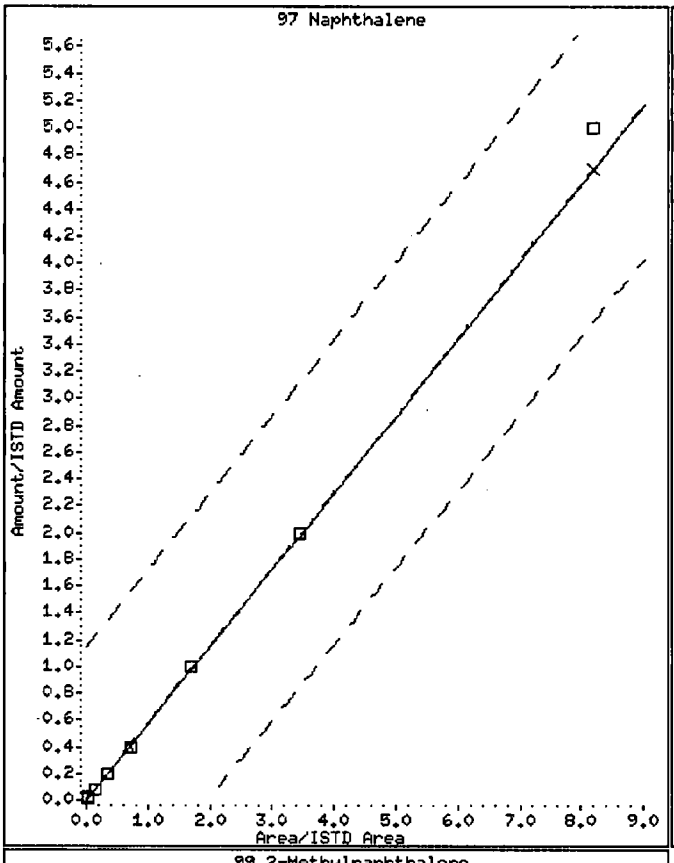

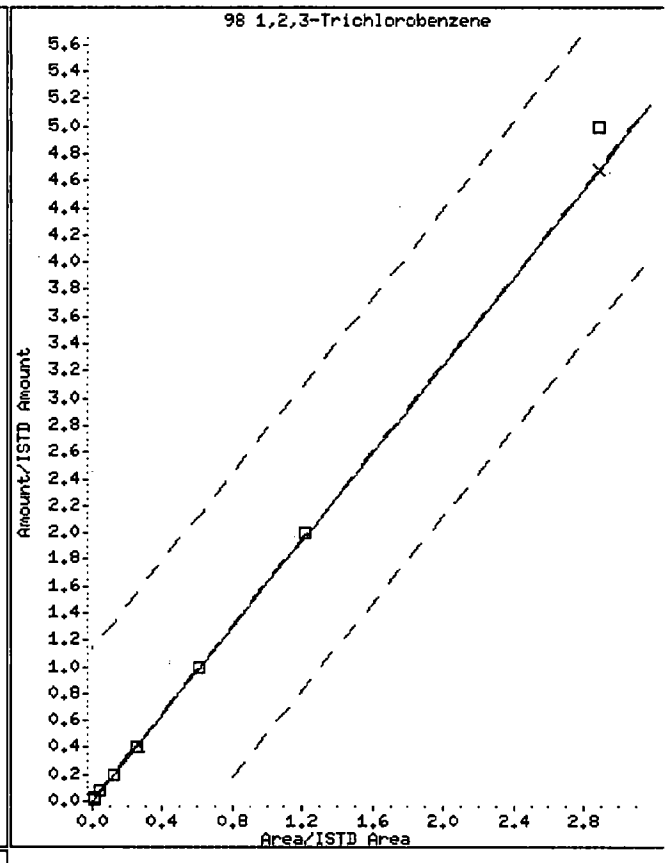

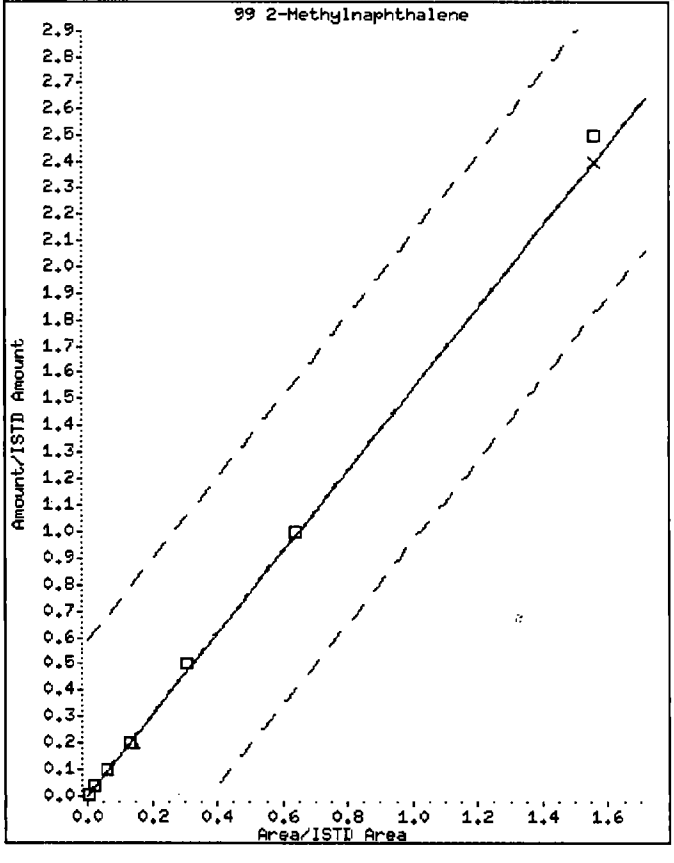

Report Date : 30-Jan-2014 09:09

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-JAN-2014 13:30
End Cal Date : 29-JAN-2014 15:38
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Last Edit : 30-Jan-2014 09:08 hpham

Calibration File Names:
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Level 3: \\192.168.10.12\chem\10msv7.i\012914A.b\012914005.D
Level 4: \\192.168.10.12\chem\10msv7.i\012914A.b\012914006.D
Level 5: \\192.168.10.12\chem\10msv7.i\012914A.b\012914007.D
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Level 7: \\192.168.10.12\chem\10msv7.i\012914A.b\012914009.D
Level 8: \\192.168.10.12\chem\10msv7.i\012914A.b\012914010.D
Level 9: \\192.168.10.12\chem\10msv7.i\012914A.b\012914011.D

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
1 Dichlorodifluoromethane	+++++	0.33394	0.32590	0.37613	0.38029	0.38336					
	0.36942	0.34637					AVRG		0.35934		6.55705
2 Chloromethane	+++++	0.34015	0.31520	0.38828	0.38617	0.37466					
	0.37234	0.35818					AVRG		0.36214		7.32733
3 Vinyl Chloride	+++++	0.38568	0.39481	0.44018	0.43776	0.44746					
	0.43159	0.42338					AVRG		0.42296		5.60490

Pace Analytical Services, Inc.

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Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Last Edit : 30-Jan-2014 09:08 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
4 Bromomethane	3553	5022	15118	33834	65303	154633					
	293108	796548					QUAD	-0.01702	4.18512	-0.54851	0.99974
5 Chloroethane	468	2473	11853	24534	40940	100688					
	218688	526329					QUAD	-0.00066	5.42521	0.72311	0.99964
6 Trichlorofluoromethane	0.57680	0.54412	0.53162	0.60290	0.58959	0.62979					
	0.57416	0.48908					AVRG		0.56726		7.80899
7 Dichlorofluoromethane	+++++	0.78667	0.70103	0.77491	0.74921	0.76028					
	0.74099	0.72180					AVRG		0.74784		3.97909
8 Diethyl ether (Ethyl Ether)	0.24862	0.25695	0.23594	0.25508	0.26039	0.26495					
	0.26357	0.25641					AVRG		0.25524		3.66025
9 1,1-Dichloroethene	0.29273	0.33973	0.32768	0.36684	0.36795	0.37879					
	0.37345	0.36721					AVRG		0.35180		8.41811
10 Carbon Disulfide	+++++	1.57706	1.25397	1.32443	1.26885	1.29913					
	1.27050	1.26455					AVRG		1.32264		8.67492

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Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Last Edit : 30-Jan-2014 09:08 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
11 Ethanol	+++++	+++++	1.26172	1.44229	1.39205	1.34199					
	1.41762	1.52198					AVRG		1.39627		6.36115
12 Trichlorotrifluoroethane	0.34866	0.35902	0.33754	0.40128	0.40793	0.41498					
	0.40711	0.39582					AVRG		0.38404		7.95711
13 Iodomethane	+++++	1628	9976	42993	109227	336881					
	681067	1782297					QUAD	0.02553	1.71001	-0.02109	0.99982
14 Acrolein	+++++	0.04108	0.04213	0.04947	0.04907	0.05174					
	0.05132	0.04955					AVRG		0.04776		9.07398
15 Allyl Chloride	0.41640	0.49164	0.47391	0.53418	0.51306	0.53589					
	0.52672	0.52664					AVRG		0.50230		8.15559
16 Methylene Chloride	9067	10928	25277	54823	100575	246723					
	490490	1229255					QUAD	-0.01295	2.45025	0.02142	1.00000
17 Isopropanol	+++++	12086	13828	37067	60582	143455					
	286220	714438					QUAD	-0.00859	0.15210	-0.00274	0.99988

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Last Edit : 30-Jan-2014 09:08 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
19 Acetone	1694	2754	6129	14975	27608	72585					
	143687	361764					QUAD	-0.02088	2.88717	0.09234	0.99997
20 trans-1,2-Dichloroethene	0.35499	0.36929	0.37097	0.41863	0.42262	0.42456					
	0.41933	0.41530					AVRG		0.39946		7.25524
21 Hexane	1.62762	1.62217	1.32454	1.48853	1.54699	1.52616					
	1.47169	1.38338					AVRG		1.49889		7.10613
22 Methyl-tert-butyl Ether	0.84082	0.96233	0.91258	1.01533	1.00833	1.03741					
	1.03410	1.02989					AVRG		0.98010		7.21357
23 tert-Butyl Alcohol	+++++	10.30580	10.60382	11.70485	11.99738	12.25289					
	12.22833	13.04912					AVRG		11.73460		8.25518
24 Acetonitrile	0.03522	0.03212	0.03164	0.03186	0.03099	0.03125					
	0.03180	0.03230					AVRG		0.03215		4.09175
25 Isopropyl Ether	1.08016	1.08807	1.08241	1.16530	1.15955	1.21302					
	1.19752	1.21171					AVRG		1.14972		5.05509

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Method file : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Last Edit : 30-Jan-2014 09:08 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
26 Acrylonitrile	+++++	0.05376	0.05243	0.05805	0.05683	0.06186					
	0.05924	0.05935					AVRG		0.05765		5.79817
27 1,1-Dichloroethane	0.56646	0.64371	0.63440	0.70728	0.70601	0.71898					
	0.70833	0.71010					AVRG		0.67441		8.06073
28 Ethyl-tert-butyl ether	0.93326	1.05364	1.04211	1.11025	1.09592	1.14106					
	1.14398	1.15811					AVRG		1.08479		6.84273
29 Vinyl Acetate	0.62830	0.60521	0.65987	0.72344	0.73518	0.76152					
	0.76822	0.75229					AVRG		0.70425		9.06851
30 cis-1,2-Dichloroethene	0.41303	0.39644	0.41732	0.45752	0.45507	0.46171					
	0.45665	0.44975					AVRG		0.43844		5.78162
31 2,2-Dichloropropane	0.53797	0.57367	0.55197	0.60506	0.60104	0.62058					
	0.60949	0.61107					AVRG		0.58986		5.18163
32 Cyclohexane	0.63961	0.62665	0.60197	0.68163	0.69437	0.71360					
	0.71235	0.71729					AVRG		0.67343		6.63999

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
33 Bromochloromethane	+++++	0.25463	0.25017	0.27532	0.27651	0.27745					
	0.27538	0.26005					AVRG		0.26707		4.38593
34 Chloroform	0.64391	0.68477	0.66314	0.72342	0.71658	0.73559					
	0.72168	0.72209					AVRG		0.70140		4.74973
35 Carbon Tetrachloride	+++++	0.42905	0.46941	0.51653	0.52309	0.54949					
	0.55692	0.55836					AVRG		0.51469		9.50481
36 Tetrahydrofuran	0.60491	0.65113	0.58820	0.63414	0.63554	0.62656					
	0.62450	0.60034					AVRG		0.62067		3.38802
37 1,1,1-Trichloroethane	0.49322	0.59445	0.56929	0.63055	0.63609	0.65408					
	0.64376	0.64378					AVRG		0.60815		8.97094
38 2-Butanone	0.12355	0.11765	0.12340	0.12398	0.12659	0.12979					
	0.13516	0.13024					AVRG		0.12629		4.25900
39 1,1-Dichloropropene	0.56245	0.51887	0.49982	0.57390	0.57575	0.59708					
	0.58216	0.57667					AVRG		0.56084		5.98935

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-JAN-2014 13:30
End Cal Date : 29-JAN-2014 15:38
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Last Edit : 30-Jan-2014 09:08 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
40 Benzene	1.73082	1.67508	1.55700	1.67982	1.69173	1.71198					
	1.68908	1.72008					AVRG		1.68182		3.22235
42 Tert-amyl methyl ether	1.19665	1.07864	1.02996	1.08883	1.09369	1.12289					
	1.13052	1.15482					AVRG		1.11200		4.58256
44 1,2-Dichloroethane	0.41915	0.44205	0.43608	0.47301	0.47124	0.48779					
	0.47751	0.47280					AVRG		0.45995		5.26282
45 Isobutanol	+++++	4.01310	4.33505	4.66967	4.76354	5.02901					
	5.06546	5.55262					AVRG		4.77549		10.60486
46 Tert-Amyl Alcohol	+++++	8.26529	9.28855	9.94028	10.36871	10.66964					
	11.01308	11.72068					AVRG		10.18089		11.24312
47 Trichloroethene	0.34176	0.35774	0.31820	0.36167	0.35165	0.36303					
	0.34910	0.34982					AVRG		0.34912		4.11201
49 Tert-amyl ethyl ether	0.55782	0.59358	0.58705	0.62843	0.62155	0.64926					
	0.65117	0.67226					AVRG		0.62014		6.18030

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Last Edit : 30-Jan-2014 09:08 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9	Curve	Coefficients b	m1	m2	%RSD or R^2	
50 Dibromomethane	0.16304	0.18038	0.18170	0.19749	0.19468	0.20192								
	0.19679	0.19533							AVRG		0.18892		6.85373	
51 1,2-Dichloropropane	0.25417	0.26824	0.26829	0.28149	0.28320	0.28947								
	0.28617	0.29260							AVRG		0.27795		4.72631	
52 Bromodichloromethane	0.31809	0.37717	0.34857	0.38221	0.38050	0.39678								
	0.38454	0.38830							AVRG		0.37202		6.96117	
54 1,4-Dioxane (P-Dioxane)	+++++	+++++	1.21927	1.42805	1.37038	1.41199								
	1.37959	1.42999							AVRG		1.37321		5.77824	
55 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	506	1803	8543								
	21719	56644							LINR	0.25361	0.00553		0.99931	<-
56 cis-1,3-Dichloropropene	0.39140	0.41609	0.43627	0.45701	0.46424	0.47830								
	0.47513	0.48747							AVRG		0.45074		7.43242	
58 Toluene	1.06261	1.01317	0.81395	0.88417	0.86193	0.89060								
	0.85101	0.86582							AVRG		0.90416		9.54711	

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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Last Edit : 30-Jan-2014 09:08 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
59 4-Methyl-2-Pentanone	0.21229	0.21917	0.21313	0.23839	0.23483	0.24304					
	0.24498	0.24229					AVRG		0.23101		6.00396
60 Tetrachloroethene	0.42153	0.41925	0.41640	0.44616	0.43313	0.46095					
	0.43358	0.41614					AVRG		0.43089		3.72111
61 trans-1,3-Dichloropropene	0.35303	0.41858	0.41544	0.46090	0.44511	0.47560					
	0.47043	0.47559					AVRG		0.43934		9.63575
62 1,1,2-Trichloroethane	0.26176	0.23511	0.25139	0.26931	0.26195	0.27275					
	0.26803	0.26479					AVRG		0.26064		4.66344
63 Dibromochloromethane	0.28705	0.28256	0.29185	0.32076	0.31614	0.33530					
	0.33207	0.33162					AVRG		0.31217		6.97574
64 1,3-Dichloropropane	0.38736	0.42428	0.41861	0.44964	0.44088	0.45756					
	0.45339	0.45292					AVRG		0.43558		5.53424
65 1,2-Dibromoethane	+++++	0.25093	0.26457	0.28294	0.27426	0.29671					
	0.28067	0.28086					AVRG		0.27442		4.59305

Pace Analytical Services, Inc.

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Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
66 2-Hexanone	0.16982	0.15026	0.15046	0.17284	0.16751	0.17920					
	0.17835	0.17962					AVRG		0.16851		7.14478
68 Chlorobenzene	0.98724	1.00430	0.92568	1.01532	1.00025	1.02089					
	0.98931	0.99863					AVRG		0.99270		2.96532
69 Ethylbenzene	2.17997	1.86900	1.60550	1.73444	1.64809	1.71812					
	1.69328	1.72667					AVRG		1.77188		10.26328
70 1,1,1,2-Tetrachloroethane	0.29458	0.31976	0.31923	0.36366	0.34879	0.36704					
	0.36087	0.36724					AVRG		0.34265		8.10115
71 M&P-Xylene	0.65699	0.65667	0.62287	0.67557	0.66140	0.68540					
	0.67138	0.67119					AVRG		0.66268		2.84339
72 O-Xylene (1,2-Dimethylbenzene	0.65866	0.59736	0.57889	0.64093	0.63649	0.66334					
	0.64429	0.65562					AVRG		0.63445		4.79372
73 Styrene	0.97870	0.99867	0.96769	1.08021	1.06073	1.14563					
	1.11869	1.14638					AVRG		1.06209		6.89181

Pace Analytical Services, Inc.

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Last Edit : 30-Jan-2014 09:08 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
74 Bromoform	0.18841	0.20962	0.21362	0.23462	0.23854	0.25149					
	0.25397	0.25680					AVRG		0.23088		10.68000
75 Isopropylbenzene (Cumene)	1.82008	1.68830	1.57266	1.72178	1.67609	1.76292					
	1.75321	1.79768					AVRG		1.72409		4.57274
77 cis-1,4-Dichloro-2-Butene	+++++	0.15613	0.15589	0.17760	0.16984	0.17586					
	0.17935	0.18381					AVRG		0.17121		6.53762
78 Bromobenzene	0.83998	0.80298	0.73154	0.78455	0.75894	0.78297					
	0.75880	0.77612					AVRG		0.77948		4.17397
79 n-Propylbenzene	3.30394	3.31851	3.15794	3.39065	3.38851	3.52568					
	3.49673	3.58994					AVRG		3.39649		4.10098
80 1,1,2,2-Tetrachloroethane	0.60984	0.53742	0.54210	0.58726	0.59712	0.60061					
	0.59588	0.60567					AVRG		0.58449		4.86497
81 2-Chlorotoluene	2.12667	2.21795	2.02766	2.15616	2.14584	2.19729					
	2.19917	2.27227					AVRG		2.16787		3.36408

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Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Last Edit : 30-Jan-2014 09:08 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
82 1,3,5-Trimethylbenzene	2.46255	2.44458	2.27122	2.45812	2.48090	2.51950					
	2.49962	2.60461					AVRG		2.46751		3.80721
83 1,2,3-Trichloropropane	+++++	0.12917	0.16861	0.16599	0.17022	0.16907					
	0.17079	0.17208					AVRG		0.16370		9.37657
84 trans-1,4-Dichloro-2-Butene	+++++	0.13045	0.13788	0.14754	0.15111	0.15879					
	0.15765	0.16198					AVRG		0.14934		7.79217
85 4-Chlorotoluene	2.02065	1.97665	1.87597	2.01753	2.03564	2.06962					
	2.05133	2.13561					AVRG		2.02287		3.71907
86 tert-Butylbenzene	2.16060	2.03711	1.97706	2.17134	2.19131	2.23163					
	2.18319	2.24772					AVRG		2.15000		4.38588
87 1,2,4-Trimethylbenzene	2.34607	2.52885	2.32067	2.45666	2.49982	2.53962					
	2.54939	2.67399					AVRG		2.48938		4.60386
88 sec-Butylbenzene	3.01556	3.09549	2.92436	3.15129	3.20262	3.26893					
	3.28720	3.36673					AVRG		3.16402		4.67403

Pace Analytical Services, Inc.

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Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Last Edit : 30-Jan-2014 09:08 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
89 p-Isopropyltoluene	2.57875	2.65350	2.54158	2.78150	2.81192	2.87747					
	2.89167	2.96914					AVRG		2.76319		5.63734
90 1,3-Dichlorobenzene	1.55698	1.47521	1.41105	1.50410	1.51516	1.53162					
	1.51760	1.52510					AVRG		1.50460		2.94992
92 1,4-Dichlorobenzene	1.77920	1.64341	1.46095	1.55632	1.55713	1.59131					
	1.54015	1.53599					AVRG		1.58306		5.97060
93 1,2,3 Trimethylbenzene	2.05479	1.86746	1.74199	1.92363	1.94373	2.06530					
	2.04043	2.09818					AVRG		1.96694		6.16502
94 n-Butylbenzene	2.38932	2.40025	2.24807	2.46023	2.56331	2.61129					
	2.56329	2.63429					AVRG		2.48376		5.34944
95 1,2-Dichlorobenzene	1.41476	1.45107	1.36864	1.40794	1.42831	1.43198					
	1.41579	1.41914					AVRG		1.41720		1.67500
96 1,2-Dibromo-3-Chloropropane	+++++	0.12400	0.11468	0.12910	0.12706	0.13027					
	0.13114	0.12646					AVRG		0.12610		4.43565

Pace Analytical Services, Inc.

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Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Last Edit : 30-Jan-2014 09:08 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9	Curve	Coefficients b	m1	m2	%RSD or R^2
97 Hexachlorobutadiene	0.56630	0.63647	0.56911	0.58794	0.61611	0.60743							
	0.59265	0.54919							AVRG		0.59065		4.88042
98 1,2,4-Trichlorobenzene	0.96636	0.92594	0.82941	0.88799	0.91677	0.90358							
	0.87787	0.83064							AVRG		0.89232		5.24364
99 Naphthalene	1.94403	1.71831	1.59260	1.69899	1.70081	1.70870							
	1.73293	1.63810							AVRG		1.71681		5.99508
100 1,2,3-Trichlorobenzene	0.89907	0.81494	0.77535	0.80179	0.81297	0.81245							
	0.78878	0.73811							AVRG		0.80543		5.68820
101 2-Methylnaphthalene	2484	4312	14664	36792	83583	217646							
	429449	944185							QUAD	0.00433	0.94897	0.30732	0.99991
$ 43 1,2-Dichloroethane d4 (S)	0.36871	0.36287	0.37193	0.37264	0.37424	0.36781							
	0.37008	0.37097							AVRG		0.36991		0.95192
$ 57 Toluene-d8 (S)	1.26469	1.26571	1.27419	1.26267	1.25169	1.26524							
	1.25757	1.24320							AVRG		1.26062		0.76123

Pace Analytical Services, Inc.

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Quant Method : ISTD
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Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Last Edit : 30-Jan-2014 09:08 hpham

Compound	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	50.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	100.0000 Level 8	250.0000 Level 9									
S 76 4-Bromofluorobenzene (S)	0.80232	0.80473	0.81138	0.79735	0.81330	0.80270					
	0.79696	0.83258					AVRG		0.80766		1.44151

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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Last Edit : 30-Jan-2014 09:08 hpham

Curve	Formula	Units
Averaged	Amt = Rsp/ml	Response
Linear	Amt = b + Rsp/ml	Response
Quad	Amt = b + ml*Rsp + m2*Rsp^2	Response

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914004.D
Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\012914A.b\012914004.D
Lab Smp Id: 0.4 ICAL 10098-17
Inj Date : 29-JAN-2014 13:30
Operator : HBP Inst ID: 10msv7.i
Smp Info : 0.4 ICAL 10098-17
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Meth Date : 30-Jan-2014 09:08 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.070	1.065	(0.254)	1250	0.40000	0.29(TaQ)
2	Chloromethane	50	1.235	1.253	(0.293)	1015	0.40000	0.24(TaQ)
3	Vinyl Chloride	62	1.265	1.259	(0.300)	1255	0.40000	0.25(Ta)
4	Bromomethane	94	1.497	1.491	(0.355)	3553	0.40000	(aQ)
5	Chloroethane	64	1.582	1.583	(0.375)	468	0.40000	0.15(TaQ)
6	Trichlorofluoromethane	101	1.692	1.680	(0.401)	2733	0.40000	0.41(a)
7	Dichlorofluoromethane	67	1.747	1.741	(0.414)	2912	0.40000	0.33(a)
8	Diethyl ether (Ethyl Ether)	59	1.960	1.961	(0.465)	1178	0.40000	0.39(aQ)
9	1,1-Dichloroethene	96	2.107	2.095	(0.500)	1387	0.40000	0.33(aQ)
10	Carbon Disulfide	76	2.113	2.107	(0.501)	10202	0.40000	0.65(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	2.156	2.144	(0.511)	1652	0.40000	0.36(aQ)
13	Iodomethane	142	2.216	2.217	(0.526)	456	0.40000	2.6(TaQ)
14	Acrolein	56	2.418	2.412	(0.573)	1856	4.00000	3.3(a)
15	Allyl Chloride	41	2.546	2.540	(0.604)	1973	0.40000	0.33(TaQ)
16	Methylene Chloride	84	2.643	2.638	(0.627)	9067	0.40000	0.58(a)
17	Isopropanol	45	2.662	2.644	(0.550)	12634	4.00000	16.5
* 18	Acetone d6	46	2.649	2.656	(1.000)	156056	200.000	
19	Acetone	58	2.704	2.699	(1.021)	1694	2.00000	2.1(aQ)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
20	trans-1,2-Dichloroethene	96	2.783	2.784	(0.660)	1682	0.40000	0.36(a)
21	Hexane	86	2.869	2.863	(1.083)	1270	1.00000	1.1(a)
22	Methyl-tert-butyl Ether	73	2.905	2.900	(0.689)	3984	0.40000	0.34(aQ)
23	tert-Butyl Alcohol	59	Compound Not Detected.					
24	Acetonitrile	41	3.076	3.077	(0.730)	1669	4.00000	4.4(TaQ)
25	Isopropyl Ether	45	3.210	3.211	(0.761)	5118	0.40000	0.38(TaQ)
26	Acrylonitrile	53	Compound Not Detected.					
27	1,1-Dichloroethane	63	3.271	3.266	(0.776)	2684	0.40000	0.34(TaQ)
28	Ethyl-tert-butyl ether	59	3.466	3.467	(0.822)	4422	0.40000	0.34(a)
29	Vinyl Acetate	43	3.472	3.467	(0.824)	2977	0.40000	0.36(TaQ)
30	cis-1,2-Dichloroethene	96	3.643	3.644	(0.864)	1957	0.40000	0.38(aQ)
31	2,2-Dichloropropane	77	3.704	3.711	(0.879)	2549	0.40000	0.36(TaQ)
32	Cyclohexane	56	3.765	3.766	(0.893)	15153	2.00000	1.9(a)
33	Bromochloromethane	130	3.765	3.766	(0.893)	843	0.40000	0.27(a)
34	Chloroform	83	3.820	3.820	(0.906)	3051	0.40000	0.37(a)
35	Carbon Tetrachloride	117	3.893	3.894	(0.923)	1817	0.40000	0.30(a)
36	Tetrahydrofuran	72	3.923	3.912	(1.481)	1888	4.00000	3.9(a)
37	1,1,1-Trichloroethane	97	3.942	3.936	(0.935)	2337	0.40000	0.32(aQ)
38	2-Butanone	43	4.015	4.009	(0.952)	2927	2.00000	2.0(aQ)
39	1,1-Dichloropropene	75	4.015	4.016	(0.952)	2665	0.40000	0.40(aQ)
40	Benzene	78	4.155	4.155	(0.986)	8201	0.40000	0.41(a)
* 41	Pentafluorobenzene	168	4.216	4.216	(1.000)	1184552	100.000	
42	Tert-amyl methyl ether	73	4.234	4.235	(1.004)	5670	0.40000	0.43(aQ)
S 43	1,2-Dichloroethane d4 (S)	65	4.234	4.235	(1.004)	436756	100.000	99.7
44	1,2-Dichloroethane	62	4.271	4.272	(1.013)	1986	0.40000	0.36(TaQ)
45	Isobutanol	43	4.308	4.308	(0.890)	1116	8.00000	6.2(Q)
46	Tert-Amyl Alcohol	59	4.356	4.357	(0.900)	961	4.00000	2.5(aQ)
47	Trichloroethene	130	4.478	4.479	(0.996)	2224	0.40000	0.39(aQ)
* 48	1,4 Difluorobenzene	114	4.497	4.491	(1.000)	1626873	100.000	
49	Tert-amyl ethyl ether	59	4.600	4.601	(1.023)	3630	0.40000	0.36(a)
50	Dibromomethane	174	4.686	4.686	(1.042)	1061	0.40000	0.34(a)
51	1,2-Dichloropropane	63	4.728	4.729	(1.052)	1654	0.40000	0.36(TaQ)
52	Bromodichloromethane	83	4.759	4.759	(1.058)	2070	0.40000	0.34(TaQ)
* 53	1,4 dioxane d8	96	4.838	4.845	(1.000)	150977	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
55	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
56	cis-1,3-Dichloropropene	75	5.045	5.046	(1.122)	2547	0.40000	0.35(a)
S 57	Toluene-d8 (S)	98	5.124	5.125	(0.882)	1887915	100.000	100
58	Toluene	92	5.149	5.149	(0.686)	6345	0.40000	0.47(a)
59	4-Methyl-2-Pentanone	43	5.307	5.308	(0.913)	6338	2.00000	1.8(a)
60	Tetrachloroethene	166	5.313	5.314	(0.914)	2517	0.40000	0.39(a)
61	trans-1,3-Dichloropropene	75	5.326	5.326	(0.916)	2108	0.40000	0.32(aQ)
62	1,1,2-Trichloroethane	97	5.393	5.393	(0.928)	1563	0.40000	0.40(a)
63	Dibromochloromethane	129	5.478	5.479	(0.942)	1714	0.40000	0.37(a)
64	1,3-Dichloropropane	76	5.515	5.515	(0.949)	2313	0.40000	0.36(a)
65	1,2-Dibromoethane	107	5.582	5.582	(0.960)	1118	0.40000	0.27(TaQ)
66	2-Hexanone	43	5.673	5.674	(0.976)	5070	2.00000	2.0(a)
* 67	Chlorobenzene-d5	117	5.813	5.814	(1.000)	1492793	100.000	
68	Chlorobenzene	112	5.819	5.826	(1.001)	5895	0.40000	0.40(aQ)
69	Ethylbenzene	91	5.832	5.832	(1.003)	13017	0.40000	0.49(a)
70	1,1,1,2-Tetrachloroethane	131	5.850	5.851	(1.006)	1759	0.40000	0.34(aQ)
71	M&P-Xylene	106	5.899	5.899	(1.015)	7846	0.80000	0.79(a)
72	O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.113	(1.051)	3933	0.40000	0.42(a)
73	Styrene	104	6.136	6.137	(1.056)	5844	0.40000	0.37(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	74 Bromoform	173	6.161	6.161	(1.060)	1125	0.40000	0.33(TaQ)
	75 Isopropylbenzene (Cumene)	105	6.271	6.271	(1.079)	10868	0.40000	0.42(a)
S	76 4-Bromofluorobenzene (S)	95	6.423	6.430	(0.906)	709451	100.000	99.3
	77 cis-1,4-Dichloro-2-Butene	53	6.453	6.454	(0.911)	415	0.40000	0.27(aQ)
	78 Bromobenzene	156	6.490	6.491	(0.916)	2971	0.40000	0.43(a)
	79 n-Propylbenzene	91	6.490	6.497	(0.916)	11686	0.40000	0.39(a)
	80 1,1,2,2-Tetrachloroethane	83	6.533	6.533	(0.922)	2157	0.40000	0.42(TaQ)
	81 2-Chlorotoluene	91	6.588	6.588	(0.929)	7522	0.40000	0.39(a)
	82 1,3,5-Trimethylbenzene	105	6.600	6.600	(0.931)	8710	0.40000	0.40(a)
	83 1,2,3-Trichloropropane	110	Compound Not Detected.					
	84 trans-1,4-Dichloro-2-Butene	53	6.630	6.631	(0.935)	860	1.00000	0.65(TaQ)
	85 4-Chlorotoluene	91	6.685	6.686	(0.943)	7147	0.40000	0.40(a)
	86 tert-Butylbenzene	119	6.789	6.795	(0.958)	7642	0.40000	0.40(a)
	87 1,2,4-Trimethylbenzene	105	6.831	6.832	(0.964)	8298	0.40000	0.38(a)
	88 sec-Butylbenzene	105	6.898	6.899	(0.973)	10666	0.40000	0.38(a)
	89 p-Isopropyltoluene	119	6.984	6.984	(0.985)	9121	0.40000	0.37(a)
	90 1,3-Dichlorobenzene	146	7.045	7.045	(0.994)	5507	0.40000	0.41(a)
*	91 1,4-Dichlorobenzene-d4	152	7.087	7.094	(1.000)	884246	100.000	
	92 1,4-Dichlorobenzene	146	7.100	7.100	(1.002)	6293	0.40000	0.45(aQ)
	93 1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	9736	0.40000	0.42(a)
	94 n-Butylbenzene	91	7.258	7.259	(1.024)	8451	0.40000	0.38(a)
	95 1,2-Dichlorobenzene	146	7.380	7.381	(1.041)	5004	0.40000	0.40(a)
	96 1,2-Dibromo-3-Chloropropane	157	7.868	7.862	(1.110)	837	1.00000	0.75(aQ)
	97 Hexachlorobutadiene	225	8.227	8.228	(1.161)	2003	0.40000	0.38(a)
	98 1,2,4-Trichlorobenzene	180	8.240	8.240	(1.163)	3418	0.40000	0.43(aQ)
	99 Naphthalene	128	8.429	8.429	(1.189)	6876	0.40000	0.45(a)
	100 1,2,3-Trichlorobenzene	180	8.532	8.532	(1.204)	3180	0.40000	0.45(a)
	101 2-Methylnaphthalene	142	9.044	9.045	(1.276)	2484	0.20000	0.70(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914004.D
Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 012914004.D
Lab Smp Id: 0.4 ICAL 10098-17
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Misc Info:

Calibration Date: 29-JAN-2014
Calibration Time: 15:01
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	164056	82028	328112	156056	-4.88
41 Pentafluorobenzen	1178461	589231	2356922	1184552	0.52
48 1,4 Difluorobenze	1667544	833772	3335088	1626873	-2.44
53 1,4 dioxane d8	159641	79821	319282	150977	-5.43
67 Chlorobenzene-d5	1508153	754077	3016306	1492793	-1.02
91 1,4-Dichlorobenze	915622	457811	1831244	884246	-3.43

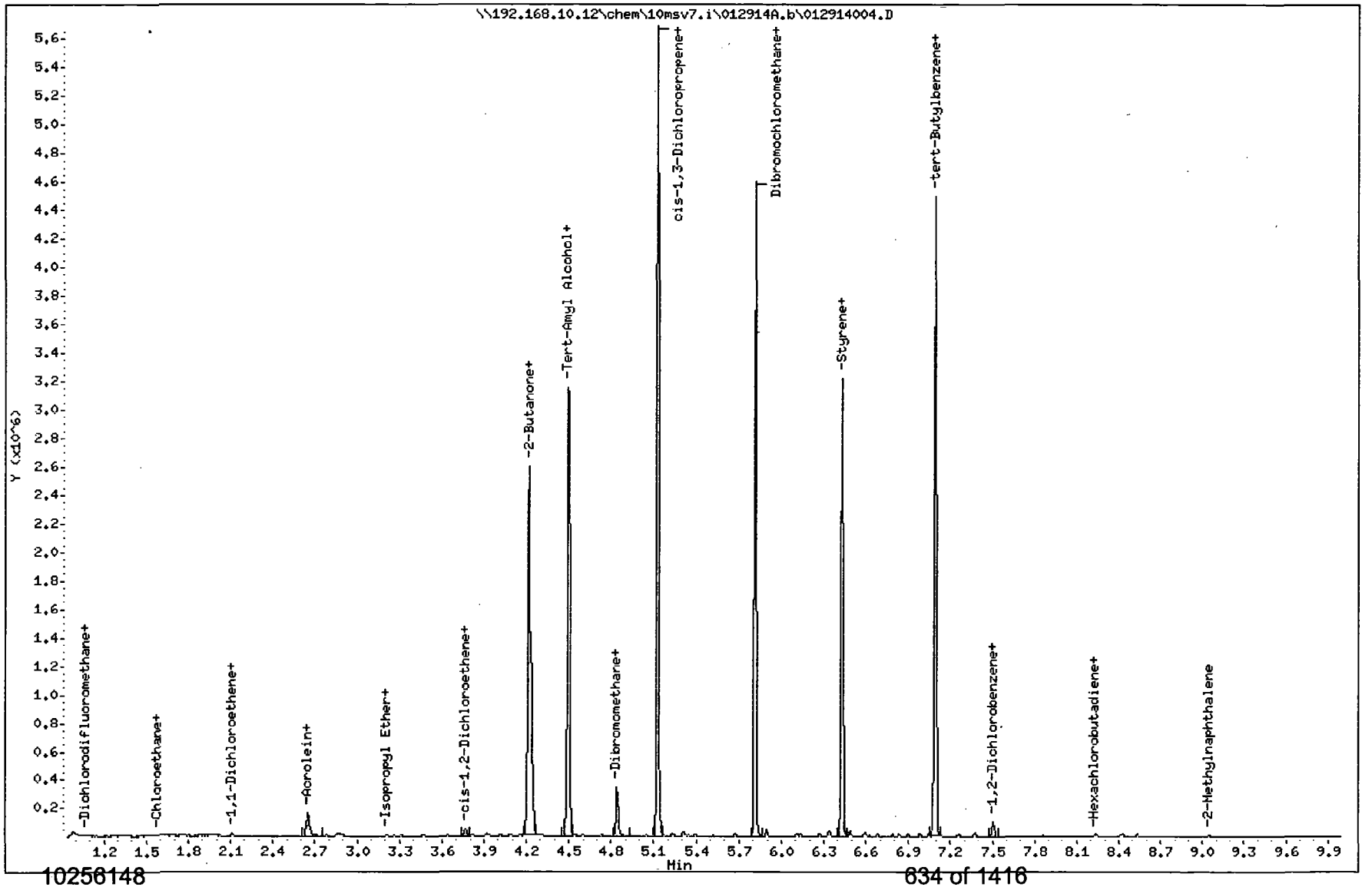
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.00
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	-0.00
48 1,4 Difluorobenze	4.49	3.99	4.99	4.50	0.14
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.00
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914004.D
Date : 29-JAN-2014 13:30
Client ID:
Sample Info: 0.4 ICAL 10098-17

Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Instrument: 10msv7.i
Lab Sample ID: 0.4 ICAL 10098-17
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data file: \\192.168.10.12\chem\10msv7.i\012914A.b\012914005.D
Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\012914A.b\012914005.D
Lab Smp Id: 1.0 ICAL 10098-17
Inj Date : 29-JAN-2014 13:48
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1.0 ICAL 10098-17
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Meth Date : 30-Jan-2014 09:08 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.070	1.065	(0.254)	4034	1.00000	0.93(aQ)
2	Chloromethane	50	1.265	1.253	(0.300)	4109	1.00000	0.94(TaQ)
3	Vinyl Chloride	62	1.259	1.259	(0.299)	4659	1.00000	0.91(aQ)
4	Bromomethane	94	1.491	1.491	(0.354)	5022	1.00000	0.037(a)
5	Chloroethane	64	1.582	1.583	(0.375)	2473	1.00000	1.0(a)
6	Trichlorofluoromethane	101	1.692	1.680	(0.401)	6573	1.00000	0.96(a)
7	Dichlorofluoromethane	67	1.747	1.741	(0.414)	9503	1.00000	1.0(a)
8	Diethyl ether (Ethyl Ether)	59	1.960	1.961	(0.465)	3104	1.00000	1.0(a)
9	1,1-Dichloroethene	96	2.101	2.095	(0.498)	4104	1.00000	0.96(a)
10	Carbon Disulfide	76	2.107	2.107	(0.500)	19051	1.00000	1.2(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	2.143	2.144	(0.508)	4337	1.00000	0.93(a)
13	Iodomethane	142	2.216	2.217	(0.526)	1628	1.00000	2.8(TaQ)
14	Acrolein	56	2.412	2.412	(0.572)	4962	10.0000	8.6
15	Allyl Chloride	41	2.546	2.540	(0.604)	5939	1.00000	0.98(a)
16	Methylene Chloride	84	2.643	2.638	(0.627)	10928	1.00000	0.92(a)
17	Isopropanol	45	2.655	2.644	(0.549)	12086	10.0000	15.5(Q)
* 18	Acetone d6	46	2.649	2.656	(1.000)	150662	200.000	
19	Acetone	58	2.704	2.699	(1.021)	2754	5.00000	6.4

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.783	2.784	(0.660)	4461	1.00000	0.92(a)
	21 Hexane	86	2.863	2.863	(1.081)	3055	2.50000	2.7(a)
	22 Methyl-tert-butyl Ether	73	2.899	2.900	(0.688)	11625	1.00000	0.98(a)
	23 tert-Butyl Alcohol	59	3.009	3.016	(0.622)	3793	10.0000	8.8(Q)
	24 Acetonitrile	41	3.070	3.077	(0.728)	3880	10.0000	10(T)
	25 Isopropyl Ether	45	3.210	3.211	(0.761)	13144	1.00000	0.95(a)
	26 Acrylonitrile	53	3.253	3.253	(0.772)	6494	10.0000	9.3
	27 1,1-Dichloroethane	63	3.265	3.266	(0.774)	7776	1.00000	0.95(a)
	28 Ethyl-tert-butyl ether	59	3.466	3.467	(0.822)	12728	1.00000	0.97(a)
	29 Vinyl Acetate	43	3.472	3.467	(0.824)	7311	1.00000	0.86(aQ)
	30 cis-1,2-Dichloroethene	96	3.643	3.644	(0.864)	4789	1.00000	0.90(a)
	31 2,2-Dichloropropane	77	3.710	3.711	(0.880)	6930	1.00000	0.97(a)
	32 Cyclohexane	56	3.765	3.766	(0.893)	37850	5.00000	4.6(a)
	33 Bromochloromethane	130	3.765	3.766	(0.893)	3076	1.00000	0.95(a)
	34 Chloroform	83	3.820	3.820	(0.906)	8272	1.00000	0.98(a)
	35 Carbon Tetrachloride	117	3.893	3.894	(0.923)	5183	1.00000	0.83(a)
	36 Tetrahydrofuran	72	3.917	3.912	(1.479)	4905	10.0000	10.5
	37 1,1,1-Trichloroethane	97	3.936	3.936	(0.933)	7181	1.00000	0.98(aQ)
	38 2-Butanone	43	4.009	4.009	(0.951)	7106	5.00000	4.6(a)
	39 1,1-Dichloropropene	75	4.015	4.016	(0.952)	6268	1.00000	0.92(a)
	40 Benzene	78	4.155	4.155	(0.986)	20235	1.00000	1.00(a)
*	41 Pentafluorobenzene	168	4.216	4.216	(1.000)	1208005	100.000	
	42 Tert-amyl methyl ether	73	4.234	4.235	(1.004)	13030	1.00000	0.97(aQ)
S	43 1,2-Dichloroethane d4 (S)	65	4.234	4.235	(1.004)	438353	100.000	98.1
	44 1,2-Dichloroethane	62	4.271	4.272	(1.013)	5340	1.00000	0.96(TaQ)
	45 Isobutanol	43	4.307	4.308	(0.890)	2954	20.0000	16.8
	46 Tert-Amyl Alcohol	59	4.350	4.357	(0.899)	3042	10.0000	8.1
	47 Trichloroethene	130	4.478	4.479	(0.997)	5928	1.00000	1.0(aQ)
*	48 1,4 Difluorobenzene	114	4.490	4.491	(1.000)	1657076	100.000	
	49 Tert-amyl ethyl ether	59	4.600	4.601	(1.024)	9836	1.00000	0.96(a)
	50 Dibromomethane	174	4.685	4.686	(1.043)	2989	1.00000	0.95(a)
	51 1,2-Dichloropropane	63	4.728	4.729	(1.053)	4445	1.00000	0.96(TaQ)
	52 Bromodichloromethane	83	4.765	4.759	(1.061)	6250	1.00000	1.0(a)
*	53 1,4 dioxane d8	96	4.838	4.845	(1.000)	147218	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	5.045	5.046	(1.124)	6895	1.00000	0.92(a)
S	57 Toluene-d8 (S)	98	5.124	5.125	(0.882)	1912236	100.000	100
	58 Toluene	92	5.149	5.149	(0.886)	15307	1.00000	1.1(a)
	59 4-Methyl-2-Pentanone	43	5.307	5.308	(0.913)	16556	5.00000	4.7(a)
	60 Tetrachloroethene	166	5.313	5.314	(0.914)	6334	1.00000	0.97(a)
	61 trans-1,3-Dichloropropene	75	5.326	5.326	(0.916)	6324	1.00000	0.95(a)
	62 1,1,2-Trichloroethane	97	5.393	5.393	(0.928)	3552	1.00000	0.90(a)
	63 Dibromochloromethane	129	5.472	5.479	(0.941)	4269	1.00000	0.90(a)
	64 1,3-Dichloropropane	76	5.515	5.515	(0.949)	6410	1.00000	0.97(a)
	65 1,2-Dibromoethane	107	5.582	5.582	(0.960)	3791	1.00000	0.91(TaQ)
	66 2-Hexanone	43	5.673	5.674	(0.976)	11351	5.00000	4.4(a)
*	67 Chlorobenzene-d5	117	5.813	5.814	(1.000)	1510806	100.000	
	68 Chlorobenzene	112	5.819	5.826	(1.001)	15173	1.00000	1.0(aQ)
	69 Ethylbenzene	91	5.832	5.832	(1.003)	28237	1.00000	1.0(a)
	70 1,1,1,2-Tetrachloroethane	131	5.850	5.851	(1.006)	4831	1.00000	0.93(aQ)
	71 M&P-Xylene	106	5.899	5.899	(1.015)	19842	2.00000	2.0(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.113	(1.051)	9025	1.00000	0.94(a)
	73 Styrene	104	6.136	6.137	(1.056)	15088	1.00000	0.94(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	74 Bromoform	173	6.161	6.161	(1.060)	3167	1.00000	0.91(TaQ)
	75 Isopropylbenzene (Cumene)	105	6.271	6.271	(1.079)	25507	1.00000	0.98(a)
$	76 4-Bromofluorobenzene (S)	95	6.423	6.430	(0.906)	713355	100.000	99.6
	77 cis-1,4-Dichloro-2-Butene	53	6.453	6.454	(0.911)	1384	1.00000	0.91(aQ)
	78 Bromobenzene	156	6.490	6.491	(0.916)	7118	1.00000	1.0(a)
	79 n-Propylbenzene	91	6.490	6.497	(0.916)	29417	1.00000	0.98(a)
	80 1,1,2,2-Tetrachloroethane	83	6.527	6.533	(0.921)	4764	1.00000	0.92(TaQ)
	81 2-Chlorotoluene	91	6.588	6.588	(0.929)	19661	1.00000	1.0(a)
	82 1,3,5-Trimethylbenzene	105	6.600	6.600	(0.931)	21670	1.00000	0.99(a)
	83 1,2,3-Trichloropropane	110	6.612	6.613	(0.933)	1145	1.00000	0.79(aQ)
	84 trans-1,4-Dichloro-2-Butene	53	6.630	6.631	(0.935)	2891	2.50000	2.2(a)
	85 4-Chlorotoluene	91	6.685	6.686	(0.943)	17522	1.00000	0.98(a)
	86 tert-Butylbenzene	119	6.789	6.795	(0.958)	18058	1.00000	0.95(a)
	87 1,2,4-Trimethylbenzene	105	6.831	6.832	(0.964)	22417	1.00000	1.0(a)
	88 sec-Butylbenzene	105	6.898	6.899	(0.973)	27440	1.00000	0.98(a)
	89 p-Isopropyltoluene	119	6.984	6.984	(0.985)	23522	1.00000	0.96(a)
	90 1,3-Dichlorobenzene	146	7.045	7.045	(0.994)	13077	1.00000	0.98(a)
*	91 1,4-Dichlorobenzene-d4	152	7.087	7.094	(1.000)	886451	100.000	
	92 1,4-Dichlorobenzene	146	7.100	7.100	(1.002)	14568	1.00000	1.0(aQ)
	93 1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	22559	1.00000	0.95(a)
	94 n-Butylbenzene	91	7.258	7.259	(1.024)	21277	1.00000	0.97(a)
	95 1,2-Dichlorobenzene	146	7.380	7.381	(1.041)	12863	1.00000	1.0(a)
	96 1,2-Dibromo-3-Chloropropane	157	7.862	7.862	(1.109)	2748	2.50000	2.4(a)
	97 Hexachlorobutadiene	225	8.227	8.228	(1.161)	5642	1.00000	1.1(a)
	98 1,2,4-Trichlorobenzene	180	8.240	8.240	(1.163)	8208	1.00000	1.0(a)
	99 Naphthalene	128	8.429	8.429	(1.189)	15232	1.00000	1.0(a)
	100 1,2,3-Trichlorobenzene	180	8.532	8.532	(1.204)	7224	1.00000	1.0(a)
	101 2-Methylnaphthalene	142	9.044	9.045	(1.276)	4312	0.50000	0.89(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914005.D
Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 012914005.D
Lab Smp Id: 1.0 ICAL 10098-17
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Misc Info:

Calibration Date: 29-JAN-2014
Calibration Time: 15:01
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	164056	82028	328112	150662	-8.16
41 Pentafluorobenzen	1178461	589231	2356922	1208005	2.51
48 1,4 Difluorobenze	1667544	833772	3335088	1657076	-0.63
53 1,4 dioxane d8	159641	79821	319282	147218	-7.78
67 Chlorobenzene-d5	1508153	754077	3016306	1510806	0.18
91 1,4-Dichlorobenze	915622	457811	1831244	886451	-3.19

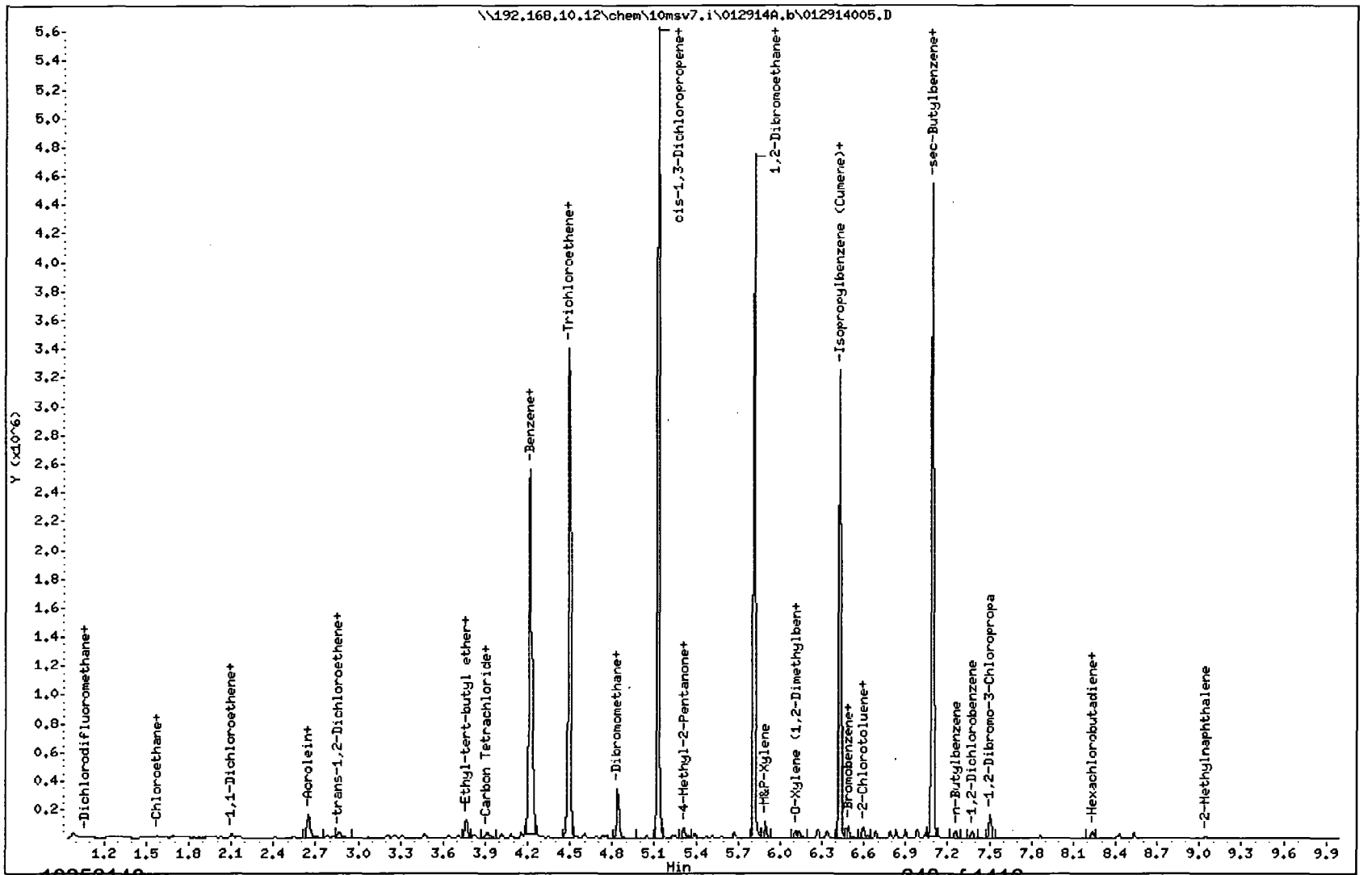
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.00
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	-0.00
48 1,4 Difluorobenze	4.49	3.99	4.99	4.49	-0.00
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.00
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914005.D
Date : 29-JAN-2014 13:48
Client ID:
Sample Info: 1.0 ICAL 10098-17

Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Instrument: 10msv7.i
Lab Sample ID: 1.0 ICAL 10098-17
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\012914A.b\012914006.D
Lab Smp Id: 4.0 ICAL 10098-17
Inj Date : 29-JAN-2014 14:06
Operator : HBP Inst ID: 10msv7.i
Smp Info : 4.0 ICAL 10098-17
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Meth Date : 30-Jan-2014 09:08 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.064	1.065	(0.253)	15567	4.00000	3.6(a)
2	Chloromethane	50	1.247	1.253	(0.296)	15056	4.00000	3.5(a)
3	Vinyl Chloride	62	1.259	1.259	(0.299)	18859	4.00000	3.7(a)
4	Bromomethane	94	1.491	1.491	(0.354)	15118	4.00000	3.6(a)
5	Chloroethane	64	1.583	1.583	(0.375)	11853	4.00000	5.3
6	Trichlorofluoromethane	101	1.692	1.680	(0.401)	25394	4.00000	3.7(a)
7	Dichlorofluoromethane	67	1.747	1.741	(0.414)	33486	4.00000	3.7(a)
8	Diethyl ether (Ethyl Ether)	59	1.954	1.961	(0.464)	11270	4.00000	3.7(a)
9	1,1-Dichloroethene	96	2.101	2.095	(0.498)	15652	4.00000	3.7(a)
10	Carbon Disulfide	76	2.107	2.107	(0.500)	59898	4.00000	3.8(a)
11	Ethanol	45	2.101	2.132	(0.434)	3864	80.0000	72.3
12	Trichlorotrifluoroethane	101	2.150	2.144	(0.510)	16123	4.00000	3.5(a)
13	Iodomethane	142	2.217	2.217	(0.526)	9976	4.00000	4.0(aQ)
14	Acrolein	56	2.412	2.412	(0.572)	20124	40.0000	35.3
15	Allyl Chloride	41	2.546	2.540	(0.604)	22637	4.00000	3.8(a)
16	Methylene Chloride	84	2.643	2.638	(0.627)	25277	4.00000	3.9(a)
17	Isopropanol	45	2.656	2.644	(0.549)	13828	40.0000	20.5(Q)
* 18	Acetone d6	46	2.649	2.656	(1.000)	158908	200.000	
19	Acetone	58	2.698	2.699	(1.018)	6129	20.0000	18.1

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.784	2.784	(0.660)	17720	4.00000	3.7(a)
	21 Hexane	86	2.863	2.863	(1.081)	10524	10.0000	8.8
	22 Methyl-tert-butyl Ether	73	2.893	2.900	(0.686)	43591	4.00000	3.7(a)
	23 tert-Butyl Alcohol	59	3.003	3.016	(0.621)	16237	40.0000	36.1
	24 Acetonitrile	41	3.070	3.077	(0.728)	15114	40.0000	39.4
	25 Isopropyl Ether	45	3.210	3.211	(0.761)	51703	4.00000	3.8(a)
	26 Acrylonitrile	53	3.253	3.253	(0.772)	25046	40.0000	36.4
	27 1,1-Dichloroethane	63	3.271	3.266	(0.776)	30303	4.00000	3.8(a)
	28 Ethyl-tert-butyl ether	59	3.466	3.467	(0.822)	49778	4.00000	3.8(a)
	29 Vinyl Acetate	43	3.472	3.467	(0.824)	31520	4.00000	3.7(a)
	30 cis-1,2-Dichloroethene	96	3.643	3.644	(0.864)	19934	4.00000	3.8(a)
	31 2,2-Dichloropropane	77	3.710	3.711	(0.880)	26366	4.00000	3.7(a)
	32 Cyclohexane	56	3.765	3.766	(0.893)	143770	20.0000	17.9
	33 Bromochloromethane	130	3.765	3.766	(0.893)	11950	4.00000	3.7(a)
	34 Chloroform	83	3.820	3.820	(0.906)	31676	4.00000	3.8(a)
	35 Carbon Tetrachloride	117	3.899	3.894	(0.925)	22422	4.00000	3.6(a)
	36 Tetrahydrofuran	72	3.918	3.912	(1.479)	18694	40.0000	37.9
	37 1,1,1-Trichloroethane	97	3.936	3.936	(0.933)	27193	4.00000	3.7(a)
	38 2-Butanone	43	4.009	4.009	(0.951)	29471	20.0000	19.5
	39 1,1-Dichloropropene	75	4.015	4.016	(0.952)	23875	4.00000	3.6(a)
	40 Benzene	78	4.155	4.155	(0.986)	74373	4.00000	3.7(a)
*	41 Pentafluorobenzene	168	4.216	4.216	(1.000)	1194169	100.000	
	42 Tert-amyl methyl ether	73	4.235	4.235	(1.004)	49198	4.00000	3.7(a)
$	43 1,2-Dichloroethane d4 (S)	65	4.235	4.235	(1.004)	444144	100.000	100
	44 1,2-Dichloroethane	62	4.271	4.272	(1.013)	20830	4.00000	3.8(a)
	45 Isobutanol	43	4.302	4.308	(0.889)	13276	80.0000	72.6
	46 Tert-Amyl Alcohol	59	4.350	4.357	(0.899)	14223	40.0000	36.5
	47 Trichloroethene	130	4.478	4.479	(0.996)	21211	4.00000	3.6(aQ)
*	48 1,4 Difluorobenzene	114	4.497	4.491	(1.000)	1666505	100.000	
	49 Tert-amyl ethyl ether	59	4.600	4.601	(1.023)	39133	4.00000	3.8(a)
	50 Dibromomethane	174	4.686	4.686	(1.042)	12112	4.00000	3.8(a)
	51 1,2-Dichloropropane	63	4.728	4.729	(1.052)	17884	4.00000	3.9(a)
	52 Bromodichloromethane	83	4.765	4.759	(1.060)	23236	4.00000	3.7(a)
*	53 1,4 dioxane d8	96	4.838	4.845	(1.000)	153124	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.856	4.857	(1.004)	3734	80.0000	71.0
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	5.045	5.046	(1.122)	29082	4.00000	3.9(a)
$	57 Toluene-d8 (S)	98	5.125	5.125	(0.882)	1931245	100.000	101
	58 Toluene	92	5.149	5.149	(0.886)	49347	4.00000	3.6(a)
	59 4-Methyl-2-Pentanone	43	5.307	5.308	(0.913)	64607	20.0000	18.4
	60 Tetrachloroethene	166	5.314	5.314	(0.914)	25245	4.00000	3.9(a)
	61 trans-1,3-Dichloropropene	75	5.326	5.326	(0.916)	25187	4.00000	3.8(a)
	62 1,1,2-Trichloroethane	97	5.393	5.393	(0.928)	15241	4.00000	3.8(a)
	63 Dibromochloromethane	129	5.472	5.479	(0.941)	17694	4.00000	3.7(a)
	64 1,3-Dichloropropane	76	5.515	5.515	(0.949)	25379	4.00000	3.8(a)
	65 1,2-Dibromoethane	107	5.582	5.582	(0.960)	16040	4.00000	3.8(a)
	66 2-Hexanone	43	5.673	5.674	(0.976)	45611	20.0000	17.8
*	67 Chlorobenzene-d5	117	5.813	5.814	(1.000)	1515669	100.000	
	68 Chlorobenzene	112	5.820	5.826	(1.001)	56121	4.00000	3.7(aQ)
	69 Ethylbenzene	91	5.832	5.832	(1.003)	97336	4.00000	3.6(a)
	70 1,1,1,2-Tetrachloroethane	131	5.850	5.851	(1.006)	19354	4.00000	3.7(a)
	71 M&P-Xylene	106	5.899	5.899	(1.015)	75525	8.00000	7.5
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.113	(1.051)	35096	4.00000	3.6(a)
	73 Styrene	104	6.137	6.137	(1.056)	58668	4.00000	3.6(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
74	Bromoform	173	6.161	6.161	(1.060)	12951	4.00000	3.7(a)
75	Isopropylbenzene (Cumene)	105	6.271	6.271	(1.079)	95345	4.00000	3.6(a)
$ 76	4-Bromofluorobenzene (S)	95	6.423	6.430	(0.906)	725571	100.000	100
77	cis-1,4-Dichloro-2-Butene	53	6.454	6.454	(0.911)	5576	4.00000	3.6(aQ)
78	Bromobenzene	156	6.490	6.491	(0.916)	26167	4.00000	3.8(a)
79	n-Propylbenzene	91	6.490	6.497	(0.916)	112959	4.00000	3.7(a)
80	1,1,2,2-Tetrachloroethane	83	6.527	6.533	(0.921)	19391	4.00000	3.7(a)
81	2-Chlorotoluene	91	6.588	6.588	(0.929)	72529	4.00000	3.7(a)
82	1,3,5-Trimethylbenzene	105	6.600	6.600	(0.931)	81241	4.00000	3.7(a)
83	1,2,3-Trichloropropane	110	6.612	6.613	(0.933)	6031	4.00000	4.1(a)
84	trans-1,4-Dichloro-2-Butene	53	6.630	6.631	(0.935)	12330	10.0000	9.2
85	4-Chlorotoluene	91	6.685	6.686	(0.943)	67103	4.00000	3.7(a)
86	tert-Butylbenzene	119	6.789	6.795	(0.958)	70719	4.00000	3.7(a)
87	1,2,4-Trimethylbenzene	105	6.832	6.832	(0.964)	83010	4.00000	3.7(a)
88	sec-Butylbenzene	105	6.899	6.899	(0.973)	104604	4.00000	3.7(a)
89	p-Isopropyltoluene	119	6.984	6.984	(0.985)	90912	4.00000	3.7(a)
90	1,3-Dichlorobenzene	146	7.045	7.045	(0.994)	50473	4.00000	3.8(a)
* 91	1,4-Dichlorobenzene-d4	152	7.088	7.094	(1.000)	894246	100.000	
92	1,4-Dichlorobenzene	146	7.100	7.100	(1.002)	52258	4.00000	3.7(aQ)
93	1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	83209	4.00000	3.5(a)
94	n-Butylbenzene	91	7.258	7.259	(1.024)	80413	4.00000	3.6(a)
95	1,2-Dichlorobenzene	146	7.380	7.381	(1.041)	48956	4.00000	3.9(a)
96	1,2-Dibromo-3-Chloropropane	157	7.862	7.862	(1.109)	10255	10.0000	9.1
97	Hexachlorobutadiene	225	8.228	8.228	(1.161)	20357	4.00000	3.8(a)
98	1,2,4-Trichlorobenzene	180	8.240	8.240	(1.163)	29668	4.00000	3.7(a)
99	Naphthalene	128	8.429	8.429	(1.189)	56967	4.00000	3.7(a)
100	1,2,3-Trichlorobenzene	180	8.532	8.532	(1.204)	27734	4.00000	3.8(a)
101	2-Methylnaphthalene	142	9.045	9.045	(1.276)	14664	2.00000	2.0(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914006.D
Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 012914006.D
Lab Smp Id: 4.0 ICAL 10098-17
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Misc Info:

Calibration Date: 29-JAN-2014
Calibration Time: 15:01
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	164056	82028	328112	158908	-3.14
41 Pentafluorobenzen	1178461	589231	2356922	1194169	1.33
48 1,4 Difluorobenze	1667544	833772	3335088	1666505	-0.06
53 1,4 dioxane d8	159641	79821	319282	153124	-4.08
67 Chlorobenzene-d5	1508153	754077	3016306	1515669	0.50
91 1,4-Dichlorobenze	915622	457811	1831244	894246	-2.33

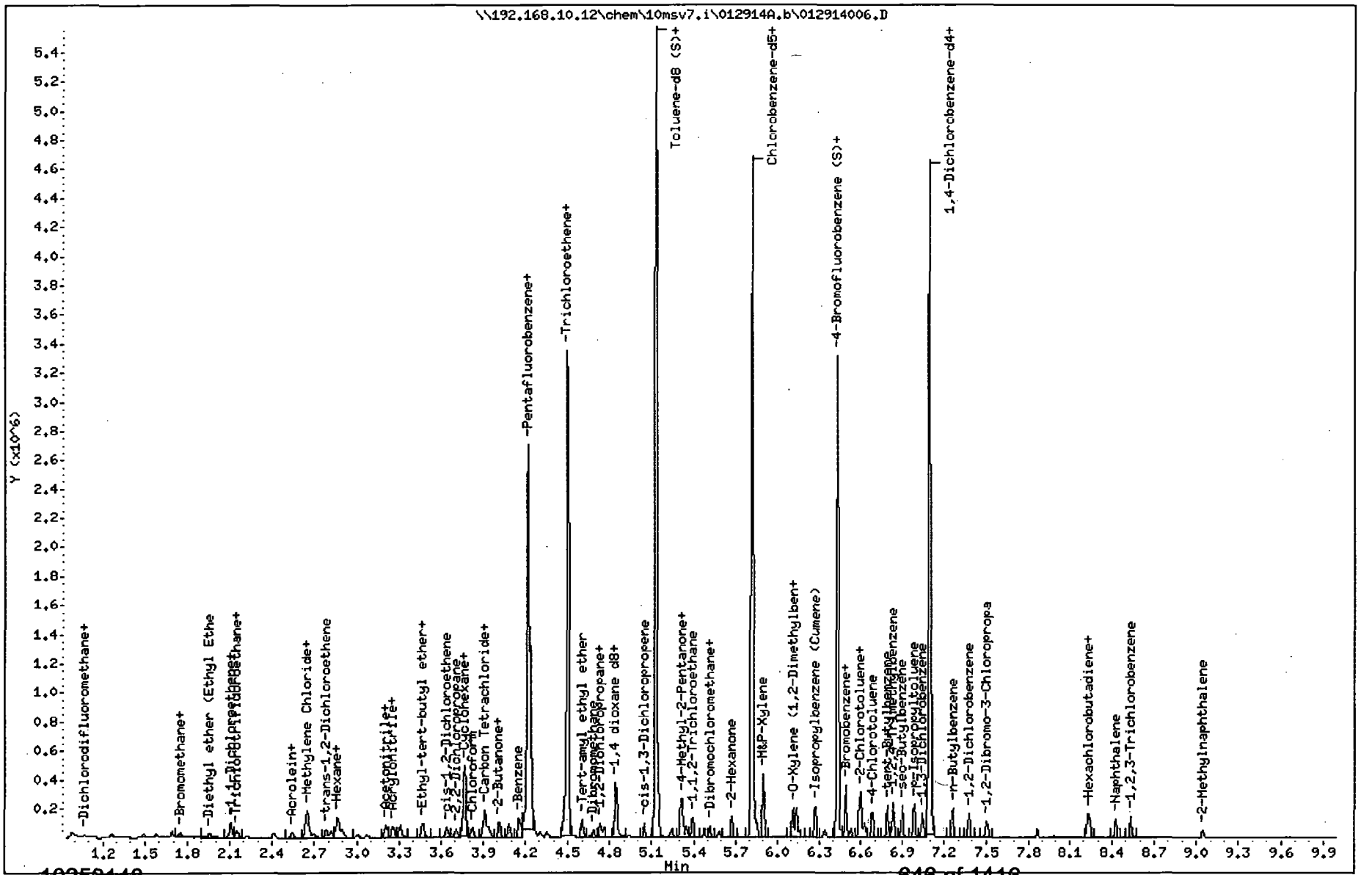
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
48 1,4 Difluorobenze	4.49	3.99	4.99	4.50	0.14
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	0.00
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914006.D
Date : 29-JAN-2014 14:06
Client ID:
Sample Info: 4.0 ICAL 10098-17

Instrument: 10msv7.i
Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



Injection Date: 19 JAN 2014 14:00
Instrument: 10msv7.i
Lab Sample ID: 4.0 ICAL 10098-17
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914007.D
Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\012914A.b\012914007.D
Lab Smp Id: 10 ICAL 10098-17
Inj Date : 29-JAN-2014 14:25
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10 ICAL 10098-17
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Meth Date : 30-Jan-2014 09:08 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.070	1.065	(0.254)	44165	10.0000	10.5
2	Chloromethane	50	1.247	1.253	(0.296)	45592	10.0000	10.7
3	Vinyl Chloride	62	1.259	1.259	(0.299)	51686	10.0000	10.4
4	Bromomethane	94	1.491	1.491	(0.354)	33834	10.0000	10.3
5	Chloroethane	64	1.583	1.583	(0.375)	24534	10.0000	11.3
6	Trichlorofluoromethane	101	1.692	1.680	(0.401)	70793	10.0000	10.6
7	Dichlorofluoromethane	67	1.747	1.741	(0.414)	90990	10.0000	10.4
8	Diethyl ether (Ethyl Ether)	59	1.954	1.961	(0.464)	29952	10.0000	10
9	1,1-Dichloroethene	96	2.101	2.095	(0.498)	43075	10.0000	10.4
10	Carbon Disulfide	76	2.107	2.107	(0.500)	155515	10.0000	10.0
11	Ethanol	45	2.107	2.132	(0.436)	11242	200.000	206
12	Trichlorotrifluoroethane	101	2.150	2.144	(0.510)	47119	10.0000	10.4
13	Iodomethane	142	2.217	2.217	(0.526)	42993	10.0000	8.8
14	Acrolein	56	2.412	2.412	(0.572)	58084	100.000	104
15	Allyl Chloride	41	2.540	2.540	(0.602)	62723	10.0000	10.6
16	Methylene Chloride	84	2.643	2.638	(0.627)	54823	10.0000	10.1
17	Isopropanol	45	2.625	2.644	(0.543)	37067	100.000	110
* 18	Acetone d6	46	2.649	2.656	(1.000)	159346	200.000	
19	Acetone	58	2.692	2.699	(1.016)	14975	50.0000	50.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
20	trans-1,2-Dichloroethene	96	2.784	2.784	(0.660)	49156	10.0000	10.5
21	Hexane	86	2.863	2.863	(1.081)	29649	25.0000	24.8
22	Methyl-tert-butyl Ether	73	2.893	2.900	(0.686)	119220	10.0000	10.4
23	tert-Butyl Alcohol	59	3.003	3.016	(0.621)	45617	100.000	99.7(Q)
24	Acetonitrile	41	3.070	3.077	(0.728)	37411	100.000	99.1
25	Isopropyl Ether	45	3.210	3.211	(0.761)	136830	10.0000	10.1
26	Acrylonitrile	53	3.253	3.253	(0.772)	68159	100.000	101
27	1,1-Dichloroethane	63	3.265	3.266	(0.774)	83049	10.0000	10.5
28	Ethyl-tert-butyl ether	59	3.466	3.467	(0.822)	130366	10.0000	10.2
29	Vinyl Acetate	43	3.466	3.467	(0.822)	84947	10.0000	10.3
30	cis-1,2-Dichloroethene	96	3.643	3.644	(0.864)	53722	10.0000	10.4
31	2,2-Dichloropropane	77	3.710	3.711	(0.880)	71046	10.0000	10.3
32	Cyclohexane	56	3.765	3.766	(0.893)	400185	50.0000	50.6
33	Bromochloromethane	130	3.765	3.766	(0.893)	32328	10.0000	10.3
34	Chloroform	83	3.820	3.820	(0.906)	84944	10.0000	10.3
35	Carbon Tetrachloride	117	3.893	3.894	(0.923)	60651	10.0000	10.0
36	Tetrahydrofuran	72	3.911	3.912	(1.476)	50524	100.000	102
37	1,1,1-Trichloroethane	97	3.936	3.936	(0.933)	74039	10.0000	10.4
38	2-Butanone	43	4.009	4.009	(0.951)	72788	50.0000	49.1
39	1,1-Dichloropropene	75	4.015	4.016	(0.952)	67387	10.0000	10.2
40	Benzene	78	4.155	4.155	(0.986)	197128	10.0000	10
* 41	Pentafluorobenzene	168	4.216	4.216	(1.000)	1174203	100.000	
42	Tert-amyl methyl ether	73	4.234	4.235	(1.004)	127851	10.0000	9.8
$ 43	1,2-Dichloroethane d4 (S)	65	4.234	4.235	(1.004)	437555	100.000	101
44	1,2-Dichloroethane	62	4.271	4.272	(1.013)	55541	10.0000	10.3
45	Isobutanol	43	4.302	4.308	(0.889)	36398	200.000	196
46	Tert-Amyl Alcohol	59	4.350	4.357	(0.899)	38740	100.000	97.6
47	Trichloroethene	130	4.478	4.479	(0.997)	59269	10.0000	10.4
* 48	1,4 Difluorobenzene	114	4.491	4.491	(1.000)	1638760	100.000	
49	Tert-amyl ethyl ether	59	4.600	4.601	(1.024)	102985	10.0000	10.1
50	Dibromomethane	174	4.686	4.686	(1.043)	32364	10.0000	10.4
51	1,2-Dichloropropane	63	4.728	4.729	(1.053)	46129	10.0000	10.1
52	Bromodichloromethane	83	4.759	4.759	(1.060)	62635	10.0000	10.3
* 53	1,4 dioxane d8	96	4.838	4.845	(1.000)	155891	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	4.856	4.857	(1.004)	11131	200.000	208
55	2-Chloroethyl Vinyl Ether	63	5.021	5.021	(1.118)	506	25.0000	30.9(TQ)
56	cis-1,3-Dichloropropene	75	5.045	5.046	(1.124)	74893	10.0000	10.1
$ 57	Toluene-d8 (S)	98	5.125	5.125	(0.882)	1870516	100.000	100
58	Toluene	92	5.149	5.149	(0.886)	130980	10.0000	9.8
59	4-Methyl-2-Pentanone	43	5.307	5.308	(0.913)	176572	50.0000	51.6
60	Tetrachloroethene	166	5.314	5.314	(0.914)	66094	10.0000	10.4
61	trans-1,3-Dichloropropene	75	5.326	5.326	(0.916)	68278	10.0000	10.5
62	1,1,2-Trichloroethane	97	5.393	5.393	(0.928)	39896	10.0000	10.3
63	Dibromochloromethane	129	5.472	5.479	(0.941)	47517	10.0000	10.3
64	1,3-Dichloropropane	76	5.515	5.515	(0.949)	66610	10.0000	10.3
65	1,2-Dibromoethane	107	5.582	5.582	(0.960)	41914	10.0000	10.3
66	2-Hexanone	43	5.673	5.674	(0.976)	128021	50.0000	51.3
* 67	Chlorobenzene-d5	117	5.813	5.814	(1.000)	1481394	100.000	
68	Chlorobenzene	112	5.820	5.826	(1.001)	150409	10.0000	10.2
69	Ethylbenzene	91	5.826	5.832	(1.002)	256939	10.0000	9.8
70	1,1,1,2-Tetrachloroethane	131	5.850	5.851	(1.006)	53873	10.0000	10.6
71	M&P-Xylene	106	5.899	5.899	(1.015)	200157	20.0000	20.4
72	O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.113	(1.051)	94947	10.0000	10.1
73	Styrene	104	6.137	6.137	(1.056)	160021	10.0000	10.2

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914007.D
Report Date: 30-Jan-2014 09:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
74	Bromoform	173	6.161	6.161	(1.060)	34757	10.0000	10.2
75	Isopropylbenzene (Cumene)	105	6.271	6.271	(1.079)	255064	10.0000	10
$ 76	4-Bromofluorobenzene (S)	95	6.423	6.430	(0.906)	706471	100.000	98.7
77	cis-1,4-Dichloro-2-Butene	53	6.454	6.454	(0.911)	15736	10.0000	10.4
78	Bromobenzene	156	6.490	6.491	(0.916)	69513	10.0000	10.1
79	n-Propylbenzene	91	6.490	6.497	(0.916)	300418	10.0000	10
80	1,1,2,2-Tetrachloroethane	83	6.527	6.533	(0.921)	52032	10.0000	10.0
81	2-Chlorotoluene	91	6.588	6.588	(0.929)	191040	10.0000	9.9
82	1,3,5-Trimethylbenzene	105	6.600	6.600	(0.931)	217794	10.0000	10
83	1,2,3-Trichloropropane	110	6.612	6.613	(0.933)	14707	10.0000	10.1
84	trans-1,4-Dichloro-2-Butene	53	6.630	6.631	(0.935)	32680	25.0000	24.7
85	4-Chlorotoluene	91	6.685	6.686	(0.943)	178757	10.0000	10
86	tert-Butylbenzene	119	6.789	6.795	(0.958)	192385	10.0000	10.1
87	1,2,4-Trimethylbenzene	105	6.832	6.832	(0.964)	217665	10.0000	9.9
88	sec-Butylbenzene	105	6.899	6.899	(0.973)	279210	10.0000	10
89	p-Isopropyltoluene	119	6.984	6.984	(0.985)	246446	10.0000	10.1
90	1,3-Dichlorobenzene	146	7.045	7.045	(0.994)	133266	10.0000	10
* 91	1,4-Dichlorobenzene-d4	152	7.088	7.094	(1.000)	886019	100.000	
92	1,4-Dichlorobenzene	146	7.100	7.100	(1.002)	137893	10.0000	9.8
93	1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	225873	10.0000	9.8
94	n-Butylbenzene	91	7.258	7.259	(1.024)	217981	10.0000	9.9
95	1,2-Dichlorobenzene	146	7.380	7.381	(1.041)	124746	10.0000	9.9
96	1,2-Dibromo-3-Chloropropane	157	7.862	7.862	(1.109)	28597	25.0000	25.6
97	Hexachlorobutadiene	225	8.222	8.228	(1.160)	52093	10.0000	10
98	1,2,4-Trichlorobenzene	180	8.240	8.240	(1.163)	78678	10.0000	10
99	Naphthalene	128	8.423	8.429	(1.188)	150534	10.0000	9.9
100	1,2,3-Trichlorobenzene	180	8.532	8.532	(1.204)	71040	10.0000	10
101	2-Methylnaphthalene	142	9.038	9.045	(1.275)	36792	5.00000	4.4(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914007.D
Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 012914007.D
Lab Smp Id: 10 ICAL 10098-17
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Misc Info:

Calibration Date: 29-JAN-2014
Calibration Time: 15:01
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

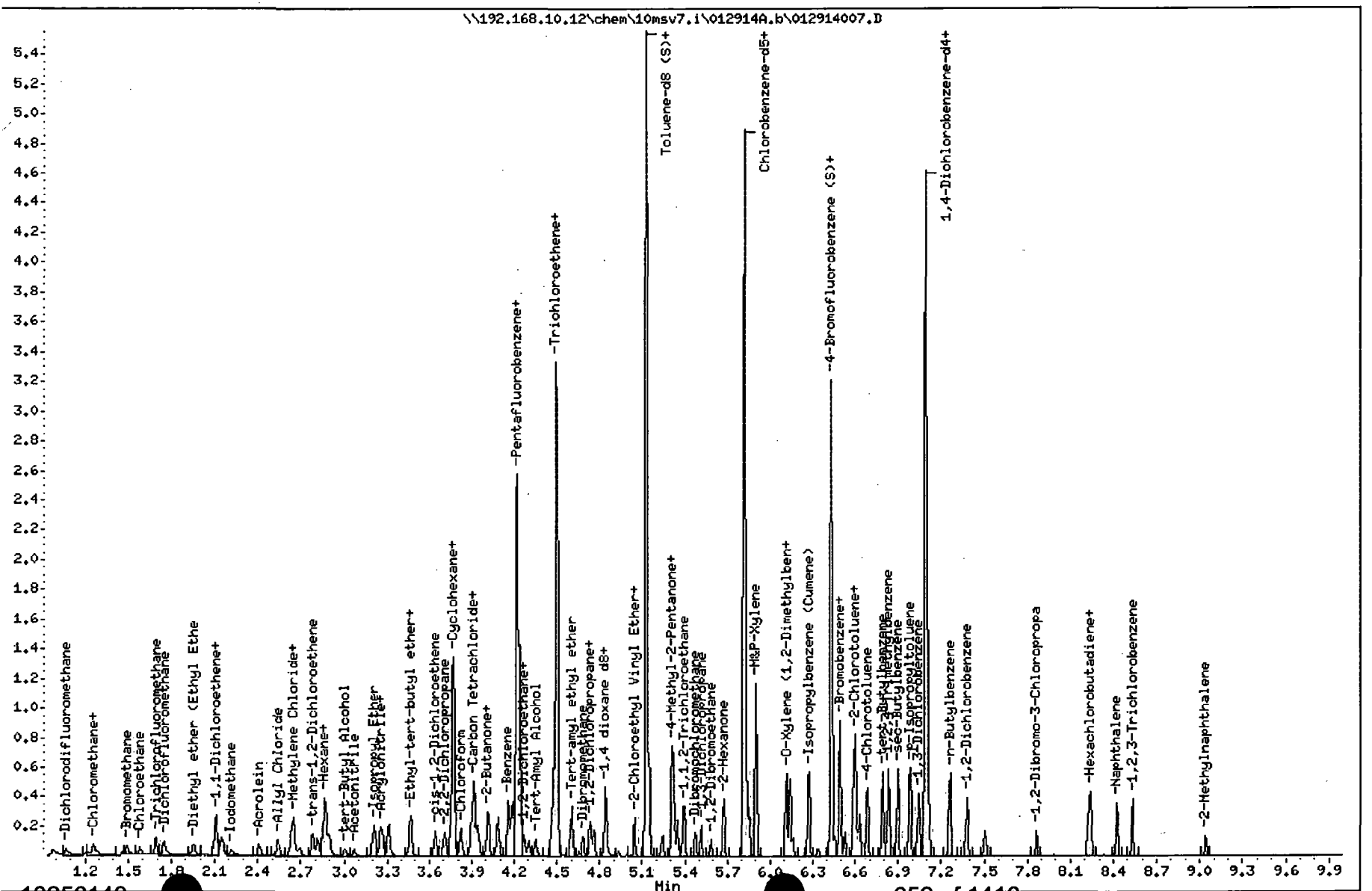
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	164056	82028	328112	159346	-2.87
41 Pentafluorobenzen	1178461	589231	2356922	1174203	-0.36
48 1,4 Difluorobenze	1667544	833772	3335088	1638760	-1.73
53 1,4 dioxane d8	159641	79821	319282	155891	-2.35
67 Chlorobenzene-d5	1508153	754077	3016306	1481394	-1.77
91 1,4-Dichlorobenze	915622	457811	1831244	886019	-3.23

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
48 1,4 Difluorobenze	4.49	3.99	4.99	4.49	0.00
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	0.00
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914007.D
Date : 29-JAN-2014 14:25
Client ID:
Sample Info: 10 ICAL 10098-17

Instrument: 10msv7.i
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Injection Date: 29 JAN 2014 14:25
Instrument: 10msv7.i
Lab Sample ID: 10 ICAL 10098-17
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\012914A.b\012914008.D
Lab Smp Id: 20 ICAL 10098-17
Inj Date : 29-JAN-2014 14:43
Operator : HBP Inst ID: 10msv7.i
Smp Info : 20 ICAL 10098-17
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Meth Date : 30-Jan-2014 09:08 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.070	1.065	(0.254)	89030	20.0000	21.2
2	Chloromethane	50	1.259	1.253	(0.299)	90407	20.0000	21.3
3	Vinyl Chloride	62	1.259	1.259	(0.299)	102483	20.0000	20.7
4	Bromomethane	94	1.491	1.491	(0.354)	65303	20.0000	21.5
5	Chloroethane	64	1.582	1.583	(0.375)	40940	20.0000	19.0(Q)
6	Trichlorofluoromethane	101	1.692	1.680	(0.401)	138030	20.0000	20.8
7	Dichlorofluoromethane	67	1.747	1.741	(0.414)	175398	20.0000	20.0
8	Diethyl ether (Ethyl Ether)	59	1.954	1.961	(0.464)	60960	20.0000	20.4
9	1,1-Dichloroethene	96	2.101	2.095	(0.498)	86141	20.0000	20.9
10	Carbon Disulfide	76	2.107	2.107	(0.500)	297050	20.0000	19.2
11	Ethanol	45	2.107	2.132	(0.436)	21267	400.000	399
12	Trichlorotrifluoroethane	101	2.149	2.144	(0.510)	95501	20.0000	21.2
13	Iodomethane	142	2.216	2.217	(0.526)	109227	20.0000	18.5
14	Acrolein	56	2.412	2.412	(0.572)	114888	200.000	205
15	Allyl Chloride	41	2.540	2.540	(0.602)	120113	20.0000	20.4
16	Methylene Chloride	84	2.637	2.638	(0.626)	100575	20.0000	19.8
17	Isopropanol	45	2.625	2.644	(0.543)	60582	200.000	205
* 18	Acetone d6	46	2.649	2.656	(1.000)	157496	200.000	
19	Acetone	58	2.692	2.699	(1.016)	27608	100.000	97.6

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.783	2.784	(0.660)	98939	20.0000	21.2
	21 Hexane	86	2.863	2.863	(1.081)	60911	50.0000	51.6
	22 Methyl-tert-butyl Ether	73	2.893	2.900	(0.686)	236061	20.0000	20.6
	23 tert-Butyl Alcohol	59	3.003	3.016	(0.621)	91645	200.000	204(Q)
	24 Acetonitrile	41	3.070	3.077	(0.728)	72542	200.000	193
	25 Isopropyl Ether	45	3.204	3.211	(0.760)	271463	20.0000	20.2
	26 Acrylonitrile	53	3.253	3.253	(0.772)	137733	200.000	204
	27 1,1-Dichloroethane	63	3.265	3.266	(0.774)	165283	20.0000	20.9
	28 Ethyl-tert-butyl ether	59	3.466	3.467	(0.822)	256566	20.0000	20.2
	29 Vinyl Acetate	43	3.466	3.467	(0.822)	172113	20.0000	20.9
	30 cis-1,2-Dichloroethene	96	3.637	3.644	(0.863)	106536	20.0000	20.8
	31 2,2-Dichloropropane	77	3.704	3.711	(0.879)	140709	20.0000	20.4
	32 Cyclohexane	56	3.765	3.766	(0.893)	812798	100.000	103
	33 Bromochloromethane	130	3.765	3.766	(0.893)	64734	20.0000	20.7
	34 Chloroform	83	3.820	3.820	(0.906)	167758	20.0000	20.4
	35 Carbon Tetrachloride	117	3.893	3.894	(0.923)	122461	20.0000	20.3
	36 Tetrahydrofuran	72	3.911	3.912	(1.476)	100095	200.000	205
	37 1,1,1-Trichloroethane	97	3.936	3.936	(0.933)	148914	20.0000	20.9
	38 2-Butanone	43	4.009	4.009	(0.951)	148176	100.000	100
	39 1,1-Dichloropropene	75	4.009	4.016	(0.951)	134789	20.0000	20.5
	40 Benzene	78	4.155	4.155	(0.986)	396050	20.0000	20.1
*	41 Pentafluorobenzene	168	4.216	4.216	(1.000)	1170550	100.000	
	42 Tert-amyl methyl ether	73	4.234	4.235	(1.004)	256044	20.0000	19.7(Q)
$	43 1,2-Dichloroethane d4 (S)	65	4.234	4.235	(1.004)	438066	100.000	101
	44 1,2-Dichloroethane	62	4.271	4.272	(1.013)	110322	20.0000	20.5
	45 Isobutanol	43	4.301	4.308	(0.889)	72775	400.000	399
	46 Tert-Amyl Alcohol	59	4.350	4.357	(0.899)	79204	200.000	204
	47 Trichloroethene	130	4.472	4.479	(0.996)	115821	20.0000	20.1(Q)
*	48 1,4 Difluorobenzene	114	4.490	4.491	(1.000)	1646802	100.000	
	49 Tert-amyl ethyl ether	59	4.600	4.601	(1.024)	204714	20.0000	20.0
	50 Dibromomethane	174	4.679	4.686	(1.042)	64120	20.0000	20.6
	51 1,2-Dichloropropane	63	4.728	4.729	(1.053)	93276	20.0000	20.4
	52 Bromodichloromethane	83	4.759	4.759	(1.060)	125322	20.0000	20.4
*	53 1,4 dioxane d8	96	4.838	4.845	(1.000)	152775	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.850	4.857	(1.003)	20936	400.000	399
	55 2-Chloroethyl Vinyl Ether	63	5.015	5.021	(1.117)	1803	50.0000	45.2(TQ)
	56 cis-1,3-Dichloropropene	75	5.045	5.046	(1.124)	152902	20.0000	20.6
$	57 Toluene-d8 (S)	98	5.124	5.125	(0.882)	1881112	100.000	99.3
	58 Toluene	92	5.149	5.149	(0.886)	259071	20.0000	19.1
	59 4-Methyl-2-Pentanone	43	5.307	5.308	(0.913)	352912	100.000	102
	60 Tetrachloroethene	166	5.313	5.314	(0.914)	130187	20.0000	20.1
	61 trans-1,3-Dichloropropene	75	5.326	5.326	(0.916)	133786	20.0000	20.3
	62 1,1,2-Trichloroethane	97	5.393	5.393	(0.928)	78735	20.0000	20.1
	63 Dibromochloromethane	129	5.472	5.479	(0.941)	95021	20.0000	20.2
	64 1,3-Dichloropropane	76	5.515	5.515	(0.949)	132517	20.0000	20.2
	65 1,2-Dibromoethane	107	5.582	5.582	(0.960)	82435	20.0000	20.0
	66 2-Hexanone	43	5.673	5.674	(0.976)	251743	100.000	99.4
*	67 Chlorobenzene-d5	117	5.813	5.814	(1.000)	1502854	100.000	
	68 Chlorobenzene	112	5.819	5.826	(1.001)	300645	20.0000	20.2
	69 Ethylbenzene	91	5.826	5.832	(1.002)	495369	20.0000	18.6
	70 1,1,1,2-Tetrachloroethane	131	5.850	5.851	(1.006)	104835	20.0000	20.4
	71 M&P-Xylene	106	5.899	5.899	(1.015)	397598	40.0000	39.9
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.113	(1.051)	191306	20.0000	20.1
	73 Styrene	104	6.136	6.137	(1.056)	318825	20.0000	20.0

Data File: \\192.168.10.12\Chem\10MSV7.I\012914R.B\012914003.D
Report Date: 30-Jan-2014 09:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	74 Bromoform	173	6.161	6.161	(1.060)	71699	20.0000	20.7
	75 Isopropylbenzene (Cumene)	105	6.271	6.271	(1.079)	503783	20.0000	19.4
$	76 4-Bromofluorobenzene (S)	95	6.423	6.430	(0.906)	724255	100.000	101
	77 cis-1,4-Dichloro-2-Butene	53	6.453	6.454	(0.911)	30249	20.0000	19.8
	78 Bromobenzene	156	6.490	6.491	(0.916)	135169	20.0000	19.5
	79 n-Propylbenzene	91	6.490	6.497	(0.916)	603505	20.0000	20.0
	80 1,1,2,2-Tetrachloroethane	83	6.527	6.533	(0.921)	106349	20.0000	20.4
	81 2-Chlorotoluene	91	6.588	6.588	(0.929)	382181	20.0000	19.8
	82 1,3,5-Trimethylbenzene	105	6.600	6.600	(0.931)	441857	20.0000	20.1
	83 1,2,3-Trichloropropane	110	6.612	6.613	(0.933)	30317	20.0000	20.8(Q)
	84 trans-1,4-Dichloro-2-Butene	53	6.630	6.631	(0.935)	67283	50.0000	50.6
	85 4-Chlorotoluene	91	6.685	6.686	(0.943)	362554	20.0000	20.1
	86 tert-Butylbenzene	119	6.789	6.795	(0.958)	390280	20.0000	20.4
	87 1,2,4-Trimethylbenzene	105	6.831	6.832	(0.964)	445227	20.0000	20.1
	88 sec-Butylbenzene	105	6.898	6.899	(0.973)	570397	20.0000	20.2
	89 p-Isopropyltoluene	119	6.984	6.984	(0.985)	500813	20.0000	20.4
	90 1,3-Dichlorobenzene	146	7.045	7.045	(0.994)	269856	20.0000	20.1
*	91 1,4-Dichlorobenzene-d4	152	7.087	7.094	(1.000)	890517	100.000	
	92 1,4-Dichlorobenzene	146	7.100	7.100	(1.002)	277330	20.0000	19.7
	93 1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	455046	20.0000	19.8
	94 n-Butylbenzene	91	7.258	7.259	(1.024)	456535	20.0000	20.6
	95 1,2-Dichlorobenzene	146	7.380	7.381	(1.041)	254386	20.0000	20.2
	96 1,2-Dibromo-3-Chloropropane	157	7.862	7.862	(1.109)	56575	50.0000	50.4
	97 Hexachlorobutadiene	225	8.227	8.228	(1.161)	109732	20.0000	20.9
	98 1,2,4-Trichlorobenzene	180	8.240	8.240	(1.163)	163279	20.0000	20.5
	99 Naphthalene	128	8.429	8.429	(1.189)	302920	20.0000	19.8
	100 1,2,3-Trichlorobenzene	180	8.538	8.532	(1.205)	144792	20.0000	20.2
	101 2-Methylnaphthalene	142	9.044	9.045	(1.276)	83583	10.0000	9.6

C Flag Legend

T - Target compound detected outside RT window.
Q - Qualifier signal failed the ratio test.

Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 012914008.D
Lab Smp Id: 20 ICAL 10098-17
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Misc Info:

Calibration Date: 29-JAN-2014
Calibration Time: 15:01
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	164056	82028	328112	157496	-4.00
41 Pentafluorobenzen	1178461	589231	2356922	1170550	-0.67
48 1,4 Difluorobenze	1667544	833772	3335088	1646802	-1.24
53 1,4 dioxane d8	159641	79821	319282	152775	-4.30
67 Chlorobenzene-d5	1508153	754077	3016306	1502854	-0.35
91 1,4-Dichlorobenze	915622	457811	1831244	890517	-2.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.00
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	-0.00
48 1,4 Difluorobenze	4.49	3.99	4.99	4.49	-0.00
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.00
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	-0.00

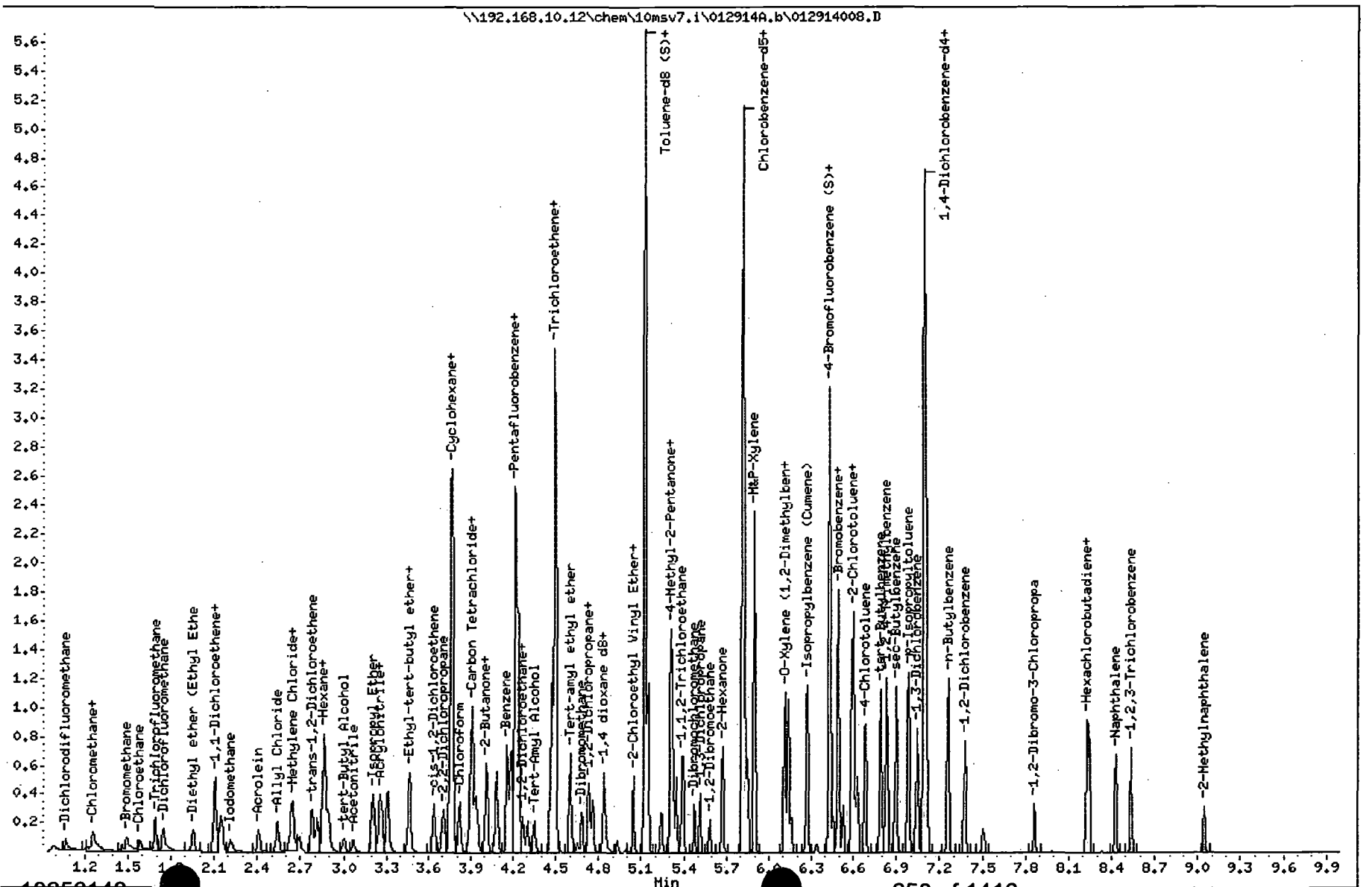
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File:"\\192.168.10.12\chem\10msv7.i\012914A.b\012914008.D
Date : 29-JAN-2014 14:43
Client ID:
Sample Info: 20 ICAL 10098-17

Instrument: 10msv7.i

Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



Injection Date: 29-JAN-2011 14:43
Instrument: 10msv7.i
Lab Sample ID: 20 ICAL 10098-17
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\012914A.b\012914009.D
Lab Smp Id: 50 ICAL 10098-17
Inj Date : 29-JAN-2014 15:01
Operator : HBP Inst ID: 10msv7.i
Smp Info : 50 ICAL 10098-17
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Meth Date : 30-Jan-2014 09:08 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.070	1.065	(0.254)	225885	50.0000	53.3
2	Chloromethane	50	1.265	1.253	(0.300)	220764	50.0000	51.7
3	Vinyl Chloride	62	1.259	1.259	(0.299)	263655	50.0000	52.9
4	Bromomethane	94	1.491	1.491	(0.354)	154633	50.0000	52.3
5	Chloroethane	64	1.582	1.583	(0.375)	100688	50.0000	46.8
6	Trichlorofluoromethane	101	1.692	1.680	(0.401)	371094	50.0000	55.5
7	Dichlorofluoromethane	67	1.747	1.741	(0.414)	447982	50.0000	50.8
8	Diethyl ether (Ethyl Ether)	59	1.960	1.961	(0.465)	156118	50.0000	51.9
9	1,1-Dichloroethene	96	2.101	2.095	(0.498)	223195	50.0000	53.8
10	Carbon Disulfide	76	2.107	2.107	(0.500)	765489	50.0000	49.1
11	Ethanol	45	2.107	2.132	(0.436)	53559	1000.00	961
12	Trichlorotrifluoroethane	101	2.149	2.144	(0.510)	244518	50.0000	54.0
13	Iodomethane	142	2.217	2.217	(0.526)	336881	50.0000	51.3
14	Acrolein	56	2.412	2.412	(0.572)	304841	500.000	542
15	Allyl Chloride	41	2.540	2.540	(0.602)	315764	50.0000	53.3
16	Methylene Chloride	84	2.643	2.638	(0.627)	246723	50.0000	50.1
17	Isopropanol	45	2.625	2.644	(0.543)	143455	500.000	504
* 18	Acetone d6	46	2.649	2.656	(1.000)	164056	200.000	
19	Acetone	58	2.692	2.699	(1.016)	72585	250.000	255

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
20	trans-1,2-Dichloroethene	96	2.783	2.784	(0.660)	250164	50.0000	53.1
21	Hexane	86	2.863	2.863	(1.081)	156485	125.000	127
22	Methyl-tert-butyl Ether	73	2.893	2.900	(0.686)	611275	50.0000	52.9
23	tert-Butyl Alcohol	59	3.003	3.016	(0.621)	244508	500.000	522
24	Acetonitrile	41	3.070	3.077	(0.728)	184112	500.000	486
25	Isopropyl Ether	45	3.204	3.211	(0.760)	714750	50.0000	52.8
26	Acrylonitrile	53	3.253	3.253	(0.772)	364484	500.000	536
27	1,1-Dichloroethane	63	3.265	3.266	(0.774)	423643	50.0000	53.3
28	Ethyl-tert-butyl ether	59	3.466	3.467	(0.822)	672349	50.0000	52.6
29	Vinyl Acetate	43	3.466	3.467	(0.822)	448713	50.0000	54.1
30	cis-1,2-Dichloroethene	96	3.643	3.644	(0.864)	272056	50.0000	52.6
31	2,2-Dichloropropane	77	3.710	3.711	(0.880)	365665	50.0000	52.7
32	Cyclohexane	56	3.765	3.766	(0.893)	2102360	250.000	265
33	Bromochloromethane	130	3.765	3.766	(0.893)	163482	50.0000	51.9
34	Chloroform	83	3.820	3.820	(0.906)	433433	50.0000	52.4
35	Carbon Tetrachloride	117	3.893	3.894	(0.923)	323775	50.0000	53.4
36	Tetrahydrofuran	72	3.911	3.912	(1.476)	256978	500.000	505
37	1,1,1-Trichloroethane	97	3.936	3.936	(0.933)	385405	50.0000	53.8
38	2-Butanone	43	4.009	4.009	(0.951)	382381	250.000	257
39	1,1-Dichloropropene	75	4.009	4.016	(0.951)	351820	50.0000	53.2
40	Benzene	78	4.155	4.155	(0.986)	1008749	50.0000	50.9
* 41	Pentafluorobenzene	168	4.216	4.216	(1.000)	1178461	100.000	
42	Tert-amyl methyl ether	73	4.234	4.235	(1.004)	661642	50.0000	50.5
$ 43	1,2-Dichloroethane d4 (S)	65	4.234	4.235	(1.004)	433448	100.000	99.4
44	1,2-Dichloroethane	62	4.271	4.272	(1.013)	287419	50.0000	53.0
45	Isobutanol	43	4.301	4.308	(0.889)	200709	1000.00	1050
46	Tert-Amyl Alcohol	59	4.350	4.357	(0.899)	212914	500.000	524
47	Trichloroethene	130	4.472	4.479	(0.996)	302684	50.0000	52.0
* 48	1,4 Difluorobenzene	114	4.490	4.491	(1.000)	1667544	100.000	
49	Tert-amyl ethyl ether	59	4.600	4.601	(1.024)	541332	50.0000	52.3
50	Dibromomethane	174	4.679	4.686	(1.042)	168358	50.0000	53.4
51	1,2-Dichloropropane	63	4.728	4.729	(1.053)	241350	50.0000	52.1
52	Bromodichloromethane	83	4.759	4.759	(1.060)	330821	50.0000	53.3
* 53	1,4 dioxane d8	96	4.838	4.845	(1.000)	159641	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	4.856	4.857	(1.004)	56353	1000.00	1030
55	2-Chloroethyl Vinyl Ether	63	5.015	5.021	(1.117)	8543	125.000	118
56	cis-1,3-Dichloropropene	75	5.045	5.046	(1.124)	398793	50.0000	53.0
$ 57	Toluene-d8 (S)	98	5.124	5.125	(0.882)	1908178	100.000	100
58	Toluene	92	5.149	5.149	(0.886)	664043	50.0000	48.7
59	4-Methyl-2-Pentanone	43	5.307	5.308	(0.913)	916335	250.000	263
60	Tetrachloroethene	166	5.313	5.314	(0.914)	347588	50.0000	53.5
61	trans-1,3-Dichloropropene	75	5.320	5.326	(0.915)	358639	50.0000	54.1
62	1,1,2-Trichloroethane	97	5.393	5.393	(0.928)	205673	50.0000	52.3
63	Dibromochloromethane	129	5.472	5.479	(0.941)	252842	50.0000	53.7
64	1,3-Dichloropropane	76	5.515	5.515	(0.949)	345035	50.0000	52.5
65	1,2-Dibromoethane	107	5.582	5.582	(0.960)	216205	50.0000	52.2
66	2-Hexanone	43	5.673	5.674	(0.976)	675660	250.000	266
* 67	Chlorobenzene-d5	117	5.813	5.814	(1.000)	1508153	100.000	
68	Chlorobenzene	112	5.819	5.826	(1.001)	769826	50.0000	51.4
69	Ethylbenzene	91	5.826	5.832	(1.002)	1295593	50.0000	48.5
70	1,1,1,2-Tetrachloroethane	131	5.850	5.851	(1.006)	276780	50.0000	53.6
71	M&P-Xylene	106	5.899	5.899	(1.015)	1033682	100.000	103
72	O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.113	(1.051)	500212	50.0000	52.3
73	Styrene	104	6.136	6.137	(1.056)	863895	50.0000	53.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
74 Bromoform	173	6.155	6.161	(1.059)	189644	50.0000	54.5
75 Isopropylbenzene (Cumene)	105	6.264	6.271	(1.078)	1329374	50.0000	51.1
$ 76 4-Bromofluorobenzene (S)	95	6.423	6.430	(0.906)	734966	100.000	99.4
77 cis-1,4-Dichloro-2-Butene	53	6.453	6.454	(0.911)	80509	50.0000	51.4
78 Bromobenzene	156	6.490	6.491	(0.916)	358452	50.0000	50.2
79 n-Propylbenzene	91	6.490	6.497	(0.916)	1614093	50.0000	51.9
80 1,1,2,2-Tetrachloroethane	83	6.527	6.533	(0.921)	274966	50.0000	51.4
81 2-Chlorotoluene	91	6.588	6.588	(0.929)	1005944	50.0000	50.7
82 1,3,5-Trimethylbenzene	105	6.600	6.600	(0.931)	1152999	50.0000	51.0
83 1,2,3-Trichloropropane	110	6.612	6.613	(0.933)	77400	50.0000	51.6(Q)
84 trans-1,4-Dichloro-2-Butene	53	6.630	6.631	(0.935)	181736	125.000	133
85 4-Chlorotoluene	91	6.679	6.686	(0.942)	947493	50.0000	51.2
86 tert-Butylbenzene	119	6.789	6.795	(0.958)	1021666	50.0000	51.9
87 1,2,4-Trimethylbenzene	105	6.831	6.832	(0.964)	1162667	50.0000	51.0
88 sec-Butylbenzene	105	6.899	6.899	(0.973)	1496551	50.0000	51.6
89 p-Isopropyltoluene	119	6.984	6.984	(0.985)	1317338	50.0000	52.1
90 1,3-Dichlorobenzene	146	7.045	7.045	(0.994)	701193	50.0000	50.9
* 91 1,4-Dichlorobenzene-d4	152	7.088	7.094	(1.000)	915622	100.000	
92 1,4-Dichlorobenzene	146	7.100	7.100	(1.002)	728521	50.0000	50.3
93 1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	1216935	50.0000	52.5
94 n-Butylbenzene	91	7.258	7.259	(1.024)	1195476	50.0000	52.6
95 1,2-Dichlorobenzene	146	7.380	7.381	(1.041)	655578	50.0000	50.5
96 1,2-Dibromo-3-Chloropropane	157	7.862	7.862	(1.109)	149094	125.000	129
97 Hexachlorobutadiene	225	8.228	8.228	(1.161)	278087	50.0000	51.4
98 1,2,4-Trichlorobenzene	180	8.240	8.240	(1.163)	413668	50.0000	50.6
99 Naphthalene	128	8.423	8.429	(1.188)	782262	50.0000	49.8
100 1,2,3-Trichlorobenzene	180	8.532	8.532	(1.204)	371950	50.0000	50.4
101 2-Methylnaphthalene	142	9.044	9.045	(1.276)	217646	25.0000	24.7

Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914009.D
Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 012914009.D
Lab Smp Id: 50 ICAL 10098-17
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Misc Info:

Calibration Date: 29-JAN-2014
Calibration Time: 15:01
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

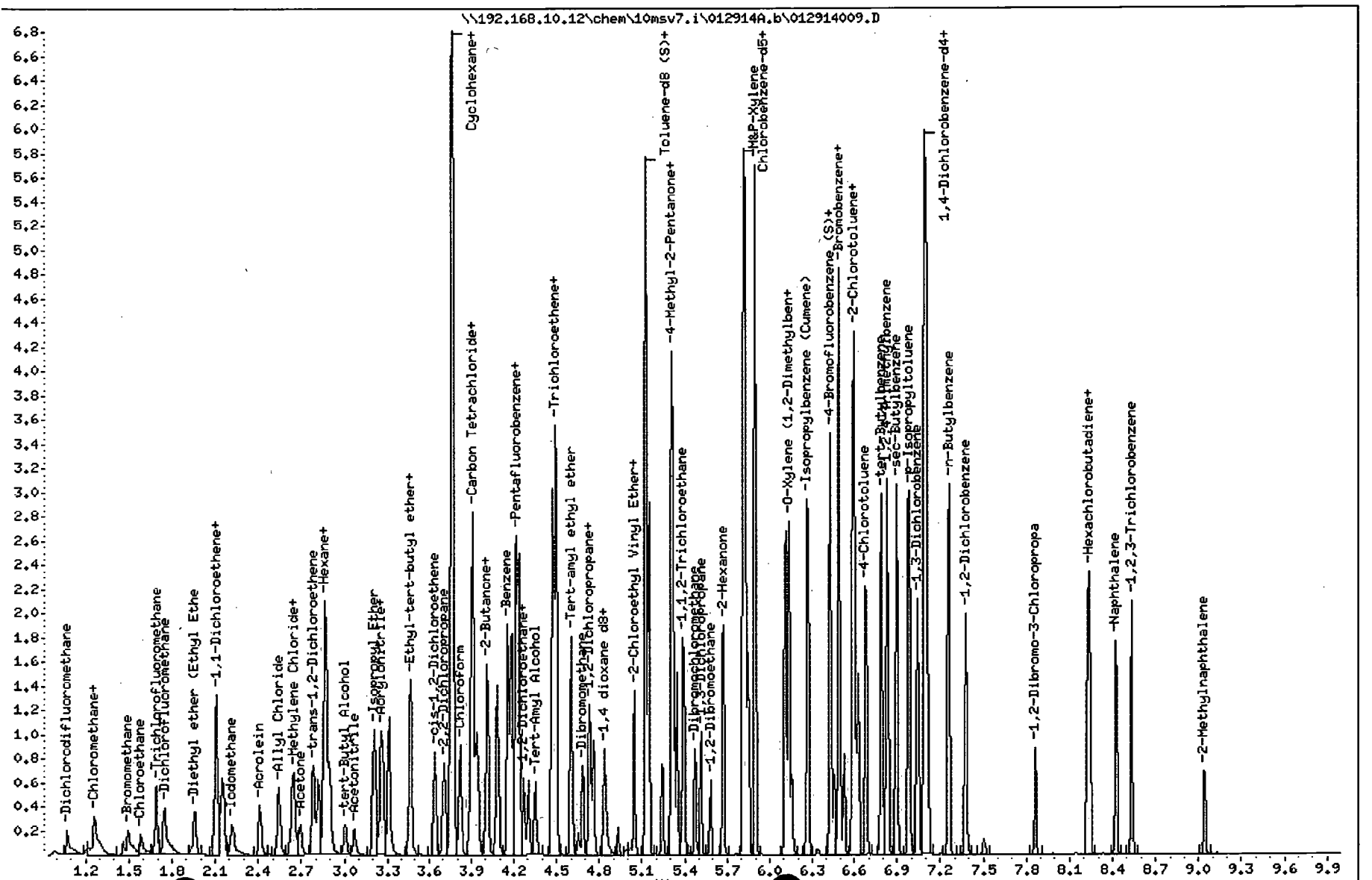
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	164056	82028	328112	164056	0.00
41 Pentafluorobenzen	1178461	589231	2356922	1178461	0.00
48 1,4 Difluorobenze	1667544	833772	3335088	1667544	0.00
53 1,4 dioxane d8	159641	79821	319282	159641	0.00
67 Chlorobenzene-d5	1508153	754077	3016306	1508153	0.00
91 1,4-Dichlorobenze	915622	457811	1831244	915622	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
48 1,4 Difluorobenze	4.49	3.99	4.99	4.49	0.00
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	0.00
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914009.D
Date : 29-JAN-2014 15:01
Client ID:
Sample Info: 50 ICAL 10098-17

Instrument: 10msv7.i
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Injection Date: 29-JAN-2014 15:01
Instrument: 10msv7.i
Lab Sample ID: 50 ICAL 10098-17
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\012914A.b\012914010.D
Lab Smp Id: 100 ICAL 10098-17
Inj Date : 29-JAN-2014 15:20
Operator : HBP Inst ID: 10msv7.i
Smp Info : 100 ICAL 10098-17
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Meth Date : 30-Jan-2014 09:08 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.064	1.065	(0.253)	439929	100.000	103
2	Chloromethane	50	1.253	1.253	(0.297)	443411	100.000	103
3	Vinyl Chloride	62	1.259	1.259	(0.299)	513962	100.000	102
4	Bromomethane	94	1.491	1.491	(0.354)	293108	100.000	98.0
5	Chloroethane	64	1.582	1.583	(0.375)	218688	100.000	102
6	Trichlorofluoromethane	101	1.686	1.680	(0.400)	683746	100.000	101
7	Dichlorofluoromethane	67	1.741	1.741	(0.413)	882418	100.000	99.1
8	Diethyl ether (Ethyl Ether)	59	1.954	1.961	(0.464)	313874	100.000	103
9	1,1-Dichloroethene	96	2.101	2.095	(0.498)	444730	100.000	106
10	Carbon Disulfide	76	2.107	2.107	(0.500)	1512994	100.000	96.0
11	Ethanol	45	2.113	2.132	(0.437)	116125	2000.00	2030
12	Trichlorotrifluoroethane	101	2.143	2.144	(0.508)	484808	100.000	106
13	Iodomethane	142	2.217	2.217	(0.526)	681067	100.000	99.6
14	Acrolein	56	2.412	2.412	(0.572)	611167	1000.00	1070
15	Allyl Chloride	41	2.540	2.540	(0.602)	627256	100.000	105
16	Methylene Chloride	84	2.637	2.638	(0.626)	490480	100.000	100
17	Isopropanol	45	2.631	2.644	(0.544)	286220	1000.00	995
* 18	Acetone d6	46	2.649	2.656	(1.000)	169901	200.000	
19	Acetone	58	2.692	2.699	(1.016)	143687	500.000	497

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.783	2.784	(0.660)	499360	100.000	105
	21 Hexane	86	2.863	2.863	(1.081)	312553	250.000	245
	22 Methyl-tert-butyl Ether	73	2.893	2.900	(0.686)	1231472	100.000	106
	23 tert-Butyl Alcohol	59	3.009	3.016	(0.622)	500845	1000.00	1040
	24 Acetonitrile	41	3.070	3.077	(0.728)	378676	1000.00	989
	25 Isopropyl Ether	45	3.204	3.211	(0.760)	1426085	100.000	104
	26 Acrylonitrile	53	3.253	3.253	(0.772)	705488	1000.00	1030
	27 1,1-Dichloroethane	63	3.265	3.266	(0.774)	843522	100.000	105
	28 Ethyl-tert-butyl ether	59	3.466	3.467	(0.822)	1362325	100.000	105
	29 Vinyl Acetate	43	3.466	3.467	(0.822)	914846	100.000	109
	30 cis-1,2-Dichloroethene	96	3.637	3.644	(0.863)	543810	100.000	104
	31 2,2-Dichloropropane	77	3.704	3.711	(0.879)	725818	100.000	104
	32 Cyclohexane	56	3.765	3.766	(0.893)	4241550	500.000	529
	33 Bromochloromethane	130	3.765	3.766	(0.893)	327937	100.000	103
	34 Chloroform	83	3.820	3.820	(0.906)	859424	100.000	103
	35 Carbon Tetrachloride	117	3.893	3.894	(0.923)	663219	100.000	108
	36 Tetrahydrofuran	72	3.911	3.912	(1.476)	530515	1000.00	1010
	37 1,1,1-Trichloroethane	97	3.936	3.936	(0.933)	766635	100.000	106
	38 2-Butanone	43	4.009	4.009	(0.951)	804789	500.000	535
	39 1,1-Dichloropropene	75	4.009	4.016	(0.951)	693277	100.000	104
	40 Benzene	78	4.155	4.155	(0.986)	2011464	100.000	100
*	41 Pentafluorobenzene	168	4.216	4.216	(1.000)	1190866	100.000	
	42 Tert-amyl methyl ether	73	4.234	4.235	(1.004)	1346300	100.000	102
$	43 1,2-Dichloroethane d4 (S)	65	4.234	4.235	(1.004)	440716	100.000	100
	44 1,2-Dichloroethane	62	4.271	4.272	(1.013)	568653	100.000	104
	45 Isobutanol	43	4.301	4.308	(0.889)	414940	2000.00	2120
	46 Tert-Amyl Alcohol	59	4.350	4.357	(0.899)	451071	1000.00	1080
	47 Trichloroethene	130	4.472	4.479	(0.996)	591048	100.000	100
*	48 1,4 Difluorobenzene	114	4.490	4.491	(1.000)	1693045	100.000	
	49 Tert-amyl ethyl ether	59	4.600	4.601	(1.024)	1102466	100.000	105
	50 Dibromomethane	174	4.686	4.686	(1.043)	333182	100.000	104
	51 1,2-Dichloropropane	63	4.728	4.729	(1.053)	484492	100.000	103
	52 Bromodichloromethane	83	4.759	4.759	(1.060)	651049	100.000	103
*	53 1,4 dioxane d8	96	4.838	4.845	(1.000)	163831	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.856	4.857	(1.004)	113010	2000.00	2010
	55 2-Chloroethyl Vinyl Ether	63	5.015	5.021	(1.117)	21719	250.000	258
	56 cis-1,3-Dichloropropene	75	5.045	5.046	(1.124)	804409	100.000	105
$	57 Toluene-d8 (S)	98	5.124	5.125	(0.882)	1945728	100.000	99.8
	58 Toluene	92	5.149	5.149	(0.886)	1316697	100.000	94.1
	59 4-Methyl-2-Pentanone	43	5.307	5.308	(0.913)	1895216	500.000	530
	60 Tetrachloroethene	166	5.313	5.314	(0.914)	670849	100.000	101
	61 trans-1,3-Dichloropropene	75	5.326	5.326	(0.916)	727857	100.000	107
	62 1,1,2-Trichloroethane	97	5.393	5.393	(0.928)	414699	100.000	103
	63 Dibromochloromethane	129	5.472	5.479	(0.941)	513789	100.000	106
	64 1,3-Dichloropropane	76	5.515	5.515	(0.949)	701489	100.000	104
	65 1,2-Dibromoethane	107	5.582	5.582	(0.960)	434251	100.000	102
	66 2-Hexanone	43	5.673	5.674	(0.976)	1379748	500.000	529
*	67 Chlorobenzene-d5	117	5.813	5.814	(1.000)	1547218	100.000	
	68 Chlorobenzene	112	5.819	5.826	(1.001)	1530682	100.000	99.6
	69 Ethylbenzene	91	5.832	5.832	(1.003)	2619870	100.000	95.6
	70 1,1,1,2-Tetrachloroethane	131	5.850	5.851	(1.006)	558341	100.000	105
	71 M&P-Xylene	106	5.899	5.899	(1.015)	2077546	200.000	203
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.113	(1.051)	996850	100.000	102
	73 Styrene	104	6.136	6.137	(1.056)	1730865	100.000	105

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	
	74	Bromoform	173	6.161	6.161	(1.060)	392941	100.000	110	
	75	Isopropylbenzene (Cumene)	105	6.271	6.271	(1.079)	2712603	100.000	102	
$	76	4-Bromofluorobenzene (S)	95	6.423	6.430	(0.906)	746319	100.000	98.7	
	77	cis-1,4-Dichloro-2-Butene	53	6.453	6.454	(0.911)	167951	100.000	105	
	78	Bromobenzene	156	6.490	6.491	(0.916)	710586	100.000	97.3	
	79	n-Propylbenzene	91	6.490	6.497	(0.916)	3274555	100.000	103	
	80	1,1,2,2-Tetrachloroethane	83	6.527	6.533	(0.921)	558023	100.000	102	
	81	2-Chlorotoluene	91	6.588	6.588	(0.929)	2059437	100.000	101	
	82	1,3,5-Trimethylbenzene	105	6.600	6.600	(0.931)	2340795	100.000	101	
	83	1,2,3-Trichloropropane	110	6.612	6.613	(0.933)	159940	100.000	104	(Q)
	84	trans-1,4-Dichloro-2-Butene	53	6.630	6.631	(0.935)	369074	250.000	264	
	85	4-Chlorotoluene	91	6.685	6.686	(0.943)	1920988	100.000	101	
	86	tert-Butylbenzene	119	6.789	6.795	(0.958)	2044472	100.000	102	
	87	1,2,4-Trimethylbenzene	105	6.831	6.832	(0.964)	2387401	100.000	102	
	88	sec-Butylbenzene	105	6.899	6.899	(0.973)	3078332	100.000	104	
	89	p-Isopropyltoluene	119	6.984	6.984	(0.985)	2707934	100.000	105	
	90	1,3-Dichlorobenzene	146	7.045	7.045	(0.994)	1421169	100.000	101	
*	91	1,4-Dichlorobenzene-d4	152	7.088	7.094	(1.000)	936461	100.000		
	92	1,4-Dichlorobenzene	146	7.100	7.100	(1.002)	1442291	100.000	97.3	
	93	1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	2429879	100.000	104	
	94	n-Butylbenzene	91	7.258	7.259	(1.024)	2400423	100.000	103	
	95	1,2-Dichlorobenzene	146	7.380	7.381	(1.041)	1325831	100.000	99.9	
	96	1,2-Dibromo-3-Chloropropane	157	7.868	7.862	(1.110)	307019	250.000	260	
	97	Hexachlorobutadiene	225	8.228	8.228	(1.161)	554993	100.000	100	
	98	1,2,4-Trichlorobenzene	180	8.240	8.240	(1.163)	822094	100.000	98.4	
	99	Naphthalene	128	8.429	8.429	(1.189)	1622822	100.000	101	
	100	1,2,3-Trichlorobenzene	180	8.532	8.532	(1.204)	738659	100.000	97.9	
	101	2-Methylnaphthalene	142	9.044	9.045	(1.276)	429449	50.0000	50.4	

Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914010.D
Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 012914010.D
Lab Smp Id: 100 ICAL 10098-17
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Misc Info:

Calibration Date: 29-JAN-2014
Calibration Time: 15:01
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

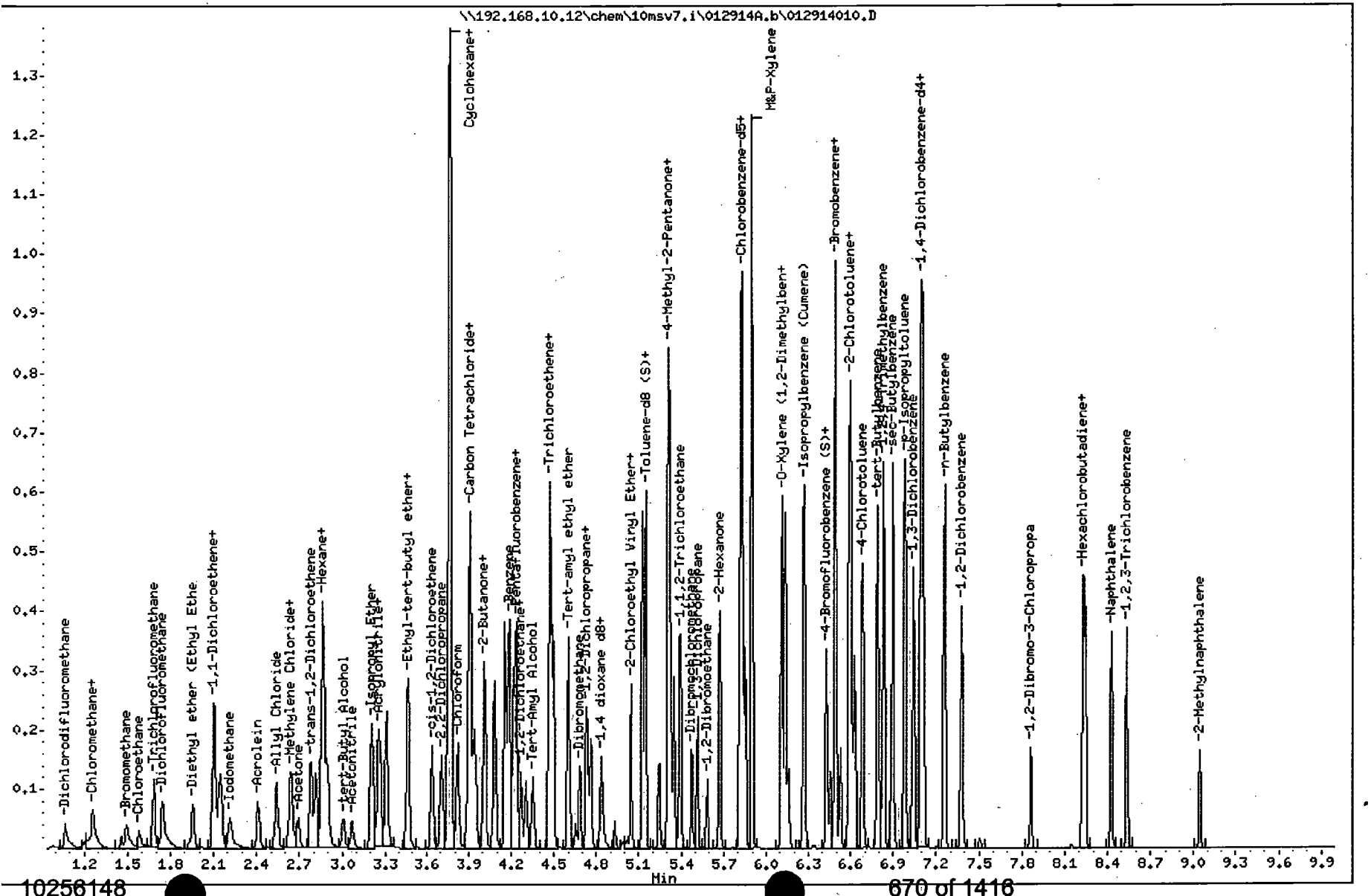
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	164056	82028	328112	169901	3.56
41 Pentafluorobenzen	1178461	589231	2356922	1190866	1.05
48 1,4 Difluorobenze	1667544	833772	3335088	1693045	1.53
53 1,4 dioxane d8	159641	79821	319282	163831	2.62
67 Chlorobenzene-d5	1508153	754077	3016306	1547218	2.59
91 1,4-Dichlorobenze	915622	457811	1831244	936461	2.28

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
48 1,4 Difluorobenze	4.49	3.99	4.99	4.49	0.00
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	0.00
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914010.D
Date : 29-JAN-2014 15:20
Client ID:
Sample Info: 100 ICAL 10098-17

Instrument: 10msv7.i
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Instrument: 10msv7.i
Lab Sample ID: 100 ICAL 10098-17
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\012914A.b\012914011.D
Lab Smp Id: 250 ICAL 10098-17
Inj Date : 29-JAN-2014 15:38
Operator : HBP Inst ID: 10msv7.i
Smp Info : 250 ICAL 10098-17
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Meth Date : 30-Jan-2014 09:08 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.064	1.065	(0.253)	1047103	250.000	241
2	Chloromethane	50	1.253	1.253	(0.297)	1082821	250.000	247
3	Vinyl Chloride	62	1.259	1.259	(0.299)	1279916	250.000	250(A)
4	Bromomethane	94	1.491	1.491	(0.354)	796548	250.000	250(A)
5	Chloroethane	64	1.583	1.583	(0.375)	526329	250.000	250
6	Trichlorofluoromethane	101	1.680	1.680	(0.399)	1478532	250.000	216
7	Dichlorofluoromethane	67	1.741	1.741	(0.413)	2182074	250.000	241
8	Diethyl ether (Ethyl Ether)	59	1.961	1.961	(0.465)	775152	250.000	251(A)
9	1,1-Dichloroethene	96	2.095	2.095	(0.497)	1110115	250.000	261(A)
10	Carbon Disulfide	76	2.107	2.107	(0.500)	3822852	250.000	239
11	Ethanol	45	2.131	2.132	(0.440)	299518	5000.00	5450(A)
12	Trichlorotrifluoroethane	101	2.143	2.144	(0.508)	1196592	250.000	258(A)
13	Iodomethane	142	2.217	2.217	(0.526)	1782297	250.000	250(A)
14	Acrolein	56	2.412	2.412	(0.572)	1497969	2500.00	2590(A)
15	Allyl Chloride	41	2.540	2.540	(0.602)	1592075	250.000	262(A)
16	Methylene Chloride	84	2.637	2.638	(0.626)	1229255	250.000	250
17	Isopropanol	45	2.643	2.644	(0.546)	714438	2500.00	2500(A)
* 18	Acetone d6	46	2.656	2.656	(1.000)	177390	200.000	
19	Acetone	58	2.698	2.699	(1.016)	361764	1250.00	1250(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	20 trans-1,2-Dichloroethene	96	2.784	2.784	(0.660)	1255499	250.000	260(A)
	21 Hexane	86	2.863	2.863	(1.078)	766868	625.000	577
	22 Methyl-tert-butyl Ether	73	2.899	2.900	(0.688)	3113431	250.000	263(A)
	23 tert-Butyl Alcohol	59	3.015	3.016	(0.622)	1284001	2500.00	2780(A)
	24 Acetonitrile	41	3.076	3.077	(0.730)	976400	2500.00	2510(A)
	25 Isopropyl Ether	45	3.210	3.211	(0.761)	3663105	250.000	263(A)
	26 Acrylonitrile	53	3.253	3.253	(0.772)	1794124	2500.00	2570(A)
	27 1,1-Dichloroethane	63	3.265	3.266	(0.774)	2146704	250.000	263(A)
	28 Ethyl-tert-butyl ether	59	3.466	3.467	(0.822)	3501056	250.000	267(A)
	29 Vinyl Acetate	43	3.466	3.467	(0.822)	2274225	250.000	267(A)
	30 cis-1,2-Dichloroethene	96	3.643	3.644	(0.864)	1359645	250.000	256(A)
	31 2,2-Dichloropropane	77	3.710	3.711	(0.880)	1847321	250.000	259(A)
	32 Cyclohexane	56	3.765	3.766	(0.893)	10842204	1250.00	1330(A)
	33 Bromochloromethane	130	3.765	3.766	(0.893)	786165	250.000	243
	34 Chloroform	83	3.820	3.820	(0.906)	2182953	250.000	257(A)
	35 Carbon Tetrachloride	117	3.893	3.894	(0.923)	1687963	250.000	271(A)
	36 Tetrahydrofuran	72	3.911	3.912	(1.473)	1331183	2500.00	2420
	37 1,1,1-Trichloroethane	97	3.936	3.936	(0.933)	1946196	250.000	265(A)
	38 2-Butanone	43	4.009	4.009	(0.951)	1968615	1250.00	1290(A)
	39 1,1-Dichloropropene	75	4.015	4.016	(0.952)	1743311	250.000	257(A)
	40 Benzene	78	4.155	4.155	(0.986)	5199950	250.000	256(A)
*	41 Pentafluorobenzene	168	4.216	4.216	(1.000)	1209234	100.000	
	42 Tert-amyl methyl ether	73	4.235	4.235	(1.004)	3491133	250.000	260(A)
$	43 1,2-Dichloroethane d4 (S)	65	4.235	4.235	(1.004)	448592	100.000	100
	44 1,2-Dichloroethane	62	4.271	4.272	(1.013)	1429306	250.000	257(A)
	45 Isobutanol	43	4.308	4.308	(0.889)	1092727	5000.00	5810(A)
	46 Tert-Amyl Alcohol	59	4.356	4.357	(0.899)	1153286	2500.00	2880(A)
	47 Trichloroethene	130	4.478	4.479	(0.997)	1499613	250.000	250(A)
*	48 1,4 Difluorobenzene	114	4.491	4.491	(1.000)	1714716	100.000	
	49 Tert-amyl ethyl ether	59	4.600	4.601	(1.024)	2881833	250.000	271(A)
	50 Dibromomethane	174	4.686	4.686	(1.043)	837321	250.000	258(A)
	51 1,2-Dichloropropane	63	4.728	4.729	(1.053)	1254314	250.000	263(A)
	52 Bromodichloromethane	83	4.759	4.759	(1.060)	1664548	250.000	261(A)
*	53 1,4 dioxane d8	.96	4.844	4.845	(1.000)	157436	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.856	4.857	(1.002)	281414	5000.00	5210(A)
	55 2-Chloroethyl Vinyl Ether	63	5.021	5.021	(1.118)	56644	625.000	623
	56 cis-1,3-Dichloropropene	75	5.045	5.046	(1.124)	2089670	250.000	270(A)
$	57 Toluene-d8 (S)	98	5.125	5.125	(0.882)	1986540	100.000	98.6
	58 Toluene	92	5.149	5.149	(0.886)	3458794	250.000	239
	59 4-Methyl-2-Pentanone	43	5.307	5.308	(0.913)	4839578	1250.00	1310(A)
	60 Tetrachloroethene	166	5.314	5.314	(0.914)	1662402	250.000	241
	61 trans-1,3-Dichloropropene	75	5.326	5.326	(0.916)	1899884	250.000	271(A)
	62 1,1,2-Trichloroethane	97	5.393	5.393	(0.928)	1057782	250.000	254(A)
	63 Dibromochloromethane	129	5.478	5.479	(0.942)	1324752	250.000	266(A)
	64 1,3-Dichloropropane	76	5.515	5.515	(0.949)	1809350	250.000	260(A)
	65 1,2-Dibromoethane	107	5.582	5.582	(0.960)	1121981	250.000	256(A)
	66 2-Hexanone	43	5.673	5.674	(0.976)	3587808	1250.00	1330(A)
*	67 Chlorobenzene-d5	117	5.813	5.814	(1.000)	1597929	100.000	
	68 Chlorobenzene	112	5.826	5.826	(1.002)	3989349	250.000	251(A)
	69 Ethylbenzene	91	5.832	5.832	(1.003)	6897723	250.000	244
	70 1,1,1,2-Tetrachloroethane	131	5.850	5.851	(1.006)	1467061	250.000	268(A)
	71 M&P-Xylene	106	5.899	5.899	(1.015)	5362541	500.000	506(A)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.113	(1.051)	2619079	250.000	258(A)
	73 Styrene	104	6.137	6.137	(1.056)	4579585	250.000	270(A)

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914011.D
Report Date: 30-Jan-2014 09:08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
74	Bromoform	173	6.161	6.161	(1.060)	1025866	250.000	278(A)
75	Isopropylbenzene (Cumene)	105	6.271	6.271	(1.079)	7181430	250.000	261(A)
$ 76	4-Bromofluorobenzene (S)	95	6.429	6.430	(0.906)	791835	100.000	103
77	cis-1,4-Dichloro-2-Butene	53	6.454	6.454	(0.910)	437049	250.000	268(A)
78	Bromobenzene	156	6.490	6.491	(0.915)	1845365	250.000	249
79	n-Propylbenzene	91	6.496	6.497	(0.916)	8535689	250.000	264(A)
80	1,1,2,2-Tetrachloroethane	83	6.533	6.533	(0.921)	1440084	250.000	259(A)
81	2-Chlorotoluene	91	6.588	6.588	(0.929)	5402691	250.000	262(A)
82	1,3,5-Trimethylbenzene	105	6.600	6.600	(0.930)	6192898	250.000	264(A)
83	1,2,3-Trichloropropane	110	6.612	6.613	(0.932)	409148	250.000	263(A)
84	trans-1,4-Dichloro-2-Butene	53	6.630	6.631	(0.935)	962861	625.000	678(A)
85	4-Chlorotoluene	91	6.685	6.686	(0.942)	5077768	250.000	264(A)
86	tert-Butylbenzene	119	6.795	6.795	(0.958)	5344336	250.000	261(A)
87	1,2,4-Trimethylbenzene	105	6.832	6.832	(0.963)	6357856	250.000	268(A)
88	sec-Butylbenzene	105	6.899	6.899	(0.973)	8004975	250.000	266(A)
89	p-Isopropyltoluene	119	6.984	6.984	(0.985)	7059629	250.000	269(A)
90	1,3-Dichlorobenzene	146	7.045	7.045	(0.993)	3626174	250.000	253(A)
* 91	1,4-Dichlorobenzene-d4	152	7.094	7.094	(1.000)	951067	100.000	
92	1,4-Dichlorobenzene	146	7.100	7.100	(1.001)	3652065	250.000	242
93	1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	6342979	250.000	267(A)
94	n-Butylbenzene	91	7.258	7.259	(1.023)	6263477	250.000	265(A)
95	1,2-Dichlorobenzene	146	7.380	7.381	(1.040)	3374252	250.000	250(A)
96	1,2-Dibromo-3-Chloropropane	157	7.862	7.862	(1.108)	751672	625.000	627(A)
97	Hexachlorobutadiene	225	8.228	8.228	(1.160)	1305785	250.000	232
98	1,2,4-Trichlorobenzene	180	8.240	8.240	(1.162)	1974992	250.000	233
99	Naphthalene	128	8.429	8.429	(1.188)	3894858	250.000	238
100	1,2,3-Trichlorobenzene	180	8.532	8.532	(1.203)	1754979	250.000	229
101	2-Methylnaphthalene	142	9.045	9.045	(1.275)	944185	125.000	125

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914011.D
Report Date: 30-Jan-2014 09:08

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 012914011.D
Lab Smp Id: 250 ICAL 10098-17
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Misc Info:

Calibration Date: 29-JAN-2014
Calibration Time: 15:01

Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	164056	82028	328112	177390	8.13
41 Pentafluorobenzen	1178461	589231	2356922	1209234	2.61
48 1,4 Difluorobenze	1667544	833772	3335088	1714716	2.83
53 1,4 dioxane d8	159641	79821	319282	157436	-1.38
67 Chlorobenzene-d5	1508153	754077	3016306	1597929	5.95
91 1,4-Dichlorobenze	915622	457811	1831244	951067	3.87

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.66	0.23
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
48 1,4 Difluorobenze	4.49	3.99	4.99	4.49	0.00
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	0.13
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	0.09

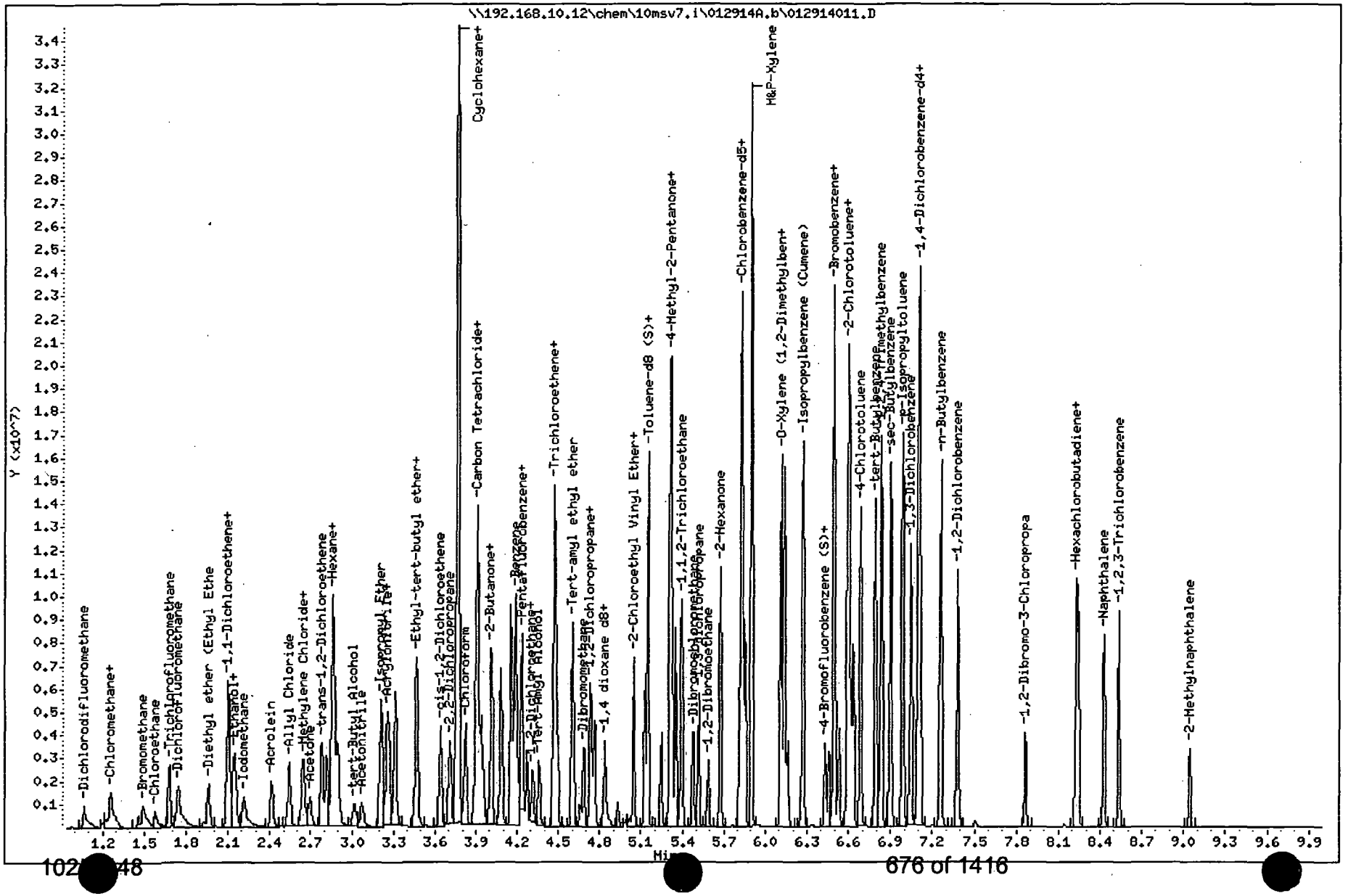
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914011.D
Date : 29-JAN-2014 15:38
Client ID:
Sample Info: 250 ICAL 10098-17

Instrument: 10msv7.i

Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



Data File: \\192.168.10.12\chem\10msv7.i\012914A.b/012914011.D
Injection Date: 29-JAN-2014 15:38
Instrument: 10msv7.i
Lab Sample ID: 250 ICAL 10098-17
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914014.D
Report Date: 30-Jan-2014 10:20

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 29-JAN-2014 16:34
Lab File ID: 012914014.D Init. Cal. Date(s): 29-JAN-2014 29-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 13:30 15:38
Lab Sample ID: ICV 50 10098-18 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	0.35934	0.36924	0.36924	0.100	2.75538	40.00000	Averaged
2 Chloromethane	0.36214	0.35388	0.35388	0.100	-2.28024	40.00000	Averaged
3 Vinyl Chloride	0.42298	0.43307	0.43307	0.100	2.38624	20.00000	Averaged
4 Bromomethane	50.00000	53.03202	0.26621	0.050	6.06404	40.00000	Quadratic
5 Chloroethane	50.00000	47.11911	0.17198	0.050	-5.76178	40.00000	Quadratic
6 Trichlorofluoromethane	0.56726	0.57922	0.57922	0.100	2.10787	40.00000	Averaged
7 Dichlorofluoromethane	0.74784	0.73975	0.73975	0.010	-1.08183	40.00000	Averaged
8 Diethyl ether (Ethyl Ether)	0.25524	0.25607	0.25607	0.010	0.32590	40.00000	Averaged
9 1,1-Dichloroethene	0.35180	0.36792	0.36792	0.100	4.58237	20.00000	Averaged
10 Carbon Disulfide	1.32264	1.24559	1.24559	0.100	-5.82528	40.00000	Averaged
11 Ethanol	1.39627	1.37069	1.37069	0.050	-1.83198	40.00000	Averaged
12 Trichlorotrifluoroethane	0.38404	0.39683	0.39683	0.010	3.32952	40.00000	Averaged
13 Iodomethane	50.00000	42.83223	0.47248	0.010	-14.33554	40.00000	Quadratic
14 Acrolein	0.04776	0.04866	0.04866	0.010	1.86839	40.00000	Averaged
15 Allyl Chloride	0.50230	0.50980	0.50980	0.010	1.49195	40.00000	Averaged
16 Methylene Chloride	50.00000	48.51609	0.40586	0.100	-2.96782	40.00000	Quadratic
17 Isopropanol	500	497	7.09790	0.010	-0.63792	40.00000	Quadratic
19 Acetone	250	253	0.35201	0.010	1.39182	40.00000	Quadratic
20 trans-1,2-Dichloroethene	0.39946	0.41334	0.41334	0.100	3.47489	20.00000	Averaged
21 Hexane	1.49889	1.52579	1.52579	0.010	1.79460	40.00000	Averaged
22 Methyl-tert-butyl Ether	0.98010	0.99697	0.99697	0.300	1.72180	20.00000	Averaged
23 tert-Butyl Alcohol	11.73460	11.95408	11.95408	0.010	1.87033	40.00000	Averaged
24 Acetonitrile	0.03215	0.02986	0.02986	0.010	-7.09979	40.00000	Averaged
25 Isopropyl Ether	1.14972	1.16621	1.16621	0.010	1.43424	40.00000	Averaged
26 Acrylonitrile	0.05765	0.05893	0.05893	0.010	2.22195	40.00000	Averaged
27 1,1-Dichloroethane	0.67441	0.69178	0.69178	0.200	2.57625	20.00000	Averaged
28 Ethyl-tert-butyl ether	1.08479	1.10571	1.10571	0.010	1.92828	40.00000	Averaged
29 Vinyl Acetate	0.70425	0.73022	0.73022	0.010	3.68688	40.00000	Averaged
30 cis-1,2-Dichloroethene	0.43844	0.45101	0.45101	0.100	2.86885	20.00000	Averaged
31 2,2-Dichloropropane	0.58886	0.58282	0.58282	0.010	-1.02581	40.00000	Averaged
32 Cyclohexane	0.67343	0.68901	0.68901	0.100	2.31305	40.00000	Averaged
33 Bromochloromethane	0.26707	0.26831	0.26831	0.010	0.46108	40.00000	Averaged
34 Chloroform	0.70140	0.71419	0.71419	0.200	1.82366	20.00000	Averaged
35 Carbon Tetrachloride	0.51469	0.52725	0.52725	0.100	2.43925	40.00000	Averaged
36 Tetrahydrofuran	0.62067	0.64861	0.64861	0.010	4.50250	40.00000	Averaged
37 1,1,1-Trichloroethane	0.60815	0.63542	0.63542	0.100	4.48378	20.00000	Averaged
38 2-Butanone	0.12629	0.12579	0.12579	0.050	-0.39578	40.00000	Averaged
39 1,1-Dichloropropene	0.56084	0.57365	0.57365	0.010	2.28483	40.00000	Averaged
40 Benzene	1.68182	1.65547	1.65547	0.500	-1.56676	20.00000	Averaged
42 Tert-amyl methyl ether	1.11200	1.08646	1.08646	0.010	-2.29680	40.00000	Averaged
$ 43 1,2-Dichloroethane d4 (S)	0.36991	0.35867	0.35867	0.200	-3.03842	40.00000	Averaged
44 1,2-Dichloroethane	0.45995	0.46595	0.46595	0.100	1.30304	20.00000	Averaged

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914014.D
Report Date: 30-Jan-2014 10:20

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 29-JAN-2014 16:34
Lab File ID: 012914014.D Init. Cal. Date(s): 29-JAN-2014 29-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 13:30 15:38
Lab Sample ID: ICV 50 10098-18 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
45 Isobutanol	4.77549	4.94833	4.94833	0.010	3.61919	40.00000	Averaged
46 Tert-Amyl Alcohol	10.18089	10.56343	10.56343	0.010	3.75738	40.00000	Averaged
47 Trichloroethene	0.34912	0.35818	0.35818	0.200	2.59401	20.00000	Averaged
49 Tert-amyl ethyl ether	0.62014	0.63742	0.63742	0.010	2.78727	40.00000	Averaged
50 Dibromomethane	0.18892	0.19226	0.19226	0.010	1.77188	40.00000	Averaged
51 1,2-Dichloropropane	0.27795	0.28599	0.28599	0.100	2.89222	20.00000	Averaged
52 Bromodichloromethane	0.37202	0.38897	0.38897	0.050	4.55610	40.00000	Averaged
54 1,4-Dioxane (P-Dioxane)	1.37321	1.38656	1.38656	0.010	0.97176	40.00000	Averaged
55 2-Chloroethyl Vinyl Ether	125	100	0.00331	0.010	-19.75711	40.00000	Linear <-
56 cis-1,3-Dichloropropene	0.45074	0.47005	0.47005	0.050	4.28477	40.00000	Averaged
$ 57 Toluene-d8 (S)	1.26062	1.25621	1.25621	0.200	-0.35010	40.00000	Averaged
58 Toluene	0.90416	0.85112	0.85112	0.400	-5.86601	20.00000	Averaged
59 4-Methyl-2-Pentanone	0.23101	0.23940	0.23940	0.100	3.63091	40.00000	Averaged
60 Tetrachloroethene	0.43089	0.43955	0.43955	0.200	2.01011	20.00000	Averaged
61 trans-1,3-Dichloropropene	0.43934	0.45943	0.45943	0.100	4.57296	40.00000	Averaged
62 1,1,2-Trichloroethane	0.26064	0.27065	0.27065	0.100	3.84156	40.00000	Averaged
63 Dibromochloromethane	0.31217	0.32356	0.32356	0.100	3.65056	40.00000	Averaged
64 1,3-Dichloropropane	0.43558	0.44360	0.44360	0.010	1.84171	40.00000	Averaged
65 1,2-Dibromoethane	0.27442	0.27758	0.27758	0.100	1.15286	20.00000	Averaged
66 2-Hexanone	0.16851	0.17298	0.17298	0.050	2.65471	40.00000	Averaged
68 Chlorobenzene	0.99270	0.99408	0.99408	0.500	0.13846	40.00000	Averaged
69 Ethylbenzene	1.77188	1.68200	1.68200	0.300	-5.07268	20.00000	Averaged
70 1,1,1,2-Tetrachloroethane	0.34265	0.35874	0.35874	0.010	4.69617	40.00000	Averaged
71 M&P-Xylene	0.66268	0.66980	0.66980	0.300	1.07446	20.00000	Averaged
72 O-Xylene (1,2-Dimethylbenze	0.63445	0.64638	0.64638	0.300	1.88160	20.00000	Averaged
73 Styrene	1.06209	1.11016	1.11016	0.300	4.52564	40.00000	Averaged
74 Bromoform	0.23088	0.24566	0.24566	0.100	6.40092	40.00000	Averaged
75 Isopropylbenzene (Cumene)	1.72409	1.71349	1.71349	0.100	-0.61499	20.00000	Averaged
$ 76 4-Bromofluorobenzene (S)	0.80766	0.80127	0.80127	0.200	-0.79227	40.00000	Averaged
77 cis-1,4-Dichloro-2-Butene	0.17121	0.16852	0.16852	0.010	-1.57369	40.00000	Averaged
78 Bromobenzene	0.77948	0.75493	0.75493	0.010	-3.15074	40.00000	Averaged
79 n-Propylbenzene	3.39649	3.40776	3.40776	0.010	0.33184	20.00000	Averaged
80 1,1,2,2-Tetrachloroethane	0.58449	0.58146	0.58146	0.300	-0.51820	40.00000	Averaged
81 2-Chlorotoluene	2.16787	2.17658	2.17658	0.010	0.40160	40.00000	Averaged
82 1,3,5-Trimethylbenzene	2.46751	2.46029	2.46029	0.300	-0.29250	20.00000	Averaged
83 1,2,3-Trichloropropane	0.16370	0.16473	0.16473	0.010	0.62820	40.00000	Averaged
84 trans-1,4-Dichloro-2-Butene	0.14934	0.14733	0.14733	0.010	-1.34615	40.00000	Averaged
85 4-Chlorotoluene	2.02287	2.00205	2.00205	0.010	-1.02931	40.00000	Averaged
86 tert-Butylbenzene	2.15000	2.15661	2.15661	0.010	0.30761	40.00000	Averaged
87 1,2,4-Trimethylbenzene	2.48938	2.47877	2.47877	0.300	-0.42651	20.00000	Averaged
88 sec-Butylbenzene	3.16402	3.18778	3.18778	0.010	0.75085	40.00000	Averaged
89 p-Isopropyltoluene	2.76319	2.81733	2.81733	0.010	1.95934	40.00000	Averaged

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914014.D
Report Date: 30-Jan-2014 10:20

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 29-JAN-2014 16:34
Lab File ID: 012914014.D Init. Cal. Date(s): 29-JAN-2014 29-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 13:30 15:38
Lab Sample ID: ICV 50 10098-18 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
90 1,3-Dichlorobenzene	1.50460	1.48107	1.48107	0.600	-1.56367	40.00000	Averaged
92 1,4-Dichlorobenzene	1.58306	1.51849	1.51849	0.500	-4.07880	40.00000	Averaged
93 1,2,3 Trimethylbenzene	1.96694	1.97092	1.97092	0.010	0.20237	40.00000	Averaged
94 n-Butylbenzene	2.48376	2.54031	2.54031	0.010	2.27711	40.00000	Averaged
95 1,2-Dichlorobenzene	1.41720	1.39014	1.39014	0.400	-1.90967	40.00000	Averaged
96 1,2-Dibromo-3-Chloropropane	0.12610	0.12386	0.12386	0.010	-1.77575	40.00000	Averaged
97 Hexachlorobutadiene	0.59065	0.58263	0.58263	0.010	-1.35744	40.00000	Averaged
98 1,2,4-Trichlorobenzene	0.89232	0.87552	0.87552	0.200	-1.88275	40.00000	Averaged
99 Naphthalene	1.71681	1.67341	1.67341	0.300	-2.52796	20.00000	Averaged
100 1,2,3-Trichlorobenzene	0.80543	0.76939	0.76939	0.010	-4.47426	40.00000	Averaged
101 2-Methylnaphthalene	25.00000	22.85336	0.88207	0.100	-8.58655	20.00000	Quadratic

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914014.D
Report Date: 30-Jan-2014 10:20

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\012914A.b\012914014.D
Lab Smp Id: ICV 50 10098-18
Inj Date : 29-JAN-2014 16:34
Operator : HBP Inst ID: 10msv7.i
Smp Info : ICV 50 10098-18
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Meth Date : 30-Jan-2014 09:10 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.070	1.070	(0.254)	219048	50.0000	51.4
2	Chloromethane	50	1.259	1.259	(0.299)	209936	50.0000	48.8
3	Vinyl Chloride	62	1.259	1.259	(0.299)	256913	50.0000	51.2
4	Bromomethane	94	1.491	1.491	(0.354)	157923	50.0000	53.0
5	Chloroethane	64	1.583	1.583	(0.375)	102023	50.0000	47.1
6	Trichlorofluoromethane	101	1.686	1.686	(0.400)	343611	50.0000	51.0
7	Dichlorofluoromethane	67	1.747	1.747	(0.414)	438846	50.0000	49.4
8	Diethyl ether (Ethyl Ether)	59	1.954	1.954	(0.464)	151910	50.0000	50.2
9	1,1-Dichloroethene	96	2.101	2.101	(0.498)	218262	50.0000	52.3
10	Carbon Disulfide	76	2.107	2.107	(0.500)	738929	50.0000	47.1
11	Ethanol	45	2.107	2.107	(0.436)	53576	1000.00	982
12	Trichlorotrifluoroethane	101	2.149	2.149	(0.510)	235412	50.0000	51.7
13	Iodomethane	142	2.217	2.217	(0.526)	280291	50.0000	42.8
14	Acrolein	56	2.412	2.412	(0.572)	288652	500.000	509
15	Allyl Chloride	41	2.540	2.540	(0.602)	302430	50.0000	50.7
16	Methylene Chloride	84	2.637	2.637	(0.626)	240771	50.0000	48.5
17	Isopropanol	45	2.625	2.625	(0.543)	138717	500.000	497
* 18	Acetone d6	46	2.649	2.649	(1.000)	158524	200.000	
19	Acetone	58	2.692	2.692	(1.016)	69753	250.000	253

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
20	trans-1,2-Dichloroethene	96	2.783	2.783	(0.660)	245208	50.0000	51.7
21	Hexane	86	2.863	2.863	(1.081)	151171	125.000	127
22	Methyl-tert-butyl Ether	73	2.893	2.893	(0.686)	591439	50.0000	50.9
23	tert-Butyl Alcohol	59	3.003	3.003	(0.621)	233623	500.000	509
24	Acetonitrile	41	3.070	3.070	(0.728)	177166	500.000	464
25	Isopropyl Ether	45	3.204	3.204	(0.760)	691834	50.0000	50.7
26	Acrylonitrile	53	3.253	3.253	(0.772)	349571	500.000	511
27	1,1-Dichloroethane	63	3.265	3.265	(0.774)	410388	50.0000	51.3
28	Ethyl-tert-butyl ether	59	3.466	3.466	(0.822)	655944	50.0000	51.0
29	Vinyl Acetate	43	3.466	3.466	(0.822)	433191	50.0000	51.8
30	cis-1,2-Dichloroethene	96	3.637	3.637	(0.863)	267557	50.0000	51.4
31	2,2-Dichloropropane	77	3.704	3.704	(0.879)	345746	50.0000	49.5
32	Cyclohexane	56	3.765	3.765	(0.893)	2043721	250.000	256
33	Bromochloromethane	130	3.765	3.765	(0.893)	159168	50.0000	50.2
34	Chloroform	83	3.820	3.820	(0.906)	423681	50.0000	50.9
35	Carbon Tetrachloride	117	3.893	3.893	(0.923)	312781	50.0000	51.2
36	Tetrahydrofuran	72	3.911	3.911	(1.476)	257051	500.000	522
37	1,1,1-Trichloroethane	97	3.936	3.936	(0.933)	376953	50.0000	52.2
38	2-Butanone	43	4.003	4.003	(0.949)	373125	250.000	249
39	1,1-Dichloropropene	75	4.009	4.009	(0.951)	340310	50.0000	51.1
40	Benzene	78	4.155	4.155	(0.986)	982083	50.0000	49.2
* 41	Pentafluorobenzene	168	4.216	4.216	(1.000)	1186468	100.000	
42	Tert-amyl methyl ether	73	4.234	4.234	(1.004)	644526	50.0000	48.8
$ 43	1,2-Dichloroethane d4 (S)	65	4.234	4.234	(1.004)	425547	100.000	97.0
44	1,2-Dichloroethane	62	4.271	4.271	(1.013)	276415	50.0000	50.6
45	Isobutanol	43	4.301	4.301	(0.889)	193414	1000.00	1040
46	Tert-Amyl Alcohol	59	4.350	4.350	(0.899)	206445	500.000	519
47	Trichloroethene	130	4.472	4.472	(0.996)	294452	50.0000	51.3
* 48	1,4 Difluorobenzene	114	4.490	4.490	(1.000)	1644166	100.000	
49	Tert-amyl ethyl ether	59	4.600	4.600	(1.024)	524016	50.0000	51.4
50	Dibromomethane	174	4.679	4.679	(1.042)	158057	50.0000	50.9
51	1,2-Dichloropropane	63	4.728	4.728	(1.053)	235109	50.0000	51.4
52	Bromodichloromethane	83	4.759	4.759	(1.060)	319766	50.0000	52.3
* 53	1,4 dioxane d8	96	4.838	4.838	(1.000)	156347	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	4.856	4.856	(1.004)	54196	1000.00	1010
55	2-Chloroethyl Vinyl Ether	63	5.015	5.015	(1.117)	6808	125.000	100
56	cis-1,3-Dichloropropene	75	5.045	5.045	(1.124)	386421	50.0000	52.1
$ 57	Toluene-d8 (S)	98	5.125	5.125	(0.882)	1879656	100.000	99.6
58	Toluene	92	5.149	5.149	(0.886)	636763	50.0000	47.1
59	4-Methyl-2-Pentanone	43	5.307	5.307	(0.913)	895540	250.000	259
60	Tetrachloroethene	166	5.313	5.313	(0.914)	328851	50.0000	51.0
61	trans-1,3-Dichloropropene	75	5.326	5.326	(0.916)	343719	50.0000	52.3
62	1,1,2-Trichloroethane	97	5.393	5.393	(0.928)	202485	50.0000	51.9
63	Dibromochloromethane	129	5.472	5.472	(0.941)	242074	50.0000	51.8
64	1,3-Dichloropropane	76	5.515	5.515	(0.949)	331881	50.0000	50.9
65	1,2-Dibromoethane	107	5.582	5.582	(0.960)	207673	50.0000	50.6
66	2-Hexanone	43	5.673	5.673	(0.976)	647082	250.000	257
* 67	Chlorobenzene-d5	117	5.813	5.813	(1.000)	1496297	100.000	
68	Chlorobenzene	112	5.819	5.819	(1.001)	743717	50.0000	50.1
69	Ethylbenzene	91	5.826	5.826	(1.002)	1258387	50.0000	47.5
70	1,1,1,2-Tetrachloroethane	131	5.850	5.850	(1.006)	268390	50.0000	52.3
71	M&P-Xylene	106	5.899	5.899	(1.015)	1002225	100.000	101
72	O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.112	(1.051)	483591	50.0000	50.9
73	Styrene	104	6.137	6.137	(1.056)	830561	50.0000	52.3

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
74	Bromoform	173	6.161	6.161	(1.060)	183792	50.0000	53.2
75	Isopropylbenzene (Cumene)	105	6.271	6.271	(1.079)	1281943	50.0000	49.7
$ 76	4-Bromofluorobenzene (S)	95	6.423	6.423	(0.906)	728249	100.000	99.2
77	cis-1,4-Dichloro-2-Butene	53	6.454	6.454	(0.911)	76580	50.0000	49.2
78	Bromobenzene	156	6.490	6.490	(0.916)	343066	50.0000	48.4
79	n-Propylbenzene	91	6.490	6.490	(0.916)	1548612	50.0000	50.2
80	1,1,2,2-Tetrachloroethane	83	6.527	6.527	(0.921)	264237	50.0000	49.7
81	2-Chlorotoluene	91	6.588	6.588	(0.929)	989119	50.0000	50.2
82	1,3,5-Trimethylbenzene	105	6.600	6.600	(0.931)	1118049	50.0000	49.8
83	1,2,3-Trichloropropane	110	6.612	6.612	(0.933)	74860	50.0000	50.3
84	trans-1,4-Dichloro-2-Butene	53	6.630	6.630	(0.935)	167383	125.000	123
85	4-Chlorotoluene	91	6.679	6.679	(0.942)	909806	50.0000	49.5
86	tert-Butylbenzene	119	6.789	6.789	(0.958)	980043	50.0000	50.2
87	1,2,4-Trimethylbenzene	105	6.831	6.831	(0.964)	1126443	50.0000	49.8
88	sec-Butylbenzene	105	6.899	6.899	(0.973)	1448645	50.0000	50.4
89	p-Isopropyltoluene	119	6.984	6.984	(0.985)	1280300	50.0000	51.0
90	1,3-Dichlorobenzene	146	7.045	7.045	(0.994)	673055	50.0000	49.2
* 91	1,4-Dichlorobenzene-d4	152	7.088	7.088	(1.000)	908874	100.000	
92	1,4-Dichlorobenzene	146	7.100	7.100	(1.002)	690057	50.0000	48.0
93	1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	1169215	50.0000	50.1
94	n-Butylbenzene	91	7.258	7.258	(1.024)	1154413	50.0000	51.1
95	1,2-Dichlorobenzene	146	7.380	7.380	(1.041)	631731	50.0000	49.0
96	1,2-Dibromo-3-Chloropropane	157	7.862	7.862	(1.109)	140718	125.000	123
97	Hexachlorobutadiene	225	8.228	8.228	(1.161)	264770	50.0000	49.3
98	1,2,4-Trichlorobenzene	180	8.240	8.240	(1.163)	397869	50.0000	49.0
99	Naphthalene	128	8.423	8.423	(1.188)	760459	50.0000	48.7
100	1,2,3-Trichlorobenzene	180	8.532	8.532	(1.204)	349641	50.0000	47.8
101	2-Methylnaphthalene	142	9.044	9.044	(1.276)	200422	25.0000	22.8

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Report Date: 30-Jan-2014 10:20

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 012914014.D
Lab Smp Id: ICV 50 10098-18
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\012914A.b\v714-LLS-012914.m
Misc Info:

Calibration Date: 29-JAN-2014
Calibration Time: 15:01

Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	164056	82028	328112	158524	-3.37
41 Pentafluorobenzen	1178461	589231	2356922	1186468	0.68
48 1,4 Difluorobenze	1667544	833772	3335088	1644166	-1.40
53 1,4 dioxane d8	159641	79821	319282	156347	-2.06
67 Chlorobenzene-d5	1508153	754077	3016306	1496297	-0.79
91 1,4-Dichlorobenze	915622	457811	1831244	908874	-0.74

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.00
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
48 1,4 Difluorobenze	4.49	3.99	4.99	4.49	0.00
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	0.00
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	0.00

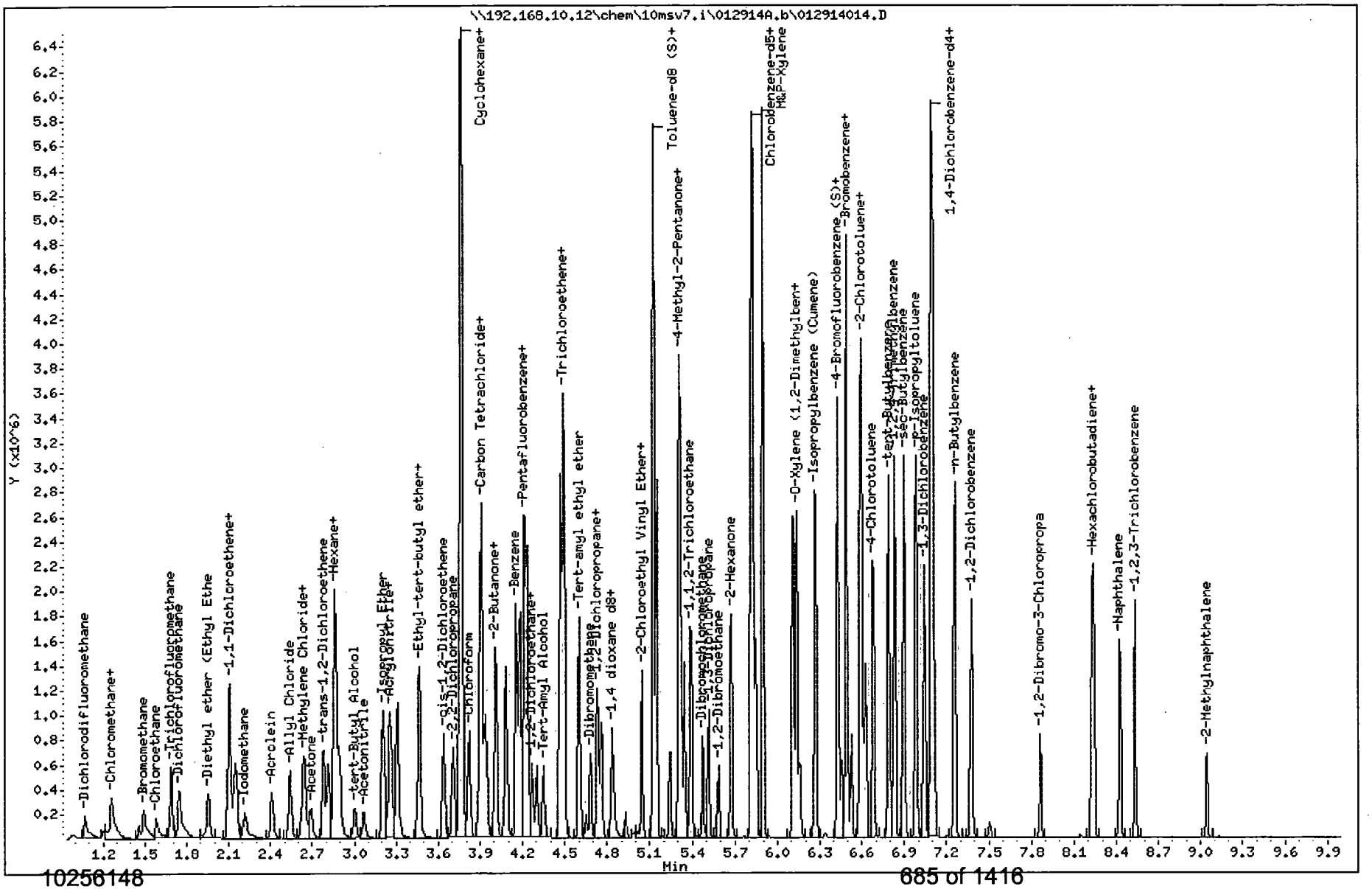
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914014.D
Date : 29-JAN-2014 16:34
Client ID:
Sample Info: ICV 50 10098-18

Instrument: 10msv7.i

Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



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Injection Date: 29-JAN-2014 16:34
Instrument: 10msv7.i
Lab Sample ID: ICV 50 10098-18
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

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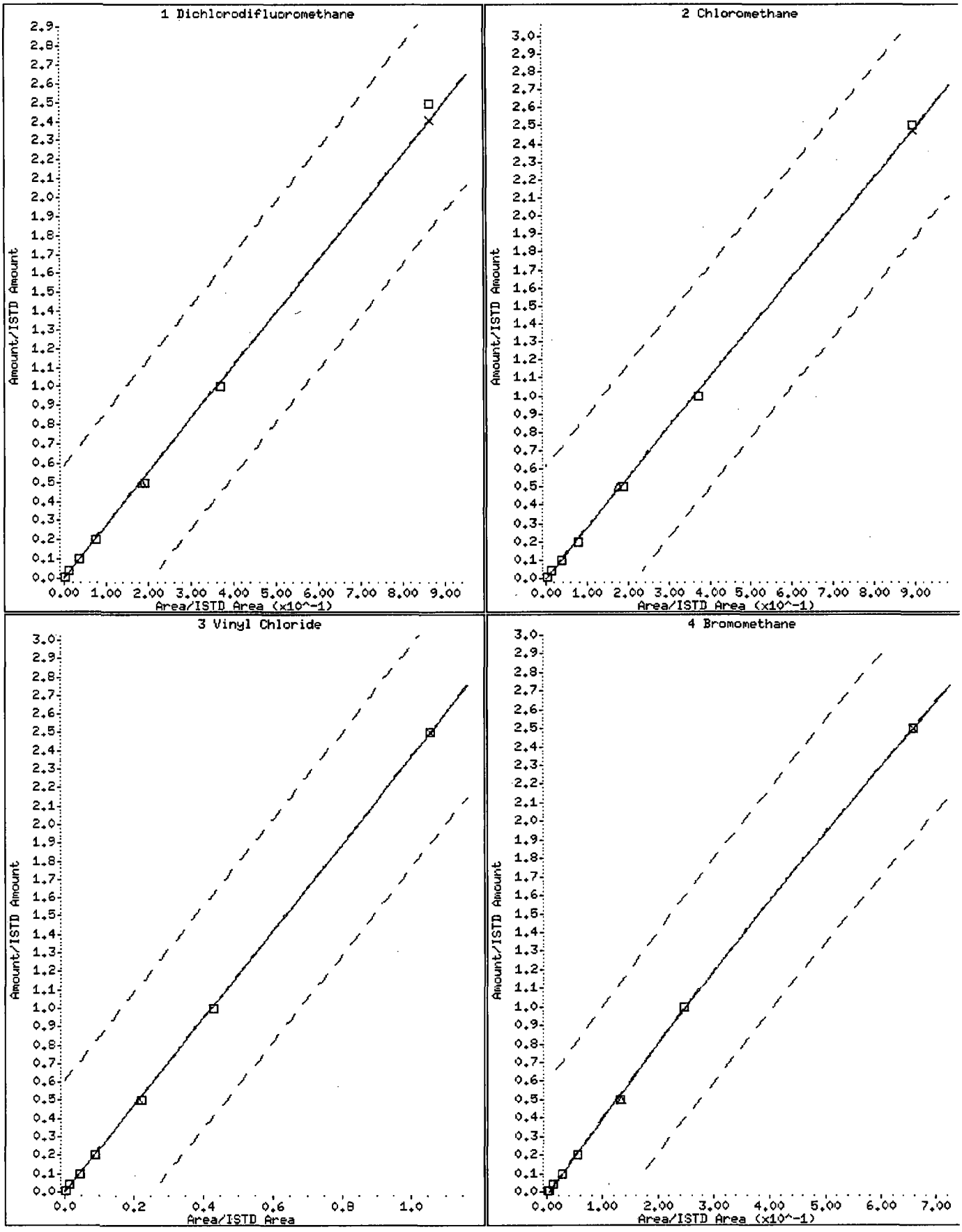

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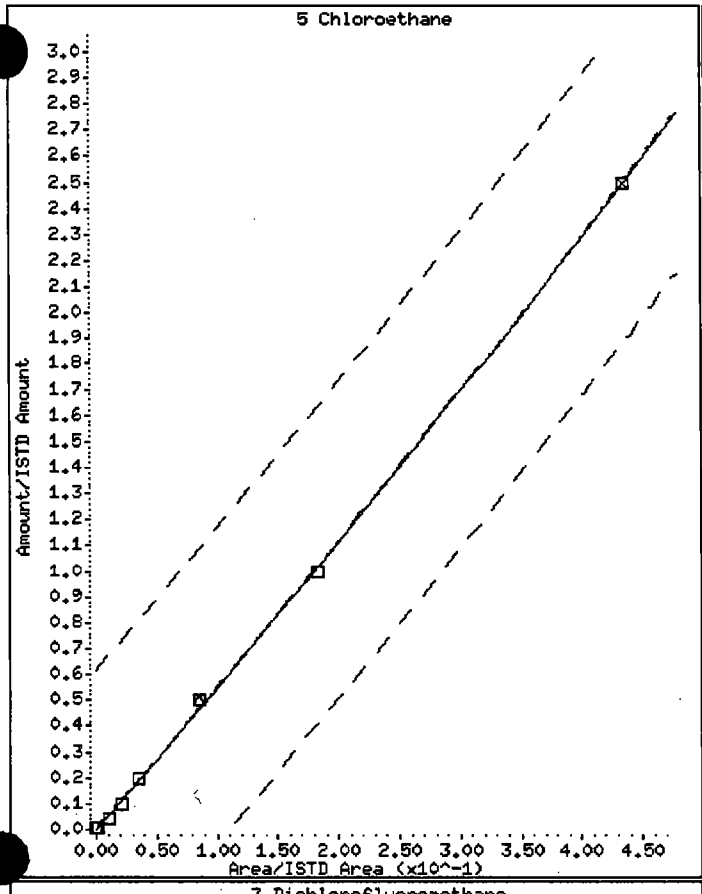

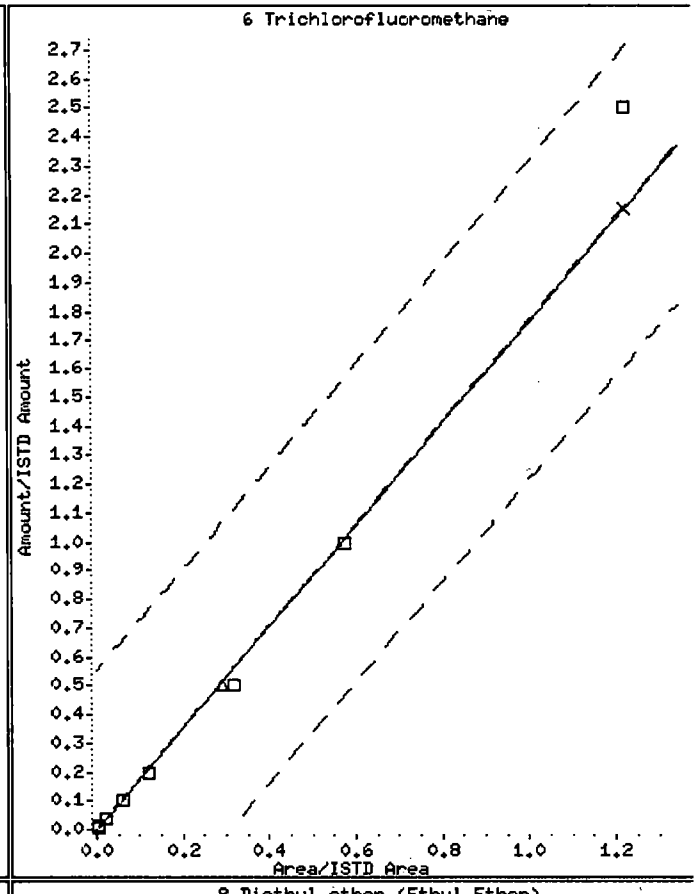

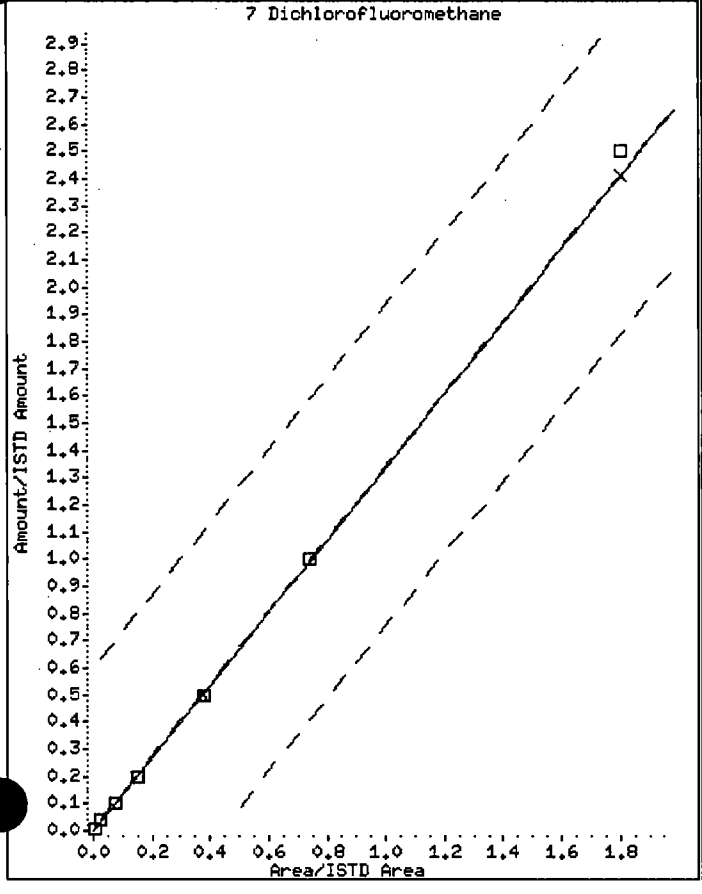

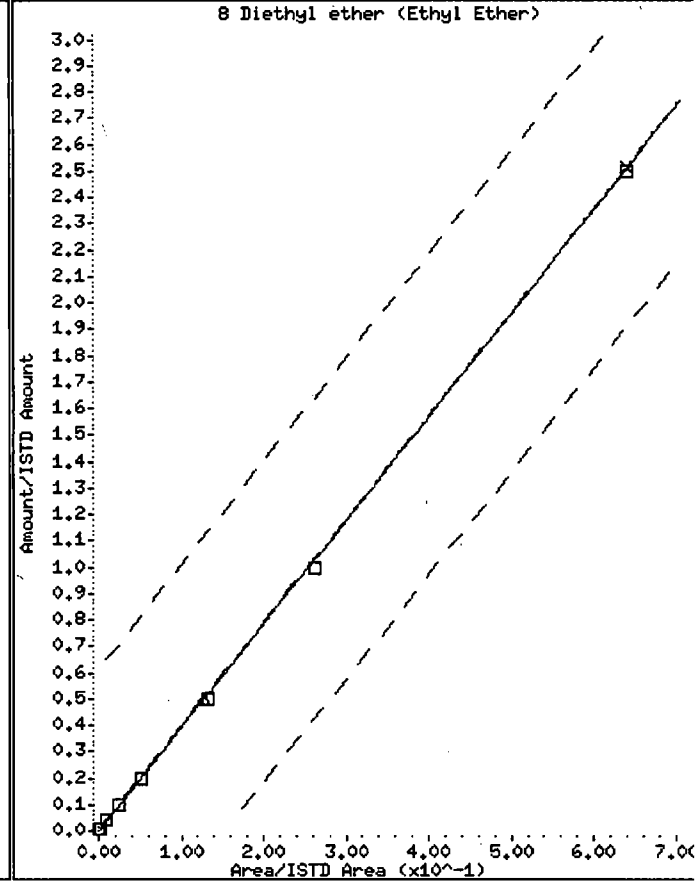

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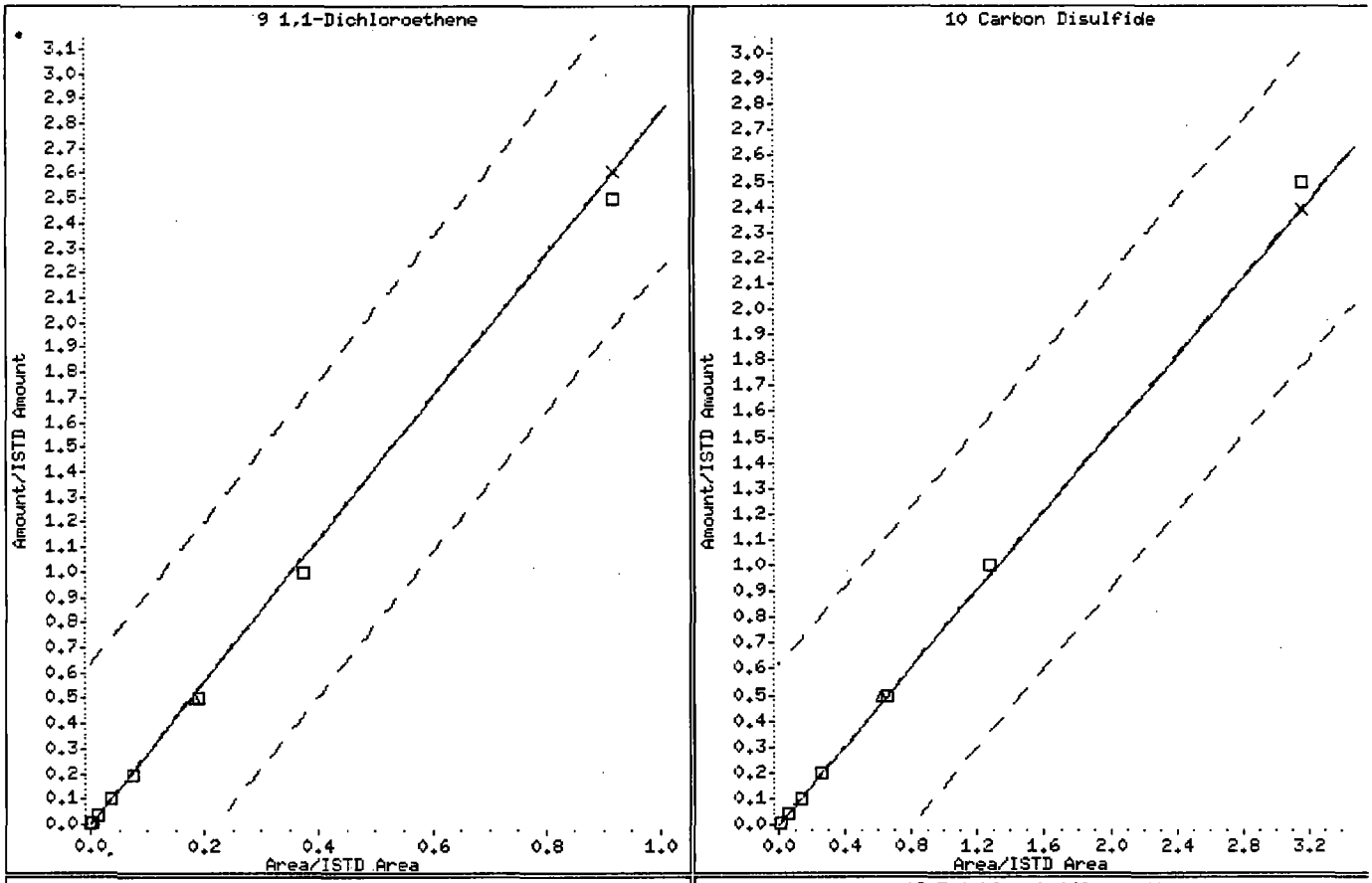

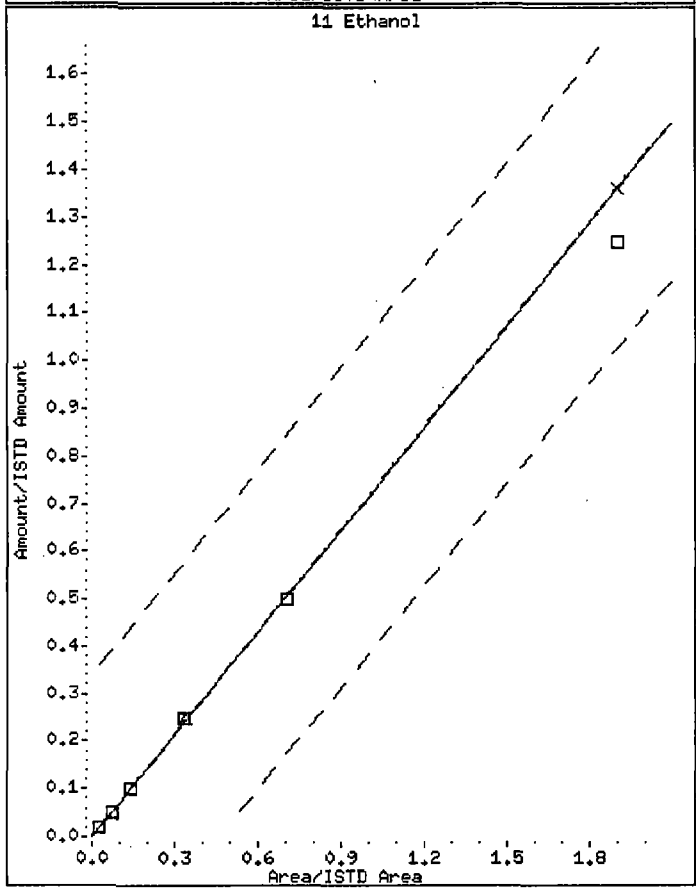

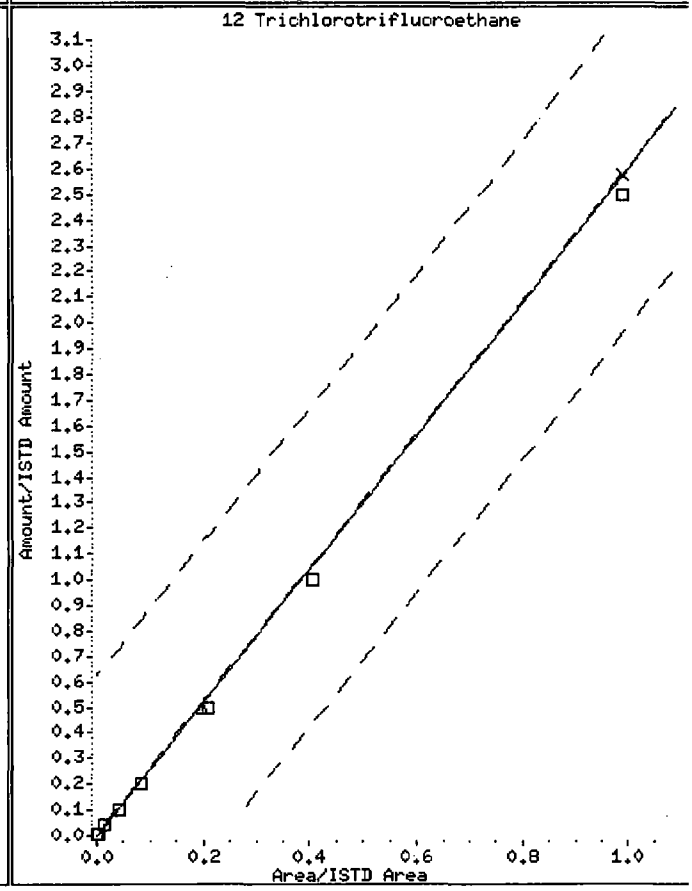

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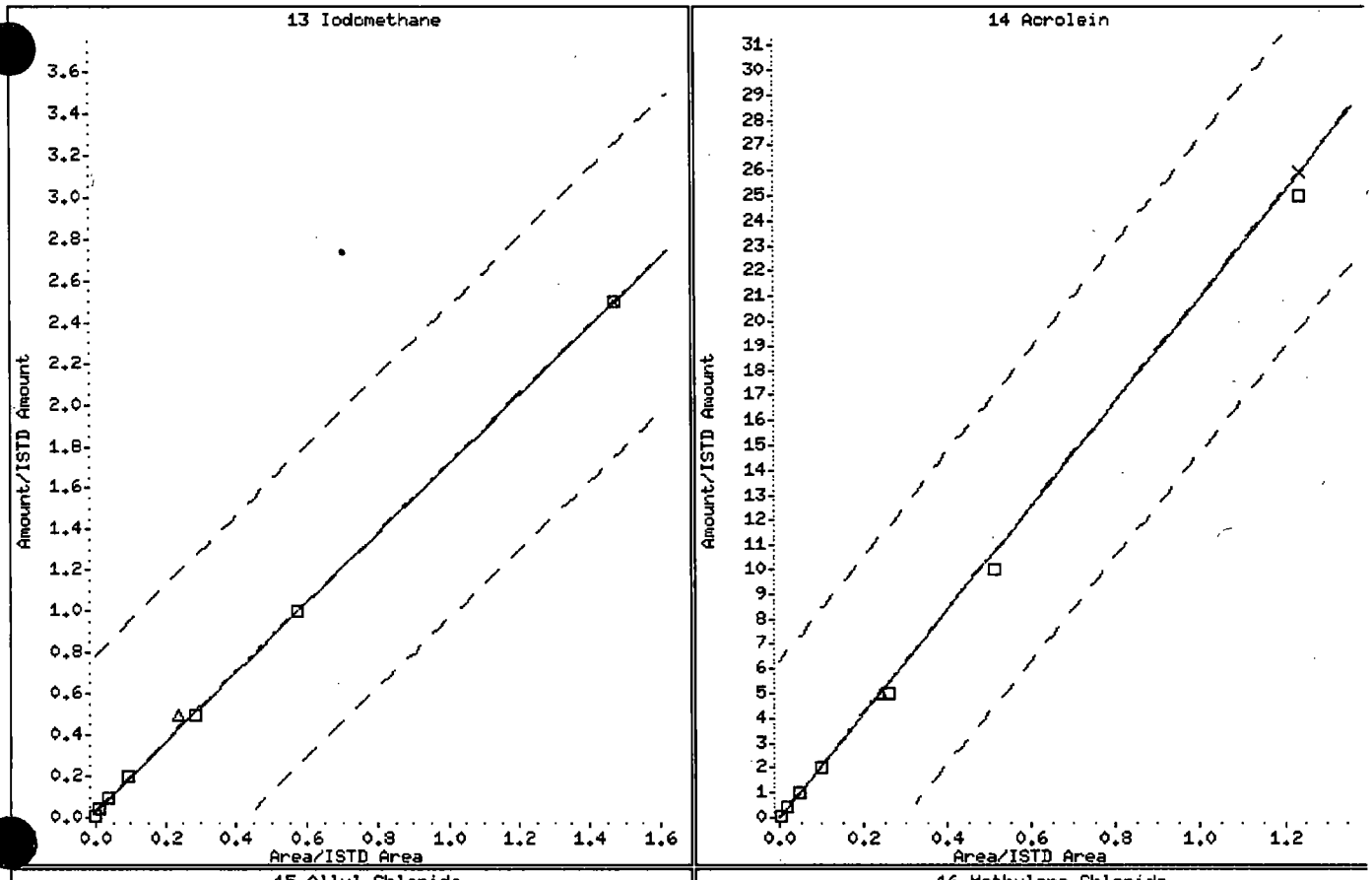

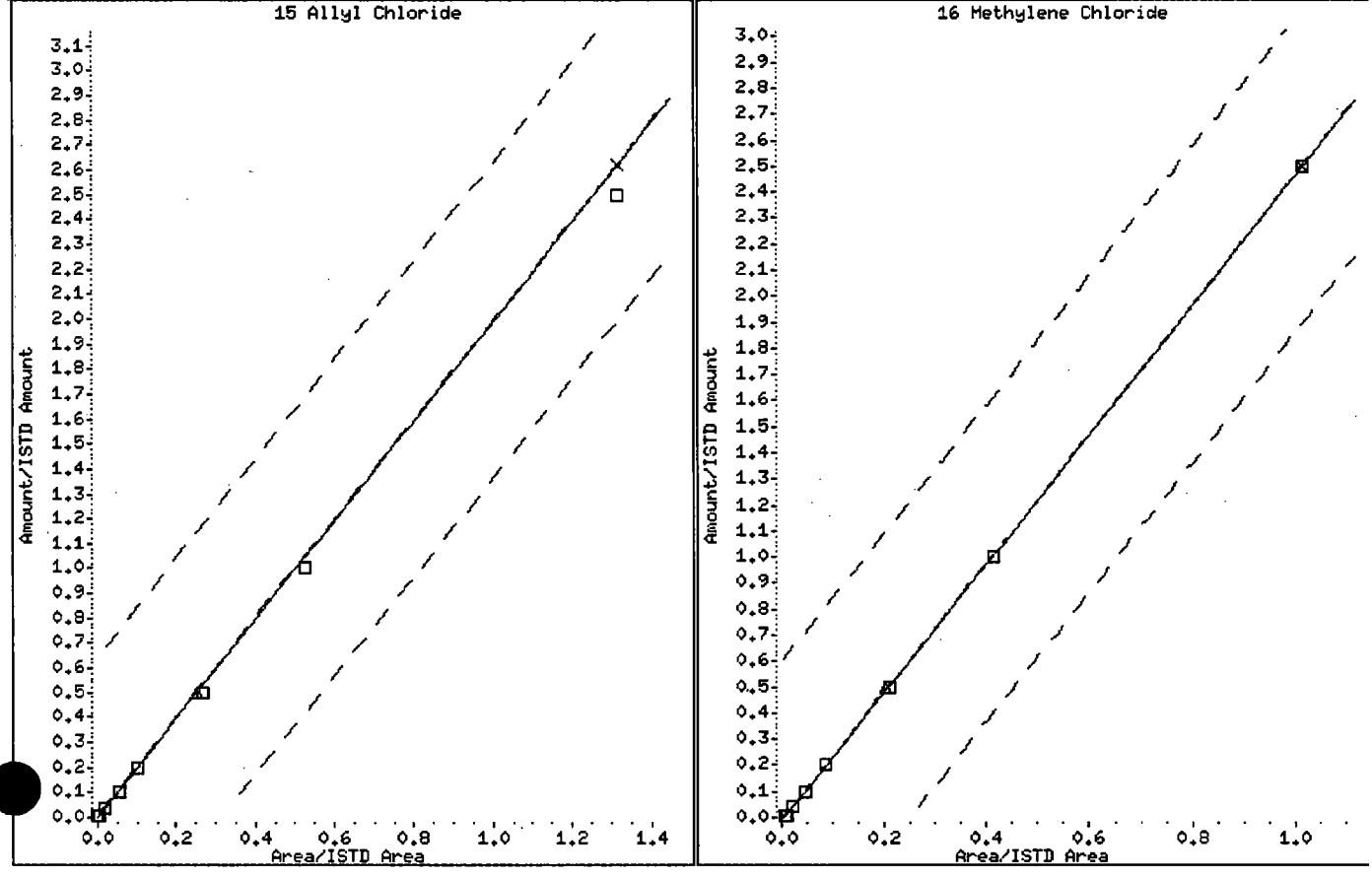

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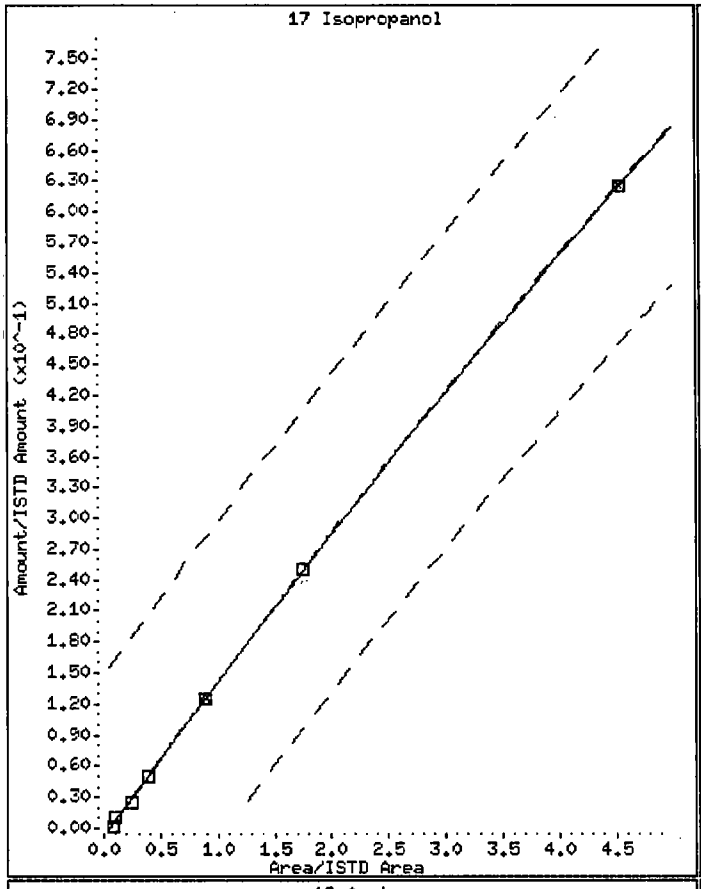

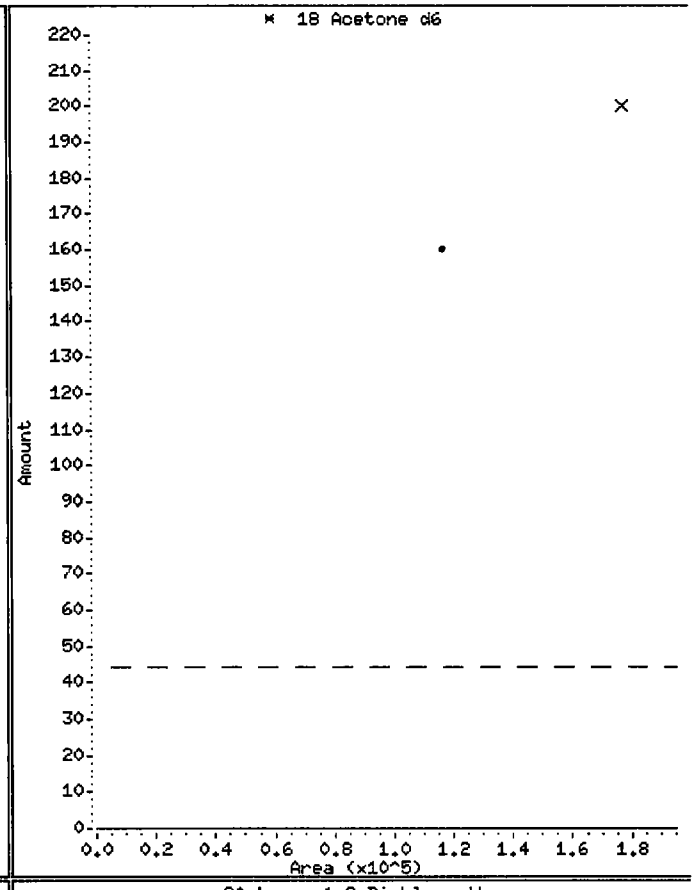

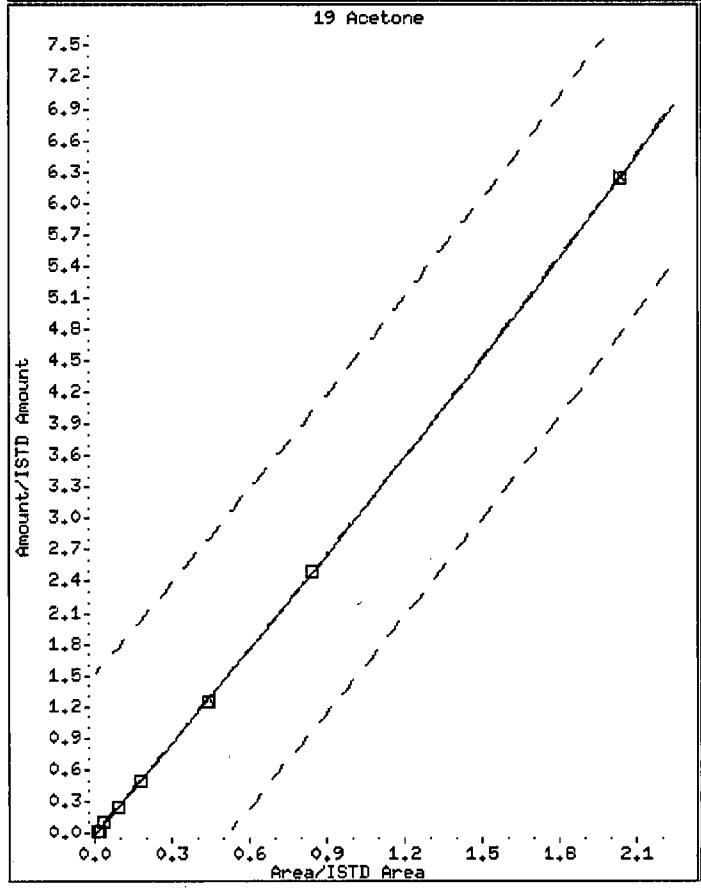

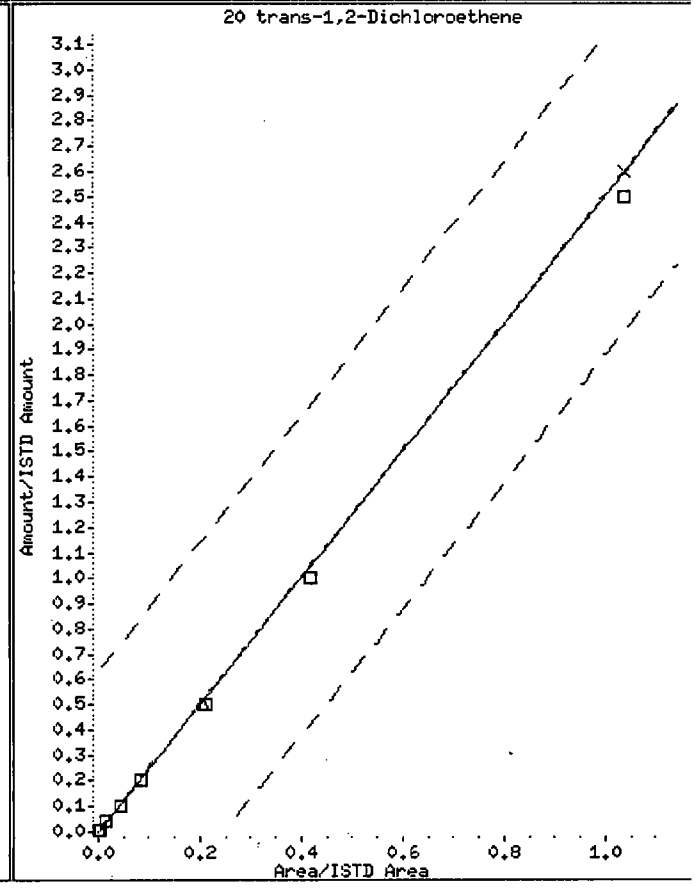

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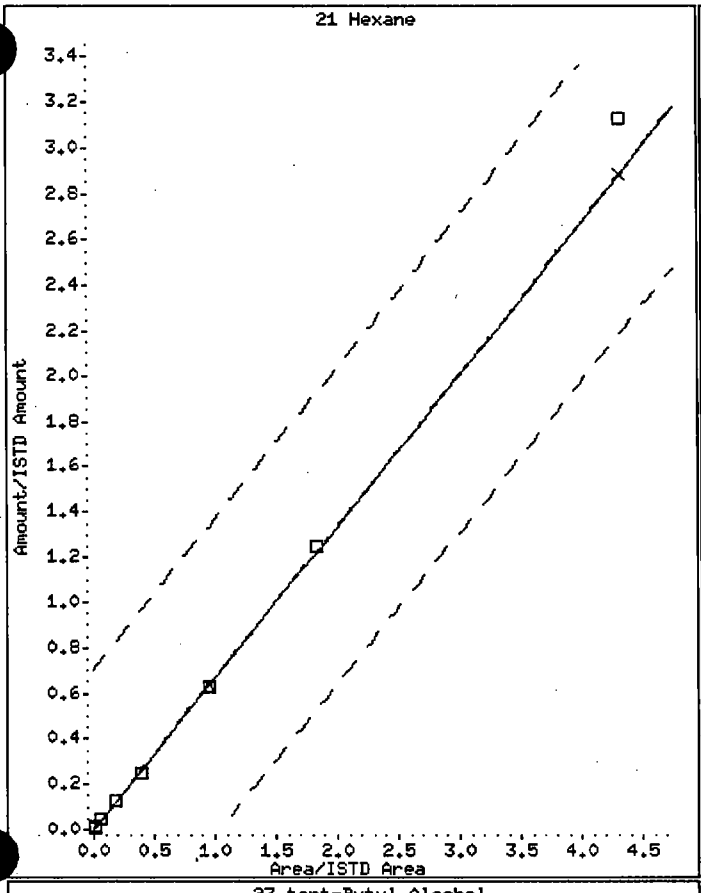

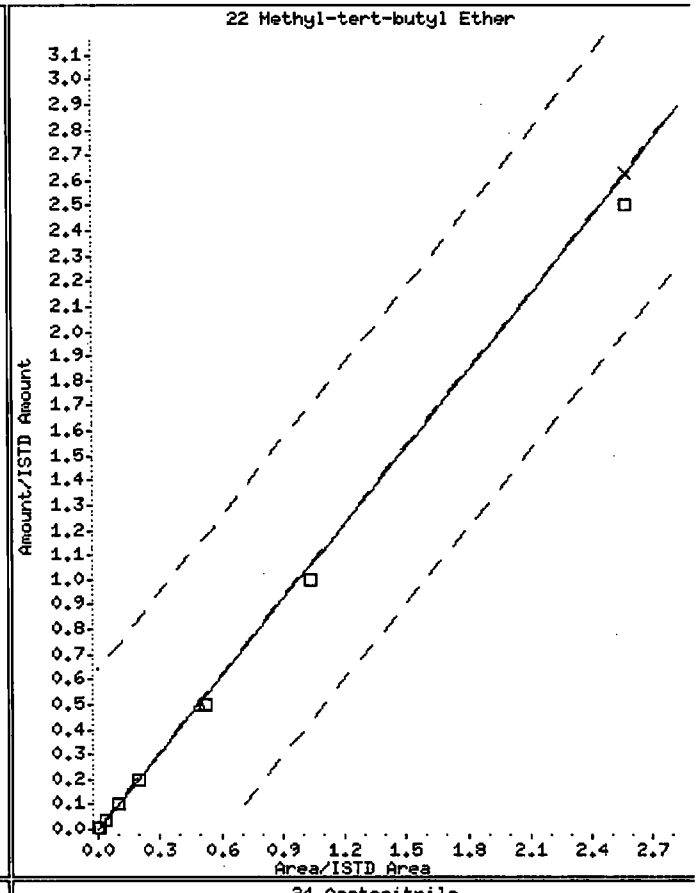

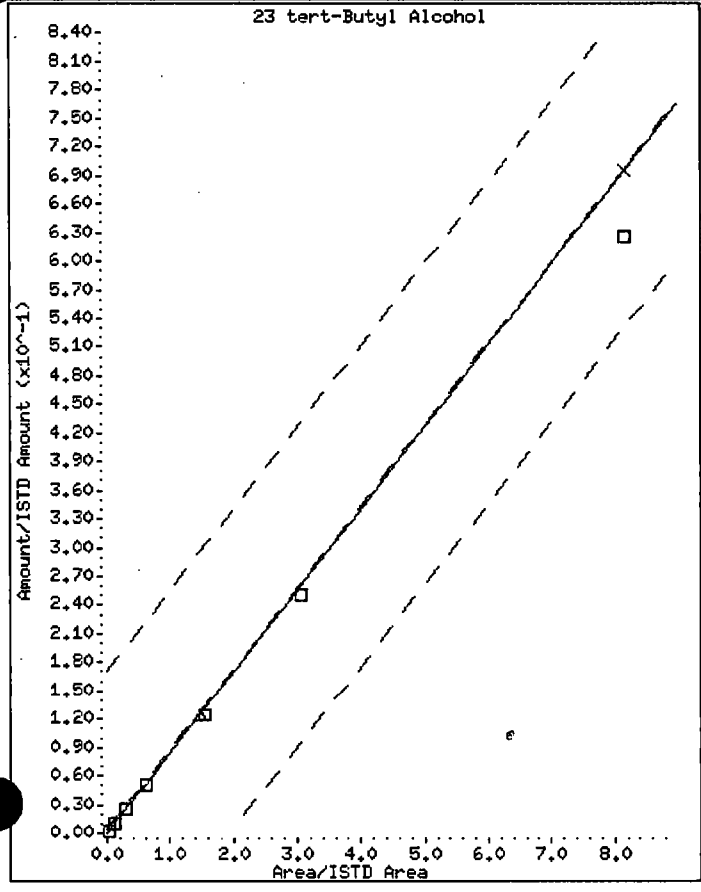

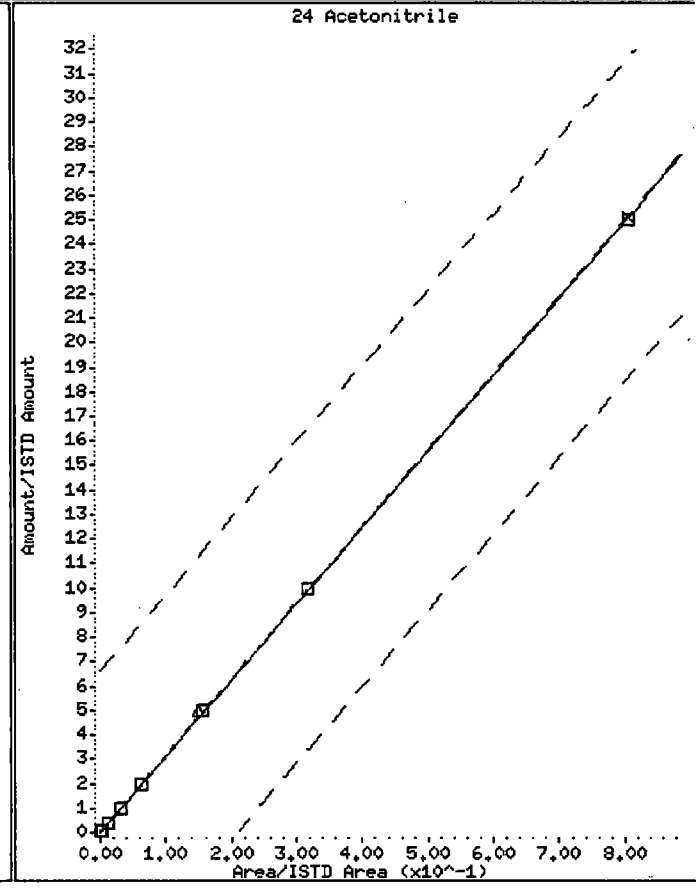

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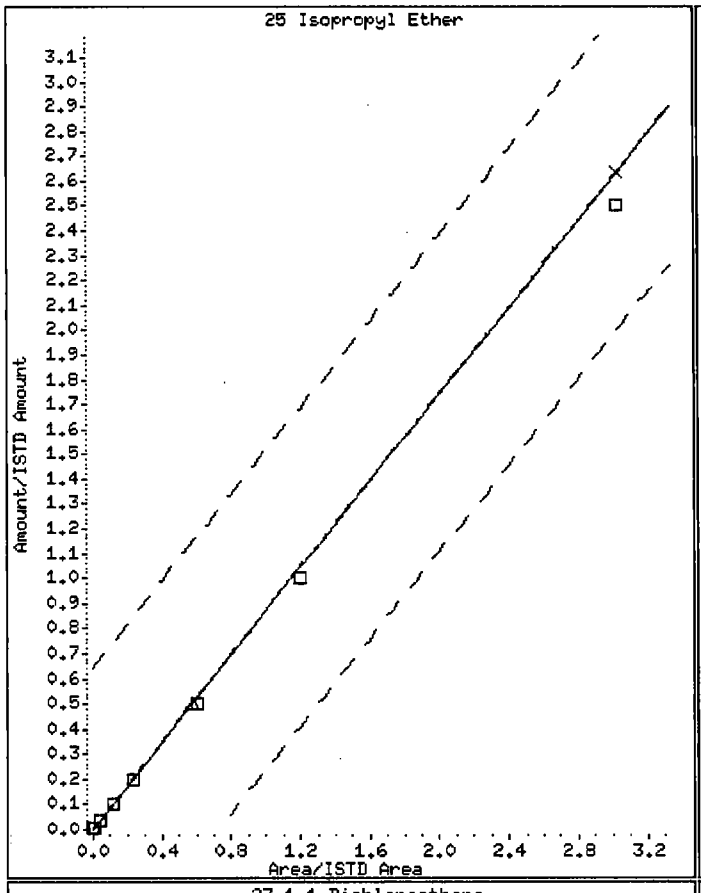

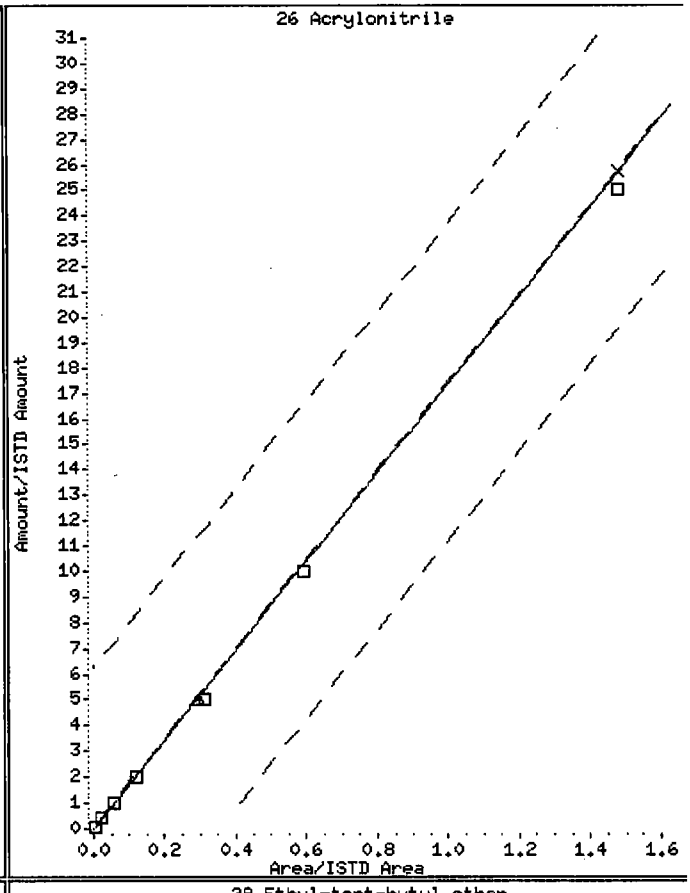

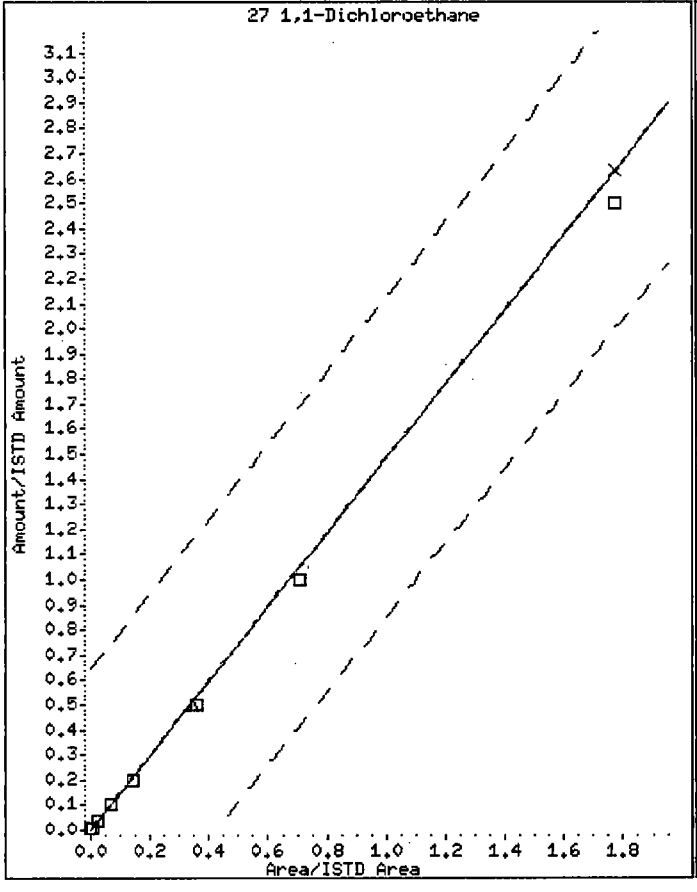

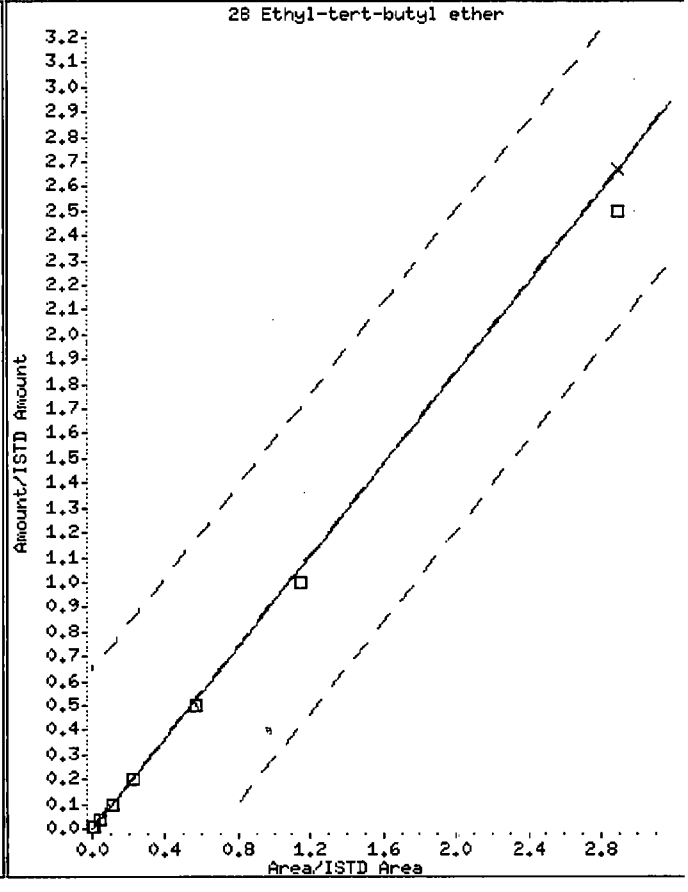

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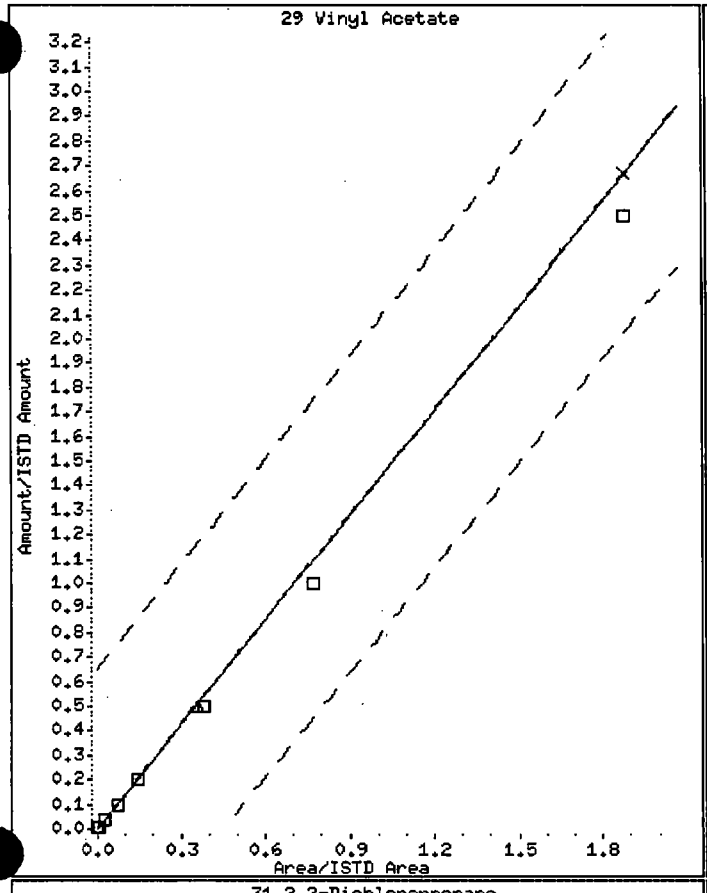

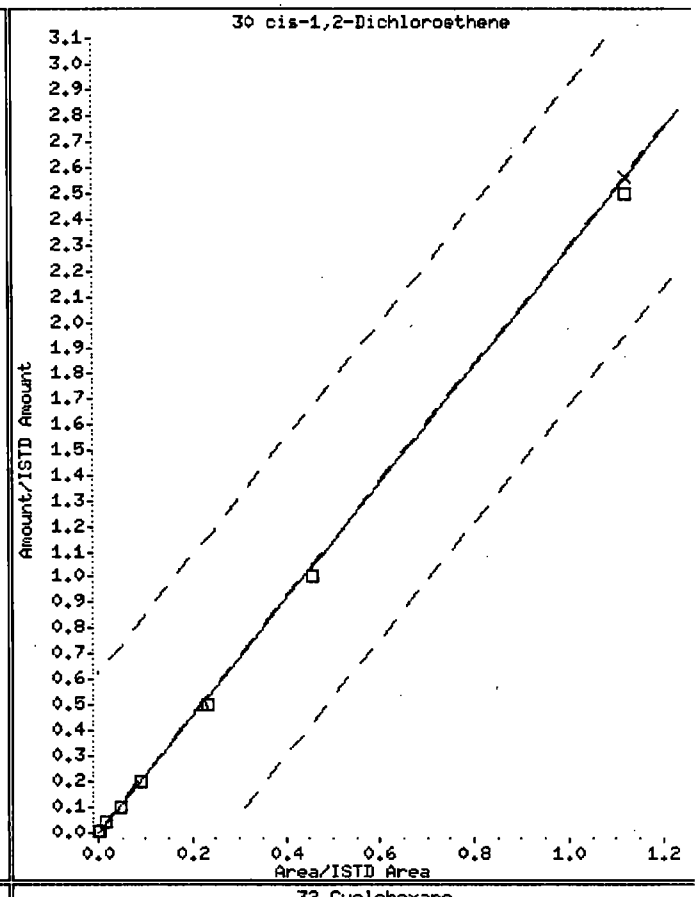

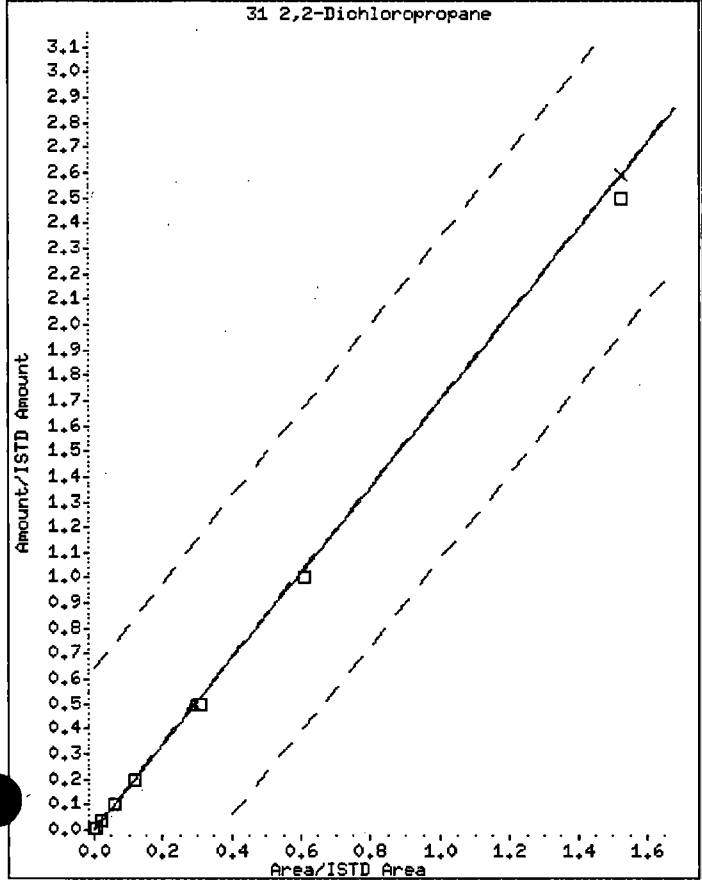

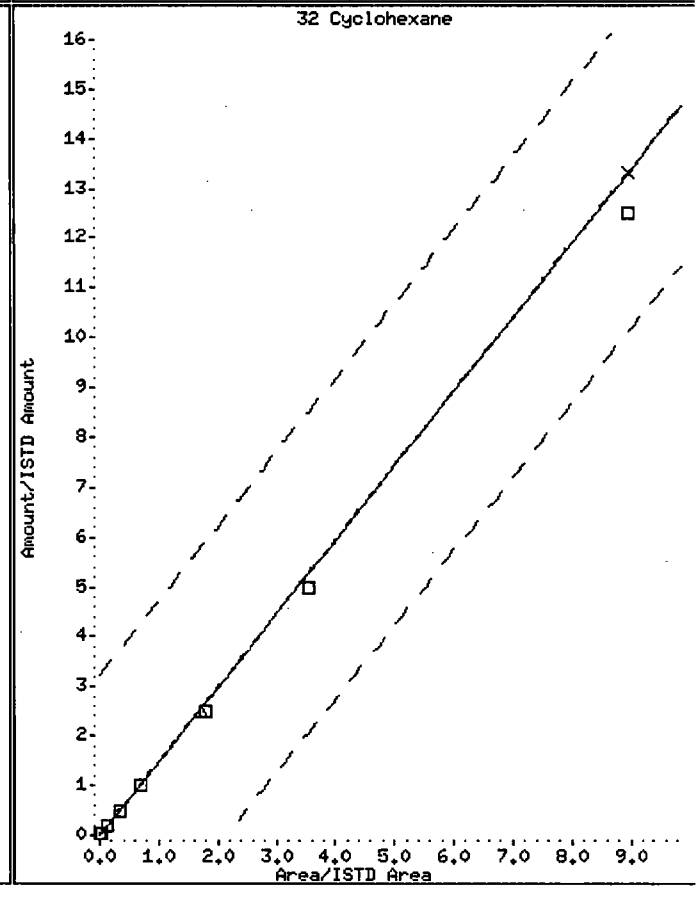

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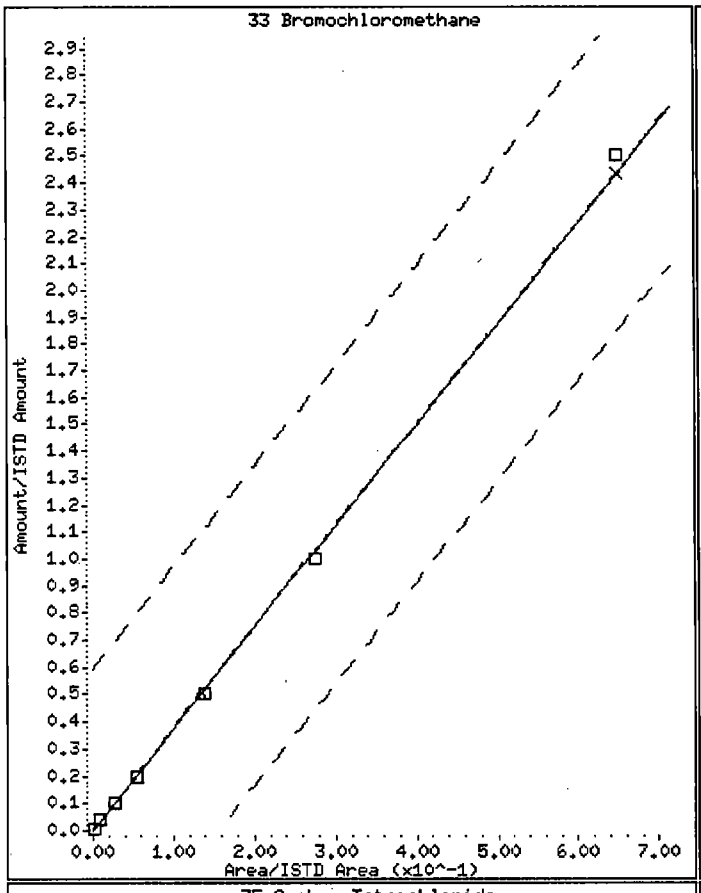

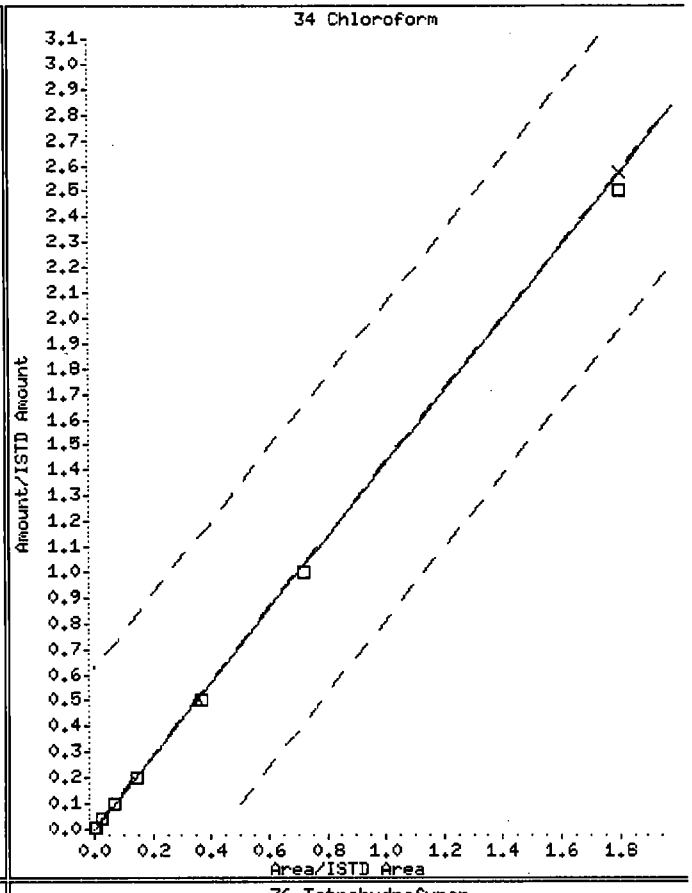

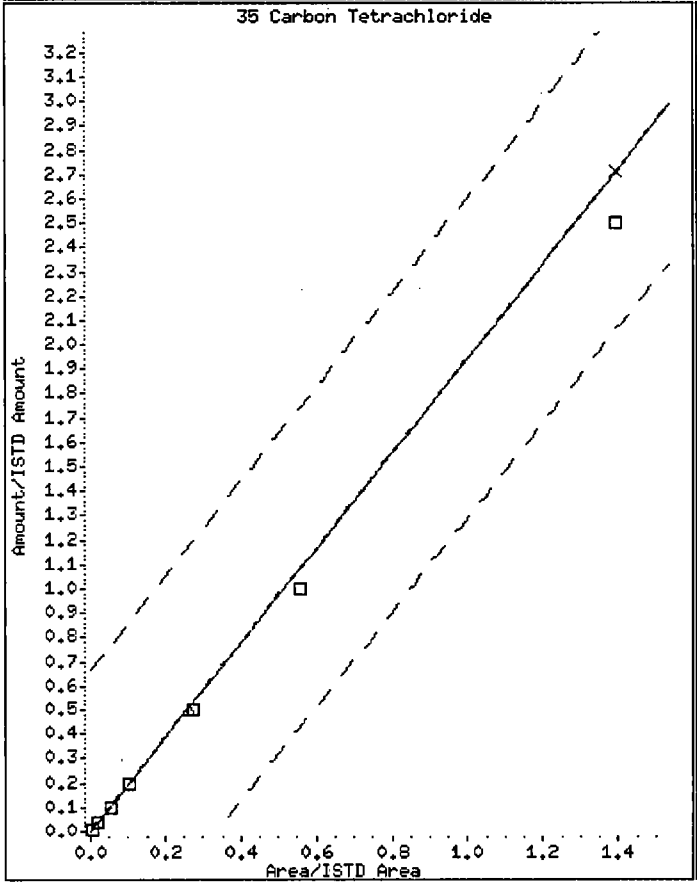

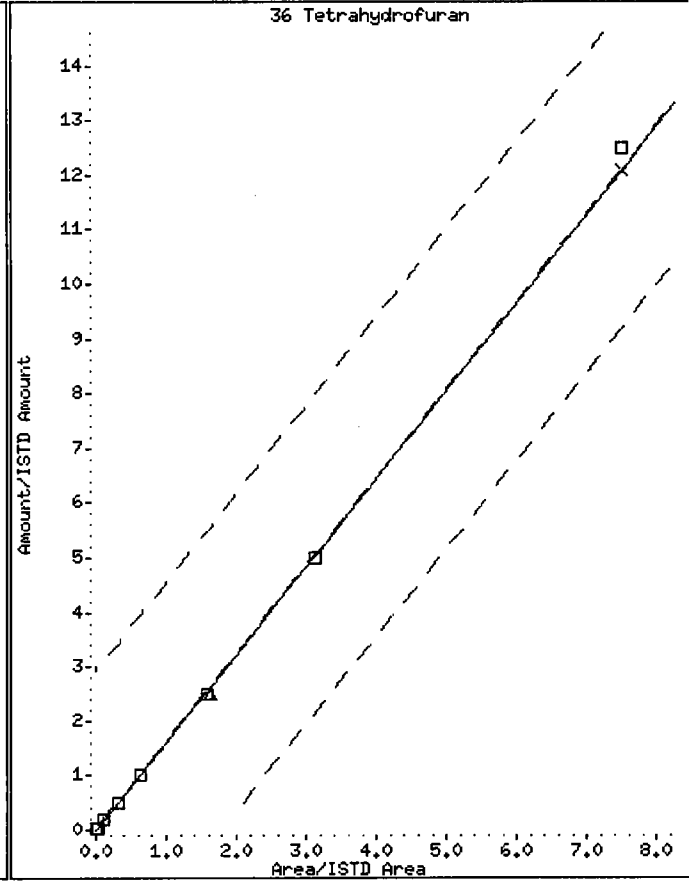

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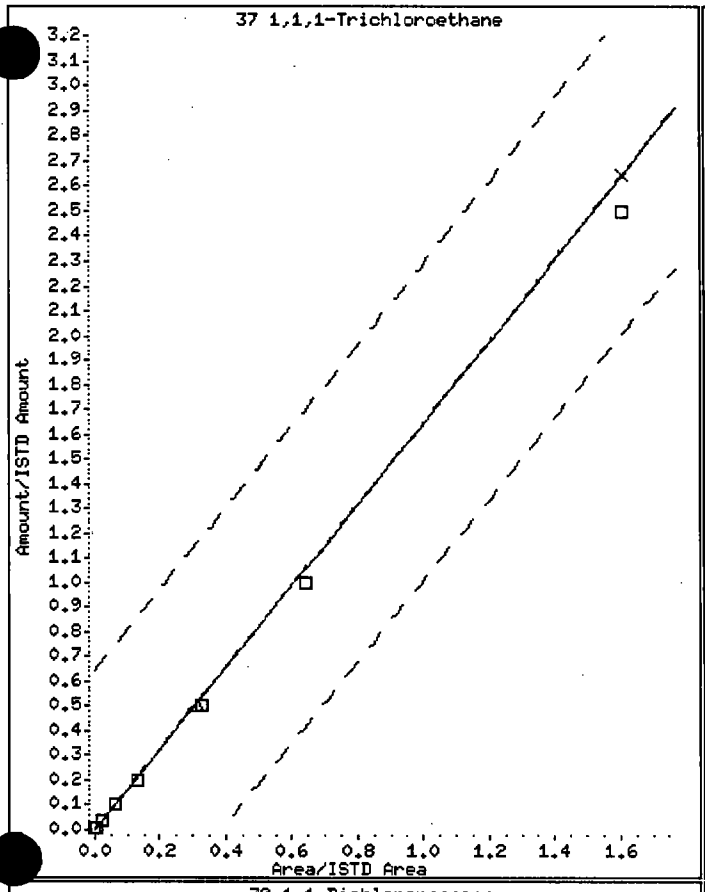

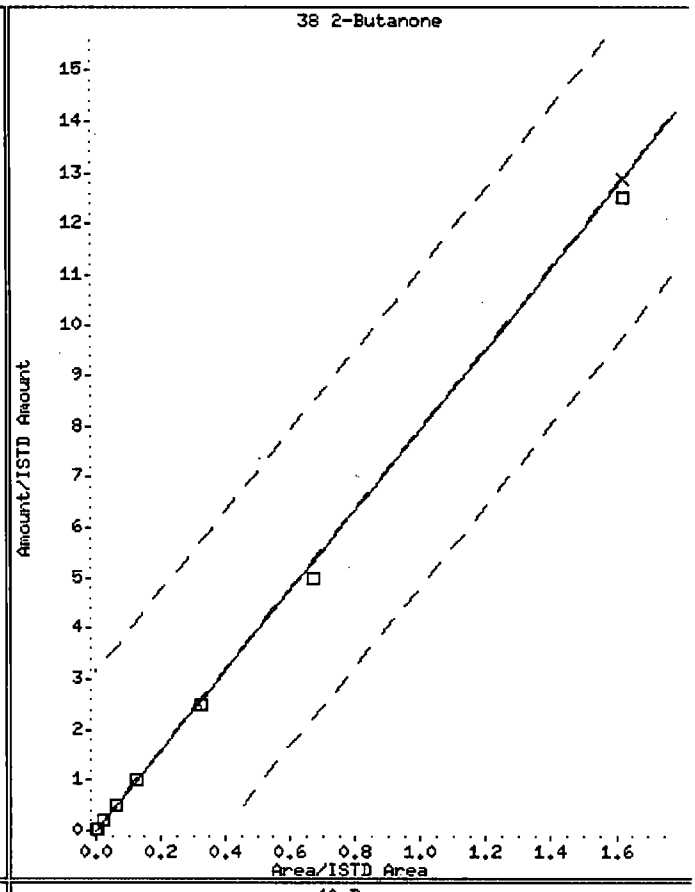

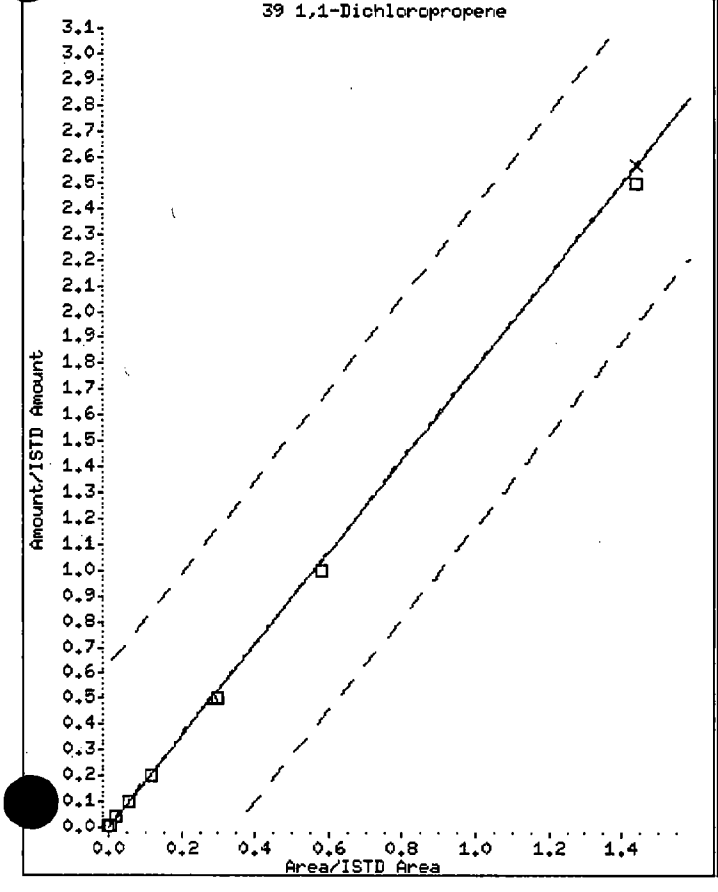

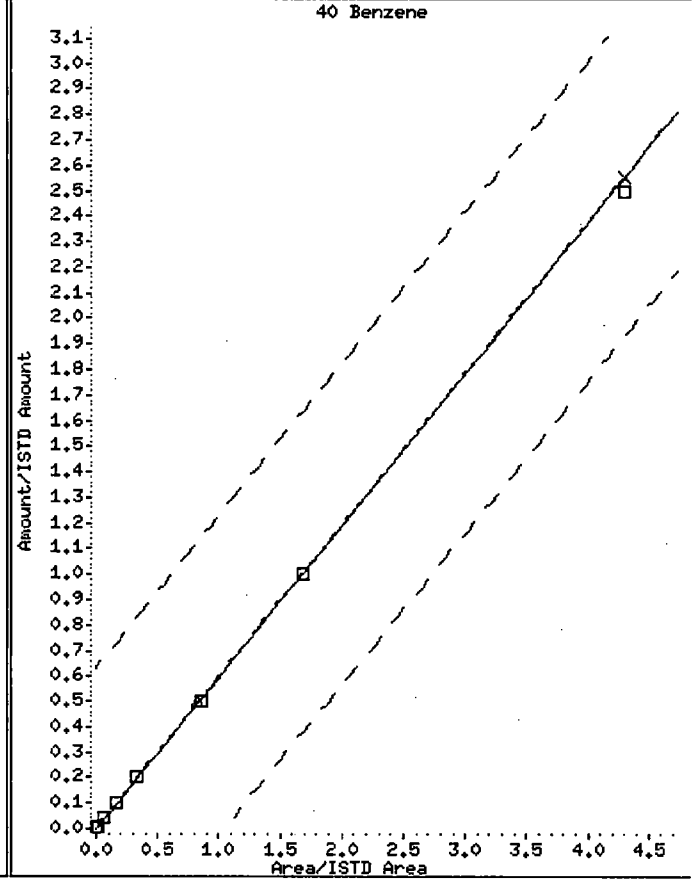

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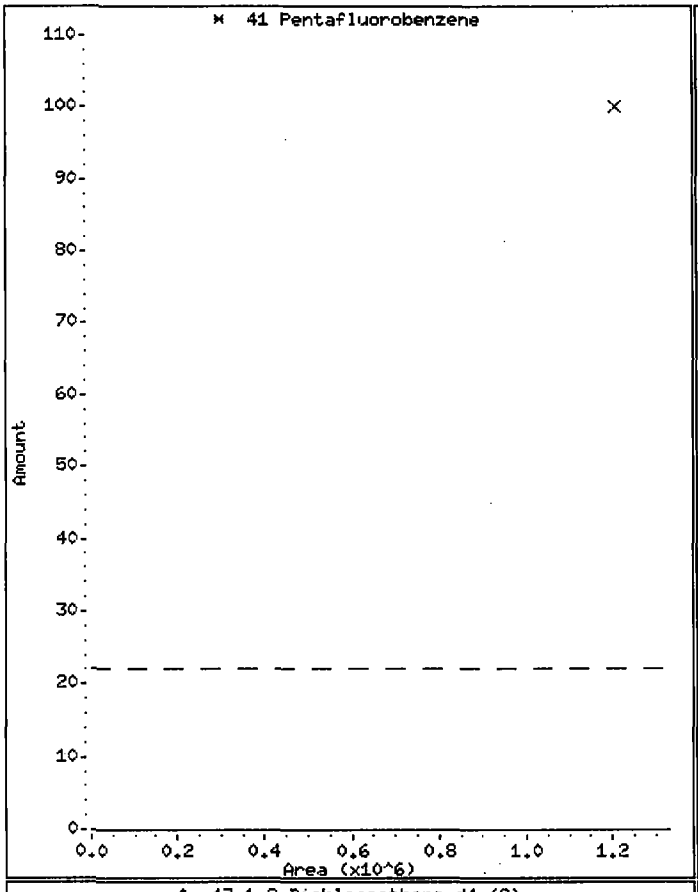

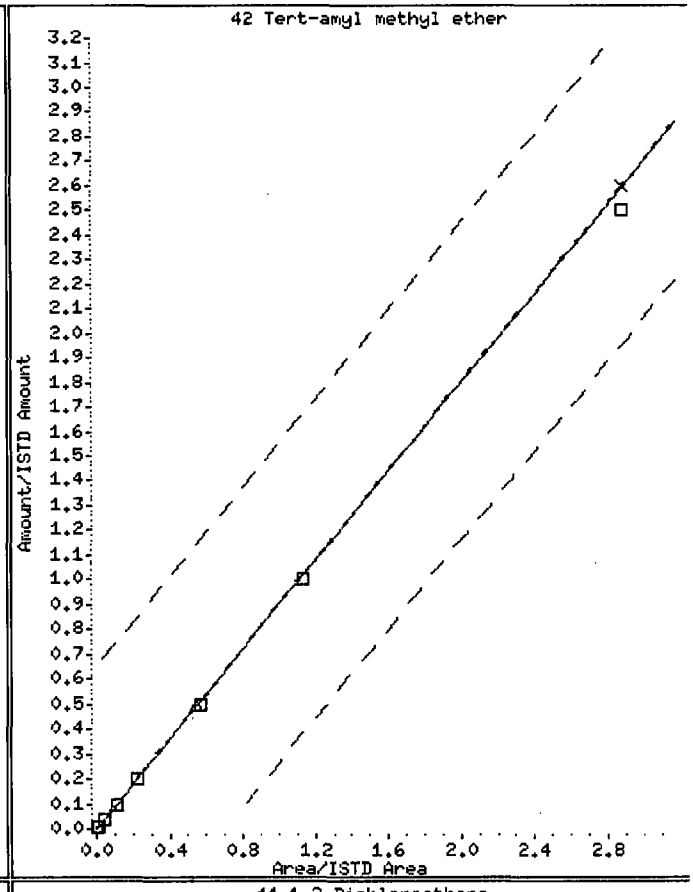

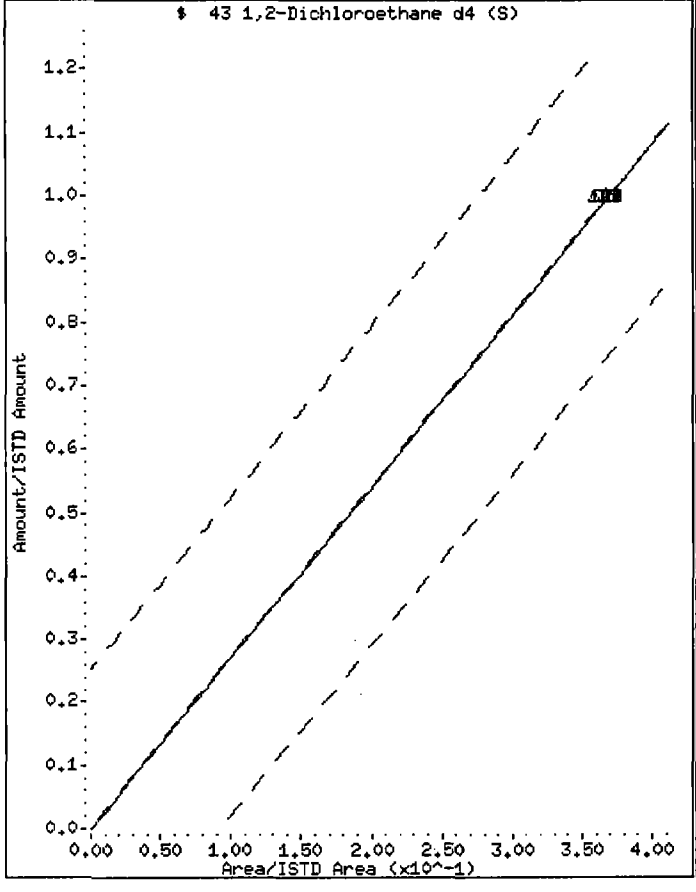

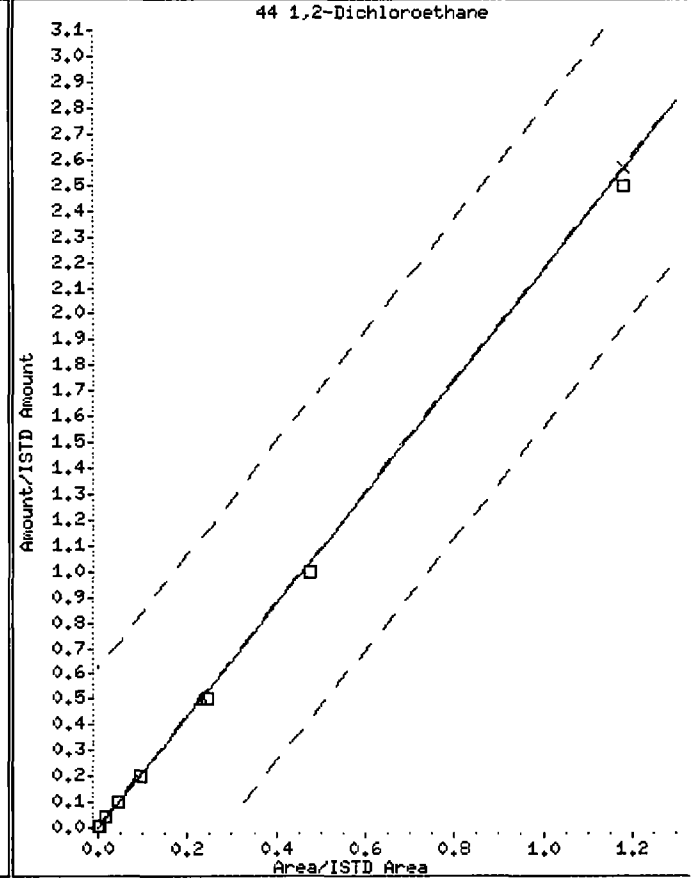

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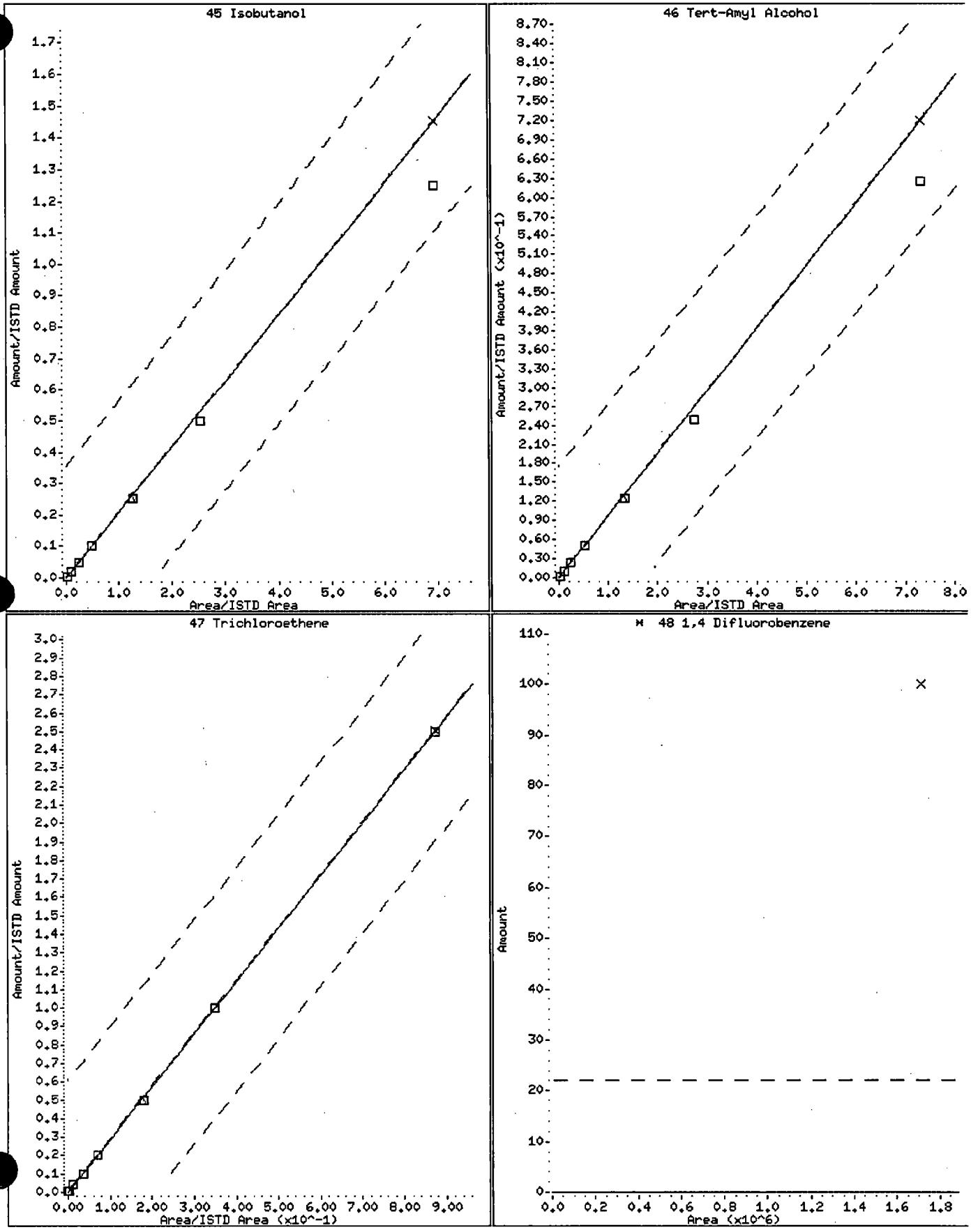

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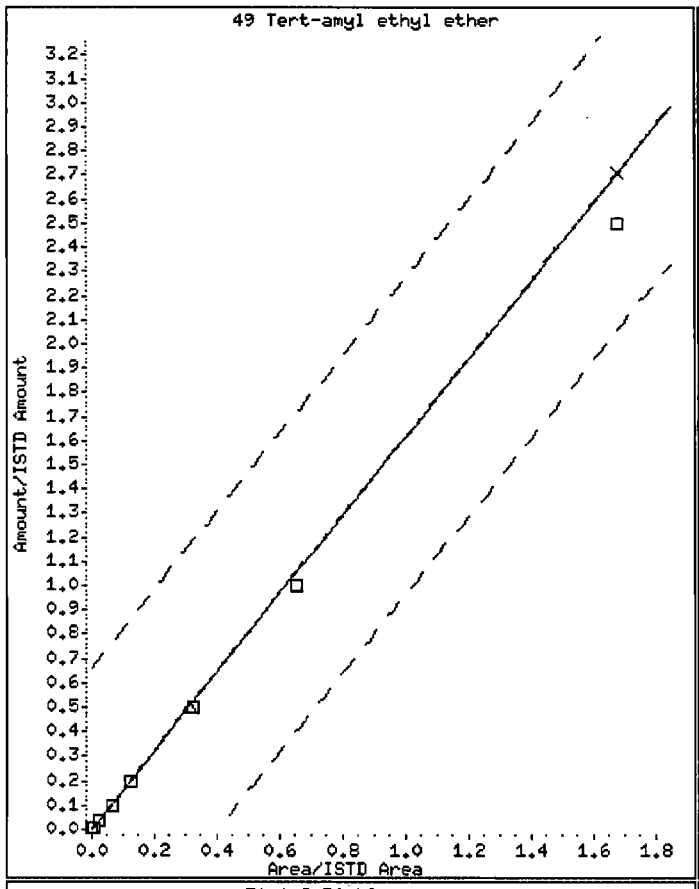

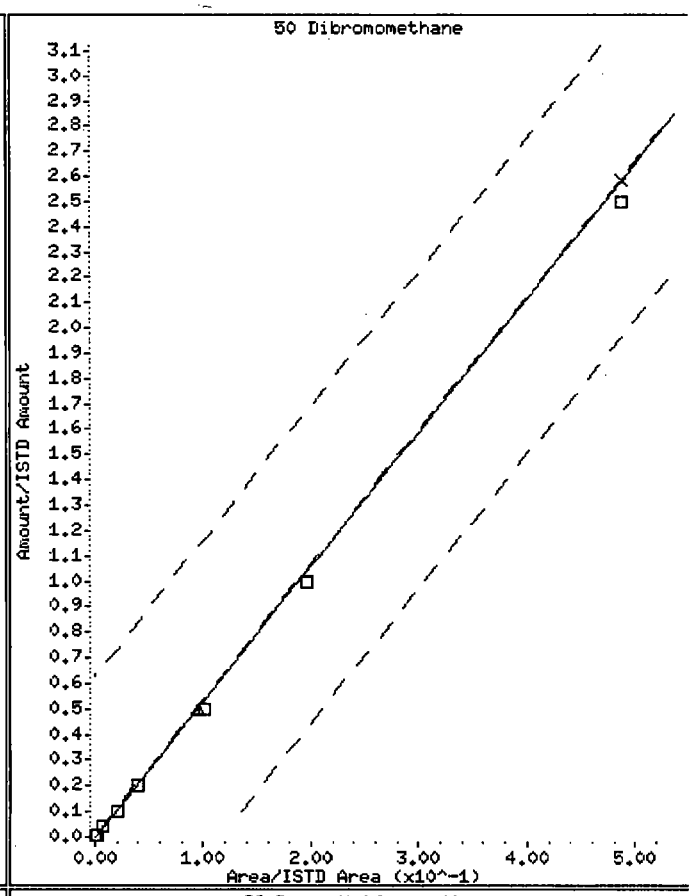

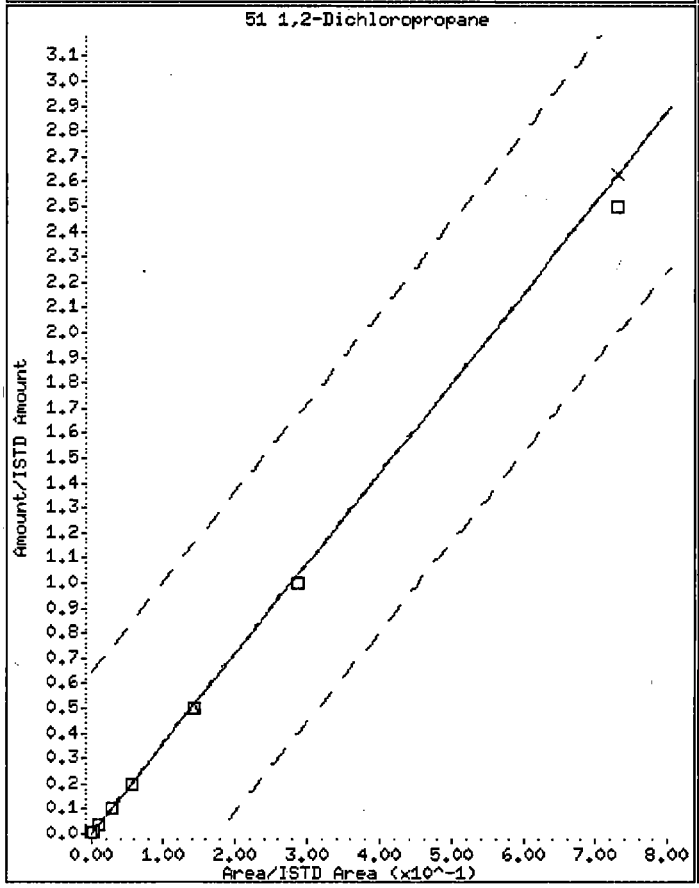

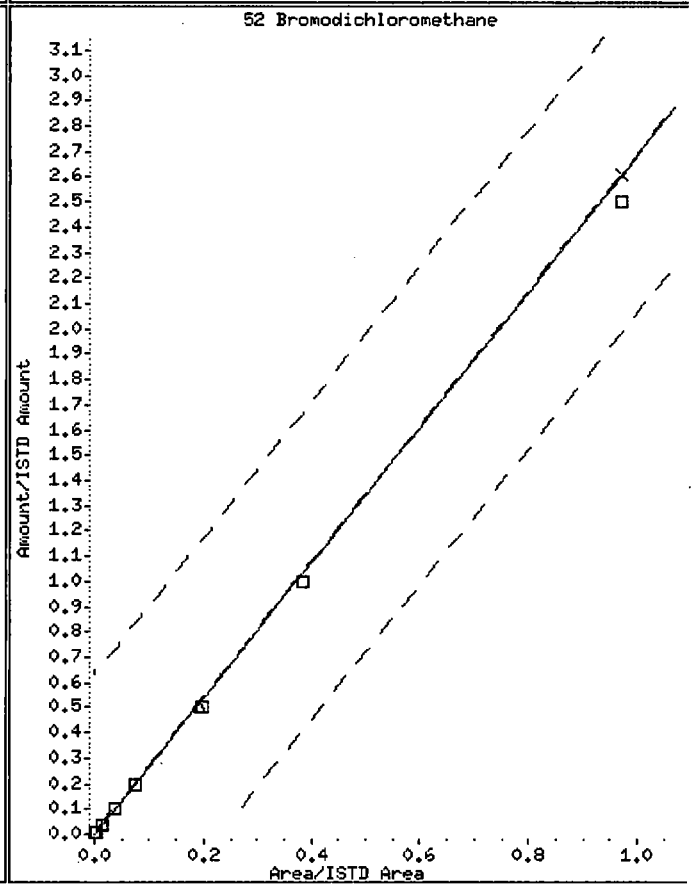

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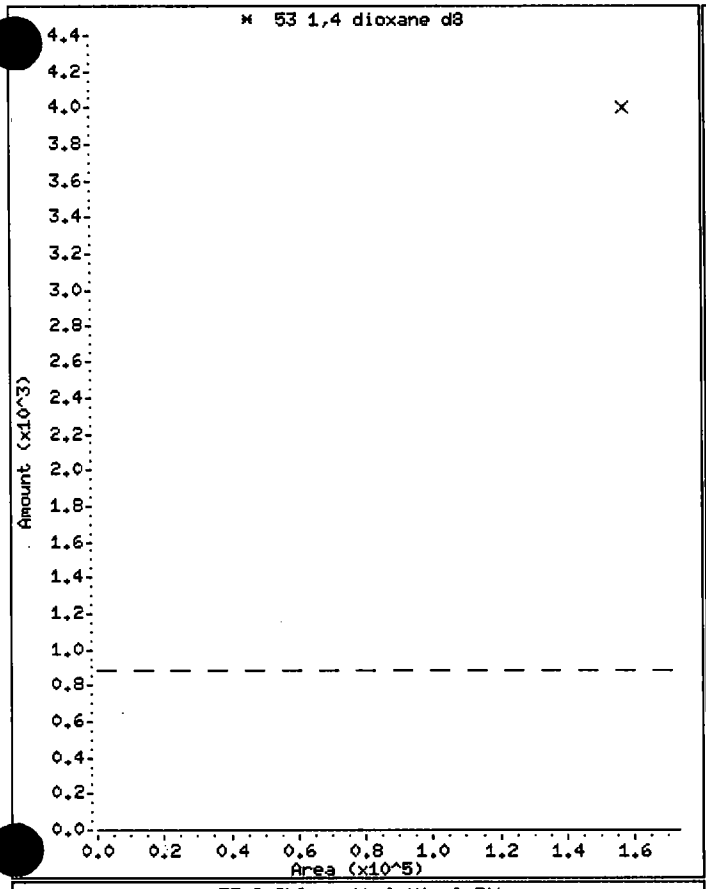

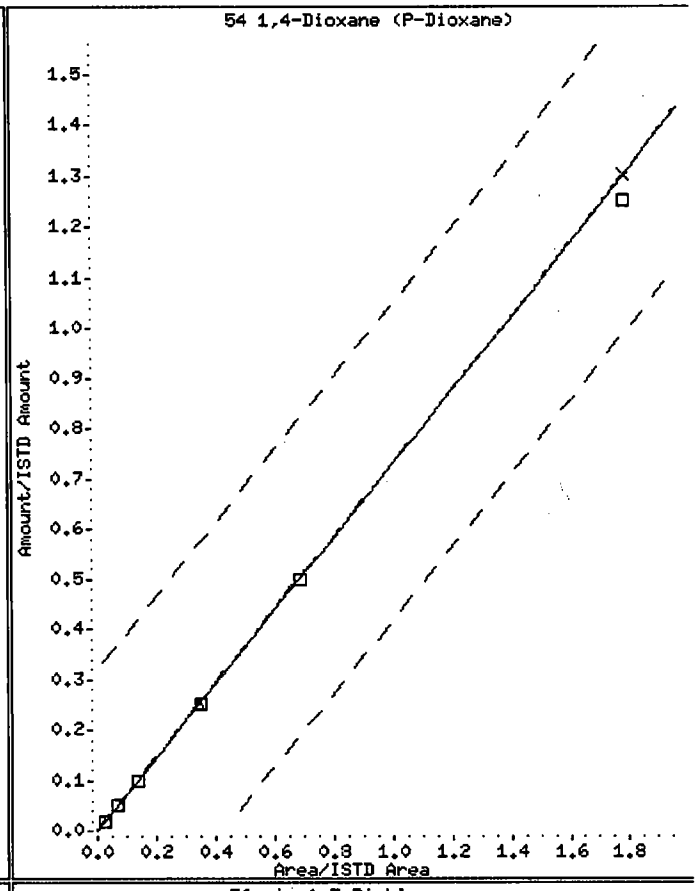

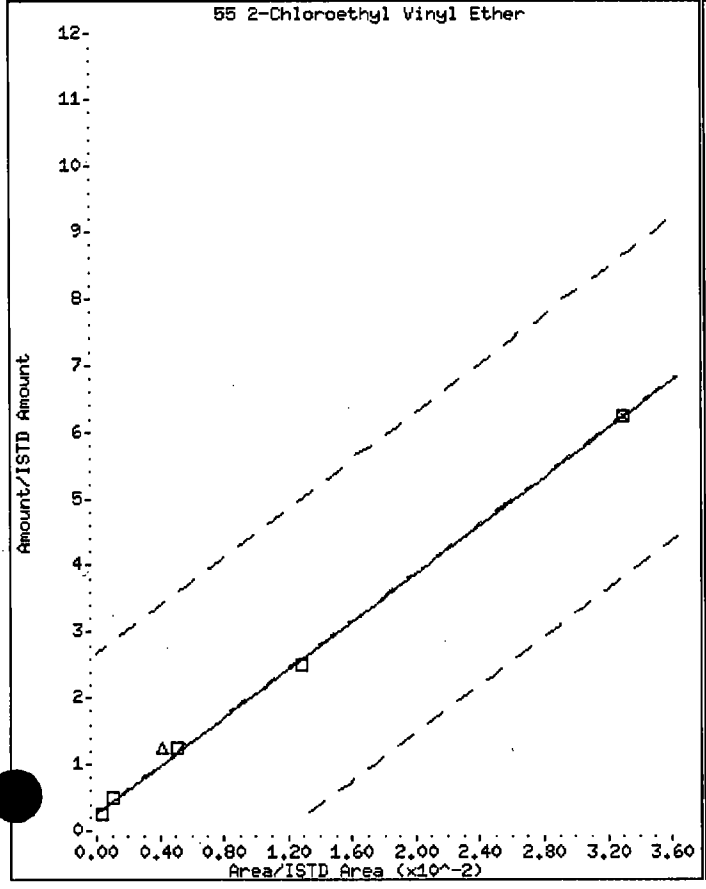

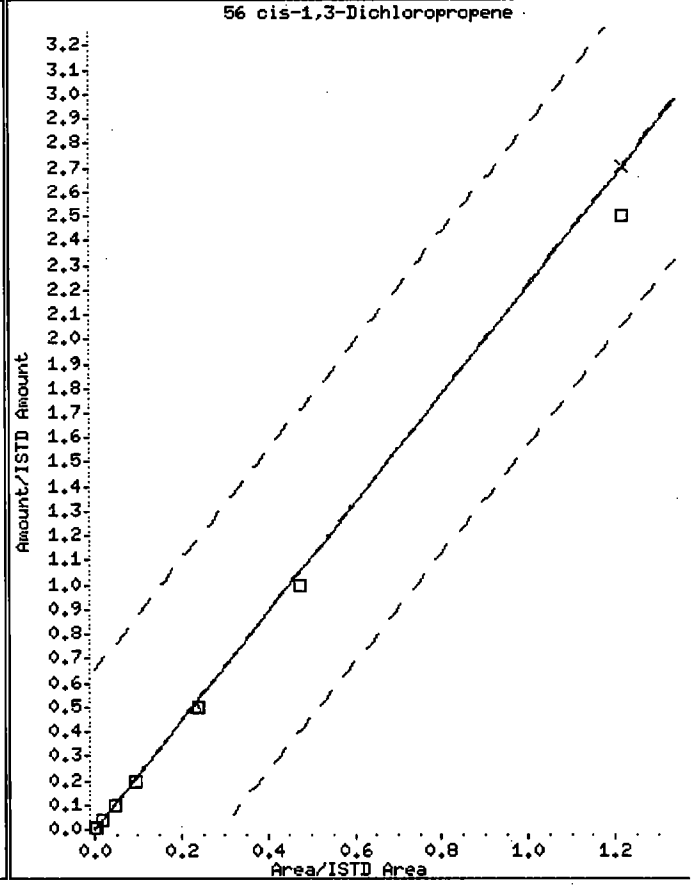

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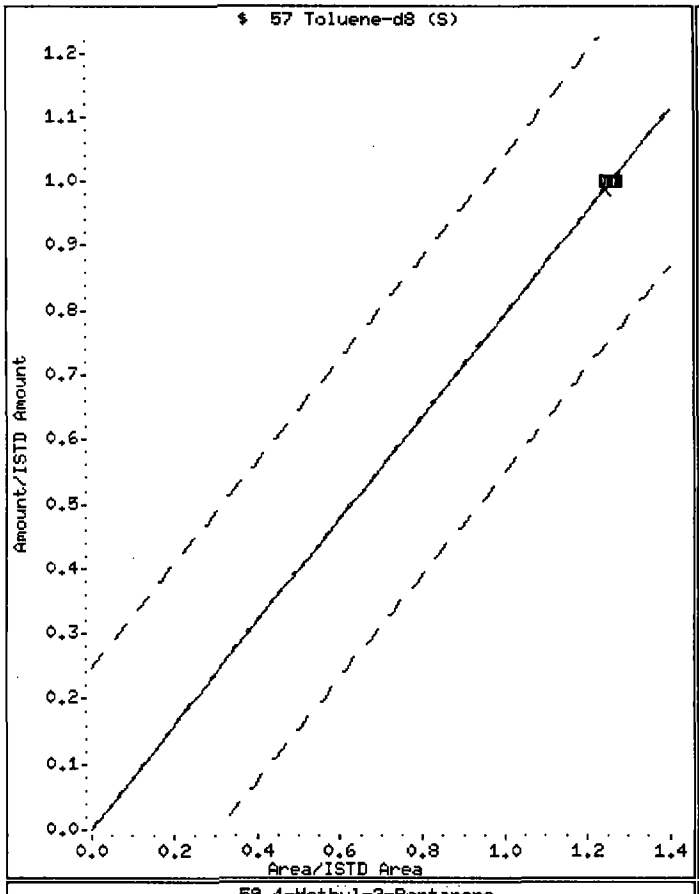

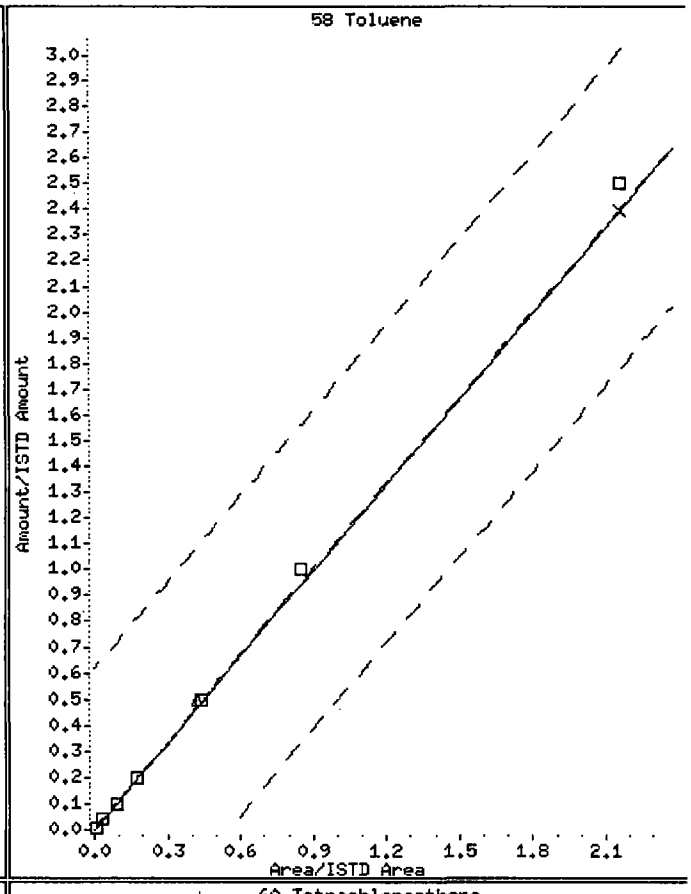

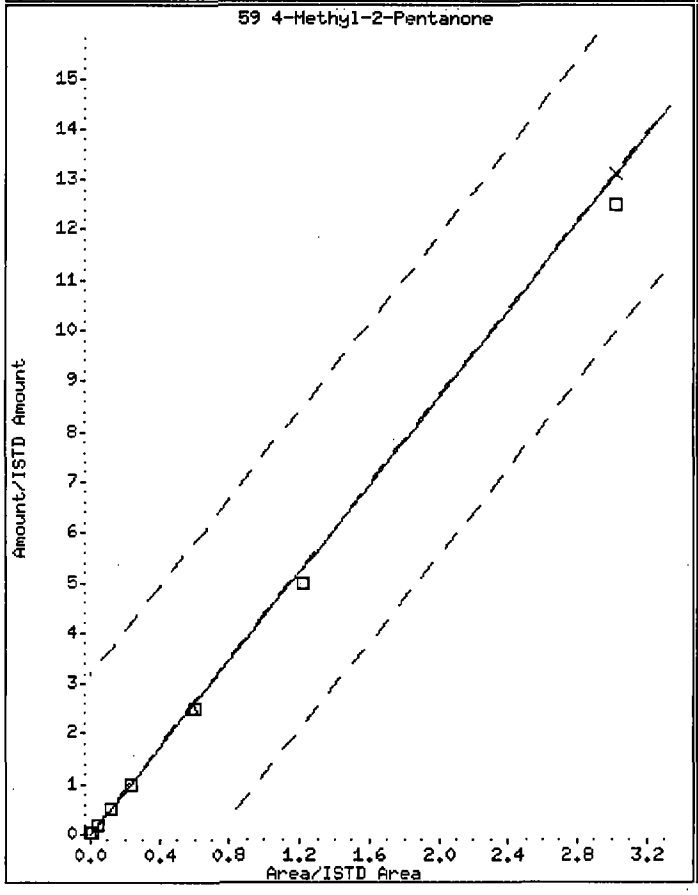

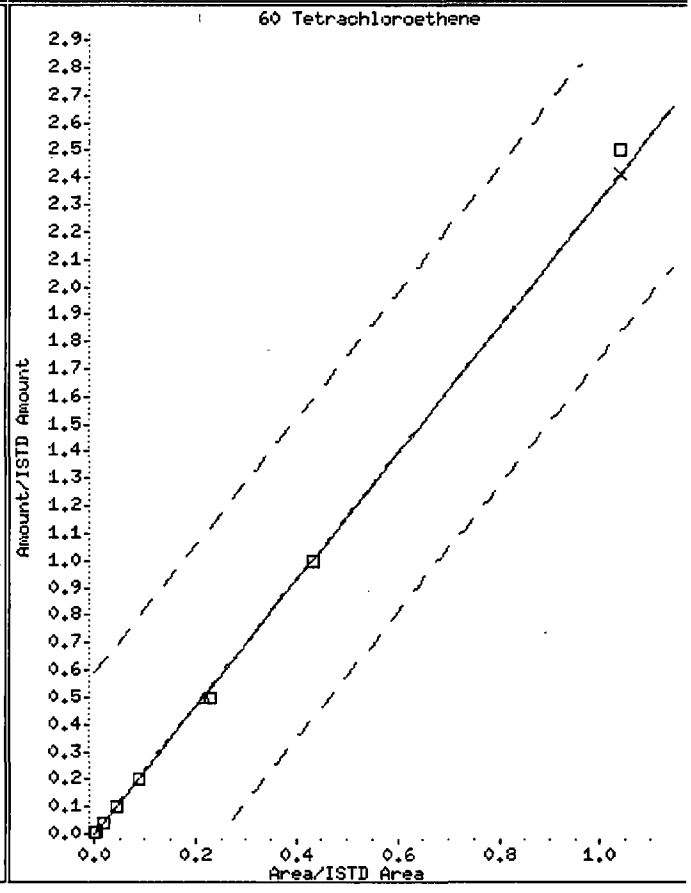

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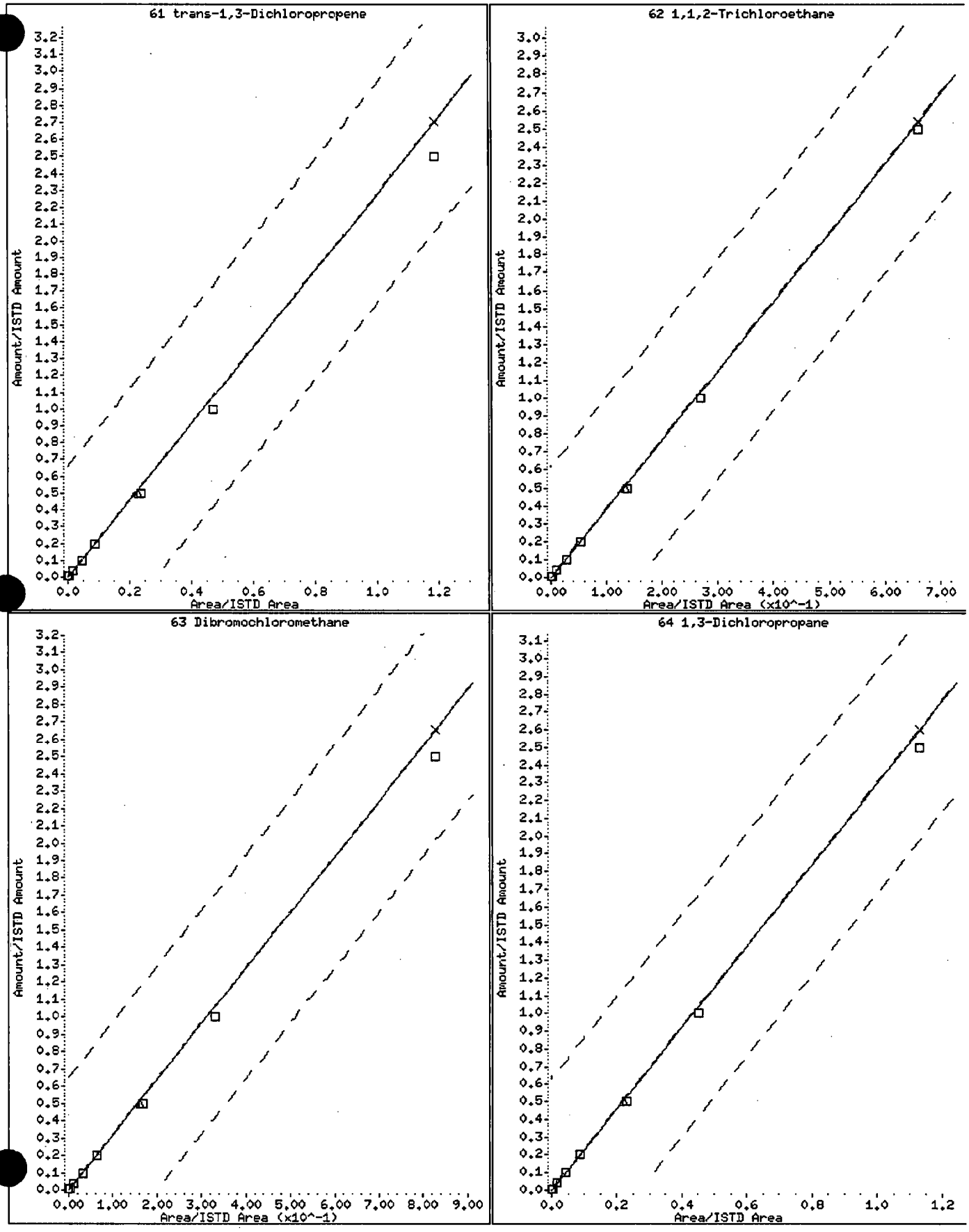

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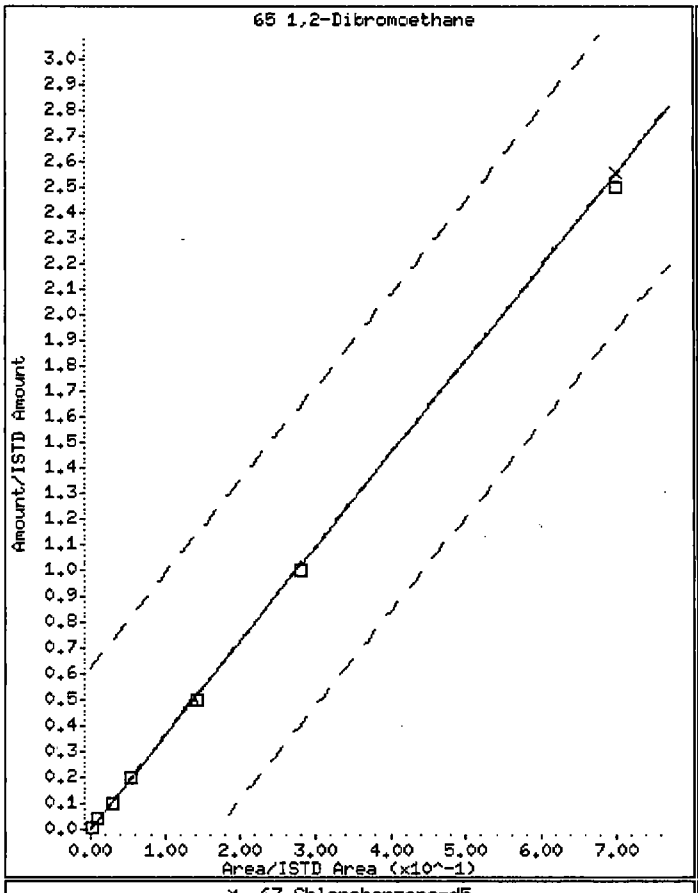

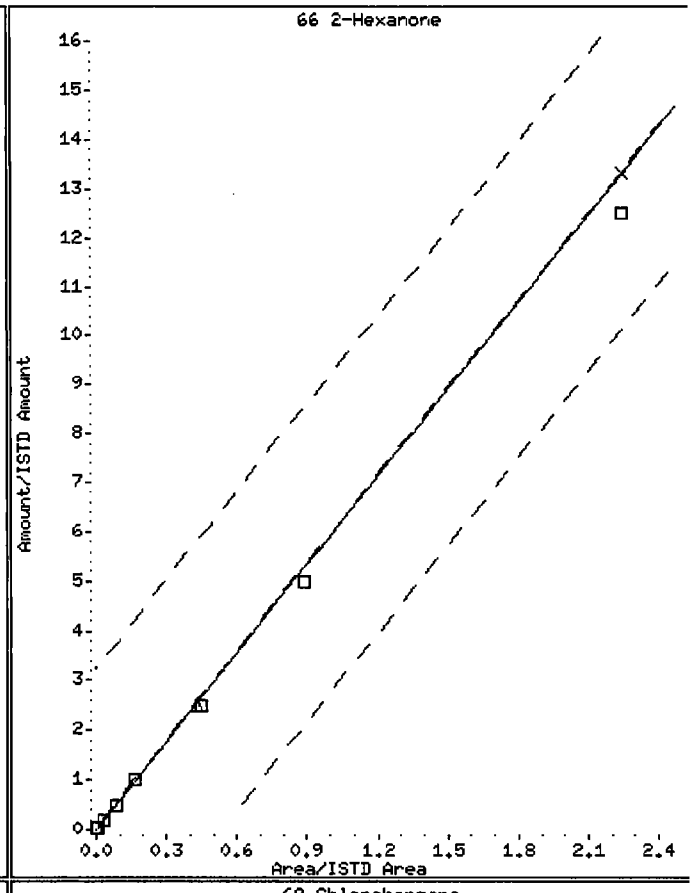

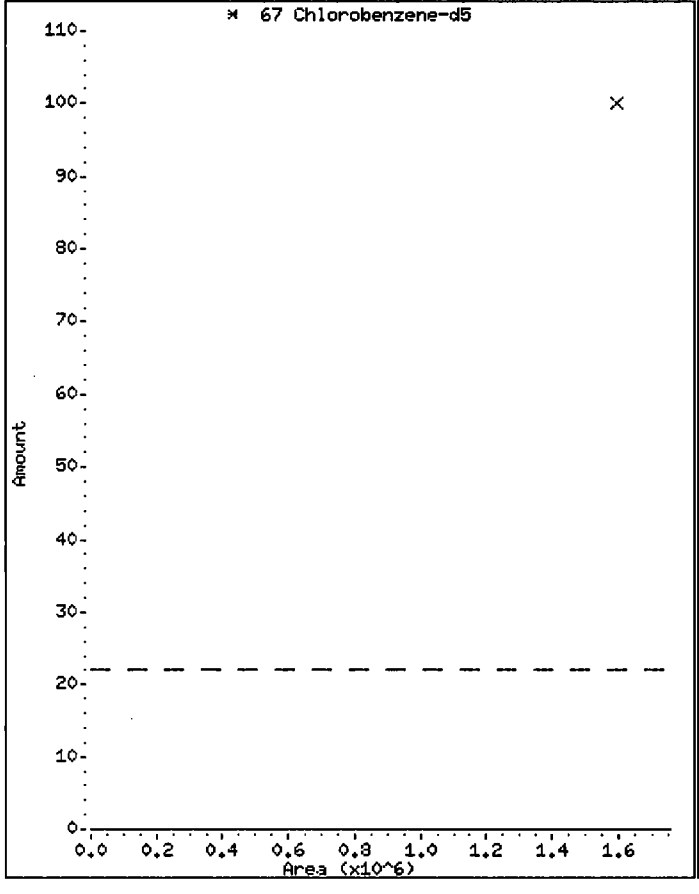

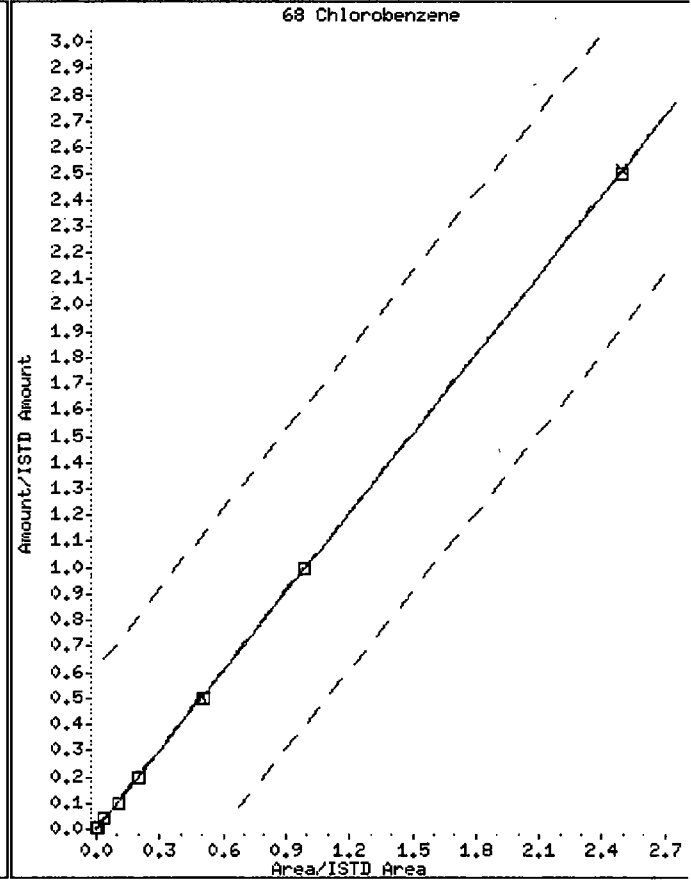

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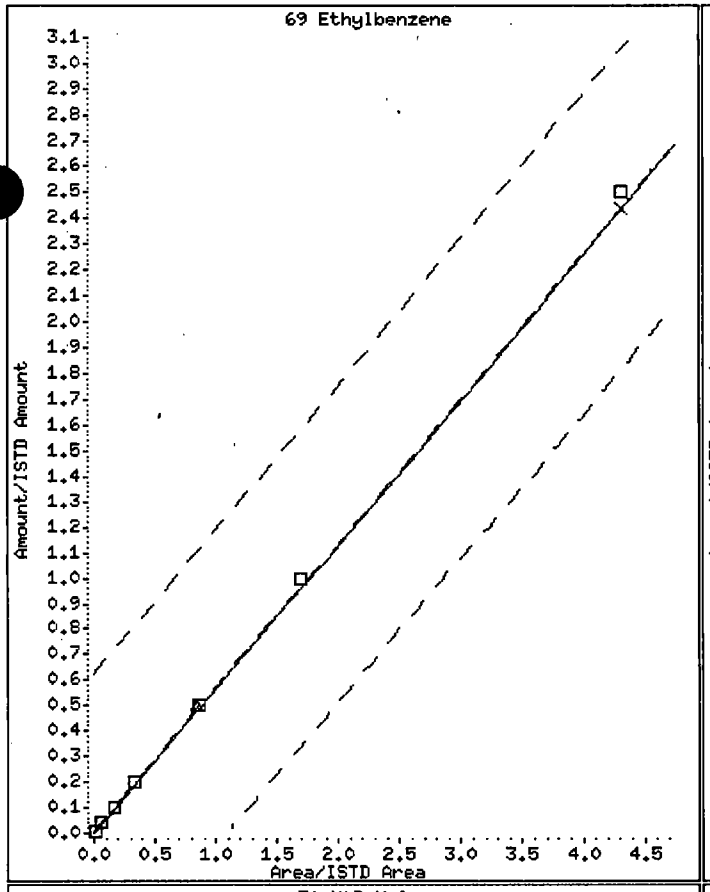

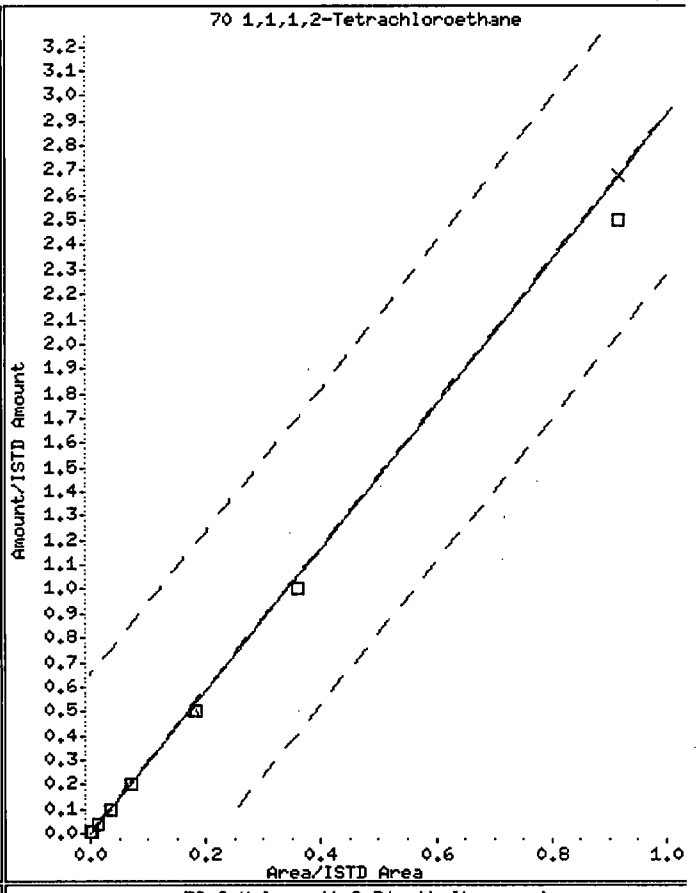

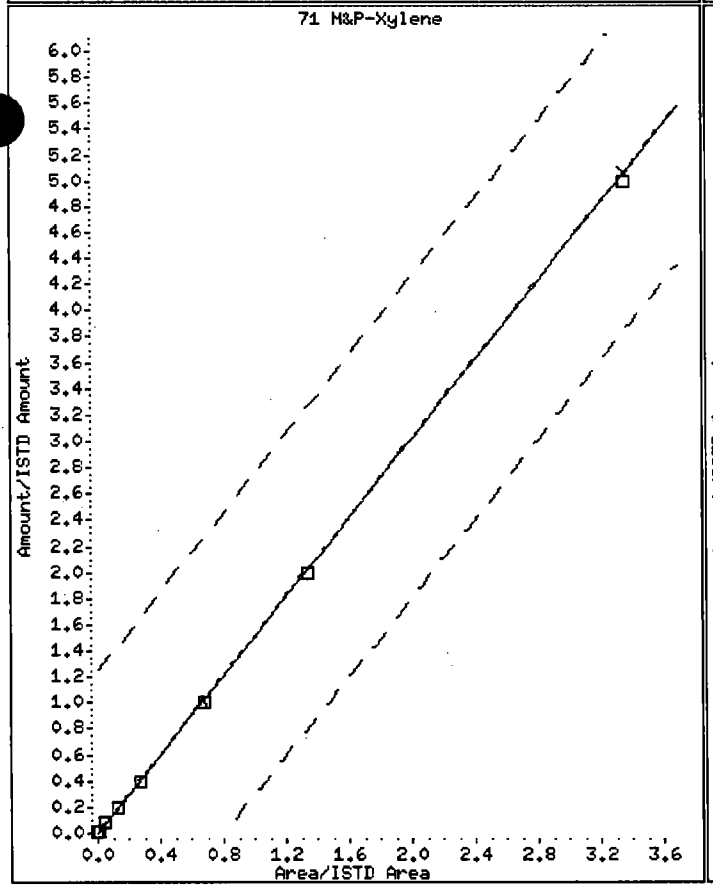

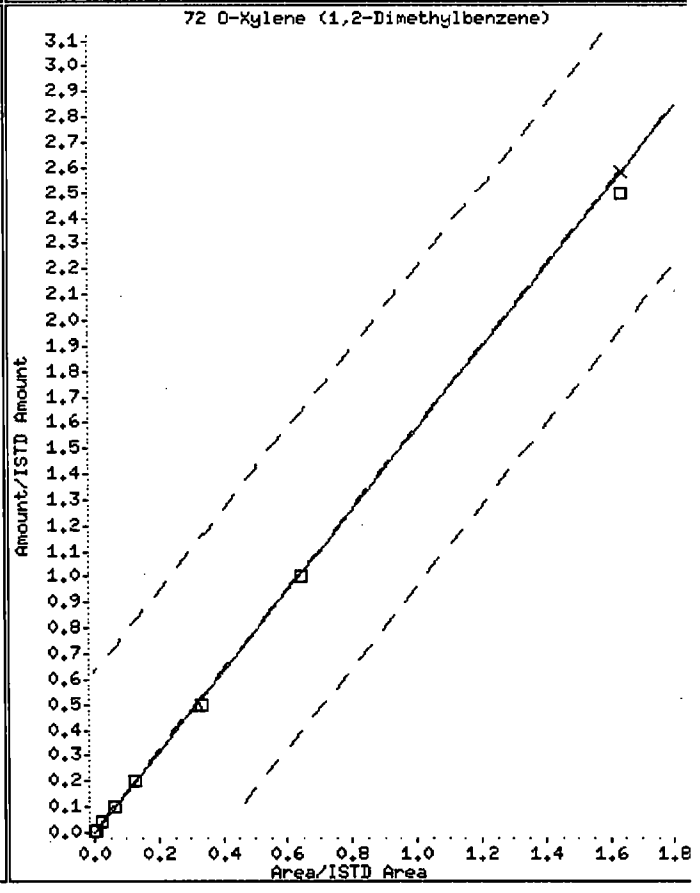

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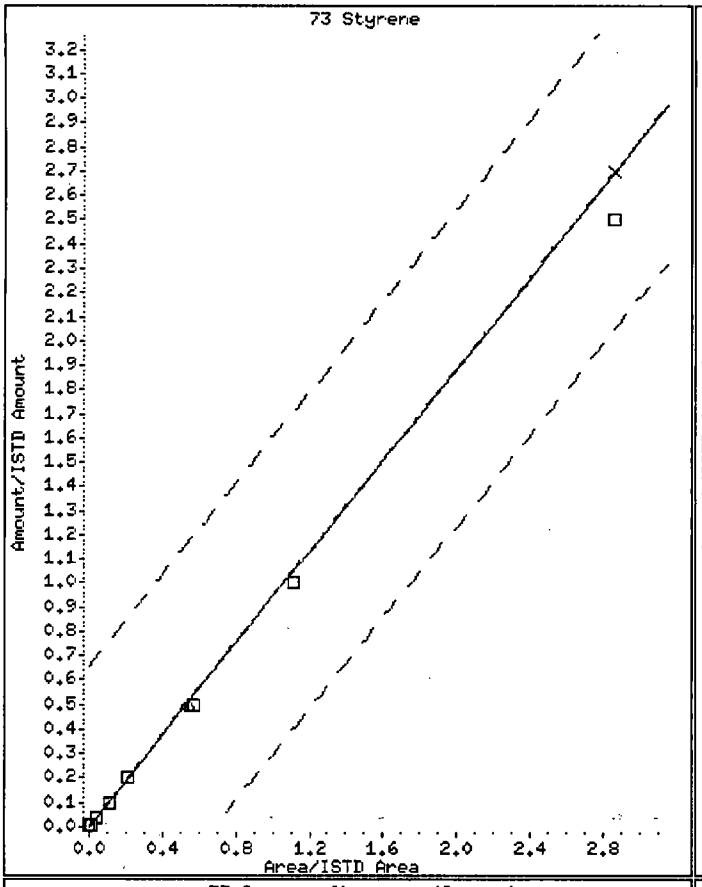

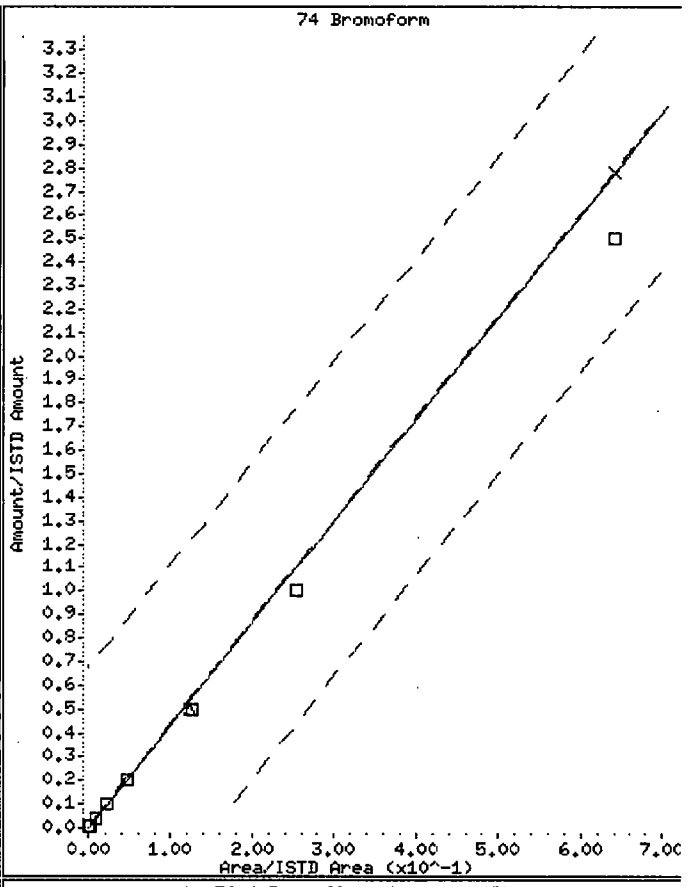

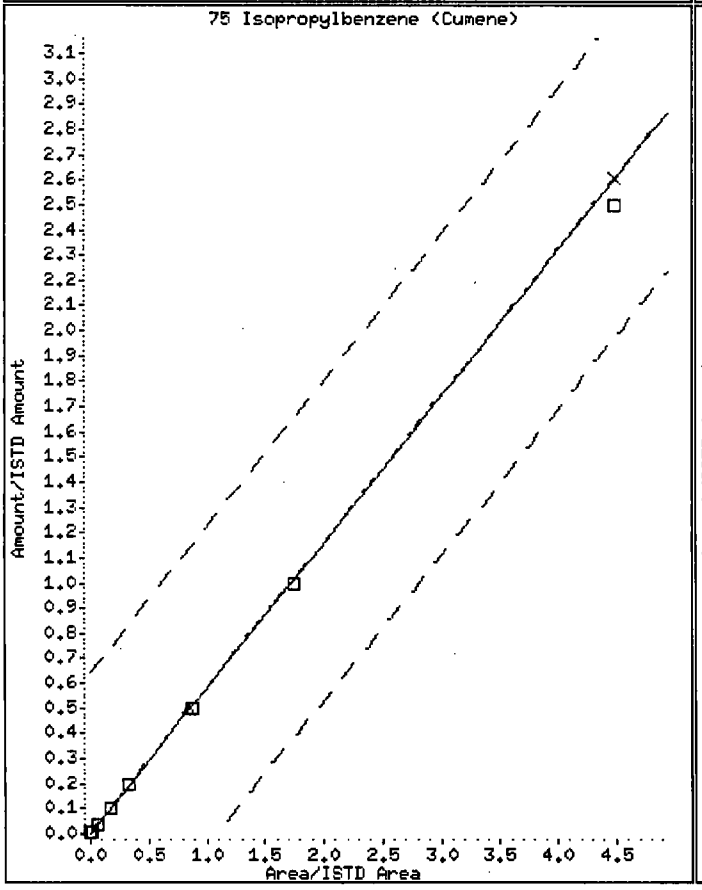

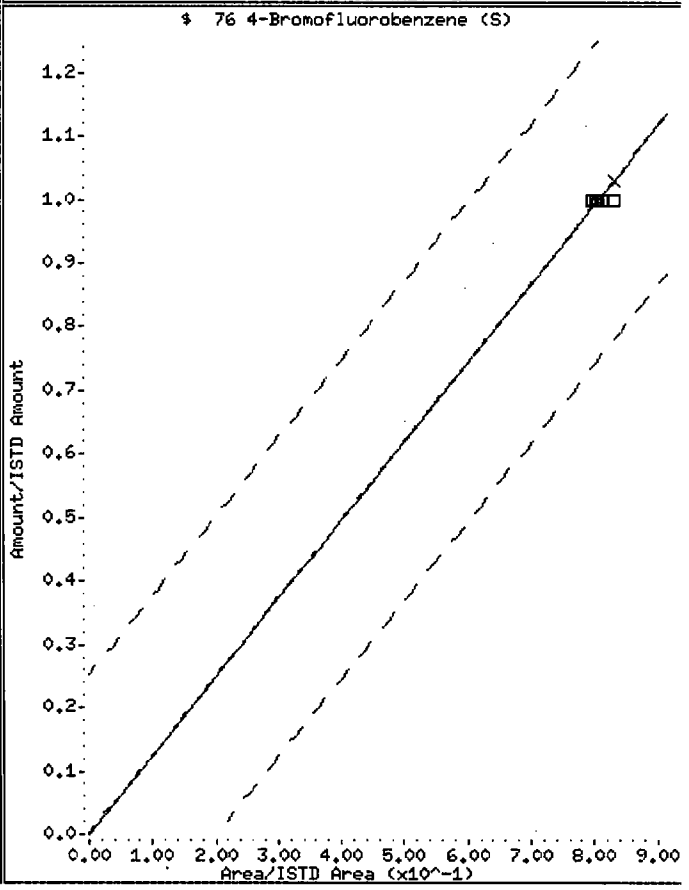

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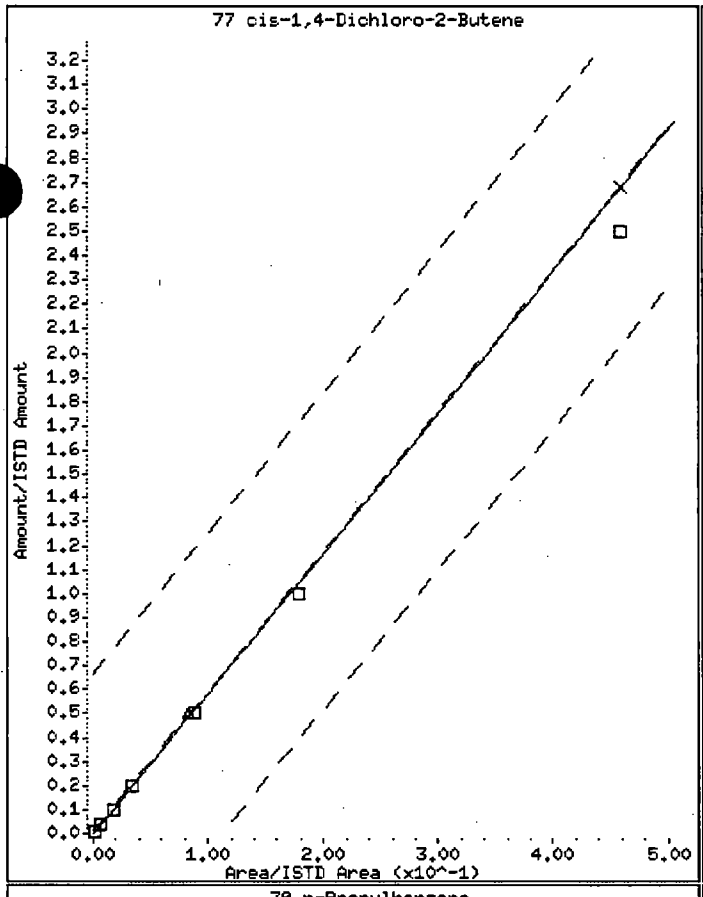

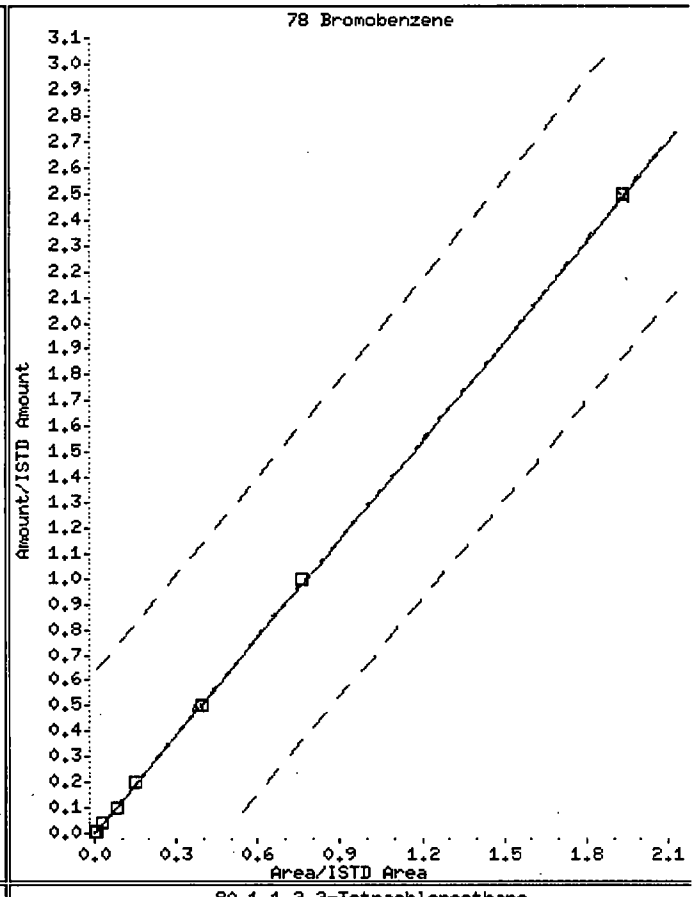

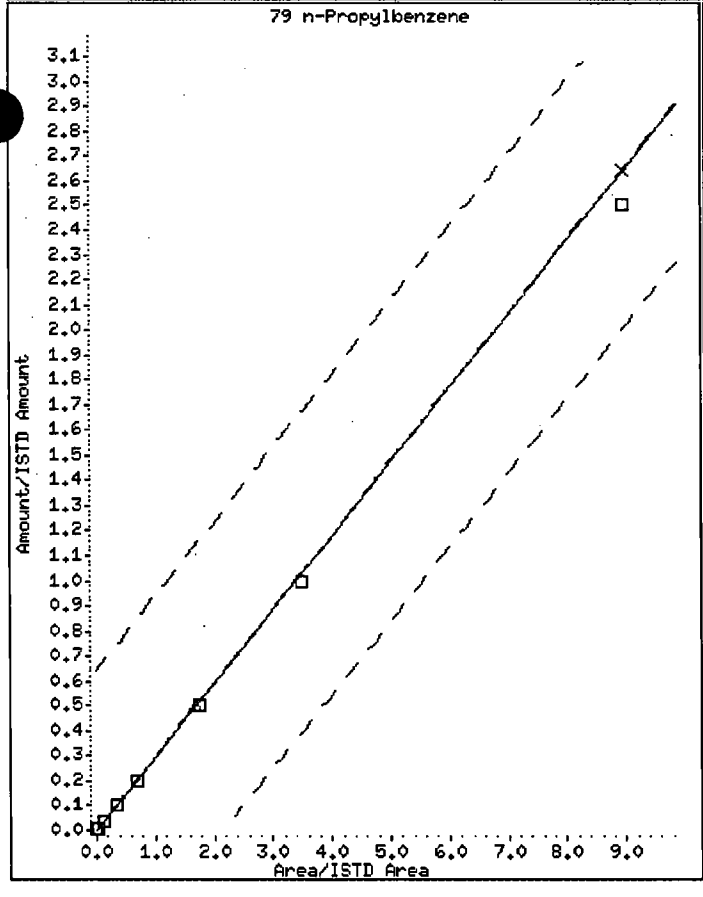

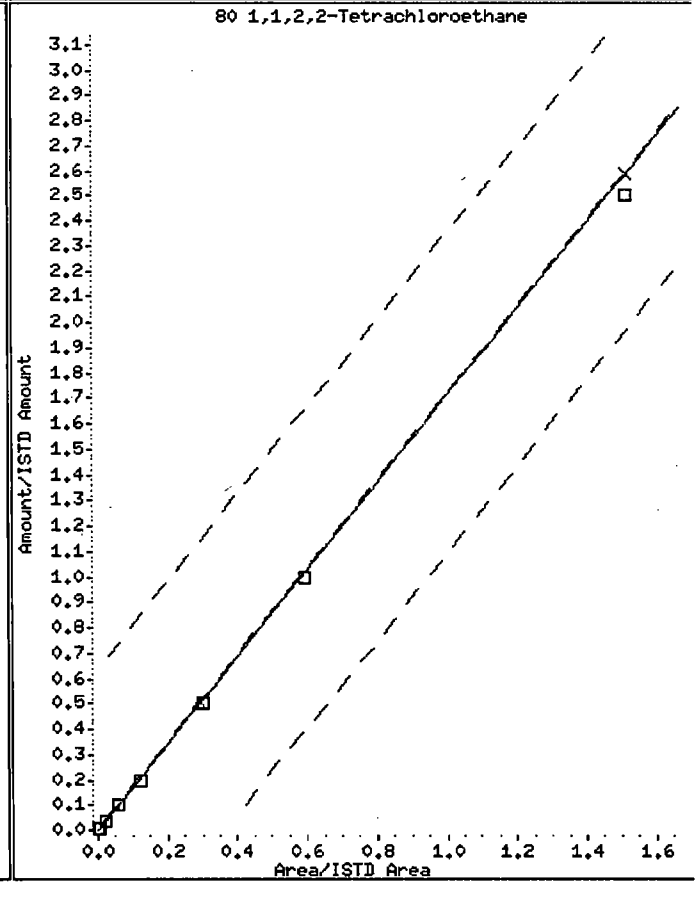

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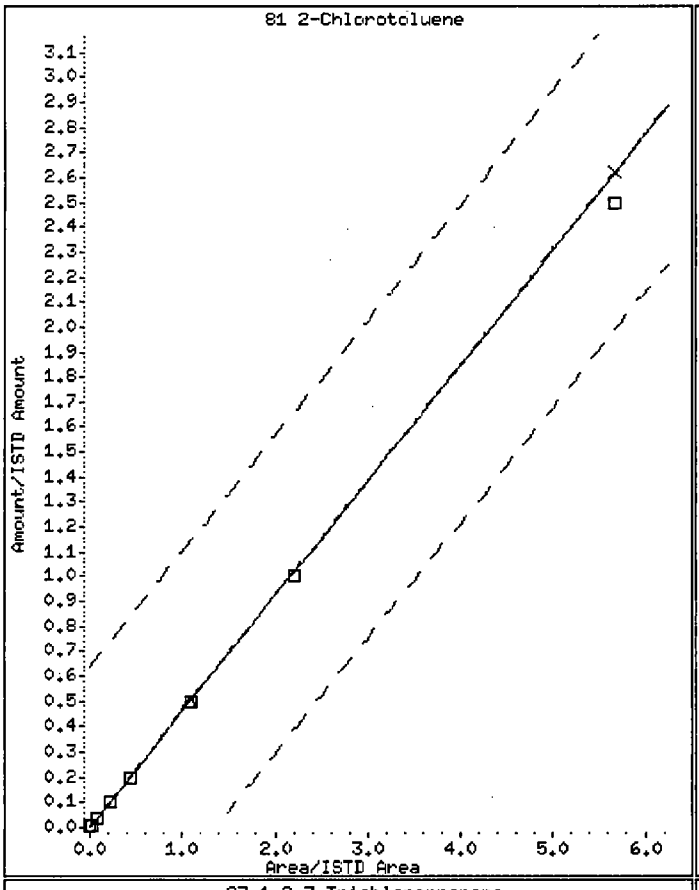

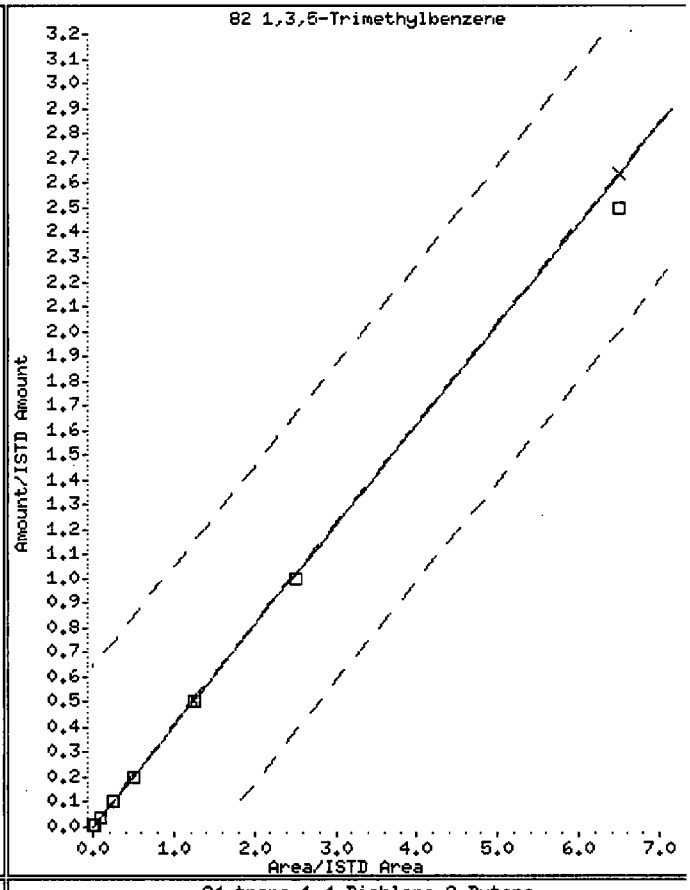

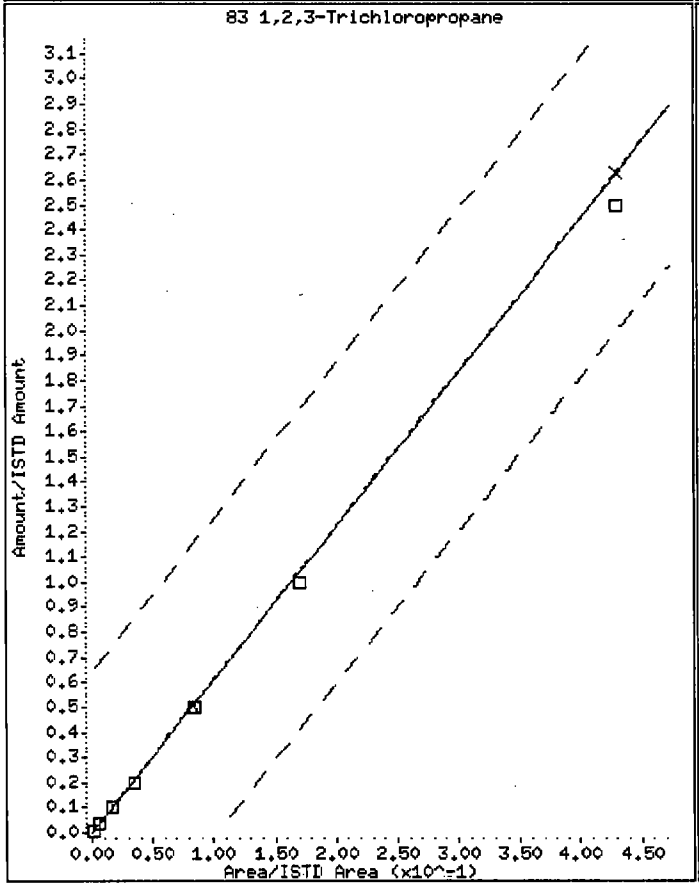

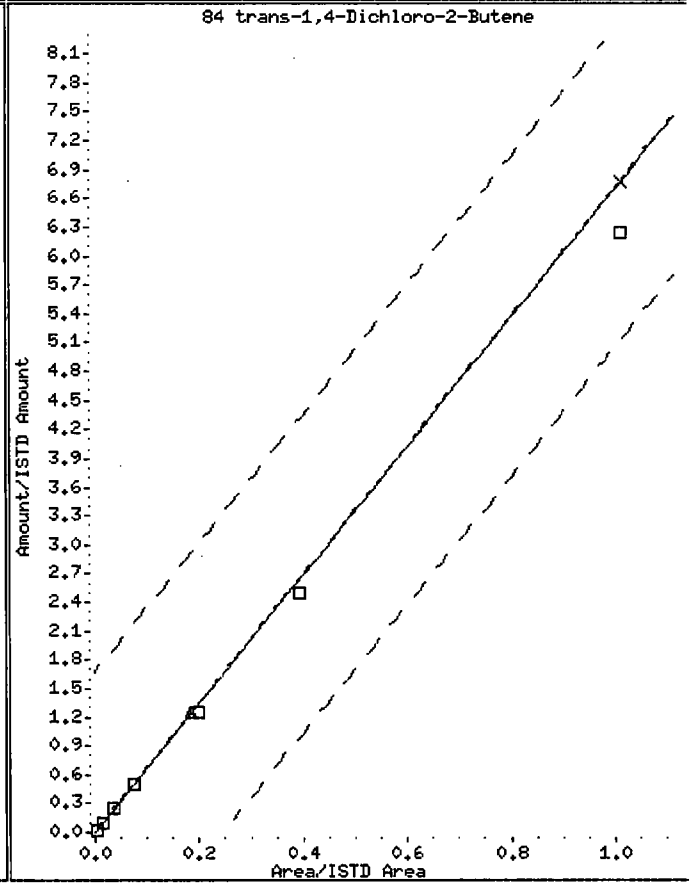

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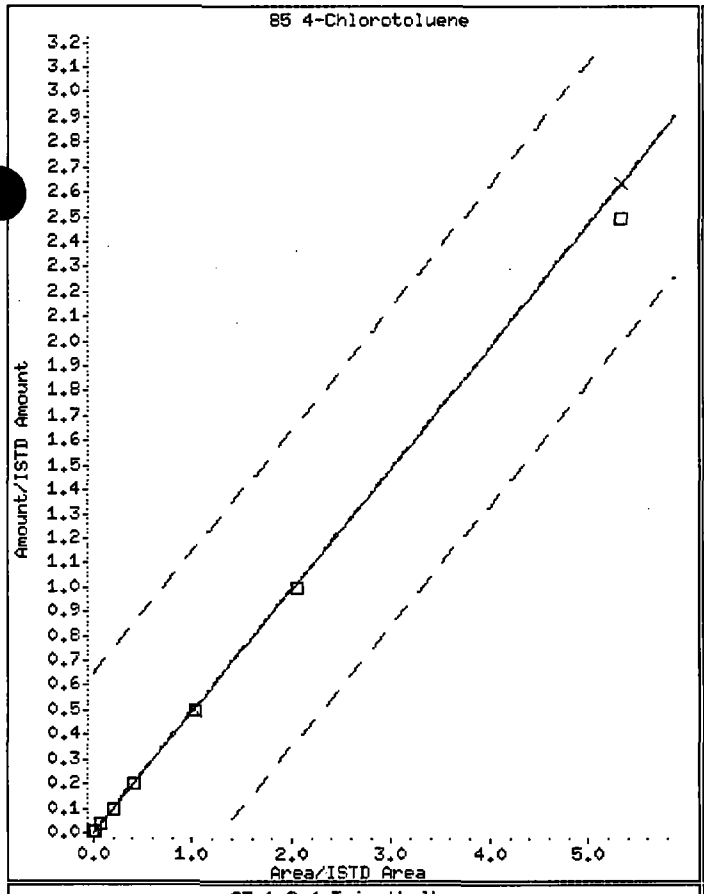
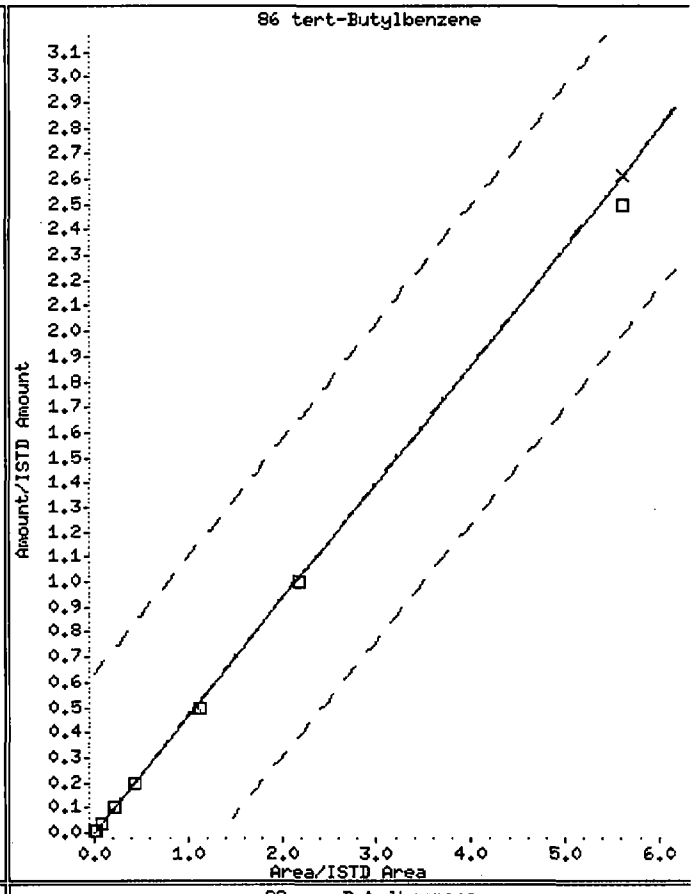

85 4-Chlorotoluene
Amount/ISTD Amount
Area/ISTD Area


86 tert-Butylbenzene
Amount/ISTD Amount
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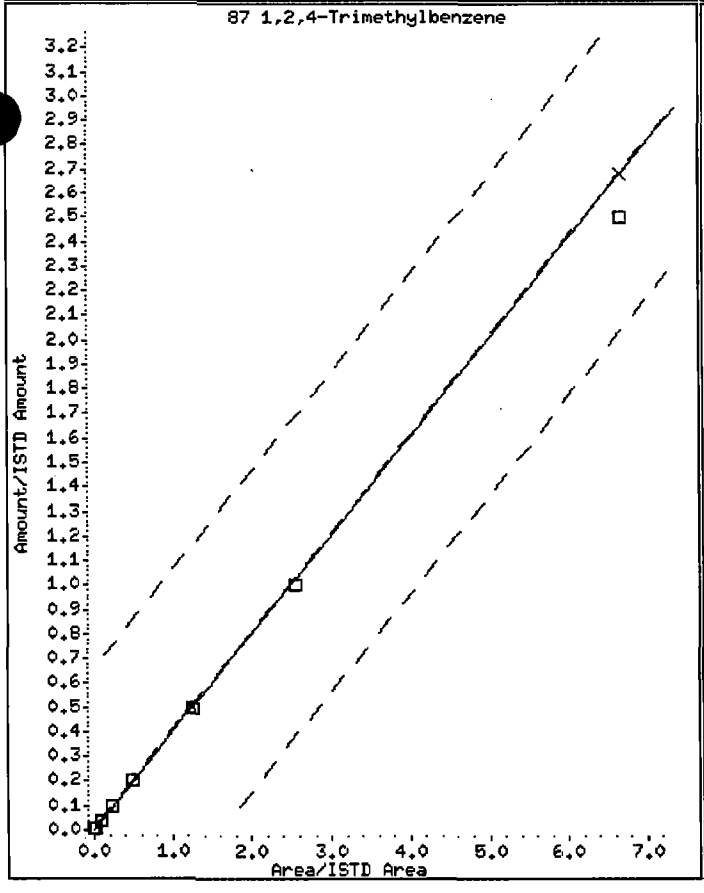
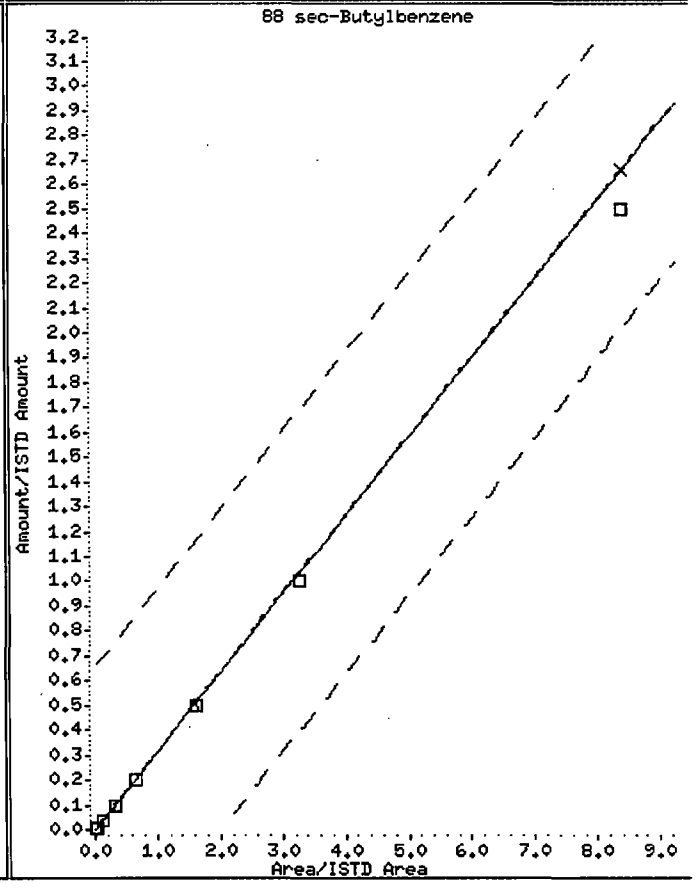
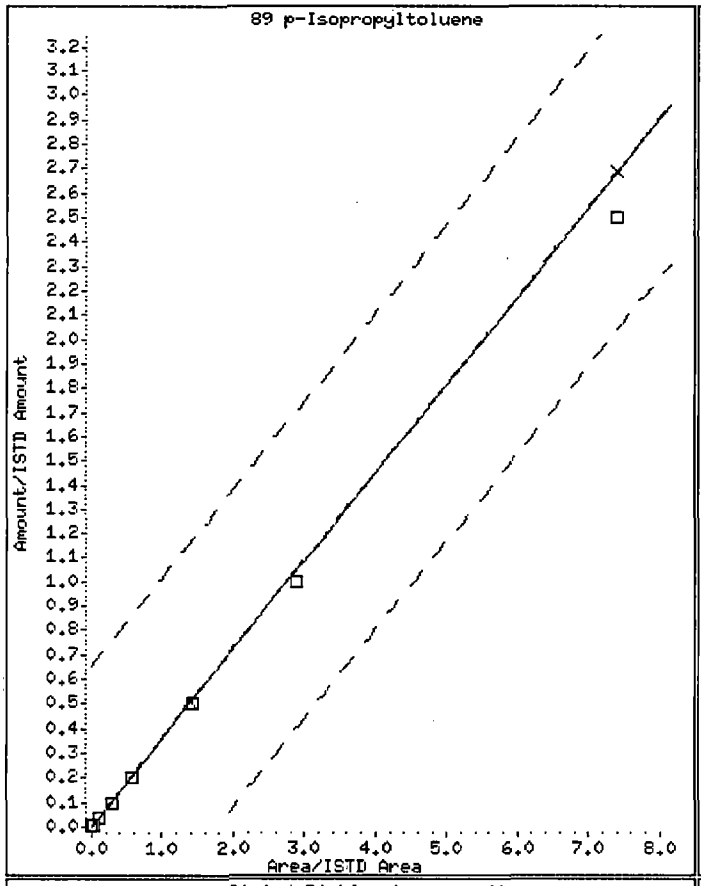
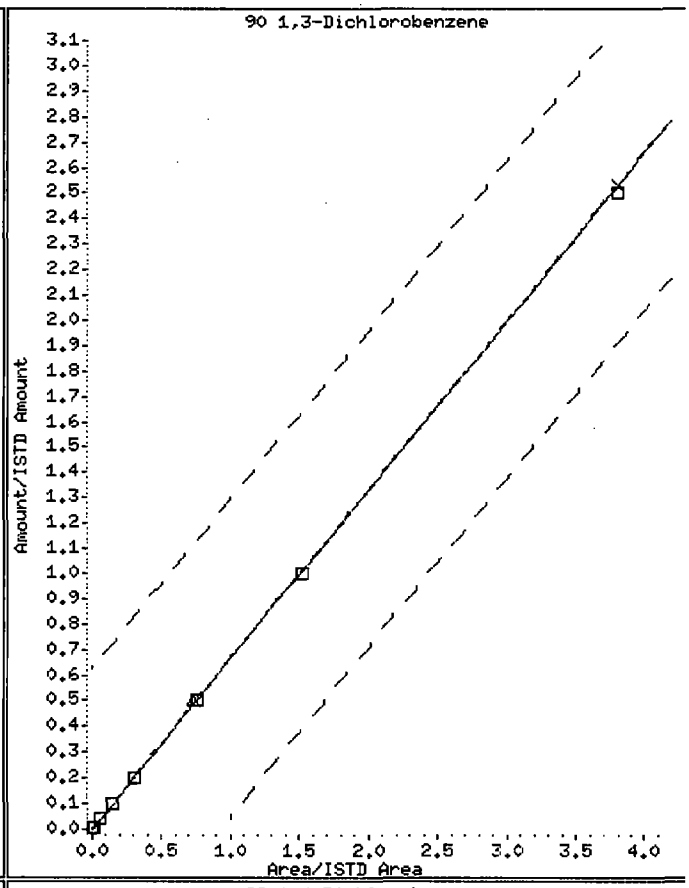
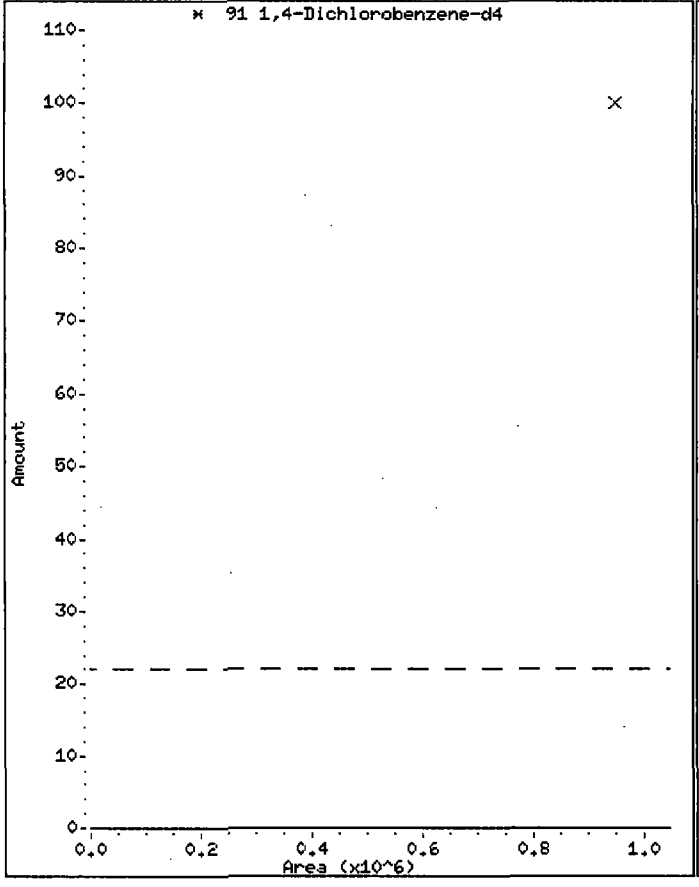

87 1,2,4-Trimethylbenzene
Amount/ISTD Amount
Area/ISTD Area

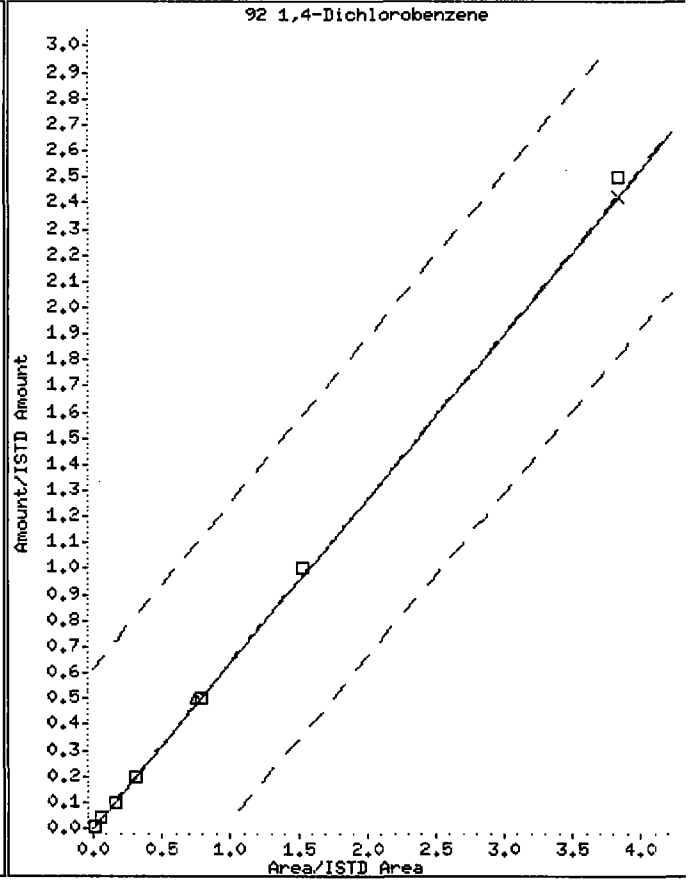

88 sec-Butylbenzene
Amount/ISTD Amount
Area/ISTD Area

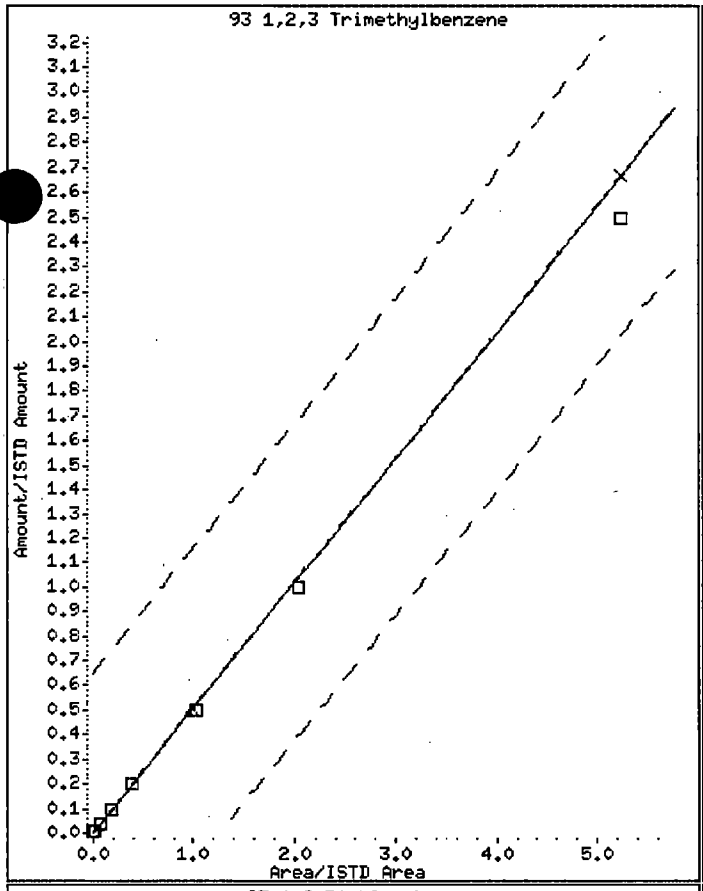
Data File: \\192.168.10.12\Chem\10MSV7.I\V12914H.B\V12914011.D

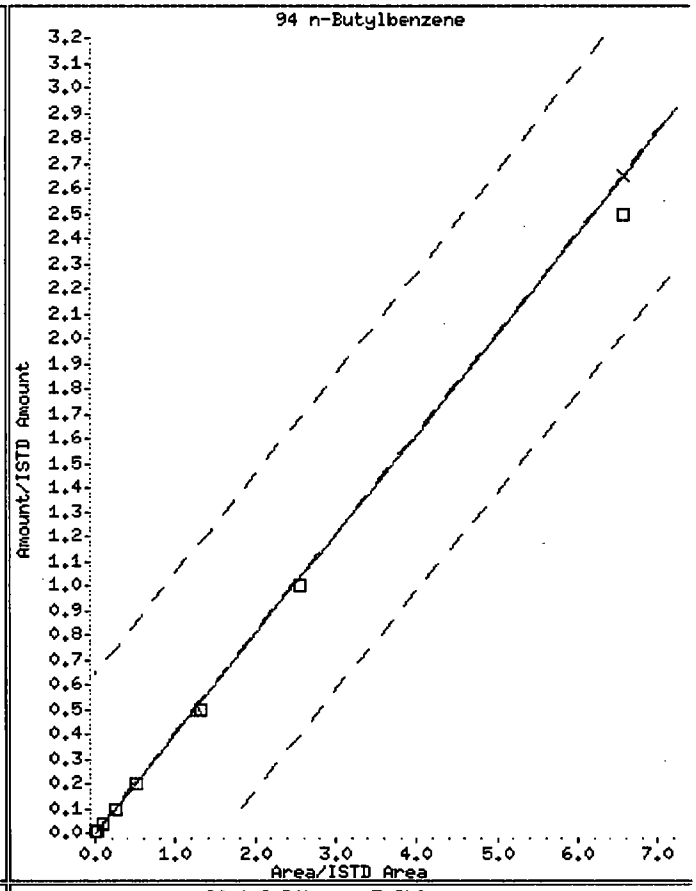


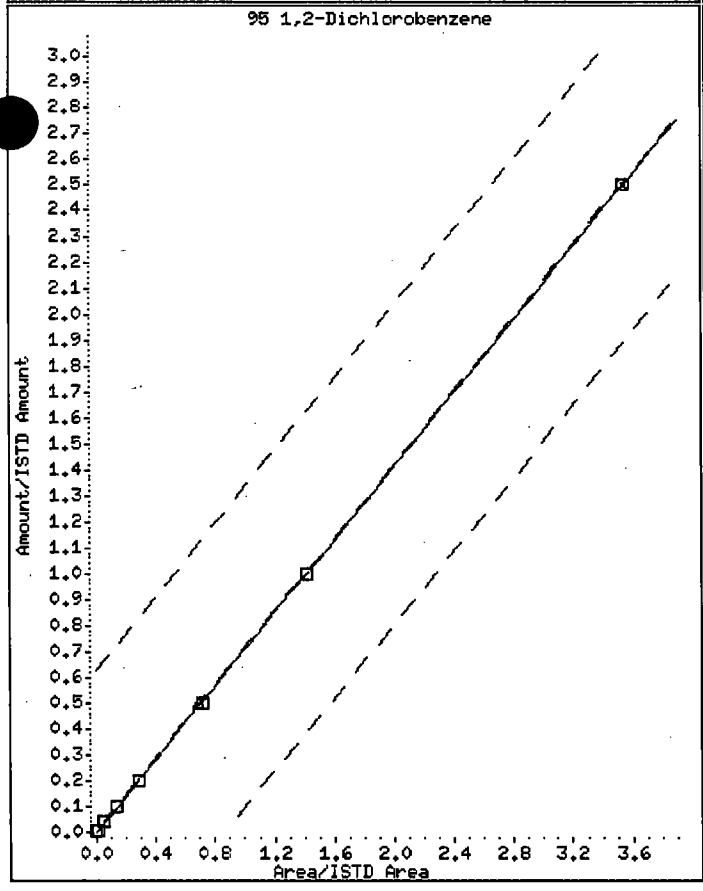


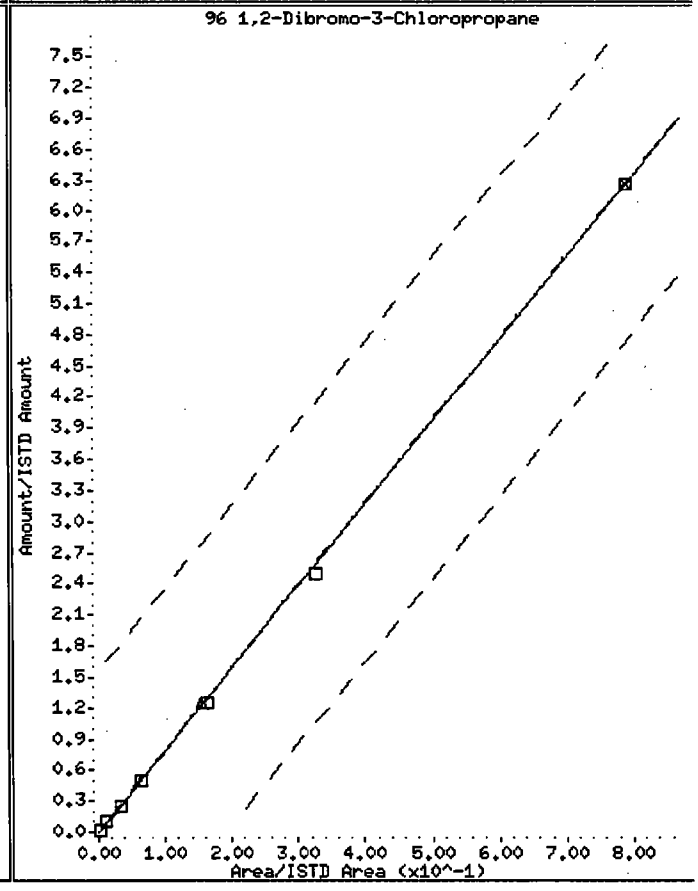




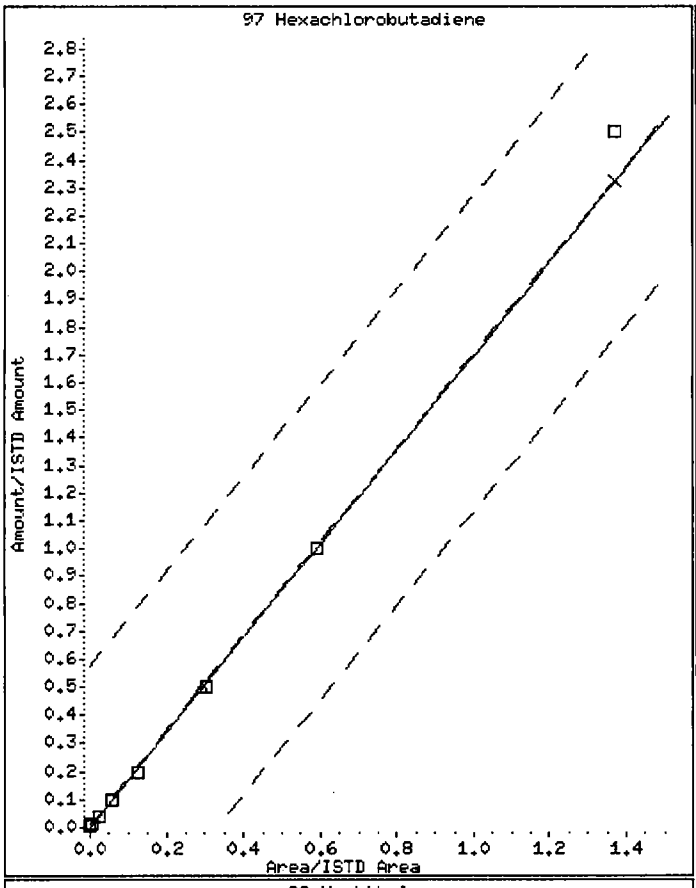

93 1,2,3 Trimethylbenzene
Amount/ISTD Amount
Area/ISTD Area

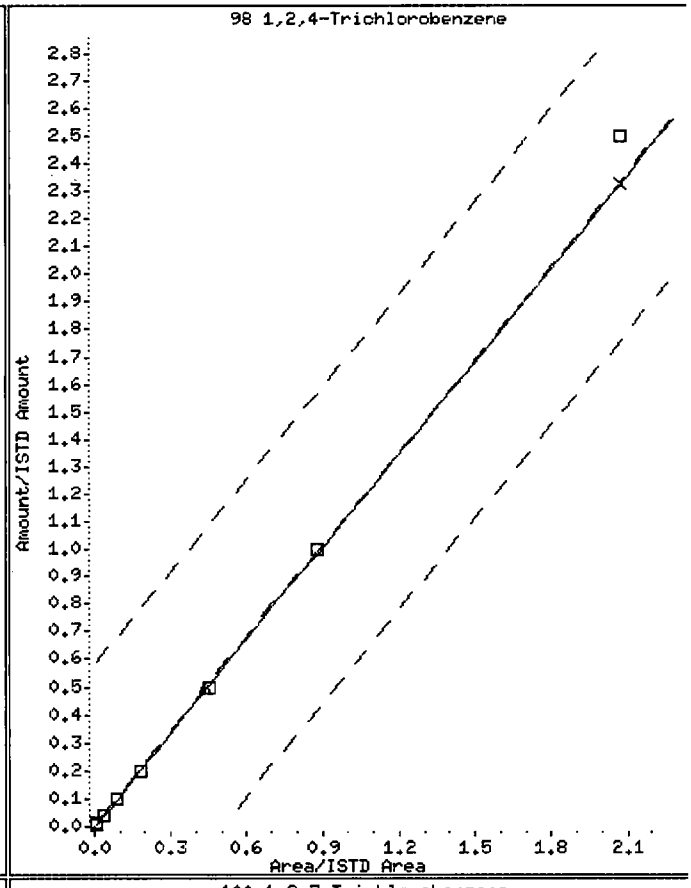

94 n-Butylbenzene
Amount/ISTD Amount
Area/ISTD Area

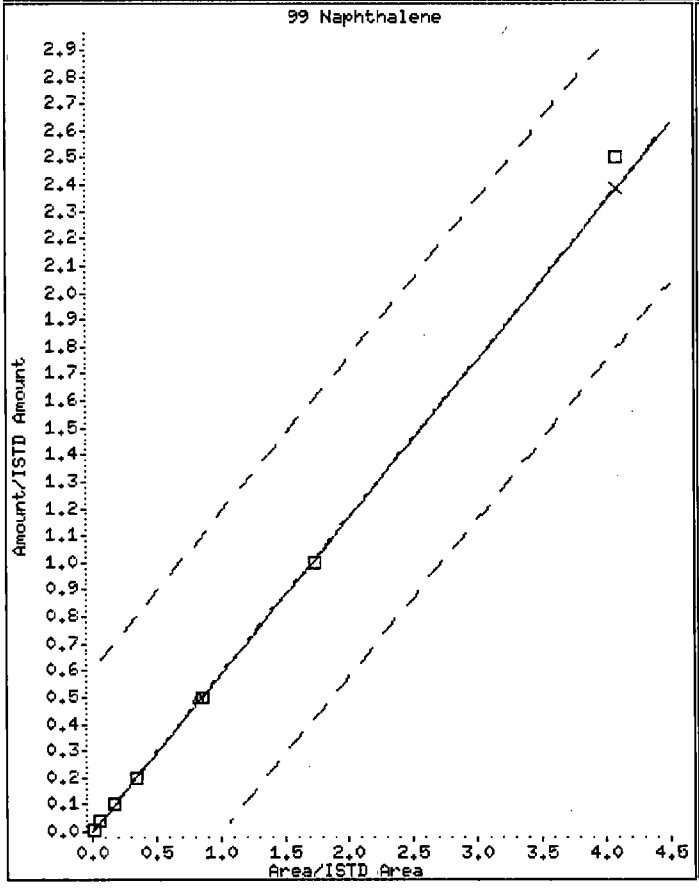

95 1,2-Dichlorobenzene
Amount/ISTD Amount
Area/ISTD Area

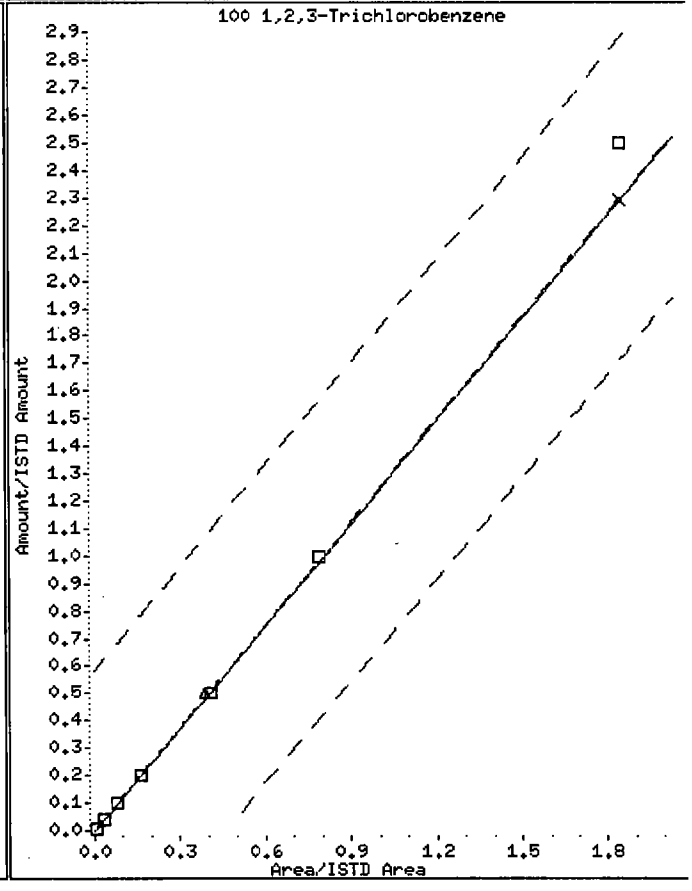

96 1,2-Dibromo-3-Chloropropane
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

Data File: \\192.168.10.12\chem\ivmsv7.i\v12914H.b\v12914v11.d

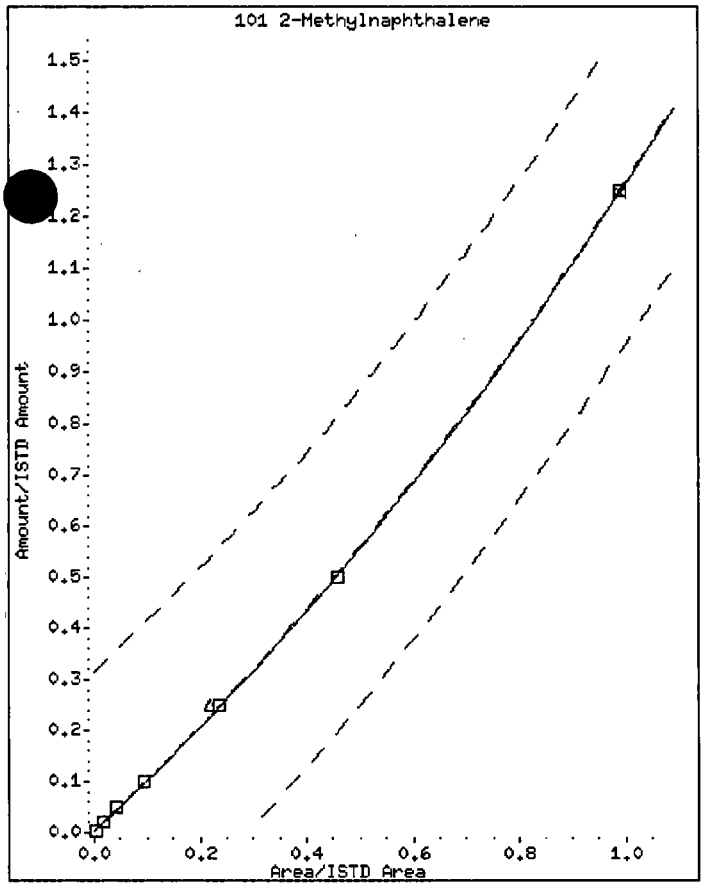








Data File: \\192.168.10.12\chem\10vmsv7.i\v12914H.b\v12914v11.d



5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148
Lab File ID: 01161411.D BFB Injection Date: 01/16/2014
Instrument ID: 10MSV3 BFB Injection Time: 21:06
GC Column: Rtx-VMS ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
95	Base Peak, 100% relative abundance	100.00	
50	8.00 - 40.00% of mass 95	16.34	
75	30.00 - 66.00% of mass 95	44.89	
96	5.00 - 9.00% of mass 95	6.64	
173	Less than 2.00% of mass 174	0.00	(0.00)
174	50.00 - 120.00% of mass 95	99.62	
175	4.00 - 9.00% of mass 174	7.37	(7.40)
176	93.00 - 101.00% of mass 174	96.88	(97.25)
177	5.00 - 9.00% of mass 176	6.28	(6.48)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	0.4ICAL10097-99	0.4ICAL10097-	01161412.D	01/16/2014	21:23
2	1.0ICAL10097-99	1.0ICAL10097-	01161413.D	01/16/2014	21:40
3	4.0ICAL10097-99	4.0ICAL10097-	01161414.D	01/16/2014	21:57
4	10ICAL10097-99	10ICAL10097-9	01161415.D	01/16/2014	22:14
5	20ICAL10097-99	20ICAL10097-9	01161416.D	01/16/2014	22:32
6	50ICAL10097-99	50ICAL10097-9	01161417.D	01/16/2014	22:49
7	100ICAL10097-99	100ICAL10097-	01161418.D	01/16/2014	23:06
8	250ICAL10097-99	250ICAL10097-	01161419.D	01/16/2014	23:23
9	ICV2010097-100	ICV2010097-10	01161422.D	01/17/2014	00:15

Date : 16-JAN-2014 21:06

Client ID:

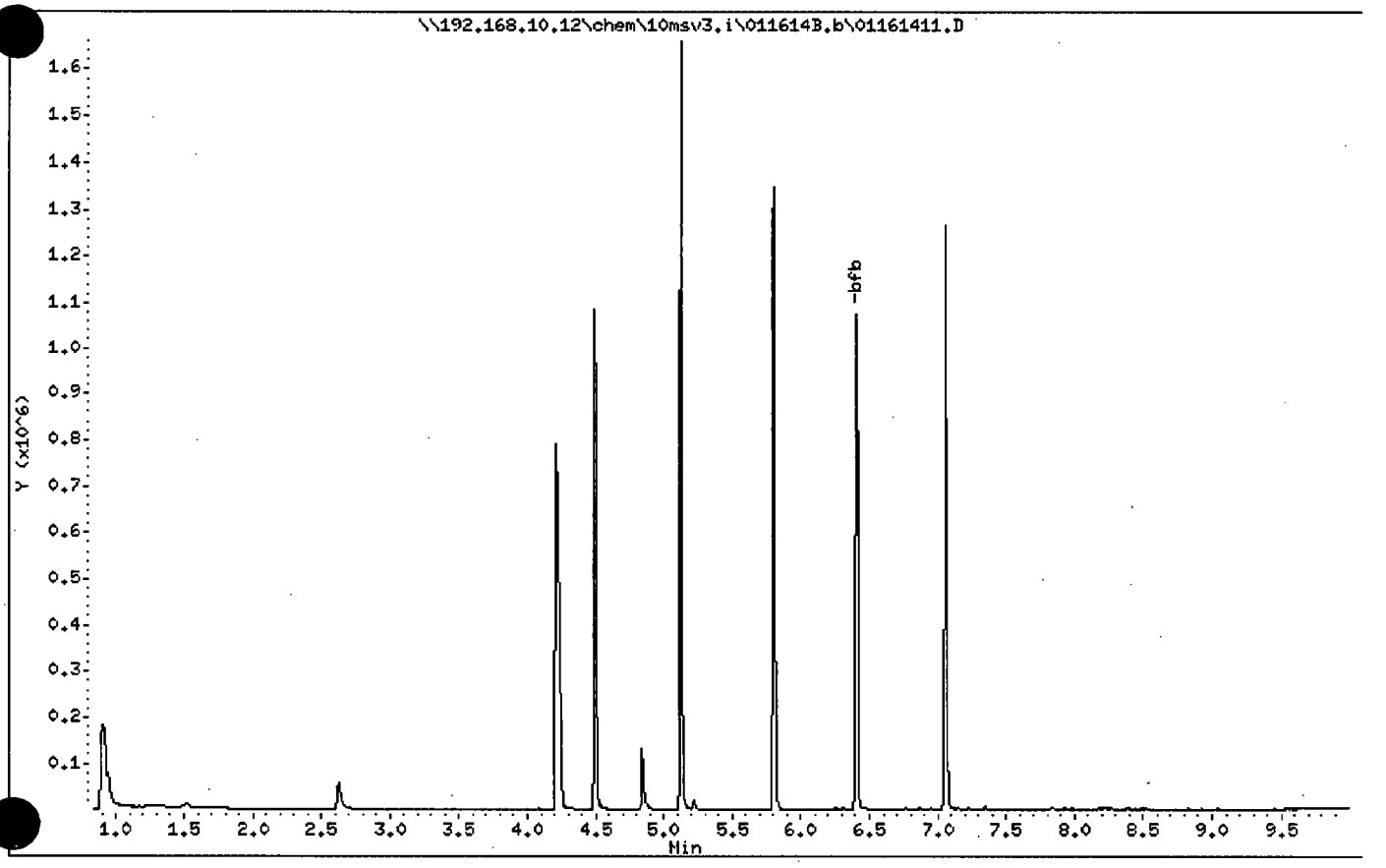
Instrument: 10msv3.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



Date : 16-JAN-2014 21:06

Client ID:

Instrument: 10msv3.i

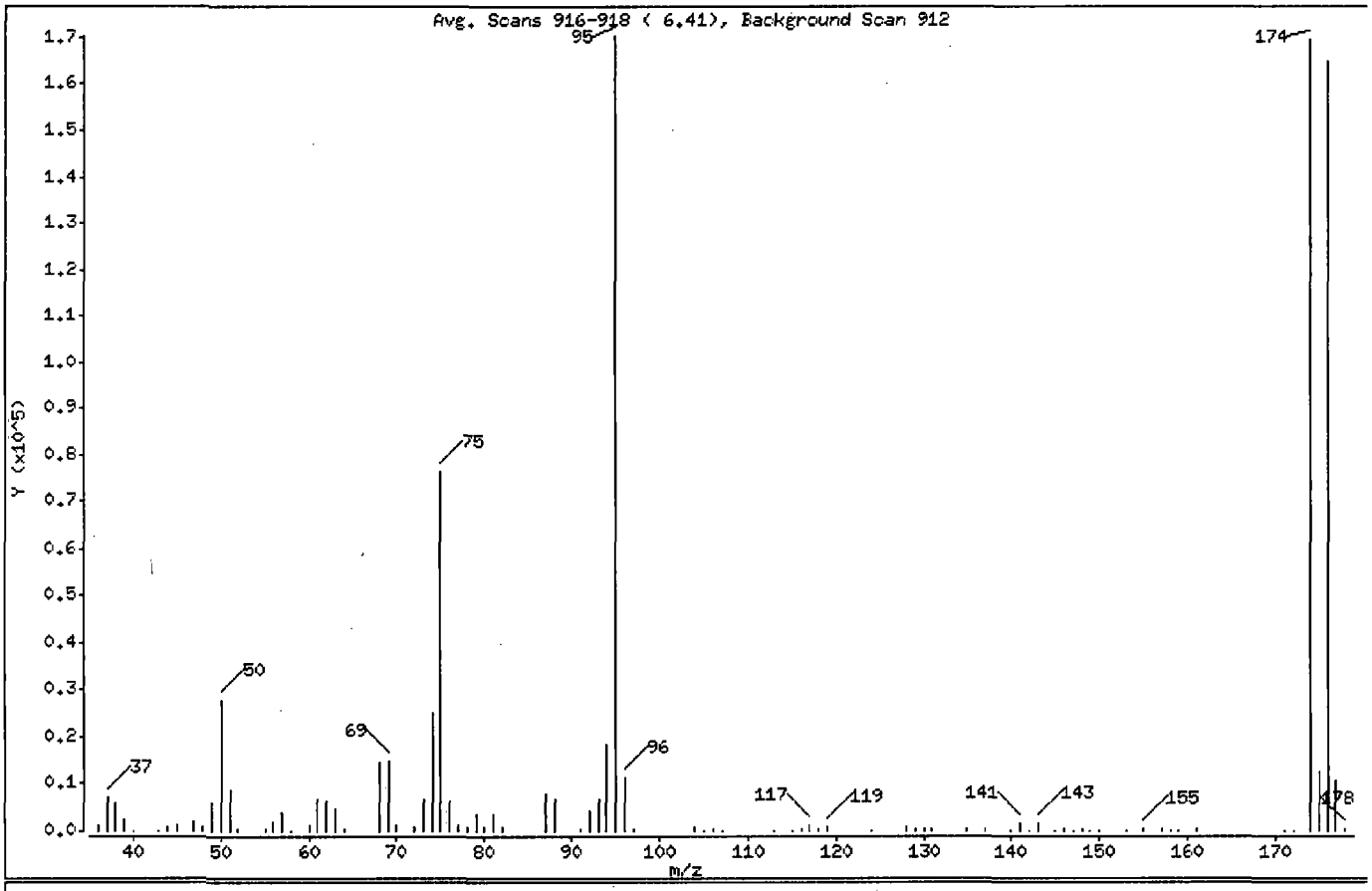
Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	16.34
75	30.00 - 66.00% of mass 95	44.89
96	5.00 - 9.00% of mass 95	6.64
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	99.62
175	4.00 - 9.00% of mass 174	7.37 (7.40)
176	93.00 - 101.00% of mass 174	96.88 (97.25)
177	5.00 - 9.00% of mass 176	6.28 (6.48)

Date : 16-JAN-2014 21:06

Client ID: Instrument: 10msv3.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS Column diameter: 0.18

Data File: 01161411.D
Spectrum: Avg. Scans 916-918 (6.41), Background Scan 912
Location of Maximum: 95.00
Number of points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1311	64.00	430	96.00	11304	143.00	1571
37.00	6959	68.00	14470	97.00	308	145.00	87
38.00	5973	69.00	14962	104.00	640	146.00	236
39.00	2229	70.00	1102	105.00	152	147.00	52
40.00	40	72.00	785	106.00	577	148.00	376
43.00	74	73.00	6757	107.00	122	149.00	64
44.00	725	74.00	25136	113.00	66	150.00	133
45.00	1157	75.00	76472	115.00	190	153.00	75
47.00	1965	76.00	6429	116.00	484	155.00	449
48.00	856	77.00	1050	117.00	984	157.00	342
49.00	6049	78.00	693	118.00	534	158.00	164
50.00	27840	79.00	3411	119.00	708	159.00	145
51.00	8697	80.00	942	124.00	51	161.00	203
52.00	375	81.00	3674	128.00	619	171.00	62
55.00	394	82.00	650	129.00	494	172.00	57
56.00	2074	87.00	7711	130.00	366	174.00	169728
57.00	3763	88.00	6800	131.00	232	175.00	12558
58.00	154	91.00	537	135.00	310	176.00	165056
60.00	1341	92.00	4226	137.00	294	177.00	10698
61.00	6795	93.00	6521	140.00	61	178.00	322
62.00	6437	94.00	18576	141.00	1469		
63.00	4765	95.00	170368	142.00	150		

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148
Lab File ID: 02031401.D BFB Injection Date: 02/03/2014
Instrument ID: 10MSV3 BFB Injection Time: 12:19
GC Column: Rtx-VMS ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
95	Base Peak, 100% relative abundance	100.00	
50	8.00 - 40.00% of mass 95	14.21	
75	30.00 - 66.00% of mass 95	41.48	
96	5.00 - 9.00% of mass 95	6.85	
173	Less than 2.00% of mass 174	0.00	(0.00)
174	50.00 - 120.00% of mass 95	105.84	
175	4.00 - 9.00% of mass 174	7.94	(7.50)
176	93.00 - 101.00% of mass 174	104.65	(98.88)
177	5.00 - 9.00% of mass 176	6.77	(6.47)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	V209525-486	V209525-486	02031402.D	02/03/2014	12:36
2	LCS for HBN 285546 [MSV/26266]	1618516	02031403.D	02/03/2014	13:25
3	SB-02 (1-2)(1618321MS)	1618517-MS	02031404.D	02/03/2014	13:42
4	BLANK for HBN 285546 [MSV/2626	1618515	02031407.D	02/03/2014	14:33
5	TRIP BLANK	10256148013	02031408.D	02/03/2014	14:51
6	TP-01 (0-1)(1618323DUP)	1618518-DUP	02031415.D	02/03/2014	16:51

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031401.D

Date : 03-FEB-2014 12:19

Client ID:

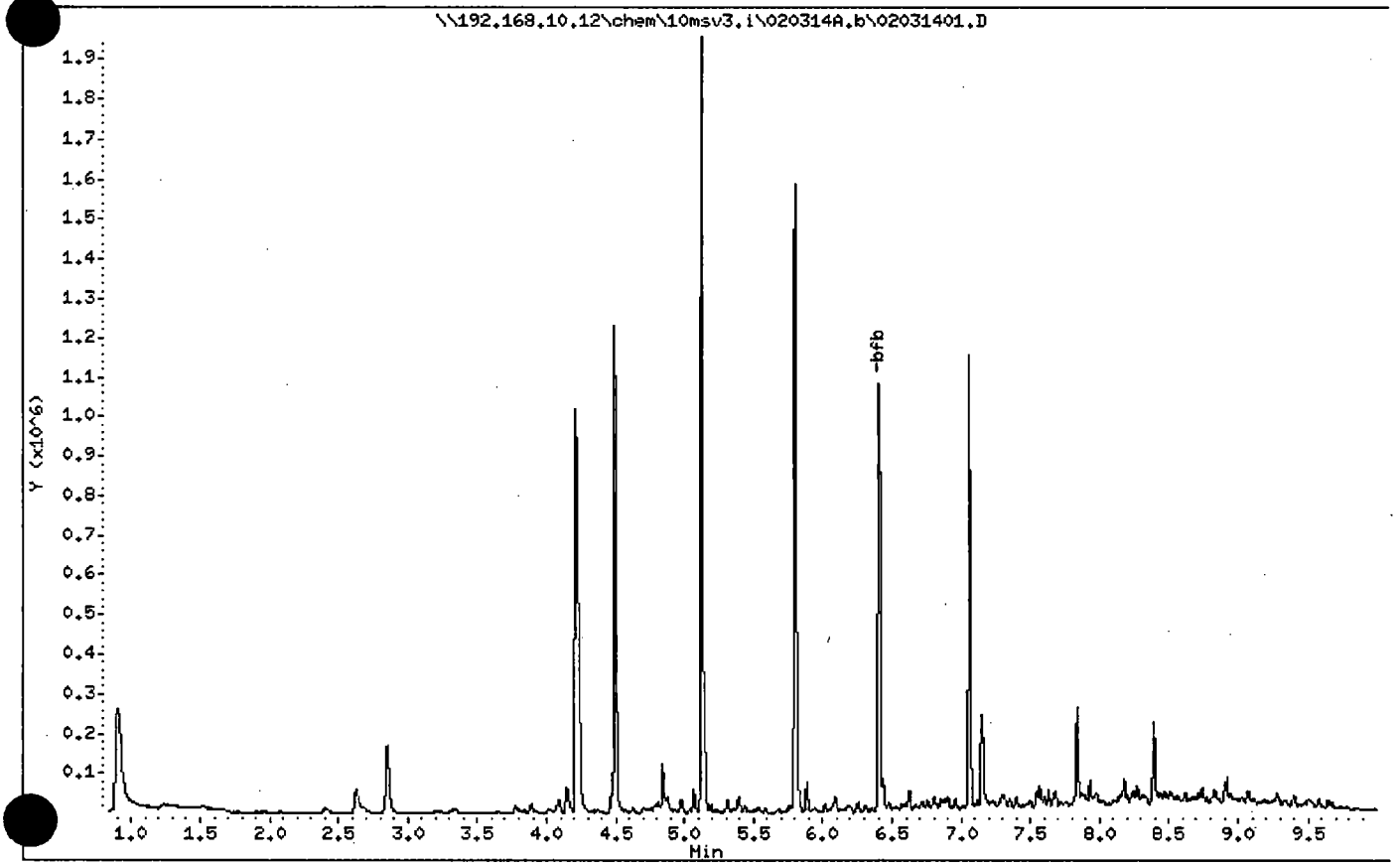
Instrument: 10msv3.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031401.D

Date : 03-FEB-2014 12:19

Client ID:

Instrument: 10msv3.i

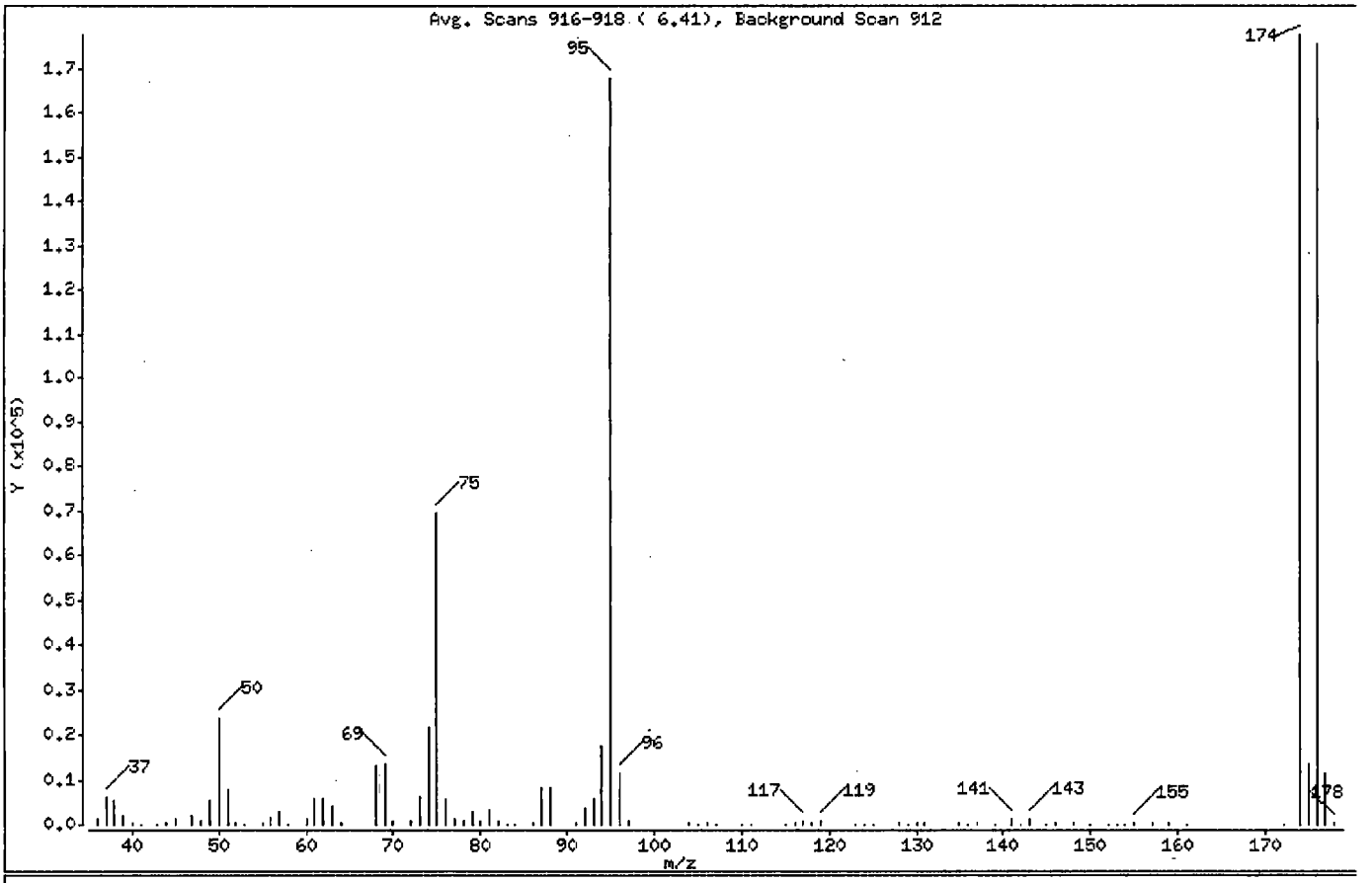
Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	14.21
75	30.00 - 66.00% of mass 95	41.48
96	5.00 - 9.00% of mass 95	6.85
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	105.84
175	4.00 - 9.00% of mass 174	7.94 (7.50)
176	93.00 - 101.00% of mass 174	104.65 (98.88)
177	5.00 - 9.00% of mass 176	6.77 (6.47)

Date : 03-FEB-2014 12:19

Client ID: Instrument: 10msv3.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS Column diameter: 0.18

Data File: 02031401.D
Spectrum: Avg. Scans 916-918 (6.41), Background Scan 912
Location of Maximum: 174.00
Number of points: 93

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1120	64.00	406	95.00	167808	139.00	51
37.00	5926	68.00	13022	96.00	11496	141.00	1215
38.00	5251	69.00	13400	97.00	619	142.00	74
39.00	2153	70.00	1015	104.00	492	143.00	1177
40.00	209	72.00	837	105.00	171	145.00	121
41.00	75	73.00	5956	106.00	552	146.00	265
43.00	148	74.00	21688	107.00	52	148.00	567
44.00	565	75.00	69608	110.00	160	150.00	196
45.00	1024	76.00	5698	111.00	81	152.00	50
47.00	2095	77.00	1109	115.00	66	153.00	74
48.00	808	78.00	752	116.00	429	154.00	70
49.00	5157	79.00	2726	117.00	969	155.00	469
50.00	23840	80.00	771	118.00	397	157.00	312
51.00	7605	81.00	3326	119.00	657	159.00	224
52.00	363	82.00	661	123.00	51	161.00	60
53.00	101	83.00	48	124.00	60	172.00	59
55.00	497	84.00	124	125.00	58	174.00	177600
56.00	1508	86.00	290	128.00	538	175.00	13326
57.00	2972	87.00	7999	129.00	168	176.00	175616
58.00	83	88.00	8062	130.00	567	177.00	11366
60.00	1173	91.00	518	131.00	210	178.00	309
61.00	5630	92.00	3724	135.00	275		
62.00	5586	93.00	5851	136.00	73		
63.00	4149	94.00	17400	137.00	265		

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148
Lab File ID: 012914003.D BFB Injection Date: 01/29/2014
Instrument ID: 10MSV7 BFB Injection Time: 13:11
GC Column: Rtx-VMS ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
95	Base Peak, 100% relative abundance	100.00	
50	8.00 - 40.00% of mass 95	15.57	
75	30.00 - 66.00% of mass 95	44.79	
96	5.00 - 9.00% of mass 95	6.39	
173	Less than 2.00% of mass 174	0.61	(0.59)
174	50.00 - 120.00% of mass 95	103.31	
175	4.00 - 9.00% of mass 174	7.23	(7.00)
176	93.00 - 101.00% of mass 174	100.72	(97.49)
177	5.00 - 9.00% of mass 176	6.46	(6.41)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	0.4ICAL10098-17	0.4ICAL10098-	012914004.D	01/29/2014	13:30
2	1.0ICAL10098-17	1.0ICAL10098-	012914005.D	01/29/2014	13:48
3	4.0ICAL10098-17	4.0ICAL10098-	012914006.D	01/29/2014	14:06
4	10ICAL10098-17	10ICAL10098-1	012914007.D	01/29/2014	14:25
5	20ICAL10098-17	20ICAL10098-1	012914008.D	01/29/2014	14:43
6	50ICAL10098-17	50ICAL10098-1	012914009.D	01/29/2014	15:01
7	100ICAL10098-17	100ICAL10098-	012914010.D	01/29/2014	15:20
8	250ICAL10098-17	250ICAL10098-	012914011.D	01/29/2014	15:38
9	ICV5010098-18	ICV5010098-18	012914014.D	01/29/2014	16:34

Data File: \\192.168.10.12\chem\10msv7.i\012914A.b\012914003.D

Date : 29-JAN-2014 13:11

Client ID:

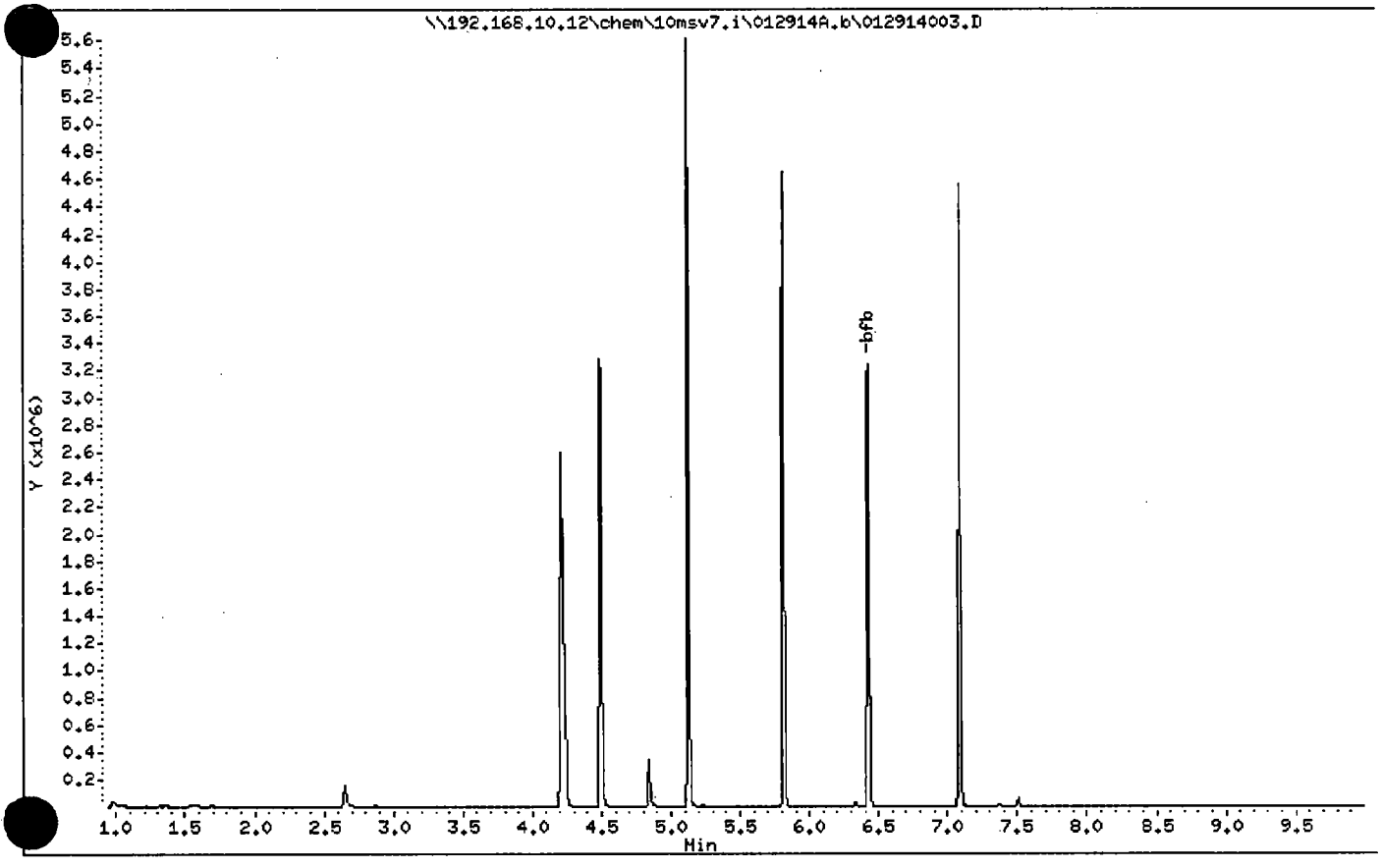
Instrument: 10msv7.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



Date : 29-JAN-2014 13:11

Client ID:

Instrument: 10msv7.i

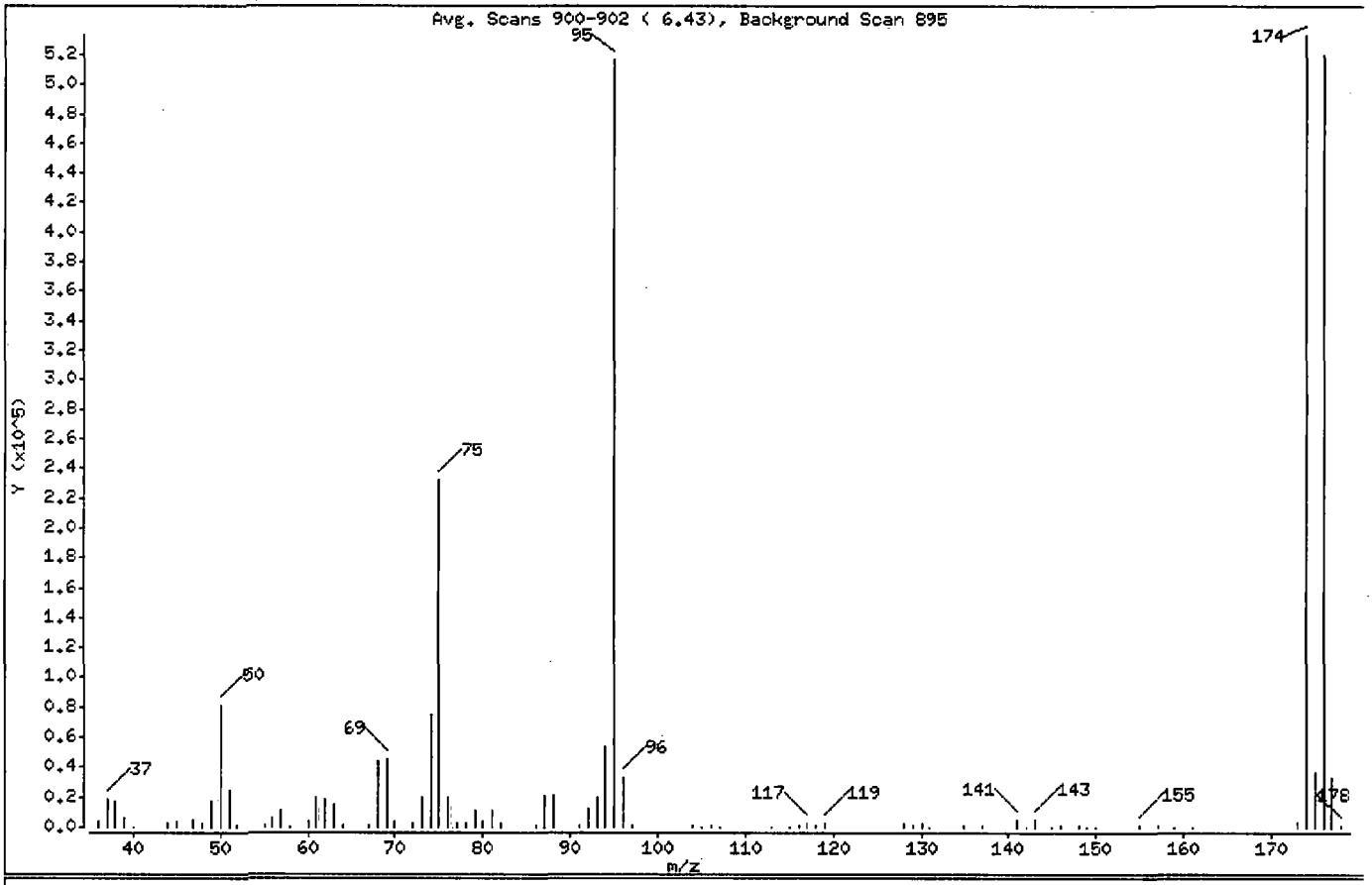
Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	15.57
75	30.00 - 66.00% of mass 95	44.79
96	5.00 - 9.00% of mass 95	6.39
173	Less than 2.00% of mass 174	0.61 (0.59)
174	50.00 - 120.00% of mass 95	103.31
175	4.00 - 9.00% of mass 174	7.23 (7.00)
176	93.00 - 101.00% of mass 174	100.72 (97.49)
177	5.00 - 9.00% of mass 176	6.46 (6.41)

Date : 29-JAN-2014 13:11

Client ID: Instrument: 10msv7.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS Column diameter: 0.18

Data File: 012914003.D
Spectrum: Avg. Scans 900-902 (6.43), Background Scan 895
Location of Maximum: 174.00
Number of points: 81

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3309	64.00	1325	93.00	19432	141.00	4353
37.00	18392	67.00	1025	94.00	54296	142.00	466
38.00	16648	68.00	44608	95.00	516288	143.00	4591
39.00	6369	69.00	44816	96.00	32976	145.00	173
40.00	506	70.00	3368	97.00	1019	146.00	871
44.00	1920	72.00	2332	104.00	1769	148.00	1264
45.00	3282	73.00	19176	105.00	503	149.00	364
47.00	5075	74.00	74432	106.00	1837	150.00	509
48.00	2360	75.00	231232	107.00	377	155.00	1553
49.00	17048	76.00	20032	113.00	173	157.00	1041
50.00	80384	77.00	2375	115.00	223	159.00	388
51.00	24016	78.00	1896	116.00	1501	161.00	526
52.00	916	79.00	10679	117.00	2774	173.00	3139
55.00	1056	80.00	3171	118.00	1666	174.00	533376
56.00	6257	81.00	11288	119.00	2405	175.00	37336
57.00	10640	82.00	2210	128.00	1870	176.00	520000
58.00	240	86.00	618	129.00	691	177.00	33328
60.00	3809	87.00	21264	130.00	1921	178.00	911
61.00	19224	88.00	20432	131.00	501		
62.00	18888	91.00	1551	135.00	725		
63.00	14463	92.00	12833	137.00	656		

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148
Lab File ID: 013014019.D BFB Injection Date: 01/30/2014
Instrument ID: 10MSV7 BFB Injection Time: 17:50
GC Column: Rtx-VMS ID: 0.18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
95	Base Peak, 100% relative abundance	100.00	
50	8.00 - 40.00% of mass 95	16.00	
75	30.00 - 66.00% of mass 95	46.32	
96	5.00 - 9.00% of mass 95	6.56	
173	Less than 2.00% of mass 174	0.62	(0.67)
174	50.00 - 120.00% of mass 95	93.49	
175	4.00 - 9.00% of mass 174	6.76	(7.23)
176	93.00 - 101.00% of mass 174	90.79	(97.10)
177	5.00 - 9.00% of mass 176	5.94	(6.54)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	V509525-477	V509525-477	013014020.D	01/30/2014	18:08
2	LCS for HBN 285327 [MSV/26253]	1617374	013014021.D	01/30/2014	18:26
3	SB-5 2-3(1616163MS)	1617375-MS	013014022.D	01/30/2014	18:44
4	SB-5 2-3(1616163MSD)	1617376-MSD	013014023.D	01/30/2014	19:02
5	BLANK for HBN 285327 [MSV/2625	1617373	013014026.D	01/30/2014	19:57
6	SB-1 2-3'	10256148001	013014027.D	01/30/2014	20:15
7	SB-1 20-21'	10256148002	013014028.D	01/30/2014	20:33
8	SB-2 2-3'	10256148003	013014029.D	01/30/2014	20:51
9	SB-2 22-23'	10256148004	013014030.D	01/30/2014	21:09
10	SB-3 3-5'	10256148005	013014031.D	01/30/2014	21:27
11	SB-3 25-27'	10256148006	013014032.D	01/30/2014	21:45
12	SB-4 2-3.5'	10256148007	013014033.D	01/30/2014	22:03
13	SB-4 19-20'	10256148008	013014034.D	01/30/2014	22:21
14	SB-5 2-3	10256148009	013014035.D	01/30/2014	22:39
15	SB-5 10-12'	10256148010	013014036.D	01/30/2014	22:57
16	DUP-001	10256148011	013014037.D	01/30/2014	23:14

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014019.D

Date : 30-JAN-2014 17:50

Client ID:

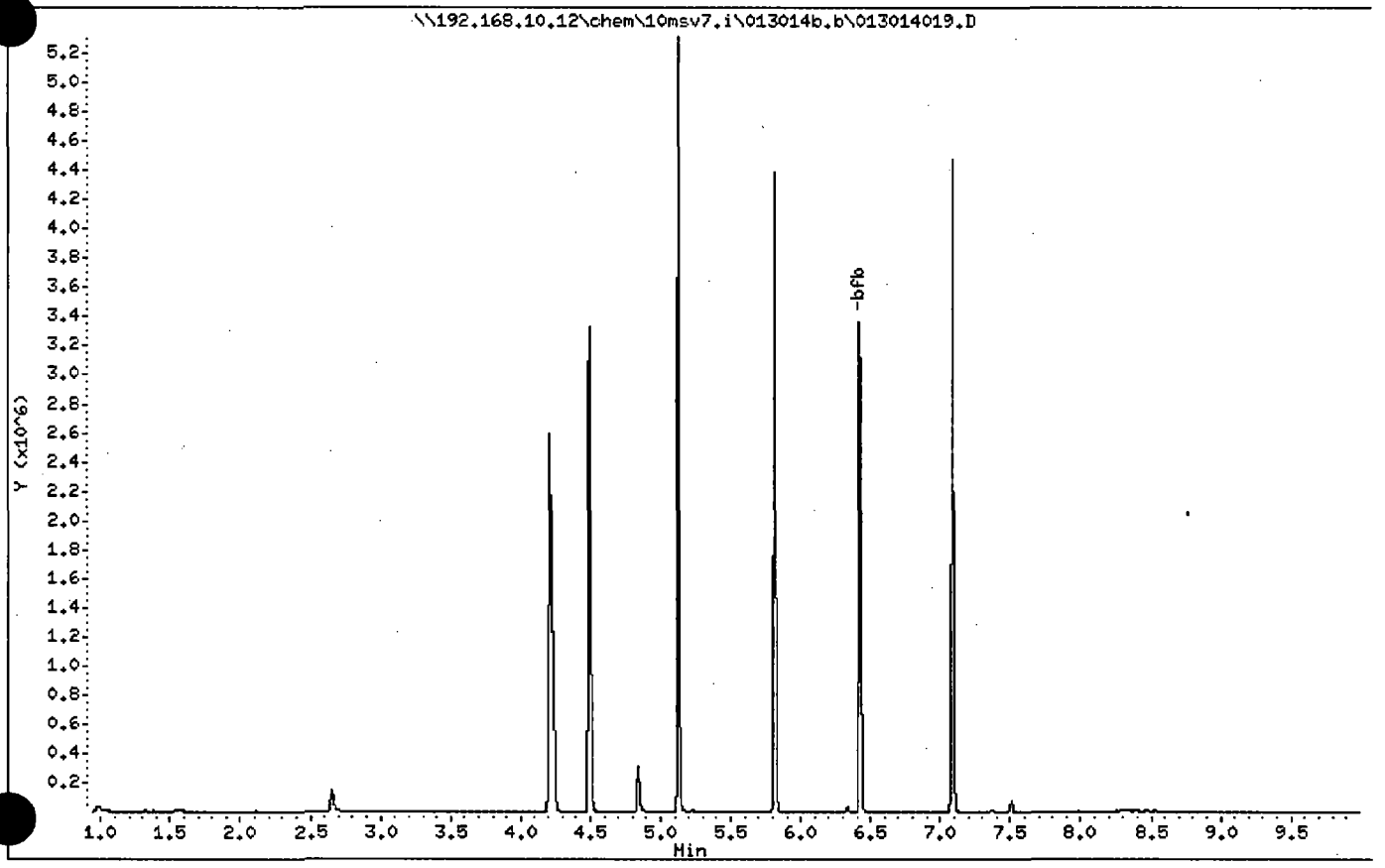
Instrument: 10msv7.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



Date : 30-JAN-2014 17:50

Client ID:

Instrument: 10msv7.i

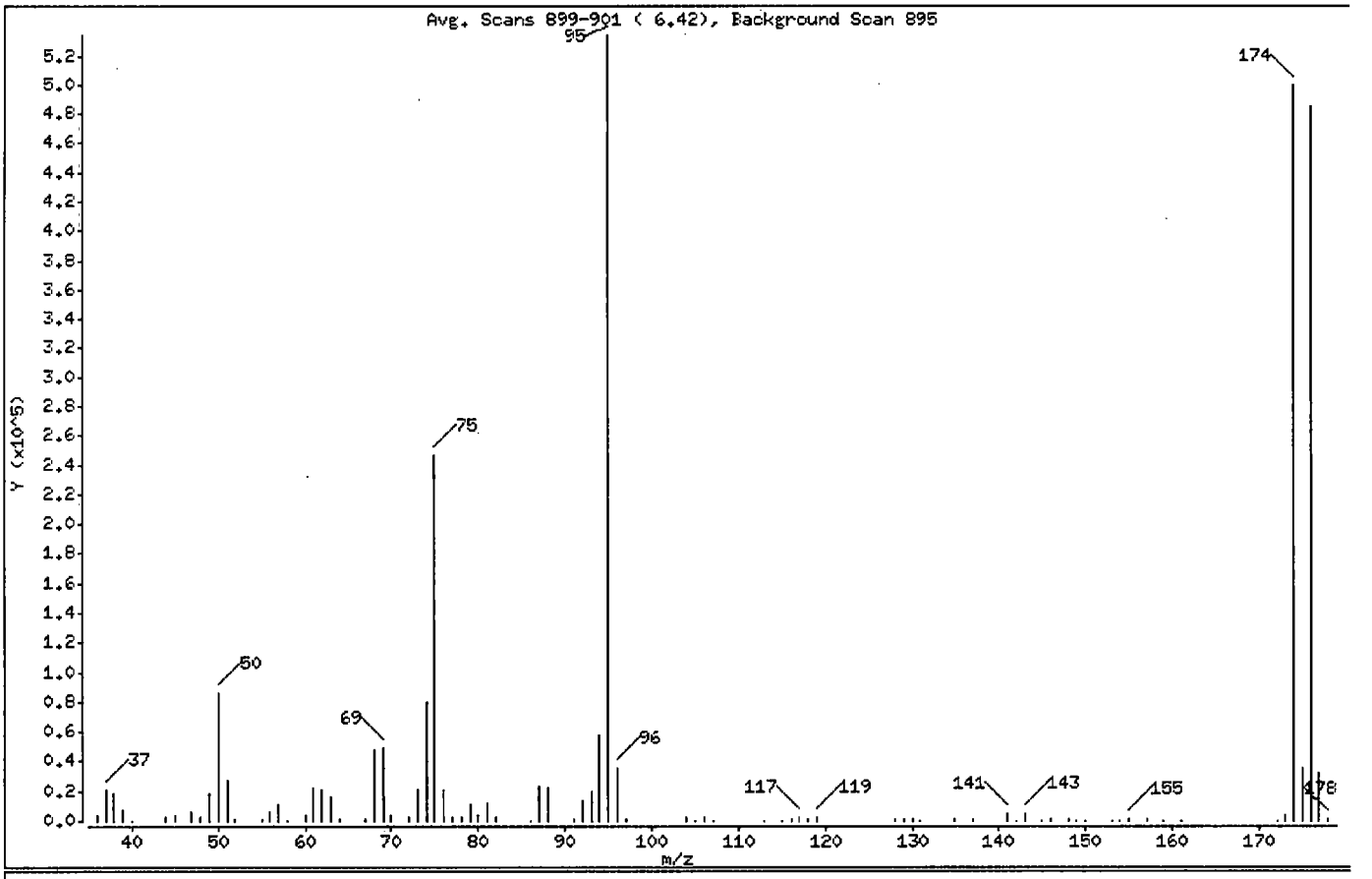
Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	16.00
75	30.00 - 66.00% of mass 95	46.32
96	5.00 - 9.00% of mass 95	6.56
173	Less than 2.00% of mass 174	0.62 (0.67)
174	50.00 - 120.00% of mass 95	93.49
175	4.00 - 9.00% of mass 174	6.76 (7.23)
176	93.00 - 101.00% of mass 174	90.79 (97.10)
177	5.00 - 9.00% of mass 176	5.94 (6.54)

Date : 30-JAN-2014 17:50

Client ID: Instrument: 10msv7.i

Sample Info: TUNE

Operator: HBP

Column phase: Rtx-VMS Column diameter: 0.18

Data File: 013014019.D

Spectrum: Avg. Scans 899-901 (6.42), Background Scan 895

Location of Maximum: 95.00

Number of points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3927	67.00	1134	95.00	534208	145.00	252
37.00	21296	68.00	48168	96.00	35056	146.00	622
38.00	18040	69.00	49056	97.00	852	148.00	1144
39.00	7048	70.00	3455	104.00	1853	149.00	176
40.00	460	72.00	2358	105.00	502	150.00	204
44.00	1936	73.00	20944	106.00	1996	153.00	230
45.00	3733	74.00	79384	107.00	186	154.00	353
47.00	5978	75.00	247424	113.00	179	155.00	1120
48.00	2755	76.00	21232	115.00	452	157.00	715
49.00	18528	77.00	2890	116.00	1548	159.00	441
50.00	85456	78.00	2013	117.00	2901	161.00	436
51.00	26944	79.00	11338	118.00	1632	172.00	178
52.00	1152	80.00	3232	119.00	2319	173.00	3326
55.00	1198	81.00	12100	128.00	1690	174.00	499456
56.00	6667	82.00	2343	129.00	652	175.00	36112
57.00	11513	86.00	216	130.00	1769	176.00	484992
58.00	272	87.00	23064	131.00	601	177.00	31712
60.00	4158	88.00	21904	135.00	842	178.00	772
61.00	21912	91.00	1635	137.00	659		
62.00	21288	92.00	13003	141.00	4425		
63.00	15611	93.00	19280	142.00	525		
64.00	1482	94.00	57536	143.00	4346		

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031402.D
Report Date: 04-Feb-2014 11:50

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv3.i Injection Date: 03-FEB-2014 12:36
Lab File ID: 02031402.D Init. Cal. Date(s): 16-JAN-2014 16-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 21:23 23:23
Lab Sample ID: V20 9525-486 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv3.i\020314A.b\v314-MLS-011614.m

COMPOUND	RRF / AMOUNT	RF20	CCAL RRF20	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.56384	0.43469	0.43469	0.100	-22.90625	40.00000	Averaged	
2 Chloromethane	20.00000	15.16948	0.60476	0.100	-24.15260	40.00000	Quadratic	
3 Vinyl Chloride	0.68466	0.58533	0.58533	0.100	-14.50864	20.00000	Averaged	
4 Bromomethane	20.00000	24.54859	0.34112	0.050	22.74295	40.00000	Quadratic	
5 Chloroethane	0.29052	0.31882	0.31882	0.050	9.74108	40.00000	Averaged	
6 Trichlorofluoromethane	0.52467	0.65345	0.65345	0.100	24.54658	40.00000	Averaged	
7 Dichlorofluoromethane	20.00000	33.38203	0.87030	0.010	66.91016	40.00000	Quadratic	<-
8 Diethyl ether (Ethyl Ether)	0.35888	0.34208	0.34208	0.010	-4.68170	40.00000	Averaged	
9 1,1-Dichloroethene	0.50504	0.46467	0.46467	0.100	-7.99366	20.00000	Averaged	
10 Carbon Disulfide	1.62823	1.50787	1.50787	0.100	-7.39211	40.00000	Averaged	
11 Trichlorotrifluoroethane	0.48477	0.44695	0.44695	0.010	-7.80217	40.00000	Averaged	
14 Allyl Chloride	0.76411	0.71443	0.71443	0.010	-6.50115	40.00000	Averaged	
15 Methylene Chloride	20.00000	18.93285	0.50393	0.100	-5.33577	40.00000	Quadratic	
17 Acetone	100	137	0.49275	0.010	37.16516	40.00000	Quadratic	
18 trans-1,2-Dichloroethene	0.52533	0.49994	0.49994	0.100	-4.83385	20.00000	Averaged	
19 Hexane	0.79597	1.06695	1.06695	0.010	34.04439	40.00000	Averaged	
20 Methyl-tert-butyl Ether	1.31605	1.19371	1.19371	0.300	-9.29628	20.00000	Averaged	
23 Isopropyl Ether	1.56395	1.44293	1.44293	0.010	-7.73808	40.00000	Averaged	
24 1,1-Dichloroethane	0.91892	0.82102	0.82102	0.200	-10.65312	20.00000	Averaged	
28 cis-1,2-Dichloroethene	0.58022	0.53881	0.53881	0.100	-7.13601	20.00000	Averaged	
29 2,2-Dichloropropane	0.74513	0.68673	0.68673	0.010	-7.83729	40.00000	Averaged	
30 Cyclohexane	0.80699	0.69879	0.69879	0.100	-13.40721	40.00000	Averaged	
31 Bromochloromethane	0.36142	0.34964	0.34964	0.010	-3.25771	40.00000	Averaged	
32 Chloroform	0.89493	0.79076	0.79076	0.200	-11.63986	20.00000	Averaged	
33 Carbon Tetrachloride	0.58165	0.55790	0.55790	0.100	-4.08401	40.00000	Averaged	
34 Tetrahydrofuran	0.58303	0.75314	0.75314	0.010	29.17782	40.00000	Averaged	
35 1,1,1-Trichloroethane	0.78544	0.67751	0.67751	0.100	-13.74161	20.00000	Averaged	
36 1,1-Dichloropropene	0.73527	0.63035	0.63035	0.010	-14.27001	40.00000	Averaged	
37 2-Butanone	0.19553	0.16287	0.16287	0.050	-16.70202	40.00000	Averaged	
38 Benzene	2.12700	1.94699	1.94699	0.500	-8.46271	20.00000	Averaged	
$ 41 1,2-Dichloroethane d4 (S)	0.47958	0.37476	0.37476	0.200	-21.85685	40.00000	Averaged	
42 1,2-Dichloroethane	0.64349	0.52146	0.52146	0.100	-18.96384	20.00000	Averaged	
45 Trichloroethene	0.40910	0.40915	0.40915	0.200	0.01167	20.00000	Averaged	
48 Dibromomethane	20.00000	21.42780	0.25691	0.010	7.13899	40.00000	Quadratic	
49 1,2-Dichloropropane	0.34354	0.34997	0.34997	0.100	1.87016	20.00000	Averaged	
50 Bromodichloromethane	0.42805	0.42293	0.42293	0.050	-1.19527	40.00000	Averaged	
54 cis-1,3-Dichloropropene	0.53137	0.53809	0.53809	0.050	1.26463	40.00000	Averaged	
$ 55 Toluene-d8 (S)	1.18389	1.20806	1.20806	0.200	2.04211	40.00000	Averaged	
56 Toluene	0.98029	0.97652	0.97652	0.400	-0.38468	20.00000	Averaged	
57 4-Methyl-2-Pentanone	0.30595	0.29145	0.29145	0.100	-4.73934	40.00000	Averaged	
58 Tetrachloroethene	0.44448	0.47494	0.47494	0.200	6.85347	40.00000	Averaged	
59 trans-1,3-Dichloropropene	0.51574	0.54662	0.54662	0.100	5.98841	40.00000	Averaged	

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv3.i Injection Date: 03-FEB-2014 12:36
Lab File ID: 02031402.D Init. Cal. Date(s): 16-JAN-2014 16-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 21:23 23:23
Lab Sample ID: V20 9525-486 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv3.i\020314A.b\v314-MLS-011614.m

COMPOUND	RRF / AMOUNT	RF20	CCAL RRF20	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
60 1,1,2-Trichloroethane	0.33537	0.34508	0.34508	0.100	2.89667	40.00000	Averaged
61 Dibromochloromethane	0.33921	0.39589	0.39589	0.100	16.70831	40.00000	Averaged
62 1,3-Dichloropropane	0.55908	0.56075	0.56075	0.010	0.29959	40.00000	Averaged
63 1,2-Dibromoethane	0.35572	0.36945	0.36945	0.100	3.85908	20.00000	Averaged
64 2-Hexanone	0.20997	0.20662	0.20662	0.050	-1.59146	40.00000	Averaged
66 Chlorobenzene	1.06108	1.05410	1.05410	0.500	-0.65805	40.00000	Averaged
67 Ethylbenzene	1.77378	1.68599	1.68599	0.300	-4.94906	20.00000	Averaged
68 1,1,1,2-Tetrachloroethane	0.34958	0.38727	0.38727	0.010	10.78107	40.00000	Averaged
69 M&P-Xylene	0.67442	0.67414	0.67414	0.300	-0.04148	20.00000	Averaged
70 O-Xylene (1,2-Dimethylbenze	0.62843	0.63703	0.63703	0.300	1.36842	20.00000	Averaged
71 Styrene	1.11090	1.14460	1.14460	0.300	3.03408	40.00000	Averaged
72 Bromoform	0.24558	0.30472	0.30472	0.100	24.07854	40.00000	Averaged
73 Isopropylbenzene (Cumene)	1.55242	1.48577	1.48577	0.100	-4.29317	20.00000	Averaged
$ 74 4-Bromofluorobenzene (S)	0.86745	0.81060	0.81060	0.200	-6.55305	40.00000	Averaged
76 Bromobenzene	0.87536	0.86126	0.86126	0.010	-1.61013	40.00000	Averaged
77 n-Propylbenzene	3.20479	2.85998	2.85998	0.010	-10.75932	20.00000	Averaged
78 1,1,2,2-Tetrachloroethane	0.77052	0.74838	0.74838	0.300	-2.87335	40.00000	Averaged
79 2-Chlorotoluene	2.13995	1.89010	1.89010	0.010	-11.67568	40.00000	Averaged
80 1,3,5-Trimethylbenzene	2.27037	2.06354	2.06354	0.300	-9.10979	20.00000	Averaged
81 1,2,3-Trichloropropane	0.23371	0.21921	0.21921	0.010	-6.20423	40.00000	Averaged
83 4-Chlorotoluene	2.06279	1.86370	1.86370	0.010	-9.65150	40.00000	Averaged
84 tert-Butylbenzene	1.85988	1.69382	1.69382	0.010	-8.92830	40.00000	Averaged
85 1,2,4-Trimethylbenzene	2.28481	2.06272	2.06272	0.300	-9.72021	20.00000	Averaged
86 sec-Butylbenzene	2.57853	2.26016	2.26016	0.010	-12.34715	40.00000	Averaged
87 p-Isopropyltoluene	2.18596	1.95492	1.95492	0.010	-10.56915	40.00000	Averaged
88 1,3-Dichlorobenzene	1.40494	1.36499	1.36499	0.600	-2.84399	40.00000	Averaged
90 1,4-Dichlorobenzene	1.49831	1.47089	1.47089	0.500	-1.83051	40.00000	Averaged
92 n-Butylbenzene	1.78828	1.53139	1.53139	0.010	-14.36530	40.00000	Averaged
93 1,2-Dichlorobenzene	1.36653	1.34397	1.34397	0.400	-1.65104	40.00000	Averaged
94 1,2-Dibromo-3-Chloropropane	0.14628	0.15576	0.15576	0.010	6.48180	40.00000	Averaged
95 Hexachlorobutadiene	0.32843	0.32848	0.32848	0.010	0.01317	40.00000	Averaged
96 1,2,4-Trichlorobenzene	0.66561	0.62793	0.62793	0.200	-5.66119	40.00000	Averaged
97 Naphthalene	1.74611	1.48877	1.48877	0.300	-14.73817	20.00000	Averaged
98 1,2,3-Trichlorobenzene	0.61848	0.56662	0.56662	0.010	-8.38448	40.00000	Averaged

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv3.i\020314A.b\02031402.D
Lab Smp Id: V20 9525-486
Inj Date : 03-FEB-2014 12:36
Operator : HBP Inst ID: 10msv3.i
Smp Info : V20 9525-486,1,2
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv3.i\020314A.b\v314-MLS-011614.m
Meth Date : 03-Feb-2014 11:11 hpham Quant Type: ISTD
Cal Date : 16-JAN-2014 23:23 Cal File: 01161419.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 465W+hex.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * Vt/(Va * Ws * (1-(M/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.029	1.029	(0.244)	64571	20.0000	15.4
2	Chloromethane	50	1.163	1.163	(0.276)	89835	20.0000	15.2
3	Vinyl Chloride	62	1.224	1.224	(0.290)	86948	20.0000	17.1
4	Bromomethane	94	1.455	1.455	(0.345)	50672	20.0000	24.5
5	Chloroethane	64	1.546	1.546	(0.367)	47359	20.0000	21.9
6	Trichlorofluoromethane	101	1.656	1.656	(0.393)	97068	20.0000	24.9
7	Dichlorofluoromethane	67	1.711	1.711	(0.406)	129280	20.0000	33.4
8	Diethyl ether (Ethyl Ether)	59	1.924	1.924	(0.456)	50815	20.0000	19.1
9	1,1-Dichloroethene	96	2.070	2.070	(0.491)	69025	20.0000	18.4
10	Carbon Disulfide	76	2.082	2.082	(0.494)	223988	20.0000	18.5
11	Trichlorotrifluoroethane	101	2.118	2.118	(0.502)	66393	20.0000	18.4
14	Allyl Chloride	41	2.514	2.514	(0.596)	106126	20.0000	18.7
15	Methylene Chloride	84	2.617	2.617	(0.621)	74857	20.0000	18.9
* 16	Acetone d6	46	2.623	2.623	(1.000)	52518	100.000	
17	Acetone	58	2.672	2.672	(1.019)	25878	100.000	137
18	trans-1,2-Dichloroethene	96	2.763	2.763	(0.655)	74264	20.0000	19.0
19	Hexane	86	2.848	2.848	(1.086)	28017	50.0000	67.0
20	Methyl-tert-butyl Ether	73	2.873	2.873	(0.681)	177321	20.0000	18.1(Q)
23	Isopropyl Ether	45	3.195	3.195	(0.758)	214342	20.0000	18.4

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	24 1,1-Dichloroethane	63	3.262	3.262	(0.774)	121960	20.0000	17.9
	28 cis-1,2-Dichloroethene	96	3.639	3.639	(0.863)	80039	20.0000	18.6
	29 2,2-Dichloropropane	77	3.706	3.706	(0.879)	102011	20.0000	18.4
	30 Cyclohexane	56	3.755	3.755	(0.890)	519016	100.000	86.6
	31 Bromochloromethane	130	3.767	3.767	(0.893)	51938	20.0000	19.3
	32 Chloroform	83	3.822	3.822	(0.906)	117465	20.0000	17.7
	33 Carbon Tetrachloride	117	3.895	3.895	(0.924)	82874	20.0000	19.2
	34 Tetrahydrofuran	72	3.907	3.907	(1.489)	79107	200.000	258
	35 1,1,1-Trichloroethane	97	3.937	3.937	(0.934)	100641	20.0000	17.2(Q)
	36 1,1-Dichloropropene	75	4.010	4.010	(0.951)	93636	20.0000	17.1
	37 2-Butanone	43	4.010	4.010	(0.951)	120968	100.000	83.3
	38 Benzene	78	4.156	4.156	(0.986)	289219	20.0000	18.3
*	39 Pentafluorobenzene	168	4.217	4.217	(1.000)	371366	50.0000	
$	41 1,2-Dichloroethane d4 (S)	65	4.235	4.235	(1.004)	139173	50.0000	39.1
	42 1,2-Dichloroethane	62	4.272	4.272	(1.013)	77461	20.0000	16.2
	45 Trichloroethene	130	4.479	4.479	(0.996)	85169	20.0000	20.0
*	46 1,4 Difluorobenzene	114	4.497	4.497	(1.000)	520400	50.0000	
	48 Dibromomethane	174	4.686	4.686	(1.042)	53478	20.0000	21.4
	49 1,2-Dichloropropane	63	4.734	4.734	(1.053)	72849	20.0000	20.4
	50 Bromodichloromethane	83	4.765	4.765	(1.060)	88038	20.0000	19.8
*	51 1,4 dioxane d8	96	4.844	4.844	(1.000)	62794	2000.00	
	54 cis-1,3-Dichloropropene	75	5.044	5.044	(1.122)	112009	20.0000	20.2
$	55 Toluene-d8 (S)	98	5.124	5.124	(0.883)	559665	50.0000	51.0
	56 Toluene	92	5.148	5.148	(0.887)	180959	20.0000	19.9
	57 4-Methyl-2-Pentanone	43	5.300	5.300	(0.913)	270045	100.000	95.3
	58 Tetrachloroethene	166	5.312	5.312	(0.915)	88011	20.0000	21.4
	59 trans-1,3-Dichloropropene	75	5.318	5.318	(0.916)	101294	20.0000	21.2(Q)
	60 1,1,2-Trichloroethane	97	5.391	5.391	(0.929)	63947	20.0000	20.6
	61 Dibromochloromethane	129	5.470	5.470	(0.942)	73362	20.0000	23.3
	62 1,3-Dichloropropane	76	5.507	5.507	(0.949)	103913	20.0000	20.0
	63 1,2-Dibromoethane	107	5.574	5.574	(0.960)	68462	20.0000	20.8
	64 2-Hexanone	43	5.659	5.659	(0.975)	191447	100.000	98.4
*	65 Chlorobenzene-d5	117	5.805	5.805	(1.000)	463274	50.0000	
	66 Chlorobenzene	112	5.811	5.811	(1.001)	195334	20.0000	19.9
	67 Ethylbenzene	91	5.817	5.817	(1.002)	312431	20.0000	19.0
	68 1,1,1,2-Tetrachloroethane	131	5.835	5.835	(1.005)	71765	20.0000	22.2
	69 M&P-Xylene	106	5.884	5.884	(1.014)	249850	40.0000	40.0
	70 O-Xylene (1,2-Dimethylbenzene)	106	6.091	6.091	(1.049)	118048	20.0000	20.3
	71 Styrene	104	6.121	6.121	(1.054)	212106	20.0000	20.6
	72 Bromoform	173	6.139	6.139	(1.058)	56467	20.0000	24.8(Q)
	73 Isopropylbenzene (Cumene)	105	6.249	6.249	(1.076)	275327	20.0000	19.1
$	74 4-Bromofluorobenzene (S)	95	6.407	6.407	(0.908)	212815	50.0000	46.7
	76 Bromobenzene	156	6.468	6.468	(0.916)	90446	20.0000	19.7
	77 n-Propylbenzene	91	6.468	6.468	(0.916)	300342	20.0000	17.8
	78 1,1,2,2-Tetrachloroethane	83	6.505	6.505	(0.922)	78592	20.0000	19.4
	79 2-Chlorotoluene	91	6.565	6.565	(0.930)	198490	20.0000	17.7
	80 1,3,5-Trimethylbenzene	105	6.571	6.571	(0.931)	216704	20.0000	18.2
	81 1,2,3-Trichloropropane	110	6.590	6.590	(0.934)	23020	20.0000	18.8
	83 4-Chlorotoluene	91	6.657	6.657	(0.943)	195718	20.0000	18.1
	84 tert-Butylbenzene	119	6.760	6.760	(0.958)	177878	20.0000	18.2
	85 1,2,4-Trimethylbenzene	105	6.803	6.803	(0.964)	216618	20.0000	18.0
	86 sec-Butylbenzene	105	6.870	6.870	(0.973)	237352	20.0000	17.5
	87 p-Isopropyltoluene	119	6.955	6.955	(0.985)	205297	20.0000	17.9
	88 1,3-Dichlorobenzene	146	7.016	7.016	(0.994)	143345	20.0000	19.4

Report Date: 04-Feb-2014 11:50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
* 89 1,4-Dichlorobenzene-d4	152	7.058	7.058	(1.000)	262539	50.0000	
90 1,4-Dichlorobenzene	146	7.070	7.070	(1.002)	154466	20.0000	19.6
92 n-Butylbenzene	91	7.228	7.228	(1.024)	160820	20.0000	17.1
93 1,2-Dichlorobenzene	146	7.350	7.350	(1.041)	141138	20.0000	19.7
94 1,2-Dibromo-3-Chloropropane	157	7.843	7.843	(1.111)	40893	50.0000	53.2
95 Hexachlorobutadiene	225	8.208	8.208	(1.163)	34495	20.0000	20.0
96 1,2,4-Trichlorobenzene	180	8.226	8.226	(1.165)	65942	20.0000	18.9
97 Naphthalene	128	8.409	8.409	(1.191)	156344	20.0000	17.0
98 1,2,3-Trichlorobenzene	180	8.518	8.518	(1.207)	59504	20.0000	18.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Report Date: 04-Feb-2014 11:50

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv3.i
Lab File ID: 02031402.D
Lab Smp Id: V20 9525-486
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv3.i\020314A.b\v314-MLS-011614.m
Misc Info:

Calibration Date: 30-JAN-2014
Calibration Time: 11:49
Level: MED
Sample Type: SOIL

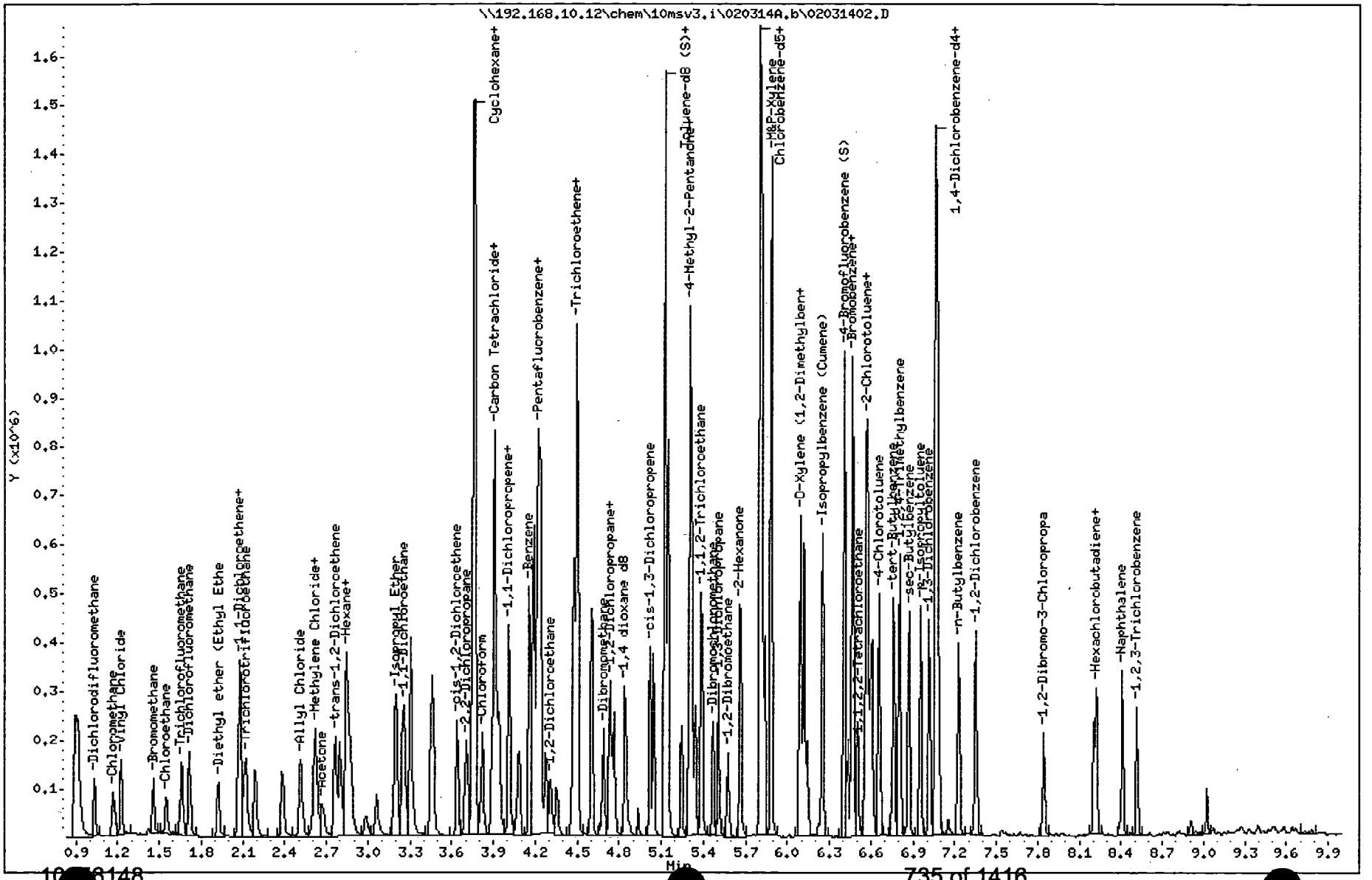
Test Mode:
Use Last Calibration Run.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	80423	40212	160846	52518	-34.70
39 Pentafluorobenzen	375691	187846	751382	371366	-1.15
46 1,4 Difluorobenze	552756	276378	1105512	520400	-5.85
51 1,4 dioxane d8	72712	36356	145424	62794	-13.64
65 Chlorobenzene-d5	532816	266408	1065632	463274	-13.05
89 1,4-Dichlorobenze	290523	145262	581046	262539	-9.63

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	2.66	2.16	3.16	2.62	-1.37
39 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
46 1,4 Difluorobenze	4.50	4.00	5.00	4.50	0.00
51 1,4 dioxane d8	4.86	4.36	5.36	4.84	-0.25
65 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
89 1,4-Dichlorobenze	7.06	6.56	7.56	7.06	-0.08

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031402.D
Date : 03-FEB-2014 12:36
Client ID:
Instrument: 10msv3.i
Sample Info: V20 9525-486,1,2
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Instrument: 10msv3.i
Lab Sample ID: V20 9525-486
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014020.D
Report Date: 03-Feb-2014 09:20

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 30-JAN-2014 18:08
Lab File ID: 013014020.D Init. Cal. Date(s): 29-JAN-2014 29-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 13:30 15:38
Lab Sample ID: V50 9525-477 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	0.35934	0.34783	0.34783	0.100	-3.20371	40.00000	Averaged
2 Chloromethane	0.36214	0.38105	0.38105	0.100	5.22044	40.00000	Averaged
3 Vinyl Chloride	0.42298	0.42625	0.42625	0.100	0.77379	20.00000	Averaged
4 Bromomethane	50.00000	50.12812	0.25184	0.050	0.25625	40.00000	Quadratic
5 Chloroethane	50.00000	54.96014	0.20018	0.050	9.92027	40.00000	Quadratic
6 Trichlorofluoromethane	*0.56726*	*0.56535*	*0.56535*	*0.100*	*-0.33661*	*40.00000*	Averaged
7 Dichlorofluoromethane	0.74784	0.75094	0.75094	0.010	0.41487	40.00000	Averaged
8 Diethyl ether (Ethyl Ether)	0.25524	0.26194	0.26194	0.010	2.62378	40.00000	Averaged
9 1,1-Dichloroethene	0.35180	0.37876	0.37876	0.100	7.66274	20.00000	Averaged
10 Carbon Disulfide	1.32264	1.32190	1.32190	0.100	-0.05577	40.00000	Averaged
11 Ethanol	1.39627	1.46091	1.46091	0.050	4.62917	40.00000	Averaged
12 Trichlorotrifluoroethane	0.38404	0.38762	0.38762	0.010	0.93195	40.00000	Averaged
13 Iodomethane	50.00000	51.15920	0.57050	0.010	2.31840	40.00000	Quadratic
14 Acrolein	0.04776	0.05084	0.05084	0.010	6.43785	40.00000	Averaged
15 Allyl Chloride	0.50230	0.53791	0.53791	0.010	7.08794	40.00000	Averaged
16 Methylene Chloride	50.00000	49.92210	0.41730	0.100	-0.15580	40.00000	Quadratic
17 Isopropanol	*500*	*504*	*7.19894*	*0.010*	*0.84925*	*40.00000*	Quadratic
19 Acetone	250	257	0.35679	0.010	2.80994	40.00000	Quadratic
20 trans-1,2-Dichloroethene	0.39946	0.42796	0.42796	0.100	7.13567	20.00000	Averaged
21 Hexane	1.49889	1.54143	1.54143	0.010	2.83843	40.00000	Averaged
22 Methyl-tert-butyl Ether	0.98010	1.01514	1.01514	0.300	3.57528	20.00000	Averaged
23 tert-Butyl Alcohol	11.73460	12.07267	12.07267	0.010	2.88096	40.00000	Averaged
24 Acetonitrile	0.03215	0.02996	0.02996	0.010	-6.80541	40.00000	Averaged
25 Isopropyl Ether	1.14972	1.17794	1.17794	0.010	2.45486	40.00000	Averaged
26 Acrylonitrile	0.05765	0.05978	0.05978	0.010	3.70348	40.00000	Averaged
27 1,1-Dichloroethane	0.67441	0.71149	0.71149	0.200	5.49862	20.00000	Averaged
28 Ethyl-tert-butyl ether	1.08479	1.11391	1.11391	0.010	2.68454	40.00000	Averaged
29 Vinyl Acetate	0.70425	0.75270	0.75270	0.010	6.87908	40.00000	Averaged
30 cis-1,2-Dichloroethene	0.43844	0.45299	0.45299	0.100	3.31864	20.00000	Averaged
31 2,2-Dichloropropane	0.58886	0.61103	0.61103	0.010	3.76519	40.00000	Averaged
32 Cyclohexane	0.67343	0.68254	0.68254	0.100	1.35289	40.00000	Averaged
33 Bromochloromethane	0.26707	0.28438	0.28438	0.010	6.47836	40.00000	Averaged
34 Chloroform	0.70140	0.73022	0.73022	0.200	4.10867	20.00000	Averaged
35 Carbon Tetrachloride	0.51469	0.53445	0.53445	0.100	3.83934	40.00000	Averaged
36 Tetrahydrofuran	0.62067	0.66101	0.66101	0.010	6.50081	40.00000	Averaged
37 1,1,1-Trichloroethane	0.60815	0.64223	0.64223	0.100	5.60419	20.00000	Averaged
38 2-Butanone	0.12629	0.12950	0.12950	0.050	2.54240	40.00000	Averaged
39 1,1-Dichloropropene	0.56084	0.58474	0.58474	0.010	4.26231	40.00000	Averaged
40 Benzene	1.68182	1.70561	1.70561	0.500	1.41447	20.00000	Averaged
42 Tert-amyl methyl ether	1.11200	1.10318	1.10318	0.010	-0.79297	40.00000	Averaged
$ 43 1,2-Dichloroethane d4 (S)	0.36991	0.36263	0.36263	0.200	-1.96756	40.00000	Averaged
44 1,2-Dichloroethane	0.45995	0.48380	0.48380	0.100	5.18370	20.00000	Averaged

Report Date: 03-Feb-2014 09:20

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 30-JAN-2014 18:08
Lab File ID: 013014020.D Init. Cal. Date(s): 29-JAN-2014 29-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 13:30 15:38
Lab Sample ID: V50 9525-477 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
45 Isobutanol	4.77549	5.04176	5.04176	0.010	5.57565	40.00000	Averaged
46 Tert-Amyl Alcohol	10.18089	10.52965	10.52965	0.010	3.42560	40.00000	Averaged
47 Trichloroethene	0.34912	0.37209	0.37209	0.200	6.57854	20.00000	Averaged
49 Tert-amyl ethyl ether	0.62014	0.65001	0.65001	0.010	4.81716	40.00000	Averaged
50 Dibromomethane	0.18892	0.20337	0.20337	0.010	7.65285	40.00000	Averaged
51 1,2-Dichloropropane	0.27795	0.28873	0.28873	0.100	3.87684	20.00000	Averaged
52 Bromodichloromethane	0.37202	0.39441	0.39441	0.050	6.01875	40.00000	Averaged
54 1,4-Dioxane (P-Dioxane)	1.37321	1.43904	1.43904	0.010	4.79403	40.00000	Averaged
55 2-Chloroethyl Vinyl Ether	125	104	0.00346	0.010	-17.08424	40.00000	Linear<-
56 cis-1,3-Dichloropropene	0.45074	0.48686	0.48686	0.050	8.01459	40.00000	Averaged
$ 57 Toluene-d8 (S)	1.26062	1.25295	1.25295	0.200	-0.60794	40.00000	Averaged
58 Toluene	0.90416	0.88967	0.88967	0.400	-1.60228	20.00000	Averaged
59 4-Methyl-2-Pentanone	0.23101	0.23273	0.23273	0.100	0.74372	40.00000	Averaged
60 Tetrachloroethene	0.43089	0.45202	0.45202	0.200	4.90284	20.00000	Averaged
61 trans-1,3-Dichloropropene	0.43934	0.47044	0.47044	0.100	7.07944	40.00000	Averaged
62 1,1,2-Trichloroethane	0.26064	0.27235	0.27235	0.100	4.49444	40.00000	Averaged
63 Dibromochloromethane	0.31217	0.33350	0.33350	0.100	6.83302	40.00000	Averaged
64 1,3-Dichloropropane	0.43558	0.45562	0.45562	0.010	4.59959	40.00000	Averaged
65 1,2-Dibromoethane	0.27442	0.28252	0.28252	0.100	2.95281	20.00000	Averaged
66 2-Hexanone	0.16851	0.16959	0.16959	0.050	0.64161	40.00000	Averaged
68 Chlorobenzene	0.99270	1.02660	1.02660	0.500	3.41499	40.00000	Averaged
69 Ethylbenzene	1.77188	1.72836	1.72836	0.300	-2.45657	20.00000	Averaged
70 1,1,1,2-Tetrachloroethane	0.34265	0.36331	0.36331	0.010	6.02966	40.00000	Averaged
71 M&P-Xylene	0.66268	0.68910	0.68910	0.300	3.98666	20.00000	Averaged
72 O-Xylene (1,2-Dimethylbenze	0.63445	0.65454	0.65454	0.300	3.16738	20.00000	Averaged
73 Styrene	1.06209	1.15028	1.15028	0.300	8.30380	40.00000	Averaged
74 Bromoform	0.23088	0.24747	0.24747	0.100	7.18189	40.00000	Averaged
75 Isopropylbenzene (Cumene)	1.72409	1.76136	1.76136	0.100	2.16153	20.00000	Averaged
$ 76 4-Bromofluorobenzene (S)	0.80766	0.79807	0.79807	0.200	-1.18756	40.00000	Averaged
77 cis-1,4-Dichloro-2-Butene	0.17121	0.18052	0.18052	0.010	5.43965	40.00000	Averaged
78 Bromobenzene	0.77948	0.79895	0.79895	0.010	2.49656	40.00000	Averaged
79 n-Propylbenzene	3.39649	3.55168	3.55168	0.010	4.56916	20.00000	Averaged
80 1,1,2,2-Tetrachloroethane	0.58449	0.60751	0.60751	0.300	3.93870	40.00000	Averaged
81 2-Chlorotoluene	2.16787	2.25040	2.25040	0.010	3.80658	40.00000	Averaged
82 1,3,5-Trimethylbenzene	2.46751	2.57243	2.57243	0.300	4.25183	20.00000	Averaged
83 1,2,3-Trichloropropane	0.16370	0.17254	0.17254	0.010	5.39620	40.00000	Averaged
84 trans-1,4-Dichloro-2-Butene	0.14934	0.15599	0.15599	0.010	4.45045	40.00000	Averaged
85 4-Chlorotoluene	2.02287	2.10582	2.10582	0.010	4.10059	40.00000	Averaged
86 tert-Butylbenzene	2.15000	2.24447	2.24447	0.010	4.39398	40.00000	Averaged
87 1,2,4-Trimethylbenzene	2.48938	2.59375	2.59375	0.300	4.19231	20.00000	Averaged
88 sec-Butylbenzene	3.16402	3.34732	3.34732	0.010	5.79312	40.00000	Averaged
89 p-Isopropyltoluene	2.76319	2.96507	2.96507	0.010	7.30595	40.00000	Averaged

Report Date: 03-Feb-2014 09:20

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10msv7.i Injection Date: 30-JAN-2014 18:08
Lab File ID: 013014020.D Init. Cal. Date(s): 29-JAN-2014 29-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 13:30 15:38
Lab Sample ID: V50 9525-477 Quant Type: ISTD
Method: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
90 1,3-Dichlorobenzene	1.50460	1.57524	1.57524	0.600	4.69486	40.00000	Averaged
92 1,4-Dichlorobenzene	1.58306	1.61115	1.61115	0.500	1.77483	40.00000	Averaged
93 1,2,3 Trimethylbenzene	1.96694	2.00442	2.00442	0.010	1.90577	40.00000	Averaged
94 n-Butylbenzene	2.48376	2.67501	2.67501	0.010	7.70004	40.00000	Averaged
95 1,2-Dichlorobenzene	1.41720	1.45809	1.45809	0.400	2.88512	40.00000	Averaged
96 1,2-Dibromo-3-Chloropropane	0.12610	0.12873	0.12873	0.010	2.08162	40.00000	Averaged
97 Hexachlorobutadiene	0.59065	0.62383	0.62383	0.010	5.61673	40.00000	Averaged
98 1,2,4-Trichlorobenzene	0.89232	0.91954	0.91954	0.200	3.05031	40.00000	Averaged
99 Naphthalene	1.71681	1.73590	1.73590	0.300	1.11216	20.00000	Averaged
100 1,2,3-Trichlorobenzene	0.80543	0.82899	0.82899	0.010	2.92497	40.00000	Averaged
101 2-Methylnaphthalene	25.00000	22.04898	0.85234	0.100	-11.80407	20.00000	Quadratic

Report Date: 03-Feb-2014 09:20

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\013014b.b\013014020.D
Lab Smp Id: V50 9525-477
Inj Date : 30-JAN-2014 18:08
Operator : HBP Inst ID: 10msv7.i
Smp Info : V50 9525-477,5,2
Misc Info :
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Meth Date : 03-Feb-2014 09:20 10msv7.i Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 20 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.071	1.071	(0.254)	194142	50.0000	48.4
2	Chloromethane	50	1.247	1.247	(0.296)	212682	50.0000	52.6
3	Vinyl Chloride	62	1.260	1.260	(0.299)	237913	50.0000	50.4
4	Bromomethane	94	1.497	1.497	(0.355)	140566	50.0000	50.1
5	Chloroethane	64	1.583	1.583	(0.375)	111733	50.0000	55.0
6	Trichlorofluoromethane	101	1.692	1.692	(0.401)	315551	50.0000	49.8
7	Dichlorofluoromethane	67	1.747	1.747	(0.414)	419141	50.0000	50.2
8	Diethyl ether (Ethyl Ether)	59	1.961	1.961	(0.465)	146200	50.0000	51.3
9	1,1-Dichloroethene	96	2.107	2.107	(0.500)	211403	50.0000	53.8
10	Carbon Disulfide	76	2.113	2.113	(0.501)	737823	50.0000	50.0
11	Ethanol	45	2.113	2.113	(0.436)	49977	1000.00	1050
12	Trichlorotrifluoroethane	101	2.156	2.156	(0.511)	216351	50.0000	50.5
13	Iodomethane	142	2.223	2.223	(0.527)	318426	50.0000	51.2
14	Acrolein	56	2.412	2.412	(0.572)	283764	500.000	532
15	Allyl Chloride	41	2.546	2.546	(0.604)	300234	50.0000	53.5
16	Methylene Chloride	84	2.643	2.643	(0.627)	232915	50.0000	49.9
17	Isopropanol	45	2.625	2.625	(0.542)	123136	500.000	504
* 18	Acetone d6	46	2.649	2.649	(1.000)	143148	200.000	
19	Acetone	58	2.698	2.698	(1.018)	63842	250.000	257

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014020.D
Report Date: 03-Feb-2014 09:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
20	trans-1,2-Dichloroethene	96	2.790	2.790	(0.662)	238869	50.0000	53.6
21	Hexane	86	2.869	2.869	(1.083)	137908	125.000	128
22	Methyl-tert-butyl Ether	73	2.899	2.899	(0.688)	566602	50.0000	51.8
23	tert-Butyl Alcohol	59	3.003	3.003	(0.620)	206500	500.000	514
24	Acetonitrile	41	3.070	3.070	(0.728)	167217	500.000	466
25	Isopropyl Ether	45	3.210	3.210	(0.761)	657470	50.0000	51.2
26	Acrylonitrile	53	3.253	3.253	(0.772)	333665	500.000	518
27	1,1-Dichloroethane	63	3.271	3.271	(0.776)	397119	50.0000	52.7
28	Ethyl-tert-butyl ether	59	3.466	3.466	(0.822)	621732	50.0000	51.3
29	Vinyl Acetate	43	3.472	3.472	(0.824)	420121	50.0000	53.4
30	cis-1,2-Dichloroethene	96	3.643	3.643	(0.864)	252835	50.0000	51.6
31	2,2-Dichloropropane	77	3.710	3.710	(0.880)	341046	50.0000	51.9
32	Cyclohexane	56	3.765	3.765	(0.893)	1904815	250.000	253
33	Bromochloromethane	130	3.765	3.765	(0.893)	158725	50.0000	53.2
34	Chloroform	83	3.820	3.820	(0.906)	407571	50.0000	52.0
35	Carbon Tetrachloride	117	3.899	3.899	(0.925)	298306	50.0000	51.9
36	Tetrahydrofuran	72	3.911	3.911	(1.476)	236557	500.000	532
37	1,1,1-Trichloroethane	97	3.942	3.942	(0.935)	358464	50.0000	52.8
38	2-Butanone	43	4.009	4.009	(0.951)	361415	250.000	256
39	1,1-Dichloropropene	75	4.015	4.015	(0.952)	326375	50.0000	52.1
40	Benzene	78	4.155	4.155	(0.986)	951990	50.0000	50.7
* 41	Pentafluorobenzene	168	4.216	4.216	(1.000)	1116303	100.000	
42	Tert-amyl methyl ether	73	4.235	4.235	(1.004)	615744	50.0000	49.6
$ 43	1,2-Dichloroethane d4 (S)	65	4.235	4.235	(1.004)	404803	100.000	98.0
44	1,2-Dichloroethane	62	4.271	4.271	(1.013)	270031	50.0000	52.6
45	Isobutanol	43	4.302	4.302	(0.888)	172476	1000.00	1060
46	Tert-Amyl Alcohol	59	4.350	4.350	(0.898)	180107	500.000	517
47	Trichloroethene	130	4.478	4.478	(0.996)	286596	50.0000	53.3
* 48	1,4 Difluorobenzene	114	4.497	4.497	(1.000)	1540471	100.000	
49	Tert-amyl ethyl ether	59	4.600	4.600	(1.023)	500663	50.0000	52.4
50	Dibromomethane	174	4.686	4.686	(1.042)	156646	50.0000	53.8
51	1,2-Dichloropropane	63	4.728	4.728	(1.052)	222389	50.0000	51.9
52	Bromodichloromethane	83	4.765	4.765	(1.060)	303790	50.0000	53.0
* 53	1,4 dioxane d8	96	4.844	4.844	(1.000)	136838	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	4.856	4.856	(1.003)	49229	1000.00	1050
55	2-Chloroethyl Vinyl Ether	63	5.021	5.021	(1.117)	6663	125.000	104
56	cis-1,3-Dichloropropene	75	5.045	5.045	(1.122)	374999	50.0000	54.0
$ 57	Toluene-d8 (S)	98	5.125	5.125	(0.882)	1775190	100.000	99.4
58	Toluene	92	5.149	5.149	(0.886)	630243	50.0000	49.2
59	4-Methyl-2-Pentanone	43	5.308	5.308	(0.913)	824338	250.000	252
60	Tetrachloroethene	166	5.314	5.314	(0.914)	320210	50.0000	52.4
61	trans-1,3-Dichloropropene	75	5.326	5.326	(0.916)	333259	50.0000	53.5
62	1,1,2-Trichloroethane	97	5.393	5.393	(0.928)	192933	50.0000	52.2
63	Dibromochloromethane	129	5.472	5.472	(0.941)	236251	50.0000	53.4
64	1,3-Dichloropropane	76	5.515	5.515	(0.949)	322759	50.0000	52.3
65	1,2-Dibromoethane	107	5.582	5.582	(0.960)	200139	50.0000	51.5
66	2-Hexanone	43	5.673	5.673	(0.976)	600689	250.000	252
* 67	Chlorobenzene-d5	117	5.814	5.814	(1.000)	1416803	100.000	
68	Chlorobenzene	112	5.820	5.820	(1.001)	727247	50.0000	51.7
69	Ethylbenzene	91	5.832	5.832	(1.003)	1224370	50.0000	48.8
70	1,1,1,2-Tetrachloroethane	131	5.850	5.850	(1.006)	257368	50.0000	53.0
71	M&P-Xylene	106	5.899	5.899	(1.015)	976322	100.000	104
72	O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.112	(1.051)	463678	50.0000	51.6
73	Styrene	104	6.137	6.137	(1.056)	814862	50.0000	54.2

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014020.D
Report Date: 03-Feb-2014 09:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
74	Bromoform	173	6.161	6.161	(1.060)	175305	50.0000	53.6
75	Isopropylbenzene (Cumene)	105	6.271	6.271	(1.079)	1247748	50.0000	51.1
S 76	4-Bromofluorobenzene (S)	95	6.423	6.423	(0.906)	673060	100.000	98.8
77	cis-1,4-Dichloro-2-Butene	53	6.454	6.454	(0.911)	76123	50.0000	52.7
78	Bromobenzene	156	6.490	6.490	(0.916)	336898	50.0000	51.2
79	n-Propylbenzene	91	6.490	6.490	(0.916)	1497667	50.0000	52.3
80	1,1,2,2-Tetrachloroethane	83	6.527	6.527	(0.921)	256174	50.0000	52.0
81	2-Chlorotoluene	91	6.588	6.588	(0.929)	948944	50.0000	51.9
82	1,3,5-Trimethylbenzene	105	6.600	6.600	(0.931)	1084737	50.0000	52.1
83	1,2,3-Trichloropropane	110	6.612	6.612	(0.933)	72755	50.0000	52.7(Q)
84	trans-1,4-Dichloro-2-Butene	53	6.630	6.630	(0.935)	164443	125.000	130
85	4-Chlorotoluene	91	6.685	6.685	(0.943)	887980	50.0000	52.0
86	tert-Butylbenzene	119	6.789	6.789	(0.958)	946443	50.0000	52.2
87	1,2,4-Trimethylbenzene	105	6.832	6.832	(0.964)	1093727	50.0000	52.1
88	sec-Butylbenzene	105	6.899	6.899	(0.973)	1411492	50.0000	52.9
89	p-Isopropyltoluene	119	6.984	6.984	(0.985)	1250306	50.0000	53.6
90	1,3-Dichlorobenzene	146	7.045	7.045	(0.994)	664245	50.0000	52.3
* 91	1,4-Dichlorobenzene-d4	152	7.088	7.088	(1.000)	843357	100.000	
92	1,4-Dichlorobenzene	146	7.100	7.100	(1.002)	679389	50.0000	50.9
93	1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	1118771	50.0000	51.0
94	n-Butylbenzene	91	7.258	7.258	(1.024)	1127993	50.0000	53.8
95	1,2-Dichlorobenzene	146	7.380	7.380	(1.041)	614846	50.0000	51.4
96	1,2-Dibromo-3-Chloropropane	157	7.862	7.862	(1.109)	135702	125.000	128
97	Hexachlorobutadiene	225	8.228	8.228	(1.161)	263054	50.0000	52.8
98	1,2,4-Trichlorobenzene	180	8.240	8.240	(1.163)	387750	50.0000	51.5
99	Naphthalene	128	8.429	8.429	(1.189)	731993	50.0000	50.6
100	1,2,3-Trichlorobenzene	180	8.532	8.532	(1.204)	349567	50.0000	51.5
101	2-Methylnaphthalene	142	9.045	9.045	(1.276)	179706	25.0000	22.0

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014020.D
Report Date: 03-Feb-2014 09:20

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 013014020.D
Lab Smp Id: V50 9525-477
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Misc Info:

Calibration Date: 30-JAN-2014
Calibration Time: 12:19

Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	164056	82028	328112	143148	-12.74
41 Pentafluorobenzen	1178461	589231	2356922	1116303	-5.27
48 1,4 Difluorobenze	1667544	833772	3335088	1540471	-7.62
53 1,4 dioxane d8	159641	79821	319282	136838	-14.28
67 Chlorobenzene-d5	1508153	754077	3016306	1416803	-6.06
91 1,4-Dichlorobenze	915622	457811	1831244	843357	-7.89

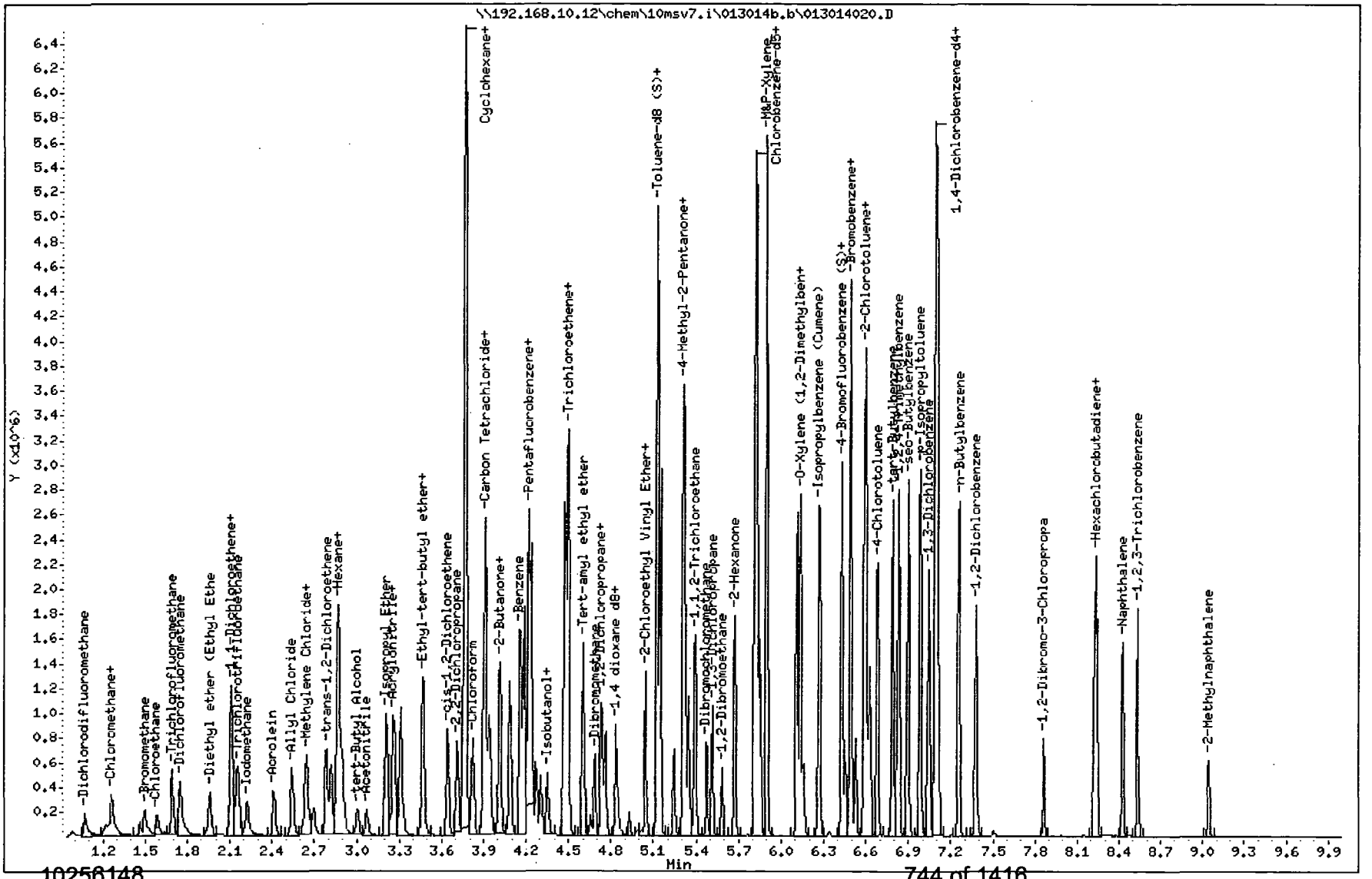
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	0.01
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
48 1,4 Difluorobenze	4.49	3.99	4.99	4.50	0.14
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	0.13
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014020.D
Date : 30-JAN-2014 18:08
Client ID:
Sample Info: V50 9525-477,5,2

Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\Chem\10msv7.i\013014b.b\013014020.d
Injection Date: 30-JAN-2014 18:08
Instrument: 10msv7.i
Lab Sample ID: V50 9525-477
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\013014b.b\013014026.D
Lab Smp Id: 1617373 Client Smp ID: 1617373
Inj Date : 30-JAN-2014 19:57
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1617373,5,3,BLANK
Misc Info : 26253
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Meth Date : 03-Feb-2014 07:51 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 26 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.113	2.113	(0.501)	4080	0.26688	0.27(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.649	2.649	(1.000)	152081	200.000	
19	Acetone	58	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014026.D
Report Date: 03-Feb-2014 09:15

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	20 trans-1,2-Dichloroethene	96	Compound Not Detected.					
	21 Hexane	86	Compound Not Detected.					
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	Compound Not Detected.					
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	Compound Not Detected.					
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	Compound Not Detected.					
*	41 Pentafluorobenzene	168	4.216	4.216	(1.000)	1155832	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
$	43 1,2-Dichloroethane d4 (S)	65	4.234	4.235	(1.004)	437346	102.291	102
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.491	4.497	(1.000)	1595499	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.838	4.844	(1.000)	144859	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	57 Toluene-d8 (S)	98	5.125	5.125	(0.882)	1831094	98.2589	98.2
	58 Toluene	92	5.149	5.149	(0.886)	1448	0.10834	0.11(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	Compound Not Detected.					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	5.673	5.673	(0.976)	2710	1.08791	1.1(aQH)
*	67 Chlorobenzene-d5	117	5.813	5.814	(1.000)	1478275	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	Compound Not Detected.					
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.899	5.899	(1.015)	681	0.06952	0.070(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	Compound Not Detected.					
	73 Styrene	104	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	74 Bromoform	173	Compound Not Detected.					
	75 Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$	76 4-Bromofluorobenzene (S)	95	6.423	6.423	(0.906)	701516	100.138	100
	77 cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	78 Bromobenzene	156	Compound Not Detected.					
	79 n-Propylbenzene	91	Compound Not Detected.					
	80 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	81 2-Chlorotoluene	91	Compound Not Detected.					
	82 1,3,5-Trimethylbenzene	105	Compound Not Detected.					
	83 1,2,3-Trichloropropane	110	Compound Not Detected.					
	84 trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	85 4-Chlorotoluene	91	Compound Not Detected.					
	86 tert-Butylbenzene	119	Compound Not Detected.					
	87 1,2,4-Trimethylbenzene	105	6.832	6.832	(0.964)	1725	0.07989	0.080(aQ)
	88 sec-Butylbenzene	105	Compound Not Detected.					
	89 p-Isopropyltoluene	119	6.978	6.984	(0.985)	2269	0.09467	0.095(aQ)
	90 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	91 1,4-Dichlorobenzene-d4	152	7.088	7.088	(1.000)	867373	100.000	
	92 1,4-Dichlorobenzene	146	Compound Not Detected.					
	93 1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	1387	0.06101	0.061(aQH)
	94 n-Butylbenzene	91	Compound Not Detected.					
	95 1,2-Dichlorobenzene	146	Compound Not Detected.					
	96 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
	97 Hexachlorobutadiene	225	Compound Not Detected.					
	98 1,2,4-Trichlorobenzene	180	8.240	8.240	(1.163)	730	0.09432	0.094(aQ)
	99 Naphthalene	128	8.429	8.429	(1.189)	3146	0.21127	0.21(a)
	100 1,2,3-Trichlorobenzene	180	8.532	8.532	(1.204)	890	0.12740	0.13(a)
	101 2-Methylnaphthalene	142	9.045	9.045	(1.276)	1795	0.62913	0.63(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
H - Operator selected an alternate compound hit.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014026.D
Report Date: 03-Feb-2014 09:15

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 013014026.D
Lab Smp Id: 1617373
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Calibration Date: 30-JAN-2014
Calibration Time: 18:08
Client Smp ID: 1617373
Level: LOW
Sample Type: SOIL
Method File: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Misc Info: 26253

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143148	71574	286296	152081	6.24
41 Pentafluorobenzen	1116303	558152	2232606	1155832	3.54
48 1,4 Difluorobenze	1540471	770236	3080942	1595499	3.57
53 1,4 dioxane d8	136838	68419	273676	144859	5.86
67 Chlorobenzene-d5	1416803	708402	2833606	1478275	4.34
91 1,4-Dichlorobenze	843357	421679	1686714	867373	2.85

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.00
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	-0.00
48 1,4 Difluorobenze	4.50	4.00	5.00	4.49	-0.14
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.13
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

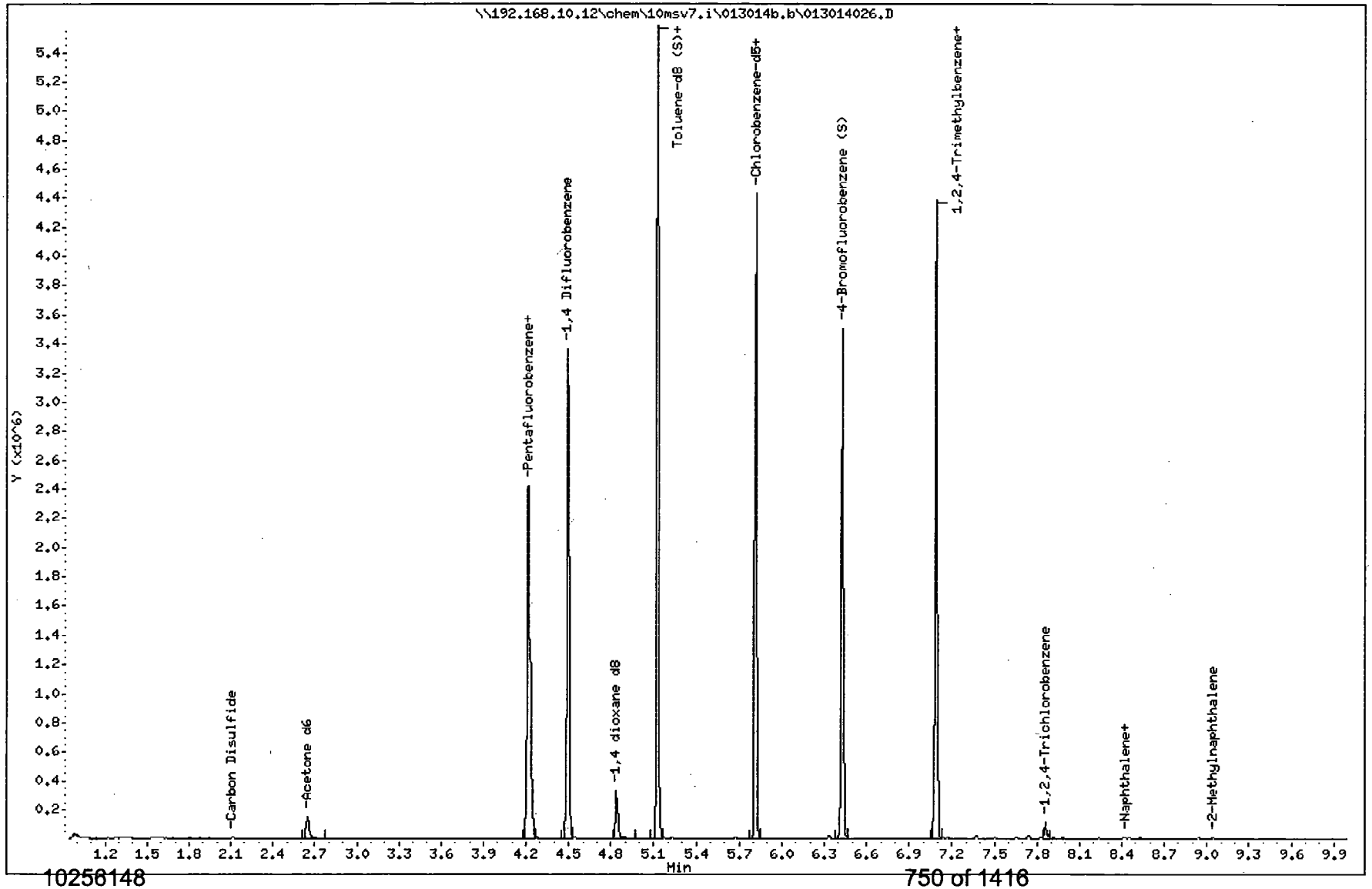
Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014026.D
Date : 30-JAN-2014 19:57
Client ID: 1617373
Sample Info: 1617373,5,3,BLANK

Instrument: 10msv7.i

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



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Date : 30-JAN-2014 19:57

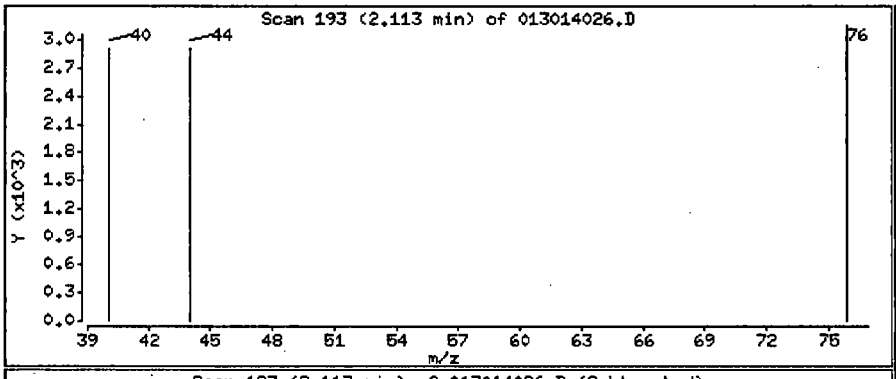
Client ID: 1617373 Instrument: 10msv7.i

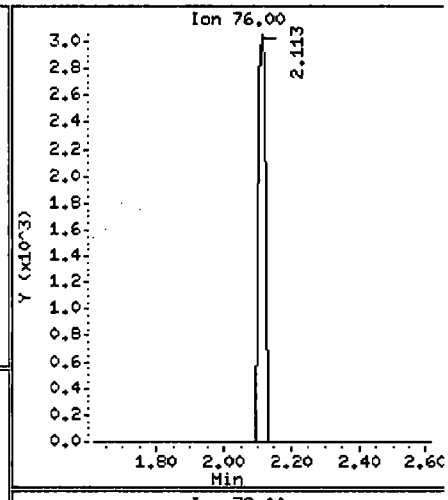
Sample Info: 1617373,5,3,BLANK

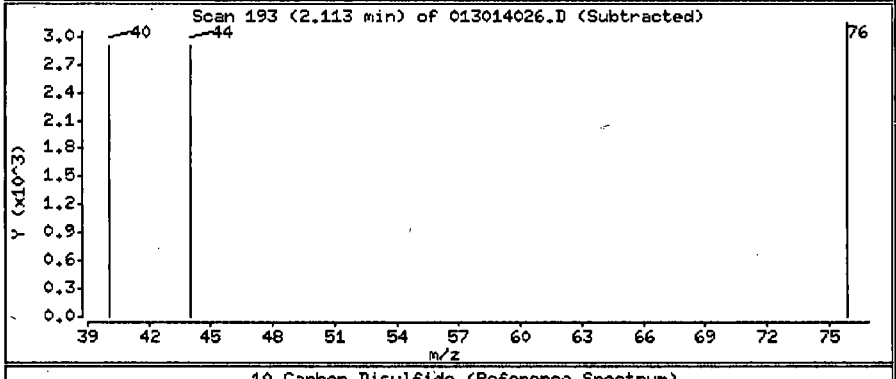
Operator: HBP

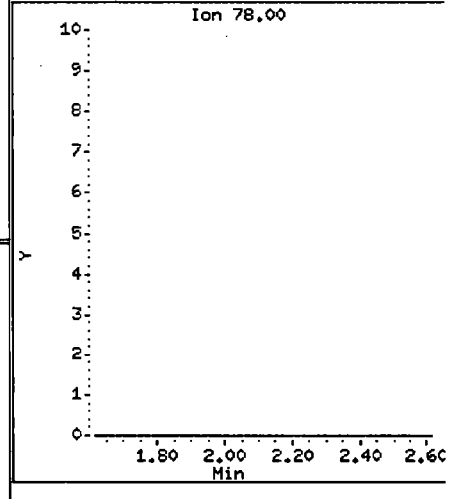
Column phase: Rtx-VMS Column diameter: 0.18

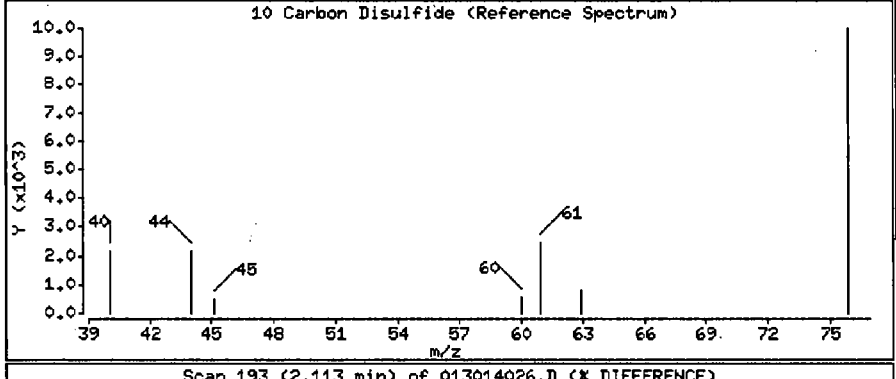
10 Carbon Disulfide Concentration: 0.27 ug/Kg

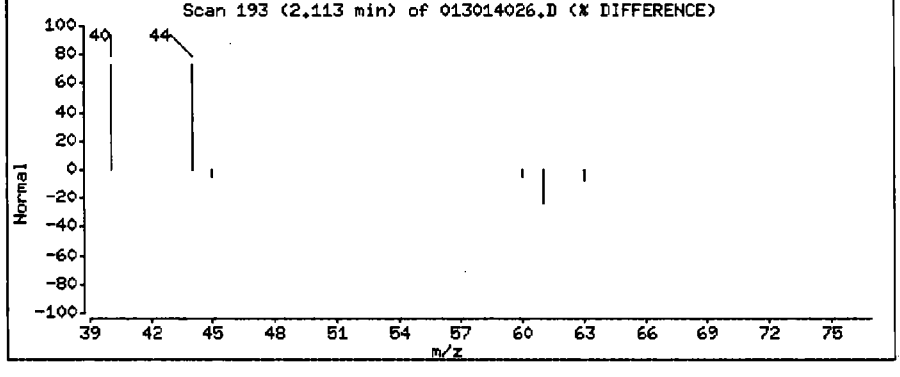












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Date : 30-JAN-2014 19:57

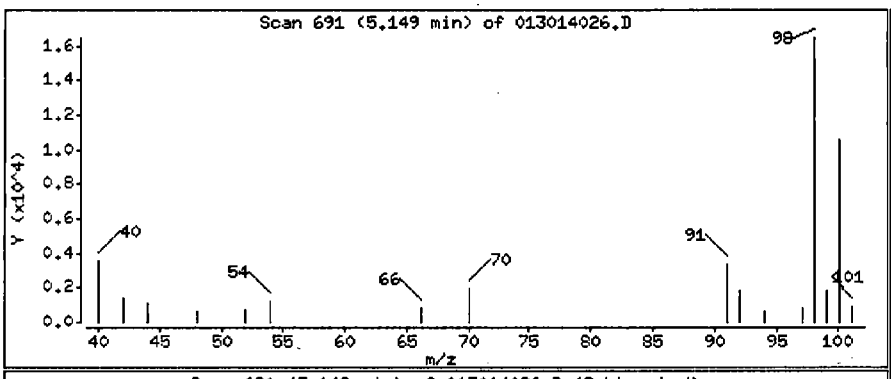
Client ID: 1617373 Instrument: 10msv7.i

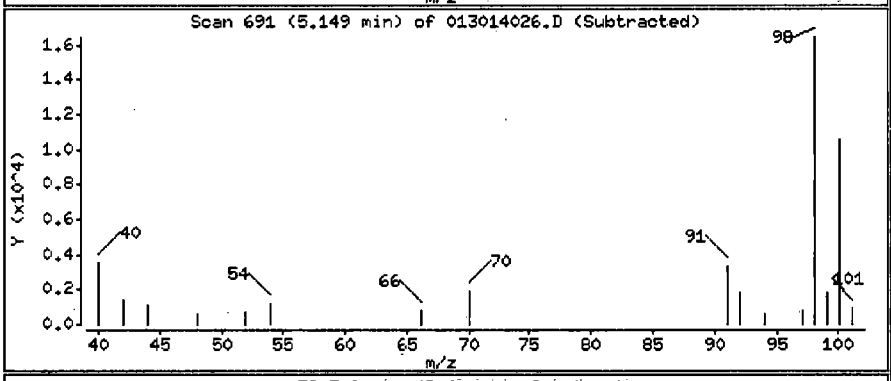
Sample Info: 1617373,5,3,BLANK

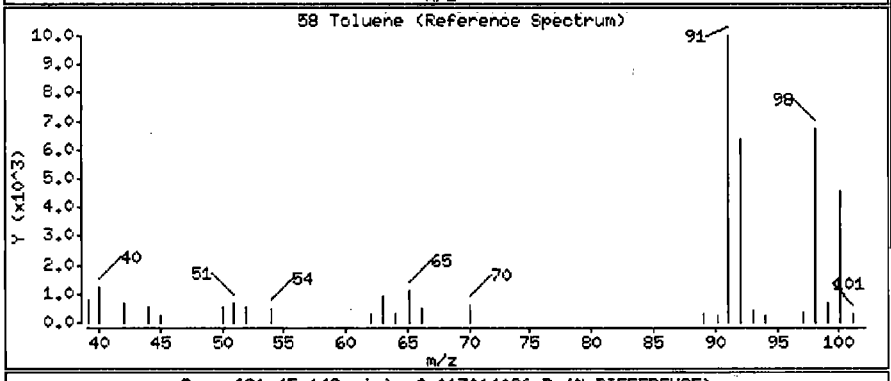
Operator: HBP

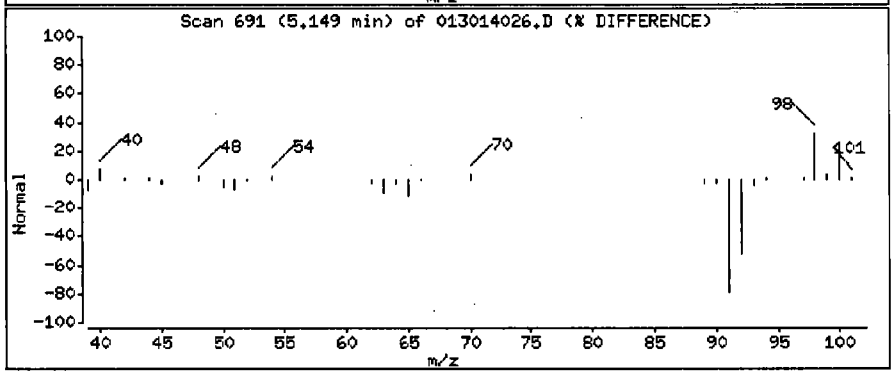
Column phase: Rtx-VMS Column diameter: 0.18

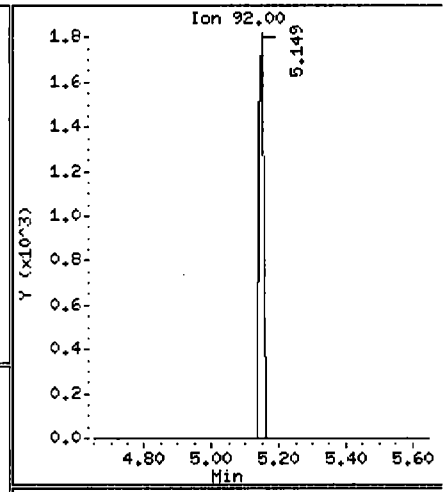
58 Toluene Concentration: 0.11 ug/Kg

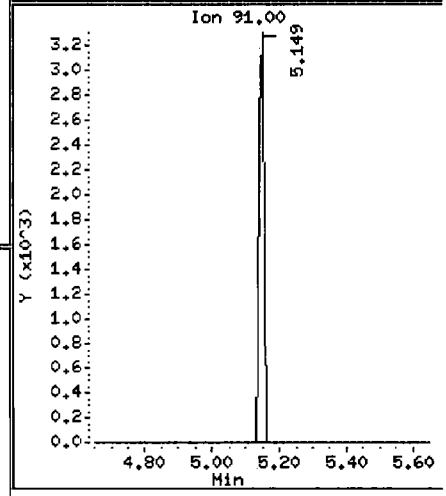












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Date : 30-JAN-2014 19:57

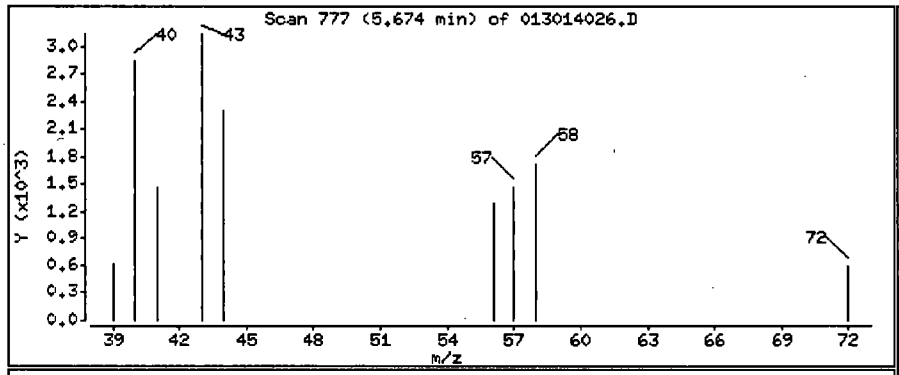
Client ID: 1617373 Instrument: 10msv7.i

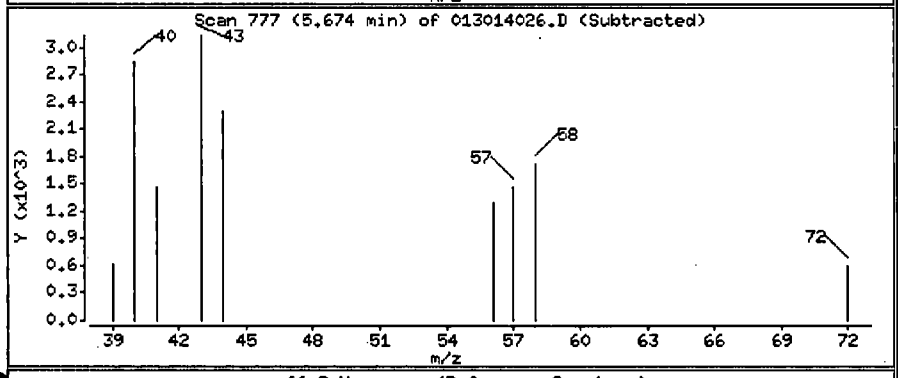
Sample Info: 1617373,5,3,BLANK

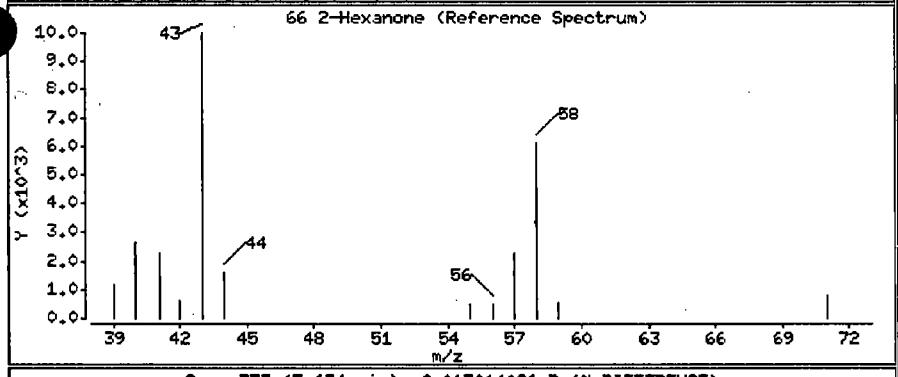
Operator: HBP

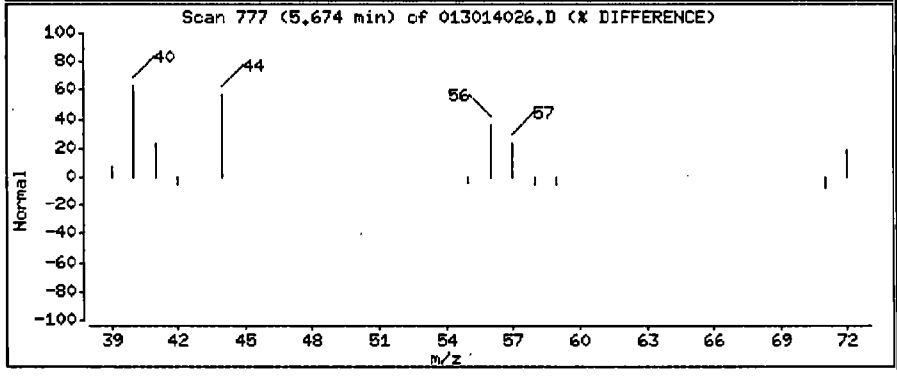
Column phase: Rtx-VMS Column diameter: 0.18

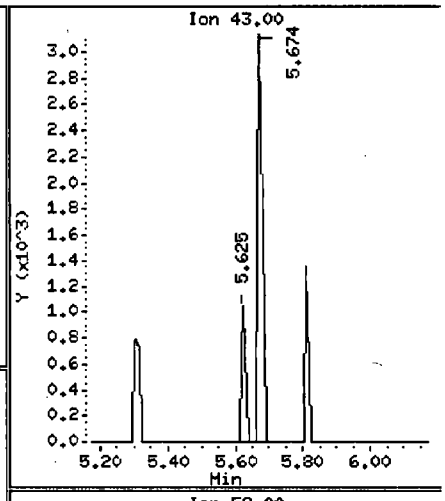
66 2-Hexanone Concentration: 1.1 ug/Kg

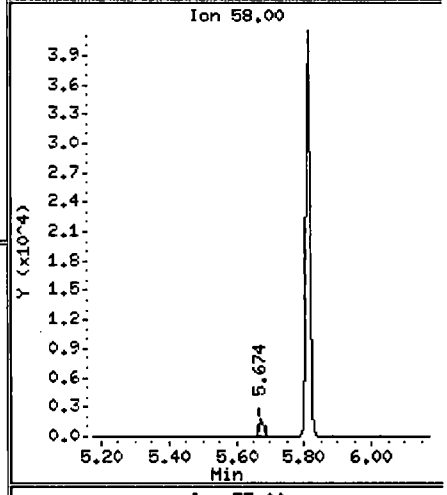


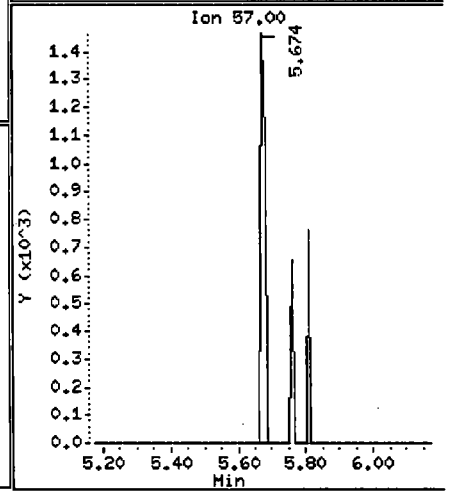












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014026.D

Date : 30-JAN-2014 19:57

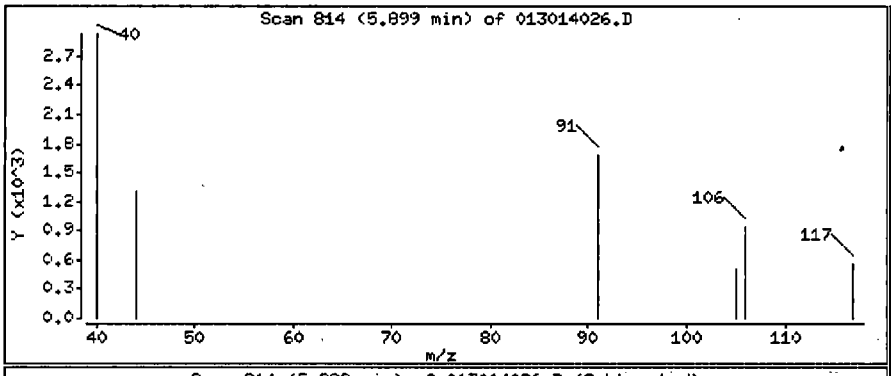
Client ID: 1617373 Instrument: 10msv7.i

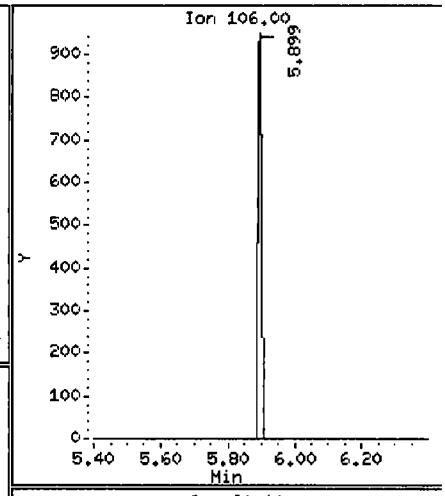
Sample Info: 1617373,5,3,BLANK

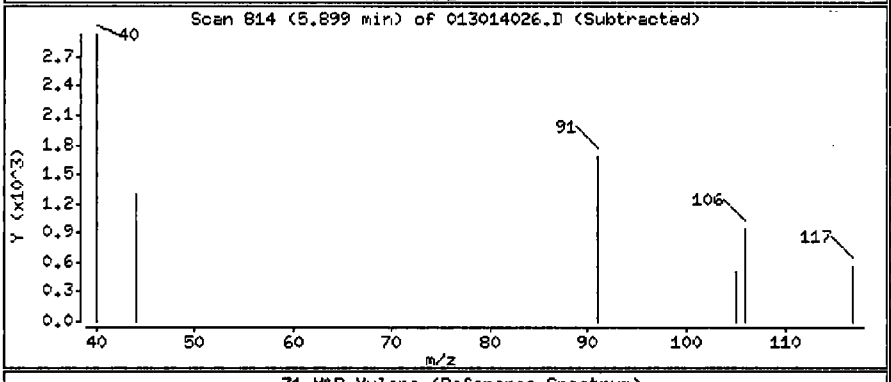
Operator: HBP

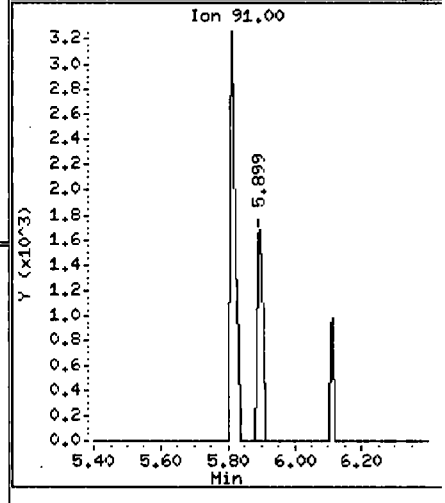
Column phase: Rtx-VMS Column diameter: 0.18

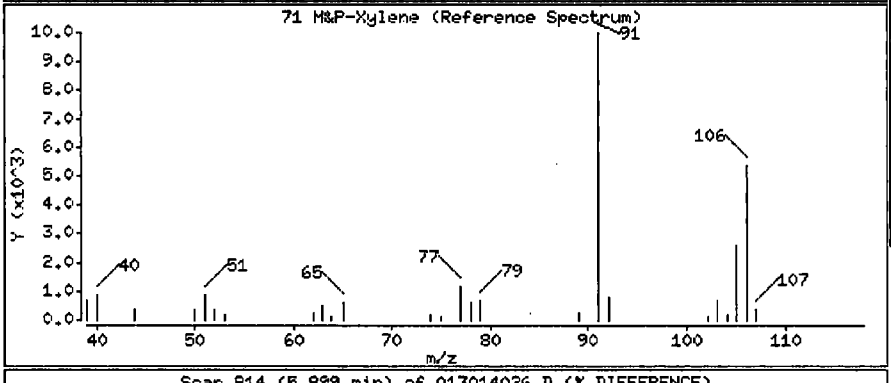
71 M&P-Xylene Concentration: 0.070 ug/Kg

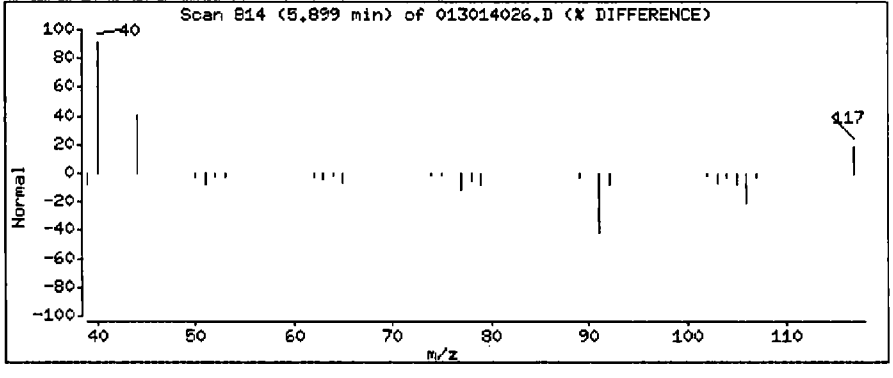












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Date : 30-JAN-2014 19:57

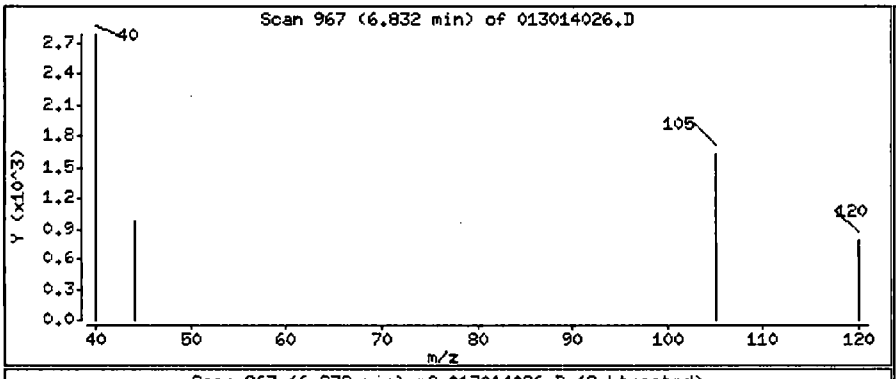
Client ID: 1617373 Instrument: 10msv7.i

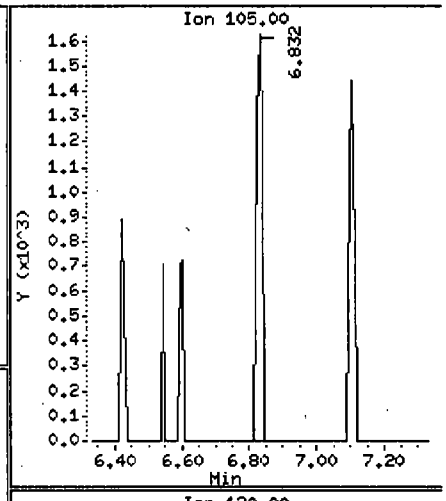
Sample Info: 1617373,5,3,BLANK

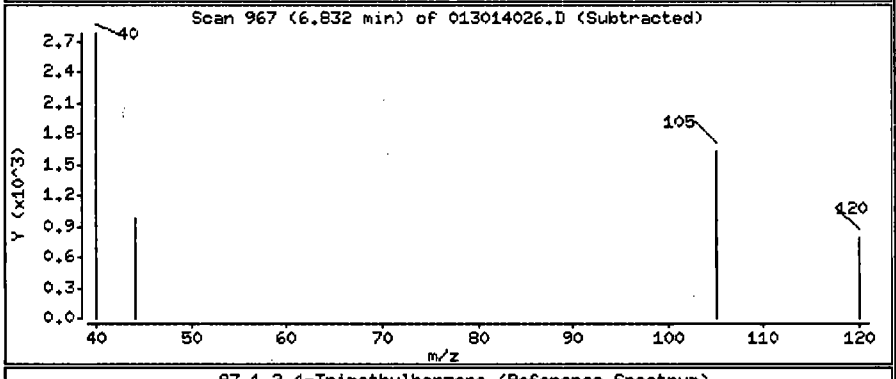
Operator: HBP

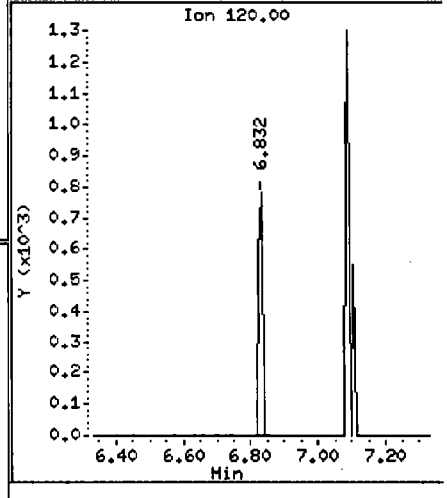
Column phase: Rtx-VMS Column diameter: 0.18

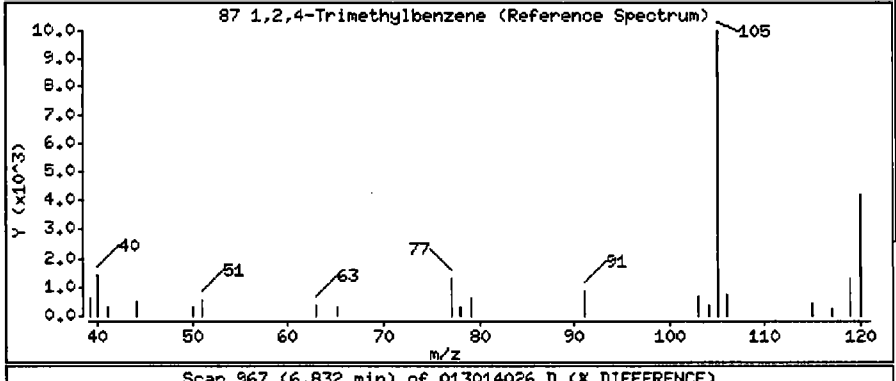
87 1,2,4-Trimethylbenzene Concentration: 0.080 ug/Kg

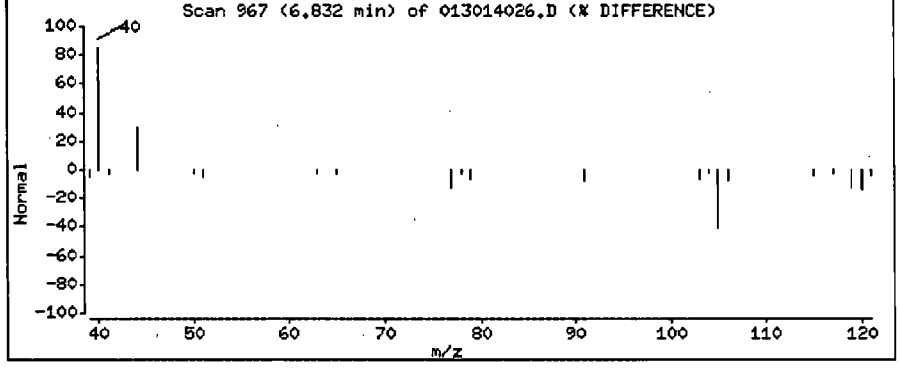












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Date : 30-JAN-2014 19:57

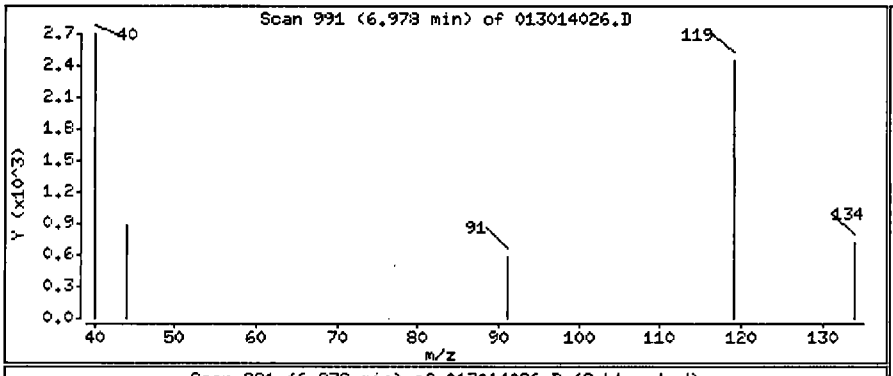
Client ID: 1617373 Instrument: 10msv7.i

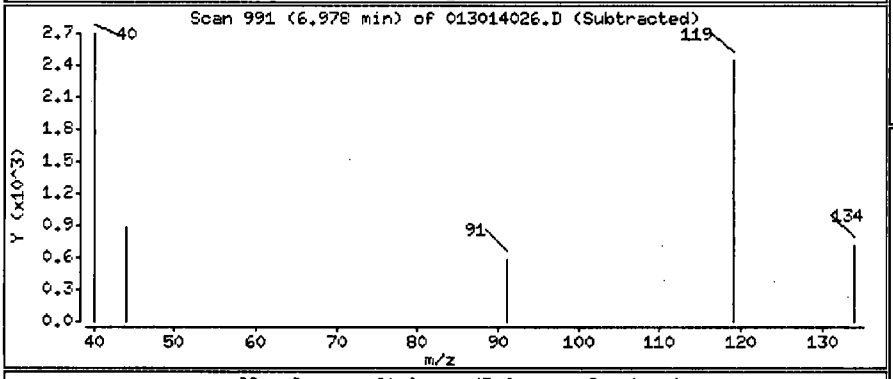
Sample Info: 1617373,5,3,BLANK

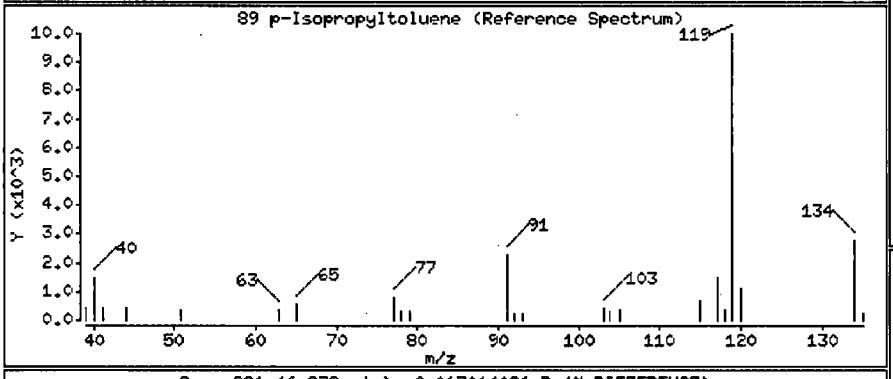
Operator: HBP

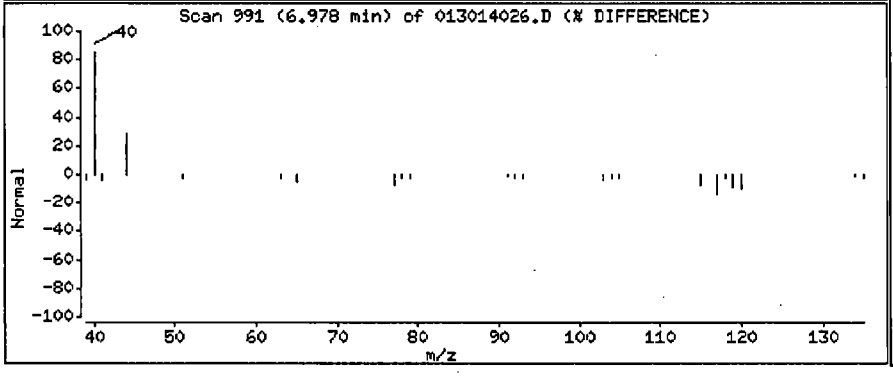
Column phase: Rtx-VMS Column diameter: 0.18

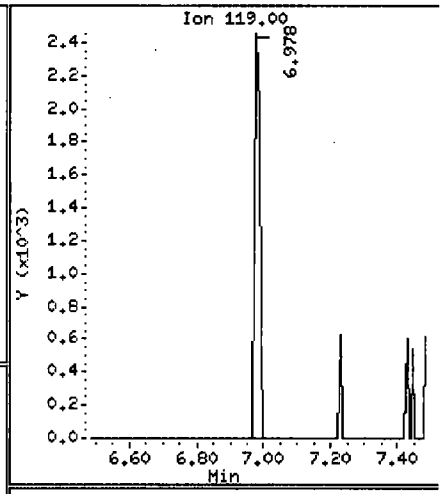
89 p-Isopropyltoluene Concentration: 0.095 ug/Kg

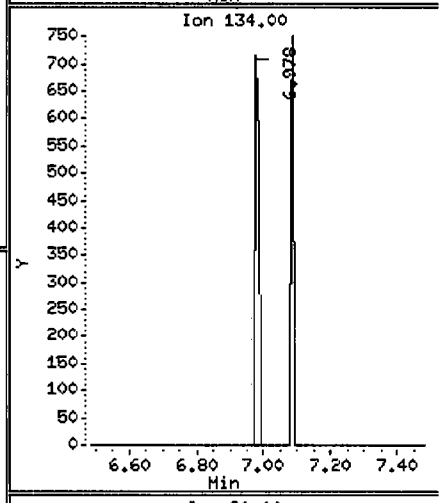


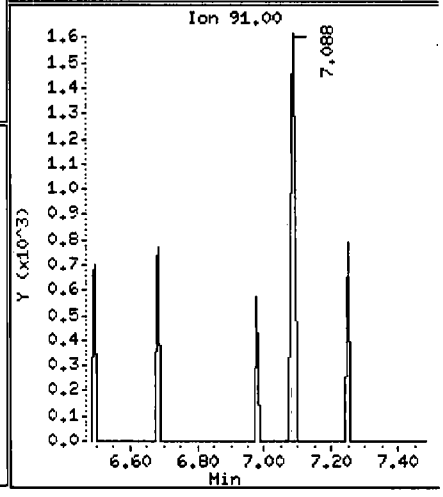












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014026.D

Date : 30-JAN-2014 19:57

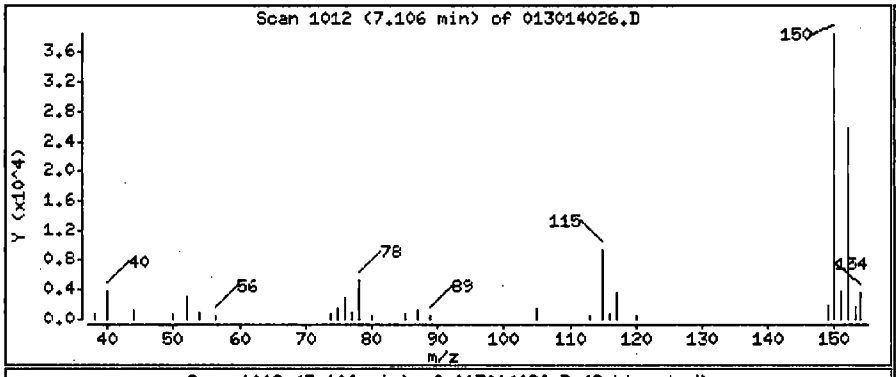
Client ID: 1617373 Instrument: 10msv7.i

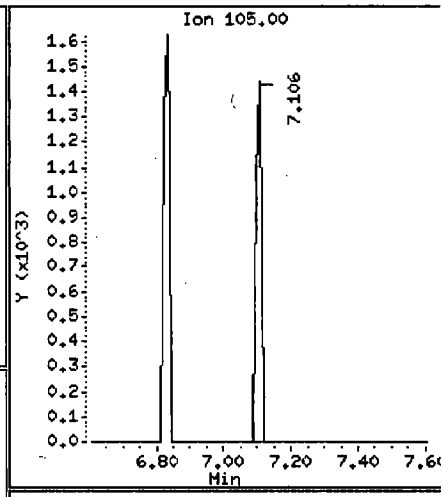
Sample Info: 1617373,5,3,BLANK

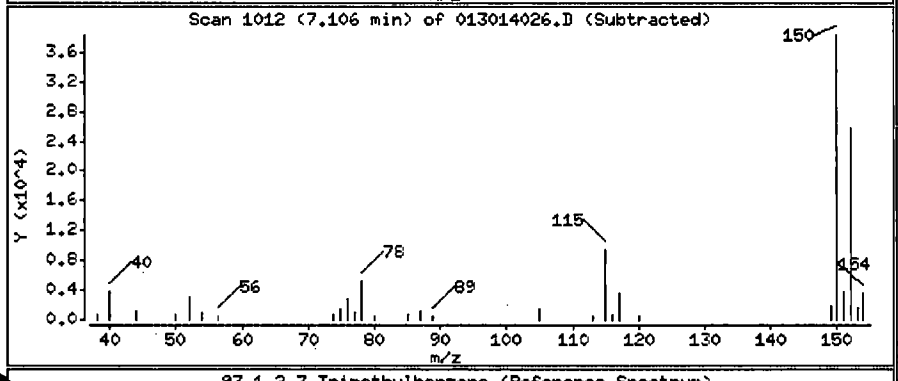
Operator: HBP

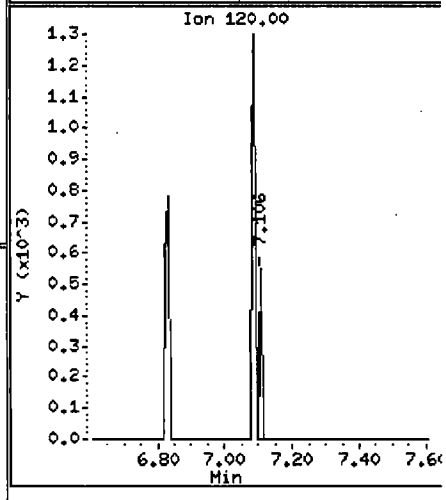
Column phase: Rtx-VMS Column diameter: 0.18

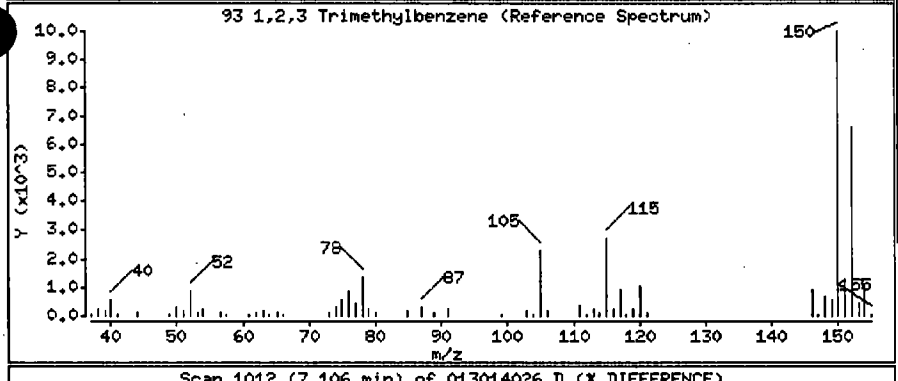
93 1,2,3 Trimethylbenzene Concentration: 0.061 ug/Kg

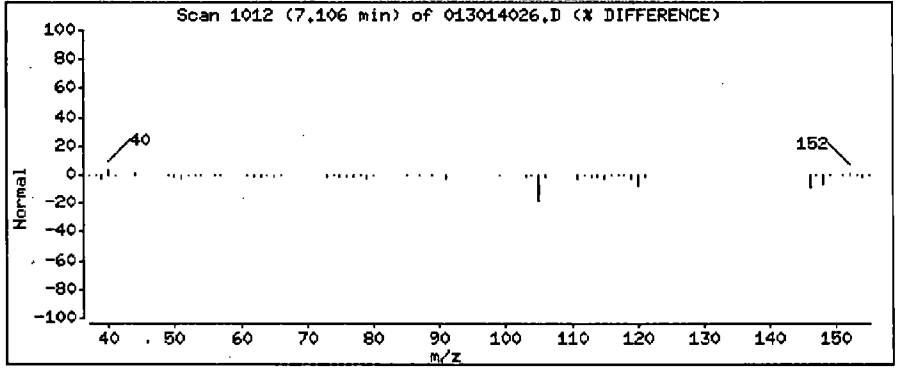












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Date : 30-JAN-2014 19:57

Client ID: 1617373

Instrument: 10msv7.i

Sample Info: 1617373,5,3,BLANK

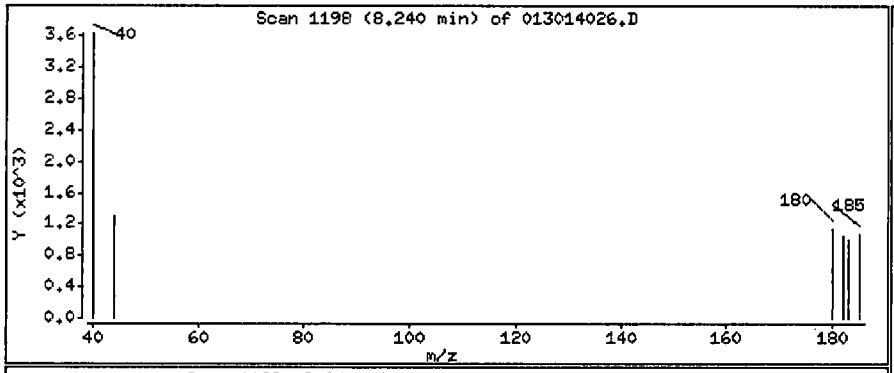
Operator: HBP

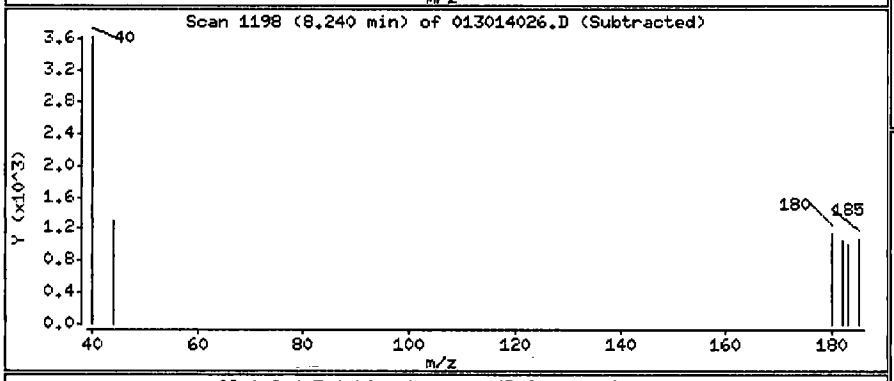
Column phase: Rtx-VMS

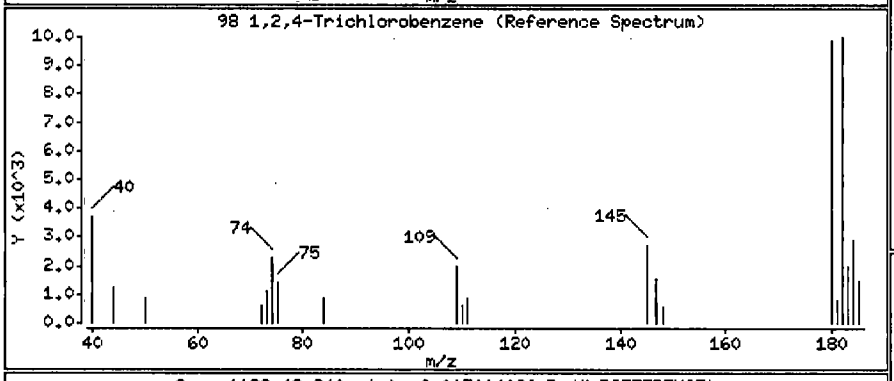
Column diameter: 0.18

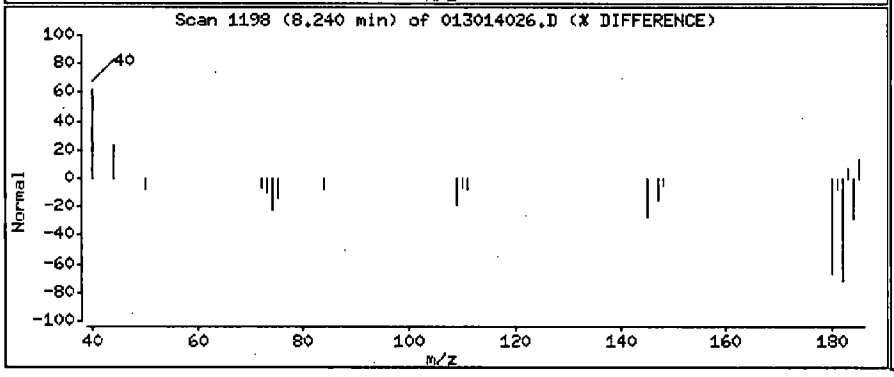
98 1,2,4-Trichlorobenzene

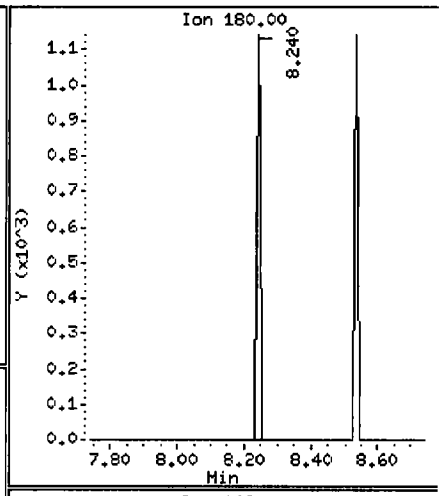
Concentration: 0.094 ug/Kg

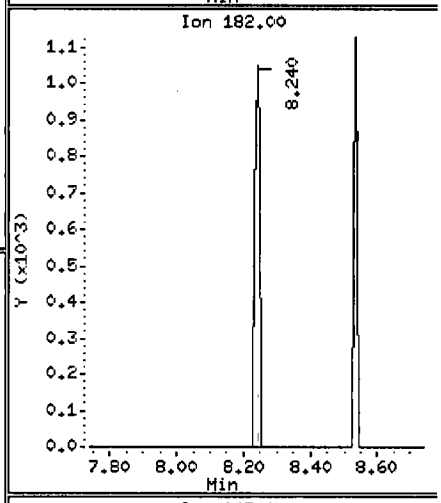


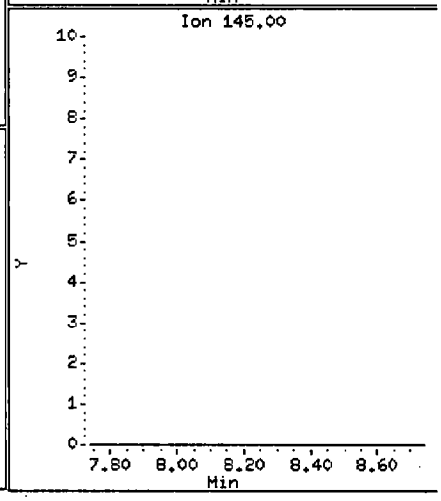












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014026.D

Date : 30-JAN-2014 19:57

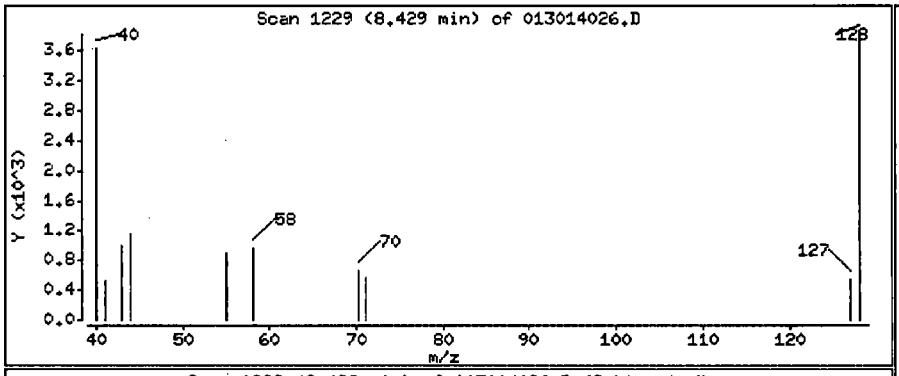
Client ID: 1617373 Instrument: 10msv7.i

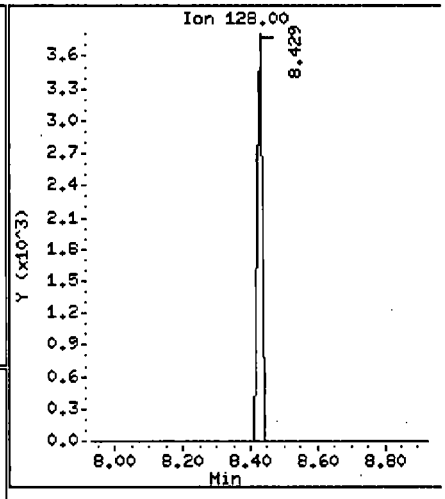
Sample Info: 1617373,5,3,BLANK

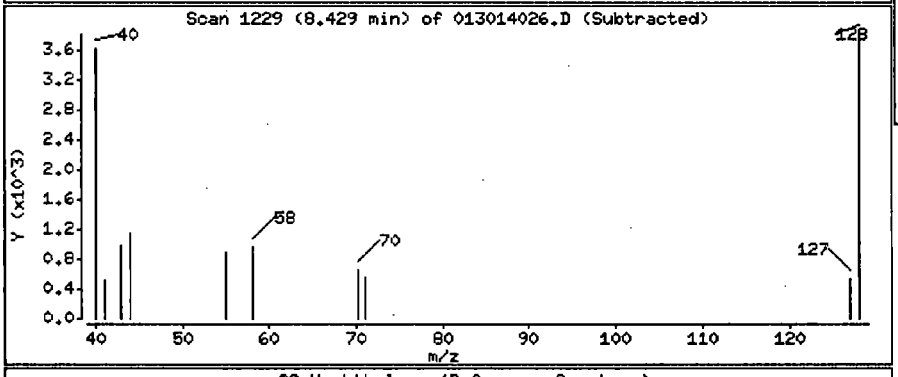
Operator: HBP

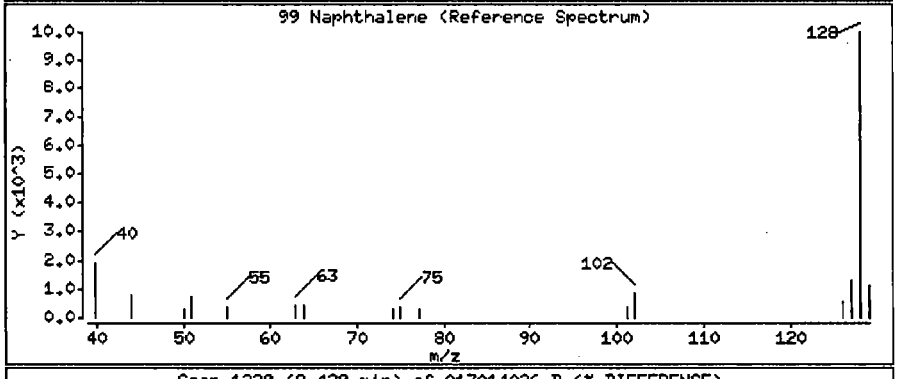
Column phase: Rtx-VMS Column diameter: 0.18

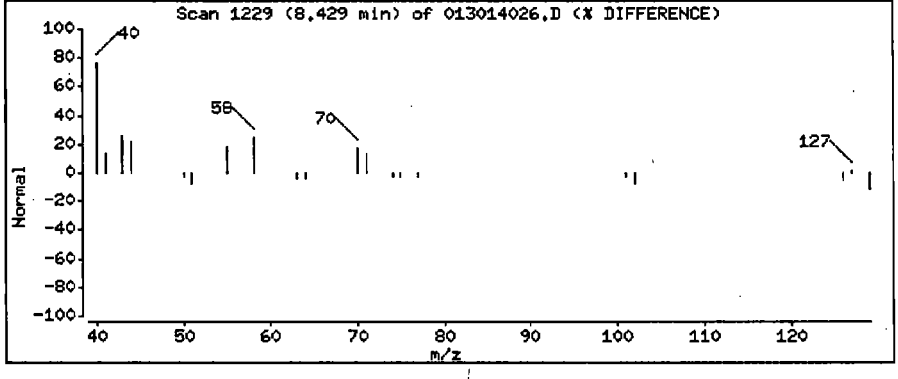
99 Naphthalene Concentration: 0.21 ug/Kg











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Date : 30-JAN-2014 19:57

Client ID: 1617373

Instrument: 10msv7.i

Sample Info: 1617373,5,3,BLANK

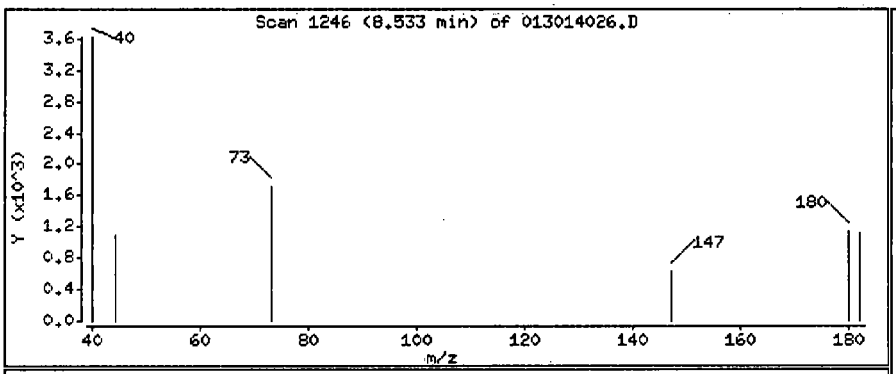
Operator: HBP

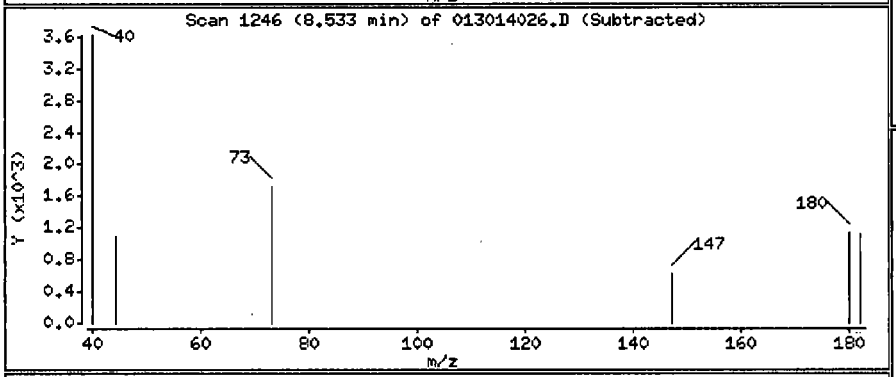
Column phase: Rtx-VMS

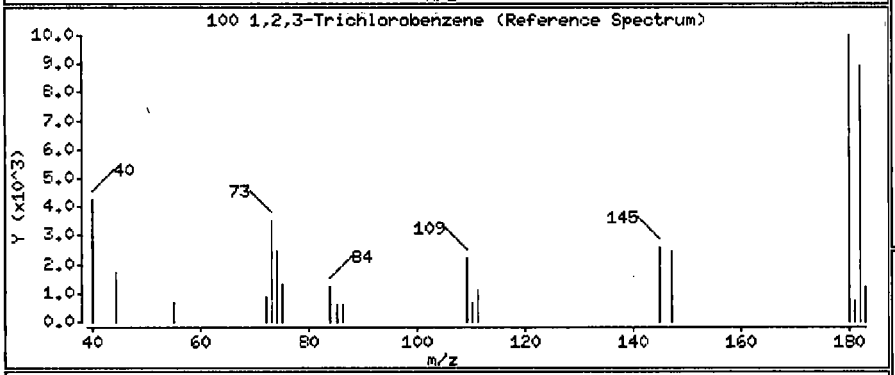
Column diameter: 0.18

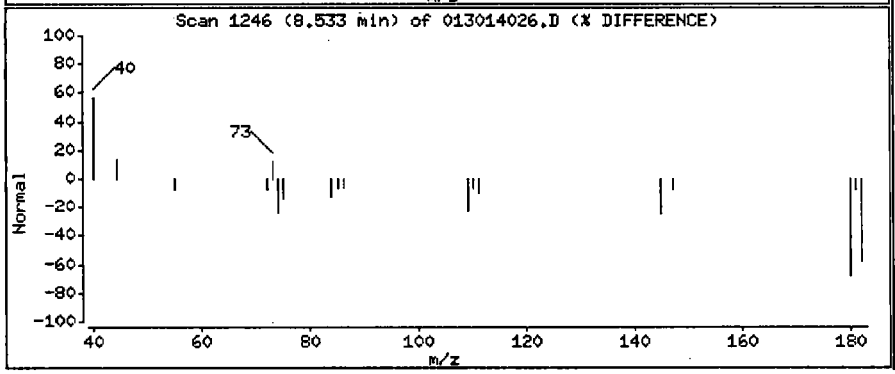
100 1,2,3-Trichlorobenzene

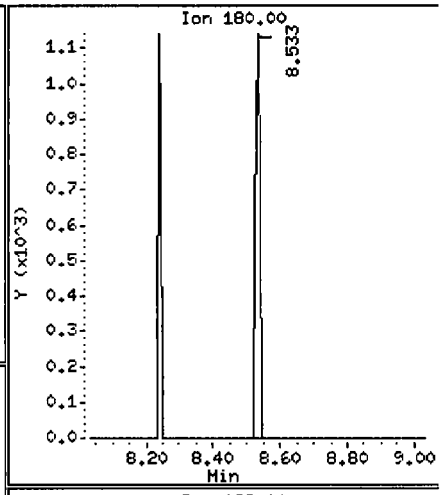
Concentration: 0.13 ug/Kg

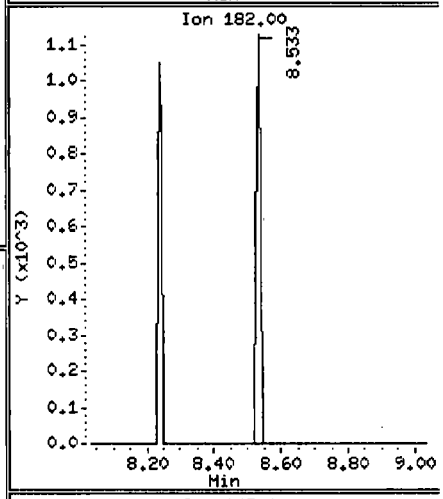


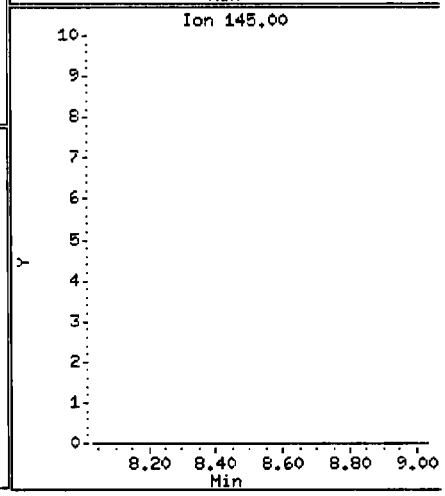












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Date : 30-JAN-2014 19:57

Client ID: 1617373

Instrument: 10msv7.i

Sample Info: 1617373,5,3,BLANK

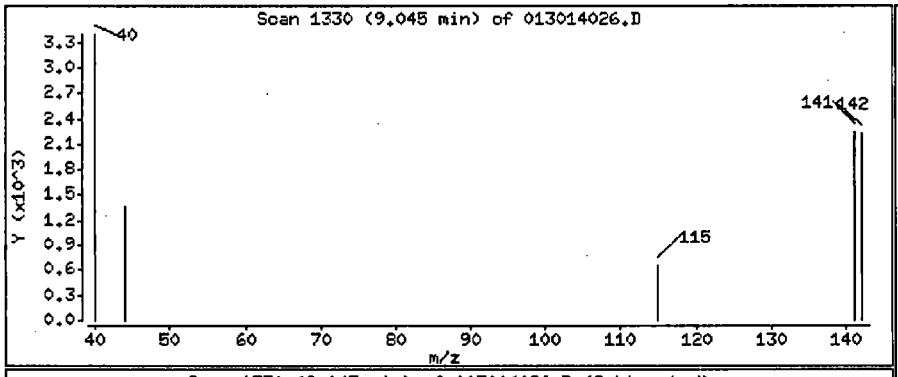
Operator: HBP

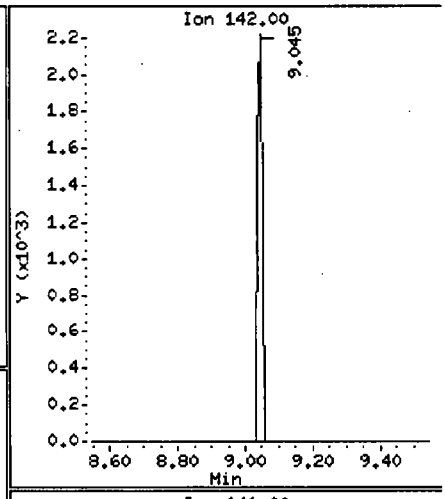
Column phase: Rtx-VMS

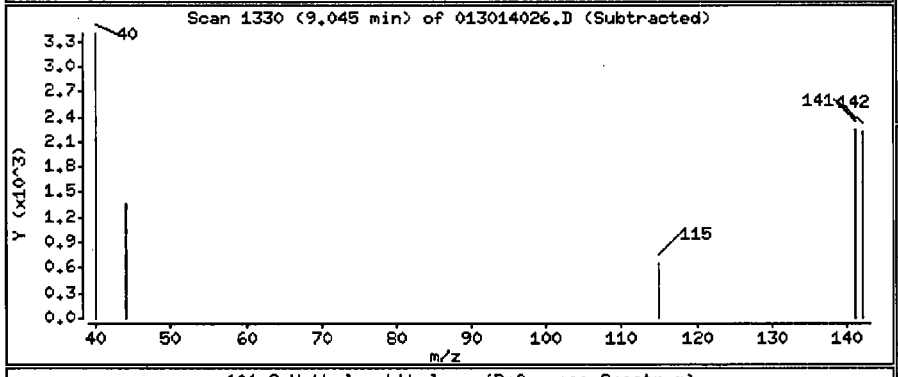
Column diameter: 0.18

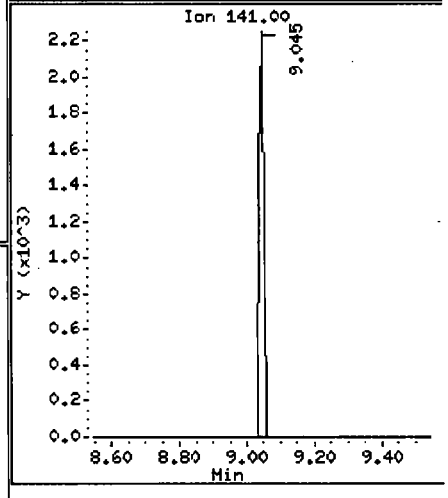
101 2-Methylnaphthalene

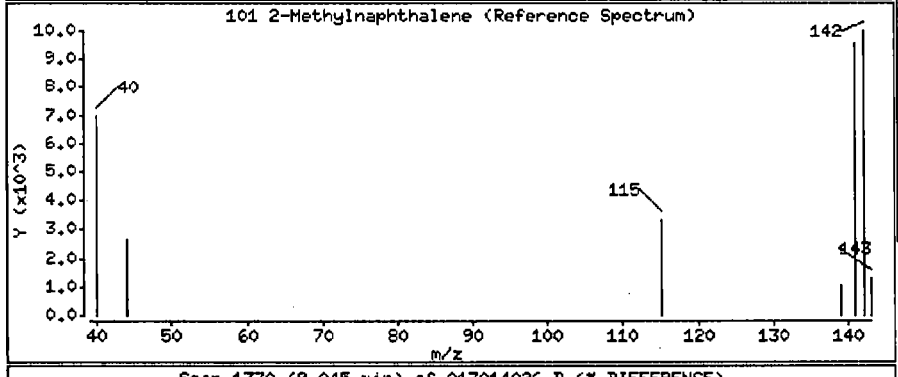
Concentration: 0.63 ug/Kg

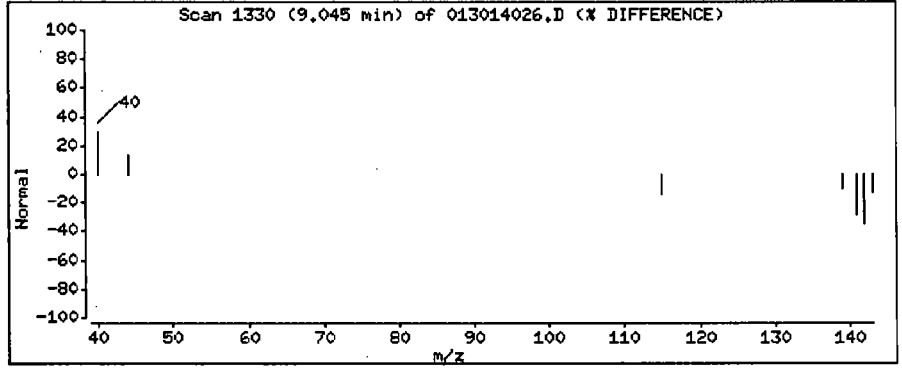












Injection Date: 30-JAN-2014 19:57
Instrument: 10msv7.i
Lab Sample ID: 1617373
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv3.i\020314A.b\02031407.D
Lab Smp Id: 1618515 Client Smp ID: 1618515
Inj Date : 03-FEB-2014 14:33
Operator : HBP Inst ID: 10msv3.i
Smp Info : 1618515,1,3,BLANK
Misc Info : 26272
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv3.i\020314A.b\v314-MLS-011614.m
Meth Date : 03-Feb-2014 11:11 hpham Quant Type: ISTD
Cal Date : 16-JAN-2014 23:23 Cal File: 01161419.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 465W+hex.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * Vt/(Va * Ws * (1-(M/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	1.461	1.455	(0.347)	3928	1.85802	92.9(QR)
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.057	2.082	(0.488)	488	0.04260	2.1(aR)
11	Trichlorotrifluoroethane	101	Compound Not Detected.					
14	Allyl Chloride	41	Compound Not Detected.					
15	Methylene Chloride	84	Compound Not Detected.					
* 16	Acetone d6	46	2.653	2.623	(1.000)	53837	100.000	
17	Acetone	58	Compound Not Detected.					
18	trans-1,2-Dichloroethene	96	Compound Not Detected.					
19	Hexane	86	Compound Not Detected.					
20	Methyl-tert-butyl Ether	73	Compound Not Detected.					
23	Isopropyl Ether	45	Compound Not Detected.					

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	24	1,1-Dichloroethane	63	Compound Not Detected.					
	28	cis-1,2-Dichloroethene	96	Compound Not Detected.					
	29	2,2-Dichloropropane	77	Compound Not Detected.					
	30	Cyclohexane	56	3.755	3.755	(0.890)	1211	0.21330	10.7(R)
	31	Bromochloromethane	130	Compound Not Detected.					
	32	Chloroform	83	Compound Not Detected.					
	33	Carbon Tetrachloride	117	Compound Not Detected.					
	34	Tetrahydrofuran	72	Compound Not Detected.					
	35	1,1,1-Trichloroethane	97	Compound Not Detected.					
	36	1,1-Dichloropropene	75	Compound Not Detected.					
	37	2-Butanone	43	Compound Not Detected.					
	38	Benzene	78	4.156	4.156	(0.986)	1265	0.08454	4.2(aQR)
*	39	Pentafluorobenzene	168	4.217	4.217	(1.000)	351761	50.0000	
$	41	1,2-Dichloroethane d4 (S)	65	4.235	4.235	(1.004)	134468	39.8547	39.8
	42	1,2-Dichloroethane	62	Compound Not Detected.					
	45	Trichloroethene	130	Compound Not Detected.					
*	46	1,4 Difluorobenzene	114	4.497	4.497	(1.000)	505136	50.0000	
	48	Dibromomethane	174	Compound Not Detected.					
	49	1,2-Dichloropropane	63	Compound Not Detected.					
	50	Bromodichloromethane	83	Compound Not Detected.					
*	51	1,4 dioxane d8	96	4.856	4.844	(1.000)	59429	2000.00	
	54	cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	55	Toluene-d8 (S)	98	5.123	5.124	(0.883)	559876	49.8818	49.9
	56	Toluene	92	5.148	5.148	(0.887)	515	0.05541	2.8(aR)
	57	4-Methyl-2-Pentanone	43	Compound Not Detected.					
	58	Tetrachloroethene	166	Compound Not Detected.					
	59	trans-1,3-Dichloropropene	75	Compound Not Detected.					
	60	1,1,2-Trichloroethane	97	Compound Not Detected.					
	61	Dibromochloromethane	129	Compound Not Detected.					
	62	1,3-Dichloropropane	76	Compound Not Detected.					
	63	1,2-Dibromoethane	107	Compound Not Detected.					
	64	2-Hexanone	43	Compound Not Detected.					
*	65	Chlorobenzene-d5	117	5.805	5.805	(1.000)	474033	50.0000	
	66	Chlorobenzene	112	Compound Not Detected.					
	67	Ethylbenzene	91	Compound Not Detected.					
	68	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	69	M&P-Xylene	106	5.890	5.884	(1.015)	302	0.04723	2.4(aR)
	70	O-Xylene (1,2-Dimethylbenzene)	106	Compound Not Detected.					
	71	Styrene	104	Compound Not Detected.					
	72	Bromoform	173	Compound Not Detected.					
	73	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$	74	4-Bromofluorobenzene (S)	95	6.407	6.407	(0.908)	218271	47.3721	47.4
	76	Bromobenzene	156	Compound Not Detected.					
	77	n-Propylbenzene	91	Compound Not Detected.					
	78	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	79	2-Chlorotoluene	91	Compound Not Detected.					
	80	1,3,5-Trimethylbenzene	105	6.571	6.571	(0.931)	337	0.02794	1.4(aR)
	81	1,2,3-Trichloropropane	110	Compound Not Detected.					
	83	4-Chlorotoluene	91	Compound Not Detected.					
	84	tert-Butylbenzene	119	6.760	6.760	(0.958)	361	0.03654	1.8(aQR)
	85	1,2,4-Trimethylbenzene	105	6.802	6.803	(0.964)	635	0.05232	2.6(aR)
	86	sec-Butylbenzene	105	Compound Not Detected.					
	87	p-Isopropyltoluene	119	Compound Not Detected.					
	88	1,3-Dichlorobenzene	146	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031407.D
Report Date: 04-Feb-2014 12:52

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
89 1,4-Dichlorobenzene-d4	152	7.058	7.058	(1.000)	265583	50.0000	
90 1,4-Dichlorobenzene	146	Compound Not Detected.					
92 n-Butylbenzene	91	7.228	7.228	(1.024)	1203	0.12665	6.3(R)
93 1,2-Dichlorobenzene	146	Compound Not Detected.					
94 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
95 Hexachlorobutadiene	225	8.202	8.208	(1.162)	913	0.52335	26.2(R)
96 1,2,4-Trichlorobenzene	180	8.226	8.226	(1.165)	470	0.13294	6.6(R)
97 Naphthalene	128	8.409	8.409	(1.191)	1124	0.12119	6.0(R)
98 1,2,3-Trichlorobenzene	180	8.518	8.518	(1.207)	694	0.21125	10.6(R)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031407.D
Report Date: 04-Feb-2014 12:52

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv3.i
Lab File ID: 02031407.D
Lab Smp Id: 1618515
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Calibration Date: 03-FEB-2014
Calibration Time: 12:36
Client Smp ID: 1618515
Level: MED
Sample Type: SOIL
Method File: \\192.168.10.12\chem\10msv3.i\020314A.b\v314-MLS-011614.m
Misc Info: 26272

Test Mode:
Use Last Calibration Run.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	52518	26259	105036	53837	2.51
39 Pentafluorobenzen	371366	185683	742732	351761	-5.28
46 1,4 Difluorobenze	520400	260200	1040800	505136	-2.93
51 1,4 dioxane d8	62794	31397	125588	59429	-5.36
65 Chlorobenzene-d5	463274	231637	926548	474033	2.32
89 1,4-Dichlorobenze	262539	131270	525078	265583	1.16

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	2.62	2.12	3.12	2.65	1.15
39 Pentafluorobenzen	4.22	3.72	4.72	4.22	-0.00
46 1,4 Difluorobenze	4.50	4.00	5.00	4.50	-0.00
51 1,4 dioxane d8	4.84	4.34	5.34	4.86	0.25
65 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
89 1,4-Dichlorobenze	7.06	6.56	7.56	7.06	-0.00

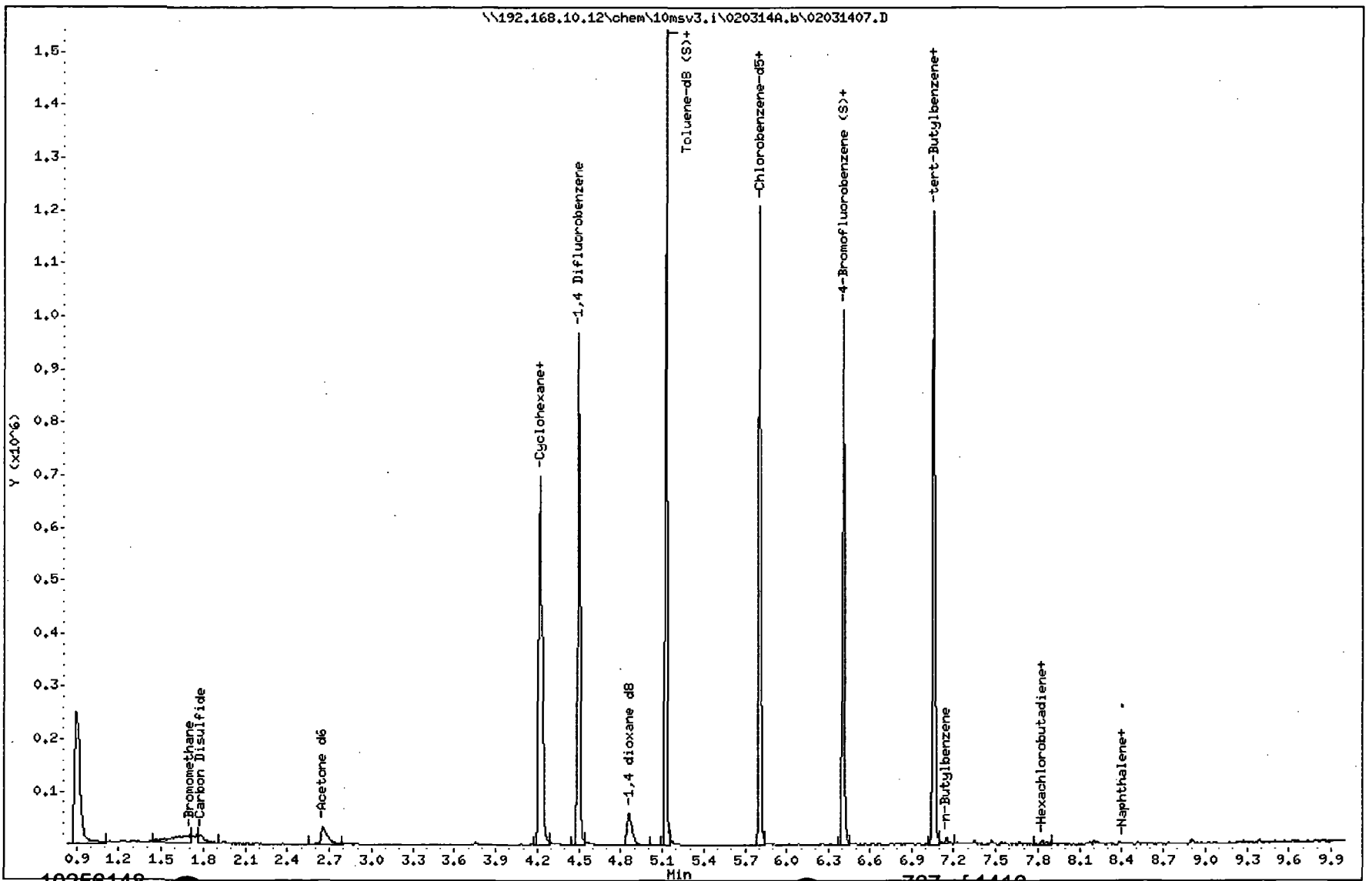
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031407.D
Date : 03-FEB-2014 14:33
Client ID: 1618515
Sample Info: 1618515,1,3,BLANK

Instrument: 10msv3.i

Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031407.D

Date : 03-FEB-2014 14:33

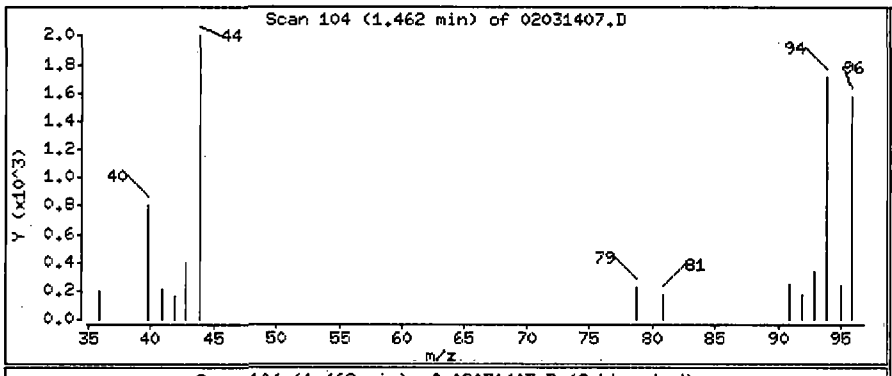
Client ID: 1618515 Instrument: 10msv3.i

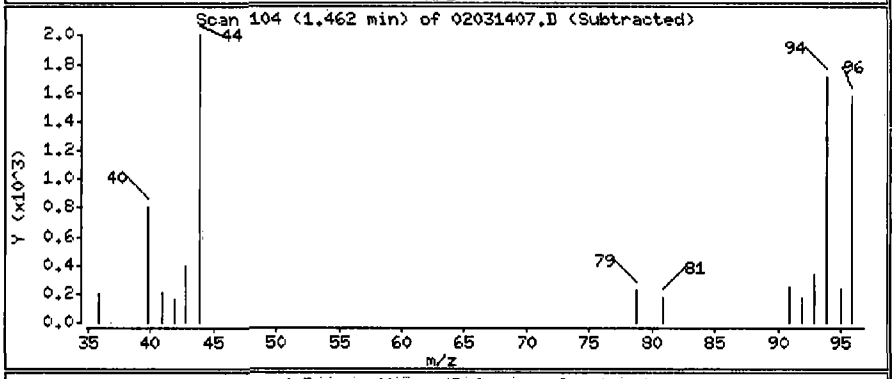
Sample Info: 1618515,1,3,BLANK

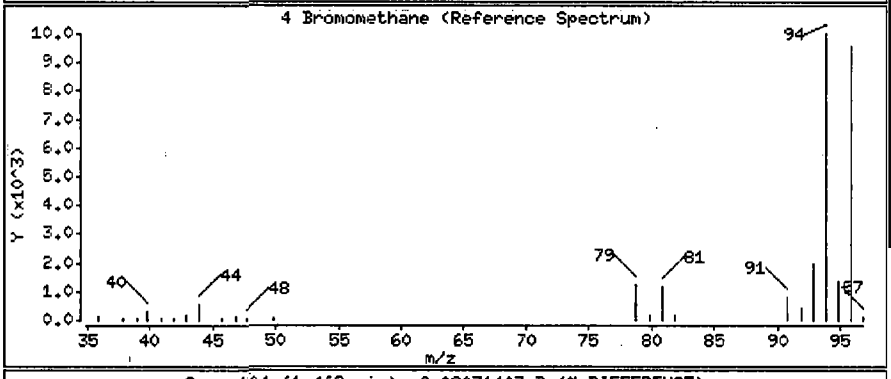
Operator: HBP

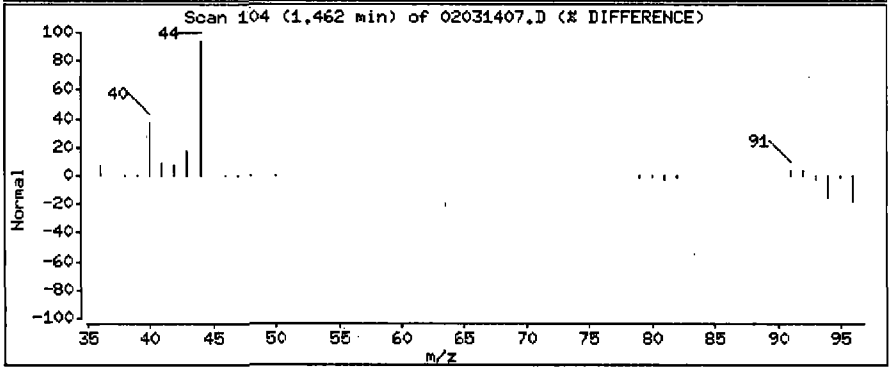
Column phase: Rtx-VMS Column diameter: 0.18

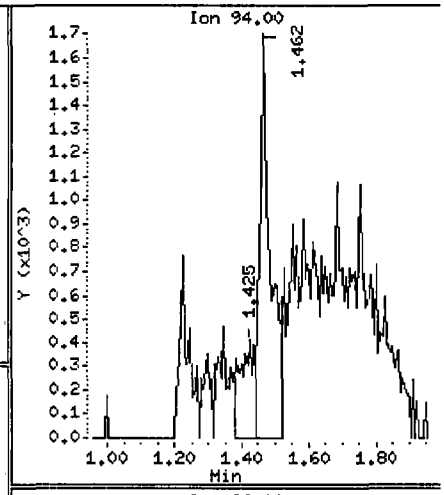
4 Bromomethane Concentration: 92.9 ug/Kg

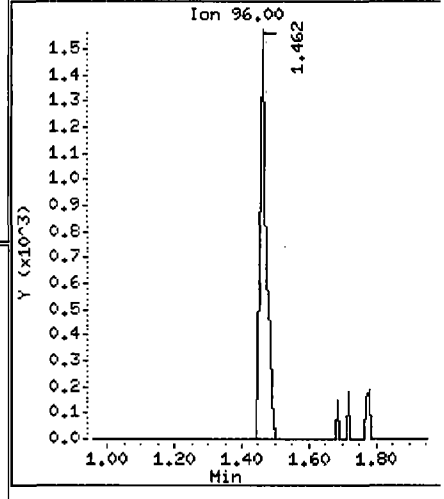












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Date : 03-FEB-2014 14:33

Client ID: 1618515

Instrument: 10msv3.i

Sample Info: 1618515,1,3,BLANK

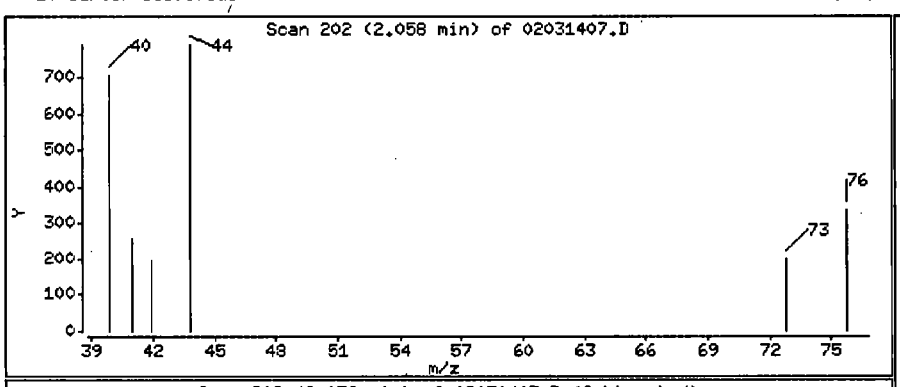
Operator: HBP

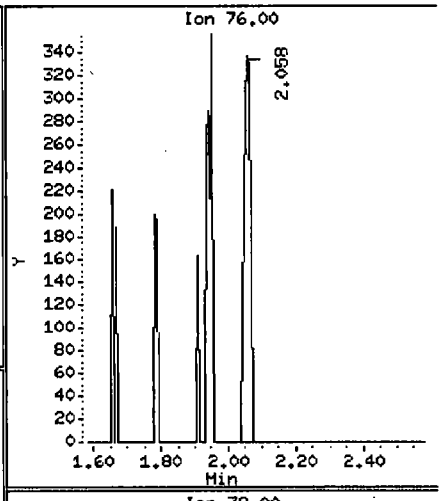
Column phase: Rtx-VMS

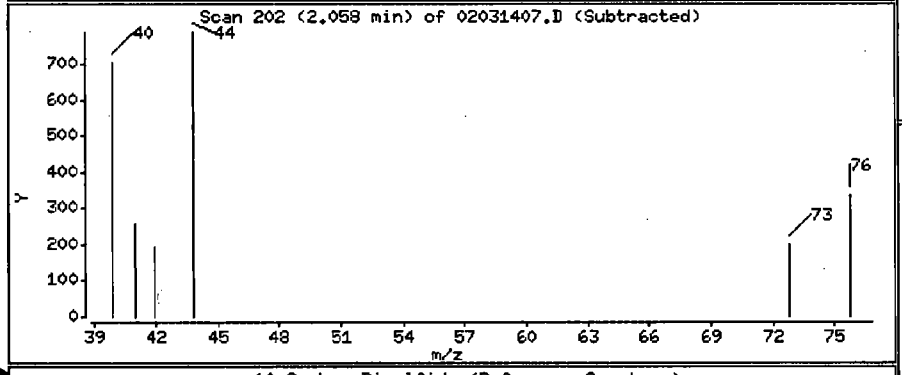
Column diameter: 0.18

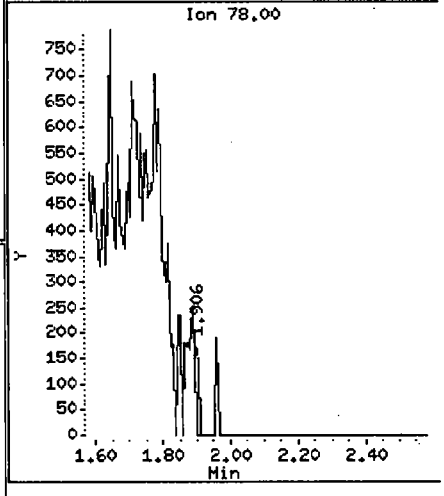
10 Carbon Disulfide

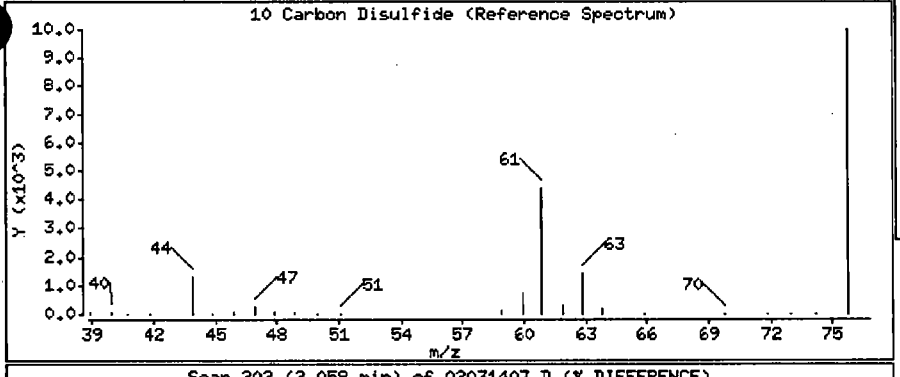
Concentration: 2.1 ug/Kg

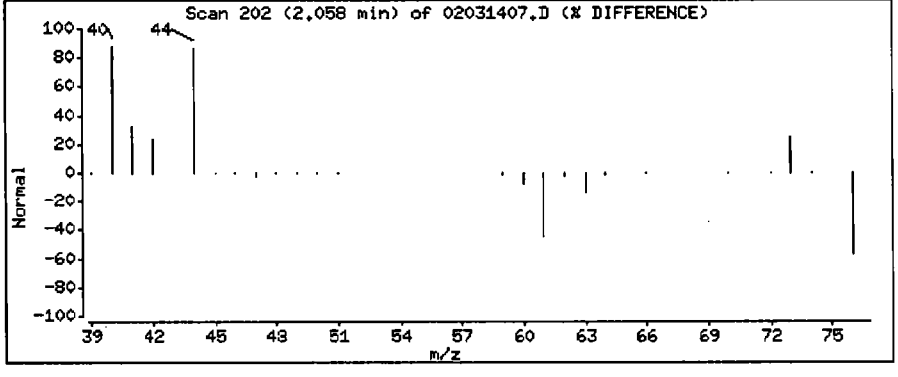












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Date : 03-FEB-2014 14:33

Client ID: 1618515

Instrument: 10msv3.i

Sample Info: 1618515,1,3,BLANK

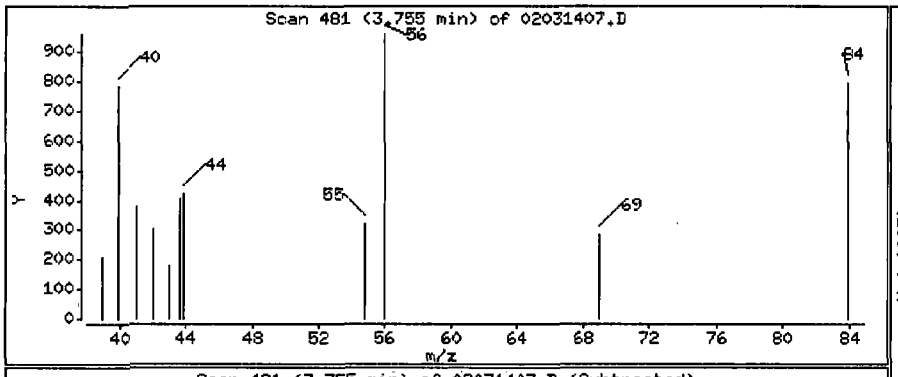
Operator: HBP

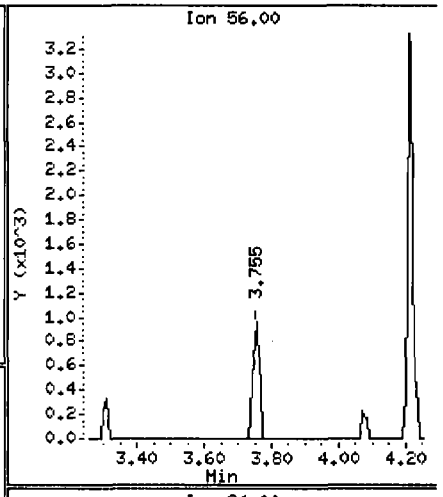
Column phase: Rtx-VMS

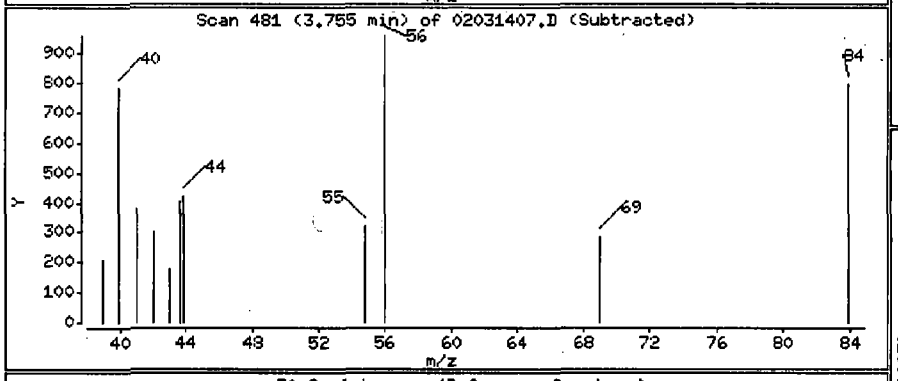
Column diameter: 0.18

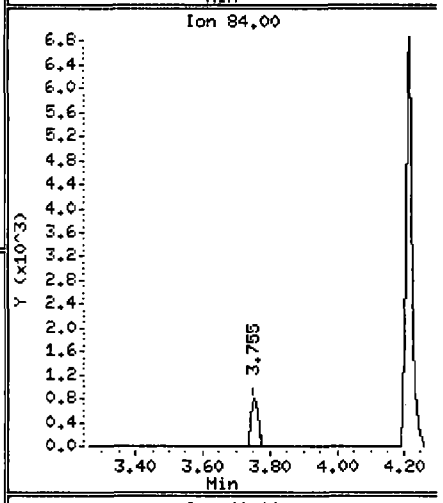
30 Cyclohexane

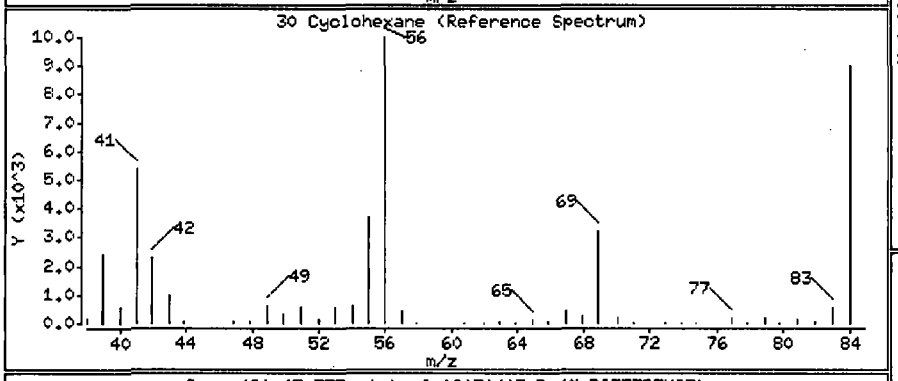
Concentration: 10.7 ug/Kg

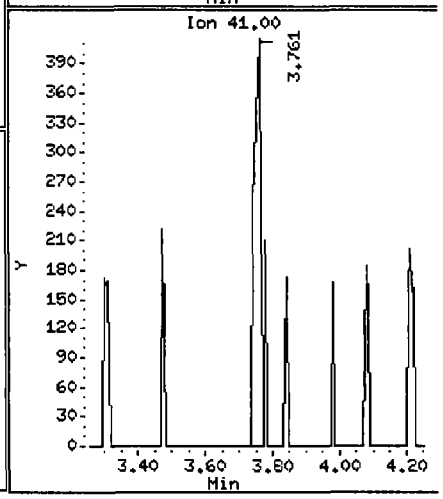


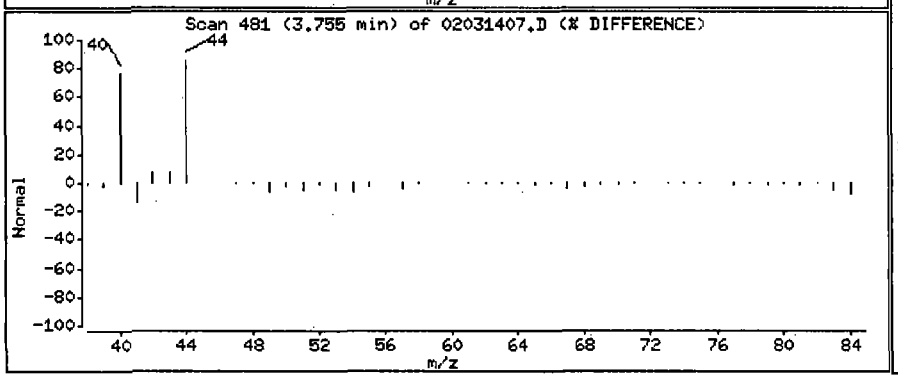












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Date : 03-FEB-2014 14:33

Client ID: 1618515

Instrument: 10msv3.i

Sample Info: 1618515,1,3,BLANK

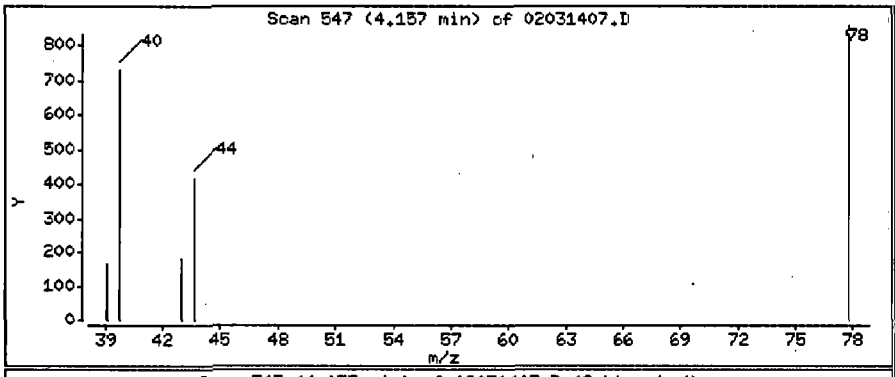
Operator: HBP

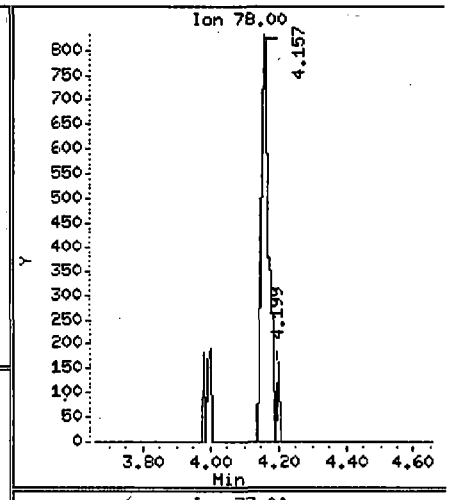
Column phase: Rtx-VMS

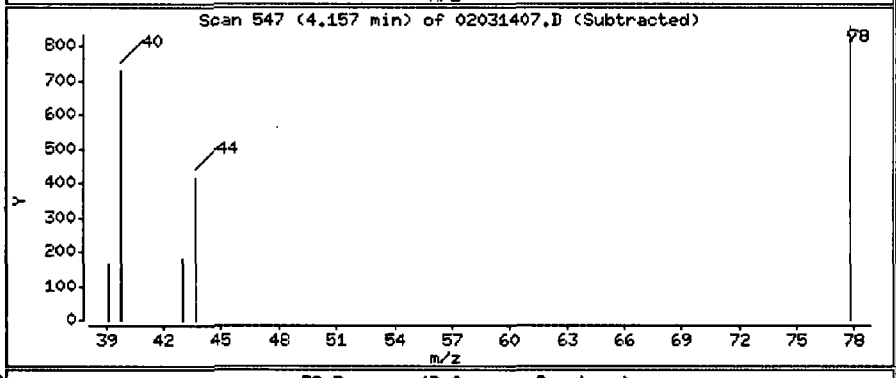
Column diameter: 0.18

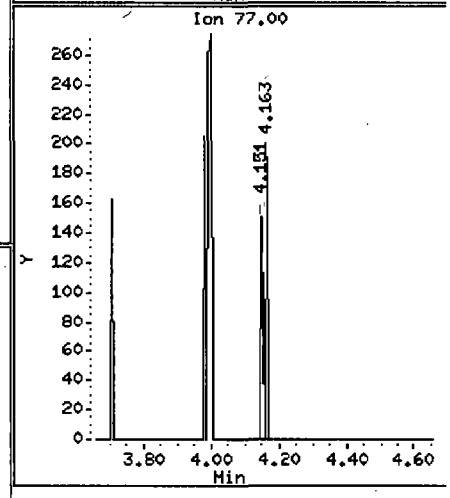
38 Benzene

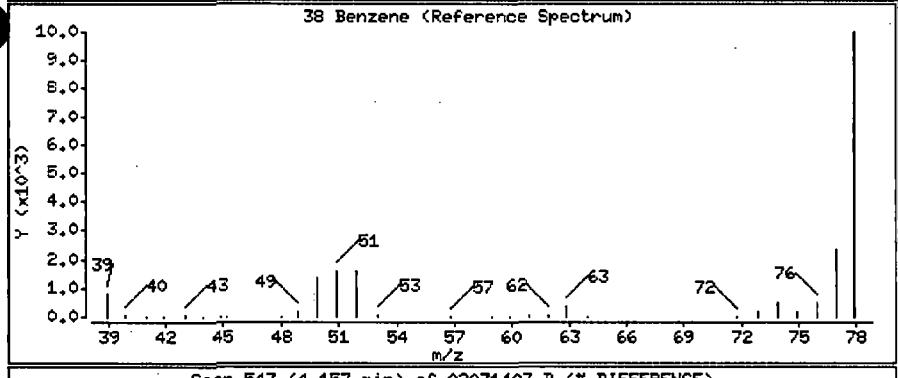
Concentration: 4.2 ug/Kg

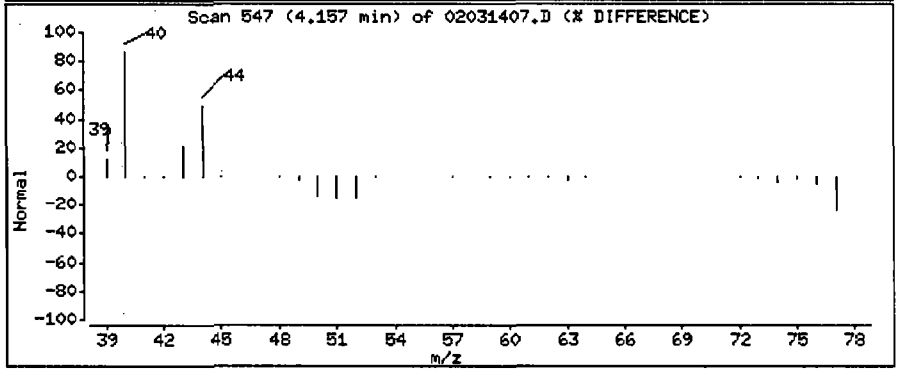












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Date : 03-FEB-2014 14:33

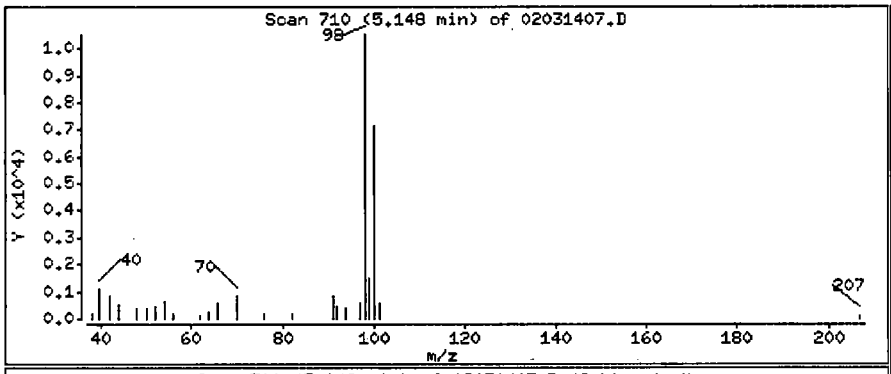
Client ID: 1618515 Instrument: 10msv3.i

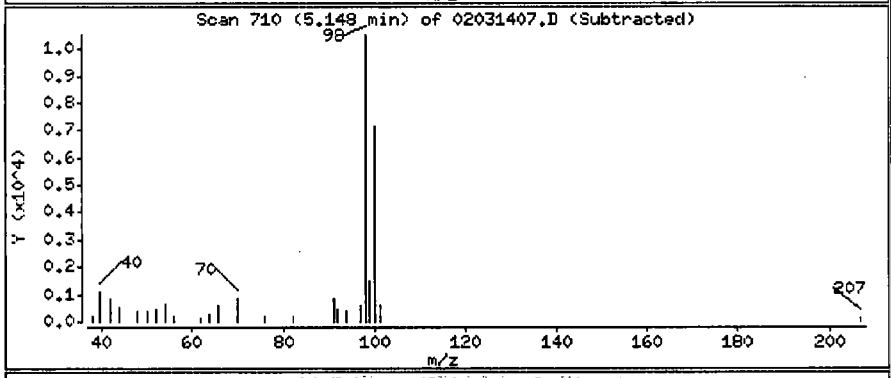
Sample Info: 1618515,1,3,BLANK

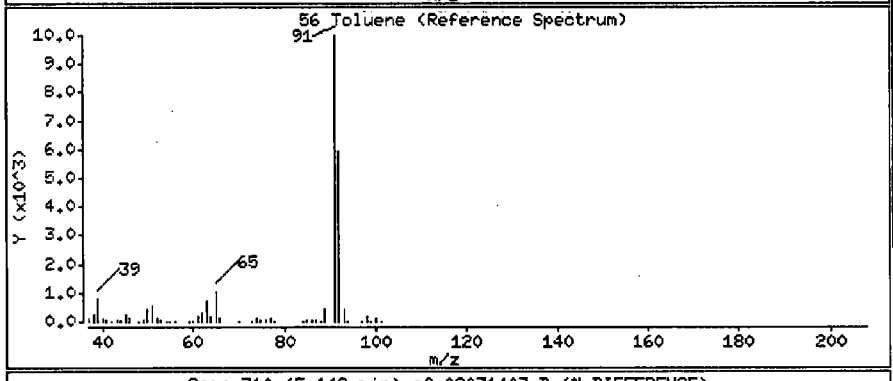
Operator: HBP

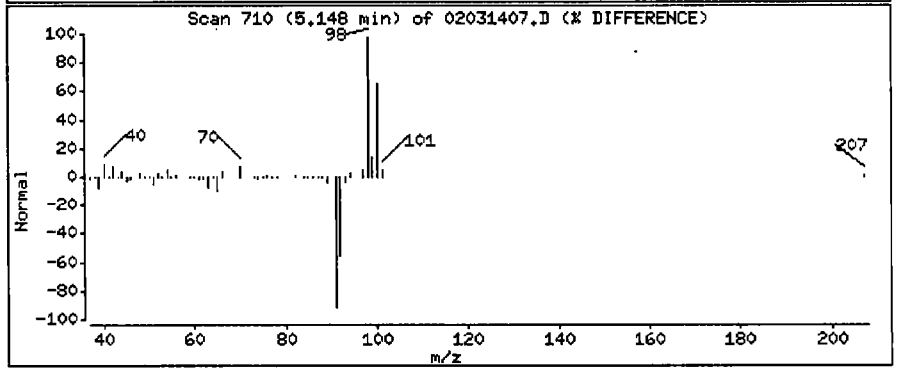
Column phase: Rtx-VMS Column diameter: 0.18

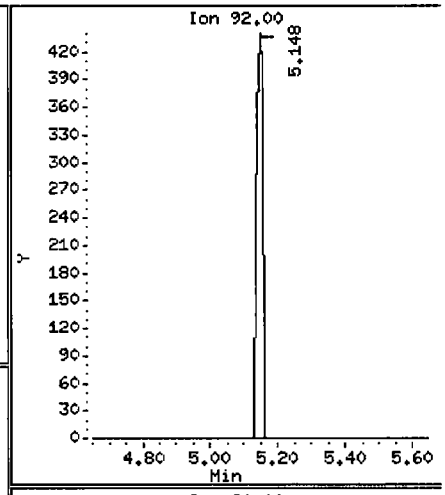
56 Toluene Concentration: 2.8 ug/Kg

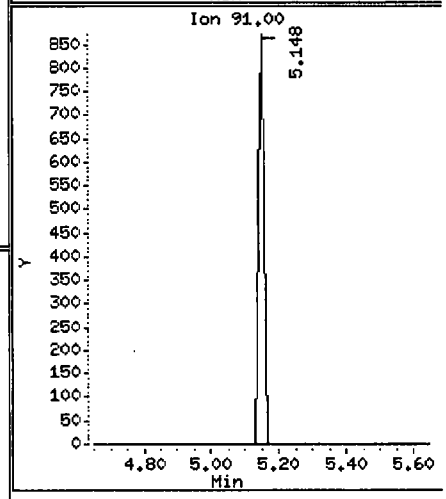












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Date : 03-FEB-2014 14:33

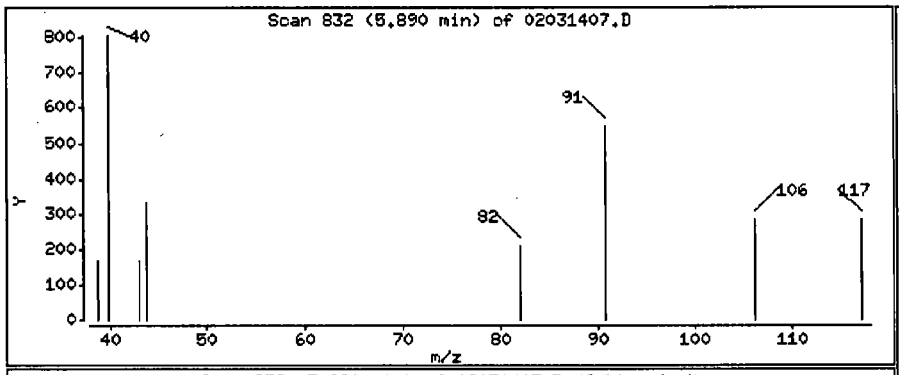
Client ID: 1618515 Instrument: 10msv3.i

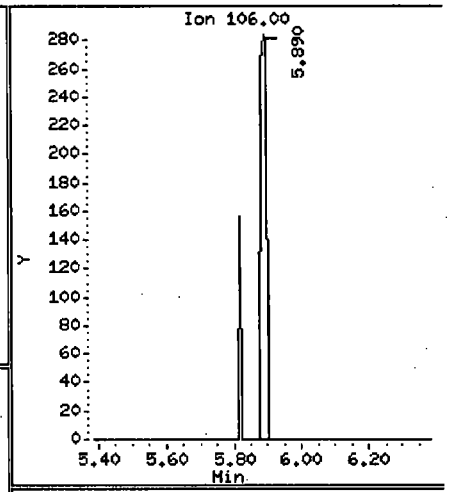
Sample Info: 1618515,1,3,BLANK

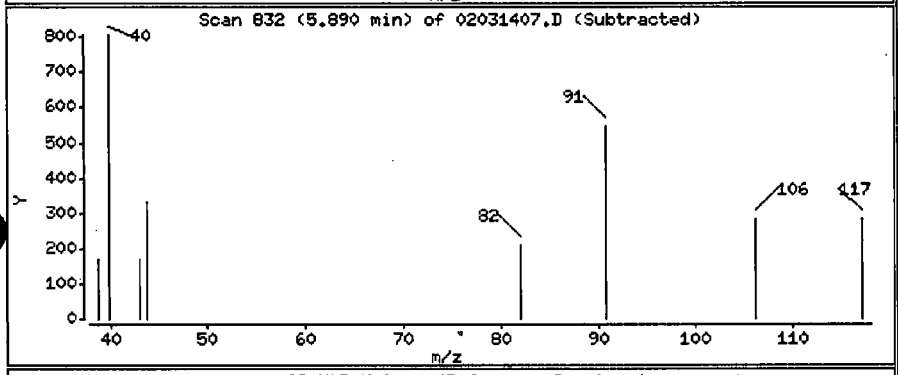
Operator: HBP

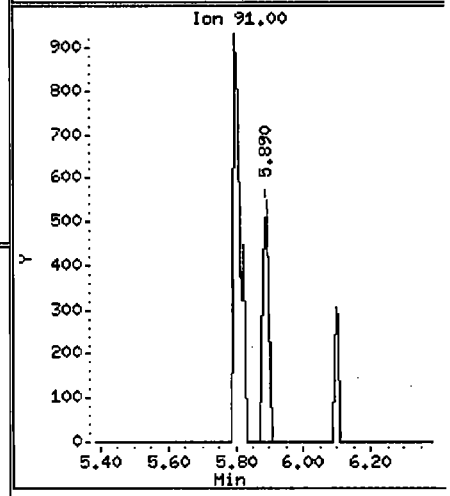
Column phase: Rtx-VMS Column diameter: 0.18

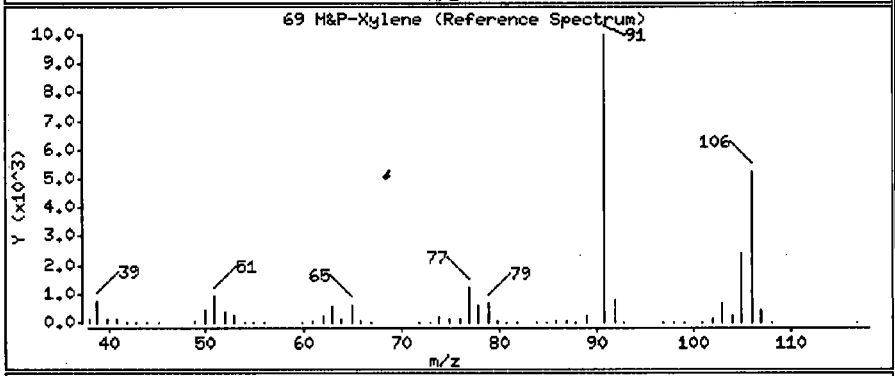
69 M&P-Xylene Concentration: 2.4 ug/Kg

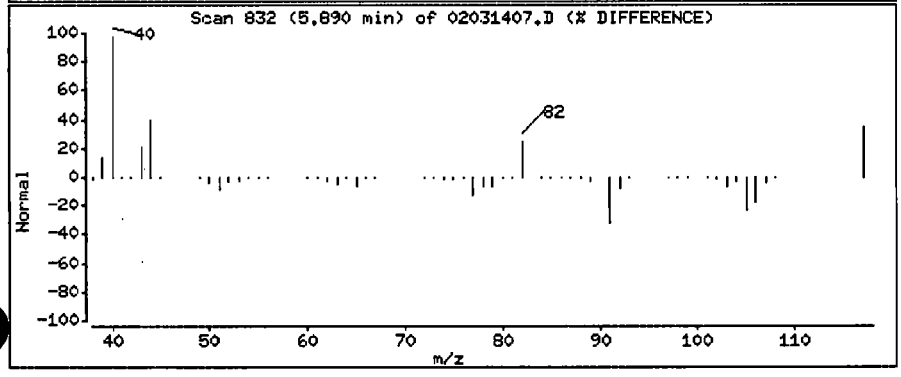












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Date : 03-FEB-2014 14:33

Client ID: 1618515

Instrument: 10msv3.i

Sample Info: 1618515,1,3,BLANK

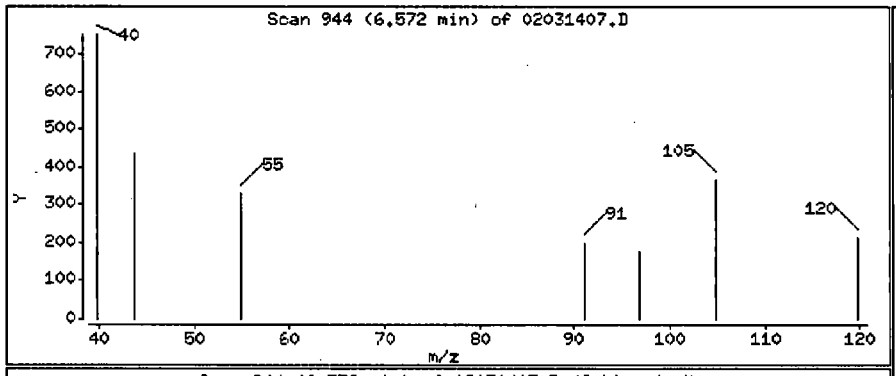
Operator: HBP

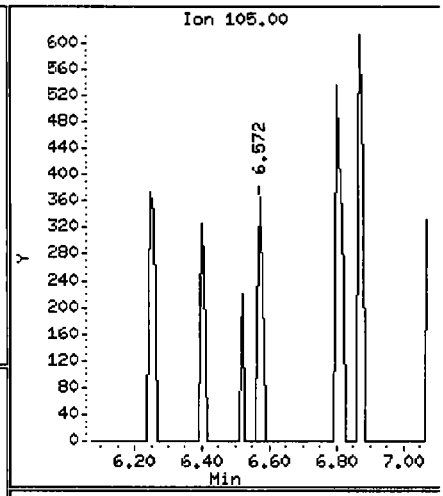
Column phase: Rtx-VMS

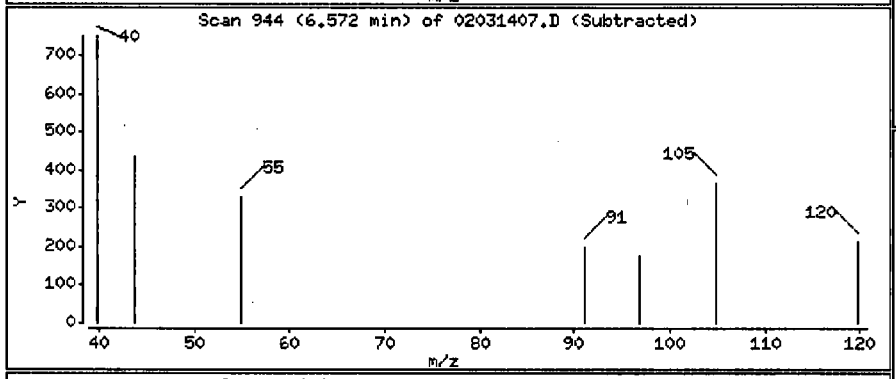
Column diameter: 0.18

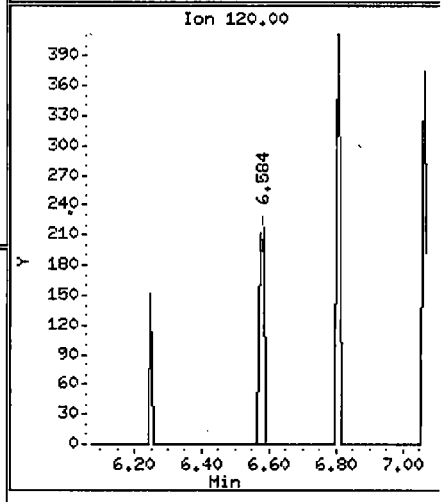
80 1,3,5-Trimethylbenzene

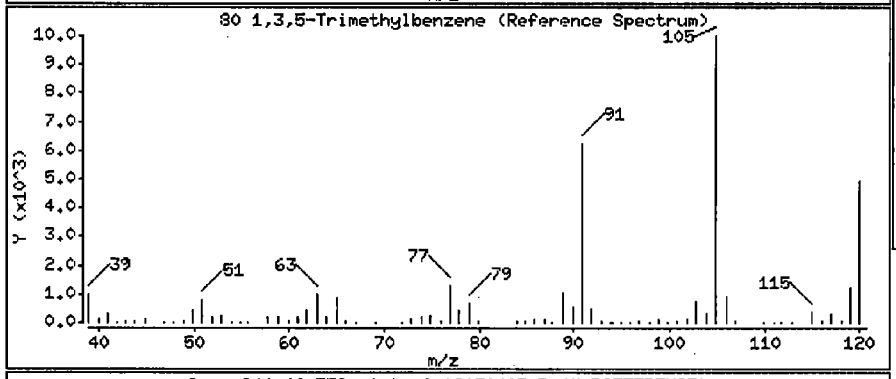
Concentration: 1.4 ug/Kg

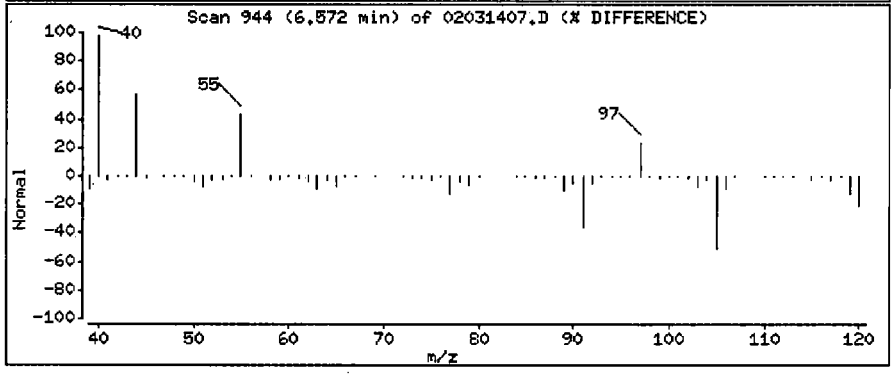












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Date : 03-FEB-2014 14:33

Client ID: 1618515

Instrument: 10msv3.i

Sample Info: 1618515,1,3,BLANK

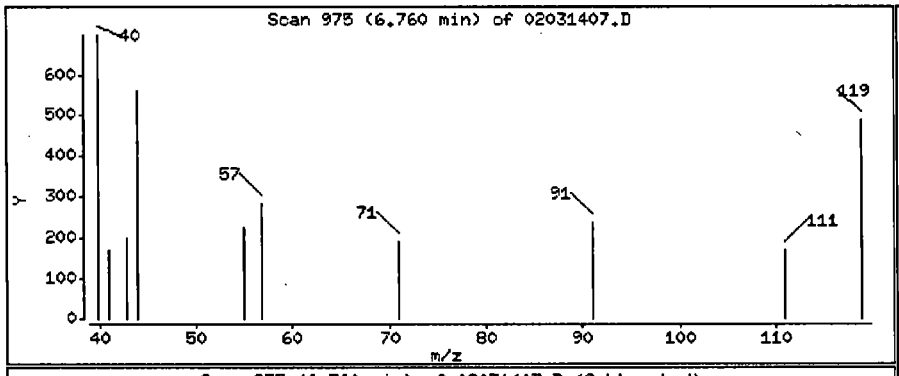
Operator: HBP

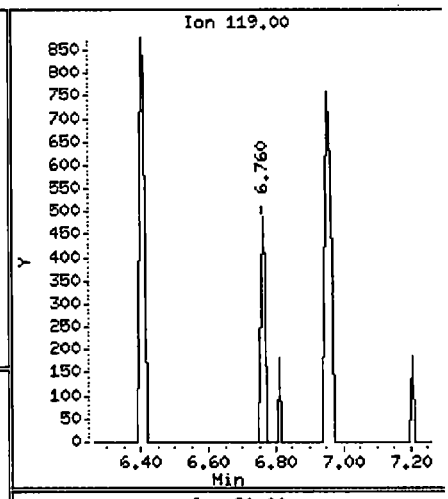
Column phase: Rtx-VMS

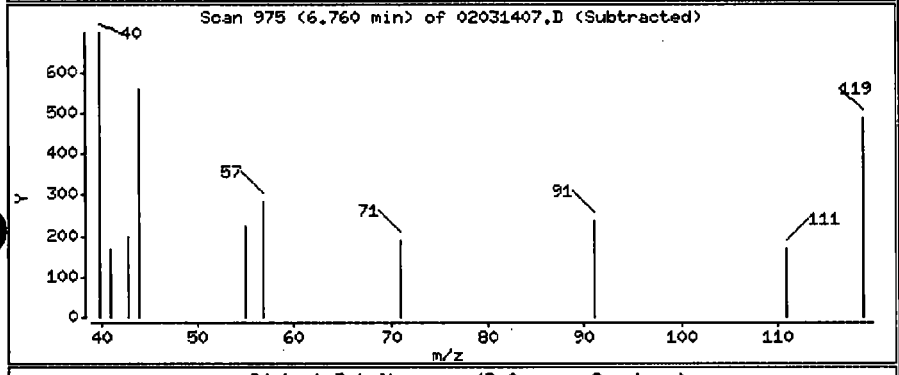
Column diameter: 0.18

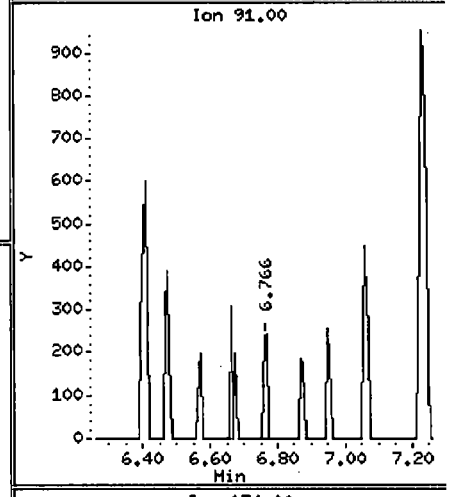
84 tert-Butylbenzene

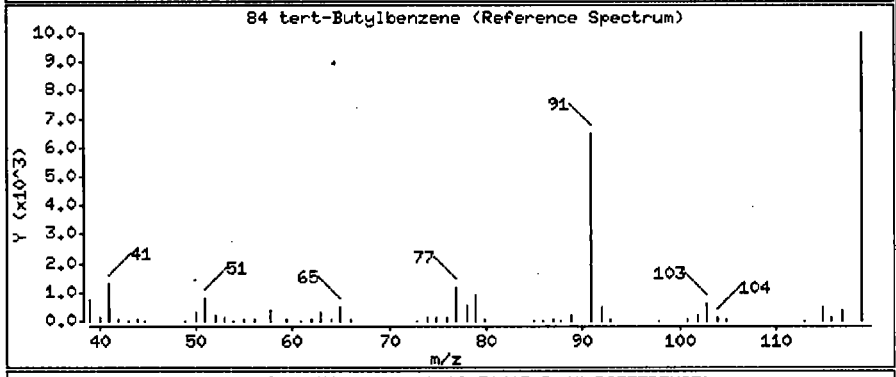
Concentration: 1.8 ug/Kg

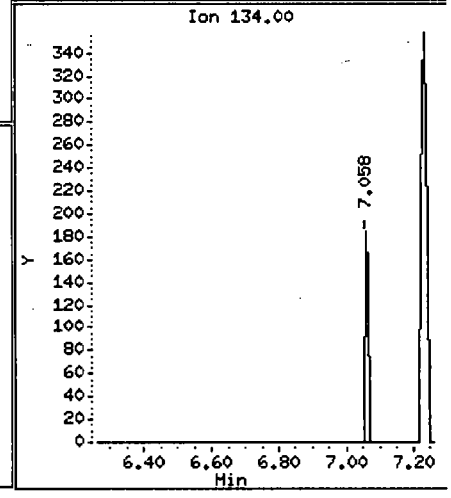


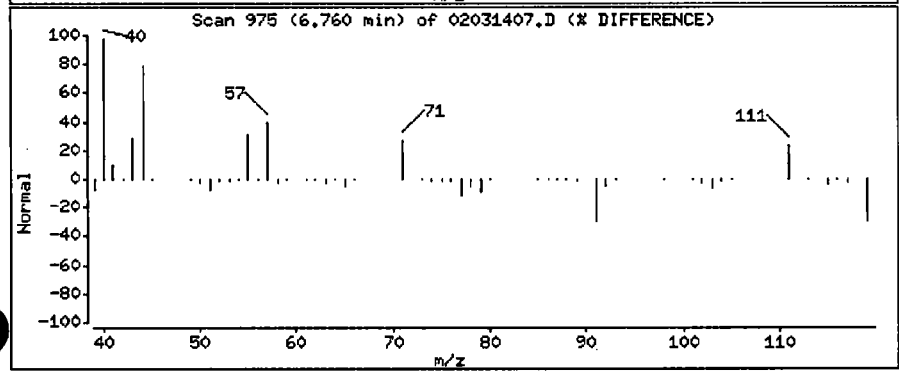












Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031407.D

Date : 03-FEB-2014 14:33

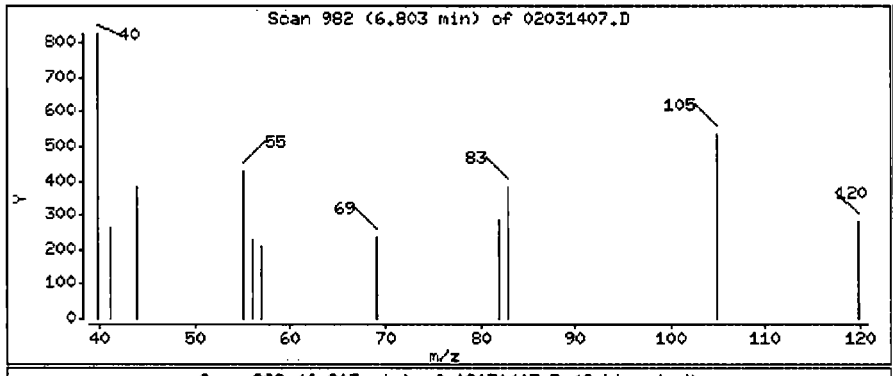
Client ID: 1618515 Instrument: 10msv3.i

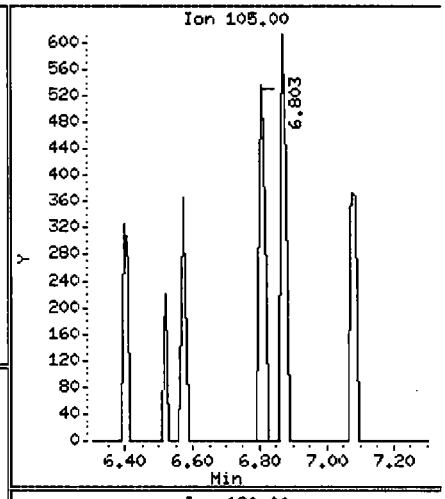
Sample Info: 1618515,1,3,BLANK

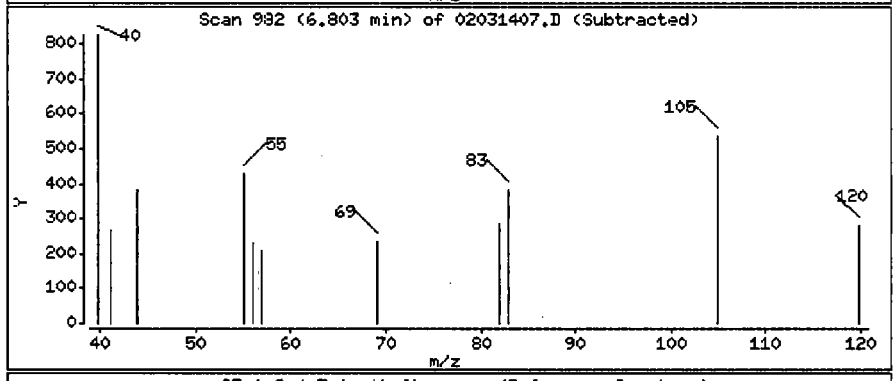
Operator: HBP

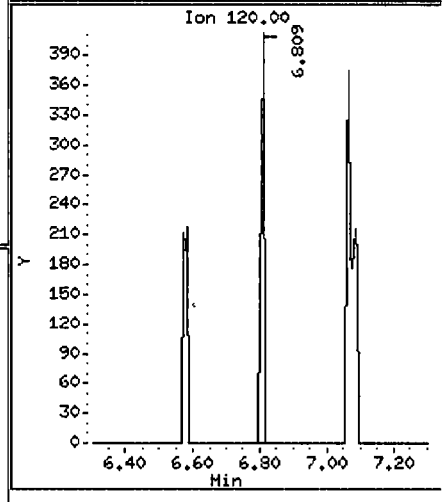
Column phase: Rtx-VMS Column diameter: 0.18

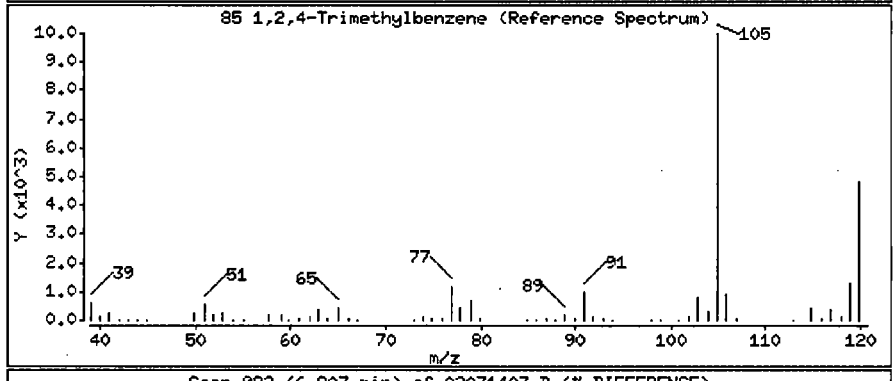
85 1,2,4-Trimethylbenzene Concentration: 2.6 ug/Kg

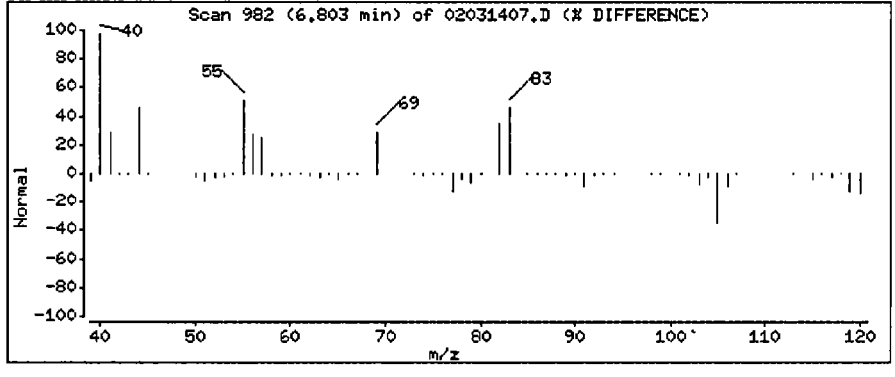












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Date : 03-FEB-2014 14:33

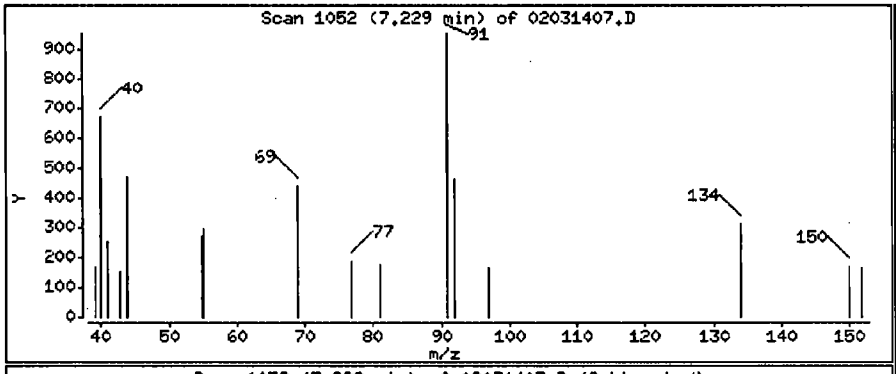
Client ID: 1618515 Instrument: 10msv3.i

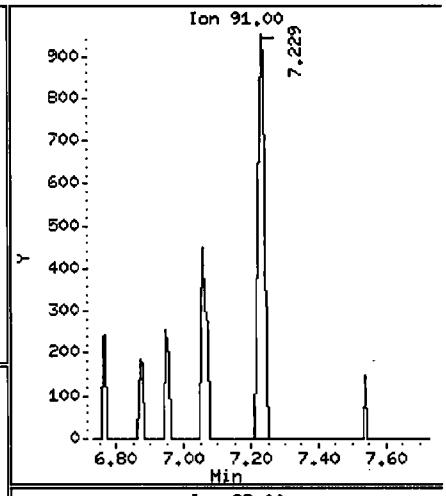
Sample Info: 1618515,1,3,BLANK

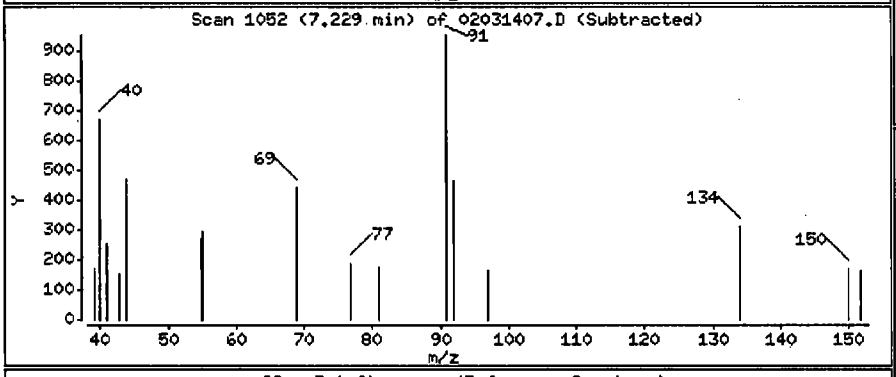
Operator: HBP

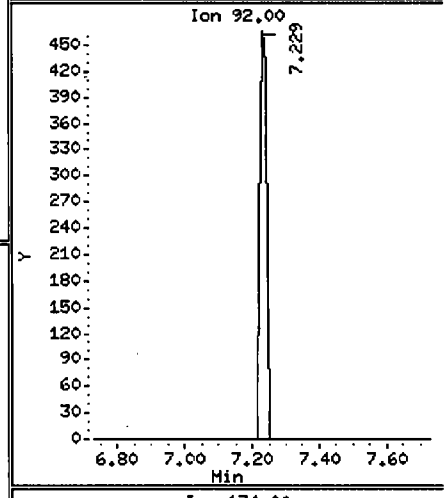
Column phase: Rtx-VMS Column diameter: 0.18

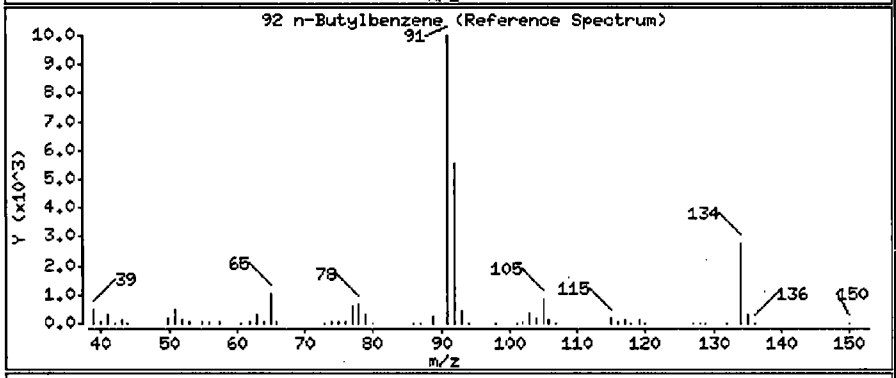
92 n-Butylbenzene Concentration: 6.3 ug/Kg

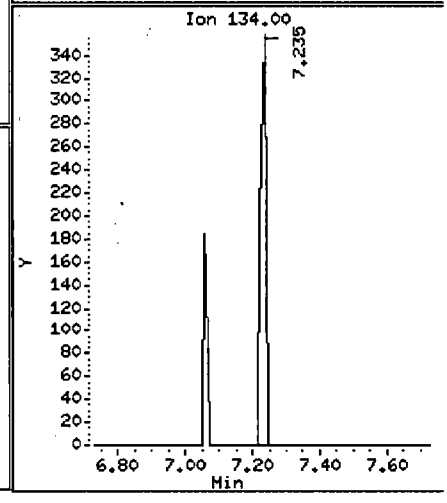


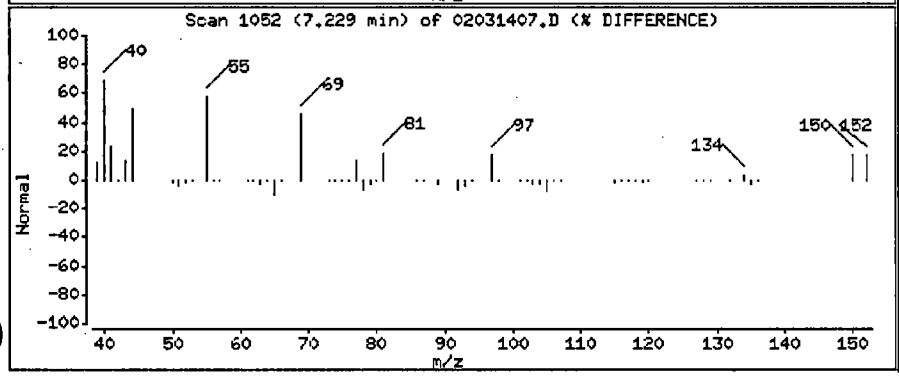












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Date : 03-FEB-2014 14:33

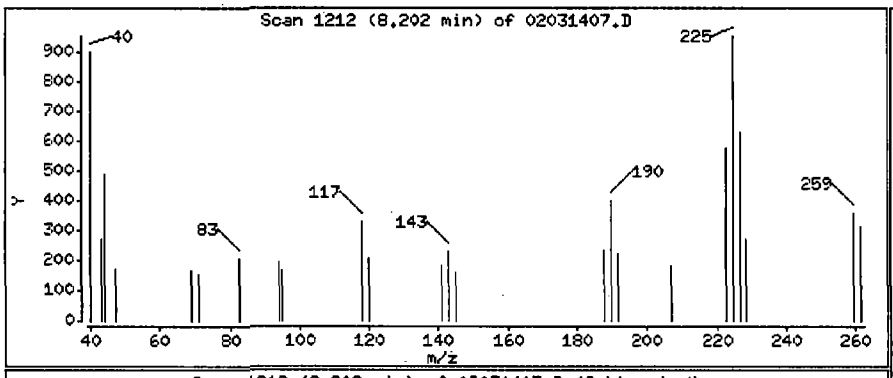
Client ID: 1618515 Instrument: 10msv3.i

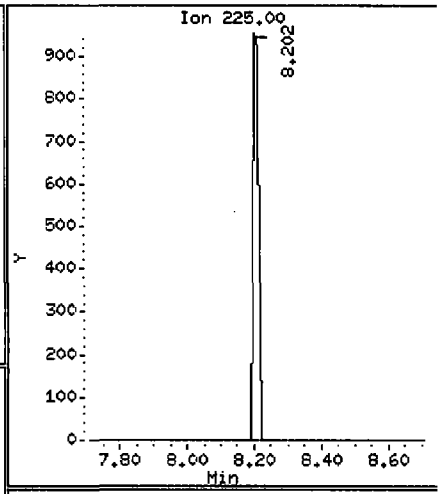
Sample Info: 1618515,1,3,BLANK

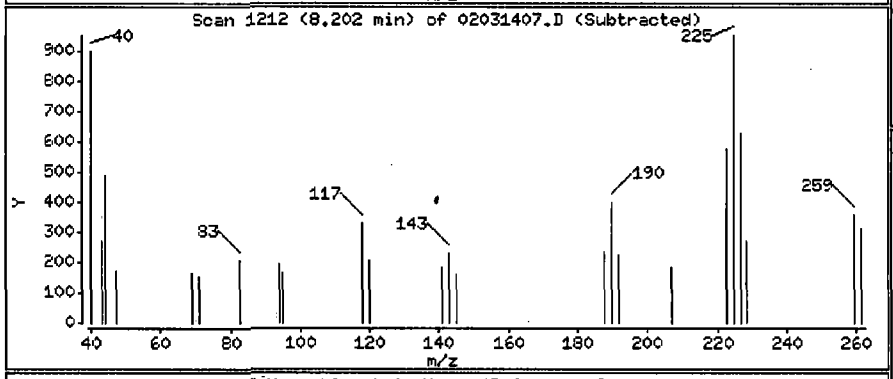
Operator: HBP

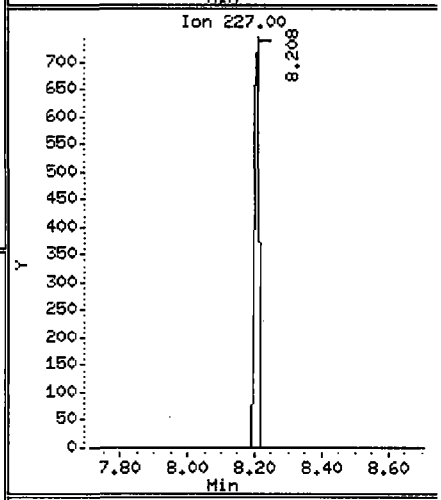
Column phase: Rtx-VMS Column diameter: 0.18

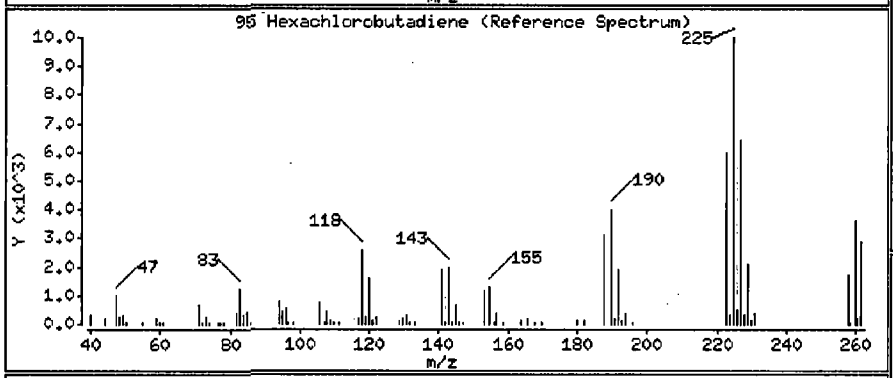
95 Hexachlorobutadiene Concentration: 26.2 ug/Kg

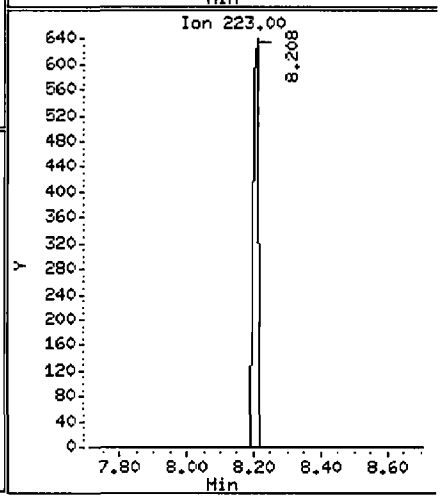


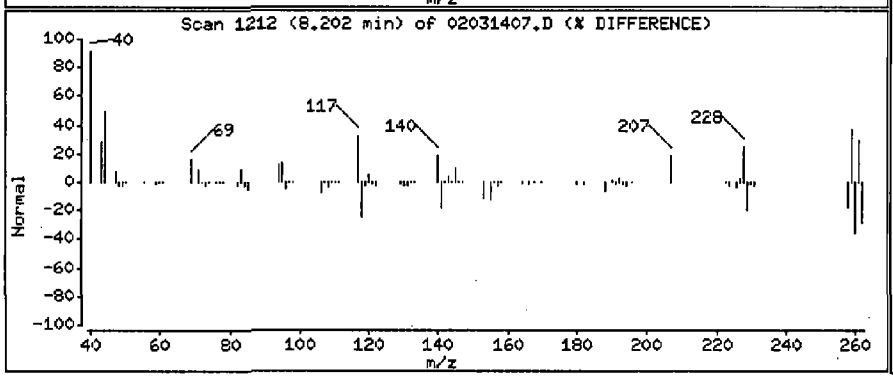












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Date : 03-FEB-2014 14:33

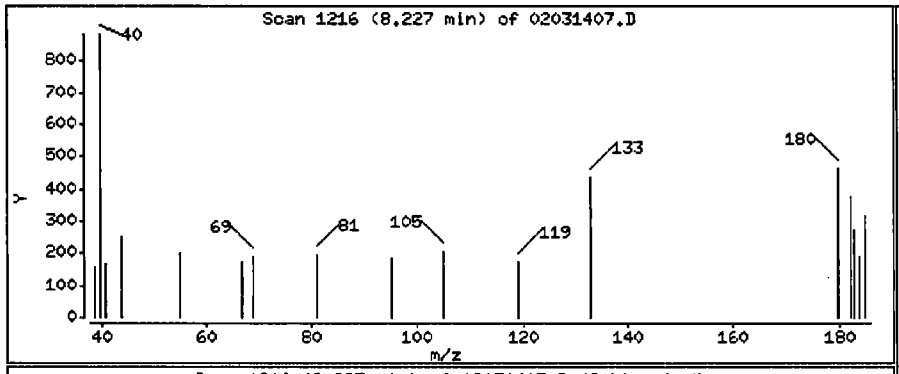
Client ID: 1618515 Instrument: 10msv3.i

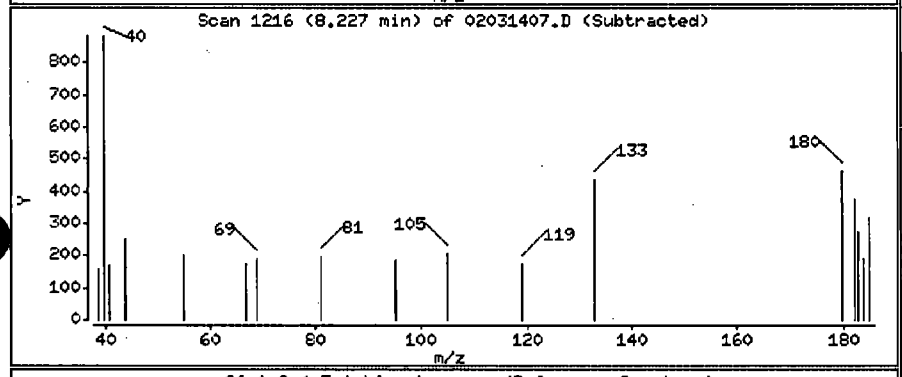
Sample Info: 1618515,1,3,BLANK

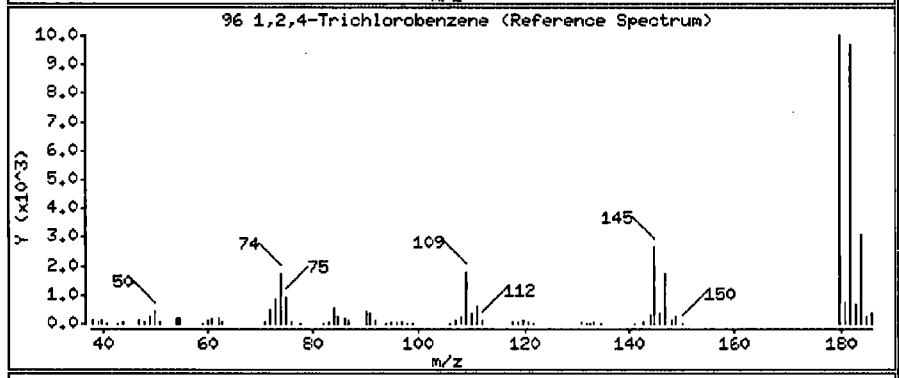
Operator: HBP

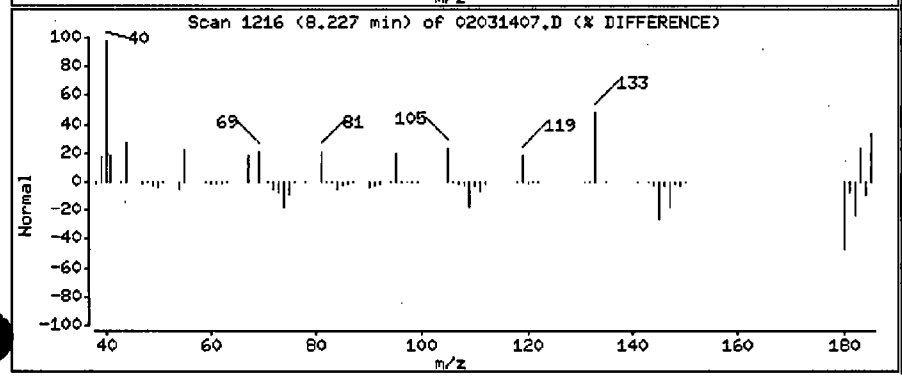
Column phase: Rtx-VMS Column diameter: 0.18

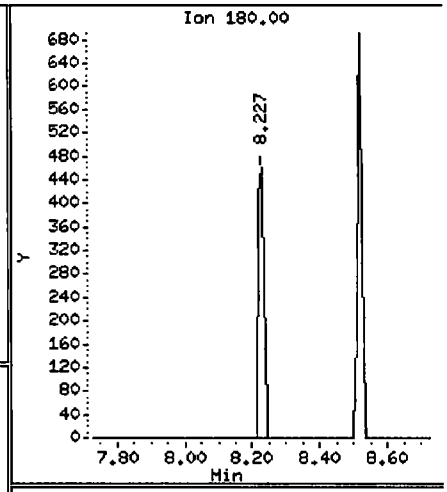
96 1,2,4-Trichlorobenzene Concentration: 6.6 ug/Kg

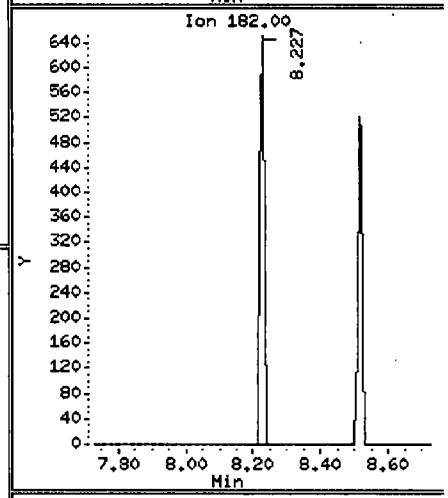


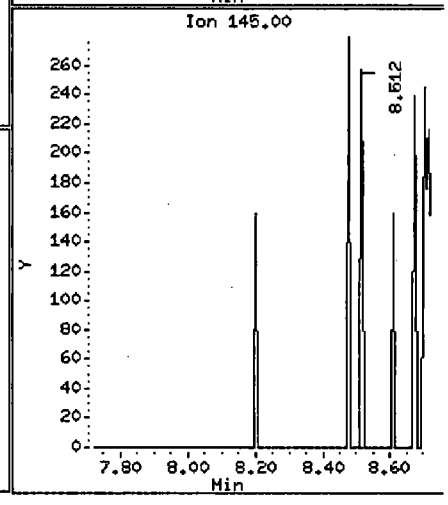












Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031407.D

Date : 03-FEB-2014 14:33

Client ID: 1618515

Instrument: 10msv3.i

Sample Info: 1618515,1,3,BLANK

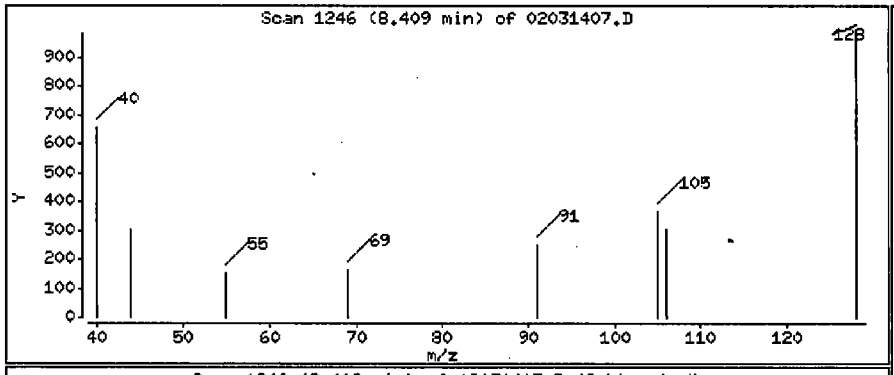
Operator: HBP

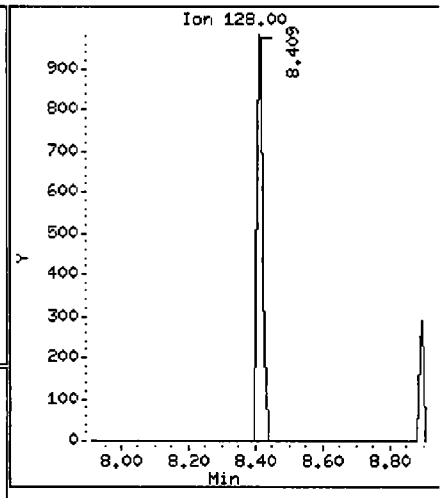
Column phase: Rtx-VMS

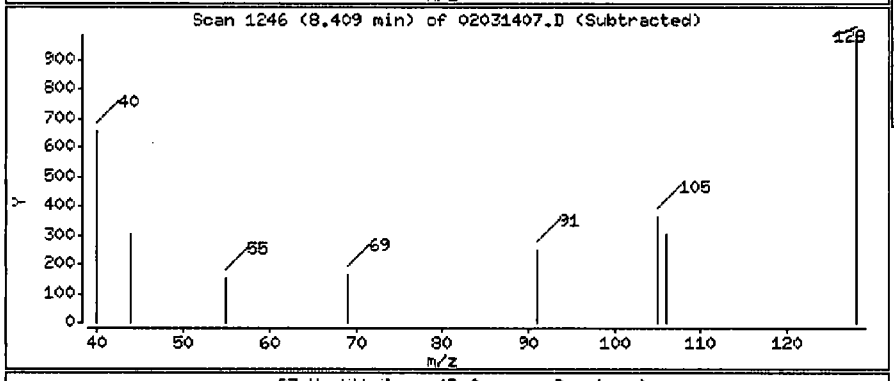
Column diameter: 0.18

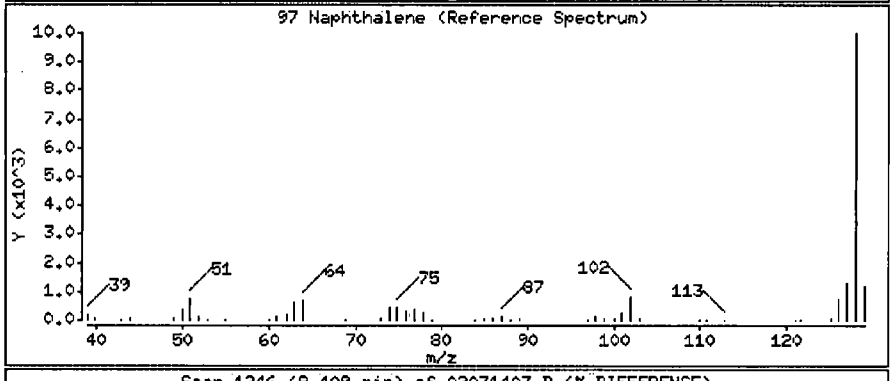
97 Naphthalene

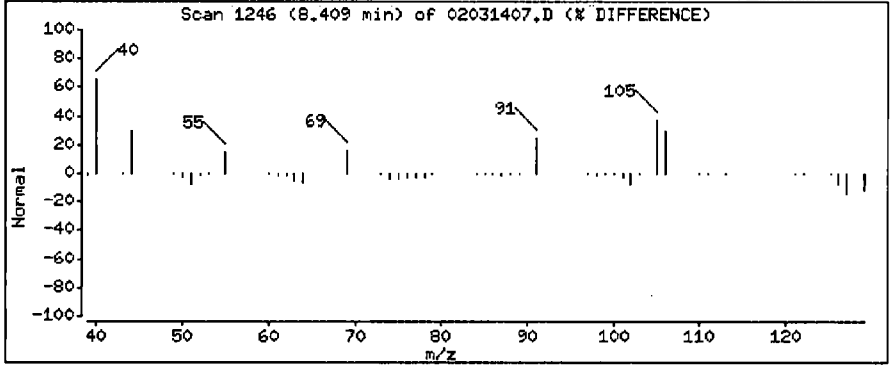
Concentration: 6.0 ug/Kg











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Date : 03-FEB-2014 14:33

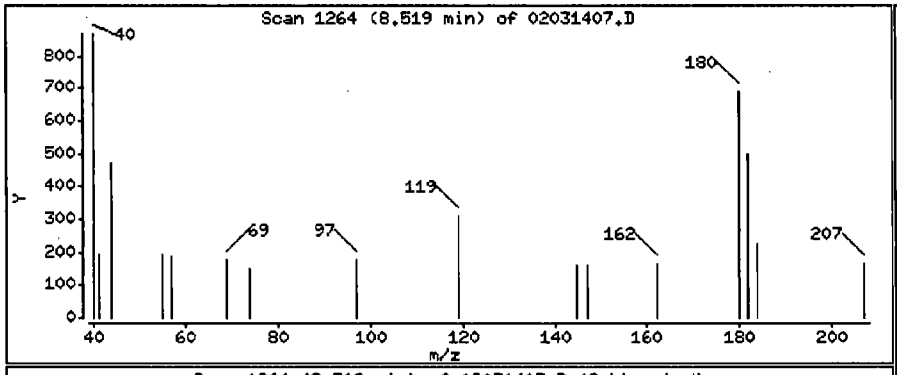
Client ID: 1618515 Instrument: 10msv3.i

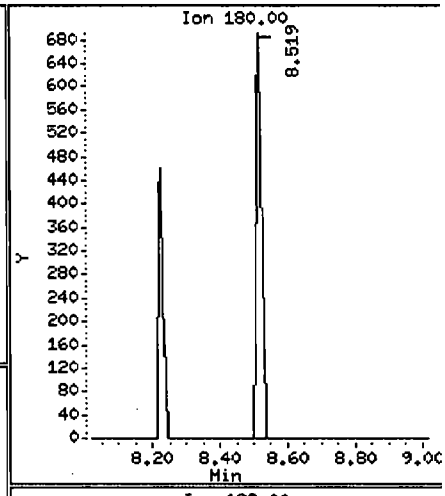
Sample Info: 1618515,1,3,BLANK

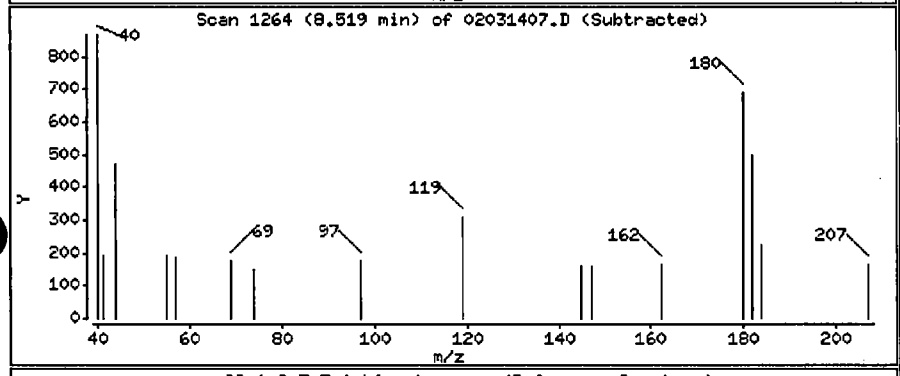
Operator: HBP

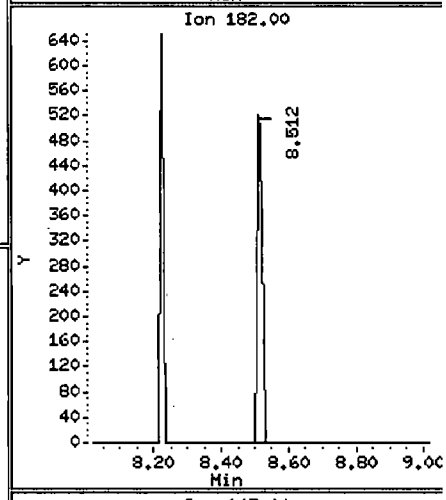
Column phase: Rtx-VMS Column diameter: 0.18

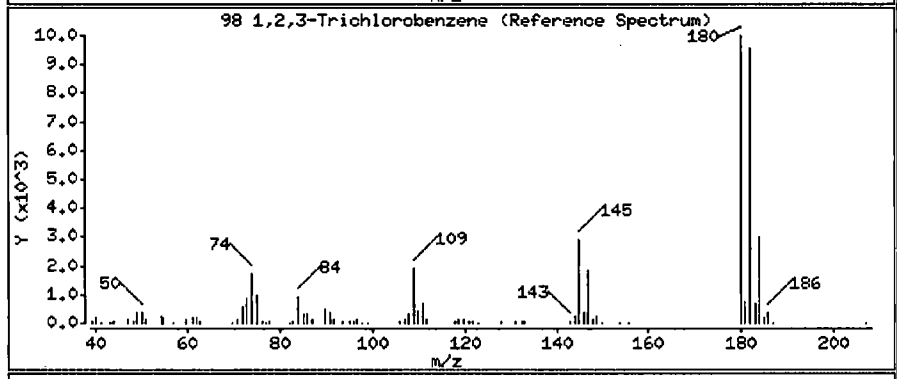
98 1,2,3-Trichlorobenzene Concentration: 10.6 ug/Kg

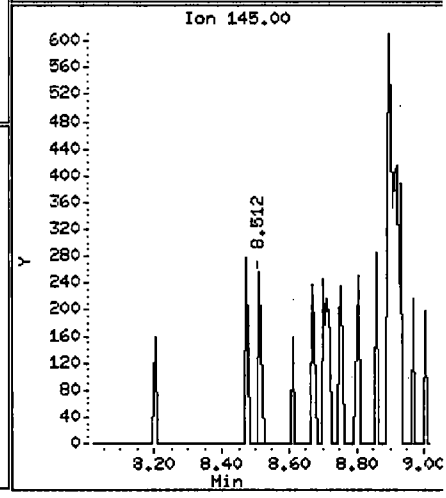


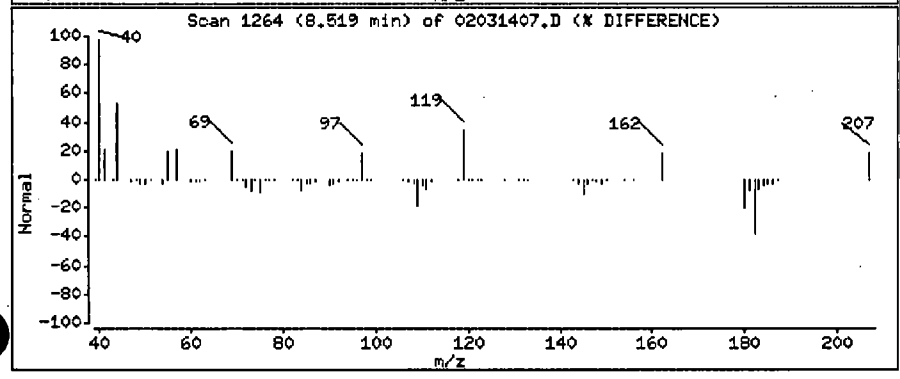












Data File: \\192.168.10.12\chem\10msv3.i\020314A.b/02031407.D
Injection Date: 03-FEB-2014 14:33
Instrument: 10msv3.i
Lab Sample ID: 1618515
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014022.D
Report Date: 03-Feb-2014 09:20

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\013014b.b\013014022.D
Lab Smp Id: 1617375 Client Smp ID: 1617375
Inj Date : 30-JAN-2014 18:44
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1617375,5.54,3,MS,10256148009
Misc Info : 26253
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Meth Date : 03-Feb-2014 09:20 10msv7.i Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 22 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.540	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.071	1.071	(0.254)	167134	39.2920	43.5
2	Chloromethane	50	1.259	1.247	(0.299)	199910	46.6342	51.7
3	Vinyl Chloride	62	1.266	1.260	(0.300)	212526	42.4465	47.0
4	Bromomethane	94	1.497	1.497	(0.355)	144424	48.5436	53.8
5	Chloroethane	64	1.589	1.583	(0.377)	136149	63.2895	70.1(R)
6	Trichlorofluoromethane	101	1.698	1.692	(0.403)	277640	41.3474	45.8
7	Dichlorofluoromethane	67	1.753	1.747	(0.416)	381943	43.1456	47.8
8	Diethyl ether (Ethyl Ether)	59	1.961	1.961	(0.465)	133438	44.1653	48.9
9	1,1-Dichloroethene	96	2.107	2.107	(0.500)	189260	45.4479	50.4
10	Carbon Disulfide	76	2.119	2.113	(0.503)	653103	41.7146	46.2
11	Ethanol	45	2.107	2.113	(0.436)	36958	1066.43	1180
12	Trichlorotrifluoroethane	101	2.156	2.156	(0.511)	189465	41.6773	46.2
13	Iodomethane	142	2.223	2.223	(0.527)	308608	46.9908	52.1
14	Acrolein	56	2.412	2.412	(0.572)	191225	338.208	375
15	Allyl Chloride	41	2.546	2.546	(0.604)	271460	45.6549	50.6
16	Methylene Chloride	84	2.643	2.643	(0.627)	213892	43.0492	47.7
17	Isopropanol	45	2.625	2.625	(0.543)	85963	484.213	536
* 18	Acetone d6	46	2.649	2.649	(1.000)	98343	200.000	
19	Acetone	58	2.698	2.698	(1.018)	56991	336.656	373

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014022.D
Report Date: 03-Feb-2014 09:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	20 trans-1,2-Dichloroethene	96	2.790	2.790	(0.662)	216125	45.7067	50.6
	21 Hexane	86	2.869	2.869	(1.083)	139041	188.652	209
	22 Methyl-tert-butyl Ether	73	2.899	2.899	(0.688)	498105	42.9338	47.6
	23 tert-Butyl Alcohol	59	3.003	3.003	(0.621)	142795	490.274	543
	24 Acetonitrile	41	3.070	3.070	(0.728)	122161	321.028	356
	25 Isopropyl Ether	45	3.210	3.210	(0.761)	616965	45.3333	50.2
	26 Acrylonitrile	53	3.259	3.253	(0.773)	292248	428.287	474
	27 1,1-Dichloroethane	63	3.271	3.271	(0.776)	367611	46.0485	51.0
	28 Ethyl-tert-butyl ether	59	3.466	3.466	(0.822)	577997	45.0120	49.9
	29 Vinyl Acetate	43	3.472	3.472	(0.824)	341863	41.0082	45.4
	30 cis-1,2-Dichloroethene	96	3.643	3.643	(0.864)	234437	45.1719	50.0
	31 2,2-Dichloropropane	77	3.710	3.710	(0.880)	305819	43.8736	48.6
	32 Cyclohexane	56	3.765	3.765	(0.893)	1589609	199.409	221
	33 Bromochloromethane	130	3.771	3.765	(0.894)	137139	43.3788	48.1
	34 Chloroform	83	3.826	3.820	(0.907)	374624	45.1211	50.0
	35 Carbon Tetrachloride	117	3.899	3.899	(0.925)	266240	43.6992	48.4
	36 Tetrahydrofuran	72	3.911	3.911	(1.476)	173716	569.205	631
	37 1,1,1-Trichloroethane	97	3.942	3.942	(0.935)	320143	44.4713	49.3
	38 2-Butanone	43	4.009	4.009	(0.951)	257728	172.397	191
	39 1,1-Dichloropropene	75	4.015	4.015	(0.952)	296187	44.6146	49.4
	40 Benzene	78	4.161	4.155	(0.987)	869581	43.6795	48.4
*	41 Pentafluorobenzene	168	4.216	4.216	(1.000)	1183727	100.000	
	42 Tert-amyl methyl ether	73	4.235	4.235	(1.004)	555007	42.1639	46.7
$	43 1,2-Dichloroethane d4 (S)	65	4.235	4.235	(1.004)	401422	91.6765	91.7
	44 1,2-Dichloroethane	62	4.271	4.271	(1.013)	237641	43.6472	48.4
	45 Isobutanol	43	4.302	4.302	(0.889)	118023	995.732	1100
	46 Tert-Amyl Alcohol	59	4.350	4.350	(0.899)	127374	504.068	558(R)
	47 Trichloroethene	130	4.478	4.478	(0.996)	261306	45.5960	50.5
*	48 1,4 Difluorobenzene	114	4.497	4.497	(1.000)	1641517	100.000	
	49 Tert-amyl ethyl ether	59	4.600	4.600	(1.023)	462691	45.4523	50.4
	50 Dibromomethane	174	4.686	4.686	(1.042)	134520	43.3782	48.1
	51 1,2-Dichloropropane	63	4.728	4.728	(1.052)	207408	45.4579	50.4
	52 Bromodichloromethane	83	4.759	4.765	(1.058)	281536	46.1022	51.1
*	53 1,4 dioxane d8	96	4.838	4.844	(1.000)	99281	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.856	4.856	(1.004)	34525	1012.95	1120
	55 2-Chloroethyl Vinyl Ether	63	5.045	5.021	(1.122)	1635	43.3878	48.1(QR)
	56 cis-1,3-Dichloropropene	75	5.045	5.045	(1.122)	337841	45.6607	50.6
$	57 Toluene-d8 (S)	98	5.125	5.125	(0.882)	1885483	99.8907	99.9
	58 Toluene	92	5.149	5.149	(0.886)	570981	42.1759	46.7
	59 4-Methyl-2-Pentanone	43	5.307	5.308	(0.913)	664601	192.136	213
	60 Tetrachloroethene	166	5.314	5.314	(0.914)	296585	45.9692	50.9
	61 trans-1,3-Dichloropropene	75	5.326	5.326	(0.916)	297134	45.1692	50.0
	62 1,1,2-Trichloroethane	97	5.393	5.393	(0.928)	167583	42.9420	47.6
	63 Dibromochloromethane	129	5.472	5.472	(0.941)	205701	44.0082	48.8
	64 1,3-Dichloropropane	76	5.515	5.515	(0.949)	283377	43.4492	48.1
	65 1,2-Dibromoethane	107	5.582	5.582	(0.960)	169597	41.2753	45.7
	66 2-Hexanone	43	5.673	5.673	(0.976)	468204	185.566	206
*	67 Chlorobenzene-d5	117	5.813	5.814	(1.000)	1497317	100.000	
	68 Chlorobenzene	112	5.820	5.820	(1.001)	669074	45.0134	49.9
	69 Ethylbenzene	91	5.826	5.832	(1.002)	1126038	42.4428	47.0
	70 1,1,1,2-Tetrachloroethane	131	5.850	5.850	(1.006)	238091	46.4068	51.4
	71 M&P-Xylene	106	5.899	5.899	(1.015)	905985	91.3064	101
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.112	(1.051)	425286	44.7685	49.6
	73 Styrene	104	6.137	6.137	(1.056)	685854	43.1278	47.8

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014022.D
Report Date: 03-Feb-2014 09:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	74 Bromoform	173	6.161	6.161	(1.060)	148727	43.0212	47.7
	75 Isopropylbenzene (Cumene)	105	6.271	6.271	(1.079)	1133343	43.9023	48.6
$	76 4-Bromofluorobenzene (S)	95	6.423	6.423	(0.906)	710823	100.563	100
	77 cis-1,4-Dichloro-2-Butene	53	6.454	6.454	(0.911)	60789	40.5697	45.0
	78 Bromobenzene	156	6.490	6.490	(0.916)	305822	44.8300	49.7
	79 n-Propylbenzene	91	6.490	6.490	(0.916)	1372478	46.1724	51.2
	80 1,1,2,2-Tetrachloroethane	83	6.527	6.527	(0.921)	209512	40.9581	45.4
	81 2-Chlorotoluene	91	6.588	6.588	(0.929)	873621	46.0465	51.0
	82 1,3,5-Trimethylbenzene	105	6.600	6.600	(0.931)	990232	45.8548	50.8
	83 1,2,3-Trichloropropane	110	6.612	6.612	(0.933)	59324	41.4077	45.9
	84 trans-1,4-Dichloro-2-Butene	53	6.630	6.630	(0.935)	136059	104.100	115
	85 4-Chlorotoluene	91	6.679	6.685	(0.942)	825942	46.6540	51.7
	86 tert-Butylbenzene	119	6.789	6.789	(0.958)	846403	44.9829	49.8
	87 1,2,4-Trimethylbenzene	105	6.832	6.832	(0.964)	1034151	47.4679	52.6
	88 sec-Butylbenzene	105	6.899	6.899	(0.973)	1259338	45.4789	50.4
	89 p-Isopropyltoluene	119	6.984	6.984	(0.985)	1127608	46.6288	51.7
	90 1,3-Dichlorobenzene	146	7.045	7.045	(0.994)	617754	46.9139	52.0
*	91 1,4-Dichlorobenzene-d4	152	7.088	7.088	(1.000)	875170	100.000	
	92 1,4-Dichlorobenzene	146	7.100	7.100	(1.002)	624601	45.0831	50.0
	93 1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	1030146	44.2443	49.0
	94 n-Butylbenzene	91	7.258	7.258	(1.024)	1042796	47.9731	53.2
	95 1,2-Dichlorobenzene	146	7.380	7.380	(1.041)	555063	44.7525	49.6
	96 1,2-Dibromo-3-Chloropropane	157	7.862	7.862	(1.109)	106600	96.5934	107
	97 Hexachlorobutadiene	225	8.228	8.228	(1.161)	227704	44.0502	48.8
	98 1,2,4-Trichlorobenzene	180	8.240	8.240	(1.163)	356055	45.5936	50.5
	99 Naphthalene	128	8.429	8.429	(1.189)	593043	39.4704	43.7
	100 1,2,3-Trichlorobenzene	180	8.532	8.532	(1.204)	299087	42.4304	47.0
	101 2-Methylnaphthalene	142	9.045	9.045	(1.276)	147862	17.3429	19.2

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014022.D
Report Date: 03-Feb-2014 09:20

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 013014022.D
Lab Smp Id: 1617375
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Calibration Date: 30-JAN-2014
Calibration Time: 18:08
Client Smp ID: 1617375
Level: LOW
Sample Type: SOIL
Method File: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Misc Info: 26253

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	143148	71574	286296	98343	-31.30
41 Pentafluorobenzen	1116303	558152	2232606	1183727	6.04
48 1,4 Difluorobenze	1540471	770236	3080942	1641517	6.56
53 1,4 dioxane d8	136838	68419	273676	99281	-27.45
67 Chlorobenzene-d5	1416803	708402	2833606	1497317	5.68
91 1,4-Dichlorobenze	843357	421679	1686714	875170	3.77

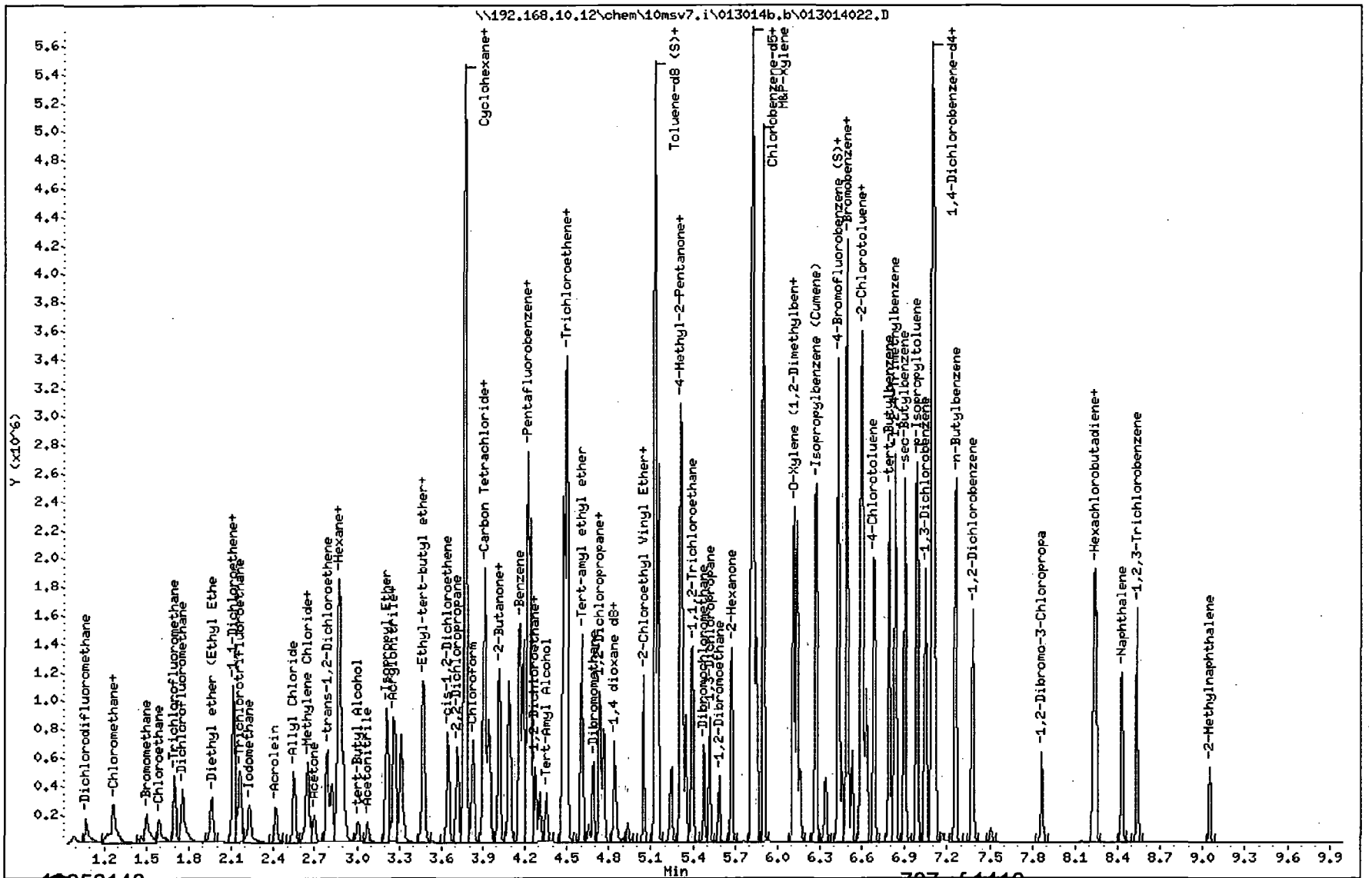
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.00
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	-0.00
48 1,4 Difluorobenze	4.50	4.00	5.00	4.50	-0.00
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.13
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014022.D
Date : 30-JAN-2014 18:44
Client ID: 1617376
Sample Info: 1617376,5.54,3,MS,10256148009

Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv7.i\013014b.b/013014022.D
Injection Date: 30-JAN-2014 18:44
Instrument: 10msv7.i
Lab Sample ID: 1617375
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031404.D
Report Date: 04-Feb-2014 12:57

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv3.i\020314A.b\02031404.D
Lab Smp Id: 1618517 Client Smp ID: 1618517
Inj Date : 03-FEB-2014 13:42
Operator : HBP Inst ID: 10msv3.i
Smp Info : 1618517,1,3,MS,10256574001
Misc Info : 26272
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv3.i\020314A.b\v314-MLS-011614.m
Meth Date : 03-Feb-2014 11:11 hpham Quant Type: ISTD
Cal Date : 16-JAN-2014 23:23 Cal File: 01161419.D
Als bottle: 4 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 465W+hex.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * Vt/(Va * Ws * (1-(M/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.029	1.029	(0.244)	43734	11.0361	552
2	Chloromethane	50	1.169	1.163	(0.277)	79385	14.0811	704
3	Vinyl Chloride	62	1.224	1.224	(0.290)	75313	15.6511	782
4	Bromomethane	94	1.455	1.455	(0.345)	44396	22.7361	1140
5	Chloroethane	64	1.546	1.546	(0.367)	31749	15.5493	777
6	Trichlorofluoromethane	101	1.644	1.656	(0.390)	71751	19.4579	973
7	Dichlorofluoromethane	67	1.704	1.711	(0.404)	75533	20.5564	1030
8	Diethyl ether (Ethyl Ether)	59	1.942	1.924	(0.461)	45765	18.1439	907
9	1,1-Dichloroethene	96	2.051	2.070	(0.486)	61779	17.4046	870
10	Carbon Disulfide	76	2.057	2.082	(0.488)	189148	16.5287	826
11	Trichlorotrifluoroethane	101	2.094	2.118	(0.497)	57293	16.8156	841
14	Allyl Chloride	41	2.507	2.514	(0.595)	97147	18.0895	904
15	Methylene Chloride	84	2.617	2.617	(0.621)	71331	19.0683	953
* 16	Acetone d6	46	2.653	2.623	(1.000)	58113	100.000	
17	Acetone	58	2.696	2.672	(1.016)	26696	127.579	6380
18	trans-1,2-Dichloroethene	96	2.757	2.763	(0.654)	66828	18.0999	905
19	Hexane	86	2.836	2.848	(1.069)	24445	52.8472	2640
20	Methyl-tert-butyl Ether	73	2.891	2.873	(0.686)	167975	18.1603	908
23	Isopropyl Ether	45	3.207	3.195	(0.761)	201954	18.3730	919

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031404.D
Report Date: 04-Feb-2014 12:57

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	24	1,1-Dichloroethane	63	3.256	3.262	(0.772)	113915	17.6383	882
	28	cis-1,2-Dichloroethene	96	3.639	3.639	(0.863)	75632	18.5466	927
	29	2,2-Dichloropropane	77	3.700	3.706	(0.877)	90150	17.2142	861
	30	Cyclohexane	56	3.755	3.755	(0.890)	476533	84.0189	4200
	31	Bromochloromethane	130	3.767	3.767	(0.893)	49859	19.6285	981
	32	Chloroform	83	3.821	3.822	(0.906)	110735	17.6054	880
	33	Carbon Tetrachloride	117	3.888	3.895	(0.922)	71697	17.5383	877
	34	Tetrahydrofuran	72	3.919	3.907	(1.477)	81994	242.003	12100
	35	1,1,1-Trichloroethane	97	3.931	3.937	(0.932)	92537	16.7631	838
	36	1,1-Dichloropropene	75	4.010	4.010	(0.951)	85648	16.5737	829
	37	2-Butanone	43	4.016	4.010	(0.952)	132132	96.1513	4810
	38	Benzene	78	4.156	4.156	(0.986)	275382	18.4213	921
*	39	Pentafluorobenzene	168	4.217	4.217	(1.000)	351414	50.0000	
S	41	1,2-Dichloroethane d4 (S)	65	4.235	4.235	(1.004)	141214	41.8954	41.9
	42	1,2-Dichloroethane	62	4.272	4.272	(1.013)	74641	16.5039	825
	45	Trichloroethene	130	4.479	4.479	(0.996)	79713	19.4148	971
*	46	1,4 Difluorobenzene	114	4.497	4.497	(1.000)	501802	50.0000	
	48	Dibromomethane	174	4.685	4.686	(1.042)	52576	21.8459	1090
	49	1,2-Dichloropropane	63	4.734	4.734	(1.053)	68951	19.9986	1000
	50	Bromodichloromethane	83	4.764	4.765	(1.060)	81351	18.9367	947
*	51	1,4 dioxane d8	96	4.856	4.844	(1.000)	63805	2000.00	
	54	cis-1,3-Dichloropropene	75	5.044	5.044	(1.122)	106843	20.0348	1000
S	55	Toluene-d8 (S)	98	5.123	5.124	(0.883)	550248	49.3280	49.3
	56	Toluene	92	5.148	5.148	(0.887)	175546	19.0056	950
	57	4-Methyl-2-Pentanone	43	5.306	5.300	(0.914)	285007	98.8659	4940
	58	Tetrachloroethene	166	5.312	5.312	(0.915)	83166	19.8583	993
	59	trans-1,3-Dichloropropene	75	5.318	5.318	(0.916)	99606	20.4976	1020
	60	1,1,2-Trichloroethane	97	5.391	5.391	(0.929)	64559	20.4306	1020
	61	Dibromochloromethane	129	5.470	5.470	(0.942)	70904	22.1843	1110
	62	1,3-Dichloropropane	76	5.507	5.507	(0.949)	104515	19.8405	992
	63	1,2-Dibromoethane	107	5.574	5.574	(0.960)	68361	20.3961	1020
	64	2-Hexanone	43	5.665	5.659	(0.976)	199605	100.895	5040
*	65	Chlorobenzene-d5	117	5.805	5.805	(1.000)	471112	50.0000	
	66	Chlorobenzene	112	5.811	5.811	(1.001)	197626	19.7671	988
	67	Ethylbenzene	91	5.817	5.817	(1.002)	306857	18.3604	918
	68	1,1,1,2-Tetrachloroethane	131	5.835	5.835	(1.005)	69804	21.1922	1060
	69	M&P-Xylene	106	5.884	5.884	(1.014)	251151	39.5229	1980
	70	O-Xylene (1,2-Dimethylbenzene)	106	6.091	6.091	(1.049)	116979	19.7558	988
	71	Styrene	104	6.121	6.121	(1.054)	213844	20.4300	1020
	72	Bromoform	173	6.139	6.139	(1.058)	53761	23.2334	1160
	73	Isopropylbenzene (Cumene)	105	6.249	6.249	(1.077)	276955	18.9342	947
S	74	4-Bromofluorobenzene (S)	95	6.407	6.407	(0.908)	216688	47.0931	47.1
	76	Bromobenzene	156	6.468	6.468	(0.916)	90218	19.4300	972
	77	n-Propylbenzene	91	6.468	6.468	(0.916)	306917	18.0546	903
	78	1,1,2,2-Tetrachloroethane	83	6.504	6.505	(0.922)	80835	19.7778	989
	79	2-Chlorotoluene	91	6.565	6.565	(0.930)	204373	18.0046	900
	80	1,3,5-Trimethylbenzene	105	6.571	6.571	(0.931)	223038	18.5203	926
	81	1,2,3-Trichloropropane	110	6.590	6.590	(0.934)	24346	19.6392	982
	83	4-Chlorotoluene	91	6.656	6.657	(0.943)	199711	18.2520	913
	84	tert-Butylbenzene	119	6.760	6.760	(0.958)	189113	19.1691	958
	85	1,2,4-Trimethylbenzene	105	6.802	6.803	(0.964)	226599	18.6971	935
	86	sec-Butylbenzene	105	6.869	6.870	(0.973)	258014	18.8641	943
	87	p-Isopropyltoluene	119	6.955	6.955	(0.985)	224705	19.3792	969
	88	1,3-Dichlorobenzene	146	7.015	7.016	(0.994)	144845	19.4361	972

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031404.D
Report Date: 04-Feb-2014 12:57

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
* 89 1,4-Dichlorobenzene-d4	152	7.058	7.058	(1.000)	265219	50.0000	
90 1,4-Dichlorobenzene	146	7.070	7.070	(1.002)	154512	19.4413	972
92 n-Butylbenzene	91	7.228	7.228	(1.024)	179982	18.9740	949
93 1,2-Dichlorobenzene	146	7.350	7.350	(1.041)	142358	19.6393	982
94 1,2-Dibromo-3-Chloropropane	157	7.843	7.843	(1.111)	40912	52.7274	2640
95 Hexachlorobutadiene	225	8.208	8.208	(1.163)	50649	29.0731	1450(R)
96 1,2,4-Trichlorobenzene	180	8.226	8.226	(1.165)	72471	20.5263	1030
97 Naphthalene	128	8.409	8.409	(1.191)	164511	17.7618	888
98 1,2,3-Trichlorobenzene	180	8.518	8.518	(1.207)	66314	20.2138	1010

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031404.D
Report Date: 04-Feb-2014 12:57

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv3.i
Lab File ID: 02031404.D
Lab Smp Id: 1618517
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Calibration Date: 03-FEB-2014
Calibration Time: 12:36
Client Smp ID: 1618517
Level: MED
Sample Type: SOIL
Method File: \\192.168.10.12\chem\10msv3.i\020314A.b\v314-MLS-011614.m
Misc Info: 26272

Test Mode:
Use Last Calibration Run.
If Continuing Cal. use Initial Cal. Level 6

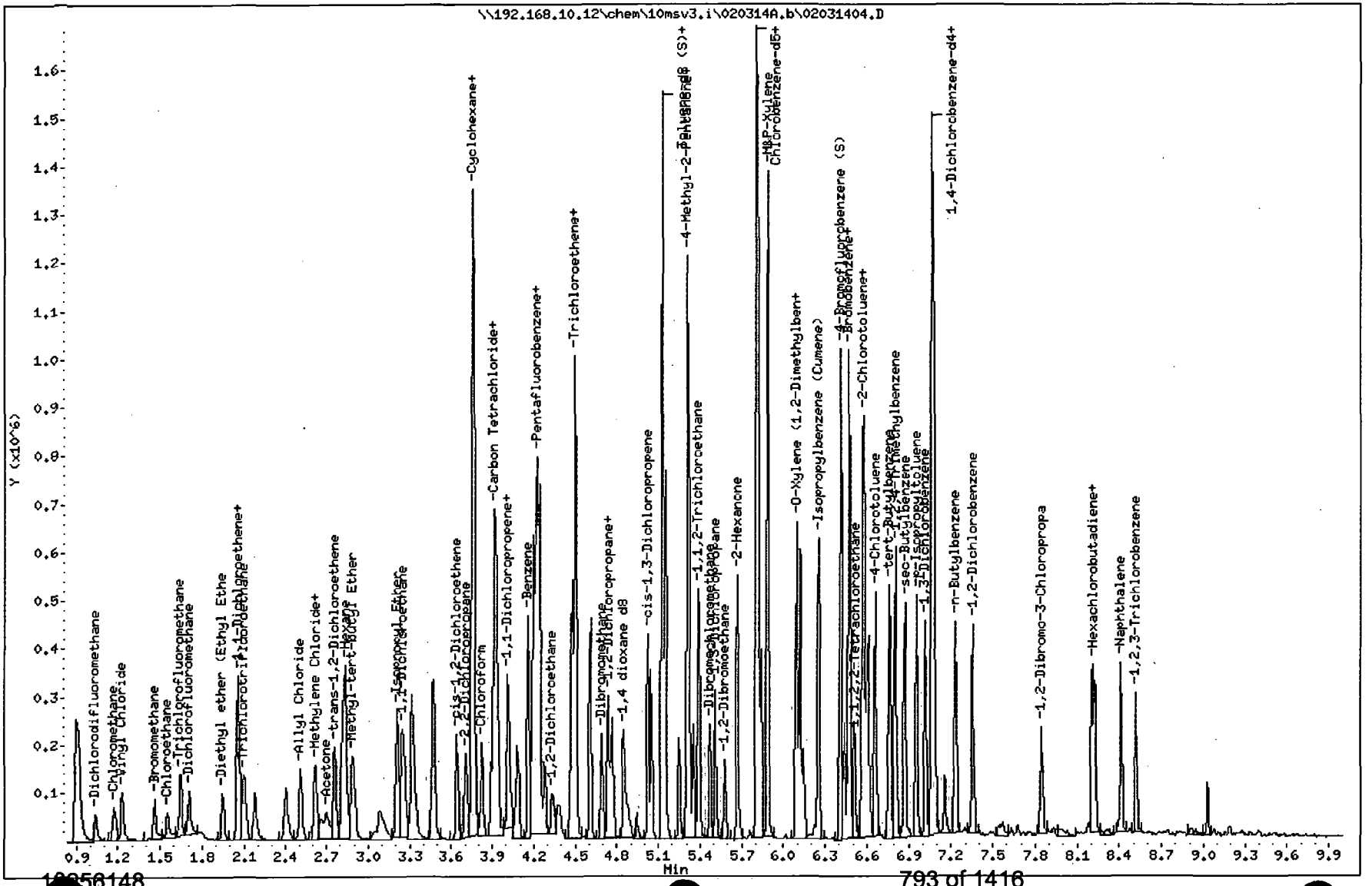
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	52518	26259	105036	58113	10.65
39 Pentafluorobenzen	371366	185683	742732	351414	-5.37
46 1,4 Difluorobenze	520400	260200	1040800	501802	-3.57
51 1,4 dioxane d8	62794	31397	125588	63805	1.61
65 Chlorobenzene-d5	463274	231637	926548	471112	1.69
89 1,4-Dichlorobenze	262539	131270	525078	265219	1.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	2.62	2.12	3.12	2.65	1.15
39 Pentafluorobenzen	4.22	3.72	4.72	4.22	-0.00
46 1,4 Difluorobenze	4.50	4.00	5.00	4.50	-0.00
51 1,4 dioxane d8	4.84	4.34	5.34	4.86	0.25
65 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
89 1,4-Dichlorobenze	7.06	6.56	7.56	7.06	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031404.D
Date : 03-FEB-2014 13:42
Client ID: 1618517
Sample Info: 1618517,1,3,MS,10256574001

Instrument: 10msv3.i
Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv3.i\020314A.b/02031404.D
Injection Date: 03-FEB-2014 13:42
Instrument: 10msv3.i
Lab Sample ID: 1618517
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014023.D
Report Date: 03-Feb-2014 09:20

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\013014b.b\013014023.D
Lab Smp Id: 1617376 Client Smp ID: 1617376
Inj Date : 30-JAN-2014 19:02
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1617376,6.11,3,MSD,10256148009
Misc Info : 26253
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Meth Date : 03-Feb-2014 09:20 10msv7.i Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 23 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	6.110	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.070	1.071	(0.254)	165339	38.3707	46.9
2	Chloromethane	50	1.253	1.247	(0.297)	188476	43.4020	53.0
3	Vinyl Chloride	62	1.259	1.260	(0.299)	205476	40.5112	49.5
4	Bromomethane	94	1.497	1.497	(0.355)	143540	47.6096	58.2
5	Chloroethane	64	1.583	1.583	(0.375)	134027	61.4746	75.1(R)
6	Trichlorofluoromethane	101	1.692	1.692	(0.401)	273465	40.2025	49.1
7	Dichlorofluoromethane	67	1.747	1.747	(0.414)	366701	40.8917	50.0
8	Diethyl ether (Ethyl Ether)	59	1.954	1.961	(0.464)	126049	41.1836	50.3
9	1,1-Dichloroethene	96	2.107	2.107	(0.500)	181649	43.0598	52.6
10	Carbon Disulfide	76	2.113	2.113	(0.501)	628560	39.6312	48.4
11	Ethanol	45	2.107	2.113	(0.436)	35365	1017.11	1240
12	Trichlorotrifluoroethane	101	2.156	2.156	(0.511)	183977	39.9501	48.8
13	Iodomethane	142	2.223	2.223	(0.527)	292233	44.1010	53.9
14	Acrolein	56	2.412	2.412	(0.572)	174394	304.477	372
15	Allyl Chloride	41	2.546	2.546	(0.604)	260344	43.2228	52.8
16	Methylene Chloride	84	2.643	2.643	(0.627)	206897	41.0448	50.2
17	Isopropanol	45	2.619	2.625	(0.541)	83243	466.432	570
* 18	Acetone d6	46	2.649	2.649	(1.000)	102123	200.000	
19	Acetone	58	2.692	2.698	(1.016)	57202	325.055	397(R)

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014023.D
Report Date: 03-Feb-2014 09:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	20 trans-1,2-Dichloroethene	96	2.784	2.790	(0.660)	204644	42.7226	52.2
	21 Hexane	86	2.869	2.869	(1.083)	113061	147.724	180
	22 Methyl-tert-butyl Ether	73	2.893	2.899	(0.686)	475186	40.4321	49.4
	23 tert-Butyl Alcohol	59	3.003	3.003	(0.621)	140444	480.619	587
	24 Acetonitrile	41	3.070	3.070	(0.728)	117074	303.707	371
	25 Isopropyl Ether	45	3.210	3.210	(0.761)	586677	42.5540	52.0
	26 Acrylonitrile	53	3.253	3.253	(0.772)	275357	398.349	487
	27 1,1-Dichloroethane	63	3.271	3.271	(0.776)	349650	43.2359	52.8
	28 Ethyl-tert-butyl ether	59	3.466	3.466	(0.822)	549566	42.2480	51.6
	29 Vinyl Acetate	43	3.466	3.472	(0.822)	313120	37.0778	45.3
	30 cis-1,2-Dichloroethene	96	3.643	3.643	(0.864)	222993	42.4148	51.8
	31 2,2-Dichloropropane	77	3.710	3.710	(0.880)	292618	41.4405	50.6
	32 Cyclohexane	56	3.765	3.765	(0.893)	1596543	197.705	242
	33 Bromochloromethane	130	3.765	3.765	(0.893)	131611	41.0954	50.2
	34 Chloroform	83	3.820	3.820	(0.906)	355608	42.2805	51.7
	35 Carbon Tetrachloride	117	3.899	3.899	(0.925)	256473	41.5553	50.8
	36 Tetrahydrofuran	72	3.911	3.911	(1.476)	164818	520.060	636
	37 1,1,1-Trichloroethane	97	3.936	3.942	(0.933)	310357	42.5581	52.0
	38 2-Butanone	43	4.009	4.009	(0.951)	243951	161.085	197
	39 1,1-Dichloropropene	75	4.015	4.015	(0.952)	275339	40.9414	50.0
	40 Benzene	78	4.155	4.155	(0.986)	816434	40.4831	49.5
*	41 Pentafluorobenzene	168	4.216	4.216	(1.000)	1199133	100.000	
	42 Tert-amyl methyl ether	73	4.234	4.235	(1.004)	519579	38.9654	47.6
$	43 1,2-Dichloroethane d4 (S)	65	4.234	4.235	(1.004)	406930	91.7404	91.7
	44 1,2-Dichloroethane	62	4.271	4.271	(1.013)	224802	40.7586	49.8
	45 Isobutanol	43	4.302	4.302	(0.889)	113239	952.234	1160
	46 Tert-Amyl Alcohol	59	4.350	4.350	(0.899)	121989	481.172	588(R)
	47 Trichloroethene	130	4.478	4.478	(0.996)	242719	42.1308	51.5
*	48 1,4 Difluorobenzene	114	4.497	4.497	(1.000)	1650166	100.000	
	49 Tert-amyl ethyl ether	59	4.600	4.600	(1.023)	434141	42.4242	51.8
	50 Dibromomethane	174	4.686	4.686	(1.042)	127394	40.8650	49.9
	51 1,2-Dichloropropane	63	4.728	4.728	(1.052)	194201	42.3402	51.7
	52 Bromodichloromethane	83	4.759	4.765	(1.058)	264918	43.1536	52.7
*	53 1,4 dioxane d8	96	4.838	4.844	(1.000)	99608	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.856	4.856	(1.004)	33516	980.122	1200
	55 2-Chloroethyl Vinyl Ether	63	5.045	5.021	(1.122)	1553	42.3940	51.8(QR)
	56 cis-1,3-Dichloropropene	75	5.045	5.045	(1.122)	315149	42.3706	51.8
$	57 Toluene-d8 (S)	98	5.125	5.125	(0.882)	1899769	100.837	101
	58 Toluene	92	5.149	5.149	(0.886)	540607	40.0076	48.9
	59 4-Methyl-2-Pentanone	43	5.307	5.308	(0.913)	629363	182.292	223
	60 Tetrachloroethene	166	5.314	5.314	(0.914)	269293	41.8178	51.1
	61 trans-1,3-Dichloropropene	75	5.326	5.326	(0.916)	279716	42.6016	52.0
	62 1,1,2-Trichloroethane	97	5.393	5.393	(0.928)	157864	40.5279	49.5
	63 Dibromochloromethane	129	5.472	5.472	(0.941)	195846	41.9789	51.3
	64 1,3-Dichloropropane	76	5.515	5.515	(0.949)	267277	41.0580	50.2
	65 1,2-Dibromoethane	107	5.582	5.582	(0.960)	162777	39.6902	48.5
	66 2-Hexanone	43	5.667	5.673	(0.975)	461418	183.222	224
*	67 Chlorobenzene-d5	117	5.813	5.814	(1.000)	1494498	100.000	
	68 Chlorobenzene	112	5.820	5.820	(1.001)	624439	42.0897	51.4
	69 Ethylbenzene	91	5.826	5.832	(1.002)	1037938	39.1959	47.9
	70 1,1,1,2-Tetrachloroethane	131	5.850	5.850	(1.006)	222123	43.3761	53.0
	71 M&P-Xylene	106	5.899	5.899	(1.015)	830571	83.8640	102
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.112	(1.051)	399919	42.1776	51.5
	73 Styrene	104	6.137	6.137	(1.056)	583263	36.7458	44.9

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014023.D
Report Date: 03-Feb-2014 09:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	74 Bromoform	173	6.155	6.161	(1.059)	139704	40.4874	49.5
	75 Isopropylbenzene (Cumene)	105	6.265	6.271	(1.078)	1046769	40.6252	49.6
$	76 4-Bromofluorobenzene (S)	95	6.423	6.423	(0.906)	722706	99.0857	99.1
	77 cis-1,4-Dichloro-2-Butene	53	6.454	6.454	(0.911)	57216	37.0056	45.2
	78 Bromobenzene	156	6.490	6.490	(0.916)	286101	40.6436	49.7
	79 n-Propylbenzene	91	6.490	6.490	(0.916)	1235644	40.2850	49.2
	80 1,1,2,2-Tetrachloroethane	83	6.527	6.527	(0.921)	194689	36.8846	45.1
	81 2-Chlorotoluene	91	6.588	6.588	(0.929)	796611	40.6904	49.7
	82 1,3,5-Trimethylbenzene	105	6.600	6.600	(0.931)	894144	40.1262	49.0
	83 1,2,3-Trichloropropane	110	6.612	6.612	(0.933)	55657	37.6481	46.0
	84 trans-1,4-Dichloro-2-Butene	53	6.630	6.630	(0.935)	124660	92.4323	113
	85 4-Chlorotoluene	91	6.679	6.685	(0.942)	736564	40.3201	49.3
	86 tert-Butylbenzene	119	6.789	6.789	(0.958)	789306	40.6526	49.7
	87 1,2,4-Trimethylbenzene	105	6.832	6.832	(0.964)	918372	40.8514	49.9
	88 sec-Butylbenzene	105	6.899	6.899	(0.973)	1143397	40.0164	48.9
	89 p-Isopropyltoluene	119	6.984	6.984	(0.985)	1001578	40.1378	49.0
	90 1,3-Dichlorobenzene	146	7.045	7.045	(0.994)	539033	39.6711	48.5
*	91 1,4-Dichlorobenzene-d4	152	7.088	7.088	(1.000)	903067	100.000	
	92 1,4-Dichlorobenzene	146	7.100	7.100	(1.002)	564496	39.4861	48.2
	93 1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	967505	41.0200	50.1
	94 n-Butylbenzene	91	7.252	7.258	(1.023)	867772	38.6880	47.3
	95 1,2-Dichlorobenzene	146	7.380	7.380	(1.041)	504196	39.3955	48.1
	96 1,2-Dibromo-3-Chloropropane	157	7.862	7.862	(1.109)	100433	88.1940	108
	97 Hexachlorobutadiene	225	8.228	8.228	(1.161)	188952	35.4243	43.3
	98 1,2,4-Trichlorobenzene	180	8.240	8.240	(1.163)	294813	36.5852	44.7
	99 Naphthalene	128	8.429	8.429	(1.189)	532919	34.3731	42.0
	100 1,2,3-Trichlorobenzene	180	8.532	8.532	(1.204)	257504	35.4026	43.3
	101 2-Methylnaphthalene	142	9.044	9.045	(1.276)	123673	14.0049	17.1(R)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014023.D
Report Date: 03-Feb-2014 09:20

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 013014023.D
Lab Smp Id: 1617376
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Calibration Date: 30-JAN-2014
Calibration Time: 18:08
Client Smp ID: 1617376
Level: LOW
Sample Type: SOIL
Method File: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Misc Info: 26253

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143148	71574	286296	102123	-28.66
41 Pentafluorobenzen	1116303	558152	2232606	1199133	7.42
48 1,4 Difluorobenze	1540471	770236	3080942	1650166	7.12
53 1,4 dioxane d8	136838	68419	273676	99608	-27.21
67 Chlorobenzene-d5	1416803	708402	2833606	1494498	5.48
91 1,4-Dichlorobenze	843357	421679	1686714	903067	7.08

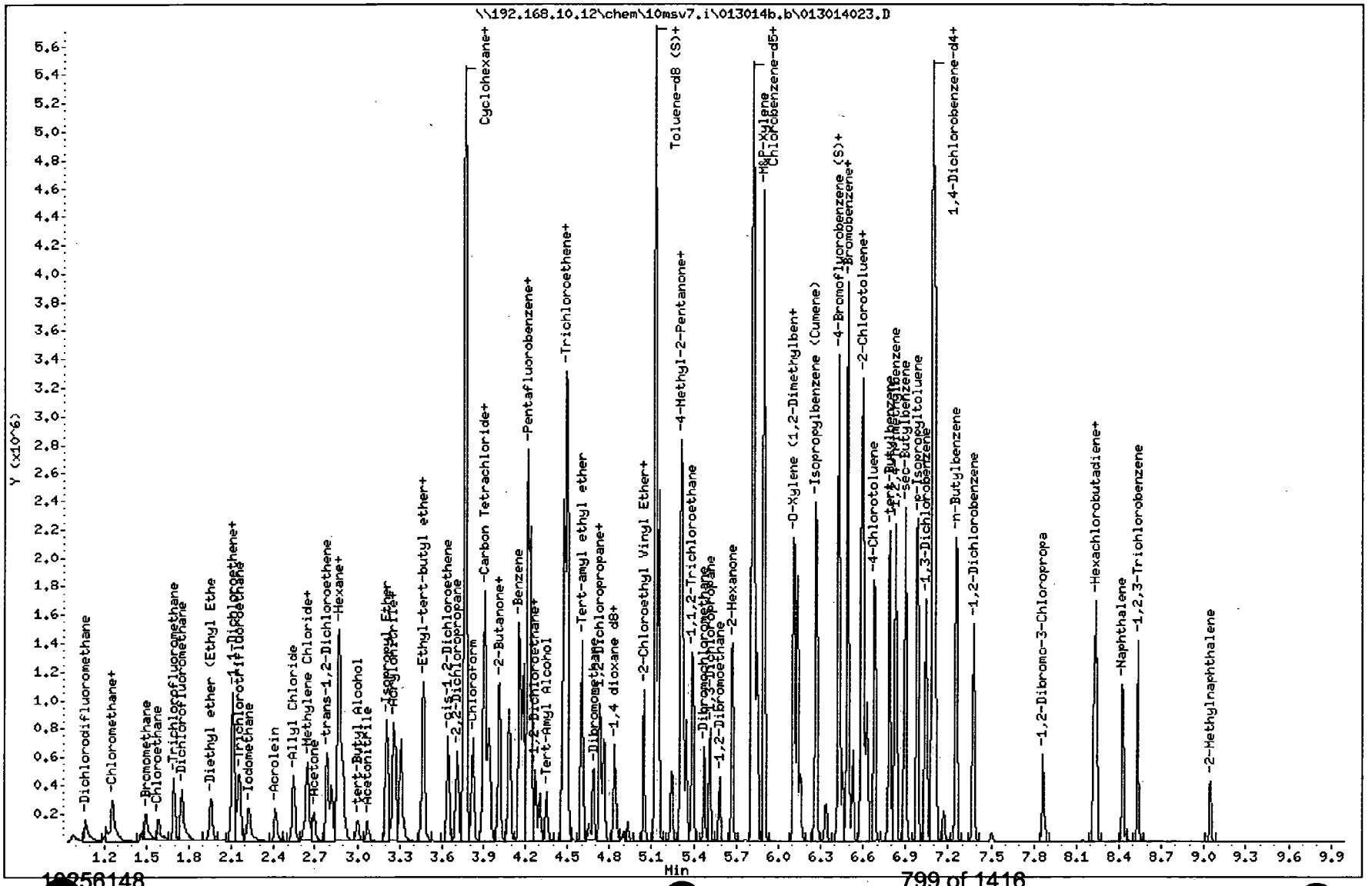
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.00
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	-0.00
48 1,4 Difluorobenze	4.50	4.00	5.00	4.50	-0.00
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.13
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014023.D
Date : 30-JAN-2014 19:02
Client ID: 1617376
Sample Info: 1617376,6.11,3,MSD,10256148009

Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv7.i\013014b.b/013014023.D
Injection Date: 30-JAN-2014 19:02
Instrument: 10msv7.i
Lab Sample ID: 1617376
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014021.D
Report Date: 03-Feb-2014 09:20

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\013014b.b\013014021.D
Lab Smp Id: 1617374 Client Smp ID: 1617374
Inj Date : 30-JAN-2014 18:26
Operator : HBP Inst ID: 10msv7.i
Smp Info : 1617374,5,3,LCS
Misc Info : 26253
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Meth Date : 03-Feb-2014 09:20 10msv7.i Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 21 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.064	1.071	(0.253)	166220	38.5086	38.5
2	Chloromethane	50	1.247	1.247	(0.296)	182903	42.0461	42.0
3	Vinyl Chloride	62	1.259	1.260	(0.299)	207938	40.9259	40.9
4	Bromomethane	94	1.497	1.497	(0.355)	128704	42.5105	42.5
5	Chloroethane	64	1.583	1.583	(0.375)	112647	51.4464	51.4
6	Trichlorofluoromethane	101	1.692	1.692	(0.401)	271136	39.7913	39.8
7	Dichlorofluoromethane	67	1.747	1.747	(0.414)	362796	40.3865	40.4
8	Diethyl ether (Ethyl Ether)	59	1.961	1.961	(0.465)	126526	41.2682	41.3
9	1,1-Dichloroethene	96	2.107	2.107	(0.500)	181653	42.9865	43.0
10	Carbon Disulfide	76	2.113	2.113	(0.501)	629309	39.6100	39.6
11	Ethanol	45	2.113	2.113	(0.437)	42562	822.791	823
12	Trichlorotrifluoroethane	101	2.156	2.156	(0.511)	183821	39.8474	39.8
13	Iodomethane	142	2.223	2.223	(0.527)	272620	41.2537	41.2
14	Acrolein	56	2.412	2.412	(0.572)	222523	387.837	388
15	Allyl Chloride	41	2.546	2.546	(0.604)	256289	42.4762	42.5
16	Methylene Chloride	84	2.643	2.643	(0.627)	204167	40.4132	40.4
17	Isopropanol	45	2.625	2.625	(0.543)	105494	393.198	393
* 18	Acetone d6	46	2.649	2.649	(1.000)	154773	200.000	
19	Acetone	58	2.698	2.698	(1.018)	54874	202.872	203

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014021.D
Report Date: 03-Feb-2014 09:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	20 trans-1,2-Dichloroethene	96	2.790	2.790	(0.662)	205520	42.8315	42.8
	21 Hexane	86	2.869	2.869	(1.083)	117349	101.169	101
	22 Methyl-tert-butyl Ether	73	2.899	2.899	(0.688)	485122	41.2064	41.2
	23 tert-Butyl Alcohol	59	3.003	3.003	(0.621)	173579	399.270	399
	24 Acetonitrile	41	3.070	3.070	(0.728)	151777	393.053	393
	25 Isopropyl Ether	45	3.210	3.210	(0.761)	566270	41.0030	41.0
	26 Acrylonitrile	53	3.253	3.253	(0.772)	286518	413.780	414
	27 1,1-Dichloroethane	63	3.271	3.271	(0.776)	343914	42.4533	42.4
	28 Ethyl-tert-butyl ether	59	3.466	3.466	(0.822)	535621	41.1050	41.1
	29 Vinyl Acetate	43	3.472	3.472	(0.824)	362871	42.8949	42.9
	30 cis-1,2-Dichloroethene	96	3.643	3.643	(0.864)	217991	41.3919	41.4
	31 2,2-Dichloropropane	77	3.710	3.710	(0.880)	293538	41.4991	41.5
	32 Cyclohexane	56	3.765	3.765	(0.893)	1609948	199.022	199
	33 Bromochloromethane	130	3.765	3.765	(0.893)	134696	41.9861	42.0
	34 Chloroform	83	3.820	3.820	(0.906)	354237	42.0449	42.0
	35 Carbon Tetrachloride	117	3.899	3.899	(0.925)	260508	42.1363	42.1
	36 Tetrahydrofuran	72	3.911	3.911	(1.476)	199393	415.133	415
	37 1,1,1-Trichloroethane	97	3.942	3.942	(0.935)	307195	42.0518	42.0
	38 2-Butanone	43	4.009	4.009	(0.951)	294507	194.133	194
	39 1,1-Dichloropropene	75	4.015	4.015	(0.952)	276831	41.0923	41.1
	40 Benzene	78	4.155	4.155	(0.986)	818990	40.5398	40.5
*	41 Pentafluorobenzene	168	4.216	4.216	(1.000)	1201204	100.000	
	42 Tert-amyl methyl ether	73	4.234	4.235	(1.004)	524351	39.2554	39.2
$	43 1,2-Dichloroethane d4 (S)	65	4.234	4.235	(1.004)	449719	101.212	101
	44 1,2-Dichloroethane	62	4.271	4.271	(1.013)	231786	41.9525	42.0
	45 Isobutanol	43	4.302	4.302	(0.889)	144978	819.449	819
	46 Tert-Amyl Alcohol	59	4.350	4.350	(0.899)	150907	400.094	400(R)
	47 Trichloroethene	130	4.478	4.478	(0.996)	244708	42.3315	42.3
*	48 1,4 Difluorobenzene	114	4.497	4.497	(1.000)	1655801	100.000	
	49 Tert-amyl ethyl ether	59	4.600	4.600	(1.023)	427115	41.5956	41.6
	50 Dibromomethane	174	4.686	4.686	(1.042)	134654	43.0468	43.0
	51 1,2-Dichloropropane	63	4.728	4.728	(1.052)	196422	42.6787	42.7
	52 Bromodichloromethane	83	4.765	4.765	(1.060)	262368	42.5927	42.6
*	53 1,4 dioxane d8	96	4.838	4.844	(1.000)	148191	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	4.856	4.856	(1.004)	41886	823.321	823
	55 2-Chloroethyl Vinyl Ether	63	5.021	5.021	(1.117)	4731	77.0739	77.1(R)
	56 cis-1,3-Dichloropropene	75	5.045	5.045	(1.122)	324401	43.4660	43.5
$	57 Toluene-d8 (S)	98	5.125	5.125	(0.882)	1917432	99.4847	99.5
	58 Toluene	92	5.149	5.149	(0.886)	528255	38.2138	38.2
	59 4-Methyl-2-Pentanone	43	5.307	5.308	(0.913)	706918	200.148	200
	60 Tetrachloroethene	166	5.314	5.314	(0.914)	270919	41.1236	41.1
	61 trans-1,3-Dichloropropene	75	5.326	5.326	(0.916)	284606	42.3709	42.4
	62 1,1,2-Trichloroethane	97	5.393	5.393	(0.928)	164927	41.3883	41.4
	63 Dibromochloromethane	129	5.472	5.472	(0.941)	201951	42.3133	42.3
	64 1,3-Dichloropropane	76	5.515	5.515	(0.949)	280928	42.1838	42.2
	65 1,2-Dibromoethane	107	5.582	5.582	(0.960)	169517	40.4035	40.4
	66 2-Hexanone	43	5.673	5.673	(0.976)	515135	199.949	200
*	67 Chlorobenzene-d5	117	5.813	5.814	(1.000)	1528903	100.000	
	68 Chlorobenzene	112	5.820	5.820	(1.001)	630147	41.5186	41.5
	69 Ethylbenzene	91	5.826	5.832	(1.002)	1044660	38.5620	38.6
	70 1,1,1,2-Tetrachloroethane	131	5.850	5.850	(1.006)	224539	42.8612	42.9
	71 M&P-Xylene	106	5.899	5.899	(1.015)	829022	81.8239	81.8
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.112	(1.051)	399269	41.1615	41.2
	73 Styrene	104	6.137	6.137	(1.056)	686923	42.3026	42.3

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014021.D
Report Date: 03-Feb-2014 09:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	74 Bromoform	173	6.161	6.161	(1.060)	148999	42.2095	42.2
	75 Isopropylbenzene (Cumene)	105	6.271	6.271	(1.079)	1051102	39.8754	39.9
$	76 4-Bromofluorobenzene (S)	95	6.423	6.423	(0.906)	724054	98.6015	98.6
	77 cis-1,4-Dichloro-2-Butene	53	6.454	6.454	(0.911)	64786	41.6192	41.6
	78 Bromobenzene	156	6.490	6.490	(0.916)	284344	40.1217	40.1
	79 n-Propylbenzene	91	6.490	6.490	(0.916)	1257316	40.7153	40.7
	80 1,1,2,2-Tetrachloroethane	83	6.527	6.527	(0.921)	214299	40.3262	40.3
	81 2-Chlorotoluene	91	6.588	6.588	(0.929)	803472	40.7643	40.8
	82 1,3,5-Trimethylbenzene	105	6.600	6.600	(0.931)	914541	40.7650	40.8
	83 1,2,3-Trichloropropane	110	6.612	6.612	(0.933)	60756	40.8203	40.8(Q)
	84 trans-1,4-Dichloro-2-Butene	53	6.630	6.630	(0.935)	139788	102.951	103
	85 4-Chlorotoluene	91	6.679	6.685	(0.942)	761130	41.3841	41.4
	86 tert-Butylbenzene	119	6.789	6.789	(0.958)	794274	40.6328	40.6
	87 1,2,4-Trimethylbenzene	105	6.832	6.832	(0.964)	921167	40.6996	40.7
	88 sec-Butylbenzene	105	6.899	6.899	(0.973)	1181256	41.0627	41.1
	89 p-Isopropyltoluene	119	6.984	6.984	(0.985)	1033577	41.1410	41.1
	90 1,3-Dichlorobenzene	146	7.045	7.045	(0.994)	560095	40.9434	40.9
*	91 1,4-Dichlorobenzene-d4	152	7.088	7.088	(1.000)	909194	100.000	
	92 1,4-Dichlorobenzene	146	7.100	7.100	(1.002)	566901	39.3871	39.4
	93 1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	935693	39.6028	39.6
	94 n-Butylbenzene	91	7.258	7.258	(1.024)	930631	41.2109	41.2
	95 1,2-Dichlorobenzene	146	7.380	7.380	(1.041)	525689	40.7981	40.8
	96 1,2-Dibromo-3-Chloropropane	157	7.862	7.862	(1.109)	116185	101.339	101
	97 Hexachlorobutadiene	225	8.228	8.228	(1.161)	213192	39.6994	39.7
	98 1,2,4-Trichlorobenzene	180	8.240	8.240	(1.163)	319285	39.3551	39.4
	99 Naphthalene	128	8.423	8.429	(1.188)	633312	40.5732	40.6
	100 1,2,3-Trichlorobenzene	180	8.532	8.532	(1.204)	296229	40.4523	40.4
	101 2-Methylnaphthalene	142	9.045	9.045	(1.276)	159941	18.0774	18.1(R)

QC Flag Legend

Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014021.D
Report Date: 03-Feb-2014 09:20

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 013014021.D
Lab Smp Id: 1617374
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Misc Info: 26253

Calibration Date: 30-JAN-2014
Calibration Time: 18:08
Client Smp ID: 1617374
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143148	71574	286296	154773	8.12
41 Pentafluorobenzen	1116303	558152	2232606	1201204	7.61
48 1,4 Difluorobenze	1540471	770236	3080942	1655801	7.49
53 1,4 dioxane d8	136838	68419	273676	148191	8.30
67 Chlorobenzene-d5	1416803	708402	2833606	1528903	7.91
91 1,4-Dichlorobenze	843357	421679	1686714	909194	7.81

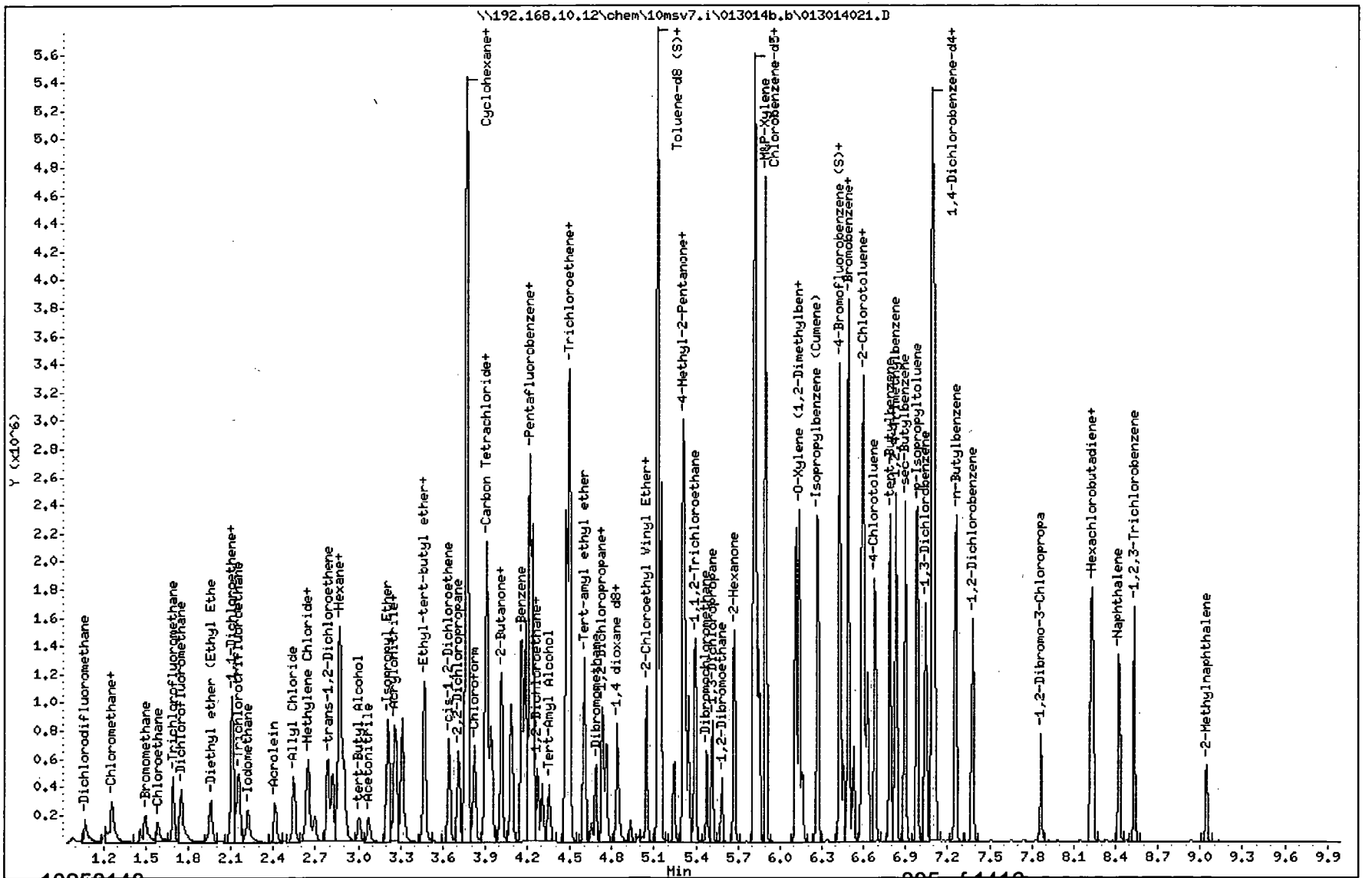
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.00
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	-0.00
48 1,4 Difluorobenze	4.50	4.00	5.00	4.50	-0.00
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.13
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014021.D
Date : 30-JAN-2014 18:26
Client ID: 1617374
Sample Info: 1617374,5,3,LCS

Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\CHEM\10msv7.i\[illegible]
Injection Date: 30-JAN-2014 18:26
Instrument: 10msv7.i
Lab Sample ID: 1617374
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031403.D
Report Date: 04-Feb-2014 12:52

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv3.i\020314A.b\02031403.D
Lab Smp Id: 1618516 Client Smp ID: 1618516
Inj Date : 03-FEB-2014 13:25
Operator : HBP Inst ID: 10msv3.i
Smp Info : 1618516,1,3,LCS
Misc Info : 26272
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv3.i\020314A.b\v314-MLS-011614.m
Meth Date : 03-Feb-2014 11:11 hpham Quant Type: ISTD
Cal Date : 16-JAN-2014 23:23 Cal File: 01161419.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 465W+hex.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * Vt/(Va * Ws * (1-(M/100))) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	1.029	1.029	(0.244)	44305	11.1626	558
2	Chloromethane	50	1.163	1.163	(0.276)	81812	14.5259	726
3	Vinyl Chloride	62	1.224	1.224	(0.290)	76412	15.8547	793
4	Bromomethane	94	1.455	1.455	(0.345)	42980	21.9785	1100
5	Chloroethane	64	1.546	1.546	(0.367)	32373	15.8301	792
6	Trichlorofluoromethane	101	1.638	1.656	(0.388)	69179	18.7311	936
7	Dichlorofluoromethane	67	1.699	1.711	(0.403)	76493	20.7838	1040
8	Diethyl ether (Ethyl Ether)	59	1.942	1.924	(0.461)	41295	16.3461	817
9	1,1-Dichloroethene	96	2.051	2.070	(0.487)	60103	16.9060	845
10	Carbon Disulfide	76	2.051	2.082	(0.487)	195027	17.0157	851
11	Trichlorotrifluoroethane	101	2.094	2.118	(0.497)	54551	15.9858	799
14	Allyl Chloride	41	2.502	2.514	(0.593)	95367	17.7303	886
15	Methylene Chloride	84	2.617	2.617	(0.621)	70188	18.7260	936
* 16	Acetone d6	46	2.654	2.623	(1.000)	60489	100.000	
17	Acetone	58	2.696	2.672	(1.016)	25736	117.829	5890
18	trans-1,2-Dichloroethene	96	2.757	2.763	(0.654)	67672	18.2998	915
19	Hexane	86	2.836	2.848	(1.069)	22778	47.3091	2360
20	Methyl-tert-butyl Ether	73	2.891	2.873	(0.686)	162753	17.5682	878
23	Isopropyl Ether	45	3.207	3.195	(0.761)	193242	17.5529	878

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	24	1,1-Dichloroethane	63	3.256	3.262	(0.772)	110952	17.1526	858
	28	cis-1,2-Dichloroethene	96	3.639	3.639	(0.863)	72856	17.8379	892
	29	2,2-Dichloropropane	77	3.700	3.706	(0.877)	90514	17.2567	863
	30	Cyclohexane	56	3.755	3.755	(0.890)	459633	80.9124	4040
	31	Bromochloromethane	130	3.767	3.767	(0.893)	49067	19.2865	964
	32	Chloroform	83	3.822	3.822	(0.906)	105313	16.7172	836
	33	Carbon Tetrachloride	117	3.889	3.895	(0.922)	71683	17.5074	875
	34	Tetrahydrofuran	72	3.919	3.907	(1.477)	76586	217.162	10800
	35	1,1,1-Trichloroethane	97	3.931	3.937	(0.932)	90509	16.3701	818
	36	1,1-Dichloropropene	75	4.010	4.010	(0.951)	86204	16.6552	833
	37	2-Butanone	43	4.022	4.010	(0.954)	124849	90.7093	4540
	38	Benzene	78	4.156	4.156	(0.986)	265959	17.7631	888
*	39	Pentafluorobenzene	168	4.217	4.217	(1.000)	351965	50.0000	
$	41	1,2-Dichloroethane d4 (S)	65	4.235	4.235	(1.004)	141392	41.8826	41.9
	42	1,2-Dichloroethane	62	4.272	4.272	(1.013)	70911	15.6546	783
	45	Trichloroethene	130	4.479	4.479	(0.996)	78627	19.1025	955
*	46	1,4 Difluorobenzene	114	4.497	4.497	(1.000)	503059	50.0000	
	48	Dibromomethane	174	4.692	4.686	(1.043)	51541	21.3637	1070
	49	1,2-Dichloropropane	63	4.734	4.734	(1.053)	65448	18.9351	947
	50	Bromodichloromethane	83	4.765	4.765	(1.060)	80796	18.7606	938
*	51	1,4 dioxane d8	96	4.856	4.844	(1.000)	60212	2000.00	
	54	cis-1,3-Dichloropropene	75	5.045	5.044	(1.122)	104994	19.6389	982
$	55	Toluene-d8 (S)	98	5.124	5.124	(0.883)	549076	49.1498	49.1
	56	Toluene	92	5.148	5.148	(0.887)	169749	18.3506	918
	57	4-Methyl-2-Pentanone	43	5.306	5.300	(0.914)	267419	92.6270	4630
	58	Tetrachloroethene	166	5.312	5.312	(0.915)	80614	19.2203	961
	59	trans-1,3-Dichloropropene	75	5.318	5.318	(0.916)	94773	19.4741	974
	60	1,1,2-Trichloroethane	97	5.391	5.391	(0.929)	62302	19.6871	984
	61	Dibromochloromethane	129	5.470	5.470	(0.942)	66653	20.8232	1040
	62	1,3-Dichloropropane	76	5.507	5.507	(0.949)	100051	18.9648	948
	63	1,2-Dibromoethane	107	5.574	5.574	(0.960)	65915	19.6371	982(Q)
	64	2-Hexanone	43	5.665	5.659	(0.976)	186292	94.0257	4700
*	65	Chlorobenzene-d5	117	5.805	5.805	(1.000)	471813	50.0000	
	66	Chlorobenzene	112	5.811	5.811	(1.001)	189925	18.9686	948
	67	Ethylbenzene	91	5.817	5.817	(1.002)	299356	17.8850	894
	68	1,1,1,2-Tetrachloroethane	131	5.841	5.835	(1.006)	68608	20.7982	1040
	69	M&P-Xylene	106	5.884	5.884	(1.014)	244379	38.4001	1920
	70	O-Xylene (1,2-Dimethylbenzene)	106	6.091	6.091	(1.049)	116340	19.6187	981
	71	Styrene	104	6.121	6.121	(1.054)	206868	19.7342	987
	72	Bromoform	173	6.146	6.139	(1.059)	52570	22.6850	1130(Q)
	73	Isopropylbenzene (Cumene)	105	6.249	6.249	(1.076)	272700	18.6156	931
$	74	4-Bromofluorobenzene (S)	95	6.407	6.407	(0.908)	215986	46.5679	46.6
	76	Bromobenzene	156	6.468	6.468	(0.916)	88667	18.9444	947
	77	n-Propylbenzene	91	6.468	6.468	(0.916)	297772	17.3776	869
	78	1,1,2,2-Tetrachloroethane	83	6.505	6.505	(0.922)	77316	18.7667	938
	79	2-Chlorotoluene	91	6.565	6.565	(0.930)	198734	17.3689	868
	80	1,3,5-Trimethylbenzene	105	6.571	6.571	(0.931)	214914	17.7041	885
	81	1,2,3-Trichloropropane	110	6.590	6.590	(0.934)	22162	17.7356	887
	83	4-Chlorotoluene	91	6.657	6.657	(0.943)	195065	17.6859	884
	84	tert-Butylbenzene	119	6.760	6.760	(0.958)	179008	18.0008	900
	85	1,2,4-Trimethylbenzene	105	6.803	6.803	(0.964)	216313	17.7067	885
	86	sec-Butylbenzene	105	6.870	6.870	(0.973)	241137	17.4902	874
	87	p-Isopropyltoluene	119	6.955	6.955	(0.985)	213147	18.2365	912
	88	1,3-Dichlorobenzene	146	7.016	7.016	(0.994)	140655	18.7241	936

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031403.D
Report Date: 04-Feb-2014 12:52

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
* 89 1,4-Dichlorobenzene-d4	152	7.058	7.058	(1.000)	267341	50.0000	
90 1,4-Dichlorobenzene	146	7.070	7.070	(1.002)	151499	18.9109	946
92 n-Butylbenzene	91	7.229	7.228	(1.024)	167251	17.4919	874
93 1,2-Dichlorobenzene	146	7.350	7.350	(1.041)	139542	19.0980	955
94 1,2-Dibromo-3-Chloropropane	157	7.843	7.843	(1.111)	40057	51.2157	2560
95 Hexachlorobutadiene	225	8.202	8.208	(1.162)	35424	20.1724	1010
96 1,2,4-Trichlorobenzene	180	8.220	8.226	(1.165)	66971	18.8180	941
97 Naphthalene	128	8.409	8.409	(1.191)	156009	16.7102	836
98 1,2,3-Trichlorobenzene	180	8.512	8.518	(1.206)	59806	18.0853	904

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031403.D
Report Date: 04-Feb-2014 12:52

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv3.i
Lab File ID: 02031403.D
Lab Smp Id: 1618516
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Calibration Date: 03-FEB-2014
Calibration Time: 12:36
Client Smp ID: 1618516
Level: MED
Sample Type: SOIL
Method File: \\192.168.10.12\chem\10msv3.i\020314A.b\v314-MLS-011614.m
Misc Info: 26272

Test Mode:
Use Last Calibration Run.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	52518	26259	105036	60489	15.18
39 Pentafluorobenzen	371366	185683	742732	351965	-5.22
46 1,4 Difluorobenze	520400	260200	1040800	503059	-3.33
51 1,4 dioxane d8	62794	31397	125588	60212	-4.11
65 Chlorobenzene-d5	463274	231637	926548	471813	1.84
89 1,4-Dichlorobenze	262539	131270	525078	267341	1.83

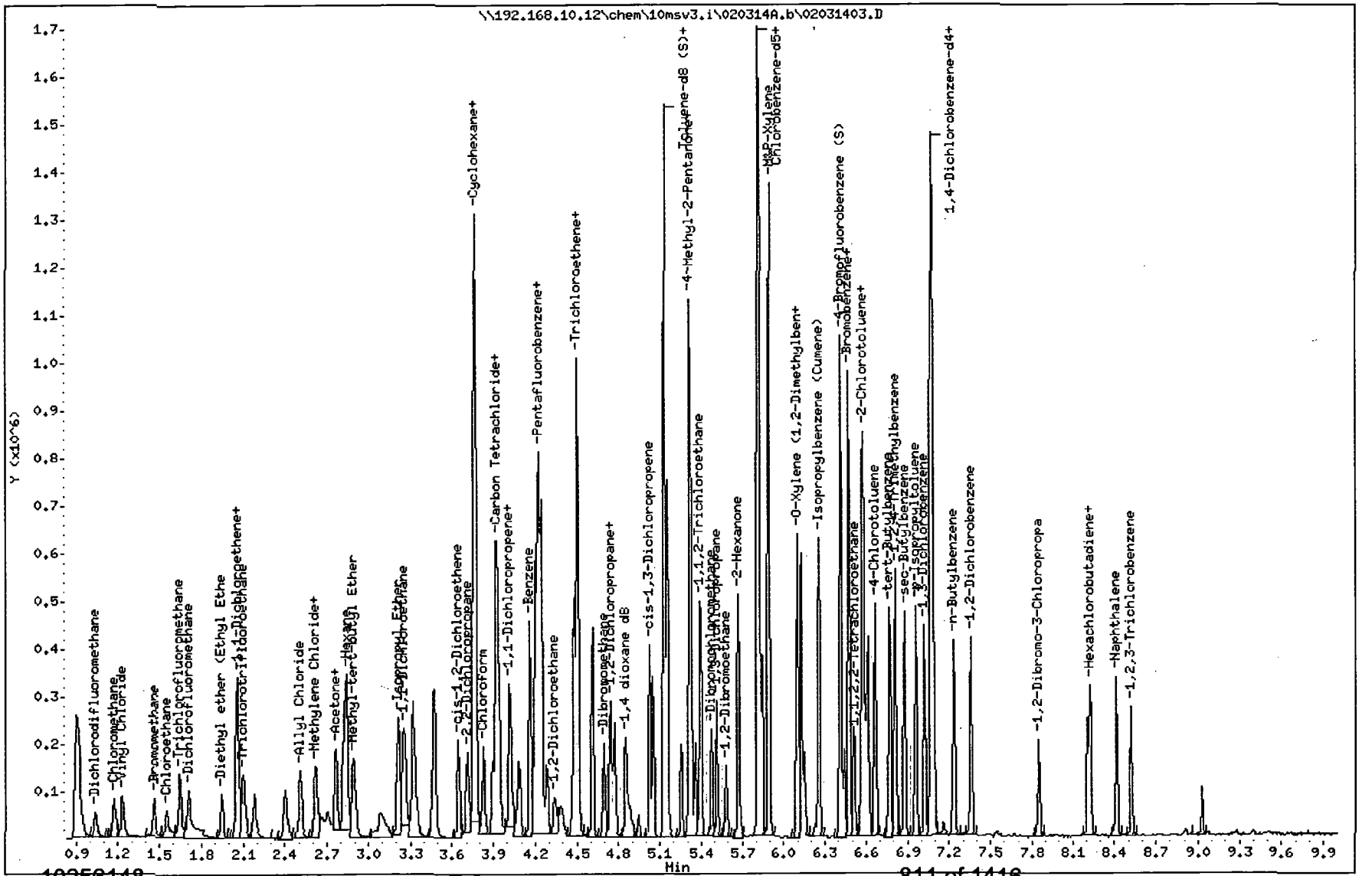
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
16 Acetone d6	2.62	2.12	3.12	2.65	1.16
39 Pentafluorobenzen	4.22	3.72	4.72	4.22	0.00
46 1,4 Difluorobenze	4.50	4.00	5.00	4.50	0.00
51 1,4 dioxane d8	4.84	4.34	5.34	4.86	0.25
65 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
89 1,4-Dichlorobenze	7.06	6.56	7.56	7.06	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031403.D
Date : 03-FEB-2014 13:25
Client ID: 1618516
Sample Info: 1618516,1,3,LCS

Instrument: 10msv3.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\Chem\10msv3.i\020314A.D\02031403.D
Injection Date: 03-FEB-2014 13:25
Instrument: 10msv3.i
Lab Sample ID: 1618516
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014027.D
Report Date: 03-Feb-2014 09:16

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\013014b.b\013014027.D
Lab Smp Id: 10256148001 Client Smp ID: 10256148001
Inj Date : 30-JAN-2014 20:15
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10256148001,5.81
Misc Info : 26253
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Meth Date : 03-Feb-2014 07:51 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.810	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.113	2.113	(0.501)	4457	0.29015	0.34(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.649	2.649	(1.000)	147097	200.000	
19	Acetone	58	2.692	2.698	(1.016)	16305	60.0569	69.8
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
21	Hexane	86	Compound Not Detected.					
22	Methyl-tert-butyl Ether	73	Compound Not Detected.					
23	tert-Butyl Alcohol	59	Compound Not Detected.					
24	Acetonitrile	41	Compound Not Detected.					
25	Isopropyl Ether	45	Compound Not Detected.					
26	Acrylonitrile	53	Compound Not Detected.					
27	1,1-Dichloroethane	63	Compound Not Detected.					
28	Ethyl-tert-butyl ether	59	Compound Not Detected.					
29	Vinyl Acetate	43	Compound Not Detected.					
30	cis-1,2-Dichloroethene	96	Compound Not Detected.					
31	2,2-Dichloropropane	77	Compound Not Detected.					
32	Cyclohexane	56	Compound Not Detected.					
33	Bromochloromethane	130	Compound Not Detected.					
34	Chloroform	83	Compound Not Detected.					
35	Carbon Tetrachloride	117	Compound Not Detected.					
36	Tetrahydrofuran	72	Compound Not Detected.					
37	1,1,1-Trichloroethane	97	Compound Not Detected.					
38	2-Butanone	43	4.009	4.009	(0.951)	8381	5.71401	6.6
39	1,1-Dichloropropene	75	Compound Not Detected.					
40	Benzene	78	Compound Not Detected.					
* 41	Pentafluorobenzene	168	4.216	4.216	(1.000)	1161380	100.000	
42	Tert-amyl methyl ether	73	Compound Not Detected.					
$ 43	1,2-Dichloroethane d4 (S)	65	4.234	4.235	(1.004)	471849	109.834	110
44	1,2-Dichloroethane	62	Compound Not Detected.					
45	Isobutanol	43	Compound Not Detected.					
46	Tert-Amyl Alcohol	59	Compound Not Detected.					
47	Trichloroethene	130	Compound Not Detected.					
* 48	1,4 Difluorobenzene	114	4.490	4.497	(1.000)	1610783	100.000	
49	Tert-amyl ethyl ether	59	Compound Not Detected.					
50	Dibromomethane	174	Compound Not Detected.					
51	1,2-Dichloropropane	63	Compound Not Detected.					
52	Bromodichloromethane	83	Compound Not Detected.					
* 53	1,4 dioxane d8	96	4.838	4.844	(1.000)	124352	4000.00	
54	1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
55	2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
56	cis-1,3-Dichloropropene	75	Compound Not Detected.					
$ 57	Toluene-d8 (S)	98	5.124	5.125	(0.882)	1870638	98.5210	98.5
58	Toluene	92	5.149	5.149	(0.886)	1726	0.12674	0.15(a)
59	4-Methyl-2-Pentanone	43	Compound Not Detected.					
60	Tetrachloroethene	166	Compound Not Detected.					
61	trans-1,3-Dichloropropene	75	Compound Not Detected.					
62	1,1,2-Trichloroethane	97	Compound Not Detected.					
63	Dibromochloromethane	129	Compound Not Detected.					
64	1,3-Dichloropropane	76	Compound Not Detected.					
65	1,2-Dibromoethane	107	Compound Not Detected.					
66	2-Hexanone	43	5.673	5.673	(0.976)	3950	1.55631	1.8(aQ)
* 67	Chlorobenzene-d5	117	5.813	5.814	(1.000)	1506181	100.000	
68	Chlorobenzene	112	Compound Not Detected.					
69	Ethylbenzene	91	Compound Not Detected.					
70	1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
71	M&P-Xylene	106	5.899	5.899	(1.015)	1161	0.11632	0.14(a)
72	O-Xylene (1,2-Dimethylbenzene)	106	Compound Not Detected.					
73	Styrene	104	Compound Not Detected.					
74	Bromoform	173	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
75	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$ 76	4-Bromofluorobenzene (S)	95	6.423	6.423	(0.906)	731250	99.9459	99.9
77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
78	Bromobenzene	156	Compound Not Detected.					
79	n-Propylbenzene	91	Compound Not Detected.					
80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
81	2-Chlorotoluene	91	Compound Not Detected.					
82	1,3,5-Trimethylbenzene	105	Compound Not Detected.					
83	1,2,3-Trichloropropane	110	Compound Not Detected.					
84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
85	4-Chlorotoluene	91	Compound Not Detected.					
86	tert-Butylbenzene	119	Compound Not Detected.					
87	1,2,4-Trimethylbenzene	105	6.831	6.832	(0.964)	1381	0.06124	0.071(a)
88	sec-Butylbenzene	105	Compound Not Detected.					
89	p-Isopropyltoluene	119	Compound Not Detected.					
90	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 91	1,4-Dichlorobenzene-d4	152	7.088	7.088	(1.000)	905879	100.000	
92	1,4-Dichlorobenzene	146	Compound Not Detected.					
93	1,2,3 Trimethylbenzene	105	Compound Not Detected.					
94	n-Butylbenzene	91	Compound Not Detected.					
95	1,2-Dichlorobenzene	146	Compound Not Detected.					
96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
97	Hexachlorobutadiene	225	Compound Not Detected.					
98	1,2,4-Trichlorobenzene	180	8.246	8.240	(1.163)	480	0.05938	0.069(a)
99	Naphthalene	128	8.429	8.429	(1.189)	2282	0.14673	0.17(a)
100	1,2,3-Trichlorobenzene	180	8.532	8.532	(1.204)	484	0.06634	0.077(a)
101	2-Methylnaphthalene	142	9.044	9.045	(1.276)	1031	0.54065	0.63(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014027.D
Report Date: 03-Feb-2014 09:16

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 013014027.D
Lab Smp Id: 10256148001
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Misc Info: 26253

Calibration Date: 30-JAN-2014
Calibration Time: 18:08
Client Smp ID: 10256148001
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143148	71574	286296	147097	2.76
41 Pentafluorobenzen	1116303	558152	2232606	1161380	4.04
48 1,4 Difluorobenze	1540471	770236	3080942	1610783	4.56
53 1,4 dioxane d8	136838	68419	273676	124352	-9.12
67 Chlorobenzene-d5	1416803	708402	2833606	1506181	6.31
91 1,4-Dichlorobenze	843357	421679	1686714	905879	7.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.65	-0.00
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	-0.00
48 1,4 Difluorobenze	4.50	4.00	5.00	4.49	-0.14
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.13
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	-0.00

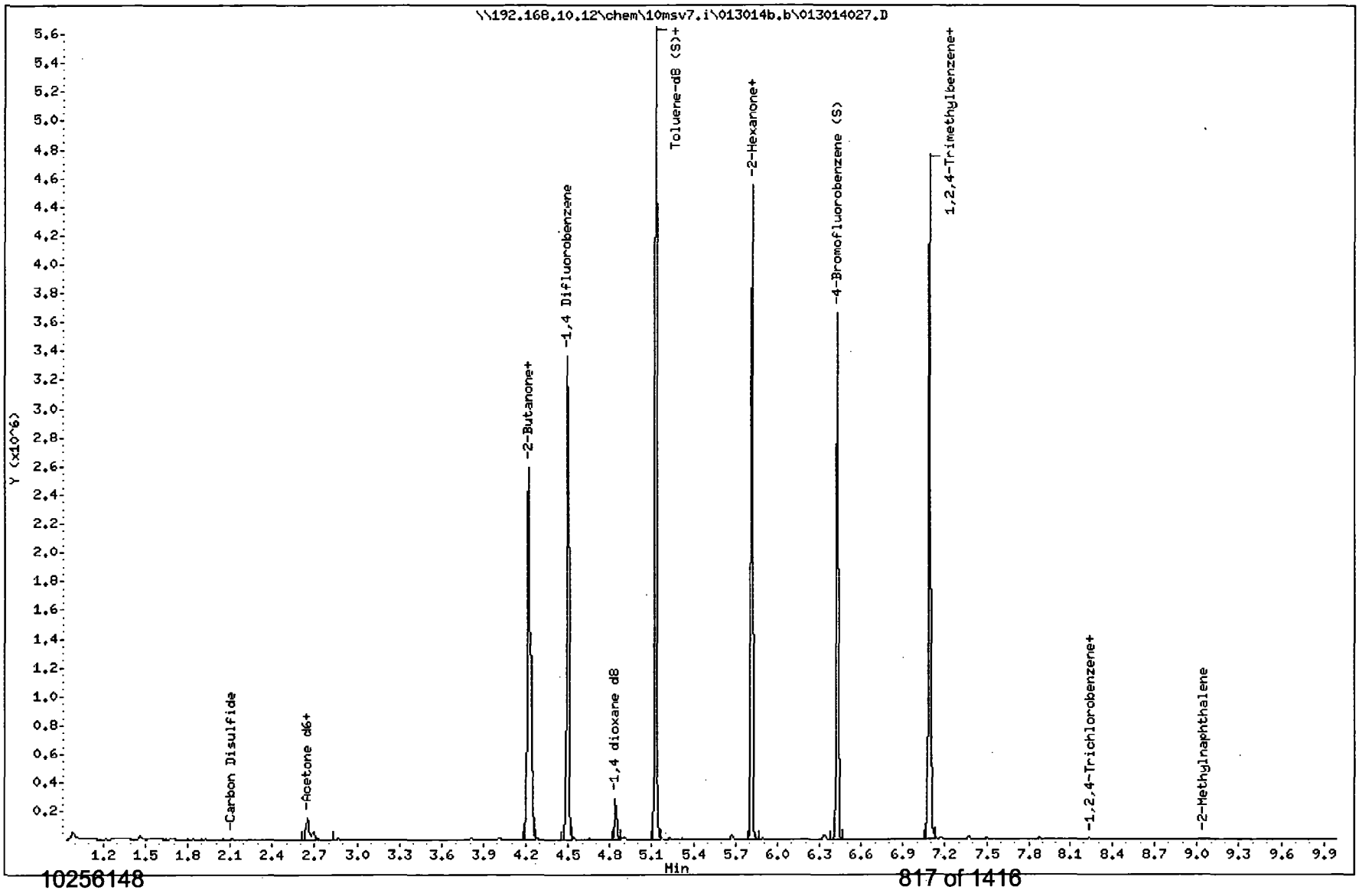
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014027.D
Date : 30-JAN-2014 20:15
Client ID: 10256148001
Sample Info: 10256148001,5.81

Instrument: 10msv7.i

Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



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Date : 30-JAN-2014 20:15

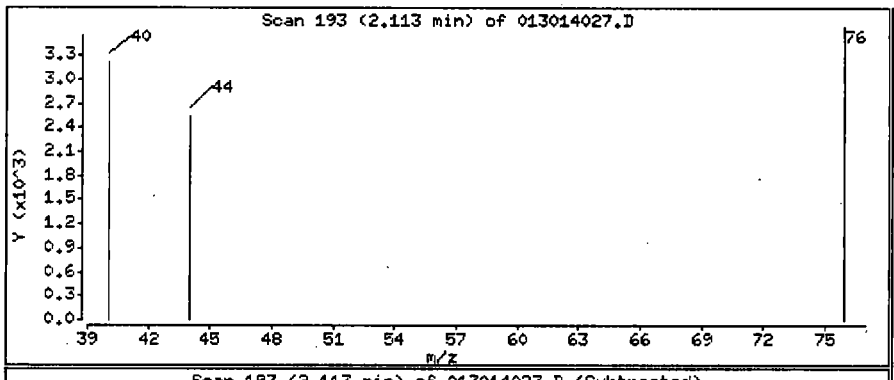
Client ID: 10256148001 Instrument: 10msv7.i

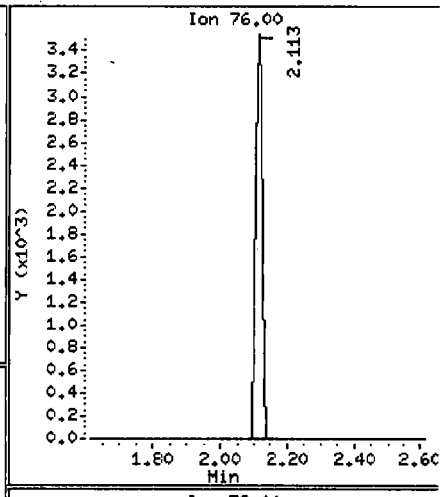
Sample Info: 10256148001,5,81

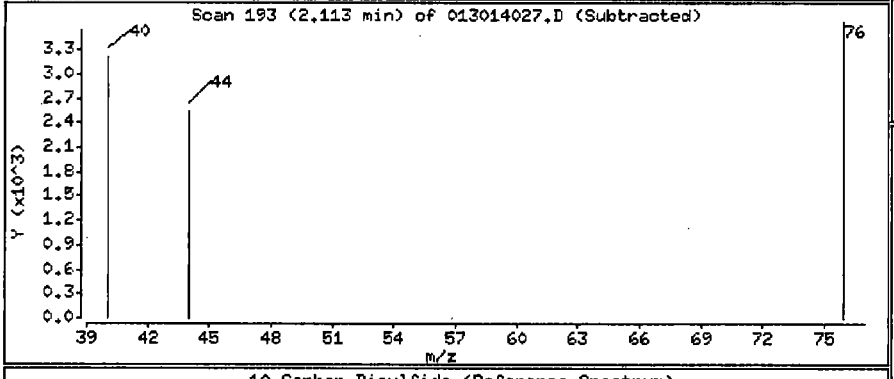
Operator: HBP

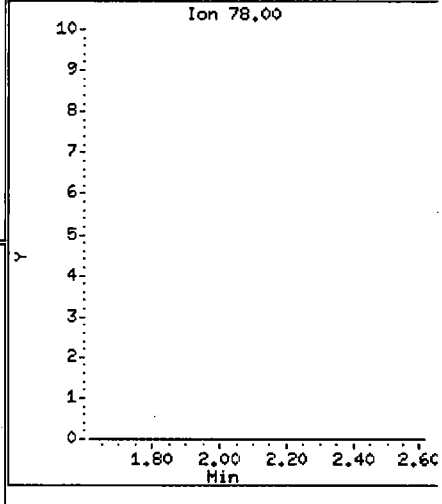
Column phase: Rtx-VMS Column diameter: 0.18

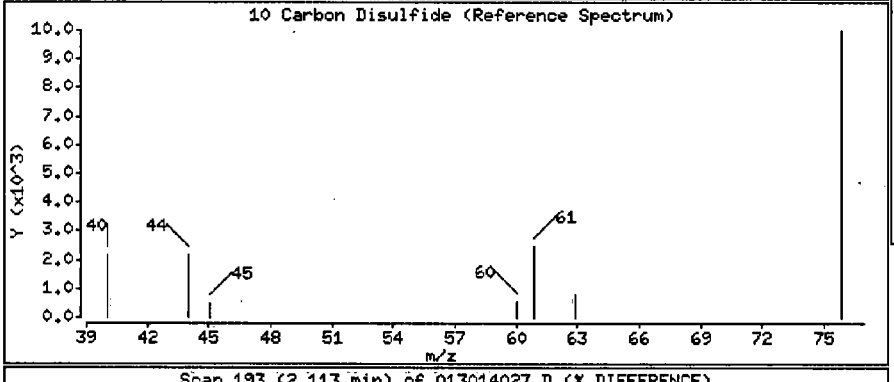
10 Carbon Disulfide Concentration: 0.34 ug/Kg

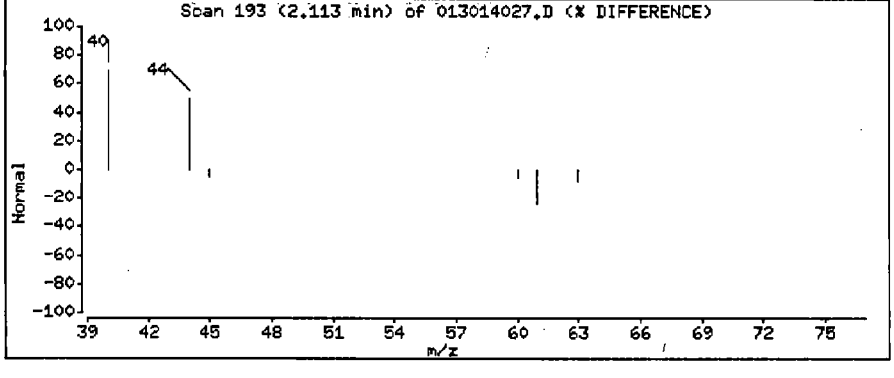












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Date : 30-JAN-2014 20:15

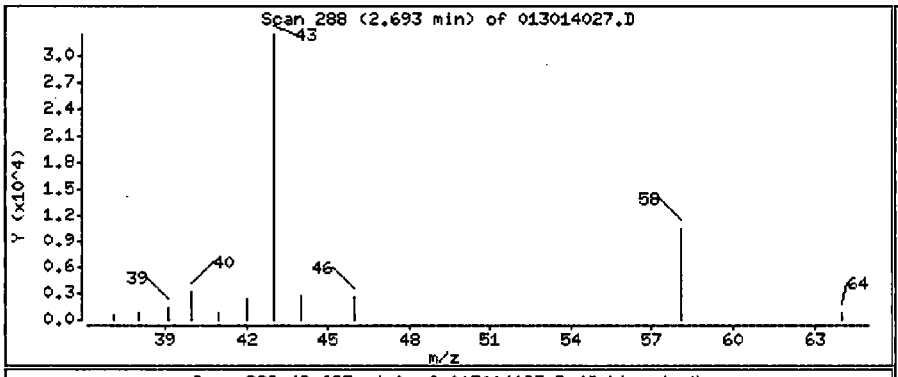
Client ID: 10256148001 Instrument: 10msv7.i

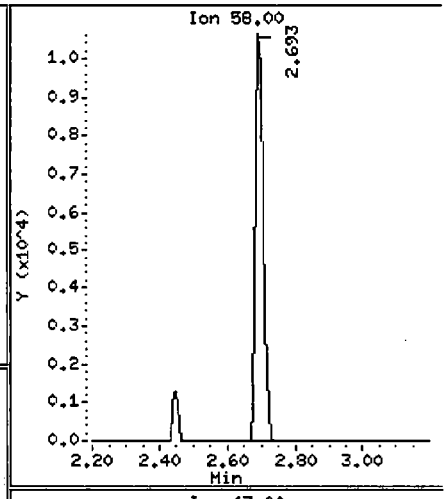
Sample Info: 10256148001,5.81

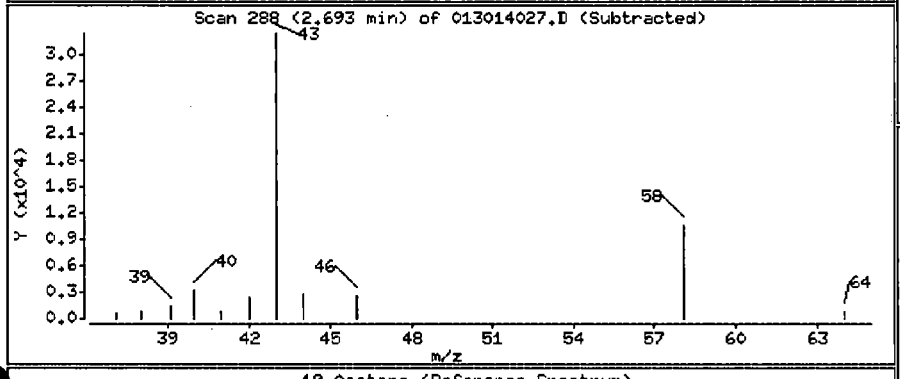
Operator: HBP

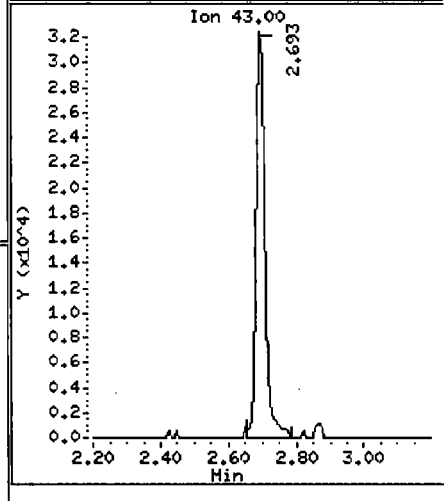
Column phase: Rtx-VMS Column diameter: 0.18

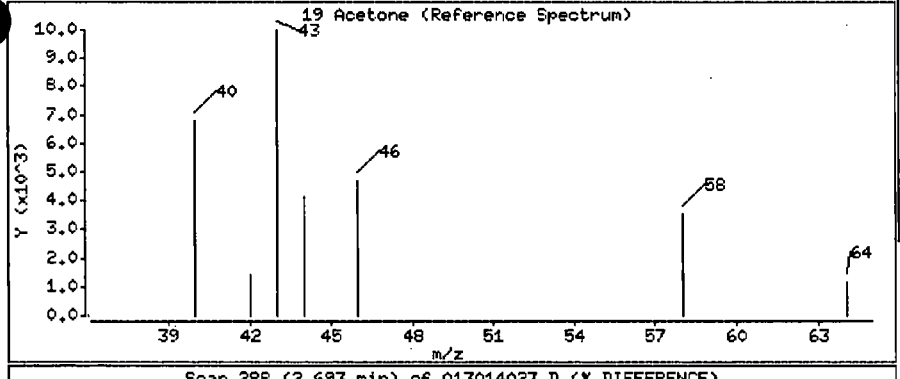
19 Acetone Concentration: 69.8 ug/Kg

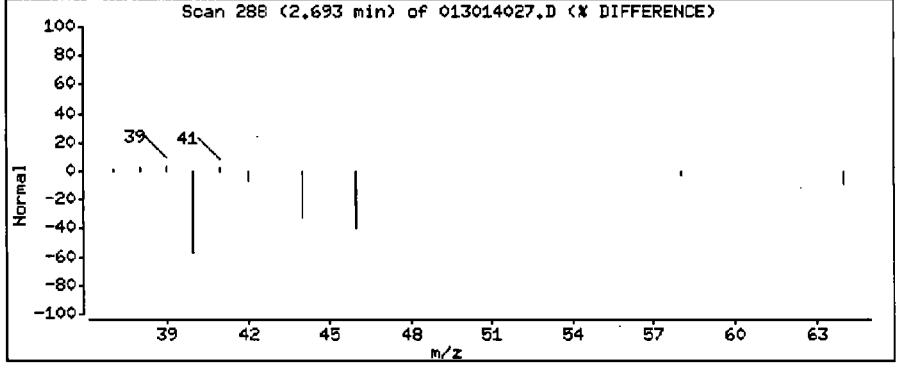












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Date : 30-JAN-2014 20:15

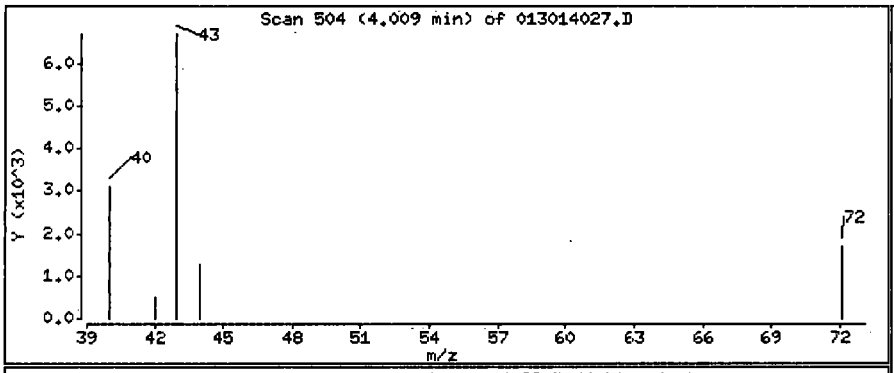
Client ID: 10256148001 Instrument: 10msv7.i

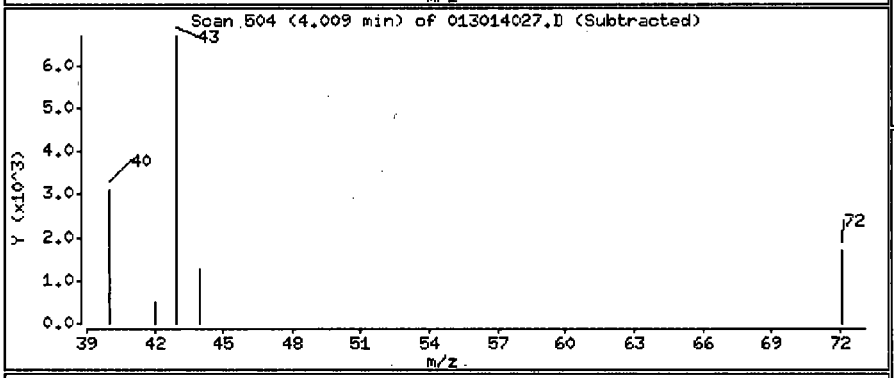
Sample Info: 10256148001,5.81

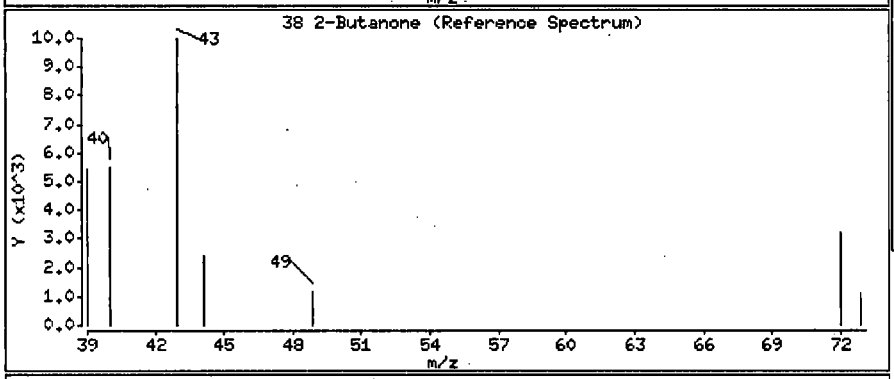
Operator: HBP

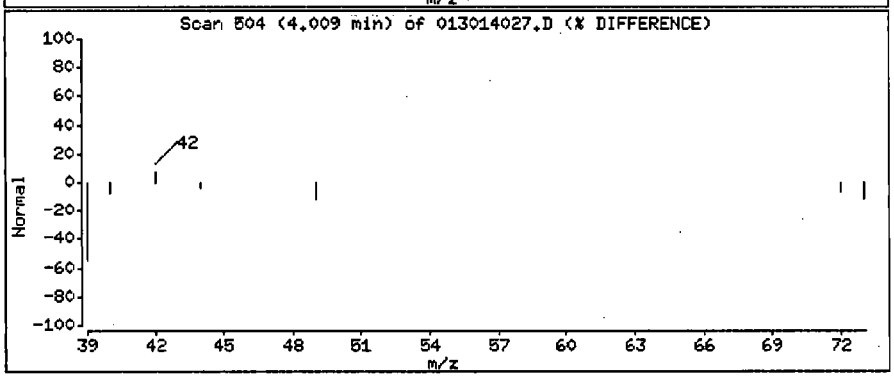
Column phase: Rtx-VMS Column diameter: 0.18

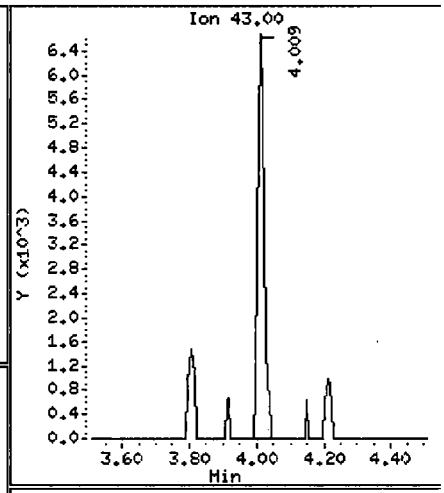
38 2-Butanone Concentration: 6.6 ug/Kg

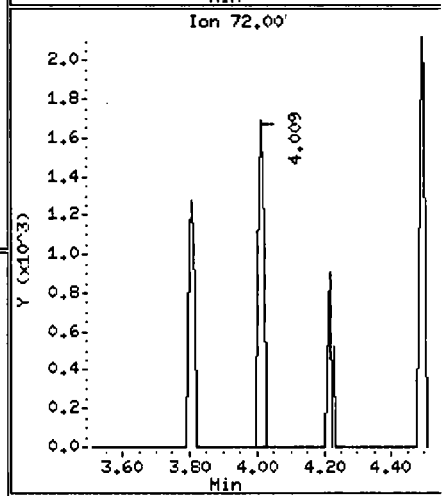












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Date : 30-JAN-2014 20:15

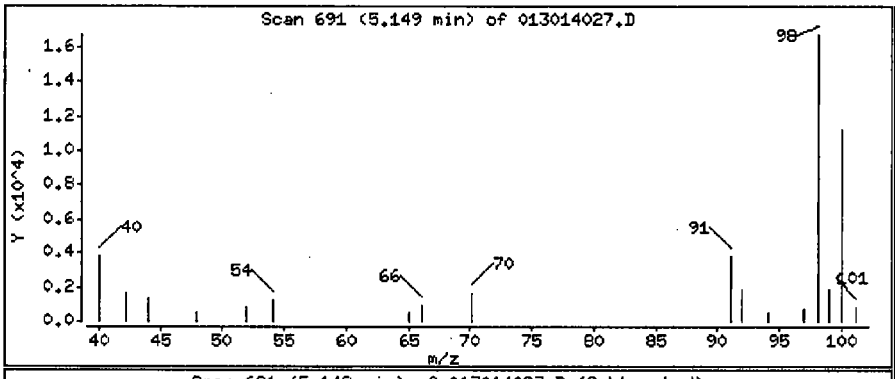
Client ID: 10256148001 Instrument: 10msv7.i

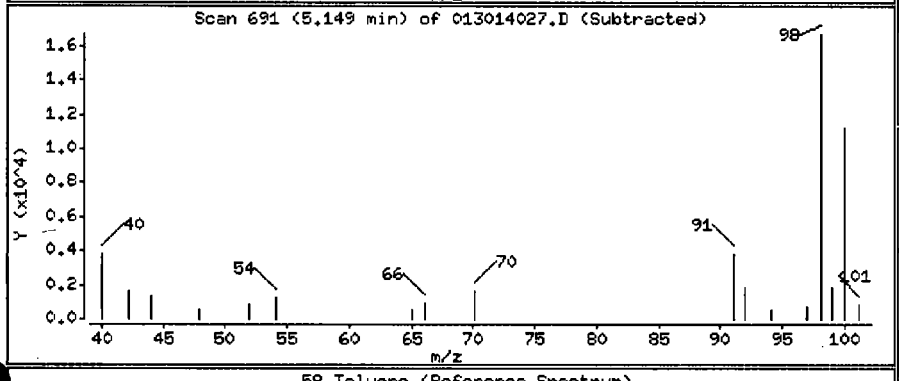
Sample Info: 10256148001,5.81

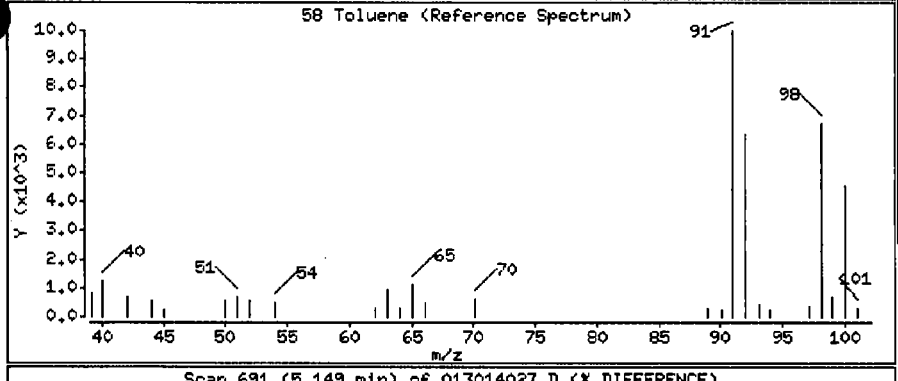
Operator: HBP

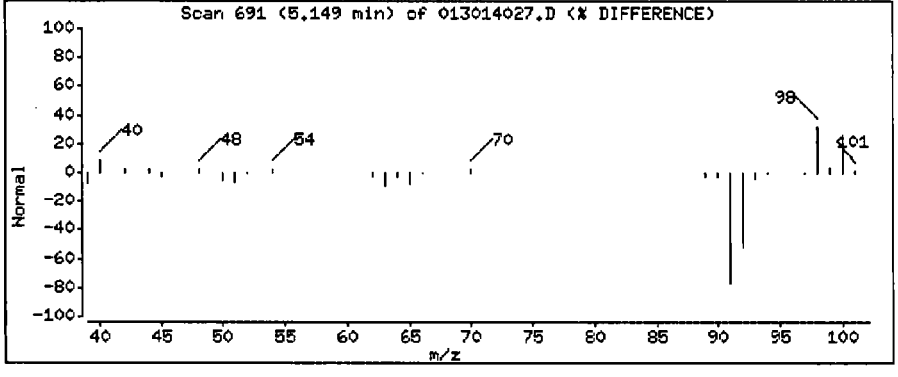
Column phase: Rtx-VMS Column diameter: 0.18

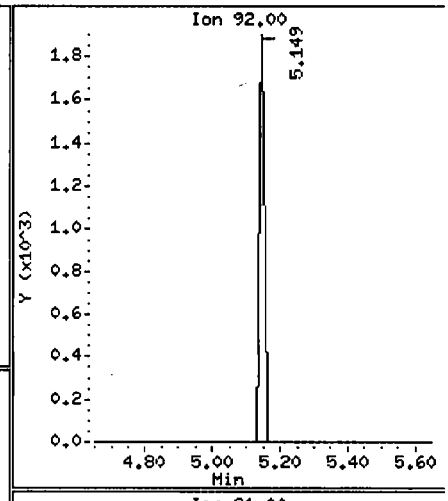
58 Toluene Concentration: 0.15 ug/Kg

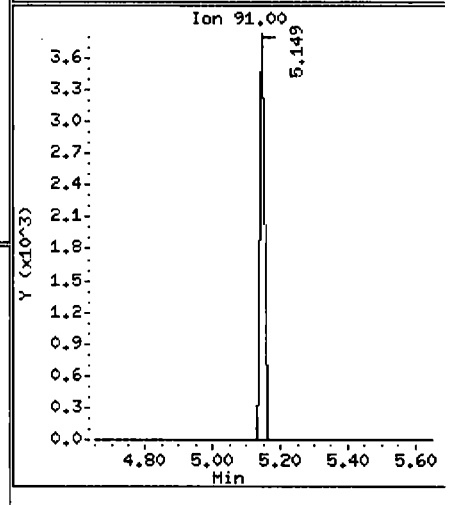












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Date : 30-JAN-2014 20:15

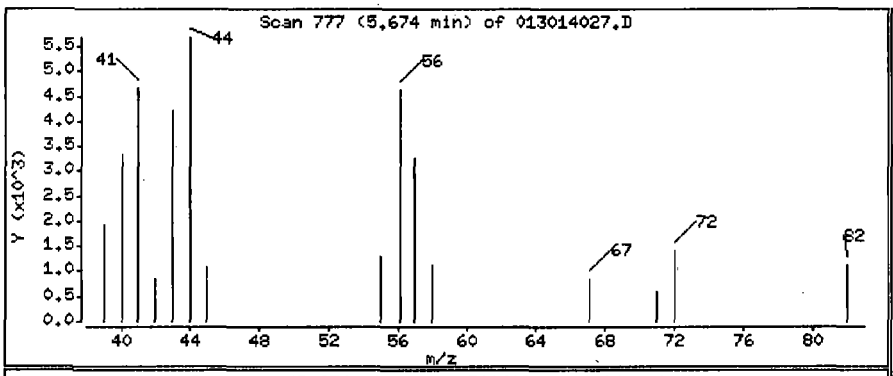
Client ID: 10256148001 Instrument: 10msv7.i

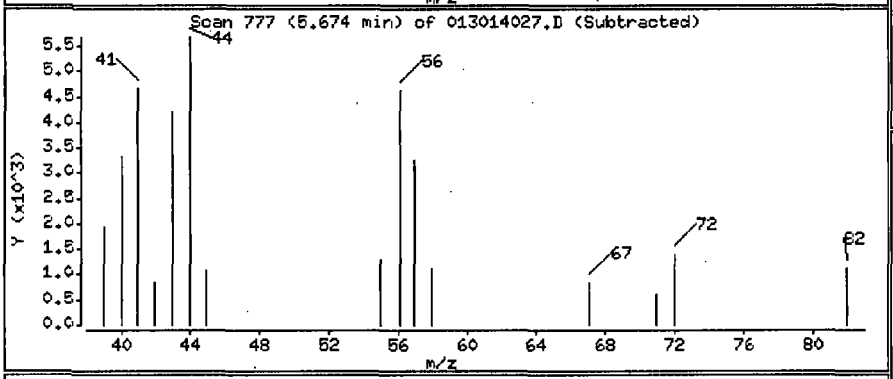
Sample Info: 10256148001,5.81

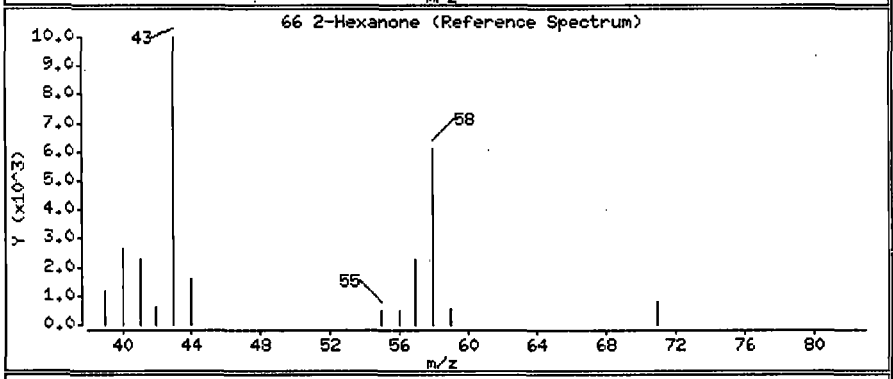
Operator: HBP

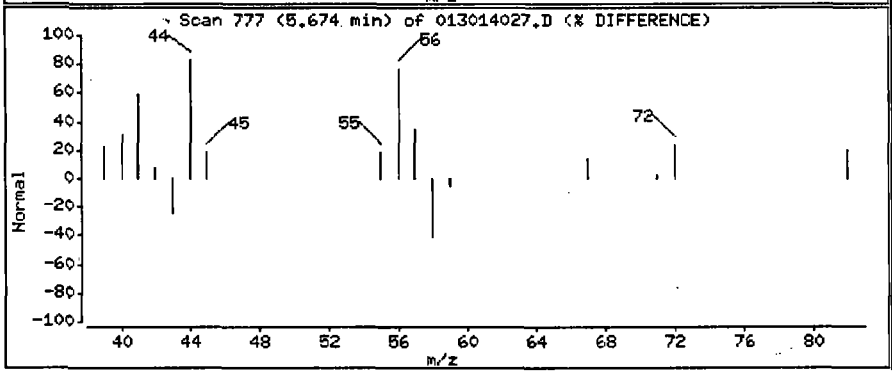
Column phase: Rtx-VMS Column diameter: 0.18

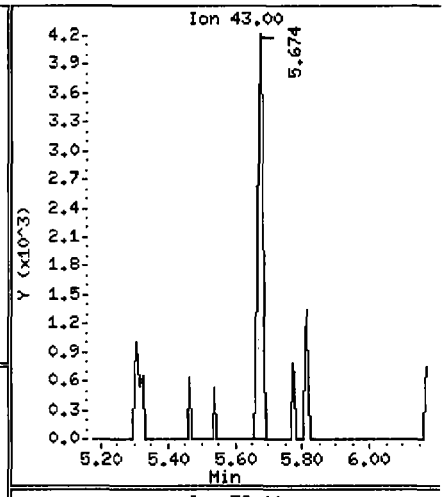
66 2-Hexanone Concentration: 1.8 ug/Kg

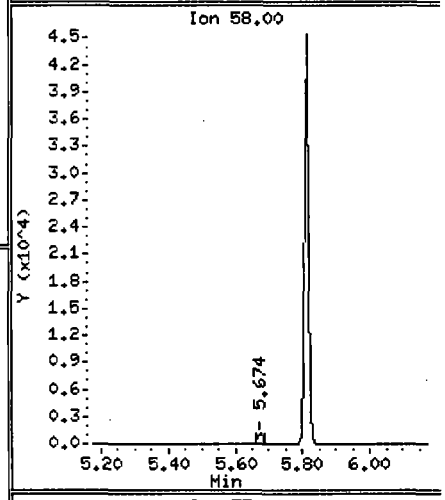


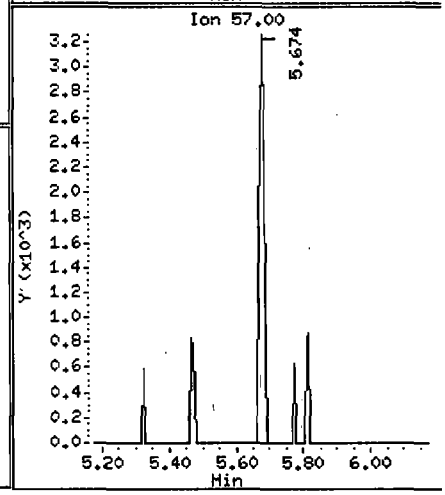












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014027.D

Date : 30-JAN-2014 20:15

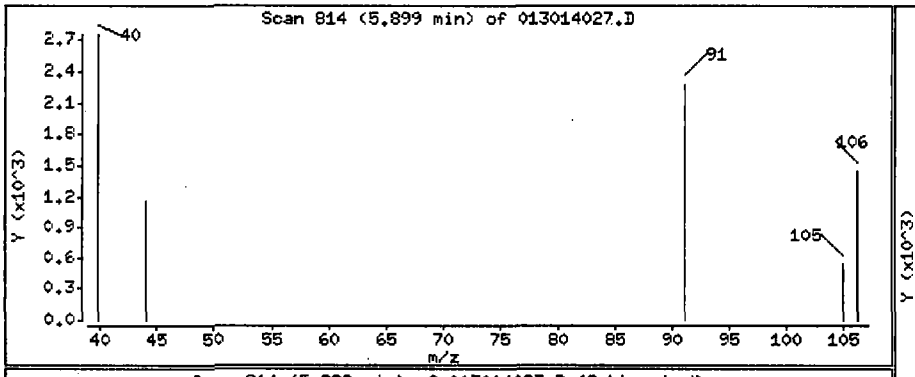
Client ID: 10256148001 Instrument: 10msv7.i

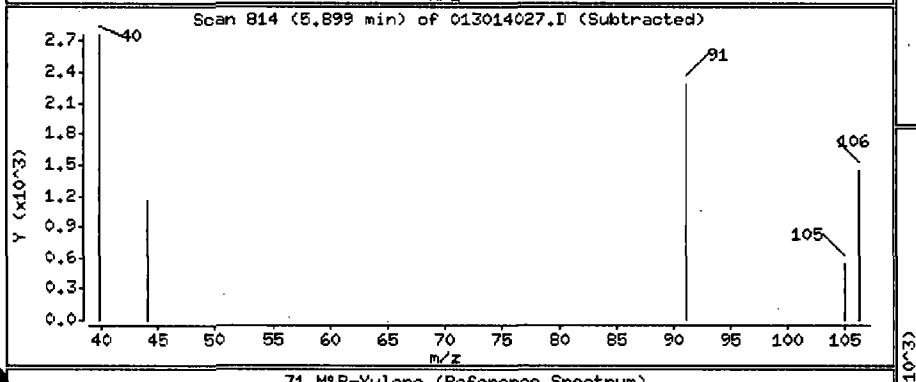
Sample Info: 10256148001,5.81

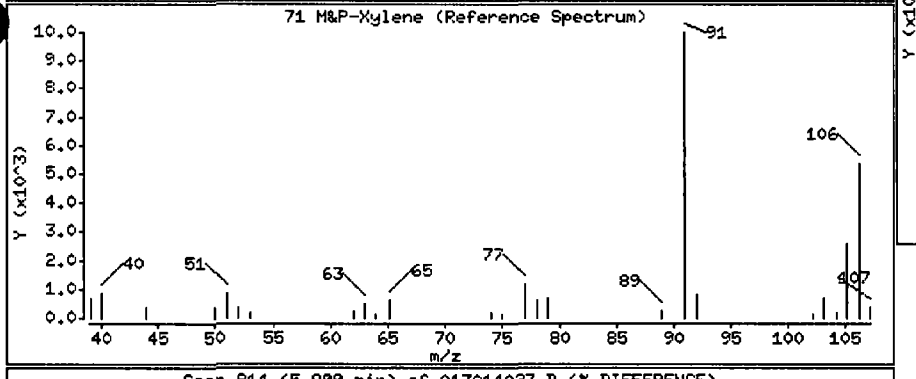
Operator: HBP

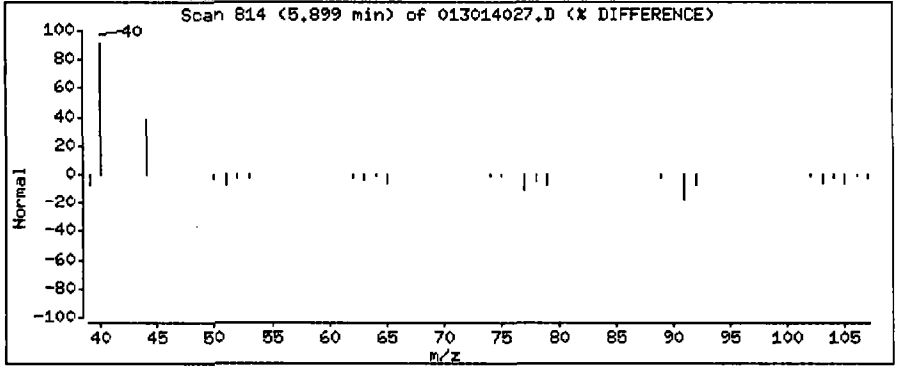
Column phase: Rtx-VMS Column diameter: 0.18

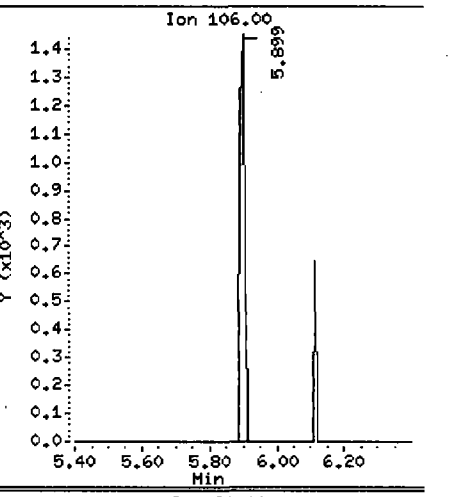
71 M&P-Xylene Concentration: 0.14 ug/Kg

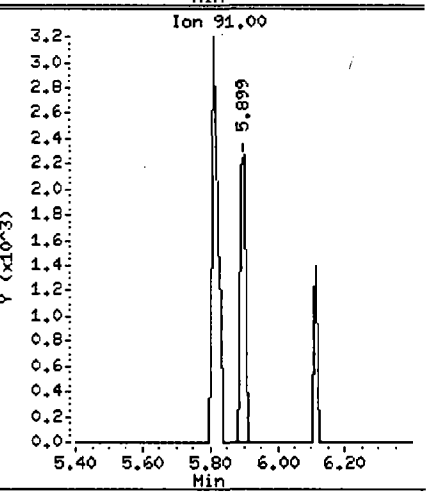












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Date : 30-JAN-2014 20:15

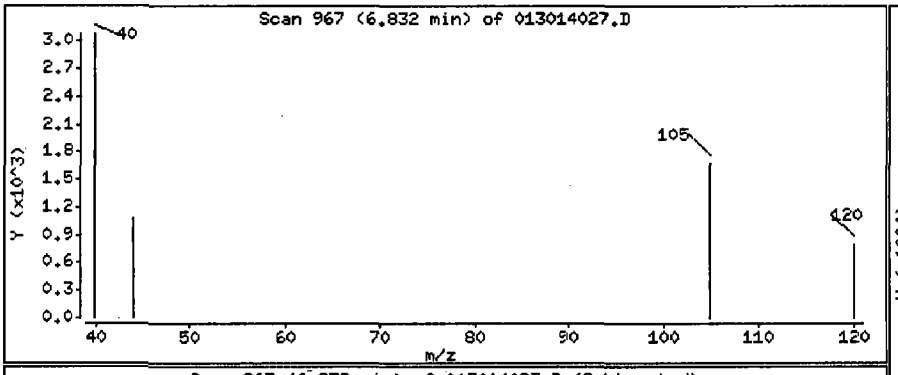
Client ID: 10256148001 Instrument: 10msv7.i

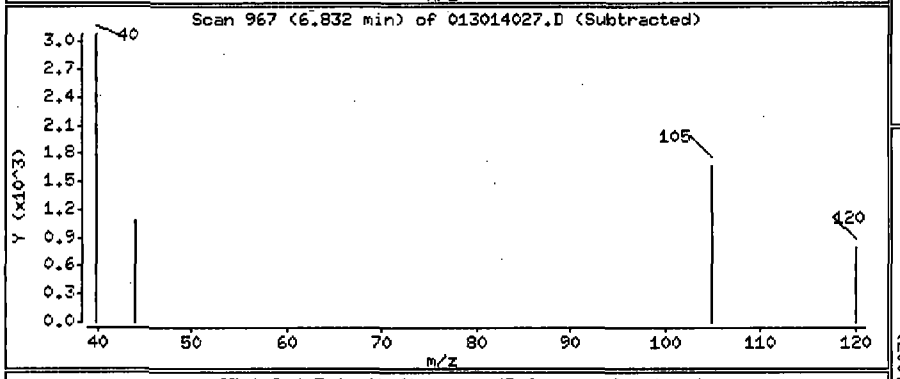
Sample Info: 10256148001,5,81

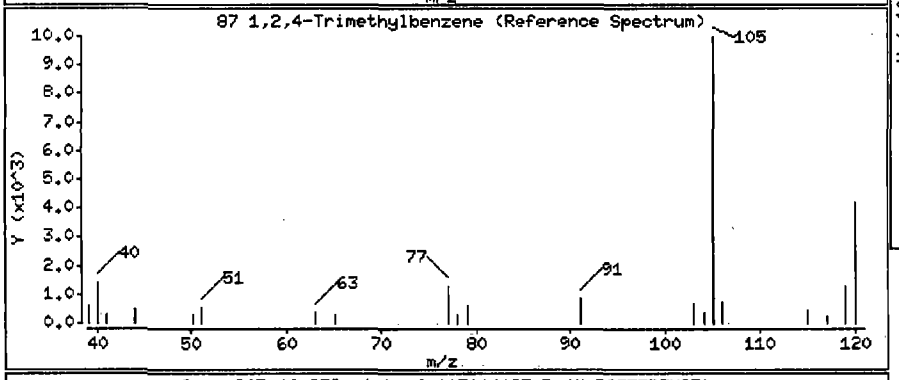
Operator: HBP

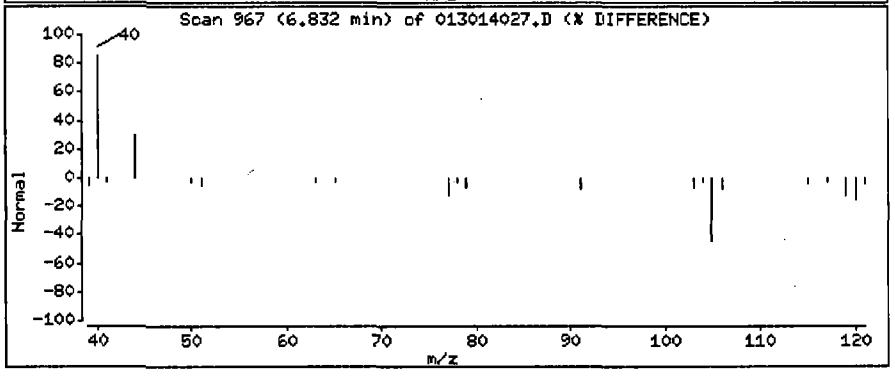
Column phase: Rtx-VMS Column diameter: 0.18

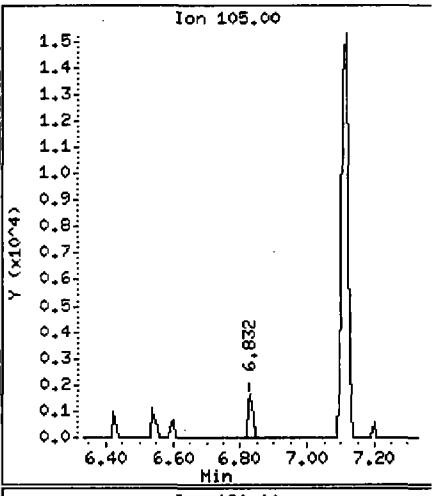
87 1,2,4-Trimethylbenzene Concentration: 0.071 ug/Kg

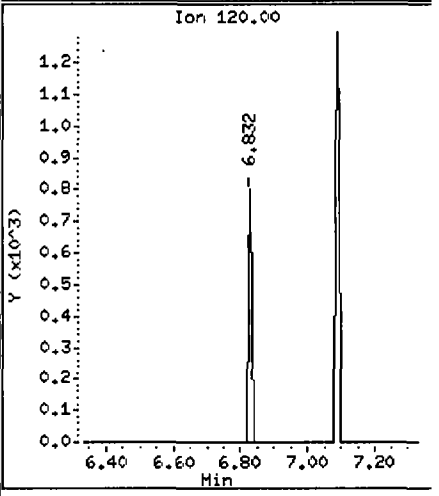












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Date : 30-JAN-2014 20:15

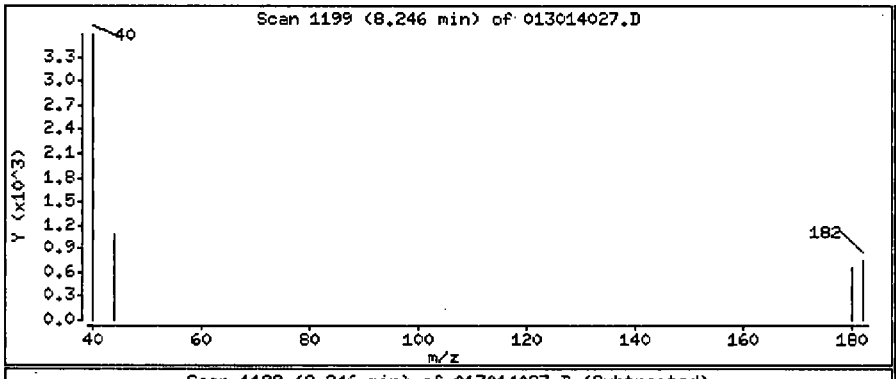
Client ID: 10256148001 Instrument: 10msv7.i

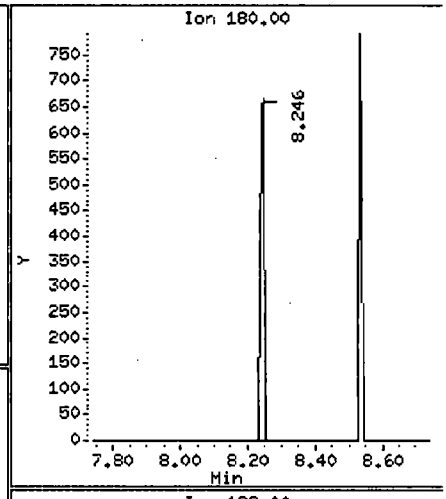
Sample Info: 10256148001,5.81

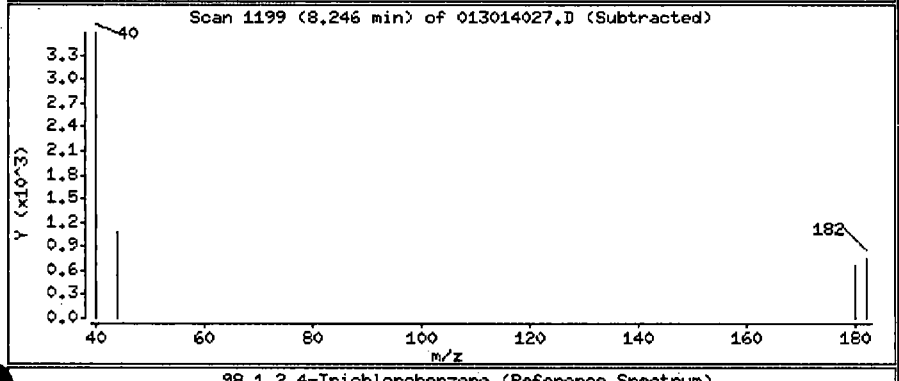
Operator: HBP

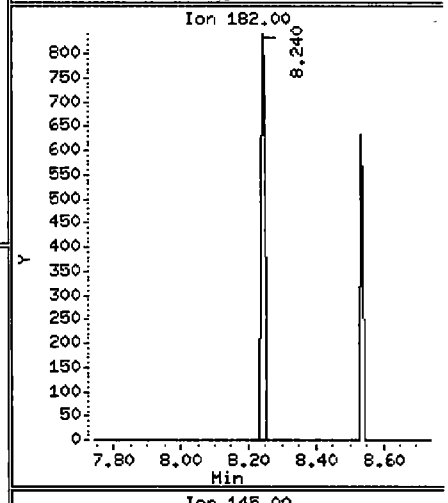
Column phase: Rtx-VMS Column diameter: 0.18

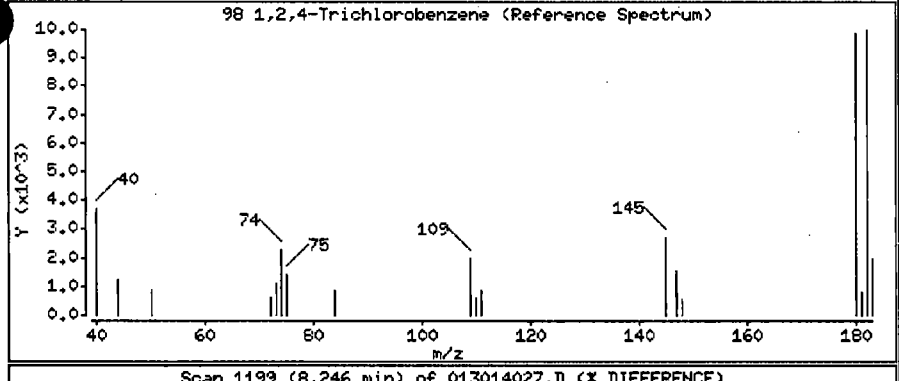
98 1,2,4-Trichlorobenzene Concentration: 0.069 ug/Kg

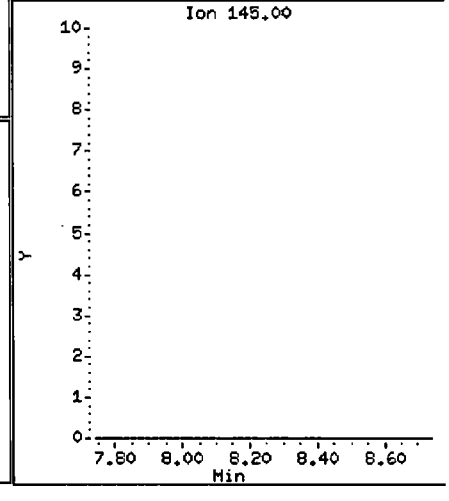


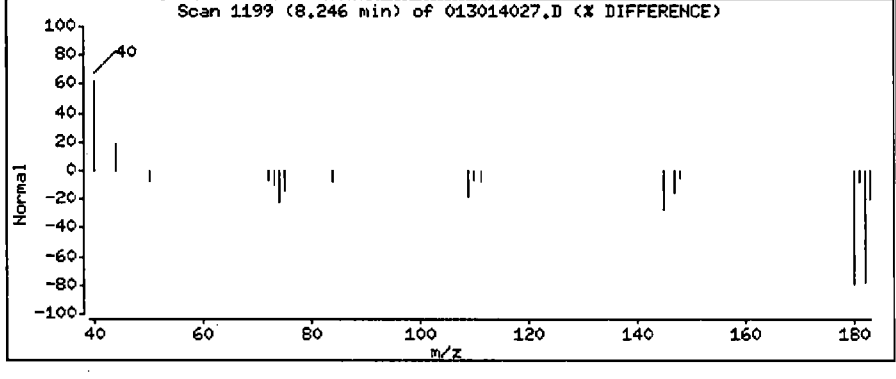












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Date : 30-JAN-2014 20:15

Client ID: 10256148001

Instrument: 10msv7.i

Sample Info: 10256148001,5.81

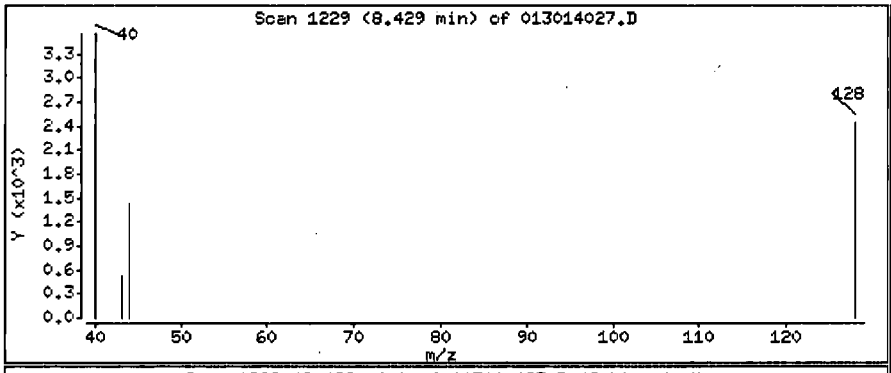
Operator: HBP

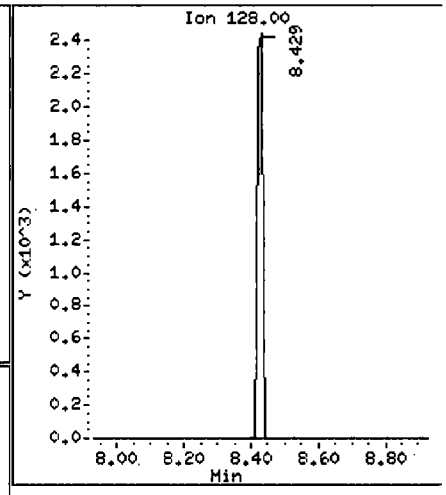
Column phase: Rtx-VMS

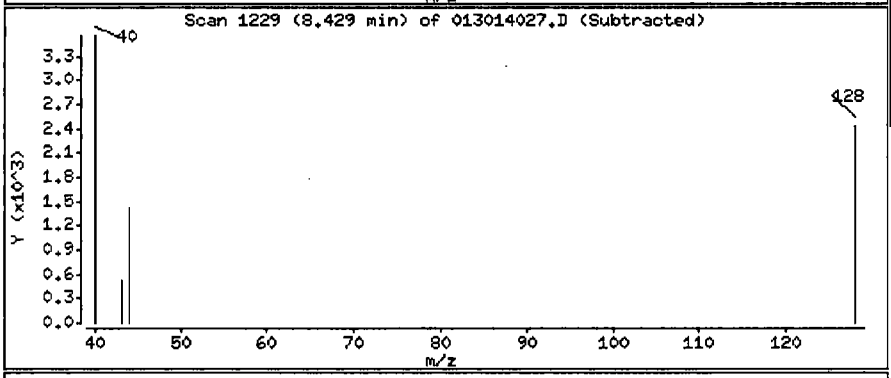
Column diameter: 0.18

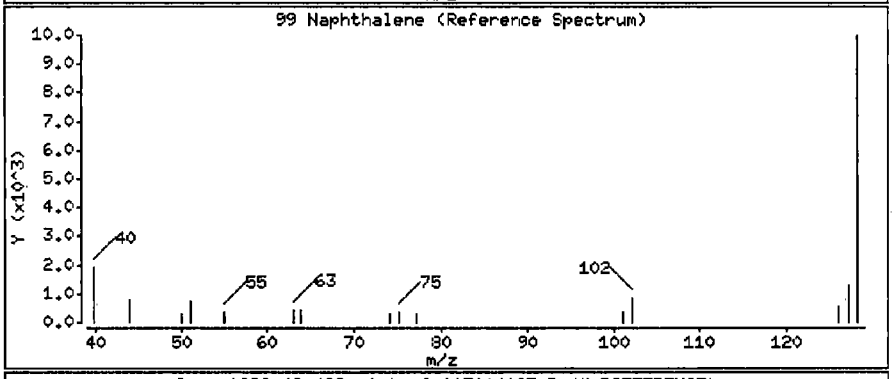
99 Naphthalene

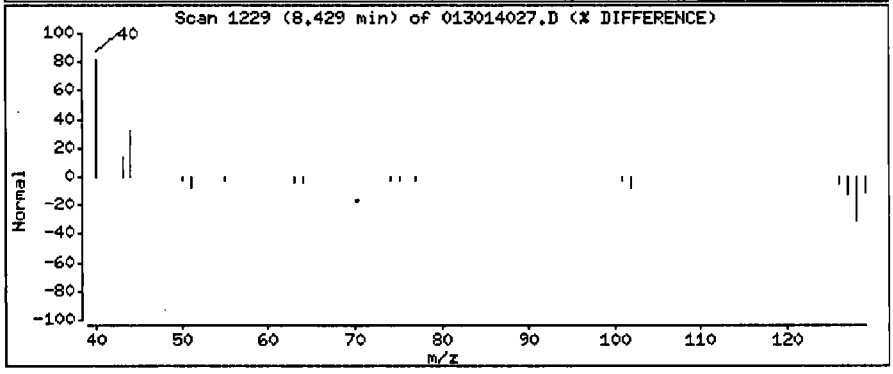
Concentration: 0.17 ug/Kg











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Date : 30-JAN-2014 20:15

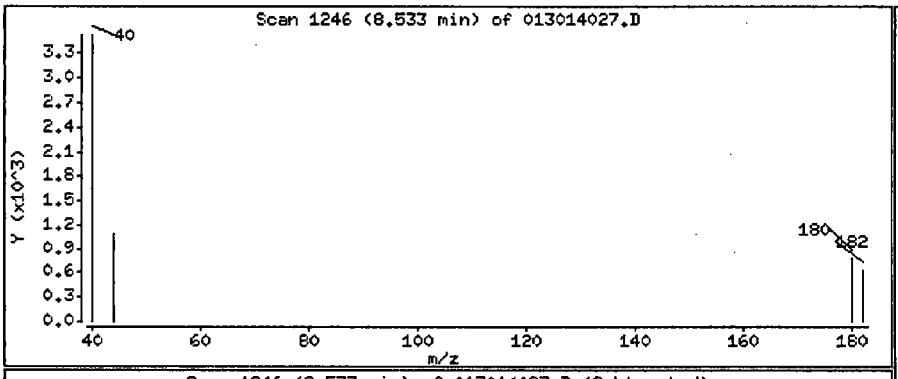
Client ID: 10256148001 Instrument: 10msv7.i

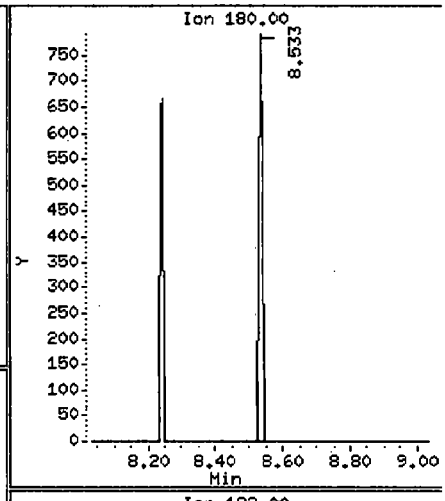
Sample Info: 10256148001,5,81

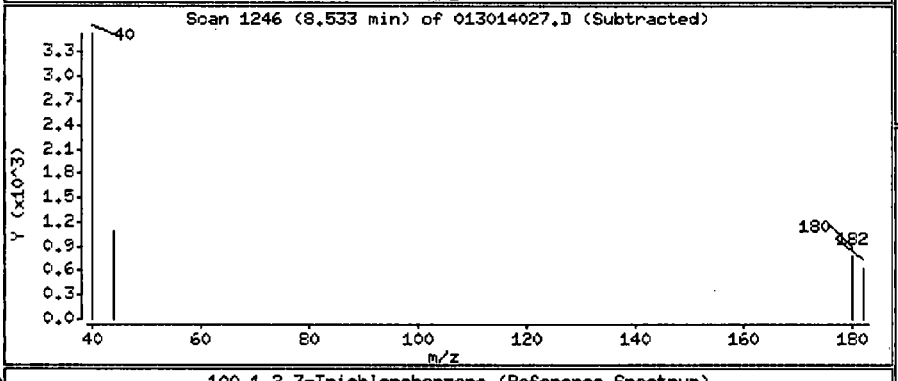
Operator: HBP

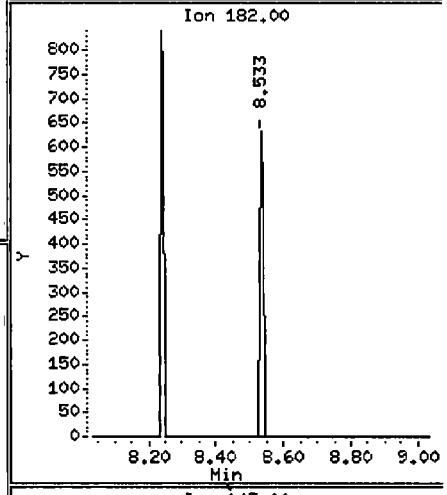
Column phase: Rtx-VMS Column diameter: 0.18

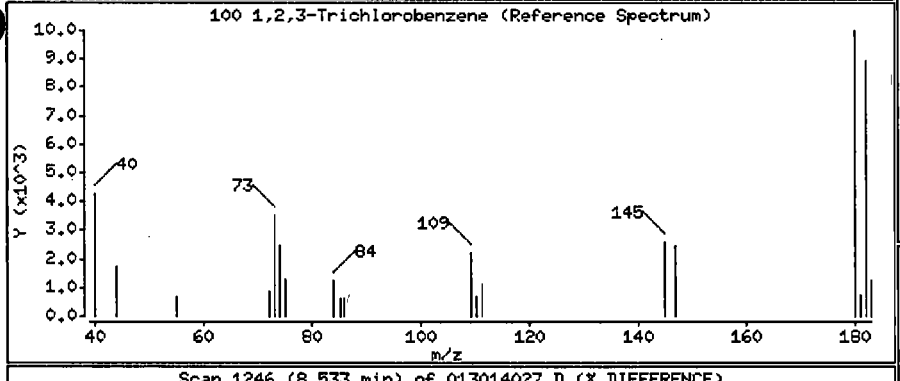
100 1,2,3-Trichlorobenzene Concentration: 0.077 ug/Kg

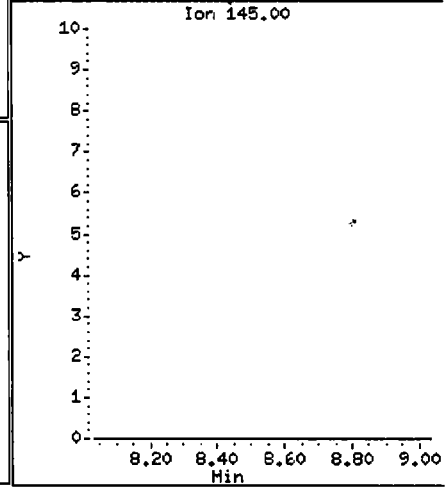


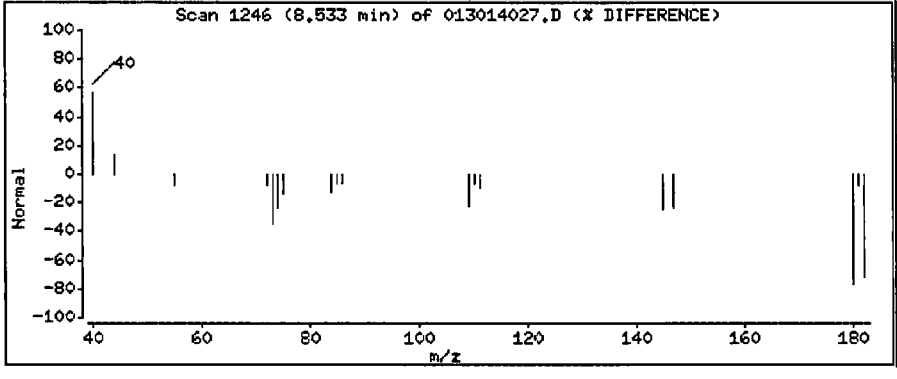












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014027.D

Date : 30-JAN-2014 20:15

Client ID: 10256148001

Instrument: 10msv7.i

Sample Info: 10256148001,5.81

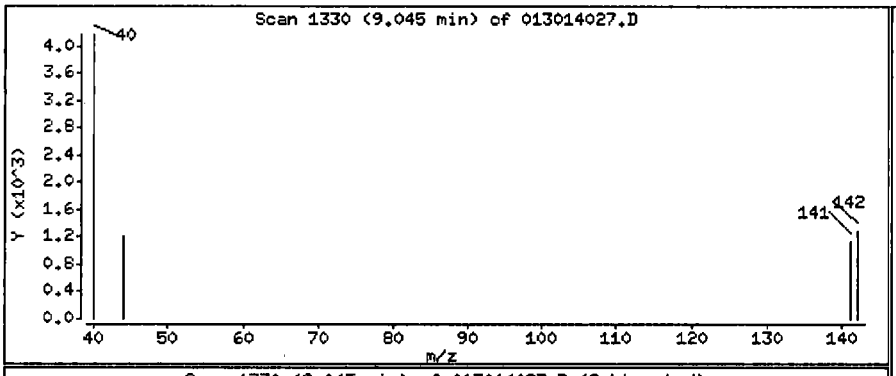
Operator: HBP

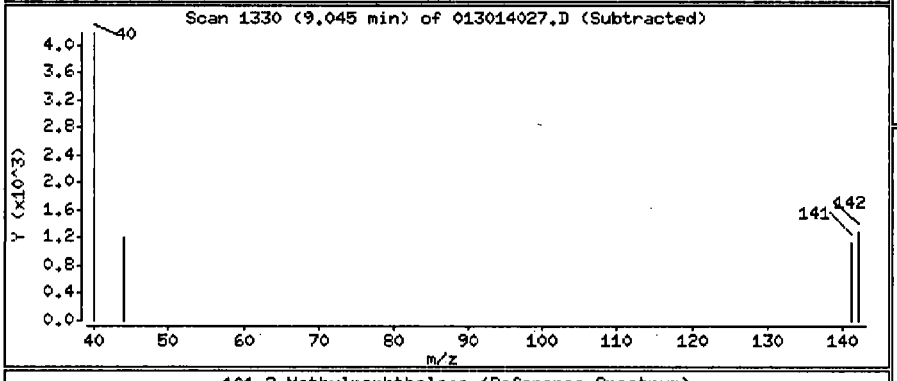
Column phase: Rtx-VMS

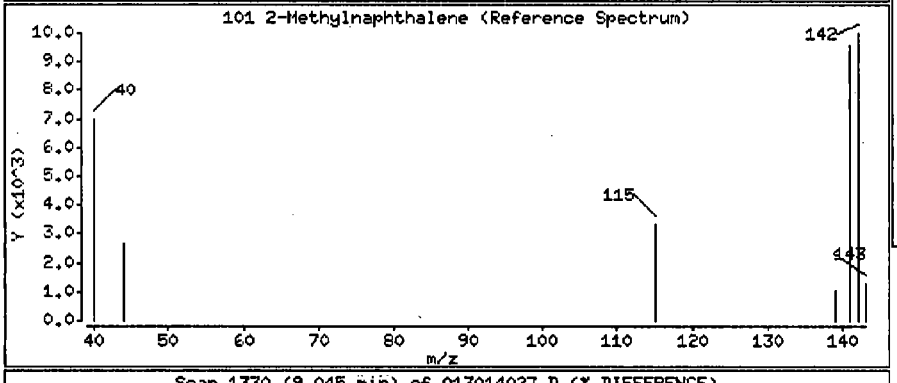
Column diameter: 0.18

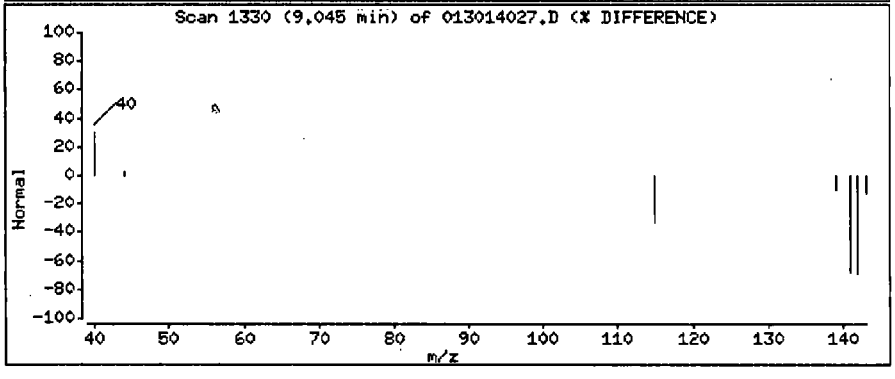
101 2-Methylnaphthalene

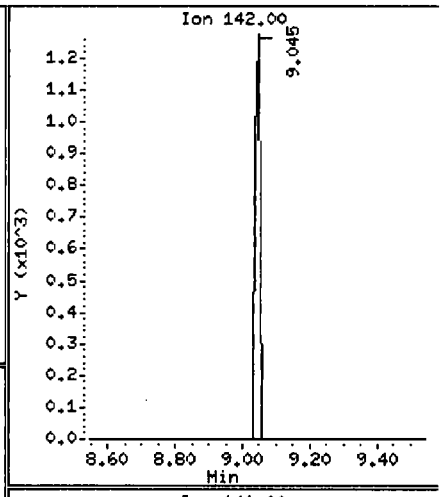
Concentration: 0.63 ug/Kg

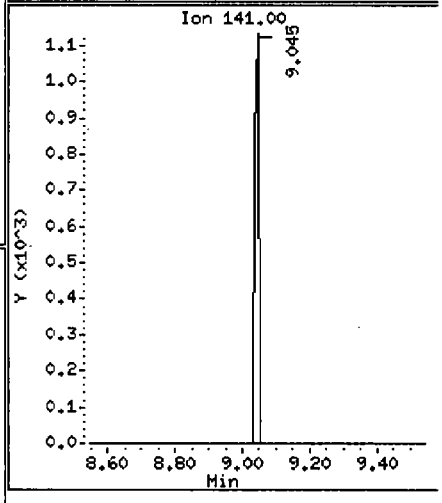












Injection Date: 30-JAN-2014 20:15
Instrument: 10msv7.i
Lab Sample ID: 10256148001
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\013014b.b\013014028.D
Lab Smp Id: 10256148002 Client Smp ID: 10256148002
Inj Date : 30-JAN-2014 20:33
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10256148002,5.29
Misc Info : 26253
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Meth Date : 03-Feb-2014 07:51 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.290	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.113	2.113	(0.501)	4523	0.30066	0.32(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.643	2.649	(1.000)	161664	200.000	
19	Acetone	58	2.698	2.698	(1.021)	2079	3.25311	3.4(a)
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	21 Hexane	86	2.869	2.869	(1.085)	2388	1.97098	2.1(a)
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	3.765	3.765	(0.893)	8113	1.05919	1.1(aQ)
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	Compound Not Detected.					
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	4.155	4.155	(0.986)	13518	0.70668	0.75(a)
*	41 Pentafluorobenzene	168	4.216	4.216	(1.000)	1137395	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
$	43 1,2-Dichloroethane d4 (S)	65	4.234	4.235	(1.004)	459170	109.137	109
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.490	4.497	(1.000)	1585339	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.838	4.844	(1.000)	116828	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	57 Toluene-d8 (S)	98	5.124	5.125	(0.882)	1812682	99.6510	99.6
	58 Toluene	92	5.149	5.149	(0.886)	15546	1.19157	1.3(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	Compound Not Detected.					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	Compound Not Detected.					
*	67 Chlorobenzene-d5	117	5.813	5.814	(1.000)	1442966	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	5.826	5.832	(1.002)	11853	0.46359	0.49(aQ)
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.893	5.899	(1.014)	5230	0.54694	0.58(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.112	(1.051)	1912	0.20885	0.22(a)
	73 Styrene	104	Compound Not Detected.					
	74 Bromoform	173	Compound Not Detected.					

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	75	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
S	76	4-Bromofluorobenzene (S)	95	6.423	6.423	(0.906)	660829	103.498	103
	77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	78	Bromobenzene	156	Compound Not Detected.					
	79	n-Propylbenzene	91	6.490	6.490	(0.916)	1731	0.06447	0.068(aQ)
	80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	81	2-Chlorotoluene	91	Compound Not Detected.					
	82	1,3,5-Trimethylbenzene	105	6.594	6.600	(0.930)	1734	0.08889	0.094(a)
	83	1,2,3-Trichloropropane	110	Compound Not Detected.					
	84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	85	4-Chlorotoluene	91	Compound Not Detected.					
	86	tert-Butylbenzene	119	Compound Not Detected.					
	87	1,2,4-Trimethylbenzene	105	6.831	6.832	(0.964)	5337	0.27119	0.29(a)
	88	sec-Butylbenzene	105	Compound Not Detected.					
	89	p-Isopropyltoluene	119	Compound Not Detected.					
	90	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	91	1,4-Dichlorobenzene-d4	152	7.087	7.088	(1.000)	790545	100.000	
	92	1,4-Dichlorobenzene	146	Compound Not Detected.					
	93	1,2,3 Trimethylbenzene	105	7.106	7.106	(1.685)	2851	0.12744	0.13(a)
	94	n-Butylbenzene	91	Compound Not Detected.					
	95	1,2-Dichlorobenzene	146	Compound Not Detected.					
	96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
	97	Hexachlorobutadiene	225	Compound Not Detected.					
	98	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	99	Naphthalene	128	8.423	8.429	(1.188)	1964	0.14471	0.15(a)
	100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
	101	2-Methylnaphthalene	142	9.044	9.045	(1.276)	630	0.50825	0.54(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014028.D
Report Date: 03-Feb-2014 09:16

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 013014028.D
Lab Smp Id: 10256148002
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Misc Info: 26253

Calibration Date: 30-JAN-2014
Calibration Time: 18:08
Client Smp ID: 10256148002
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143148	71574	286296	161664	12.93
41 Pentafluorobenzen	1116303	558152	2232606	1137395	1.89
48 1,4 Difluorobenze	1540471	770236	3080942	1585339	2.91
53 1,4 dioxane d8	136838	68419	273676	116828	-14.62
67 Chlorobenzene-d5	1416803	708402	2833606	1442966	1.85
91 1,4-Dichlorobenze	843357	421679	1686714	790545	-6.26

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.64	-0.24
41 Pentafluorobenzen	4.22	3.72	4.72	4.22	-0.00
48 1,4 Difluorobenze	4.50	4.00	5.00	4.49	-0.14
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.13
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	-0.00

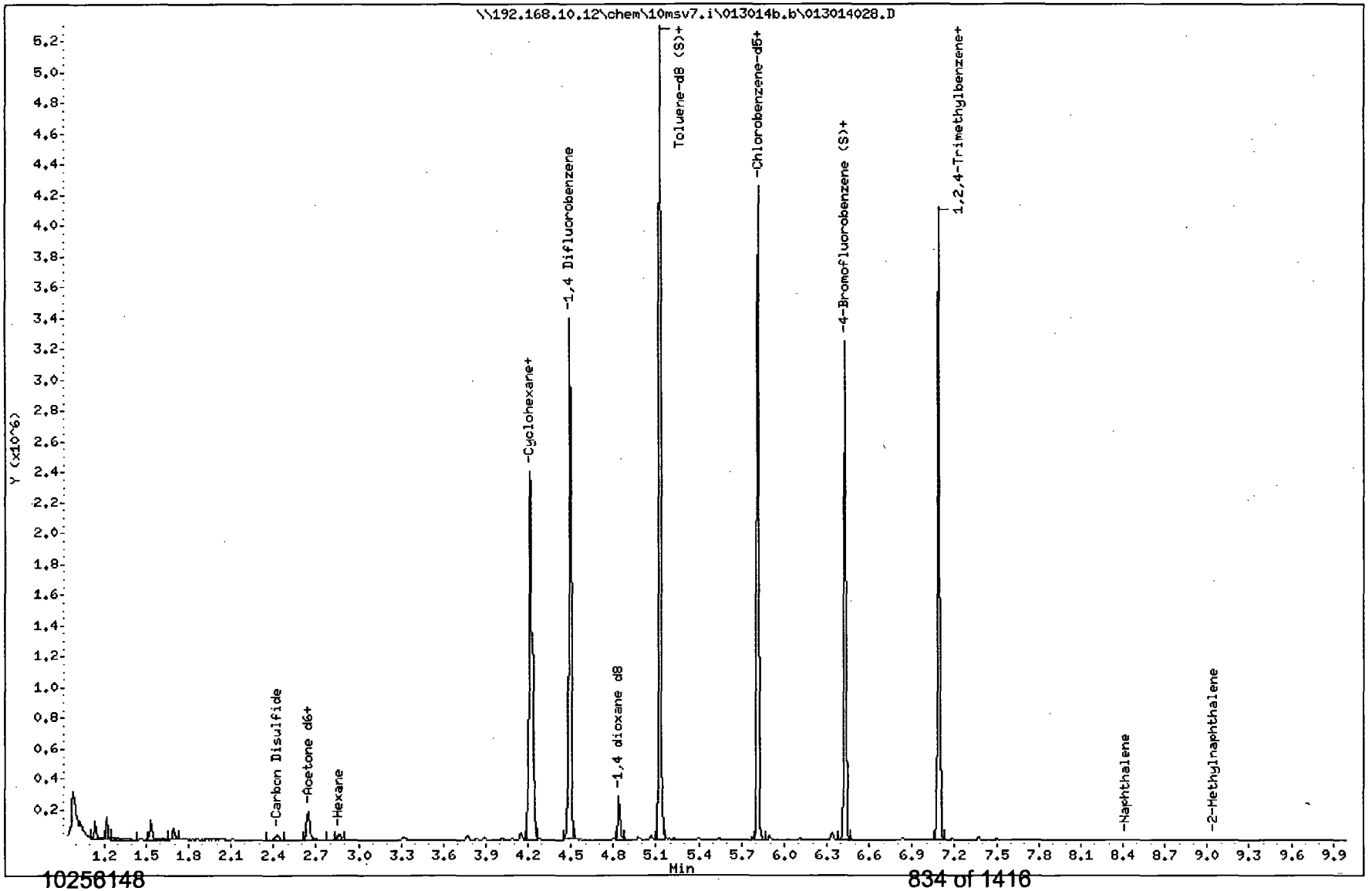
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014028.D
Date : 30-JAN-2014 20:33
Client ID: 10256148002
Sample Info: 10256148002,5.29

Instrument: 10msv7.i

Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014028.D

Date : 30-JAN-2014 20:33

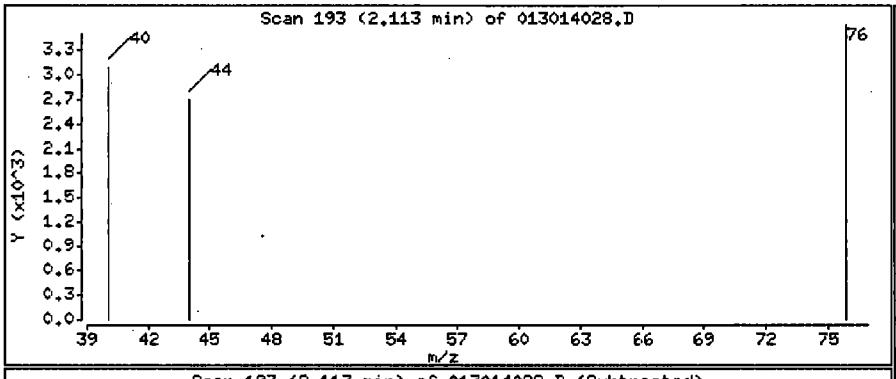
Client ID: 10256148002 Instrument: 10msv7.i

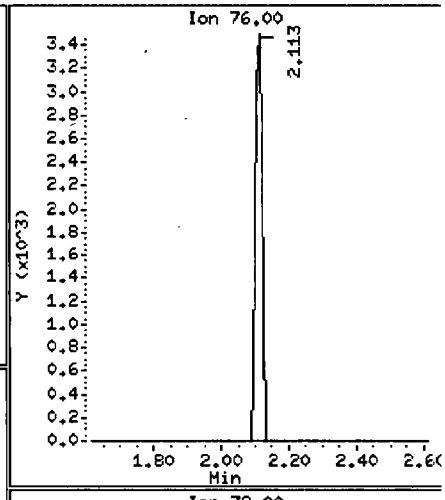
Sample Info: 10256148002,5.29

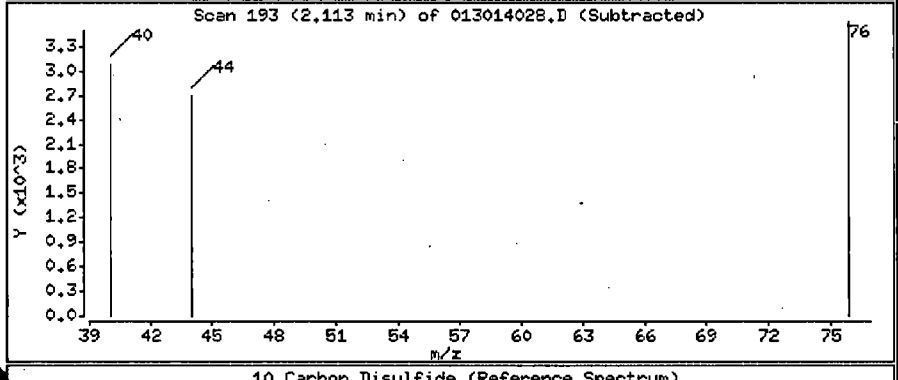
Operator: HBP

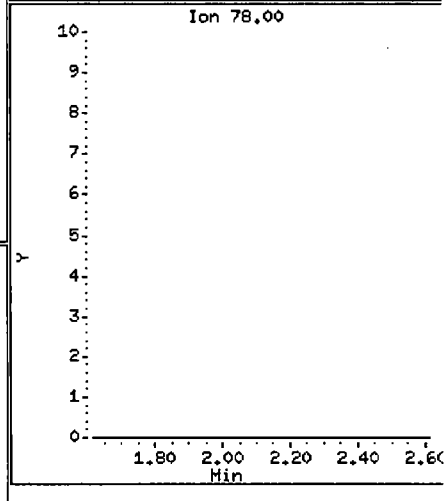
Column phase: Rtx-VMS Column diameter: 0.18

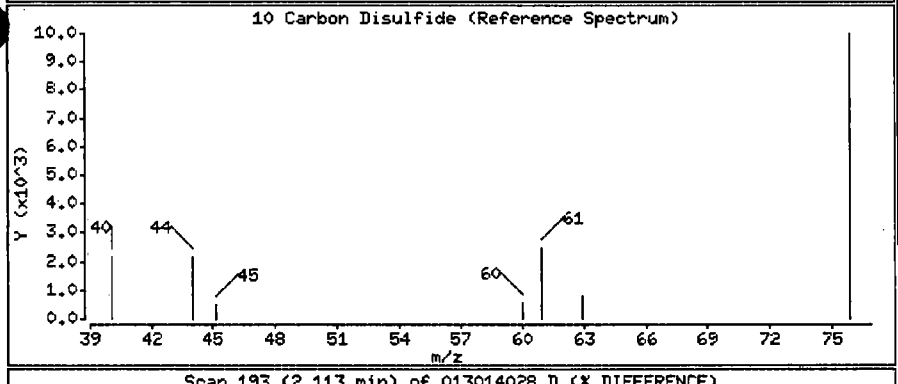
10 Carbon Disulfide Concentration: 0.32 ug/Kg

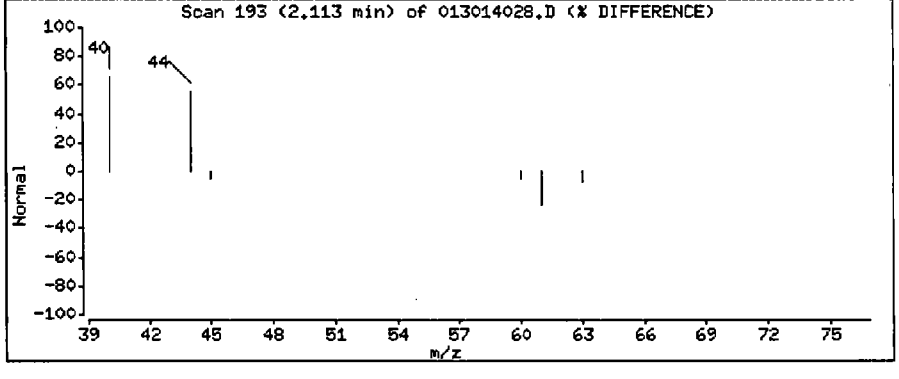












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Date : 30-JAN-2014 20:33

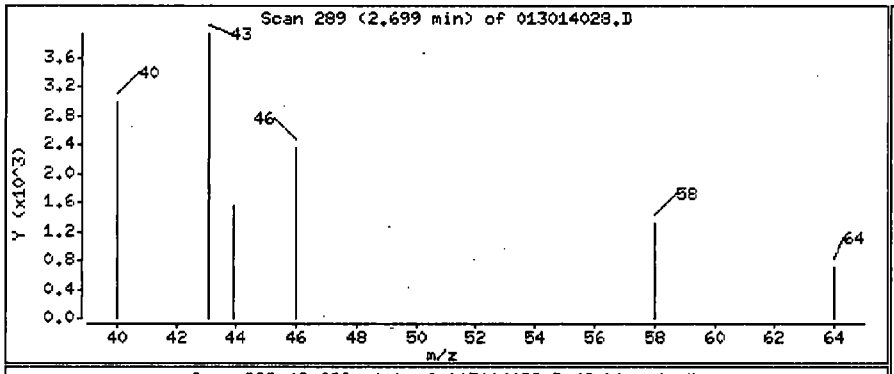
Client ID: 10256148002 Instrument: 10msv7.i

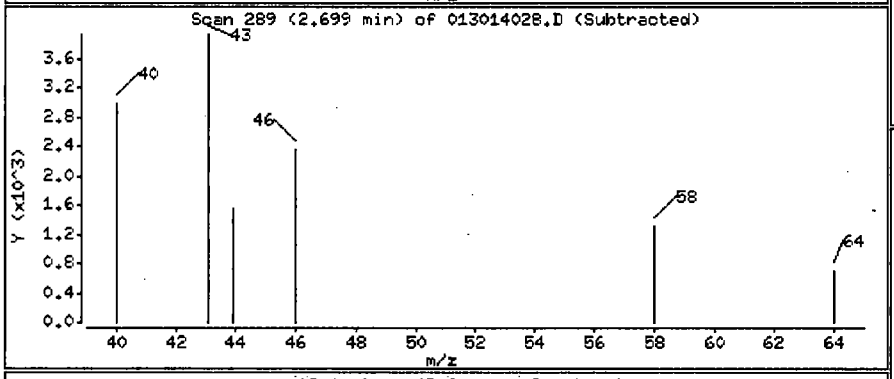
Sample Info: 10256148002,5.29

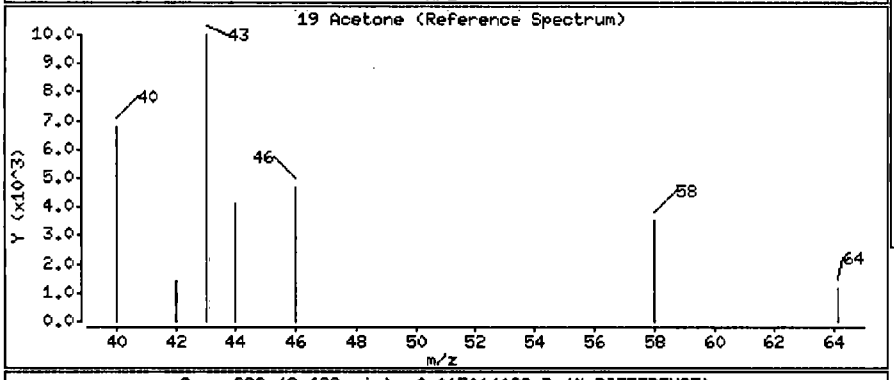
Operator: HBP

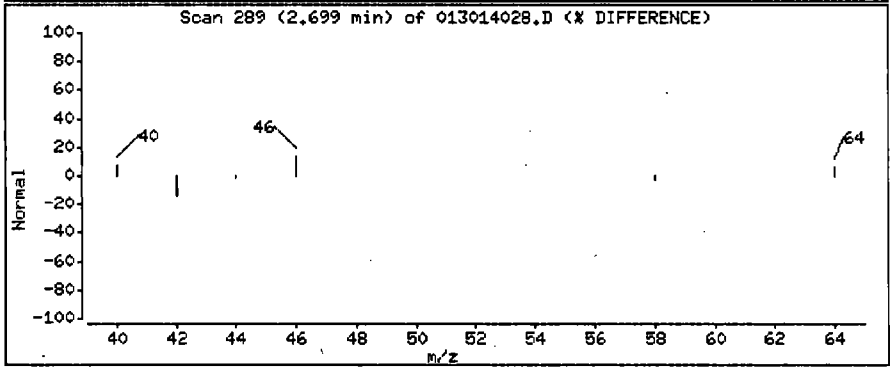
Column phase: Rtx-VMS Column diameter: 0.18

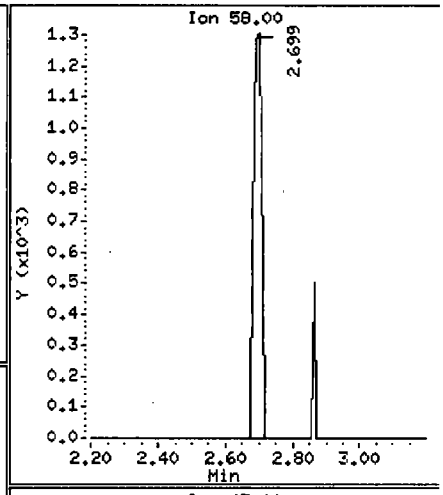
19 Acetone Concentration: 3.4 ug/Kg

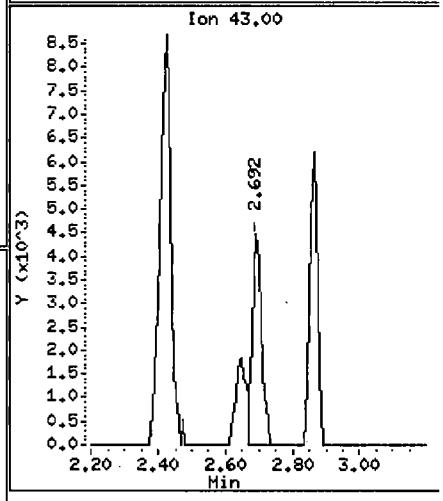












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Date : 30-JAN-2014 20:33

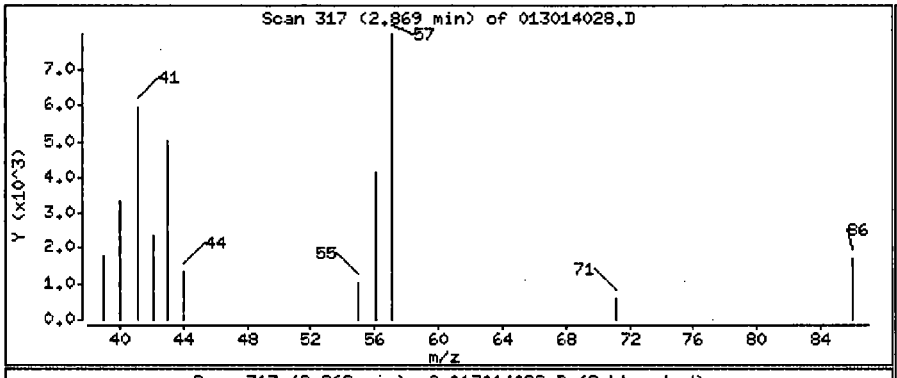
Client ID: 10256148002 Instrument: 10msv7.i

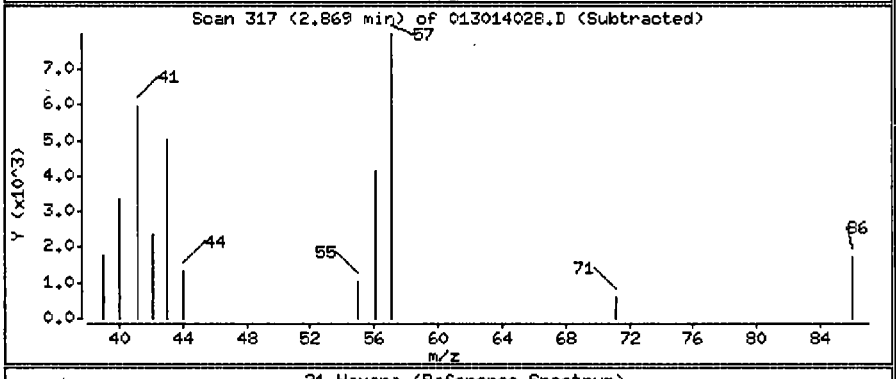
Sample Info: 10256148002,5.29

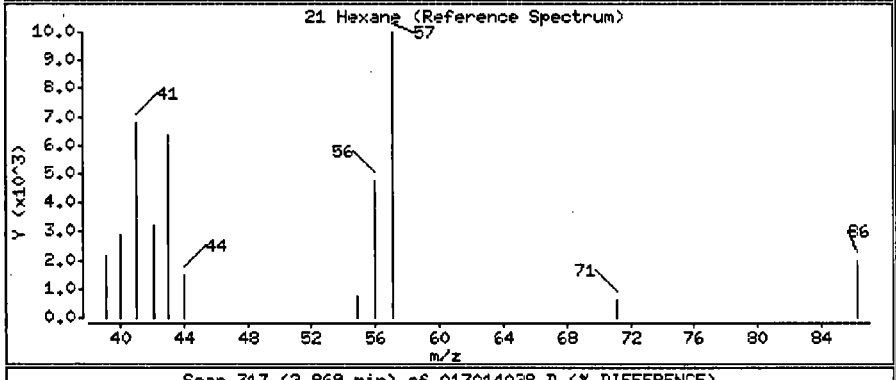
Operator: HBP

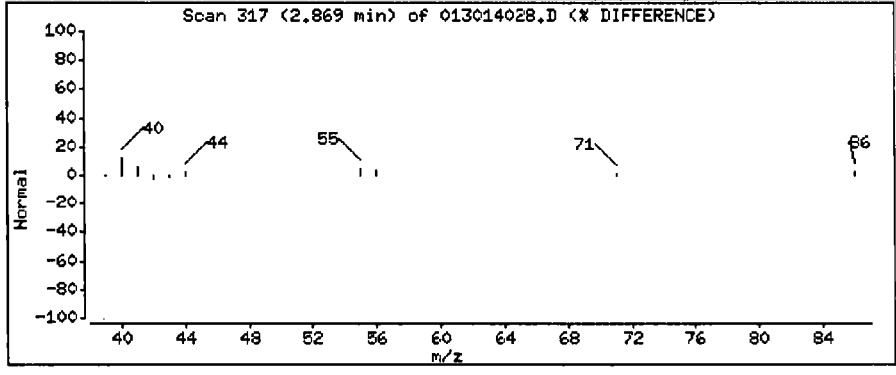
Column phase: Rtx-VMS Column diameter: 0.18

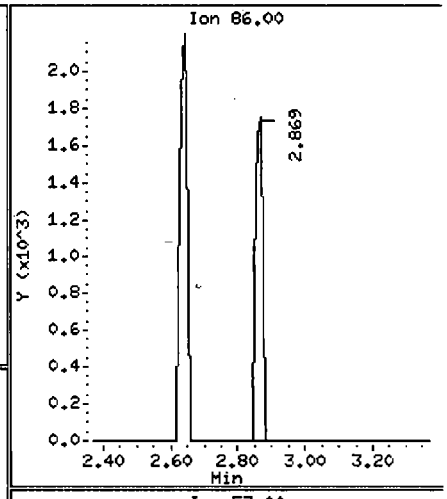
21 Hexane Concentration: 2.1 ug/Kg

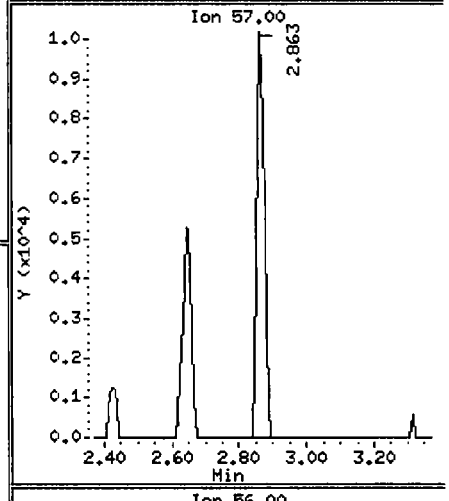


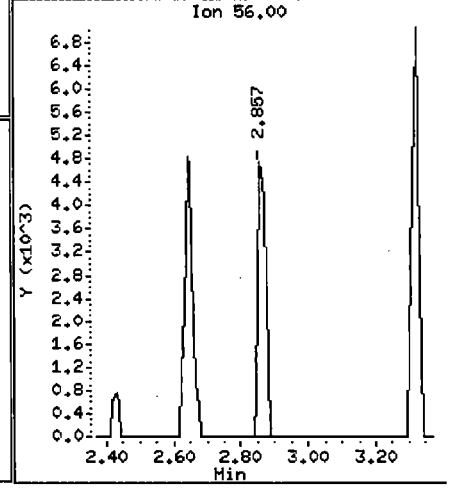












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Date : 30-JAN-2014 20:33

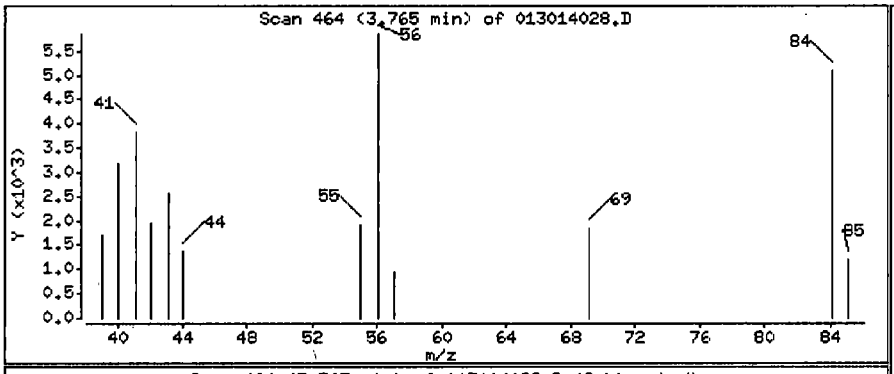
Client ID: 10256148002 Instrument: 10msv7.i

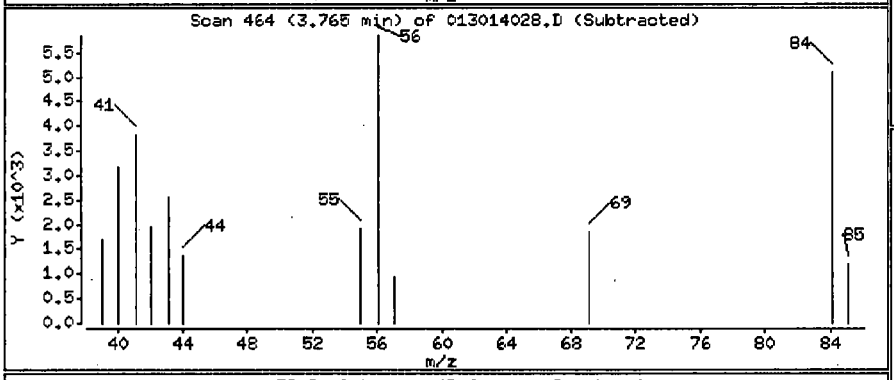
Sample Info: 10256148002,5.29

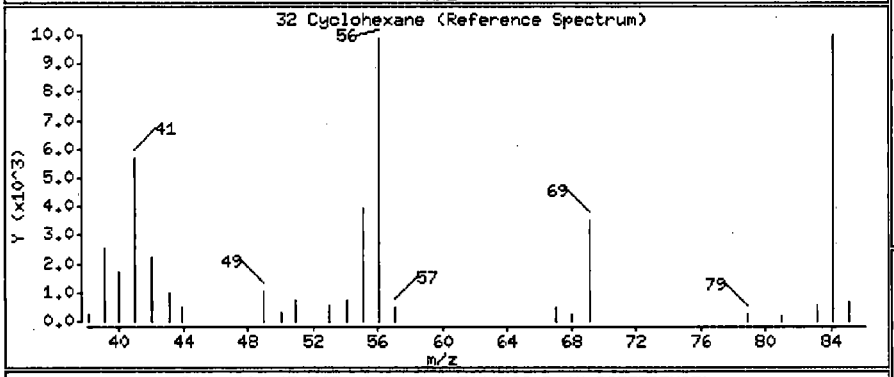
Operator: HBP

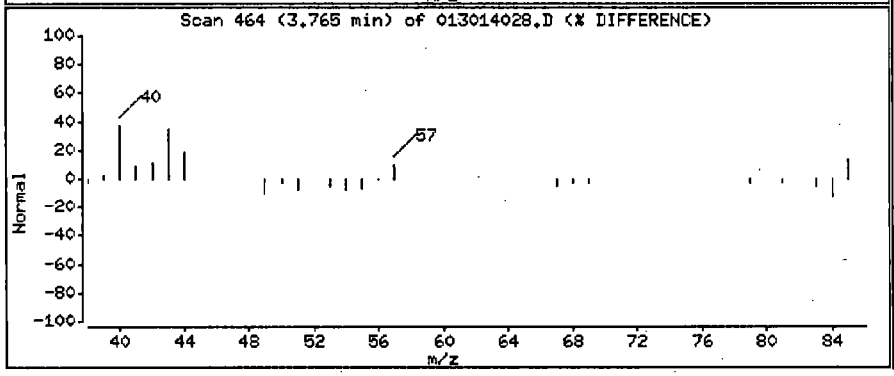
Column phase: Rtx-VMS Column diameter: 0.18

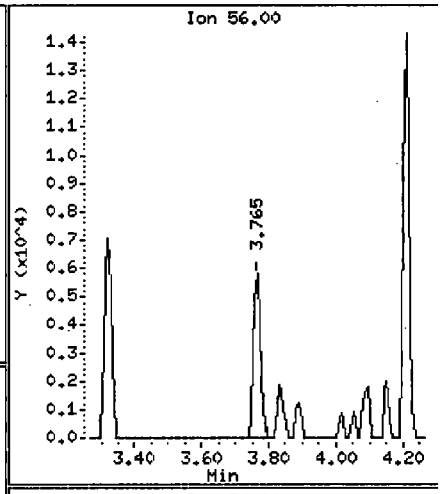
32 Cyclohexane Concentration: 1.1 ug/Kg

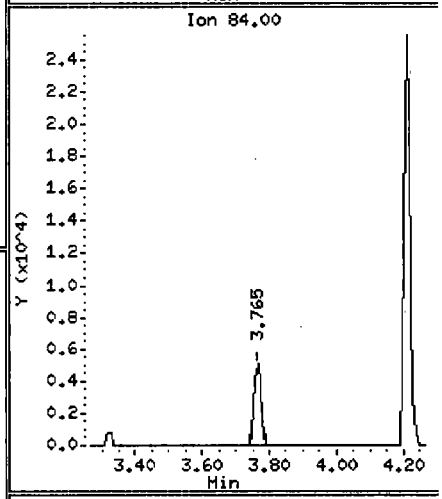


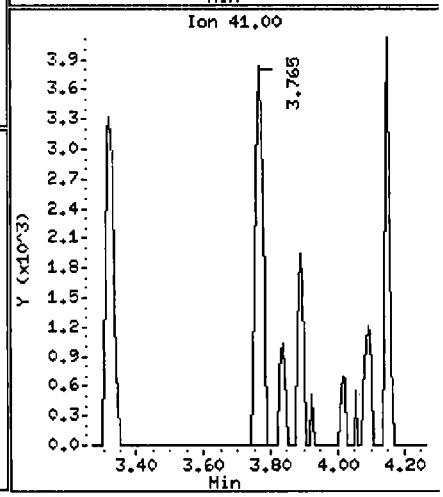












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Date : 30-JAN-2014 20:33

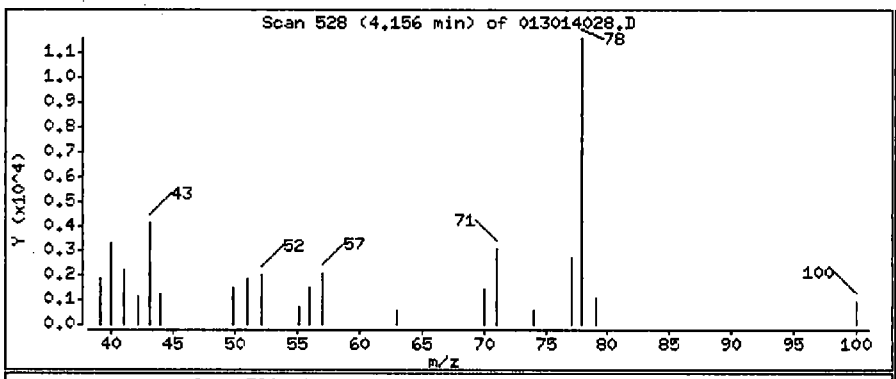
Client ID: 10256148002 Instrument: 10msv7.i

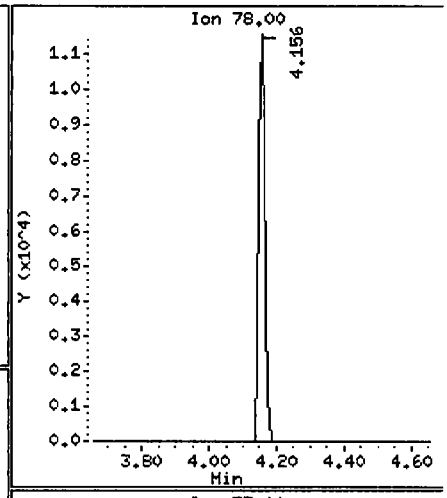
Sample Info: 10256148002,5.29

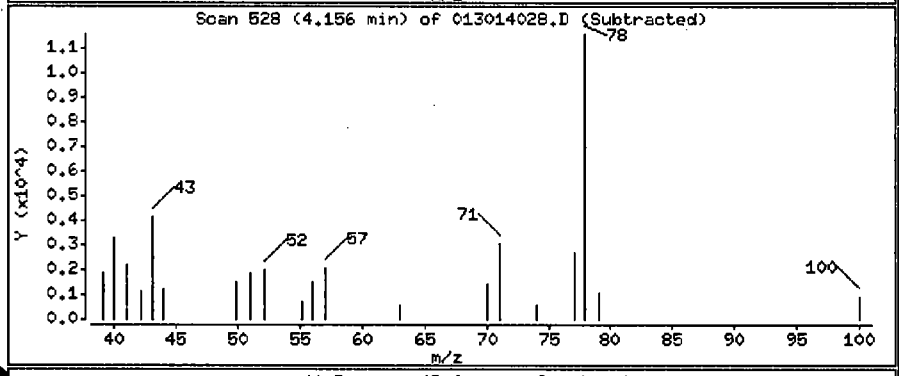
Operator: HBP

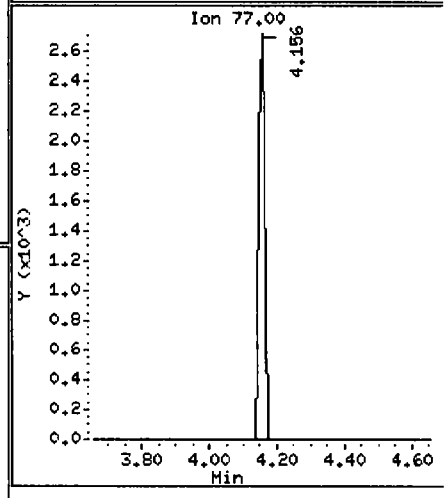
Column phase: Rtx-VMS Column diameter: 0.18

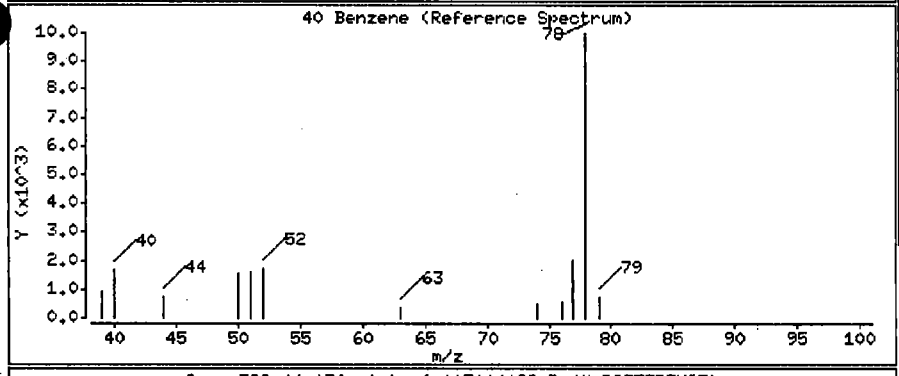
40 Benzene Concentration: 0.75 ug/Kg

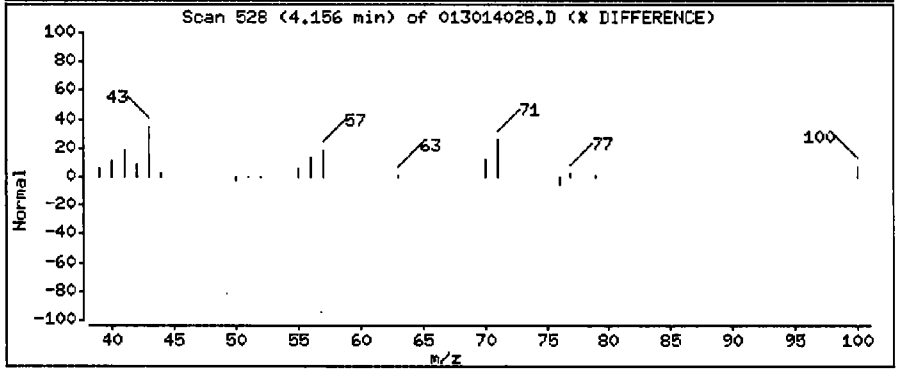












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Date : 30-JAN-2014 20:33

Client ID: 10256148002

Instrument: 10msv7.i

Sample Info: 10256148002,5.29

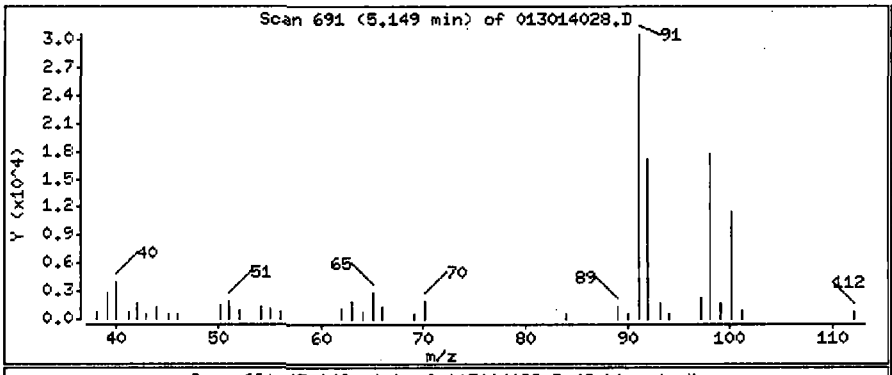
Operator: HBP

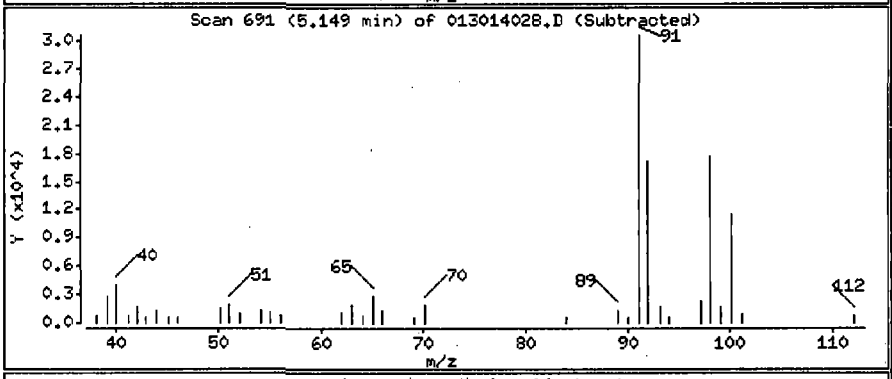
Column phase: Rtx-VMS

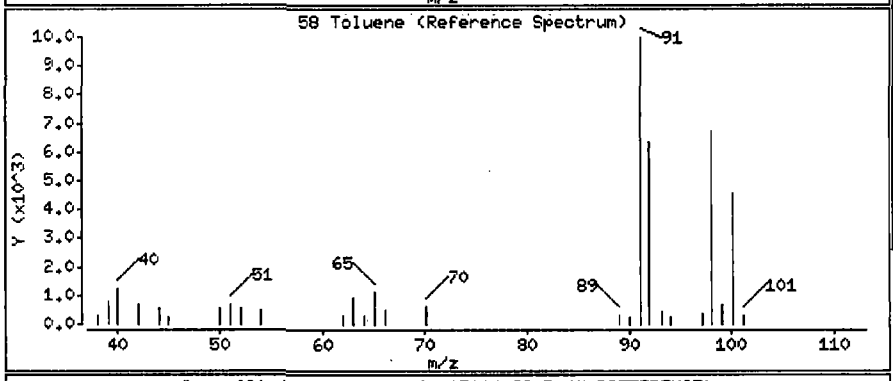
Column diameter: 0.18

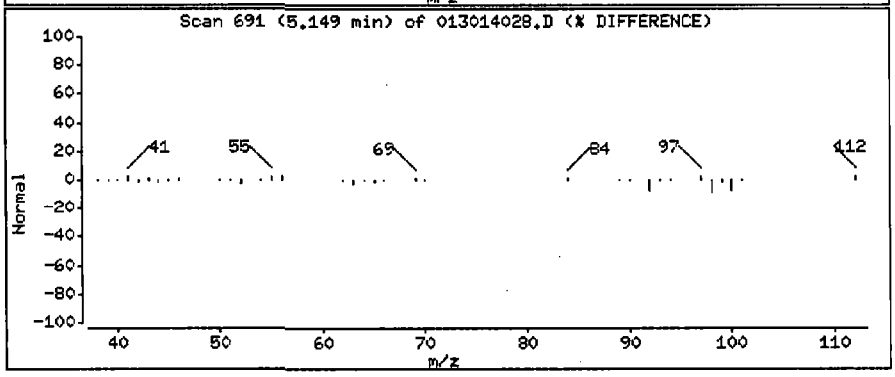
58 Toluene

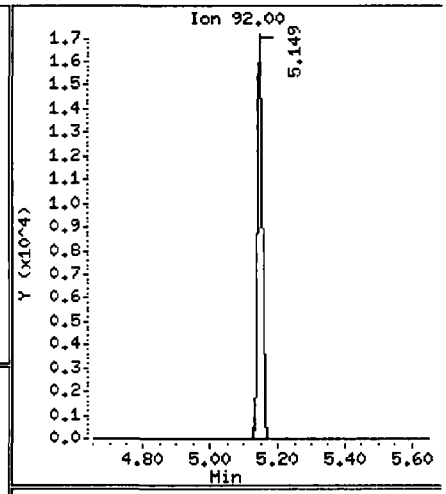
Concentration: 1.3 ug/Kg

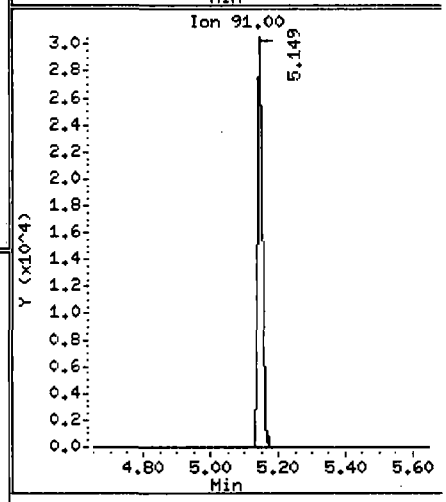












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Date : 30-JAN-2014 20:33

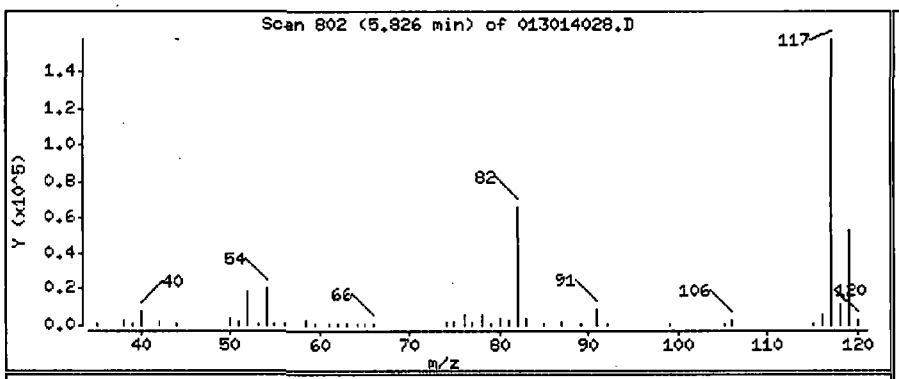
Client ID: 10256148002 Instrument: 10msv7.i

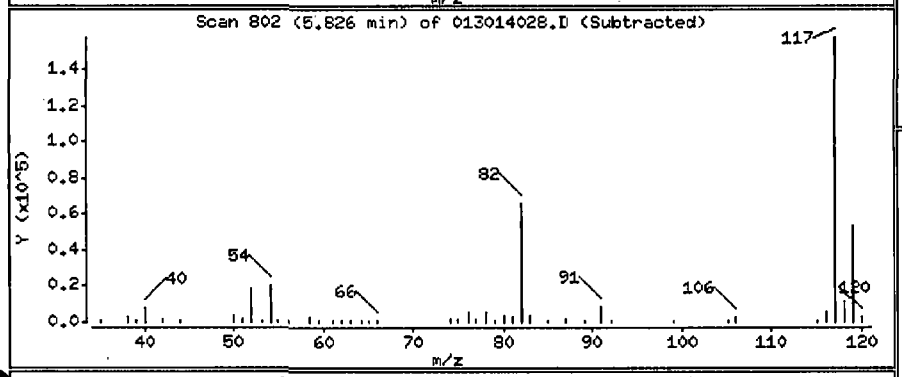
Sample Info: 10256148002,5,29

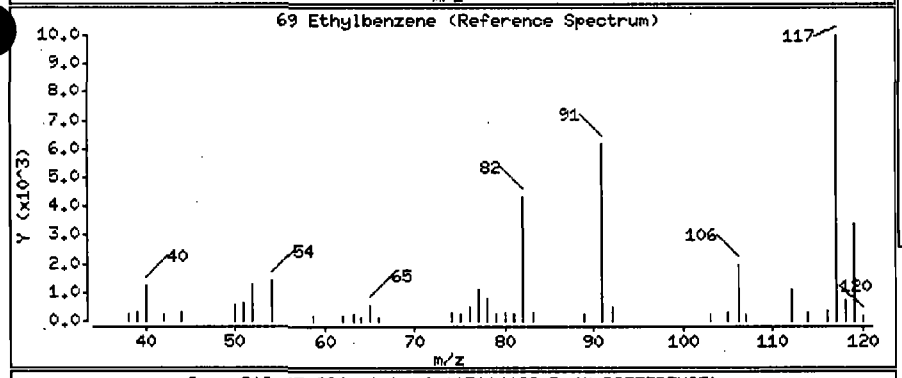
Operator: HBP

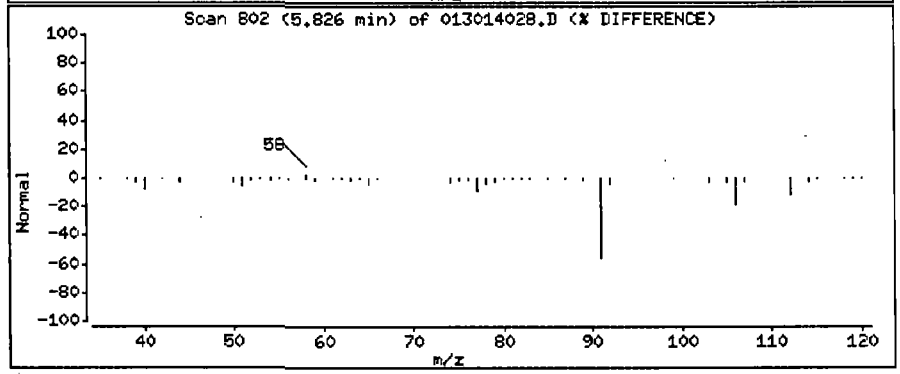
Column phase: Rtx-VMS Column diameter: 0.18

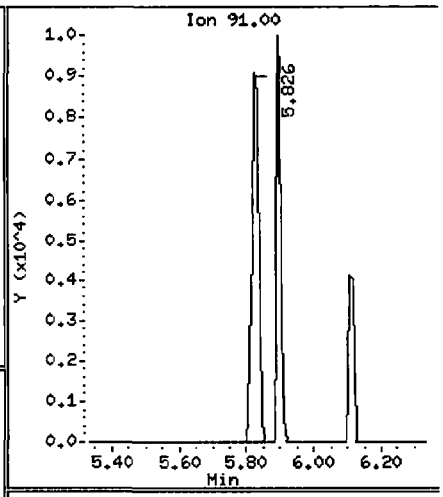
69 Ethylbenzene Concentration: 0.49 ug/Kg

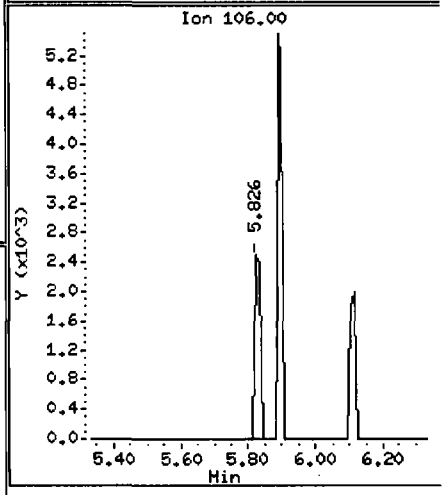












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Date : 30-JAN-2014 20:33

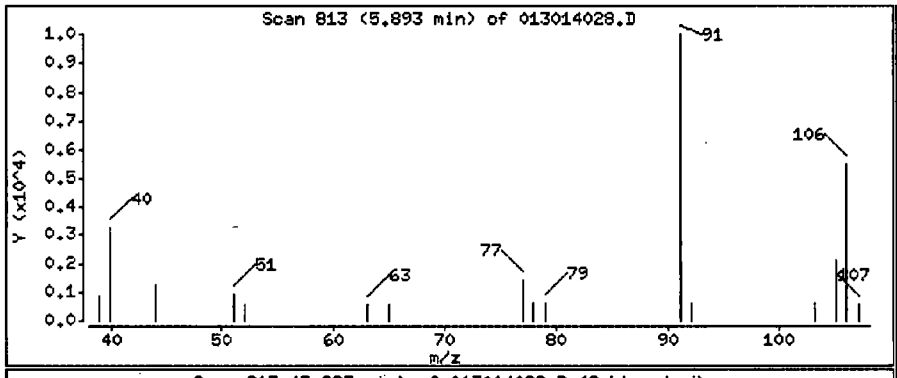
Client ID: 10256148002 Instrument: 10msv7.i

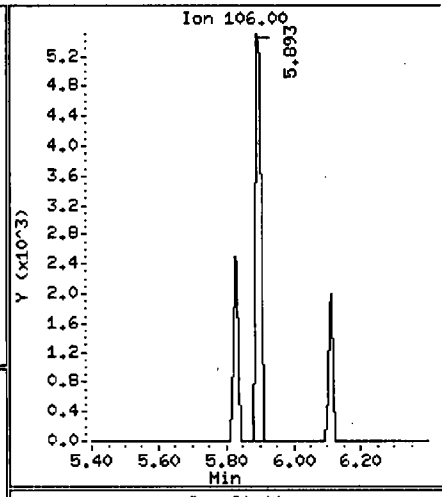
Sample Info: 10256148002,5.29

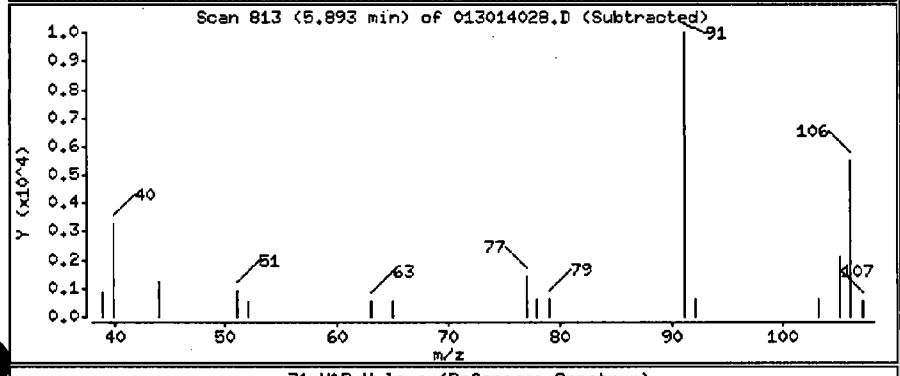
Operator: HBP

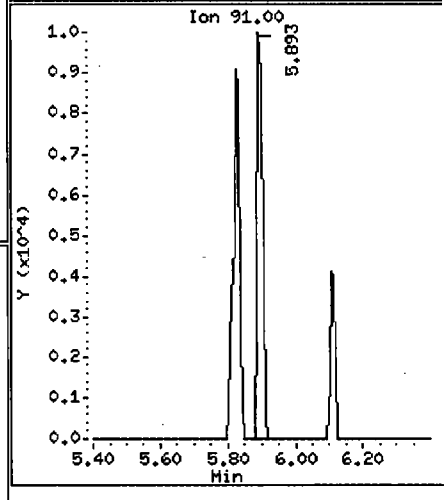
Column phase: Rtx-VMS Column diameter: 0.18

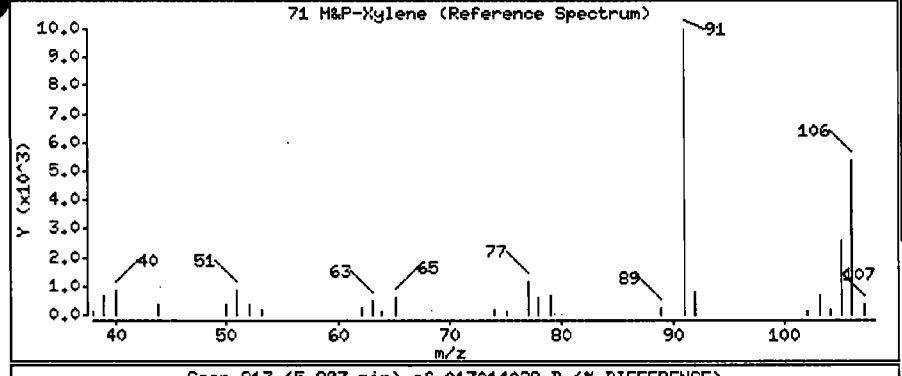
71 M&P-Xylene Concentration: 0.58 ug/Kg

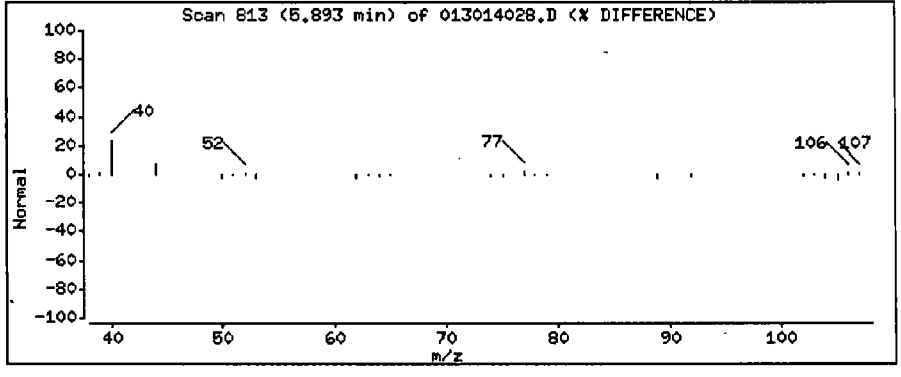












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Date : 30-JAN-2014 20:33

Client ID: 10256148002

Instrument: 10msv7.i

Sample Info: 10256148002,5,29

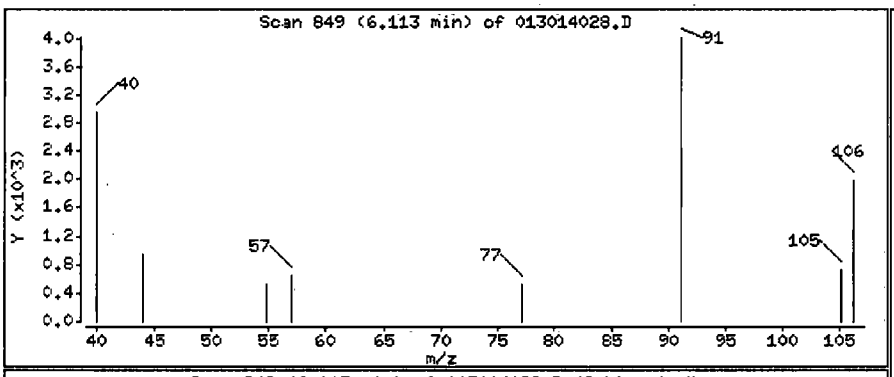
Operator: HBP

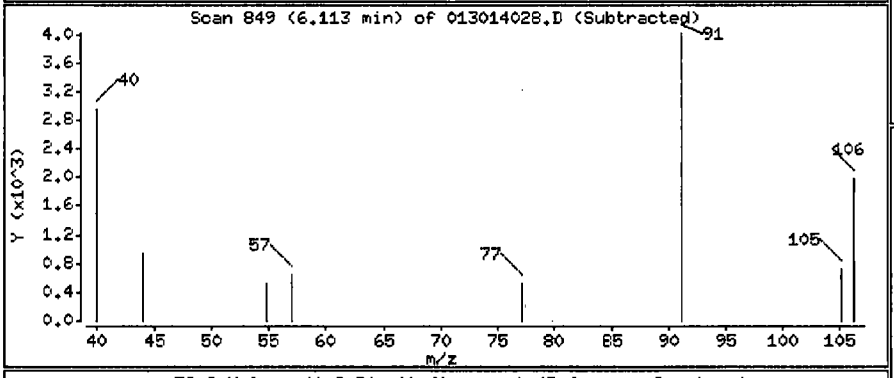
Column phase: Rtx-VMS

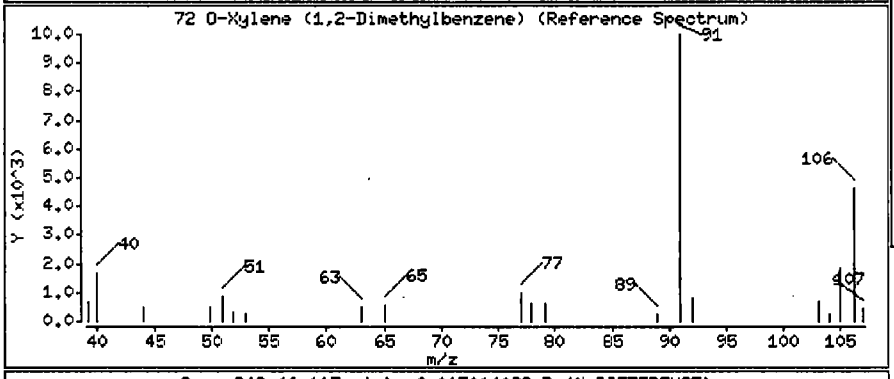
Column diameter: 0.18

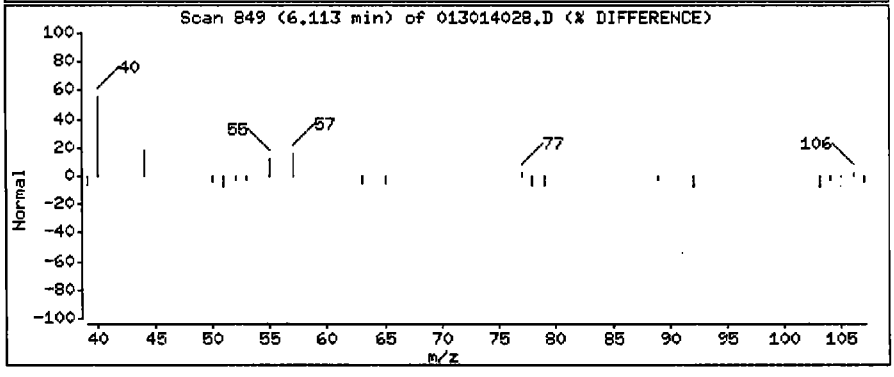
72 O-Xylene (1,2-Dimethylbenzene)

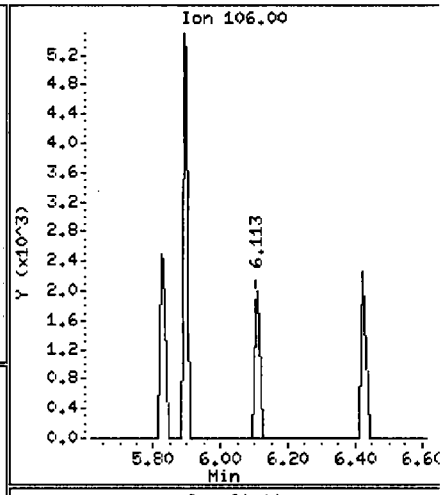
Concentration: 0.22 ug/Kg

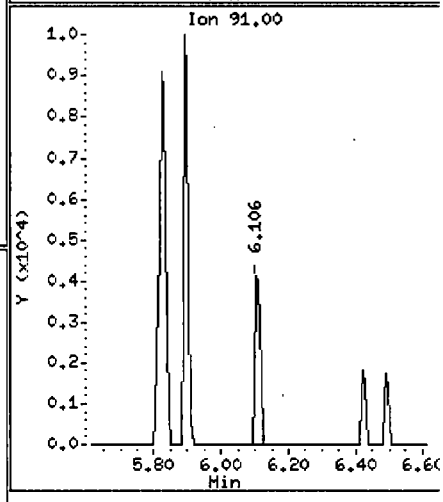












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Date : 30-JAN-2014 20:33

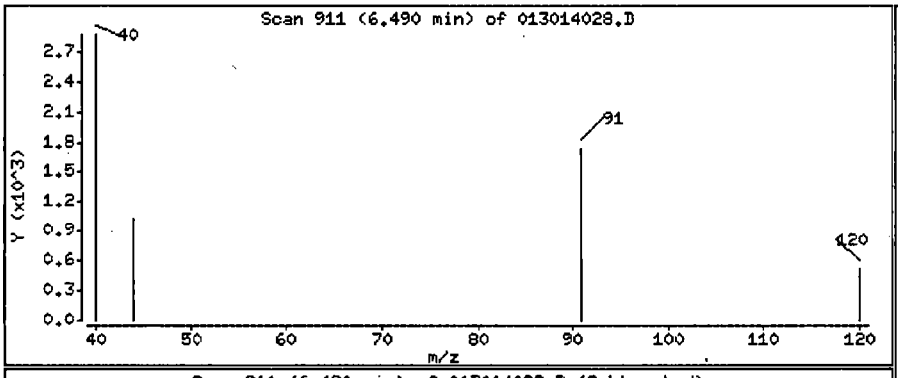
Client ID: 10256148002 Instrument: 10msv7.i

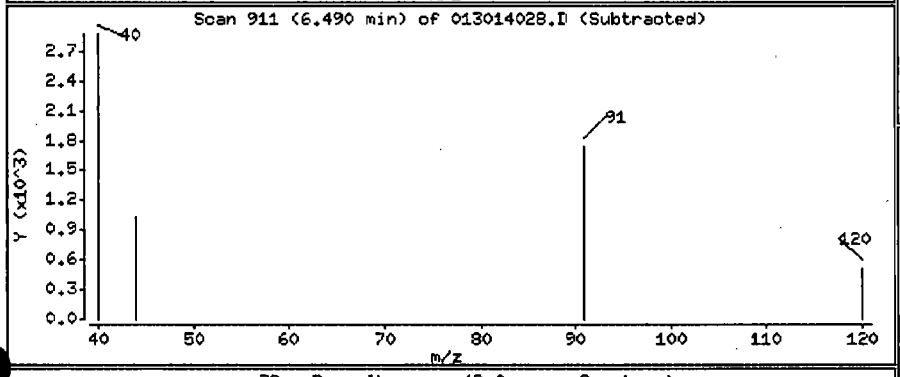
Sample Info: 10256148002,5.29

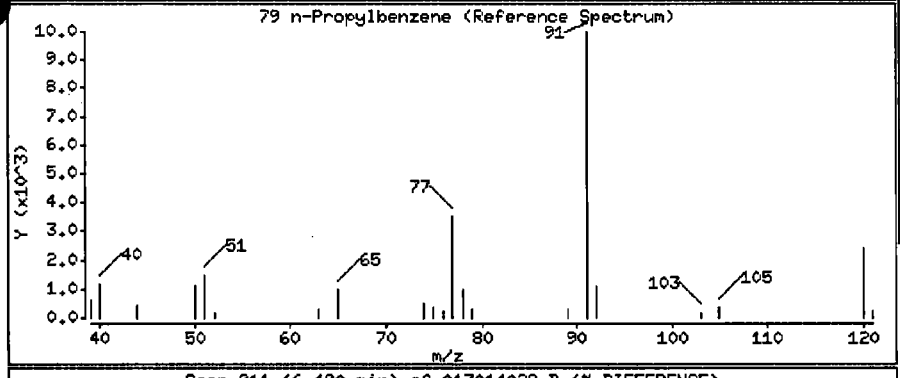
Operator: HBP

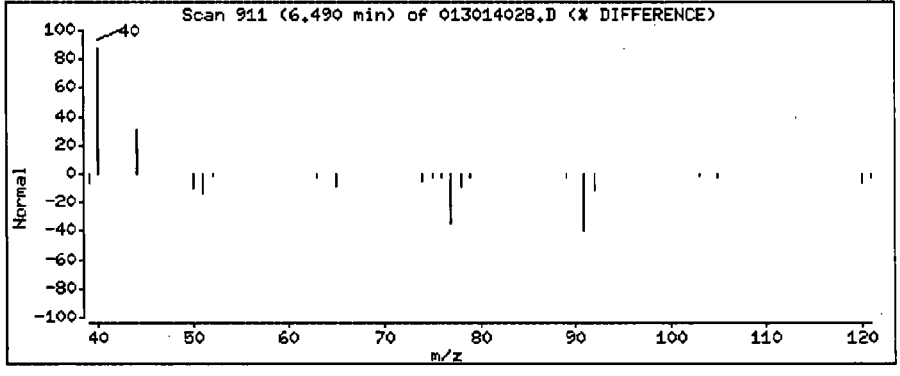
Column phase: Rtx-VMS Column diameter: 0.18

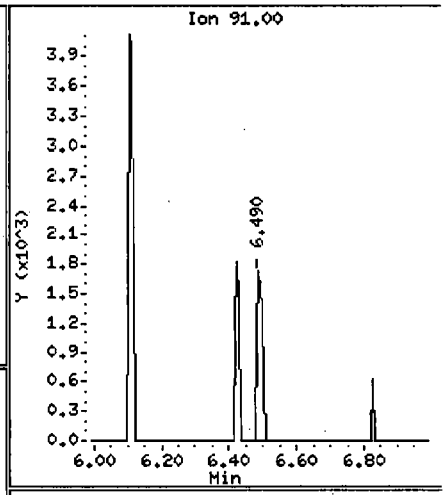
79 n-Propylbenzene Concentration: 0.068 ug/Kg

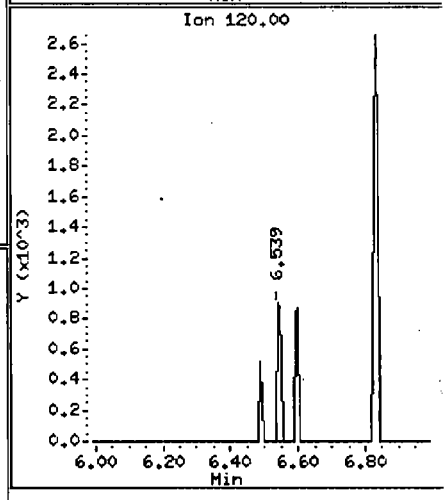












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Date : 30-JAN-2014 20:33

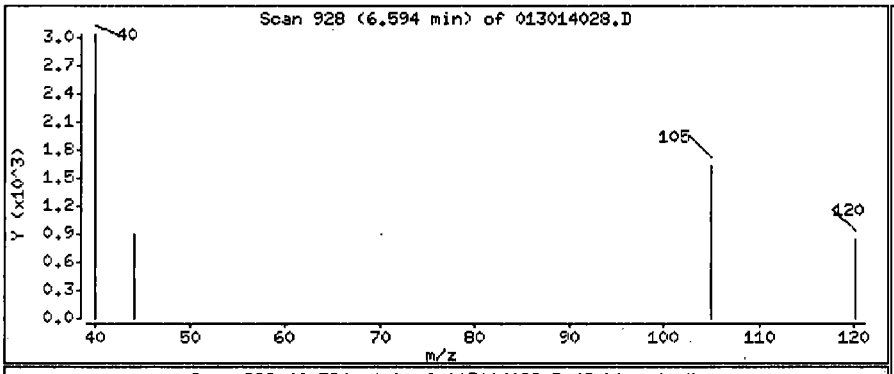
Client ID: 10256148002 Instrument: 10msv7.i

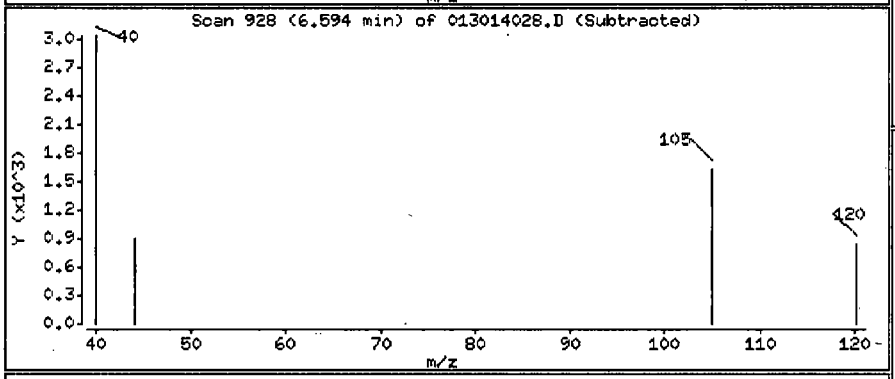
Sample Info: 10256148002,5.29

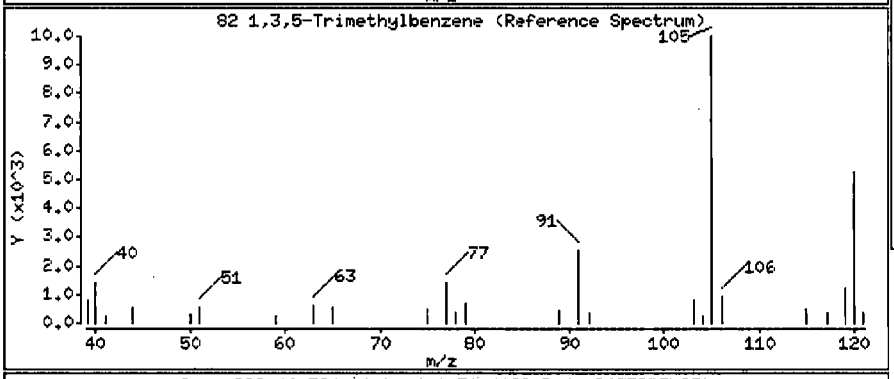
Operator: HBP

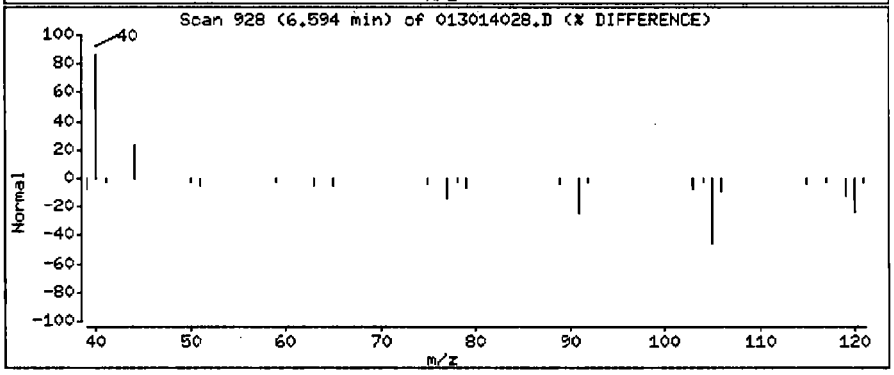
Column phase: Rtx-VMS Column diameter: 0.18

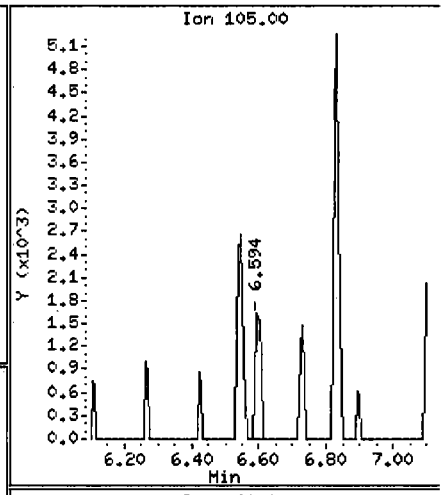
82 1,3,5-Trimethylbenzene Concentration: 0.094 ug/Kg

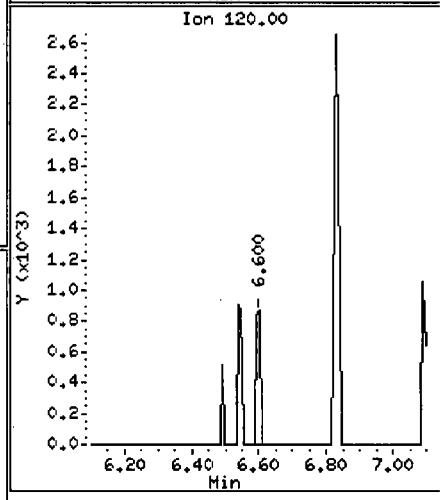












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Date : 30-JAN-2014 20:33

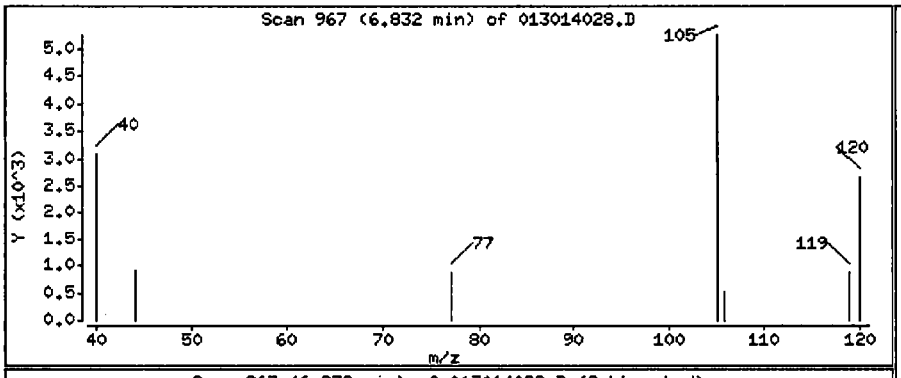
Client ID: 10256148002 Instrument: 10msv7.i

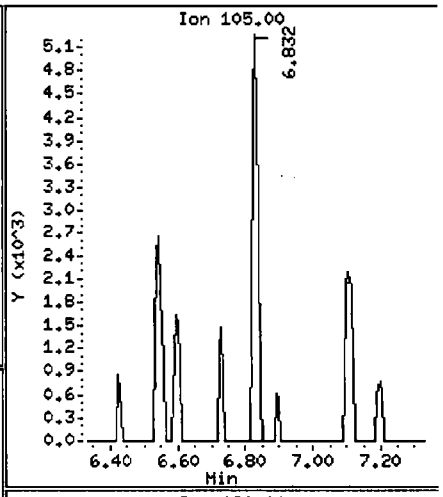
Sample Info: 10256148002,5.29

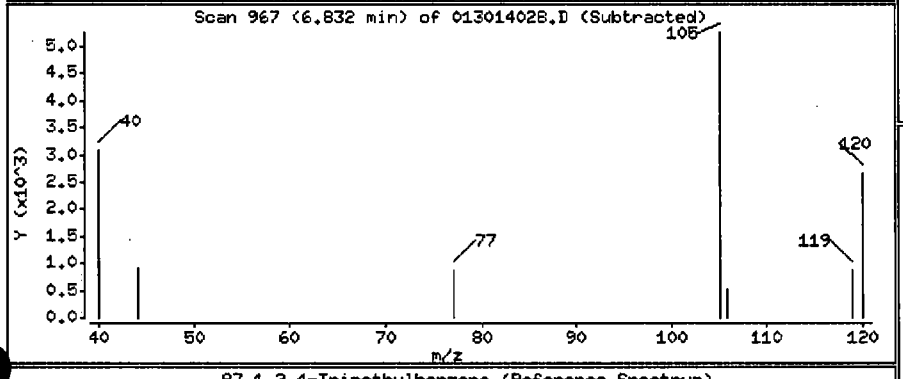
Operator: HBP

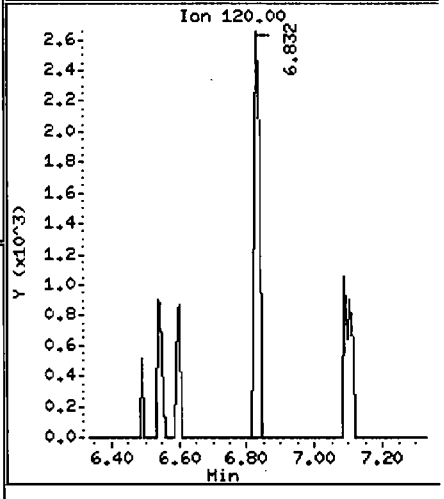
Column phase: Rtx-VMS Column diameter: 0.18

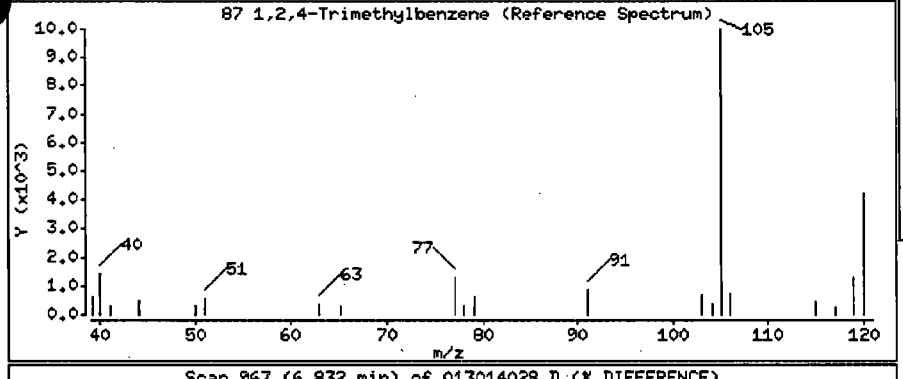
87 1,2,4-Trimethylbenzene Concentration: 0.29 ug/Kg

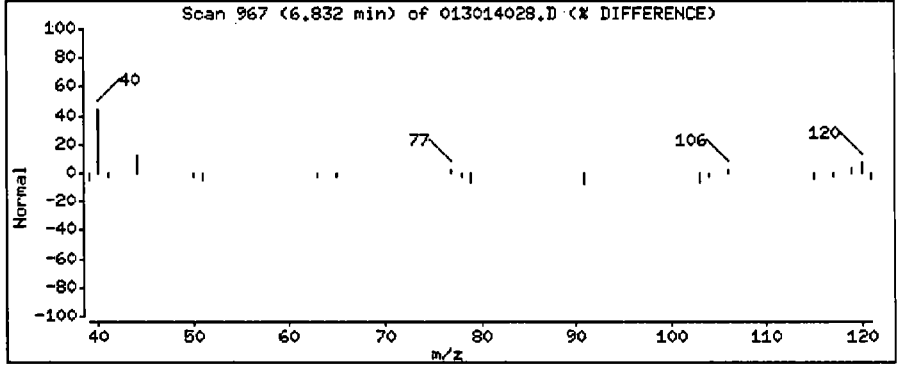












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Date : 30-JAN-2014 20:33

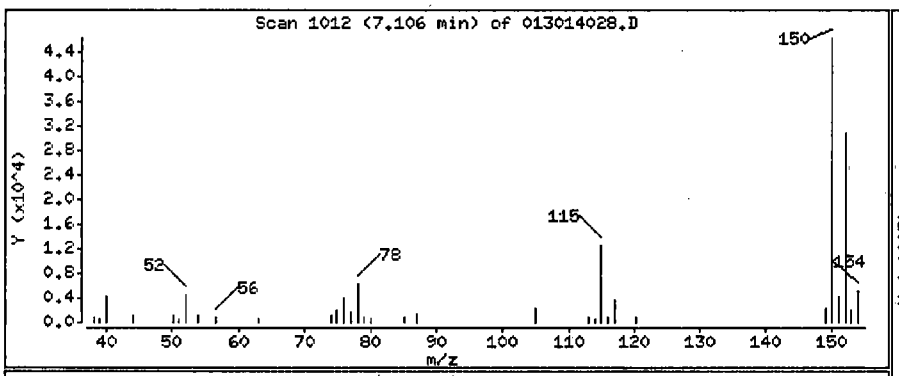
Client ID: 10256148002 Instrument: 10msv7.i

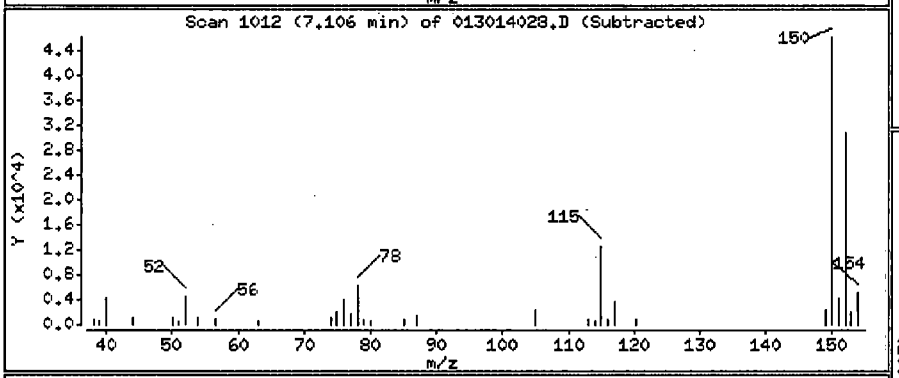
Sample Info: 10256148002,5,29

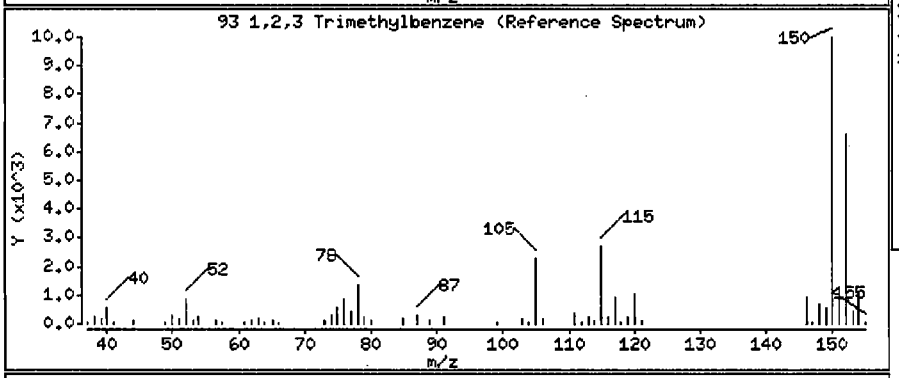
Operator: HBP

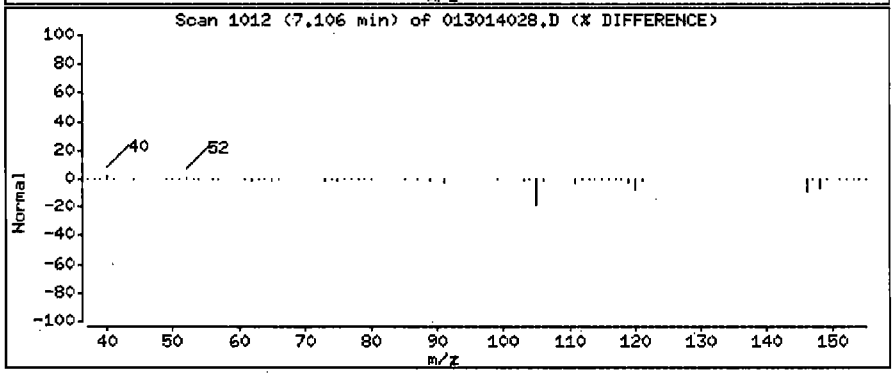
Column phase: Rtx-VMS Column diameter: 0.18

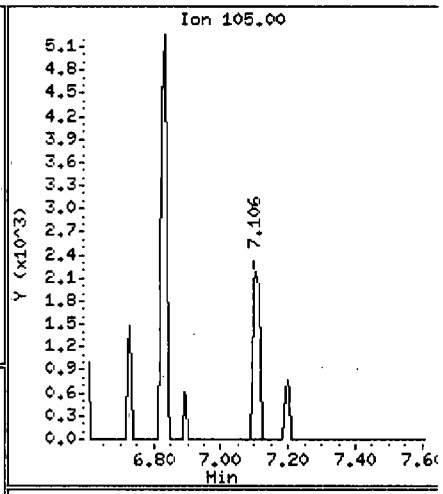
93 1,2,3 Trimethylbenzene Concentration: 0.13 ug/Kg

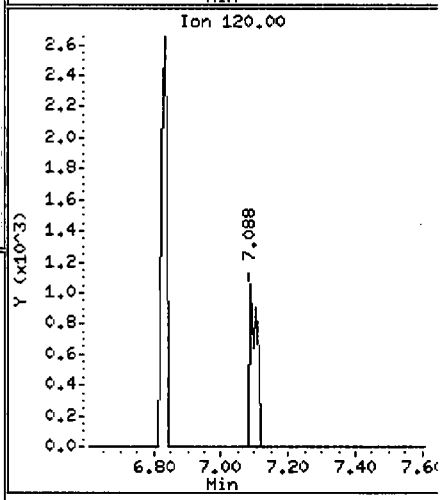












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Date : 30-JAN-2014 20:33

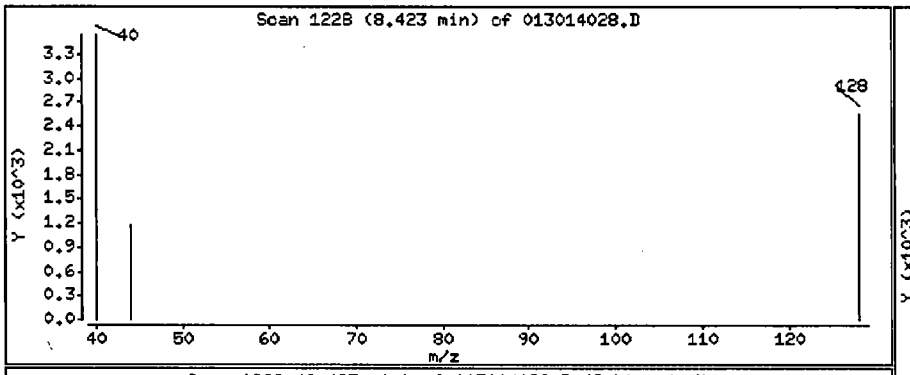
Client ID: 10256148002 Instrument: 10msv7.i

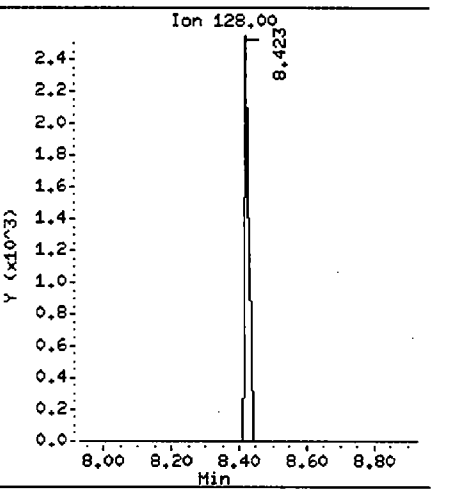
Sample Info: 10256148002,5.29

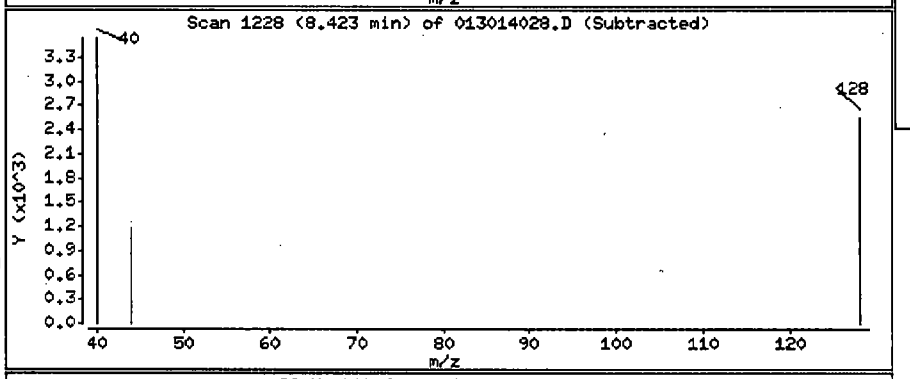
Operator: HBP

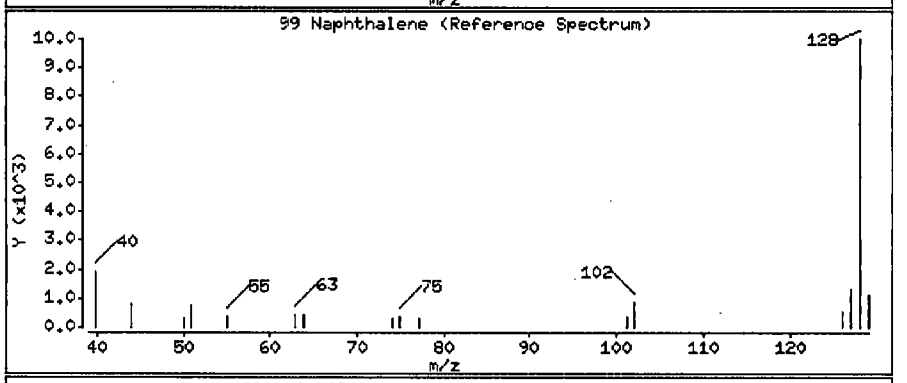
Column phase: Rtx-VMS Column diameter: 0.18

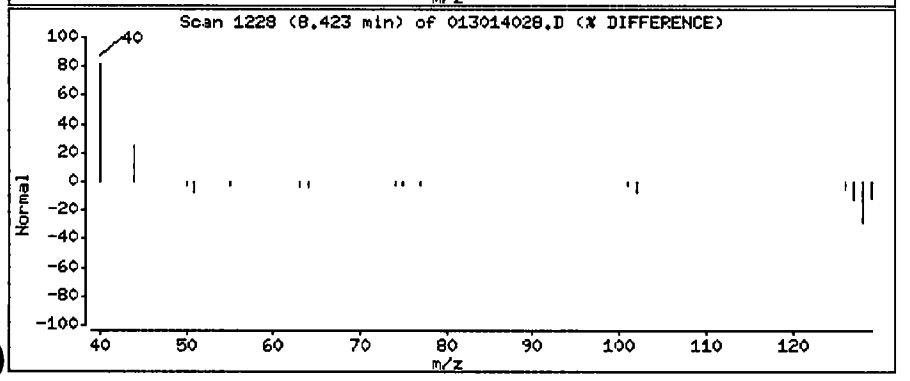
99 Naphthalene Concentration: 0.15 ug/Kg











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Date : 30-JAN-2014 20:33

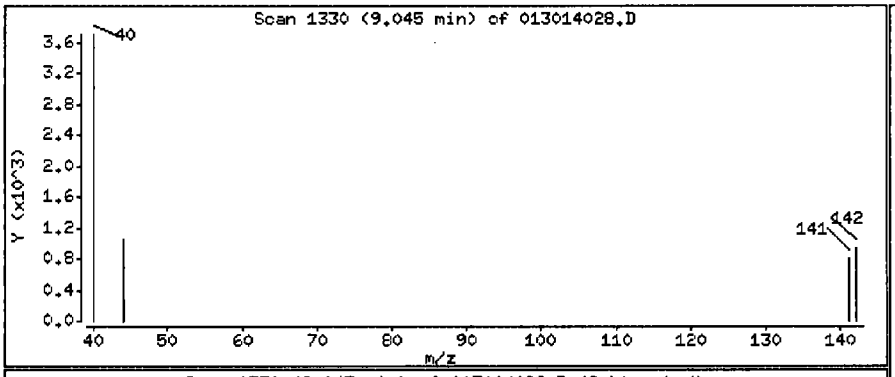
Client ID: 10256148002 Instrument: 10msv7.i

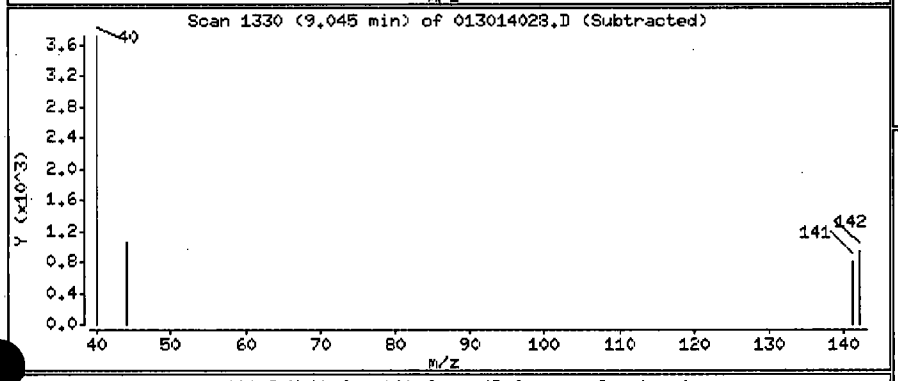
Sample Info: 10256148002,5.29

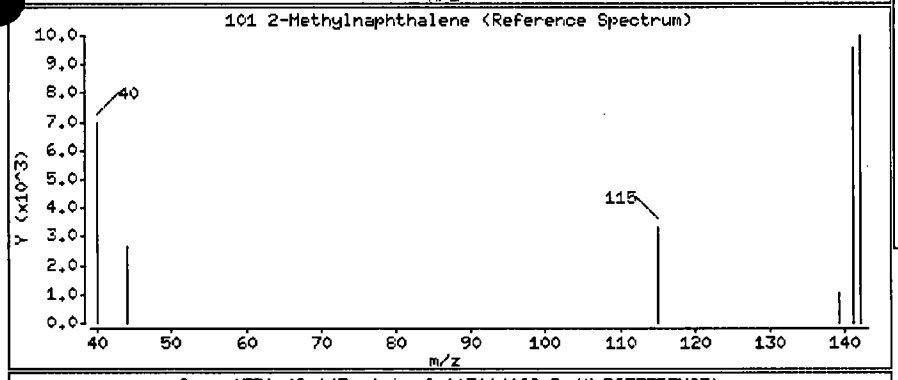
Operator: HBP

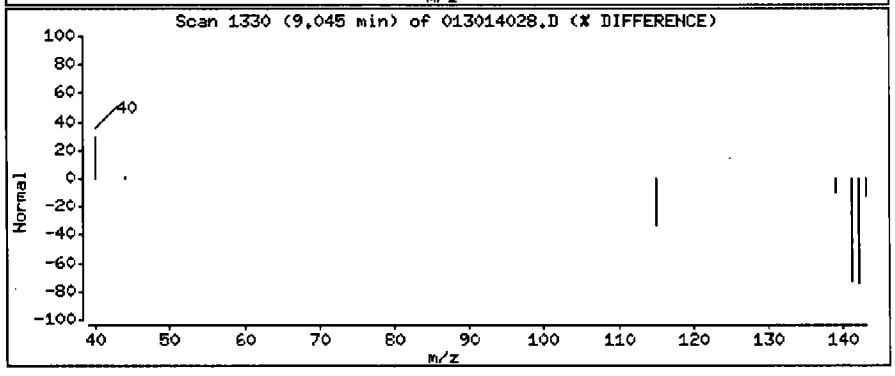
Column phase: Rtx-VMS Column diameter: 0.18

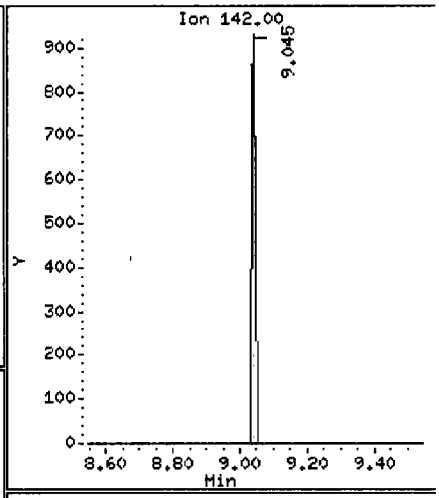
101 2-Methylnaphthalene Concentration: 0.54 ug/Kg

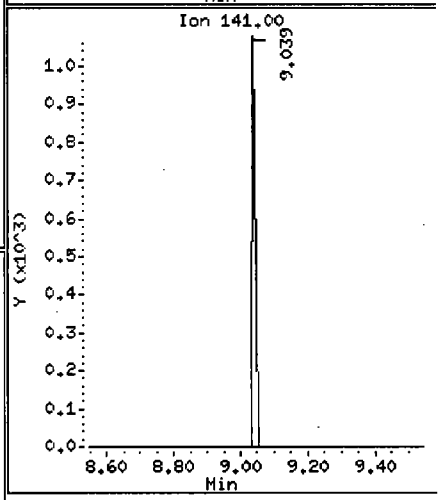












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Injection Date: 30-JAN-2014 20:33
Instrument: 10msv7.i
Lab Sample ID: 10256148002
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014029.D
Report Date: 03-Feb-2014 09:16

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\013014b.b\013014029.D
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Inj Date : 30-JAN-2014 20:51
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10256148003,5.25
Misc Info : 26253
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Meth Date : 03-Feb-2014 07:51 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 29
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.250	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.113	2.113	(0.502)	9457	0.60313	0.63(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.643	2.649	(1.000)	149199	200.000	
19	Acetone	58	2.686	2.698	(1.016)	81360	316.197	332
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	21 Hexane	86	2.863	2.869	(1.083)	455	0.40692	0.43(aQ)
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	Compound Not Detected.					
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	4.009	4.009	(0.952)	38930	26.0019	27.3
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	4.155	4.155	(0.987)	24955	1.25164	1.3(a)
*	41 Pentafluorobenzene	168	4.210	4.216	(1.000)	1185492	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
$	43 1,2-Dichloroethane d4 (S)	65	4.228	4.235	(1.004)	466345	106.345	106
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.491	4.497	(1.000)	1641404	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.838	4.844	(1.000)	144046	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	57 Toluene-d8 (S)	98	5.125	5.125	(0.882)	1903729	99.0964	99.1
	58 Toluene	92	5.143	5.149	(0.885)	7285	0.52872	0.56(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	Compound Not Detected.					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	5.673	5.673	(0.976)	4808	1.87231	2.0(aQ)
*	67 Chlorobenzene-d5	117	5.814	5.814	(1.000)	1523925	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	5.826	5.832	(1.002)	7030	0.26035	0.27(aQ)
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.899	5.899	(1.015)	25105	2.48594	2.6(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.106	6.112	(1.050)	11711	1.21126	1.3(a)
	73 Styrene	104	Compound Not Detected.					
	74 Bromoform	173	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014029.D
Report Date: 03-Feb-2014 09:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
75	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$ 76	4-Bromofluorobenzene (S)	95	6.423	6.423	(0.906)	727556	100.875	101
77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
78	Bromobenzene	156	Compound Not Detected.					
79	n-Propylbenzene	91	Compound Not Detected.					
80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
81	2-Chlorotoluene	91	Compound Not Detected.					
82	1,3,5-Trimethylbenzene	105	6.594	6.600	(0.930)	7323	0.33233	0.35(a)
83	1,2,3-Trichloropropane	110	Compound Not Detected.					
84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
85	4-Chlorotoluene	91	Compound Not Detected.					
86	tert-Butylbenzene	119	Compound Not Detected.					
87	1,2,4-Trimethylbenzene	105	6.832	6.832	(0.964)	28652	1.28887	1.4(a)
88	sec-Butylbenzene	105	Compound Not Detected.					
89	p-Isopropyltoluene	119	Compound Not Detected.					
90	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 91	1,4-Dichlorobenzene-d4	152	7.088	7.088	(1.000)	893005	100.000	
92	1,4-Dichlorobenzene	146	Compound Not Detected.					
93	1,2,3 Trimethylbenzene	105	7.106	7.106	(1.688)	17857	0.76581	0.80(a)
94	n-Butylbenzene	91	Compound Not Detected.					
95	1,2-Dichlorobenzene	146	Compound Not Detected.					
96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
97	Hexachlorobutadiene	225	Compound Not Detected.					
98	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
99	Naphthalene	128	8.429	8.429	(1.189)	2777	0.18113	0.19(a)
100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
101	2-Methylnaphthalene	142	9.045	9.045	(1.276)	495	0.48522	0.51(aQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014029.D
Report Date: 03-Feb-2014 09:16

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 013014029.D
Lab Smp Id: 10256148003
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Misc Info: 26253

Calibration Date: 30-JAN-2014
Calibration Time: 18:08
Client Smp ID: 10256148003
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143148	71574	286296	149199	4.23
41 Pentafluorobenzen	1116303	558152	2232606	1185492	6.20
48 1,4 Difluorobenze	1540471	770236	3080942	1641404	6.55
53 1,4 dioxane d8	136838	68419	273676	144046	5.27
67 Chlorobenzene-d5	1416803	708402	2833606	1523925	7.56
91 1,4-Dichlorobenze	843357	421679	1686714	893005	5.89

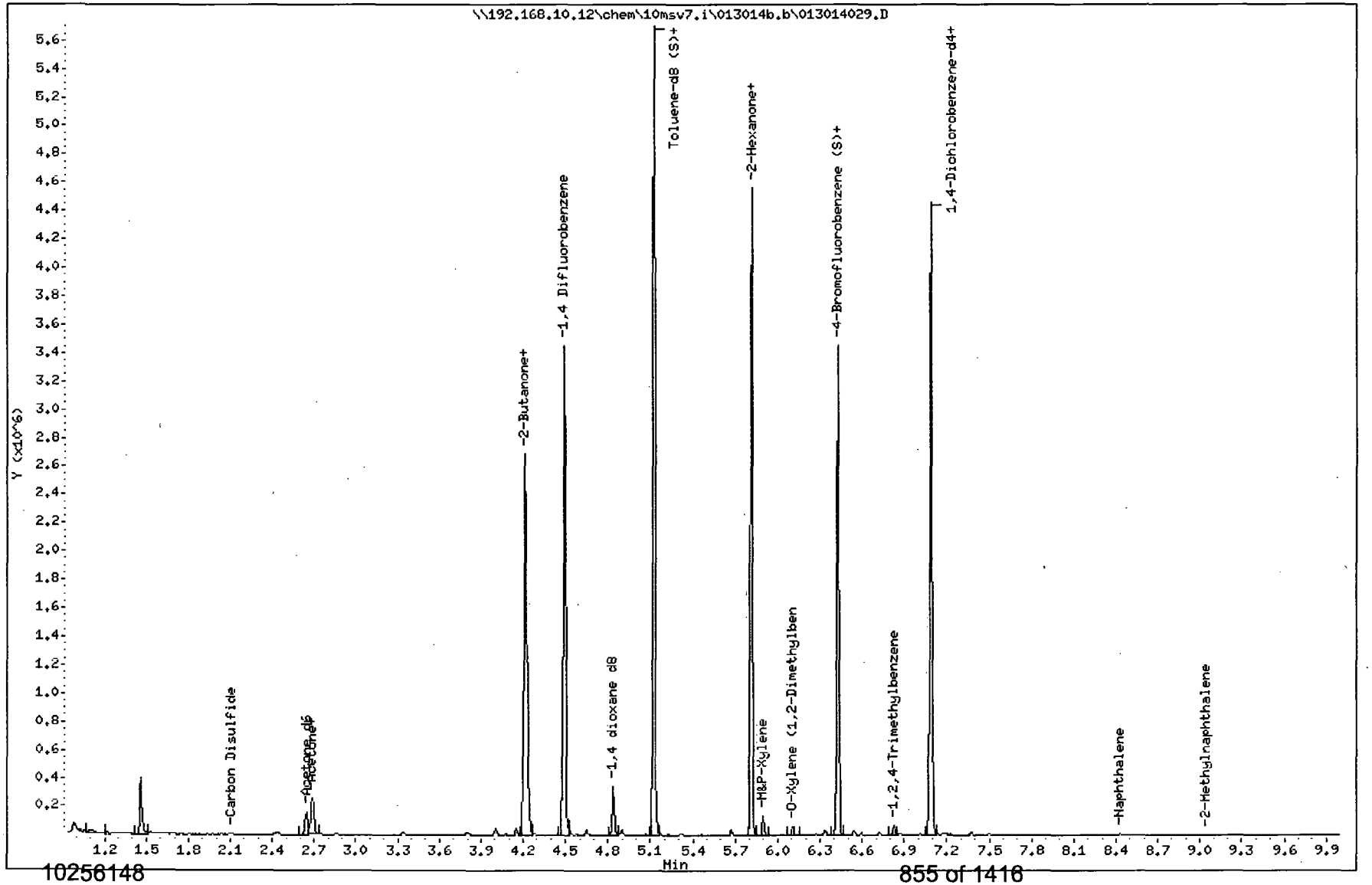
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.64	-0.23
41 Pentafluorobenzen	4.22	3.72	4.72	4.21	-0.14
48 1,4 Difluorobenze	4.50	4.00	5.00	4.49	-0.13
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.12
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014029.D
Date : 30-JAN-2014 20:51
Client ID: 10256148003
Sample Info: 10256148003,5.25

Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



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Date : 30-JAN-2014 20:51

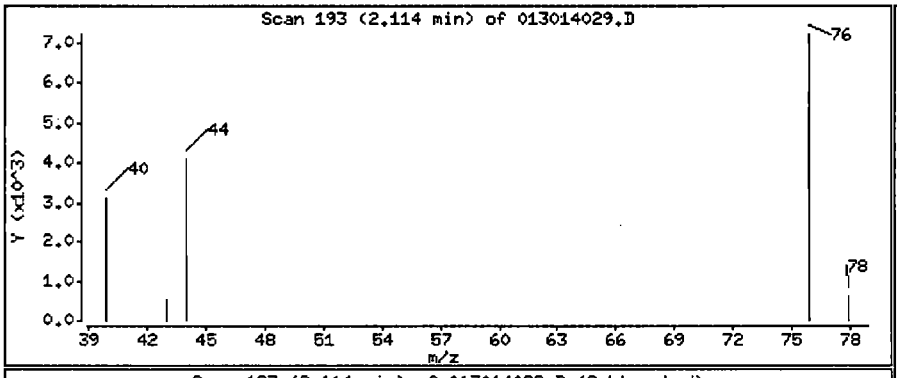
Client ID: 10256148003 Instrument: 10msv7.i

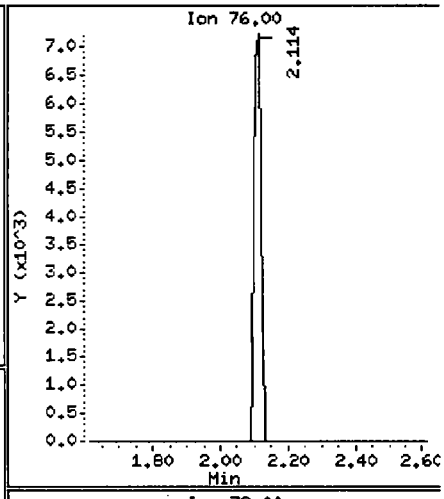
Sample Info: 10256148003,5.25

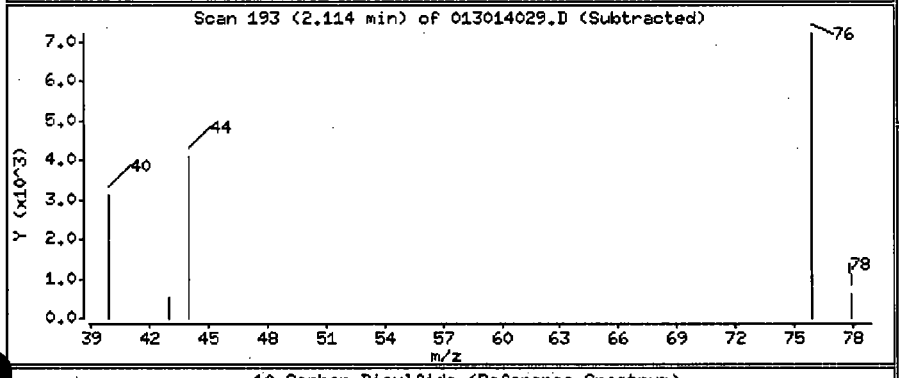
Operator: HBP

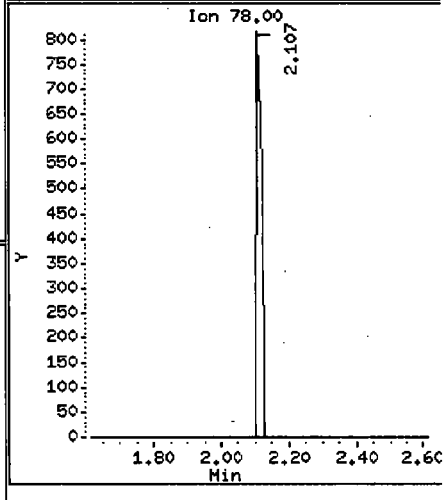
Column phase: Rtx-VMS Column diameter: 0.18

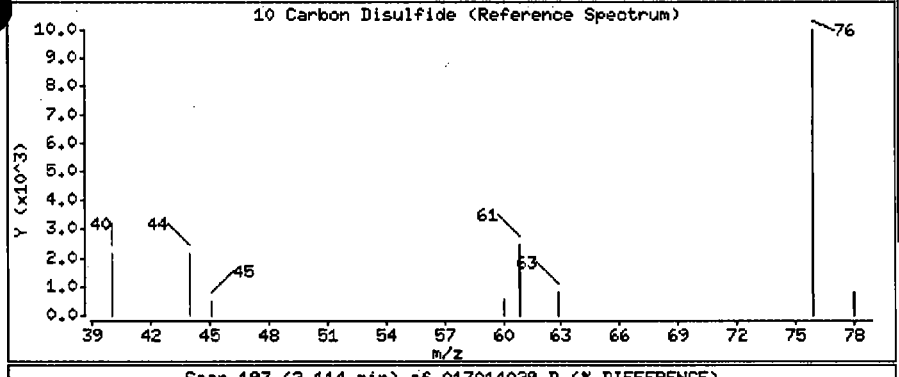
10 Carbon Disulfide Concentration: 0.63 ug/Kg

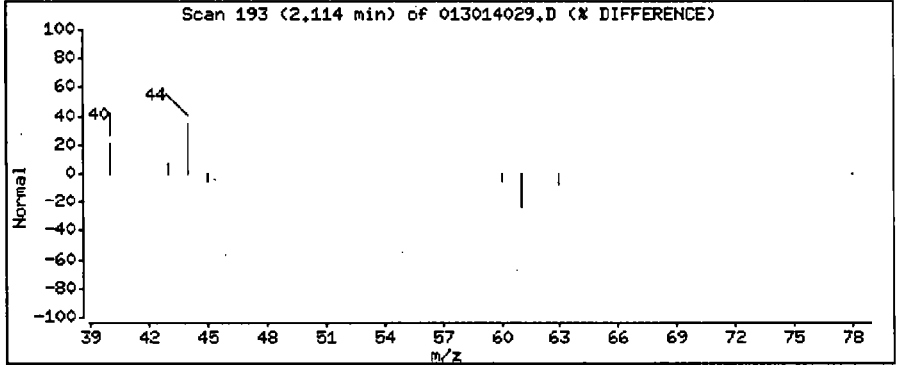












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Date : 30-JAN-2014 20:51

Client ID: 10256148003

Instrument: 10msv7.i

Sample Info: 10256148003,5.25

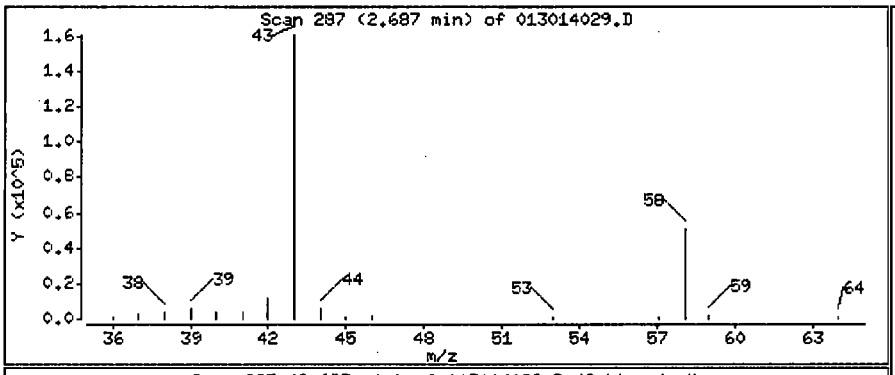
Operator: HBP

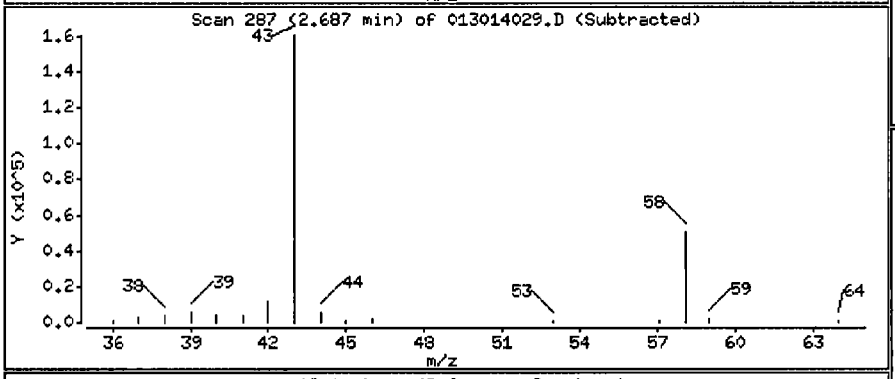
Column phase: Rtx-VMS

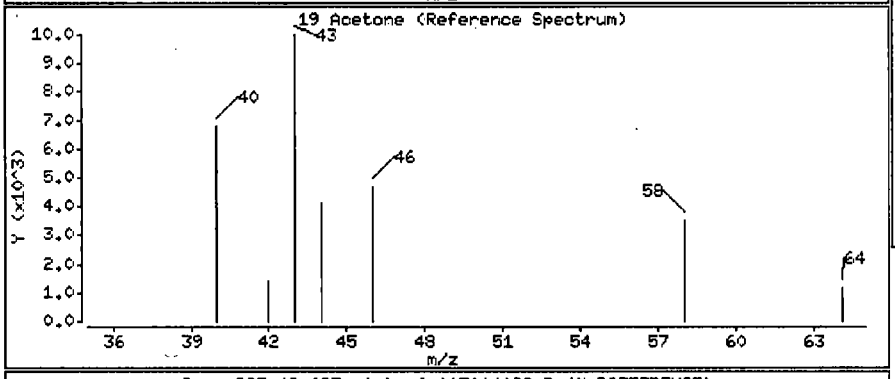
Column diameter: 0.18

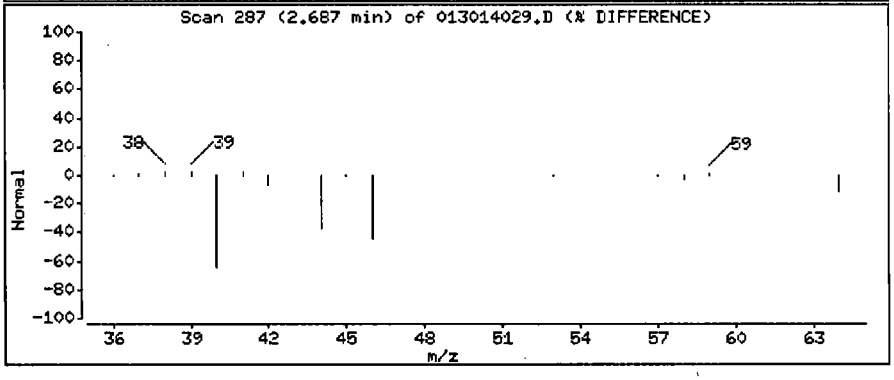
19 Acetone

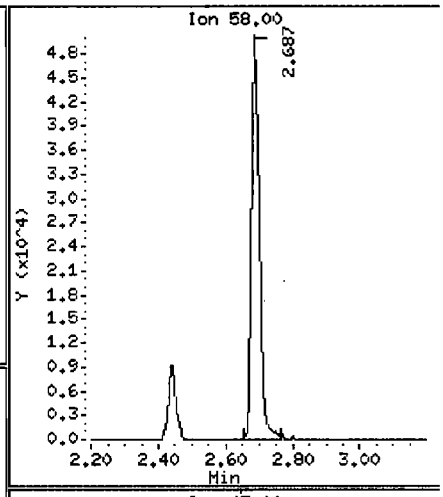
Concentration: 332 ug/Kg

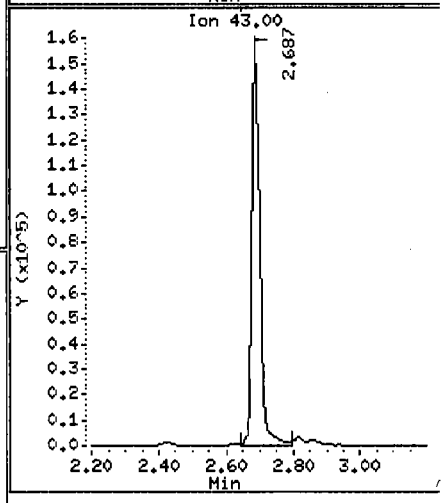












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Date : 30-JAN-2014 20:51

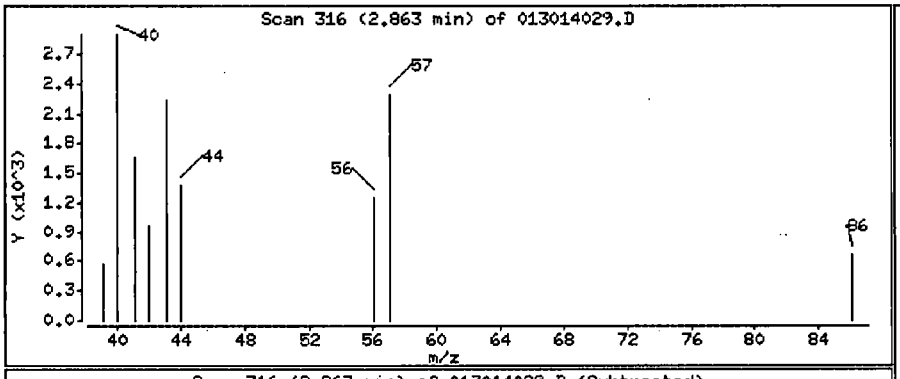
Client ID: 10256148003 Instrument: 10msv7.i

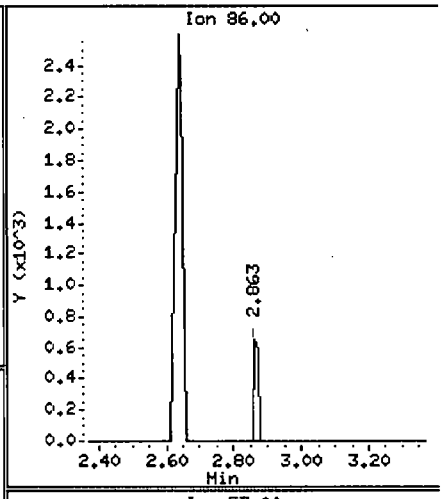
Sample Info: 10256148003,5.25

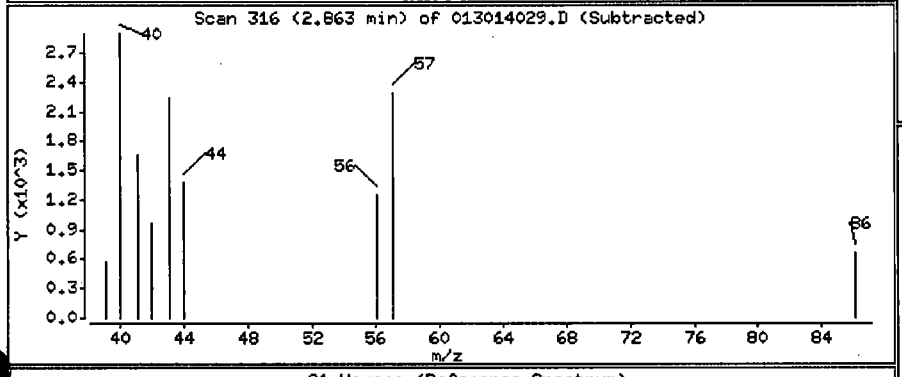
Operator: HBP

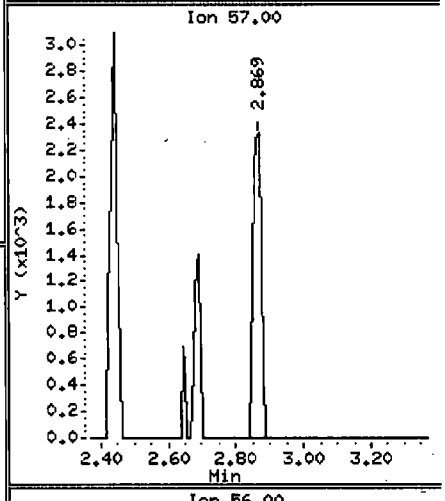
Column phase: Rtx-VMS Column diameter: 0.18

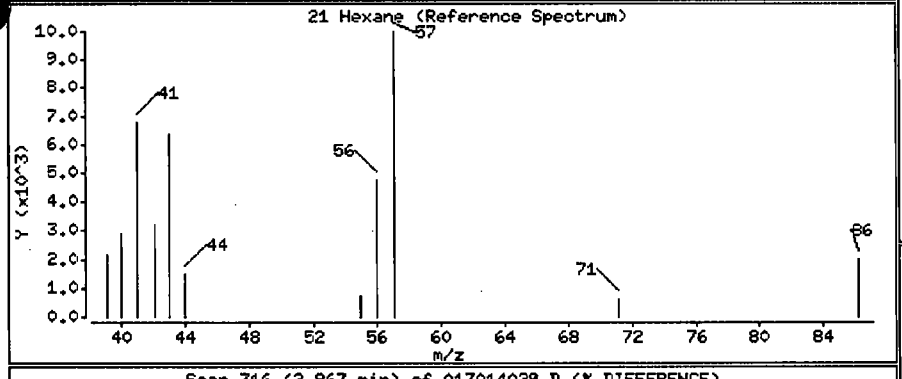
21 Hexane Concentration: 0.43 ug/Kg

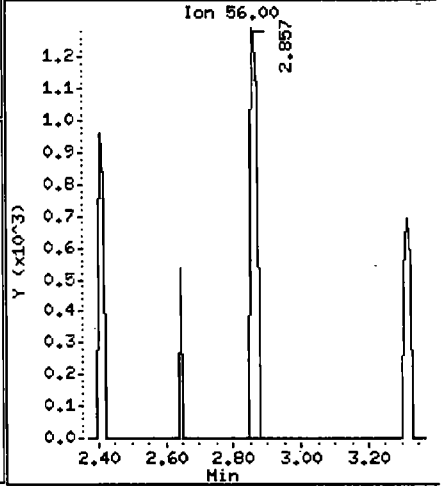


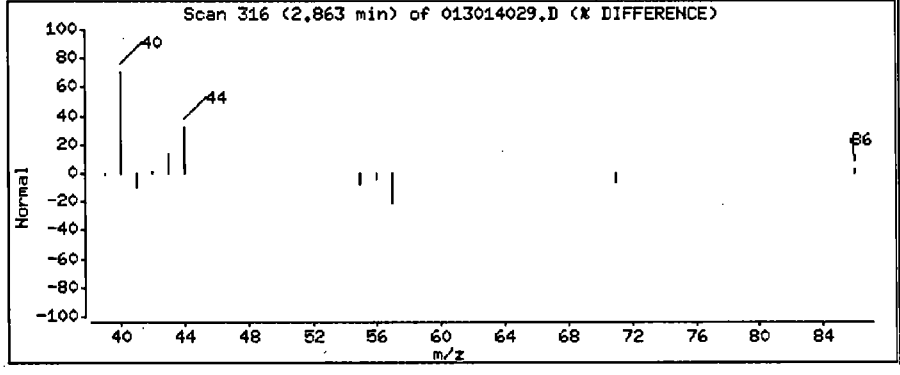












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Date : 30-JAN-2014 20:51

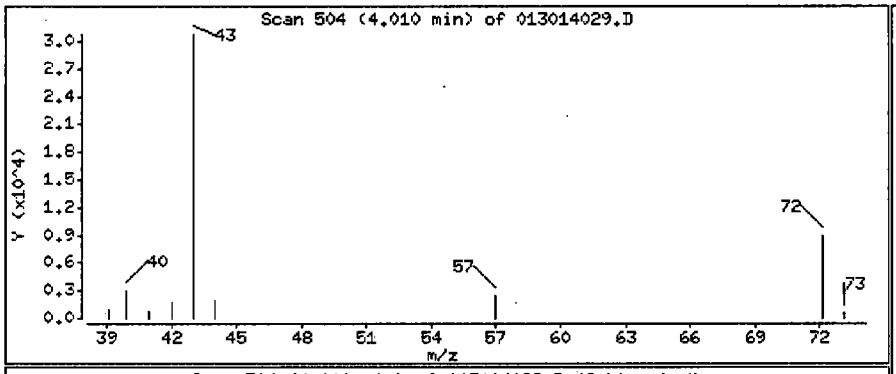
Client ID: 10256148003 Instrument: 10msv7.i

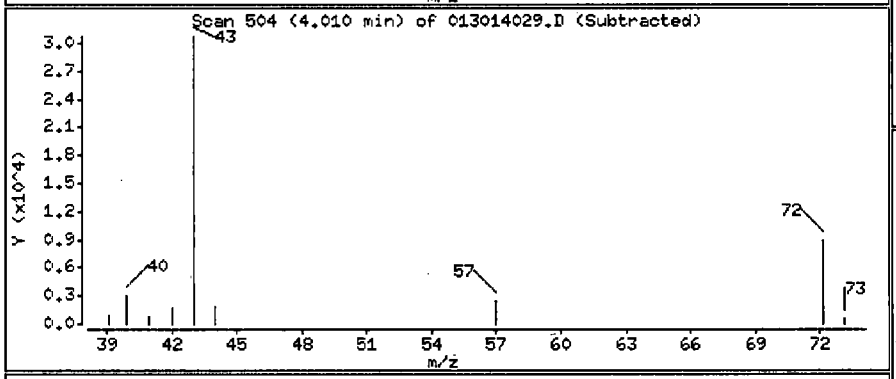
Sample Info: 10256148003,5.25

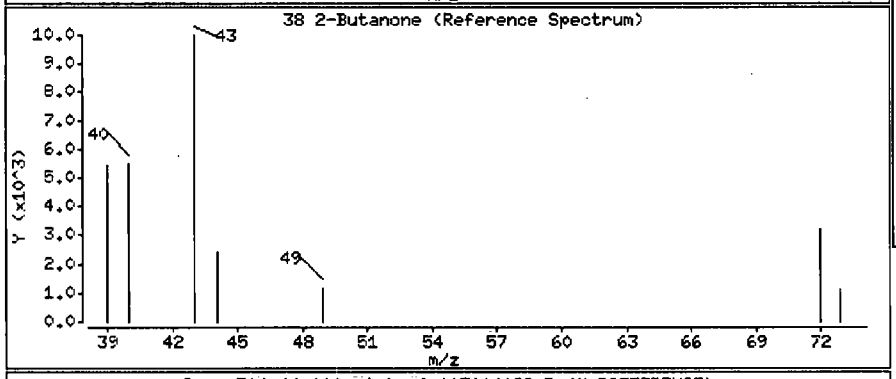
Operator: HBP

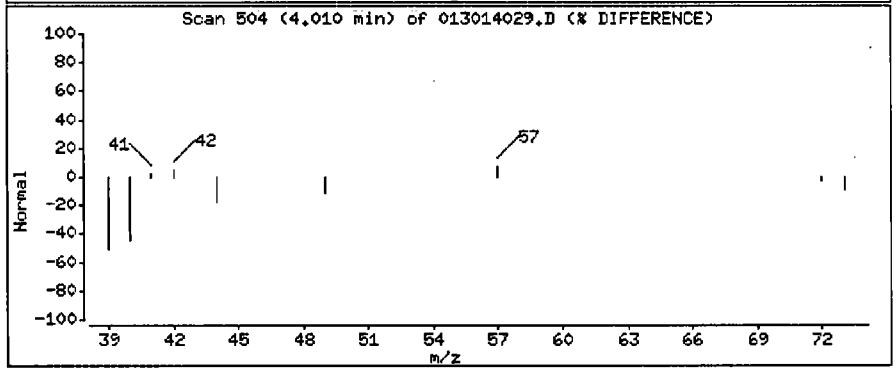
Column phase: Rtx-VMS Column diameter: 0.18

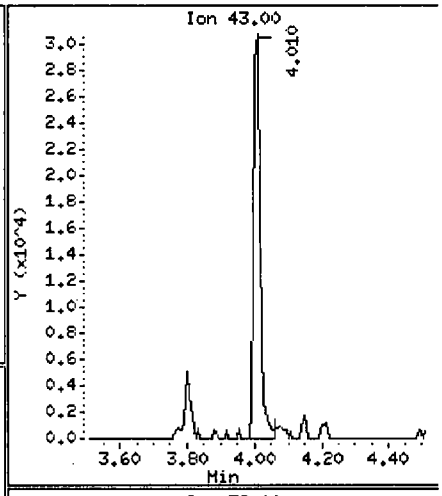
38 2-Butanone Concentration: 27.3 ug/Kg

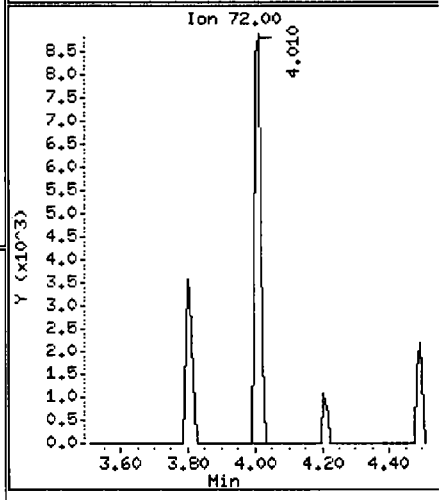












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Date : 30-JAN-2014 20:51

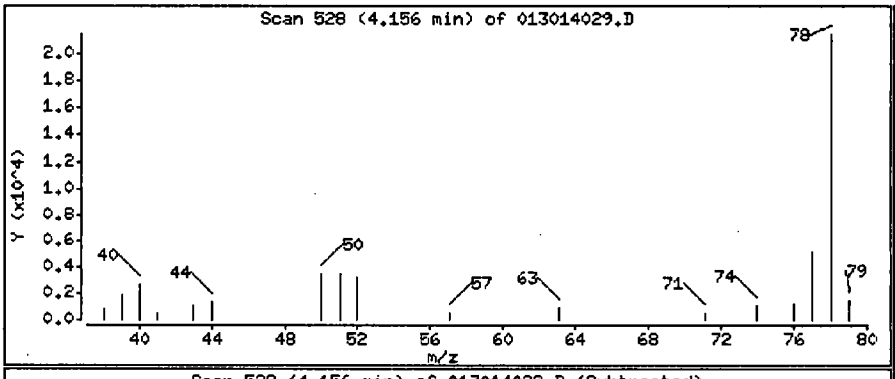
Client ID: 10256148003 Instrument: 10msv7.i

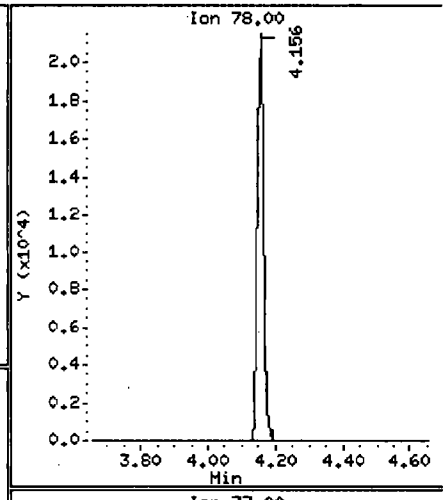
Sample Info: 10256148003,5.25

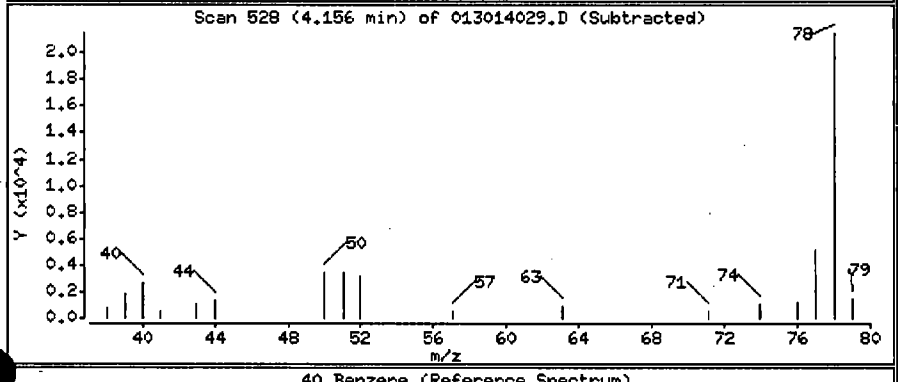
Operator: HBP

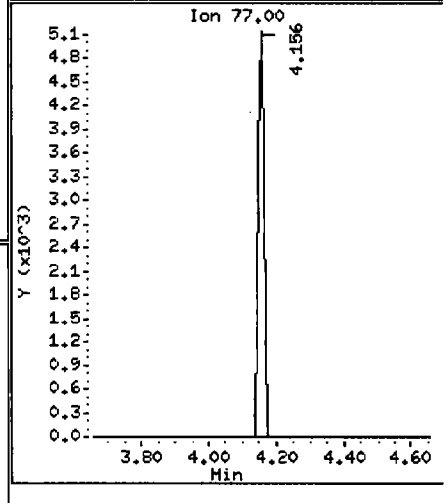
Column phase: Rtx-VMS Column diameter: 0.18

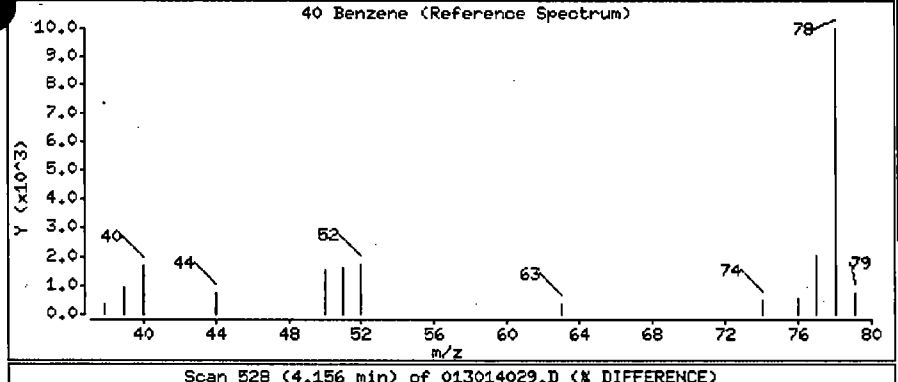
40 Benzene Concentration: 1.3 ug/Kg

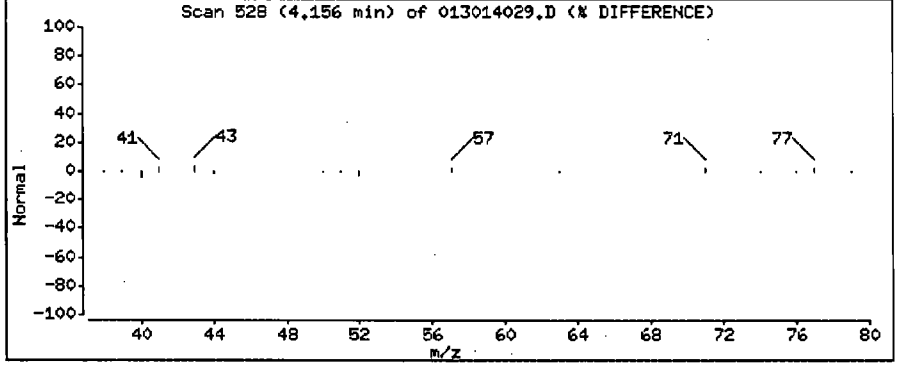












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Date : 30-JAN-2014 20:51

Client ID: 10256148003

Instrument: 10msv7.i

Sample Info: 10256148003,5.25

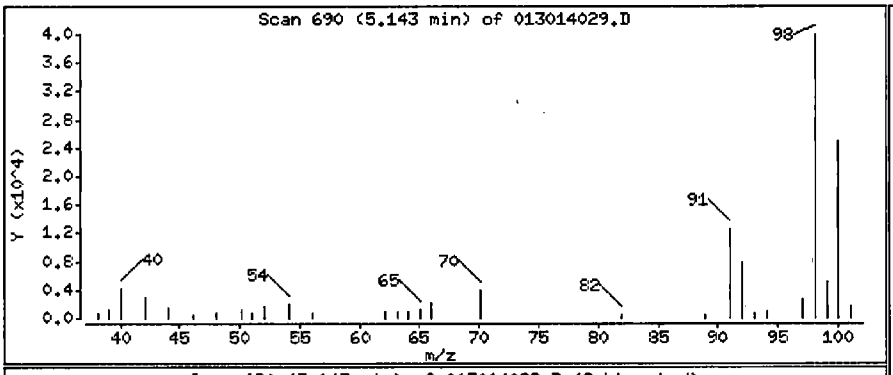
Operator: HBP

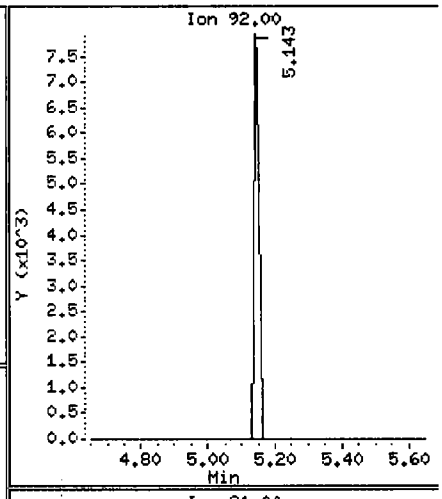
Column phase: Rtx-VMS

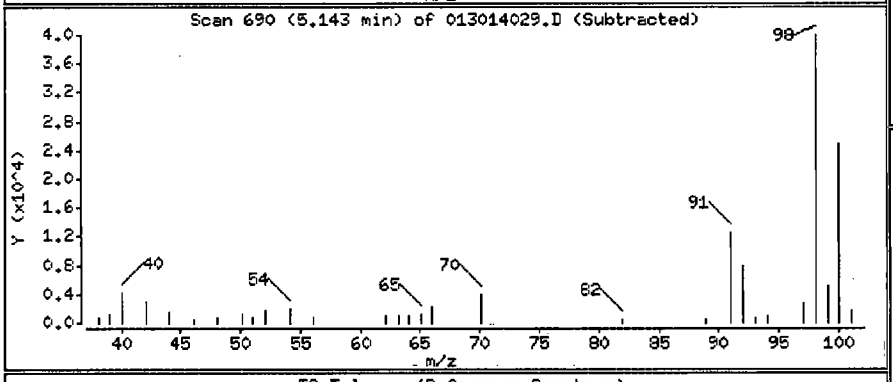
Column diameter: 0.18

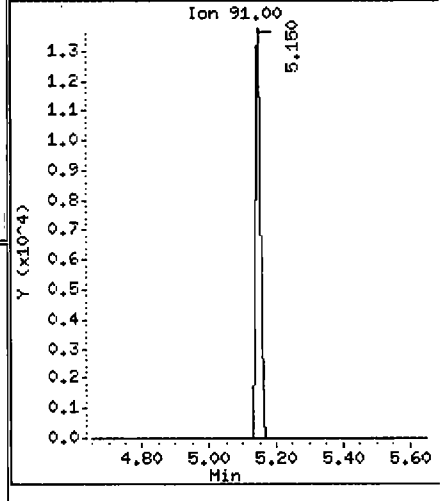
58 Toluene

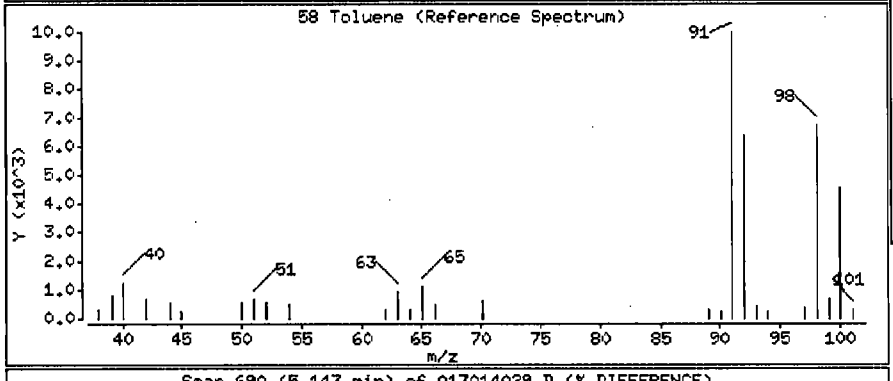
Concentration: 0.56 ug/Kg

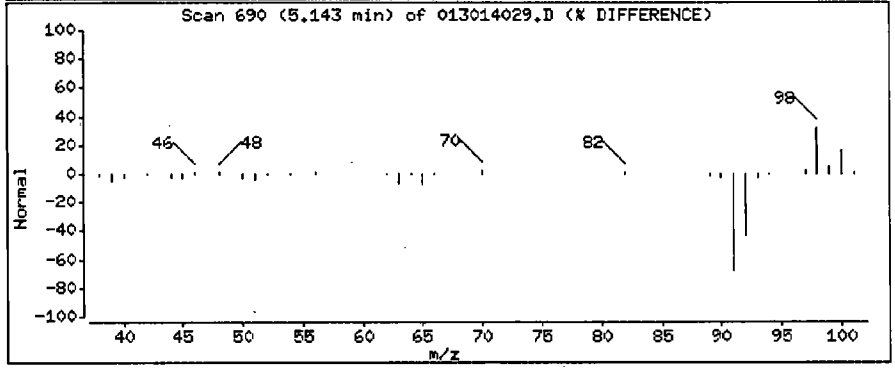












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Date : 30-JAN-2014 20:51

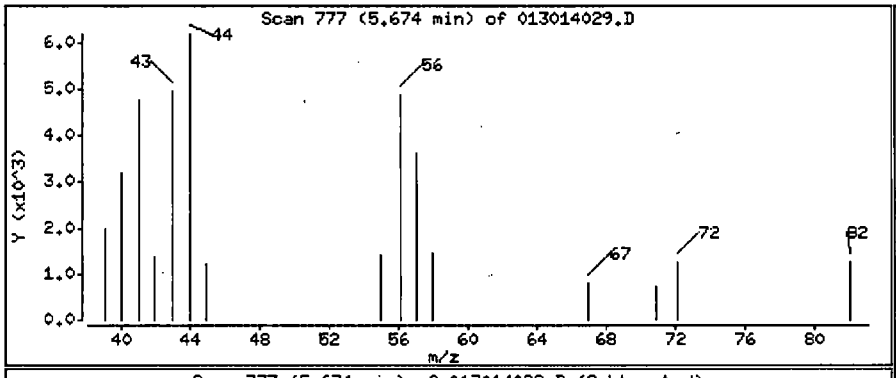
Client ID: 10256148003 Instrument: 10msv7.i

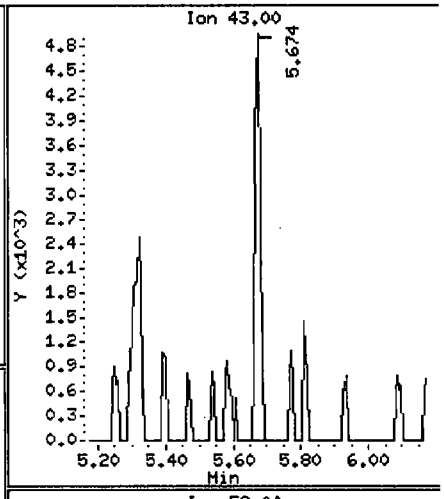
Sample Info: 10256148003,5.25

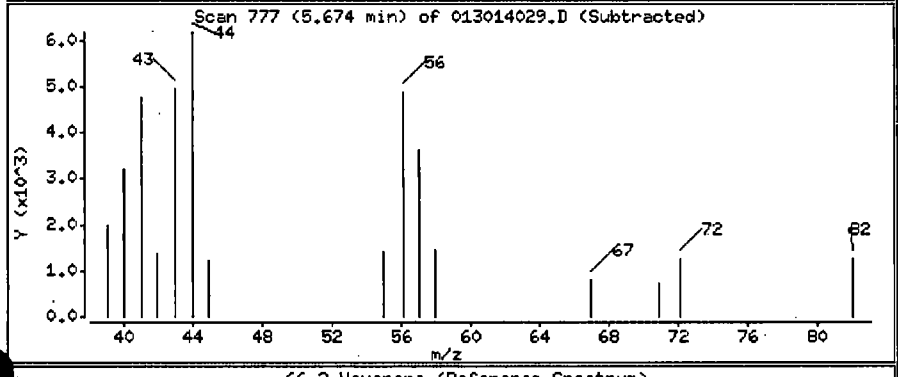
Operator: HBP

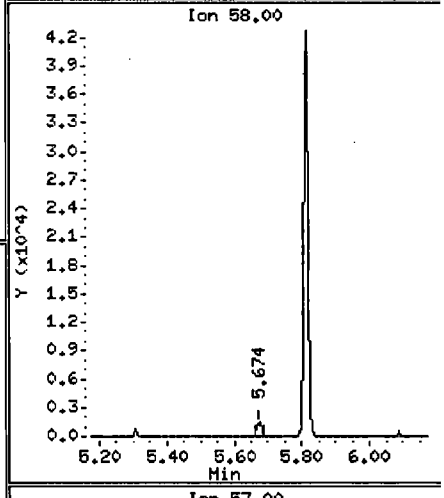
Column phase: Rtx-VMS Column diameter: 0.18

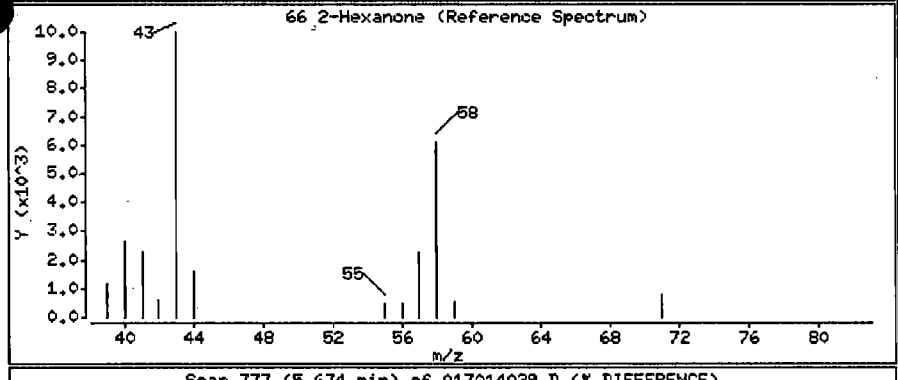
66 2-Hexanone Concentration: 2.0 ug/Kg

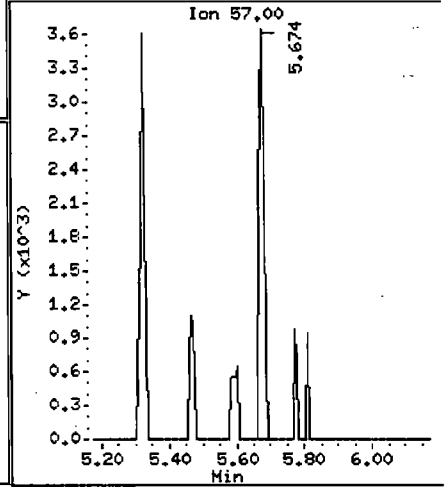


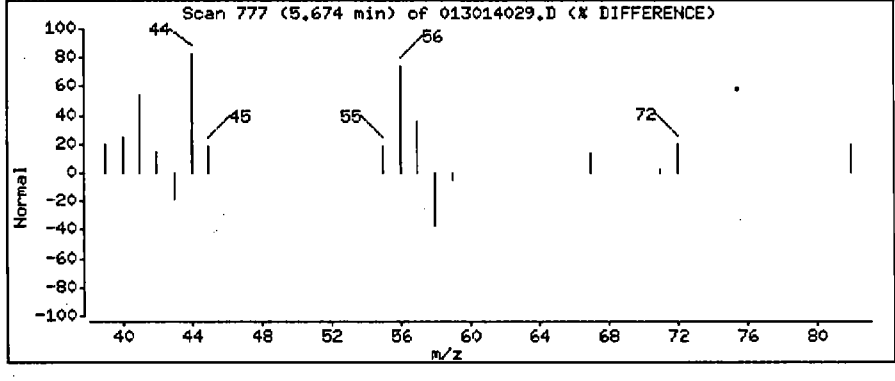












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Date : 30-JAN-2014 20:51

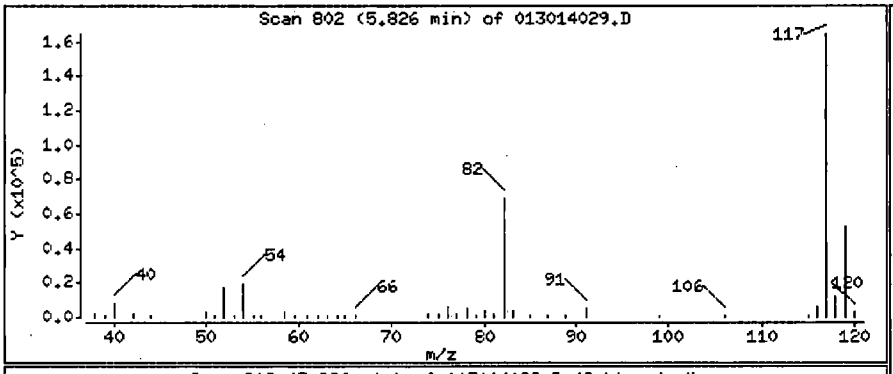
Client ID: 10256148003 Instrument: 10msv7.i

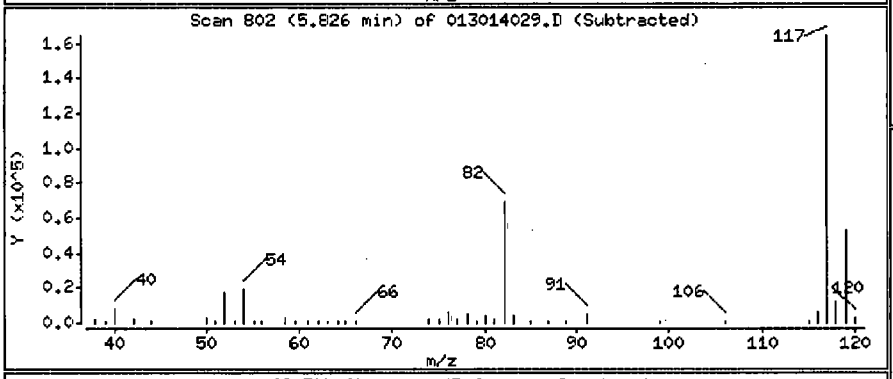
Sample Info: 10256148003,5.25

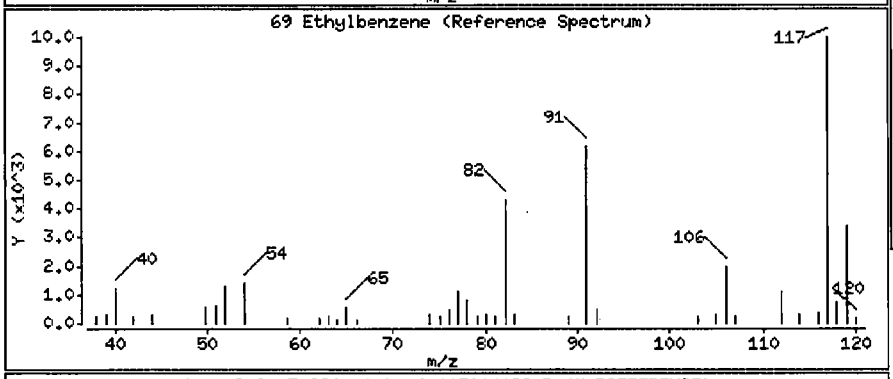
Operator: HBP

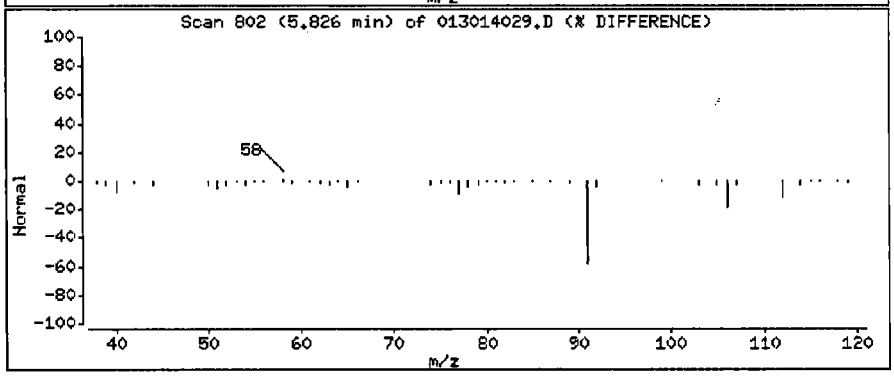
Column phase: Rtx-VMS Column diameter: 0.18

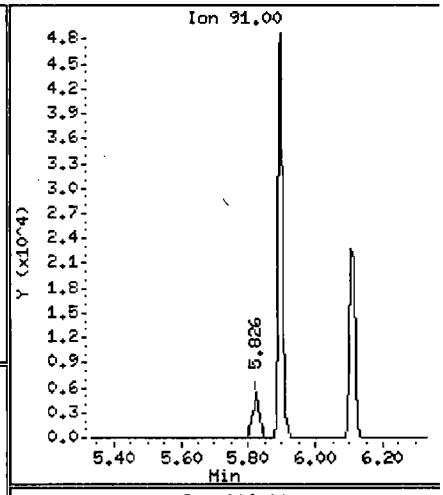
69 Ethylbenzene Concentration: 0.27 ug/Kg

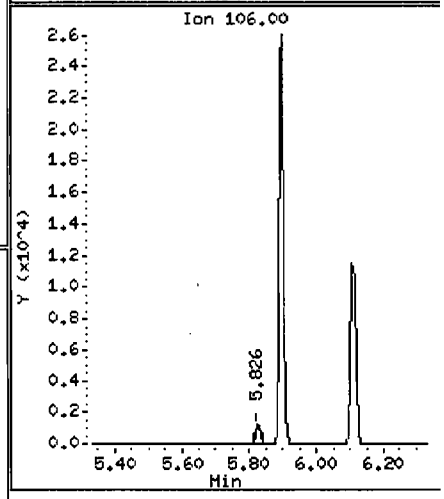












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Date : 30-JAN-2014 20:51

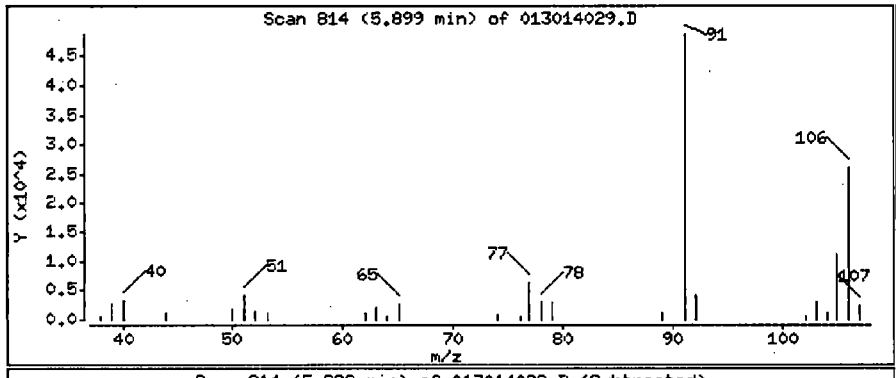
Client ID: 10256148003 Instrument: 10msv7.i

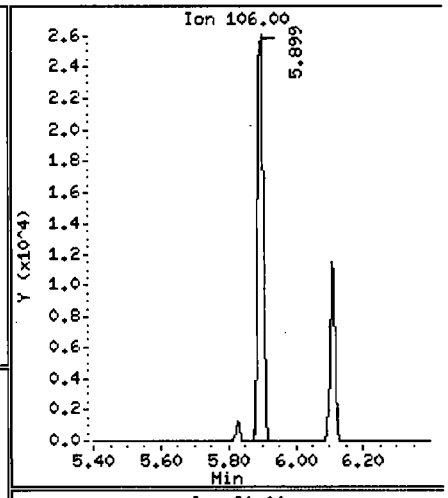
Sample Info: 10256148003,5.25

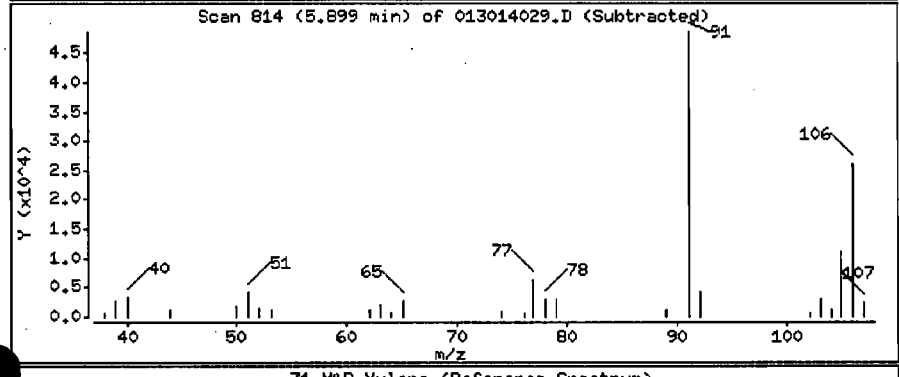
Operator: HBP

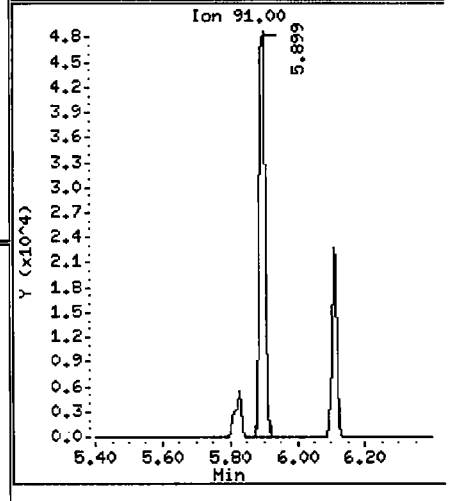
Column phase: Rtx-VMS Column diameter: 0.18

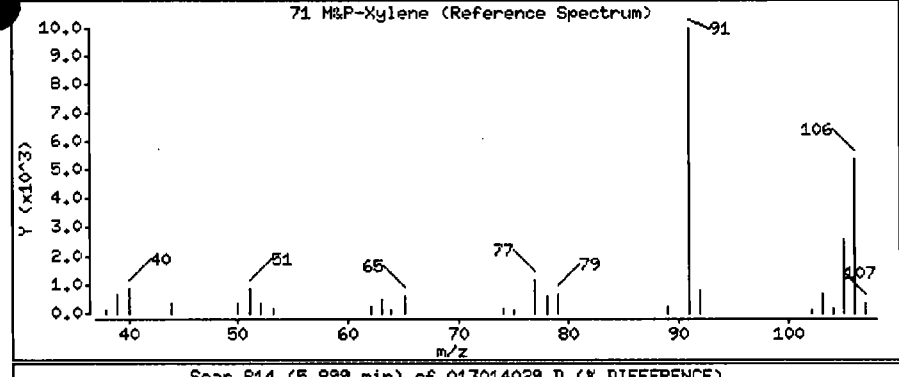
71 M&P-Xylene Concentration: 2.6 ug/Kg

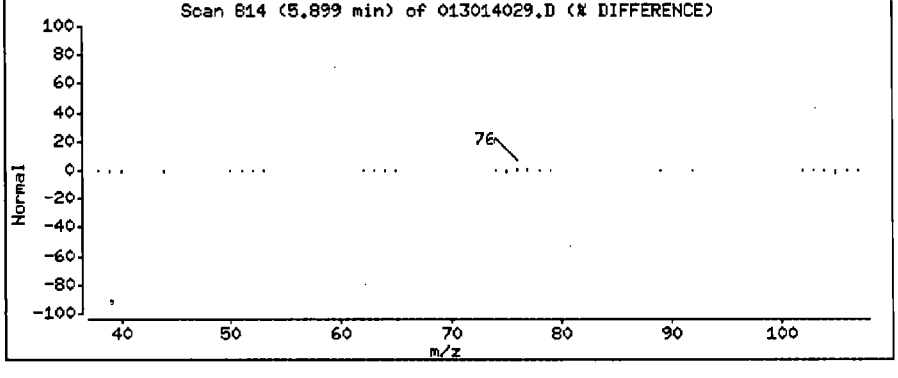












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Date : 30-JAN-2014 20:51

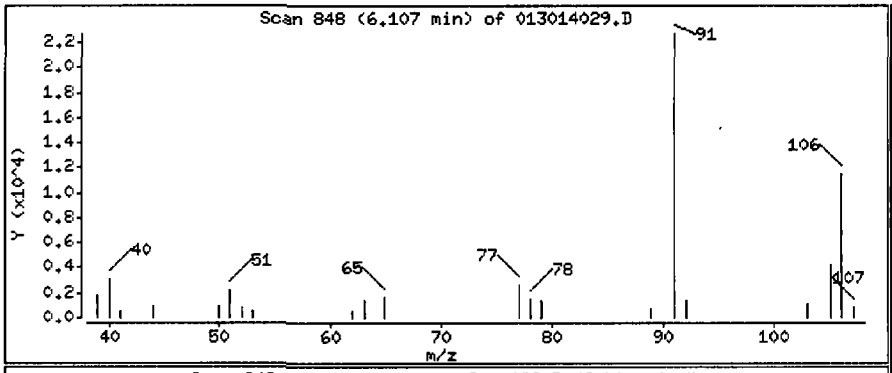
Client ID: 10256148003 Instrument: 10msv7.i

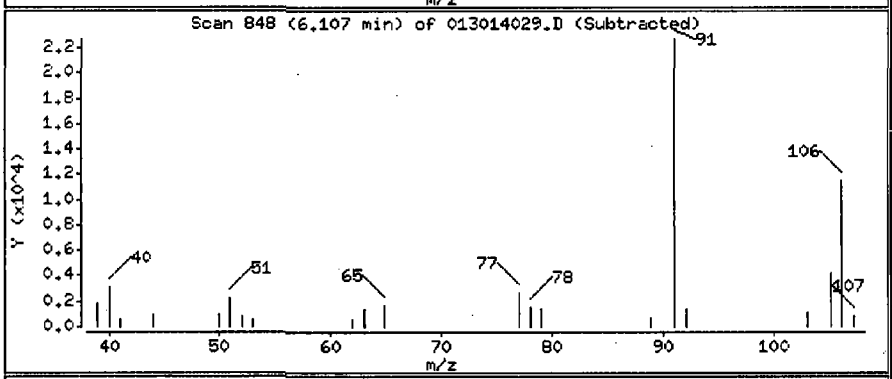
Sample Info: 10256148003,5,25

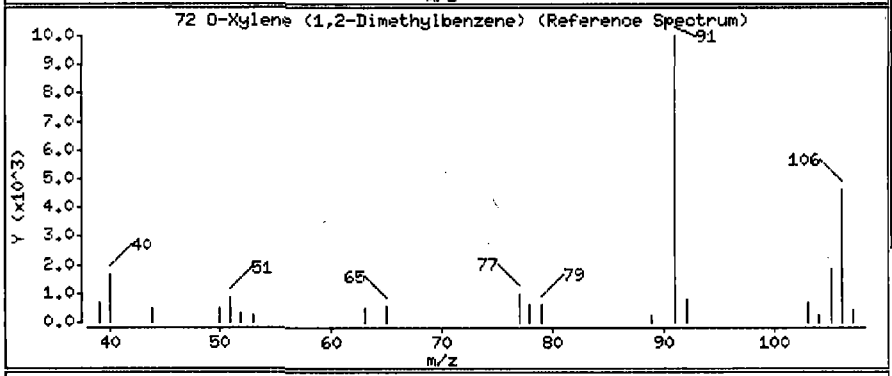
Operator: HBP

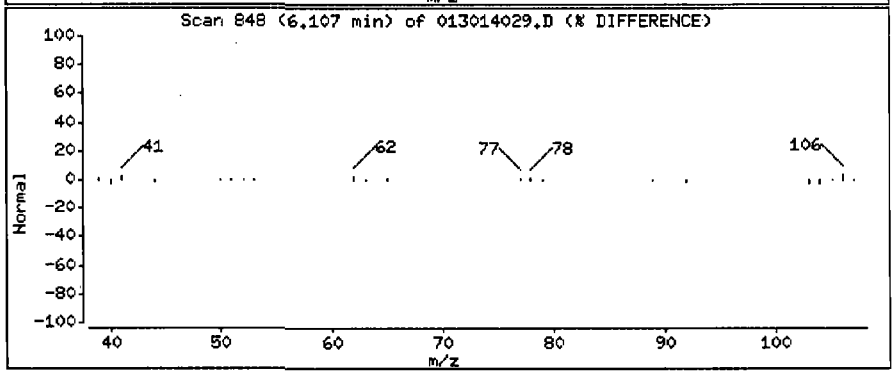
Column phase: Rtx-VMS Column diameter: 0.18

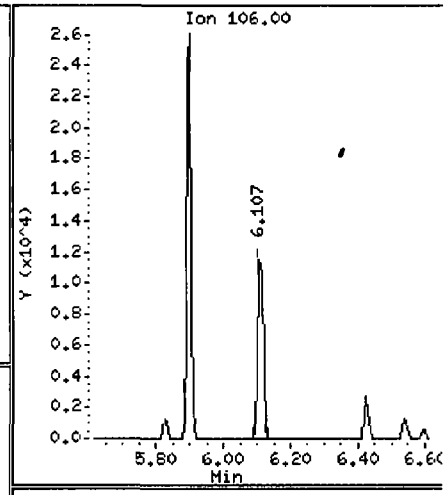
72 O-Xylene (1,2-Dimethylbenzene) Concentration: 1.3 ug/Kg

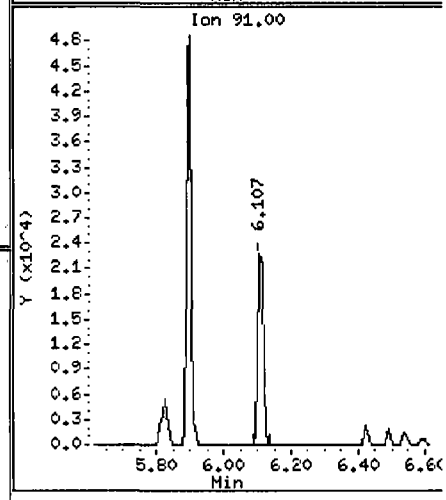












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Date : 30-JAN-2014 20:51

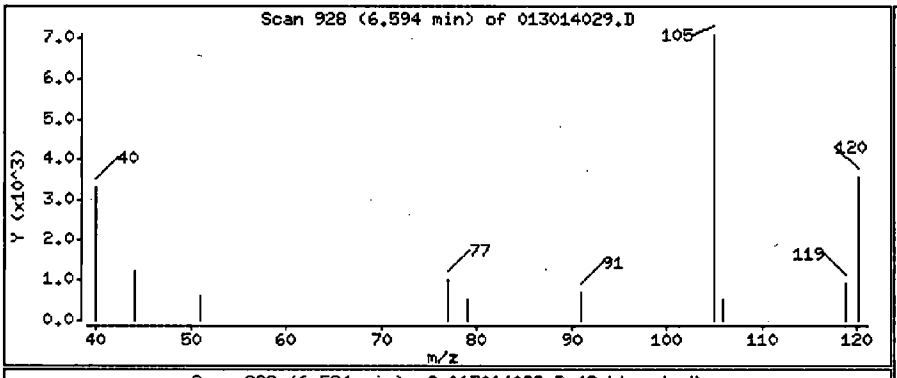
Client ID: 10256148003 Instrument: 10msv7.i

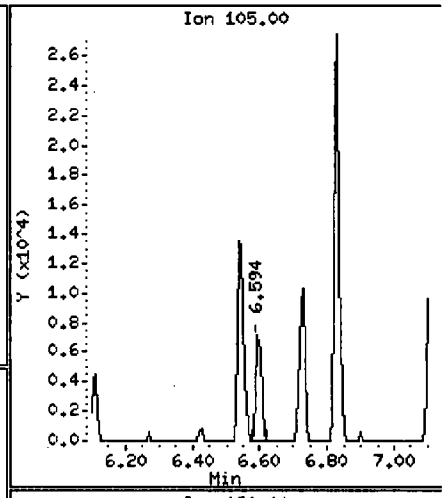
Sample Info: 10256148003,5.25

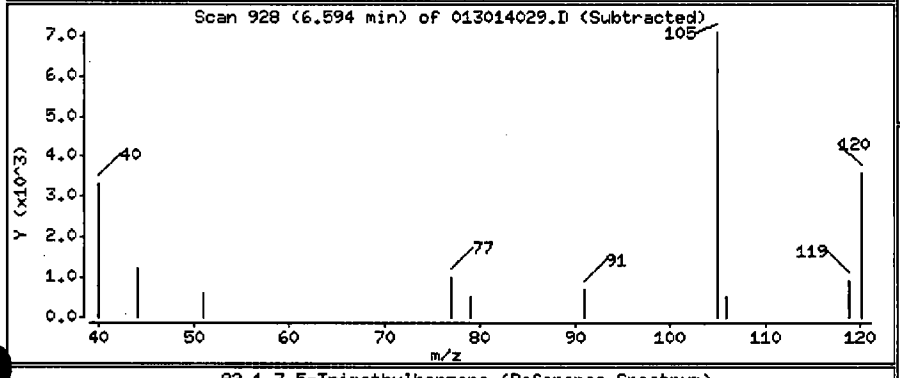
Operator: HBP

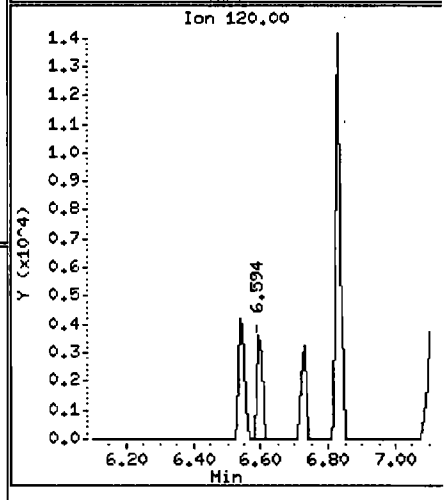
Column phase: Rtx-VMS Column diameter: 0.18

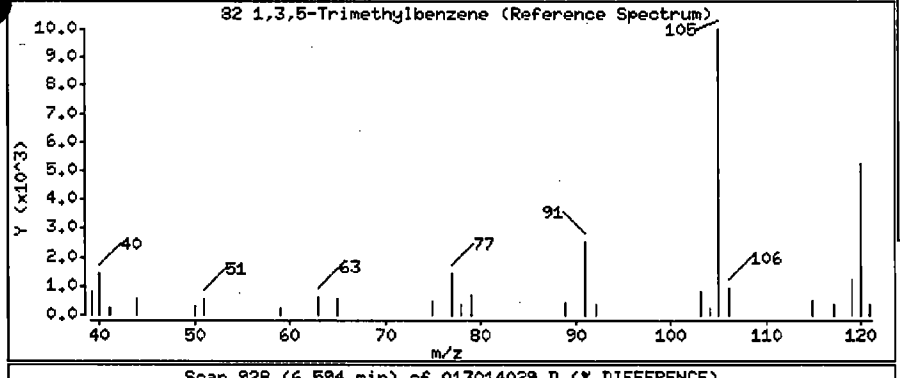
82 1,3,5-Trimethylbenzene Concentration: 0.35 ug/Kg

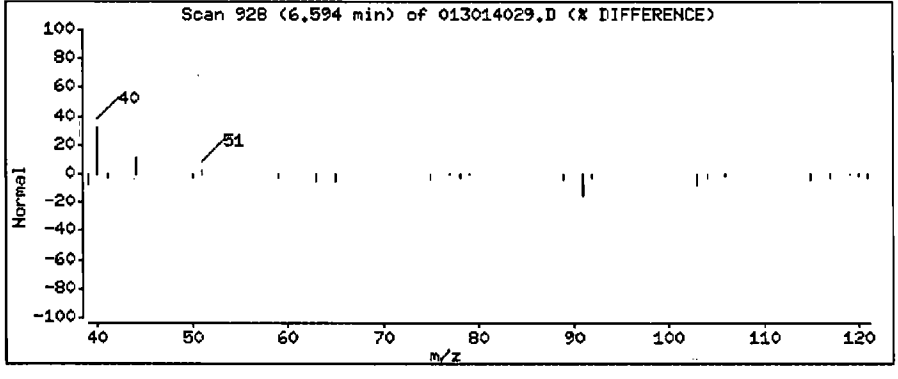












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Date : 30-JAN-2014 20:51

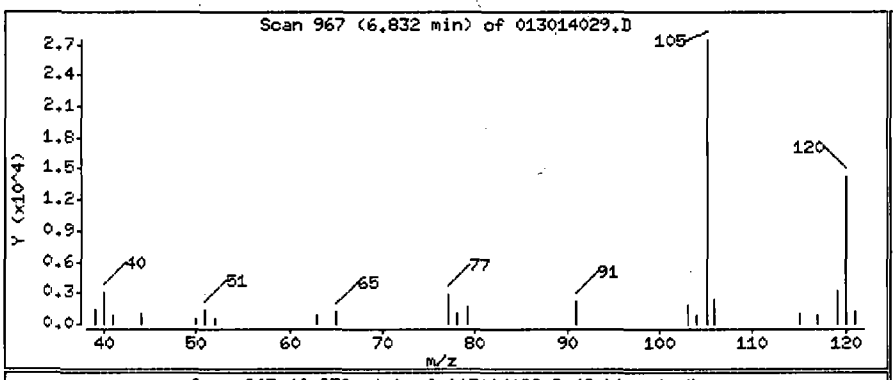
Client ID: 10256148003 Instrument: 10msv7.i

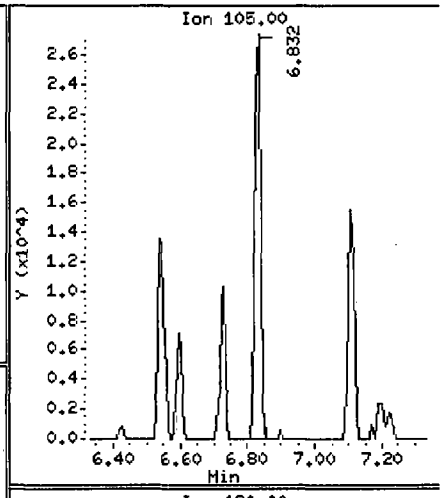
Sample Info: 10256148003,5,25

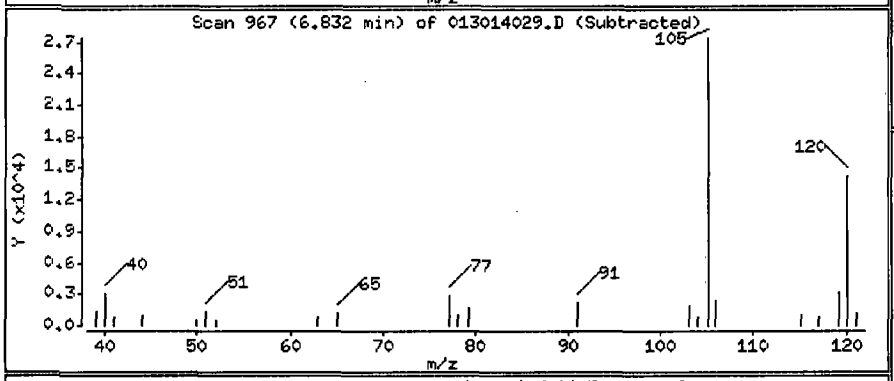
Operator: HBP

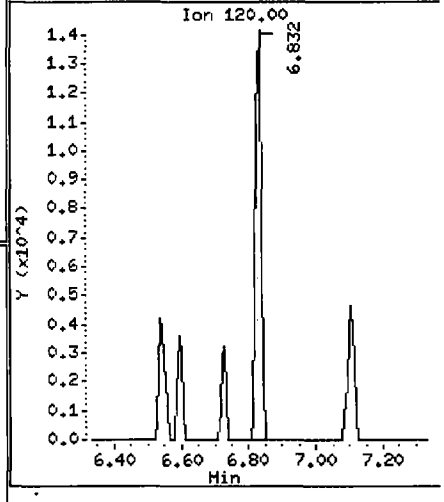
Column phase: Rtx-VMS Column diameter: 0.18

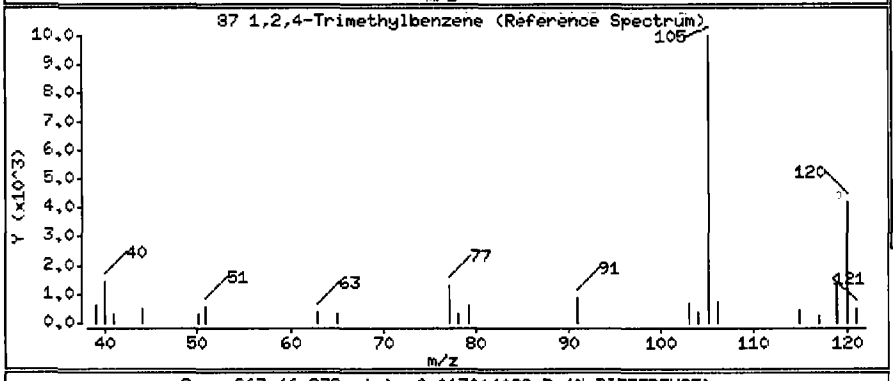
87 1,2,4-Trimethylbenzene Concentration: 1.4 ug/Kg

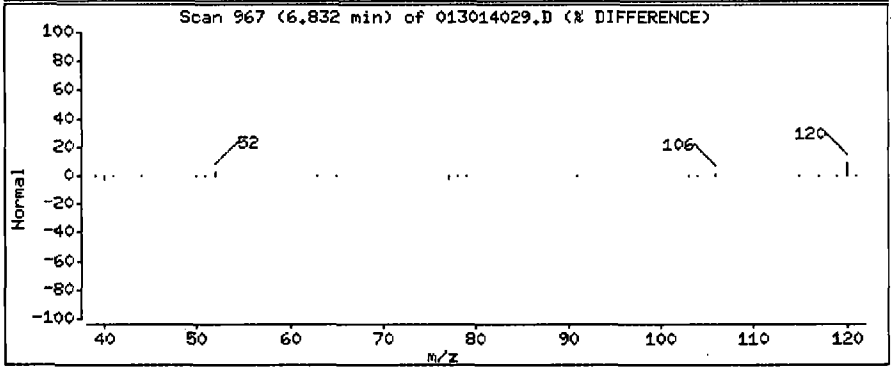












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Date : 30-JAN-2014 20:51

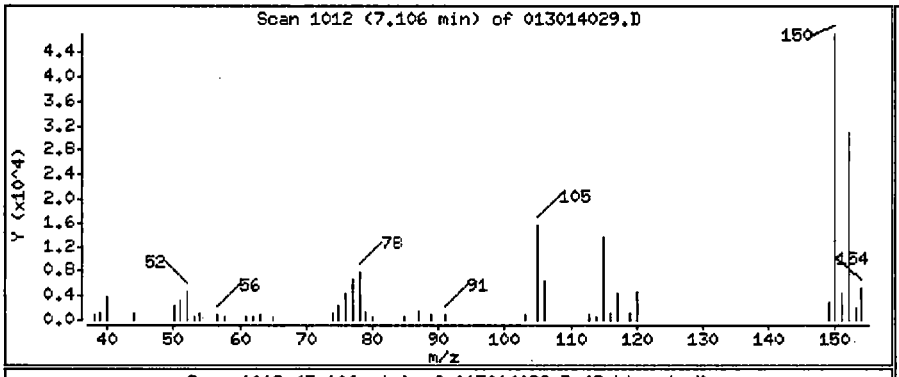
Client ID: 10256148003 Instrument: 10msv7.i

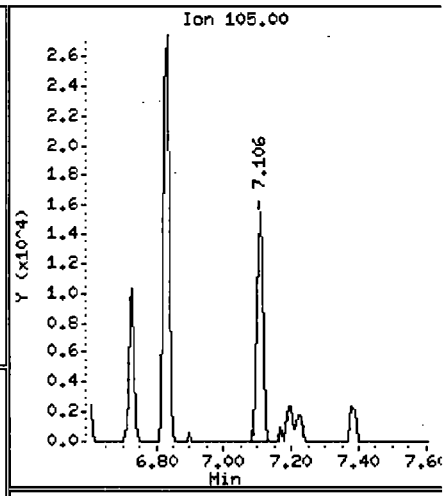
Sample Info: 10256148003,5.25

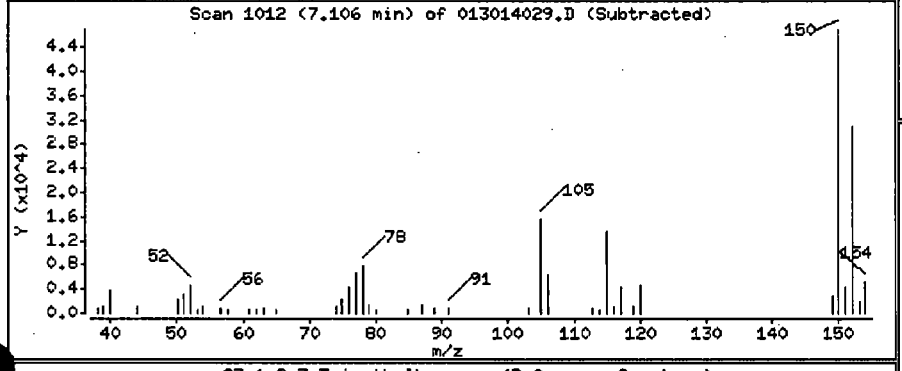
Operator: HBP

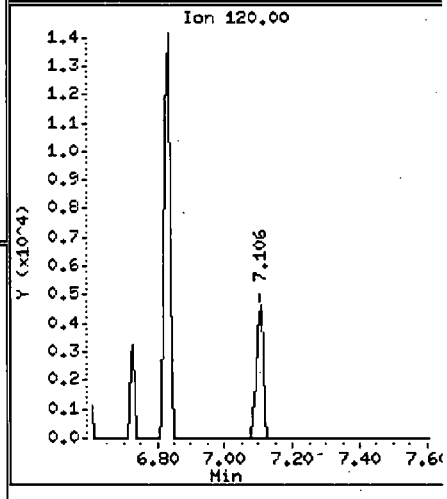
Column phase: Rtx-VMS Column diameter: 0.18

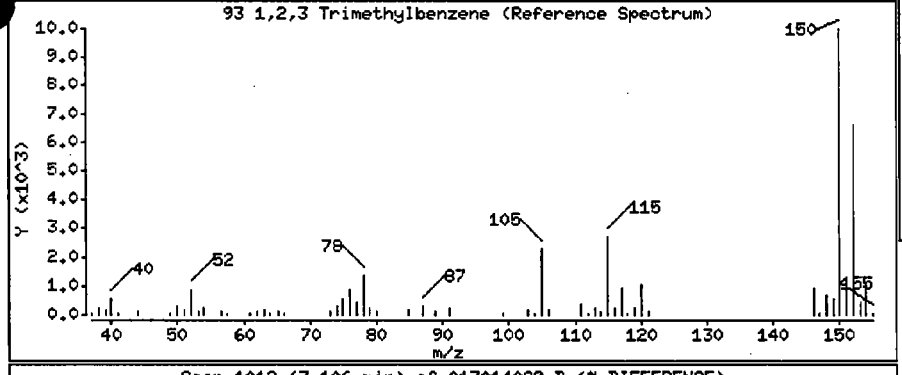
93 1,2,3 Trimethylbenzene Concentration: 0.80 ug/Kg

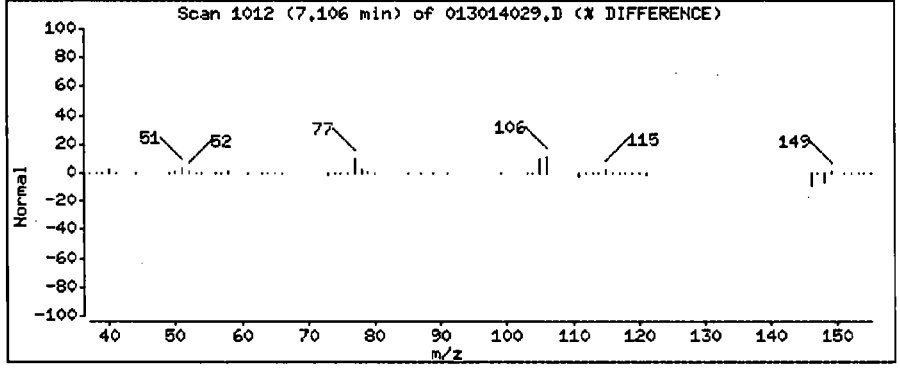












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Date : 30-JAN-2014 20:51

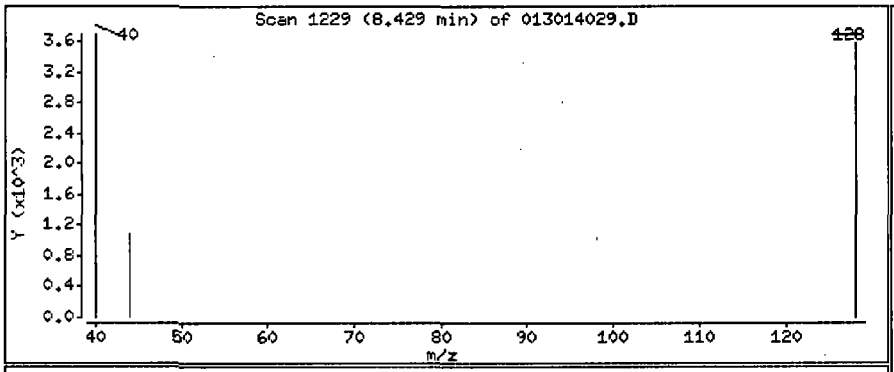
Client ID: 10256148003 Instrument: 10msv7.i

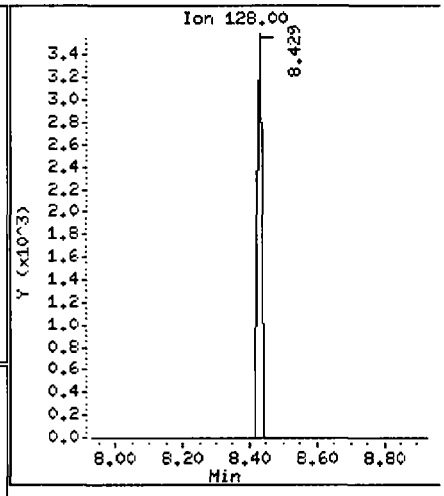
Sample Info: 10256148003,5.25

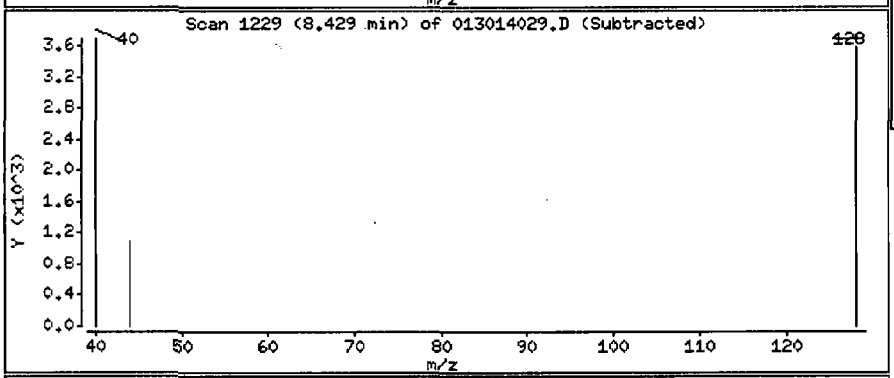
Operator: HBP

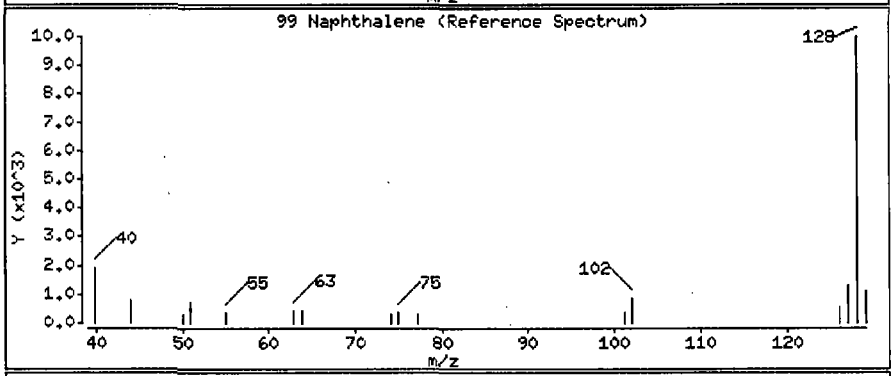
Column phase: Rtx-VMS Column diameter: 0.18

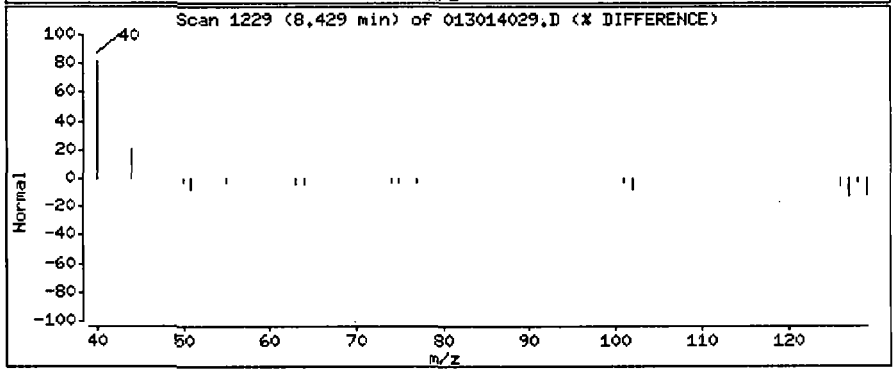
99 Naphthalene Concentration: 0.19 ug/Kg











Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014029.D

Date : 30-JAN-2014 20:51

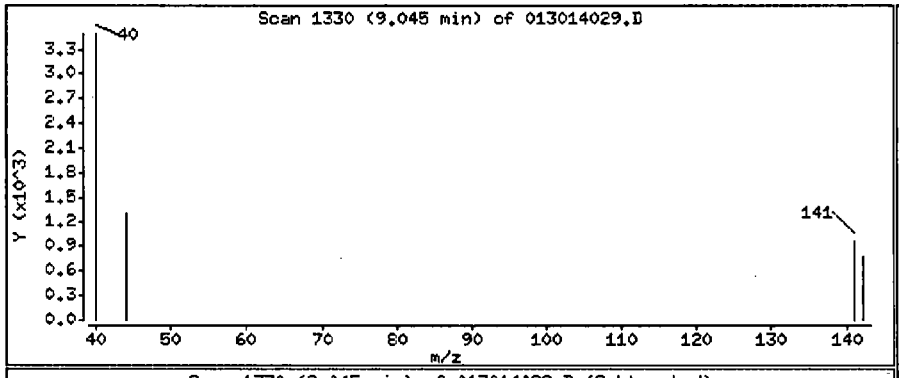
Client ID: 10256148003 Instrument: 10msv7.i

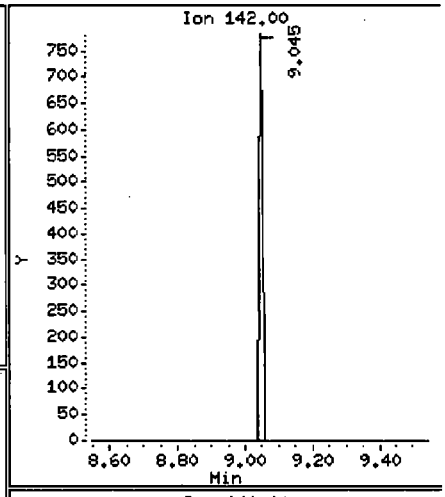
Sample Info: 10256148003,5.25

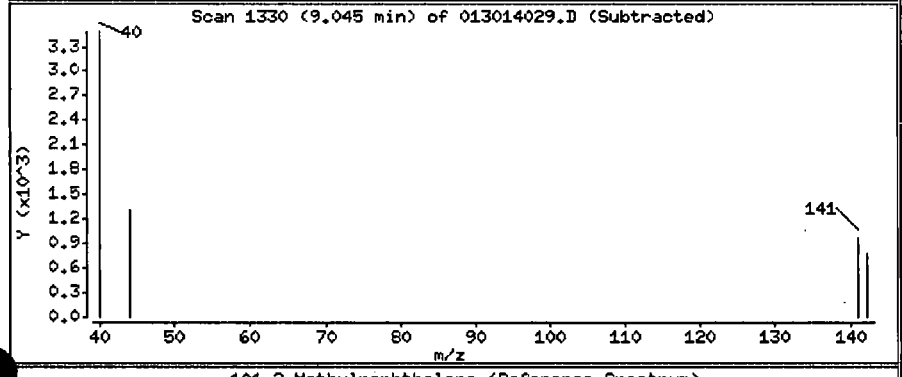
Operator: HBP

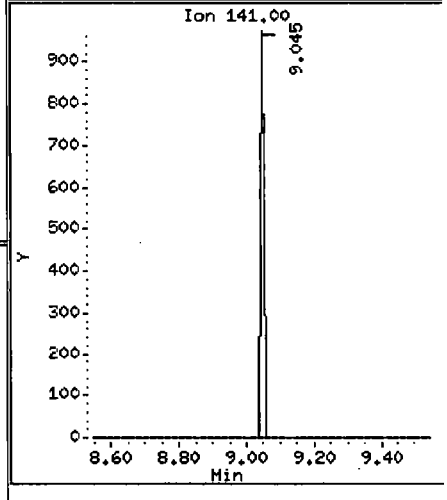
Column phase: Rtx-VMS Column diameter: 0.18

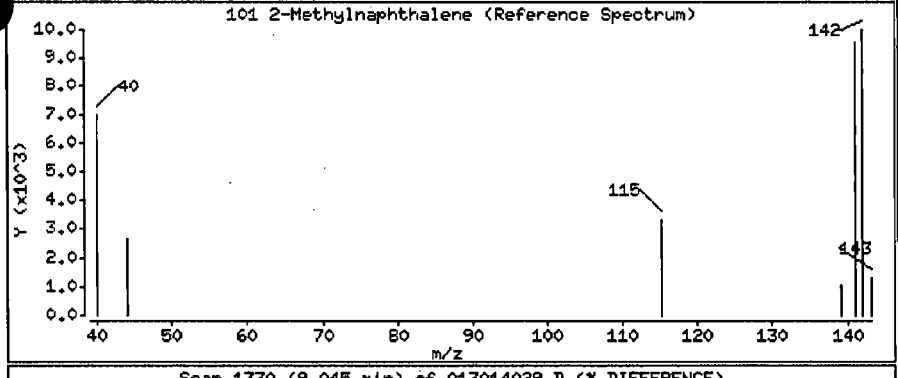
101 2-Methylnaphthalene Concentration: 0.51 ug/Kg

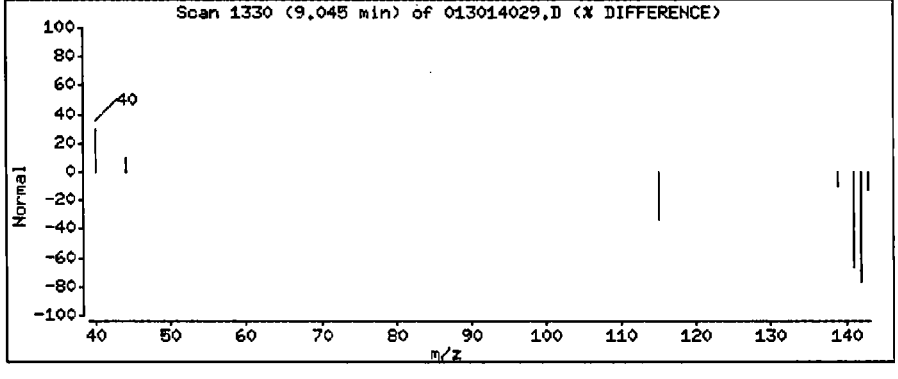












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Injection Date: 30-JAN-2014 20:51
Instrument: 10msv7.i
Lab Sample ID: 10256148003
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014030.D
Report Date: 03-Feb-2014 09:16

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\013014b.b\013014030.D
Lab Smp Id: 10256148004 Client Smp ID: 10256148004
Inj Date : 30-JAN-2014 21:09
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10256148004,5.92
Misc Info : 26253
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Meth Date : 03-Feb-2014 07:51 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 30
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.920	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.107	2.113	(0.500)	6703	0.44658	0.53(aQ)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.637	2.649	(1.000)	162893	200.000	
19	Acetone	58	2.686	2.698	(1.018)	5741	16.1982	19.2
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	21 Hexane	86	2.857	2.869	(1.083)	1240	1.01574	1.2(a)
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	3.759	3.765	(0.893)	4671	0.61121	0.72(aQ)
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	4.009	4.009	(0.952)	4473	3.12098	3.7(aQ)
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	4.155	4.155	(0.987)	4760	0.24940	0.30(a)
*	41 Pentafluorobenzene	168	4.210	4.216	(1.000)	1134820	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
$	43 1,2-Dichloroethane d4 (S)	65	4.228	4.235	(1.004)	453575	108.051	108
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.491	4.497	(1.000)	1557296	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.838	4.844	(1.000)	120156	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
$	57 Toluene-d8 (S)	98	5.125	5.125	(0.882)	1782058	104.031	104
	58 Toluene	92	5.143	5.149	(0.885)	5029	0.40932	0.48(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	Compound Not Detected.					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	Compound Not Detected.					
*	67 Chlorobenzene-d5	117	5.813	5.814	(1.000)	1358858	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	5.826	5.832	(1.002)	5319	0.22091	0.26(aQM)
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.893	5.899	(1.014)	1758	0.19523	0.23(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.112	(1.051)	513	0.05950	0.070(a)
	73 Styrene	104	Compound Not Detected.					
	74 Bromoform	173	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014030.D
Report Date: 03-Feb-2014 09:16

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	75	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
S	76	4-Bromofluorobenzene (S)	95	6.423	6.423	(0.906)	620519	114.057	114
	77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	78	Bromobenzene	156	Compound Not Detected.					
	79	n-Propylbenzene	91	Compound Not Detected.					
	80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	81	2-Chlorotoluene	91	Compound Not Detected.					
	82	1,3,5-Trimethylbenzene	105	Compound Not Detected.					
	83	1,2,3-Trichloropropane	110	Compound Not Detected.					
	84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	85	4-Chlorotoluene	91	Compound Not Detected.					
	86	tert-Butylbenzene	119	Compound Not Detected.					
	87	1,2,4-Trimethylbenzene	105	6.825	6.832	(0.963)	2239	0.13352	0.16(a)
	88	sec-Butylbenzene	105	Compound Not Detected.					
	89	p-Isopropyltoluene	119	Compound Not Detected.					
	90	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	91	1,4-Dichlorobenzene-d4	152	7.088	7.088	(1.000)	673602	100.000	
	92	1,4-Dichlorobenzene	146	Compound Not Detected.					
	93	1,2,3 Trimethylbenzene	105	7.106	7.106	(1.688)	1532	0.06863	0.081(aQ)
	94	n-Butylbenzene	91	Compound Not Detected.					
	95	1,2-Dichlorobenzene	146	Compound Not Detected.					
	96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
	97	Hexachlorobutadiene	225	Compound Not Detected.					
	98	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	99	Naphthalene	128	8.423	8.429	(1.188)	861	0.07445	0.088(a)
	100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
	101	2-Methylnaphthalene	142	9.038	9.045	(1.275)	398	0.48869	0.58(aQ)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014030.D
Report Date: 03-Feb-2014 09:16

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 013014030.D
Lab Smp Id: 10256148004
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Misc Info: 26253

Calibration Date: 30-JAN-2014
Calibration Time: 18:08
Client Smp ID: 10256148004
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	143148	71574	286296	162893	13.79
41 Pentafluorobenzen	1116303	558152	2232606	1134820	1.66
48 1,4 Difluorobenze	1540471	770236	3080942	1557296	1.09
53 1,4 dioxane d8	136838	68419	273676	120156	-12.19
67 Chlorobenzene-d5	1416803	708402	2833606	1358858	-4.09
91 1,4-Dichlorobenze	843357	421679	1686714	673602	-20.13

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.64	-0.46
41 Pentafluorobenzen	4.22	3.72	4.72	4.21	-0.15
48 1,4 Difluorobenze	4.50	4.00	5.00	4.49	-0.14
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.13
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

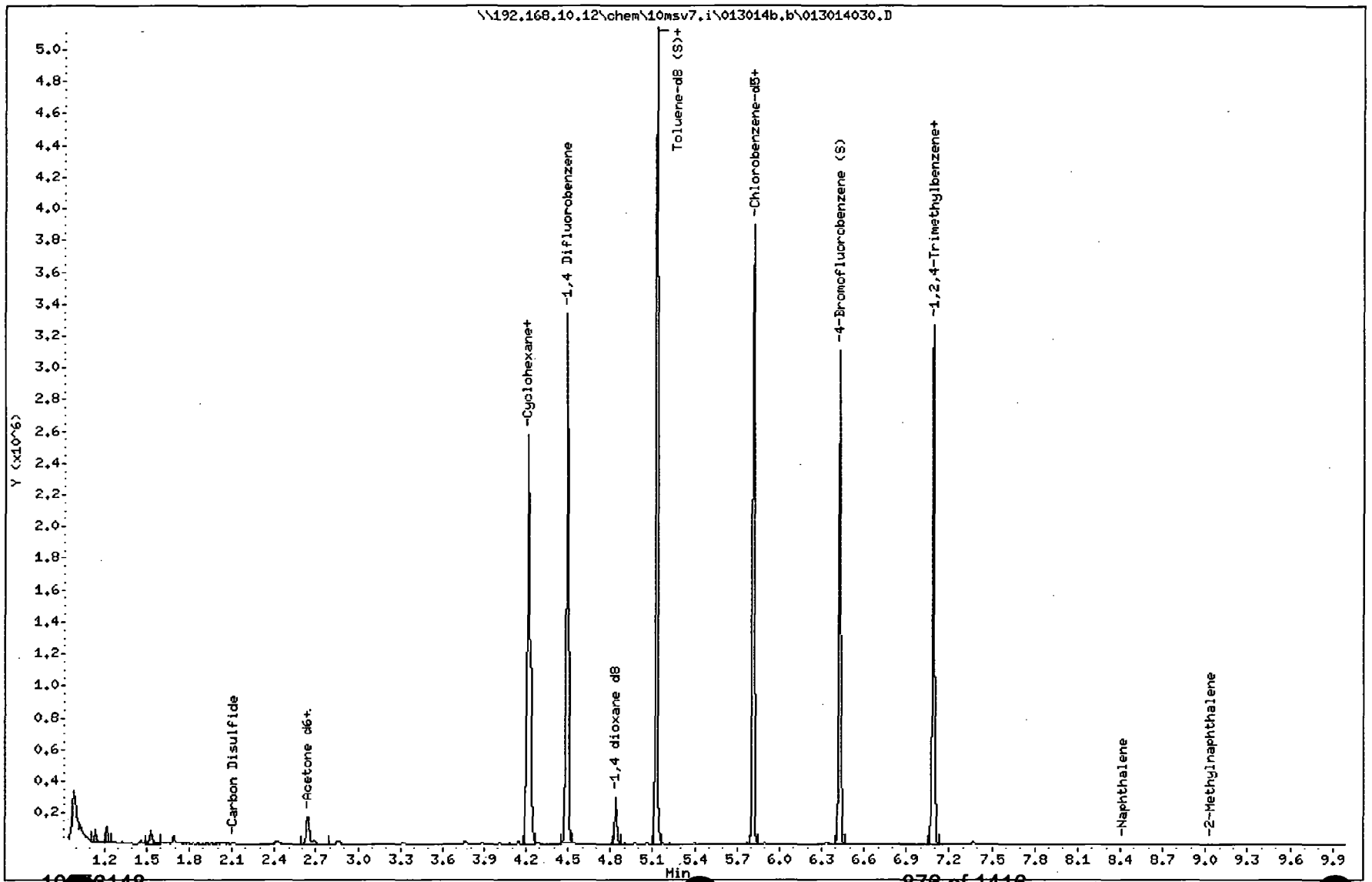
Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014030.D
Date : 30-JAN-2014 21:09
Client ID: 10256148004
Sample Info: 10256148004,5.92

Instrument: 10msv7.i

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



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Date : 30-JAN-2014 21:09

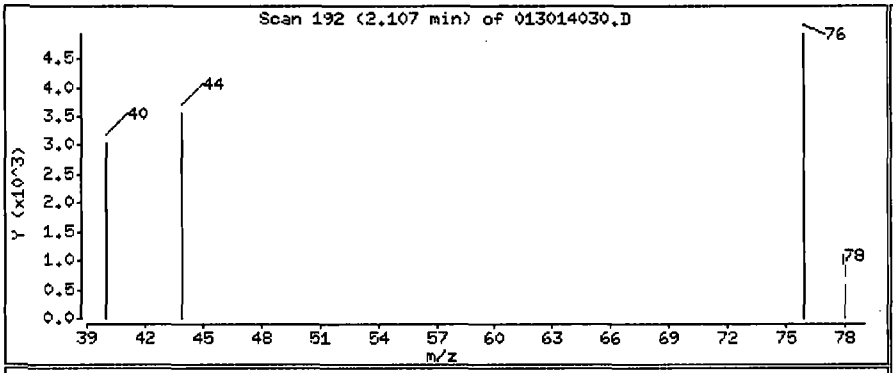
Client ID: 10256148004 Instrument: 10msv7.i

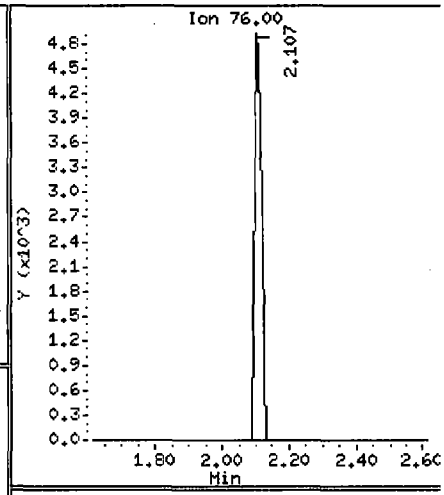
Sample Info: 10256148004,5.92

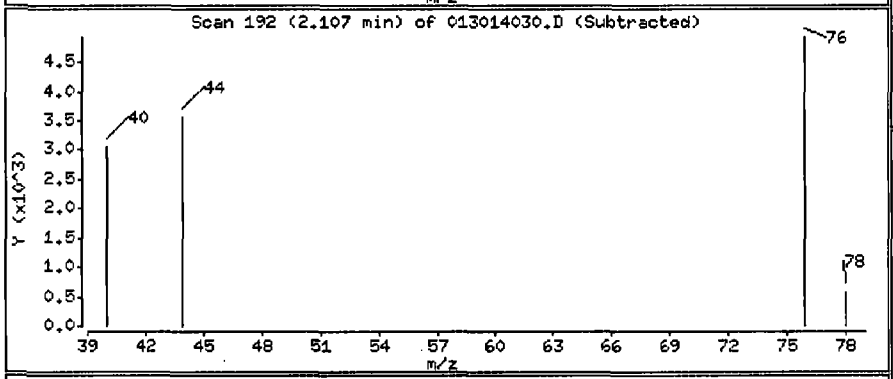
Operator: HBP

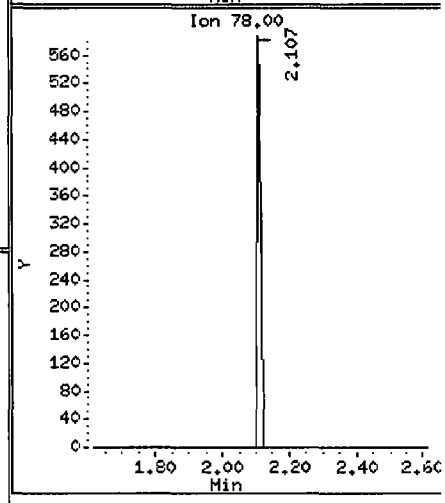
Column phase: Rtx-VMS Column diameter: 0.18

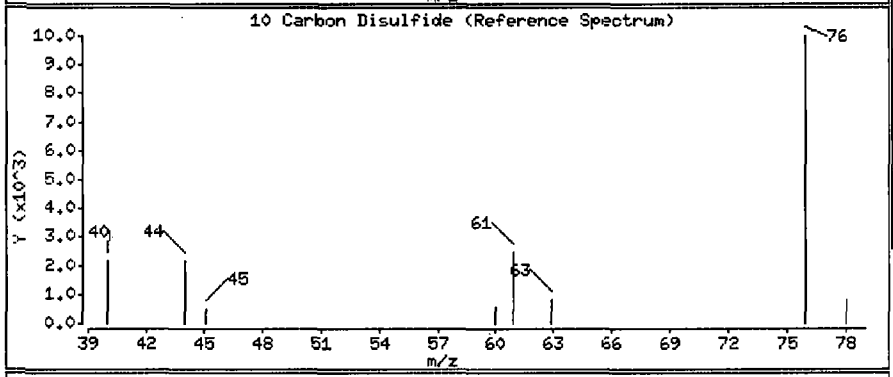
10 Carbon Disulfide Concentration: 0.53 ug/Kg

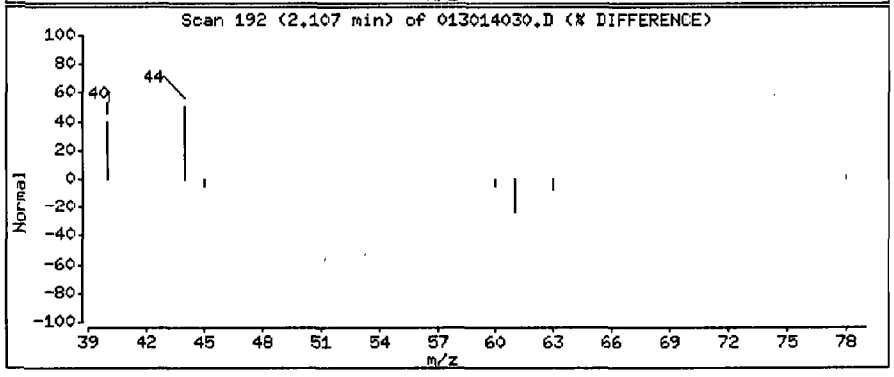












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Date : 30-JAN-2014 21:09

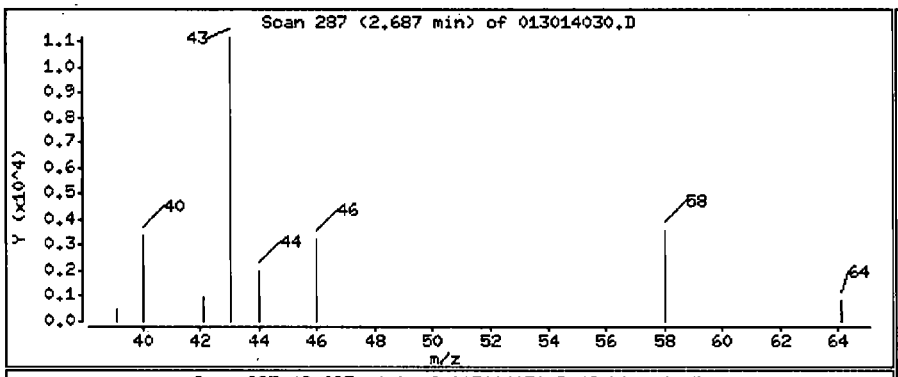
Client ID: 10256148004 Instrument: 10msv7.i

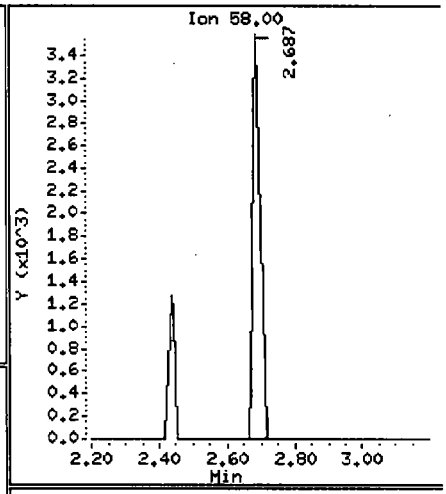
Sample Info: 10256148004,5,92

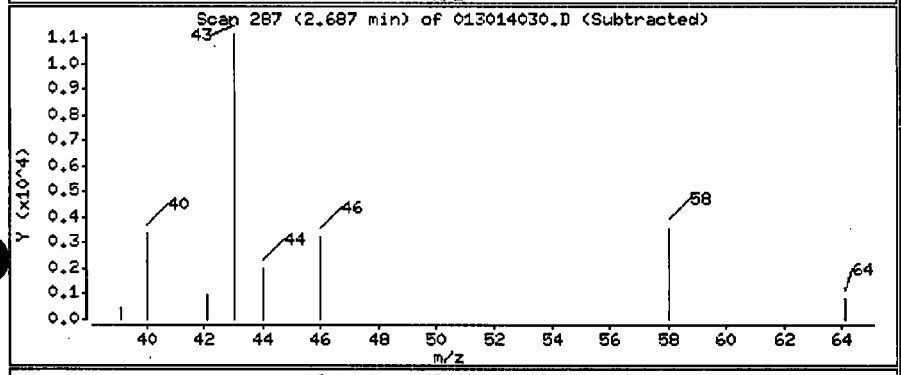
Operator: HBP

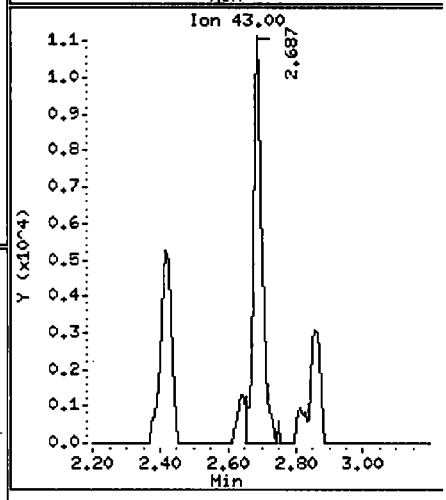
Column phase: Rtx-VMS Column diameter: 0.18

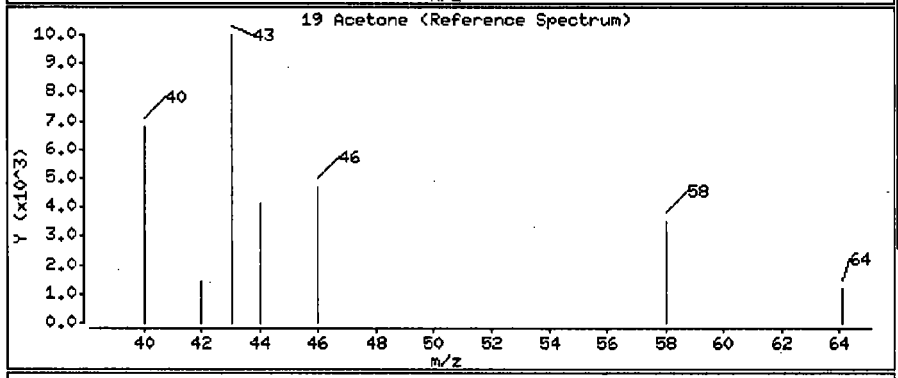
19 Acetone Concentration: 19.2 ug/Kg

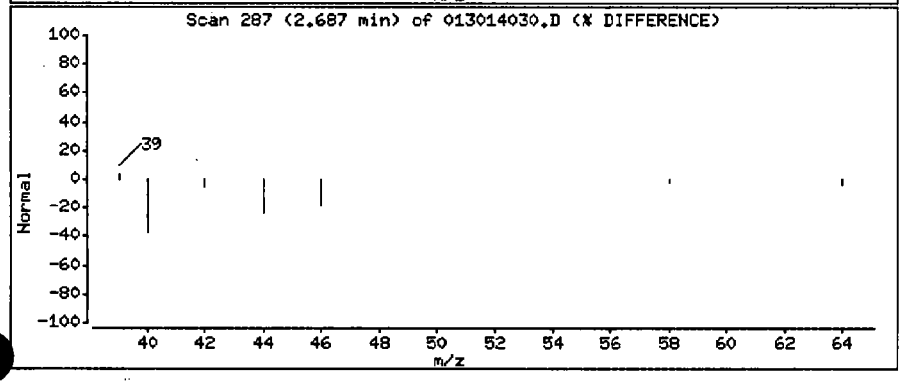












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Date : 30-JAN-2014 21:09

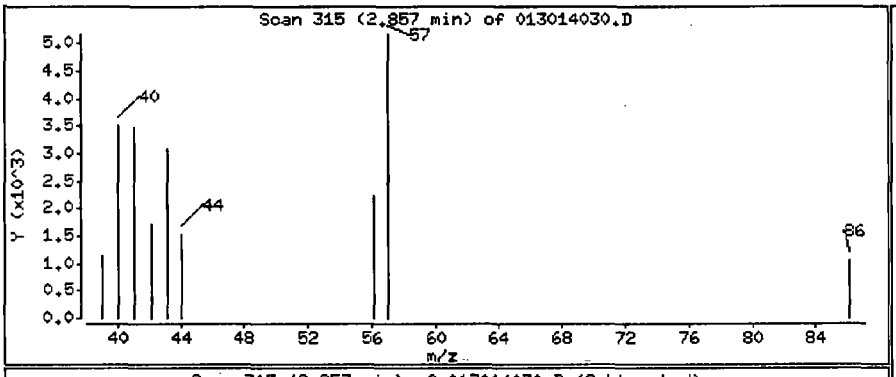
Client ID: 10256148004 Instrument: 10msv7.i

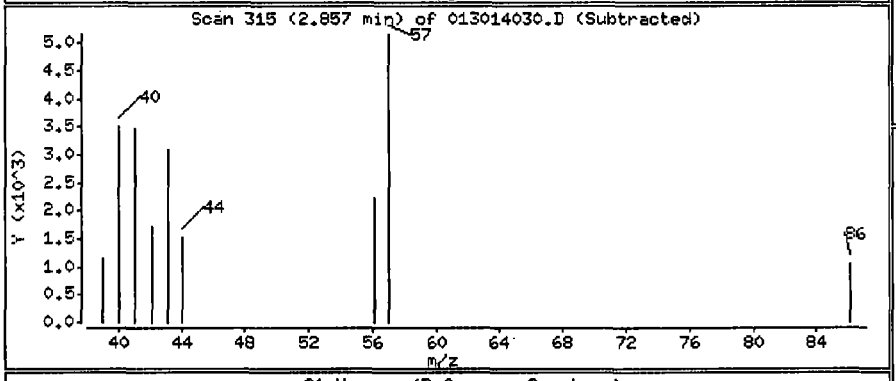
Sample Info: 10256148004,5.92

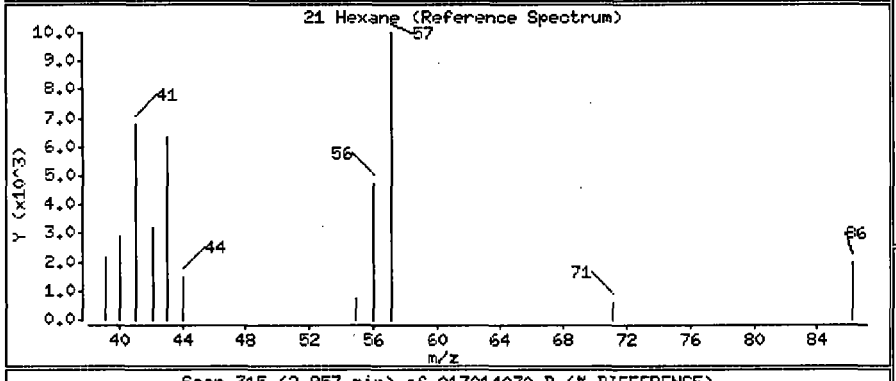
Operator: HBP

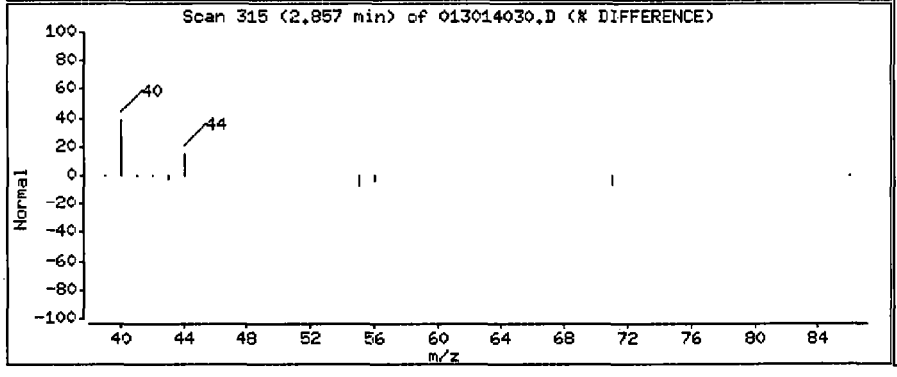
Column phase: Rtx-VMS Column diameter: 0.18

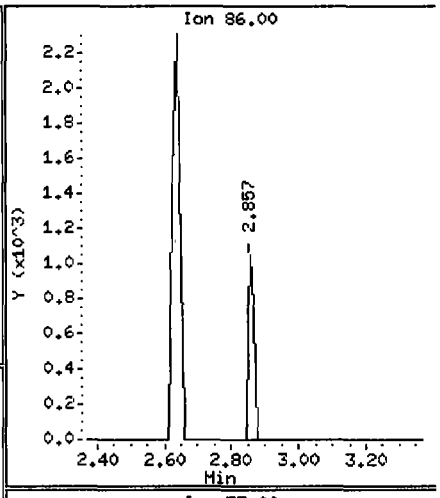
21 Hexane Concentration: 1.2 ug/Kg

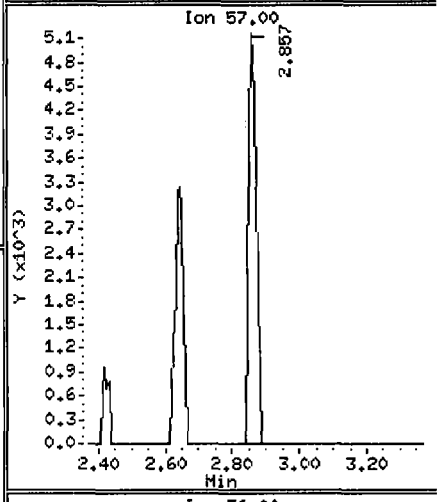


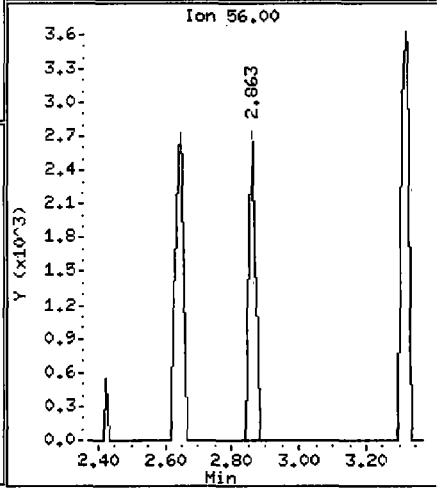












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Date : 30-JAN-2014 21:09

Client ID: 10256148004

Instrument: 10msv7.i

Sample Info: 10256148004,5.92

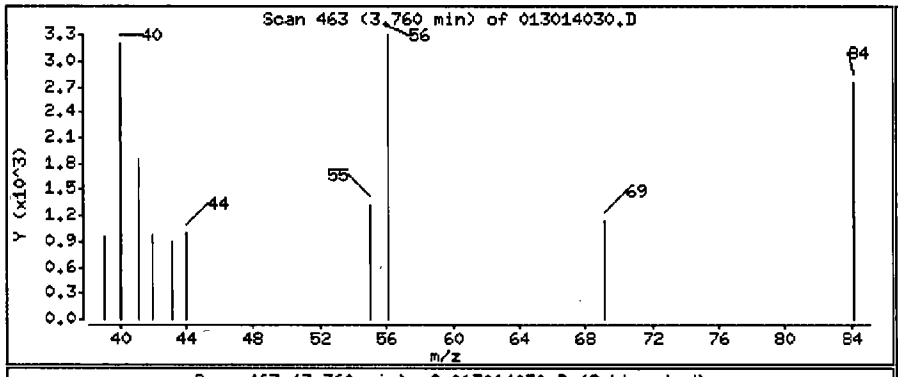
Operator: HBP

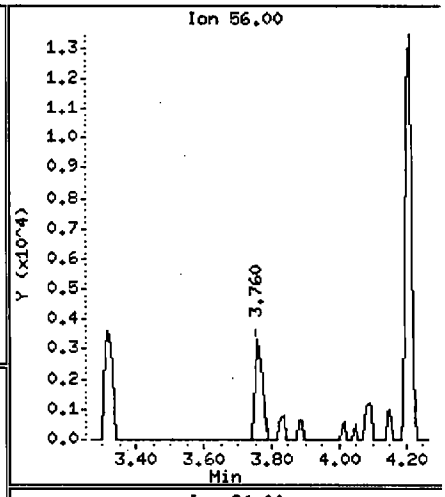
Column phase: Rtx-VMS

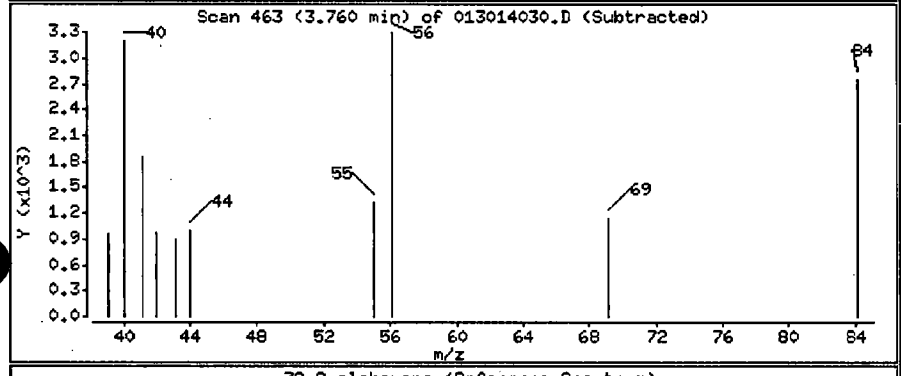
Column diameter: 0.18

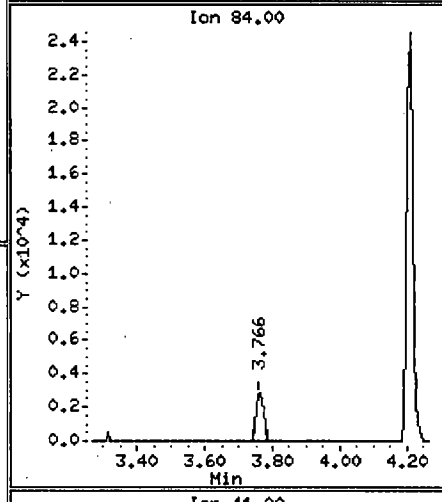
32 Cyclohexane

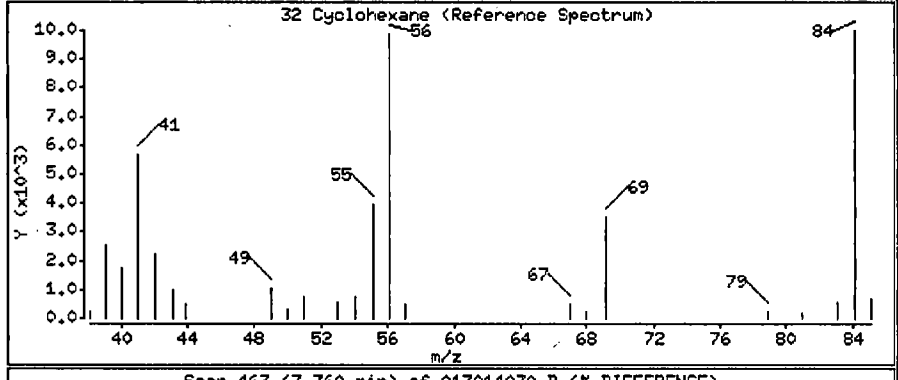
Concentration: 0.72 ug/Kg

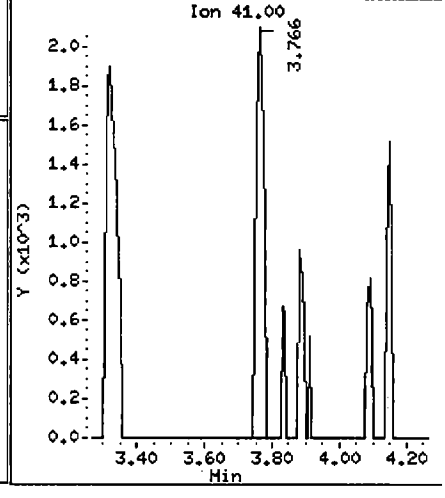


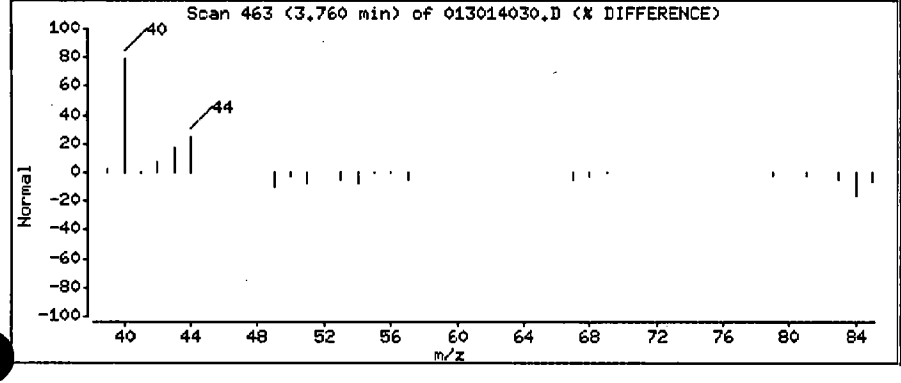












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Date : 30-JAN-2014 21:09

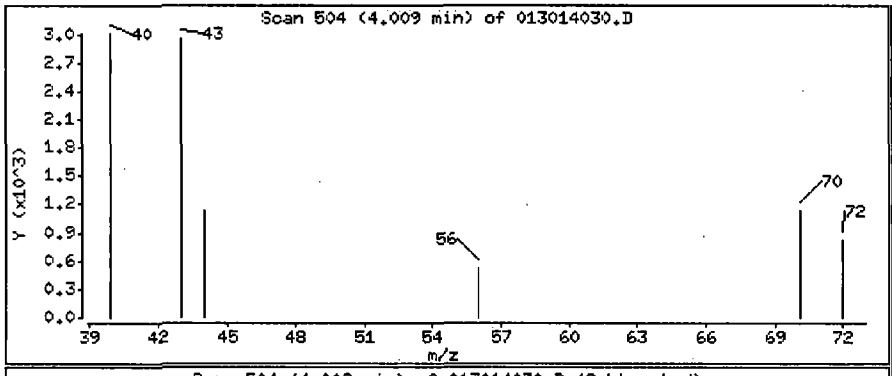
Client ID: 10256148004 Instrument: 10msv7.i

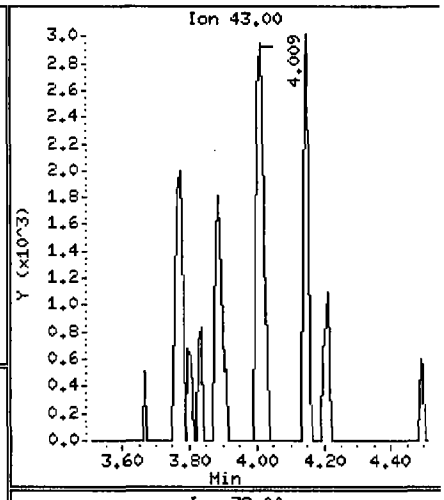
Sample Info: 10256148004,5.92

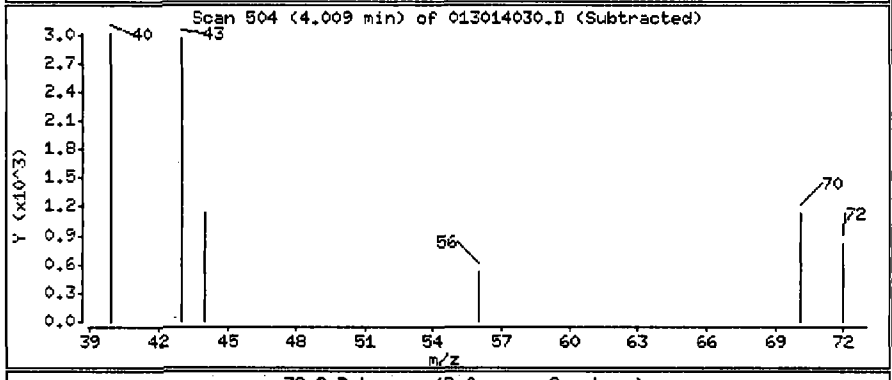
Operator: HBP

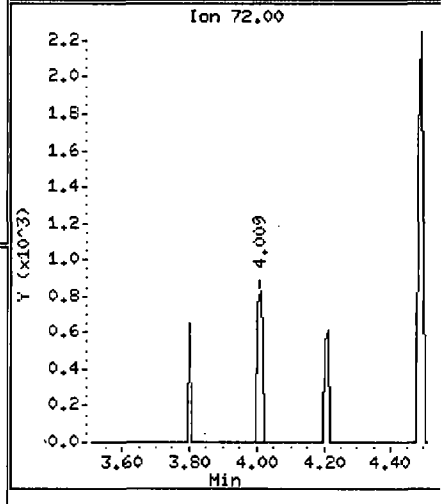
Column phase: Rtx-VMS Column diameter: 0.18

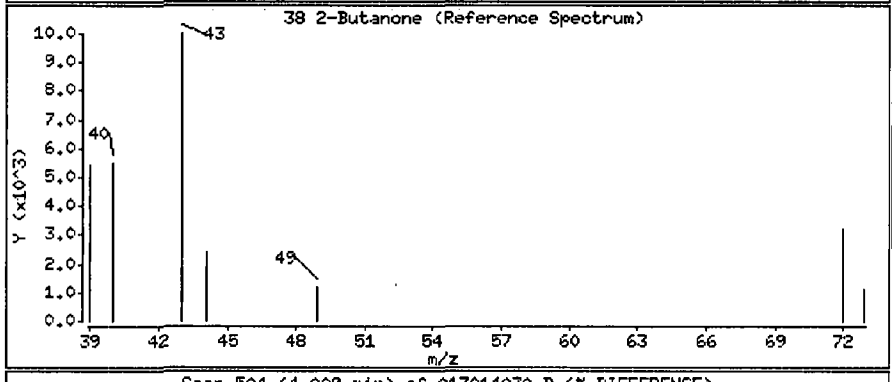
38 2-Butanone Concentration: 3.7 ug/Kg

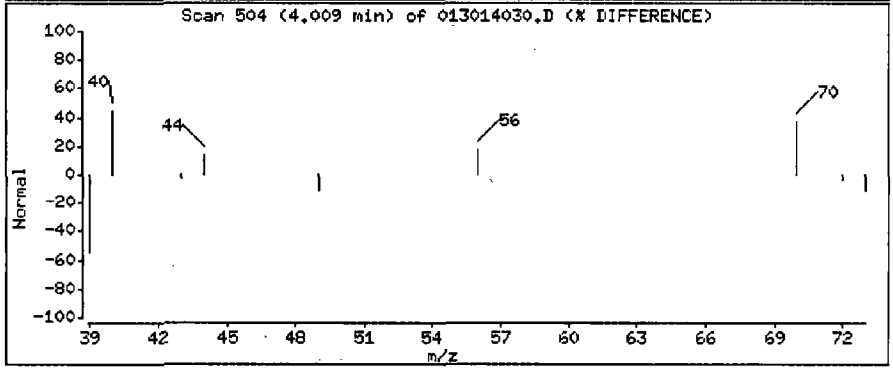












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Date : 30-JAN-2014 21:09

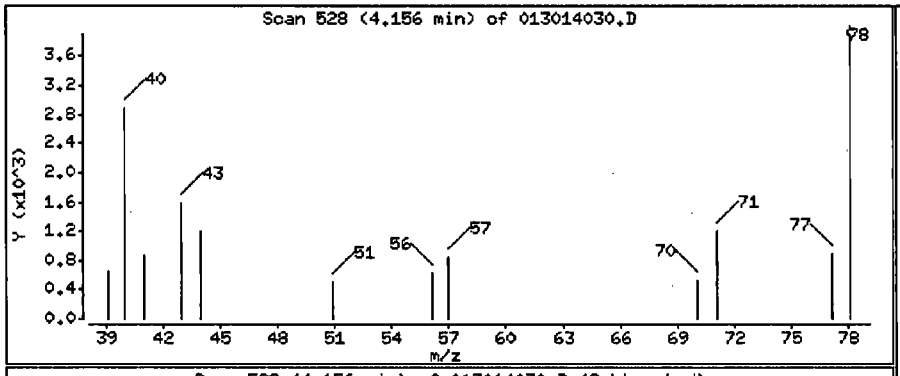
Client ID: 10256148004 Instrument: 10msv7.i

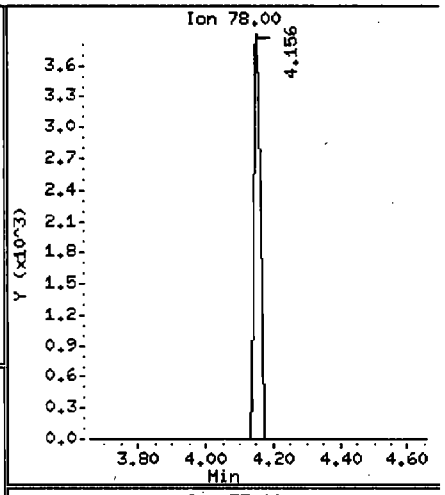
Sample Info: 10256148004,5.92

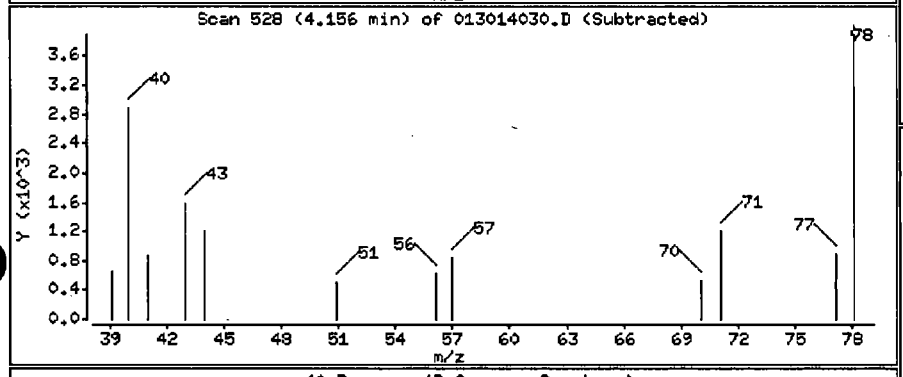
Operator: HBP

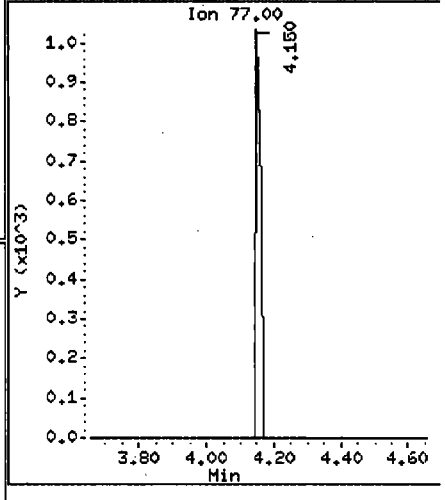
Column phase: Rtx-VMS Column diameter: 0.18

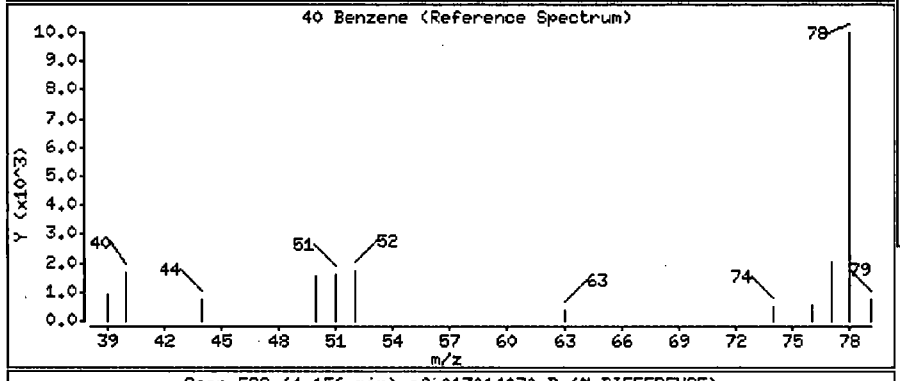
40 Benzene Concentration: 0.30 ug/Kg

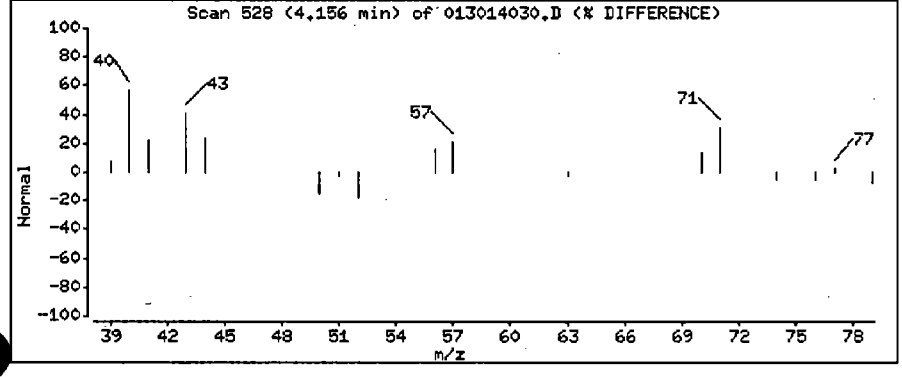












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Date : 30-JAN-2014 21:09

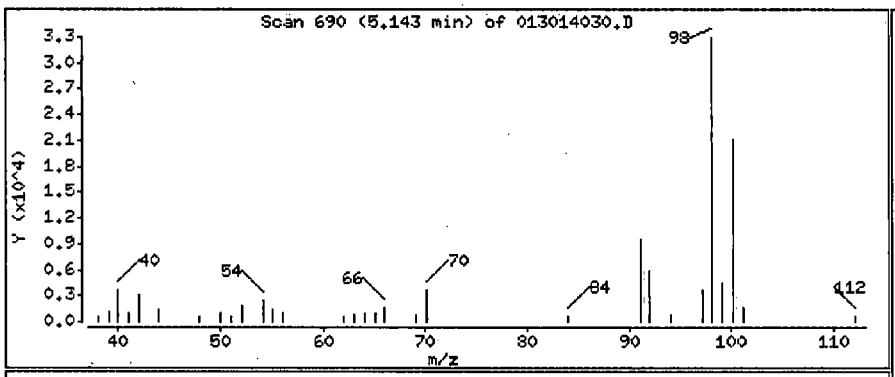
Client ID: 10256148004 Instrument: 10msv7.i

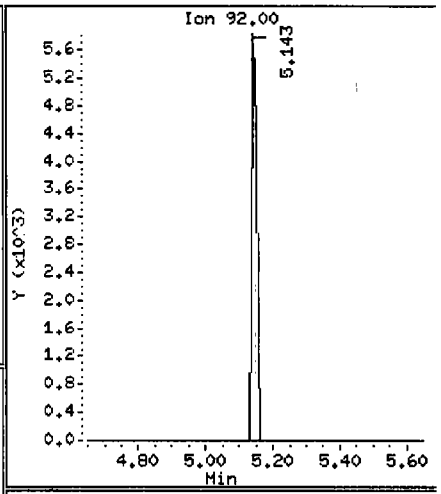
Sample Info: 10256148004,5.92

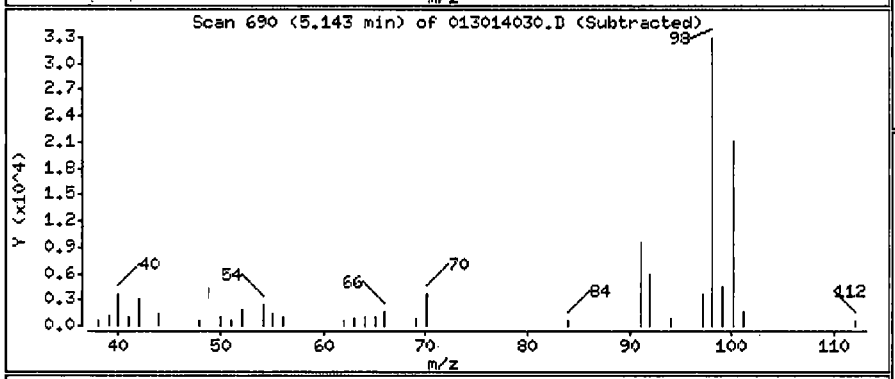
Operator: HBP

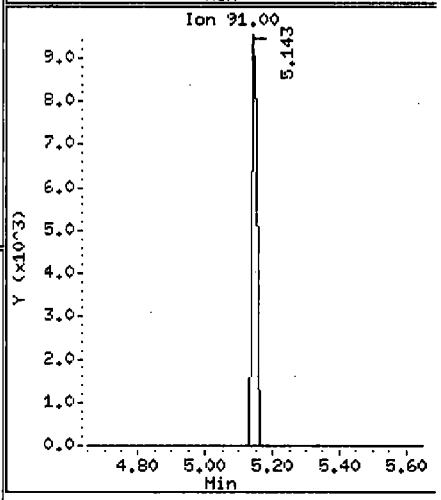
Column phase: Rtx-VMS Column diameter: 0.18

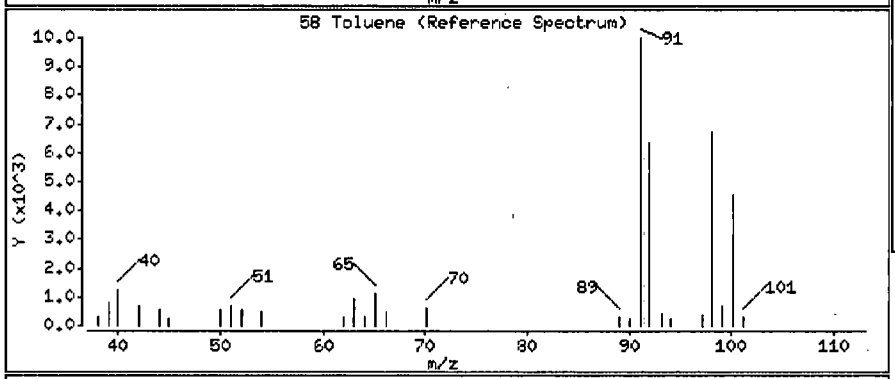
58 Toluene Concentration: 0.48 ug/Kg

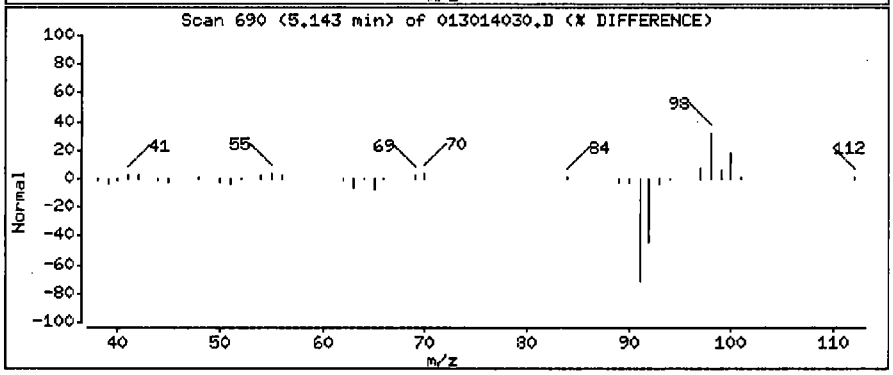












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Date : 30-JAN-2014 21:09

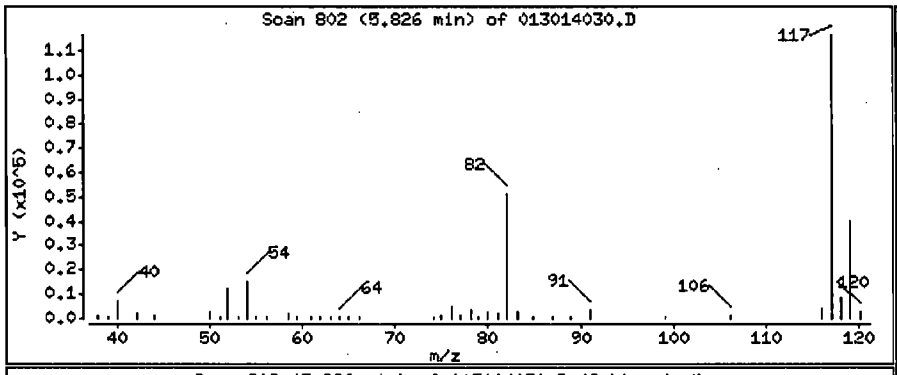
Client ID: 10256148004 Instrument: 10msv7.i

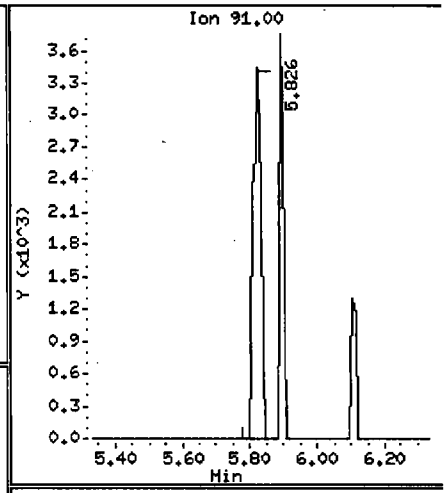
Sample Info: 10256148004,5.92

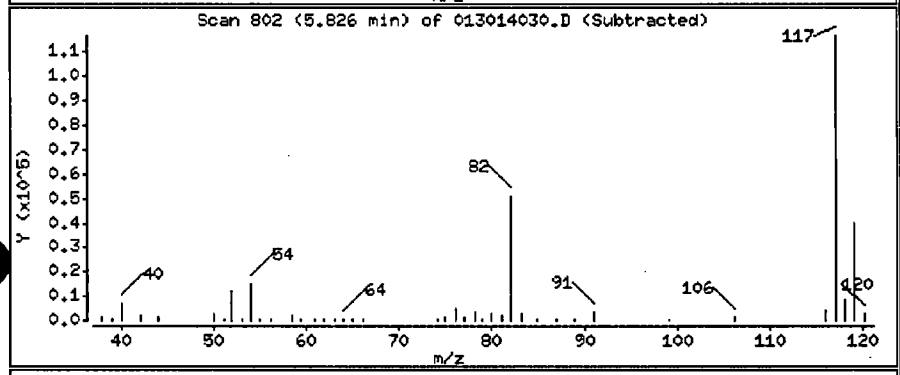
Operator: HBP

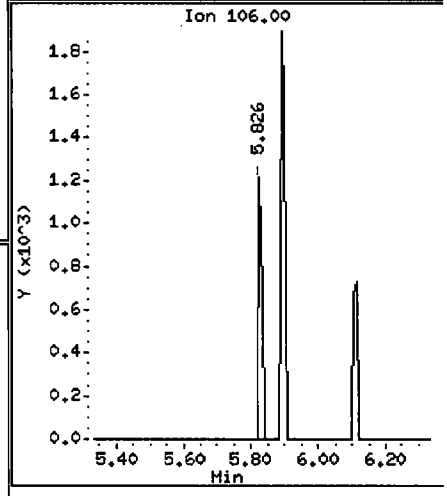
Column phase: Rtx-VMS Column diameter: 0.18

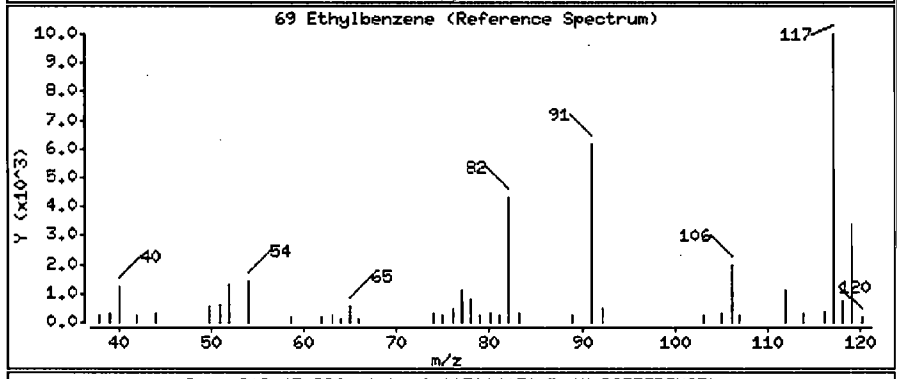
69 Ethylbenzene Concentration: 0.26 ug/Kg

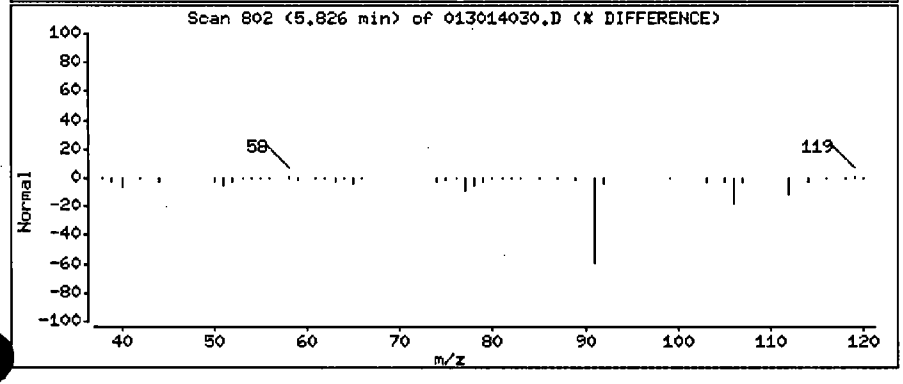












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Date : 30-JAN-2014 21:09

Client ID: 10256148004

Instrument: 10msv7.i

Sample Info: 10256148004,5.92

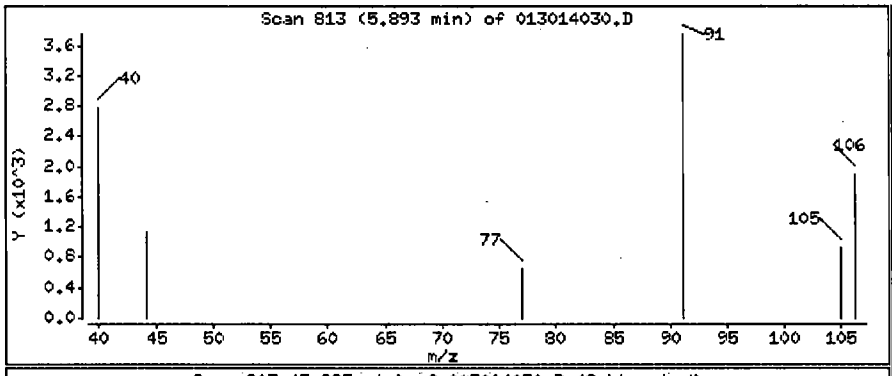
Operator: HBP

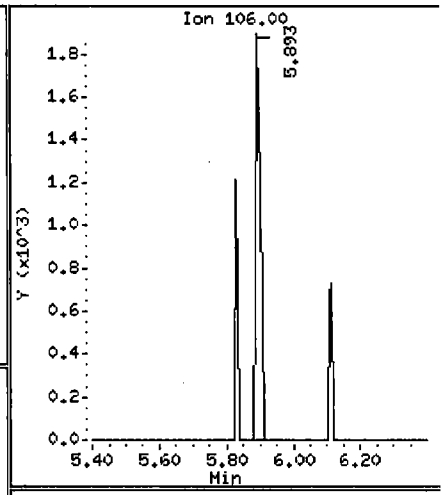
Column phase: Rtx-VMS

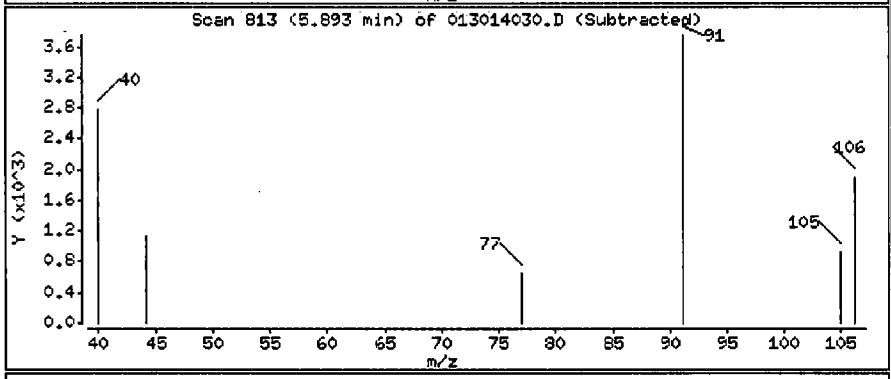
Column diameter: 0.18

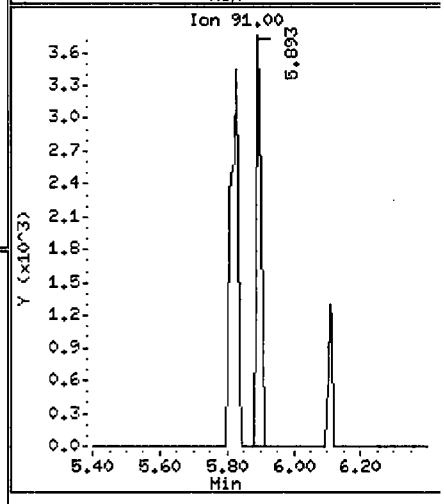
71 M&P-Xylene

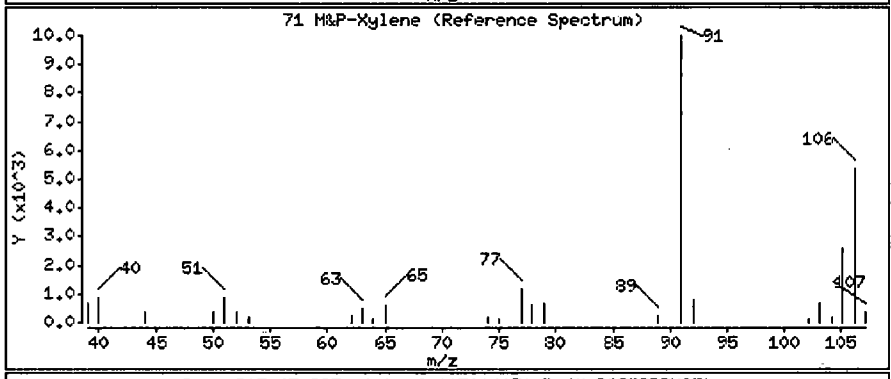
Concentration: 0.23 ug/Kg

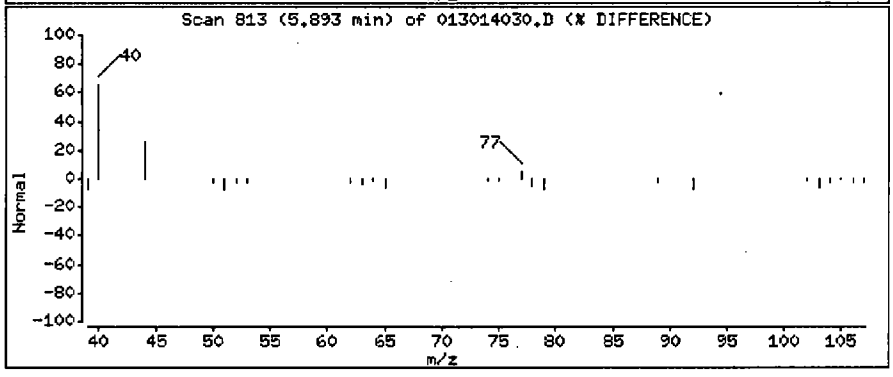












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Date : 30-JAN-2014 21:09

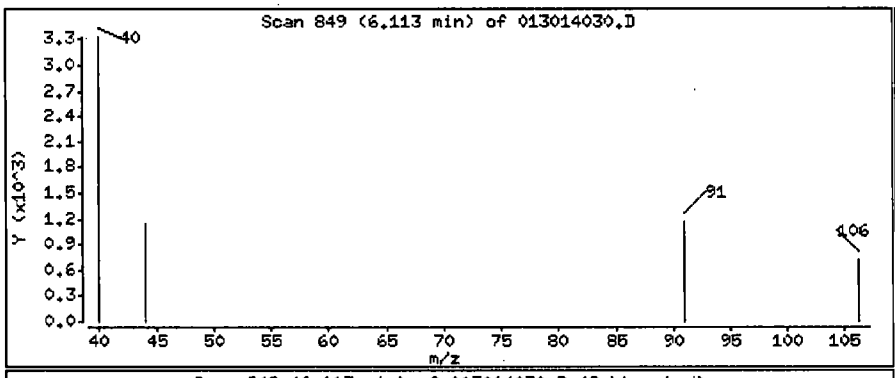
Client ID: 10256148004 Instrument: 10msv7.i

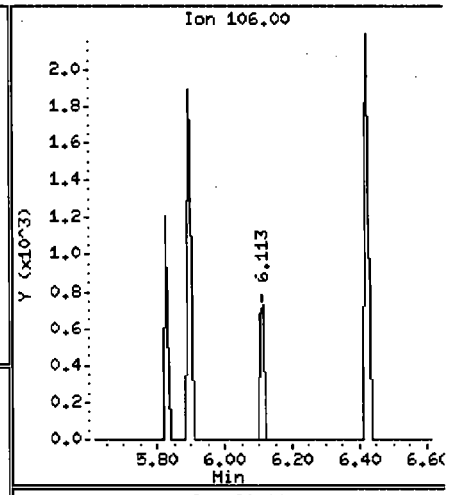
Sample Info: 10256148004,5.92

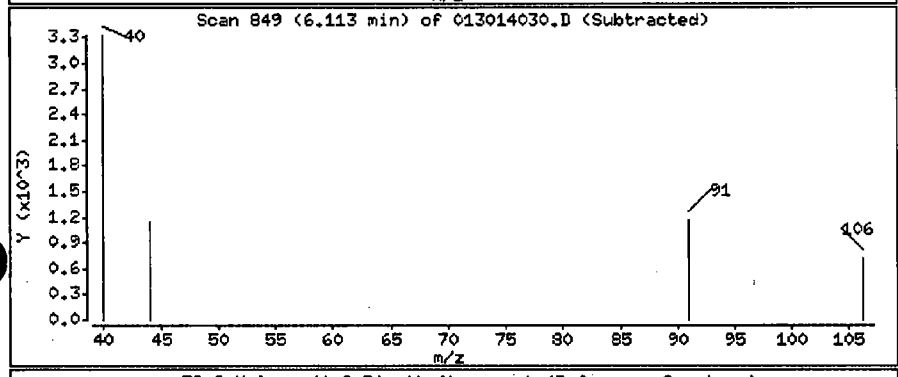
Operator: HBP

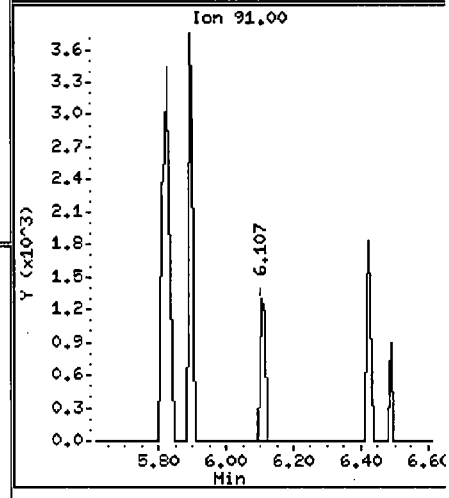
Column phase: Rtx-VMS Column diameter: 0.18

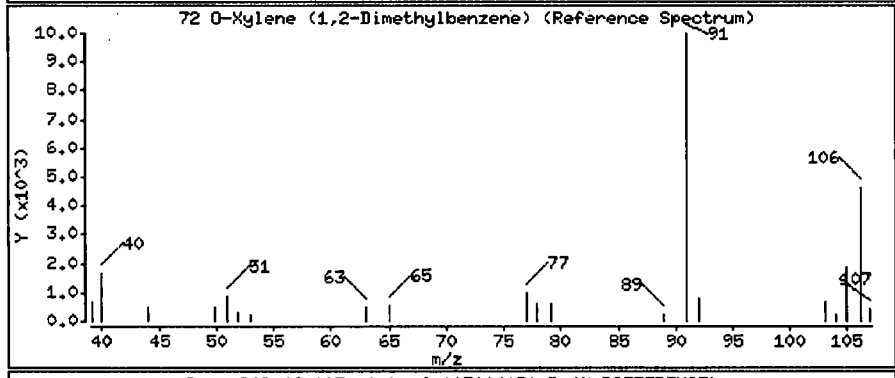
72 O-Xylene (1,2-Dimethylbenzene) Concentration: 0.070 ug/Kg

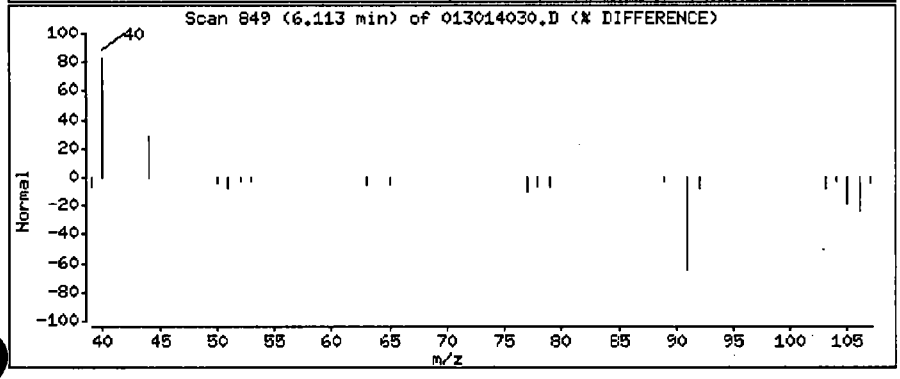












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Date : 30-JAN-2014 21:09

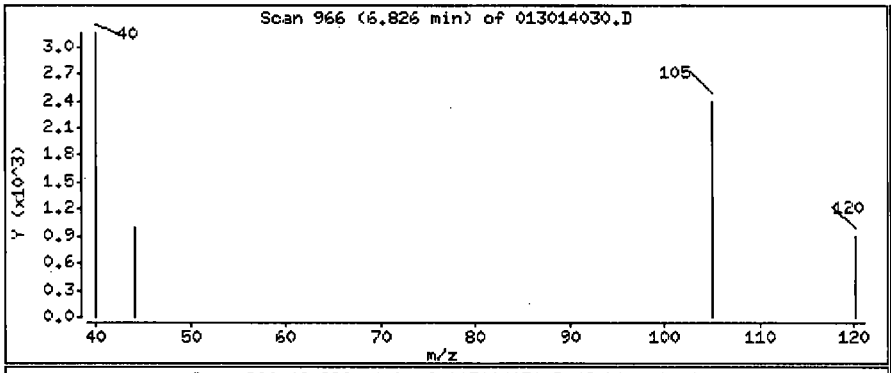
Client ID: 10256148004 Instrument: 10msv7.i

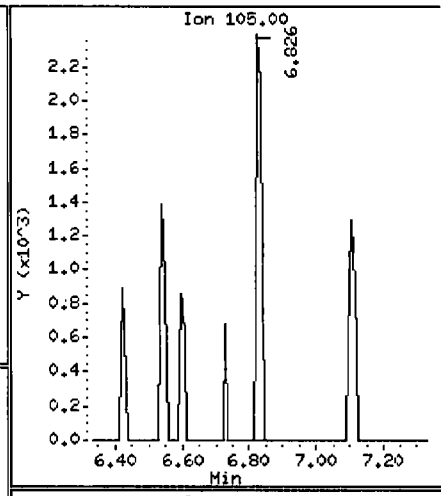
Sample Info: 10256148004,5.92

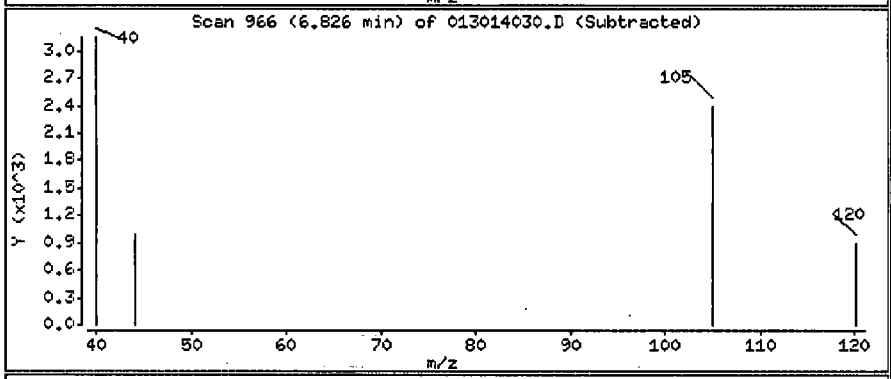
Operator: HBP

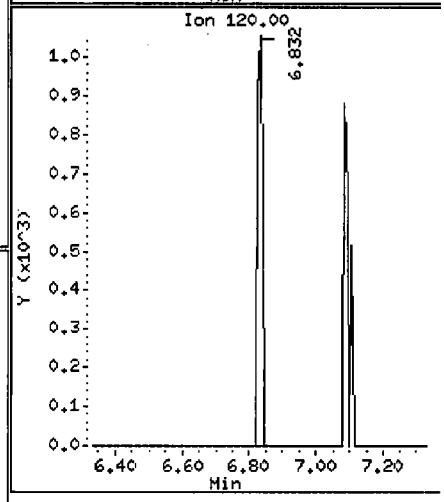
Column phase: Rtx-VMS Column diameter: 0.18

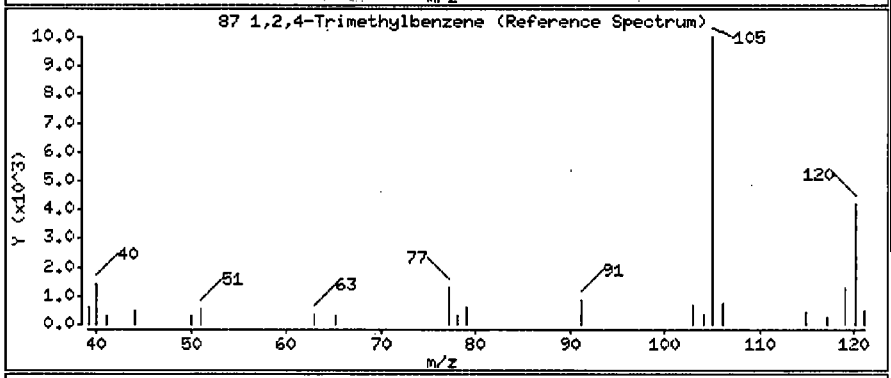
87 1,2,4-Trimethylbenzene Concentration: 0.16 ug/Kg

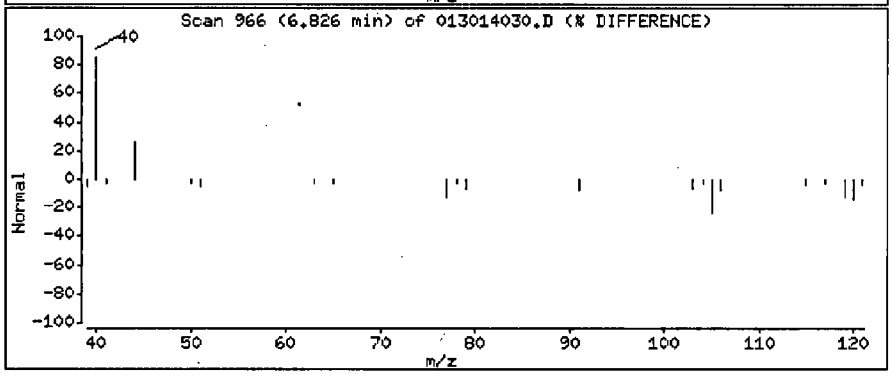












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014030.D

Date : 30-JAN-2014 21:09

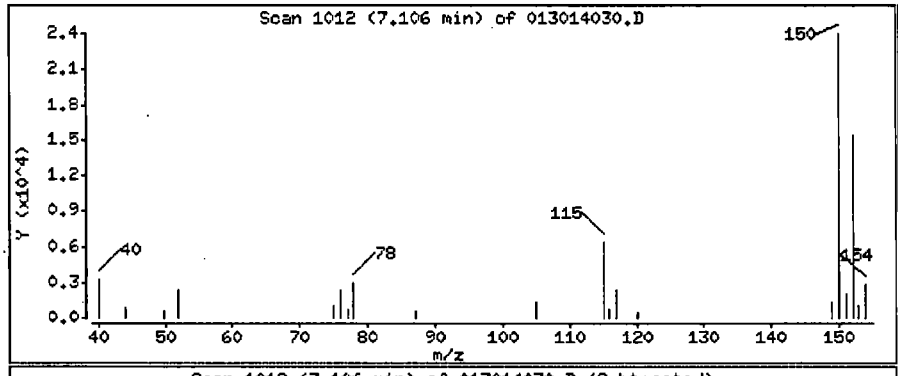
Client ID: 10256148004 Instrument: 10msv7.i

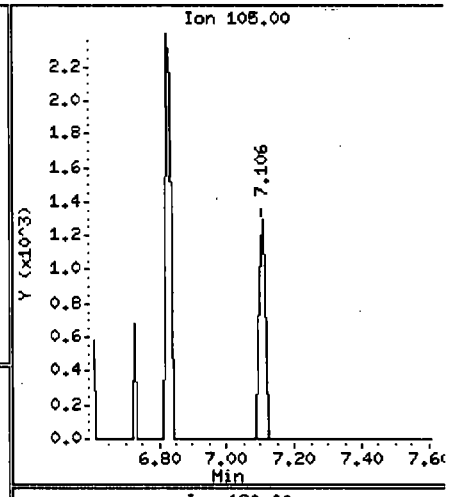
Sample Info: 10256148004,5.92

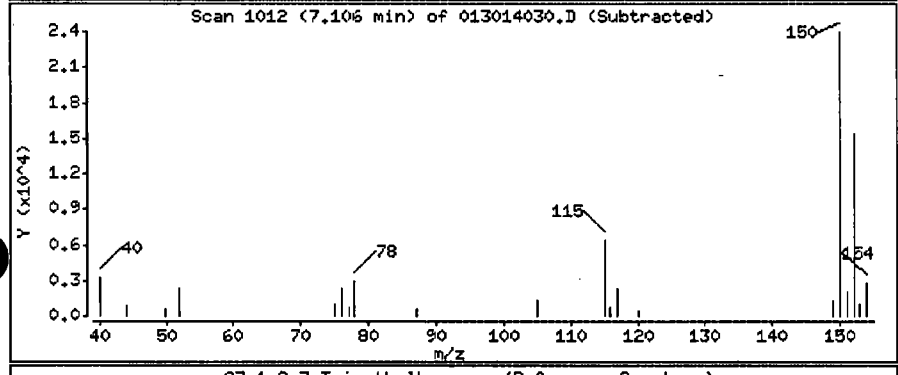
Operator: HBP

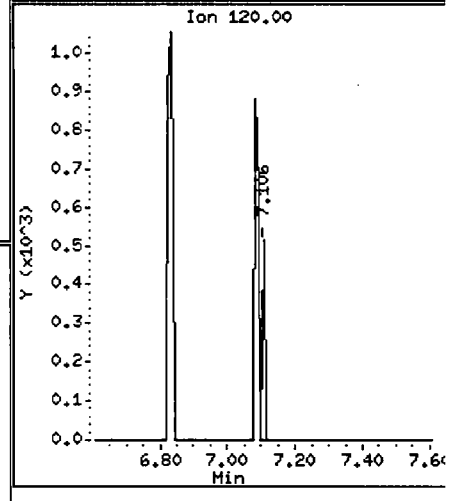
Column phase: Rtx-VMS Column diameter: 0.18

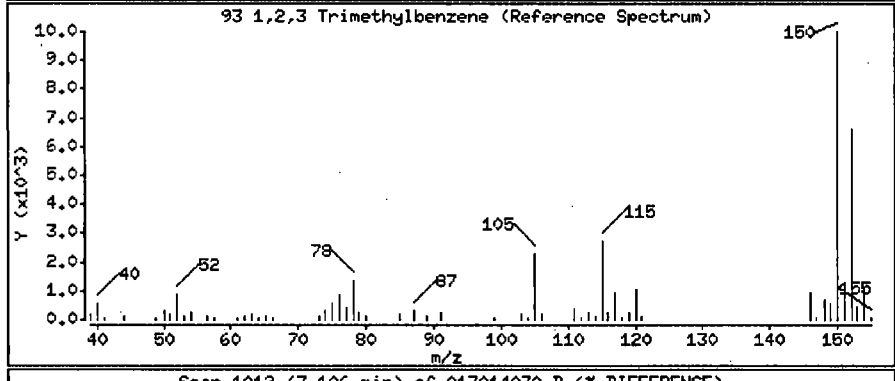
93 1,2,3 Trimethylbenzene Concentration: 0.081 ug/Kg

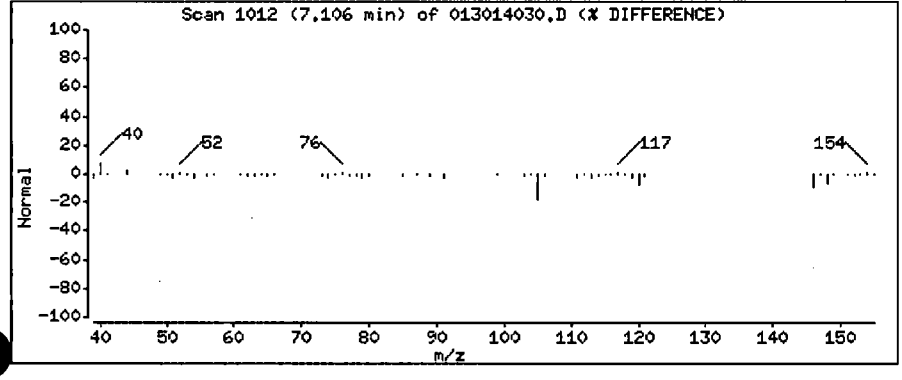












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014030.D

Date : 30-JAN-2014 21:09

Client ID: 10256148004

Instrument: 10msv7.i

Sample Info: 10256148004,5.92

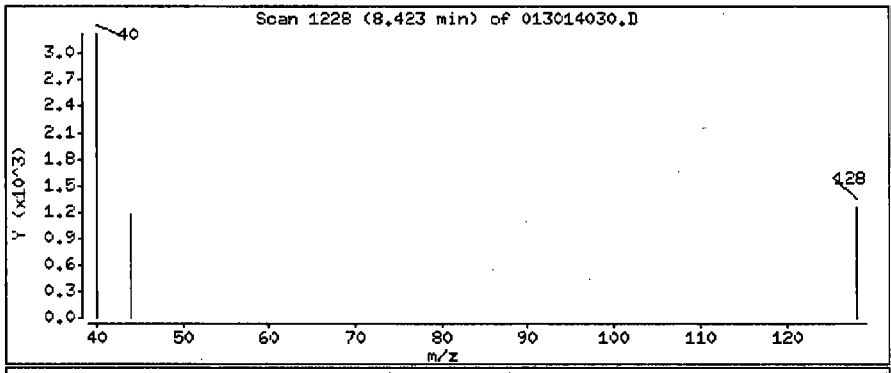
Operator: HBP

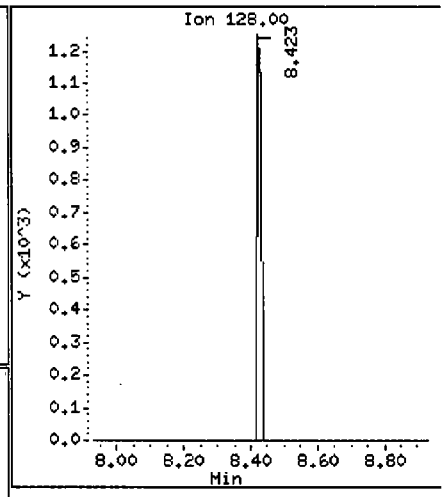
Column phase: Rtx-VMS

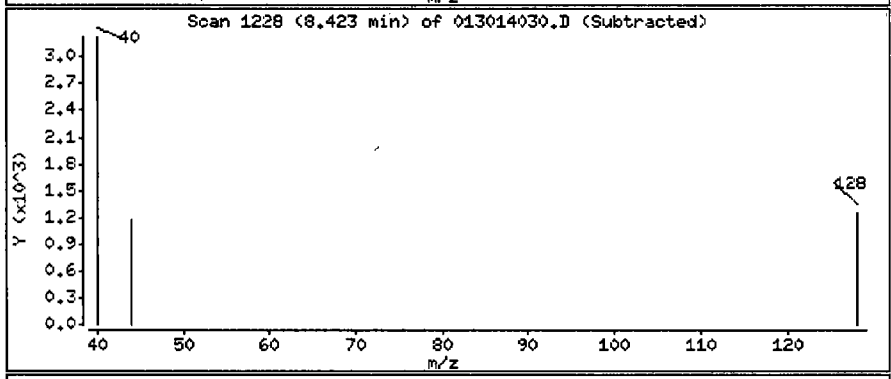
Column diameter: 0.18

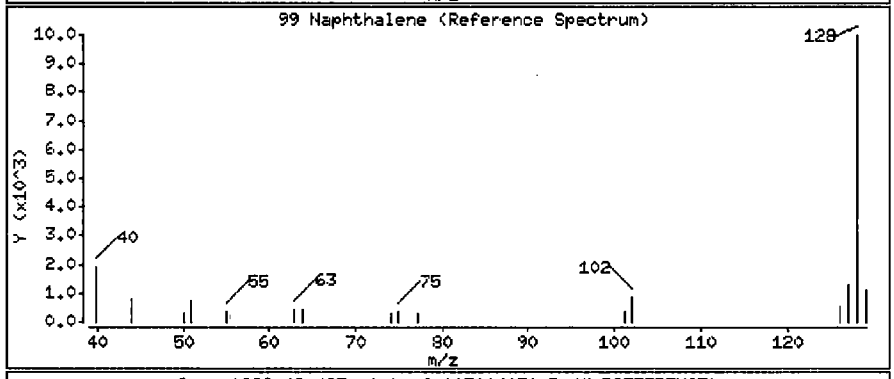
99 Naphthalene

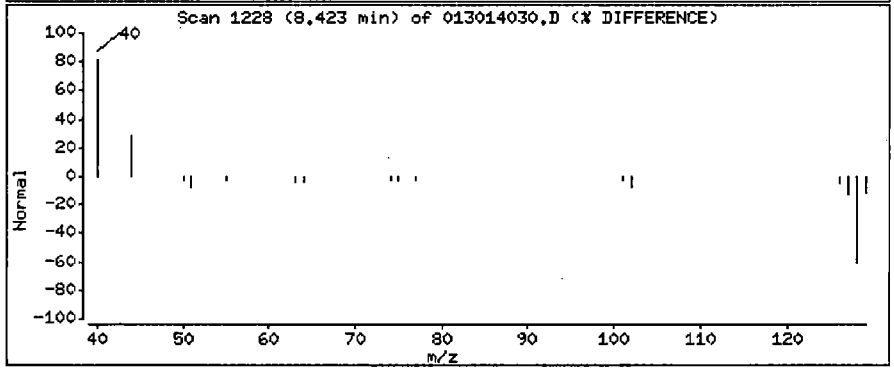
Concentration: 0.088 ug/Kg











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Date : 30-JAN-2014 21:09

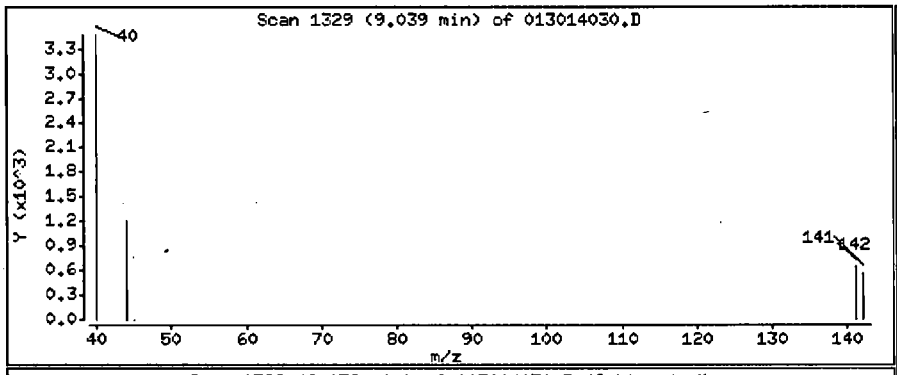
Client ID: 10256148004 Instrument: 10msv7.i

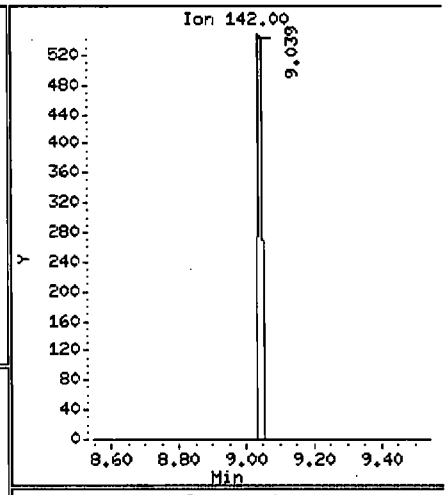
Sample Info: 10256148004,5.92

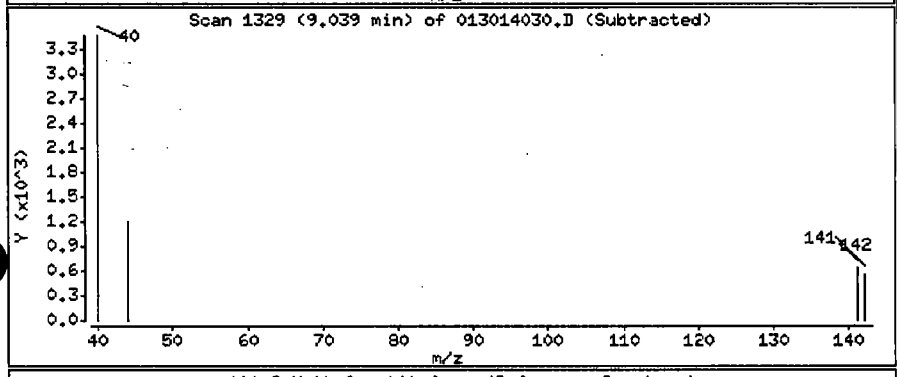
Operator: HBP

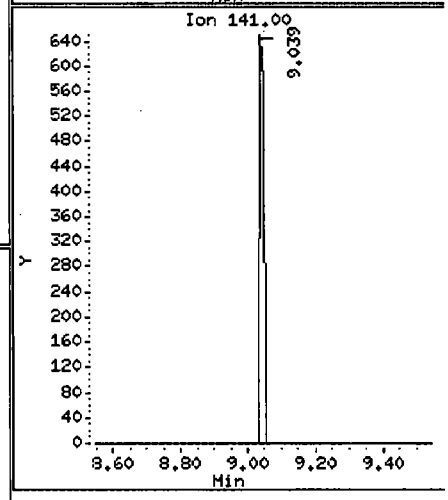
Column phase: Rtx-VMS Column diameter: 0.18

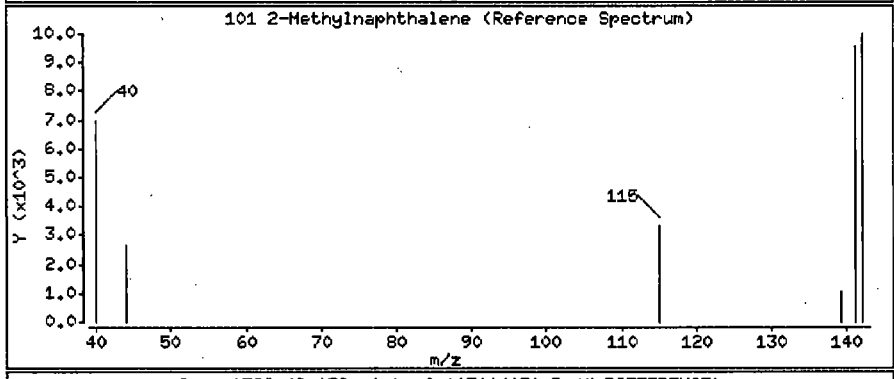
101 2-Methylnaphthalene Concentration: 0.58 ug/Kg

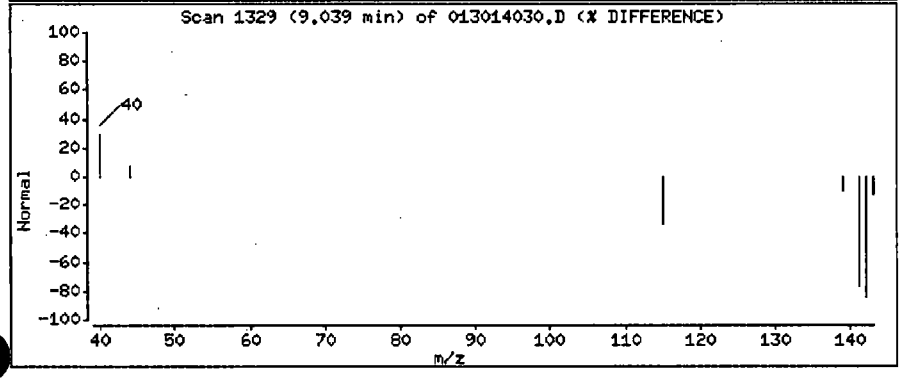












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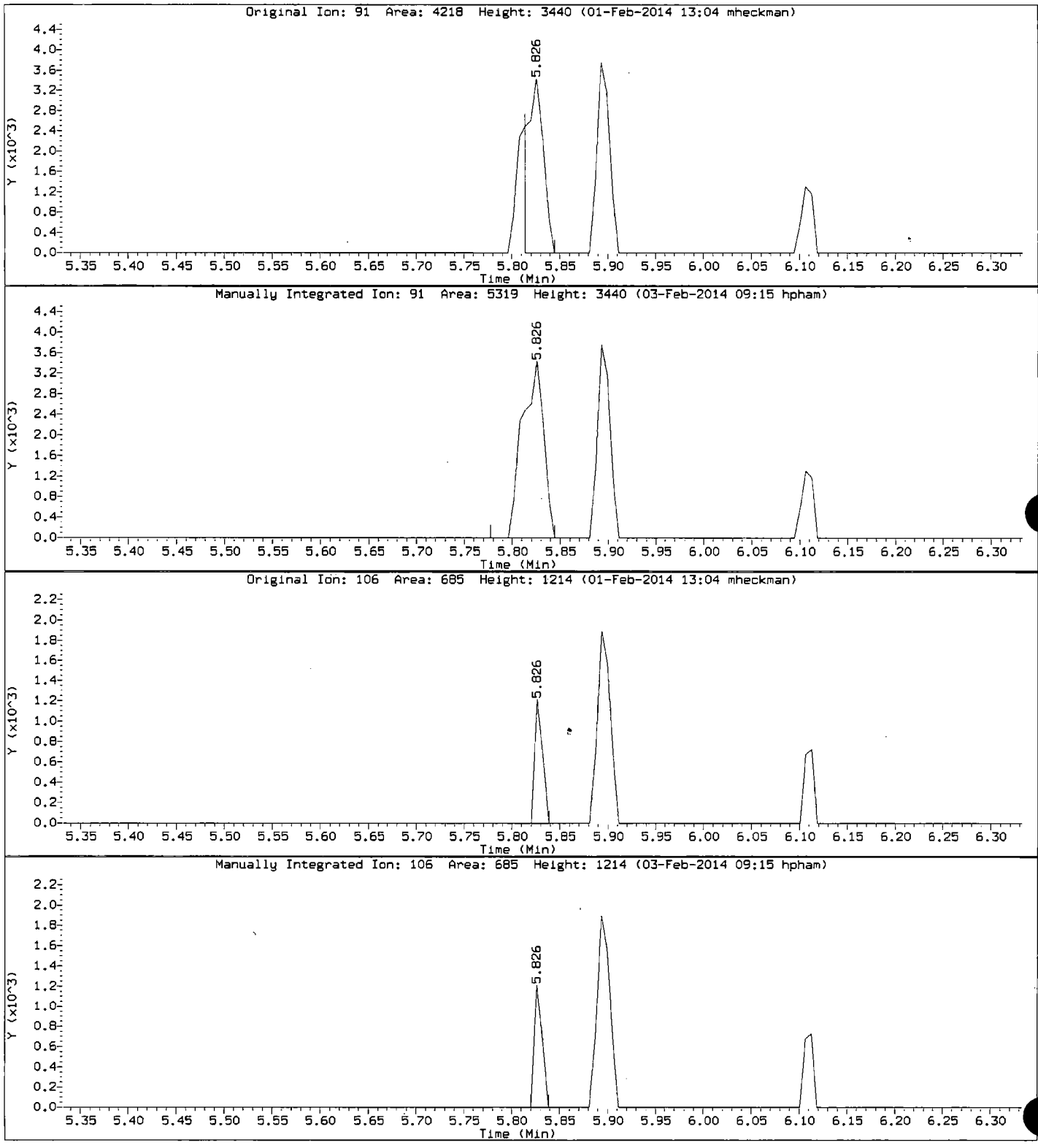
Injection Date: 30-JAN-2014 21:09
Instrument: 10msv7.i
Lab Sample ID: 10256148004

Compound: Ethylbenzene
CAS Number: 100-41-4



Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014031.D
Report Date: 03-Feb-2014 09:16

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\013014b.b\013014031.D
Lab Smp Id: 10256148005 Client Smp ID: 10256148005
Inj Date : 30-JAN-2014 21:27
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10256148005,6.48
Misc Info : 26253
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Meth Date : 03-Feb-2014 07:51 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 31
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	6.480	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.107	2.113	(0.500)	4981	0.33249	0.43(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	2.211	2.223	(0.525)	1586	2.79213	3.6(a)
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	2.631	2.643	(0.625)	8216	0.48229	0.62(a)
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.637	2.649	(1.000)	142805	200.000	
19	Acetone	58	2.686	2.698	(1.018)	13848	51.9924	67.4
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014031.D
Report Date: 03-Feb-2014 09:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	21 Hexane	86	Compound Not Detected.					
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	Compound Not Detected.					
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	4.009	4.009	(0.952)	7909	5.52894	7.2
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	4.155	4.155	(0.987)	2636	0.13838	0.18(a)
*	41 Pentafluorobenzene	168	4.210	4.216	(1.000)	1132659	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
S	43 1,2-Dichloroethane d4 (S)	65	4.228	4.235	(1.004)	453606	108.265	108
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.491	4.497	(1.000)	1583381	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.838	4.844	(1.000)	148585	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
S	57 Toluene-d8 (S)	98	5.125	5.125	(0.882)	1827957	98.0736	98.1
	58 Toluene	92	5.149	5.149	(0.886)	2317	0.17332	0.22(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	5.314	5.314	(0.914)	1232	0.19338	0.25(a)
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	5.673	5.673	(0.976)	3709	1.48869	1.9(aQ)
*	67 Chlorobenzene-d5	117	5.814	5.814	(1.000)	1478530	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	Compound Not Detected.					
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.893	5.899	(1.014)	720	0.07348	0.095(aQ)
	72 O-Xylene (1,2-Dimethylbenzene)	106	Compound Not Detected.					
	73 Styrene	104	Compound Not Detected.					
	74 Bromoform	173	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014031.D
Report Date: 03-Feb-2014 09:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
75	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$ 76	4-Bromofluorobenzene (S)	95	6.423	6.423	(0.906)	719821	101.387	101
77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
78	Bromobenzene	156	Compound Not Detected.					
79	n-Propylbenzene	91	Compound Not Detected.					
80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
81	2-Chlorotoluene	91	Compound Not Detected.					
82	1,3,5-Trimethylbenzene	105	Compound Not Detected.					
83	1,2,3-Trichloropropane	110	Compound Not Detected.					
84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
85	4-Chlorotoluene	91	Compound Not Detected.					
86	tert-Butylbenzene	119	Compound Not Detected.					
87	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
88	sec-Butylbenzene	105	Compound Not Detected.					
89	p-Isopropyltoluene	119	Compound Not Detected.					
90	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 91	1,4-Dichlorobenzene-d4	152	7.088	7.088	(1.000)	877827	100.000	
92	1,4-Dichlorobenzene	146	Compound Not Detected.					
93	1,2,3 Trimethylbenzene	105	7.106	7.106	(1.688)	17419	0.78187	1.0(aQ)
94	n-Butylbenzene	91	Compound Not Detected.					
95	1,2-Dichlorobenzene	146	Compound Not Detected.					
96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
97	Hexachlorobutadiene	225	Compound Not Detected.					
98	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
99	Naphthalene	128	8.429	8.429	(1.189)	1181	0.07836	0.10(a)
100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
101	2-Methylnaphthalene	142	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014031.D
Report Date: 03-Feb-2014 09:16

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 013014031.D
Lab Smp Id: 10256148005
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Calibration Date: 30-JAN-2014
Calibration Time: 18:08
Client Smp ID: 10256148005
Level: LOW
Sample Type: SOIL
Method File: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Misc Info: 26253

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143148	71574	286296	142805	-0.24
41 Pentafluorobenzen	1116303	558152	2232606	1132659	1.47
48 1,4 Difluorobenze	1540471	770236	3080942	1583381	2.79
53 1,4 dioxane d8	136838	68419	273676	148585	8.58
67 Chlorobenzene-d5	1416803	708402	2833606	1478530	4.36
91 1,4-Dichlorobenze	843357	421679	1686714	877827	4.09

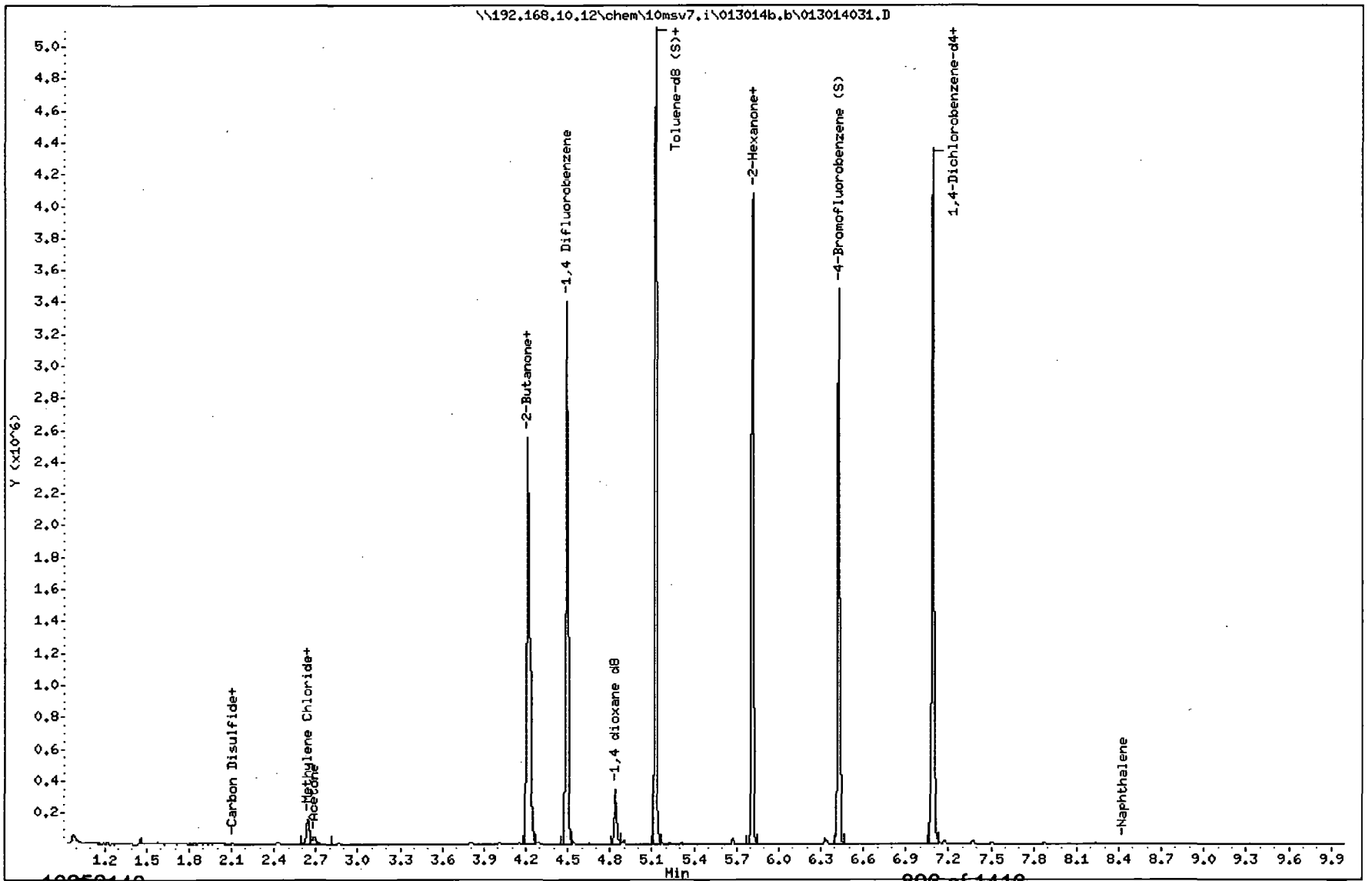
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.64	-0.46
41 Pentafluorobenzen	4.22	3.72	4.72	4.21	-0.14
48 1,4 Difluorobenze	4.50	4.00	5.00	4.49	-0.14
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.13
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014031.D
Date : 30-JAN-2014 21:27
Client ID: 10256148005
Sample Info: 10256148005,6.48

Instrument: 10msv7.i

Operator: HBP
Column phase: Rtx-VMS
Column diameter: 0.18



Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014031.D

Date : 30-JAN-2014 21:27

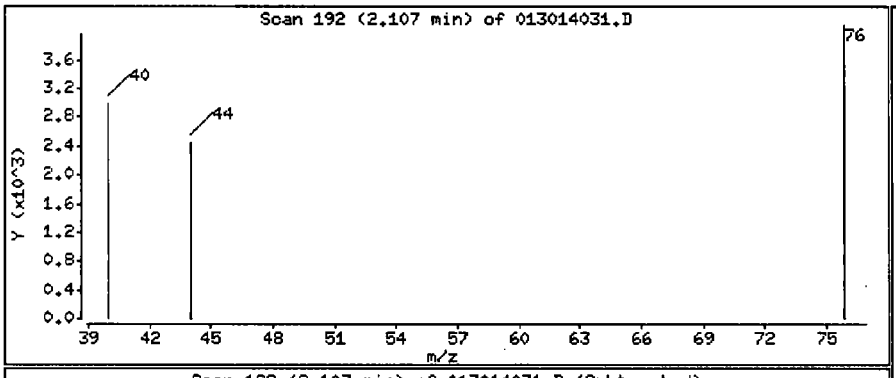
Client ID: 10256148005 Instrument: 10msv7.i

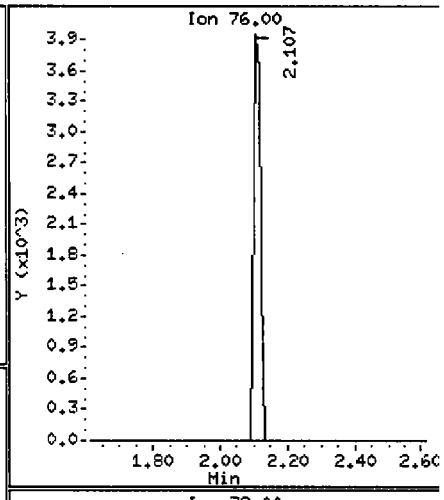
Sample Info: 10256148005,6.48

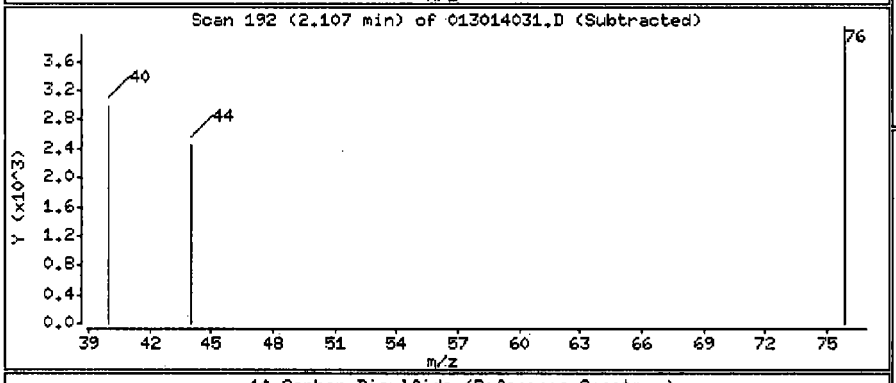
Operator: HBP

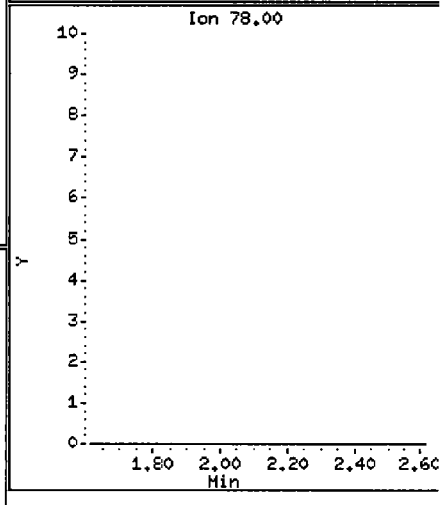
Column phase: Rtx-VMS Column diameter: 0.18

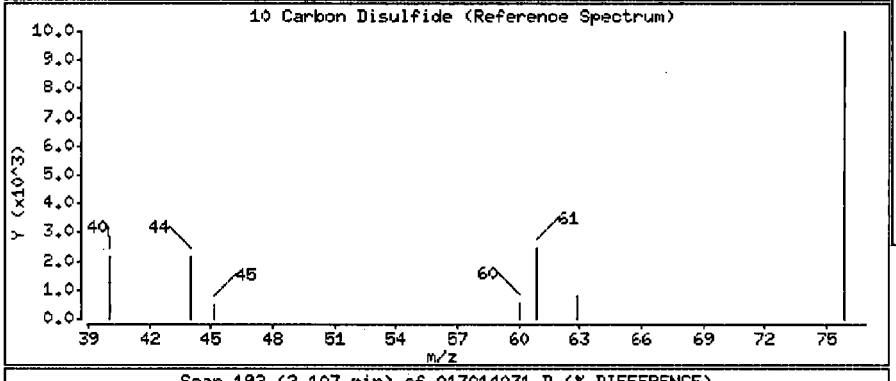
10 Carbon Disulfide Concentration: 0.43 ug/Kg

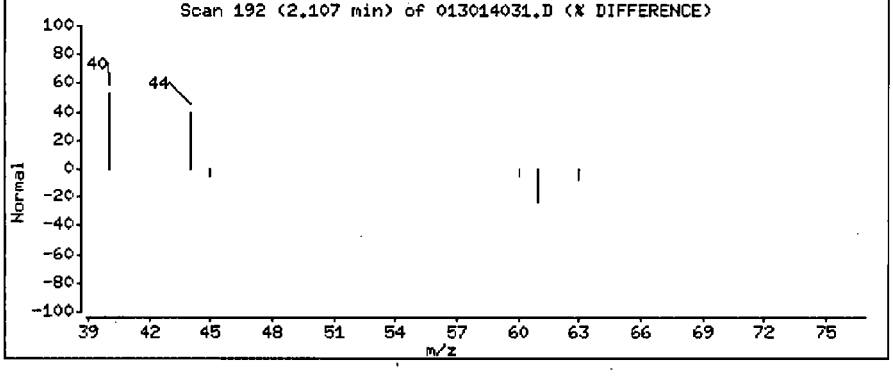












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Date : 30-JAN-2014 21:27

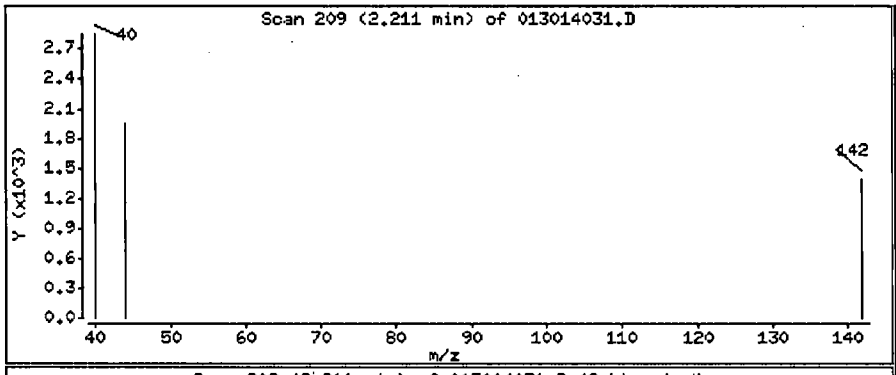
Client ID: 10256148005 Instrument: 10msv7.i

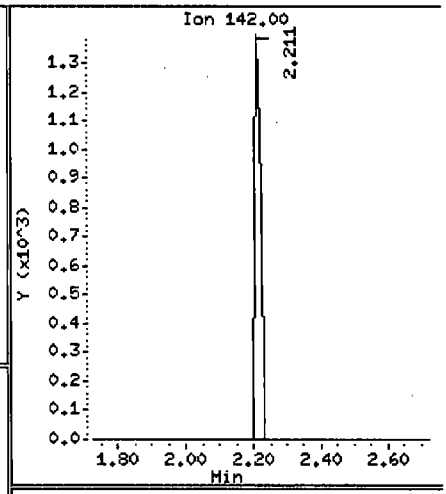
Sample Info: 10256148005,6.48

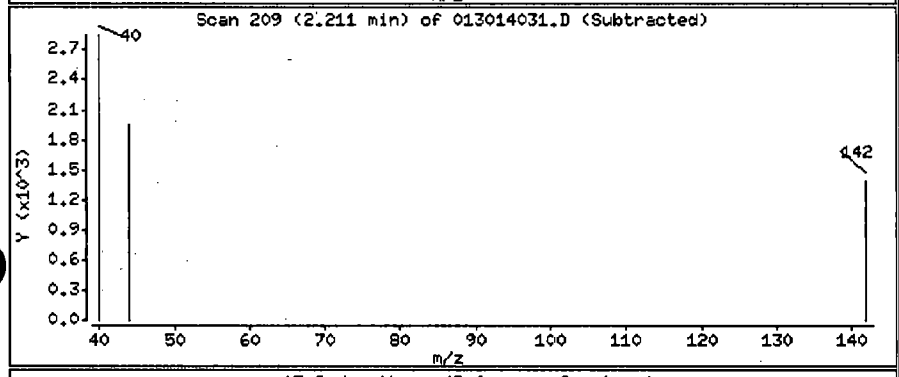
Operator: HBP

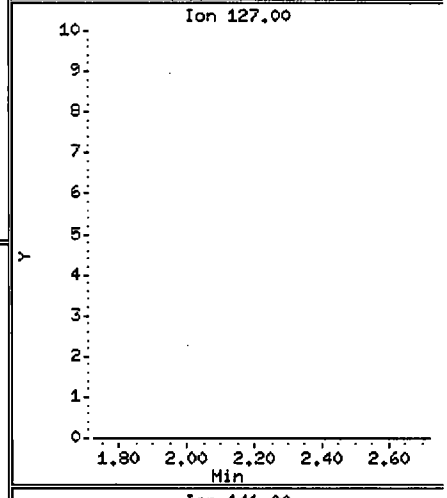
Column phase: Rtx-VMS Column diameter: 0.18

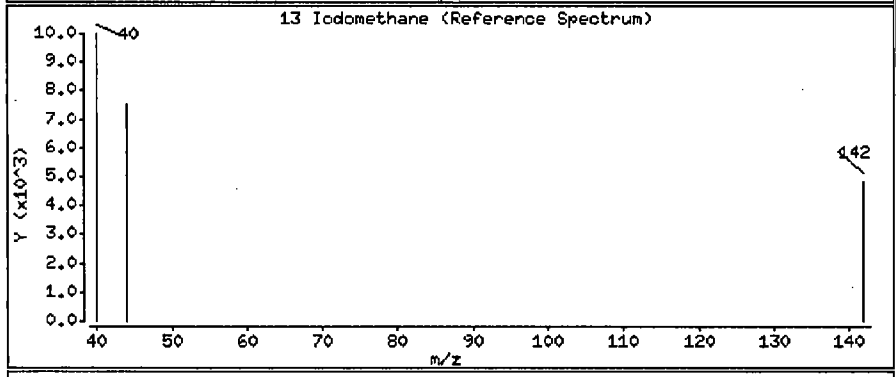
13 Iodomethane Concentration: 3.6 ug/Kg

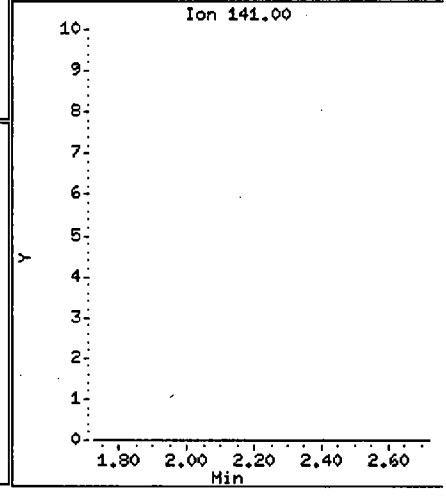


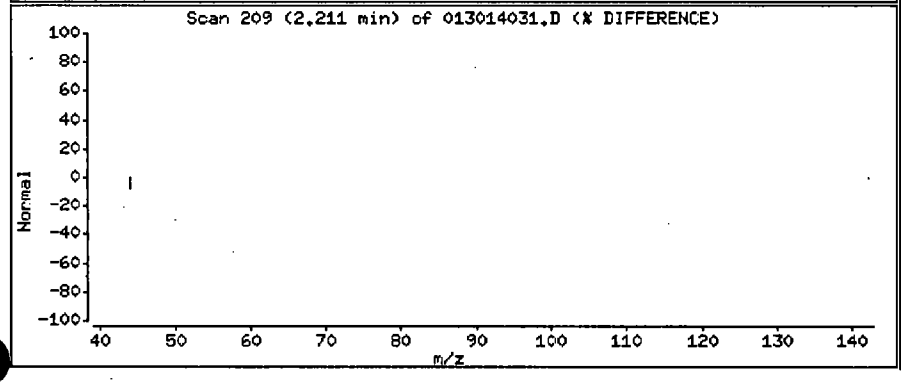












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Date : 30-JAN-2014 21:27

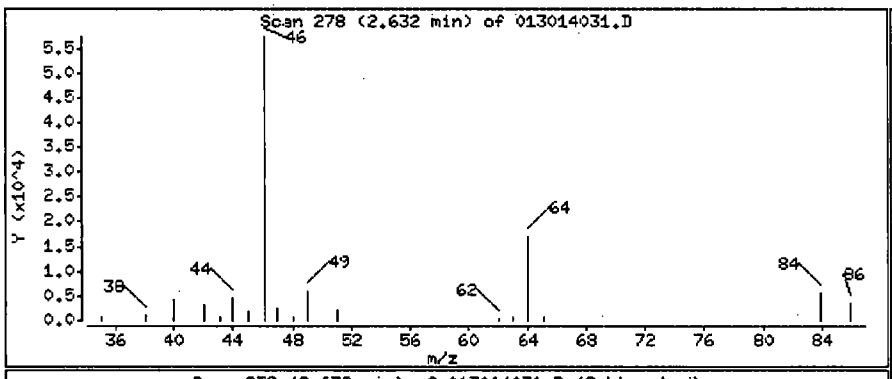
Client ID: 10256148005 Instrument: 10msv7.i

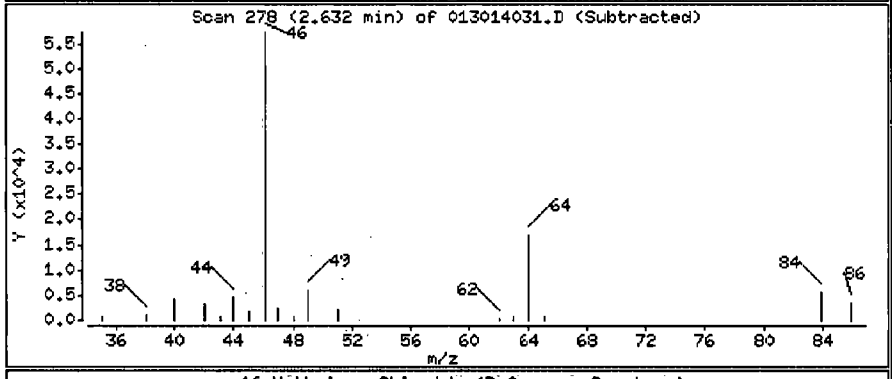
Sample Info: 10256148005,6.48

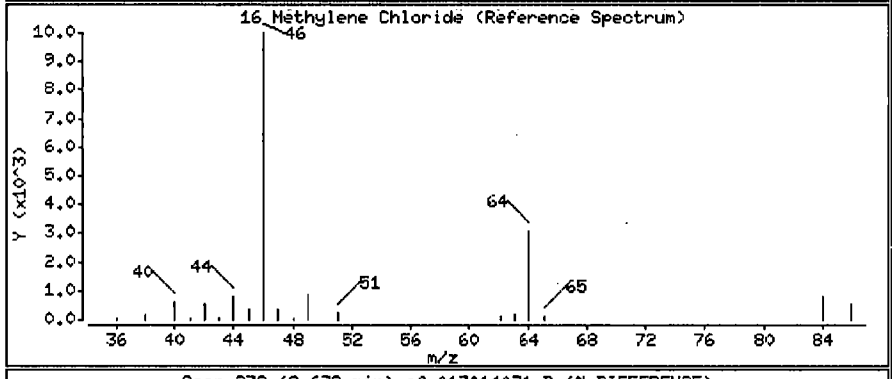
Operator: HBP

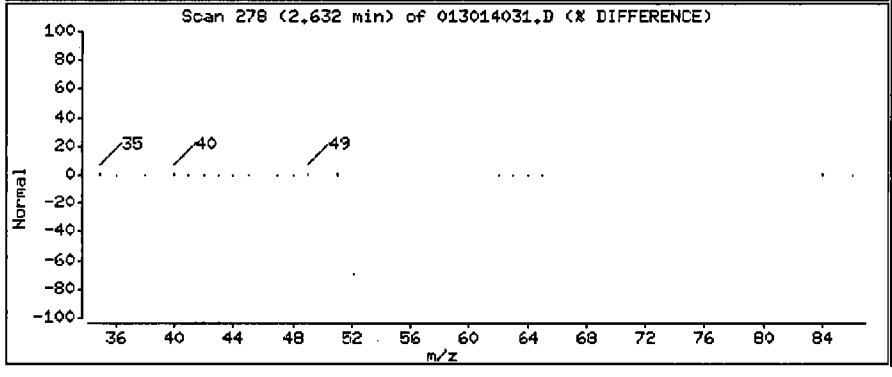
Column phase: Rtx-VMS Column diameter: 0.18

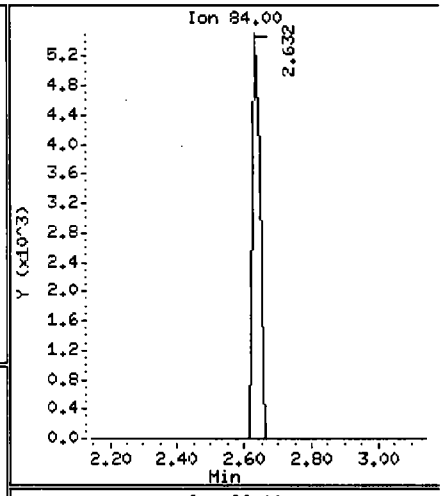
16 Methylene Chloride Concentration: 0.62 ug/Kg

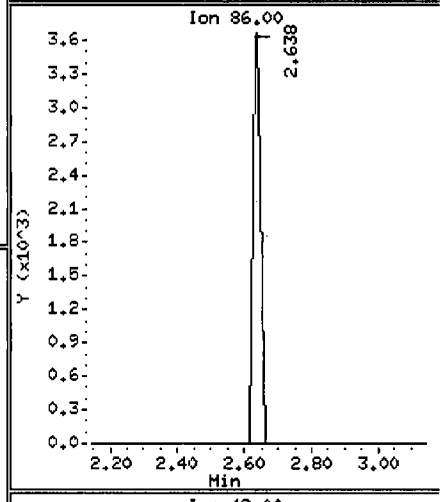


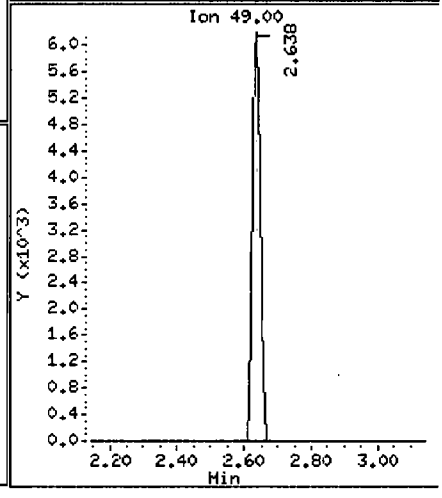












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014031.D

Date : 30-JAN-2014 21:27

Client ID: 10256148005

Instrument: 10msv7.i

Sample Info: 10256148005,6.48

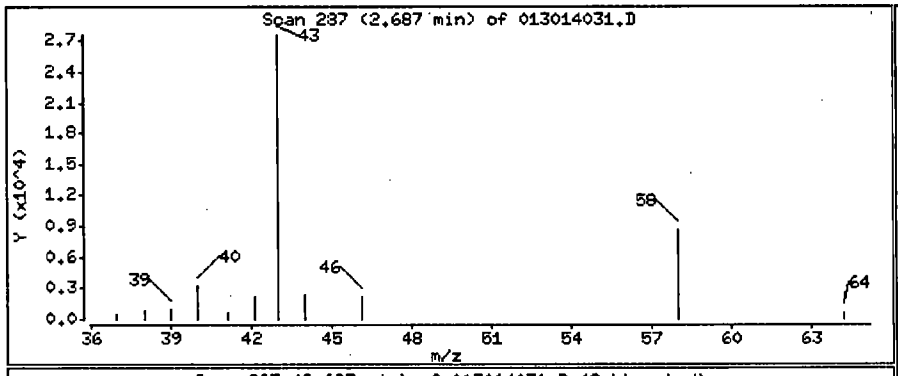
Operator: HBP

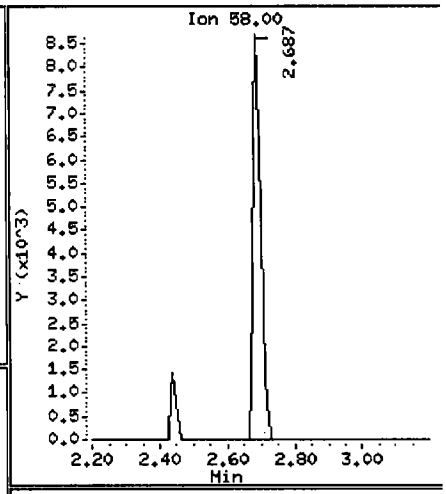
Column phase: Rtx-VMS

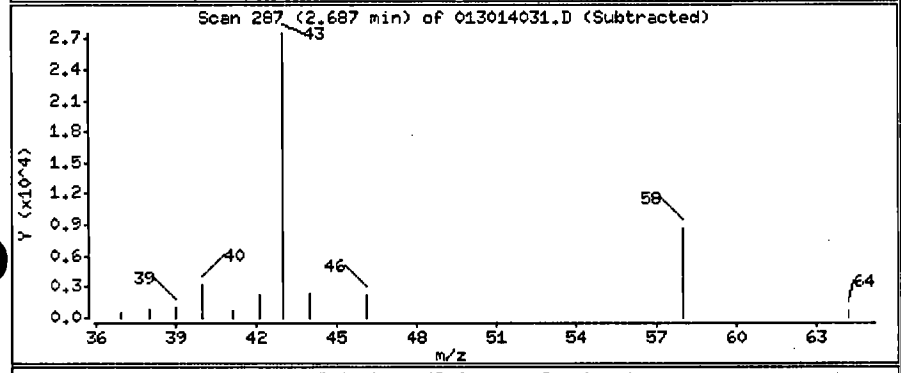
Column diameter: 0.18

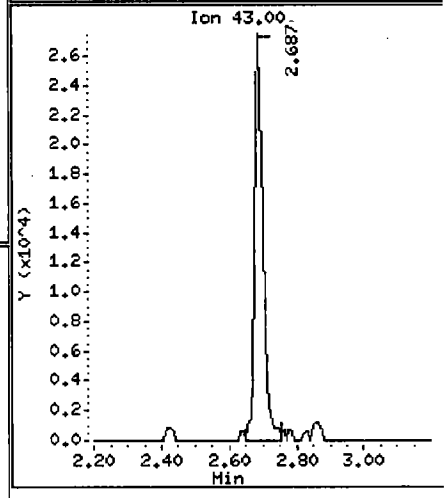
19 Acetone

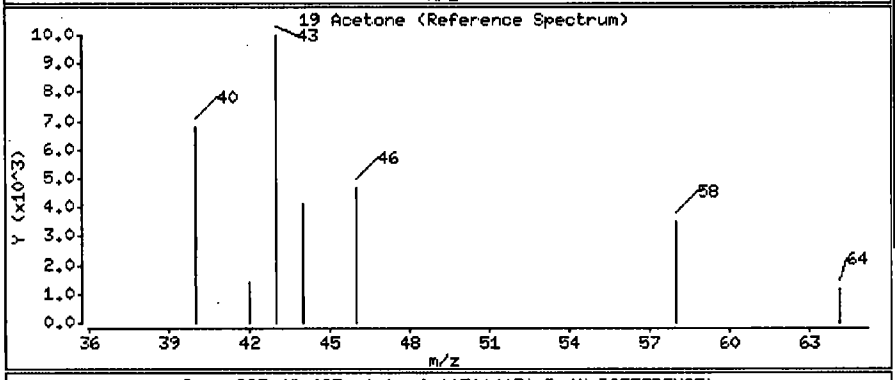
Concentration: 67.4 ug/Kg

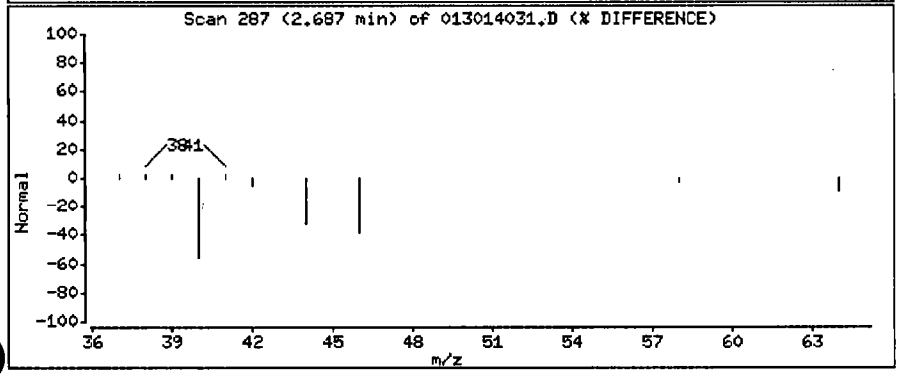












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Date : 30-JAN-2014 21:27

Client ID: 10256148005

Instrument: 10msv7.i

Sample Info: 10256148005,6.48

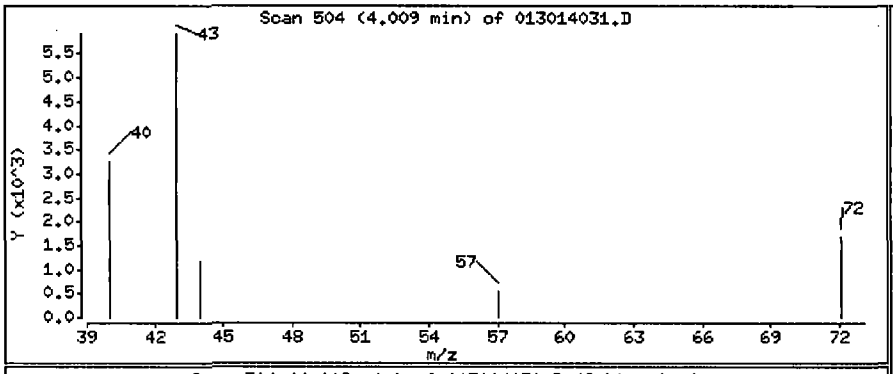
Operator: HBP

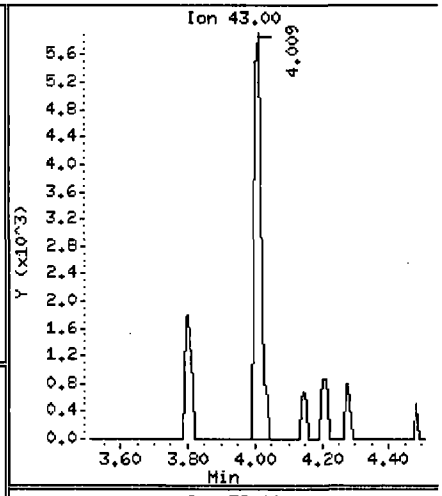
Column phase: Rtx-VMS

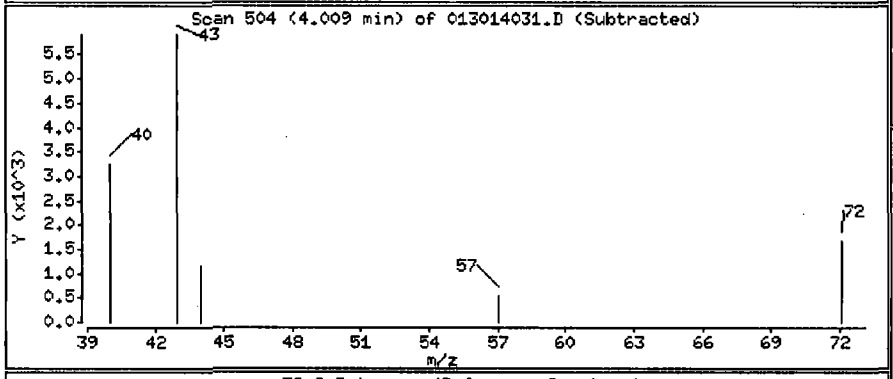
Column diameter: 0.18

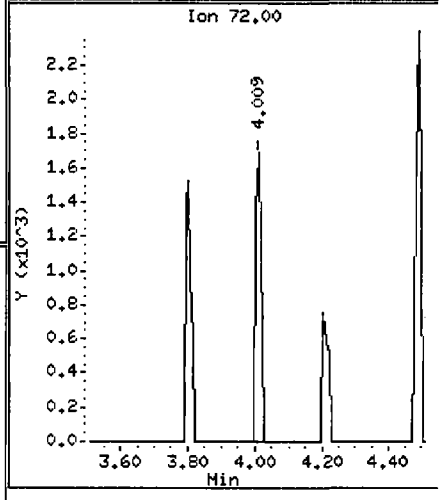
38 2-Butanone

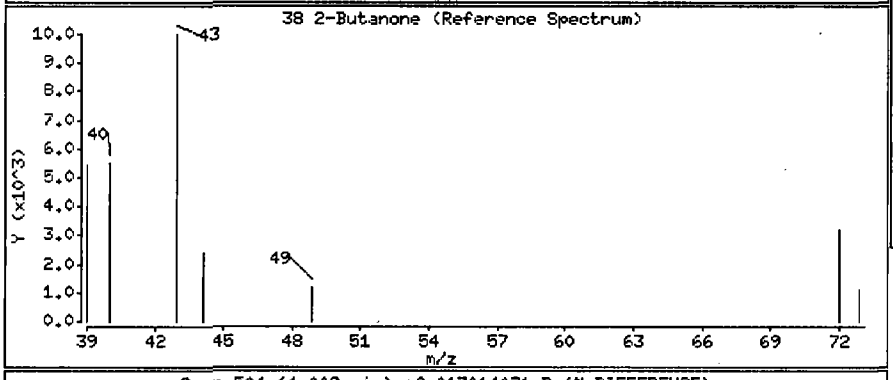
Concentration: 7.2 ug/Kg

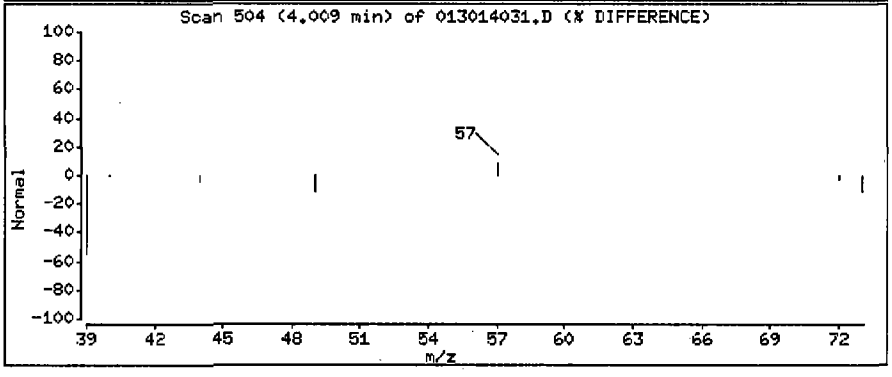












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Date : 30-JAN-2014 21:27

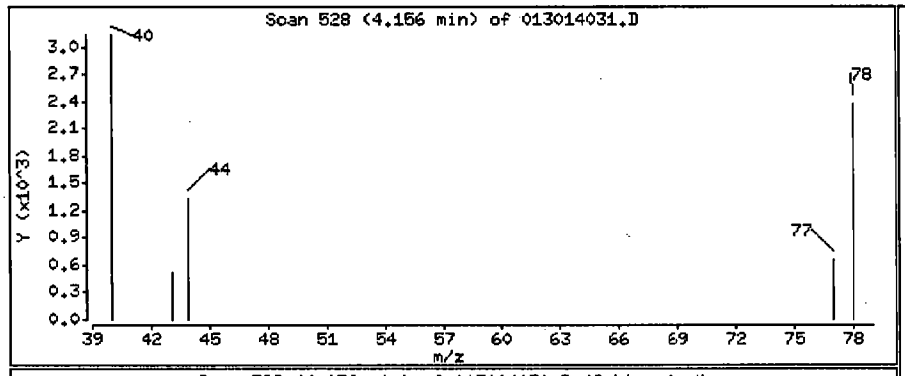
Client ID: 10256148005 Instrument: 10msv7.i

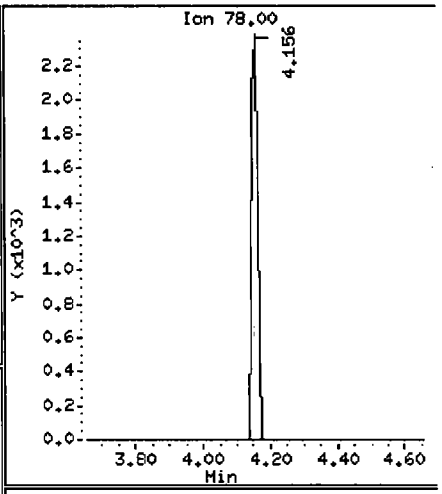
Sample Info: 10256148005,6.48

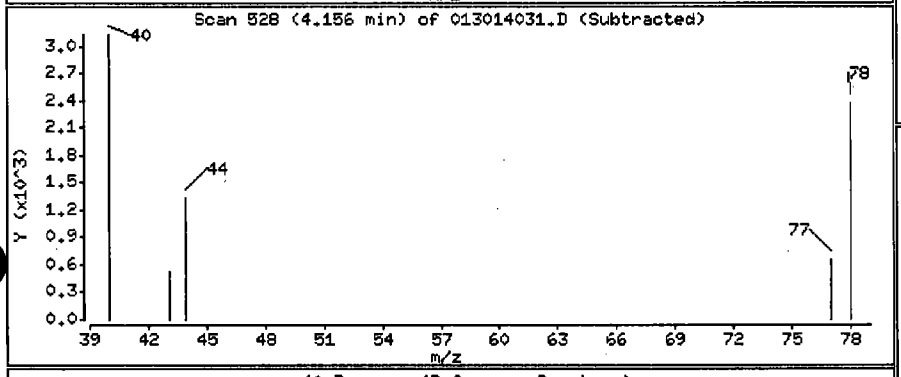
Operator: HBP

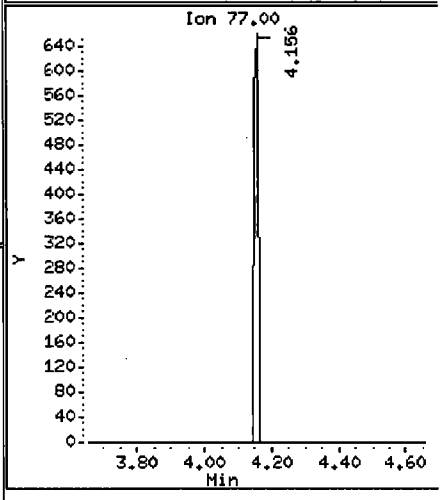
Column phase: Rtx-VMS Column diameter: 0.18

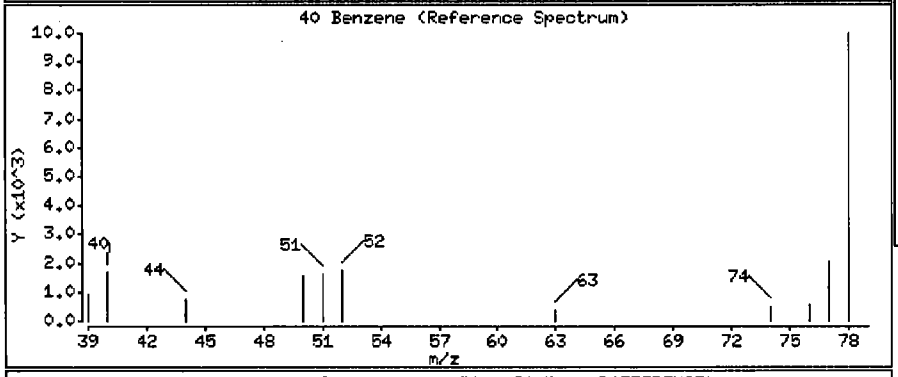
40 Benzene Concentration: 0.18 ug/Kg

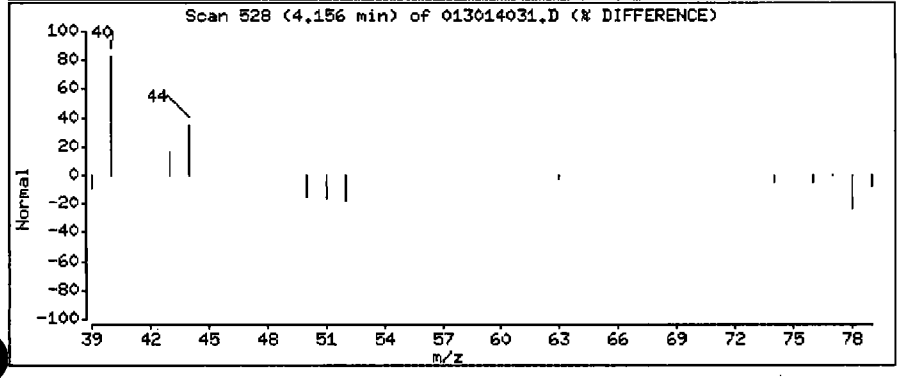












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Date : 30-JAN-2014 21:27

Client ID: 10256148005

Instrument: 10msv7.i

Sample Info: 10256148005,6.48

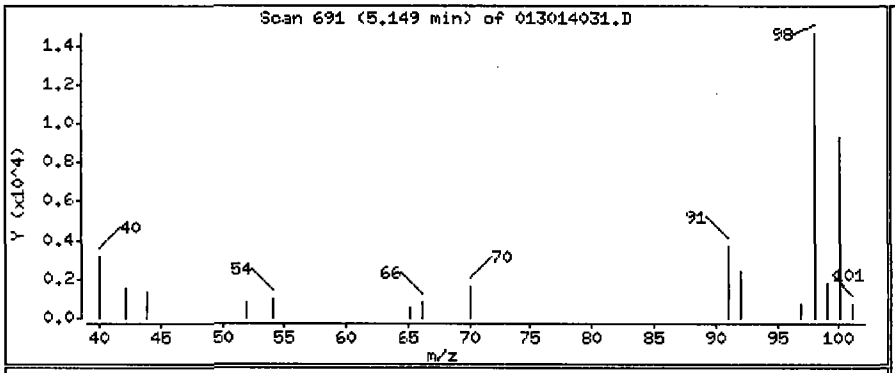
Operator: HBP

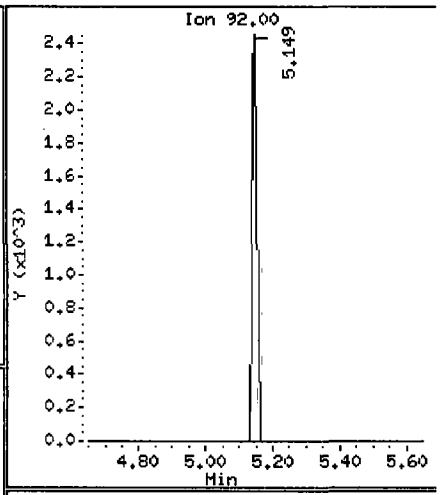
Column phase: Rtx-VMS

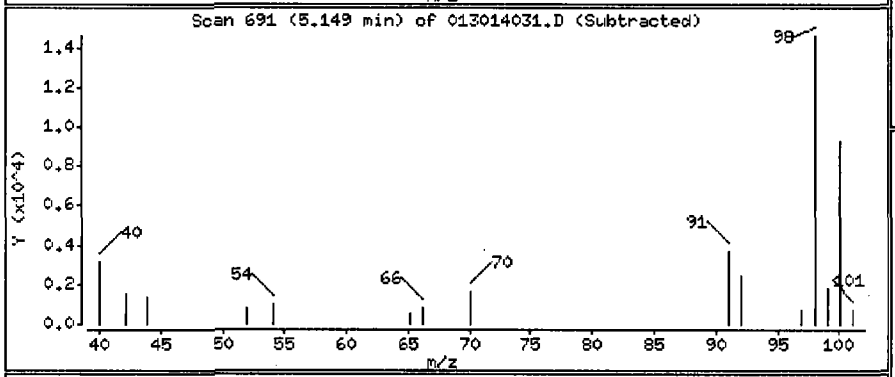
Column diameter: 0.18

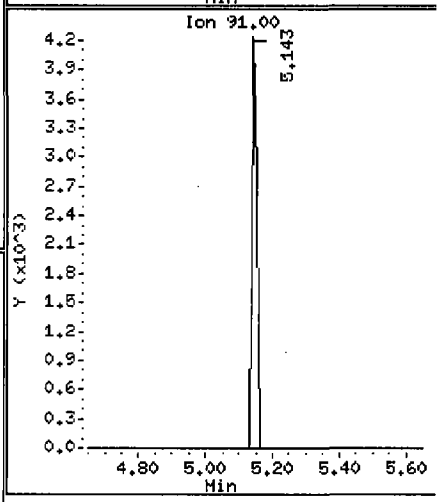
58 Toluene

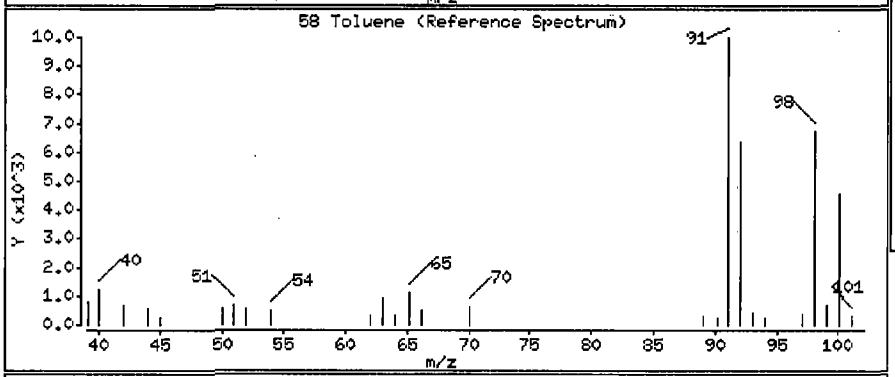
Concentration: 0.22 ug/Kg

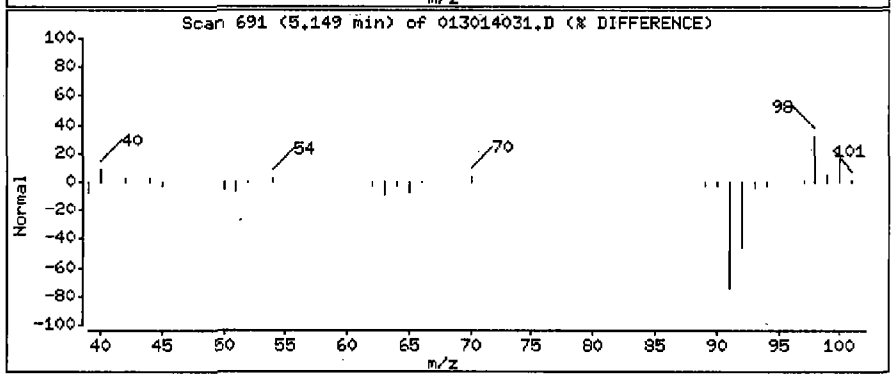












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Date : 30-JAN-2014 21:27

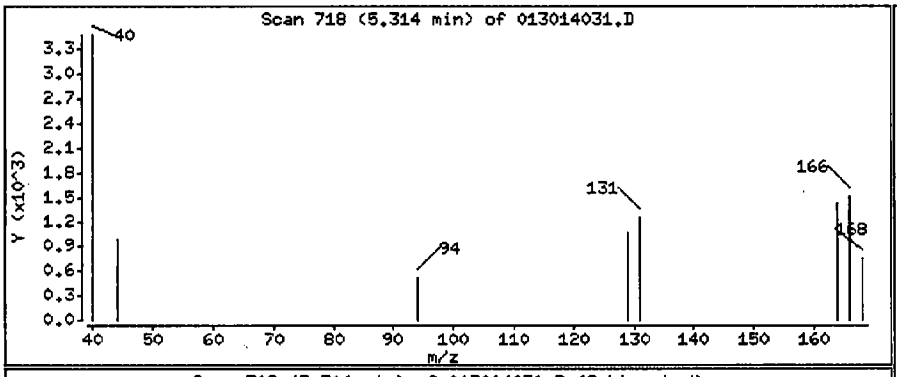
Client ID: 10256148005 Instrument: 10msv7.i

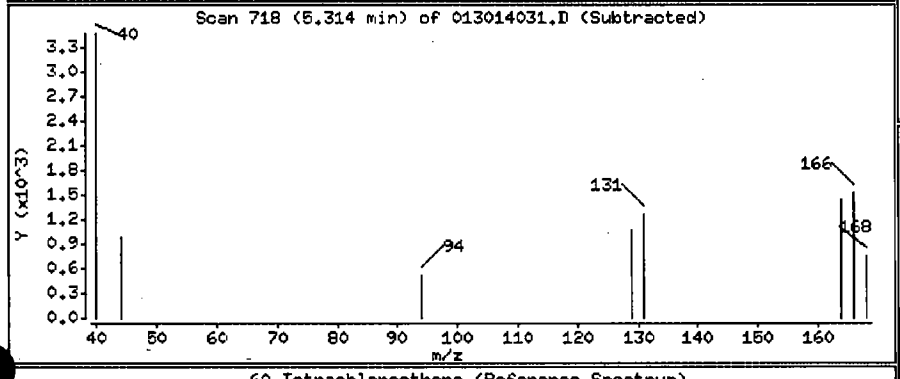
Sample Info: 10256148005,6.48

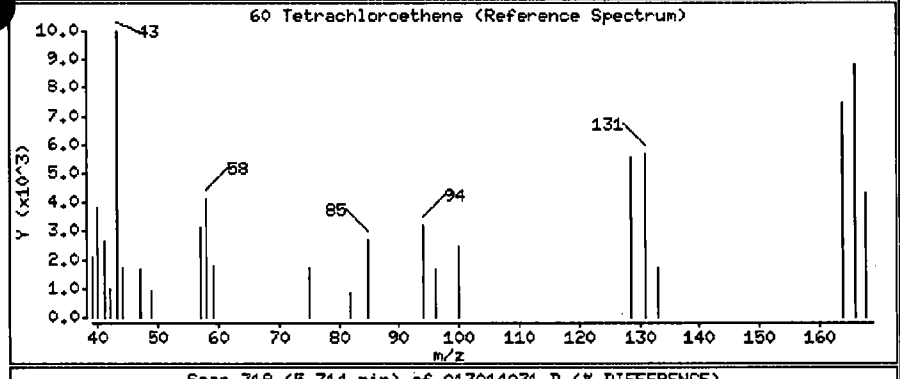
Operator: HBP

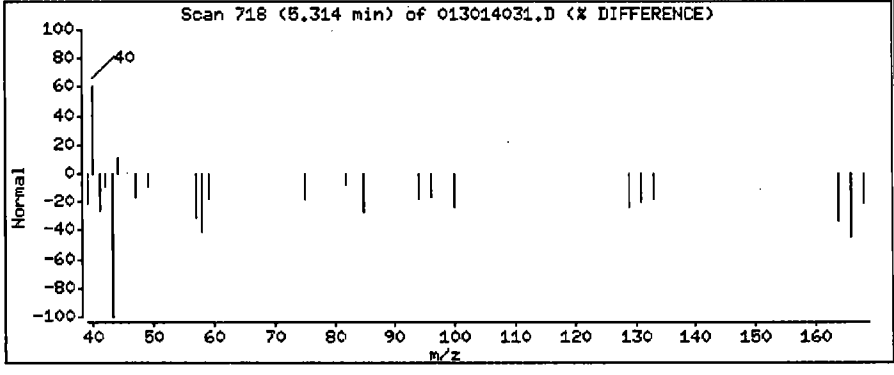
Column phase: Rtx-VMS Column diameter: 0.18

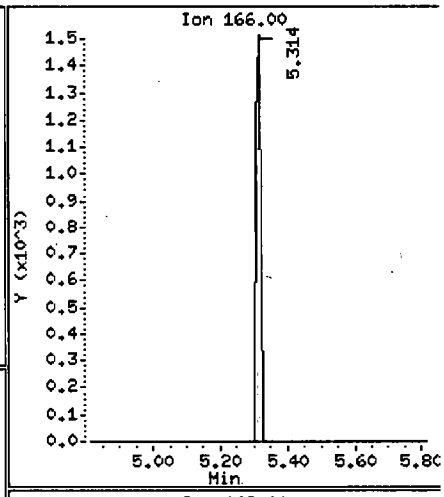
60 Tetrachloroethene Concentration: 0.25 ug/Kg

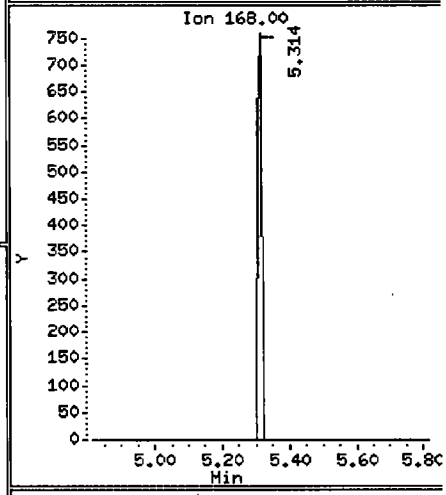


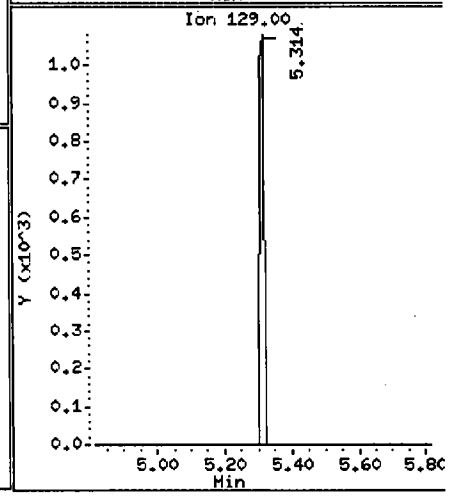












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014031.D

Date : 30-JAN-2014 21:27

Client ID: 10256148005

Instrument: 10msv7.i

Sample Info: 10256148005,6.48

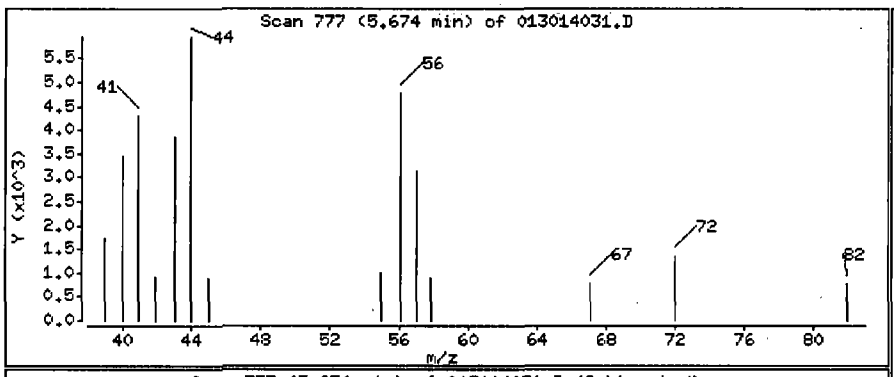
Operator: HBP

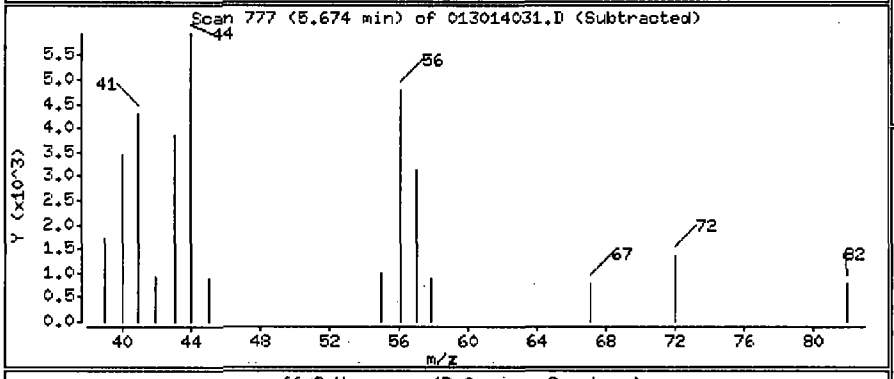
Column phase: Rtx-VMS

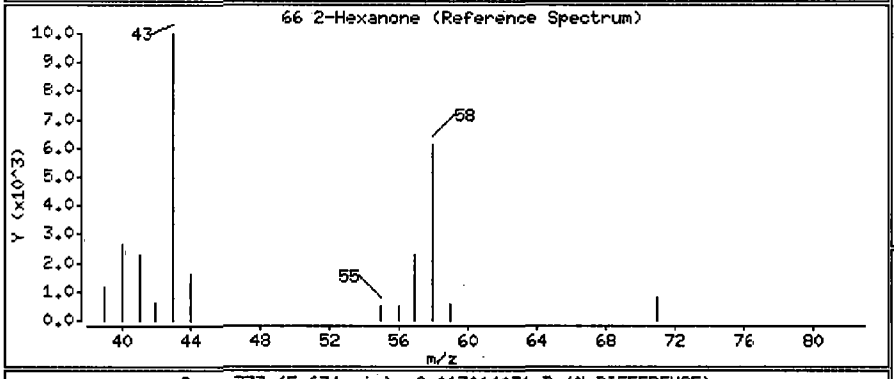
Column diameter: 0.18

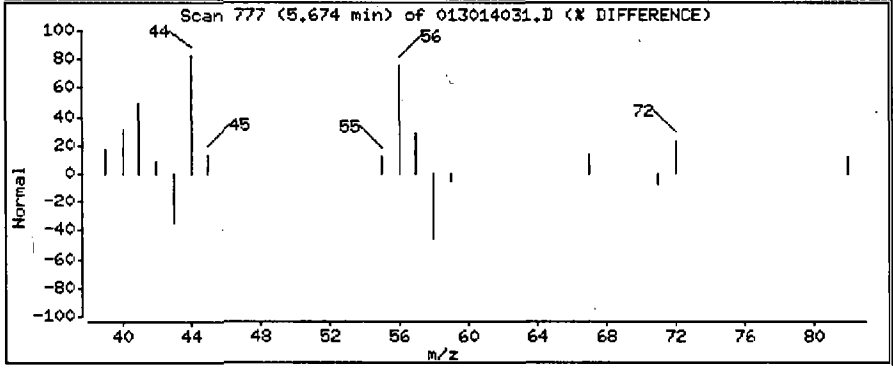
66 2-Hexanone

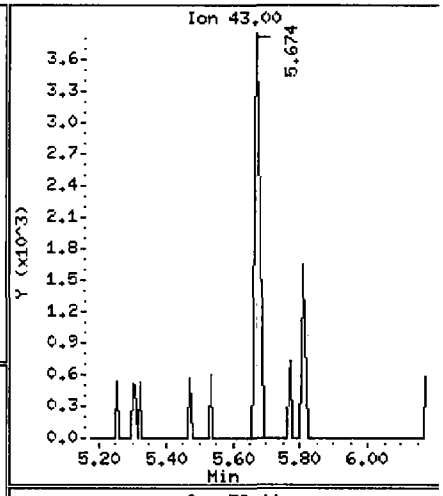
Concentration: 1.9 ug/Kg

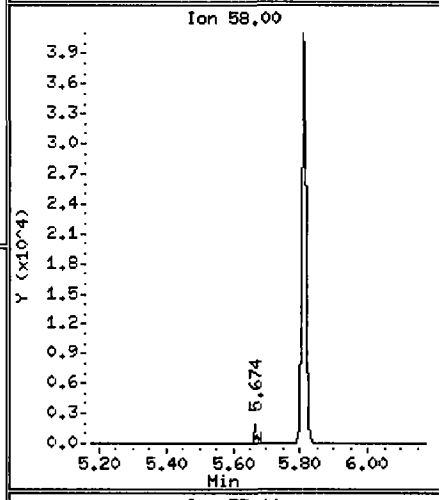


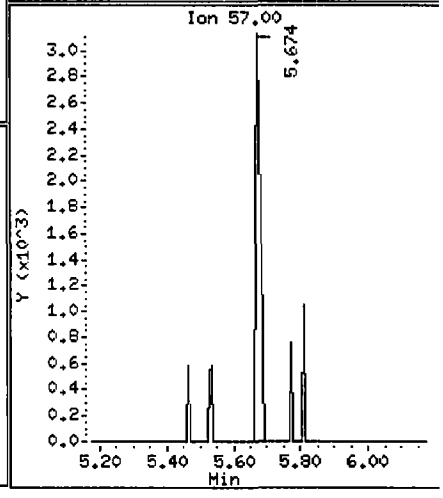












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014031.D

Date : 30-JAN-2014 21:27

Client ID: 10256148005

Instrument: 10msv7.i

Sample Info: 10256148005,6.48

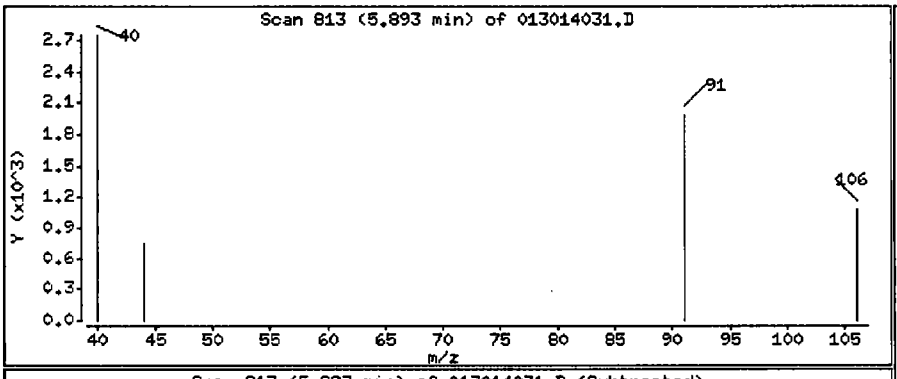
Operator: HBP

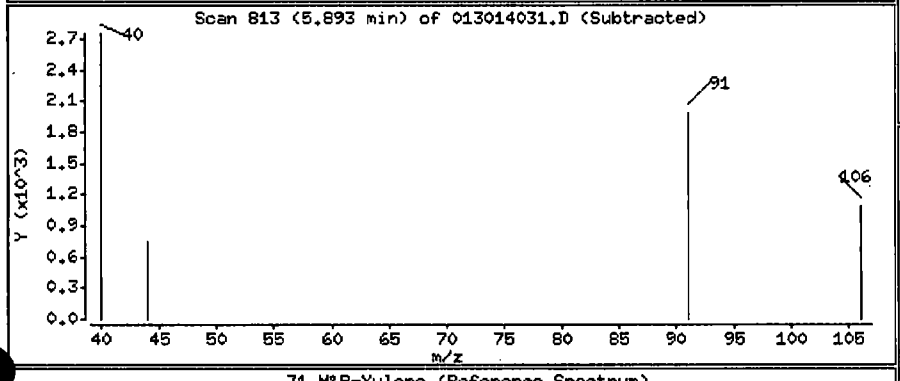
Column phase: Rtx-VMS

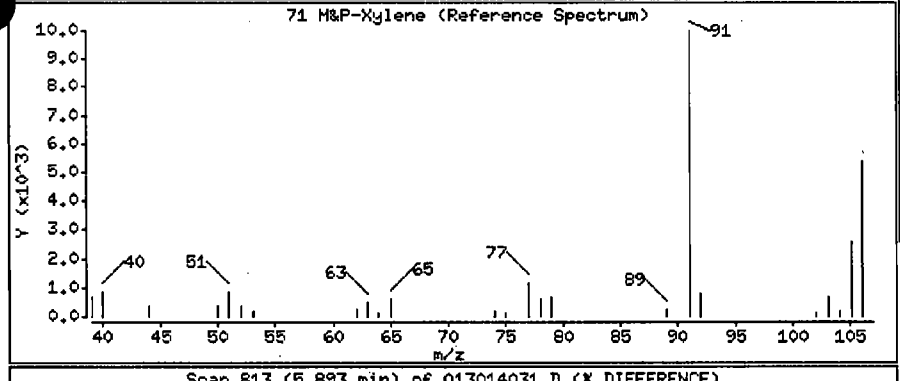
Column diameter: 0.18

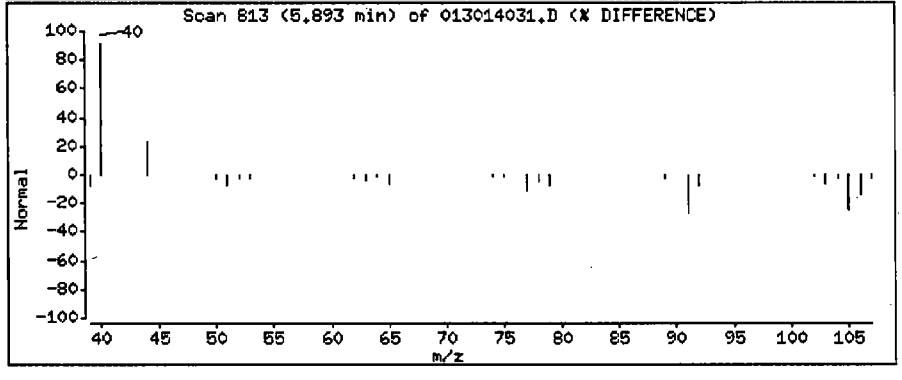
71 M&P-Xylene

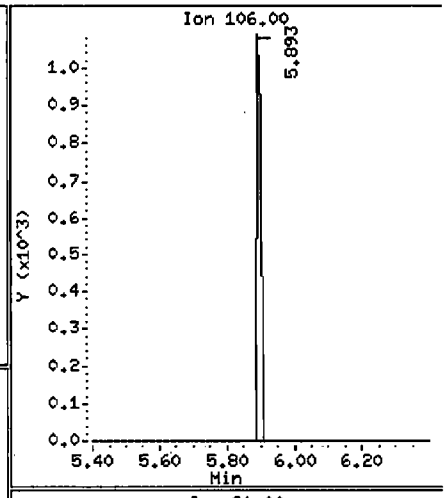
Concentration: 0.095 ug/Kg

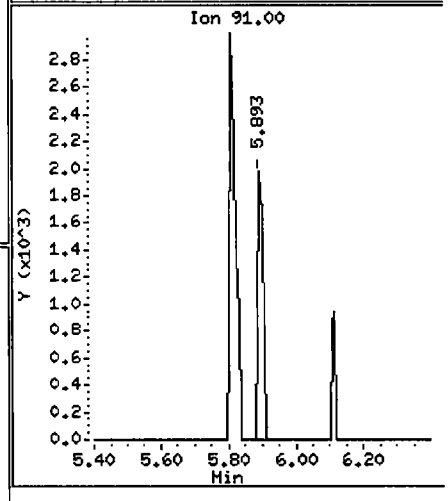












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014031.D

Date : 30-JAN-2014 21:27

Client ID: 10256148005

Instrument: 10msv7.i

Sample Info: 10256148005,6.48

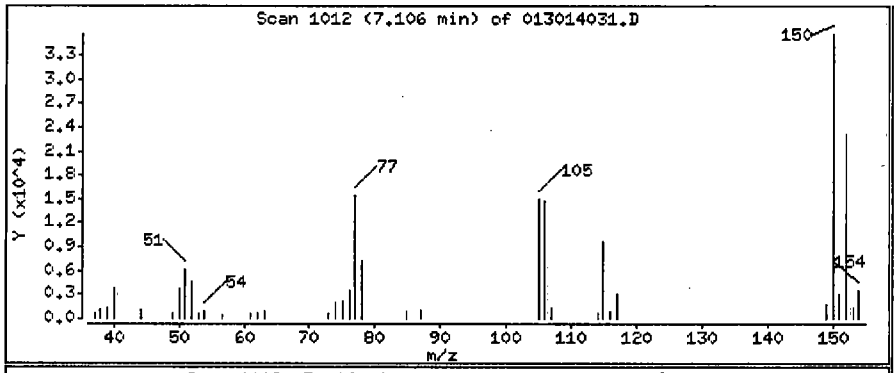
Operator: HBP

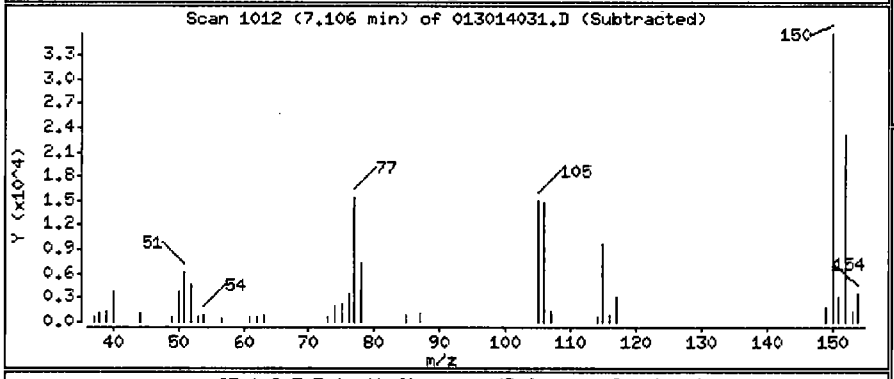
Column phase: Rtx-VMS

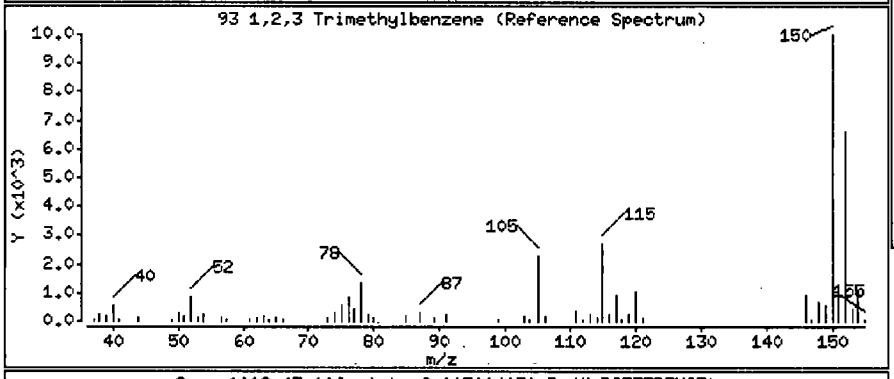
Column diameter: 0.18

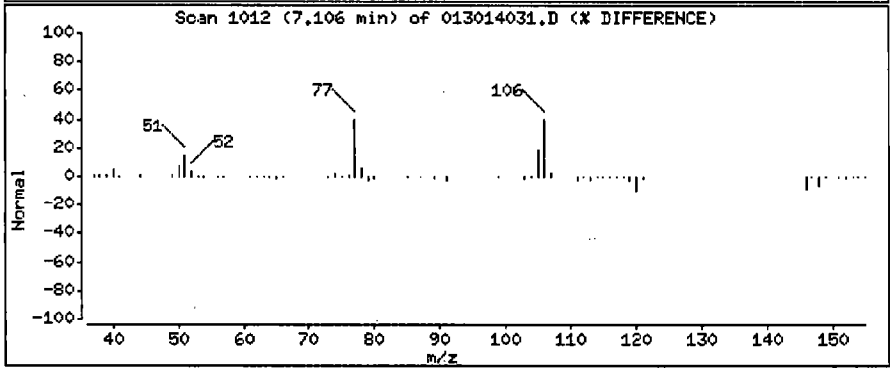
93 1,2,3 Trimethylbenzene

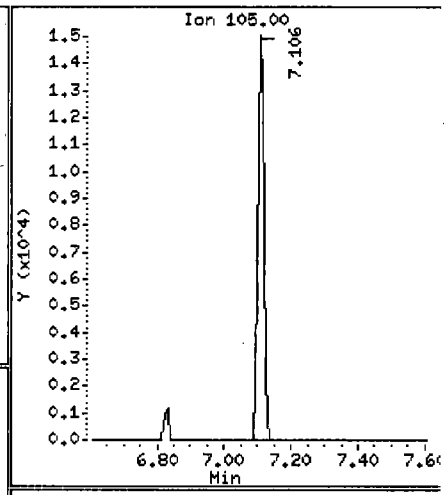
Concentration: 1.0 ug/Kg

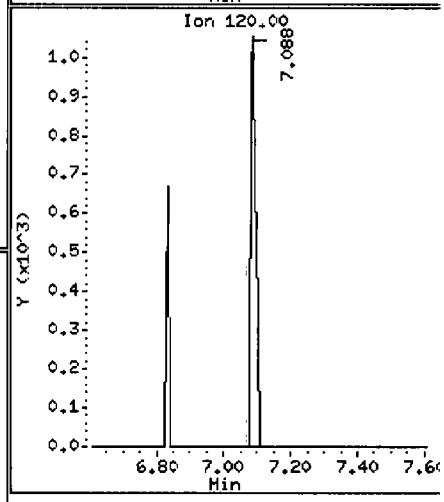












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Date : 30-JAN-2014 21:27

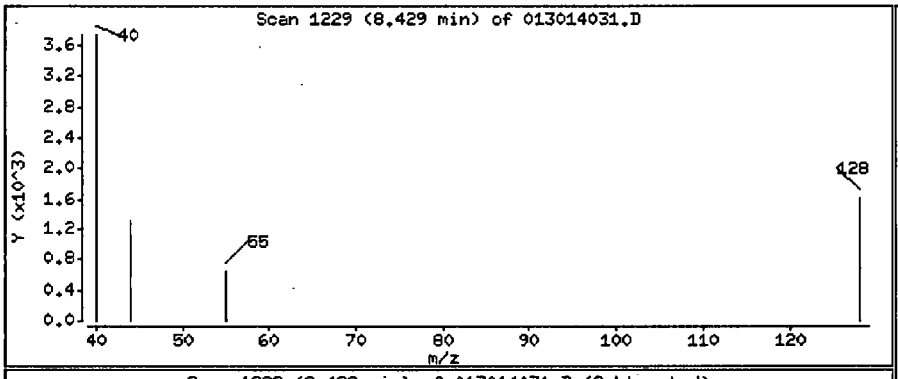
Client ID: 10256148005 Instrument: 10msv7.i

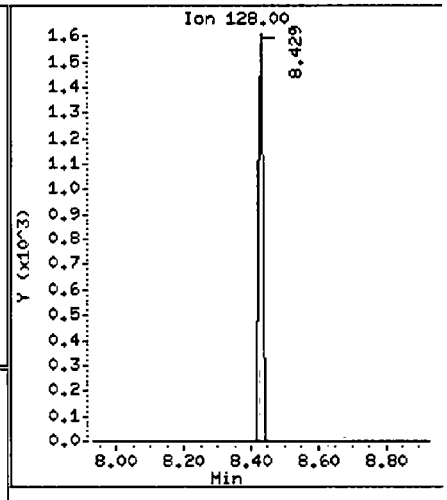
Sample Info: 10256148005,6.48

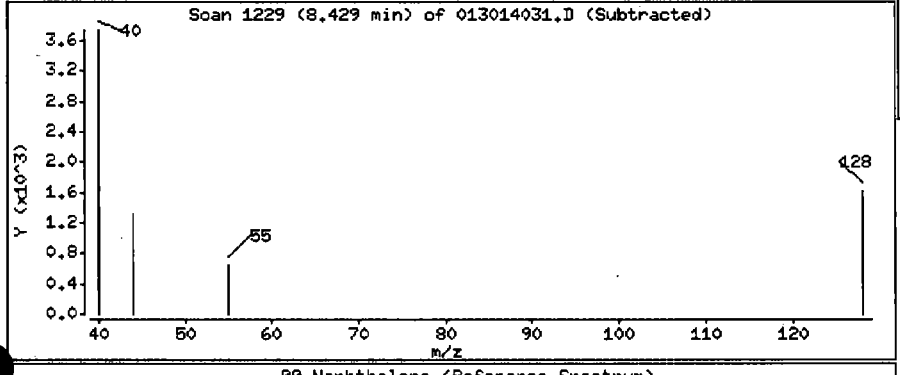
Operator: HBP

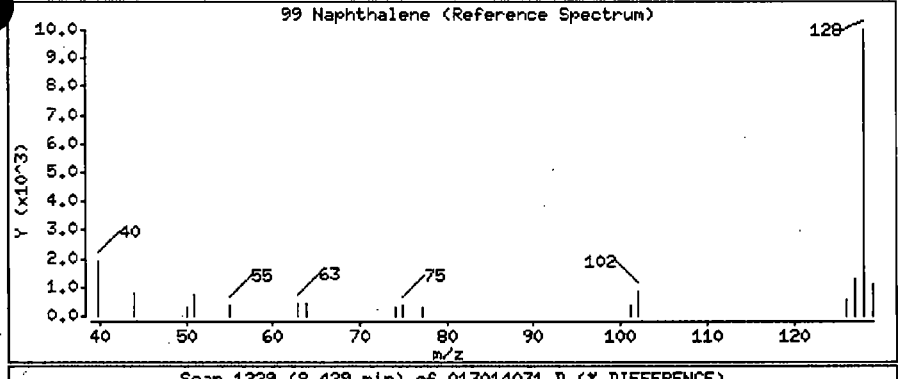
Column phase: Rtx-VMS Column diameter: 0.18

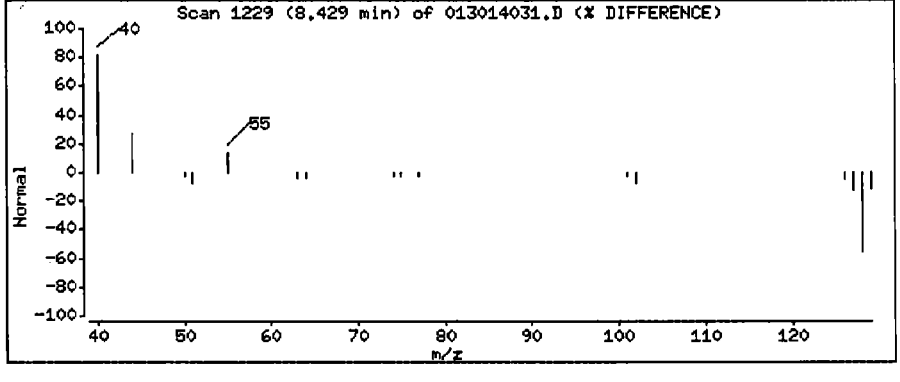
99 Naphthalene Concentration: 0.10 ug/Kg











Data File: \\192.168.10.12\chem\10msv7.i\013014b.b/013014031.D
Injection Date: 30-JAN-2014 21:27
Instrument: 10msv7.i
Lab Sample ID: 10256148005
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014032.D
Report Date: 03-Feb-2014 09:16

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\013014b.b\013014032.D
Lab Smp Id: 10256148006 Client Smp ID: 10256148006
Inj Date : 30-JAN-2014 21:45
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10256148006,6.32
Misc Info : 26253
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Meth Date : 03-Feb-2014 07:51 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 32
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	6.320	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.107	2.113	(0.500)	4994	0.32931	0.42(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	Compound Not Detected.					
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.637	2.649	(1.000)	172473	200.000	
19	Acetone	58	2.692	2.698	(1.021)	2987	5.83016	7.4
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	21 Hexane	86	2.857	2.869	(1.083)	386	0.29863	0.38(aQ)
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	3.765	3.765	(0.894)	3036	0.39319	0.50(aQ)
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	Compound Not Detected.					
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	4.155	4.155	(0.987)	3617	0.18757	0.24(aQ)
*	41 Pentafluorobenzene	168	4.210	4.216	(1.000)	1146569	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
S	43 1,2-Dichloroethane d4 (S)	65	4.228	4.235	(1.004)	465502	109.756	110
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.490	4.497	(1.000)	1590943	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.838	4.844	(1.000)	152346	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
S	57 Toluene-d8 (S)	98	5.124	5.125	(0.882)	1810608	103.084	103
	58 Toluene	92	5.143	5.149	(0.885)	3187	0.25298	0.32(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	Compound Not Detected.					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	Compound Not Detected.					
*	67 Chlorobenzene-d5	117	5.813	5.814	(1.000)	1393318	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	5.813	5.832	(1.000)	4388	0.17774	0.22(aQ)
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.893	5.899	(1.014)	1161	0.12574	0.16(a)
	72 O-Xylene (1,2-Dimethylbenzene)	106	6.112	6.112	(1.051)	504	0.05701	0.072(a)
	73 Styrene	104	Compound Not Detected.					
	74 Bromoform	173	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014032.D
Report Date: 03-Feb-2014 09:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	75 Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$	76 4-Bromofluorobenzene (S)	95	6.423	6.423	(0.906)	619676	115.218	115
	77 cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	78 Bromobenzene	156	Compound Not Detected.					
	79 n-Propylbenzene	91	Compound Not Detected.					
	80 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	81 2-Chlorotoluene	91	Compound Not Detected.					
	82 1,3,5-Trimethylbenzene	105	Compound Not Detected.					
	83 1,2,3-Trichloropropane	110	Compound Not Detected.					
	84 trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	85 4-Chlorotoluene	91	Compound Not Detected.					
	86 tert-Butylbenzene	119	Compound Not Detected.					
	87 1,2,4-Trimethylbenzene	105	6.831	6.832	(0.964)	1937	0.11685	0.15(aQ)
	88 sec-Butylbenzene	105	Compound Not Detected.					
	89 p-Isopropyltoluene	119	Compound Not Detected.					
	90 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	91 1,4-Dichlorobenzene-d4	152	7.087	7.088	(1.000)	665908	100.000	
	92 1,4-Dichlorobenzene	146	Compound Not Detected.					
	93 1,2,3 Trimethylbenzene	105	Compound Not Detected.					
	94 n-Butylbenzene	91	Compound Not Detected.					
	95 1,2-Dichlorobenzene	146	Compound Not Detected.					
	96 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
	97 Hexachlorobutadiene	225	Compound Not Detected.					
	98 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	99 Naphthalene	128	8.423	8.429	(1.188)	896	0.07837	0.099(a)
	100 1,2,3-Trichlorobenzene	180	Compound Not Detected.					
	101 2-Methylnaphthalene	142	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014032.D
Report Date: 03-Feb-2014 09:16

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 013014032.D
Lab Smp Id: 10256148006
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Calibration Date: 30-JAN-2014
Calibration Time: 18:08
Client Smp ID: 10256148006
Level: LOW
Sample Type: SOIL
Method File: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Misc Info: 26253

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143148	71574	286296	172473	20.49
41 Pentafluorobenzen	1116303	558152	2232606	1146569	2.71
48 1,4 Difluorobenze	1540471	770236	3080942	1590943	3.28
53 1,4 dioxane d8	136838	68419	273676	152346	11.33
67 Chlorobenzene-d5	1416803	708402	2833606	1393318	-1.66
91 1,4-Dichlorobenze	843357	421679	1686714	665908	-21.04

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.64	-0.47
41 Pentafluorobenzen	4.22	3.72	4.72	4.21	-0.15
48 1,4 Difluorobenze	4.50	4.00	5.00	4.49	-0.14
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.13
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

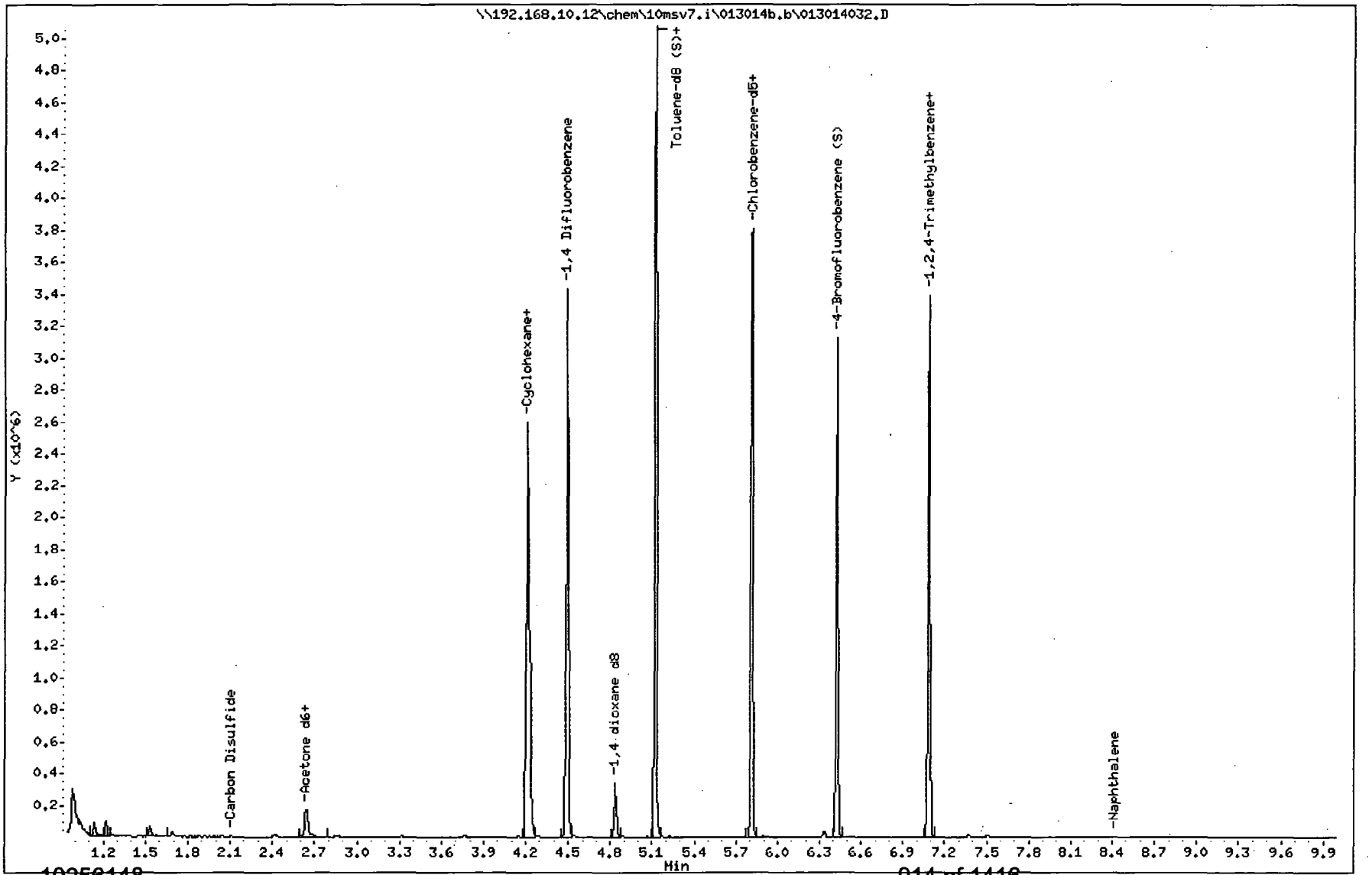
Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014032.D
Date : 30-JAN-2014 21:45
Client ID: 10256148006
Sample Info: 10256148006,6.32

Instrument: 10msv7.i

Operator: HBP

Column phase: Rtx-VMS

Column diameter: 0.18



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Date : 30-JAN-2014 21:45

Client ID: 10256148006

Instrument: 10msv7.i

Sample Info: 10256148006,6.32

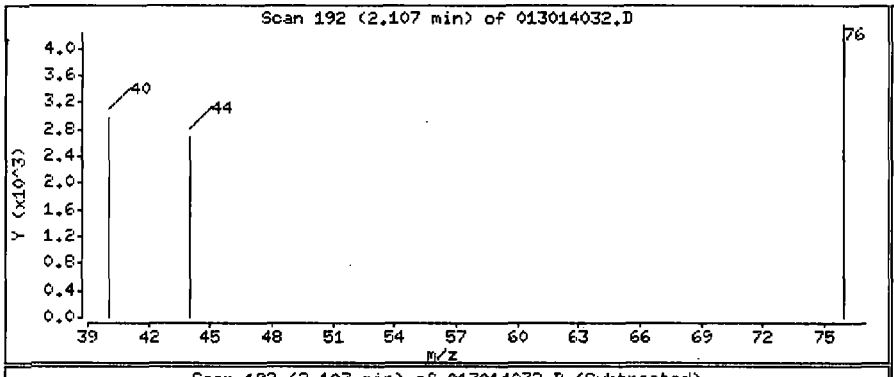
Operator: HBP

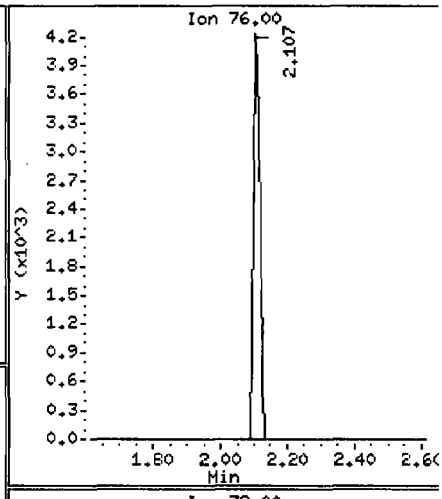
Column phase: Rtx-VMS

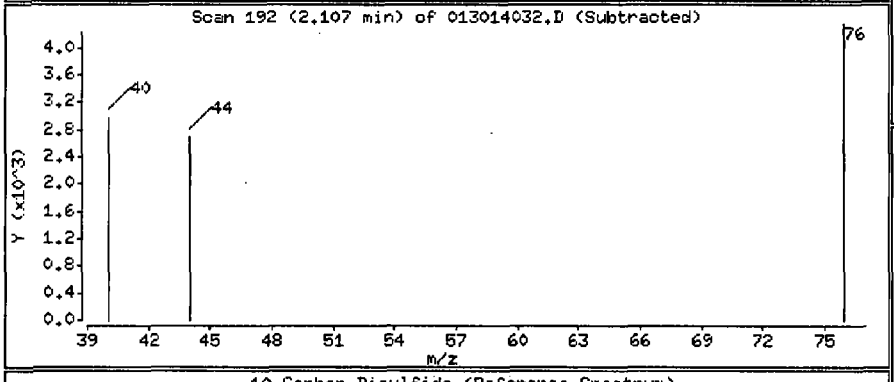
Column diameter: 0.18

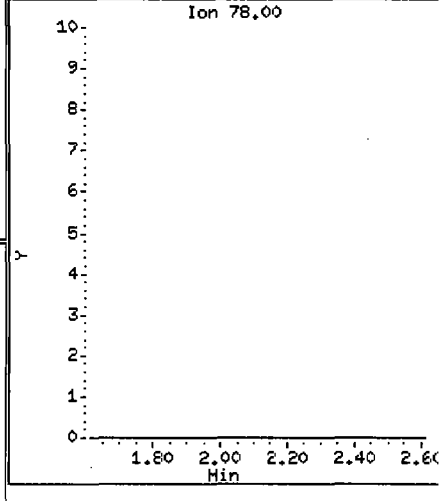
10 Carbon Disulfide

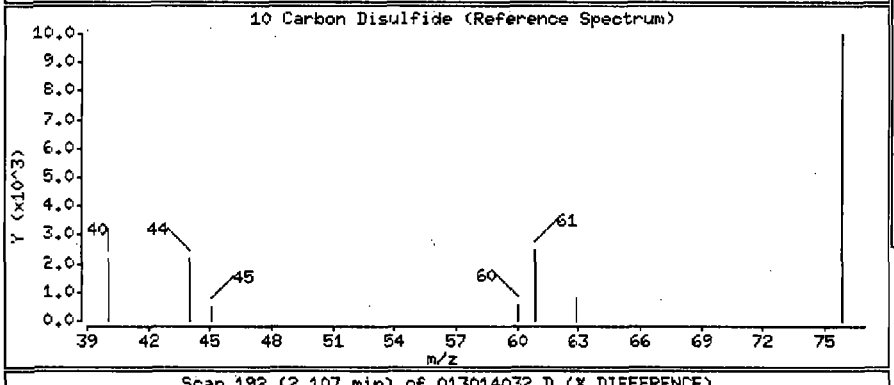
Concentration: 0.42 ug/Kg

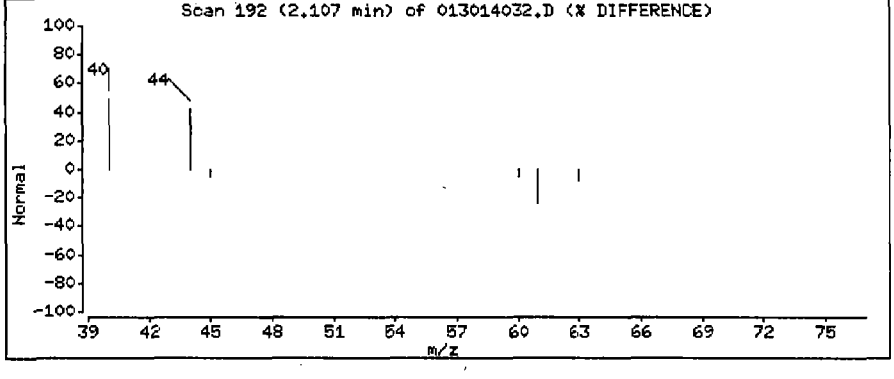












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014032.D

Date : 30-JAN-2014 21:45

Client ID: 10256148006

Instrument: 10msv7.i

Sample Info: 10256148006,6.32

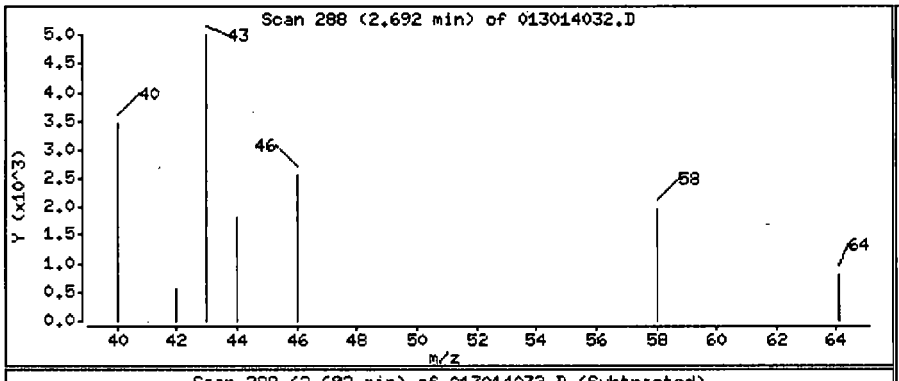
Operator: HBP

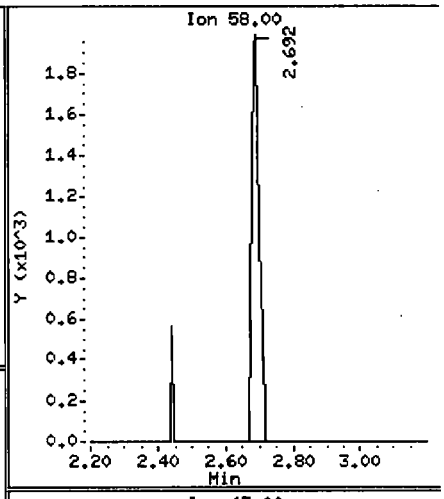
Column phase: Rtx-VMS

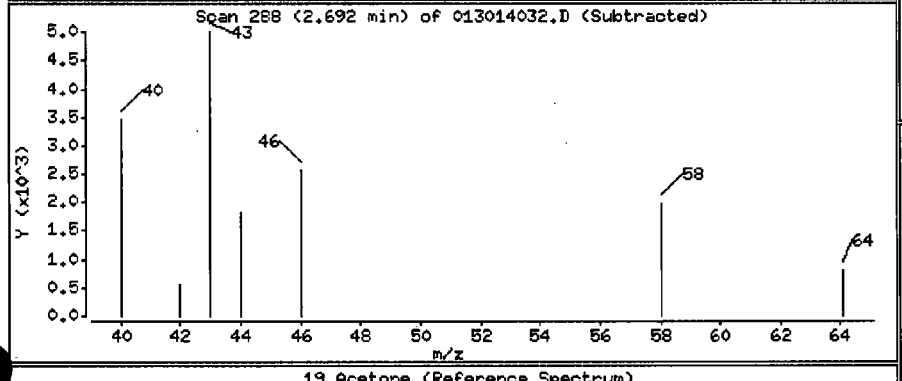
Column diameter: 0.18

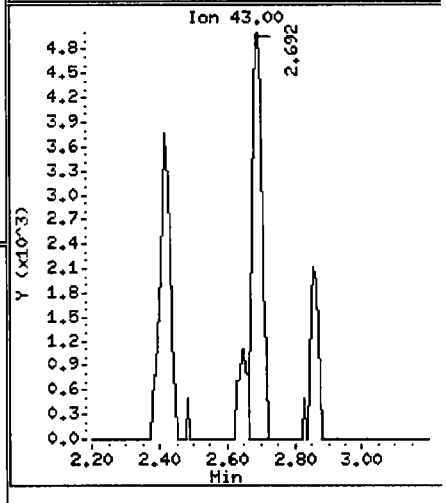
19 Acetone

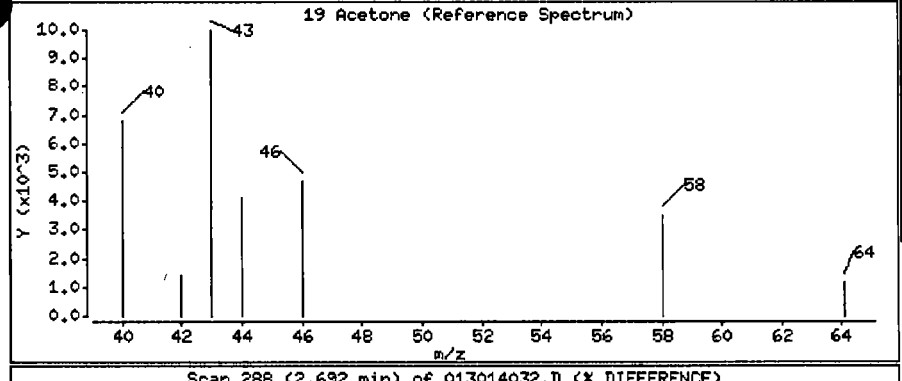
Concentration: 7.4 ug/Kg

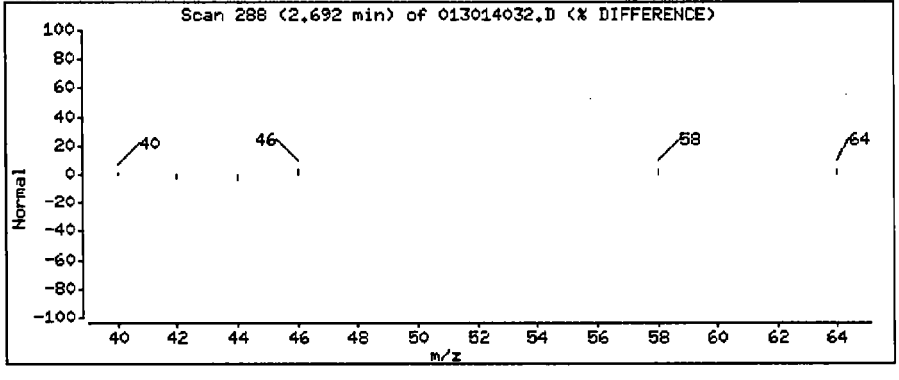












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Date : 30-JAN-2014 21:45

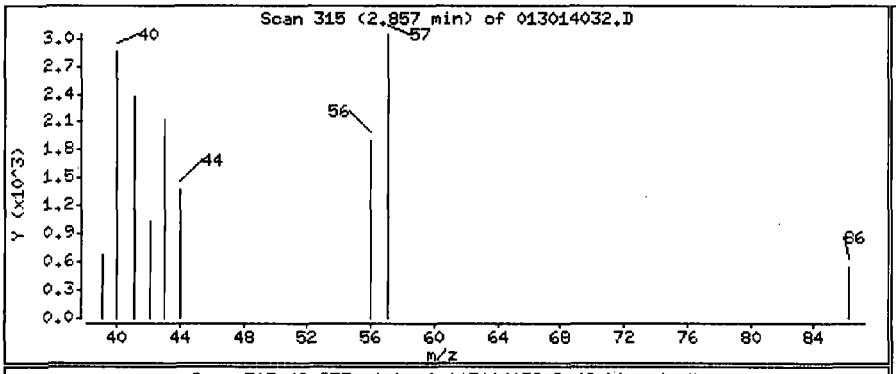
Client ID: 10256148006 Instrument: 10msv7.i

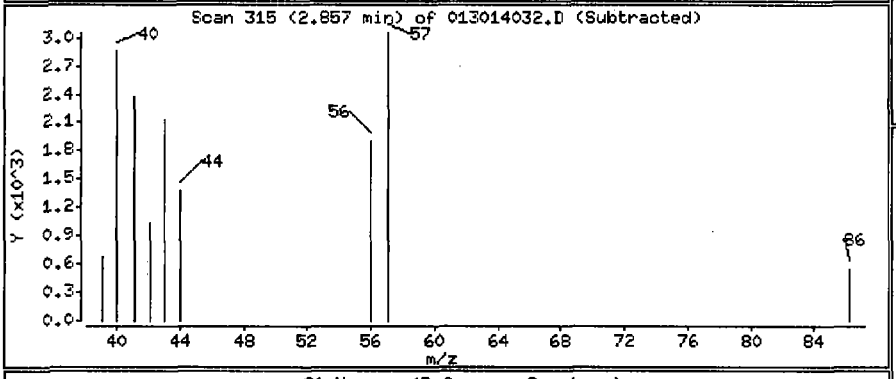
Sample Info: 10256148006,6.32

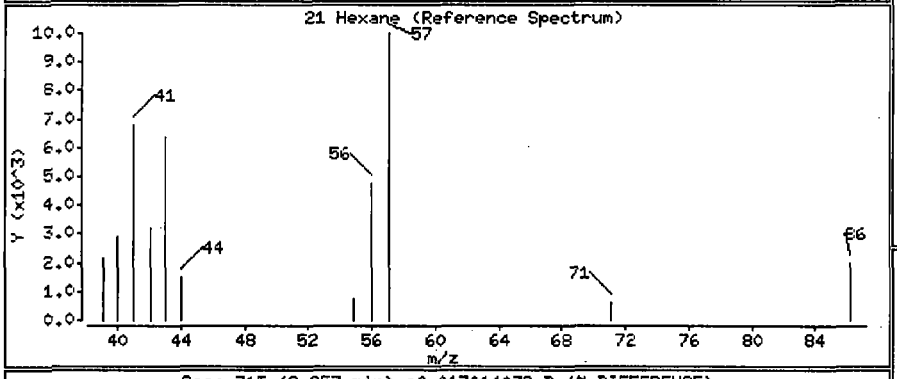
Operator: HBP

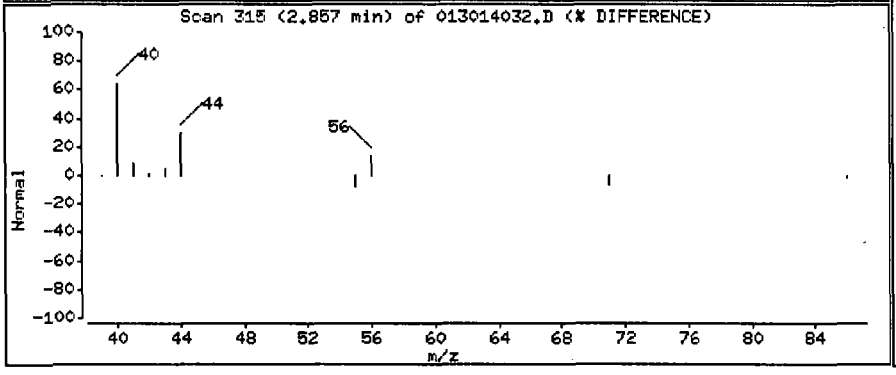
Column phase: Rtx-VMS Column diameter: 0.18

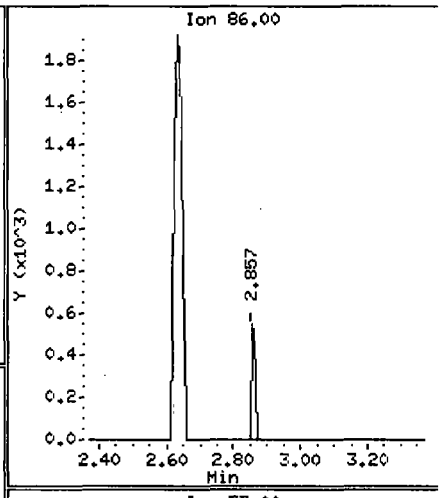
21 Hexane Concentration: 0.38 ug/Kg

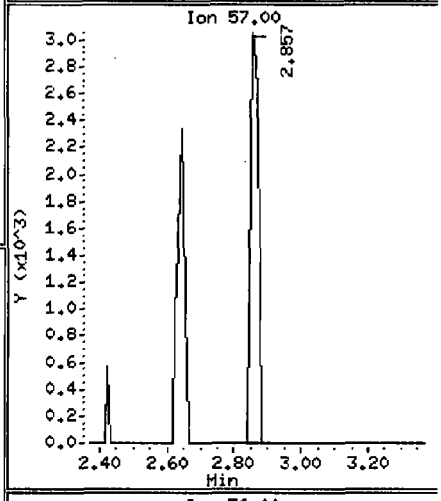


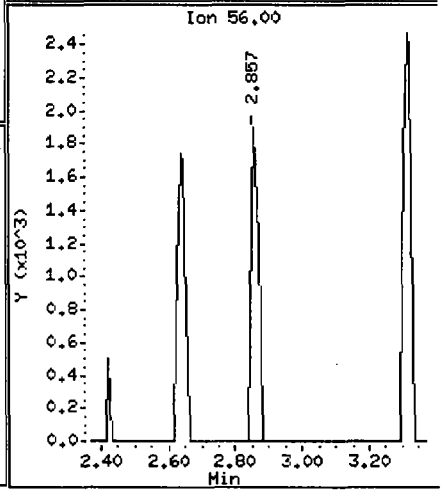












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Date : 30-JAN-2014 21:45

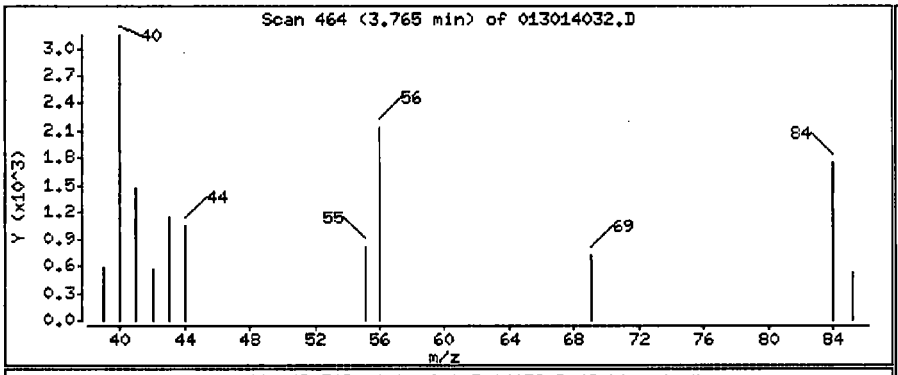
Client ID: 10256148006 Instrument: 10msv7.i

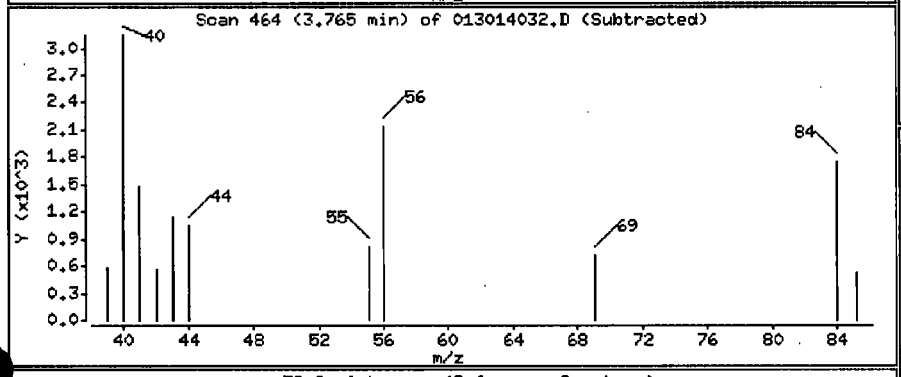
Sample Info: 10256148006,6.32

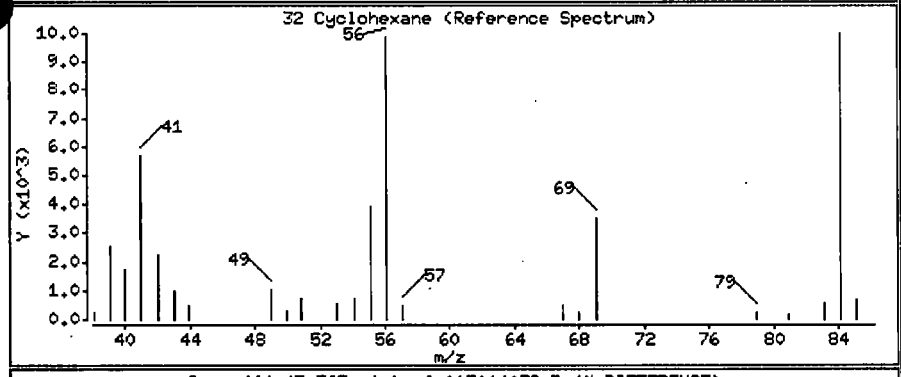
Operator: HBP

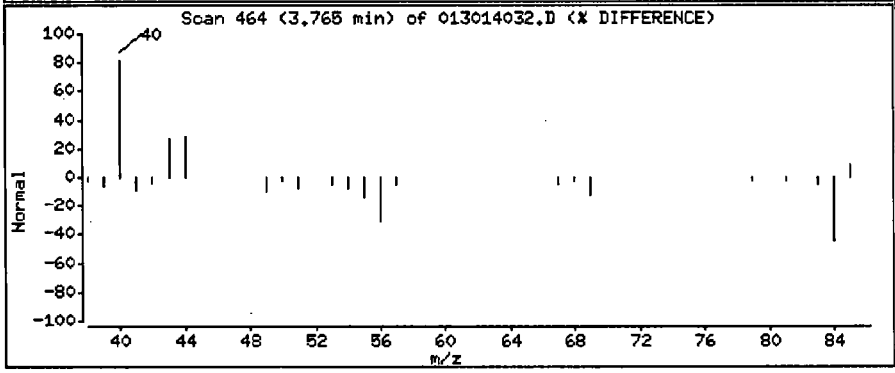
Column phase: Rtx-VMS Column diameter: 0.18

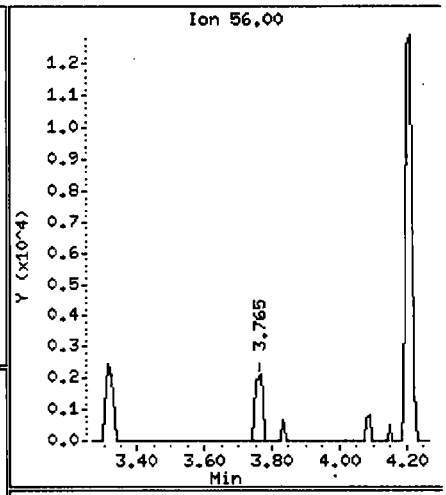
32 Cyclohexane Concentration: 0.50 ug/Kg

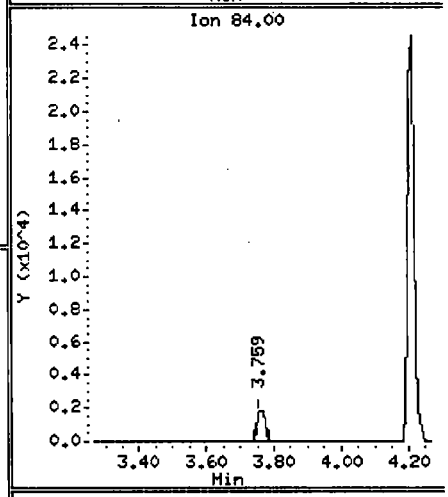


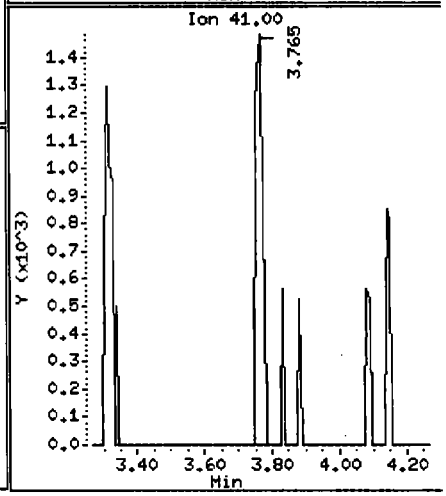












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Date : 30-JAN-2014 21:45

Client ID: 10256148006

Instrument: 10msv7.i

Sample Info: 10256148006,6.32

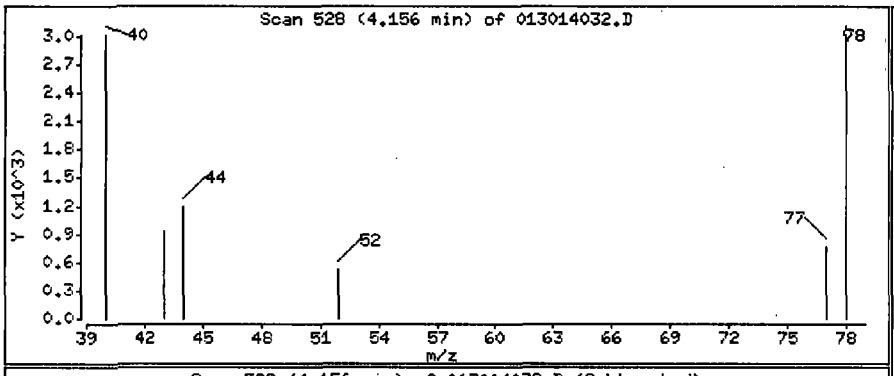
Operator: HBP

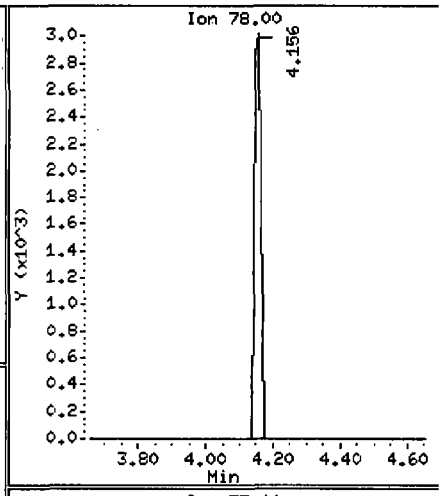
Column phase: Rtx-VMS

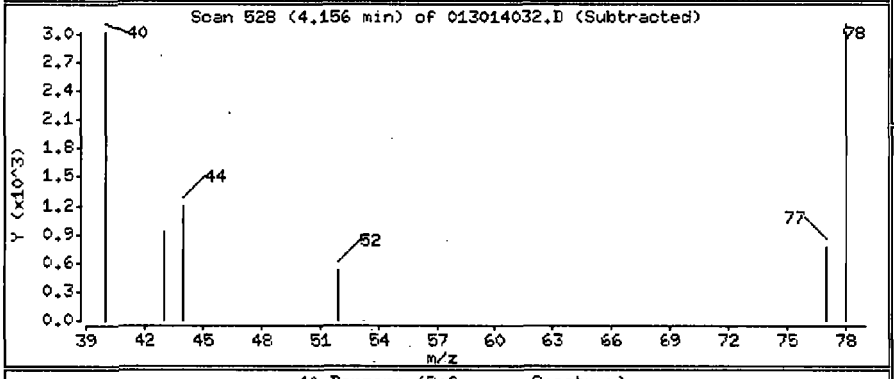
Column diameter: 0.18

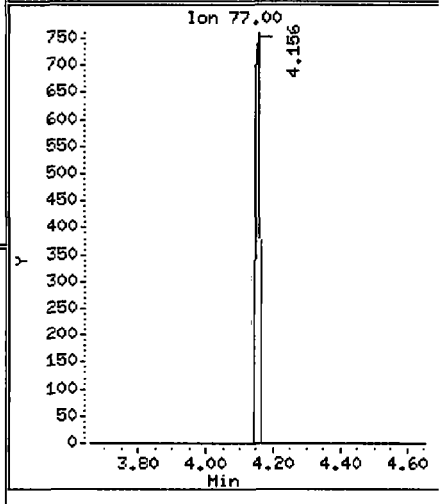
40 Benzene

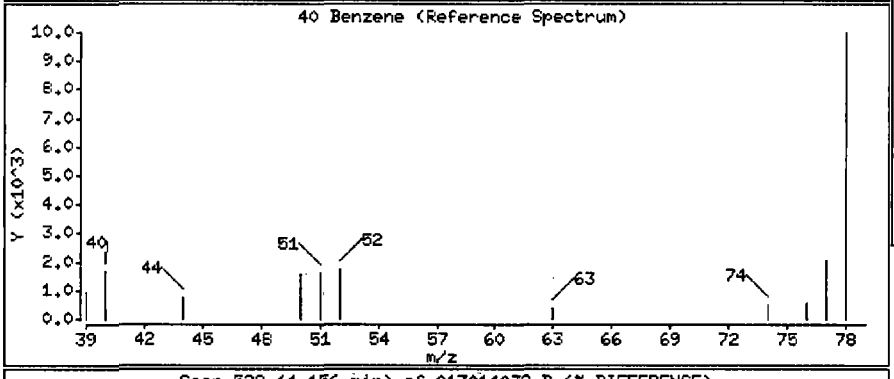
Concentration: 0.24 ug/Kg

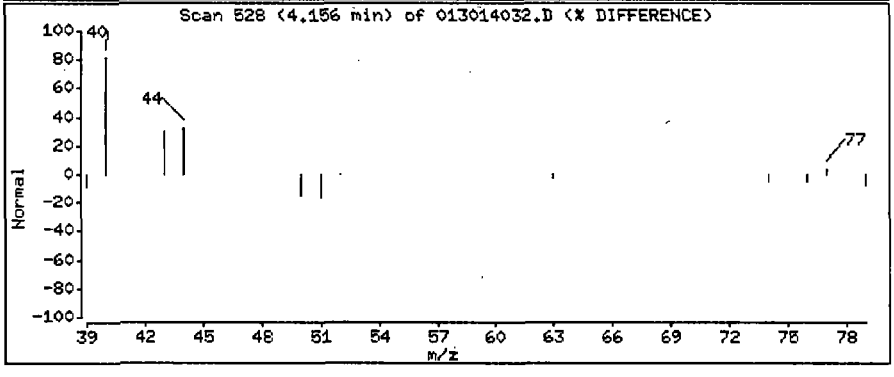












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Date : 30-JAN-2014 21:45

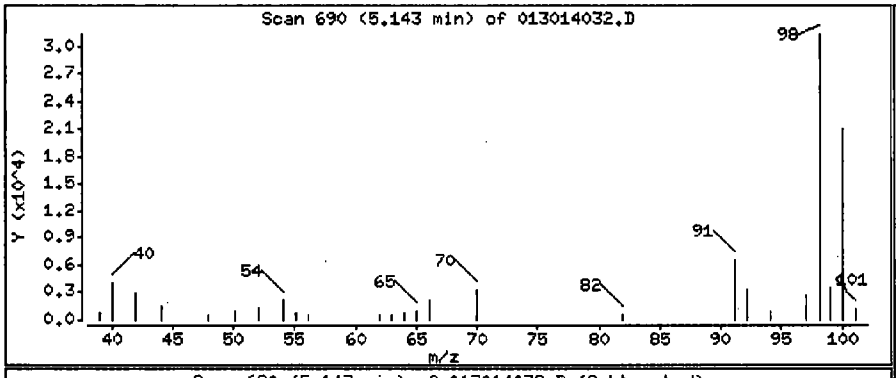
Client ID: 10256148006 Instrument: 10msv7.i

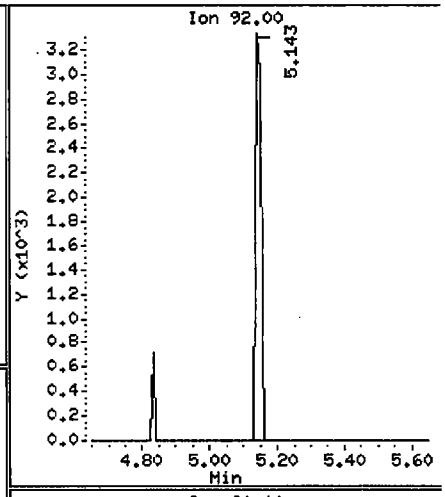
Sample Info: 10256148006,6.32

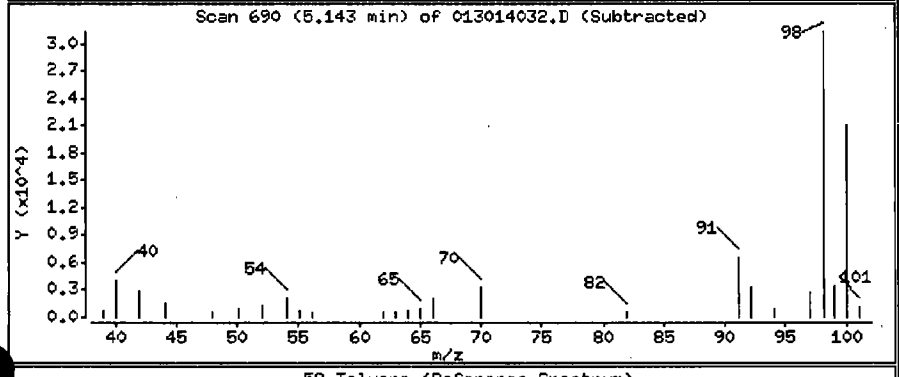
Operator: HBP

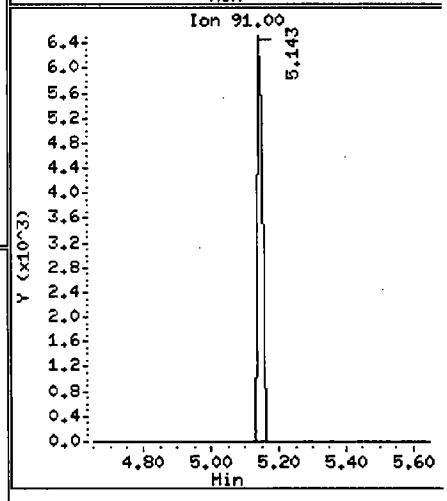
Column phase: Rtx-VMS Column diameter: 0.18

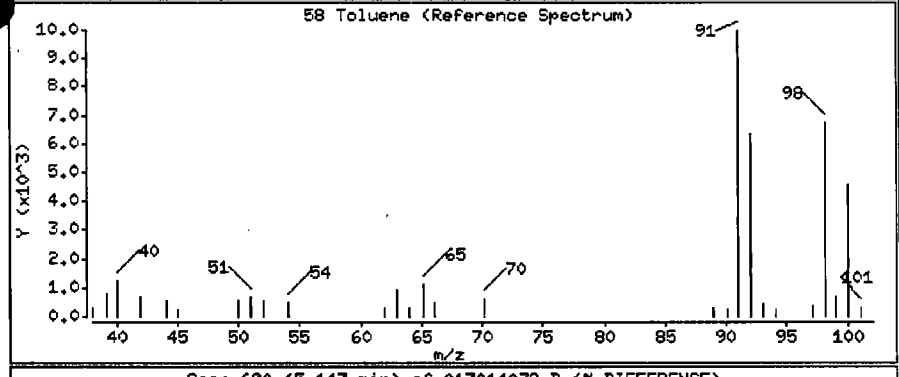
58 Toluene Concentration: 0.32 ug/Kg

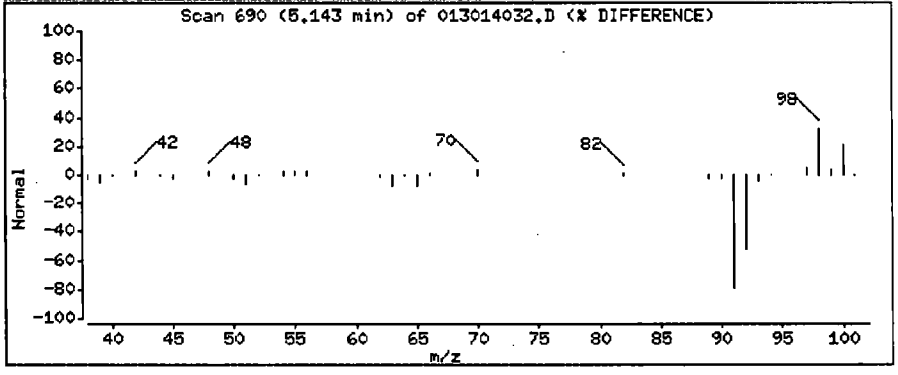












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Date : 30-JAN-2014 21:45

Client ID: 10256148006

Instrument: 10msv7.i

Sample Info: 10256148006,6.32

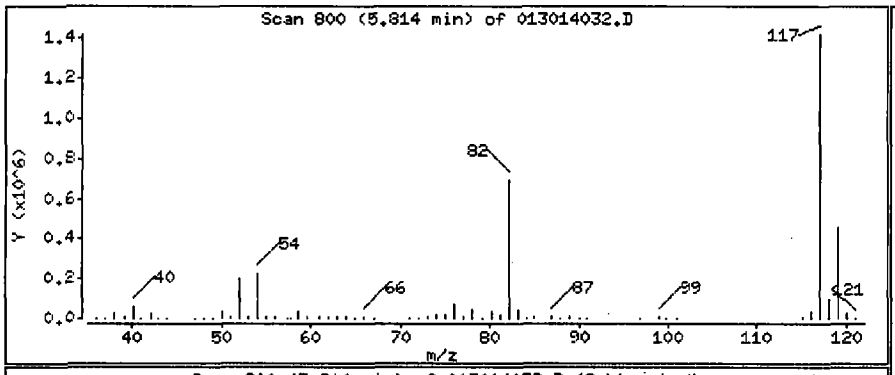
Operator: HBP

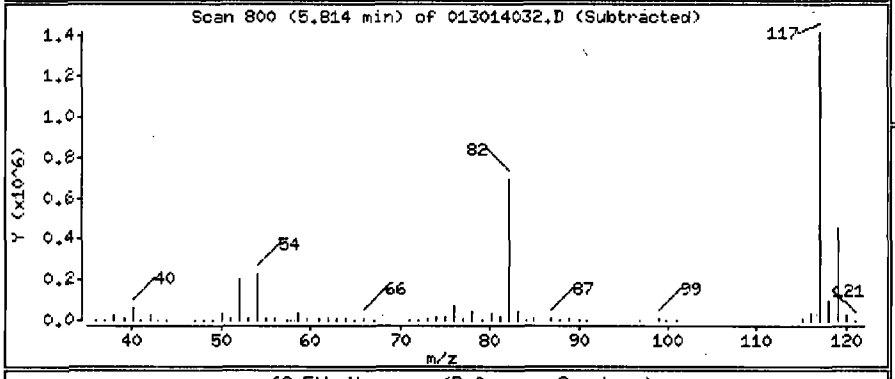
Column phase: Rtx-VMS

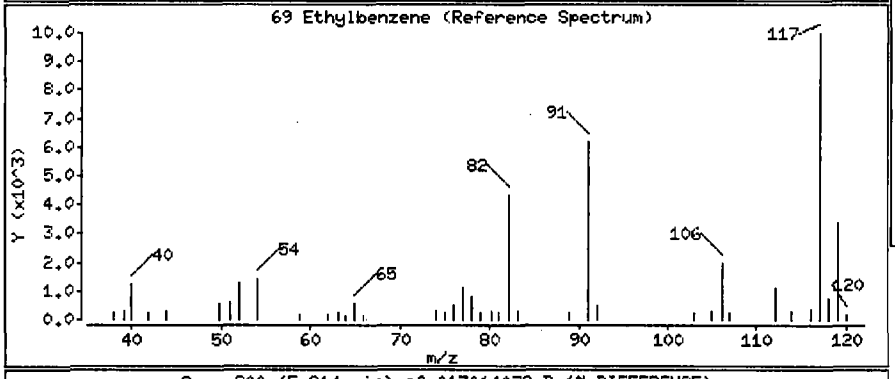
Column diameter: 0.18

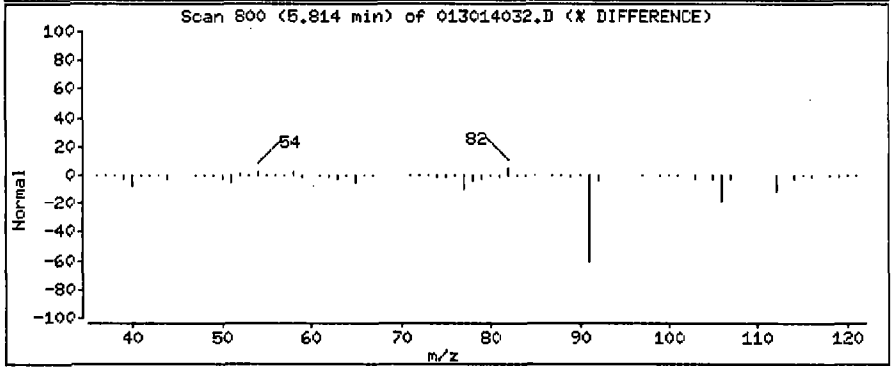
69 Ethylbenzene

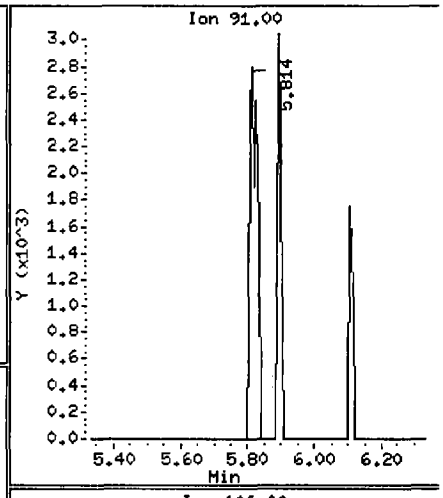
Concentration: 0.22 ug/Kg

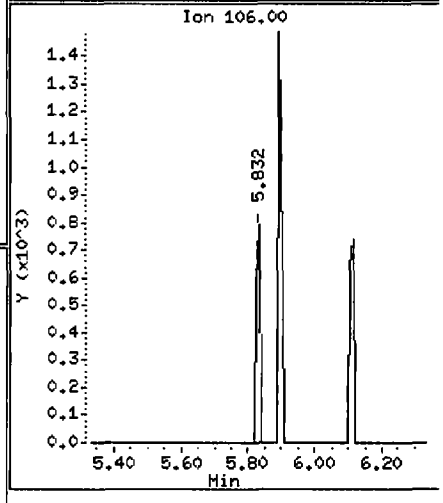












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Date : 30-JAN-2014 21:45

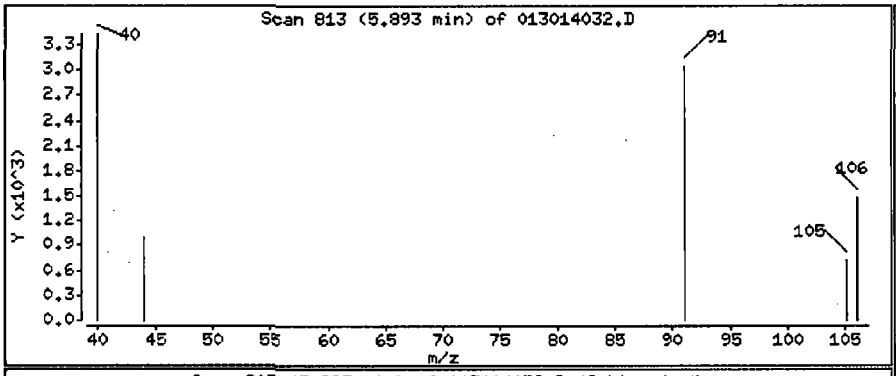
Client ID: 10256148006 Instrument: 10msv7.i

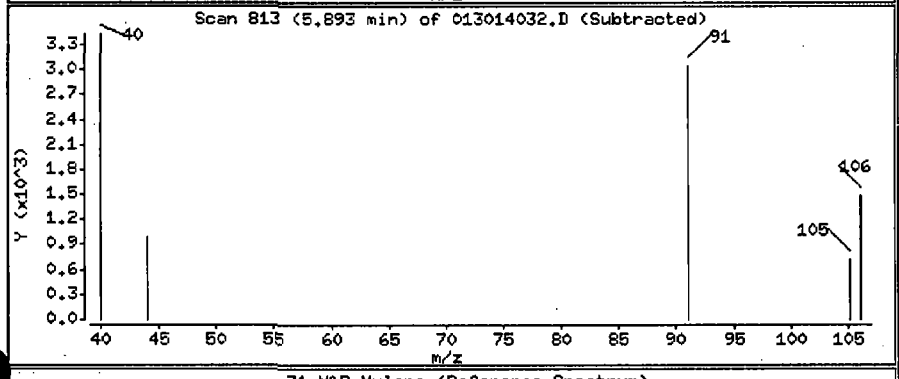
Sample Info: 10256148006,6.32

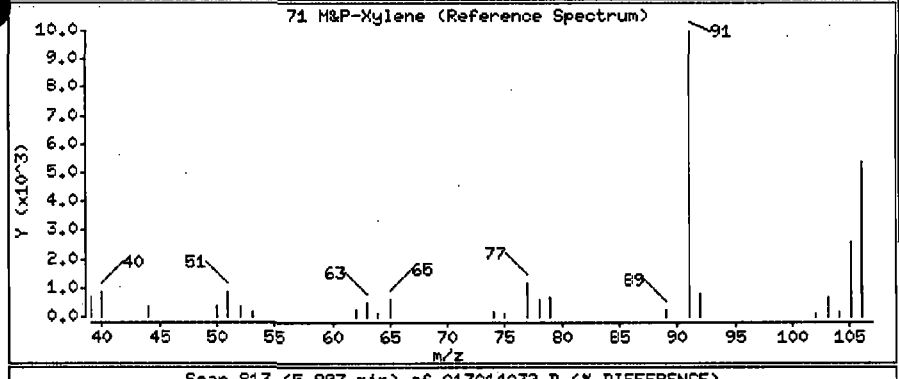
Operator: HBP

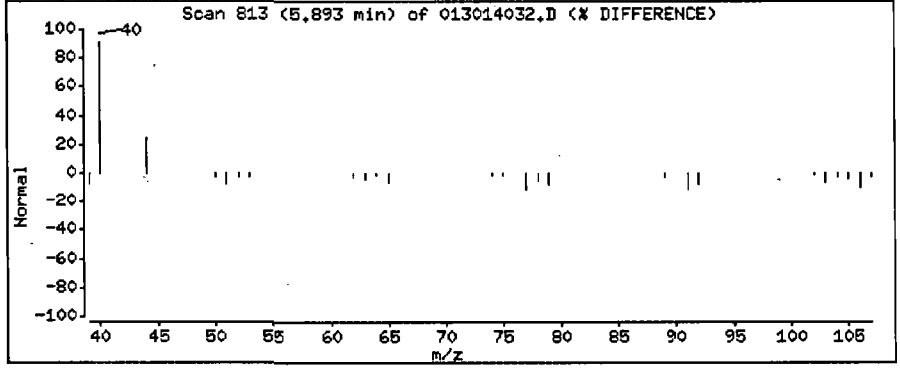
Column phase: Rtx-VMS Column diameter: 0.18

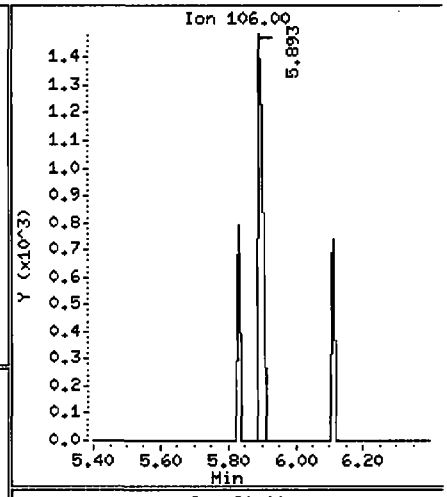
71 M&P-Xylene Concentration: 0.16 ug/Kg

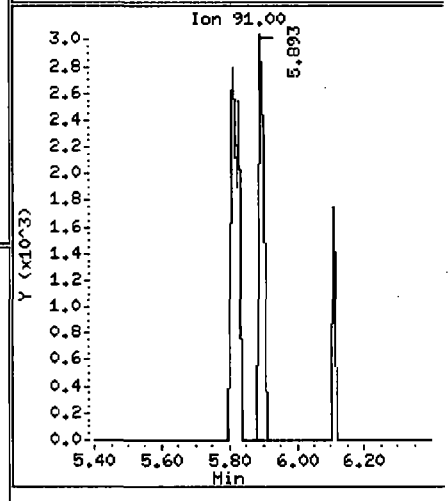












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Date : 30-JAN-2014 21:45

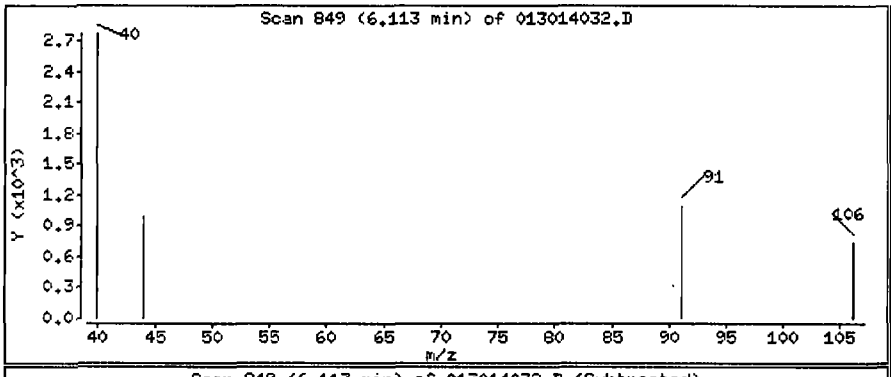
Client ID: 10256148006 Instrument: 10msv7.i

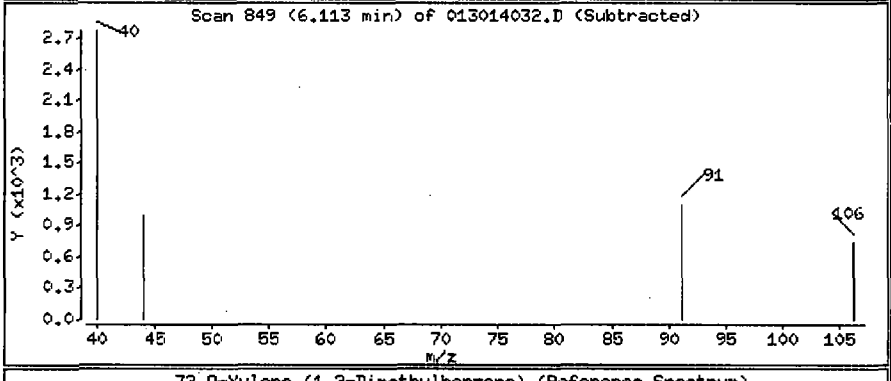
Sample Info: 10256148006,6.32

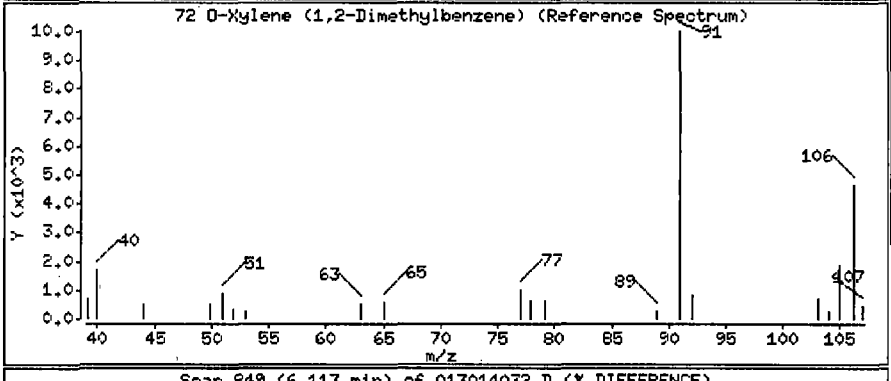
Operator: HBP

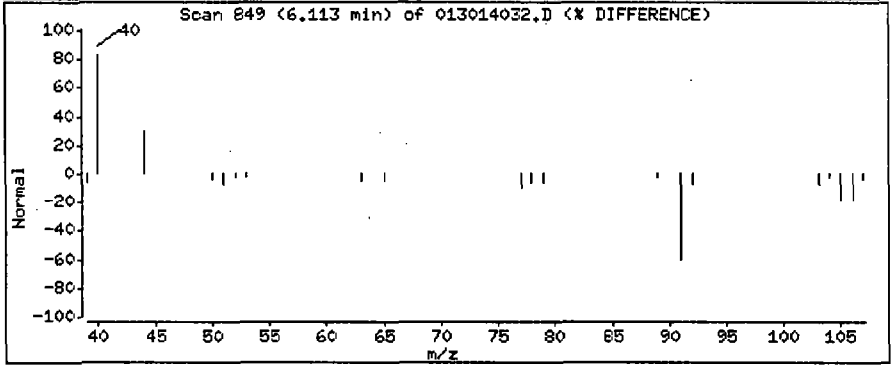
Column phase: Rtx-VMS Column diameter: 0.18

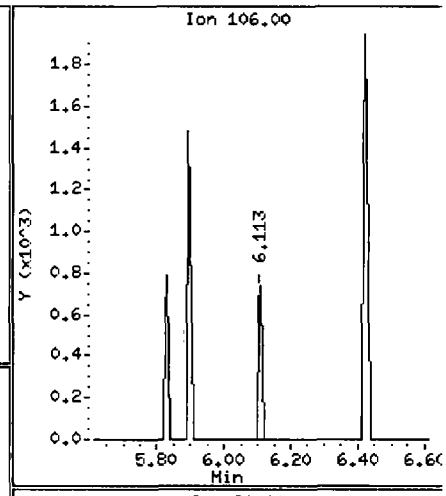
72 O-Xylene (1,2-Dimethylbenzene) Concentration: 0.072 ug/Kg

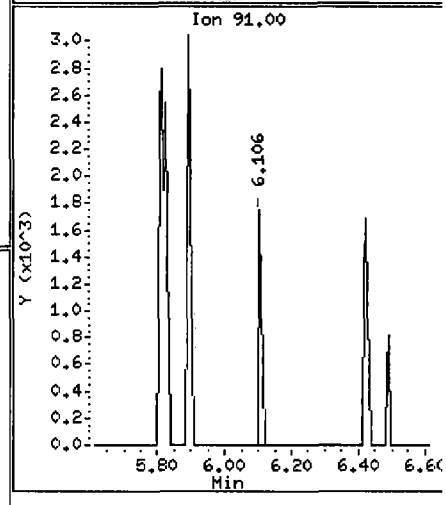












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Date : 30-JAN-2014 21:45

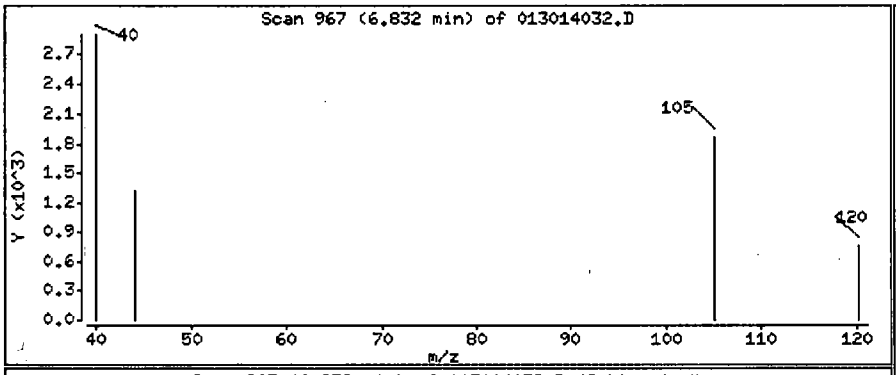
Client ID: 10256148006 Instrument: 10msv7.i

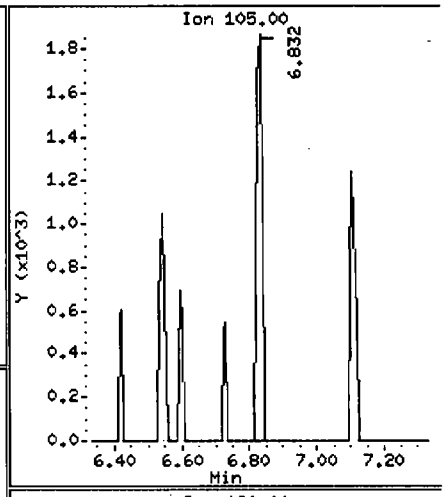
Sample Info: 10256148006,6.32

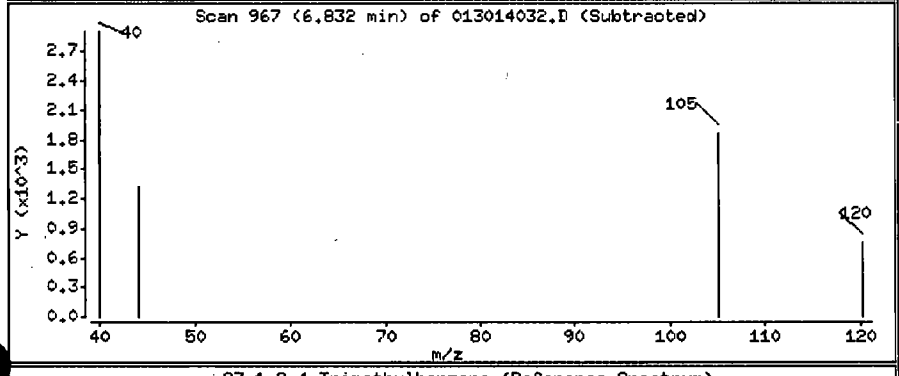
Operator: HBP

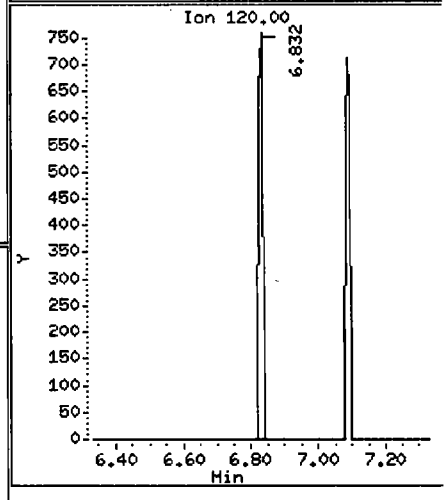
Column phase: Rtx-VMS Column diameter: 0.18

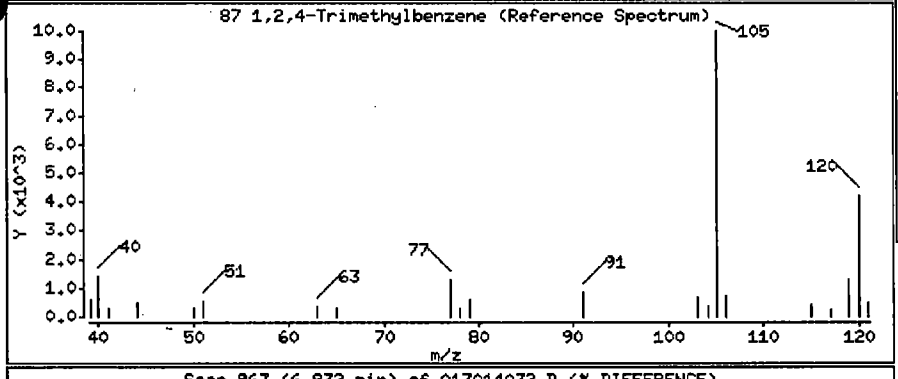
87 1,2,4-Trimethylbenzene Concentration: 0.15 ug/Kg

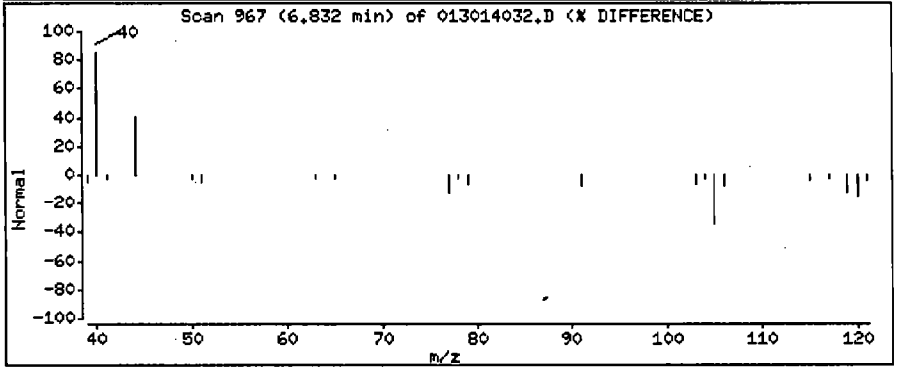












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Date : 30-JAN-2014 21:45

Client ID: 10256148006

Instrument: 10msv7.i

Sample Info: 10256148006,6.32

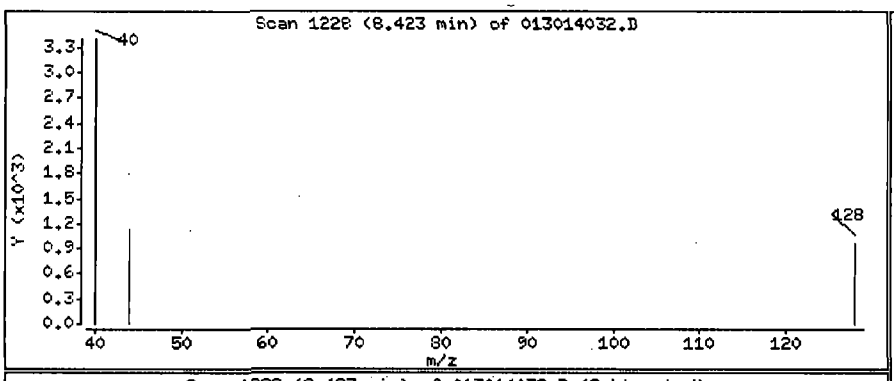
Operator: HBP

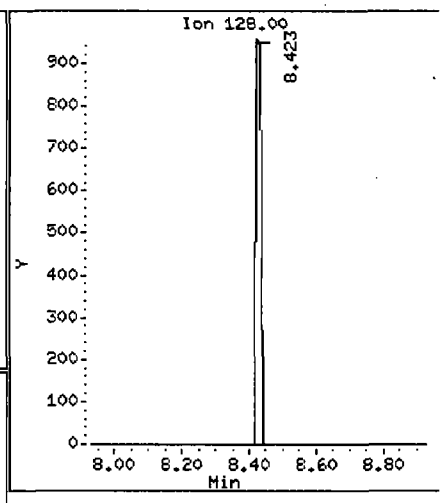
Column phase: Rtx-VMS

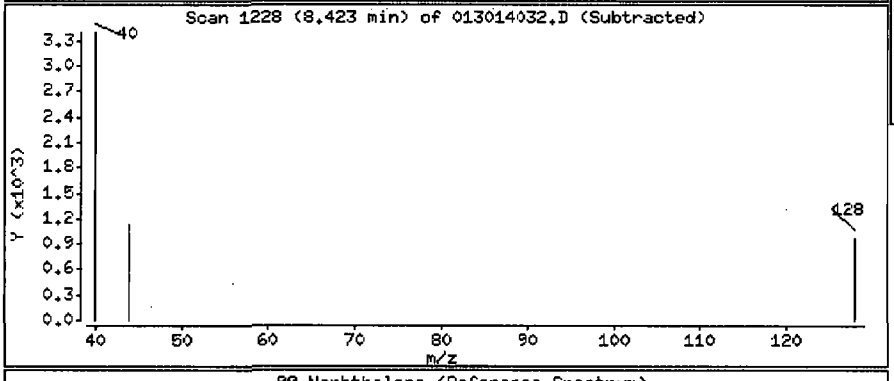
Column diameter: 0.18

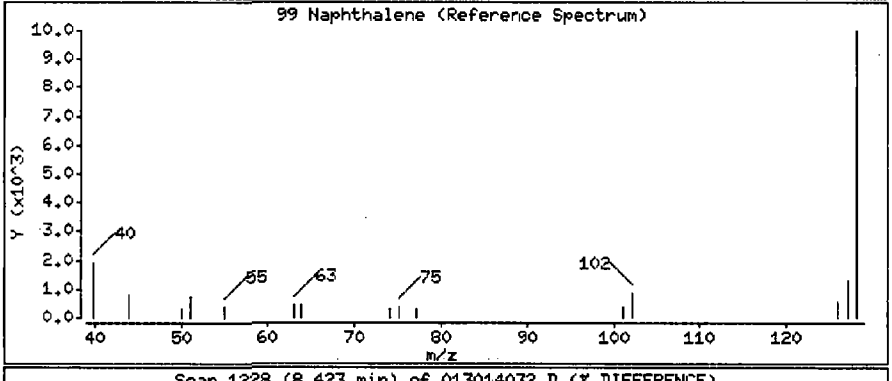
99 Naphthalene

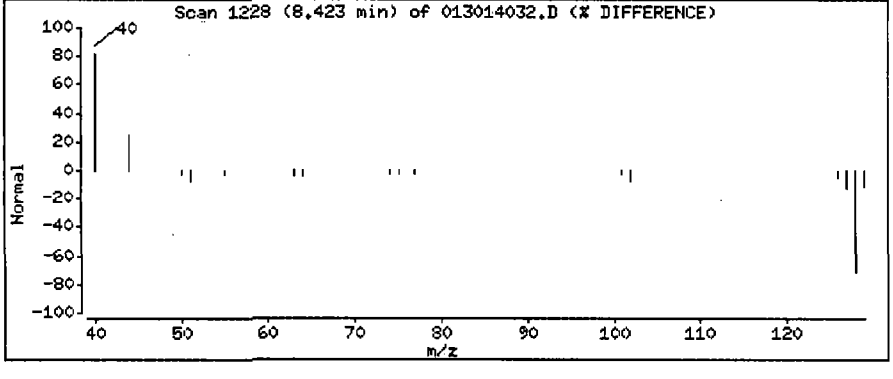
Concentration: 0.099 ug/Kg











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Injection Date: 30-JAN-2014 21:45
Instrument: 10msv7.i
Lab Sample ID: 10256148006
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014033.D
Report Date: 03-Feb-2014 09:16

Pace Analytical Services, Inc.

8260B VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv7.i\013014b.b\013014033.D
Lab Smp Id: 10256148007 Client Smp ID: 10256148007
Inj Date : 30-JAN-2014 22:03
Operator : HBP Inst ID: 10msv7.i
Smp Info : 10256148007,5.61
Misc Info : 26253
Comment : 8260B VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Meth Date : 03-Feb-2014 07:51 hpham Quant Type: ISTD
Cal Date : 29-JAN-2014 15:38 Cal File: 012914011.D
Als bottle: 33
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: 10ICPMSTIER2

Concentration Formula: Amt * DF * Uf * (Ws * (100 - M)/100)/Vt * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Ws	5.610	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Vt	5.000	Volume of final extract (uL)
Va	100.000	Volume of aliquot extract added (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1	Dichlorodifluoromethane	85	Compound Not Detected.					
2	Chloromethane	50	Compound Not Detected.					
3	Vinyl Chloride	62	Compound Not Detected.					
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	Compound Not Detected.					
6	Trichlorofluoromethane	101	Compound Not Detected.					
7	Dichlorofluoromethane	67	Compound Not Detected.					
8	Diethyl ether (Ethyl Ether)	59	Compound Not Detected.					
9	1,1-Dichloroethene	96	Compound Not Detected.					
10	Carbon Disulfide	76	2.113	2.113	(0.502)	4391	0.28757	0.32(a)
11	Ethanol	45	Compound Not Detected.					
12	Trichlorotrifluoroethane	101	Compound Not Detected.					
13	Iodomethane	142	2.216	2.223	(0.527)	1058	2.70940	3.0(a)
14	Acrolein	56	Compound Not Detected.					
15	Allyl Chloride	41	Compound Not Detected.					
16	Methylene Chloride	84	2.637	2.643	(0.626)	8964	0.60748	0.68(a)
17	Isopropanol	45	Compound Not Detected.					
* 18	Acetone d6	46	2.643	2.649	(1.000)	145712	200.000	
19	Acetone	58	2.692	2.698	(1.018)	10330	36.8532	41.3
20	trans-1,2-Dichloroethene	96	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014033.D
Report Date: 03-Feb-2014 09:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
	21 Hexane	86	Compound Not Detected.					
	22 Methyl-tert-butyl Ether	73	Compound Not Detected.					
	23 tert-Butyl Alcohol	59	Compound Not Detected.					
	24 Acetonitrile	41	Compound Not Detected.					
	25 Isopropyl Ether	45	Compound Not Detected.					
	26 Acrylonitrile	53	Compound Not Detected.					
	27 1,1-Dichloroethane	63	Compound Not Detected.					
	28 Ethyl-tert-butyl ether	59	Compound Not Detected.					
	29 Vinyl Acetate	43	Compound Not Detected.					
	30 cis-1,2-Dichloroethene	96	Compound Not Detected.					
	31 2,2-Dichloropropane	77	Compound Not Detected.					
	32 Cyclohexane	56	Compound Not Detected.					
	33 Bromochloromethane	130	Compound Not Detected.					
	34 Chloroform	83	Compound Not Detected.					
	35 Carbon Tetrachloride	117	Compound Not Detected.					
	36 Tetrahydrofuran	72	Compound Not Detected.					
	37 1,1,1-Trichloroethane	97	Compound Not Detected.					
	38 2-Butanone	43	4.009	4.009	(0.952)	5615	3.85111	4.3(aQ)
	39 1,1-Dichloropropene	75	Compound Not Detected.					
	40 Benzene	78	Compound Not Detected.					
*	41 Pentafluorobenzene	168	4.210	4.216	(1.000)	1154472	100.000	
	42 Tert-amyl methyl ether	73	Compound Not Detected.					
S	43 1,2-Dichloroethane d4 (S)	65	4.228	4.235	(1.004)	456296	106.849	107
	44 1,2-Dichloroethane	62	Compound Not Detected.					
	45 Isobutanol	43	Compound Not Detected.					
	46 Tert-Amyl Alcohol	59	Compound Not Detected.					
	47 Trichloroethene	130	Compound Not Detected.					
*	48 1,4 Difluorobenzene	114	4.490	4.497	(1.000)	1600653	100.000	
	49 Tert-amyl ethyl ether	59	Compound Not Detected.					
	50 Dibromomethane	174	Compound Not Detected.					
	51 1,2-Dichloropropane	63	Compound Not Detected.					
	52 Bromodichloromethane	83	Compound Not Detected.					
*	53 1,4 dioxane d8	96	4.838	4.844	(1.000)	141686	4000.00	
	54 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	55 2-Chloroethyl Vinyl Ether	63	Compound Not Detected.					
	56 cis-1,3-Dichloropropene	75	Compound Not Detected.					
S	57 Toluene-d8 (S)	98	5.124	5.125	(0.882)	1865675	98.4921	98.5
	58 Toluene	92	5.149	5.149	(0.886)	2373	0.17466	0.20(a)
	59 4-Methyl-2-Pentanone	43	Compound Not Detected.					
	60 Tetrachloroethene	166	5.313	5.314	(0.914)	1413	0.21823	0.24(a)
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	62 1,1,2-Trichloroethane	97	Compound Not Detected.					
	63 Dibromochloromethane	129	Compound Not Detected.					
	64 1,3-Dichloropropane	76	Compound Not Detected.					
	65 1,2-Dibromoethane	107	Compound Not Detected.					
	66 2-Hexanone	43	5.673	5.673	(0.976)	4619	1.82421	2.0(aQ)
*	67 Chlorobenzene-d5	117	5.813	5.814	(1.000)	1502626	100.000	
	68 Chlorobenzene	112	Compound Not Detected.					
	69 Ethylbenzene	91	Compound Not Detected.					
	70 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	71 M&P-Xylene	106	5.899	5.899	(1.015)	596	0.05985	0.067(aQ)
	72 O-Xylene (1,2-Dimethylbenzene)	106	Compound Not Detected.					
	73 Styrene	104	Compound Not Detected.					
	74 Bromoform	173	Compound Not Detected.					

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	75	Isopropylbenzene (Cumene)	105	Compound Not Detected.					
$	76	4-Bromofluorobenzene (S)	95	6.423	6.423	(0.906)	723062	100.298	100
	77	cis-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	78	Bromobenzene	156	Compound Not Detected.					
	79	n-Propylbenzene	91	Compound Not Detected.					
	80	1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	81	2-Chlorotoluene	91	Compound Not Detected.					
	82	1,3,5-Trimethylbenzene	105	Compound Not Detected.					
	83	1,2,3-Trichloropropane	110	Compound Not Detected.					
	84	trans-1,4-Dichloro-2-Butene	53	Compound Not Detected.					
	85	4-Chlorotoluene	91	Compound Not Detected.					
	86	tert-Butylbenzene	119	Compound Not Detected.					
	87	1,2,4-Trimethylbenzene	105	Compound Not Detected.					
	88	sec-Butylbenzene	105	Compound Not Detected.					
	89	p-Isopropyltoluene	119	Compound Not Detected.					
	90	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	91	1,4-Dichlorobenzene-d4	152	7.087	7.088	(1.000)	892595	100.000	
	92	1,4-Dichlorobenzene	146	Compound Not Detected.					
	93	1,2,3 Trimethylbenzene	105	Compound Not Detected.					
	94	n-Butylbenzene	91	Compound Not Detected.					
	95	1,2-Dichlorobenzene	146	Compound Not Detected.					
	96	1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
	97	Hexachlorobutadiene	225	Compound Not Detected.					
	98	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
	99	Naphthalene	128	8.429	8.429	(1.189)	838	0.05468	0.061(a)
	100	1,2,3-Trichlorobenzene	180	Compound Not Detected.					
	101	2-Methylnaphthalene	142	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014033.D
Report Date: 03-Feb-2014 09:16

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv7.i
Lab File ID: 013014033.D
Lab Smp Id: 10256148007
Analysis Type: VOA
Quant Type: ISTD
Operator: HBP
Method File: \\192.168.10.12\chem\10msv7.i\013014b.b\v714-LLS-012914.m
Misc Info: 26253

Calibration Date: 30-JAN-2014
Calibration Time: 18:08
Client Smp ID: 10256148007
Level: LOW
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 7

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	143148	71574	286296	145712	1.79
41 Pentafluorobenzen	1116303	558152	2232606	1154472	3.42
48 1,4 Difluorobenze	1540471	770236	3080942	1600653	3.91
53 1,4 dioxane d8	136838	68419	273676	141686	3.54
67 Chlorobenzene-d5	1416803	708402	2833606	1502626	6.06
91 1,4-Dichlorobenze	843357	421679	1686714	892595	5.84

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.65	2.15	3.15	2.64	-0.24
41 Pentafluorobenzen	4.22	3.72	4.72	4.21	-0.15
48 1,4 Difluorobenze	4.50	4.00	5.00	4.49	-0.14
53 1,4 dioxane d8	4.84	4.34	5.34	4.84	-0.13
67 Chlorobenzene-d5	5.81	5.31	6.31	5.81	-0.00
91 1,4-Dichlorobenze	7.09	6.59	7.59	7.09	-0.00

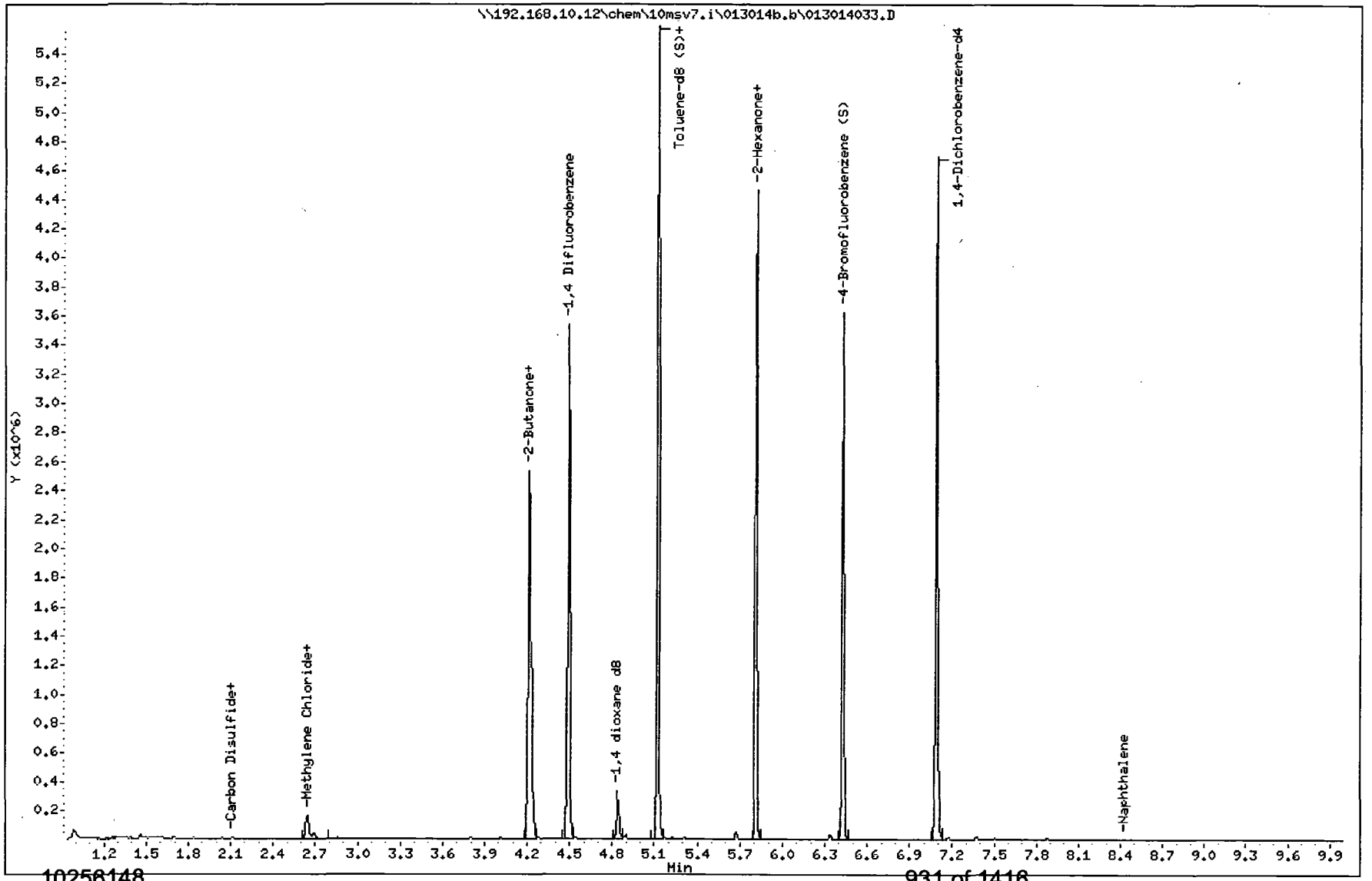
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014033.D
Date : 30-JAN-2014 22:03
Client ID: 10256148007
Sample Info: 10256148007,5.61

Instrument: 10msv7.i

Operator: HBP
Column diameter: 0.18

Column phase: Rtx-VMS



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Date : 30-JAN-2014 22:03

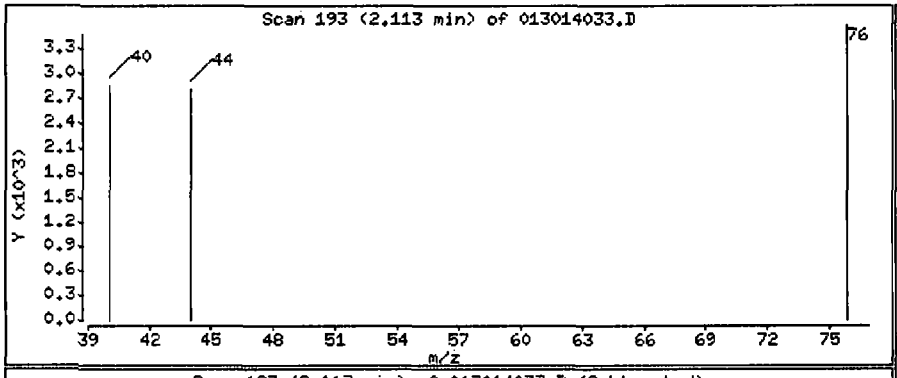
Client ID: 10256148007 Instrument: 10msv7.i

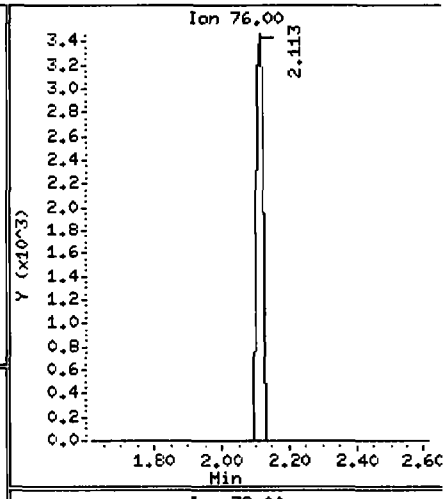
Sample Info: 10256148007,5.61

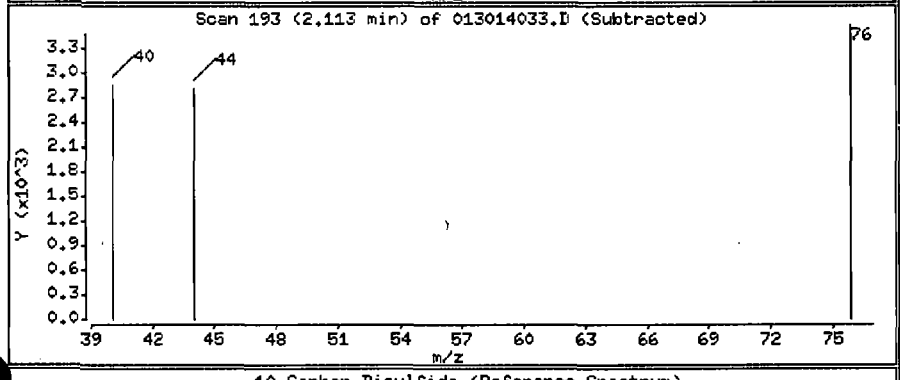
Operator: HBP

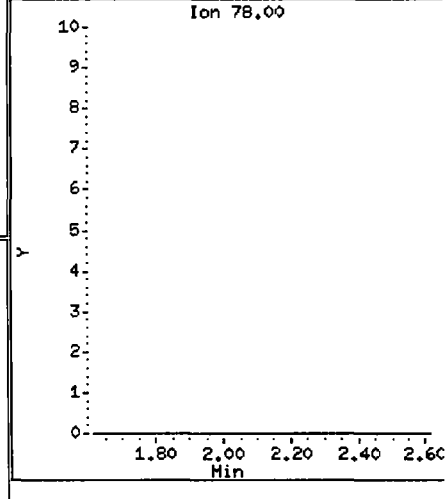
Column phase: Rtx-VMS Column diameter: 0.18

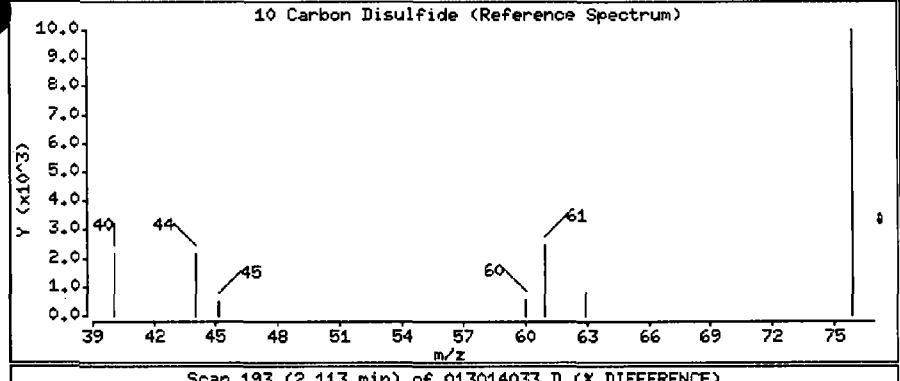
10 Carbon Disulfide Concentration: 0.32 ug/Kg

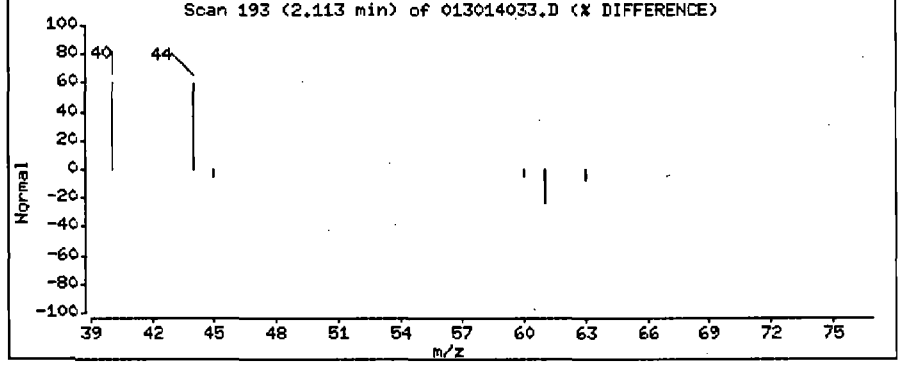












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Date : 30-JAN-2014 22:03

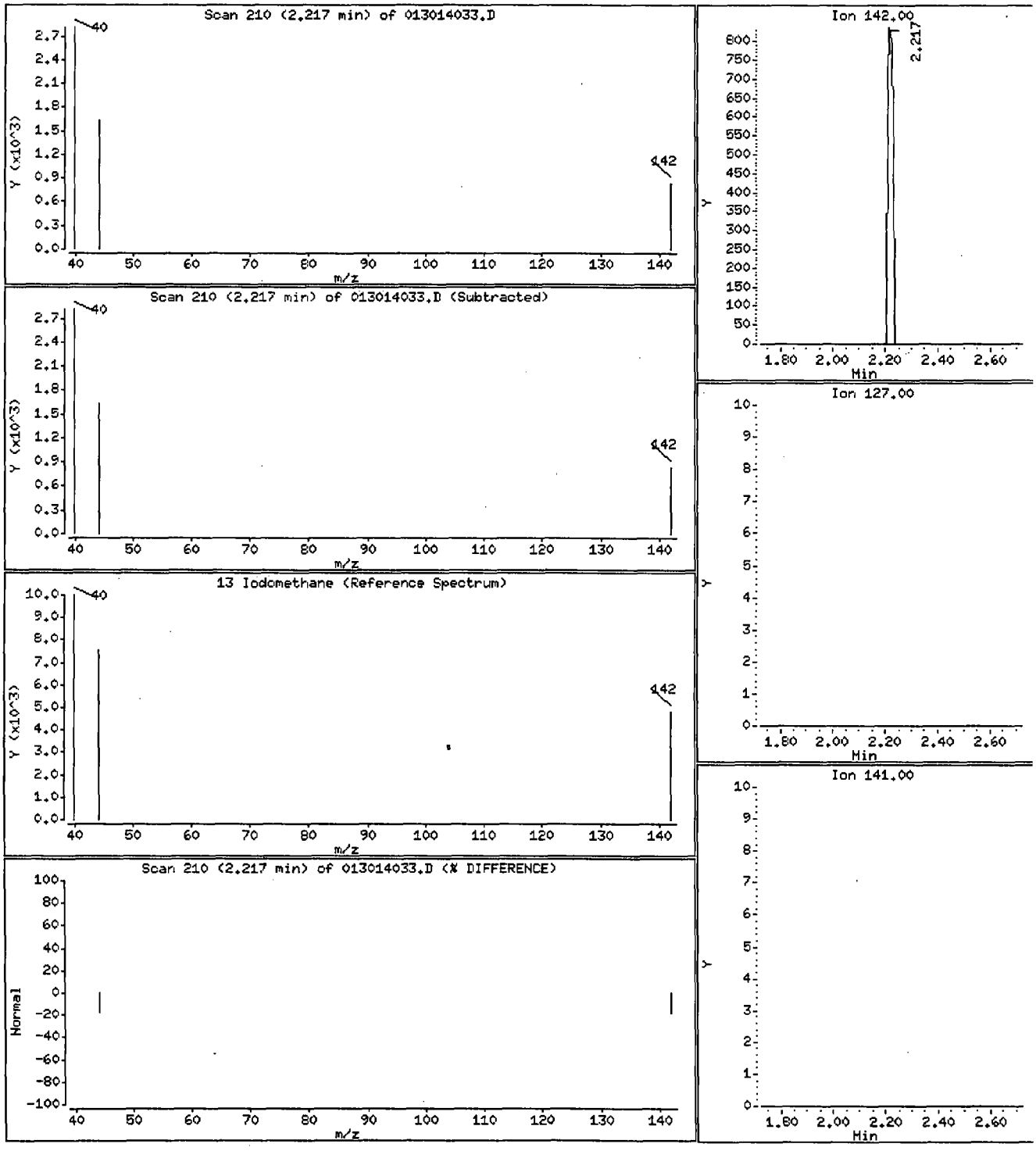
Client ID: 10256148007 Instrument: 10msv7.i

Sample Info: 10256148007,5.61

Operator: HBP

Column phase: Rtx-VMS Column diameter: 0.18

13 Iodomethane Concentration: 3.0 ug/Kg



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Date : 30-JAN-2014 22:03

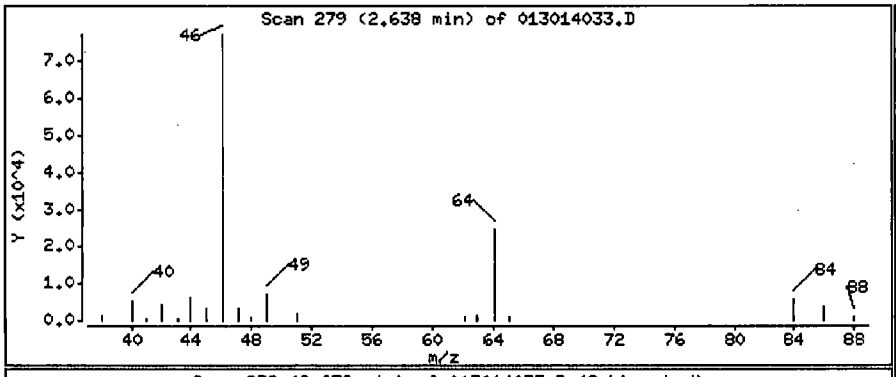
Client ID: 10256148007 Instrument: 10msv7.i

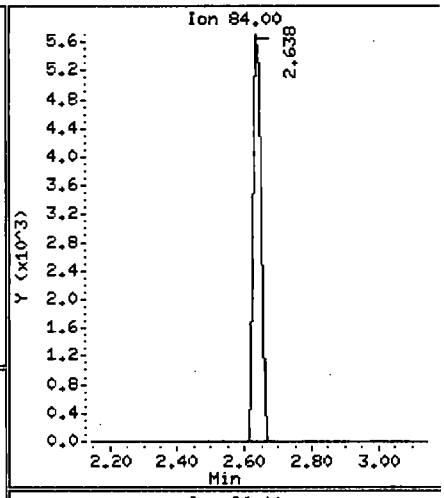
Sample Info: 10256148007,5.61

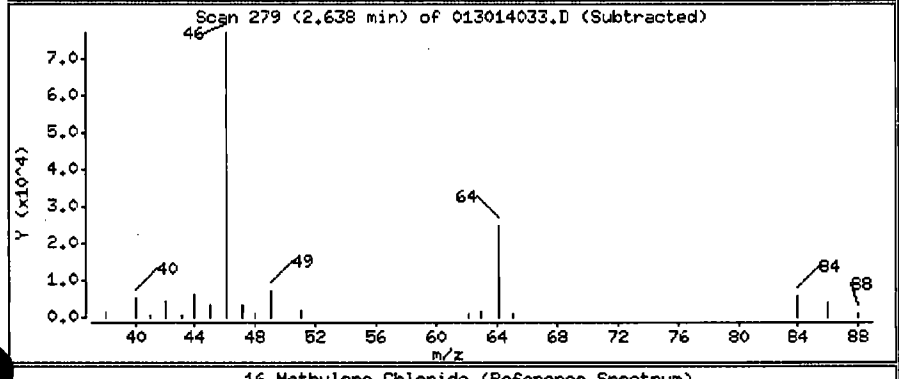
Operator: HBP

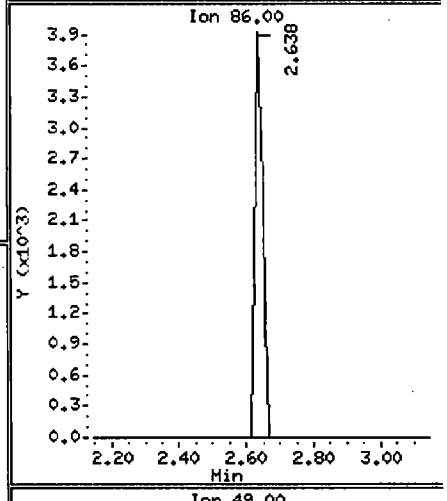
Column phase: Rtx-VMS Column diameter: 0.18

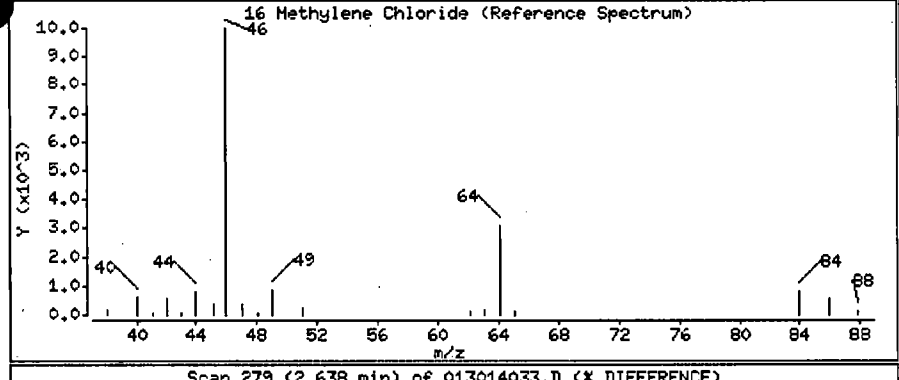
16 Methylene Chloride Concentration: 0.68 ug/Kg

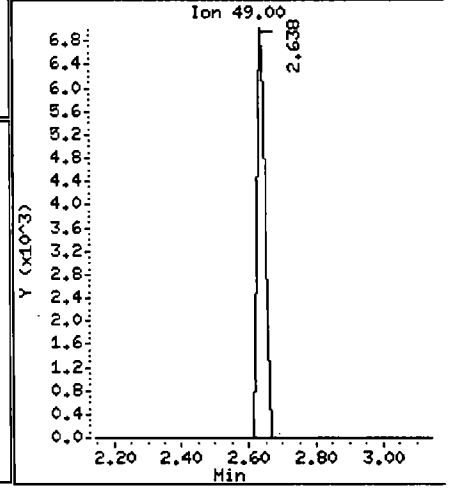


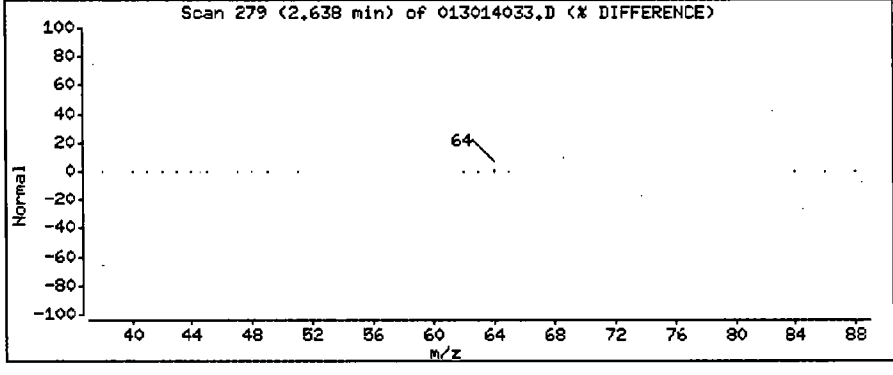












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Date : 30-JAN-2014 22:03

Client ID: 10256148007

Instrument: 10msv7.i

Sample Info: 10256148007,5.61

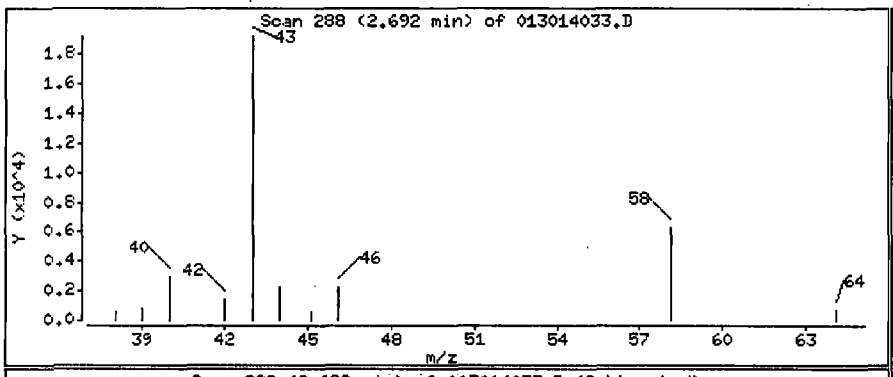
Operator: HBP

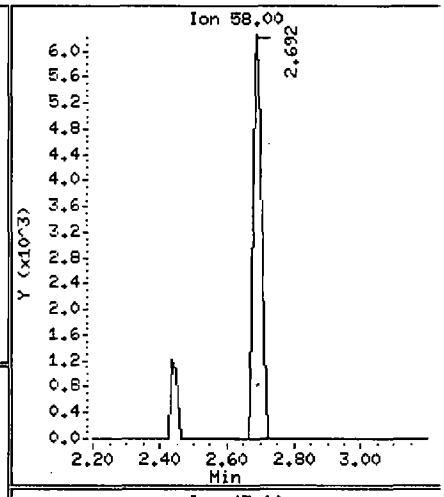
Column phase: Rtx-VMS

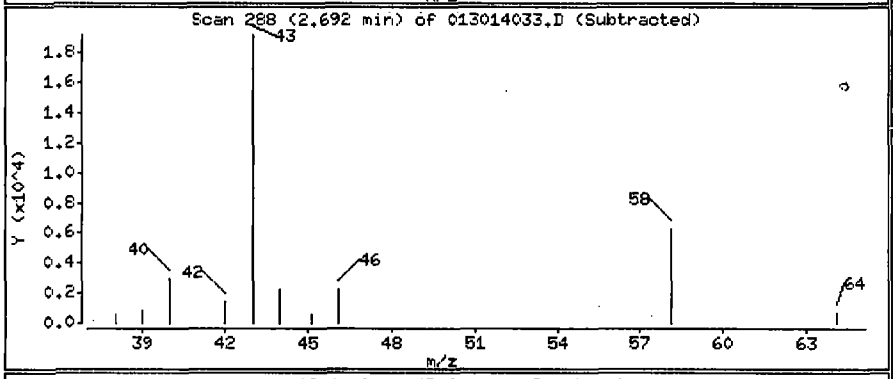
Column diameter: 0.18

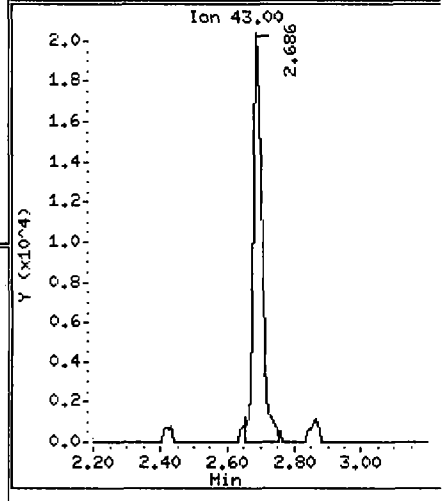
19 Acetone

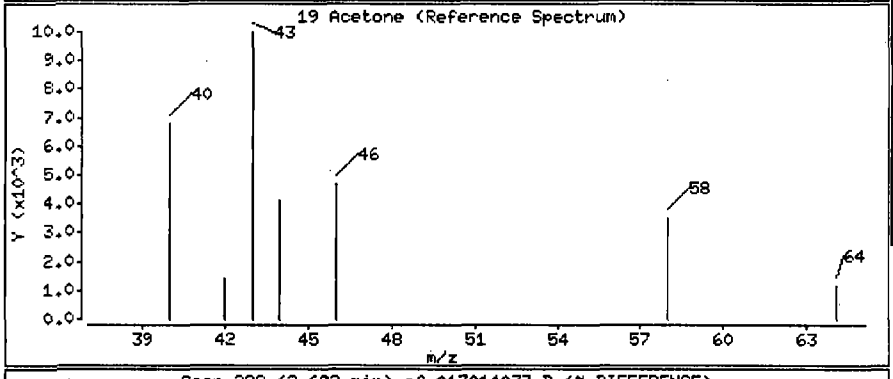
Concentration: 41.3 ug/Kg

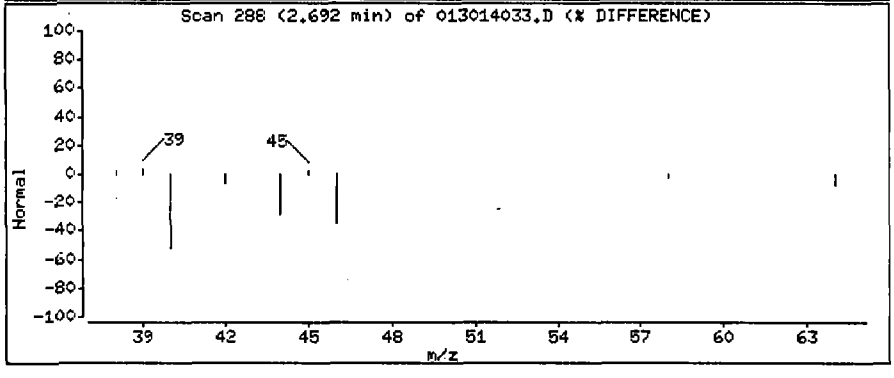












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014033.D

Date : 30-JAN-2014 22:03

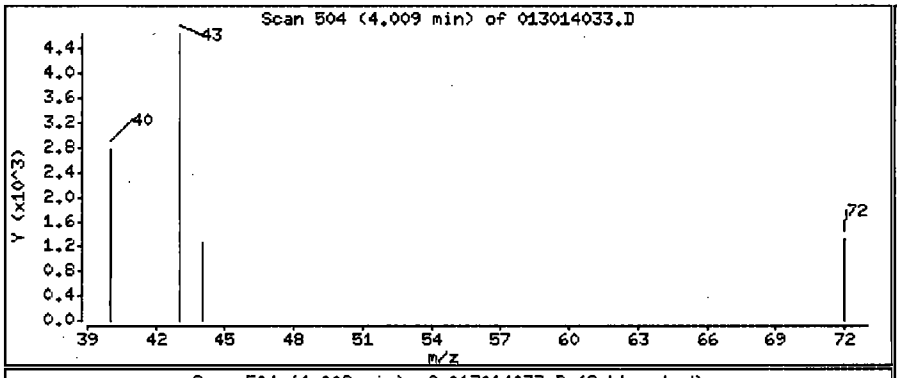
Client ID: 10256148007 Instrument: 10msv7.i

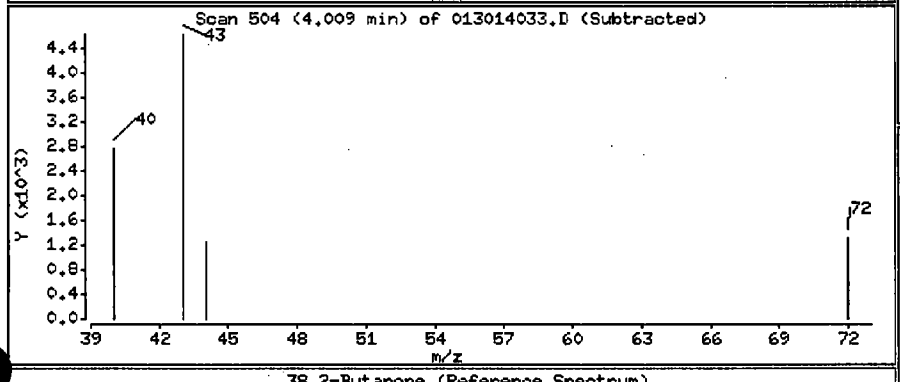
Sample Info: 10256148007,5.61

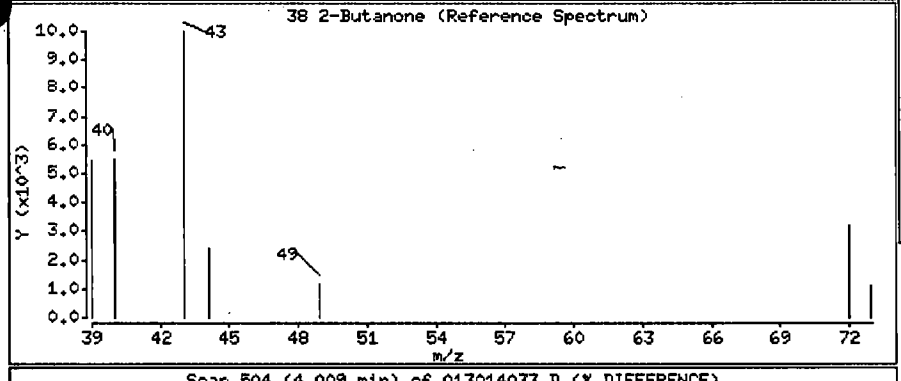
Operator: HBP

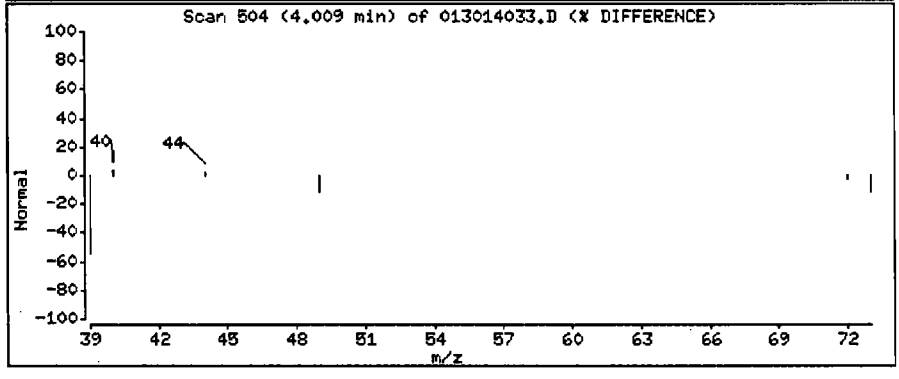
Column phase: Rtx-VMS Column diameter: 0.18

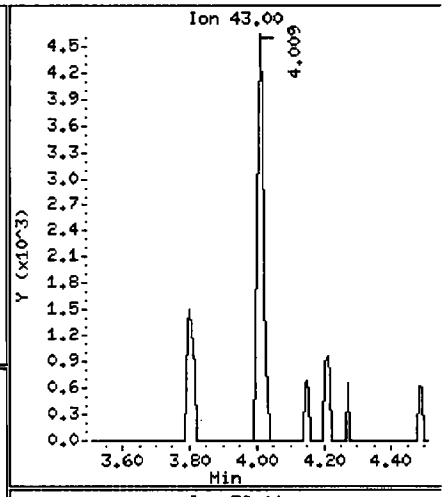
38 2-Butanone Concentration: 4.3 ug/Kg

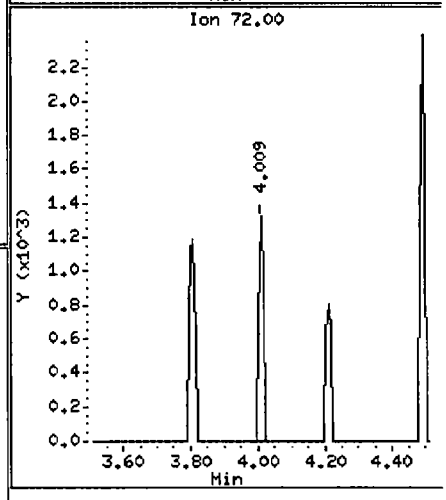












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014033.D

Date : 30-JAN-2014 22:03

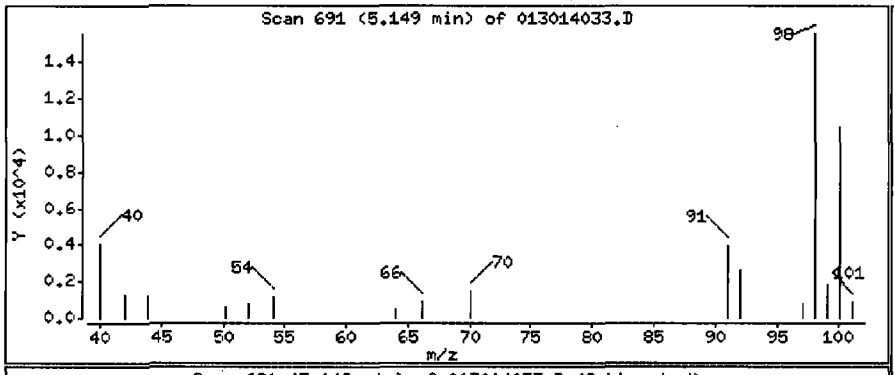
Client ID: 10256148007 Instrument: 10msv7.i

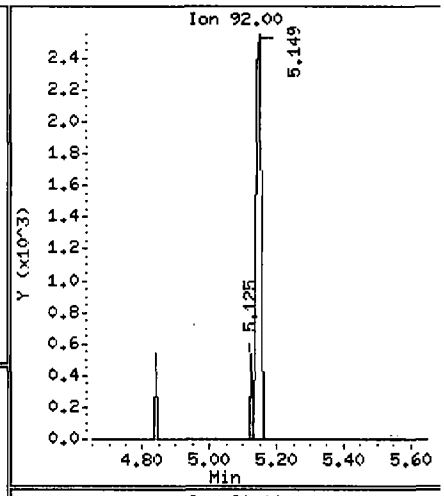
Sample Info: 10256148007,5.61

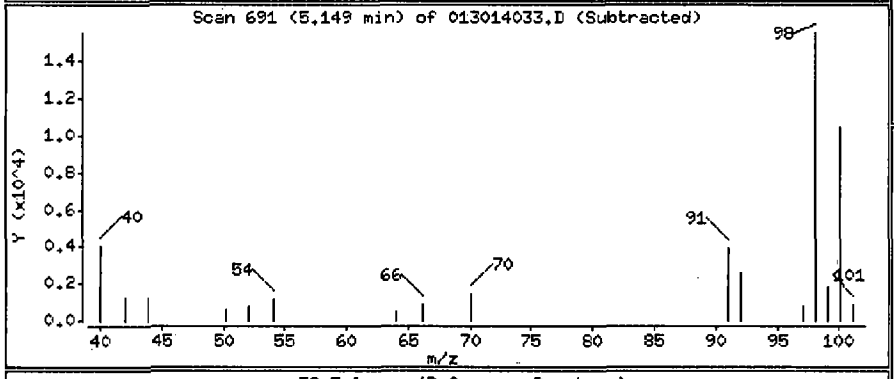
Operator: HBP

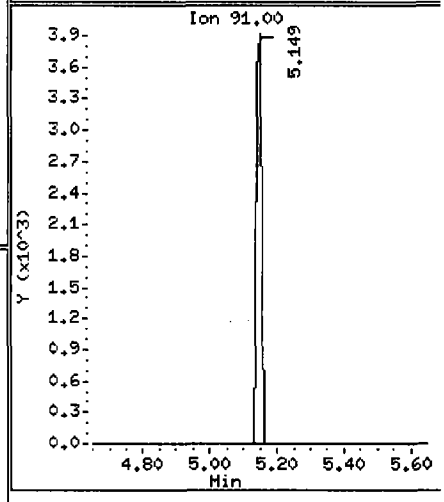
Column phase: Rtx-VMS Column diameter: 0.18

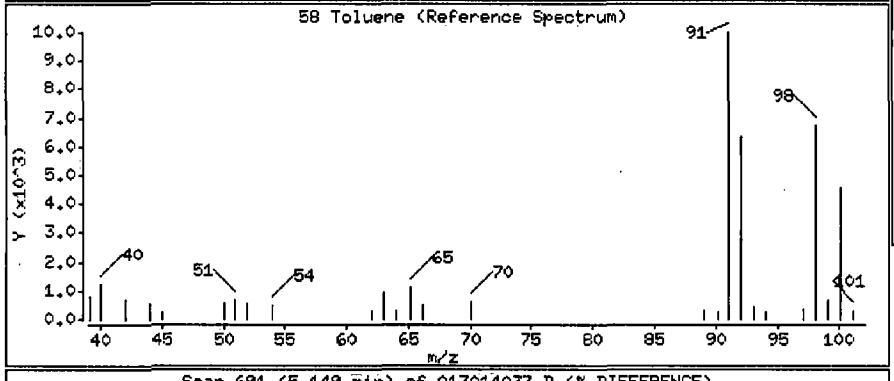
58 Toluene Concentration: 0.20 ug/Kg

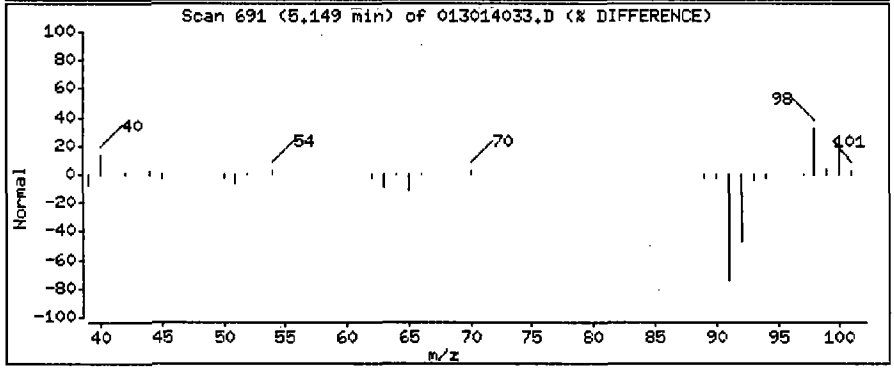












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Date : 30-JAN-2014 22:03

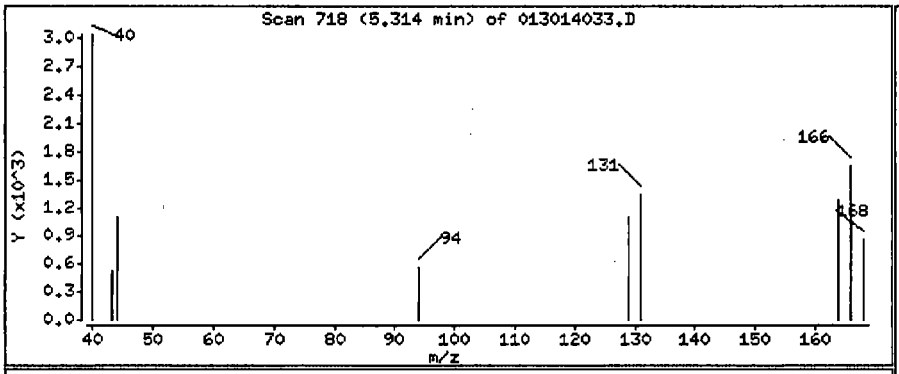
Client ID: 10256148007 Instrument: 10msv7.i

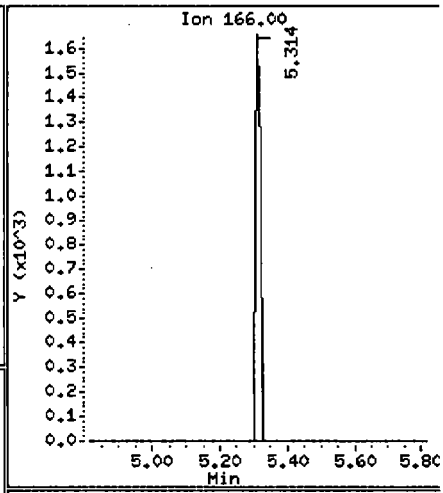
Sample Info: 10256148007,5.61

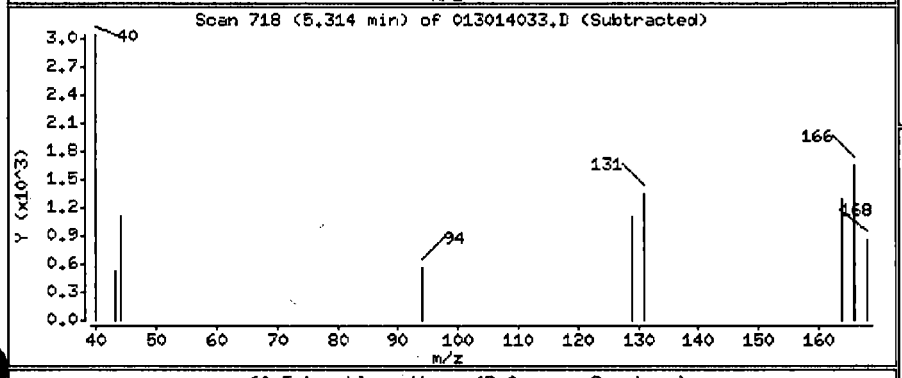
Operator: HBP

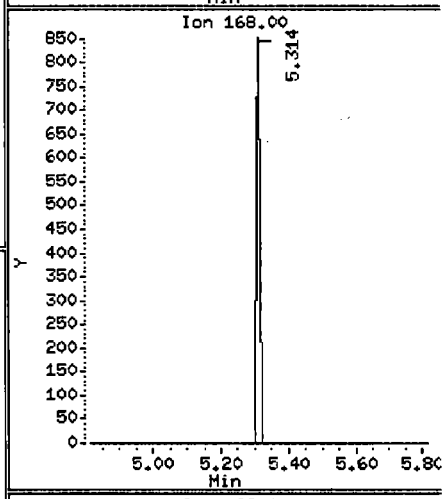
Column phase: Rtx-VMS Column diameter: 0.18

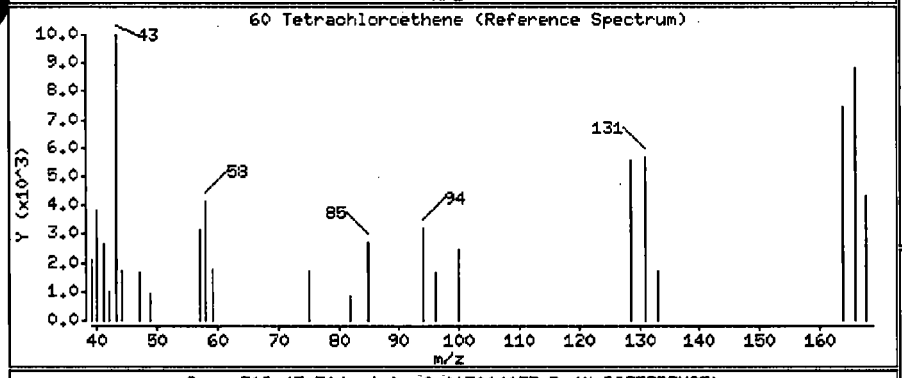
60 Tetrachloroethene Concentration: 0.24 ug/Kg

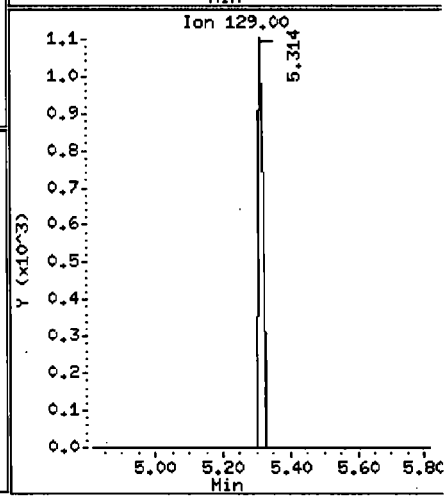


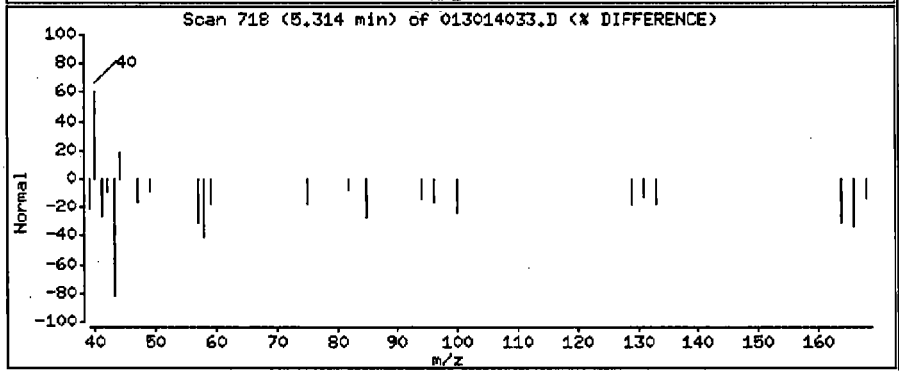












Data File: \\192.168.10.12\chem\10msv7.i\013014b.b\013014033.D

Date : 30-JAN-2014 22:03

Client ID: 10256148007

Instrument: 10msv7.i

Sample Info: 10256148007,5.61

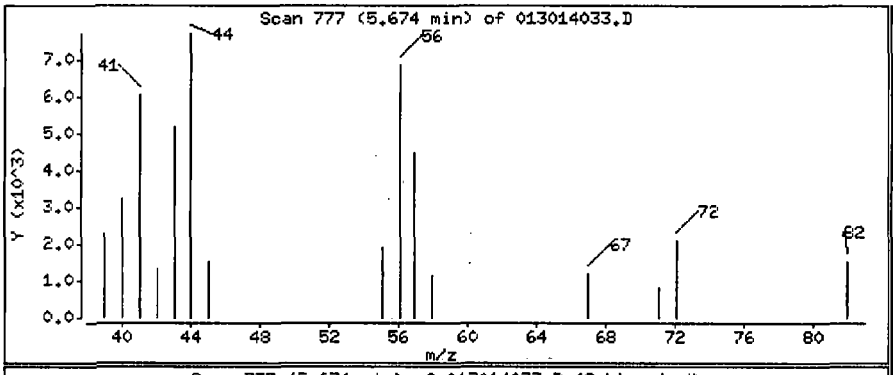
Operator: HBP

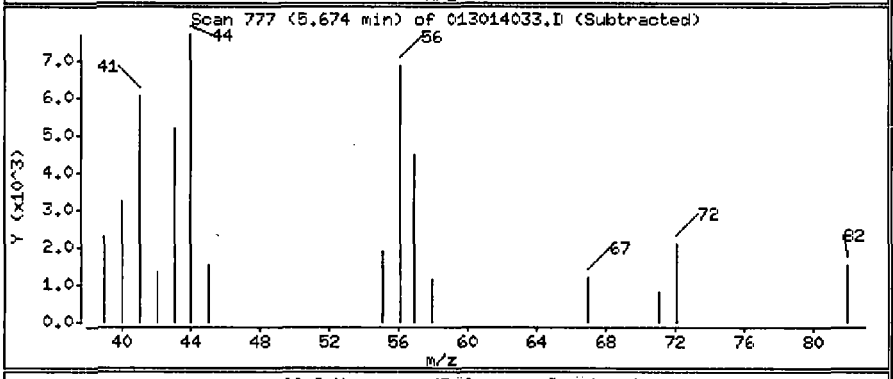
Column phase: Rtx-VMS

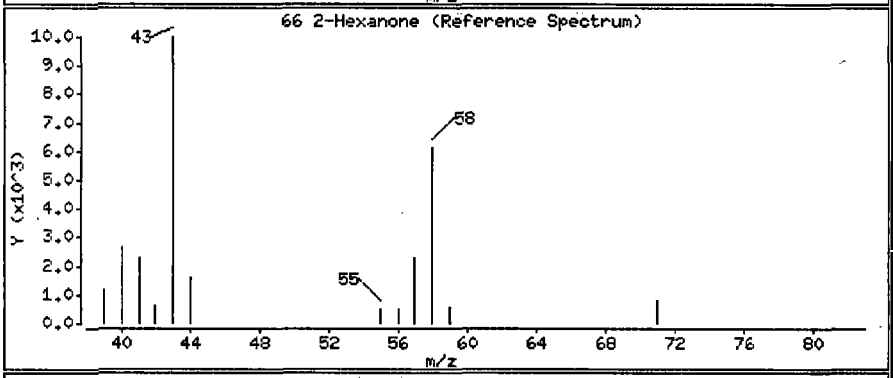
Column diameter: 0.18

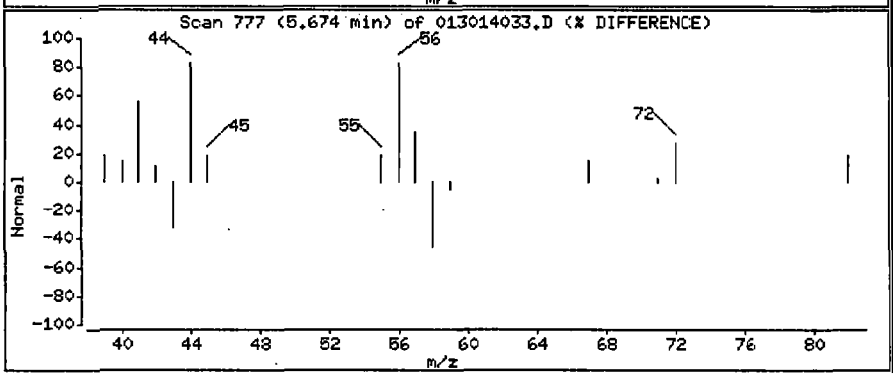
66 2-Hexanone

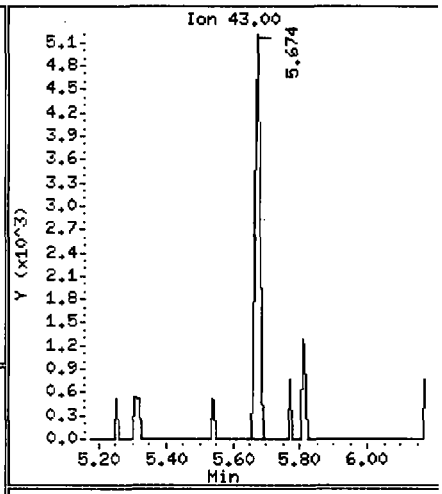
Concentration: 2.0 ug/Kg

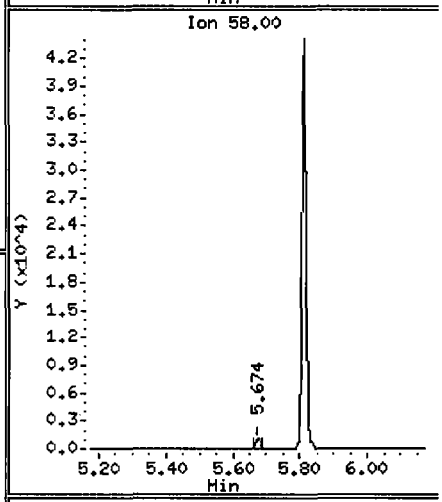


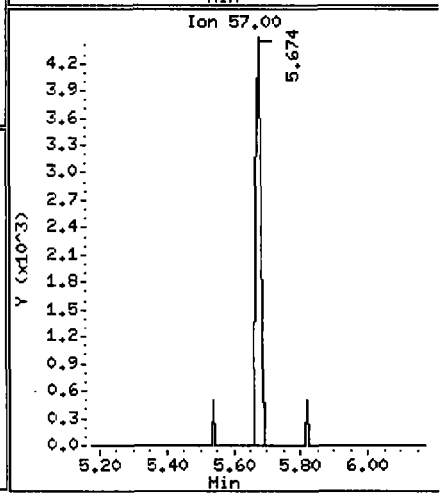












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Date : 30-JAN-2014 22:03

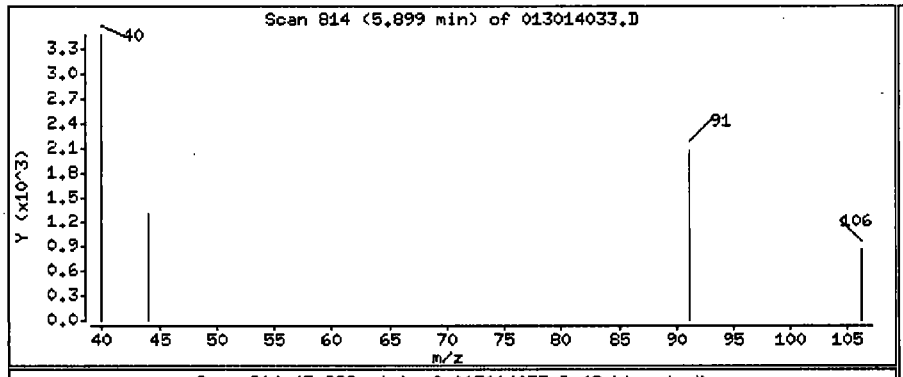
Client ID: 10256148007 Instrument: 10msv7.i

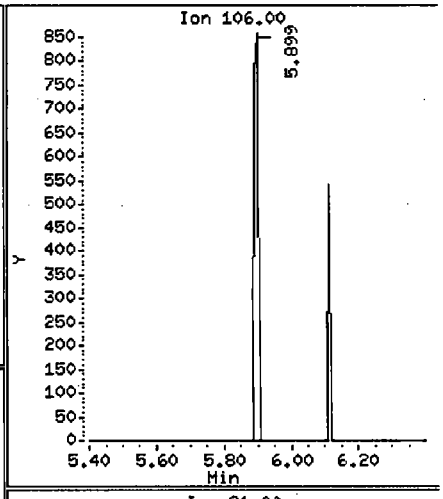
Sample Info: 10256148007,5.61

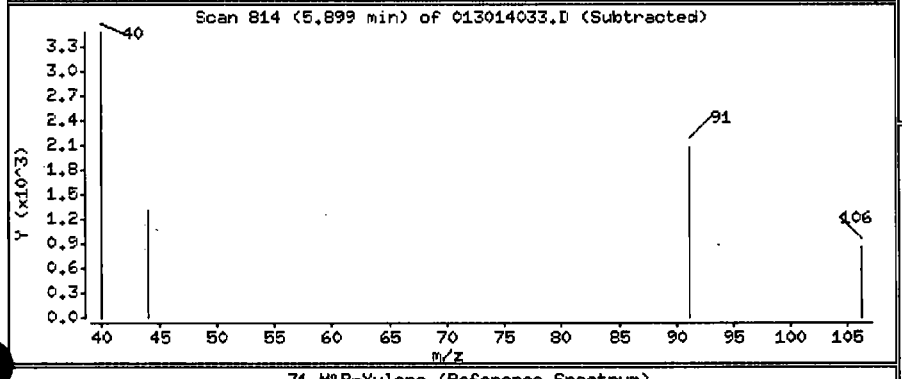
Operator: HBP

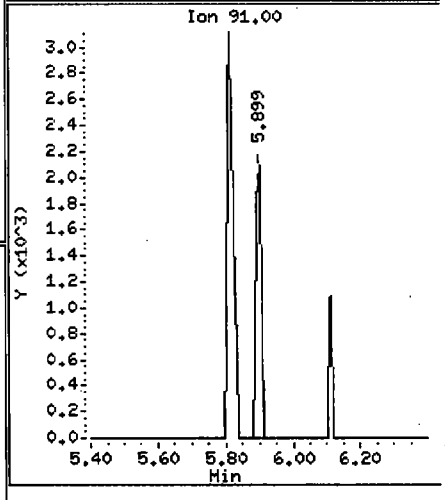
Column phase: Rtx-VMS Column diameter: 0.18

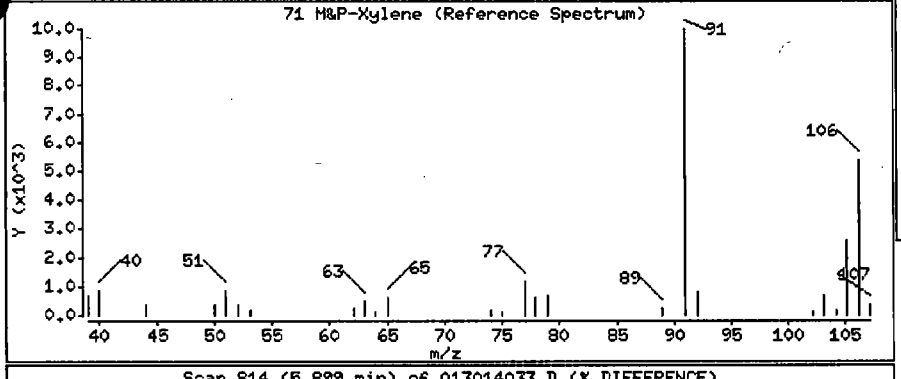
71 M&P-Xylene Concentration: 0.067 ug/Kg

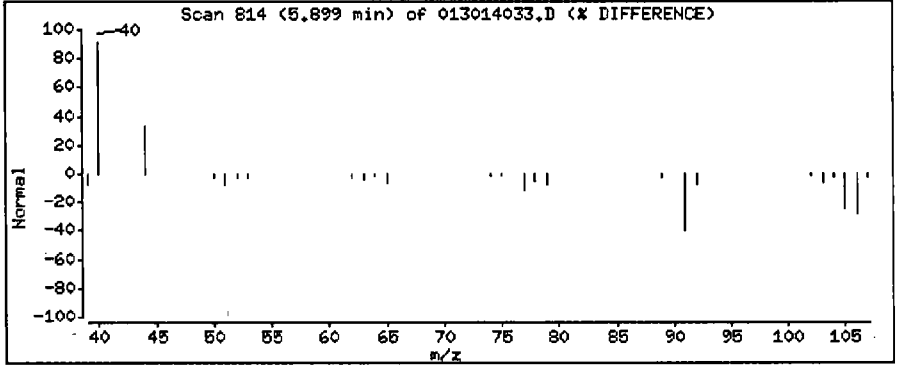












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Date : 30-JAN-2014 22:03

Client ID: 10256148007

Instrument: 10msv7.i

Sample Info: 10256148007,5,61

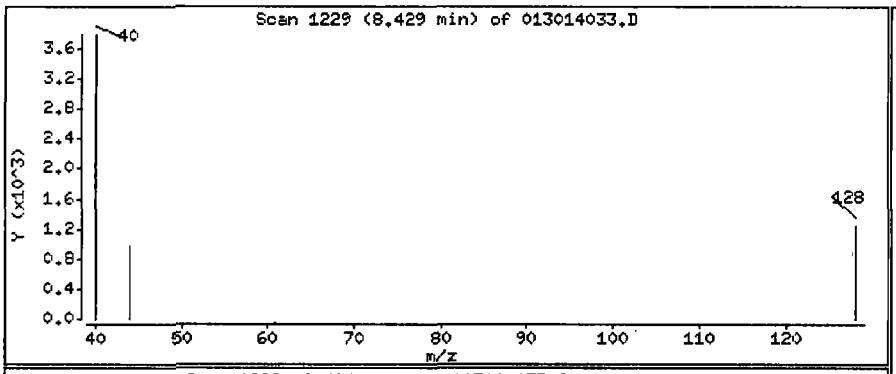
Operator: HBP

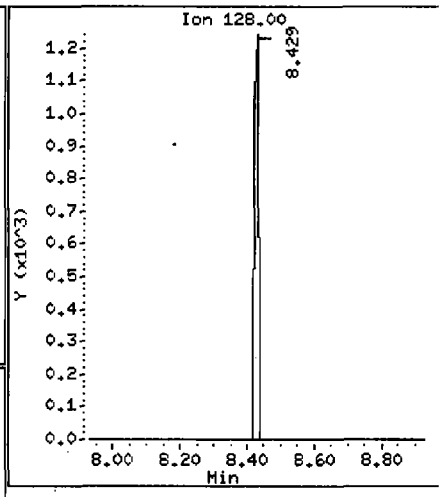
Column phase: Rtx-VMS

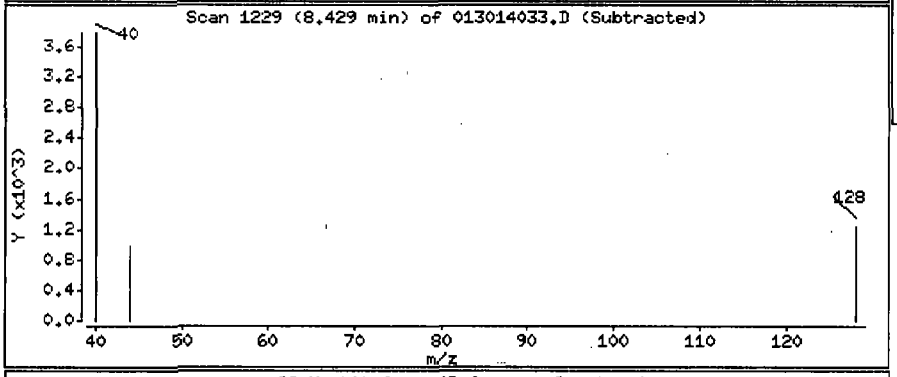
Column diameter: 0.18

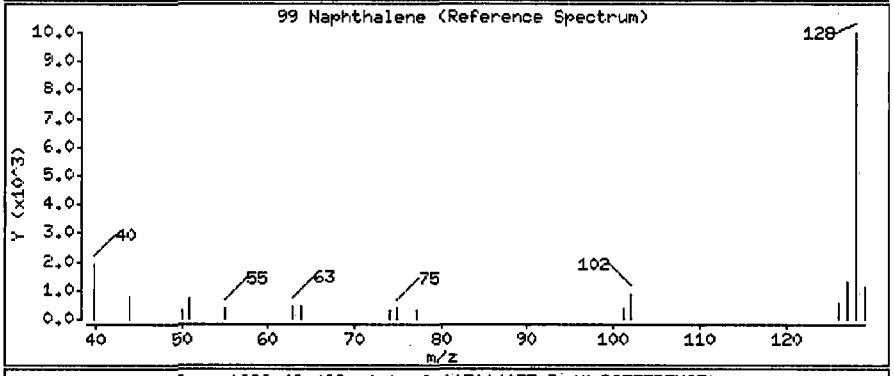
99 Naphthalene

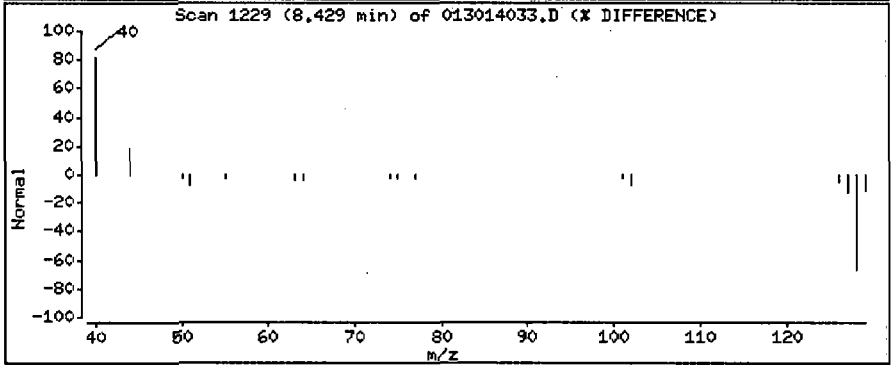
Concentration: 0.061 ug/Kg











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Date : 03-FEB-2014 16:51

Client ID:

Instrument: 10msv3.i

Sample Info: 1618518,1,3,DUP,10256574003

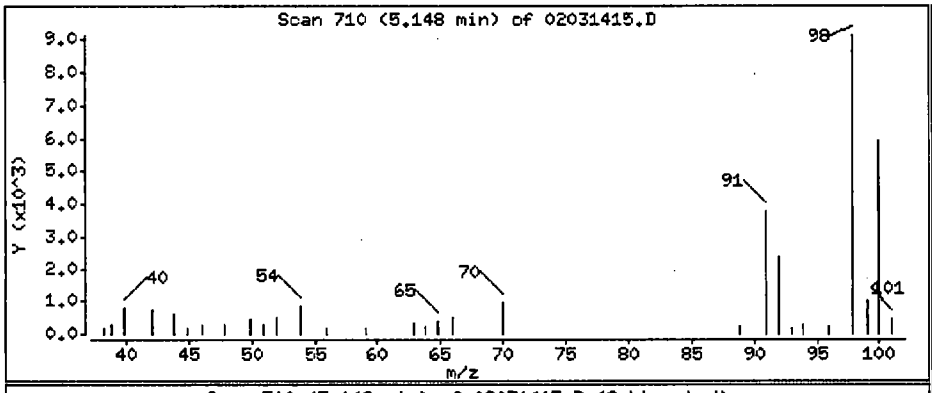
Operator: HBP

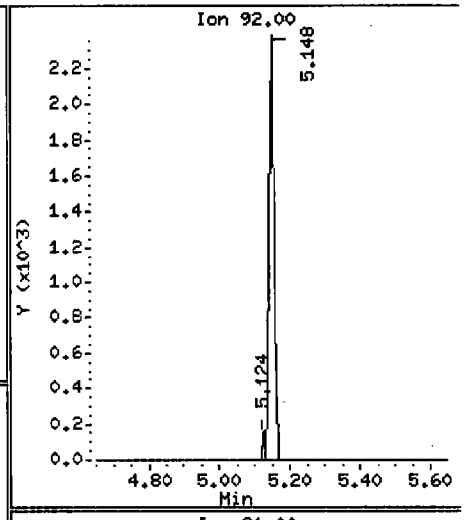
Column phase: Rtx-VMS

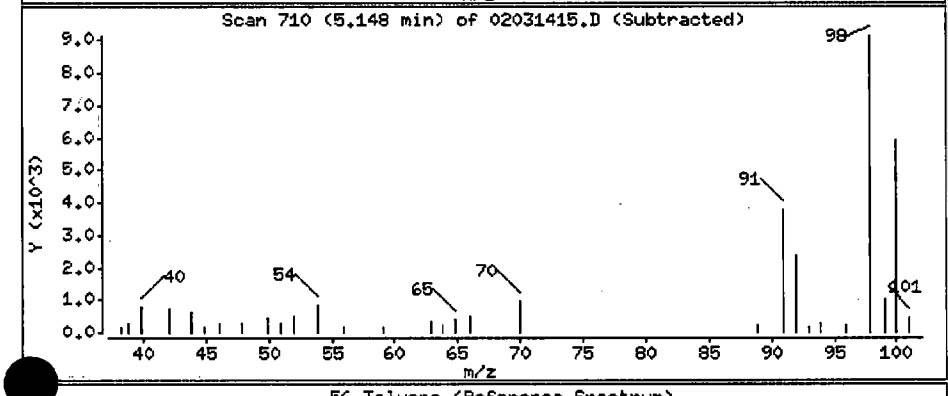
Column diameter: 0.18

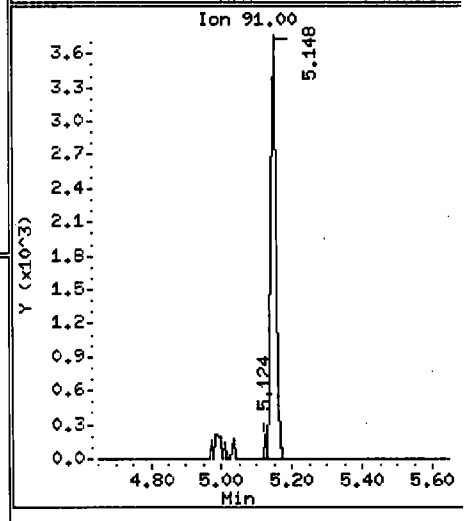
56 Toluene

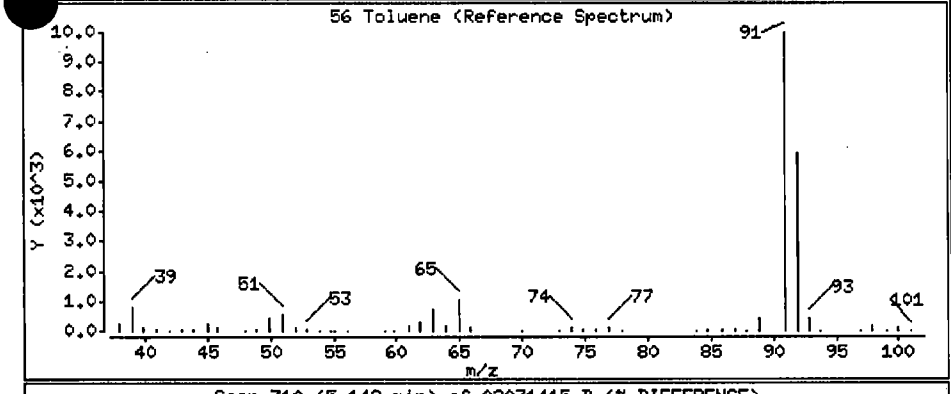
Concentration: 10.6 ug/Kg

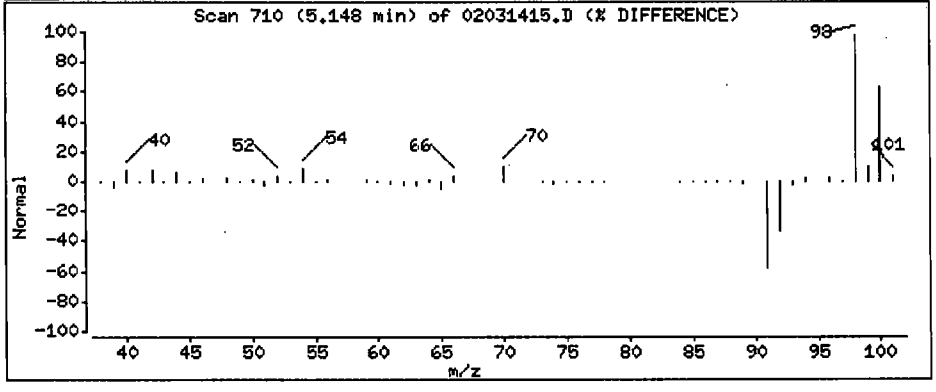












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Date : 03-FEB-2014 16:51

Client ID:

Instrument: 10msv3.i

Sample Info: 1618518,1,3,DUP,10256574003

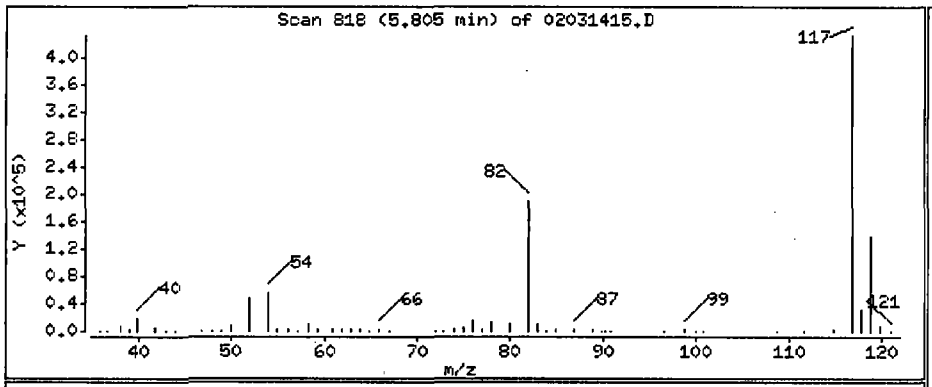
Operator: HBP

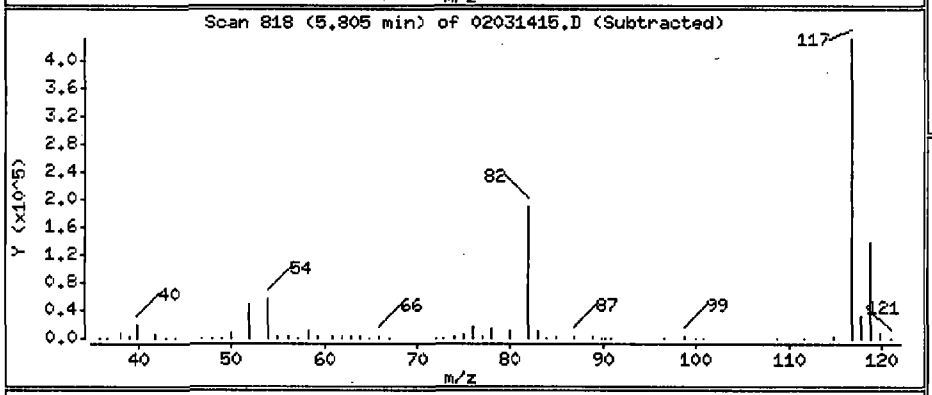
Column phase: Rtx-VMS

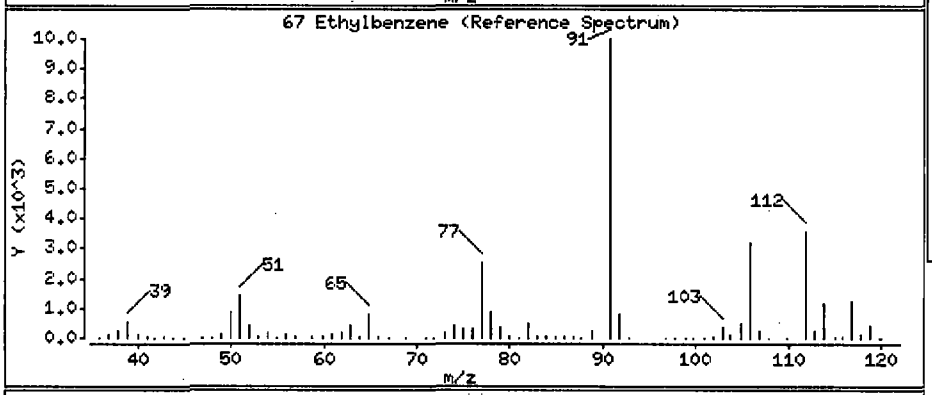
Column diameter: 0.18

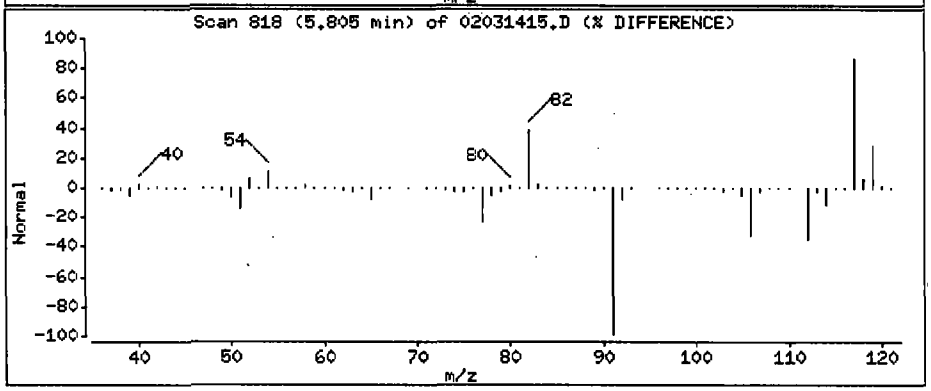
67 Ethylbenzene

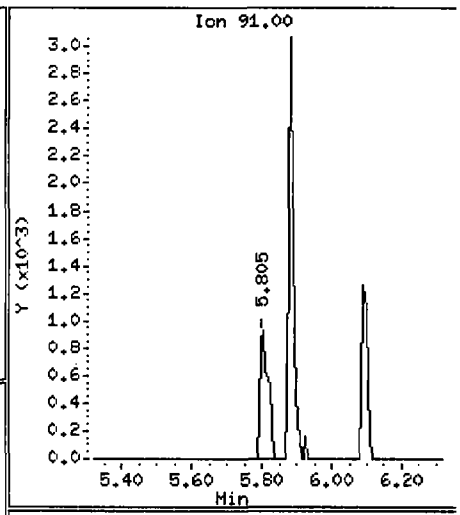
Concentration: 4.5 ug/Kg

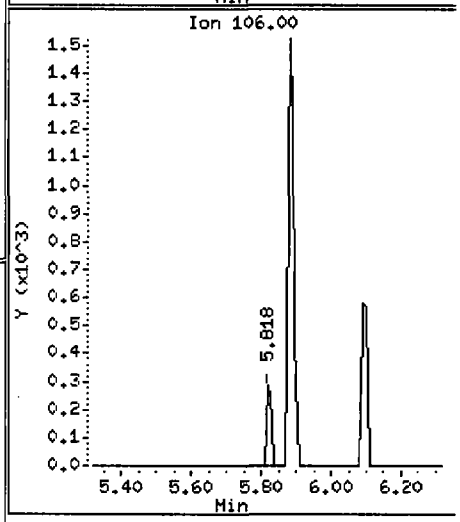












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Date : 03-FEB-2014 16:51

Client ID:

Instrument: 10msv3.i

Sample Info: 1618518,1,3,DUP,10256574003

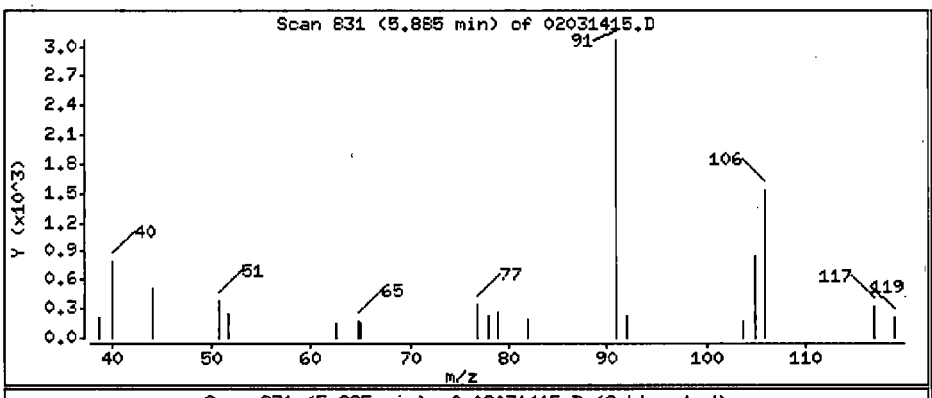
Operator: HBP

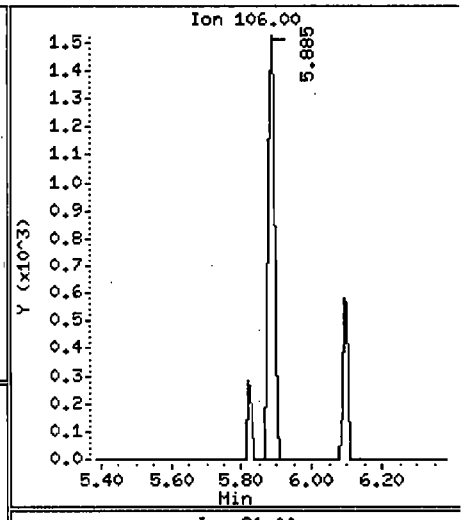
Column phase: Rtx-VMS

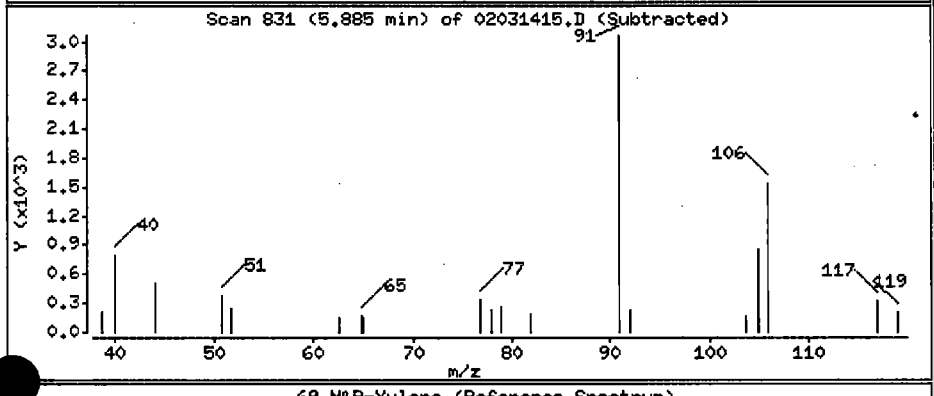
Column diameter: 0.18

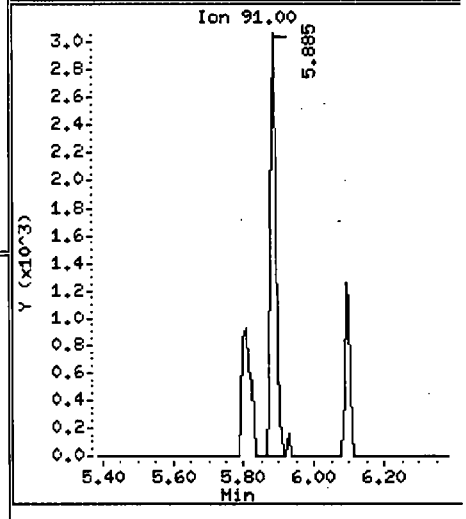
69 M&P-Xylene

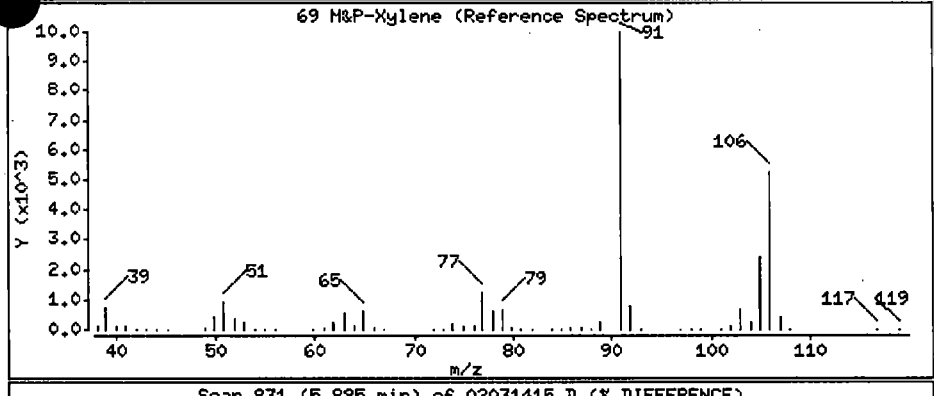
Concentration: 13.8 ug/Kg

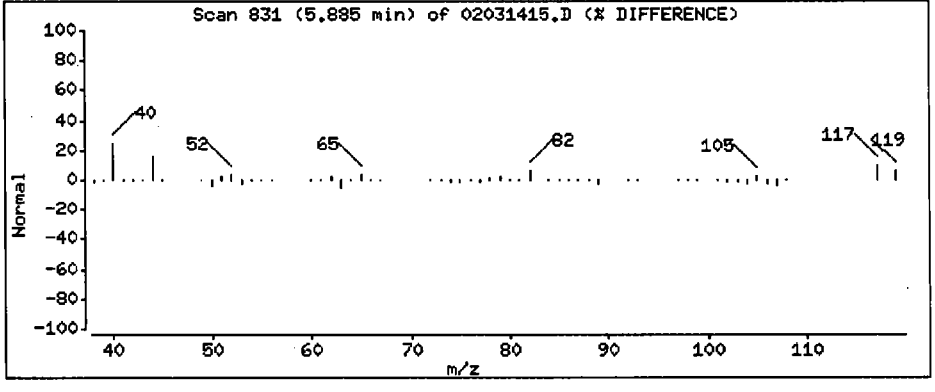












Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031415.D

Date : 03-FEB-2014 16:51

Client ID:

Instrument: 10msv3.i

Sample Info: 1618518,1,3,DUP,10256574003

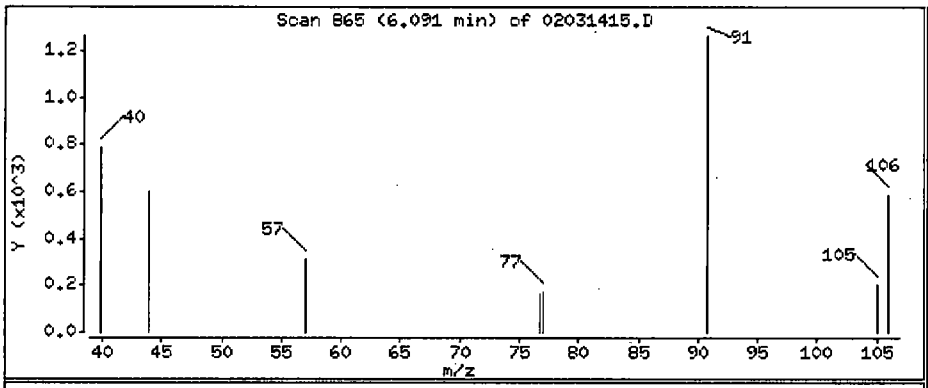
Operator: HBP

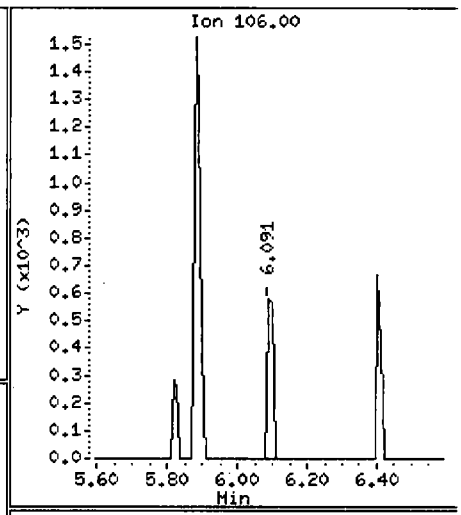
Column phase: Rtx-VMS

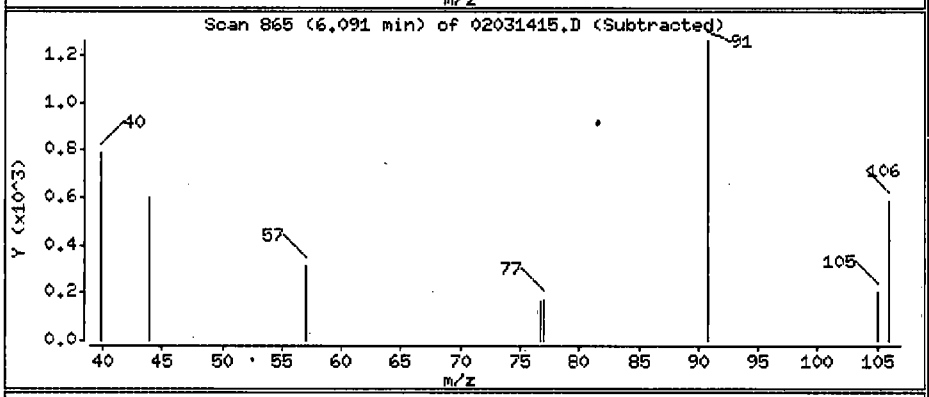
Column diameter: 0.18

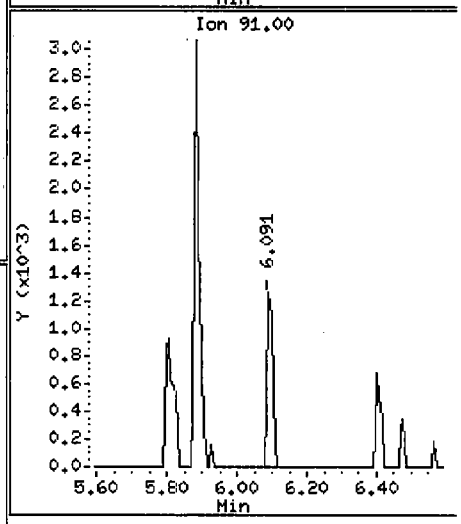
70 O-Xylene (1,2-Dimethylbenzene)

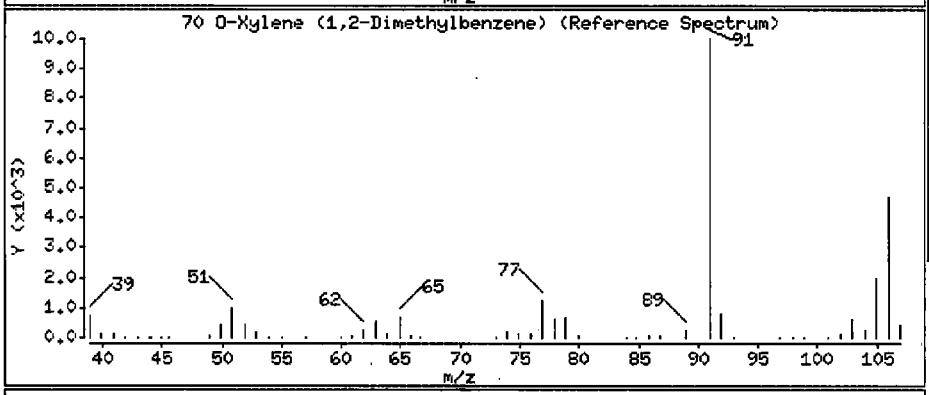
Concentration: 5.0 ug/Kg

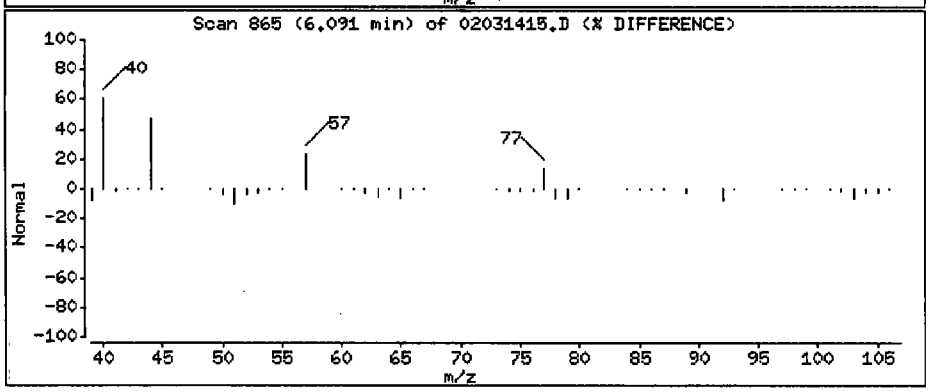












Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031415.D

Date : 03-FEB-2014 16:51

Client ID:

Instrument: 10msv3.i

Sample Info: 1618518,1,3,DUP,10256574003

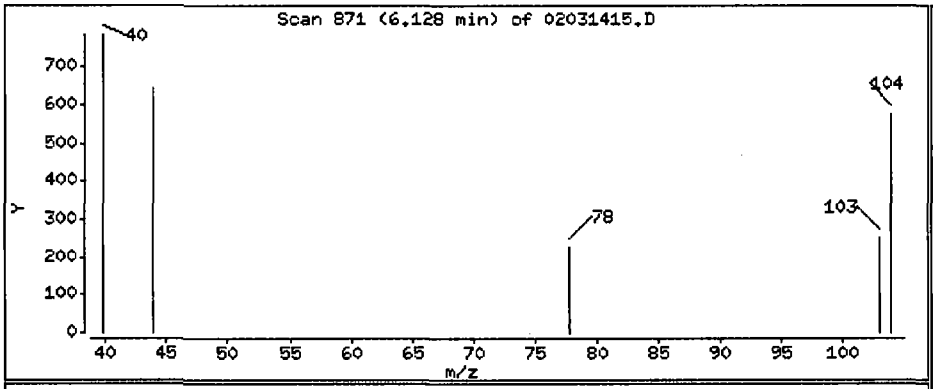
Operator: HBP

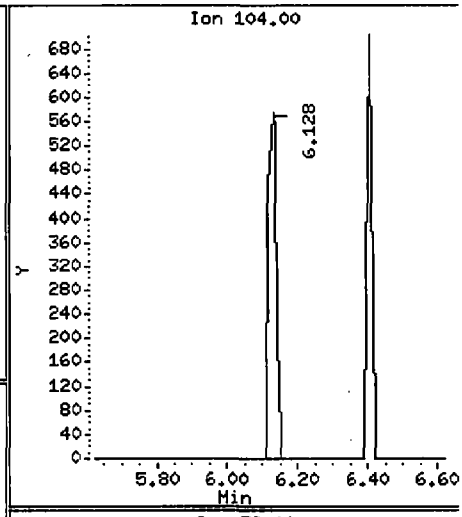
Column phase: Rtx-VMS

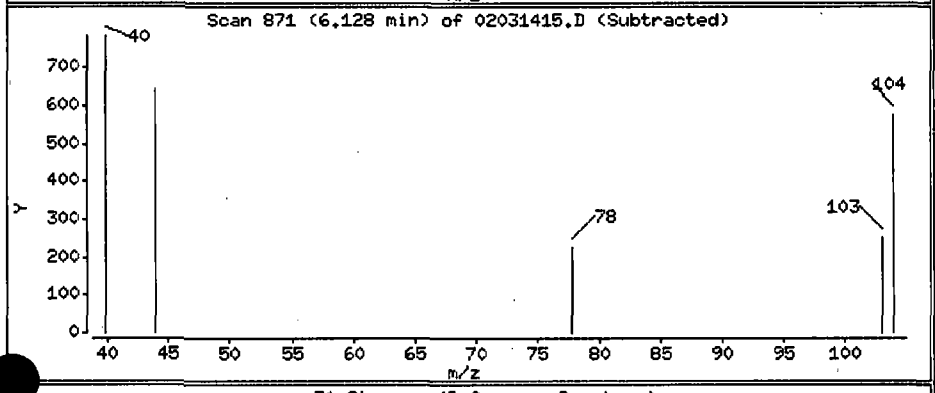
Column diameter: 0.18

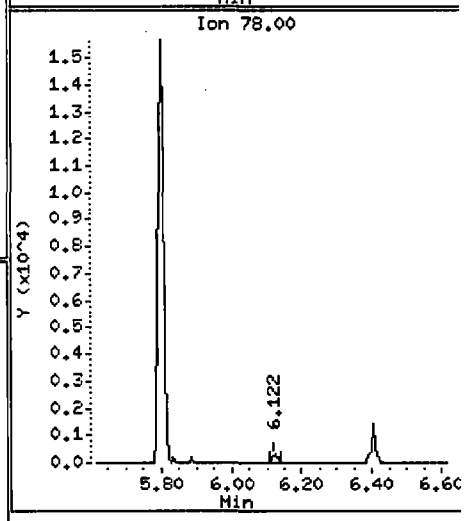
71 Styrene

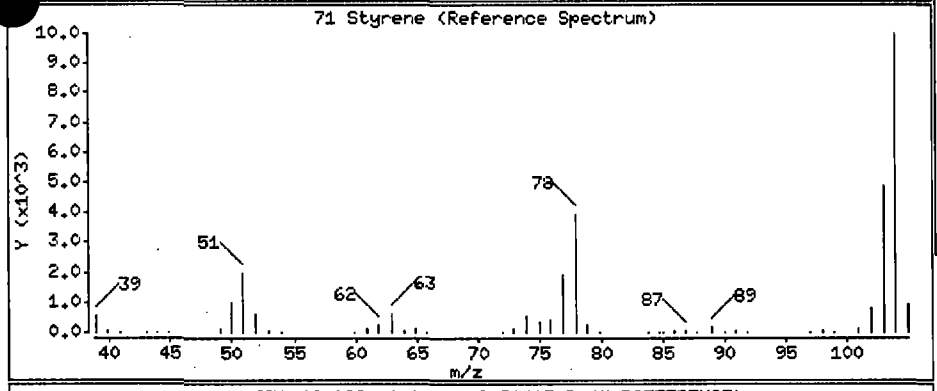
Concentration: 4.2 ug/Kg

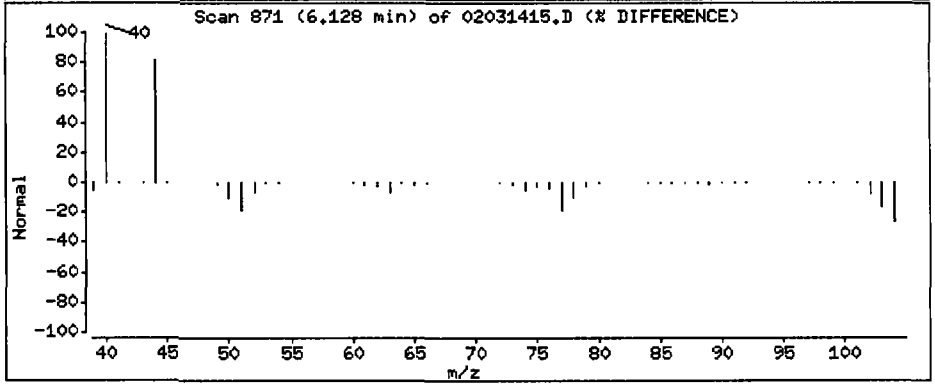












Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031415.D

Date : 03-FEB-2014 16:51

Client ID:

Instrument: 10msv3.i

Sample Info: 1618518,1,3,DUP,10256574003

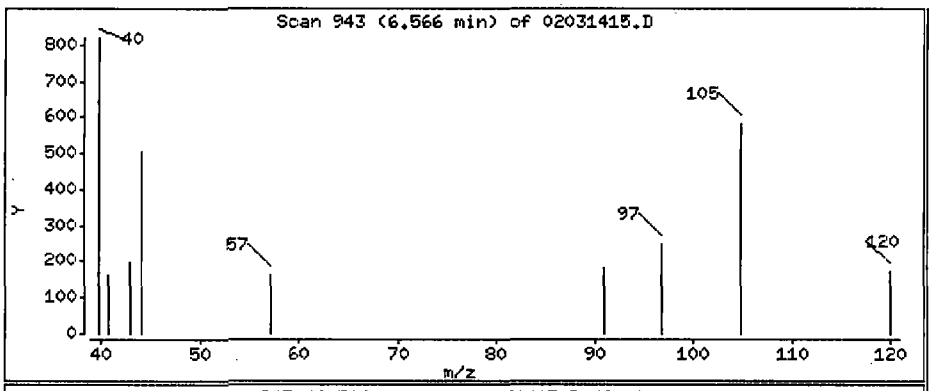
Operator: HBP

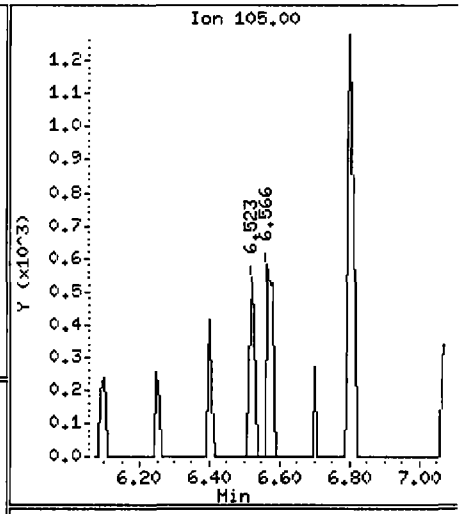
Column phase: Rtx-VMS

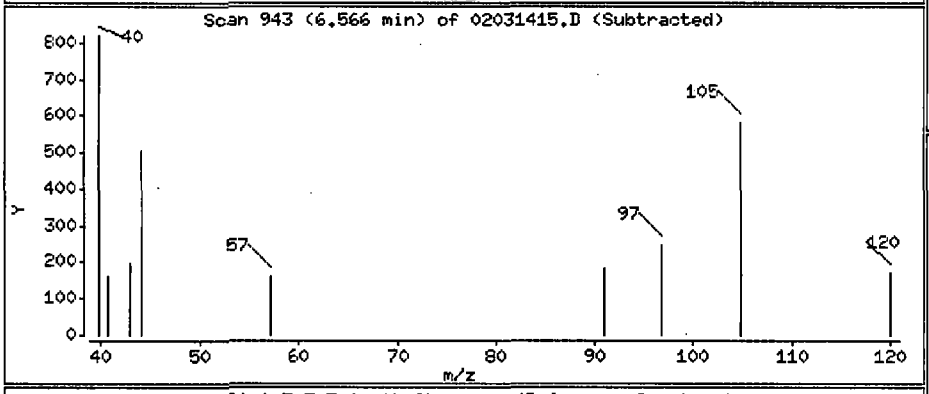
Column diameter: 0.18

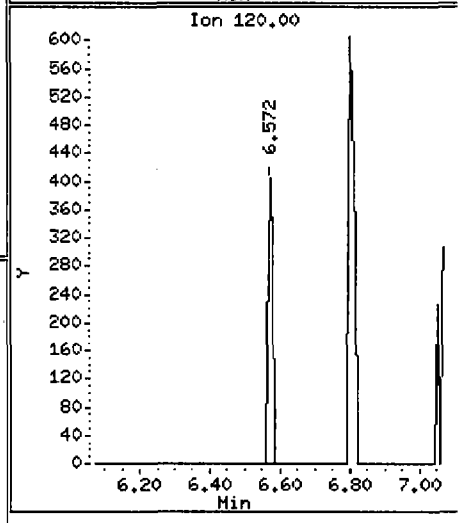
80 1,3,5-Trimethylbenzene

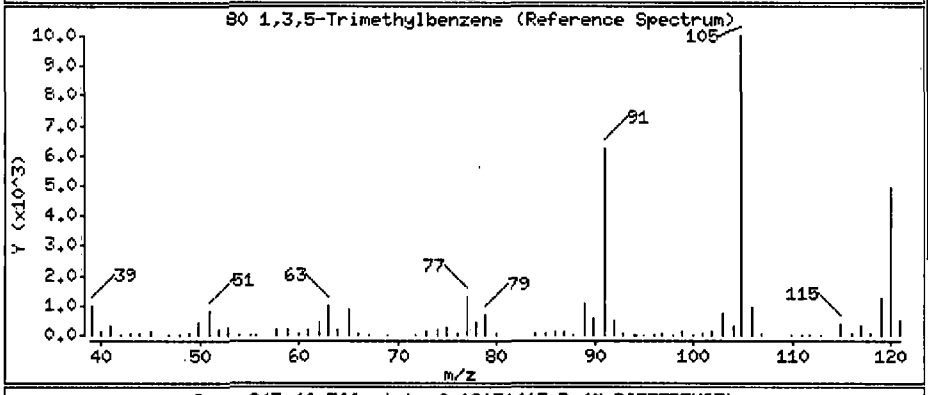
Concentration: 2.6 ug/Kg

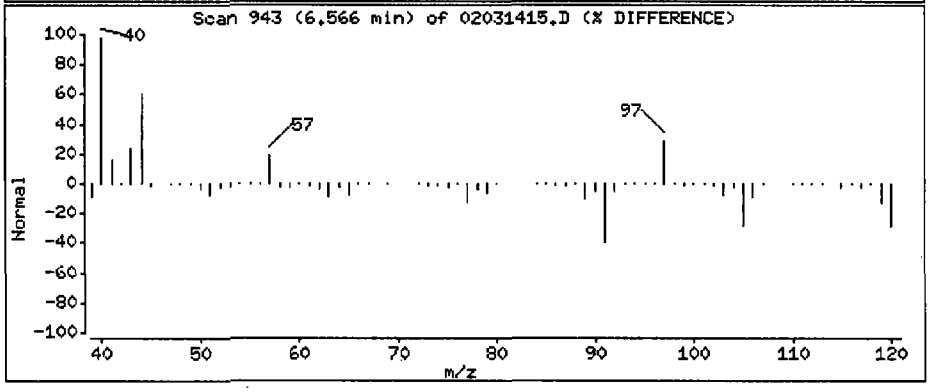












Data File: \\192.168.10.12\chem\10msv3.i\020314A.b\02031415.D

Date : 03-FEB-2014 16:51

Client ID:

Instrument: 10msv3.i

Sample Info: 1618518,1,3,DUP,10256574003

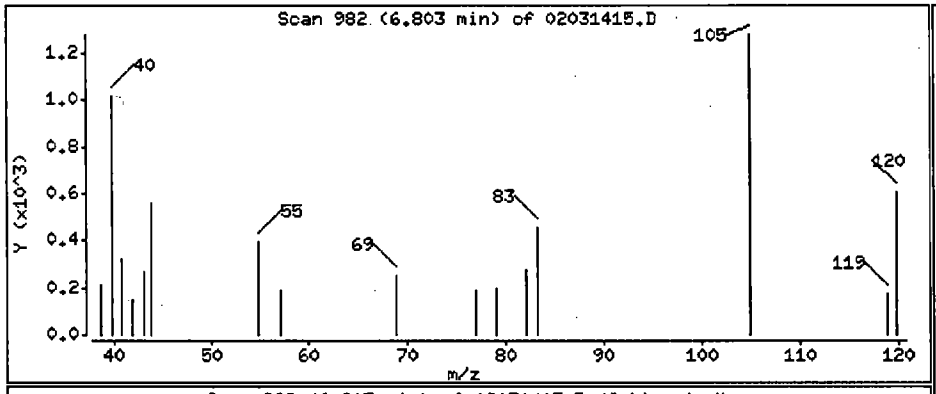
Operator: HBP

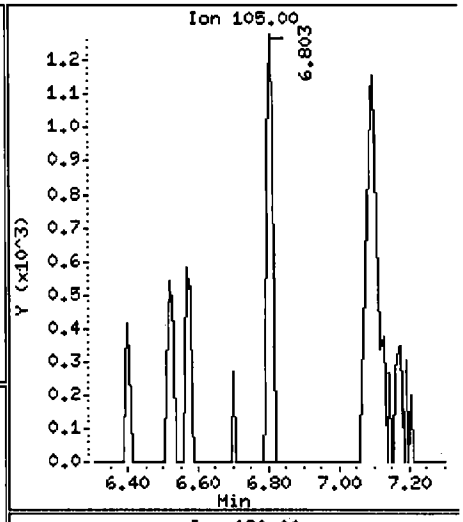
Column phase: Rtx-VMS

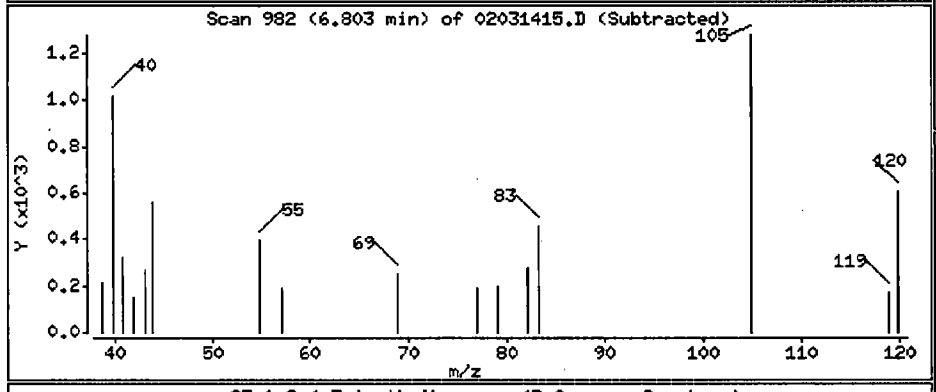
Column diameter: 0.18

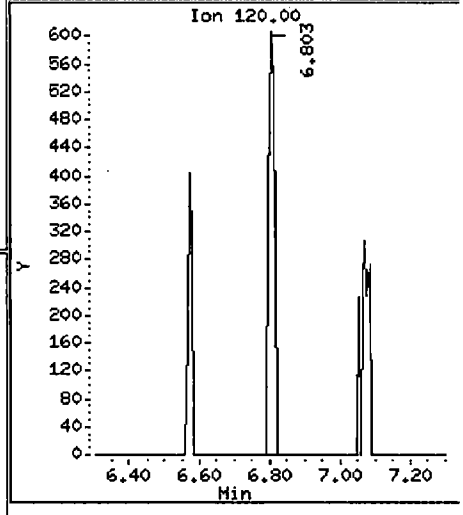
85 1,2,4-Trimethylbenzene

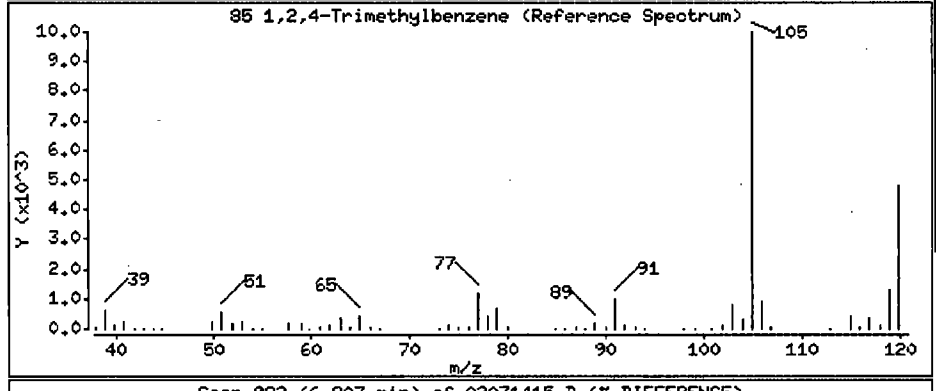
Concentration: 5.6 ug/Kg

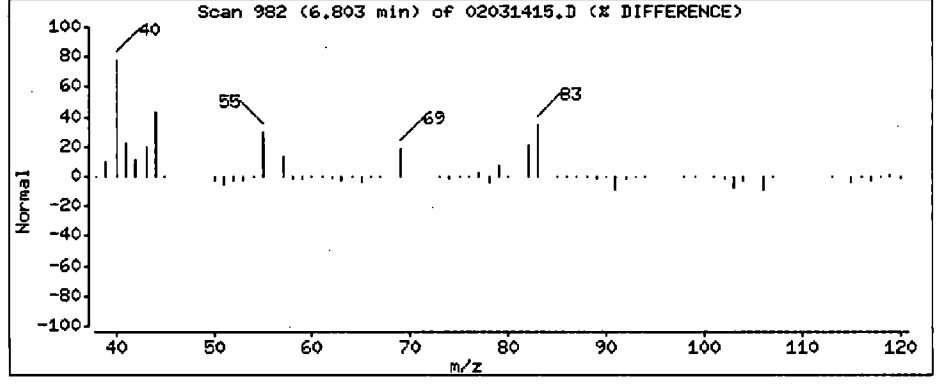












Data File: \\192.168.10.12\ohem\10msv3.i\020314A.b\02031415.D

Date : 03-FEB-2014 16:51

Client ID:

Instrument: 10msv3.i

Sample Info: 1618513,1,3,DUP,10256574003

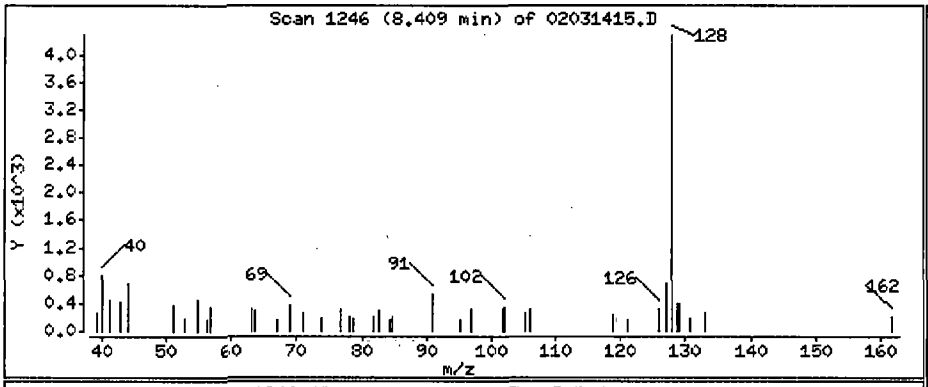
Operator: HBP

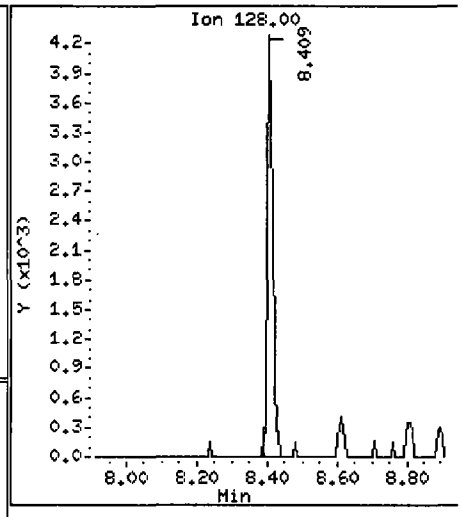
Column phase: Rtx-VMS

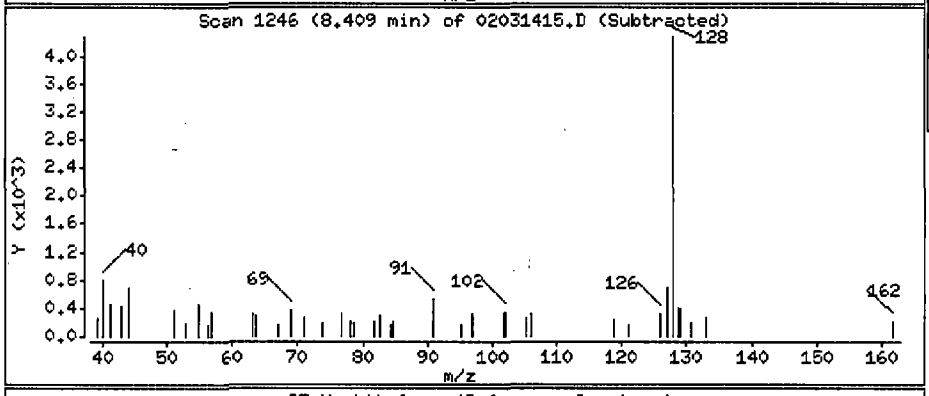
Column diameter: 0.18

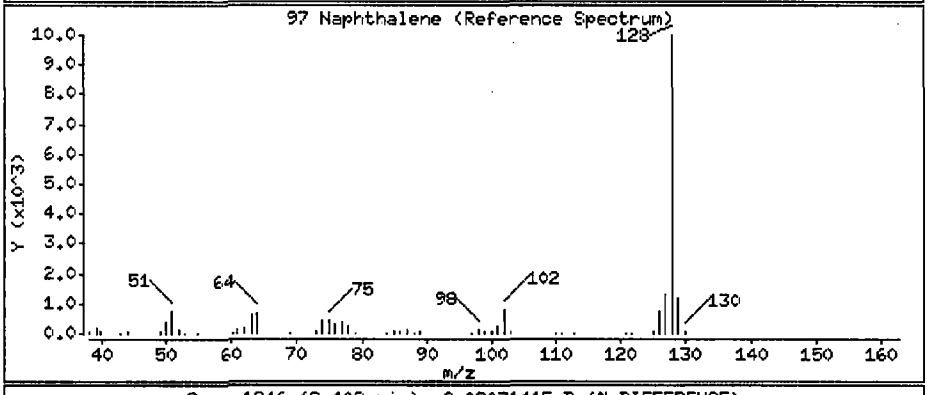
97 Naphthalene

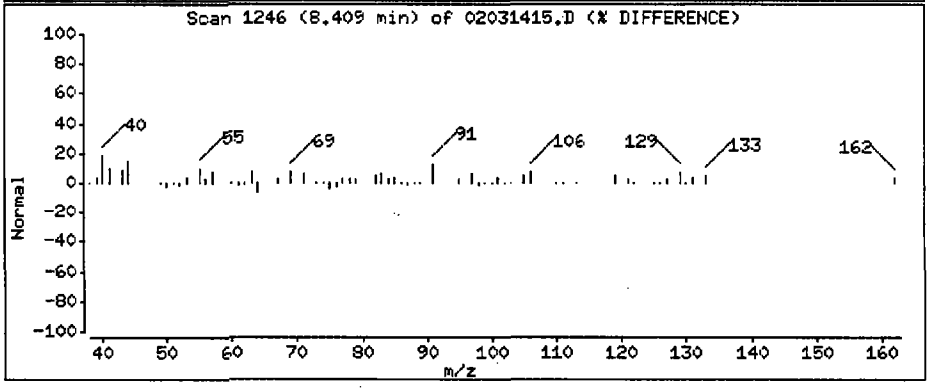
Concentration: 21.4 ug/Kg











Data File: \\192.168.10.12\chem\10msv3.i\020314A.b/02031415.D
Injection Date: 03-FEB-2014 16:51
Instrument: 10msv3.i
Lab Sample ID: 1518518
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Pace Analytical	Document Name: MSV LL Soil Prep Batch Worklist	Document Revised: 29Mar2012 Page 1 of 1		
	Document Number: F-MN-O-234-rev.01	Issuing Authority: Pace Minnesota Quality Office		

Prep Date 1/30/2014

Prep Analyst Mary Schwelch

Queue	MSV	GC/MS Volatiles	QC Rule	8260 SLL; 8260 MSV 5035 Low Prep
Batch	26253	HBN 285327	Created	1/30/14 13:16

Balance ID	Sand Lot #	MeOH Lot #	Surr. Lot #	Standard, Traceability #
P1897220	113854	NA	NA	10233-52D 10233-56A

*Weight of Pace label subtracted from soil weight= 0.18 grams

Analyst Henrik Pham

Has the balance been calibrated before use? yes

Lab ID	Type	Client	Sample ID	**	***	Comments	Soil & Vial Wt (g)	Vial Wt (g)	Soil Wt (g)*	DI Water Added (mL)	Surr. Added (uL)	Standard Added (mL)
1617373	BLANK	Quality Control					-----	-----	5	5	-----	-----
1617374	LCS	Quality Control					-----	-----	5	-----	-----	5
~~1617375~~	~~BS~~	~~Quality Control~~					~~-----~~	~~-----~~	~~5~~	~~-----~~	~~-----~~	~~5~~
10256148001	PS		SB-1 2-3'	5			41.49	35.50	5.81	-----	-----	-----
10256148002	PS		SB-1 20-21'	5			40.95	35.48	5.29	-----	-----	-----
10256148003	PS		SB-2 2-3'	5			40.90	35.47	5.25	-----	-----	-----
10256148004	PS		SB-2 22-23'	5			41.47	35.37	5.92	-----	-----	-----
10256148005	PS		SB-3 3-5'	5			42.02	35.36	6.48	-----	-----	-----
10256148006	PS		SB-3 25-27'	5			41.98	35.48	6.32	-----	-----	-----
10256148007	PS		SB-4 2-3.5'	5			41.10	35.31	5.61	-----	-----	-----
10256148008	PS		SB-4 19-20'	5			41.41	35.28	5.95	-----	-----	-----
10256148009	RQS		SB-5 2-3	5			41.09	35.53	5.38	-----	-----	-----
1617375	MS		SB-5 2-3(1616163MS)	5			41.33	35.61	5.54	-----	-----	-----
1617376	MSD		SB-5 2-3(1616163MSD)	5			41.44	35.15	6.11	-----	-----	-----
10256148010	PS		SB-5 10-12'	5			42.56	35.10	7.28	-----	-----	-----
10256148011	PS		DUP-001	5			42.19	35.43	6.58	-----	-----	-----
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										-----	-----	-----

hp 2/3/14

**If 1=manually entered; 5=5g/5mL; TB=trip blank ***Weight for jars--manually entering

Date/Initials Reviewed

Pace Analytical	Document Name: MSV/GCV Soil Prep Batch Worklist	Document Revised: 06Feb2013 Page 1 of 1
	Document Number: F-MN-O-173-rev.04	Issuing Authority: Pace Minnesota Quality Office

Prep Date 2/3/2014

Prep Analyst Mary Schweich

Queue	MSV	GC/MS Volatiles		QC Rule	8260 SM_P: 8260 MSV 5035 Med EXT
Batch	26266	HBN	265548	Created	2/3/14 9:10
*Weight of Pace label subtracted from soil weight=	0.18			Analyst	Henrik Pham

Balance ID	Sand Lot #	MeOH Lot #	Standard Traceability #	Standard Verification (initial)
21353507	12/11/2012	134079	10233-56A, 10233-52D	MS

Has the balance been calibrated before use? yes

Has the batch been methanol corrected (mc) for Alaska? NA

Lab ID	Type	Sample ID	**	***	Comments	Soil & Vial Wt (g)	Vial Wt (g)	Soil Wt (g)*	MeOH Added (mL)	Total MeOH (mL)	Standard Added (uL)
1618515	BLANK					-----	-----	10	10	10	-----
1618516	LCS					-----	-----	10	10	10	100
~~[illegible]~~						~~[illegible]~~	~~[illegible]~~	~~10~~	~~10~~	~~10~~	~~100~~
10256182001	PS		10			53.39	37.34	15.87	6	16	-----
10256295001	PS		10			52.08	37.36	14.54	5	15	-----
10256319001	PS		1	10.06	previously preserved from encore see attached	-----	-----	10.06	10	10	-----
10256148013	PS		TB			37.44	37.20	10	-----	10	-----
10256574001	PS		10			46.11	37.08	8.85	0	10	-----
1618517	MS		10			46.71	36.90	9.63	0	10	100
10256574003	PS		10			47.52	37.52	9.82	0	10	-----
1618518	DUP		10			48.39	37.41	10.80	1	11	-----
10256574004	PS		10			46.30	36.87	9.25	0	10	-----
10256574005	PS		10			49.58	37.22	12.18	2	12	-----
10256574012	PS		10			49.28	37.32	11.78	2	12	-----
10256574014	PS		10			51.59	37.01	14.40	4	14	-----
10256574015	PS		10			51.32	36.83	14.31	4	14	-----
10256574016	PS		10			46.66	36.92	9.56	0	10	-----
10256574017	PS		10			48.55	37.34	11.03	1	11	-----
10256574018	PS		10			46.76	36.85	9.73	0	10	-----
10256574019	PS		10			48.59	37.15	11.26	1	11	-----
10256574020	PS		10			47.47	37.45	9.84	0	10	-----
10256574021	PS		10			47.85	37.14	10.53	1	11	-----
10256574023	PS		10			49.11	36.85	12.08	2	12	-----
10256574024	PS		TB			38.06	37.93	10	-----	10	-----
[illegible]											-----
[illegible]											-----
[illegible]										lp - 2/4/14	-----

**If blank=manually entered; 1=waste dl or preserved from jar w/10mls MeOH; 2=Preserved Jar greater than 10mls MeOH; 5=5g/5mL; 10=10g/10mL; TB=trip blank

***Weight for jars--manually entering

Note: Methanol extracts are diluted 1:50 for a 1x analysis. Further dilutions maybe be performed refer to department SOP for more information.

Date/Initials Reviewed_____

Pace Analytical®	Document Name: Encore Soil Prep	Date Revised: 11 Aug 2011 Page 1 of 1
	Document Number: O221 Rev.01	Issuing Authority: Pace Minnesota Quality Office

Prep Date: 1/30/2014 Methanol Lot #: 134079

Prep Analyst: Mary Schweich Balance ID: 21353507

Lab ID	Type	Date/Time Collected	Date/Time Preserved	Date/Time Frozen	Preserved in Field (Yes or No)	Comments	Soil Wt (g)	H2O Added (mL)	MeOH Added (mL)
	LLS							5.0	na
	LLS							5.0	na
10256188001 VG9M3/4	MLS	1/27/2014 12:40	1/30/2014 11:30		no	jar w/HS	10.13	na	10
	LLS							5.0	na
	LLS							5.0	na
10256188001 VG9M4/4	MLS	1/27/2014 12:40	1/30/2014 11:30		no	jar w/HS	10.03	na	10
	LLS							5.0	na
	LLS							5.0	na
10256319001 VG9M1/1	MLS	1/23/2014 11:05	1/30/2014 11:30		no	packed jar	10.06	na	10
	LLS							5.0	na
	LLS							5.0	na
10256322001 VG9M1/1	MLS	1/25/2014 9:00	1/30/2014 11:30		no	packed jar	10.13	na	10
	LLS							5.0	na
	LLS							5.0	na
10256322001 VG9M2/2	MLS	1/25/2014 9:00	1/30/2014 11:30		no	packed jar	10.24	na	10
	LLS							5.0	na
	LLS							5.0	na
10256197001 VG9M2/4	MLS	1/24/2014 14:40	1/30/2014 11:30		no	packed jar	10.41	na	10
	LLS							5.0	na
	LLS							5.0	na
10256197001 VG9M1/4	MLS	1/24/2014 14:40	1/30/2014 11:30		no	packed jar	10.24	na	10
	LLS							5.0	na
	LLS							5.0	na
	MLS							na	
	LLS							5.0	na
	LLS					MS Y30/14		5.0	na
	MLS							na	

LLS= Low level soil with a stir bar
MLS = Medium level soil

Date/Initials Reviewed: _____

Fraction: 8270

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 285275 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148
Lab File ID: 01311404.D Lab Sample ID: 1617223
GC Column: DB-5MS ID: 0.25 (mm) Time Analyzed: 07:49
Instrument ID: 10MSS9

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BLANK for HBN 285275 [OEXT/242	1617223	01311404.D	07:49
02	LCS for HBN 285275 [OEXT/24255	1617224	01311405.D	08:19
03	SB-1 2-3'	10256148001	01311415.D	13:18
04	SB-1 20-21'	10256148002	01311416.D	13:48
05	SB-2 2-3'	10256148003	01311417.D	14:18
06	SB-2 22-23'	10256148004	01311418.D	14:48
07	SB-3 3-5'	10256148005	01311419.D	15:18
08	SB-3 25-27'	10256148006	01311420.D	15:49
09	SB-4 2-3.5'	10256148007	01311421.D	16:19
10	SB-4 19-20'	10256148008	01311422.D	16:49
11	SB-5 2-3	10256148009	01311423.D	17:19
12	SB-5 2-3(1616163MS)	1617225-MS	01311424.D	17:49
13	SB-5 2-3(1616163MSD)	1617226-MSD	01311425.D	18:19
14	SB-5 10-12'	10256148010	01311426.D	18:49
15	DUP-001	10256148011	02031410.D	10:44

Pace Analytical
www.pacelabs.com

1700 [illegible]reet - Suite 200
Minneapolis, MN 55414
(612)607-1700

SURROGATE RECOVERY SUMMARY

Project: BP SS# 5482
Pace Project No.: 10256148

QB Batch: OEXT / 24255
Method(s): EPA 3550 / EPA 8270

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
10256148001		SB-1 2-3'	1	78		73		68		59		69		81	
1617223	BLANK		1	80		72		73		64		73		86	
10256148002		SB-1 20-21'	1	71		66		68		58		68		75	
1617224	LCS		1	84		75		76		67		76		79	
10256148003		SB-2 2-3'	1	89		78		65		57		74		88	
1617225	MS		1	86		78		76		69		77		82	
10256148004		SB-2 22-23'	1	83		79		81		70		82		85	
1617226	MSD		1	85		77		74		68		74		81	
10256148005		SB-3 3-5'	1	81		77		75		67		77		88	
10256148006		SB-3 25-27'	1	85		78		79		68		79		88	
10256148007		SB-4 2-3.5'	1	83		67		68		59		69		84	
10256148008		SB-4 19-20'	1	84		80		79		70		80		89	
10256148009	OQS	SB-5 2-3	1	82		76		75		66		77		88	
10256148010		SB-5 10-12'	1	78		79		78		68		78		85	
10256148011		DUP-001	1	78		76		76		66		78		85	
		QC Limits:		41-125		46-125		31-125		30-125		38-125		64-125	
		Sample Limits:		41-125		46-125		31-125		30-125		38-125		64-125	

Sur 1: 2,4,6-Tribromophenol (S)
Sur 2: 2-Fluorobiphenyl (S)
Sur 3: 2-Fluorophenol (S)
Sur 4: Nitrobenzene-d5 (S)
Sur 5: Phenol-d6 (S)
Sur 6: Terphenyl-d14 (S)

REPORT OF LABORATORY ANALYSIS

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8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148

GC Column: DB-5MS ID: 0.25 (mm) Init Calib. Date(s):

EPA Sample No.: CCAL610328-96 Date Analyzed: 01/31/2014

Lab File ID (Standard): 01311403.D Time Analyzed: 07:18

Instrument ID: 10MSS9

	EPA SAMPLE NO.	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STANDARD	60191	5.204	214969	6.673	112201	8.832
	UPPER LIMIT	120382	5.704	429938	7.173	224402	9.332
	LOWER LIMIT	30096	4.704	107484	6.173	56100	8.332
	EPA SAMPLE NO.						
01	BLANK for HBN 285275 [OEXT/242	58024	5.204	211301	6.673	107974	8.832
02	LCS for HBN 285275 [OEXT/24255	57280	5.204	211932	6.673	111024	8.832
03	SB-1 2-3'	56797	5.204	204035	6.673	106992	8.826
04	SB-1 20-21'	60148	5.204	222183	6.673	116200	8.826
05	SB-2 2-3'	58137	5.204	213687	6.673	112489	8.826
06	SB-2 22-23'	60352	5.204	219755	6.673	115179	8.826
07	SB-3 3-5'	61280	5.204	222021	6.668	115555	8.826
08	SB-3 25-27'	59894	5.204	219641	6.673	113176	8.826
09	SB-4 2-3.5'	61122	5.204	223606	6.673	117444	8.826
10	SB-4 19-20'	60372	5.204	217623	6.668	114403	8.826
11	SB-5 2-3	61362	5.204	223451	6.673	115367	8.826
12	SB-5 2-3(1616163MS)	61468	5.204	223494	6.673	117664	8.832
13	SB-5 2-3(1616163MSD)	63525	5.204	229870	6.674	120508	8.832
14	SB-5 10-12'	60847	5.204	222053	6.673	115540	8.826

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148

GC Column: DB-5MS ID: 0.25 (mm) Init Calib. Date(s):

EPA Sample No.: CCAL610328-96 Date Analyzed: 01/31/2014

Lab File ID (Standard): 01311403.D Time Analyzed: 07:18

Instrument ID: 10MSS9

	EPA SAMPLE NO.	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STANDARD	205101	10.691	220549	13.998	213057	15.996
	UPPER LIMIT	410202	11.191	441098	14.498	426114	16.496
	LOWER LIMIT	102550	10.191	110274	13.498	106528	15.496
	EPA SAMPLE NO.						
01	BLANK for HBN 285275 [OEXT/242	201392	10.685	203005	13.992	190539	15.985
02	LCS for HBN 285275 [OEXT/24255	206093	10.691	216814	13.992	206049	15.990
03	SB-1 2-3'	199394	10.685	206112	13.992	199178	15.985
04	SB-1 20-21'	214406	10.686	221458	13.992	213128	15.985
05	SB-2 2-3'	208663	10.685	217852	13.992	210868	15.985
06	SB-2 22-23'	213510	10.685	221816	13.992	210101	15.985
07	SB-3 3-5'	214542	10.685	218368	13.992	209593	15.985
08	SB-3 25-27'	212063	10.685	216192	13.992	210677	15.985
09	SB-4 2-3.5'	218478	10.685	223249	13.992	212676	15.985
10	SB-4 19-20'	211114	10.685	218971	13.992	209271	15.985
11	SB-5 2-3	213326	10.685	219250	13.992	208121	15.985
12	SB-5 2-3(1616163MS)	219256	10.685	227867	13.992	216931	15.990
13	SB-5 2-3(1616163MSD)	223152	10.686	233501	13.992	222967	15.985
14	SB-5 10-12'	216365	10.685	218189	13.992	209483	15.985

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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8C - FORM VIII SV-1
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148

GC Column: DB-5MS ID: 0.25 (mm) Init Calib. Date(s):

EPA Sample No.: CCAL610328-96 Date Analyzed: 02/03/2014

Lab File ID (Standard): 02031403.D Time Analyzed: 07:16

Instrument ID: 10MSS9

	EPA SAMPLE NO.	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STANDARD	65010	5.204	238486	6.668	126711	8.826
	UPPER LIMIT	130020	5.704	476972	7.168	253422	9.326
	LOWER LIMIT	32505	4.704	119243	6.168	63356	8.326
	EPA SAMPLE NO.						
01	DUP-001	63627	5.199	233525	6.668	121358	8.826

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148

GC Column: DB-5MS ID: 0.25 (mm) Init Calib. Date(s):

EPA Sample No.: CCAL610328-96 Date Analyzed: 02/03/2014

Lab File ID (Standard): 02031403.D Time Analyzed: 07:16

Instrument ID: 10MSS9

	EPA SAMPLE NO.	IS4 AREA #	RT #	IS5 AREA #	RT #	IS6 AREA #	RT #
	12 HOUR STANDARD	233467	10.685	251891	13.992	245242	15.980
	UPPER LIMIT	466934	11.185	503782	14.492	490484	16.480
	LOWER LIMIT	116734	10.185	125946	13.492	122621	15.480
	EPA SAMPLE NO.						
01	DUP-001	226043	10.680	230200	13.982	217271	15.974

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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Instrument Run Log

Instrument: 10MSS9 | Method: 8270 | Misc. Prep. Info: | Surrogate Lot: see extract sheet
Column: DB-5MS 0.25mm Helium | Tune Standard: 10328-111 | ISTD Lot: 10362-006 | Cal. Standard: 10328-96

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
01301401.D	MECL2 RINSE	Gas	Tune	1		SW846TUN	1/30/14 08:26	JLR	
01301402.D	TUNE	Gas	Tune	1		SW846TUN	1/30/14 08:42	JLR	pass
01301403.D	ICAL 10328-96 8	Liquid	Ical	1		013014-8270MSS9	1/30/14 08:59	JLR	pass
01301404.D	ICAL 10328-96 7	Liquid	Ical	1		013014-8270MSS9	1/30/14 09:30	JLR	pass
01301405.D	ICAL 10328-96 6	Liquid	Ical	1		013014-8270MSS9	1/30/14 10:00	JLR	pass
01301406.D	ICAL 10328-96 5	Liquid	Ical	1		013014-8270MSS9	1/30/14 10:30	JLR	pass
01301407.D	ICAL 10328-96 4	Liquid	Ical	1		013014-8270MSS9	1/30/14 11:00	JLR	pass
01301408.D	ICAL 10328-96 3	Liquid	Ical	1		013014-8270MSS9	1/30/14 11:30	JLR	pass
01301409.D	ICAL 10328-96 2	Liquid	Ical	1		013014-8270MSS9	1/30/14 12:01	JLR	pass
01301410.D	ICV 10328-98	Liquid	CCal	1		013014-8270MSS9	1/30/14 12:31	JLR	pass
01301411.D	CHRYDIPDIB 10328-47	Liquid	CCal	1		013014-8270MSS9	1/30/14 13:01	JLR	pass

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments:

File Path 1: U:\10MSS9.I\013014.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: JLR

Report Date: 01/30/2014 13:48
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSS9 Method: 8270 Misc. Prep. Info: Surrogate Lot: see extract sheet
Column: DB-5MS 0.25mm Helium Tune Standard: 10328-111 ISTD Lot: 10362-007 Cal. Standard: 10328-96

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
01311401.D	MECL2 RINSE	G/	Tune	1		SW846TUN	1/31/14 06:36	JLR	
01311402.D	TUNE	G/	Tune	1		SW846TUN	1/31/14 06:52	JLR	pass
01311403.D	CCAL 6 10328-96	/	CCal	1		013014-8270MSS9	1/31/14 07:18	JLR	pass
01311404.D	1617223	S/10257	Blank	1		013014-8270MSS9	1/31/14 07:49	JLR	pass
01311405.D	1617224	S/10257	LCS	1		013014-8270MSS9	1/31/14 08:19	JLR	pass
01311406.D	10255947001	L/10250	Sample	100		013014-8270MSS9	1/31/14 08:49	JLR	
01311407.D	8270 SOIL DOC 1 FT	S/	LCS	1		013014-8270MSS9	1/31/14 09:19	JRH	
01311408.D	8270 SOIL DOC 2 FT	S/	LCS	1		013014-8270MSS9	1/31/14 09:49	JRH	
01311409.D	8270 SOIL DOC 3 FT	S/	LCS	1		013014-8270MSS9	1/31/14 10:18	JRH	
01311410.D	8270 SOIL DOC 4 FT	S/	LCS	1		013014-8270MSS9	1/31/14 10:48	JRH	
01311411.D	8270 SOIL DOC 1 TT	S/	LCS	1		013014-8270MSS9	1/31/14 11:18	JRH	
01311412.D	8270 SOIL DOC 2 TT	S/	LCS	1		013014-8270MSS9	1/31/14 11:48	JRH	
01311413.D	8270 SOIL DOC 3 TT	S/	LCS	1		013014-8270MSS9	1/31/14 12:18	JRH	
01311414.D	8270 SOIL DOC 4 TT	S/	LCS	1		013014-8270MSS9	1/31/14 12:48	JRH	
01311415.D	10256148001	S/	Sample	1		013014-8270MSS9	1/31/14 13:18	JLR	
01311416.D	10256148002	S/	Sample	1		013014-8270MSS9	1/31/14 13:48	JLR	
01311417.D	10256148003	S/	Sample	1		013014-8270MSS9	1/31/14 14:18	JLR	
01311418.D	10256148004	S/	Sample	1		013014-8270MSS9	1/31/14 14:48	JLR	
01311419.D	10256148005	S/	Sample	1		013014-8270MSS9	1/31/14 15:18	JLR	
01311420.D	10256148006	S/	Sample	1		013014-8270MSS9	1/31/14 15:49	JLR	
01311421.D	10256148007	S/	Sample	1		013014-8270MSS9	1/31/14 16:19	JLR	
01311422.D	10256148008	S/	Sample	1		013014-8270MSS9	1/31/14 16:49	JLR	
01311423.D	10256148009	S/	Sample	1		013014-8270MSS9	1/31/14 17:19	JLR	
01311424.D	1617225	S/	MS	1		013014-8270MSS9	1/31/14 17:49	JLR	
01311425.D	1617226	S/	MSD	1		013014-8270MSS9	1/31/14 18:19	JLR	
01311426.D	10256148010	S/	Sample	1		013014-8270MSS9	1/31/14 18:49	JLR	
01311427.D	10256148011	S/	Sample	1		013014-8270MSS9	1/31/14 19:19	JLR	out of tune, RR
01311428.D	10256319001	S/	Sample	50		013014-8270MSS9	1/31/14 19:49	JLR	out of tune, RR

Check Maintenance Items Performed:

Changed septum	x Clipped column	Changed column - Lot #
x Cleaned liner	Changed trap - Lot #	Other minor parts replaced
x Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: U:\10MSS9.I\013114.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: JLR

Report Date: 01/31/2014 14:58
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSS9 Method: 8270 Misc. Prep. Info: Surrogate Lot: see extract sheet
Column: DB-5MS 0.25mm Helium Tune Standard: 10174-107 ISTD Lot: 10362-007 Cal. Standard: 10328-96

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
02031401.D	MECL2 RINSE	G/	Tune	1		sw846tun	2/03/14 06:43	JLR	
02031402.D	TUNE	G/	Tune	1		sw846tun	2/03/14 06:58	JLR	pass
02031403.D	CCAL 6 10328-96	S/	CCal	1		013014-8270MSS9	2/03/14 07:16	JLR	pass
02031404.D	1617223	S/	Blank	1		013014-8270MSS9	2/03/14 07:46	JLR	clean
02031405.D	DOC 1 FT	S/	LCS	1		013014-8270MSS9	2/03/14 08:16	ACH1	
02031406.D	DOC 2 FT	S/	LCS	1		013014-8270MSS9	2/03/14 08:45	ACH1	
02031407.D	DOC 4 FT	S/	LCS	1		013014-8270MSS9	2/03/14 09:15	ACH1	
02031408.D	DOC 2 TT	S/	LCS	1		013014-8270MSS9	2/03/14 09:45	ACH1	
02031409.D	DOC 4 TT	S/	LCS	1		013014-8270MSS9	2/03/14 10:15	ACH1	
02031410.D	10256148011	S/10257	Sample	1		013014-8270MSS9	2/03/14 10:44	JLR	
02031411.D	10256319001	S/10257	Sample	50		013014-8270MSS9	2/03/14 11:15	JLR	
02031412.D	1617101	L/10263	Blank	1		013014-8270MSS9	2/03/14 12:44	JLR	pass
02031413.D	1617102	L/10263	LCS	1		013014-8270MSS9	2/03/14 13:14	JLR	pass
02031414.D	1617103	L/10263	LCSD	1		013014-8270MSS9	2/03/14 13:44	JLR	pass
02031415.D	10256307001	L/10263	Sample	10		013014-8270MSS9	2/03/14 14:15	JLR	OD 1x
02031416.D	10256307002	L/10263	Sample	10		013014-8270MSS9	2/03/14 14:45	JLR	OD 1x
02031417.D	10256307003	L/10263	Sample	10		013014-8270MSS9	2/03/14 15:16	JLR	
02031418.D	10256307004	L/10263	Sample	1		013014-8270MSS9	2/03/14 15:46	JLR	OD 1x
02031419.D	10256307001	L/10263	Sample	1		013014-8270MSS9	2/03/14 16:17	JLR	
02031420.D	10256307002	L/10263	Sample	1		013014-8270MSS9	2/03/14 16:48	JLR	
02031421.D	10256307003	L/10263	Sample	1		013014-8270MSS9	2/03/14 17:18	JLR	
02031422.D	1616733	L/10264	Blank	1		013014-8270MSS9	2/03/14 17:49	JLR	pass
02031423.D	1616734	L/10264	LCS	1		013014-8270MSS9	2/03/14 18:20	JLR	pass
02031424.D	1616735	L/10264	LCSD	1		013014-8270MSS9	2/03/14 18:51	JLR	pass
02031425.D	10256060001	L/10264	Sample	1		013014-8270MSS9	2/03/14 19:22	JLR	625 24 hr tune

Check Maintenance Items Performed:

Changed septum	x Clipped column	Changed column - Lot #
x Cleaned liner	Changed trap - Lot #	Other minor parts replaced
x Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: U:\10MSS9.I\020314.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: JLR

Report Date: 02/04/2014 08:12
Reviewed By/Date:

Report Date : 30-Jan-2014 12:45

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-JAN-2014 08:59
End Cal Date : 30-JAN-2014 12:01
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Last Edit : 30-Jan-2014 12:36 jlries

Calibration File Names:
Level 2: \\192.168.10.12\chem\10mss9.i\013014.b\01301409.D
Level 3: \\192.168.10.12\chem\10mss9.i\013014.b\01301408.D
Level 4: \\192.168.10.12\chem\10mss9.i\013014.b\01301407.D
Level 5: \\192.168.10.12\chem\10mss9.i\013014.b\01301406.D
Level 6: \\192.168.10.12\chem\10mss9.i\013014.b\01301405.D
Level 7: \\192.168.10.12\chem\10mss9.i\013014.b\01301404.D
Level 8: \\192.168.10.12\chem\10mss9.i\013014.b\01301403.D

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	160.0000 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
1 N-Nitrosodimethylamine	0.82545	0.82839	0.89408	0.80666	0.85027	0.89400						
	0.83806							AVRG		0.84813		4.01150
2 Pyridine	1.31171	1.47494	1.58009	1.52175	1.52516	1.60691						
	1.52212							AVRG		1.50609		6.37205
5 Phenol	1.74532	1.77830	1.81333	1.70934	1.70813	1.77887						
	1.65526							AVRG		1.74122		3.10257
6 bis(2-Chloroethyl)ether	1.12130	1.13472	1.12066	1.07193	1.07677	1.13549						
	1.07045							AVRG		1.10447		2.71752

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-JAN-2014 08:59
End Cal Date : 30-JAN-2014 12:01
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Last Edit : 30-Jan-2014 12:36 jlries

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	160.0000 Level 8	Curve	Coefficients b	m1	m2	%RSD or R^2
7 2-Chlorophenol	1.34447	1.37318	1.39392	1.33625	1.36675	1.41422						
	1.33725							AVRG		1.36657		2.18089
8 1,3-Dichlorobenzene	1.53431	1.55694	1.57103	1.48709	1.49807	1.54074						
	1.45713							AVRG		1.51933		2.77368
10 1,4-Dichlorobenzene	1.54818	1.54776	1.60389	1.49099	1.51568	1.56575						
	1.46363							AVRG		1.53370		3.08366
11 Benzyl alcohol	1.08596	1.07973	1.14796	1.07252	1.08550	1.12029						
	1.03965							AVRG		1.09023		3.19045
12 1,2-Dichlorobenzene	1.44289	1.44867	1.50724	1.41784	1.42744	1.48046						
	1.38748							AVRG		1.44457		2.75508
13 2-Methylphenol	1.07566	1.07321	1.09720	1.04678	1.06695	1.10545						
	1.03950							AVRG		1.07211		2.24830
14 bis(2-Chloroisopropyl) ether	2.05948	2.07175	2.14821	2.02057	2.00942	2.08098						
	1.94647							AVRG		2.04812		3.11201

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 30-JAN-2014 08:59
End Cal Date : 30-JAN-2014 12:01
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Last Edit : 30-Jan-2014 12:36 jlries

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2	
	160.0000 Level 8											
15 3 & 4-Methylphenol	1.31815	1.34328	1.42850	1.34057	1.35682	1.41385						
	1.34130						AVRG		1.36321		3.03762	
16 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
17 N-Nitroso-di-n-propylamine	0.84004	0.87021	0.89092	0.83143	0.83792	0.87757						
	0.81951						AVRG		0.85251		3.14681	
18 Hexachloroethane	0.59899	0.58712	0.60113	0.57959	0.58129	0.60044						
	0.56824						AVRG		0.58811		2.14477	
20 Nitrobenzene	0.37202	0.37999	0.38336	0.35614	0.36716	0.38104						
	0.34910						AVRG		0.36983		3.56179	
21 Isophorone	0.65061	0.65701	0.68057	0.64135	0.64383	0.67231						
	0.61582						AVRG		0.65164		3.28192	
22 2-Nitrophenol	0.16873	0.16819	0.19186	0.18116	0.18701	0.19836						
	0.18228						AVRG		0.18251		6.14865	

Pace Analytical Services, Inc.

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Method file : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Last Edit : 30-Jan-2014 12:36 jlries

Compound	5.0000 Level 2 / 160.0000 Level 8	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
23 2,4-Dimethylphenol	0.33369	0.35164	0.36233	0.34281	0.34034	0.35544					
	0.32766						AVRG		0.34484		3.56817
24 Benzoic acid	3411	7999	17600	38565	82843	134259					
	179371						QUAD	0.07964	4.54583	-0.15662	0.99599
25 bis(2-Chloroethoxy)methane	0.40961	0.41169	0.43492	0.39774	0.40712	0.42541					
	0.39214						AVRG		0.41123		3.61780
26 2,4-Dichlorophenol	0.28093	0.29124	0.31077	0.29375	0.29426	0.31498					
	0.28875						AVRG		0.29638		4.10455
27 1,2,4-Trichlorobenzene	0.35129	0.34016	0.35788	0.33189	0.33446	0.35322					
	0.32522						AVRG		0.34202		3.59768
29 Naphthalene	1.09768	1.08996	1.10301	1.02342	1.02122	1.05734					
	0.96628						AVRG		1.05127		4.79810
30 4-Chloroaniline	10886	21644	41859	76682	136695	174958					
	+++++						QUAD	0.00648	2.01187	1.39713	0.99991

Pace Analytical Services, Inc.

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Method file : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Last Edit : 30-Jan-2014 12:36 jlries

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
31 Hexachlorobutadiene	0.19956	0.20566	0.21149	0.19615	0.19949	0.20811					
	0.19214						AVRG		0.20180		3.41128
32 4-Chloro-3-methylphenol	0.26408	0.27277	0.29276	0.27090	0.27530	0.28852					
	0.27055						AVRG		0.27641		3.75204
33 2-Methylnaphthalene	0.69908	0.69076	0.71343	0.66551	0.66417	0.70192					
	0.64653						AVRG		0.68306		3.58276
34 1-Methylnaphthalene	0.64282	0.64120	0.66684	0.61521	0.62488	0.64828					
	0.59588						AVRG		0.63359		3.70174
35 Hexachlorocyclopentadiene	0.33416	0.35046	0.38063	0.38554	0.41130	0.43908					
	0.41335						AVRG		0.38779		9.51097
36 2,4,6-Trichlorophenol	0.35499	0.36669	0.39959	0.38206	0.39293	0.40902					
	0.38810						AVRG		0.38477		4.86951
37 2,4,5-Trichlorophenol	0.40419	0.40773	0.44470	0.41449	0.42083	0.43002					
	0.40574						AVRG		0.41824		3.55113

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
39 2-Chloronaphthalene	1.23559	1.22470	1.26472	1.18778	1.21300	1.26108					
	1.14291						AVRG		1.21854		3.50865
40 2-Nitroaniline	0.33627	0.34837	0.37078	0.36249	0.35898	0.37067					
	0.34043						AVRG		0.35543		3.93229
41 Dimethylphthalate	1.33332	1.33081	1.38074	1.29336	1.28686	1.32753					
	1.21787						AVRG		1.31007		3.89082
42 2,6-Dinitrotoluene	0.29907	0.29611	0.30835	0.29923	0.30722	0.31869					
	0.29532						AVRG		0.30343		2.78142
43 Acenaphthylene	2.02647	1.99967	2.06030	1.93540	1.90553	2.00515					
	1.81900						AVRG		1.96450		4.22842
44 3-Nitroaniline	0.31303	0.33183	0.35744	0.32379	0.28085	0.25779					
	+++++						AVRG		0.31079		11.59964
46 Acenaphthene	1.20148	1.20750	1.25276	1.18338	1.18951	1.22829					
	1.12453						AVRG		1.19821		3.35593

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
47 2,4-Dinitrophenol	917	2102	5114	12275	30872	49760					
	67043						QUAD	0.14674	6.31455	-0.32181	0.99588
48 4-Nitrophenol	0.20330	0.21749	0.23663	0.22895	0.24054	0.25329					
	0.23440						AVRG		0.23066		7.04497
49 2,4-Dinitrotoluene	0.35491	0.36953	0.41079	0.39176	0.39900	0.41574					
	0.38063						AVRG		0.38891		5.66123
50 Dibenzofuran	1.78574	1.78008	1.84806	1.72920	1.70350	1.75995					
	1.61936						AVRG		1.74656		4.14687
51 Diethylphthalate	1.29846	1.31761	1.39331	1.31051	1.30048	1.33573					
	1.22848						AVRG		1.31208		3.74677
52 4-Chlorophenylphenyl ether	0.72213	0.72057	0.71882	0.67924	0.69541	0.72129					
	0.66118						AVRG		0.70266		3.50033
53 4-Nitroaniline	0.34148	0.34825	0.37195	0.35102	0.35097	0.36159					
	0.32947						AVRG		0.35067		3.88174

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
54 Fluorene	1.44637	1.45811	1.49025	1.40392	1.39585	1.44031					
	1.31497						AVRG		1.42140		3.99598
55 4,6-Dinitro-2-methylphenol	1526	3241	8102	18051	45061	70329					
	92551						QUAD	0.13401	8.00085	0.20902	0.99605
56 N-Nitrosodiphenylamine	0.63837	0.63415	0.66541	0.62729	0.62072	0.64613					
	0.60459						AVRG		0.63381		3.04748
57 Azobenzene	1.30464	1.31248	1.37363	1.29184	1.27077	1.31524					
	1.19308						AVRG		1.29453		4.22800
58 1,2-Diphenylhydrazine	1.30464	1.31248	1.37363	1.29184	1.27077	1.31524					
	1.19308						AVRG		1.29453		4.22800
60 4-Bromophenylphenyl ether	0.21206	0.21658	0.23375	0.21226	0.21540	0.22565					
	0.21208						AVRG		0.21826		3.82539
61 Hexachlorobenzene	0.23778	0.23310	0.23975	0.22790	0.22334	0.23641					
	0.21779						AVRG		0.23087		3.53106

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
	160.0000 Level 8										
62 Pentachlorophenol	0.08415	0.09813	0.11576	0.11578	0.12707	0.13808					
	0.13173						AVRG		0.11581		16.50069
64 Phenanthrene	1.08756	1.08866	1.13395	1.03971	1.03891	1.06065					
	0.98974						AVRG		1.06274		4.34458
65 Anthracene	1.07346	1.12784	1.14703	1.05927	1.05347	1.10362					
	1.01803						AVRG		1.08324		4.17660
66 Carbazole	1.02945	1.04987	1.10444	1.01634	1.00609	1.05460					
	0.96551						AVRG		1.03233		4.22615
67 di-n-Butylphthalate	1.14866	1.20521	1.26107	1.19309	1.19933	1.24972					
	1.14871						AVRG		1.20083		3.65183
68 Fluoranthene	1.20980	1.24604	1.29631	1.22455	1.21451	1.27201					
	1.17340						AVRG		1.23380		3.34175
69 Benzidine	14178	31141	59420	105759	188214	254427					
	+++++						QUAD	-0.01927	1.67502	0.63195	0.99934

Pace Analytical Services, Inc.

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Method file : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Last Edit : 30-Jan-2014 12:36 jlries

Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
70 Pyrene	1.23536	1.23196	1.28426	1.21664	1.18625	1.21989					
	1.12761						AVRG		1.21457		3.97531
72 Butylbenzylphthalate	0.46507	0.49298	0.52759	0.50693	0.51419	0.52995					
	0.49209						AVRG		0.50411		4.52436
73 bis(2-Ethylhexyl)phthalate	0.66149	0.71293	0.75244	0.71865	0.72607	0.75637					
	0.69487						AVRG		0.71755		4.57909
74 3,3'-Dichlorobenzidine	0.36882	0.39135	0.39606	0.34821	0.30055	0.28395					
	+++++						AVRG		0.34816		13.45768
75 Benzo(a)anthracene	1.17531	1.15429	1.21094	1.11128	1.11354	1.15266					
	1.05121						AVRG		1.13846		4.54105
77 Chrysene	1.06847	1.08606	1.09409	1.02706	1.03503	1.04233					
	0.96375						AVRG		1.04526		4.22019
78 di-n-Octylphthalate	1.12817	1.19882	1.26037	1.23126	1.25696	1.31462					
	1.20187						AVRG		1.22744		4.80810

Report Date : 30-Jan-2014 12:45

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INITIAL CALIBRATION DATA

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Last Edit : 30-Jan-2014 12:36 jlries

Compound	5.0000 Level 2 / 160.0000 Level 8	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
79 Benzo(b)fluoranthene	1.13203	1.17310	1.20501	1.16931	1.17988	1.24072					
	1.16233						AVRG		1.18034		2.91184
80 Benzo(k)fluoranthene	1.17375	1.22037	1.29305	1.17245	1.18528	1.21544					
	1.13728						AVRG		1.19966		4.15525
81 Benzo(a)pyrene	1.08732	1.12866	1.15499	1.10383	1.12925	1.18395					
	1.09643						AVRG		1.12635		3.04943
83 Indeno(1,2,3-cd)pyrene	1.20179	1.23326	1.29512	1.25019	1.28212	1.32059					
	1.22303						AVRG		1.25802		3.39301
84 Dibenzo(a,h)anthracene	1.01521	1.06496	1.09379	1.05038	1.07455	1.11626					
	1.02996						AVRG		1.06359		3.31388
85 Benzo(g,h,i)perylene	1.00068	1.05987	1.08641	1.04638	1.09447	1.10245					
	1.00931						AVRG		1.05708		3.84297
$ 3 2-Fluorophenol (S)	1.35949	1.35934	1.42023	1.36287	1.35137	1.41959					
	1.33431						AVRG		1.37246		2.45951

Report Date : 30-Jan-2014 12:45

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Compound	5.0000 Level 2	10.0000 Level 3	20.0000 Level 4	40.0000 Level 5	80.0000 Level 6	120.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2
	160.0000 Level 8										
$ 4 Phenol-d6 (S)	1.66664	1.73405	1.73230	1.65178	1.65651	1.72524					
	1.62820						AVRG		1.68496		2.62527
$ 19 Nitrobenzene-d5 (S)	0.41382	0.41589	0.43054	0.40284	0.41762	0.43290					
	0.40106						AVRG		0.41638		2.94061
$ 38 2-Fluorobiphenyl (S)	1.47318	1.50052	1.55449	1.47448	1.47228	1.49654					
	1.40286						AVRG		1.48205		3.05530
$ 59 2,4,6-Tribromophenol (S)	0.16610	0.18449	0.19525	0.19535	0.20004	0.20980					
	0.19247						AVRG		0.19193		7.15275
$ 71 Terphenyl-d14 (S)	0.86667	0.86976	0.88046	0.83029	0.83415	0.86696					
	0.80377						AVRG		0.85029		3.27772

Report Date : 30-Jan-2014 12:45

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INITIAL CALIBRATION DATA

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Target Version : 4.14
Integrator : HP RTE
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Last Edit : 30-Jan-2014 12:36 jlries

Average %RSD Results.
Calculated Average %RSD = 5.65120
Maximun Average %RSD = 15.00000
* Passed Average %RSD Test.

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301403.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013014.b\01301403.D
Lab Smp Id: ICAL 10328-96 8
Inj Date : 30-JAN-2014 08:59
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 8
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Meth Date : 30-Jan-2014 13:47 10mss9.i Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * Vt / (Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.768	2.768	(0.531)	188466	160.000	158
2	Pyridine	79	2.821	2.821	(0.542)	342300	160.000	162(A)
$ 3	2-Fluorophenol (S)	112	3.868	3.868	(0.743)	300064	160.000	156
$ 4	Phenol-d6 (S)	99	4.739	4.739	(0.910)	366157	160.000	155
5	Phenol	94	4.755	4.755	(0.913)	372241	160.000	152
6	bis(2-Chloroethyl)ether	63	4.883	4.883	(0.937)	240727	160.000	155
7	2-Chlorophenol	128	4.979	4.979	(0.956)	300726	160.000	156
8	1,3-Dichlorobenzene	146	5.150	5.150	(0.989)	327686	160.000	153
* 9	1,4-Dichlorobenzene-d4	152	5.209	5.209	(1.000)	56221	40.0000	
10	1,4-Dichlorobenzene	146	5.225	5.225	(1.003)	329147	160.000	153
11	Benzyl alcohol	79	5.321	5.321	(1.022)	233801	160.000	152
12	1,2-Dichlorobenzene	146	5.401	5.401	(1.037)	312021	160.000	154
13	2-Methylphenol	107	5.417	5.417	(1.040)	233768	160.000	155
14	bis(2-Chloroisopropyl) ether	45	5.471	5.471	(1.050)	437729	160.000	152(Q)
15	3 & 4-Methylphenol	107	5.594	5.594	(1.074)	301638	160.000	157
17	N-Nitroso-di-n-propylamine	70	5.620	5.620	(1.079)	184295	160.000	154
18	Hexachloroethane	117	5.791	5.791	(1.112)	127789	160.000	154
$ 19	Nitrobenzene-d5 (S)	82	5.818	5.818	(0.871)	248939	120.000	116(M)
20	Nitrobenzene	77	5.839	5.839	(0.874)	288919	160.000	151
21	Isophorone	82	6.106	6.106	(0.914)	509656	160.000	151
22	2-Nitrophenol	139	6.208	6.208	(0.930)	150858	160.000	160
23	2,4-Dimethylphenol	107	6.213	6.213	(0.930)	271178	160.000	152

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301403.D
Report Date: 30-Jan-2014 13:47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	24 Benzoic acid	105	6.315	6.315	(0.946)	179371	160.000	156(M)
	25 bis(2-Chloroethoxy)methane	93	6.336	6.336	(0.949)	324540	160.000	152(Q)
	26 2,4-Dichlorophenol	162	6.486	6.486	(0.971)	238973	160.000	156
	27 1,2,4-Trichlorobenzene	180	6.598	6.598	(0.988)	269154	160.000	152
*	28 Naphthalene-d8	136	6.678	6.678	(1.000)	206902	40.0000	(Q)
	29 Naphthalene	128	6.705	6.705	(1.004)	799705	160.000	147
	30 4-Chloroaniline	127	6.737	6.737	(1.009)	177418	160.000	110(A)
	31 Hexachlorobutadiene	225	6.838	6.838	(1.024)	159013	160.000	152
	32 4-Chloro-3-methylphenol	107	7.292	7.292	(1.092)	223908	160.000	157
	33 2-Methylnaphthalene	142	7.538	7.538	(1.129)	535073	160.000	151
	34 1-Methylnaphthalene	142	7.666	7.666	(1.148)	493152	160.000	150
	35 Hexachlorocyclopentadiene	237	7.731	7.731	(0.875)	180221	160.000	170(A)
	36 2,4,6-Trichlorophenol	196	7.864	7.864	(0.890)	169215	160.000	161(A)
	37 2,4,5-Trichlorophenol	196	7.907	7.907	(0.895)	176903	160.000	155
$	38 2-Fluorobiphenyl (S)	172	7.976	7.976	(0.903)	458738	120.000	114
	39 2-Chloronaphthalene	162	8.142	8.142	(0.921)	498315	160.000	150
	40 2-Nitroaniline	65	8.243	8.243	(0.933)	148431	160.000	153
	41 Dimethylphthalate	163	8.468	8.468	(0.958)	530996	160.000	149
	42 2,6-Dinitrotoluene	165	8.543	8.543	(0.967)	128762	160.000	156
	43 Acenaphthylene	152	8.665	8.665	(0.981)	793091	160.000	148(M)
	44 3-Nitroaniline	138	8.751	8.751	(0.990)	88669	160.000	105(A)
*	45 Acenaphthene-d10	164	8.836	8.836	(1.000)	109001	40.0000	
	46 Acenaphthene	154	8.879	8.879	(1.005)	490300	160.000	150
	47 2,4-Dinitrophenol	184	8.879	8.879	(1.005)	67043	160.000	156
	48 4-Nitrophenol	65	8.927	8.927	(1.010)	102201	160.000	162(A)
	49 2,4-Dinitrotoluene	165	9.045	9.045	(1.024)	165955	160.000	156
	50 Dibenzofuran	168	9.093	9.093	(1.029)	706049	160.000	148
	51 Diethylphthalate	149	9.339	9.339	(1.057)	535621	160.000	150
	52 4-Chlorophenylphenyl ether	204	9.504	9.504	(1.076)	288277	160.000	150
	53 4-Nitroaniline	138	9.520	9.520	(1.077)	143652	160.000	150
	54 Fluorene	166	9.520	9.520	(1.077)	573330	160.000	148
	55 4,6-Dinitro-2-methylphenol	198	9.558	9.558	(0.894)	92551	160.000	156
	56 N-Nitrosodiphenylamine	169	9.643	9.643	(0.902)	480064	160.000	153
	57 Azobenzene	77	9.702	9.702	(1.098)	520189	160.000	147
	58 1,2-Diphenylhydrazine	77	9.702	9.702	(1.098)	520189	160.000	147
$	59 2,4,6-Tribromophenol (S)	330	9.814	9.814	(1.111)	83918	160.000	160(A)
	60 4-Bromophenylphenyl ether	248	10.119	10.119	(0.946)	168398	160.000	155
	61 Hexachlorobenzene	284	10.209	10.209	(0.955)	172935	160.000	151
	62 Pentachlorophenol	266	10.439	10.439	(0.976)	104597	160.000	174(A)
*	63 Phenanthrene-d10	188	10.695	10.695	(1.000)	198507	40.0000	
	64 Phenanthrene	178	10.728	10.728	(1.003)	785879	160.000	149
	65 Anthracene	178	10.792	10.792	(1.009)	808347	160.000	150
	66 Carbazole	167	10.973	10.973	(1.026)	766645	160.000	150
	67 di-n-Butylphthalate	149	11.374	11.374	(1.063)	912105	160.000	153
	68 Fluoranthene	202	12.218	12.218	(1.142)	931710	160.000	152
	69 Benzidine	184	12.352	12.352	(0.882)	293394	160.000	137(A)
	70 Pyrene	202	12.512	12.512	(0.893)	972604	160.000	148
$	71 Terphenyl-d14 (S)	244	12.667	12.667	(0.904)	519955	120.000	113
	72 Butylbenzylphthalate	149	13.254	13.254	(0.946)	424446	160.000	156
	73 bis(2-Ethylhexyl)phthalate	149	13.949	13.949	(0.996)	599347	160.000	155
	74 3,3'-Dichlorobenzidine	252	13.933	13.933	(0.995)	196363	160.000	105(A)
	75 Benzo(a)anthracene	228	13.992	13.992	(0.999)	906704	160.000	148
*	76 Chrysene-d12	240	14.008	14.008	(1.000)	215633	40.0000	(Q)
	77 Chrysene	228	14.040	14.040	(1.002)	831269	160.000	148

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301403.D
Report Date: 30-Jan-2014 13:47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.740	14.740	(1.052)	1036653	160.000	157
79	Benzo(b)fluoranthene	252	15.402	15.402	(0.963)	936916	160.000	158
80	Benzo(k)fluoranthene	252	15.445	15.445	(0.965)	916719	160.000	152
81	Benzo(a)pyrene	252	15.920	15.920	(0.995)	883789	160.000	156
* 82	Perylene-d12	264	16.000	16.000	(1.000)	201516	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	18.100	18.100	(1.131)	985844	160.000	156
84	Dibenzo(a,h)anthracene	278	18.127	18.127	(1.133)	830217	160.000	155
85	Benzo(g,h,i)perylene	276	18.741	18.741	(1.171)	813566	160.000	153

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301403.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01301403.D
Lab Smp Id: ICAL 10328-96 8
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Misc Info:

Calibration Date: 30-JAN-2014
Calibration Time: 12:31
Level: LOW
Sample Type: WATER

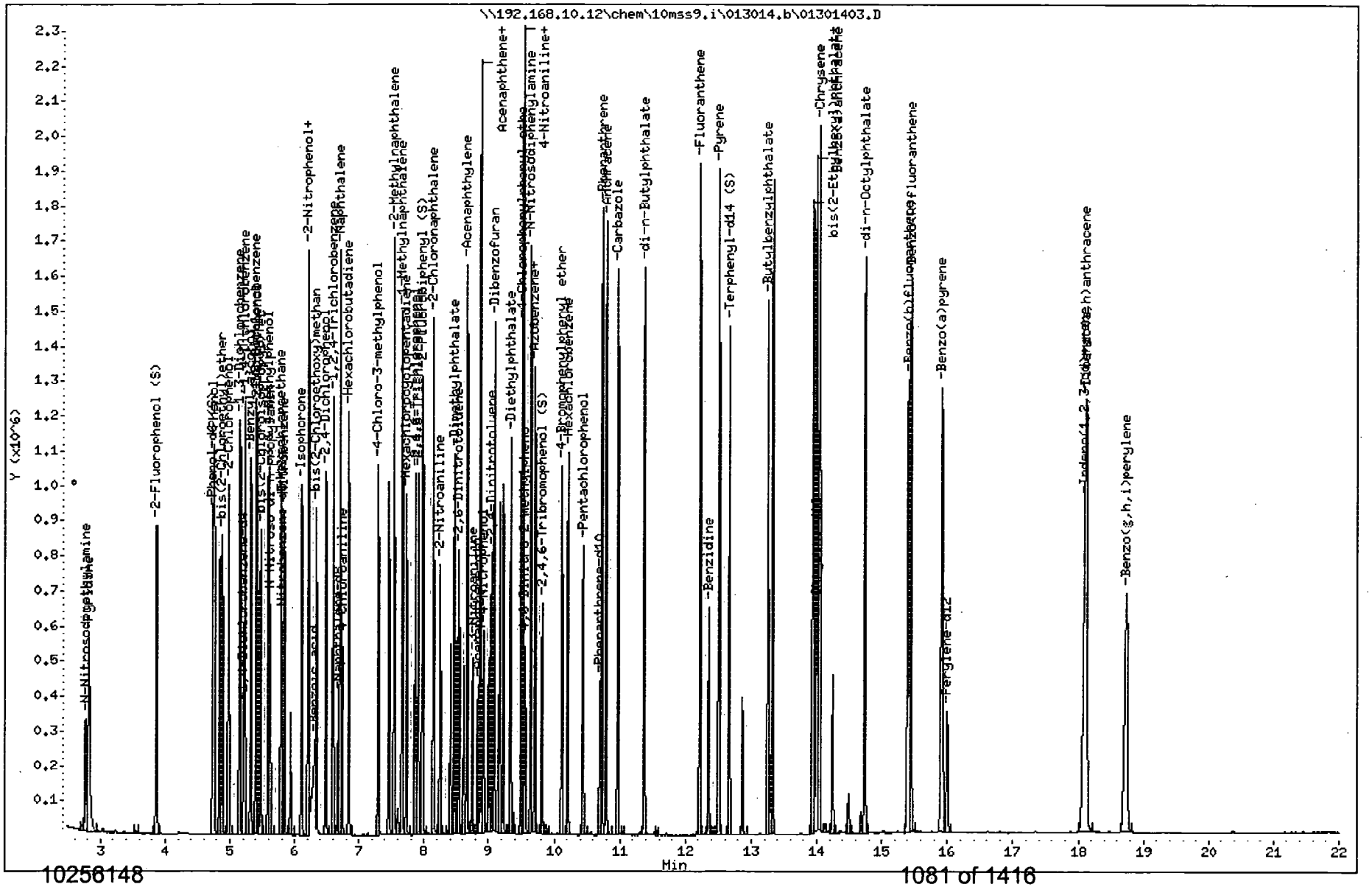
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	55114	27557	110228	56221	2.01
28 Naphthalene-d8	204229	102115	408458	206902	1.31
45 Acenaphthene-d10	107656	53828	215312	109001	1.25
63 Phenanthrene-d10	198170	99085	396340	198507	0.17
76 Chrysene-d12	212105	106053	424210	215633	1.66
82 Perylene-d12	202468	101234	404936	201516	-0.47

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.21	0.10
28 Naphthalene-d8	6.67	6.17	7.17	6.68	0.08
45 Acenaphthene-d10	8.83	8.33	9.33	8.84	0.06
63 Phenanthrene-d10	10.69	10.19	11.19	10.70	0.05
76 Chrysene-d12	14.00	13.50	14.50	14.01	0.08
82 Perylene-d12	15.99	15.49	16.49	16.00	0.07

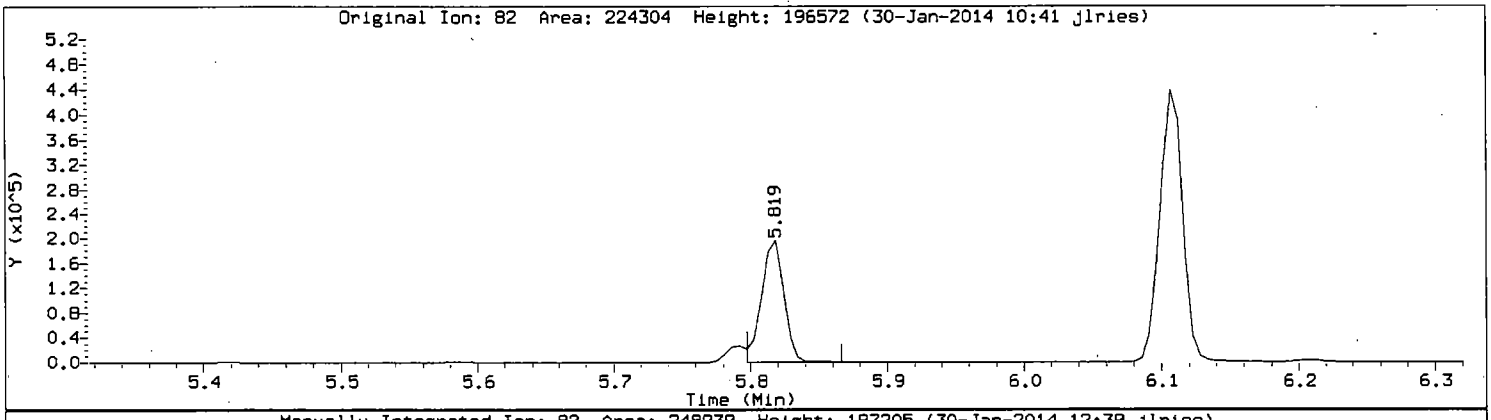
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

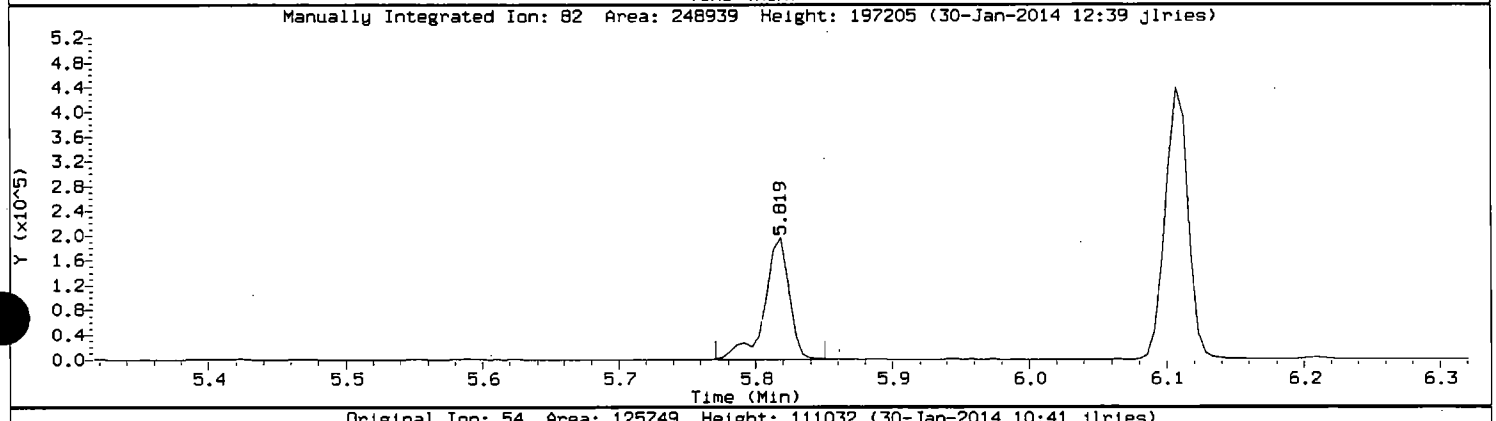
Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301403.D
Date : 30-JAN-2014 08:59
Client ID:
Instrument: 10mss9.i
Sample Info: ICAL 10328-96 8
Purge Volume: 1.0
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

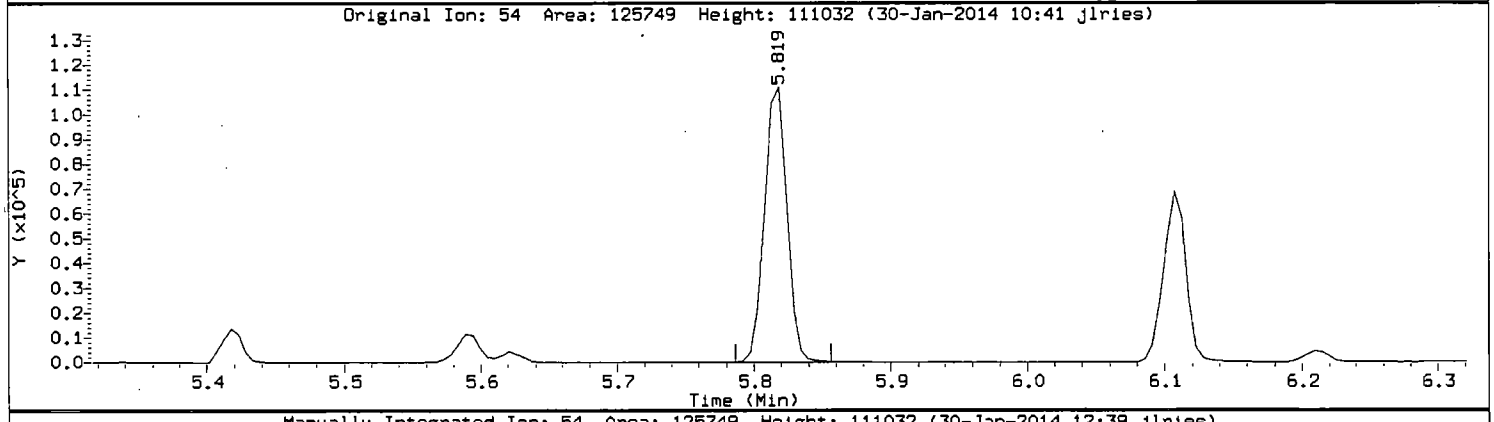


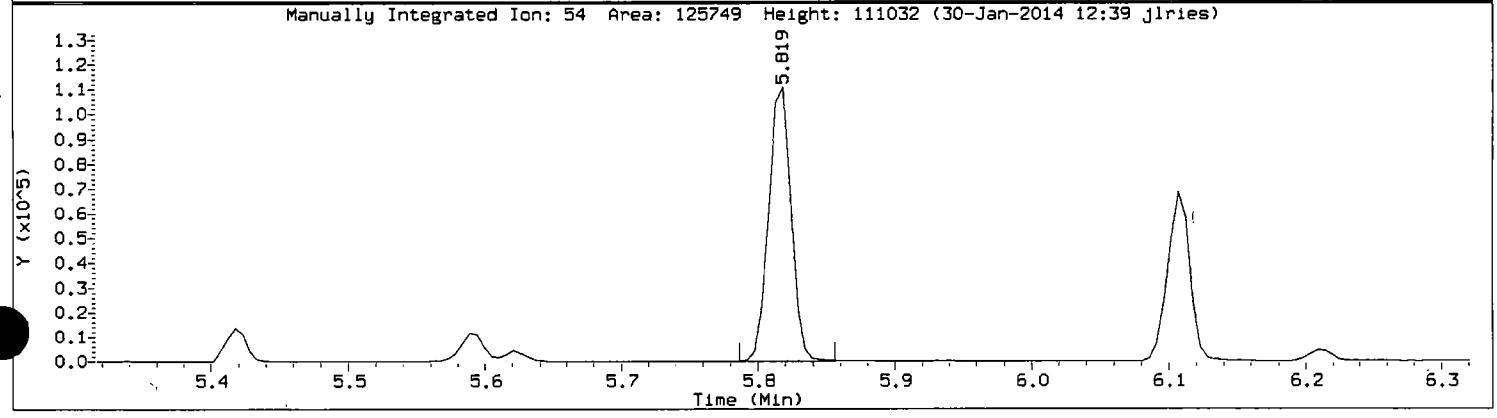
Data File: \\192.168.10.12\chem\10mss9.i\013014.b/01301403.D
Injection Date: 30-JAN-2014 08:59
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 8

Compound: Nitrobenzene-d5 (S)
CAS Number: 4165-60-0









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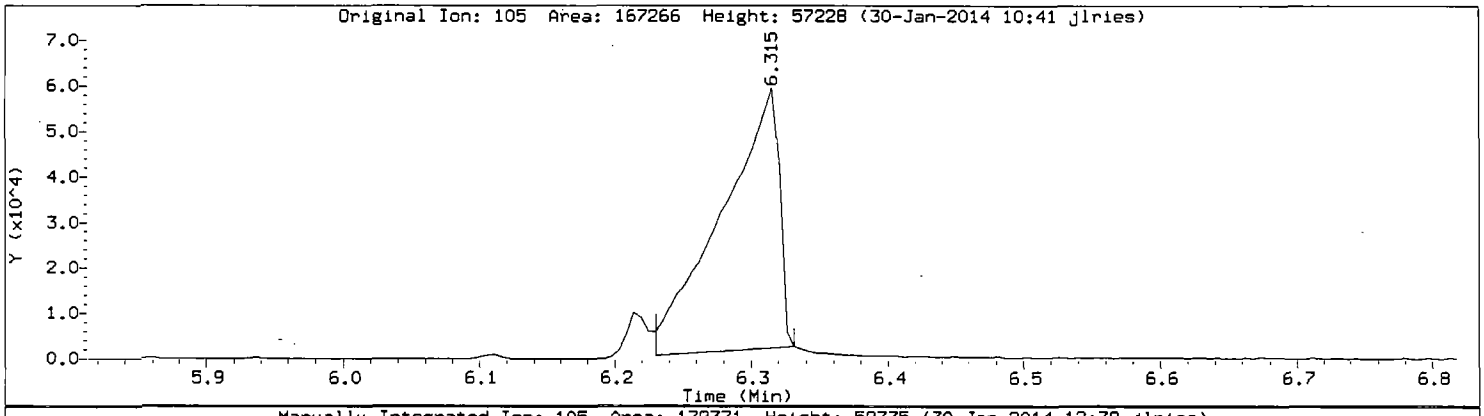
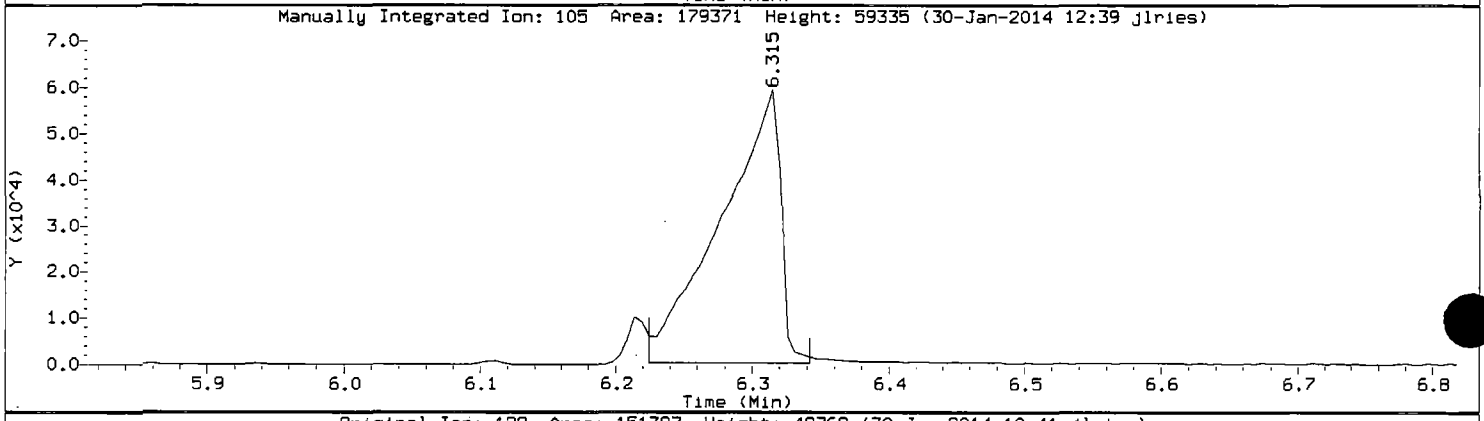
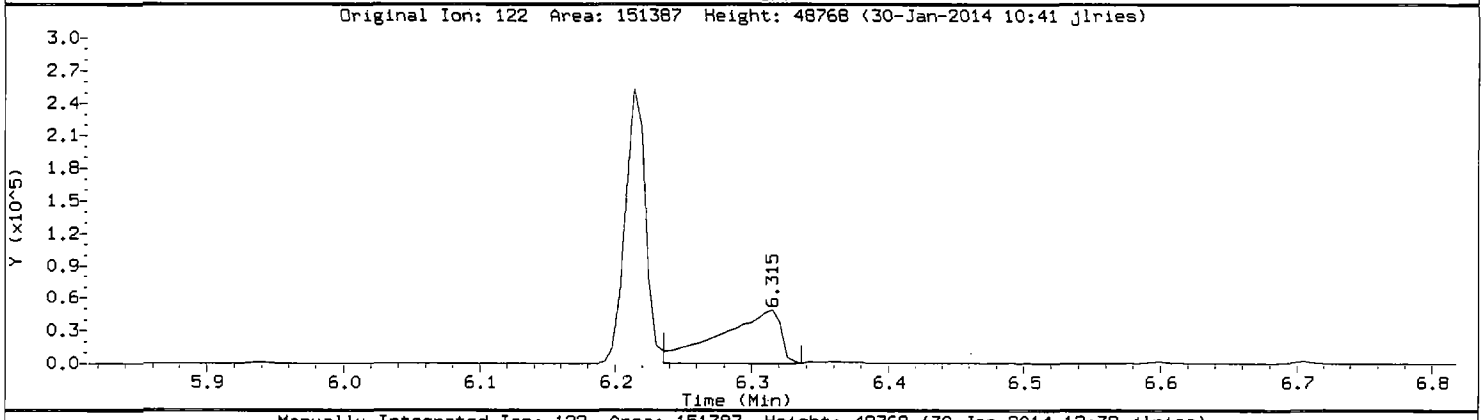
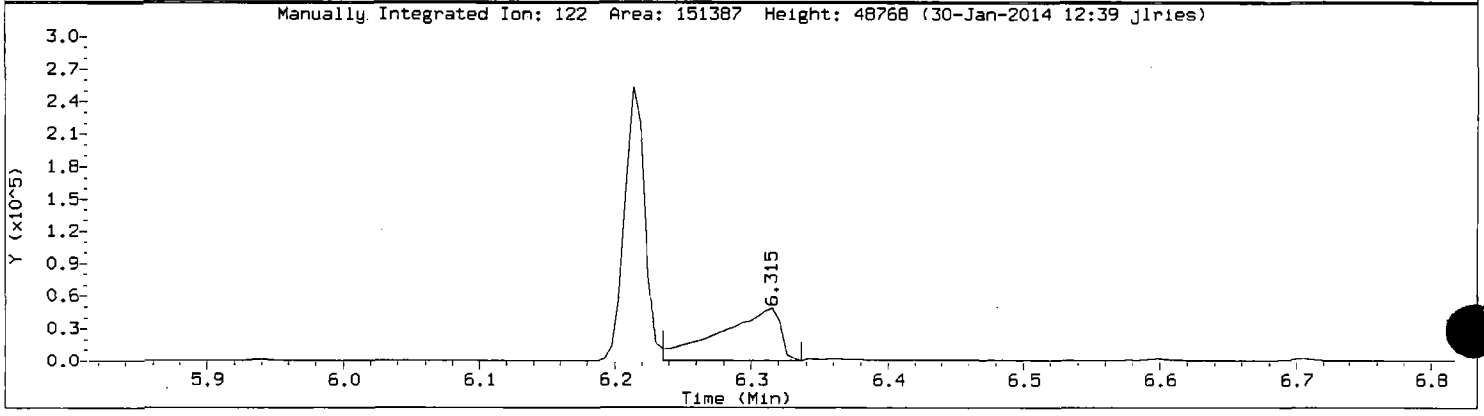
Injection Date: 30-JAN-2014 08:59
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 8

Compound: Benzoic acid
CAS Number: 65-85-0









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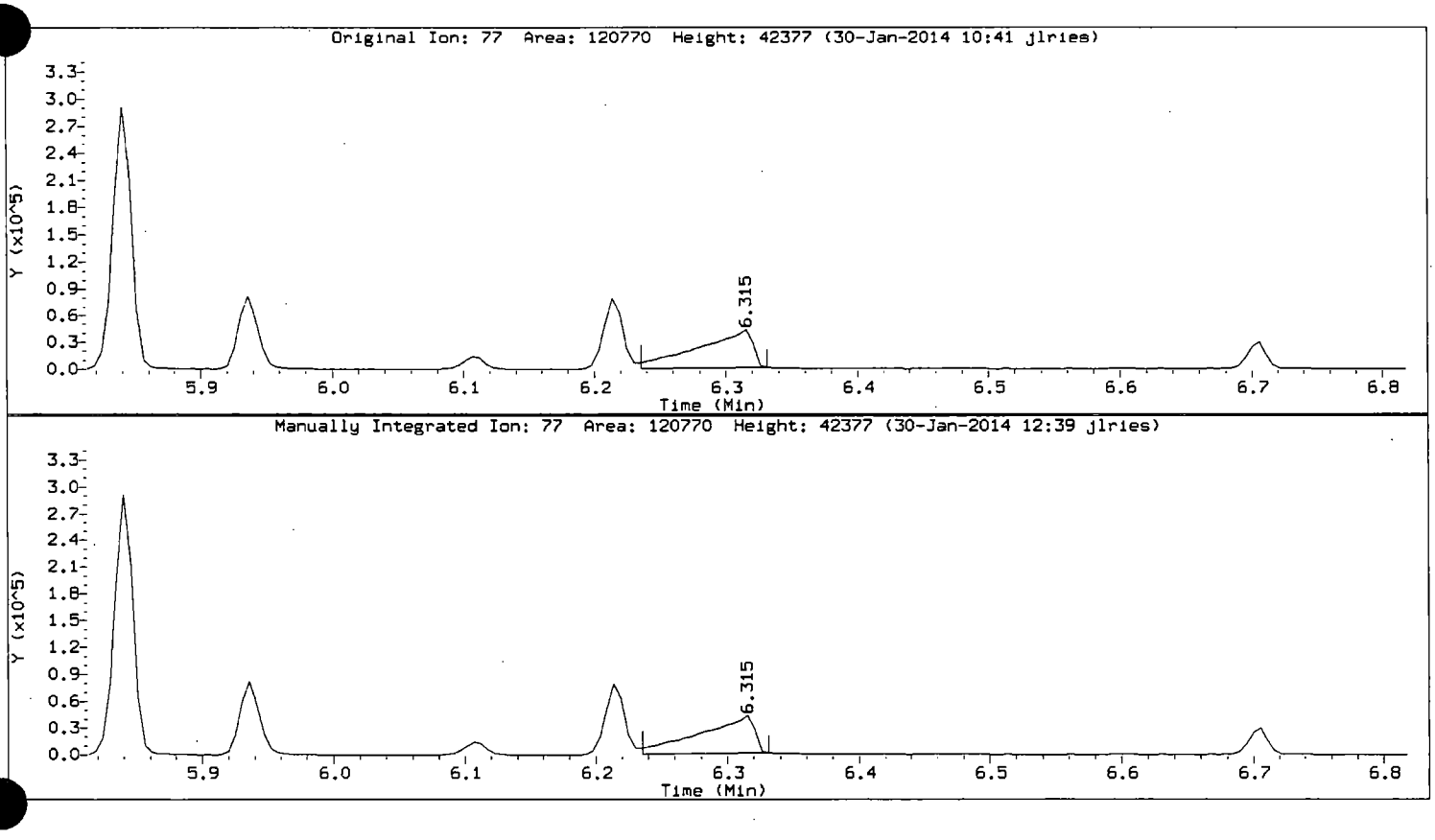
Injection Date: 30-JAN-2014 08:59
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 8



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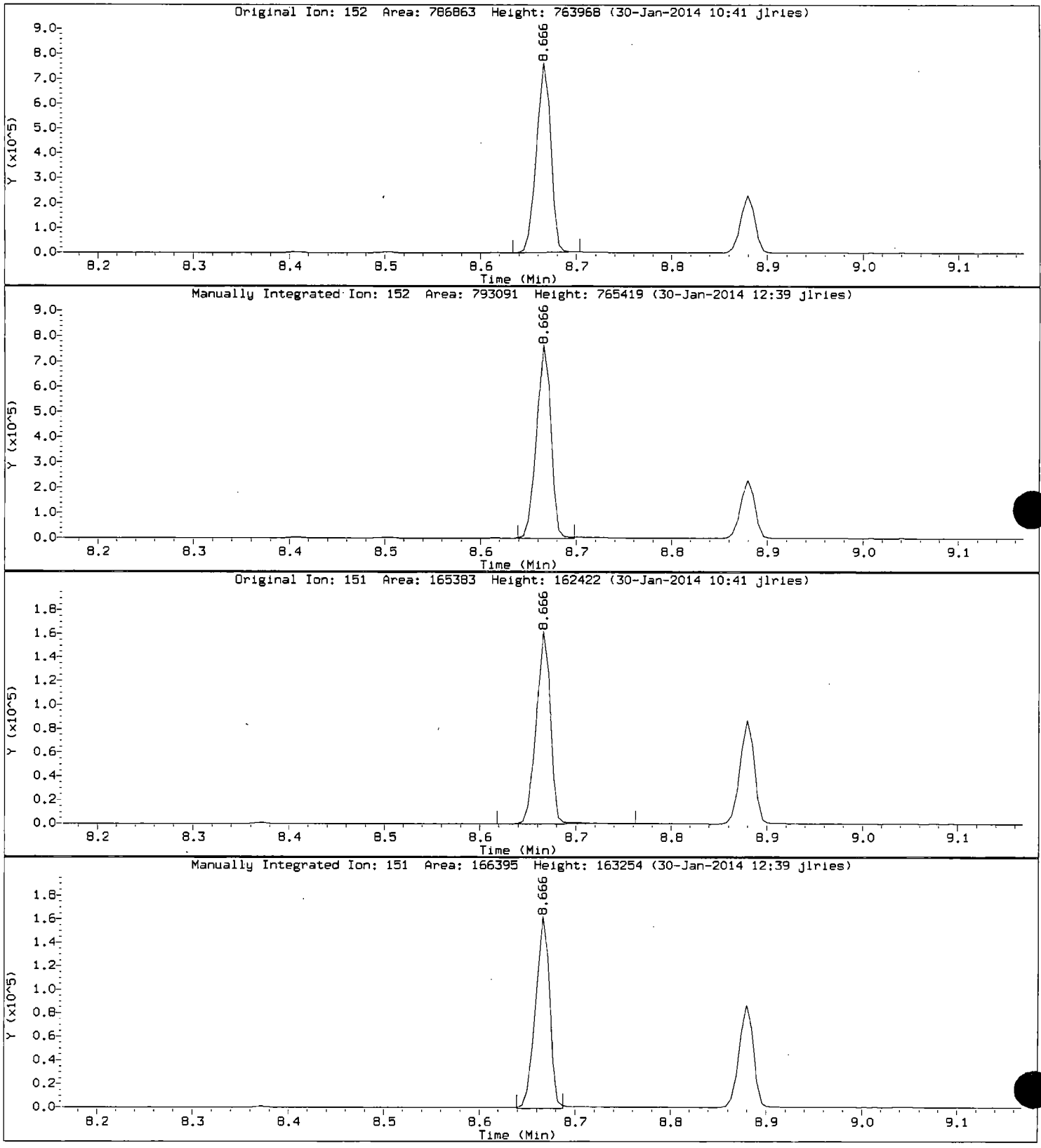
Injection Date: 30-JAN-2014 08:59
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 8

Compound: Acenaphthylene
CAS Number: 208-96-8



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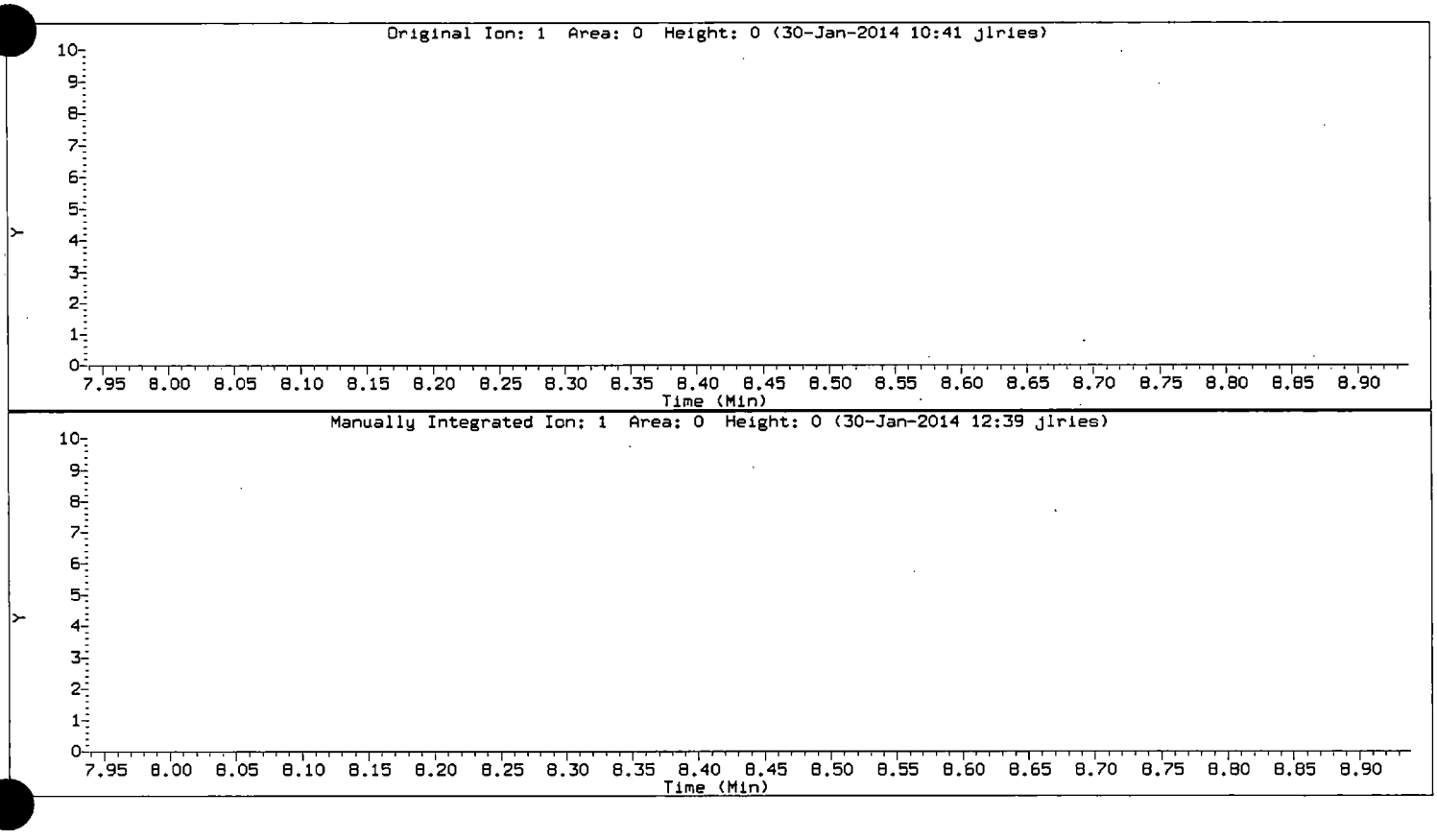
Injection Date: 30-JAN-2014 08:59
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 8



Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301404.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013014.b\01301404.D
Lab Smp Id: ICAL 10328-96 7
Inj Date : 30-JAN-2014 09:30
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 7
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Meth Date : 30-Jan-2014 13:47 10mss9.i Quant Type: ISTD
Cal Date : 30-JAN-2014 08:59 Cal File: 01301403.D
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * Vt / (Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.768	2.768	(0.531)	142640	120.000	126
2	Pyridine	79	2.821	2.821	(0.542)	256385	120.000	128
$ 3	2-Fluorophenol (S)	112	3.863	3.863	(0.742)	226499	120.000	124
$ 4	Phenol-d6 (S)	99	4.739	4.739	(0.910)	275266	120.000	123
5	Phenol	94	4.750	4.750	(0.912)	283823	120.000	122
6	bis(2-Chloroethyl)ether	63	4.883	4.883	(0.937)	181169	120.000	123
7	2-Chlorophenol	128	4.974	4.974	(0.955)	225641	120.000	124
8	1,3-Dichlorobenzene	146	5.150	5.150	(0.989)	245828	120.000	122
* 9	1,4-Dichlorobenzene-d4	152	5.209	5.209	(1.000)	53184	40.0000	
10	1,4-Dichlorobenzene	146	5.225	5.225	(1.003)	249818	120.000	122
11	Benzyl alcohol	79	5.321	5.321	(1.022)	178745	120.000	123
12	1,2-Dichlorobenzene	146	5.402	5.402	(1.037)	236211	120.000	123
13	2-Methylphenol	107	5.418	5.418	(1.040)	176377	120.000	124
14	bis(2-Chloroisopropyl) ether	45	5.471	5.471	(1.050)	332024	120.000	122(Q)
15	3 & 4-Methylphenol	107	5.588	5.588	(1.073)	225583	120.000	124
17	N-Nitroso-di-n-propylamine	70	5.621	5.621	(1.079)	140018	120.000	124
18	Hexachloroethane	117	5.792	5.792	(1.112)	95801	120.000	122
$ 19	Nitrobenzene-d5 (S)	82	5.813	5.813	(0.871)	186960	90.0000	93.6(M)
20	Nitrobenzene	77	5.840	5.840	(0.875)	219422	120.000	124
21	Isophorone	82	6.107	6.107	(0.915)	387144	120.000	124
22	2-Nitrophenol	139	6.208	6.208	(0.930)	114225	120.000	130
23	2,4-Dimethylphenol	107	6.214	6.214	(0.931)	204679	120.000	124

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301404.D
Report Date: 30-Jan-2014 13:47

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	24	Benzoic acid	105	6.304	6.304	(0.945)	134259	120.000	127 (M)
	25	bis(2-Chloroethoxy)methane	93	6.331	6.331	(0.949)	244970	120.000	124
	26	2,4-Dichlorophenol	162	6.481	6.481	(0.971)	181381	120.000	128
	27	1,2,4-Trichlorobenzene	180	6.598	6.598	(0.989)	203402	120.000	124
*	28	Naphthalene-d8	136	6.673	6.673	(1.000)	191948	40.0000	(Q)
	29	Naphthalene	128	6.705	6.705	(1.005)	608862	120.000	121
	30	4-Chloroaniline	127	6.732	6.732	(1.009)	174958	120.000	120 (A)
	31	Hexachlorobutadiene	225	6.839	6.839	(1.025)	119841	120.000	124
	32	4-Chloro-3-methylphenol	107	7.287	7.287	(1.092)	166144	120.000	125
	33	2-Methylnaphthalene	142	7.538	7.538	(1.130)	404197	120.000	123
	34	1-Methylnaphthalene	142	7.661	7.661	(1.148)	373311	120.000	123
	35	Hexachlorocyclopentadiene	237	7.731	7.731	(0.875)	133771	120.000	136
	36	2,4,6-Trichlorophenol	196	7.864	7.864	(0.891)	124613	120.000	128
	37	2,4,5-Trichlorophenol	196	7.907	7.907	(0.895)	131012	120.000	123
$	38	2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	341958	90.0000	90.9
	39	2-Chloronaphthalene	162	8.142	8.142	(0.922)	384206	120.000	124
	40	2-Nitroaniline	65	8.244	8.244	(0.933)	112930	120.000	125
	41	Dimethylphthalate	163	8.463	8.463	(0.958)	404453	120.000	122
	42	2,6-Dinitrotoluene	165	8.537	8.537	(0.967)	97093	120.000	126
	43	Acenaphthylene	152	8.660	8.660	(0.981)	610900	120.000	122 (M)
	44	3-Nitroaniline	138	8.751	8.751	(0.991)	78541	120.000	99.5 (A)
*	45	Acenaphthene-d10	164	8.831	8.831	(1.000)	101555	40.0000	
	46	Acenaphthene	154	8.874	8.874	(1.005)	374218	120.000	123
	47	2,4-Dinitrophenol	184	8.874	8.874	(1.005)	49760	120.000	126
	48	4-Nitrophenol	65	8.922	8.922	(1.010)	77170	120.000	132
	49	2,4-Dinitrotoluene	165	9.040	9.040	(1.024)	126661	120.000	128
	50	Dibenzofuran	168	9.088	9.088	(1.029)	536195	120.000	121
	51	Diethylphthalate	149	9.333	9.333	(1.057)	406949	120.000	122
	52	4-Chlorophenylphenyl ether	204	9.499	9.499	(1.076)	219753	120.000	123
	53	4-Nitroaniline	138	9.515	9.515	(1.077)	110163	120.000	124
	54	Fluorene	166	9.520	9.520	(1.078)	438812	120.000	122
	55	4,6-Dinitro-2-methylphenol	198	9.552	9.552	(0.894)	70329	120.000	126
	56	N-Nitrosodiphenylamine	169	9.643	9.643	(0.902)	364231	120.000	122
	57	Azobenzene	77	9.702	9.702	(1.099)	400708	120.000	122
	58	1,2-Diphenylhydrazine	77	9.702	9.702	(1.099)	400708	120.000	122
$	59	2,4,6-Tribromophenol (S)	330	9.814	9.814	(1.111)	63919	120.000	131
	60	4-Bromophenylphenyl ether	248	10.113	10.113	(0.946)	127202	120.000	124
	61	Hexachlorobenzene	284	10.210	10.210	(0.955)	133268	120.000	123
	62	Pentachlorophenol	266	10.439	10.439	(0.977)	77836	120.000	137
*	63	Phenanthrene-d10	188	10.690	10.690	(1.000)	187904	40.0000	
	64	Phenanthrene	178	10.722	10.722	(1.003)	597901	120.000	120
	65	Anthracene	178	10.792	10.792	(1.009)	622122	120.000	122
	66	Carbazole	167	10.973	10.973	(1.026)	594488	120.000	122
	67	di-n-Butylphthalate	149	11.369	11.369	(1.063)	704480	120.000	125
	68	Fluoranthene	202	12.213	12.213	(1.142)	717048	120.000	124
	69	Benzidine	184	12.346	12.346	(0.882)	254427	120.000	121 (A)
	70	Pyrene	202	12.507	12.507	(0.893)	753410	120.000	120
$	71	Terphenyl-d14 (S)	244	12.662	12.662	(0.904)	401578	90.0000	91.8
	72	Butylbenzylphthalate	149	13.249	13.249	(0.946)	327301	120.000	126
	73	bis(2-Ethylhexyl)phthalate	149	13.944	13.944	(0.996)	467139	120.000	126
	74	3,3'-Dichlorobenzidine	252	13.928	13.928	(0.995)	175367	120.000	97.9 (A)
	75	Benzo(a)anthracene	228	13.987	13.987	(0.999)	711889	120.000	121
*	76	Chrysene-d12	240	14.003	14.003	(1.000)	205868	40.0000	(Q)
	77	Chrysene	228	14.035	14.035	(1.002)	643748	120.000	120

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301404.D
Report Date: 30-Jan-2014 13:47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.734	14.734	(1.052)	811915	120.000	128
79	Benzo(b)fluoranthene	252	15.397	15.397	(0.963)	731983	120.000	126
80	Benzo(k)fluoranthene	252	15.440	15.440	(0.965)	717068	120.000	122
81	Benzo(a)pyrene	252	15.915	15.915	(0.995)	698489	120.000	126
* 82	Perylene-d12	264	15.995	15.995	(1.000)	196655	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	18.089	18.089	(1.131)	779104	120.000	126
84	Dibenzo(a,h)anthracene	278	18.111	18.111	(1.132)	658552	120.000	126
85	Benzo(g,h,i)perylene	276	18.730	18.730	(1.171)	650405	120.000	125

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301404.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01301404.D
Lab Smp Id: ICAL 10328-96 7
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Misc Info:

Calibration Date: 30-JAN-2014
Calibration Time: 12:31

Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

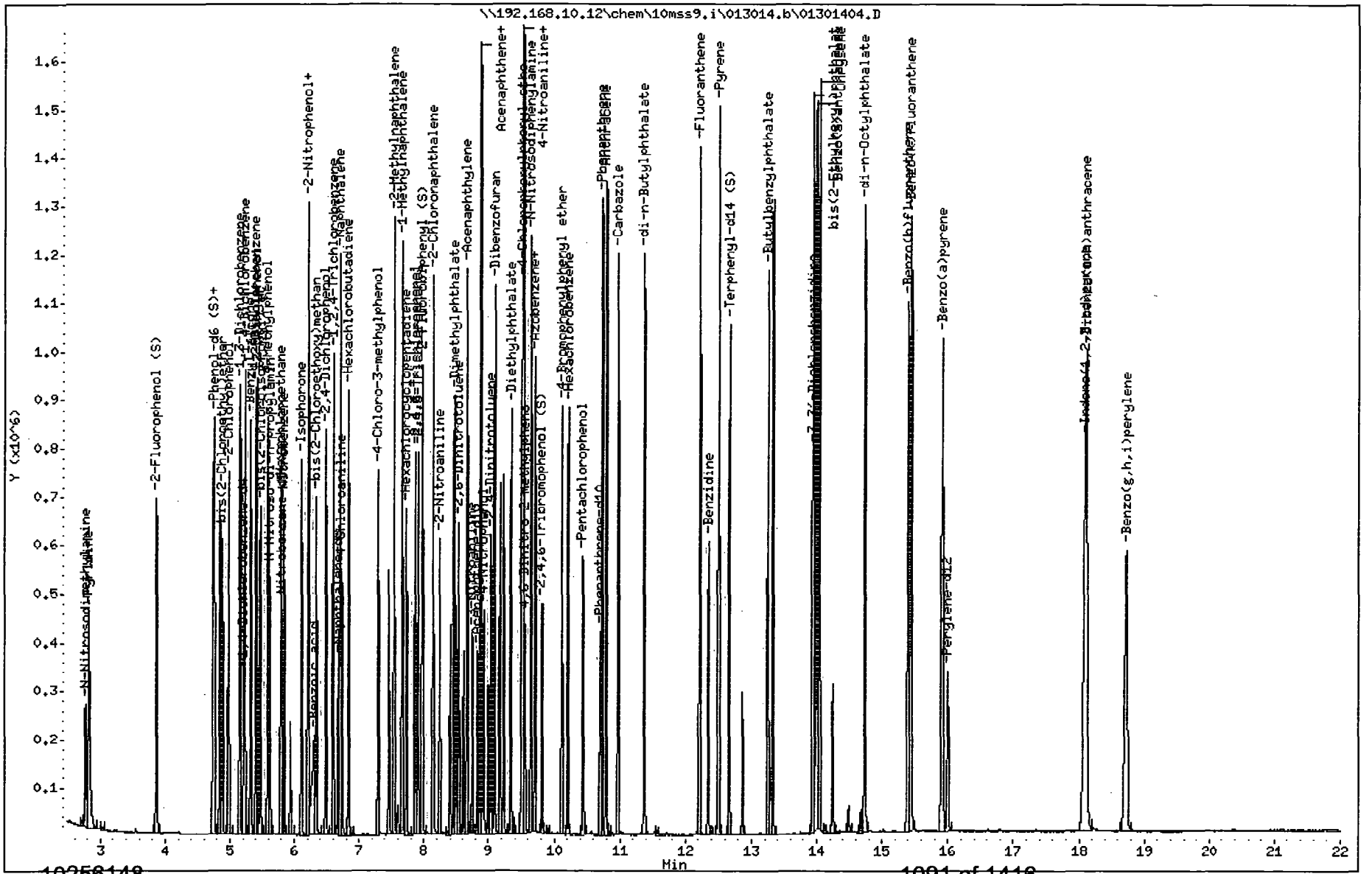
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	55114	27557	110228	53184	-3.50
28 Naphthalene-d8	204229	102115	408458	191948	-6.01
45 Acenaphthene-d10	107656	53828	215312	101555	-5.67
63 Phenanthrene-d10	198170	99085	396340	187904	-5.18
76 Chrysene-d12	212105	106053	424210	205868	-2.94
82 Perylene-d12	202468	101234	404936	196655	-2.87

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.21	0.10
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	0.00
76 Chrysene-d12	14.00	13.50	14.50	14.00	0.04
82 Perylene-d12	15.99	15.49	16.49	16.00	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

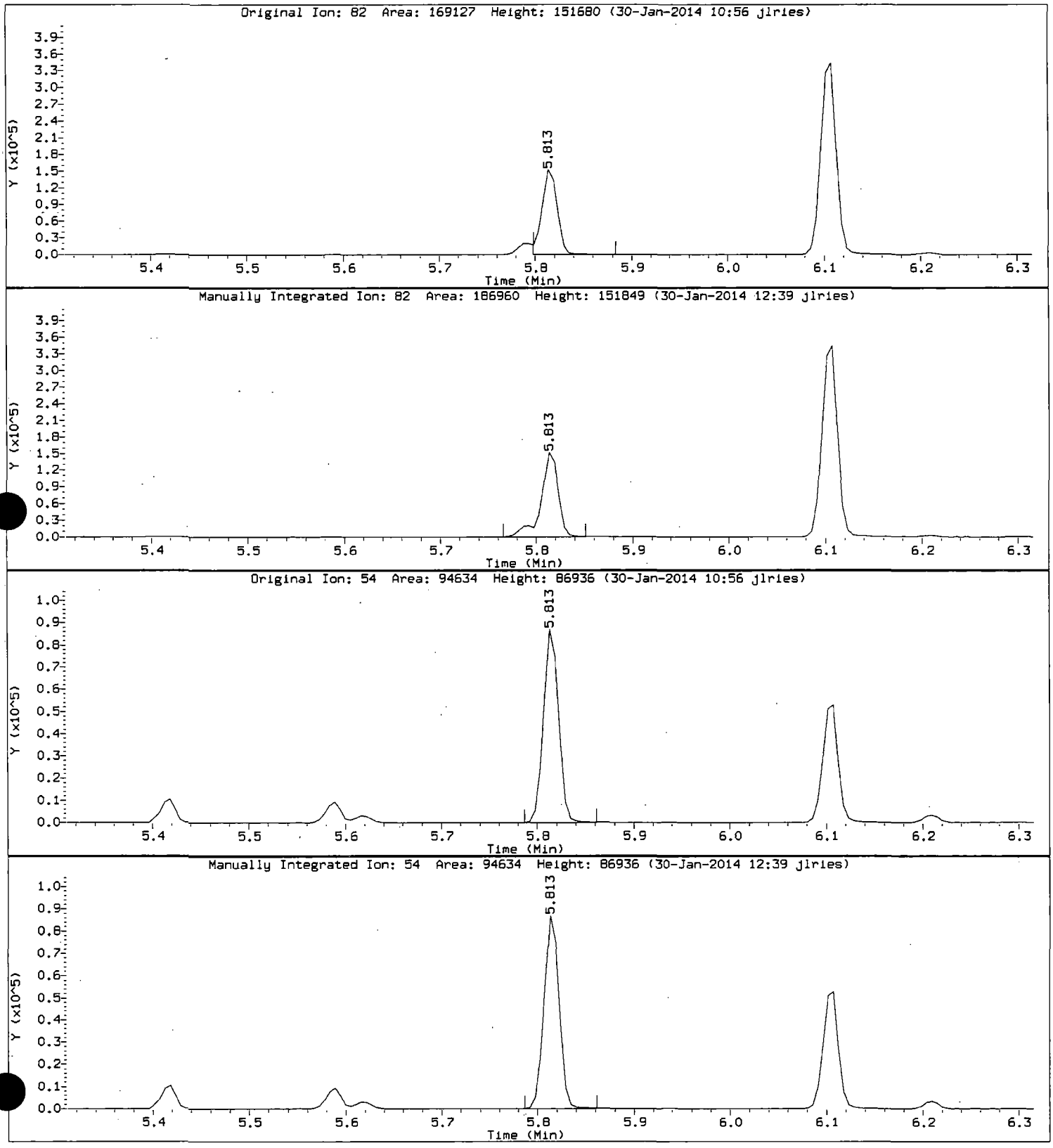
Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301404.D
Date : 30-JAN-2014 09:30
Client ID:
Sample Info: ICAL 10328-96 7
Purge Volume: 1.0
Column phase: DB-5MS

Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25



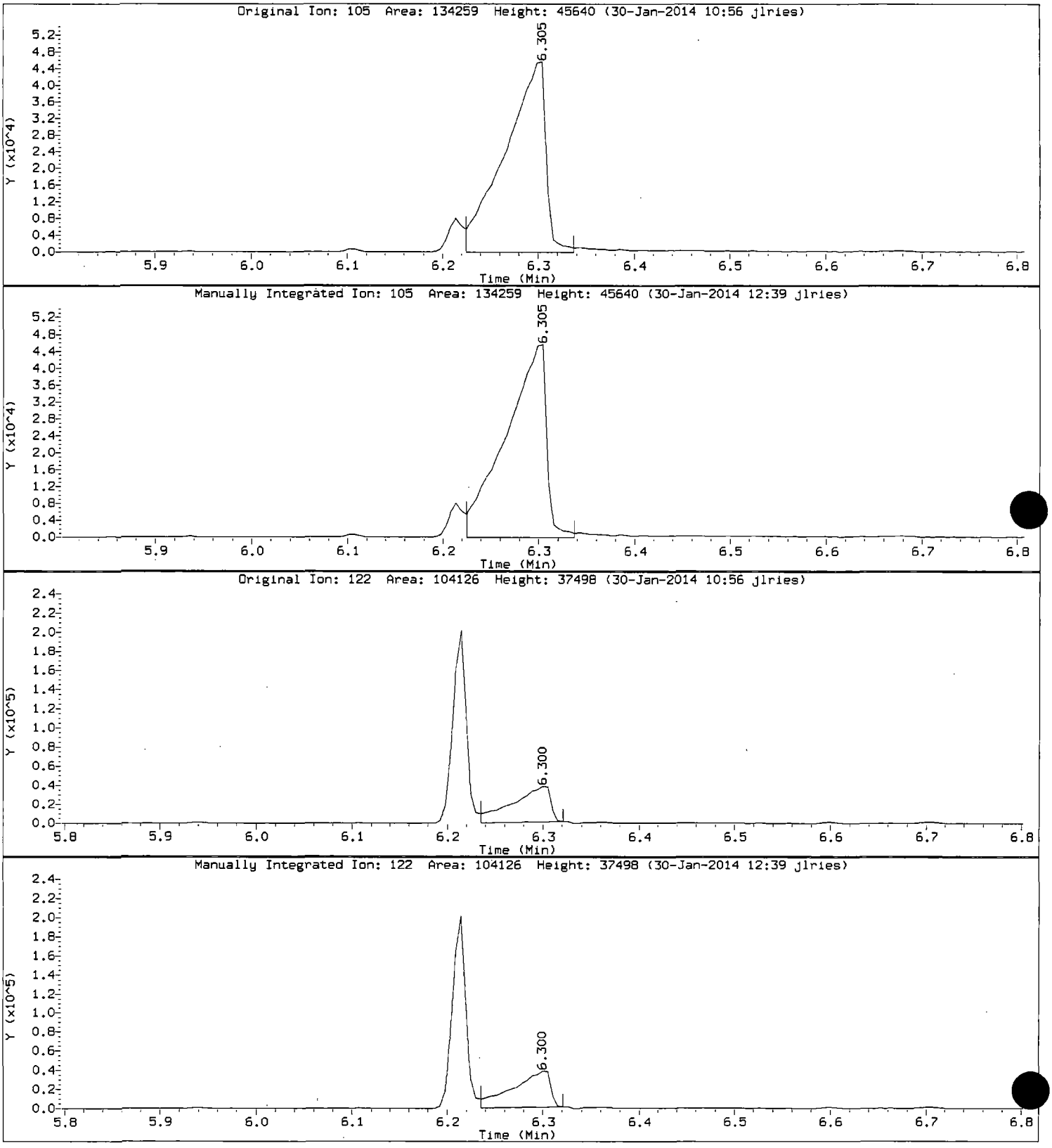
Data File: \\192.168.10.12\chem\10mss9.i\013014.b/01301404.D
Injection Date: 30-JAN-2014 09:30
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 7

Compound: Nitrobenzene-d5 (S)
CAS Number: 4165-60-0

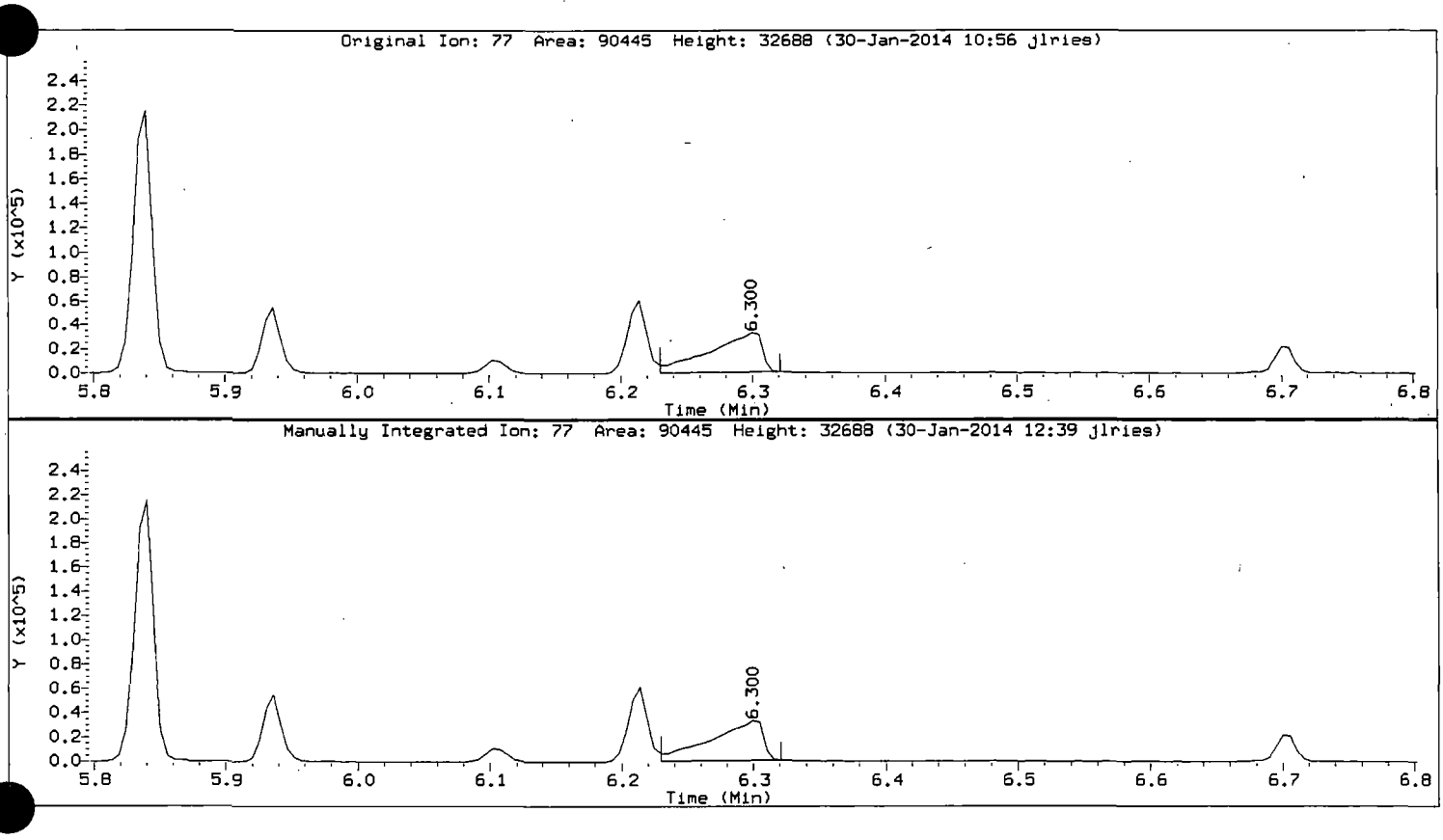


Data File: \\192.168.10.12\chem\10mss9.i\013014.b/01301404.D
Injection Date: 30-JAN-2014 09:30
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 7

Compound: Benzoic acid
CAS Number: 65-85-0

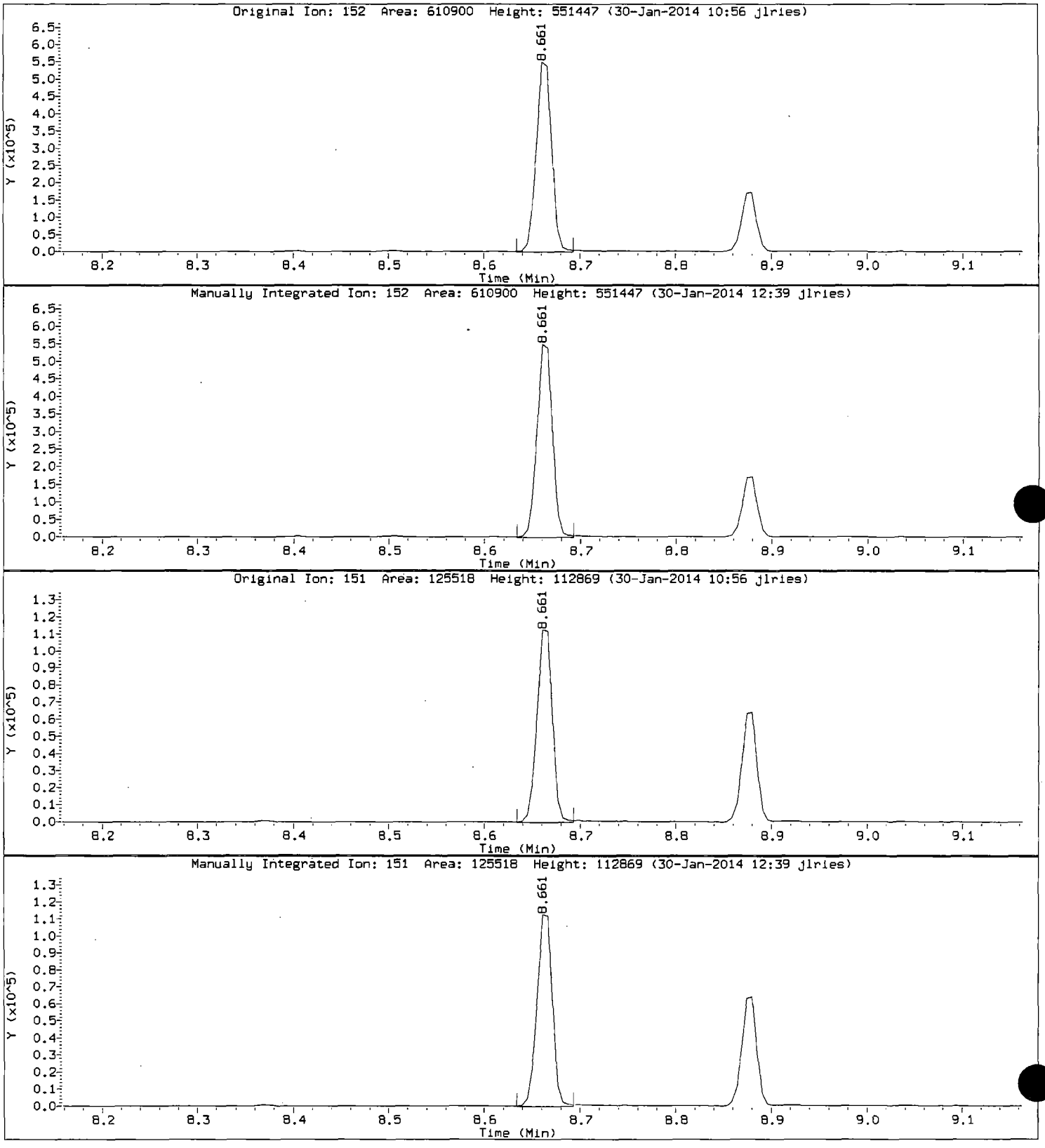


Data File: \\192.168.10.12\chem\10mss9.i\013014.b/01301404.D
Injection Date: 30-JAN-2014 09:30
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 7

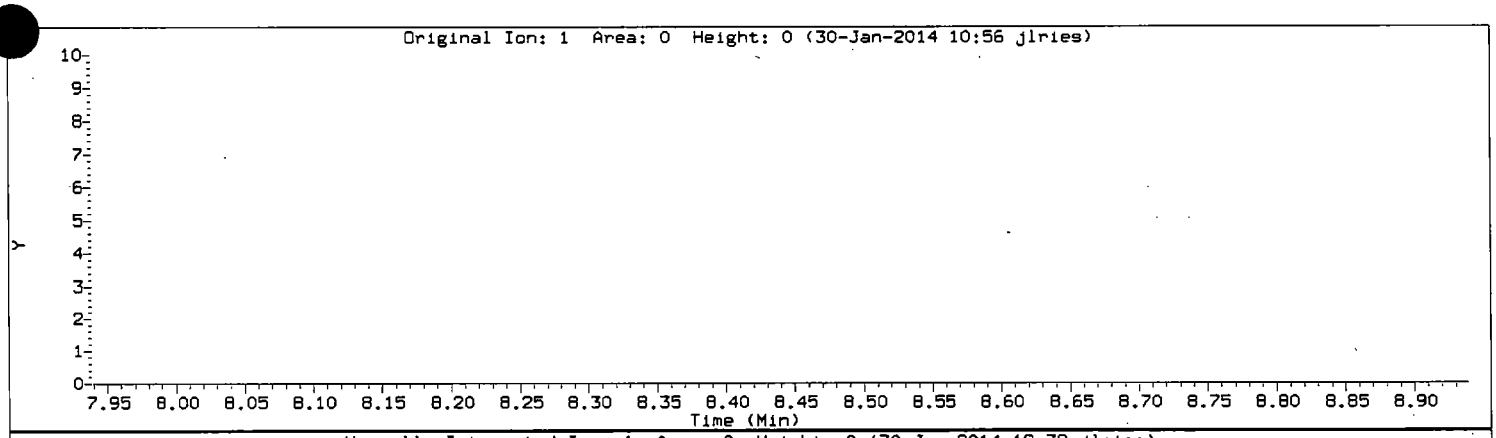


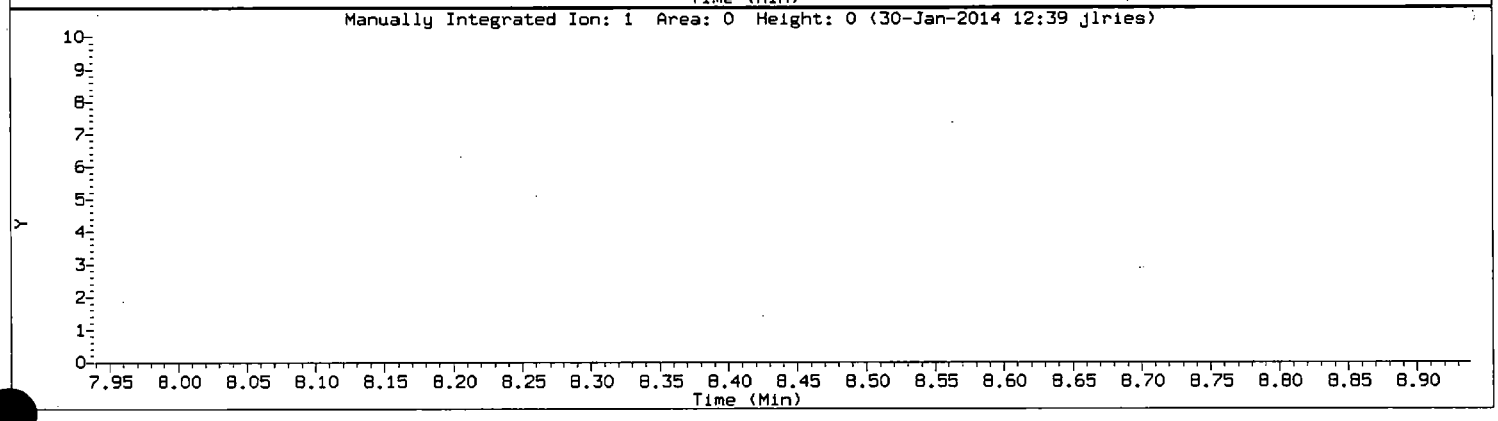
Data File: \\192.168.10.12\chem\10mss9.i\013014.b/01301404.D
Injection Date: 30-JAN-2014 09:30
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 7

Compound: Acenaphthylene
CAS Number: 208-96-8



Data File: \\192.168.10.12\chem\10mss9.i\013014.b/01301404.D
Injection Date: 30-JAN-2014 09:30
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 7





Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301405.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013014.b\01301405.D
Lab Smp Id: ICAL 10328-96 6
Inj Date : 30-JAN-2014 10:00
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 6
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Meth Date : 30-Jan-2014 13:47 10mss9.i Quant Type: ISTD
Cal Date : 30-JAN-2014 09:30 Cal File: 01301404.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * Vt / (Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.768	2.768	(0.532)	94439	80.0000	80.2
	2 Pyridine	79	2.821	2.821	(0.542)	169399	80.0000	81.0
$	3 2-Fluorophenol (S)	112	3.863	3.863	(0.742)	150097	80.0000	78.8
$	4 Phenol-d6 (S)	99	4.734	4.734	(0.910)	183989	80.0000	78.6
	5 Phenol	94	4.750	4.750	(0.913)	189722	80.0000	78.5
	6 bis(2-Chloroethyl)ether	63	4.878	4.878	(0.937)	119597	80.0000	78.0
	7 2-Chlorophenol	128	4.974	4.974	(0.956)	151805	80.0000	80.0
	8 1,3-Dichlorobenzene	146	5.150	5.150	(0.990)	165280	80.0000	78.4
*	9 1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	55535	40.0000	
	10 1,4-Dichlorobenzene	146	5.225	5.225	(1.004)	168347	80.0000	79.1
	11 Benzyl alcohol	79	5.316	5.316	(1.022)	120566	80.0000	79.6
	12 1,2-Dichlorobenzene	146	5.396	5.396	(1.037)	158546	80.0000	79.0
	13 2-Methylphenol	107	5.417	5.417	(1.041)	118506	80.0000	79.6
	14 bis(2-Chloroisopropyl) ether	45	5.471	5.471	(1.051)	223186	80.0000	78.5
	15 3 & 4-Methylphenol	107	5.583	5.583	(1.073)	150702	80.0000	79.6
	17 N-Nitroso-di-n-propylamine	70	5.615	5.615	(1.079)	93068	80.0000	78.6
	18 Hexachloroethane	117	5.786	5.786	(1.112)	64564	80.0000	79.1
$	19 Nitrobenzene-d5 (S)	82	5.813	5.813	(0.871)	126897	60.0000	60.2(M)
	20 Nitrobenzene	77	5.834	5.834	(0.874)	148756	80.0000	79.4
	21 Isophorone	82	6.101	6.101	(0.914)	260848	80.0000	79.0
	22 2-Nitrophenol	139	6.203	6.203	(0.930)	75768	80.0000	82.0
	23 2,4-Dimethylphenol	107	6.208	6.208	(0.930)	137887	80.0000	79.0

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301405.D
Report Date: 30-Jan-2014 13:47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)	
	24 Benzoic acid	105	6.283	6.283	(0.942)	82843	80.0000	76.5	
	25 bis(2-Chloroethoxy)methane	93	6.331	6.331	(0.949)	164944	80.0000	79.2	
	26 2,4-Dichlorophenol	162	6.481	6.481	(0.971)	119219	80.0000	79.4	
	27 1,2,4-Trichlorobenzene	180	6.598	6.598	(0.989)	135507	80.0000	78.2	
*	28 Naphthalene-d8	136	6.673	6.673	(1.000)	202574	40.0000		(Q)
	29 Naphthalene	128	6.700	6.700	(1.004)	413746	80.0000	77.7	
	30 4-Chloroaniline	127	6.732	6.732	(1.009)	136695	80.0000	80.0	(A)
	31 Hexachlorobutadiene	225	6.838	6.838	(1.025)	80821	80.0000	79.1	
	32 4-Chloro-3-methylphenol	107	7.287	7.287	(1.092)	111539	80.0000	79.7	
	33 2-Methylnaphthalene	142	7.533	7.533	(1.129)	269086	80.0000	77.8	
	34 1-Methylnaphthalene	142	7.661	7.661	(1.148)	253168	80.0000	78.9	
	35 Hexachlorocyclopentadiene	237	7.725	7.725	(0.875)	87003	80.0000	84.8	
	36 2,4,6-Trichlorophenol	196	7.864	7.864	(0.891)	83117	80.0000	81.7	
	37 2,4,5-Trichlorophenol	196	7.907	7.907	(0.895)	89019	80.0000	80.5	
$	38 2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	233574	60.0000	59.6	
	39 2-Chloronaphthalene	162	8.137	8.137	(0.921)	256585	80.0000	79.6	
	40 2-Nitroaniline	65	8.238	8.238	(0.933)	75935	80.0000	80.8	
	41 Dimethylphthalate	163	8.457	8.457	(0.958)	272209	80.0000	78.6	
	42 2,6-Dinitrotoluene	165	8.532	8.532	(0.966)	64987	80.0000	81.0	
	43 Acenaphthylene	152	8.660	8.660	(0.981)	403077	80.0000	77.6	(M)
	44 3-Nitroaniline	138	8.746	8.746	(0.990)	59408	80.0000	72.3	
*	45 Acenaphthene-d10	164	8.831	8.831	(1.000)	105765	40.0000		
	46 Acenaphthene	154	8.874	8.874	(1.005)	251618	80.0000	79.4	
	47 2,4-Dinitrophenol	184	8.874	8.874	(1.005)	30872	80.0000	78.5	
	48 4-Nitrophenol	65	8.917	8.917	(1.010)	50882	80.0000	83.4	
	49 2,4-Dinitrotoluene	165	9.039	9.039	(1.024)	84400	80.0000	82.1	
	50 Dibenzofuran	168	9.088	9.088	(1.029)	360342	80.0000	78.0	
	51 Diethylphthalate	149	9.333	9.333	(1.057)	275091	80.0000	79.3	
	52 4-Chlorophenylphenyl ether	204	9.499	9.499	(1.076)	147101	80.0000	79.2	
	53 4-Nitroaniline	138	9.510	9.510	(1.077)	74240	80.0000	80.1	
	54 Fluorene	166	9.515	9.515	(1.077)	295265	80.0000	78.6	
	55 4,6-Dinitro-2-methylphenol	198	9.547	9.547	(0.893)	45061	80.0000	78.9	
	56 N-Nitrosodiphenylamine	169	9.638	9.638	(0.902)	244955	80.0000	78.3	
	57 Azobenzene	77	9.697	9.697	(1.098)	268806	80.0000	78.5	
	58 1,2-Diphenylhydrazine	77	9.697	9.697	(1.098)	268806	80.0000	78.5	
$	59 2,4,6-Tribromophenol (S)	330	9.809	9.809	(1.111)	42315	80.0000	83.4	
	60 4-Bromophenylphenyl ether	248	10.113	10.113	(0.946)	85002	80.0000	79.0	
	61 Hexachlorobenzene	284	10.209	10.209	(0.955)	88137	80.0000	77.4	
	62 Pentachlorophenol	266	10.434	10.434	(0.976)	50146	80.0000	84.0	
*	63 Phenanthrene-d10	188	10.690	10.690	(1.000)	197315	40.0000		
	64 Phenanthrene	178	10.722	10.722	(1.003)	409984	80.0000	78.2	
	65 Anthracene	178	10.786	10.786	(1.009)	415732	80.0000	77.8	
	66 Carbazole	167	10.968	10.968	(1.026)	397034	80.0000	78.0	
	67 di-n-Butylphthalate	149	11.369	11.369	(1.063)	473292	80.0000	79.9	
	68 Fluoranthene	202	12.213	12.213	(1.142)	479284	80.0000	78.7	
	69 Benzidine	184	12.346	12.346	(0.882)	188214	80.0000	78.5	
	70 Pyrene	202	12.501	12.501	(0.893)	503614	80.0000	78.1	
$	71 Terphenyl-d14 (S)	244	12.661	12.661	(0.905)	265599	60.0000	58.9	
	72 Butylbenzylphthalate	149	13.249	13.249	(0.947)	218295	80.0000	81.6	
	73 bis(2-Ethylhexyl)phthalate	149	13.944	13.944	(0.996)	308246	80.0000	81.0	
	74 3,3'-Dichlorobenzidine	252	13.928	13.928	(0.995)	127595	80.0000	69.1	
	75 Benzo(a)anthracene	228	13.986	13.986	(0.999)	472744	80.0000	78.2	
*	76 Chrysene-d12	240	13.997	13.997	(1.000)	212271	40.0000		(Q)
	77 Chrysene	228	14.034	14.034	(1.003)	439414	80.0000	79.2	

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301405.D
Report Date: 30-Jan-2014 13:47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.734	14.734	(1.053)	533631	80.0000	81.9
79	Benzo(b)fluoranthene	252	15.391	15.391	(0.962)	480636	80.0000	80.0
80	Benzo(k)fluoranthene	252	15.434	15.434	(0.965)	482835	80.0000	79.0
81	Benzo(a)pyrene	252	15.910	15.910	(0.995)	460013	80.0000	80.2
* 82	Perylene-d12	264	15.995	15.995	(1.000)	203680	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	18.079	18.079	(1.130)	522284	80.0000	81.5
84	Dibenzo(a,h)anthracene	278	18.100	18.100	(1.132)	437730	80.0000	80.8
85	Benzo(g,h,i)perylene	276	18.714	18.714	(1.170)	445842	80.0000	82.8

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301405.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01301405.D
Lab Smp Id: ICAL 10328-96 6
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Misc Info:

Calibration Date: 30-JAN-2014
Calibration Time: 10:00
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

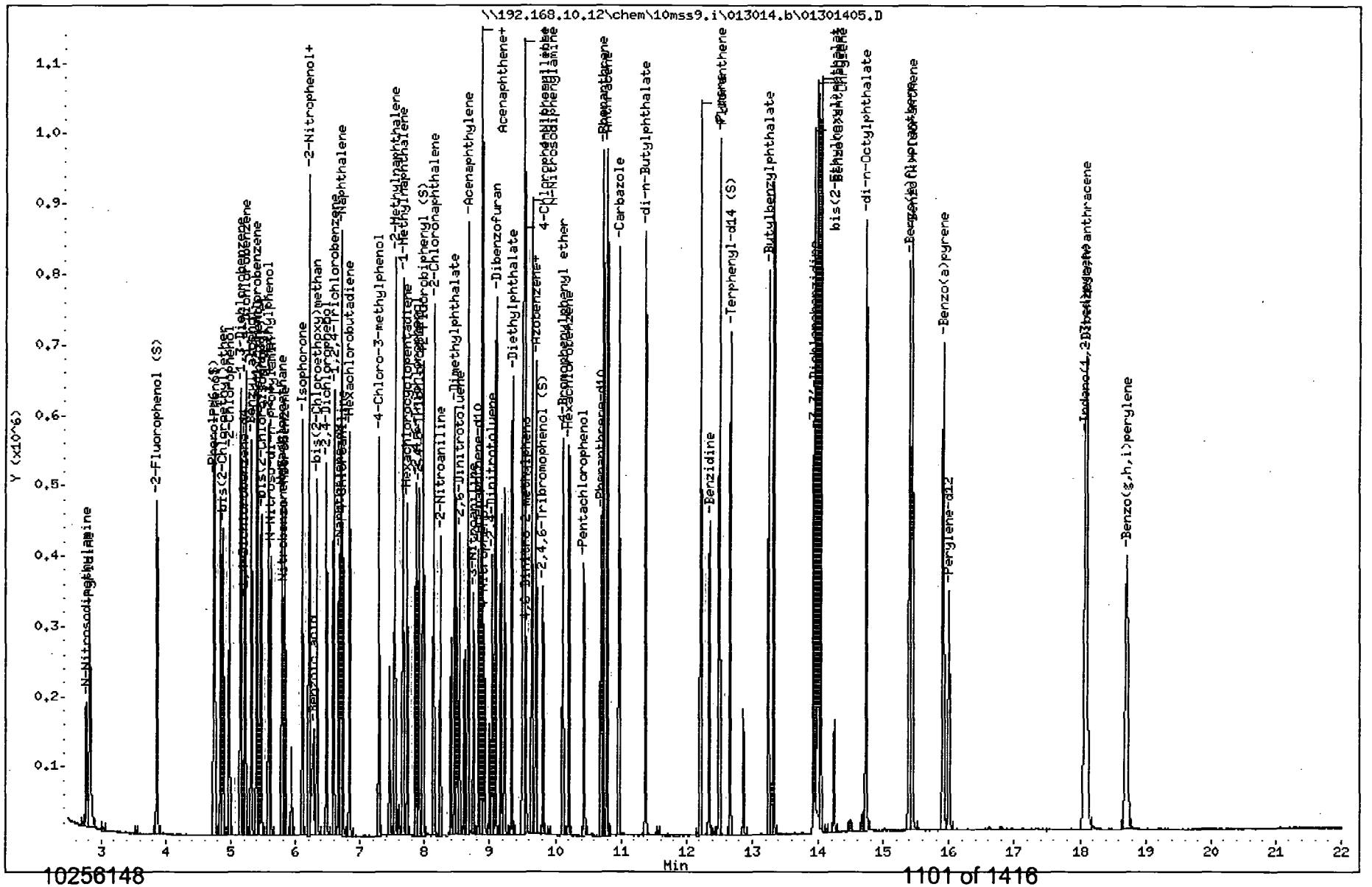
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	55114	27557	110228	55535	0.76
28 Naphthalene-d8	204229	102115	408458	202574	-0.81
45 Acenaphthene-d10	107656	53828	215312	105765	-1.76
63 Phenanthrene-d10	198170	99085	396340	197315	-0.43
76 Chrysene-d12	212105	106053	424210	212271	0.08
82 Perylene-d12	202468	101234	404936	203680	0.60

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	-0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	-0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.00
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.00
76 Chrysene-d12	14.00	13.50	14.50	14.00	-0.00
82 Perylene-d12	15.99	15.49	16.49	16.00	0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301405.D
Date : 30-JAN-2014 10:00
Client ID:
Sample Info: ICAL 10328-96 6
Purge Volume: 1.0
Column phase: DB-5MS

Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25



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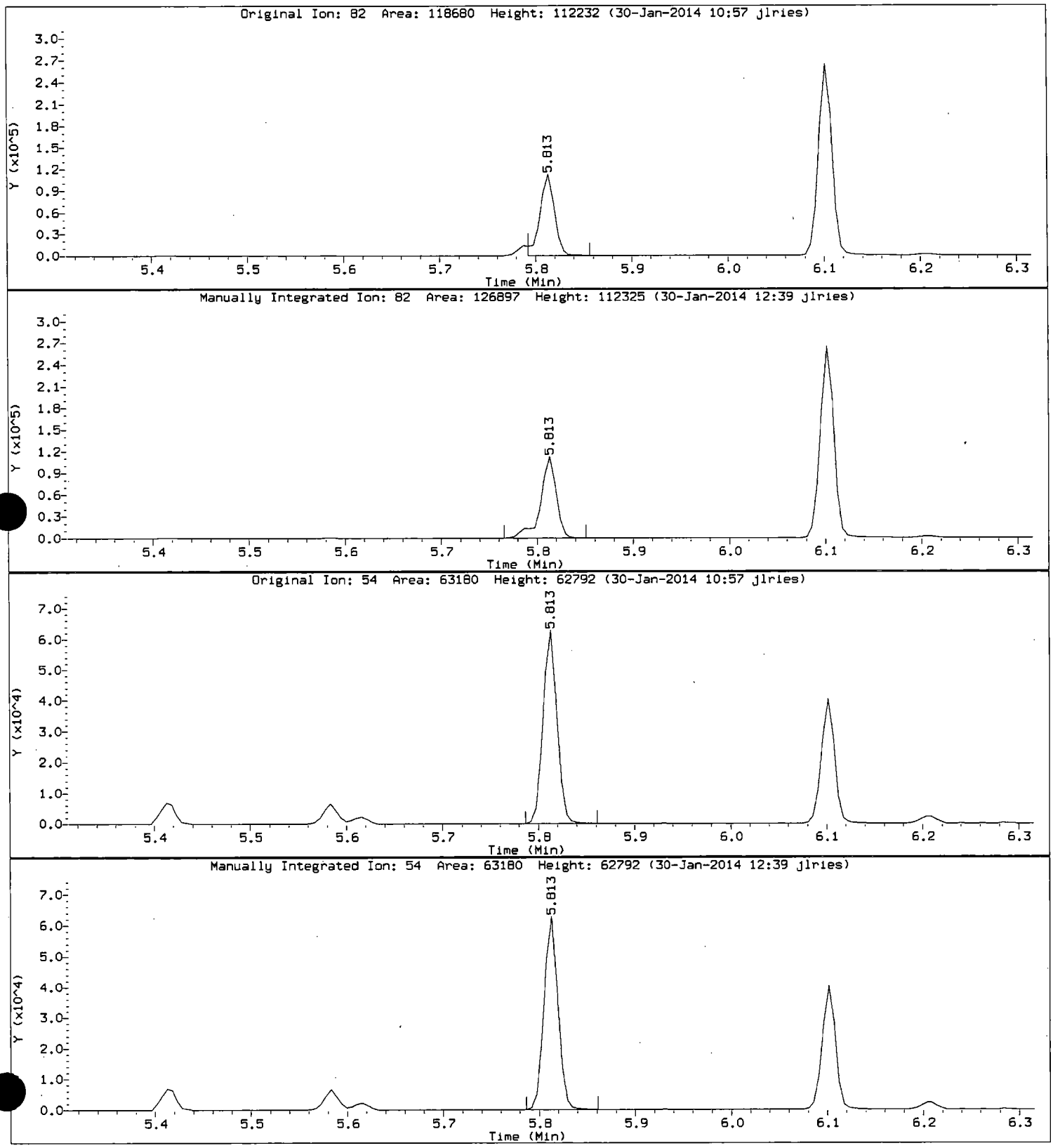
Injection Date: 30-JAN-2014 10:00
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 6

Compound: Nitrobenzene-d5 (S)
CAS Number: 4165-60-0



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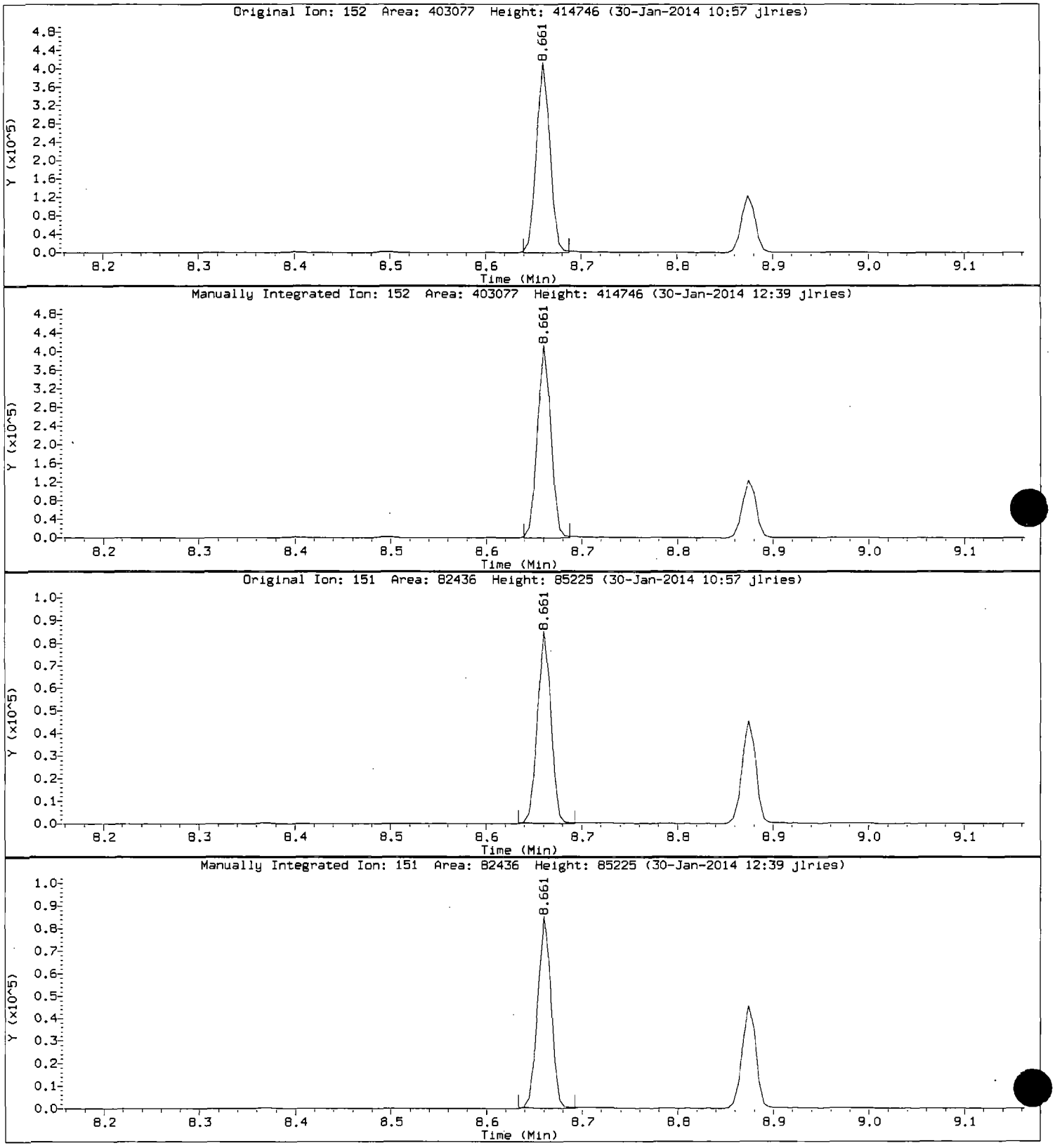
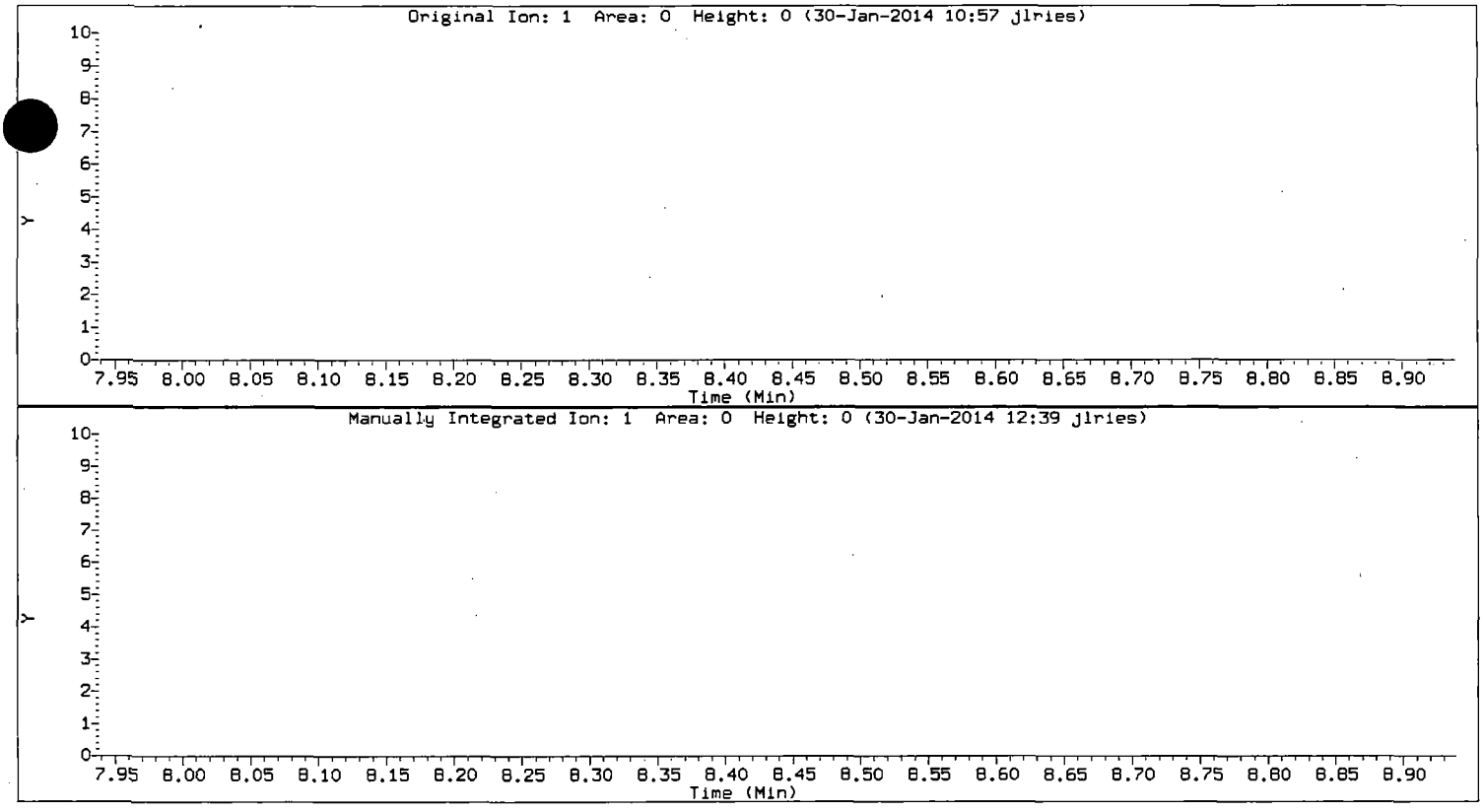
Injection Date: 30-JAN-2014 10:00
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 6

Compound: Acenaphthylene
CAS Number: 208-96-8



Injection Date: 30-JAN-2014 10:00
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 6



Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301406.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013014.b\01301406.D
Lab Smp Id: ICAL 10328-96 5
Inj Date : 30-JAN-2014 10:30
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 5
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Meth Date : 30-Jan-2014 13:47 10mss9.i Quant Type: ISTD
Cal Date : 30-JAN-2014 10:00 Cal File: 01301405.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * Vt / (Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.768	2.768	(0.531)	43847	40.0000	38.0
2	Pyridine	79	2.821	2.821	(0.542)	82716	40.0000	40.4
$ 3	2-Fluorophenol (S)	112	3.863	3.863	(0.742)	74080	40.0000	39.7
$ 4	Phenol-d6 (S)	99	4.734	4.734	(0.909)	89784	40.0000	39.2
5	Phenol	94	4.744	4.744	(0.911)	92913	40.0000	39.3
6	bis(2-Chloroethyl)ether	63	4.878	4.878	(0.936)	58266	40.0000	38.8
7	2-Chlorophenol	128	4.974	4.974	(0.955)	72633	40.0000	39.1
8	1,3-Dichlorobenzene	146	5.150	5.150	(0.989)	80832	40.0000	39.2
* 9	1,4-Dichlorobenzene-d4	152	5.209	5.209	(1.000)	54356	40.0000	
10	1,4-Dichlorobenzene	146	5.225	5.225	(1.003)	81044	40.0000	38.9
11	Benzyl alcohol	79	5.316	5.316	(1.021)	58298	40.0000	39.4
12	1,2-Dichlorobenzene	146	5.396	5.396	(1.036)	77068	40.0000	39.2
13	2-Methylphenol	107	5.412	5.412	(1.039)	56899	40.0000	39.0
14	bis(2-Chloroisopropyl) ether	45	5.471	5.471	(1.050)	109830	40.0000	39.5
15	3 & 4-Methylphenol	107	5.578	5.578	(1.071)	72868	40.0000	39.3
17	N-Nitroso-di-n-propylamine	70	5.610	5.610	(1.077)	45193	40.0000	39.0
18	Hexachloroethane	117	5.786	5.786	(1.111)	31504	40.0000	39.4
$ 19	Nitrobenzene-d5 (S)	82	5.813	5.813	(0.871)	60214	30.0000	29.0(M)
20	Nitrobenzene	77	5.834	5.834	(0.874)	70978	40.0000	38.5
21	Isophorone	82	6.101	6.101	(0.914)	127819	40.0000	39.4
22	2-Nitrophenol	139	6.203	6.203	(0.930)	36104	40.0000	39.7
23	2,4-Dimethylphenol	107	6.208	6.208	(0.930)	68321	40.0000	39.8

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)	
Compounds									
	24 Benzoic acid	105	6.256	6.256	(0.938)	38565	40.0000	38.1	(M)
	25 bis(2-Chloroethoxy)methane	93	6.331	6.331	(0.949)	79269	40.0000	38.7	
	26 2,4-Dichlorophenol	162	6.475	6.475	(0.970)	58544	40.0000	39.6	
	27 1,2,4-Trichlorobenzene	180	6.598	6.598	(0.989)	66145	40.0000	38.8	
*	28 Naphthalene-d8	136	6.673	6.673	(1.000)	199297	40.0000		
	29 Naphthalene	128	6.700	6.700	(1.004)	203964	40.0000	38.9	
	30 4-Chloroaniline	127	6.732	6.732	(1.009)	76682	40.0000	39.5	
	31 Hexachlorobutadiene	225	6.839	6.839	(1.025)	39093	40.0000	38.9	
	32 4-Chloro-3-methylphenol	107	7.287	7.287	(1.092)	53989	40.0000	39.2	
	33 2-Methylnaphthalene	142	7.533	7.533	(1.129)	132634	40.0000	39.0	
	34 1-Methylnaphthalene	142	7.661	7.661	(1.148)	122609	40.0000	38.8	
	35 Hexachlorocyclopentadiene	237	7.725	7.725	(0.875)	39844	40.0000	39.8	
	36 2,4,6-Trichlorophenol	196	7.864	7.864	(0.891)	39484	40.0000	39.7	
	37 2,4,5-Trichlorophenol	196	7.902	7.902	(0.895)	42836	40.0000	39.6	
$	38 2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	114286	30.0000	29.8	
	39 2-Chloronaphthalene	162	8.137	8.137	(0.921)	122752	40.0000	39.0	
	40 2-Nitroaniline	65	8.238	8.238	(0.933)	37462	40.0000	40.8	
	41 Dimethylphthalate	163	8.452	8.452	(0.957)	133664	40.0000	39.5	
	42 2,6-Dinitrotoluene	165	8.532	8.532	(0.966)	30924	40.0000	39.4	
	43 Acenaphthylene	152	8.660	8.660	(0.981)	200016	40.0000	39.4	(M)
	44 3-Nitroaniline	138	8.740	8.740	(0.990)	33462	40.0000	41.7	
*	45 Acenaphthene-d10	164	8.831	8.831	(1.000)	103346	40.0000		
	46 Acenaphthene	154	8.874	8.874	(1.005)	122298	40.0000	39.5	
	47 2,4-Dinitrophenol	184	8.869	8.869	(1.004)	12275	40.0000	35.7	(Q)
	48 4-Nitrophenol	65	8.906	8.906	(1.008)	23661	40.0000	39.7	
	49 2,4-Dinitrotoluene	165	9.034	9.034	(1.023)	40487	40.0000	40.3	
	50 Dibenzofuran	168	9.082	9.082	(1.028)	178706	40.0000	39.6	
	51 Diethylphthalate	149	9.328	9.328	(1.056)	135436	40.0000	40.0	
	52 4-Chlorophenylphenyl ether	204	9.499	9.499	(1.076)	70197	40.0000	38.7	
	53 4-Nitroaniline	138	9.504	9.504	(1.076)	36276	40.0000	40.0	
	54 Fluorene	166	9.515	9.515	(1.077)	145089	40.0000	39.5	
	55 4,6-Dinitro-2-methylphenol	198	9.542	9.542	(0.893)	18051	40.0000	35.3	
	56 N-Nitrosodiphenylamine	169	9.638	9.638	(0.902)	121276	40.0000	39.6	
	57 Azobenzene	77	9.697	9.697	(1.098)	133506	40.0000	39.9	
	58 1,2-Diphenylhydrazine	77	9.697	9.697	(1.098)	133506	40.0000	39.9	
$	59 2,4,6-Tribromophenol (S)	330	9.809	9.809	(1.111)	20189	40.0000	40.7	
	60 4-Bromophenylphenyl ether	248	10.108	10.108	(0.946)	41037	40.0000	38.9	
	61 Hexachlorobenzene	284	10.204	10.204	(0.955)	44061	40.0000	39.5	
	62 Pentachlorophenol	266	10.434	10.434	(0.976)	22384	40.0000	38.2	
*	63 Phenanthrene-d10	188	10.690	10.690	(1.000)	193332	40.0000		
	64 Phenanthrene	178	10.722	10.722	(1.003)	201009	40.0000	39.1	
	65 Anthracene	178	10.786	10.786	(1.009)	204790	40.0000	39.1	
	66 Carbazole	167	10.968	10.968	(1.026)	196492	40.0000	39.4	
	67 di-n-Butylphthalate	149	11.369	11.369	(1.063)	230663	40.0000	39.7	
	68 Fluoranthene	202	12.213	12.213	(1.142)	236744	40.0000	39.7	
	69 Benzidine	184	12.346	12.346	(0.882)	105759	40.0000	40.1	
	70 Pyrene	202	12.501	12.501	(0.893)	251406	40.0000	40.1	
$	71 Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	128677	30.0000	29.3	
	72 Butylbenzylphthalate	149	13.249	13.249	(0.947)	104751	40.0000	40.2	
	73 bis(2-Ethylhexyl)phthalate	149	13.944	13.944	(0.996)	148501	40.0000	40.1	
	74 3,3'-Dichlorobenzidine	252	13.922	13.922	(0.995)	71954	40.0000	40.0	
	75 Benzo(a)anthracene	228	13.981	13.981	(0.999)	229633	40.0000	39.0	
*	76 Chrysene-d12	240	13.997	13.997	(1.000)	206639	40.0000		
	77 Chrysene	228	14.029	14.029	(1.002)	212230	40.0000	39.3	

Data File: \\192.168.10.12\Chem\10MSD9.I\013014.D\01301406.D
Report Date: 30-Jan-2014 13:47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.729	14.729	(1.052)	254427	40.0000	40.1
79	Benzo(b)fluoranthene	252	15.386	15.386	(0.962)	229640	40.0000	39.6
80	Benzo(k)fluoranthene	252	15.429	15.429	(0.965)	230258	40.0000	39.1
81	Benzo(a)pyrene	252	15.904	15.904	(0.995)	216781	40.0000	39.2
* 82	Perylene-d12	264	15.990	15.990	(1.000)	196390	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	18.068	18.068	(1.130)	245525	40.0000	39.8
84	Dibenzo(a,h)anthracene	278	18.089	18.089	(1.131)	206285	40.0000	39.5
85	Benzo(g,h,i)perylene	276	18.704	18.704	(1.170)	205498	40.0000	39.6

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301406.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01301406.D
Lab Smp Id: ICAL 10328-96 5
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Misc Info:

Calibration Date: 30-JAN-2014
Calibration Time: 10:00
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

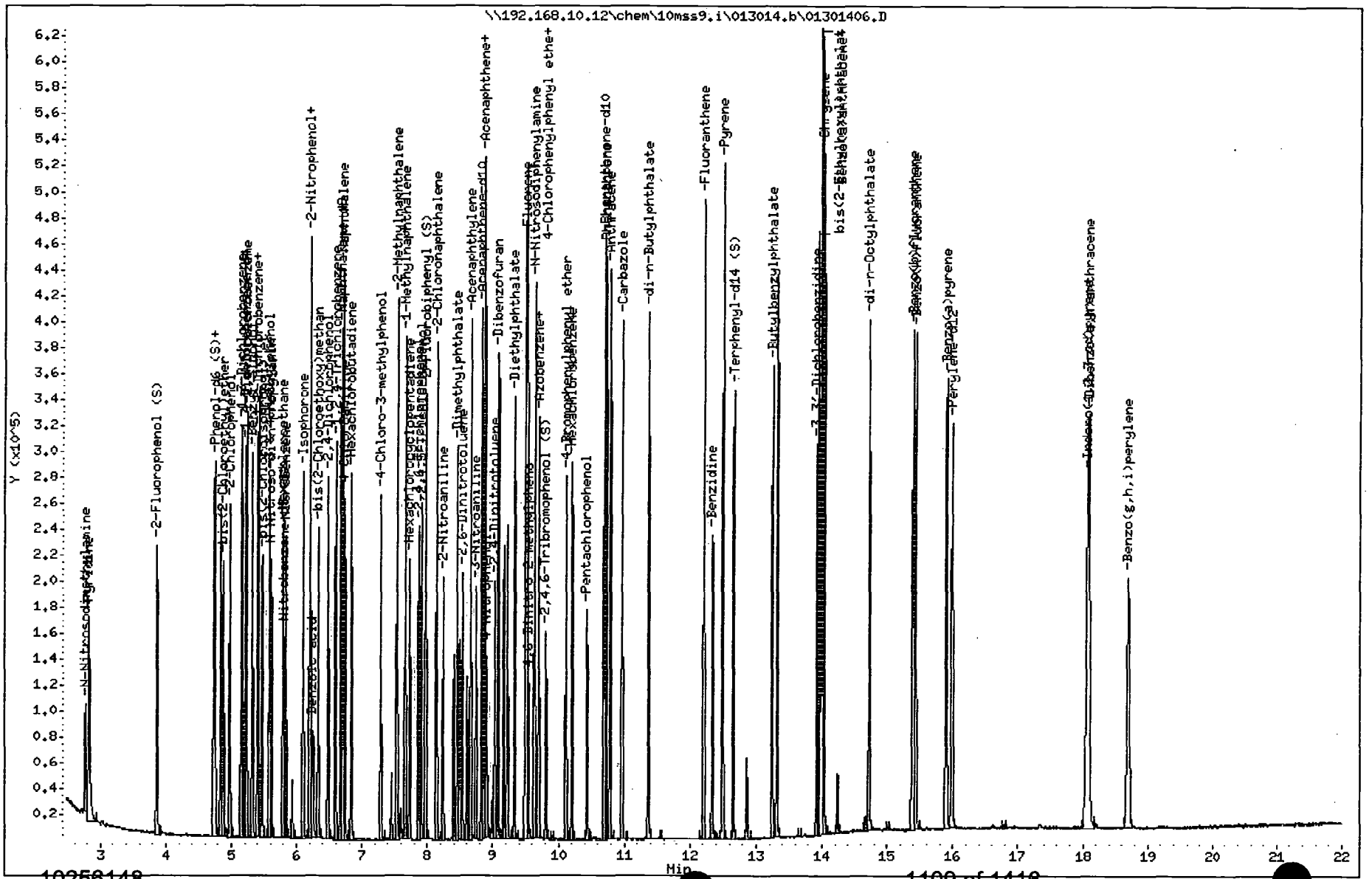
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	55114	27557	110228	54356	-1.38
28 Naphthalene-d8	204229	102115	408458	199297	-2.41
45 Acenaphthene-d10	107656	53828	215312	103346	-4.00
63 Phenanthrene-d10	198170	99085	396340	193332	-2.44
76 Chrysene-d12	212105	106053	424210	206639	-2.58
82 Perylene-d12	202468	101234	404936	196390	-3.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.21	0.10
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	0.00
76 Chrysene-d12	14.00	13.50	14.50	14.00	0.00
82 Perylene-d12	15.99	15.49	16.49	15.99	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

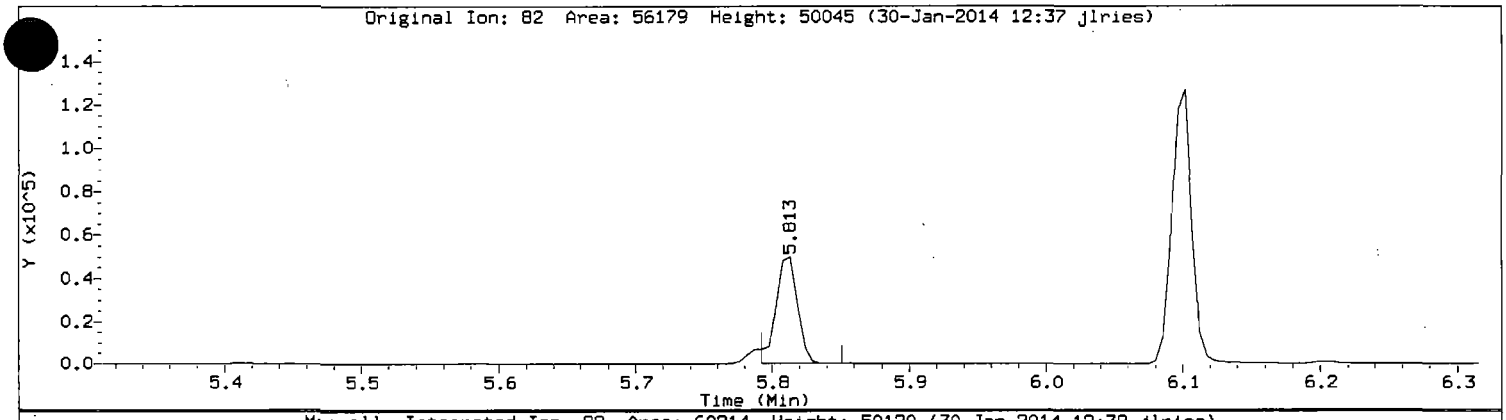
Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301406.D
Date : 30-JAN-2014 10:30
Client ID:
Sample Info: ICAL 10328-96 5
Purge Volume: 1.0
Column phase: DB-5MS

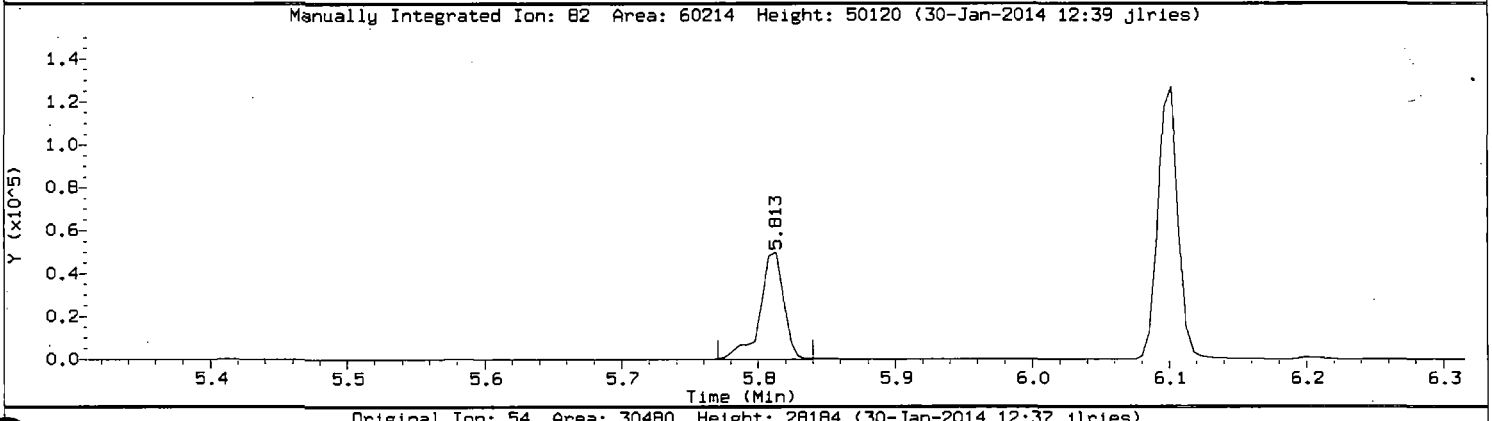
Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25

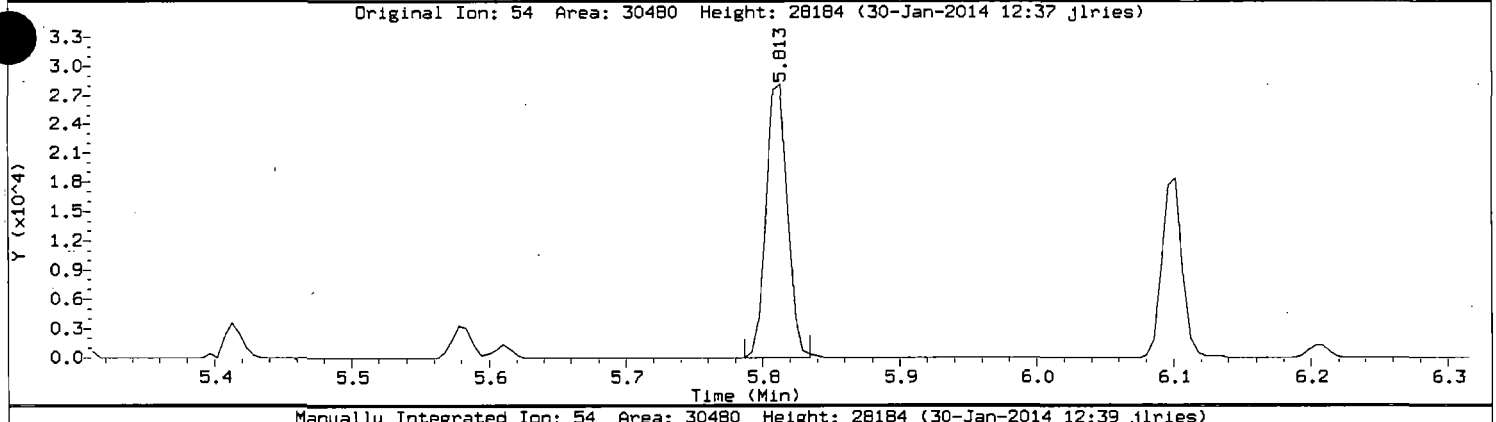


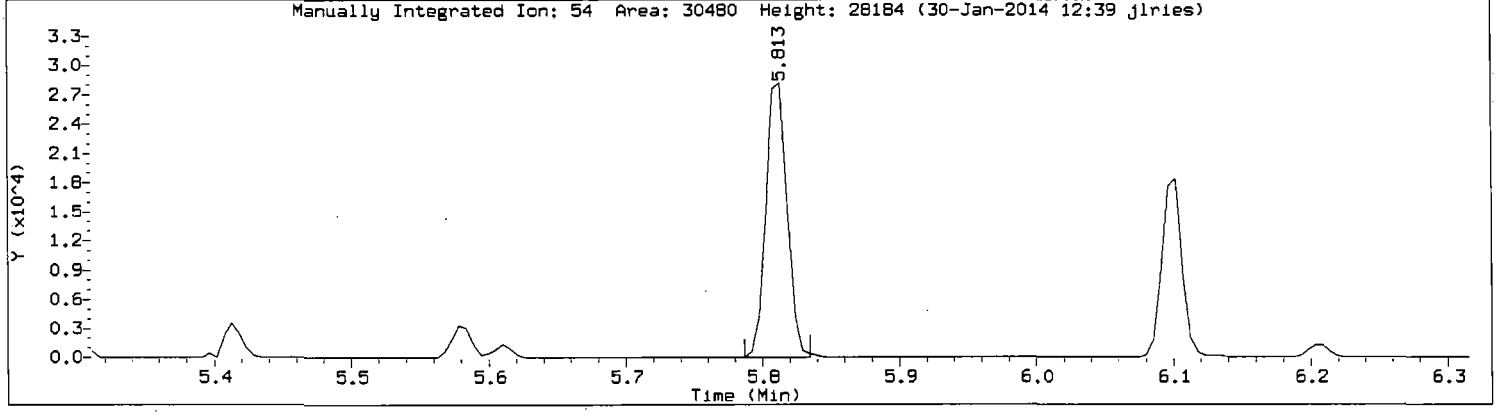
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 5

Compound: Nitrobenzene-d5 (S)
CAS Number: 4165-60-0



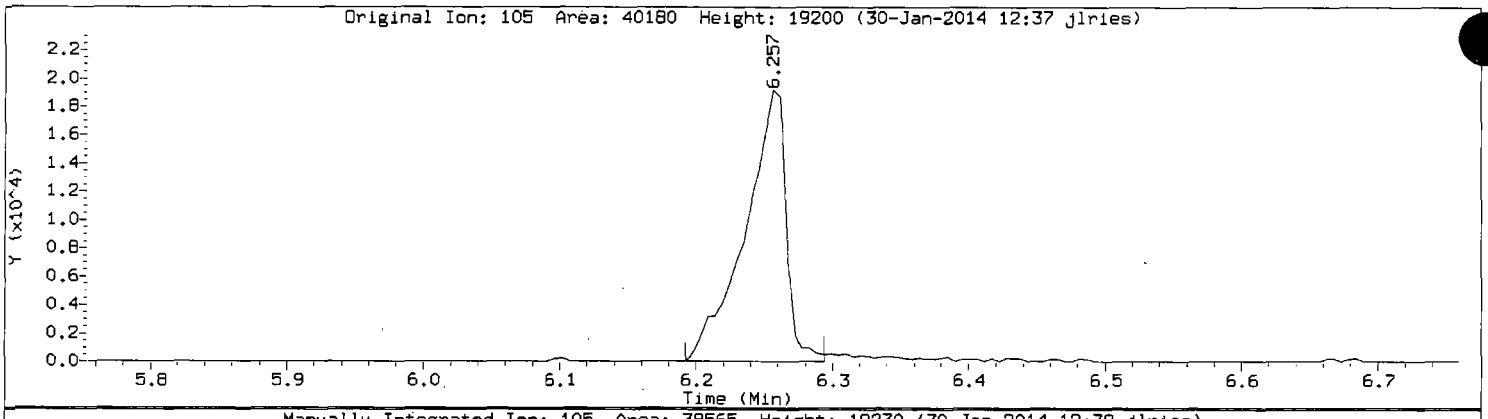


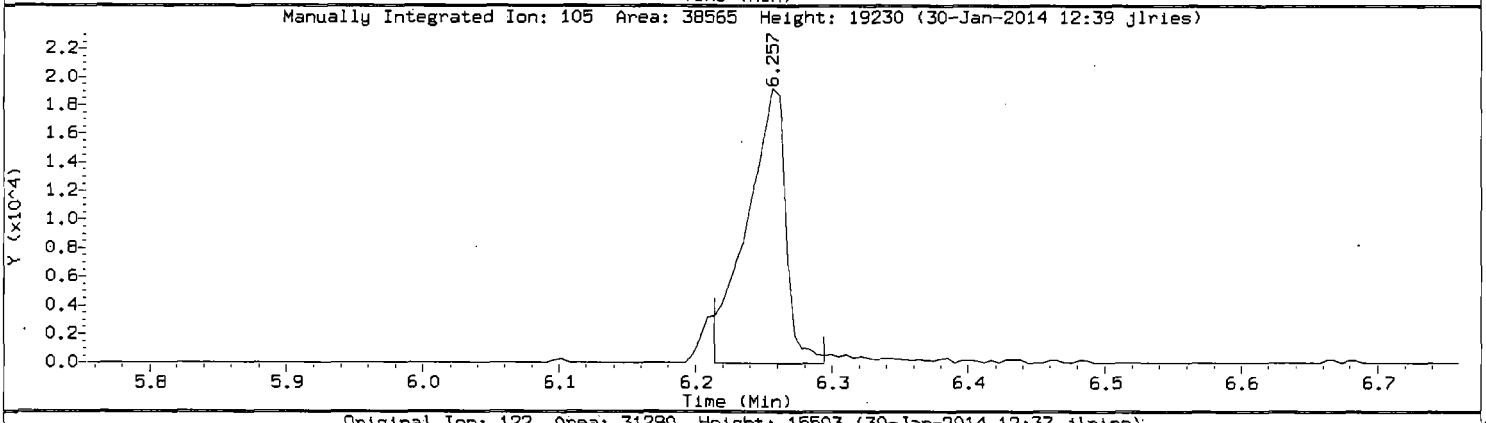


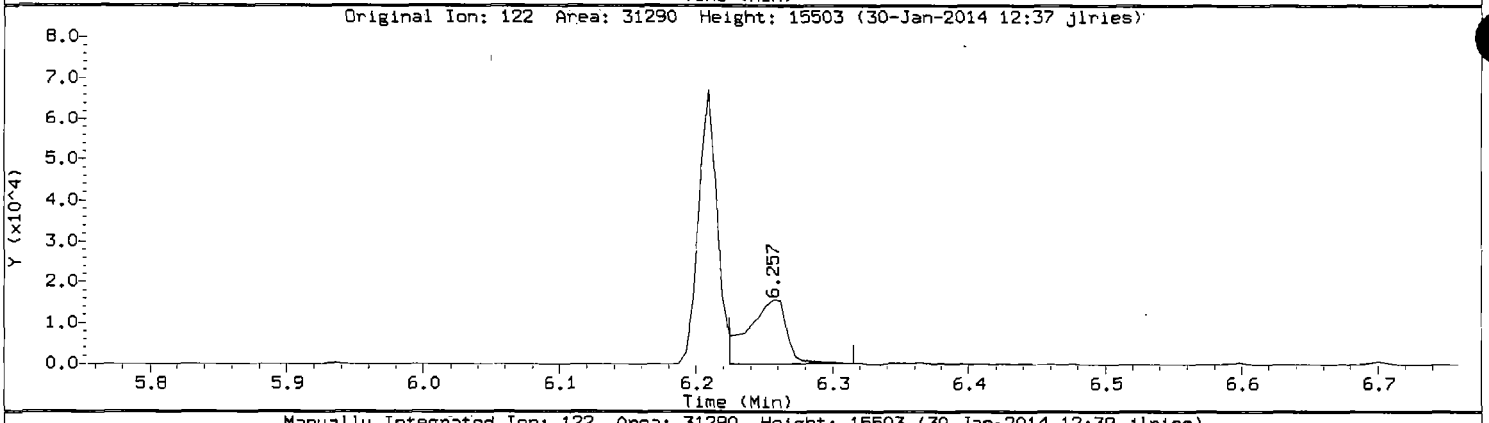


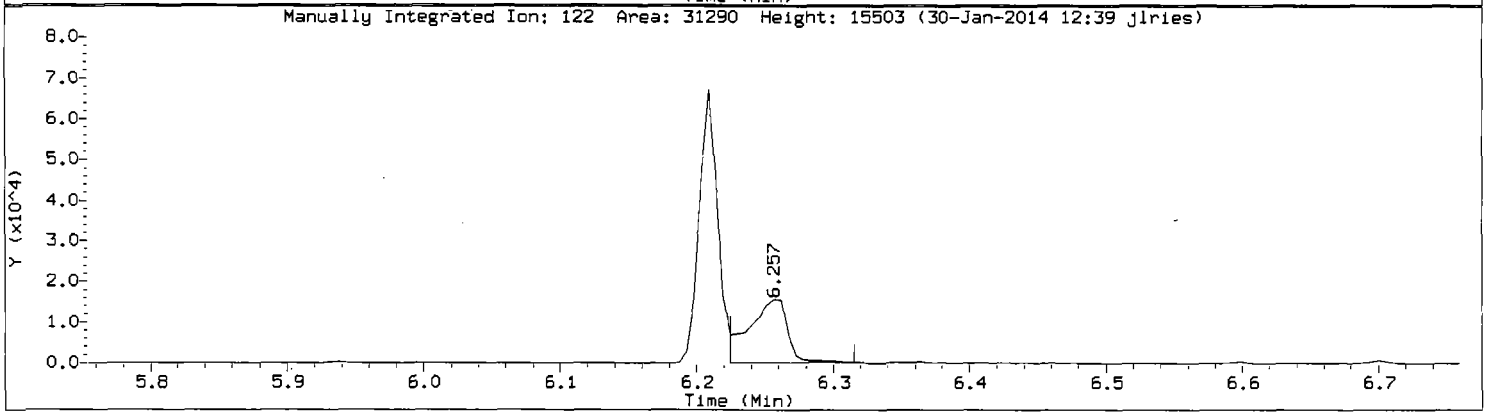
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 5

Compound: Benzoic acid
CAS Number: 65-85-0

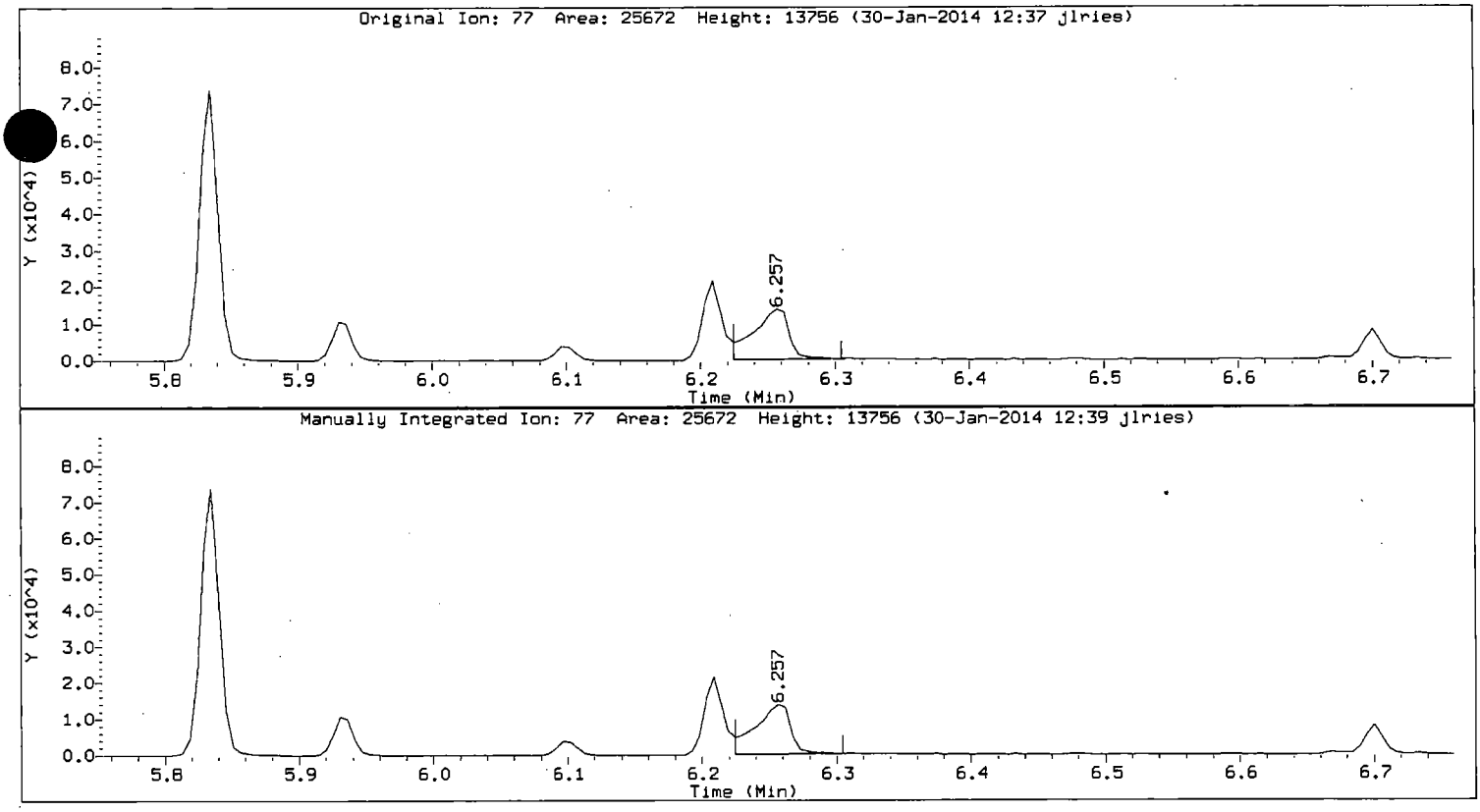






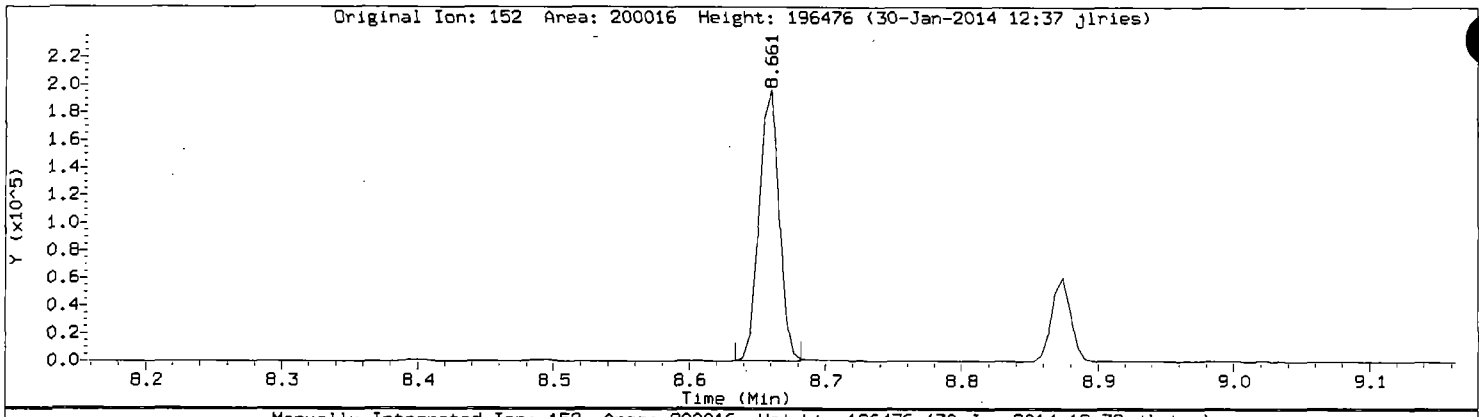


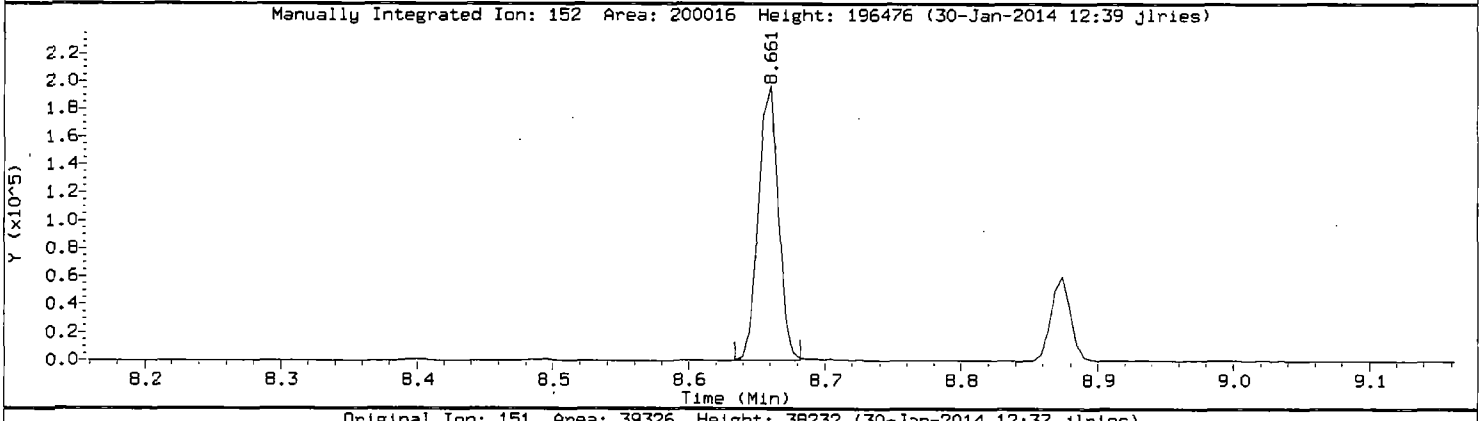
Injection Date: 30-JAN-2014 10:50
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 5

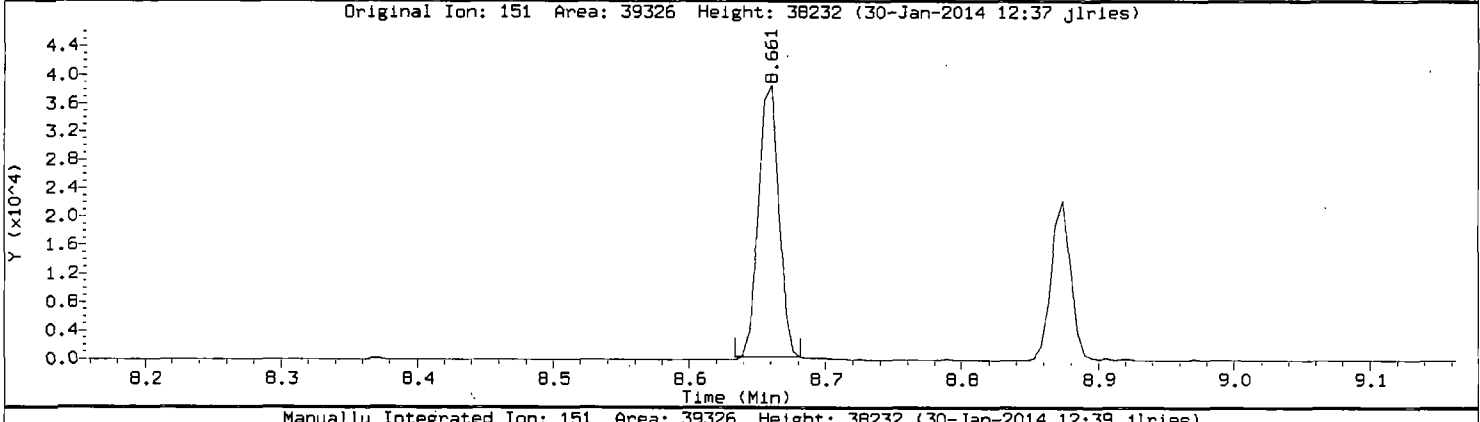


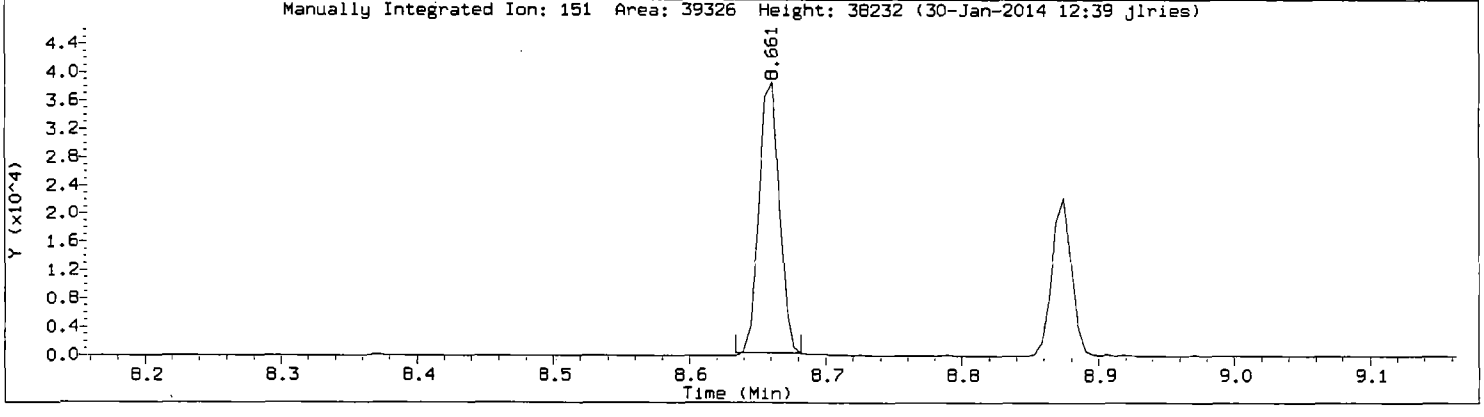
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 5

Compound: Acenaphthylene
CAS Number: 208-96-8

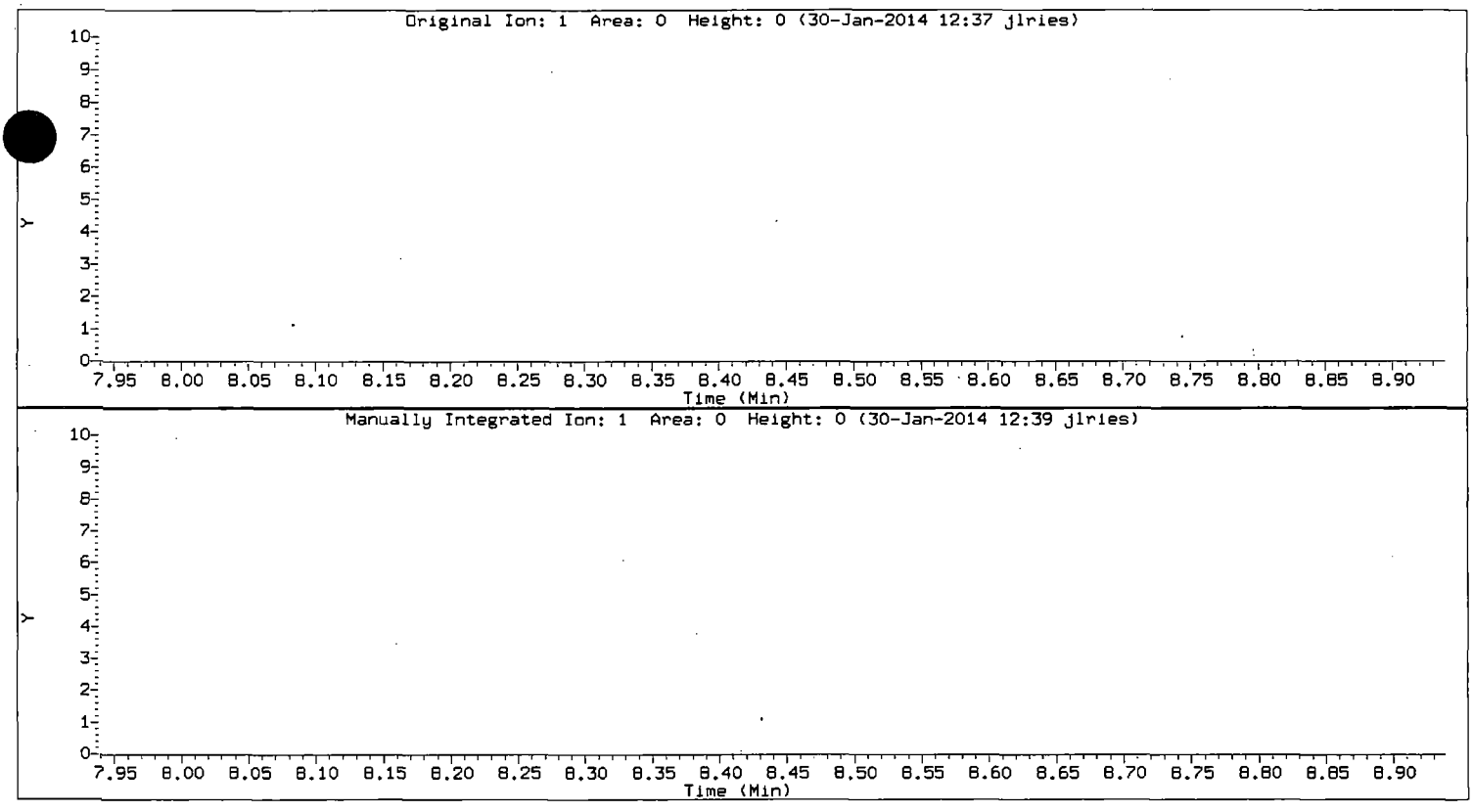








Injection Date: 30-JAN-2014 10:39
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 5



Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013014.b\01301407.D
Lab Smp Id: ICAL 10328-96 4
Inj Date : 30-JAN-2014 11:00
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 4
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Meth Date : 30-Jan-2014 13:47 10mss9.i Quant Type: ISTD
Cal Date : 30-JAN-2014 10:30 Cal File: 01301406.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * Vt / (Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.768	2.768	(0.532)	23479	20.0000	21.1
2	Pyridine	79	2.821	2.821	(0.542)	41494	20.0000	21.0
$ 3	2-Fluorophenol (S)	112	3.863	3.863	(0.742)	37296	20.0000	20.7
$ 4	Phenol-d6 (S)	99	4.728	4.728	(0.909)	45491	20.0000	20.6
5	Phenol	94	4.744	4.744	(0.912)	47619	20.0000	20.8
6	bis(2-Chloroethyl)ether	63	4.878	4.878	(0.937)	29429	20.0000	20.3
7	2-Chlorophenol	128	4.974	4.974	(0.956)	36605	20.0000	20.4
8	1,3-Dichlorobenzene	146	5.150	5.150	(0.990)	41256	20.0000	20.7
* 9	1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	52521	40.0000	
10	1,4-Dichlorobenzene	146	5.225	5.225	(1.004)	42119	20.0000	20.9
11	Benzyl alcohol	79	5.316	5.316	(1.022)	30146	20.0000	21.0
12	1,2-Dichlorobenzene	146	5.396	5.396	(1.037)	39581	20.0000	20.9
13	2-Methylphenol	107	5.412	5.412	(1.040)	28813	20.0000	20.5
14	bis(2-Chloroisopropyl) ether	45	5.466	5.466	(1.050)	56413	20.0000	21.0
15	3 & 4-Methylphenol	107	5.578	5.578	(1.072)	37513	20.0000	21.0
17	N-Nitroso-di-n-propylamine	70	5.610	5.610	(1.078)	23396	20.0000	20.9
18	Hexachloroethane	117	5.786	5.786	(1.112)	15786	20.0000	20.4
$ 19	Nitrobenzene-d5 (S)	82	5.807	5.807	(0.870)	30554	15.0000	15.5
20	Nitrobenzene	77	5.834	5.834	(0.874)	36275	20.0000	20.7
21	Isophorone	82	6.096	6.096	(0.914)	64398	20.0000	20.9
22	2-Nitrophenol	139	6.203	6.203	(0.930)	18154	20.0000	21.0
23	2,4-Dimethylphenol	107	6.208	6.208	(0.930)	34285	20.0000	21.0

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)	
	24 Benzoic acid	105	6.240	6.240	(0.935)	17600	20.0000	20.0	
	25 bis(2-Chloroethoxy)methane	93	6.326	6.326	(0.948)	41153	20.0000	21.2	
	26 2,4-Dichlorophenol	162	6.475	6.475	(0.970)	29406	20.0000	21.0	
	27 1,2,4-Trichlorobenzene	180	6.593	6.593	(0.988)	33864	20.0000	20.9	
*	28 Naphthalene-d8	136	6.673	6.673	(1.000)	189246	40.0000		(Q)
	29 Naphthalene	128	6.700	6.700	(1.004)	104370	20.0000	21.0	
	30 4-Chloroaniline	127	6.732	6.732	(1.009)	41859	20.0000	20.8	
	31 Hexachlorobutadiene	225	6.833	6.833	(1.024)	20012	20.0000	21.0	
	32 4-Chloro-3-methylphenol	107	7.282	7.282	(1.091)	27702	20.0000	21.2	
	33 2-Methylnaphthalene	142	7.533	7.533	(1.129)	67507	20.0000	20.9	
	34 1-Methylnaphthalene	142	7.656	7.656	(1.147)	63098	20.0000	21.0	
	35 Hexachlorocyclopentadiene	237	7.725	7.725	(0.875)	18894	20.0000	19.6	
	36 2,4,6-Trichlorophenol	196	7.859	7.859	(0.890)	19835	20.0000	20.8	
	37 2,4,5-Trichlorophenol	196	7.902	7.902	(0.895)	22074	20.0000	21.3	
$	38 2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	57872	15.0000	15.7	
	39 2-Chloronaphthalene	162	8.137	8.137	(0.921)	62779	20.0000	20.8	
	40 2-Nitroaniline	65	8.233	8.233	(0.932)	18405	20.0000	20.9	
	41 Dimethylphthalate	163	8.452	8.452	(0.957)	68538	20.0000	21.1	
	42 2,6-Dinitrotoluene	165	8.527	8.527	(0.966)	15306	20.0000	20.3	
	43 Acenaphthylene	152	8.655	8.655	(0.980)	102270	20.0000	21.0	(M)
	44 3-Nitroaniline	138	8.740	8.740	(0.990)	17743	20.0000	23.0	
*	45 Acenaphthene-d10	164	8.831	8.831	(1.000)	99277	40.0000		
	46 Acenaphthene	154	8.869	8.869	(1.004)	62185	20.0000	20.9	
	47 2,4-Dinitrophenol	184	8.869	8.869	(1.004)	5114	20.0000	18.8	(Q)
	48 4-Nitrophenol	65	8.906	8.906	(1.008)	11746	20.0000	20.5	
	49 2,4-Dinitrotoluene	165	9.029	9.029	(1.022)	20391	20.0000	21.1	
	50 Dibenzofuran	168	9.082	9.082	(1.028)	91735	20.0000	21.2	
	51 Diethylphthalate	149	9.323	9.323	(1.056)	69162	20.0000	21.2	
	52 4-Chlorophenylphenyl ether	204	9.494	9.494	(1.075)	35681	20.0000	20.4	
	53 4-Nitroaniline	138	9.499	9.499	(1.076)	18463	20.0000	21.2	
	54 Fluorene	166	9.510	9.510	(1.077)	73974	20.0000	21.0	
	55 4,6-Dinitro-2-methylphenol	198	9.542	9.542	(0.893)	8102	20.0000	19.5	
	56 N-Nitrosodiphenylamine	169	9.633	9.633	(0.901)	61114	20.0000	21.0	
	57 Azobenzene	77	9.691	9.691	(1.097)	68185	20.0000	21.2	
	58 1,2-Diphenylhydrazine	77	9.691	9.691	(1.097)	68185	20.0000	21.2	
$	59 2,4,6-Tribromophenol (S)	330	9.809	9.809	(1.111)	9692	20.0000	20.3	
	60 4-Bromophenylphenyl ether	248	10.108	10.108	(0.946)	21469	20.0000	21.4	
	61 Hexachlorobenzene	284	10.204	10.204	(0.955)	22020	20.0000	20.8	
	62 Pentachlorophenol	266	10.434	10.434	(0.976)	10632	20.0000	19.1	
*	63 Phenanthrene-d10	188	10.690	10.690	(1.000)	183689	40.0000		
	64 Phenanthrene	178	10.717	10.717	(1.002)	104147	20.0000	21.3	
	65 Anthracene	178	10.781	10.781	(1.008)	105348	20.0000	21.2	
	66 Carbazole	167	10.963	10.963	(1.025)	101437	20.0000	21.4	
	67 di-n-Butylphthalate	149	11.369	11.369	(1.063)	115822	20.0000	21.0	
	68 Fluoranthene	202	12.207	12.207	(1.142)	119059	20.0000	21.0	
	69 Benzidine	184	12.341	12.341	(0.882)	59420	20.0000	21.7	
	70 Pyrene	202	12.501	12.501	(0.893)	126589	20.0000	21.1	
$	71 Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	65090	15.0000	15.5	
	72 Butylbenzylphthalate	149	13.244	13.244	(0.946)	52004	20.0000	20.9	
	73 bis(2-Ethylhexyl)phthalate	149	13.938	13.938	(0.996)	74168	20.0000	21.0	
	74 3,3'-Dichlorobenzidine	252	13.922	13.922	(0.995)	39039	20.0000	22.8	
	75 Benzo(a)anthracene	228	13.981	13.981	(0.999)	119362	20.0000	21.3	
*	76 Chrysene-d12	240	13.997	13.997	(1.000)	197139	40.0000		(Q)
	77 Chrysene	228	14.029	14.029	(1.002)	107844	20.0000	20.9	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
78	di-n-Octylphthalate	149	14.729	14.729	(1.052)	124234	20.0000	20.5
79	Benzo(b)fluoranthene	252	15.386	15.386	(0.962)	112004	20.0000	20.4
80	Benzo(k)fluoranthene	252	15.424	15.424	(0.965)	120187	20.0000	21.6
81	Benzo(a)pyrene	252	15.899	15.899	(0.994)	107355	20.0000	20.5
* 82	Perylene-d12	264	15.990	15.990	(1.000)	185897	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	18.063	18.063	(1.130)	120379	20.0000	20.6
84	Dibenzo(a,h)anthracene	278	18.079	18.079	(1.131)	101666	20.0000	20.6
85	Benzo(g,h,i)perylene	276	18.693	18.693	(1.169)	100980	20.0000	20.6

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301407.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01301407.D
Lab Smp Id: ICAL 10328-96 4
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Misc Info:

Calibration Date: 30-JAN-2014
Calibration Time: 10:00
Level: LOW
Sample Type: WATER

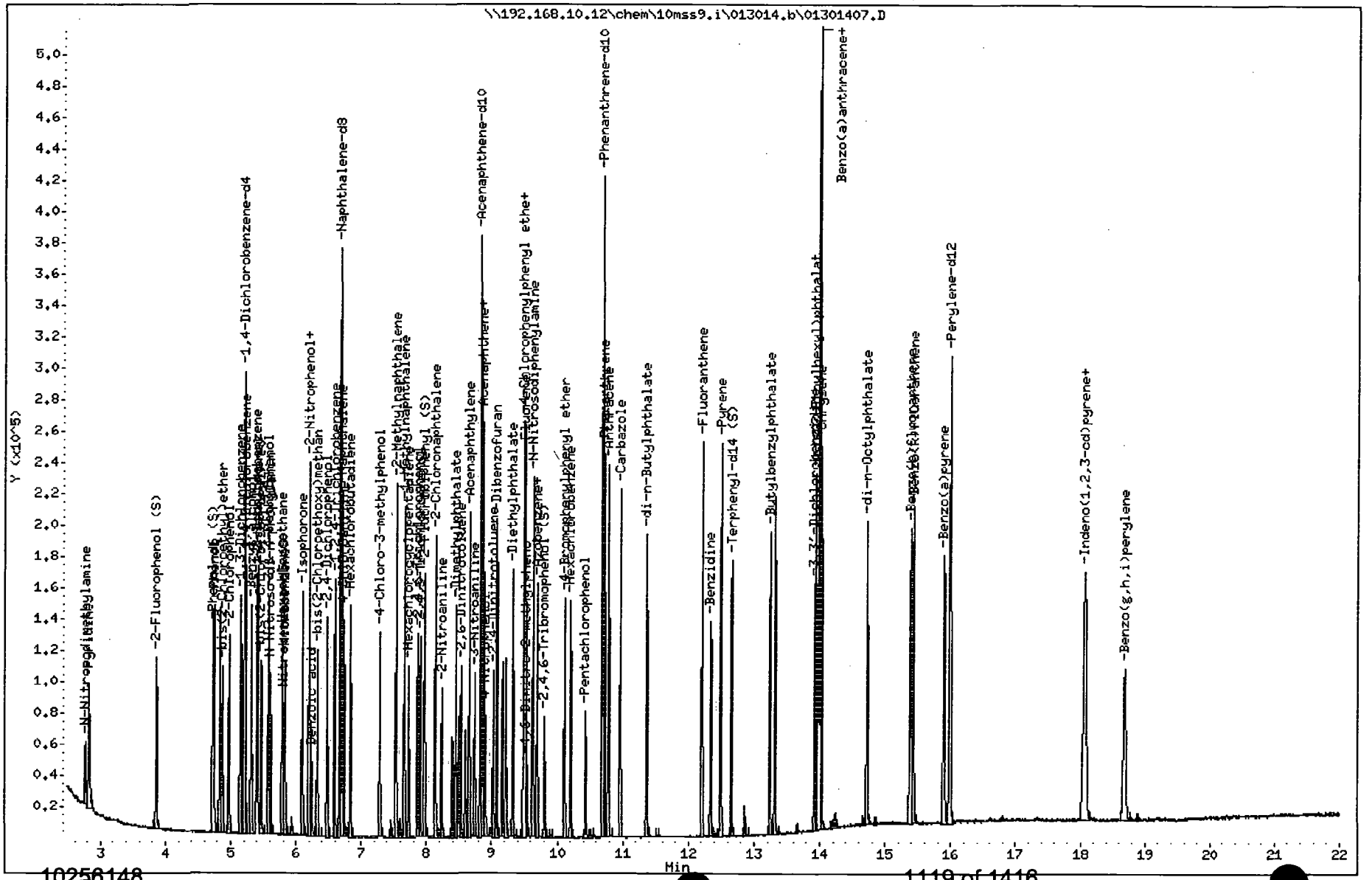
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	55114	27557	110228	52521	-4.70
28 Naphthalene-d8	204229	102115	408458	189246	-7.34
45 Acenaphthene-d10	107656	53828	215312	99277	-7.78
63 Phenanthrene-d10	198170	99085	396340	183689	-7.31
76 Chrysene-d12	212105	106053	424210	197139	-7.06
82 Perylene-d12	202468	101234	404936	185897	-8.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	0.00
76 Chrysene-d12	14.00	13.50	14.50	14.00	0.00
82 Perylene-d12	15.99	15.49	16.49	15.99	0.00

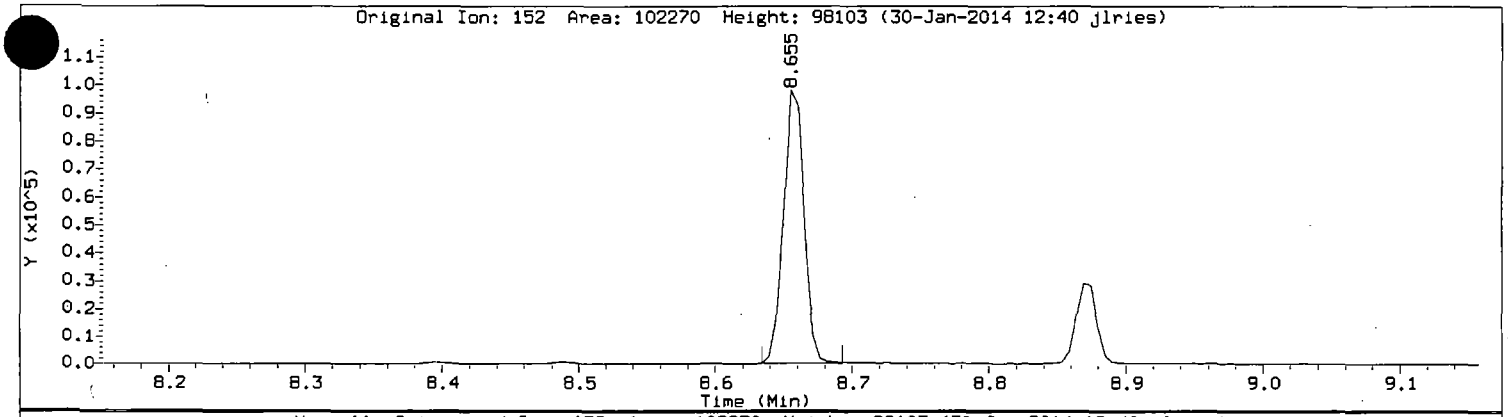
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

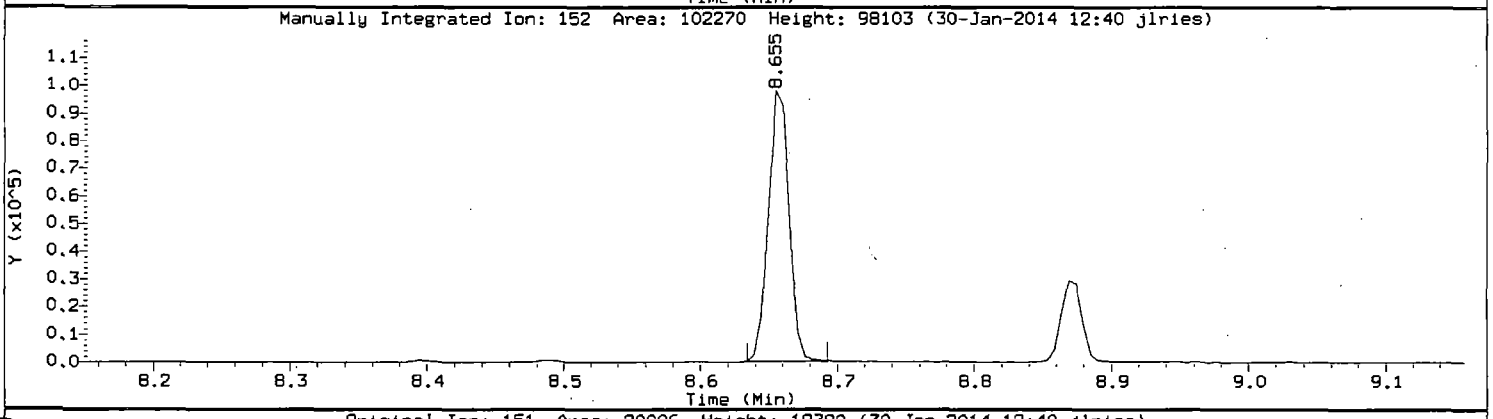
Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301407.D
Date : 30-JAN-2014 11:00
Client ID:
Instrument: 10mss9.i
Sample Info: ICAL 10328-96 4
Purge Volume: 1.0
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

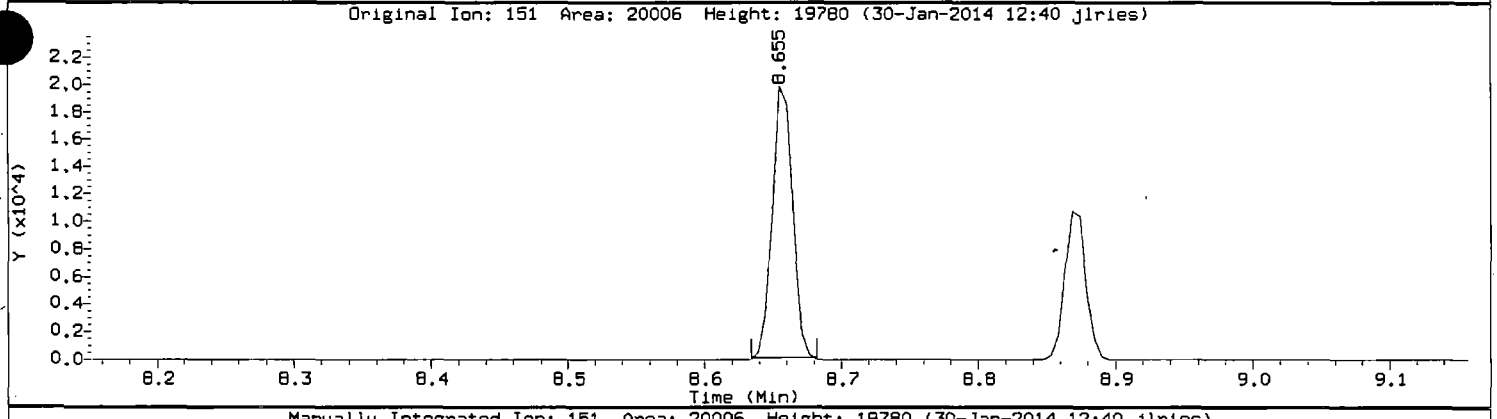


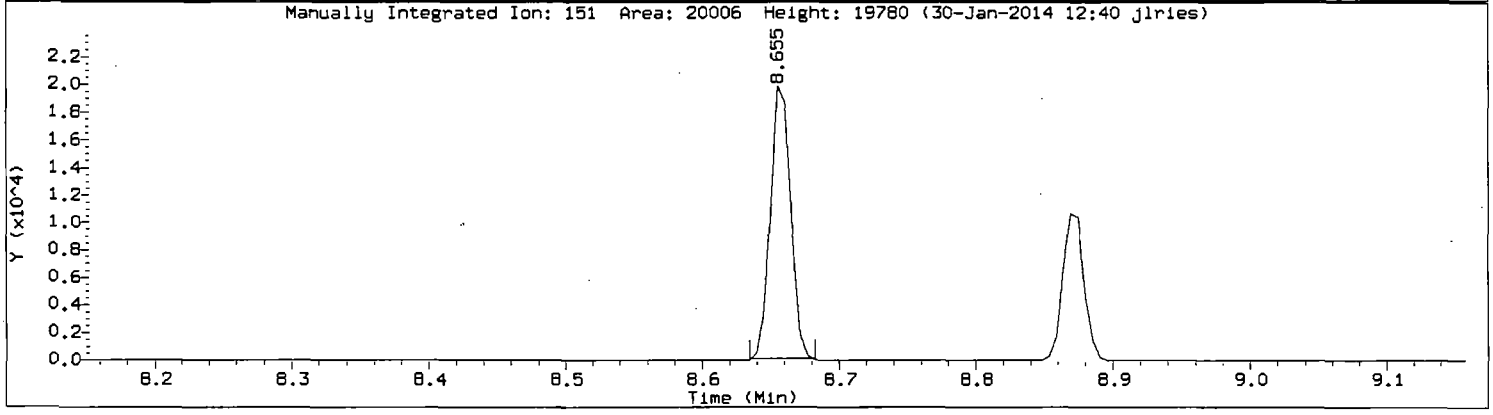
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 4

Compound: Acenaphthylene
CAS Number: 208-96-8

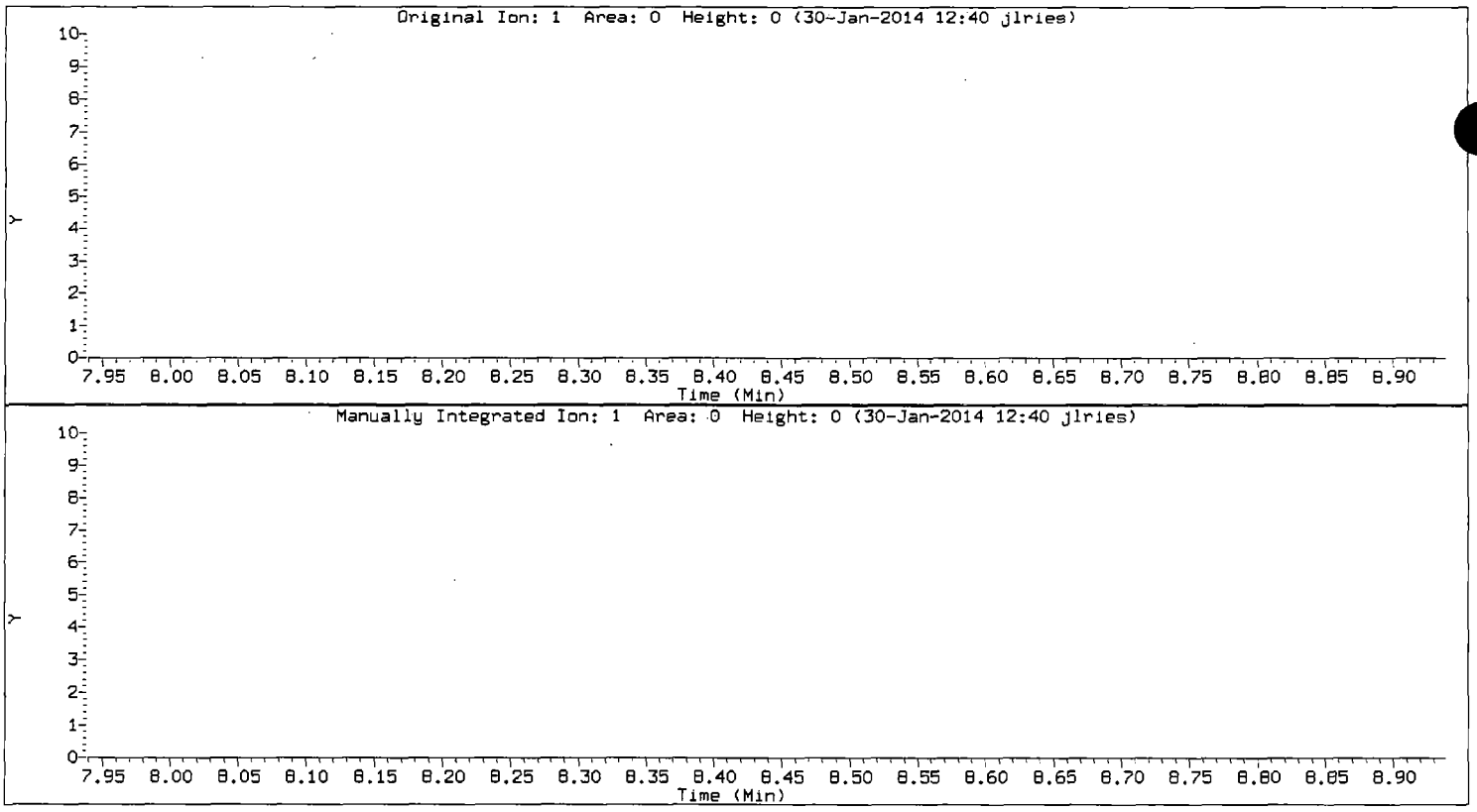








Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 4



Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013014.b\01301408.D
Lab Smp Id: ICAL 10328-96 3
Inj Date : 30-JAN-2014 11:30
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 3
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Meth Date : 30-Jan-2014 13:47 10mss9.i Quant Type: ISTD
Cal Date : 30-JAN-2014 11:00 Cal File: 01301407.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * Vt / (Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.768	2.768	(0.532)	11193	10.0000	9.8(aQM)
	2 Pyridine	79	2.826	2.826	(0.543)	19929	10.0000	9.8(a)
$	3 2-Fluorophenol (S)	112	3.863	3.863	(0.742)	18367	10.0000	9.9(a)
$	4 Phenol-d6 (S)	99	4.728	4.728	(0.909)	23430	10.0000	10.3
	5 Phenol	94	4.744	4.744	(0.912)	24028	10.0000	10.2
	6 bis(2-Chloroethyl)ether	63	4.878	4.878	(0.937)	15332	10.0000	10.3
	7 2-Chlorophenol	128	4.974	4.974	(0.956)	18554	10.0000	10.0
	8 1,3-Dichlorobenzene	146	5.150	5.150	(0.990)	21037	10.0000	10.2
*	9 1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	54047	40.0000	
	10 1,4-Dichlorobenzene	146	5.225	5.225	(1.004)	20913	10.0000	10.1
	11 Benzyl alcohol	79	5.311	5.311	(1.021)	14589	10.0000	9.9(a)
	12 1,2-Dichlorobenzene	146	5.396	5.396	(1.037)	19574	10.0000	10.0
	13 2-Methylphenol	107	5.412	5.412	(1.040)	14501	10.0000	10.0
	14 bis(2-Chloroisopropyl) ether	45	5.466	5.466	(1.050)	27993	10.0000	10.1
	15 3 & 4-Methylphenol	107	5.578	5.578	(1.072)	18150	10.0000	9.8(a)
	17 N-Nitroso-di-n-propylamine	70	5.604	5.604	(1.077)	11758	10.0000	10.2
	18 Hexachloroethane	117	5.786	5.786	(1.112)	7933	10.0000	10
$	19 Nitrobenzene-d5 (S)	82	5.807	5.807	(0.870)	15194	7.50000	7.5(aM)
	20 Nitrobenzene	77	5.829	5.829	(0.874)	18510	10.0000	10.3
	21 Isophorone	82	6.096	6.096	(0.914)	32004	10.0000	10.1
	22 2-Nitrophenol	139	6.203	6.203	(0.930)	8193	10.0000	9.2(a)
	23 2,4-Dimethylphenol	107	6.208	6.208	(0.930)	17129	10.0000	10.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	24 Benzoic acid	105	6.229	6.229	(0.934)	7999	10.0000	10.6(Q)
	25 bis(2-Chloroethoxy)methane	93	6.326	6.326	(0.948)	20054	10.0000	10.0
	26 2,4-Dichlorophenol	162	6.475	6.475	(0.970)	14187	10.0000	9.8(a)
	27 1,2,4-Trichlorobenzene	180	6.593	6.593	(0.988)	16570	10.0000	9.9(a)
*	28 Naphthalene-d8	136	6.673	6.673	(1.000)	194847	40.0000	(Q)
	29 Naphthalene	128	6.700	6.700	(1.004)	53094	10.0000	10.4
	30 4-Chloroaniline	127	6.732	6.732	(1.009)	21644	10.0000	9.9(a)
	31 Hexachlorobutadiene	225	6.833	6.833	(1.024)	10018	10.0000	10.2
	32 4-Chloro-3-methylphenol	107	7.282	7.282	(1.091)	13287	10.0000	9.9(a)
	33 2-Methylnaphthalene	142	7.533	7.533	(1.129)	33648	10.0000	10.1
	34 1-Methylnaphthalene	142	7.656	7.656	(1.147)	31234	10.0000	10.1
	35 Hexachlorocyclopentadiene	237	7.725	7.725	(0.875)	9027	10.0000	9.0(a)
	36 2,4,6-Trichlorophenol	196	7.859	7.859	(0.890)	9445	10.0000	9.5(a)
	37 2,4,5-Trichlorophenol	196	7.902	7.902	(0.895)	10502	10.0000	9.7(a)
$	38 2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	28987	7.50000	7.6(a)
	39 2-Chloronaphthalene	162	8.137	8.137	(0.921)	31545	10.0000	10.0
	40 2-Nitroaniline	65	8.233	8.233	(0.932)	8973	10.0000	9.8(a)
	41 Dimethylphthalate	163	8.446	8.446	(0.956)	34278	10.0000	10.2
	42 2,6-Dinitrotoluene	165	8.527	8.527	(0.966)	7627	10.0000	9.8(a)
	43 Acenaphthylene	152	8.655	8.655	(0.980)	51506	10.0000	10.2(M)
	44 3-Nitroaniline	138	8.740	8.740	(0.990)	8547	10.0000	10.7(M)
*	45 Acenaphthene-d10	164	8.831	8.831	(1.000)	103029	40.0000	
	46 Acenaphthene	154	8.869	8.869	(1.004)	31102	10.0000	10.1
	47 2,4-Dinitrophenol	184	8.863	8.863	(1.004)	2102	10.0000	11.0(Q)
	48 4-Nitrophenol	65	8.906	8.906	(1.008)	5602	10.0000	9.4(a)
	49 2,4-Dinitrotoluene	165	9.029	9.029	(1.022)	9518	10.0000	9.5(a)
	50 Dibenzofuran	168	9.082	9.082	(1.028)	45850	10.0000	10.2
	51 Diethylphthalate	149	9.323	9.323	(1.056)	33938	10.0000	10.0
	52 4-Chlorophenylphenyl ether	204	9.494	9.494	(1.075)	18560	10.0000	10.2
	53 4-Nitroaniline	138	9.494	9.494	(1.075)	8970	10.0000	9.9(a)
	54 Fluorene	166	9.510	9.510	(1.077)	37557	10.0000	10.2
	55 4,6-Dinitro-2-methylphenol	198	9.542	9.542	(0.893)	3241	10.0000	10.8
	56 N-Nitrosodiphenylamine	169	9.632	9.632	(0.901)	30328	10.0000	10.0
	57 Azobenzene	77	9.691	9.691	(1.097)	33806	10.0000	10.1
	58 1,2-Diphenylhydrazine	77	9.691	9.691	(1.097)	33806	10.0000	10.1
$	59 2,4,6-Tribromophenol (S)	330	9.803	9.803	(1.110)	4752	10.0000	9.6(a)
	60 4-Bromophenylphenyl ether	248	10.108	10.108	(0.946)	10358	10.0000	9.9(a)
	61 Hexachlorobenzene	284	10.204	10.204	(0.955)	11148	10.0000	10.1
	62 Pentachlorophenol	266	10.434	10.434	(0.976)	4693	10.0000	8.1(a)
*	63 Phenanthrene-d10	188	10.690	10.690	(1.000)	191300	40.0000	
	64 Phenanthrene	178	10.717	10.717	(1.002)	52065	10.0000	10.2
	65 Anthracene	178	10.781	10.781	(1.008)	53939	10.0000	10.4
	66 Carbazole	167	10.963	10.963	(1.025)	50210	10.0000	10.2
	67 di-n-Butylphthalate	149	11.363	11.363	(1.063)	57639	10.0000	10.0
	68 Fluoranthene	202	12.207	12.207	(1.142)	59592	10.0000	10.1
	69 Benzidine	184	12.341	12.341	(0.882)	31141	10.0000	10.1
	70 Pyrene	202	12.496	12.496	(0.893)	62743	10.0000	10.1
$	71 Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	33222	7.50000	7.7(a)
	72 Butylbenzylphthalate	149	13.244	13.244	(0.947)	25107	10.0000	9.8(a)
	73 bis(2-Ethylhexyl)phthalate	149	13.938	13.938	(0.996)	36309	10.0000	9.9(a)
	74 3,3'-Dichlorobenzidine	252	13.917	13.917	(0.995)	19931	10.0000	11.2
	75 Benzo(a)anthracene	228	13.981	13.981	(0.999)	58787	10.0000	10.1
*	76 Chrysene-d12	240	13.992	13.992	(1.000)	203717	40.0000	(Q)
	77 Chrysene	228	14.024	14.024	(1.002)	55312	10.0000	10.4

Report Date: 30-Jan-2014 13:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
78 di-n-Octylphthalate	149	14.729	14.729	(1.053)	61055	10.0000	9.8(aM)
79 Benzo(b)fluoranthene	252	15.381	15.381	(0.962)	56410	10.0000	9.9(a)
80 Benzo(k)fluoranthene	252	15.423	15.423	(0.965)	58683	10.0000	10.2
81 Benzo(a)pyrene	252	15.899	15.899	(0.994)	54273	10.0000	10.0
* 82 Perylene-d12	264	15.990	15.990	(1.000)	192345	40.0000	
83 Indeno(1,2,3-cd)pyrene	276	18.052	18.052	(1.129)	59303	10.0000	9.8(a)
84 Dibenzo(a,h)anthracene	278	18.079	18.079	(1.131)	51210	10.0000	10.0
85 Benzo(g,h,i)perylene	276	18.688	18.688	(1.169)	50965	10.0000	10.0

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01301408.D
Lab Smp Id: ICAL 10328-96 3
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Misc Info:

Calibration Date: 30-JAN-2014
Calibration Time: 10:00

Level: LOW
Sample Type: WATER

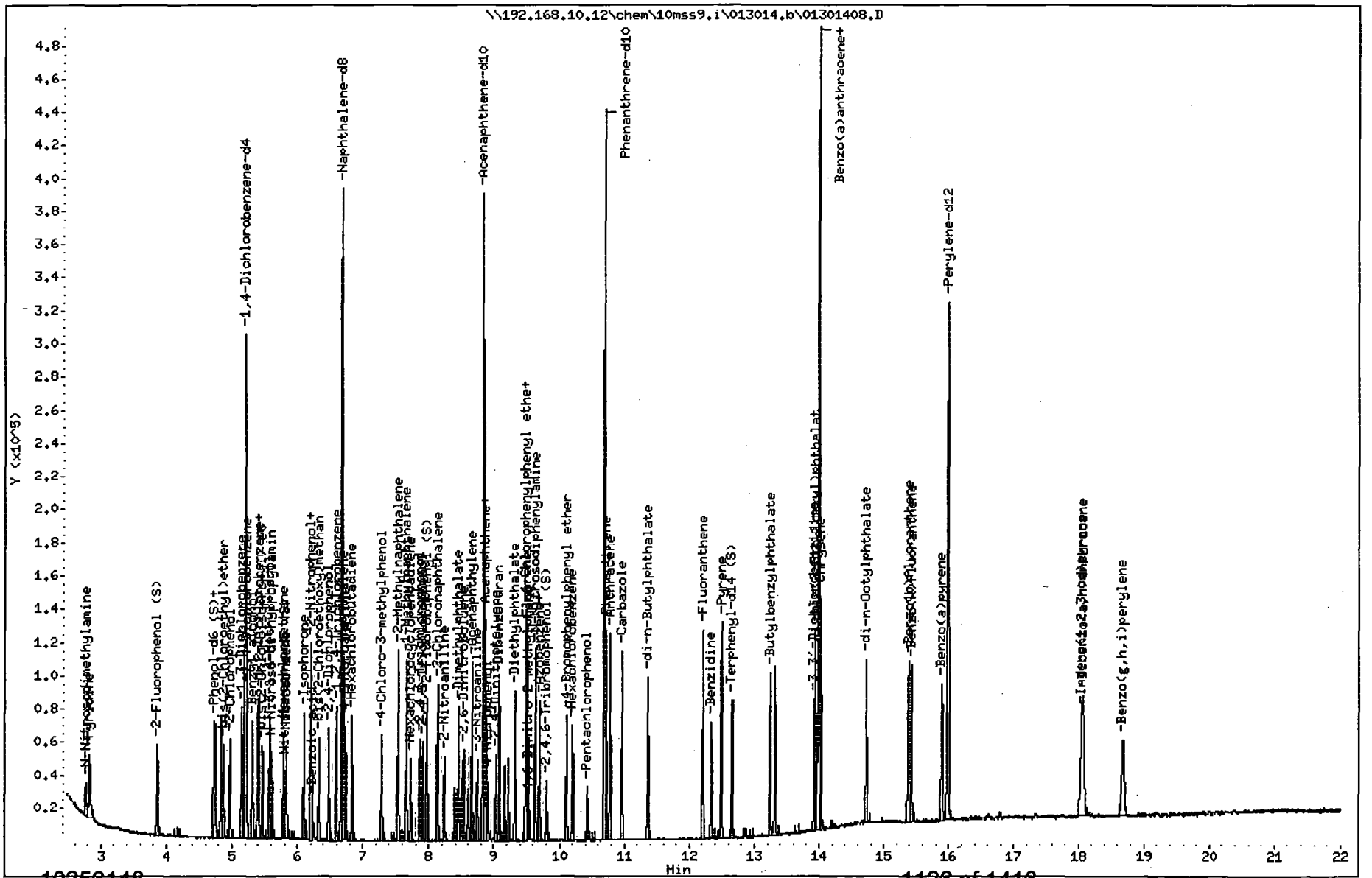
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	55114	27557	110228	54047	-1.94
28 Naphthalene-d8	204229	102115	408458	194847	-4.59
45 Acenaphthene-d10	107656	53828	215312	103029	-4.30
63 Phenanthrene-d10	198170	99085	396340	191300	-3.47
76 Chrysene-d12	212105	106053	424210	203717	-3.95
82 Perylene-d12	202468	101234	404936	192345	-5.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	-0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	-0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.00
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.00
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	15.99	15.49	16.49	15.99	-0.00

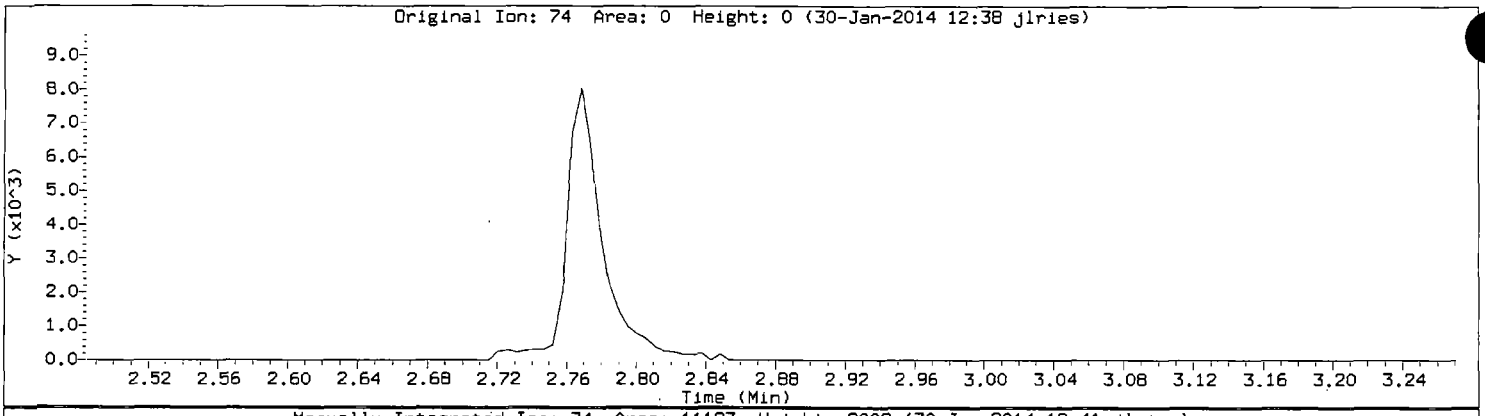
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

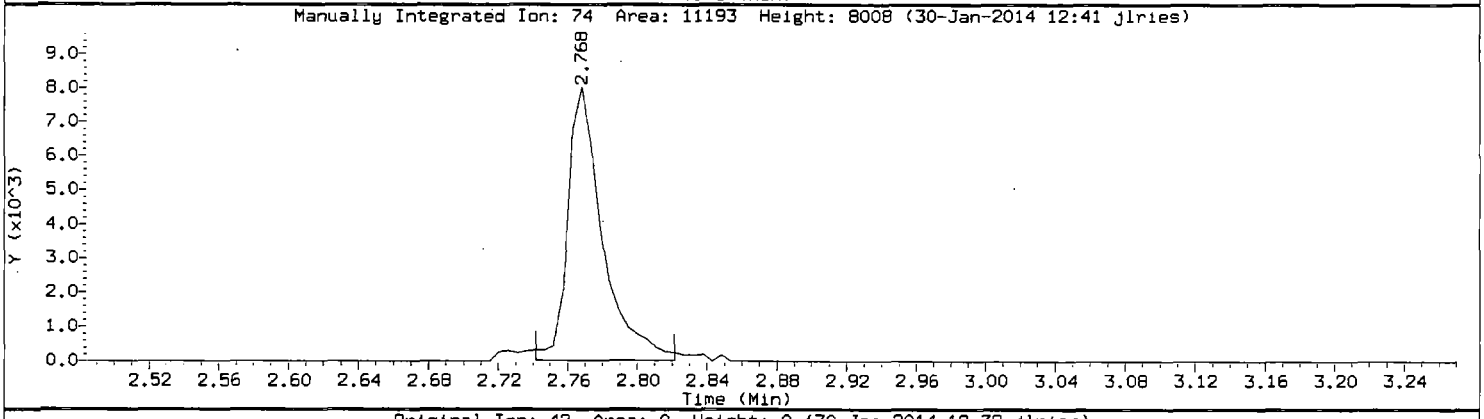
Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301408.D
Date : 30-JAN-2014 11:30
Client ID:
Instrument: 10mss9.i
Sample Info: ICAL 10328-96 3
Purge Volume: 1.0
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

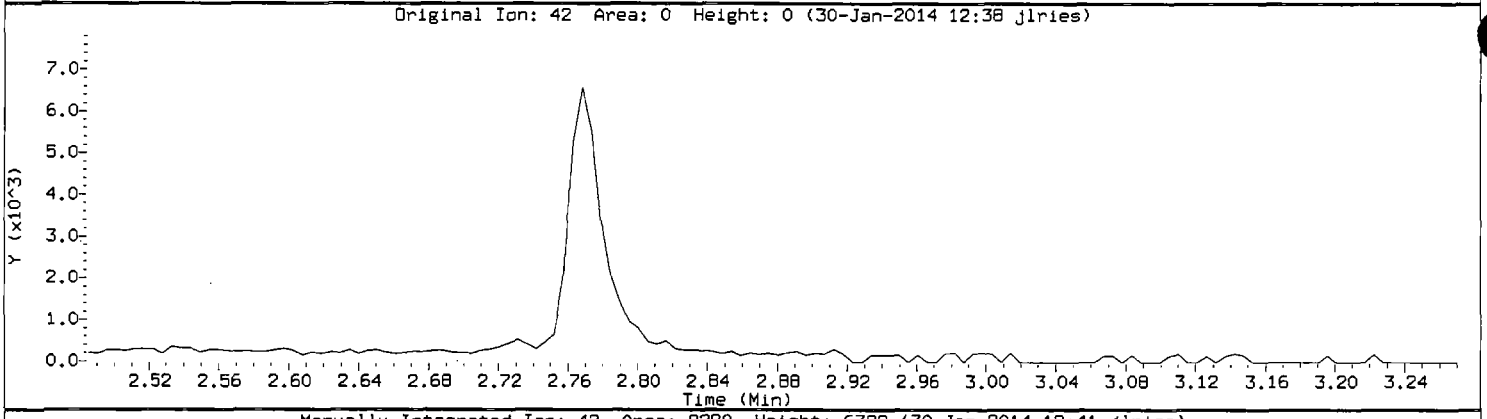


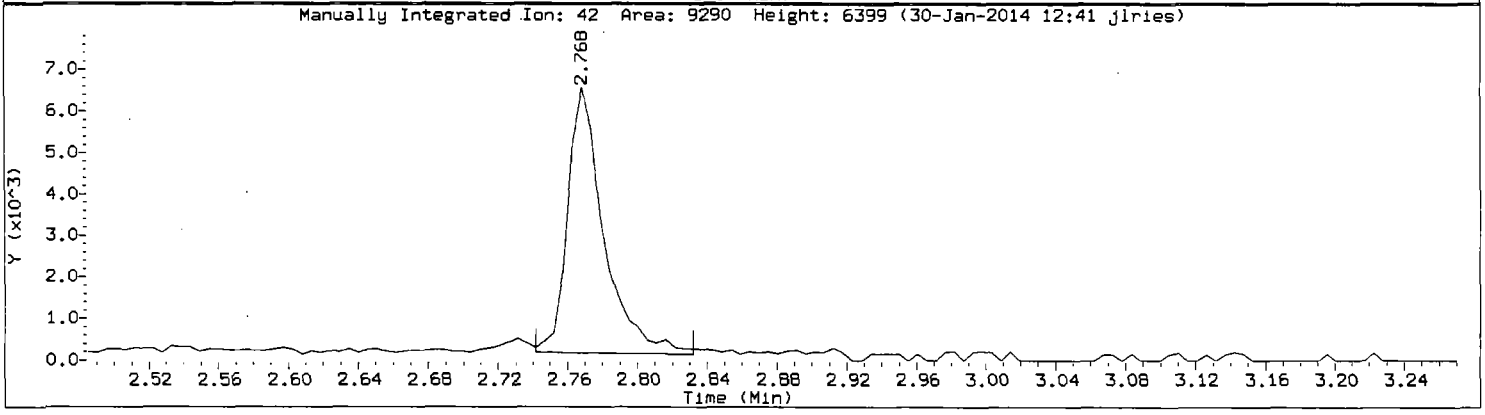
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9

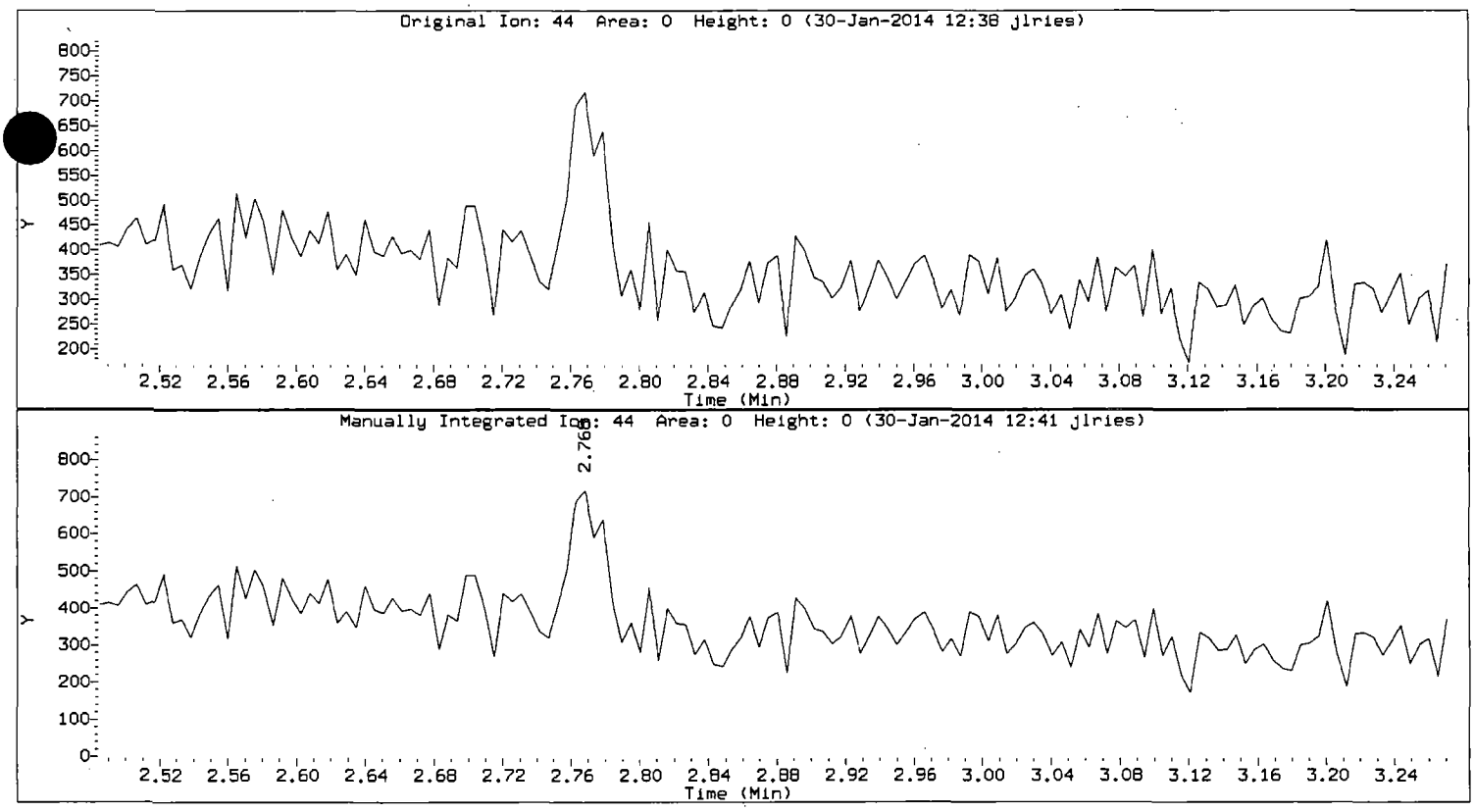






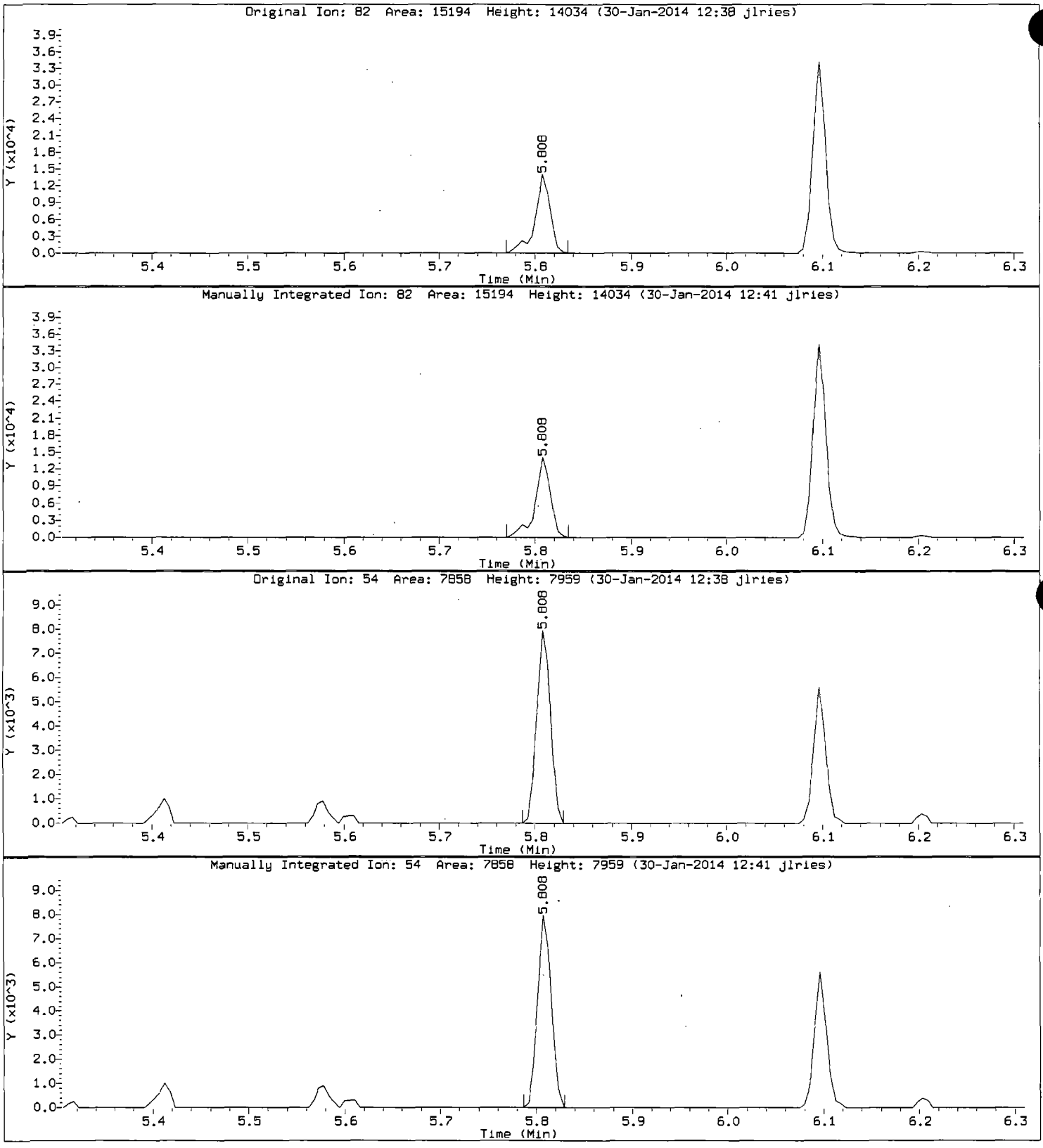


Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3



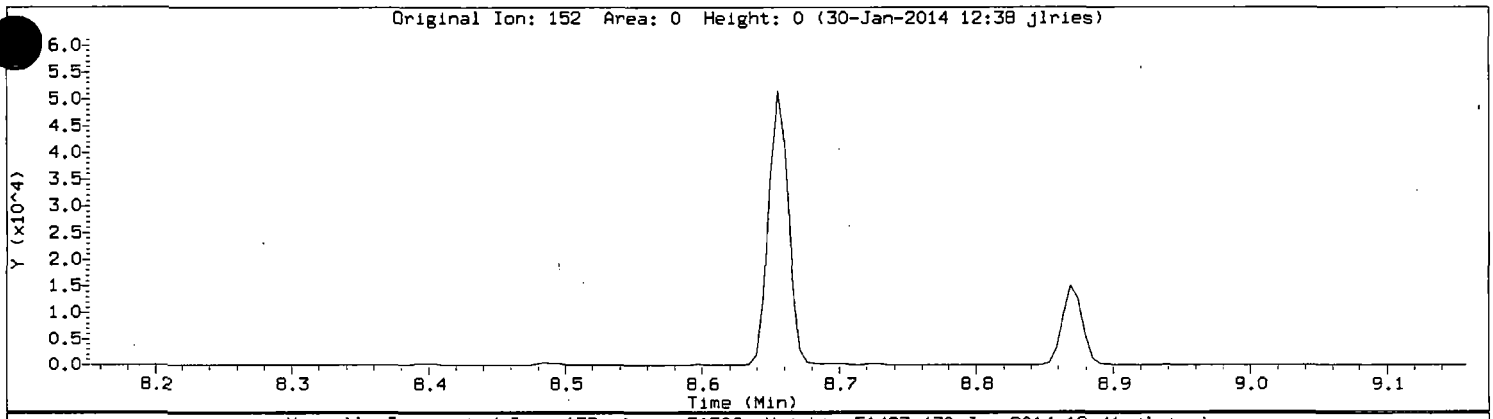
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

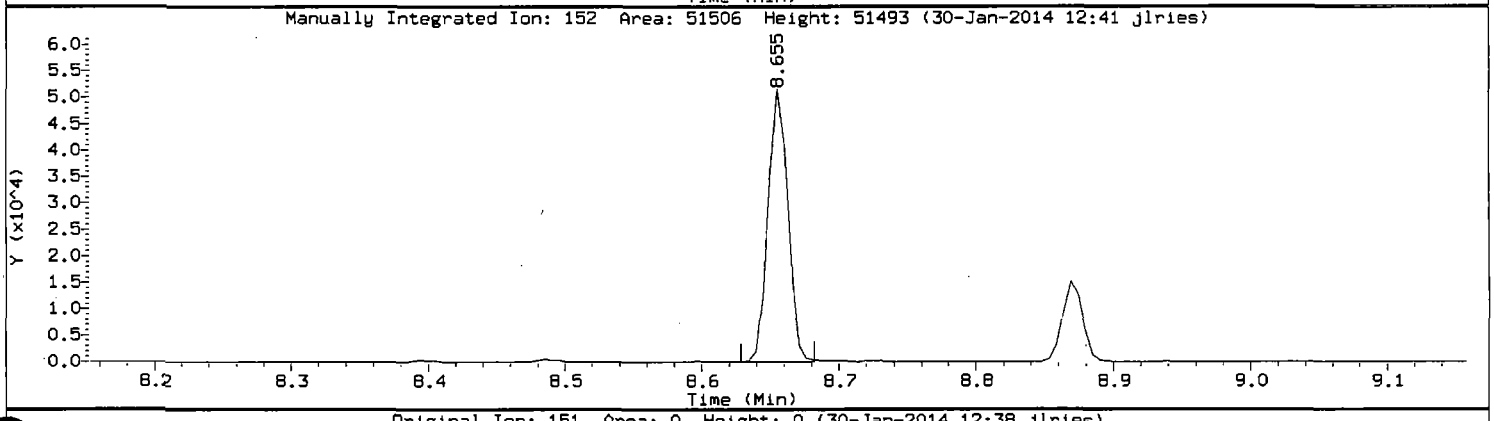
Compound: Nitrobenzene-d5 (S)
CAS Number: 4165-60-0

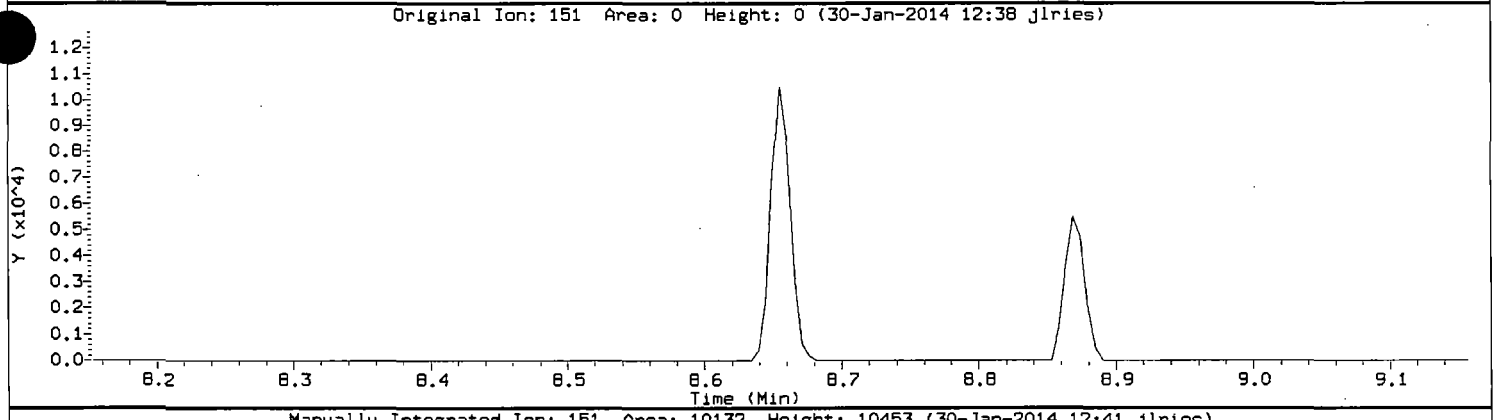


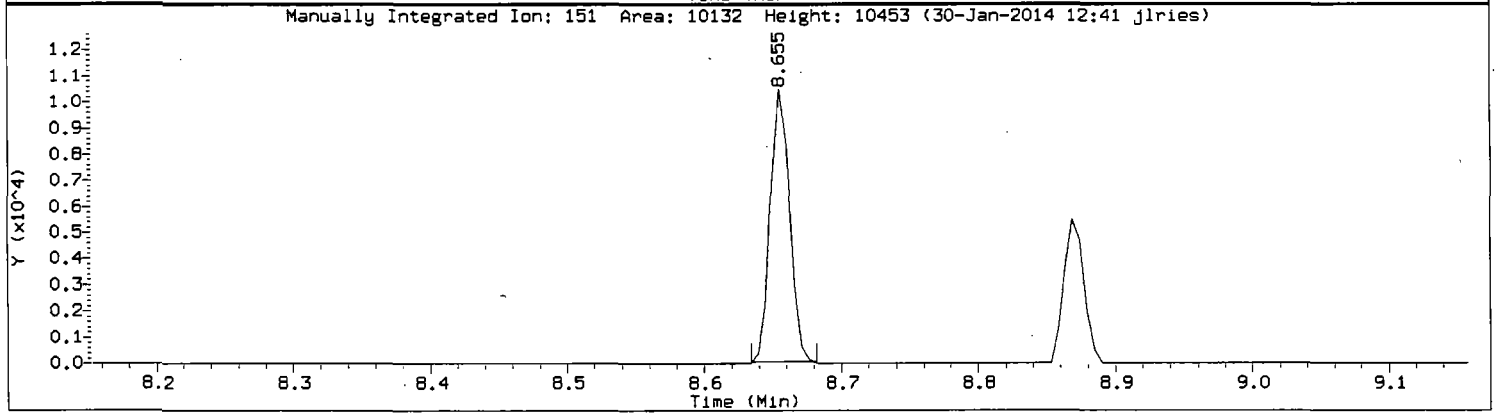
Injection Date: 30-JAN-2014 11:38
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

Compound: Acenaphthylene
CAS Number: 208-96-8

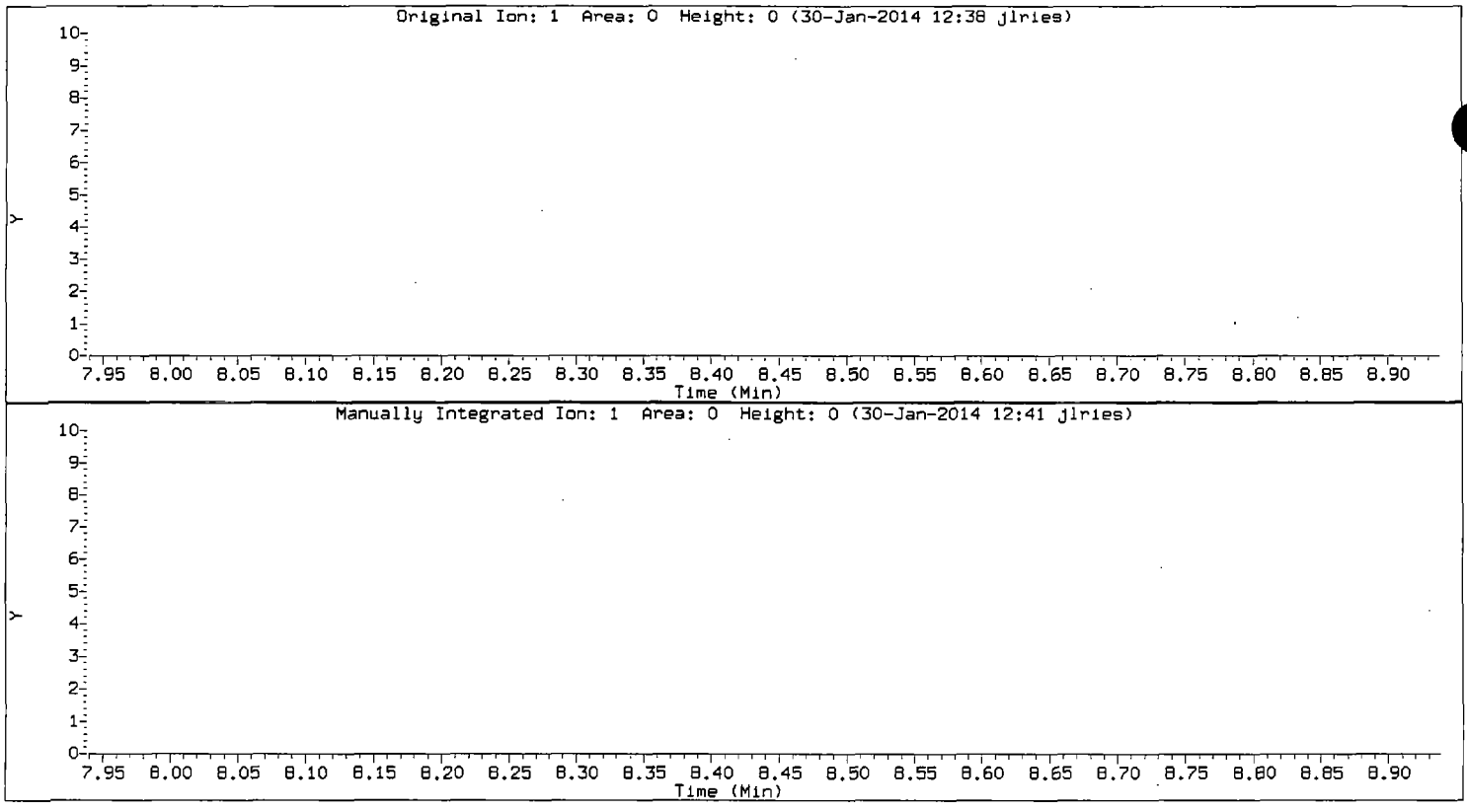






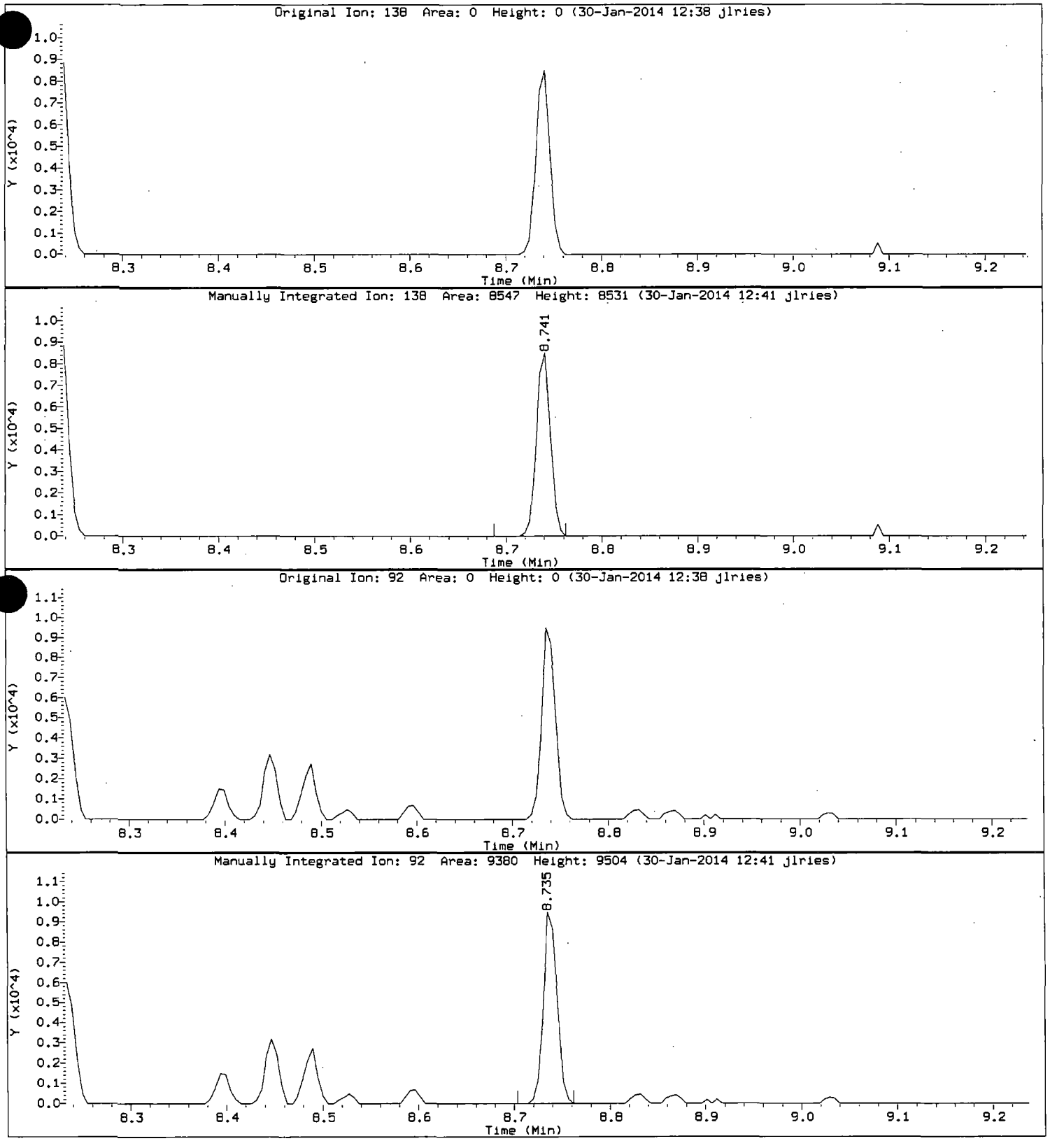


Injection Date: 30-JAN-2014 11:38
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

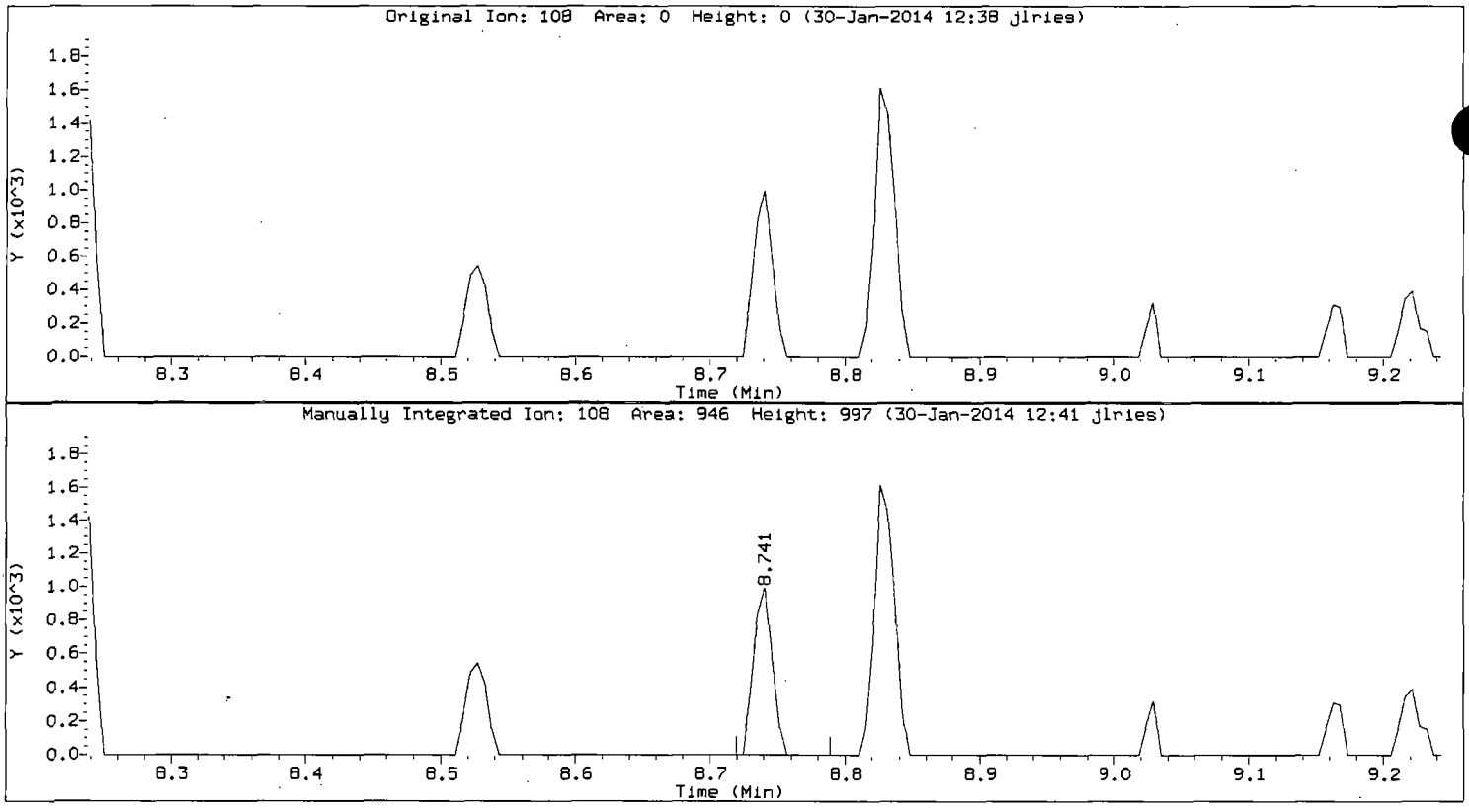


Injection Date: 30-JAN-2014 11:38
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

Compound: 3-Nitroaniline
CAS Number: 99-09-2

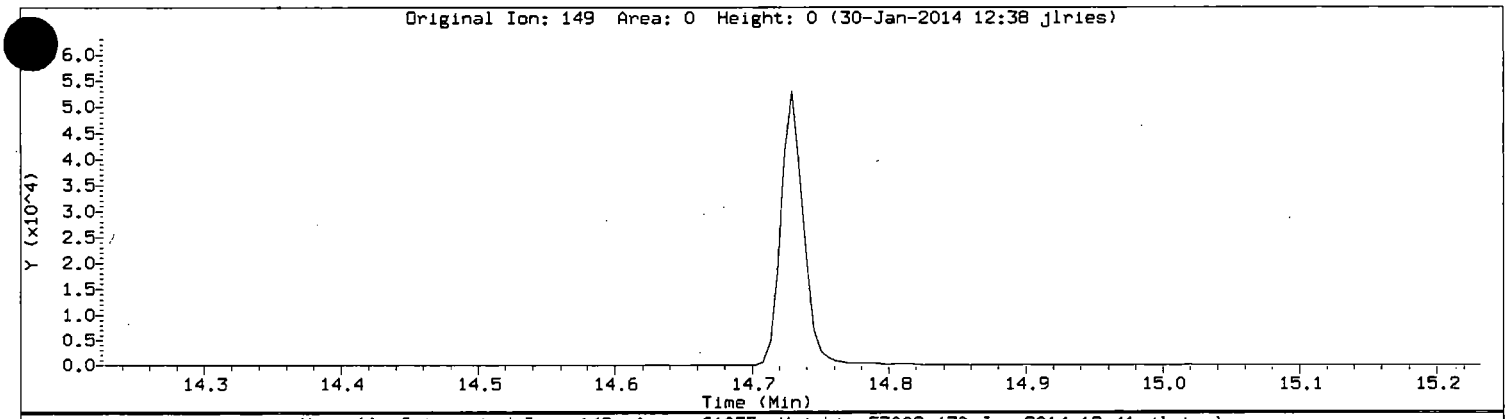


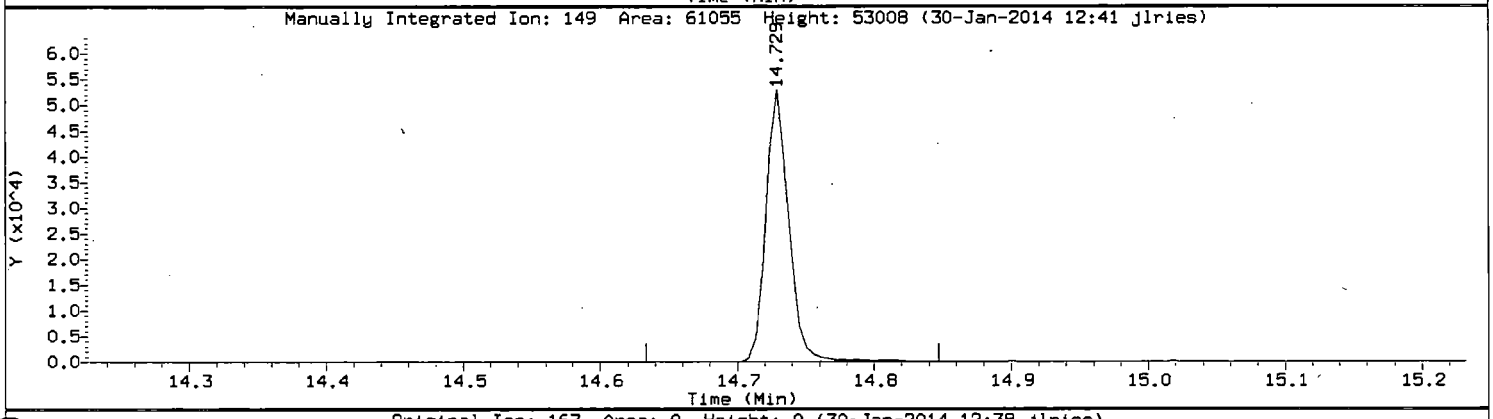
Injection Date: 30-Jan-2014 11:38
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

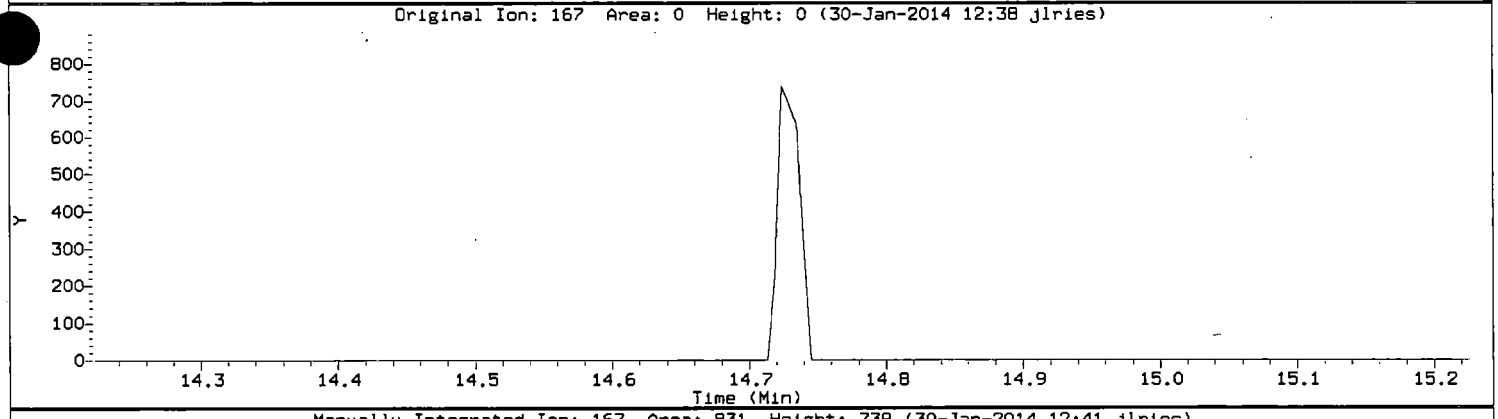


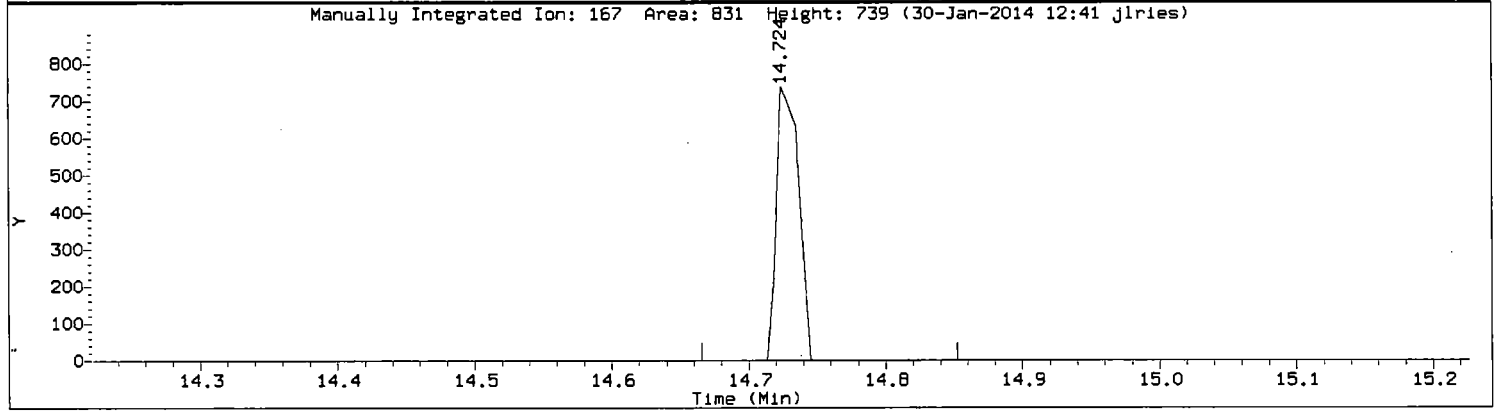
Injection Date: 30-JAN-2014 11:30
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3

Compound: di-n-Octylphthalate
CAS Number: 117-84-0

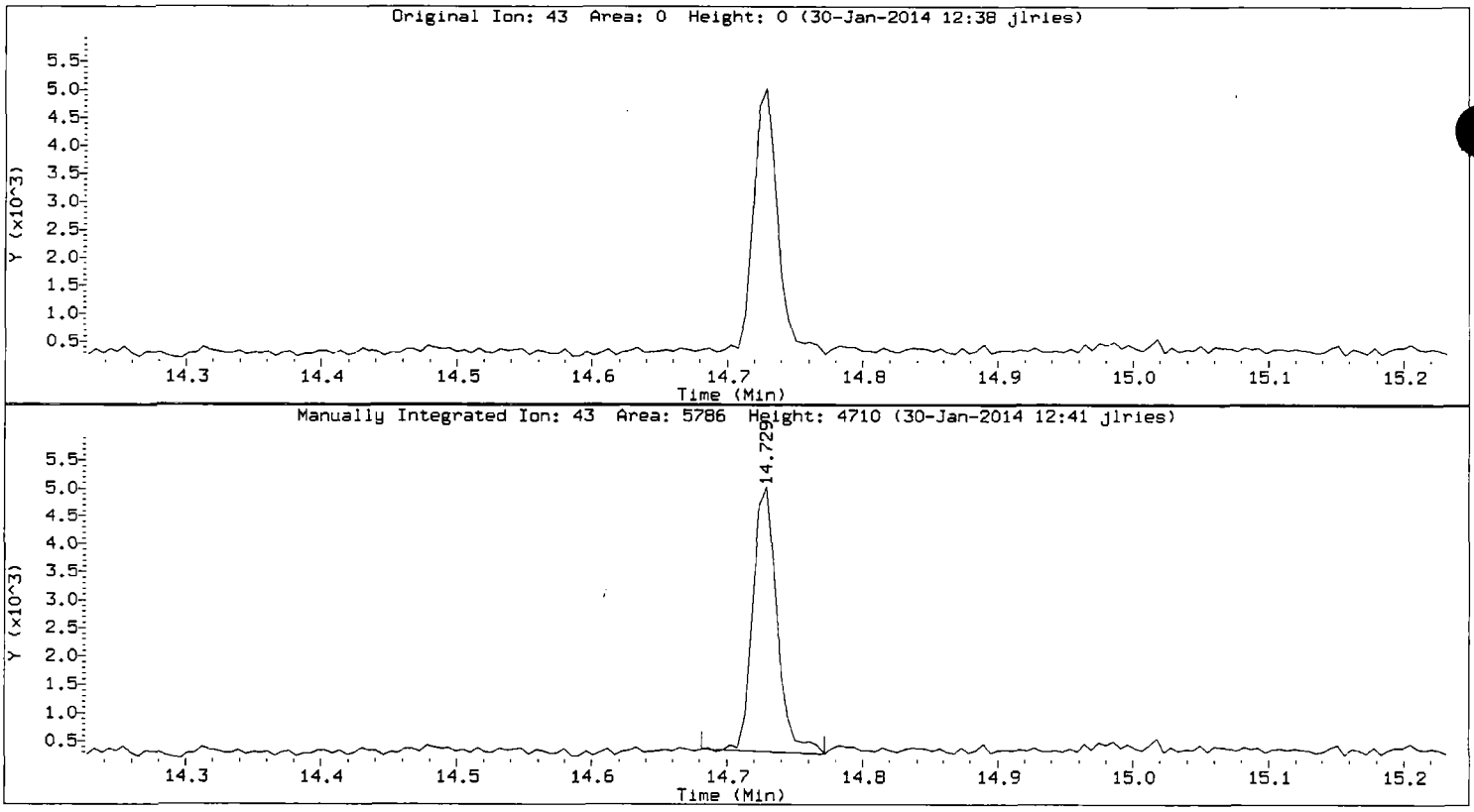








Injection Date: 30-JAN-2014 11:50
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 3



Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301409.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013014.b\01301409.D
Lab Smp Id: ICAL 10328-96 2
Inj Date : 30-JAN-2014 12:01
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICAL 10328-96 2
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Meth Date : 30-Jan-2014 13:47 10mss9.i Quant Type: ISTD
Cal Date : 30-JAN-2014 11:30 Cal File: 01301408.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * Vt / (Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.768	2.768	(0.532)	5770	5.00000	4.9(aQM)
	2 Pyridine	79	2.827	2.827	(0.543)	9169	5.00000	4.4(a)
$	3 2-Fluorophenol (S)	112	3.863	3.863	(0.742)	9503	5.00000	5.0(a)
$	4 Phenol-d6 (S)	99	4.728	4.728	(0.909)	11650	5.00000	4.9(a)
	5 Phenol	94	4.744	4.744	(0.912)	12200	5.00000	5.0(a)
	6 bis(2-Chloroethyl)ether	63	4.878	4.878	(0.937)	7838	5.00000	5.1(a)
	7 2-Chlorophenol	128	4.974	4.974	(0.956)	9398	5.00000	4.9(a)
	8 1,3-Dichlorobenzene	146	5.150	5.150	(0.990)	10725	5.00000	5.0(a)
*	9 1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	55921	40.0000	
	10 1,4-Dichlorobenzene	146	5.225	5.225	(1.004)	10822	5.00000	5.0(a)
	11 Benzyl alcohol	79	5.316	5.316	(1.022)	7591	5.00000	5.0(a)
	12 1,2-Dichlorobenzene	146	5.396	5.396	(1.037)	10086	5.00000	5.0(a)
	13 2-Methylphenol	107	5.412	5.412	(1.040)	7519	5.00000	5.0(a)
	14 bis(2-Chloroisopropyl) ether	45	5.466	5.466	(1.050)	14396	5.00000	5.0(a)
	15 3 & 4-Methylphenol	107	5.578	5.578	(1.072)	9214	5.00000	4.8(a)
	17 N-Nitroso-di-n-propylamine	70	5.605	5.605	(1.077)	5872	5.00000	4.9(aM)
	18 Hexachloroethane	117	5.786	5.786	(1.112)	4187	5.00000	5.1(a)
$	19 Nitrobenzene-d5 (S)	82	5.808	5.808	(0.870)	7812	3.75000	3.7(a)
	20 Nitrobenzene	77	5.829	5.829	(0.874)	9364	5.00000	5.0(a)
	21 Isophorone	82	6.096	6.096	(0.914)	16376	5.00000	5.0(aM)
	22 2-Nitrophenol	139	6.203	6.203	(0.930)	4247	5.00000	4.6(aM)
	23 2,4-Dimethylphenol	107	6.208	6.208	(0.930)	8399	5.00000	4.8(aQ)

Data File: \\192.168.10.12\Chem\10mss9.i\013014.b\01301409.D
Report Date: 30-Jan-2014 13:47

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	24	Benzoic acid	105	6.219	6.219	(0.932)	3411	5.00000	6.3(aQ)
	25	bis(2-Chloroethoxy)methane	93	6.326	6.326	(0.948)	10310	5.00000	5.0(a)
	26	2,4-Dichlorophenol	162	6.475	6.475	(0.970)	7071	5.00000	4.7(a)
	27	1,2,4-Trichlorobenzene	180	6.593	6.593	(0.988)	8842	5.00000	5.1(a)
*	28	Naphthalene-d8	136	6.673	6.673	(1.000)	201363	40.0000	(Q)
	29	Naphthalene	128	6.700	6.700	(1.004)	27629	5.00000	5.2(a)
	30	4-Chloroaniline	127	6.732	6.732	(1.009)	10886	5.00000	4.8(a)
	31	Hexachlorobutadiene	225	6.833	6.833	(1.024)	5023	5.00000	4.9(a)
	32	4-Chloro-3-methylphenol	107	7.282	7.282	(1.091)	6647	5.00000	4.8(a)
	33	2-Methylnaphthalene	142	7.533	7.533	(1.129)	17596	5.00000	5.1(a)
	34	1-Methylnaphthalene	142	7.656	7.656	(1.147)	16180	5.00000	5.1(a)
	35	Hexachlorocyclopentadiene	237	7.725	7.725	(0.875)	4428	5.00000	4.3(aM)
	36	2,4,6-Trichlorophenol	196	7.859	7.859	(0.890)	4704	5.00000	4.6(a)
	37	2,4,5-Trichlorophenol	196	7.902	7.902	(0.895)	5356	5.00000	4.8(a)
$	38	2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	14641	3.75000	3.7(a)
	39	2-Chloronaphthalene	162	8.137	8.137	(0.921)	16373	5.00000	5.1(a)
	40	2-Nitroaniline	65	8.233	8.233	(0.932)	4456	5.00000	4.7(a)
	41	Dimethylphthalate	163	8.447	8.447	(0.956)	17668	5.00000	5.1(aQM)
	42	2,6-Dinitrotoluene	165	8.527	8.527	(0.966)	3963	5.00000	4.9(a)
	43	Acenaphthylene	152	8.655	8.655	(0.980)	26853	5.00000	5.2(aM)
	44	3-Nitroaniline	138	8.740	8.740	(0.990)	4148	5.00000	5.0(aM)
*	45	Acenaphthene-d10	164	8.831	8.831	(1.000)	106009	40.0000	
	46	Acenaphthene	154	8.869	8.869	(1.004)	15921	5.00000	5.0(a)
	47	2,4-Dinitrophenol	184	8.869	8.869	(1.004)	917	5.00000	8.0(aQM)
	48	4-Nitrophenol	65	8.906	8.906	(1.008)	2694	5.00000	4.4(a)
	49	2,4-Dinitrotoluene	165	9.029	9.029	(1.022)	4703	5.00000	4.6(a)
	50	Dibenzofuran	168	9.082	9.082	(1.028)	23663	5.00000	5.1(a)
	51	Diethylphthalate	149	9.323	9.323	(1.056)	17206	5.00000	4.9(a)
	52	4-Chlorophenylphenyl ether	204	9.494	9.494	(1.075)	9569	5.00000	5.1(a)
	53	4-Nitroaniline	138	9.494	9.494	(1.075)	4525	5.00000	4.9(a)
	54	Fluorene	166	9.510	9.510	(1.077)	19166	5.00000	5.1(a)
	55	4,6-Dinitro-2-methylphenol	198	9.536	9.536	(0.892)	1526	5.00000	7.8(aQM)
	56	N-Nitrosodiphenylamine	169	9.633	9.633	(0.901)	15840	5.00000	5.0(a)
	57	Azobenzene	77	9.691	9.691	(1.097)	17288	5.00000	5.0(a)
	58	1,2-Diphenylhydrazine	77	9.691	9.691	(1.097)	17288	5.00000	5.0(a)
$	59	2,4,6-Tribromophenol (S)	330	9.804	9.804	(1.110)	2201	5.00000	4.3(aM)
	60	4-Bromophenylphenyl ether	248	10.108	10.108	(0.946)	5262	5.00000	4.8(a)
	61	Hexachlorobenzene	284	10.204	10.204	(0.955)	5900	5.00000	5.1(a)
	62	Pentachlorophenol	266	10.434	10.434	(0.976)	2088	5.00000	3.5(a)
*	63	Phenanthrene-d10	188	10.690	10.690	(1.000)	198506	40.0000	
	64	Phenanthrene	178	10.717	10.717	(1.002)	26986	5.00000	5.1(a)
	65	Anthracene	178	10.781	10.781	(1.008)	26636	5.00000	5.0(a)
	66	Carbazole	167	10.963	10.963	(1.025)	25544	5.00000	5.0(a)
	67	di-n-Butylphthalate	149	11.364	11.364	(1.063)	28502	5.00000	4.8(a)
	68	Fluoranthene	202	12.208	12.208	(1.142)	30019	5.00000	4.9(a)
	69	Benzidine	184	12.341	12.341	(0.882)	14178	5.00000	3.9(a)
	70	Pyrene	202	12.496	12.496	(0.893)	32051	5.00000	5.1(a)
$	71	Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	16864	3.75000	3.8(a)
	72	Butylbenzylphthalate	149	13.244	13.244	(0.947)	12066	5.00000	4.6(a)
	73	bis(2-Ethylhexyl)phthalate	149	13.938	13.938	(0.996)	17162	5.00000	4.6(aM)
	74	3,3'-Dichlorobenzidine	252	13.922	13.922	(0.995)	9569	5.00000	5.3(a)
	75	Benzo(a)anthracene	228	13.981	13.981	(0.999)	30493	5.00000	5.2(a)
*	76	Chrysene-d12	240	13.992	13.992	(1.000)	207557	40.0000	(Q)
	77	Chrysene	228	14.024	14.024	(1.002)	27721	5.00000	5.1(a)

Data File: \\192.168.10.12\Chem\10MSS9.I\013014.D\01301409.D
Report Date: 30-Jan-2014 13:47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	78 di-n-Octylphthalate	149	14.729	14.729	(1.053)	29270	5.00000	4.6(aQM)
	79 Benzo(b)fluoranthene	252	15.381	15.381	(0.962)	28054	5.00000	4.8(a)
	80 Benzo(k)fluoranthene	252	15.418	15.418	(0.964)	29088	5.00000	4.9(a)
	81 Benzo(a)pyrene	252	15.899	15.899	(0.994)	26946	5.00000	4.8(a)
*	82 Perylene-d12	264	15.990	15.990	(1.000)	198257	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	18.052	18.052	(1.129)	29783	5.00000	4.8(aQ)
	84 Dibenzo(a,h)anthracene	278	18.079	18.079	(1.131)	25159	5.00000	4.8(a)
	85 Benzo(g,h,i)perylene	276	18.682	18.682	(1.168)	24799	5.00000	4.7(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301409.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01301409.D
Lab Smp Id: ICAL 10328-96 2
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Misc Info:

Calibration Date: 30-JAN-2014
Calibration Time: 10:00
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

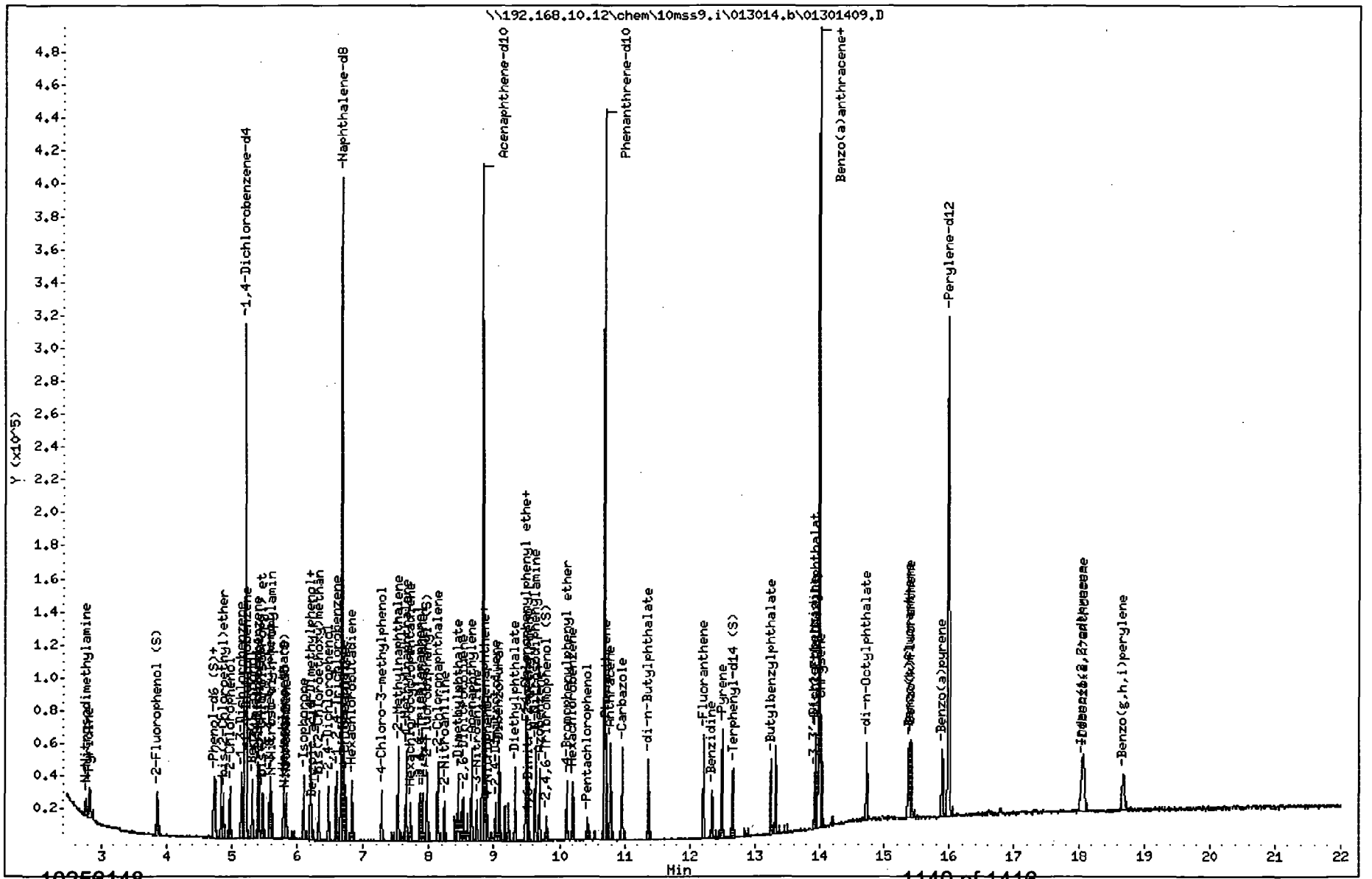
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	55114	27557	110228	55921	1.46
28 Naphthalene-d8	204229	102115	408458	201363	-1.40
45 Acenaphthene-d10	107656	53828	215312	106009	-1.53
63 Phenanthrene-d10	198170	99085	396340	198506	0.17
76 Chrysene-d12	212105	106053	424210	207557	-2.14
82 Perylene-d12	202468	101234	404936	198257	-2.08

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	0.00
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	15.99	15.49	16.49	15.99	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

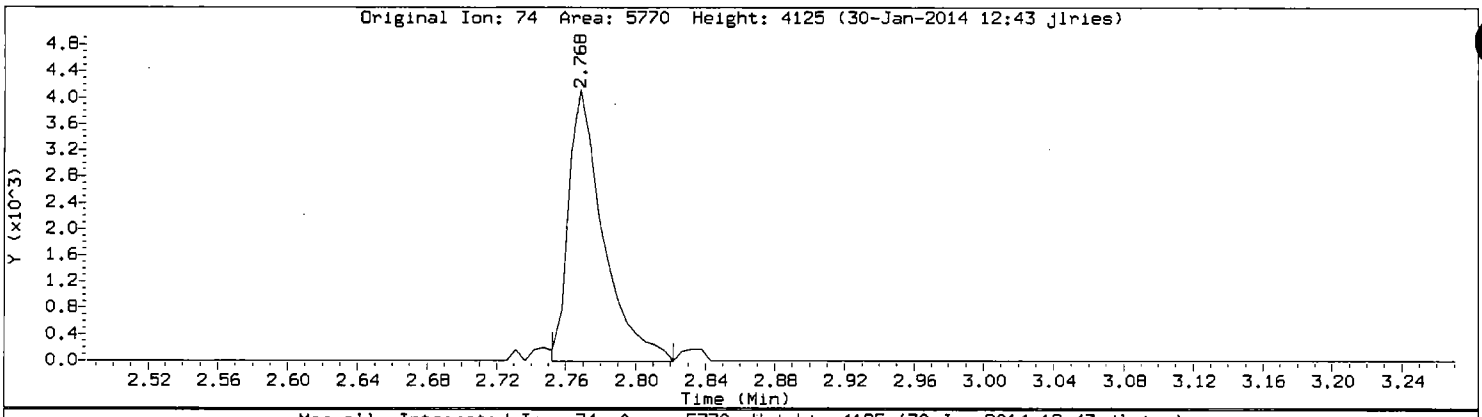
Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301409.D
Date : 30-JAN-2014 12:01
Client ID:
Sample Info: ICAL 10328-96 2
Purge Volume: 1.0
Column phase: DB-5MS

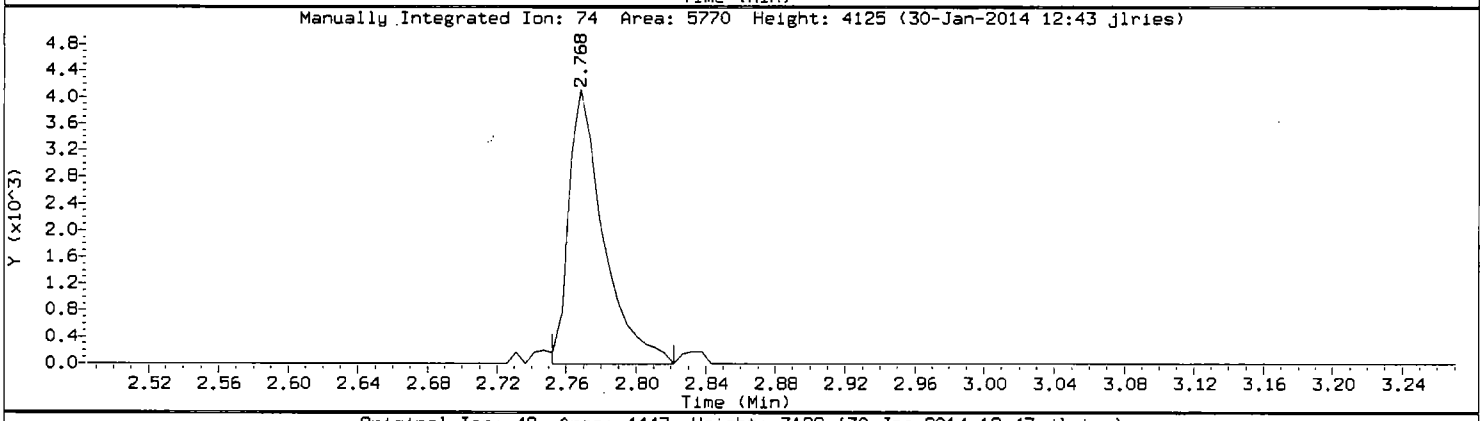
Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25

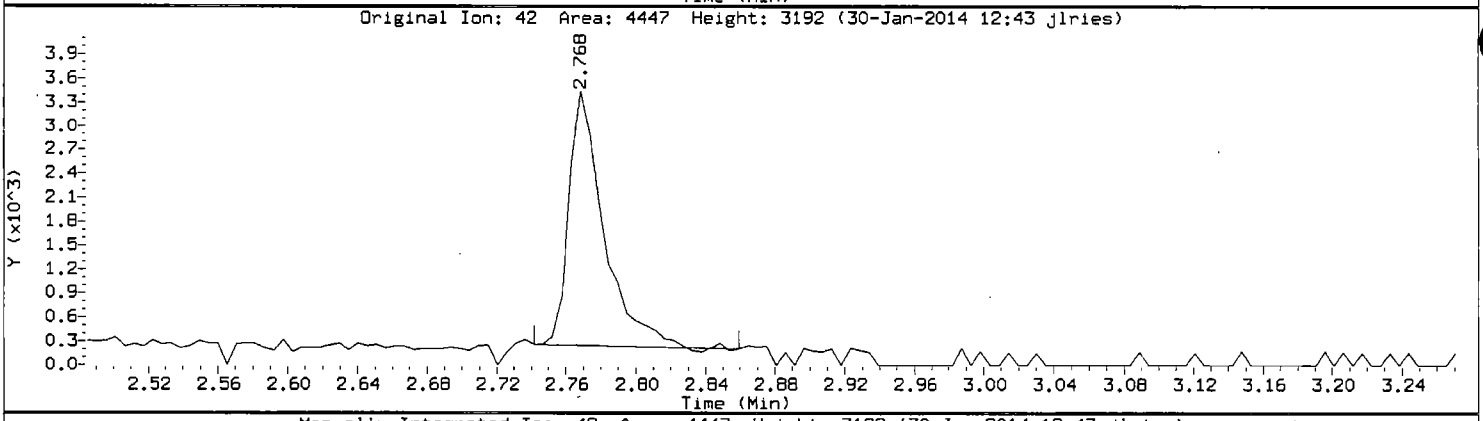


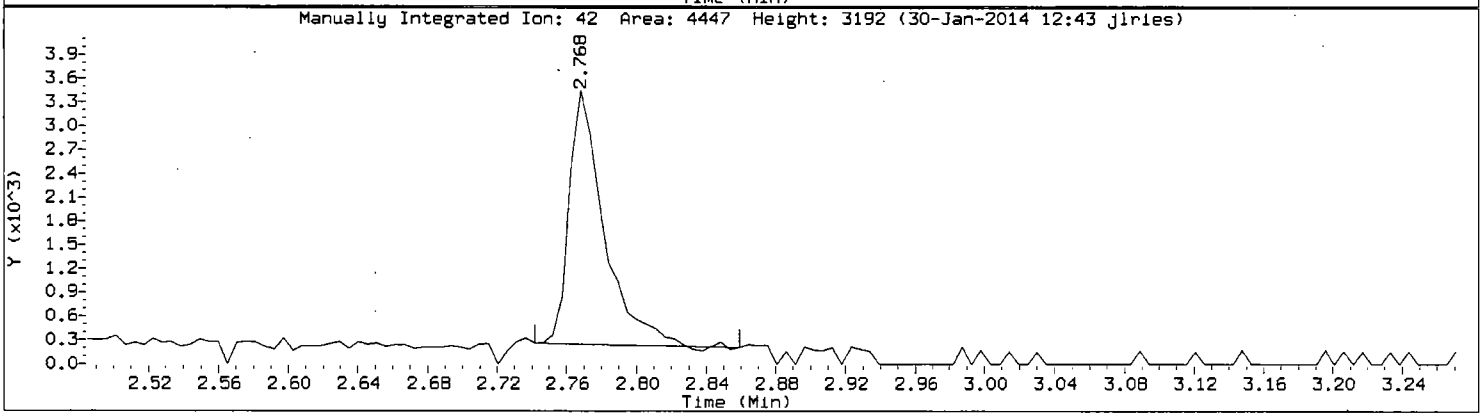
Injection Date: 30-JAN-2014 12:01
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: N-Nitrosodimethylamine
CAS Number: 62-75-9









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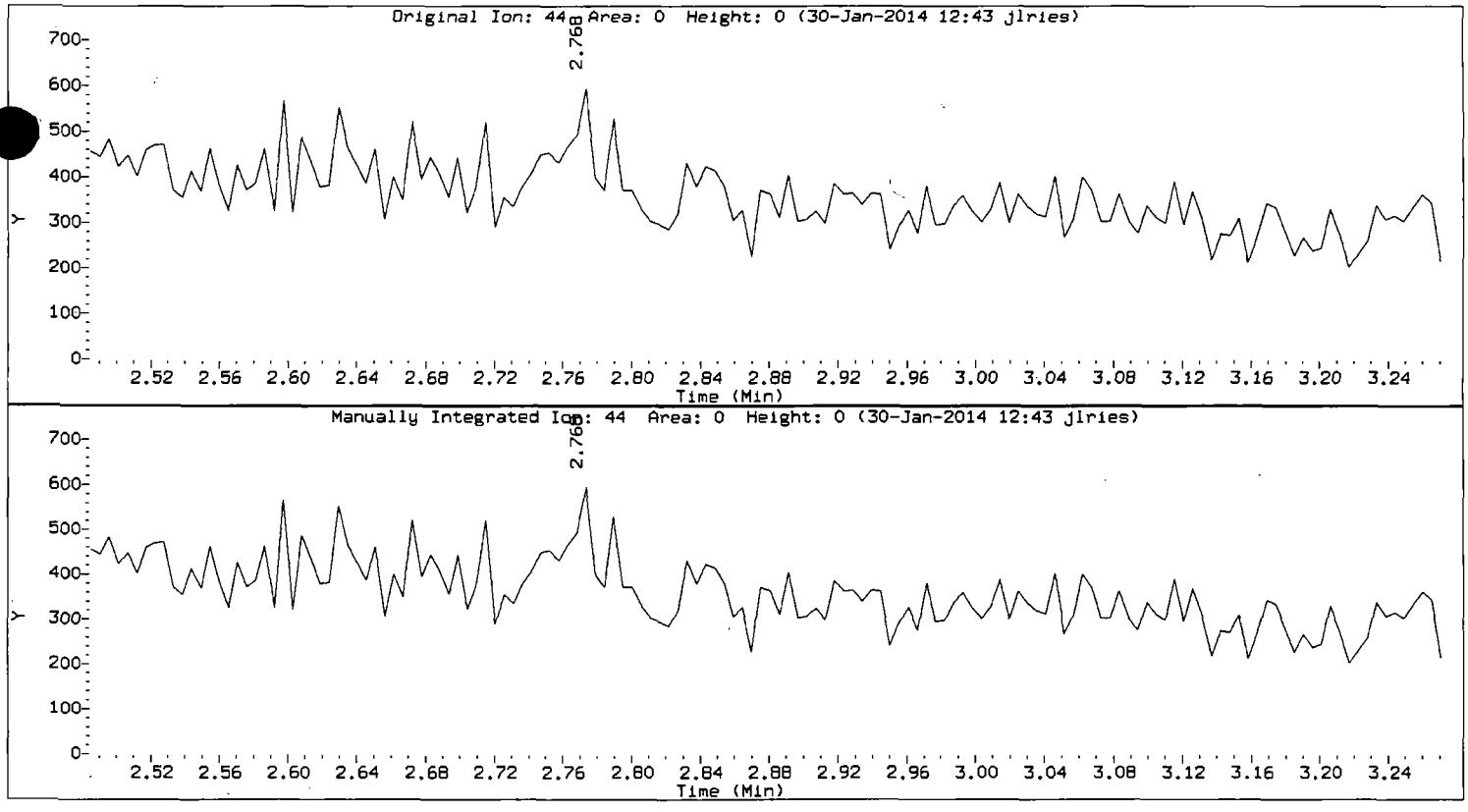
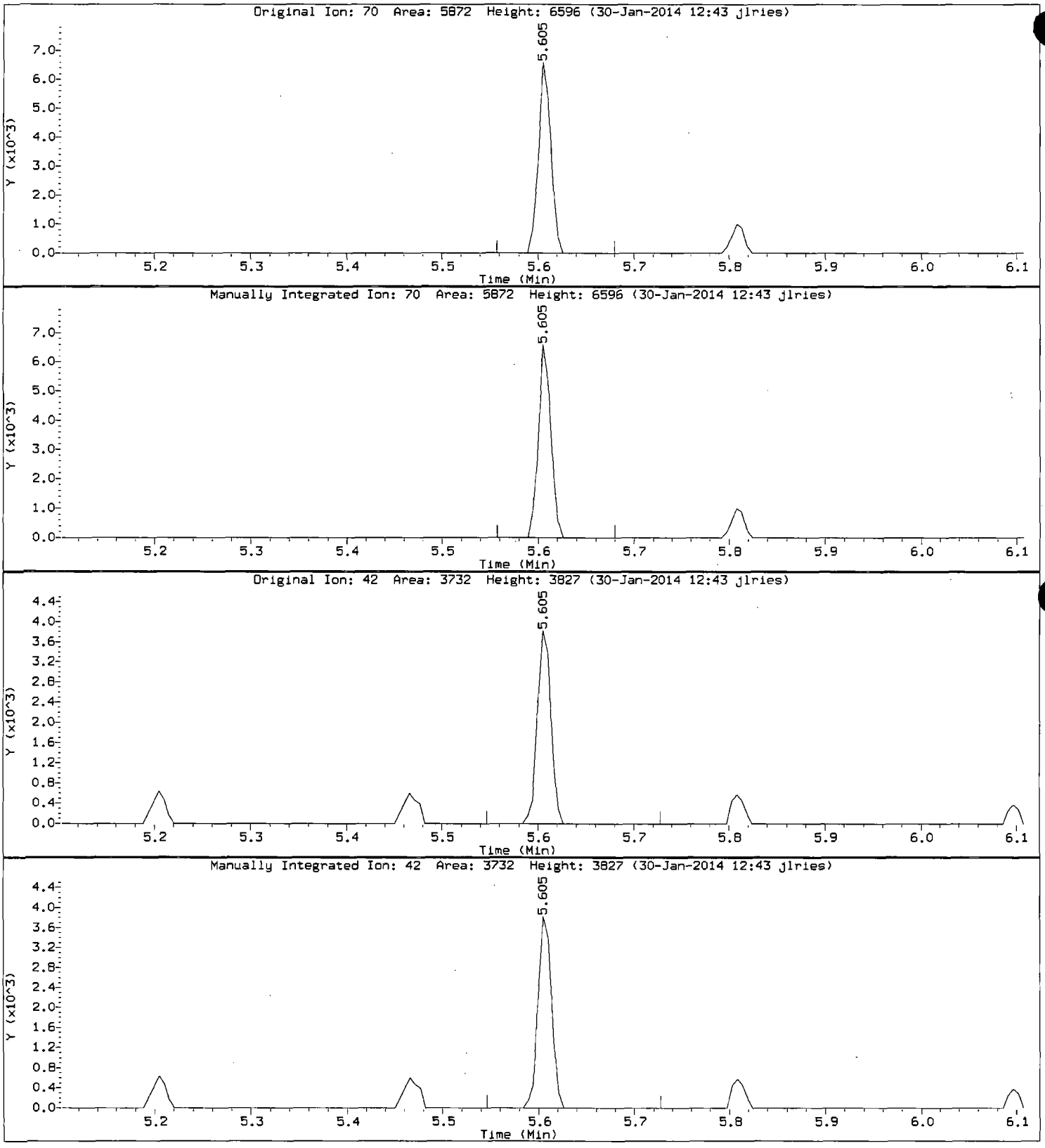
Lab Sample ID: ICAL 10328-96 2



Injection Date: 30-JAN-2014 12:01
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: N-Nitroso-di-n-propylamine
CAS Number: 621-64-7



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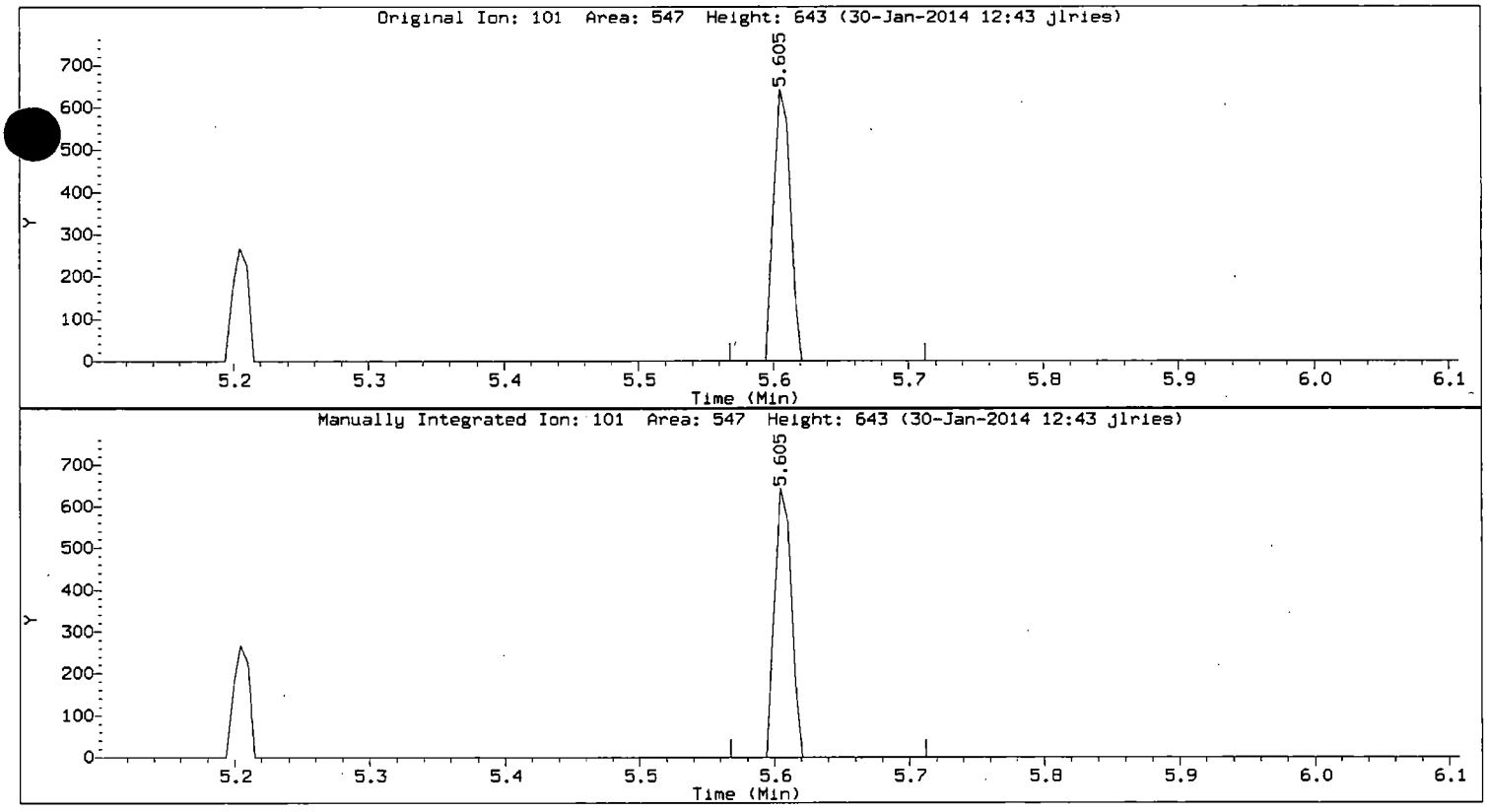
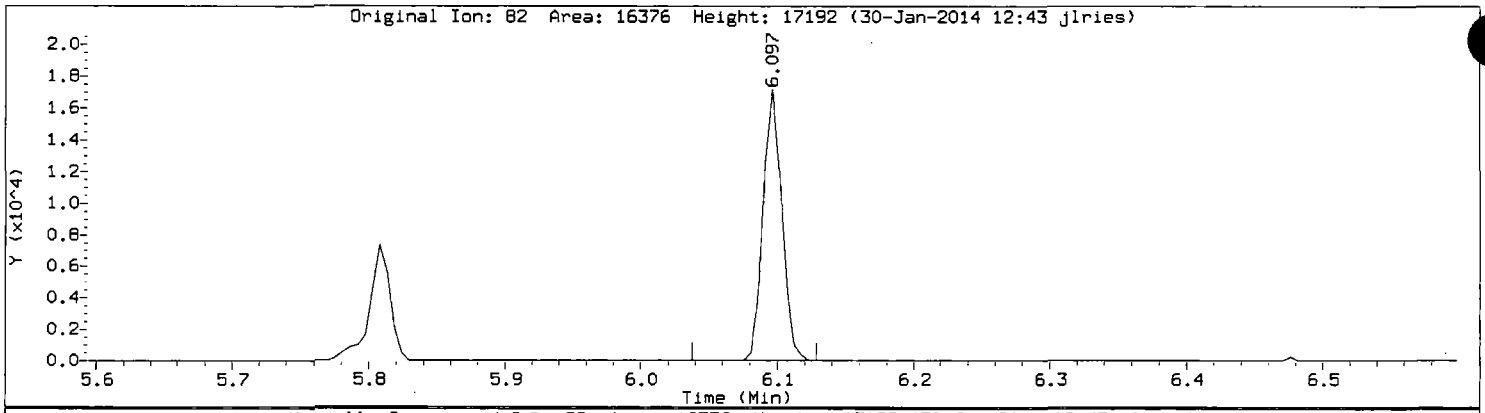
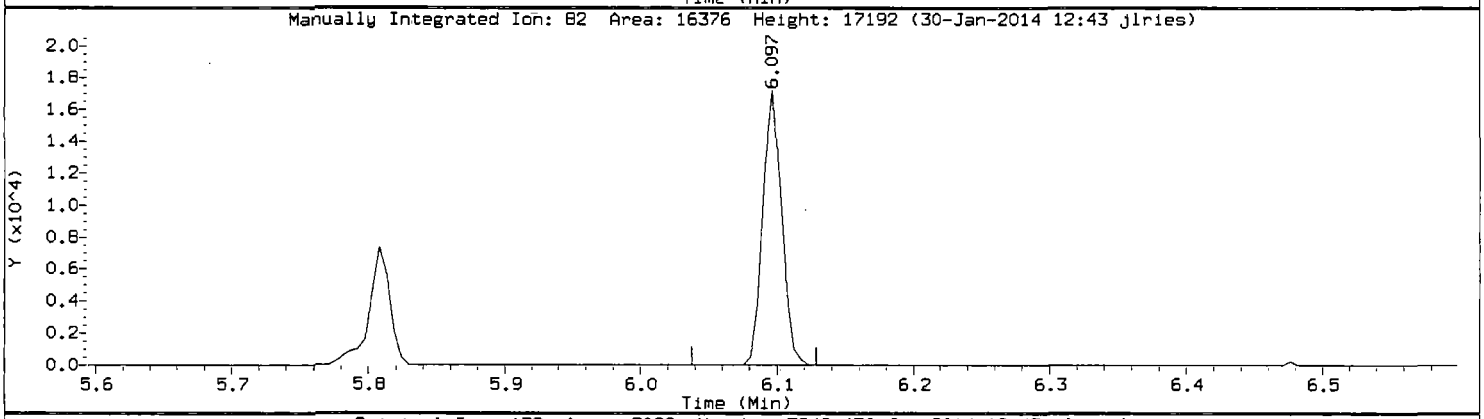
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

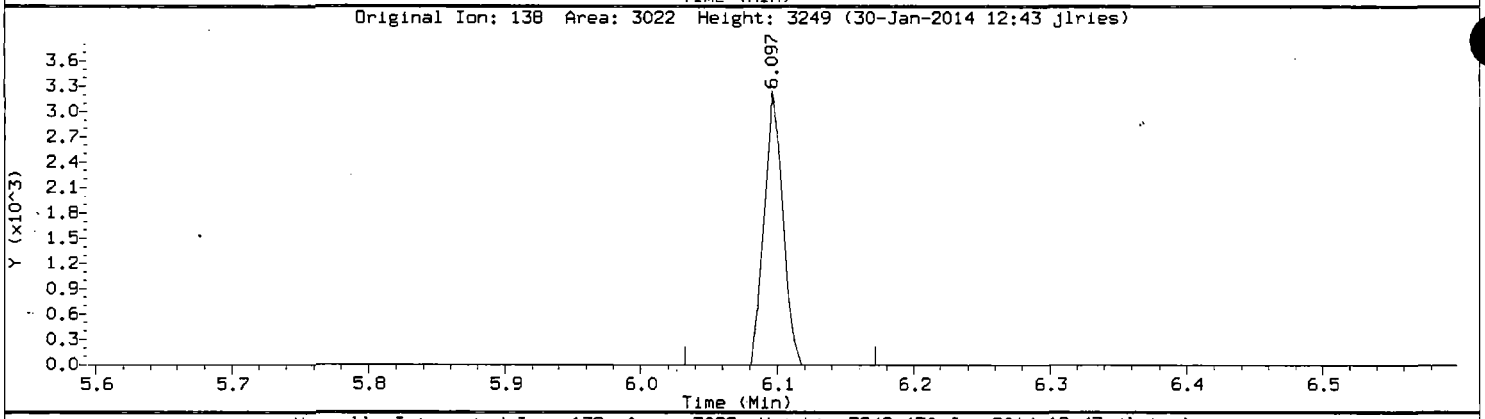


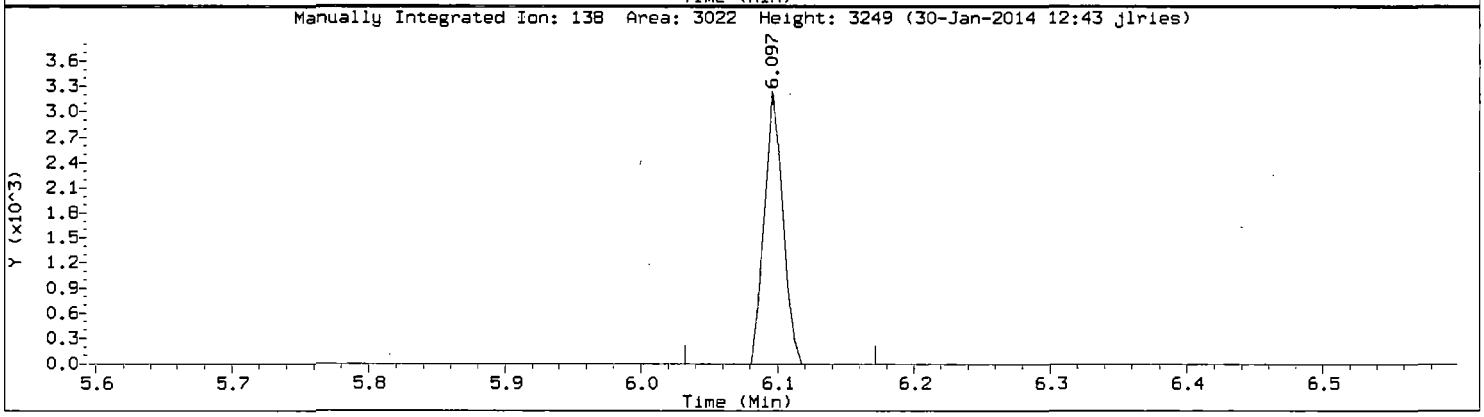
Injection Date: 30-JAN-2014 12:01
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Isophorone
CAS Number: 78-59-1









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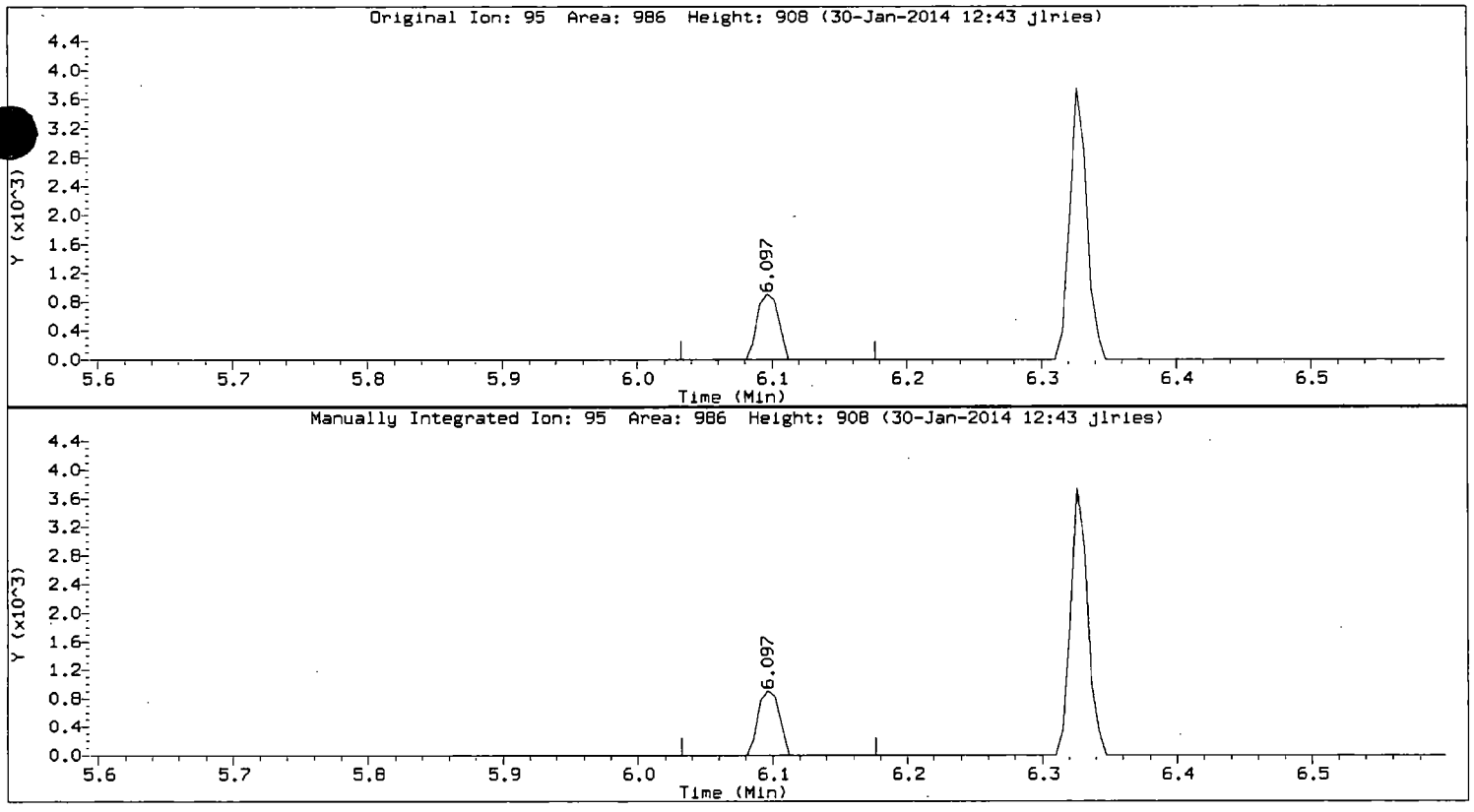
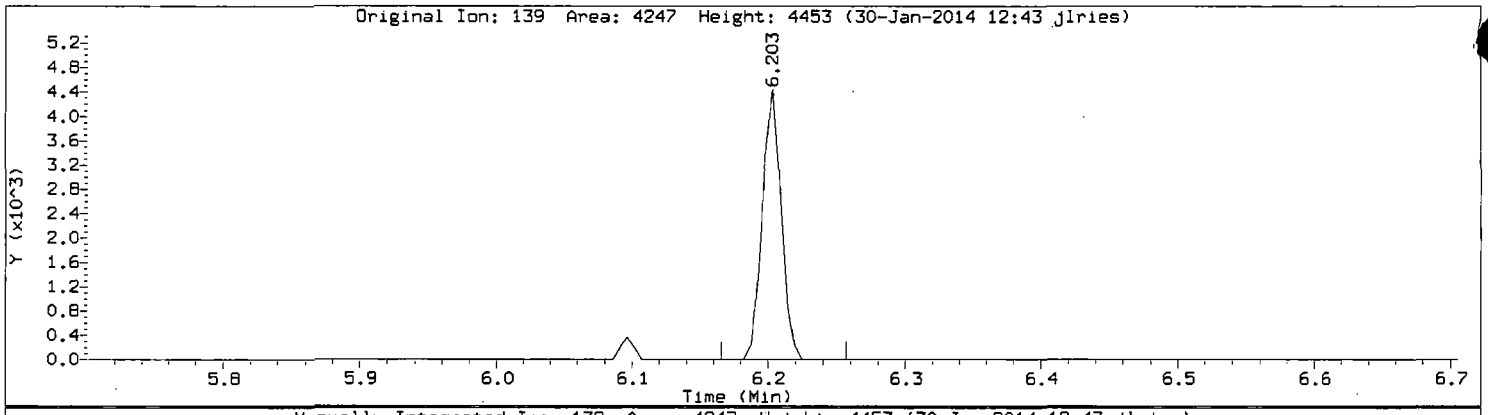
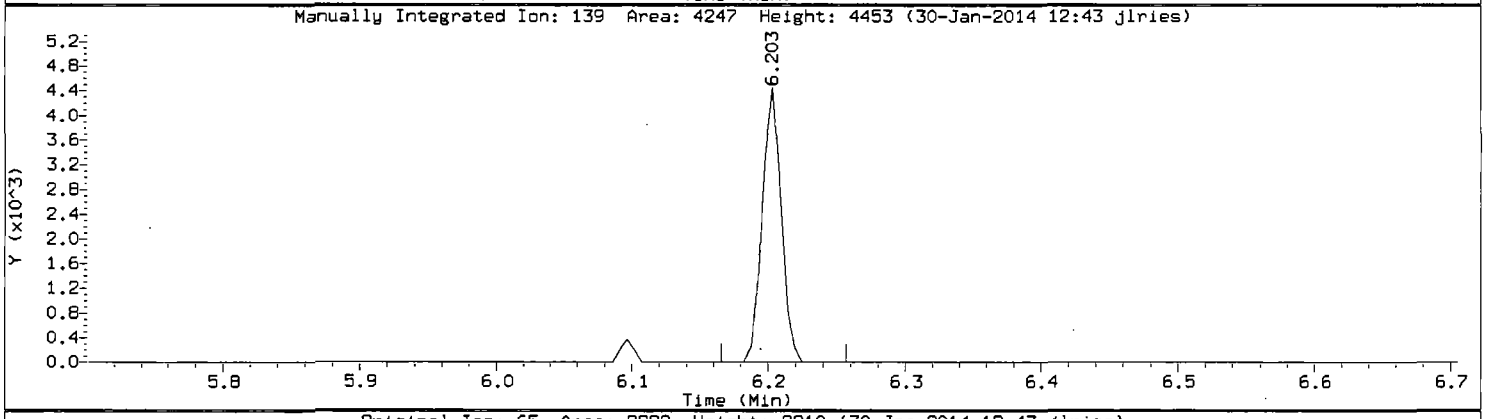
Lab Sample ID: ICAL 10328-96 2

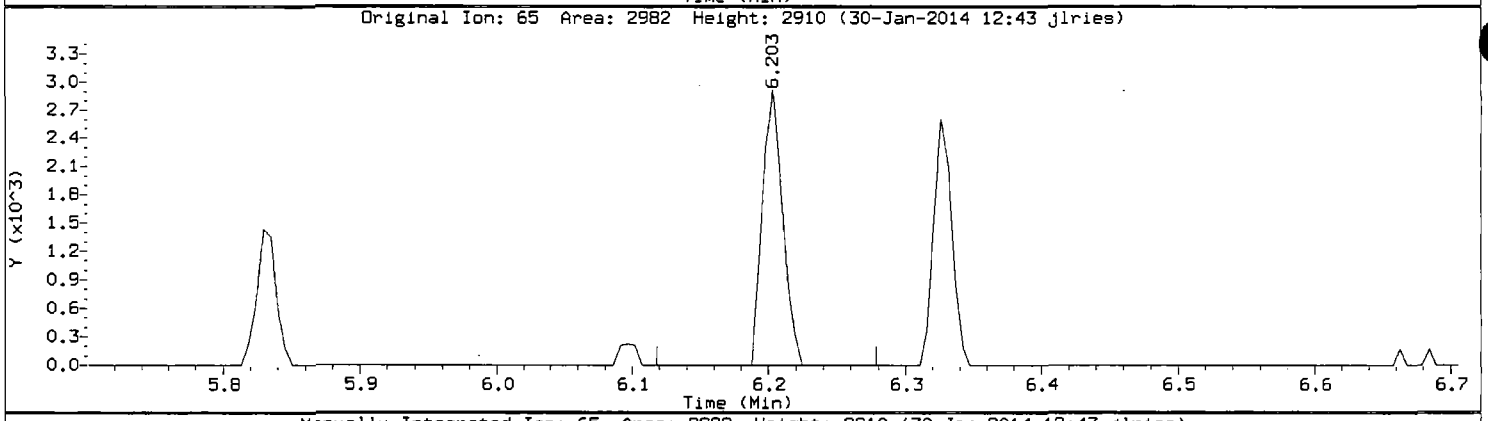


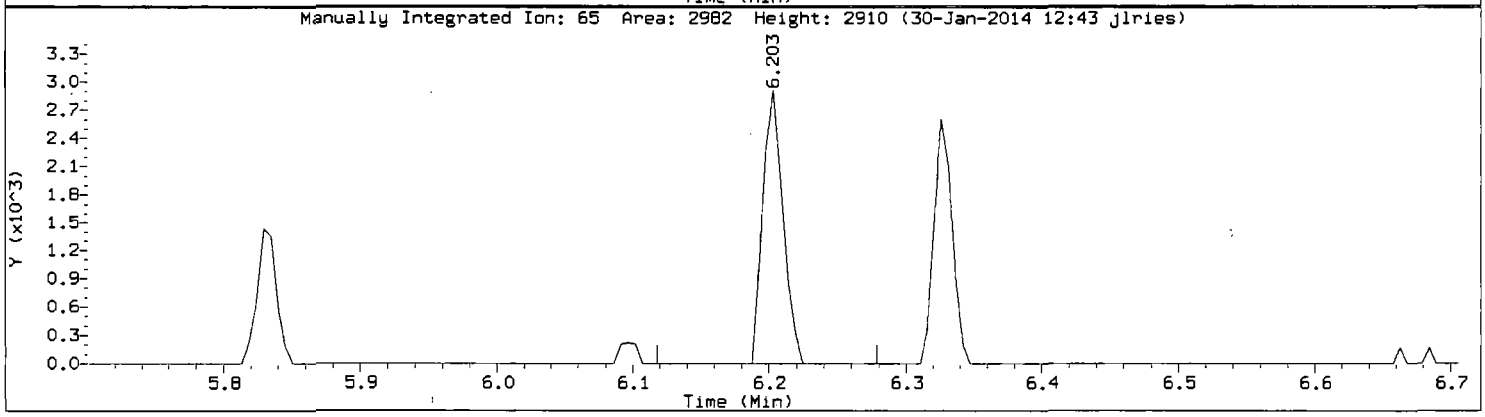
Injection Date: 30-JAN-2014 12:01
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: 2-Nitrophenol
CAS Number: 88-75-5









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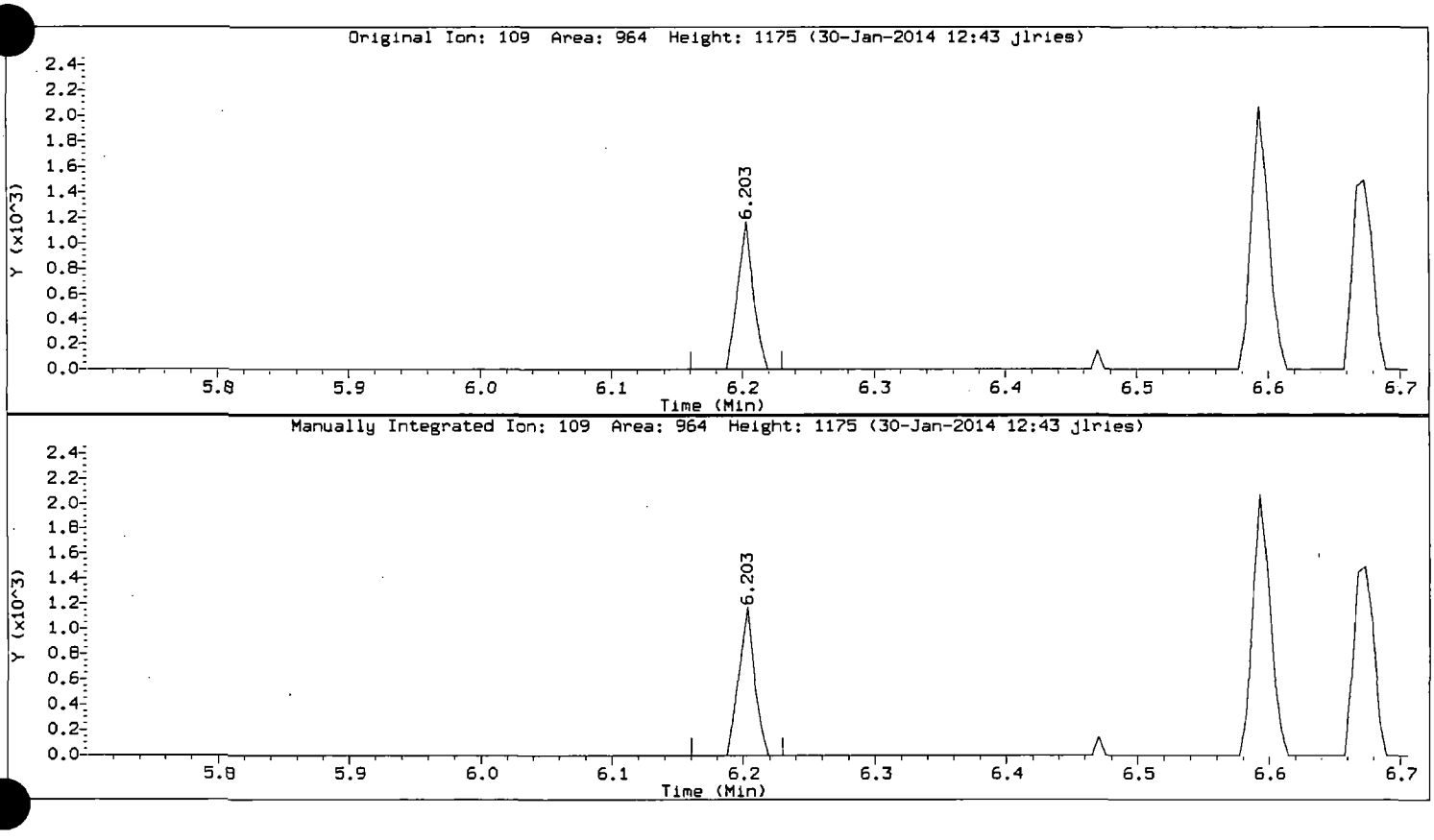
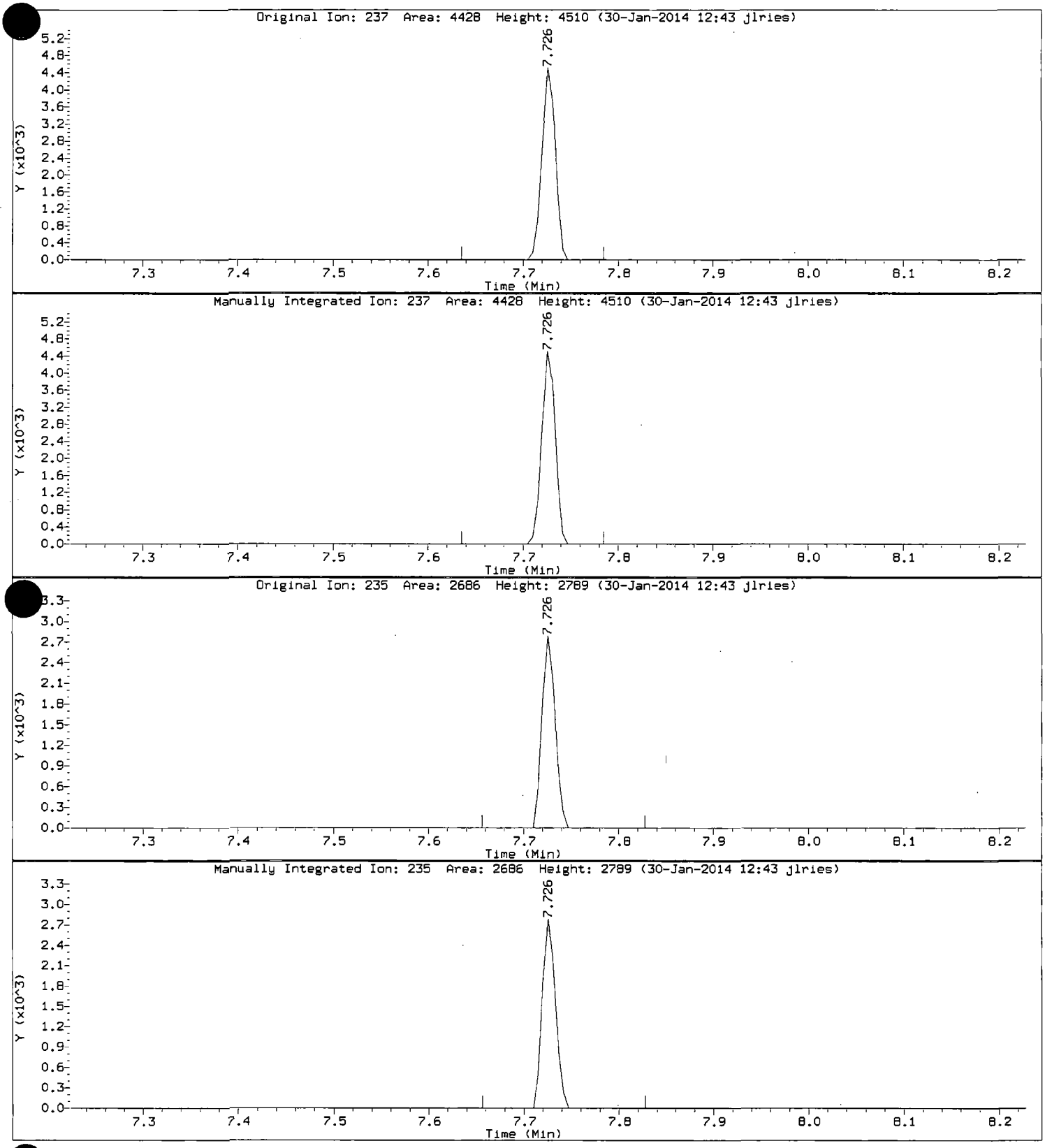
Lab Sample ID: ICAL 10328-96 2



Injection Date: 30-JAN-2014 12:01
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Hexachlorocyclopentadiene
CAS Number: 77-47-4



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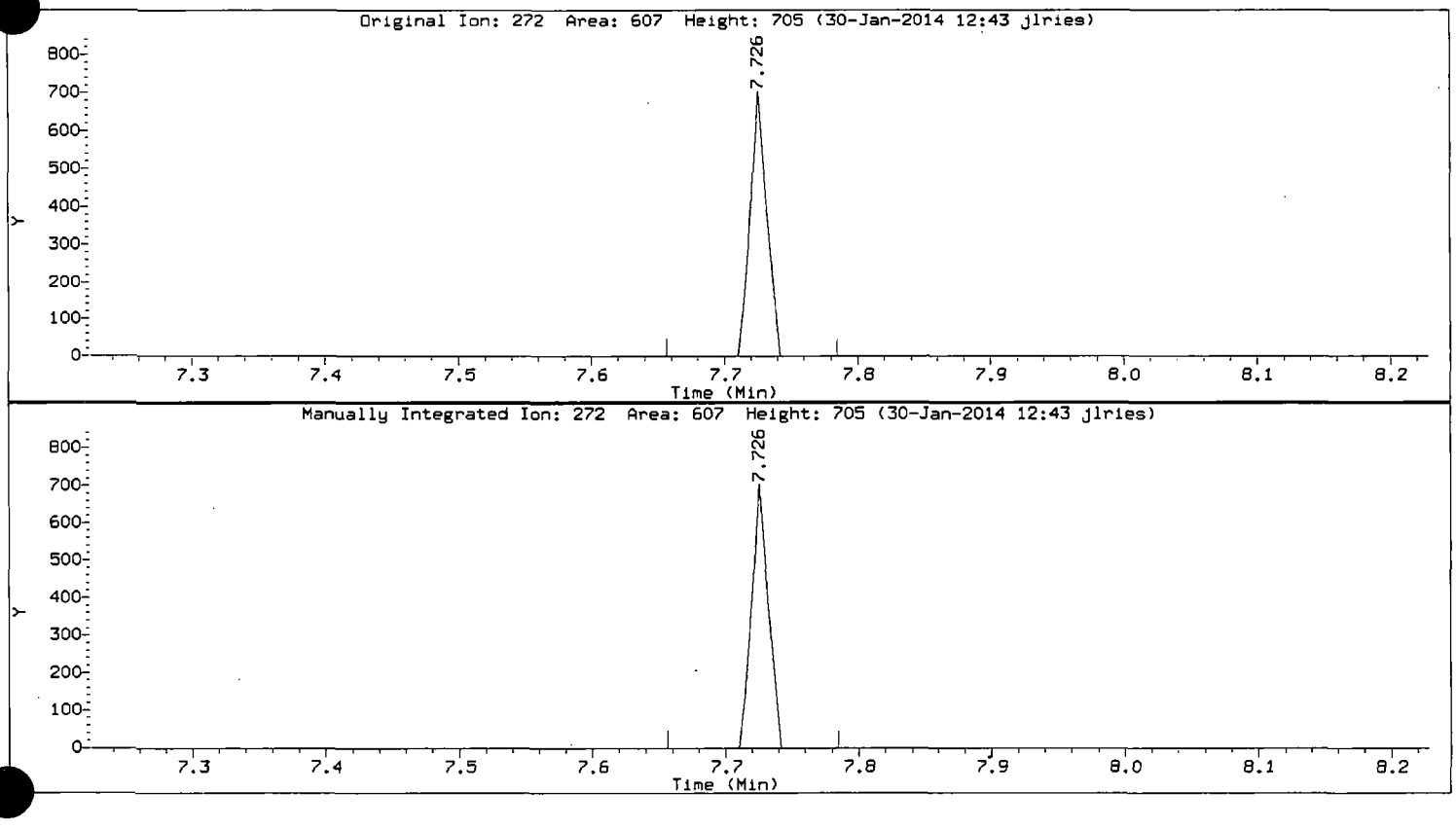
Lab Sample ID: ICAL 10328-96 2



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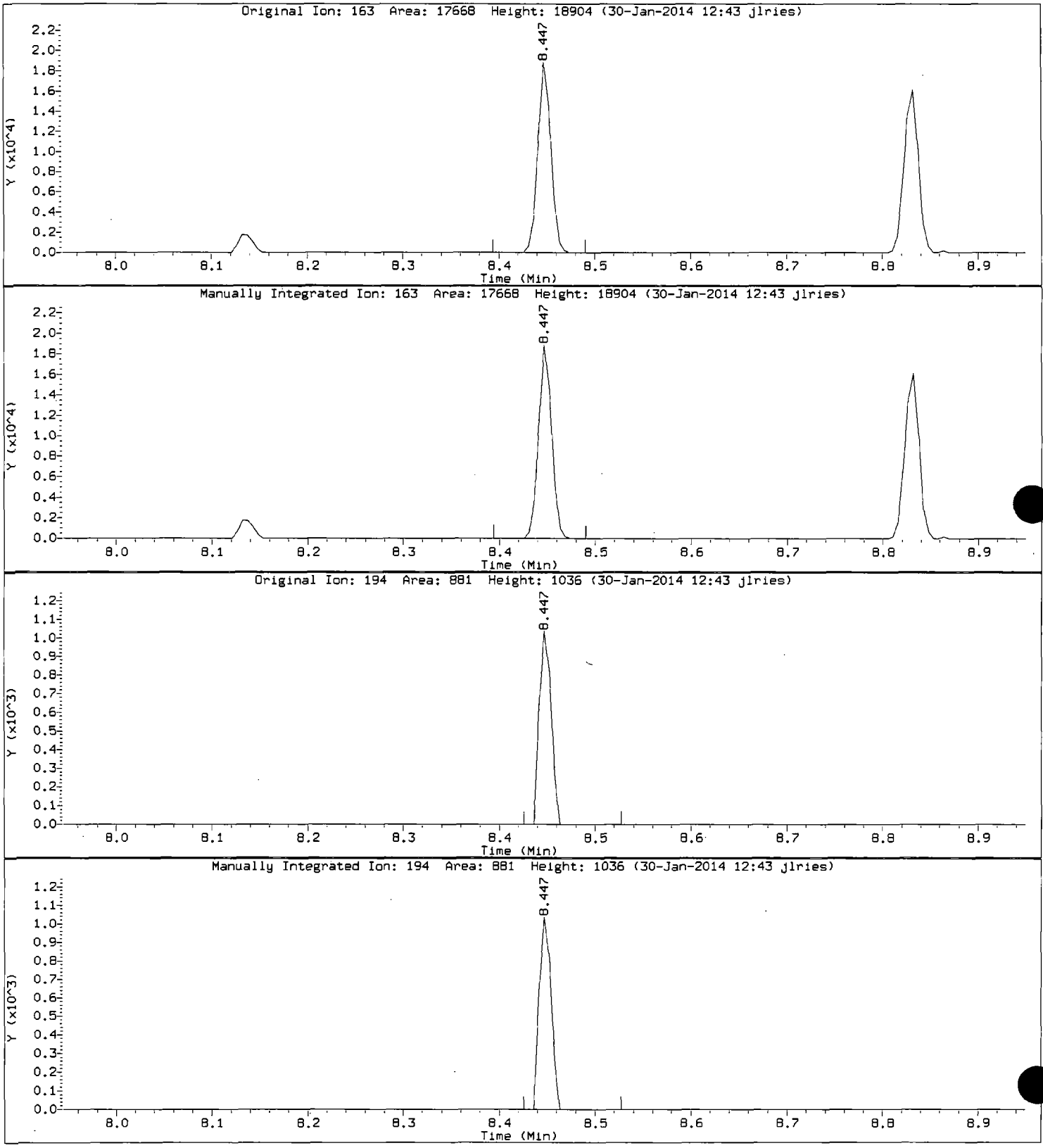
Injection Date: 30-JAN-2014 12:01
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Dimethylphthalate
CAS Number: 131-11-3



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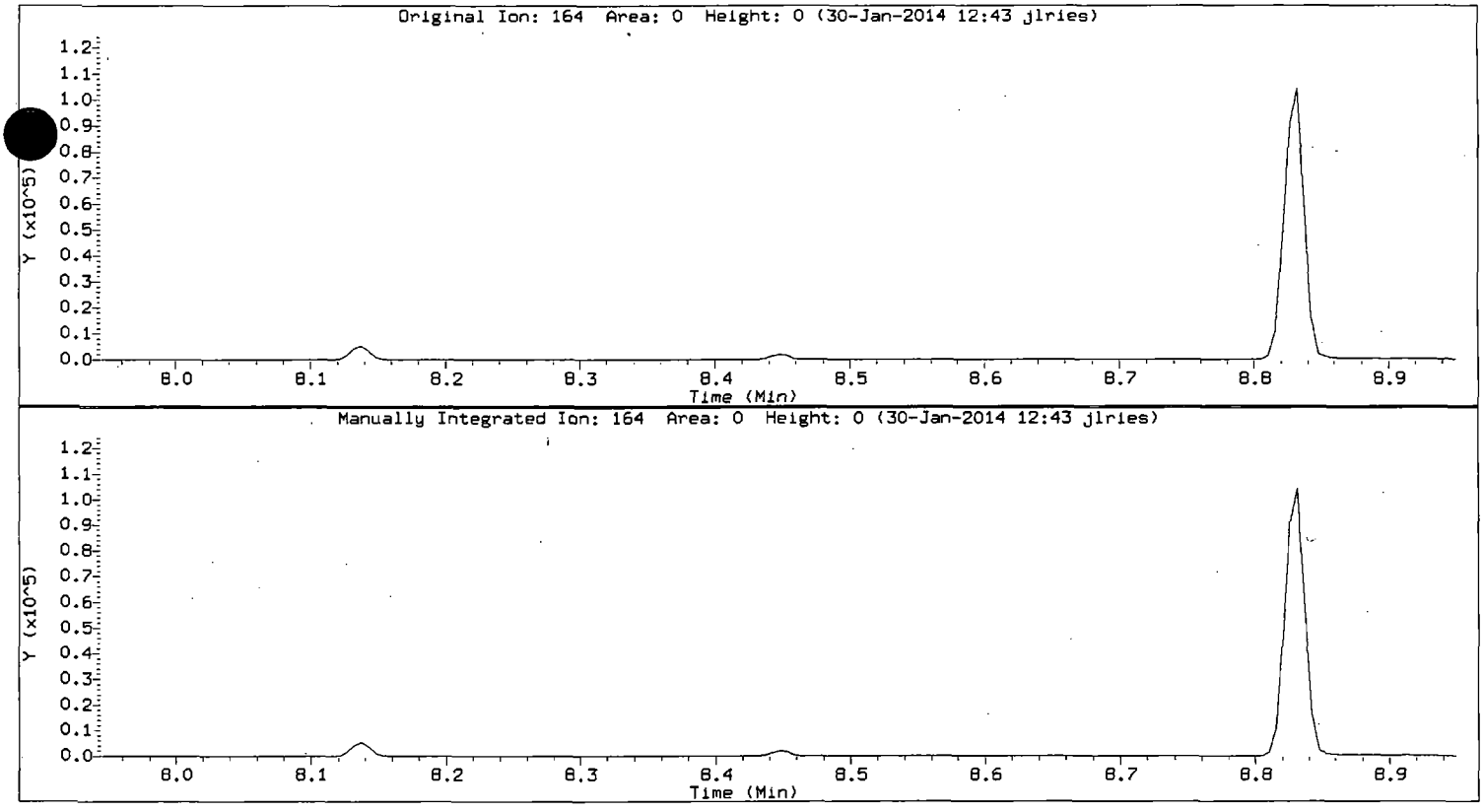
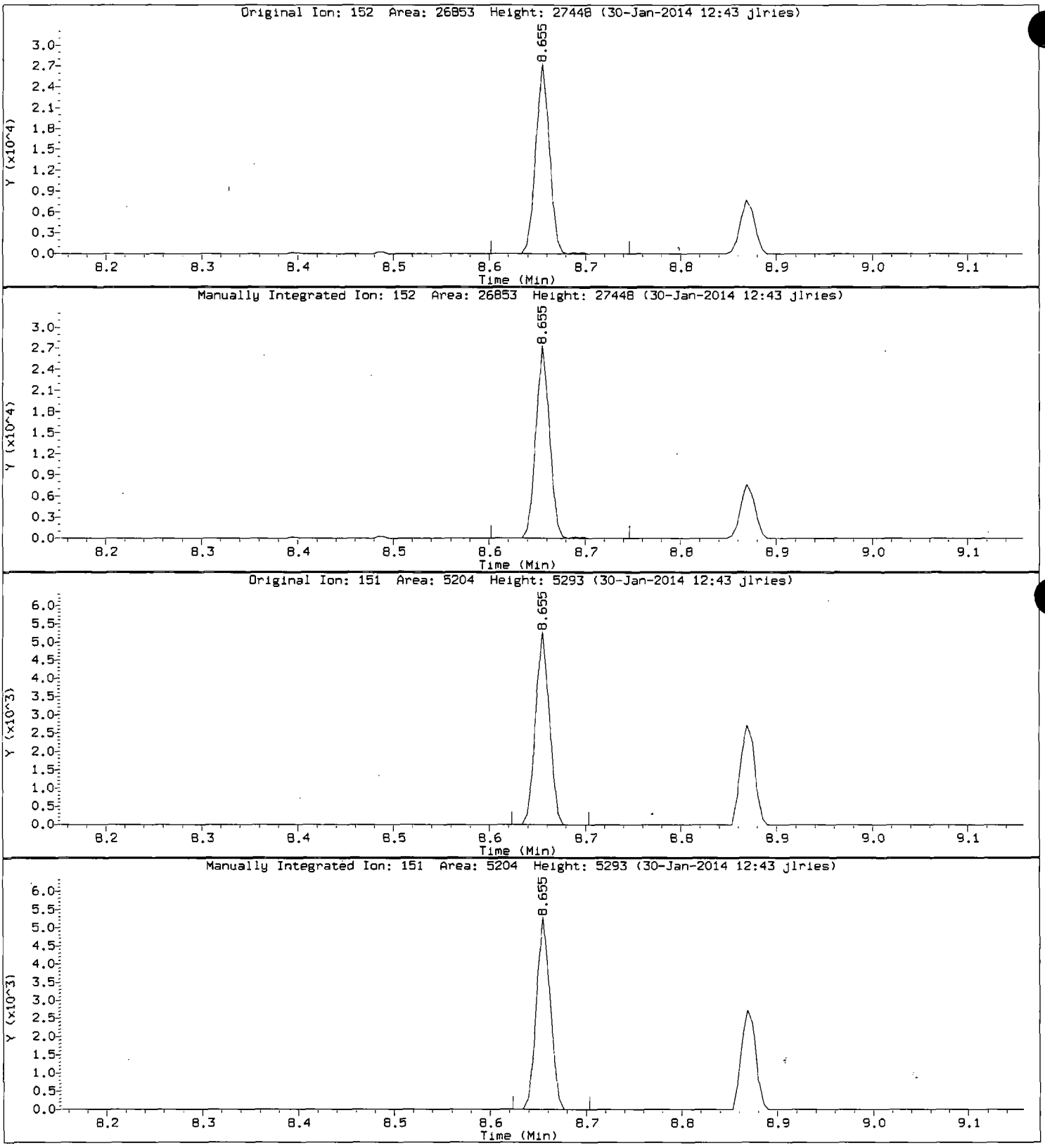
Lab Sample ID: ICAL 10328-96 2



Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: Acenaphthylene
CAS Number: 208-96-8



Injection Date: 30-JAN-2014 12:01
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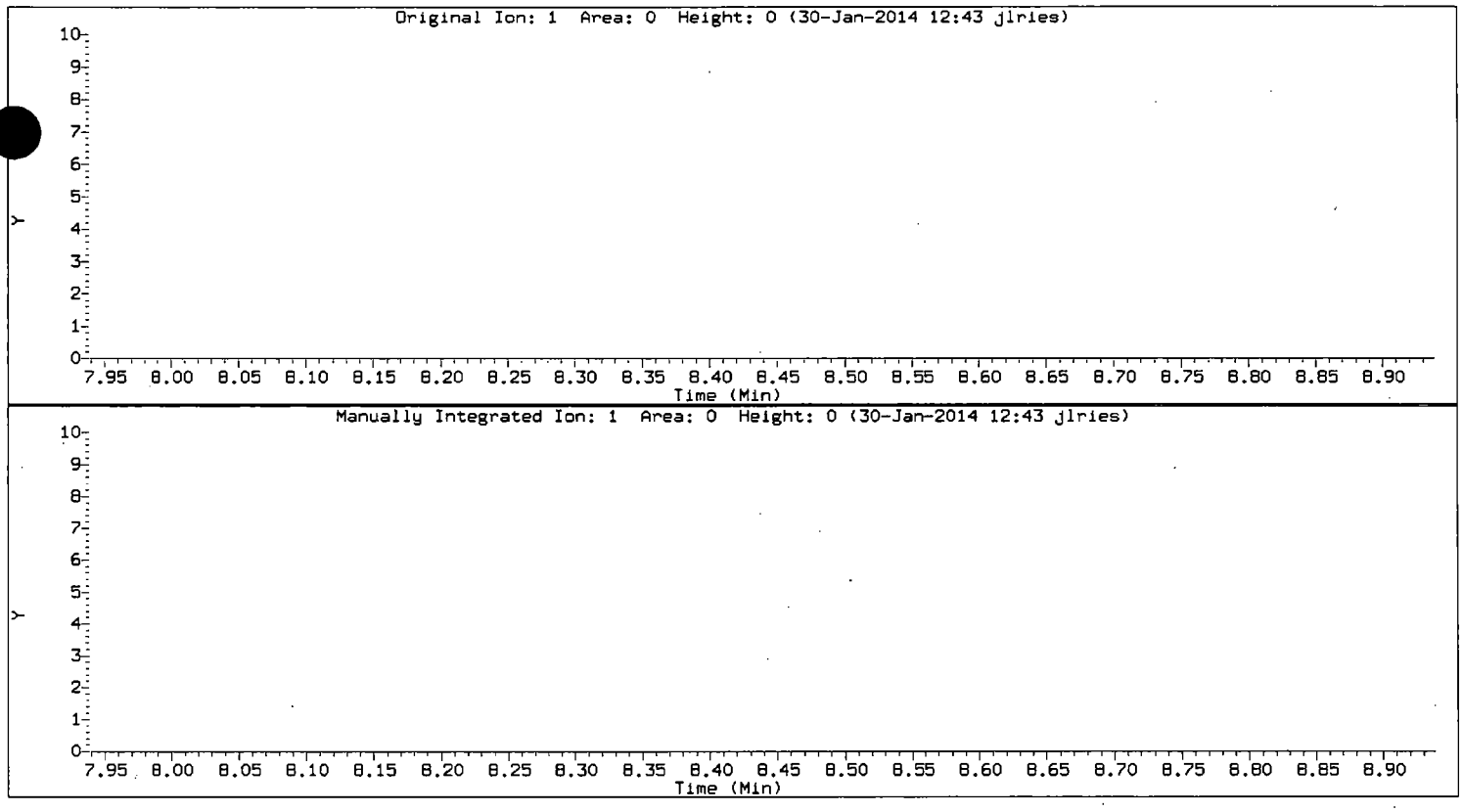
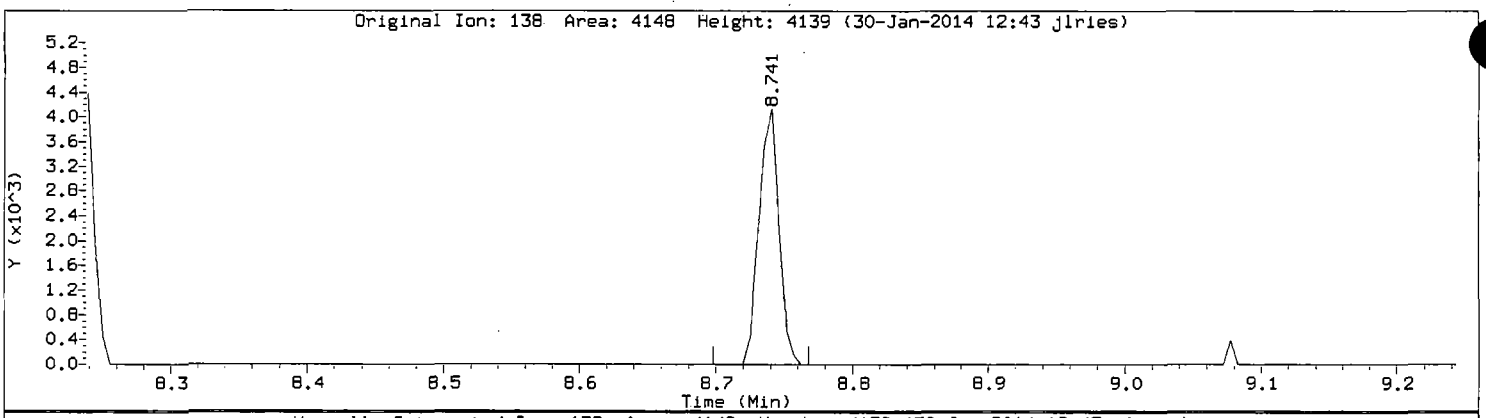
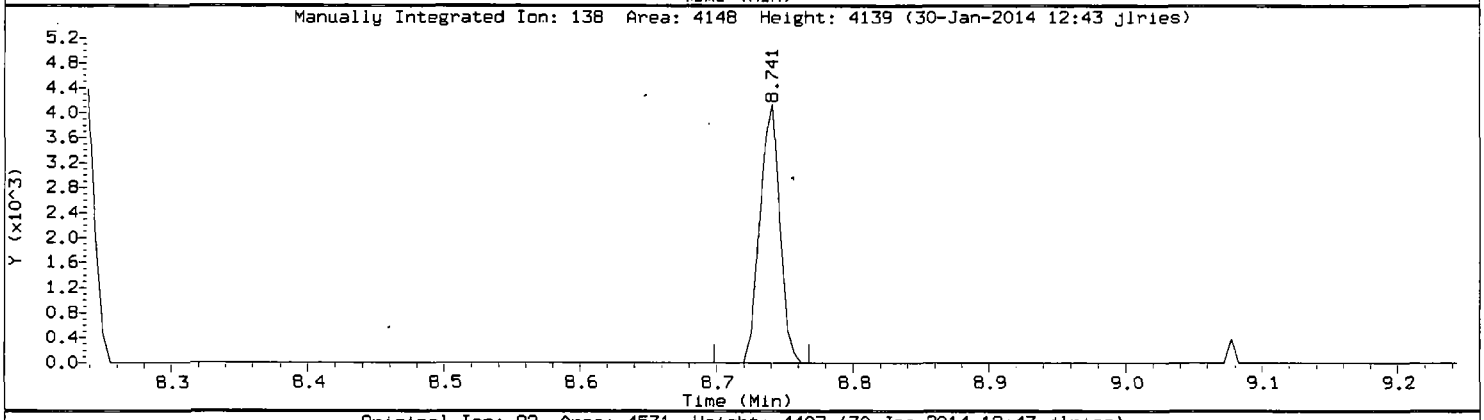
Lab Sample ID: ICAL 10328-96 2

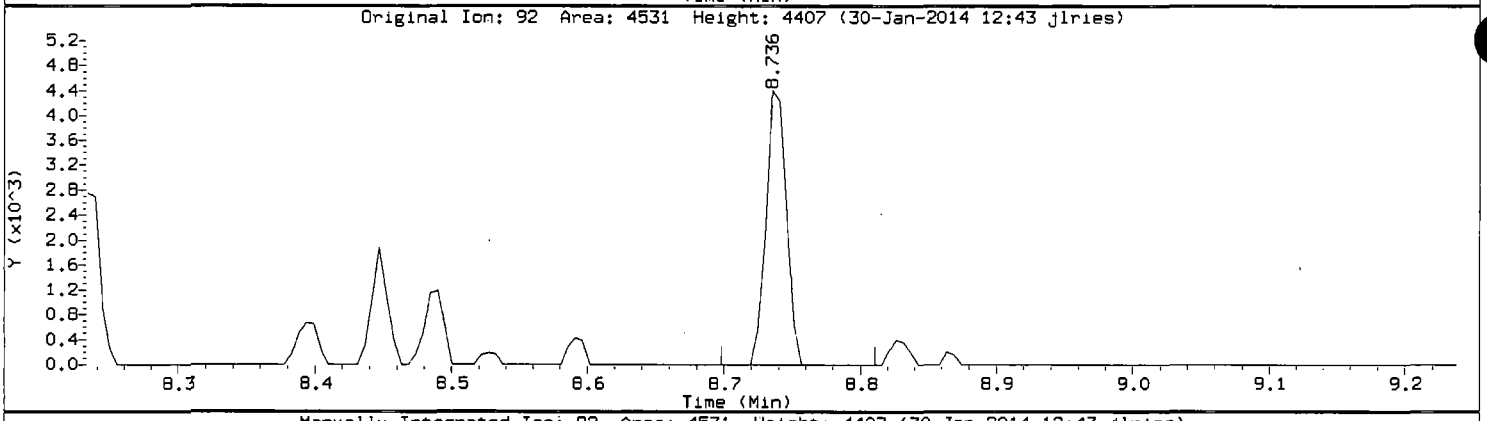


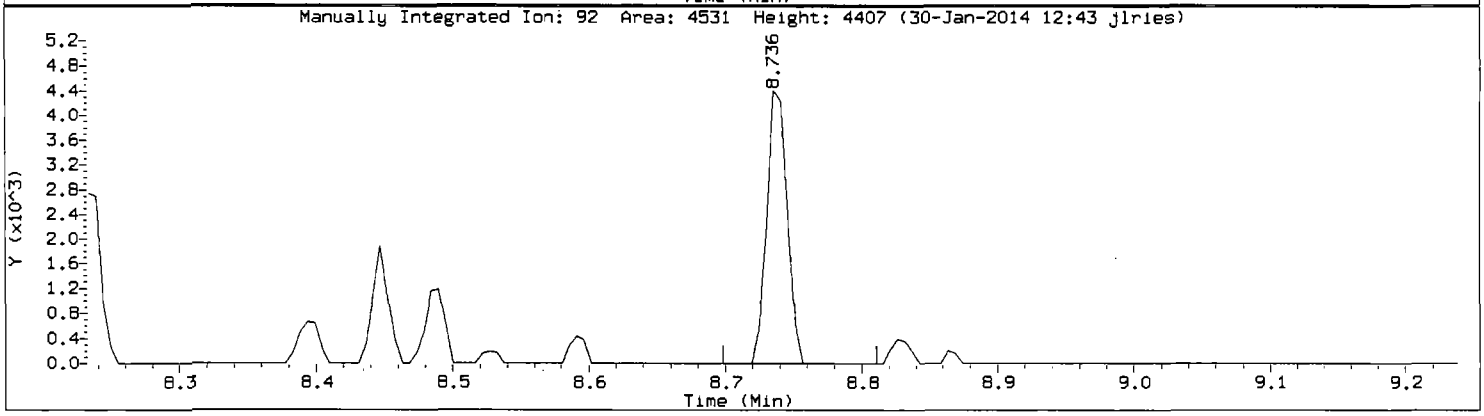
Injection Date: 30-JAN-2014 12:01
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: 3-Nitroaniline
CAS Number: 99-09-2









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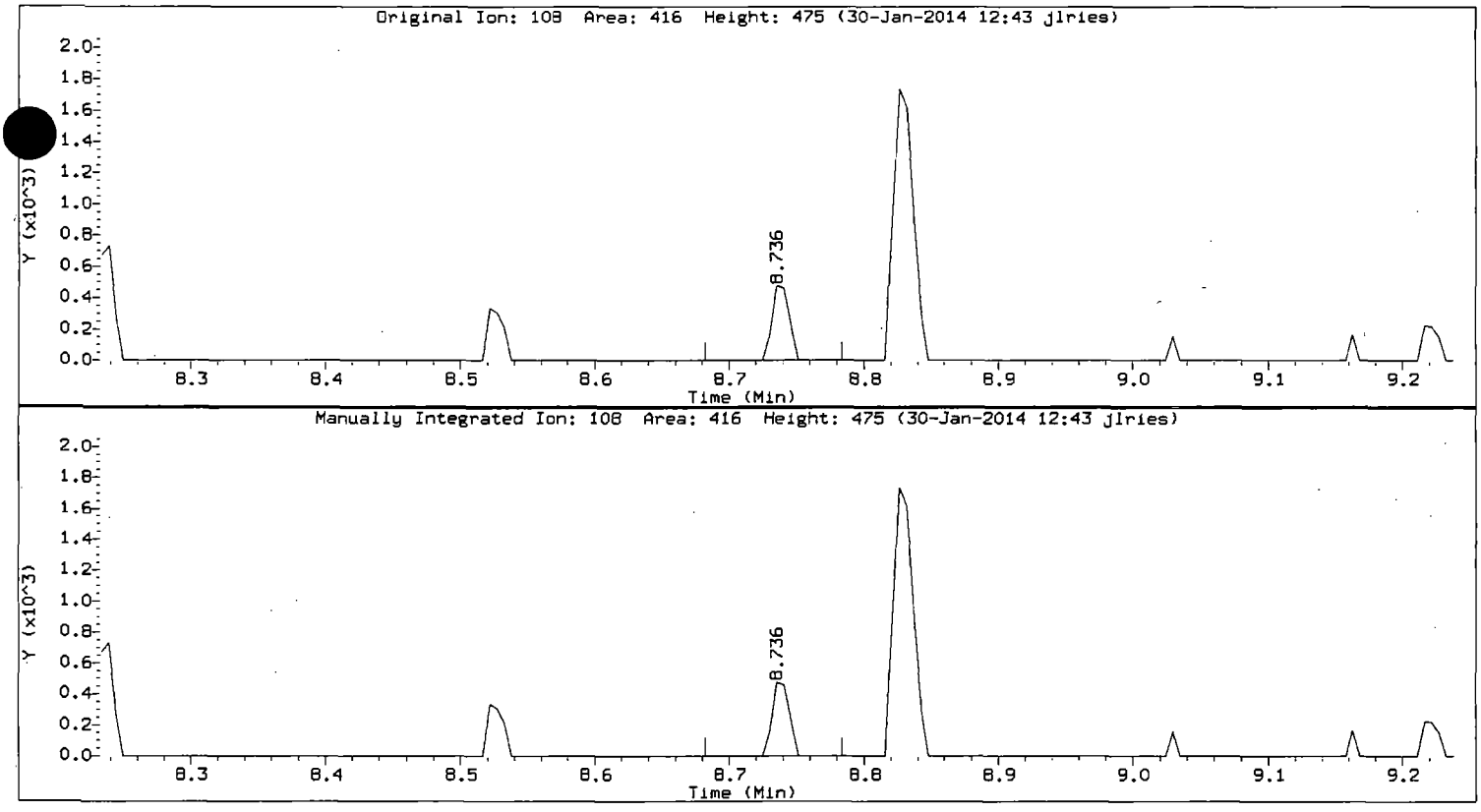
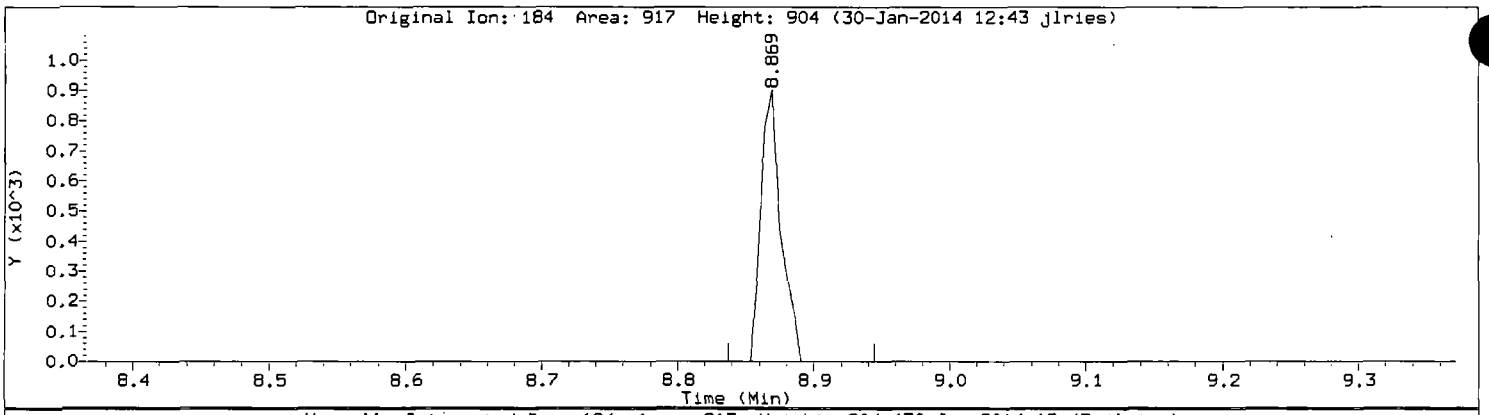
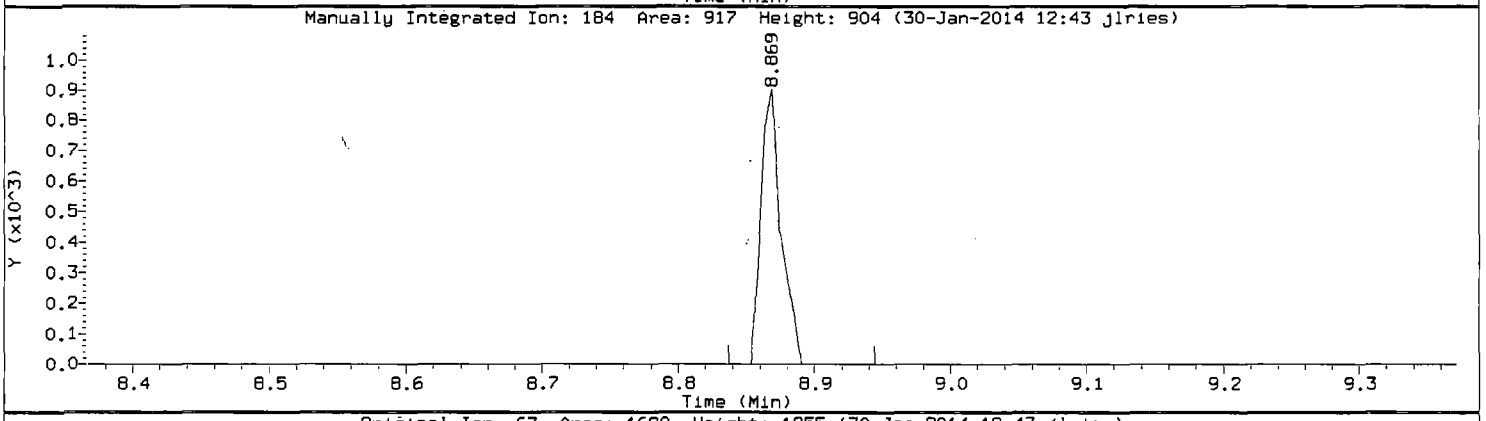
Lab Sample ID: ICAL 10328-96 2

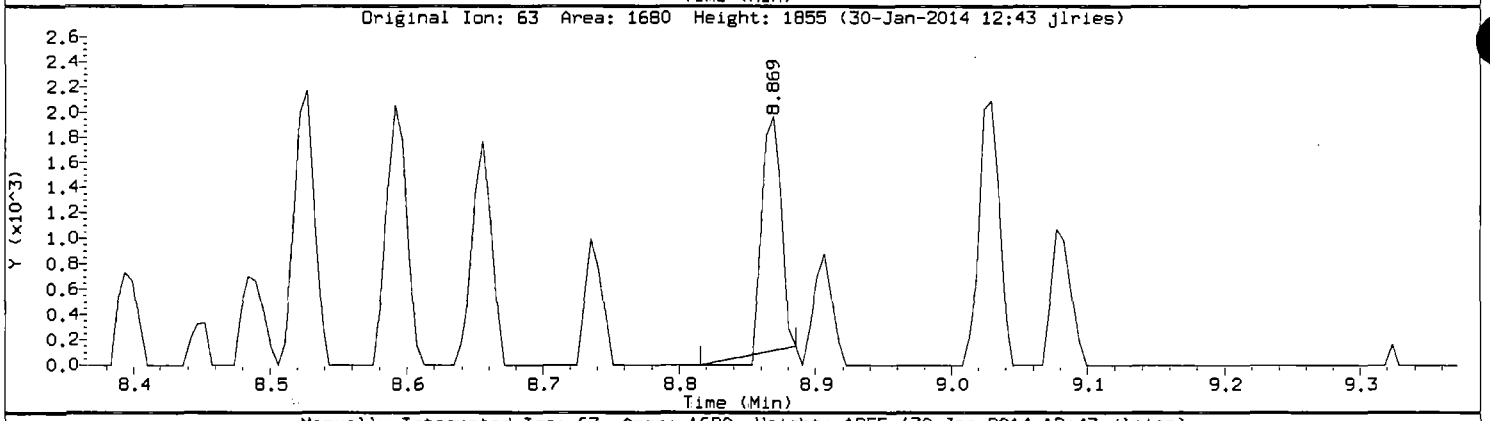


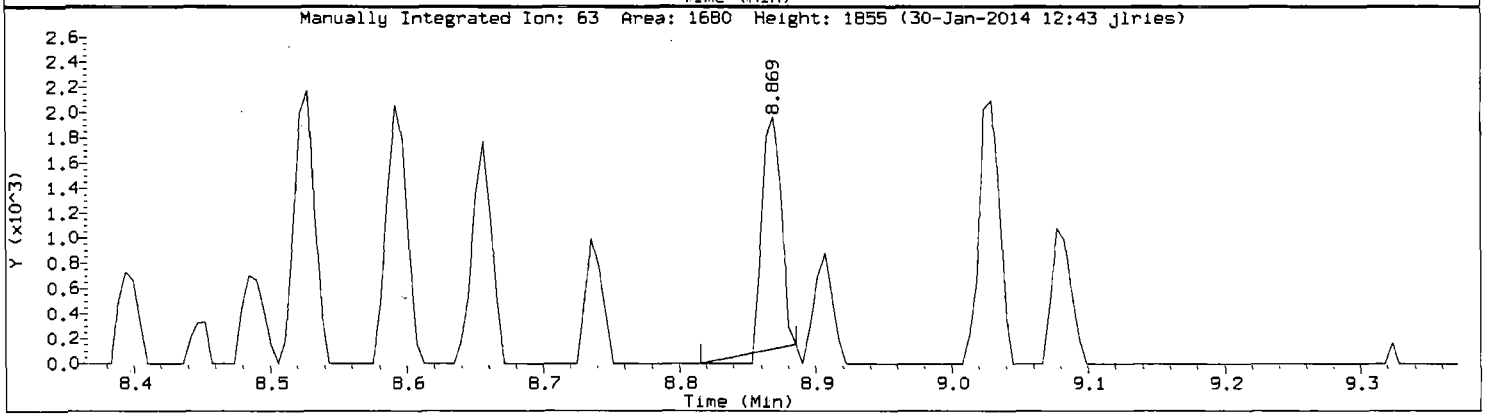
Injection Date: 30-JAN-2014 12:01
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: 2,4-Dinitrophenol
CAS Number: 51-28-5









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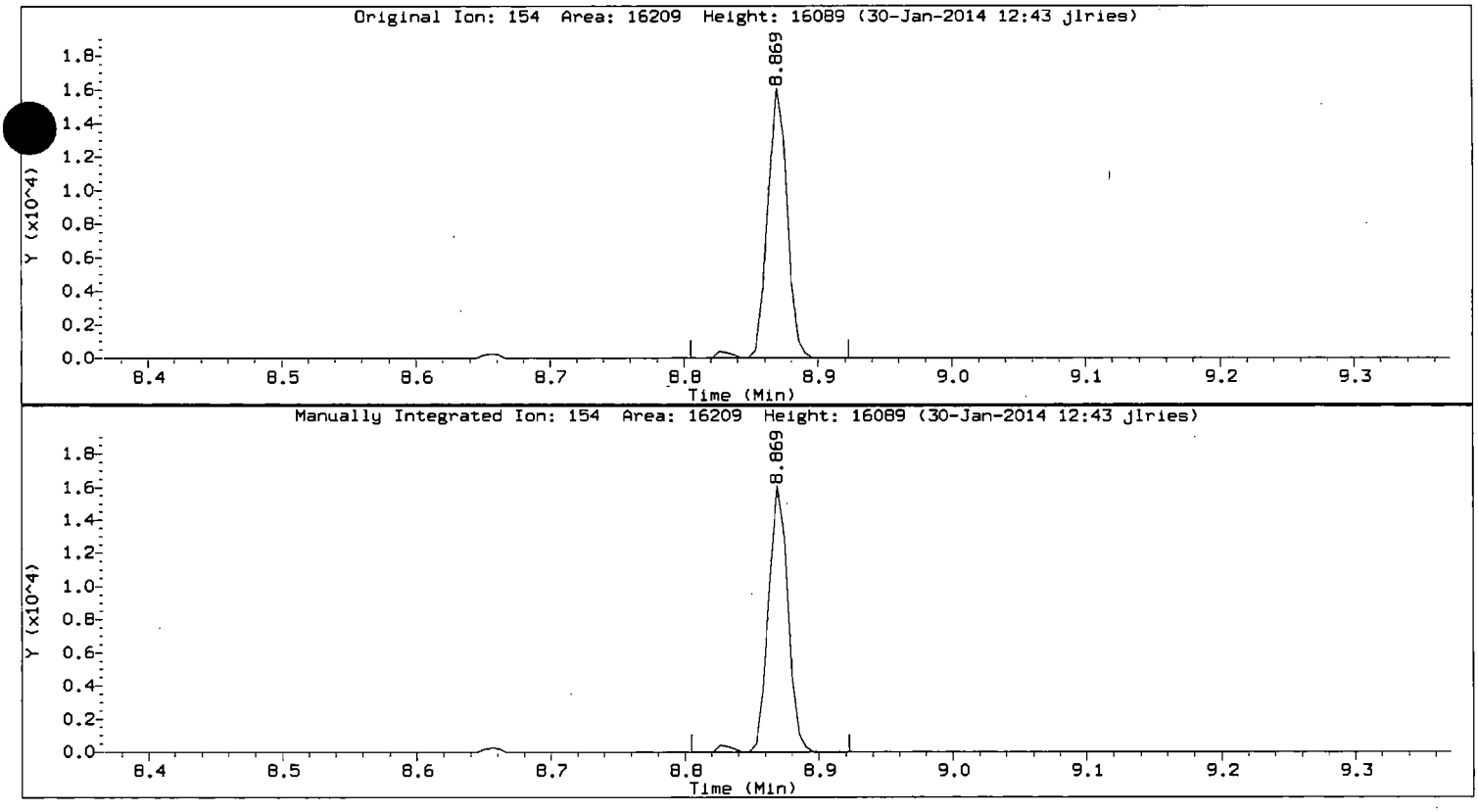
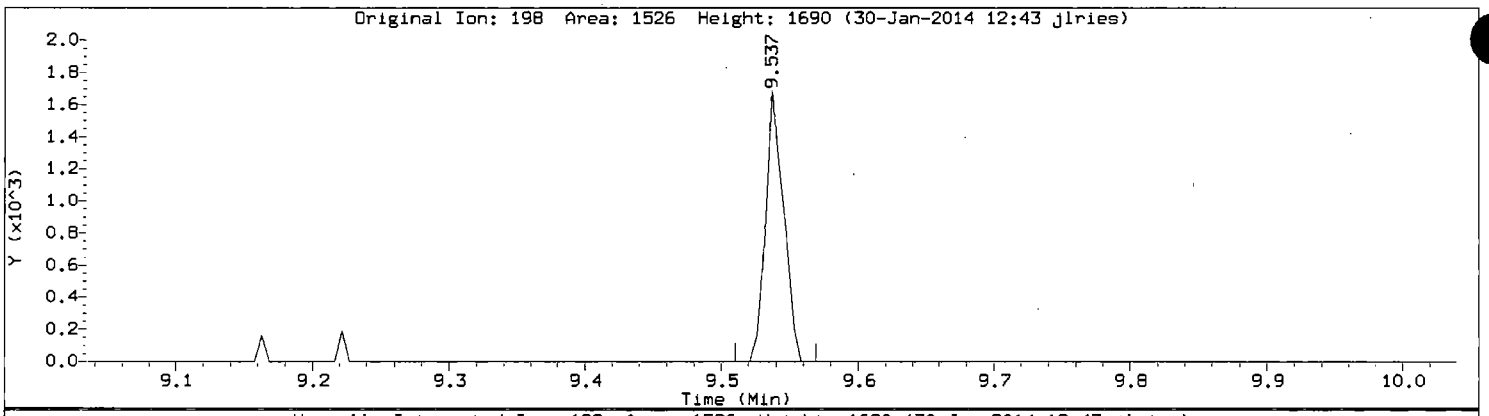
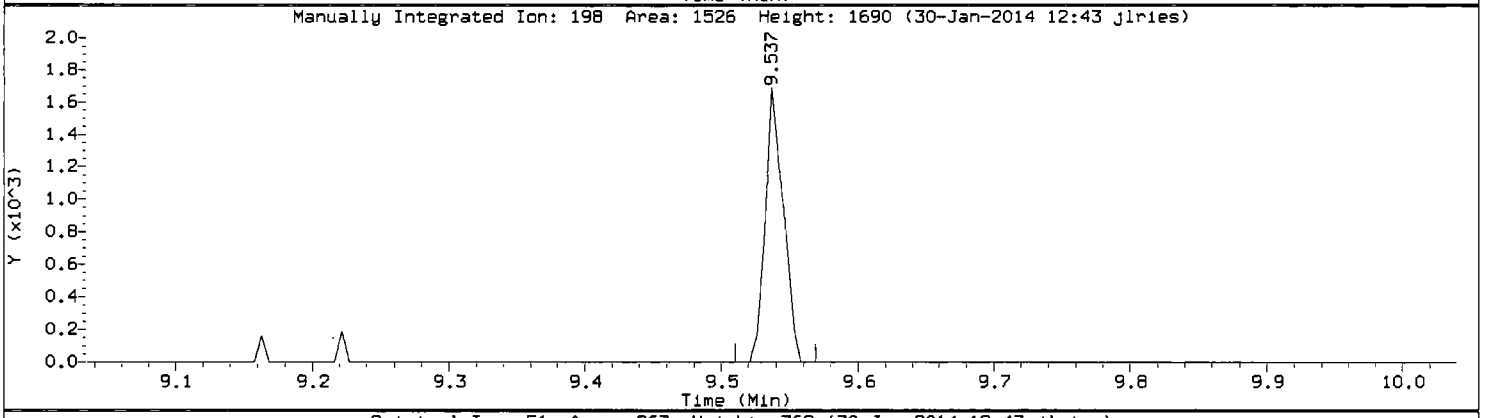
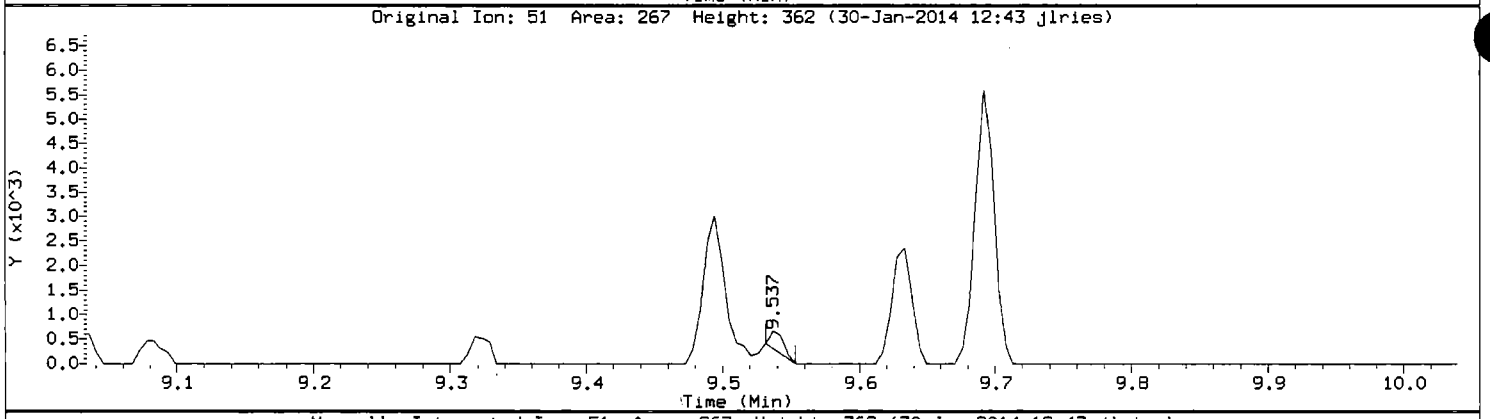


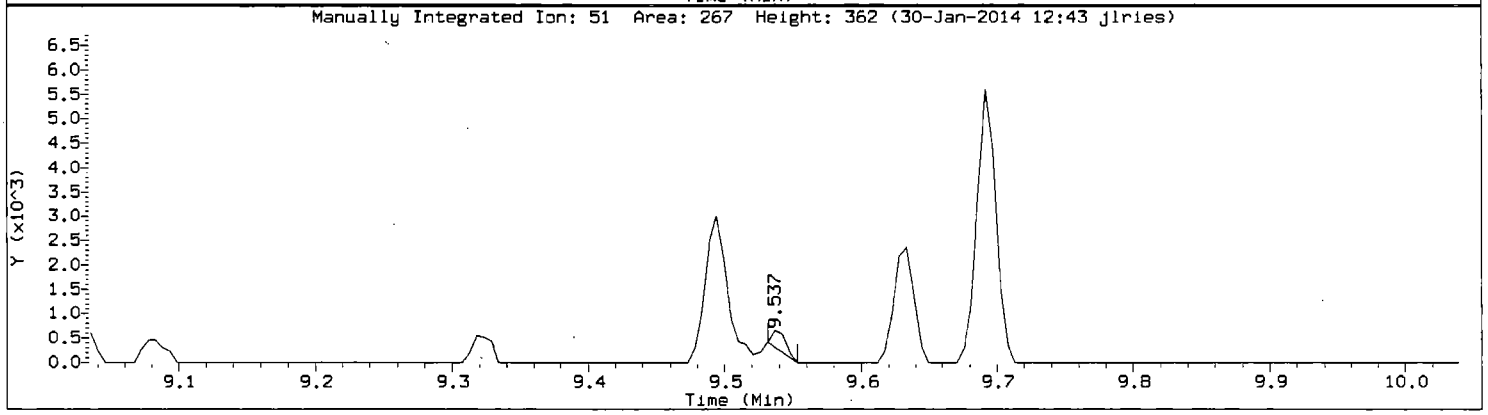
Injection Date: 30-JAN-2014 12:01
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1









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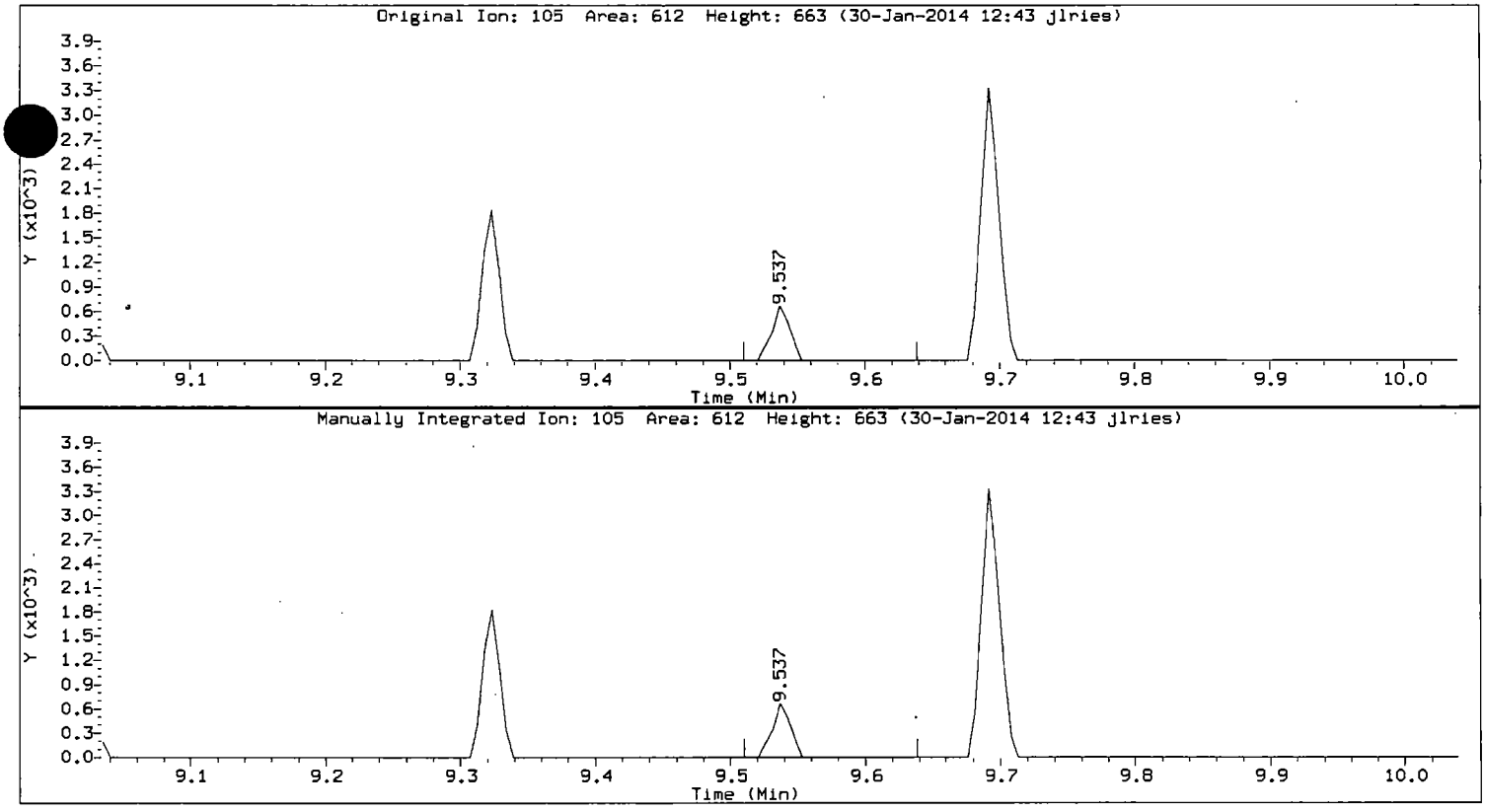
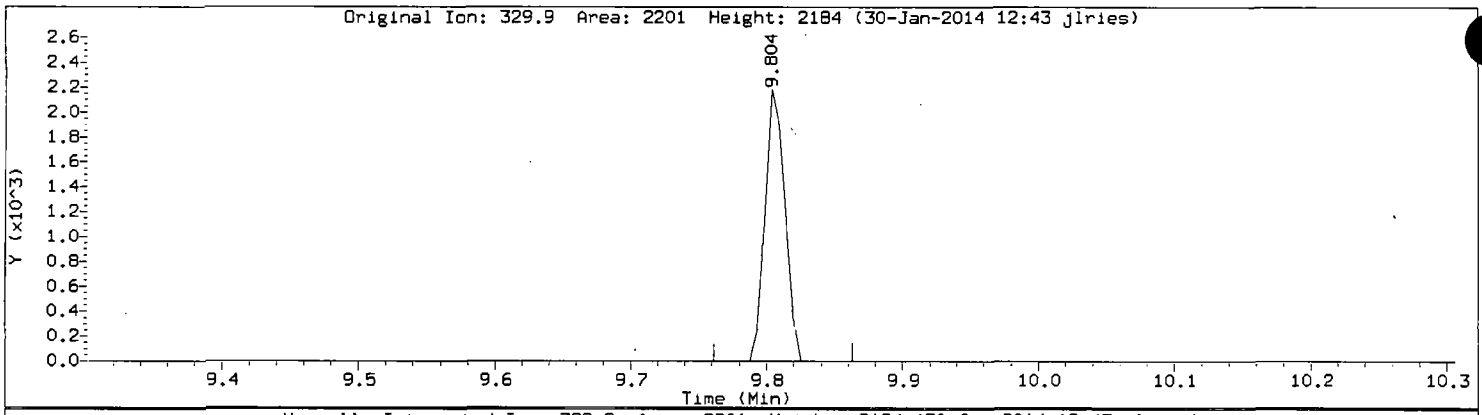
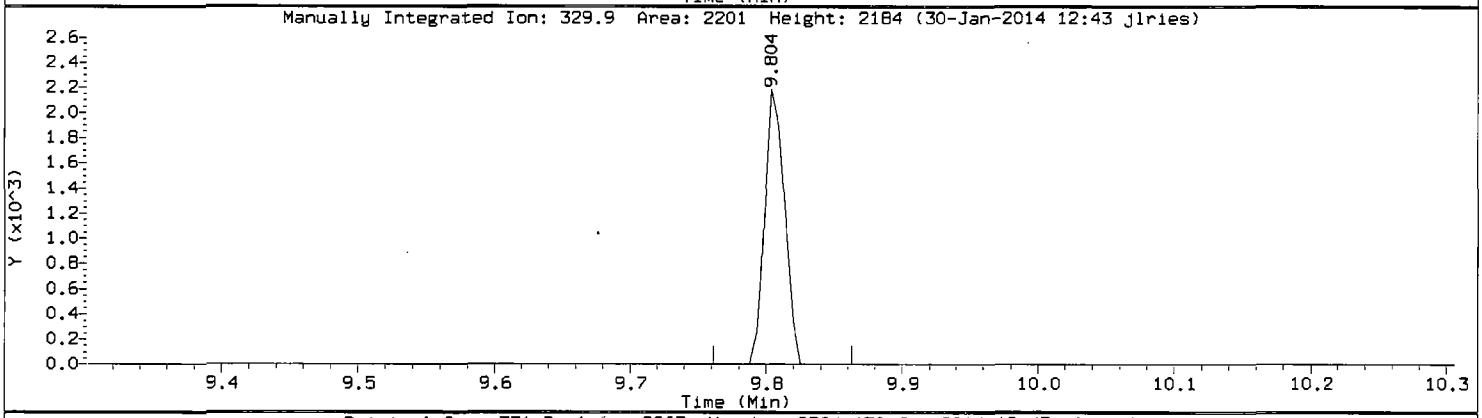
Lab Sample ID: ICAL 10328-96 2

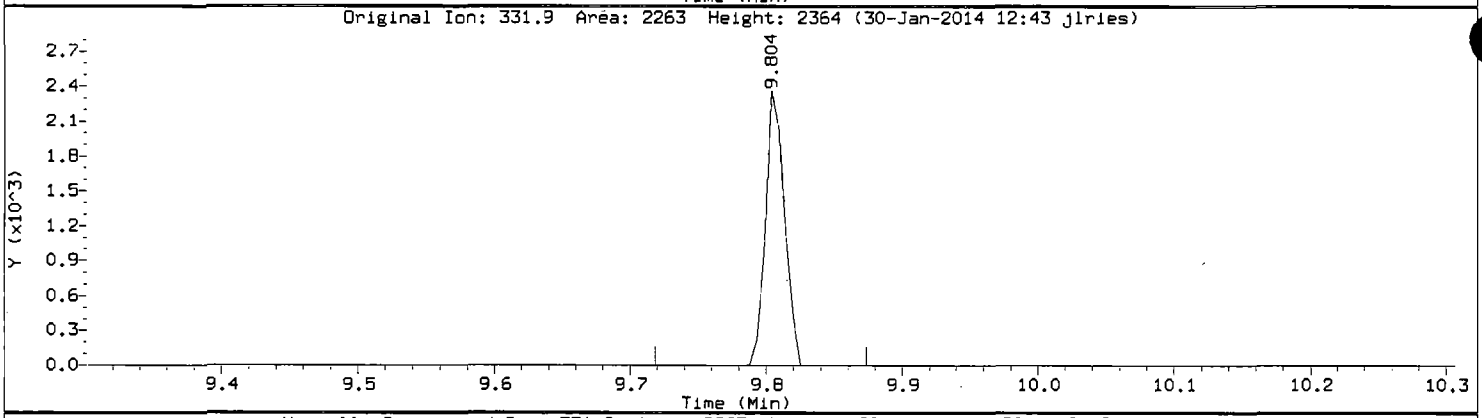


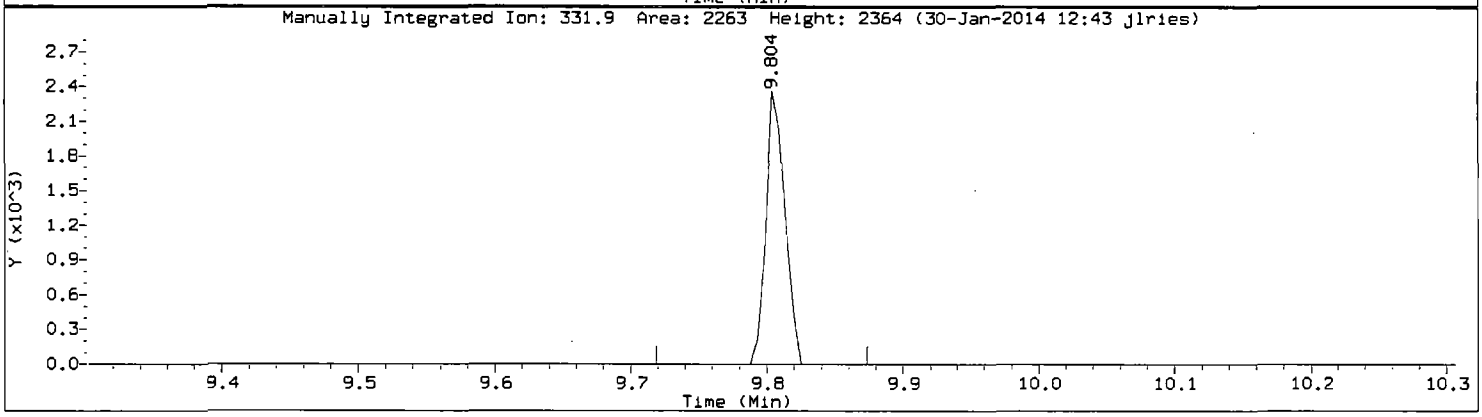
Injection Date: 30-JAN-2014 12:01
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: 2,4,6-Tribromophenol (S)
CAS Number: 118-79-6

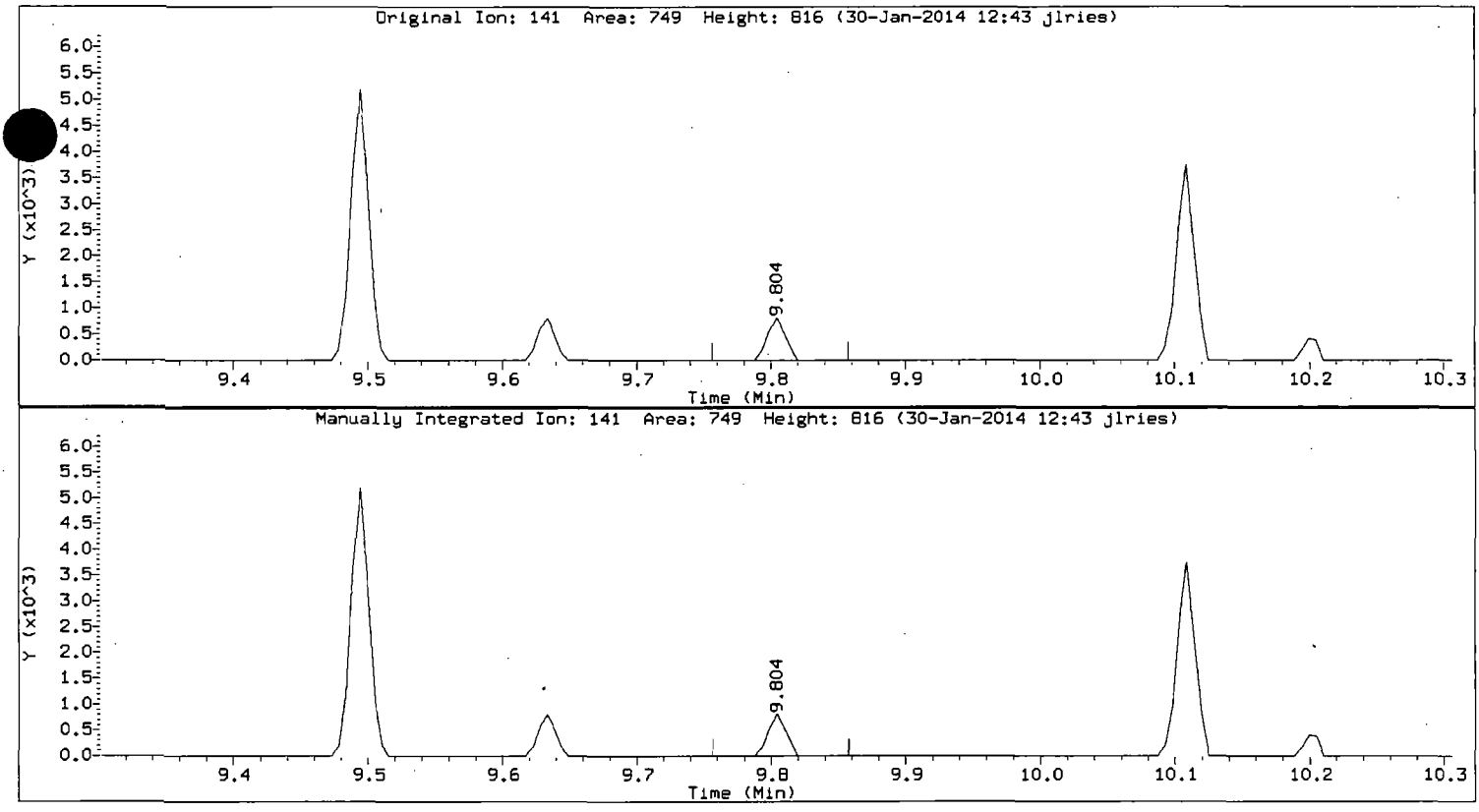






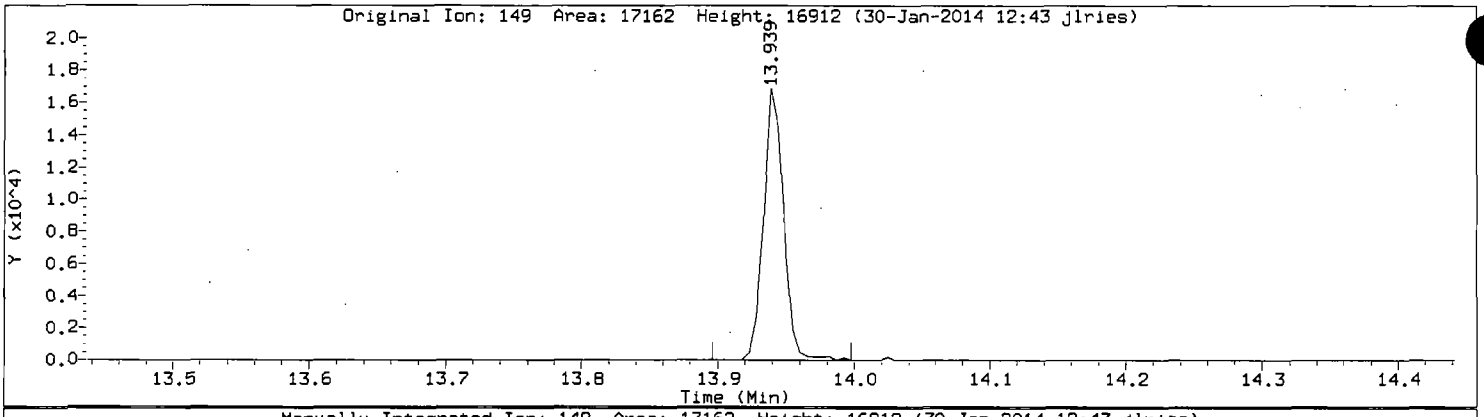


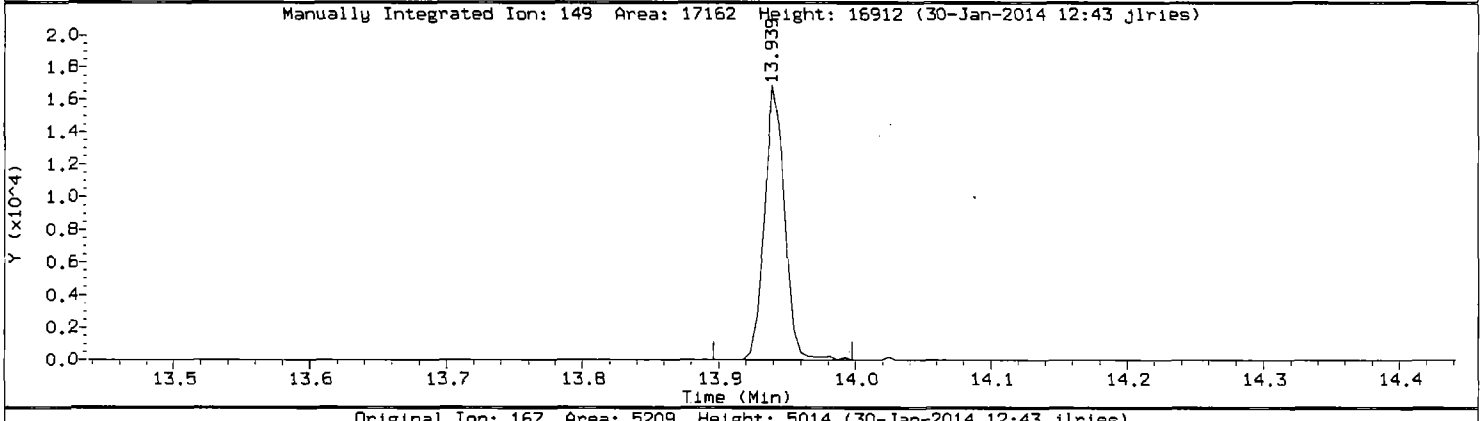
Injection Date: 30-JAN-2014 12:43
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

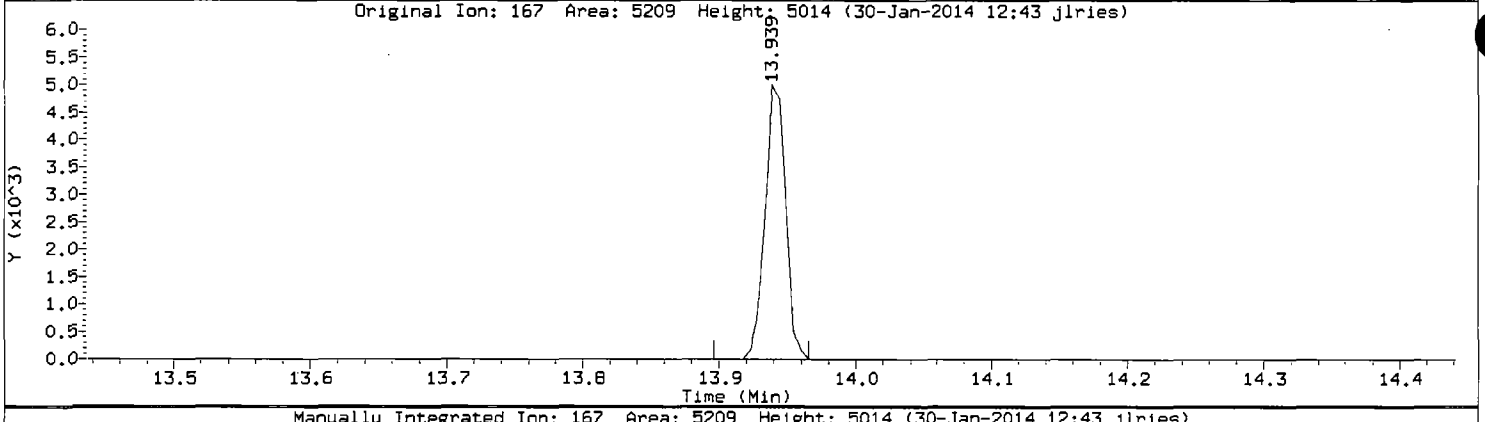


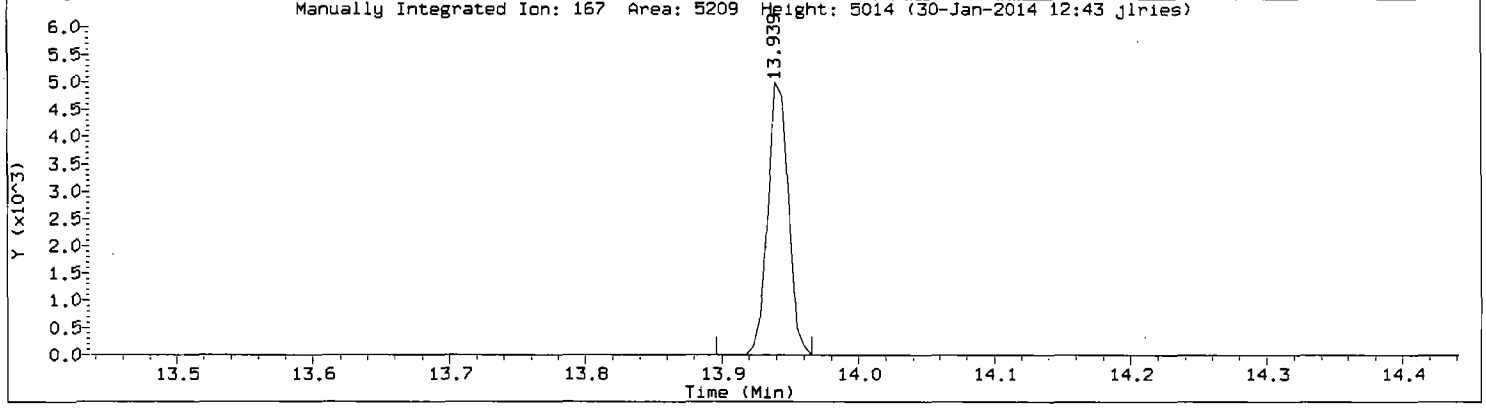
Injection Date: 30-JAN-2014 12:43
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: bis(2-Ethylhexyl)phthalate
CAS Number: 117-81-7

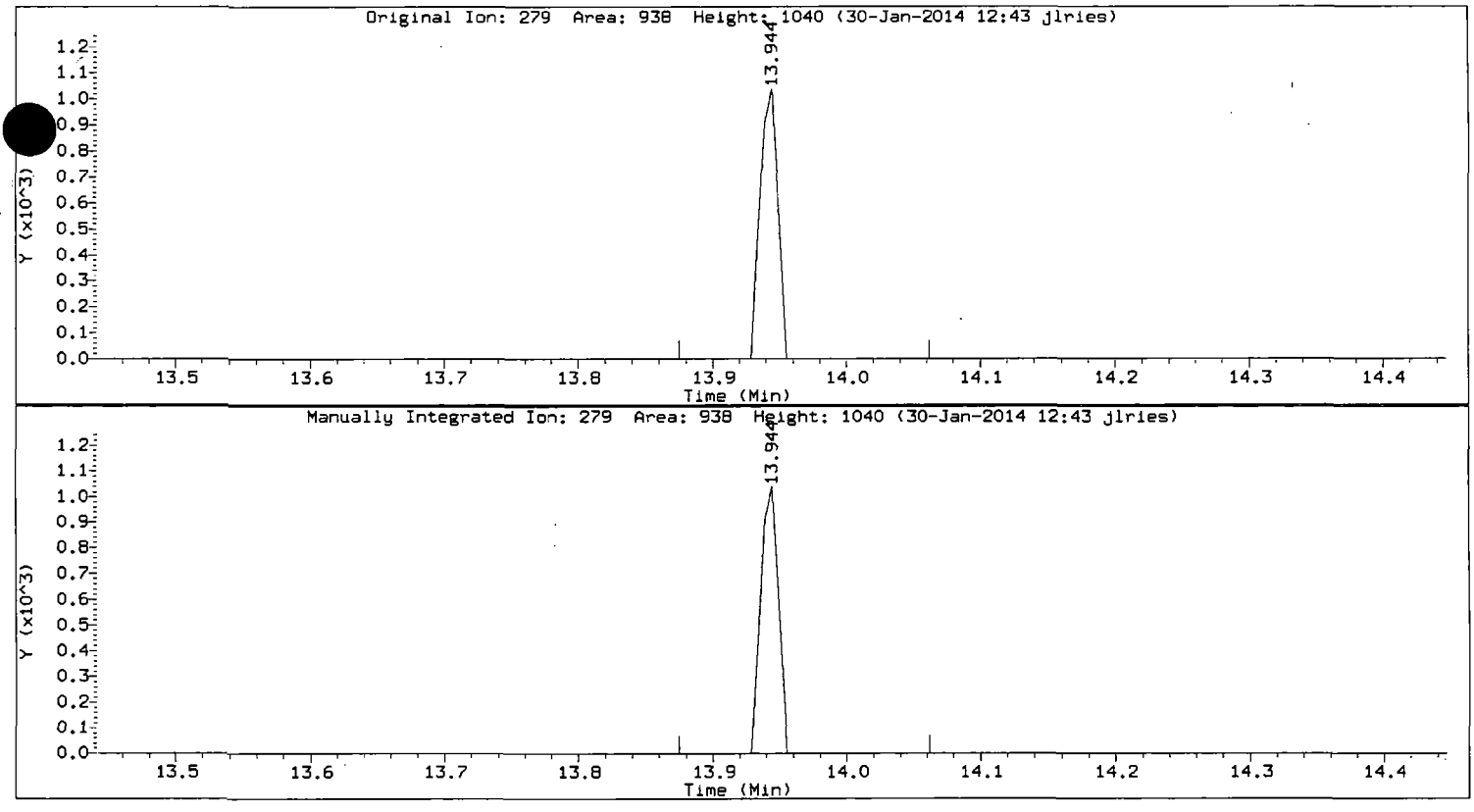






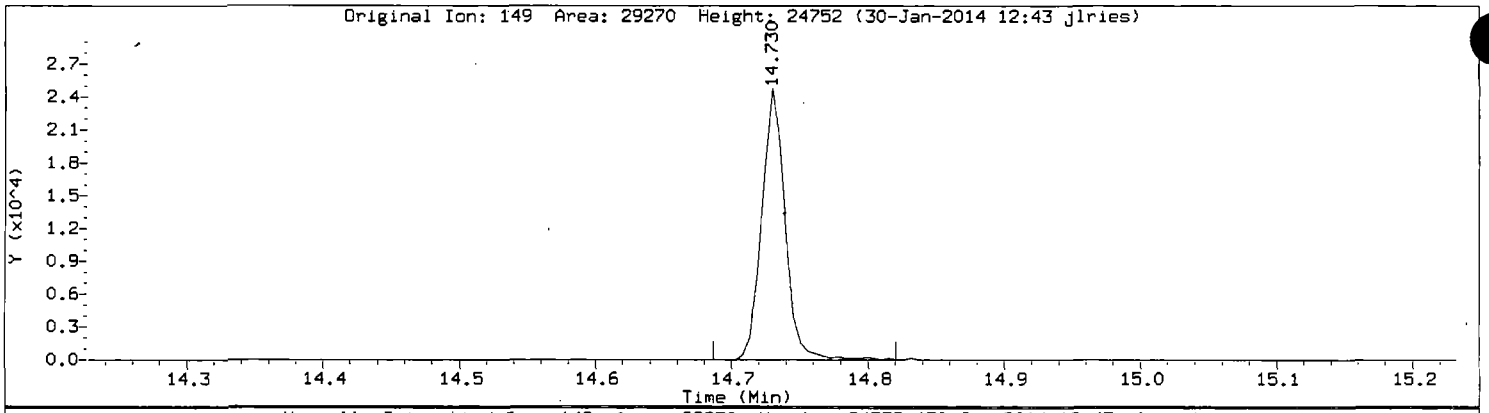


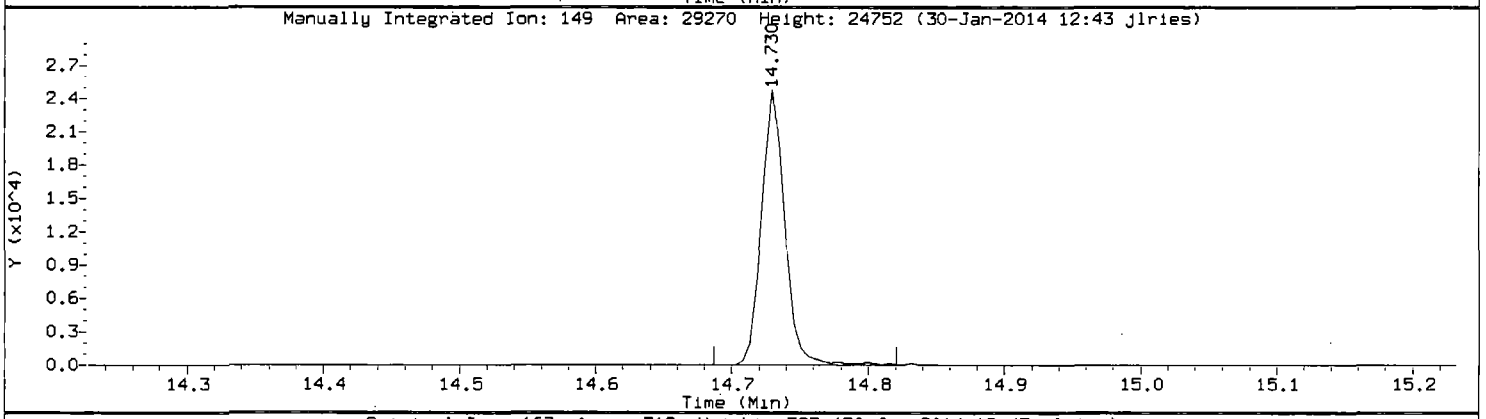
Injection Date: 30-JAN-2014 12:01
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

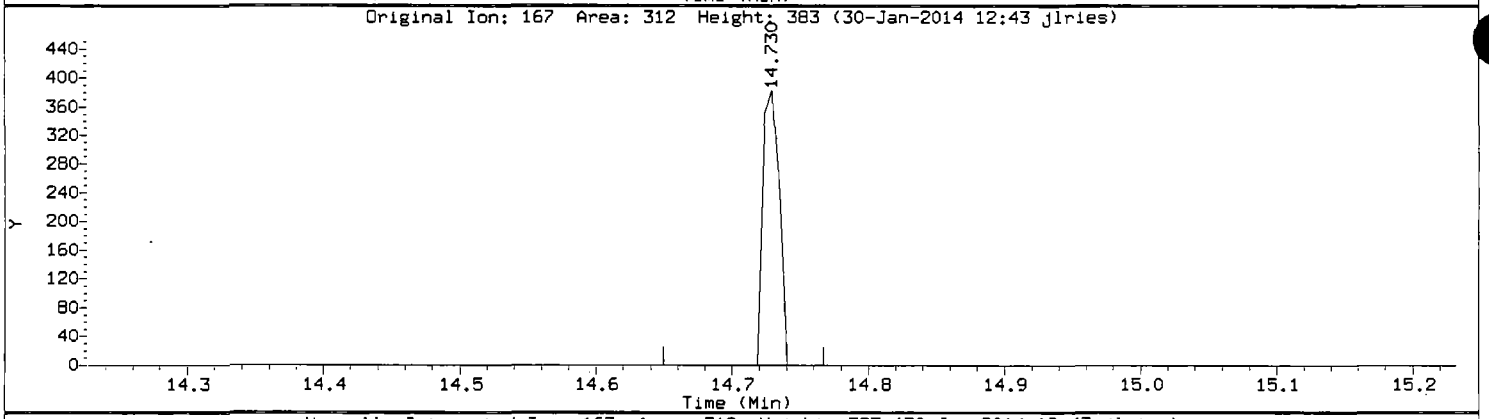


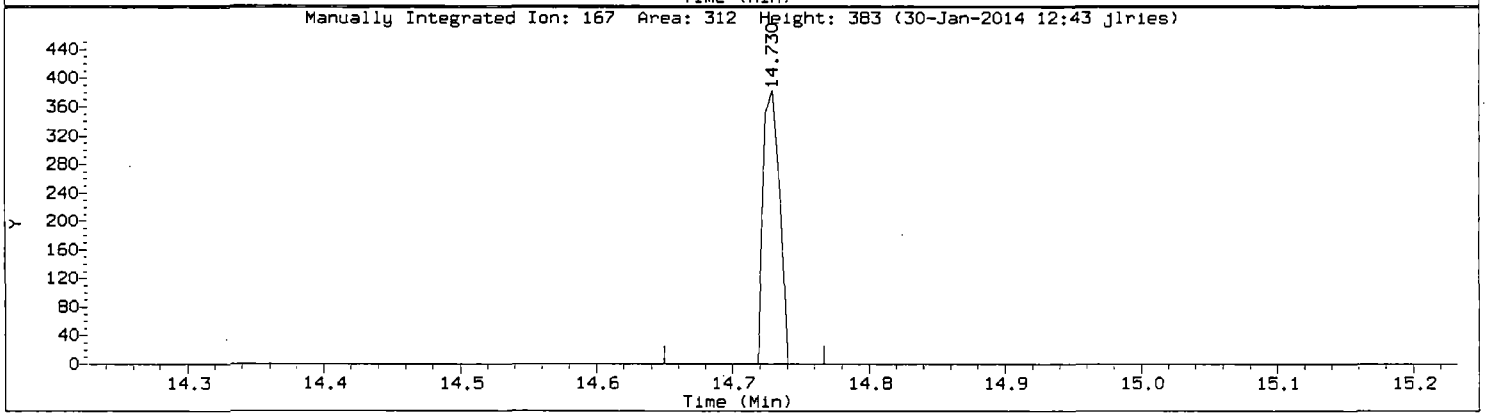
Injection Date: 30-JAN-2014 12:01
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2

Compound: di-n-Octylphthalate
CAS Number: 117-84-0

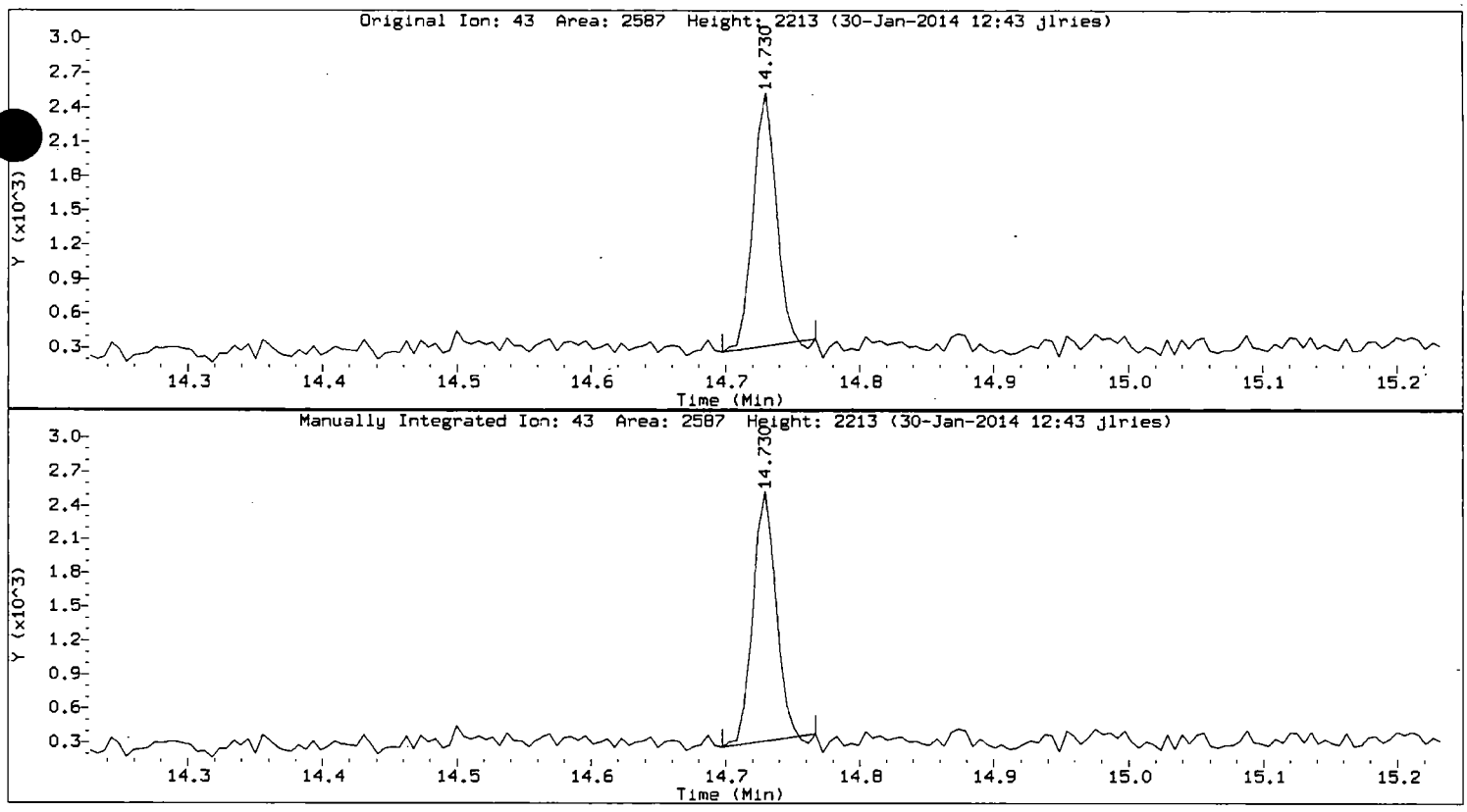








Injection Date: 30-JAN-2014 12:01
Instrument: 10mss9.i
Lab Sample ID: ICAL 10328-96 2



Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301410.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 30-JAN-2014 12:31
Lab File ID: 01301410.D Init. Cal. Date(s): 30-JAN-2014 30-JAN-2014
Analysis Type: WATER Init. Cal. Times: 08:59 12:01
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 N-Nitrosodimethylamine	0.84813	0.76559	0.76559	0.000	-9.73144	40.00000	Averaged
2 Pyridine	1.50609	1.42271	1.42271	0.000	-5.53616	40.00000	Averaged
$ 3 2-Fluorophenol (S)	1.37246	1.31050	1.31050	0.000	-4.51415	20.00000	Averaged
$ 4 Phenol-d6 (S)	1.68496	1.59511	1.59511	0.000	-5.33235	20.00000	Averaged
5 Phenol	1.74122	1.66629	1.66629	0.800	-4.30336	20.00000	Averaged
6 bis(2-Chloroethyl)ether	1.10447	0.96117	0.96117	0.700	-12.97463	40.00000	Averaged
7 2-Chlorophenol	1.36657	1.27833	1.27833	0.800	-6.45722	40.00000	Averaged
8 1,3-Dichlorobenzene	1.51933	1.32936	1.32936	0.000	-12.50332	40.00000	Averaged
10 1,4-Dichlorobenzene	1.53370	1.39112	1.39112	0.000	-9.29657	20.00000	Averaged
11 Benzyl alcohol	1.09023	0.97844	0.97844	0.000	-10.25420	40.00000	Averaged
12 1,2-Dichlorobenzene	1.44457	1.26762	1.26762	0.000	-12.24973	40.00000	Averaged
13 2-Methylphenol	1.07211	1.02674	1.02674	0.700	-4.23132	40.00000	Averaged
14 bis(2-Chloroisopropyl) ethe	2.04812	1.54862	1.54862	0.000	-24.38848	40.00000	Averaged
15 3 & 4-Methylphenol	1.36321	1.46979	1.46979	0.600	7.81838	40.00000	Averaged
17 N-Nitroso-di-n-propylamine	0.85251	0.71290	0.71290	0.500	-16.37624	40.00000	Averaged
18 Hexachloroethane	0.58811	0.51668	0.51668	0.300	-12.14564	40.00000	Averaged
$ 19 Nitrobenzene-d5 (S)	0.41638	0.35962	0.35962	0.000	-13.63264	20.00000	Averaged
20 Nitrobenzene	0.36983	0.32180	0.32180	0.200	-12.98825	40.00000	Averaged
21 Isophorone	0.65164	0.57625	0.57625	0.400	-11.56919	40.00000	Averaged
22 2-Nitrophenol	0.18251	0.17289	0.17289	0.100	-5.27034	20.00000	Averaged
23 2,4-Dimethylphenol	0.34484	0.31915	0.31915	0.200	-7.45205	40.00000	Averaged
24 Benzoic acid	80.00000	72.38641	0.19285	0.000	-9.51698	40.00000	Quadratic
25 bis(2-Chloroethoxy)methane	0.41123	0.37181	0.37181	0.300	-9.58568	40.00000	Averaged
26 2,4-Dichlorophenol	0.29638	0.27518	0.27518	0.200	-7.15291	20.00000	Averaged
27 1,2,4-Trichlorobenzene	0.34202	0.29647	0.29647	0.000	-13.31873	40.00000	Averaged
29 Naphthalene	1.05127	0.91063	0.91063	0.700	-13.37841	40.00000	Averaged
30 4-Chloroaniline	80.00000	76.73397	0.32681	0.010	-4.08254	40.00000	Quadratic
31 Hexachlorobutadiene	0.20180	0.17222	0.17222	0.010	-14.65883	20.00000	Averaged
32 4-Chloro-3-methylphenol	0.27641	0.25957	0.25957	0.200	-6.09251	20.00000	Averaged
33 2-Methylnaphthalene	0.68306	0.58601	0.58601	0.040	-14.20742	40.00000	Averaged
34 1-Methylnaphthalene	0.63359	0.55453	0.55453	0.000	-12.47802	40.00000	Averaged
35 Hexachlorocyclopentadiene	0.38779	0.33187	0.33187	0.050	-14.42066	40.00000	Averaged
36 2,4,6-Trichlorophenol	0.38477	0.36678	0.36678	0.200	-4.67534	20.00000	Averaged
37 2,4,5-Trichlorophenol	0.41824	0.40915	0.40915	0.200	-2.17393	40.00000	Averaged
$ 38 2-Fluorobiphenyl (S)	1.48205	1.38312	1.38312	0.000	-6.67558	20.00000	Averaged
39 2-Chloronaphthalene	1.21854	1.03923	1.03923	0.800	-14.71546	40.00000	Averaged
40 2-Nitroaniline	0.35543	0.31305	0.31305	0.010	-11.92238	40.00000	Averaged
41 Dimethylphthalate	1.31007	1.11404	1.11404	0.010	-14.96311	40.00000	Averaged
42 2,6-Dinitrotoluene	0.30343	0.26337	0.26337	0.200	-13.20272	40.00000	Averaged
43 Acenaphthylene	1.96450	1.62754	1.62754	0.900	-17.15255	40.00000	Averaged
44 3-Nitroaniline	0.31079	0.25848	0.25848	0.010	-16.83225	40.00000	Averaged
46 Acenaphthene	1.19821	1.03847	1.03847	0.900	-13.33116	20.00000	Averaged

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301410.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 30-JAN-2014 12:31
Lab File ID: 01301410.D Init. Cal. Date(s): 30-JAN-2014 30-JAN-2014
Analysis Type: WATER Init. Cal. Times: 08:59 12:01
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
47 2,4-Dinitrophenol	80.00000	64.54487	0.11756	0.050	-19.31892	40.00000	Quadratic	
48 4-Nitrophenol	0.23066	0.22730	0.22730	0.050	-1.45735	40.00000	Averaged	
49 2,4-Dinitrotoluene	0.38891	0.33888	0.33888	0.200	-12.86481	40.00000	Averaged	
50 Dibenzofuran	1.74656	1.53472	1.53472	0.800	-12.12871	40.00000	Averaged	
51 Diethylphthalate	1.31208	1.12363	1.12363	0.010	-14.36284	40.00000	Averaged	
52 4-Chlorophenylphenyl ether	0.70266	0.61701	0.61701	0.400	-12.18968	40.00000	Averaged	
53 4-Nitroaniline	0.35067	0.31171	0.31171	0.010	-11.11127	40.00000	Averaged	
54 Fluorene	1.42140	1.22257	1.22257	0.900	-13.98782	40.00000	Averaged	
55 4,6-Dinitro-2-methylphenol	80.00000	68.08649	0.09750	0.010	-14.89189	40.00000	Quadratic	
56 N-Nitrosodiphenylamine	0.63381	0.46761	0.46761	0.010	-26.22200	20.00000	Averaged	<-
57 Azobenzene	1.29453	1.13006	1.13006	0.000	-12.70497	40.00000	Averaged	
58 1,2-Diphenylhydrazine	1.29453	1.13006	1.13006	0.000	-12.70497	40.00000	Averaged	
$ 59 2,4,6-Tribromophenol (S)	0.19193	0.18639	0.18639	0.000	-2.88891	20.00000	Averaged	
60 4-Bromophenylphenyl ether	0.21826	0.19208	0.19208	0.100	-11.99423	40.00000	Averaged	
61 Hexachlorobenzene	0.23087	0.20289	0.20289	0.100	-12.11926	40.00000	Averaged	
62 Pentachlorophenol	0.12109	0.13849	0.13849	0.050	14.37217	20.00000	Averaged	
64 Phenanthrene	1.06274	0.93634	0.93634	0.700	-11.89370	40.00000	Averaged	
65 Anthracene	1.08324	0.95382	0.95382	0.700	-11.94813	40.00000	Averaged	
66 Carbazole	1.03233	0.92498	0.92498	0.010	-10.39892	40.00000	Averaged	
67 di-n-Butylphthalate	1.20083	1.10651	1.10651	0.010	-7.85448	40.00000	Averaged	
68 Fluoranthene	1.23380	1.07250	1.07250	0.600	-13.07397	20.00000	Averaged	
69 Benzidine	80.00000	24.91129	0.16988	0.000	-68.86088	40.00000	Quadratic	<-
70 Pyrene	1.21457	1.06622	1.06622	0.600	-12.21385	40.00000	Averaged	
$ 71 Terphenyl-d14 (S)	0.85029	0.82312	0.82312	0.000	-3.19553	20.00000	Averaged	
72 Butylbenzylphthalate	0.50411	0.45459	0.45459	0.010	-9.82419	40.00000	Averaged	
73 bis(2-Ethylhexyl)phthalate	0.71755	0.65053	0.65053	0.010	-9.33933	40.00000	Averaged	
74 3,3'-Dichlorobenzidine	0.34816	0.33053	0.33053	0.010	-5.06191	40.00000	Averaged	
75 Benzo(a)anthracene	1.13846	0.94259	0.94259	0.800	-17.20474	40.00000	Averaged	
77 Chrysene	1.04526	0.58150	0.58150	0.700	-44.36769	40.00000	Averaged	<-
78 di-n-Octylphthalate	1.22744	1.12816	1.12816	0.010	-8.08846	20.00000	Averaged	
79 Benzo(b)fluoranthene	1.18034	1.02250	1.02250	0.700	-13.37223	40.00000	Averaged	
80 Benzo(k)fluoranthene	1.19966	1.09159	1.09159	0.700	-9.00798	40.00000	Averaged	
81 Benzo(a)pyrene	1.12635	0.96423	0.96423	0.700	-14.39304	20.00000	Averaged	
83 Indeno(1,2,3-cd)pyrene	1.25802	1.09054	1.09054	0.500	-13.31267	40.00000	Averaged	
84 Dibenzo(a,h)anthracene	1.06359	0.63098	0.63098	0.400	-40.67451	40.00000	Averaged	<-
85 Benzo(g,h,i)perylene	1.05708	0.99228	0.99228	0.500	-6.13021	40.00000	Averaged	

Data File: \\192.168.10.12\chem\10mss9.i\013014.D\01301410.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 30-JAN-2014 12:31
Lab File ID: 01301410.D Init. Cal. Date(s): 30-JAN-2014 30-JAN-2014
Analysis Type: WATER Init. Cal. Times: 08:59 12:01
Lab Sample ID: ICV 10328-98 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	12.55255
Maximun Average %D/Drift =	40.00000
* Passed Average %D/Drift Test.	

Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013014.b\01301410.D
Lab Smp Id: ICV 10328-98
Inj Date : 30-JAN-2014 12:31
Operator : JLR Inst ID: 10mss9.i
Smp Info : ICV 10328-98
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Meth Date : 30-Jan-2014 13:47 10mss9.i Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * Vt / (Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
1	N-Nitrosodimethylamine	74	2.768	2.768	(0.532)	84390	80.0000	72.2
2	Pyridine	79	2.821	2.821	(0.542)	156823	80.0000	75.6
$ 3	2-Fluorophenol (S)	112	3.863	3.863	(0.742)	144454	80.0000	76.4
$ 4	Phenol-d6 (S)	99	4.734	4.734	(0.910)	175826	80.0000	75.7
5	Phenol	94	4.750	4.750	(0.913)	183672	80.0000	76.6
6	bis(2-Chloroethyl)ether	63	4.878	4.878	(0.937)	105948	80.0000	69.6
7	2-Chlorophenol	128	4.974	4.974	(0.956)	140908	80.0000	74.8
8	1,3-Dichlorobenzene	146	5.150	5.150	(0.990)	146533	80.0000	70.0
* 9	1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	55114	40.0000	
10	1,4-Dichlorobenzene	146	5.225	5.225	(1.004)	153340	80.0000	72.6
11	Benzyl alcohol	79	5.316	5.316	(1.022)	107851	80.0000	71.8
12	1,2-Dichlorobenzene	146	5.396	5.396	(1.037)	139727	80.0000	70.2
13	2-Methylphenol	107	5.412	5.412	(1.040)	113176	80.0000	76.6
14	bis(2-Chloroisopropyl) ether	45	5.466	5.466	(1.050)	170701	80.0000	60.5(M)
15	3 & 4-Methylphenol	107	5.583	5.583	(1.073)	162012	80.0000	86.2
17	N-Nitroso-di-n-propylamine	70	5.615	5.615	(1.079)	78582	80.0000	66.9
18	Hexachloroethane	117	5.786	5.786	(1.112)	56953	80.0000	70.3
$ 19	Nitrobenzene-d5 (S)	82	5.813	5.813	(0.871)	110166	60.0000	51.8
20	Nitrobenzene	77	5.834	5.834	(0.874)	131441	80.0000	69.6
21	Isophorone	82	6.101	6.101	(0.914)	235375	80.0000	70.7
22	2-Nitrophenol	139	6.203	6.203	(0.930)	70620	80.0000	75.8
23	2,4-Dimethylphenol	107	6.208	6.208	(0.930)	130353	80.0000	74.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	24 Benzoic acid	105	6.283	6.283	(0.942)	78771	80.0000	72.4(H)
	25 bis(2-Chloroethoxy)methane	93	6.331	6.331	(0.949)	151870	80.0000	72.3
	26 2,4-Dichlorophenol	162	6.475	6.475	(0.970)	112401	80.0000	74.3
	27 1,2,4-Trichlorobenzene	180	6.598	6.598	(0.989)	121094	80.0000	69.3
*	28 Naphthalene-d8	136	6.673	6.673	(1.000)	204229	40.0000	(Q)
	29 Naphthalene	128	6.700	6.700	(1.004)	371954	80.0000	69.3
	30 4-Chloroaniline	127	6.732	6.732	(1.009)	133488	80.0000	76.7
	31 Hexachlorobutadiene	225	6.838	6.838	(1.025)	70344	80.0000	68.3
	32 4-Chloro-3-methylphenol	107	7.287	7.287	(1.092)	106024	80.0000	75.1
	33 2-Methylnaphthalene	142	7.533	7.533	(1.129)	239361	80.0000	68.6
	34 1-Methylnaphthalene	142	7.661	7.661	(1.148)	226501	80.0000	70.0
	35 Hexachlorocyclopentadiene	237	7.725	7.725	(0.875)	71455	80.0000	68.5
	36 2,4,6-Trichlorophenol	196	7.864	7.864	(0.891)	78972	80.0000	76.2
	37 2,4,5-Trichlorophenol	196	7.902	7.902	(0.895)	88095	80.0000	78.3
$	38 2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	223351	60.0000	56.0
	39 2-Chloronaphthalene	162	8.137	8.137	(0.921)	223758	80.0000	68.2
	40 2-Nitroaniline	65	8.238	8.238	(0.933)	67404	80.0000	70.5
	41 Dimethylphthalate	163	8.452	8.452	(0.957)	239867	80.0000	68.0
	42 2,6-Dinitrotoluene	165	8.532	8.532	(0.966)	56706	80.0000	69.4
	43 Acenaphthylene	152	8.655	8.655	(0.980)	350429	80.0000	66.3(M)
	44 3-Nitroaniline	138	8.746	8.746	(0.990)	55653	80.0000	66.5
*	45 Acenaphthene-d10	164	8.831	8.831	(1.000)	107656	40.0000	
	46 Acenaphthene	154	8.874	8.874	(1.005)	223596	80.0000	69.3
	47 2,4-Dinitrophenol	184	8.869	8.869	(1.004)	25312	80.0000	64.5
	48 4-Nitrophenol	65	8.911	8.911	(1.009)	48940	80.0000	78.8
	49 2,4-Dinitrotoluene	165	9.034	9.034	(1.023)	72964	80.0000	69.7
	50 Dibenzofuran	168	9.088	9.088	(1.029)	330444	80.0000	70.3
	51 Diethylphthalate	149	9.328	9.328	(1.056)	241931	80.0000	68.5
	52 4-Chlorophenylphenyl ether	204	9.499	9.499	(1.076)	132850	80.0000	70.2
	53 4-Nitroaniline	138	9.510	9.510	(1.077)	67115	80.0000	71.1
	54 Fluorene	166	9.515	9.515	(1.077)	263235	80.0000	68.8
	55 4,6-Dinitro-2-methylphenol	198	9.547	9.547	(0.893)	38644	80.0000	68.1
	56 N-Nitrosodiphenylamine	169	9.638	9.638	(0.902)	185333	80.0000	59.0
	57 Azobenzene	77	9.697	9.697	(1.098)	243315	80.0000	69.8
	58 1,2-Diphenylhydrazine	77	9.697	9.697	(1.098)	243315	80.0000	69.8
$	59 2,4,6-Tribromophenol (S)	330	9.809	9.809	(1.111)	40131	80.0000	77.7
	60 4-Bromophenylphenyl ether	248	10.108	10.108	(0.946)	76128	80.0000	70.4
	61 Hexachlorobenzene	284	10.204	10.204	(0.955)	80413	80.0000	70.3
	62 Pentachlorophenol	266	10.434	10.434	(0.976)	54891	80.0000	91.5(M)
*	63 Phenanthrene-d10	188	10.690	10.690	(1.000)	198170	40.0000	
	64 Phenanthrene	178	10.722	10.722	(1.003)	371109	80.0000	70.5
	65 Anthracene	178	10.786	10.786	(1.009)	378036	80.0000	70.4
	66 Carbazole	167	10.968	10.968	(1.026)	366606	80.0000	71.7
	67 di-n-Butylphthalate	149	11.369	11.369	(1.063)	438553	80.0000	73.7
	68 Fluoranthene	202	12.213	12.213	(1.142)	425073	80.0000	69.5
	69 Benzidine	184	12.341	12.341	(0.882)	72065	80.0000	24.9
	70 Pyrene	202	12.501	12.501	(0.893)	452303	80.0000	70.2
$	71 Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	261882	60.0000	58.1
	72 Butylbenzylphthalate	149	13.249	13.249	(0.947)	192841	80.0000	72.1
	73 bis(2-Ethylhexyl)phthalate	149	13.944	13.944	(0.996)	275962	80.0000	72.5
	74 3,3'-Dichlorobenzidine	252	13.922	13.922	(0.995)	140215	80.0000	76.0
	75 Benzo(a)anthracene	228	13.986	13.986	(0.999)	399857	80.0000	66.2
*	76 Chrysene-d12	240	13.997	13.997	(1.000)	212105	40.0000	(Q)
	77 Chrysene	228	14.029	14.029	(1.002)	246678	80.0000	44.5

Data File: \\192.168.10.12\Chem\10MSD.I\013014.D\0130[illegible].D
Report Date: 30-Jan-2014 13:47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	78 di-n-Octylphthalate	149	14.729	14.729	(1.052)	478576	80.0000	73.5
	79 Benzo(b)fluoranthene	252	15.391	15.391	(0.963)	414048	80.0000	69.3
	80 Benzo(k)fluoranthene	252	15.429	15.429	(0.965)	442026	80.0000	72.8
	81 Benzo(a)pyrene	252	15.904	15.904	(0.995)	390452	80.0000	68.5
*	82 Perylene-d12	264	15.990	15.990	(1.000)	202468	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	18.073	18.073	(1.130)	441599	80.0000	69.3
	84 Dibenzo(a,h)anthracene	278	18.089	18.089	(1.131)	255506	80.0000	47.5
	85 Benzo(g,h,i)perylene	276	18.709	18.709	(1.170)	401809	80.0000	75.1

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301410.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01301410.D
Lab Smp Id: ICV 10328-98
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Misc Info:

Calibration Date: 30-JAN-2014
Calibration Time: 10:00
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

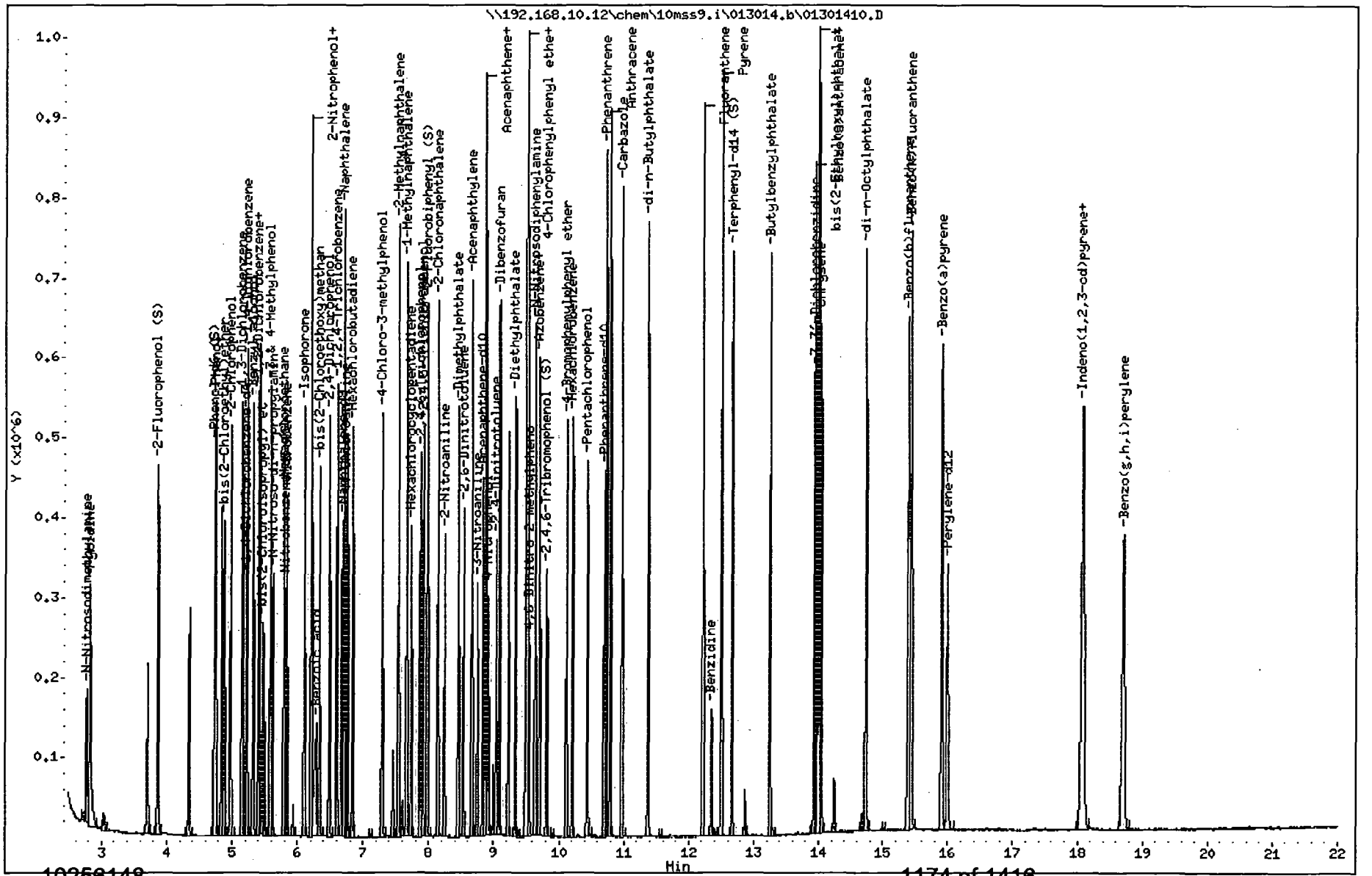
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	55535	27768	111070	55114	-0.76
28 Naphthalene-d8	202574	101287	405148	204229	0.82
45 Acenaphthene-d10	105765	52883	211530	107656	1.79
63 Phenanthrene-d10	197315	98658	394630	198170	0.43
76 Chrysene-d12	212271	106136	424542	212105	-0.08
82 Perylene-d12	203680	101840	407360	202468	-0.60

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	0.00
76 Chrysene-d12	14.00	13.50	14.50	14.00	0.00
82 Perylene-d12	16.00	15.50	16.50	15.99	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301410.D
Date : 30-JAN-2014 12:31
Client ID:
Sample Info: ICV 10328-98
Purge Volume: 1.0
Column phase: DB-5MS

Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25



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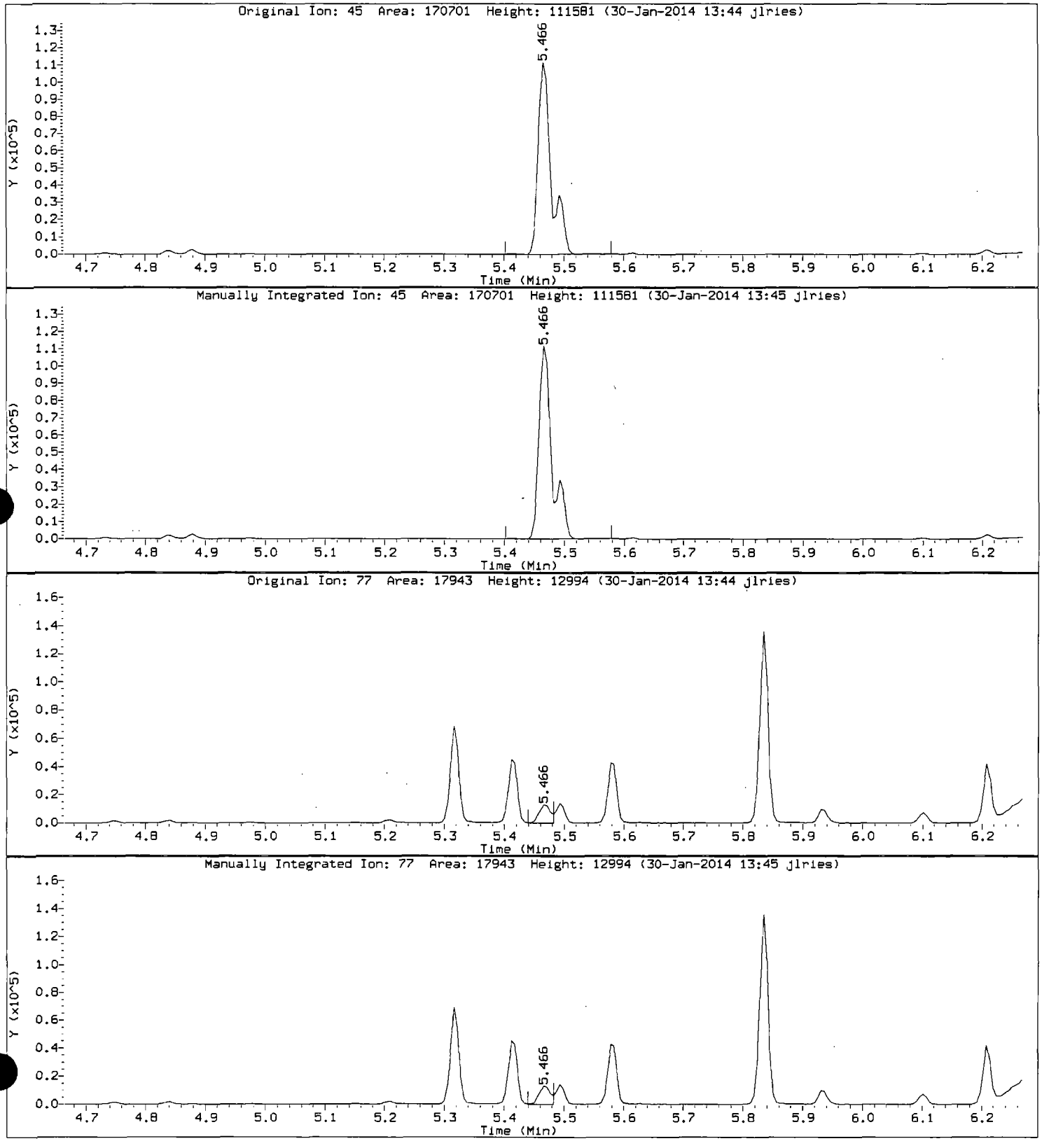
Injection Date: 30-JAN-2014 12:31
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98

Compound: bis(2-Chloroisopropyl) ether
CAS Number: 108-60-1



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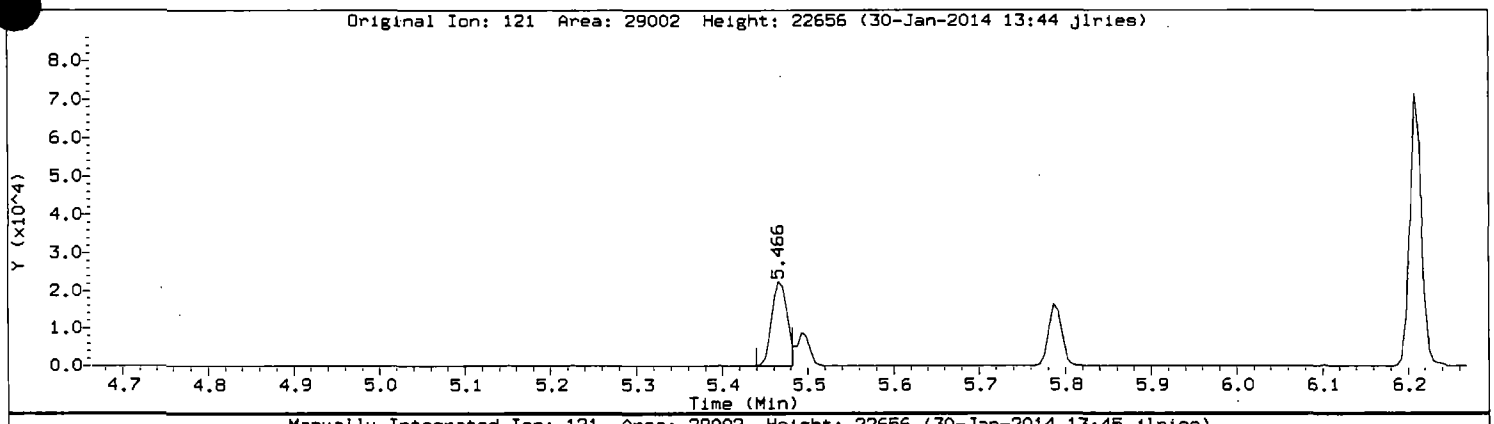
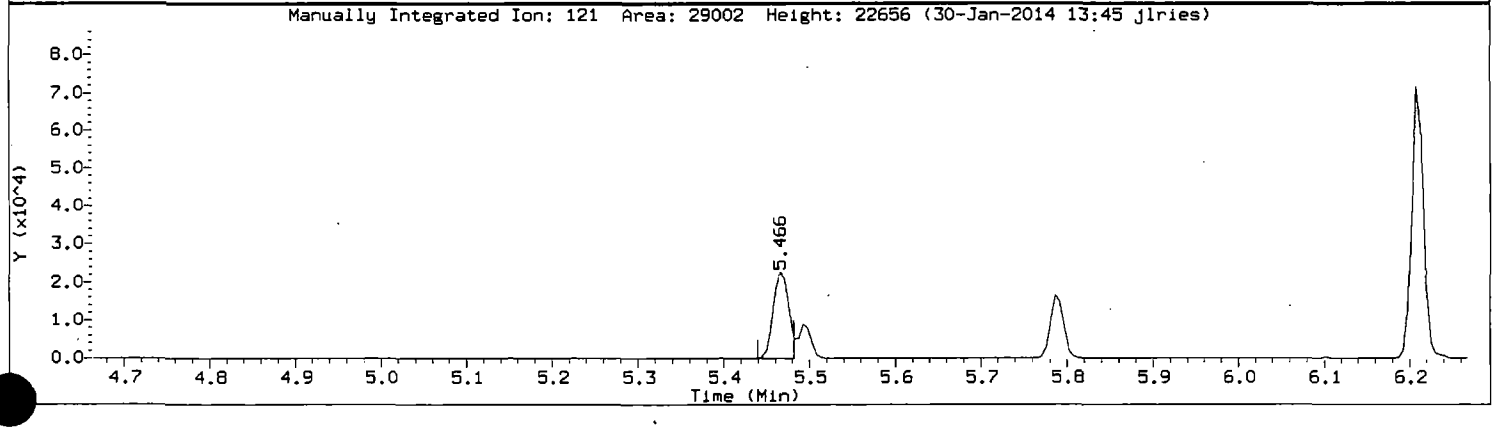
Injection Date: 30-JAN-2014 12:31
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98





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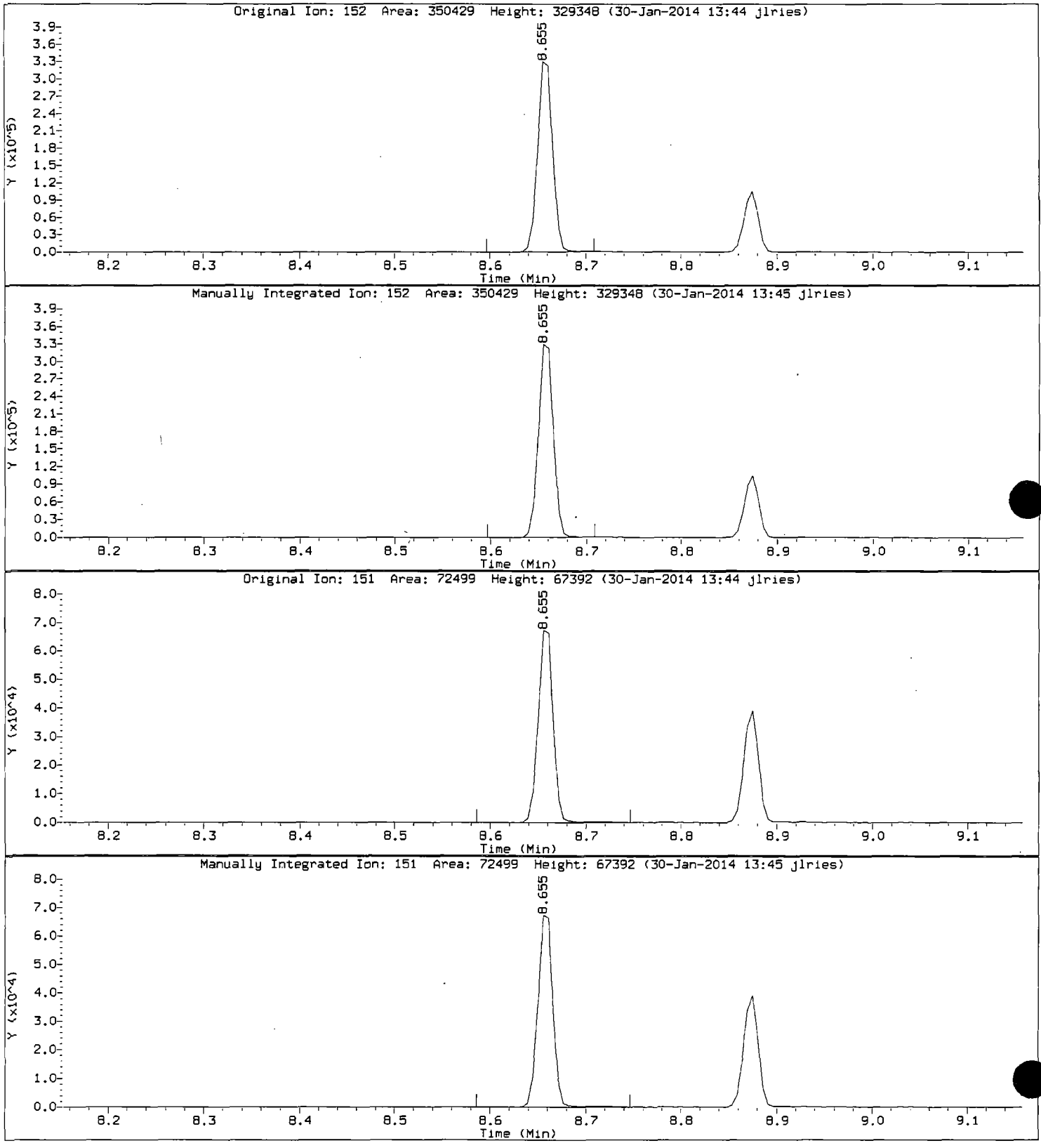
Injection Date: 30-JAN-2014 12:31
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98

Compound: Acenaphthylene
CAS Number: 208-96-8



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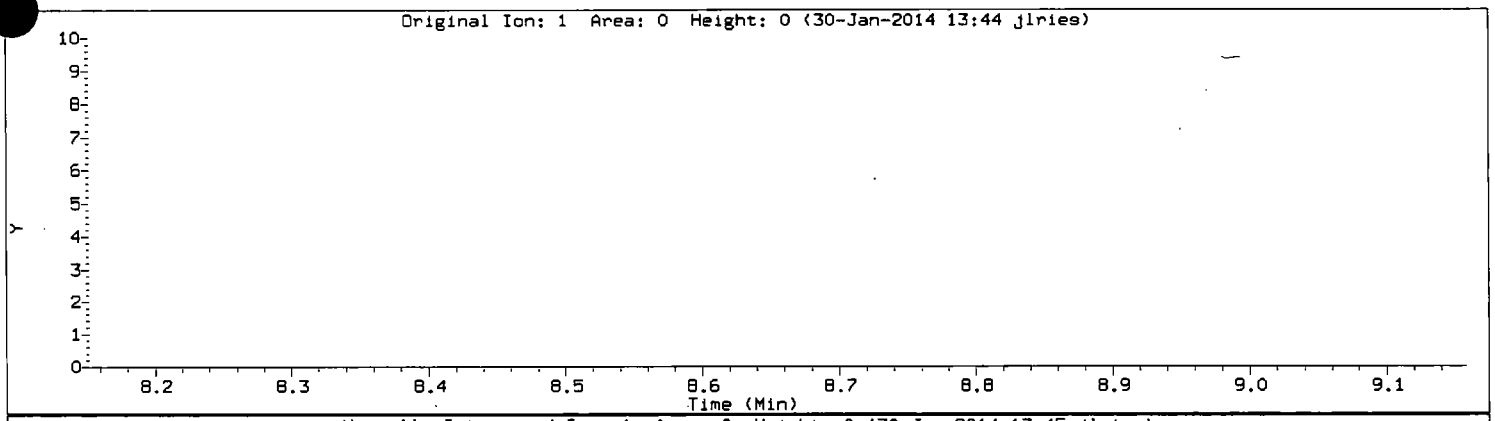
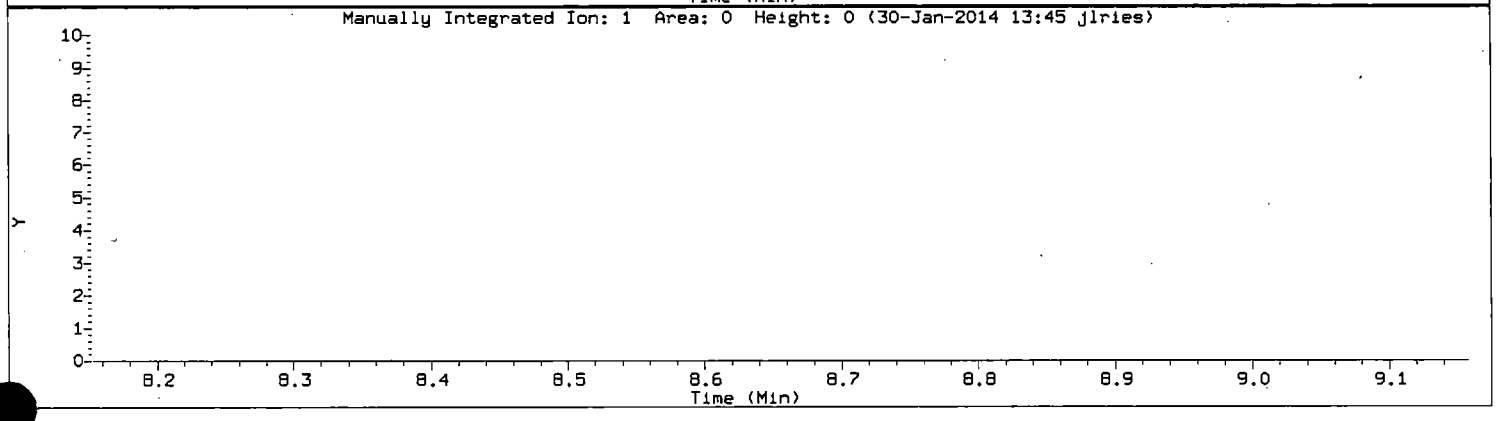
Injection Date: 30-JAN-2014 12:31
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98





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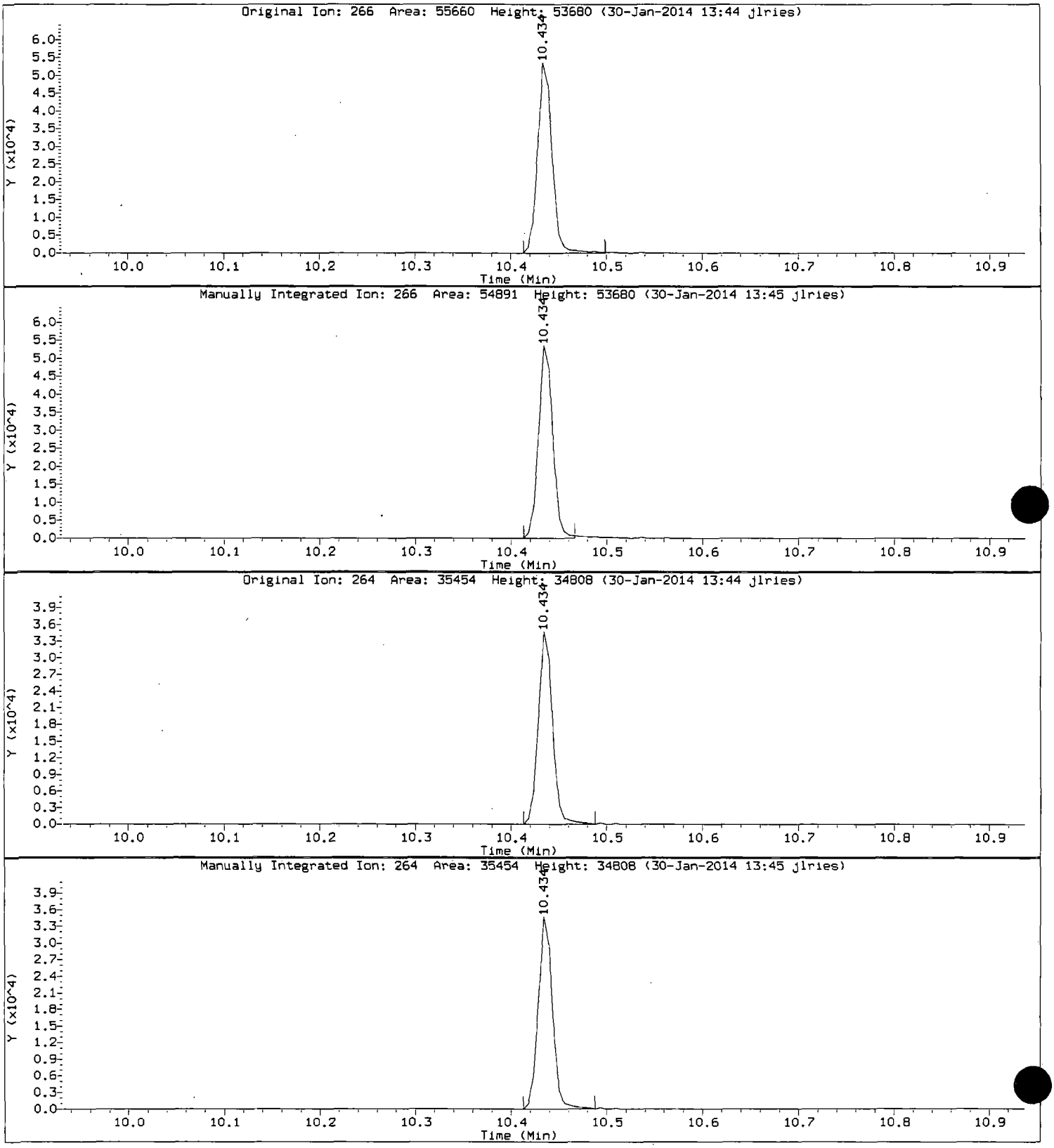
Injection Date: 30-JAN-2014 12:31
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98

Compound: Pentachlorophenol
CAS Number: 87-86-5



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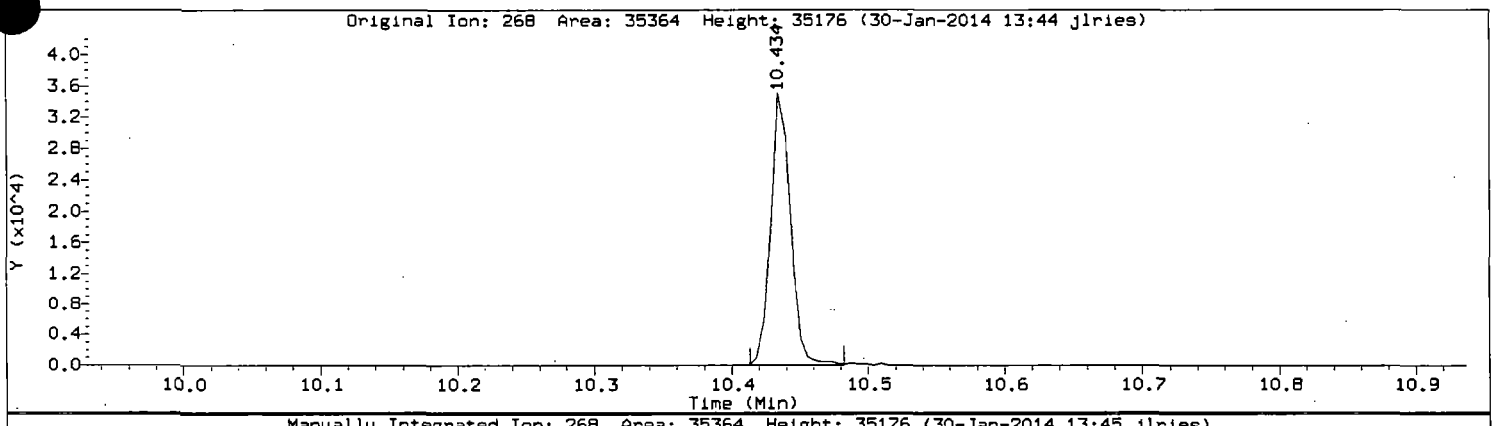
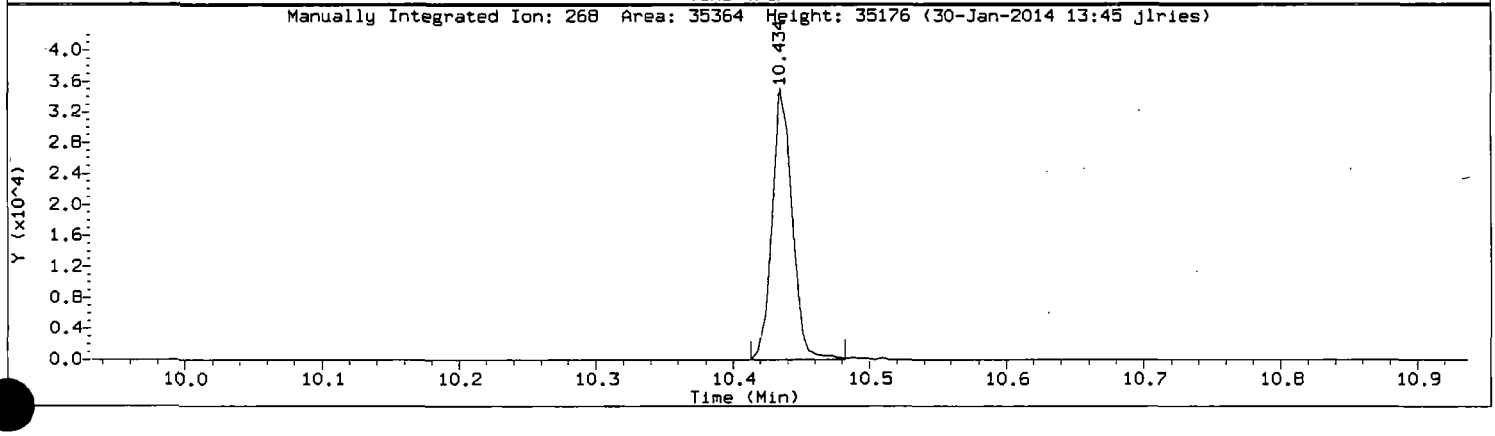
Injection Date: 30-JAN-2014 12:31
Instrument: 10mss9.i
Lab Sample ID: ICV 10328-98





Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301411.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 30-JAN-2014 13:01
Lab File ID: 01301411.D Init. Cal. Date(s): 30-JAN-2014 30-JAN-2014
Analysis Type: WATER Init. Cal. Times: 08:59 12:01
Lab Sample ID: CHRYDIPDIB 10328-47 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
35 Hexachlorocyclopentadiene	0.38779	0.37006	0.37006	0.050	-4.57210	40.00000	Averaged
56 N-Nitrosodiphenylamine	0.63381	0.62351	0.62351	0.010	-1.62520	20.00000	Averaged
77 Chrysene	1.04526	1.02717	1.02717	0.700	-1.72999	40.00000	Averaged
84 Dibenzo(a,h)anthracene	1.06359	1.03996	1.03996	0.400	-2.22176	40.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 2.53726
Maximun Average %D/Drift = 40.00000
* Passed Average %D/Drift Test.

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301411.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013014.b\01301411.D
Lab Smp Id: CHRYDIPDIB 10328-47
Inj Date : 30-JAN-2014 13:01
Operator : JLR Inst ID: 10mss9.i
Smp Info : CHRYDIPDIB 10328-47
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Meth Date : 30-Jan-2014 13:47 10mss9.i Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ChrysDIPDIB.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * Vt / (Vo) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	1.000	Volume of sample extracted (L)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
* 9 1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	53020	40.0000	
* 28 Naphthalene-d8	136	6.673	6.673	(1.000)	195497	40.0000	(Q)
35 Hexachlorocyclopentadiene	237	7.725	7.725	(0.875)	75717	80.0000	76.3
* 45 Acenaphthene-d10	164	8.826	8.826	(1.000)	102304	40.0000	
56 N-Nitrosodiphenylamine	169	9.633	9.633	(0.901)	240457	80.0000	78.7
* 63 Phenanthrene-d10	188	10.690	10.690	(1.000)	192826	40.0000	
* 76 Chrysene-d12	240	13.992	13.992	(1.000)	200772	40.0000	(Q)
77 Chrysene	228	14.029	14.029	(1.003)	412455	80.0000	78.6
* 82 Perylene-d12	264	15.990	15.990	(1.000)	192617	40.0000	
84 Dibenzo(a,h)anthracene	278	18.095	18.095	(1.132)	400627	80.0000	78.2(Q)

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301411.D
Report Date: 30-Jan-2014 13:47

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01301411.D
Lab Smp Id: CHRYDIPDIB 10328-47
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013014.b\013014-8270MSS9.m
Misc Info:

Calibration Date: 30-JAN-2014
Calibration Time: 12:31
Level: LOW
Sample Type: WATER

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

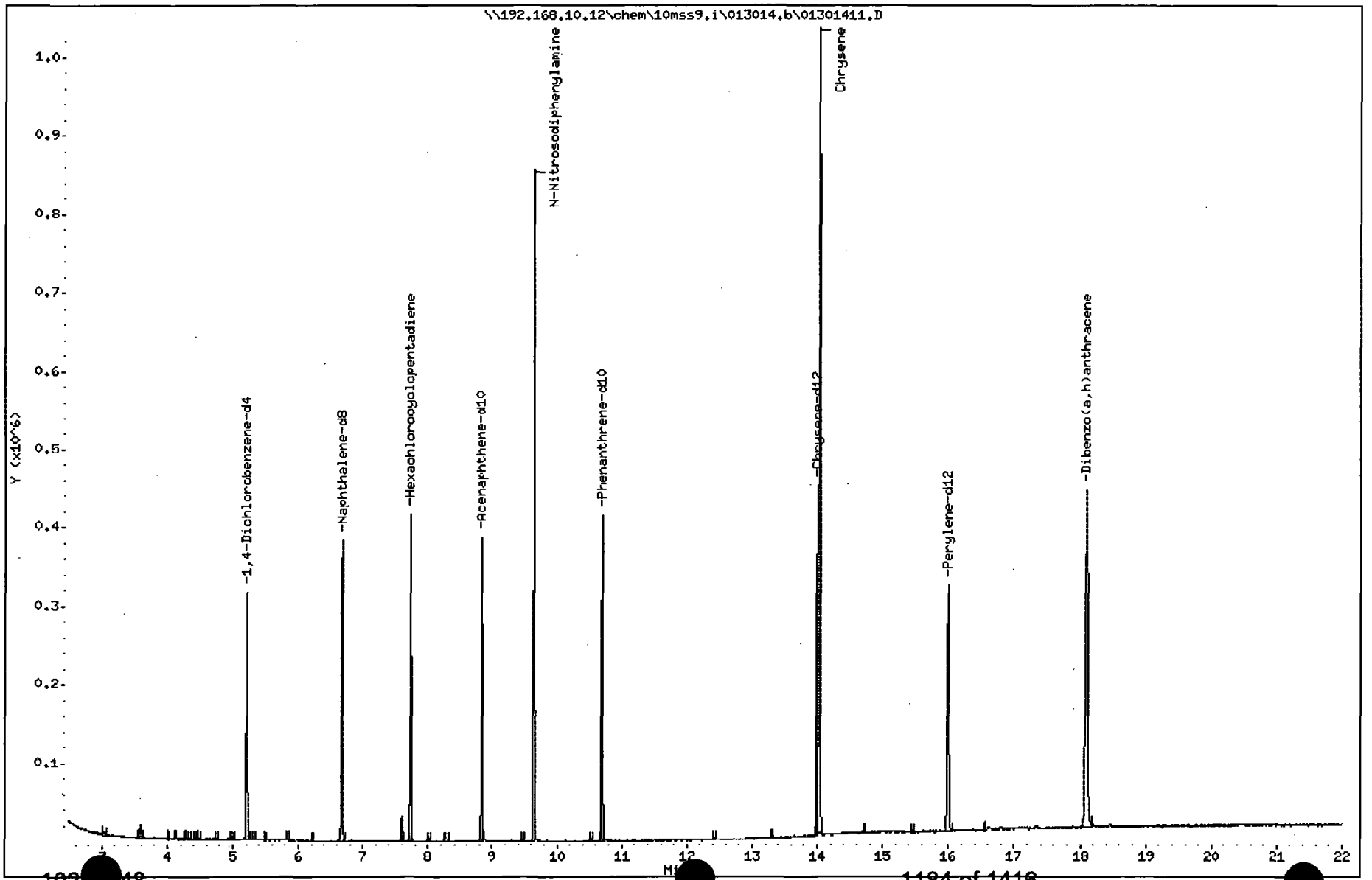
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	55535	27768	111070	53020	-4.53
28 Naphthalene-d8	202574	101287	405148	195497	-3.49
45 Acenaphthene-d10	105765	52883	211530	102304	-3.27
63 Phenanthrene-d10	197315	98658	394630	192826	-2.28
76 Chrysene-d12	212271	106136	424542	200772	-5.42
82 Perylene-d12	203680	101840	407360	192617	-5.43

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.06
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	0.00
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.99	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

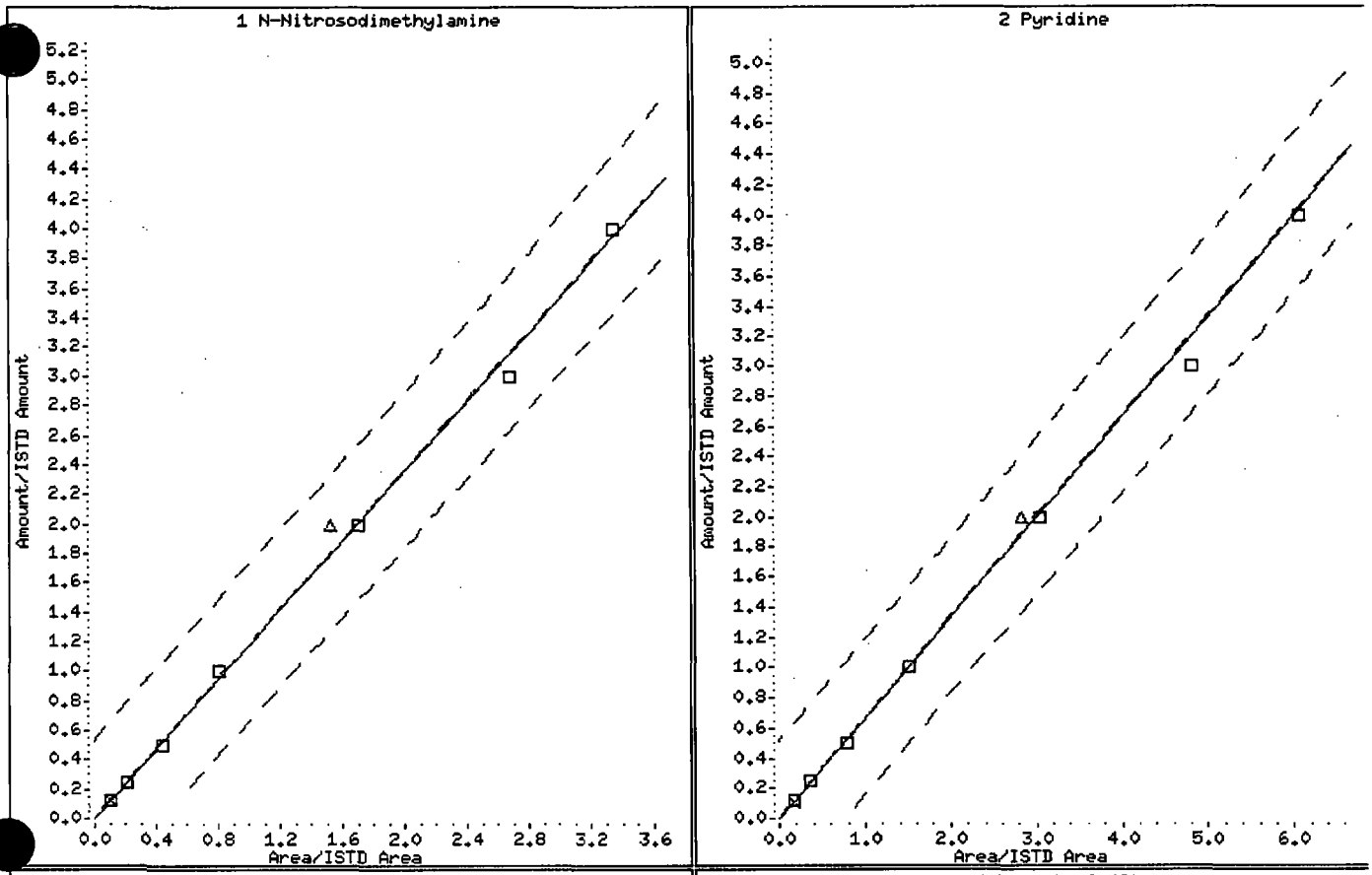
Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301411.D
Date : 30-JAN-2014 13:01
Client ID:
Sample Info: CHRYDIPDIB 10328-47
Purge Volume: 1.0
Column phase: DB-5MS

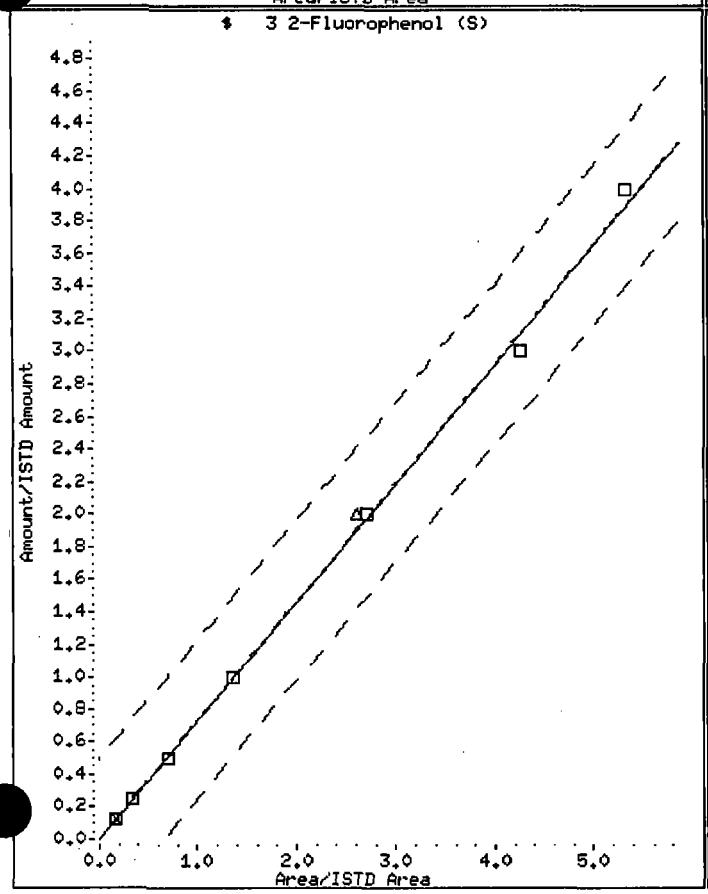
Instrument: 10mss9.i
Operator: JLR
Column diameter: 0.25

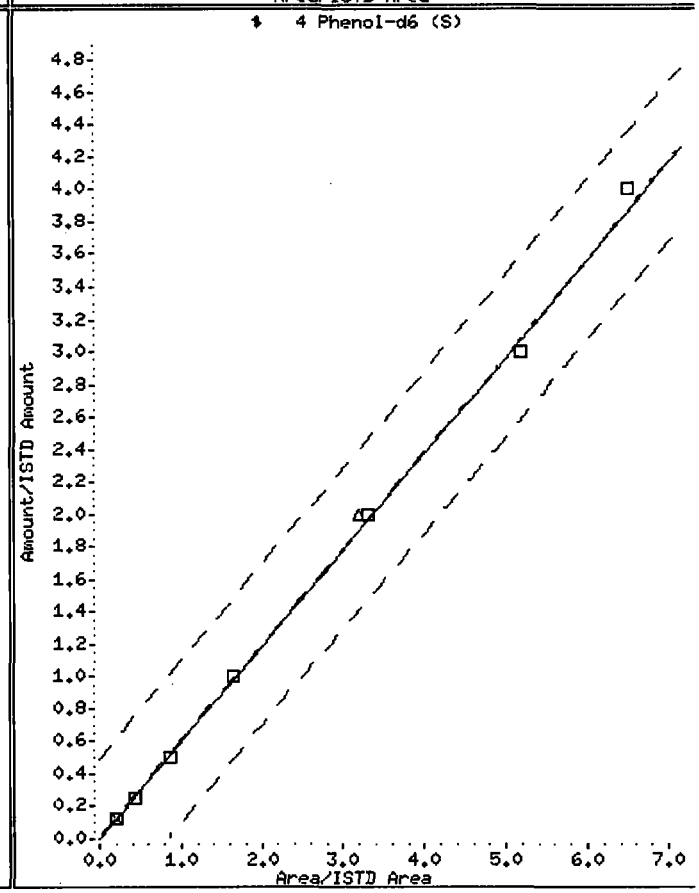


Data File: \\192.168.10.12\chem\10mss9.i\013014.b/01301411.D
Injection Date: 30-JAN-2014 13:01
Instrument: 10mss9.i
Lab Sample ID: CHRYDIPDIB 10328-47
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301409.D







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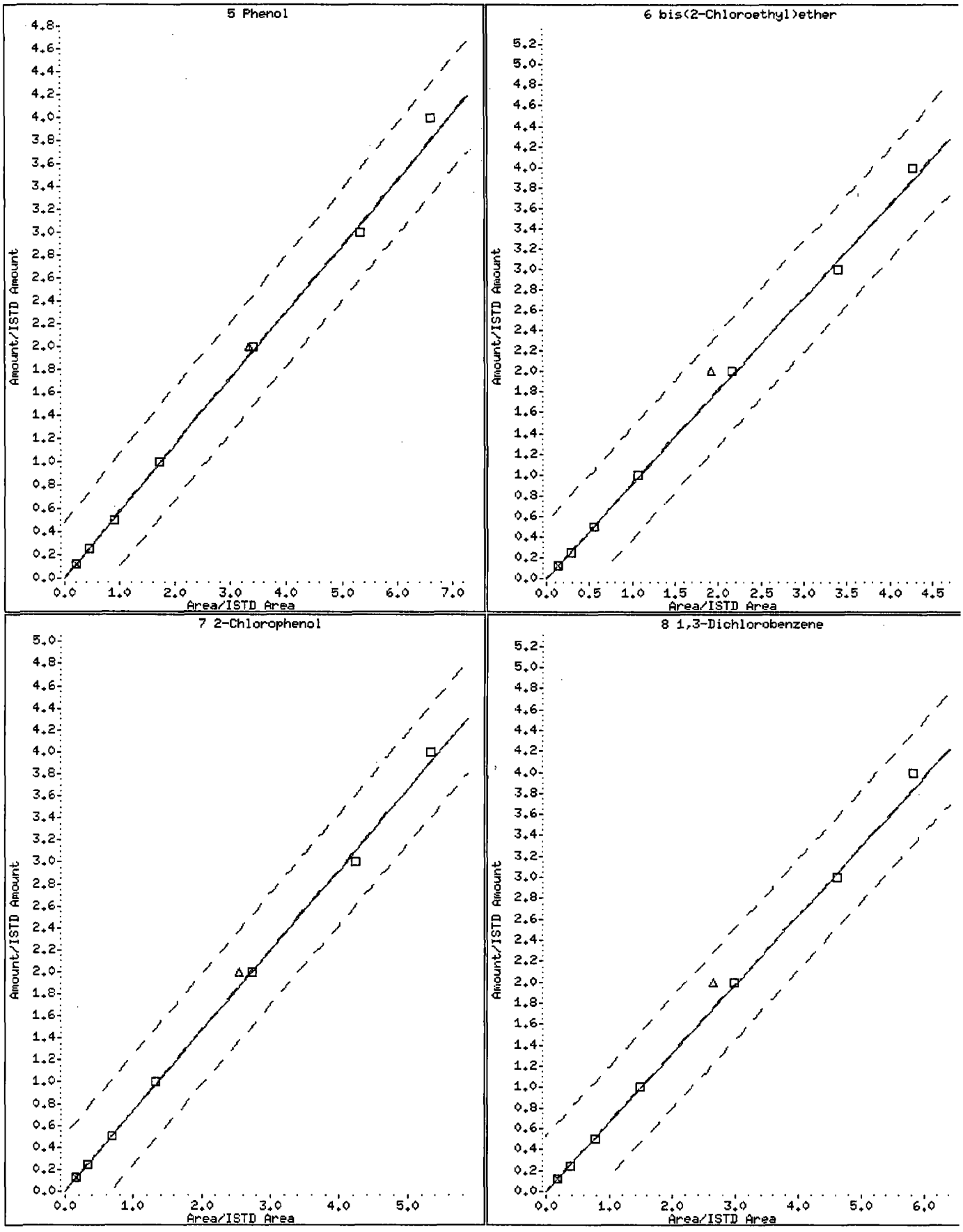

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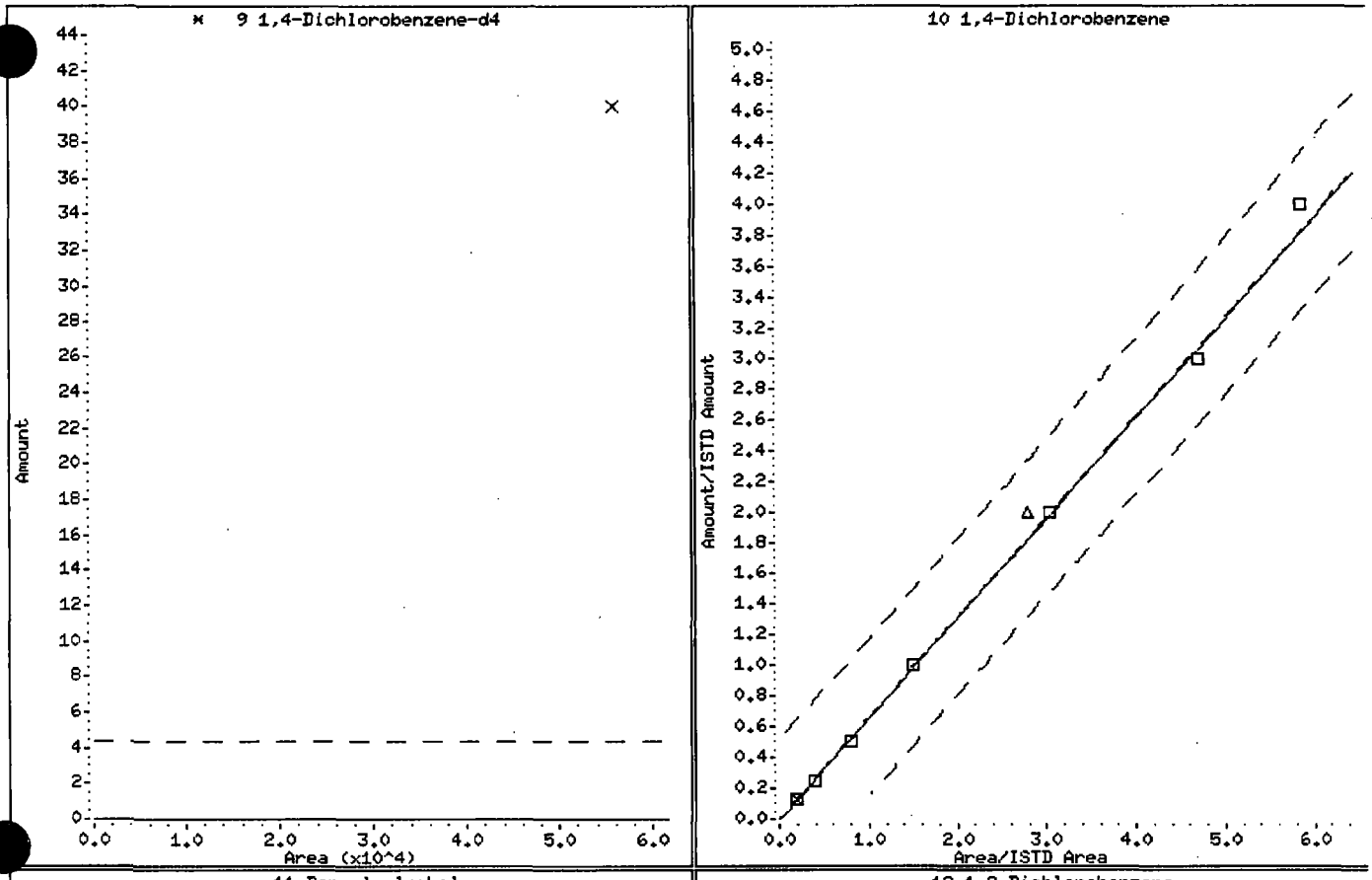

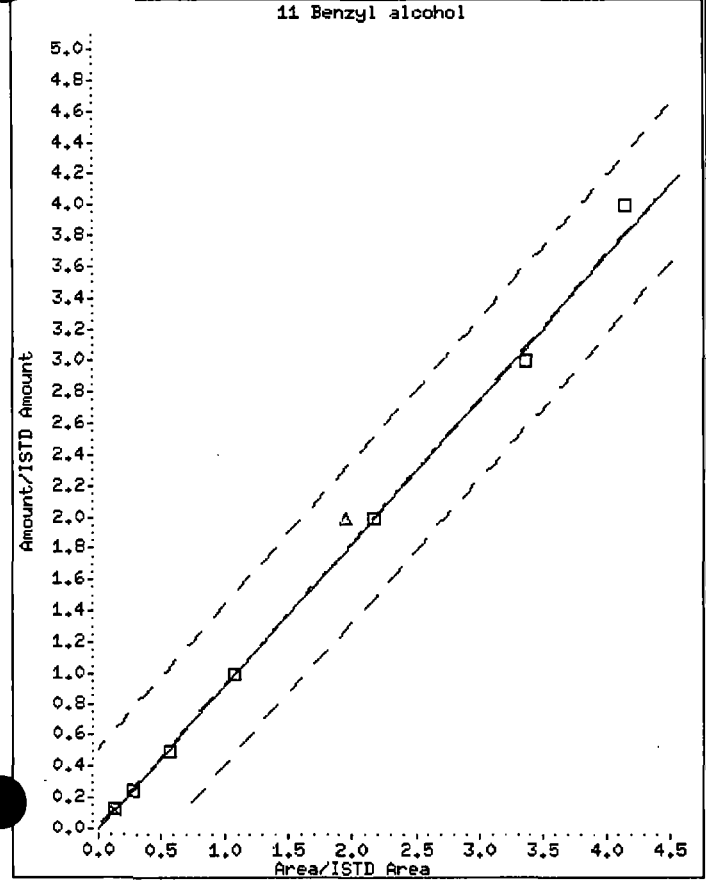

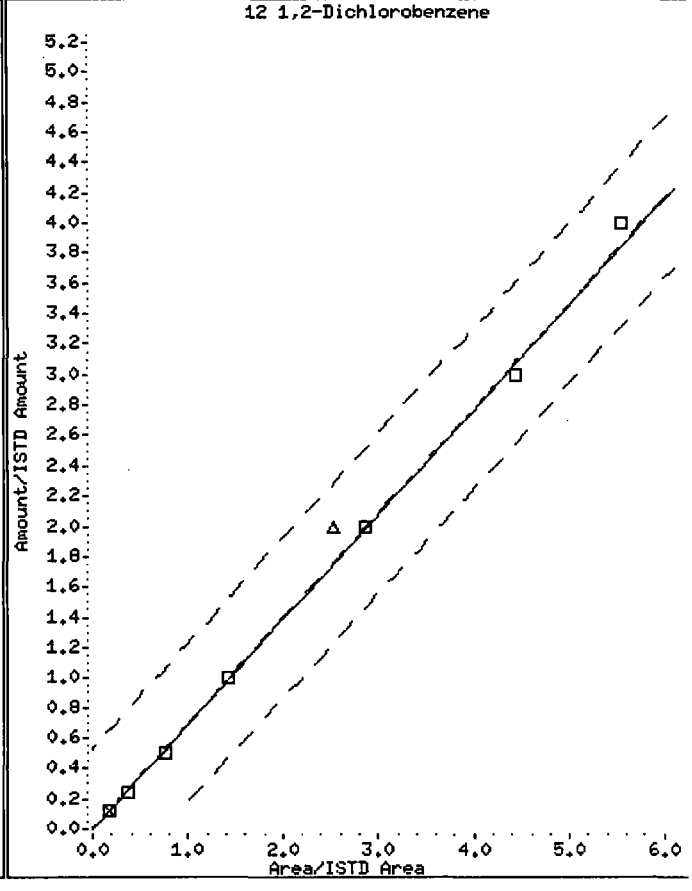

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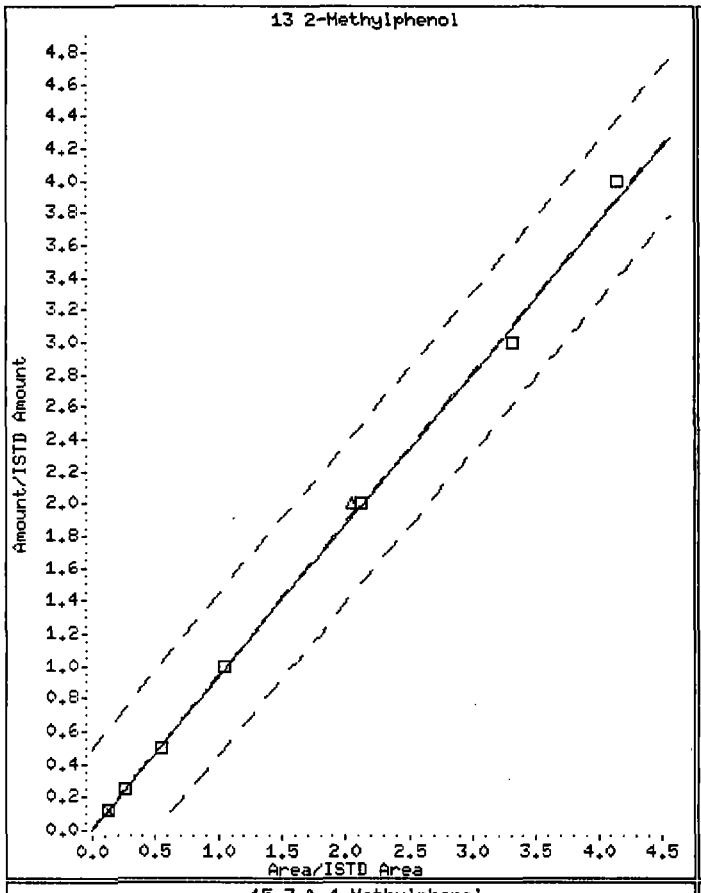

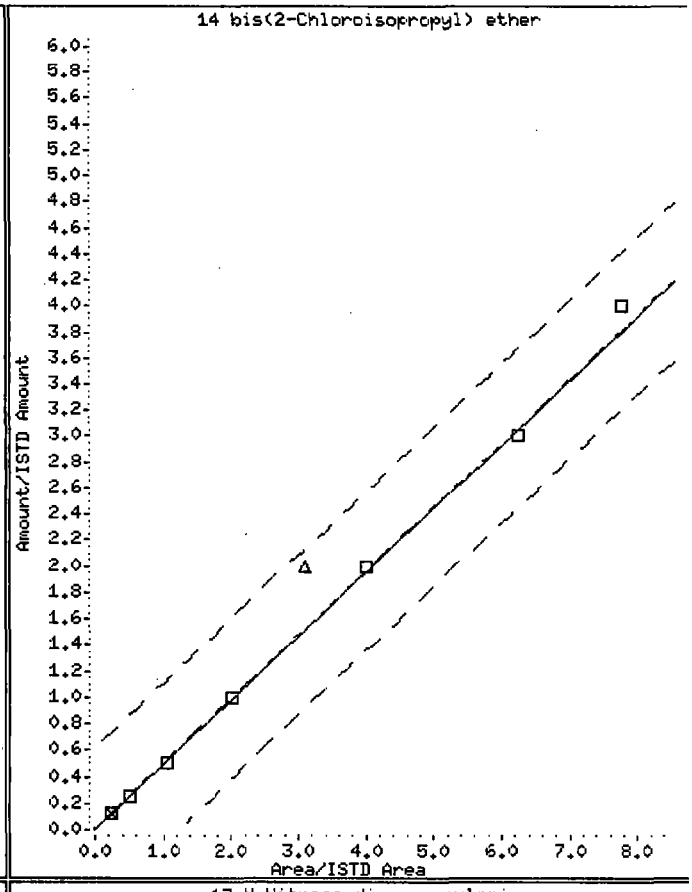

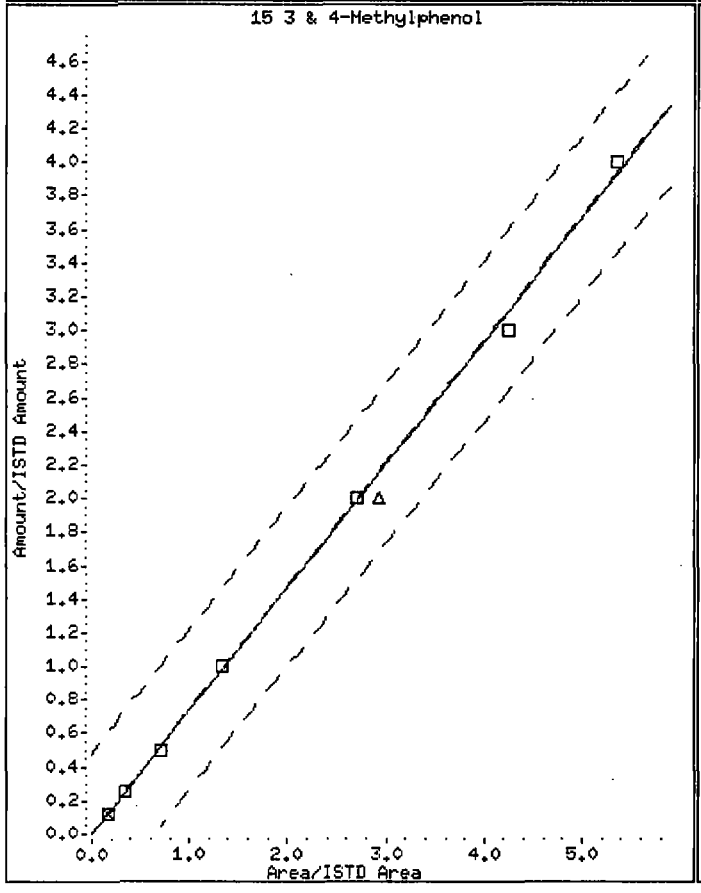

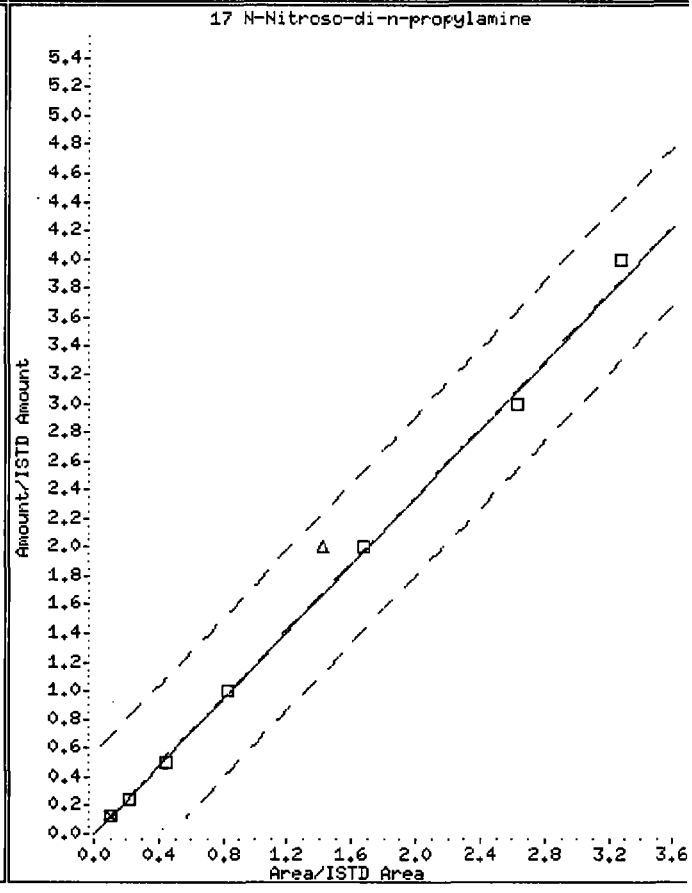

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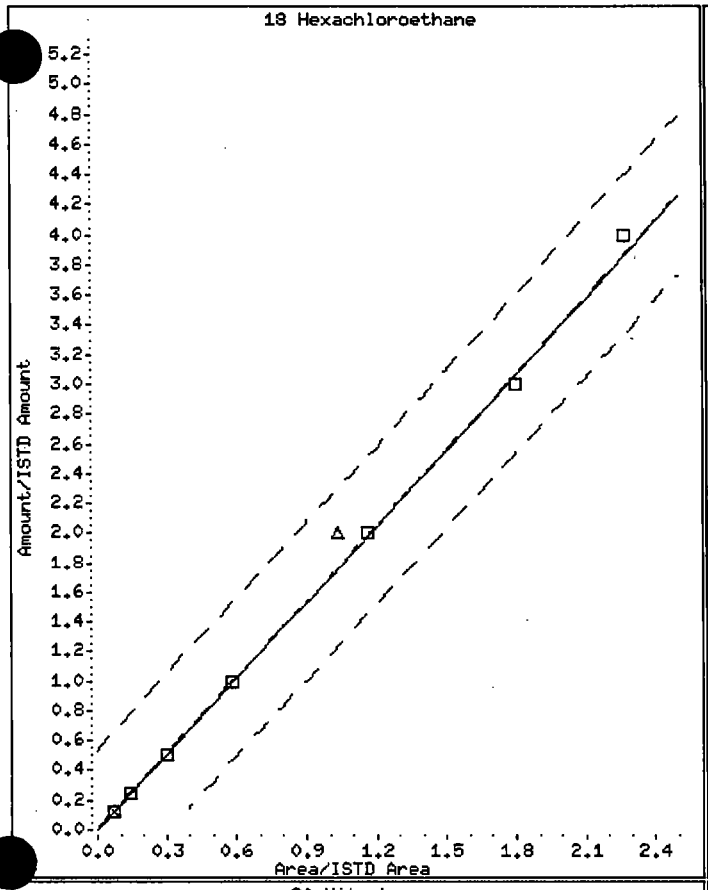

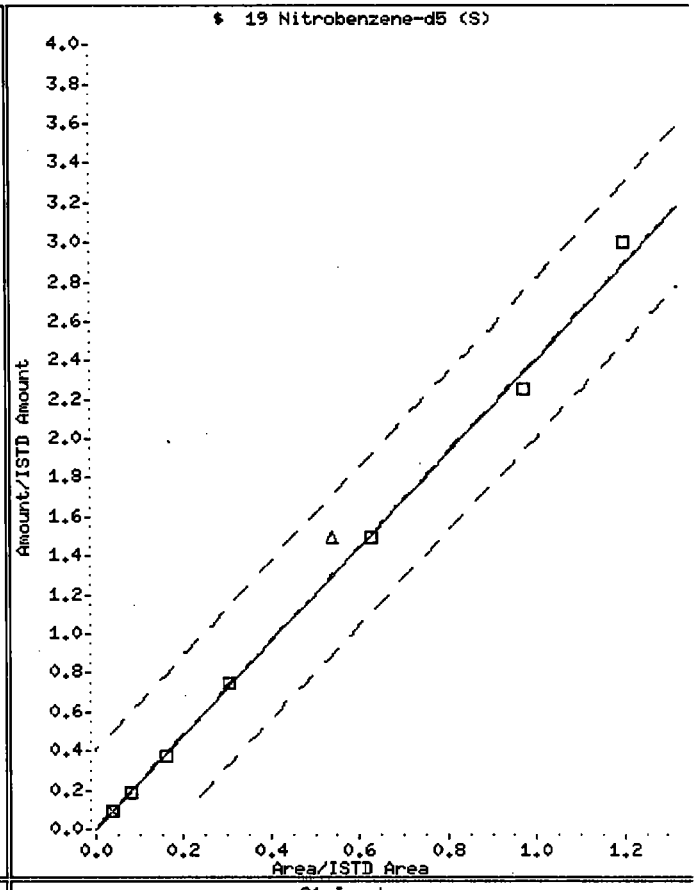

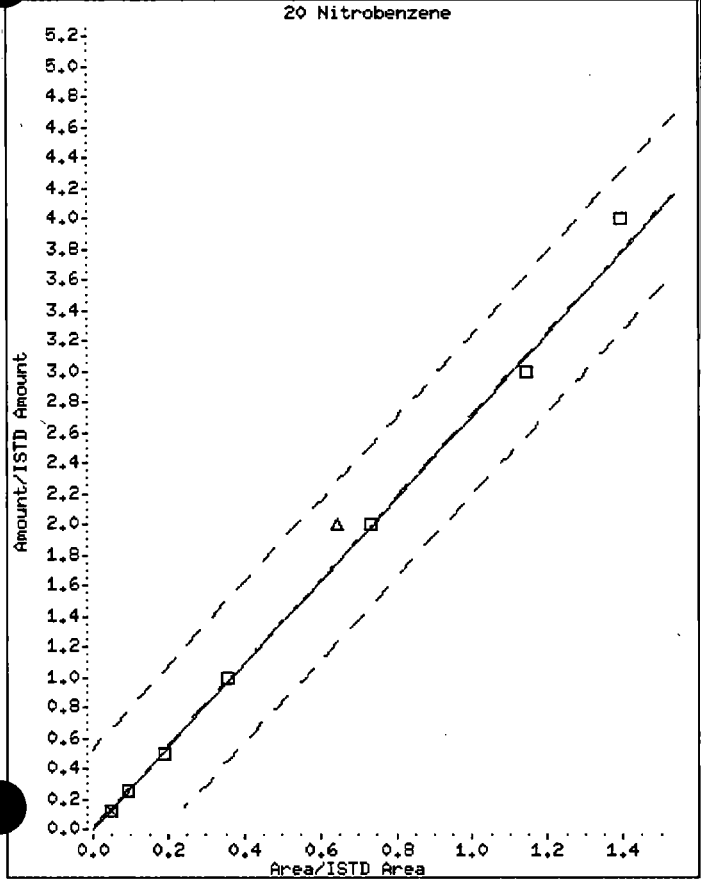

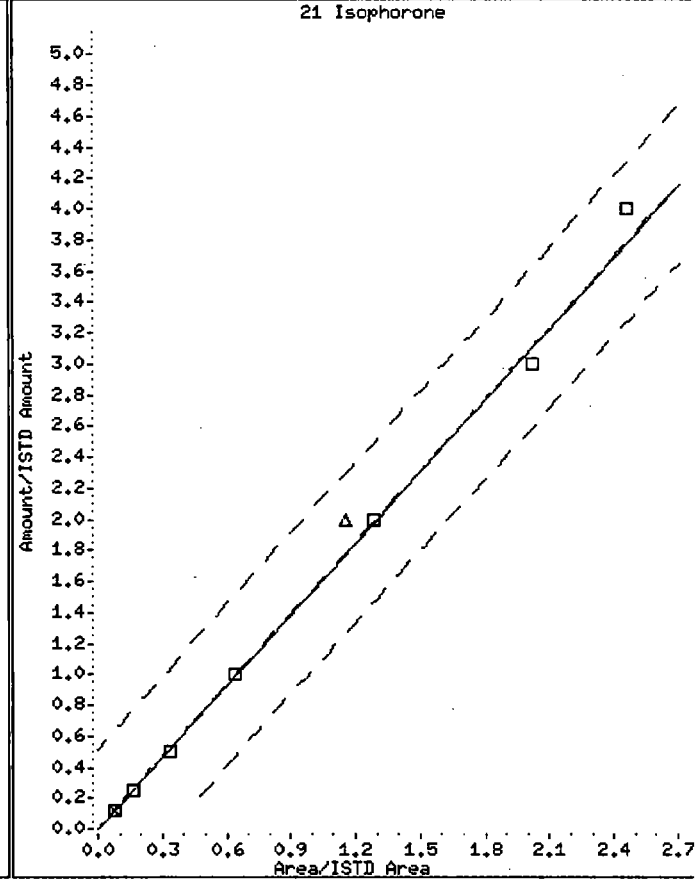

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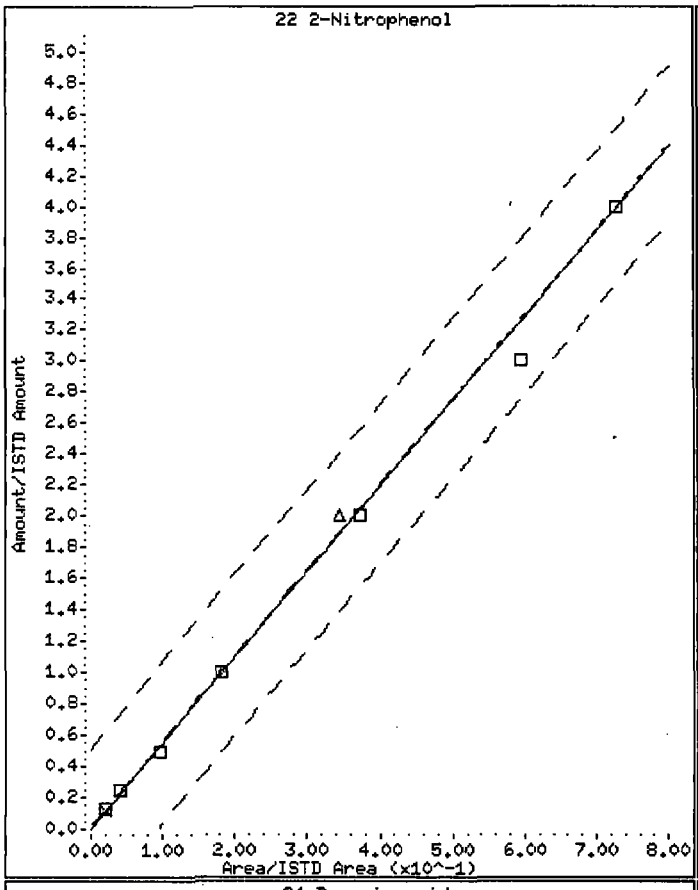

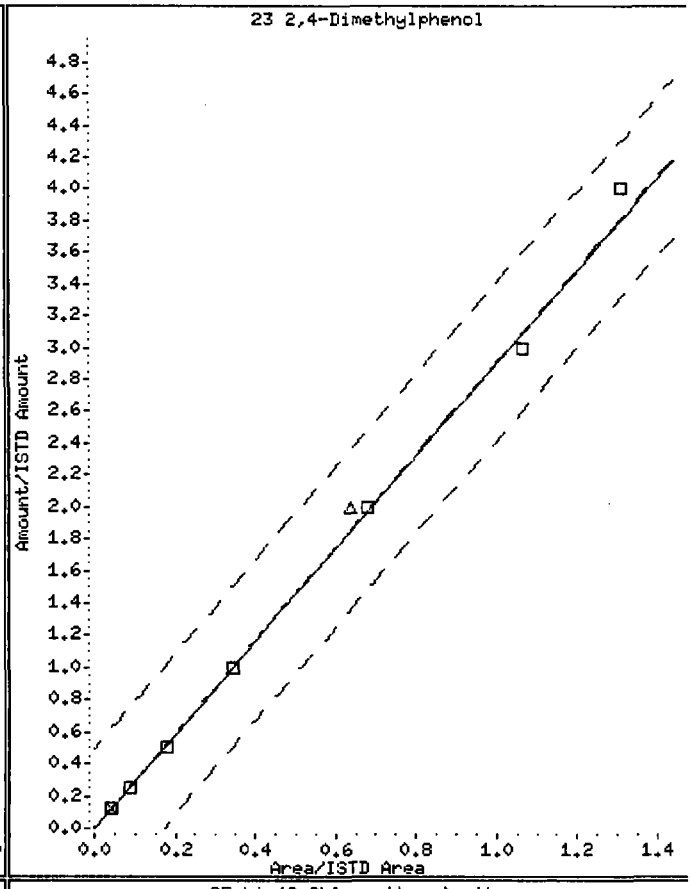

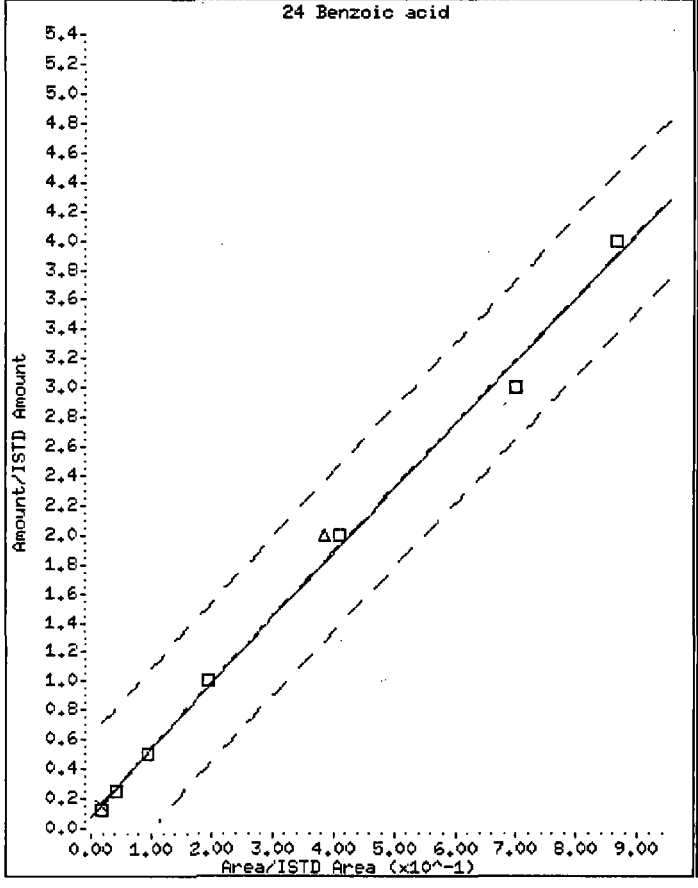

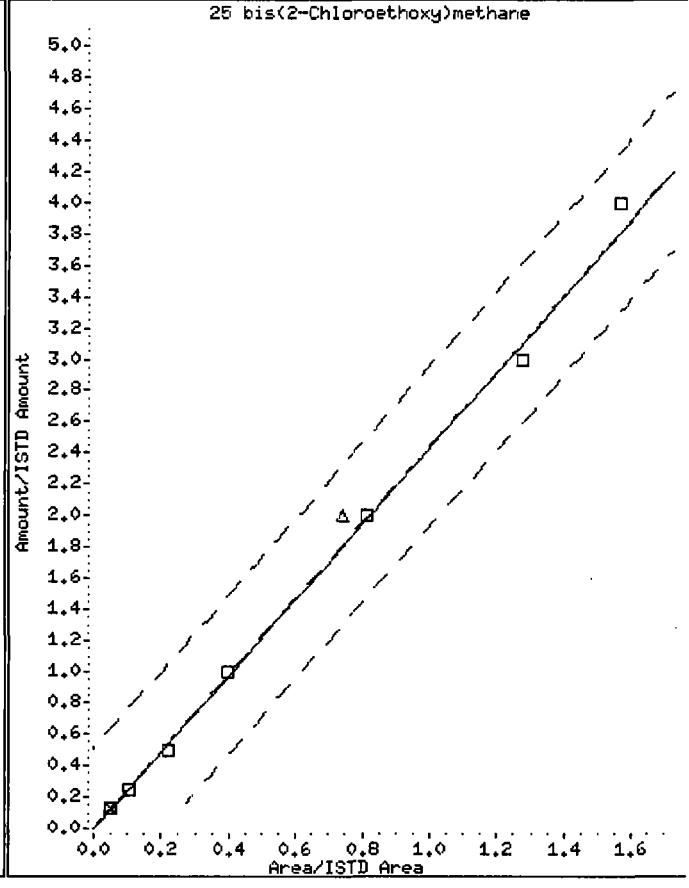

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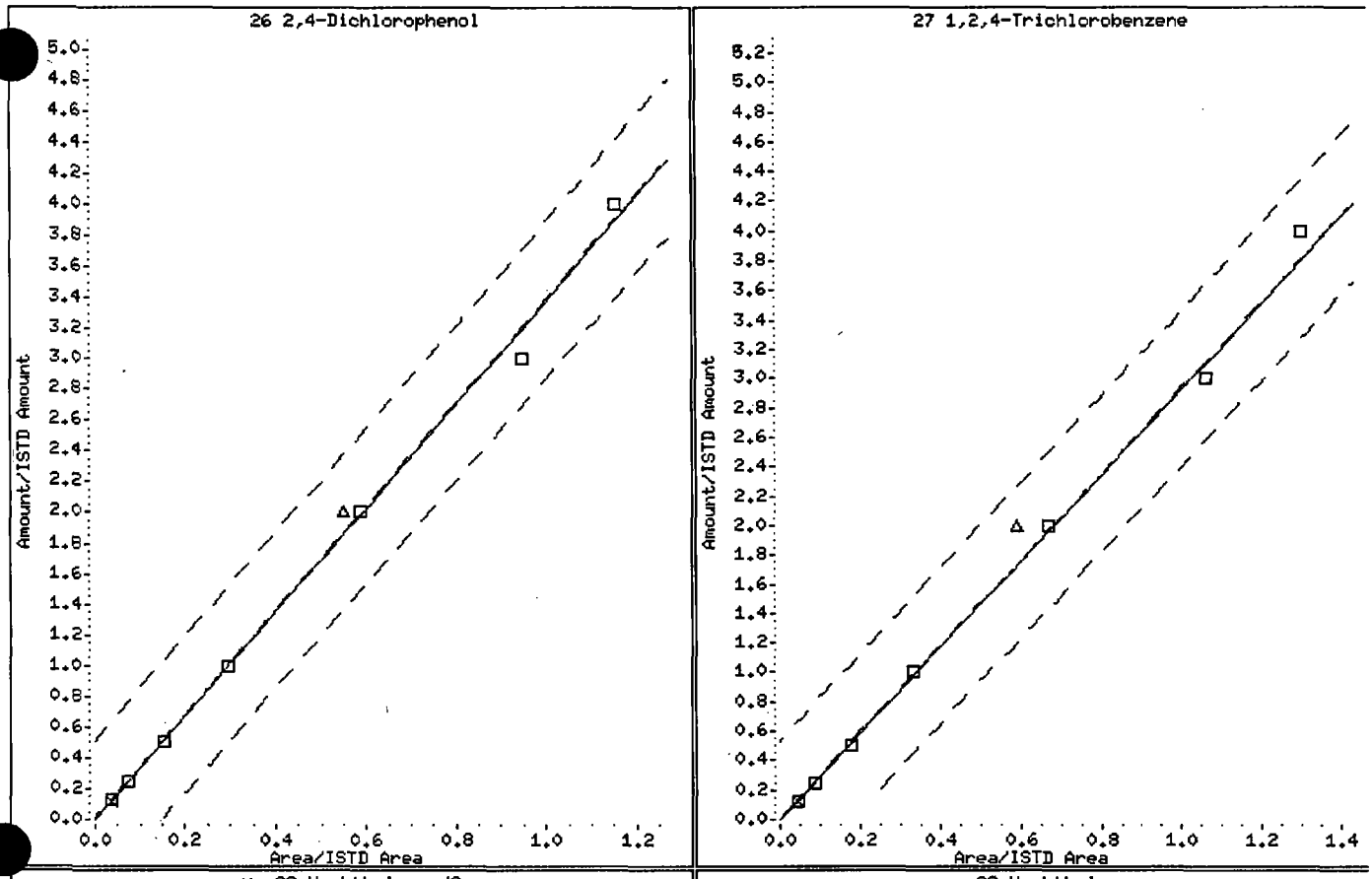

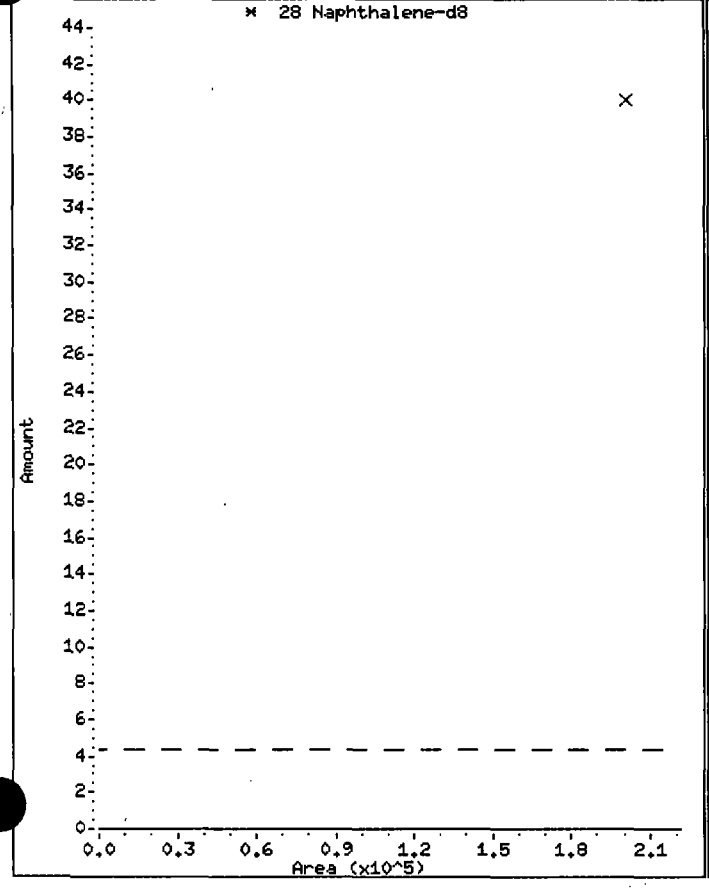

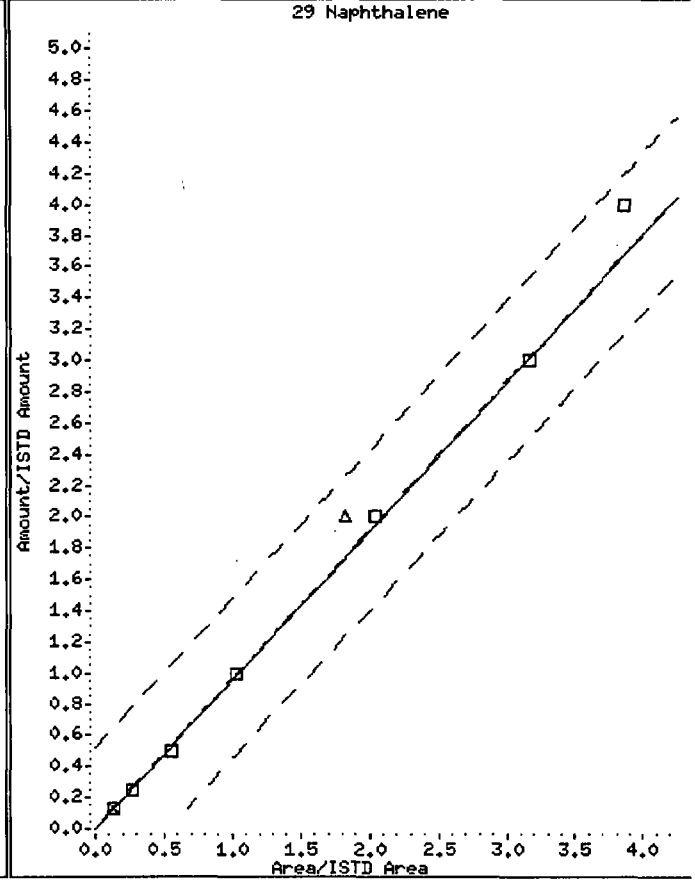

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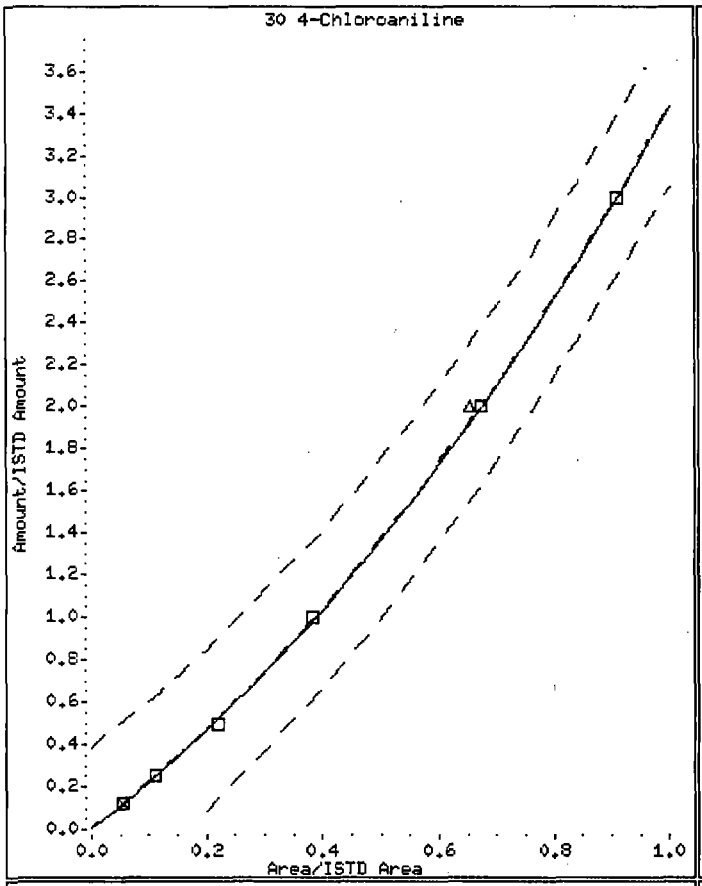

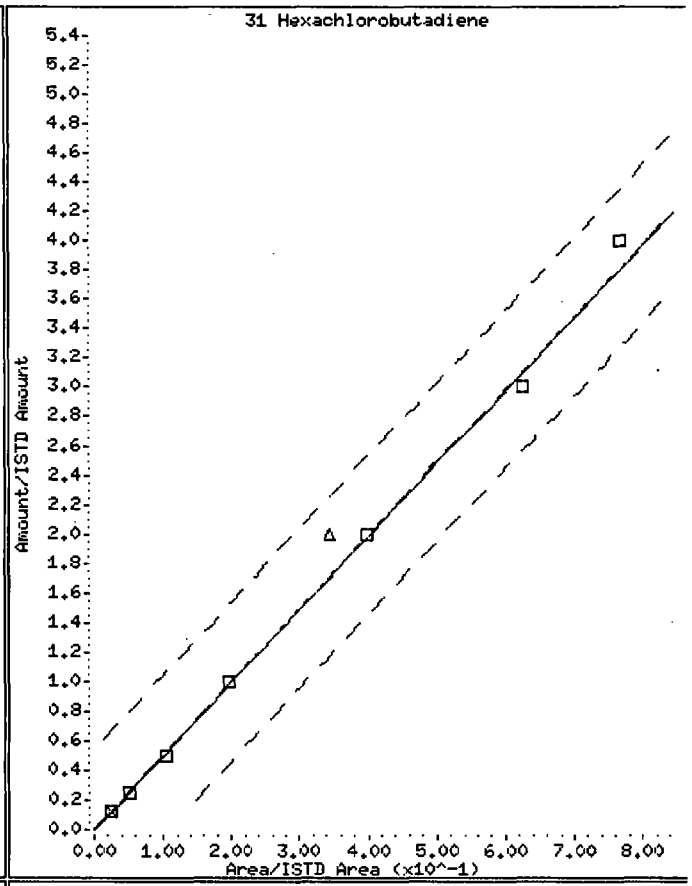

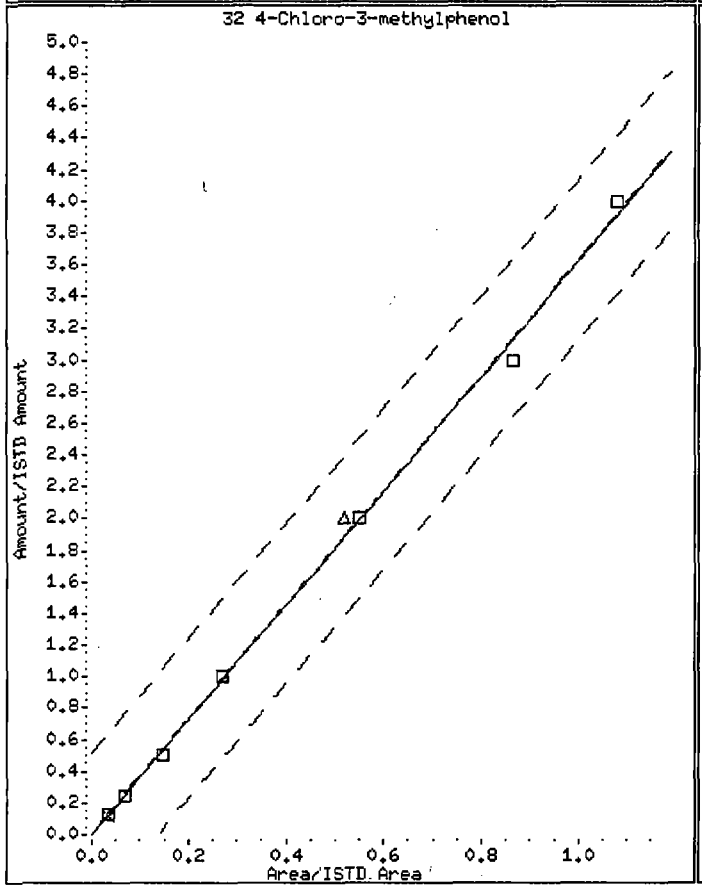

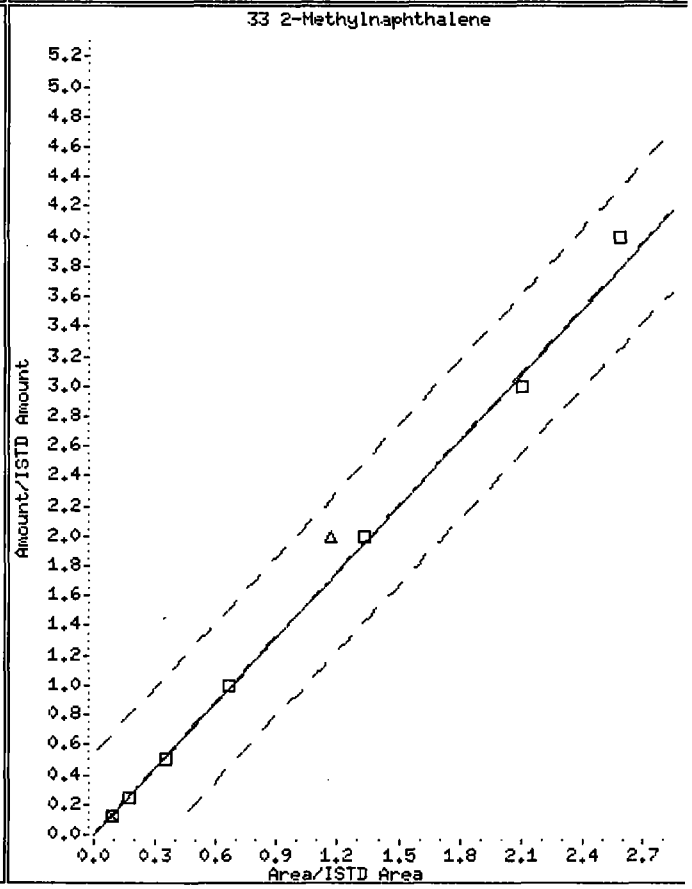

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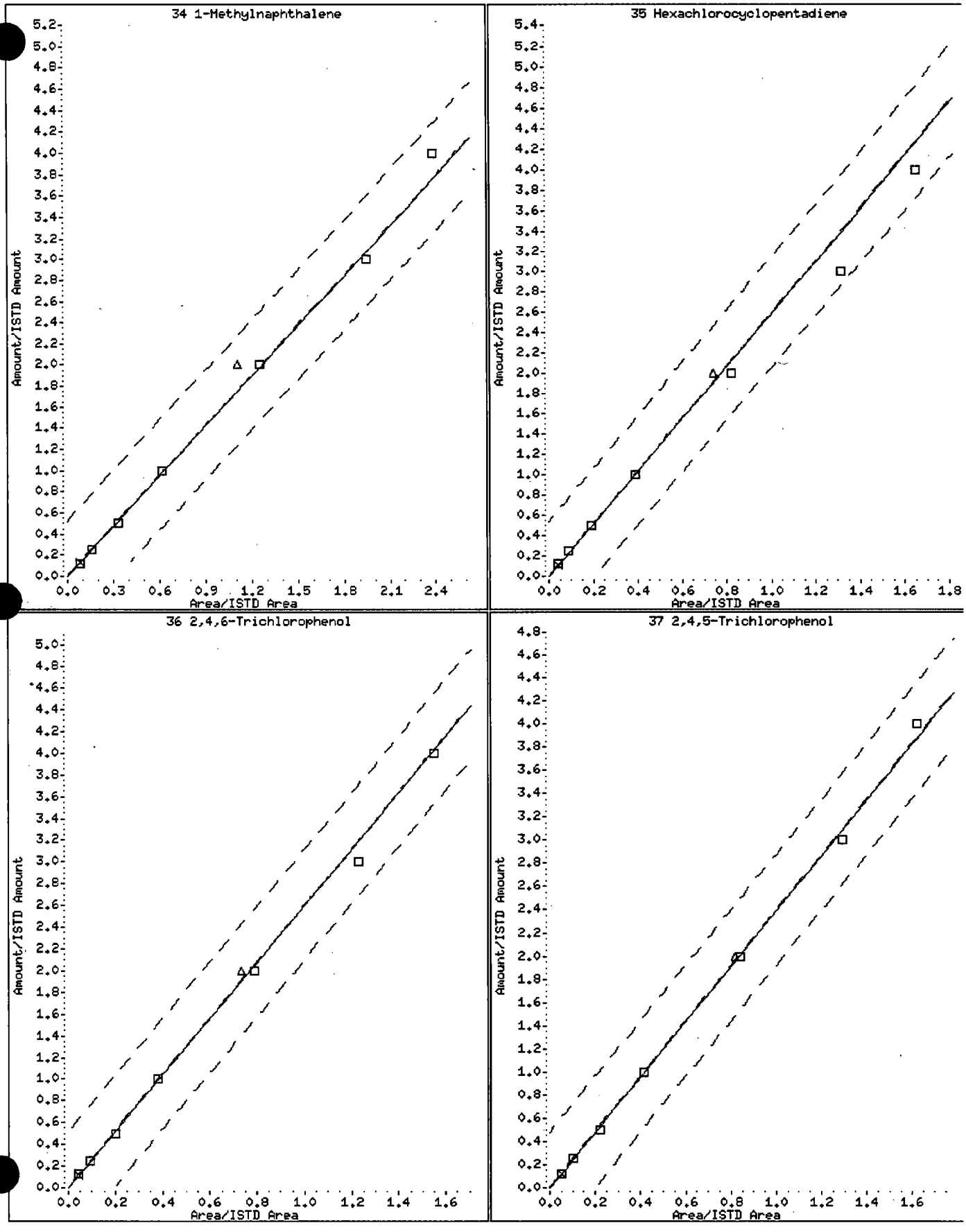

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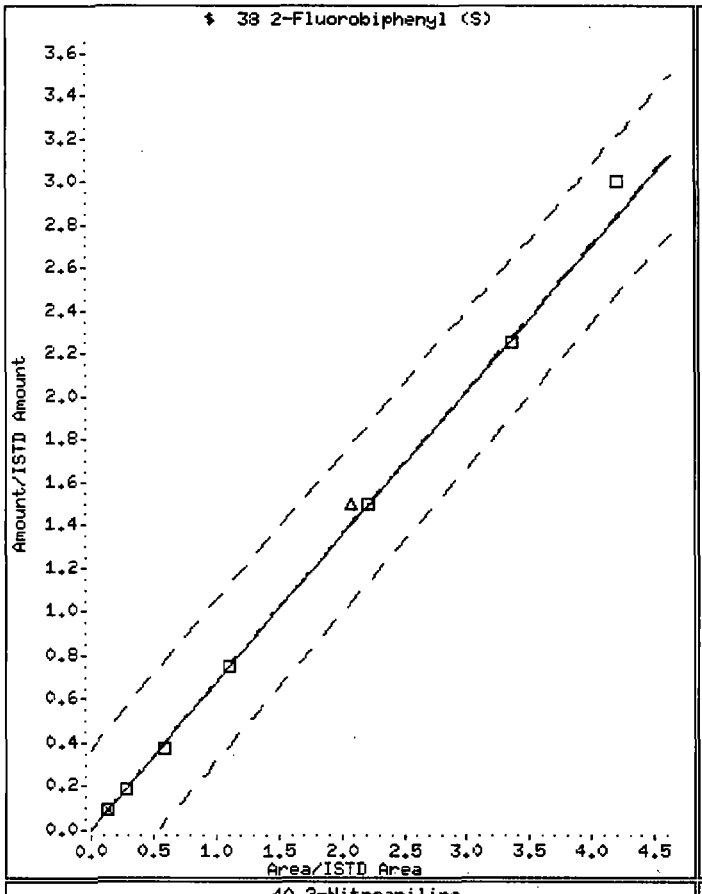

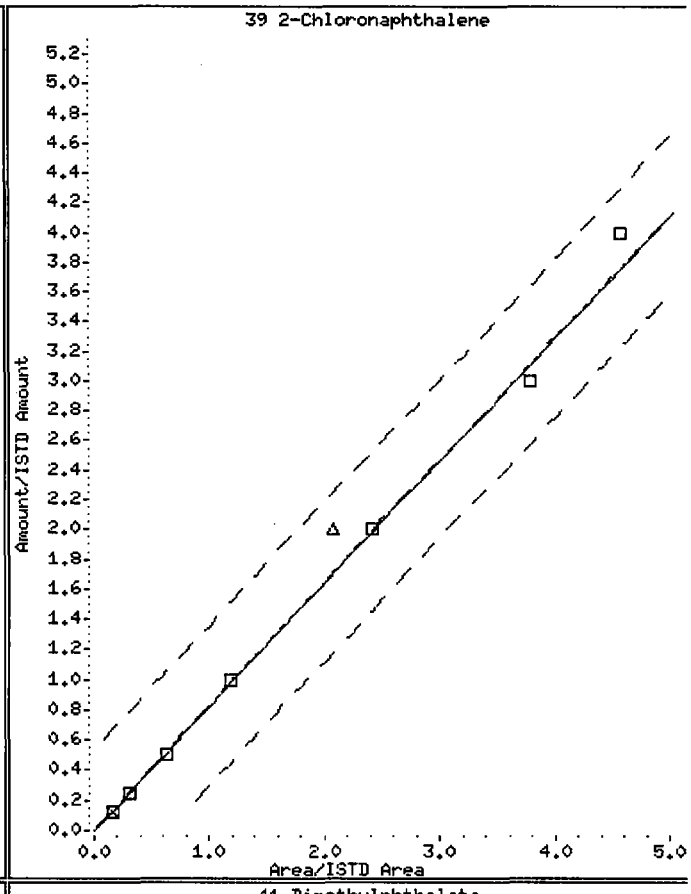

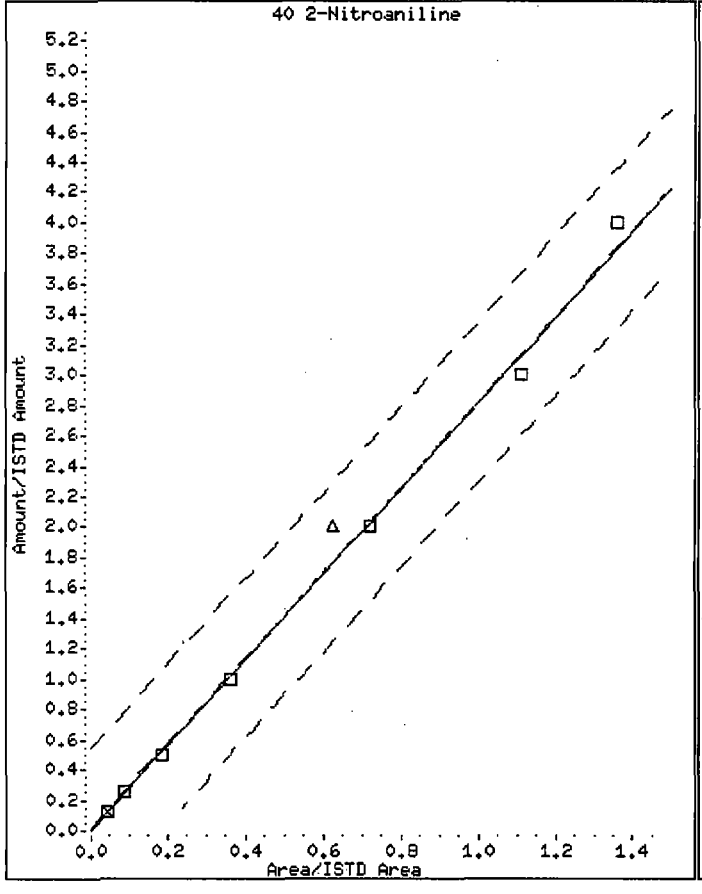

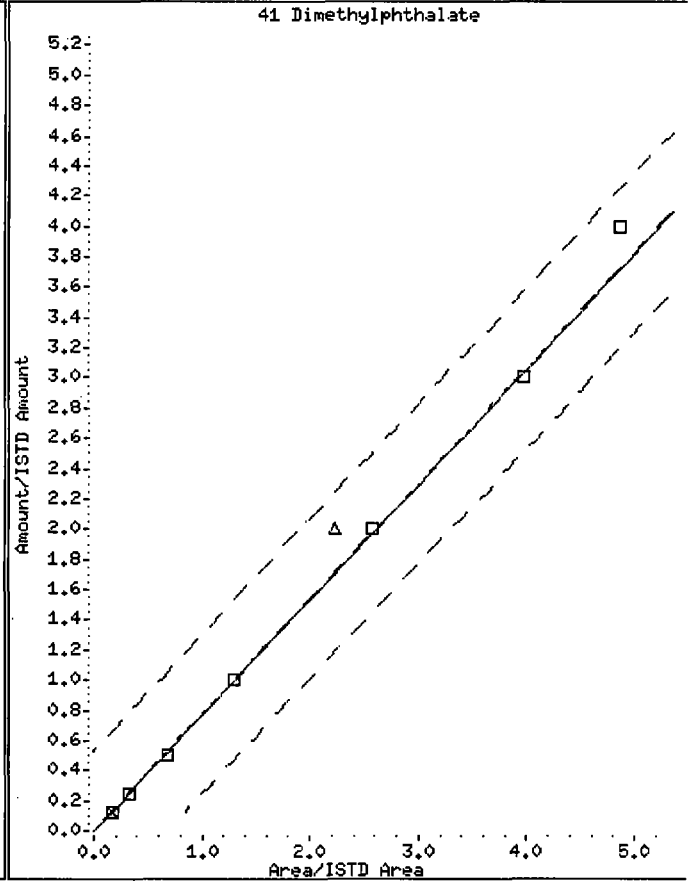

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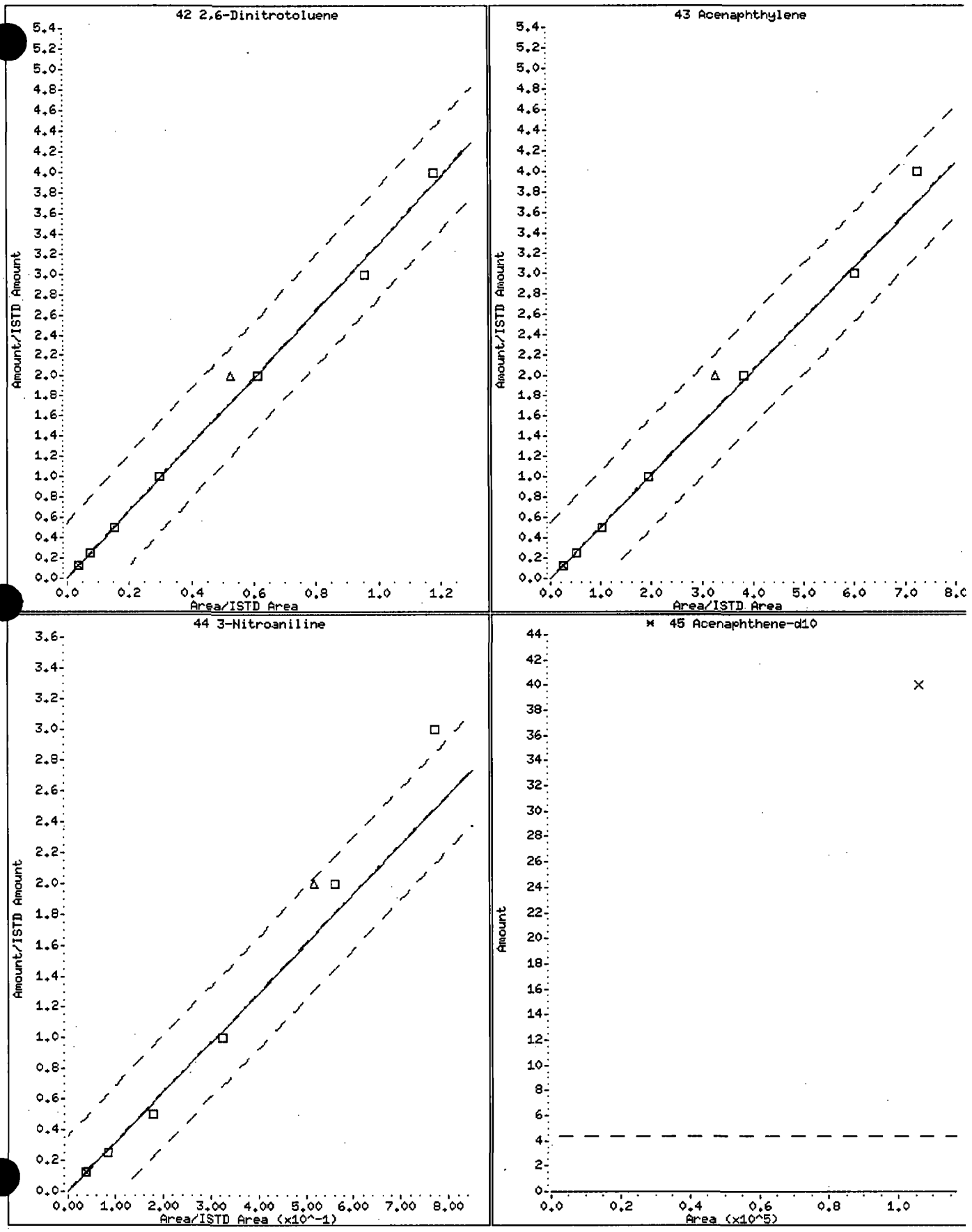

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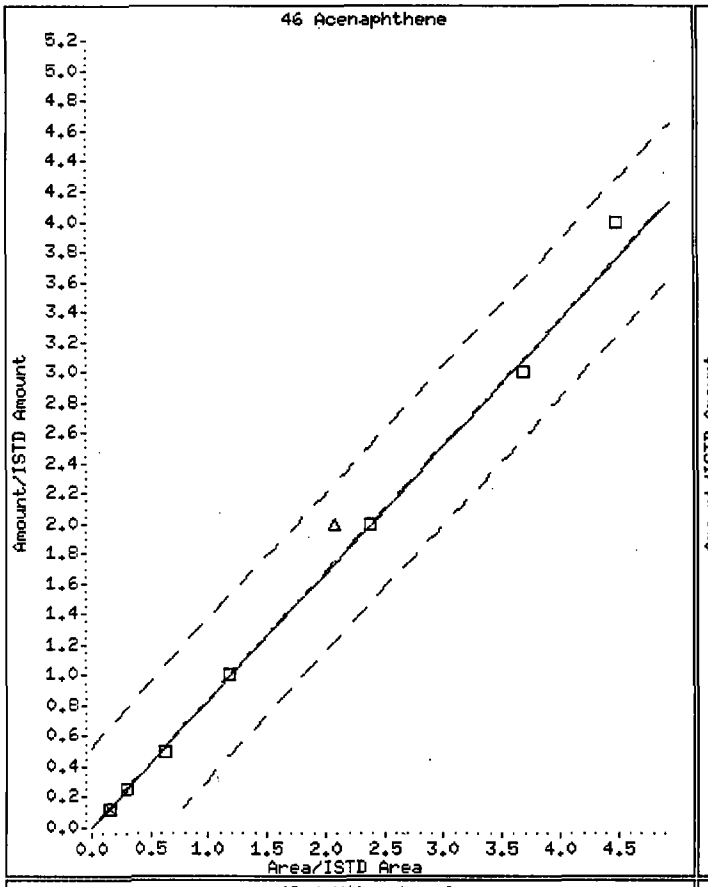

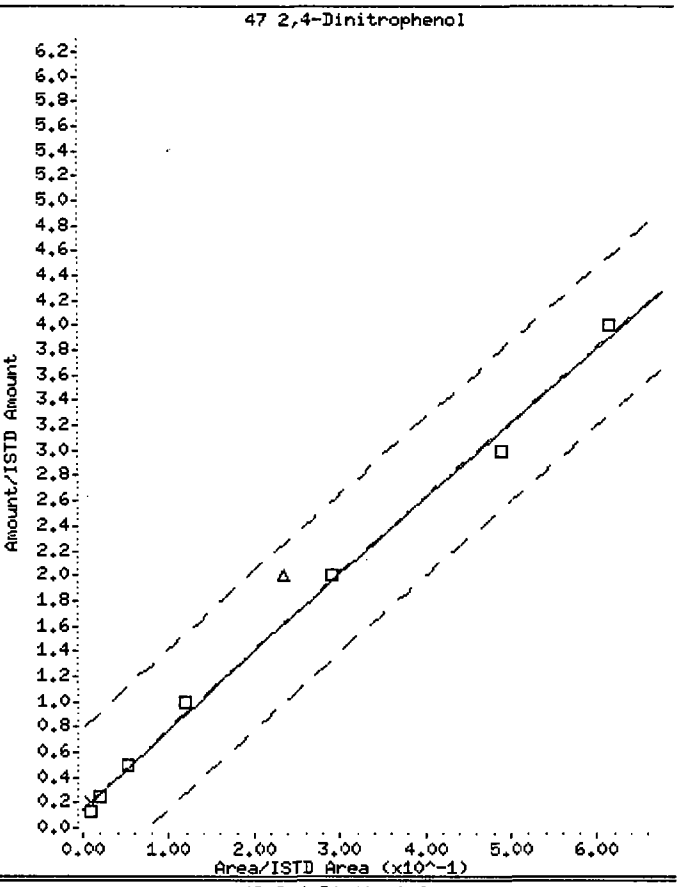

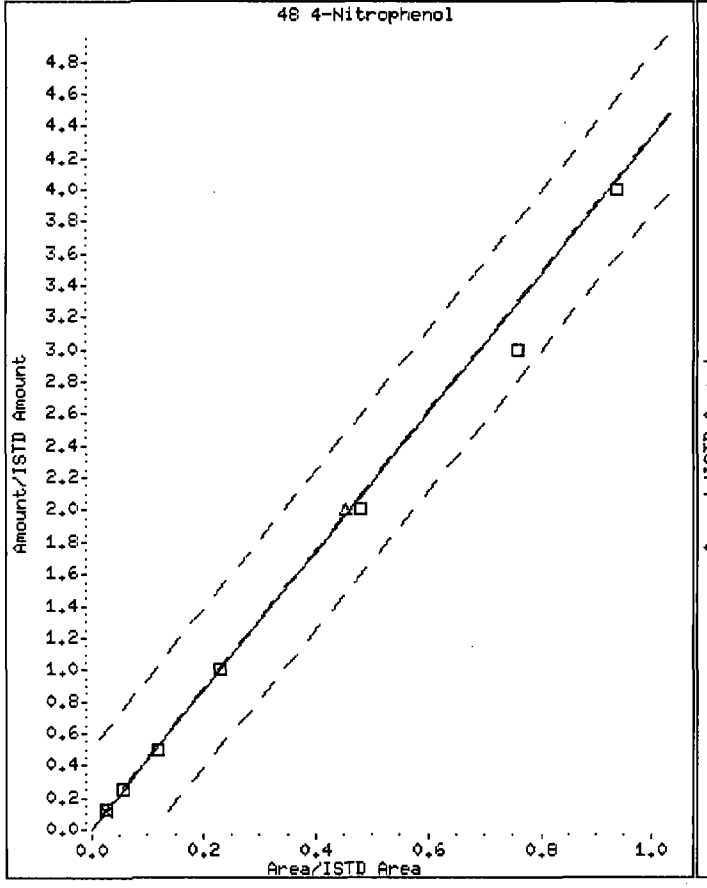

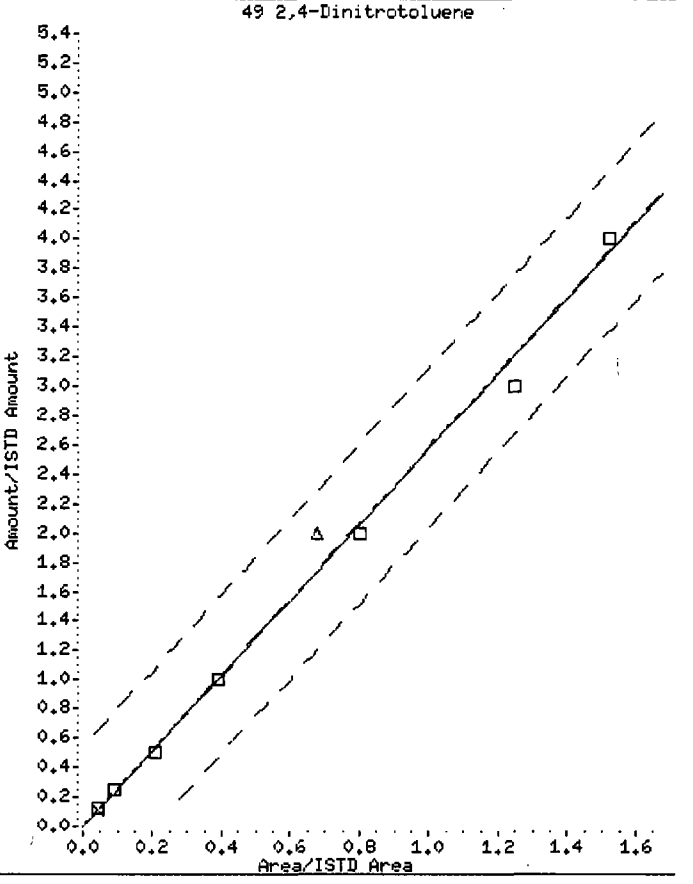

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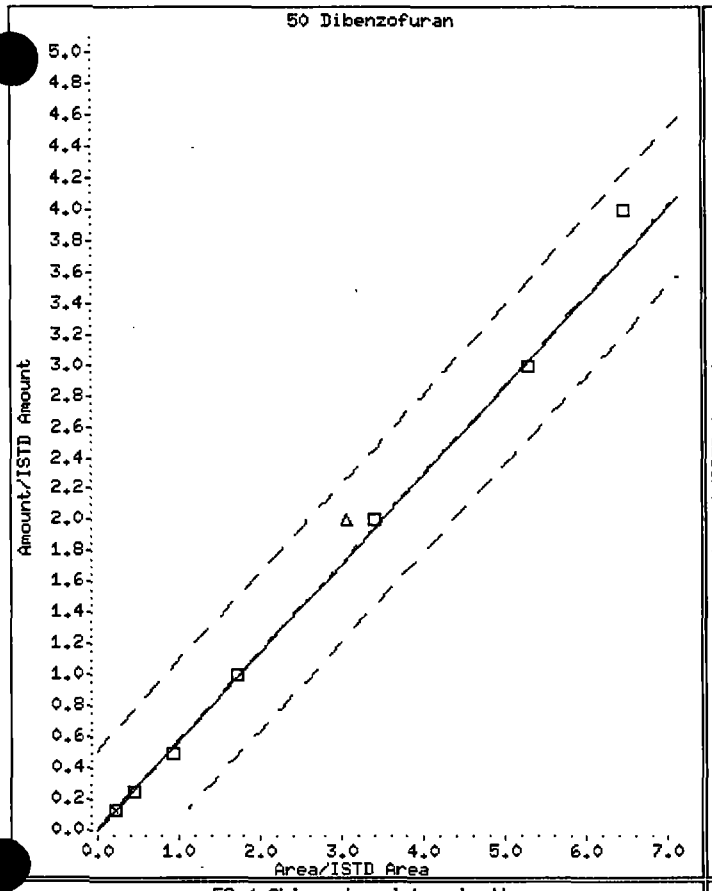

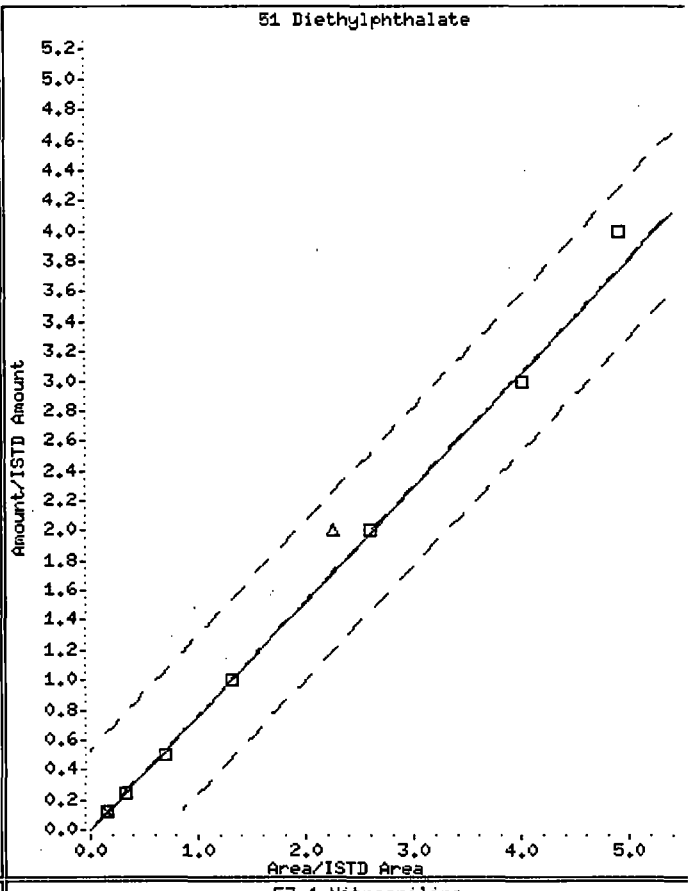

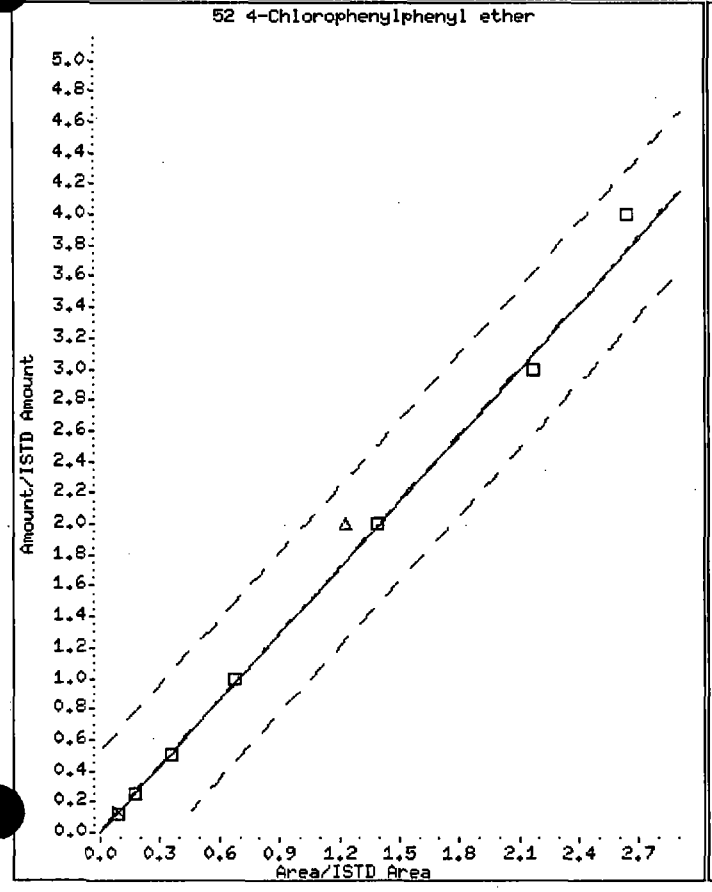

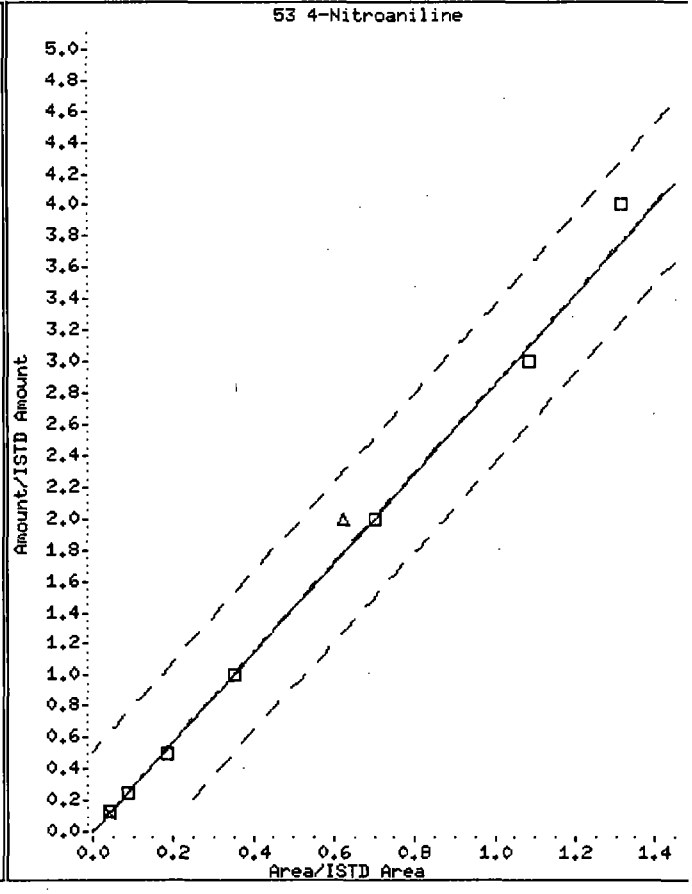

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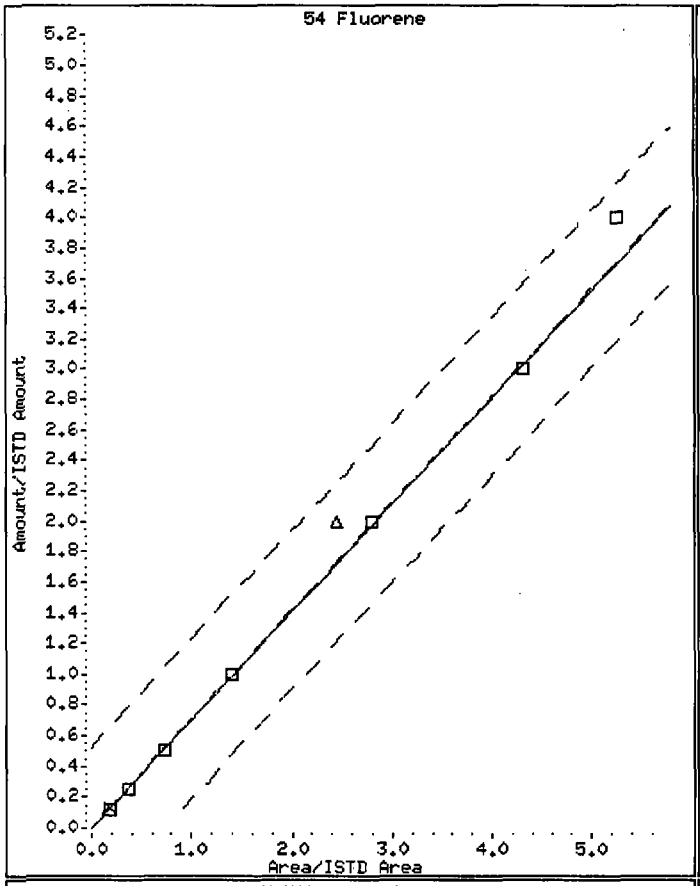

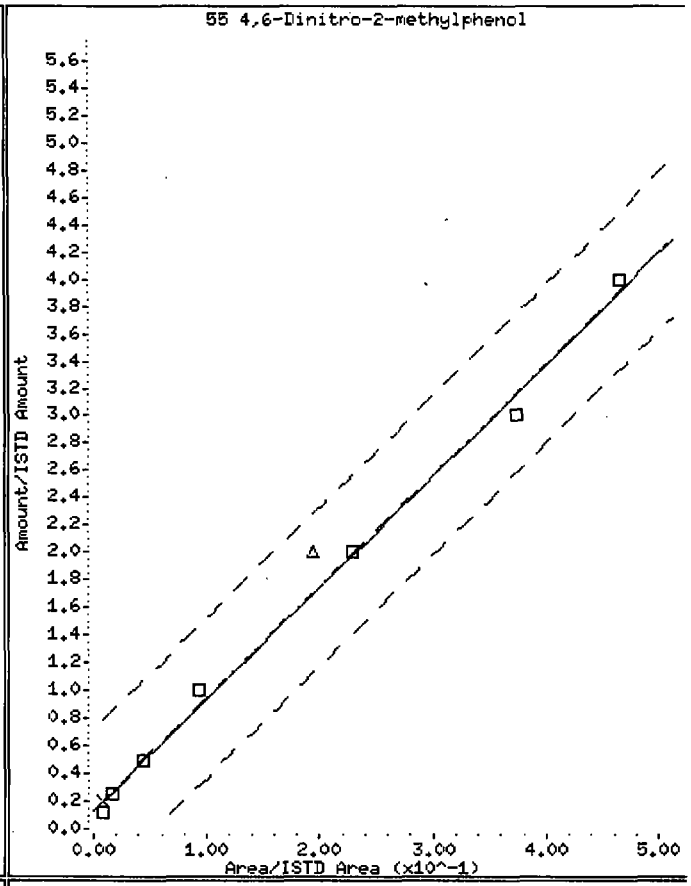

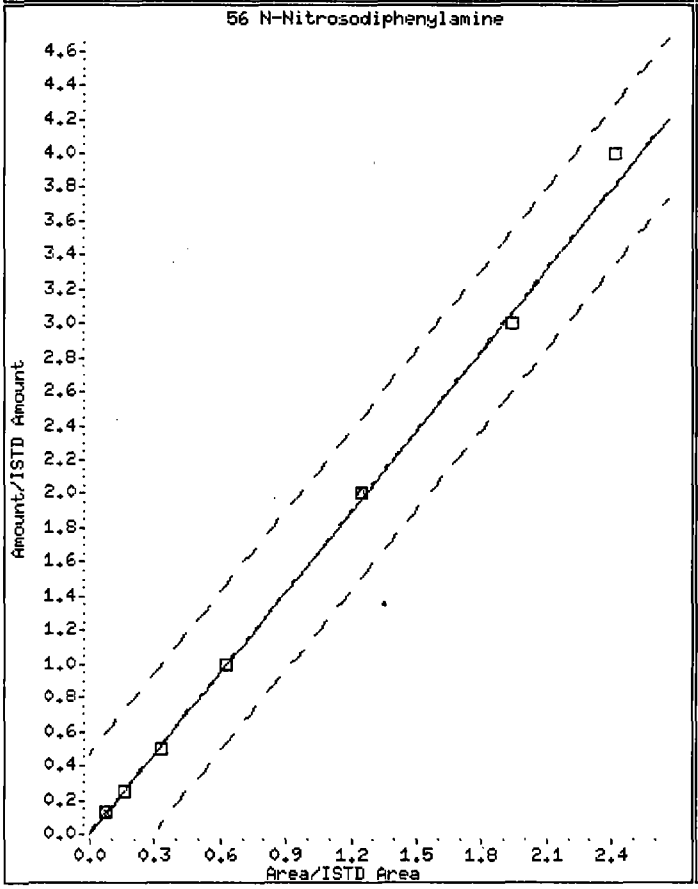

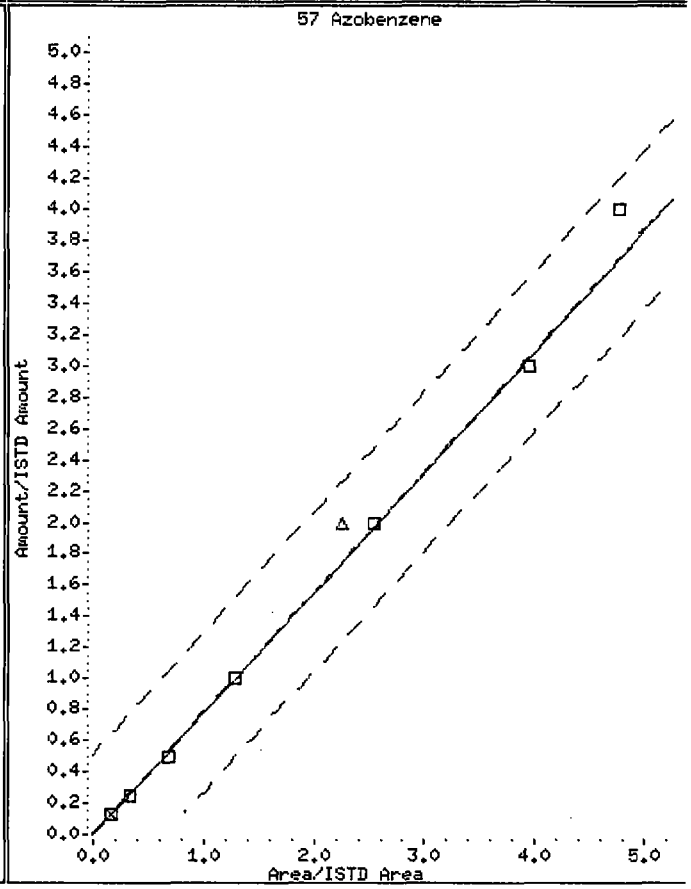

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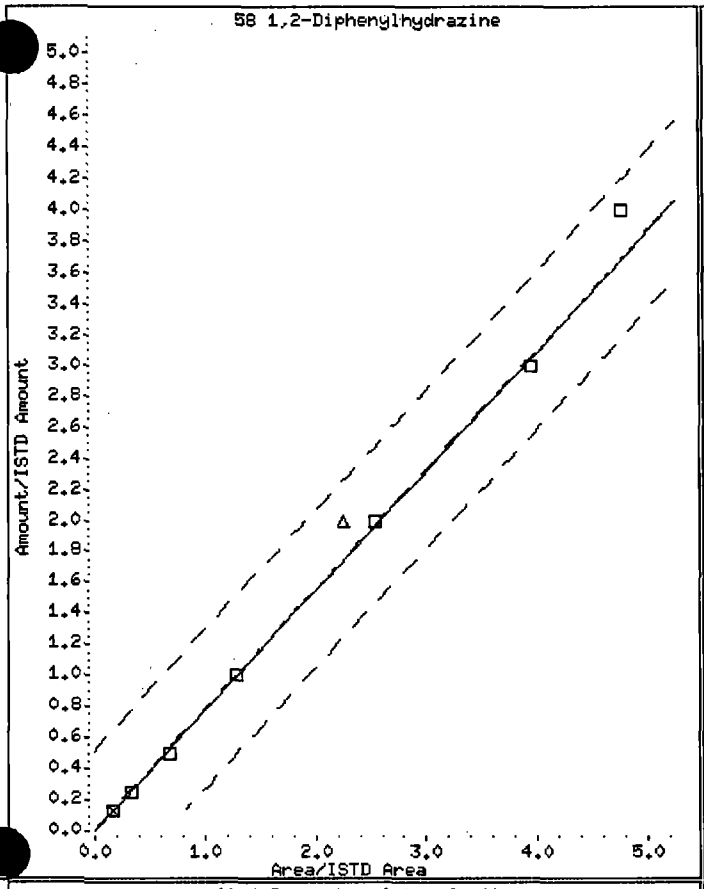

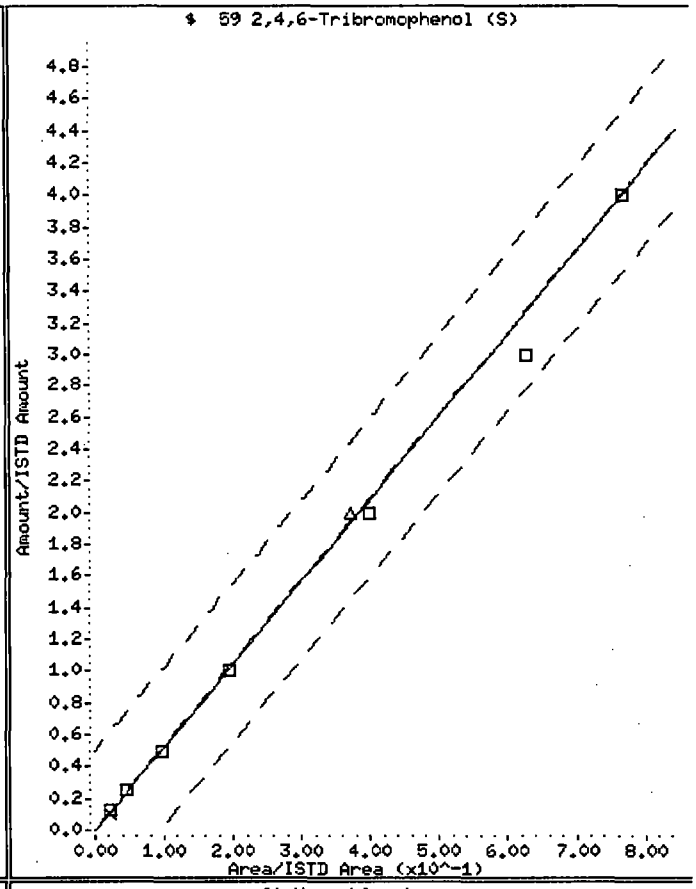

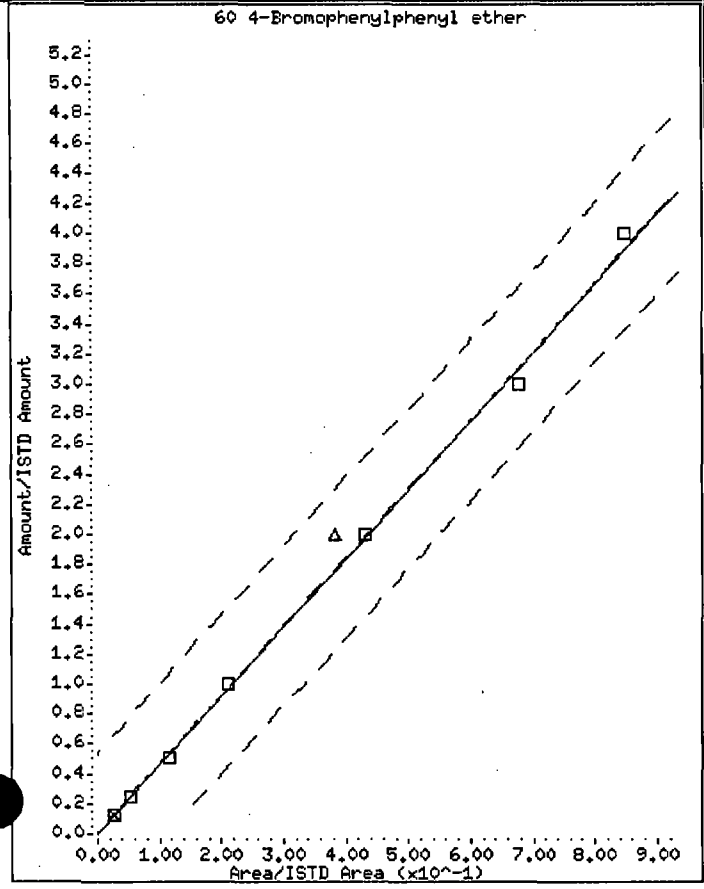

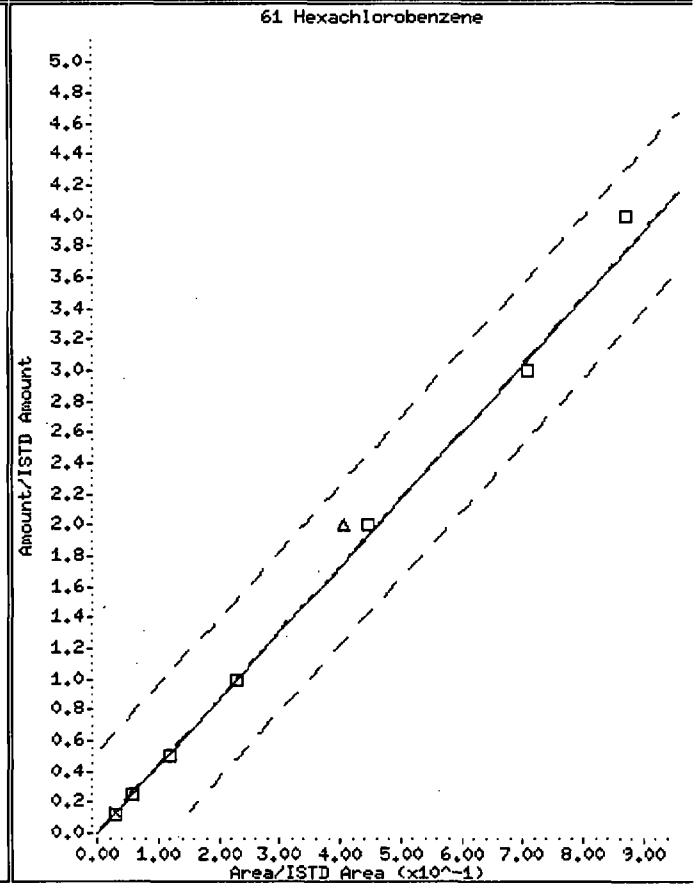

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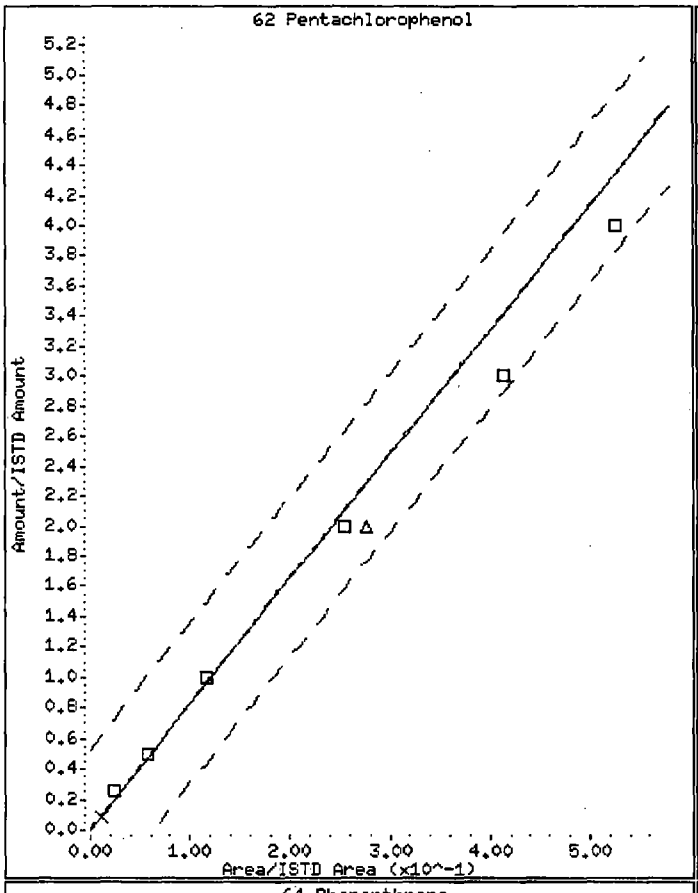

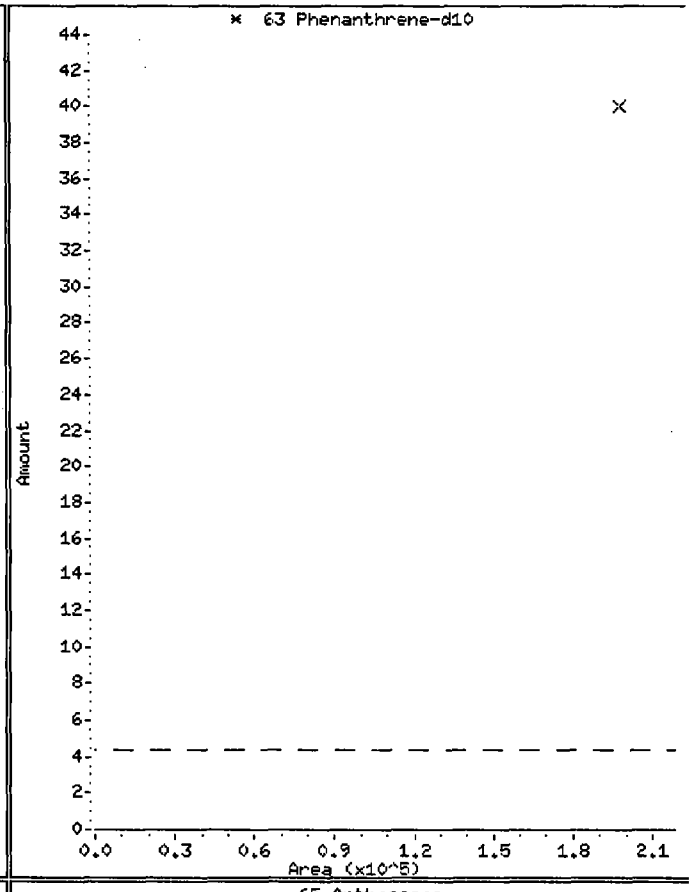

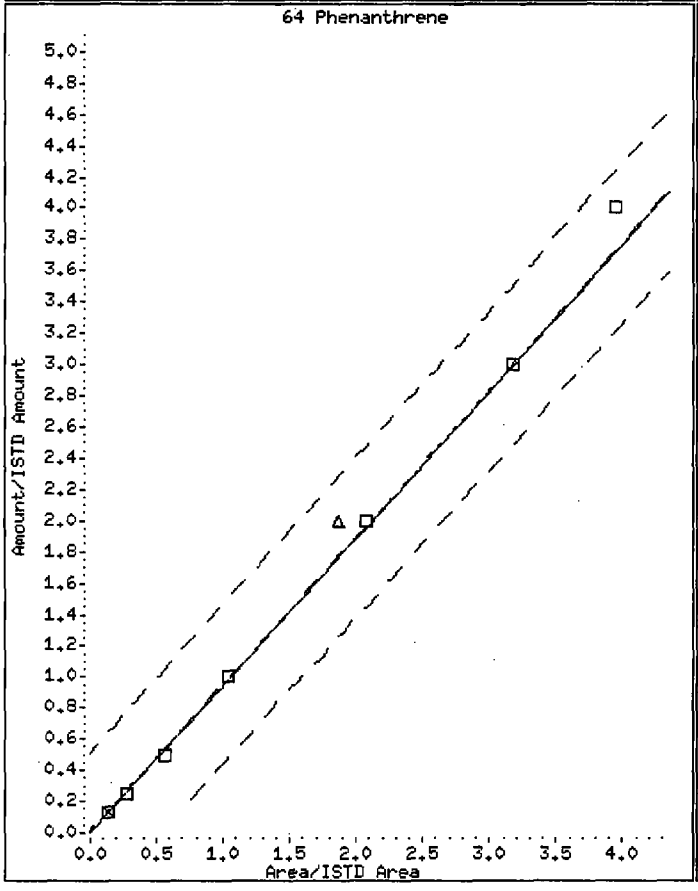

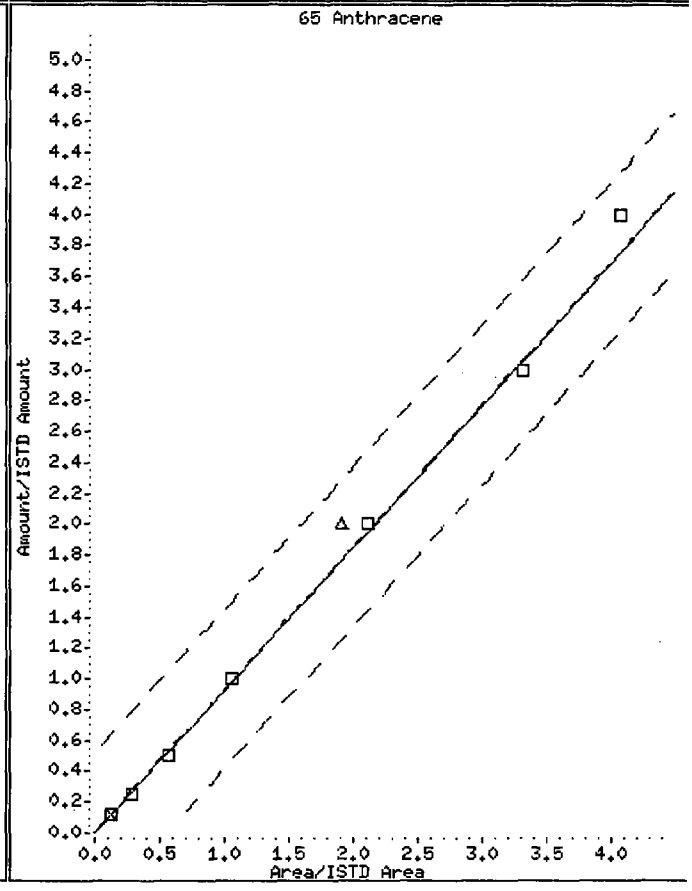

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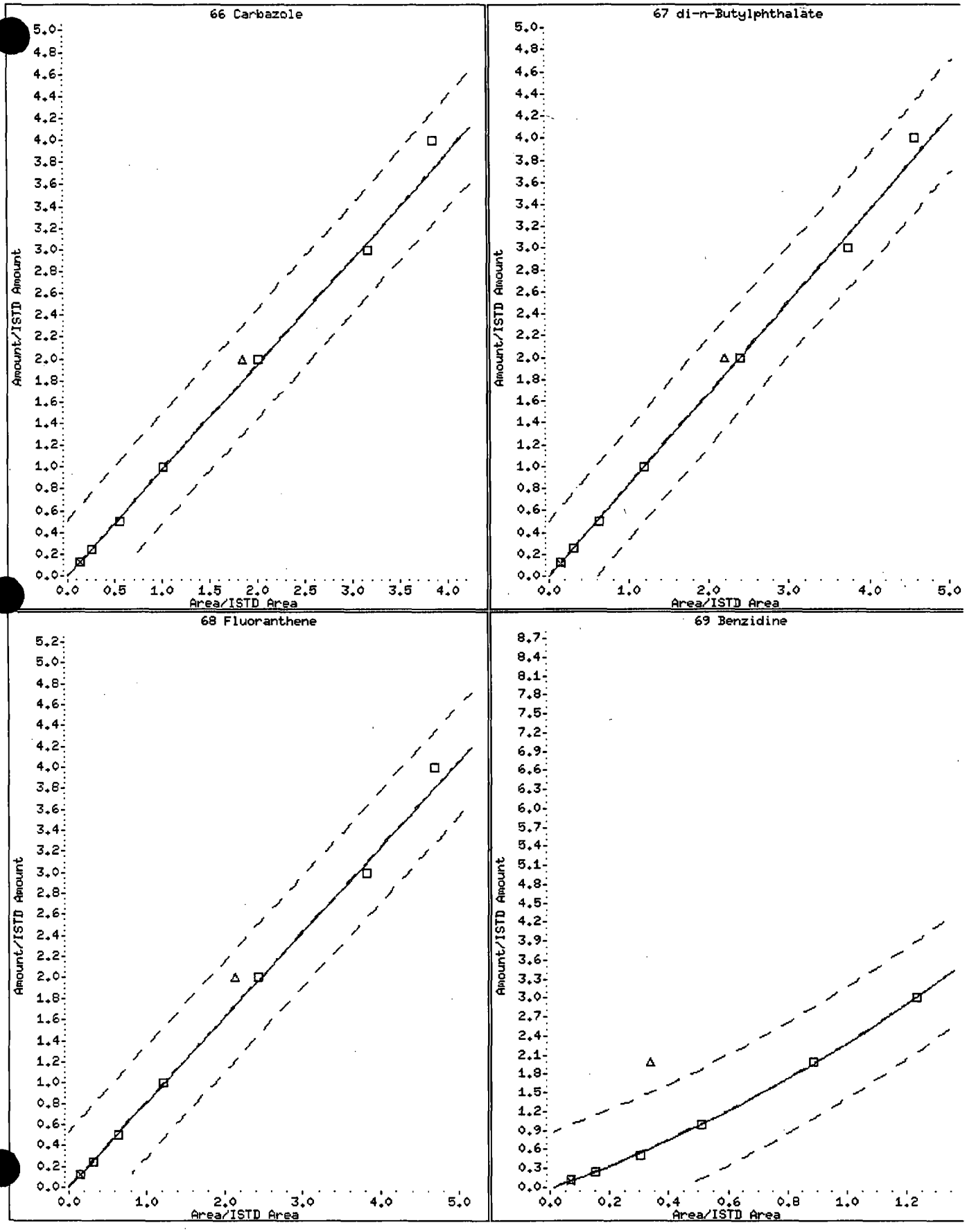

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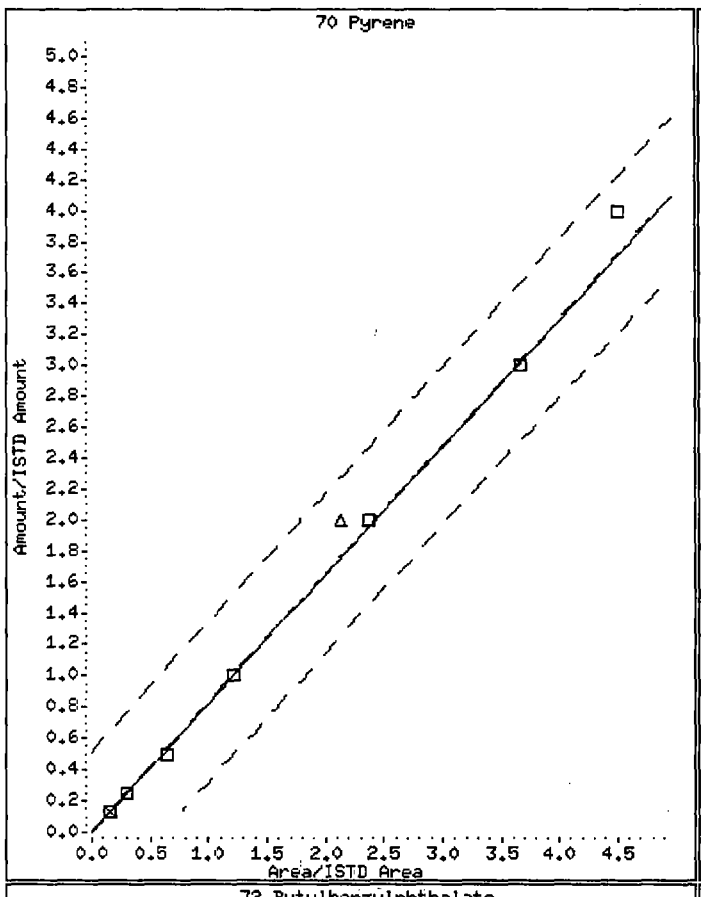

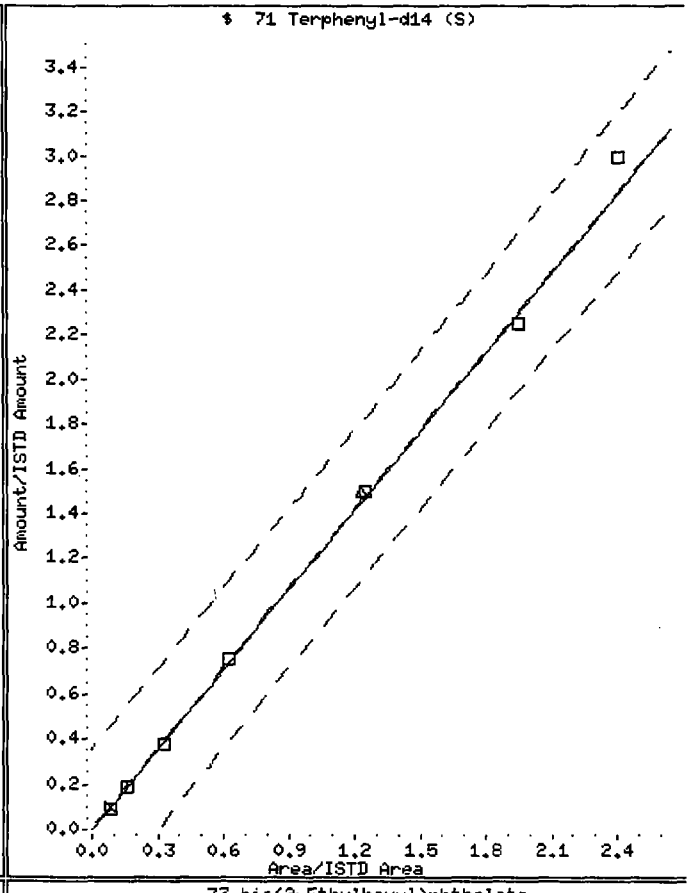

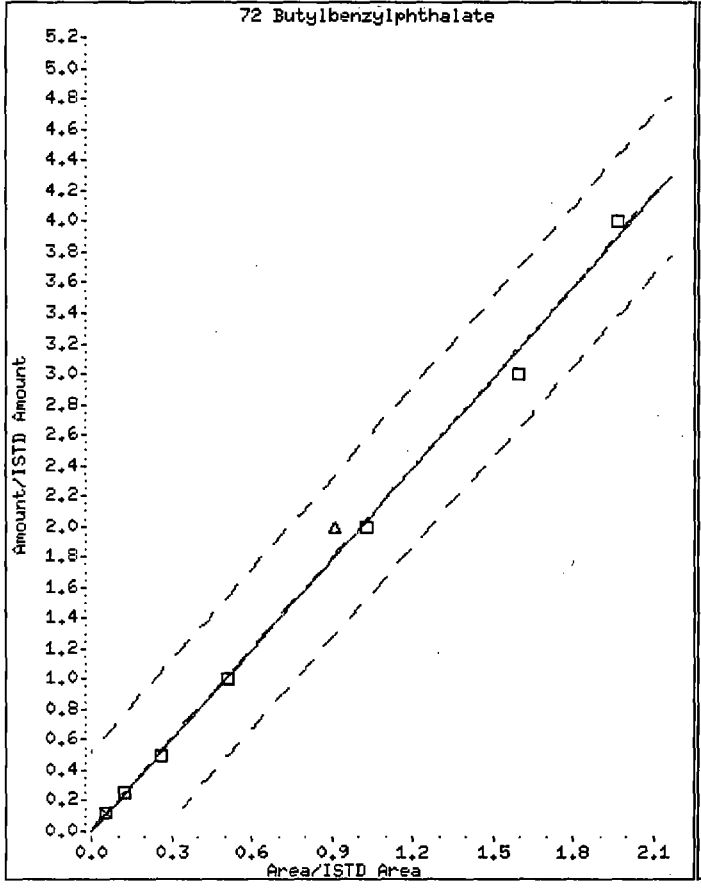

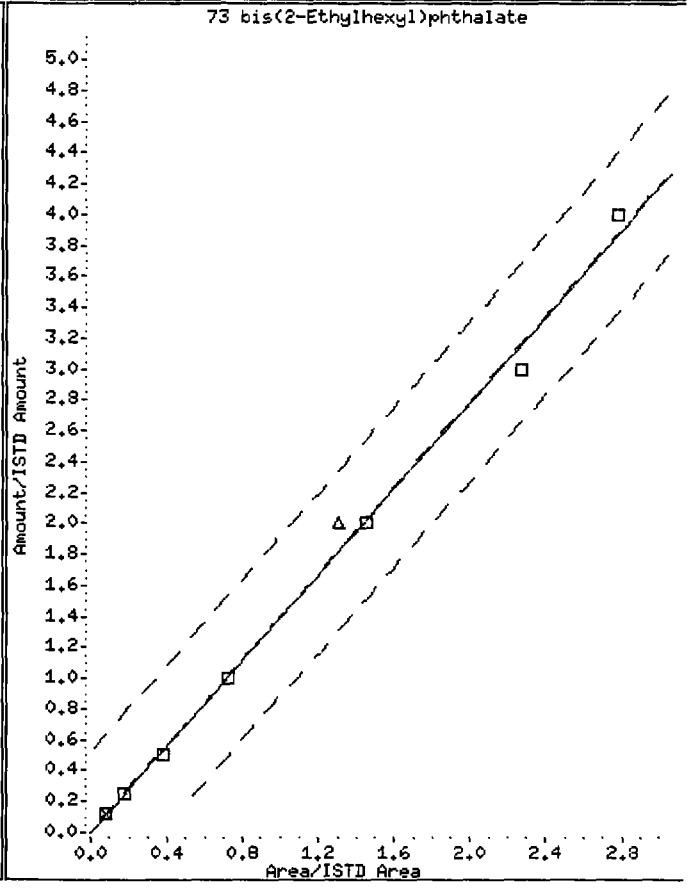

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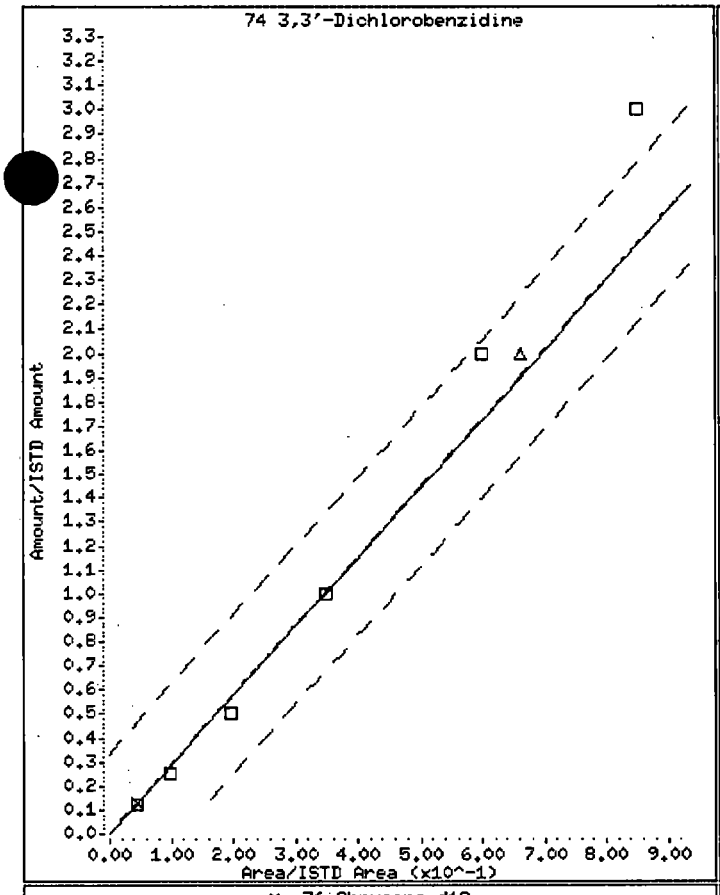

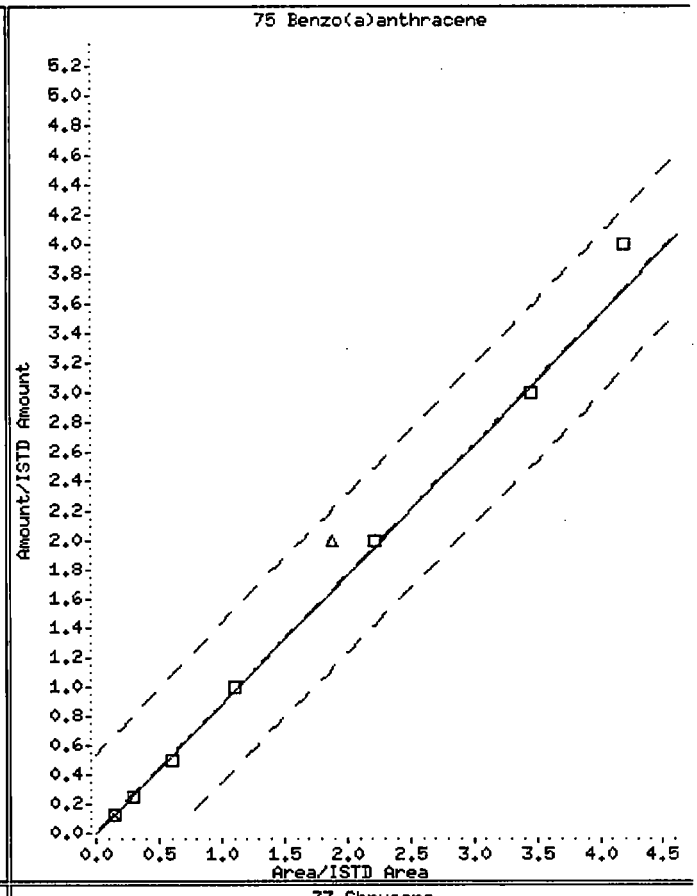

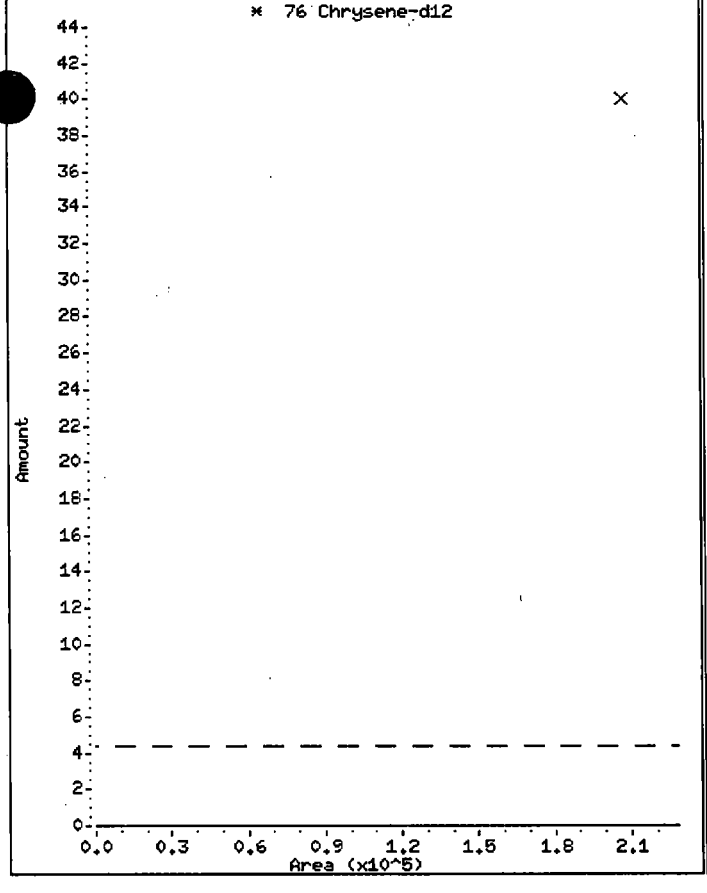

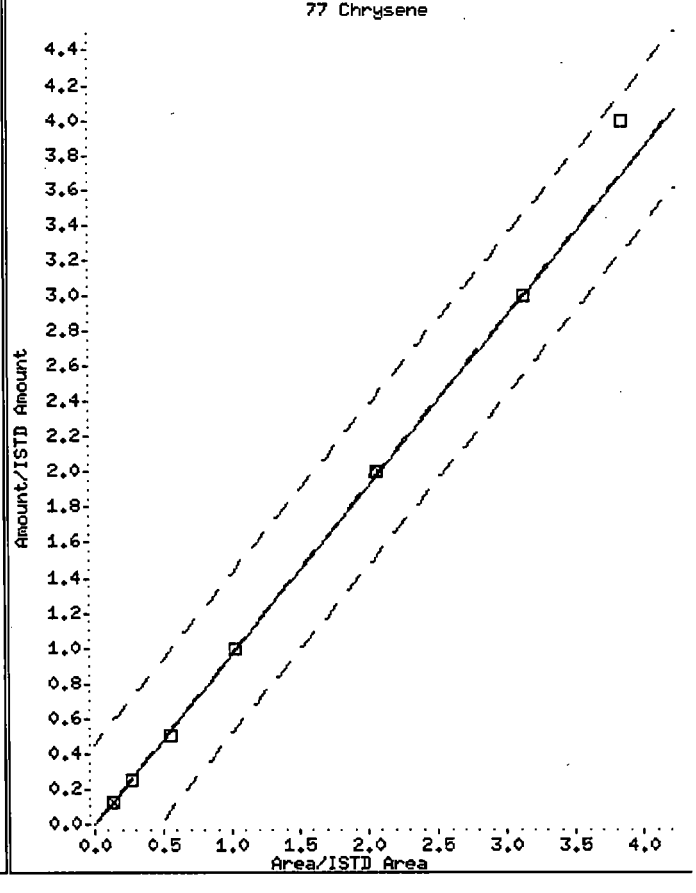

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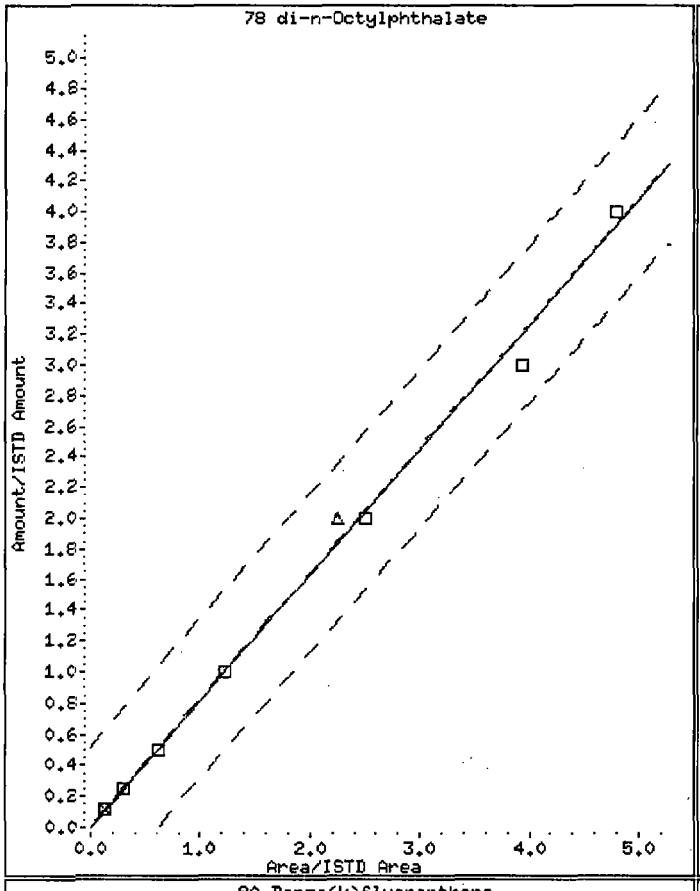

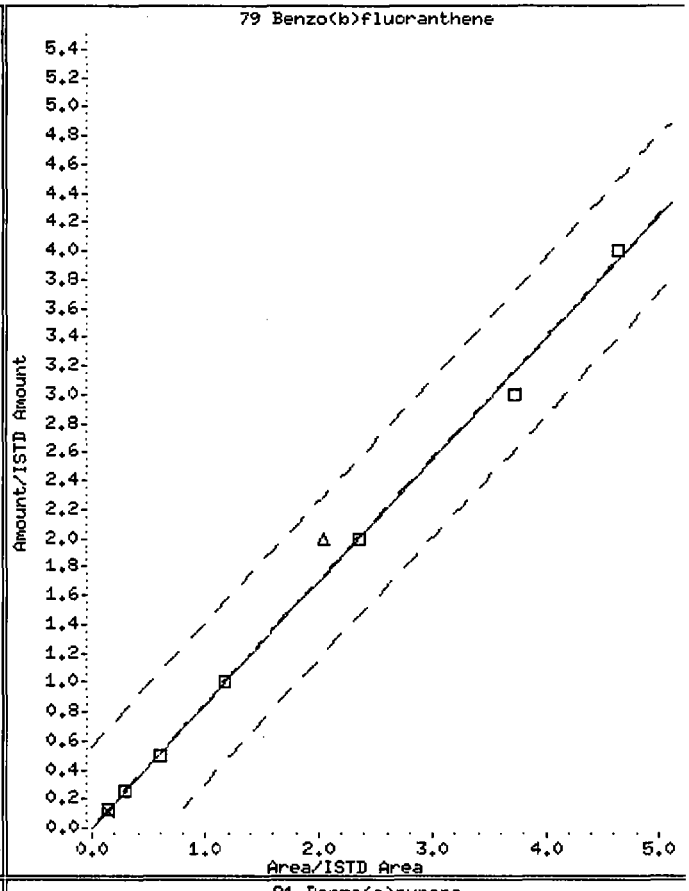

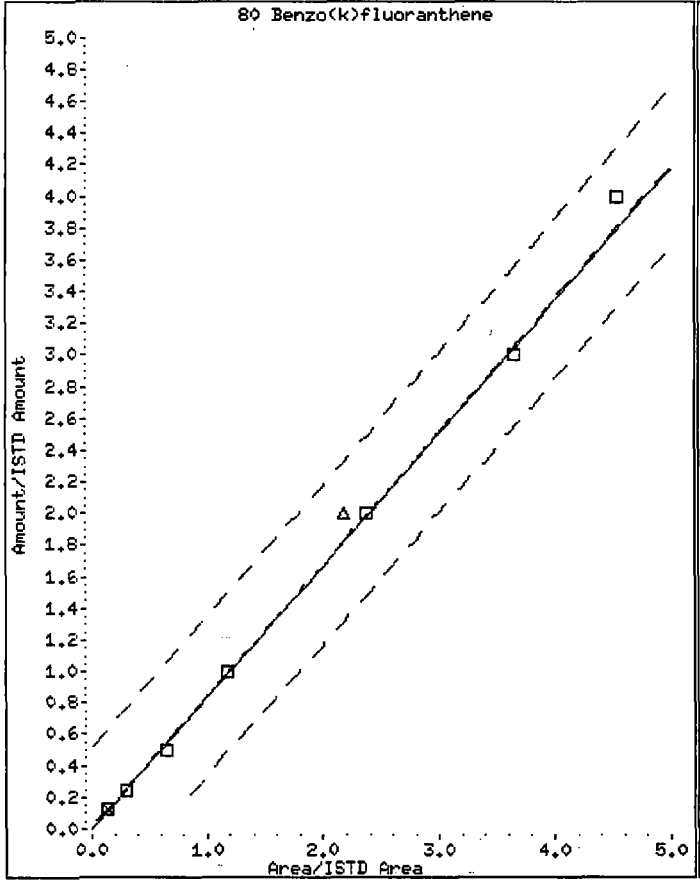

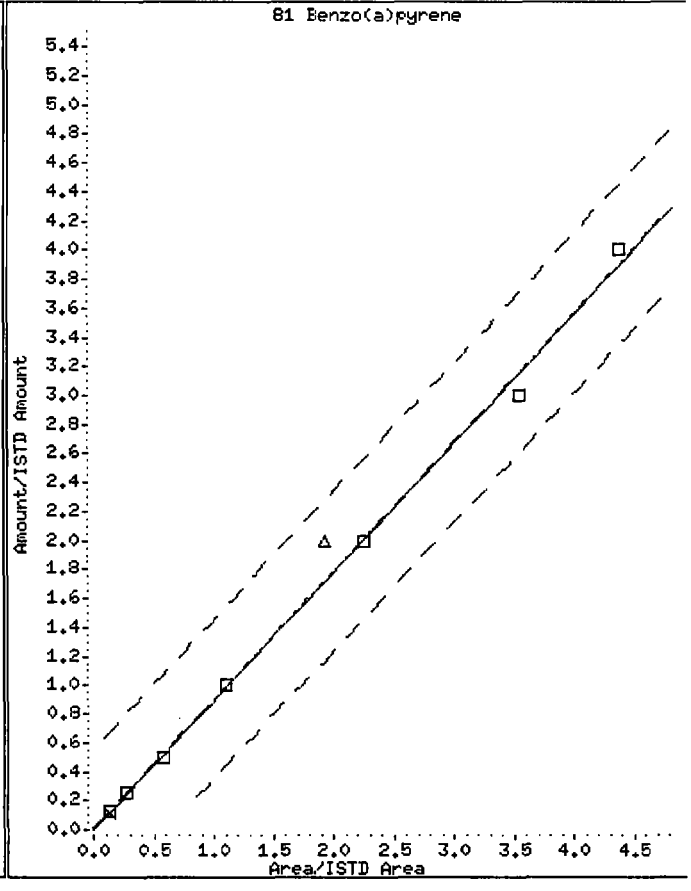

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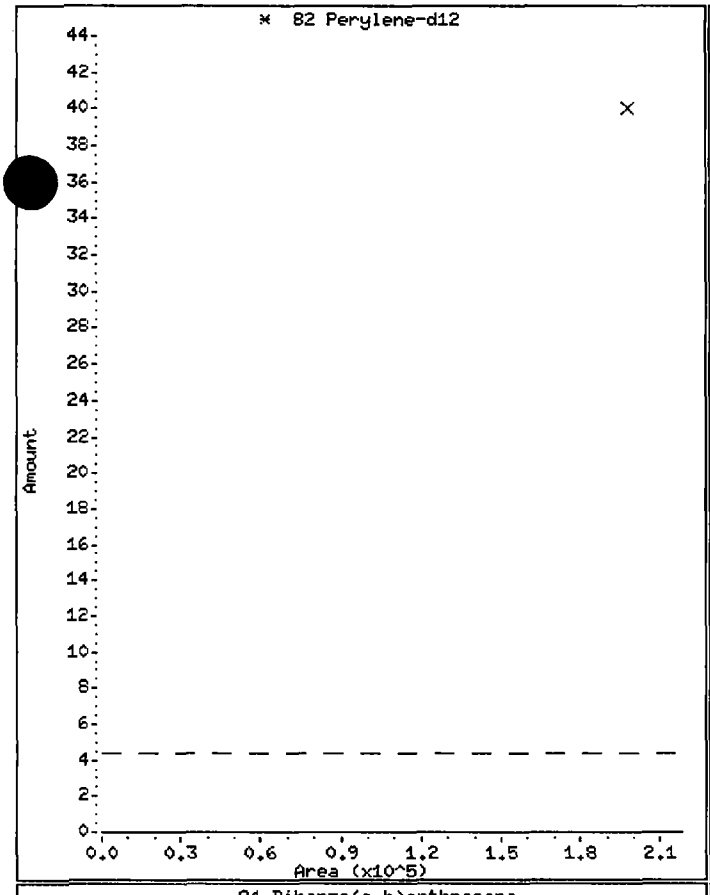

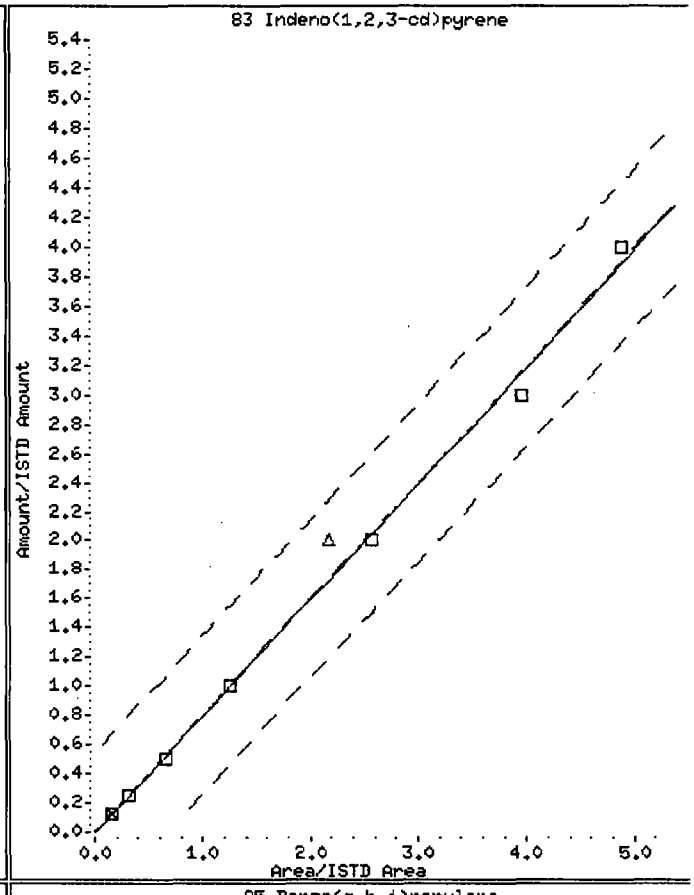

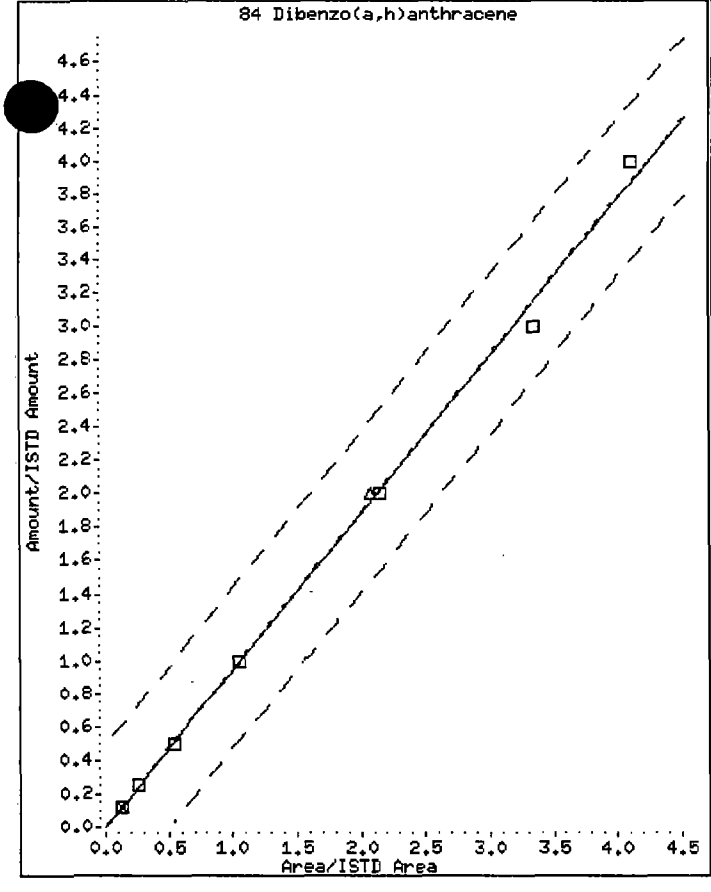

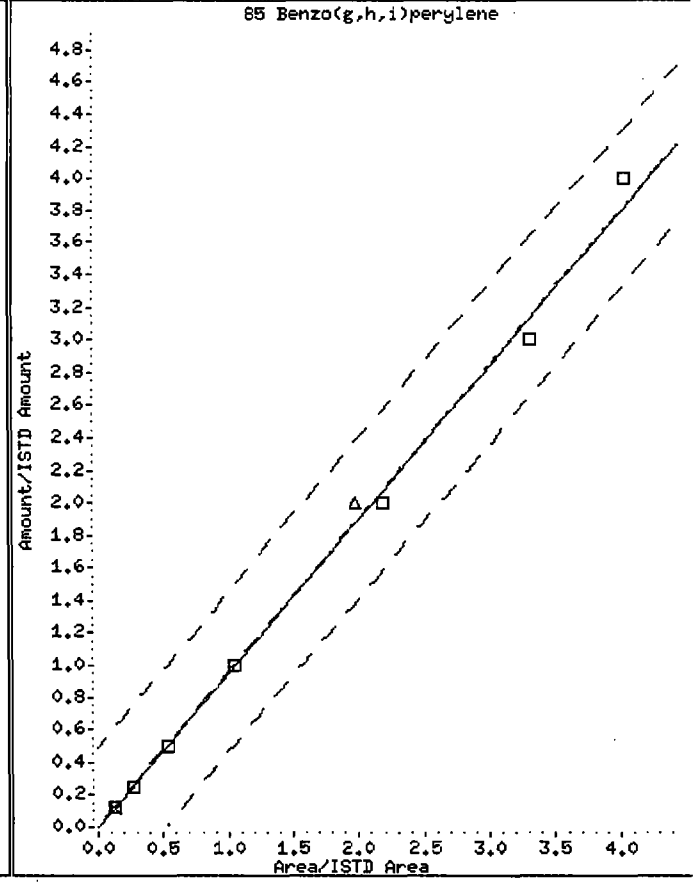

5A - FORM V SV
SEMI VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148
Lab File ID: 01301402.D DFTPP Injection Date: 01/30/2014
Instrument ID: 10MSS9 DFTPP Injection Time: 08:42
GC Column: ID: 9999 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base Peak, 100% relative abundance	100.00	
51	30.00 - 60.00% of mass 198	35.95	
68	Less than 2.00% of mass 69	0.00	(0.00)
69	Mass 69 relative abundance	30.39	
70	Less than 2.00% of mass 69	0.20	(0.67)
127	40.00 - 60.00% of mass 198	41.47	
197	Less than 1.00% of mass 198	0.00	
199	5.00 - 9.00% of mass 198	7.06	
275	10.00 - 30.00% of mass 198	23.46	
365	Greater than 1.00% of mass 198	2.81	
441	Present, but less than mass 443	12.68	
442	Greater than 40.00% of mass 198	85.65	
443	17.00 - 23.00% of mass 442	16.83	(19.65)

1 - Value is %mass 69 2 - Value is %mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	ICAL10328-968	ICAL10328-968	01301403.D	01/30/2014	08:59
2	ICAL10328-967	ICAL10328-967	01301404.D	01/30/2014	09:30
3	ICAL10328-966	ICAL10328-966	01301405.D	01/30/2014	10:00
4	ICAL10328-965	ICAL10328-965	01301406.D	01/30/2014	10:30
5	ICAL10328-964	ICAL10328-964	01301407.D	01/30/2014	11:00
6	ICAL10328-963	ICAL10328-963	01301408.D	01/30/2014	11:30
7	ICAL10328-962	ICAL10328-962	01301409.D	01/30/2014	12:01
8	ICV10328-98	ICV10328-98	01301410.D	01/30/2014	12:31
9	CHRYDIPDIB10328-47	CHRYDIPDIB1	01301411.D	01/30/2014	13:01

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	35.95		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	30.39		PASS
70	Less than 2% of mass 69	0.20	(0.67)	PASS
127	40 - 60% of mass 198	41.47		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	7.06		PASS
275	10 - 30% of mass 198	23.46		PASS
365	Greater than 1% of mass 198	2.81		PASS
441	Present, but less than mass 443	12.68	(75.34)	PASS
442	Greater than 40% of mass 198	85.65		PASS
443	17 - 23% of mass 442	16.83	(19.65)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.9983389	5.000	PASS
Benzidine	0.6569832	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	368107			N/A
4,4-DDE	1398	0.4	15.0	PASS
4,4-DDD	17215	4.5	15.0	PASS
4,4-DDD + DDE	18613	4.8	15.0	PASS

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Tuning Sample, //192.168.10.12/chem/10mss9.i/013014.b/01301402.D/01301402.D,***
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Data File: \\192.168.10.12\chem\10mss9.i\013014.b\01301402.D

Date : 30-JAN-2014 08:42

Client ID:

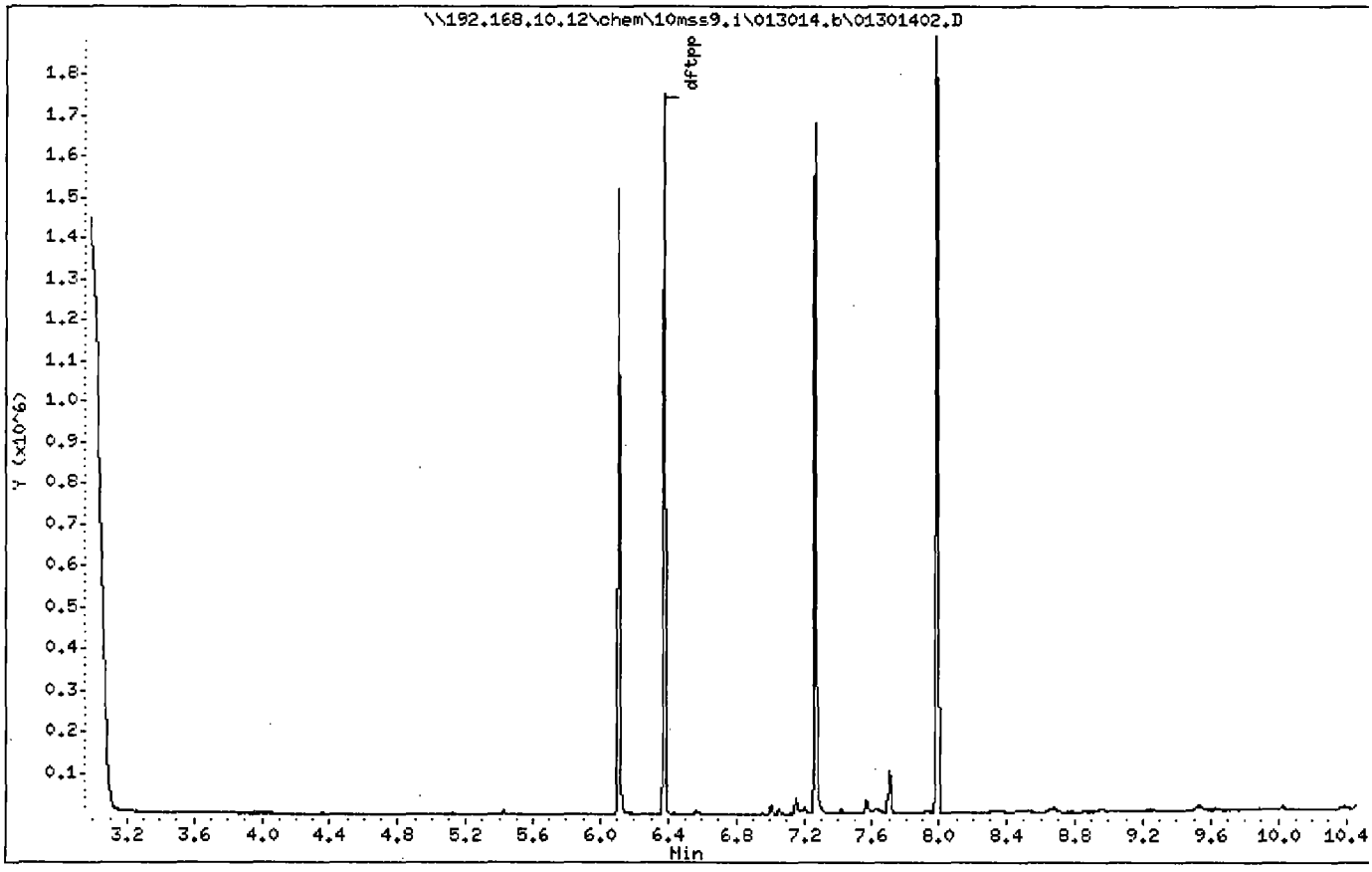
Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99



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Date : 30-JAN-2014 08:42

Client ID:

Instrument: 10mss9.i

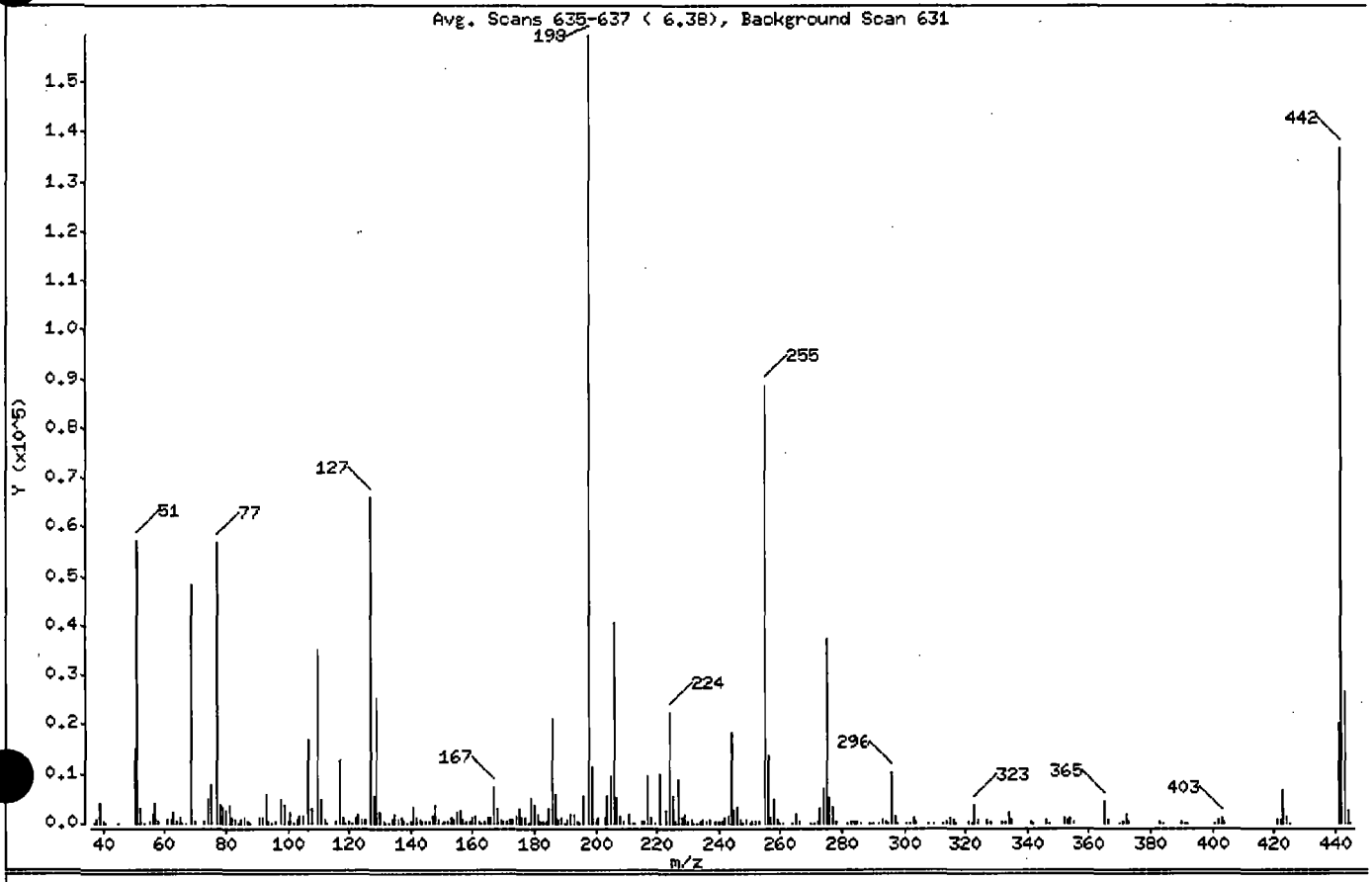
Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	35.95
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	30.39
70	Less than 2.00% of mass 69	0.20 (0.67)
127	40.00 - 60.00% of mass 198	41.47
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.06
275	10.00 - 30.00% of mass 198	23.46
365	Greater than 1.00% of mass 198	2.81
441	Present, but less than mass 443	12.68
442	Greater than 40.00% of mass 198	85.65
443	17.00 - 23.00% of mass 442	16.83 (19.65)

Date : 30-JAN-2014 08:42

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 01301402.D

Spectrum: Avg. Scans 635-637 (6.38), Background Scan 631

Location of Maximum: 198.00

Number of points: 275

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	164	128.00	5686	198.00	159616	282.00	50
38.00	652	129.00	25144	199.00	11261	283.00	410
39.00	3973	130.00	2158	200.00	819	284.00	203
40.00	261	131.00	413	201.00	1058	285.00	513
41.00	95	132.00	180	203.00	1095	286.00	53
45.00	125	133.00	122	204.00	5644	289.00	129
50.00	14897	134.00	728	205.00	9607	290.00	56
51.00	57384	135.00	1918	206.00	40840	292.00	143
52.00	3065	136.00	823	207.00	5266	293.00	758
53.00	59	137.00	974	208.00	1324	294.00	189
55.00	277	138.00	307	209.00	419	295.00	51
56.00	1804	139.00	61	211.00	1921	296.00	10431
57.00	4001	140.00	352	212.00	111	297.00	1358
58.00	215	141.00	3131	213.00	70	298.00	62
61.00	715	142.00	1084	215.00	434	301.00	172
62.00	797	143.00	748	216.00	503	302.00	173
63.00	2267	144.00	231	217.00	9662	303.00	1158
64.00	216	145.00	255	218.00	1273	304.00	274
65.00	1097	146.00	548	219.00	54	308.00	146
66.00	67	147.00	1566	221.00	10008	310.00	68
67.00	51	148.00	3517	223.00	2505	313.00	61
69.00	48512	149.00	821	224.00	22304	314.00	472
70.00	324	150.00	165	225.00	5568	315.00	1171
73.00	298	151.00	452	226.00	273	316.00	659
74.00	4890	152.00	284	227.00	8675	317.00	56
75.00	7660	153.00	1039	228.00	1236	321.00	405
77.00	56696	154.00	877	229.00	1801	322.00	64
78.00	3840	155.00	2091	230.00	293	323.00	3592
79.00	3429	156.00	2724	231.00	898	324.00	708
80.00	2641	157.00	773	232.00	151	327.00	693
81.00	3761	158.00	536	233.00	152	328.00	329
82.00	1068	159.00	477	234.00	526	332.00	256
83.00	916	160.00	1016	235.00	675	333.00	354
84.00	95	161.00	1581	236.00	428	334.00	2113
85.00	564	162.00	378	237.00	692	335.00	575

Date : 30-JAN-2014 08:42

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 01301402.D

Spectrum: Avg. Scans 635-637 (6.38), Background Scan 631

Location of Maximum: 198.00

Number of points: 275

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	1178	163.00	56	239.00	392	341.00	349
87.00	506	164.00	248	240.00	206	342.00	131
88.00	169	165.00	1269	241.00	494	346.00	652
91.00	946	166.00	1188	242.00	1197	347.00	50
92.00	1033	167.00	7343	243.00	1329	352.00	998
93.00	5868	168.00	3030	244.00	18224	353.00	781
94.00	444	169.00	588	245.00	2411	354.00	1075
95.00	125	170.00	256	246.00	3164	355.00	201
96.00	330	171.00	295	247.00	579	365.00	4484
98.00	4615	172.00	576	248.00	145	366.00	643
99.00	3509	173.00	808	249.00	679	370.00	122
100.00	295	174.00	1423	250.00	162	371.00	273
101.00	2146	175.00	2850	251.00	218	372.00	1713
102.00	58	176.00	977	252.00	206	373.00	455
103.00	769	177.00	1235	253.00	493	383.00	511
104.00	1415	178.00	139	255.00	88672	384.00	127
105.00	1321	179.00	5242	256.00	13491	390.00	185
107.00	16896	180.00	3574	257.00	1092	391.00	182
108.00	2760	181.00	1688	258.00	4787	392.00	53
110.00	35080	182.00	350	259.00	813	401.00	113
111.00	4897	183.00	219	260.00	60	402.00	758
112.00	554	184.00	466	261.00	132	403.00	1028
113.00	170	185.00	2888	264.00	115	404.00	322
116.00	324	186.00	21176	265.00	1771	421.00	882
117.00	12677	187.00	5907	266.00	382	422.00	843
118.00	972	188.00	621	270.00	56	423.00	6621
119.00	52	189.00	1169	271.00	166	424.00	1331
120.00	184	190.00	163	272.00	227	425.00	158
121.00	64	191.00	618	273.00	2815	441.00	20240
122.00	1088	192.00	1710	274.00	7153	442.00	136704
123.00	1823	193.00	1909	275.00	37448	443.00	26864
124.00	736	194.00	374	276.00	5068	444.00	2521
125.00	834	195.00	118	277.00	3164	445.00	161
127.00	66192	196.00	5489	278.00	474		

5A - FORM V SV
SEMI VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148
Lab File ID: 01311402.D DFTPP Injection Date: 01/31/2014
Instrument ID: 10MSS9 DFTPP Injection Time: 06:52
GC Column: ID: 9999 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base Peak, 100% relative abundance	100.00	
51	30.00 - 60.00% of mass 198	34.44	
68	Less than 2.00% of mass 69	0.00	(0.00)
69	Mass 69 relative abundance	29.26	
70	Less than 2.00% of mass 69	0.13	(0.44)
127	40.00 - 60.00% of mass 198	40.36	
197	Less than 1.00% of mass 198	0.00	
199	5.00 - 9.00% of mass 198	6.79	
275	10.00 - 30.00% of mass 198	24.93	
365	Greater than 1.00% of mass 198	3.02	
441	Present, but less than mass 443	14.71	
442	Greater than 40.00% of mass 198	98.85	
443	17.00 - 23.00% of mass 442	19.34	(19.57)

1 - Value is %mass 69 2 - Value is %mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCAL610328-96	CCAL610328-9	01311403.D	01/31/2014	07:18
2	BLANK for HBN 285275 [OEXT/242	1617223	01311404.D	01/31/2014	07:49
3	LCS for HBN 285275 [OEXT/24255	1617224	01311405.D	01/31/2014	08:19
4	SB-1 2-3'	10256148001	01311415.D	01/31/2014	13:18
5	SB-1 20-21'	10256148002	01311416.D	01/31/2014	13:48
6	SB-2 2-3'	10256148003	01311417.D	01/31/2014	14:18
7	SB-2 22-23'	10256148004	01311418.D	01/31/2014	14:48
8	SB-3 3-5'	10256148005	01311419.D	01/31/2014	15:18
9	SB-3 25-27'	10256148006	01311420.D	01/31/2014	15:49
10	SB-4 2-3.5'	10256148007	01311421.D	01/31/2014	16:19
11	SB-4 19-20'	10256148008	01311422.D	01/31/2014	16:49
12	SB-5 2-3	10256148009	01311423.D	01/31/2014	17:19
13	SB-5 2-3(1616163MS)	1617225-MS	01311424.D	01/31/2014	17:49
14	SB-5 2-3(1616163MSD)	1617226-MSD	01311425.D	01/31/2014	18:19
15	SB-5 10-12'	10256148010	01311426.D	01/31/2014	18:49

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	34.44		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	29.26		PASS
70	Less than 2% of mass 69	0.13	(0.44)	PASS
127	40 - 60% of mass 198	40.36		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.79		PASS
275	10 - 30% of mass 198	24.93		PASS
365	Greater than 1% of mass 198	3.02		PASS
441	Present, but less than mass 443	14.71	(76.07)	PASS
442	Greater than 40% of mass 198	98.85		PASS
443	17 - 23% of mass 442	19.34	(19.57)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.8746177	5.000	PASS
Benzidine	0.6089744	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	368160			N/A
4,4-DDE	1865	0.5	15.0	PASS
4,4-DDD	21152	5.4	15.0	PASS
4,4-DDD + DDE	23017	5.9	15.0	PASS

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Tuning Sample, //192.168.10.12/chem/10mss9.i/013114.b/01311402.D/01311402.D,***
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Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311402.D

Date : 31-JAN-2014 06:52

Client ID:

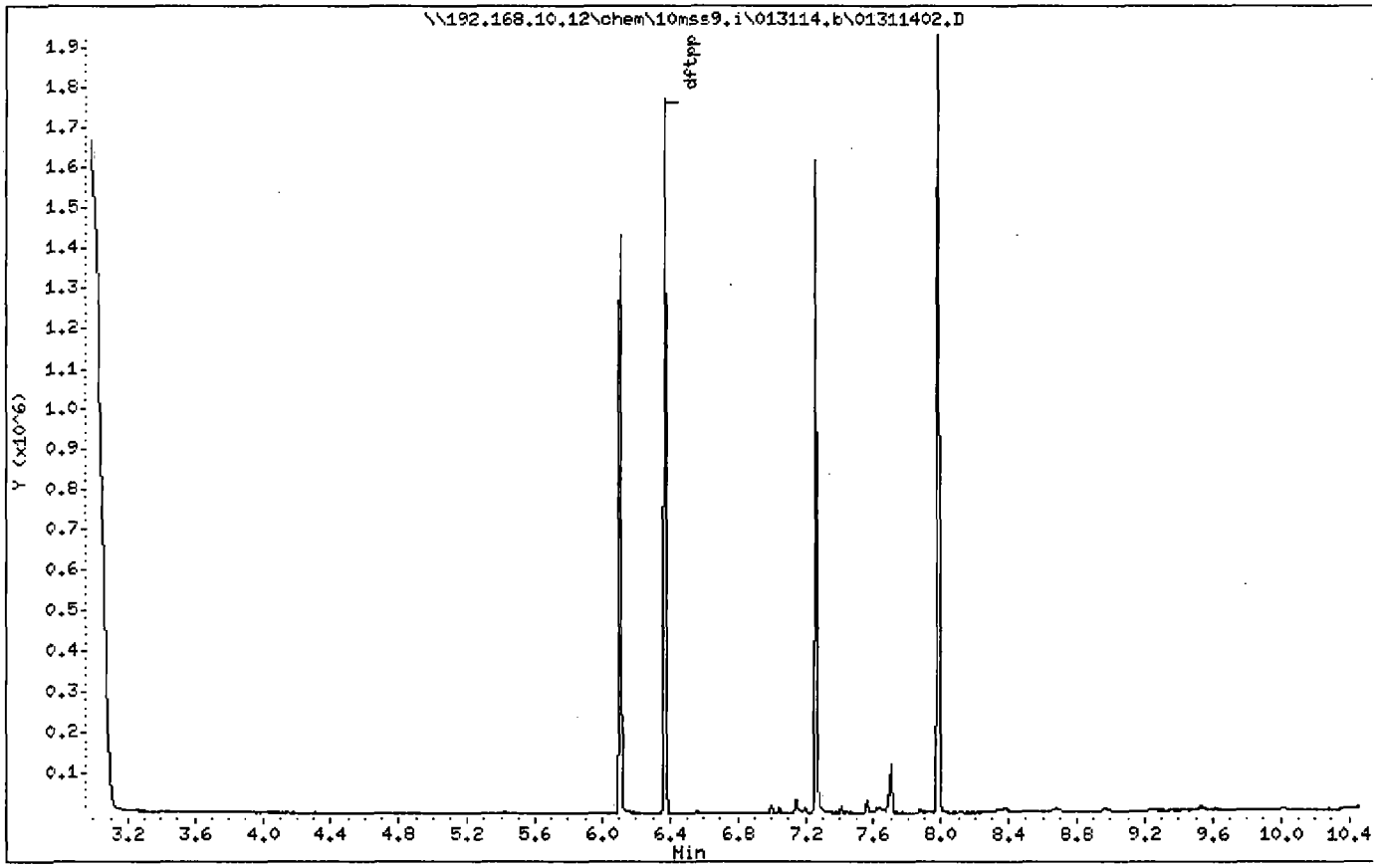
Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99



Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311402.D

Date : 31-JAN-2014 06:52

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Instrument: 10mss9.i

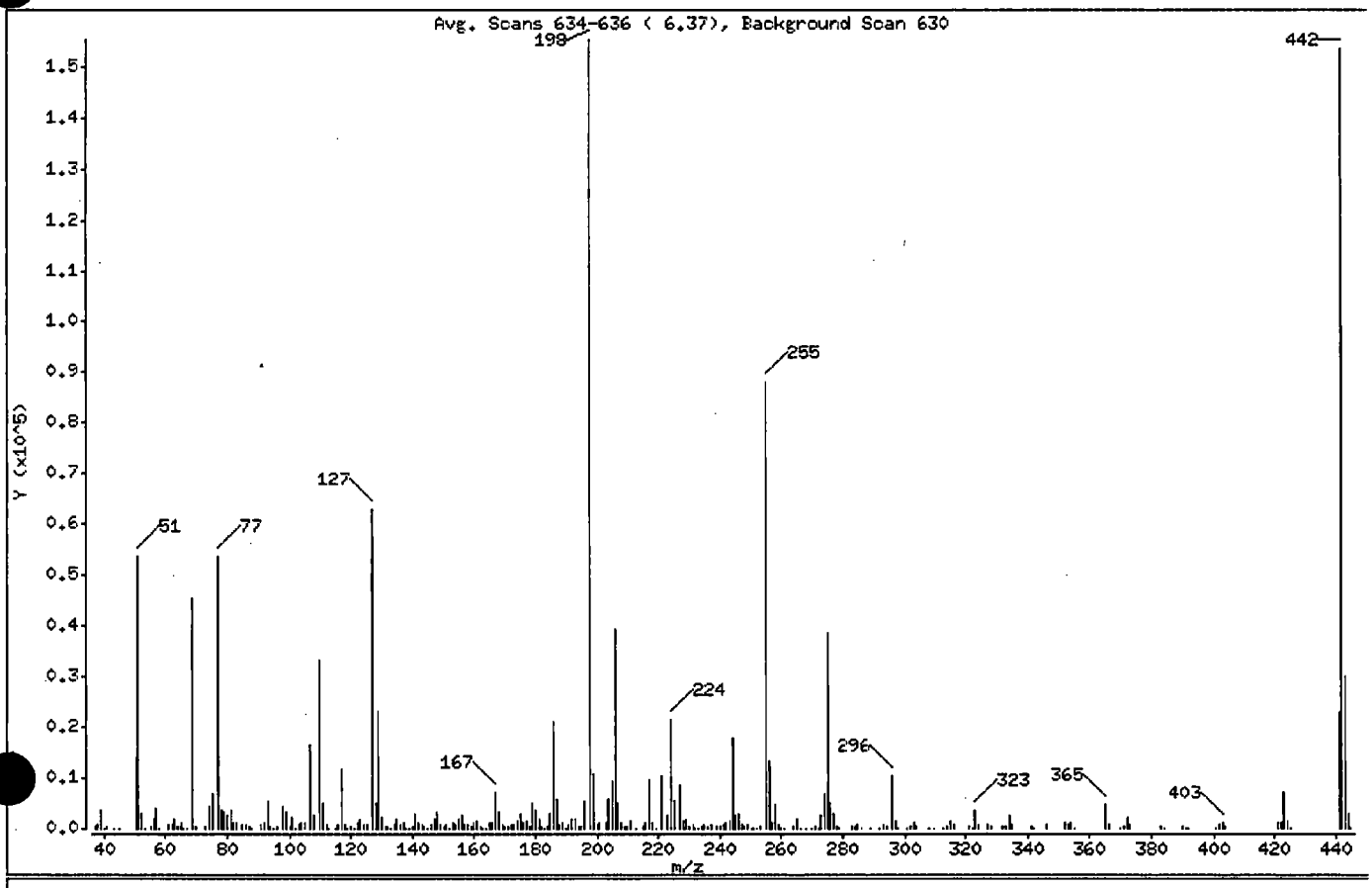
Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	34.44
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	29.26
70	Less than 2.00% of mass 69	0.13 (0.44)
127	40.00 - 60.00% of mass 198	40.36
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.79
275	10.00 - 30.00% of mass 198	24.93
365	Greater than 1.00% of mass 198	3.02
441	Present, but less than mass 443	14.71
442	Greater than 40.00% of mass 198	98.85
443	17.00 - 23.00% of mass 442	19.34 (19.57)

Date : 31-JAN-2014 06:52

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 01311402.D

Spectrum: Avg. Scans 634-636 (6.37), Background Scan 630

Location of Maximum: 198.00

Number of points: 272

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	189	127.00	62640	196.00	5283	278.00	458
38.00	581	128.00	4878	198.00	155200	279.00	71
39.00	3475	129.00	23320	199.00	10542	283.00	374
40.00	96	130.00	2103	200.00	804	284.00	232
41.00	232	131.00	354	201.00	1060	285.00	567
43.00	93	132.00	210	203.00	953	286.00	54
45.00	129	133.00	176	204.00	5589	289.00	115
50.00	14010	134.00	642	205.00	9333	292.00	85
51.00	53456	135.00	1869	206.00	39128	293.00	680
52.00	2760	136.00	730	207.00	5038	294.00	181
53.00	114	137.00	983	208.00	1237	296.00	10501
55.00	310	138.00	136	209.00	452	297.00	1465
56.00	1674	139.00	114	210.00	220	298.00	52
57.00	3934	140.00	323	211.00	1459	301.00	51
58.00	168	141.00	2807	213.00	66	302.00	219
61.00	605	142.00	1083	215.00	475	303.00	1185
62.00	814	143.00	655	216.00	904	304.00	331
63.00	1910	144.00	180	217.00	9629	308.00	127
64.00	220	145.00	171	218.00	1180	310.00	54
65.00	1003	146.00	597	219.00	70	313.00	52
66.00	59	147.00	1660	221.00	10293	314.00	447
67.00	175	148.00	3143	223.00	2368	315.00	1251
69.00	45416	149.00	660	224.00	21536	316.00	683
70.00	198	150.00	188	225.00	5292	321.00	373
73.00	262	151.00	619	227.00	8483	322.00	56
74.00	4455	152.00	165	228.00	1253	323.00	3744
75.00	6928	153.00	954	229.00	1768	324.00	646
77.00	53560	154.00	797	230.00	278	327.00	626
78.00	3676	155.00	1724	231.00	789	328.00	362
79.00	3132	156.00	2622	232.00	67	332.00	238
80.00	2463	157.00	616	233.00	131	333.00	317
81.00	3454	158.00	561	234.00	453	334.00	2403
82.00	947	159.00	429	235.00	599	335.00	563
83.00	963	160.00	914	236.00	377	341.00	490
85.00	596	161.00	1482	237.00	680	342.00	58

Date : 31-JAN-2014 06:52

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 01311402.D

Spectrum: Avg. Scans 634-636 (6.37), Background Scan 630

Location of Maximum: 198.00

Number of points: 272

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	887	162.00	449	239.00	349	346.00	676
87.00	460	163.00	56	240.00	278	352.00	1130
88.00	153	164.00	165	241.00	556	353.00	783
91.00	867	165.00	1120	242.00	1223	354.00	1097
92.00	1027	166.00	1108	243.00	1292	355.00	157
93.00	5507	167.00	6975	244.00	17928	365.00	4686
94.00	441	168.00	3041	245.00	2475	366.00	616
95.00	139	169.00	573	246.00	2985	370.00	54
96.00	335	170.00	224	247.00	610	371.00	326
98.00	4186	171.00	248	248.00	189	372.00	2136
99.00	3363	172.00	540	249.00	682	373.00	601
100.00	325	173.00	871	250.00	115	383.00	526
101.00	2048	174.00	1376	251.00	131	384.00	141
102.00	57	175.00	2837	252.00	172	390.00	305
103.00	720	176.00	1080	253.00	503	391.00	153
104.00	1248	177.00	1275	255.00	87712	392.00	112
105.00	1192	178.00	347	256.00	13161	401.00	52
107.00	16335	179.00	4856	257.00	1066	402.00	839
108.00	2499	180.00	3412	258.00	4711	403.00	1231
110.00	33232	181.00	1641	259.00	705	404.00	403
111.00	4906	182.00	200	260.00	70	421.00	1166
112.00	557	183.00	133	261.00	174	422.00	931
113.00	152	184.00	466	264.00	188	423.00	7042
115.00	50	185.00	2766	265.00	1710	424.00	1421
116.00	870	186.00	20928	266.00	167	425.00	125
117.00	11916	187.00	5749	268.00	53	441.00	22832
118.00	795	188.00	598	270.00	128	442.00	153408
119.00	59	189.00	1178	271.00	214	443.00	30016
120.00	222	190.00	152	272.00	68	444.00	2748
121.00	52	191.00	610	273.00	2653	445.00	156
122.00	1064	192.00	1694	274.00	6837		
123.00	1700	193.00	1866	275.00	38688		
124.00	754	194.00	415	276.00	5028		
125.00	725	195.00	276	277.00	2927		

5A - FORM V SV
SEMI VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

EPA SAMPLE NO.

TUNE

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10256148
Lab File ID: 02031402.D DFTPP Injection Date: 02/03/2014
Instrument ID: 10MSS9 DFTPP Injection Time: 06:58
GC Column: ID: 9999 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base Peak, 100% relative abundance	100.00	
51	30.00 - 60.00% of mass 198	35.45	
68	Less than 2.00% of mass 69	0.00	(0.00)
69	Mass 69 relative abundance	30.45	
70	Less than 2.00% of mass 69	0.22	(0.71)
127	40.00 - 60.00% of mass 198	41.22	
197	Less than 1.00% of mass 198	0.23	
199	5.00 - 9.00% of mass 198	7.06	
275	10.00 - 30.00% of mass 198	23.75	
365	Greater than 1.00% of mass 198	2.77	
441	Present, but less than mass 443	14.11	
442	Greater than 40.00% of mass 198	89.83	
443	17.00 - 23.00% of mass 442	17.89	(19.91)

1 - Value is %mass 69 2 - Value is %mass 442

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	CCAL610328-96	CCAL610328-9	02031403.D	02/03/2014	07:16
2	DUP-001	10256148011	02031410.D	02/03/2014	10:44

DFTPP Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	35.45		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	30.45		PASS
70	Less than 2% of mass 69	0.22	(0.71)	PASS
127	40 - 60% of mass 198	41.22		PASS
197	0 - 1% of mass 198	0.23		PASS
199	5 - 9% of mass 198	7.06		PASS
275	10 - 30% of mass 198	23.75		PASS
365	Greater than 1% of mass 198	2.77		PASS
441	Present, but less than mass 443	14.11	(78.88)	PASS
442	Greater than 40% of mass 198	89.83		PASS
443	17 - 23% of mass 442	17.89	(19.91)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.1086207	5.000	PASS
Benzidine	0.6954545	3.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	442391			N/A
4,4-DDE	2683	0.6	15.0	PASS
4,4-DDD	16251	3.5	15.0	PASS
4,4-DDD + DDE	18934	4.1	15.0	PASS

*****
Tuning Sample, //192.168.10.12/chem/10mss9.i/020314.b/02031402.D/02031402.D,***
*****

Data File: \\192.168.10.12\chem\10mss9.i\020314.b\02031402.D

Date : 03-FEB-2014 06:58

Client ID:

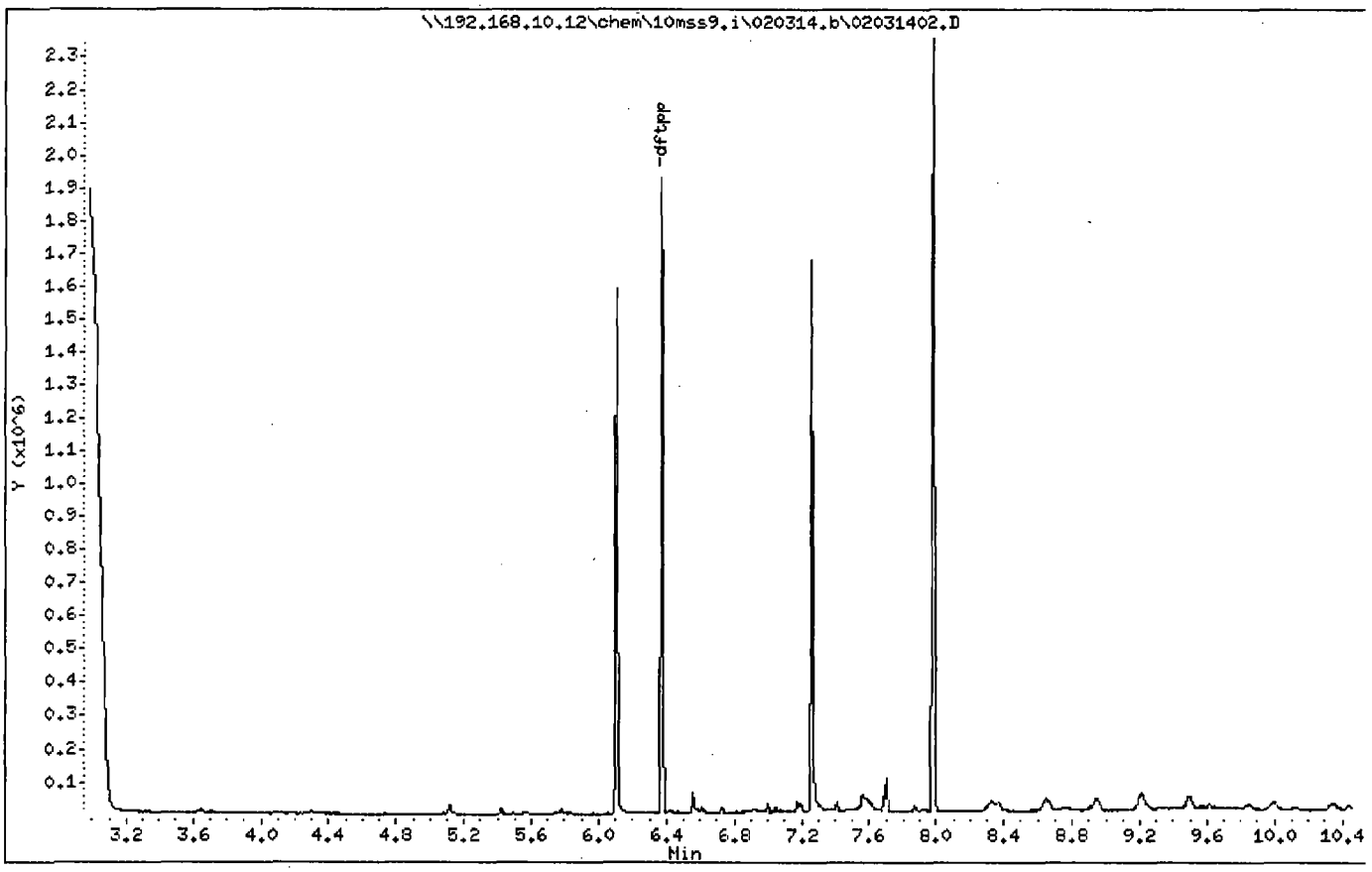
Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99



Date : 03-FEB-2014 06:58

Client ID:

Instrument: 10mss9.i

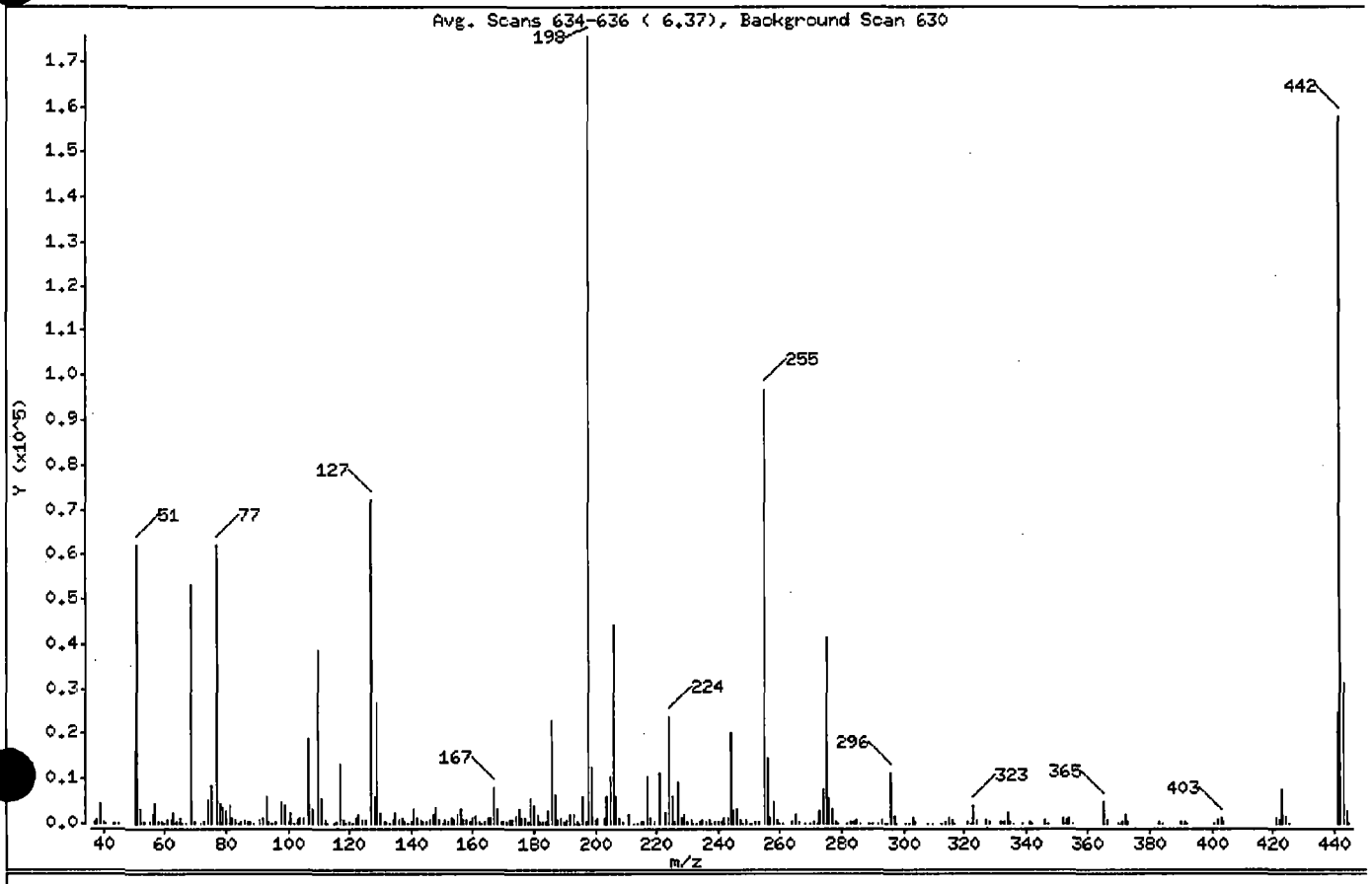
Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	35.45
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	30.45
70	Less than 2.00% of mass 69	0.22 (0.71)
127	40.00 - 60.00% of mass 198	41.22
197	Less than 1.00% of mass 198	0.23
199	5.00 - 9.00% of mass 198	7.06
275	10.00 - 30.00% of mass 198	23.75
365	Greater than 1.00% of mass 198	2.77
441	Present, but less than mass 443	14.11
442	Greater than 40.00% of mass 198	89.83
443	17.00 - 23.00% of mass 442	17.89 (19.91)

Date : 03-FEB-2014 06:58

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 02031402.D
Spectrum: Avg. Scans 634-636 (6.37), Background Scan 630
Location of Maximum: 198.00
Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	246	124.00	883	198.00	175552	283.00	434
38.00	718	125.00	935	199.00	12401	284.00	238
39.00	4286	127.00	72368	200.00	949	285.00	617
40.00	298	128.00	5948	201.00	1159	286.00	128
41.00	125	129.00	26848	203.00	1227	289.00	147
43.00	7	130.00	2386	204.00	6230	290.00	75
44.00	37	131.00	510	205.00	10624	292.00	194
45.00	93	132.00	275	206.00	44432	293.00	914
50.00	16063	133.00	57	207.00	5933	294.00	173
51.00	62240	134.00	787	208.00	1376	295.00	173
52.00	3288	135.00	2320	209.00	499	296.00	11301
53.00	203	136.00	831	211.00	1839	297.00	1602
55.00	292	137.00	1048	213.00	101	298.00	107
56.00	1983	138.00	290	214.00	52	301.00	180
57.00	4465	139.00	91	215.00	443	302.00	175
58.00	259	140.00	314	216.00	533	303.00	1278
59.00	380	141.00	3156	217.00	10475	304.00	364
60.00	62	142.00	1216	218.00	1390	308.00	162
61.00	728	143.00	851	219.00	253	310.00	177
62.00	784	144.00	212	221.00	11137	313.00	113
63.00	2284	145.00	241	223.00	2583	314.00	560
64.00	321	146.00	645	224.00	23896	315.00	1133
65.00	1187	147.00	1924	225.00	6041	316.00	713
66.00	53	148.00	3577	226.00	269	317.00	127
67.00	108	149.00	810	227.00	9409	321.00	394
69.00	53448	150.00	200	228.00	1403	322.00	78
70.00	379	151.00	655	229.00	2021	323.00	4049
72.00	66	152.00	354	230.00	323	324.00	734
73.00	605	153.00	1060	231.00	904	327.00	695
74.00	5269	154.00	910	232.00	149	328.00	355
75.00	8450	155.00	2000	233.00	176	332.00	276
77.00	62256	156.00	3047	234.00	543	333.00	325
78.00	4393	157.00	818	235.00	701	334.00	2352
79.00	3652	158.00	750	236.00	454	335.00	576
80.00	2991	159.00	544	237.00	715	336.00	52

Date : 03-FEB-2014 06:58

Client ID: Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase: Column diameter: 99999999.99

Data File: 02031402.D
Spectrum: Avg. Scans 634-636 (6.37), Background Scan 630
Location of Maximum: 198.00
Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	3985	160.00	1080	238.00	124	339.00	52
82.00	1039	161.00	1660	239.00	422	341.00	418
83.00	889	162.00	489	240.00	286	342.00	109
84.00	70	163.00	133	241.00	541	346.00	829
85.00	598	164.00	261	242.00	1268	347.00	123
86.00	919	165.00	1192	243.00	1277	352.00	1158
87.00	600	166.00	1230	244.00	20016	353.00	834
88.00	282	167.00	8149	245.00	2739	354.00	1184
89.00	146	168.00	3372	246.00	3393	355.00	192
91.00	902	169.00	579	247.00	762	365.00	4870
92.00	1190	170.00	280	248.00	169	366.00	750
93.00	6253	171.00	354	249.00	690	370.00	55
94.00	461	172.00	687	250.00	83	371.00	277
95.00	110	173.00	876	251.00	144	372.00	2144
96.00	465	174.00	1639	252.00	281	373.00	548
98.00	4893	175.00	3028	253.00	459	383.00	590
99.00	3841	176.00	1102	255.00	96936	384.00	170
100.00	397	177.00	1380	256.00	14471	390.00	231
101.00	2433	178.00	574	257.00	1083	391.00	215
102.00	106	179.00	5537	258.00	5033	392.00	138
103.00	953	180.00	3974	259.00	843	401.00	114
104.00	1391	181.00	1817	260.00	52	402.00	848
105.00	1300	182.00	311	261.00	164	403.00	1229
107.00	19024	183.00	204	264.00	228	404.00	418
108.00	3081	184.00	473	265.00	1938	421.00	1163
110.00	38640	185.00	2921	266.00	238	422.00	885
111.00	5514	186.00	23136	268.00	58	423.00	7635
112.00	771	187.00	6375	270.00	132	424.00	1457
113.00	159	188.00	690	271.00	212	425.00	143
115.00	60	189.00	1410	272.00	193	441.00	24768
116.00	351	190.00	285	273.00	3017	442.00	157696
117.00	13153	191.00	761	274.00	7683	443.00	31400
118.00	1006	192.00	1820	275.00	41696	444.00	2818
119.00	67	193.00	2109	276.00	5637	445.00	172
120.00	297	194.00	525	277.00	3270		

Date : 03-FEB-2014 06:58

Client ID:

Instrument: 10mss9.i

Sample Info: TUNE

Operator: JLR

Column phase:

Column diameter: 99999999.99

Data File: 02031402.D

Spectrum: Avg. Scans 634-636 (6.37), Background Scan 630

Location of Maximum: 198.00

Number of points: 288

m/z	Y	m/z	Y	m/z	Y	m/z	Y
121.00	65	195.00	129	278.00	501		
122.00	1210	196.00	6244	279.00	53		
123.00	2041	197.00	399	282.00	61		

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311403.D
Report Date: 31-Jan-2014 15:00

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 31-JAN-2014 07:18
Lab File ID: 01311403.D Init. Cal. Date(s): 30-JAN-2014 30-JAN-2014
Analysis Type: Init. Cal. Times: 08:59 12:01
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 N-Nitrosodimethylamine	0.84813	0.84039	0.84039	0.000	-0.91246	40.00000	Averaged
2 Pyridine	1.50609	1.53968	1.53968	0.000	2.23010	40.00000	Averaged
$ 3 2-Fluorophenol (S)	1.37246	1.30340	1.30340	0.000	-5.03154	20.00000	Averaged
$ 4 Phenol-d6 (S)	1.68496	1.59064	1.59064	0.000	-5.59796	20.00000	Averaged
5 Phenol	1.74122	1.65482	1.65482	0.800	-4.96197	20.00000	Averaged
6 bis(2-Chloroethyl)ether	1.10447	1.03758	1.03758	0.700	-6.05649	40.00000	Averaged
7 2-Chlorophenol	1.36657	1.30506	1.30506	0.800	-4.50123	40.00000	Averaged
8 1,3-Dichlorobenzene	1.51933	1.45190	1.45190	0.000	-4.43790	40.00000	Averaged
10 1,4-Dichlorobenzene	1.53370	1.46421	1.46421	0.000	-4.53049	20.00000	Averaged
11 Benzyl alcohol	1.09023	1.03344	1.03344	0.000	-5.20866	40.00000	Averaged
12 1,2-Dichlorobenzene	1.44457	1.37374	1.37374	0.000	-4.90324	40.00000	Averaged
13 2-Methylphenol	1.07211	1.00666	1.00666	0.700	-6.10450	40.00000	Averaged
14 bis(2-Chloroisopropyl) ethe	2.04812	1.91556	1.91556	0.000	-6.47241	40.00000	Averaged
15 3 & 4-Methylphenol	1.36321	1.29636	1.29636	0.600	-4.90404	40.00000	Averaged
17 N-Nitroso-di-n-propylamine	0.85251	0.82009	0.82009	0.500	-3.80339	40.00000	Averaged
18 Hexachloroethane	0.58811	0.55611	0.55611	0.300	-5.44125	40.00000	Averaged
$ 19 Nitrobenzene-d5 (S)	0.41638	0.39528	0.39528	0.000	-5.06618	20.00000	Averaged
20 Nitrobenzene	0.36983	0.35237	0.35237	0.200	-4.72200	40.00000	Averaged
21 Isophorone	0.65164	0.61974	0.61974	0.400	-4.89597	40.00000	Averaged
22 2-Nitrophenol	0.18251	0.18076	0.18076	0.100	-0.96263	20.00000	Averaged
23 2,4-Dimethylphenol	0.34484	0.33056	0.33056	0.200	-4.14322	40.00000	Averaged
24 Benzoic acid	80.00000	74.60409	0.19912	0.000	-6.74489	40.00000	Quadratic
25 bis(2-Chloroethoxy)methane	0.41123	0.39593	0.39593	0.300	-3.72018	40.00000	Averaged
26 2,4-Dichlorophenol	0.29638	0.28786	0.28786	0.200	-2.87433	20.00000	Averaged
27 1,2,4-Trichlorobenzene	0.34202	0.32491	0.32491	0.000	-5.00104	40.00000	Averaged
29 Naphthalene	1.05127	0.99028	0.99028	0.700	-5.80230	40.00000	Averaged
30 4-Chloroaniline	80.00000	75.45526	0.32263	0.010	-5.68092	40.00000	Quadratic
31 Hexachlorobutadiene	0.20180	0.19291	0.19291	0.010	-4.40572	20.00000	Averaged
32 4-Chloro-3-methylphenol	0.27641	0.26943	0.26943	0.200	-2.52434	20.00000	Averaged
33 2-Methylnaphthalene	0.68306	0.65444	0.65444	0.040	-4.18927	40.00000	Averaged
34 1-Methylnaphthalene	0.63359	0.59211	0.59211	0.000	-6.54571	40.00000	Averaged
35 Hexachlorocyclopentadiene	0.38779	0.40816	0.40816	0.050	5.25322	40.00000	Averaged
36 2,4,6-Trichlorophenol	0.38477	0.37406	0.37406	0.200	-2.78291	20.00000	Averaged
37 2,4,5-Trichlorophenol	0.41824	0.41018	0.41018	0.200	-1.92799	40.00000	Averaged
$ 38 2-Fluorobiphenyl (S)	1.48205	1.40561	1.40561	0.000	-5.15748	20.00000	Averaged
39 2-Chloronaphthalene	1.21854	1.14217	1.14217	0.800	-6.26710	40.00000	Averaged
40 2-Nitroaniline	0.35543	0.34394	0.34394	0.010	-3.23199	40.00000	Averaged
41 Dimethylphthalate	1.31007	1.23717	1.23717	0.010	-5.56481	40.00000	Averaged
42 2,6-Dinitrotoluene	0.30343	0.29690	0.29690	0.200	-2.14966	40.00000	Averaged
43 Acenaphthylene	1.96450	1.85743	1.85743	0.900	-5.45038	40.00000	Averaged
44 3-Nitroaniline	0.31079	0.26796	0.26796	0.010	-13.78178	40.00000	Averaged
46 Acenaphthene	1.19821	1.14120	1.14120	0.900	-4.75811	20.00000	Averaged

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311403.D
Report Date: 31-Jan-2014 15:00

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 31-JAN-2014 07:18
Lab File ID: 01311403.D Init. Cal. Date(s): 30-JAN-2014 30-JAN-2014
Analysis Type: Init. Cal. Times: 08:59 12:01
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m

			CCAL	MIN		MAX	
COMPOUND	RRF / AMOUNT	RF80	RRF80	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
47 2,4-Dinitrophenol	80.00000	70.38086	0.12941	0.050	-12.02393	40.00000	Quadratic
48 4-Nitrophenol	0.23066	0.22810	0.22810	0.050	-1.10986	40.00000	Averaged
49 2,4-Dinitrotoluene	0.38891	0.38555	0.38555	0.200	-0.86365	40.00000	Averaged
50 Dibenzofuran	1.74656	1.65073	1.65073	0.800	-5.48637	40.00000	Averaged
51 Diethylphthalate	1.31208	1.25665	1.25665	0.010	-4.22467	40.00000	Averaged
52 4-Chlorophenylphenyl ether	0.70266	0.67137	0.67137	0.400	-4.45349	40.00000	Averaged
53 4-Nitroaniline	0.35067	0.34020	0.34020	0.010	-2.98778	40.00000	Averaged
54 Fluorene	1.42140	1.35122	1.35122	0.900	-4.93703	40.00000	Averaged
55 4,6-Dinitro-2-methylphenol	80.00000	73.16166	0.10535	0.010	-8.54793	40.00000	Quadratic
56 N-Nitrosodiphenylamine	0.63381	0.61776	0.61776	0.010	-2.53182	20.00000	Averaged
57 Azobenzene	1.29453	1.22892	1.22892	0.000	-5.06842	40.00000	Averaged
58 1,2-Diphenylhydrazine	1.29453	1.22892	1.22892	0.000	-5.06842	40.00000	Averaged
$ 59 2,4,6-Tribromophenol (S)	0.19193	0.19723	0.19723	0.000	2.76186	20.00000	Averaged
60 4-Bromophenylphenyl ether	0.21826	0.21377	0.21377	0.100	-2.05506	40.00000	Averaged
61 Hexachlorobenzene	0.23087	0.22514	0.22514	0.100	-2.48220	40.00000	Averaged
62 Pentachlorophenol	0.12109	0.12853	0.12853	0.050	6.14455	20.00000	Averaged
64 Phenanthrene	1.06274	1.01924	1.01924	0.700	-4.09271	40.00000	Averaged
65 Anthracene	1.08324	1.03861	1.03861	0.700	-4.12068	40.00000	Averaged
66 Carbazole	1.03233	0.99039	0.99039	0.010	-4.06285	40.00000	Averaged
67 di-n-Butylphthalate	1.20083	1.17382	1.17382	0.010	-2.24858	40.00000	Averaged
68 Fluoranthene	1.23380	1.19452	1.19452	0.600	-3.18398	20.00000	Averaged
69 Benzidine	80.00000	71.55186	0.41177	0.000	-10.56017	40.00000	Quadratic
70 Pyrene	1.21457	1.17131	1.17131	0.600	-3.56185	40.00000	Averaged
$ 71 Terphenyl-d14 (S)	0.85029	0.82249	0.82249	0.000	-3.26971	20.00000	Averaged
72 Butylbenzylphthalate	0.50411	0.48921	0.48921	0.010	-2.95575	40.00000	Averaged
73 bis(2-Ethylhexyl)phthalate	0.71755	0.70683	0.70683	0.010	-1.49377	40.00000	Averaged
74 3,3'-Dichlorobenzidine	0.34816	0.29327	0.29327	0.010	-15.76319	40.00000	Averaged
75 Benzo(a)anthracene	1.13846	1.08616	1.08616	0.800	-4.59425	40.00000	Averaged
77 Chrysene	1.04526	1.01319	1.01319	0.700	-3.06816	40.00000	Averaged
78 di-n-Octylphthalate	1.22744	1.21848	1.21848	0.010	-0.72993	20.00000	Averaged
79 Benzo(b)fluoranthene	1.18034	1.16941	1.16941	0.700	-0.92621	40.00000	Averaged
80 Benzo(k)fluoranthene	1.19966	1.13966	1.13966	0.700	-5.00162	40.00000	Averaged
81 Benzo(a)pyrene	1.12635	1.09500	1.09500	0.700	-2.78323	20.00000	Averaged
83 Indeno(1,2,3-cd)pyrene	1.25802	1.22342	1.22342	0.500	-2.74972	40.00000	Averaged
84 Dibenzo(a,h)anthracene	1.06359	1.03156	1.03156	0.400	-3.01134	40.00000	Averaged
85 Benzo(g,h,i)perylene	1.05708	1.02643	1.02643	0.500	-2.89967	40.00000	Averaged

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311403.D
Report Date: 31-Jan-2014 15:00

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 31-JAN-2014 07:18
Lab File ID: 01311403.D Init. Cal. Date(s): 30-JAN-2014 30-JAN-2014
Analysis Type: Init. Cal. Times: 08:59 12:01
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m

Average %D / Drift Results.
Calculated Average %D/Drift = 4.49393
Maximun Average %D/Drift = 40.00000
* Passed Average %D/Drift Test.

Data file: \\192.168.10.12\chem\10mss9.i\013114.b\01311403.D
Report Date: 31-Jan-2014 15:00

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311403.D
Lab Smp Id: CCAL 6 10328-96
Inj Date : 31-JAN-2014 07:18
Operator : JLR Inst ID: 10mss9.i
Smp Info : CCAL 6 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.762	2.762	(0.531)	101168	80.0000	79.3
	2 Pyridine	79	2.821	2.821	(0.542)	185350	80.0000	81.8
$	3 2-Fluorophenol (S)	112	3.863	3.863	(0.742)	156906	80.0000	76.0
$	4 Phenol-d6 (S)	99	4.734	4.734	(0.910)	191484	80.0000	75.5
	5 Phenol	94	4.750	4.750	(0.913)	199211	80.0000	76.0
	6 bis(2-Chloroethyl)ether	63	4.878	4.878	(0.937)	124906	80.0000	75.2
	7 2-Chlorophenol	128	4.974	4.974	(0.956)	157106	80.0000	76.4
	8 1,3-Dichlorobenzene	146	5.150	5.150	(0.990)	174783	80.0000	76.4
*	9 1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	60191	40.0000	
	10 1,4-Dichlorobenzene	146	5.225	5.225	(1.004)	176265	80.0000	76.4
	11 Benzyl alcohol	79	5.316	5.316	(1.022)	124408	80.0000	75.8
	12 1,2-Dichlorobenzene	146	5.396	5.396	(1.037)	165374	80.0000	76.1
	13 2-Methylphenol	107	5.412	5.412	(1.040)	121184	80.0000	75.1
	14 bis(2-Chloroisopropyl) ether	45	5.471	5.471	(1.051)	230599	80.0000	74.8
	15 3 & 4-Methylphenol	107	5.583	5.583	(1.073)	156058	80.0000	76.1
	17 N-Nitroso-di-n-propylamine	70	5.615	5.615	(1.079)	98724	80.0000	77.0
	18 Hexachloroethane	117	5.786	5.786	(1.112)	66946	80.0000	75.6
$	19 Nitrobenzene-d5 (S)	82	5.813	5.813	(0.871)	127461	60.0000	57.0(M)
	20 Nitrobenzene	77	5.834	5.834	(0.874)	151497	80.0000	76.2
	21 Isophorone	82	6.101	6.101	(0.914)	266449	80.0000	76.1
	22 2-Nitrophenol	139	6.203	6.203	(0.930)	77714	80.0000	79.2
	23 2,4-Dimethylphenol	107	6.208	6.208	(0.930)	142119	80.0000	76.7
	24 Benzoic acid	105	6.283	6.283	(0.942)	85608	80.0000	74.6
	25 bis(2-Chloroethoxy)methane	93	6.331	6.331	(0.949)	170227	80.0000	77.0
	26 2,4-Dichlorophenol	162	6.481	6.481	(0.971)	123764	80.0000	77.7
	27 1,2,4-Trichlorobenzene	180	6.598	6.598	(0.989)	139693	80.0000	76.0
*	28 Naphthalene-d8	136	6.673	6.673	(1.000)	214969	40.0000	(Q)
	29 Naphthalene	128	6.700	6.700	(1.004)	425757	80.0000	75.4
	30 4-Chloroaniline	127	6.732	6.732	(1.009)	138712	80.0000	75.4
	31 Hexachlorobutadiene	225	6.839	6.839	(1.025)	82939	80.0000	76.5
	32 4-Chloro-3-methylphenol	107	7.287	7.287	(1.092)	115840	80.0000	78.0
	33 2-Methylnaphthalene	142	7.538	7.538	(1.130)	281369	80.0000	76.6
	34 1-Methylnaphthalene	142	7.661	7.661	(1.148)	254572	80.0000	74.8

		QUANT SIG					AMOUNTS CAL-AMT	AMOUNTS ON-COL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)	
	35 Hexachlorocyclopentadiene	237	7.731	7.731	(0.875)	91592	80.0000	84.2	
	36 2,4,6-Trichlorophenol	196	7.864	7.864	(0.891)	83940	80.0000	77.8	
	37 2,4,5-Trichlorophenol	196	7.907	7.907	(0.895)	92045	80.0000	78.4	
$	38 2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	236567	60.0000	56.9	
	39 2-Chloronaphthalene	162	8.142	8.142	(0.922)	256306	80.0000	75.0	
	40 2-Nitroaniline	65	8.238	8.238	(0.933)	77181	80.0000	77.4	
	41 Dimethylphthalate	163	8.457	8.457	(0.958)	277623	80.0000	75.5	
	42 2,6-Dinitrotoluene	165	8.537	8.537	(0.967)	66626	80.0000	78.3	
	43 Acenaphthylene	152	8.660	8.660	(0.981)	416811	80.0000	75.6	(M)
	44 3-Nitroaniline	138	8.746	8.746	(0.990)	60130	80.0000	69.0	
*	45 Acenaphthene-d10	164	8.831	8.831	(1.000)	112201	40.0000		
	46 Acenaphthene	154	8.874	8.874	(1.005)	256087	80.0000	76.2	
	47 2,4-Dinitrophenol	184	8.874	8.874	(1.005)	29040	80.0000	70.4	
	48 4-Nitrophenol	65	8.917	8.917	(1.010)	51186	80.0000	79.1	
	49 2,4-Dinitrotoluene	165	9.040	9.040	(1.024)	86518	80.0000	79.3	
	50 Dibenzofuran	168	9.088	9.088	(1.029)	370428	80.0000	75.6	
	51 Diethylphthalate	149	9.333	9.333	(1.057)	281995	80.0000	76.6	
	52 4-Chlorophenylphenyl ether	204	9.499	9.499	(1.076)	150657	80.0000	76.4	
	53 4-Nitroaniline	138	9.510	9.510	(1.077)	76341	80.0000	77.6	
	54 Fluorene	166	9.515	9.515	(1.077)	303217	80.0000	76.0	
	55 4,6-Dinitro-2-methylphenol	198	9.547	9.547	(0.893)	43214	80.0000	73.2	
	56 N-Nitrosodiphenylamine	169	9.638	9.638	(0.902)	253407	80.0000	78.0	
	57 Azobenzene	77	9.697	9.697	(1.098)	275771	80.0000	75.9	
	58 1,2-Diphenylhydrazine	77	9.697	9.697	(1.098)	275771	80.0000	75.9	
$	59 2,4,6-Tribromophenol (S)	330	9.809	9.809	(1.111)	44259	80.0000	82.2	
	60 4-Bromophenylphenyl ether	248	10.113	10.113	(0.946)	87689	80.0000	78.4	
	61 Hexachlorobenzene	284	10.209	10.209	(0.955)	92352	80.0000	78.0	
	62 Pentachlorophenol	266	10.434	10.434	(0.976)	52724	80.0000	84.9	
*	63 Phenanthrene-d10	188	10.690	10.690	(1.000)	205101	40.0000		
	64 Phenanthrene	178	10.722	10.722	(1.003)	418096	80.0000	76.7	
	65 Anthracene	178	10.786	10.786	(1.009)	426039	80.0000	76.7	
	66 Carbazole	167	10.968	10.968	(1.026)	406259	80.0000	76.7	
	67 di-n-Butylphthalate	149	11.369	11.369	(1.063)	481505	80.0000	78.2	
	68 Fluoranthene	202	12.213	12.213	(1.142)	489994	80.0000	77.4	
	69 Benzidine	184	12.346	12.346	(0.882)	181633	80.0000	71.6	
	70 Pyrene	202	12.501	12.501	(0.893)	516662	80.0000	77.2	
$	71 Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	272099	60.0000	58.0	
	72 Butylbenzylphthalate	149	13.249	13.249	(0.947)	215791	80.0000	77.6	
	73 bis(2-Ethylhexyl)phthalate	149	13.944	13.944	(0.996)	311780	80.0000	78.8	
	74 3,3'-Dichlorobenzidine	252	13.922	13.922	(0.995)	129363	80.0000	67.4	
	75 Benzo(a)anthracene	228	13.986	13.986	(0.999)	479102	80.0000	76.3	
*	76 Chrysene-d12	240	13.997	13.997	(1.000)	220549	40.0000		(Q)
	77 Chrysene	228	14.035	14.035	(1.003)	446914	80.0000	77.5	
	78 di-n-Octylphthalate	149	14.734	14.734	(1.053)	537469	80.0000	79.4	
	79 Benzo(b)fluoranthene	252	15.391	15.391	(0.962)	498301	80.0000	79.2	
	80 Benzo(k)fluoranthene	252	15.429	15.429	(0.965)	485624	80.0000	76.0	
	81 Benzo(a)pyrene	252	15.910	15.910	(0.995)	466594	80.0000	77.8	
*	82 Perylene-d12	264	15.995	15.995	(1.000)	213057	40.0000		
	83 Indeno(1,2,3-cd)pyrene	276	18.073	18.073	(1.130)	521318	80.0000	77.8	
	84 Dibenzo(a,h)anthracene	278	18.095	18.095	(1.131)	439562	80.0000	77.6	
	85 Benzo(g,h,i)perylene	276	18.714	18.714	(1.170)	437375	80.0000	77.7	

Data File: \\192.168.10.12\Chem\10mss9.i\013114.b\01311403.D
Report Date: 31-Jan-2014 15:00

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311403.D
Report Date: 31-Jan-2014 15:00

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311403.D
Lab Smp Id: CCAL 6 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info:

Calibration Date: 30-JAN-2014
Calibration Time: 13:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

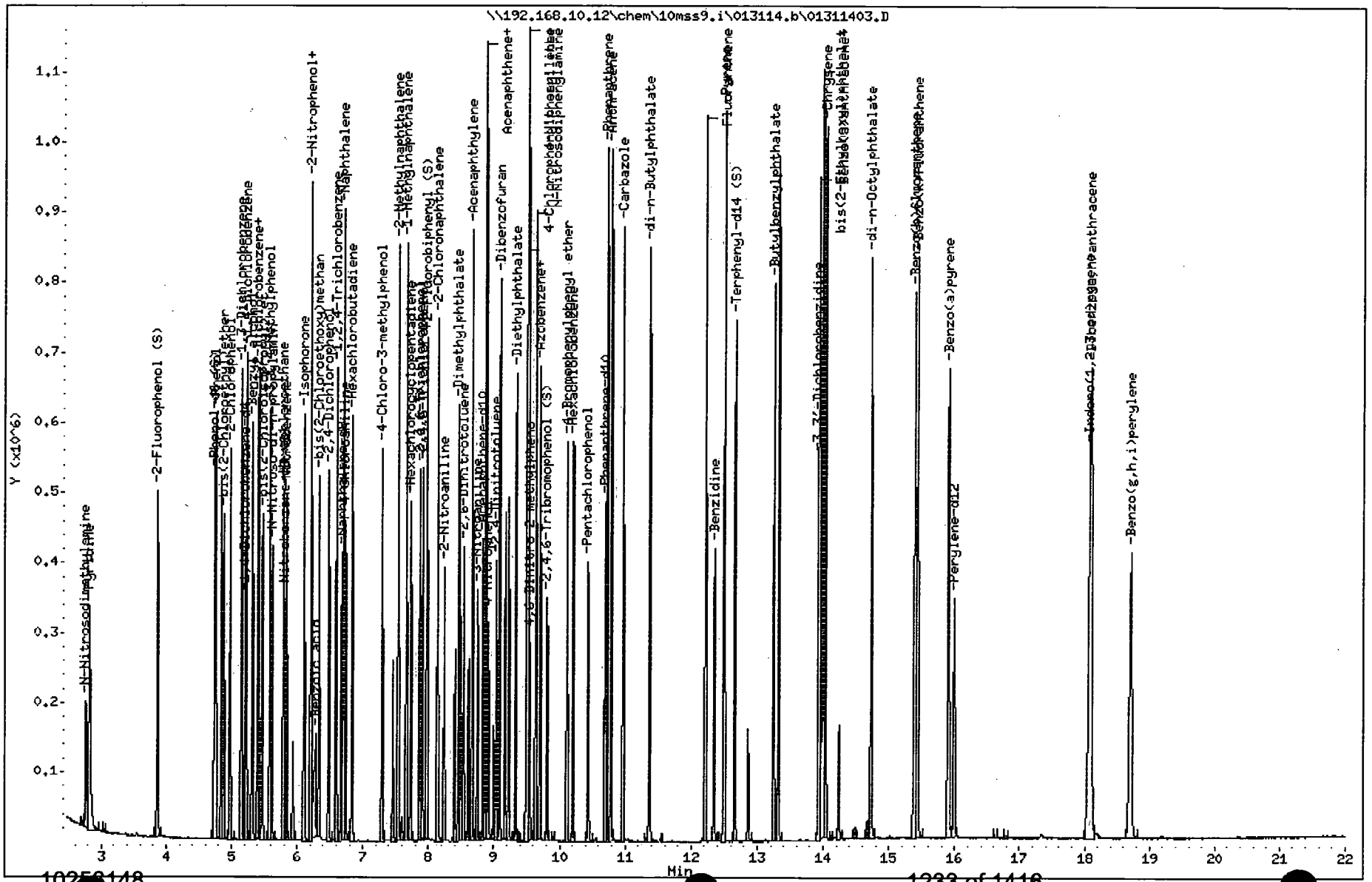
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	55535	27768	111070	60191	8.38
28 Naphthalene-d8	202574	101287	405148	214969	6.12
45 Acenaphthene-d10	105765	52883	211530	112201	6.09
63 Phenanthrene-d10	197315	98658	394630	205101	3.95
76 Chrysene-d12	212271	106136	424542	220549	3.90
82 Perylene-d12	203680	101840	407360	213057	4.60

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	0.00
76 Chrysene-d12	14.00	13.50	14.50	14.00	0.00
82 Perylene-d12	16.00	15.50	16.50	16.00	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

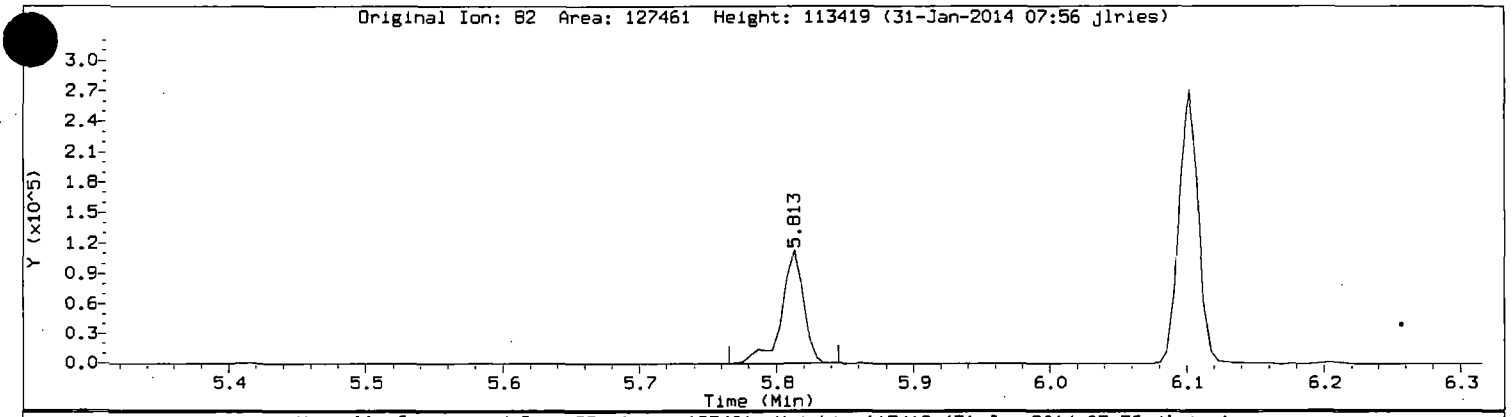
Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311403.D
Date : 31-JAN-2014 07:18
Client ID:
Sample Info: CCAL 6 10328-96

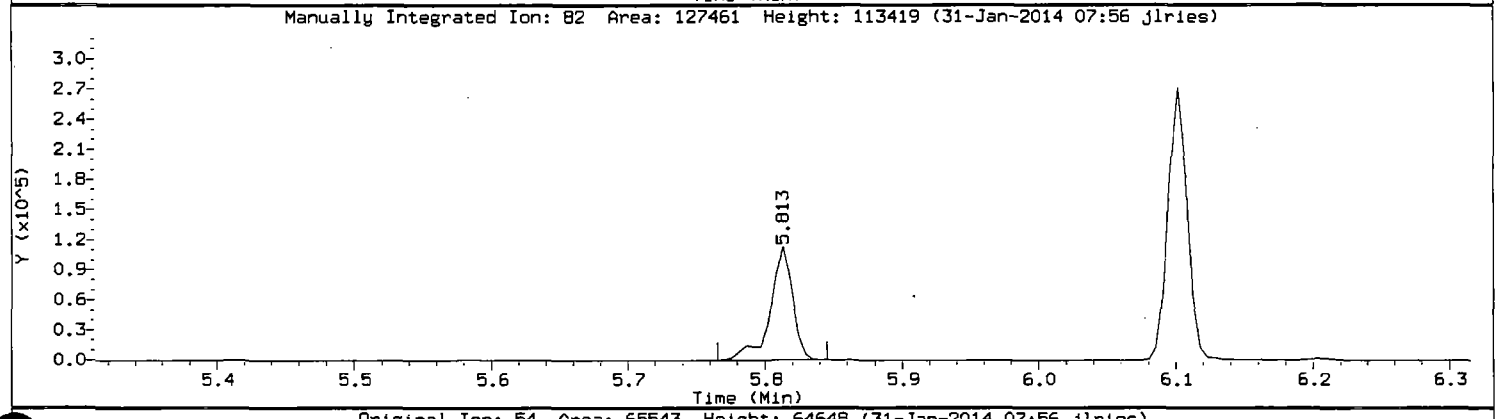
Instrument: 10mss9.i
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

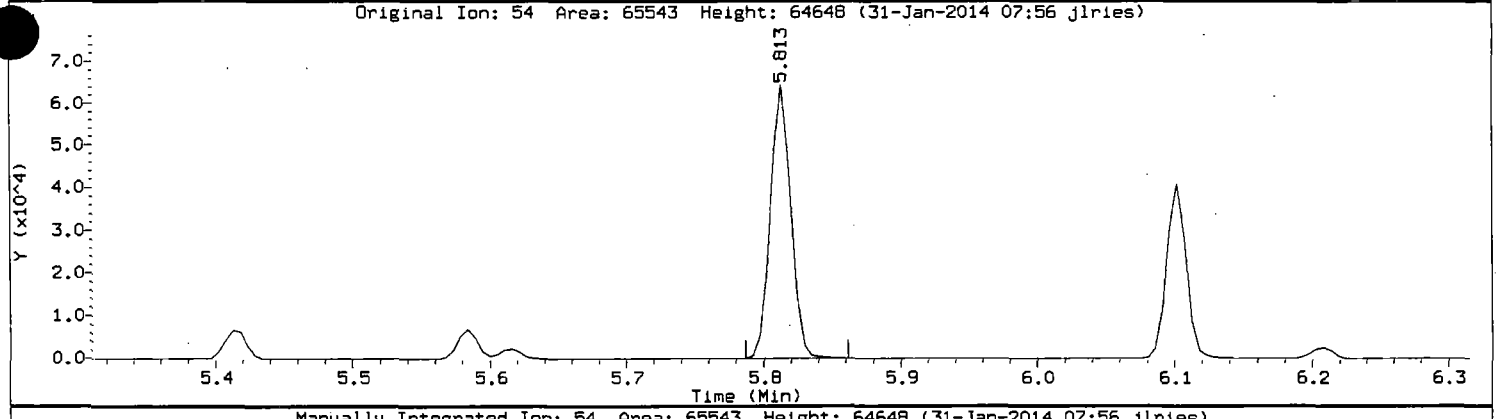


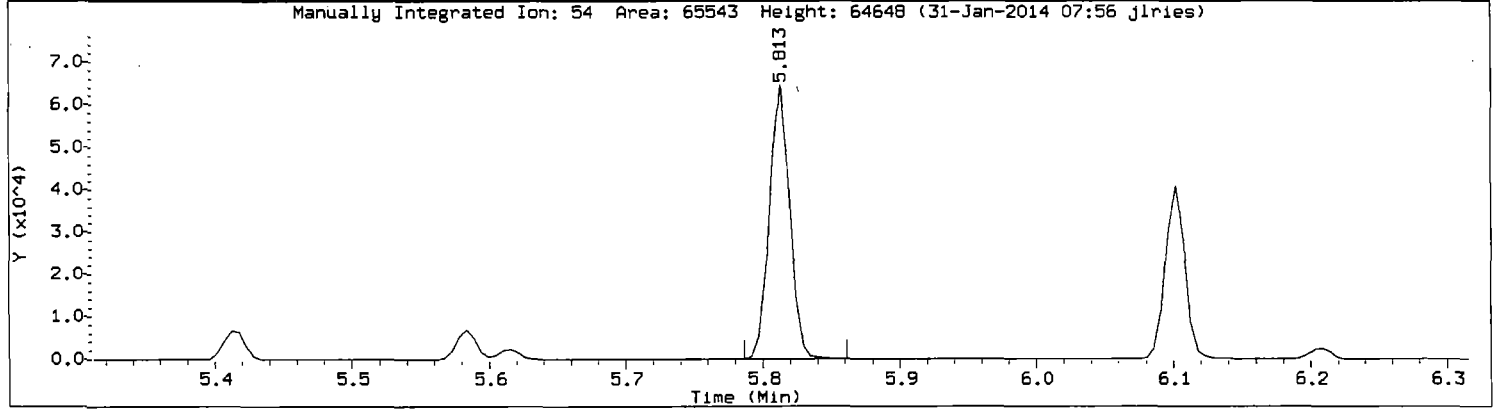
Injection Date: 31-JAN-2014 07:18
Instrument: 10mss9.i
Lab Sample ID: CCAL 6 10328-96

Compound: Nitrobenzene-d5 (S)
CAS Number: 4165-60-0



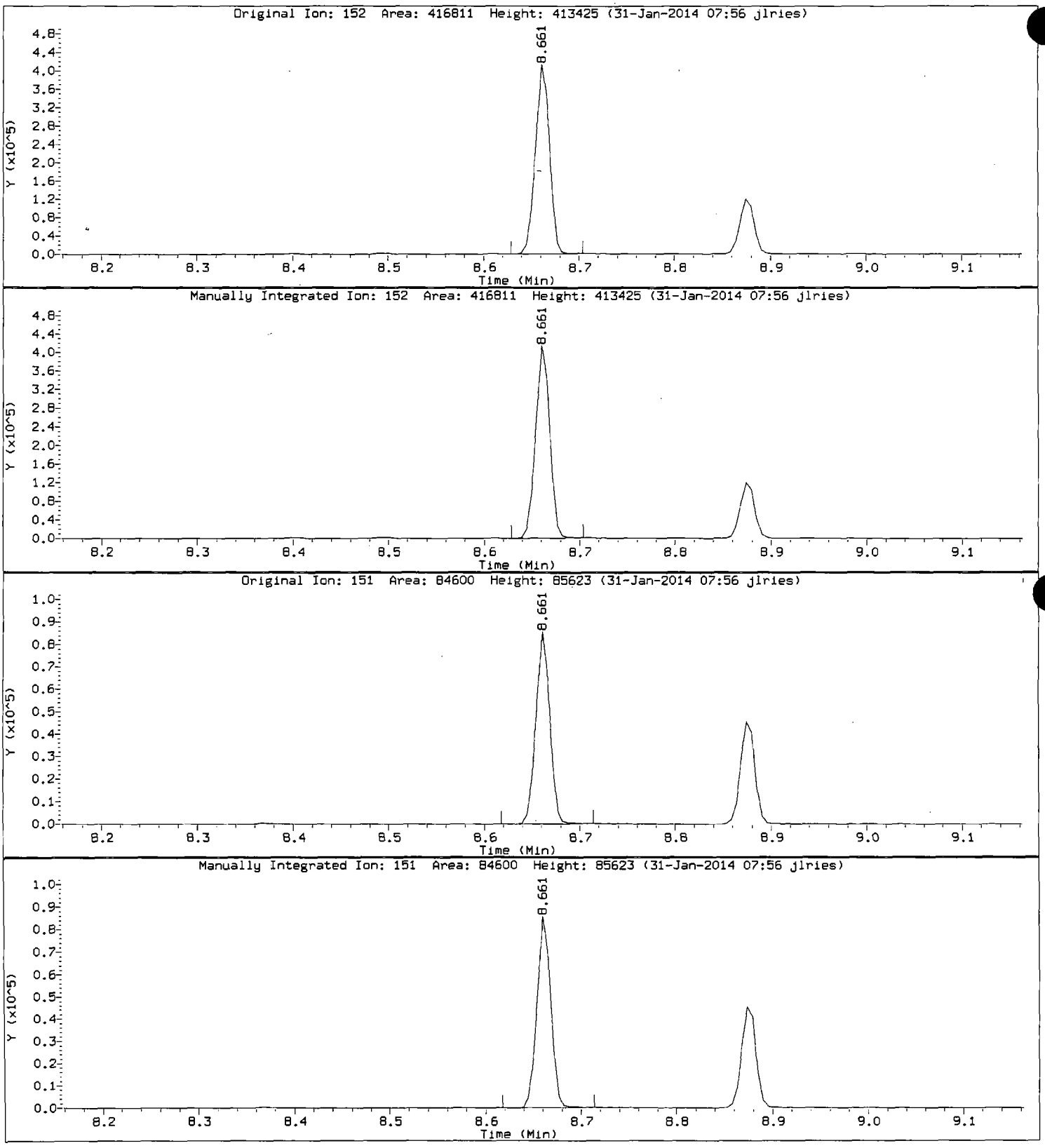




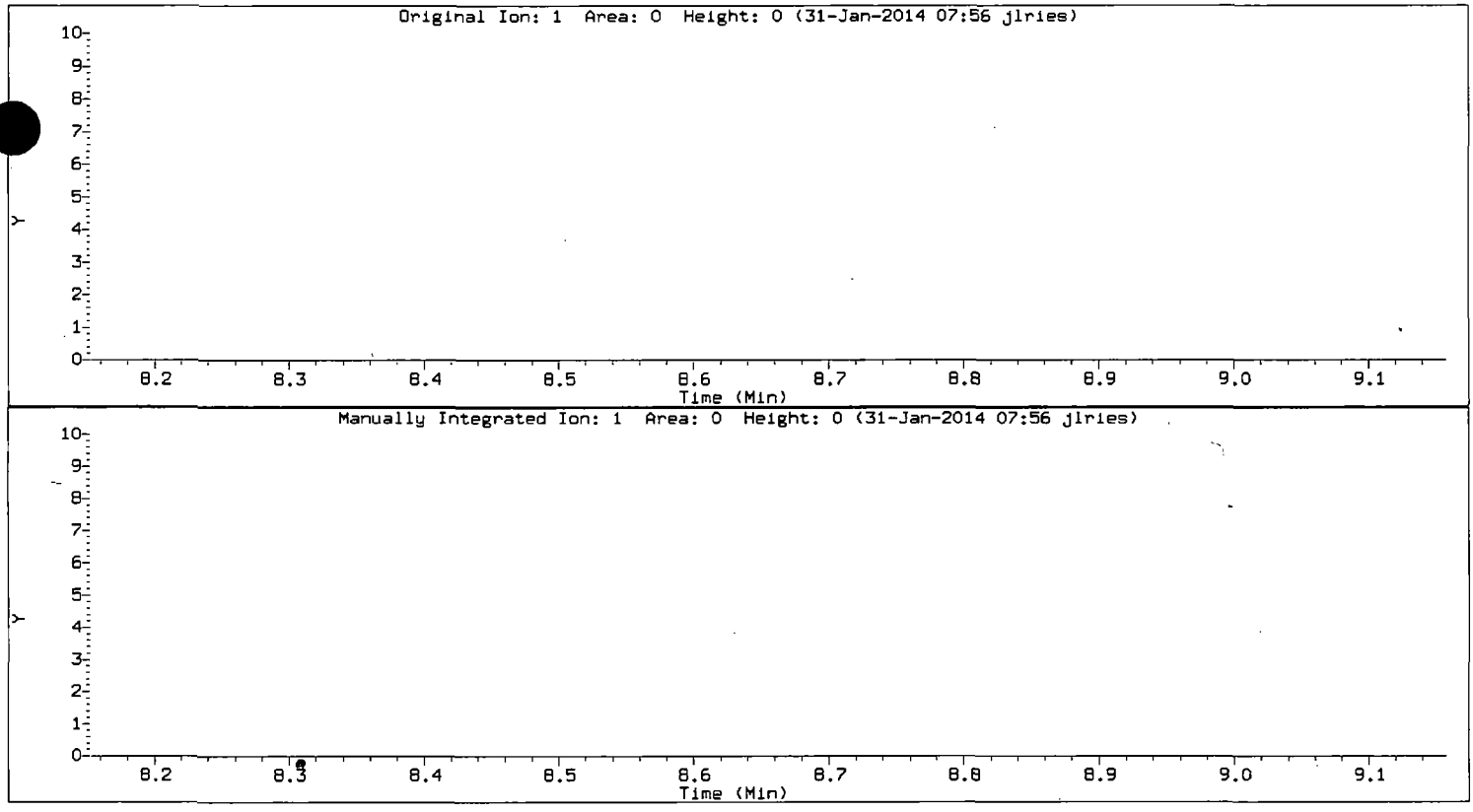


Injection Date: 31-JAN-2014 07:18
Instrument: 10mss9.i
Lab Sample ID: CCAL 6 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8



Injection Date: 31-JAN-2014 07:18
Instrument: 10mss9.i
Lab Sample ID: CCAL 6 10328-96



Data File: \\192.168.10.12\chem\10mss9.i\020314.b\02031403.D
Report Date: 03-Feb-2014 07:54

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 03-FEB-2014 07:16
Lab File ID: 02031403.D Init. Cal. Date(s): 30-JAN-2014 30-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 08:59 12:01
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\020314.b\013014-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 N-Nitrosodimethylamine	0.84813	0.81901	0.81901	0.000	-3.43317	40.00000	Averaged
2 Pyridine	1.50609	1.49905	1.49905	0.000	-0.46799	40.00000	Averaged
$ 3 2-Fluorophenol (S)	1.37246	1.32399	1.32399	0.000	-3.53147	20.00000	Averaged
$ 4 Phenol-d6 (S)	1.68496	1.64496	1.64496	0.000	-2.37380	20.00000	Averaged
5 Phenol	1.74122	1.70136	1.70136	0.800	-2.28928	20.00000	Averaged
6 bis(2-Chloroethyl)ether	1.10447	1.04202	1.04202	0.700	-5.65483	40.00000	Averaged
7 2-Chlorophenol	1.36657	1.34235	1.34235	0.800	-1.77287	40.00000	Averaged
8 1,3-Dichlorobenzene	1.51933	1.47087	1.47087	0.000	-3.18978	40.00000	Averaged
10 1,4-Dichlorobenzene	1.53370	1.48240	1.48240	0.000	-3.34505	20.00000	Averaged
11 Benzyl alcohol	1.09023	1.05475	1.05475	0.000	-3.25407	40.00000	Averaged
12 1,2-Dichlorobenzene	1.44457	1.41368	1.41368	0.000	-2.13849	40.00000	Averaged
13 2-Methylphenol	1.07211	1.04990	1.04990	0.700	-2.07152	40.00000	Averaged
14 bis(2-Chloroisopropyl) ethe	2.04812	1.92930	1.92930	0.000	-5.80142	40.00000	Averaged
15 3 & 4-Methylphenol	1.36321	1.34644	1.34644	0.600	-1.23018	40.00000	Averaged
17 N-Nitroso-di-n-propylamine	0.85251	0.81517	0.81517	0.500	-4.37990	40.00000	Averaged
18 Hexachloroethane	0.58811	0.56338	0.56338	0.300	-4.20518	40.00000	Averaged
$ 19 Nitrobenzene-d5 (S)	0.41638	0.39933	0.39933	0.000	-4.09463	20.00000	Averaged
20 Nitrobenzene	0.36983	0.35287	0.35287	0.200	-4.58727	40.00000	Averaged
21 Isophorone	0.65164	0.61855	0.61855	0.400	-5.07864	40.00000	Averaged
22 2-Nitrophenol	0.18251	0.17986	0.17986	0.100	-1.45623	20.00000	Averaged
23 2,4-Dimethylphenol	0.34484	0.33220	0.33220	0.200	-3.66682	40.00000	Averaged
24 Benzoic acid	80.00000	73.61895	0.19633	0.000	-7.97632	40.00000	Quadratic
25 bis(2-Chloroethoxy)methane	0.41123	0.39560	0.39560	0.300	-3.80091	40.00000	Averaged
26 2,4-Dichlorophenol	0.29638	0.29140	0.29140	0.200	-1.68200	20.00000	Averaged
27 1,2,4-Trichlorobenzene	0.34202	0.33073	0.33073	0.000	-3.30122	40.00000	Averaged
29 Naphthalene	1.05127	0.99636	0.99636	0.700	-5.22347	40.00000	Averaged
30 4-Chloroaniline	80.00000	78.32421	0.33197	0.010	-2.09474	40.00000	Quadratic
31 Hexachlorobutadiene	0.20180	0.19471	0.19471	0.010	-3.51358	20.00000	Averaged
32 4-Chloro-3-methylphenol	0.27641	0.27228	0.27228	0.200	-1.49626	20.00000	Averaged
33 2-Methylnaphthalene	0.68306	0.66350	0.66350	0.040	-2.86328	40.00000	Averaged
34 1-Methylnaphthalene	0.63359	0.60603	0.60603	0.000	-4.34933	40.00000	Averaged
35 Hexachlorocyclopentadiene	0.38779	0.41063	0.41063	0.050	5.88938	40.00000	Averaged
36 2,4,6-Trichlorophenol	0.38477	0.38065	0.38065	0.200	-1.07152	20.00000	Averaged
37 2,4,5-Trichlorophenol	0.41824	0.41119	0.41119	0.200	-1.68684	40.00000	Averaged
$ 38 2-Fluorobiphenyl (S)	1.48205	1.40860	1.40860	0.000	-4.95591	20.00000	Averaged
39 2-Chloronaphthalene	1.21854	1.16748	1.16748	0.800	-4.19067	40.00000	Averaged
40 2-Nitroaniline	0.35543	0.33450	0.33450	0.010	-5.88889	40.00000	Averaged
41 Dimethylphthalate	1.31007	1.23915	1.23915	0.010	-5.41380	40.00000	Averaged
42 2,6-Dinitrotoluene	0.30343	0.29692	0.29692	0.200	-2.14598	40.00000	Averaged
43 Acenaphthylene	1.96450	1.85527	1.85527	0.900	-5.56018	40.00000	Averaged
44 3-Nitroaniline	0.31079	0.27151	0.27151	0.010	-12.63920	40.00000	Averaged
46 Acenaphthene	1.19821	1.13819	1.13819	0.900	-5.00891	20.00000	Averaged

Data File: \\192.168.10.12\chem\10mss9.i\020314.b\02031403.D
Report Date: 03-Feb-2014 07:54

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 03-FEB-2014 07:16
Lab File ID: 02031403.D Init. Cal. Date(s): 30-JAN-2014 30-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 08:59 12:01
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\020314.b\013014-8270MSS9.m

COMPOUND	RRF / AMOUNT	RF80	CCAL RRF80	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
47 2,4-Dinitrophenol	80.00000	67.78169	0.12413	0.050	-15.27289	40.00000	Quadratic
48 4-Nitrophenol	0.23066	0.23065	0.23065	0.050	-0.00378	40.00000	Averaged
49 2,4-Dinitrotoluene	0.38891	0.38373	0.38373	0.200	-1.33102	40.00000	Averaged
50 Dibenzofuran	1.74656	1.65711	1.65711	0.800	-5.12156	40.00000	Averaged
51 Diethylphthalate	1.31208	1.25782	1.25782	0.010	-4.13595	40.00000	Averaged
52 4-Chlorophenylphenyl ether	0.70266	0.66992	0.66992	0.400	-4.65969	40.00000	Averaged
53 4-Nitroaniline	0.35067	0.34187	0.34187	0.010	-2.51127	40.00000	Averaged
54 Fluorene	1.42140	1.35761	1.35761	0.900	-4.48743	40.00000	Averaged
55 4,6-Dinitro-2-methylphenol	80.00000	73.22318	0.10544	0.010	-8.47102	40.00000	Quadratic
56 N-Nitrosodiphenylamine	0.63381	0.61214	0.61214	0.010	-3.41875	20.00000	Averaged
57 Azobenzene	1.29453	1.21068	1.21068	0.000	-6.47734	40.00000	Averaged
58 1,2-Diphenylhydrazine	1.29453	1.21068	1.21068	0.000	-6.47734	40.00000	Averaged
$ 59 2,4,6-Tribromophenol (S)	0.19193	0.19881	0.19881	0.000	3.58292	20.00000	Averaged
60 4-Bromophenylphenyl ether	0.21826	0.21220	0.21220	0.100	-2.77394	40.00000	Averaged
61 Hexachlorobenzene	0.23087	0.22455	0.22455	0.100	-2.73871	40.00000	Averaged
62 Pentachlorophenol	0.12109	0.12989	0.12989	0.050	7.26431	20.00000	Averaged
64 Phenanthrene	1.06274	1.00445	1.00445	0.700	-5.48456	40.00000	Averaged
65 Anthracene	1.08324	1.04501	1.04501	0.700	-3.52921	40.00000	Averaged
66 Carbazole	1.03233	0.99227	0.99227	0.010	-3.88064	40.00000	Averaged
67 di-n-Butylphthalate	1.20083	1.15694	1.15694	0.010	-3.65438	40.00000	Averaged
68 Fluoranthene	1.23380	1.19679	1.19679	0.600	-2.99954	20.00000	Averaged
69 Benzidine	80.00000	72.21928	0.41484	0.000	-9.72590	40.00000	Quadratic
70 Pyrene	1.21457	1.15229	1.15229	0.600	-5.12773	40.00000	Averaged
$ 71 Terphenyl-d14 (S)	0.85029	0.81749	0.81749	0.000	-3.85760	20.00000	Averaged
72 Butylbenzylphthalate	0.50411	0.49658	0.49658	0.010	-1.49446	40.00000	Averaged
73 bis(2-Ethylhexyl)phthalate	0.71755	0.70065	0.70065	0.010	-2.35431	40.00000	Averaged
74 3,3'-Dichlorobenzidine	0.34816	0.30281	0.30281	0.010	-13.02573	40.00000	Averaged
75 Benzo(a)anthracene	1.13846	1.08833	1.08833	0.800	-4.40363	40.00000	Averaged
77 Chrysene	1.04526	1.00373	1.00373	0.700	-3.97277	40.00000	Averaged
78 di-n-Octylphthalate	1.22744	1.22162	1.22162	0.010	-0.47396	20.00000	Averaged
79 Benzo(b)fluoranthene	1.18034	1.10200	1.10200	0.700	-6.63732	40.00000	Averaged
80 Benzo(k)fluoranthene	1.19966	1.16810	1.16810	0.700	-2.63063	40.00000	Averaged
81 Benzo(a)pyrene	1.12635	1.08065	1.08065	0.700	-4.05737	20.00000	Averaged
83 Indeno(1,2,3-cd)pyrene	1.25802	1.24444	1.24444	0.500	-1.07928	40.00000	Averaged
84 Dibenzo(a,h)anthracene	1.06359	1.04502	1.04502	0.400	-1.74551	40.00000	Averaged
85 Benzo(g,h,i)perylene	1.05708	1.05129	1.05129	0.500	-0.54801	40.00000	Averaged

Data File: \\192.168.10.12\chem\10mss9.i\020314.b\02031403.D
Report Date: 03-Feb-2014 07:54

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10mss9.i Injection Date: 03-FEB-2014 07:16
Lab File ID: 02031403.D Init. Cal. Date(s): 30-JAN-2014 30-JAN-2014
Analysis Type: SOIL Init. Cal. Times: 08:59 12:01
Lab Sample ID: CCAL 6 10328-96 Quant Type: ISTD
Method: \\192.168.10.12\chem\10mss9.i\020314.b\013014-8270MSS9.m

Average %D / Drift Results.	
Calculated Average %D/Drift =	4.07930
Maximun Average %D/Drift =	40.00000
* Passed Average %D/Drift Test.	

Data File: \\192.168.10.12\chem\10mss9.i\020314.b\02031403.D
Report Date: 03-Feb-2014 07:54

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\020314.b\02031403.D
Lab Smp Id: CCAL 6 10328-96
Inj Date : 03-FEB-2014 07:16
Operator : JLR Inst ID: 10mss9.i
Smp Info : CCAL 6 10328-96
Misc Info :
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\020314.b\013014-8270MSS9.m
Meth Date : 03-Feb-2014 07:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 N-Nitrosodimethylamine	74	2.762	2.762	(0.531)	106488	80.0000	77.2
	2 Pyridine	79	2.816	2.816	(0.541)	194906	80.0000	79.6
$	3 2-Fluorophenol (S)	112	3.863	3.863	(0.742)	172145	80.0000	77.2
$	4 Phenol-d6 (S)	99	4.728	4.728	(0.909)	213878	80.0000	78.1
	5 Phenol	94	4.744	4.744	(0.912)	221211	80.0000	78.2
	6 bis(2-Chloroethyl)ether	63	4.873	4.873	(0.936)	135483	80.0000	75.5
	7 2-Chlorophenol	128	4.969	4.969	(0.955)	174532	80.0000	78.6
	8 1,3-Dichlorobenzene	146	5.145	5.145	(0.989)	191242	80.0000	77.4
*	9 1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	65010	40.0000	
	10 1,4-Dichlorobenzene	146	5.220	5.220	(1.003)	192741	80.0000	77.3
	11 Benzyl alcohol	79	5.316	5.316	(1.022)	137139	80.0000	77.4
	12 1,2-Dichlorobenzene	146	5.396	5.396	(1.037)	183807	80.0000	78.3
	13 2-Methylphenol	107	5.412	5.412	(1.040)	136508	80.0000	78.3
	14 bis(2-Chloroisopropyl) ether	45	5.466	5.466	(1.050)	250848	80.0000	75.4
	15 3 & 4-Methylphenol	107	5.583	5.583	(1.073)	175064	80.0000	79.0
	17 N-Nitroso-di-n-propylamine	70	5.610	5.610	(1.078)	105989	80.0000	76.5
	18 Hexachloroethane	117	5.786	5.786	(1.112)	73251	80.0000	76.6
$	19 Nitrobenzene-d5 (S)	82	5.807	5.807	(0.871)	142852	60.0000	57.5(M)
	20 Nitrobenzene	77	5.834	5.834	(0.875)	168308	80.0000	76.3
	21 Isophorone	82	6.096	6.096	(0.914)	295030	80.0000	75.9
	22 2-Nitrophenol	139	6.203	6.203	(0.930)	85786	80.0000	78.8
	23 2,4-Dimethylphenol	107	6.208	6.208	(0.931)	158450	80.0000	77.1

Data File: \\192.168.10.12\Chem\10mss9.1\020314.B\02031403.D
Report Date: 03-Feb-2014 07:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)	
	24 Benzoic acid	105	6.278	6.278	(0.942)	93645	80.0000	73.6	
	25 bis(2-Chloroethoxy)methane	93	6.326	6.326	(0.949)	188691	80.0000	77.0	
	26 2,4-Dichlorophenol	162	6.475	6.475	(0.971)	138989	80.0000	78.6	
	27 1,2,4-Trichlorobenzene	180	6.593	6.593	(0.989)	157748	80.0000	77.4	
*	28 Naphthalene-d8	136	6.668	6.668	(1.000)	238486	40.0000		(Q)
	29 Naphthalene	128	6.694	6.694	(1.004)	475236	80.0000	75.8	
	30 4-Chloroaniline	127	6.726	6.726	(1.009)	158340	80.0000	78.3	
	31 Hexachlorobutadiene	225	6.833	6.833	(1.025)	92871	80.0000	77.2	
	32 4-Chloro-3-methylphenol	107	7.282	7.282	(1.092)	129868	80.0000	78.8	
	33 2-Methylnaphthalene	142	7.533	7.533	(1.130)	316470	80.0000	77.7	
	34 1-Methylnaphthalene	142	7.656	7.656	(1.148)	289059	80.0000	76.5	
	35 Hexachlorocyclopentadiene	237	7.725	7.725	(0.875)	104062	80.0000	84.7	
	36 2,4,6-Trichlorophenol	196	7.859	7.859	(0.890)	96464	80.0000	79.1	
	37 2,4,5-Trichlorophenol	196	7.902	7.902	(0.895)	104204	80.0000	78.6	
$	38 2-Fluorobiphenyl (S)	172	7.966	7.966	(0.903)	267728	60.0000	57.0	
	39 2-Chloronaphthalene	162	8.131	8.131	(0.921)	295864	80.0000	76.6	
	40 2-Nitroaniline	65	8.233	8.233	(0.933)	84769	80.0000	75.3	
	41 Dimethylphthalate	163	8.452	8.452	(0.958)	314027	80.0000	75.7	
	42 2,6-Dinitrotoluene	165	8.527	8.527	(0.966)	75245	80.0000	78.3	
	43 Acenaphthylene	152	8.655	8.655	(0.981)	470167	80.0000	75.6	(M)
	44 3-Nitroaniline	138	8.740	8.740	(0.990)	68806	80.0000	69.9	
*	45 Acenaphthene-d10	164	8.826	8.826	(1.000)	126711	40.0000		
	46 Acenaphthene	154	8.869	8.869	(1.005)	288443	80.0000	76.0	
	47 2,4-Dinitrophenol	184	8.869	8.869	(1.005)	31457	80.0000	67.8	
	48 4-Nitrophenol	65	8.911	8.911	(1.010)	58452	80.0000	80.0	
	49 2,4-Dinitrotoluene	165	9.034	9.034	(1.024)	97246	80.0000	78.9	
	50 Dibenzofuran	168	9.082	9.082	(1.029)	419947	80.0000	75.9	
	51 Diethylphthalate	149	9.328	9.328	(1.057)	318758	80.0000	76.7	
	52 4-Chlorophenylphenyl ether	204	9.494	9.494	(1.076)	169773	80.0000	76.3	
	53 4-Nitroaniline	138	9.504	9.504	(1.077)	86637	80.0000	78.0	
	54 Fluorene	166	9.510	9.510	(1.077)	344049	80.0000	76.4	
	55 4,6-Dinitro-2-methylphenol	198	9.542	9.542	(0.893)	49235	80.0000	73.2	
	56 N-Nitrosodiphenylamine	169	9.632	9.632	(0.902)	285829	80.0000	77.3	
	57 Azobenzene	77	9.691	9.691	(1.098)	306812	80.0000	74.8	
	58 1,2-Diphenylhydrazine	77	9.691	9.691	(1.098)	306812	80.0000	74.8	
$	59 2,4,6-Tribromophenol (S)	330	9.803	9.803	(1.111)	50382	80.0000	82.9	
	60 4-Bromophenylphenyl ether	248	10.108	10.108	(0.946)	99084	80.0000	77.8	
	61 Hexachlorobenzene	284	10.199	10.199	(0.955)	104848	80.0000	77.8	
	62 Pentachlorophenol	266	10.428	10.428	(0.976)	60649	80.0000	85.8	
*	63 Phenanthrene-d10	188	10.685	10.685	(1.000)	233467	40.0000		
	64 Phenanthrene	178	10.717	10.717	(1.003)	469013	80.0000	75.6	
	65 Anthracene	178	10.781	10.781	(1.009)	487953	80.0000	77.2	
	66 Carbazole	167	10.963	10.963	(1.026)	463324	80.0000	76.9	
	67 di-n-Butylphthalate	149	11.363	11.363	(1.063)	540216	80.0000	77.1	
	68 Fluoranthene	202	12.207	12.207	(1.142)	558824	80.0000	77.6	
	69 Benzidine	184	12.336	12.336	(0.882)	208990	80.0000	72.2	
	70 Pyrene	202	12.496	12.496	(0.893)	580503	80.0000	75.9	
$	71 Terphenyl-d14 (S)	244	12.656	12.656	(0.905)	308878	60.0000	57.7	
	72 Butylbenzylphthalate	149	13.238	13.238	(0.946)	250168	80.0000	78.8	
	73 bis(2-Ethylhexyl)phthalate	149	13.933	13.933	(0.996)	352976	80.0000	78.1	
	74 3,3'-Dichlorobenzidine	252	13.917	13.917	(0.995)	152548	80.0000	69.6	
	75 Benzo(a)anthracene	228	13.976	13.976	(0.999)	548280	80.0000	76.5	
*	76 Chrysene-d12	240	13.992	13.992	(1.000)	251891	40.0000		(Q)
	77 Chrysene	228	14.024	14.024	(1.002)	505661	80.0000	76.8	

Data File: \\192.168.10.12\Chem\10mss9.i\020314.b\02031403.D
Report Date: 03-Feb-2014 07:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	78 di-n-Octylphthalate	149	14.718	14.718	(1.052)	615431	80.0000	79.6
	79 Benzo(b)fluoranthene	252	15.381	15.381	(0.963)	540512	80.0000	74.7
	80 Benzo(k)fluoranthene	252	15.418	15.418	(0.965)	572935	80.0000	77.9
	81 Benzo(a)pyrene	252	15.894	15.894	(0.995)	530040	80.0000	76.8
*	82 Perylene-d12	264	15.979	15.979	(1.000)	245242	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	18.063	18.063	(1.130)	610377	80.0000	79.1
	84 Dibenzo(a,h)anthracene	278	18.079	18.079	(1.131)	512567	80.0000	78.6
	85 Benzo(g,h,i)perylene	276	18.693	18.693	(1.170)	515639	80.0000	79.6

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\020314.b\02031403.D
Report Date: 03-Feb-2014 07:54

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 02031403.D
Lab Smp Id: CCAL 6 10328-96
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\020314.b\013014-8270MSS9.m
Misc Info:

Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	55535	27768	111070	65010	17.06
28 Naphthalene-d8	202574	101287	405148	238486	17.73
45 Acenaphthene-d10	105765	52883	211530	126711	19.80
63 Phenanthrene-d10	197315	98658	394630	233467	18.32
76 Chrysene-d12	212271	106136	424542	251891	18.66
82 Perylene-d12	203680	101840	407360	245242	20.41

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	-0.08
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.06
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.98	-0.10

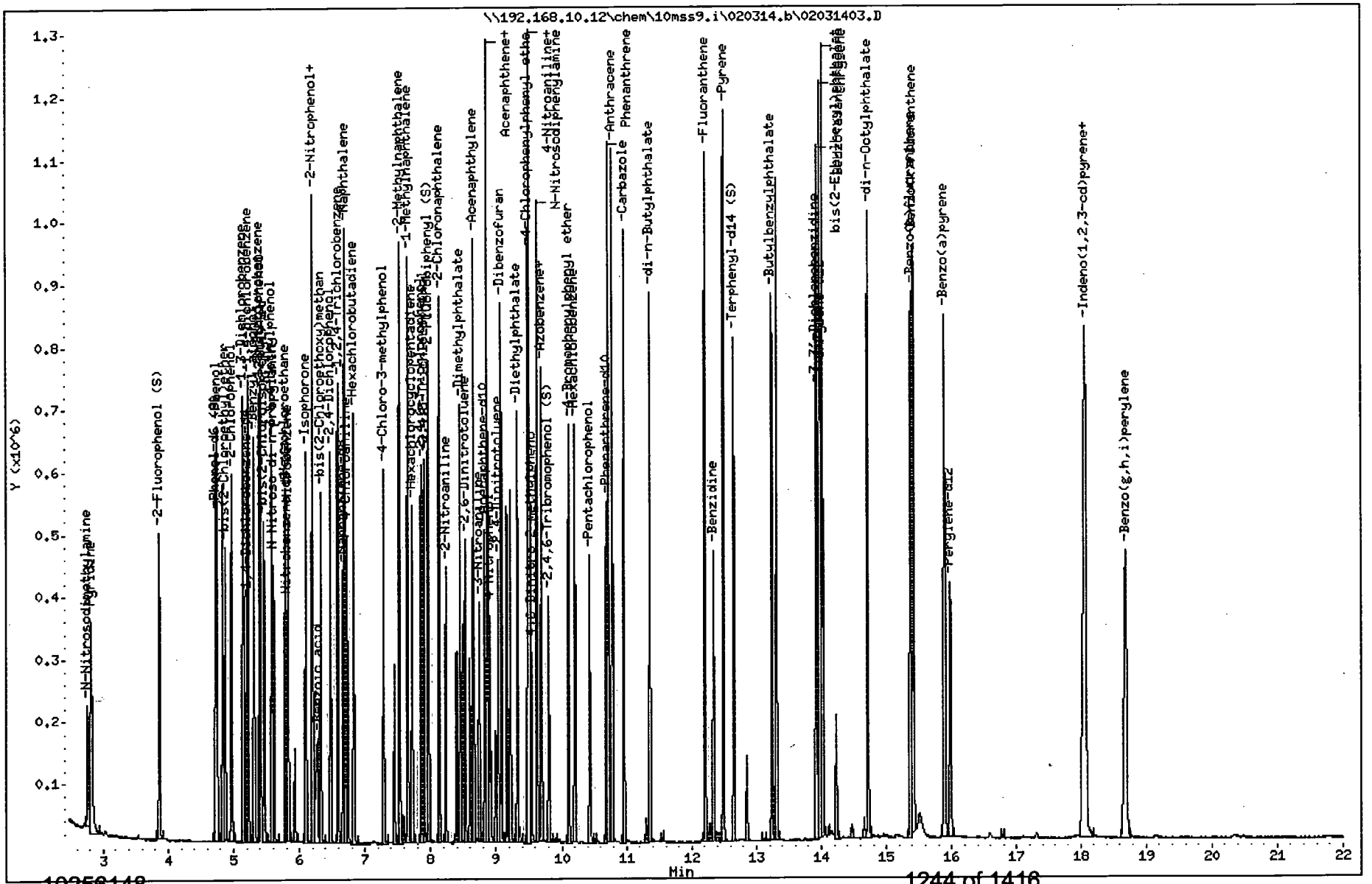
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\020314.b\02031403.D
Date : 03-FEB-2014 07:16
Client ID:
Sample Info: CCAL 6 10328-96

Instrument: 10mss9.i

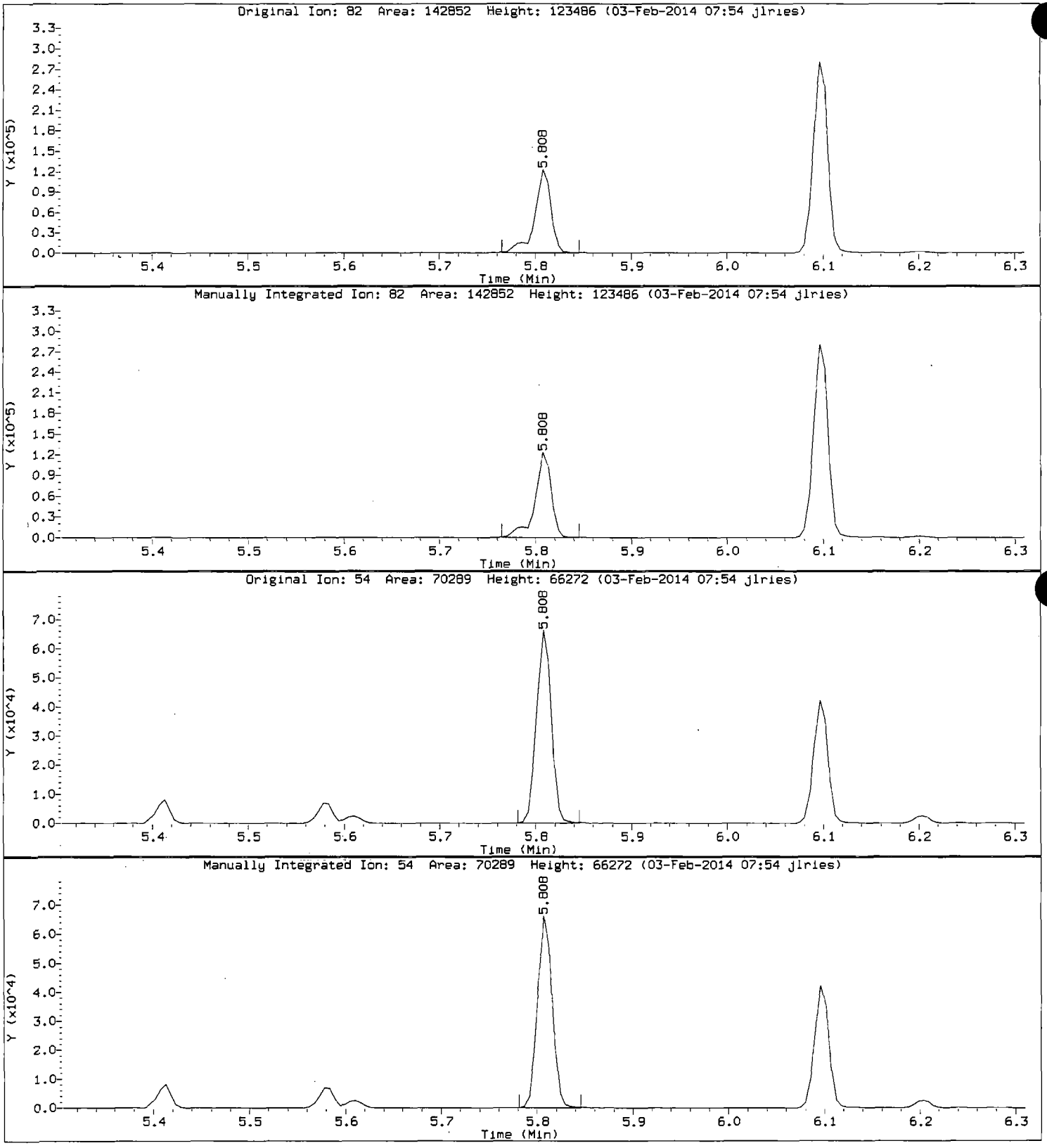
Operator: JLR
Column diameter: 0.25

Column phase: DB-5MS



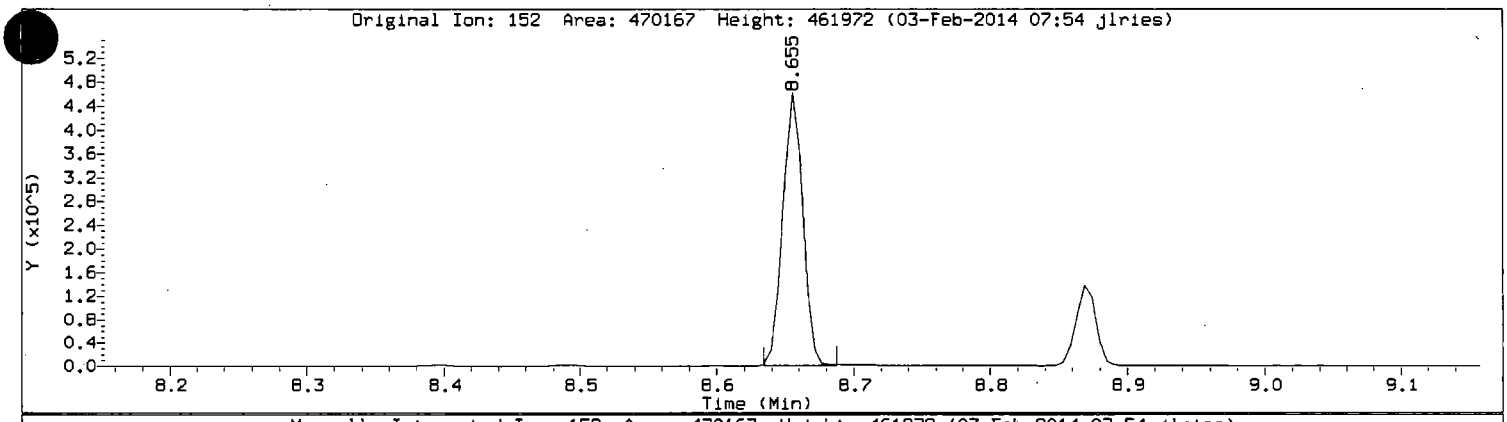
Injection Date: 03-FEB-2014 07:16
Instrument: 10mss9.i
Lab Sample ID: CCAL 6 10328-96

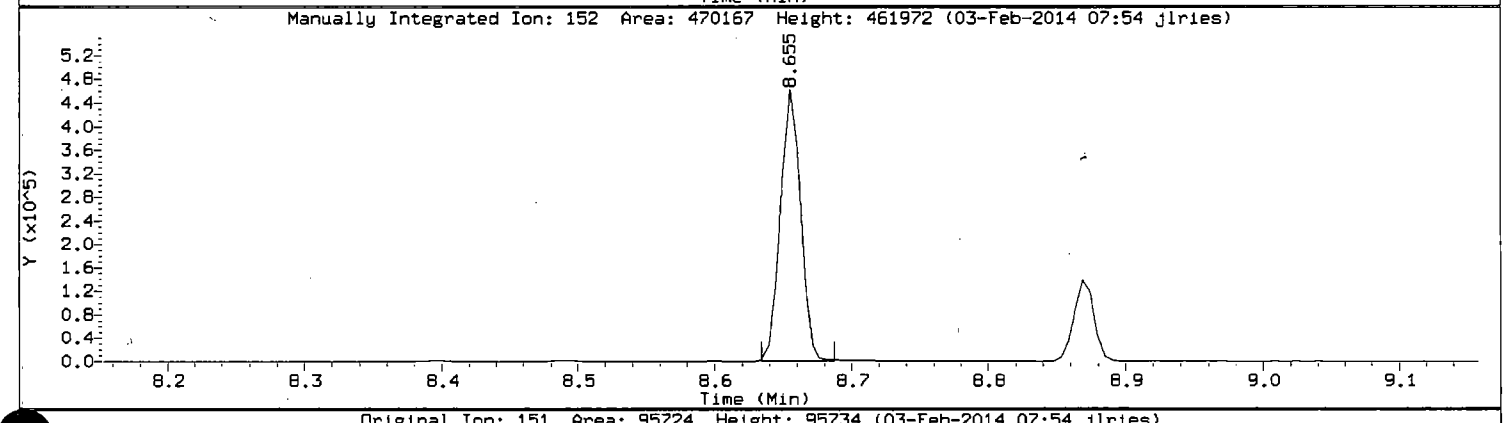
Compound: Nitrobenzene-d5 (S)
CAS Number: 4165-60-0

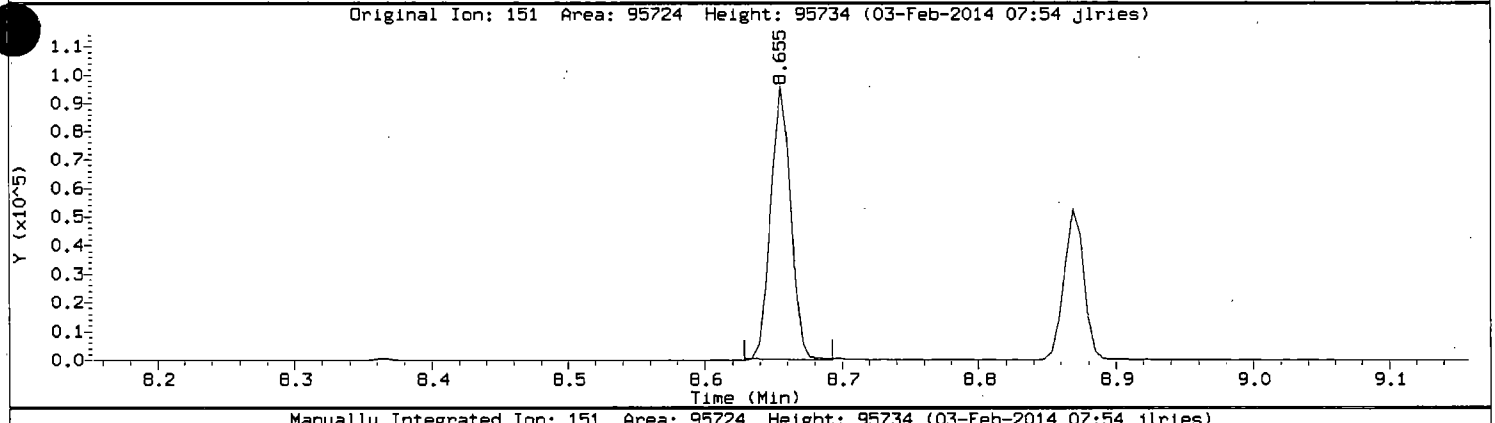


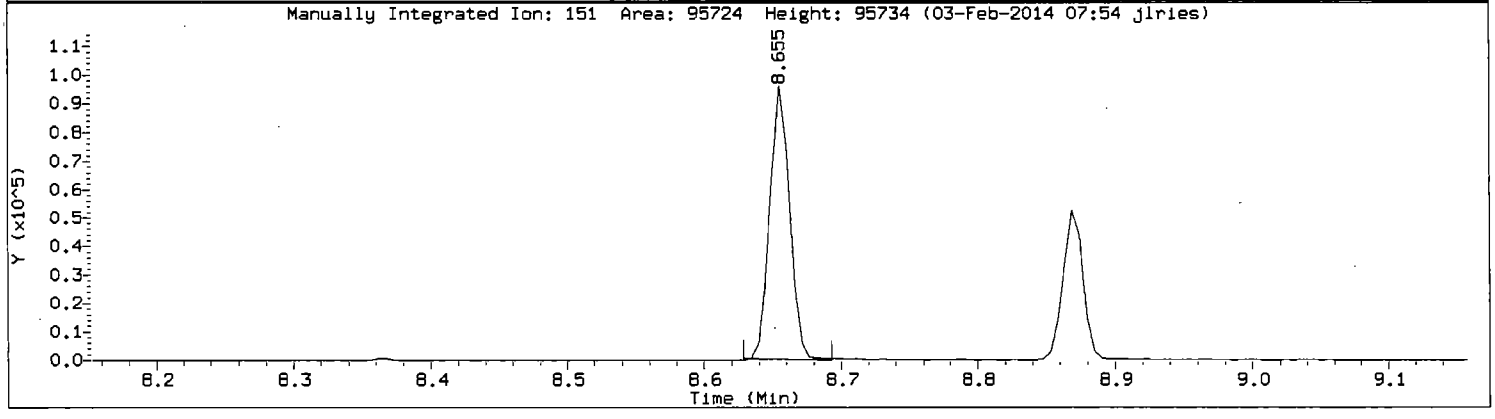
Injection Date: 03-FEB-2014 07:16
Instrument: 10mss9.i
Lab Sample ID: CCAL 6 10328-96

Compound: Acenaphthylene
CAS Number: 208-96-8

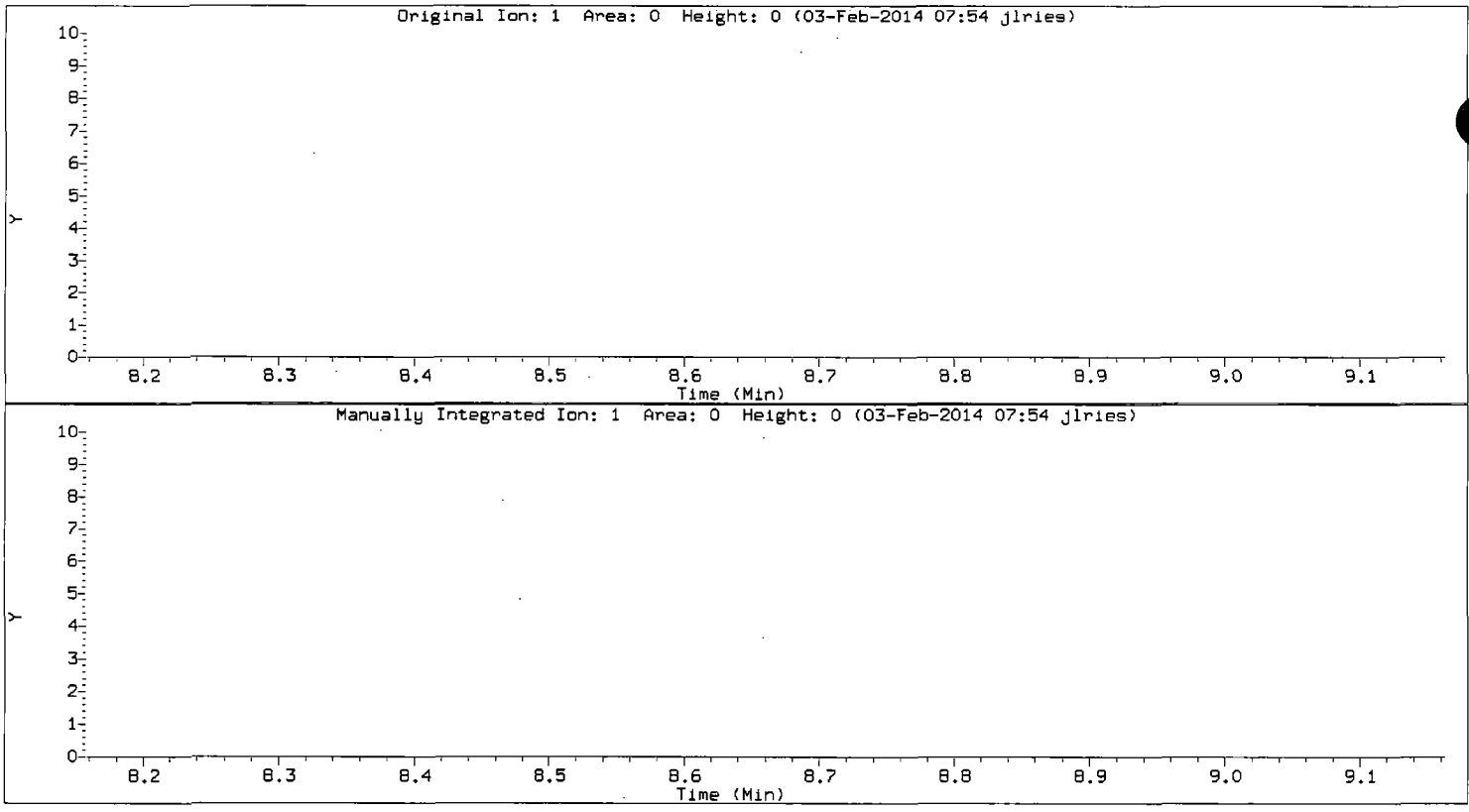








Injection Date: 03-FEB-2014 07:16
Instrument: 10mss9.i
Lab Sample ID: CCAL 6 10328-96



Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311404.D
Report Date: 31-Jan-2014 15:00

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311404.D
Lab Smp Id: 1617223
Inj Date : 31-JAN-2014 07:49
Operator : JLR Inst ID: 10mss9.i
Smp Info : 1617223,MB
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
1	N-Nitrosodimethylamine	74	Compound Not Detected.					
2	Pyridine	79	Compound Not Detected.					
$ 3	2-Fluorophenol (S)	112	3.863	3.863	(0.742)	145988	73.3282	2440
$ 4	Phenol-d6 (S)	99	4.728	4.734	(0.909)	179590	73.4759	2450
5	Phenol	94	Compound Not Detected.					
6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
7	2-Chlorophenol	128	Compound Not Detected.					
8	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 9	1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	58024	40.0000	
10	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	107	Compound Not Detected.					
14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
15	3 & 4-Methylphenol	107	Compound Not Detected.					
17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
18	Hexachloroethane	117	Compound Not Detected.					
$ 19	Nitrobenzene-d5 (S)	82	5.808	5.813	(0.870)	105851	48.1243	1600
20	Nitrobenzene	77	Compound Not Detected.					
21	Isophorone	82	Compound Not Detected.					
22	2-Nitrophenol	139	Compound Not Detected.					
23	2,4-Dimethylphenol	107	Compound Not Detected.					

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24	Benzoic acid	105	Compound Not Detected.						
	25	bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26	2,4-Dichlorophenol	162	Compound Not Detected.						
	27	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28	Naphthalene-d8	136	6.673	6.673	(1.000)	211301	40.0000		(Q)
	29	Naphthalene	128	Compound Not Detected.						
	30	4-Chloroaniline	127	Compound Not Detected.						
	31	Hexachlorobutadiene	225	Compound Not Detected.						
	32	4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33	2-Methylnaphthalene	142	Compound Not Detected.						
	34	1-Methylnaphthalene	142	Compound Not Detected.						
	35	Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36	2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37	2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38	2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	217215	54.2960	1810	
	39	2-Chloronaphthalene	162	Compound Not Detected.						
	40	2-Nitroaniline	65	Compound Not Detected.						
	41	Dimethylphthalate	163	Compound Not Detected.						
	42	2,6-Dinitrotoluene	165	Compound Not Detected.						
	43	Acenaphthylene	152	Compound Not Detected.						
	44	3-Nitroaniline	138	Compound Not Detected.						
*	45	Acenaphthene-d10	164	8.831	8.831	(1.000)	107974	40.0000		
	46	Acenaphthene	154	Compound Not Detected.						
	47	2,4-Dinitrophenol	184	Compound Not Detected.						
	48	4-Nitrophenol	65	Compound Not Detected.						
	49	2,4-Dinitrotoluene	165	Compound Not Detected.						
	50	Dibenzofuran	168	Compound Not Detected.						
	51	Diethylphthalate	149	Compound Not Detected.						
	52	4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53	4-Nitroaniline	138	Compound Not Detected.						
	54	Fluorene	166	Compound Not Detected.						
	55	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56	N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57	Azobenzene	77	Compound Not Detected.						
	58	1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59	2,4,6-Tribromophenol (S)	330	9.809	9.809	(1.111)	41599	80.2936	2680	
	60	4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61	Hexachlorobenzene	284	Compound Not Detected.						
	62	Pentachlorophenol	266	Compound Not Detected.						
*	63	Phenanthrene-d10	188	10.685	10.690	(1.000)	201392	40.0000		
	64	Phenanthrene	178	Compound Not Detected.						
	65	Anthracene	178	Compound Not Detected.						
	66	Carbazole	167	Compound Not Detected.						
	67	di-n-Butylphthalate	149	Compound Not Detected.						
	68	Fluoranthene	202	Compound Not Detected.						
	69	Benzidine	184	Compound Not Detected.						
	70	Pyrene	202	Compound Not Detected.						
$	71	Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	277395	64.2812	2140	
	72	Butylbenzylphthalate	149	Compound Not Detected.						
	73	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74	3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75	Benzo(a)anthracene	228	Compound Not Detected.						
*	76	Chrysene-d12	240	13.992	13.997	(1.000)	203005	40.0000		(Q)
	77	Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311404.D
Report Date: 31-Jan-2014 15:00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
78	di-n-Octylphthalate	149	Compound Not Detected.					
79	Benzo(b)fluoranthene	252	Compound Not Detected.					
80	Benzo(k)fluoranthene	252	Compound Not Detected.					
81	Benzo(a)pyrene	252	Compound Not Detected.					
* 82	Perylene-d12	264	15.985	15.995	(1.000)	190539	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85	Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311404.D
Report Date: 31-Jan-2014 15:00

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311404.D
Lab Smp Id: 1617223
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

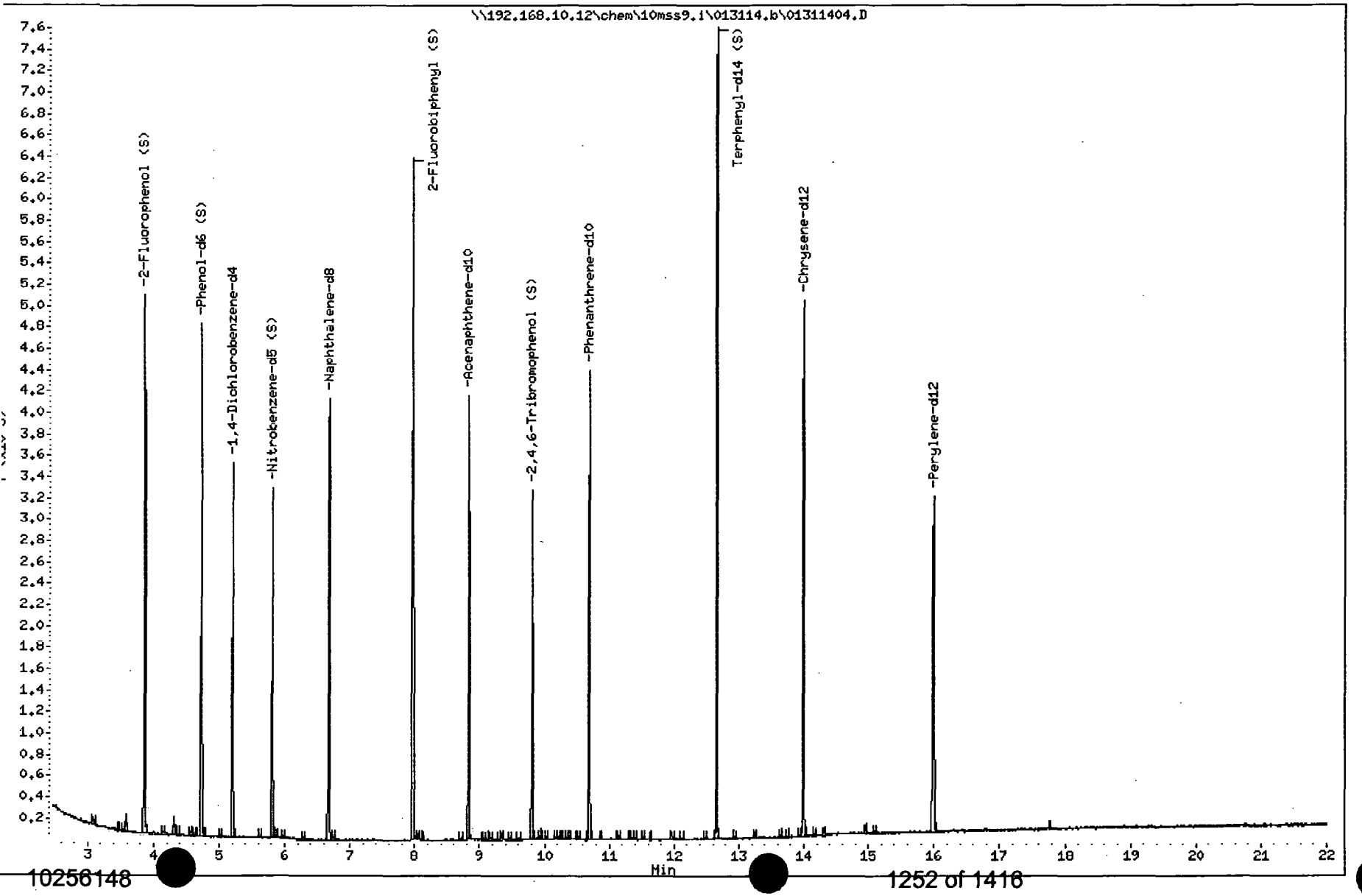
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	58024	-3.60
28 Naphthalene-d8	214969	107485	429938	211301	-1.71
45 Acenaphthene-d10	112201	56101	224402	107974	-3.77
63 Phenanthrene-d10	205101	102551	410202	201392	-1.81
76 Chrysene-d12	220549	110275	441098	203005	-7.95
82 Perylene-d12	213057	106529	426114	190539	-10.57

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.99	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311404.D
Date : 31-JAN-2014 07:49
Client ID:
Sample Info: 1617223,MB

Instrument: 10mss9.i
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Injection Date: 31-JAN-2014 07:49
Instrument: 10mss9.i
Lab Sample ID: 1617223
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311424.D
Report Date: 03-Feb-2014 07:16

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311424.D
Lab Smp Id: 1617225
Inj Date : 31-JAN-2014 17:49
Operator : JLR Inst ID: 10mss9.i
Smp Info : 1617225,MS
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 24 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	2.757	2.762	(0.530)	46517	35.6911	1190
	2 Pyridine	79	2.810	2.821	(0.540)	64235	27.7543	925
$	3 2-Fluorophenol (S)	112	3.863	3.863	(0.742)	160719	76.2043	2540
$	4 Phenol-d6 (S)	99	4.734	4.734	(0.910)	200353	77.3779	2580
	5 Phenol	94	4.744	4.750	(0.912)	100360	37.5074	1250
	6 bis(2-Chloroethyl)ether	63	4.873	4.878	(0.936)	60682	35.7533	1190
	7 2-Chlorophenol	128	4.974	4.974	(0.956)	77334	36.8254	1230
	8 1,3-Dichlorobenzene	146	5.145	5.150	(0.989)	83792	35.8890	1200
*	9 1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	61468	40.0000	
	10 1,4-Dichlorobenzene	146	5.225	5.225	(1.004)	85423	36.2448	1210
	11 Benzyl alcohol	79	5.316	5.316	(1.022)	62196	37.1240	1240
	12 1,2-Dichlorobenzene	146	5.396	5.396	(1.037)	82492	37.1606	1240
	13 2-Methylphenol	107	5.412	5.412	(1.040)	62083	37.6829	1260
	14 bis(2-Chloroisopropyl) ether	45	5.466	5.471	(1.050)	108781	34.5627	1150
	15 3 & 4-Methylphenol	107	5.578	5.583	(1.072)	80295	38.3298	1280
	17 N-Nitroso-di-n-propylamine	70	5.610	5.615	(1.078)	48828	37.2716	1240
	18 Hexachloroethane	117	5.786	5.786	(1.112)	31244	34.5713	1150
$	19 Nitrobenzene-d5 (S)	82	5.807	5.813	(0.870)	119947	51.5578	1720
	20 Nitrobenzene	77	5.829	5.834	(0.874)	75073	36.3306	1210
	21 Isophorone	82	6.096	6.101	(0.914)	135145	37.1180	1240
	22 2-Nitrophenol	139	6.203	6.203	(0.930)	36908	36.1926	1210
	23 2,4-Dimethylphenol	107	6.208	6.208	(0.930)	73005	37.8899	1260

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
	24 Benzoic acid	105	6.256	6.283	(0.938)	32524	29.5141	984
	25 bis(2-Chloroethoxy)methane	93	6.326	6.331	(0.948)	86413	37.6085	1250
	26 2,4-Dichlorophenol	162	6.475	6.481	(0.970)	63358	38.2597	1280
	27 1,2,4-Trichlorobenzene	180	6.593	6.598	(0.988)	71242	37.2804	1240
*	28 Naphthalene-d8	136	6.673	6.673	(1.000)	223494	40.0000	(Q)
	29 Naphthalene	128	6.700	6.700	(1.004)	218956	37.2765	1240
	30 4-Chloroaniline	127	6.732	6.732	(1.009)	45765	19.0812	636
	31 Hexachlorobutadiene	225	6.833	6.839	(1.024)	41621	36.9135	1230
	32 4-Chloro-3-methylphenol	107	7.287	7.287	(1.092)	61537	39.8450	1330
	33 2-Methylnaphthalene	142	7.533	7.538	(1.129)	146033	38.2639	1280
	34 1-Methylnaphthalene	142	7.656	7.661	(1.147)	133162	37.6157	1250
	35 Hexachlorocyclopentadiene	237	7.725	7.731	(0.875)	35487	31.1093	1040
	36 2,4,6-Trichlorophenol	196	7.859	7.864	(0.890)	44719	39.5102	1320
	37 2,4,5-Trichlorophenol	196	7.902	7.907	(0.895)	48459	39.3879	1310
$	38 2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	255286	58.5572	1950
	39 2-Chloronaphthalene	162	8.137	8.142	(0.921)	136387	38.0495	1270
	40 2-Nitroaniline	65	8.233	8.238	(0.932)	40214	38.4629	1280
	41 Dimethylphthalate	163	8.452	8.457	(0.957)	152026	39.4493	1310
	42 2,6-Dinitrotoluene	165	8.527	8.537	(0.966)	36102	40.4476	1350
	43 Acenaphthylene	152	8.655	8.660	(0.980)	226203	39.1437	1300(M)
	44 3-Nitroaniline	138	8.740	8.746	(0.990)	25629	28.0338	934
*	45 Acenaphthene-d10	164	8.831	8.831	(1.000)	117664	40.0000	
	46 Acenaphthene	154	8.869	8.874	(1.004)	133637	37.9149	1260
	47 2,4-Dinitrophenol	184	8.869	8.874	(1.004)	7188	21.2515	708(Q)
	48 4-Nitrophenol	65	8.906	8.917	(1.008)	24149	35.5913	1190
	49 2,4-Dinitrotoluene	165	9.029	9.040	(1.022)	46107	40.3029	1340
	50 Dibenzofuran	168	9.082	9.088	(1.028)	202619	39.4379	1310
	51 Diethylphthalate	149	9.323	9.333	(1.056)	151276	39.1945	1310
	52 4-Chlorophenylphenyl ether	204	9.494	9.499	(1.075)	81729	39.5407	1320
	53 4-Nitroaniline	138	9.499	9.510	(1.076)	37798	36.6421	1220
	54 Fluorene	166	9.510	9.515	(1.077)	165774	39.6476	1320
	55 4,6-Dinitro-2-methylphenol	198	9.542	9.547	(0.893)	13838	25.5923	853
	56 N-Nitrosodiphenylamine	169	9.633	9.638	(0.902)	137483	39.5730	1320
	57 Azobenzene	77	9.691	9.697	(1.097)	148543	39.0083	1300
	58 1,2-Diphenylhydrazine	77	9.691	9.697	(1.097)	148543	39.0083	1300
$	59 2,4,6-Tribromophenol (S)	330	9.809	9.809	(1.111)	48286	85.5253	2850
	60 4-Bromophenylphenyl ether	248	10.108	10.113	(0.946)	47255	39.4994	1320
	61 Hexachlorobenzene	284	10.204	10.209	(0.955)	50677	40.0456	1330
	62 Pentachlorophenol	266	10.434	10.434	(0.977)	23690	35.6912	1190
*	63 Phenanthrene-d10	188	10.685	10.690	(1.000)	219256	40.0000	
	64 Phenanthrene	178	10.717	10.722	(1.003)	228415	39.2109	1310
	65 Anthracene	178	10.781	10.786	(1.009)	232709	39.1918	1310
	66 Carbazole	167	10.963	10.968	(1.026)	221374	39.1216	1300
	67 di-n-Butylphthalate	149	11.363	11.369	(1.063)	258077	39.2083	1310
	68 Fluoranthene	202	12.207	12.213	(1.142)	264974	39.1801	1310
	69 Benzidine	184	12.341	12.346	(0.882)	10559	2.38801	79.6(aRM)
	70 Pyrene	202	12.496	12.501	(0.893)	276184	39.9167	1330
$	71 Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	298198	61.5624	2050
	72 Butylbenzylphthalate	149	13.244	13.249	(0.947)	116097	40.4270	1350
	73 bis(2-Ethylhexyl)phthalate	149	13.938	13.944	(0.996)	162886	39.8486	1330
	74 3,3'-Dichlorobenzidine	252	13.917	13.922	(0.995)	55063	27.7629	925
	75 Benzo(a)anthracene	228	13.981	13.986	(0.999)	256176	39.5001	1320
*	76 Chrysene-d12	240	13.992	13.997	(1.000)	227867	40.0000	(Q)
	77 Chrysene	228	14.024	14.035	(1.002)	239544	40.2292	1340

Data File: \\192.168.10.12\Chem\1cmss9.i\013114.b\0131124.b
Report Date: 03-Feb-2014 07:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	78 di-n-Octylphthalate	149	14.724	14.734	(1.052)	278143	39.7783	1320
	79 Benzo(b)fluoranthene	252	15.381	15.391	(0.962)	252831	39.4968	1320
	80 Benzo(k)fluoranthene	252	15.423	15.429	(0.965)	256958	39.4950	1320
	81 Benzo(a)pyrene	252	15.899	15.910	(0.994)	241193	39.4849	1320
*	82 Perylene-d12	264	15.990	15.995	(1.000)	216931	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	18.063	18.073	(1.130)	273327	40.0622	1340
	84 Dibenzo(a,h)anthracene	278	18.079	18.095	(1.131)	228935	39.6896	1320
	85 Benzo(g,h,i)perylene	276	18.693	18.714	(1.169)	229719	40.0708	1340

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311424.D
Report Date: 03-Feb-2014 07:16

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311424.D
Lab Smp Id: 1617225
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	61468	2.12
28 Naphthalene-d8	214969	107485	429938	223494	3.97
45 Acenaphthene-d10	112201	56101	224402	117664	4.87
63 Phenanthrene-d10	205101	102551	410202	219256	6.90
76 Chrysene-d12	220549	110275	441098	227867	3.32
82 Perylene-d12	213057	106529	426114	216931	1.82

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.99	-0.03

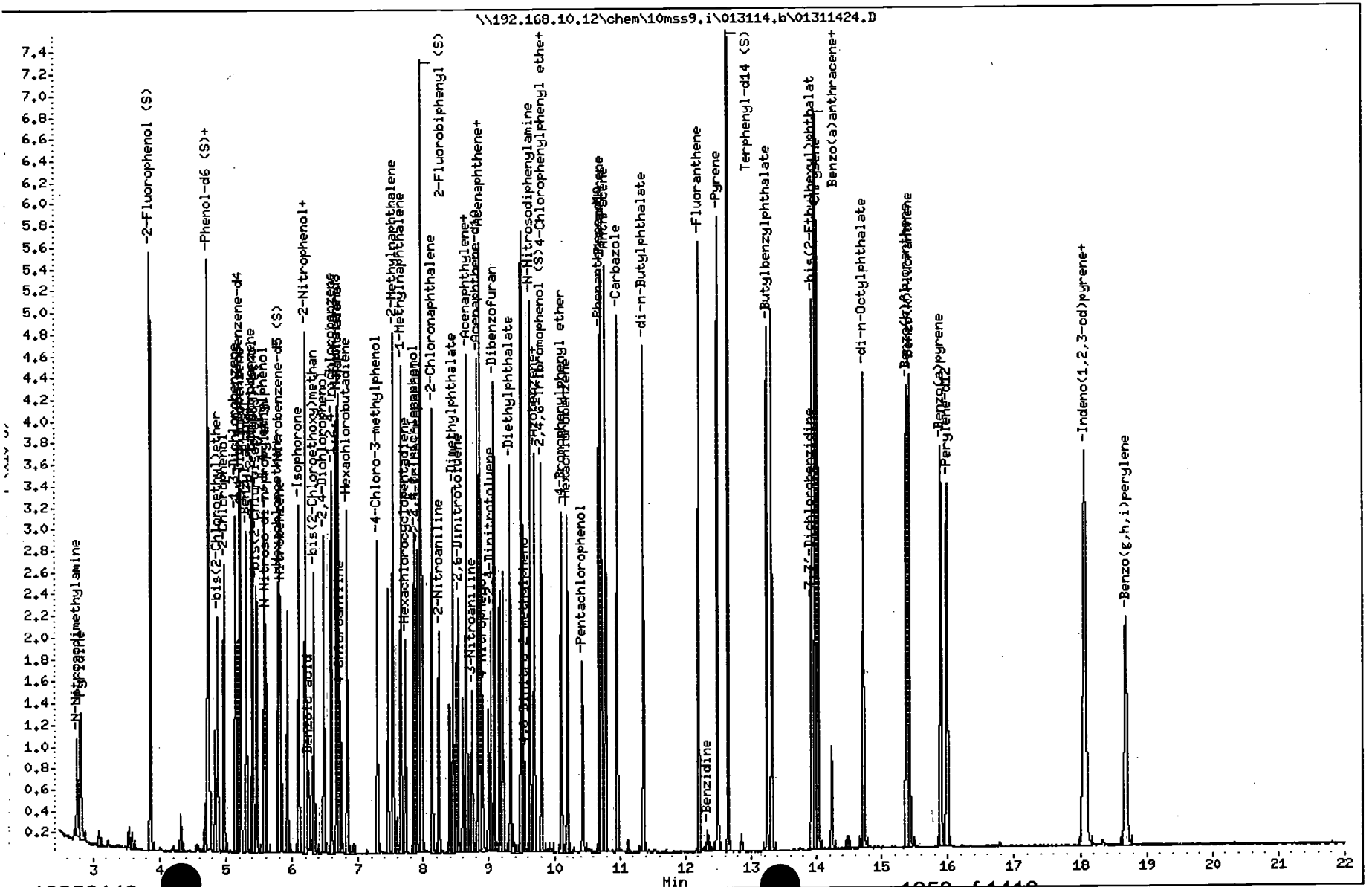
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311424.D
Date : 31-JAN-2014 17:49
Client ID:
Sample Info: 1617225,MS

Instrument: 10mss9.i

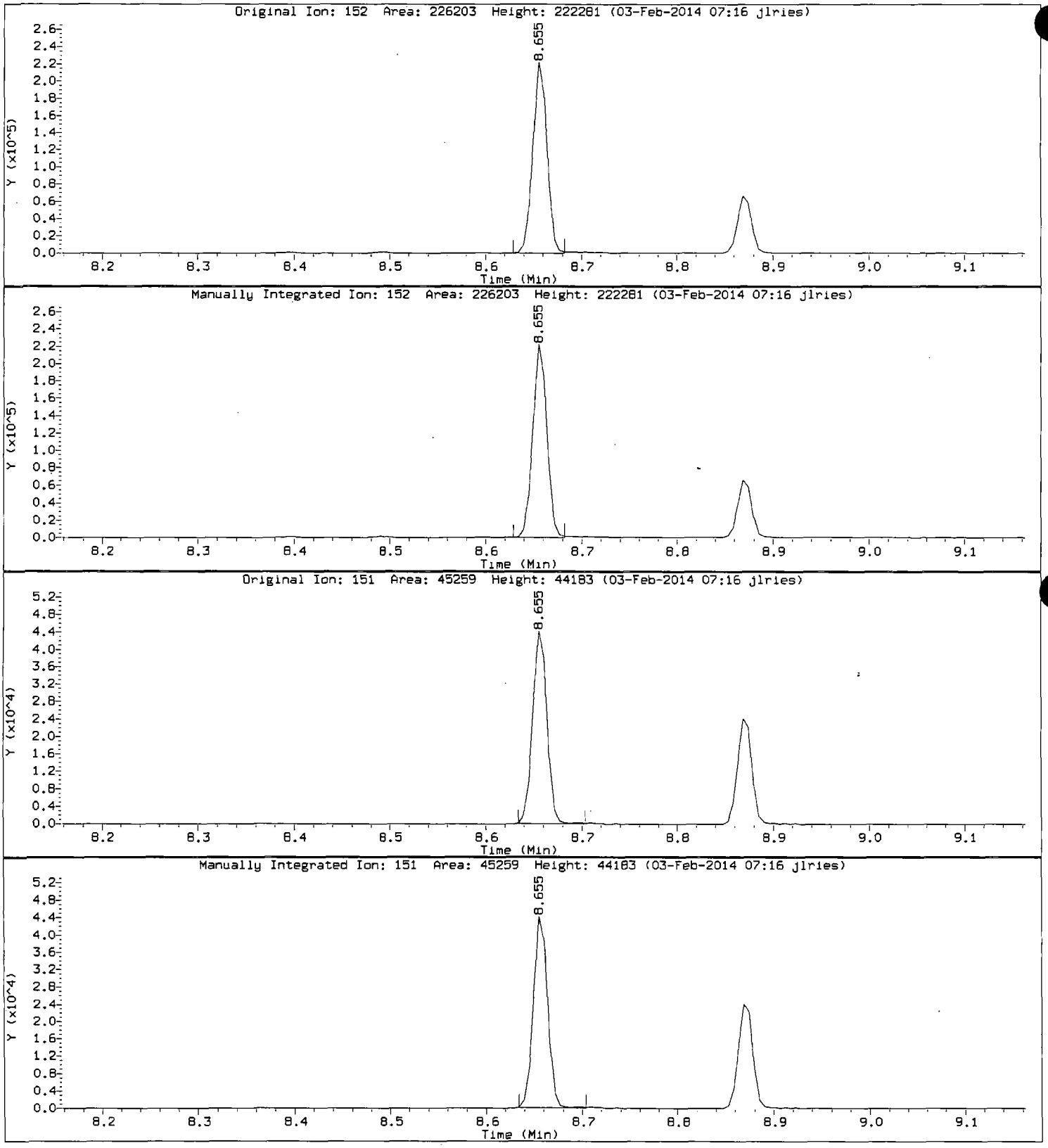
Operator: JLR
Column diameter: 0.25

Column phase: DB-5MS

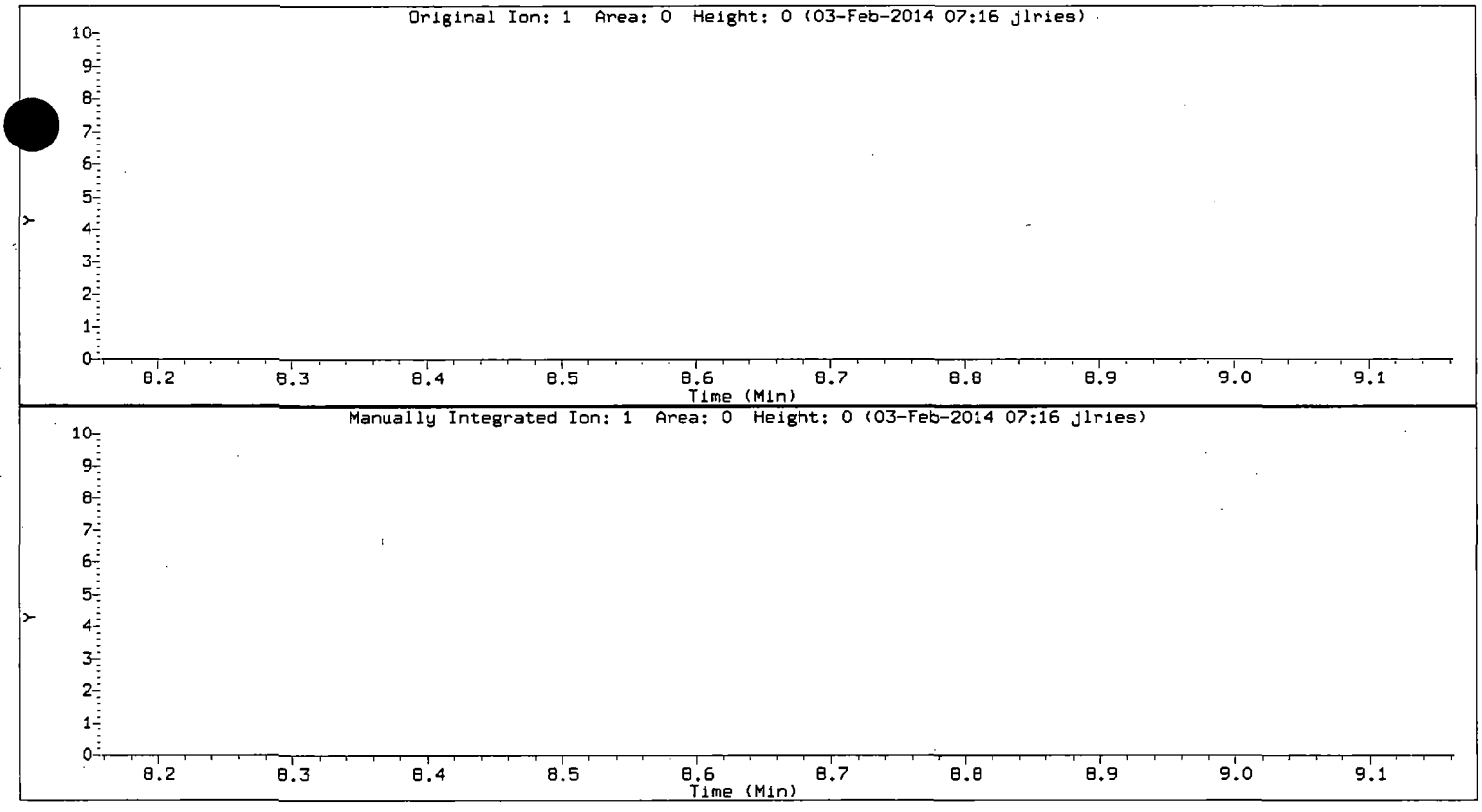


Injection Date: 31-JAN-2014 17:49
Instrument: 10mss9.i
Lab Sample ID: 1617225

Compound: Acenaphthylene
CAS Number: 208-96-8

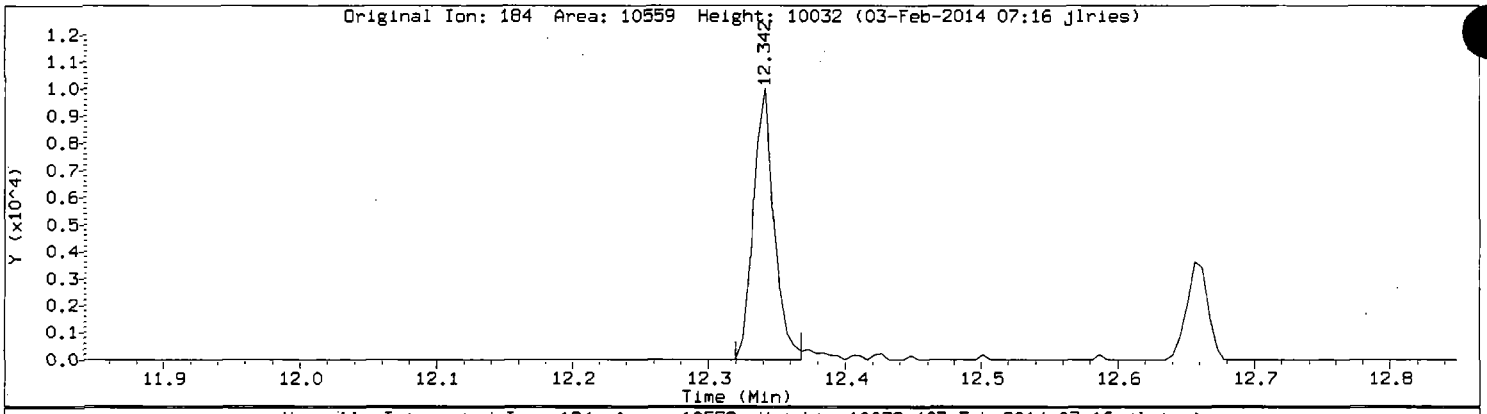


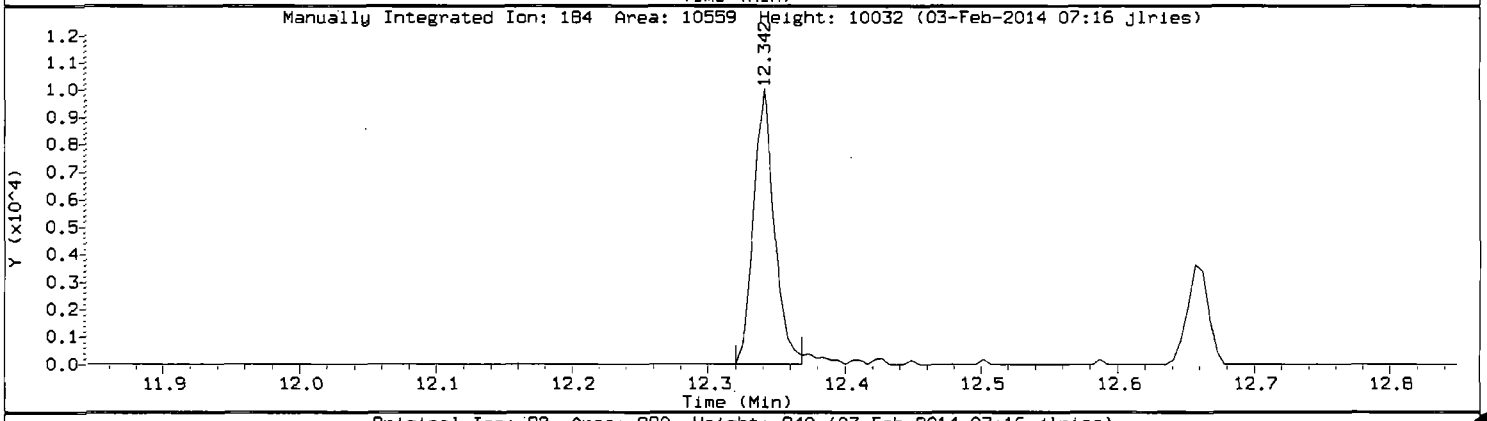
Injection Date: 31-JAN-2014 17:49
Instrument: 10mss9.i
Lab Sample ID: 1617225

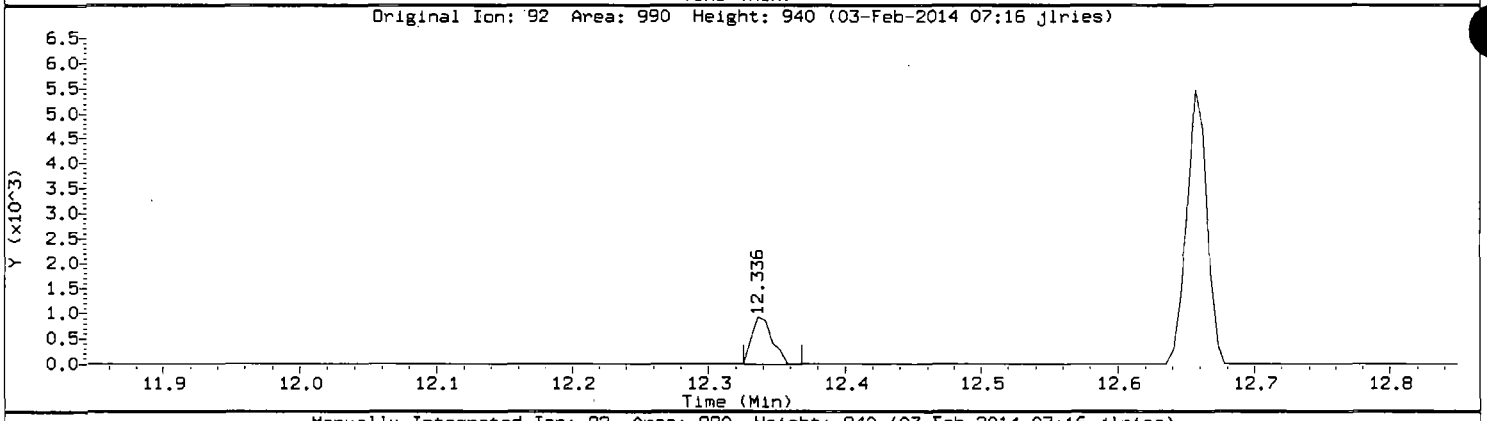


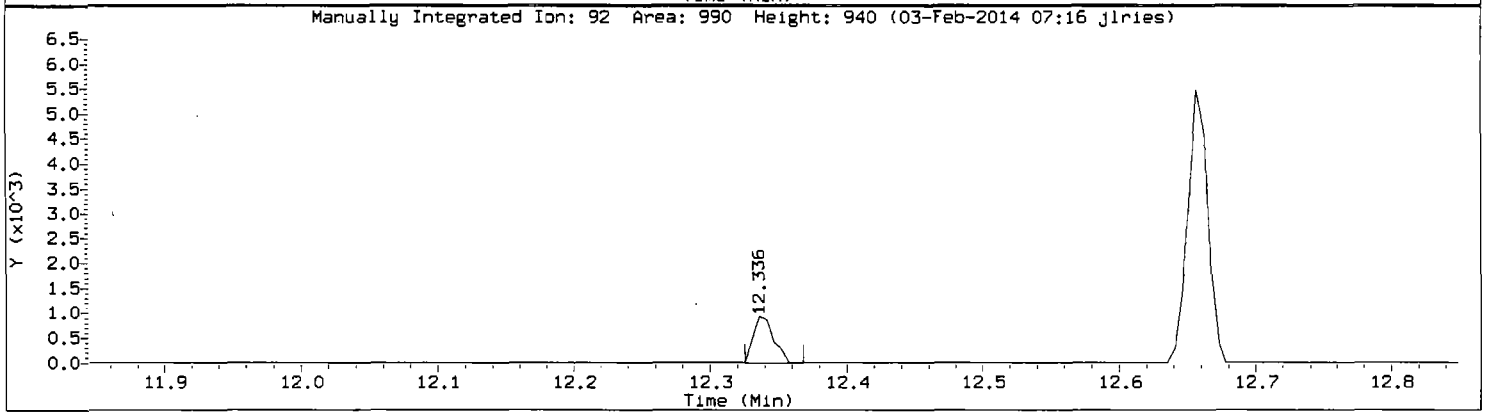
Injection Date: 31-JAN-2014 17:49
Instrument: 10mss9.i
Lab Sample ID: 1617225

Compound: Benzidine
CAS Number:









Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311425.D
Report Date: 03-Feb-2014 07:16

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311425.D
Lab Smp Id: 1617226
Inj Date : 31-JAN-2014 18:19
Operator : JLR Inst ID: 10mss9.i
Smp Info : 1617226,MSD
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 25 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	2.757	2.762	(0.530)	46357	34.4166	1150
	2 Pyridine	79	2.811	2.821	(0.540)	67390	28.1746	939
$	3 2-Fluorophenol (S)	112	3.863	3.863	(0.742)	160595	73.6798	2460
$	4 Phenol-d6 (S)	99	4.734	4.734	(0.910)	198608	74.2203	2470
	5 Phenol	94	4.744	4.750	(0.912)	100446	36.3240	1210
	6 bis(2-Chloroethyl)ether	63	4.873	4.878	(0.936)	59646	34.0049	1130
	7 2-Chlorophenol	128	4.974	4.974	(0.956)	78218	36.0403	1200
	8 1,3-Dichlorobenzene	146	5.145	5.150	(0.989)	83576	34.6374	1150
*	9 1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	63525	40.0000	
	10 1,4-Dichlorobenzene	146	5.220	5.225	(1.003)	86297	35.4300	1180
	11 Benzyl alcohol	79	5.316	5.316	(1.022)	61187	35.3392	1180
	12 1,2-Dichlorobenzene	146	5.396	5.396	(1.037)	81083	35.3431	1180
	13 2-Methylphenol	107	5.412	5.412	(1.040)	62829	36.9009	1230
	14 bis(2-Chloroisopropyl) ether	45	5.466	5.471	(1.050)	107471	33.0408	1100
	15 3 & 4-Methylphenol	107	5.578	5.583	(1.072)	81025	37.4259	1250
	17 N-Nitroso-di-n-propylamine	70	5.605	5.615	(1.077)	48234	35.6260	1190
	18 Hexachloroethane	117	5.786	5.786	(1.112)	31390	33.6082	1120
$	19 Nitrobenzene-d5 (S)	82	5.808	5.813	(0.870)	121438	50.7508	1690
	20 Nitrobenzene	77	5.829	5.834	(0.874)	75449	35.4998	1180
	21 Isophorone	82	6.096	6.101	(0.914)	136034	36.3259	1210
	22 2-Nitrophenol	139	6.203	6.203	(0.930)	36969	35.2469	1170
	23 2,4-Dimethylphenol	107	6.208	6.208	(0.930)	73438	37.0574	1240

			QUANT SIG					CONCENTRATIONS		
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
	24	Benzoic acid	105	6.251	6.283	(0.937)	33062	29.2088	974	
	25	bis(2-Chloroethoxy)methane	93	6.326	6.331	(0.948)	86002	36.3914	1210	
	26	2,4-Dichlorophenol	162	6.475	6.481	(0.970)	64527	37.8848	1260	
	27	1,2,4-Trichlorobenzene	180	6.593	6.598	(0.988)	70573	35.9059	1200	
*	28	Naphthalene-d8	136	6.673	6.673	(1.000)	229870	40.0000		(Q)
	29	Naphthalene	128	6.700	6.700	(1.004)	217247	35.9597	1200	
	30	4-Chloroaniline	127	6.732	6.732	(1.009)	53048	21.8068	727	
	31	Hexachlorobutadiene	225	6.833	6.839	(1.024)	41516	35.7991	1190	
	32	4-Chloro-3-methylphenol	107	7.287	7.287	(1.092)	60592	38.1449	1270	
	33	2-Methylnaphthalene	142	7.533	7.538	(1.129)	144558	36.8268	1230	
	34	1-Methylnaphthalene	142	7.656	7.661	(1.147)	133325	36.6171	1220	
	35	Hexachlorocyclopentadiene	237	7.725	7.731	(0.875)	34554	29.5765	986	
	36	2,4,6-Trichlorophenol	196	7.859	7.864	(0.890)	45046	38.8598	1300	
	37	2,4,5-Trichlorophenol	196	7.902	7.907	(0.895)	49277	39.1075	1300	
$	38	2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	259516	58.1226	1940	
	39	2-Chloronaphthalene	162	8.137	8.142	(0.921)	137932	37.5724	1250	
	40	2-Nitroaniline	65	8.233	8.238	(0.932)	39597	36.9789	1230	
	41	Dimethylphthalate	163	8.452	8.457	(0.957)	153816	38.9718	1300	
	42	2,6-Dinitrotoluene	165	8.527	8.537	(0.966)	35450	38.7798	1290	
	43	Acenaphthylene	152	8.655	8.660	(0.980)	226702	38.3042	1280	(M)
	44	3-Nitroaniline	138	8.740	8.746	(0.990)	29191	31.1765	1040	
*	45	Acenaphthene-d10	164	8.831	8.831	(1.000)	120508	40.0000		
	46	Acenaphthene	154	8.869	8.874	(1.004)	136187	37.7265	1260	
	47	2,4-Dinitrophenol	184	8.869	8.874	(1.004)	8000	22.5806	753	(Q)
	48	4-Nitrophenol	65	8.906	8.917	(1.008)	25769	37.0826	1240	
	49	2,4-Dinitrotoluene	165	9.029	9.040	(1.022)	47473	40.5176	1350	
	50	Dibenzofuran	168	9.082	9.088	(1.028)	203750	38.7221	1290	
	51	Diethylphthalate	149	9.323	9.333	(1.056)	151676	38.3707	1280	
	52	4-Chlorophenylphenyl ether	204	9.494	9.499	(1.075)	80741	38.1409	1270	
	53	4-Nitroaniline	138	9.499	9.510	(1.076)	38620	36.5554	1220	
	54	Fluorene	166	9.510	9.515	(1.077)	164587	38.4348	1280	
	55	4,6-Dinitro-2-methylphenol	198	9.542	9.547	(0.893)	15494	27.6216	921	
	56	N-Nitrosodiphenylamine	169	9.633	9.638	(0.902)	137766	38.9622	1300	
	57	Azobenzene	77	9.691	9.697	(1.097)	148329	38.0329	1270	
	58	1,2-Diphenylhydrazine	77	9.691	9.697	(1.097)	148329	38.0329	1270	
$	59	2,4,6-Tribromophenol (S)	330	9.809	9.809	(1.111)	49396	85.4266	2850	
	60	4-Bromophenylphenyl ether	248	10.108	10.113	(0.946)	48577	39.8956	1330	
	61	Hexachlorobenzene	284	10.204	10.209	(0.955)	51097	39.6725	1320	
	62	Pentachlorophenol	266	10.434	10.434	(0.977)	24234	35.8733	1200	
*	63	Phenanthrene-d10	188	10.685	10.690	(1.000)	223152	40.0000		
	64	Phenanthrene	178	10.717	10.722	(1.003)	230758	38.9215	1300	
	65	Anthracene	178	10.781	10.786	(1.009)	236386	39.1160	1300	
	66	Carbazole	167	10.963	10.968	(1.026)	223700	38.8425	1290	
	67	di-n-Butylphthalate	149	11.364	11.369	(1.063)	260724	38.9189	1300	
	68	Fluoranthene	202	12.208	12.213	(1.142)	267739	38.8978	1300	
	69	Benzidine	184	12.341	12.346	(0.882)	19331	4.94910	165	(aR)
	70	Pyrene	202	12.496	12.501	(0.893)	282428	39.8342	1330	
$	71	Terphenyl-d14 (S)	244	12.656	12.662	(0.905)	300716	60.5842	2020	
	72	Butylbenzylphthalate	149	13.244	13.249	(0.947)	116389	39.5508	1320	
	73	bis(2-Ethylhexyl)phthalate	149	13.938	13.944	(0.996)	168556	40.2407	1340	
	74	3,3'-Dichlorobenzidine	252	13.917	13.922	(0.995)	64217	31.5972	1050	
	75	Benzo(a)anthracene	228	13.981	13.986	(0.999)	260019	39.1253	1300	
*	76	Chrysene-d12	240	13.992	13.997	(1.000)	233501	40.0000		(Q)
	77	Chrysene	228	14.024	14.035	(1.002)	242959	39.8182	1330	

Data File: \\192.168.10.12\Chem\10mss9.i\013114.b\01311425.D
Report Date: 03-Feb-2014 07:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	78 di-n-Octylphthalate	149	14.724	14.734	(1.052)	282984	39.4942	1320
	79 Benzo(b)fluoranthene	252	15.381	15.391	(0.962)	255473	38.8291	1290
	80 Benzo(k)fluoranthene	252	15.424	15.429	(0.965)	259485	38.8037	1290
	81 Benzo(a)pyrene	252	15.899	15.910	(0.995)	243871	38.8425	1290
*	82 Perylene-d12	264	15.985	15.995	(1.000)	222967	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	18.057	18.073	(1.130)	272283	38.8288	1290
	84 Dibenzo(a,h)anthracene	278	18.079	18.095	(1.131)	232751	39.2588	1310
	85 Benzo(g,h,i)perylene	276	18.688	18.714	(1.169)	231211	39.2392	1310

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311425.D
Report Date: 03-Feb-2014 07:16

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311425.D
Lab Smp Id: 1617226
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	63525	5.54
28 Naphthalene-d8	214969	107485	429938	229870	6.93
45 Acenaphthene-d10	112201	56101	224402	120508	7.40
63 Phenanthrene-d10	205101	102551	410202	223152	8.80
76 Chrysene-d12	220549	110275	441098	233501	5.87
82 Perylene-d12	213057	106529	426114	222967	4.65

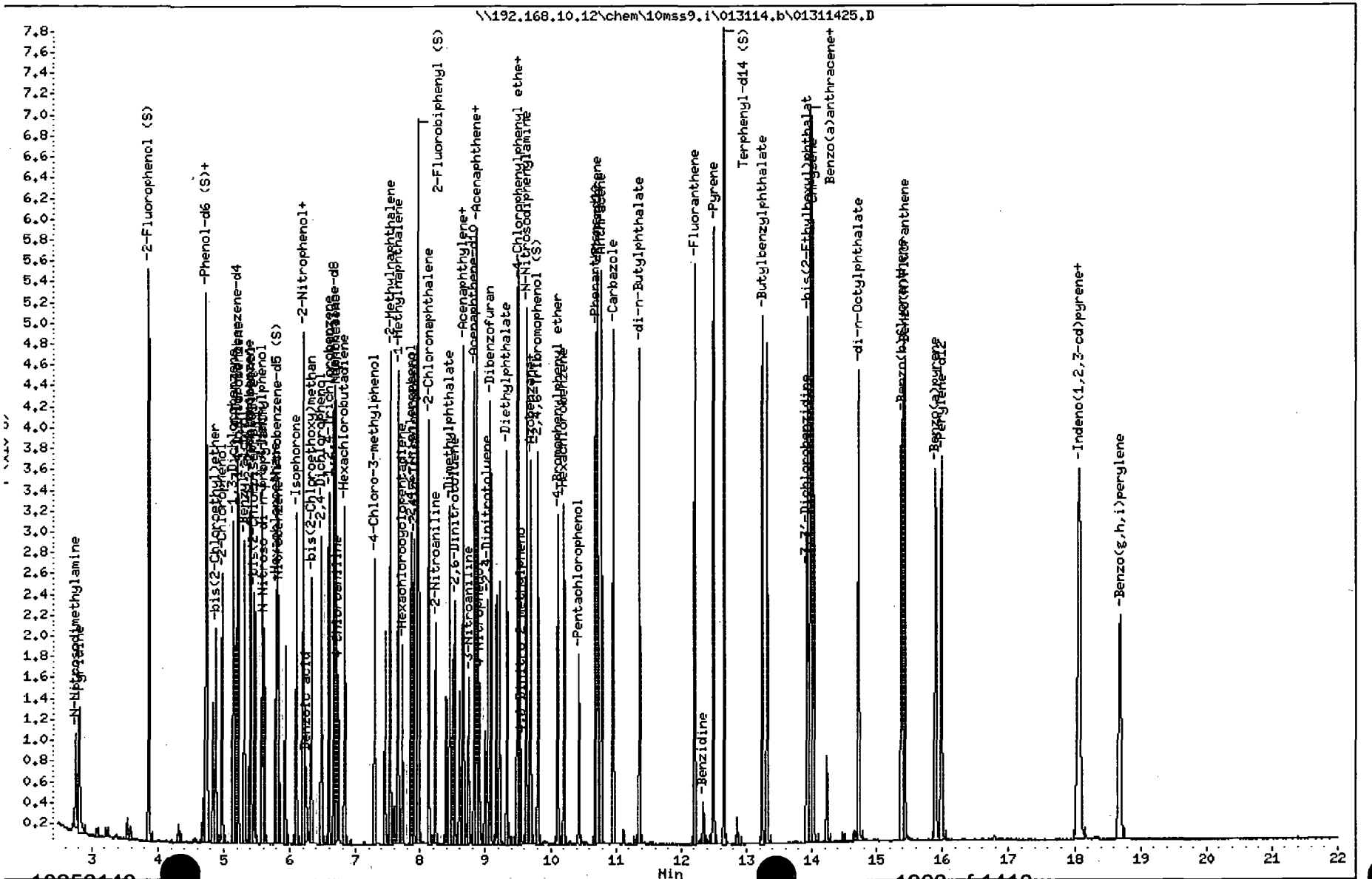
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.99	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311425.D
Date : 31-JAN-2014 18:19
Client ID:
Sample Info: 1617226,MSD

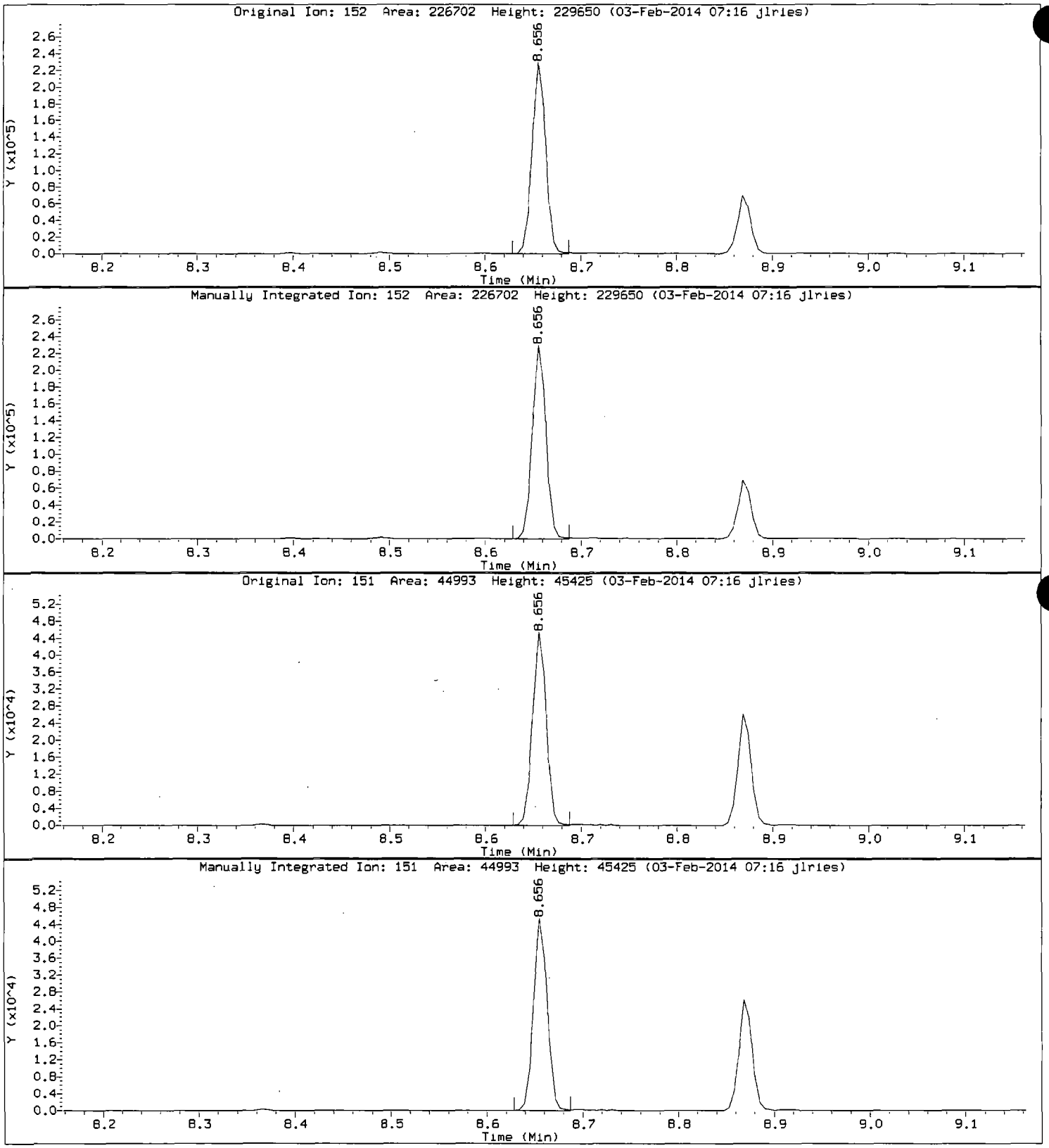
Instrument: 10mss9.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

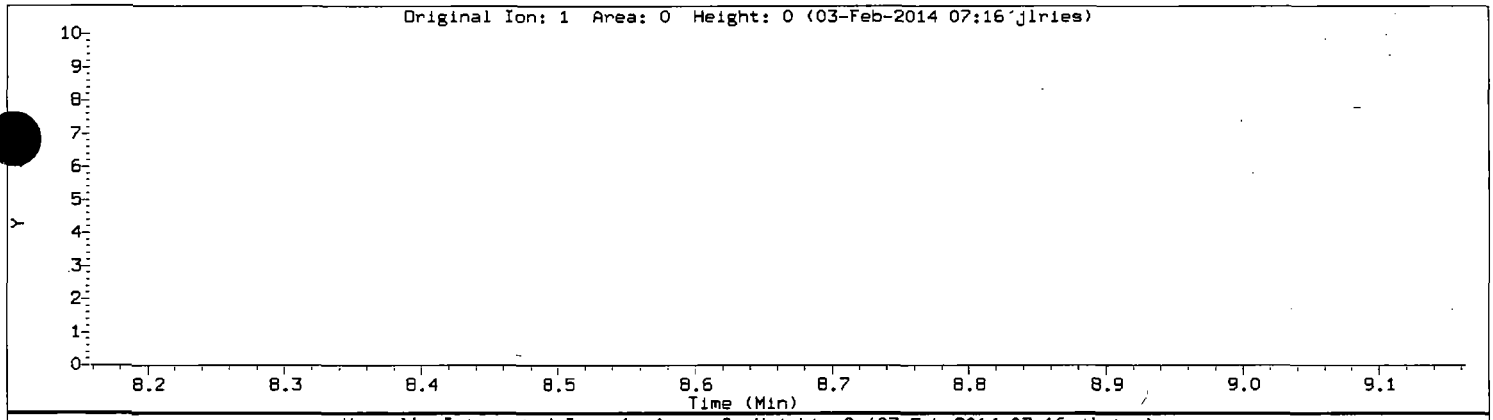


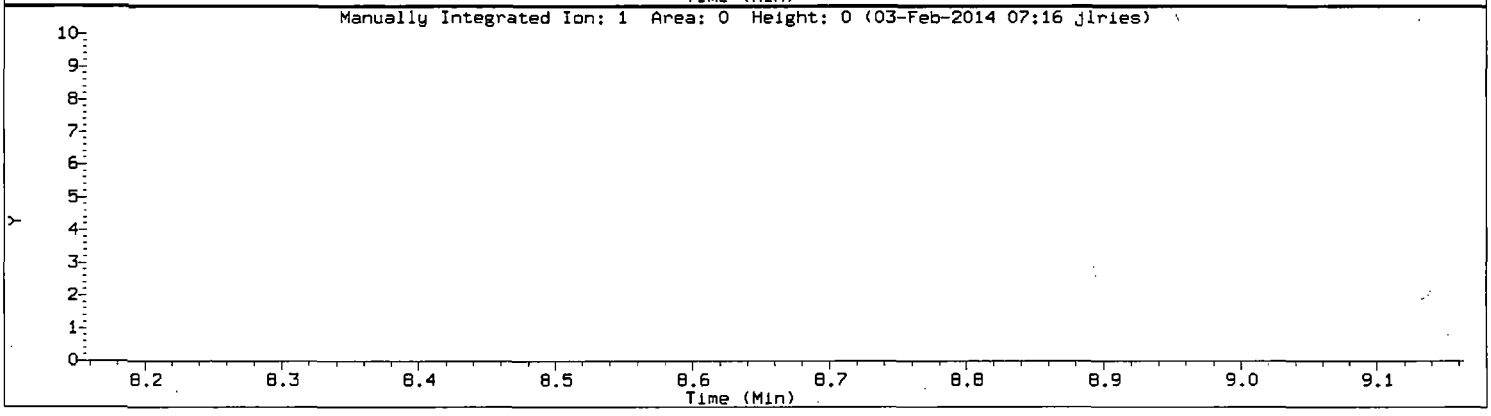
Injection Date: 31-JAN-2014 18:19
Instrument: 10mss9.i
Lab Sample ID: 1617226

Compound: Acenaphthylene
CAS Number: 208-96-8



Injection Date: 31-JAN-2014 18:19
Instrument: 10mss9.i
Lab Sample ID: 1617226





Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311405.D
Report Date: 31-Jan-2014 09:16

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311405.D
Lab Smp Id: 1617224
Inj Date : 31-JAN-2014 08:19
Operator : JLR Inst ID: 10mss9.i
Smp Info : 1617224,LCS
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 07:55 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	2.757	2.762	(0.530)	43688	35.9713	1200
	2 Pyridine	79	2.810	2.821	(0.540)	56209	26.0622	869
$	3 2-Fluorophenol (S)	112	3.863	3.863	(0.742)	149805	76.2228	2540
$	4 Phenol-d6 (S)	99	4.734	4.734	(0.910)	184369	76.4109	2550
	5 Phenol	94	4.744	4.750	(0.912)	96139	38.5569	1280
	6 bis(2-Chloroethyl)ether	63	4.873	4.878	(0.936)	59144	37.3949	1250
	7 2-Chlorophenol	128	4.974	4.974	(0.956)	74464	38.0513	1270
	8 1,3-Dichlorobenzene	146	5.145	5.150	(0.989)	78701	36.1731	1200
*	9 1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	57280	40.0000	
	10 1,4-Dichlorobenzene	146	5.220	5.225	(1.003)	80843	36.8095	1230
	11 Benzyl alcohol	79	5.316	5.316	(1.022)	59210	37.9257	1260
	12 1,2-Dichlorobenzene	146	5.396	5.396	(1.037)	77317	37.3759	1240
	13 2-Methylphenol	107	5.412	5.412	(1.040)	58883	38.3538	1280
	14 bis(2-Chloroisopropyl) ether	45	5.466	5.471	(1.050)	108371	36.9500	1230
	15 3 & 4-Methylphenol	107	5.578	5.583	(1.072)	77305	39.6006	1320
	17 N-Nitroso-di-n-propylamine	70	5.610	5.615	(1.078)	46203	37.8465	1260
	18 Hexachloroethane	117	5.786	5.786	(1.112)	31089	36.9150	1230
$	19 Nitrobenzene-d5 (S)	82	5.807	5.813	(0.870)	111015	50.3218	1680
	20 Nitrobenzene	77	5.834	5.834	(0.874)	73284	37.3996	1250
	21 Isophorone	82	6.096	6.101	(0.914)	129095	37.3907	1250
	22 2-Nitrophenol	139	6.203	6.203	(0.930)	36340	37.5798	1250
	23 2,4-Dimethylphenol	107	6.208	6.208	(0.930)	69873	38.2428	1270

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
	24 Benzoic acid	105	6.251	6.283	(0.937)	32224	30.6882	1020	
	25 bis(2-Chloroethoxy)methane	93	6.326	6.331	(0.948)	81779	37.5334	1250	
	26 2,4-Dichlorophenol	162	6.475	6.481	(0.970)	60390	38.4569	1280	
	27 1,2,4-Trichlorobenzene	180	6.593	6.598	(0.988)	67797	37.4131	1250	
*	28 Naphthalene-d8	136	6.673	6.673	(1.000)	211932	40.0000		(Q)
	29 Naphthalene	128	6.700	6.700	(1.004)	209431	37.6001	1250	
	30 4-Chloroaniline	127	6.732	6.732	(1.009)	51395	23.0613	769	
	31 Hexachlorobutadiene	225	6.833	6.839	(1.024)	39433	36.8810	1230	
	32 4-Chloro-3-methylphenol	107	7.287	7.287	(1.092)	58096	39.6692	1320	
	33 2-Methylnaphthalene	142	7.533	7.538	(1.129)	139144	38.4478	1280	
	34 1-Methylnaphthalene	142	7.656	7.661	(1.147)	127311	37.9248	1260	
	35 Hexachlorocyclopentadiene	237	7.725	7.731	(0.875)	41395	38.4588	1280	
	36 2,4,6-Trichlorophenol	196	7.859	7.864	(0.890)	42439	39.7382	1320	
	37 2,4,5-Trichlorophenol	196	7.902	7.907	(0.895)	46564	40.1111	1340	
$	38 2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	232409	56.4980	1880	
	39 2-Chloronaphthalene	162	8.137	8.142	(0.921)	130633	38.6239	1290	
	40 2-Nitroaniline	65	8.238	8.238	(0.933)	39225	39.7607	1320	
	41 Dimethylphthalate	163	8.452	8.457	(0.957)	144163	39.6462	1320	
	42 2,6-Dinitrotoluene	165	8.527	8.537	(0.966)	33024	39.2119	1310	
	43 Acenaphthylene	152	8.655	8.660	(0.980)	209476	38.4171	1280	(M)
	44 3-Nitroaniline	138	8.740	8.746	(0.990)	27699	32.1101	1070	
*	45 Acenaphthene-d10	164	8.831	8.831	(1.000)	111024	40.0000		
	46 Acenaphthene	154	8.869	8.874	(1.004)	130133	39.1289	1300	
	47 2,4-Dinitrophenol	184	8.869	8.874	(1.004)	10650	29.9801	999	(Q)
	48 4-Nitrophenol	65	8.906	8.917	(1.008)	25424	39.7114	1320	
	49 2,4-Dinitrotoluene	165	9.029	9.040	(1.022)	44046	40.8040	1360	
	50 Dibenzofuran	168	9.082	9.088	(1.028)	192192	39.6457	1320	
	51 Diethylphthalate	149	9.328	9.333	(1.056)	144539	39.6887	1320	
	52 4-Chlorophenylphenyl ether	204	9.494	9.499	(1.075)	77954	39.9700	1330	
	53 4-Nitroaniline	138	9.499	9.510	(1.076)	36377	37.3736	1240	
	54 Fluorene	166	9.510	9.515	(1.077)	155824	39.4968	1320	
	55 4,6-Dinitro-2-methylphenol	198	9.542	9.547	(0.893)	17355	32.3698	1080	
	56 N-Nitrosodiphenylamine	169	9.633	9.638	(0.901)	130903	40.0856	1340	
	57 Azobenzene	77	9.691	9.697	(1.097)	142969	39.7900	1330	
	58 1,2-Diphenylhydrazine	77	9.691	9.697	(1.097)	142969	39.7900	1330	
$	59 2,4,6-Tribromophenol (S)	330	9.809	9.809	(1.111)	44649	83.8131	2790	
	60 4-Bromophenylphenyl ether	248	10.108	10.113	(0.946)	46564	41.4078	1380	
	61 Hexachlorobenzene	284	10.204	10.209	(0.955)	47047	39.5516	1320	
	62 Pentachlorophenol	266	10.434	10.434	(0.976)	22365	35.8470	1190	
*	63 Phenanthrene-d10	188	10.690	10.690	(1.000)	206093	40.0000		
	64 Phenanthrene	178	10.717	10.722	(1.002)	219913	40.1625	1340	
	65 Anthracene	178	10.781	10.786	(1.008)	223764	40.0922	1340	
	66 Carbazole	167	10.963	10.968	(1.025)	214222	40.2756	1340	
	67 di-n-Butylphthalate	149	11.363	11.369	(1.063)	251040	40.5751	1350	
	68 Fluoranthene	202	12.207	12.213	(1.142)	254294	40.0025	1330	
	69 Benzidine	184	12.341	12.346	(0.882)	10363	2.48918	83.0	(aRM)
	70 Pyrene	202	12.496	12.501	(0.893)	268078	40.7203	1360	
$	71 Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	272856	59.2022	1970	
	72 Butylbenzylphthalate	149	13.244	13.249	(0.947)	110660	40.4981	1350	
	73 bis(2-Ethylhexyl)phthalate	149	13.938	13.944	(0.996)	159828	41.0938	1370	
	74 3,3'-Dichlorobenzidine	252	13.922	13.922	(0.995)	55216	29.2593	975	
	75 Benzo(a)anthracene	228	13.981	13.986	(0.999)	246632	39.9672	1330	
*	76 Chrysene-d12	240	13.992	13.997	(1.000)	216814	40.0000		(Q)
	77 Chrysene	228	14.024	14.035	(1.002)	229027	40.4238	1350	

Data File: \\192.168.10.12\Chem\10mss9.i\013114.b\01311405.D
Report Date: 31-Jan-2014 09:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	78 di-n-Octylphthalate	149	14.729	14.734	(1.053)	271501	40.8079	1360
	79 Benzo(b)fluoranthene	252	15.381	15.391	(0.962)	248572	40.8822	1360
	80 Benzo(k)fluoranthene	252	15.424	15.429	(0.965)	244796	39.6128	1320
	81 Benzo(a)pyrene	252	15.899	15.910	(0.994)	229806	39.6076	1320
*	82 Perylene-d12	264	15.990	15.995	(1.000)	206049	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	18.057	18.073	(1.129)	259395	40.0281	1330
	84 Dibenzo(a,h)anthracene	278	18.084	18.095	(1.131)	220691	40.2810	1340
	85 Benzo(g,h,i)perylene	276	18.688	18.714	(1.169)	218742	40.1711	1340

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311405.D
Report Date: 31-Jan-2014 09:16

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311405.D
Lab Smp Id: 1617224
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

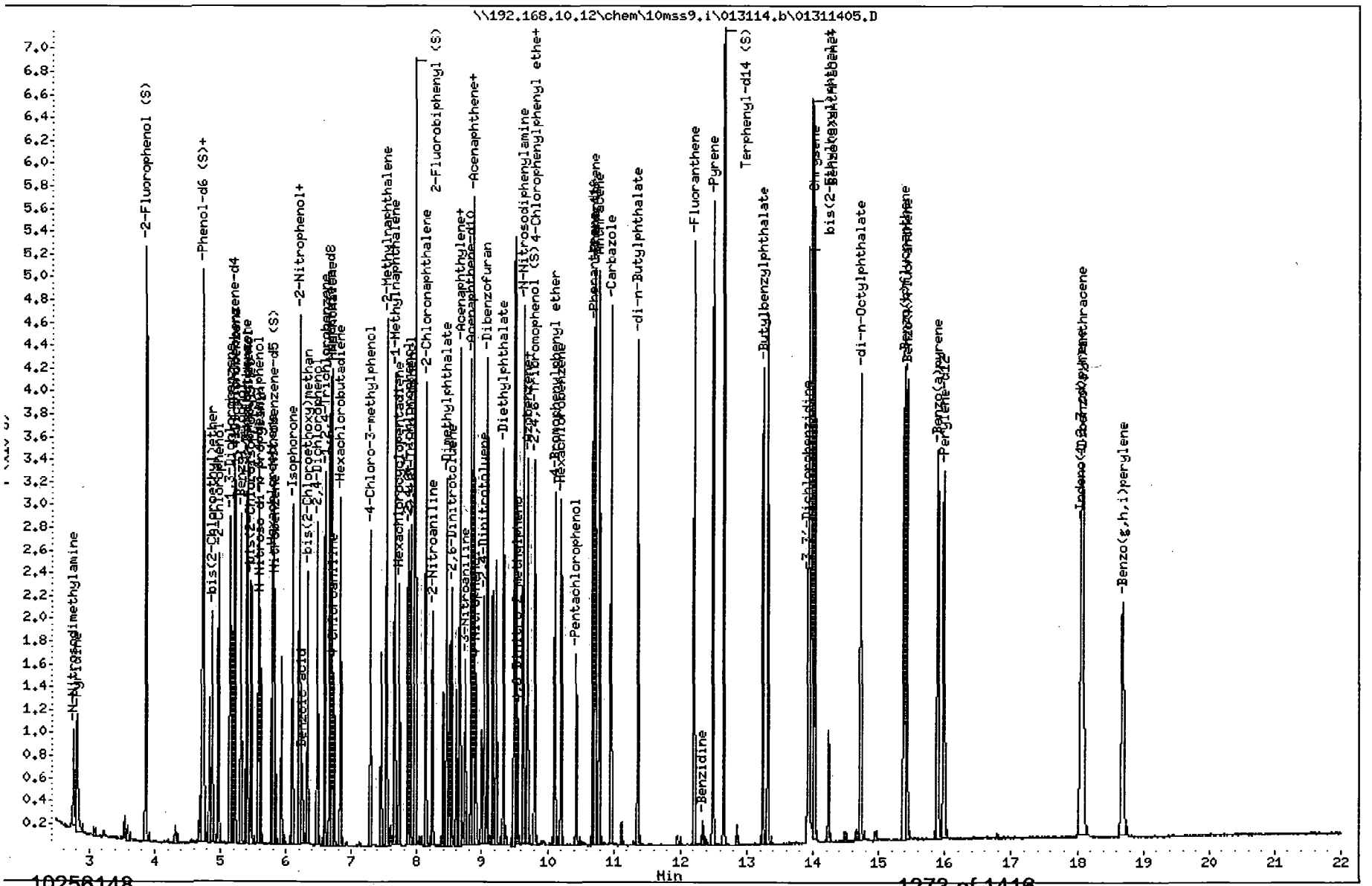
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	57280	-4.84
28 Naphthalene-d8	214969	107485	429938	211932	-1.41
45 Acenaphthene-d10	112201	56101	224402	111024	-1.05
63 Phenanthrene-d10	205101	102551	410202	206093	0.48
76 Chrysene-d12	220549	110275	441098	216814	-1.69
82 Perylene-d12	213057	106529	426114	206049	-3.29

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	0.00
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	0.00
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.99	-0.03

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

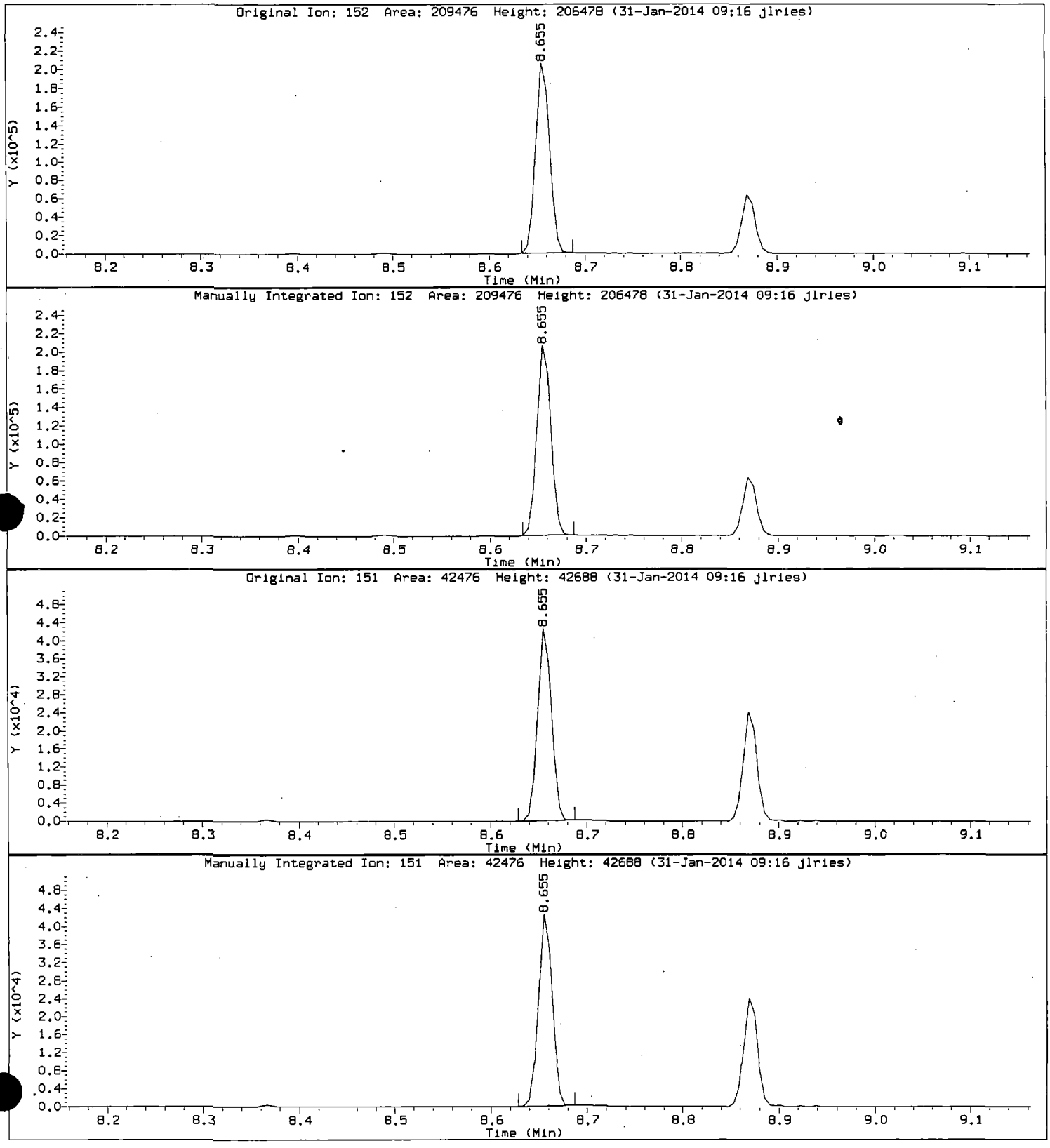
Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311405.D
Date : 31-JAN-2014 08:19
Client ID:
Sample Info: 1617224,LCS

Instrument: 10mss9.i
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25

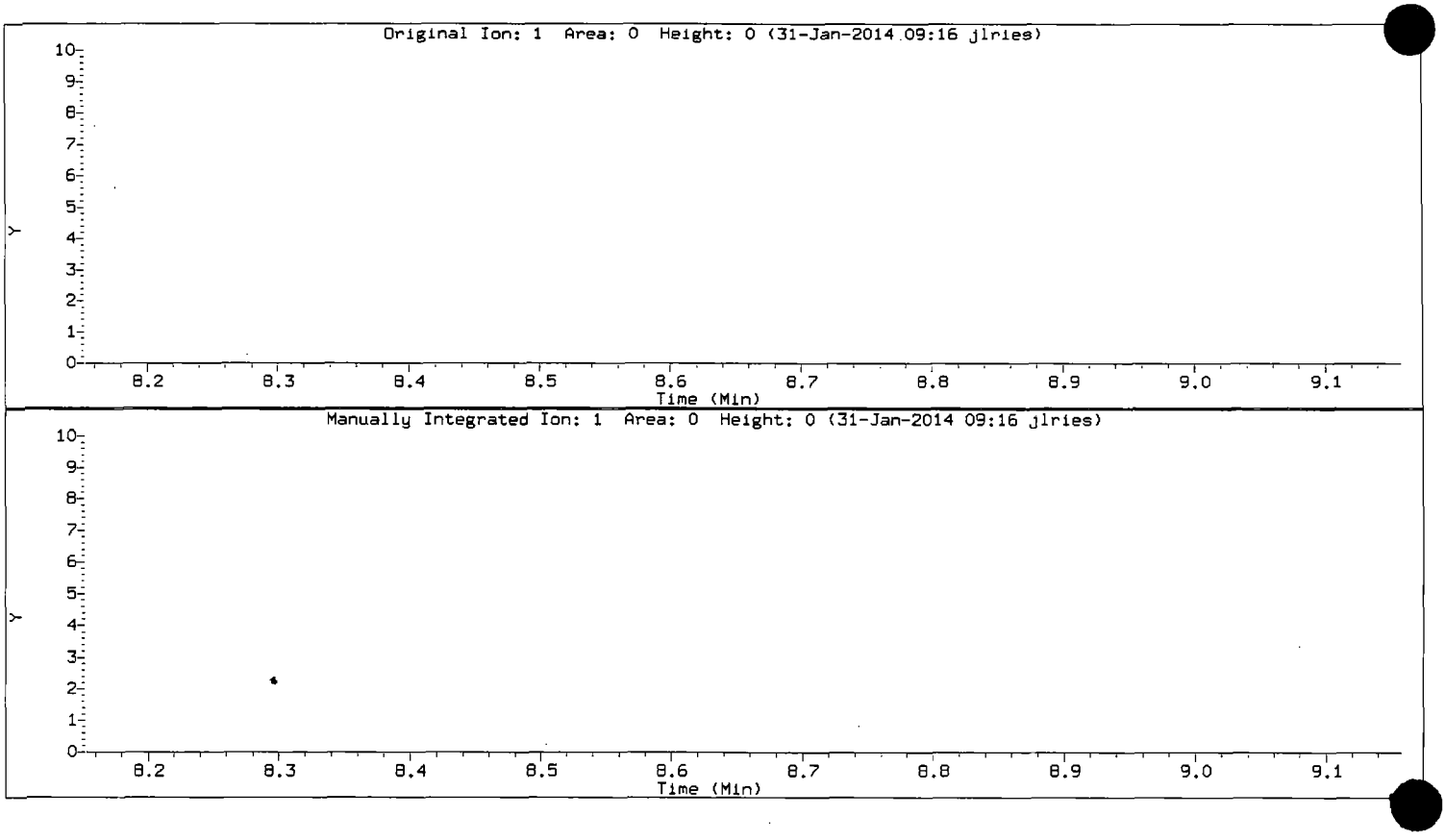


Data File: \\192.168.10.12\chem\10mss9.i\013114.b/01311405.D
Injection Date: 31-JAN-2014 08:19
Instrument: 10mss9.i
Lab Sample ID: 1617224

Compound: Acenaphthylene
CAS Number: 208-96-8

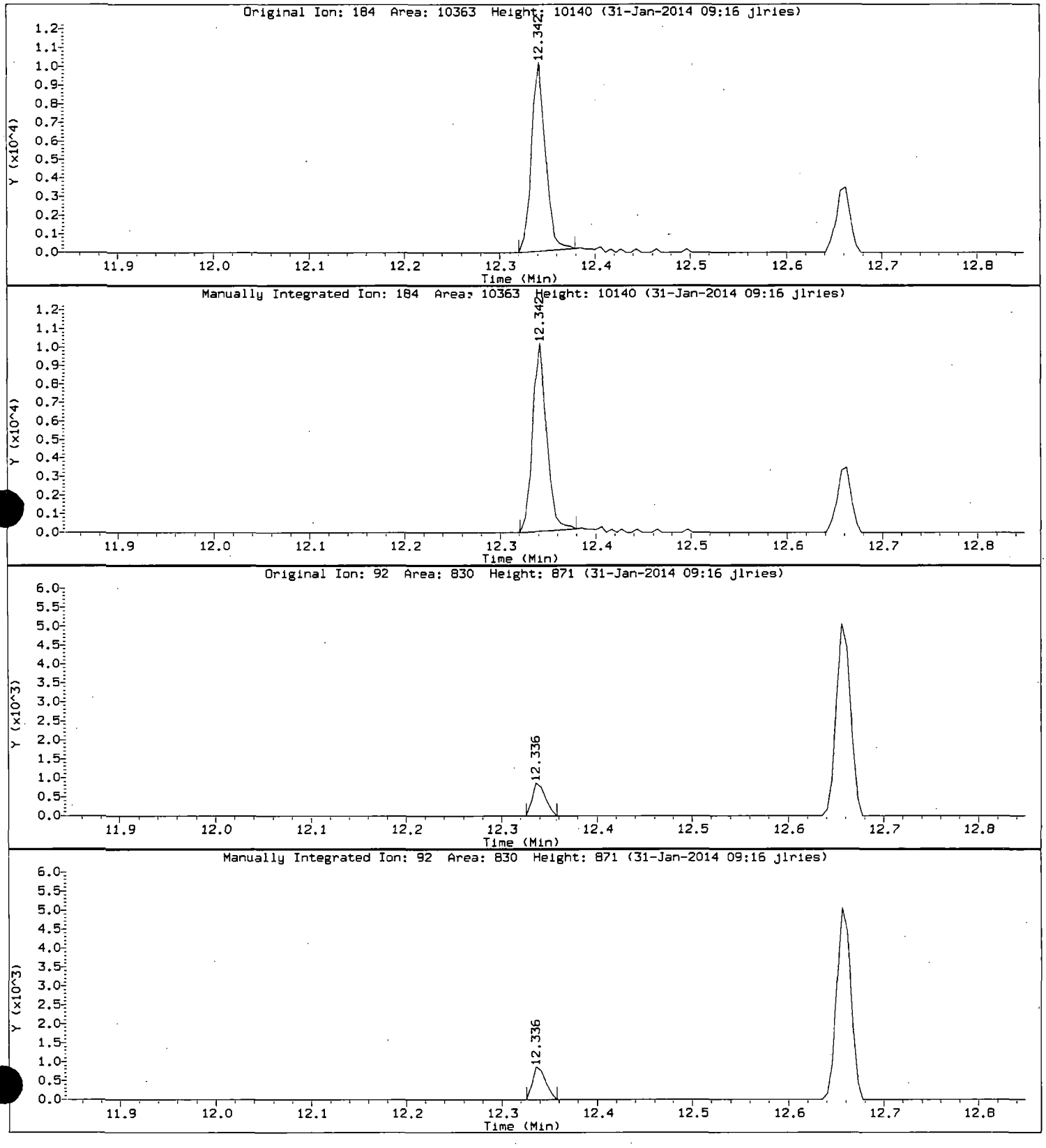


Data File: \\192.168.10.12\chem\10mss9.i\013114.b/01311405.D
Injection Date: 31-JAN-2014 08:19
Instrument: 10mss9.i
Lab Sample ID: 1617224



Data File: \\192.168.10.12\chem\10mss9.i\013114.b/01311405.D
Injection Date: 31-JAN-2014 08:19
Instrument: 10mss9.i
Lab Sample ID: 1617224

Compound: Benzidine
CAS Number:



Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311415.D
Report Date: 03-Feb-2014 07:12

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311415.D
Lab Smp Id: 10256148001
Inj Date : 31-JAN-2014 13:18
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10256148001
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
1	N-Nitrosodimethylamine	74	Compound Not Detected.					
2	Pyridine	79	Compound Not Detected.					
$ 3	2-Fluorophenol (S)	112	3.863	3.863	(0.742)	133151	68.3251	2280
$ 4	Phenol-d6 (S)	99	4.728	4.734	(0.909)	164596	68.7962	2290
5	Phenol	94	Compound Not Detected.					
6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
7	2-Chlorophenol	128	Compound Not Detected.					
8	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 9	1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	56797	40.0000	
10	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	107	Compound Not Detected.					
14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
15	3 & 4-Methylphenol	107	Compound Not Detected.					
17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
18	Hexachloroethane	117	Compound Not Detected.					
$ 19	Nitrobenzene-d5 (S)	82	5.808	5.813	(0.870)	94234	44.3684	1480
20	Nitrobenzene	77	Compound Not Detected.					
21	Isophorone	82	Compound Not Detected.					
22	2-Nitrophenol	139	Compound Not Detected.					
23	2,4-Dimethylphenol	107	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311415.D
Report Date: 03-Feb-2014 07:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24 Benzoic acid	105	Compound Not Detected.						
	25 bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26 2,4-Dichlorophenol	162	Compound Not Detected.						
	27 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28 Naphthalene-d8	136	6.673	6.673	(1.000)	204035	40.0000		(Q)
	29 Naphthalene	128	Compound Not Detected.						
	30 4-Chloroaniline	127	Compound Not Detected.						
	31 Hexachlorobutadiene	225	Compound Not Detected.						
	32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33 2-Methylnaphthalene	142	Compound Not Detected.						
	34 1-Methylnaphthalene	142	Compound Not Detected.						
	35 Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36 2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37 2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38 2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	217050	54.7527	1820	
	39 2-Chloronaphthalene	162	Compound Not Detected.						
	40 2-Nitroaniline	65	Compound Not Detected.						
	41 Dimethylphthalate	163	Compound Not Detected.						
	42 2,6-Dinitrotoluene	165	Compound Not Detected.						
	43 Acenaphthylene	152	Compound Not Detected.						
	44 3-Nitroaniline	138	Compound Not Detected.						
*	45 Acenaphthene-d10	164	8.826	8.831	(1.000)	106992	40.0000		
	46 Acenaphthene	154	Compound Not Detected.						
	47 2,4-Dinitrophenol	184	Compound Not Detected.						
	48 4-Nitrophenol	65	Compound Not Detected.						
	49 2,4-Dinitrotoluene	165	Compound Not Detected.						
	50 Dibenzofuran	168	Compound Not Detected.						
	51 Diethylphthalate	149	Compound Not Detected.						
	52 4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53 4-Nitroaniline	138	Compound Not Detected.						
	54 Fluorene	166	Compound Not Detected.						
	55 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56 N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57 Azobenzene	77	Compound Not Detected.						
	58 1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59 2,4,6-Tribromophenol (S)	330	9.804	9.809	(1.111)	39974	77.8652	2600	
	60 4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61 Hexachlorobenzene	284	Compound Not Detected.						
	62 Pentachlorophenol	266	Compound Not Detected.						
*	63 Phenanthrene-d10	188	10.685	10.690	(1.000)	199394	40.0000		
	64 Phenanthrene	178	Compound Not Detected.						
	65 Anthracene	178	Compound Not Detected.						
	66 Carbazole	167	Compound Not Detected.						
	67 di-n-Butylphthalate	149	Compound Not Detected.						
	68 Fluoranthene	202	Compound Not Detected.						
	69 Benzidine	184	Compound Not Detected.						
	70 Pyrene	202	Compound Not Detected.						
$	71 Terphenyl-d14 (S)	244	12.656	12.662	(0.905)	265021	60.4880	2020	
	72 Butylbenzylphthalate	149	Compound Not Detected.						
	73 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75 Benzo(a)anthracene	228	Compound Not Detected.						
*	76 Chrysene-d12	240	13.992	13.997	(1.000)	206112	40.0000		(Q)
	77 Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311415.D
Report Date: 03-Feb-2014 07:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
78	di-n-Octylphthalate	149	Compound Not Detected.					
79	Benzo(b)fluoranthene	252	Compound Not Detected.					
80	Benzo(k)fluoranthene	252	Compound Not Detected.					
81	Benzo(a)pyrene	252	Compound Not Detected.					
* 82	Perylene-d12	264	15.985	15.995	(1.000)	199178	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85	Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311415.D
Report Date: 03-Feb-2014 07:12

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311415.D
Lab Smp Id: 10256148001
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	56797	-5.64
28 Naphthalene-d8	214969	107485	429938	204035	-5.09
45 Acenaphthene-d10	112201	56101	224402	106992	-4.64
63 Phenanthrene-d10	205101	102551	410202	199394	-2.78
76 Chrysene-d12	220549	110275	441098	206112	-6.55
82 Perylene-d12	213057	106529	426114	199178	-6.51

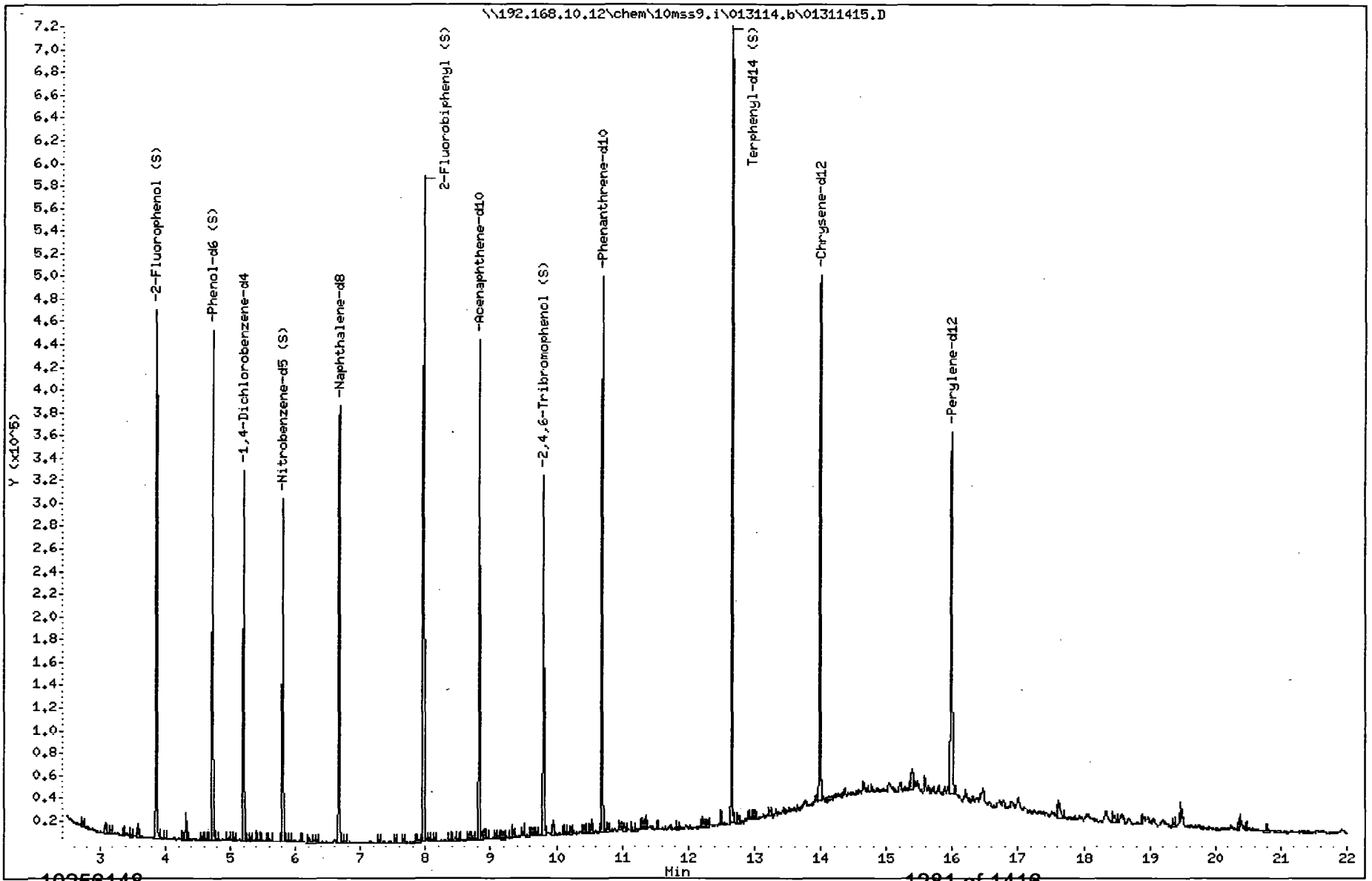
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.06
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.99	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311415.D
Date : 31-JAN-2014 13:18
Client ID:
Sample Info: 10256148001

Instrument: 10mss9.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Data File: \\192.168.10.12\chem\10mss9.i\013114.b/01311415.D
Injection Date: 31-JAN-2014 13:18
Instrument: 10mss9.i
Lab Sample ID: 10256148001
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311416.D
Report Date: 03-Feb-2014 07:12

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311416.D
Lab Smp Id: 10256148002
Inj Date : 31-JAN-2014 13:48
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10256148002
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
1	N-Nitrosodimethylamine	74	Compound Not Detected.					
2	Pyridine	79	Compound Not Detected.					
$ 3	2-Fluorophenol (S)	112	3.863	3.863	(0.742)	139528	67.6085	2250
$ 4	Phenol-d6 (S)	99	4.728	4.734	(0.909)	173393	68.4354	2280
5	Phenol	94	Compound Not Detected.					
6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
7	2-Chlorophenol	128	Compound Not Detected.					
8	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 9	1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	60148	40.0000	
10	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	107	Compound Not Detected.					
14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
15	3 & 4-Methylphenol	107	Compound Not Detected.					
17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
18	Hexachloroethane	117	Compound Not Detected.					
$ 19	Nitrobenzene-d5 (S)	82	5.808	5.813	(0.870)	100522	43.4631	1450
20	Nitrobenzene	77	Compound Not Detected.					
21	Isophorone	82	Compound Not Detected.					
22	2-Nitrophenol	139	Compound Not Detected.					
23	2,4-Dimethylphenol	107	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311416.D
Report Date: 03-Feb-2014 07:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
	24 Benzoic acid	105	Compound Not Detected.						
	25 bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26 2,4-Dichlorophenol	162	Compound Not Detected.						
	27 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28 Naphthalene-d8	136	6.673	6.673	(1.000)	222183	40.0000		(Q)
	29 Naphthalene	128	Compound Not Detected.						
	30 4-Chloroaniline	127	Compound Not Detected.						
	31 Hexachlorobutadiene	225	Compound Not Detected.						
	32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33 2-Methylnaphthalene	142	Compound Not Detected.						
	34 1-Methylnaphthalene	142	Compound Not Detected.						
	35 Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36 2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37 2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38 2-Fluorobiphenyl (S)	172	7.966	7.971	(0.903)	214683	49.8641	1660	
	39 2-Chloronaphthalene	162	Compound Not Detected.						
	40 2-Nitroaniline	65	Compound Not Detected.						
	41 Dimethylphthalate	163	Compound Not Detected.						
	42 2,6-Dinitrotoluene	165	Compound Not Detected.						
	43 Acenaphthylene	152	Compound Not Detected.						
	44 3-Nitroaniline	138	Compound Not Detected.						
*	45 Acenaphthene-d10	164	8.826	8.831	(1.000)	116200	40.0000		
	46 Acenaphthene	154	Compound Not Detected.						
	47 2,4-Dinitrophenol	184	Compound Not Detected.						
	48 4-Nitrophenol	65	Compound Not Detected.						
	49 2,4-Dinitrotoluene	165	Compound Not Detected.						
	50 Dibenzofuran	168	Compound Not Detected.						
	51 Diethylphthalate	149	Compound Not Detected.						
	52 4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53 4-Nitroaniline	138	Compound Not Detected.						
	54 Fluorene	166	Compound Not Detected.						
	55 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56 N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57 Azobenzene	77	Compound Not Detected.						
	58 1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59 2,4,6-Tribromophenol (S)	330	9.804	9.809	(1.111)	39782	71.3506	2380	
	60 4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61 Hexachlorobenzene	284	Compound Not Detected.						
	62 Pentachlorophenol	266	Compound Not Detected.						
*	63 Phenanthrene-d10	188	10.685	10.690	(1.000)	214406	40.0000		
	64 Phenanthrene	178	Compound Not Detected.						
	65 Anthracene	178	Compound Not Detected.						
	66 Carbazole	167	Compound Not Detected.						
	67 di-n-Butylphthalate	149	Compound Not Detected.						
	68 Fluoranthene	202	Compound Not Detected.						
	69 Benzidine	184	Compound Not Detected.						
	70 Pyrene	202	Compound Not Detected.						
$	71 Terphenyl-d14 (S)	244	12.656	12.662	(0.905)	264943	56.2799	1880	
	72 Butylbenzylphthalate	149	Compound Not Detected.						
	73 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75 Benzo(a)anthracene	228	Compound Not Detected.						
*	76 Chrysene-d12	240	13.992	13.997	(1.000)	221458	40.0000		(Q)
	77 Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311416.D
Report Date: 03-Feb-2014 07:12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
78	di-n-Octylphthalate	149	Compound Not Detected.					
79	Benzo(b)fluoranthene	252	Compound Not Detected.					
80	Benzo(k)fluoranthene	252	Compound Not Detected.					
81	Benzo(a)pyrene	252	Compound Not Detected.					
* 82	Perylene-d12	264	15.985	15.995	(1.000)	213128	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85	Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311416.D
Report Date: 03-Feb-2014 07:12

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311416.D
Lab Smp Id: 10256148002
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	60148	-0.07
28 Naphthalene-d8	214969	107485	429938	222183	3.36
45 Acenaphthene-d10	112201	56101	224402	116200	3.56
63 Phenanthrene-d10	205101	102551	410202	214406	4.54
76 Chrysene-d12	220549	110275	441098	221458	0.41
82 Perylene-d12	213057	106529	426114	213128	0.03

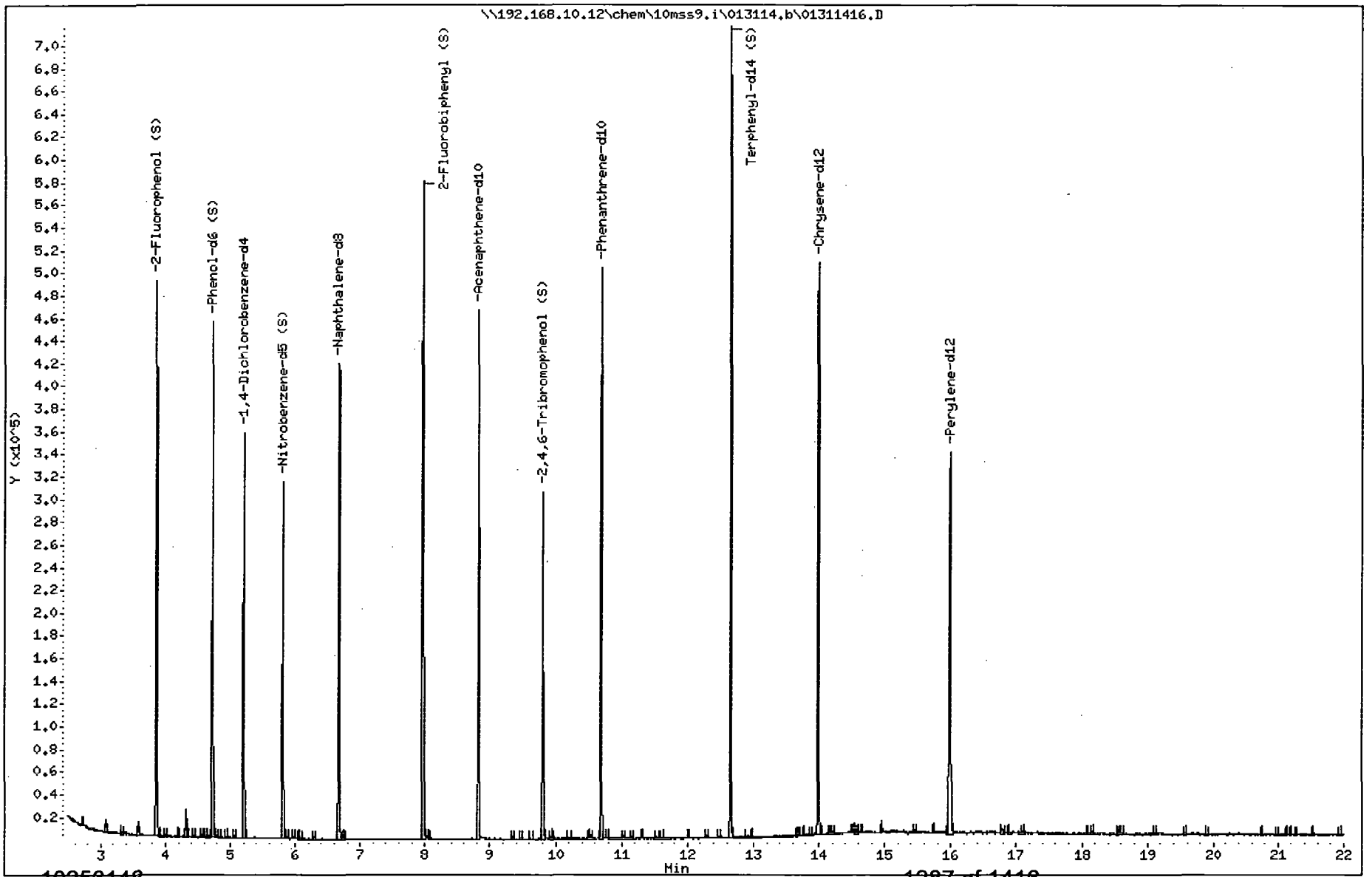
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.06
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.99	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311416.D
Date : 31-JAN-2014 13:48
Client ID:
Sample Info: 10256148002

Instrument: 10mss9.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Data File: \\192.168.10.12\chem\10mss9.i\013114.b/01311416.D
Injection Date: 31-JAN-2014 13:48
Instrument: 10mss9.i
Lab Sample ID: 10256148002
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311417.D
Report Date: 03-Feb-2014 07:13

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311417.D
Lab Smp Id: 10256148003
Inj Date : 31-JAN-2014 14:18
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10256148003
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
1	N-Nitrosodimethylamine	74	Compound Not Detected.					
2	Pyridine	79	Compound Not Detected.					
$ 3	2-Fluorophenol (S)	112	3.863	3.863	(0.742)	129293	64.8162	2160
$ 4	Phenol-d6 (S)	99	4.728	4.734	(0.909)	180603	73.7467	2460
5	Phenol	94	Compound Not Detected.					
6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
7	2-Chlorophenol	128	Compound Not Detected.					
8	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 9	1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	58137	40.0000	
10	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	107	Compound Not Detected.					
14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
15	3 & 4-Methylphenol	107	Compound Not Detected.					
17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
18	Hexachloroethane	117	Compound Not Detected.					
$ 19	Nitrobenzene-d5 (S)	82	5.807	5.813	(0.870)	94979	42.6992	1420
20	Nitrobenzene	77	Compound Not Detected.					
21	Isophorone	82	Compound Not Detected.					
22	2-Nitrophenol	139	Compound Not Detected.					
23	2,4-Dimethylphenol	107	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311417.D
Report Date: 03-Feb-2014 07:13

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/Kg)
	24 Benzoic acid	105	Compound Not Detected.					
	25 bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	26 2,4-Dichlorophenol	162	Compound Not Detected.					
	27 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	28 Naphthalene-d8	136	6.673	6.673	(1.000)	213687	40.0000	(Q)
	29 Naphthalene	128	6.694	6.700	(1.003)	8101	1.44246	48.1(a)
	30 4-Chloroaniline	127	Compound Not Detected.					
	31 Hexachlorobutadiene	225	Compound Not Detected.					
	32 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	33 2-Methylnaphthalene	142	7.533	7.538	(1.129)	4512	1.23650	41.2(a)
	34 1-Methylnaphthalene	142	7.656	7.661	(1.147)	4474	1.32182	44.1(a)
	35 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	36 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	37 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	38 2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	244915	58.7628	1960
	39 2-Chloronaphthalene	162	Compound Not Detected.					
	40 2-Nitroaniline	65	Compound Not Detected.					
	41 Dimethylphthalate	163	Compound Not Detected.					
	42 2,6-Dinitrotoluene	165	Compound Not Detected.					
	43 Acenaphthylene	152	Compound Not Detected.					
	44 3-Nitroaniline	138	Compound Not Detected.					
*	45 Acenaphthene-d10	164	8.826	8.831	(1.000)	112489	40.0000	
	46 Acenaphthene	154	Compound Not Detected.					
	47 2,4-Dinitrophenol	184	Compound Not Detected.					
	48 4-Nitrophenol	65	Compound Not Detected.					
	49 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Dibenzofuran	168	Compound Not Detected.					
	51 Diethylphthalate	149	Compound Not Detected.					
	52 4-Chlorophenylphenyl ether	204	Compound Not Detected.					
	53 4-Nitroaniline	138	Compound Not Detected.					
	54 Fluorene	166	Compound Not Detected.					
	55 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	56 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Azobenzene	77	Compound Not Detected.					
	58 1,2-Diphenylhydrazine	77	Compound Not Detected.					
$	59 2,4,6-Tribromophenol (S)	330	9.809	9.809	(1.111)	47956	88.8485	2960
	60 4-Bromophenylphenyl ether	248	Compound Not Detected.					
	61 Hexachlorobenzene	284	Compound Not Detected.					
	62 Pentachlorophenol	266	Compound Not Detected.					
*	63 Phenanthrene-d10	188	10.685	10.690	(1.000)	208663	40.0000	
	64 Phenanthrene	178	Compound Not Detected.					
	65 Anthracene	178	Compound Not Detected.					
	66 Carbazole	167	Compound Not Detected.					
	67 di-n-Butylphthalate	149	Compound Not Detected.					
	68 Fluoranthene	202	Compound Not Detected.					
	69 Benzidine	184	Compound Not Detected.					
	70 Pyrene	202	Compound Not Detected.					
$	71 Terphenyl-d14 (S)	244	12.661	12.662	(0.905)	305156	65.8950	2200
	72 Butylbenzylphthalate	149	Compound Not Detected.					
	73 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
	74 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	75 Benzo(a)anthracene	228	Compound Not Detected.					
*	76 Chrysene-d12	240	13.992	13.997	(1.000)	217852	40.0000	(Q)
	77 Chrysene	228	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311417.D
Report Date: 03-Feb-2014 07:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
78	di-n-Octylphthalate	149	Compound Not Detected.					
79	Benzo(b)fluoranthene	252	Compound Not Detected.					
80	Benzo(k)fluoranthene	252	Compound Not Detected.					
81	Benzo(a)pyrene	252	Compound Not Detected.					
* 82	Perylene-d12	264	15.984	15.995	(1.000)	210868	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85	Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311417.D
Report Date: 03-Feb-2014 07:13

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311417.D
Lab Smp Id: 10256148003
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	58137	-3.41
28 Naphthalene-d8	214969	107485	429938	213687	-0.60
45 Acenaphthene-d10	112201	56101	224402	112489	0.26
63 Phenanthrene-d10	205101	102551	410202	208663	1.74
76 Chrysene-d12	220549	110275	441098	217852	-1.22
82 Perylene-d12	213057	106529	426114	210868	-1.03

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	-0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	-0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.06
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.98	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

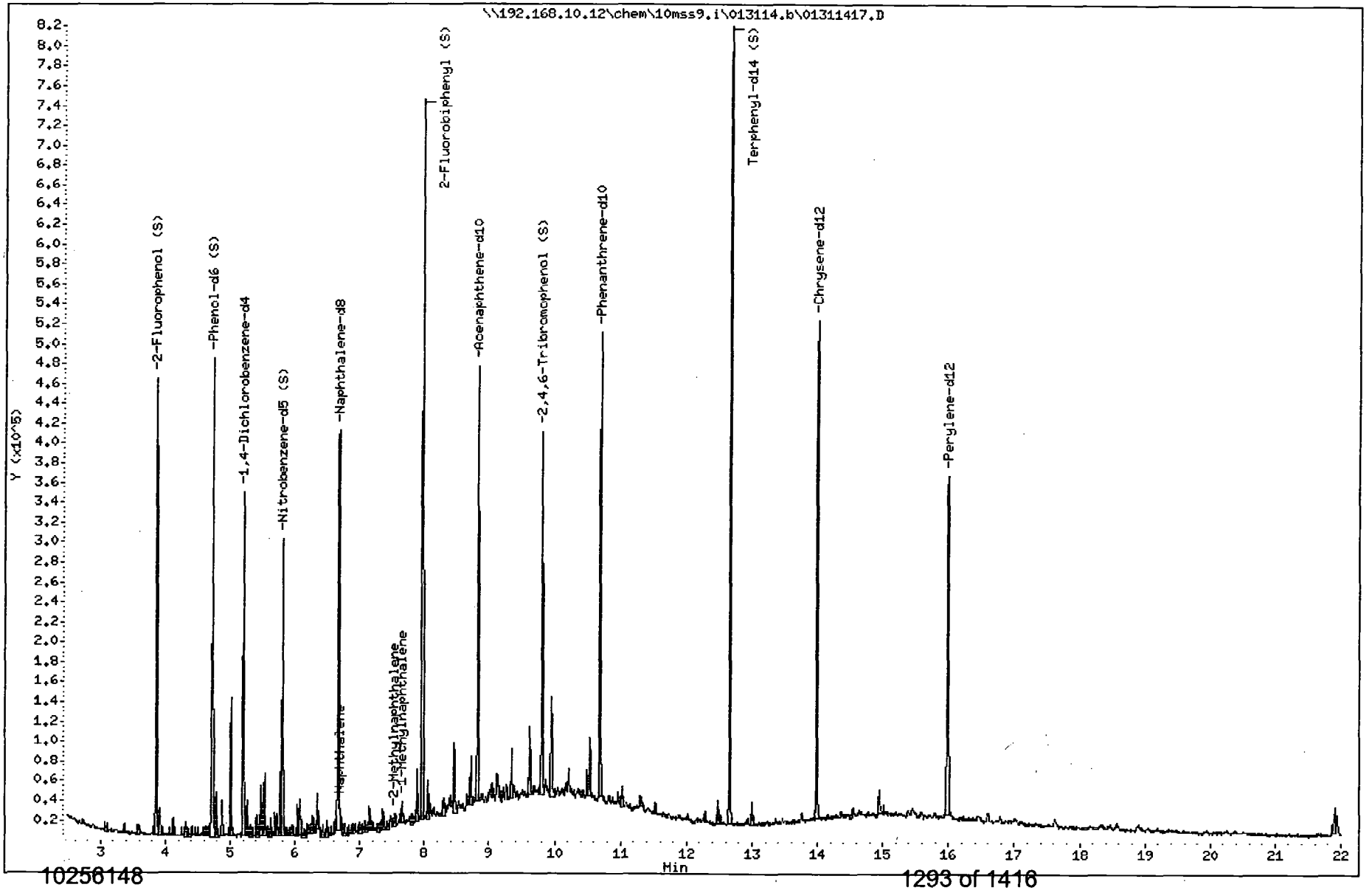
Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311417.D
Date : 31-JAN-2014 14:18
Client ID:
Sample Info: 10256148003

Instrument: 10mss9.i

Operator: JLR

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311417.D

Date : 31-JAN-2014 14:18

Client ID:

Instrument: 10mss9.i

Sample Info: 10256148003

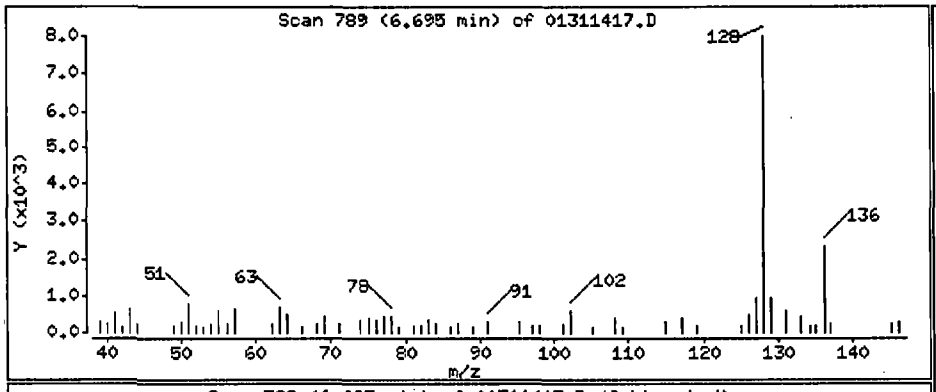
Operator: JLR

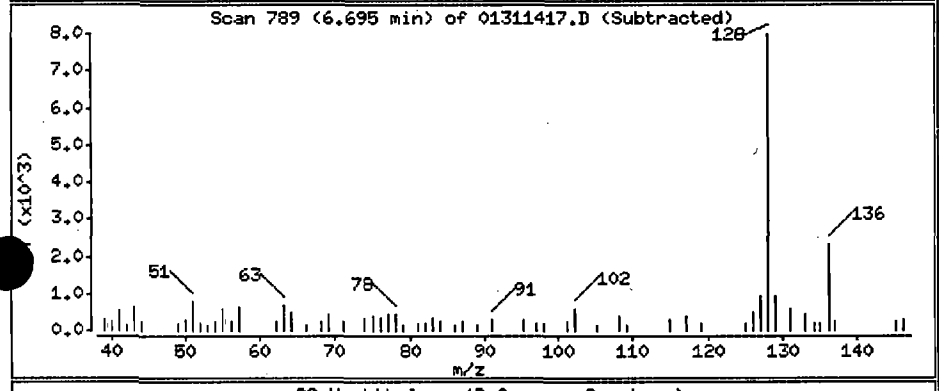
Column phase: DB-5MS

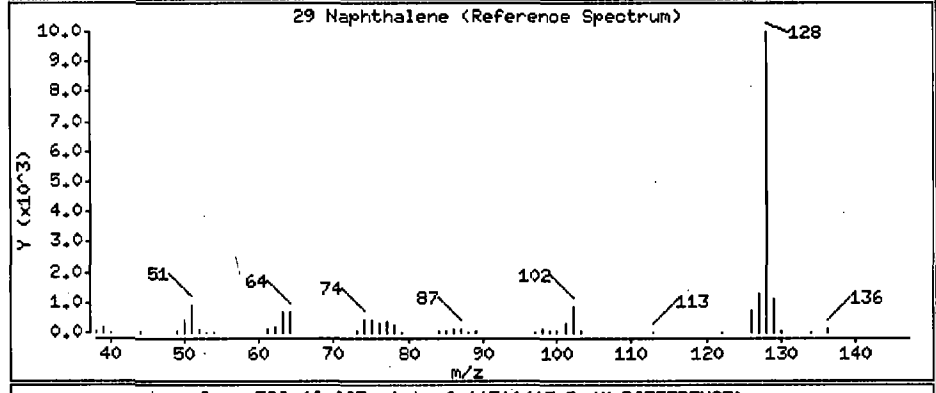
Column diameter: 0.25

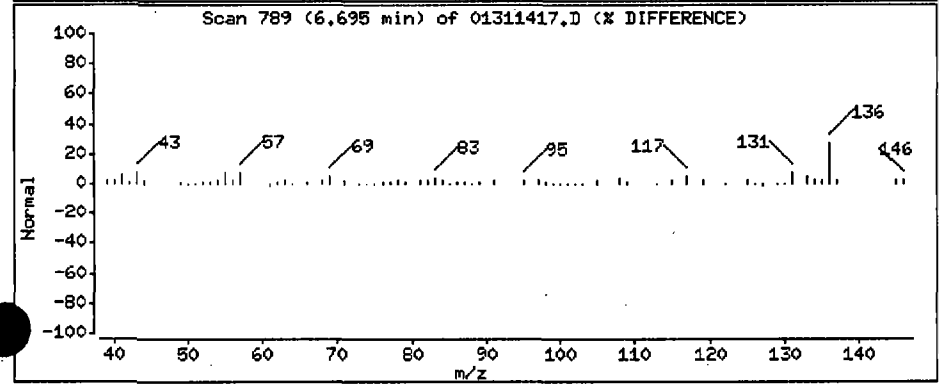
29 Naphthalene

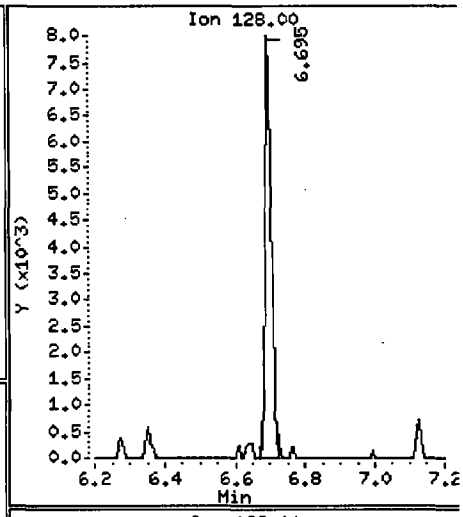
Concentration: 48.1 ug/Kg

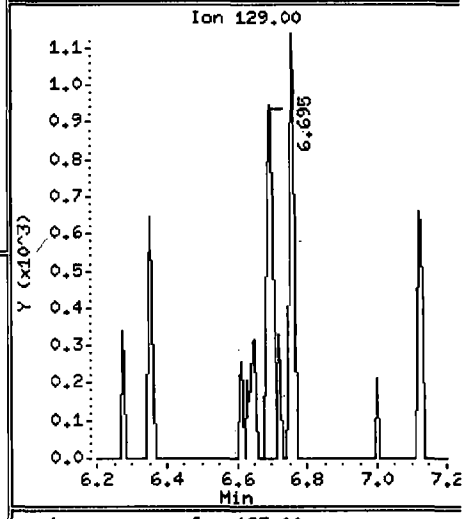


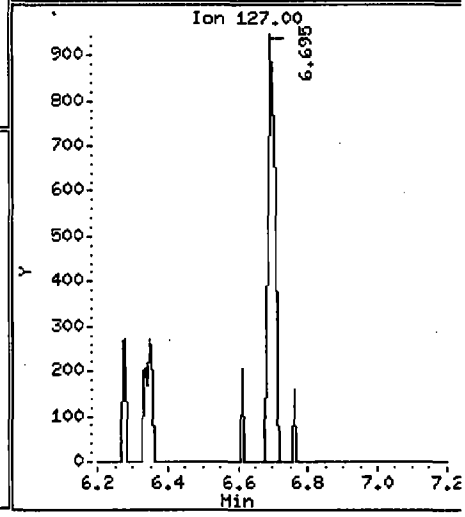












Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311417.D

Date : 31-JAN-2014 14:18

Client ID:

Instrument: 10mss9.i

Sample Info: 10256148003

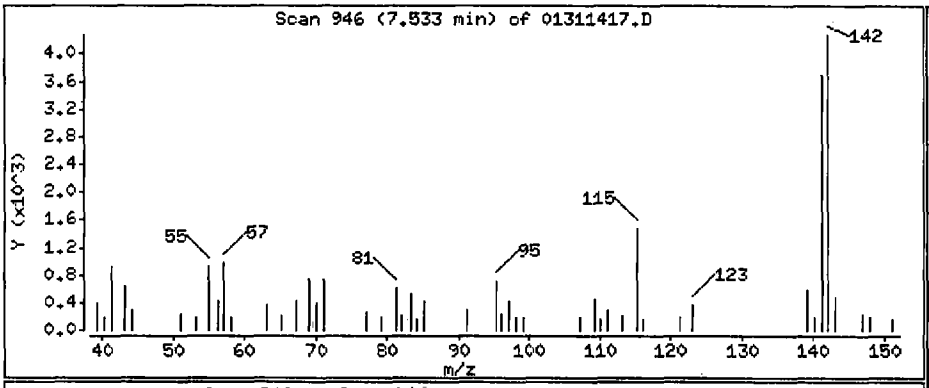
Operator: JLR

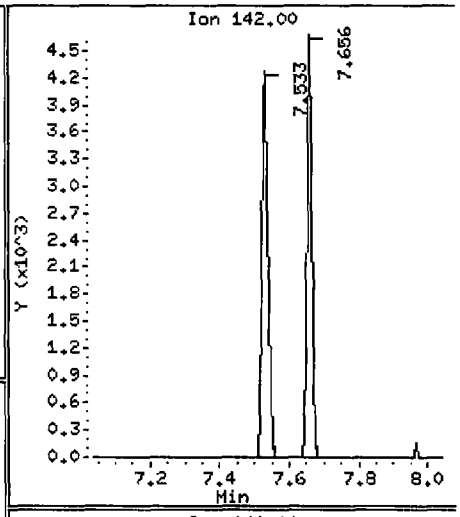
Column phase: DB-5MS

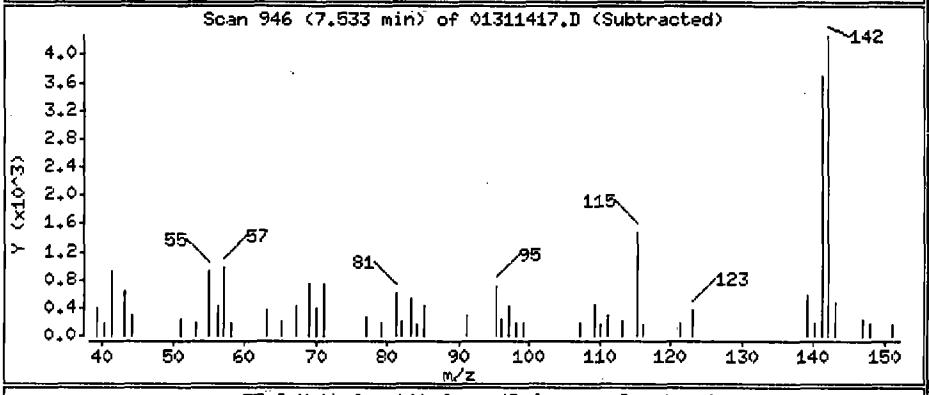
Column diameter: 0.25

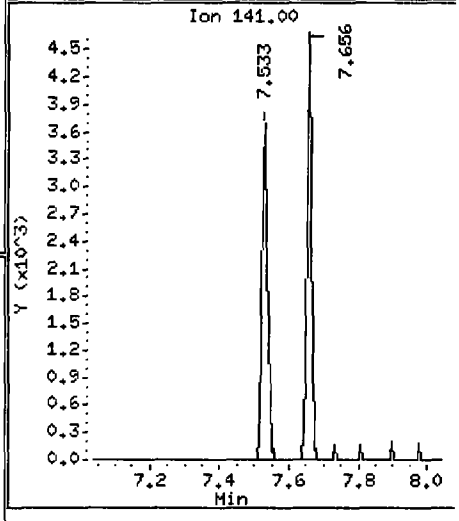
33 2-Methylnaphthalene

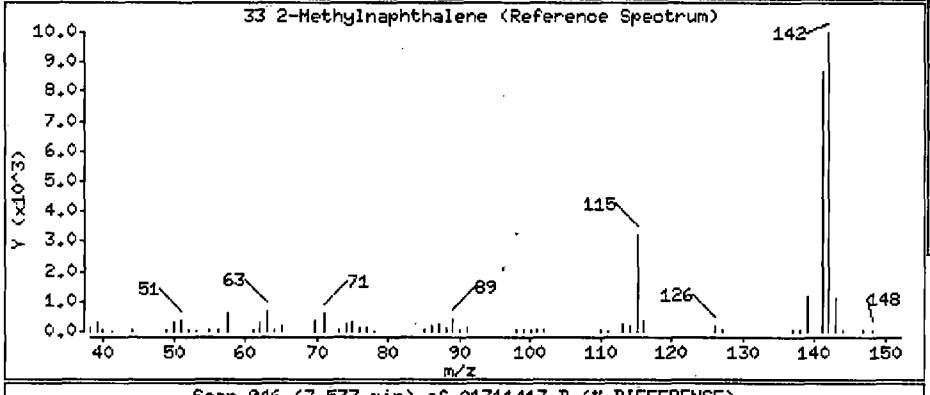
Concentration: 41.2 ug/Kg

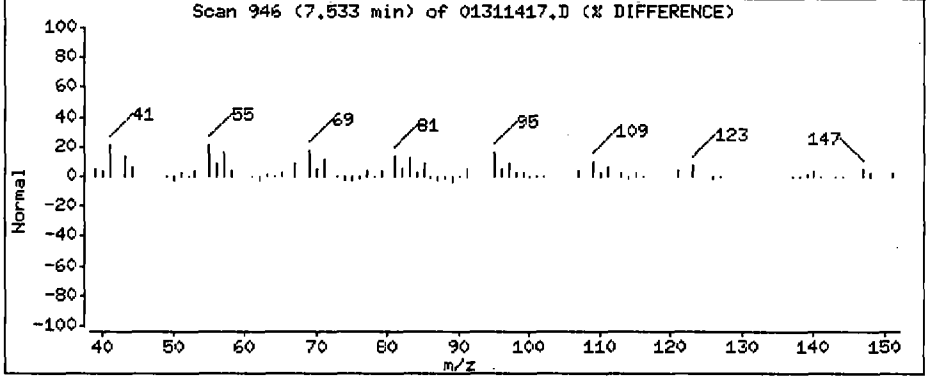












Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311417.D

Date : 31-JAN-2014 14:18

Client ID:

Instrument: 10mss9.i

Sample Info: 10256148003

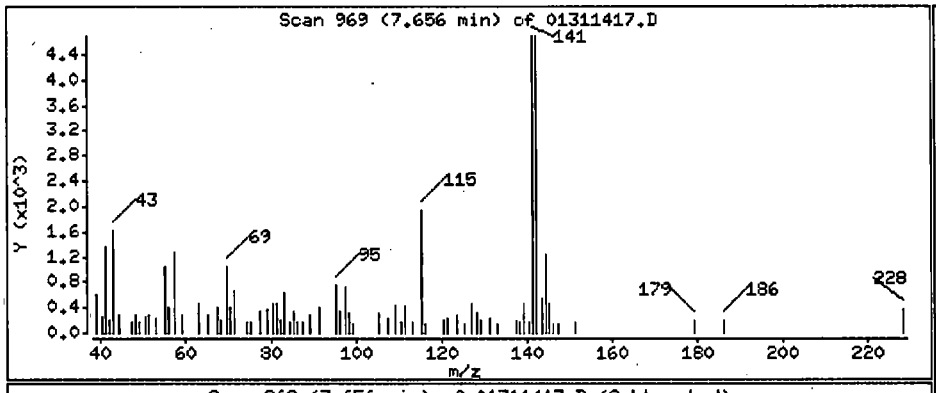
Operator: JLR

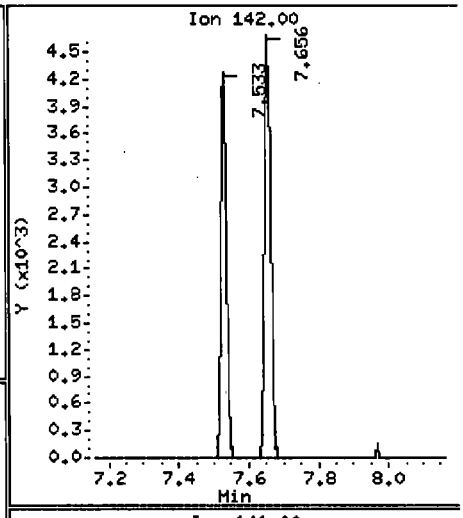
Column phase: DB-5MS

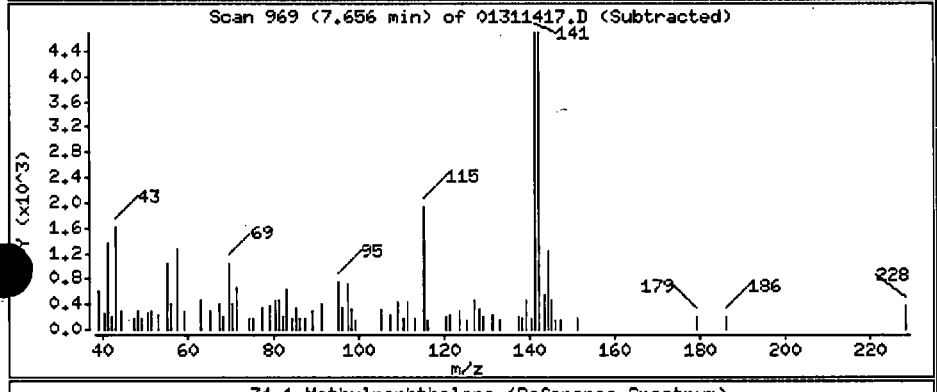
Column diameter: 0.25

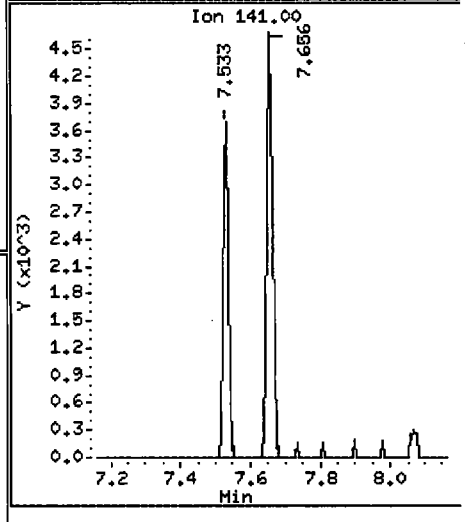
34 1-Methylnaphthalene

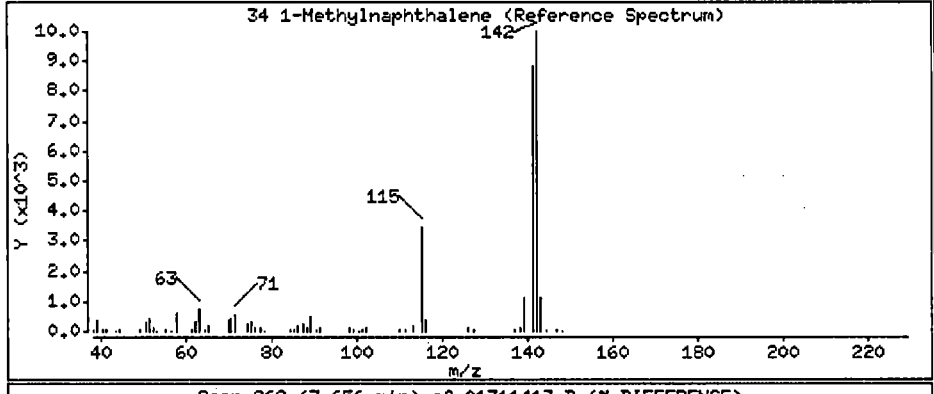
Concentration: 44.1 ug/Kg

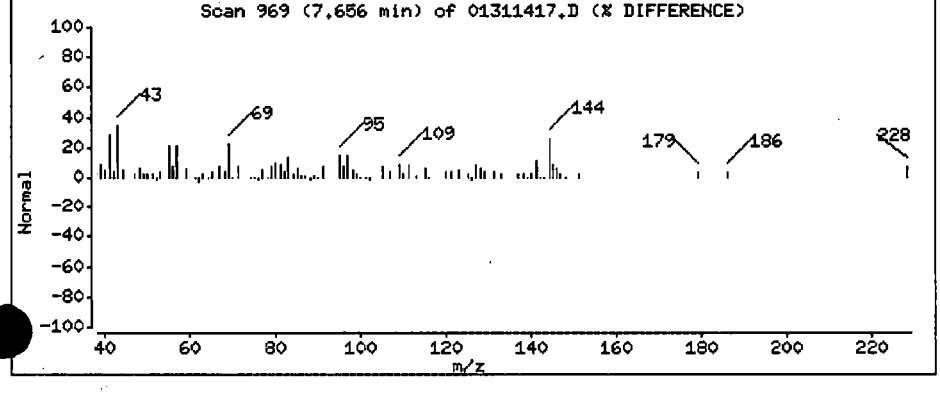












Data File: \\192.168.10.12\chem\10mss9.i\013114.b/01311417.D
Injection Date: 31-JAN-2014 14:18
Instrument: 10mss9.i
Lab Sample ID: 10256148003
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311418.D
Report Date: 03-Feb-2014 07:13

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311418.D
Lab Smp Id: 10256148004
Inj Date : 31-JAN-2014 14:48
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10256148004
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	Compound Not Detected.					
	2 Pyridine	79	Compound Not Detected.					
$	3 2-Fluorophenol (S)	112	3.863	3.863	(0.742)	167888	81.0755	2700
$	4 Phenol-d6 (S)	99	4.728	4.734	(0.909)	208845	82.1491	2740
	5 Phenol	94	Compound Not Detected.					
	6 bis(2-Chloroethyl)ether	63	Compound Not Detected.					
	7 2-Chlorophenol	128	Compound Not Detected.					
	8 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	9 1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	60352	40.0000	
	10 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	107	Compound Not Detected.					
	14 bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
	15 3 & 4-Methylphenol	107	Compound Not Detected.					
	17 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	18 Hexachloroethane	117	Compound Not Detected.					
$	19 Nitrobenzene-d5 (S)	82	5.807	5.813	(0.870)	119709	52.3310	1740
	20 Nitrobenzene	77	Compound Not Detected.					
	21 Isophorone	82	Compound Not Detected.					
	22 2-Nitrophenol	139	Compound Not Detected.					
	23 2,4-Dimethylphenol	107	Compound Not Detected.					

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311418.D
Report Date: 03-Feb-2014 07:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
	24 Benzoic acid	105	Compound Not Detected.						
	25 bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26 2,4-Dichlorophenol	162	Compound Not Detected.						
	27 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28 Naphthalene-d8	136	6.673	6.673	(1.000)	219755	40.0000		(Q)
	29 Naphthalene	128	Compound Not Detected.						
	30 4-Chloroaniline	127	Compound Not Detected.						
	31 Hexachlorobutadiene	225	Compound Not Detected.						
	32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33 2-Methylnaphthalene	142	Compound Not Detected.						
	34 1-Methylnaphthalene	142	Compound Not Detected.						
	35 Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36 2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37 2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38 2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	253819	59.4768	1980	
	39 2-Chloronaphthalene	162	Compound Not Detected.						
	40 2-Nitroaniline	65	Compound Not Detected.						
	41 Dimethylphthalate	163	Compound Not Detected.						
	42 2,6-Dinitrotoluene	165	Compound Not Detected.						
	43 Acenaphthylene	152	Compound Not Detected.						
	44 3-Nitroaniline	138	Compound Not Detected.						
*	45 Acenaphthene-d10	164	8.826	8.831	(1.000)	115179	40.0000		
	46 Acenaphthene	154	Compound Not Detected.						
	47 2,4-Dinitrophenol	184	Compound Not Detected.						
	48 4-Nitrophenol	65	Compound Not Detected.						
	49 2,4-Dinitrotoluene	165	Compound Not Detected.						
	50 Dibenzofuran	168	Compound Not Detected.						
	51 Diethylphthalate	149	Compound Not Detected.						
	52 4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53 4-Nitroaniline	138	Compound Not Detected.						
	54 Fluorene	166	Compound Not Detected.						
	55 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56 N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57 Azobenzene	77	Compound Not Detected.						
	58 1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59 2,4,6-Tribromophenol (S)	330	9.803	9.809	(1.111)	45994	83.2233	2770	
	60 4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61 Hexachlorobenzene	284	Compound Not Detected.						
	62 Pentachlorophenol	266	Compound Not Detected.						
*	63 Phenanthrene-d10	188	10.685	10.690	(1.000)	213510	40.0000		
	64 Phenanthrene	178	Compound Not Detected.						
	65 Anthracene	178	Compound Not Detected.						
	66 Carbazole	167	Compound Not Detected.						
	67 di-n-Butylphthalate	149	Compound Not Detected.						
	68 Fluoranthene	202	Compound Not Detected.						
	69 Benzidine	184	Compound Not Detected.						
	70 Pyrene	202	Compound Not Detected.						
$	71 Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	301610	63.9653	2130	
	72 Butylbenzylphthalate	149	Compound Not Detected.						
	73 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75 Benzo(a)anthracene	228	Compound Not Detected.						
*	76 Chrysene-d12	240	13.992	13.997	(1.000)	221816	40.0000		(Q)
	77 Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311418.D
Report Date: 03-Feb-2014 07:13

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
78	di-n-Octylphthalate	149	Compound Not Detected.					
79	Benzo(b)fluoranthene	252	Compound Not Detected.					
80	Benzo(k)fluoranthene	252	Compound Not Detected.					
81	Benzo(a)pyrene	252	Compound Not Detected.					
* 82	Perylene-d12	264	15.984	15.995	(1.000)	210101	40.0000	
83	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85	Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311418.D
Report Date: 03-Feb-2014 07:13

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311418.D
Lab Smp Id: 10256148004
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	60352	0.27
28 Naphthalene-d8	214969	107485	429938	219755	2.23
45 Acenaphthene-d10	112201	56101	224402	115179	2.65
63 Phenanthrene-d10	205101	102551	410202	213510	4.10
76 Chrysene-d12	220549	110275	441098	221816	0.57
82 Perylene-d12	213057	106529	426114	210101	-1.39

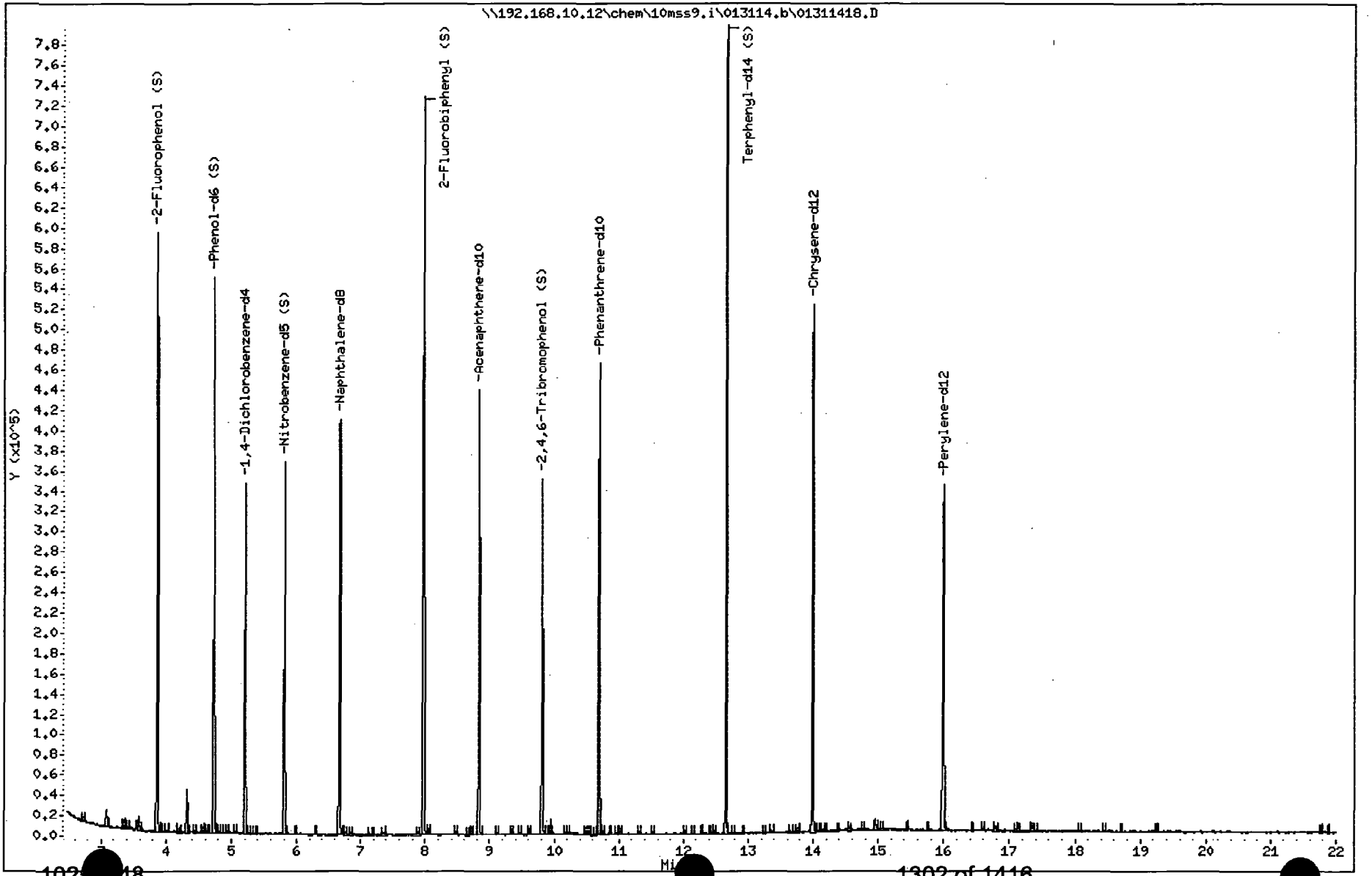
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.06
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.98	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311418.D
Date : 31-JAN-2014 14:48
Client ID:
Sample Info: 10256148004

Instrument: 10mss9.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Data File: \\192.168.10.12\chem\10mss9.i\013114.b/01311418.D
Injection Date: 31-JAN-2014 14:48
Instrument: 10mss9.i
Lab Sample ID: 10256148004
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311419.D
Report Date: 03-Feb-2014 07:14

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311419.D
Lab Smp Id: 10256148005
Inj Date : 31-JAN-2014 15:18
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10256148005
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
1	N-Nitrosodimethylamine	74	Compound Not Detected.					
2	Pyridine	79	Compound Not Detected.					
$ 3	2-Fluorophenol (S)	112	3.863	3.863	(0.742)	158708	75.4817	2520
$ 4	Phenol-d6 (S)	99	4.728	4.734	(0.909)	198291	76.8165	2560
5	Phenol	94	Compound Not Detected.					
6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
7	2-Chlorophenol	128	Compound Not Detected.					
8	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 9	1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	61280	40.0000	
10	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	107	Compound Not Detected.					
14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
15	3 & 4-Methylphenol	107	Compound Not Detected.					
17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
18	Hexachloroethane	117	Compound Not Detected.					
$ 19	Nitrobenzene-d5 (S)	82	5.807	5.813	(0.871)	115478	49.9662	1660
20	Nitrobenzene	77	Compound Not Detected.					
21	Isophorone	82	Compound Not Detected.					
22	2-Nitrophenol	139	Compound Not Detected.					
23	2,4-Dimethylphenol	107	Compound Not Detected.					

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24	Benzoic acid	105	Compound Not Detected.						
	25	bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26	2,4-Dichlorophenol	162	Compound Not Detected.						
	27	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28	Naphthalene-d8	136	6.668	6.673	(1.000)	222021	40.0000		(Q)
	29	Naphthalene	128	Compound Not Detected.						
	30	4-Chloroaniline	127	Compound Not Detected.						
	31	Hexachlorobutadiene	225	Compound Not Detected.						
	32	4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33	2-Methylnaphthalene	142	Compound Not Detected.						
	34	1-Methylnaphthalene	142	Compound Not Detected.						
	35	Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36	2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37	2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38	2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	246897	57.6665	1920	
	39	2-Chloronaphthalene	162	Compound Not Detected.						
	40	2-Nitroaniline	65	Compound Not Detected.						
	41	Dimethylphthalate	163	Compound Not Detected.						
	42	2,6-Dinitrotoluene	165	Compound Not Detected.						
	43	Acenaphthylene	152	Compound Not Detected.						
	44	3-Nitroaniline	138	Compound Not Detected.						
*	45	Acenaphthene-d10	164	8.826	8.831	(1.000)	115555	40.0000		
	46	Acenaphthene	154	Compound Not Detected.						
	47	2,4-Dinitrophenol	184	Compound Not Detected.						
	48	4-Nitrophenol	65	Compound Not Detected.						
	49	2,4-Dinitrotoluene	165	Compound Not Detected.						
	50	Dibenzofuran	168	Compound Not Detected.						
	51	Diethylphthalate	149	Compound Not Detected.						
	52	4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53	4-Nitroaniline	138	Compound Not Detected.						
	54	Fluorene	166	Compound Not Detected.						
	55	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56	N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57	Azobenzene	77	Compound Not Detected.						
	58	1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59	2,4,6-Tribromophenol (S)	330	9.803	9.809	(1.111)	44765	80.7359	2690	
	60	4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61	Hexachlorobenzene	284	Compound Not Detected.						
	62	Pentachlorophenol	266	Compound Not Detected.						
*	63	Phenanthrene-d10	188	10.685	10.690	(1.000)	214542	40.0000		
	64	Phenanthrene	178	Compound Not Detected.						
	65	Anthracene	178	Compound Not Detected.						
	66	Carbazole	167	Compound Not Detected.						
	67	di-n-Butylphthalate	149	Compound Not Detected.						
	68	Fluoranthene	202	Compound Not Detected.						
	69	Benzidine	184	Compound Not Detected.						
	70	Pyrene	202	Compound Not Detected.						
$	71	Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	306898	66.1145	2200	
	72	Butylbenzylphthalate	149	Compound Not Detected.						
	73	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74	3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75	Benzo(a)anthracene	228	Compound Not Detected.						
*	76	Chrysene-d12	240	13.992	13.997	(1.000)	218368	40.0000		(Q)
	77	Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311419.D
Report Date: 03-Feb-2014 07:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	78 di-n-Octylphthalate	149	Compound Not Detected.					
	79 Benzo(b)fluoranthene	252	Compound Not Detected.					
	80 Benzo(k)fluoranthene	252	Compound Not Detected.					
	81 Benzo(a)pyrene	252	Compound Not Detected.					
*	82 Perylene-d12	264	15.984	15.995	(1.000)	209593	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	84 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	85 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311419.D
Report Date: 03-Feb-2014 07:14

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311419.D
Lab Smp Id: 10256148005
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	61280	1.81
28 Naphthalene-d8	214969	107485	429938	222021	3.28
45 Acenaphthene-d10	112201	56101	224402	115555	2.99
63 Phenanthrene-d10	205101	102551	410202	214542	4.60
76 Chrysene-d12	220549	110275	441098	218368	-0.99
82 Perylene-d12	213057	106529	426114	209593	-1.63

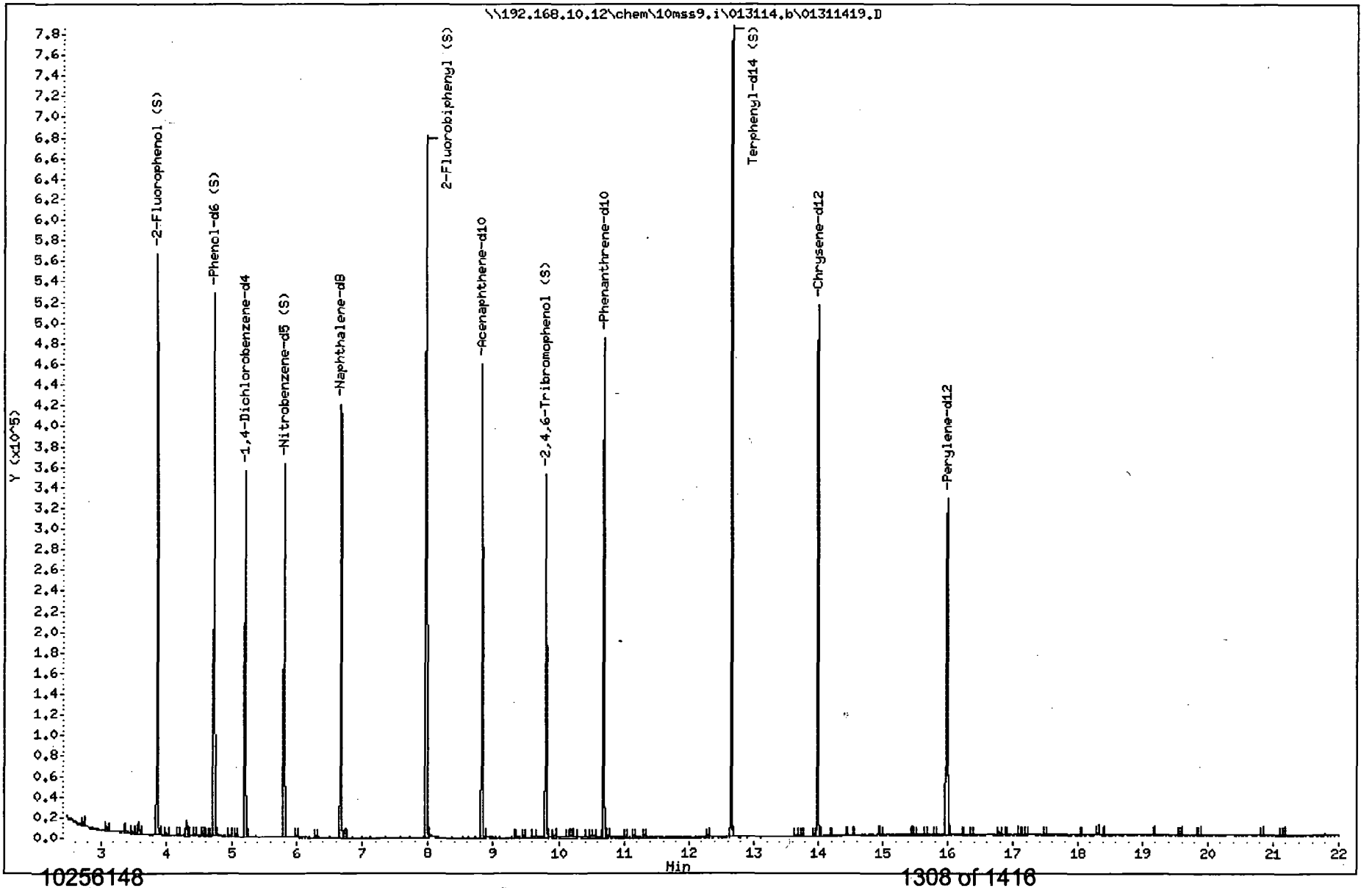
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	-0.08
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.06
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.98	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311419.D
Date : 31-JAN-2014 15:18
Client ID:
Sample Info: 10256148005

Instrument: 10mss9.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Injection Date: 31-JAN-2014 15:18
Instrument: 10mss9.i
Lab Sample ID: 10256148005
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311420.D
Report Date: 03-Feb-2014 07:14

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311420.D
Lab Smp Id: 10256148006
Inj Date : 31-JAN-2014 15:49
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10256148006
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
1	N-Nitrosodimethylamine	74	Compound Not Detected.					
2	Pyridine	79	Compound Not Detected.					
$ 3	2-Fluorophenol (S)	112	3.863	3.863	(0.742)	162166	78.9111	2630
$ 4	Phenol-d6 (S)	99	4.728	4.734	(0.909)	198529	78.6885	2620
5	Phenol	94	Compound Not Detected.					
6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
7	2-Chlorophenol	128	Compound Not Detected.					
8	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 9	1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	59894	40.0000	
10	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	107	Compound Not Detected.					
14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
15	3 & 4-Methylphenol	107	Compound Not Detected.					
17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
18	Hexachloroethane	117	Compound Not Detected.					
$ 19	Nitrobenzene-d5 (S)	82	5.808	5.813	(0.870)	116058	50.7613	1690
20	Nitrobenzene	77	Compound Not Detected.					
21	Isophorone	82	Compound Not Detected.					
22	2-Nitrophenol	139	Compound Not Detected.					
23	2,4-Dimethylphenol	107	Compound Not Detected.					

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24	Benzoic acid	105	Compound Not Detected.						
	25	bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26	2,4-Dichlorophenol	162	Compound Not Detected.						
	27	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28	Naphthalene-d8	136	6.673	6.673	(1.000)	219641	40.0000		(Q)
	29	Naphthalene	128	Compound Not Detected.						
	30	4-Chloroaniline	127	Compound Not Detected.						
	31	Hexachlorobutadiene	225	Compound Not Detected.						
	32	4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33	2-Methylnaphthalene	142	Compound Not Detected.						
	34	1-Methylnaphthalene	142	Compound Not Detected.						
	35	Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36	2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37	2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38	2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	244965	58.4180	1950	
	39	2-Chloronaphthalene	162	Compound Not Detected.						
	40	2-Nitroaniline	65	Compound Not Detected.						
	41	Dimethylphthalate	163	Compound Not Detected.						
	42	2,6-Dinitrotoluene	165	Compound Not Detected.						
	43	Acenaphthylene	152	Compound Not Detected.						
	44	3-Nitroaniline	138	Compound Not Detected.						
*	45	Acenaphthene-d10	164	8.826	8.831	(1.000)	113176	40.0000		
	46	Acenaphthene	154	Compound Not Detected.						
	47	2,4-Dinitrophenol	184	Compound Not Detected.						
	48	4-Nitrophenol	65	Compound Not Detected.						
	49	2,4-Dinitrotoluene	165	Compound Not Detected.						
	50	Dibenzofuran	168	Compound Not Detected.						
	51	Diethylphthalate	149	Compound Not Detected.						
	52	4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53	4-Nitroaniline	138	Compound Not Detected.						
	54	Fluorene	166	Compound Not Detected.						
	55	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56	N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57	Azobenzene	77	Compound Not Detected.						
	58	1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59	2,4,6-Tribromophenol (S)	330	9.804	9.809	(1.111)	46022	84.7478	2820	
	60	4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61	Hexachlorobenzene	284	Compound Not Detected.						
	62	Pentachlorophenol	266	Compound Not Detected.						
*	63	Phenanthrene-d10	188	10.685	10.690	(1.000)	212063	40.0000		
	64	Phenanthrene	178	Compound Not Detected.						
	65	Anthracene	178	Compound Not Detected.						
	66	Carbazole	167	Compound Not Detected.						
	67	di-n-Butylphthalate	149	Compound Not Detected.						
	68	Fluoranthene	202	Compound Not Detected.						
	69	Benzidine	184	Compound Not Detected.						
	70	Pyrene	202	Compound Not Detected.						
$	71	Terphenyl-d14 (S)	244	12.656	12.662	(0.905)	302300	65.7795	2190	
	72	Butylbenzylphthalate	149	Compound Not Detected.						
	73	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74	3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75	Benzo(a)anthracene	228	Compound Not Detected.						
*	76	Chrysene-d12	240	13.992	13.997	(1.000)	216192	40.0000		(Q)
	77	Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\Chem\10mss9.i\013114.b\01311420.D
Report Date: 03-Feb-2014 07:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	78 di-n-Octylphthalate	149	Compound Not Detected.					
	79 Benzo(b)fluoranthene	252	Compound Not Detected.					
	80 Benzo(k)fluoranthene	252	Compound Not Detected.					
	81 Benzo(a)pyrene	252	Compound Not Detected.					
*	82 Perylene-d12	264	15.984	15.995	(1.000)	210677	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	84 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	85 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311420.D
Report Date: 03-Feb-2014 07:14

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311420.D
Lab Smp Id: 10256148006
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	59894	-0.49
28 Naphthalene-d8	214969	107485	429938	219641	2.17
45 Acenaphthene-d10	112201	56101	224402	113176	0.87
63 Phenanthrene-d10	205101	102551	410202	212063	3.39
76 Chrysene-d12	220549	110275	441098	216192	-1.98
82 Perylene-d12	213057	106529	426114	210677	-1.12

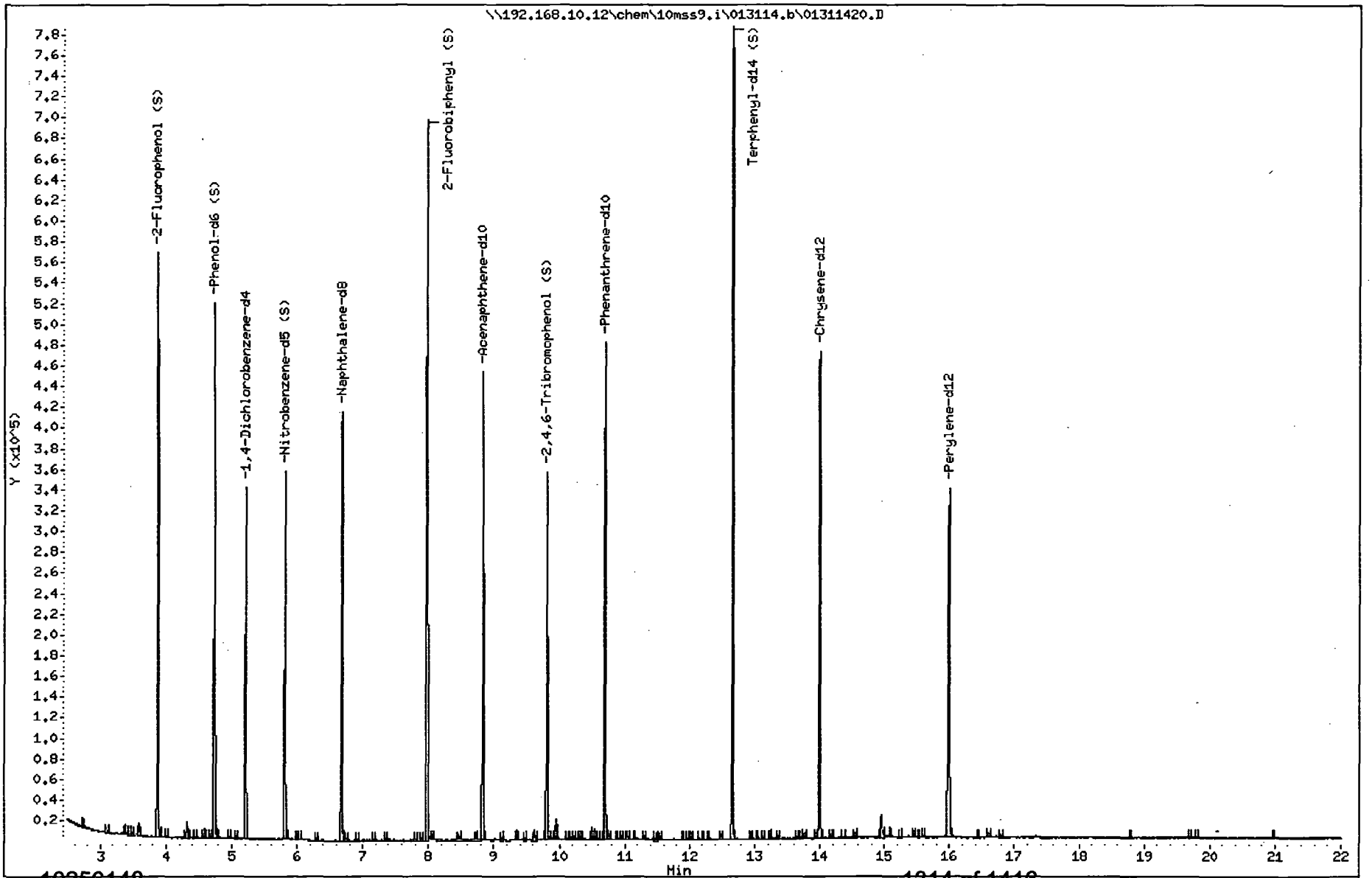
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.06
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.98	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311420.D
Date : 31-JAN-2014 15:49
Client ID:
Sample Info: 10256148006

Instrument: 10mss9.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Injection Date: 31-JAN-2014 15:49
Instrument: 10mss9.i
Lab Sample ID: 10256148006
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data file: \\192.168.10.12\chem\10mss9.i\013114.b\01311421.D
Report Date: 03-Feb-2014 07:14

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311421.D
Lab Smp Id: 10256148007
Inj Date : 31-JAN-2014 16:19
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10256148007
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	Compound Not Detected.					
	2 Pyridine	79	Compound Not Detected.					
$	3 2-Fluorophenol (S)	112	3.863	3.863	(0.742)	143055	68.2130	2270
$	4 Phenol-d6 (S)	99	4.728	4.734	(0.909)	177448	68.9198	2300
	5 Phenol	94	Compound Not Detected.					
	6 bis(2-Chloroethyl)ether	63	Compound Not Detected.					
	7 2-Chlorophenol	128	Compound Not Detected.					
	8 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	9 1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	61122	40.0000	
	10 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	107	Compound Not Detected.					
	14 bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
	15 3 & 4-Methylphenol	107	Compound Not Detected.					
	17 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	18 Hexachloroethane	117	Compound Not Detected.					
$	19 Nitrobenzene-d5 (S)	82	5.808	5.813	(0.870)	102850	44.1867	1470
	20 Nitrobenzene	77	Compound Not Detected.					
	21 Isophorone	82	Compound Not Detected.					
	22 2-Nitrophenol	139	Compound Not Detected.					
	23 2,4-Dimethylphenol	107	Compound Not Detected.					

			Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
	24		Benzoic acid	105	Compound Not Detected.						
	25		bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26		2,4-Dichlorophenol	162	Compound Not Detected.						
	27		1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28		Naphthalene-d8	136	6.673	6.673	(1.000)	223606	40.0000		(Q)
	29		Naphthalene	128	Compound Not Detected.						
	30		4-Chloroaniline	127	Compound Not Detected.						
	31		Hexachlorobutadiene	225	Compound Not Detected.						
	32		4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33		2-Methylnaphthalene	142	Compound Not Detected.						
	34		1-Methylnaphthalene	142	Compound Not Detected.						
	35		Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36		2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37		2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38		2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	219886	50.5317	1680	
	39		2-Chloronaphthalene	162	Compound Not Detected.						
	40		2-Nitroaniline	65	Compound Not Detected.						
	41		Dimethylphthalate	163	Compound Not Detected.						
	42		2,6-Dinitrotoluene	165	Compound Not Detected.						
	43		Acenaphthylene	152	Compound Not Detected.						
	44		3-Nitroaniline	138	Compound Not Detected.						
*	45		Acenaphthene-d10	164	8.826	8.831	(1.000)	117444	40.0000		
	46		Acenaphthene	154	Compound Not Detected.						
	47		2,4-Dinitrophenol	184	Compound Not Detected.						
	48		4-Nitrophenol	65	Compound Not Detected.						
	49		2,4-Dinitrotoluene	165	Compound Not Detected.						
	50		Dibenzofuran	168	Compound Not Detected.						
	51		Diethylphthalate	149	Compound Not Detected.						
	52		4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53		4-Nitroaniline	138	Compound Not Detected.						
	54		Fluorene	166	Compound Not Detected.						
	55		4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56		N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57		Azobenzene	77	Compound Not Detected.						
	58		1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59		2,4,6-Tribromophenol (S)	330	9.804	9.809	(1.111)	46528	82.5659	2750	
	60		4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61		Hexachlorobenzene	284	Compound Not Detected.						
	62		Pentachlorophenol	266	Compound Not Detected.						
*	63		Phenanthrene-d10	188	10.685	10.690	(1.000)	218478	40.0000		
	64		Phenanthrene	178	Compound Not Detected.						
	65		Anthracene	178	Compound Not Detected.						
	66		Carbazole	167	Compound Not Detected.						
	67		di-n-Butylphthalate	149	Compound Not Detected.						
	68		Fluoranthene	202	Compound Not Detected.						
	69		Benzidine	184	Compound Not Detected.						
	70		Pyrene	202	Compound Not Detected.						
$	71		Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	299346	63.0777	2100	
	72		Butylbenzylphthalate	149	Compound Not Detected.						
	73		bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74		3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75		Benzo(a)anthracene	228	Compound Not Detected.						
*	76		Chrysene-d12	240	13.992	13.997	(1.000)	223249	40.0000		(Q)
	77		Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311421.D
Report Date: 03-Feb-2014 07:14

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
78 di-n-Octylphthalate	149	Compound Not Detected.					
79 Benzo(b)fluoranthene	252	Compound Not Detected.					
80 Benzo(k)fluoranthene	252	Compound Not Detected.					
81 Benzo(a)pyrene	252	Compound Not Detected.					
* 82 Perylene-d12	264	15.984	15.995	(1.000)	212676	40.0000	
83 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
84 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
85 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311421.D
Report Date: 03-Feb-2014 07:14

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311421.D
Lab Smp Id: 10256148007
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	61122	1.55
28 Naphthalene-d8	214969	107485	429938	223606	4.02
45 Acenaphthene-d10	112201	56101	224402	117444	4.67
63 Phenanthrene-d10	205101	102551	410202	218478	6.52
76 Chrysene-d12	220549	110275	441098	223249	1.22
82 Perylene-d12	213057	106529	426114	212676	-0.18

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.06
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.98	-0.07

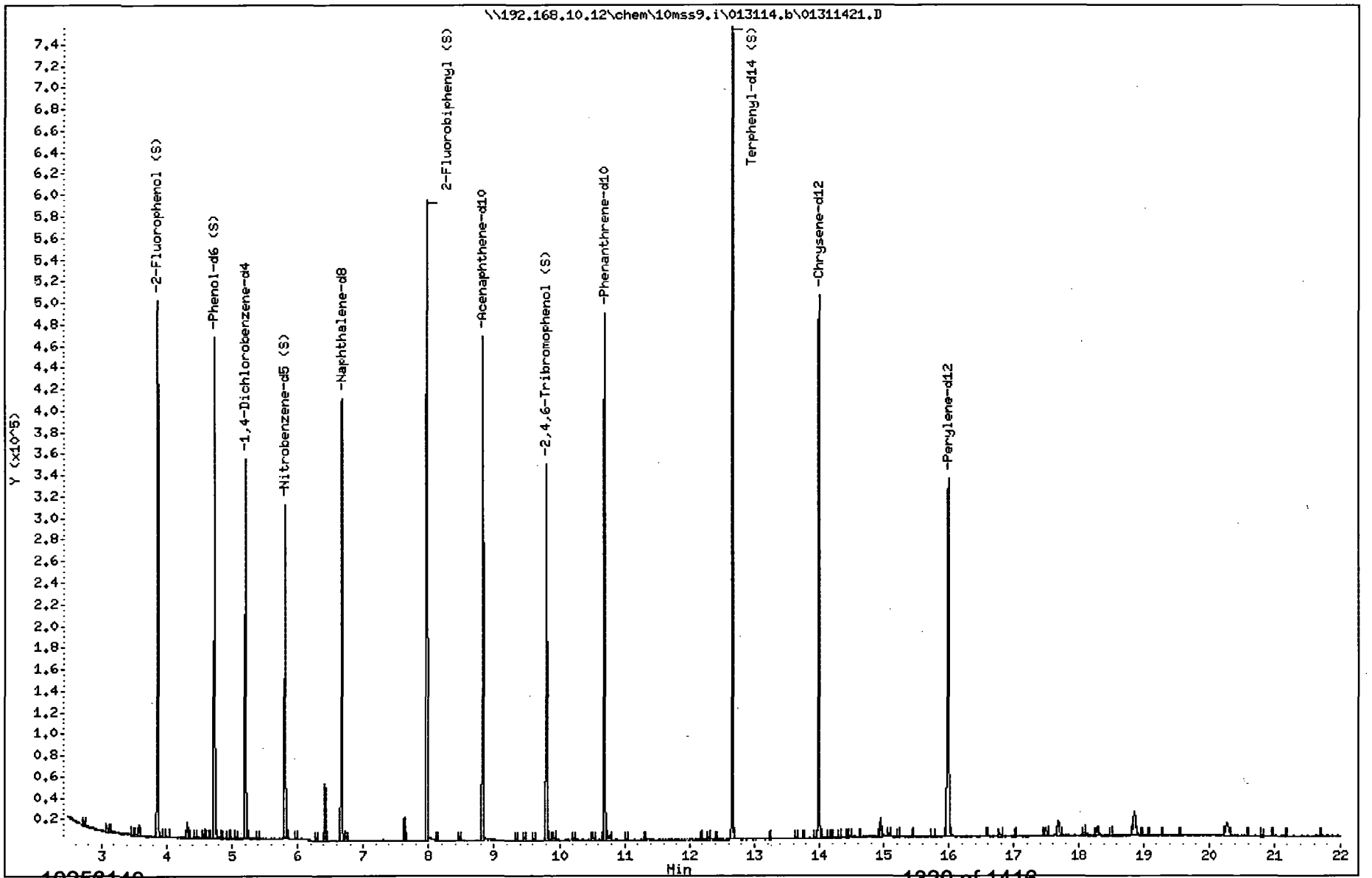
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311421.D
Date : 31-JAN-2014 16:19
Client ID:
Sample Info: 10256148007

Instrument: 10mss9.i

Operator: JLR
Column diameter: 0.25

Column phase: DB-5MS



Injection Date: 31-JAN-2014 16:19
Instrument: 10mss9.i
Lab Sample ID: 10256148007
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311422.D
Report Date: 03-Feb-2014 07:15

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311422.D
Lab Smp Id: 10256148008
Inj Date : 31-JAN-2014 16:49
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10256148008
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
1	N-Nitrosodimethylamine	74	Compound Not Detected.					
2	Pyridine	79	Compound Not Detected.					
$ 3	2-Fluorophenol (S)	112	3.863	3.863	(0.742)	163632	78.9940	2630
$ 4	Phenol-d6 (S)	99	4.728	4.734	(0.909)	204340	80.3504	2680
5	Phenol	94	Compound Not Detected.					
6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
7	2-Chlorophenol	128	Compound Not Detected.					
8	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 9	1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	60372	40.0000	
10	1,4-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	79	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
13	2-Methylphenol	107	Compound Not Detected.					
14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
15	3 & 4-Methylphenol	107	Compound Not Detected.					
17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
18	Hexachloroethane	117	Compound Not Detected.					
$ 19	Nitrobenzene-d5 (S)	82	5.807	5.813	(0.871)	119157	52.6000	1750
20	Nitrobenzene	77	Compound Not Detected.					
21	Isophorone	82	Compound Not Detected.					
22	2-Nitrophenol	139	Compound Not Detected.					
23	2,4-Dimethylphenol	107	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
	24 Benzoic acid	105	Compound Not Detected.						
	25 bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26 2,4-Dichlorophenol	162	Compound Not Detected.						
	27 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28 Naphthalene-d8	136	6.668	6.673	(1.000)	217623	40.0000		(Q)
	29 Naphthalene	128	Compound Not Detected.						
	30 4-Chloroaniline	127	Compound Not Detected.						
	31 Hexachlorobutadiene	225	Compound Not Detected.						
	32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33 2-Methylnaphthalene	142	Compound Not Detected.						
	34 1-Methylnaphthalene	142	Compound Not Detected.						
	35 Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36 2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37 2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38 2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	253334	59.7658	1990	
	39 2-Chloronaphthalene	162	Compound Not Detected.						
	40 2-Nitroaniline	65	Compound Not Detected.						
	41 Dimethylphthalate	163	Compound Not Detected.						
	42 2,6-Dinitrotoluene	165	Compound Not Detected.						
	43 Acenaphthylene	152	Compound Not Detected.						
	44 3-Nitroaniline	138	Compound Not Detected.						
*	45 Acenaphthene-d10	164	8.826	8.831	(1.000)	114403	40.0000		
	46 Acenaphthene	154	Compound Not Detected.						
	47 2,4-Dinitrophenol	184	Compound Not Detected.						
	48 4-Nitrophenol	65	Compound Not Detected.						
	49 2,4-Dinitrotoluene	165	Compound Not Detected.						
	50 Dibenzofuran	168	Compound Not Detected.						
	51 Diethylphthalate	149	Compound Not Detected.						
	52 4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53 4-Nitroaniline	138	Compound Not Detected.						
	54 Fluorene	166	Compound Not Detected.						
	55 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56 N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57 Azobenzene	77	Compound Not Detected.						
	58 1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59 2,4,6-Tribromophenol (S)	330	9.803	9.809	(1.111)	46310	84.3635	2810	
	60 4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61 Hexachlorobenzene	284	Compound Not Detected.						
	62 Pentachlorophenol	266	Compound Not Detected.						
*	63 Phenanthrene-d10	188	10.685	10.690	(1.000)	211114	40.0000		
	64 Phenanthrene	178	Compound Not Detected.						
	65 Anthracene	178	Compound Not Detected.						
	66 Carbazole	167	Compound Not Detected.						
	67 di-n-Butylphthalate	149	Compound Not Detected.						
	68 Fluoranthene	202	Compound Not Detected.						
	69 Benzidine	184	Compound Not Detected.						
	70 Pyrene	202	Compound Not Detected.						
$	71 Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	310200	66.6419	2220	
	72 Butylbenzylphthalate	149	Compound Not Detected.						
	73 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75 Benzo(a)anthracene	228	Compound Not Detected.						
*	76 Chrysene-d12	240	13.992	13.997	(1.000)	218971	40.0000		(Q)
	77 Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311422.D
Report Date: 03-Feb-2014 07:15

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	78 di-n-Octylphthalate	149	Compound Not Detected.					
	79 Benzo(b)fluoranthene	252	Compound Not Detected.					
	80 Benzo(k)fluoranthene	252	Compound Not Detected.					
	81 Benzo(a)pyrene	252	Compound Not Detected.					
*	82 Perylene-d12	264	15.984	15.995	(1.000)	209271	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	84 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	85 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311422.D
Report Date: 03-Feb-2014 07:15

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311422.D
Lab Smp Id: 10256148008
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	60372	0.30
28 Naphthalene-d8	214969	107485	429938	217623	1.23
45 Acenaphthene-d10	112201	56101	224402	114403	1.96
63 Phenanthrene-d10	205101	102551	410202	211114	2.93
76 Chrysene-d12	220549	110275	441098	218971	-0.72
82 Perylene-d12	213057	106529	426114	209271	-1.78

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	-0.08
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.06
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.98	-0.07

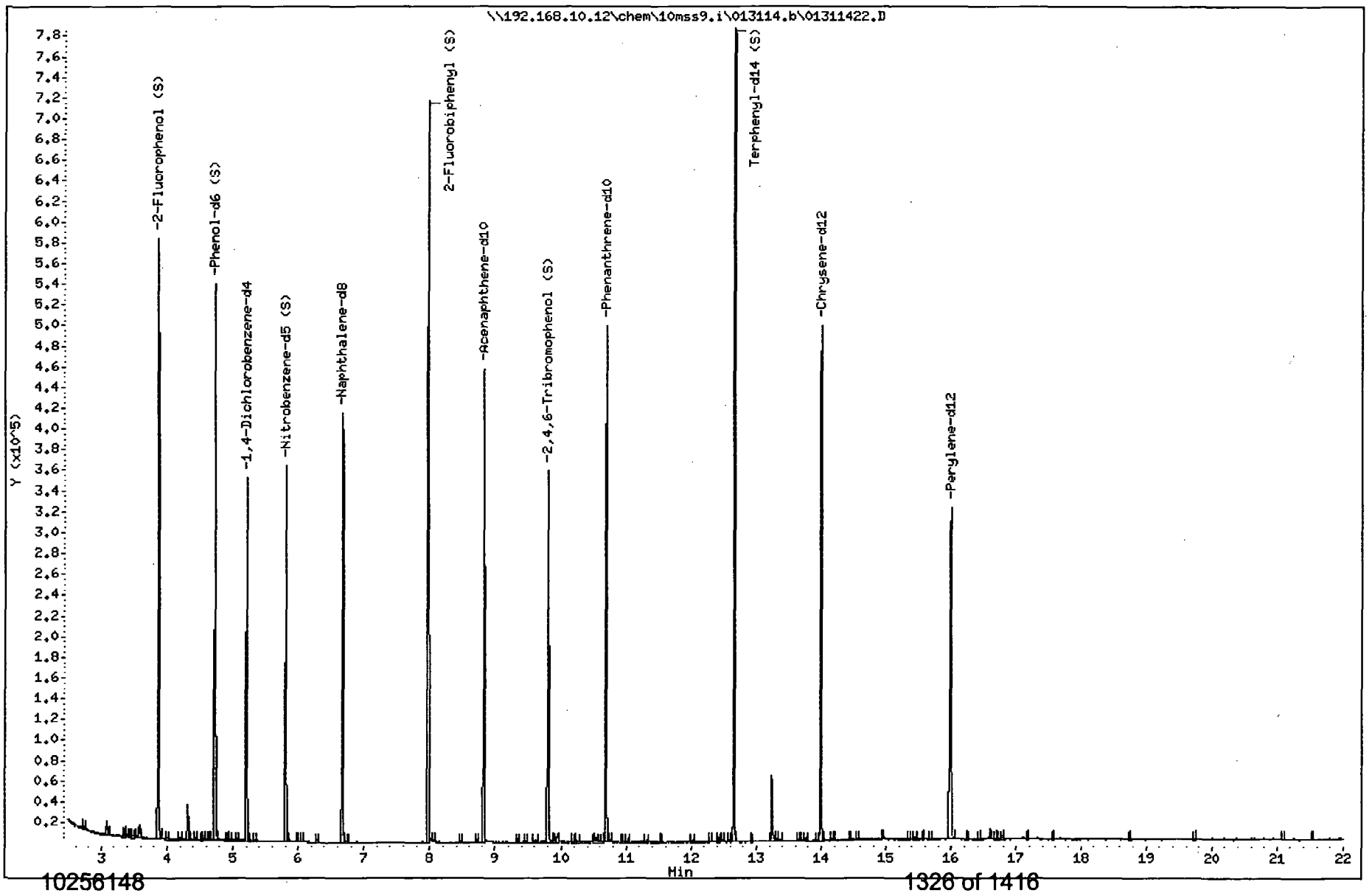
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311422.D
Date : 31-JAN-2014 16:49
Client ID:
Sample Info: 10256148008

Instrument: 10mss9.i

Operator: JLR
Column diameter: 0.25

Column phase: DB-5MS



Injection Date: 31-JAN-2014 16:49
Instrument: 10mss9.i
Lab Sample ID: 10256148008
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311423.D
Report Date: 03-Feb-2014 07:15

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311423.D
Lab Smp Id: 10256148009
Inj Date : 31-JAN-2014 17:19
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10256148009
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	1	N-Nitrosodimethylamine	74	Compound Not Detected.					
	2	Pyridine	79	Compound Not Detected.					
$	3	2-Fluorophenol (S)	112	3.863	3.863	(0.742)	157417	74.7676	2490
$	4	Phenol-d6 (S)	99	4.728	4.734	(0.909)	199164	77.0516	2570
	5	Phenol	94	Compound Not Detected.					
	6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
	7	2-Chlorophenol	128	Compound Not Detected.					
	8	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	9	1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	61362	40.0000	
	10	1,4-Dichlorobenzene	146	Compound Not Detected.					
	11	Benzyl alcohol	79	Compound Not Detected.					
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	13	2-Methylphenol	107	Compound Not Detected.					
	14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
	15	3 & 4-Methylphenol	107	Compound Not Detected.					
	17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	18	Hexachloroethane	117	Compound Not Detected.					
$	19	Nitrobenzene-d5 (S)	82	5.807	5.813	(0.870)	114713	49.3175	1640
	20	Nitrobenzene	77	Compound Not Detected.					
	21	Isophorone	82	Compound Not Detected.					
	22	2-Nitrophenol	139	Compound Not Detected.					
	23	2,4-Dimethylphenol	107	Compound Not Detected.					

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/Kg)	
	24	Benzoic acid	105	Compound Not Detected.						
	25	bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26	2,4-Dichlorophenol	162	Compound Not Detected.						
	27	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28	Naphthalene-d8	136	6.673	6.673	(1.000)	223451	40.0000		(Q)
	29	Naphthalene	128	Compound Not Detected.						
	30	4-Chloroaniline	127	Compound Not Detected.						
	31	Hexachlorobutadiene	225	Compound Not Detected.						
	32	4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33	2-Methylnaphthalene	142	Compound Not Detected.						
	34	1-Methylnaphthalene	142	Compound Not Detected.						
	35	Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36	2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37	2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38	2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	242690	56.7763	1890	
	39	2-Chloronaphthalene	162	Compound Not Detected.						
	40	2-Nitroaniline	65	Compound Not Detected.						
	41	Dimethylphthalate	163	Compound Not Detected.						
	42	2,6-Dinitrotoluene	165	Compound Not Detected.						
	43	Acenaphthylene	152	Compound Not Detected.						
	44	3-Nitroaniline	138	Compound Not Detected.						
*	45	Acenaphthene-d10	164	8.826	8.831	(1.000)	115367	40.0000		
	46	Acenaphthene	154	Compound Not Detected.						
	47	2,4-Dinitrophenol	184	Compound Not Detected.						
	48	4-Nitrophenol	65	Compound Not Detected.						
	49	2,4-Dinitrotoluene	165	Compound Not Detected.						
	50	Dibenzofuran	168	Compound Not Detected.						
	51	Diethylphthalate	149	Compound Not Detected.						
	52	4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53	4-Nitroaniline	138	Compound Not Detected.						
	54	Fluorene	166	Compound Not Detected.						
	55	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56	N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57	Azobenzene	77	Compound Not Detected.						
	58	1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59	2,4,6-Tribromophenol (S)	330	9.803	9.809	(1.111)	45344	81.9135	2730	
	60	4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61	Hexachlorobenzene	284	Compound Not Detected.						
	62	Pentachlorophenol	266	Compound Not Detected.						
*	63	Phenanthrene-d10	188	10.685	10.690	(1.000)	213326	40.0000		
	64	Phenanthrene	178	Compound Not Detected.						
	65	Anthracene	178	Compound Not Detected.						
	66	Carbazole	167	Compound Not Detected.						
	67	di-n-Butylphthalate	149	Compound Not Detected.						
	68	Fluoranthene	202	Compound Not Detected.						
	69	Benzidine	184	Compound Not Detected.						
	70	Pyrene	202	Compound Not Detected.						
$	71	Terphenyl-d14 (S)	244	12.662	12.662	(0.905)	305989	65.6535	2190	
	72	Butylbenzylphthalate	149	Compound Not Detected.						
	73	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74	3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75	Benzo(a)anthracene	228	Compound Not Detected.						
*	76	Chrysene-d12	240	13.992	13.997	(1.000)	219250	40.0000		(Q)
	77	Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311423.d
Report Date: 03-Feb-2014 07:15

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	78 di-n-Octylphthalate	149	Compound Not Detected.					
	79 Benzo(b)fluoranthene	252	Compound Not Detected.					
	80 Benzo(k)fluoranthene	252	Compound Not Detected.					
	81 Benzo(a)pyrene	252	Compound Not Detected.					
*	82 Perylene-d12	264	15.984	15.995	(1.000)	208121	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	84 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	85 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311423.D
Report Date: 03-Feb-2014 07:15

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311423.D
Lab Smp Id: 10256148009
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

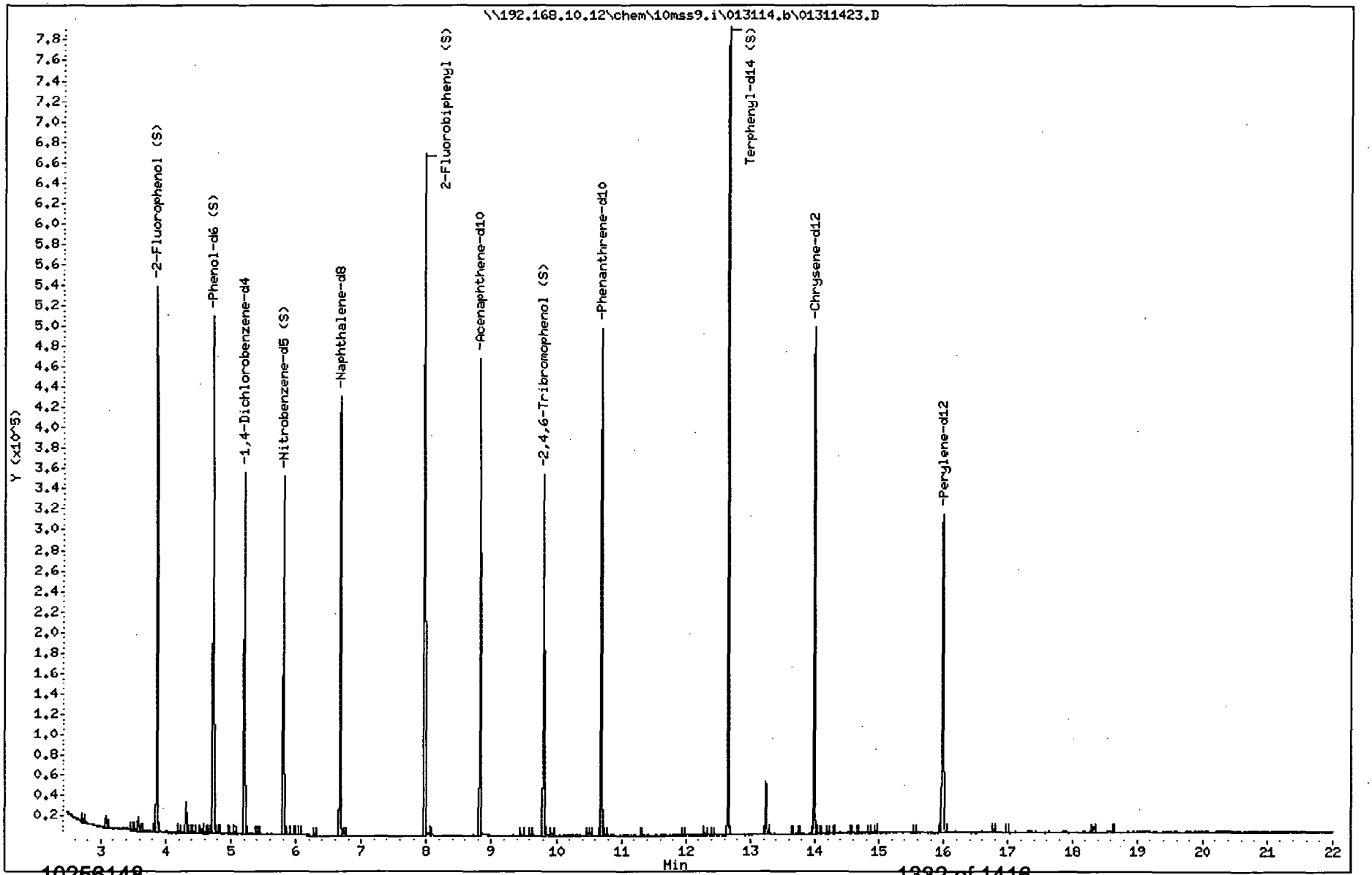
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	61362	1.95
28 Naphthalene-d8	214969	107485	429938	223451	3.95
45 Acenaphthene-d10	112201	56101	224402	115367	2.82
63 Phenanthrene-d10	205101	102551	410202	213326	4.01
76 Chrysene-d12	220549	110275	441098	219250	-0.59
82 Perylene-d12	213057	106529	426114	208121	-2.32

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	-0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	-0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.06
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.98	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311423.D
Date : 31-JAN-2014 17:19
Client ID:
Sample Info: 10256148009

Instrument: 10mss9.i
Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Injection Date: 31-JAN-2014 17:19
Instrument: 10mss9.i
Lab Sample ID: 10256148009
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data file: \\192.168.10.12\chem\10mss9.i\013114.b\01311426.D
Report Date: 03-Feb-2014 07:16

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\013114.b\01311426.D
Lab Smp Id: 10256148010
Inj Date : 31-JAN-2014 18:49
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10256148010
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Meth Date : 31-Jan-2014 12:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	1 N-Nitrosodimethylamine	74	Compound Not Detected.					
	2 Pyridine	79	Compound Not Detected.					
$	3 2-Fluorophenol (S)	112	3.863	3.863	(0.742)	162739	77.9496	2600
$	4 Phenol-d6 (S)	99	4.728	4.734	(0.909)	200316	78.1532	2600
	5 Phenol	94	Compound Not Detected.					
	6 bis(2-Chloroethyl)ether	63	Compound Not Detected.					
	7 2-Chlorophenol	128	Compound Not Detected.					
	8 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	9 1,4-Dichlorobenzene-d4	152	5.204	5.204	(1.000)	60847	40.0000	
	10 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	107	Compound Not Detected.					
	14 bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
	15 3 & 4-Methylphenol	107	Compound Not Detected.					
	17 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	18 Hexachloroethane	117	Compound Not Detected.					
$	19 Nitrobenzene-d5 (S)	82	5.807	5.813	(0.870)	117332	50.7610	1690
	20 Nitrobenzene	77	Compound Not Detected.					
	21 Isophorone	82	Compound Not Detected.					
	22 2-Nitrophenol	139	Compound Not Detected.					
	23 2,4-Dimethylphenol	107	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24 Benzoic acid	105	Compound Not Detected.						
	25 bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26 2,4-Dichlorophenol	162	Compound Not Detected.						
	27 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28 Naphthalene-d8	136	6.673	6.673	(1.000)	222053	40.0000		(Q)
	29 Naphthalene	128	Compound Not Detected.						
	30 4-Chloroaniline	127	Compound Not Detected.						
	31 Hexachlorobutadiene	225	Compound Not Detected.						
	32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33 2-Methylnaphthalene	142	Compound Not Detected.						
	34 1-Methylnaphthalene	142	Compound Not Detected.						
	35 Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36 2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37 2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38 2-Fluorobiphenyl (S)	172	7.971	7.971	(0.903)	254179	59.3751	1980	
	39 2-Chloronaphthalene	162	Compound Not Detected.						
	40 2-Nitroaniline	65	Compound Not Detected.						
	41 Dimethylphthalate	163	Compound Not Detected.						
	42 2,6-Dinitrotoluene	165	Compound Not Detected.						
	43 Acenaphthylene	152	Compound Not Detected.						
	44 3-Nitroaniline	138	Compound Not Detected.						
*	45 Acenaphthene-d10	164	8.826	8.831	(1.000)	115540	40.0000		
	46 Acenaphthene	154	Compound Not Detected.						
	47 2,4-Dinitrophenol	184	Compound Not Detected.						
	48 4-Nitrophenol	65	Compound Not Detected.						
	49 2,4-Dinitrotoluene	165	Compound Not Detected.						
	50 Dibenzofuran	168	Compound Not Detected.						
	51 Diethylphthalate	149	Compound Not Detected.						
	52 4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53 4-Nitroaniline	138	Compound Not Detected.						
	54 Fluorene	166	Compound Not Detected.						
	55 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56 N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57 Azobenzene	77	Compound Not Detected.						
	58 1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59 2,4,6-Tribromophenol (S)	330	9.803	9.809	(1.111)	43106	77.7539	2590	
	60 4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61 Hexachlorobenzene	284	Compound Not Detected.						
	62 Pentachlorophenol	266	Compound Not Detected.						
*	63 Phenanthrene-d10	188	10.685	10.690	(1.000)	216365	40.0000		
	64 Phenanthrene	178	Compound Not Detected.						
	65 Anthracene	178	Compound Not Detected.						
	66 Carbazole	167	Compound Not Detected.						
	67 di-n-Butylphthalate	149	Compound Not Detected.						
	68 Fluoranthene	202	Compound Not Detected.						
	69 Benzidine	184	Compound Not Detected.						
	70 Pyrene	202	Compound Not Detected.						
$	71 Terphenyl-d14 (S)	244	12.656	12.662	(0.905)	294130	63.4159	2110	
	72 Butylbenzylphthalate	149	Compound Not Detected.						
	73 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75 Benzo(a)anthracene	228	Compound Not Detected.						
*	76 Chrysene-d12	240	13.992	13.997	(1.000)	218189	40.0000		(Q)
	77 Chrysene	228	Compound Not Detected.						

Data File: \\192.168.10.12\Chem\10mss9.i\013114.b\0131426.D
Report Date: 03-Feb-2014 07:16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	78 di-n-Octylphthalate	149	Compound Not Detected.					
	79 Benzo(b)fluoranthene	252	Compound Not Detected.					
	80 Benzo(k)fluoranthene	252	Compound Not Detected.					
	81 Benzo(a)pyrene	252	Compound Not Detected.					
*	82 Perylene-d12	264	15.984	15.995	(1.000)	209483	40.0000	
	83 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	84 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	85 Benzo(g,h,i)perylene	276	Compound Not Detected.					

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311426.D
Report Date: 03-Feb-2014 07:16

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10mss9.i
Lab File ID: 01311426.D
Lab Smp Id: 10256148010
Analysis Type: SV
Quant Type: ISTD
Operator: JLR
Method File: \\192.168.10.12\chem\10mss9.i\013114.b\013014-8270MSS9.m
Misc Info: 10257

Calibration Date: 31-JAN-2014
Calibration Time: 07:18
Level: MED
Sample Type: SOIL

Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	60191	30096	120382	60847	1.09
28 Naphthalene-d8	214969	107485	429938	222053	3.30
45 Acenaphthene-d10	112201	56101	224402	115540	2.98
63 Phenanthrene-d10	205101	102551	410202	216365	5.49
76 Chrysene-d12	220549	110275	441098	218189	-1.07
82 Perylene-d12	213057	106529	426114	209483	-1.68

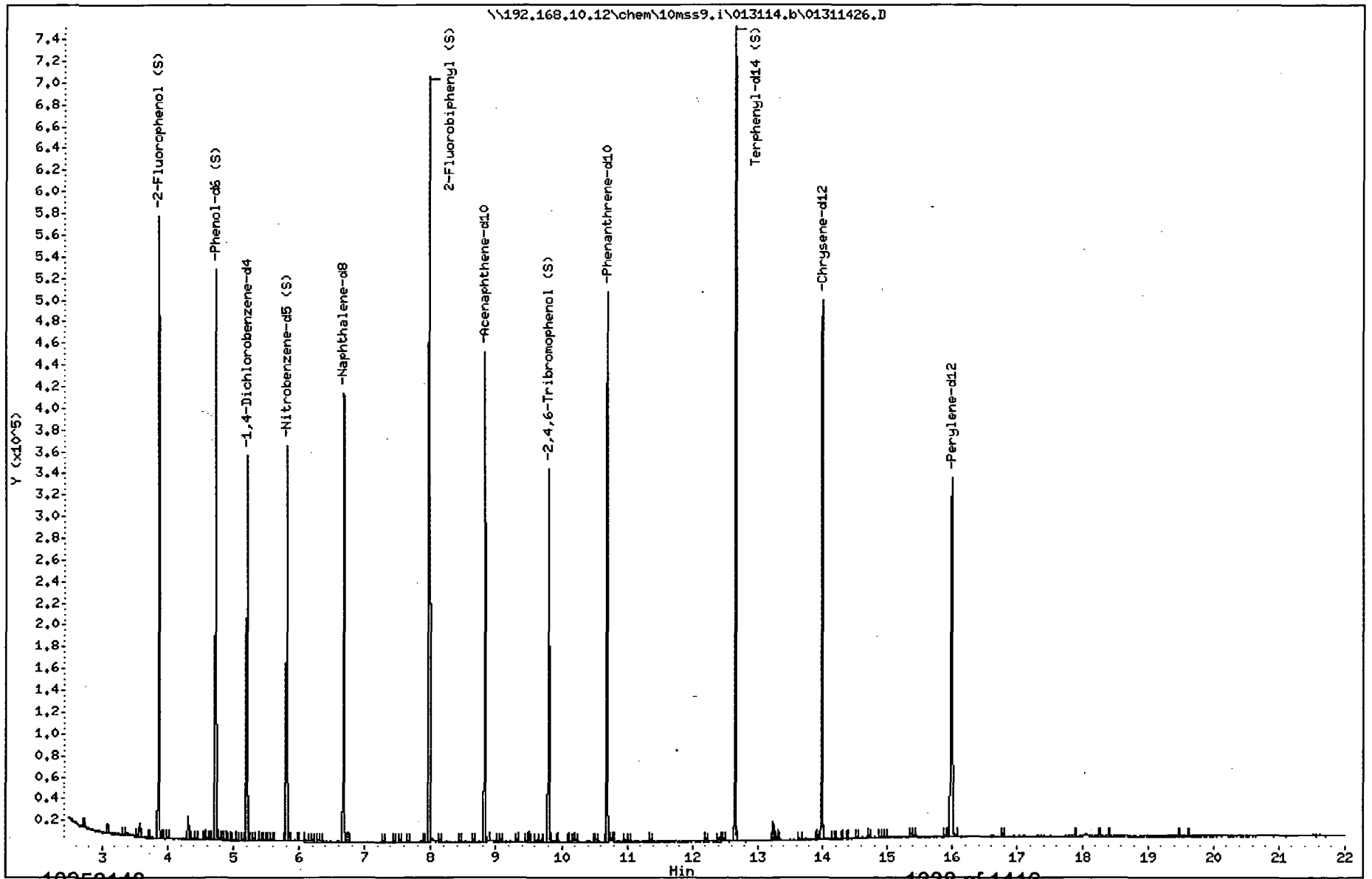
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 1,4-Dichlorobenze	5.20	4.70	5.70	5.20	-0.00
28 Naphthalene-d8	6.67	6.17	7.17	6.67	-0.00
45 Acenaphthene-d10	8.83	8.33	9.33	8.83	-0.06
63 Phenanthrene-d10	10.69	10.19	11.19	10.69	-0.05
76 Chrysene-d12	14.00	13.50	14.50	13.99	-0.04
82 Perylene-d12	16.00	15.50	16.50	15.98	-0.07

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10mss9.i\013114.b\01311426.D
Date : 31-JAN-2014 18:49
Client ID:
Sample Info: 10256148010

Instrument: 10mss9.i

Operator: JLR
Column phase: DB-5MS
Column diameter: 0.25



Injection Date: 31-JAN-2014 18:49
Instrument: 10mss9.i
Lab Sample ID: 10256148010
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Data File: \\192.168.10.12\chem\10mss9.i\020314.b\02031410.D
Report Date: 03-Feb-2014 14:40

Pace Analytical Services, Inc.

Semivolatile REPORT SW-846 Method 8270/EPA 625

Data file : \\192.168.10.12\chem\10mss9.i\020314.b\02031410.D
Lab Smp Id: 10256148011
Inj Date : 03-FEB-2014 10:44
Operator : JLR Inst ID: 10mss9.i
Smp Info : 10256148011
Misc Info : 10257
Comment : RCRA 8270C/625 - SEMIVOLATILES
Method : \\192.168.10.12\chem\10mss9.i\020314.b\013014-8270MSS9.m
Meth Date : 03-Feb-2014 07:53 jlries Quant Type: ISTD
Cal Date : 30-JAN-2014 12:01 Cal File: 01301409.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: noacetophenone.sub
Target Version: 4.14
Processing Host: 10MNJRWKS

Concentration Formula: Amt * DF * / (Ws * (100-M) / 100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Ws	0.03000	Weight of Sample Extracted (kg)
M	0.00000	%Moisture
Cpnd Variable		Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)
	1	N-Nitrosodimethylamine	74	Compound Not Detected.					
	2	Pyridine	79	Compound Not Detected.					
$	3	2-Fluorophenol (S)	112	3.863	3.863	(0.743)	166609	76.3165	2540
$	4	Phenol-d6 (S)	99	4.728	4.728	(0.910)	209484	78.1592	2600
	5	Phenol	94	Compound Not Detected.					
	6	bis(2-Chloroethyl)ether	63	Compound Not Detected.					
	7	2-Chlorophenol	128	Compound Not Detected.					
	8	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	9	1,4-Dichlorobenzene-d4	152	5.198	5.204	(1.000)	63627	40.0000	
	10	1,4-Dichlorobenzene	146	Compound Not Detected.					
	11	Benzyl alcohol	79	Compound Not Detected.					
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	13	2-Methylphenol	107	Compound Not Detected.					
	14	bis(2-Chloroisopropyl) ether	45	Compound Not Detected.					
	15	3 & 4-Methylphenol	107	Compound Not Detected.					
	17	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	18	Hexachloroethane	117	Compound Not Detected.					
$	19	Nitrobenzene-d5 (S)	82	5.807	5.807	(0.871)	120959	49.7594	1660
	20	Nitrobenzene	77	Compound Not Detected.					
	21	Isophorone	82	Compound Not Detected.					
	22	2-Nitrophenol	139	Compound Not Detected.					
	23	2,4-Dimethylphenol	107	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/Kg)	
	24 Benzoic acid	105	Compound Not Detected.						
	25 bis(2-Chloroethoxy)methane	93	Compound Not Detected.						
	26 2,4-Dichlorophenol	162	Compound Not Detected.						
	27 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	28 Naphthalene-d8	136	6.667	6.668	(1.000)	233525	40.0000		(Q)
	29 Naphthalene	128	Compound Not Detected.						
	30 4-Chloroaniline	127	Compound Not Detected.						
	31 Hexachlorobutadiene	225	Compound Not Detected.						
	32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
	33 2-Methylnaphthalene	142	Compound Not Detected.						
	34 1-Methylnaphthalene	142	Compound Not Detected.						
	35 Hexachlorocyclopentadiene	237	Compound Not Detected.						
	36 2,4,6-Trichlorophenol	196	Compound Not Detected.						
	37 2,4,5-Trichlorophenol	196	Compound Not Detected.						
$	38 2-Fluorobiphenyl (S)	172	7.966	7.966	(0.903)	256345	57.0103	1900	
	39 2-Chloronaphthalene	162	Compound Not Detected.						
	40 2-Nitroaniline	65	Compound Not Detected.						
	41 Dimethylphthalate	163	Compound Not Detected.						
	42 2,6-Dinitrotoluene	165	Compound Not Detected.						
	43 Acenaphthylene	152	Compound Not Detected.						
	44 3-Nitroaniline	138	Compound Not Detected.						
*	45 Acenaphthene-d10	164	8.826	8.826	(1.000)	121358	40.0000		
	46 Acenaphthene	154	Compound Not Detected.						
	47 2,4-Dinitrophenol	184	Compound Not Detected.						
	48 4-Nitrophenol	65	Compound Not Detected.						
	49 2,4-Dinitrotoluene	165	Compound Not Detected.						
	50 Dibenzofuran	168	Compound Not Detected.						
	51 Diethylphthalate	149	Compound Not Detected.						
	52 4-Chlorophenylphenyl ether	204	Compound Not Detected.						
	53 4-Nitroaniline	138	Compound Not Detected.						
	54 Fluorene	166	Compound Not Detected.						
	55 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
	56 N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57 Azobenzene	77	Compound Not Detected.						
	58 1,2-Diphenylhydrazine	77	Compound Not Detected.						
$	59 2,4,6-Tribromophenol (S)	330	9.798	9.803	(1.110)	45677	78.4416	2610	
	60 4-Bromophenylphenyl ether	248	Compound Not Detected.						
	61 Hexachlorobenzene	284	Compound Not Detected.						
	62 Pentachlorophenol	266	Compound Not Detected.						
*	63 Phenanthrene-d10	188	10.679	10.685	(1.000)	226043	40.0000		
	64 Phenanthrene	178	Compound Not Detected.						
	65 Anthracene	178	Compound Not Detected.						
	66 Carbazole	167	Compound Not Detected.						
	67 di-n-Butylphthalate	149	Compound Not Detected.						
	68 Fluoranthene	202	Compound Not Detected.						
	69 Benzidine	184	Compound Not Detected.						
	70 Pyrene	202	Compound Not Detected.						
$	71 Terphenyl-d14 (S)	244	12.651	12.656	(0.905)	311671	63.6917	2120	
	72 Butylbenzylphthalate	149	Compound Not Detected.						
	73 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.						
	74 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
	75 Benzo(a)anthracene	228	Compound Not Detected.						
*	76 Chrysene-d12	240	13.981	13.992	(1.000)	230200	40.0000		(Q)
	77 Chrysene	228	Compound Not Detected.						

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

QC Batch: MSV/26501
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035 Low Level
Associated Lab Samples: 10259041001, 10259041002

METHOD BLANK: 1635950
Matrix: Solid
Associated Lab Samples: 10259041001, 10259041002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,1,1-Trichloroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,1,2,2-Tetrachloroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,1,2-Trichloroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,1-Dichloroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,1-Dichloroethene	ug/kg	ND	4.0	03/10/14 16:48	
1,1-Dichloropropene	ug/kg	ND	4.0	03/10/14 16:48	
1,2,3-Trichlorobenzene	ug/kg	ND	4.0	03/10/14 16:48	
1,2,3-Trichloropropane	ug/kg	ND	4.0	03/10/14 16:48	
1,2,4-Trichlorobenzene	ug/kg	ND	4.0	03/10/14 16:48	
1,2,4-Trimethylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
1,2-Dibromo-3-chloropropane	ug/kg	ND	10.0	03/10/14 16:48	
1,2-Dibromoethane (EDB)	ug/kg	ND	4.0	03/10/14 16:48	
1,2-Dichlorobenzene	ug/kg	ND	4.0	03/10/14 16:48	
1,2-Dichloroethane	ug/kg	ND	4.0	03/10/14 16:48	
1,2-Dichloropropane	ug/kg	ND	4.0	03/10/14 16:48	
1,3,5-Trimethylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
1,3-Dichlorobenzene	ug/kg	ND	4.0	03/10/14 16:48	
1,3-Dichloropropane	ug/kg	ND	4.0	03/10/14 16:48	
1,4-Dichlorobenzene	ug/kg	ND	4.0	03/10/14 16:48	
2,2-Dichloropropane	ug/kg	ND	10.0	03/10/14 16:48	
2-Butanone (MEK)	ug/kg	ND	20.0	03/10/14 16:48	
2-Chlorotoluene	ug/kg	ND	4.0	03/10/14 16:48	
4-Chlorotoluene	ug/kg	ND	4.0	03/10/14 16:48	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	20.0	03/10/14 16:48	
Acetone	ug/kg	ND	20.0	03/10/14 16:48	
Allyl chloride	ug/kg	ND	10.0	03/10/14 16:48	
Benzene	ug/kg	ND	4.0	03/10/14 16:48	
Bromobenzene	ug/kg	ND	4.0	03/10/14 16:48	
Bromochloromethane	ug/kg	ND	4.0	03/10/14 16:48	
Bromodichloromethane	ug/kg	ND	4.0	03/10/14 16:48	
Bromoform	ug/kg	ND	20.0	03/10/14 16:48	
Bromomethane	ug/kg	ND	20.0	03/10/14 16:48	
Carbon tetrachloride	ug/kg	ND	4.0	03/10/14 16:48	
Chlorobenzene	ug/kg	ND	4.0	03/10/14 16:48	
Chloroethane	ug/kg	ND	10.0	03/10/14 16:48	
Chloroform	ug/kg	ND	4.0	03/10/14 16:48	
Chloromethane	ug/kg	ND	10.0	03/10/14 16:48	
cis-1,2-Dichloroethene	ug/kg	ND	4.0	03/10/14 16:48	
cis-1,3-Dichloropropene	ug/kg	ND	4.0	03/10/14 16:48	
Dibromochloromethane	ug/kg	ND	4.0	03/10/14 16:48	
Dibromomethane	ug/kg	ND	4.0	03/10/14 16:48	

REPORT OF LABORATORY ANALYSIS

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(612)607-1700

QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

METHOD BLANK: 1635950 Matrix: Solid
Associated Lab Samples: 10259041001, 10259041002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/kg	ND	10.0	03/10/14 16:48	
Dichlorofluoromethane	ug/kg	ND	4.0	03/10/14 16:48	
Diethyl ether (Ethyl ether)	ug/kg	ND	10.0	03/10/14 16:48	
Ethylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
Hexachloro-1,3-butadiene	ug/kg	ND	10.0	03/10/14 16:48	
Isopropylbenzene (Cumene)	ug/kg	ND	4.0	03/10/14 16:48	
Methyl-tert-butyl ether	ug/kg	ND	4.0	03/10/14 16:48	
Methylene Chloride	ug/kg	ND	20.0	03/10/14 16:48	
n-Butylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
n-Propylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
Naphthalene	ug/kg	ND	10.0	03/10/14 16:48	
p-Isopropyltoluene	ug/kg	ND	4.0	03/10/14 16:48	
sec-Butylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
Styrene	ug/kg	ND	4.0	03/10/14 16:48	
tert-Butylbenzene	ug/kg	ND	4.0	03/10/14 16:48	
Tetrachloroethene	ug/kg	ND	4.0	03/10/14 16:48	
Tetrahydrofuran	ug/kg	ND	40.0	03/10/14 16:48	
Toluene	ug/kg	ND	4.0	03/10/14 16:48	
trans-1,2-Dichloroethene	ug/kg	ND	4.0	03/10/14 16:48	
trans-1,3-Dichloropropene	ug/kg	ND	4.0	03/10/14 16:48	
Trichloroethene	ug/kg	ND	4.0	03/10/14 16:48	
Trichlorofluoromethane	ug/kg	ND	10.0	03/10/14 16:48	
Vinyl chloride	ug/kg	ND	4.0	03/10/14 16:48	
Xylene (Total)	ug/kg	ND	12.0	03/10/14 16:48	
1,2-Dichloroethane-d4 (S)	%.	96	30-150	03/10/14 16:48	
4-Bromofluorobenzene (S)	%.	100	30-150	03/10/14 16:48	
Toluene-d8 (S)	%.	102	30-150	03/10/14 16:48	

LABORATORY CONTROL SAMPLE: 1635951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	50	47.1	94	75-125	
1,1,1-Trichloroethane	ug/kg	50	45.6	91	71-128	
1,1,2,2-Tetrachloroethane	ug/kg	50	48.4	97	69-125	
1,1,2-Trichloroethane	ug/kg	50	47.5	95	75-125	
1,1,2-Trichlorotrifluoroethane	ug/kg	50	43.8	88	69-137	
1,1-Dichloroethane	ug/kg	50	47.6	95	69-127	
1,1-Dichloroethene	ug/kg	50	45.1	90	71-125	
1,1-Dichloropropene	ug/kg	50	44.5	89	71-127	
1,2,3-Trichlorobenzene	ug/kg	50	48.2	96	68-126	
1,2,3-Trichloropropane	ug/kg	50	48.6	97	70-126	
1,2,4-Trichlorobenzene	ug/kg	50	46.6	93	65-130	
1,2,4-Trimethylbenzene	ug/kg	50	46.1	92	68-125	
1,2-Dibromo-3-chloropropane	ug/kg	125	125	100	63-131	
1,2-Dibromoethane (EDB)	ug/kg	50	47.9	96	75-125	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

LABORATORY CONTROL SAMPLE: 1635951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichlorobenzene	ug/kg	50	45.8	92	74-125	
1,2-Dichloroethane	ug/kg	50	47.7	95	70-129	
1,2-Dichloropropane	ug/kg	50	47.3	95	75-125	
1,3,5-Trimethylbenzene	ug/kg	50	45.5	91	69-125	
1,3-Dichlorobenzene	ug/kg	50	45.5	91	72-125	
1,3-Dichloropropane	ug/kg	50	47.3	95	75-125	
1,4-Dichlorobenzene	ug/kg	50	45.2	90	70-125	
2,2-Dichloropropane	ug/kg	50	46.7	93	58-135	
2-Butanone (MEK)	ug/kg	250	235	94	57-129	
2-Chlorotoluene	ug/kg	50	46.1	92	69-125	
4-Chlorotoluene	ug/kg	50	45.3	91	70-125	
4-Methyl-2-pentanone (MIBK)	ug/kg	250	244	98	62-127	
Acetone	ug/kg	250	233	93	56-144	
Allyl chloride	ug/kg	50	45.7	91	60-132	
Benzene	ug/kg	50	45.4	91	67-125	
Bromobenzene	ug/kg	50	47.4	95	72-125	
Bromochloromethane	ug/kg	50	47.9	96	74-125	
Bromodichloromethane	ug/kg	50	46.4	93	75-125	
Bromoform	ug/kg	50	48.0	96	70-125	
Bromomethane	ug/kg	50	53.9	108	60-142	
Carbon tetrachloride	ug/kg	50	45.8	92	71-126	
Chlorobenzene	ug/kg	50	45.2	90	73-125	
Chloroethane	ug/kg	50	46.6	93	64-143	
Chloroform	ug/kg	50	47.5	95	72-125	
Chloromethane	ug/kg	50	46.5	93	48-143	
cis-1,2-Dichloroethene	ug/kg	50	47.4	95	74-125	
cis-1,3-Dichloropropene	ug/kg	50	47.4	95	71-125	
Dibromochloromethane	ug/kg	50	48.3	97	74-125	
Dibromomethane	ug/kg	50	47.4	95	75-125	
Dichlorodifluoromethane	ug/kg	50	41.3	83	39-150	
Dichlorofluoromethane	ug/kg	50	46.3	93	50-150	
Diethyl ether (Ethyl ether)	ug/kg	50	48.6	97	63-129	
Ethylbenzene	ug/kg	50	44.1	88	72-125	
Hexachloro-1,3-butadiene	ug/kg	50	44.3	89	65-133	
Isopropylbenzene (Cumene)	ug/kg	50	44.2	88	72-125	
Methyl-tert-butyl ether	ug/kg	50	49.4	99	71-125	
Methylene Chloride	ug/kg	50	46.3	93	65-125	
n-Butylbenzene	ug/kg	50	44.6	89	63-132	
n-Propylbenzene	ug/kg	50	45.2	90	68-125	
Naphthalene	ug/kg	50	47.8	96	65-127	
p-Isopropyltoluene	ug/kg	50	45.8	92	68-126	
sec-Butylbenzene	ug/kg	50	45.4	91	69-125	
Styrene	ug/kg	50	48.2	96	75-125	
tert-Butylbenzene	ug/kg	50	45.9	92	70-125	
Tetrachloroethene	ug/kg	50	45.7	91	68-125	
Tetrahydrofuran	ug/kg	500	488	98	69-129	
Toluene	ug/kg	50	43.8	88	71-125	
trans-1,2-Dichloroethene	ug/kg	50	46.0	92	71-125	

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

LABORATORY CONTROL SAMPLE: 1635951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,3-Dichloropropene	ug/kg	50	48.2	96	71-127	
Trichloroethene	ug/kg	50	46.6	93	75-125	
Trichlorofluoromethane	ug/kg	50	42.4	85	61-145	
Vinyl chloride	ug/kg	50	45.0	90	60-134	
Xylene (Total)	ug/kg	150	136	91	74-125	
1,2-Dichloroethane-d4 (S)	%.			103	30-150	
4-Bromofluorobenzene (S)	%.			101	30-150	
Toluene-d8 (S)	%.			100	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1635952 1635953

Parameter	Units	10259041002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/kg	ND	51.1	51.9	41.4	40.7	81	79	39-150	2	30	
1,1,1-Trichloroethane	ug/kg	ND	51.1	51.9	42.0	40.2	82	77	49-150	4	30	
1,1,2,2-Tetrachloroethane	ug/kg	ND	51.1	51.9	52.5	53.6	103	103	30-150	2	30	
1,1,2-Trichloroethane	ug/kg	ND	51.1	51.9	41.3	39.1	81	75	46-150	5	30	
1,1,2-Trichlorotrifluoroethane	ug/kg	ND	51.1	51.9	40.5	41.1	79	79	30-150	1	30	
1,1-Dichloroethane	ug/kg	ND	51.1	51.9	45.1	42.5	88	82	56-150	6	30	
1,1-Dichloroethene	ug/kg	ND	51.1	51.9	42.7	41.0	83	79	44-150	4	30	
1,1-Dichloropropene	ug/kg	ND	51.1	51.9	34.3	30.2	67	58	48-150	13	30	
1,2,3-Trichlorobenzene	ug/kg	ND	51.1	51.9	12.6	10.8	25	21	30-150	15	30	M1
1,2,3-Trichloropropane	ug/kg	ND	51.1	51.9	55.1	54.7	108	105	33-150	8	30	
1,2,4-Trichlorobenzene	ug/kg	ND	51.1	51.9	12.6	10.2	25	20	30-150	21	30	M1
1,2,4-Trimethylbenzene	ug/kg	ND	51.1	51.9	37.9	35.0	74	67	34-150	8	30	
1,2-Dibromo-3-chloropropane	ug/kg	ND	128	130	101	99.4	79	77	30-150	1	30	
1,2-Dibromoethane (EDB)	ug/kg	ND	51.1	51.9	37.2	33.2	73	64	55-145	11	30	
1,2-Dichlorobenzene	ug/kg	ND	51.1	51.9	26.2	22.5	51	43	30-150	15	30	
1,2-Dichloroethane	ug/kg	ND	51.1	51.9	42.6	40.7	83	79	49-150	4	30	
1,2-Dichloropropane	ug/kg	ND	51.1	51.9	41.2	38.1	81	74	59-146	8	30	
1,3,5-Trimethylbenzene	ug/kg	ND	51.1	51.9	39.9	39.4	78	76	34-150	1	30	
1,3-Dichlorobenzene	ug/kg	ND	51.1	51.9	26.5	21.9	52	42	30-150	19	30	
1,3-Dichloropropane	ug/kg	ND	51.1	51.9	40.2	36.7	79	71	57-145	9	30	
1,4-Dichlorobenzene	ug/kg	ND	51.1	51.9	25.4	20.2	50	39	30-150	23	30	
2,2-Dichloropropane	ug/kg	ND	51.1	51.9	44.0	43.2	86	83	43-150	2	30	
2-Butanone (MEK)	ug/kg	ND	256	259	188	200	74	77	43-150	6	30	
2-Chlorotoluene	ug/kg	ND	51.1	51.9	39.2	35.8	77	69	33-150	9	30	
4-Chlorotoluene	ug/kg	ND	51.1	51.9	33.4	28.0	65	54	33-150	18	30	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	256	259	227	234	89	90	43-150	3	30	
Acetone	ug/kg	ND	256	259	254	281	96	105	43-150	10	30	
Allyl chloride	ug/kg	ND	51.1	51.9	44.5	38.5	87	74	46-150	14	30	
Benzene	ug/kg	ND	51.1	51.9	40.3	36.8	78	70	49-145	9	30	
Bromobenzene	ug/kg	ND	51.1	51.9	38.4	31.9	75	62	35-150	18	30	
Bromochloromethane	ug/kg	ND	51.1	51.9	43.1	41.7	84	80	60-142	3	30	
Bromodichloromethane	ug/kg	ND	51.1	51.9	38.1	34.4	74	66	43-150	10	30	
Bromoform	ug/kg	ND	51.1	51.9	30.1	27.4	59	53	32-150	9	30	
Bromomethane	ug/kg	ND	51.1	51.9	55.0	47.3	108	91	46-150	15	30	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1635952 1635953

Parameter	Units	10259041002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Carbon tetrachloride	ug/kg	ND	51.1	51.9	39.9	36.8	78	71	38-150	8	30	
Chlorobenzene	ug/kg	ND	51.1	51.9	30.3	25.5	59	49	40-150	17	30	
Chloroethane	ug/kg	ND	51.1	51.9	51.5	49.6	101	96	41-150	4	30	
Chloroform	ug/kg	ND	51.1	51.9	42.9	40.3	84	78	55-148	6	30	
Chloromethane	ug/kg	ND	51.1	51.9	48.8	49.1	95	95	30-150	.8	30	
cis-1,2-Dichloroethene	ug/kg	ND	51.1	51.9	43.6	41.1	85	79	61-142	6	30	
cis-1,3-Dichloropropene	ug/kg	ND	51.1	51.9	36.8	31.2	72	60	47-148	16	30	
Dibromochloromethane	ug/kg	ND	51.1	51.9	38.5	34.4	75	66	36-150	11	30	
Dibromomethane	ug/kg	ND	51.1	51.9	39.4	37.1	77	71	60-140	6	30	
Dichlorodifluoromethane	ug/kg	ND	51.1	51.9	42.6	41.9	83	81	30-150	2	30	
Dichlorofluoromethane	ug/kg	ND	51.1	51.9	47.4	46.5	93	90	34-150	2	30	
Diethyl ether (Ethyl ether)	ug/kg	ND	51.1	51.9	47.9	48.3	94	93	56-143	.9	30	
Ethylbenzene	ug/kg	ND	51.1	51.9	30.2	25.6	59	49	42-148	17	30	
Hexachloro-1,3-butadiene	ug/kg	ND	51.1	51.9	22.1	24.3	43	47	30-150	9	30	
Isopropylbenzene (Cumene)	ug/kg	ND	51.1	51.9	27.8	25.9	54	50	30-150	7	30	
Methyl-tert-butyl ether	ug/kg	ND	51.1	51.9	47.7	49.1	93	95	58-147	3	30	
Methylene Chloride	ug/kg	ND	51.1	51.9	45.9	46.6	90	90	53-135	1	30	
n-Butylbenzene	ug/kg	ND	51.1	51.9	21.6	19.6	42	38	30-150	10	30	
n-Propylbenzene	ug/kg	ND	51.1	51.9	35.7	31.7	70	61	31-150	12	30	
Naphthalene	ug/kg	ND	51.1	51.9	16.9	13.8	33	26	30-150	20	30	M1
p-Isopropyltoluene	ug/kg	ND	51.1	51.9	32.4	31.4	63	61	30-150	3	30	
sec-Butylbenzene	ug/kg	ND	51.1	51.9	34.7	35.5	68	68	30-150	2	30	
Styrene	ug/kg	ND	51.1	51.9	28.2	22.7	55	44	33-150	22	30	
tert-Butylbenzene	ug/kg	ND	51.1	51.9	47.0	49.3	92	95	30-150	5	30	
Tetrachloroethene	ug/kg	ND	51.1	51.9	31.4	27.1	61	52	38-150	15	30	
Tetrahydrofuran	ug/kg	ND	511	519	516	514	101	99	51-150	.4	30	
Toluene	ug/kg	ND	51.1	51.9	40.1	34.8	76	65	44-150	14	30	
trans-1,2-Dichloroethene	ug/kg	ND	51.1	51.9	44.3	41.7	87	81	59-142	6	30	
trans-1,3-Dichloropropene	ug/kg	ND	51.1	51.9	39.2	33.8	77	65	45-150	15	30	
Trichloroethene	ug/kg	ND	51.1	51.9	34.9	30.7	68	59	48-150	13	30	
Trichlorofluoromethane	ug/kg	ND	51.1	51.9	37.8	36.8	74	71	32-150	3	30	
Vinyl chloride	ug/kg	ND	51.1	51.9	46.2	45.8	90	88	34-150	.9	30	
Xylene (Total)	ug/kg	ND	154	156	91.2	79.8	59	51	42-150	13	30	
1,2-Dichloroethane-d4 (S)	%.						97	99	30-150			IS
4-Bromofluorobenzene (S)	%.						134	137	30-150			
Toluene-d8 (S)	%.						113	114	30-150			

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

QC Batch: MSV/26462
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 465 W
Associated Lab Samples: 10259041003

METHOD BLANK: 1632466
Matrix: Water
Associated Lab Samples: 10259041003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	03/03/14 10:43	
1,1,1-Trichloroethane	ug/L	ND	1.0	03/03/14 10:43	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/03/14 10:43	
1,1,2-Trichloroethane	ug/L	ND	1.0	03/03/14 10:43	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	4.0	03/03/14 10:43	
1,1-Dichloroethane	ug/L	ND	1.0	03/03/14 10:43	
1,1-Dichloroethene	ug/L	ND	1.0	03/03/14 10:43	
1,1-Dichloropropene	ug/L	ND	1.0	03/03/14 10:43	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	03/03/14 10:43	
1,2,3-Trichloropropane	ug/L	ND	4.0	03/03/14 10:43	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	03/03/14 10:43	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	03/03/14 10:43	
1,2-Dibromo-3-chloropropane	ug/L	ND	4.0	03/03/14 10:43	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	03/03/14 10:43	
1,2-Dichlorobenzene	ug/L	ND	1.0	03/03/14 10:43	
1,2-Dichloroethane	ug/L	ND	1.0	03/03/14 10:43	
1,2-Dichloropropane	ug/L	ND	4.0	03/03/14 10:43	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	03/03/14 10:43	
1,3-Dichlorobenzene	ug/L	ND	1.0	03/03/14 10:43	
1,3-Dichloropropane	ug/L	ND	1.0	03/03/14 10:43	
1,4-Dichlorobenzene	ug/L	ND	1.0	03/03/14 10:43	
2,2-Dichloropropane	ug/L	ND	4.0	03/03/14 10:43	
2-Butanone (MEK)	ug/L	ND	5.0	03/03/14 10:43	
2-Chlorotoluene	ug/L	ND	1.0	03/03/14 10:43	
4-Chlorotoluene	ug/L	ND	1.0	03/03/14 10:43	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	03/03/14 10:43	
Acetone	ug/L	ND	20.0	03/03/14 10:43	
Allyl chloride	ug/L	ND	4.0	03/03/14 10:43	
Benzene	ug/L	ND	1.0	03/03/14 10:43	
Bromobenzene	ug/L	ND	1.0	03/03/14 10:43	
Bromochloromethane	ug/L	ND	1.0	03/03/14 10:43	
Bromodichloromethane	ug/L	ND	1.0	03/03/14 10:43	
Bromoform	ug/L	ND	4.0	03/03/14 10:43	
Bromomethane	ug/L	ND	4.0	03/03/14 10:43	
Carbon tetrachloride	ug/L	ND	1.0	03/03/14 10:43	
Chlorobenzene	ug/L	ND	1.0	03/03/14 10:43	
Chloroethane	ug/L	ND	1.0	03/03/14 10:43	
Chloroform	ug/L	ND	1.0	03/03/14 10:43	
Chloromethane	ug/L	ND	4.0	03/03/14 10:43	
cis-1,2-Dichloroethene	ug/L	ND	1.0	03/03/14 10:43	
cis-1,3-Dichloropropene	ug/L	ND	4.0	03/03/14 10:43	
Dibromochloromethane	ug/L	ND	1.0	03/03/14 10:43	
Dibromomethane	ug/L	ND	4.0	03/03/14 10:43	

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

METHOD BLANK: 1632466 Matrix: Water
Associated Lab Samples: 10259041003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/L	ND	1.0	03/03/14 10:43	
Dichlorofluoromethane	ug/L	ND	1.0	03/03/14 10:43	
Diethyl ether (Ethyl ether)	ug/L	ND	4.0	03/03/14 10:43	
Ethylbenzene	ug/L	ND	1.0	03/03/14 10:43	
Hexachloro-1,3-butadiene	ug/L	ND	4.0	03/03/14 10:43	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	03/03/14 10:43	
Methyl-tert-butyl ether	ug/L	ND	1.0	03/03/14 10:43	
Methylene Chloride	ug/L	ND	4.0	03/03/14 10:43	
n-Butylbenzene	ug/L	ND	1.0	03/03/14 10:43	
n-Propylbenzene	ug/L	ND	1.0	03/03/14 10:43	
Naphthalene	ug/L	ND	4.0	03/03/14 10:43	
p-Isopropyltoluene	ug/L	ND	1.0	03/03/14 10:43	
sec-Butylbenzene	ug/L	ND	1.0	03/03/14 10:43	
Styrene	ug/L	ND	1.0	03/03/14 10:43	
tert-Butylbenzene	ug/L	ND	1.0	03/03/14 10:43	
Tetrachloroethene	ug/L	ND	1.0	03/03/14 10:43	
Tetrahydrofuran	ug/L	ND	10.0	03/03/14 10:43	
Toluene	ug/L	ND	1.0	03/03/14 10:43	
s-1,2-Dichloroethene	ug/L	ND	1.0	03/03/14 10:43	
s-1,3-Dichloropropene	ug/L	ND	4.0	03/03/14 10:43	
Trichloroethene	ug/L	ND	0.40	03/03/14 10:43	
Trichlorofluoromethane	ug/L	ND	1.0	03/03/14 10:43	
Vinyl chloride	ug/L	ND	0.40	03/03/14 10:43	
Xylene (Total)	ug/L	ND	3.0	03/03/14 10:43	
1,2-Dichloroethane-d4 (S)	%.	98	75-125	03/03/14 10:43	
4-Bromofluorobenzene (S)	%.	100	75-125	03/03/14 10:43	
Toluene-d8 (S)	%.	99	75-125	03/03/14 10:43	

LABORATORY CONTROL SAMPLE: 1632467

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	18.1	91	75-125	
1,1,1-Trichloroethane	ug/L	20	17.4	87	73-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.4	87	74-125	
1,1,2-Trichloroethane	ug/L	20	18.0	90	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	20	17.1	86	56-133	
1,1-Dichloroethane	ug/L	20	17.2	86	75-125	
1,1-Dichloroethene	ug/L	20	15.6	78	70-125	
1,1-Dichloropropene	ug/L	20	16.8	84	73-125	
1,2,3-Trichlorobenzene	ug/L	20	18.3	91	75-125	
1,2,3-Trichloropropane	ug/L	20	19.3	96	75-125	
1,2,4-Trichlorobenzene	ug/L	20	19.5	98	75-125	
1,2,4-Trimethylbenzene	ug/L	20	17.8	89	75-125	
1,2-Dibromo-3-chloropropane	ug/L	50	44.4	89	70-125	
1,2-Dibromoethane (EDB)	ug/L	20	18.1	90	75-125	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

LABORATORY CONTROL SAMPLE: 1632467

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichlorobenzene	ug/L	20	17.7	88	75-125	
1,2-Dichloroethane	ug/L	20	18.2	91	75-125	
1,2-Dichloropropane	ug/L	20	18.6	93	75-125	
1,3,5-Trimethylbenzene	ug/L	20	18.0	90	75-125	
1,3-Dichlorobenzene	ug/L	20	18.1	91	75-125	
1,3-Dichloropropane	ug/L	20	18.8	94	75-125	
1,4-Dichlorobenzene	ug/L	20	18.4	92	75-125	
2,2-Dichloropropane	ug/L	20	18.0	90	66-130	
2-Butanone (MEK)	ug/L	100	83.2	83	64-126	
2-Chlorotoluene	ug/L	20	17.6	88	73-125	
4-Chlorotoluene	ug/L	20	17.9	89	75-125	
4-Methyl-2-pentanone (MIBK)	ug/L	100	91.7	92	71-125	
Acetone	ug/L	100	94.3	94	66-131	
Allyl chloride	ug/L	20	17.8	89	70-129	
Benzene	ug/L	20	16.6	83	75-125	
Bromobenzene	ug/L	20	17.7	88	75-125	
Bromochloromethane	ug/L	20	17.8	89	75-125	
Bromodichloromethane	ug/L	20	17.6	88	75-125	
Bromoform	ug/L	20	18.2	91	70-125	
Bromomethane	ug/L	20	20.4	102	30-150	
Carbon tetrachloride	ug/L	20	17.4	87	68-129	
Chlorobenzene	ug/L	20	18.0	90	75-125	
Chloroethane	ug/L	20	18.9	95	68-133	
Chloroform	ug/L	20	17.2	86	75-125	
Chloromethane	ug/L	20	17.5	87	57-140	
cis-1,2-Dichloroethene	ug/L	20	16.7	84	75-125	
cis-1,3-Dichloropropene	ug/L	20	18.8	94	75-125	
Dibromochloromethane	ug/L	20	18.5	92	75-125	
Dibromomethane	ug/L	20	18.9	95	75-125	
Dichlorodifluoromethane	ug/L	20	18.2	91	50-134	
Dichlorofluoromethane	ug/L	20	17.5	88	74-125	
Diethyl ether (Ethyl ether)	ug/L	20	16.7	83	75-125	
Ethylbenzene	ug/L	20	17.7	88	75-125	
Hexachloro-1,3-butadiene	ug/L	20	20.4	102	74-128	
Isopropylbenzene (Cumene)	ug/L	20	18.2	91	73-125	
Methyl-tert-butyl ether	ug/L	20	17.3	86	75-125	
Methylene Chloride	ug/L	20	17.4	87	75-125	
n-Butylbenzene	ug/L	20	18.3	91	73-125	
n-Propylbenzene	ug/L	20	18.0	90	72-125	
Naphthalene	ug/L	20	18.1	90	74-125	
p-Isopropyltoluene	ug/L	20	18.1	90	74-125	
sec-Butylbenzene	ug/L	20	18.1	91	74-125	
Styrene	ug/L	20	18.2	91	75-125	
tert-Butylbenzene	ug/L	20	17.8	89	74-125	
Tetrachloroethene	ug/L	20	18.5	93	71-125	
Tetrahydrofuran	ug/L	200	187	94	70-125	
Toluene	ug/L	20	18.0	90	75-125	
trans-1,2-Dichloroethene	ug/L	20	15.9	80	73-125	

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

LABORATORY CONTROL SAMPLE: 1632467

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,3-Dichloropropene	ug/L	20	18.6	93	75-125	
Trichloroethene	ug/L	20	18.0	90	75-125	
Trichlorofluoromethane	ug/L	20	19.0	95	70-128	
Vinyl chloride	ug/L	20	18.2	91	70-130	
Xylene (Total)	ug/L	60	53.7	89	75-125	
1,2-Dichloroethane-d4 (S)	%.			100	75-125	
4-Bromofluorobenzene (S)	%.			99	75-125	
Toluene-d8 (S)	%.			102	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1633048 1633049

Parameter	Units	10258825016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	100	100	96.8	93.4	97	93	74-131	4	30	
1,1,1-Trichloroethane	ug/L	ND	100	100	109	99.8	109	100	73-139	9	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	100	100	96.7	98.0	97	98	72-125	1	30	
1,1,2-Trichloroethane	ug/L	ND	100	100	96.1	95.6	96	96	75-125	.5	30	
1,1,2-Trichlorotrifluoroethane	ug/L	ND	100	100	103	105	103	105	68-150	1	30	
1,1-Dichloroethane	ug/L	ND	100	100	102	96.3	102	96	73-132	5	30	
1,1-Dichloroethene	ug/L	ND	100	100	90.9	90.3	91	90	71-142	.6	30	
1,1-Dichloropropene	ug/L	ND	100	100	103	93.6	103	94	73-139	10	30	
1,2,3-Trichlorobenzene	ug/L	ND	100	100	95.9	95.6	96	96	70-129	.3	30	
1,2,3-Trichloropropane	ug/L	ND	100	100	107	108	107	108	74-125	1	30	
1,2,4-Trichlorobenzene	ug/L	ND	100	100	98.1	101	98	101	70-129	3	30	
1,2,4-Trimethylbenzene	ug/L	118	100	100	218	218	100	100	72-136	.3	30	
1,2-Dibromo-3-chloropropane	ug/L	ND	250	250	240	225	96	90	66-127	6	30	
1,2-Dibromoethane (EDB)	ug/L	ND	100	100	98.8	98.6	99	99	75-125	.2	30	
1,2-Dichlorobenzene	ug/L	ND	100	100	97.7	98.3	98	98	75-125	.6	30	
1,2-Dichloroethane	ug/L	7.5	100	100	119	114	112	107	68-128	4	30	
1,2-Dichloropropane	ug/L	ND	100	100	99.3	95.3	99	95	74-131	4	30	
1,3,5-Trimethylbenzene	ug/L	41.3	100	100	139	143	98	101	75-131	3	30	
1,3-Dichlorobenzene	ug/L	ND	100	100	96.9	99.5	97	99	73-125	3	30	
1,3-Dichloropropane	ug/L	ND	100	100	98.6	98.3	99	98	75-125	.2	30	
1,4-Dichlorobenzene	ug/L	ND	100	100	97.7	99.9	98	100	73-125	2	30	
2,2-Dichloropropane	ug/L	ND	100	100	101	96.4	101	96	58-150	5	30	
2-Butanone (MEK)	ug/L	ND	500	500	487	436	97	87	56-140	11	30	
2-Chlorotoluene	ug/L	ND	100	100	105	106	105	106	70-130	1	30	
4-Chlorotoluene	ug/L	ND	100	100	102	103	102	103	73-126	1	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	500	500	462	458	92	92	69-128	.8	30	
Acetone	ug/L	ND	500	500	573	611	115	122	57-143	6	30	
Allyl chloride	ug/L	ND	100	100	89.6	86.6	90	87	65-146	3	30	
Benzene	ug/L	743	100	100	876	815	133	72	75-129	7	30	M1
Bromobenzene	ug/L	ND	100	100	96.2	95.3	96	95	74-125	.9	30	
Bromochloromethane	ug/L	ND	100	100	101	101	101	101	75-126	.3	30	
Bromodichloromethane	ug/L	ND	100	100	98.5	97.3	99	97	75-128	1	30	
Bromoform	ug/L	ND	100	100	83.4	83.3	83	83	66-130	.1	30	
Bromomethane	ug/L	ND	100	100	39.3	54.8	39	55	30-150	33	30	R1

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1633048 1633049

Parameter	Units	10258825016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Carbon tetrachloride	ug/L	ND	100	100	103	97.6	103	98	69-148	5	30	
Chlorobenzene	ug/L	ND	100	100	99.2	99.6	99	100	75-125	.4	30	
Chloroethane	ug/L	ND	100	100	110	106	110	106	71-143	4	30	
Chloroform	ug/L	ND	100	100	111	105	107	102	75-126	5	30	
Chloromethane	ug/L	ND	100	100	108	98.2	108	98	55-150	9	30	
cis-1,2-Dichloroethene	ug/L	ND	100	100	98.6	97.2	99	97	75-130	2	30	
cis-1,3-Dichloropropene	ug/L	ND	100	100	96.6	99.6	97	100	72-129	3	30	
Dibromochloromethane	ug/L	ND	100	100	92.7	93.9	93	94	73-129	1	30	
Dibromomethane	ug/L	ND	100	100	92.8	94.1	93	94	75-125	1	30	
Dichlorodifluoromethane	ug/L	ND	100	100	113	107	113	107	70-150	5	30	
Dichlorofluoromethane	ug/L	ND	100	100	101	98.2	101	98	75-135	2	30	
Diethyl ether (Ethyl ether)	ug/L	ND	100	100	98.0	92.9	98	93	72-126	5	30	
Ethylbenzene	ug/L	36.2	100	100	130	131	94	95	75-128	.8	30	
Hexachloro-1,3-butadiene	ug/L	ND	100	100	91.9	90.0	92	90	65-144	2	30	
Isopropylbenzene (Cumene)	ug/L	ND	100	100	103	103	100	99	75-131	.3	30	
Methyl-tert-butyl ether	ug/L	366	100	100	457	477	91	112	74-128	4	30	
Methylene Chloride	ug/L	ND	100	100	101	99.4	101	99	69-125	2	30	
n-Butylbenzene	ug/L	ND	100	100	103	106	102	105	70-137	3	30	
n-Propylbenzene	ug/L	ND	100	100	105	105	102	102	72-131	.03	30	
Naphthalene	ug/L	70.1	100	100	171	171	101	100	70-132	.1	30	
p-Isopropyltoluene	ug/L	ND	100	100	102	103	101	102	73-133	.6	30	
sec-Butylbenzene	ug/L	ND	100	100	102	102	101	101	74-133	.1	30	
Styrene	ug/L	ND	100	100	97.8	99.8	98	100	75-128	2	30	
tert-Butylbenzene	ug/L	ND	100	100	101	101	101	101	74-130	.1	30	
Tetrachloroethene	ug/L	ND	100	100	93.8	93.3	94	93	68-140	.6	30	
Tetrahydrofuran	ug/L	ND	1000	1000	1170	1220	117	122	65-131	4	30	
Toluene	ug/L	48.8	100	100	147	144	98	95	75-129	2	30	
trans-1,2-Dichloroethene	ug/L	ND	100	100	91.2	93.6	91	94	70-136	3	30	
trans-1,3-Dichloropropene	ug/L	ND	100	100	95.3	97.3	95	97	71-125	2	30	
Trichloroethene	ug/L	ND	100	100	91.5	94.5	92	95	72-135	3	30	
Trichlorofluoromethane	ug/L	ND	100	100	112	110	112	110	75-150	2	30	
Vinyl chloride	ug/L	ND	100	100	102	96.8	102	97	73-150	5	30	
Xylene (Total)	ug/L	36.9	300	300	333	333	99	99	75-129	.1	30	
1,2-Dichloroethane-d4 (S)	%.						114	99	75-125			
4-Bromofluorobenzene (S)	%.						101	103	75-125			
Toluene-d8 (S)	%.						101	100	75-125			

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

QC Batch: OEXT/24492
QC Batch Method: EPA 3550 Sonication
Analysis Method: EPA 8015 Modified
Analysis Description: 8015 Solid GCSV
Associated Lab Samples: 10259041001, 10259041002

METHOD BLANK: 1632388 Matrix: Solid
Associated Lab Samples: 10259041001, 10259041002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO (C10-C28)	mg/kg	ND	10.0	03/05/14 13:46	
n-Triacontane (S)	%.	99	30-147	03/05/14 13:46	
o-Terphenyl (S)	%.	104	30-150	03/05/14 13:46	

LABORATORY CONTROL SAMPLE: 1632389

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO (C10-C28)	mg/kg	50	54.4	109	70-125	
n-Triacontane (S)	%.			102	30-147	
o-Terphenyl (S)	%.			109	30-150	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1632390 1632391

Parameter	Units	10259041002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-DRO (C10-C28)	mg/kg	ND	61.9	61.9	66.1	65.5	92	91	30-150	1	30	
n-Triacontane (S)	%.						99	94	30-147			
o-Terphenyl (S)	%.						102	97	30-150			

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

QC Batch: OEXT/24489
QC Batch Method: EPA 3550
Analysis Method: EPA 8270
Analysis Description: 8270 Solid MSSV
Associated Lab Samples: 10259041001, 10259041002

METHOD BLANK: 1632345
Matrix: Solid
Associated Lab Samples: 10259041001, 10259041002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	ND	330	03/06/14 08:16	
1,2-Dichlorobenzene	ug/kg	ND	330	03/06/14 08:16	
1,2-Diphenylhydrazine	ug/kg	ND	330	03/06/14 08:16	
1,3-Dichlorobenzene	ug/kg	ND	330	03/06/14 08:16	
1,4-Dichlorobenzene	ug/kg	ND	330	03/06/14 08:16	
1-Methylnaphthalene	ug/kg	ND	330	03/06/14 08:16	
2,4,5-Trichlorophenol	ug/kg	ND	330	03/06/14 08:16	
2,4,6-Trichlorophenol	ug/kg	ND	330	03/06/14 08:16	
2,4-Dichlorophenol	ug/kg	ND	330	03/06/14 08:16	
2,4-Dimethylphenol	ug/kg	ND	330	03/06/14 08:16	
2,4-Dinitrophenol	ug/kg	ND	330	03/06/14 08:16	
2,4-Dinitrotoluene	ug/kg	ND	330	03/06/14 08:16	
2,6-Dinitrotoluene	ug/kg	ND	330	03/06/14 08:16	
2-Chloronaphthalene	ug/kg	ND	330	03/06/14 08:16	
2-Chlorophenol	ug/kg	ND	330	03/06/14 08:16	
2-Methylnaphthalene	ug/kg	ND	330	03/06/14 08:16	
2-Methylphenol(o-Cresol)	ug/kg	ND	330	03/06/14 08:16	
2-Nitroaniline	ug/kg	ND	330	03/06/14 08:16	
2-Nitrophenol	ug/kg	ND	330	03/06/14 08:16	
3&4-Methylphenol	ug/kg	ND	660	03/06/14 08:16	
3,3'-Dichlorobenzidine	ug/kg	ND	330	03/06/14 08:16	
3-Nitroaniline	ug/kg	ND	330	03/06/14 08:16	
4,6-Dinitro-2-methylphenol	ug/kg	ND	1700	03/06/14 08:16	
4-Bromophenylphenyl ether	ug/kg	ND	330	03/06/14 08:16	
4-Chloro-3-methylphenol	ug/kg	ND	330	03/06/14 08:16	
4-Chloroaniline	ug/kg	ND	330	03/06/14 08:16	
4-Chlorophenylphenyl ether	ug/kg	ND	330	03/06/14 08:16	
4-Nitroaniline	ug/kg	ND	330	03/06/14 08:16	
4-Nitrophenol	ug/kg	ND	330	03/06/14 08:16	
Acenaphthene	ug/kg	ND	330	03/06/14 08:16	
Acenaphthylene	ug/kg	ND	330	03/06/14 08:16	
Anthracene	ug/kg	ND	330	03/06/14 08:16	
Benzo(a)anthracene	ug/kg	ND	330	03/06/14 08:16	
Benzo(a)pyrene	ug/kg	ND	330	03/06/14 08:16	
Benzo(b)fluoranthene	ug/kg	ND	330	03/06/14 08:16	
Benzo(g,h,i)perylene	ug/kg	ND	330	03/06/14 08:16	
Benzo(k)fluoranthene	ug/kg	ND	330	03/06/14 08:16	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	03/06/14 08:16	
bis(2-Chloroethyl) ether	ug/kg	ND	330	03/06/14 08:16	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	03/06/14 08:16	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	03/06/14 08:16	
Butylbenzylphthalate	ug/kg	ND	330	03/06/14 08:16	
Carbazole	ug/kg	ND	330	03/06/14 08:16	

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QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

METHOD BLANK: 1632345 Matrix: Solid
Associated Lab Samples: 10259041001, 10259041002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chrysene	ug/kg	ND	330	03/06/14 08:16	
Di-n-butylphthalate	ug/kg	ND	330	03/06/14 08:16	
Di-n-octylphthalate	ug/kg	ND	330	03/06/14 08:16	
Dibenz(a,h)anthracene	ug/kg	ND	330	03/06/14 08:16	
Dibenzofuran	ug/kg	ND	330	03/06/14 08:16	
Diethylphthalate	ug/kg	ND	330	03/06/14 08:16	
Dimethylphthalate	ug/kg	ND	330	03/06/14 08:16	
Fluoranthene	ug/kg	ND	330	03/06/14 08:16	
Fluorene	ug/kg	ND	330	03/06/14 08:16	
Hexachloro-1,3-butadiene	ug/kg	ND	330	03/06/14 08:16	
Hexachlorobenzene	ug/kg	ND	330	03/06/14 08:16	
Hexachloroethane	ug/kg	ND	330	03/06/14 08:16	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	330	03/06/14 08:16	
Isophorone	ug/kg	ND	330	03/06/14 08:16	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	03/06/14 08:16	
N-Nitrosodimethylamine	ug/kg	ND	330	03/06/14 08:16	
N-Nitrosodiphenylamine	ug/kg	ND	330	03/06/14 08:16	
Naphthalene	ug/kg	ND	330	03/06/14 08:16	
Nitrobenzene	ug/kg	ND	330	03/06/14 08:16	
Pentachlorophenol	ug/kg	ND	670	03/06/14 08:16	
Phenanthrene	ug/kg	ND	330	03/06/14 08:16	
Phenol	ug/kg	ND	330	03/06/14 08:16	
Pyrene	ug/kg	ND	330	03/06/14 08:16	
2,4,6-Tribromophenol (S)	%.	71	41-125	03/06/14 08:16	
2-Fluorobiphenyl (S)	%.	67	46-125	03/06/14 08:16	
2-Fluorophenol (S)	%.	63	31-125	03/06/14 08:16	
Nitrobenzene-d5 (S)	%.	63	30-125	03/06/14 08:16	
Phenol-d6 (S)	%.	65	38-125	03/06/14 08:16	
Terphenyl-d14 (S)	%.	79	64-125	03/06/14 08:16	

LABORATORY CONTROL SAMPLE: 1632346

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/kg	1670	1350	81	40-125	
1,2-Dichlorobenzene	ug/kg	1670	1310	79	32-125	
1,2-Diphenylhydrazine	ug/kg	1670	1400	84	63-125	
1,3-Dichlorobenzene	ug/kg	1670	1290	78	31-125	
1,4-Dichlorobenzene	ug/kg	1670	1300	78	30-125	
1-Methylnaphthalene	ug/kg	1670	1370	82	54-125	
2,4,5-Trichlorophenol	ug/kg	1670	1500	90	63-125	
2,4,6-Trichlorophenol	ug/kg	1670	1500	90	62-125	
2,4-Dichlorophenol	ug/kg	1670	1410	85	56-125	
2,4-Dimethylphenol	ug/kg	1670	1200	72	55-125	
2,4-Dinitrophenol	ug/kg	1670	1130	68	30-129	
2,4-Dinitrotoluene	ug/kg	1670	1480	89	61-125	

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

LABORATORY CONTROL SAMPLE: 1632346

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2,6-Dinitrotoluene	ug/kg	1670	1430	86	63-125	
2-Chloronaphthalene	ug/kg	1670	1430	86	60-125	
2-Chlorophenol	ug/kg	1670	1350	81	37-125	
2-Methylnaphthalene	ug/kg	1670	1380	83	56-125	
2-Methylphenol(o-Cresol)	ug/kg	1670	1350	81	45-125	
2-Nitroaniline	ug/kg	1670	1430	86	63-125	
2-Nitrophenol	ug/kg	1670	1400	84	47-125	
3&4-Methylphenol	ug/kg	1670	1380	83	50-125	
3,3'-Dichlorobenzidine	ug/kg	1670	1190	71	49-125	
3-Nitroaniline	ug/kg	1670	1030	62	48-125	
4,6-Dinitro-2-methylphenol	ug/kg	1670	1260J	75	39-125	
4-Bromophenylphenyl ether	ug/kg	1670	1480	89	65-125	
4-Chloro-3-methylphenol	ug/kg	1670	1440	86	63-125	
4-Chloroaniline	ug/kg	1670	688	41	30-125	
4-Chlorophenylphenyl ether	ug/kg	1670	1460	88	66-125	
4-Nitroaniline	ug/kg	1670	1350	81	60-125	
4-Nitrophenol	ug/kg	1670	1350	81	59-125	
Acenaphthene	ug/kg	1670	1410	84	62-125	
Acenaphthylene	ug/kg	1670	1430	86	64-125	
Anthracene	ug/kg	1670	1420	85	66-125	
Benzo(a)anthracene	ug/kg	1670	1470	88	66-125	
Benzo(a)pyrene	ug/kg	1670	1500	90	66-125	
Benzo(b)fluoranthene	ug/kg	1670	1520	91	65-125	
Benzo(g,h,i)perylene	ug/kg	1670	1550	93	67-125	
Benzo(k)fluoranthene	ug/kg	1670	1500	90	66-125	
bis(2-Chloroethoxy)methane	ug/kg	1670	1360	81	51-125	
bis(2-Chloroethyl) ether	ug/kg	1670	1230	74	30-125	
bis(2-Chloroisopropyl) ether	ug/kg	1670	1220	73	30-125	
bis(2-Ethylhexyl)phthalate	ug/kg	1670	1450	87	68-125	
Butylbenzylphthalate	ug/kg	1670	1510	91	67-125	
Carbazole	ug/kg	1670	1450	87	63-125	
Chrysene	ug/kg	1670	1460	88	67-125	
Di-n-butylphthalate	ug/kg	1670	1450	87	68-125	
Di-n-octylphthalate	ug/kg	1670	1460	87	65-125	
Dibenz(a,h)anthracene	ug/kg	1670	1550	93	67-125	
Dibenzofuran	ug/kg	1670	1460	88	64-125	
Diethylphthalate	ug/kg	1670	1420	85	65-125	
Dimethylphthalate	ug/kg	1670	1460	88	66-125	
Fluoranthene	ug/kg	1670	1480	89	66-125	
Fluorene	ug/kg	1670	1440	87	64-125	
Hexachloro-1,3-butadiene	ug/kg	1670	1380	83	33-125	
Hexachlorobenzene	ug/kg	1670	1470	88	65-125	
Hexachloroethane	ug/kg	1670	1260	76	30-125	
Indeno(1,2,3-cd)pyrene	ug/kg	1670	1550	93	67-125	
Isophorone	ug/kg	1670	1330	80	56-125	
N-Nitroso-di-n-propylamine	ug/kg	1670	1280	77	45-125	
N-Nitrosodimethylamine	ug/kg	1670	1150	69	30-125	
N-Nitrosodiphenylamine	ug/kg	1670	1460	87	65-125	

REPORT OF LABORATORY ANALYSIS

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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

LABORATORY CONTROL SAMPLE: 1632346

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	1670	1330	80	44-125	
Nitrobenzene	ug/kg	1670	1290	78	39-125	
Pentachlorophenol	ug/kg	1670	1390	83	45-125	
Phenanthrene	ug/kg	1670	1420	85	66-125	
Phenol	ug/kg	1670	1340	80	44-125	
Pyrene	ug/kg	1670	1480	89	67-125	
2,4,6-Tribromophenol (S)	%.			108	41-125	
2-Fluorobiphenyl (S)	%.			92	46-125	
2-Fluorophenol (S)	%.			87	31-125	
Nitrobenzene-d5 (S)	%.			80	30-125	
Phenol-d6 (S)	%.			87	38-125	
Terphenyl-d14 (S)	%.			98	64-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1632347 1632348

Parameter	Units	10259041002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/kg	ND	2060	2070	1520	1620	74	79	38-125	7	30	
1,2-Dichlorobenzene	ug/kg	ND	2060	2070	1460	1530	71	74	42-125	4	30	
1,2-Diphenylhydrazine	ug/kg	ND	2060	2070	1620	1720	79	83	58-125	6	30	
1,3-Dichlorobenzene	ug/kg	ND	2060	2070	1420	1500	69	73	32-125	5	30	
1,4-Dichlorobenzene	ug/kg	ND	2060	2070	1460	1510	71	73	31-125	3	30	
1-Methylnaphthalene	ug/kg	ND	2060	2070	1530	1630	75	79	56-125	6	30	
2,4,5-Trichlorophenol	ug/kg	ND	2060	2070	1580	1750	77	85	56-125	10	30	
2,4,6-Trichlorophenol	ug/kg	ND	2060	2070	1620	1750	79	85	57-125	8	30	
2,4-Dichlorophenol	ug/kg	ND	2060	2070	1630	1660	79	80	55-125	2	30	
2,4-Dimethylphenol	ug/kg	ND	2060	2070	1490	1540	72	75	55-125	4	30	
2,4-Dinitrophenol	ug/kg	ND	2060	2070	1310	1280	64	62	30-127	2	30	
2,4-Dinitrotoluene	ug/kg	ND	2060	2070	1640	1790	80	87	36-129	9	30	
2,6-Dinitrotoluene	ug/kg	ND	2060	2070	1640	1740	80	85	37-127	6	30	
2-Chloronaphthalene	ug/kg	ND	2060	2070	1630	1670	79	81	56-125	2	30	
2-Chlorophenol	ug/kg	ND	2060	2070	1480	1580	72	77	46-125	7	30	
2-Methylnaphthalene	ug/kg	ND	2060	2070	1570	1650	76	80	54-125	5	30	
2-Methylphenol(o-Cresol)	ug/kg	ND	2060	2070	1570	1600	77	78	53-125	2	30	
2-Nitroaniline	ug/kg	ND	2060	2070	1630	1770	79	86	59-125	8	30	
2-Nitrophenol	ug/kg	ND	2060	2070	1530	1620	74	78	30-125	6	30	
3&4-Methylphenol	ug/kg	ND	2060	2070	1550	1610	75	78	54-125	4	30	
3,3'-Dichlorobenzidine	ug/kg	ND	2060	2070	1040	1090	51	53	30-148	5	30	
3-Nitroaniline	ug/kg	ND	2060	2070	1140	1220	56	59	31-125	7	30	
4,6-Dinitro-2-methylphenol	ug/kg	ND	2060	2070	1490J	1500J	73	73	30-150		30	
4-Bromophenylphenyl ether	ug/kg	ND	2060	2070	1640	1730	80	84	59-125	5	30	
4-Chloro-3-methylphenol	ug/kg	ND	2060	2070	1590	1750	77	85	62-125	10	30	
4-Chloroaniline	ug/kg	ND	2060	2070	825	835	40	40	30-125	1	30	
4-Chlorophenylphenyl ether	ug/kg	ND	2060	2070	1600	1750	78	85	61-125	9	30	
4-Nitroaniline	ug/kg	ND	2060	2070	1490	1580	72	77	53-125	6	30	
4-Nitrophenol	ug/kg	ND	2060	2070	1610	1730	78	84	45-125	7	30	
Acenaphthene	ug/kg	ND	2060	2070	1680	1780	82	86	58-125	5	30	

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1632347 1632348

Parameter	Units	10259041002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acenaphthylene	ug/kg	ND	2060	2070	1620	1710	79	83	59-125	5	30	
Anthracene	ug/kg	ND	2060	2070	1620	1680	79	82	54-125	4	30	
Benzo(a)anthracene	ug/kg	ND	2060	2070	1630	1720	79	83	61-125	5	30	
Benzo(a)pyrene	ug/kg	ND	2060	2070	1660	1760	81	85	41-129	6	30	
Benzo(b)fluoranthene	ug/kg	ND	2060	2070	1720	1750	84	85	43-129	1	30	
Benzo(g,h,i)perylene	ug/kg	ND	2060	2070	1640	1760	80	85	55-125	7	30	
Benzo(k)fluoranthene	ug/kg	ND	2060	2070	1610	1820	78	88	53-125	12	30	
bis(2-Chloroethoxy)methane	ug/kg	ND	2060	2070	1550	1630	75	79	52-125	5	30	
bis(2-Chloroethyl) ether	ug/kg	ND	2060	2070	1440	1510	70	73	30-125	5	30	
bis(2-Chloroisopropyl) ether	ug/kg	ND	2060	2070	1420	1530	69	74	30-127	8	30	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	2060	2070	1610	1740	78	84	67-125	8	30	
Butylbenzylphthalate	ug/kg	ND	2060	2070	1630	1720	79	83	63-125	5	30	
Carbazole	ug/kg	ND	2060	2070	1610	1720	78	83	58-125	7	30	
Chrysene	ug/kg	ND	2060	2070	1640	1710	80	83	39-133	4	30	
Di-n-butylphthalate	ug/kg	ND	2060	2070	1570	1670	76	81	64-125	6	30	
Di-n-octylphthalate	ug/kg	ND	2060	2070	1580	1650	77	80	64-125	4	30	
Dibenz(a,h)anthracene	ug/kg	ND	2060	2070	1650	1740	80	85	58-125	5	30	
Dibenzofuran	ug/kg	ND	2060	2070	1610	1710	78	83	60-125	6	30	
Diethylphthalate	ug/kg	ND	2060	2070	1630	1710	79	83	63-125	5	30	
Dimethylphthalate	ug/kg	ND	2060	2070	1600	1740	78	84	63-125	8	30	
Fluoranthene	ug/kg	ND	2060	2070	1610	1710	78	83	54-125	6	30	
Fluorene	ug/kg	ND	2060	2070	1650	1740	80	85	60-125	6	30	
Hexachloro-1,3-butadiene	ug/kg	ND	2060	2070	1480	1570	72	76	35-125	6	30	
Hexachlorobenzene	ug/kg	ND	2060	2070	1630	1690	79	82	58-125	4	30	
Hexachloroethane	ug/kg	ND	2060	2070	1420	1540	69	75	30-125	8	30	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	2060	2070	1650	1740	80	84	51-125	6	30	
Isophorone	ug/kg	ND	2060	2070	1560	1640	76	79	54-125	5	30	
N-Nitroso-di-n-propylamine	ug/kg	ND	2060	2070	1490	1560	72	76	51-125	5	30	
N-Nitrosodimethylamine	ug/kg	ND	2060	2070	1580	1610	77	78	30-130	2	30	
N-Nitrosodiphenylamine	ug/kg	ND	2060	2070	1610	1700	78	82	61-125	5	30	
Naphthalene	ug/kg	ND	2060	2070	1510	1610	73	78	46-125	6	30	
Nitrobenzene	ug/kg	ND	2060	2070	1480	1610	72	78	41-125	9	30	
Pentachlorophenol	ug/kg	ND	2060	2070	1530	1550	75	75	30-136	1	30	
Phenanthrene	ug/kg	ND	2060	2070	1600	1660	78	81	55-125	4	30	
Phenol	ug/kg	ND	2060	2070	1500	1630	73	79	49-125	8	30	
Pyrene	ug/kg	ND	2060	2070	1650	1750	80	85	43-129	6	30	
2,4,6-Tribromophenol (S)	%.						85	94	41-125			
2-Fluorobiphenyl (S)	%.						80	81	46-125			
2-Fluorophenol (S)	%.						74	79	31-125			
Nitrobenzene-d5 (S)	%.						76	79	30-125			
Phenol-d6 (S)	%.						77	80	38-125			
Terphenyl-d14 (S)	%.						83	86	64-125			

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street - Suite 200
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(612)607-1700

QUALITY CONTROL DATA

Project: BP-IL SS#5482
Pace Project No.: 10259041

QC Batch: WET/34603
QC Batch Method: EPA 9045
Analysis Method: EPA 9045
Analysis Description: 9045 pH
Associated Lab Samples: 10259041001, 10259041002

LABORATORY CONTROL SAMPLE: 1635852

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
pH at 25 Degrees C	Std. Units	5	5.0	100	98-102	

SAMPLE DUPLICATE: 1635853

Parameter	Units	10256148009 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.6	7.6	.3	3	

SAMPLE DUPLICATE: 1635854

Parameter	Units	10259041002 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	8.0	8.0	.9	3	

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QUALIFIERS

Project: BP-IL SS#5482
Pace Project No.: 10259041

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

IS	The internal standard recovery associated with this result exceeds the lower control limit. The reported result should be considered an estimated value.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BP-IL SS#5482
Pace Project No.: 10259041

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10259041001	SB-9 3-4'	EPA 3550 Sonication	OEXT/24492	EPA 8015 Modified	GCSV/12910
10259041002	SB-9 12-14'	EPA 3550 Sonication	OEXT/24492	EPA 8015 Modified	GCSV/12910
10259041001	SB-9 3-4'	EPA 5030	GCV/11739	EPA 8015/8021	GCV/11740
10259041002	SB-9 12-14'	EPA 5030	GCV/11739	EPA 8015/8021	GCV/11740
10259041001	SB-9 3-4'	EPA 3050	MPRP/44612	EPA 6010	ICP/18873
10259041002	SB-9 12-14'	EPA 3050	MPRP/44612	EPA 6010	ICP/18873
10259041001	SB-9 3-4'	ASTM D2974	MPRP/44616		
10259041002	SB-9 12-14'	ASTM D2974	MPRP/44616		
10259041001	SB-9 3-4'	EPA 3550	OEXT/24489	EPA 8270	MSSV/10357
10259041002	SB-9 12-14'	EPA 3550	OEXT/24489	EPA 8270	MSSV/10357
10259041001	SB-9 3-4'	EPA 5035A	MSV/26460	EPA 8260	MSV/26501
10259041002	SB-9 12-14'	EPA 5035A	MSV/26460	EPA 8260	MSV/26501
10259041003	EQUIPMENT BLANK	EPA 8260	MSV/26462		
10259041001	SB-9 3-4'	EPA 9045	WET/34603		
10259041002	SB-9 12-14'	EPA 9045	WET/34603		

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Laboratory Management Program LaMP Chain of Custody Record

1 1

BP Site Node Path: BP>USA>IL>GSAU6>05482>ASSESSMENT / FIELD WORK>AOC SITE INVESTIGATION

Req Due Date (mm/dd/yy): 03/16/14 Rush TAT: Yes X No

BP Facility No: 5482

Lab Work Order Number: 10259041

10259041

Lab Name:	Pace Analytical	Facility Address:	E 2153rd Road/Route 11	Consultant/Contractor:	Stantec
Lab Address:	1700 Elm St SE, Minneapolis, MN 55414	City, State, ZIP Code:	Wedron, IL 61350	Consultant/Contractor Project No:	182630001
Lab PM:	Lori Castille	Lead Regulatory Agency:	USEPA	Address:	446 Eisenhower Lane North, Lombard, IL 60148
Lab Phone:	612-607-1700	California Global ID No.:		Consultant/Contractor PM:	Luisa Price
Lab Shipping Accnt:	1797 5692 7	Enfos Proposal No:	008X9-0004	Phone: 630.792.1680	Email: luisa.price@stantec.com
Lab Bottle Order No:	69417; 69429	Accounting Mode:	Provision X OOC-BU ___ OOC-RM ___	Email EDD To:	and to lab.enfosdoc@bp.com
Other Info:		Stage: 4_Execute (40)	Activity: Project Spend (80)	Invoice To:	BP X Contractor ___

BP Project Manager (PM): Mary Wojciechowski

BP PM Phone: 630.420.5149

BP PM Email: mary.wojciechowski@bp.com

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix: Is this location a well?	No. Containers / Preservative: Total Number of Containers	Unpreserved	H2SO4	HNO3	HCl	Methanol	SBS	Requested Analyses: VOC 8260	TPH as GAS 8015	TPH DIESEL 8015	SVOC 8270C	TOTAL Pb 6010	Report Type & QC Level / Comments
	SB-9 3-4'	2-26-14	0850	X			N	9	3				4	2	X	X	X	X	X	-001
	SB-9 12-14'	1	0908	X			N	27	9				12	6	X	X	X	X	X	MS/MSD -002
	EQUIPMENT BLANK	2-26-14	1115		X			6				6			X			X		-003

Standard ___

Full Data Package X

Comments

Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name:	Craig A. Varland	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company:	Stantec	[signature] - STANTEC	2-27-14	1700	[signature] PMCF	2/28/14	930
Shipment Method:	Fed Ex Ship Date: 2-27-14						
Shipment Tracking No:	5753 4197 6216; 5753 4197 6227						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 1.1 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Pace Analytical	Document Name: Sample Condition Upon Receipt Form - ESI	Document Revised: 28Jan2013 Page 1 of 1
	Document No.: F-MN-L-210-rev.09	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt - ESI Tech Specs

Client Name: Stantec **Project #:** WO#: 1259041

10259041

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other:

Tracking Number: 575341978227

Custody Seal on Cooler/Box Present? ☒ Yes ☐ No (seal on top of cooler) **Seals Intact?** ☒ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☒ Yes ☐ No

Thermom. Used: ☒ B88A912167504 ☐ 80512447 ☐ 72337080 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 1.5 **Cooler Temp Corrected (°C):** 1.1 **Biological Tissue Frozen?** ☐ Yes ☐ No N/A

Temp should be above freezing to 6°C **Correction Factor:** -0.4 **Date and Initials of Person Examining Contents:** BD 2/28/14

Comments:

Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☒ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☒ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☐ Yes	☒ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	7.
Sufficient Volume (triple volume provided for MS/MSD)?	☐ Yes	☐ No	☒ N/A	8.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☐ Yes	☒ No	☐ N/A	10. SB-4 12-14' VOA 1 vial broken
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	11.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: SL, WT	☒ Yes	☐ No	☐ N/A	12. EB SVOC vials are clear; presewed w/ HCL
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☒ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH>12) Per method, VOA pH is checked after analysis	☐ Yes	☐ No	☒ N/A	Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☒ N/A	14.
3 Trip Blanks Present?	☒ Yes	☐ No	☐ N/A	15. JT 2/28/14.
Trip Blank Custody Seals Present?	☒ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Luisa Date/Time: 3/3

Comments/Resolution:

Temp Log: Temp must be maintained at <6°C during login, record temp every 20 mins		
Opened Time: 1116 Temp: 1.5	Corrected Temp: 1.1	
Time: put in cooler		
Time: 1135 Temp: 1.5	Corrected Temp: 1.1	

notified of breakage

EB should be VOCs only per Rachelle 3/5 add pH to all samples

Project Manager Review: Date: 3/3/14

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Fraction: 8015-DRO

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 288068 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041
Lab File ID: 0305R017.D Lab Sample ID: 1632388
GC Column: DB-5MS ID: 0.25 (mm) Time Analyzed: 13:46
Instrument ID: 10GCS8

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BLANK for HBN 288068 [OEXT/244	1632388	0305R017.D	13:46
02	LCS for HBN 288068 [OEXT/24492	1632389	0305R018.D	14:09
03	SB-9 12-14'	10259041002	0305R020.D	14:55
04	SB-9 12-14'(1631878MS)	1632390-MS	0305R021.D	15:18
05	SB-9 12-14'(1631878MSD)	1632391-MSD	0305R022.D	15:41
06	SB-9 3-4'	10259041001	0305R026.D	17:14

Pace Analytical
www.pacelabs.com

1700 Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SURROGATE RECOVERY SUMMARY

Project: BP-IL SS#5482
Pace Project No.: 10259041

QB Batch: OEXT / 24492
Method(s): EPA 3550 Sonication / EPA 8015

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
10259041001		SB-9 3-4'	1	99		99									
1632388	BLANK		1	99		104									
10259041002	OQS	SB-9 12-14'	1	97		106									
1632389	LCS		1	102		109									
1632390	MS		1	99		102									
1632391	MSD		1	94		97									
		QC Limits:		30-147		30-150									
		Sample Limits:		30-147		30-150									

Sur 1: n-Triacontane (S)
Sur 2: o-Terphenyl (S)

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Instrument Run Log

Instrument: 10GCS8 Method: 8015/NWTPH/AK102/103 Misc. Prep. Info: Surrogate Lot: See extract sheet
Column: DB-5MS 0.25mm HydrogenTune Standard: NA ISTD Lot: NA Cal. Standard: 10528-027

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
0305R001.D	MECL2 RINSE	Solid	Sample	1		GCS8AKNW8015-030514R	3/05/14 07:35	MT	
0305R002.D	MECL2 RINSE	Solid	Sample	1		GCS8AKNW8015-030514R	3/05/14 07:58	MT	
0305R003.D	MECL2 RINSE	Solid	Sample	1		GCS8AKNW8015-030514R	3/05/14 08:21	MT	
0305R004.D	RTMARK 10328-153	Solid	Sample	1		GCS8AKNW8015-030514R	3/05/14 08:45	MT	
0305R005.D	D/MOICAL1		Ical	1		GCS8AKNW8015-030514R	3/05/14 09:08	MT	All levels 10528-027
0305R006.D	D/MOICAL2		Ical	1		GCS8AKNW8015-030514R	3/05/14 09:31	MT	
0305R007.D	D/MOICAL3		Ical	1		GCS8AKNW8015-030514R	3/05/14 09:54	MT	passes 40% rule
0305R008.D	D/MOICAL4		Ical	1		GCS8AKNW8015-030514R	3/05/14 10:17	MT	passes 40% rule
0305R009.D	D/MOICAL5		Ical	1		GCS8AKNW8015-030514R	3/05/14 10:40	MT	passes 40% rule
0305R010.D	D/MOICAL6		Ical	1		GCS8AKNW8015-030514R	3/05/14 11:04	MT	
0305R011.D	D/MOICAL7		Ical	1		GCS8AKNW8015-030514R	3/05/14 11:27	MT	
0305R012.D	D/MOICAL8		Ical	1		GCS8AKNW8015-030514R	3/05/14 11:50	MT	
0305R013.D	D/MOICAL9		Ical	1		GCS8AKNW8015-030514R	3/05/14 12:13	MT	
0305R014.D	D/MOICAL10		Ical	1		GCS8AKNW8015-030514R	3/05/14 12:36	MT	ICAL passes
0305R015.D	MECL2 RINSE	Solid	Sample	1		GCS8AKNW8015-030514R	3/05/14 12:59	MT	rinse ran for carryover, carryover present.
0305R016.D	D/MOICV		CCal	1		GCS8AKNW8015-030514R	3/05/14 13:22	MT	passes all 15%
0305R017.D	1632388	SOLID	Blank	1		GCS8AKNW8015-030514R	3/05/14 13:46	MT	ok
0305R018.D	1632389	SOLID	LCS	1		GCS8AKNW8015-030514R	3/05/14 14:09	MT	pass
0305R019.D	10258121002	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 14:32	MT	
0305R020.D	10259041002	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 14:55	MT	
0305R021.D	1632390	SOLID	MS	1		GCS8AKNW8015-030514R	3/05/14 15:18	MT	
0305R022.D	1632391	SOLID	MSD	1		GCS8AKNW8015-030514R	3/05/14 15:41	MT	
0305R023.D	10259055002	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 16:04	MT	
0305R024.D	10259055007	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 16:28	MT	
0305R025.D	10259055001	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 16:51	MT	
0305R026.D	10259041001	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 17:14	MT	
0305R027.D	D/MO7 10528-020		CCal	1		GCS8AKNW8015-030514R	3/05/14 17:37	MT	pass 8015
0305R028.D	1632388	SOLID	Blank	1		GCS8AKNW8015-030514R	3/05/14 18:01	MT	ok
0305R029.D	10258999001	SOLID	Sample	20		GCS8AKNW8015-030514R	3/05/14 18:24	MT	
0305R030.D	10259055003	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 18:47	MT	
0305R031.D	10259055004	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 19:10	MT	
0305R032.D	10259055006	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 19:33	MT	
0305R033.D	10259055005	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 19:56	MT	
0305R034.D	D/MO7 10528-020		CCal	1		GCS8AKNW8015-030514R	3/05/14 20:19	MT	pass 8015/NW
0305R035.D	1632638	SOLID	Blank	1		GCS8AKNW8015-030514R	3/05/14 20:43	MT	ok
0305R036.D	1632639	SOLID	LCS	1		GCS8AKNW8015-030514R	3/05/14 21:06	MT	pass
0305R037.D	10258597003	SOLID	Sample	1		GCS8AKNW8015-030514R	3/05/14 21:29	MT	surr's low
0305R038.D	1632640	SOLID	MS	1		GCS8AKNW8015-030514R	3/05/14 21:52	MT	
0305R039.D	1632641	SOLID	MSD	1		GCS8AKNW8015-030514R	3/05/14 22:15	MT	
0305R040.D	D/MO7 10528-020		CCal	1		GCS8AKNW8015-030514R	3/05/14 22:39	MT	pass NW

Instrument Run Log

Instrument: 10GCS8 Method: 8015/NWTPH/AK102/103 Misc. Prep. Info: Surrogate Lot: See extract sheet
Column: DB-5MS 0.25mm HydrogenTune Standard: NA ISTD Lot: NA Cal. Standard: 10528-027

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments

Check Maintenance Items Performed:

x Changed septum	Clipped column	Changed column - Lot #
x Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments:

File Path 1: U:\10GCS8.I\030514RLL.B\ Run order verified: MT Report Date: 03/05/2014 13:52
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one Reviewed By/Date:

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAR-2014 09:08
End Cal Date : 05-MAR-2014 12:36
Quant Method : ESTD
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Last Edit : 05-Mar-2014 13:42 10gcs8.i

Calibration File Names:
Level 1: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R005.d
Level 2: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R006.d
Level 3: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R007.d
Level 4: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R008.d
Level 5: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R009.d
Level 6: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R010.d
Level 7: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R011.d
Level 8: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R012.d
Level 9: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R013.d
Level 10: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R014.d

Compound	6.0000 Level 1	10.0000 Level 2	25.0000 Level 3	50.0000 Level 4	100.0000 Level 5	250.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	500.0000 Level 7	1000.0000 Level 8	2000.0000 Level 9	4000.0000 Level 10							
S 1 DRO by AK 102	1222812	1564354	2302123	3535080	5828784	12362195					
	23371921	45607763	95868241	204157857			QUAD	-25.26407	0.00002	-1.452e-01	0.99995
S 4 Residual Range Organics AK103	425447	553385	793240	1420317	2525253	5578314					
	11073935	21800816	44313144	93502939			QUAD	-16.61745	0.00005	-5.093e-01	1.00000
S 5 TPH-DRO (C10-C28)	1283528	1654368	2459003	3853467	6423849	13727647					
	26060136	51171886	108109532	229512672			QUAD	-21.83078	0.00002	-1.115e-01	0.99993

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAR-2014 09:08
End Cal Date : 05-MAR-2014 12:36
Quant Method : ESTD
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Last Edit : 05-Mar-2014 13:42 10gcs8.i

	Compound	6.0000 Level 1	10.0000 Level 2	25.0000 Level 3	50.0000 Level 4	100.0000 Level 5	250.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
		500.0000 Level 7	1000.0000 Level 8	2000.0000 Level 9	4000.0000 Level 10							
$	6 Motor Oil Range (C24-C36)	443053	574881	822608	1486290	2648617	5853491					
		11616686	22907863	46840333	98651105			QUAD	-15.39890	0.00005	-4.554e-01	1.00000
$	7 DRO (C12-C24)	825044	1065899	1660974	2738379	4694494	10291210					
		19788324	38870475	82359076	178742732			QUAD	-18.29416	0.00003	-2.283e-01	0.99995
$	8 Diesel Fuel Range	825044	1065889	1660974	2738379	4694494	10291210					
		19788324	38870475	82359076	178742732			QUAD	-18.29416	0.00003	-2.283e-01	0.99995
$	9 ORO (C24-C40)	834868	961465	1290912	2101889	3515110	7513433					
		14561250	27094880	52906643	114323573			QUAD	-39.49793	0.00004	-4.212e-01	0.99978
$	10 Motor Oil Range	834868	961465	1290912	2101889	3515110	7513433					
		14561250	27094880	52906643	114323573			QUAD	-39.49793	0.00004	-4.212e-01	0.99978
$	2 o-Terphenyl (S)	25084	42895	105133	237121	456676	1090121					
		2180779	4574739	9707361	20893356			LINR	3.61445	51868		0.99825
$	3 n-Triacontane (S)	19091	32336	78027	175290	344161	815604					
		1652499	3272748	6783709	14264426			LINR	1.98277	35437		0.99924

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAR-2014 09:08
End Cal Date : 05-MAR-2014 12:36
Quant Method : ESTD
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Last Edit : 05-Mar-2014 13:42 10gcs8.i

Average %RSD Results.
Calculated Average %RSD = 0.000e+000
Maximun Average %RSD = 25.00000
* Passed Average %RSD Test.

Curve	Formula	Units
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R005.d
Lab Smp Id: D/MOICAL1
Inj Date : 05-MAR-2014 09:08
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL1
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			1222812	6.00000	2.44 (M)
$	2 o-Terphenyl (S)	6.736	6.736	0.000	25084	0.60000	4.10 (M)
$	3 n-Triacontane (S)	9.768	9.768	0.000	19091	0.60000	2.52 (M)
S	4 Residual Range Organics AK103	8.240-11.450			425447	6.00000	3.68 (M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			1283528	6.00000	3.91 (M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			443053	6.00000	4.62 (M)
S	7 DRO (C12-C24)	4.240-8.210			825044	6.00000	3.60 (M)
S	8 Diesel Fuel Range	4.240-8.210			825044	6.00000	3.60 (M)
S	9 ORO (C24-C40)	8.220-13.070			834868	6.00000	(M)
S	10 Motor Oil Range	8.220-13.070			834868	6.00000	(M)

QC Flag Legend

M - Compound response manually integrated.

- Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R005.D

Date : 05-MAR-2014 09:08

Client ID:

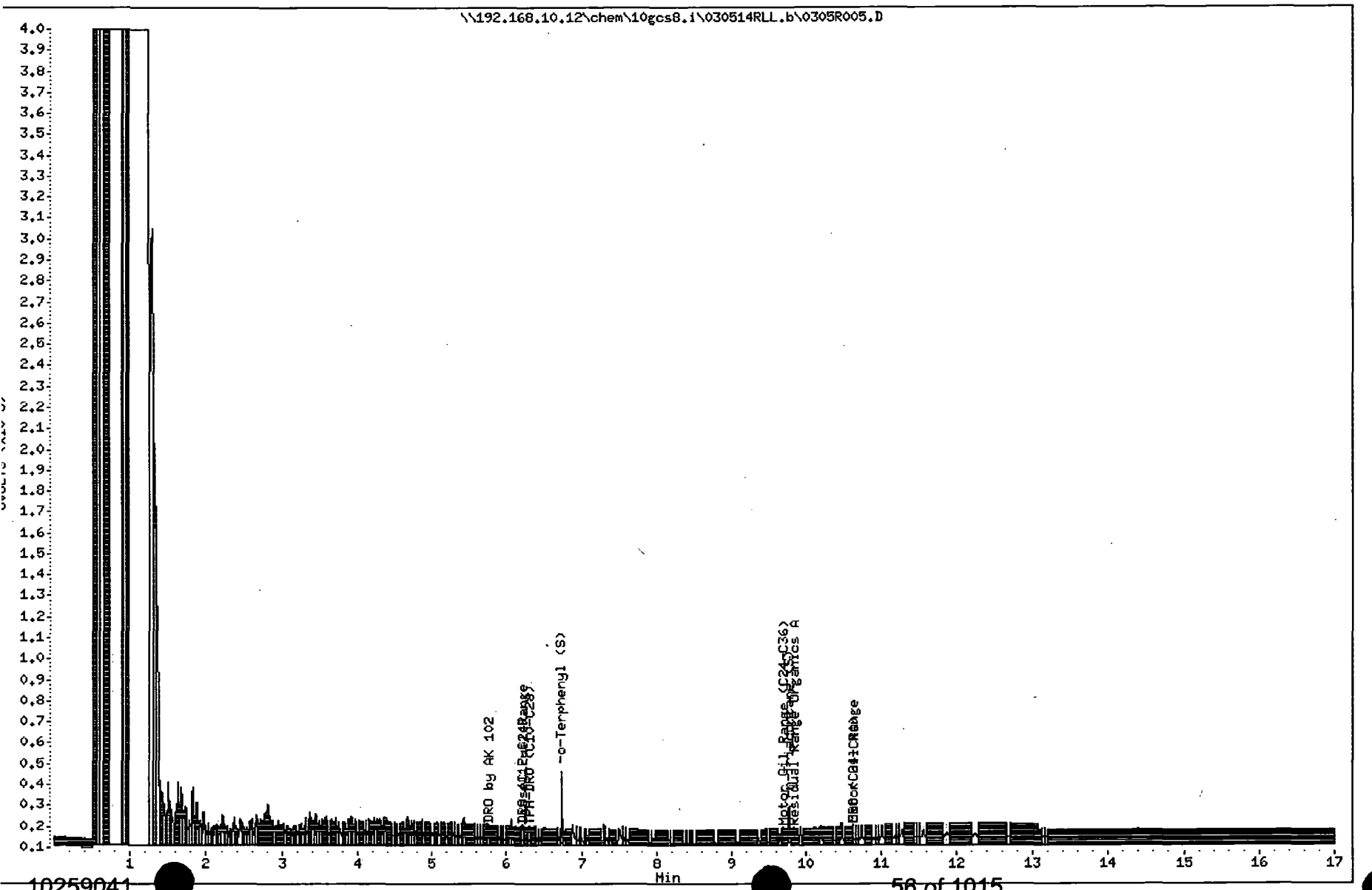
Instrument: 10gcs8.i

Sample Info: D/MOICAL1

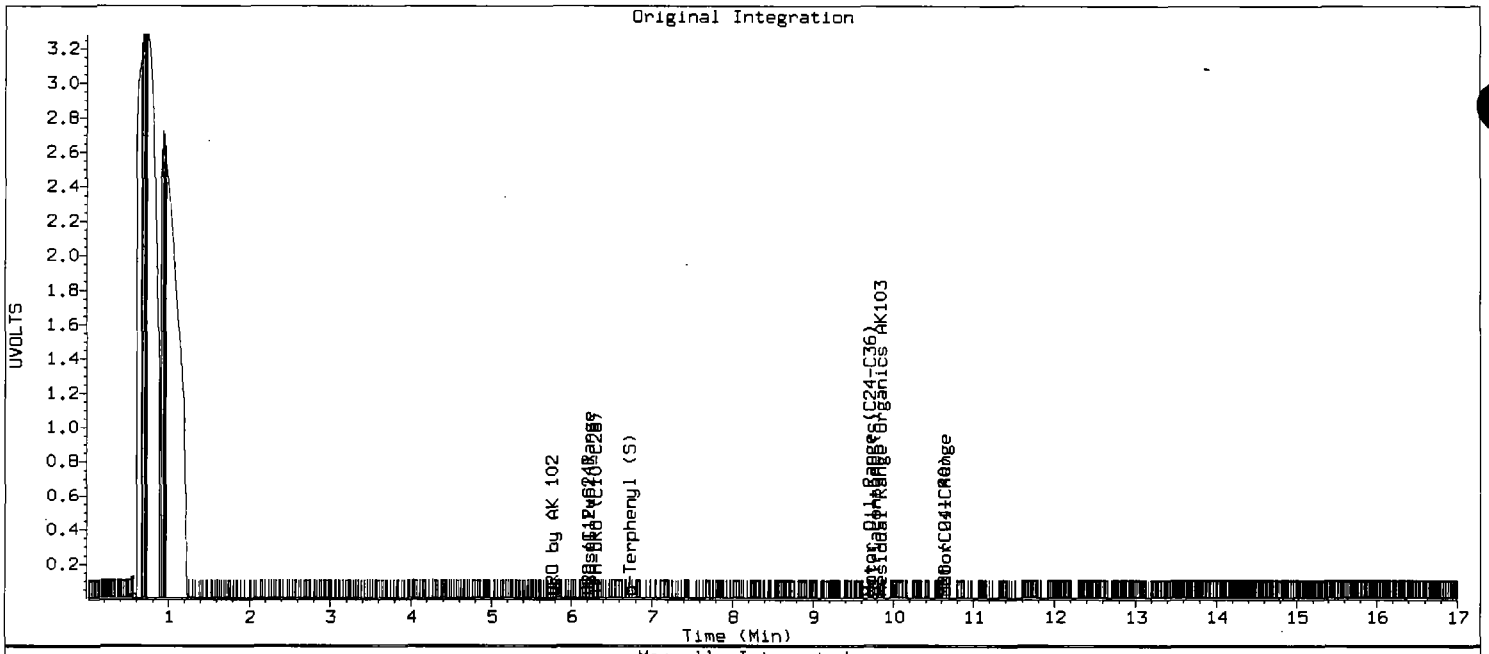
Operator: MT

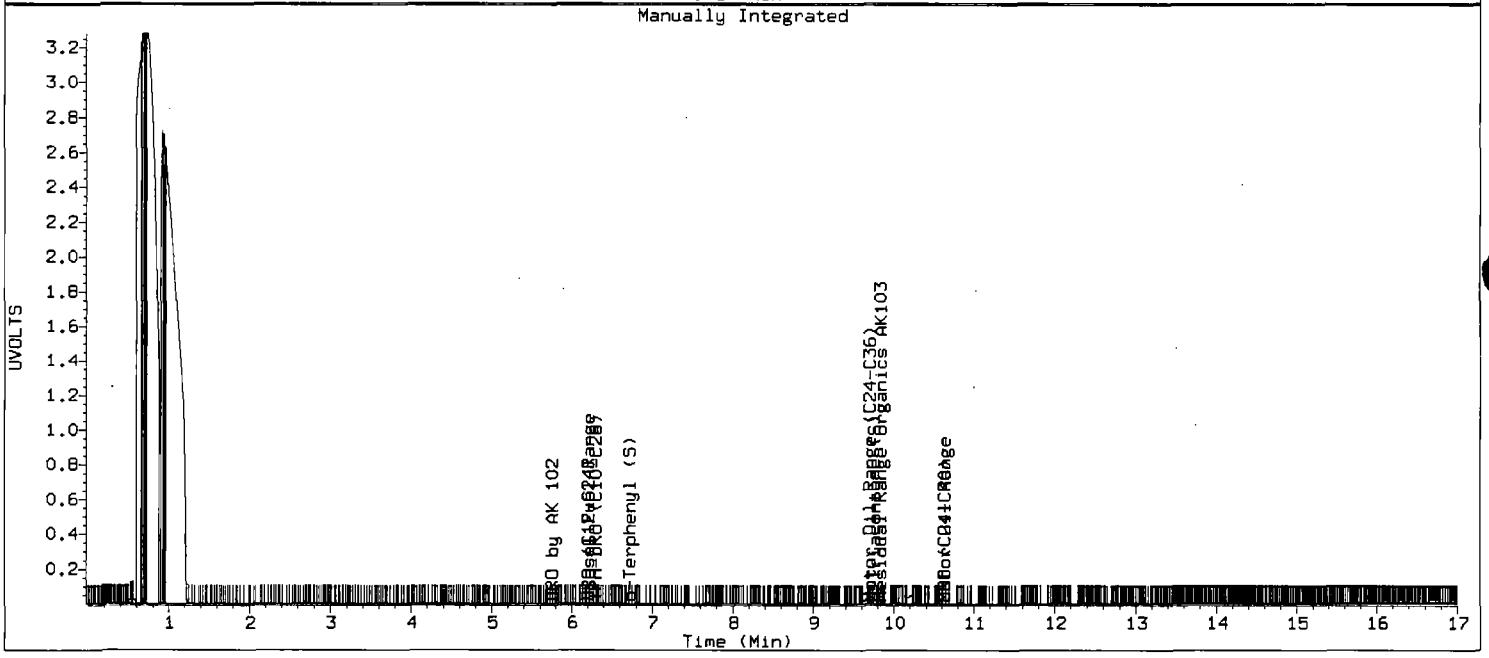
Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAR-2014 09:08
Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL1





Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	425447	425447	
DRO by AK 102	1222812	1222812	
TPH-DRO (C10-C28)	1283528	1283528	
Motor Oil Range (C24-C36)	443053	443053	
DRO (C12-C24)	825044	825044	
ORO (C24-C40)	834868	834868	
Diesel Fuel Range	825044	825044	
Motor Oil Range	834868	834868	

n-Triacontane (S)	19091	19091
o-Terphenyl (S)	25084	25084

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R006.d
Lab Smp Id: D/MOICAL2
Inj Date : 05-MAR-2014 09:31
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL2
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 09:08 Cal File: 0305R005.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			1564354	10.0000	10.2 (M)
S	2 o-Terphenyl (S)	6.696	6.696	0.000	42895	1.00000	4.44 (M)
S	3 n-Triacontane (S)	9.599	9.599	0.000	32336	1.00000	2.90 (M)
S	4 Residual Range Organics AK103	8.240-11.450			553385	10.0000	9.78 (M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			1654368	10.0000	11.3 (M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			574881	10.0000	10.6 (M)
S	7 DRO (C12-C24)	4.240-8.210			1065889	10.0000	9.98 (M)
S	8 Diesel Fuel Range	4.240-8.210			1065889	10.0000	9.98 (M)
S	9 ORO (C24-C40)	8.220-13.070			961465	10.0000	(M)
S	10 Motor Oil Range	8.220-13.070			961465	10.0000	(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R006.D

Page 1

Date : 05-MAR-2014 09:31

Client ID:

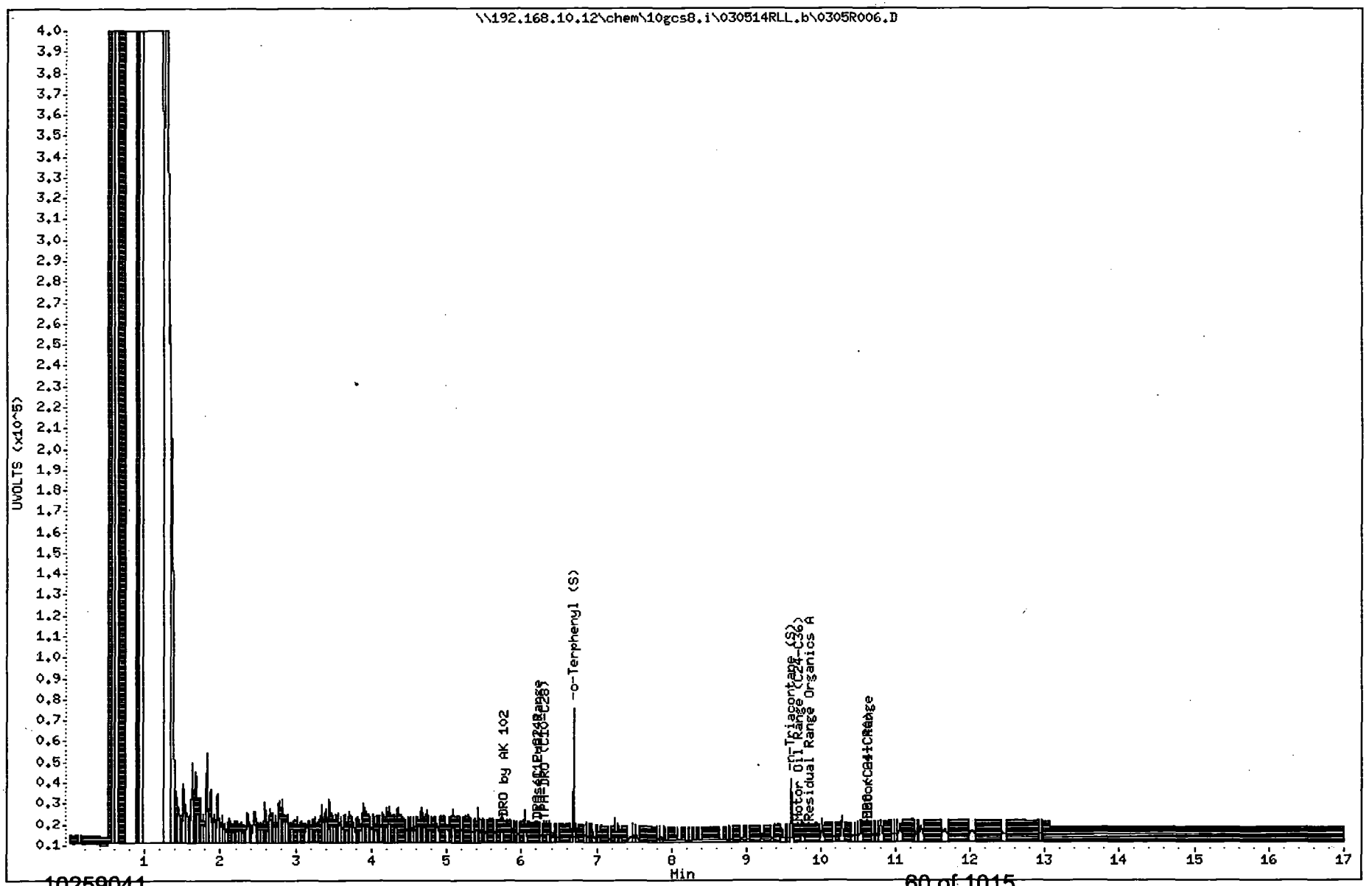
Instrument: 10gcs8.i

Sample Info: D/MOICAL2

Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



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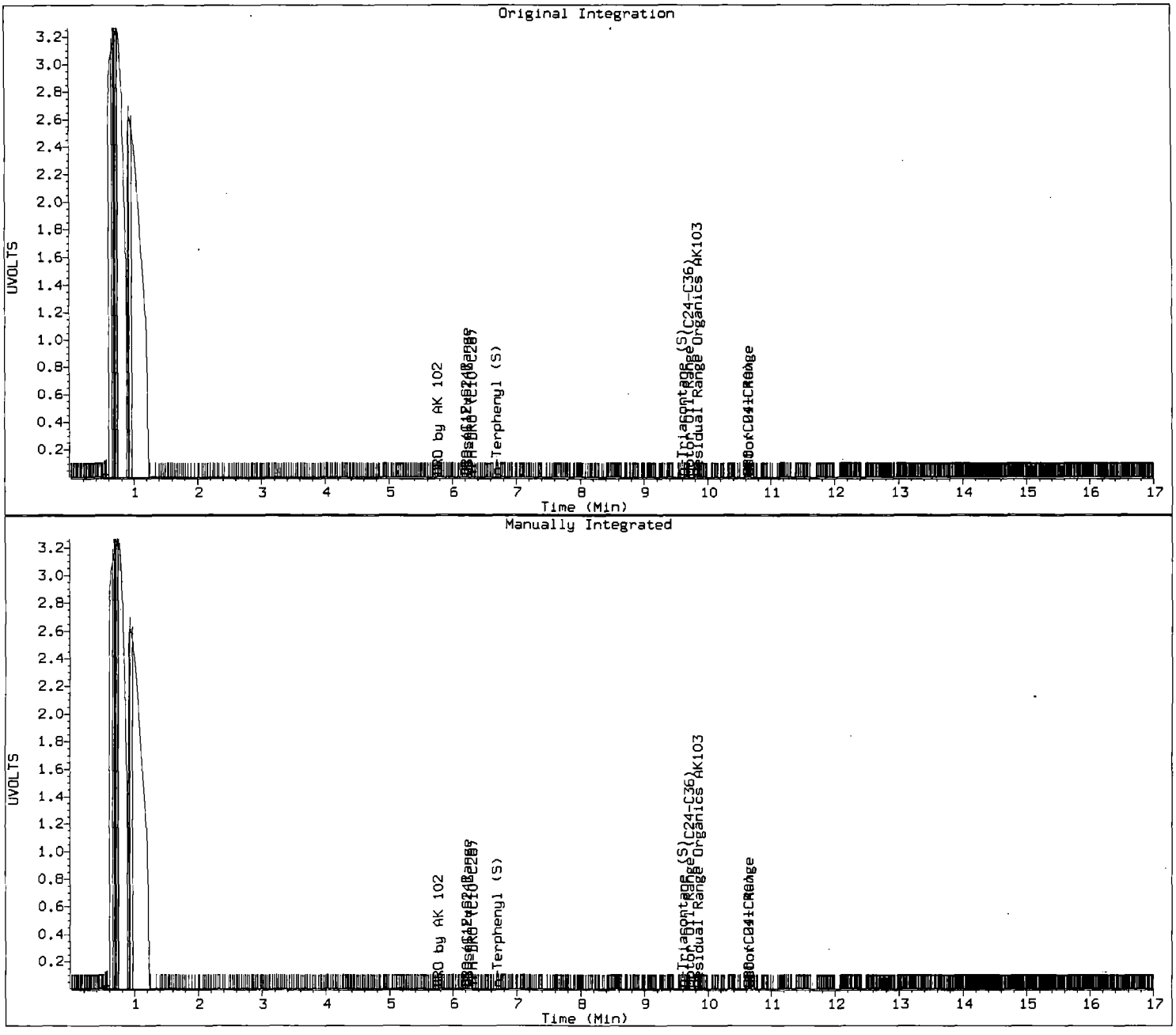
Injection Date: 05-MAR-2014 09:31
Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL2



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	553385	553385	
DRO by AK 102	1564354	1564354	
TPH-DRO (C10-C28)	1654368	1654368	
Motor Oil Range (C24-C36)	574881	574881	
DRO (C12-C24)	1065889	1065889	
ORO (C24-C40)	961465	961465	
Diesel Fuel Range	1065889	1065889	
Motor Oil Range	961465	961465	

n-Triacontane (S)	32336	32336
o-Terphenyl (S)	42895	42895

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R007.d
Lab Smp Id: D/MOICAL3
Inj Date : 05-MAR-2014 09:54
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL3
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 09:31 Cal File: 0305R006.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			2302123	25.0000	26.8(M)
$	2 o-Terphenyl (S)	6.704	6.704	0.000	105133	2.50000	5.64(M)
$	3 n-Triacontane (S)	9.691	9.691	0.000	78027	2.50000	4.18(M)
S	4 Residual Range Organics AK103	8.240-11.450			793240	25.0000	21.2(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			2459003	25.0000	27.4(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			822608	25.0000	21.7(M)
S	7 DRO (C12-C24)	4.240-8.210			1660974	25.0000	25.7(M)
S	8 Diesel Fuel Range	4.240-8.210			1660974	25.0000	25.7(M)
S	9 ORO (C24-C40)	8.220-13.070			1290912	25.0000	12.3(M)
S	10 Motor Oil Range	8.220-13.070			1290912	25.0000	12.3(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R007.D

Page 1

Date : 05-MAR-2014 09:54

Client ID:

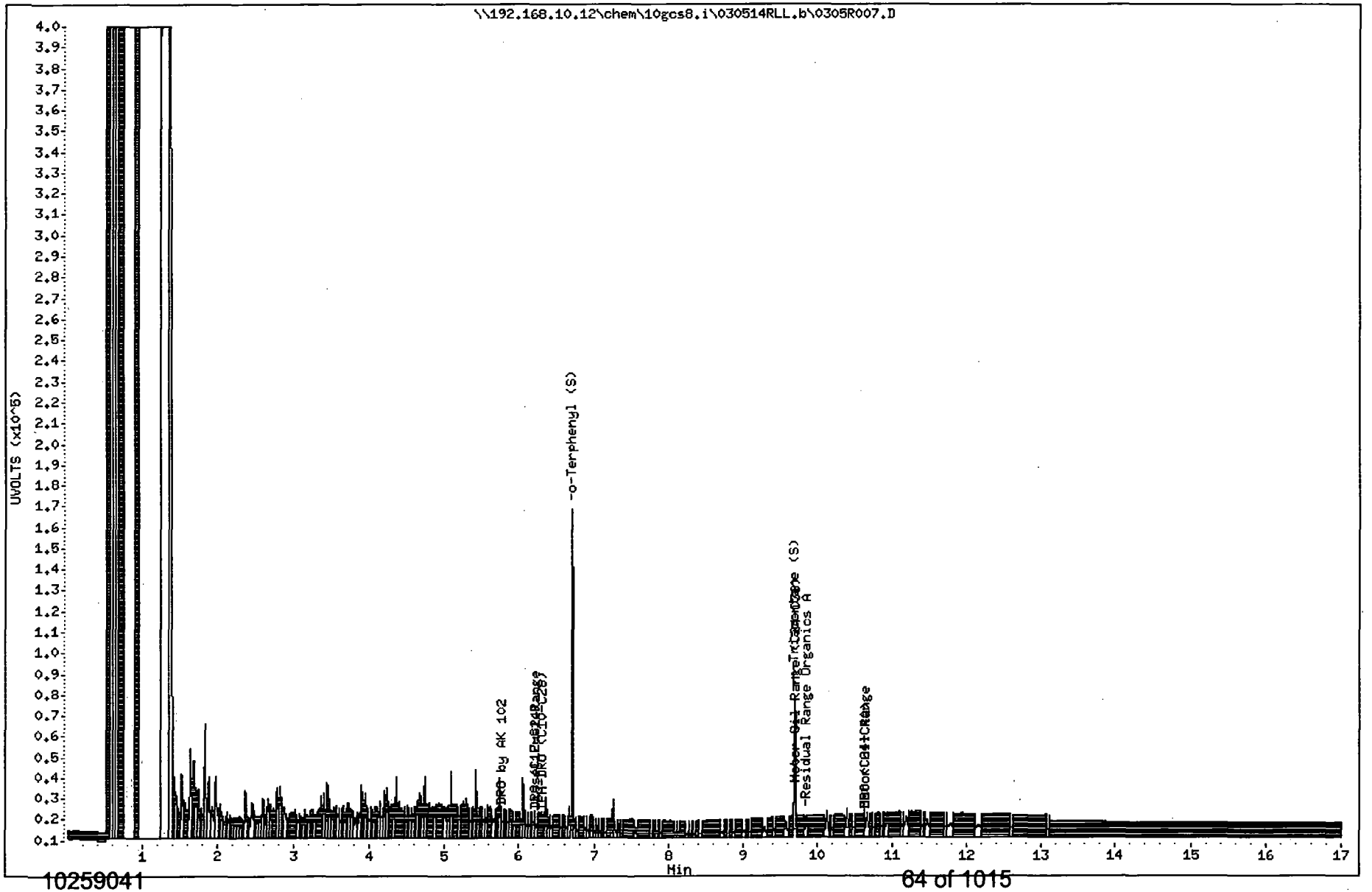
Instrument: 10gcs8.i

Sample Info: D/MOICAL3

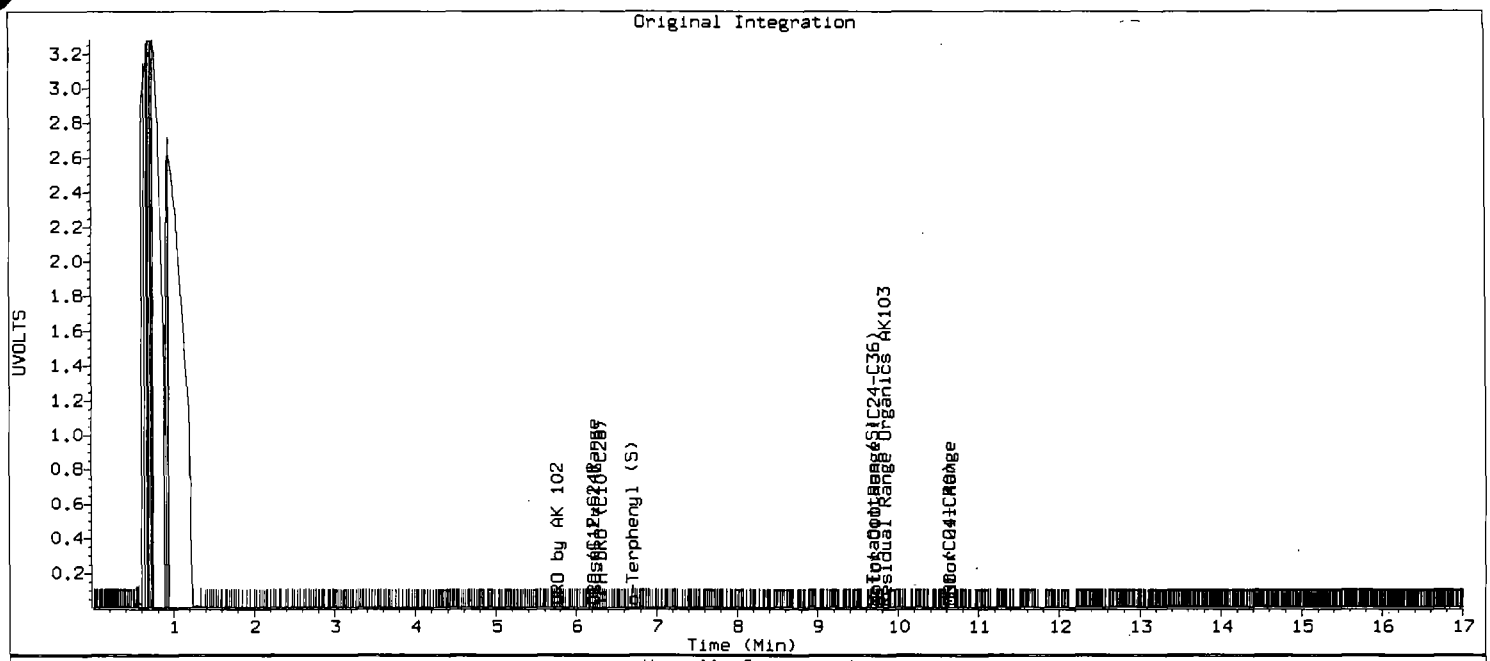
Operator: MT

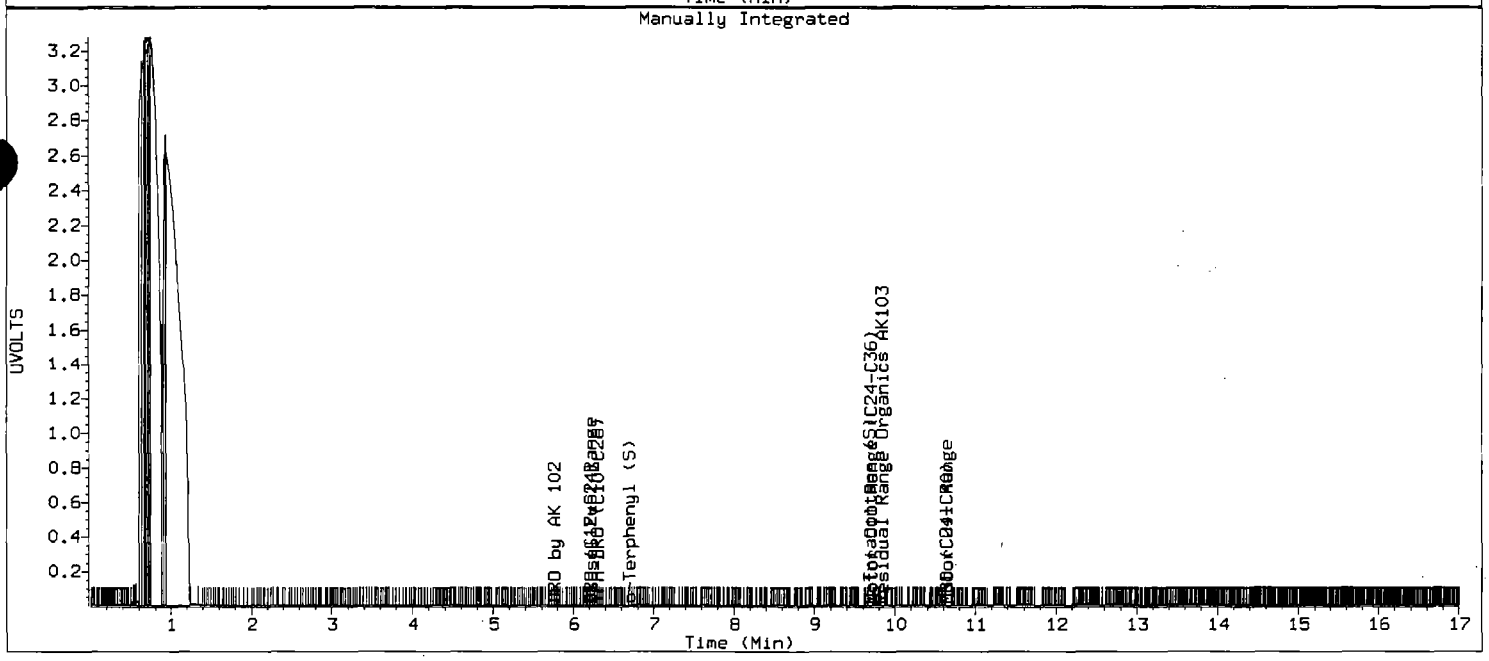
Column phase: DB-5MS

Column diameter: 0.25



Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b/0305R007.d (ManInt: all.sub Orig: all.sub)
Injection Date: 05-MAR-2014 09:54
Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL3





Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	793240	793240	
DRO by AK 102	2302123	2302123	
TPH-DRO (C10-C28)	2459003	2459003	
Motor Oil Range (C24-C36)	822608	822608	
DRO (C12-C24)	1660974	1660974	
DRO (C24-C40)	1290912	1290912	
Diesel Fuel Range	1660974	1660974	
Motor Oil Range	1290912	1290912	

n-Triacontane (S)	78027	78027
o-Terphenyl (S)	105133	105133

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R008.d
Lab Smp Id: D/MOICAL4
Inj Date : 05-MAR-2014 10:17
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL4
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 09:54 Cal File: 0305R007.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S 1	DRO by AK 102	3.320-8.230			3535080	50.0000	54.7(M)
$ 2	o-Terphenyl (S)	6.710	6.710	0.000	237121	5.00000	8.19(M)
$ 3	n-Triacontane (S)	9.681	9.681	0.000	175290	5.00000	6.93(M)
S 4	Residual Range Organics AK103	8.240-11.450			1420317	50.0000	51.1(M)
S 5	TPH-DRO (C10-C28)	3.320-9.310			3853467	50.0000	55.3(M)
S 6	Motor Oil Range (C24-C36)	7.960-11.450			1486290	50.0000	51.7(M)
S 7	DRO (C12-C24)	4.240-8.210			2738379	50.0000	54.2(M)
S 8	Diesel Fuel Range	4.240-8.210			2738379	50.0000	54.2(M)
S 9	ORO (C24-C40)	8.220-13.070			2101889	50.0000	44.8(M)
S 10	Motor Oil Range	8.220-13.070			2101889	50.0000	44.8(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R008.D

Page 1

Date : 05-MAR-2014 10:17

Client ID:

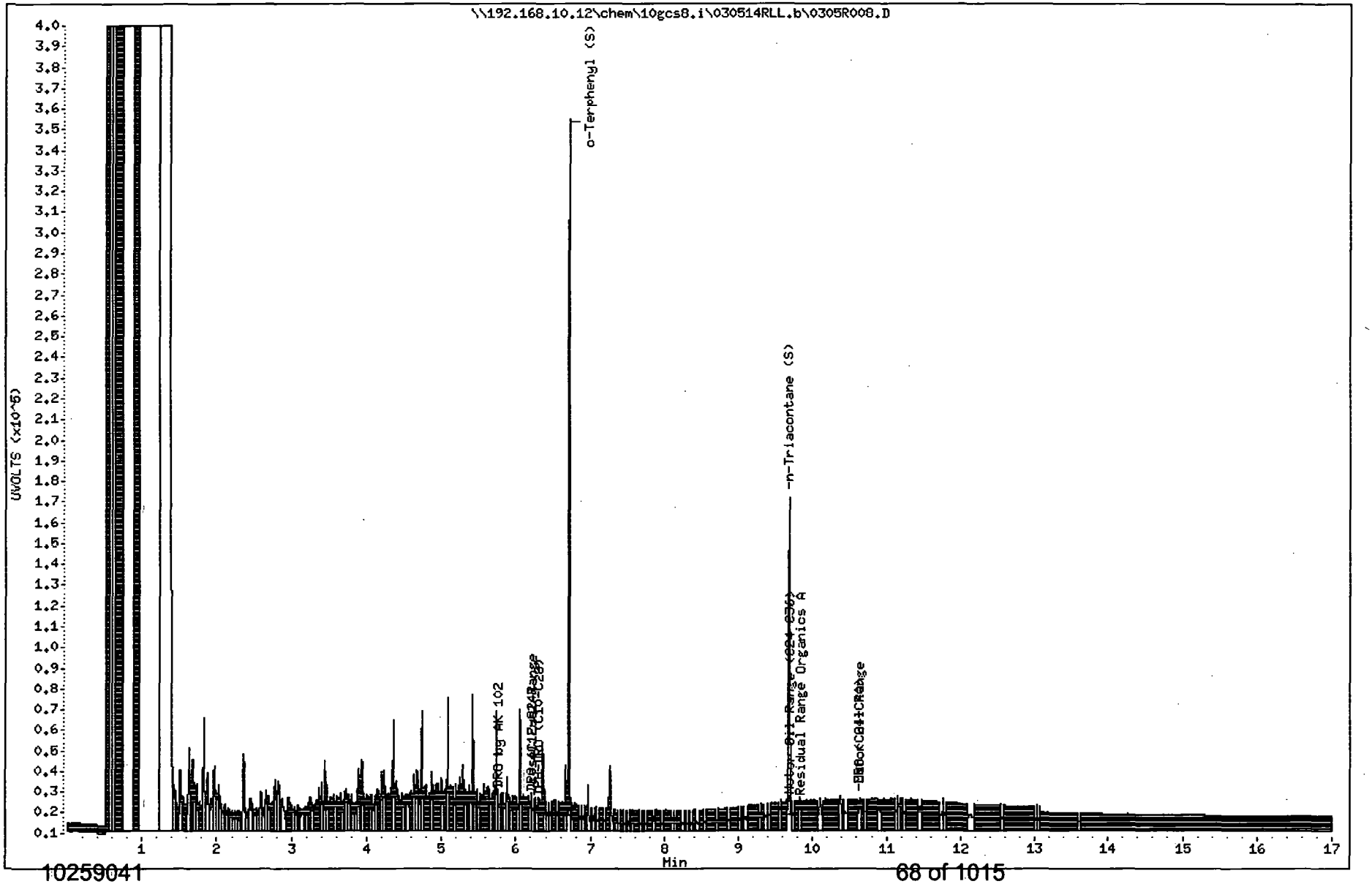
Instrument: 10gcs8.i

Sample Info: D/MOICAL4

Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



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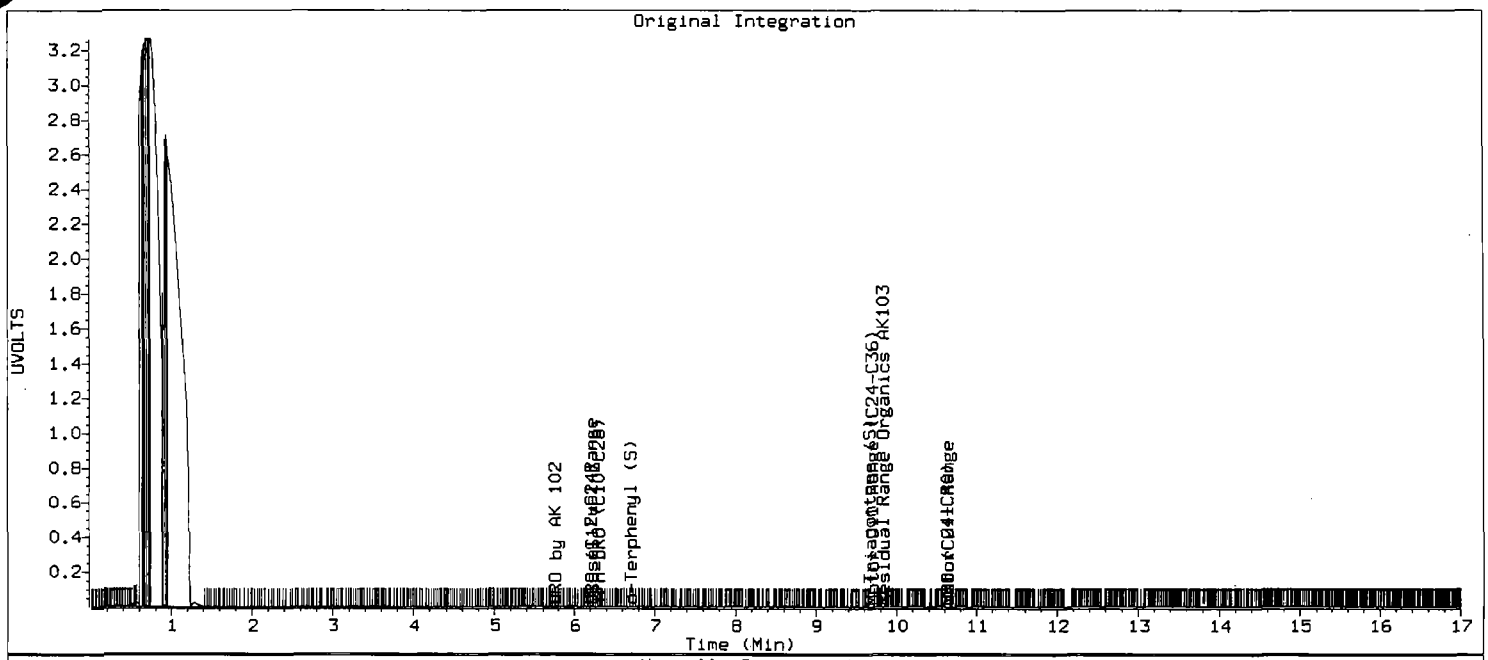
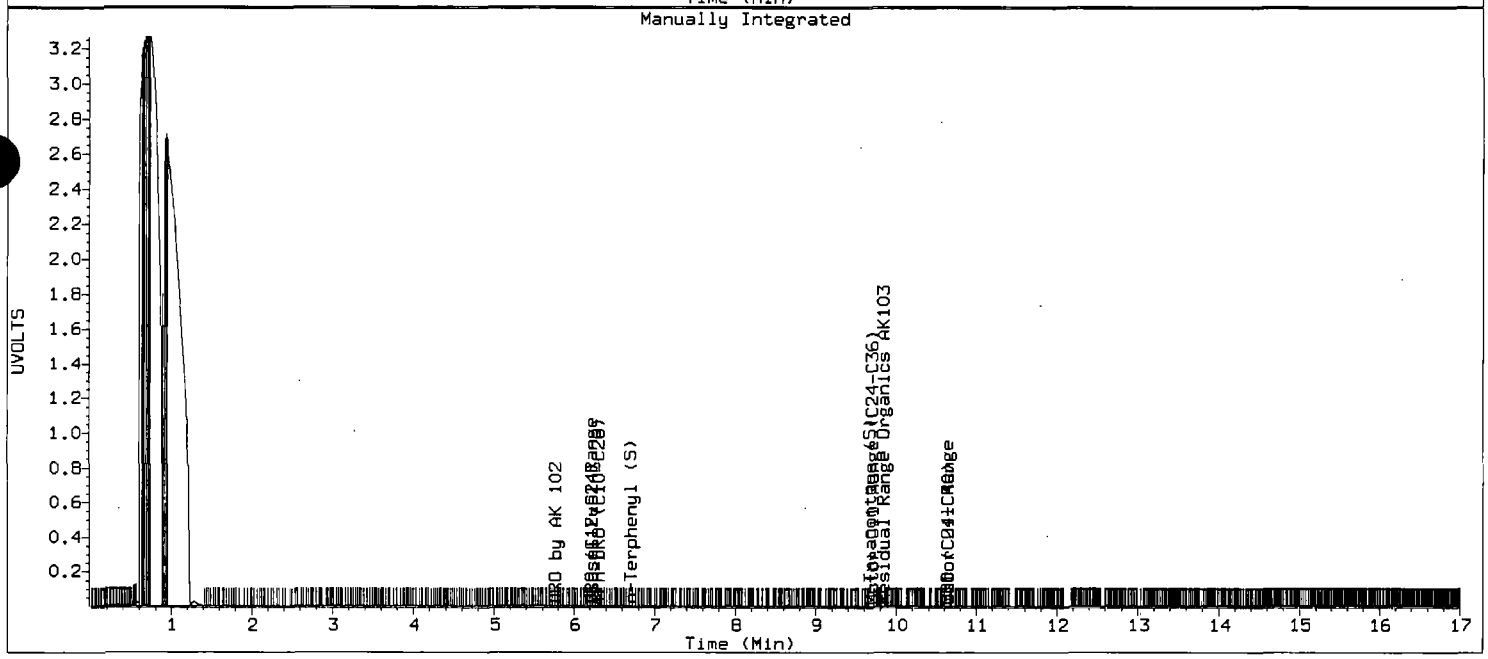
Injection Date: 05-MAR-2014 10:17
Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL4





Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	1420317	1420317	
DRO by AK 102	3535080	3535080	
TPH-DRO (C10-C28)	3853467	3853467	
Motor Oil Range (C24-C36)	1486290	1486290	
DRO (C12-C24)	2738379	2738379	
DRO (C24-C40)	2101889	2101889	
Diesel Fuel Range	2738379	2738379	
Motor Oil Range	2101889	2101889	

n-Triacontane (S)	175290	175290
o-Terphenyl (S)	237121	237121

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R009.d
Lab Smp Id: D/MOICAL5
Inj Date : 05-MAR-2014 10:40
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL5
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 10:17 Cal File: 0305R008.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			5828784	100.000	106 (M)
$	2 o-Terphenyl (S)	6.715	6.715	0.000	456676	10.0000	12.4 (M)
$	3 n-Triacontane (S)	9.692	9.692	0.000	344161	10.0000	11.7 (M)
S	4 Residual Range Organics AK103	8.240-11.450			2525253	100.000	104 (M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			6423849	100.000	107 (M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			2648617	100.000	104 (M)
S	7 DRO (C12-C24)	4.240-8.210			4694494	100.000	106 (M)
S	8 Diesel Fuel Range	4.240-8.210			4694494	100.000	106 (M)
S	9 ORO (C24-C40)	8.220-13.070			3515110	100.000	101 (M)
S	10 Motor Oil Range	8.220-13.070			3515110	100.000	101 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R009.D

Page 1

Date : 05-MAR-2014 10:40

Client ID:

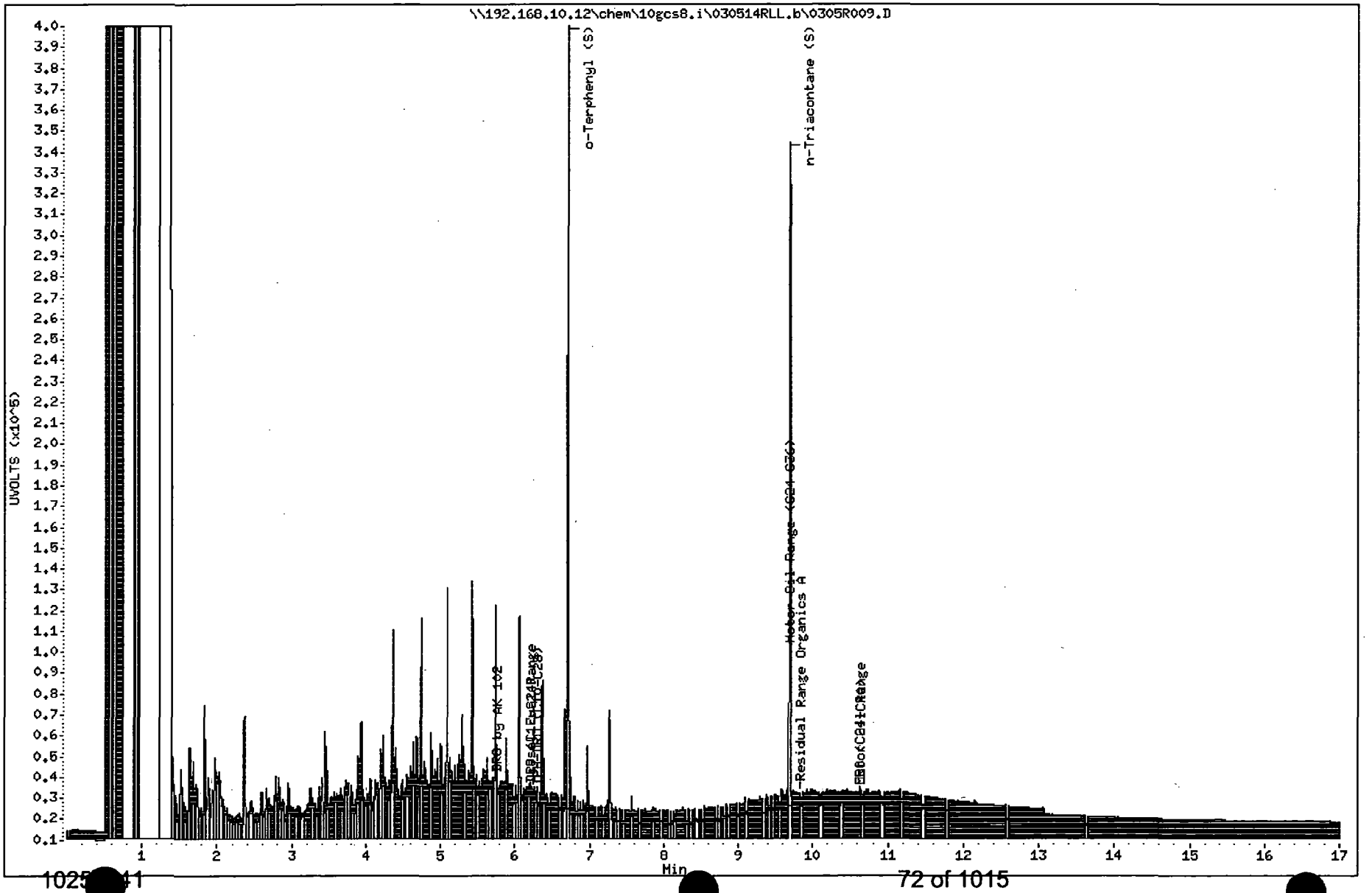
Instrument: 10gcs8.i

Sample Info: D/MOICAL5

Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



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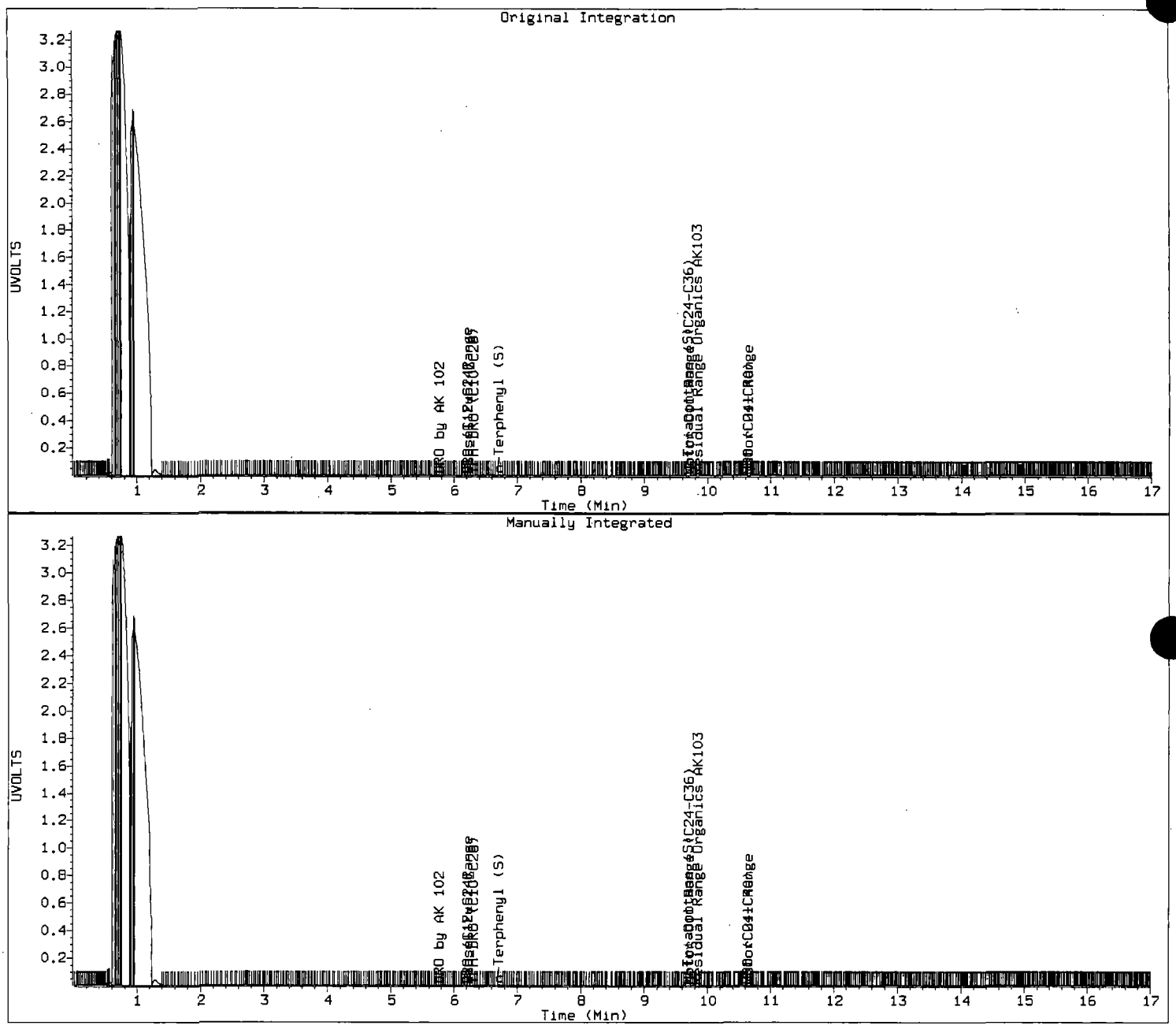
Injection Date: 05-MAR-2014 10:40
Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL5



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	2525253	2525253	
DRO by AK 102	5828784	5828784	
TPH-DRO (C10-C28)	6423849	6423849	
Motor Oil Range (C24-C36)	2648617	2648617	
DRO (C12-C24)	4694494	4694494	
ORO (C24-C40)	3515110	3515110	
Diesel Fuel Range	4694494	4694494	
Motor Oil Range	3515110	3515110	

n-Triacontane (S)	344161	344161
o-Terphenyl (S)	456676	456676

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R010.d
Lab Smp Id: D/MOICAL6
Inj Date : 05-MAR-2014 11:04
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL6
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 10:40 Cal File: 0305R009.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			12362195	250.000	253(M)
$	2 o-Terphenyl (S)	6.729	6.729	0.000	1090121	25.0000	24.6(M)
$	3 n-Triacontane (S)	9.724	9.724	0.000	815604	25.0000	25.0(M)
S	4 Residual Range Organics AK103	8.240-11.450			5578314	250.000	248(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			13727647	250.000	252(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			5853491	250.000	248(M)
S	7 DRO (C12-C24)	4.240-8.210			10291210	250.000	252(M)
S	8 Diesel Fuel Range	4.240-8.210			10291210	250.000	252(M)
S	9 ORO (C24-C40)	8.220-13.070			7513433	250.000	260(M)
S	10 Motor Oil Range	8.220-13.070			7513433	250.000	260(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R010.D

Page 1

Date : 05-MAR-2014 11:04

Client ID:

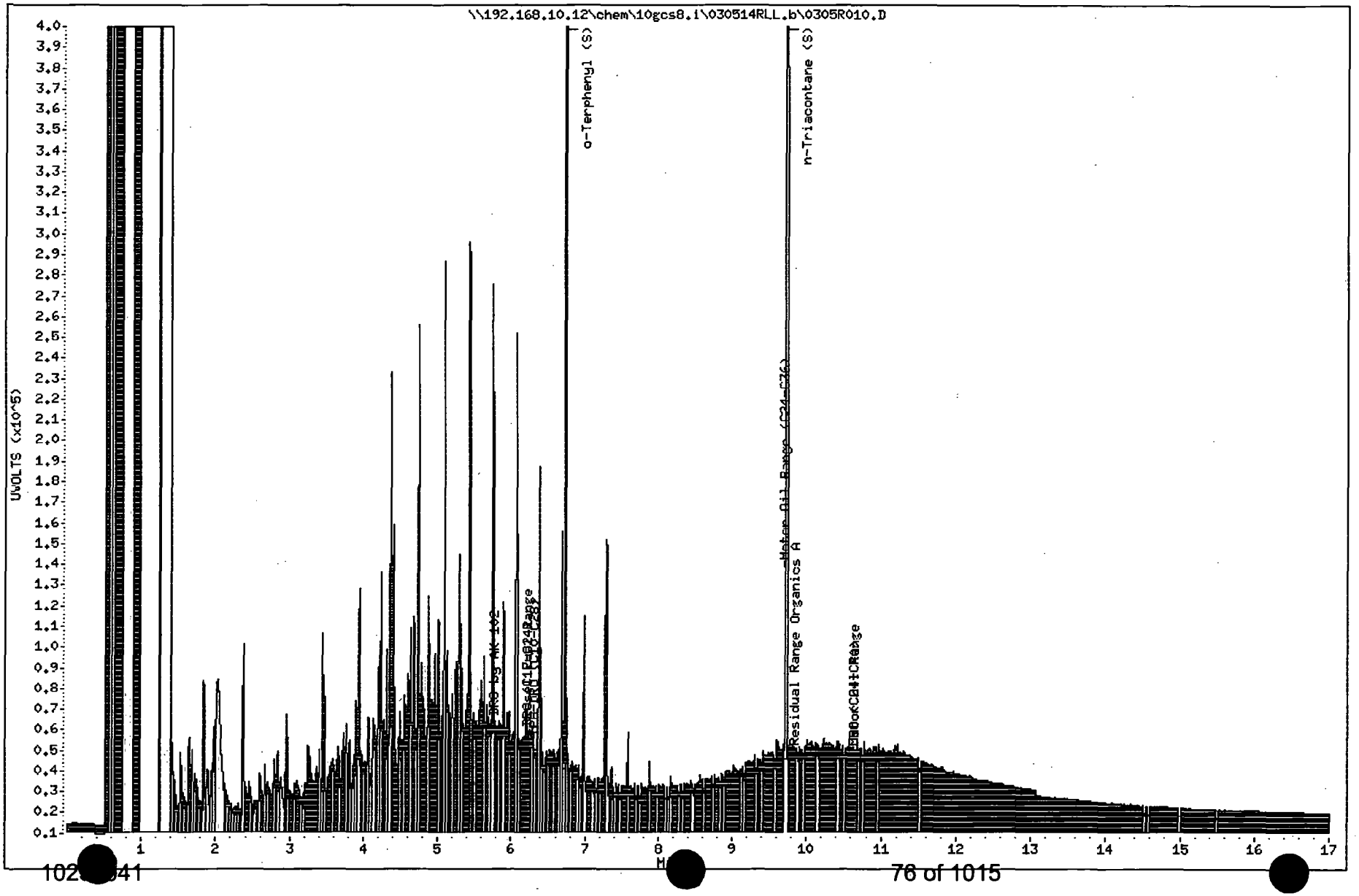
Instrument: 10gcs8.i

Sample Info: D/MOICAL6

Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



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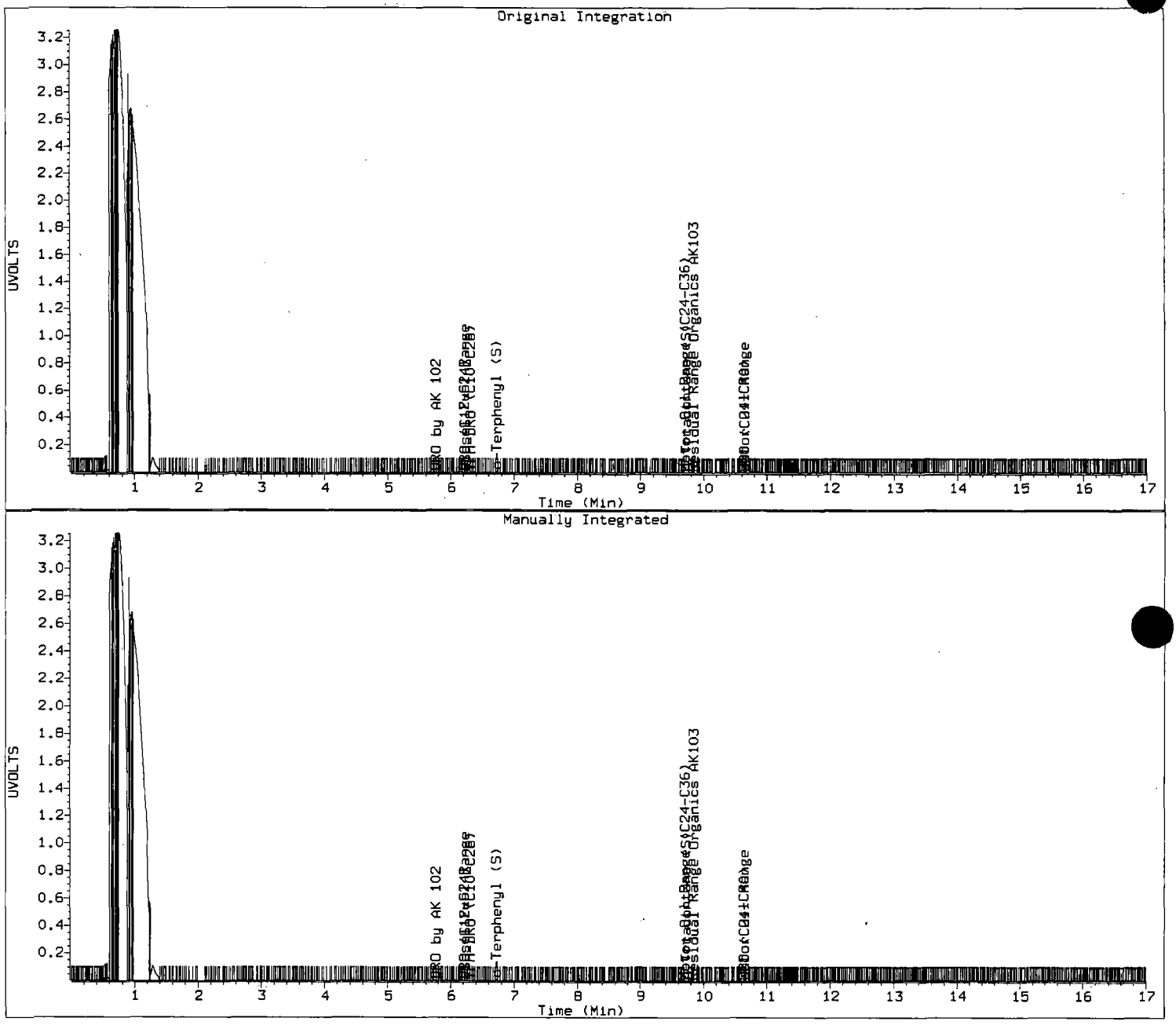
Injection Date: 05-MAR-2014 11:04
Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL6



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	5578314	5578314	
DRO by AK 102	12362195	12362195	
TPH-DRO (C10-C28)	13727647	13727647	
Motor Oil Range (C24-C36)	5853491	5853491	
DRO (C12-C24)	10291210	10291210	
ORO (C24-C40)	7513433	7513433	
Diesel Fuel Range	10291210	10291210	
Motor Oil Range	7513433	7513433	

n-Triacontane (S)	815604	815604
o-Terphenyl (S)	1090121	1090121

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R011.d
Lab Smp Id: D/MOICAL7
Inj Date : 05-MAR-2014 11:27
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL7
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 11:04 Cal File: 0305R010.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			23371921	500.000	497(M)
$	2 o-Terphenyl (S)	6.741	6.741	0.000	2180779	50.0000	45.6(M)
$	3 n-Triacontane (S)	9.755	9.755	0.000	1652499	50.0000	48.6(M)
S	4 Residual Range Organics AK103	8.240-11.450			11073935	500.000	506(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			26060136	500.000	494(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			11616686	500.000	503(M)
S	7 DRO (C12-C24)	4.240-8.210			19788324	500.000	498(M)
S	8 Diesel Fuel Range	4.240-8.210			19788324	500.000	498(M)
S	9 ORO (C24-C40)	8.220-13.070			14561250	500.000	537(M)
S	10 Motor Oil Range	8.220-13.070			14561250	500.000	537(M)

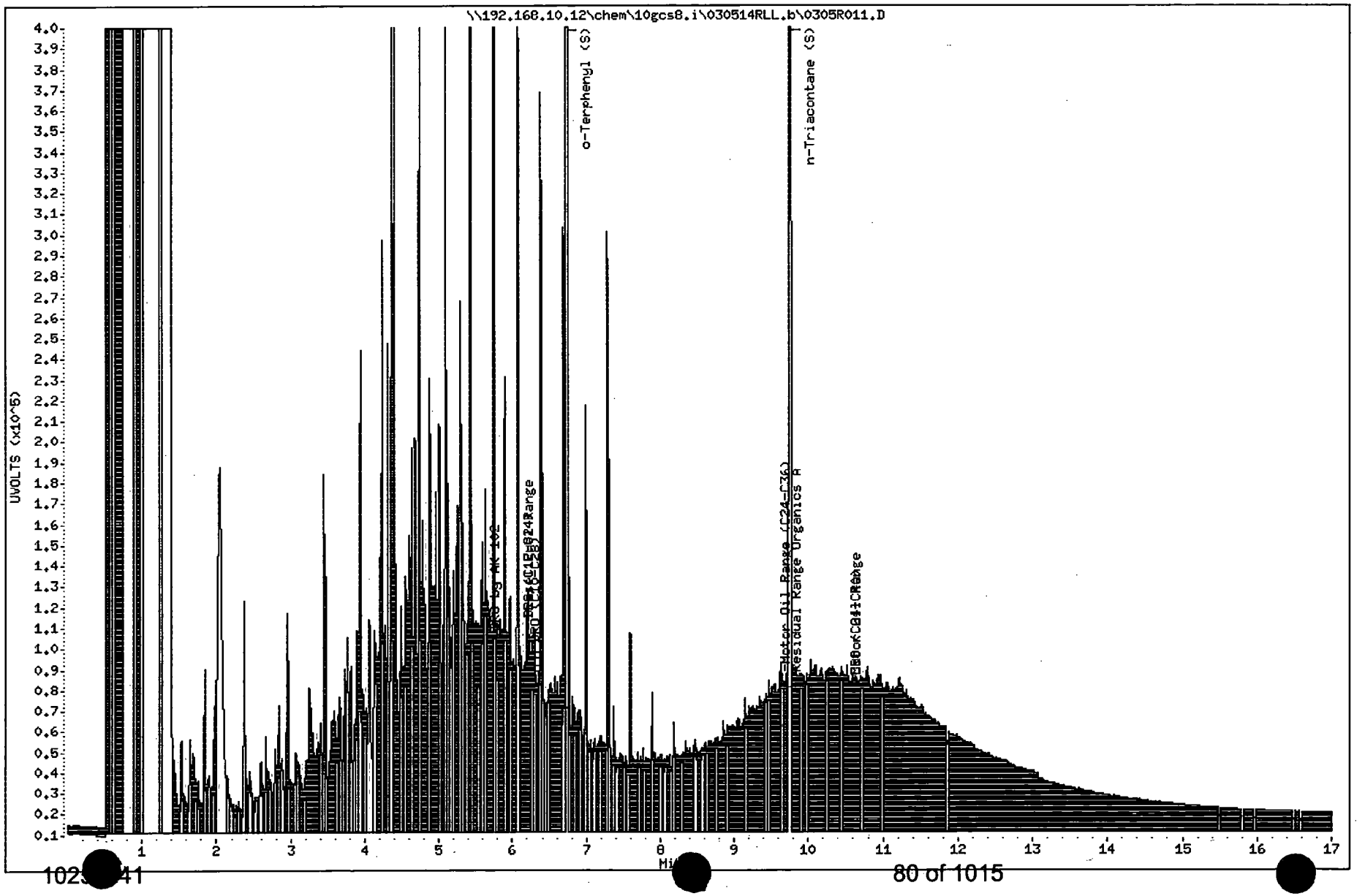
QC Flag Legend

M - Compound response manually integrated.

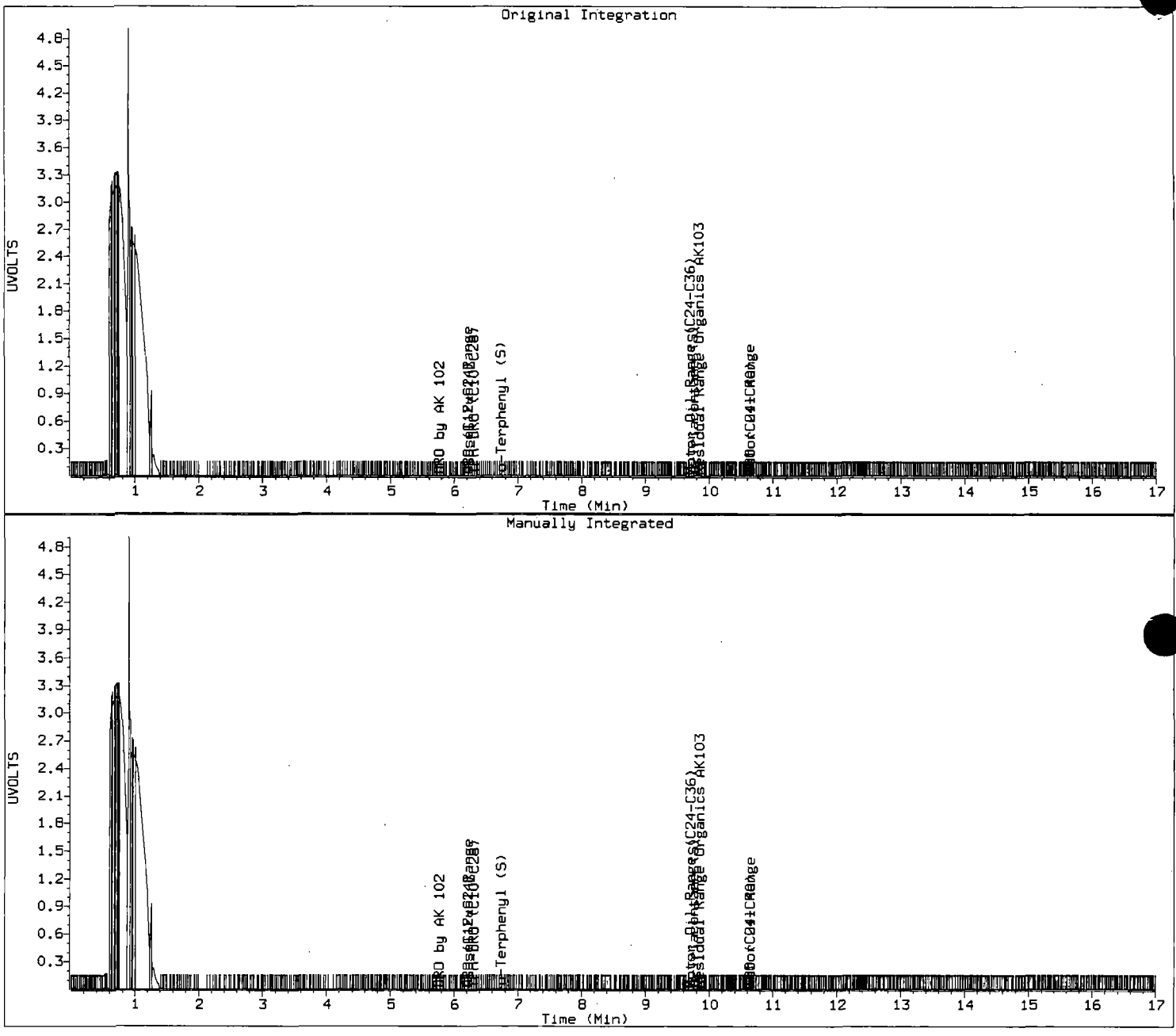
Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R011.D
Date : 05-MAR-2014 11:27
Client ID:
Sample Info: D/MOICAL7

Instrument: 10gcs8.i
Operator: MT
Column diameter: 0.25

Column phase: DB-5MS



Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b/0305R011.d (ManInt: all.sub Orig: all.sub)
Injection Date: 05-MAR-2014 11:27
Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL7



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	11073935	11073935	
DRO by AK 102	23371921	23371921	
TPH-DRO (C10-C28)	26060136	26060136	
Motor Oil Range (C24-C36)	11616686	11616686	
DRO (C12-C24)	19788324	19788324	
ORO (C24-C40)	14561250	14561250	
Diesel Fuel Range	19788324	19788324	
Motor Oil Range	14561250	14561250	

n-Triacontane (S)	1652499	1652499
o-Terphenyl (S)	2180779	2180779

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R012.d
Lab Smp Id: D/MOICAL8
Inj Date : 05-MAR-2014 11:50
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL8
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 11:27 Cal File: 0305R011.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			45607763	1000.00	978 (M)
$	2 o-Terphenyl (S)	6.743	6.743	0.000	4574739	100.000	91.8 (M)
$	3 n-Triacontane (S)	9.728	9.728	0.000	3272748	100.000	94.3 (M)
S	4 Residual Range Organics AK103	8.240-11.450			21800816	1000.00	1000 (M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			51171886	1000.00	976 (M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			22907863	1000.00	996 (M)
S	7 DRO (C12-C24)	4.240-8.210			38870475	1000.00	979 (M)
S	8 Diesel Fuel Range	4.240-8.210			38870475	1000.00	979 (M)
S	9 ORO (C24-C40)	8.220-13.070			27094880	1000.00	1020 (M)
S	10 Motor Oil Range	8.220-13.070			27094880	1000.00	1020 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R012.D

Page 1

Date : 05-MAR-2014 11:50

Client ID:

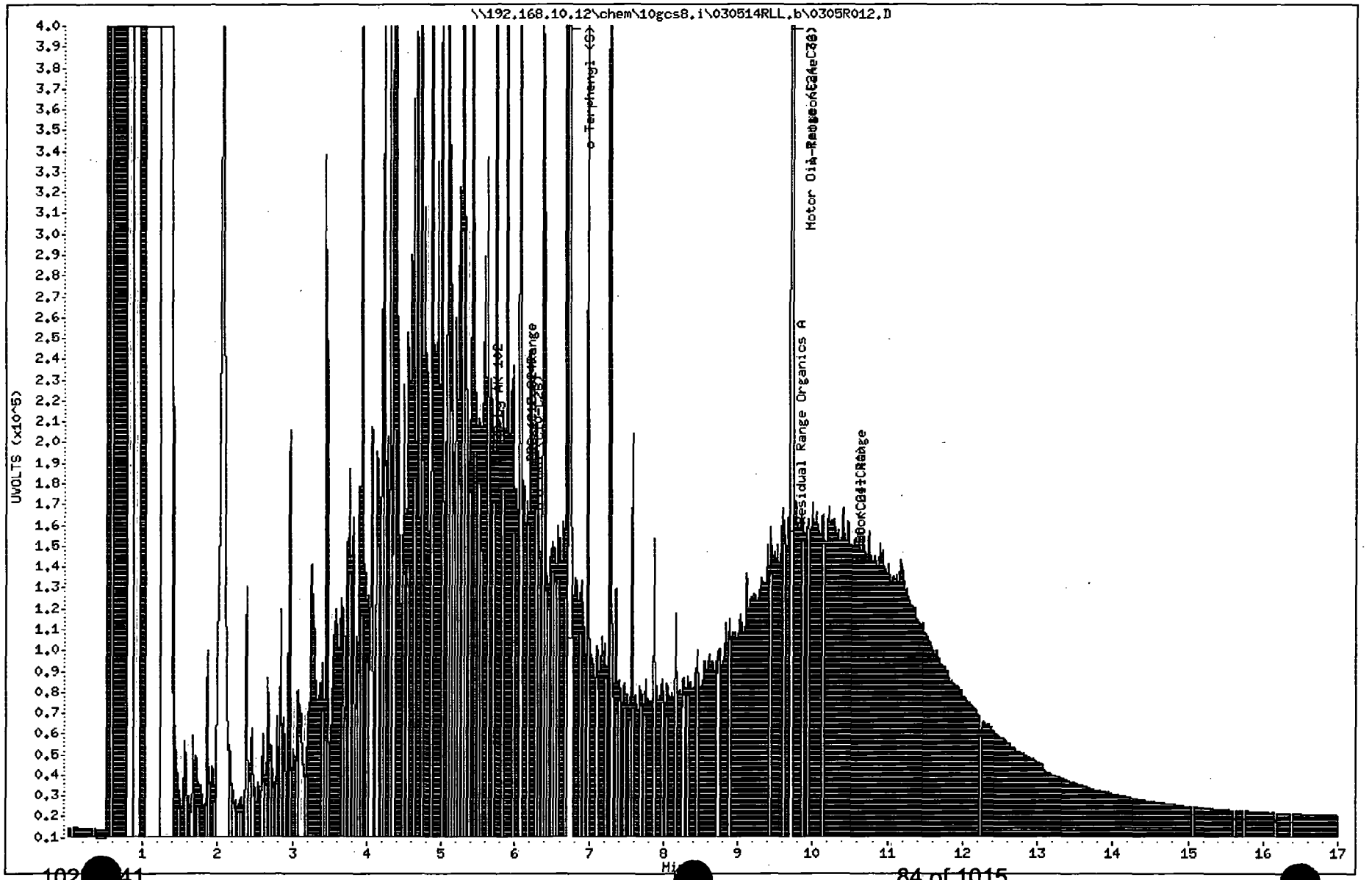
Instrument: 10gcs8.i

Sample Info: D/MOICAL8

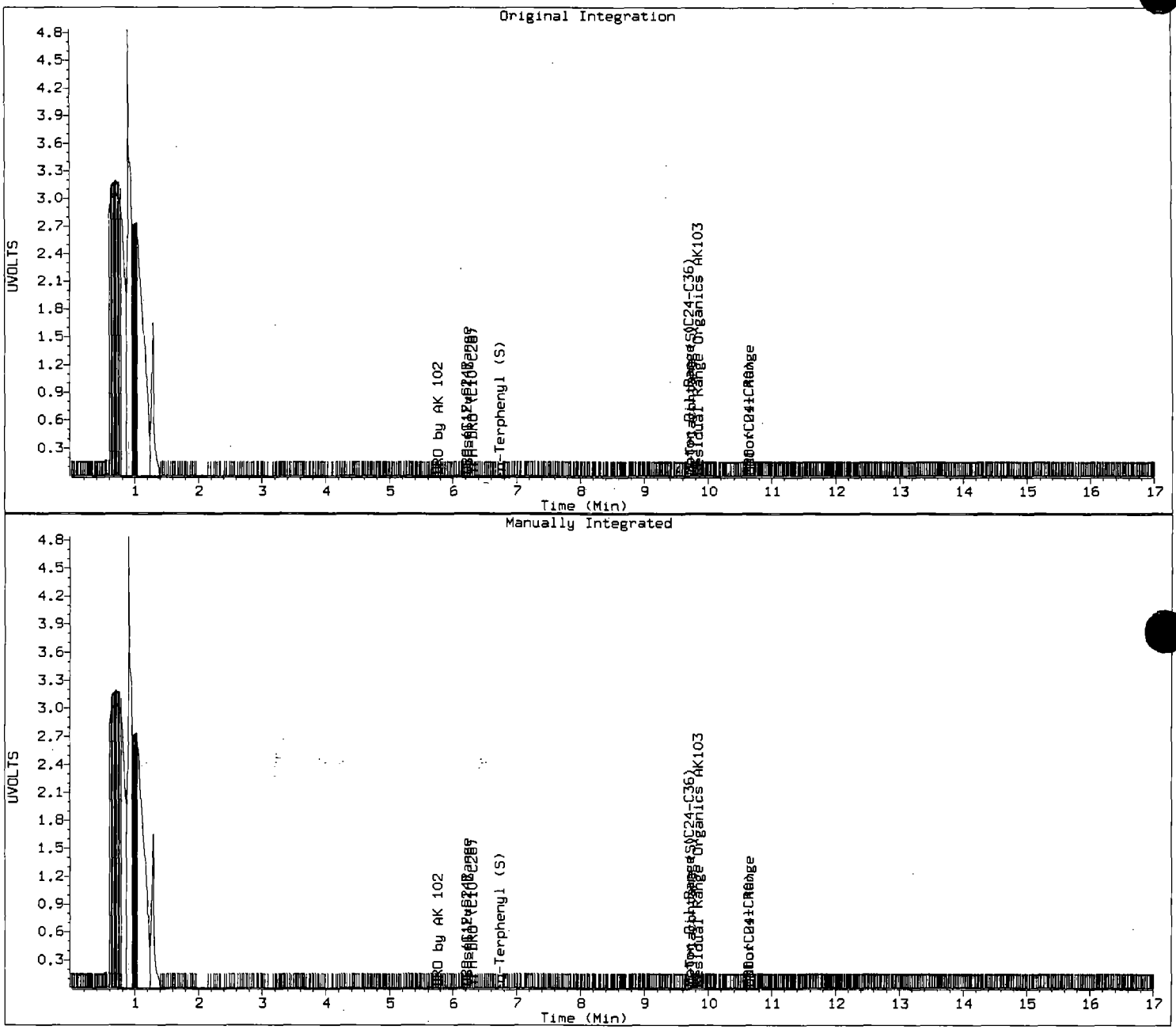
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b/0305R012.d (ManInt: all.sub Orig: all.sub)
Injection Date: 05-MAR-2014 11:50
Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL8



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	21800816	21800816	
DRO by AK 102	45607763	45607763	
TPH-DRO (C10-C28)	51171886	51171886	
Motor Oil Range (C24-C36)	22907863	22907863	
DRO (C12-C24)	38870475	38870475	
ORO (C24-C40)	27094880	27094880	
Diesel Fuel Range	38870475	38870475	
Motor Oil Range	27094880	27094880	

n-Triacontane (S)	3272748	3272748
o-Terphenyl (S)	4574739	4574739

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R013.d
Lab Smp Id: D/MOICAL9
Inj Date : 05-MAR-2014 12:13
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL9
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 11:50 Cal File: 0305R012.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			95868241	2000.00	2010(M)
$	2 o-Terphenyl (S)	6.744	6.744	0.000	9707361	200.000	191(M)
$	3 n-Triacontane (S)	9.702	9.702	0.000	6783709	200.000	193(M)
S	4 Residual Range Organics AK103	8.240-11.450			44313144	2000.00	2000(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			108109532	2000.00	2020(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			46840333	2000.00	2000(M)
S	7 DRO (C12-C24)	4.240-8.210			82359076	2000.00	2010(M)
S	8 Diesel Fuel Range	4.240-8.210			82359076	2000.00	2010(M)
S	9 ORO (C24-C40)	8.220-13.070			52906643	2000.00	1970(M)
S	10 Motor Oil Range	8.220-13.070			52906643	2000.00	1970(M)

QC Flag Legend

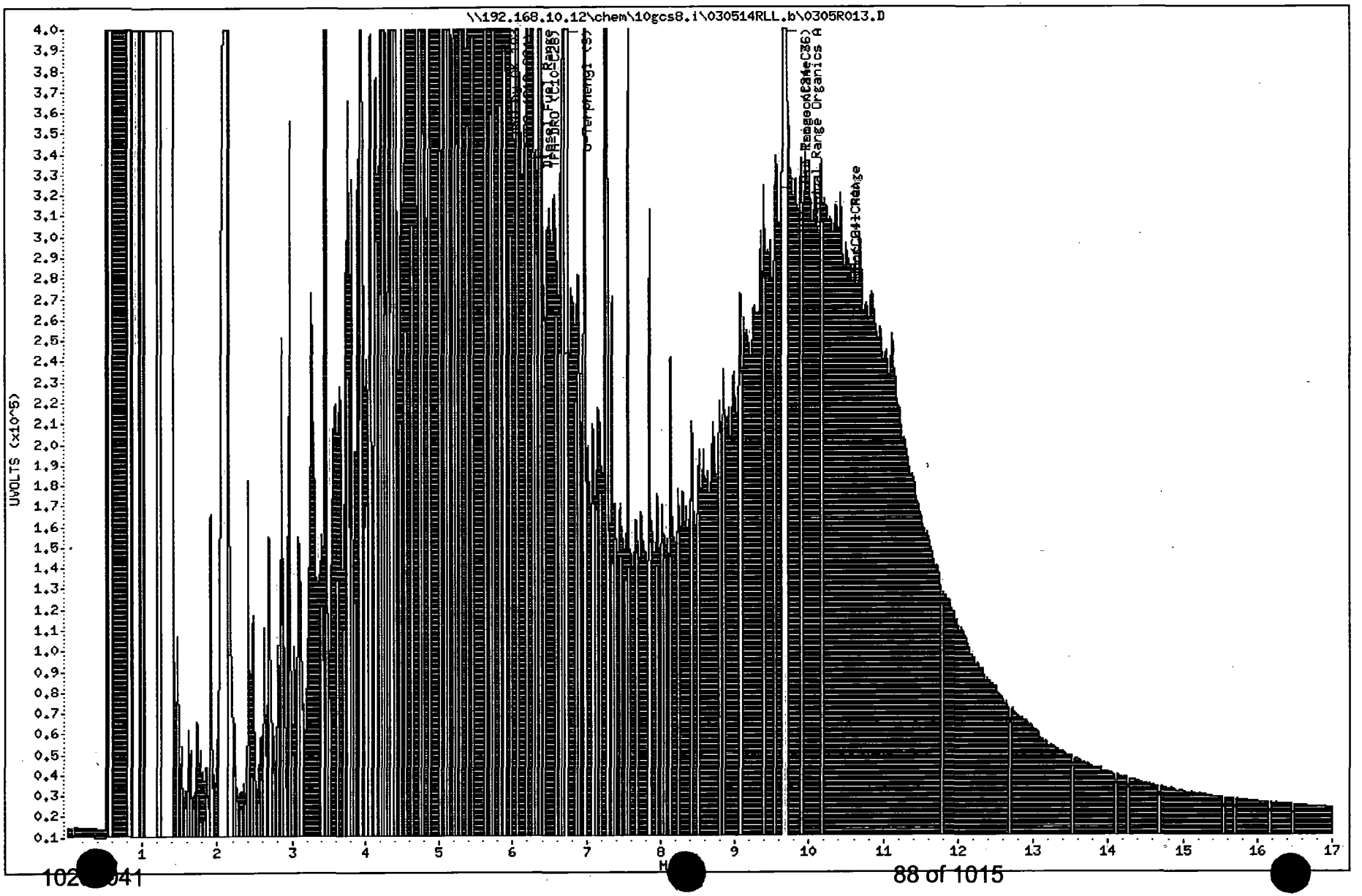
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R013.D
Date : 05-MAR-2014 12:13
Client ID:
Sample Info: D/MOICAL9

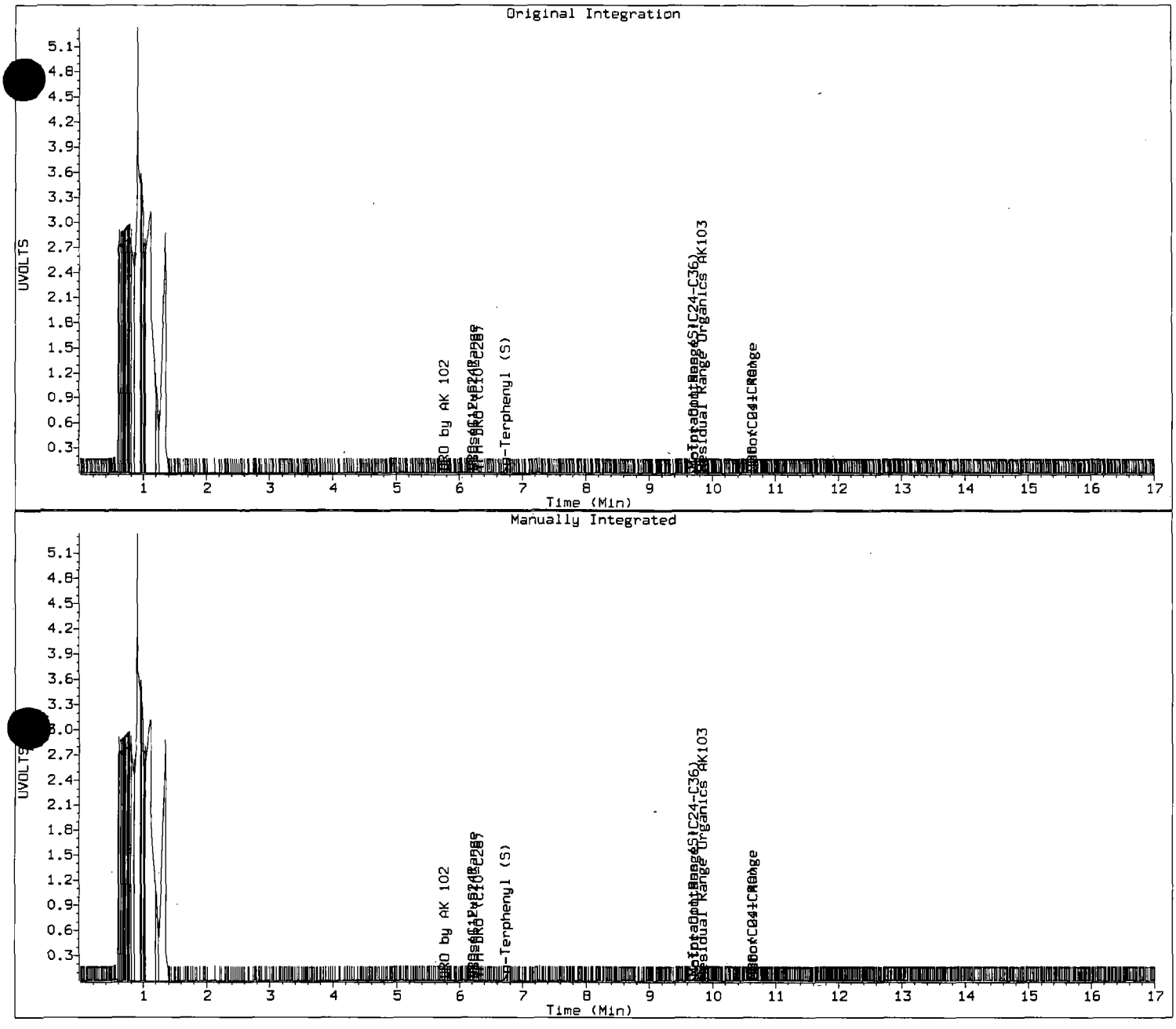
Instrument: 10gcs8.i

Operator: MT
Column diameter: 0.25

Column phase: DB-5MS



Injection Date: 05-MAR-2014 12:13
Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL9



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	44313144	44313144	
DRO by AK 102	95868241	95868241	
TPH-DRO (C10-C28)	108109532	108109532	
Motor Oil Range (C24-C36)	46840333	46840333	
DRO (C12-C24)	82359076	82359076	
ORO (C24-C40)	52906643	52906643	
Diesel Fuel Range	82359076	82359076	
Motor Oil Range	52906643	52906643	

o-Terphenyl (S)	9707361	9707361

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R014.d
Lab Smp Id: D/MOICAL10
Inj Date : 05-MAR-2014 12:36
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICAL10
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:18 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 12:13 Cal File: 0305R013.d
Als bottle: 1 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			204157857	4000.00	4000(M)
$	2 o-Terphenyl (S)	6.772	6.772	0.000	20893356	400.000	406(AM)
$	3 n-Triacontane (S)	9.769	9.769	0.000	14264426	400.000	404(AM)
S	4 Residual Range Organics AK103	8.240-11.450			93502939	4000.00	4000(AM)
S	5 TPH-DRO (C10-C28)	3.320-9.310			229512672	4000.00	4000(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			98651105	4000.00	4000(M)
S	7 DRO (C12-C24)	4.240-8.210			178742732	4000.00	4000(M)
S	8 Diesel Fuel Range	4.240-8.210			178742732	4000.00	4000(M)
S	9 ORO (C24-C40)	8.220-13.070			114323573	4000.00	4000(AM)
S	10 Motor Oil Range	8.220-13.070			114323573	4000.00	4000(AM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R014.D

Page 1

Date : 05-MAR-2014 12:36

Client ID:

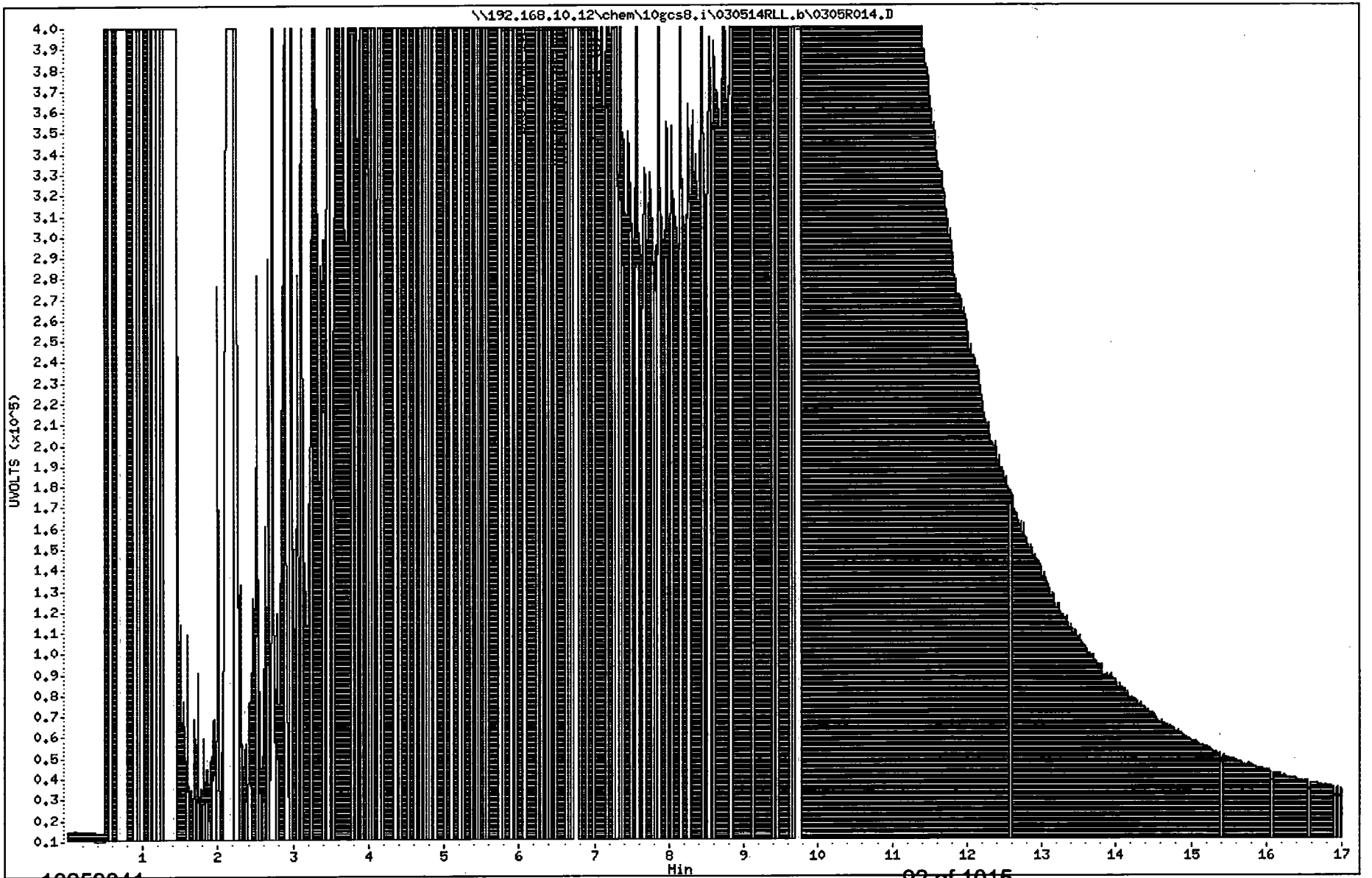
Instrument: 10gcs8.i

Sample Info: D/MOICAL10

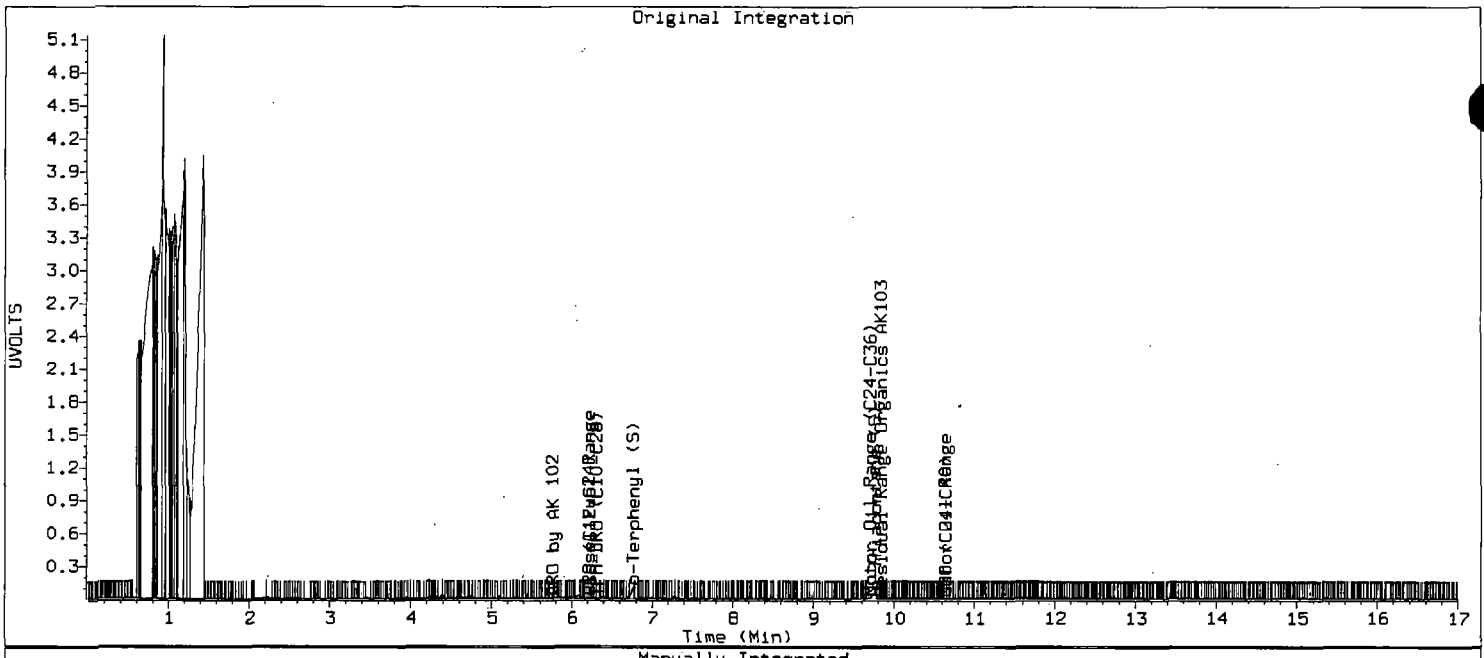
Operator: MT

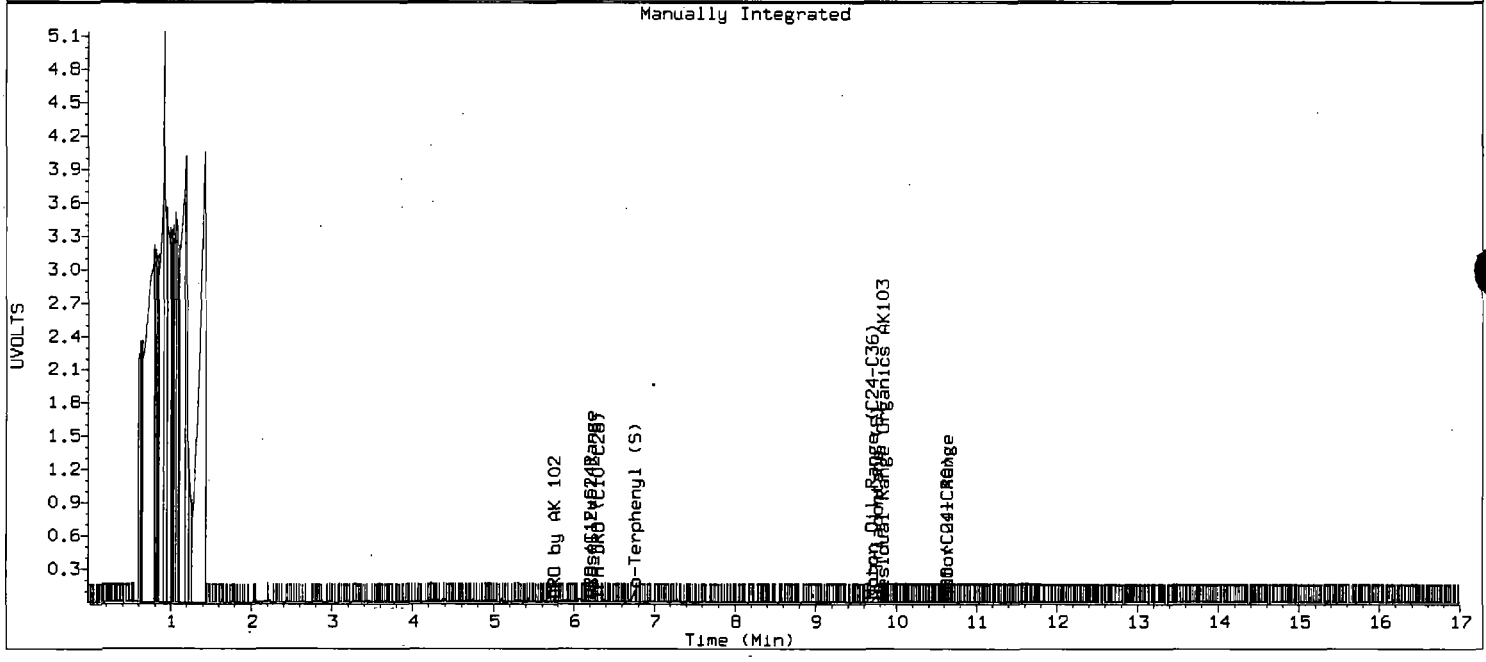
Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAR-2014 12:36
Instrument: 10gcs8.i
Lab Sample ID: D/MOICAL10





Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	93502939	93502939	
DRO by AK 102	204157857	204157857	
TPH-DRO (C10-C28)	229512672	229512672	
Motor Oil Range (C24-C36)	98651105	98651105	
DRO (C12-C24)	178742732	178742732	
ORO (C24-C40)	114323573	114323573	
Diesel Fuel Range	178742732	178742732	
Motor Oil Range	114323573	114323573	

o-Terphenyl (S)	20893356	20893356

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcs8.i
Lab File ID: 0305R016.d
Analysis Type:
Lab Sample ID: D/MOICV
Injection Date: 05-MAR-2014 13:22
Init. Cal. Date(s): 05-MAR-2014 05-MAR-2014
Init. Cal. Times: 09:08 12:36
Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m

	COMPOUND	RRF / AMOUNT	RF250	CCAL RRF250	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
S	1 DRO by AK 102	250	245	48136	0.010	-1.81859	25.00000	Quadratic
$	2 o-Terphenyl (S)	25.00000	23.12561	40480	0.010	-7.49758	15.00000	Linear
$	3 n-Triacontane (S)	25.00000	24.23240	31538	0.010	-3.07042	15.00000	Linear
S	4 Residual Range Organics AK1	250	255	22919	0.010	2.06222	25.00000	Quadratic
S	5 TPH-DRO (C10-C28)	250	231	50829	0.010	-7.43455	15.00000	Quadratic
S	6 Motor Oil Range (C24-C36)	250	247	23401	0.010	-1.02574	15.00000	Quadratic
S	7 DRO (C12-C24)	250	270	43844	0.010	7.99481	15.00000	Quadratic
S	8 Diesel Fuel Range	250	270	43844	0.010	7.99481	15.00000	Quadratic
S	9 ORO (C24-C40)	250	277	31769	0.010	10.82342	15.00000	Quadratic
S	10 Motor Oil Range	250	277	31769	0.010	10.82342	15.00000	Quadratic

Average %D / Drift Results.

Calculated Average %D/Drift = 6.05456
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

Report Date: 05-Mar-2014 13:42

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R016.d
Lab Smp Id: D/MOICV
Inj Date : 05-MAR-2014 13:22
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MOICV
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 13:42 10gcs8.i Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
S	1 DRO by AK 102	3.320-8.230			12034050	250.000	245(M)
$	2 o-Terphenyl (S)	6.731	6.731	0.000	1011995	25.0000	23.1(M)
$	3 n-Triacontane (S)	9.704	9.704	0.000	788460	25.0000	24.2(M)
S	4 Residual Range Organics AK103	8.240-11.450			5729839	250.000	255(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			12707256	250.000	231(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			5850242	250.000	247(M)
S	7 DRO (C12-C24)	4.240-8.210			10961103	250.000	270(M)
S	8 Diesel Fuel Range	4.240-8.210			10961103	250.000	270(M)
S	9 ORO (C24-C40)	8.220-13.070			7942202	250.000	277(M)
S	10 Motor Oil Range	8.220-13.070			7942202	250.000	277(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R016.D

Page 1

Date : 05-MAR-2014 13:22

Client ID:

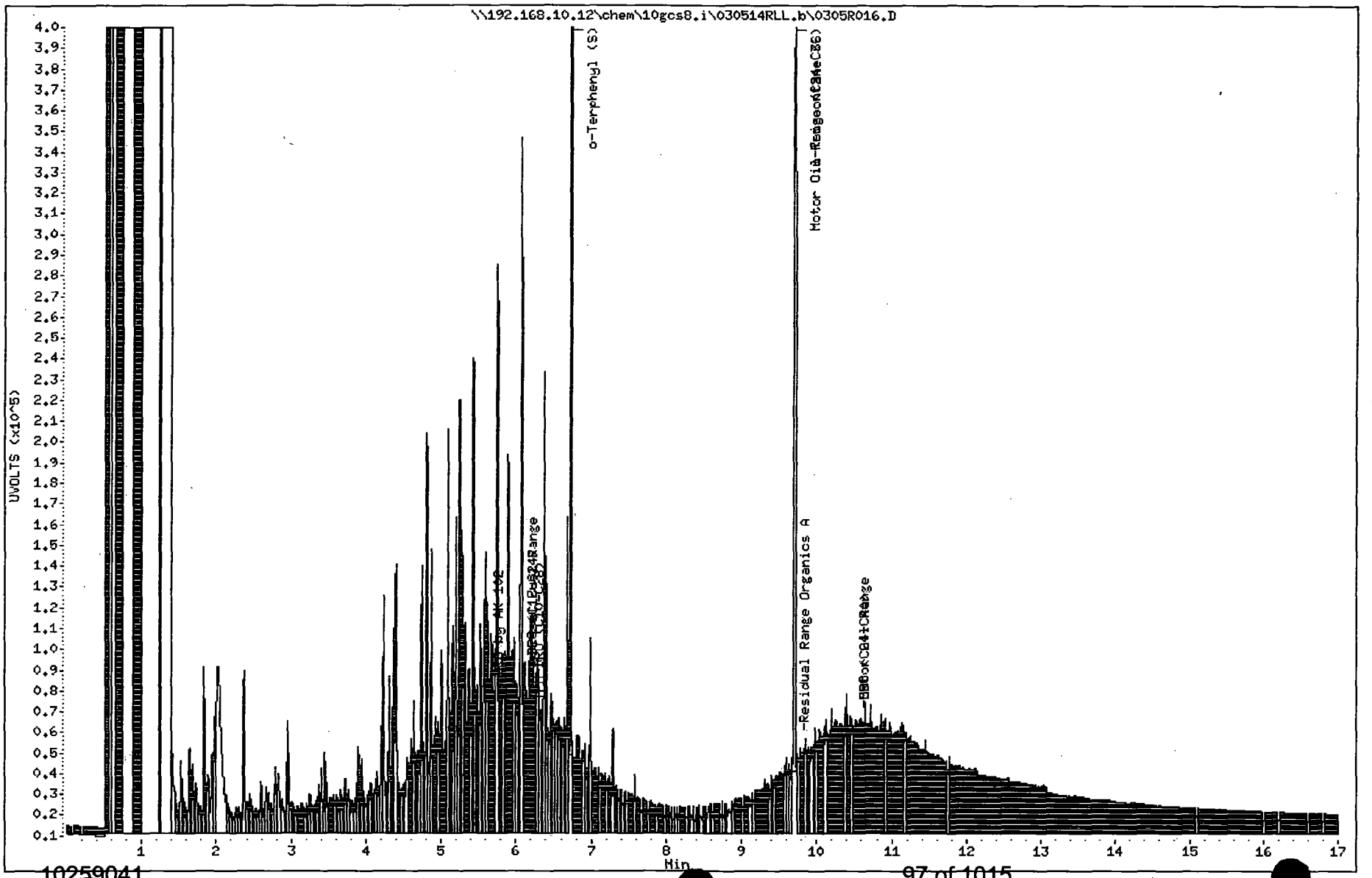
Instrument: 10gcs8.i

Sample Info: D/MOICV

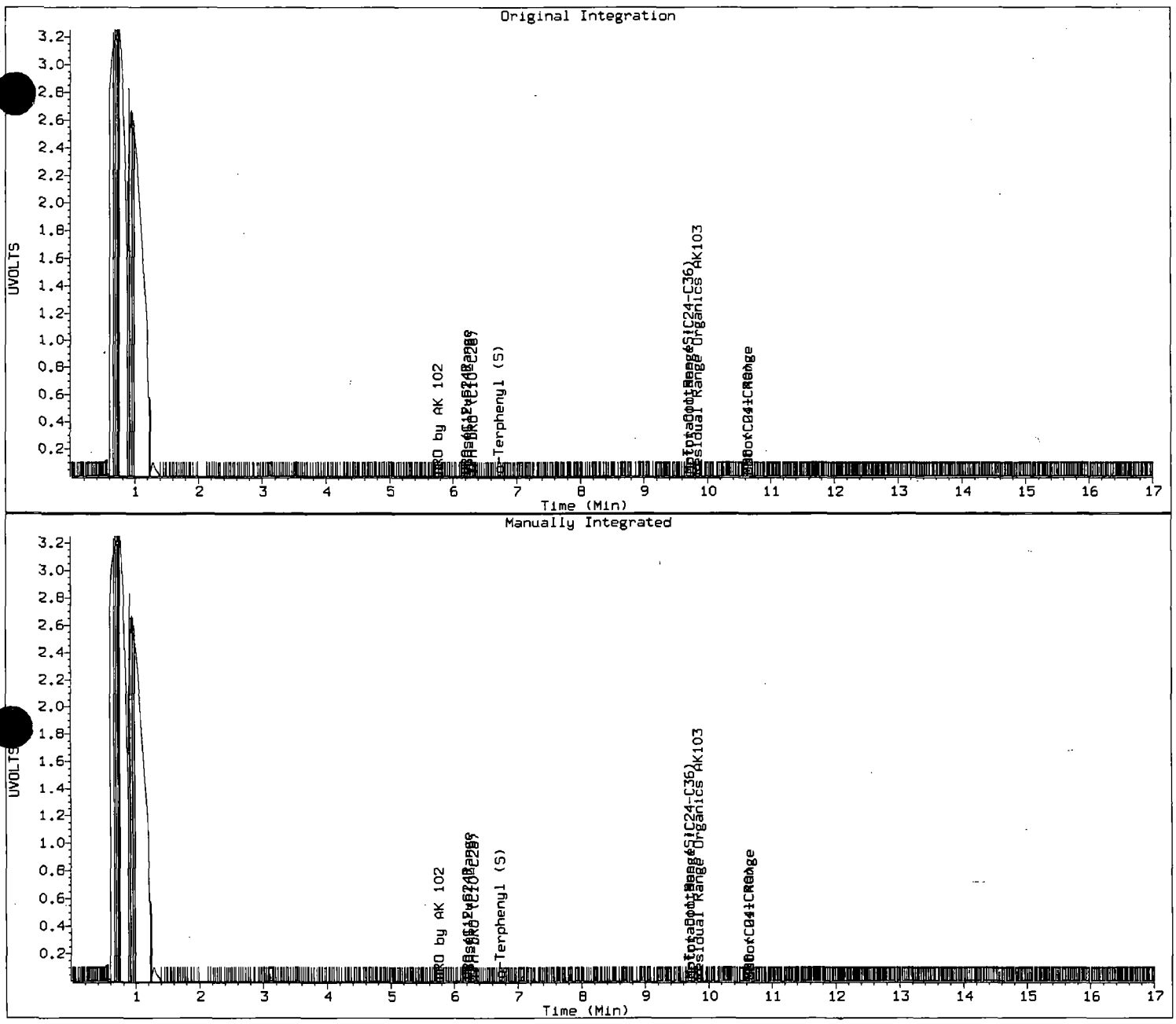
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25

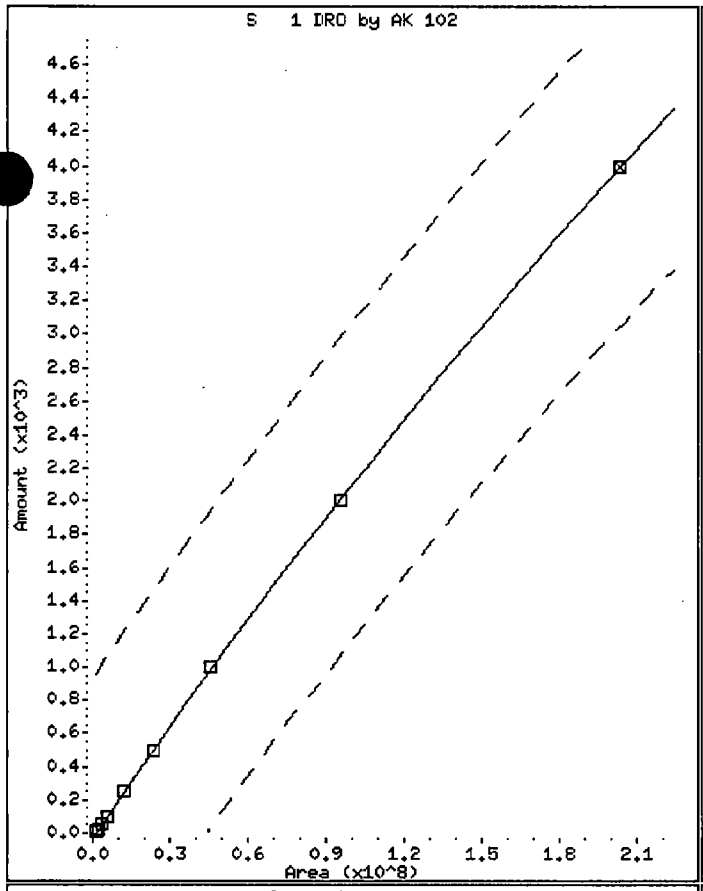


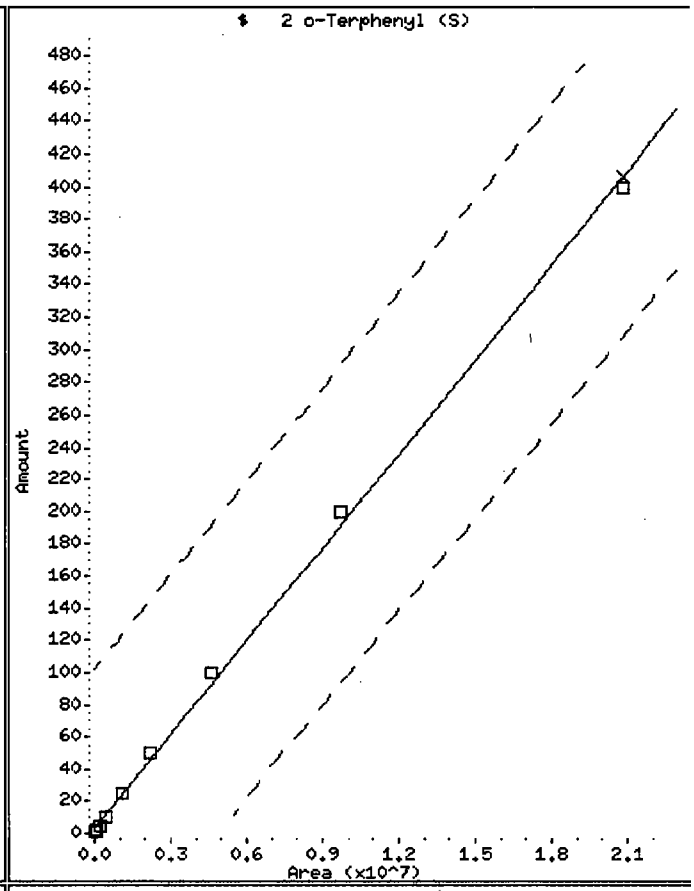
Injection Date: 05-MAR-2014 13:22
Instrument: 10gcs8.i
Lab Sample ID: D/MOICV

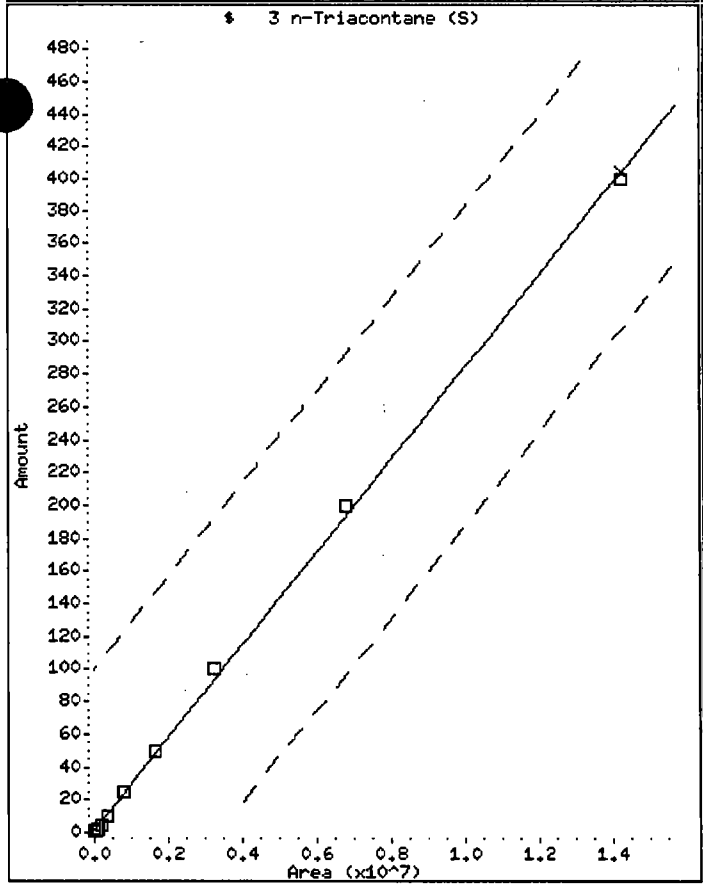


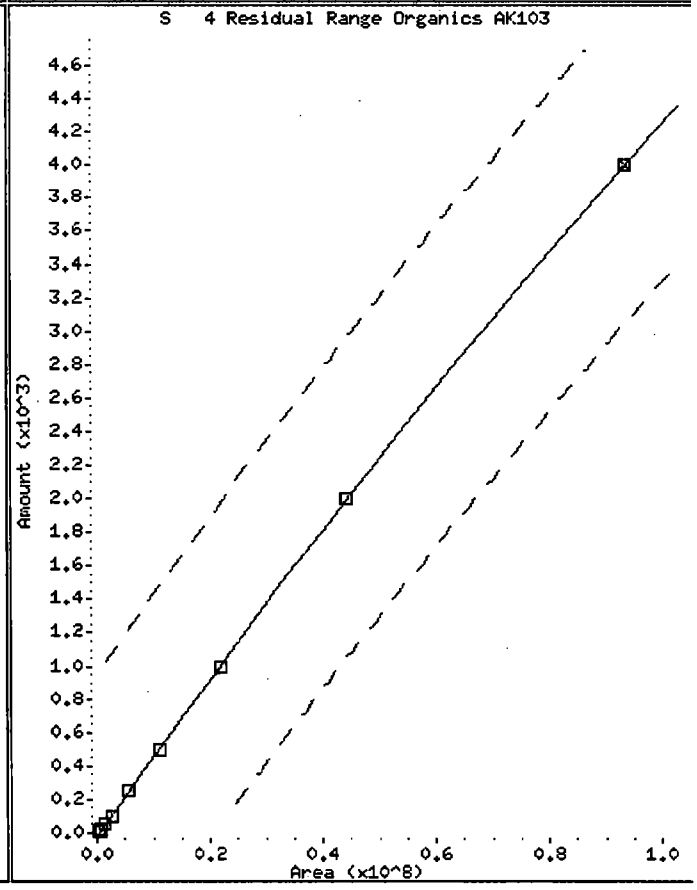
Manually Integrated Compounds

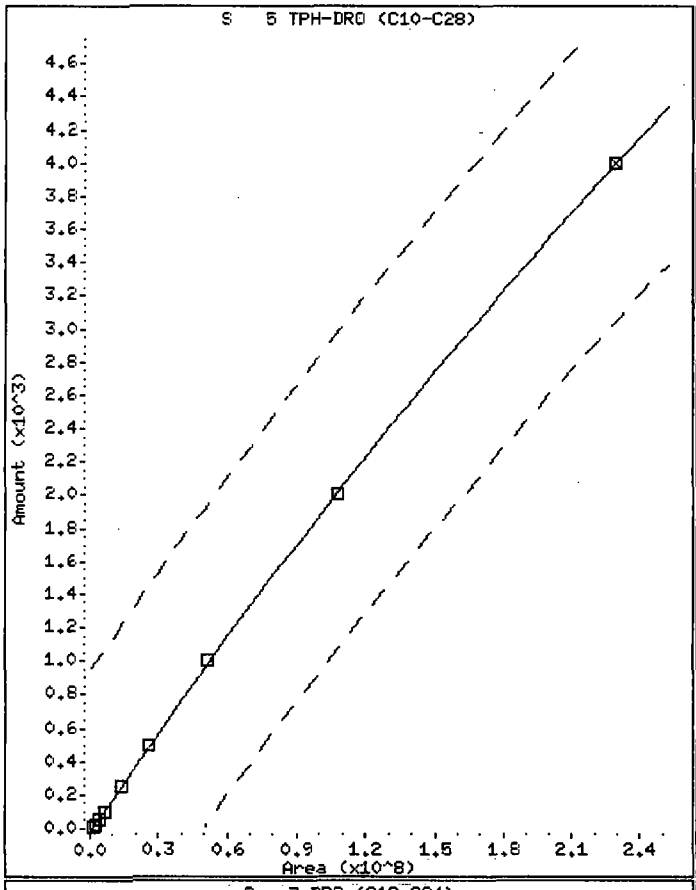
Compound	Area (before)	Area (after)	Code
Residual Range Organics AK103	5729839	5729839	
DRO by AK 102	12034050	12034050	
TPH-DRO (C10-C28)	12707256	12707256	
Motor Oil Range (C24-C36)	5850242	5850242	
DRO (C12-C24)	10961103	10961103	
ORO (C24-C40)	7942202	7942202	
Diesel Fuel Range	10961103	10961103	
Motor Oil Range	7942202	7942202	

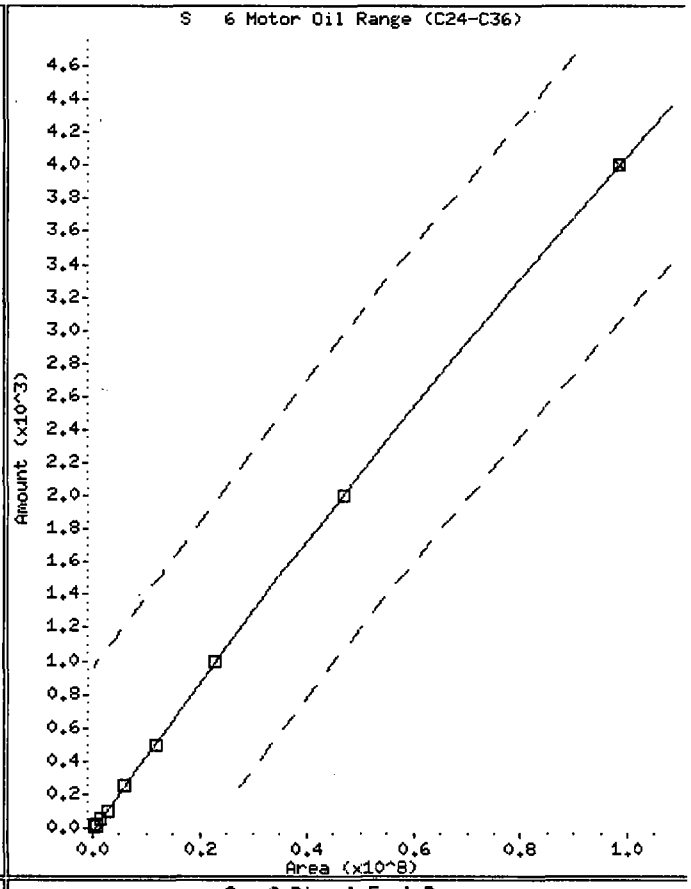

S 1 IRD by AK 102
Amount (x10^3)
Area (x10^8)

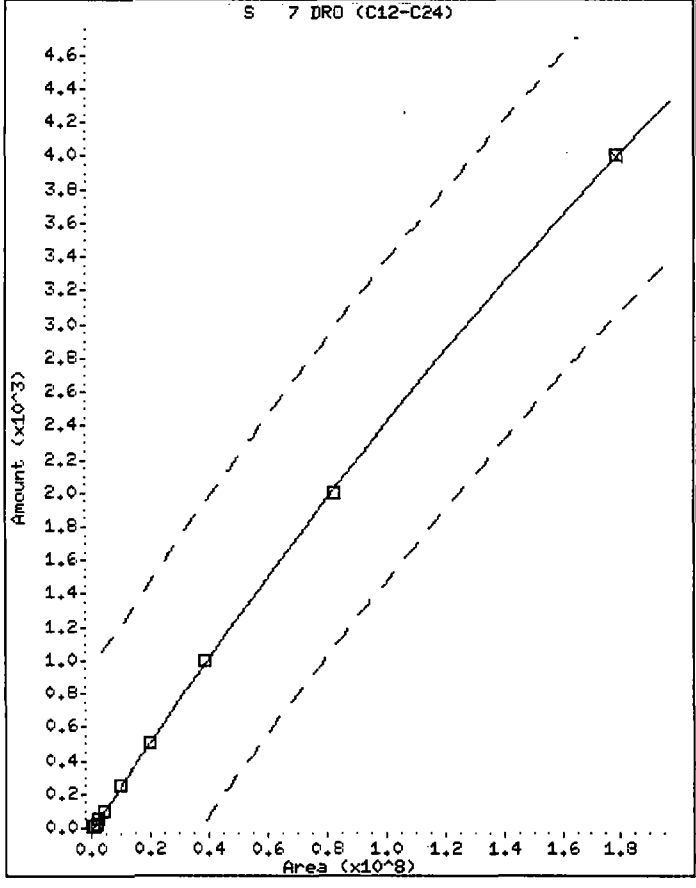

$ 2 o-Terphenyl (S)
Amount
Area (x10^7)

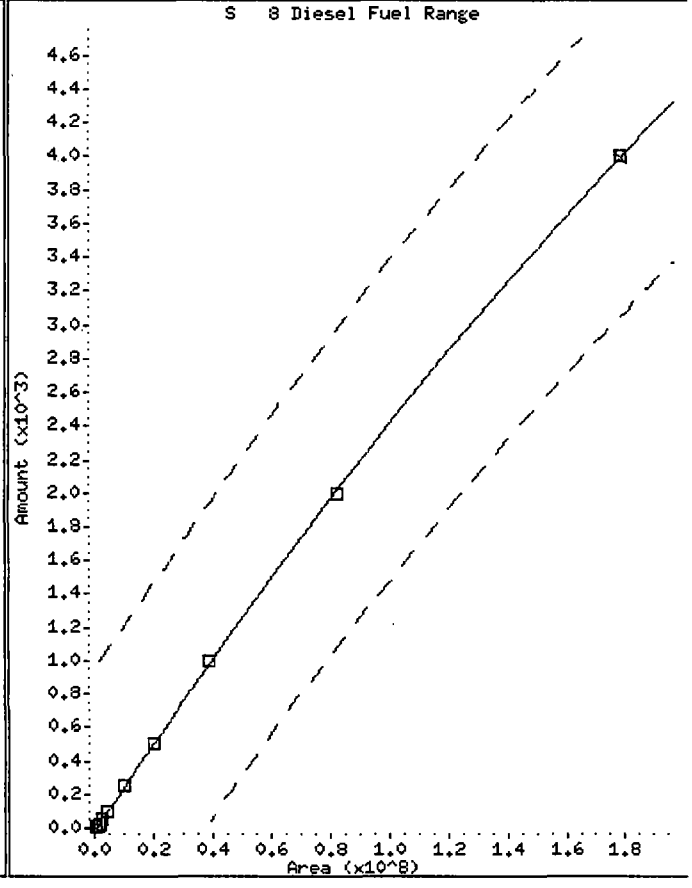

$ 3 n-Triacontane (S)
Amount
Area (x10^7)

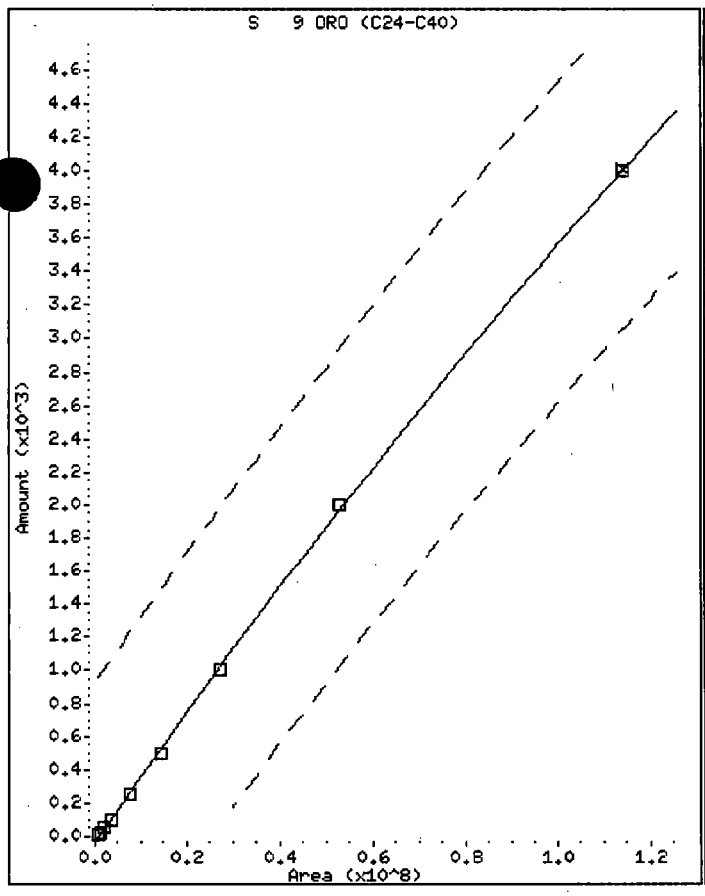

S 4 Residual Range Organics AK103
Amount (x10^3)
Area (x10^8)

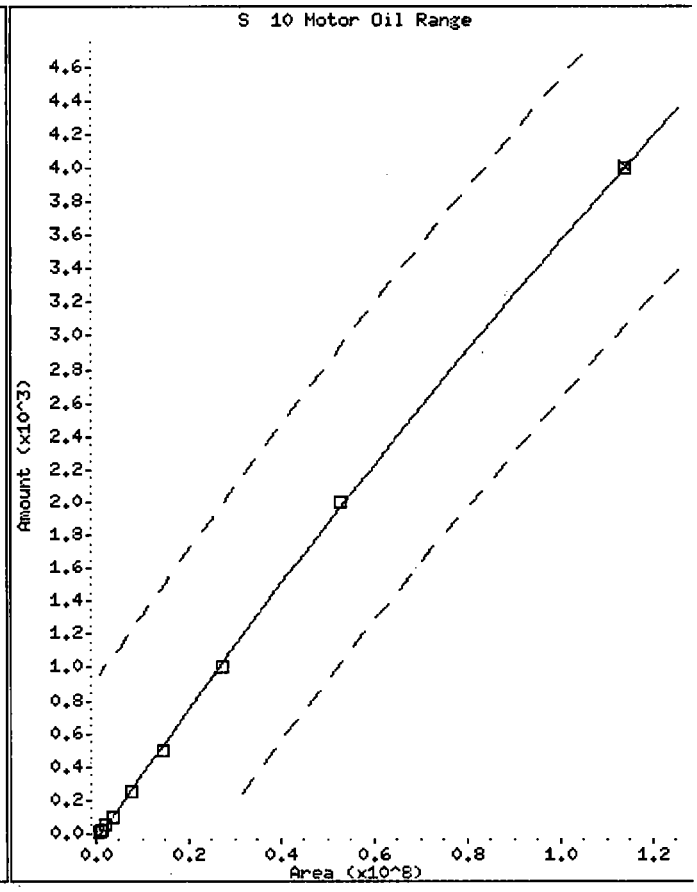

S 5 TPH-DRO (C10-C28)
Amount (x10^3)
Area (x10^8)


S 6 Motor Oil Range (C24-C36)
Amount (x10^3)
Area (x10^8)


S 7 DRO (C12-C24)
Amount (x10^3)
Area (x10^8)


S 8 Diesel Fuel Range
Amount (x10^3)
Area (x10^8)


S 9 DRO (C24-C40)
Amount (x10^3)
Area (x10^8)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
4.6
4.4
4.2
4.0
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0


S 10 Motor Oil Range
Amount (x10^3)
Area (x10^8)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
4.6
4.4
4.2
4.0
3.8
3.6
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R004.d
Lab Smp Id: RTmark 10328-153
Inj Date : 05-MAR-2014 08:45
Operator : MT Inst ID: 10gcs8.i
Smp Info : RTmark 10328-153
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 05-Mar-2014 12:45 mthao Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)	
S	1 DRO by AK 102	3.320-8.230			6679070			
$	2 o-Terphenyl (S)	6.748	6.748	0.000	132			(R)
$	3 n-Triacontane (S)	9.754	9.760	-0.006	428			(R)
S	4 Residual Range Organics AK103	8.240-11.450			6400910			
S	5 TPH-DRO (C10-C28)	3.320-9.310			10716687			
S	6 Motor Oil Range (C24-C36)	7.960-11.450			8346842			
S	7 DRO (C12-C24)	4.240-8.210			4439636			
S	8 Diesel Fuel Range	4.240-8.210			4439636			
S	9 ORO (C24-C40)	8.220-13.070			8642882			
S	10 Motor Oil Range	8.220-13.070			8642882			

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R004.D

Page 1

Date : 05-MAR-2014 08:45

Client ID:

Instrument: 10gcs8.i

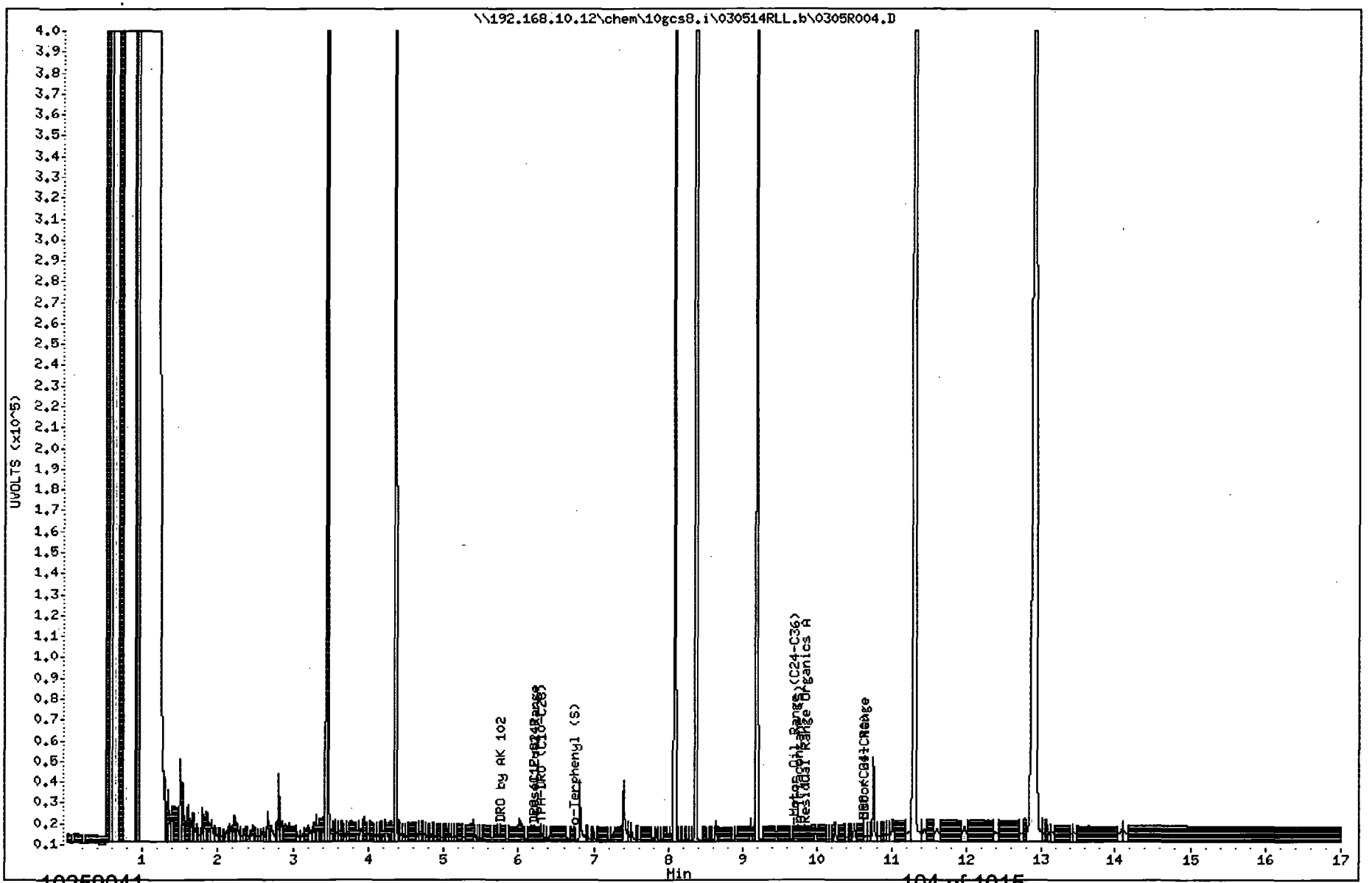
Sample Info: RTmark 10328-153

Volume Injected (uL): 1.0

Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcs8.i Injection Date: 05-MAR-2014 17:37
Lab File ID: 0305R027.d Init. Cal. Date(s): 05-MAR-2014 05-MAR-2014
Analysis Type: Init. Cal. Times: 09:08 12:36
Lab Sample ID: D/MO7 10528-020 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m

	COMPOUND	RRF / AMOUNT	RF500	CCAL RRF500	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	2 o-Terphenyl (S)	50.00000	45.12724	43063	0.010	-9.74552	15.00000	Linear
$	3 n-Triacontane (S)	50.00000	47.74245	32432	0.010	-4.51510	15.00000	Linear
S	5 TPH-DRO (C10-C28)	500	507	53497	0.010	1.41195	15.00000	Quadratic
S	6 Motor Oil Range (C24-C36)	500	539	24861	0.010	7.86643	15.00000	Quadratic

Average %D / Drift Results.

Calculated Average %D/Drift = 5.88475
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R027.d
Lab Smp Id: D/MO7 10528-020
Inj Date : 05-MAR-2014 17:37
Operator : MT Inst ID: 10gcs8.i
Smp Info : D/MO7 10528-020
Misc Info :
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	2 o-Terphenyl (S)	6.712	6.712	0.000	2153165	50.0000	45.1(M)
$	3 n-Triacontane (S)	9.650	9.650	0.000	1621586	50.0000	47.7(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			26748717	500.000	507(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			12430256	500.000	539(M)

QC Flag Legend

M- Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R027.D

Date : 05-MAR-2014 17:37

Client ID:

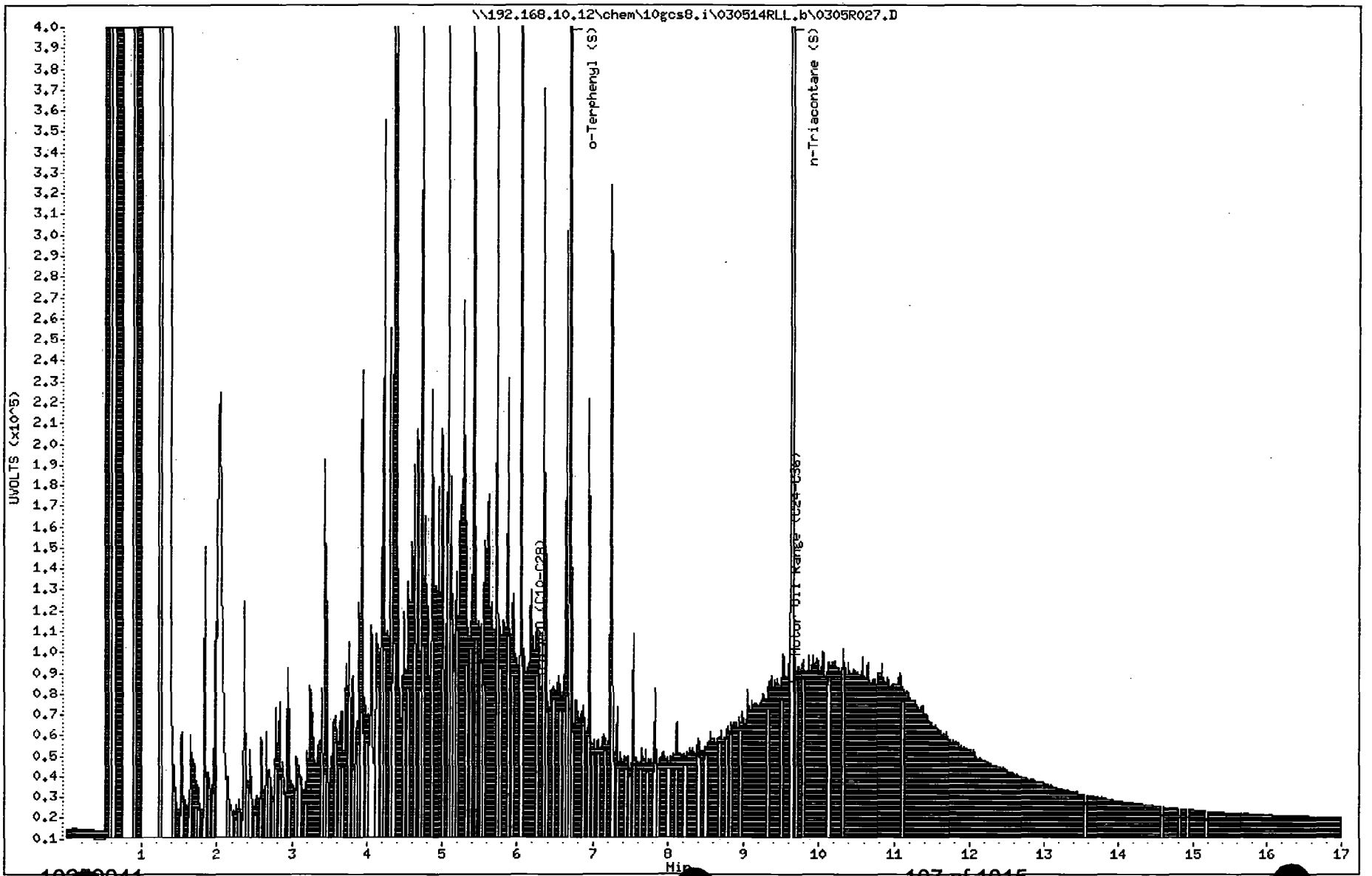
Instrument: 10gcs8.i

Sample Info: D/M07 10528-020

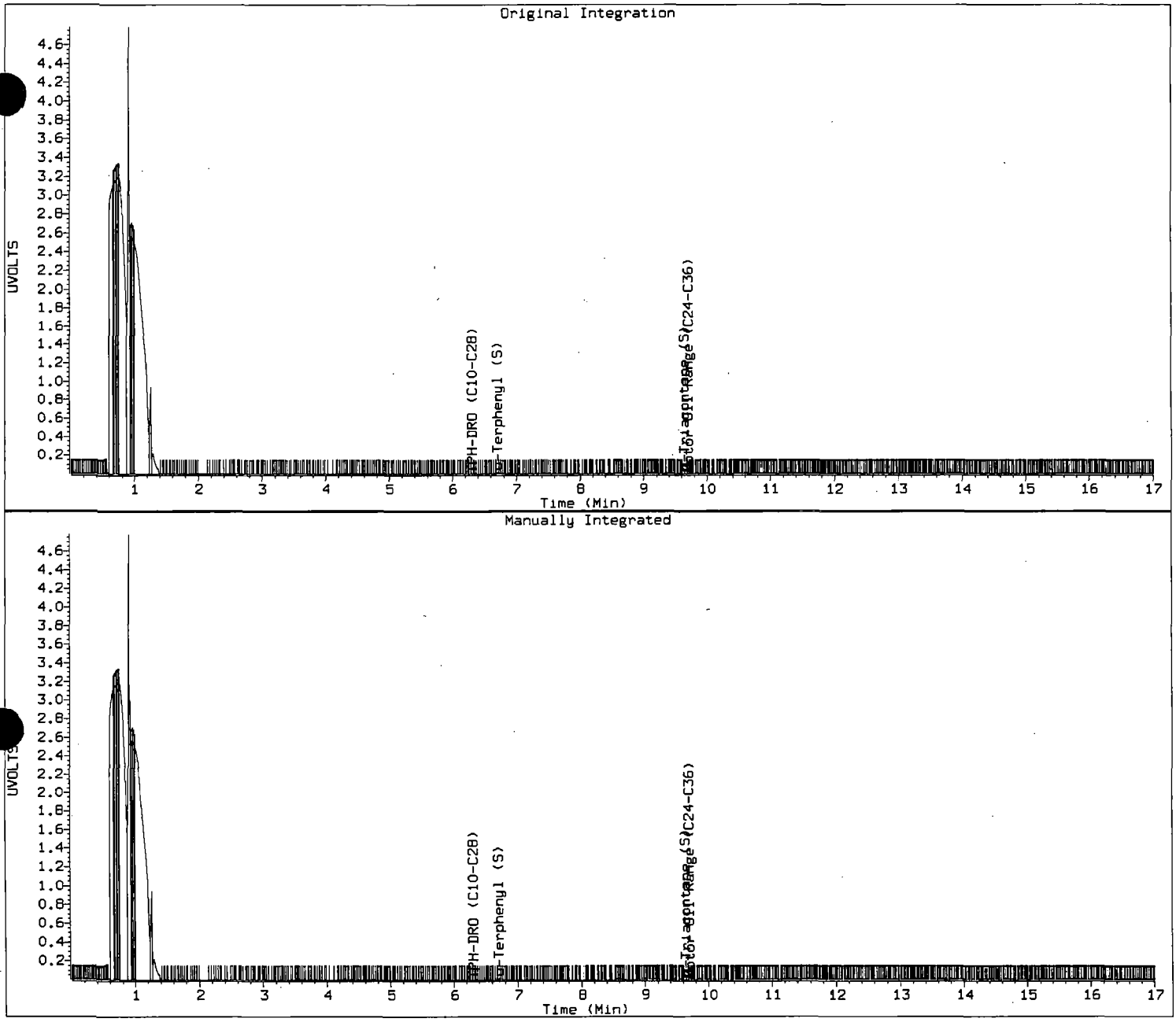
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAR-2014 17:37
Instrument: 10gcs8.i
Lab Sample ID: D/MO7 10528-020



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	12430256	12430256	
TPH-DRO (C10-C28)	26748717	26748717	
o-Terphenyl (S)	2153165	2153165	
n-Triacontane (S)	1621586	1621586	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R017.d
Lab Smp Id: 1632388
Inj Date : 05-MAR-2014 13:46
Operator : MT Inst ID: 10gcs8.i
Smp Info : 1632388,mb
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.736	6.722	0.014	2521311	52.2251	5.22(M)
$	3 n-Triacontane (S)	9.669	9.698	-0.029	1689096	49.6475	4.96(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			3028229	38.8460	3.88(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			1354492	45.7318	4.57(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R017.D

Page 1

Date : 05-MAR-2014 13:46

Client ID:

Instrument: 10gcs8.i

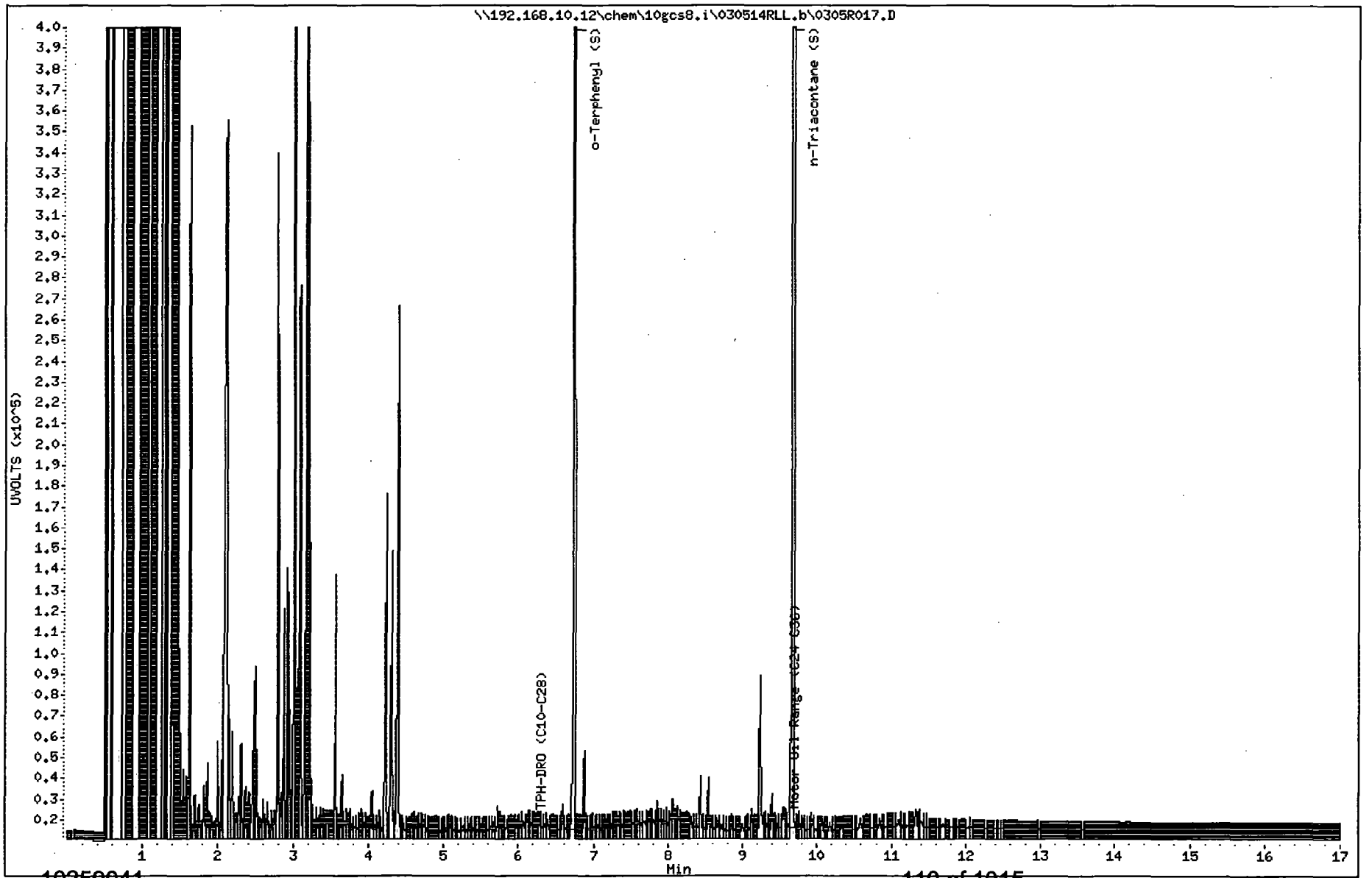
Sample Info: 1632388,mb

Volume Injected (uL): 1.0

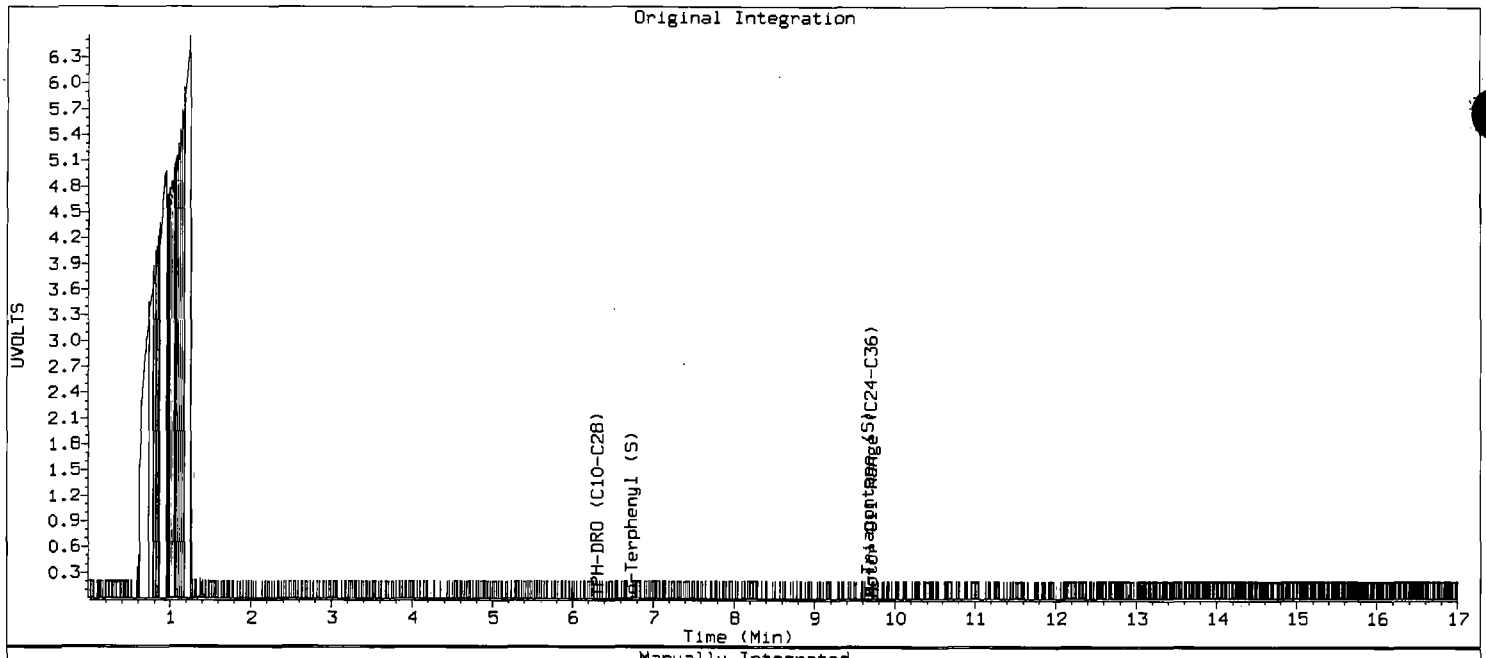
Operator: MT

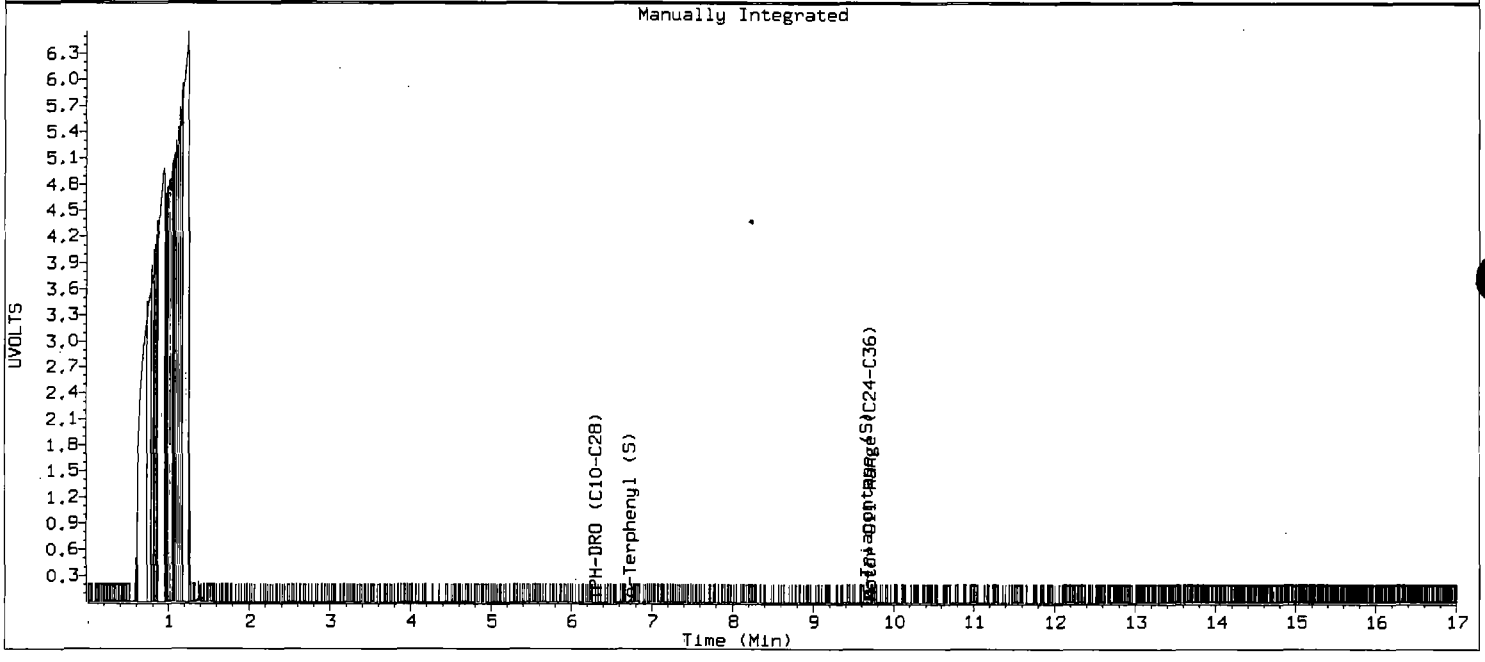
Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAR-2014 13:46
Instrument: 10gcs8.i
Lab Sample ID: 1632388





Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	1354492	1354492	
TPH-DRO (C10-C28)	3028229	3028229	
o-Terphenyl (S)	2521311	2521311	
n-Triacontane (S)	1689096	1689096	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R021.d
Lab Smp Id: 1632390
Inj Date : 05-MAR-2014 15:18
Operator : MT Inst ID: 10gcs8.i
Smp Info : 1632390,ms
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.707	6.704	0.003	2466690	51.1720	5.12(M)
$	3 n-Triacontane (S)	9.617	9.618	-0.001	1680530	49.4058	4.94(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			28145635	534.242	53.4(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			14181373	616.349	61.6(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R021.D

Date : 05-MAR-2014 15:18

Client ID:

Instrument: 10gcs8.i

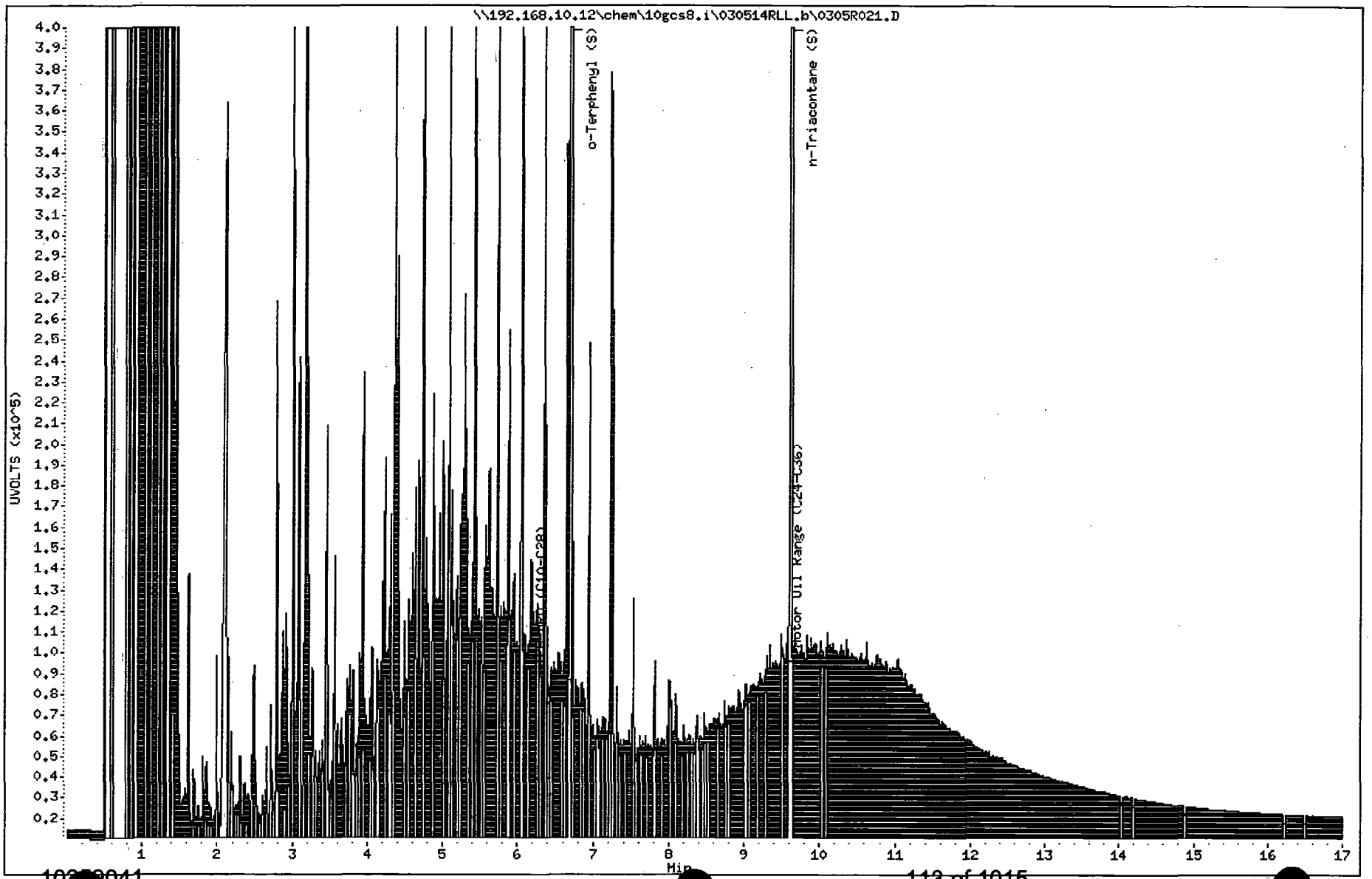
Sample Info: 1632390,ms

Volume Injected (uL): 1.0

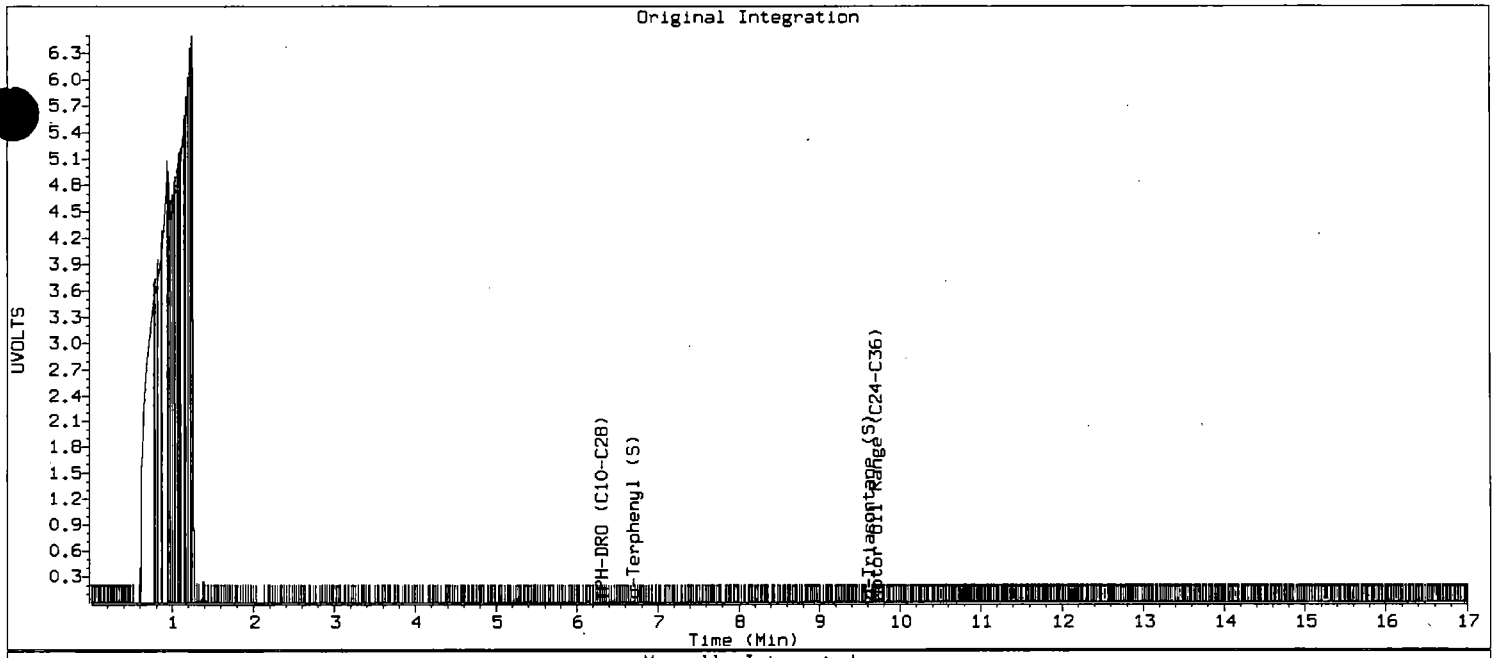
Operator: MT

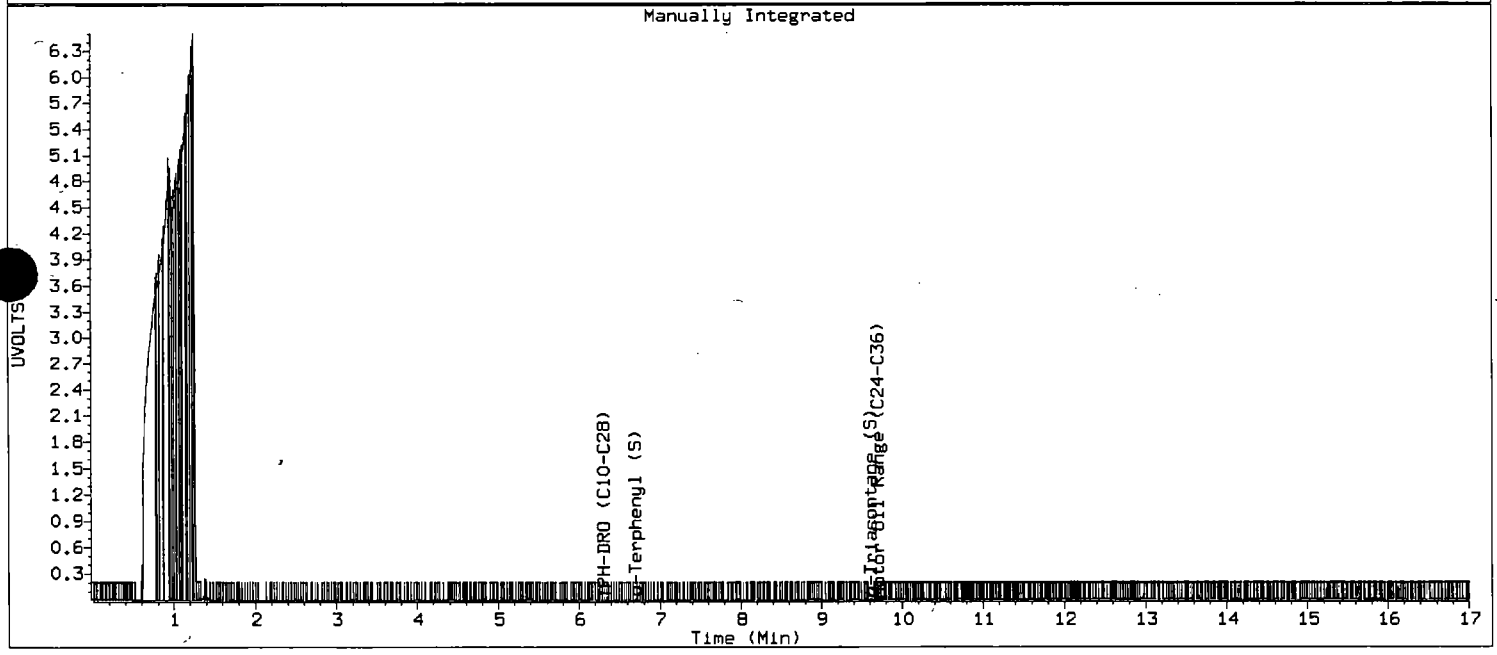
Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAR-2014 15:18
Instrument: 10gcs8.i
Lab Sample ID: 1632390





Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	14181373	14181373	
TPH-DRO (C10-C28)	28145635	28145635	
o-Terphenyl (S)	2466690	2466690	
n-Triacontane (S)	1680530	1680530	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R022.d
Lab Smp Id: 1632391
Inj Date : 05-MAR-2014 15:41
Operator : MT Inst ID: 10gcs8.i
Smp Info : 1632391,msd
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.691	6.704	-0.013	2329038	48.5181	4.85(M)
$	3 n-Triacontane (S)	9.586	9.618	-0.032	1588442	46.8072	4.68(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			27884936	529.172	52.9(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			14832899	644.933	64.5(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R022.D

Page 1

Date : 05-MAR-2014 15:41

Client ID:

Instrument: 10gcs8.i

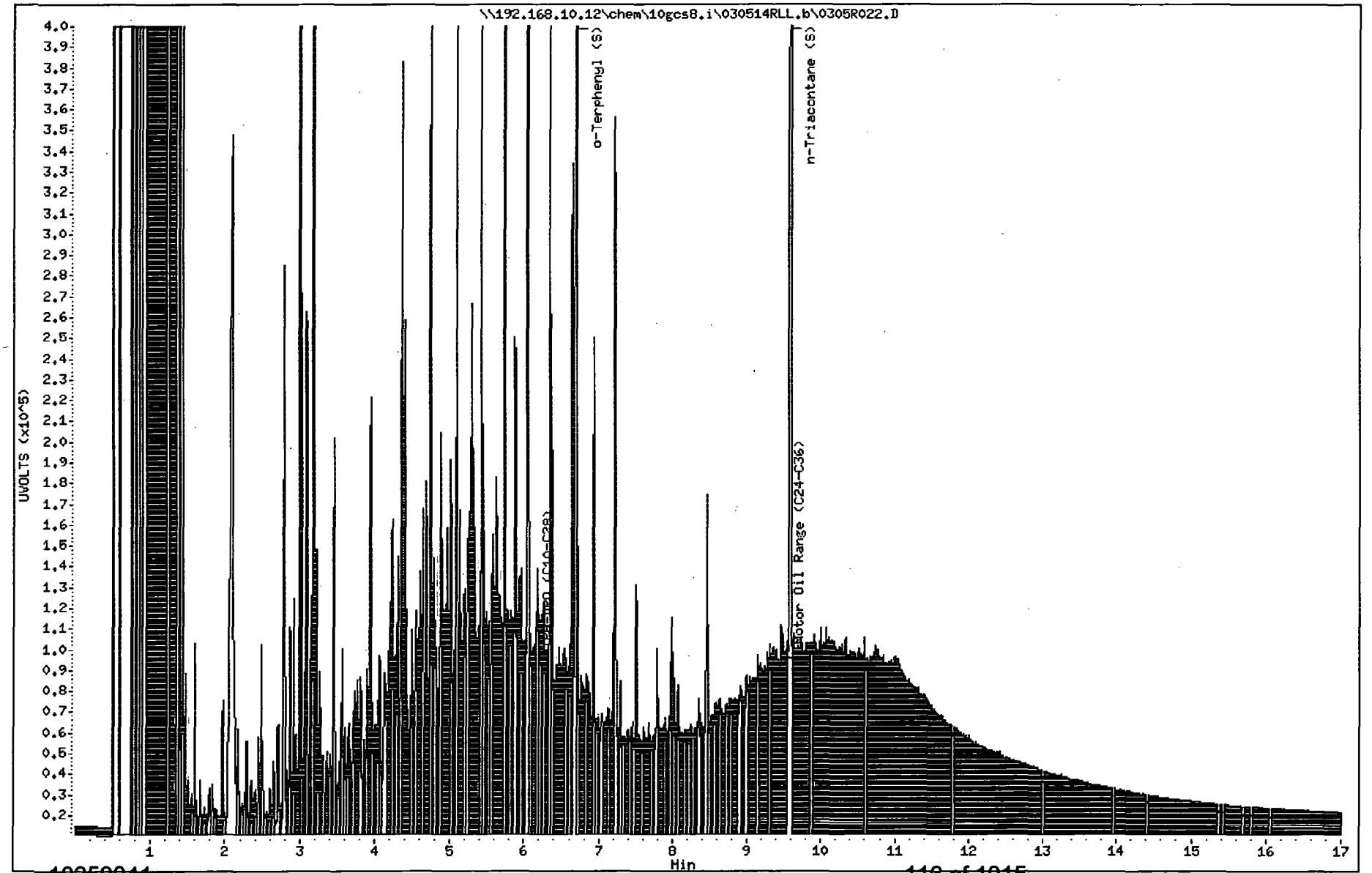
Sample Info: 1632391,msd

Volume Injected (uL): 1.0

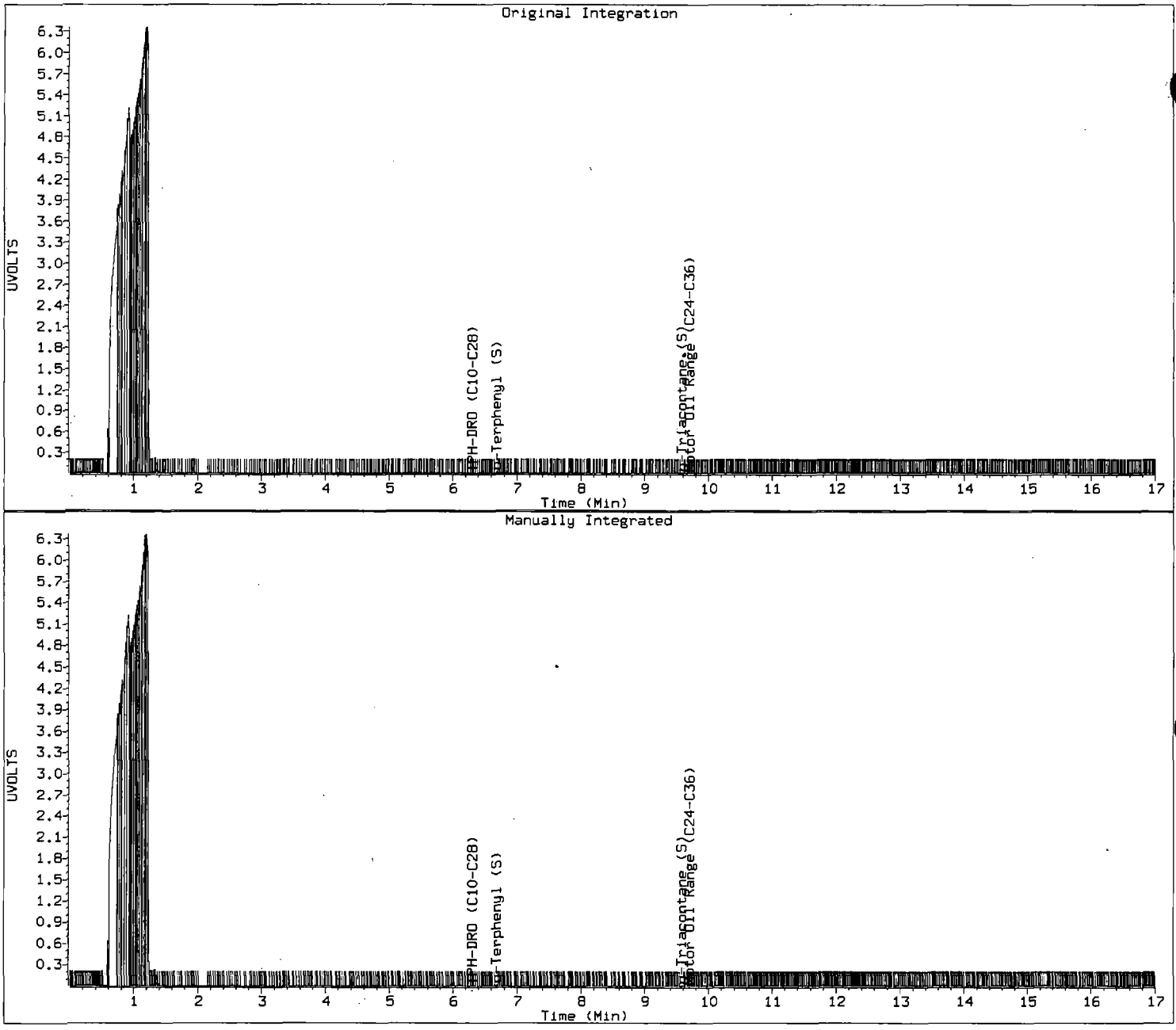
Operator: HT

Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAR-2014 15:41
Instrument: 10gcs8.i
Lab Sample ID: 1632391



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	14832899	14832899	
TPH-DRO (C10-C28)	27884936	27884936	
o-Terphenyl (S)	2329038	2329038	
n-Triacontane (S)	1588442	1588442	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R018.d
Lab Smp Id: 1632389
Inj Date : 05-MAR-2014 14:09
Operator : MT Inst ID: 10gcs8.i
Smp Info : 1632389,lcs
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.725	6.722	0.003	2639716	54.5079	5.45(M)
$	3 n-Triacontane (S)	9.671	9.698	-0.027	1741815	51.1352	5.11(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			28633242	543.720	54.4(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			14261626	619.872	62.0(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R018.D

Date : 05-MAR-2014 14:09

Client ID:

Instrument: 10gcs8.i

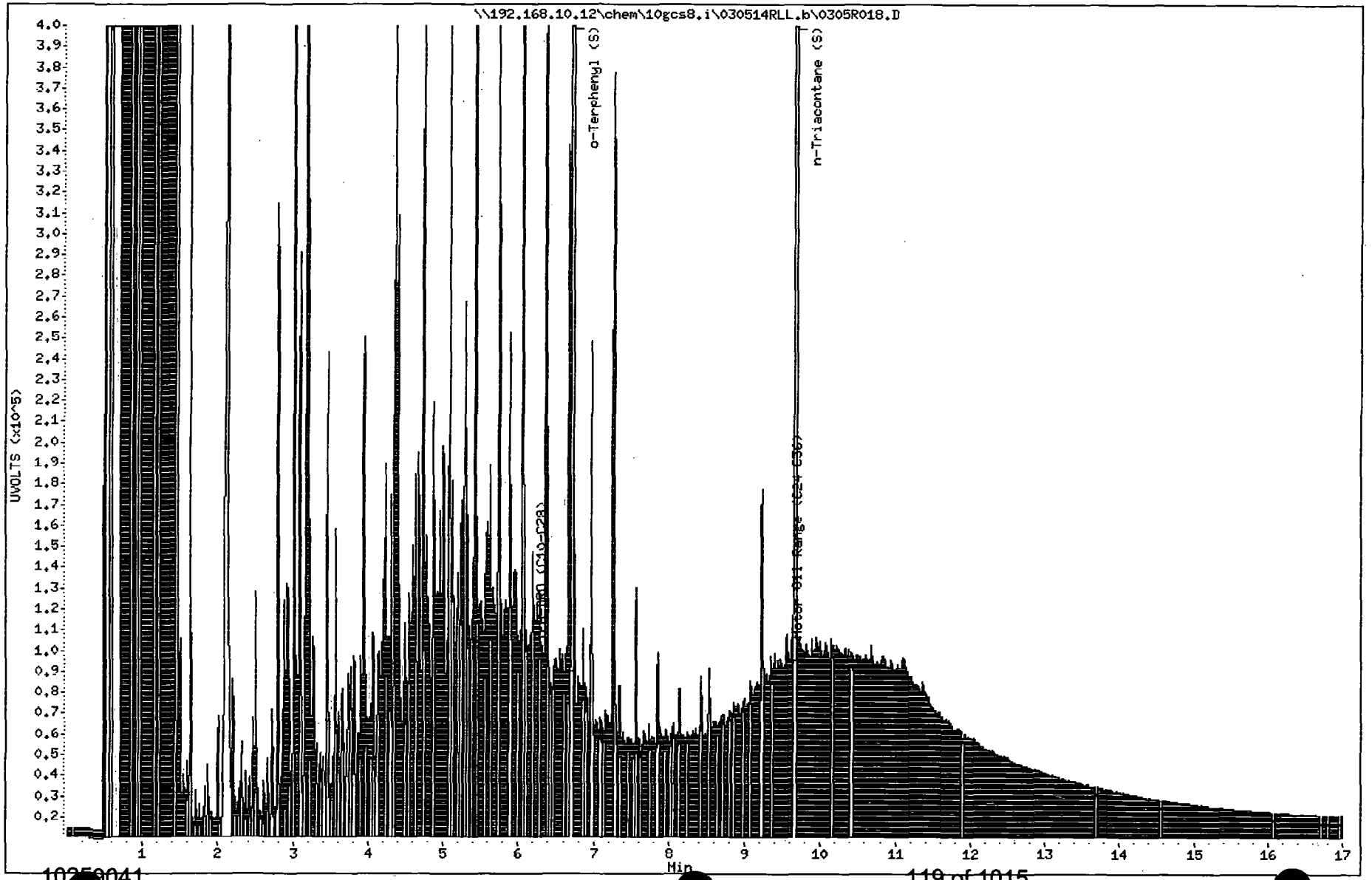
Sample Info: 1632389,lcs

Volume Injected (uL): 1.0

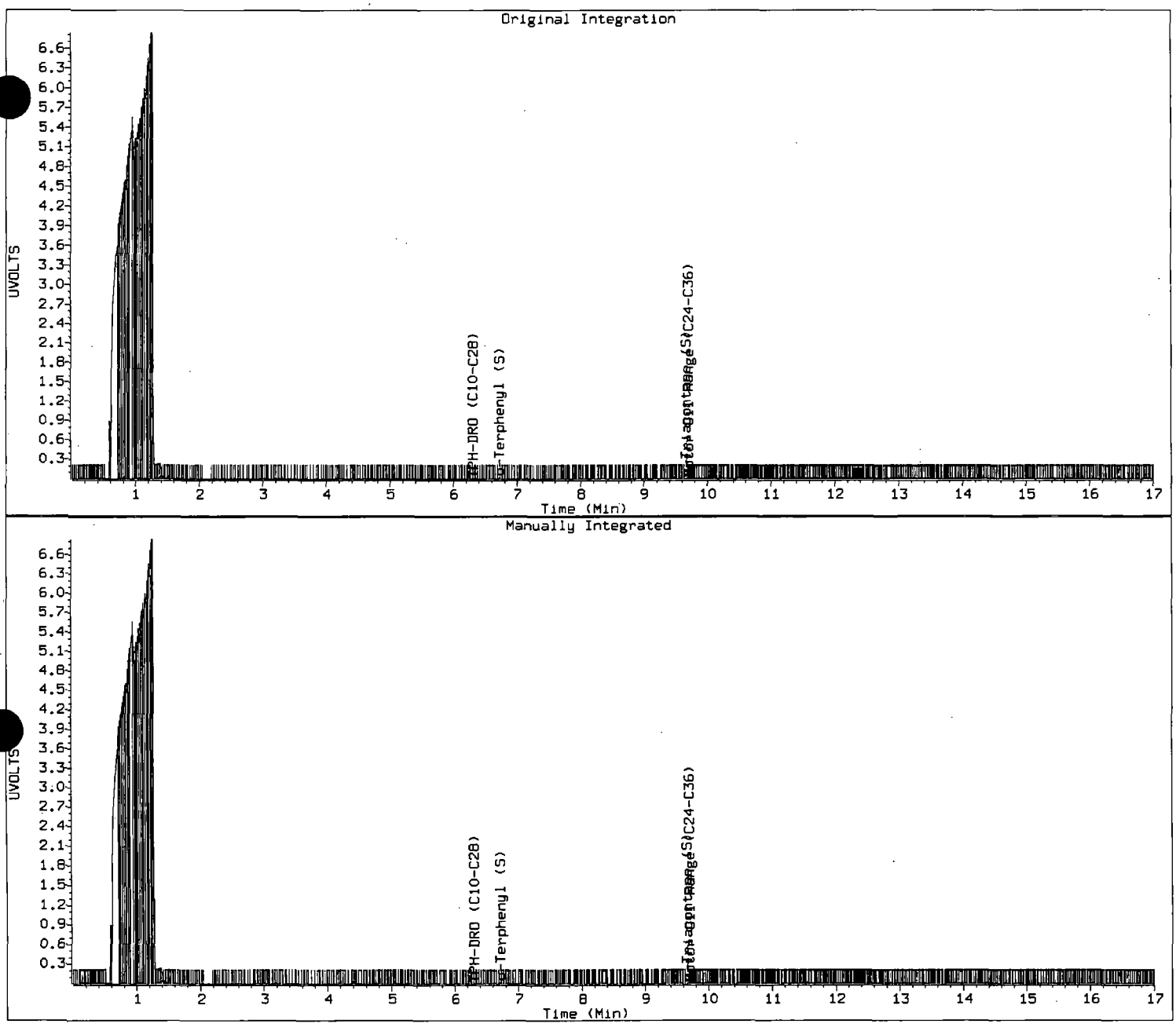
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAR-2014 14:09
Instrument: 10gcs8.i
Lab Sample ID: 1632389



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	14261626	14261626	
TPH-DRO (C10-C28)	28633242	28633242	
o-Terphenyl (S)	2639716	2639716	
n-Triacontane (S)	1741815	1741815	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R026.d
Lab Smp Id: 10259041001
Inj Date : 05-MAR-2014 17:14
Operator : MT Inst ID: 10gcs8.i
Smp Info : 10259041001
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.703	6.704	-0.001	2378164	49.4652	4.95(M)
$	3 n-Triacontane (S)	9.628	9.618	0.010	1675112	49.2529	4.92(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			2704274	32.3646	3.24(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			1291833	42.9076	4.29(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R026.D

Date : 05-MAR-2014 17:14

Client ID:

Instrument: 10gcs8.i

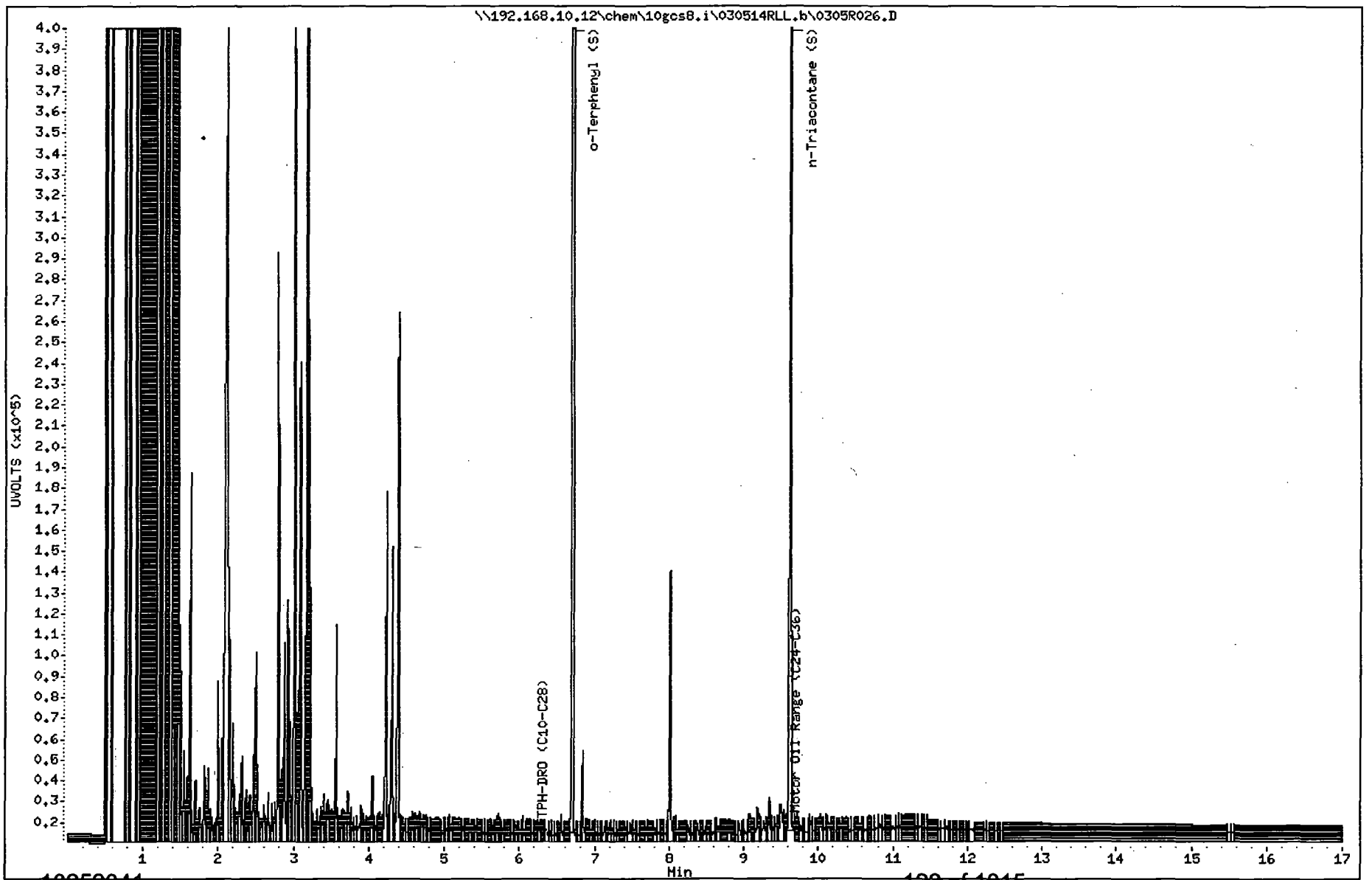
Sample Info: 10259041001

Volume Injected (uL): 1.0

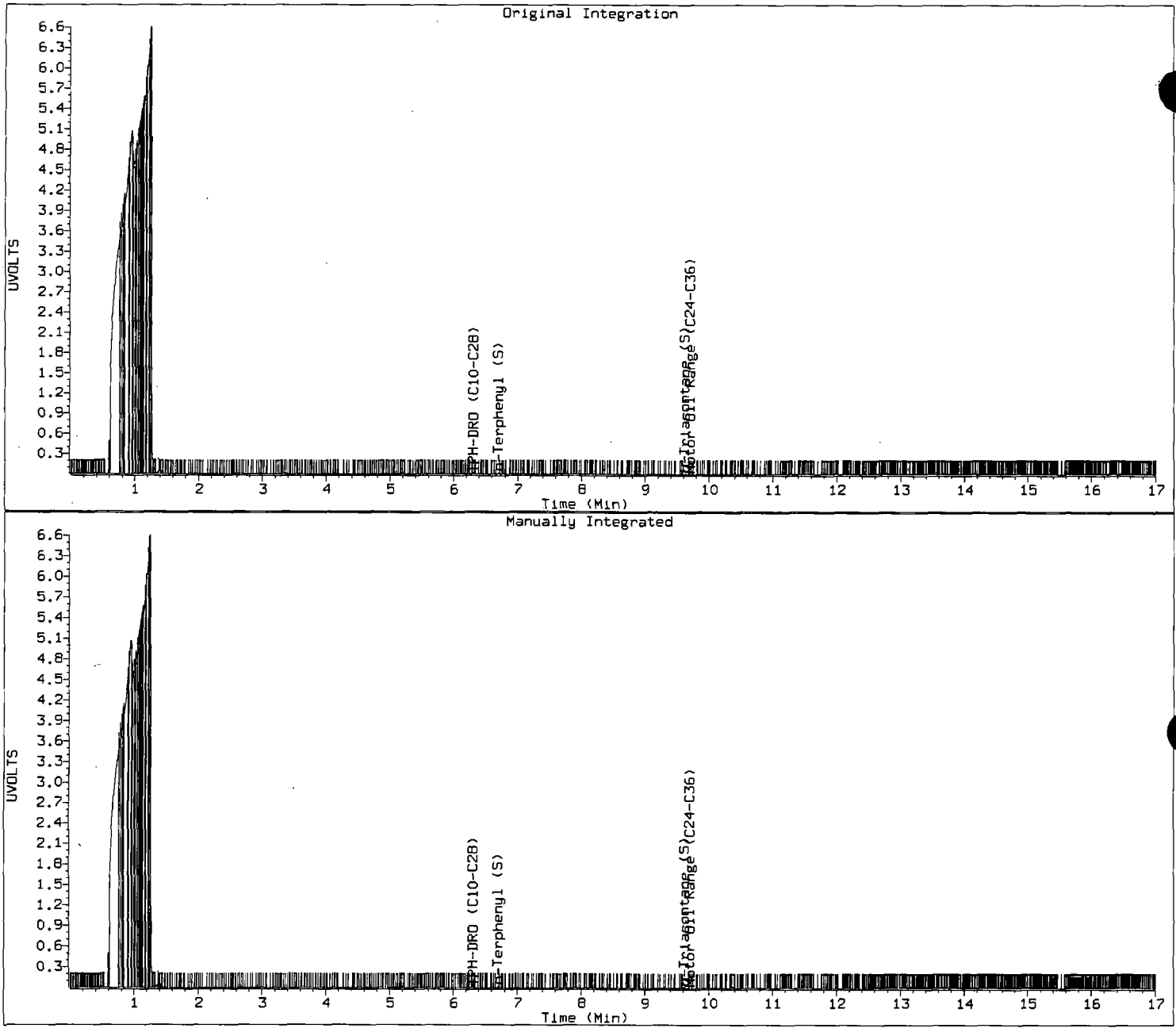
Operator: MT

Column phase: DB-5MS

Column diameter: 0.25



Instrument: 10gcs8.i
Lab Sample ID: 10259041001



Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	1291833	1291833	
TPH-DRO (C10-C28)	2704274	2704274	
o-Terphenyl (S)	2378164	2378164	
n-Triacontane (S)	1675112	1675112	

Pace Analytical Services, Inc.

AK 102/AK 103

Data file : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R020.d
Lab Smp Id: 10259041002
Inj Date : 05-MAR-2014 14:55
Operator : MT Inst ID: 10gcs8.i
Smp Info : 10259041002
Misc Info : 12910
Comment : FID
Method : \\192.168.10.12\chem\10gcs8.i\030514RLL.b\GCS8akNW8015-030514R.m
Meth Date : 06-Mar-2014 07:13 mthao Quant Type: ESTD
Cal Date : 05-MAR-2014 12:36 Cal File: 0305R014.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015LL.sub
Target Version: 4.14
Processing Host: VIRTUALXP-48388

Concentration Formula: Amt * DF * Uf*Vt/(Ws*Vi*(100-M)/100) * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng on column unit factor
Vt	1.000	Volume of final extract (mL)
Ws	10.000	Weight of the sample extracted (g)
Vi	1.000	Volume Injected (uL)
M	0.00000	% Moisture
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (mg/Kg)
$	2 o-Terphenyl (S)	6.696	6.704	-0.008	2549792	52.7742	5.28(M)
$	3 n-Triacontane (S)	9.576	9.618	-0.042	1641088	48.2928	4.83(M)
S	5 TPH-DRO (C10-C28)	3.320-9.310			4707580	72.4070	7.24(M)
S	6 Motor Oil Range (C24-C36)	7.960-11.450			2731542	107.709	10.8(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcs8.i\030514RLL.b\0305R020.D

Date : 05-MAR-2014 14:55

Client ID:

Instrument: 10gcs8.i

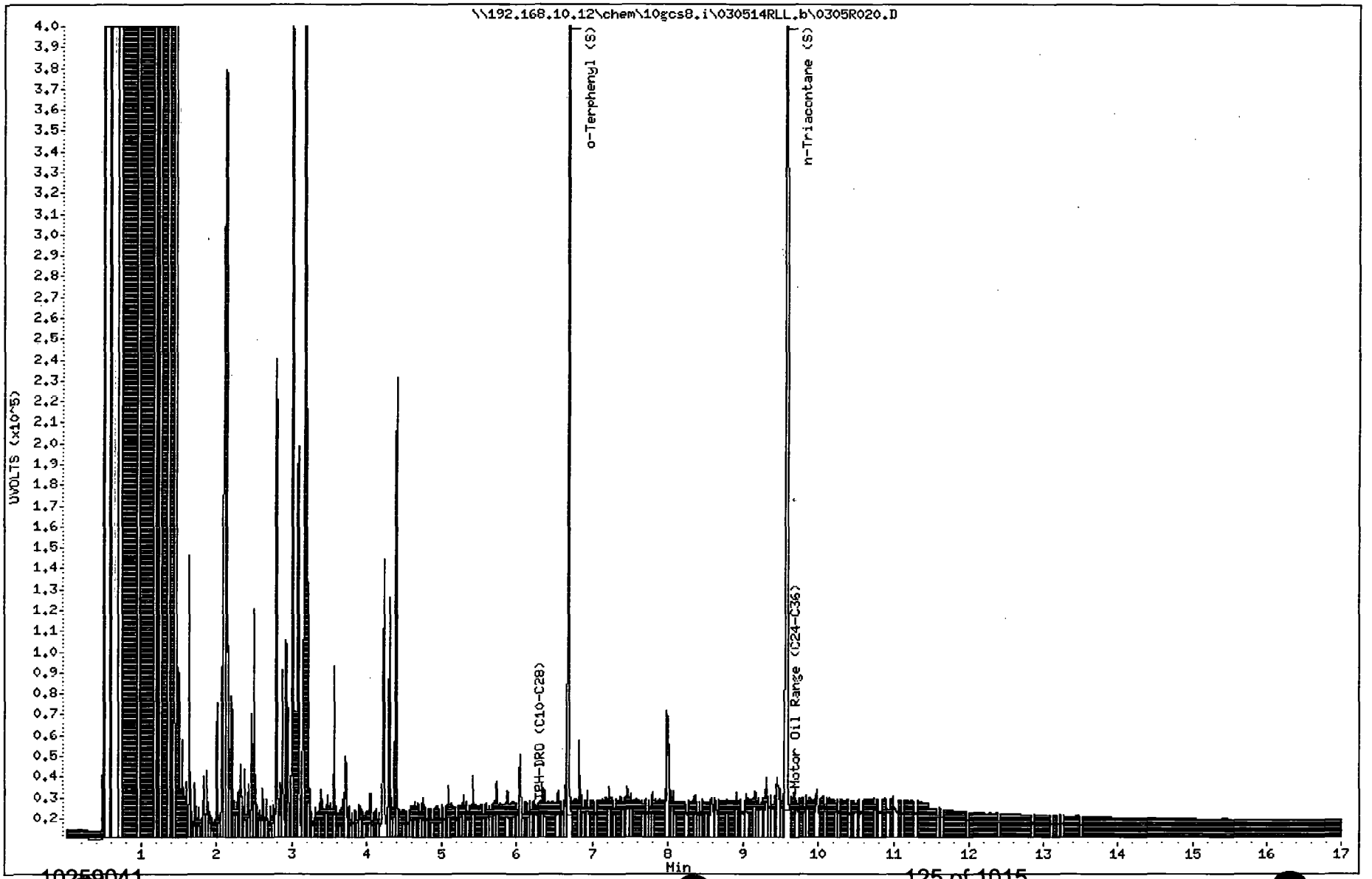
Sample Info: 10259041002

Volume Injected (uL): 1.0

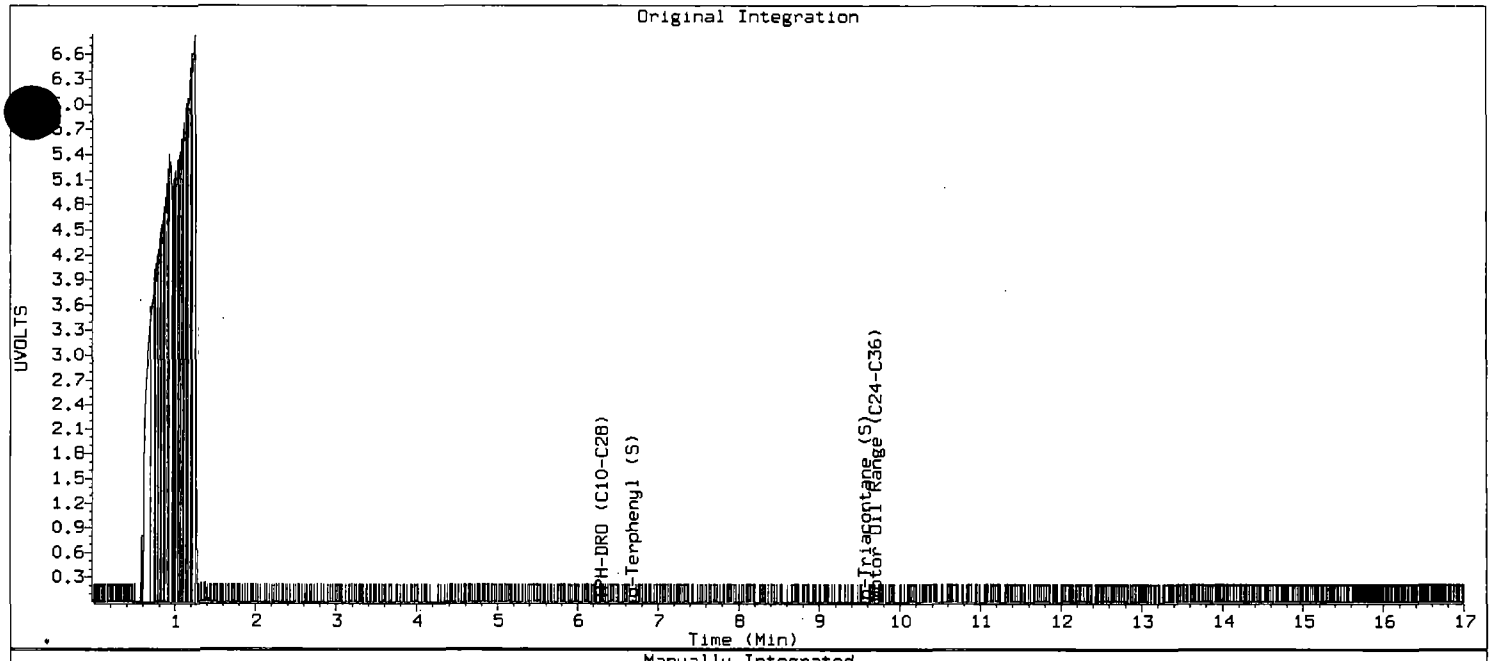
Operator: MT

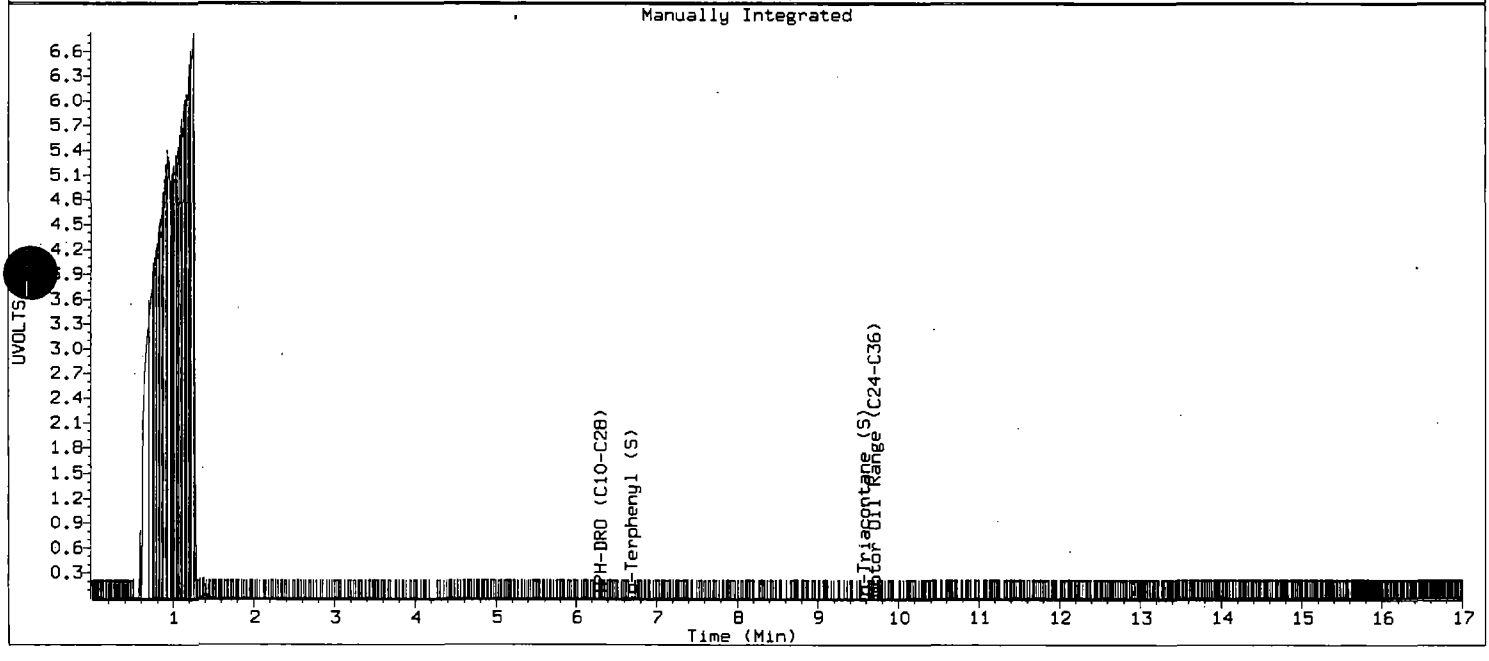
Column phase: DB-5MS

Column diameter: 0.25



Injection Date: 05-MAR-2014 14:55
Instrument: 10gcs8.i
Lab Sample ID: 10259041002





Manually Integrated Compounds

Compound	Area (before)	Area (after)	Code
Motor Oil Range (C24-C36)	* 2731542	2731542	
TPH-DRO (C10-C28)	4707580	4707580	
o-Terphenyl (S)	2549792	2549792	
n-Triacontane (S)	1641088	1641088	

12910-288432

Pace Analytical®	Document Name: Extraction Method: SW 3550 Sonication Analysis: AK102/AK103, 8015, NwTPH-Dx – Soil	Document Revised: 18Feb2014 Page 1 of 2
	Document No.: F-MN-O-253-rev.03	Issuing Authority: Pace Minnesota Quality Office

☐ AK102/AK103 ☒ 8015 ☐ NwTPH-Dx

SS (1): 10185-334	Amt: 25 µL	Analyst: SR	Ext. Date/By: 3/3/14 SR		
SS (2): 10185-320	Amt: 10 µL	Analyst: SR	Batch: 24492-288068		
MS: 10528-009	Amt: 250 µL	Analyst: SR	Dispensor/Syringe IDs: BTJ/~~[illegible]~~ 3-4-13 [illegible]		

SS (1): o-terphenyl: 2,000 µg/mL SS (2): n-triacontane d62: 5,000 µg/mL MS: Diesel/MO: 2,000 µg/mL

	Sample ID	10 grams IV	Spike Ver.		F.V. 1.0 mL (clear) Lot # C4011-1W	Comments
1	MB- 1632388	10	MT	MT	1.0	Sand Lot #: 116733
2	LCS- 1632389	10	MT	MT MT	1.0	Sand Lot #: 116733
3	~~LCSD-~~	~~10~~				~~Sand Lot #:~~ 3/3/14 SR
4	10258121002	10.0	MT	MT	1.0	
5	10258999001	10.0	MT	MT	5.0	
6	10259041001	10.1	MT	MT	1.0	
7	41002	10.0	MT	MT	1.0	
8	MS 1632390	10.0	MT	MT MT	1.0	
9	MSD 1632391	10.0	MT	MT MT	1.0	
10	10259055001	10.1	MT	MT	1.0	
11	55002	10.0	MT	MT	1.0	
12	55003	10.1	MT	MT	1.0	
13	55004	10.0	MT	MT	1.0	
14	55005	10.0	MT	MT	1.0	
15	55006	10.0	MT	MT	1.0	
16	55007	10.0	MT	MT	1.0	
17						
18						
19						
20						
21						3-4-14 AD
22						
23						
24						
25						

Sample IDs Verified: ① H_2SO_4: NA Na_2SO_4: 136130-11 Silica Lot: NA

MeCl2/Acetone: 9222481 Date Conc./By: AD 3-4-14 MeCl2 Final Volume /Pipet: 137829 / PP 1-35, PP 5-

Thermometer ID: Q146 Bath Temp Read (80°C): 86 °C Bath Temp Corrected: 87 °C

Comments: ① No one to verify Filter Paper Lot #: glass wool LOT: 26013999

Posted by: AD	Date: 3-4-14	Validated by: KR	Date: 3-4-14

Fraction: 8015-GRO

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 288113 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041
Lab File ID: 03031409.D Lab Sample ID: 1632555
GC Column: DB-624 ID: 0.53 (mm) Time Analyzed: 16:55
Instrument ID: 10GCV5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BLANK for HBN 288113 [GCV/1173	1632555	03031409.D	16:55
02	SB-9 3-4'	10259041001	03031418.D	20:17
03	LCS for HBN 288113 [GCV/11739]	1632556	03041404.D	10:53
04	LCSD for HBN 288113 [GCV/11739	1632557	03041405.D	11:15
05	SB-9 12-14'(1631878MS)	1632558-MS	03041406.D	12:04
06	SB-9 12-14'(1631878MSD)	1632559-MSD	03041407.D	12:27
07	SB-9 12-14'	10259041002	03041410.D	13:38

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SURROGATE RECOVERY SUMMARY

Project: BP-IL SS#5482
Pace Project No.: 10259041

QB Batch: GCV / 11739
Method(s): EPA 5030 / EPA 8015/8021

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
10259041001		SB-9 3-4'	1	94											
1632555	BLANK		1	96											
10259041002	OQS	SB-9 12-14'	1	95											
1632556	LCS		1	118											
1632557	LCSD		1	119											
1632558	MS		1	127											
1632559	MSD		1	121											
		QC Limits:		68-135											
		Sample Limits:		68-135											

Sur 1: a,a,a-Trifluorotoluene (S)

REPORT OF LABORATORY ANALYSIS

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without the written consent of Pace Analytical Services, Inc..

Pace Analytical™

Instrument Run Log

Instrument: 10GCV5 Method: TPH Soils Ical Misc. Prep. Info: Surrogate Lot: 10186-41exp 3/11/14
Column: DB-624 0.53mm Hydrogen Tune Standard: NA ISTD Lot: 10186-41exp 3/11/14 Cal. Standard: 10186-67C, 10186-68B

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
02241401.D	CONDITIONING BLK	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 09:48	LLC	DNR
02241402.D	REAGENT BLANK	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 10:10	LLC	ok
02241403.D	RTM 9314-499	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 10:33	LLC	ok
02241404.D	VB	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 10:55	LLC	ok
02241405.D	VB	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 11:18	LLC	ok
02241406.D	10 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 11:42	LLC	ok
02241407.D	25 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 12:07	LLC	ok
02241408.D	50 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 12:45	LLC	ok
02241409.D	100 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 13:19	LLC	ok
02241410.D	500 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 13:42	LLC	ok
02241411.D	1000 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 14:04	LLC	ok
02241412.D	2500 10099-11	Solid	Ical	1		G514-TPH-MLS-022414	2/24/14 14:27	LLC	ok
02241413.D	VB	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 14:49	LLC	ok
02241414.D	VB	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 15:12	LLC	ok
02241415.D	VB	Solid	Sample	1		G514-TPH-MLS-022414	2/24/14 15:34	LLC	ok
02241416.D	ICV 10099-12	Solid	CCal	1		G514-TPH-MLS-022414	2/24/14 15:57	LLC	pass

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	x Other minor parts replaced Auto sampler was switched.
Replaced/Cleaned gold seal	Cleaned MS Source	No maintenance performed today

Additional Comments: TPh Ical

File Path 1: U:\10GCV5.I\022414A-2.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: 2/25/14 LC

Report Date: 02/25/2014 11:08
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10GCV5 Method: 8015B soils Misc. Prep. Info: Surrogate Lot: 10186-41exp 3/11/14
Column: DB-624 0.53mm Hydrogen Tune Standard: NA ISTD Lot: 10186-41exp 3/11/14 Cal. Standard: 10186-66D

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
03031401.D	CONDITIONING BLK	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 12:08	LLC	DNR
03031402.D	RTM 9314-533	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 12:31	LLC	ok
03031403.D	CCV 9314-552	S/	CCal	1		G514-TPH-MLS-022414	3/03/14 12:54	LLC	pass
03031404.D	LCS	S/	LCS	1		G514-TPH-MLS-022414	3/03/14 14:12	LLC	DNR,failed high
03031405.D	1632558	S/	MS	1		G514-TPH-MLS-022414	3/03/14 14:35	LLC	DNR, RR
03031406.D	1632559	S/	MSD	1		G514-TPH-MLS-022414	3/03/14 14:57	LLC	DNR,RR
03031407.D	VB	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 15:20	LLC	ok
03031408.D	VB	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 16:01	LLC	ok
03031409.D	1632555	S/11740	Blank	1		G514-TPH-MLS-022414	3/03/14 16:55	LLC	ok
03031410.D	10259055002	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 17:17	LLC	ok
03031411.D	10259055003	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 17:40	LLC	ok
03031412.D	10259055005	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 18:02	LLC	ok
03031413.D	10259055004	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 18:25	LLC	ok
03031414.D	CCV 9314-552	S/	CCal	1		G514-TPH-MLS-022414	3/03/14 18:47	LLC	pass
03031415.D	VB	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 19:10	LLC	ok
03031416.D	VB	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 19:32	LLC	ok
03031417.D	10259041002	S/	Sample	1		G514-TPH-MLS-022414	3/03/14 19:55	LLC	DNR, RR
03031418.D	10259041001	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 20:17	LLC	ok
03031419.D	10259055007	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 20:40	LLC	ok
03031420.D	10259055006	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 21:02	LLC	ok
03031421.D	10259055001	S/11740	Sample	1		G514-TPH-MLS-022414	3/03/14 21:25	LLC	ok
03031422.D	10258999001	S/11740	Sample	20		G514-TPH-MLS-022414	3/03/14 21:47	LLC	ok
03031423.D	1632557	S/	LCSD	1		G514-TPH-MLS-022414	3/03/14 22:10	LLC	DNR, failed high
03031424.D	CCV 9314-552	S/	CCal	1		G514-TPH-MLS-022414	3/03/14 22:32	LLC	pass

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: batch 11740.288114

File Path 1: U:\10GCV5.I\030314A-2.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: 3/5/14 LC

Report Date: 03/05/2014 14:50
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10GCV5 Method: 8015B soils Misc. Prep. Info: Surrogate Lot: 10186-41exp 3/11/14
Column: DB-624 0.53mm Hydrogen Tune Standard: NA ISTD Lot: 10186-41exp 3/11/14 Cal. Standard: 10186-66D

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
03041401.D	CONDITIONING BLK	S/	Sample	1		G514-TPH-MLS-022414	3/04/14 09:23	LLC	DNR
03041402.D	RTM 9314-533	S/	Sample	1		G514-TPH-MLS-022414	3/04/14 09:45	LLC	ok
03041403.D	CCV 9314-552	S/	CCal	1		G514-TPH-MLS-022414	3/04/14 10:08	LLC	pass
03041404.D	1632556	S/11740	LCS	1		G514-TPH-MLS-022414	3/04/14 10:53	LLC	pass
03041405.D	1632557	S/11740	LCSD	1		G514-TPH-MLS-022414	3/04/14 11:15	LLC	ok
03041406.D	1632558	S/11740	MS	1		G514-TPH-MLS-022414	3/04/14 12:04	LLC	ok
03041407.D	1632559	S/11740	MSD	1		G514-TPH-MLS-022414	3/04/14 12:27	LLC	ok
03041408.D	VB	S/	Sample	1		G514-TPH-MLS-022414	3/04/14 12:49	LLC	ok
03041409.D	VB	S/	Sample	1		G514-TPH-MLS-022414	3/04/14 13:16	LLC	ok
03041410.D	10259041002	S/11740	Sample	1		G514-TPH-MLS-022414	3/04/14 13:38	LLC	ok
03041411.D	CCV 9314-552	S/	CCal	1		G514-TPH-MLS-022414	3/04/14 14:03	LLC	pass

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: batch 11740.288114

File Path 1: U:\10GCV5.I\030414A-2.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: 3/5/14 LC

Report Date: 03/05/2014 14:46
Reviewed By/Date:

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031402.d
Lab Smp Id: RTM 9314-533
Inj Date : 03-MAR-2014 12:31
Operator : LLC Inst ID: 10gcv5.i
Smp Info : RTM 9314-533
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 03-Mar-2014 13:36 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 1	a,a,a-Trifluorotoluene (S)	7.097	7.106	-0.009	482441	48.8847	48.88
S 2	GRO by AK101	4.250-10.450			411955	37.6906	1884
S 4	GRO by 8015B	3.480-10.990			484093	33.0851	1654
S 5	GRO by 8015 C5-C12	2.360-12.280			502929	26.8398	1342
S 8	GRO by 8015 AZ C6-C10	5.900-12.800			495318	35.8935	1795
S 9	GRO by NWPTH-Gx	7.850-12.680			487909	40.9026	2045
10	Pentane (C5)	2.484	2.488	-0.004	359299		
11	2-methylpentane (C6)	3.651	3.667	-0.016	3112272		
12	MTBE (C6)	4.008	4.027	-0.019	98946		
13	Hexane (C6)	4.385	4.401	-0.016	355230		
14	Benzene (C6.5)	6.161	6.181	-0.020	767262		
15	Toluene (C7.6)	7.979	7.996	-0.017	783823		
16	n-Octane (C8)	8.108	8.126	-0.018	142386		
17	Ethylbenzene (C8.5)	9.324	9.341	-0.017	758689		
18	m&p xylene (C8.6)	9.430	9.446	-0.016	1509000		
19	o-xylene (C8.8)	9.778	9.794	-0.016	776889		
21	n-decane (C10)	10.581	10.600	-0.019	112688		
20	1,2,4 Trimethylbenzene (C10)	10.843	10.858	-0.015	7362180		
22	1,2,3 Trimethylbenzene (C10.1)	11.144	11.158	-0.014	712246		

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
23 n-dodecane (C12)	12.156	12.167	-0.011	89836		
24 Naphthalene (C11.7)	12.562	12.574	-0.012	332313		
25 1-Methylnaphthalene (C13)	13.445	13.461	-0.016	234248		

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031402.D

Page 1

Date : 03-MAR-2014 12:31

Client ID:

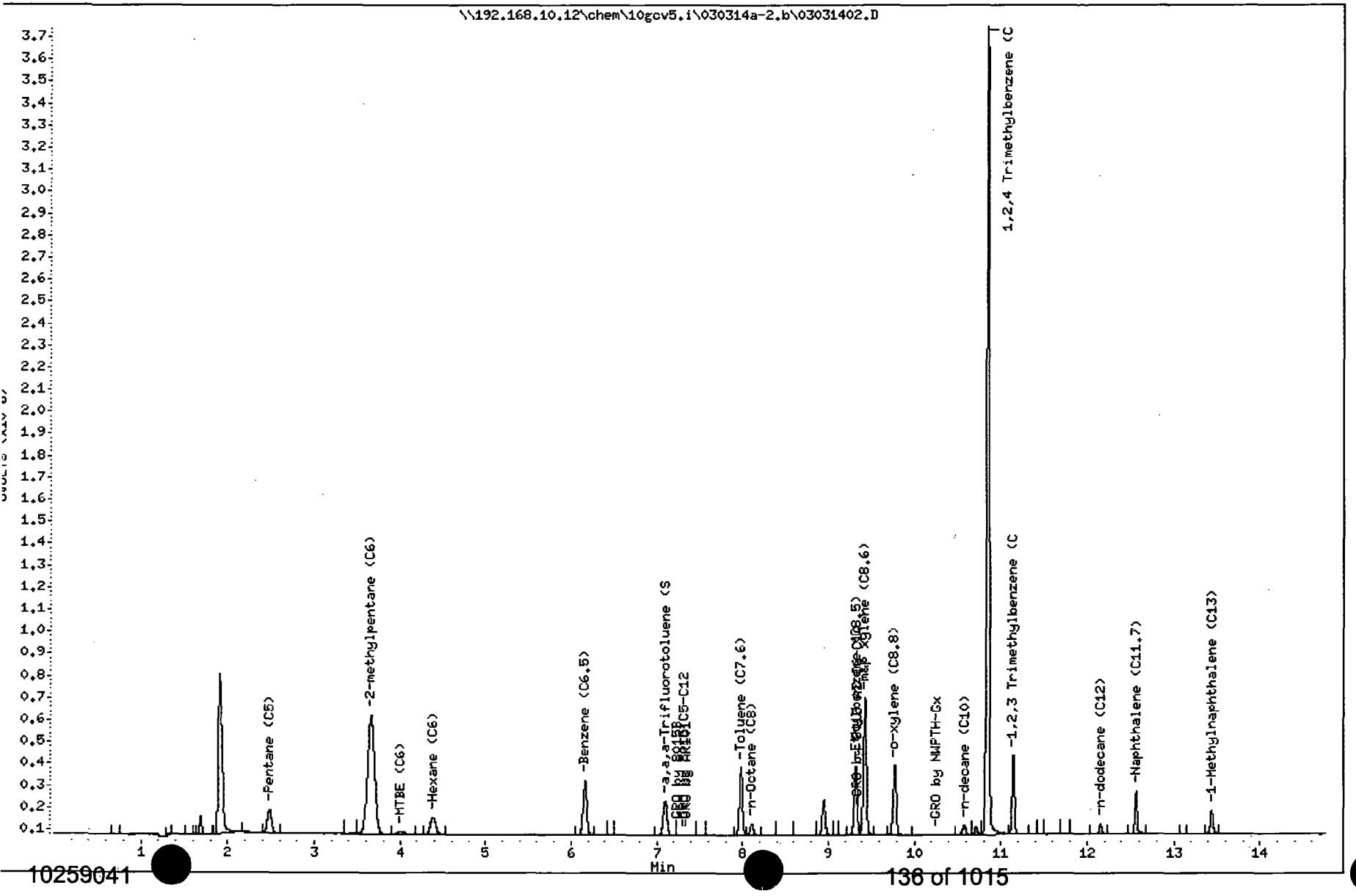
Instrument: 10gcv5.i

Sample Info: RTM 9314-533

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041402.d
Lab Smp Id: RTM 9314-533
Inj Date : 04-MAR-2014 09:45
Operator : LLC Inst ID: 10gcv5.i
Smp Info : RTM 9314-533
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 10:13 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 1	a,a,a-Trifluorotoluene (S)	7.108	7.105	0.003	480112	48.6488	48.65
S 2	GRO by AK101	4.250-10.450			388128	35.5106	1776
S 4	GRO by 8015B	3.480-10.990			421008	28.7736	1439
S 5	GRO by 8015 C5-C12	2.360-12.280			440436	23.5047	1175
S 8	GRO by 8015 AZ C6-C10	5.900-12.800			443855	32.1642	1608
S 9	GRO by NWPTH-Gx	7.850-12.680			443855	37.2095	1860
10	Pentane (C5)	2.496	2.488	0.008	103342		
11	2-methylpentane (C6)	3.667	3.667	0.000	1069672		
12	MTBE (C6)	4.022	4.027	-0.005	38656		
13	Hexane (C6)	4.398	4.401	-0.003	101283		
14	Benzene (C6.5)	6.173	6.181	-0.008	278635		
15	Toluene (C7.6)	7.989	7.996	-0.007	281821		
16	n-Octane (C8)	8.118	8.126	-0.008	35860		
17	Ethylbenzene (C8.5)	9.333	9.341	-0.008	273702		
18	m&p xylene (C8.6)	9.438	9.446	-0.008	543418		
19	o-xylene (C8.8)	9.787	9.794	-0.007	282293		
21	n-decane (C10)	10.588	10.600	-0.012	37421		
20	1,2,4 Trimethylbenzene (C10)	10.850	10.858	-0.008	3068239		
22	1,2,3 Trimethylbenzene (C10.1)	11.151	11.158	-0.007	259432		

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
23 n-dodecane (C12)	12.161	12.167	-0.006	19059		
24 Naphthalene (C11.7)	12.568	12.574	-0.006	117369		
25 1-Methylnaphthalene (C13)	13.450	13.461	-0.011	86467		

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041402.D

Date : 04-MAR-2014 09:45

Client ID:

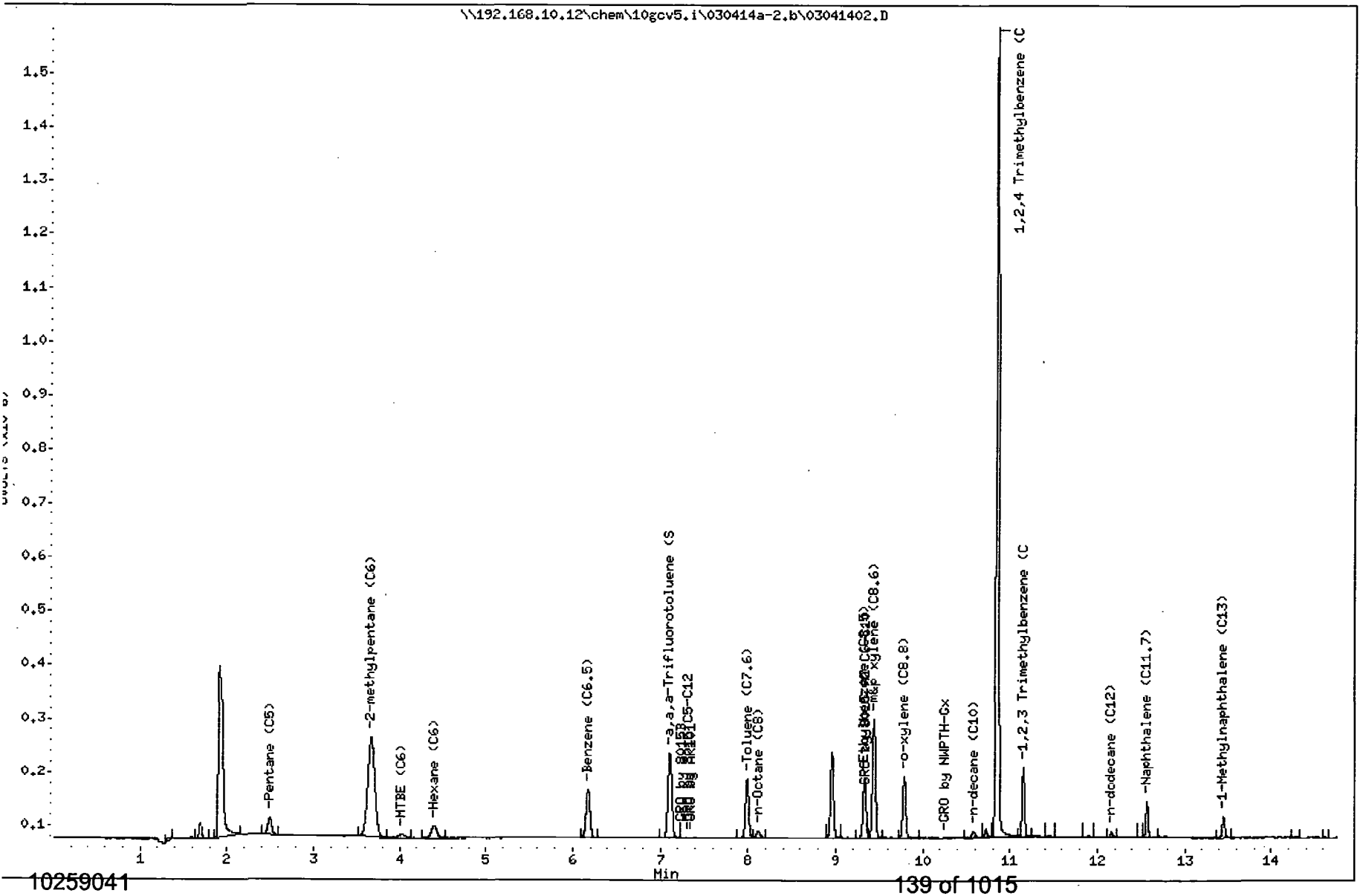
Sample Info: RTM 9314-533

Column phase: DB-624

Instrument: 10gcv5.i

Operator: LLC

Column diameter: 0.53



Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2014 11:42
End Cal Date : 24-FEB-2014 14:27
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.
Last Edit : 25-Feb-2014 10:57 lchristopher
Curve Type : Average

Calibration File Names:
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Level 2: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241407.d
Level 3: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241408.d
Level 4: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241409.d
Level 5: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241410.d
Level 6: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241411.d
Level 7: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241412.d

Compound	10.000 Level 1	25.000 Level 2	50.000 Level 3	100.000 Level 4	500.000 Level 5	1000.000 Level 6	2500.000 Level 7	RRF	% RSD	
S 2 GRO by AK101	+++++	9721	10389	10525	11662	11516	11766	10930	7.651	
S 4 GRO by 8015B	+++++	12502	14253	14962	15494	15202	15377	14632	7.740	
S 5 GRO by 8015 C5-C12	+++++	+++++	16400	21773	18955	18350	18212	18738	10.387	
S 8 GRO by 8015 AZ C6-C10	+++++	12955	13621	13956	14029	14021	14216	13800	3.311	
S 9 GRO by NWPTH-Gx	+++++	11930	11970	12107	11754	11851	11960	11929	0.998	
10 Pentane (C5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
11 2-methylpentane (C6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
12 MTBE (C6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2014 11:42
End Cal Date : 24-FEB-2014 14:27
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.
Last Edit : 25-Feb-2014 10:57 lchristopher
Curve Type : Average

Compound	10.000 Level 1	25.000 Level 2	50.000 Level 3	100.000 Level 4	500.000 Level 5	1000.000 Level 6	2500.000 Level 7	RRF	% RSD	
13 Hexane (C6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
14 Benzene (C6.5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
15 Toluene (C7.6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
16 n-Octane (C8)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
17 Ethylbenzene (C8.5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
18 m&p xylene (C8.6)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
19 o-xylene (C8.8)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
21 n-decane (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
20 1,2,4 Trimethylbenzene (C10)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
22 1,2,3 Trimethylbenzene (C10.1	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
23 n-dodecane (C12)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2014 11:42
End Cal Date : 24-FEB-2014 14:27
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.
Last Edit : 25-Feb-2014 10:57 lchristopher
Curve Type : Average

Compound	10.000 Level 1	25.000 Level 2	50.000 Level 3	100.000 Level 4	500.000 Level 5	1000.000 Level 6	2500.000 Level 7	RRF	% RSD	
24 Naphthalene (C11.7)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
25 1-Methylnaphthalene (C13)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
$ 1 a,a,a-Trifluorotoluene (S)	9609	9690	9665	9844	10536	+++++		9869	3.880	

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 24-FEB-2014 11:42
End Cal Date : 24-FEB-2014 14:27
Quant Method : ESTD
Origin : Disabled
Target Version : 4.14
Integrator : Falcon
Method file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.
Last Edit : 25-Feb-2014 10:57 lchristopher
Curve Type : Average

Average %RSD Results.
Calculated Average %RSD = 6.99314
Maximun Average %RSD = 15.00000
* Passed Average %RSD Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241403.d
Lab Smp Id: RTM 9314-499
Inj Date : 24-FEB-2014 10:33
Operator : LLC Inst ID: 10gcv5.i
Smp Info : RTM 9314-499
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 11:02 10gcv5.i Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 1	a,a,a-Trifluorotoluene (S)	7.097	7.106	-0.009	8829	0.89462	0.8946(R)
S 2	GRO by AK101	4.250-10.450			39165	3.58329	179.2
S 4	GRO by 8015B	3.480-10.990			71727	4.90215	245.1
S 5	GRO by 8015 C5-C12	2.360-12.280			71727	3.82785	191.4
S 8	GRO by 8015 AZ C6-C10	5.900-12.800			66977	4.85352	242.7
S 9	GRO by NWPTH-Gx	7.850-12.680			48447	4.06143	203.1
10	Pentane (C5)	2.501	2.488	0.013	87046		
11	2-methylpentane (C6)	3.669	3.667	0.002	846982		
12	MTBE (C6)	4.028	4.027	0.001	40267		
13	Hexane (C6)	4.401	4.401	0.000	78327		
14	Benzene (C6.5)	6.174	6.181	-0.007	263591		
15	Toluene (C7.6)	7.986	7.996	-0.010	261155		
16	n-Octane (C8)	8.116	8.126	-0.010	21169		
17	Ethylbenzene (C8.5)	9.330	9.341	-0.011	252045		
18	m&p xylene (C8.6)	9.436	9.446	-0.010	511810		
19	o-xylene (C8.8)	9.783	9.794	-0.011	270072		
21	n-decane (C10)	10.573	10.600	-0.027	28012		
20	1,2,4 Trimethylbenzene (C10)	10.847	10.858	-0.011	2692746		
22	1,2,3 Trimethylbenzene (C10.1)	11.149	11.158	-0.009	241930		

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
23 n-dodecane (C12)	12.156	12.167	-0.011	13071		
24 Naphthalene (C11.7)	12.566	12.574	-0.008	114362		
25 1-Methylnaphthalene (C13)	13.449	13.461	-0.012	86335		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241403.D

Page 1

Date : 24-FEB-2014 10:33

Client ID:

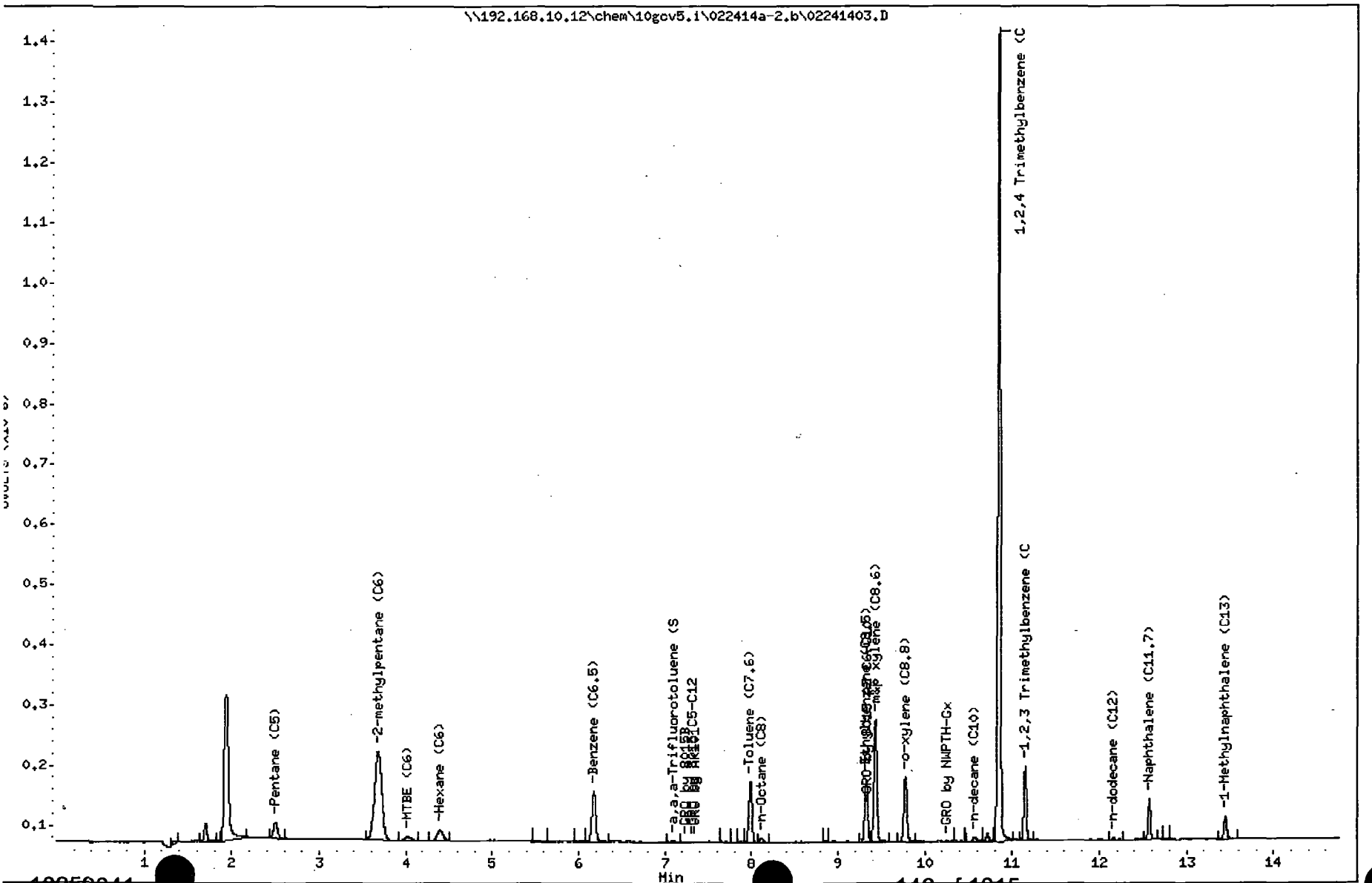
Instrument: 10gcv5.i

Sample Info: RTM 9314-499

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241406.d
Lab Smp Id: 10 10099-11
Inj Date : 24-FEB-2014 11:42
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.106	7.104	0.002	480439	50.0000	48.68
S	2 GRO by AK101	4.250-10.450			74548	10.0000	6.820
S	4 GRO by 8015B	3.480-10.990			99200	10.0000	6.780
S	5 GRO by 8015 C5-C12	2.360-12.280			99200	10.0000	5.294
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			105638	10.0000	7.655
S	9 GRO by NWPTH-Gx	7.850-12.680			105638	10.0000	8.856

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241406.D

Page 1

Date : 24-FEB-2014 11:42

Client ID:

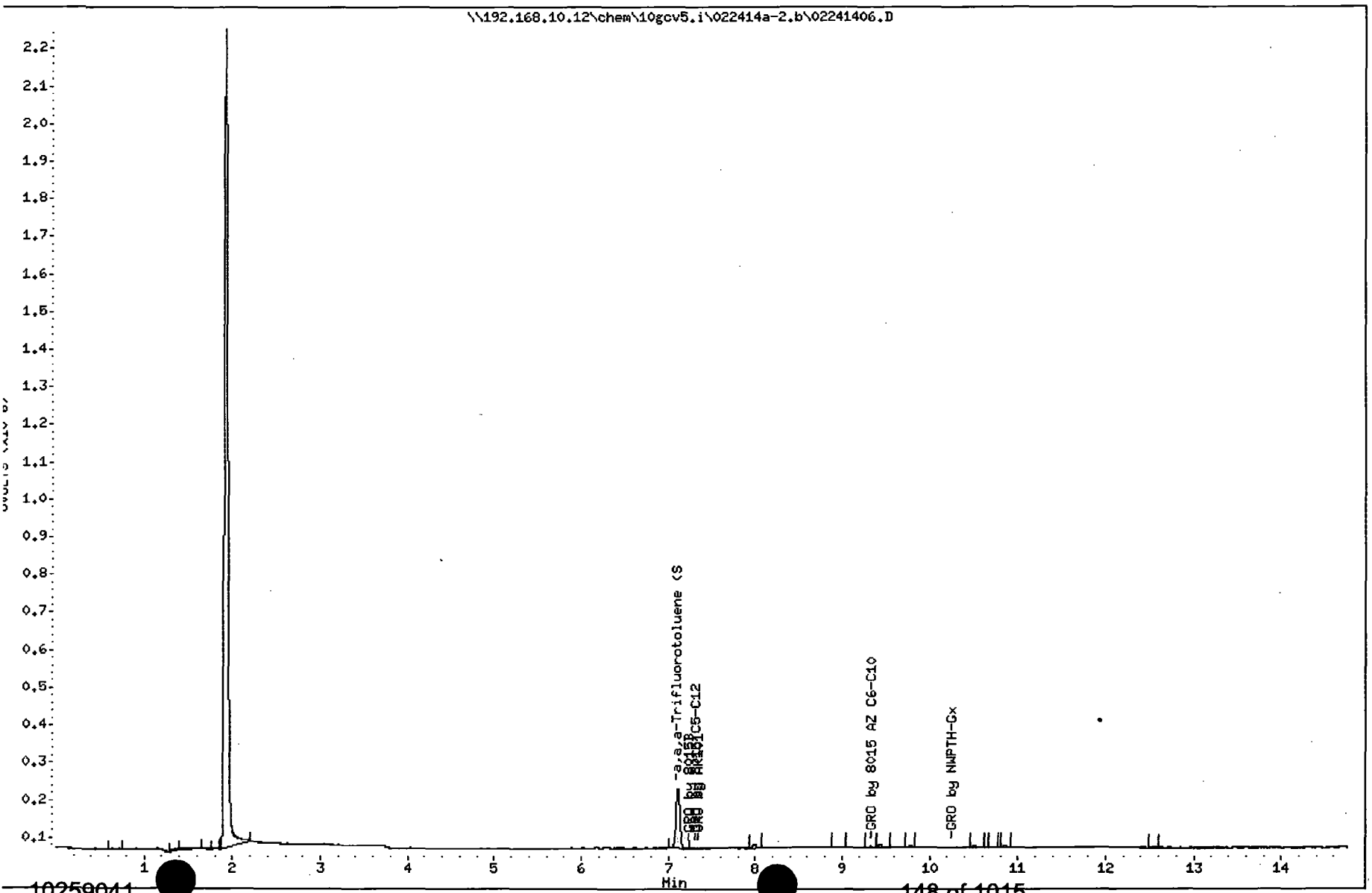
Instrument: 10gcv5.i

Sample Info: 10 10099-11

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 24-FEB-2014 11:42
Instrument: 10gcv5.i
Lab Sample ID: 10 10099-11

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	99200	99200
GRO by 8015B	99200	99200
GRO by AK101	74548	74548
GRO by 8015 AZ C6-C10	105638	105638
GRO by NWPTH-Gx	105638	105638
a,a,a-Trifluorotoluene (S)	480439	480439

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241407.d
Lab Smp Id: 25 10099-11
Inj Date : 24-FEB-2014 12:07
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 25 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.108	7.104	0.004	484517	50.0000	49.10
S	2 GRO by AK101	4.250-10.450			243024	25.0000	22.23
S	4 GRO by 8015B	3.480-10.990			312554	25.0000	21.36
S	5 GRO by 8015 C5-C12	2.360-12.280			356764	25.0000	19.04
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			323879	25.0000	23.47
S	9 GRO by NWPTH-Gx	7.850-12.680			298244	25.0000	25.00

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241407.D

Page 1

Date : 24-FEB-2014 12:07

Client ID:

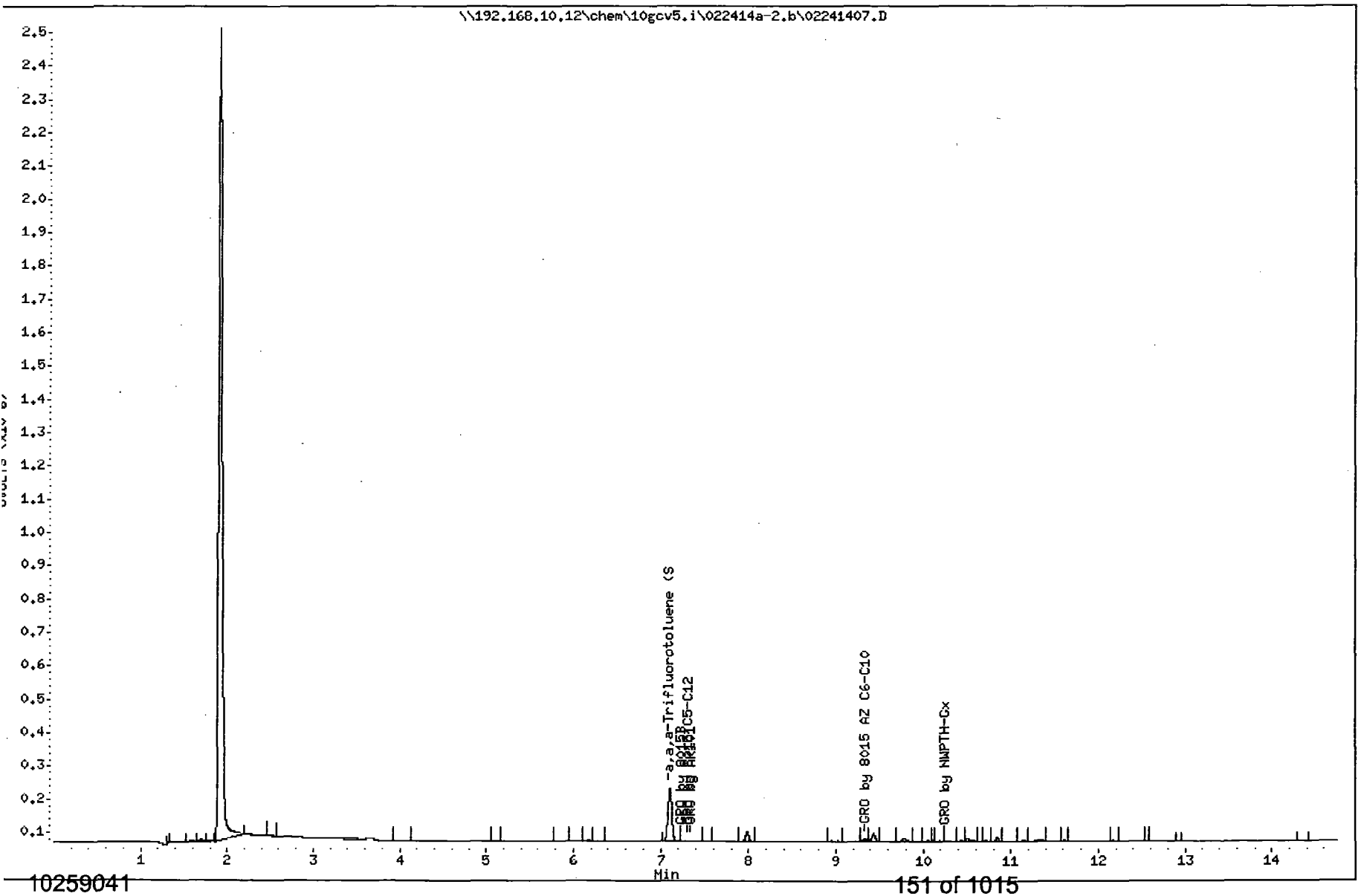
Instrument: 10gcv5.i

Sample Info: 25 10099-11

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 24-FEB-2014 12:07
Instrument: 10gcv5.i
Lab Sample ID: 25 10099-11

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	356764	356764
GRO by 8015B	312554	312554
GRO by AK101	243024	243024
GRO by 8015 AZ C6-C10	323879	323879
GRO by NWPTH-Gx	298244	298244
a,a,a-Trifluorotoluene (S)	484517	484517

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241408.d
Lab Smp Id: 50 10099-11
Inj Date : 24-FEB-2014 12:45
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 50 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.104	7.104	0.000	483267	50.0000	48.97
S	2 GRO by AK101	4.250-10.450			519466	50.0000	47.53
S	4 GRO by 8015B	3.480-10.990			712647	50.0000	48.70
S	5 GRO by 8015 C5-C12	2.360-12.280			820018	50.0000	43.76
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			681073	50.0000	49.35
S	9 GRO by NWPTH-Gx	7.850-12.680			598519	50.0000	50.18

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241408.D

Page 1

Date : 24-FEB-2014 12:45

Client ID:

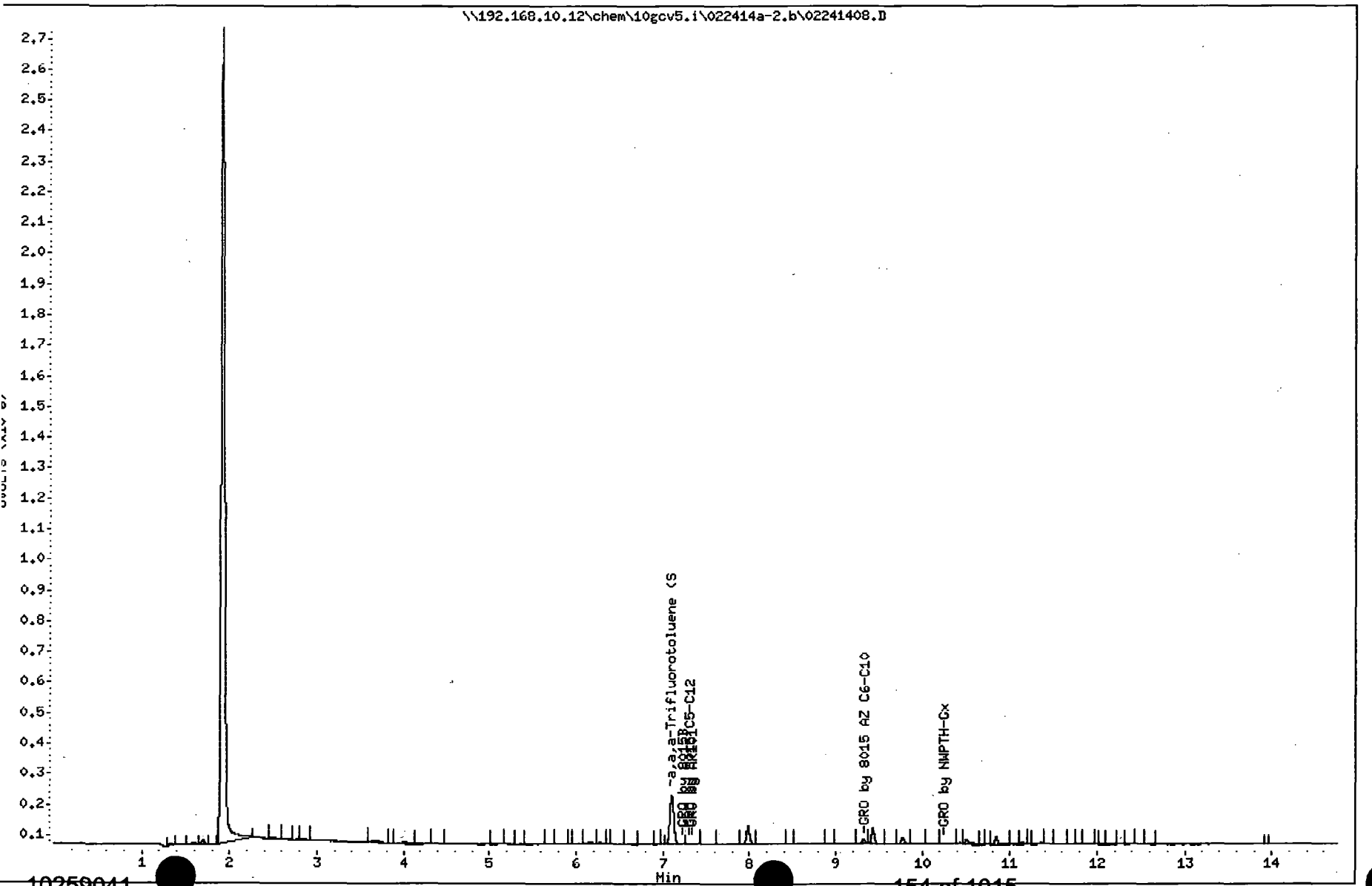
Instrument: 10gcv5.i

Sample Info: 50 10099-11

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 24-FEB-2014 12:45
Instrument: 10gcv5.i
Lab Sample ID: 50 10099-11

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	820018	820018
GRO by 8015B	712647	712647
GRO by AK101	519466	519466
GRO by 8015 AZ C6-C10	681073	681073
GRO by NWPTH-Gx	598519	598519
a,a,a-Trifluorotoluene (S)	483267	483267

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241409.d
Lab Smp Id: 100 10099-11
Inj Date : 24-FEB-2014 13:19
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 100 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$ 1 a,a,a-Trifluorotoluene (S)	7.104	7.104	0.000	492221	50.0000	49.88(M)
S 2 GRO by AK101	4.250-10.450			1052492	100.000	96.29
S 4 GRO by 8015B	3.480-10.990			1496226	100.000	102.2
S 5 GRO by 8015 C5-C12	2.360-12.280			2177337	100.000	116.2
S 8 GRO by 8015 AZ C6-C10	5.900-12.800			1395608	100.000	101.1
S 9 GRO by NWPTH-Gx	7.850-12.680			1210671	100.000	101.5

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241409.D

Page 1

Date : 24-FEB-2014 13:19

Client ID:

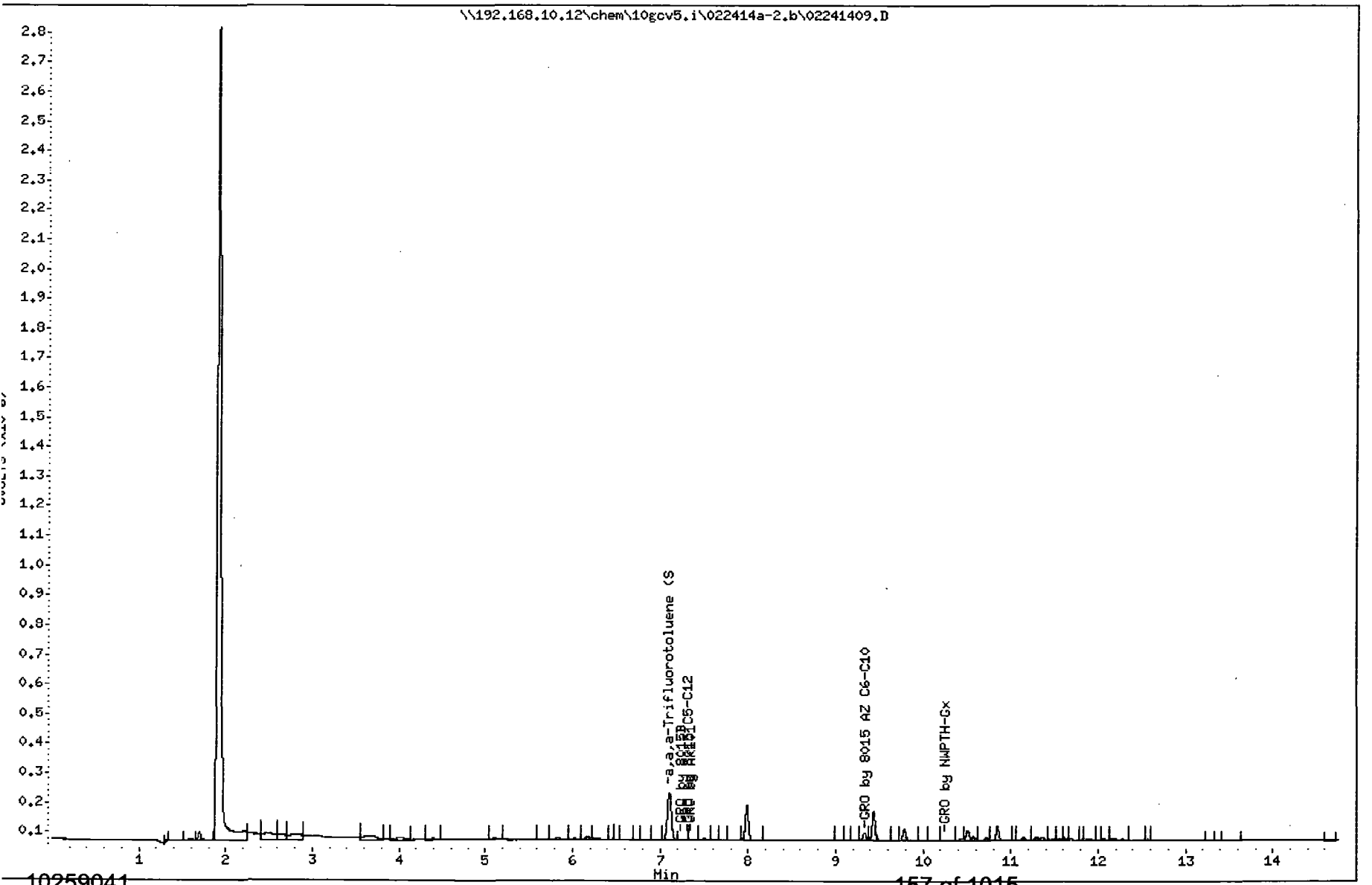
Instrument: 10gcv5.i

Sample Info: 100 10099-11

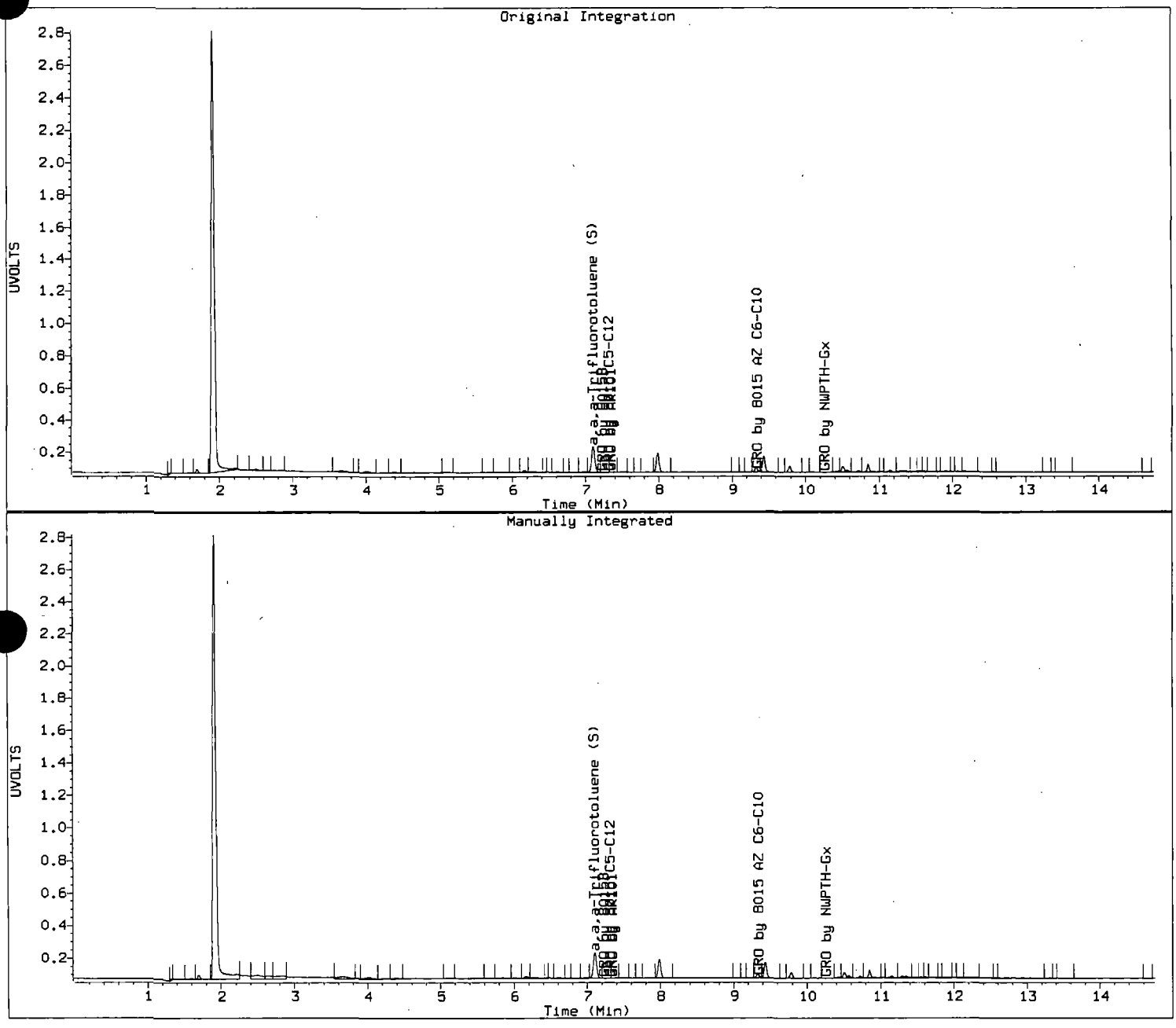
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b/02241409.d (ManInt: ALLGRO.sub Orig: ALLGRO.sub)
Injection Date: 24-FEB-2014 13:19
Instrument: 10gcv5.i
Lab Sample ID: 100 10099-11



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	1571905	2177337
GRO by 8015B	1357979	1496226
GRO by AK101	1008194	1052492
GRO by 8015 AZ C6-C10	1323905	1395608
GRO by NWPTH-Gx	1165593	1210671
a,a,a-Trifluorotoluene (S)	485300	492221

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241410.d
Lab Smp Id: 500 10099-11
Inj Date : 24-FEB-2014 13:42
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 500 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.105	7.104	0.001	526793	50.0000	53.38(M)
S	2 GRO by AK101	4.250-10.450			5831236	500.000	533.5
S	4 GRO by 8015B	3.480-10.990			7747156	500.000	529.5
S	5 GRO by 8015 C5-C12	2.360-12.280			9477474	500.000	505.8
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			7014499	500.000	508.3
S	9 GRO by NWPTH-Gx	7.850-12.680			5877069	500.000	492.7

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241410.D

Page 1

Date : 24-FEB-2014 13:42

Client ID:

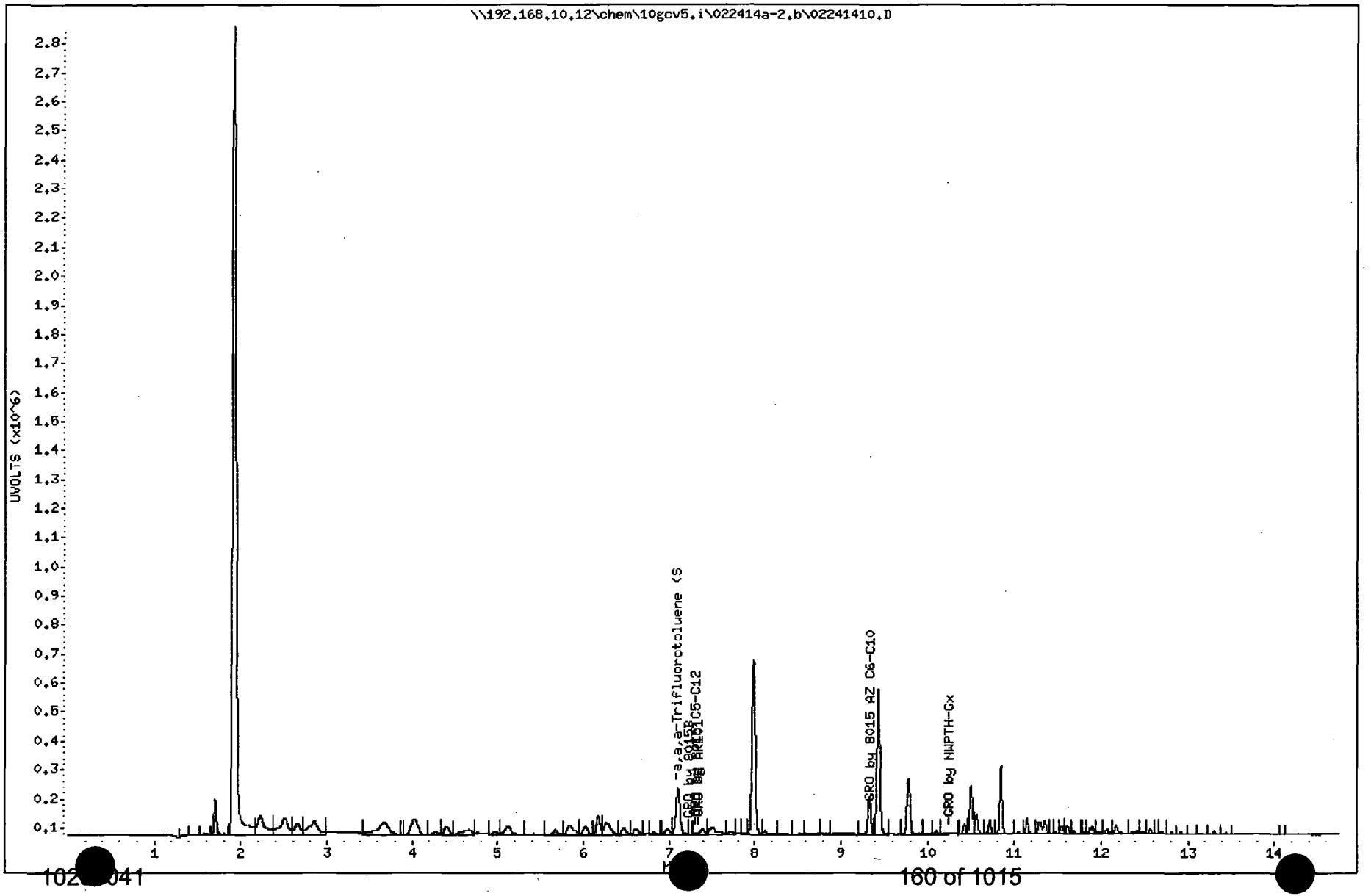
Instrument: 10gcv5.i

Sample Info: 500 10099-11

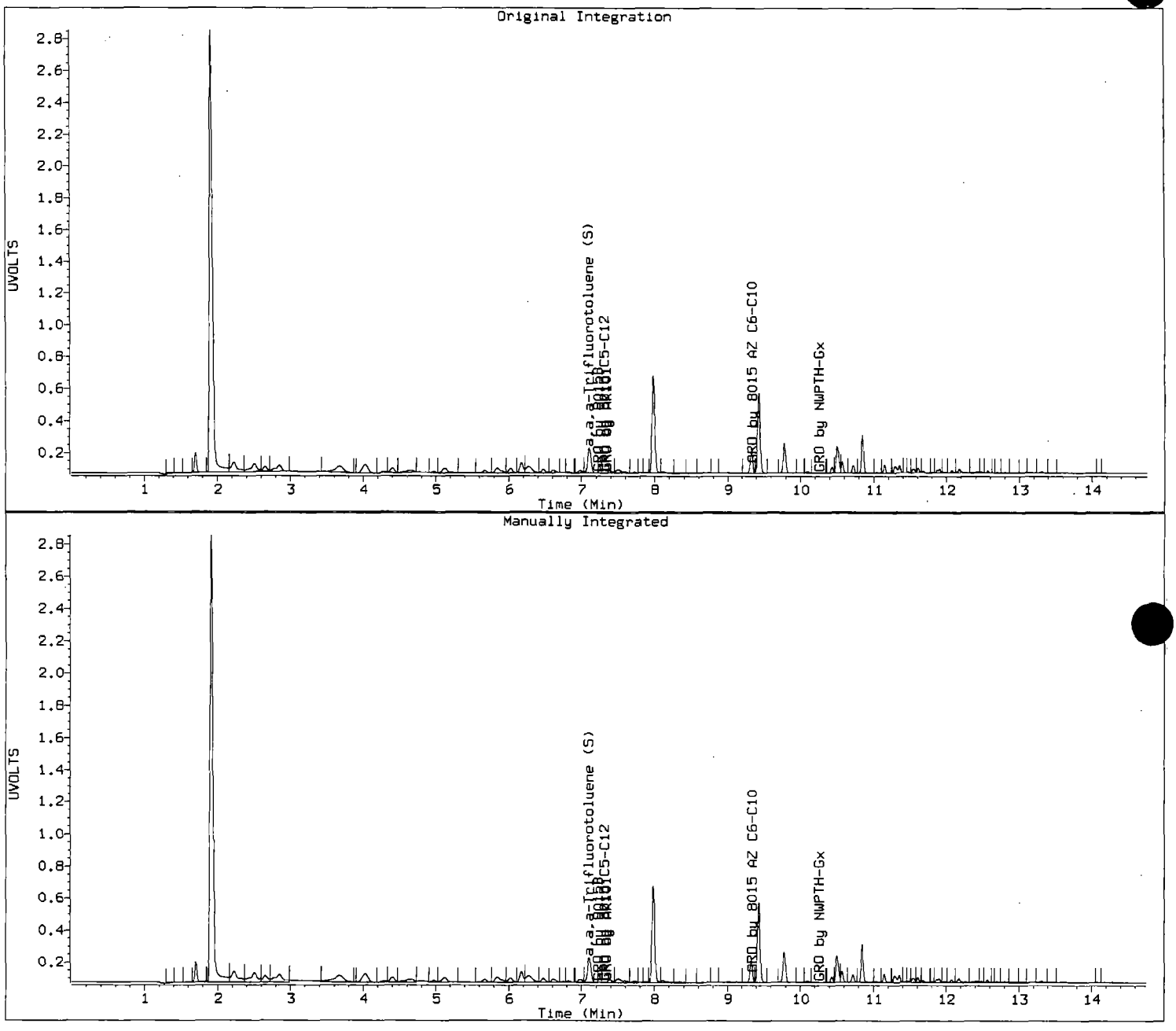
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b/02241410.d (ManInt: ALLGRO.sub Orig: ALLGRO.sub)
Injection Date: 24-FEB-2014 13:42
Instrument: 10gcv5.i
Lab Sample ID: 500 10099-11



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	8605047	9477474
GRO by 8015B	7272388	7747156
GRO by AK101	5467576	5831236
GRO by 8015 AZ C6-C10	6707973	7014499
GRO by NWPTH-Gx	5682646	5877069
a,a,a-Trifluorotoluene (S)	511223	526793

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241411.d
Lab Smp Id: 1000 10099-11
Inj Date : 24-FEB-2014 14:04
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1000 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.103	7.104	-0.001	587332	50.0000	59.51(M)
S	2 GRO by AK101	4.250-10.450			11515618	1000.00	1054
S	4 GRO by 8015B	3.480-10.990			15201812	1000.00	1039
S	5 GRO by 8015 C5-C12	2.360-12.280			18350158	1000.00	979.3
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			14020626	1000.00	1016
S	9 GRO by NWPTH-Gx	7.850-12.680			11850759	1000.00	993.5

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241411.D

Page 1

Date : 24-FEB-2014 14:04

Client ID:

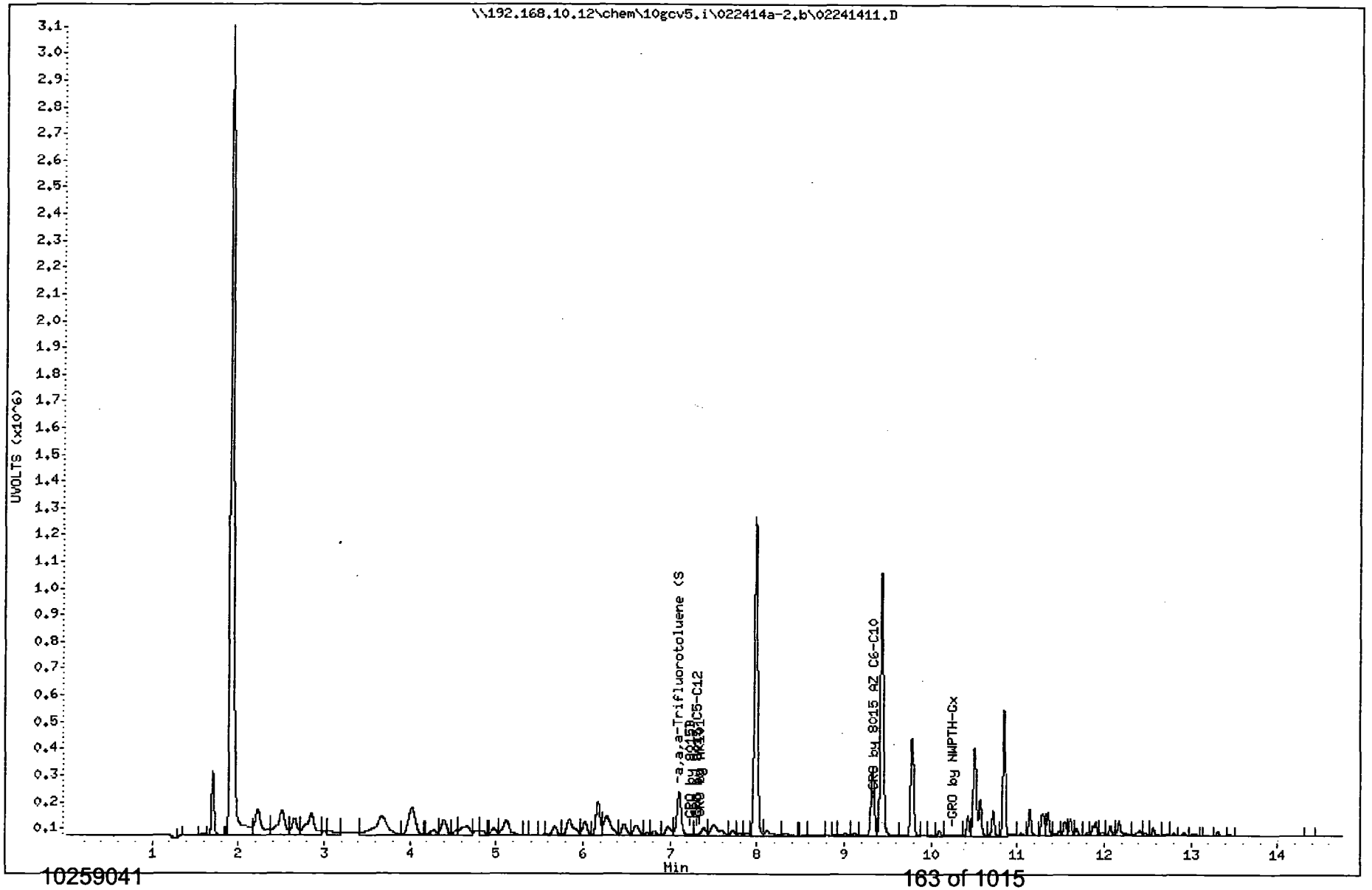
Instrument: 10gcv5.i

Sample Info: 1000 10099-11

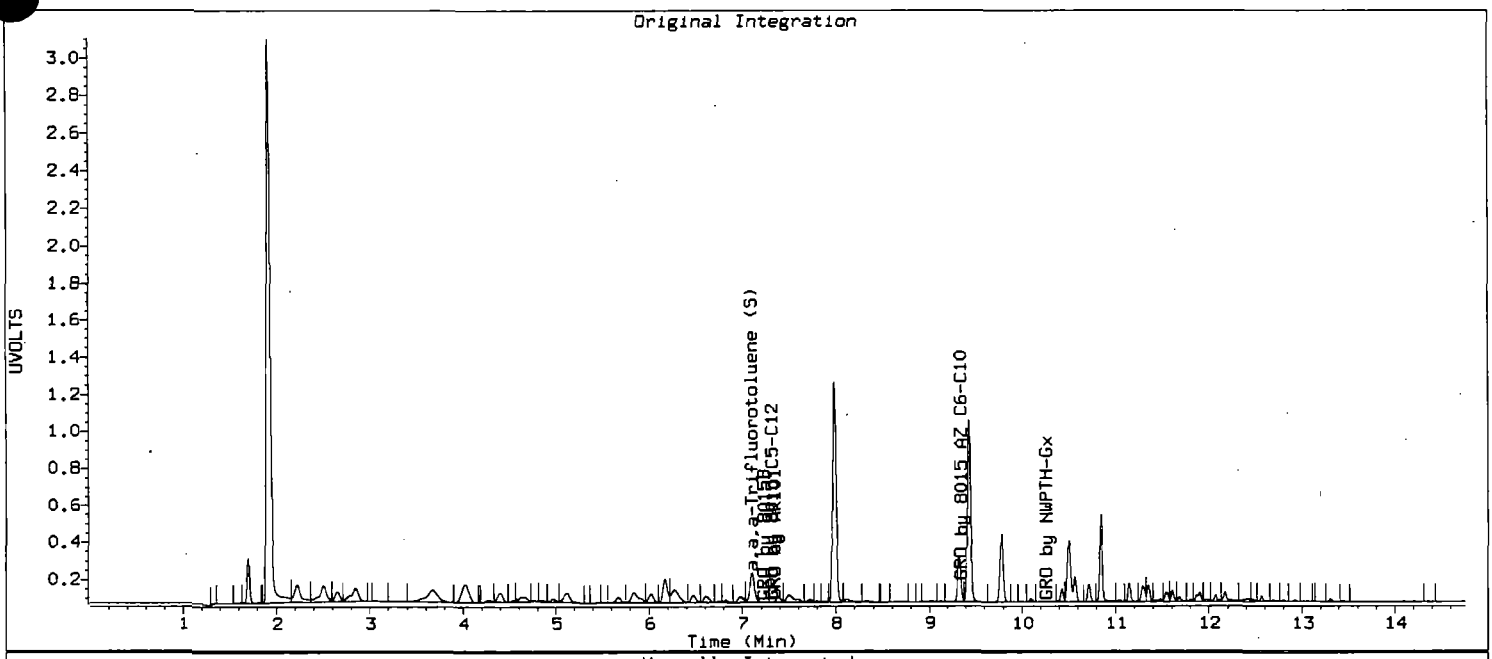
Operator: LLC

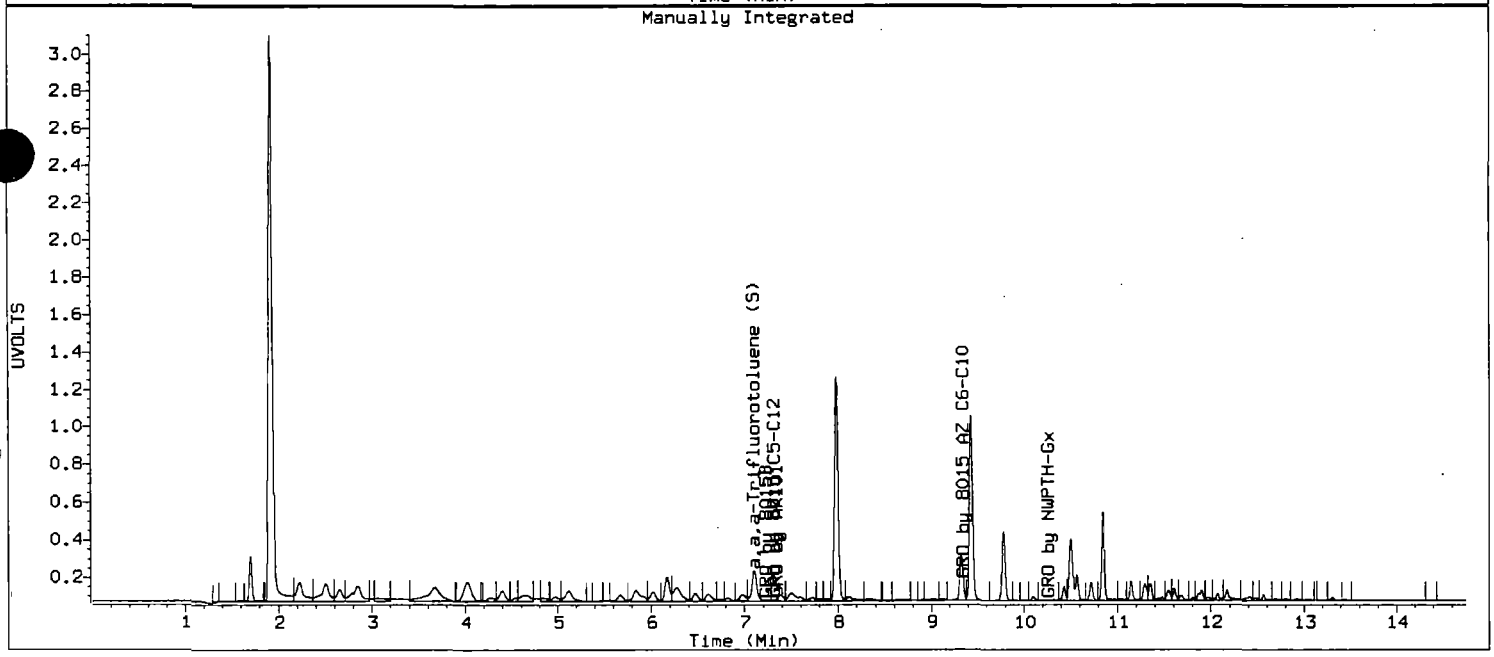
Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b/02241411.d (ManInt: ALLGRO.sub Orig: ALLGRO.sub)
Injection Date: 24-FEB-2014 14:04
Instrument: 10gcv5.i
Lab Sample ID: 1000 10099-11





Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	16563408	18350158
GRO by 8015B	14002767	15201812
GRO by AK101	10562811	11515618
GRO by 8015 AZ C6-C10	13405924	14020626
GRO by NWPTH-Gx	11476991	11850759
a,a,a-Trifluorotoluene (S)	550653	587332

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241412.d
Lab Smp Id: 2500 10099-11
Inj Date : 24-FEB-2014 14:27
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 2500 10099-11
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 10:59 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.101	7.104	-0.003	731737	50.0000	74.14(M)
S	2 GRO by AK101	4.250-10.450			29415434	2500.00	2691(A)
S	4 GRO by 8015B	3.480-10.990			38442500	2500.00	2627(A)
S	5 GRO by 8015 C5-C12	2.360-12.280			45530331	2500.00	2430
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			35539330	2500.00	2575(A)
S	9 GRO by NWPTH-Gx	7.850-12.680			29898863	2500.00	2506(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241412.D

Date : 24-FEB-2014 14:27

Client ID:

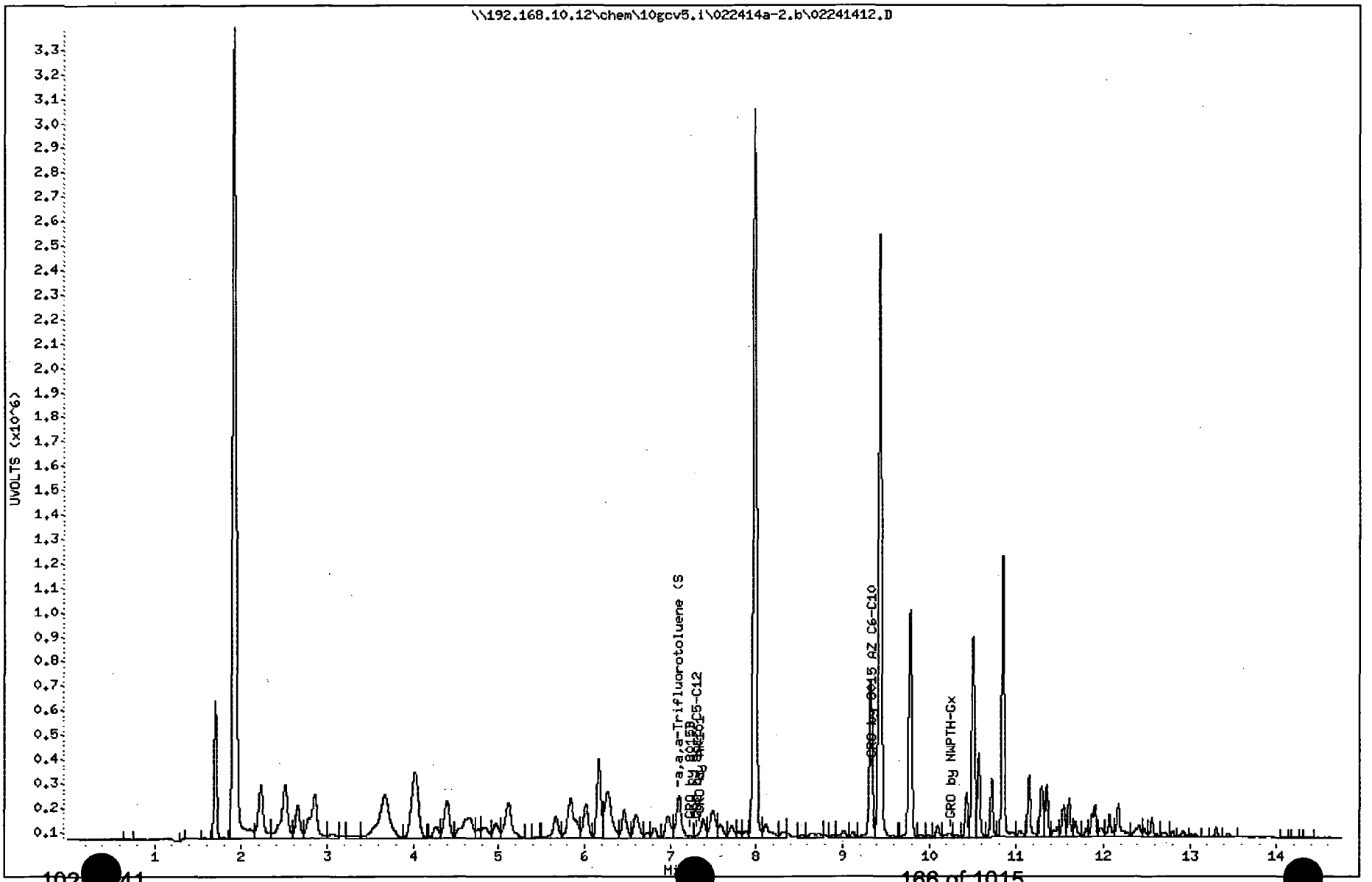
Instrument: 10gcv5.i

Sample Info: 2500 10099-11

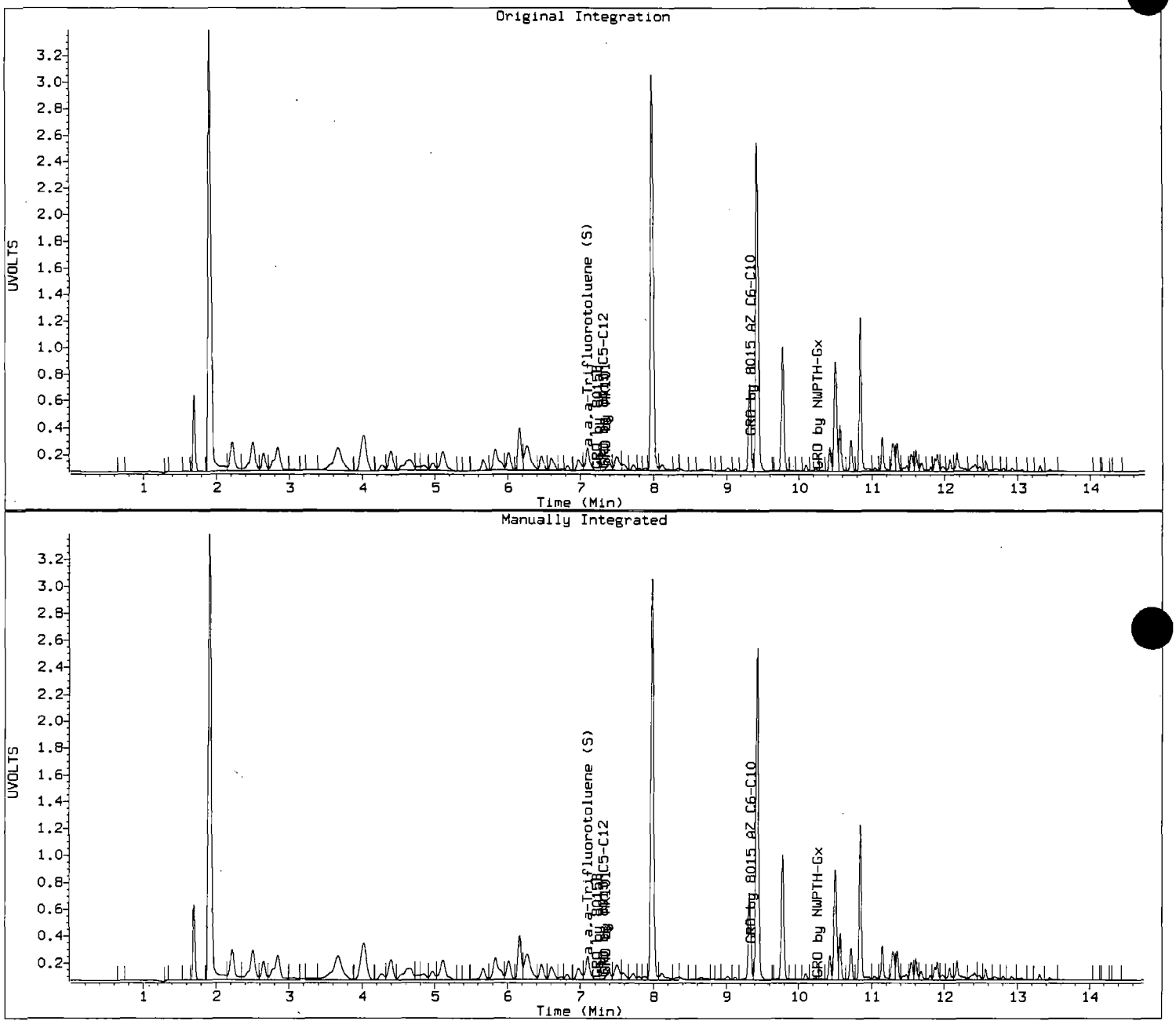
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b/02241412.d (ManInt: ALLGRO.sub Orig: ALLGRO.sub)
Injection Date: 24-FEB-2014 14:27
Instrument: 10gcv5.i
Lab Sample ID: 2500 10099-11



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	42947973	45530331
GRO by 8015B	36353364	38442500
GRO by AK101	27548271	29415434
GRO by 8015 AZ C6-C10	34210773	35539330
GRO by NWPTH-Gx	29278710	29898863
a,a,a-Trifluorotoluene (S)	648417	731737

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 24-FEB-2014 15:57
Lab File ID: 02241416.d Init. Cal. Date(s): 24-FEB-2014 24-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 11:42 14:27
Lab Sample ID: ICV 10099-12 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m

	COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	1 a,a,a-Trifluorotoluene (S)	9869	12145	0.010	23.06215	25.00000	Averaged
S	2 GRO by AK101	10930	12468	0.010	14.07554	25.00000	Averaged
S	4 GRO by 8015B	14632	16393	0.010	12.03721	15.00000	Averaged
S	5 GRO by 8015 C5-C12	18738	19855	0.010	5.95865	15.00000	Averaged
S	8 GRO by 8015 AZ C6-C10	13800	14400	0.010	4.34862	15.00000	Averaged
S	9 GRO by NWPTH-Gx	11929	11931	0.010	0.02125	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.91724
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241416.d
Lab Smp Id: ICV 10099-12
Inj Date : 24-FEB-2014 15:57
Operator : LLC Inst ID: 10gcv5.i
Smp Info : ICV 10099-12,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\022414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 25-Feb-2014 11:02 10gcv5.i Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: ALLGRO.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.106	7.106	0.000	607247	50.0000	61.53(M)
S	2 GRO by AK101	4.250-10.450			12468355	1000.00	1141
S	4 GRO by 8015B	3.480-10.990			16393001	1000.00	1120
S	5 GRO by 8015 C5-C12	2.360-12.280			19854738	1000.00	1060
S	8 GRO by 8015 AZ C6-C10	5.900-12.800			14399771	1000.00	1043
S	9 GRO by NWPTH-Gx	7.850-12.680			11931083	1000.00	1000

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b\02241416.D

Page 1

Date : 24-FEB-2014 15:57

Client ID:

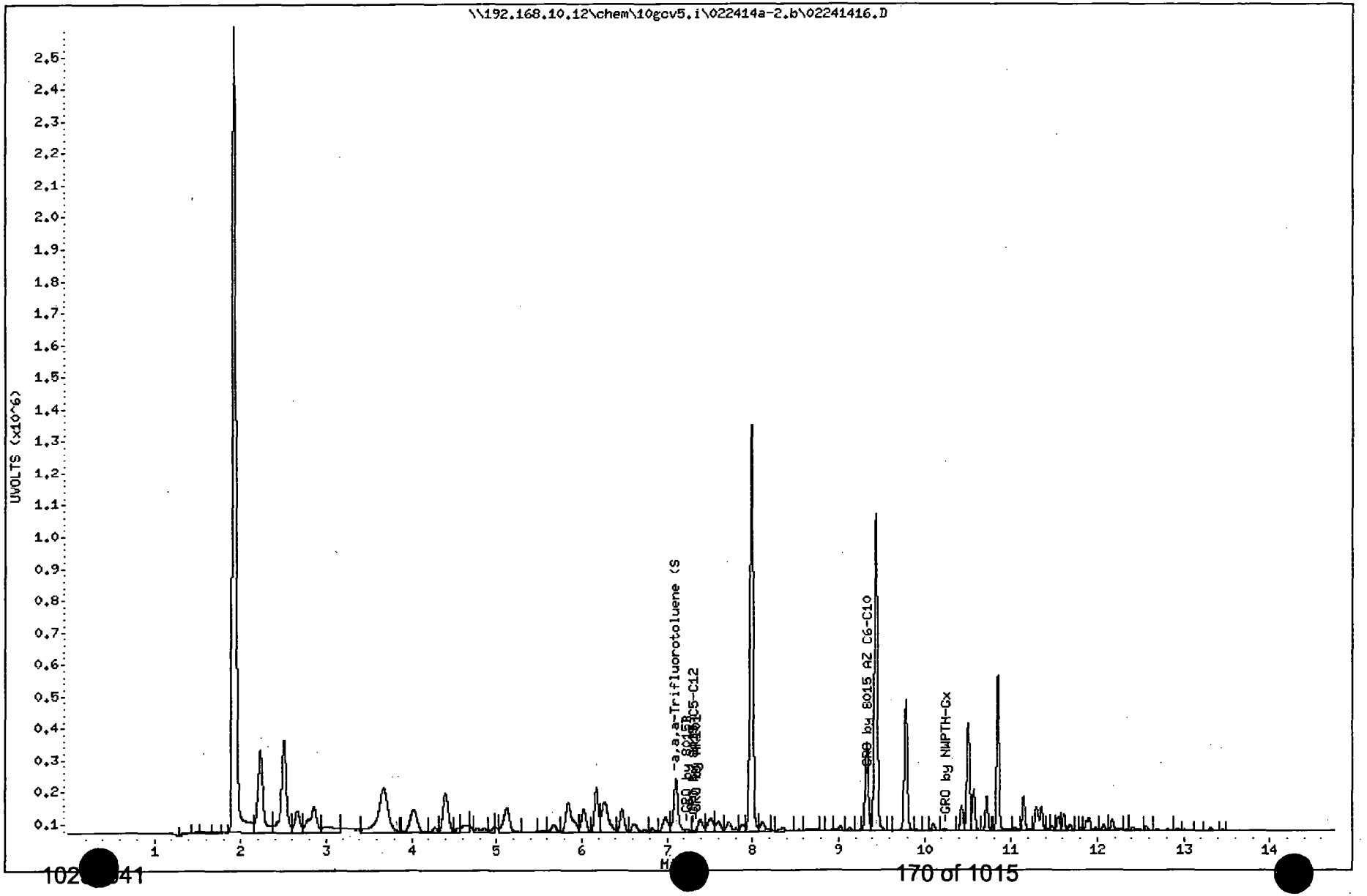
Instrument: 10gcv5.i

Sample Info: ICV 10099-12,1,2

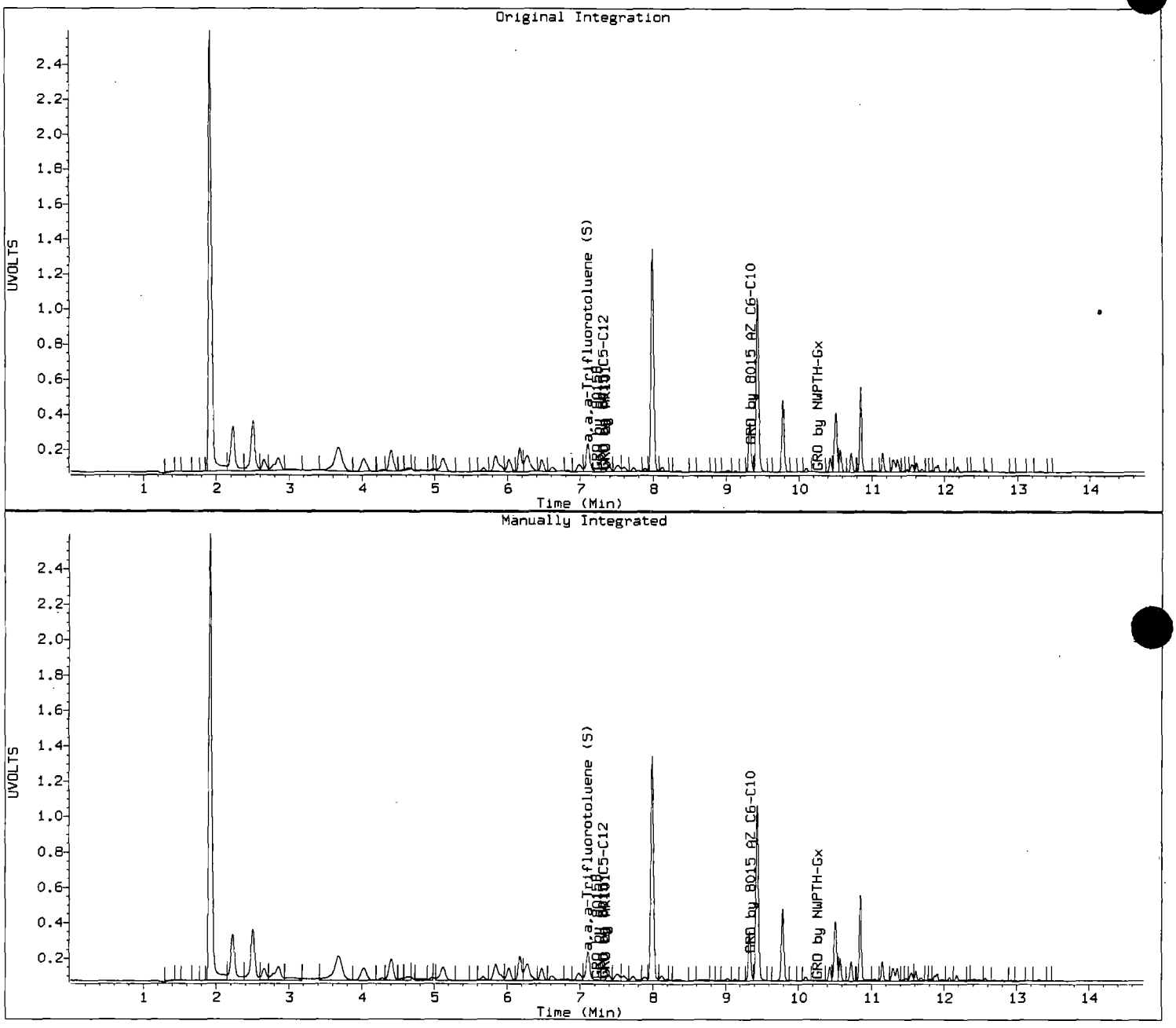
Operator: LLC

Column phase: DB-624

Column diameter: 0.53

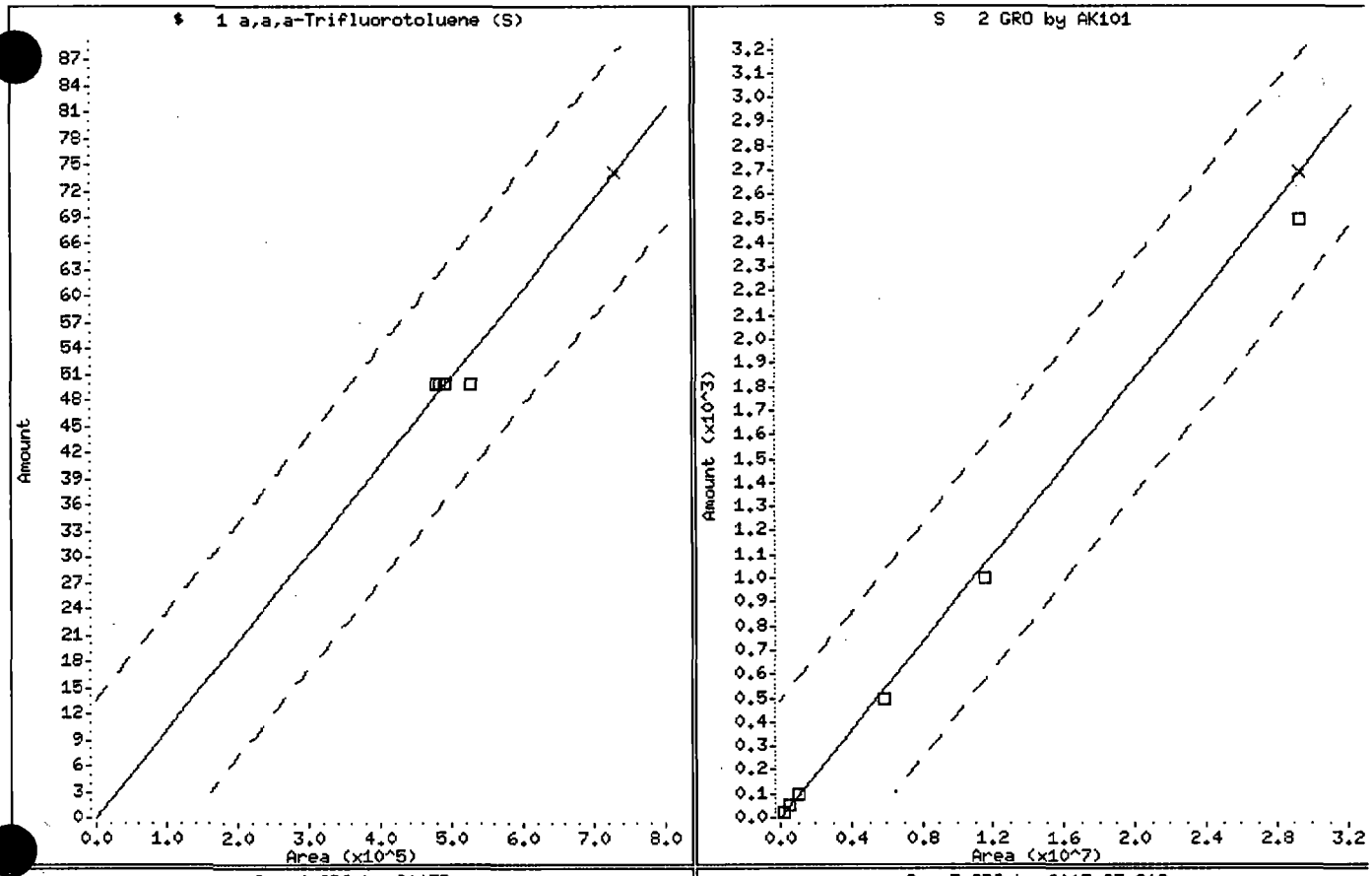


Data File: \\192.168.10.12\chem\10gcv5.i\022414a-2.b/02241416.d (ManInt: ALLGRO.sub Orig: ALLGRO.sub)
Injection Date: 24-FEB-2014 15:57
Instrument: 10gcv5.i
Lab Sample ID: ICV 10099-12

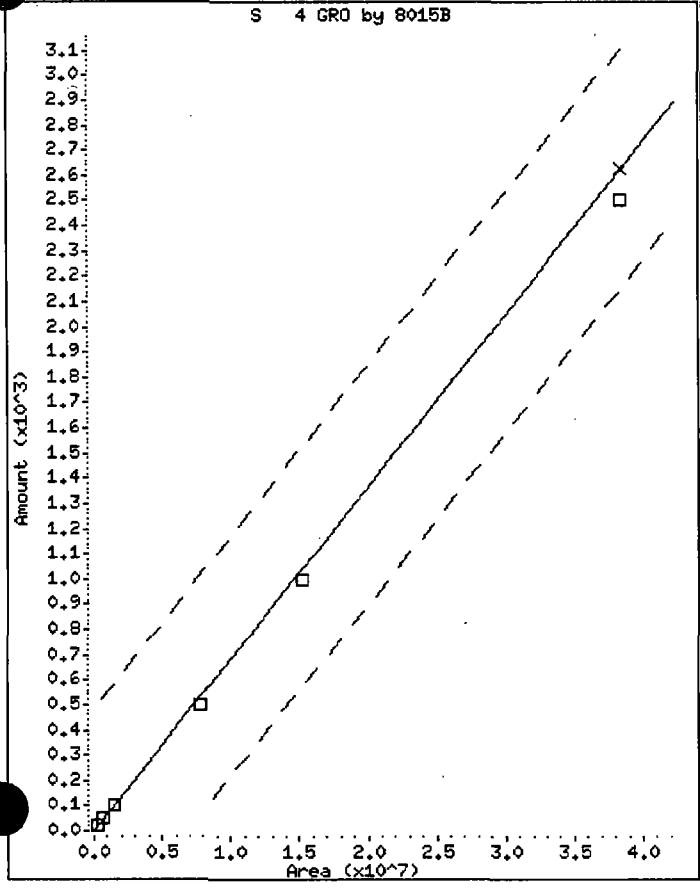


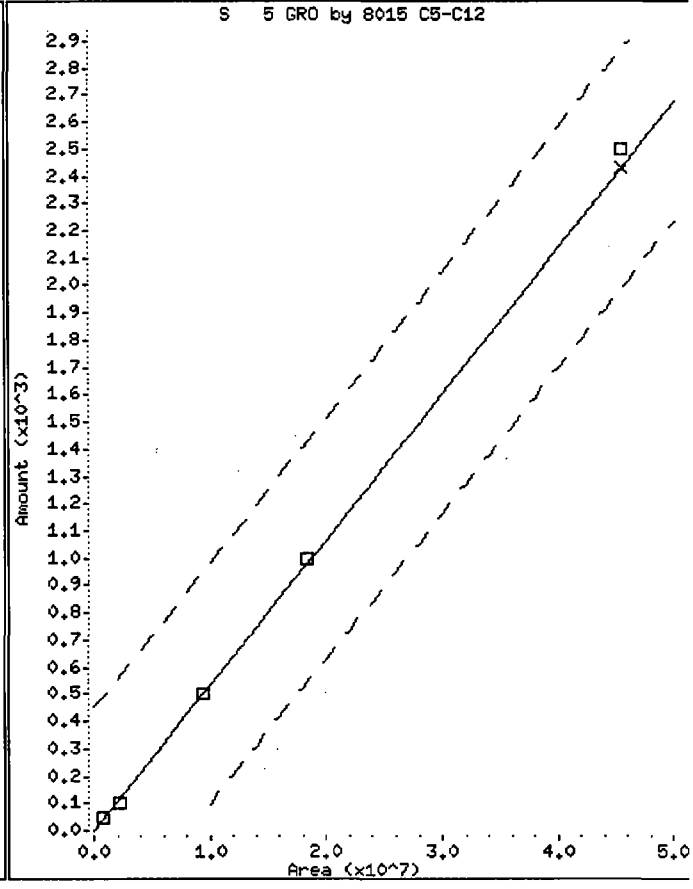
Manually Integrated Compounds

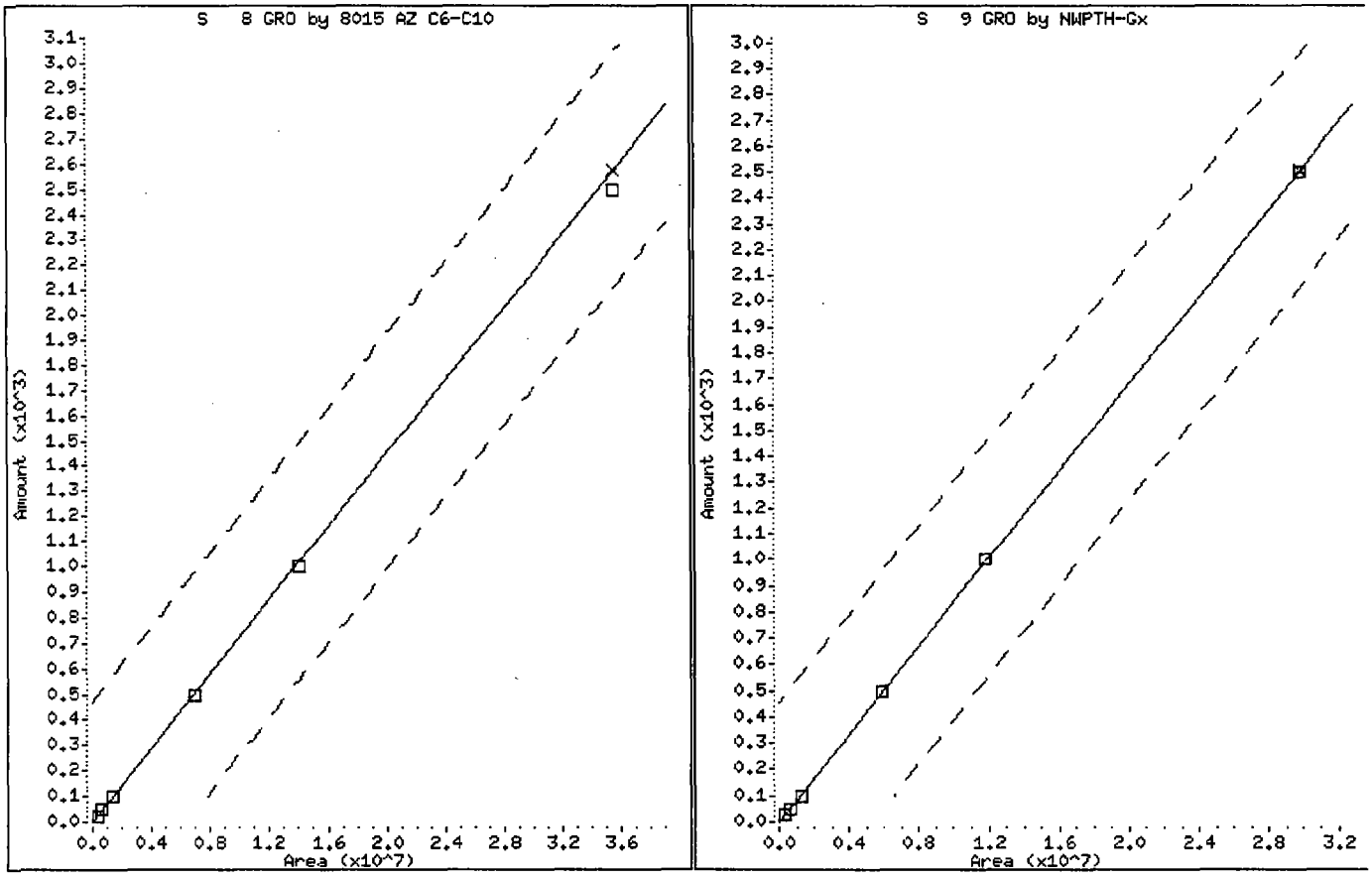
Compound	Area (before)	Area (after)
GRO by 8015 C5-C12	18292384	19854738
GRO by 8015B	15308527	16393001
GRO by AK101	11587564	12468355
GRO by 8015 AZ C6-C10	13609707	14399771
GRO by NWPTH-Gx	11431881	11931083
a,a,a-Trifluorotoluene (S)	571279	607247


$ 1 a,a,a-Trifluorotoluene (S)
Amount
Area (x10^5)

S 2 GRO by AK101
Amount (x10^3)
Area (x10^7)


S 4 GRO by 8015B
Amount (x10^3)
Area (x10^7)


S 5 GRO by 8015 C5-C12
Amount (x10^3)
Area (x10^7)


S 8 GRO by 8015 AZ C6-C10
Amount (x10^3)
Area (x10^7)
S 9 GRO by NWPTH-Gx
Amount (x10^3)
Area (x10^7)

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 03-MAR-2014 12:54
Lab File ID: 03031403.d Init. Cal. Date(s): 24-FEB-2014 24-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 11:42 14:27
Lab Sample ID: CCV 9314-552 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m

	COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	1 a,a,a-Trifluorotoluene (S)	9869	11466	0.010	16.18442	25.00000	Averaged
S	4 GRO by 8015B	14632	15713	0.010	7.38775	15.00000	Averaged

Average %D / Drift Results.	
Calculated Average %D/Drift =	11.78608
Maximun Average %D/Drift =	15.00000
* Passed Average %D/Drift Test.	

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031403.d
Lab Smp Id: CCV 9314-552
Inj Date : 03-MAR-2014 12:54
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-552,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 09:49 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.098	7.098	0.000	573309	50.0000	58.09(M)
S	4 GRO by 8015B	3.480-10.990			15712704	1000.00	1074

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031403.D

Page 1

Date : 03-MAR-2014 12:54

Client ID:

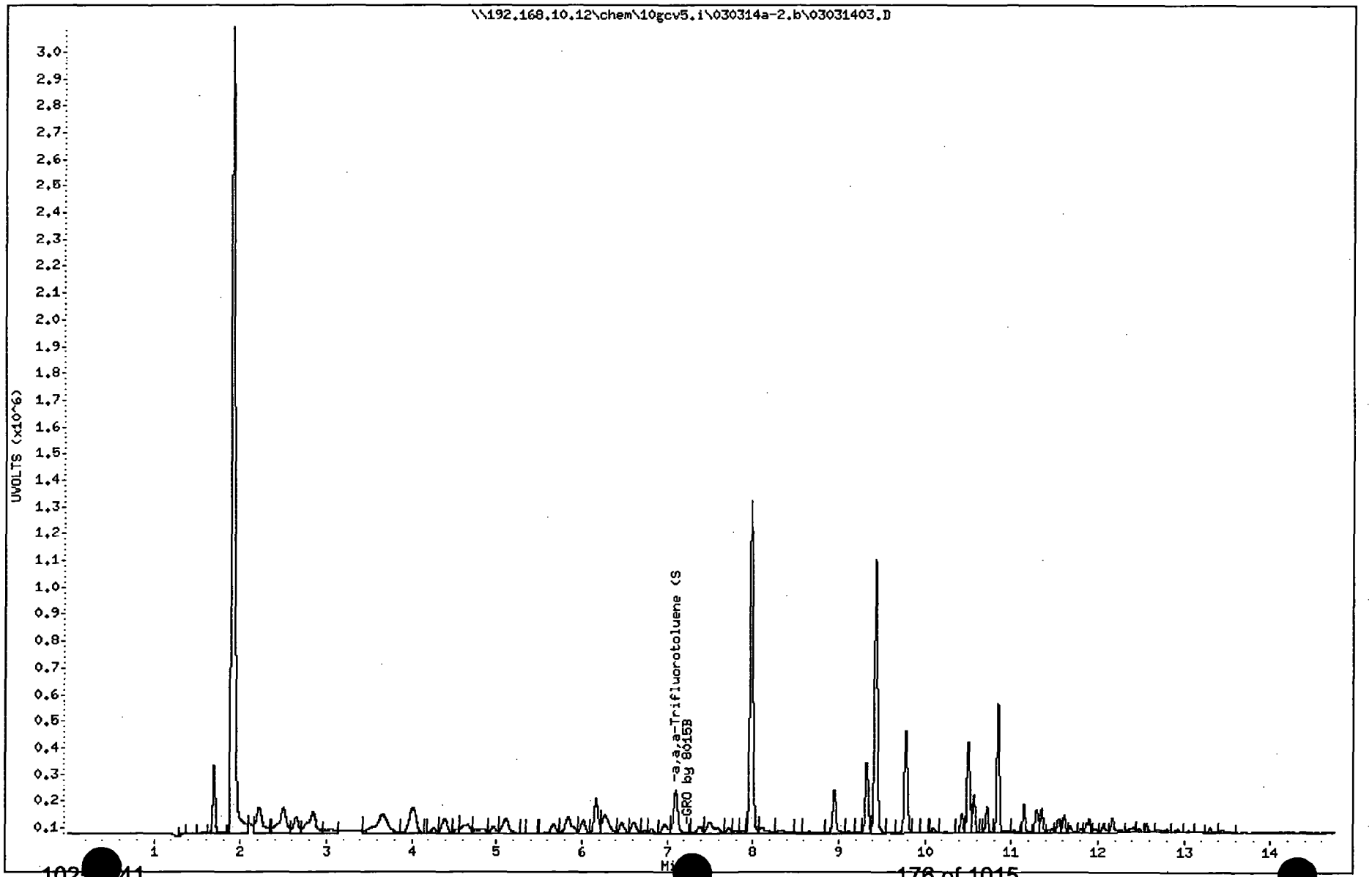
Instrument: 10gcv5.i

Sample Info: CCV 9314-552,1,2

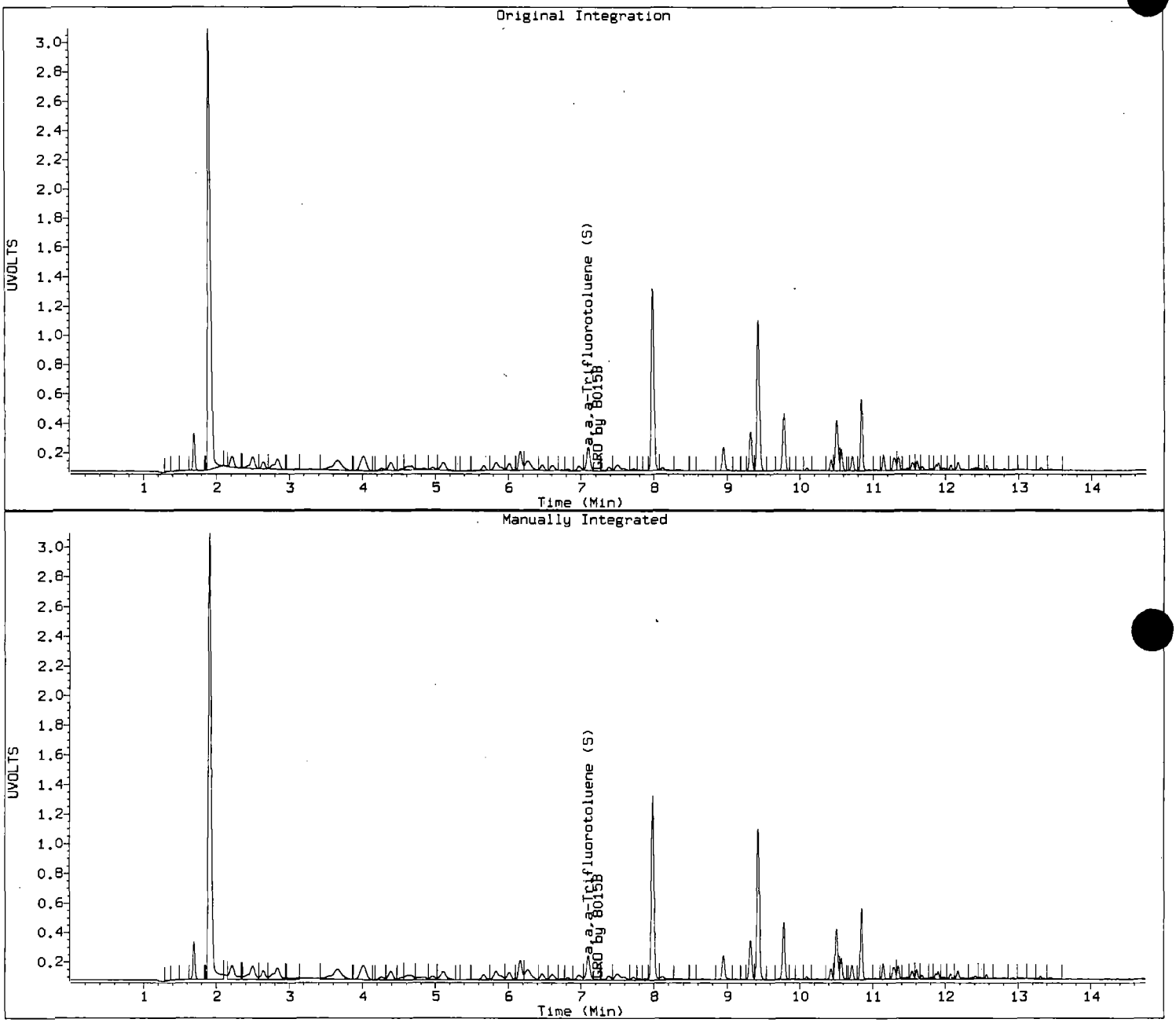
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b/03031403.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 03-MAR-2014 12:54
Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-552



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	14639771	15712704
a,a,a-Trifluorotoluene (S)	528314	573309

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 03-MAR-2014 18:47
Lab File ID: 03031414.d Init. Cal. Date(s): 24-FEB-2014 24-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 11:42 14:27
Lab Sample ID: CCV 9314-552 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m

	COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	1 a,a,a-Trifluorotoluene (S)	9869	11024	0.010	11.70492	25.00000	Averaged
S	4 GRO by 8015B	14632	15037	0.010	2.76771	15.00000	Averaged

Average %D / Drift Results.
Calculated Average %D/Drift = 7.23631
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031414.d
Lab Smp Id: CCV 9314-552
Inj Date : 03-MAR-2014 18:47
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-552,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 09:49 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.104	7.104	0.000	551205	50.0000	55.85(M)
S	4 GRO by 8015B	3.480-10.990			15036711	1000.00	1028

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031414.D

Date : 03-MAR-2014 18:47

Client ID:

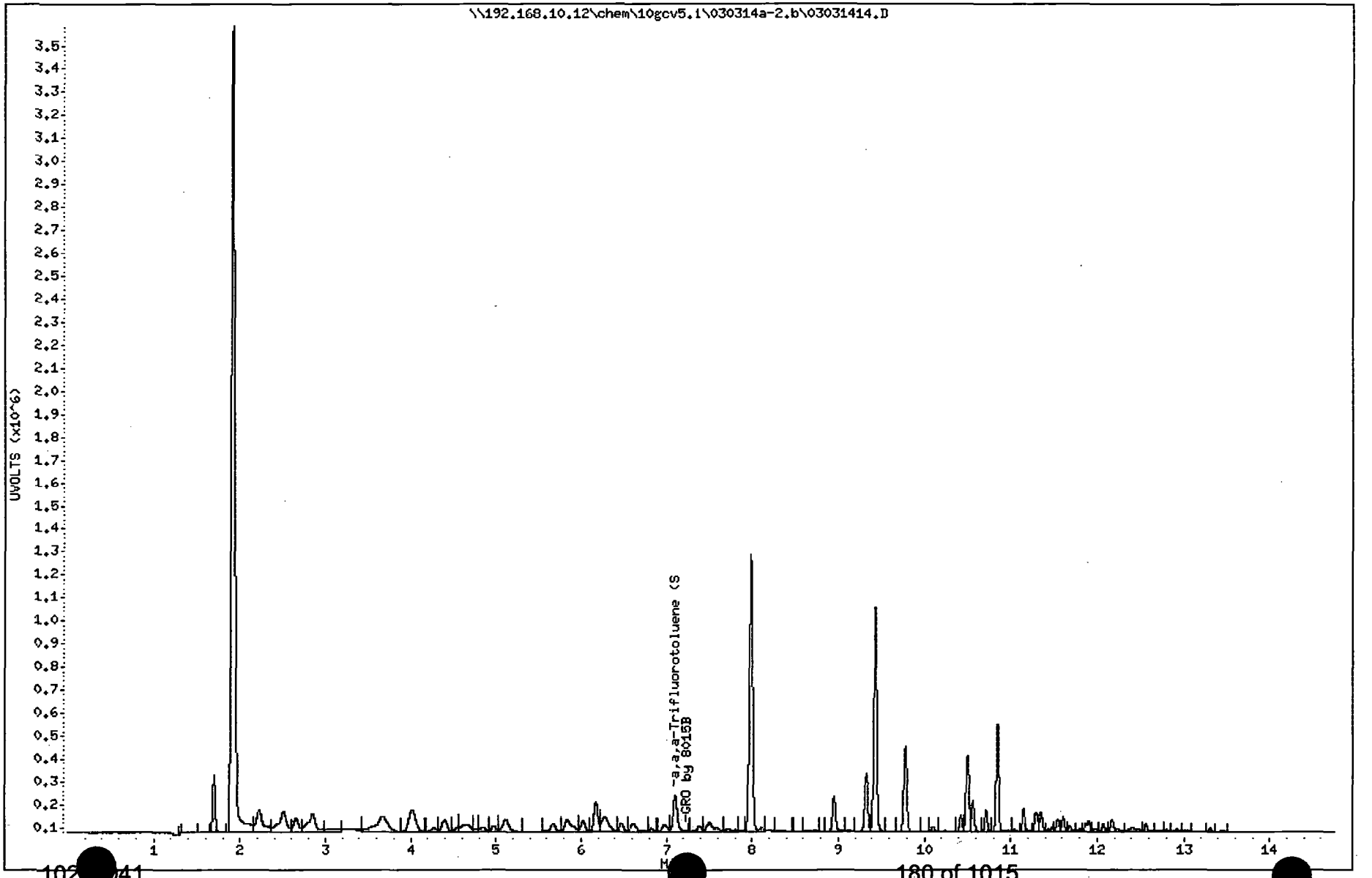
Instrument: 10gcv5.i

Sample Info: CCV 9314-552,1,2

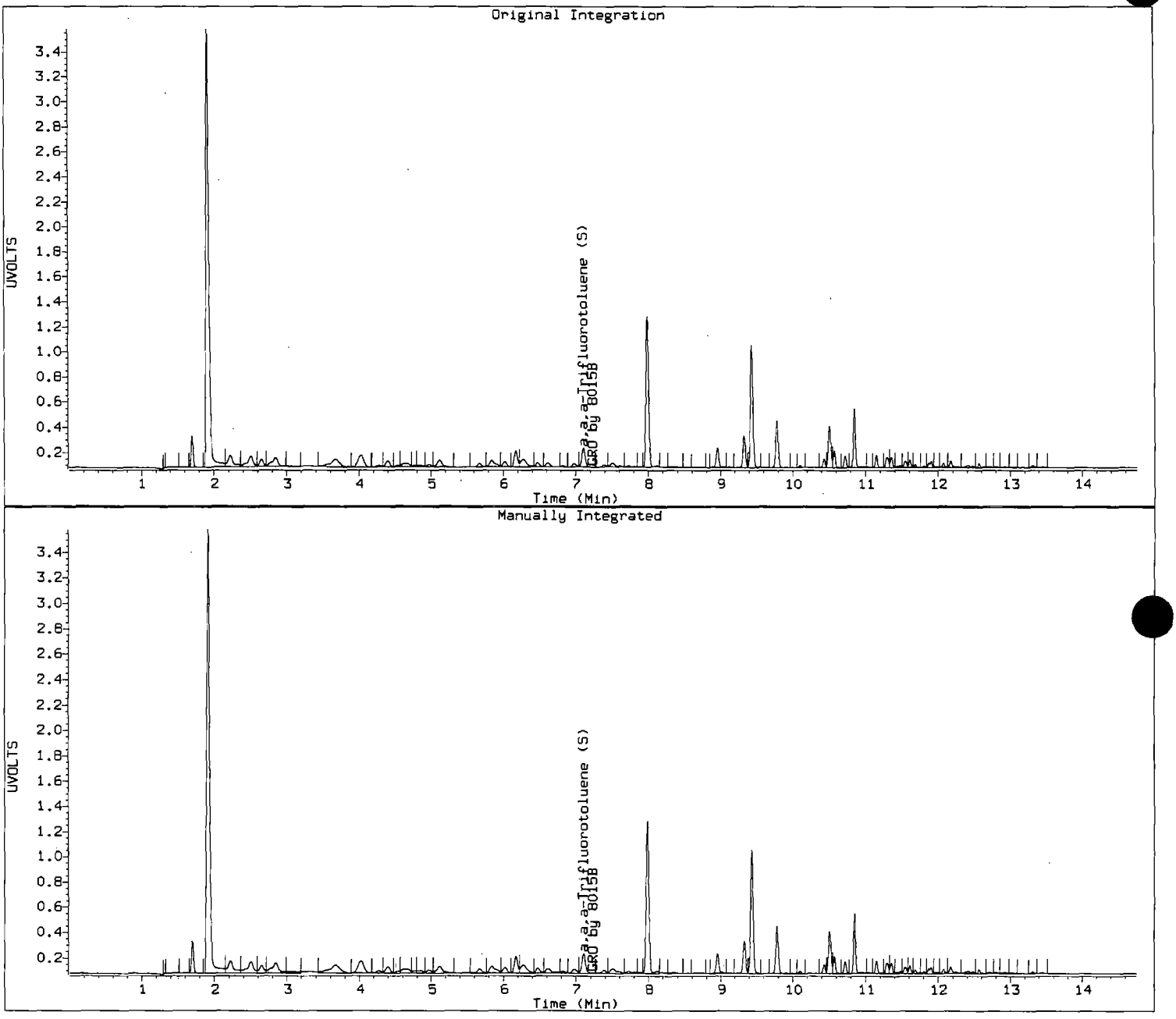
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b/03031414.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 03-MAR-2014 18:47
Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-552



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	14153092	15036711
a,a,a-Trifluorotoluene (S)	504612	551205

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 03-MAR-2014 22:32
Lab File ID: 03031424.d Init. Cal. Date(s): 24-FEB-2014 24-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 11:42 14:27
Lab Sample ID: CCV 9314-552 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m

	COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	1 a,a,a-Trifluorotoluene (S)	9869	10826	0.010	9.69356	25.00000	Averaged
S	4 GRO by 8015B	14632	14803	0.010	1.17196	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 5.43276
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031424.d
Lab Smp Id: CCV 9314-552
Inj Date : 03-MAR-2014 22:32
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-552,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 09:49 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
$ 1 a,a,a-Trifluorotoluene (S)	7.105	7.105	0.000	541280	50.0000	54.85(M)
S 4 GRO by 8015B	3.480-10.990			14803226	1000.00	1012

QC Flag Legend

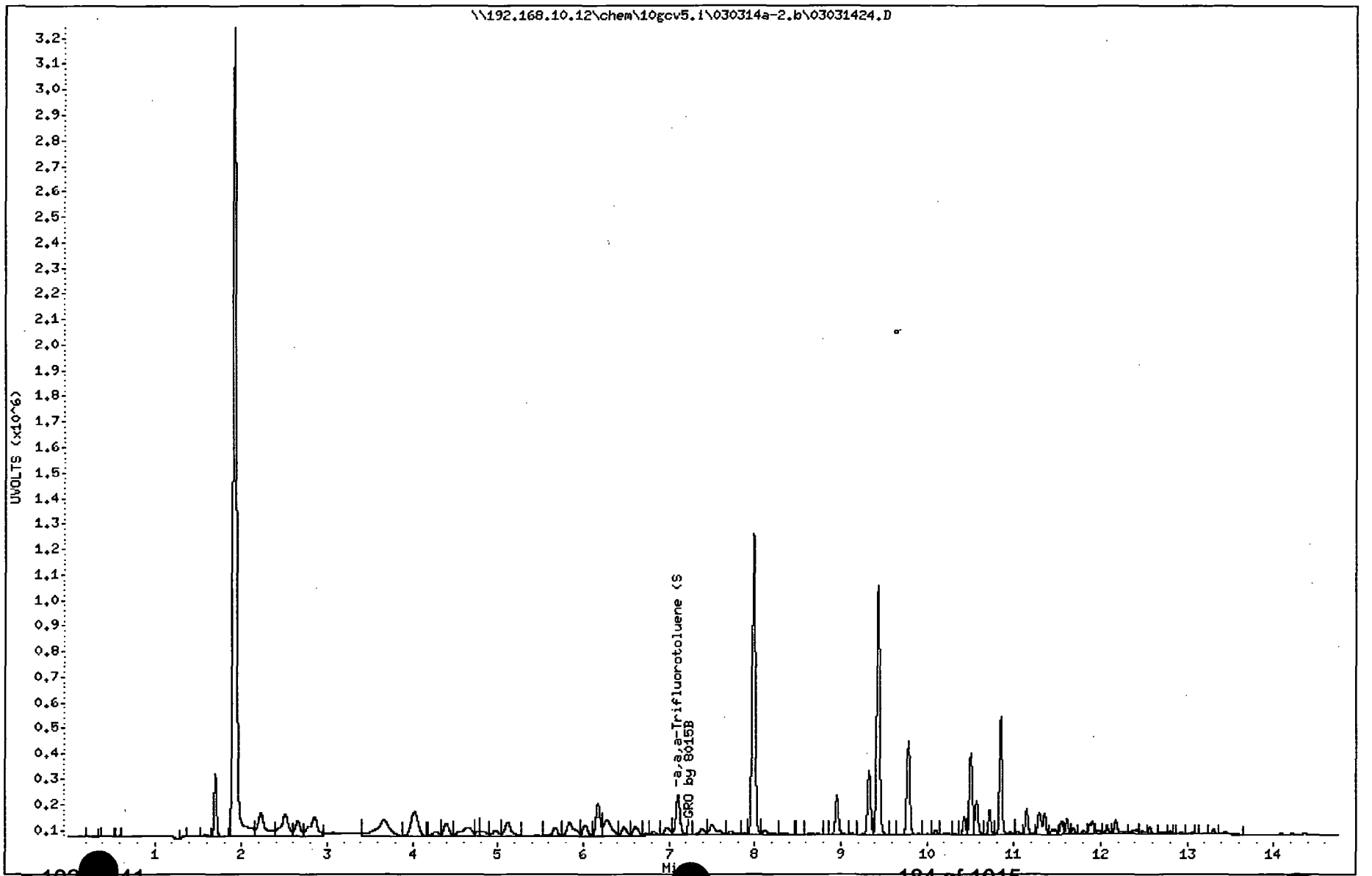
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031424.D
Date : 03-MAR-2014 22:32
Client ID:
Sample Info: CCV 9314-552,1,2

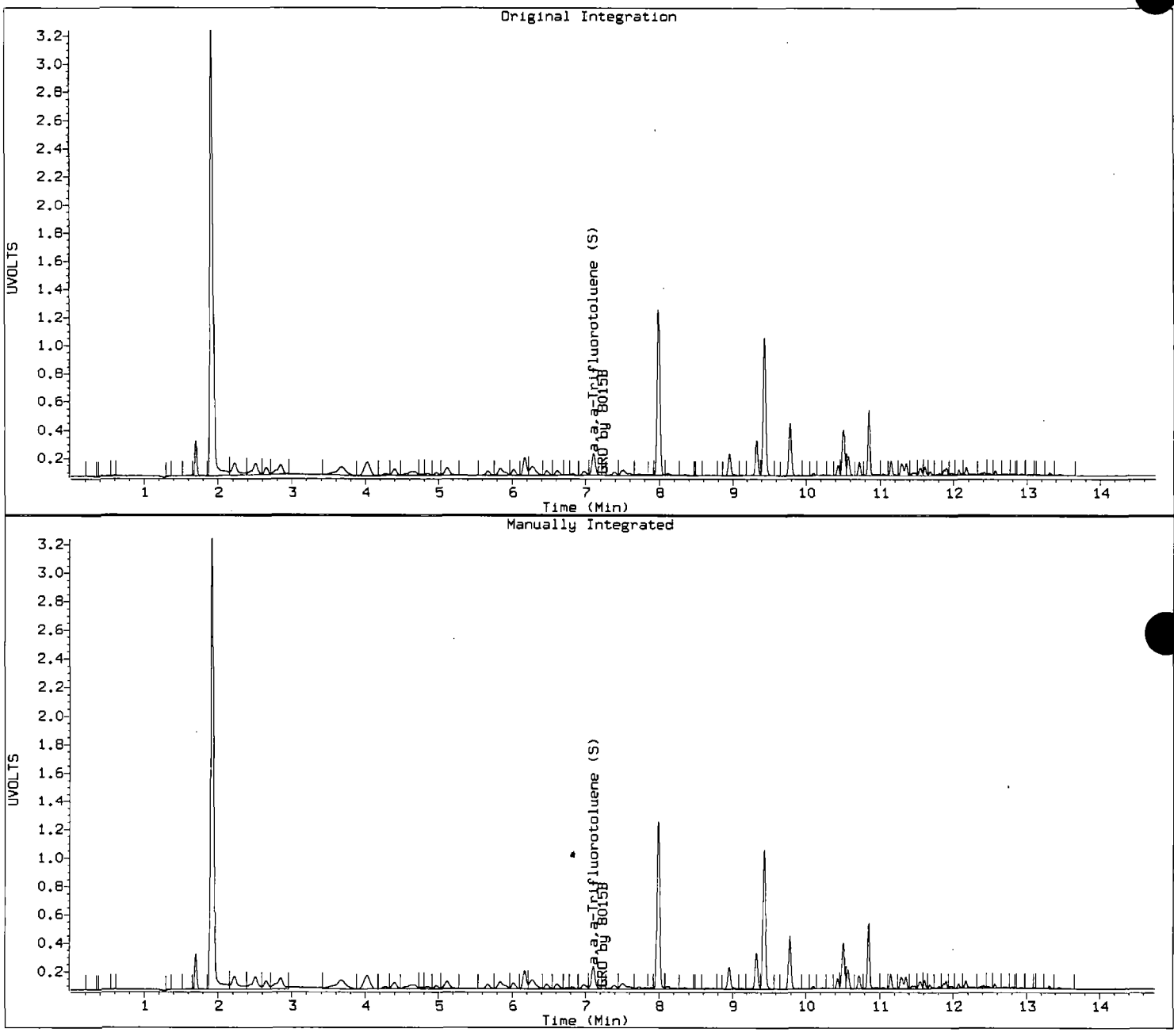
Column phase: DB-624

Instrument: 10gcv5.i

Operator: LLC
Column diameter: 0.53



Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b/03031424.d (ManInt: 8015.sub Orig: 8015.sub)
Injection Date: 03-MAR-2014 22:32
Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-552



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	14265329	14803226
a,a,a-Trifluorotoluene (S)	513363	541280

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 04-MAR-2014 10:08
Lab File ID: 03041403.d Init. Cal. Date(s): 24-FEB-2014 24-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 11:42 14:27
Lab Sample ID: CCV 9314-552 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m

COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 1 a,a,a-Trifluorotoluene (S)	9869	11166	0.010	13.14681	25.00000	Averaged
S 4 GRO by 8015B	14632	14246	0.010	-2.63929	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 7.89305
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041403.d
Lab Smp Id: CCV 9314-552
Inj Date : 04-MAR-2014 10:08
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-552,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 10:34 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$ 1 a,a,a-Trifluorotoluene (S)	7.108	7.108	0.000	558320	50.0000	56.57(M)
S 4 GRO by 8015B	3.480-10.990			14245573	1000.00	973.6

QC Flag Legend

M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041403.D

Page 1

Date : 04-MAR-2014 10:08

Client ID:

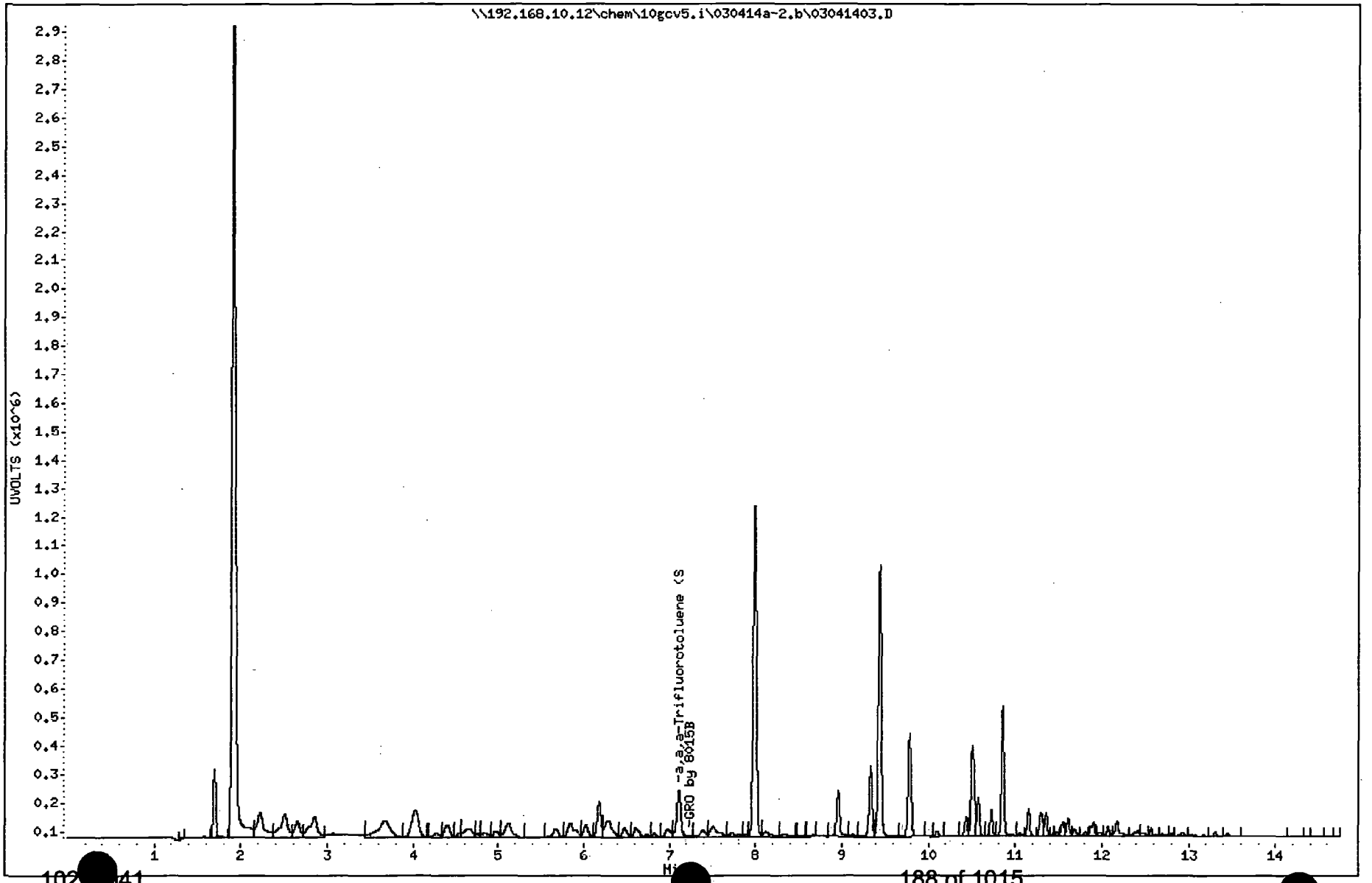
Instrument: 10gcv5.i

Sample Info: CCV 9314-552,1,2

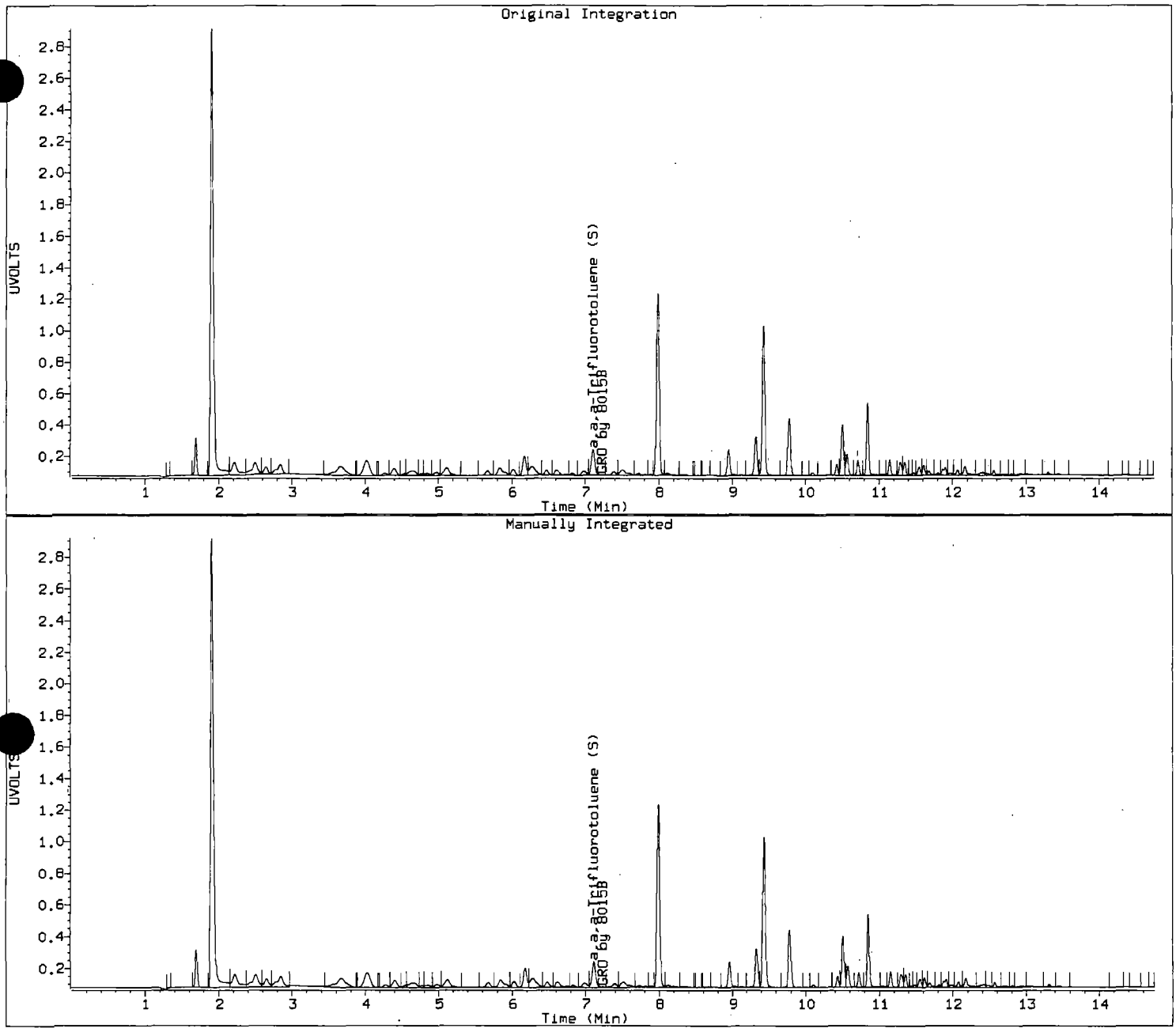
Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 04-MAR-2014 10:08
Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-552



Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	13746604	14245573
a,a,a-Trifluorotoluene (S)	534187	558320

Report Date: 04-Mar-2014 14:36

Pace Analytical Services, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: 10gcv5.i Injection Date: 04-MAR-2014 14:03
Data File ID: 03041411.d Init. Cal. Date(s): 24-FEB-2014 24-FEB-2014
Analysis Type: SOIL Init. Cal. Times: 11:42 14:27
Lab Sample ID: CCV 9314-552 Quant Type: ESTD
Method: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m

	COMPOUND	RRF / AMOUNT	RF1000	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$	1 a,a,a-Trifluorotoluene (S)	9869	10341	0.010	4.78320	25.00000	Averaged
S	4 GRO by 8015B	14632	15027	0.010	2.69914	15.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 3.74117
Maximun Average %D/Drift = 15.00000
* Passed Average %D/Drift Test.

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041411.d
Lab Smp Id: CCV 9314-552
Inj Date : 04-MAR-2014 14:03
Operator : LLC Inst ID: 10gcv5.i
Smp Info : CCV 9314-552,1,2
Misc Info :
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:31 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
$	1 a,a,a-Trifluorotoluene (S)	7.094	7.094	0.000	517050	50.0000	52.39
S	4 GRO by 8015B	3.480-10.990			15026679	1000.00	1027

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041411.D

Page 1

Date : 04-MAR-2014 14:03

Client ID:

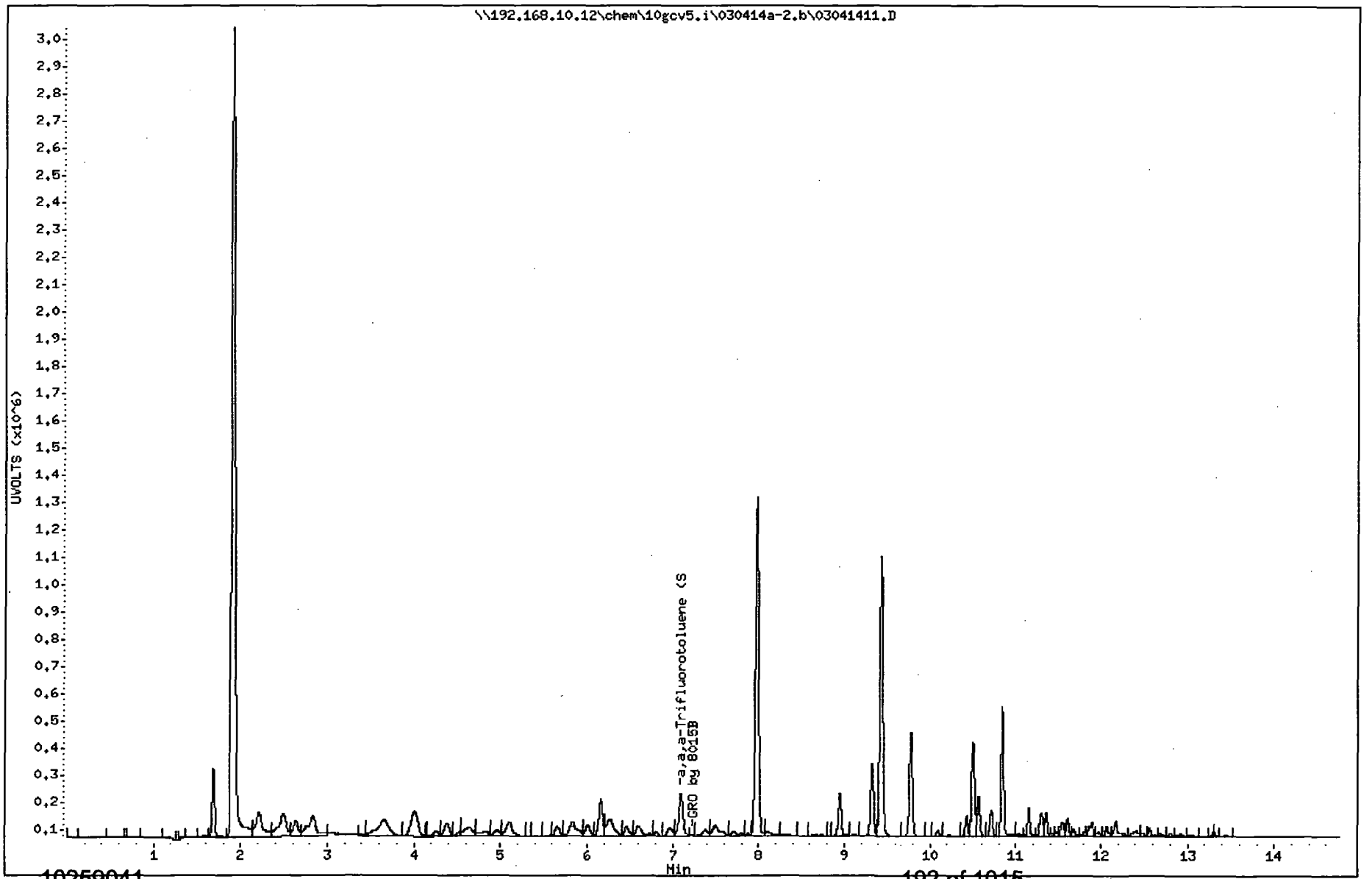
Instrument: 10gcv5.i

Sample Info: CCV 9314-552,1,2

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 04-MAR-2014 14:03
Instrument: 10gcv5.i
Lab Sample ID: CCV 9314-552

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	14878171	15026679
a,a,a-Trifluorotoluene (S)	517050	517050

Report Date: 04-Mar-2014 14:34

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031409.d
Lab Smp Id: 1632555
Inj Date : 03-MAR-2014 16:55
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1632555,1,3,BLANK
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:33 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.099	7.105	-0.006	471256	47.7514	47.75
S	4 GRO by 8015B	3.480-10.990			435481	29.7627	1488

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031409.D

Page 1

Date : 03-MAR-2014 16:55

Client ID:

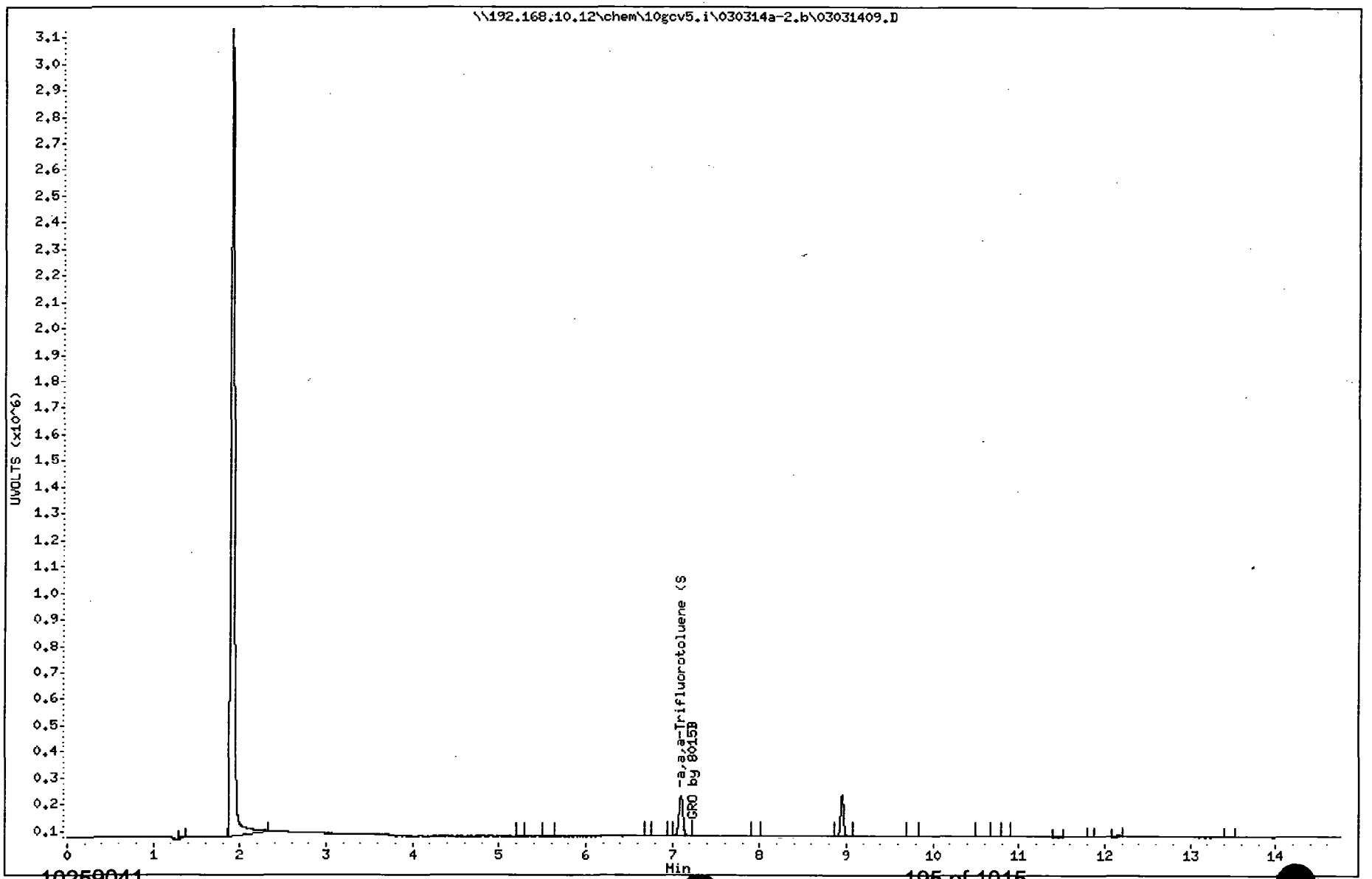
Instrument: 10gcv5.i

Sample Info: 1632555,1,3,BLANK

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 05-MAR-2014 10:55
Instrument: 10gcv5.i
Lab Sample ID: 1632555

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	435481	435481
a,a,a-Trifluorotoluene (S)	471256	471256

Report Date: 04-Mar-2014 14:39

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041406.d
Lab Smp Id: 1632558
Inj Date : 04-MAR-2014 12:04
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1632558,1,3,MS
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:38 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.103	7.094	0.009	625482	63.3788	63.38(R)
S	4 GRO by 8015B	3.480-10.990			21864916	1494.35	74720

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041406.D

Page 1

Date : 04-MAR-2014 12:04

Client ID:

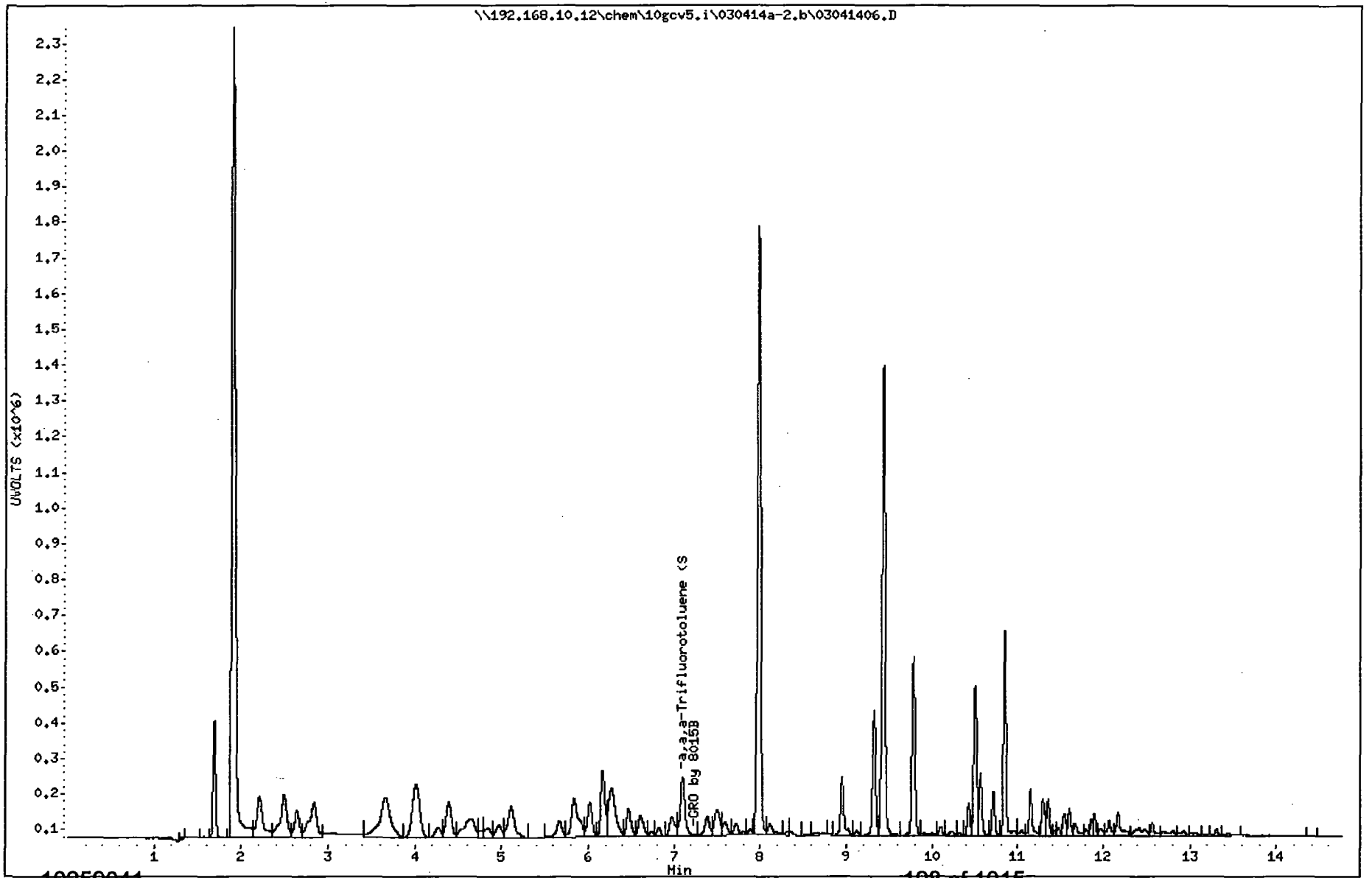
Instrument: 10gcv5.i

Sample Info: 1632558,1,3,MS

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Instrument: 10gcv5.i
Lab Sample ID: 1632558
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	21664591	21864916
a,a,a-Trifluorotoluene (S)	625482	625482

Report Date: 04-Mar-2014 14:39

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041407.d
Lab Smp Id: 1632559
Inj Date : 04-MAR-2014 12:27
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1632559,1,3,MSD
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:38 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.105	7.094	0.011	596754	60.4678	60.47
S	4 GRO by 8015B	3.480-10.990			18889397	1290.99	64550

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041407.D

Date : 04-MAR-2014 12:27

Client ID:

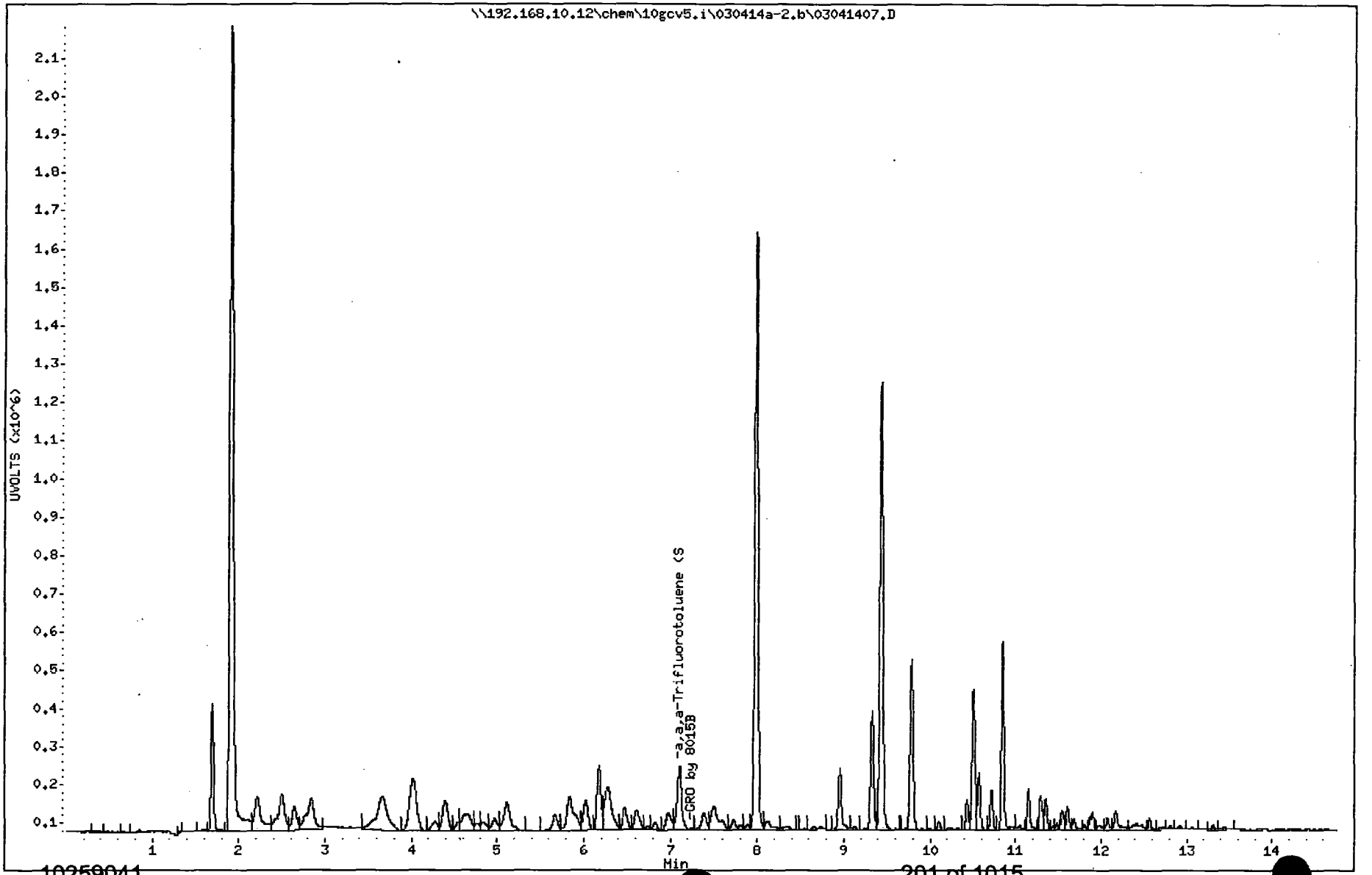
Instrument: 10gcv5.i

Sample Info: 1632559,1,3,MSD

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 04-MAR-2014 12:27
Instrument: 10gcv5.i
Lab Sample ID: 1632559

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	18727396	18889397
a,a,a-Trifluorotoluene (S)	596754	596754

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041404.d
Lab Smp Id: 1632556
Inj Date : 04-MAR-2014 10:53
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1632556,1,3,LCS
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:38 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

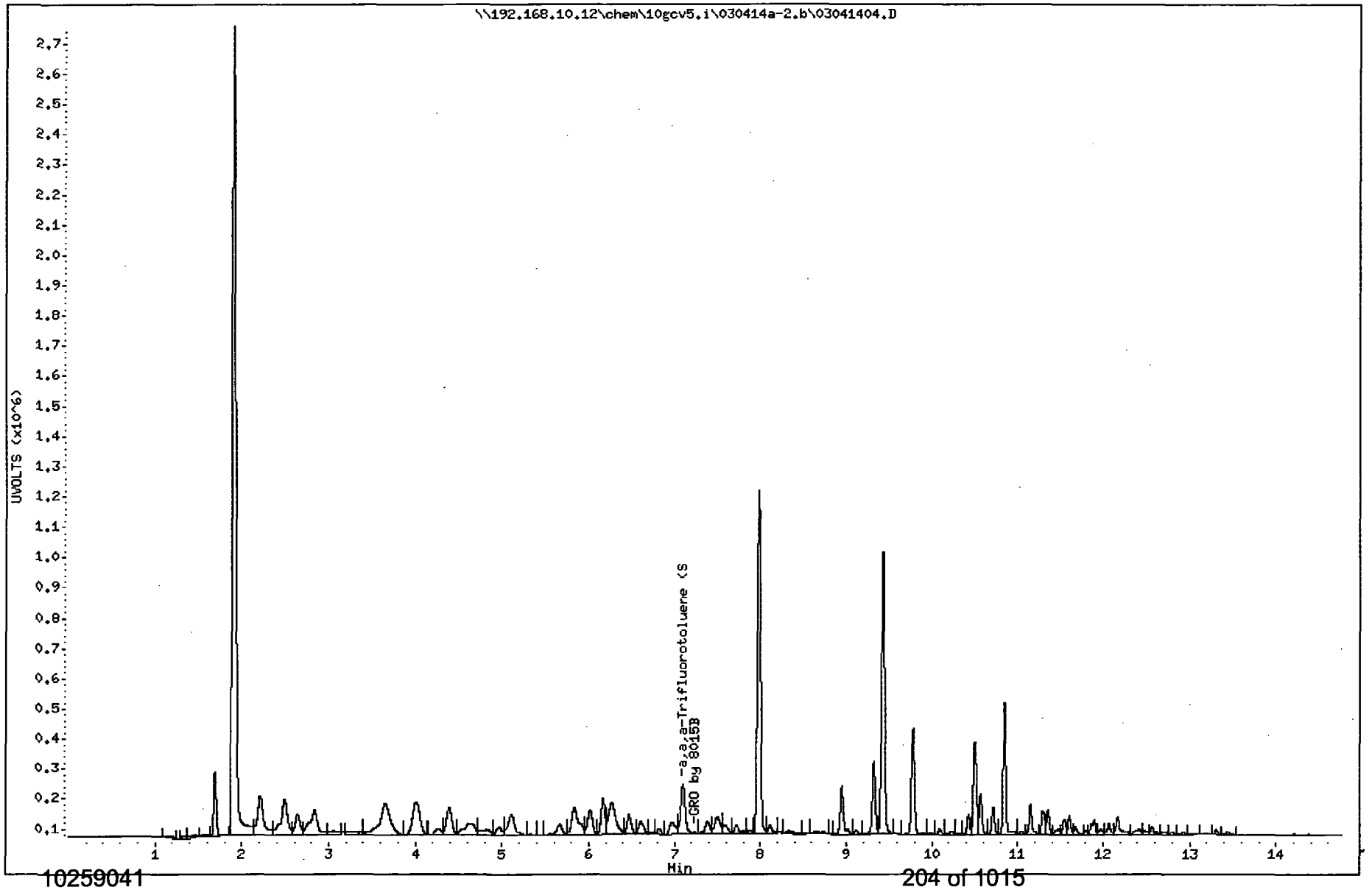
Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.098	7.094	0.004	579853	58.7553	58.76
S	4 GRO by 8015B	3.480-10.990			16209733	1107.85	55390

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041404.D
Date : 04-MAR-2014 10:53
Client ID:
Sample Info: 1632556,1,3,LCS

Instrument: 10gcv5.i
Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Injection Date: 04-MAR-2014 10:53
Instrument: 10gcv5.i
Lab Sample ID: 1632556

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	15815355	16209733
a,a,a-Trifluorotoluene (S)	579853	579853

Report Date: 04-Mar-2014 14:38

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041405.d
Lab Smp Id: 1632557
Inj Date : 04-MAR-2014 11:15
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 1632557,1,3,LCSD
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:38 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

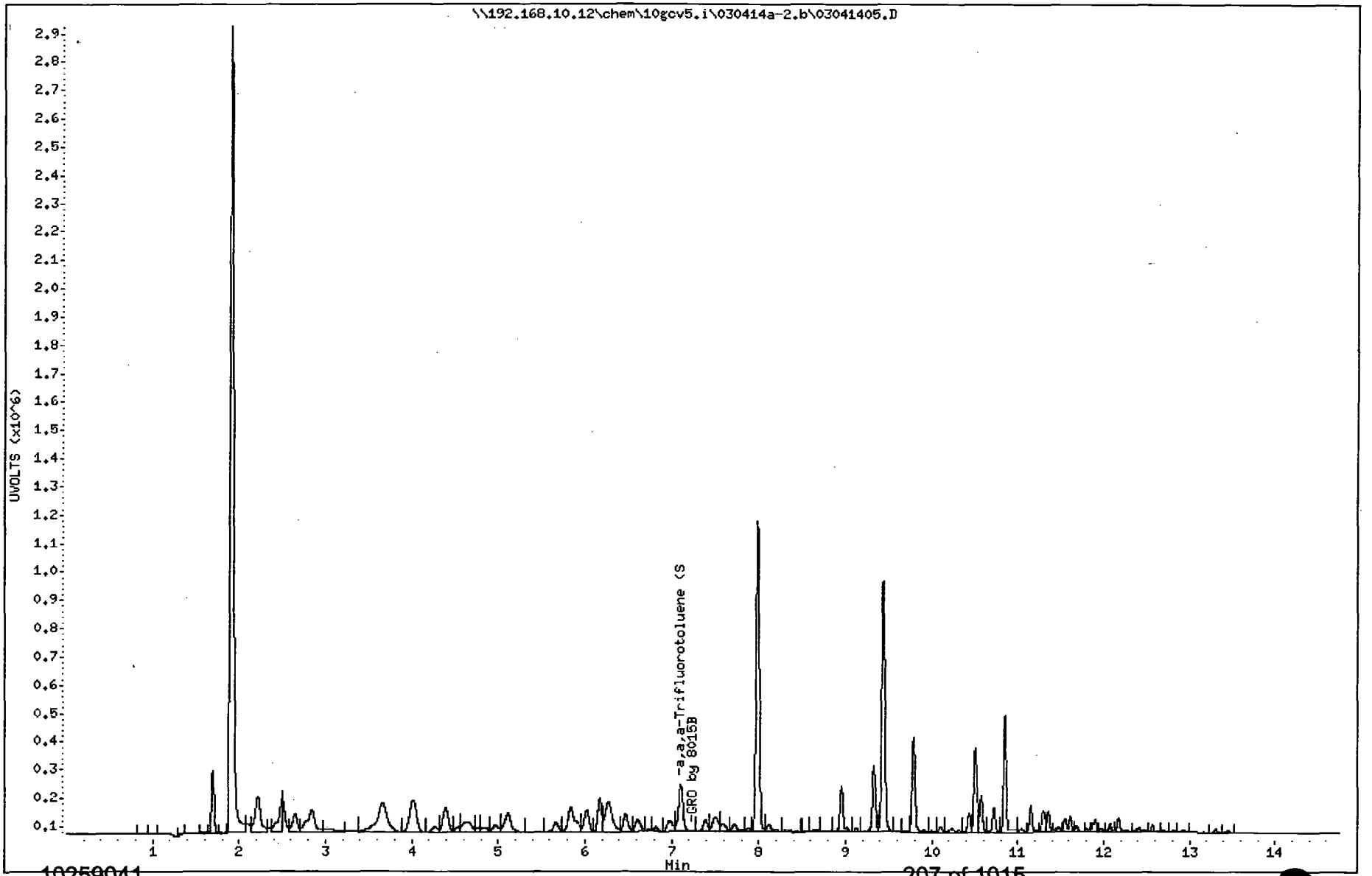
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.102	7.094	0.008	587216	59.5014	59.50
S	4 GRO by 8015B	3.480-10.990			15661434	1070.37	53520

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041405.D
Date : 04-MAR-2014 11:15
Client ID:
Sample Info: 1632557,1,3,LCSD

Column phase: DB-624

Instrument: 10gcv5.i

Operator: LLC
Column diameter: 0.53



Injection Date: 04-MAR-2014 11:13
Instrument: 10gcv5.i
Lab Sample ID: 1632557

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
[redacted] by 8015B	15453621	15661434
a,a,a-Trifluorotoluene (S)	587216	587216

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AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031418.d
Lab Smp Id: 10259041001
Inj Date : 03-MAR-2014 20:17
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10259041001
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030314a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:33 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 1 a,a,a-Trifluorotoluene (S)	7.103	7.105	-0.002	465771	47.1956	47.20
S 4 GRO by 8015B	3.480-10.990			391246	26.7395	1337

Data File: \\192.168.10.12\chem\10gcv5.i\030314a-2.b\03031418.D

Page 1

Date : 03-MAR-2014 20:17

Client ID:

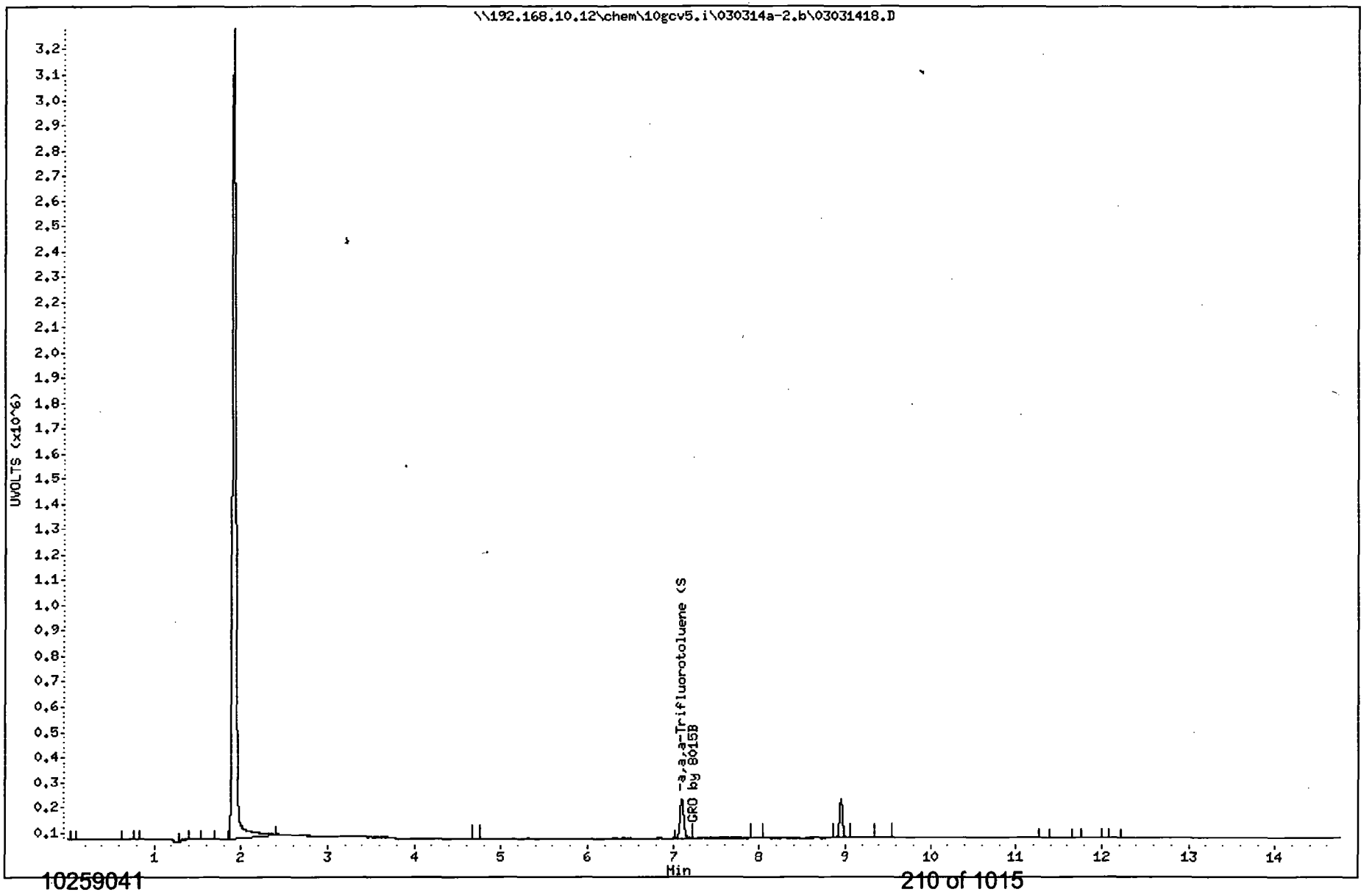
Instrument: 10gcv5.i

Sample Info: 10259041001

Operator: LLC

Column phase: DB-624

Column diameter: 0.53



Injection Date: 03 MAR 2014 20:17
Instrument: 10gcv5.i
Lab Sample ID: 10259041001

NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
GRO by 8015B	391246	391246
a,a,a-Trifluorotoluene (S)	465771	465771

Report Date: 04-Mar-2014 14:39

Pace Analytical Services, Inc.

AK 101/8015B&C/NWTPH-Gx

Data file : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041410.d
Lab Smp Id: 10259041002
Inj Date : 04-MAR-2014 13:38
Operator : LLC Inst ID: 10gcv5.i
Smp Info : 10259041002
Misc Info : 11740
Comment : GAS RANGE ORGANICS
Method : \\192.168.10.12\chem\10gcv5.i\030414a-2.b\G514-TPH-MLS-022414.m
Meth Date : 04-Mar-2014 14:38 lchristoph Quant Type: ESTD
Cal Date : 24-FEB-2014 14:27 Cal File: 02241412.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8015.sub
Target Version: 4.14
Processing Host: V10SELLEFSON

Concentration Formula: Amt * DF * Uf * Vt/ (Va * Ws * (1-(M/100))) * CpndVariabl

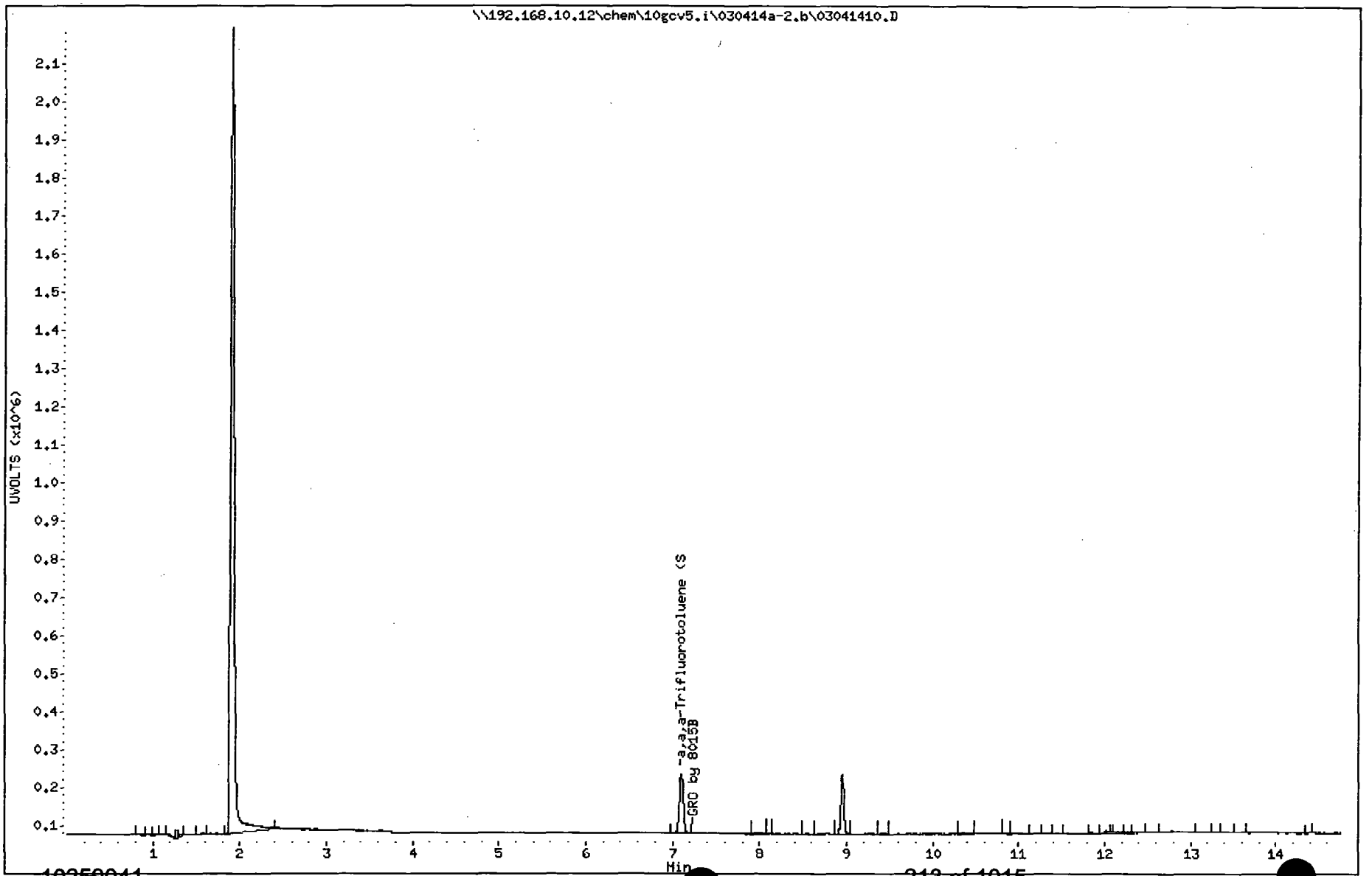
Name	Value	Description
DF	1.000	Dilution Factor
Uf	50.000	mL of Volumetric Flask
Ws	10.000	Weight of sample extracted
M	0.00000	%Moisture
Vt	10000.000	Volume of final extract (uL)
Va	1000.000	Volume of the aliquot of methanol added(
Cpnd Variable		Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$	1 a,a,a-Trifluorotoluene (S)	7.099	7.094	0.005	470093	47.6335	47.63
S	4 GRO by 8015B	3.480-10.990			444002	30.3451	1517

Data File: \\192.168.10.12\chem\10gcv5.i\030414a-2.b\03041410.D
Date : 04-MAR-2014 13:38
Client ID:
Sample Info: 10259041002

Instrument: 10gcv5.i
Operator: LLC
Column diameter: 0.53

Column phase: DB-624



Instrument: 10gcv5.i
Lab Sample ID: 10259041002
NO SIGNAL MANUAL INTEGRATIONS DONE FOR THIS DATA FILE

Manually Integrated Compounds

Compound	Area (before)	Area (after)
by 8015B	444002	444002
a,a,a-Trifluorotoluene (S)	470093	470093

Pace Analytical	Document Name: MSV/GCV Soil Prep Batch Worklist	Document Revised: 06Feb2013 Page 1 of 1
	Document Number: F-MN-O-173-rev.04	Issuing Authority: Pace Minnesota Quality Office

Prep Date 3/3/2014

Prep Analyst Lakeisha Christopher

Balance ID	Sand Lot #	MeOH Lot #	Standard Traceability #	Standard Verification (Initial)
P1897220	12/11/2012	126253	101806	LC

Queue GCV GC Volatiles QC Rule 8015 SG_P; 5030 GCV Extraction Soil

Batch 11739 HBN 288113 Created 3/3/14 11:27

*Weight of Pace label subtracted from soil weight= 0.18

Analyst Lakeisha Christopher

Has the balance been calibrated before use? YES

Has the batch been methanol corrected (mc) for Alaska? NA

Lab ID	Type	Sample ID	**	***	Comments	Soil & Vial Wt (g)	Vial Wt (g)	Soil Wt (g)*	MeOH Added (mL)	Total MeOH (mL)	Standard Added (uL)
1632555	BLANK					-----	-----	10	10	10	-----
1632556	LCS					-----	-----	10	10	10	100
1632557	LCSD					-----	-----	10	10	10	100
10259055001	PS	SB-6 1.5-3'	10			40.16	37.16	2.82	0	10	-----
10259055002	PS	SB-6 15-16.5'	10			43.71	37.21	6.32	0	10	-----
10259055003	PS	SB-7 1.5-3'	10			43.79	37.11	6.50	0	10	-----
10259055004	PS	SB-7 17-18'	10			43.55	36.89	6.48	0	10	-----
10259055005	PS	SB-8 1.5-2.5"	10			45.16	37.18	7.80	0	10	-----
10259055006	PS	SB-8 14-15"	10			43.50	37.01	6.31	0	10	-----
10259055007	PS	DUP-002	10			43.30	37.15	5.97	0	10	-----
10258999001	PS	EP #5 SL 1-8	1	10.19	Preserved from packed jar.			10.19	10	10	-----
10259041001	PS	SB-9 3-4'	10			43.24	36.64	6.42	0	10	-----
10259041002	RQS	SB-9 12-14'	10			38.79	33.07	5.54	0	10	-----
1632558	MS	SB-9 12-14'(1631878MS)	10			40.18	33.45	6.55	0	10	100
1632559	MSD	SB-9 12-14'(1631878MSD)	10			40.52	33.17	7.17	0	10	100

**If blank=manually entered; 1=waste dl or preserved from jar w/10mls MeOH; 2=Preserved Jar greater than 10mls MeOH; 5=5g/5mL; 10=10g/10mL; TB=trip blank

***Weight for jars--manually entering

Note: Methanol extracts are diluted 1:50 for a 1x analysis. Further dilutions maybe be performed refer to department SOP for more information.

Date/Initials Reviewed_____

Fraction: 8260

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 288099 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041
Lab File ID: 03031405.D Lab Sample ID: 1632466
GC Column: Rtx-VMS ID: 0.18 (mm) Time Analyzed: 10:43
Instrument ID: 10MSV5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS for HBN 288099 [MSV/26462]	1632467	03031403.D	10:14
02	BLANK for HBN 288099 [MSV/2646	1632466	03031405.D	10:43
03	EQUIPMENT BLANK	10259041003	03031419.D	14:27
04	MW-23(1630665MS)	1633048-MS	03031434.D	18:08
05	MW-23(1630665MSD)	1633049-MSD	03031435.D	18:23

FORM 4
METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLANK FOR HBN 288759 [

Lab Name: Pace Analytical Contract:
Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041
Lab File ID: 031014020.D Lab Sample ID: 1635950
GC Column: Rtx-VMS ID: 0.18 (mm) Time Analyzed: 16:48
Instrument ID: 10MSV7

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS for HBN 288759 [MSV/26501]	1635951	031014016B.D	15:30
02	SB-9 12-14'(1631878MS)	1635952-MS	031014017.D	15:49
03	SB-9 12-14'(1631878MSD)	1635953-MSD	031014018.D	16:09
04	BLANK for HBN 288759 [MSV/2650	1635950	031014020.D	16:48
05	SB-9 3-4'	10259041001	031014031.D	20:19
06	SB-9 12-14'	10259041002	031014032.D	20:38

Pace Analytical Services, Inc.
1700 [redacted]treet - Suite 200
Minneapolis, MN 55414
(612)607-1700

SURROGATE RECOVERY SUMMARY

Project: BP-IL SS#5482
Pace Project No.: 10259041

QB Batch: MSV / 26460
Method(s): EPA 5035A / EPA 8260

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
10259041001		SB-9 3-4'	1	106		102		99							
1635950	BLANK		1	96		100		102							
10259041002	OQS	SB-9 12-14'	1	108		114		103							
1635951	LCS		1	103		101		100							
1635952	MS		1	97		134		113							
1635953	MSD		1	99	IS	137		114							
		QC Limits:		30-150		30-150		30-150							
		Sample Limits:		30-150		30-150		30-150							

Sur 1: 1,2-Dichloroethane-d4 (S)
Sur 2: 4-Bromofluorobenzene (S)
Sur 3: Toluene-d8 (S)

REPORT OF LABORATORY ANALYSIS

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Minneapolis, MN 55414
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SURROGATE RECOVERY SUMMARY

Project: BP-IL SS#5482
Pace Project No.: 10259041

QB Batch: MSV / 26462
Method(s): EPA 8260 / EPA 8260

Lab ID	Type	Client Sample ID	Dilution	Sur1 % Rec	Sur1 Qual	Sur2 % Rec	Sur2 Qual	Sur3 % Rec	Sur3 Qual	Sur4 % Rec	Sur4 Qual	Sur5 % Rec	Sur5 Qual	Sur6 % Rec	Sur6 Qual
1632466	BLANK		1	98		100		99							
1632467	LCS		1	100		99		102							
10259041003		EQUIPMENT BLANK	1	106		102		100							
1633048	MS		5	114		101		101							
1633049	MSD		5	99		103		100							
		QC Limits:		75-125		75-125		75-125							
		Sample Limits:		75-125		75-125		75-125							

Sur 1: 1,2-Dichloroethane-d4 (S)
Sur 2: 4-Bromofluorobenzene (S)
Sur 3: Toluene-d8 (S)

REPORT OF LABORATORY ANALYSIS

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Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8 FORM VIII VOA-I

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041

EPA Sample No. (VSTD050##): V209525-609 Date Analyzed: 03/03/2014

Lab File ID (Standard): 03031402.D Time Analyzed: 09:36

Instrument ID: 10MSV5 Heated Purge (Y/N): N

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS1 AREA #	RT #	IS2 AREA #	RT #
12 HOUR STANDARD	114178	2.331	409621	3.992
UPPER LIMIT	228356	2.831	819242	4.492
LOWER LIMIT	57089	1.831	204810	3.492
EPA SAMPLE NO.				
LCS for HBN 288099 [MSV/26462]	109454	2.332	438473	3.992
BLANK for HBN 288099 [MSV/2646	92965	2.338	399898	3.999
EQUIPMENT BLANK	81105	2.339	344887	4.000
MW-23(1630665MS)	71687	2.343	306204	3.998
MW-23(1630665MSD)	64037	2.349	309882	3.998

IS1 = Acetone d6
IS2 = Pentafluorobenzene

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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Fax: 612- 607-6444

8 FORM VIII VOA-II

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041

EPA Sample No. (VSTD050##): V209525-609 Date Analyzed: 03/03/2014

Lab File ID (Standard): 03031402.D Time Analyzed: 09:36

Instrument ID: 10MSV5 Heated Purge (Y/N): N

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS3 AREA #	RT #	IS4 AREA #	RT #
12 HOUR STANDARD	611915	4.320	23365	4.740
UPPER LIMIT	1223830	4.820	46730	5.240
LOWER LIMIT	305958	3.820	11682	4.240
EPA SAMPLE NO.				
LCS for HBN 288099 [MSV/26462]	641262	4.315	11675 *	4.741
BLANK for HBN 288099 [MSV/2646	599724	4.321	22571	4.747
EQUIPMENT BLANK	535812	4.323	21726	4.761
MW-23(1630665MS)	502006	4.320	17954	4.758
MW-23(1630665MSD)	483016	4.320	20131	4.771

IS3 = 1,4-Difluorobenzene
IS4 = 1,4 dioxane d8

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

REPORT OF LABORATORY ANALYSIS

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Minneapolis, MN 55414

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Fax: 612- 607-6444

8 FORM VIII VOA-III

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041

EPA Sample No. (VSTD050##): V209525-609 Date Analyzed: 03/03/2014

Lab File ID (Standard): 03031402.D Time Analyzed: 09:36

Instrument ID: 10MSV5 Heated Purge (Y/N): N

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS5 AREA #	RT #	IS6 AREA #	RT #
12 HOUR STANDARD	575331	5.914	315847	7.222
UPPER LIMIT	1150662	6.414	631694	7.722
LOWER LIMIT	287666	5.414	157924	6.722
EPA SAMPLE NO.				
LCS for HBN 288099 [MSV/2	598708	5.915	329685	7.223
BLANK for HBN 288099 [MSV	571419	5.915	295456	7.223
EQUIPMENT BLANK	504478	5.916	264634	7.224
MW-23(1630665MS)	469532	5.920	250536	7.222
MW-23(1630665MSD)	450984	5.920	239003	7.228

IS5 = Chlorobenzene-d5
IS6 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8 FORM VIII VOA-I

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041

EPA Sample No. (VSTD050##): V509525-630 Date Analyzed: 03/10/2014

Lab File ID (Standard): 031014016A.D Time Analyzed: 15:30

Instrument ID: 10MSV7 Heated Purge (Y/N): Y

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS1 AREA #	RT #	IS2 AREA #	RT #
12 HOUR STANDARD	143669	2.650	966546	4.204
UPPER LIMIT	287338	3.150	1933092	4.704
LOWER LIMIT	71834	2.150	483273	3.704
EPA SAMPLE NO.				
LCS for HBN 288759 [MSV/26501]	143669	2.650	966546	4.204
SB-9 12-14'(1631878MS)	105481	2.650	941297	4.204
SB-9 12-14'(1631878MSD)	106982	2.650	929676	4.204
BLANK for HBN 288759 [MSV/2650	121103	2.650	971464	4.204
SB-9 3-4'	145784	2.650	997246	4.204
SB-9 12-14'	160631	2.644	987099	4.204

IS1 = Acetone d6
IS2 = Pentafluorobenzene

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

8 FORM VIII VOA-II

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041

EPA Sample No. (VSTD050##): V509525-630 Date Analyzed: 03/10/2014

Lab File ID (Standard): 031014016A.D Time Analyzed: 15:30

Instrument ID: 10MSV7 Heated Purge (Y/N): Y

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS3 AREA #	RT #	IS4 AREA #	RT #
12 HOUR STANDARD	1457917	4.485	174389	4.826
UPPER LIMIT	2915834	4.985	348778	5.326
LOWER LIMIT	728958	3.985	87194	4.326
EPA SAMPLE NO.				
LCS for HBN 288759 [MSV/26501]	1457917	4.485	174389	4.826
SB-9 12-14'(1631878MS)	1415725	4.479	117767	4.826
SB-9 12-14'(1631878MSD)	1398554	4.479	123316	4.826
BLANK for HBN 288759 [MSV/2650	1431301	4.479	155713	4.826
SB-9 3-4'	1474997	4.479	166618	4.826
SB-9 12-14'	1460500	4.479	188830	4.826

IS3 = 1,4-Difluorobenzene
IS4 = 1,4 dioxane d8

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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8 FORM VIII VOA-III

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Pace Analytical Contract:

Lab Code: PASI Case No.: SAS No.: SDG No.: 10259041

EPA Sample No. (VSTD050##): V509525-630 Date Analyzed: 03/10/2014

Lab File ID (Standard): 031014016A.D Time Analyzed: 15:30

Instrument ID: 10MSV7 Heated Purge (Y/N): Y

GC Column: Rtx-VMS ID: 0.18 (mm)

EPA SAMPLE NO.	IS5 AREA #	RT #	IS6 AREA #	RT #
12 HOUR STANDARD	1458689	5.789	888899	7.045
UPPER LIMIT	2917378	6.289	1777798	7.545
LOWER LIMIT	729344	5.289	444450	6.545
EPA SAMPLE NO.				
LCS for HBN 288759 [MSV/2	1458689	5.789	888899	7.045
SB-9 12-14'(1631878MS)	1216359	5.783	469070	7.045
SB-9 12-14'(1631878MSD)	1168927	5.789	435818 *	7.045
BLANK for HBN 288759 [MSV	1396129	5.783	847359	7.045
SB-9 3-4'	1486406	5.783	900928	7.045
SB-9 12-14'	1401418	5.783	723742	7.045

IS5 = Chlorobenzene-d5
IS6 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk

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Instrument Run Log

Instrument: 10MSV5 | Method: 8260B | Misc. Prep. Info: | Surrogate Lot: 10233-30exp2.25.13
Column: Rtx-VMS 0.18mm | Tune Standard: 10233-30 BFB | ISTD Lot: 10233-30exp2.25.13 | Cal. Standard: 10233-64D, 10233-70D

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
02261401.D	BFB	Liquid	Tune	1	> 2	VOA-BFB-TUNE	2/26/14 10:24	SH2	passing tune
02261402.D	EM VOLATE TEST 0.4	Liquid	Sample	1	> 2	V514-022014	2/26/14 10:39	SH2	ok, EM volage test
02261403.D	VB	Liquid	Sample	1	> 2	V514-022014	2/26/14 10:53	SH2	ok
02261404.D	VB	Liquid	Sample	1	> 2	V514-022014	2/26/14 11:21	SH2	ok
02261405.D	VB	Liquid	Sample	1	> 2	V514-022014	2/26/14 11:36	SH2	ok
02261406.D	IC 0.2 10098-49	Liquid	Ical	1	> 2	V514-022614	2/26/14 12:09	SH2	passing 8260 ICal
02261407.D	IC 0.4 10098-49	Liquid	Ical	1	> 2	V514-022614	2/26/14 12:24	SH2	'
02261408.D	IC 1 10098-49	Liquid	Ical	1	> 2	V514-022614	2/26/14 12:39	SH2	'
02261409.D	IC 4 10098-49	Liquid	Ical	1	> 2	V514-022614	2/26/14 12:54	SH2	'
02261410.D	IC 10 10098-49	Liquid	Ical	1	> 2	V514-022614	2/26/14 13:08	SH2	'
02261411.D	IC 20 10098-49	Liquid	Ical	1	> 2	V514-022614	2/26/14 13:23	SH2	'
02261412.D	IC 50 10098-49	Liquid	Ical	1	> 2	V514-022614	2/26/14 13:38	SH2	'
02261413.D	IC 100 10098-49	Liquid	Ical	1	> 2	V514-022614	2/26/14 13:53	SH2	'
02261414.D	IC 250 10098-49	Liquid	Ical	1	> 2	V514-022614	2/26/14 14:08	SH2	'
02261415.D	VB	Liquid	Sample	1	> 2	V514-022614	2/26/14 14:23	SH2	ok
02261416.D	VB	Liquid	Sample	1	> 2	V514-022614	2/26/14 14:37	SH2	ok
02261417.D	ICV 20 10098-50	Liquid	CCal	1	> 2	V514-022614	2/26/14 16:17	SH2	DNR, failing ICV
02261418.D	ICV 20 9525-595	Liquid	CCal	1	> 2	V514-022614	2/26/14 16:52	SH2	ok, ICV, 1,4-Dioxane D8 failing

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: Instrument ICaled due to previous failing ICal and adjusting EM voltage. Passing 8260 ICal. Passes MN 40% rule. 1,4-Dioxane D8 fails in ICV. Will only be running 465 list.

File Path 1: U:\10MSV5.I\022614A.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: SH 02/27/14

Report Date: 02/27/2014 10:04
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSV5 | Method: 8260B | Misc. Prep. Info: | Surrogate Lot: 10233-54exp4.28.13
Column: Rtx-VMS 0.18mm | Tune Standard: 10233-30 BFB | ISTD Lot: 10233-54exp4.28.13 | Cal. Standard: 10233-64D, 10233-70D

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
03031401.D	BFB	L/	Tune	1	> 2	VOA-BFB-TUNE	3/03/14 09:21	SH2	passing tune
03031402.D	V20 9525-609	L/	CCal	1	> 2	V514-022614	3/03/14 09:36	SH2	ok, CCV
03031403.D	1632467	L/26462	LCS	1	> 2	V514-022614	3/03/14 10:14	LPM	ok lcs, 9525-609
03031404.D	VB	L/	Sample	1	> 2	V514-022614	3/03/14 10:29	SH2	dne
03031405.D	1632466	L/26462	Blank	1	> 2	V514-022614	3/03/14 10:43	LPM	ok, blank
03031406.D	1631841	L/26459	Blank	1		V514-022614	3/03/14 10:58	SH2	ok, TCLP
03031407.D	1631842	L/26459	LCS	1		V514-022614	3/03/14 11:13	SH2	ok, TCLP
03031408.D	1631843	L/26459	MS	1		V514-022614	3/03/14 11:27	SH2	ok, MS, 10257956001, spiked 8.4ul cal std, TCLP
03031409.D	1631844	L/26459	MSD	1		V514-022614	3/03/14 11:42	SH2	ok, MSD, 10257956001, spiked 8.4ul cal std, TCLP
03031410.D	10257956001	L/26459	Sample	1		V514-022614	3/03/14 11:57	SH2	ok, MS/MSD parent, TCLP
03031411.D	10258078001	L/26459	Sample	1		V514-022614	3/03/14 12:11	SH2	ok, TCLP
03031412.D	10258189001	L/26459	Sample	1		V514-022614	3/03/14 12:26	SH2	ok, TCLP
03031413.D	10258393005	L/26459	Sample	1		V514-022614	3/03/14 12:41	SH2	ok, TCLP
03031414.D	10258237001	L/26459	Sample	1		V514-022614	3/03/14 12:56	SH2	ok, TCLP
03031415.D	10258342001	L/26459	Sample	1		V514-022614	3/03/14 13:10	SH2	ok, TCLP
03031416.D	10258973003	L/26462	Sample	1	<= 2	V514-022614	3/03/14 13:43	LPM	dnr tb, acetone >RL, rr to confirm
03031417.D	10258825021	L/26462	Sample	1	<= 2	V514-022614	3/03/14 13:58	LPM	ok, tb
03031418.D	10259124009	L/26462	Sample	1	<= 2	V514-022614	3/03/14 14:12	LPM	ok, tb
03031419.D	10259041003	L/26462	Sample	1	<= 2	V514-022614	3/03/14 14:27	LPM	ok, eb
03031420.D	10258825010	L/26462	Sample	1	<= 2	V514-022614	3/03/14 14:42	LPM	ok, benzene OR, needs 2x (Lab ID 10258825007)
03031421.D	10258825007	L/26462	Sample	1	<= 2	V514-022614	3/03/14 14:57	LPM	ok (Lab ID 10258825010)
03031422.D	10258825004	L/26462	Sample	1	<= 2	V514-022614	3/03/14 15:11	LPM	ok
03031423.D	10258754006	L/26462	Sample	25	<= 2	V514-022614	3/03/14 15:26	LPM	ok
03031424.D	10258825016	L/26462	Sample	5	<= 2	V514-022614	3/03/14 15:41	LPM	ok, ms/msd parent
03031425.D	10258973001	L/26462	Sample	1	<= 2	V514-022614	3/03/14 15:56	LPM	ok, TCE OR, needs 2x
03031426.D	10258973002	L/26462	Sample	1	<= 2	V514-022614	3/03/14 16:10	LPM	ok, TCE OR, needs 5x
03031427.D	10259072001	L/26462	Sample	1	<= 2	V514-022614	3/03/14 16:25	LPM	ok
03031428.D	10259072002	L/26462	Sample	1	<= 2	V514-022614	3/03/14 16:40	LPM	ok
03031429.D	10259072003	L/26462	Sample	1	<= 2	V514-022614	3/03/14 16:55	LPM	ok
03031430.D	10259124004	L/26462	Sample	1	<= 2	V514-022614	3/03/14 17:09	LPM	ok
03031431.D	10259124007	L/26462	Sample	1	<= 2	V514-022614	3/03/14 17:24	LPM	ok
03031432.D	10259124008	L/26462	Sample	1	<= 2	V514-022614	3/03/14 17:39	LPM	ok
03031433.D	10259124001	L/26462	Sample	1	<= 2	V514-022614	3/03/14 17:54	LPM	ok
03031434.D	1633048	L/26462	MS	5	<= 2	V514-022614	3/03/14 18:08	LPM	ok, ms, 10258825016, spiked 8.4ul of cal std
03031435.D	1633049	L/26462	MSD	5	<= 2	V514-022614	3/03/14 18:23	SH2	ok, msd, 10258825016, spiked 8.4ul of cal std
03031436.D	10258825009	L/26457	Sample	5	<= 2	V514-022614	3/03/14 18:38	SH2	ok, dl
03031437.D	10258825008	L/26457	Sample	5	<= 2	V514-022614	3/03/14 18:53	SH2	ok, dl
03031438.D	10258825019	L/26457	Sample	5	<= 2	V514-022614	3/03/14 19:07	SH2	ok, dl
03031439.D	10258825015	L/26457	Sample	10	<= 2	V514-022614	3/03/14 19:22	SH2	ok, dl
03031440.D	10258825018	L/26457	Sample	100	<= 2	V514-022614	3/03/14 19:37	SH2	MTBE OR, needs 250x
03031441.D	10258825012	L/26457	Sample	500	<= 2	V514-022614	3/03/14 19:52	SH2	ok, dl
03031442.D	VB	L/	Sample	1	> 2	V514-022614	3/03/14 20:06	SH2	dne

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Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: Batch 26459/287984 (TCLP), Batch 26462 (465)

File Path 1: U:\10MSV5.I\030314A.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: SH03/03/14, LC 3/4/14

Report Date: 03/04/2014 15:09
Reviewed By/Date:

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Instrument Run Log

Instrument: 10MSV7 Method: 8260B Misc. Prep. Info: Surrogate Lot: 10233-54exp4/28/14
Column: Rtx-VMS 0.18mm Helium Tune Standard: 10233-54/BFB ISTD Lot: 10233-54exp4/28/14 Cal. Standard: 10233-72B/10233-74B

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
031014001.D	VB	Solid	Sample	1		V714-LLS-012914	3/10/14 10:37	HBP	dne
031014002.D	TUNE	Liquid	Tune	1		VOA-BFB-TUNE	3/10/14 10:56	HBP	pass
031014003.D	0.4 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 11:15	HBP	ok
031014004.D	1.0 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 11:34	HBP	ok
031014005.D	4.0 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 11:53	HBP	ok
031014006.D	10 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 12:13	HBP	ok
031014007.D	20 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 12:32	HBP	ok
031014008.D	50 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 12:52	HBP	ok
031014009.D	100 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 13:11	HBP	ok
031014010.D	250 ICAL 10098-65	Solid	Ical	1		V714-LLS-031014	3/10/14 13:31	HBP	ok
031014011.D	VB	Solid	Sample	1		V714-LLS-031014	3/10/14 13:50	HBP	dne
031014012.D	V50 ICV 10098-66	Solid	CCal	1		V714-LLS-031014	3/10/14 14:10	HBP	ok

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: 8260 LLS ical

File Path 1: U:\10MSV7.I\031014A.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: hp 3/11/14

Report Date: 03/11/2014 11:43
Reviewed By/Date:

Pace Analytical™

Instrument Run Log

Instrument: 10MSV7 Method: 8260B Misc. Prep. Info: Surrogate Lot: 10233-54exp4/28/14
Column: Rtx-VMS 0.18mm Helium Tune Standard: 10233-54/BFB ISTD Lot: 10233-54exp24/28/14 Cal. Standard: 10233-72B/10233-74B

Path/File	Lab ID	Matrix/Batch	Type	DF	pH	Method	Date & Time	Oper.	Comments
031014013.D	VB	S/	Sample	1		v714-LLS-031014	3/10/14 14:30	HBP	dne
031014014.D	TUNE	L/	Tune	1		voa-bfb-tune	3/10/14 14:49	HBP	pass
031014015.D	V50 9525-630	S/	CCal	1		v714-LLS-031014	3/10/14 15:10	HBP	VC failed low
031014016B.D	1635951	S/26501	LCS	1		v714-LLS-031014	3/10/14 15:30	HBP	ok lcs
031014016A.D	V50 9525-630	S/	CCal	1		v714-LLS-031014	3/10/14 15:30	HBP	ok ccal
031014017.D	1635952	S/26501	MS	1		v714-LLS-031014	3/10/14 15:49	HBP	ok ms
031014018.D	1635953	S/26501	MSD	1		v714-LLS-031014	3/10/14 16:09	HBP	ok msd
031014019.D	VB	S/	Sample	1		v714-LLS-031014	3/10/14 16:29	HBP	dne
031014020.D	1635950	S/26501	Blank	1		v714-LLS-031014	3/10/14 16:48	HBP	ok
031014021.D	10259308001	S/26501	Sample	1		v714-LLS-031014	3/10/14 17:08	HBP	ok cb
031014022.D	10259308002	S/26501	Sample	1		v714-LLS-031014	3/10/14 17:27	HBP	ok cb
031014023.D	10259055008	S/26501	Sample	1		v714-LLS-031014	3/10/14 17:47	HBP	ok
031014024.D	10259055001	S/26501	Sample	1		v714-LLS-031014	3/10/14 18:06	HBP	ok
031014025.D	10259055002	S/26501	Sample	1		v714-LLS-031014	3/10/14 18:26	HBP	ok
031014026.D	10259055003	S/26501	Sample	1		v714-LLS-031014	3/10/14 18:45	HBP	ok
031014027.D	10259055004	S/26501	Sample	1		v714-LLS-031014	3/10/14 19:04	HBP	ok
031014028.D	10259055005	S/26501	Sample	1		v714-LLS-031014	3/10/14 19:23	HBP	ok
031014029.D	10259055006	S/26501	Sample	1		v714-LLS-031014	3/10/14 19:41	HBP	ok
031014030.D	10259055007	S/26501	Sample	1		v714-LLS-031014	3/10/14 20:00	HBP	ok
031014031.D	10259041001	S/26501	Sample	1		v714-LLS-031014	3/10/14 20:19	HBP	ok
031014032.D	10259041002	S/26501	Sample	1		v714-LLS-031014	3/10/14 20:38	HBP	ok
031014033.D	10259318001	S/26501	Sample	1		v714-LLS-031014	3/10/14 20:57	HBP	ok, btex only
031014034.D	10259353005	S/26501	Sample	1		v714-LLS-031014	3/10/14 21:15	HBP	ok, btex only
031014035.D	10259353006	S/26501	Sample	1		v714-LLS-031014	3/10/14 21:34	HBP	ok, btex only
031014036.D	10259353007	S/26501	Sample	1		v714-LLS-031014	3/10/14 21:52	HBP	ok, btex only
031014037.D	10259353008	S/26501	Sample	1		v714-LLS-031014	3/10/14 22:11	HBP	ok, btex only

Check Maintenance Items Performed:

Changed septum	Clipped column	Changed column - Lot #
Cleaned liner	Changed trap - Lot #	Other minor parts replaced
Replaced/Cleaned gold seal	Cleaned MS Source	x No maintenance performed today

Additional Comments: 26501 (8260 LLS)

File Path 1: U:\10MSV7.I\031014B.B\
Matrix Codes: [G]as, [L]iquid, [S]olid, [N]one

Run order verified: hp 3/11/14

Report Date: 03/11/2014 16:17
Reviewed By/Date:

Report Date : 28-Feb-2014 07:52

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 26-FEB-2014 12:09
End Cal Date : 26-FEB-2014 14:08
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Last Edit : 28-Feb-2014 07:48 10msv5.i

Calibration File Names:
Level 1: \\192.168.10.12\chem\10msv5.i\022614A.B\02261406.D
Level 2: \\192.168.10.12\chem\10msv5.i\022614A.B\02261407.D
Level 3: \\192.168.10.12\chem\10msv5.i\022614A.B\02261408.D
Level 4: \\192.168.10.12\chem\10msv5.i\022614A.B\02261409.D
Level 5: \\192.168.10.12\chem\10msv5.i\022614A.B\02261410.D
Level 6: \\192.168.10.12\chem\10msv5.i\022614A.B\02261411.D
Level 7: \\192.168.10.12\chem\10msv5.i\022614A.B\02261412.D
Level 8: \\192.168.10.12\chem\10msv5.i\022614A.B\02261413.D
Level 9: \\192.168.10.12\chem\10msv5.i\022614A.B\02261414.D

Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
1 Dichlorodifluoromethane	0.72228	0.76787	0.71697	0.61441	0.76004	0.76358					
	0.76686	0.78375	0.81527				AVRG		0.74567		7.69831
2 Chloromethane	0.49419	0.80683	0.74911	0.78465	0.77989	0.77339					
	0.79667	0.80172	0.87422				AVRG		0.76230		13.93206
3 Vinyl Chloride	977	2679	6690	28886	77093	155023					
	411962	832213	2197075				QUAD	0.00127	1.28622	-0.02046	0.99998

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 26-FEB-2014 12:09
End Cal Date : 26-FEB-2014 14:08
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
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Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
4 Bromomethane	+++++	480	992	4786	14760	41949					
	142878	356887	+++++				QUAD	0.03933	4.00355	-1.65433	0.99818
5 Chloroethane	0.37485	0.45044	0.45735	0.45478	0.43974	0.44110					
	0.44095	0.43174	0.43299				AVRG		0.43600		5.64612
6 Trichlorofluoromethane	0.66020	0.87012	0.92438	0.77796	0.96291	0.96198					
	0.96822	0.98158	1.03130				AVRG		0.90429		12.97112
7 Dichlorofluoromethane	+++++	+++++	1.40773	1.13807	1.12426	1.11908					
	1.13085	1.11117	1.14061				AVRG		1.16740		9.12141
8 Diethyl ether (Ethyl Ether)	+++++	0.46484	0.47795	0.32903	0.36623	0.42496					
	0.40816	0.41169	0.42850				AVRG		0.41392		11.74521
9 Ethanol	+++++	+++++	190	2720	7655	14551					
	26331	77089	+++++				QUAD	-0.02545	0.83702	-0.16127	0.99505
10 1,1-Dichloroethene	+++++	0.57230	0.64146	0.39617	0.45640	0.51138					
	0.50746	0.52160	0.56809				AVRG		0.52186		14.37392

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Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

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Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
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Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
11 Trichlorotrifluoroethane	+++++	+++++	5842	15042	47121	108189					
	286659	601507	1587173				QUAD	0.01873	1.77832	-C.04057	0.99996
12 Carbon Disulfide	+++++	1.54119	1.91969	1.29041	1.38833	1.62591					
	1.62013	1.65478	1.75194				AVRG		1.59905		12.36077
13 Iodomethane	+++++	+++++	988	5289	20848	69403					
	246280	551796	+++++				QUAD	0.06914	2.13711	-C.28991	0.99744
14 Acrolein	+++++	0.15010	0.13786	0.09191	0.10569	0.11682					
	0.11840	0.12203	0.12406				AVRG		0.12086		14.82153
15 Allyl Chloride	+++++	+++++	+++++	0.72236	0.71795	0.85826					
	0.87675	0.88822	0.87921				AVRG		0.82379		9.81786
16 Isopropanol	+++++	+++++	+++++	13.02635	13.65071	13.78145					
	15.62485	16.46929	18.12217				AVRG		15.11247		13.04149
17 Methylene Chloride	+++++	+++++	+++++	0.48434	0.51384	0.57165					
	0.57338	0.57245	0.61045				AVRG		0.55435		8.33679

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Last Edit : 28-Feb-2014 07:48 10msv5.i

Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
19 Acetone	+++++	+++++	+++++	0.38453	0.38616	0.40868					
	0.39431	0.38033	0.39110				AVRG		0.39085		2.56508
20 trans-1,2-Dichloroethene	+++++	0.57503	0.70907	0.47927	0.50208	0.57306					
	0.58213	0.57410	0.59224				AVRG		0.57337		11.93622
21 Methyl Acetate	+++++	0.08934	0.13971	0.09193	0.10020	0.11282					
	0.10810	0.10913	0.11451				AVRG		0.10822		14.56642
22 Hexane	+++++	+++++	+++++	0.64718	0.83011	0.94218					
	0.95400	0.91876	0.96096				AVRG		0.87553		13.89261
23 Methyl-tert-butyl Ether	+++++	1.85117	2.03588	1.37298	1.40832	1.65452					
	1.69653	1.65311	1.76733				AVRG		1.67998		12.98852
24 tert-Butyl Alcohol	+++++	38.02874	49.33337	33.91904	33.76064	35.30075					
	39.82920	42.92807	43.62046				AVRG		39.59003		13.81357
25 Isopropyl Ether	+++++	2.00876	2.30163	1.48044	1.59372	1.85661					
	1.92464	1.85268	2.00823				AVRG		1.87834		13.58318

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Last Edit : 28-Feb-2014 07:48 10msv5.i

Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
26 Acetonitrile	+++++	+++++	+++++	0.03087	0.03198	0.03547					
	0.03721	0.03578	0.03881				AVRG		0.03502		8.70616
27 Chloroprene	+++++	0.90312	1.09444	0.66400	0.75221	0.85326					
	0.88840	0.89734	0.93834				AVRG		0.87389		14.58366
28 1,1-Dichloroethane	+++++	0.91752	1.16715	0.80790	0.88248	1.00569					
	1.00185	1.01876	1.08337				AVRG		0.98559		11.57705
29 Acrylonitrile	+++++	0.23145	0.29702	0.20984	0.21602	0.25309					
	0.24682	0.25504	0.25951				AVRG		0.24610		11.21959
30 Ethyl-tert-butyl ether	+++++	1.77671	2.04056	1.40870	1.51963	1.71859					
	1.79476	1.74560	1.85477				AVRG		1.73241		11.25660
31 Vinyl Acetate	+++++	+++++	+++++	1.28465	1.33505	1.56574					
	1.63577	1.66008	1.68558				AVRG		1.52781		11.40314
32 cis-1,2-Dichloroethene	+++++	0.61821	0.76888	0.52609	0.56798	0.62195					
	0.65340	0.61317	0.64936				AVRG		0.62738		11.31648

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Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
33 2,2-Dichloropropane	+++++	0.84530	1.17349	0.73724	0.78262	0.85686					
	0.87225	0.87066	0.91740				AVRG		0.88198		14.79887
34 Cyclohexane	1.27864	0.92596	1.21271	0.78141	0.91177	1.06712					
	1.05507	1.04355	1.05431				AVRG		1.03672		14.63556
35 Bromochloromethane	0.38159	0.34199	0.41387	0.29757	0.33718	0.39272					
	0.40094	0.37581	0.38803				AVRG		0.36997		10.02204
36 Chloroform	+++++	1.03441	1.28988	0.81109	0.91271	1.00068					
	1.01757	1.03559	1.10521				AVRG		1.02589		13.57706
37 Carbon Tetrachloride	+++++	0.71351	0.95080	0.63262	0.68664	0.80976					
	0.79091	0.79523	0.84539				AVRG		0.77811		12.80692
38 Ethyl Acetate	+++++	0.89995	1.00463	0.69244	0.76156	0.84954					
	0.84074	0.84159	0.83269				AVRG		0.84039		10.90322
39 Tetrahydrofuran	+++++	0.80556	0.92451	0.64546	0.70238	0.75179					
	0.72077	0.69326	0.69510				AVRG		0.74235		11.76105

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Compound	0.2000000 Level 1 / 50.0000 Level 7	0.4000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 250.0000 Level 9	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
40 sec-Butyl Alcohol	+++++	+++++	+++++	29.55694	28.39390	30.80049					
	35.56633	37.47086	33.29922				AVRG		32.51462		10.93087
41 1,1,1-Trichloroethane	+++++	0.92496	1.12440	0.76029	0.83854	0.96589					
	0.95745	0.96407	1.02255				AVRG		0.94477		11.66416
42 2-Butanone	+++++	0.43322	0.42211	0.29646	0.31712	0.35542					
	0.34970	0.35831	0.36010				AVRG		0.36156		12.89054
43 1,1-Dichloropropene	1.05334	0.77457	0.90253	0.65024	0.69701	0.82181					
	0.82911	0.83342	0.85600				AVRG		0.82423		14.14064
44 2,2,4-Trimethylpentane	+++++	1.44465	1.61587	0.96406	1.17393	1.39276					
	1.36637	1.40936	1.45874				AVRG		1.35322		14.69898
45 Benzene	+++++	2.40237	2.97991	2.05472	2.12561	2.45054					
	2.44946	2.40221	2.44037				AVRG		2.41315		11.46761
46 Propionitrile	0.12410	0.08860	0.10194	0.07430	0.08581	0.09550					
	0.09409	0.09622	0.09713				AVRG		0.09530		14.15322

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Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
47 Methacrylonitrile	+++++	+++++-	26188	67103	185969	433799					
	1074654	2264941	+++++				QUAD	0.00531	0.48250	-0.00464	0.99969
49 Tert-amyl methyl ether	+++++	1.93009	2.16392	1.42117	1.58777	1.81748					
	1.84125	1.81800	1.87936				AVRG		1.80738		12.30289
51 1,2-Dichloroethane	+++++	0.70185	0.79259	0.56539	0.62171	0.71279					
	0.75259	0.73179	0.77998				AVRG		0.70734		11.04601
52 Isobutanol	+++++	+++++-	+++++	14.92835	15.01755	16.06494					
	18.20503	19.20330	19.61105				AVRG		17.17170		12.22763
53 Tert-Amyl Alcohol	+++++	43.55416	53.39720	35.53199	35.61778	37.51685					
	40.61027	44.88664	44.16327				AVRG		41.90977		14.25546
54 Methylcylohexane	+++++	0.51522	0.60235	0.36562	0.41849	0.49470					
	0.48596	0.49932	0.52360				AVRG		0.48816		14.49957
55 Trichloroethene	+++++	0.40968	0.54193	0.36131	0.40435	0.46550					
	0.45689	0.45497	0.46960				AVRG		0.44553		12.16541

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Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
57 Tert-amyl ethyl ether	+++++	0.86242	1.21119	0.78749	0.86738	0.97013					
	0.99229	0.99567	1.01847				AVRG		0.96313		13.40690
58 n-Butanol	+++++	+++++	+++++	7.50236	7.73429	8.18415					
	9.36140	9.61100	9.40887				AVRG		8.63368		10.83638
59 Dibromomethane	+++++	0.24124	0.26407	0.21749	0.23147	0.26459					
	0.27529	0.26742	0.28441				AVRG		0.25575		9.05107
60 1,2-Dichloropropane	+++++	0.35003	0.40341	0.32350	0.36128	0.39710					
	0.41061	0.40091	0.41817				AVRG		0.38313		8.84273
61 Ethyl Arcylate	+++++	+++++	+++++	0.52967	0.57151	0.66848					
	0.67065	0.66779	0.68885				AVRG		0.63283		10.35323
62 Bromodichloromethane	+++++	0.57270	0.66858	0.42644	0.46999	0.54027					
	0.51723	0.54153	0.56415				AVRG		0.53761		13.42389
63 Methyl Methacrylate	+++++	0.08420	0.08369	0.06165	0.06580	0.07537					
	0.07205	0.07218	0.07402				AVRG		0.07362		10.59062

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Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
65 1,4-Dioxane (P-Dioxane)	+++++	+++++	+++++	+++++	0.90476	1.16942					
	1.21344	1.36197	1.27288				AVRG		1.18450		14.53870
66 3-Pentanone	+++++	+++++	+++++	0.32916	0.34231	0.38885					
	0.39596	0.39735	0.40787				AVRG		0.37692		8.68550
67 2-Chloroethyl Vinyl Ether	+++++	0.25767	0.32097	0.23303	0.26186	0.29028					
	0.29509	0.28966	0.29490				AVRG		0.28043		9.86723
68 cis-1,3-Dichloropropene	+++++	0.55430	0.67859	0.50777	0.56774	0.64348					
	0.65420	0.64089	0.66507				AVRG		0.61400		10.11042
70 Toluene	+++++	1.07419	1.26365	0.89988	0.99197	1.13389					
	1.11134	1.09931	1.10083				AVRG		1.08438		9.76536
71 2-Nitropropane	+++++	0.65713	0.66600	0.44841	0.50124	0.58287					
	0.55293	0.55283	0.50883				AVRG		0.55878		13.49535
72 Tetrachloroethene	+++++	0.40957	0.59425	0.41313	0.45873	0.51417					
	0.50636	0.50443	0.53321				AVRG		0.49173		12.65996

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Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
73 4-Methyl-2-Pentanone	+++++	0.66480	0.66600	0.44841	0.50124	0.58287					
	0.55293	0.55283	0.50893				AVRG		0.55974		13.73380
74 trans-1,3-Dichloropropene	+++++	0.57090	0.75240	0.53104	0.57865	0.66173					
	0.65702	0.65329	0.67852				AVRG		0.63545		11.17555
75 4-Methyl-2-pentanol	+++++	10609	28486	78650	225249	515757					
	1289101	2731652	6594926				QUAD	0.00764	0.00676	5.227e-006	0.99956
76 Ethyl Methacrylate	+++++	0.75905	0.91890	0.53957	0.65071	0.72461					
	0.69975	0.69242	0.70138				AVRG		0.71080		14.97441
77 1,1,2-Trichloroethane	+++++	0.42463	0.48503	0.32934	0.35223	0.39932					
	0.39930	0.38590	0.39727				AVRG		0.39650		11.81558
78 Dibromochloromethane	+++++	0.47876	0.50924	0.35362	0.42478	0.47641					
	0.46913	0.46769	0.48790				AVRG		0.45844		10.59140
79 1,3-Dichloropropane	+++++	0.66760	0.78835	0.52617	0.59195	0.67498					
	0.66122	0.65344	0.66675				AVRG		0.65381		11.42858

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	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
80 1,2-Dibromoethane	+++++	0.41832	0.50326	0.34747	0.38981	0.44154					
	0.42468	0.42761	0.44590				AVRG		0.42482		10.57756
81 2-Hexanone	+++++	0.47294	0.50040	0.34699	0.38773	0.44588					
	0.42460	0.42834	0.40108				AVRG		0.42600		11.38680
83 Chlorobenzene	+++++	1.23010	1.41719	0.96455	1.06495	1.20072					
	1.18468	1.16862	1.18360				AVRG		1.17680		11.07652
84 Ethylbenzene	+++++	2.48542	2.74021	1.78043	1.88955	2.15235					
	2.11332	2.07633	2.00216				AVRG		2.15497		14.60819
85 1,1,1,2-Tetrachloroethane	+++++	0.41377	0.52264	0.35672	0.39356	0.44912					
	0.44218	0.44151	0.45557				AVRG		0.43438		11.24095
86 M&P-Xylene	+++++	0.77840	0.99837	0.68489	0.75008	0.84697					
	0.82784	0.81389	0.80200				AVRG		0.81281		11.14343
87 O-Xylene (1,2-Dimethylbenzene	+++++	0.81300	0.98490	0.65851	0.70926	0.81393					
	0.79221	0.78694	0.80000				AVRG		0.79484		11.91871

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	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
88 Styrene	+++++	1.22607	1.57634	1.06565	1.19714	1.35779					
	1.33835	1.34111	1.33148				AVRG		1.30424		11.39746
89 Bromoform	+++++	0.33809	0.41269	0.29214	0.32091	0.37081					
	0.37048	0.37583	0.39615				AVRG		0.35964		11.10871
90 Isopropylbenzene (Cumene)	+++++	2.02208	2.34805	1.58958	1.77652	2.01873					
	2.01066	1.99291	1.91827				AVRG		1.95960		11.14957
92 cis-1,4-Dichloro-2-Butene	0.33863	0.27744	0.32285	0.26970	0.27528	0.33057					
	0.34222	0.35783	0.38591				AVRG		0.32227		12.52301
93 Bromobenzene	+++++	0.90600	1.11880	0.76789	0.84397	0.92455					
	0.93118	0.91530	0.94956				AVRG		0.91966		10.84828
94 n-Propylbenzene	+++++	4.29984	5.23608	3.49376	3.85068	4.20762					
	4.23954	4.15608	3.94539				AVRG		4.17862		12.03027
95 1,1,2,2-Tetrachloroethane	+++++	1.18051	1.40279	0.94299	0.99384	1.07278					
	1.08518	1.07770	1.07955				AVRG		1.10442		12.61189

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 26-FEB-2014 12:09
End Cal Date : 26-FEB-2014 14:08
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Last Edit : 28-Feb-2014 07:48 10msv5.i

Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
96 2-Chlorotoluene	+++++	2.86732	3.37060	2.24642	2.46238	2.68405					
	2.75936	2.73323	2.72348				AVRG		2.73086		11.88776
97 1,3,5-Trimethylbenzene	+++++	2.95209	3.50394	2.39421	2.57355	2.86484					
	2.92209	2.87876	2.85821				AVRG		2.86846		11.22577
98 1,2,3-Trichloropropane	+++++	++++-	+++++	0.26997	0.31137	0.33986					
	0.34238	0.34585	0.34749				AVRG		0.32615		9.36958
99 trans-1,4-Dichloro-2-Butene	+++++	++++-	0.33565	0.23174	0.26622	0.31319					
	0.32570	0.33445	0.34942				AVRG		0.30805		13.95059
100 4-Chlorotoluene	+++++	2.56217	3.13250	2.12580	2.32624	2.56815					
	2.56678	2.53576	2.51506				AVRG		2.54156		11.23674
101 tert-Butylbenzene	+++++	2.42948	2.90454	2.01796	2.19603	2.45743					
	2.44439	2.42644	2.39589				AVRG		2.40902		10.50519
102 1,2,4-Trimethylbenzene	+++++	2.73953	3.45521	2.38487	2.60664	2.88647					
	2.93075	2.90723	2.85861				AVRG		2.84616		10.83041

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 26-FEB-2014 12:09
End Cal Date : 26-FEB-2014 14:08
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Last Edit : 28-Feb-2014 07:48 10msv5.i

Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
103 sec-Butylbenzene	+++++	3.43101	4.02009	2.61709	2.95347	3.34339					
	3.34357	3.35005	3.25938				AVRG		3.28976		12.20899
104 p-Isopropyltoluene	+++++	3.00425	3.31307	2.27263	2.50413	2.86823					
	2.85290	2.84776	2.80528				AVRG		2.80853		11.09592
105 1,3-Dichlorobenzene	+++++	1.58966	1.99867	1.33330	1.40871	1.60672					
	1.61832	1.62260	1.63698				AVRG		1.60187		12.23759
107 1,4-Dichlorobenzene	+++++	1.78755	1.97431	1.35641	1.50106	1.65101					
	1.66787	1.65555	1.69356				AVRG		1.66092		11.00265
108 1,2,3 Trimethylbenzene	+++++	2.21897	2.79633	1.85108	1.98995	2.23296					
	2.28711	2.26578	2.28343				AVRG		2.24070		12.26331
109 n-Butylbenzene	+++++	2.50414	2.71530	1.84663	2.04937	2.40145					
	2.40780	2.43687	2.40436				AVRG		2.34574		11.58894
110 1,2-Dichlorobenzene	+++++	1.52576	1.96429	1.27342	1.40100	1.55872					
	1.52966	1.53850	1.55396				AVRG		1.54316		12.75483

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 26-FEB-2014 12:09
End Cal Date : 26-FEB-2014 14:08
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Last Edit : 28-Feb-2014 07:48 10msv5.i

Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
111 1,2-Dibromo-3-Chloropropane	+++++	0.32654	0.34854	0.24433	0.28418	0.31532					
	0.30569	0.31295	0.31128				AVRG		0.30610		10.08711
112 Hexachlorobutadiene	+++++	+++++	+++++	0.30988	0.33270	0.41167					
	0.40925	0.41509	0.41331				AVRG		0.38198		12.46177
113 1,2,4-Trichlorobenzene	+++++	0.70746	1.03013	0.74798	0.78342	0.89845					
	0.88955	0.89464	0.91254				AVRG		0.85802		12.21625
114 Naphthalene	+++++	3.19725	3.78157	2.58114	2.80982	3.17687					
	3.09622	3.07980	2.98343				AVRG		3.08826		11.25855
115 1,2,3-Trichlorobenzene	+++++	0.83200	1.04056	0.68443	0.74639	0.84719					
	0.84142	0.84998	0.87130				AVRG		0.83916		12.28392
116 2-Methylnaphthalene	1.59659	1.63856	1.48252	1.12443	1.30688	1.47045					
	1.48379	1.50550	1.49314				AVRG		1.45576		10.60811
$ 50 1,2-Dichloroethane d4 (S)	0.47659	0.48680	0.49346	0.48628	0.49557	0.52748					
	0.49276	0.49120	0.52383				AVRG		0.49711		3.44793

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 26-FEB-2014 12:09
End Cal Date : 26-FEB-2014 14:08
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Last Edit : 28-Feb-2014 07:48 10msv5.i

Compound	0.2000000 Level 1	0.4000000 Level 2	1.0000 Level 3	4.0000 Level 4	10.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	250.0000 Level 9								
$ 69 Toluene-d8 (S)	1.26502	1.26401	1.25867	1.24928	1.28561	1.30002					
	1.28839	1.26026	1.27026				AVRG		1.27128		1.29900
$ 91 4-Bromofluorobenzene (S)	0.92214	0.91964	0.92897	0.91710	0.94493	0.91688					
	0.93634	0.95000	0.94393				AVRG		0.93110		1.39778

Pace Analytical Services, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 26-FEB-2014 12:09
End Cal Date : 26-FEB-2014 14:08
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Last Edit : 28-Feb-2014 07:48 10msv5.i

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261406.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\022614A.B\02261406.D
Lab Smp Id: IC 0.2 10098-49
Inj Date : 26-FEB-2014 12:09
Operator : SH2 Inst ID: 10msv5.i
Smp Info : IC 0.2 10098-49,1,1
Misc Info :
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Meth Date : 28-Feb-2014 07:52 shaider Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 6 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-99096

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.119	1.116	(0.281)	1501	0.20000	0.19(TaQ)
2	Chloromethane	50	1.229	1.231	(0.308)	1027	0.20000	0.13(aQM)
3	Vinyl Chloride	62	1.277	1.274	(0.320)	977	0.20000	0.18(aQ)
4	Bromomethane	94	Compound Not Detected.					
5	Chloroethane	64	1.539	1.536	(0.386)	779	0.20000	0.17(TaQ)
6	Trichlorofluoromethane	101	1.618	1.615	(0.406)	1372	0.20000	0.15(a)
7	Dichlorofluoromethane	67	1.648	1.645	(0.413)	2755	0.20000	0.23(aQ)
8	Diethyl ether (Ethyl Ether)	59	1.800	1.797	(0.451)	1486	0.20000	0.34(aQ)
9	Ethanol	45	Compound Not Detected.					
10	1,1-Dichloroethene	96	1.934	1.925	(0.485)	1614	0.20000	0.30(a)
11	Trichlorotrifluoroethane	101	1.946	1.949	(0.488)	1066	0.20000	1.1(QM)
12	Carbon Disulfide	76	1.959	1.955	(0.491)	5549	0.20000	0.33(TaQ)
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	2.153	2.150	(0.540)	4174	2.00000	3.3
15	Allyl Chloride	41	Compound Not Detected.					
16	Isopropanol	45	2.269	2.260	(0.479)	420	2.00000	3.2(Q)
17	Methylene Chloride	84	2.330	2.326	(0.584)	2710	0.20000	0.47(a)
* 18	Acetone d6	46	2.330	2.326	(1.000)	118815	100.000	
19	Acetone	58	2.366	2.363	(1.016)	1139	1.00000	2.4(Q)
20	trans-1,2-Dichloroethene	96	2.451	2.448	(0.614)	1769	0.20000	0.30(a)
21	Methyl Acetate	74	2.458	2.454	(0.616)	1480	1.00000	1.3(Q)
22	Hexane	86	2.518	2.503	(1.081)	611	0.50000	0.59(aQ)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 Methyl-tert-butyl Ether	73	2.537	2.533	(0.636)	4978	0.20000	0.28(aQ)
	24 tert-Butyl Alcohol	59	2.622	2.606	(0.553)	1641	2.00000	4.8
	25 Isopropyl Ether	45	2.859	2.850	(0.716)	6819	0.20000	0.35(TaQ)
	26 Acetonitrile	41	Compound Not Detected.					
	27 Chloroprene	53	2.932	2.935	(0.735)	2901	0.20000	0.32(TaQ)
	28 1,1-Dichloroethane	63	2.962	2.953	(0.742)	2925	0.20000	0.28(aQ)
	29 Acrylonitrile	53	2.999	2.996	(0.752)	7555	2.00000	3.0
	30 Ethyl-tert-butyl ether	59	3.151	3.142	(0.790)	5789	0.20000	0.32(a)
	31 Vinyl Acetate	43	3.157	3.154	(0.791)	7623	0.20000	0.48(TaQM)
	32 cis-1,2-Dichloroethene	96	3.364	3.361	(0.843)	2154	0.20000	0.33(a)
	33 2,2-Dichloropropane	77	3.443	3.440	(0.863)	2763	0.20000	0.30(a)
	34 Cyclohexane	56	3.498	3.501	(0.877)	13286	1.00000	1.2
	35 Bromochloromethane	130	3.510	3.501	(0.880)	793	0.20000	0.21(a)
	36 Chloroform	83	3.559	3.555	(0.892)	3043	0.20000	0.28(a)
	37 Carbon Tetrachloride	117	3.650	3.647	(0.915)	2595	0.20000	0.32(a)
	38 Ethyl Acetate	43	3.650	3.640	(0.915)	14630	1.00000	1.7(M)
	39 Tetrahydrofuran	72	3.674	3.665	(1.577)	3430	2.00000	3.9
	40 sec-Butyl Alcohol	45	3.686	3.677	(0.778)	1440	2.00000	5.1(QM)
	41 1,1,1-Trichloroethane	97	3.692	3.689	(0.925)	2911	0.20000	0.30(a)
	42 2-Butanone	43	3.772	3.768	(0.945)	7642	1.00000	2.0(QM)
	43 1,1-Dichloropropene	75	3.772	3.774	(0.945)	2189	0.20000	0.26(a)
	44 2,2,4-Trimethylpentane	57	3.851	3.841	(0.965)	4388	0.20000	0.31(a)
	45 Benzene	78	3.936	3.932	(0.986)	8157	0.20000	0.32(a)
	46 Propionitrile	54	3.966	3.957	(0.994)	2579	2.00000	2.6(Q)
	47 Methacrylonitrile	41	Compound Not Detected.					
*	48 Pentafluorobenzene	168	3.991	3.987	(1.000)	519538	50.0000	
	49 Tert-amyl methyl ether	73	4.015	4.012	(1.006)	6403	0.20000	0.34(aQ)
$	50 1,2-Dichloroethane d4 (S)	65	4.021	4.024	(1.008)	247606	50.0000	47.9(Q)
	51 1,2-Dichloroethane	62	4.064	4.066	(1.018)	2077	0.20000	0.28(aQ)
	52 Isobutanol	43	Compound Not Detected.					
	53 Tert-Amyl Alcohol	59	4.143	4.139	(0.874)	1406	2.00000	3.9(Q)
	54 Methylcylohexane	98	4.289	4.285	(1.075)	1496	0.20000	0.29(aQ)
	55 Trichloroethene	130	4.295	4.291	(0.994)	2044	0.20000	0.30(aQ)
*	56 1,4 Difluorobenzene	114	4.319	4.316	(1.000)	776463	50.0000	
	57 Tert-amyl ethyl ether	59	4.435	4.431	(1.027)	4797	0.20000	0.32(a)
	58 n-Butanol	56	Compound Not Detected.					
	59 Dibromomethane	174	4.544	4.547	(1.052)	1233	0.20000	0.31(a)
	60 1,2-Dichloropropane	63	4.599	4.602	(1.065)	1762	0.20000	0.30(TaQ)
	61 Ethyl Arcylate	55	4.617	4.608	(1.069)	4199	0.20000	0.43(aQ)
	62 Bromodichloromethane	83	4.635	4.638	(1.073)	2978	0.20000	0.36(TaQ)
	63 Methyl Methacrylate	69	4.727	4.723	(1.094)	2327	1.00000	2.0(TQ)
*	64 1,4 dioxane d8	96	4.739	4.735	(1.000)	17349	2000.00	
	65 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	66 3-Pentanone	57	4.848	4.845	(1.123)	2774	0.20000	0.47(TaQ)
	67 2-Chloroethyl Vinyl Ether	63	4.958	4.954	(1.148)	3099	0.50000	0.71(a)
	68 cis-1,3-Dichloropropene	75	4.988	4.991	(1.155)	2784	0.20000	0.29(aQ)
$	69 Toluene-d8 (S)	98	5.092	5.088	(0.861)	916888	50.0000	49.8
	70 Toluene	92	5.116	5.119	(0.865)	5171	0.20000	0.33(a)
	71 2-Nitropropane	43	5.323	5.319	(0.900)	15814	1.00000	2.0(Q)
	72 Tetrachloroethene	166	5.329	5.326	(0.901)	2199	0.20000	0.31(a)
	73 4-Methyl-2-Pentanone	43	5.323	5.319	(0.900)	15814	1.00000	1.9
	74 trans-1,3-Dichloropropene	75	5.347	5.344	(0.904)	2733	0.20000	0.30(aQ)
	75 4-Methyl-2-pentanol	45	5.378	5.374	(1.135)	6671	2.00000	20.5
	76 Ethyl Methacrylate	69	5.426	5.423	(0.918)	3919	0.20000	0.38(aQ)

Data File: \\192.168.10.12\Chem\10msv5.i\022614A.B\02261406.D
Report Date: 28-Feb-2014 07:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	77 1,1,2-Trichloroethane	97	5.432	5.429	(0.919)	2030	0.20000	0.35(aQ)
	78 Dibromochloromethane	129	5.524	5.526	(0.934)	2172	0.20000	0.33(a)
	79 1,3-Dichloropropane	76	5.572	5.575	(0.942)	2959	0.20000	0.31(a)
	80 1,2-Dibromoethane	107	5.651	5.648	(0.956)	2235	0.20000	0.36(TaQ)
	81 2-Hexanone	43	Compound Not Detected.					
*	82 Chlorobenzene-d5	117	5.913	5.916	(1.000)	724804	50.0000	
	83 Chlorobenzene	112	5.925	5.922	(1.002)	5116	0.20000	0.30(aQ)
	84 Ethylbenzene	91	5.931	5.928	(1.003)	11694	0.20000	0.37(a)
	85 1,1,1,2-Tetrachloroethane	131	5.955	5.952	(1.007)	1884	0.20000	0.30(aQ)
	86 M&P-Xylene	106	6.010	6.007	(1.016)	7793	0.40000	0.66(a)
	87 O-Xylene (1,2-Dimethylbenzene)	106	6.229	6.232	(1.053)	3658	0.20000	0.32(a)
	88 Styrene	104	6.260	6.256	(1.059)	5788	0.20000	0.31(a)
	89 Bromoform	173	6.284	6.281	(1.063)	1697	0.20000	0.32(TaQ)
	90 Isopropylbenzene (Cumene)	105	6.394	6.390	(1.081)	8649	0.20000	0.30(a)
$	91 4-Bromofluorobenzene (S)	95	6.546	6.542	(0.906)	358091	50.0000	49.5
	92 cis-1,4-Dichloro-2-Butene	53	6.582	6.579	(0.912)	526	0.20000	0.21(aQ)
	93 Bromobenzene	156	6.606	6.609	(0.915)	2087	0.20000	0.29(a)
	94 n-Propylbenzene	91	6.613	6.609	(0.916)	11371	0.20000	0.35(a)
	95 1,1,2,2-Tetrachloroethane	83	6.655	6.652	(0.922)	3105	0.20000	0.36(TaQ)
	96 2-Chlorotoluene	91	6.710	6.707	(0.929)	7409	0.20000	0.35(a)
	97 1,3,5-Trimethylbenzene	105	6.722	6.719	(0.931)	7298	0.20000	0.33(a)
	98 1,2,3-Trichloropropane	110	6.740	6.737	(0.933)	595	0.20000	0.23(aQ)
	99 trans-1,4-Dichloro-2-Butene	53	6.759	6.755	(0.936)	1796	0.50000	0.75(aQ)
	100 4-Chlorotoluene	91	6.807	6.804	(0.943)	6698	0.20000	0.34(a)
	101 tert-Butylbenzene	119	6.917	6.913	(0.958)	6156	0.20000	0.33(a)
	102 1,2,4-Trimethylbenzene	105	6.959	6.956	(0.964)	6970	0.20000	0.32(a)
	103 sec-Butylbenzene	105	7.026	7.029	(0.973)	8050	0.20000	0.32(a)
	104 p-Isopropyltoluene	119	7.117	7.114	(0.986)	7220	0.20000	0.33(a)
	105 1,3-Dichlorobenzene	146	7.178	7.175	(0.994)	4035	0.20000	0.32(a)
	106 1,4-Dichlorobenzene-d4	152	7.221	7.224	(1.000)	388328	50.0000	
	107 1,4-Dichlorobenzene	146	7.233	7.230	(1.002)	4416	0.20000	0.34(aQ)
	108 1,2,3 Trimethylbenzene	105	7.239	7.236	(1.814)	7459	0.20000	0.32(a)
	109 n-Butylbenzene	91	7.391	7.388	(1.024)	5961	0.20000	0.33(a)
	110 1,2-Dichlorobenzene	146	7.513	7.510	(1.040)	3614	0.20000	0.30(a)
	111 1,2-Dibromo-3-Chloropropane	157	8.054	8.051	(1.115)	2014	0.50000	0.85(a)
	112 Hexachlorobutadiene	225	8.498	8.495	(1.177)	827	0.20000	0.28(aQ)
	113 1,2,4-Trichlorobenzene	180	8.523	8.519	(1.180)	2229	0.20000	0.33(Ta)
	114 Naphthalene	128	8.760	8.757	(1.213)	7936	0.20000	0.33(a)
	115 1,2,3-Trichlorobenzene	180	8.894	8.890	(1.232)	2472	0.20000	0.38(aQ)
	116 2-Methylnaphthalene	142	9.526	9.523	(1.319)	1240	0.10000	0.11(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261406.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 02261406.D
Lab Smp Id: IC 0.2 10098-49
Analysis Type: VOA
Quant Type: ISTD
Operator: SH2
Method File: \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Misc Info:

Calibration Date: 26-FEB-2014
Calibration Time: 16:52

Level: LOW
Sample Type: WATER

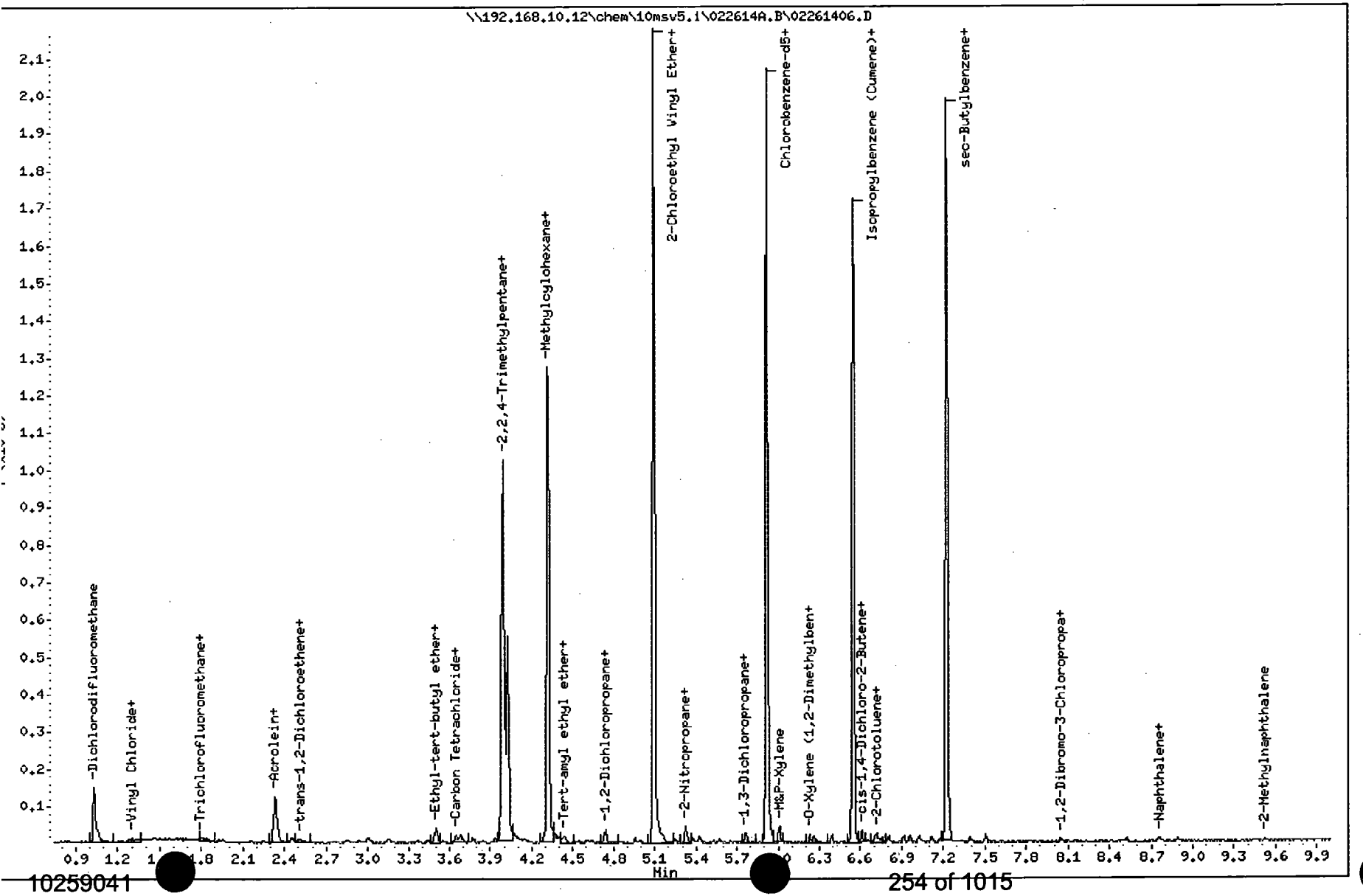
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	132549	66275	265098	118815	-10.36
48 Pentafluorobenzen	514078	257039	1028156	519538	1.06
56 1,4 Difluorobenze	796453	398227	1592906	776463	-2.51
64 1,4 dioxane d8	17142	8571	34284	17349	1.21
82 Chlorobenzene-d5	743514	371757	1487028	724804	-2.52
106 1,4-Dichlorobenze	400705	200353	801410	388328	-3.09

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.33	0.20
48 Pentafluorobenzen	3.99	3.49	4.49	3.99	-0.03
56 1,4 Difluorobenze	4.31	3.81	4.81	4.32	0.11
64 1,4 dioxane d8	4.74	4.24	5.24	4.74	-0.03
82 Chlorobenzene-d5	5.91	5.41	6.41	5.91	-0.02
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.22	-0.02

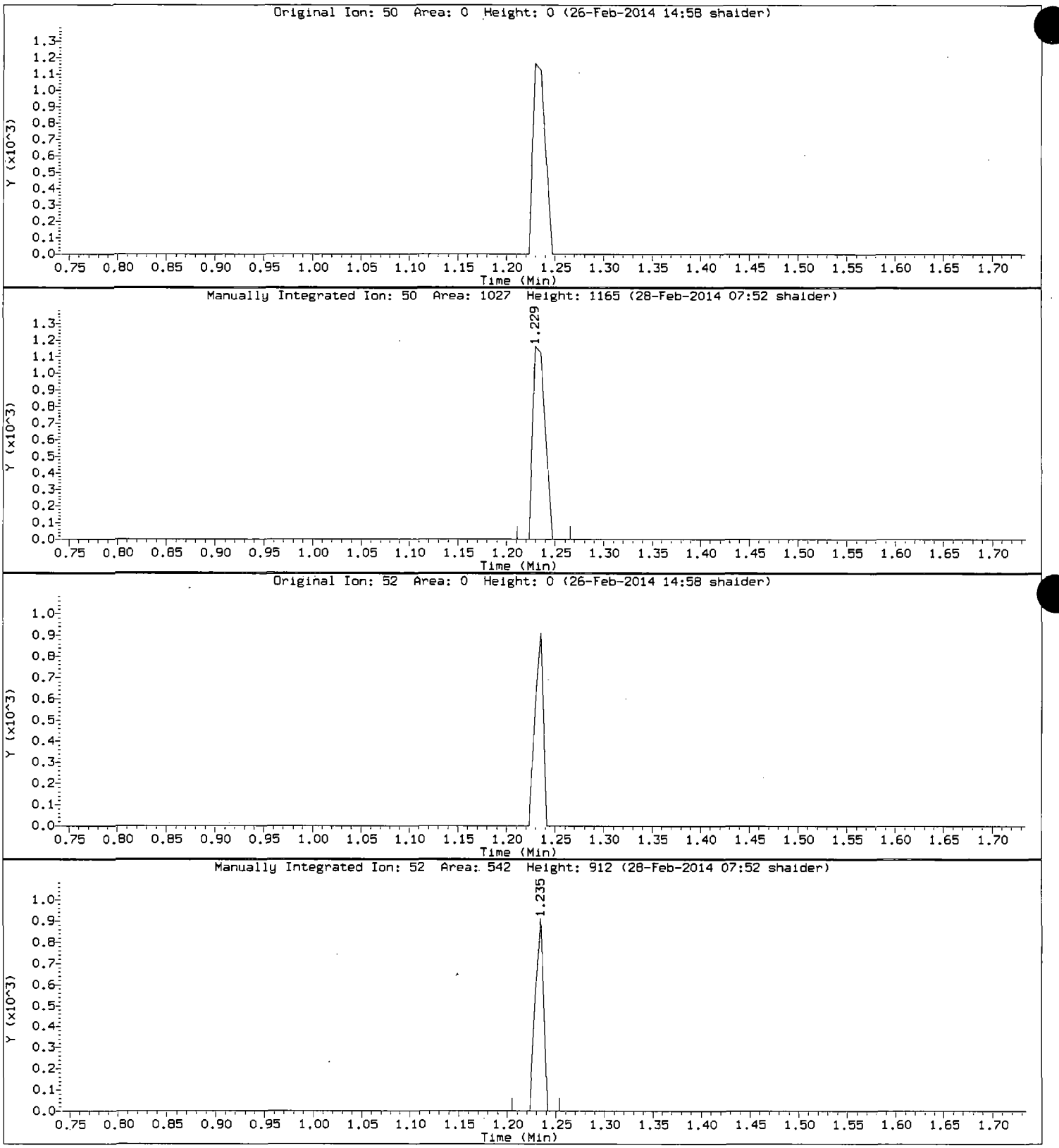
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261406.D
Date : 26-FEB-2014 12:09
Client ID:
Instrument: 10msv5.i
Sample Info: IC 0.2 10098-49,1,1
Purge Volume: 10.0
Operator: SH2
Column phase: Rtx-VMS
Column diameter: 0.18



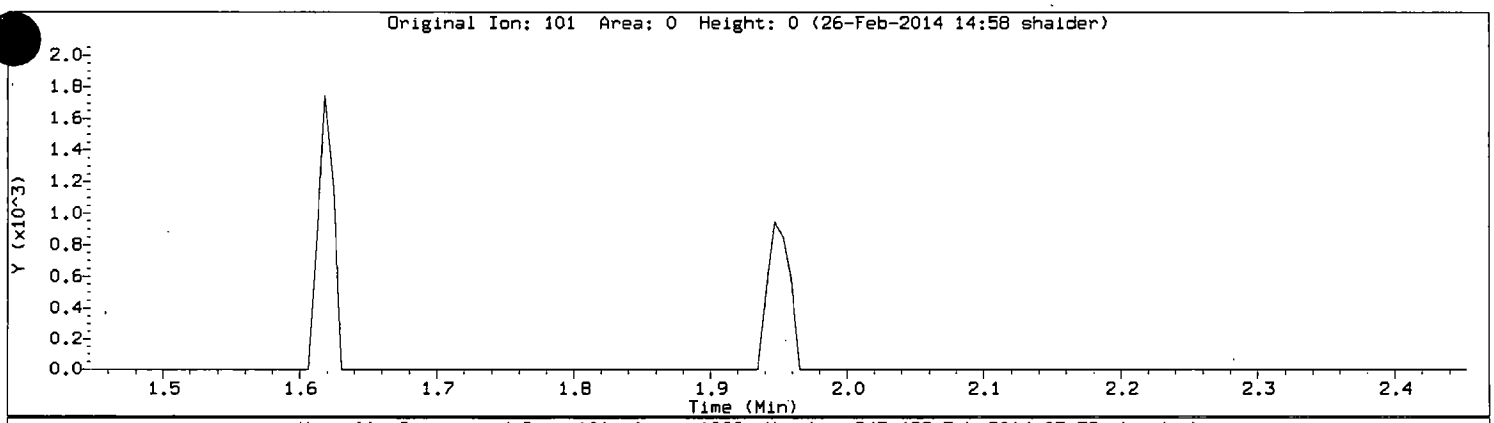
Injection Date: 26-FEB-2014 12:09
Instrument: 10msv5.i
Lab Sample ID: IC 0.2 10098-49

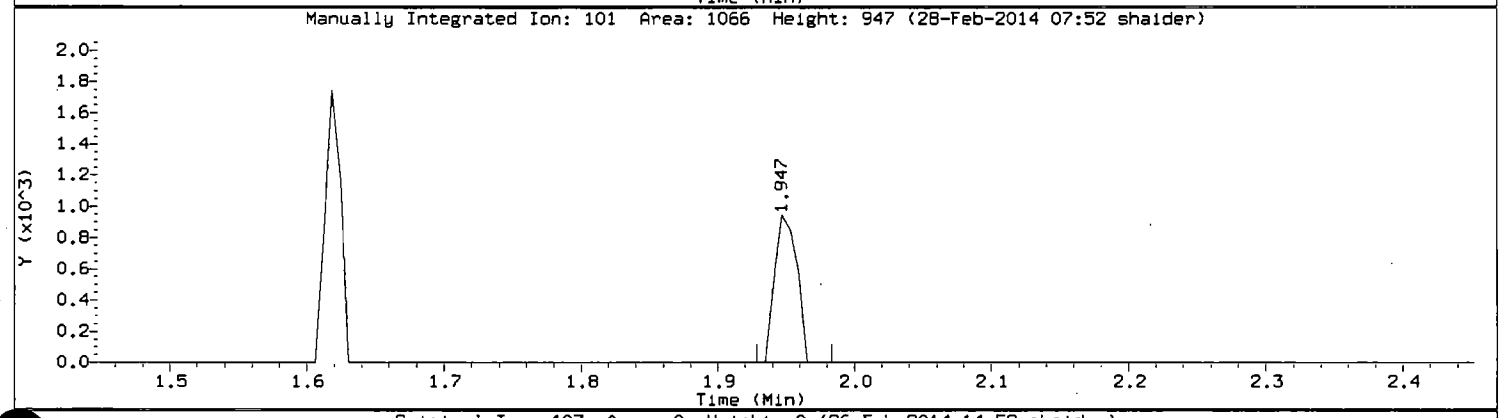
Compound: Chloromethane
CAS Number: 74-87-3

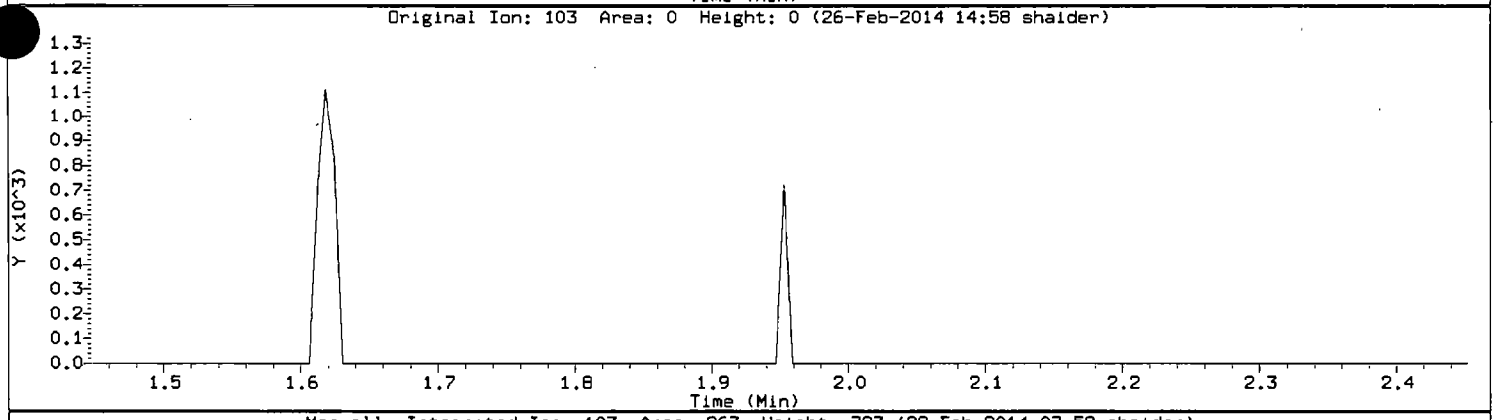


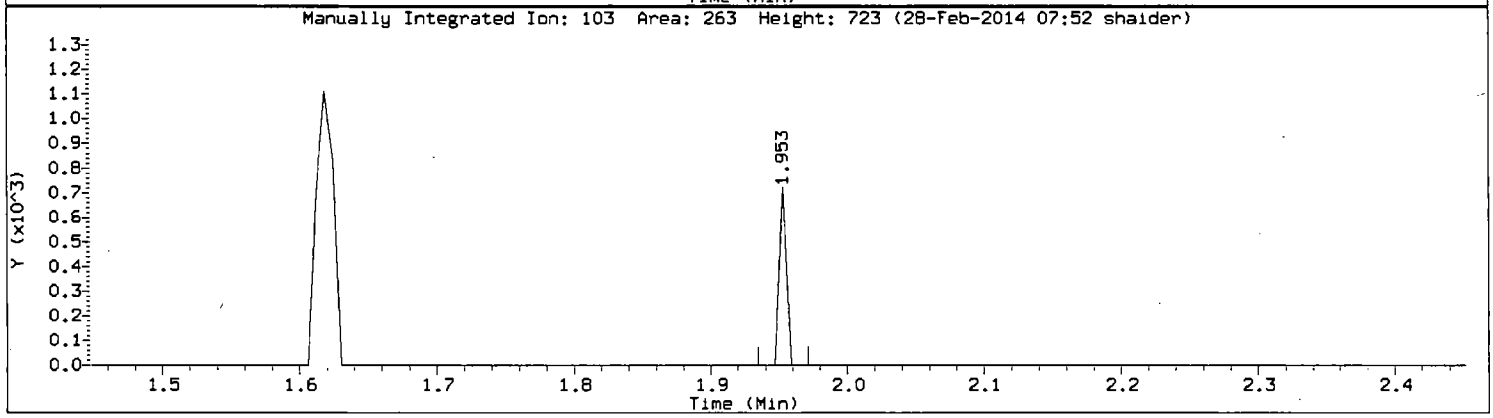
Injection Date: 26-FEB-2014 12:09
Instrument: 10msv5.i
Lab Sample ID: IC 0.2 10098-49

Compound: Trichlorotrifluoroethane
CAS Number: 76-13-1

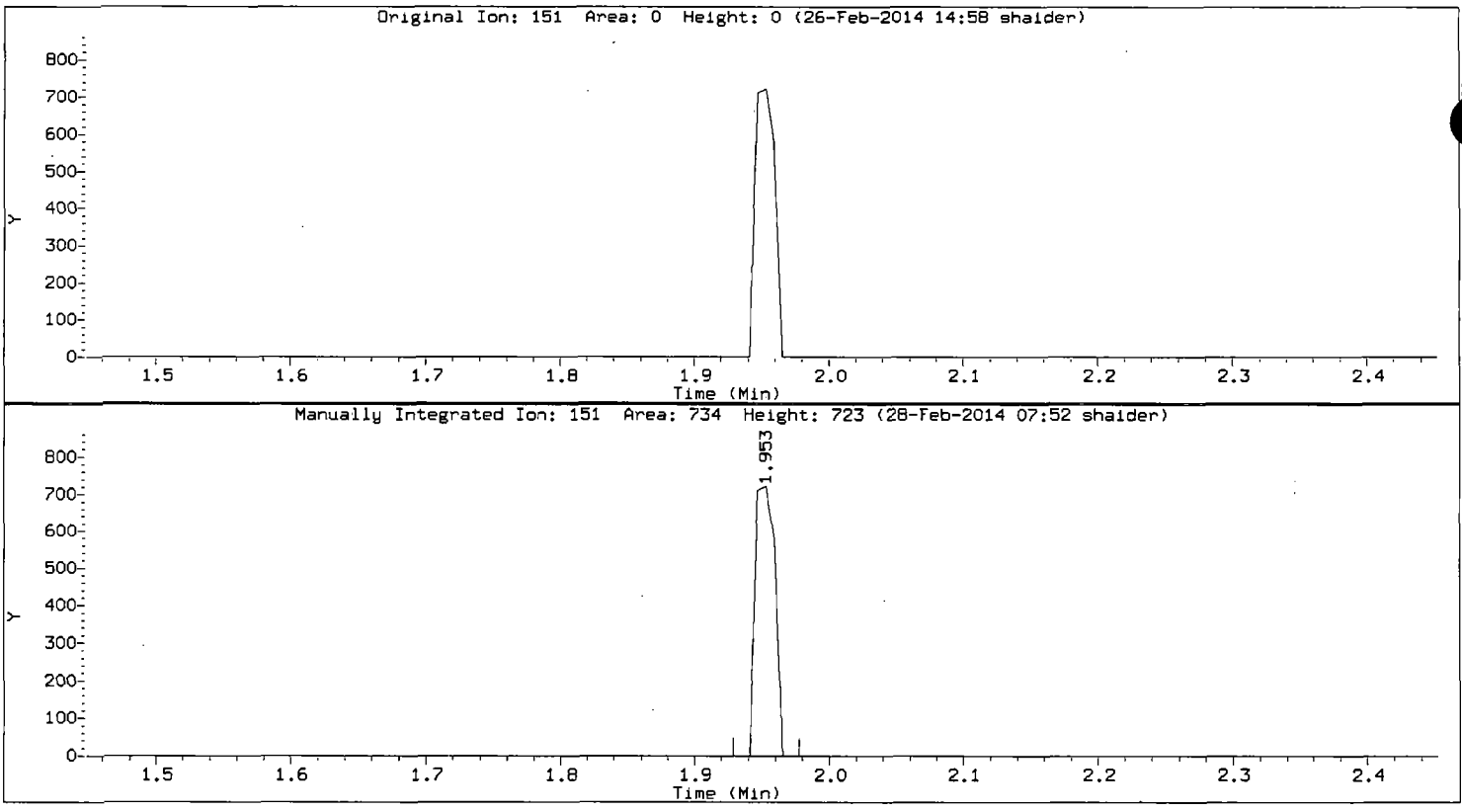






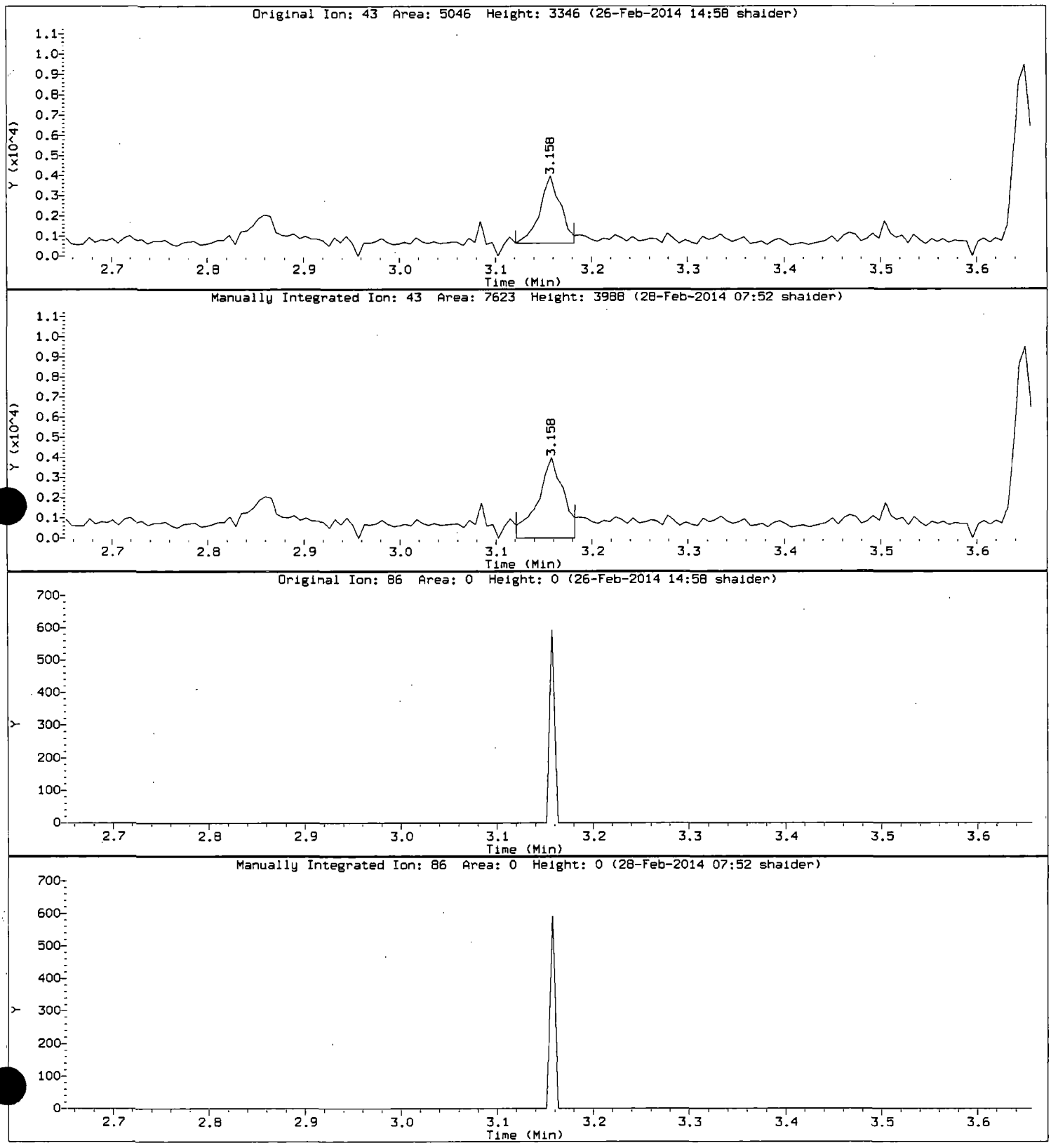


Injection Date: 26-FEB-2014 12:09
Instrument: 10msv5.i
Lab Sample ID: IC 0.2 10098-49



Data File: \\192.168.10.12\chem\10msv5.i\022614A.B/02261406.D
Injection Date: 26-FEB-2014 12:09
Instrument: 10msv5.i
Lab Sample ID: IC 0.2 10098-49

Compound: Vinyl Acetate
CAS Number: 108-05-4



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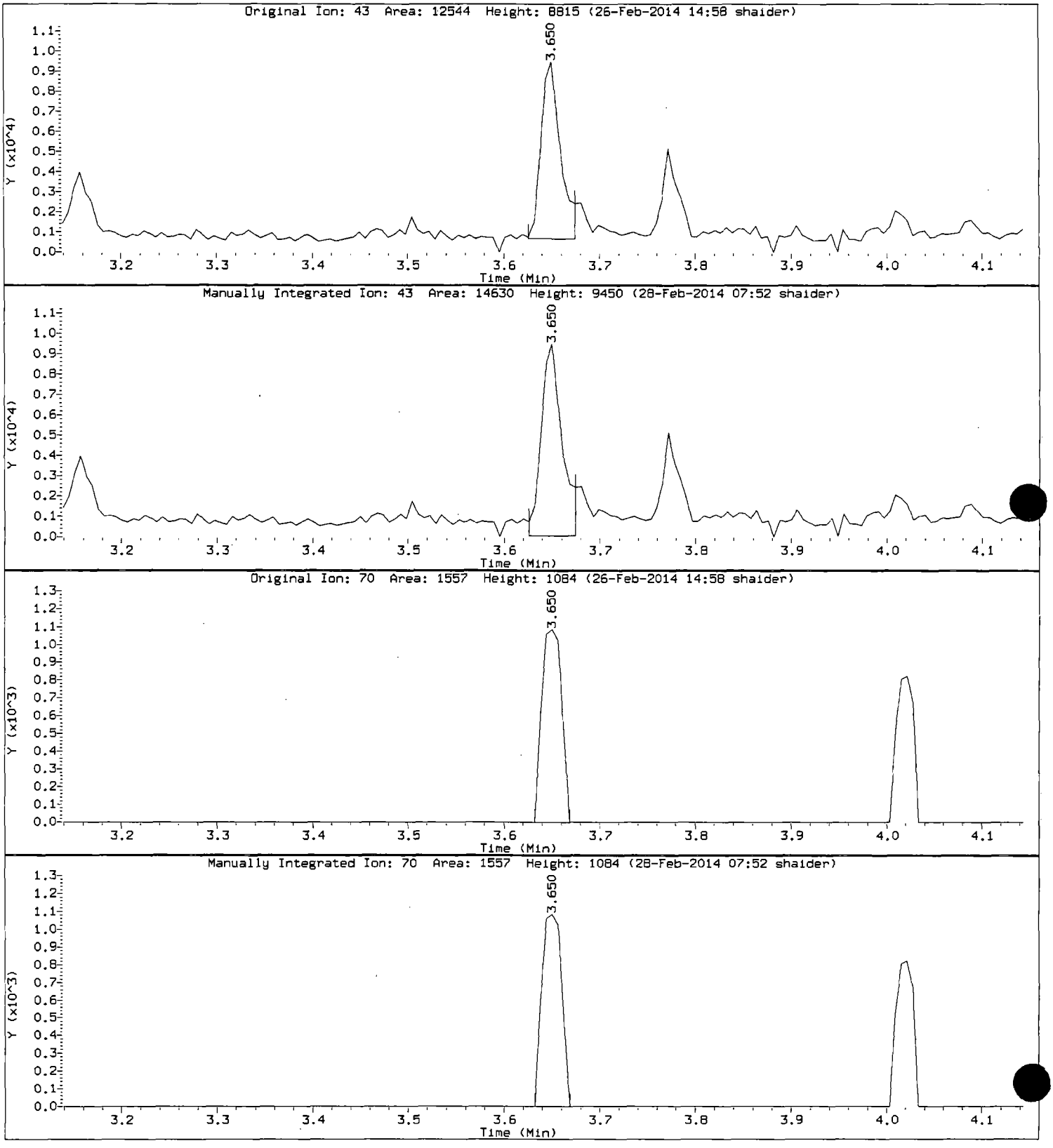
Injection Date: 26-FEB-2014 12:09
Instrument: 10msv5.i
Lab Sample ID: IC 0.2 10098-49

Compound: Ethyl Acetate
CAS Number: 141-78-6



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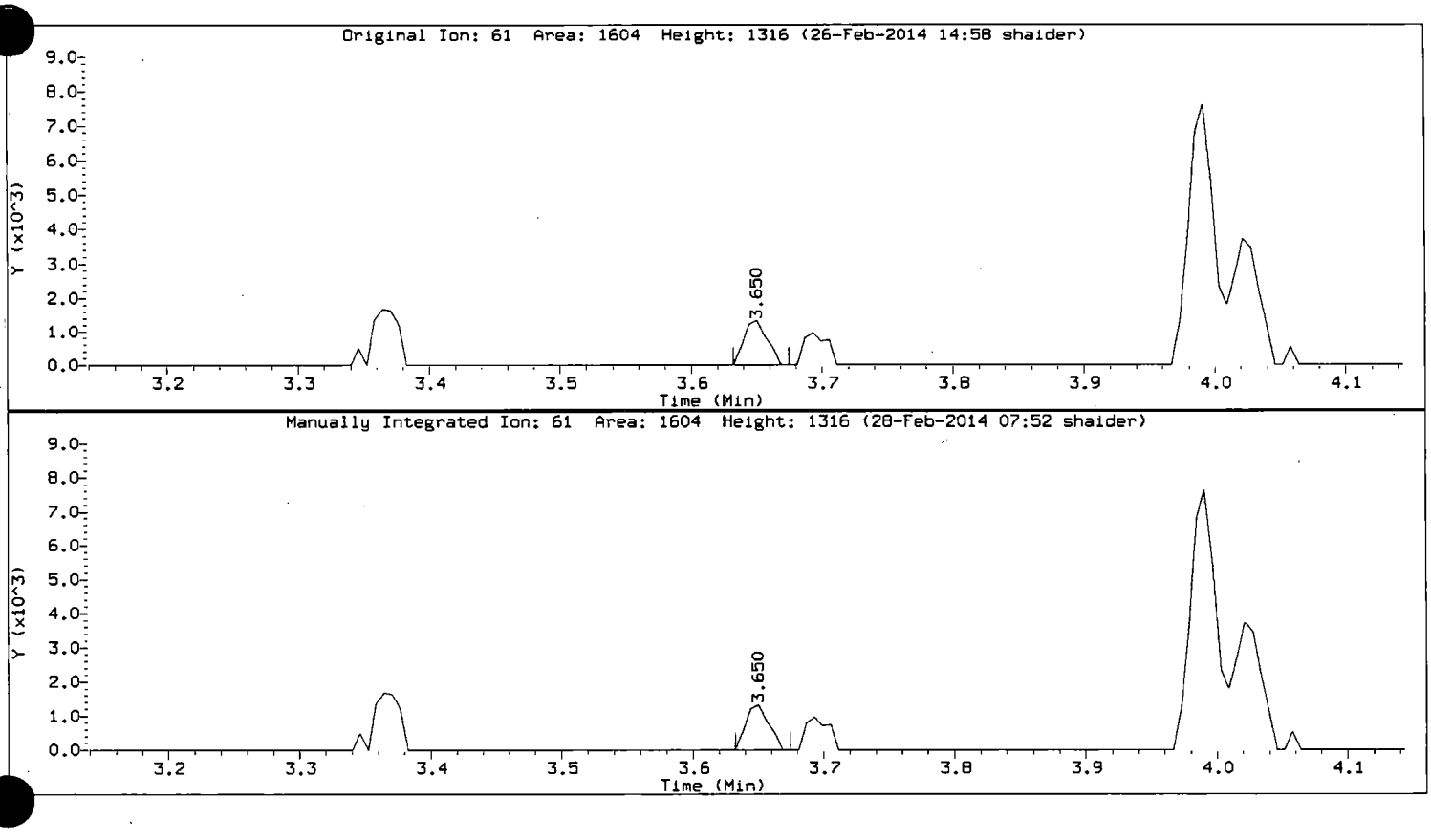
Injection Date: 26-FEB-2014 12:09
Instrument: 10msv5.i
Lab Sample ID: IC 0.2 10098-49



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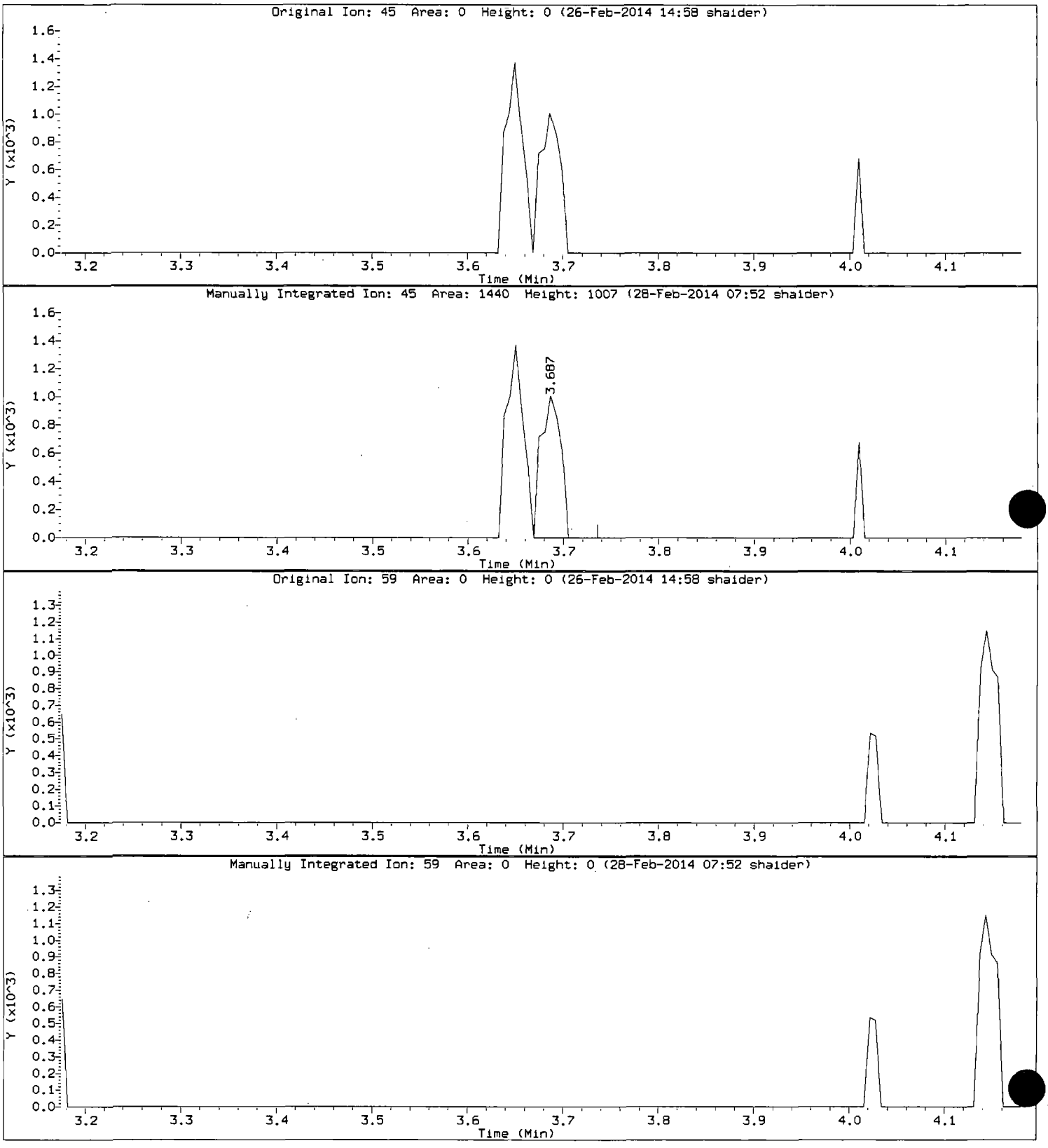
Injection Date: 26-FEB-2014 12:09
Instrument: 10msv5.i
Lab Sample ID: IC 0.2 10098-49

Compound: sec-Butyl Alcohol
CAS Number: 78-92-2



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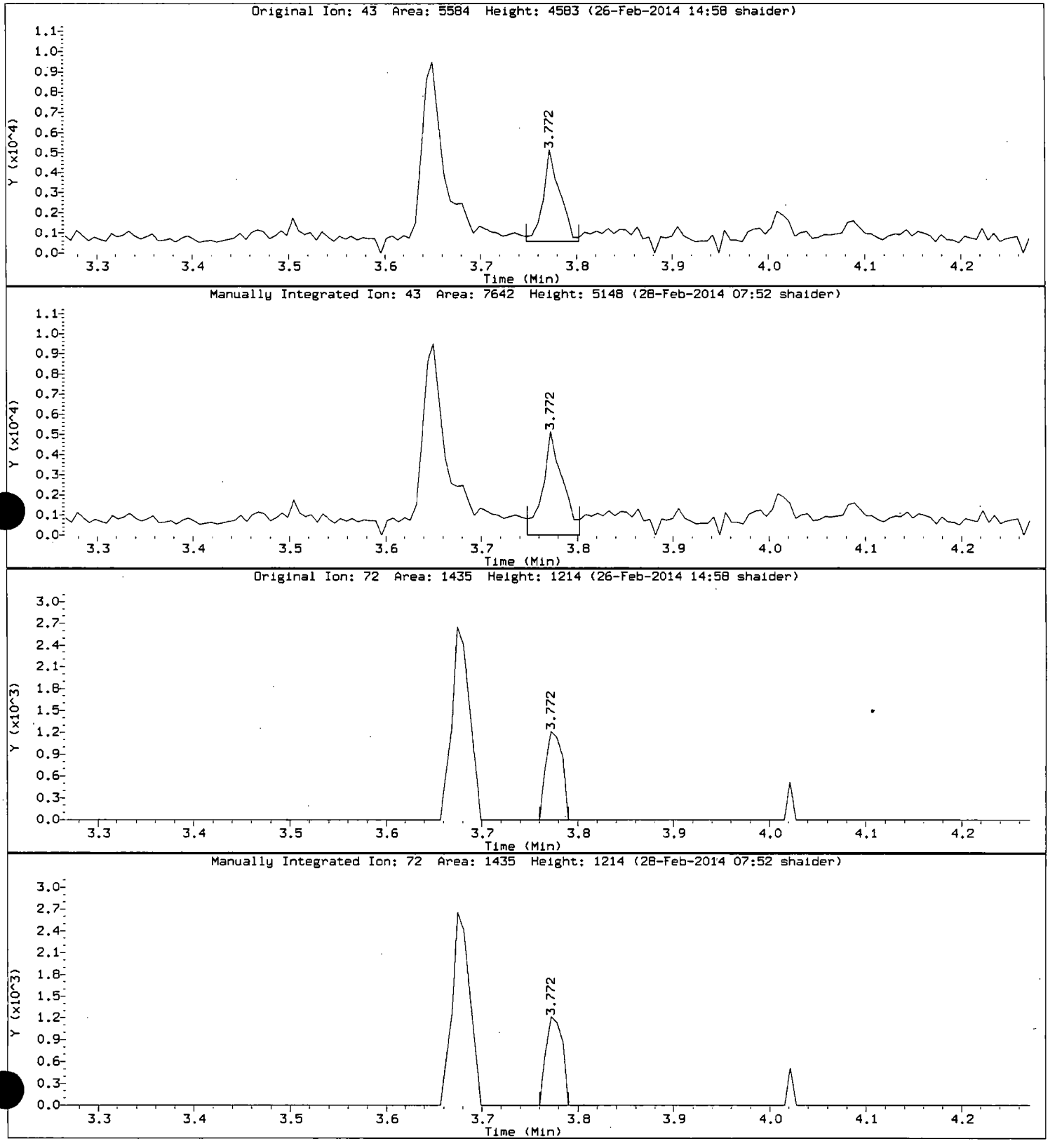
Injection Date: 26-FEB-2014 12:09
Instrument: 10msv5.i
Lab Sample ID: IC 0.2 10098-49

Compound: 2-Butanone
CAS Number: 78-93-3



Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261407.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

8260B/624/524.2 VOLATILE ISTD AND RATIO REPORT (UNIX)

Data file : \\192.168.10.12\chem\10msv5.i\022614A.B\02261407.D
Lab Smp Id: IC 0.4 10098-49
Inj Date : 26-FEB-2014 12:24
Operator : SH2 Inst ID: 10msv5.i
Smp Info : IC 0.4 10098-49,1,1
Misc Info :
Comment : 8260B/624/524.2 VOLATILE CAPILLARY METHOD
Method : \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Meth Date : 28-Feb-2014 07:52 shaider Quant Type: ISTD
Cal Date : 26-FEB-2014 14:08 Cal File: 02261414.D
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: VIRTUALXP-99096

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	10.000	ng unit correction factor
Vo	10.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	1.120	1.116	(0.280)	3094	0.40000	0.41(aQ)
2	Chloromethane	50	1.230	1.231	(0.308)	3251	0.40000	0.42(aM)
3	Vinyl Chloride	62	1.278	1.274	(0.320)	2679	0.40000	0.40(aQ)
4	Bromomethane	94	1.467	1.463	(0.367)	480	0.40000	2.2(Q)
5	Chloroethane	64	1.540	1.536	(0.385)	1815	0.40000	0.41(a)
6	Trichlorofluoromethane	101	1.619	1.615	(0.405)	3506	0.40000	0.38(a)
7	Dichlorofluoromethane	67	1.649	1.645	(0.413)	7524	0.40000	0.64(a)
8	Diethyl ether (Ethyl Ether)	59	1.801	1.797	(0.451)	1873	0.40000	0.45(a)
9	Ethanol	45	Compound Not Detected.					
10	1,1-Dichloroethene	96	1.929	1.925	(0.483)	2306	0.40000	0.44(aQ)
11	Trichlorotrifluoroethane	101	1.960	1.949	(0.490)	1521	0.40000	1.2
12	Carbon Disulfide	76	1.954	1.955	(0.489)	6210	0.40000	0.38(a)
13	Iodomethane	142	Compound Not Detected.					
14	Acrolein	56	2.160	2.150	(0.540)	6048	4.00000	5.0(Q)
15	Allyl Chloride	41	Compound Not Detected.					
16	Isopropanol	45	2.276	2.260	(0.480)	1047	4.00000	4.0(Q)
17	Methylene Chloride	84	2.331	2.326	(0.583)	3137	0.40000	0.56(a)
* 18	Acetone d6	46	2.331	2.326	(1.000)	129847	100.000	
19	Acetone	58	2.367	2.363	(1.016)	1282	2.00000	2.5(Q)
20	trans-1,2-Dichloroethene	96	2.458	2.448	(0.615)	2317	0.40000	0.40(a)
21	Methyl Acetate	74	2.465	2.454	(0.617)	1800	2.00000	1.6(Q)
22	Hexane	86	2.519	2.503	(1.081)	315	1.00000	0.28(aQ)

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261407.D
Report Date: 28-Feb-2014 07:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 Methyl-tert-butyl Ether	73	2.544	2.533	(0.636)	7459	0.40000	0.44(aQ)
	24 tert-Butyl Alcohol	59	2.617	2.606	(0.552)	2636	4.00000	3.8
	25 Isopropyl Ether	45	2.860	2.850	(0.715)	8094	0.40000	0.43(aQ)
	26 Acetonitrile	41	Compound Not Detected.					
	27 Chloroprene	53	2.945	2.935	(0.737)	3639	0.40000	0.41(TaQ)
	28 1,1-Dichloroethane	63	2.963	2.953	(0.741)	3697	0.40000	0.37(TaQ)
	29 Acrylonitrile	53	3.006	2.996	(0.752)	9326	4.00000	3.8
	30 Ethyl-tert-butyl ether	59	3.158	3.142	(0.790)	7159	0.40000	0.41(a)
	31 Vinyl Acetate	43	3.158	3.154	(0.790)	9287	0.40000	0.60(TaQM)
	32 cis-1,2-Dichloroethene	96	3.371	3.361	(0.843)	2491	0.40000	0.39(a)
	33 2,2-Dichloropropane	77	3.444	3.440	(0.862)	3406	0.40000	0.38(a)
	34 Cyclohexane	56	3.505	3.501	(0.877)	18655	2.00000	1.8
	35 Bromochloromethane	130	3.511	3.501	(0.878)	1378	0.40000	0.37(a)
	36 Chloroform	83	3.566	3.555	(0.892)	4168	0.40000	0.40(a)
	37 Carbon Tetrachloride	117	3.651	3.647	(0.913)	2875	0.40000	0.37(a)
	38 Ethyl Acetate	43	3.651	3.640	(0.913)	18131	2.00000	2.1(Q)
	39 Tetrahydrofuran	72	3.681	3.665	(1.579)	4184	4.00000	4.3
	40 sec-Butyl Alcohol	45	3.687	3.677	(0.778)	2548	4.00000	4.5(QM)
	41 1,1,1-Trichloroethane	97	3.706	3.689	(0.927)	3727	0.40000	0.39(a)
	42 2-Butanone	43	3.779	3.768	(0.945)	8728	2.00000	2.4(M)
	43 1,1-Dichloropropene	75	3.779	3.774	(0.945)	3121	0.40000	0.38(a)
	44 2,2,4-Trimethylpentane	57	3.852	3.841	(0.963)	5821	0.40000	0.43(a)
	45 Benzene	78	3.943	3.932	(0.986)	9680	0.40000	0.40(a)
	46 Propionitrile	54	3.967	3.957	(0.992)	3570	4.00000	3.7(Q)
	47 Methacrylonitrile	41	Compound Not Detected.					
	48 Pentafluorobenzene	168	3.998	3.987	(1.000)	503669	50.0000	
	49 Tert-amyl methyl ether	73	4.022	4.012	(1.006)	7777	0.40000	0.43(aQ)
$	50 1,2-Dichloroethane d4 (S)	65	4.028	4.024	(1.008)	245184	50.0000	49.0(Q)
	51 1,2-Dichloroethane	62	4.064	4.066	(1.017)	2828	0.40000	0.40(aQ)
	52 Isobutanol	43	Compound Not Detected.					
	53 Tert-Amyl Alcohol	59	4.150	4.139	(0.876)	3019	4.00000	4.2(Q)
	54 Methylcylohexane	98	4.290	4.285	(1.073)	2076	0.40000	0.42(a)
	55 Trichloroethene	130	4.302	4.291	(0.996)	2493	0.40000	0.37(aQ)
*	56 1,4 Difluorobenzene	114	4.320	4.316	(1.000)	760649	50.0000	
	57 Tert-amyl ethyl ether	59	4.442	4.431	(1.028)	5248	0.40000	0.36(a)
	58 n-Butanol	56	4.509	4.498	(0.951)	295	4.00000	2.0(Q)
	59 Dibromomethane	174	4.545	4.547	(1.052)	1468	0.40000	0.38(a)
	60 1,2-Dichloropropane	63	4.600	4.602	(1.065)	2130	0.40000	0.36(TaQ)
	61 Ethyl Arcylate	55	4.618	4.608	(1.069)	5202	0.40000	0.54(a)
	62 Bromodichloromethane	83	4.636	4.638	(1.073)	3485	0.40000	0.43(TaQ)
	63 Methyl Methacrylate	69	4.734	4.723	(1.096)	2562	2.00000	2.3(Q)
*	64 1,4 dioxane d8	96	4.740	4.735	(1.000)	34658	2000.00	
	65 1,4-Dioxane (P-Dioxane)	88	Compound Not Detected.					
	66 3-Pentanone	57	4.849	4.845	(1.122)	3447	0.40000	0.60(TaQ)
	67 2-Chloroethyl Vinyl Ether	63	4.959	4.954	(1.148)	3920	1.00000	0.92(a)
	68 cis-1,3-Dichloropropene	75	4.995	4.991	(1.156)	3373	0.40000	0.36(aQ)
$	69 Toluene-d8 (S)	98	5.093	5.088	(0.861)	901951	50.0000	49.7
	70 Toluene	92	5.123	5.119	(0.866)	6132	0.40000	0.40(a)
	71 2-Nitropropane	43	5.324	5.319	(0.900)	18756	2.00000	2.4(M)
	72 Tetrachloroethene	166	5.330	5.326	(0.901)	2338	0.40000	0.33(a)
	73 4-Methyl-2-Pentanone	43	5.324	5.319	(0.900)	18975	2.00000	2.4(M)
	74 trans-1,3-Dichloropropene	75	5.348	5.344	(0.904)	3259	0.40000	0.36(aQ)
	75 4-Methyl-2-pentanol	45	5.379	5.374	(1.135)	10609	4.00000	19.4(TQ)
	76 Ethyl Methacrylate	69	5.427	5.423	(0.918)	4333	0.40000	0.43(aQ)

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261407.D
Report Date: 28-Feb-2014 07:53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
77	1,1,2-Trichloroethane	97	5.433	5.429	(0.919)	2424	0.40000	0.43(a)
78	Dibromochloromethane	129	5.531	5.526	(0.935)	2733	0.40000	0.42(a)
79	1,3-Dichloropropane	76	5.579	5.575	(0.943)	3811	0.40000	0.41(a)
80	1,2-Dibromoethane	107	5.652	5.648	(0.956)	2388	0.40000	0.39(TaQ)
81	2-Hexanone	43	5.762	5.757	(0.974)	13499	2.00000	2.2
* 82	Chlorobenzene-d5	117	5.914	5.916	(1.000)	713561	50.0000	
83	Chlorobenzene	112	5.926	5.922	(1.002)	7022	0.40000	0.42(aQ)
84	Ethylbenzene	91	5.932	5.928	(1.003)	14188	0.40000	0.46(a)
85	1,1,1,2-Tetrachloroethane	131	5.956	5.952	(1.007)	2362	0.40000	0.38(aQ)
86	M&P-Xylene	106	6.005	6.007	(1.015)	8887	0.80000	0.77(a)
87	O-Xylene (1,2-Dimethylbenzene)	106	6.230	6.232	(1.053)	4641	0.40000	0.41(a)
88	Styrene	104	6.261	6.256	(1.059)	6999	0.40000	0.38(a)
89	Bromoform	173	6.279	6.281	(1.062)	1930	0.40000	0.38(TaQ)
90	Isopropylbenzene (Cumene)	105	6.394	6.390	(1.081)	11543	0.40000	0.41(a)
$ 91	4-Bromofluorobenzene (S)	95	6.547	6.542	(0.907)	352604	50.0000	49.4
92	cis-1,4-Dichloro-2-Butene	53	6.583	6.579	(0.912)	851	0.40000	0.34(aQM)
93	Bromobenzene	156	6.613	6.609	(0.916)	2779	0.40000	0.39(a)
94	n-Propylbenzene	91	6.613	6.609	(0.916)	13189	0.40000	0.41(a)
95	1,1,2,2-Tetrachloroethane	83	6.656	6.652	(0.922)	3621	0.40000	0.43(Ta)
96	2-Chlorotoluene	91	6.705	6.707	(0.928)	8795	0.40000	0.42(a)
97	1,3,5-Trimethylbenzene	105	6.723	6.719	(0.931)	9055	0.40000	0.41(a)
98	1,2,3-Trichloropropane	110	6.735	6.737	(0.933)	817	0.40000	0.33(aQM)
99	trans-1,4-Dichloro-2-Butene	53	6.753	6.755	(0.935)	1895	1.00000	0.80(a)
100	4-Chlorotoluene	91	6.808	6.804	(0.943)	7859	0.40000	0.40(a)
101	tert-Butylbenzene	119	6.918	6.913	(0.958)	7452	0.40000	0.40(a)
102	1,2,4-Trimethylbenzene	105	6.960	6.956	(0.964)	8403	0.40000	0.38(a)
103	sec-Butylbenzene	105	7.027	7.029	(0.973)	10524	0.40000	0.42(a)
104	p-Isopropyltoluene	119	7.112	7.114	(0.985)	9215	0.40000	0.43(a)
105	1,3-Dichlorobenzene	146	7.173	7.175	(0.993)	4876	0.40000	0.40(a)
* 106	1,4-Dichlorobenzene-d4	152	7.222	7.224	(1.000)	383415	50.0000	
107	1,4-Dichlorobenzene	146	7.228	7.230	(1.001)	5483	0.40000	0.43(aQ)
108	1,2,3 Trimethylbenzene	105	7.240	7.236	(1.811)	8941	0.40000	0.40(a)
109	n-Butylbenzene	91	7.392	7.388	(1.024)	7681	0.40000	0.43(a)
110	1,2-Dichlorobenzene	146	7.508	7.510	(1.040)	4680	0.40000	0.40(a)
111	1,2-Dibromo-3-Chloropropane	157	8.055	8.051	(1.115)	2504	1.00000	1.1
112	Hexachlorobutadiene	225	8.499	8.495	(1.177)	1079	0.40000	0.37(TaQ)
113	1,2,4-Trichlorobenzene	180	8.524	8.519	(1.180)	2170	0.40000	0.33(a)
114	Naphthalene	128	8.755	8.757	(1.212)	9807	0.40000	0.41(a)
115	1,2,3-Trichlorobenzene	180	8.889	8.890	(1.231)	2552	0.40000	0.40(aQ)
116	2-Methylnaphthalene	142	9.527	9.523	(1.319)	2513	0.20000	0.22(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261407.D
Report Date: 28-Feb-2014 07:53

Pace Analytical Services, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: 10msv5.i
Lab File ID: 02261407.D
Lab Smp Id: IC 0.4 10098-49
Analysis Type: VOA
Quant Type: ISTD
Operator: SH2
Method File: \\192.168.10.12\chem\10msv5.i\022614A.B\v514-022614.m
Misc Info:

Calibration Date: 26-FEB-2014
Calibration Time: 16:52
Level: LOW
Sample Type: WATER

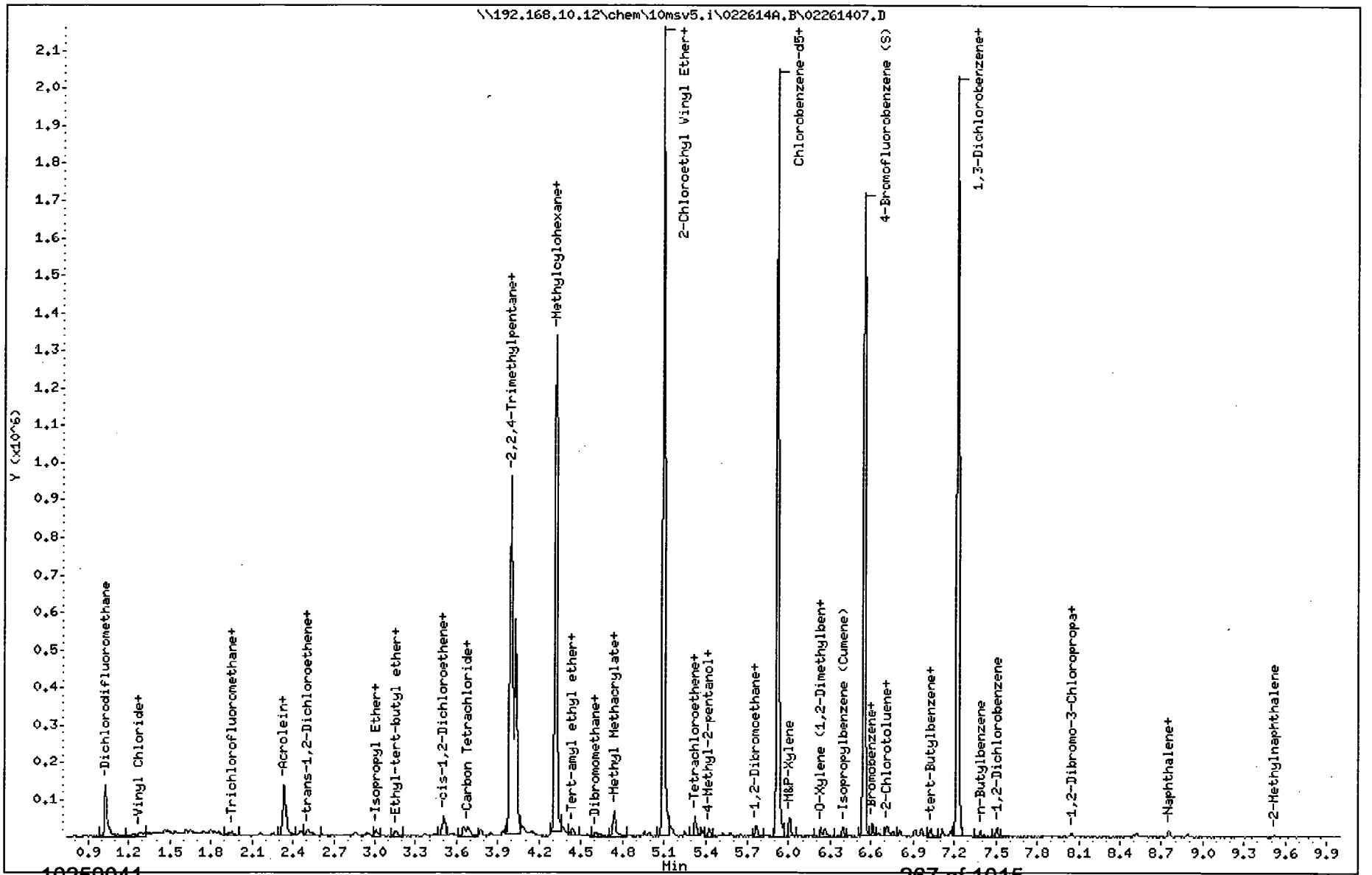
Test Mode:
Use Last Continuing Calibrator.
If Continuing Cal. use Initial Cal. Level 6

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF	
18 Acetone d6	132549	66275	265098	129847	-2.04	
48 Pentafluorobenzen	514078	257039	1028156	503669	-2.02	
56 1,4 Difluorobenze	796453	398227	1592906	760649	-4.50	
64 1,4 dioxane d8	17142	8571	34284	34658	102.18	<-
82 Chlorobenzene-d5	743514	371757	1487028	713561	-4.03	
106 1,4-Dichlorobenze	400705	200353	801410	383415	-4.31	

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
18 Acetone d6	2.33	1.83	2.83	2.33	0.25
48 Pentafluorobenzen	3.99	3.49	4.49	4.00	0.14
56 1,4 Difluorobenze	4.31	3.81	4.81	4.32	0.13
64 1,4 dioxane d8	4.74	4.24	5.24	4.74	-0.01
82 Chlorobenzene-d5	5.91	5.41	6.41	5.91	-0.01
106 1,4-Dichlorobenze	7.22	6.72	7.72	7.22	-0.01

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: \\192.168.10.12\chem\10msv5.i\022614A.B\02261407.D
Date : 26-FEB-2014 12:24
Client ID:
Instrument: 10msv5.i
Sample Info: IC 0.4 10098-49,1,1
Purge Volume: 10.0
Operator: SH2
Column phase: Rtx-VMS
Column diameter: 0.18



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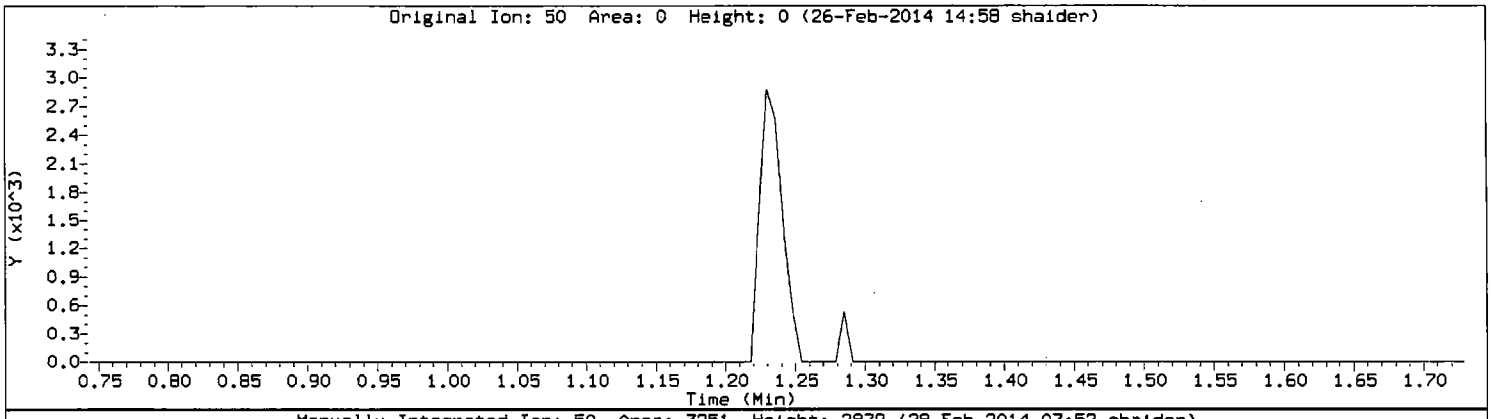
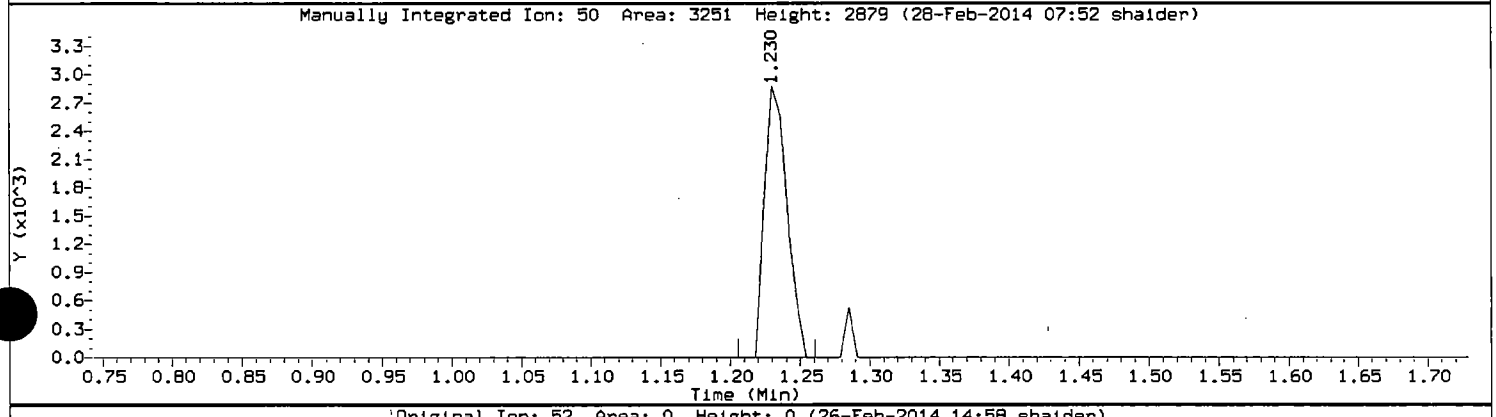
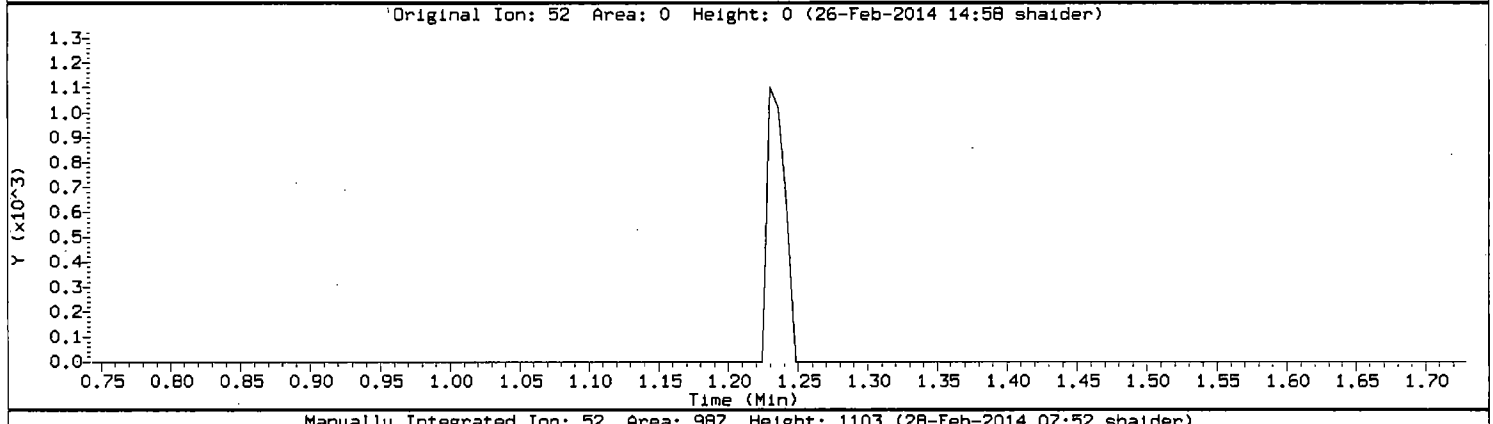
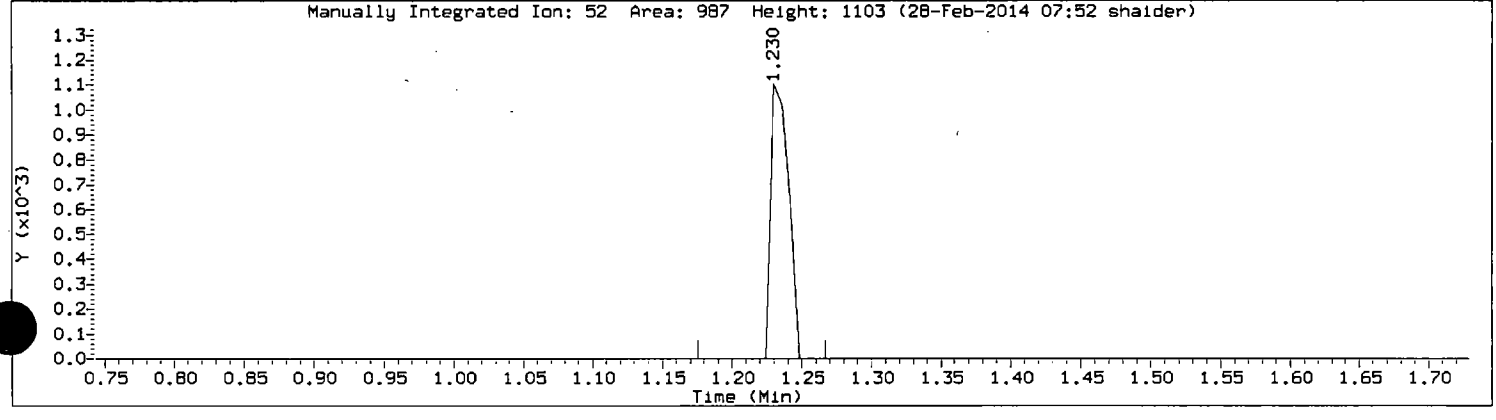
Injection Date: 26-FEB-2014 12:24
Instrument: 10msv5.i
Lab Sample ID: IC 0.4 10098-49

Compound: Chloromethane
CAS Number: 74-87-3









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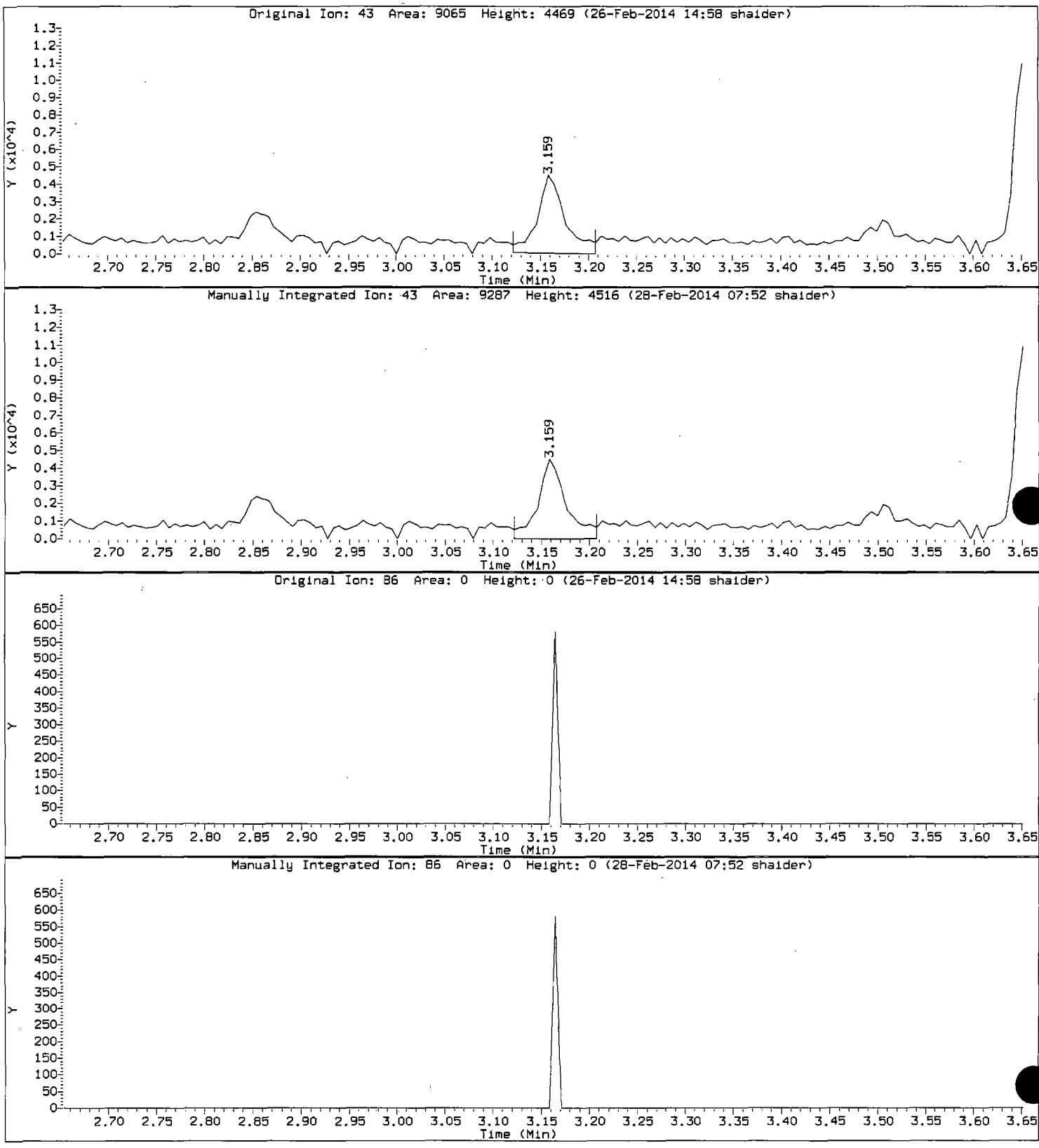
Injection Date: 26-FEB-2014 12:24
Instrument: 10msv5.i
Lab Sample ID: IC 0.4 10098-49

Compound: Vinyl Acetate
CAS Number: 108-05-4



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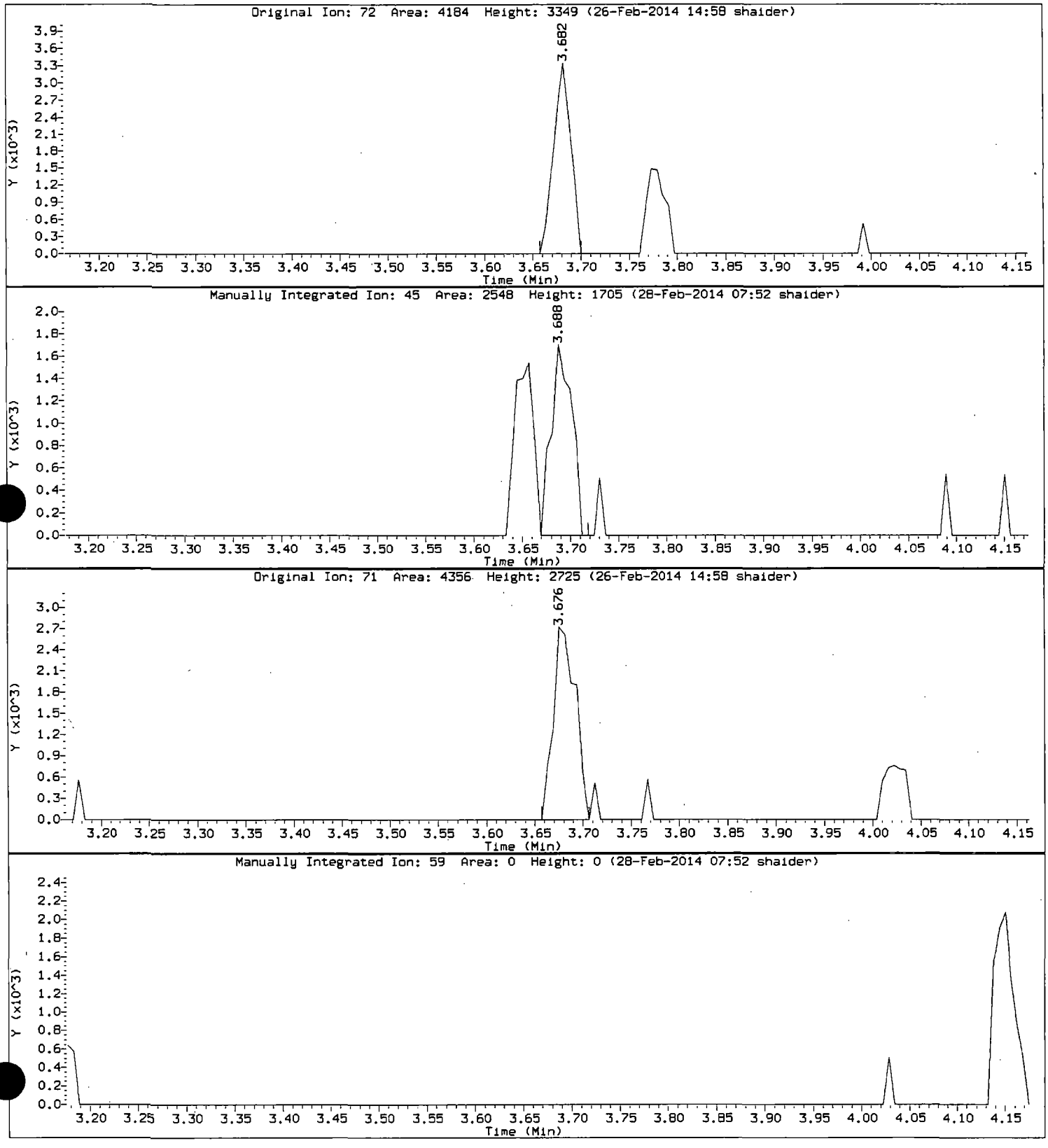
Injection Date: 26-FEB-2014 12:24
Instrument: 10msv5.i
Lab Sample ID: IC 0.4 10098-49

Compound: sec-Butyl Alcohol
CAS Number: 78-92-2



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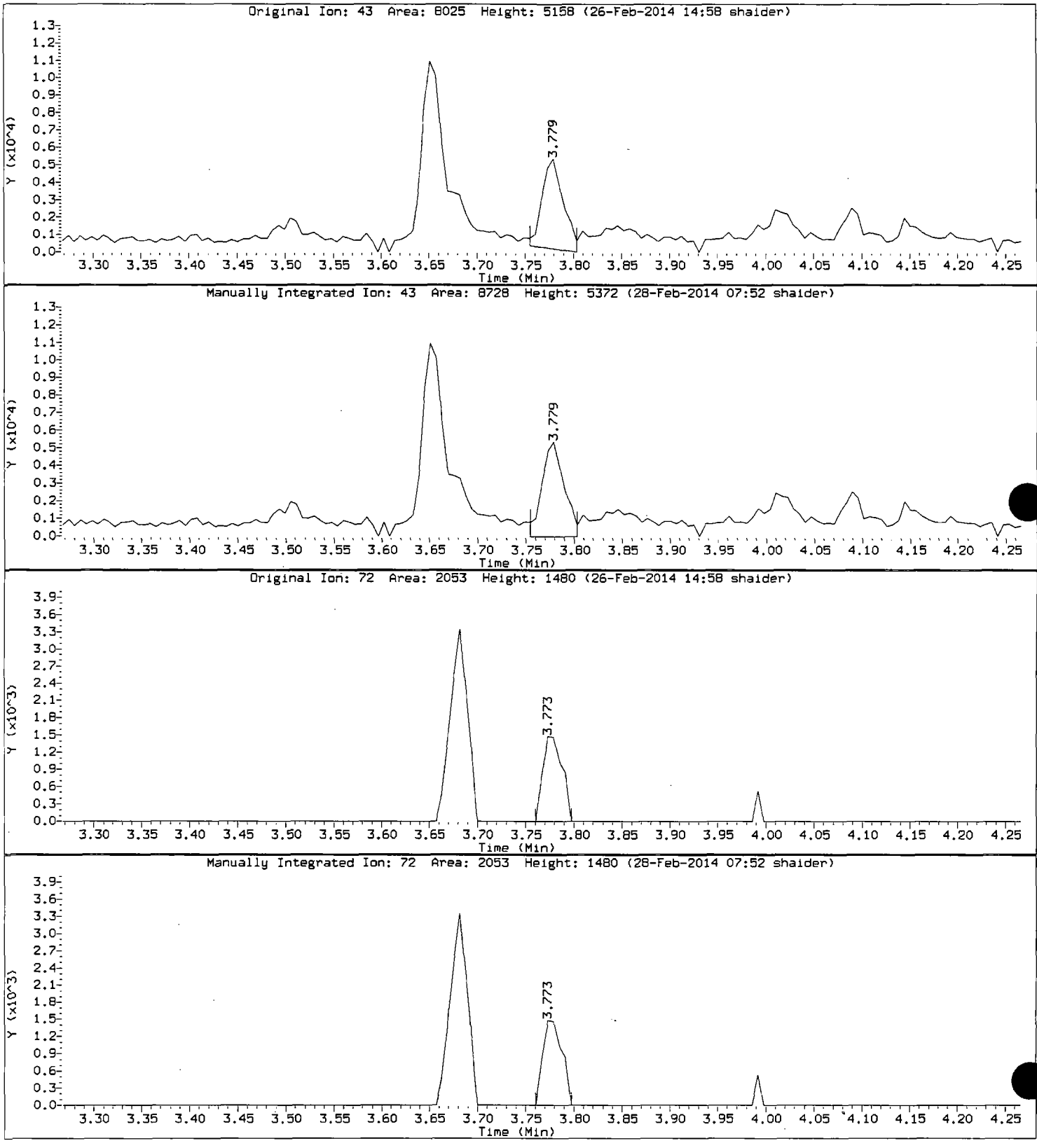
Injection Date: 26-FEB-2014 12:24
Instrument: 10msv5.i
Lab Sample ID: IC 0.4 10098-49

Compound: 2-Butanone
CAS Number: 78-93-3



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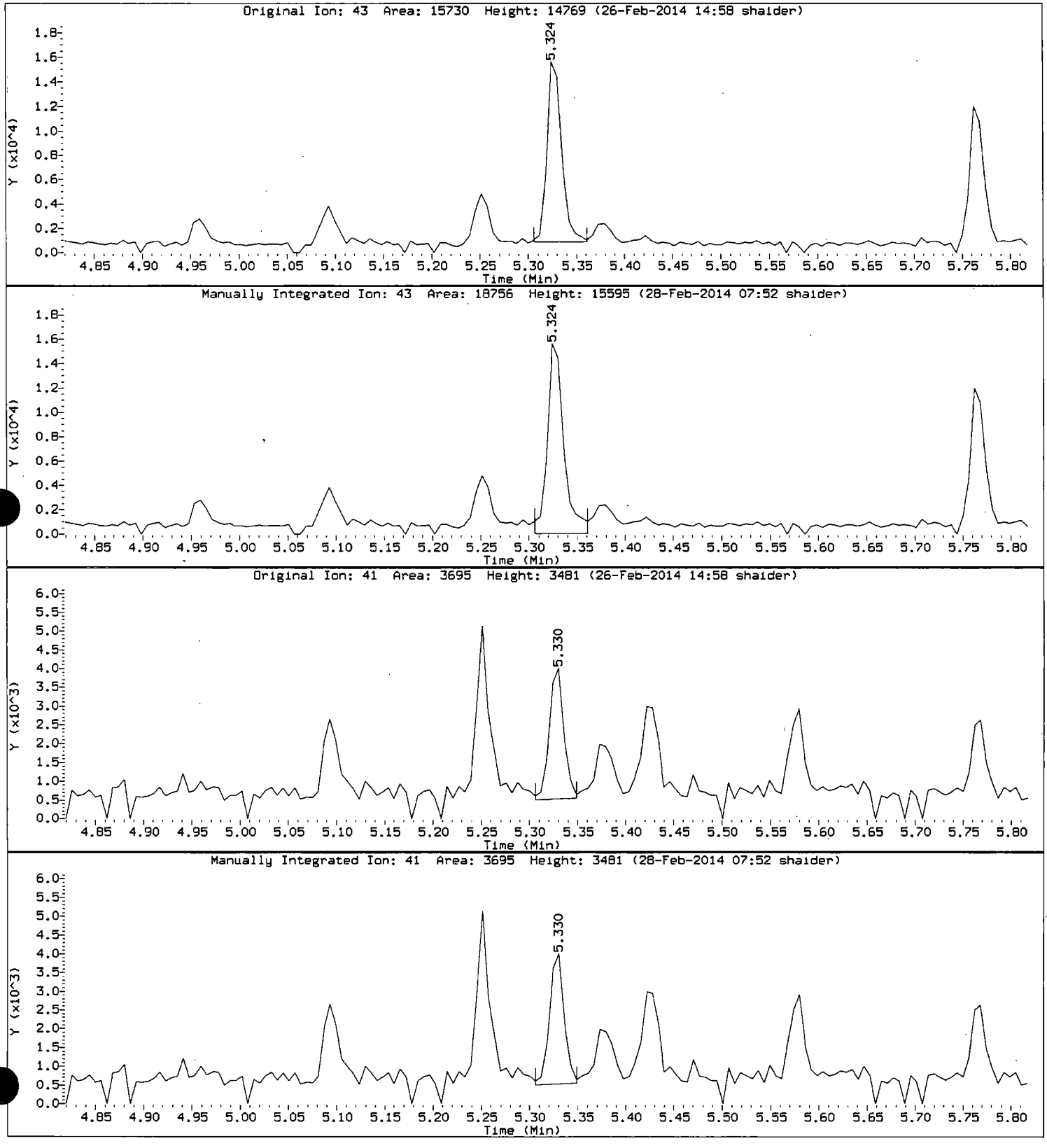
Instrument: 10msv5.i
Lab Sample ID: IC 0.4 10098-49

Compound: 2-Nitropropane
CAS Number: 79-46-9



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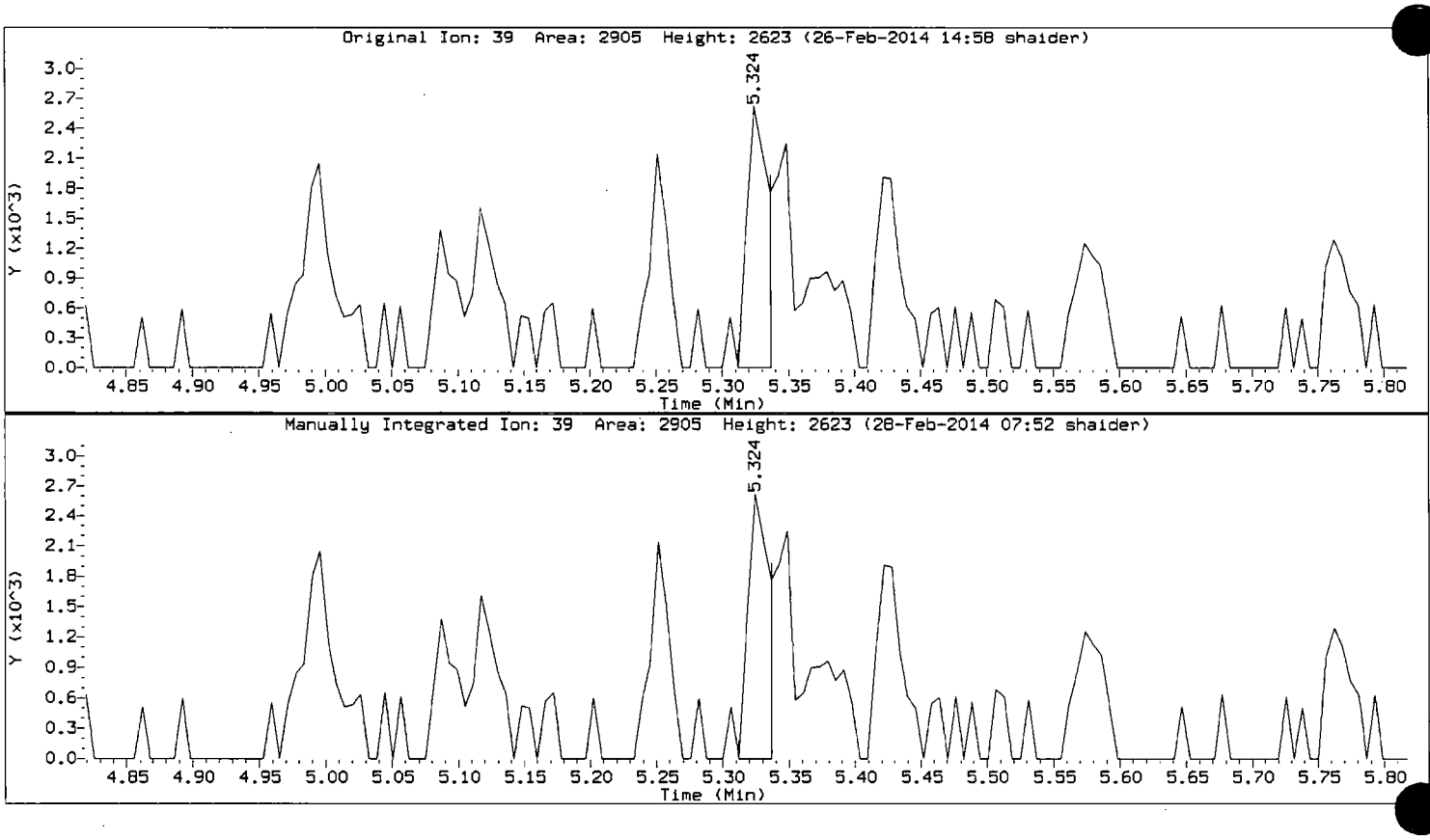
Lab Sample ID: IC 0.4 10098-49



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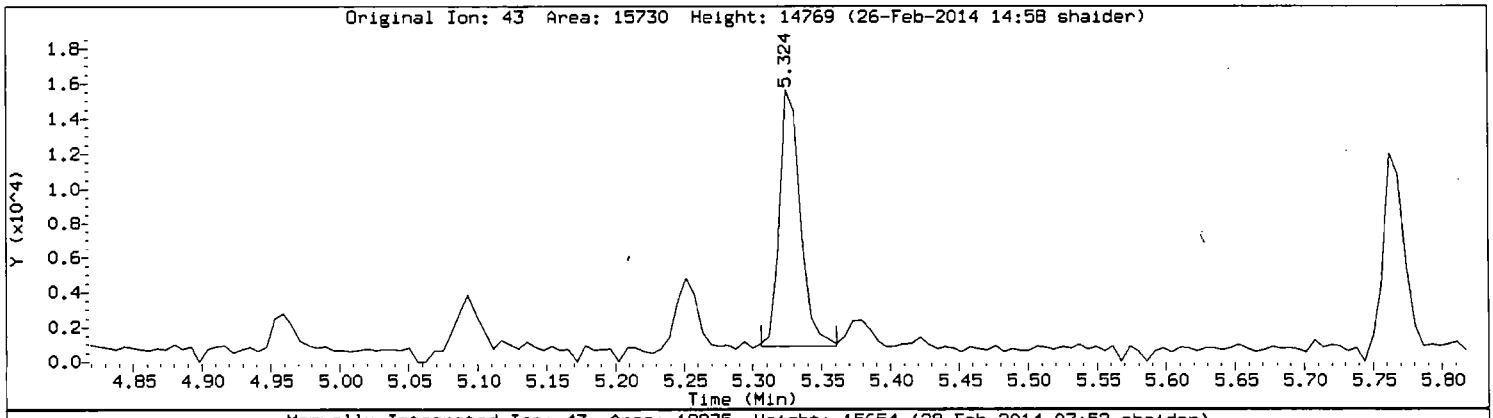
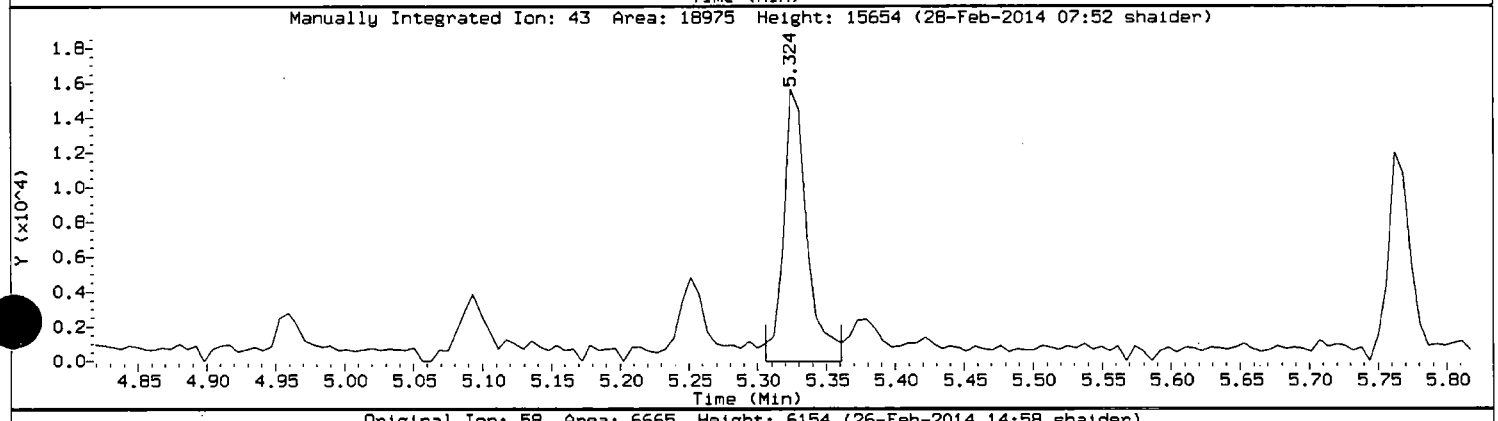
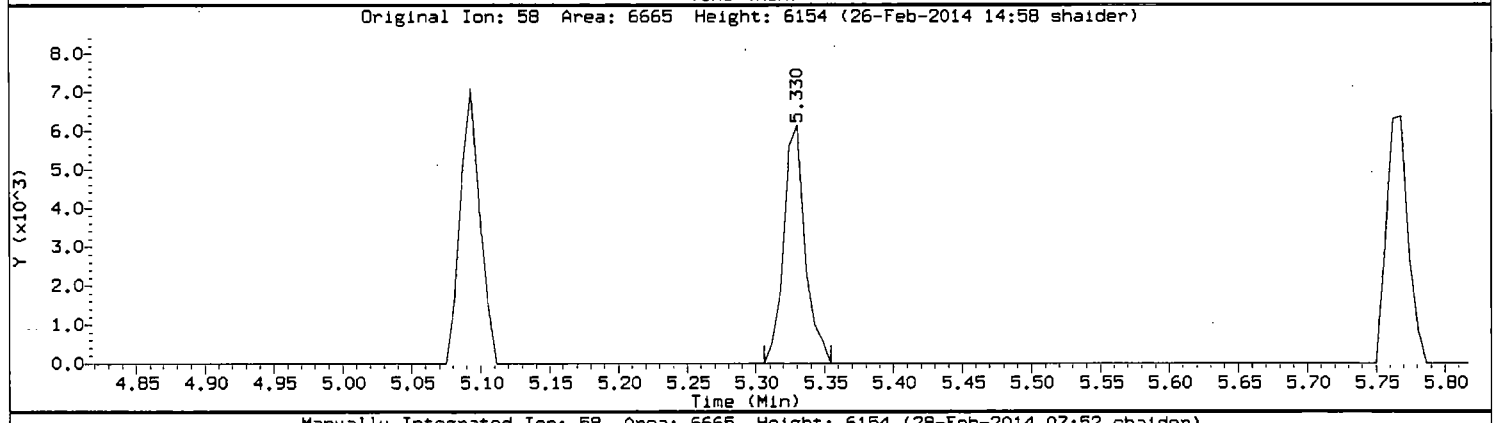
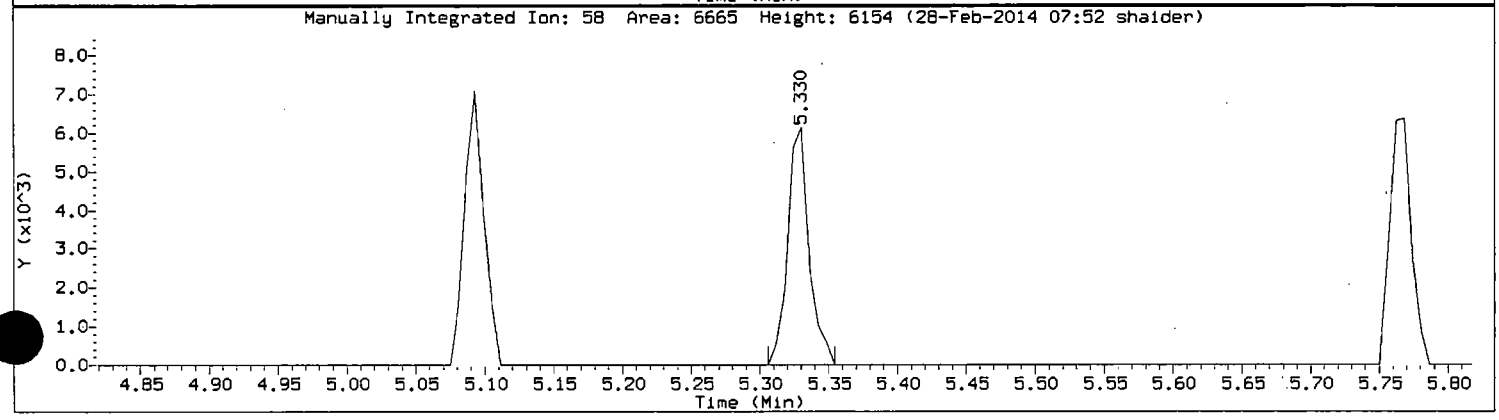
Injection Date: 26-FEB-2014 12:24
Instrument: 10msv5.i
Lab Sample ID: IC 0.4 10098-49

Compound: 4-Methyl-2-Pentanone
CAS Number: 108-10-1









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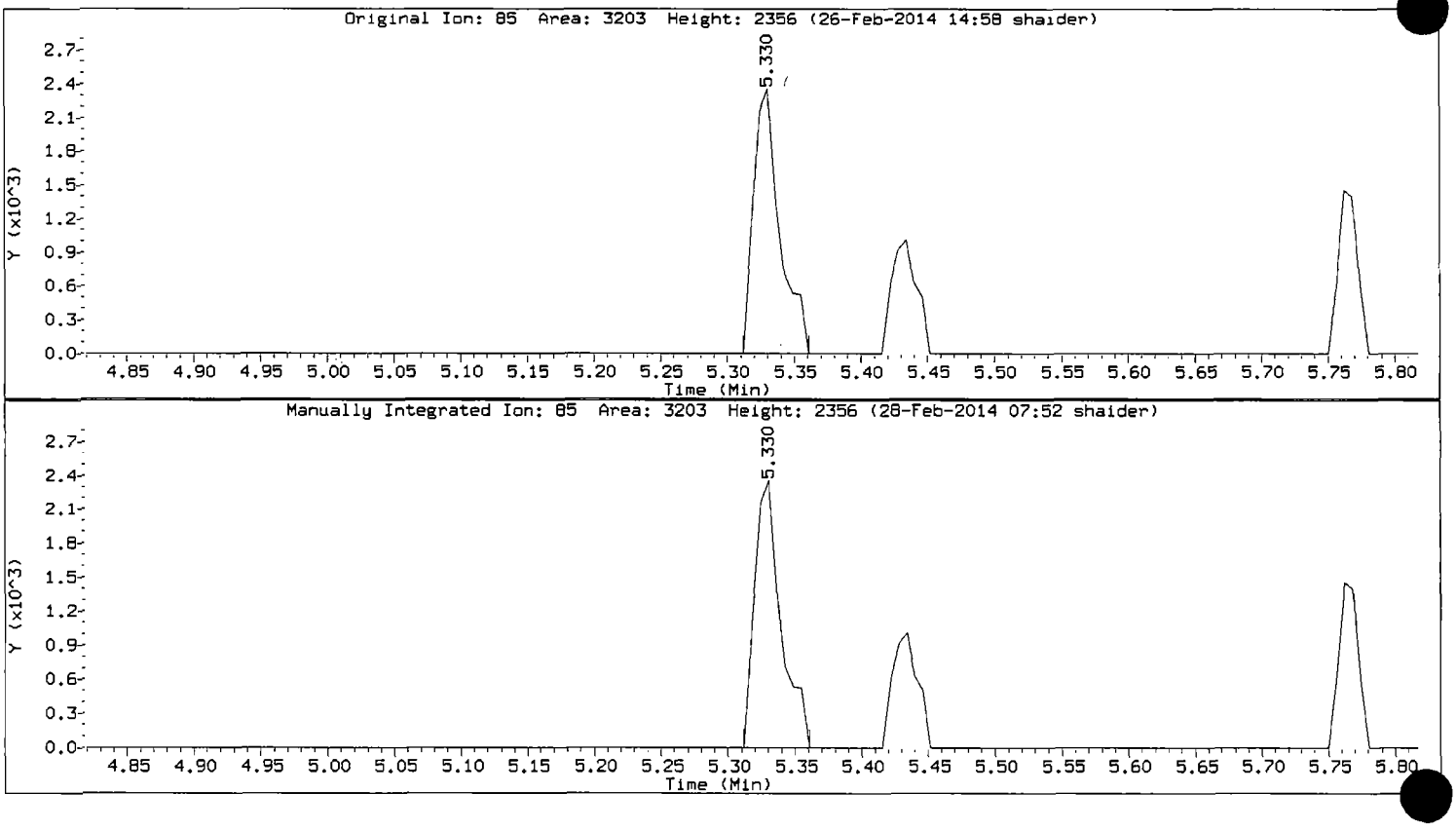

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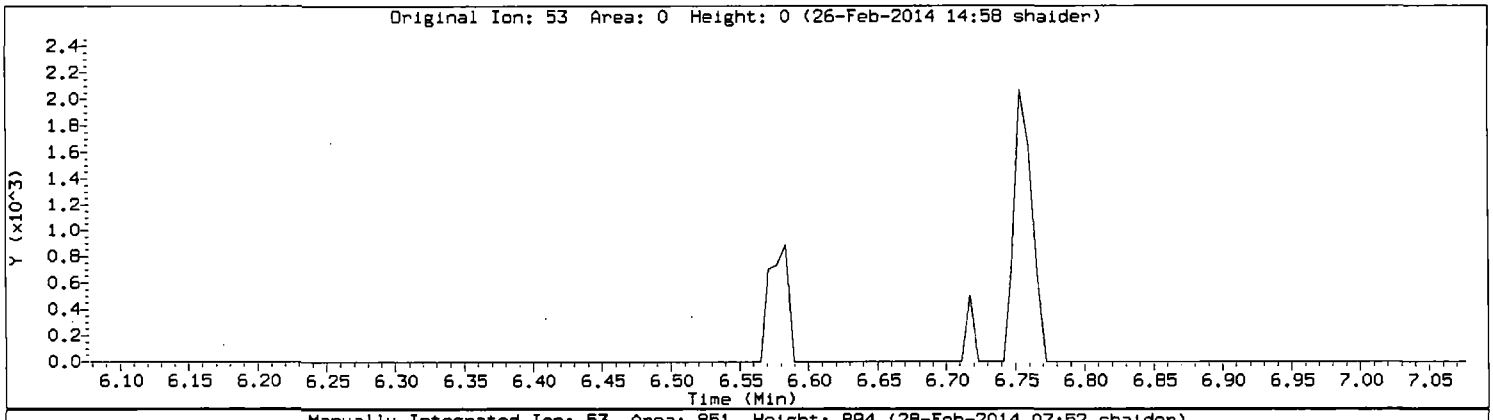
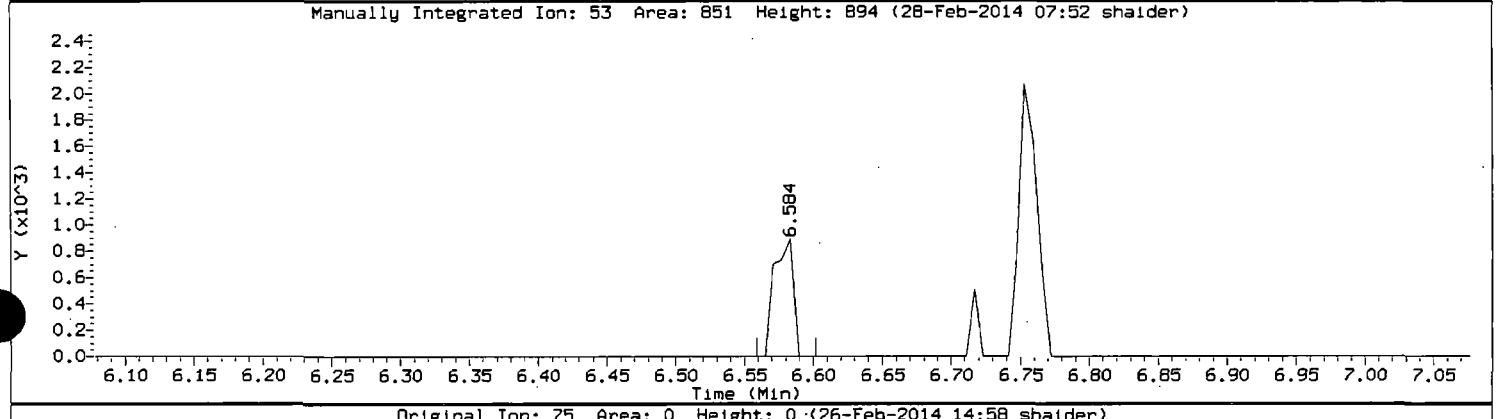
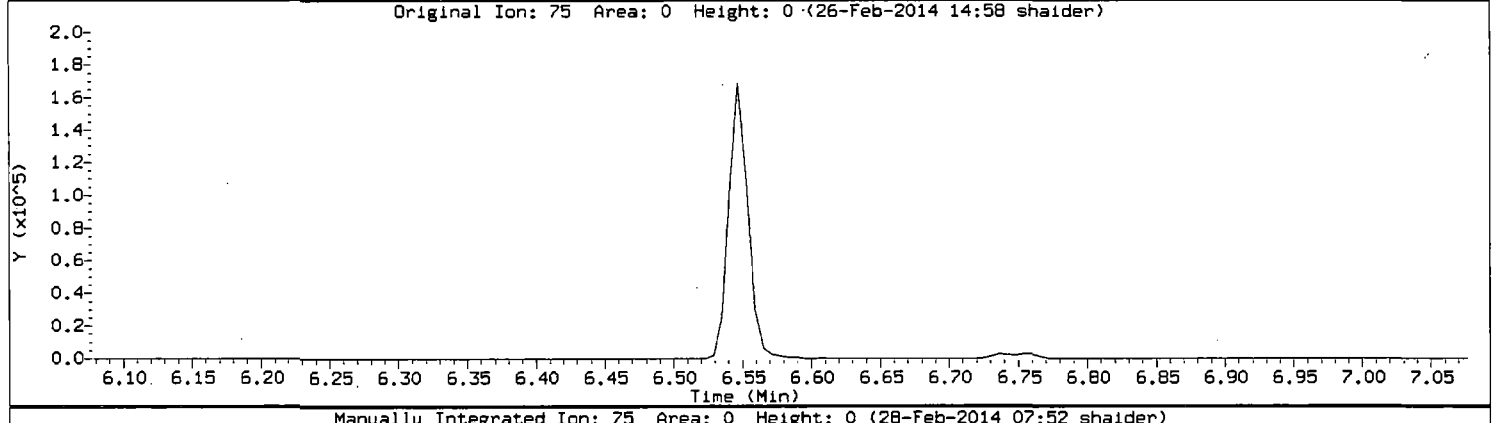
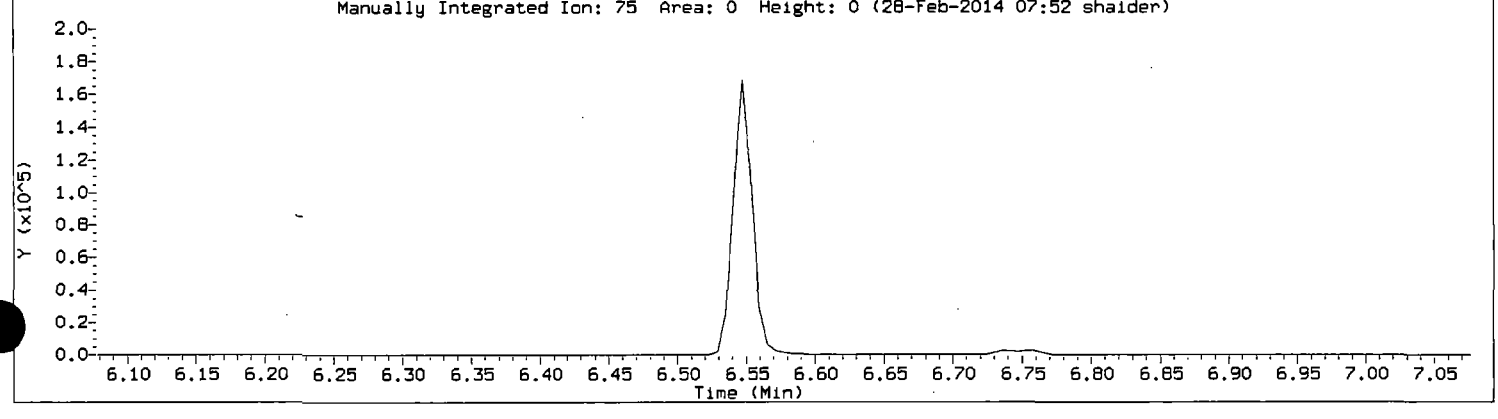
Injection Date: 26-FEB-2014 12:24
Instrument: 10msv5.i
Lab Sample ID: IC 0.4 10098-49

Compound: cis-1,4-Dichloro-2-Butene
CAS Number: 1476-11-5









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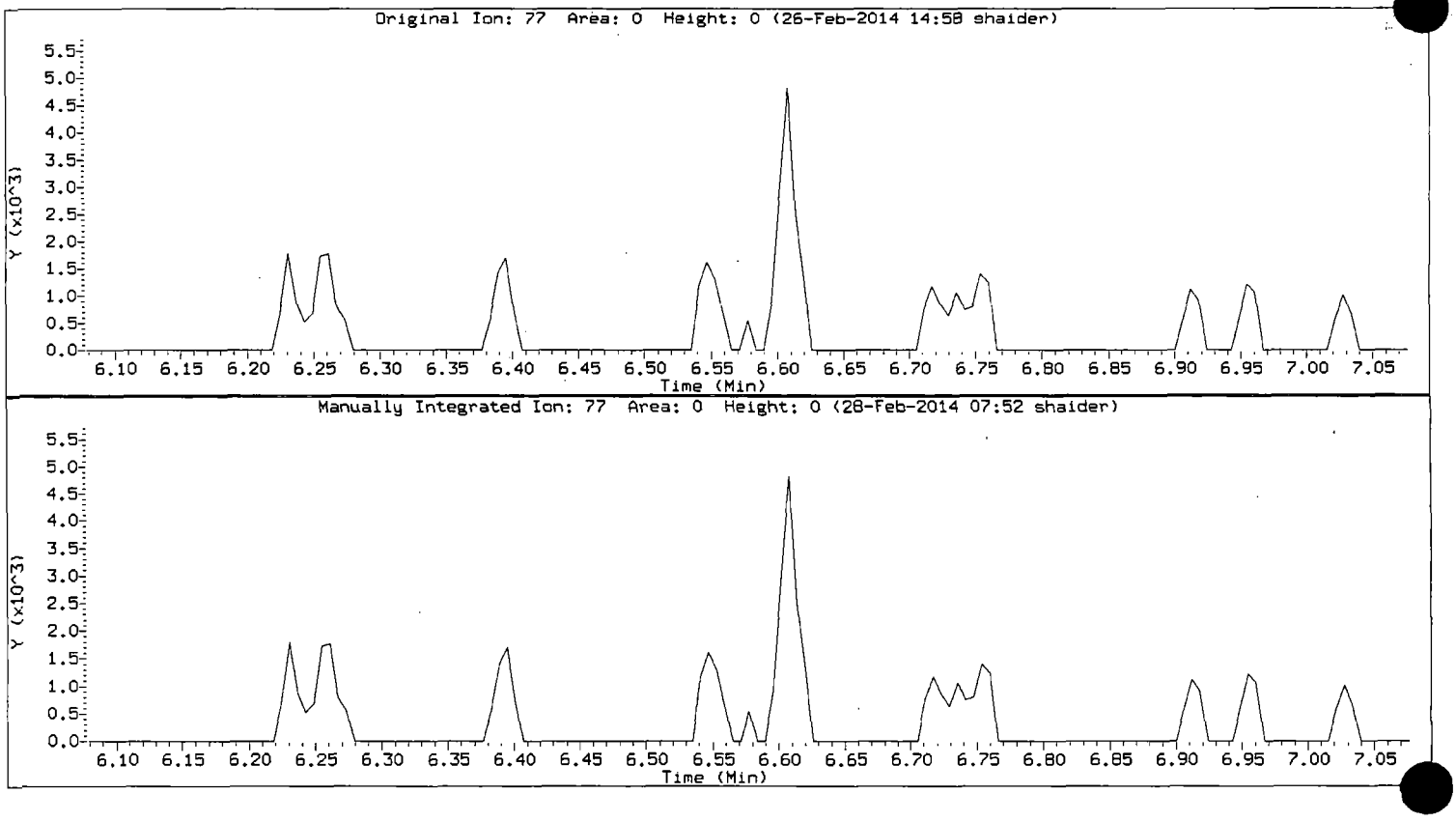

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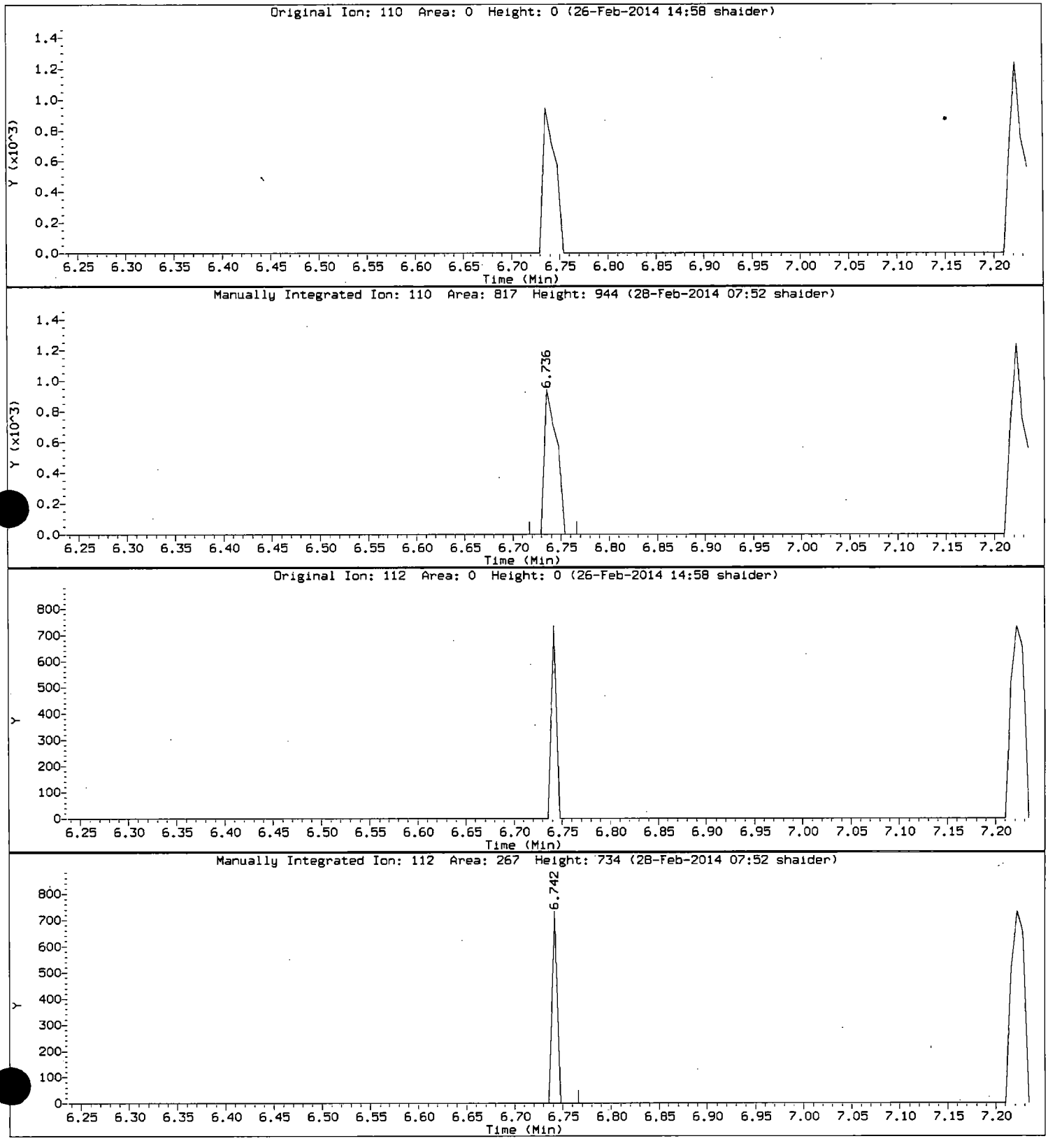
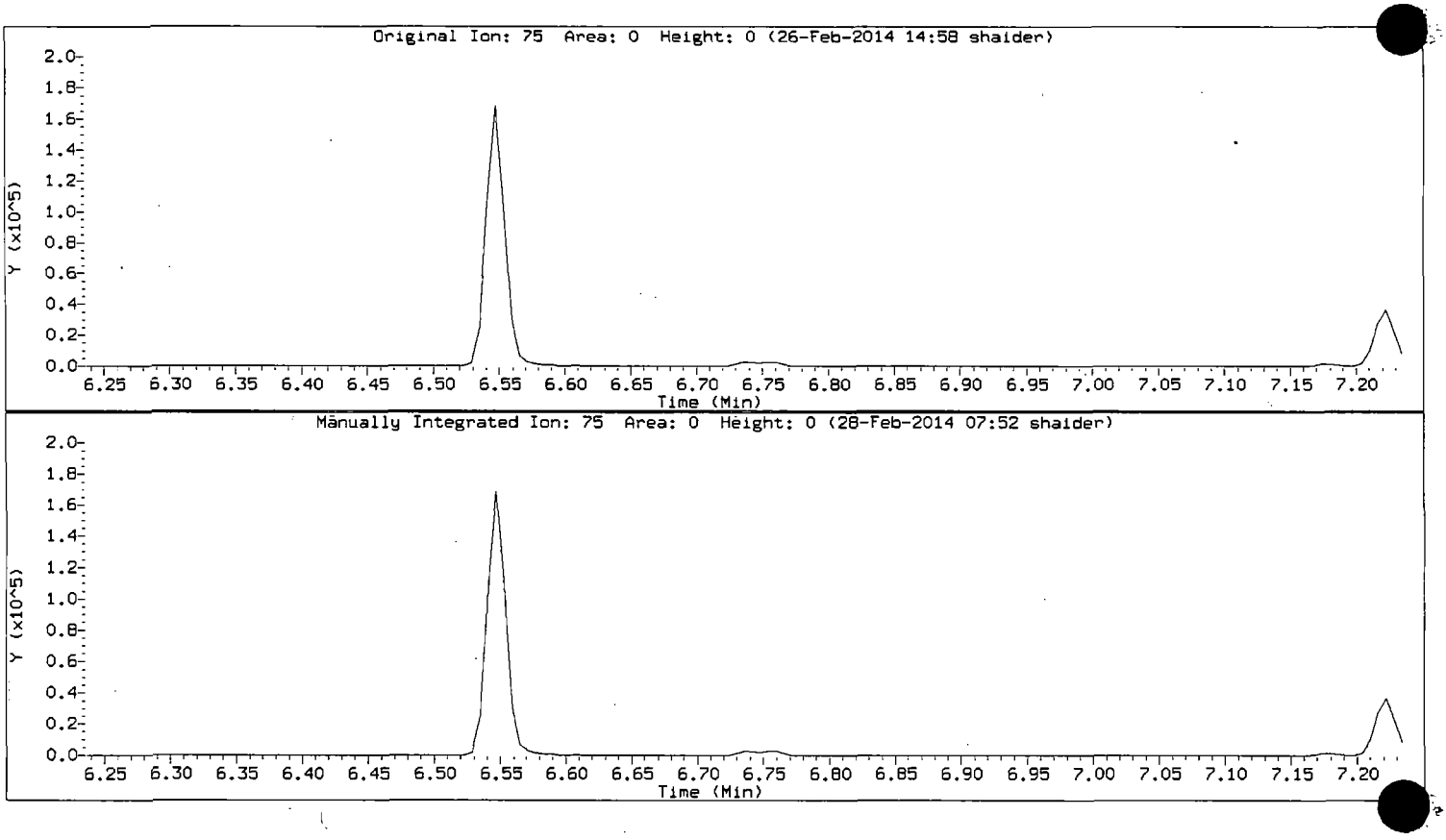
Injection Date: 26-FEB-2014 12:24
Instrument: 10msv5.i
Lab Sample ID: IC 0.4 10098-49

Compound: 1,2,3-Trichloropropane
CAS Number: 96-18-4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